

Bulletin No. 2 (2014 – 2015)

Global Glacier Change Bulletin

A contribution to

the Global Terrestrial Network for Glaciers (GTN-G) as part of the Global Climate Observing System (GCOS) and its Terrestrial Observation Panel for Climate (TOPC),

the Division of Early Warning and Assessment and the Global Environment Outlook as part of the United Nations Environment Programme (DEWA and GEO, UNEP),

and the International Hydrological Programme of the United Nations Educational, Scientific and Cultural Organization (IHP, UNESCO)



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Edited by

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Cover page

Panoramic view of Waldemarbreen (Svalbard/Norway). Photo taken by I. Sobota in the summer of 2015.

Preface by GCOS

Since the publication of the first Global Glacier Change Bulletin in 2015, the “climate observations landscape” has seen substantial progress in the face of increasing effects of global climate change. The Paris Agreement, which was adopted by the 21st Conference of Parties (COP) to the United Nations Framework Convention on Climate Change (UNFCCC) in December 2015 marks a watershed moment in global efforts to address and limit climate change. Its central aim is to strengthen the global response to the threat of climate change by keeping the global temperature rise until the end of this century well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit it to 1.5 °C. This is, however, not possible without a thorough and reliable systematic observation of the climate system.

The mechanism to address these observation needs is the Global Climate Observing System (GCOS). Established in 1992 and co-sponsored by the World Meteorological Organization (WMO), the United Nations Educational, Scientific and Cultural Organization (UNESCO), the United Nations Environment Programme (UNEP), and the International Council for Science (ICSU), GCOS promotes standardized, systematic and sustained climate observations to improve the understanding of our climate system and enhance climate services.

GCOS guides climate observing systems through regular implementation plans. The recent plan was published in 2016 and responds to the needs identified in the GCOS status report from 2015 but also to the ambitious goals and expectations of the Paris Agreement. This 2016 plan includes nine explicit actions to improve the global glacier observing network (T19–T27) and many more general actions, that will help to improve and adapt glacier observations networks to the increasing needs of the climate community. To reach this goal, the 22nd COP in Marrakesh in 2016 invited “United Nations agencies and international organizations to support the full implementation of the [GCOS] implementation plan, as appropriate”.

This recognition and support by the United Nations and its members to address the big challenges laid out in the Paris Agreement holds of course for all climate observing networks of which the GCOS consists. With the present second issue of the Global Glacier Change Bulletin, the WGMS proves once more its relevance as the renowned international centre for glacier observations for providing highly regarded climate information to a broad user community. It also proves, that the WGMS is very well positioned to provide answers not only to the needs of the Paris Agreement but to the complex challenges of climate change and glaciers in general. The efforts of the WGMS to provide these services and the sustained support of the Swiss Government are shining examples, and the WGMS can be regarded as a model for other observation networks for sustainable climate observations. The GCOS Secretariat congratulates the WGMS for this successful work, and we look forward to continuing our fruitful and excellent cooperation.

Carolin Richter, Dr
Director, GCOS Secretariat



Preface by IACS (IUGG)

The International Association of Cryospheric Sciences (IACS) was established in 2007 as the eighth Association under the International Union of Geodesy and Geophysics (IUGG). Glacier monitoring is an important activity of the IACS. This activity goes back to the Commission Internationale des Glaciers (CIG), the common origin of both IACS and the World Glacier Monitoring Service (WGMS). Nowadays, IACS leads the Advisory Board for the Global Terrestrial Network for Glaciers (GTN-G), where WGMS has a leading role.

Since 1986, the WGMS has collected and published standardized information about ongoing glacier fluctuations and events, i.e., changes in glacier length, area, volume, and mass. In response to calls-for-data, observations are contributed through an international scientific collaboration network, which consists of WGMS National Correspondents and Principal Investigators in over 30 countries worldwide. Submitted data are converted into standardized formats and uploaded into the Fluctuations of Glaciers database. Each version of the database is given a digital object identifier and made available to the public. The WGMS datasets have been cited in all five Assessment Reports of Working Group I of the Intergovernmental Panel on Climate Change (IPCC). They have been and will certainly continue to be used in numerous scientific publications.

The present Global Glacier Change Bulletin presents a wealth of data from numerous glaciers around the world. The data collected either in situ or via remote sensing are the result of much hard work and a joint effort by members of the glaciological community. IACS is thus much obliged to all the investigators who have collected, analyzed and submitted their data to the WGMS database to be shared with the international community.

The IACS extends thanks to the World Glacier Monitoring Service for its thorough work and continuous efforts in collecting and standardizing glaciological data, as published in the current Global Glacier Change Bulletin, and for making the data available in digital format. We also thank WGMS for its contribution to several IACS Working Groups, in particular for its efforts to collect and standardize ice thickness data in support of the Working Group on Glacier Ice Thickness Estimation.

Liss M. Andreassen, Dr
Head, Division of Glaciers and Ice Sheets, IACS



Regine Hock, Prof. Dr
President, IACS



Preface by UNESCO

Glaciers are key and unique indicators of global warming and climate change. They are also an integral part of the culture, landscape, and environment, and an important component of the hydrological cycle in high mountain regions. In 2014, IPCC confirmed with a high degree of confidence that glaciers have continued to shrink almost worldwide and that these changes will affect water availability for the large populations situated downstream. The monitoring of these glaciers is therefore very crucial, not only to understanding climate change and its impact on flow regimes in mountain regions, but also to the safeguarding of the wellbeing of those who live downstream of these glaciers and depend on this water for their livelihood.

The need for a worldwide inventory of existing perennial ice and snow masses was first considered during the International Hydrological Decade, declared by UNESCO for the period 1965–1974. More than half a century later, major progress has been made but gaps still remain in the monitoring and understanding of glacier systems in many mountainous regions.

The International Hydrological Programme (IHP) of UNESCO plays a key role, as a platform for scientific networking and cooperation, in contributing to the assessment and monitoring of changes in snow, glaciers, and water resources and in proposing options for adaptation.

The task undertaken by the World Glacier Monitoring Services (WGMS) to prepare the Global Glacier Change Bulletin is relevant and timely as it enhances the knowledge of the state of the glacier resources and also contributes to the IHP Strategy (IHP VIII, 2014–2021) on ‘Water Security: Responses to Local Regional and Global Responses’. The publication is extremely applicable to the recent UNESCO-IHP Project ‘The Impact of Glacier Retreat in the Andes: International Multidisciplinary Network for Adaptation Strategies’. It also provides information and a knowledge base to the IHP Snow and Ice Working Group in Latin America (Grupo de Trabajo de Nieves y Hielos).

IHP has already established a solid partnership with WGMS for various joint activities. During the Paris Climate Conference (COP21) in December 2015, WGMS and UNESCO-IHP jointly launched the wgms Glacier App for mobile devices. This aimed at bringing scientifically sound facts and figures on worldwide glacier changes to policymakers at governmental and intergovernmental levels as well as reaching out to the interested public. WGMS and UNESCO-IHP are collaborating in capacity building and twinning activities in Central Asia and Latin America.

I would also like to recall successful collaboration with WGMS for the publication of the UNESCO IHP Glossary of Glacier Mass Balance published as IHP Technical Series No. 86.

UNESCO-IHP takes great pride in its association and collaboration with WGMS for this very important publication, which not only provides a knowledge base on the status of glaciers worldwide but also represents a great contribution to IHP VIII. I would like to congratulate the team for their excellent work.

We look forward to further cooperation with WGMS.

Blanca Jiménez-Cisneros, Dr
Director, Division of Water Sciences
Secretary, International Hydrological Programme (IHP)
UNESCO



Foreword by the WGMS Director

Glaciers around the globe continue to melt at rapid rates. In the time period covered by the present bulletin, the glaciers observed lost more than 0.9 m w.e. (water equivalent) per year, thus continuing the historically unprecedented ice loss observed since the turn of the century and amounting to double the ice loss rates of the 1990s (based on the ‘reference’ glacier sample). In 2014/15, the observed glaciers lost more than 1,100 litres of water reserve and this per square metre of ice cover. Glaciers are indeed key indicators and unique demonstration objects of ongoing climate change. Their rapid decline not only alters the visual landscape of mountain and polar regions, it also has a very real impact on local hazard situations, regional water cycles, and global sea levels.

For more than a century, glacier monitoring has been coordinated internationally by the WGMS and its predecessor organizations through a collaboration network of National Correspondents from countries active in glacier research. The initial focus on glacier front variations and Ice Age theories has developed into a comprehensive monitoring strategy for assessing global glacier distribution and changes in length, area, volume, and mass related to climate change. Glaciers are recognized as Essential Climate Variables and their monitoring has been internationally coordinated in recent years within the framework of the Global Terrestrial Network for Glaciers (GTN-G, <http://www.gtn-g.org>) under the Global Climate Observing System (GCOS) in support of the United Nations Framework Convention on Climate Change (UNFCCC).

The present Global Glacier Change Bulletin is the second issue of the new publication series merging the former Fluctuations of Glaciers (Vol. I–X) and Glacier Mass Balance Bulletin (No. 1–12) series. The primary focus is on glaciological mass balance observations that are complemented by geodetic volume changes and front variation series. It serves as an authoritative source of illustrated and commentated information on global glacier changes based on the latest operations from the scientific collaboration network of the WGMS. The Global Glacier Change Bulletin No. 2 reports the observations from balance years 2013/14 and 2014/15 as well as preliminary results from the ‘reference’ glaciers (with more than 30 years of ongoing measurements) for 2015/16. Overall, this report presents more than 7,000 lines of database entries from 621 glaciers measured by more than 400 Principal Investigators in 35 countries.

The compilation, analysis and dissemination of standardized data and information on glacier distribution and changes is the core task of the WGMS. In addition, it is worth noting the recent key achievements related to the present bulletin. The number of glaciers with more than 30 years of observations is growing. In this bulletin, Allalin and Giétro, CH, as well as Rainbow, US, are joining the list of ‘reference’ glaciers. At the same time, well observed glaciers have started to disintegrate (e.g. Caresèr, IT, Echaurren Norte, CL, Lewis, KE, Sarennes, FR, Stubacher Sonnblick and Wurten, AT) or already vanished (e.g. Chacaltaya, BO). Consequently, we revised and specified in more detail the criteria for receiving the status of a ‘reference’ glacier. The proposed framework for reanalyzing glacier mass balance series (Zemp et al., 2013) has been well accepted as good practice for validation and calibration (if necessary) of the glaciological with the geodetic balance results (e.g. Andreassen et al., 2016; Basantes-Serrano et al., 2016; Sold et al., 2016; Thomson et al., 2017; Wang et al., 2014). With the backing from the Swiss Agency for Development and Cooperation, it was possible to support glacier monitoring in the tropical Andes (Mölg et al., 2017; Rabatel et al., 2017) as well as to resume disrupted long-term monitoring programs from the Soviet times and extend the capacity building and twinning efforts in Central Asia (Hoelzle et al., 2017). Within the framework of ESA’s Climate Change Initiative (CCI) and Europe’s Copernicus Climate Change Service (C3S), the WGMS was able to start long-term efforts for improving and extending the global glacier inventory and to boost the compilation and computation of glacier volume changes using space-borne sensors.

Sincere thanks are extended to WGMS co-workers, National Correspondents, and Principal Investigators around the world and their sponsoring agencies at national and international levels for their long-term commitment to building up an unrivaled database which, despite its limitations, nevertheless remains an indispensable treasury of international snow and ice research, readily available to the scientific community and the public.

Michael Zemp, PD Dr
Director, World Glacier Monitoring Service



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Please note:

In the print version, the main part of the Bulletin and the Appendix are provided separately. Hardcopies including both parts are distributed to about 150 libraries worldwide. The electronic version includes both parts in one file.

1 INTRODUCTION

Internationally coordinated glacier monitoring began in 1894, with the periodic publication of compiled information on glacier fluctuations starting one year later (Forel, 1895). In the beginning, glacier monitoring focused mainly on observations of glacier front variations and after the late 1940s on glacier-wide mass balance measurements (Haeberli, 1998). Beginning with the introduction of the Fluctuations of Glaciers (FoG) series in the late 1960s (PSFG, 1967; WGMS, 2012, and volumes in between), standardized data on changes in glacier length, area, volume and mass have been published at pentadal intervals. At the beginning of the 1990s, the Glacier Mass Balance Bulletin series (WGMS, 1991; WGMS, 2013, and issues in between) was designed in order to speed up access to information on glacier mass balance at two-year intervals. Since the late 1980s, glacier fluctuation data have been organized in a relational database (Hoelzle & Trindler, 1998) and are available in electronic form through websites of the WGMS (<http://www.wgms.ch>) and GTN-G (<http://www.gtn-g.org>). The Fluctuations of Glaciers web browser and the wgms Glacier App were launched to provide easy access to global glacier change data and to increase the visibility of related observers, their sponsoring agencies, and the internationally coordinated glacier monitoring network.

In the 1990s, an international glacier monitoring strategy was drawn up for providing quantitative, comprehensive, and easily understandable information relating to questions about process understanding, change detection, model validation and environmental impacts with an interdisciplinary knowledge transfer to the scientific community as well as to policymakers, the media and the public (Haeberli et al., 2000; Haeberli, 1998). This strategy has five tiers:

1. organizing glacier monitoring as a multi-component system across environmental gradients, thereby integrating glacier-wide observations at the following levels;
2. extensive glacier mass balance and flow studies within major climatic zones for improved process understanding and calibration of numerical models;
3. determination of glacier mass balance using cost-saving methodologies within major mountain systems to assess the regional variability;
4. long-term observations of glacier length changes and remotely sensed volume changes for large glacier samples within major mountain ranges for assessing the representativeness of mass balance measurement series; and
5. glacier inventories repeated at time intervals of a few decades by using remotely sensed data.

Based on this strategy, the monitoring of glaciers has been internationally coordinated within the framework of GTN-G under the Global Climate Observing System (GCOS) in support of the United Nations Framework Convention on Climate Change (UNFCCC). The GTN-G is run by the WGMS in close collaboration with the U.S. National Snow and Ice Data Center (NSIDC) and the Global Land Ice Measurements from Space (GLIMS) initiative. The WGMS is a permanent service of the International Association of Cryospheric Sciences of the International Union of Geodesy and Geophysics (IACS/IUGG) and of the World Data System within the International Council of Science (WDS/ICSU) and operates under the auspices of the United Nations Environment Programme (UNEP), United Nations Educational, Scientific and Cultural Organization (UNESCO), and the World Meteorological Organization (WMO).

To further document the evolution and to clarify the physical processes and relationship involved in global glacier changes, the WGMS collects standardized information on changes in glacier length, area, volume, and mass through annual calls-for-data. In accordance with an agreement between the international organizations and the countries involved, a one-year retention period is granted to allow investigators time to properly analyze, document, and publish their observations before making them available. In 2014, a near-time reporting was introduced for the official ‘reference’ glaciers (with more than 30 years of continued mass balance observations) in agreement with the responsible Principal Investigators. This allows the WGMS to report preliminary mass balance estimates as soon as a few months after the end of the corresponding observation period. All submitted

data are considered public domain and are made available in print and digital form through the WGMS at no cost under the requirement of appropriate citation.

The new Global Glacier Change Bulletin series merges the former *Fluctuations of Glaciers* (Vol. I–X) and *Glacier Mass Balance Bulletin* (No. 1–12) series. It aims to provide an integrative assessment of global glacier changes every two years. In this process, the main focus is on mass balance measurements based on the glaciological method (cf. Cogley et al., 2011). This method provides quantitative results at high temporal resolution, which are essential for understanding climate-glacier processes and for allowing the spatial and temporal variability of the glacier mass balance to be captured, even with only a small sample of observation points. The glaciological observations are complemented by results from the geodetic method (cf. Cogley et al., 2011) to extend the balance sample in space and time. The geodetic method provides overall glacier volume changes over a longer time period by repeat mapping from ground, air- or spaceborne surveys and subsequent differencing of glacier surface elevations. It is recommended to periodically validate and calibrate annual glaciological mass balance series with decadal geodetic balances to detect and remove systematic biases (Zemp et al., 2013). In addition, glacier front variation series are reported for the documentation of clearly visibly glacier reactions to mass changes and for extending observations of glacier fluctuations back in time.

The Global Glacier Change Bulletin No. 2 is organized in three main sections: global summary, regional summaries, and detailed information for selected glaciers. The global summary provides an overview of reported data and of glaciological balance results for the observation periods 2013/14 and 2014/15, including preliminary values for the ‘reference glaciers’ based on the near-time reporting for 2015/16. This first section contains a global map of available glacier fluctuation data, tables with key statistics on reported data and glaciological balance results as well as a set of global figures summarizing reported data and results of changes in glacier mass, volume and length. The second section consists of standardized facts and figures on glacier changes for all glacierized regions of the world, each supplemented with mass balance and front variation series of selected glaciers. The third section contains detailed information for selected glaciers to provide an insight into the results of the glaciological method. In addition, a list is included naming all Principal Investigators and their sponsoring agencies for the observation periods of the current bulletin as well as of all National Correspondents as of 2017. Data tables with the results for the observation periods of the current bulletin are given in the Appendix. The full report including the data Appendix is made available in digital format on the WGMS website as well as being printed and shipped to libraries around the world as a long-term guarantee for data availability. Full access to the latest and earlier versions of the database, including addenda from earlier years, can be accessed through a data browser on the WGMS website (<http://www.wgms.ch>).

2 GLOBAL SUMMARY

Pioneer surveys of accumulation and ablation of snow, firn and ice at isolated points date back to the end of the 19th century and the beginning of the 20th century (e.g., Mercanton, 1916). In the 1920s and 1930s, short-term observations (up to one year) were carried out at various glaciers in the Nordic countries. Continuous, modern series of annual/seasonal measurements of glacier-wide mass balance were started in the late 1940s in Sweden, Norway, and in western North America, followed by a growing number of glaciers in the European Alps, North America, and other glacierized regions. In the meantime, more than 6,500 glaciological mass balance observations from 450 glaciers have been collected and made available by the WGMS.

For the observation periods covering the hydrological years 2013/14 and 2014/15, 316 annual mass balance observations were compiled based on 166 glaciers worldwide. Of these observations, 73%, 55%, and 46% were reported including seasonal mass balance, mass distribution with elevation, and point measurements, respectively. In addition, 27 geodetic thickness changes and 889 front variations were reported from 23 and 528 glaciers, respectively, for these two observation periods. A global overview of available glacier change data is shown in Figure 2.1. Reported data for the observation periods covered by the present bulletin are given in Table 2.1. In addition, preliminary balance estimates for 2015/16 are given as reported for the ‘reference’ glaciers.

Table 2.1 Annual mass balances for the observation periods 2013/14 and 2014/15 as well as preliminary values (*) for ‘reference’ glaciers (highlighted in grey) for 2015/16. Abbreviations and units: PU = political unit; B14, B15, B16 in mm w.e.; BwBs = winter and summer balances; ELA = equilibrium line altitude; AAR = accumulation area ratio; B elevation = balance-elevation distribution; b point = point balances; FV = front variations reported (x) for current observation periods; TC (since 2006) = thickness changes from geodetic surveys of the past decade. For the current observation periods no data were reported for the following ‘reference’ glaciers: Levyi Aktru, Maliy Aktru, No. 125 (Vodopadny), RU.

PU	Glacier name	1 st /last/nr years	B14	B15	B16*	BwBs	ELA-AAR	B elevation	b point	FV	TC (since 2006)
AQ	Bahia del Diablo	2000/2015/16	190	25		o	x	x	x	x	x
AQ	Hurd	2002/2016/15	400	560		x	x	o	o	o	o
AQ	Johnsons	2002/2016/15	590	750		x	x	o	o	o	o
AR	Brown Superior	2008/2015/08	-1359	-2387		x	x	x	x	x	x
AR	Conconta Norte	2008/2015/08	-1783	-2890		x	x	x	x	x	x
AR	Los Amarillos	2008/2015/08	-950	-1097		x	x	x	x	x	x
AR	Martial Este	2001/2015/15	566	-157		x	x	x	x	o	o
AT	Goldbergkees	1989/2014/26	519			x	o	o	o	x	o
AT	Hallstätter Gletscher	2007/2015/09	-274	-2054		x	x	x	o	x	o
AT	Hintereisferner	1953/2016/64	-122	-1682	-1263	x	x	x	x	x	x
AT	Jamtalferner	1989/2015/27	-572	-2016		x	x	x	o	x	x
AT	Kesselwandferner	1953/2016/64	459	-1169	-500	o	x	x	x	o	x
AT	Kleinfleisskees	1999/2014/16	0			x	o	o	o	x	o
AT	Obersulzbachkees	2013/2015/03	-152	-1567		x	x	x	o	o	o
AT	Pasterze	1980/2015/29	-509	-1434		o	x	x	o	x	o
AT	Stubacher Sonnblickkees ₁	1946/2016/71	274	-2734		o	x	o	o	x	o
AT	Vernagtferner	1965/2016/52	-144	-1268	-781	o	x	x	o	x	x
AT	Wurtenkees ₂	1983/2015/33	-380	-1275		o	x	x	x	x	o

PU	Glacier name	1 st /last/nr years	B14	B15	B16*	BwBs	ELA-AAR	B elevation	b point	FV	TC (since 2006)
AT	Zettalunitz/ Mullwitzkees	2007/2015/09	117	-1599		x	x	x	o	x	o
BO	Chacaltaya ³	1992/2008/17									
BO	Charquini Sur	2003/2015/13	-310	78		o	x	x	x	o	x
BO	Zongo	1992/2015/24	-97	368		o	x	x	x	x	x
CA	Devon Ice Cap NW	1961/2016/56	-246	-395	-483	x	x	o	x	o	o
CA	Helm	1975/2015/39		-2500		o	x	o	o	o	o
CA	Meighen Ice Cap	1960/2015/56	57	-892	-775	x	x	o	x	o	o
CA	Melville South Ice Cap	1963/2015/53	-159	-1148	-782	x	x	o	x	o	o
CA	Peyto	1966/2016/50	-1630	-1538	-1844	o	x	o	o	o	o
CA	Place	1965/2016/51		-1590	-1330	o	x	o	o	o	o
CA	White	1960/2015/53	-417	-693		o	x	x	x	o	x
CH	Adler	2006/2015/10	230	-378		x	x	x	x	o	x
CH	Allalin	1956/2015/60	77	-656		x	x	x	x	x	x
CH	Basòdino	1992/2015/24	-250	-1345		x	x	x	x	x	x
CH	Claridenfirn ⁴	1915/2015/101	-501	-1362		x	x	x	x	o	o
CH	Corbassière	1997/2015/19	-221	-1449		x	x	x	x	x	x
CH	Corvatsch South ⁵	2014/2015/02	120	-1643		x	x	x	x	o	o
CH	Findelen	2005/2015/11	159	-606		x	x	x	x	x	x
CH	Giétro	1967/2015/49	-198	-1271		x	x	x	x	x	x
CH	Gries	1962/2016/55	-610	-1713	-1200	x	x	x	x	x	x
CH	Hohlaub	1956/2015/60	-53	-1010		x	x	x	x	x	x
CH	Murtèls	2013/2015/03	427	-902		x	x	x	x	o	x
CH	Pizols	2007/2015/09	-1223	-1501		x	x	x	x	x	x
CH	Plaine Morte	2010/2015/06	-958	-2395		x	x	x	x	x	o
CH	Rhone	1885/2015/34	-383	-1083		x	x	x	x	x	x
CH	Sankt Annas	2012/2015/04	-438	-1477		x	x	x	x	x	x
CH	Schwarzbach ⁵	2013/2015/03	-541	-1258		x	x	x	x	o	x
CH	Schwarzberg	1956/2015/60	-9	-1331		x	x	x	x	x	x
CH	Sex Rouges ⁵	2012/2015/04	-613	-2213		x	x	x	x	x	x
CH	Silvretta	1919/2016/98	-950	-1649	-600	x	x	x	x	x	x
CH	Tsanfleuron	2010/2015/06	-642	-2744		x	x	x	x	x	x
CL	Amarillos ⁵	2008/2015/08	-1319	-1393		x	x	x	x	x	x
CL	Echaurren Norte ⁶	1976/2016/41	-940	-1720	-2284	x	o	o	o	o	o
CL	Guanaco	2004/2015/12	-880	-1130		x	o	o	o	x	o
CN	Parlung No. 94	2006/2015/10	-1116	-653		o	x	x	x	x	o
CN	Urumqi Glacier No. 1 ⁷	1959/2016/58	-185	-815	-1017	x	x	x	o	x	o
CN	Urumqi Glacier No. 1 E-Branch	1988/2015/28	-228	-932		x	x	x	x	x	o
CN	Urumqi Glacier No. 1 W-Branch	1988/2015/28	-109	-607		x	x	x	x	x	o
CO	Conejeras ⁶	2006/2015/10	-4082	-5599		o	x	x	x	x	x
CO	Ritacuba Blanco	2009/2015/07	-119	-887		o	x	x	x	x	x
EC	Antizana 15 Alpha	1995/2015/21	-267	-305		o	x	x	o	x	o
ES	Maladeta ⁶	1992/2016/25	78	-1760		x	x	x	o	x	x
FR	Argentière	1976/2015/40	-720	-2480		o	o	o	o	x	x
FR	Gébroulaz	1995/2015/21	-270	-2080		o	o	o	o	o	o

PU	Glacier name	1 st /last/nr years	B14	B15	B16*	BwBs	ELA-AAR	B elevation	b point	FV	TC (since 2006)
FR	Ossoue ⁶	2002/2015/14	-310	-2280		x	x	o	o	x	o
FR	Saint Sorlin	1957/2015/59	-1340	-2980		o	o	o	o	x	o
FR	Sarennes ⁶	1949/2016/68	-1910	-3420	-1510	x	x	o	o	o	o
FR	Tré la Tête	2014/2015/02	-460	-1910		o	x	o	x	x	x
GL	Freya	2008/2015/08	394	97		x	x	x	x	o	o
GL	Mittivakkat	1996/2016/21	-1200	200		x	x	x	x	x	o
GL	Qasigiannguit	2013/2015/03	-324	217		x	x	x	x	o	o
IN	Chhota Shigri	1987/2014/14	-80			o	x	o	o	o	x
IS	Brúarjökull	1993/2015/23	-34	1044		x	x	o	o	o	x
IS	Dyngjujökull	1992/2015/18	171	1469		x	x	o	o	o	o
IS	Eyjabakkajökull	1991/2015/24	-353	734		x	x	o	o	o	o
IS	Hofsjökull E	1989/2016/28	-990	850		x	x	o	x	o	x
IS	Hofsjökull N	1988/2015/28	-950	430		x	x	o	o	o	o
IS	Hofsjökull SW	1990/2015/26	-990	1380		x	x	o	o	o	o
IS	Köldukvíslarjökull	1992/2015/22	-877	1074		x	x	o	o	o	o
IS	Langjökull Ice Cap	1997/2015/19	-1950	413		x	x	o	o	o	x
IS	Tungnárjökull	1986/2015/24	-1535	196		x	x	o	o	x	o
IT	Calderones	1995/2015/21	626			x	x	o	x	x	x
IT	Campo settentrionale ⁶	2010/2015/06	37	-1799		o	x	o	x	o	x
IT	Caresèr ⁶	1967/2016/50	-131	-2475	-1748	x	x	x	x	o	o
IT	Ciardoney ⁶	1992/2015/24	-560	-1831		x	x	x	o	x	o
IT	Fontana Bianca/ Weissbrunnferner	1984/2016/32	467	-1291		x	x	x	x	x	o
IT	Grand Etret	2000/2015/13	-569	-1791		x	x	o	x	x	o
IT	Vedretta de la Mare	2003/2015/13	830	-1315		x	x	x	o	x	o
IT	Lunga/Langenferner	2004/2015/12	442	-1727		x	x	x	x	x	x
IT	Lupo	2010/2015/06	1369	-1561		x	x	o	x	o	x
IT	Malavalle/ Übeltalferner	2002/2016/15	34	-1213		x	x	x	x	x	o
IT	Pendente/ Hangender Ferner.	1996/2016/21	-11	-1500		x	x	x	x	x	o
IT	Vedretta occ. di Ries/ Westlicher Rieserferner	2009/2016/08	146	-1622		x	x	x	x	x	o
IT	Suretta meridionale ⁶	2010/2015/06	378	-909		x	x	o	x	o	x
IT	Timorion	2001/2015/15	-155	-1470		x	x	o	o	x	o
JP	Hamaguri Yukis	1967/2015/49		-329		x	o	o	o	o	o
KE	Lewis ⁶	1979/2014/22	-934			o	x	x	x	o	x
KG	Abramov	1968/2015/35	-665	-33		x	x	x	x	x	o
KG	Batysh Sook/Syek Zapadny	1971/2015/10	-435	-499		x	x	x	x	x	o
KG	Glacier No. 354 (Akshiyrak)	2011/2015/05	-675	-635		x	x	x	x	x	x
KG	Glacier No. 599 (Kjungei Ala-Too)	2015/2015/01		-62		o	x	x	x	o	o
KG	Golubin	1969/2015/31	-1999	-671		x	x	x	x	x	x
KG	Kara-Batkak	1957/2016/45	-950	-880		x	x	x	o	x	o
KG	Sary Tor (Glacier No. 356)	1985/2016/07		-820		x	x	x	o	x	o
KZ	Ts. Tuyuksuyskiy	1957/2016/60	-1088	-756	561	x	x	x	x	x	o

PU	Glacier name	1 st /last/nr years	B14	B15	B16*	BwBs	ELA-AAR	B elevation	b point	FV	TC (since 2006)
NO	Ålfotbreen	1963/2016/54	-1653	1399	-640	x	x	x	o	o	x
NO	Austdalsbreen	1988/2015/28	-1352	722		x	x	x	o	o	x
NO	Blomstølskardsbreen	2007/2015/09	-80	1990		x	x	x	o	x	o
NO	Engabreen	1970/2016/47	-971	624	-260	x	x	x	o	x	x
NO	Gråsubreen	1962/2016/55	-1168	294	-510	x	o	x	o	o	x
NO	Hansebreen	1986/2015/30	-2113	1007		x	x	x	o	o	x
NO	Hellstugubreen	1962/2016/55	-1220	487	-340	x	x	x	o	x	x
NO	Langfjordjøkelen	1989/2015/25	-780	-797		x	x	x	o	x	x
NO	Nigardsbreen	1962/2016/55	-343	1715	490	x	x	x	o	x	x
NO	Rembesdalskåka	1963/2016/54	-1294	1183	-390	x	x	x	o	x	x
NO	Rundvassbreen	2002/2015/08	-790	-20		x	x	x	o	x	o
NO	Storbreen	1949/2016/68	-1167	486	-1020	x	x	x	o	x	x
NO	Svelgjåbreen	2007/2015/09	-457	1835		x	x	x	o	x	o
NP	Mera	2008/2015/08	-200	-20		o	x	o	o	o	o
NP	Pokalde	2010/2015/06	-1230	-700		o	x	o	o	o	o
NP	Rikha Samba	1999/2015/05	-451	-525		o	x	o	o	o	x
NP	West Changri Nup	2011/2015/05	-1330	-1280		o	x	o	o	o	x
NP	Yala	2012/2015/04	-642	-903		o	x	x	o	x	x
NZ	Brewster	2005/2015/11	470	215		x	x	o	o	x	o
NZ	Rolleston	2011/2015/05	-38	657		x	x	o	x	o	o
PE	Artesonraju	2005/2015/11	-341	-372		o	x	x	o	x	o
PE	Yanamarey	1978/2015/21	-1407	-563		o	x	x	o	x	o
RU	Djankuat	1968/2016/49	-1370	-1010	-730	x	o	o	o	o	o
RU	Garabashi	1984/2014/31	-920			x	x	x	o	o	o
RU	Leviy Aktru	1977/2012/36				o	o	o	o	o	o
RU	Maliy Aktru	1962/2012/51				o	o	o	o	o	o
RU	Vodopadny (No. 125)	1977/2012/36				o	o	o	o	o	o
SE	Märmagläciären	1990/2016/26	-1370	20		x	x	x	o	x	o
SE	Rabots glaciär	1946/2015/32		-43		x	x	x	o	o	o
SE	Riukojetna	1986/2015/27		40		x	x	x	o	o	o
SE	Storgläciären	1946/2016/71	-890	640	-240	x	x	x	o	o	o
SE	Tarfalagläciären	1986/2015/20		610		x	x	x	o	o	o
SJ	Austre Brøggerbreen	1967/2015/49	10	-610		x	x	o	o	o	o
SJ	Austre Lovénbreen	2008/2014/07	10			x	x	o	o	x	o
SJ	Hansbreens	1989/2015/25	-277	-436		x	x	x	o	x	o
SJ	Irenebreen	2002/2015/14	-687	-1335		o	x	o	o	o	o
SJ	Kongsvegens	1987/2015/29	140	-160		x	x	o	o	o	o
SJ	Kronebreens	2003/2015/07	80	-60		x	x	o	o	o	o
SJ	Midtre Lovénbreen	1968/2015/48	30	-450		x	x	o	o	o	o
SJ	Waldemarbreen	1995/2015/21	-576	-1439		o	x	o	x	o	o
SJ	Werenskioldbreen	1980/2015/06	366	-705		x	x	x	o	o	o
US	Blue Glacier	1956/2015/46	-1410	-2300		x	x	o	x	o	x
US	Columbia (2057)	1984/2016/33	-500	-3480	-1180	o	x	x	o	x	o
US	Daniels	1984/2016/33	-550	-3080		o	x	o	o	o	o
US	Easton	1990/2016/27	-1300	-2780		o	x	o	o	x	o
US	Eel6	2014/2015/02	-70	-3740		x	x	o	x	o	x

PU	Glacier name	1 st /last/nr years	B14	B15	B16*	BwBs	ELA-AAR	B elevation	b point	FV	TC (since 2006)
US	Eklutna	1986/2015/11	-840	-1340		x	o	o	o	o	x
US	Eklutna East Branch	2008/2015/08	-850	-1320		x	o	o	o	o	x
US	Eklutna West Branch	2008/2015/08	-820	-1370		x	o	o	o	o	x
US	Emmons	2003/2015/11	-1330	-1260		x	x	o	x	o	o
US	Gulkana	1966/2016/51	-300	-1500	-1400	x	o	o	x	o	o
US	Ice Worm	1984/2016/33	-320	-3250		o	x	o	o	o	o
US	Lemon Creek	1953/2016/64	-1825	-2270	-1200	o	x	x	o	x	o
US	Lower Curtis	1984/2016/33	-1350	-3400		o	x	o	o	x	o
US	Lynch	1984/2016/33	-850	-2850		o	x	o	o	o	o
US	Nisqually ⁹	2003/2015/11	-650	-840		x	x	o	x	o	o
US	Noisy Creek	1993/2015/23	-180	-3550		x	x	o	x	o	o
US	North Klawatti	1993/2015/23	-210	-2300		x	x	o	x	o	o
US	Rainbow	1984/2016/33	-1940	-3450	-880	o	x	o	o	o	o
US	Sandalee	1994/2015/22	-220	-2000		x	x	o	x	o	o
US	Sholes	1990/2016/27	-1530	-3050		o	x	o	o	x	o
US	Silver	1993/2015/23	-270	-1060		x	x	o	x	o	o
US	South Cascade	1953/2015/60		-2717		x	o	o	x	x	o
US	Sperry	2005/2015/11	60	-1220		x	o	o	x	o	o
US	Taku ¹⁰	1946/2016/71	-600	-860		o	x	o	o	o	o
US	Wolverine	1966/2016/51	-1500	-700	-400	x	o	o	x	o	o
US	Yawning ⁶	1984/2016/33	-1650	-3360		o	x	o	o	o	o

1 = based on Ba-AAR regression from 1963/64 to 1979/80

2 = influenced by strong glacier disintegration and artificial snow management

3 = glacier vanished in 2009

4 = balances include estimates for dry calving

5 = glacieret (cf. Cogley et al., 2011)

6 = influenced by strong glacier disintegration

7 = In 1993, Urumqi Glacier No. 1 is divided into two parts: the East Branch and the West Branch.

8 = glacier influenced by calving

9 = calculated based on ablation and accumulation measurements on Nisqually and adjacent glaciers

10 = The mass balance of this tidewater glacier is determined by a combination of (i) snowpit, (ii) ablation stake measurements, (iii) observations of the transient snowline, and the ELA.

Climate (change)-related trend analysis is, in the ideal case, based on long-term measurement series. Continuous glaciological mass balance records for more than 30 continuous observation years are now available for a set of 41 ‘reference’ glaciers. These glaciers have well-documented and long-term mass balance programmes based on the direct glaciological method (cf. Østrem & Brugman, 1991; Cogley et al., 2011) and are not dominated by non-climatic drivers such as calving or surge dynamics. Furthermore, it is recommended that these glaciological results be validated and, if necessary, calibrated with independent results from the geodetic method (cf. Zemp et al., 2013). In collaboration with the GTN-G Advisory Board, the criteria for receiving the status of a ‘reference’ glacier have been revised in 2017 providing more details with regard to preconditions, length of time series, observational gaps, detailed information, validation and calibration. Results from this sample of glaciers in North and South America and Eurasia are summarized in Table 2.2.

Table 2.2 Summarized mass balance data. A statistical overview of the results of the ‘reference’ glacier sample is given for the three recent reporting periods 2014, 2015 and 2016* (upper table) in comparison with corresponding values averaged for the decades 1981–1990, 1991–2000 and 2001–2010 (lower table). All annual balance values in mm w.e.; * = preliminary values

	2013/14	2014/15	2015/16*
mean specific (annual) mass balance	-751	-1136	-805
standard deviation	661	1356	638
minimum value	-1940	-3480	-2284
maximum value	459	1715	561
nr of positive/reported balances	5/35	8/38	2/26
mean AAR	39 %	29 %	23 %

decadal averages of:	1981–1990	1991–2000	2001–2010
mean specific (annual) mass balance	-259	-425	-764
standard deviation	746	801	871
minimum	-1941	-2509	-2940
maximum	1861	1336	956
avg nr of positive/reported balances	13/40	10/41	7/41
mean AAR	49 %	46 %	36 %

Taking the two years of this reporting period and preliminary results for 2015/16 (from the near-time reporting) together, the mean annual mass balance was -0.90 m w.e. per year. This is 20% more negative than the mean annual mass balance for the first decade of the 21st century (2001–2010: -0.76 m w.e. per year) which has been without precedent on a global scale, at least for the time period with available observations (Zemp et al., 2015). Since the turn of the century, the maximum mass loss of the 1980–2000 time period (observed in 1997/98) has been exceeded four times: in 2002/03, 2005/06, 2010/11 and again in 2014/15. The percentage of positive annual mass balances decreased from 33% in the 1980s to below 20% (2013/14–2015/16), and there have been no more years with a positive mean balance for four decades. The melt rate and cumulative loss in glacier thickness continues to be extraordinary. Furthermore, the analysis of mean AAR values shows that the glaciers are in strong and increasing imbalance with the climate and hence will continue to lose mass even if climate remains stable (Mernild et al., 2013).

The arithmetic mean of the ‘reference’ glaciers included in the analysis is based on a small sample and influenced by the large proportion of Alpine and Scandinavian glaciers. Therefore, mean values are also calculated for (i) all mass balances available, independent of record length, and (ii) using only one single value (averaged) for each of the 19 regions (cf. GTN-G, 2017). Looking at the regional average of the ‘reference’ glaciers, the year 2014/15 resulted in the most negative reported balance with more than 1.1 m

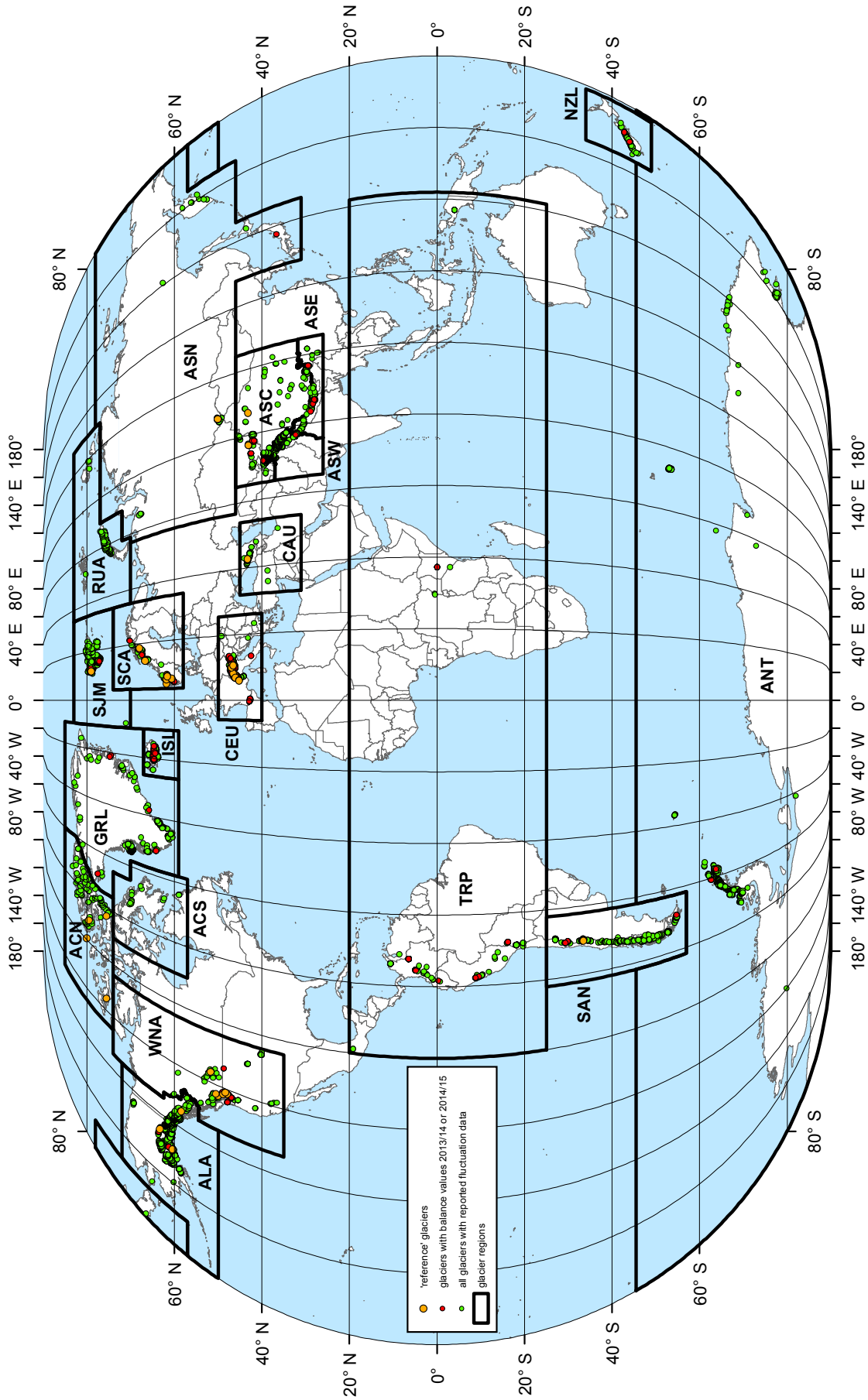


Figure 2.1 Location of the 9,500 glaciers for which fluctuation data or special events are available from the WGMS. This overview includes 166 glaciers with reported mass balance data for the observation periods 2013/14 and 2014/15, and 41 'reference' glaciers with well-documented and independently calibrated, long-term mass balance programmes based on the glaciological method. The glacier regions are based on GTN-G (2017).

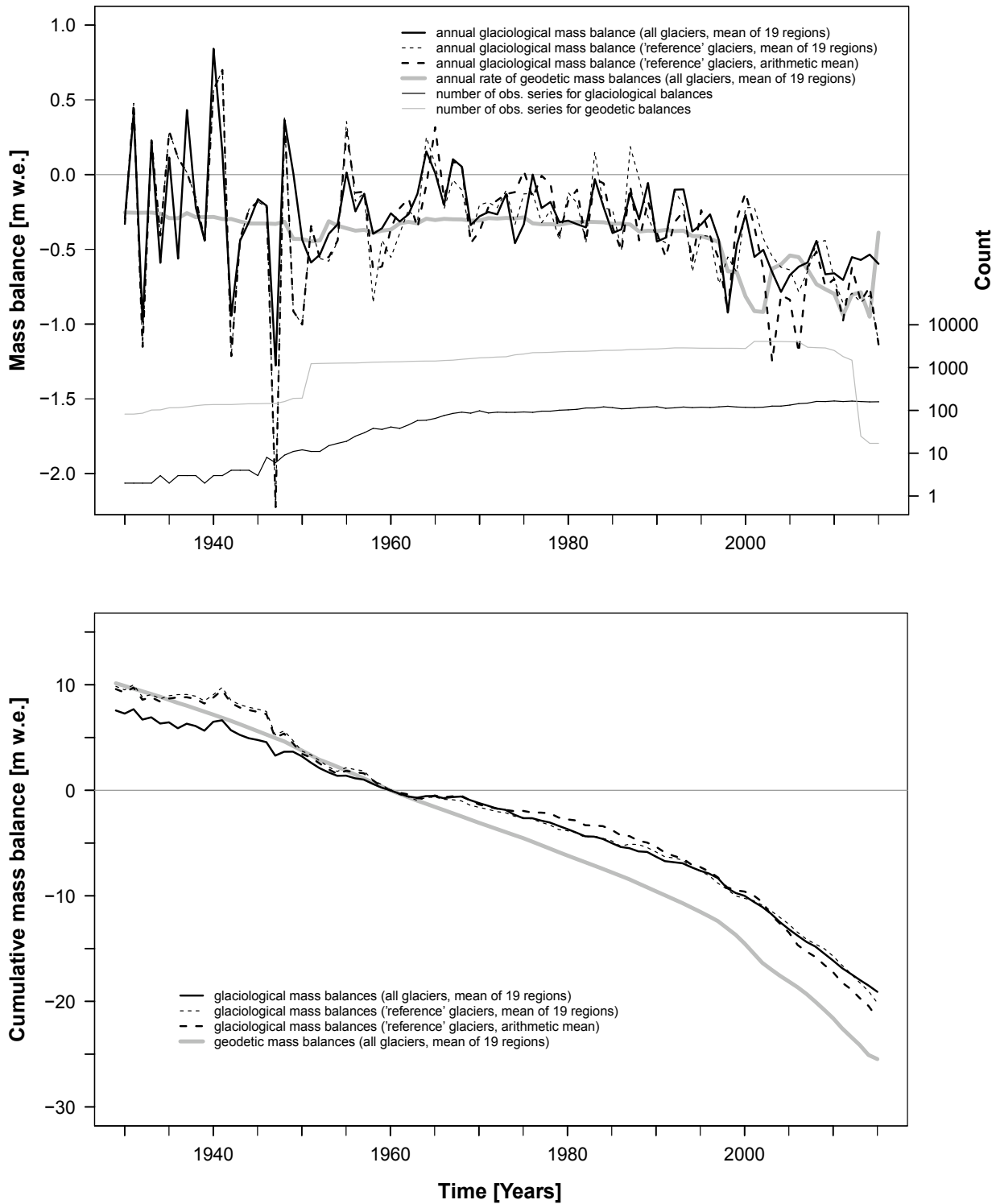


Figure 2.2 Global averages of observed mass balances from 1930 to 2015. Annual glaciological balances (m w.e.) and annual rates of geodetic balances (m w.e. a⁻¹) are shown together with the corresponding number of observed glaciers (upper graph). Cumulative annual averages relative to 1960 (lower graph). Geodetic balances were calculated assuming a glacier-wide average density of 850 kg m⁻³. Note that the strong variability in the glaciological data before 1960 and in the geodetic data after 2012 is due to the small sample size.

w.e. of annual average ice loss, and this in spite of several regions reporting positive balances. Note that extreme balance values before the 1960s are strongly influenced by the very small sample size. Looking at the arithmetic mean, 2014/15 is one of the most negative balance years together with 2002/03 and 2005/06,

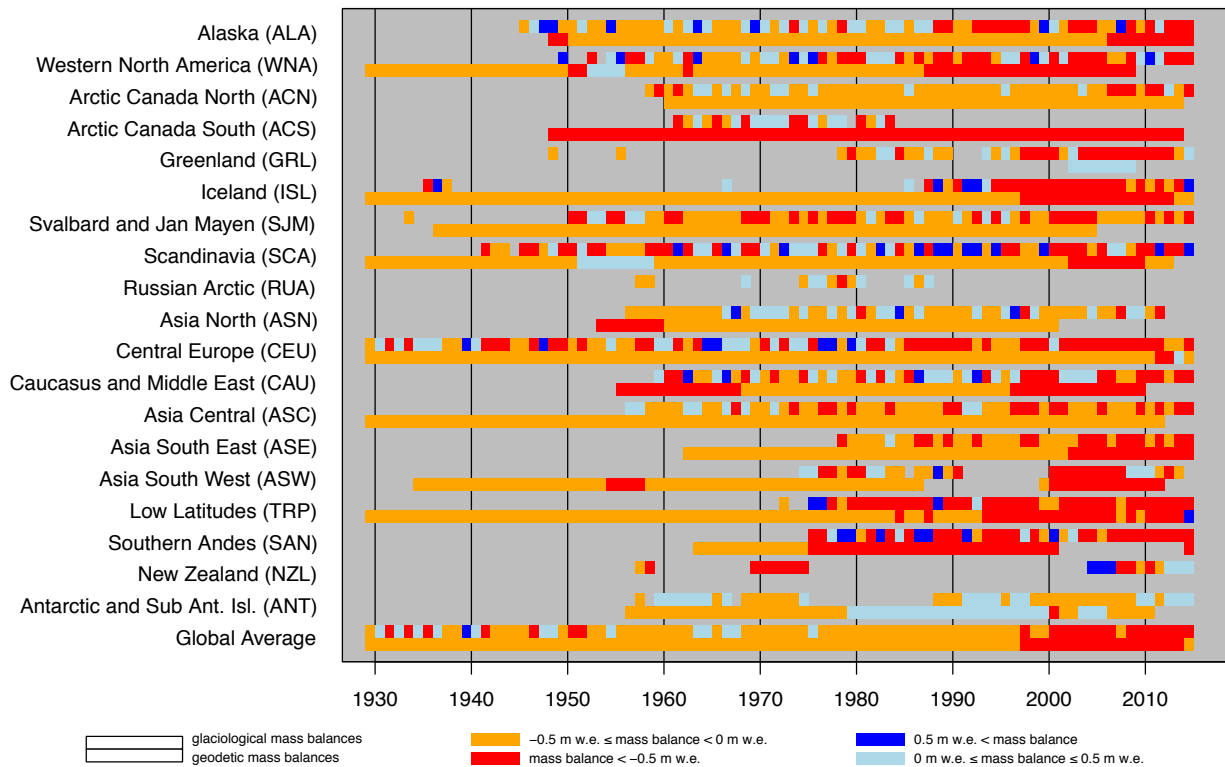


Figure 2.3 Regional mass balances 1930–2015. Annual glaciological balances (m w.e.) and annual rates of geodetic balances (m w.e. a⁻¹) are shown for 19 glacier regions and for the global average. Geodetic balances were calculated assuming a glacier-wide average density of 850 kg m⁻³.

which were influenced by very negative balances reported from the large sample of European glaciers. Figure 2.2 shows the number of reported observation series as well as annual and cumulative results for all three means. In their general trend and magnitude, all three averages relate quite closely to each other and are in good agreement with the results from a moving-sample averaging of all available data (cf. Kaser et al., 2006; Zemp et al., 2009; Zemp et al., 2015). The global average cumulative mass balance indicates a strong mass loss in the first decade after the start of measurements in 1946 (though based on few observation series only), slowing down in the second decade (1956–1965; based on observations above 30° N only), followed by a moderate ice loss between 1966 and 1985 (with data from the Southern Hemisphere only since 1976) and a subsequent acceleration of mass loss until the present (2015).

The geodetic method (cf. Cogley et al., 2011) provides overall glacier volume changes over a longer time period by repeat mapping from ground, air- or spaceborne surveys and subsequent differencing of glacier surface elevations. The geodetic results allow the glaciological sample to be extended in both space and time (Figures 2.2, 2.3). The difference in survey periods between the glaciological and the geodetic data becomes manifest in the variability of the two graphs: a smooth line with step changes towards more negative balances for the geodetic sample, and a strong variability with a negative trend for the glaciological observations. Overall, the results from both methods match with regard to the increased ice loss towards the early 21st century.

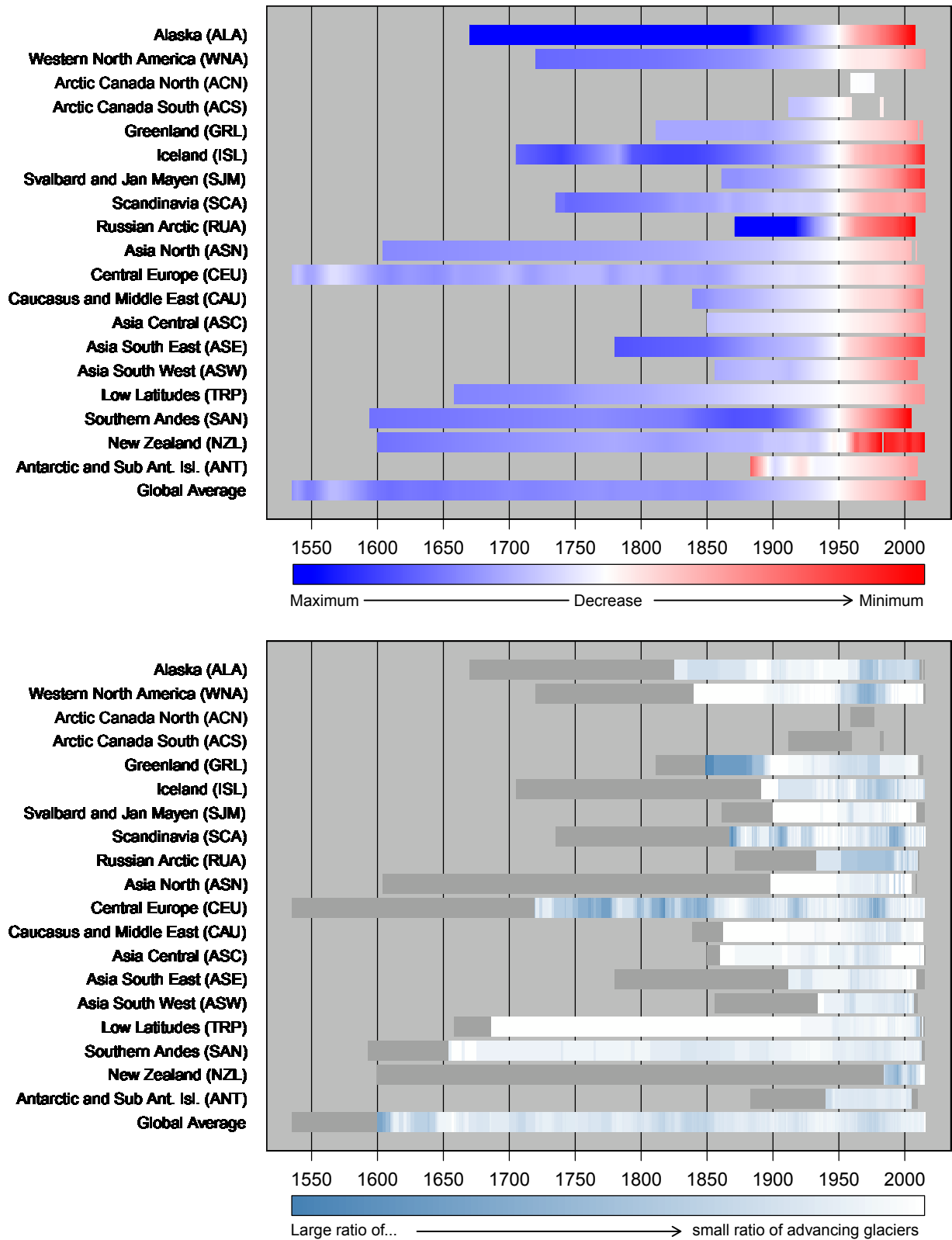


Figure 2.4 Global front variation observations from 1535 to 2015. (a) Qualitative summary of cumulative mean annual front variations. The colours range from dark blue for maximum extents (+2.5 km) to dark red for minimum extents (-1.6 km) relative to the extent in 1950 as a common reference (i.e. 0 km in white). (b) Qualitative summary of the ratio of advancing glaciers. The colours range from white for years with no reported advances to dark blue for years with a large ratio of advancing glaciers. Periods with very small data samples ($n < 6$) are masked in dark grey. The figure is based on all available front variation observations and reconstructions, excluding absolute annual front variations larger than 210 m a^{-1} in order to reduce the effects of calving and surging glaciers.

Table 2.3 Database statistics and increase from current observation periods.

Dataset	Number of glaciers	Number of observations	Increments since WGMS (2015)
Front variations (from observations)	2499	44692	+48/+1137
Front variations (from reconstructions)	38	1855	+2/+37
Mass balance (glacier-wide)	450	6562	+37/+1019
Mass balance (point information)	125	37463	+58/+20086
Volume/thickness change (geodetic method)	4281	5325	+3820/+4175
Special events	2457	3045	+2143/+2496
Glacier maps	85	140	+10/+23

Direct observations of glacier front positions extend back into the 19th century. This data sample has been extended in space based on remotely sensed length change observations and continued back in time by reconstructed front variations. Overall, the database contains more than 46,500 observations which allow the front variations of about 2,500 glaciers to be illustrated and quantified back into the 19th century. Additional reconstruction series from 38 glaciers extend as far back as the Little Ice Age (LIA) period, i.e., to the 16th century. The global compilation of front variation data, as qualitatively summarized in Figure 2.4, shows that glacier retreat has been dominant for the past two centuries, with LIA maximum extents reached (in some regions several times) between the mid-16th and the late 19th centuries. The qualitative summary of cumulative mean annual front variations (Fig. 2.4) reveals a distinct trend toward global centennial glacier retreat, with the early 21st century marking the historical minimum extent in all regions (except New Zealand (NZL) and Antarctic and Sub Antarctic Islands (ANT), where few observations are available) at least for the time period of documented front variations. Intermittent periods of glacier re-advance, such as those in the European Alps around the 1920s and 1970s or in Scandinavia in the 1990s, are hardly visible in Figure 2.4a because they do not even come close to achieving LIA maximum extents. Figure 2.4b provides a better overview of these re-advance periods by highlighting the years with a larger ratio of advancing glaciers. A qualitative overview of regional changes from both the glaciological and the geodetic method is given in Figure 2.3 and discussed in more detail in Section 3 on regional summaries.

A global and regional overview of the observational datasets is given in Figures 2.3–2.7. Overall, the Fluctuations of Glaciers database contains around 99,000 observations from 9,500 glaciers. This includes 46,550 front variations from 2,500 glaciers. From glaciological measurements, 6,560 annual balances are available from 450 glaciers. Geodetic results have been compiled for 5,330 (multi-year) periods from 4,280 glaciers. A look at all the data samples reveals that the glaciological sample has been increasing whereas the geodetic and the two front variation samples have been decreasing over the past 25 years. The increase found in the glaciological sample reflects the successful efforts of the observers to continue and extend their monitoring programmes as well as of the WGMS to compile these results through its collaboration network. The decline in the geodetic sample has to do with the normal post-processing character of geodetic surveys. Another reason is the stronger reluctance found here to share data; it appears that the cost to the relevant research community in terms of the extra effort required to submit data (beyond a journal publication of the main results) is considerable compared with the benefit gained from increased visibility through data sharing. Within the framework of ESA's Climate Change Initiative and Europe's Copernicus Climate Change Service, the WGMS has tackled this issue and compiled geodetic results from an extensive literature research and by integrating original data – published and made available from research groups – with its own resources. These efforts resulted in a strong data increase mainly manifested in the European Alps and in Alaska. In the case of the observational front variation sample, the decrease is reported to be caused mainly by the abandonment of in situ programmes without remote-sensing compensation.

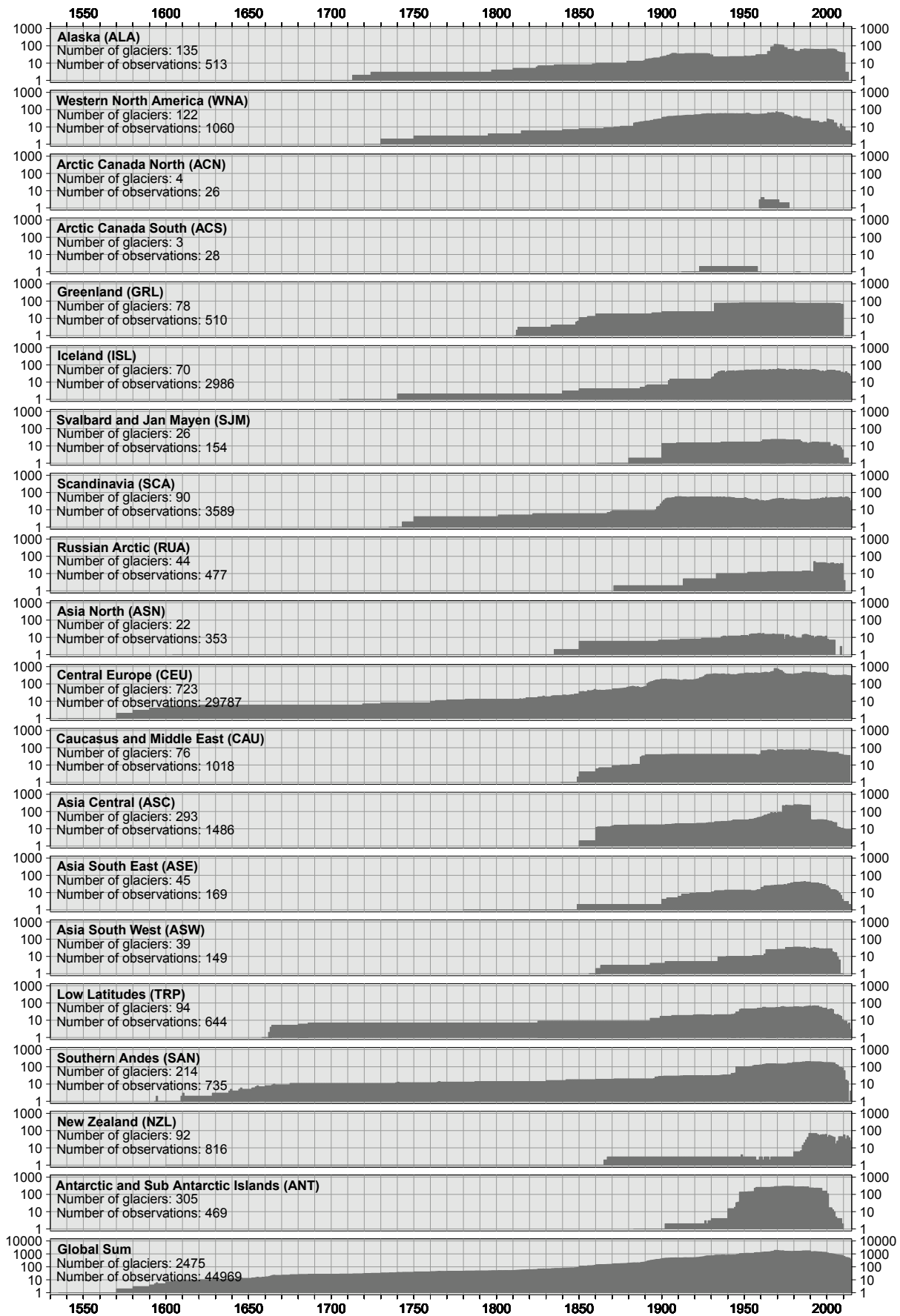


Figure 2.5 Number of regional and global glacier fluctuation records over time: front variation data 1550–2015.

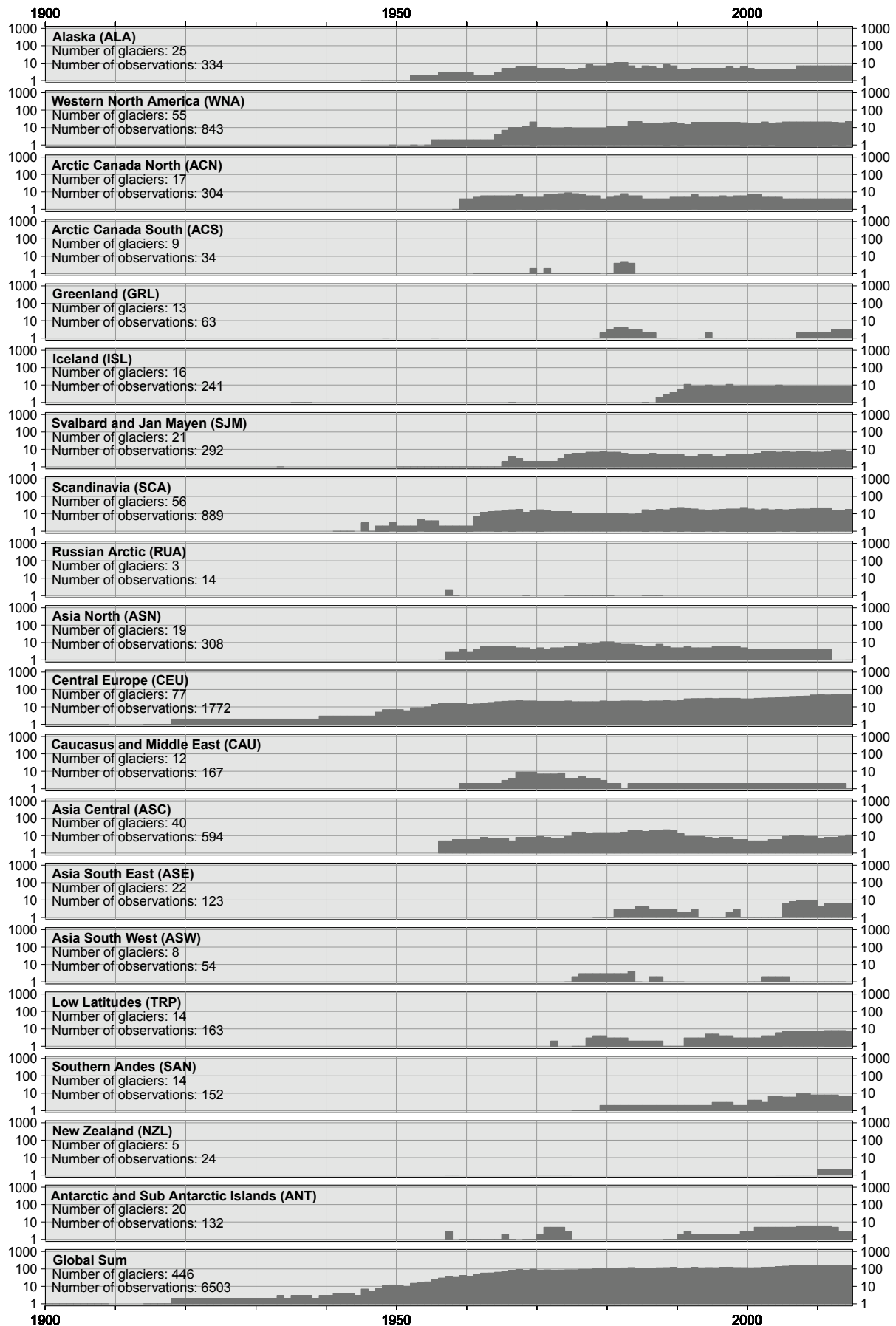


Figure 2.6 Number of regional and global glacier fluctuation records over time: glaciological mass balance data 1900–2015.

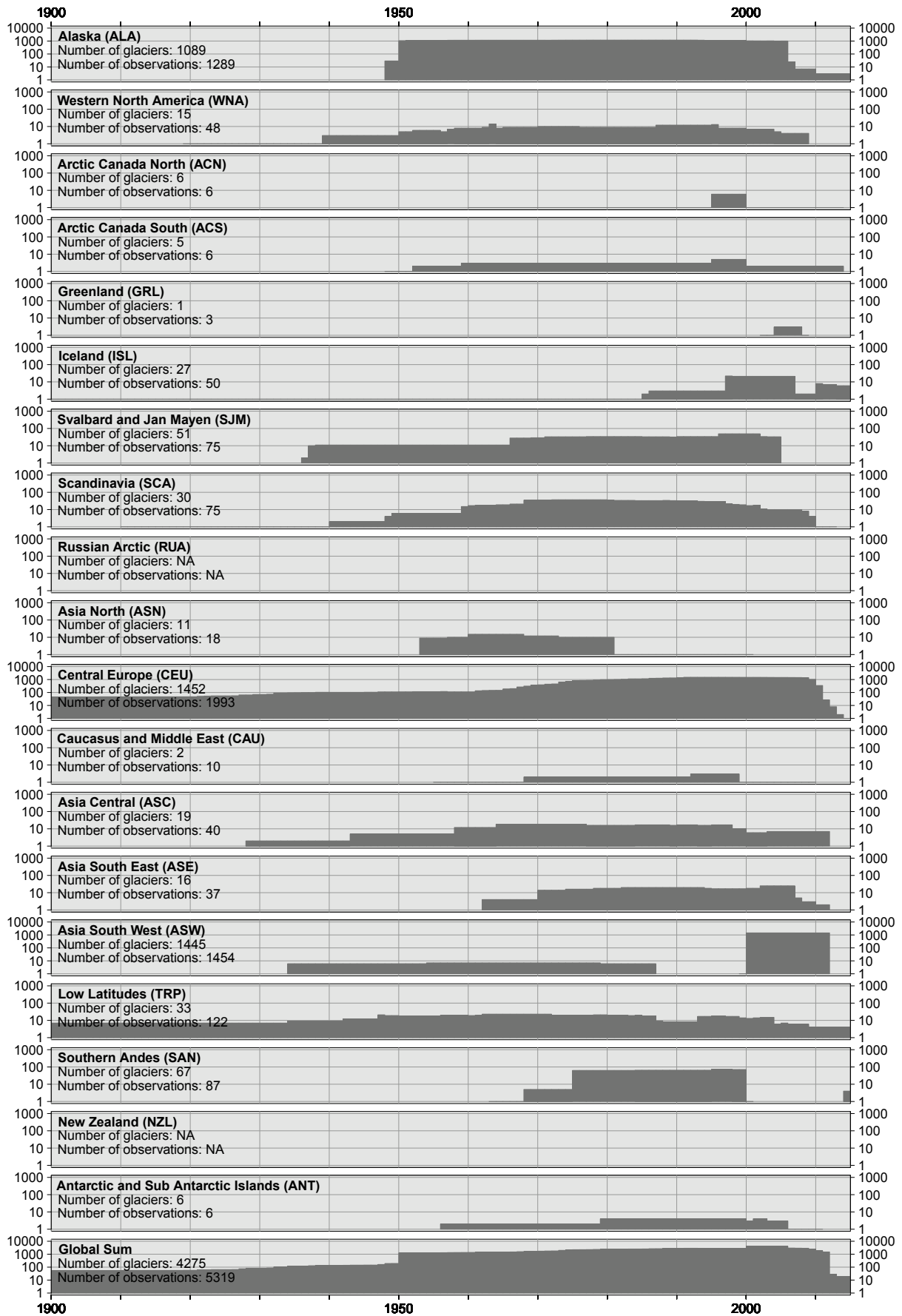


Figure 2.7 Number of regional and global glacier fluctuation records over time: geodetic mass balance data 1900–2015.

3 REGIONAL INFORMATION

Fluctuations of glaciers (not influenced by surge or calving dynamics) are recognized as high-confidence climate indicators and as an important element in early detection strategies within the international climate monitoring programmes (GCOS, 2010; GTOS, 2009). Their fluctuations can be analyzed on global and regional scales, but also on the local scale, where topographic effects may lead to different reactions of two adjacent glaciers. The glacier sensitivity to climatic change is strongly related to the climate regime in which the ice resides. The mass balance of temperate glaciers in the mid-latitudes is mainly dependent on winter precipitation, summer temperature and summer snowfalls (temporally reducing the melt due to the increased albedo; Kuhn et al., 1999). In contrast, the glaciers in low latitudes, where ablation occurs throughout the year and multiple accumulation seasons exist, are strongly influenced by variations in the atmospheric moisture content which affects incoming solar radiation, precipitation and albedo, atmospheric long-wave emission, and sublimation (Wagnon et al., 2001; Kaser & Osmaston, 2002). In the Himalaya, which is influenced by the monsoon, most of the accumulation and ablation occurs during the summer (Ageta & Fujita, 1996; Fujita & Ageta, 2000). Glaciers at high altitudes and in polar regions can experience accumulation in any season (Chinn, 1985). The challenges of fieldwork in these different regions and climate regimes are summarized and contrasted by Stumm et al. (2017).

For regional analysis and comparison of glacier fluctuation data, it is convenient to group glaciers by proximity. We refer to the glacier regions as jointly defined by the GTN-G Advisory Board, GLIMS, the Randolph Glacier Inventory Working Group of IACS, and the WGMS (GTN-G, 2017). For global studies of mass balance, these glacier regions seem to be appropriate because of their manageable number and their geographical extent, which is close to the spatial correlation distance of glacier mass balance variability in most regions (several hundred kilometres; cf. Letreguilly & Reynaud, 1990; Cogley & Adams, 1998). For every region, all data records are aggregated at the annual time resolution to give consideration to the corresponding observational peculiarities, i.e., for multiannual survey periods, the annual change rate is calculated and assigned to each year of the survey period. For quantitative comparisons over time and between regions, decadal arithmetic mean mass balances are calculated to reduce the influence of meteorological extremes and of density conversion issues (cf. Huss, 2013). Global values are calculated as arithmetic means of the regional averages to avoid a bias in favour of regions with large observation densities (e.g. in Central Europe, Scandinavia, or Svalbard). This approach is suitable for assessing the temporal variability of glacier mass balance (Zemp et al., 2015).

This chapter provides regional overviews including a figure showing regional averages of glaciological and geodetic mass balances. They are cited together with the corresponding number of observations, key statistics on regional glacier distribution and available fluctuation series, as well as graphs of cumulative front variation and mass balance from selected glaciers with long-term observation series. The regions are named approximately from West to East and from North to South. Regional estimates of total glacier area, rounded out to the next 500 km² mark, are from the RGI Consortium (2017).

3.1 ALASKA

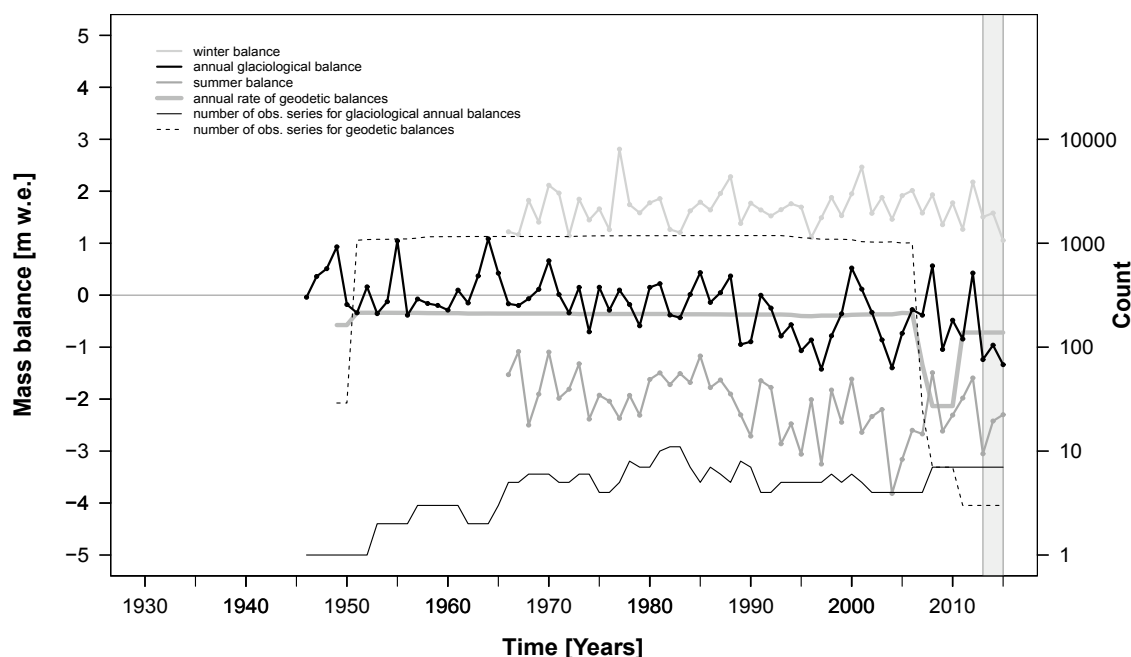


Figure 3.1.1 Regional mass balances: Annual glaciological balances (m w.e.) and annual rates of geodetic balances (m w.e. a⁻¹) are shown together with the corresponding number of observations. Geodetic balances were calculated assuming a glacier-wide average density of 850 kg m⁻³.

The glaciers and icefields of Alaska are located in the Brooks Range, the Alaska Range, where Mount McKinley/Denali (the highest peak of the continent) is located, and in the Coast Mountains along the Gulf of Alaska coastline. Together these glaciers cover an area of about 86,500 km². Climate conditions in this region range from very maritime conditions in the Coast Mountains to continental conditions in the Alaska Range. In Alaska, the major part of the front variation series was discontinued at the end of the 20th century. Long-term mass balance measurements have been reported from Gulkana and Wolverine in the Alaska Range as well as from the Juneau Icefield's Taku and Lemon Creek glaciers located in southeast Alaska.

In Alaska, glaciers reached their Little Ice Age (LIA) maxima at various times; for the northeast Brooks Range it was the late 15th century, and for the Kenai Mountains, the mid-17th century (Grove, 2004). However, most of the glaciers attained the LIA maximum extent between the early 18th and late 19th centuries (Molnia, 2007). Reported front variation observations show a general glacier retreat from the LIA extents. Exceptions to this general trend are large tidewater glaciers with impressive frontal retreat (e.g. Columbia No 627) and advance (e.g. Taku) cycles, mainly driven by calving dynamics. The former tidewater glacier Muir, located in the Saint Elias Mountains, became a land-terminating glacier

after its last retreat phase. Observed mass balance glaciers lost about half a metre w.e. per year during the 1990s and 2000s, with four years of positive mean balances in 1999/00, 2000/01, 2007/08, and 2011/12. Seasonal balance observations show the large mass turnover of the maritime glaciers. In 2013/14 the reported balance was negative with -962 mm w.e. a⁻¹ followed by a very negative balance of -1337 mm w.e. a⁻¹ in 2014/15. The glaciological measurements are supported by results from geodetic surveys from about 1,200 glaciers between the 1950s and the 2000s. Regional glacier change assessments were recently published by Larsen et al. (2015), Le Bris & Paul (2015), McNabb & Hock (2014), and Pelto et al. (2013).

Estimated total glacier area (km ²):	86,500
Front variations	
- # of series*:	136/1
- # of obs. from stat. or adv. glaciers*:	212/0
- # of obs. from retreating glaciers*:	381/1
Glaciological balances	
- # of series*:	26/7
- # of observations*:	340/14
Geodetic balances	
- # of series ^o :	1,089/1,007
- # of observations ^o :	1,289/1,018

* (total/2014 & 2015), ^o (total/>2005)

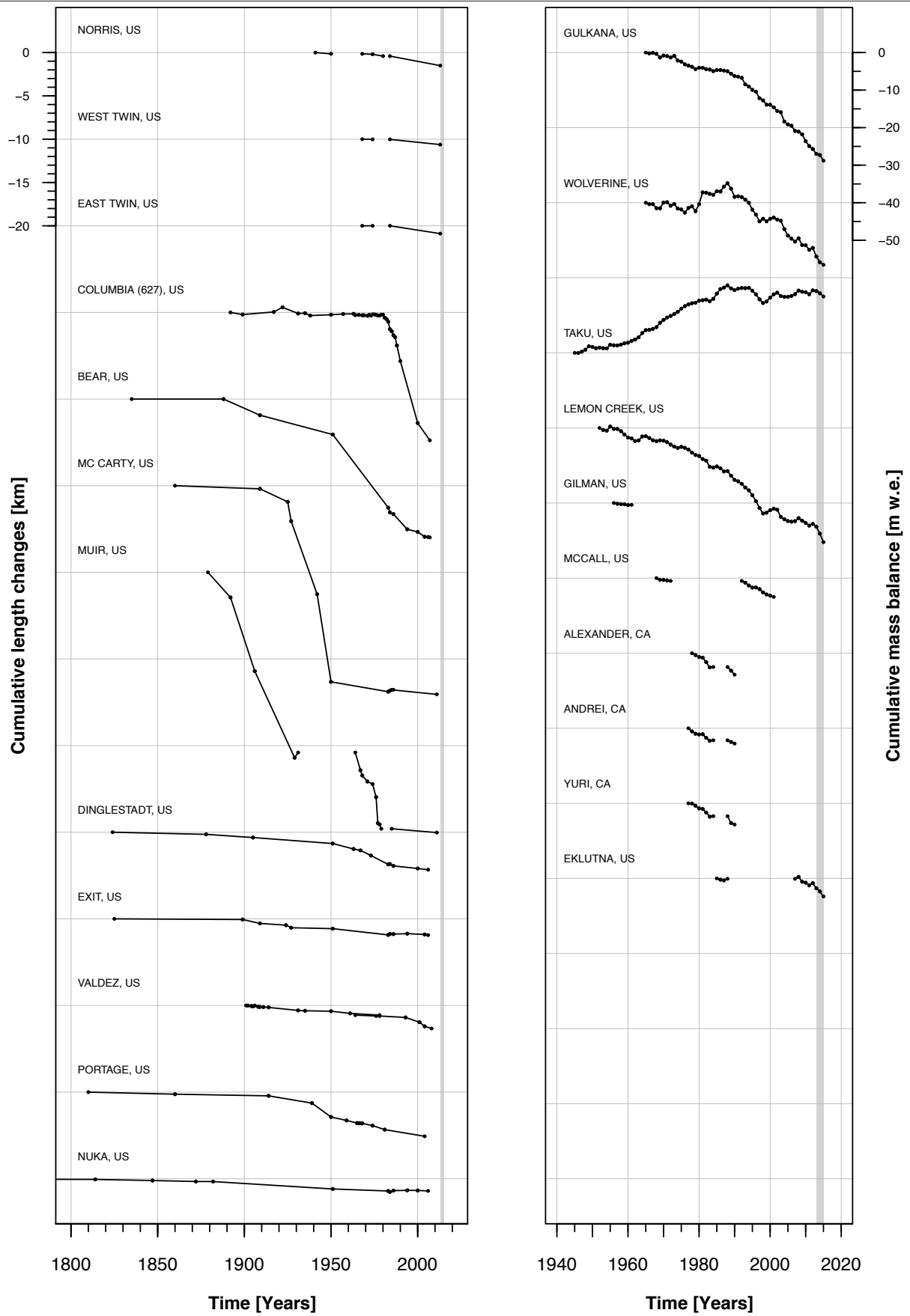


Figure 3.1.2 Cumulative length changes (left) and cumulative mass balances (right) of selected glaciers in Alaska over the entire observation period.

3.2 WESTERN NORTH AMERICA

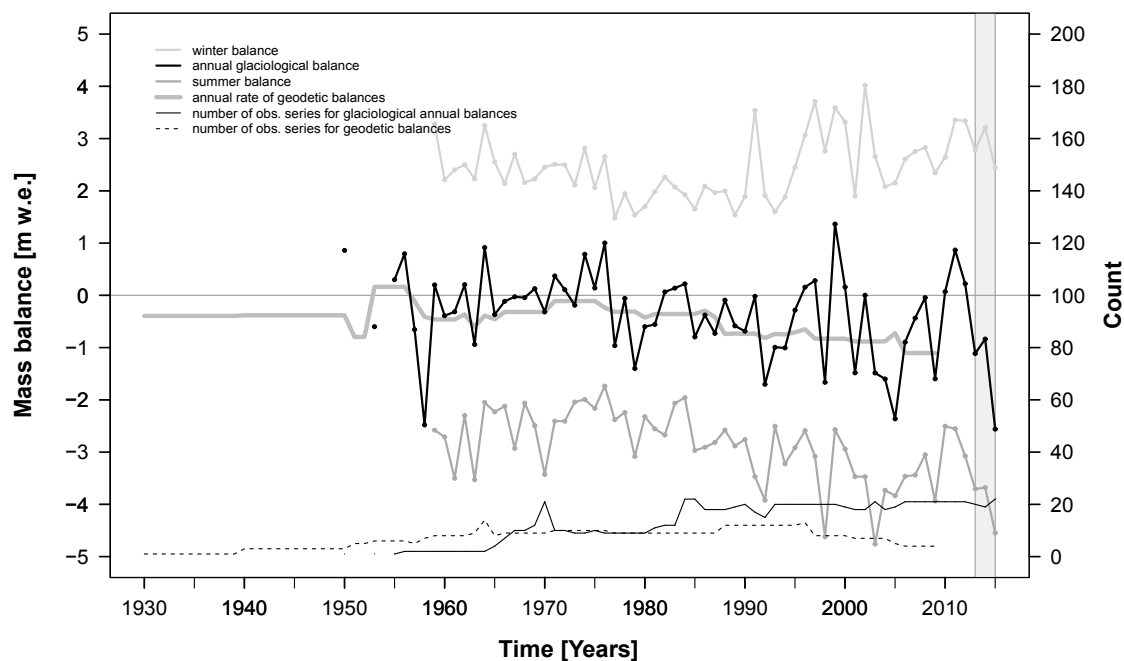


Figure 3.2.1 Regional mass balances: Annual glaciological balances (m w.e.) and annual rates of geodetic balances (m w.e. a⁻¹) are shown together with the corresponding number of observations. Geodetic balances were calculated assuming a glacier-wide average density of 850 kg m⁻³.

The glaciers in Western North America are located in the Pacific Coast Mountains, the Rocky Mountains, the Cascade Range, and in the Sierra Nevada. Together, the glacier area covers a total of approx. 14,500 km². In general, the climate of the mountain ranges shows strong variations depending on latitude, altitude and proximity to the sea. Therefore, glaciers in the south are much smaller and occur at higher elevations than in the higher latitudes, where some glaciers extend down to the coast.

From western North America more than 50 mass balance and more than 120 front variation series are available but only half of them have been continued into the 21st century. South Cascade Glacier in the Cascade Range has the longest mass balance record followed by Place and Helm glaciers in the Coast Mountains and Peyto Glacier in the Rocky Mountains. In conterminous USA and Canada, glaciers reached their LIA maximum extent in the mid to late 19th century (Kaufmann et al., 2004). Reported front variations show a general glacier retreat from the LIA extents with intermittent periods of glacier readvances in the early 20th century and from the 1970s to 1980s. Since the 1990s glacier retreat has been continued.

Mean annual balance rates of the observed glaciers were between 400 and 450 mm w.e. a⁻¹ in the 1980s

and 1990s, and almost -1000 mm w.e. a⁻¹ in the 2000s. Seasonal balance observations show the large mass turnover of the maritime glaciers. Similar to Alaska, the reported mean annual balance of 2013/14 was negative with -837 mm w.e. followed by a very negative mean annual balance of -2,560 mm w.e. in 2014/15. The glaciological observations are well supported by results from the few geodetic surveys.

Regional glacier change assessments were recently published by Pelto & Brown (2012), Shea et al. (2013), Tennant & Menounos (2013), and Tennant et al. (2012).

Estimated total glacier area (km ²):	14,500
Front variations	
- # of series*:	122/6
- # of obs. from stat. or adv. glaciers*:	284/0
- # of obs. from retreating glaciers*:	784/9
Glaciological balances	
- # of series*:	55/22
- # of observations*:	853/41
Geodetic balances	
- # of series ^o :	15/4
- # of observations ^o :	48/4

* (total/2014 & 2015), ^o (total/>2005)

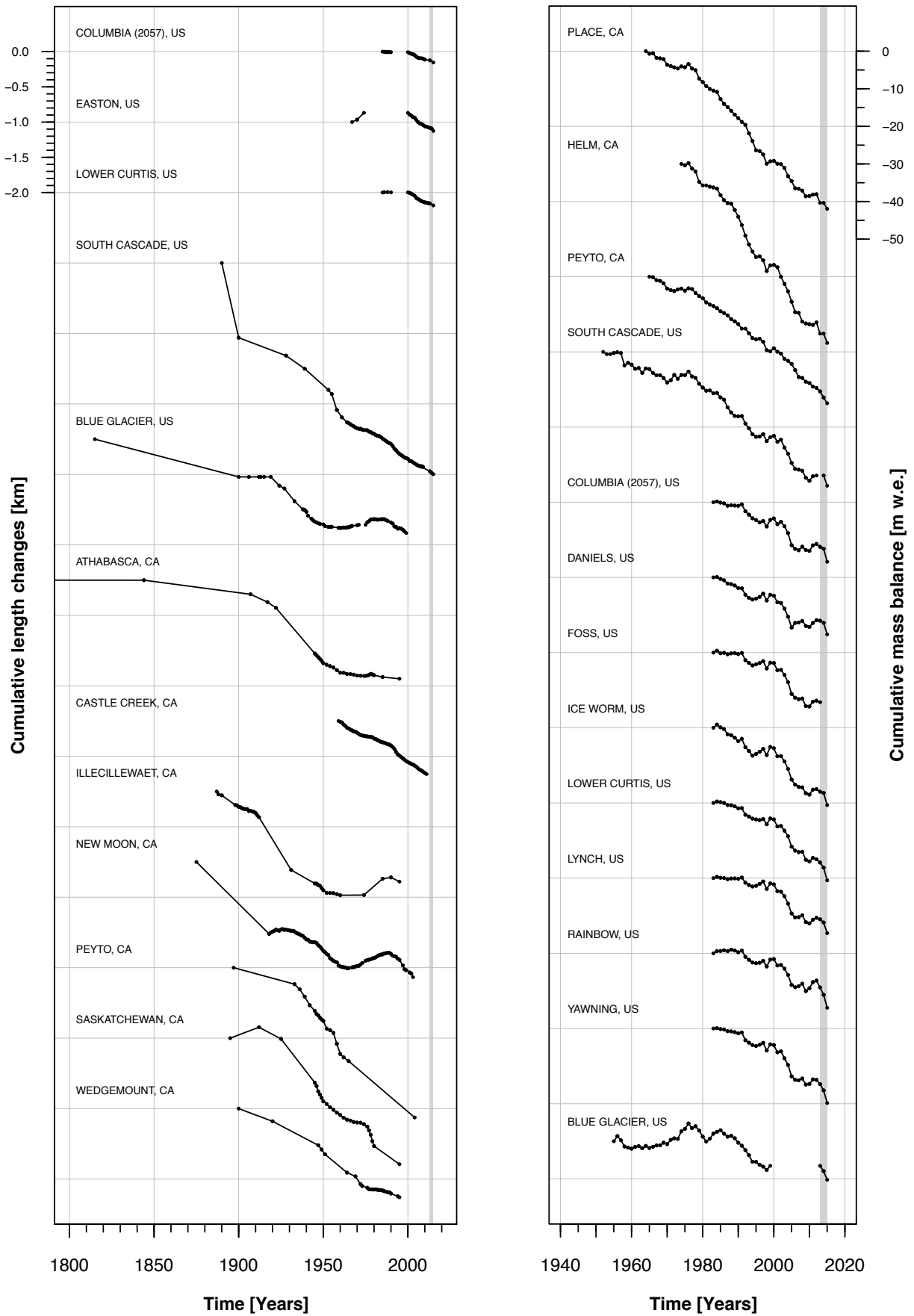


Figure 3.2.2 Cumulative length changes (left) and cumulative mass balances (right) of selected glaciers in Western North America over the entire observation period.

WESTERN NORTH AMERICA

3.3 ARCTIC CANADA NORTH & SOUTH

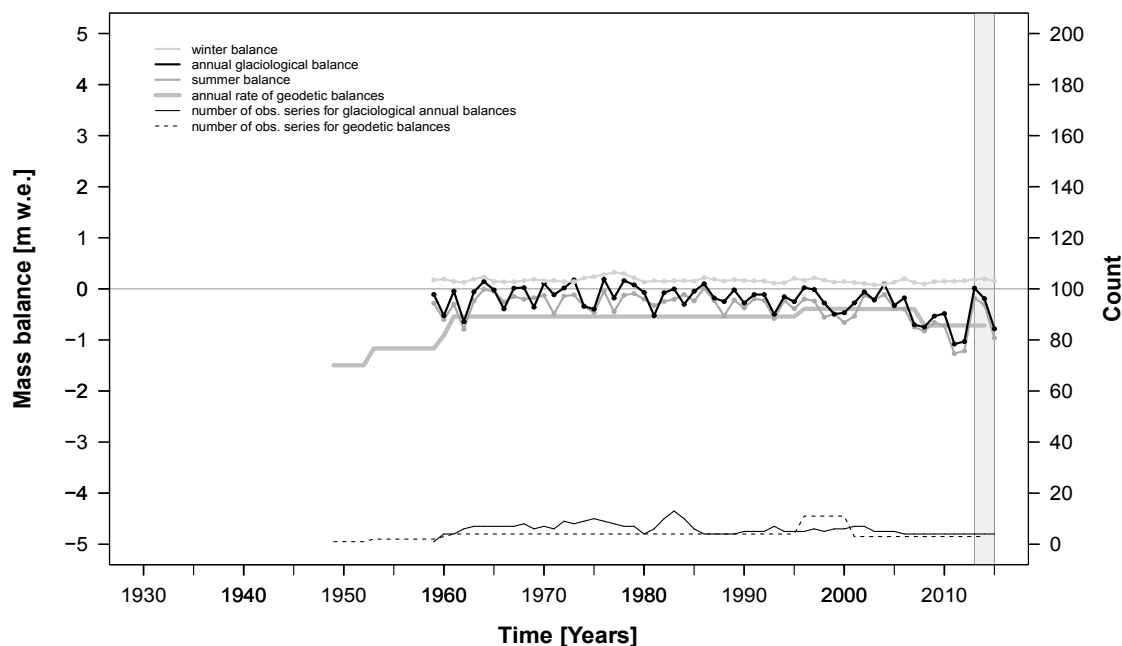


Figure 3.3.1 Regional mass balances: Annual glaciological balances (m w.e.) and annual rates of geodetic balances (m w.e. a⁻¹) are shown together with the corresponding number of observations. Geodetic balances were calculated assuming a glacier-wide average density of 850 kg m⁻³.

The Canadian Arctic Archipelago is a group of more than 36,000 islands and hosts a total of about 146,000 km² of glaciers, icefields and ice caps. The largest islands with glaciers are Baffin, Ellesmere, Devon, Axel Heiberg, and Melville. The glaciers in this high-latitude region are much influenced by the extent and distribution of sea ice which in turn depends on ocean currents and on the Arctic and North Atlantic Oscillations.

Information on glacier changes mainly stems from a few dozen mass balance series. The longest continuous measurements are reported from Meighen, Devon and Melville Ice Caps and from White Glacier. The long-term glaciological measurement series of White Glacier has recently been homogenized and validated with geodetic surveys by Thomson et al. (2017).

The timing of the LIA maximum extent of glaciers in the Canadian Arctic Archipelago is estimated to the end of the 19th century (Grove, 2004). The subsequent glacier retreat is clearly visible in remotely sensed images thanks to glacier moraines and trimlines. However, detailed front variation observations are not available for this region.

The few reported mass balance measurements indicate slightly negative balances of less than 100 mm w.e. a⁻¹ between the 1960s and the 1980s and

an increased mass loss between -200 and -300 mm w.e. a⁻¹ in the 1990s and 2000s. Seasonal balances show the small mass turnover of the Arctic ice caps. In Arctic Canada North, the reported mean annual balance of 2013/14 and 2014/15 were both negative with -191 mm w.e. and -782 mm w.e., respectively.

The few available results from geodetic surveys are also indicating negative balances over the second half of the 20th century but relate to a different glacier sample.

Estimated total glacier area (km ²):	146,000
Front variations	
- # of series*:	7/0
- # of obs. from stat. or adv. glaciers*:	17/0
- # of obs. from retreating glaciers*:	37/0
Glaciological balances	
- # of series*:	26/4
- # of observations*:	339/8
Geodetic balances	
- # of series ^o :	11/3
- # of observations ^o :	12/4
* (total/2014 & 2015), ^o (total/>2005)	

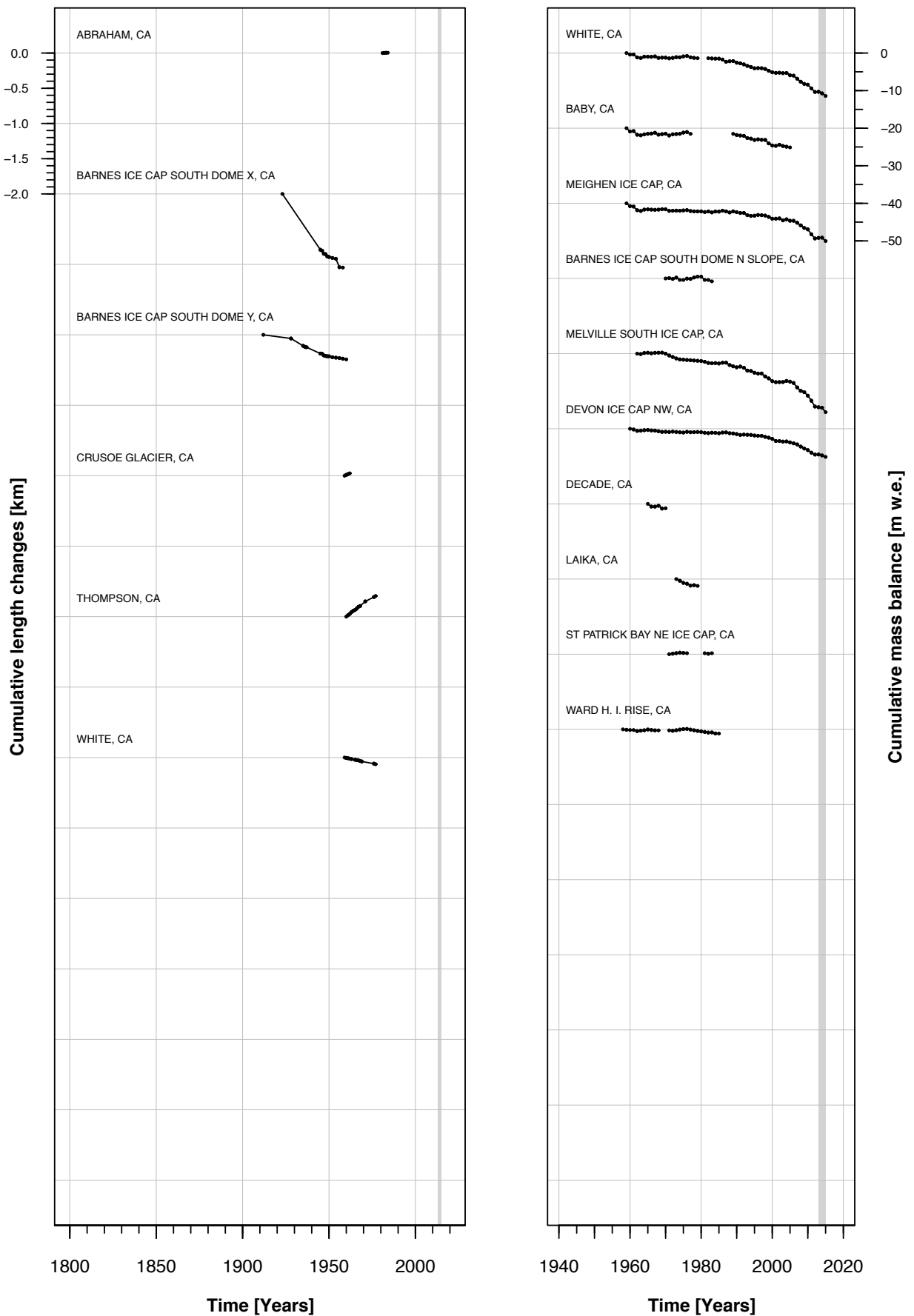


Figure 3.3.2 Cumulative length changes (left) and cumulative mass balances (right) of selected glaciers in Arctic Canada over the entire observation period.

3.4 GREENLAND

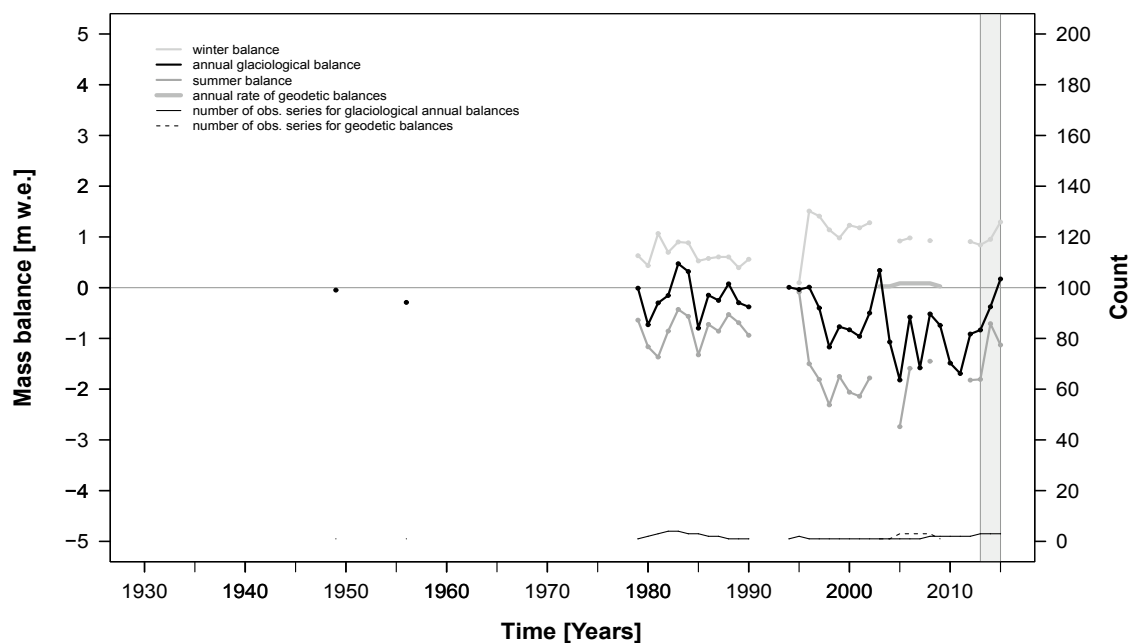


Figure 3.4.1 Regional mass balances: Annual glaciological balances (m w.e.) and annual rates of geodetic balances (m w.e. a⁻¹) are shown together with the corresponding number of observations. Geodetic balances were calculated assuming a glacier-wide average density of 850 kg m⁻³.

The world’s largest non-continental island is covered to about 80% by the Greenland Ice Sheet. In addition, about 20,300 local glaciers cover an area between 90,000 km² and 130,000 km², depending on the counting of different connectivity levels between local glaciers and the ice sheet (Rastner et al., 2012). These glaciers range from sea level to 3,694 m a.s.l. at Gunnbjørn Fjeld – Greenland’s highest mountain located in the Watkins Range on the east coast.

There exists a large variety of glacier types, from icefields and ice caps with numerous outlet glaciers, to valley, mountain and cirque glaciers. The island acts as a centre of cooling resulting in a polar to subpolar climate regime. Due to the large north-south extent, different thermal regimes can be expected for the glaciers, ranging from mostly cold in the north to polythermal in the central part to temperate in the south. About 80 front variation series are available from the southern part. Mass balance measurements are available from about 25 sites, but most series are discontinued after a couple of years. Recent measurements are reported from Mittivakkat Glacier in the Ammassalik Region and Freya Glacier on Clavering Island, both located on the east coast. The few investigations from Greenland indicate that many glaciers and ice caps (e.g. on Disko Island) reached their maximum extents before the 19th century. The subsequent glacier retreat is documented at about decadal intervals for approx. 80 glaciers in the

southern part of Greenland. However, observations made after 2010 have been reported only from Mittivakkat Glacier.

Mass balance measurements from Mittivakat and Freya glaciers indicate that the ice loss increased from -630 mm w.e. a⁻¹ in the 1990s to -890 mm w.e. a⁻¹ in the 2000s. In 2013/14 Mittivakkat showed again a negative balance (-1,200 mm w.e.), while Freya glacier showed a positive mass balance (394 mm w.e.). In 2014/15 both glaciers had positive balances, averaging 171 mm w.e. Regional glacier change assessments were recently published by Bjørk et al. (2012), Bolch et al. (2013), and Machguth et al. (2016). Changes since the LIA maximum extents are presented by Citterio et al. (2009) for selected glaciers in central western Greenland.

Estimated total glacier area (km ²):	89,500
Front variations	
- # of series*:	78/1
- # of obs. from stat. or adv. glaciers*:	116/0
- # of obs. from retreating glaciers*:	385/1
Glaciological balances	
- # of series*:	13/3
- # of observations*:	64/6
Geodetic balances	
- # of series ^o :	1/1
- # of observations ^o :	3/3

* (total/2014 & 2015), ^o (total/>2005)

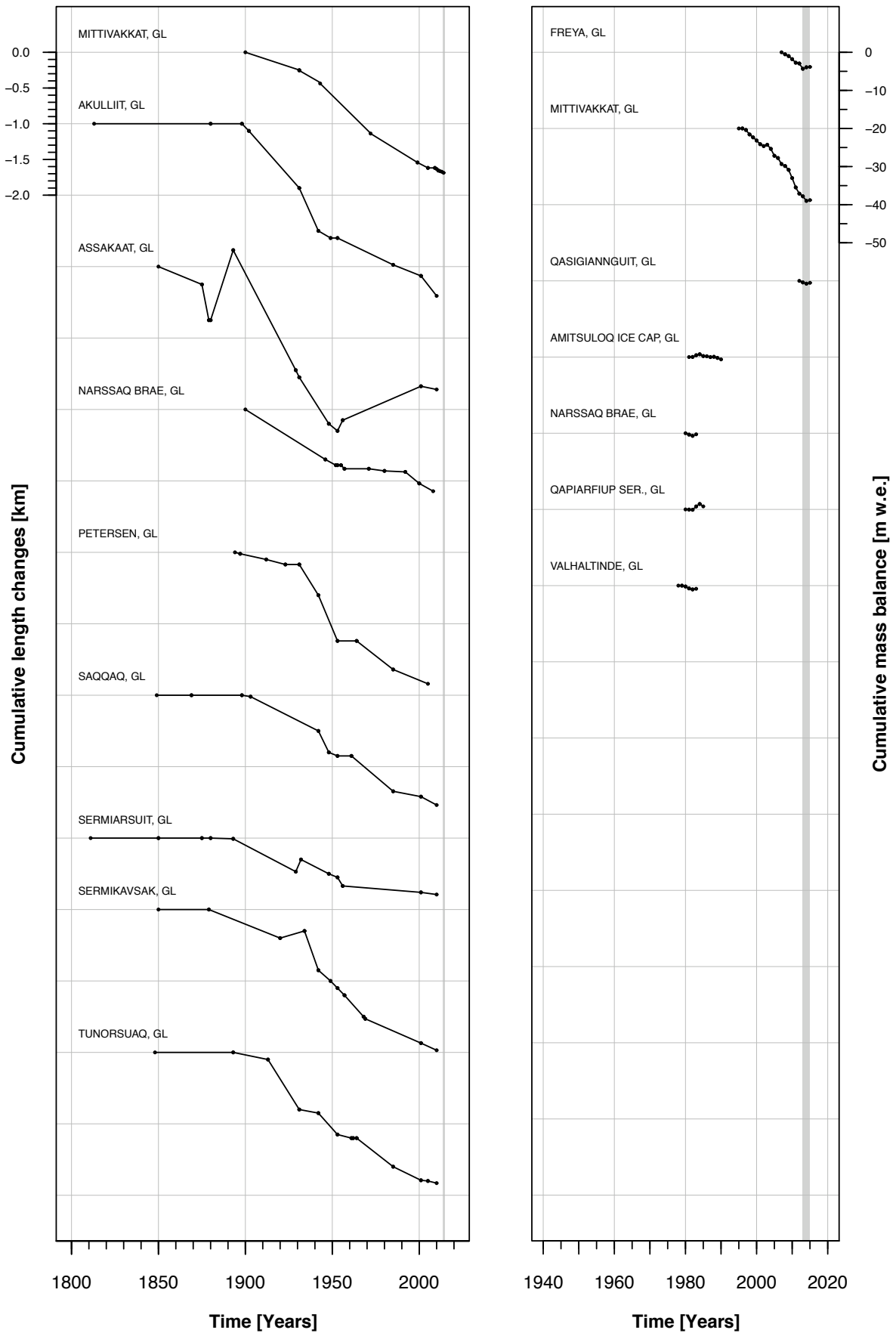


Figure 3.4.2 Cumulative length changes (left) and cumulative mass balances (right) of selected glaciers in Greenland over the entire observation period.

3.5 ICELAND

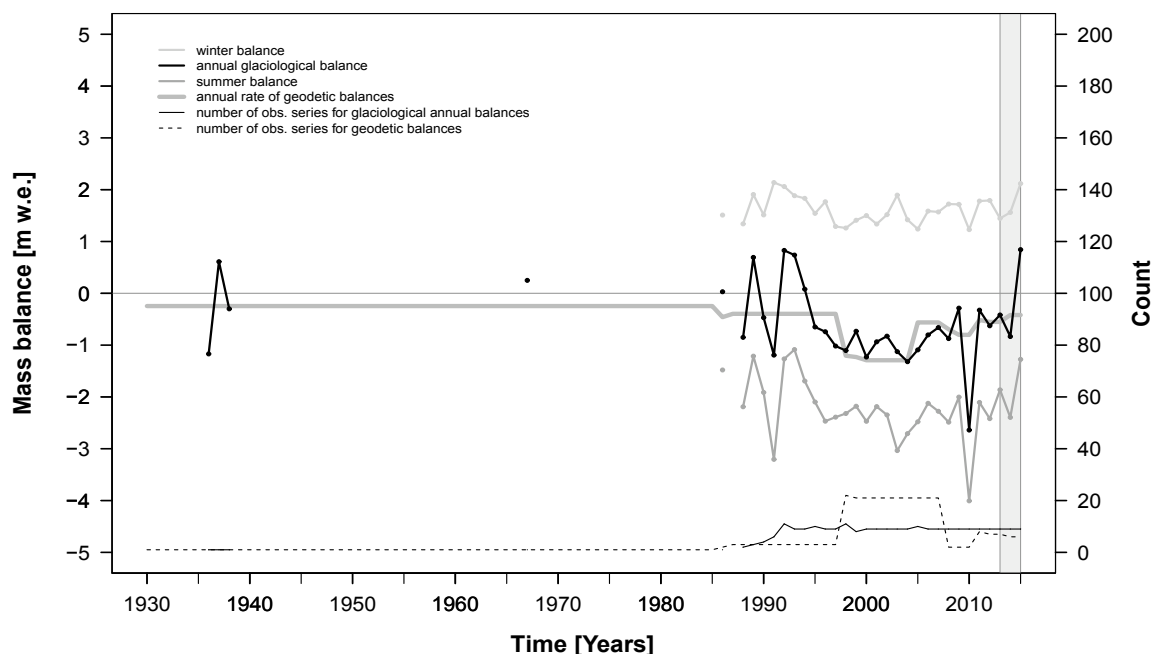


Figure 3.5.1 Regional mass balances: Annual glaciological balances (m w.e.) and annual rates of geodetic balances (m w.e. a⁻¹) are shown together with the corresponding number of observations. Geodetic balances were calculated assuming a glacier-wide average density of 850 kg m⁻³.

Iceland is located on the Mid-Atlantic Ridge, the boundary of the Eurasian and the American tectonic plates, and its ice cover is dominated by six large ice caps. Vatnajökull is the largest followed by Langjökull, Hofsjökull, Mýrdalsjökull, Drangajökull, and Eyjafjallajökull. The entire glacier cover is estimated to total close to 11,000 km².

The glaciers in Iceland are located in a region of subpolar oceanic climate. The warm North Atlantic Current ensures generally higher temperatures than in most places of similar latitude. Winter precipitation and summer ablation levels on the glaciers are comparatively high and the mass balance sensitivity is among the highest recorded. Many ice caps and glaciers in Iceland are influenced by geothermal and volcanic activity, resulting in frequent glacier outburst floods, known in Icelandic as jökulhlaups.

Mass balance measurements are available from a dozen glaciers. The longest series starting in 1988 is from outlet glaciers of Hofsjökull. Measurements on Vatnajökull outlets and on Langjökull were started in 1991 and 1997, respectively. Detailed front variation series are available from over 70 glacier tongues reaching back to the 1930s, with sporadic information derived from historical sources back to the 18th century and in a few cases even further back in time. The maximum Little Ice Age (LIA) extent of glaciers and ice caps in Iceland is estimated to have occurred close to the end of the 19th century (Thorarinsson,

1943; Sigurðsson, 2005). Detailed front variation observations document the general retreat from the LIA maximum extent up to 1970, with a period of intermittent re-advance between 1970 and 1990 and continued retreat from 1995 to the present time. Abrupt re-advances are due to surges.

The average mass loss of glaciers has increased from about -500 mm w.e. a⁻¹ in the 1990s to more than -1,000 mm w.e. a⁻¹ in the 2000s. The average mass balance during the glaciological year 2013/14 was -834 mm w.e., which is typical for the 20-year period of negative annual mass balance in the period 1995–2014. In contrast, a positive mass balance of 843 mm w.e. was measured in 2014/15. A regional glacier change assessment was recently published by Björnsson et al. (2013).

Estimated total glacier area (km ²):	11,000
Front variations	
- # of series*:	70/33
- # of obs. from stat. or adv. glaciers*:	775/9
- # of obs. from retreating glaciers*:	2,267/38
Glaciological balances	
- # of series*:	16/9
- # of observations*:	242/18
Geodetic balances	
- # of series ^o :	27/26
- # of observations ^o :	50/28

* (total/2014 & 2015), ^o (total/>2005)

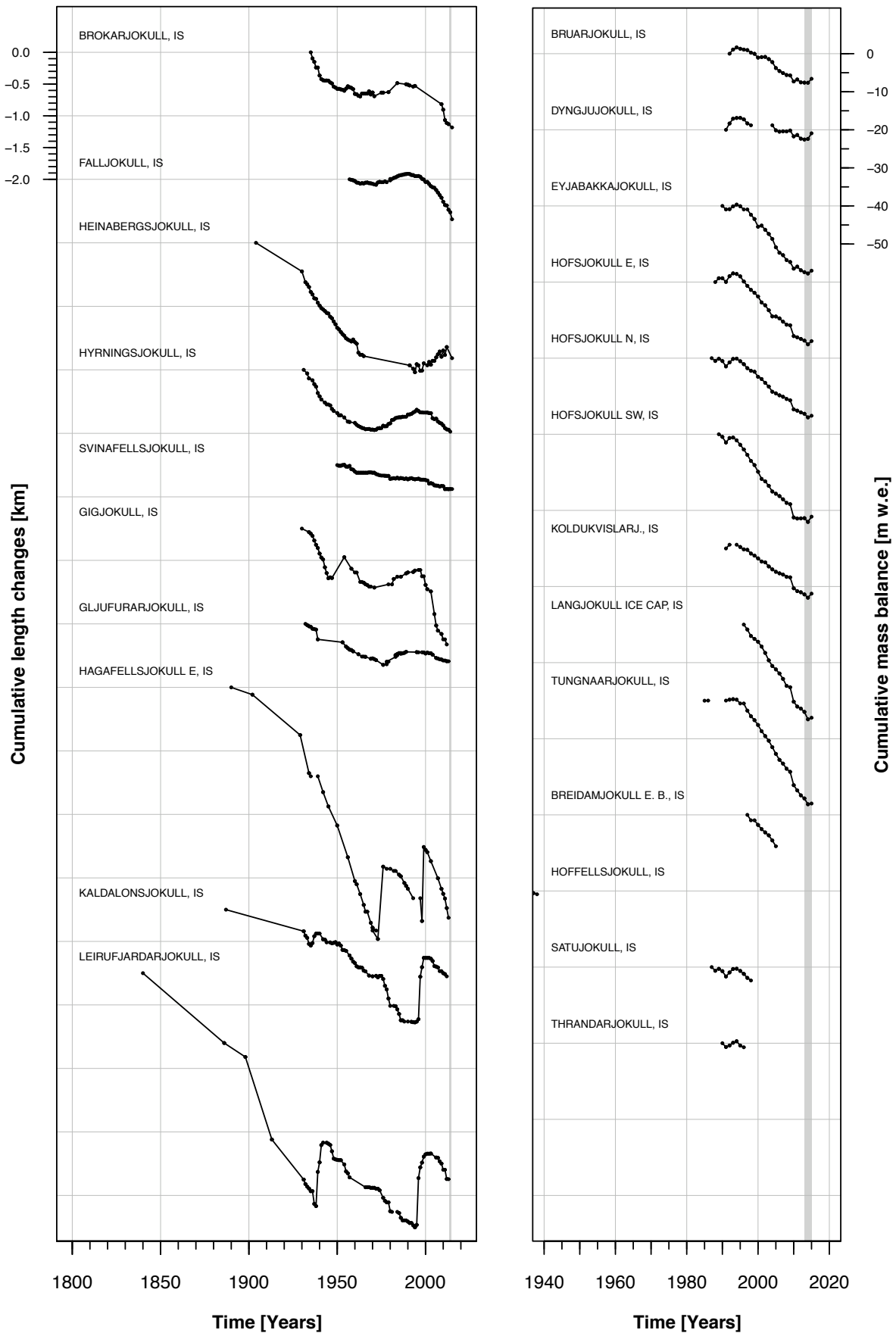


Figure 3.5.2 Cumulative length changes (left) and cumulative mass balances (right) of selected glaciers in Iceland over the entire observation period.

3.6 SVALBARD & JAN MAYEN

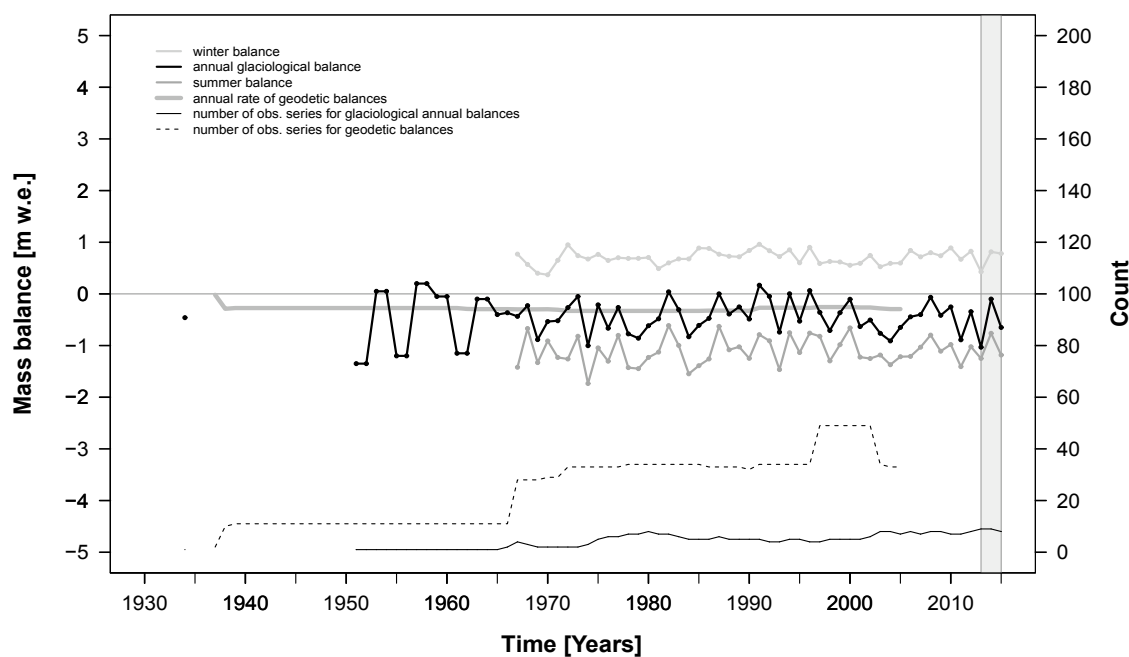


Figure 3.6.1 Regional mass balances: Annual glaciological balances (m w.e.) and annual rates of geodetic balances (m w.e. a⁻¹) are shown together with the corresponding number of observations. Geodetic balances were calculated assuming a glacier-wide average density of 850 kg m⁻³.

The Svalbard Archipelago is situated in the Arctic Ocean north of mainland Europe. The largest island is Spitsbergen, followed by Nordaustlandet and Edgeøya. Its topography is more than half covered by ice, and is characterized by plateau mountains and fjords. The entire glacier area totals about 34,000 km².

Jan Mayen is a volcanic island in the Arctic Ocean and is part of the Kingdom of Norway, as is Svalbard. It is partly covered by glaciers, with an area of about 100 km² around the Beerenberg Volcano.

Svalbard and Jan Mayen both have an arctic climate, although with much higher temperatures than other regions at the same latitude. Numerous glaciers on Svalbard are of the surge-type.

Over 20 continuous mass balance series are reported from Svalbard, the longest ones being from Austre Brøggerbreen, Midtre Lovénbreen, Kongsvegen, Hansbreen, and Waldemarbreen. Front variations are available from roughly 30 glaciers, most of them dating back to about 1900. From Jan Mayen, front variations are reported from Sorbreen.

During the LIA, glaciers in Svalbard were close to their late Holocene maximum extent and remained there until the beginning of the 20th century (Svendsen & Magerud, 1997). The reported front variation series show a general trend of retreat without a

common period of distinct re-advances. On Jan Mayen, Sorbreen shows a retreat starting in the late 19th century with a re-advance period in the mid-20th century.

Glaciological mass balance measurements indicate continued ice loss at a rate of a few hundred mm w.e. per year over the second half of the 20th century, well supported by results from geodetic survey of a few dozen glaciers. Mass loss increased to -490 mm w.e. a⁻¹ in the 2000s. Seasonal balances show a relatively low mass turnover. The average mass balance of 2013/14 was -1,032 mm w.e. and -100 mm w.e. in 2014/15. Regional glacier change assessments were recently published by Sobota (2013).

Estimated total glacier area (km²): 34,000

Front variations

- # of series*: 26/2
 - # of obs. from stat. or adv. glaciers*: 27/0
 - # of obs. from retreating glaciers*: 134/3

Glaciological balances

- # of series*: 21/9
 - # of observations*: 292/17

Geodetic balances

- # of series^o: 51/0
 - # of observations^o: 75/0

* (total/2014 & 2015), ^o (total/>2005)

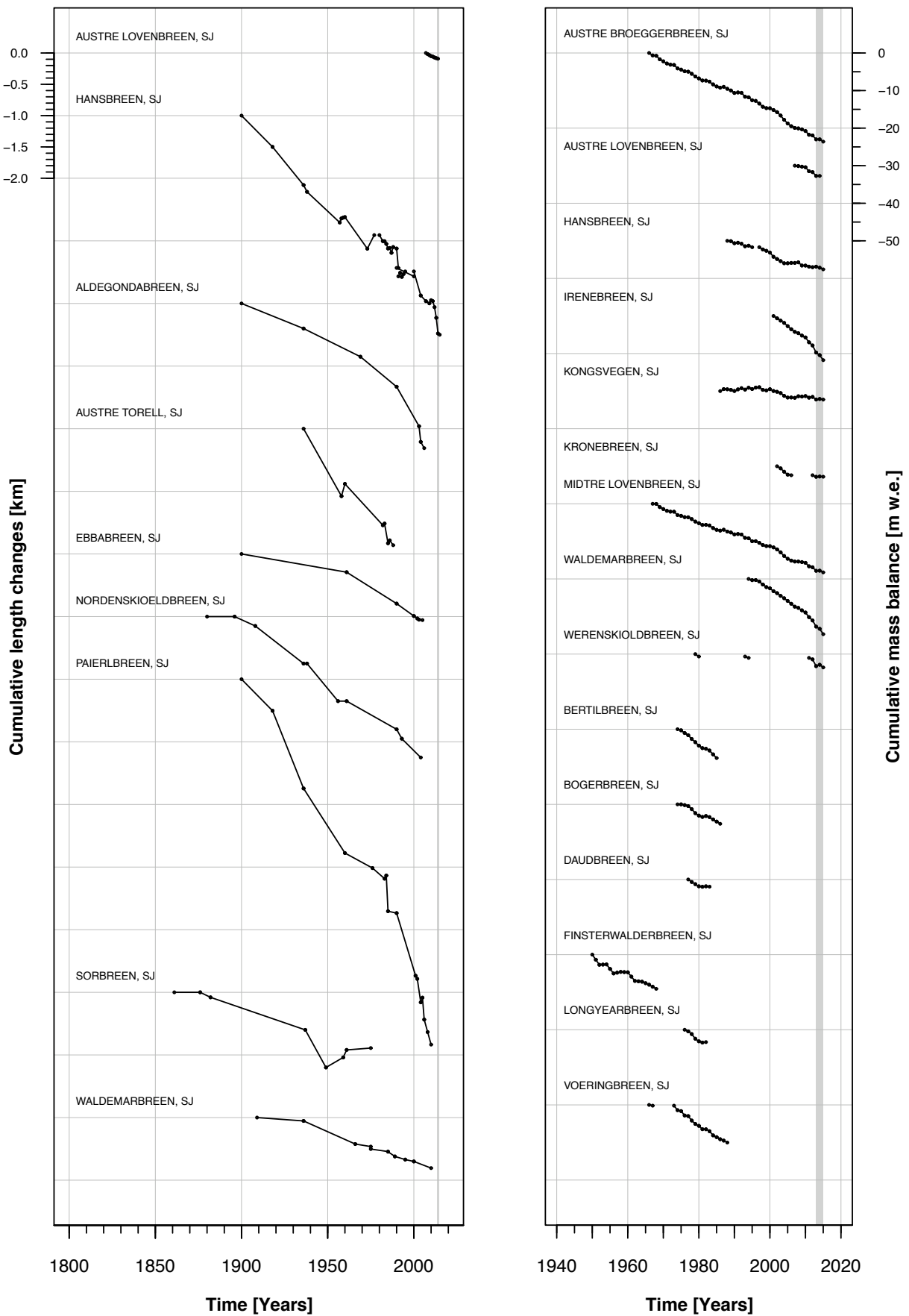


Figure 3.6.2 Cumulative length changes (left) and cumulative mass balances (right) of selected glaciers in Svalbard and Jan Mayen over the entire observation period.

3.7 SCANDINAVIA

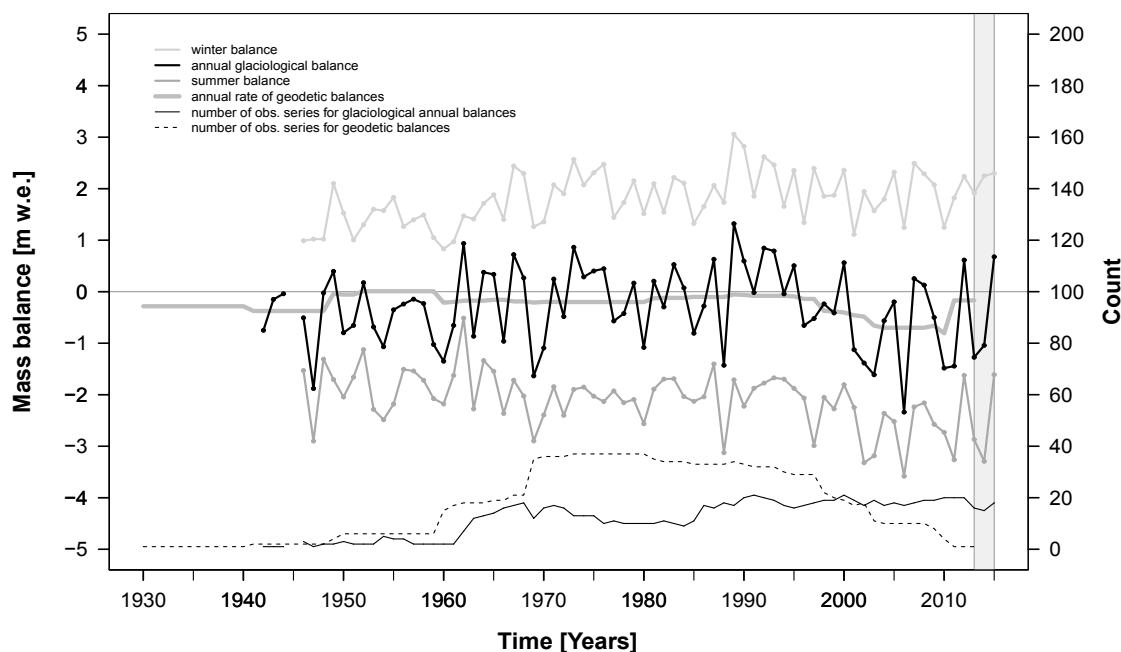


Figure 3.7.1 Regional mass balances: Annual glaciological balances (m w.e.) and annual rates of geodetic balances (m w.e. a⁻¹) are shown together with the corresponding number of observations. Geodetic balances were calculated assuming a glacier-wide average density of 850 kg m⁻³.

In Scandinavia, the greater part of the ice cover is concentrated in southern Norway, namely in Folgefonna, Hardangerjøkulen, Breheimen, Jotunheimen, and Jostedalbreen, which is the largest ice cap of mainland Europe. In northern Norway there are the Okstindan and Svartisen ice caps, glaciers in Lyngen and Skjomen as well as in the adjacent Kebnekaise region in Sweden. Together, these glaciers cover about 3,000 km². Glaciers are situated in different climatic regimes, ranging from maritime along the Norwegian west coast, humid continental in the central part, to subarctic further north.

Scandinavia is one of the regions with the most and longest reported observation series. From the approx. 60 mass balance series, eight have continuously reported series since 1970 and have recently been reanalysed by Andreassen et al. (2016). Front variations series are available from almost 90 glaciers extending back to the 19th century, with some reconstructions even back to the 17th century.

After having disappeared most likely during the early/mid-Holocene (Nesje et al., 2008), most of the Scandinavian glaciers reached their LIA maximum extent in the mid-18th century (Grove, 2004). Following a minor retreat trend with small frontal oscillations up until the late 19th century, the glaciers experienced a general recession during the 20th century with intermittent periods of re-advances around 1910 and 1930, in the 1970s, and around

1990; the last advance stopped at the beginning of the 21st century. On average, the observed mass balances were slightly positive from the 1970s to the 1990s. This was because coastal glaciers were able to gain mass while the glaciers further inland continued to lose mass. Geodetic results are well centred within the variability of the glaciological results with slightly negative average balances. After 2000, glaciers in both the coastal and the inland region lost mass resulting in an average balance of -790 mm w.e. a⁻¹. Seasonal balances show a large mass turnover. The regional average of reported balances was very negative (-1,043 mm w.e.) in 2013/14 and positive (677 m w.e.) in 2014/15. Regional glacier change assessments were recently published by NVE (2016, and earlier issues).

Estimated total glacier area (km ²):	3,000
Front variations	
- # of series*:	90/48
- # of obs. from stat. or adv. glaciers*:	732/14
- # of obs. from retreating glaciers*:	2,372/64
Glaciological balances	
- # of series*:	56/18
- # of observations*:	898/33
Geodetic balances	
- # of series ^o :	30/10
- # of observations ^o :	75/10

* (total/2014 & 2015), ^o (total/>2005)

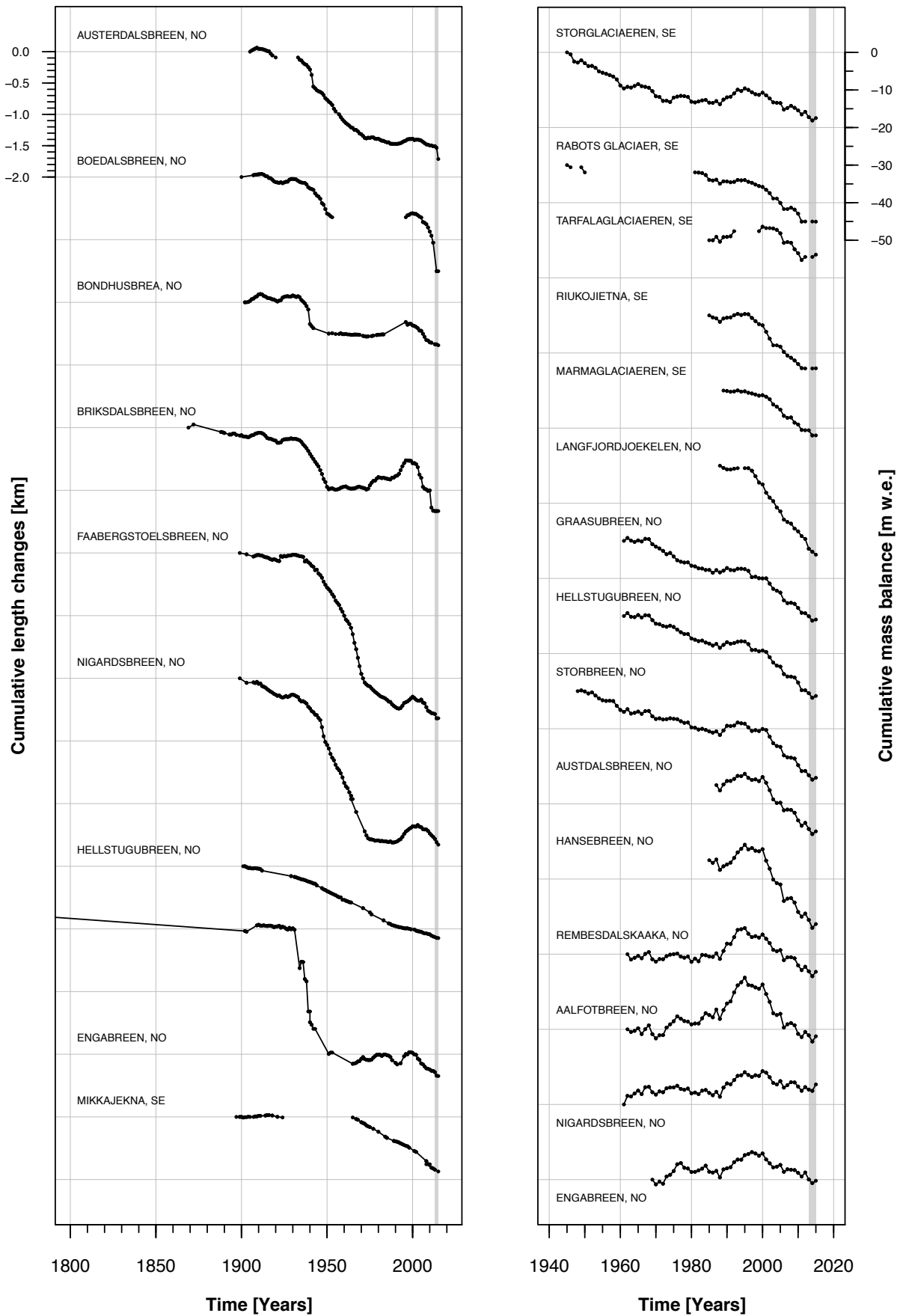


Figure 3.7.2 Cumulative length changes (left) and cumulative mass balances (right) of selected glaciers in Scandinavia over the entire observation period.

3.8 CENTRAL EUROPE

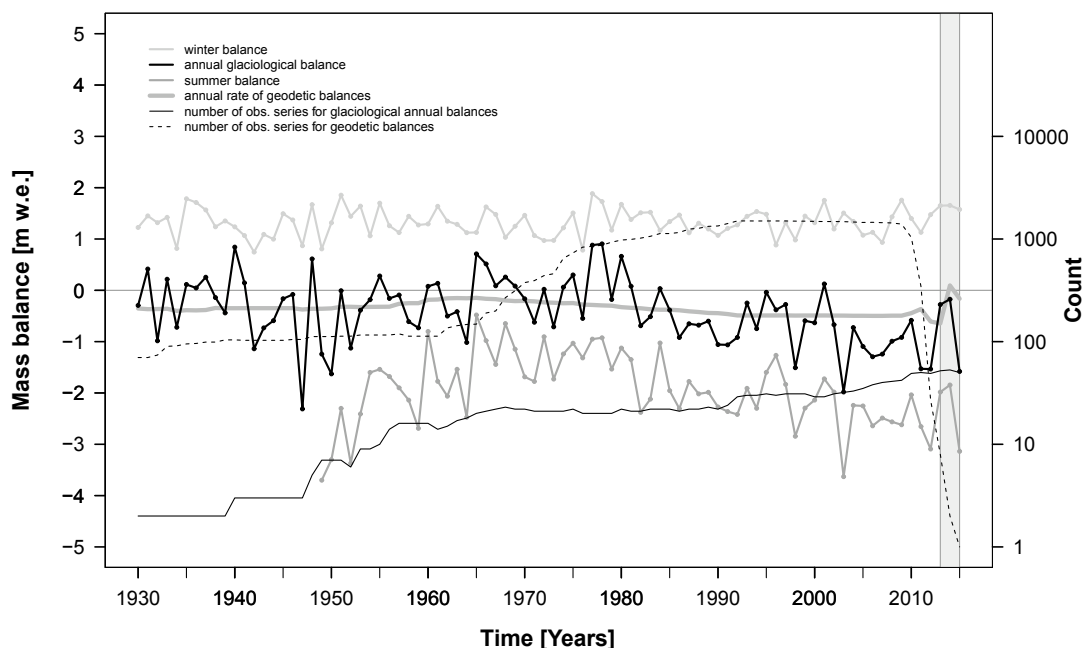


Figure 3.8.1 Regional mass balances: Annual glaciological balances (m w.e.) and annual rates of geodetic balances (m w.e. a⁻¹) are shown together with the corresponding number of observations. Geodetic balances were calculated assuming a glacier-wide average density of 850 kg m⁻³.

Central Europe has about 2,000 km² of glacier ice. The major part of it is located in the Alps with Grosser Aletschgletscher as its largest valley glacier. The Alps represent the ‘water tower’ of Europe and form the watershed of the Mediterranean Sea, the North Sea/North Atlantic Ocean, and the Black Sea. Some smaller glaciers are found in the Pyrenees – a mountain range in southwest Europe which extends from the Bay of Biscay to the Mediterranean Sea. The glaciers are situated in the Maladeta massif in Spain and around the Vignemale peak in France. A few more perennial icefields exist e.g., in the Apennine, Italy, as well as in Slovenia and Poland.

Central Europe has the greatest number of available front variation and mass balance measurements, with many long-term series. From the over 60 mass balance series, ten have been maintained for more than 30 years. Over 700 front variation series cover the entire Alps, many with more than 100 observation years. In addition, reconstructed front variations are available for a dozen glaciers extending back to the 16th century. About three dozen front variation series are available from the Pyrenees range, some of them extending back to the 19th century. Mass balance measurements have been carried out at Maladeta (ES) and Ossoue (FR) glaciers. In the Apennine, long-term measurements are available from Calderone (IT). Front variation observations give good documentation of the subsequent retreat with intermittent periods of re-advances in the 1890s, 1920s, and 1970–80s.

Glacier mass loss accelerated from close to zero balances in the 1960s and 1970s, to -560/-720/-1,030 mm w.e. a⁻¹ in the 1980s/1990s/2000s. Glaciological results are well supported by results from geodetic surveys, which provide data for all glaciers in Switzerland (Fischer et al., 2015), as well as other glaciers.

Seasonal balances show a relatively large mass turnover and a tendency towards more negative summer balances over the past decades. Regional mean balances were only slightly negative (-174 mm w.e.) in 2013/14 but very negative (-1,581 mm w.e.) in 2014/15. Regional glacier change assessments were recently published by Fischer (2016, and earlier issues), Huss et al. (2015), and SCNAT (2017).

Estimated total glacier area (km ²):	2,000
Front variations	
- # of series*:	734/319
- # of obs. from stat. or adv. glaciers*:	6,849/55
- # of obs. from retreating glaciers*:	22,287/534
Glaciological balances	
- # of series*:	77/53
- # of observations*:	1,786/103
Geodetic balances	
- # of series ^o :	1,452/1,421
- # of observations ^o :	1,993/1,490
* (total/2014 & 2015), ^o (total/>2005)	

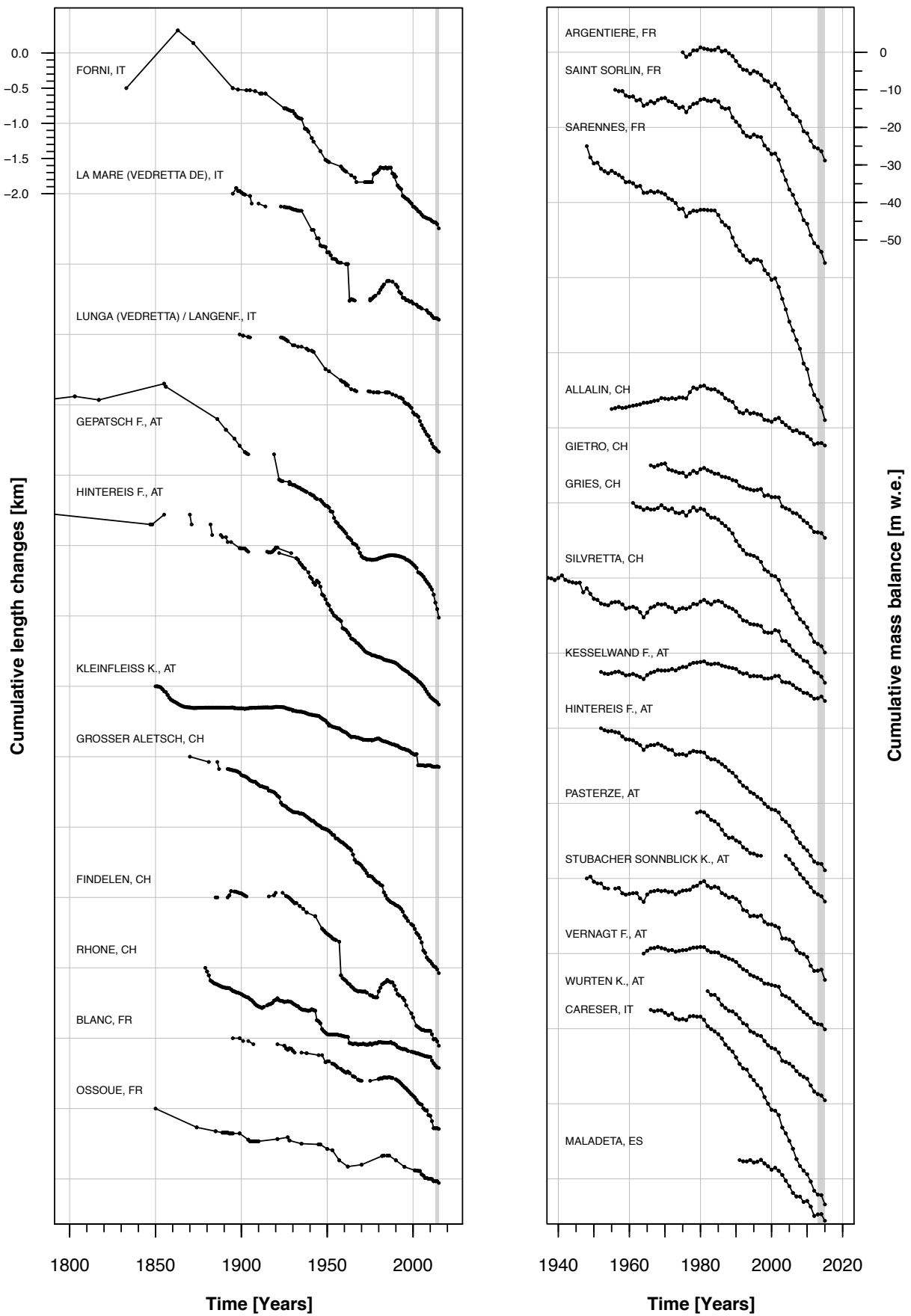


Figure 3.8.2 Cumulative length changes (left) and cumulative mass balances (right) of selected glaciers in Central Europe over the entire observation period.

CENTRAL EUROPE

3.9 CAUCASUS & MIDDLE EAST

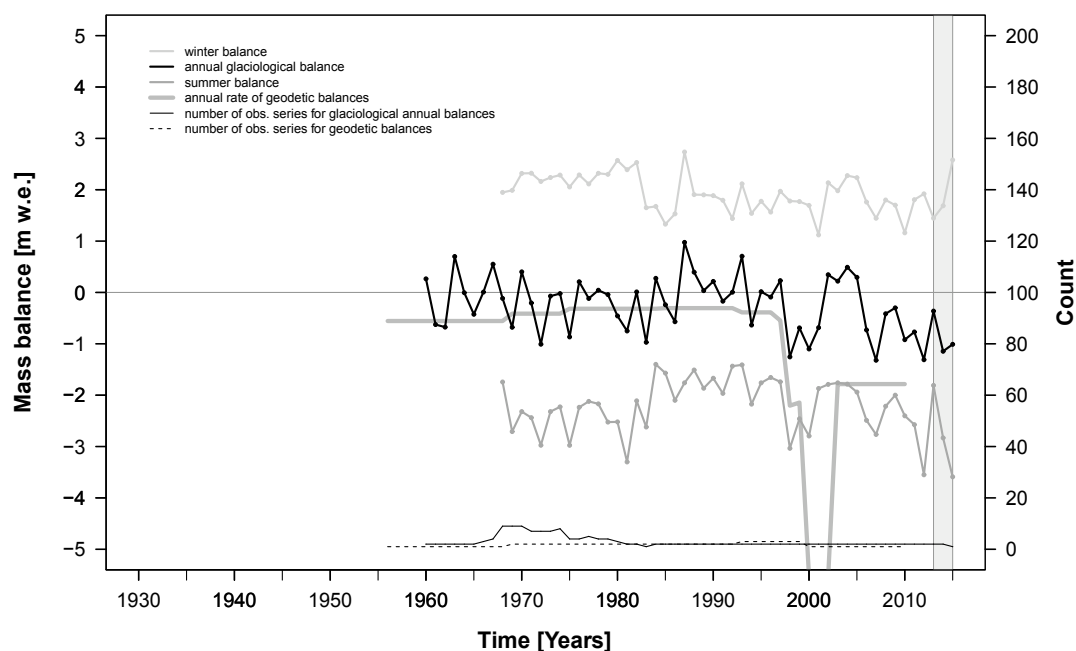


Figure 3.9.1 Regional mass balances: Annual glaciological balances (m w.e.) and annual rates of geodetic balances (m w.e. a⁻¹) are shown together with the corresponding number of observations. Geodetic balances were calculated assuming a glacier-wide average density of 850 kg m⁻³.

About 1,000 km² of land surface ice is found in the Caucasus Mountains which are situated between the Black Sea and the Caspian Sea. Most of the glaciers are located in the northern Caucasus, with Mount Elbrus (5,642 m a.s.l.) considered the highest peak in Europe. The climate of the Caucasus varies with elevation and latitude. The northern slopes are a few degrees colder than the southern slopes and precipitation increases from east to west in most regions. In the Middle East, small glaciers are found on Mount Erciyes in Central Anatolia, Turkey, as well as in the higher elevations of the Sabalan, Takhte-Soleiman, Damavand, Oshtorankuh, and Zardkuh regions in Iran.

Mass balance measurements are reported from a dozen glaciers located in the Caucasus with ongoing long-term series at Djankuat and Garabashi (RU). Frontal variations of glaciers in the Caucasus as well as of Erciyes Glacier (TR) are well-documented throughout the 20th century. Geodetic measurements are available for only Djankuat and Alamkouh glaciers located in the Russian Caucasus and in the Takhte-Soleiman of Iran, respectively. In the Caucasus, glaciers reached their LIA maximum extents around 1850 (Grove, 2004). Glacier front variations show a general trend of glacier retreat with intermittent readvances around the 1980s. No further length change measurements have been reported since 2010.

The few mass balance measurement series indicate negative mean balances around -250 mm w.e. a⁻¹ over the past decades, with a relatively large mass turnover. The poor fit between glaciological and geodetic results in the last two decades is caused by the very small geodetic sample size, and an unfortunate mixture of the moderately negative values from the Caucasus glaciers with the strongly negative values from Alamkouh Glacier, Iran. The mean balances of Djankuat and Garabashi glaciers were -1,145 and -1,010 mm w.e. in 2013/14 and 2014/15, respectively.

Estimated total glacier area (km ²):	1,500
Front variations	
- # of series*:	76/36
- # of obs. from stat. or adv. glaciers*:	243/0
- # of obs. from retreating glaciers*:	776/36
Glaciological balances	
- # of series*:	12/2
- # of observations*:	168/3
Geodetic balances	
- # of series ^o :	2/1
- # of observations ^o :	10/1

* (total/2014 & 2015), ^o (total/>2005)

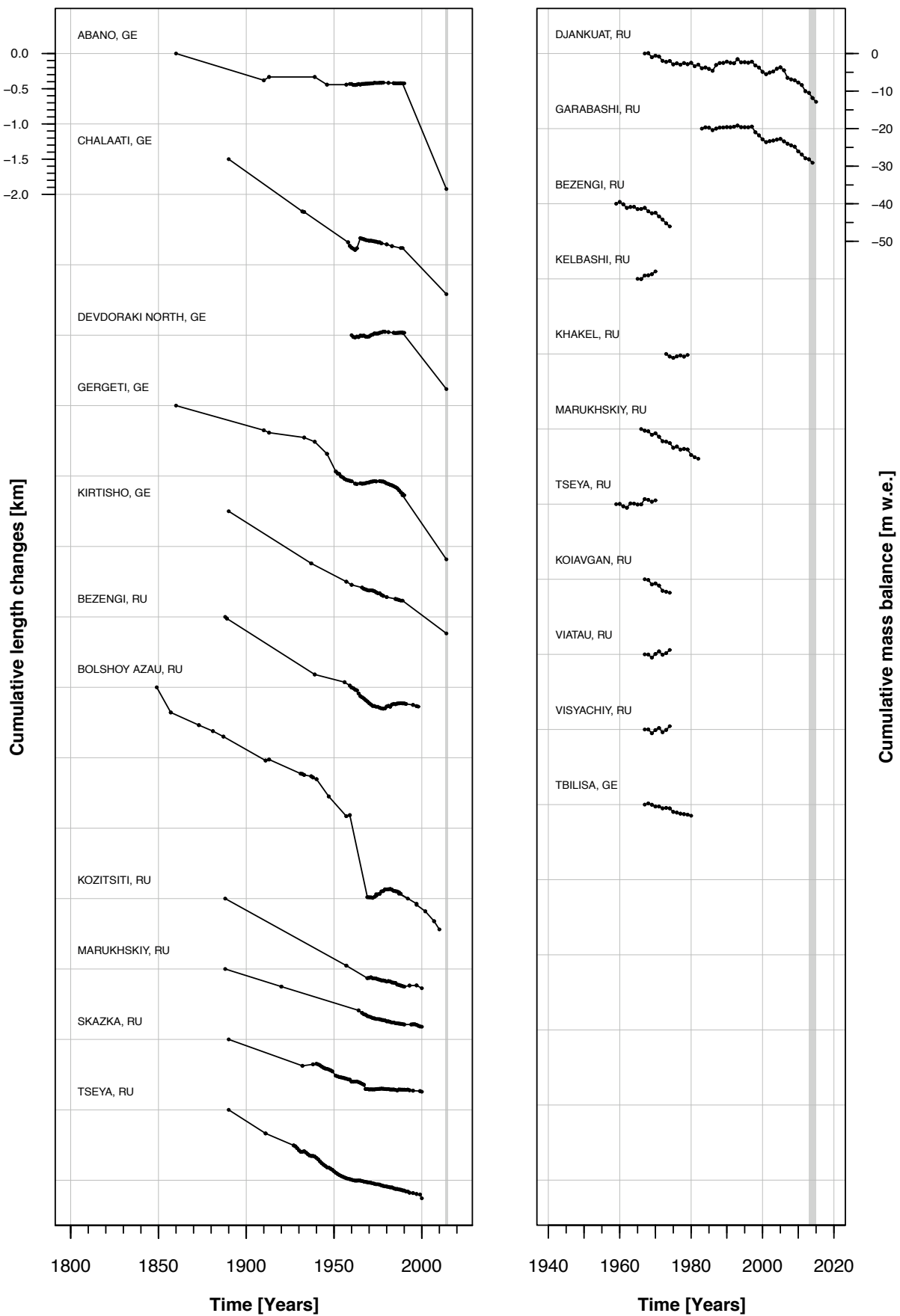


Figure 3.9.2 Cumulative length changes (left) and cumulative mass balances (right) of selected glaciers in Caucasus and Middle East over the entire observation period.

CAUCASUS & MIDDLE EAST

3.10 RUSSIAN ARCTIC

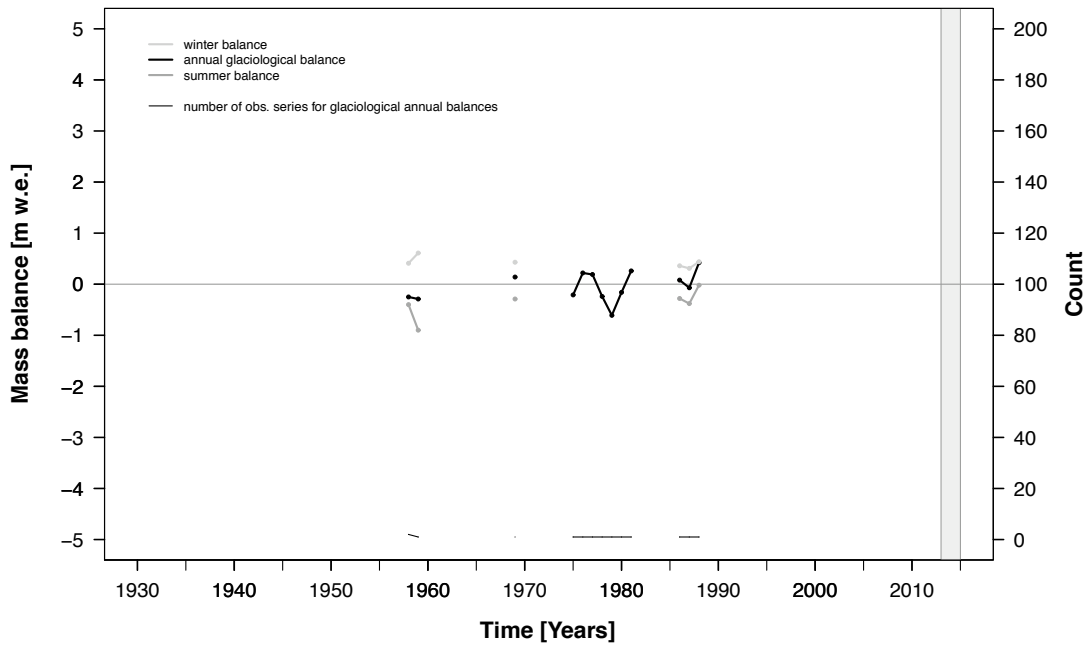


Figure 3.10.1 Regional mass balances: Annual glaciological balances (m w.e.) and annual rates of geodetic balances (m w.e. a⁻¹) are shown together with the corresponding number of observations. Geodetic balances were calculated assuming a glacier-wide average density of 850 kg m⁻³.

Large ice caps are located on the Russian high Arctic archipelagos such as Novaya Zemlya, Severnaya Zemlya and Franz Josef Land totalling an area of 51,500 km². These glaciers are very much influenced by the North Atlantic Oscillation and sea ice conditions in the Barents and Kara Seas.

The glaciers in this region are not well investigated due to their remote locations. Front variations have been reported from about 40 outlet glaciers on Novaya Zemlya based on expeditions, topographic maps and remote sensing data (e.g., Carr et al., 2014).

Mass balance measurements are limited to a few observation years from Sedov Glacier on Hooker Island, Franz Josef Land, and Glacier No. 104, which is part of Vavilov Ice Cap on October Revolution Island, Severnaya Zemlya.

Dated moraines suggest LIA maxima around or after 1300 for some glaciers, and the late 19th century for others on Novaya Zemlya (Zeeberg & Forman, 2001). In the Russian Arctic islands, a slight reduction was found in the glacierized area of little more than one per cent over the past 50 years (Kotlyakov et al., 2006). Front variation observations document a rapid retreat of tidewater glaciers on Novaya Zemlya over the 20th century, with a more stable period during the 1950s and 1960s.

The small number of glaciological and geodetic observations do not allow for a sound estimate of glacier mass balance.

Regional glacier change assessments were recently published by Carr et al. (2014).

Estimated total glacier area (km ²):	51,500
Front variations	
- # of series*:	44/0
- # of obs. from stat. or adv. glaciers*:	151/0
- # of obs. from retreating glaciers*:	382/0
Glaciological balances	
- # of series*:	3/0
- # of observations*:	14/0
Geodetic balances	
- # of series ^o :	0/0
- # of observations ^o :	0/0

* (total/2014 & 2015), ^o (total/>2005)

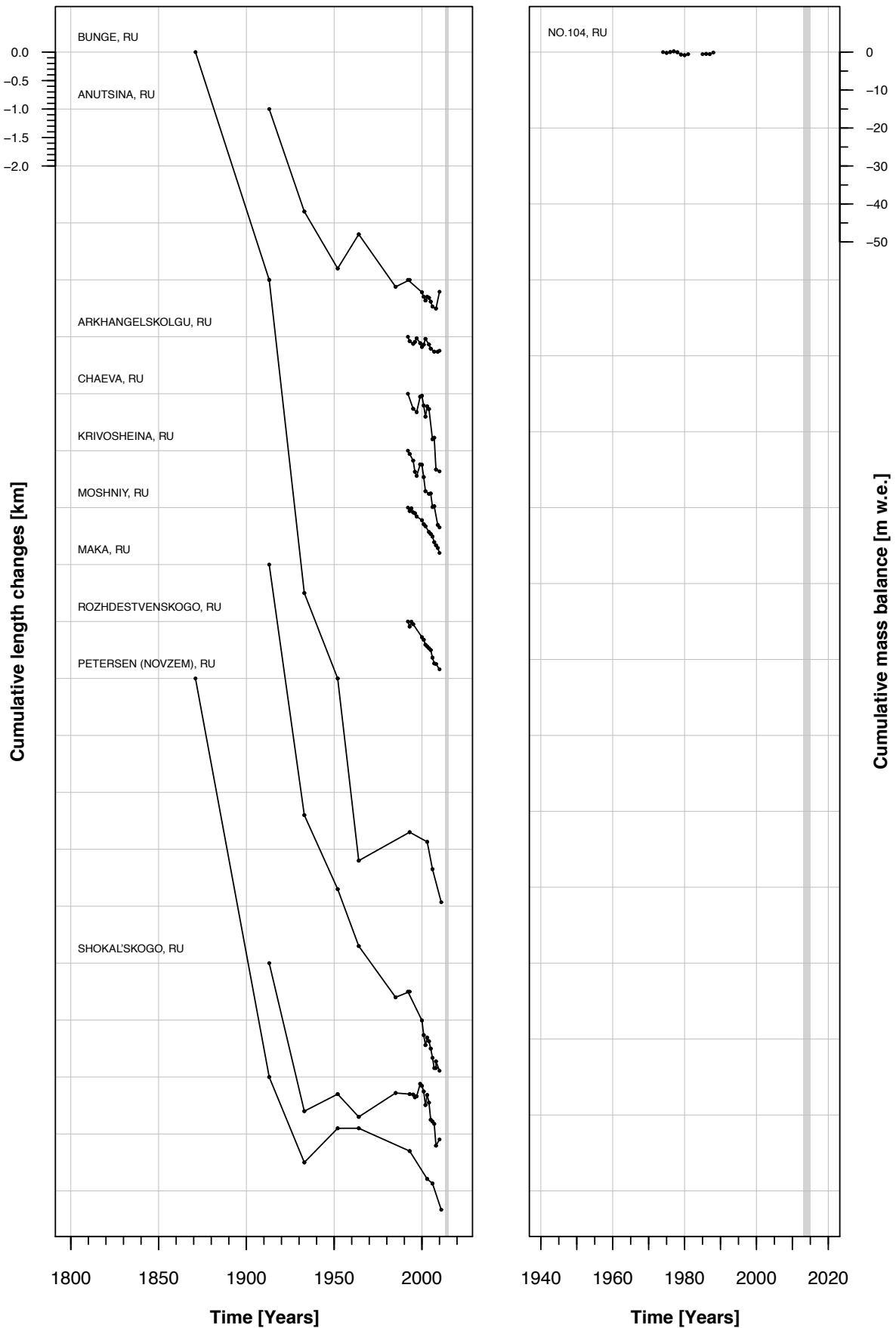


Figure 3.10.2 Cumulative length changes (left) and cumulative mass balances (right) of selected glaciers in the Russian Arctic over the entire observation period.

3.11 ASIA NORTH

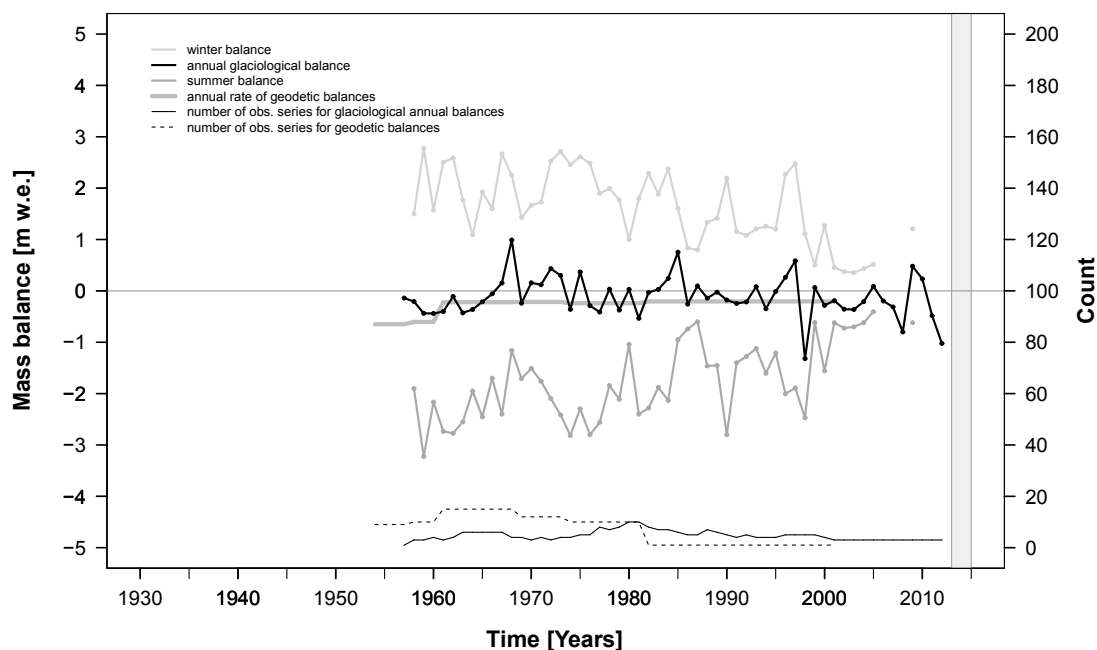


Figure 3.11.1 Regional mass balances: Annual glaciological balances (m w.e.) and annual rates of geodetic balances (m w.e. a⁻¹) are shown together with the corresponding number of observations. Geodetic balances were calculated assuming a glacier-wide average density of 850 kg m⁻³.

In Northern Asia, glaciers with a total area of about 3,500 km² are located in the mountain ranges from the Ural to the Altai, in the east Siberian Mountains, and Kamchatka. The Ural Mountains form a north-south running mountain chain that extends about 2,500 km. Its mountain peaks reach 900 to 1,400 m a.s.l. hosting about 140 small glaciers in a continental climate. The Altai extends over about 2,100 km from Kazakhstan, China, and Russia to Mongolia, and hosts the greatest number of glaciers in this region. The east Siberian Mountains such as Cherskiy Range, Suntar-Khayata, and Kodar Mountains, have only small amounts of glacier ice. The topography of Kamchatka is characterized by numerous volcanoes with heights up to almost 5,000 m a.s.l. Here, many glaciers are strongly influenced by volcanic activities.

The available data series are sparse and most of them were discontinued in the latter decades of the 20th century. The few ongoing mass balance programmes are reported from Maliy Aktru, Leviy Aktru, and Vodopadny (No. 125) glaciers in the Russian Altai. In Japan, long-term observations are carried out on Hamagury Yuki, a perennial snow patch which is located in the northern Alps of Central Japan.

Until some years ago, investigations in the Altai failed to reveal evidence of early LIA advances (Kotlyakov et al., 1991). New studies based on lichenometry indicate extended glacier states in the late 14th and

mid-19th centuries (Solomina, 2000). In the Cherskiy Range, the LIA maxima extents have been dated as 1550–1850 (Gurney et al., 2008). On Kamchatka, the maximum stage of the LIA was reached in the 19th century (Grove, 2004), with advances of similar magnitude in the 17th and 18th centuries (Solomina, 2000). The few front variation series show a centennial retreat with no distinct re-advance periods. Kozelskiy Glacier on Kamchaka advanced during the 1950s to the mid-1980s.

Available mass balance measurements reveal slightly negative balances since the 1960s. The small number of glaciological and geodetic observations do not allow for a sound estimate of glacier mass balance.

Estimated total glacier area (km ²):	2,500
Front variations	
- # of series*:	23/0
- # of obs. from stat. or adv. glaciers*:	43/0
- # of obs. from retreating glaciers*:	321/0
Glaciological balances	
- # of series*:	19/1
- # of observations*:	264/0
Geodetic balances	
- # of series ^o :	11/0
- # of observations ^o :	18/0

* (total/2014 & 2015), ^o (total/>2005)

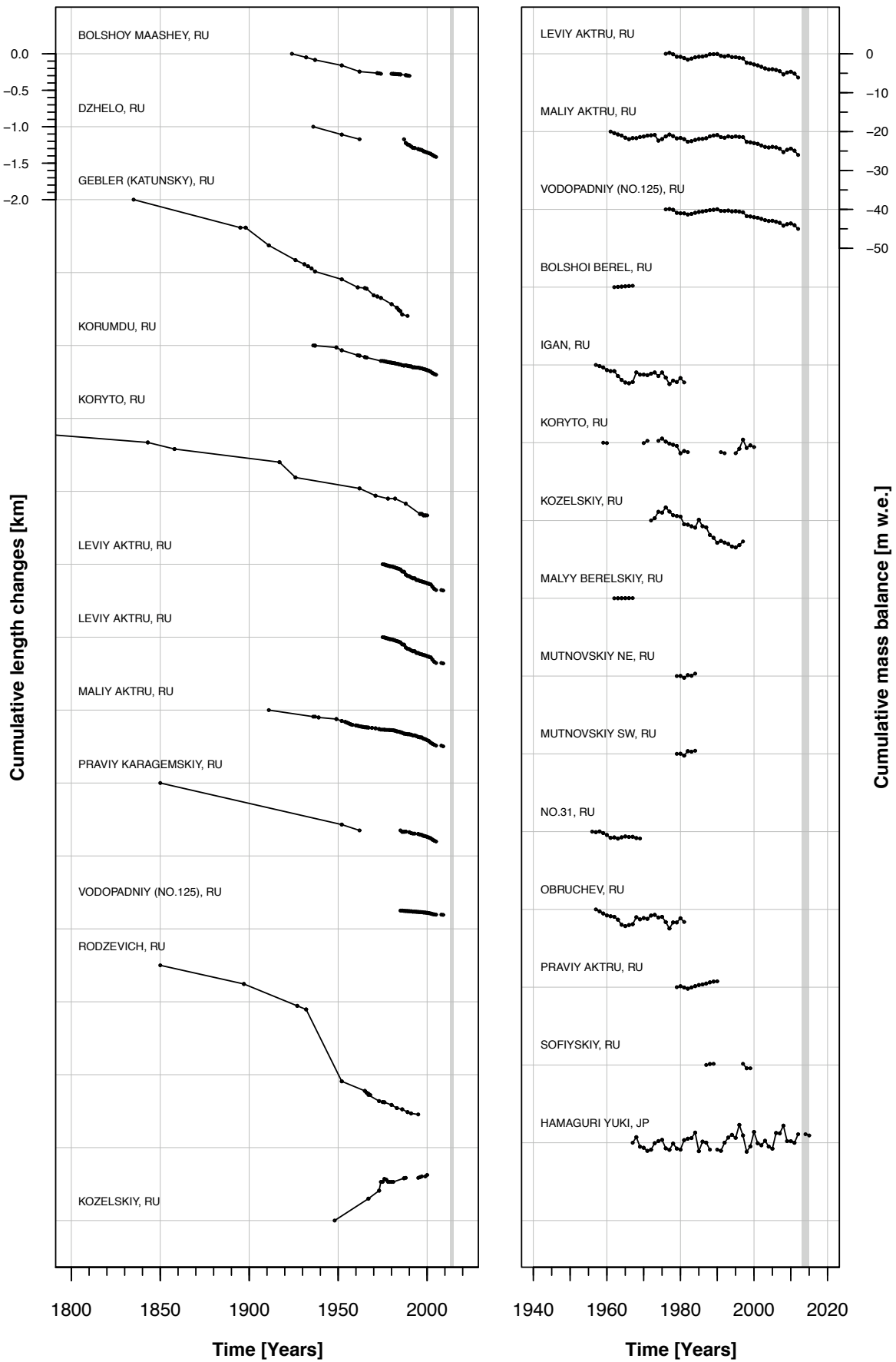


Figure 3.11.2 Cumulative length changes (left) and cumulative mass balances (right) of selected glaciers in Asia North over the entire observation period.

3.12 ASIA CENTRAL

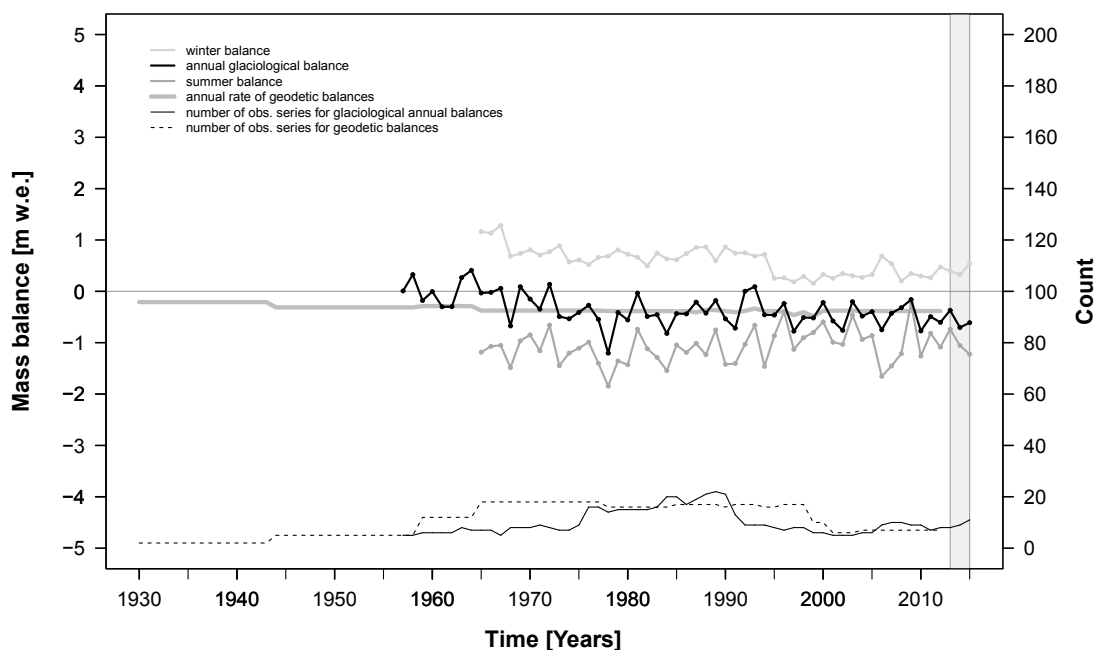


Figure 3.12.1 Regional mass balances: Annual glaciological balances (m w.e.) and annual rates of geodetic balances (m w.e. a⁻¹) are shown together with the corresponding number of observations. Geodetic balances were calculated assuming a glacier-wide average density of 850 kg m⁻³.

Central Asia stretches from the Caspian Sea in the west to China in the east and from Russia in the north to Afghanistan in the south. It is characterised by a continental climate. Glaciers cover a total area of about 62,500 km² and are located in the Hissar Alay, Pamir, Tien Shan, Kunlun, and Qilian Mountains.

There is a large number of glacier fluctuation series available, distributed evenly over the region. However, continuous long-term measurements are sparse. Most of the observation series were discontinued after the demise of the Soviet Union. Only two of the long-term mass balance programmes have been continued: Ts. Tuyuksuyskiy and Urumqi Glacier No. 1 in the Kazakh and Chinese Tien Shan, respectively. In recent years, interrupted long-term mass balance measurements have been resumed at Abramov, Golubin, Glacier No. 354 (Akshiyrak), and Batysh Sook/Syek Zapadnyy in Kyrgyzstan.

The LIA is considered to have lasted until the mid or late 19th century in most regions (Grove, 2004) with glacier maximum extents occurring between the 17th and mid 19th centuries (Solomina, 1996; Su & Shi, 2002; Kutuzov, 2005). Front variation observations show a general retreat over the 20th century with some re-advances around the 1970s.

The available mass balance measurements indicate slightly negative balances in the 1950s and 1960s with

increased ice loss of about -500 mm w.e. a⁻¹ between the 1970s and 2000s. Seasonal balances show a relatively small mass turnover. The glaciological results are supported by the available geodetic surveys. Regional average balances for 2013/14 and 2014/15 were -704 and -610 mm w.e., respectively.

Regional glacier change assessments were recently published by Sorg et al. (2012), Unger-Shayesteh et al. (2013), Farinotti et al. (2015), and Hoelzle et al. (2017).

Estimated total glacier area (km ²):	49,500
Front variations	
- # of series*:	293/10
- # of obs. from stat. or adv. glaciers*:	353/0
- # of obs. from retreating glaciers*:	1,158/17
Glaciological balances	
- # of series*:	41/11
- # of observations*:	599/20
Geodetic balances	
- # of series ^o :	19/7
- # of observations ^o :	40/7

* (total/2014 & 2015), ^o (total/>2005)

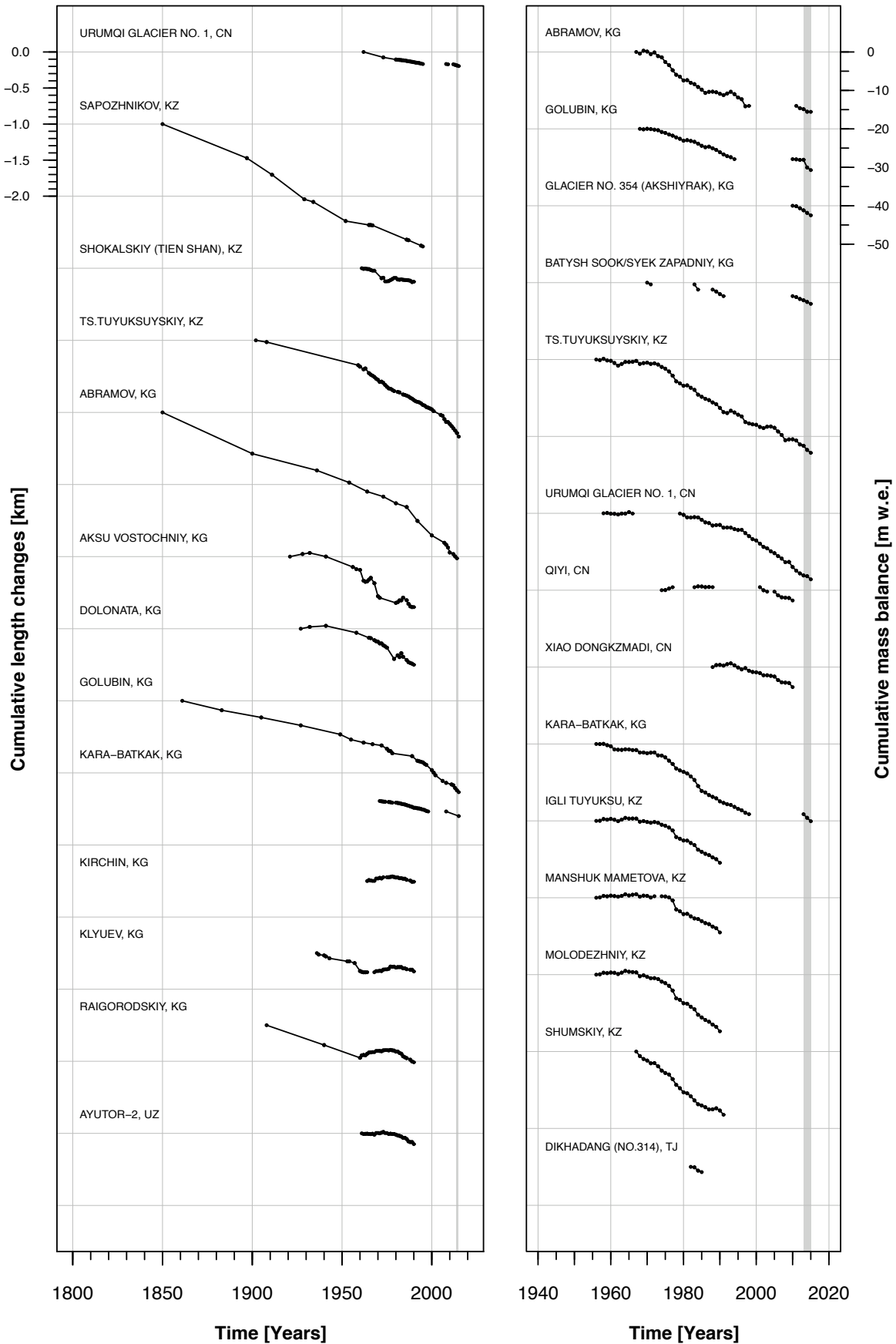


Figure 3.12.2 Cumulative length changes (left) and cumulative mass balances (right) of selected glaciers in Asia Central over the entire observation period.

3.13 ASIA SOUTH WEST & SOUTH EAST

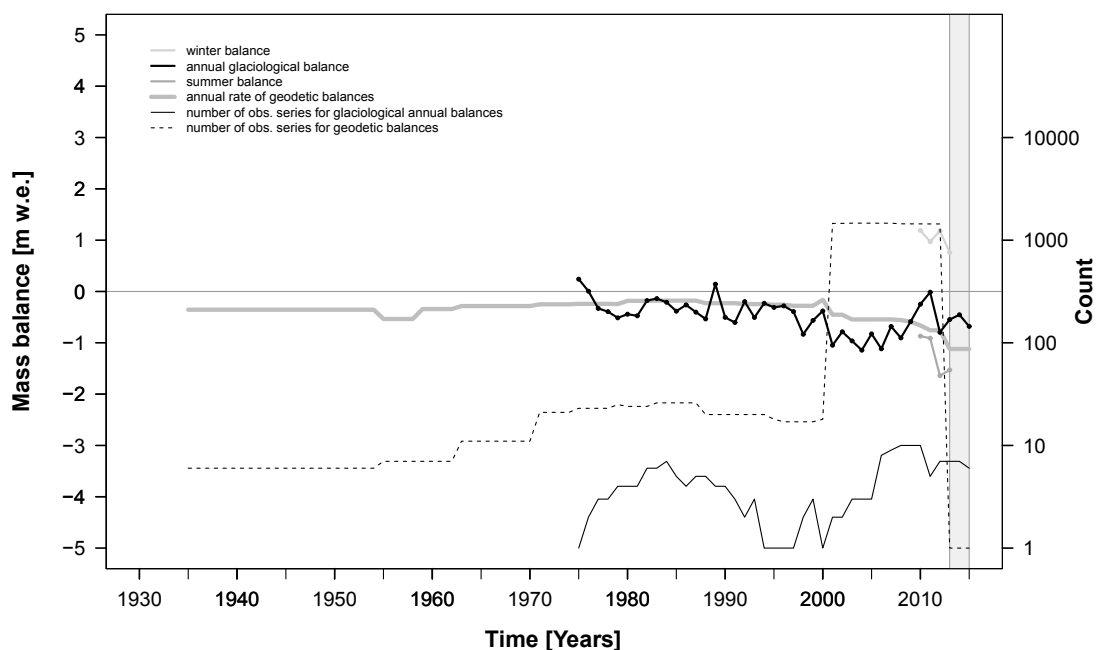


Figure 3.13.1 Regional mass balances: Annual glaciological balances (m w.e.) and annual rates of geodetic balances (m w.e. a⁻¹) are shown together with the corresponding number of observations. Geodetic balances were calculated assuming a glacier-wide average density of 850 kg m⁻³.

Adjacent to Central Asia, the regions Asia South West and Asia South East comprise the Karakoram, Hindu Kush, Himalaya, and Hengduan Shan mountain ranges. The Himalaya is the largest mountain range in the world and extends from the Nanga Parbat (8,126 m a.s.l.) in the NW over 2,500 km to the Mancha Barwa (7,782 m a.s.l.) in the SE. The climate, and the precipitation in particular, is characterized by the influence of the South Asian monsoon in summer and the mid-latitude westerlies in winter. The glacier area in this region totals about 49,000 km².

The data coverage of Asia South West is very sparse. The only reported mass balance series of more than 10 years is from Chhota Shigri located in the Himachal Pradesh, India. Also Asia South West lacks long-term glacier observation series. Recent mass balance results are reported from Parlung Glacier No. 94, located in the south-eastern Tibetan Plateau, and from Yala, Rikha Samba, Pokalde, West Changri Nup and Mera glaciers in Nepal.

The LIA is considered to have lasted until the mid or late 19th century in most regions (Grove, 2004) with glacier maximum extents occurring between the 17th and mid-19th century (Solomina, 1996; Su & Shi, 2002; Kutuzov, 2005). Front variation observations show a general retreat over the 20th century with no marked period of glacier re-advances.

Glaciological and geodetic surveys reported from a variable glacier sample indicate an ice loss at the rate of a few hundred millimetres w.e. a⁻¹ over the past decades. For 2013/14 and 2014/15, reported balances were -828 and -680 mm w.e., respectively, in Asia South East and -80 mm w.e. in 2013/14 for Chhota Shigri (Asia South West). From the Karakoram, information about positive mass balances and re-advances of (mainly surge-type) glaciers has been reported for the beginning of the 21st century. However, the corresponding data has not (yet) been made available.

Regional glacier change assessments were recently published by Gardelle et al. (2013), Rankl et al. (2014), and Vijay et al. (2016).

Estimated total glacier area (km ²):	49,000
Front variations	
- # of series*:	87/2
- # of obs. from stat. or adv. glaciers*:	64/0
- # of obs. from retreating glaciers*:	268/4
Glaciological balances	
- # of series*:	30/7
- # of observations*:	177/13
Geodetic balances	
- # of series ^o :	1,461/1,453
- # of observations ^o :	1,491/1,465

* (total/2014& 2015), ^o (total/>2005)

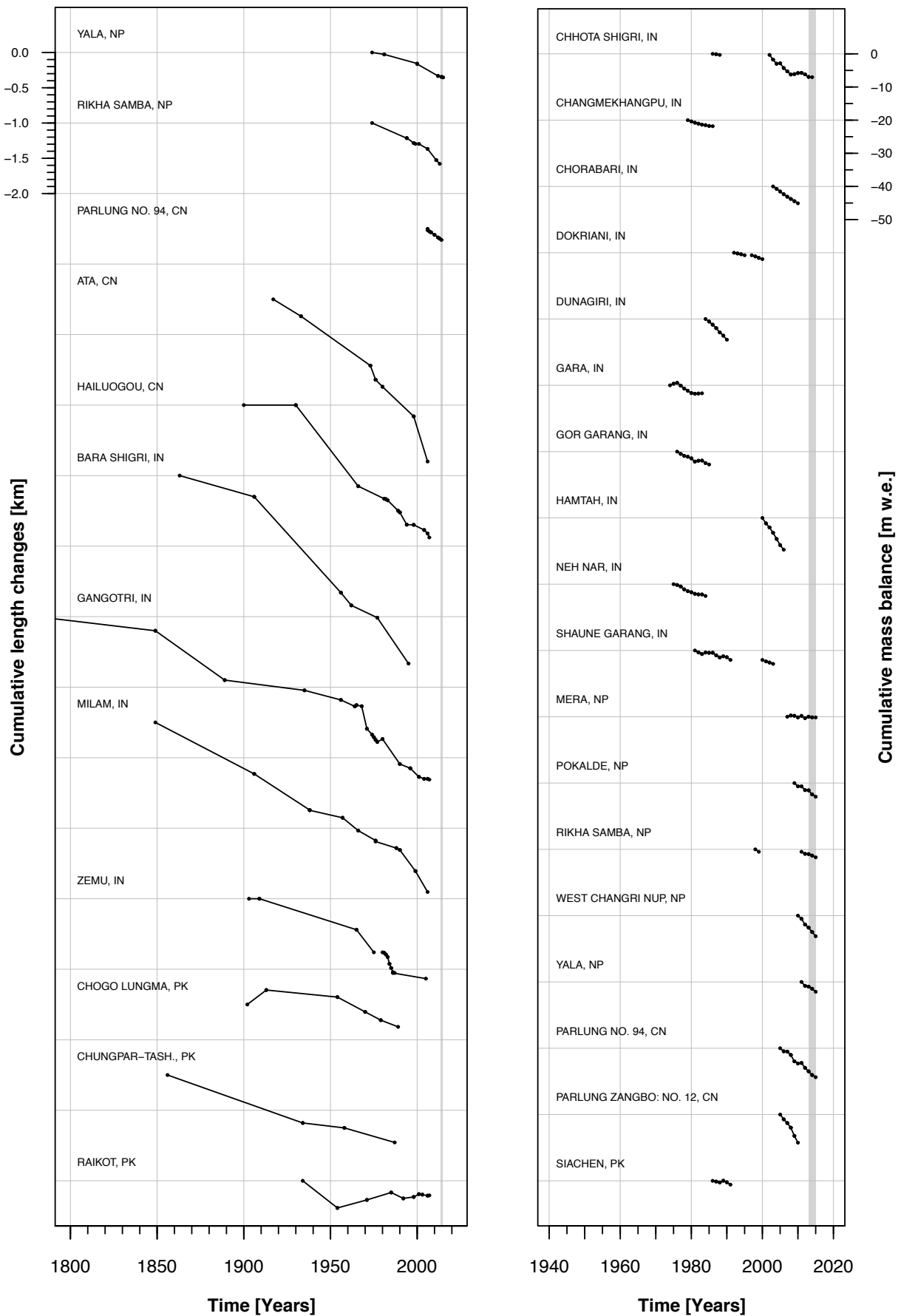


Figure 3.13.2 Cumulative length changes (left) and cumulative mass balances (right) of selected glaciers in Asia South East and South West over the entire observation period.

ASIA SOUTH WEST & SOUTH EAST

3.14 LOW LATITUDES (incl. Africa & New Guinea)

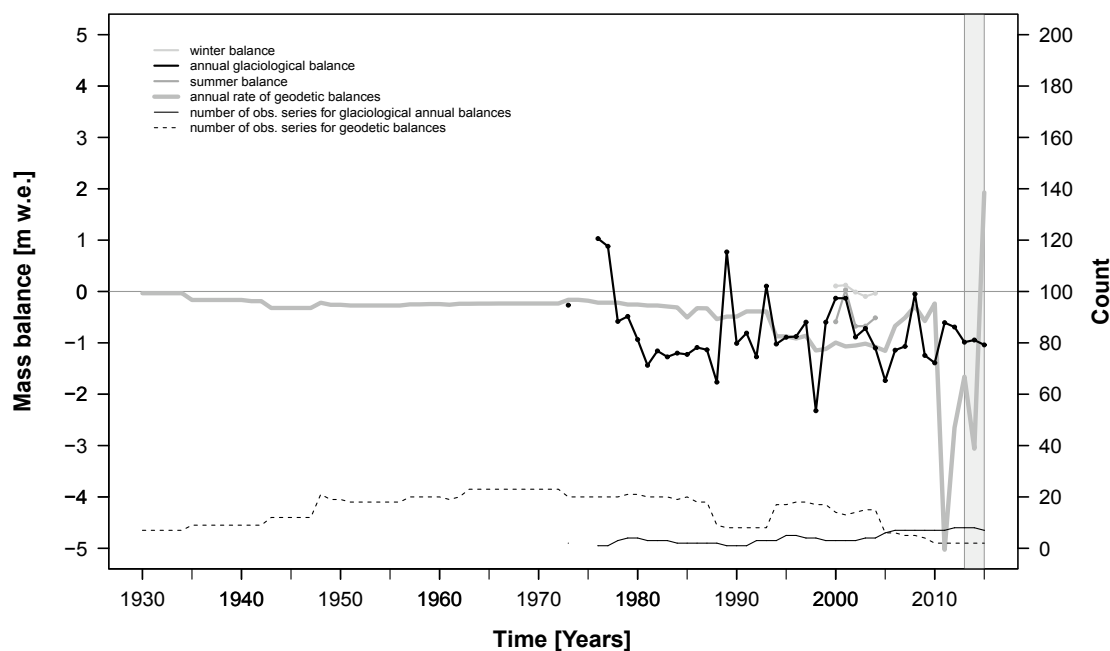


Figure 3.14.1 Regional mass balances: Annual glaciological balances (m w.e.) and annual rates of geodetic balances (m w.e. a⁻¹) are shown together with the corresponding number of observations. Geodetic balances were calculated assuming a glacier-wide average density of 850 kg m⁻³.

Glaciers in the low latitudes are situated on the highest mountain peaks of Mexico and in the tropical Andes. In addition, a few ice bodies are located in East Africa on Ruwenzori, Mount Kenya and Kilimanjaro, as well as in Papua (formerly Irian Jaya, Indonesia) and Papua New Guinea. The glacier area of the Low Latitudes totals about 2,500 km² of which the largest parts are located in Peru and Bolivia. In the tropical Andes, long-term monthly mass balance measurements are carried out at Zongo and Charquini Sur glaciers (BO), Antizana 15 Alpha (EC), and Conejeras (CO). Several dozen front variation series document glacier retreat over the past half-century. Front variations of glaciers in Africa and New Guinea are well documented with a few observation series back to the 19th century. From Lewis Glacier on Mount Kenya, mass balance measurements have been reported between 1978/79 and 1995/96 and again between 2010/11 and 2013/14.

In the tropical Andes, glaciers reached their latest LIA maximum extensions between the mid-17th and early 18th centuries (Rabatel et al., 2013). Glaciers in Peru and Ecuador were in advanced positions until the 1860s, followed by a rapid retreat (Grove, 2004). Front variation observations document a general retreat over the 20th century, with increase retreat rates since the late 1970s. In Africa, glaciers reached their LIA maximum extents towards the late 19th century (Hastenrath, 2001) followed by a continuous retreat

until present. In New Guinea, glaciers reached their LIA maxima in the mid-19th century. Here the glacier changes have been traced from information on glacier extents derived from historical records, dated cairns erected during several expeditions, and remote sensing data. All ice masses except some on Punkcak Java seem to have now disappeared.

The regional mass balance shows a strong interannual variability with an average mass balance around -800 mm w.e. a⁻¹ since between the 1970s and the 2000s. The reported balances for 2013/14 and 2014/15 were -945 and -1,040 mm w.e., respectively. Regional glacier change assessments were recently published by Prinz et al. (2011) and Rabatel et al. (2013).

Estimated total glacier area (km ²):	2,500
Front variations	
- # of series*:	89/9
- # of obs. from stat. or adv. glaciers*:	50/3
- # of obs. from retreating glaciers*:	501/7
Glaciological balances	
- # of series*:	14/8
- # of observations*:	163/15
Geodetic balances	
- # of series ^o :	39/6
- # of observations ^o :	128/41

* (total/2014 & 2015), ^o (total/>2005)

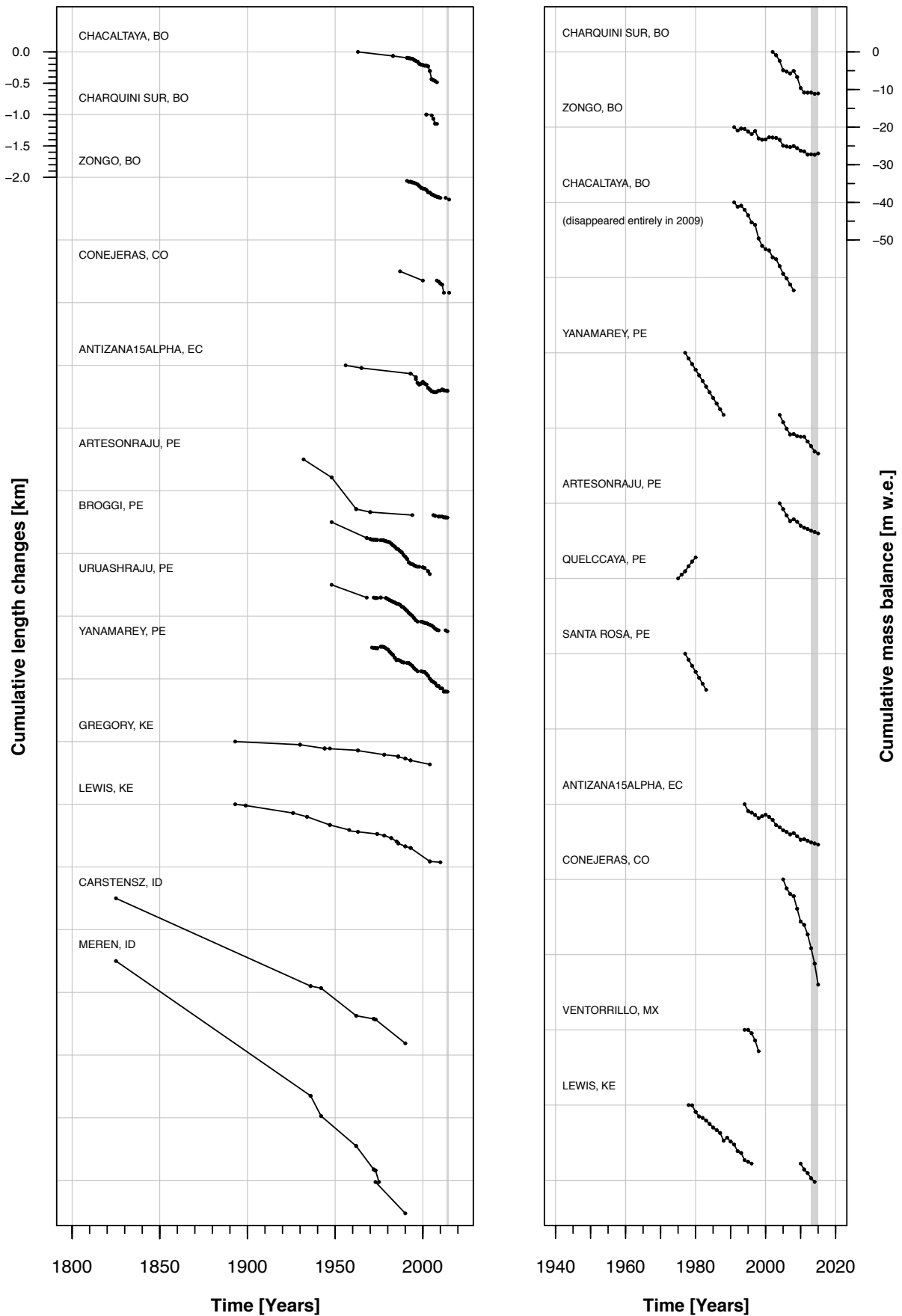


Figure 3.14.2 Cumulative length changes (left) and cumulative mass balances (right) of selected glaciers in the Low Latitudes over the entire observation period.

LOW LATITUDES

3.15 SOUTHERN ANDES

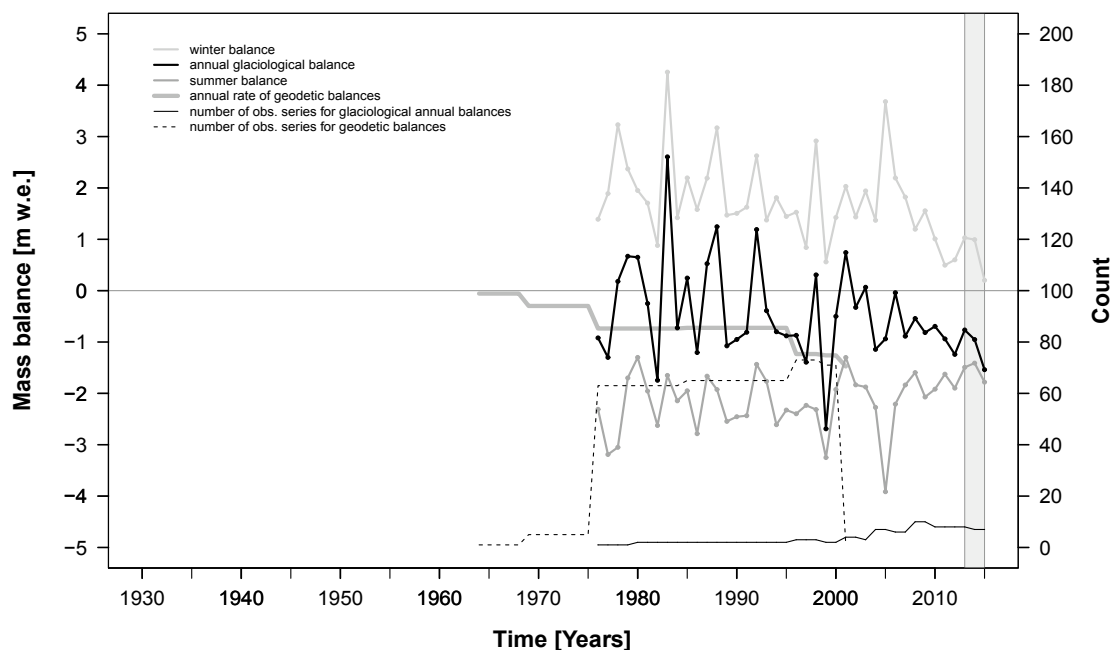


Figure 3.15.1 Regional mass balances: Annual glaciological balances (m w.e.) and annual rates of geodetic balances (m w.e. a⁻¹) are shown together with the corresponding number of observations. Geodetic balances were calculated assuming a glacier-wide average density of 850 kg m⁻³.

The Southern Andes contain the glaciers of Argentina and Chile. The entire glacier area totals about 29,000 km², most of which is located in the Northern and Southern Patagonian Icefields as well as in the Cordillera Darwin mountain range in Tierra del Fuego. The climate and topography varies along the Andes, creating different types of glaciers. The longest mass balance series of the entire Andes is reported from Echaurren Norte (CL) with continuous measurements since 1975/76. Besides this, observations series of more than ten years are available only from Martial Este (AR), Guanaco (CL), and Piloto Este (AR). From the Patagonian Ice fields, geodetic thickness change estimates and front variation measurements are available for most outlet glaciers. The available observations cover the second half of the 20th century but are usually not continued into the 21st century.

In the Southern Andes, most glaciers reached their LIA maximum between the late 17th and early 19th century (Masiokas et al., 2009). Most front variation measurements document a general retreat since the LIA maximum extent with some re-advances in the 1980s and an enhanced retreat trend in recent decades. There have been a few well-documented cases of surging glaciers, the most recent being Horcones Inferior and Nevado del Plomo in Argentina.

The available mass balance measurements indicate a strong interannual variability with decadal mean

balances slightly negative in the 1970s, 1980s, and 2000s; and -680 mm w.e. a⁻¹ in the 1990s. The reported balances for 2013/14 and 2014/15 were -952 and -1,539 mm w.e., respectively.

Based on geodetic surveys, the Patagonian Ice fields show a general thinning trend towards the end of the 20th and early 21st centuries. Most of the major outlet glaciers feature a strong centennial retreat. Exceptions in the Southern Patagonian Ice field are Pio XI (Brüggen) with the maximum observed advance and Perito Moreno, almost stationary. Garibaldi in Tierra del Fuego also displays an advance phase of its calving dynamics. Regional glacier change assessments were recently published by Masiokas et al. (2015) and White & Copland (2015), for example.

Estimated total glacier area (km ²):	29,000
Front variations	
- # of series*:	206/6
- # of obs. from stat. or adv. glaciers*:	168/0
- # of obs. from retreating glaciers*:	498/6
Glaciological balances	
- # of series*:	14/7
- # of observations*:	153/14
Geodetic balances	
- # of series ^o :	67/4
- # of observations ^o :	87/4

* (total/2014 & 2015), ^o (total/>2005)

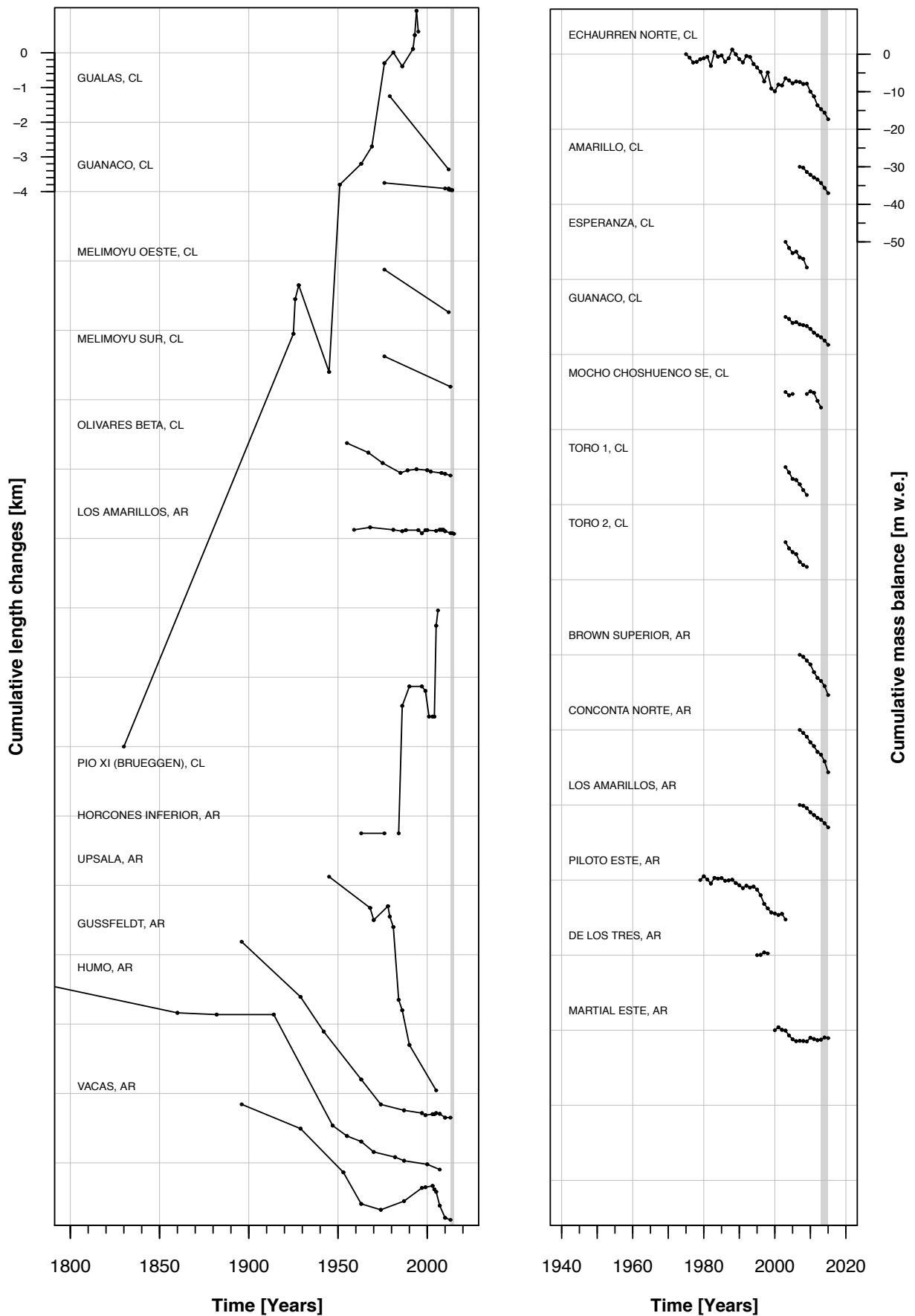


Figure 3.15.2 Cumulative length changes (left) and cumulative mass balances (right) of selected glaciers in the Southern Andes over the entire observation period.

3.16 NEW ZEALAND

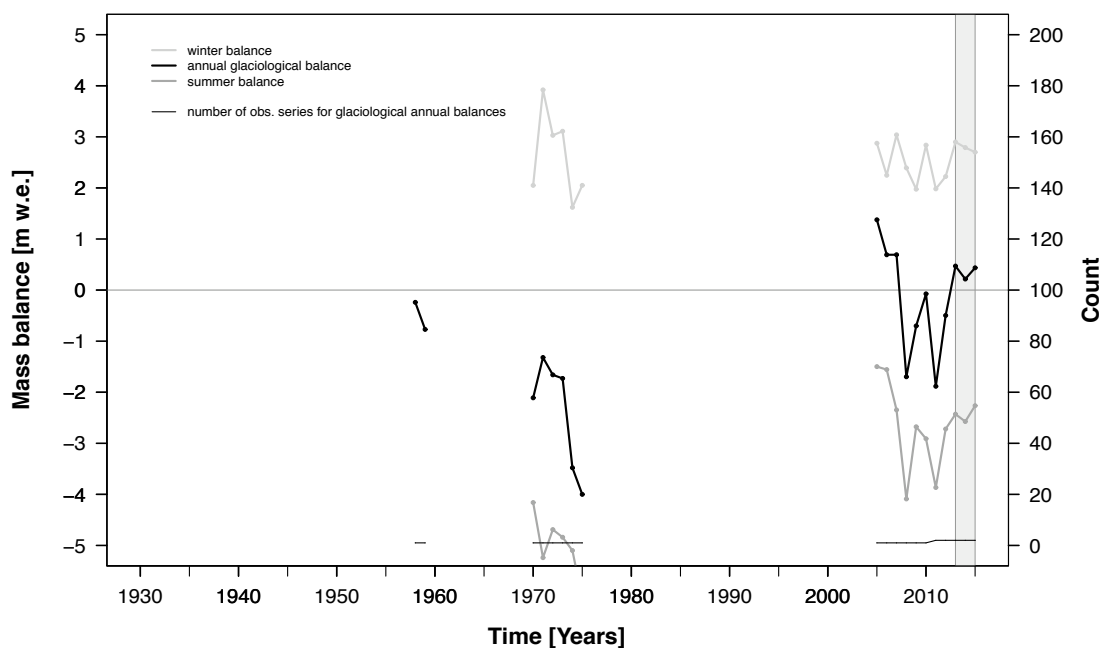


Figure 3.16.1 Regional mass balances: Annual glaciological balances (m w.e.) and annual rates of geodetic balances (m w.e. a⁻¹) are shown together with the corresponding number of observations. Geodetic balances were calculated assuming a glacier-wide average density of 850 kg m⁻³.

The majority of glaciers in New Zealand are located along the Southern Alps spanning the length of the South Island between 42° and 46° south. Their climatic regime is characterized by high precipitation with extreme gradients. Mean annual precipitation amounts to 4,500 mm on the west side (Whataroa) of the Alps and maximum values of up to 15,000 mm (cf. WGMS, 2008).

Mount Cook is the highest peak at 3,754 m a.s.l. The Tasman Glacier, the largest glacier in New Zealand, is located below its flank. In total, the inventory of 1978 reported 3,144 glaciers covering an area of about 1,000 km² with an estimated total ice volume of about 53 km³ at that time (Chinn, 2001).

New Zealand has a long history of glacier observation; however, most of the available front variation series are of qualitative character, i.e., indicating whether glacier fronts are advancing, retreating or stationary. Long-term quantitative front variation series are reported for Franz Josef, Fox, and Stocking Glaciers. Mass balance observations are available for only a few glaciers; recent measurements have been reported for Brewster and Rolleston.

Since 1977, the end-of-summer-snow-line has been surveyed on fifty index glaciers distributed over the Southern Alps. The surveys are carried out by hand-held oblique photography taken from a light aircraft.

Methods, data and more details are given in Chinn et al. (2005).

The few mass balance measurements indicate a large interannual variability with an average mean balance of a few hundred millimetres w.e. a⁻¹. Seasonal balances indicate very large mass turnover. Average annual balances (of Rolleston and Brewster) were positive with 216 and 436 mm w.e. in 2013/14 and 2014/15, respectively.

Regional glacier change assessments were recently published by Mackintosh et al. (2017).

Estimated total glacier area (km ²):	1,000
Front variations	
- # of series*:	103/54
- # of obs. from stat. or adv. glaciers*:	447/19
- # of obs. from retreating glaciers*:	564/54
Glaciological balances	
- # of series*:	5/2
- # of observations*:	24/4
Geodetic balances	
- # of series ^o :	0/0
- # of observations ^o :	0/0

* (total/2014 & 2015), ^o (total/>2005)

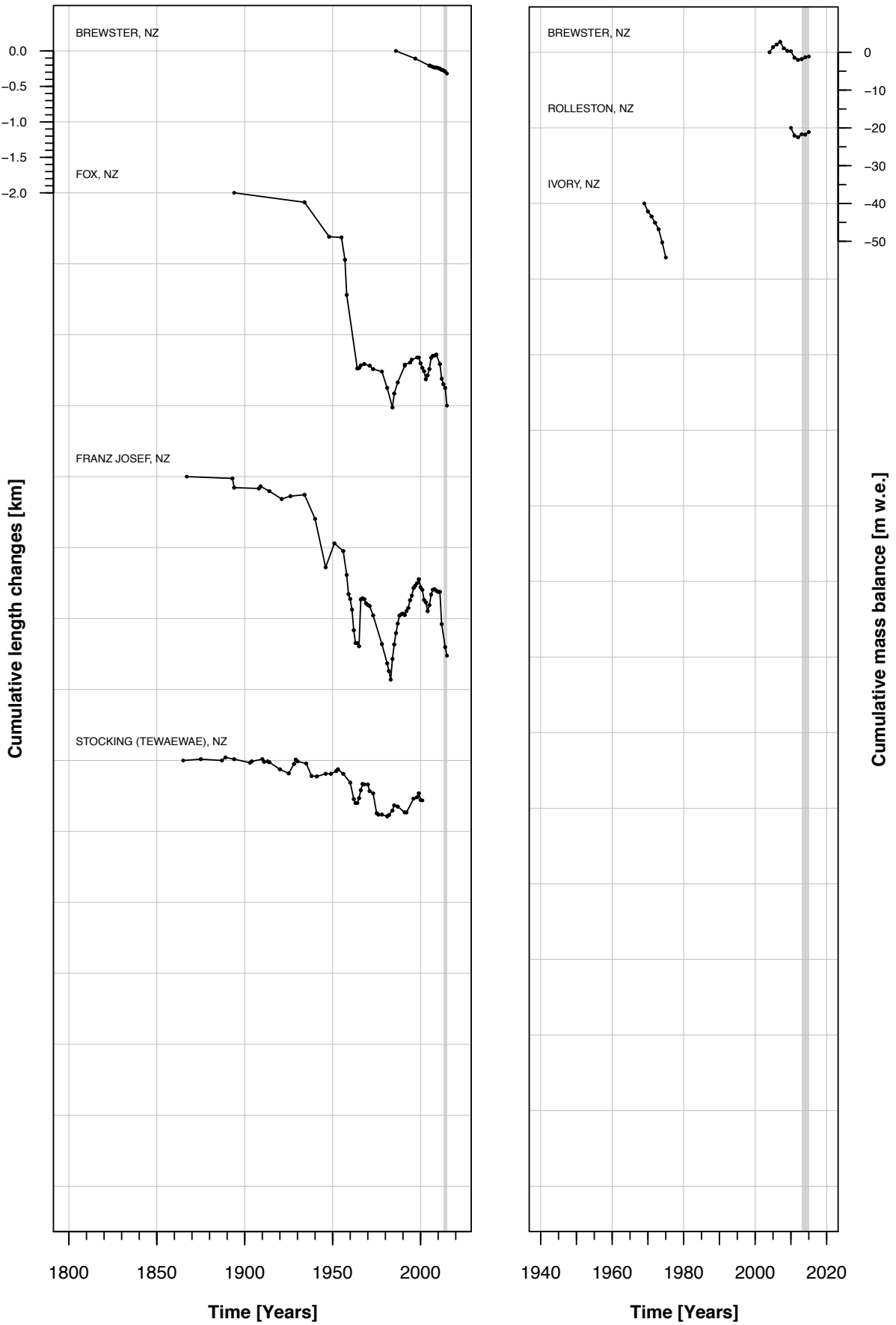


Figure 3.16.2 Cumulative length changes (left) and cumulative mass balances (right) of selected glaciers in New Zealand over the entire observation period.

3.17 ANTARCTICA & SUBANTARCTIC ISLANDS

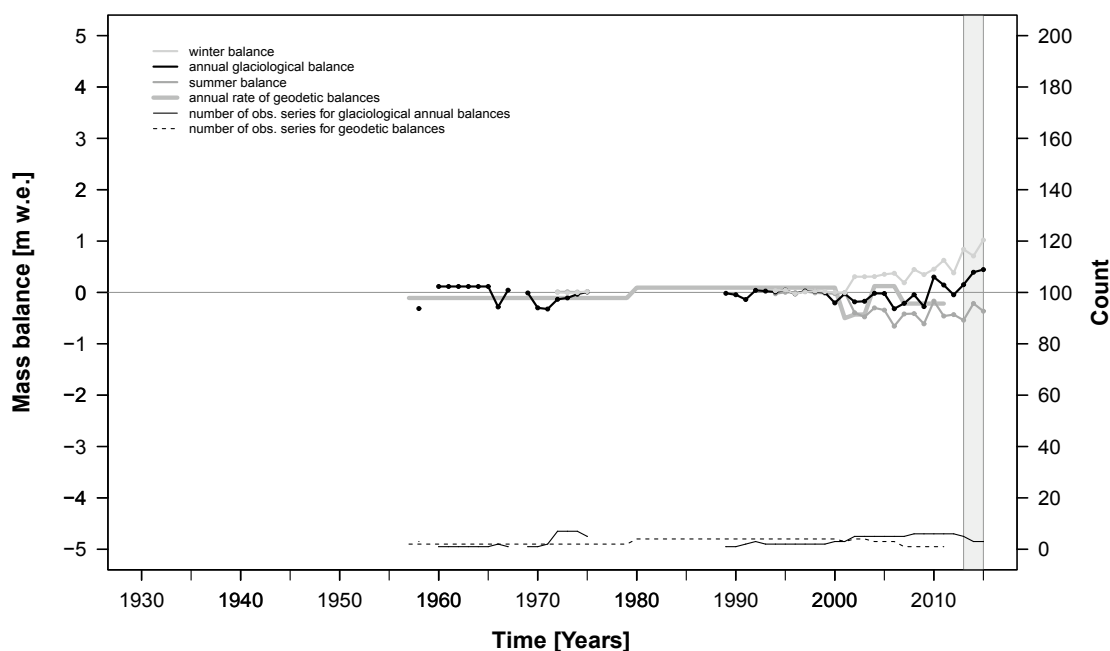


Figure 3.17.1 Regional mass balances: Annual glaciological balances (m w.e.) and annual rates of geodetic balances (m w.e. a⁻¹) are shown together with the corresponding number of observations. Geodetic balances were calculated assuming a glacier-wide average density of 850 kg m⁻³.

The total area of local glaciers in and around Antarctica is estimated to be about 130,000 km². Mainly due to the remoteness and the immense size of the ice masses, little is known about these glaciers. There are three categories of local glaciers outside the ice sheet: coastal glaciers, ice streams which are discrete dynamic units attached to the ice sheet, and isolated ice caps. In addition, glaciers are situated on Subantarctic Islands such as the South Shetland Islands, South Georgia, Heard Islands, and Kerguelen with a total estimated ice cover of roughly 7,000 km². Mass balance measurements are available from only a dozens of glaciers. Series of more than ten years are reported from Bahía del Diablo on Vega Island as well as from Hurd and Johnsons glaciers on Livingston Island located east and west of the northern tip of the Antarctic Peninsula.

Evidence of the timing of LIA glacier maxima south of the Antarctic Circle (66° 30' S) is sparse due to the lack of organic material for dating (Grove, 2004). For South Georgia, LIA maximum extends are reported for the 18th, 19th, and 20th centuries (Clapperton et al., 1989a, b).

Front variations, derived from aerial photographs and satellite images, of glaciers on the Antarctic Peninsula show a vast majority of glaciers retreating over the past six decades. Glaciers on South Georgia receded overall by varying amounts from their more

advanced positions in the 19th century, with large tidewater glaciers showing a more variable behaviour and remaining in relatively advanced positions until the 1980s. According to expedition records, little or no change occurred on glaciers at Heard Island during the first decades of the 20th century (Grove, 2004). However, in the second half, glacier recession has been widespread, interrupted by a period of some re-advancing glaciers in the 1960s. The very few glaciological and geodetic surveys indicate slightly negative mass balances since the 1960s and some positive years recently. Reported balance for 2013/14 and 2014/15 averaged at 393 and 445 mm w.e., respectively.

Estimated total glacier area (km ²):	133,000
Front variations	
- # of series*:	308/1
- # of obs. from stat. or adv. glaciers*:	136/2
- # of obs. from retreating glaciers*:	364/0
Glaciological balances	
- # of series*:	22/3
- # of observations*:	142/6
Geodetic balances	
- # of series°:	6/3
- # of observations°:	6/3
* (total/2014 & 2015), ° (total/>2005)	

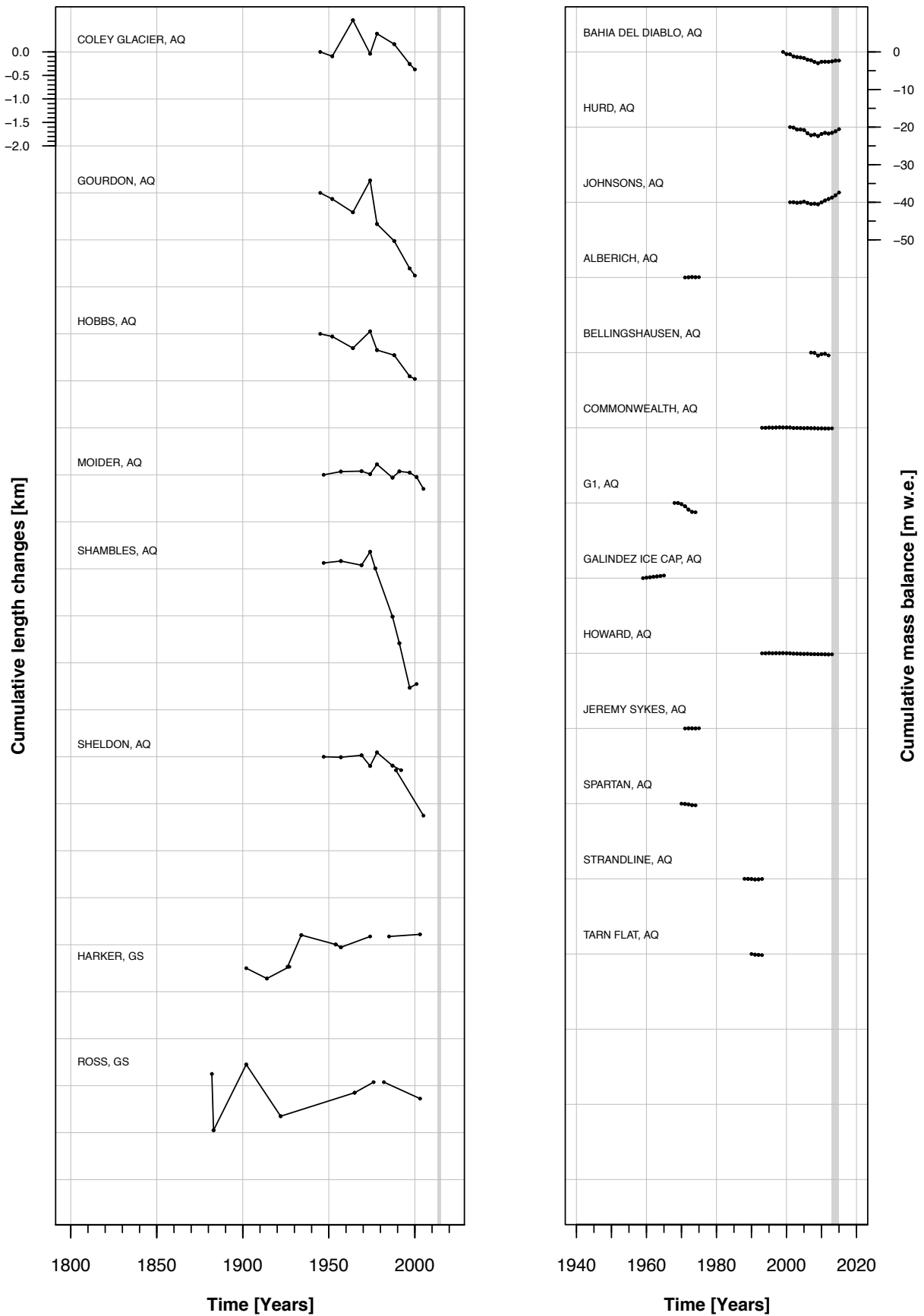


Figure 3.17.2 Cumulative length changes (left) and cumulative mass balances (right) of of selected glaciers in Antarctica and the Subantarctic Islands over the entire observation period.

ANTARCTICA & SUBANTARCTIC ISLANDS

4 DETAILED INFORMATION

Detailed information on selected glaciers with ongoing direct glaciological mass balance measurements in various mountain ranges is presented here, in addition to the global and regional information contained in the previous chapters. In order to facilitate comparison between the individual glaciers, the submitted material (text, maps, graphs and tables) was standardized, and in some cases generalized.

The text provides general information on the glacier followed by characteristics of the two reported balance years. General information concerns basic geographic, geometric, climatic and glaciological characteristics of the observed glacier which may help with the interpretation of climate/glacier relationships. A recent photograph showing the glacier is included.

Three maps are presented for each glacier: the first one, a topographic map, shows the stakes, snow pits and snow probing network. This network is basically the same from one year to the next on most glaciers. In cases of differences between the two reported years, the second was chosen, i.e., the network from the year 2014/15. The second and third maps are mass balance maps from the reported years, illustrating the pattern of ablation and accumulation. The accuracy of such mass balance maps depends on the density of the observation network, the complexity of the mass balance distribution, the applied technique for spatial extrapolation, and the experience of the local investigators.

A graph of glacier mass balance versus elevation is given for both reported years, overlaid with the corresponding glacier hypsography and point measurements (if available). The relationship between mass balance and elevation – the mass balance gradient – is an important parameter in climate/glacier relationships and represents the climatic sensitivity of a glacier. It constitutes the main forcing function of glacier flow over long time intervals. Therefore, the mass balance gradient near the equilibrium line is often called the ‘activity index’ of a glacier. The glacier hypsography reveals the glacier elevation bands that are most influential for the specific mass balance, and indicates how the specific mass balance might change with a shift in the ELA. An additional graph compares the mean annual glaciological and the geodetic balances (if available) for the whole observation period. For the comparison, the geodetic values were converted with a density factor of 850 kg m^{-3} .

The last two graphs show the relationship between the specific mass balance and the accumulation area ratio (AAR) and the equilibrium line altitude (ELA) for the whole observation period. The linear regression equation is given at the top of both diagrams. The AAR regression equation is calculated using integer values only (in percent). AAR values of 0 or 100 % as well as corresponding ELA values outside the elevation range of the observed glaciers were excluded from the regression analysis. The regressions were used to determine the AAR_0 and ELA_0 values for each glacier. The points from the two reported balance years (2013/14 and 2014/15) are marked in black. Minimum sample size for regression was defined as 6 ELA or AAR values.

4.1 BAHÍA DEL DIABLO (ANTARCTICA/A. PENINSULA)

COORDINATES: 63.82° S / 57.43° W



Photograph taken by S. Marinsek, 27 January 2015.

This polythermal-type outlet glacier is located on Vega Island, on the northeastern side of the Antarctic Peninsula. The glacier is exposed to the northeast, covers an area of ~12.9 km², and extends from an altitude of 630 m to 50 m a.s.l. The mean annual air temperature at the equilibrium line around the 400 m a.s.l. ranges between -7 and -8 °C. The glacier snout overrides an ice-cored moraine over a periglacial plain of continuous permafrost. The mass balance measurements on this glacier began in austral summer 1999/2000, using a simplified version of the combined stratigraphic annual mass balance method because the glacier can be visited only once a year.

The mass balance for the year 2013/14 was 190 mm w.e. and the mass balance for the year 2014/15 was 25 mm w. e., continuing a series of positive or near equilibrium results since the 2009/10 first positive and extraordinary mass balance recorded for the glacier. Annual precipitations for both periods were within the mean for the long record since the data is recorded nearby the glacier. Mean summer air temperatures, -0.85 °C for 2013/14 summer and 0.05 °C for 2014/15 summer, were much below the last 16 year mean. From mass balance vs. altitude data, the ELA derived for 2013/14 was 325 m a.s.l. and for 2014/15 it was 380 m a.s.l., both being close to the mean long-term ELA of ~400 m a.s.l.

This data, continuing the series, confirms the existing strong correlation between the annual mass balance and mean summer air temperature. Recently, the glaciological mass balance series was homogenized and validated using data from geodetic surveys in 2001 and 2011 (Marinsek & Ermolin, 2015). The results attained by the two methods agree well.

Figure 4.1.1 Topography and observation network and mass balance maps 2013/14 and 2014/15.

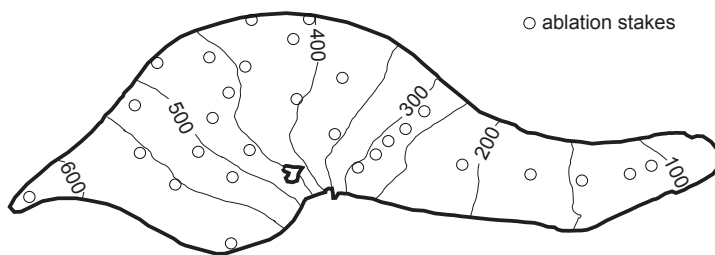
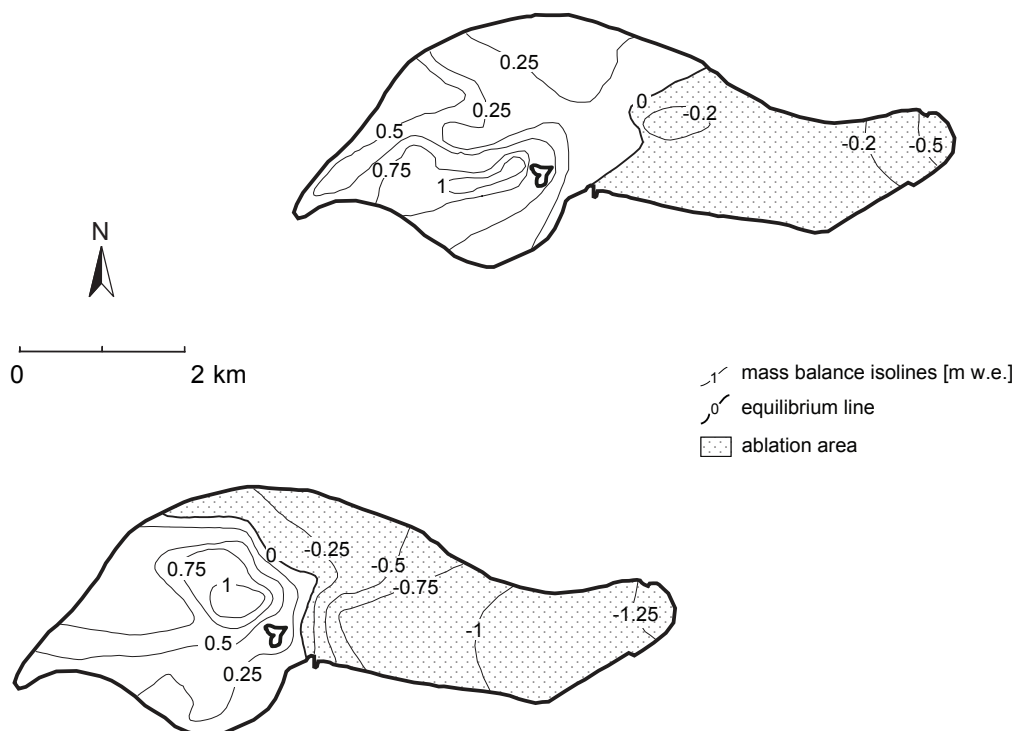
Topography and observational network**Mass balance maps 2013/14 and 2014/15****Bahía del Diablo (ANTARCTICA)**

Figure 4.1.2 Mass balance versus elevation (2013/14 and 2014/15).

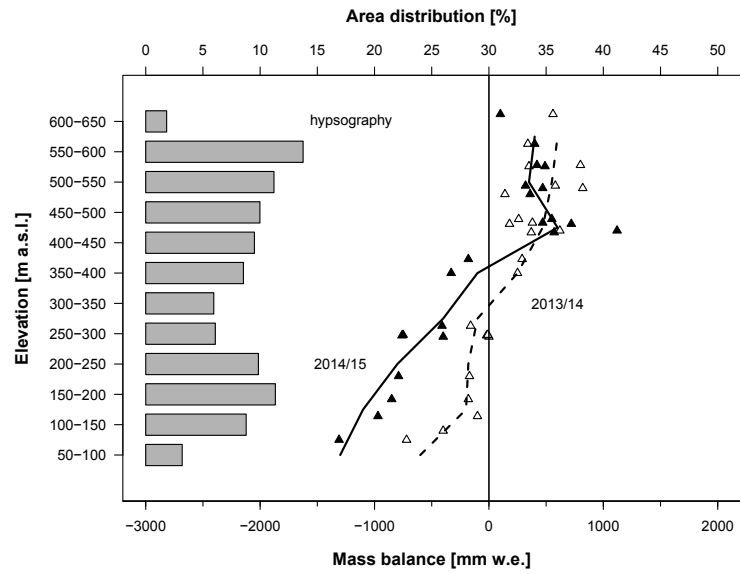


Figure 4.1.3 Glaciological balance versus geodetic balance for the whole observation period.

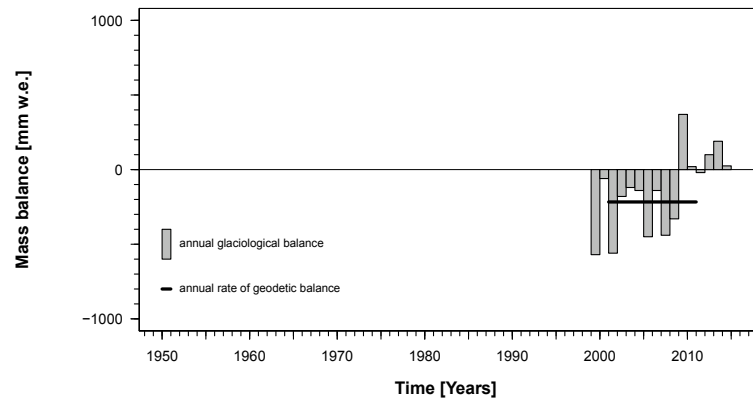
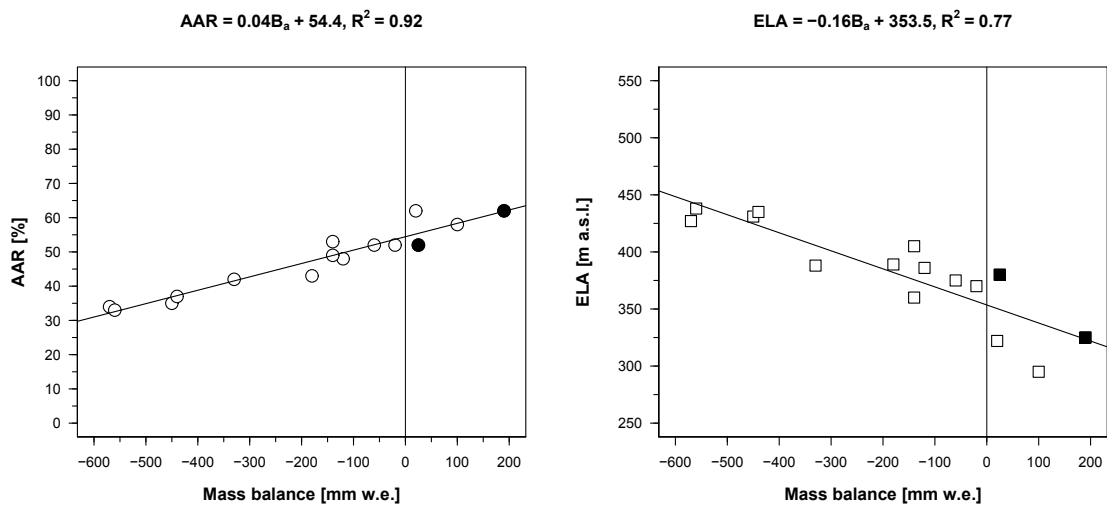


Figure 4.1.4 Accumulation area ratio (AAR) and equilibrium line altitude (ELA) versus specific mass balance for the whole observation period.



Bahía del Diablo (ANTARCTICA)

4.2 MARTIAL ESTE (ARGENTINA/ANDES FUEGUINOS)

COORDINATES: 54.78° S / 68.40° W



Photo of Martial Este Glacier by R. Iturraspe, 2 March 2013.

The Martial Este Glacier is one of the four small cirque glaciers located in the Cordón Martial (1,319 m a.s.l.), very close to Ushuaia city, on the southern shore of Tierra del Fuego Island. The glacier is one of the tourist attractions of Ushuaia city and contributes to the Buena Esperanza River, which is used as water source for the local population. The Martial Este, one of the main ice bodies, is a temperate glacier specially favored by the relief which protects it from wind and solar radiation. Since the LIA these glaciers have lost 75% of their total area. According to topographic surveys, the annual rate of vertical thinning at Martial Este Glacier from 1984 to 1998 was 0.5 m a^{-1} ($450 \text{ mm w.e. a}^{-1}$). This rate persisted until 2005 but since 2006 it has been stable.

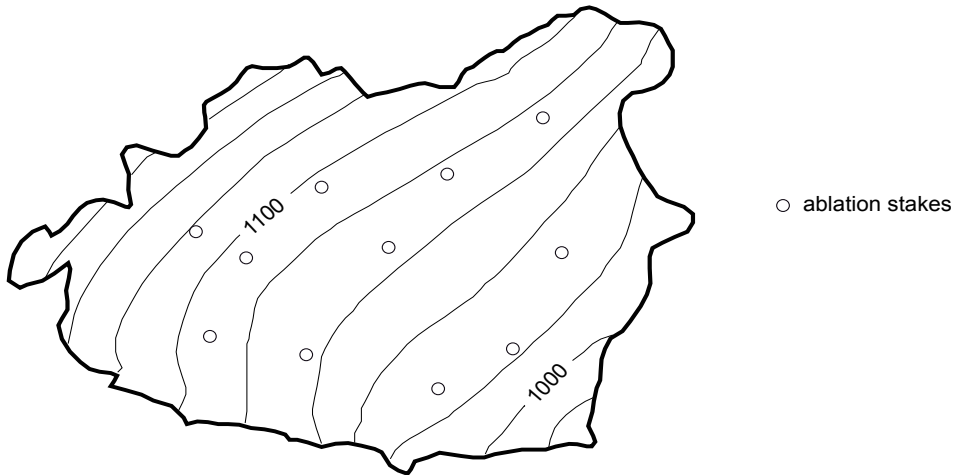
The hydrological cycle starts in April and the maximum accumulation on the glacier ends usually in November. The systematic monitoring of this glacier is done jointly by the Water Agency of Tierra del Fuego and the National University of Tierra del Fuego.

A weather station located at 1,000 m a.s.l., very close to the glacier, collects climate data. Mean annual air temperature at the ELA level (1,075 m a.s.l.) is $-1.5 \text{ }^{\circ}\text{C}$ and the average precipitation, distributed over the whole year without a dry season, amounts to 1300 mm. This amount, compared to the precipitation at the sea level in Ushuaia (530 mm) indicates a significant orographic gradient.

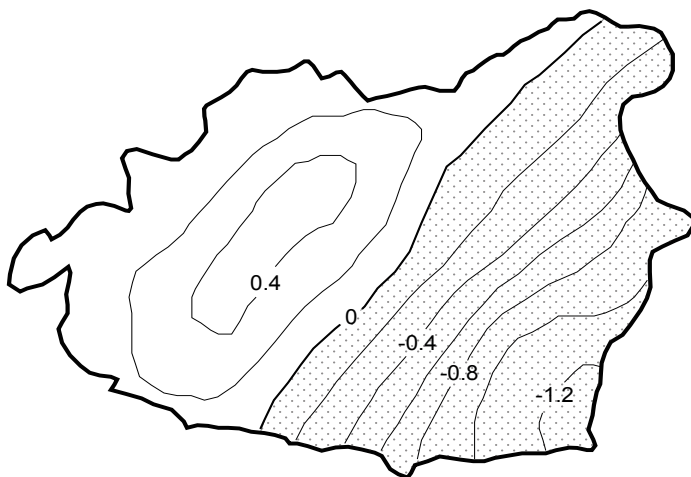
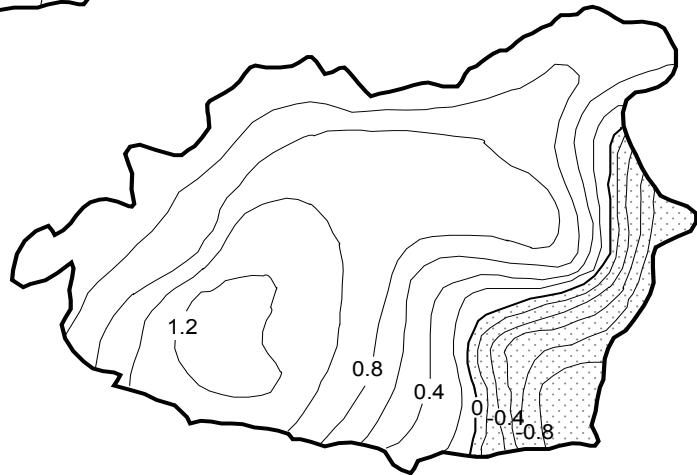
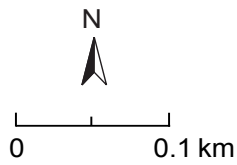
The mass balance 2013/14 was positive with 566 mm w.e., with an ELA at 1,025 m a.s.l. and an AAR of 85%. In 2014/15 a slightly negative mass balance was observed with -157 mm w.e. Corresponding ELA and AAR values were 1,075 m a.s.l. and 50%, respectively.

Figure 4.2.1 Topography and observation network and mass balance maps 2013/14 and 2014/15.

Topography and observational network



Mass balance maps 2013/14 and 2014/15



- ▬ mass balance isolines [m w.e.]
- equilibrium line
- ▨ ablation area

Martial Este (ARGENTINA)

Figure 4.2.2 Mass balance versus elevation (2013/14 and 2014/15).

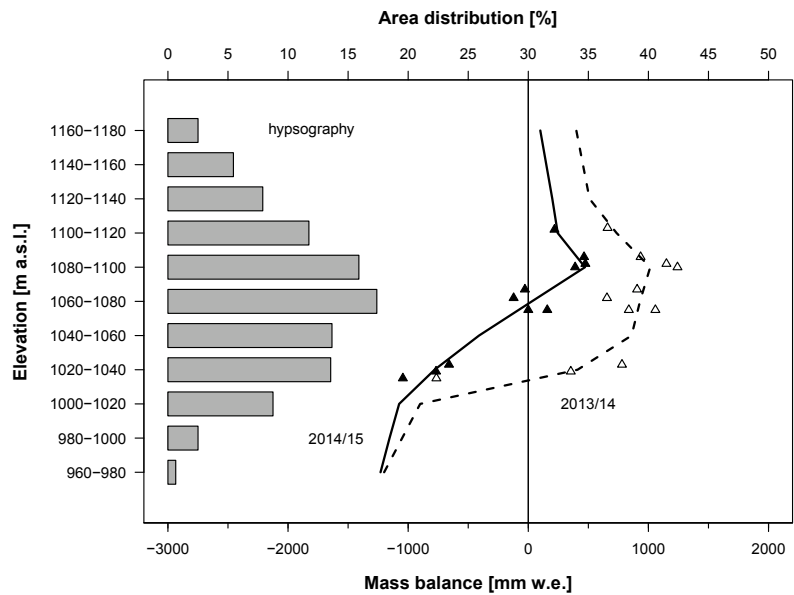


Figure 4.2.3 Glaciological balance versus geodetic balance for the whole observation period.

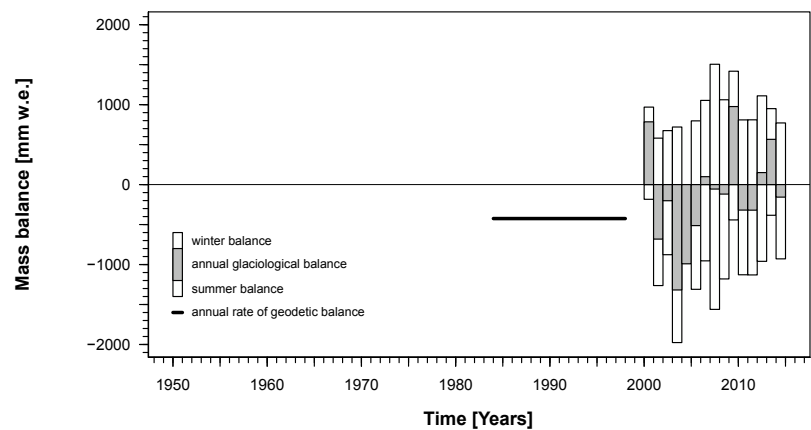
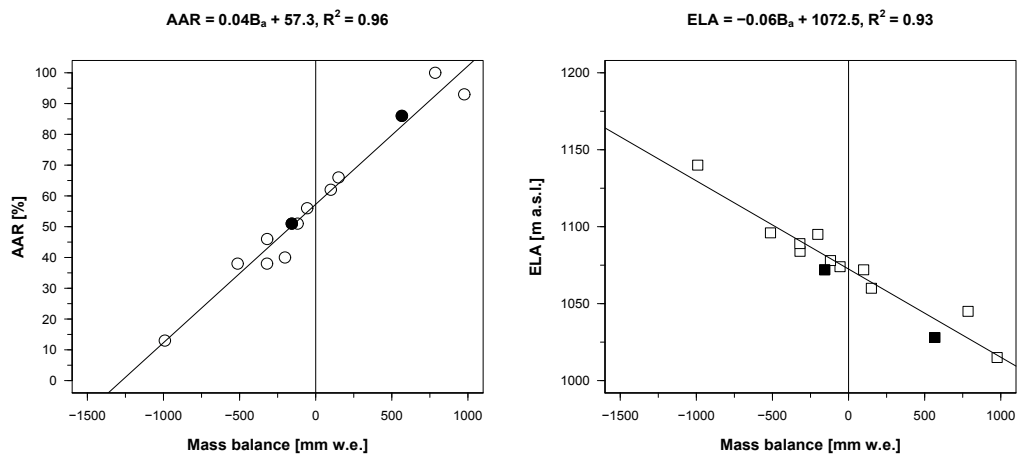


Figure 4.2.4 Accumulation area ratio (AAR) and equilibrium line altitude (ELA) versus specific mass balance for the whole observation period.



Martial Este (ARGENTINA)

4.3 HINTEREISFERNER (AUSTRIA/ALPS)

COORDINATES: 46.80° N / 10.77° E



Photograph taken by W. Gurgiser, 31 August 2015.

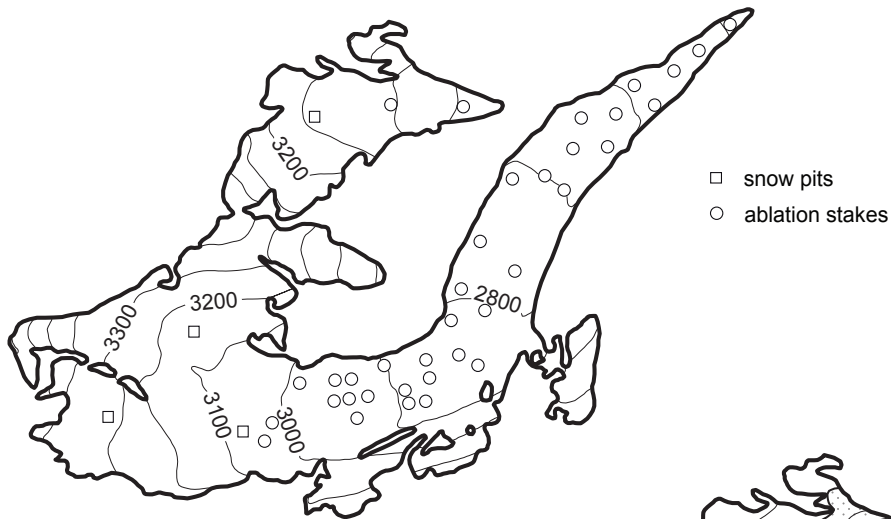
Hintereisferner is a 6.5 km long valley glacier in the Rofental (Ötztal Alps, Austria). Its surface area is 6.6 km² (2013), descending from the upper slopes of Weißkugel (3,739 m a.s.l.) to 2,455 m a.s.l. The glacier accumulation area is mainly orientated east and the glacier tongue northeast. Glacier mass balance has been derived using the glaciological method (fixed date) since 1953.

The surface mass balance for the 2013/14 hydrological year was slightly negative with a loss of -122 mm w.e. and an ELA at 2,990 m a.s.l. Substantial winter snow led to a sustained high albedo into the early summer months. High winter accumulation in conjunction with snowfalls down to low altitudes during the summer months contributed to this year being the least negative mass balance of the last decade on Hintereisferner.

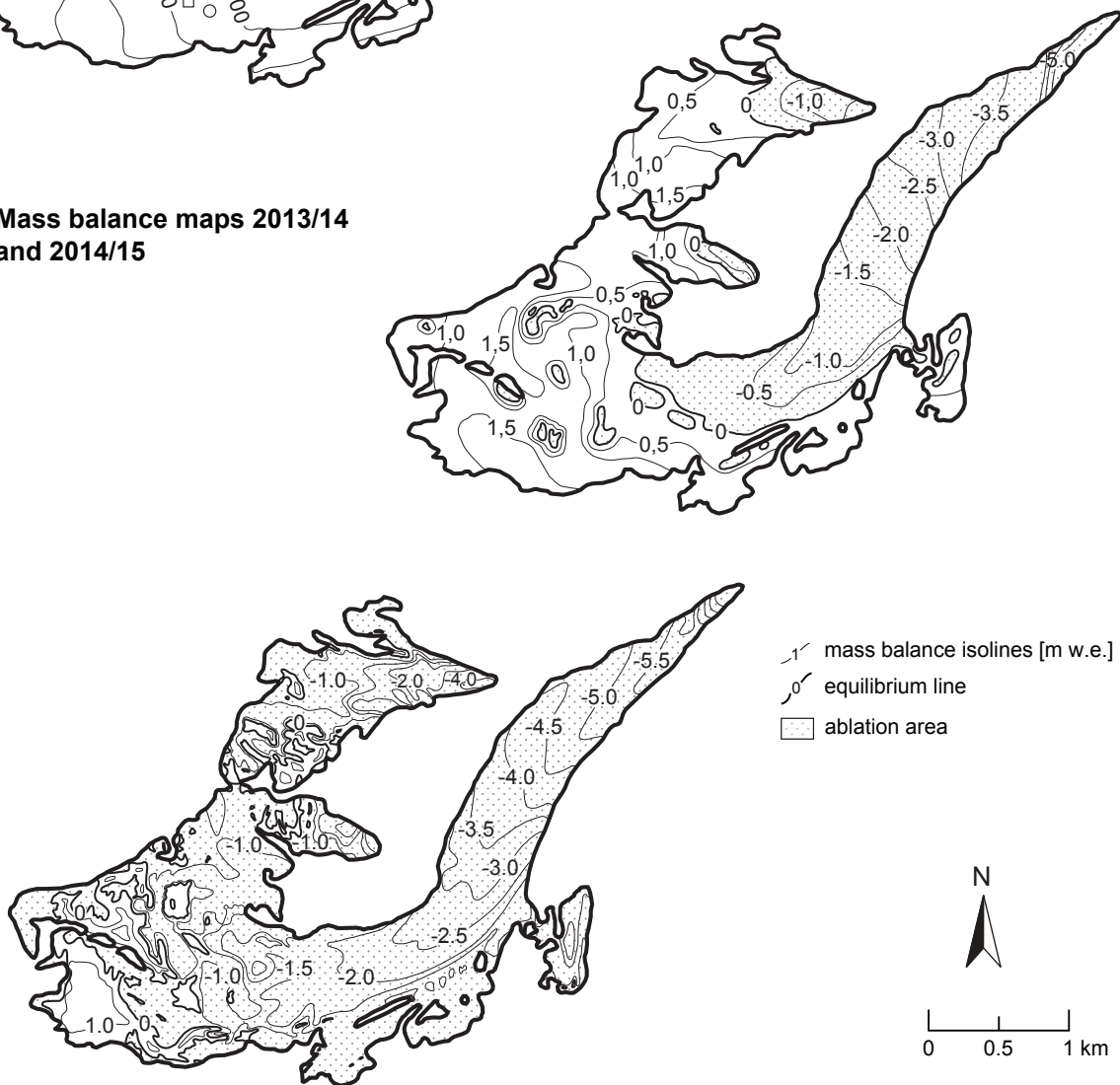
By contrast, the surface mass balance for the 2014/15 hydrological year was strongly negative with a loss of -1,682 mm w.e. and an ELA above the upper limit of the glacier. Although the winter accumulation was high, the very hot summer of 2015 resulted in ablation of almost the entire winter accumulation, aside from isolated snow patches in surface depressions. Between late June and mid August there was no snowfall on the glacier surface. The 2014/15 mass balance is one of the most negative in the whole range of mass balance records for Hintereisferner.

Figure 4.3.1 Topography and observation network and mass balance maps 2013/14 and 2014/15.

Topography and observational network



Mass balance maps 2013/14 and 2014/15



Hintereisferner (AUSTRIA)

Figure 4.3.2 Mass balance versus elevation 2013/14 and 2014/15.

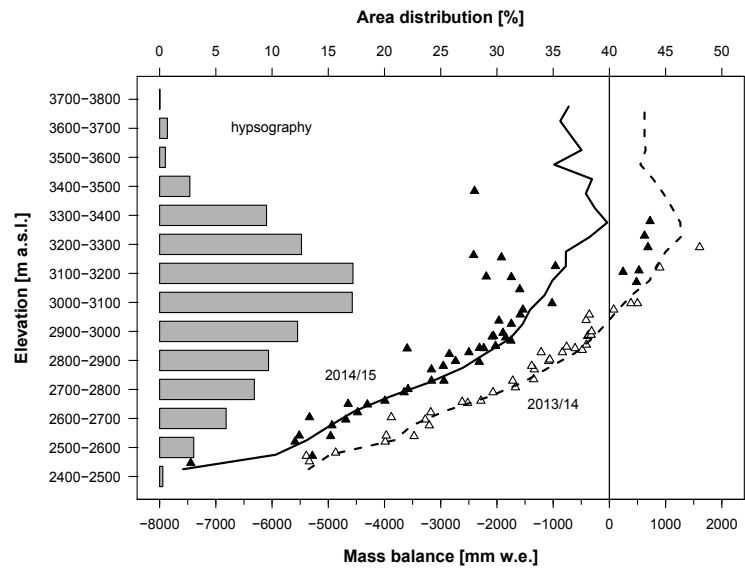


Figure 4.3.3 Glaciological balance versus geodetic balance for the whole observation period.

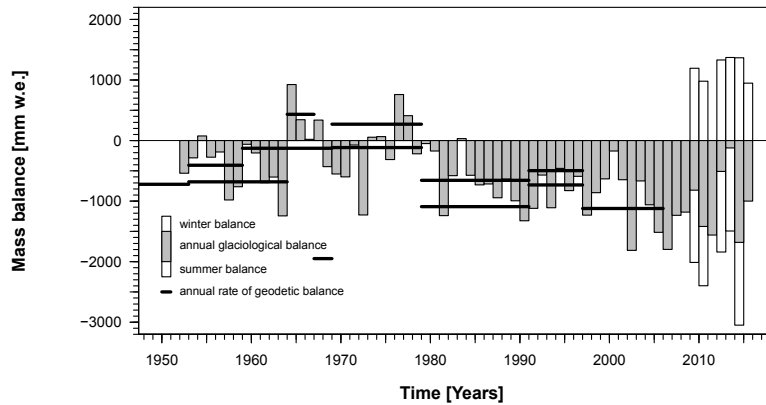
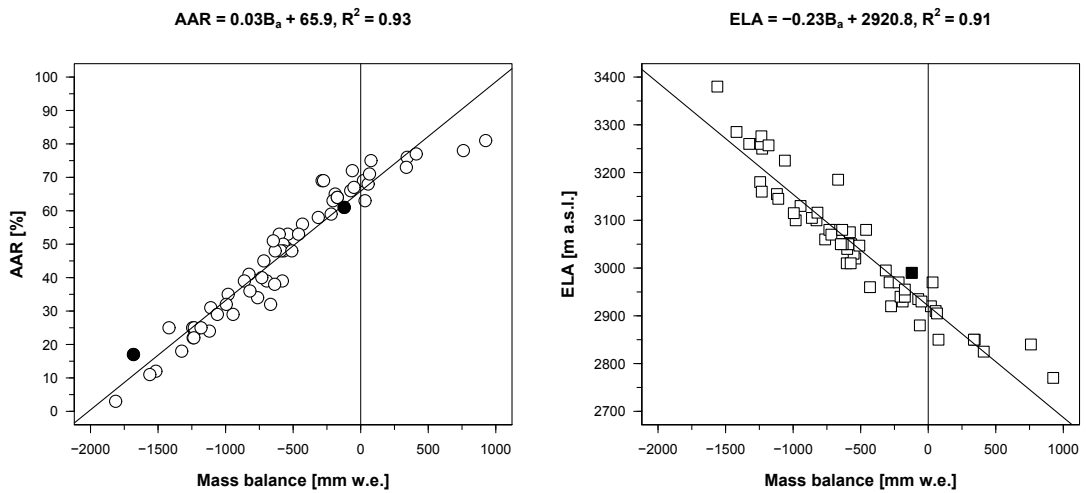


Figure 4.3.4 Accumulation area ratio (AAR) and equilibrium line altitude (ELA) versus specific mass balance for the whole observation period.



Hintereisferner (AUSTRIA)

4.4 CHARQUINI SUR (BOLIVIA/TROPICAL ANDES)

COORDINATES: 16.17° S / 68.09° W



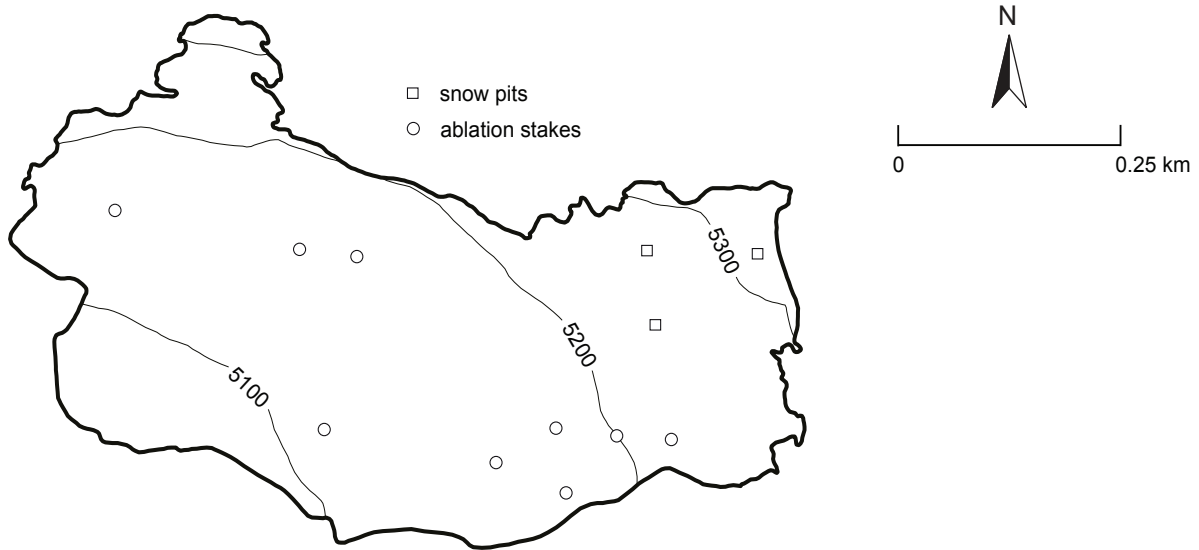
Photograph taken by Alvaro Soruco, 21 August 2017.

The Charquini Sur Glacier is a very small temperate valley glacier located 30 km northeast of La Paz city. Its length is around 0.5 km and its width is around 0.6 km, flowing from 5,334 to 5,000 m a.s.l. The glacier has an area close to 0.3 km² and the valley has a south exposure in the upper and lower part. Climate is characterized by one dry and one wet season, the latter occurring during the austral summer. Melting takes place mainly during the summer, reaching a peak in November, before the peak of precipitation, which takes place between January and March.

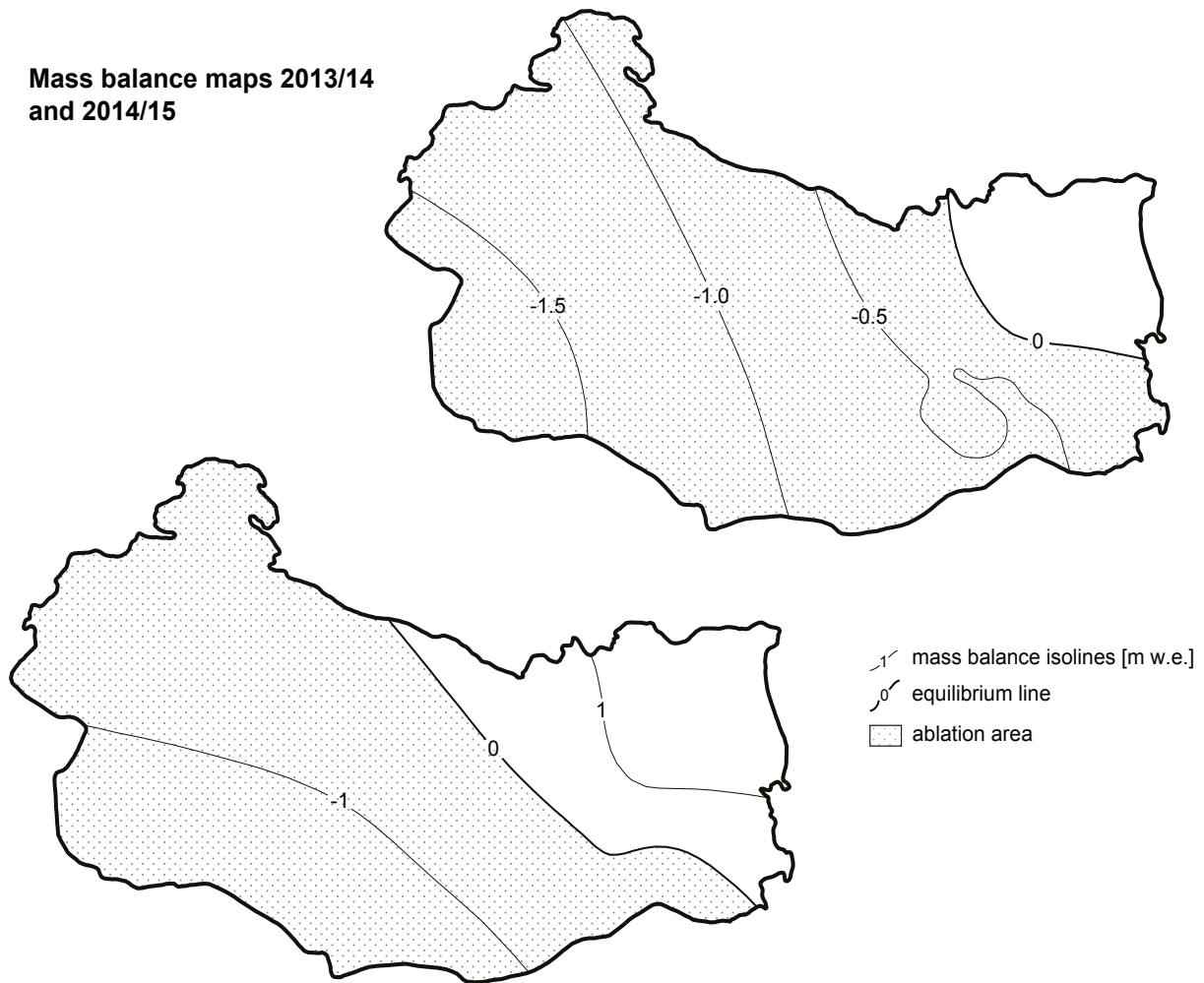
As all glaciers in the region, Charquini Sur Glacier had a negative mass balance in the latter periods. The 2013/14 period revealed a negative mass balance of -310 mm w.e. The few periods with positive mass balances coincided with La Niña events (region 3-4). The 2014/15 period presented a slight positive mass balance (78 mm w.e.) close to the equilibrium. The 2013/14 period was characterized by La Niña conditions, while the 2014/15 period by El Niño ones. The greatest loss (-2,921 mm w.e.) occurred during the El Niño event of 2009/10.

Figure 4.4.1 Topography and observation network and mass balance maps 2013/14 and 2014/15.

Topography and observational network



**Mass balance maps 2013/14
and 2014/15**



Charquini Sur (BOLIVIA)

Figure 4.4.2 Mass balance versus elevation (2013/14 and 2014/15).

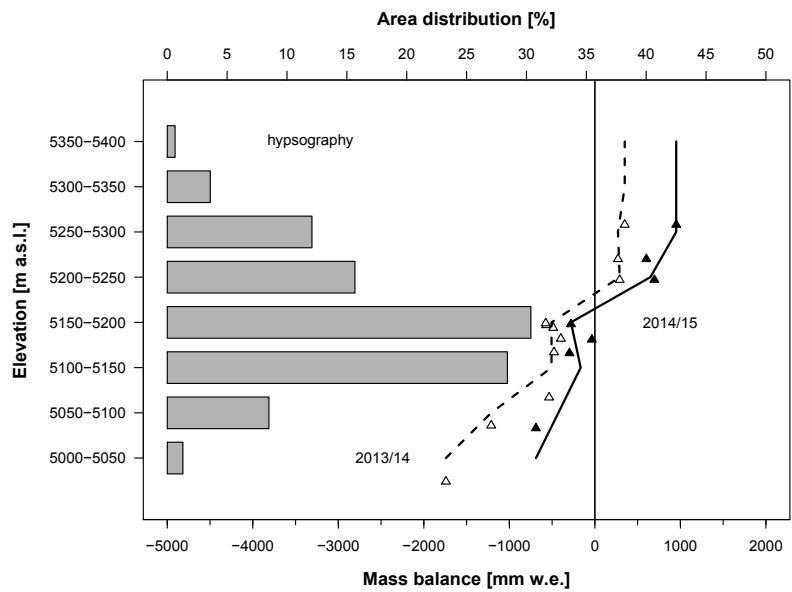


Figure 4.4.3 Glaciological balance versus geodetic balance for the whole observation period.

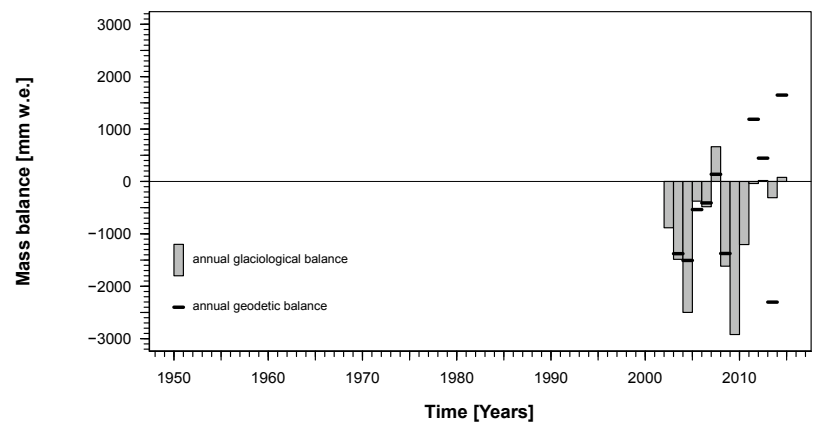
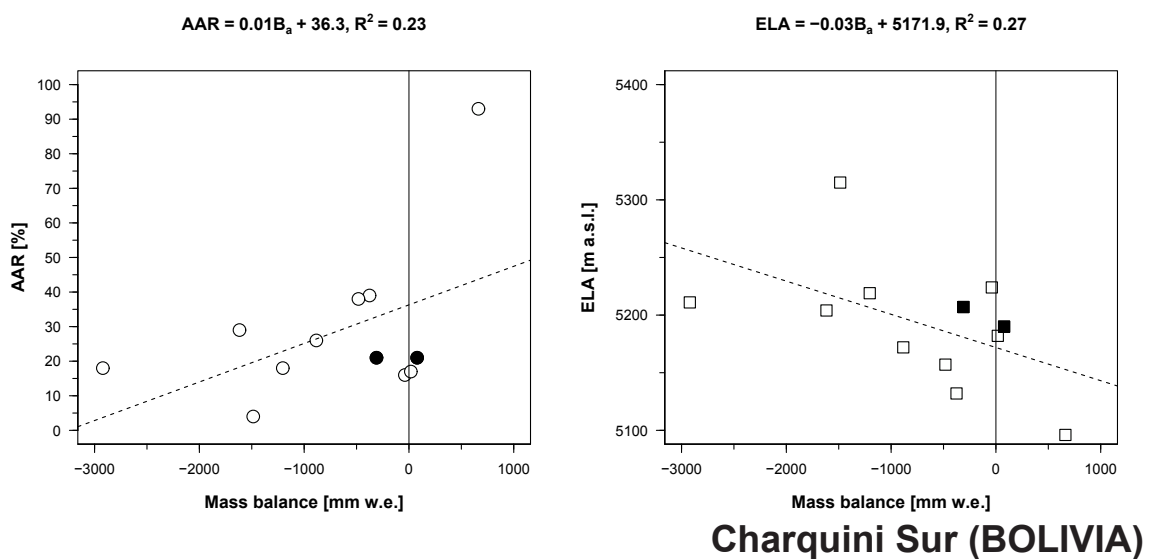


Figure 4.4.4 Accumulation area ratio (AAR) and equilibrium line altitude (ELA) versus specific mass balance for the whole observation period.



4.5 WHITE (CANADA/HIGH ARCTIC)

COORDINATES: 79.45° N / 90.67° W



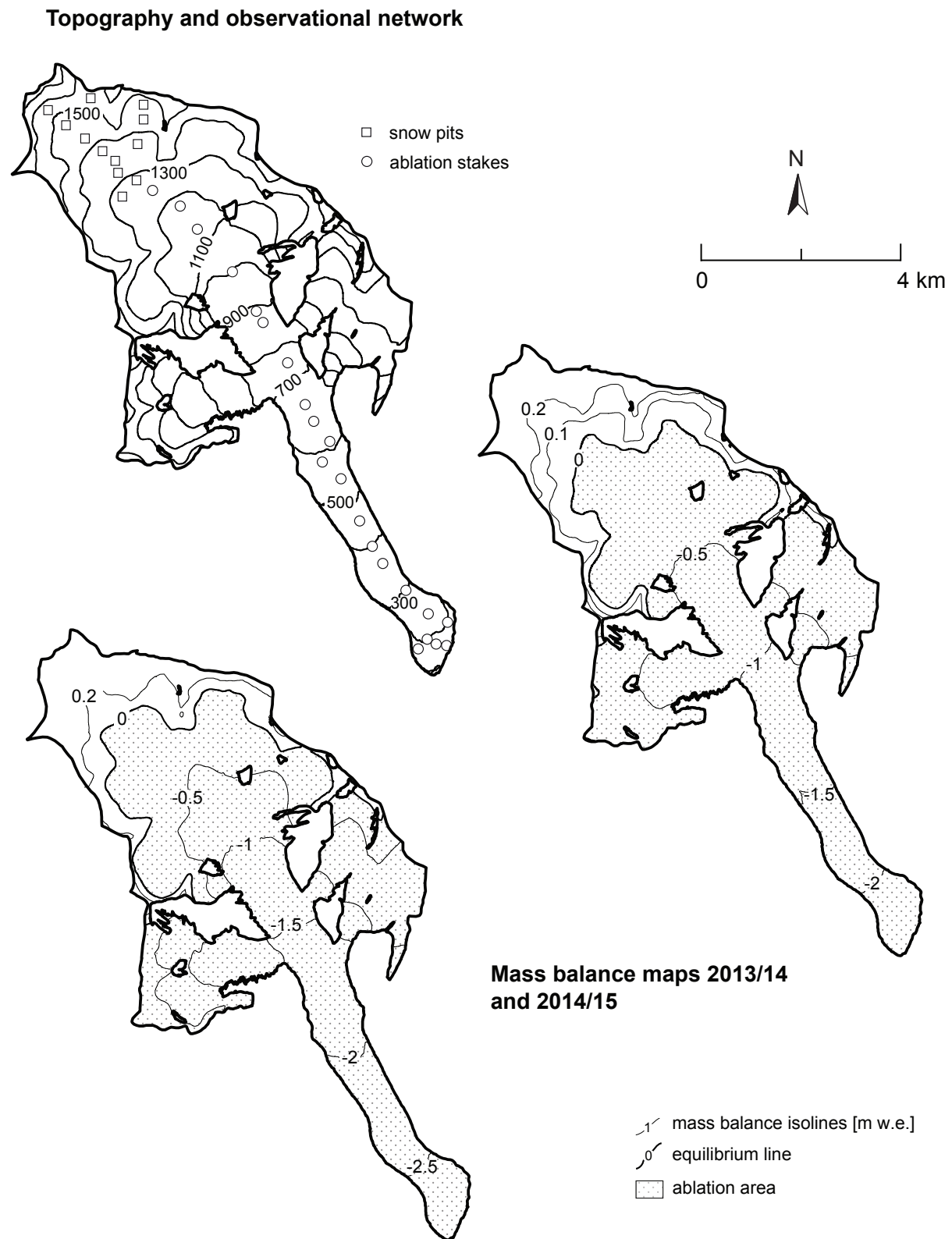
Photograph taken by L. Thomson, 28 June 2014.

White Glacier is a 14 km long polythermal valley glacier located in the Expedition Fiord region of Axel Heiberg Island, Nunavut, Canada. The glacier has a 5 km wide accumulation area reaching a maximum elevation of 1,782 m a.s.l. and flows southeast into a narrow 0.8–1.1 km wide valley, terminating at a junction with Thompson Glacier to the east at an elevation of ~100 m a.s.l. Since the onset of mass balance measurements in 1960, the glacier area has diminished from approximately 2.5 km² to 38.54 km² in 2014. The region experiences mean annual temperatures of about -20 °C and annual precipitation ranging from 58 mm at sea level (as measured at Eureka, 100 km to the east) to 370 mm at 2,120 m a.s.l. as measured in a 41-year snowpit record of annual accumulation on the Müller Ice Cap (Cogley et al., 1996). Over the period of observation (1960–2015), the average equilibrium line altitude (ELA) was 1,075 m a.s.l. and the mean accumulation area ratio (AAR, accumulation area divided by the total area) was 55%.

In July 2014 a photo survey was conducted by helicopter flying over White Glacier. Analysis of the resulting photographs using Structure from Motion methods led to the production of a new 1:10,000 topographic map of the glacier basin (Thomson & Copland, 2016). The new map supported the calculation of the glacier's geodetic mass and a re-analysis of the 54-year mass balance record, including updates to the mass balance calculations to account for thinning and retreat (Thomson et al., 2017).

A relatively cool and cloudy summer in 2014 across the Canadian high Arctic led to suppressed melt levels in this region (Wolken et al., 2016); however, the 2013/14 annual mass balance (-417 mm w.e.) remained the 14th most negative balance on record. Significantly warmer and clearer summer conditions in the summer of 2015 led to a 2014/15 annual balance of -693 mm w.e., resulting in the 6th most negative balance on record.

Figure 4.5.1 Topography and observation network and mass balance maps 2013/14 and 2014/15.



White (CANADA)

Figure 4.5.2 Mass balance versus elevation (2013/14 and 2014/15).

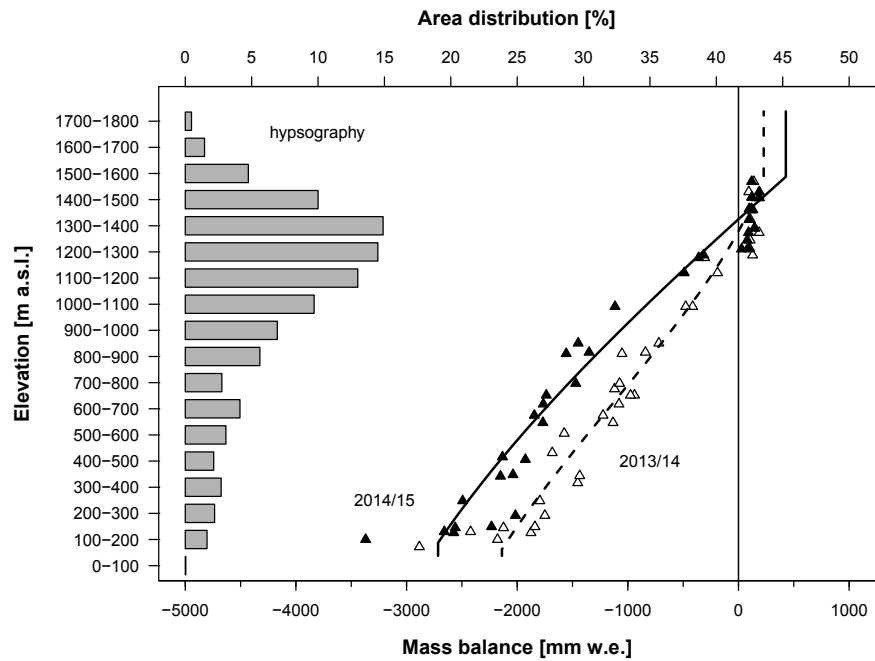


Figure 4.5.3 Glaciological balance versus geodetic balance for the whole observation period.

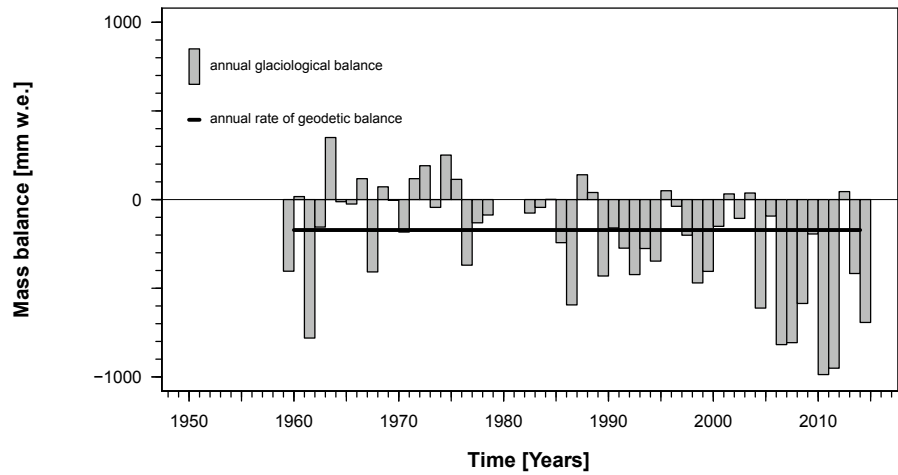
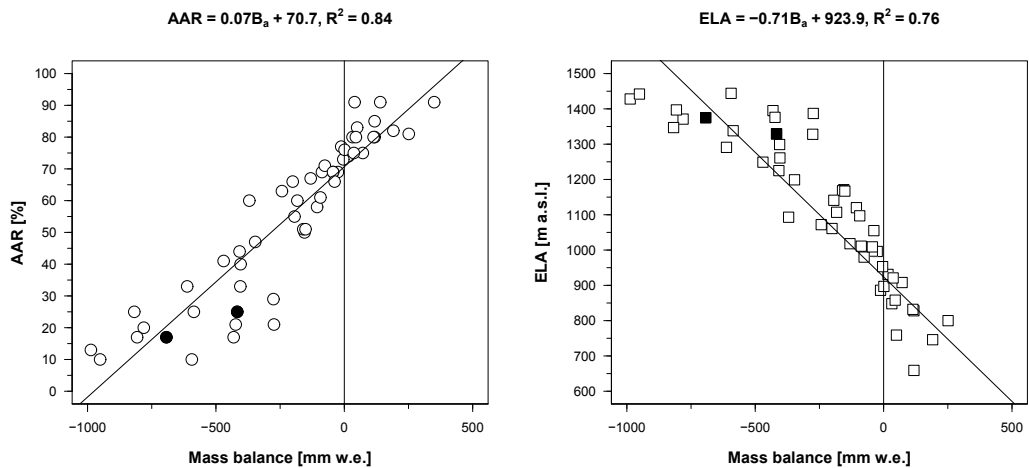


Figure 4.5.4 Accumulation area ratio (AAR) and equilibrium line altitude (ELA) versus specific mass balance for the whole observation period.



White (CANADA)

4.6 URUMQI GLACIER NO. 1 (CHINA/TIEN SHAN)

COORDINATES: 43.08° N / 86.82° E



Photo taken by L. Huilin, 28 August 2015.

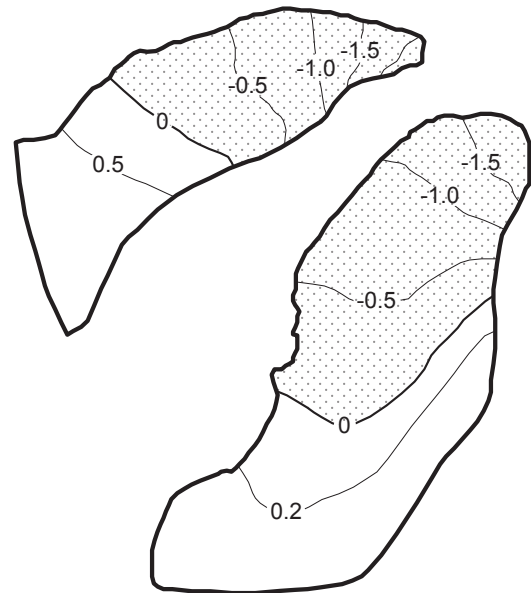
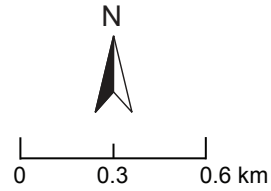
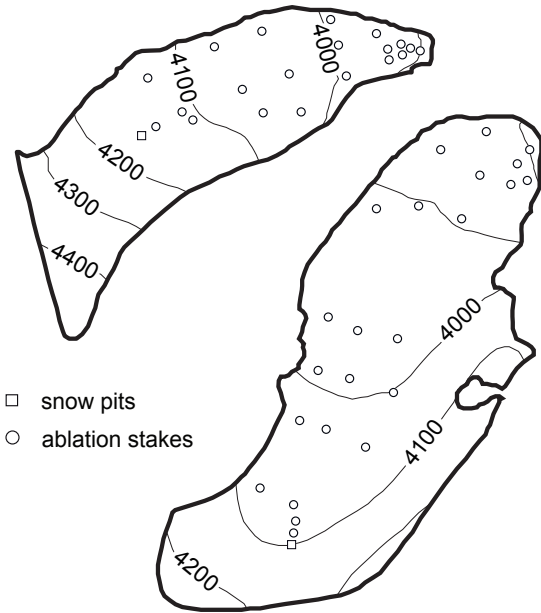
Urumqi S. No 1 has been in constant recession since it was first observed in 1959. Due to retreat, the two branches of the former glacier have become separated into two small glaciers, but are still called the East and West Branch of Glacier No. 1. According to the latest survey in August 2012, the East Branch has a total area of 1.029 km², and the highest and lowest points are at 4,225 and 3,752 m a.s.l. The West Branch has a total area of 0.589 km², while the highest and lowest points are at 4,445 and 3,848 m a.s.l. The latest radar echo-sounding measurement was carried out on the glacier in August 2012, and indicates its maximum thickness as 124±5 m.

For Urumqi S. No 1, accumulation and ablation both take place primarily during the warm season and the formation of superimposed ice on this continental glacier is important. In the 2013/2014 mass balance year (2013.8.29-2014.9.1), the annual precipitation at the nearby meteorological station located at 3,539 m a.s.l. (Daxigou Meteorological Station) was 494 mm. Mean annual air temperature at DMS was -4.4 °C. The mass balances of both branches of Urumqi S. No 1 were negative in 2013/2014, i.e., -228 mm w.e. for the East Branch and -109 mm w.e. for the West Branch. The calculated mean for entire glacier was -185 mm w.e.

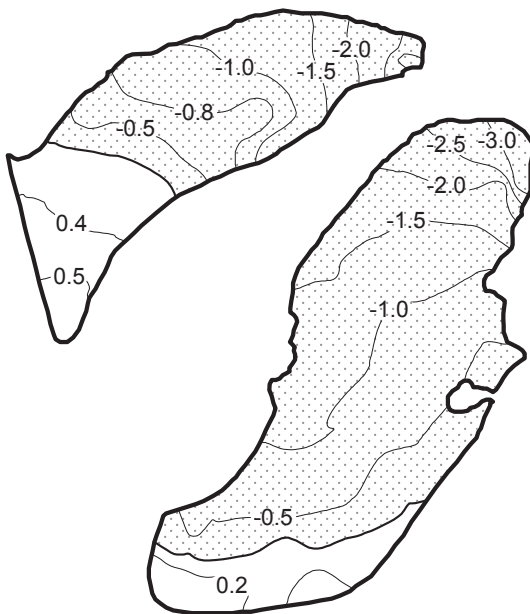
In the 2014/2015 mass balance year (2014.9.1–2015.9.2), the total precipitation at the nearby meteorological station located at 3,539 m a.s.l. (Daxigou Meteorological Station) was 576 mm and the mean annual air temperature was -4.0 °C. The corresponding precipitation and mean air temperature at the ELA of Urumqi S. No 1 was determined to be -8.1 °C and 870 mm, respectively. The mass balances of both branches of the glacier were negative in 2014/2015, i.e., -932 mm w.e. for the East Branch and -607 mm w.e. for the West Branch. The calculated mean for the entire glacier was -815 mm w.e. To obtain the mean mass balance, the specific value observed at each stake was used for interpolation, together with simulated values obtained by means of a simple energy balance model (Oerlemans, 2011) in areas with no measurements.

Figure 4.6.1 Topography and observation network and mass balance maps 2013/14 and 2014/15.

Topography and observational network



Mass balance maps 2013/14 and 2014/15



- mass balance isolines [m w.e.]
- equilibrium line
- ▨ ablation area

Urumqi Glacier No. 1 (CHINA)

Figure 4.6.2 Mass balance versus elevation (2013/14 and 2014/15), West Branch on the left and East Branch on the right.

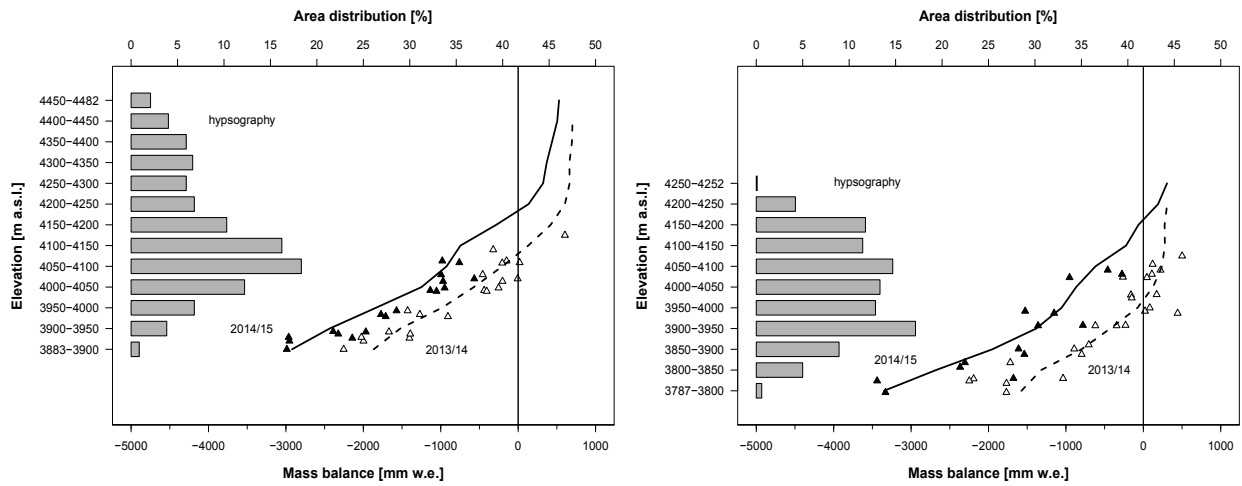


Figure 4.6.3 Glaciological balance versus geodetic balance for the whole observation period.

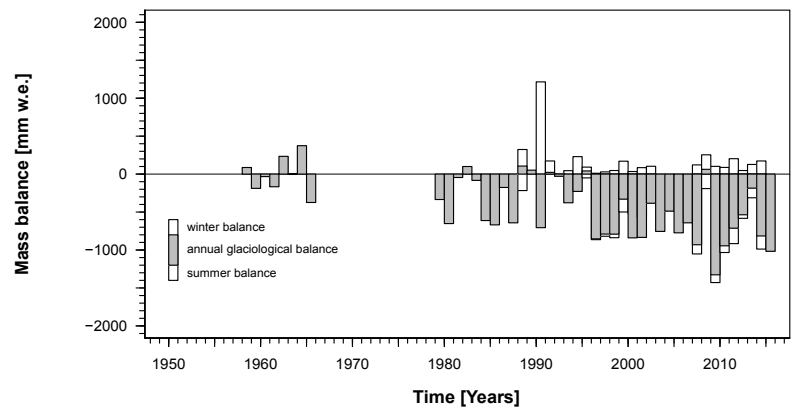
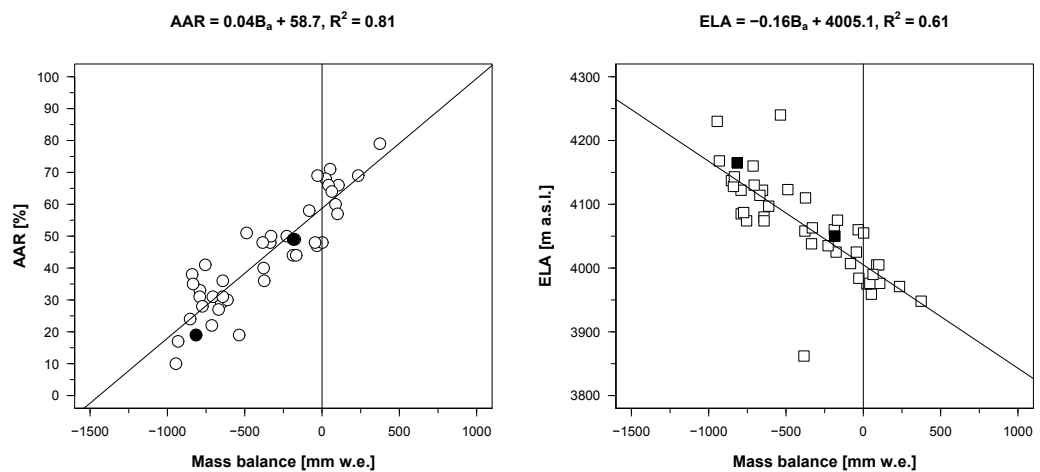


Figure 4.6.4 Accumulation area ratio (AAR) and equilibrium line altitude (ELA) versus specific mass balance for the whole observation period.



Urumqi Glacier No. 1 (CHINA)

4.7 PARLUNG NO. 94 (CHINA/SOUTHEAST TIBETAN PLATEAU)

COORDINATES: 29.23° N / 96.59° E



Photo taken by Li S. H. on 19 June 2014.

Parlung No. 94 Glacier is located within the headwaters of the Parlung Zangbo River, a tributary of the Brahmaputra River in southeastern Tibetan Plateau. It is a typical valley glacier with an area of 2.4 km² and an axis length of nearly 2.9 km. It flows northwestward from elevation 5,635 to 5,075 m a.s.l. at its front position. Mean annual air temperature at the equilibrium line of the glacier varied from -7.3 to -8.2 °C and annual total precipitation varied from 678 to 1,238 mm based on the past two years AWS and rainfall observation. Both the mass balance observations and simulations reveal that the mass accumulation of this glacier occurred primarily in the boreal spring, thus named as “spring accumulation type” glacier.

The mass balance has been measured using the glaciological method since 2005/06. The cumulative mass balance of Parlung No. 94 from 2005/06 to 2014/15 was -8,427 mm w.e. Mean annual ELA was 5,410 m a.s.l. The mass balances in 2013/14 and 2014/15 were negative (-1,169 and -653 mm w.e.), with ELA of 5,435 and 5,403 m a.s.l. and AAR of 19% and 29%.

Figure 4.7.1 Topography and observation network and mass balance maps 2013/14 and 2014/15.

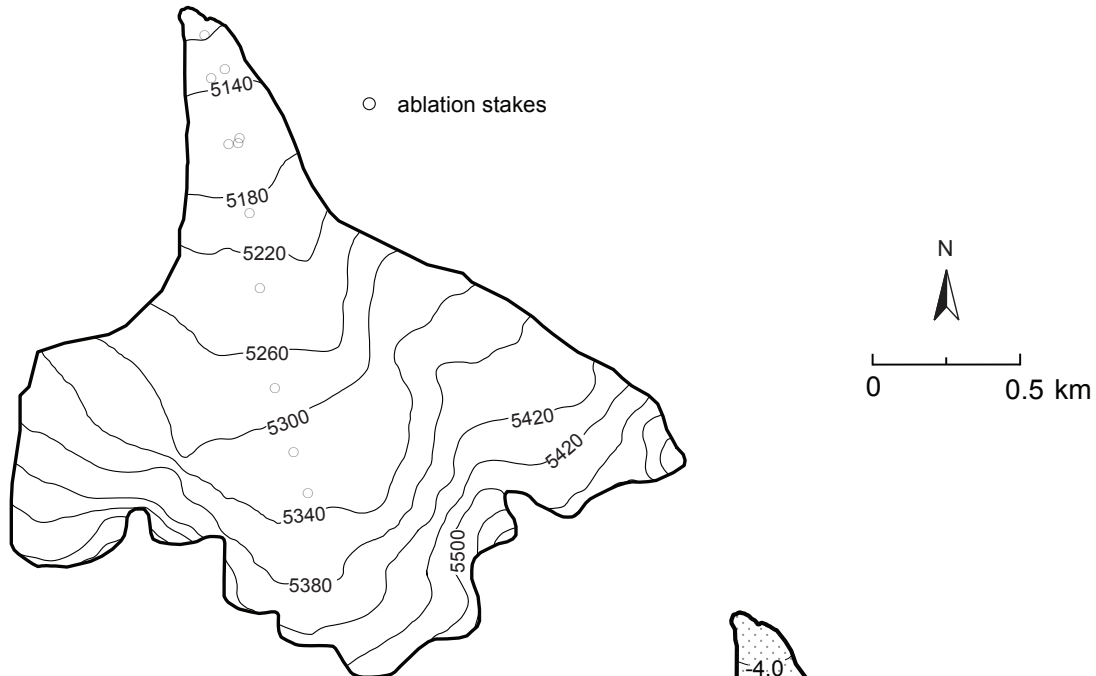
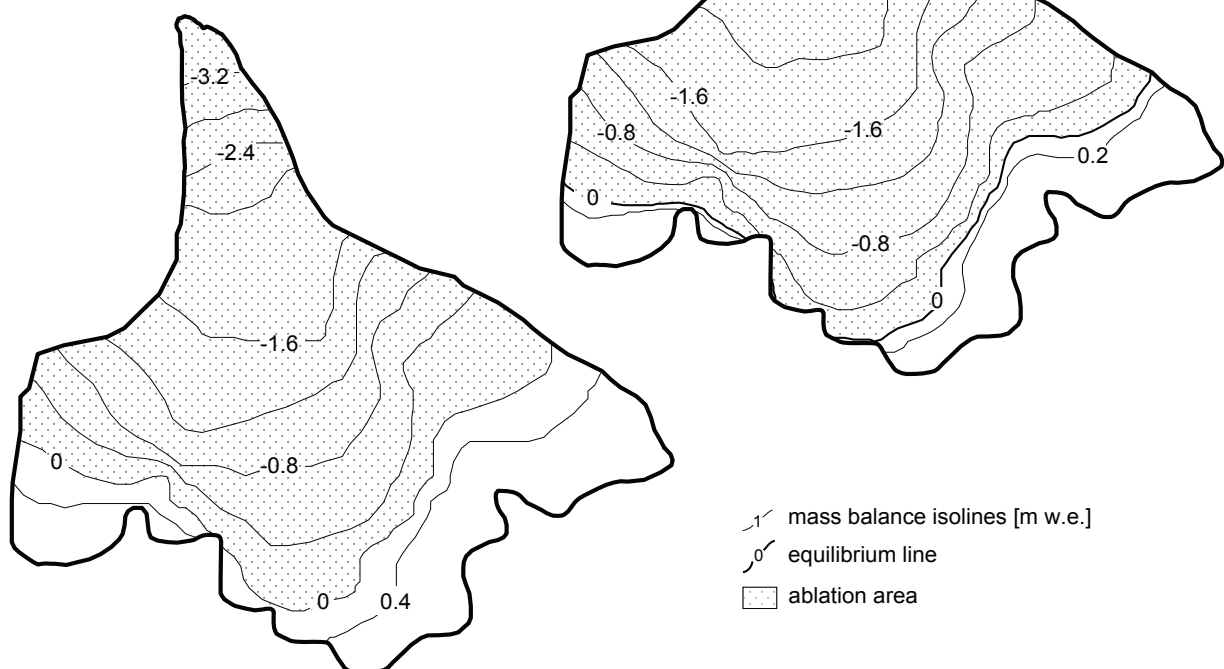
Topography and observational network**Mass balance maps 2013/14 and 2014/15****Parlung No. 94 (CHINA)**

Figure 4.7.2 Mass balance versus elevation (2013/14 and 2014/15).

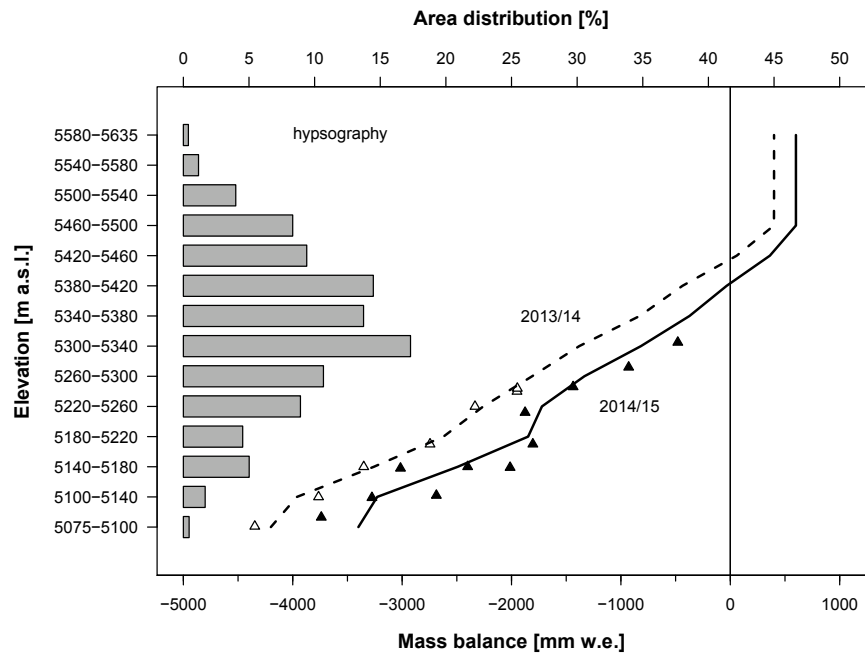


Figure 4.7.3 Glaciological balance versus geodetic balance for the whole observation period.

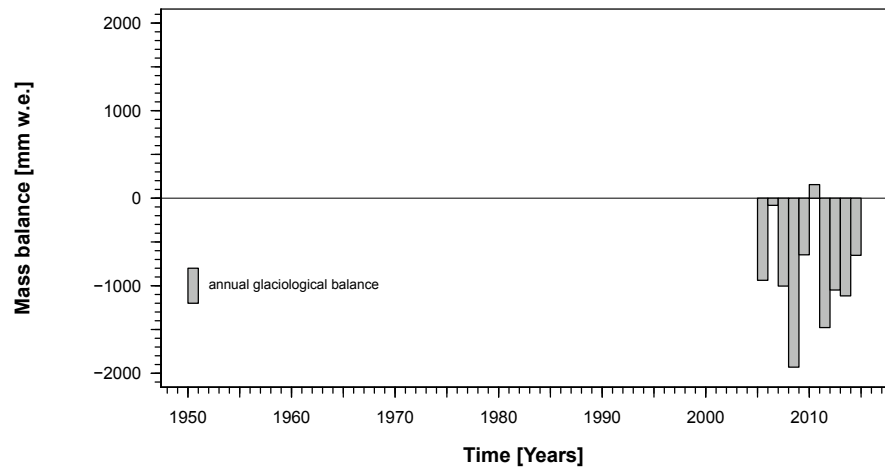
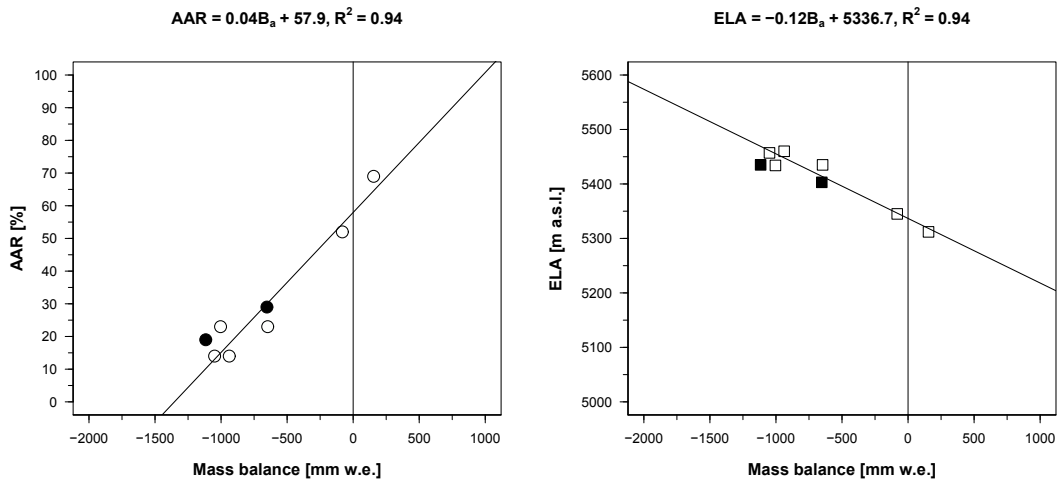


Figure 4.7.4 Accumulation area ratio (AAR) and equilibrium line altitude (ELA) versus specific mass balance for the whole observation period.



Parlung No. 94 (CHINA)

4.8 CONEJERAS (COLOMBIA/CORDILLERA CENTRAL)

COORDINATES: 4.82° N / 75.37° W



Photo taken by Y.P. Nocua on 12 December 2015.

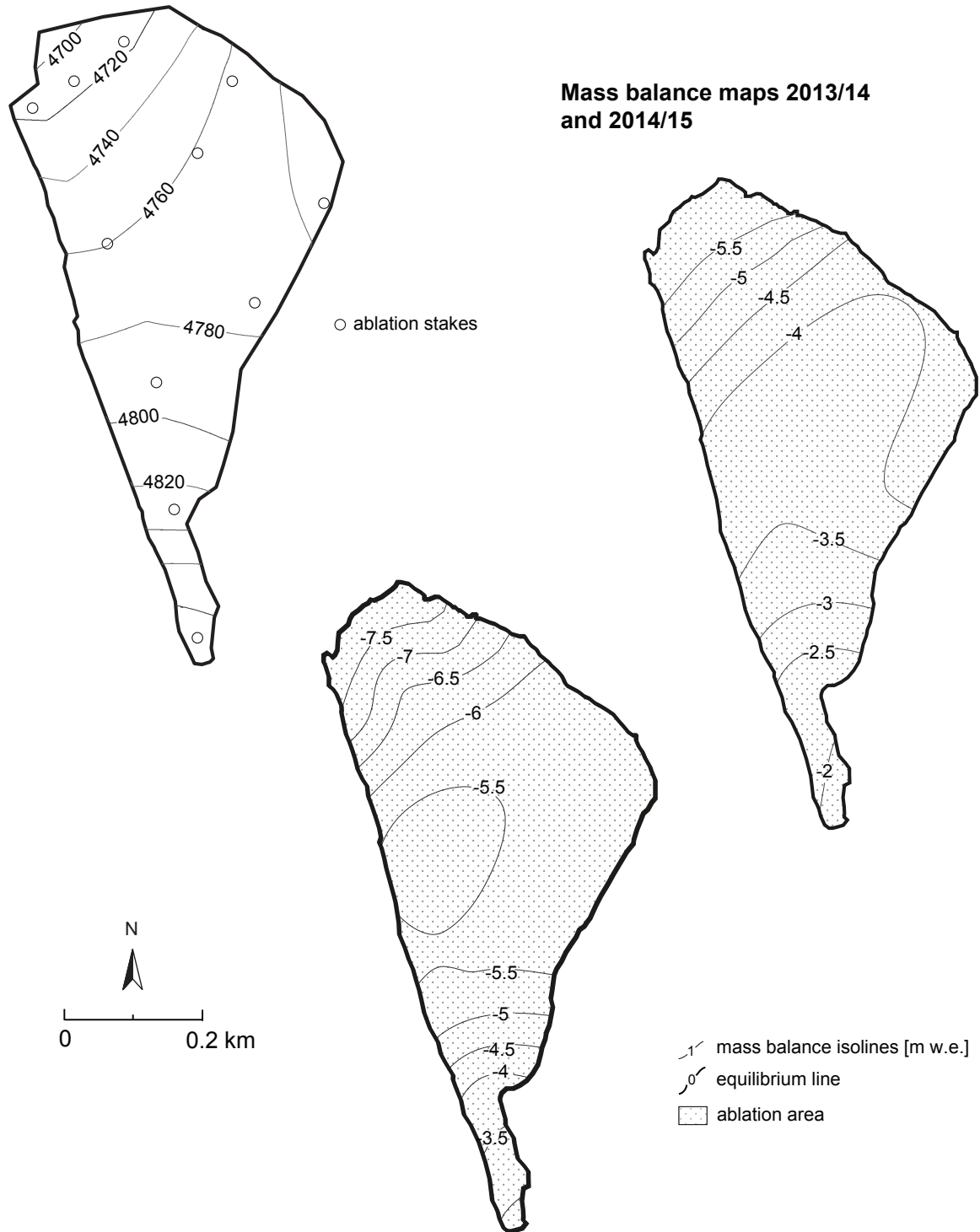
Conejeras Glacier is a small glacier (0.20 km², 2015) forming part of the ice cap on top of Santa Isabel volcano in the northern Andes. Along with the glacierized volcanos Nevado del Ruiz and Nevado del Tolima, it is surrounded by the “Paramo” ecosystem and Andean forests. Conejeras, which has a minimum elevation of 4,700 m a.s.l. and maximum of 4,895 m a.s.l. is located at Santa Isabel’s northwest side. Conejeras mass balance has been calculated monthly by the direct glaciological method since April 2006 (field measurements using 14 stakes distributed along the glacier every 50 m of altitude; however, three located at the lower glacier could no longer be monitored due to glacier retreat). Mass balance calculation has been also supplemented by ten meteorological and hydrological stations, extending downvalley to 2,700 m a.s.l. to support research on high mountain systems.

Since 2006, Conejeras Glacier has shown a permanent negative mass balance (cumulative mass balance 2006–2013: -27 m w.e.). In 2013/14 and 2014/15 the mass balance was -4,084 mm w.e. and -5,599 mm w.e. The ELA was located at 5,003 m a.s.l. (AAR = 0%) in 2013/14 and at 4,950 m a.s.l. (AAR = 0%) in 2014/15. Mölg et al. (2017) acquired a terrestrial Lidar digital elevation model and performed a full homogenization of the ten year time series of monthly mass balances.

The glacier reacts rapidly to atmospheric changes and its dynamics are strongly influenced by climatic variability generated by the Intertropical Convergence Zone (ITCZ) and the El Niño-Southern Oscillation (ENSO), such as during the 2015 event. Weather patterns in these mountains (2010–2015) lead to an annual average precipitation of 1,300 mm, relative humidity is 94% on average and the mean temperature ranges between -2 °C and 4 °C. Calculation in January 2014 showed a maximum ice thickness of 52 m and 22 m on average (Rabatel et al., 2017). By December 2015, based on ablation stakes, the thickness decreased by 10 metres.

Figure 4.8.1 Topography and observation network and mass balance maps of 2013/14 and 2014/15.

Topography and observational network



Conejeras (COLOMBIA)

Figure 4.8.2 Mass balance versus elevation (2013/14 and 2014/15).

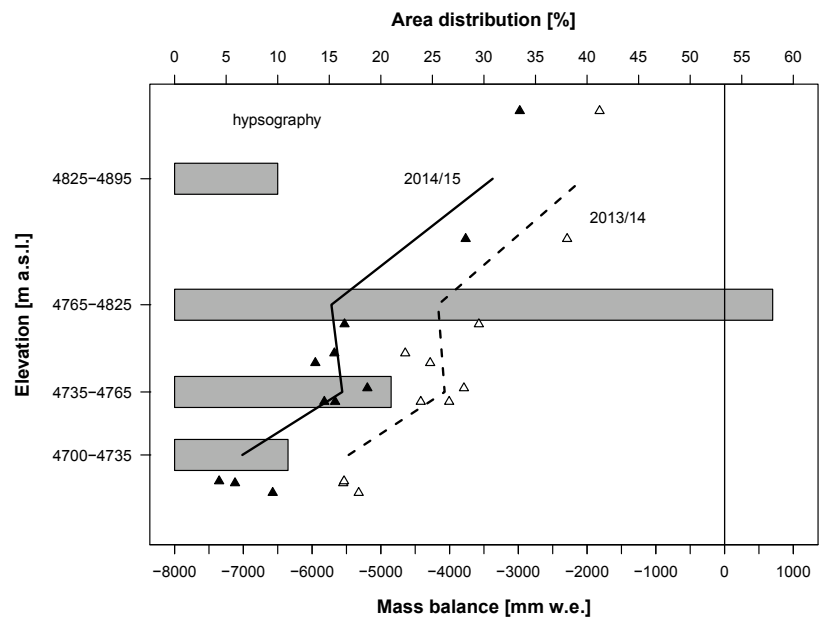


Figure 4.8.3 Glaciological balance versus geodetic balance for the whole observation period.

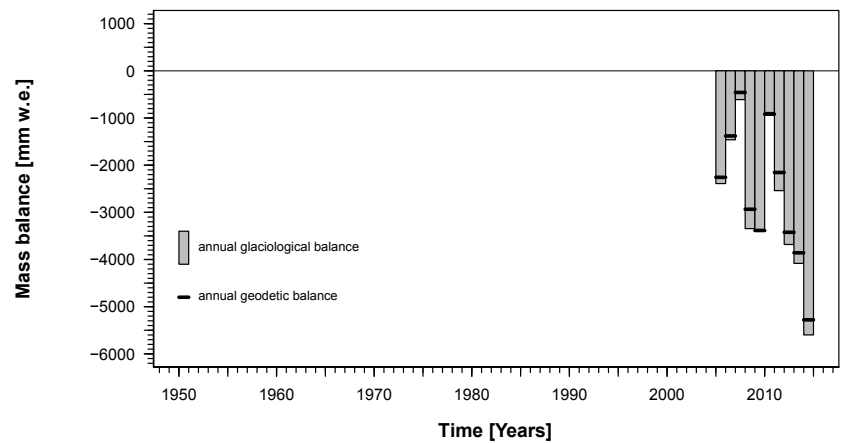
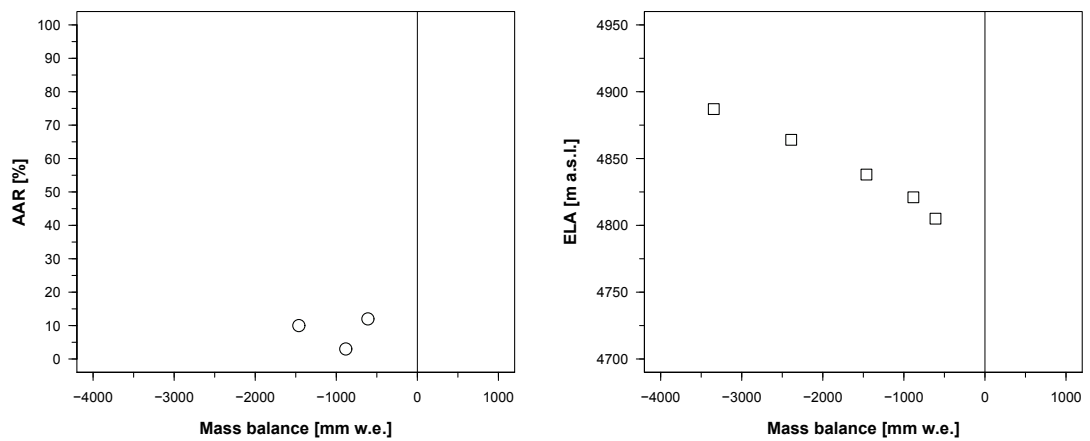


Figure 4.8.4 Accumulation area ratio (AAR) and equilibrium line altitude (ELA) versus specific mass balance for the whole observation period.



Conejeras (COLOMBIA)

4.9 FREYA (GREENLAND/NORTHEAST GREENLAND)

COORDINATES: 74.39° N / 20.83° W



Photo taken by B. Hynek, 12 August 2013.

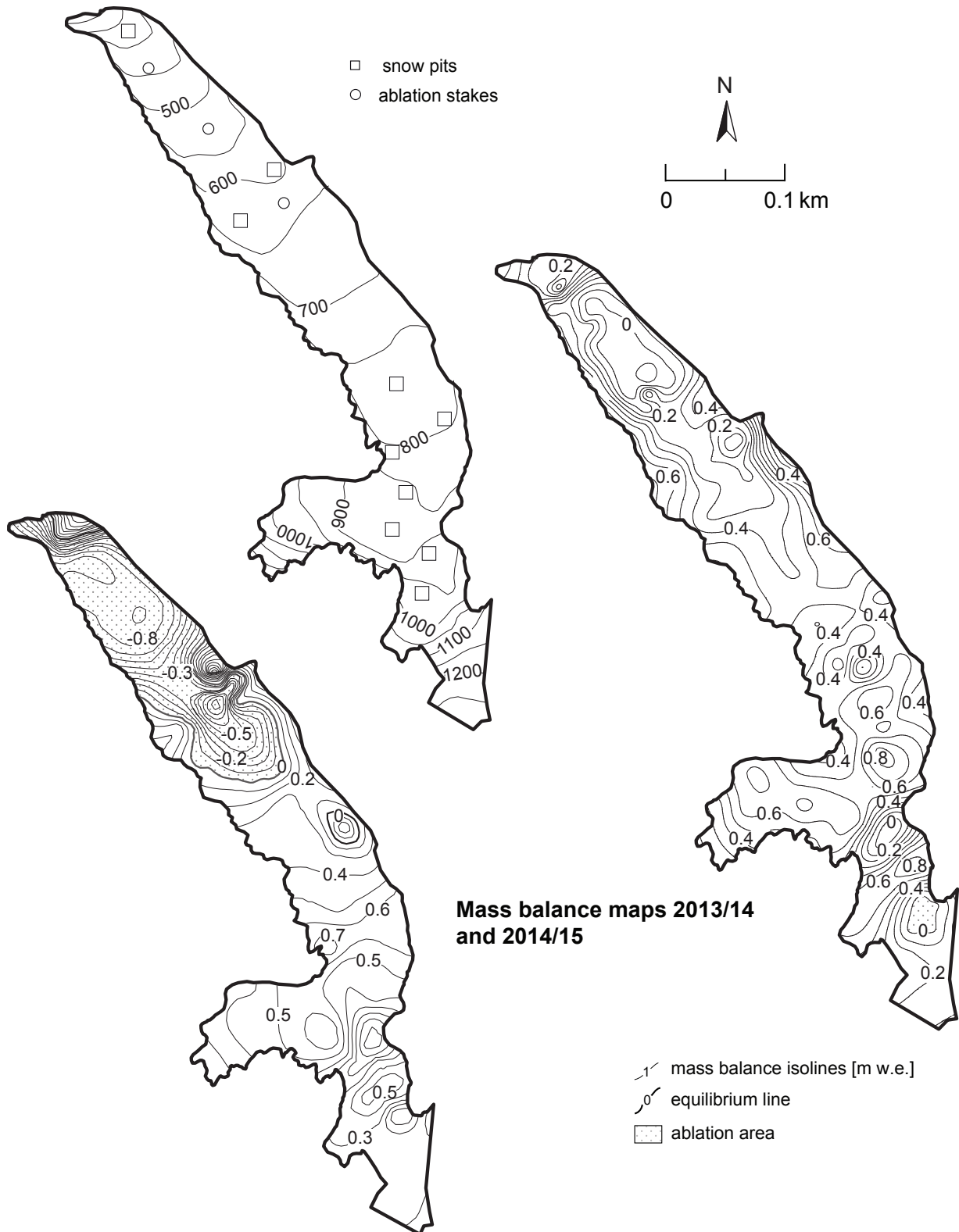
Freya Glacier is a 6 km long, polythermal valley glacier situated on Clavering Island 10 km southeast of the Zackenberg research station at the northeastern coast of Greenland. Its surface area is 5.3 km² (2013), extending from 1,305 m to 273 m a.s.l. and mainly oriented to the NW with two separate accumulation areas oriented NE and NW. The thickest ice found during a GPR survey in May 2008 is 200 m, located at the confluence of the two accumulation areas. Mean values (1996–2005) of annual temperature and precipitation at Zackenberg (38 m a.s.l.) are -9.2 °C and 230 mm.

A terrestrial photogrammetric survey of the whole glacier in August 2013 using Structure from Motion methods delivered a new high-resolution DEM of the glacier, an orthophoto and a new glacier outline (Hynek et al., 2014). All existing mass balance measurements have been re-evaluated using the topographic data of 2013.

In 2013/14 Freya Glacier showed a clearly positive annual mass balance of 394 mm w.e., while the balance was less positive with 97 mm w.e. in 2014/15. The ELA in 2013/14 was below the glacier with an AAR of 93%. In 2014/15 the ELA was at 670 m a.s.l. with an AAR of 70%.

Figure 4.9.1 Topography and observation network and mass balance maps of 2013/14 and 2014/15.

Topography and observational network



Freya (GREENLAND)

Figure 4.9.2 Mass balance versus elevation (2013/14 and 2014/15).

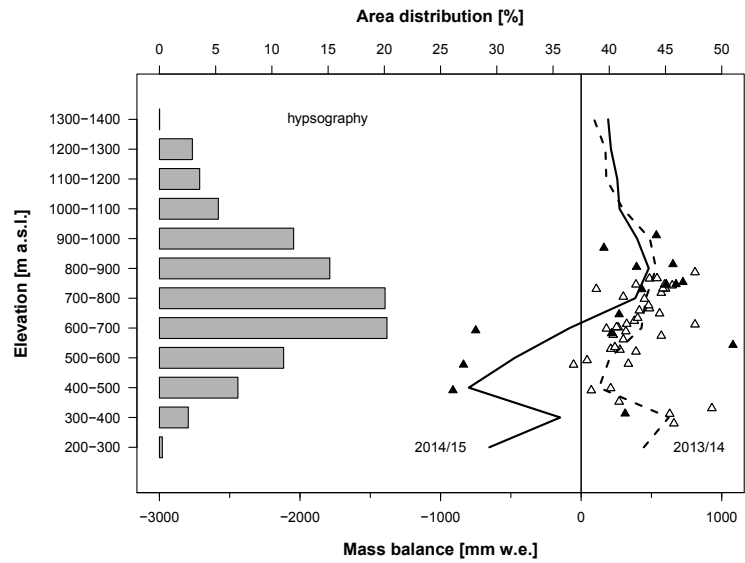


Figure 4.9.3 Glaciological balance versus geodetic balance for the whole observation period.

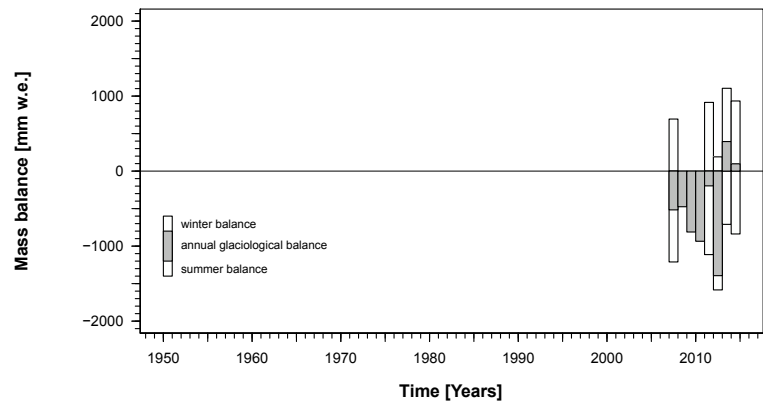
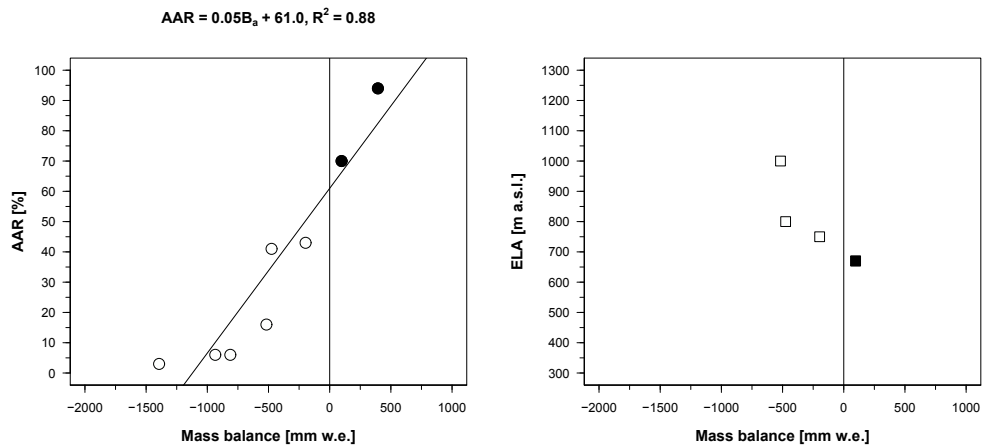


Figure 4.9.4 Accumulation area ratio (AAR) and equilibrium line altitude (ELA) versus specific mass balance for the whole observation period.



Freya (GREENLAND)

4.10 CARESÈR (ITALY/ALPS)

COORDINATES: 46.45° N / 10.70° E



View of Caresèr Glacier taken on 3 August 2015. Photo by M. Callegari.

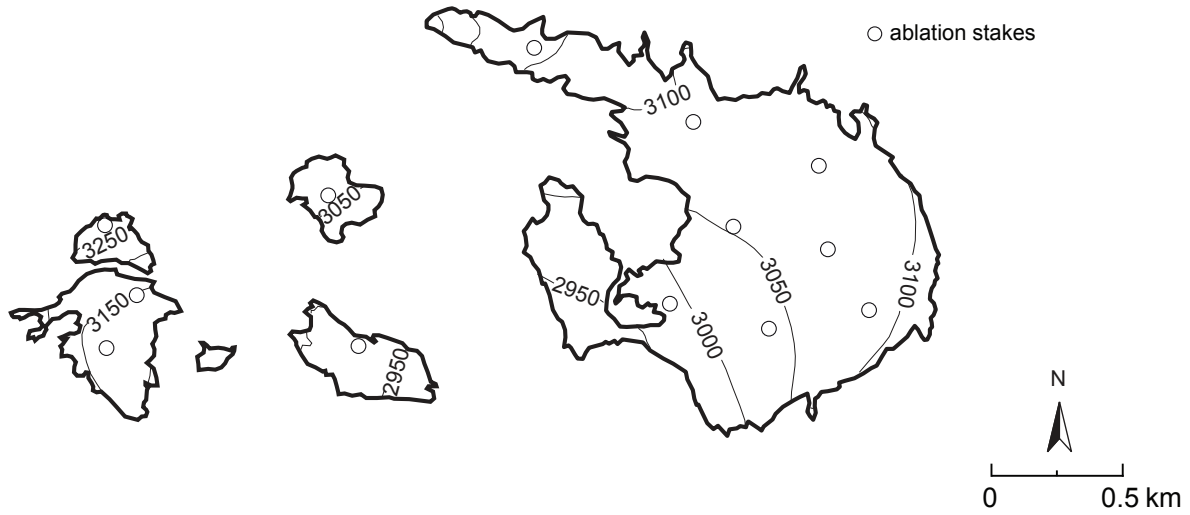
Caresèr Glacier is located in the Ortles-Cevedale group (Eastern European Alps, Italy). It occupies an area of 1.31 km² (year 2015) and its elevation ranges from 2,910 to 3,275 m a.s.l. The glacier is exposed mainly to the south and is rather flat. A full 90% of the glacier area lies between 2,950 and 3,150 m a.s.l. and the median altitude is 3,076 m a.s.l. The mean annual air temperature at this elevation is about -3 to -4 °C and precipitation averages 1,450 mm.

Direct mass balance investigations on Caresèr Glacier started in 1967, and until 1980 the mass balance was close to equilibrium. Imbalanced conditions and steadily negative mass balances followed, and in the last three decades the ELA was mostly above the maximum altitude of the glacier. The mean value of the annual mass balance was -1,200 mm w.e. a⁻¹ from 1981 to 2001, and decreased to -1,800 mm w.e. a⁻¹ from 2002 to 2015. In the last fifteen years the glacier separated into several ice bodies, due to the widespread outcrop of the bedrock.

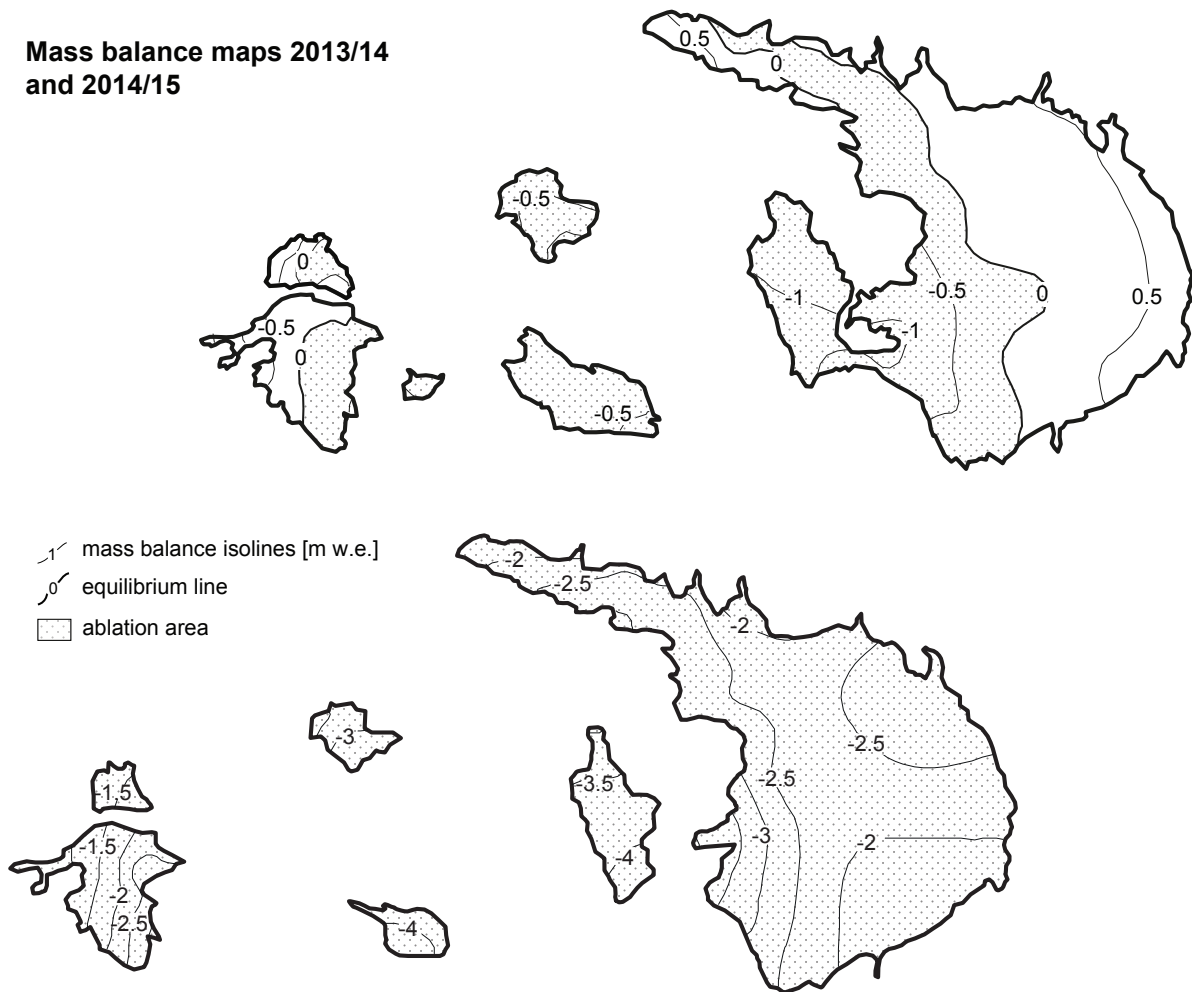
In the 2013/14 hydrological year the annual mass balance of Caresèr Glacier was close to zero (-131 mm w.e.), thanks to high snow accumulation between October and May (63% above the long-term mean) and to favourable conditions in the ablation season, with frequent snowfall above 2,900–3,000 m. In this year the ELA was at 3,061 m a.s.l. with an AAR of 48%. Opposite conditions occurred in 2014/15, with scarce snow accumulation (10% below the long-term mean) and a warm ablation season (2 °C above the 1981–2010 mean at a neighbouring weather station located at 2,605 m a.s.l.). The annual balance in 2014/15 was -2,475 mm w.e. with the ELA above the maximum elevation and an AAR of 0%.

Figure 4.10.1 Topography and observation network and mass balance maps of 2013/14 and 2014/15.

Topography and observational network



Mass balance maps 2013/14 and 2014/15



Caresèr (ITALY)

Figure 4.10.2 Mass balance versus elevation (2013/14 and 2014/15).

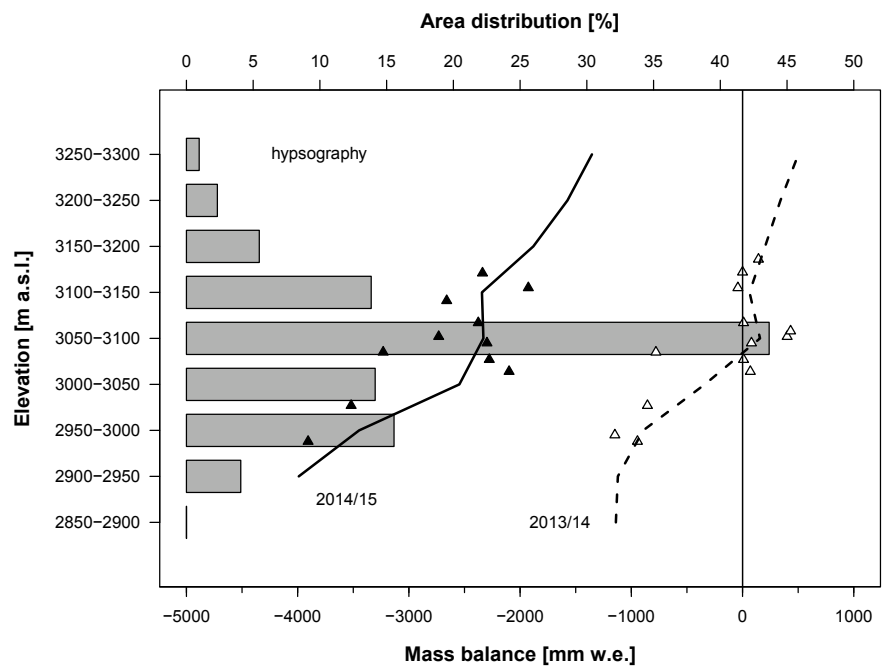


Figure 4.10.3 Glaciological balance versus geodetic balance for the whole observation period.

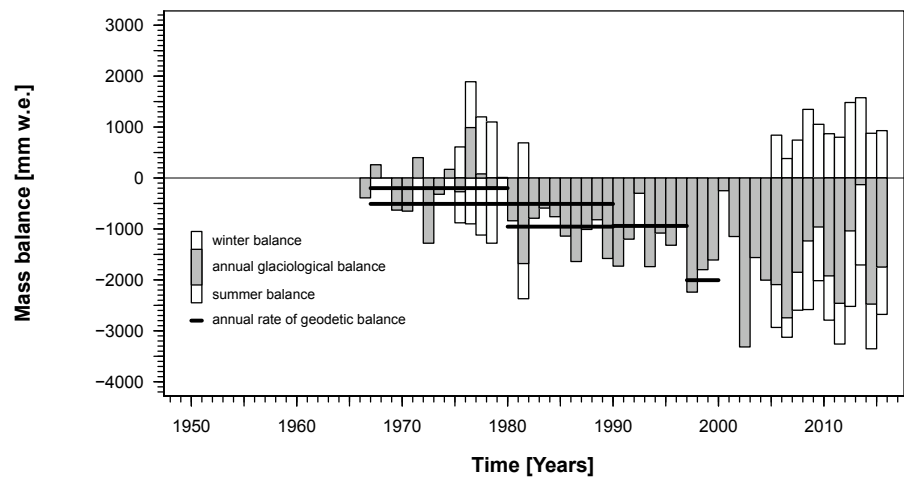
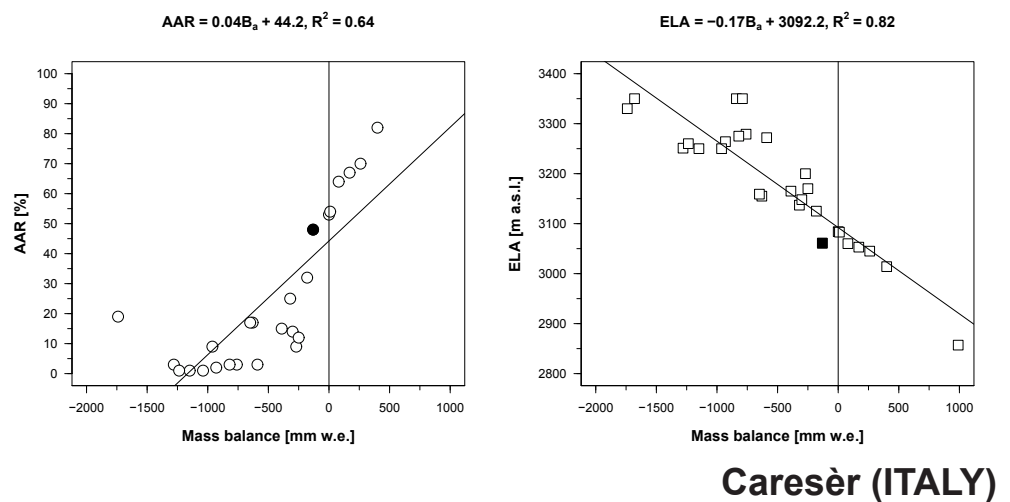


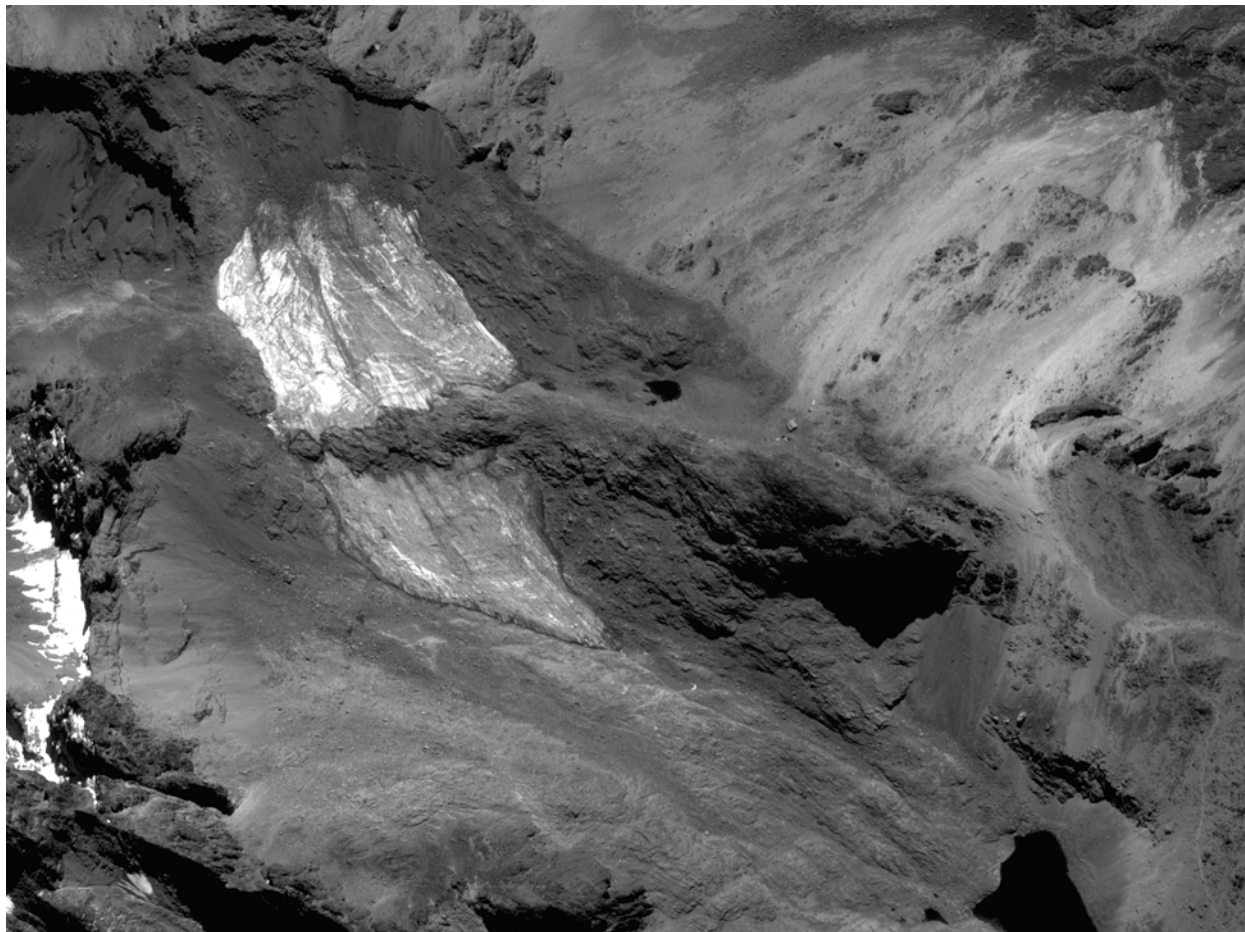
Figure 4.10.4 Accumulation area ratio (AAR) and equilibrium line altitude (ELA) versus specific mass balance for the whole observation period.



Caresèr (ITALY)

4.11 LEWIS (KENYA/MT. KENYA)

COORDINATES: 0.15° S / 37.30° E



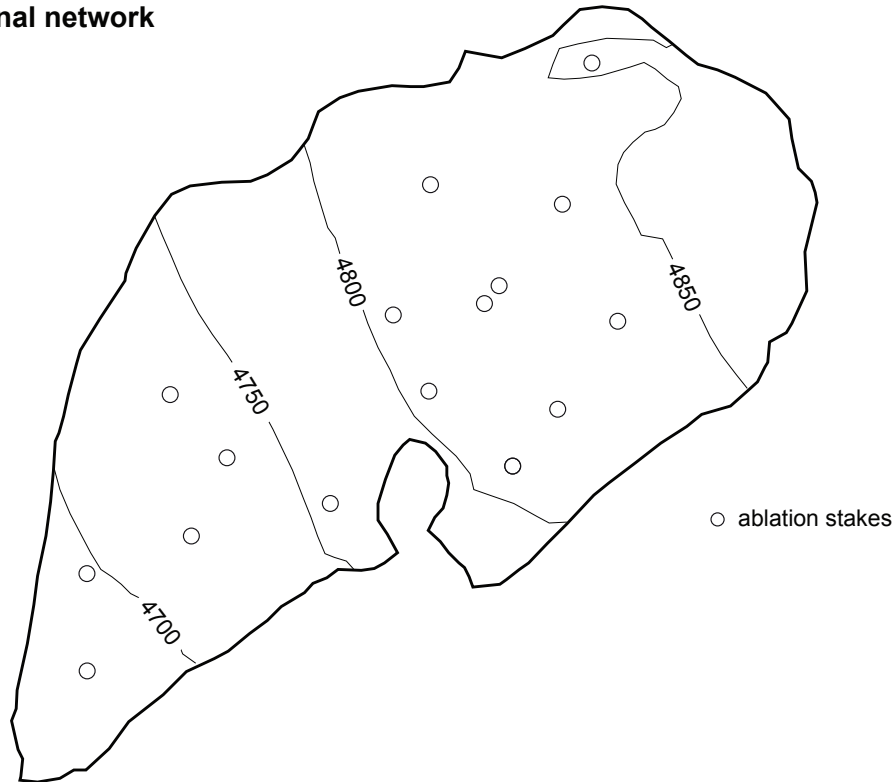
Satellite view of Lewis Glacier on 23 February 2016. Source: Pléiades PHR1B scene, courtesy of M. Ladner and A. Heller (Institute of Geography, University of Innsbruck, Austria). North is to the left.

Lewis Glacier (0.107 km²) is the largest among a number of glacierets on Mt Kenya and extends from 4,870 to 4,650 m a.s.l (the 2010 extent). Major glacier changes on Mt Kenya are evident from historical maps, e.g. the 90% decrease in Lewis Glacier volume since 1934 and the vanishing of eight smaller glacierets during the last century, including Gregory Glacier, formerly connected to Lewis Glacier to the north, which disappeared completely in 2011.




Mass balance was measured by applying the glaciological method during the periods 1978/79 to 1995/96 and 2010/11 to 2013/14. Persistent negative mass balances caused the emergence of rock outcrops that divided the glacier into an upper and a lower part in 2014, reducing the glacier area by about 25% and accelerating its disintegration (debris cover, cavities). Thus, the detection of a regional climate signal through mass balance measurements became obsolete. Consequently, the growing impediments of mass balance measurements transformed our observation strategy into the remote sensing of aerial changes, resulting in the ultimate end of the longest mass balance series in the Tropics. The last measured mass balance in 2013/14 (defined from March to March) yielded a value of -934 mm w.e. As there was no accumulation area at the end of the mass balance year, ELA and AAR remain undefined. The mean air temperature from September 2009 to February 2012 was -0.9 °C at 4,830 m a.s.l. A sensitivity study shows that the main drivers of the mass balance are atmospheric humidity, cloudiness and solid precipitation controlling the radiative energy fluxes and mass income. Lower air temperatures do not have the potential to balance the mass budget as they are usually linked to dry conditions, causing accumulation deficits and high net radiative energy gains (Prinz et al., 2016).

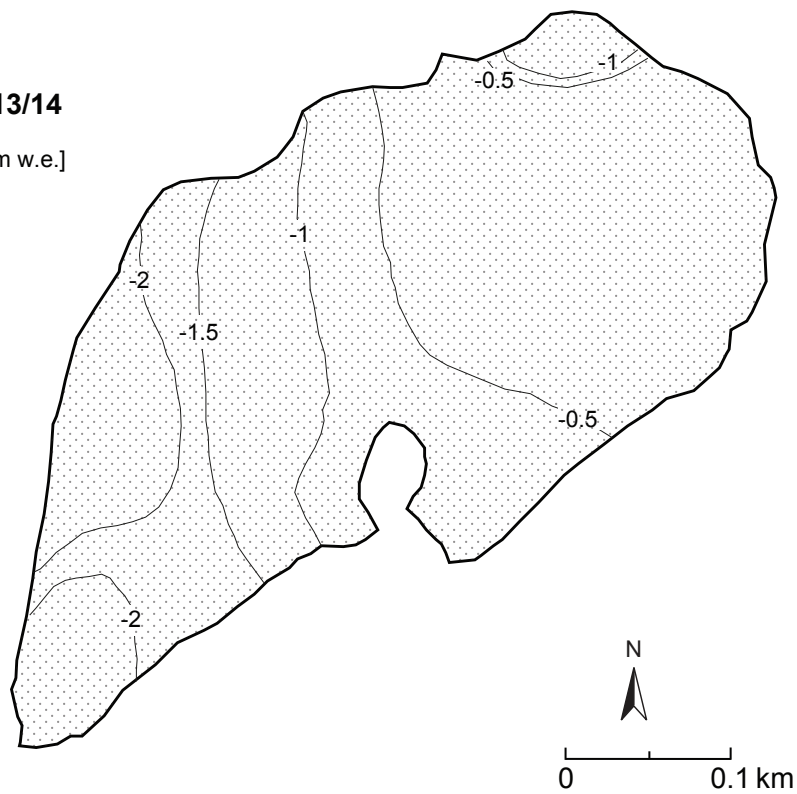
Figure 4.11.1 Topography and observation network and mass balance maps of 2013/14.

Topography and observational network



Mass balance map 2013/14

-  mass balance isolines [m w.e.]
-  equilibrium line
-  ablation area



Lewis (KENYA)

Figure 4.11.2 Mass balance versus elevation (2013/14).

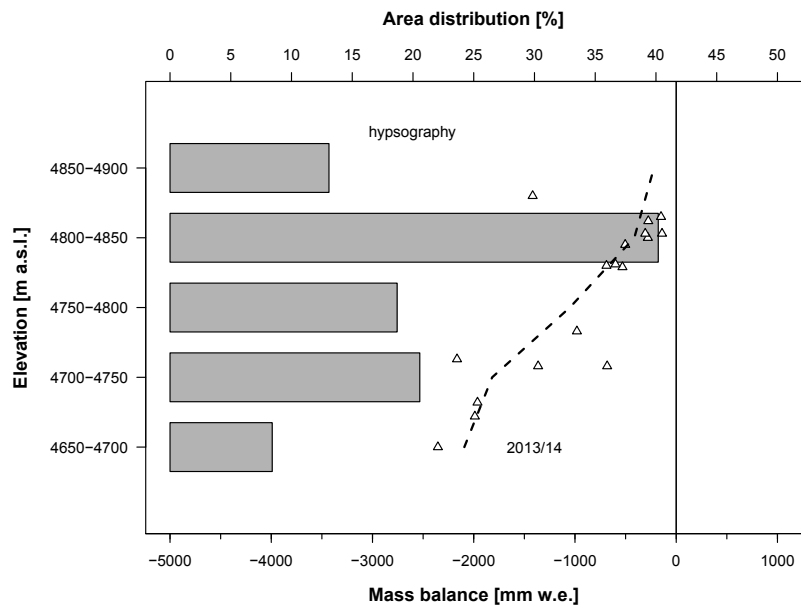


Figure 4.11.3 Glaciological balance versus geodetic balance for the whole observation period.

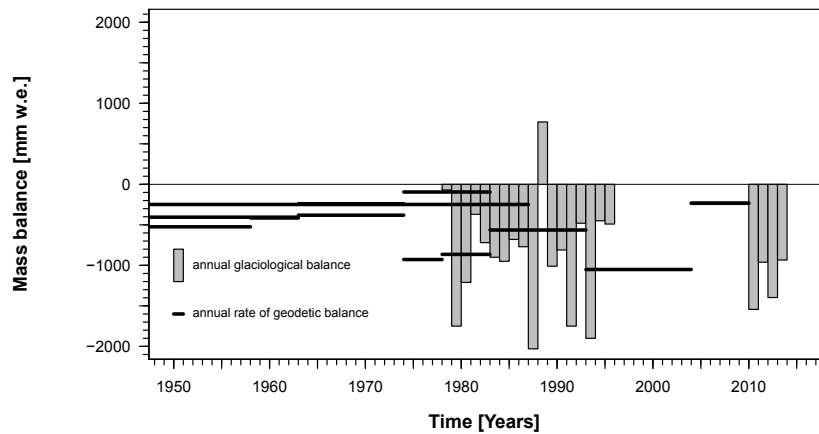
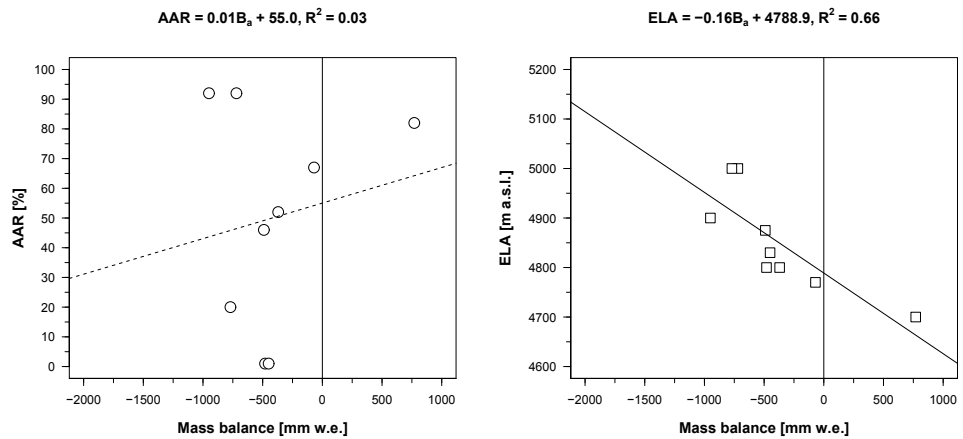


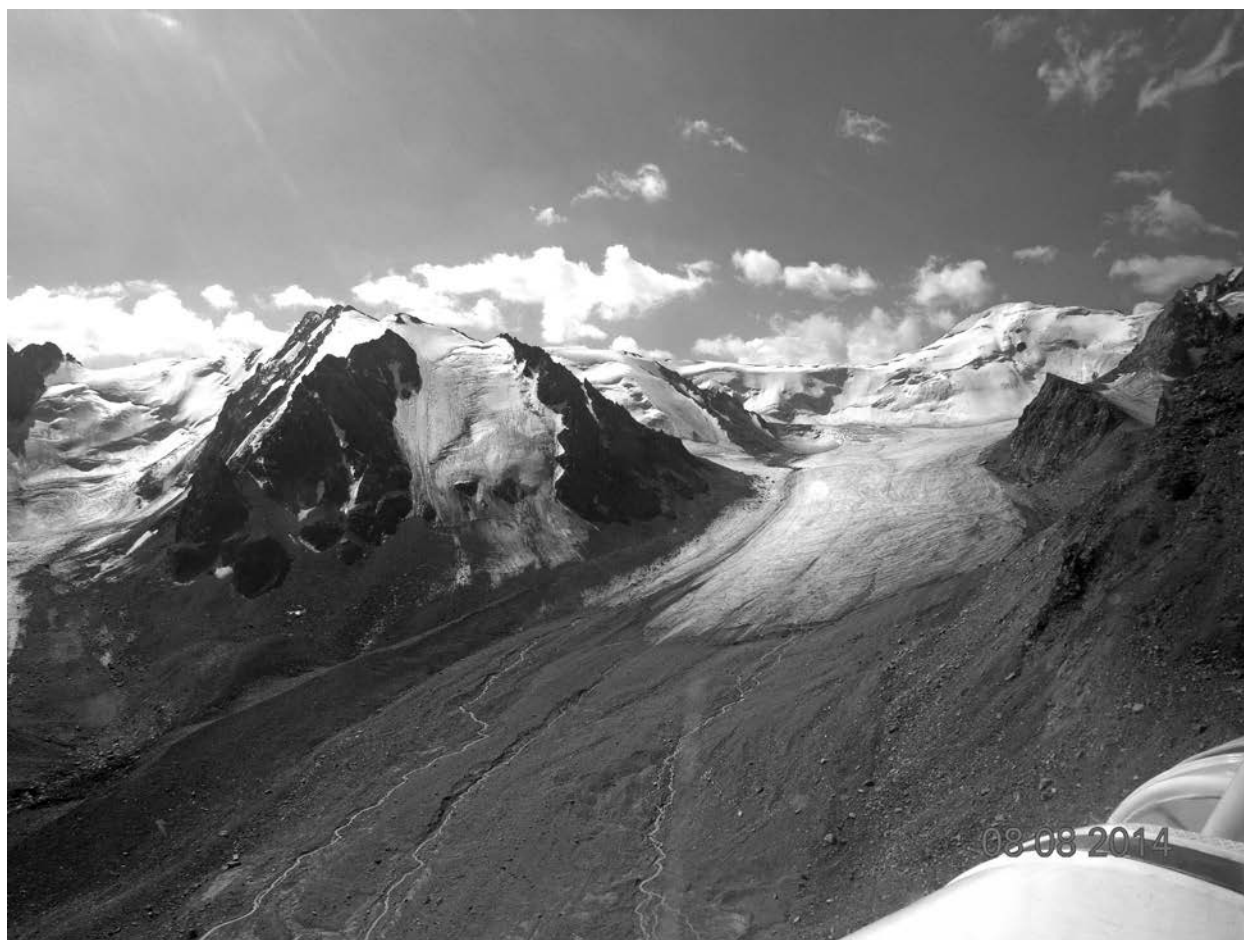
Figure 4.11.4 Accumulation area ratio (AAR) and equilibrium line altitude (ELA) versus specific mass balance for the whole observation period.



Lewis (KENYA)

4.12 TSENTRALNIY TUYUKSUYSKIY (KAZAKHSTAN/TIEN SHAN)

COORDINATES: 43.05° N / 77.08° E



Tuyuksuyskiy glacier on 8 August 2014 (Photo: N. E. Kassatkin).

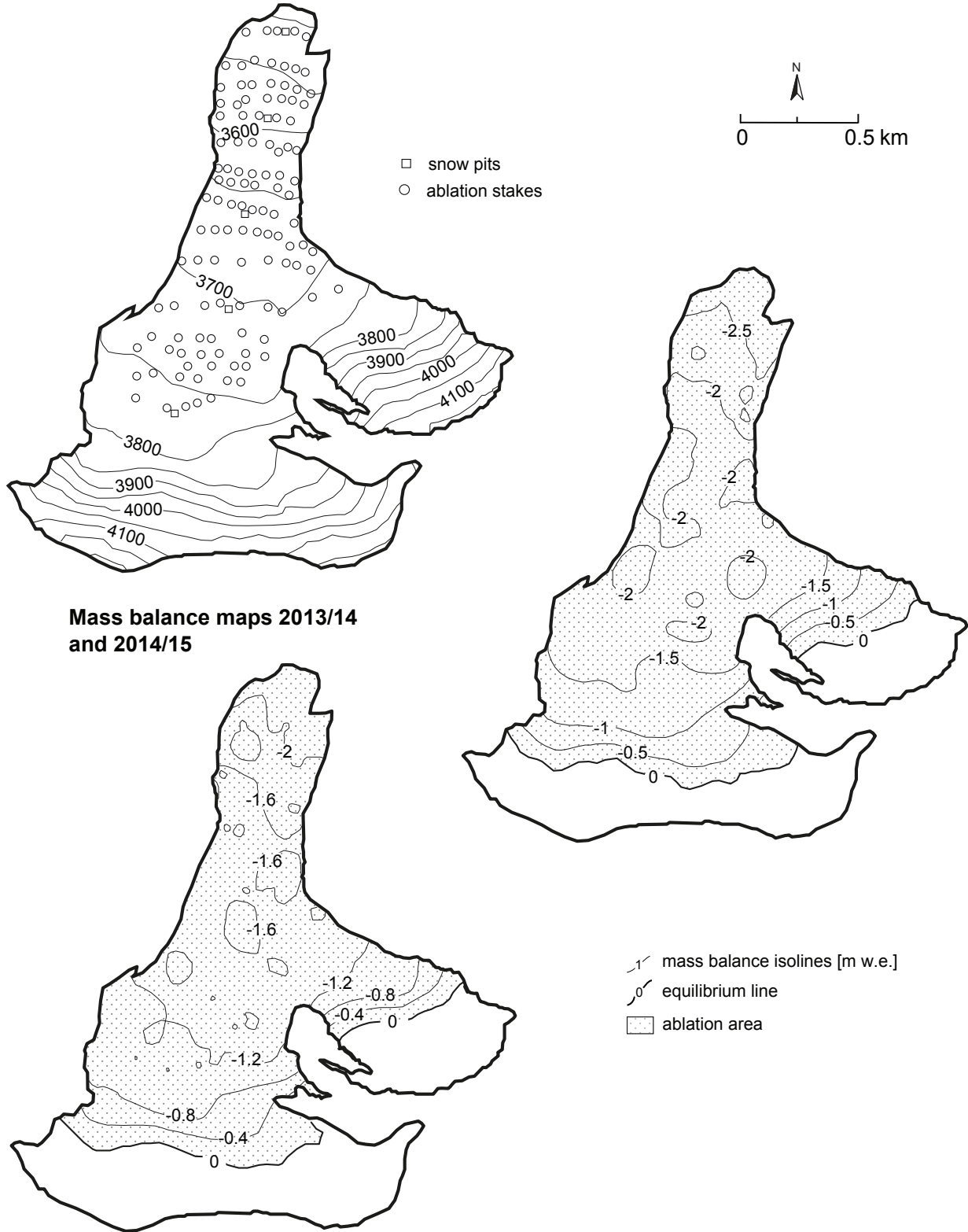
The Tuyuksu valley glacier is located on the northern slope of the Zailiyskiy Alatau ridge. The glacier is considered to be cold to polythermal and is surrounded by continuous permafrost. Its debris-free surface area amounted to 2.3 km² as of 2014. The equilibrium line altitude (ELA) in 2013/14 amounted to 3,920 m a.s.l. The average annual temperature at the equilibrium line altitude was -7.5 °C, the annual sum of precipitation at the Tuyuksu meteorological station was equal to 626 mm, 64% of this amount was passed on as precipitation during the summer period. The amount of precipitation for the 2013/14 balance year, as measured using 13 precipitation gauges, equaled 623 mm.

The average temperature during the warm season (June to September) at the Tuyuksu station amounted to 5 °C, which was 0.8 °C above the average for 1972–2014, while the annual sum of precipitation for the warm season was 227 mm less than the average for a specified period.

As a result of these conditions, the glacier mass balances for 2013/14 and 2014/15 were -1,088 and -756 mm w.e., respectively. Corresponding ELA (AAR) values were 3,920 m a.s.l. (29%) and 3,900 m a.s.l. (31%). The average annual balance for the 1972–2015 period was -525 mm w.e. a⁻¹.

Figure 4.12.1 Topography and observation network and mass balance maps of 2013/14 and 2014/15.

Topography and observational network



Tsentralniy Tuyuksuyskiy (KAZAKHSTAN)

Figure 4.12.2 Mass balance versus elevation (2013/14 and 2014/15).

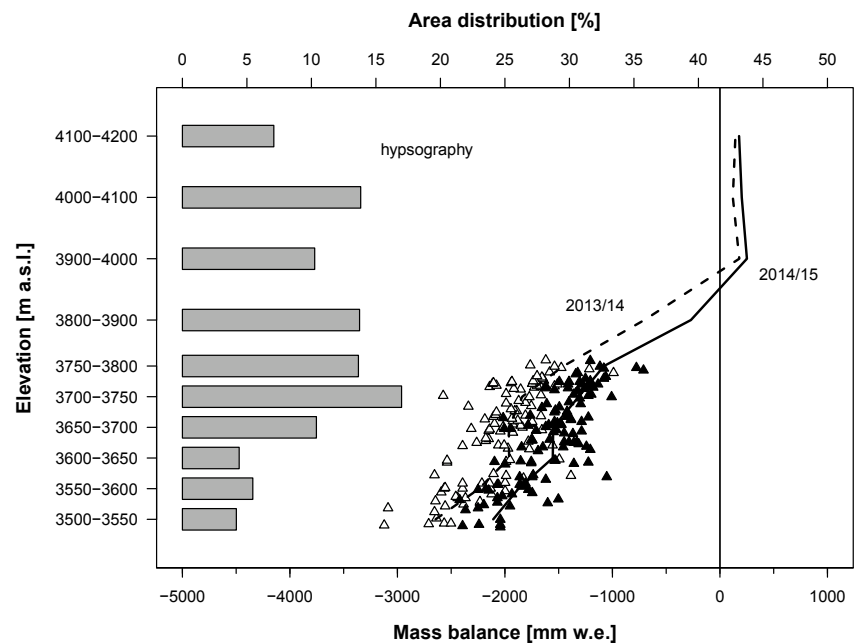


Figure 4.12.3 Glaciological balance versus geodetic balance for the whole observation period.

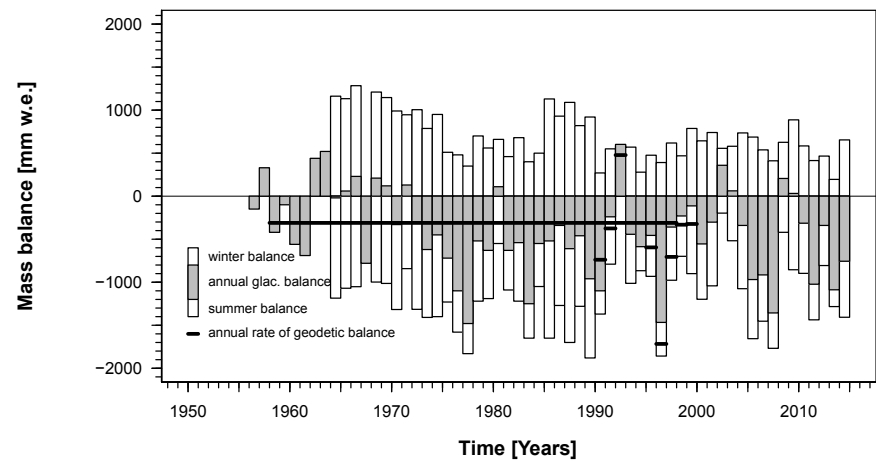
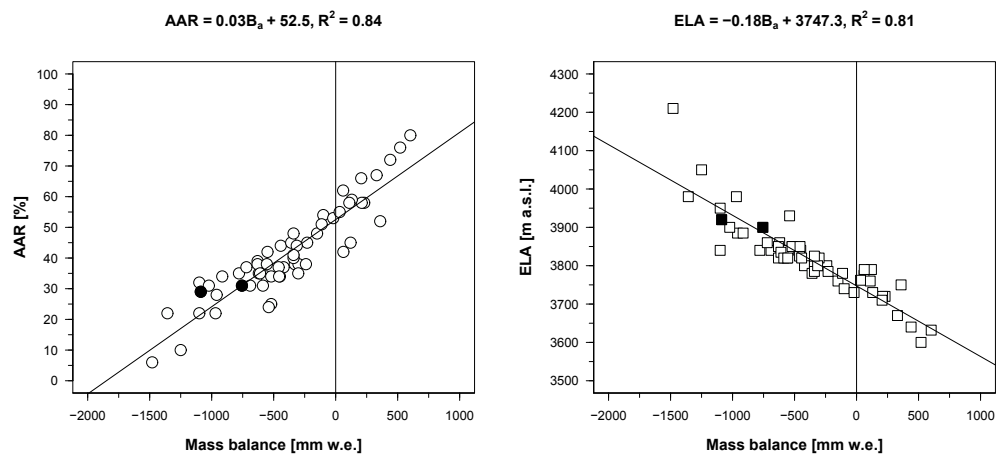


Figure 4.12.4 Accumulation area ratio (AAR) and equilibrium line altitude (ELA) versus specific mass balance for the whole observation period.



Tsentralniy Tuyuksuyskiy (KAZAKHSTAN)

4.13 YALA (NEPAL/HIMALAYA)

COORDINATES: 28.24° N / 85.62° E



Panoramic view of Yala Glacier. Photograph taken by S.P. Joshi on 9 May 2016.

Yala Glacier is located in the Langtang Valley, Rasuwa district of Nepal 70 km north of Kathmandu. It is a plateau glacier with an altitude range from 5,661 to 5,168 m a.s.l. In 2012, the length and area of Yala Glacier was about 1.2 km and 1.61 km², respectively. The glacier is mainly oriented south west, and has many ice cliffs facing south and southwest. The nearest weather station with long term data is in Kyangjing (3,920 m a.s.l.), which is about 6 km horizontal distance and south west from the Yala Glacier. The mean annual air temperature in Kyangjing is about 4 °C and the annual average precipitation is about 661 mm (1988–2012). The main precipitation originates from monsoon systems during the summer months, and the rest from westerly disturbances mainly in the second part of winter and spring.

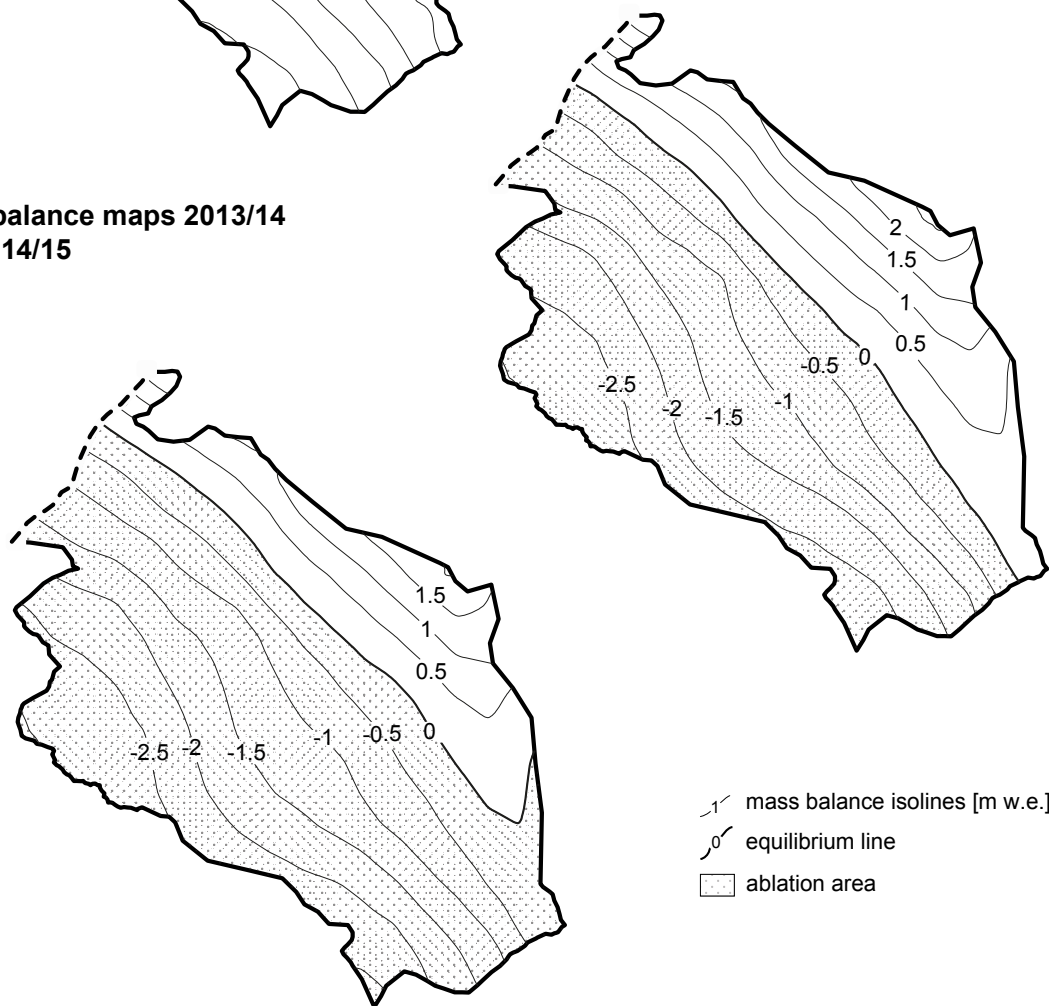
Yala Glacier has been investigated since the 1980s by Japanese researchers. The mass balance monitoring programme was re-established in 2011 by the Cryosphere Monitoring Programme of ICIMOD and partner organizations, and has been funded by the Government of Norway. The observations show that the glacier has been shrinking continuously, retreating 345 m since 1974, with an annual average retreat rate of -8 m. From 2014 to 2016, Yala Glacier retreated 21 m. The annual balances in 2013/14 and 2014/15 showed a mass loss of -642 mm w.e. and -903 mm w.e., respectively, and the corresponding ELAs were 5,435 m and 5,466 m a.s.l., with an AAR of 34% and 24%.

Figure 4.13.1 Topography and observation network and mass balance maps of 2013/14 and 2014/15.

Topography and observational network



Mass balance maps 2013/14 and 2014/15



Yala (NEPAL)

Figure 4.13.2 Mass balance versus elevation (2013/14 and 2014/15).

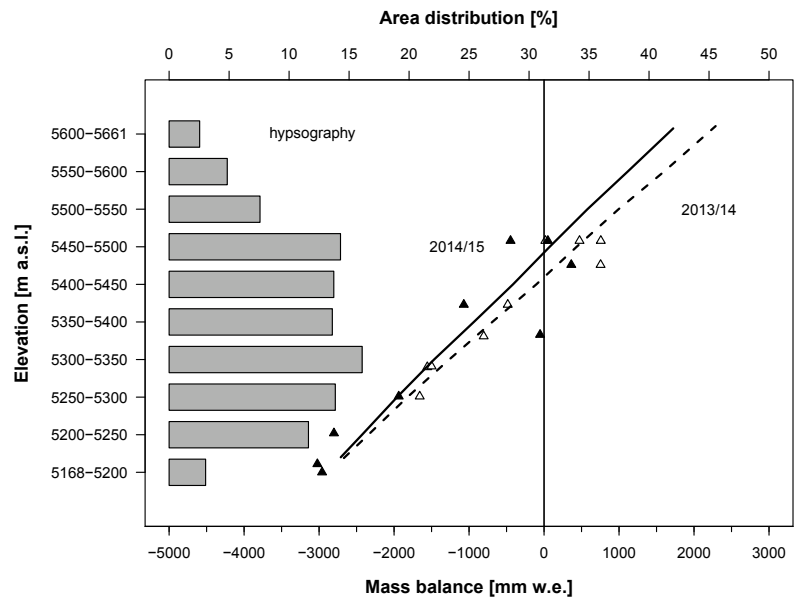


Figure 4.13.3 Glaciological balance versus geodetic balance for the whole observation period.

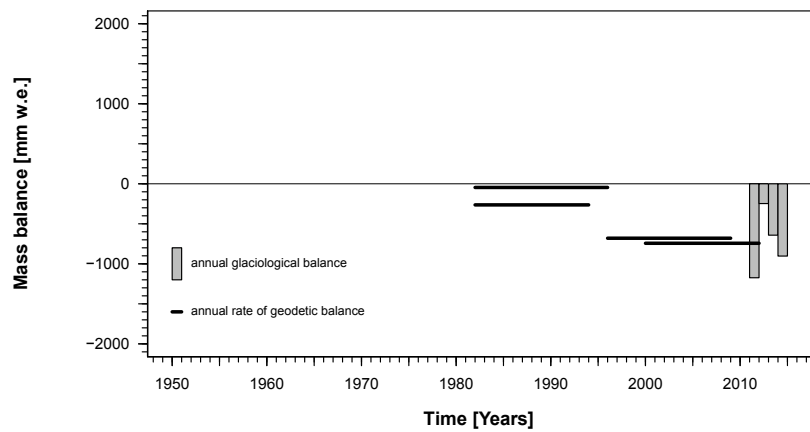
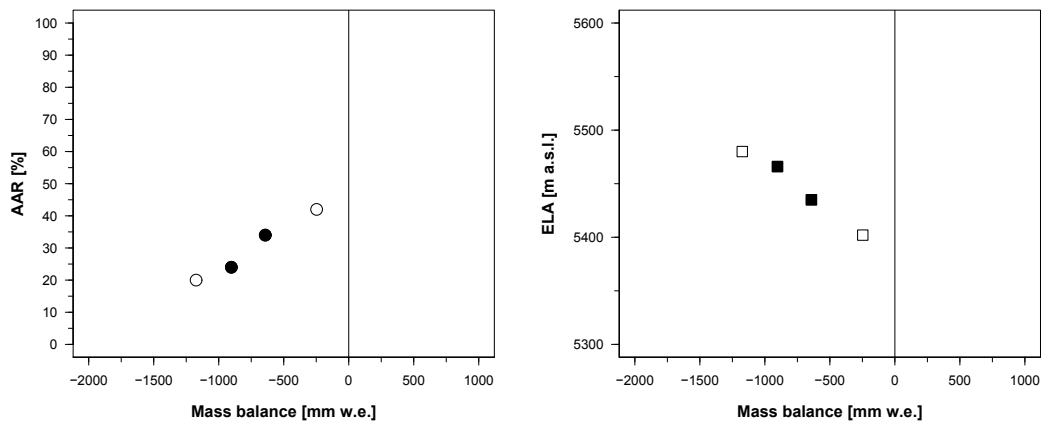


Figure 4.13.4 Accumulation area ratio (AAR) and equilibrium line altitude (ELA) versus specific mass balance for the whole observation period.



Yala (NEPAL)

4.14 WALDEMARBREEN (NORWAY/SPITSBERGEN)

COORDINATES: 78.67° N / 12.00° E



Photograph from summer 2015, taken by I. Sobota.

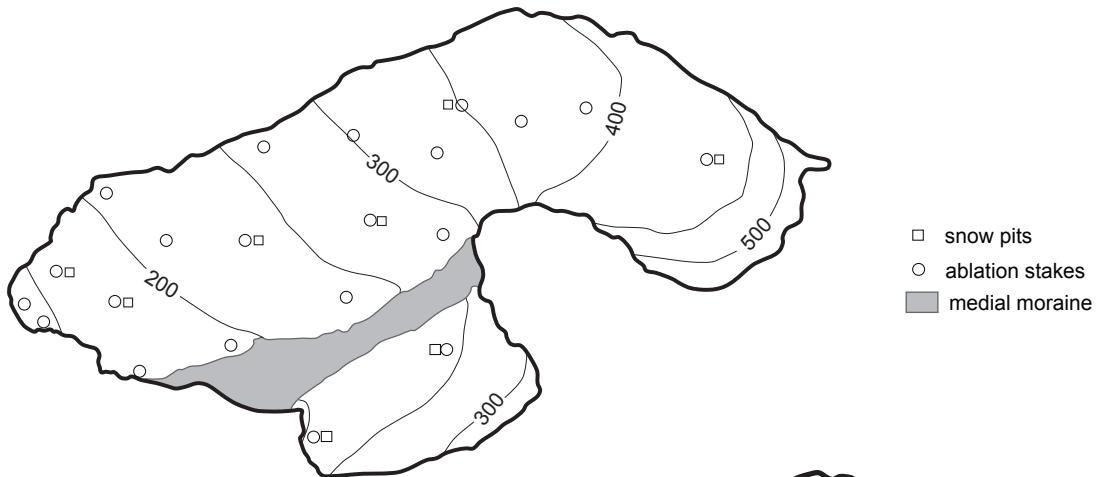
Waldemarbreen is located in the northern part of the Oscar II Land, northwestern Spitsbergen, and flows downvalley to the Kaffiøyra plain. Kaffiøyra is a coastal lowland situated on the Forlandsundet. The glacier is composed of two parts separated by a 1,600 m long medial moraine. It occupies an area of about 2.4 km² and extends from 500 m to 150 m a.s.l. with a general exposure to the west. Mean annual air temperature in this area is about -4 to -5 °C and annual precipitation is approximately 300–400 mm. In the years 1997–2015 the average air temperature during the summer season in this region was 5.4 °C. Since the 19th century the surface area of the Kaffiøyra region glaciers has decreased by over 43 %. Recently Waldemarbreen has been retreating by 8 m a⁻¹.

Mass balance investigations have been conducted since 1996. Since then, the average glacier mass balance was -700 mm w.e. a⁻¹. Detailed glaciological research methods and geodetic surveys are described by Sobota & Lankauf (2010) and Sobota (2013). Long-term mass balance of glaciers changes in the Kaffiøyra region are described by Sobota et al. (2016).

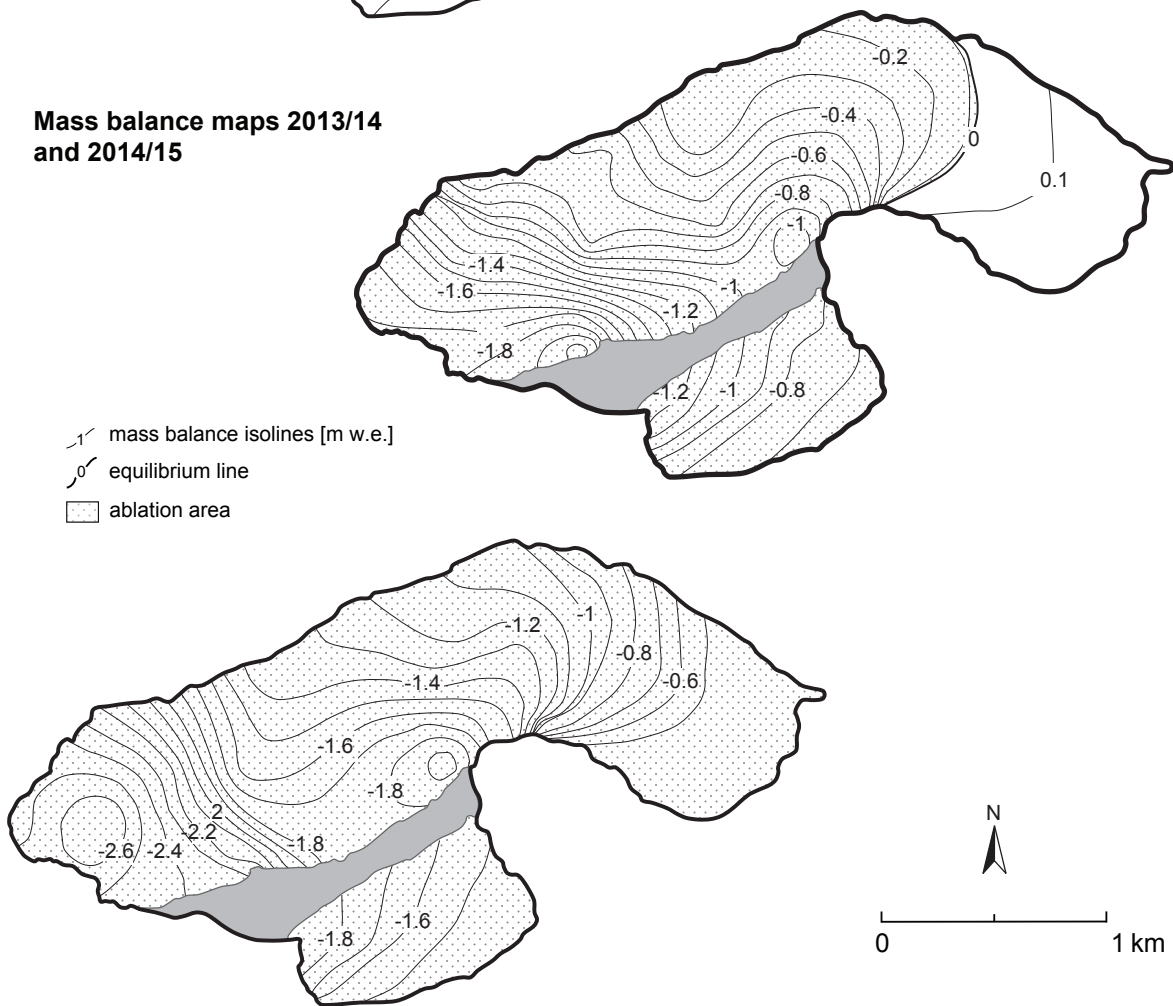
The balance in 2013/14 showed a mass loss of -576 mm w.e. The corresponding ELA was 385 m a.s.l., with an AAR of 16%. In 2014/15 the mass balance was -1,439 mm w.e. The ELA was 526 m a.s.l., with an AAR of 0%.

Figure 4.14.1 Topography and observation network and mass balance maps of 2013/14 and 2014/15.

Topography and observational network



Mass balance maps 2013/14 and 2014/15



Waldemarbreen (NORWAY)

Figure 4.14.2 Mass balance versus elevation (2013/14 and 2014/15).

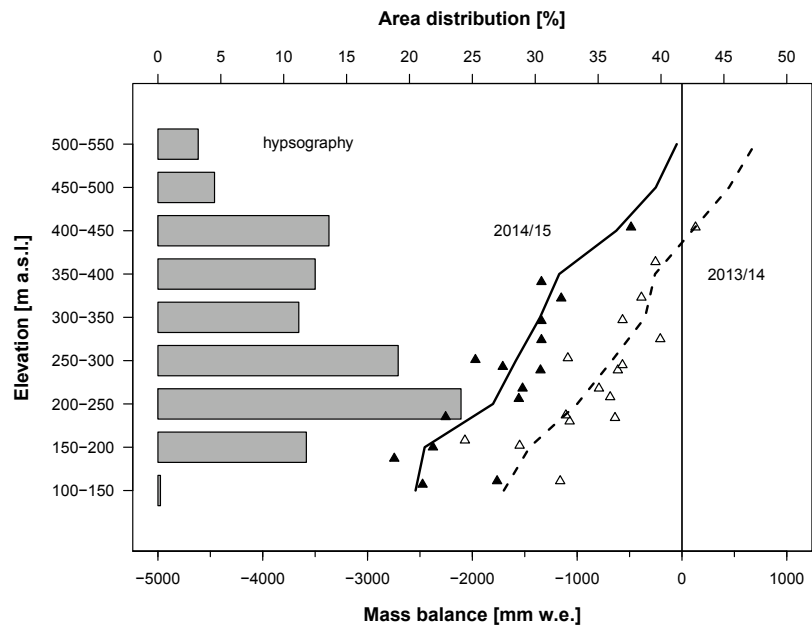


Figure 4.14.3 Glaciological balance versus geodetic balance for the whole observation period.

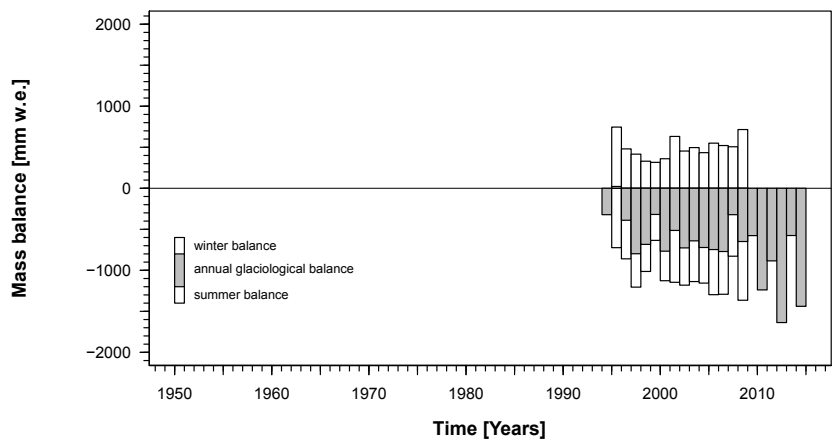
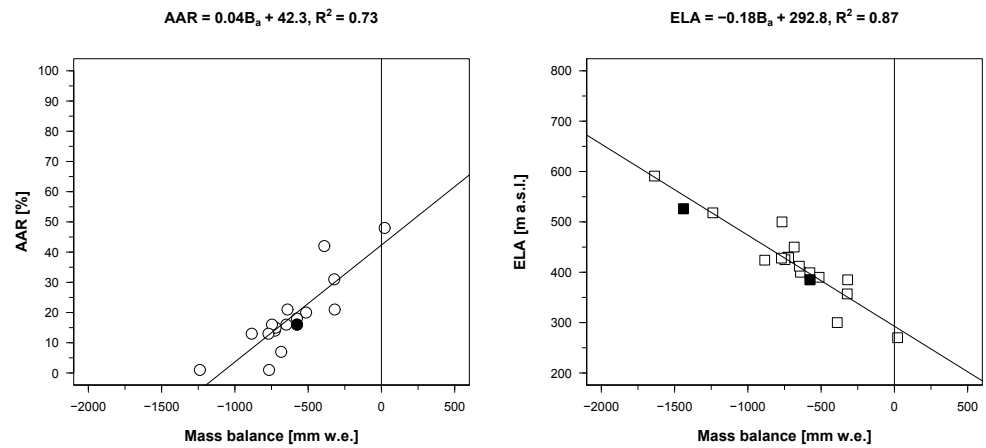


Figure 4.14.4 Accumulation area ratio (AAR) and equilibrium line altitude (ELA) versus specific mass balance for the whole observation period.



Waldemarbreen (NORWAY)

4.15 RHONEGLETSCHER (SWITZERLAND/ALPS)

COORDINATES: 46.62° N / 8.40° E



Tongue of Rhonegletscher with proglacial lake as in summer 2015 (photograph taken by M. Huss).

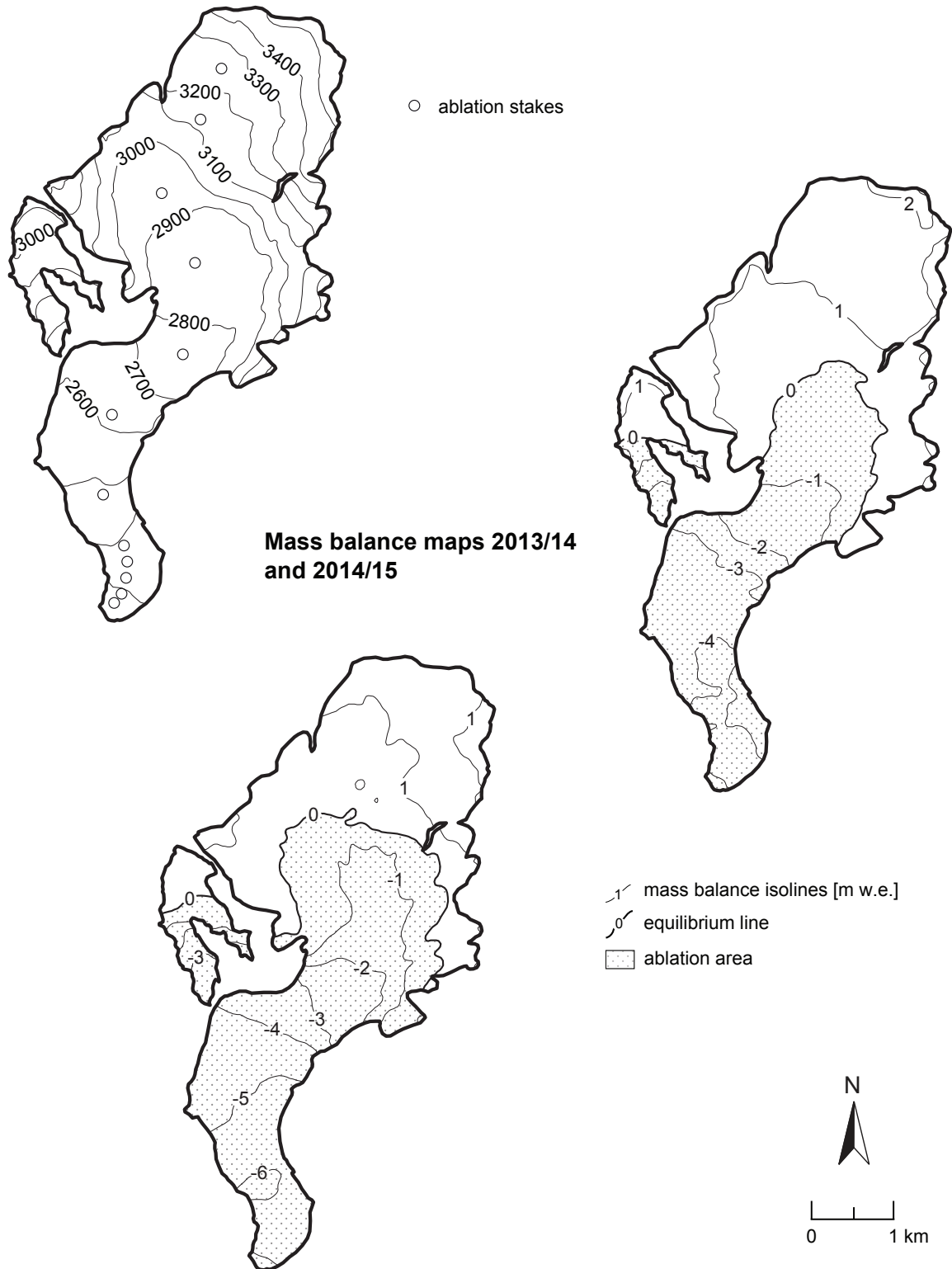
Rhonegletscher is a valley glacier located in the Central Swiss Alps at the source of the Rhone River. The glacier is characterized by a wide and relatively gently sloping accumulation area and a roughly four-kilometre-long tongue with no debris coverage exposed to the south. Glacier area was 15.6 km² in 2014, and covers an elevation range from 2,200 to 3,600 m a.s.l. The glacier currently terminates in a proglacial lake that has been growing continuously since 2005. Various campaigns to measure ice thickness were conducted, indicating a maximum thickness of more than 400 metres in the upper part of the glacier and an overall ice volume of 1.86 km³. The average annual and summer air temperature at the equilibrium line is around -3 °C and +4 °C, respectively, and mean annual precipitation at nearby Grimsel Hospiz is 1,980 mm. Winter snow measurements indicate a strong north-south gradient resulting in up to twice as much precipitation in the accumulation area compared to the glacier terminus.

On Rhonegletscher, the first direct mass balance measurements worldwide were conducted at a network of 10 to 20 stakes between 1884 and 1910 (Mercanton, 1916). After detailed mass balance surveys between 1979 and 1982, monitoring was resumed in 2006 and is now conducted regularly at seasonal resolution. The evolution of surface topography is documented by eight digital elevation models and volumetric changes have been determined over the period 1874 to 2013.

The annual surface mass balance 2013/14 was -383 mm w.e. with an ELA at 2,915 m a.s.l. and an AAR of 57%. Due to strongly above-average summer temperatures, strong mass loss was observed in 2014/15 with a mass balance of -1,083 mm w.e. The ELA was on 3,000 m a.s.l. and AAR was 45%.

Figure 4.15.1 Topography and observation network and mass balance maps of 2013/14 and 2014/15.

Topography and observational network



Rhonegletscher (SWITZERLAND)

Figure 4.15.2 Mass balance versus elevation (2013/14 and 2014/15).

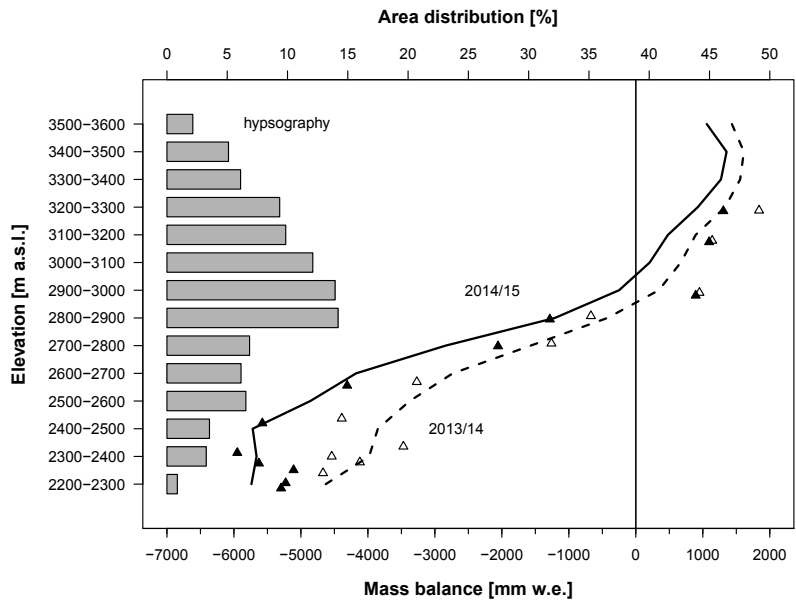


Figure 4.15.3 Glaciological balance versus geodetic balance for the whole observation period.

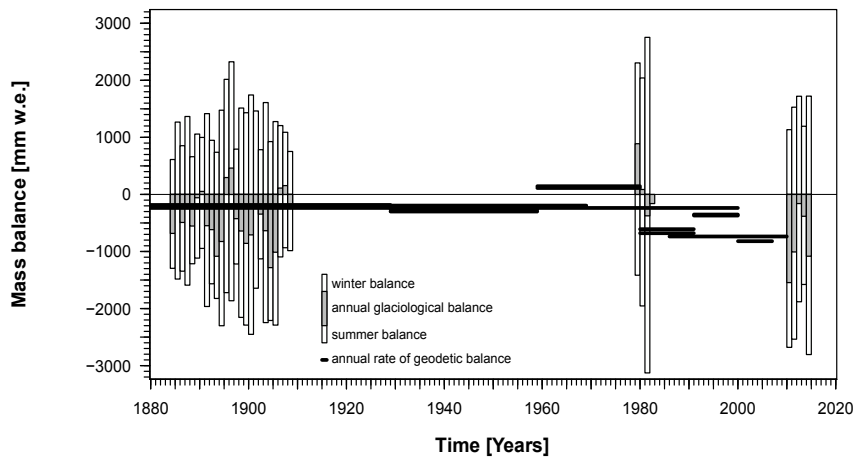
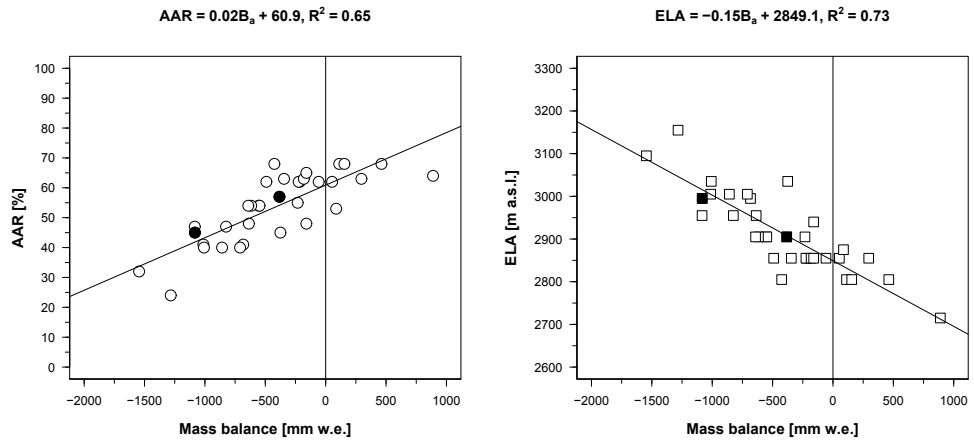


Figure 4.15.4 Accumulation area ratio (AAR) and equilibrium line altitude (ELA) versus specific mass balance for the whole observation period.



Rhonegletscher (SWITZERLAND)

4.16 LEMON CREEK (USA/COAST MOUNTAINS)

COORDINATES: 58.38° N / 134.36° W



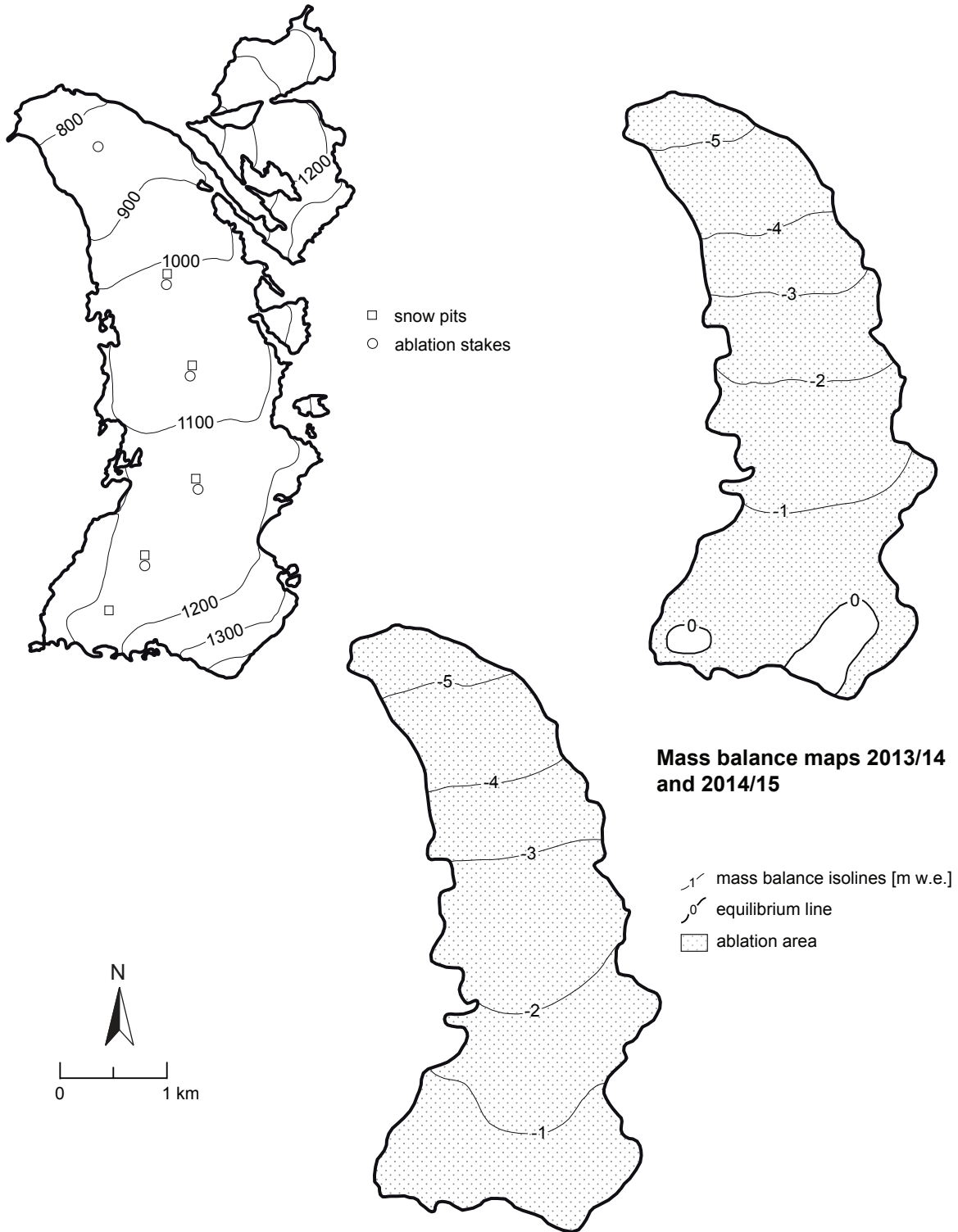
Lemon Creek Glacier on 11 September 2016 (photograph taken by M. Pelto).

This temperate valley glacier is part of the Juneau Icefield in the Coast Range of Southeast Alaska. The equilibrium line is at 1,020 m a.s.l. The glacier extends from 1,400 to 820 m a.s.l. and has a surface area of 11.6 km². The terminus of the glacier is currently steep and continuing a long-term retreat averaging 10-13 m a⁻¹, from 1998–2015. Mass balance measurements were initiated on this glacier in 1953 and have been conducted continuously since. A combined fixed date/stratigraphic method is employed, and only annual balance is determined. In 2014 five snow pits were completed in early July, ablation stakes were emplaced at four of the snowpits and one location near the terminus recording ablation up to September 17th. The accumulation was assessed in early July at 625 locations using probing with average 1,410 mm w.e. Average ablation from July 2 to September 17th was 2,750 mm w.e. The transient snowline was mapped on September 17th providing both the annual ELA and the AAR. In 2015, GPR surveys on March 31st indicate snow depth with an average of 1,860 mm w.e. retained. Ablation from 9/17/2014 to 7/6/2015 was ~1 m w.e. The transient snowline was observed to rise from 760 m a.s.l. on May 26th to 1,250 m a.s.l. by September 8th.

During July and August, the primary ablation period on the Lemon Creek Glacier, average temperature at Camp 17 adjacent to the glacier averaged 5.5 °C in 2014 and 4.5 °C in 2015. The freezing level during the winter of 2014 and 2015 averaged 685 m a.s.l. and 812 m a.s.l. respectively compared to an average of 570 m a.s.l. The freezing level in May and June was more than 300 m above average in 2014 and 2015, indicating the early onset of significant melt during the ablation season in 2014 and 2015. The 812 m a.s.l. was the second-highest freezing level since 1953. This led to less of the accumulation season precipitation being retained as snowpack at the end of the accumulation season. The mass balance was negative -1,825 mm w.e. in 2013/14, with an ELA of 1,240 m a.s.l. In 2014/15 the mass balance was negative -2,270 mm w.e., with an ELA above the glacier.

Figure 4.16.1 Topography and observation network and mass balance maps of 2013/14 and 2014/15.

Topography and observational network



Lemon Creek (USA)

Figure 4.16.2 Mass balance versus elevation (2013/14 and 2014/15).

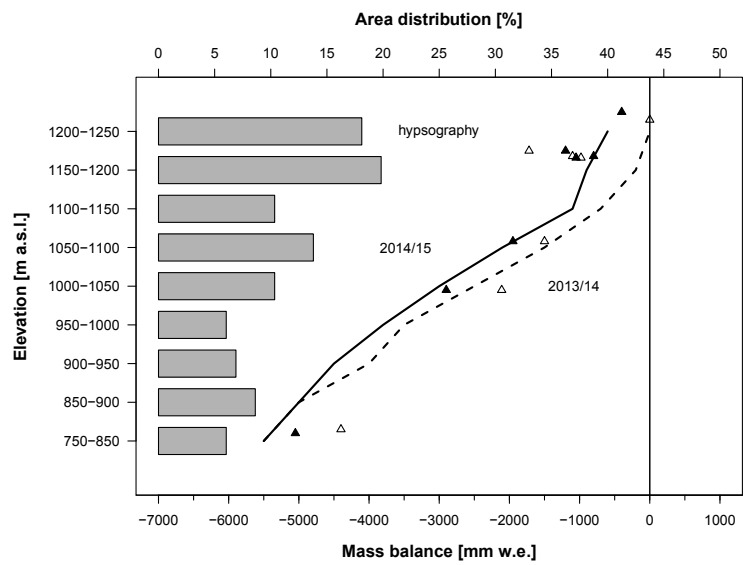


Figure 4.16.3 Glaciological balance versus geodetic balance for the whole observation period.

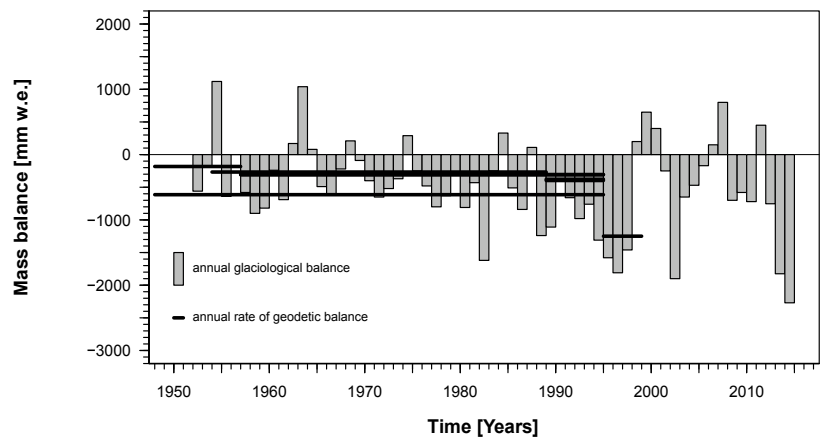
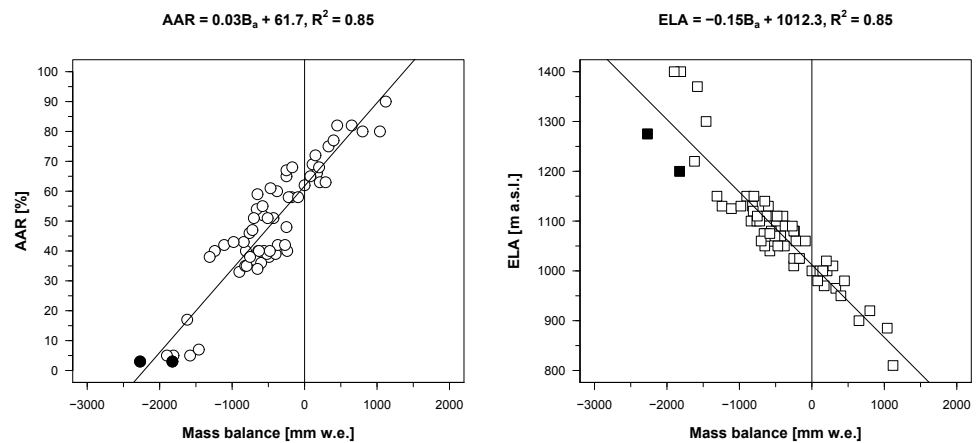


Figure 4.16.4 Accumulation area ratio (AAR) and equilibrium line altitude (ELA) versus specific mass balance for the whole observation period.



Lemon Creek (USA)

5 CONCLUDING REMARKS

Glacier monitoring has been coordinated internationally since 1894. This long-term effort has resulted in the compilation of an unprecedented dataset of changes in glacier length, area, volume, and mass. The dataset has been made freely available by the WGMS and its predecessor organizations and is widely used in scientific studies and assessment reports. The worldwide retreat of glaciers has become one of the most prominent icons of global climate change. Moreover, glacier decline has impacts on the local hazard situation, regional water availability, and global sea level rise.

The retreat of glaciers from their Little Ice Age (LIA) moraines and trimlines can be observed in the field as well as on aerial and satellite images for tens of thousands of glaciers around the world. Large collections of historical and modern photographs (e.g., NSIDC, 2002, updated 2015) document this change in a qualitative manner. The dataset presented here allows these changes to be quantified at samples ranging from a few hundred to a few thousand glaciers with observation series. There is a global trend to centennial glacier retreat from LIA maximum positions, with typical cumulative values of several hundred to a few thousand metres.

In various mountain ranges, glaciers with decadal response times have shown intermittent re-advances which, however, were short and thus much less extensive when compared to the overall frontal retreat. The most recent re-advance phases were reported from Scandinavia and New Zealand in the 1990s or from (mainly surge glaciers in) the Karakoram at the beginning of the 21st century. Early (geodetic) mass balance measurements indicate moderate decadal ice losses of a few dm w.e. a⁻¹ in the second half of the 19th and at the beginning of the 20th centuries, followed by increased ice losses around 0.4 m w.e. a⁻¹ in the 1940s and 1950s. Larger data samples (from both glaciological and geodetic methods) with better global coverage adequately document the period of moderate ice loss which followed between the mid-1960s and mid-1980s, as well as the subsequent acceleration in ice loss to > 0.5 m w.e. a⁻¹ in the first decade of the 21st century.

In the time period covered by the present bulletin, glaciers observed by the glaciological method lost more than 0.9 m w.e. a⁻¹. This continues the historically unprecedented ice loss observed since the turn of the century and is double the ice loss rates of the 1990s.

With their dynamic response to changes in climatic conditions – growth/reduction in area mainly through the advance/retreat of glacier tongues – glaciers re-adjust their extent to equilibrium conditions of ice geometry with a zero mass balance. Recorded mass balances document the degree of imbalance between glaciers and climate due to the delay in dynamic response caused by the characteristics of ice flow (deformation and sliding); over longer time intervals they depend on the rate of climatic forcing. With constant climatic conditions (no forcing), balances would tend towards and finally become zero. Long-term non-zero balances are, therefore, an expression of ongoing climate change and sustained forcing. Trends towards increasing non-zero balances are triggered by accelerated forcing. In the same way, comparison between present-day and past values of mass balance must take the changes in glacier area into account (Elsberg et al., 2001). Many of the relatively small glaciers, measured within the framework of the present mass balance observation network, have lost large percentages of their area during the past decades. The recent increase in the rates of ice loss over diminishing glacier surface areas, as compared with earlier losses related to larger surface areas, becomes even more pronounced and leaves no doubt about the accelerating change in climatic conditions, even if a part of the observed acceleration trend is likely to be caused by positive feedback processes.

Rising snowlines and cumulative mass losses lead to changes in the average albedo and to a continued surface lowering. Such effects cause pronounced positive feedbacks with respect to radiative and sensible heat fluxes. Albedo changes are especially effective in enhancing melt rates and can also be caused by the input of dust (Oerlemans et al., 2009). The cumulative length change of glaciers is the result of all effects combined, and

constitutes the key to a global intercomparison of decadal with secular mass losses. Surface lowering, thickness loss and the resulting reduction in driving stress and flow, however, increasingly replace processes of tongue retreat with processes of downwasting, disintegration or even the collapse of entire glaciers. Moreover, the thickness of most glaciers regularly observed for their mass balance is measured in (a few) tens of metres. From the measured mass losses and thickness reductions, it is evident that several network glaciers with important long-term observations may not survive for many more decades. A special challenge therefore consists in developing a strategy for ensuring the continuity of adequate mass balance observations under such extreme conditions.

Key tasks for the future of glacier mass balance monitoring include the continuation of (long-term) measurement series, the extension of the presently available dataset, especially in under-represented regions (Nussbaumer et al., 2017; Hoelzle et al., 2017), the quantitative assessment of uncertainties relating to available measurements (e.g., Magnússon et al., 2016), and their representativeness for changes in corresponding mountain ranges. The latter requires a well-considered integration of in-situ measurements, remotely sensed observations (e.g., Gardner et al., 2013), and numerical modelling (e.g., Huss, 2012) taking into account the related spatial and temporal scales.

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ACINN:	Institute of Atmospheric and Cryospheric Sciences (formerly: Institute of Meteorology and Geophysics, IMG), University of Innsbruck (AT)
AM:	Association Moraine (FR)
ARC:	Antarctic Research Centre, Victoria University of Wellington (NZ)
ARPA:	Agenzia Regionale per la Protezione dell'Ambiente della Valle d'Aosta (IT)
BE-Forest:	Forestry Service of Canton Bern (CH)
CAIAG:	Central Asian Institute of Applied Geosciences (KG)
CAREERI:	Cold and Arid Regions Environment and Engineering Research Institute, Chinese Academy of Sciences (CN)
CAS/ITPR:	Institute of Tibetan Plateau Research, Chinese Academy of Sciences (CN)
CECS:	Glaciology Laboratory, Centro de Estudios Científicos (CL)
CGGBAS:	Commission for Geodesy and Glaciology, Bavarian Academy of Sciences (DE)
CGI:	Comitato Glaciologico Italiano (IT)
CGI-Torino:	Comitato Glaciologico Italiano Torino (IT)
CNRS TheMA:	Laboratoire ThéMA, CNRS & Université de Franche-Comté et de Bourgogne (FR)
CNRS:	Centre national de la recherche scientifique (FR)
CNSAS:	Corpo Nazionale Soccorso Alpino e Speleologico (IT)
DES/UU:	Department of Earth Sciences, Uppsala University (SE)
DES:	Department of Earth Sciences, University of Bergen (NO)
DESA:	Department of Earth Science, Aarhus University (DK)
DGA:	Dirección General de Aguas, Ministerio de Obras Públicas, Gobierno de Chile (CL)
DGUF:	Department of Geosciences, University of Fribourg (CH)
DGUO-NZ:	Department of Geography/Te Ihowhenua, University of Otago (NZ)
DHAS:	Department of Hydrospheric-Atmospheric Sciences, Graduate School of Environmental Studies, Nagoya University (JP)
DRH-TDF/ CADIC:	Dirección de Recursos Hídricos Provincia de Tierra del Fuego, Centro Austral de Investigaciones Científicas (AR)
FES NCU:	Faculty of Earth Sciences, Nicolaus Copernicus University in Toruń (PL)
FGUA:	Federal Government of Upper Austria (AT)
GEM-CB:	Greenland Ecosystem Monitoring - Climate Basis (GL)
GEUS Geology:	Department of Quaternary Geology, The Geological Survey of Denmark and Greenland (DK)
GFZ Potsdam:	Helmholtz-Zentrum Potsdam, Deutsches GeoForschungsZentrum (DE)
GIUZ:	Department of Geography, University of Zurich (CH)
GLACIOLAB:	GLACIOLAB (FR)
GL-Forest:	Forestry Service of Canton Glarus (CH)
GR-Forest:	Forestry Service of Canton Graubünden (CH)
GSC:	Natural Resources Canada, Geological Survey of Canada (CA)
HD/LT:	Hydrologischer Dienst, Land Tirol (AT)
HD/SB:	Hydrografischer Dienst, Land Salzburg (AT)
I75SA:	Ingeniería 75, S.A. (ES)

Abbreviation	Sponsoring Agency
IAA-DG:	Departamento de Glaciología, Instituto Antártico Argentino (AR)
IAA-UNC:	Instituto Antártico Argentino, Universidad Nacional de Córdoba (AR)
IANIGLA:	Instituto Argentino de Nivología, Glaciología y Ciencias Ambientales, CCT CONICET Mendoza (AR)
ICIMOD:	International Centre for Integrated Mountain Development (NP)
IDEAM:	Instituto de Hidrología, Meteorología y Estudios Ambientales, Subdirección de Ecosistemas e Información Ambiental (CO)
IES:	Institute of Earth Sciences, University of Iceland (IS)
IGE:	Institut des Géosciences de l'Environnement (IGE)
IGNANKaz:	Institute of Geography, National Academy of Sciences of the Kazakh Republic (KZ)
IGRAN:	Institute of Geography of the Siberian Branch, Russian Academy of Science (RU)
IGS-IMO:	Iceland Glaciological Society, Icelandic Meteorological Office (IS)
IMO:	Icelandic Meteorological Office (IS)
INAMHI:	Programa Glaciares Ecuador, Instituto Nacional de Meteorología e Hidrología (EC)
INK:	Department of Physical Geography and Quaternary Geology, University of Stockholm (SE)
IRD:	Institut de Recherche pour le Développement (FR)
IRSTEA:	Institut national de recherche en sciences et technologies pour l'environnement et l'agriculture (FR)
ITAC:	Italian Alpine Club (IT)
JIRP:	Juneau Icefield Research Project, Nicols College (US)
JNU/SES:	School of Environmental Sciences, Jawaharlal Nehru University (IN)
MeteoTrentino:	Meteo Trentino (IT)
MGU:	Geographical Faculty, Moscow State University (RU)
NCGCP:	North Cascade Glacier Climate Project, Nichols College (US)
NCNP:	Sandalee Marblemount Ranger Station, North Cascades National Park (US)
NGM:	Norwegian Glacier Museum (NO)
NHT:	Nationalpark Hohe Tauern (AT)
NIWA:	National Institute of Water and Atmospheric Research (NZ), Dunedin
NMC:	Norwegian Mountain Center (NO)
NPC:	National Power Company (IS)
NPI:	Norwegian Polar Institute, Polar Environmental Centre (NO)
NVE:	Norwegian Water Resources and Energy Directorate (NO)
ÖAV:	Österreichischer Alpenverein (AT)
OW-Forest:	Forestry Service Canton Obwalden (CH)
PAS:	Institute of Geophysics, Polish Academy of Sciences (PL)
PJPS:	Pope John Paul II State School of Higher Education in Biala Podlaska (PL)
SAT:	Comitato Glaciologico Trentino, Società degli Alpinisti Tridentini (IT)
SGAA:	Servizio Glaciologico Alto Adige (IT)
SG-Forest:	Forestry Service of Canton St. Gallen (CH)
SGL:	Servizio Glaciologico Lombardo (IT)
SISO:	Siso Energy AS (NO)
SMI:	Società Meteorologica Italiana (IT)
SPESA:	Servicios y Proyectos del Ebro SA (ES)
SRNSF:	Shota Rustaveli National Science Foundation, Tbilisi, Georgia (GE)

Abbreviation	Sponsoring Agency
STAK:	Statkraft AS (NO)
SUNK:	Sunnhordland Kraftlag AS (NO)
TI-Forest:	Forestry Service of Canton Ticino (CH)
TshMRC:	The Tien-Shan High Mountain Research Center Power, Institute of Water Problems and Hydro Power (KG)
TU/G:	Department of Geography, Trent University (CA)
UCant/DG:	Dept. Of Geography, University of Canterbury (NZ)
UGRH/ANA:	Unidad de Glaciología y Recursos Hídricos, Autoridad Nacional del Agua (PE)
UG/CNRS:	CNRS, IRD, Grenoble-INP, IGE, Université Grenoble Alpes (FR)
UI/HA:	Ufficio Idrografico / Hydrographisches Amt, Provincia autonoma di Bolzano - Alto Adige / Autonome Provinz Bozen - Südtirol (IT)
UMSA:	Instituto de Investigaciones Geológicas y del Medio Ambiente, Universidad Mayor de San Andres (BO)
UNTFD:	Universidad Nacional de Tierra del Fuego (AR)
Uottawa/DG:	Department of Geography, University of Ottawa (CA)
UP/TeSAF:	Dept. of Land, Environment, Agriculture and Forestry, University of Padua (IT)
UPM/ETSIT:	ETSI Telecomunicación, Universidad Politécnica de Madrid (ES)
UPV:	Departamento de Ingeniería del Terreno, Universidad Politécnica de Valencia (ES)
UR-Forest:	Forestry Service of Canton Uri (CH)
US/FES:	Faculty of Earth Sciences, University of Silesia (PL)
USGS:	U.S. Geological Survey (US)
USGS-F:	Alaska Science Center, Glaciology, U.S. Geological Survey (US)
USGS-GNP:	United States Geological Survey Glacier National Park (US)
VAW:	Laboratory of Hydraulics, Hydrology and Glaciology, ETH Zurich (CH)
VD-Forest:	Forestry Service of Canton Vaud (CH)
VS-Forest:	Forestry Service of Canton Valais (CH)
WSL:	Eidg. Forschungsanstalt für Wald, Schnee und Landschaft (CH)
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APPENDIX

The Appendix includes the data reported for the observation periods covered by the current Bulletin (i.e. 2013/14 and 2014/15).

The Appendix starts with explanatory notes on the completion of the Excel-based data submission forms, as sent out with the corresponding calls-for-data:

NOTES ON THE COMPLETION OF THE DATA SHEETS

- Notes on the completion of the data sheet “A GENERAL INFORMATION”
- Notes on the completion of the data sheet “AA GLACIER ID LOOKUP TABLE”
- Notes on the completion of the data sheet “B STATE”
- Notes on the completion of the data sheet “C FRONT VARIATION”
- Notes on the completion of the data sheet “D CHANGE”
- Notes on the completion of the data sheet “E MASS BALANCE OVERVIEW”
- Notes on the completion of the data sheet “EE MASS BALANCE”
- Notes on the completion of the data sheet “EEE MASS BALANCE POINT”
- Notes on the completion of the data sheet “F SPECIAL EVENT”

The notes on the completion of the data sheets A–F describe all attributes compiled during the call-for-data, whereas the Tables 1 to 6 in this bulletin provide a summary of the collected data. Full details, including all attributes, are stored in, and available from, the *Fluctuations of Glaciers* database.

The WGMS website provides access to information on available data, to procedures for data order and data submission as well as to the addresses of National Correspondents. Website and database can be accessed via:

<http://www.wgms.ch>

A - GENERAL INFORMATION

NOTES ON THE COMPLETION OF THE DATA SHEET

This data sheet should be completed in cases of new glacier entries related to available fluctuation data[#]; for glaciers already existing in the FoG database, POLITICAL UNIT (A1), GLACIER NAME (A2) AND WGMS ID (A3) are to be used in data sheets B to F.

A1 - POLITICAL UNIT [alphabetic code; 2 digits]

Name of country or territory in which glacier is located (for 2 digit abbreviations, see ISO 3166 country code, available at www.iso.org).

Political unit is part of WGI key (positions 1 and 2).

Political unit is part of PSFG key (positions 1 and 2).

A2 - GLACIER NAME [alpha-numeric code; up to 60 digits]

The name of the glacier, written in CAPITAL letters.

Format: max. 60 column positions.

If necessary, the name can be abbreviated; in this case, please give the full name under "A16 - REMARKS".

A3 - WGMS ID [numeric code; 5 digits]

5 digit key identifying glaciers in the Fluctuations of Glaciers (FoG) database of the WGMS.

For new glacier entries, this key is assigned by the WGMS.

A4 - GEOGRAPHICAL LOCATION (GENERAL) [alpha-numeric code; up to 30 digits]

Refers to a large geographical entity (e.g. a large mountain range or large political subdivision) which gives a rough idea of the location of the glacier, without requiring the use of a map or an atlas. Examples: Western Alps, Southern Norway, Polar Ural, Tien Shan, Himalayas.

A5 - GEOGRAPHICAL LOCATION (SPECIFIC) [alpha-numeric code; up to 30 digits]

Refers to a more specific geographical location (e.g. mountain group, drainage basin), which can be found easily on a small scale map of the country concerned. Examples: Rhone Basin, Jotunheimen.

A6 - LATITUDE [decimal degree North or South; up to 6 digits]

The geographical coordinates should refer to a point in the upper ablation area; for small glaciers, this point may lie outside the glacier.

Latitude should be given in decimal degrees, positive values indicating the northern hemisphere and negative values indicating the southern hemisphere.

Latitude should be given to a maximum precision of 4 decimal places.

A7 - LONGITUDE [decimal degree East or West; up to 7 digits]

The geographical coordinates should refer to a point in the upper ablation area; for small glaciers, this point may lie outside the glacier.

Longitude should be given in decimal degrees, positive values indicating east of zero meridian and negative values indicating west of zero meridian.

Longitude should be given to a maximum precision of 4 decimal places.

A8 - CODE [numeric code; 3 digits]

Classification should be given in coded form, according to "Perennial Ice and Snow Masses" (Technical papers in hydrology, UNESCO/IAHS, 1970). The following information should be given:

- Primary Classification Digit 1
- Form Digit 2
- Frontal Characteristics Digit 3

[#] For new glacier entries, you may check the World Glacier Inventory (WGI) or the GLIMS database for existing information:

+ WGI: http://nsidc.org/data/glacier_inventory/index.html

+ GLIMS: <http://www.glims.org>

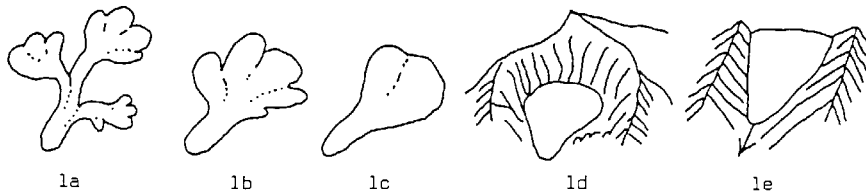
A8a - PRIMARY CLASSIFICATION - Digit 1

0	Miscellaneous	Any type not listed below (please explain)
1	Continental ice sheet	Inundates areas of continental size
2	Icefield	Ice masses of sheet or blanket type of a thickness insufficient to obscure the subsurface topography
3	Ice cap	Dome-shaped ice masses with radial flow
4	Outlet glacier	Drains an ice sheet, icefield or ice cap, usually of valley glacier form; the catchment area may not be easily defined
5	Valley glacier	Flows down a valley; the catchment area is well defined
6	Mountain glacier	Cirque, niche or crater type, hanging glacier; includes ice aprons and groups of small units
7	Glacieret and snowfield	Small ice masses of indefinite shape in hollows, river beds and on protected slopes, which has developed from snow drifting, avalanhcng, and/or particularly heavy accumulation in certain years; usually no marked flow pattern is visible; in existence for at least two consecutive years.
8	Ice shelf	Floating ice sheet of considerable thickness attached to a coast nourished by a glacier(s); snow accumulation on its surface or bottom freezing
9	Rock glacier	Lava-stream-like debris mass containing ice in several possible forms and moving slowly downslope

Note: The parent glacier concept (cf. A15 - PARENT GLACIER) can be used for the classification of complex glacier systems (e.g., ice cap or icefield with outlet glaciers) or of disintegrating/coalescing glaciers over time.

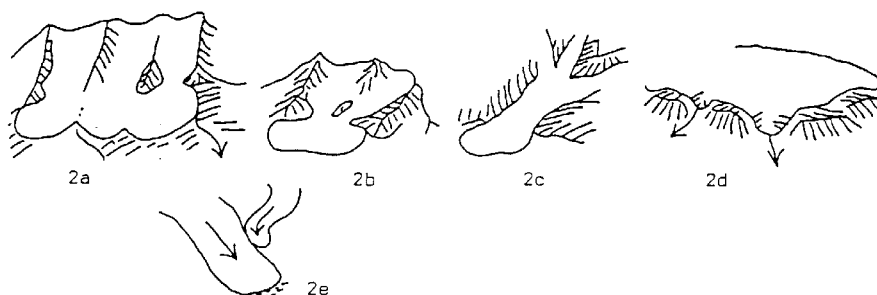
A8b - FORM – Digit 2

0	Miscellaneous	Any type not listed below (please explain)
1	Compound basins	Two or more individual valley glaciers issuing from tributary valleys and coalescing (Fig. 1a)
2	Compound basin	Two or more individual accumulation basins feeding one glacier system (Fig. 1b)
3	Simple basin	Single accumulation area (Fig. 1c)
4	Cirque	Occupies a separate, rounded, steep-walled recess which it has formed on a mountain side (Fig. 1d)
5	Niche	Small glacier in a V-shaped gulley or depression on a mountain slope (Fig. 1e); generally more common than genetically further-developed cirque glacier.
6	Crater	Occurring in extinct or dormant volcanic craters
7	Ice apron	Irregular, usually thin ice mass which adheres to mountain slope or ridge
8	Group	A number of similar ice masses in close proximity and too small to be assessed individually
9	Remnant	Inactive, usually small ice masses left by a receding glacier



A8c - FRONTAL CHARACTERISTICS – Digit 3

0	Miscellaneous	Any type not listed below (please explain)
1	Piedmont	Icefield formed on a lowland area by lateral expansion of one or coalescence of several glaciers (Fig. 2a, 2b)
2	Expanded foot	Lobe or fan formed where the lower portion of the glacier leaves the confining wall of a valley and extends on to a less restricted and more level surface (Fig. 2c)
3	Lobed	Part of an ice sheet or ice cap, disqualified as an outlet glacier (Fig. 2d)
4	Calving	Terminus of a glacier sufficiently extending into sea or lake water to produce icebergs; includes- for this inventory- dry land ice calving which would be recognisable from the “lowest glacier elevation”
5	Coalescing, non-contributing (Fig. 2e)	
6	Irregular, mainly clean ice (mountain or valley glaciers)	
7	Irregular, debris-covered (mountain or valley glaciers)	
8	Single lobe, mainly clean ice (mountain or valley glaciers)	
9	Single lobe, debris-covered (mountain or valley glaciers)	



A9 - EXPOSITION OF ACCUMULATION AREA [cardinal point; up to 2 digits]
The main orientation of the accumulation area using the 8 cardinal points (8-point compass).

A10 - EXPOSITION OF ABLATION AREA [cardinal point; up to 2 digits]
The main orientation of the ablation area using the 8 cardinal points (8-point compass).

A11 - PARENT GLACIER [numeric code; 5 digits]
Links separated glacier parts with (former) parent glacier, using WGMS ID (see "A3 - WGMS ID").

A12 - REMARKS [alpha-numeric]
Any important information or comments not included above may be given here. Comments about the uncertainty of the numerical data may be made, including quantitative comments. Only significant decimals should be given.

A13 - GLACIER REGION [alphabetic code; 3 digits]
3-digit code assigning each glacier to one of 19 first-order regions. For new glacier entries, this key is assigned by the WGMS.

A14 - GLACIER SUBREGION [alpha-numeric code; 6 digits]
6-digit code assigning each glacier to one of 90 second-order regions. For new glacier entries, this key is assigned by the WGMS.

AA - GLACIER ID LOOKUP TABLE

NOTES ON THE COMPLETION OF THE DATA SHEET

This data sheet is completed by the WGMS and aims at linking the WGMS_ID as used in the Fluctuations of Glaciers database to glacier identifiers in other databases, such as to the PSFG_ID, the WGI_ID, the GLIMS_ID, and the RGI_ID.

AA1 - POLITICAL UNIT [alphabetic code; 2 digits]

Name of country or territory in which glacier is located (cf. "A1 - POLITICAL UNIT").

AA2 - GLACIER NAME [alpha-numeric code; up to 30 digits]

The name of the glacier, written in CAPITAL letters. Use the same spelling as in "A2 - GLACIER NAME".

AA3 - WGMS ID [numeric code; 5 digits]

5 digit key identifying glaciers in the FoG database of the WGMS (cf. "A3 – WGMS ID"). This key is assigned by the WGMS.

AA4 - PSFG ID [alpha-numeric code; 7 digits]

7 digit key identifying glaciers in the Fluctuations of Glaciers publication series. The key was introduced by the "Permanent Service for the Fluctuations of Glaciers" (PSFG), one of the predecessor services of the WGMS. This key is assigned by the National Correspondents according to existing national glacier inventories or similar glacier numerations.

The PSFG ID consists of 7 digits, starting with 2-character political unit followed by 4 or, as an exception, 5 alpha-numerical digits. Empty spaces are filled with the digit 0.

AA5 - WGI ID [alpha-numeric code; 12 digits]

12 digit key identifying glaciers in the World Glacier Inventory. The key is assigned to the glaciers as defined by Müller (1978) combining the five following elements:

+ 2-character political unit

+ 1-digit continent code

+ 4-character drainage code

+ 2-digit free position code

+ 3-digit local glacier code

Empty spaces are filled with the digit 0. This key is assigned by WGMS and NSIDC. More information is found in Müller (1978) and on the WGI webpage: http://nsidc.org/data/docs/noaa/g01130_glacier_inventory/

AA6 - GLIMS ID [alpha-numeric code; 14 digits]

14 digit key identifying glaciers in the GLIMS database. The identifier has the format GxxxxxxEyyyyy Θ , where xxxxxx is longitude east of the Greenwich meridian in millidegrees, yyyyy is north or south latitude in millidegrees, and Θ is N or S depending on the hemisphere. This key is assigned by NSIDC. More information is found on the GLIMS webpage: <http://www.glims.org/MapsAndDocs/>

AA7 - RGI ID [alpha-numeric code; 14 digits]

14 digit key identifying glaciers in the RGI database. The identifier has the format RGIvv-rr.nnnn, where vv is the version number, rr is the first-order region number and nnnn is an arbitrary identifying code that is unique within the region. These codes were assigned as sequential positive integers at the first-order (not second-order) level, but they should not be assumed to be sequential numbers, or even to be numbers. In general the identifying code of each glacier, nnnn, should not be expected to be the same in different RGI versions. This key is assigned by the RGI Working Group. More information is found on the RGI webpage: <http://www.glims.org/RGI/index.html>

AA8 - REMARKS [alpha-numeric]

Any important information or comments not included above may be given here

B - STATE

NOTES ON THE COMPLETION OF THE DATA SHEET

This data sheet should be completed in order to report length, area and elevation range of glaciers with available fluctuation data.

B1 - POLITICAL UNIT [alphabetic code; 2 digits]

Name of country or territory in which glacier is located (cf. "A1 - POLITICAL UNIT").

B2 - GLACIER NAME [alpha-numeric code; up to 30 digits]

The name of the glacier, written in CAPITAL letters. Use the same spelling as in "A2 - GLACIER NAME".

B3 - WGMS ID [numeric code; 5 digits]

5 digit key identifying glaciers in the FoG database of the WGMS (cf. "A3 - WGMS ID").

B4 - YEAR [year]

Year of present survey.

B5 - MAXIMUM ELEVATION OF GLACIER [m a.s.l.]

Altitude of the highest point of the glacier.

B6 - MEDIAN ELEVATION OF GLACIER [m a.s.l.]

Altitude of the contour line which halves the area of the glacier.

B7 - MINIMUM ELEVATION OF GLACIER [m a.s.l.]

Altitude of the lowest point of the glacier.

B8 - ELEVATION UNCERTAINTY [m]

Estimated random uncertainty of reported elevations.

B9 - LENGTH [km]

Maximum length of glacier measured along the most important flowline (in horizontal projection).

B10 - LENGTH UNCERTAINTY [km]

Estimated random uncertainty of reported length.

B11 - AREA [km²]

Glacier area (in horizontal projection) in the survey YEAR.

B12 - AREA UNCERTAINTY [km²]

Estimated random uncertainty of reported area.

B13 - SURVEY DATE [numeric; 8 digits]

Date of present survey.

For each survey, please indicate the complete date in numeric format (YYYYMMDD).

Missing data: For unknown day or month, put "99" in the corresponding position(s) and make a note under "B16 - REMARKS"

B14 - SURVEY PLATFORM & METHOD [alphabetic code; 2 digits]

The survey platform and method should be given using the following alphabetic code:

Platform (first digit, lower case)

t: terrestrial

a: airborne

s: spaceborne

c: combined

x: unknown

Method (second digit, upper case)

R: reconstructed (e.g., from landforms)

M: derived from maps

G: ground survey (e.g., GPS, tachymetry, tape)

P: photogrammetry

L: laser altimetry or scanning

Z: radar altimetry or interferometry

C: combined (explain under B16 REMARKS)

X: other (explain under B16 REMARKS)

B15 - INVESTIGATOR [alpha-numeric; 255 digits]

Name(s) of the person(s) or agency doing the field work and/or the name(s) of the person(s) or agency processing the data.

B16 - SPONSORING AGENCY [alpha-numeric; 255 digits]

Full name, abbreviation and address of the agency where the data are held.

B17 - REFERENCE [alpha-numeric; 255 digits]

Reference to publication related to above data and methods.

Use short format such as: Author et al. (YYYY); Journal, V(I), X-XX p.

B18 - REMARKS [alpha-numeric]

Any important information or comments not included above may be given here as well as short references to related publications.

Comments about the uncertainty of the numerical data may be made, including quantitative comments. Only significant decimals should be given.

C - FRONT VARIATION

NOTES ON THE COMPLETION OF THE DATA SHEET

This data sheet should be completed in order to report glacier length change records mainly from in-situ and remote sensing measurements.*

C1 - POLITICAL UNIT [alphabetic code; 2 digits]

Name of country or territory in which glacier is located (cf. "A1 - POLITICAL UNIT").

C2 - GLACIER NAME [alpha-numeric code; up to 60 digits]

The name of the glacier, written in CAPITAL letters. Use the same spelling as in "A2 - GLACIER NAME".

C3 - WGMS ID [numeric code; 5 digits]

5 digit key identifying glaciers in the FoG database of the WGMS (cf. "A3 - WGMS ID").

C4 - YEAR [year]

Year of present survey.

C5 - FRONT VARIATION [m]

Variation in the position of the glacier front (in horizontal projection) between the previous and present survey.

Positive values: advance

Negative values: retreat

C6 - FRONT VARIATION UNCERTAINTY [m]

Estimated random uncertainty of reported front variation.

C7 - QUALITATIVE VARIATION [alphabetic code; 2 digits]

If no quantitative data are available for a particular year, but qualitative data are available, then the front variation should be denoted using the following symbols. They should be positioned in the far left of the data field.

+X : Glacier in advance

-X : Glacier in retreat

ST : Glacier stationary

SN : Glacier front covered by snow making survey impossible.

Qualitative variations will be understood with reference to the previous survey data, whether this data is qualitative or quantitative.

C8 - SURVEY DATE [numeric; 8 digits]

Date of present survey.

For each survey, please indicate the complete date in numeric format (YYYYMMDD).

Missing data: For unknown day or month, put "99" in the corresponding position(s) and make a note under "C14 - REMARKS"

C9 - SURVEY PLATFORM & METHOD [alphabetic code; 2 digits]

The survey platform and method should be given using the following alphabetic code:

Platform (first digit, lower case)

t: terrestrial

a: airborne

s: spaceborne

c: combined

x: unknown

Method (second digit, upper case)

R: reconstructed (e.g., historical sources, geomorphological evidence, dating of moraines)

M: derived from maps

G: ground survey (e.g., GPS, tachymetry, tape)

P: photogrammetry

L: laser altimetry or scanning

Z: radar altimetry or interferometry

C: combined (explain under C14 REMARKS)

X: other (explain under C14 REMARKS)

* For the submission of front variation series mainly based on reconstruction methods (e.g., paintings, drawings, written sources, photography, maps, and moraine dating), please contact the WGMS staff.

C10 - REFERENCE DATE [numeric, 8 digits]

Date of previous survey

For each survey, please indicate the complete date in numeric format (YYYYMMDD).

Missing data: For unknown day or month, put "99" in the corresponding position(s) and make a note under "C14 - REMARKS"

C11 - INVESTIGATOR [alpha-numeric; 255 digits]

Name(s) of the person(s) or agency doing the fieldwork and/or the name(s) of the person(s) or agency processing the data.

C12 - SPONSORING AGENCY [alpha-numeric; 255 digits]

Full name, abbreviation and address of the agency where the data are held.

C13 - REFERENCE [alpha-numeric; 255 digits]

Reference to publication related to above data and methods.

Use short format such as: Author et al. (YYYY); Journal, V(I), X-XX p.

C14 - REMARKS [alpha-numeric]

Any important information or comments not included above may be given here as well as short references to related publications. Comments about the uncertainty of the numerical data may be made, including quantitative comments. Only significant decimals should be given.

D - CHANGE

NOTES ON THE COMPLETION OF THE DATA SHEET

This data sheet should be completed in order to report changes in thickness, area and volume from geodetic surveys and/or area data of glaciers with available fluctuation data.

D1 - POLITICAL UNIT [alphabetic code; 2 digits]

Name of country or territory in which glacier is located (cf. "A1 - POLITICAL UNIT").

D2 - GLACIER NAME [alpha-numeric code; up to 60 digits]

The name of the glacier, written in CAPITAL letters. Use the same spelling as in "A2 - GLACIER NAME".

D3 - WGMS ID [numeric code; 5 digits]

5 digit key identifying glaciers in the FoG database of the WGMS (cf. "A3 - WGMS ID").

D4 - YEAR [year]

Year of present survey.

D5 - LOWER BOUNDARY [m a.s.l.]

Lower boundary of altitude interval.

If refers to entire glacier, then lower bound = 9999.

D6 - UPPER BOUNDARY [m a.s.l.]

Upper boundary of altitude interval

If refers to entire glacier, then upper bound = 9999.

D7 - AREA SURVEY YEAR[km²]

Glacier area of each altitude interval (in horizontal projection) in the survey YEAR.

D8 - AREA CHANGE [1000 m²]

Area change for each altitude interval.

D9 - AREA CHANGE UNCERTAINTY [1000 m²]

Estimated random uncertainty of reported area change.

D10 - THICKNESS CHANGE [mm]

Specific ice thickness change for each altitude interval.

D11 - THICKNESS CHANGE UNCERTAINTY [mm]

Estimated random uncertainty of reported thickness change.

D12 - VOLUME CHANGE [1000 m³]

Ice volume change for each altitude interval.

D13 - VOLUME CHANGE UNCERTAINTY [1000 m³]

Estimated random uncertainty of reported volume change.

D14 - SURVEY DATE [numeric; 8 digits]

Date of present survey.

For each survey, please indicate the complete date in numeric format (YYYYMMDD).

Missing data: For unknown day or month, put "99" in the corresponding position(s) and make a note under "D21 - REMARKS"

D15 - SURVEY DATE PLATFORM & METHOD [alphabetic code; 2 digits]

The survey platform and method applied at the survey date should be given using the following alphabetic code:

Platform (first digit, lower case)

t: terrestrial
a: airborne
s: spaceborne
c: combined
x: unknown

Method (second digit, upper case)

R: reconstructed (e.g., from landforms)
M: derived from maps
G: ground survey (e.g., GPS, tachymetry, tape)
P: photogrammetry
L: laser altimetry or scanning
Z: radar altimetry or interferometry
C: combined (explain under D21 REMARKS)
X: other (explain under D21 REMARKS)

D16 - REFERENCE DATE [numeric; 8 digits]

Date of previous survey.

For each survey, please indicate the complete date in numeric format (YYYYMMDD).

Missing data: For unknown day or month, put "99" in the corresponding position(s) and make a note under "D21 - REMARKS"

D17 - REFERENCE DATE PLATFORM & METHOD [alphabetic code; 2 digits]

The survey platform and method applied at the reference date should be given using the alphabetic code given under D15.

D18 - INVESTIGATOR [alpha-numeric; 255 digits]

Name(s) of the person(s) or agency doing the fieldwork and/or the name(s) of the person(s) or agency processing the data.

D19 - SPONSORING AGENCY [alpha-numeric; 255 digits]

Full name, abbreviation and address of the agency where the data are held.

D20 - REFERENCE [alpha-numeric; 255 digits]

Reference to publication related to above data and methods.

Use short format such as: Author et al. (YYYY); Journal, V(I), X-XX p.

D21 - REMARKS [alpha-numeric]

Any important information or comments not included above may be given here as well as short references to related publications. Comments about the uncertainty of the numerical data may be made, including quantitative comments. Only significant decimals should be given.

E - MASS BALANCE OVERVIEW

NOTES ON THE COMPLETION OF THE DATA SHEET

This data sheet should be completed in order to report glacier mass balance data measured by the direct glaciological method.

E1 - POLITICAL UNIT [alphabetic code; 2 digits]

Name of country or territory in which glacier is located (cf. "A1 - POLITICAL UNIT").

E2 - GLACIER NAME [alpha-numeric code; up to 60 digits]

The name of the glacier, written in CAPITAL letters. Use the same spelling as in "A2 - GLACIER NAME".

E3 - WGMS ID [numeric code; 5 digits]

5 digit key identifying glaciers in the FoG database of the WGMS (cf. "A3 - WGMS ID").

E4 - YEAR [year]

Year of present survey.

E5 - TIME MEASUREMENT SYSTEM [alphabetic code; 3 digits]

The time measurement system should be given using the following 3 digit alphabetic code:

FLO = floating-date system

FXD = fixed-data system

STR = stratigraphic system

COM = combined system; usually of STR and FXD according Mayo et al. (1972)

OTH = other

Please give floating survey dates in E6-E8 for all time systems and explain methodological details (e.g., fixed calendar dates and correction methods) under "E23 - REMARKS".

Note that FLO was newly introduced in 2011 in order to reduce earlier ambiguities. Before that, mass balance results based on the floating-date system were (at least theoretically) reported as OTH. For definitions of the above time measurement systems and more details see Cogley et al. (2011).

E6 - BEGINNING OF SURVEY PERIOD [numeric; 8 digits]

Date on which survey period began.

For each survey, please indicate the complete date in numeric format (YYYYMMDD).

Missing data: For unknown day or month, put "99" in the corresponding position(s) and make a note under "E23 - REMARKS"

E7 - END OF WINTER SEASON [numeric; 8 digits]

Date of end of winter season.

If known, please indicate the complete date in numeric format (YYYYMMDD).

Missing data: For unknown day or month, put "99" in the corresponding position(s) and make a note under "E23 - REMARKS"

E8 - END OF SURVEY PERIOD [numeric; 8 digits]

Date on which survey period ended.

For each survey, please indicate the complete date in numeric format (YYYYMMDD).

Missing data: For unknown day or month, put "99" in the corresponding position(s) and make a note under "E23 - REMARKS"

E9a - ELA PREFIX [alphabetic code, 1 digit]

Prefix denoting if the equilibrium line was below (" $<$ ") or above (" $>$ ") the minimum or maximum elevation of the glacier, respectively. Leave this field empty if the mean altitude of the equilibrium line was within the glacier elevation range.

E9b - EQUILIBRIUM LINE ALTITUDE [m a.s.l.]

Mean altitude (averaged over the glacier) of the end-of-mass-balance-year equilibrium line (ELA). Give glacier minimum or maximum elevation if the ELA was below or above the elevation range of the glacier, respectively.

E10 - ELA UNCERTAINTY [m]

Estimated random uncertainty of reported ELA.

E11 - MINIMUM NUMBER OF MEAS. SITES USED IN ACCUMULATION AREA [numeric]

The minimum number of different sites at which measurements were taken in the accumulation area. Repeat measurements may be taken for one site, in order to obtain an average value for that site, but the site is still only counted once. Minimum and maximum values can be used to indicate different numbers of measurements carried out for (i) winter and annual balance surveys or (ii) for different accumulation measurement types (e.g., snow pits versus snow probings).

E12 - MAXIMUM NUMBER OF MEAS. SITES USED IN ACCUMULATION AREA [numeric]

The maximum number of different sites at which measurements were taken in the accumulation area. Repeat measurements may be taken for one site, in order to obtain an average value for that site, but the site is still only counted once. Minimum and maximum values can be used to indicate different numbers of measurements carried out for (i) winter and annual balance surveys or (ii) for different accumulation measurement types (e.g., snow pits versus snow probings).

E13 - MINIMUM NUMBER OF MEAS. SITES USED IN ABLATION AREA [numeric]

The minimum number of different sites at which measurements were taken in the ablation area. Repeat measurements may be taken for one site, in order to obtain an average value for that site, but the site is still only counted once. Minimum and maximum values can be used to indicate different numbers of measurements carried out for (i) winter and annual balance surveys.

E14 - MAXIMUM NUMBER OF MEAS. SITES USED IN ABLATION AREA [numeric]

The maximum number of different sites at which measurements were taken in the ablation area. Repeat measurements may be taken for one site, in order to obtain an average value for that site, but the site is still only counted once. Minimum and maximum values can be used to indicate different numbers of measurements carried out for (i) winter and annual balance surveys.

E15 - ACCUMULATION AREA [km²]

Accumulation area in horizontal projection.

E16 - ACCUMULATION AREA UNCERTAINTY [km²]

Estimated random uncertainty of reported accumulation area.

E17 - ABLATION AREA [km²]

Ablation area in horizontal projection.

E18 - ABLATION AREA UNCERTAINTY [km²]

Estimated random uncertainty of reported ablation area.

E19 - ACCUMULATION AREA RATIO [%]

Accumulation area divided by the total area, multiplied by 100. Given in percent.

E20 - INVESTIGATOR [alpha-numeric; 255 digits]

Name(s) of the person(s) or agency doing the fieldwork and/or the name(s) of the person(s) or agency processing the data.

E21 - SPONSORING AGENCY [alpha-numeric; 255 digits]

Full name, abbreviation and address of the agency where the data are held.

E22 - REFERENCE [alpha-numeric; 255 digits]

Reference to publication related to above data and methods.

Use short format such as: Author et al. (YYYY); Journal, V(I), X-XX p.

E23 - REMARKS [alpha-numeric]

Any important information or comments not included above may be given here as well as short references to related publications. Comments about the uncertainty of the numerical data may be made, including quantitative comments. Only significant decimals should be given.

EE - MASS BALANCE

NOTES ON THE COMPLETION OF THE DATA SHEET

This data sheet should be completed in order to report glacier mass balance data with values related to the data given in data sheet E.

EE1 - POLITICAL UNIT [alphabetic code; 2 digits]

Name of country or territory in which glacier is located (cf. "A1 - POLITICAL UNIT").

EE2 - GLACIER NAME [alpha-numeric code; up to 60 digits]

The name of the glacier, written in CAPITAL letters. Use the same spelling as in "A2 - GLACIER NAME".

EE3 - WGMS ID [numeric code; 5 digits]

5 digit key identifying glaciers in the FoG database of the WGMS (cf. "A3 - WGMS ID").

EE4 - YEAR [year]

Year of present survey.

EE5 - LOWER BOUNDARY OF ALTITUDE INTERVAL [m a.s.l.]

If refers to entire glacier, then lower bound = 9999.

EE6 - UPPER BOUNDARY OF ALTITUDE INTERVAL [m a.s.l.]

If refers to entire glacier, then lower bound = 9999.

EE7 - ALTITUDE INTERVAL AREA [km²]

Area of each altitude interval (in horizontal projection).

EE8 - SPECIFIC WINTER BALANCE [mm w.e.]

Specific means the total value divided by the total glacier area under investigation.

Specific winter balance equals the net winter balance divided by the total area of the glacier.

EE9 - SPECIFIC WINTER BALANCE UNCERTAINTY [mm w.e.]

Estimated random uncertainty of reported winter balance.

EE10 - SPECIFIC SUMMER BALANCE [mm w.e.]

Specific means the total value divided by the total glacier area, in this case, it is the net summer balance divided by the total area of the glacier.

EE11 - SPECIFIC SUMMER BALANCE UNCERTAINTY [mm w.e.]

Estimated random uncertainty of reported winter balance.

EE12 - SPECIFIC ANNUAL BALANCE [mm w.e.]

Annual mass balance of glacier divided by the area of the glacier.

EE13 - SPECIFIC ANNUAL BALANCE UNCERTAINTY [mm w.e.]

Estimated random uncertainty of reported annual balance.

EE14 - REMARKS [alpha-numeric]

Any important information or comments not included above may be given here. Comments about the uncertainty of the numerical data may be made, including quantitative comments. Only significant decimals should be given.

EEE - MASS BALANCE POINT

NOTES ON THE COMPLETION OF THE DATA SHEET

This data sheet should be completed in order to report point mass balance data. Values related to glacier-wide balances (cf. data sheet EE) need to be denoted in EEE13 BALANCE_CODE.

EEE1 - POLITICAL UNIT [alphabetic code; 2 digits]

Name of country or territory in which glacier is located (cf. "A1 - POLITICAL UNIT").

EEE2 - GLACIER NAME [alpha-numeric code; up to 60 digits]

The name of the glacier, written in CAPITAL letters. Use the same spelling as in "A2 - GLACIER NAME".

EEE3 - WGMS ID [numeric code; 5 digits]

5 digit key identifying glaciers in the FoG database of the WGMS (cf. "A3 - WGMS ID").

EEE4 - YEAR [year]

Year of present survey.

EEE5 - FROM DATE [numeric; 8 digits]

Date on which survey period began. Please indicate the complete date in numeric format YYYYMMDD. Missing data: For unknown day or month, put "99" in the corresponding position(s) and make a note under "E23 - REMARKS"

EEE6 - TO DATE [numeric; 8 digits]

Date on which survey period ended. Please indicate the complete date in numeric format YYYYMMDD. Note: the first four digits of TO DATE correspond to EEE4 YEAR. Missing data: For unknown day or month, put "99" in the corresponding position(s) and make a note under "E23 - REMARKS"

EEE7 - POINT ID [alpha-numeric; 4 digits]

4 digit key identifying the stake or pit.

EEE8 - POINT LATITUDE [decimal degree North or South; up to 6 digits]

Latitude of stake or pit given in decimal degrees, positive values indicating the northern hemisphere and negative values indicating the southern hemisphere. Latitude should be given to a maximum precision of 4 decimal places.

EEE9 - POINT LONGITUDE [decimal degree East or West; up to 7 digits]

Longitude of stake or pit given in decimal degrees, positive values indicating east of zero meridian and negative values indicating west of zero meridian. Longitude should be given to a maximum precision of 4 decimal places.

EEE10 - POINT ELEVATION [m a.s.l.]

Elevation above sea level of stake or pit.

EEE11 - POINT BALANCE [mm w.e.]

Mass balance at this observation point between FROM DATE and TO DATE.

EEE12 - POINT BALANCE UNCERTAINTY [mm w.e.]

Estimated random uncertainty of reported point balance.

EEE13 - DENSITY [kg m⁻³]

Measured or assumed density used to convert the height readings (in mm) to point balances (in mm w.e.).

EEE14 - DENSITY UNCERTAINTY [kg m⁻³]

Estimated random uncertainty of reported density.

EEE15 - BALANCE CODE [alphabetic code; 2 digits]

Code used to denote point balances used for the calculation of glacier-wide balances:

BW = winter balance (cf. data sheet EE8)

BS = summer balance (cf. data sheet EE10)

BA = annual balance (cf. data sheet EE12)

IN = balance at index point not used for glacier-wide balance calculations

EEE16 - REMARKS [alpha-numeric]

Any important information or comments not included above, such as type of point location.

F - SPECIAL EVENT

NOTES ON COMPLETION OF THE DATA SHEET

This data sheet should be completed in cases of extraordinary events, especially concerning glacier hazards and dramatic changes in glaciers.

F1 - POLITICAL UNIT [alphabetic code; 2 digits]

Name of country or territory in which glacier is located (cf. "A1 - POLITICAL UNIT").

F2 - GLACIER NAME [alpha-numeric code; up to 60 digits]

The name of the glacier, written in CAPITAL letters. Use the same spelling as in "A2 - GLACIER NAME".

F3 - WGMS ID [numeric code; 5 digits]

5 digit key identifying glaciers in the FoG database of the WGMS (cf. "A3 - WGMS ID").

F4 - EVENT DATE [numeric; 8 digits]

Date of event.

For each event, please indicate the complete date in numeric format (YYYYMMDD).

Missing data: For unknown day or month, put "99" in the corresponding position(s) and make a note under "F6 - EVENT DESCRIPTION". For events lasting for several days, please indicate the date of the main event, and describe the sequence of the event under "F6 - EVENT DESCRIPTION".

F5 - EVENT TYPE [binary code; 6 digits]

Indicate the involved event type(s) using 1 = event type involved and 0 = event type not involved for the following event types:

F5a - GLACIER SURGE

F5b - CALVING INSTABILITY

F5c - GLACIER FLOOD (including debris flow, mudflow)

F5d - ICE AVALANCHE

F5e - TECTONIC EVENT (earthquake, volcanic eruption)

F5f - OTHER

F6 - EVENT DESCRIPTION [alpha-numeric]

Please give quantitative information wherever possible, for example:

- Glacier surge: Date and location of onset, duration, flow or advance velocities, discharge anomalies and periodicity;

- Calving instability: Rate of retreat, iceberg discharge, ice flow velocity and water depth at calving front;

- Glacier flood (including debris flow, mudflow): Outburst volume, outburst mechanism, peak discharge, sediment load, sediment load, reach and propagation velocity of flood wave or front of debris flow / mudflow;

- Ice avalanche: Volume released, runout distance, overall slope (ratio of vertical drop height to horizontal travel distance) of avalanche path;

- Tectonic event: Volumes, runout distances and overall slopes (ratio of vertical drop height to horizontal travel distance) of rockslides on glacier surfaces, amount of geothermal melting in craters, etc.

F7 - DATA SOURCE [alpha-numeric]

Please indicate at least one reference or source which could help the reader to locate more detailed information, or give the name(s) of contact person(s) who would be able to supply additional information.

F8 - REMARKS [alpha-numeric]

Any important information or comments not included above may be given here. Comments about the uncertainty of the numerical data may be made, including quantitative comments. Only significant decimals should be given.

The amount and/or kind of possible destruction, particular technical measures taken against glacier hazards, or special studies carried out in connection with the event may be given.

APPENDIX - Table 1

GENERAL INFORMATION ON THE OBSERVED GLACIERS 2014–2015

GLACIER NAME	Name of the glacier in capital letters, up to 30 alpha-numeric digits
WGMS ID	Key identifier of the glacier in the Fluctuations of Glaciers database, assigned by the WGMS, up to 5 numeric digits
PSFG NR	Identifier of the glacier in line with existing national inventories, assigned by the National Correspondents, up to 5 numeric digits with 2 alphabetic digits prefix denoting country (cf. www.iso.org)
REGION	Code for geographical location of the glacier in of 19 macro-scale regions, 3 alphabetic digits
LAT	Latitude in decimal degrees north (positive) or south (negative)
LON	Longitude in decimal degrees east (positive) or west (negative)
CODE	3 digits giving primary classification, form, and frontal characteristics of the glacier (cf. Notes on the Completion of the Data Sheets)
EXP ACC	Exposition of the accumulation area (cardinal point)
EXP ABL	Exposition of the ablation area (cardinal point)
ELEV MAX	Maximum elevation of the glacier in metres above sea level*
ELEV MED	Median elevation of the glacier in metres above sea level*
ELEV MIN	Minimum elevation of the glacier in metres above sea level*
AREA	Total area of the glacier in km ² *
LEN	Total length of the glacier in km*
DATA TYPE	2 = Variations in the positions of glacier fronts reported for 2013/14 and 2014/15 3 = Mass balance summary data reported for 2013/14 and 2014/15 4 = Mass balance versus elevation data reported for 2013/14 and 2014/15 5 = Mass balance point data reported for 2013/14 and 2014/15 6 = Changes in area, volume and thickness from geodetic surveys in 2013/14 and 2014/15

* these are the last reported values which may not correspond to the same survey year

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GLACIER_NAME	WGMS_ID	PSFG_NR	REGION	LAT	LONG	CODE	EXP-ACC	EXP-ABL	ELEV-MAX	ELEV-MED	ELEV-MIN	AREA	LEN	DATA_TYPE
AQ - Antarctica														
BAHIA DEL DIABLO	2665		ANT	-63.82	-57.43	4-3-8	NE	E	630	390	50	12.9	7.6	2345-
HURD	3367		ANT	-62.688	-60.402	4-3-3	W	W	334		4	4		-3---
JOHNSONS	3366		ANT	-62.669	-60.354	4-2-4	NW	NW	356		0	5.4		-3---
AR - Argentina														
BROWN SUPERIOR	3903		SAN	-29.983	-69.642	6-3-8	E	NE	5115	5060	4965	0.2	0.57	23456
CONCONTA NORTE	3902		SAN	-29.976	-69.645	6-3-8	E	E	5125	5050	4950	0.1	0.52	23456
LOS AMARILLOS	3904		SAN	-29.296	-69.995	6-3-8	SE	SE	5535	5275	4915	0.8	1.53	23456
MARTIAL ESTE	2000		SAN	-54.78	-68.4	6-4-6	SE	SE	1180	1074	960	0.1	0.35	-345-
AT - Austria														
ALPEINER F.	497	AT0307	CEU	47.05	11.13	5-2-8	N	NE	3340	2930	2310	3.900	4.6	2----
BACHFALLEN F.	500	AT0304	CEU	47.08	11.08	6-0-8	N	N	3120	2850	2580	2.5	2.9	2----
BAERENKOPF K.	567	AT0702	CEU	47.14	12.723	6-2-4	N	N	3400	3030	2270	2.5	3.1	2----
BERGLAS F.	496	AT0308	CEU	47.07	11.12	6-0-8	E	NE	3290	2990	2490	1.5	2.5	2----
BIETAL F.	481	AT0105A	CEU	46.88	10.13	6-0-6	NW	NW	3000	2740	2544	0.700	1.1	2----
BRENNKOGEL K.	528	AT0727	CEU	47.1	12.8	6-4-6	N	N	2960	2670	2430	0.600	1.2	2----
DAUNKOGEL F.	604	AT0310A	CEU	47	11.1	6-0-8	NE	NE	3240	2880	2550	2.700	2.9	2----
DIEM F.	513	AT0220	CEU	46.811	10.945	6-0-8	NW	NW	3540	3060	2710	3.5	3.4	2----
EISKAR G.	1632	AT1301	CEU	46.62	12.9	6-4-6	N	N	2390	2250	2160	0.200	0.4	2----
FERNAU F.	601	AT0312	CEU	46.98	11.13	6-4-8	NW	N	3310	2850	2380	2	2.5	2----
FIRMISAN F.	4337		CEU	46.827	10.95	X-X-X	W	W				0.800		2----
FREIWAND K.	564	AT0706	CEU	47.1	12.75	6-4-8	SE	SE	3130	2890	2690	0.300	1.1	2----
FROSnitz K.	579	AT0507	CEU	47.08	12.4	6-3-6	E	E	3330	2780	2400	4.200	4.4	2----
GAISKAR F.	530	AT0325	CEU	46.97	11.12	6-4-8	SE	SE	3190	3070	2890	0.800	1.1	2----
GAISSBERG F.	508	AT0225	CEU	46.83	11.07	5-2-8	NW	NW	3390	2850	2460	1.400	3.3	2----
GEFATSCH F.	522	AT0202	CEU	46.85	10.77	5-2-8	NE	N	3536	3057	2060	17.300	8.2	2----
GOESSNITZ K.	532	AT1201	CEU	46.97	12.75	6-4-7	NW	NW	3060	2690	2520	0.900	1.5	2----
GOLDBERG K.	1305	AT0802B	CEU	47.04	12.97	6-4-8	SE	NE	3080	2680	2350	1.1	2.8	23---
GR. GOSAU G.	536	AT1101	CEU	47.48	13.6	6-4-6	NW	NW	2810	2520	2250	1.5	2.2	2----
GROSSELEND K.	542	AT1001	CEU	47.03	13.32	6-3-6	NW	NW	3140	2720	2410	2.800	2.4	2----
GURGLER F.	511	AT0222	CEU	46.8	10.98	5-2-8	NW	N	3420	2990	2270	11.900	8	2----
GUSLAR F.	490	AT0210	CEU	46.85	10.8	6-4-8	E	SE	3480	3120	2780	2.600	2.5	2----
HALLSTAETTER G.	535	AT1102	CEU	47.48	13.62	6-0-8	NE	NE	2910	2560	2150	2.8	2.3	234--
HINTEREIS F.	491	AT0209	CEU	46.8	10.77	5-2-8	E	NE	3715	3064	2450	6.7	6.56	2345-
HOCHALM K.	538	AT1005	CEU	47.02	13.33	6-3-6	E	E	3350	2880	2540	3.200	2.4	2----
HOCHJOCH F.	492	AT0208	CEU	46.78	10.82	5-2-6	N	NW	3500	3030	2300	2.6	3.8	2----
HORN K. (SCHOB.)	531	AT1202	CEU	46.97	12.77	6-4-8	N	NW	3010	2780	2600	0.5	1.1	2----
HORN K. (ZILLER)	589	AT0402	CEU	47	11.82	5-3-8	N	N	3217	2819	2119	3.100	3	2----
INN. PIRCHLKAR	505	AT0228	CEU	47	10.92	6-5-6	E	NE	3340	2990	2720	0.600	1.8	2----
JAMTAL F.	480	AT0106	CEU	46.858	10.156	5-2-8	N	N	3120	2780	2400	3.1	2.8	234--
KAELBERSPITZ K.	540	AT1003	CEU	47.03	13.28	6-0-8	N	N	2890	2690	2450	0.800	2.2	2----
KALSER BAERENKOPF K.	2676		CEU	47.11	12.6	X-X-X								2----
KARLINGER K.	568	AT0701	CEU	47.13	12.7	6-2-4	NE	N	3340	2800	2060	4	3.6	2----
KESSELWAND F.	507	AT0226	CEU	46.838	10.793	6-3-8	SE	E	3493	3190	2850	3.6	3.58	-345-
KLEINEISER K.	555	AT0717	CEU	47.15	12.67	6-4-6	NW	NW	2880	2730	2620	0.200	0.7	2----
KLEINLEND K.	541	AT1002	CEU	47.07	13.25	6-3-4	NE	NE	3190	2750	2150	3	2.7	2----
KLEINFLEISS K.	547	AT0801	CEU	47.053	12.947	6-0-6	W	W	3080	2840	2700	0.8	2.3	23---
KLOSTERTALER M	485	AT0102B	CEU	46.87	10.07	6-0-8	W	W	3220	2940	2640	0.400	1.6	2----
KRIMMLER K.	584	AT0501A	CEU	47.08	12.25	6-2-6	NW	NW	3490	2550	1910	7.5	3.5	2----
LANDECK K.	569	AT0604	CEU	47.13	12.58	6-4-6	N	N	2940	2600	2430	0.400	0.9	2----
LANGTALER F.	510	AT0223	CEU	46.789	11.019	5-3-8	N	NW	3420	2910	2450	3.5	5.1	2----
LATSCH F.	4338		CEU	46.855	10.962	X-X-X	NW	NW				1.700		2----
MARZELL F.	515	AT0218	CEU	46.78	10.88	5-2-8	NW	N	3620	3160	2450	5.100	4.4	2----
MAURER K. (GLO.)	558	AT0714	CEU	47.18	12.68	6-4-6	W	W	2890	2730	2610	0.5	1.4	2----
MITTERKAR F.	487	AT0214	CEU	46.88	10.87	6-4-6	SE	SE	3580	3230	2960	1.100	2.1	2----
MUTMAL F.	506	AT0227	CEU	46.78	10.92	6-4-8	N	NW	3520	3080	2720	0.800	1.5	2----
NIEDERJOCH F.	516	AT0217	CEU	46.78	10.87	5-2-8	N	N	3600	3100	2690	2.900	3	2----
OBERSULZBACH K.	583	AT0502	CEU	47.111	12.293	5-1-8	NW	NW	3600	2730	2400	2	5.7	-34--
OCHSENTALER G.	483	AT0103	CEU	46.85	10.1	5-2-8	N	N	3160	2910	2400	2.6	2.8	2----
OEDENWINKEL K.	559	AT0712	CEU	47.110	12.645	5-3-9	NW	NW	3180	2590	2130	2	3.8	2----
PASTERZE	566	AT0704	CEU	47.1	12.7	5-2-8	SE	SE	3600	2990	2000	16.3	9.4	234--
PFaffen F.	591	AT0324	CEU	46.965	11.135	6-4-8	W	W	3470	3060	2770	1.200	1.8	2----
RETTENBACH F.	488	AT0212	CEU	46.93	10.93	6-4-6	N	N	3350	2920	2610	1.800	2.5	2----
ROFENKAR F.	518	AT0215	CEU	46.88	10.88	6-4-4	SE	SE	3750	3290	2820	1.300	2.2	2----
ROTER KNOPF K.	3297		CEU	46.97	12.75	X-X-X								2----
ROTHMOOS F.	509	AT0224	CEU	46.82	11.05	6-2-8	N	N	3410	2960	2370	3.200	3.3	2----
SCHALF F.	514	AT0219	CEU	46.78	10.93	5-2-8	NW	NW	3500	3130	2500	8.5	5.6	2----
SCHLADMINGER G.	534	AT1103	CEU	47.47	13.63	6-4-6	NE	NE	2700	2600	2420	0.800	0.9	2----
SCHLATEN K.	580	AT0506	CEU	47.112	12.384	5-1-8	NE	NE	3670	2810	1940	11.300	6.3	2----
SCHMIEDINGER K.	548	AT0726	CEU	47.18	12.68	6-0-6	NE	NE	3160	2750	2410	1.800	2	2----
SCHNEEGLOCKEN	525	AT0109	CEU	46.87	10.1	6-4-6	NE	NE	3020	2770	2570	0.700	1.2	2----
SCHNEELOCH G.	533	AT1104	CEU	47.5	13.6	6-4-8	NW	NW	2530	2300	2190	0.200	0.8	2----
SCHWARZENBERG F.	501	AT0303	CEU	47.05	11.12	6-3-8	SE	SW	3490	3030	2590	1.800	2.9	2----
SCHWARZKARL K.	556	AT0716	CEU	47.17	12.67	6-4-6	NW	NW	2970	2750	2560	0.5	1.2	2----
SCHWEIKERT F.	4336		CEU	47.028	10.81	X-X-X	NW	NW				0.800		2----
SEKERTEN F.	520	AT0204	CEU	46.9	10.8	6-2-8	N	NE	3470	2950	2560	2.800	2.9	2----
SIMILAUN F.	3296		CEU	46.78	10.88	X-X-X								2----
SIMONY K.	575	AT0511	CEU	47.07	12.27	6-0-9	SE	SE	3490	2810	2230	4.200	3.5	2----
SPIEGEL F.	512	AT0221	CEU	46.83	10.95	6-4-8	NW	NW	3430	3080	2780	1.100	1.7	2----
STUBACHER SONNBLICK K.	573	AT0601A	CEU	47.13	12.6	6-0-6	NE	E	3050	2780	2500	0.9	1.5	23---
SULTZAL F.	503	AT0301	CEU	47	11.08	5-2-8	N	N	3350	2860	2290	4.5	4.1	2----
TASCHACH F.	519	AT0205	CEU	46.902	10.849	5-2-8	N	NW	3760	3130	2240	8.200	5.6	2----
TOTENFELD	524	AT0110	CEU	46.88	10.15	6-4-8	NE	NE	3040	2790	2550	0.700	1.5	2----
TOTENKOPF K.	2680		CEU	47.13	12.66	X-X-X								2----
TRIEBENKARLAS F.	592	AT0323	CEU	46.956	11.15	6-4-8	W	W	3460	3040	2760	1.800	2	2----
UMBAL K.	574	AT0512	CEU	47.05	12.25	5-3-8	SW	SW	3440	2850	2230	7.300	5	2----
UNT. RIFFL K.	605	AT0713B												

Table 1

GLACIER_NAME	WGMS_ID	PSFG_NR	REGION	LAT	LON	CODE	EXP-ACC	EXP-ABL	ELEV-MAX	ELEV-MED	ELEV-MIN	AREA	LEN	DATA_TYPE
WASSERFALLWINKL	565	AT0705	CEU	47.12	12.72	6-3-8	SE	S	3150	2870	2610	1.900	2.5	2----
WAXEGG K.	590	AT0401	CEU	47	11.8	6-3-6	NE	N	3327	2848	2424	3.100	1.97	2----
WEISSEE F.	523	AT0201	CEU	46.85	10.72	6-0-8	N	N	3530	2970	2540	3.5	3.4	2----
WILDGERIOS	587	AT0404	CEU	47.151	12.106	6-0-8	N	N	3260	2650	2110	3.700	2.8	2----
WINKL K.	537	AT1006	CEU	47.02	13.32	6-4-8	W	W	3100	2710	2390	0.700	1.5	2----
WURTEN K.	545	AT0804	CEU	47.039	13.005	6-2-8	SW	S	3120	2680	2500	0.3	3	2345-
ZETTALUNITZ/MULLWITZ K.	578	AT0508	CEU	47.08	12.38	6-3-8	SW	SW	3470	2980	2650	2.8	4.5	234--
BO - Bolivia														
CHARQUINI SUR	2667		TRP	-16.303	-68.107	X-X-X	S	S	5334	5143	5000	0.3	0.448	-3456
ZONGO	1503	BO5150	TRP	-16.28	-68.14	5-3-8	S	E	6109	5420	4939	1.9	2.7	23456
CA - Canada														
DEVON ICE CAP NW	39	CA0431	ACN	75.42	-83.25	3-0-3	NW	NW	1820	1200	0	1668	50	-3-5-
GRINNELL	2668	ACS	ACS	62.55	-67.25	X-X-X			875		25	106.300		---6
HELM	45	CA0855	WNA	49.958	-122.987	6-2-6	NW	NW	2150	1900	1700	0.8	2.4	-3---
MEIGHEN ICE CAP	16	CA1335	ACN	79.95	-99.13	3-0-3			260	600	90	58	56	-3-5-
MELVILLE SOUTH ICE CAP	3690	ACN	ACN	75.4	-115	3-0-0			715		526	51		-3-5-
PEYTO	57	CA1640	WNA	51.660	-116.564	5-3-8	NE	NE	3190	2640	2100	11.4	5.3	-3---
PLACE	41	CA1660	WNA	50.425	-122.601	5-3-8	NE	NW	2610	2089	1800	3.2	4.2	-3---
TERRA NIVEA	4534	ACS	ACS	62.27	-66.51	3-X-X			875		25	146.100		---6
WHITE	0	CA2340	ACN	79.45	-90.695	5-1-5	SE	SE	1780	1160	75	38.5	15.4	-3456
CH - Switzerland														
ADLER	3801	CH0016B	CEU	46.01	7.87	6-2-8	W	W	4119	3465	2900	2	3.06	-345-
ALBIGNA	1674	CH0116	CEU	46.302	9.644	X-X-X	N	N	3077	2491	2179	2.5	3.42	2----
ALLALIN	394	CH0011	CEU	46.05	7.93	6-2-6	N	E	4179	3323	2600	9.7	6.77	2345-
ALPETLI (KANDER)	439	CH0109	CEU	46.48	7.8	5-3-6	NW	SW	3211	2791	2307	12.200	6.28	2----
AMMERTEN	435	CH0111	CEU	46.42	7.53	6-0-7	NW	NW	3240	2720	2350	1.900	2.8	2----
AROLLA (BAS)	377	CH0027	CEU	45.98	7.5	5-1-9	N	N	3649	3086	2168	5.400	5.11	2----
BASODINO	463	CH0104	CEU	46.42	8.48	6-3-6	NE	NE	3180	2886	2566	1.8	1.5	2345-
BIFERTEN	422	CH0077	CEU	46.82	8.95	5-3-8	E	NE	3602	2883	2004	2.5	4.4	2----
BLUEMLISALP	436	CH0064	CEU	46.5	7.77	6-1-6	NW	NW	3646	2986	2338	2.200	2.47	2----
BOVEYRE	459	CH0041	CEU	45.972	7.256	5-2-9	NW	NW	3617	3256	2691	1.600	2.59	2----
BRENEY	368	CH0036	CEU	45.97	7.42	5-1-7	S	SW	3814	3348	2576	7	6.25	2----
BRESCIANA	465	CH0103	CEU	46.5	9.03	6-3-6	W	W	3368	3127	2934	0.5	0.75	2----
BRUNEGG	384	CH0020	CEU	46.14	7.72	5-3-0	NW	NW	3791	3165	2624	5.5	4.72	2----
BRUNNI	427	CH0072	CEU	46.73	8.78	6-2-4	E	N	3275	2726	2564	2.300	3.52	2----
CALDERAS	403	CH0095	CEU	46.530	9.707	6-1-7	N	NE	3260	3085	2773	0.700	1.16	2----
CAMBRENA	399	CH0099	CEU	46.393	9.994	6-1-4	NE	NE	3252	2974	2493	1.300	2.03	2----
CAVAGNOLI	464	CH0119	CEU	46.45	8.48	6-2-8	NE	E	2810	2714	2542	0.400	1.17	2----
CHEILLON	375	CH0029	CEU	46	7.42	5-1-7	N	N	3629	2961	2684	3.600	3.83	2----
CLARIDENFIRN	2660	CH0141	CEU	46.846	8.901	6-0-0			3300		2500	4.6		-345-
CORBASSIERE	366	CH0038	CEU	45.98	7.3	5-1-9	N	N	4305	3234	2300	15.2	9.75	2345-
CORNO	468	CH0120	CEU	46.45	8.38	6-5-6	N	N	2884	2747	2601	0.100	0.57	2----
CORWATSCH SOUTH	4535	CEU	CEU	46.417	9.824	X-X-X	E	E	3450		2950	0.2		-345-
CROSLINA	1681	CH0121	CEU	46.43	8.73	X-X-X	NE	NE	3033	2802	2722	0.100	0.45	2----
DAMMA	429	CH0070	CEU	46.63	8.45	6-1-6	E	NE	3311	2869	2062	4.200	2.15	2----
EIGER	442	CH0059	CEU	46.57	7.98	6-1-6	W	NW	3720	3088	2400	1.5	2.59	2----
FEE NORTH	392	CH0013	CEU	46.08	7.88	6-0-6	NE	NE	4360	3260	2135	16.700	5.1	2----
FERPECLE	379	CH0025	CEU	46.02	7.58	5-3-8	NW	N	3668	3280	2140	9	6.07	2----
FIESCHER	471	CH0004	CEU	46.5	8.15	5-1-9	SE	S	4084	3145	1706	29.400	15.38	2----
FINDELEN	389	CH0016	CEU	46	7.87	5-1-6	NW	W	3937	3322	2500	12.9	6.86	2345-
FIRNALPELI	424	CH0075	CEU	46.78	8.47	6-0-6	NW	N	2920	2680	2172	1.200	1.1	2----
FORNO	396	CH0102	CEU	46.3	9.7	5-1-9	N	N	3324	2721	2231	6.200	5.8	2----
GAMCHI	440	CH0061	CEU	46.512	7.794	6-1-9	N	N	2765	2230	1958	1.200	1.79	2----
GAULI	449	CH0052	CEU	46.62	8.18	5-1-6	E	E	3611	2935	2140	11.300	6.38	2----
GIETRO	367	CH0037	CEU	46	7.38	6-3-4	NW	W	3810	3229	2700	5.3	4.45	2345-
GLAERNISCH	418	CH0080	CEU	47	8.98	6-2-6	W	W	2903	2532	2355	1.400	2.32	2----
GORNER	391	CH0014	CEU	45.97	7.8	5-1-9	N	NW	4576	3351	2173	51.300	13.43	2----
GRAND DESERT	373	CH0031	CEU	46.070	7.342	6-3-6	NW	N	3215	2961	2801	1.100	1.74	2----
GRAND PLAN NEVE	455	CH0045	CEU	46.25	7.15	6-4-7	N	N	2539	2458	2375	0.100	0.34	2----
GRIES	359	CH0003	CEU	46.445	8.340	5-3-4	NE	NE	3305	2945	2444	4.4	5.48	2345-
GRIESS (KLAUSEN)	425	CH0074	CEU	46.83	8.83	6-1-7	N	NW	3080	2420	2223	2.5	1.3	2----
GRIESSEN (OBWALDEN)	423	CH0076	CEU	46.85	8.5	6-2-6	W	NW	2830	2609	2479	0.900	1.65	2----
GROSSER ALETSCHE	360	CH0005	CEU	46.5	8.03	5-1-9	SE	S	4126	3153	1649	78.200	23.58	2----
HINTERSULZFIRN	419	CH0079	CEU	46.88	9.05	6-5-8	N	N	2086	1956	1815	0.200	0.96	2----
HOLLAUB	3332	CEU	CEU	46.059	7.918	X-X-X			4100		2800	2.1		2345-
KALTWASSER	363	CH0007	CEU	46.25	8.08	6-0-6	NW	W	3262	2967	2757	1.5	1.88	2----
KEHLEN	431	CH0068	CEU	46.68	8.42	5-1-8	SE	SE	3311	2783	2161	1.700	3.39	2----
KESSIEN	393	CH0012	CEU	46.065	7.928	6-5-6	NE	NE	3223	2969	2873	0.300	0.33	2----
LAEMMERN (WILDSTRUBEL)	437	CH0063	CEU	46.4	7.55	6-1-6	E	E	3231	3005	2558	2.300	2.5	2----
LANG	386	CH0018	CEU	46.459	7.928	5-1-9	SW	SW	3890	3001	2086	8.200	6.39	2----
LAVAZ	416	CH0082	CEU	46.63	8.93	6-1-8	NE	N	3020	2580	2428	1.800	2.6	2----
LENTA	414	CH0084	CEU	46.513	9.038	5-2-7	N	N	3379	2944	2393	0.800	2.3	2----
LIMMERN	421	CH0078	CEU	46.813	8.977	6-2-7	NE	NE	3404	2779	2328	1.900	3.13	2----
LISCHANA	400	CH0098	CEU	46.77	10.35	6-5-9	NW	NW	3030	2880	2800	0.200	0.6	2----
MOIRY	380	CH0024	CEU	46.08	7.6	5-1-8	N	N	3640	3194	2388	4.900	5.07	2----
MOMING	381	CH0023	CEU	46.08	7.67	6-0-9	N	NW	4057	3148	2539	5.200	3.26	2----
MONT DURAND	369	CH0035	CEU	45.92	7.33	5-1-9	E	NE	4058	3057	2402	6	5.5	2----
MONT MINE	378	CH0026	CEU	46.02	7.55	5-1-9	NW	N	3711	3230	2023	9.800	5.44	2----
MORTERATSCHE	1673	CH0094	CEU	46.4	9.93	5-1-9	N	N	3972	3011	2021	14.200	7.42	2----
MURTEL	4339	CEU	CEU	46.408	9.824	X-X-X	E	E	3263	3167	3050	0.3	0.98	-345-
OBERAAR	451	CH0050	CEU	46.535	8.22	5-2-4	NE	NE	3388	2878	2310	3.700	4.654	---56
OBERER GRINDELWALD	444	CH0057	CEU	46.62	8.1	5-1-8	NW	NW	3705	3030	1392	8.400	6.22	2----
OTEMMA	370	CH0034	CEU	45.95	7.45	5-1-7	SW	SW	3774	3032	2462	12.600	7.07	2----
PALUE	398	CH0100	CEU	46.37	9.98	6-2-9	E	E	3847	3189	2592	5.300	2.54	2----
PANEYROSSE	456	CH0044	CEU	46.27	7.17	6-4-6	N	N	2756	2568	2452	0.300	0.59	2----
PARADIES	412	CH0086	CEU	46.5	9.07	6-0-6	N	NE	3136	2872	2566</			

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GLACIER_NAME	WGMS_ID	PSFG_NR	REGION	LAT	LOX_CODE	EXP-ACC	EXP-ABL	ELEV-MAX	ELEV-MED	ELEV-MIN	AREA	LEN	DATA_TYPE
RAETZLI (PLAINE MORTE)	434	CH0065	CEU	46.39	7.51 6-2-6	N	NW	2953	2725	2468	9.800	3.7	2---
RHONE	473	CH0001	CEU	46.62	8.4 5-1-4	S	S	3596	2958	2252	15.6	10.06	2345-
RIED	387	CH0017	CEU	46.13	7.85 5-3-9	NW	NW	4244	3476	2078	7.300	5.33	2---
ROSEG	406	CH0092	CEU	46.378	9.839 5-1-7	N	N	3517	3127	2197	6.700	3.72	2---
ROTFIRN NORD	430	CH0069	CEU	46.662	8.424 6-1-9	E	NE	3254	2726	2086	0.900	2.05	2---
SALEINA	458	CH0042	CEU	45.98	7.07 5-1-8	E	NE	3871	3030	1850	6.5	6.4	2---
SANKT ANNA	432	CH0067	CEU	46.6	8.6 6-3-6	N	N	2928	2720	2600	0.2	0.68	2345-
SARDONA	407	CH0091	CEU	46.92	9.27 6-4-6	E	E	3003	2745	2583	0.400	0.64	2---
SCALETTA	1680	CH0115	CEU	46.7	9.95 6-5-0	N	N	3050	2893	2590	0.200	0.78	2---
SCHWARZ	438	CH0062	CEU	46.42	7.67 5-1-9	SW	NW	3649	2903	2318	1.100	3.48	2---
SCHWARZBACH	4340	CEU	46.597	8.612 X-X-X	NE	NE	2832	2754	2700	0.1	0.34	-345-	
SCHWARZBERG	395	CH0010	CEU	46.02	7.93 6-2-6	NE	NE	3551	3044	2600	0.8	4.11	2345-
SEEWIINEN	3333	CEU	46.002	7.950 X-X-X			3228	3004	2719	1.400	1.84	2---	
SESVENNA	401	CH0097	CEU	46.713	10.411 6-5-6	NE	N	3065	2930	2748	0.400	0.97	2---
SEX ROUGE	454	CH0047	CEU	46.329	7.211 6-5-6	N	NW	2867	2808	2700	0.3	0.64	2345-
SILVRETTA	408	CH0090	CEU	46.85	10.08 6-2-6	NW	W	3075	2782	2475	2.7	3.29	2345-
STEIN	448	CH0053	CEU	46.7	8.43 5-2-8	N	N	2974	2725	2491	0.5	0.9	2---
STEINLIMMI	447	CH0054	CEU	46.7	8.4 5-1-7	N	N	3300	2640	2100	2.200	2.7	2---
SURETTA	411	CH0087	CEU	46.52	9.38 6-1-7	NE	NE	3010	2720	2227	1.200	1.6	2---
TIATSCHA	402	CH0096	CEU	46.833	10.087 6-3-4	S	S	3080	2886	2667	1.800	2.05	2---
TIEFEN	433	CH0066	CEU	46.62	8.43 5-1-9	SE	SE	3336	2956	2501	2	2.71	2---
TORTIN GLACIER DE (MONT FORT)	372	CH0032	CEU	46.085	7.308 6-3-6	NW	N	3330	2900	2780	1.100	2	2---
TRIENT	457	CH0043	CEU	46	7.03 5-3-8	N	N	3460	3132	2099	5.700	4.39	2---
TRIFT (GADMEN)	446	CH0055	CEU	46.67	8.37 5-1-8	N	N	3381	2931	1753	14.600	6.42	2---
TSANFLEURON	371	CH0033	CEU	46.32	7.23 6-5-6	E	E	2969	2769	2500	2.6	2.9	2345-
TSCHIERVA	405	CH0093	CEU	46.4	9.88 5-1-8	NW	NW	4000	3060	2340	6.800	5	2---
TSCHINGEL	441	CH0060	CEU	46.5	7.85 6-2-7	N	E	3510	2680	2269	6.200	3.8	2---
TSEUDET	364	CH0040	CEU	45.9	7.25 6-1-7	N	N	3714	2919	2524	1.400	2.87	2---
TSIDIJORE NOUVE	376	CH0028	CEU	46	7.45 5-2-8	N	NE	3783	3266	2289	2.700	5	2---
TURTMANN (WEST)	385	CH0019	CEU	46.13	7.69 5-2-8	NW	N	4147	3382	2294	5.100	5.87	2---
UNTERER GRINDELWALD	443	CH0058	CEU	46.577	8.095 5-1-9	N	N	4100	2780	1090	20.600	9	2---
VALLEGGIA	467	CH0117	CEU	46.472	8.506 6-4-8	NE	NE	2785	2519	2430	0.300	1.25	2---
VALSOREY	365	CH0039	CEU	45.9	7.27 5-1-8	NE	NW	3720	3173	2440	1.900	3.8	2---
VERSTANKLA	409	CH0089	CEU	46.843	10.068 6-1-7	NW	NW	2983	2693	2430	0.700	1.84	2---
VORAB	413	CH0085	CEU	46.88	9.17 6-0-6	E	SE	2953	2706	2621	1.200	1.79	2---
WALLENBUR	428	CH0071	CEU	46.707	8.470 6-1-9	E	SE	3126	2570	2263	1.400	2.27	2---
ZINAL	382	CH0022	CEU	46.07	7.63 5-1-9	N	N	4074	3112	2078	13.300	7.29	2---
CL - Chile													
AMARILLO	3905		SAN	-29.303	-70.001 6-3-8	SE	SE	5315	5180	5160	0.2	0.55	23456
ECHAURREN NORTE	1344	CL0001B	SAN	-33.578	-70.131 6-4-3	SW	SW	3880	3750	3650	0.4	1.2	3---
GUANACO	3983		SAN	-29.348	-70.016 6-3-6	SE	SE	5356	5168	5007	1.6	2.353	23---
MELIMOYU ESTE	4434		SAN	-44.07	-72.86 X-X-X								2---
CN - China													
PARLUNG NO. 94	3987	CN0094	ASE	29.386	96.976 5-2-8	NW	NW	5635	5358	5080	2.4	2.9	2345-
URUMQI GLACIER NO. 1	853	CN0010	ASC	43.118	86.811 6-2-2	NE	NE	4482	4066	3787	1.6	2.075	234--
URUMQI GLACIER NO. 1 E-BRANCH	1511	CN0001	ASC	43.118	86.811 6-2-8	NE	NE	4252	4021	3787	1	2.075	2345-
URUMQI GLACIER NO. 1 W-BRANCH	1512	CN0002	ASC	43.118	86.811 6-2-8	NE	NE	4482	4121	3883	0.6	1.816	2345-
CO - Colombia													
CONEJERAS	2721	CO0033	TRP	4.815	-75.373 6-3-6	NW	NW	4895	4808	4700	0.2	0.91	23456
RITACUBA BLANCO	2763		TRP	6.45	-72.3 6-3-6	w	w	5170	5029	4820	0.4	1.36	23456
EC - Ecuador													
ANTIZANA15ALPHA	1624	EC1DA15	TRP	-0.47	-78.15 4-7-8	NW	NW	5760	5310	4860	0.3	1.87	234--
ES - Spain													
MALADETA	942	ES9020	CEU	42.649	0.639 6-4-8	NE	NE	3190	3090	2842	0.200	0.76	234--
FR - France													
ARGENTIERE	354	FR0002	CEU	45.954	6.985 5-1-9	NW	NW	3500	2600	1500	13.5	9	23---
BLANC	351	FR0031	CEU	44.944	6.387 5-2-8	E	S	4000	3000	2500	7.700	7	2---
BOSSONS	355	FR0004	CEU	45.880	6.865 5-2-8	N	N	4800	3200	1190	10.5	7.2	2---
GEBROULAZ	352	FR0009	CEU	45.298	6.629 5-2-9	N	N	3400	3000	2600	2.800	3	-3--
MER DE GLACE	353	FR0003	CEU	45.88	6.93 5-1-9	N	N	4100	2700	1800	22.700	13	2---
OSSOUE	2867	CEU	42.771	-0.143 5-2-9	E	E	3200	3000	2650	0.5	1.4	23---	
SAINT SORLIN	356	FR0015	CEU	45.160	6.160 5-2-9	N	N	3400	2900	2600	3	3	23---
SARENNES	357	FR0029	CEU	45.116	6.129 5-4-8	S	S	2960	2905	2848	0.1	0.6	-3--
TRE LA TETE	1314	FR0007	CEU	45.794	6.789 5-1-8	S	S	3850	3250	2050	6.6	7.1	23-5-
GE - Georgia													
ABANO	767	GE3037	CAU	42.691	44.522 5-3-9	SE	SE	4800	4090	3380	0.700	2.7	2---
ADISHI	4551	GE0351	CAU	43.017	43.006 5-3-8	SW	SW	4860	3673	2485	9.5	6.9	2---
BOKO	4560	GE0436	CAU	42.759	43.708 5-3-8	SW	SW	3940	3300	2660	3.900	4.1	2---
BUBA	4561	GE0440	CAU	42.751	43.743 5-1-9	SW	SW	4300	3660	3020	3.100	3.03	2---
CHACHI	765	GE3035	CAU	42.724	44.055 5-3-8	N	N	4280	3815	3350	1.300	2.4	2---
CHALAATI	1110	GE0287	CAU	43.13	42.7 5-X-X			3800	2880	1960	8.600	6.9	2---
CHANCHAKHI	4562	GE0447	CAU	42.727	43.790 5-3-9	SW	SW	4000	3545	3090	0.5	1.61	2---
DEVODORAKI NORTH	766	GE3036	CAU	42.714	44.524 5-3-9	NE	NE	4300	3390	2480	1.600	4.04	2---
DOLRA	4543	GE0271	CAU	43.168	42.522 5-3-8	SE	SE	4450	3678	2905	5.5	5.68	2---
EDENA BIGGER	4556	GE0392	CAU	42.885	43.374 5-3-8	SW	SW	3870	3365	2860	3.5	3.46	2---
GERGETI	768	GE3038	CAU	42.677	44.508 5-2-8	SE	SE	4900	4050	3200	6	6.62	2---
GULI	4545	GE0284	CAU	43.106	42.667 5-3-9	S	S	3780	3371	2970	0.5	1.54	2---
KHALDE	4552	GE0355	CAU	42.990	43.036 5-1-9	SW	SW	4800	3673	2545	8.800	7.52	2---
KIBESHA	772	GE3042	CAU	42.626	44.752 5-3-9	N	N	3600	3445	3290	0.900	1.27	2---
KIRTISHO	4559	GE0423	CAU	42.834	43.587 5-3-8	NW	NW	3840	3253	2655	4.400	4.76	2---
KORULDASHI	783	GE3015	CAU	42.955	43.154 5-3-9	S	S	4220	3450	2680	2.200	2.98	2---
KVITLODI	4549	GE0329	CAU	43.104	42.939 5-3-8	SW	SW	3800	3165	2530	9.800	6.64	2---
LABODA	4558	GE0401	CAU	42.874	43.467 5-3-9	SW	SW	4300	3405	2510	1.5	2.99	2---
LAILA	4555	GE0601	CAU	42.925	42.524 5-3-8	NW	NW	4008	3324	2640	3.5	4.52	2---
LEADASHTI NORTH	4541	GE0237	CAU	43.185	42.476 5-3-8	SW	SW	4060	3600	3140	3.5	4.02	2---
LEKHZIRI	1111	GE0296	CAU	43.158	42.737 X-X-X			4300	3315	2330	23.300	10.73	2---
MARUKHI SOUTH	4537	GE0018	CAU	43.353	41.402 5-3-8	NE	NE	3320	2905	2490	1.700	3	2---
MNA	769	GE3039	CAU	42.690	44.471 5-3-9	SE	SE	4510	3935	3360	2.600	2.5	2---
NAMKVANI	4554	GE0370	CAU	42.967	43.124 5-3-9	SW	SW	4000	3503	3005	2.300	2.38	2---

Table 1

GLACIER_NAME	WGMS_ID	PSFG_NR	REGION	LAT	LON	CODE	EXP-ACC	EXP-ABL	ELEV-MAX	ELEV-MED	ELEV-MIN	AREA	LEN	DATA_TYPE	
PSISHI	4536	GE0003	CAU	43.391	41.141	5-3-8	NW	NW	3120	2893	2665	0.600	1.53	2----	
SAKENI	4539	GE0133	CAU	43.204	42.092	5-3-8	SE	SE	3905	3268	2630	2	3.15	2----	
SHDAVLERI	4540	GE0206	CAU	43.140	42.335	5-3-8	N	N	3900	3315	2730	2.300	3.32	2----	
SHKHARA	4553	GE0365	CAU	42.972	43.100	5-1-9	S	S	4480	3510	2540	3.5	3.78	2----	
SOPRIJU SOUTH	4538	GE0041	CAU	43.237	41.569	5-3-8	S	S	3700	3195	2690	3.700	2.8	2----	
SUATISI CENTRAL	770	GE3040	CAU	42.7	44.42	5-3-9	S	S	4530	3814	3095	1.900	3.53	2----	
SUATISI EASTERN	4564	GE0489	CAU	42.700	44.442	5-2-9	SW	SW	4300	3270	2240	7.700	4.95	2----	
SUATISI WESTERN	4563	GE0485	CAU	42.692	44.393	5-3-9	SE	SE	4300	3820	3340	1.5	2.82	2----	
TBILISA	724	GE3012	CAU	42.741	43.774	X-X-X	SE	SE	4200	3595	2990	1.900	2.87	2----	
TSANERI SOUTH	4550	GE0342	CAU	43.054	42.985	5-3-8	NW	NW	4300	3413	2525	12.600	8.62	2----	
USHBA SOUTH	773	GE3013	CAU	43.13	42.65	5-2-9	NE	NE	4500	3550	2600	4.700	4.89	2----	
ZOPKHITO	4557	GE0396	CAU	42.877	43.420	5-3-9	SE	SE	3780	3193	2605	2.400	3.6	2----	
GL - Greenland															
A.P. OLSEN ICE CAP	4576		GRL	74.64	-21.45	3-0-0								---	
FREYA	3350		GRL	74.38	-20.82	5-2-8	N	NW	1250		200	5.3	6	-345-	
MITTIVAKKAT	1629	GL0019	GRL	65.696	-37.803	2-2-3	SW	SW	899		180	15.9	7.5	2345-	
QAANAAQ ICE CAP	4575		GRL	77.51	-69.15	3-0-0								---	
QASIGIANNGUIT	4566	GL0003	GRL	64.16	-51.35	6-3-8	N	N	1000	860	650	0.7	1.3	-345-	
IN - India															
CHHOTA SHIGRI	2921		ASW	32.235	77.516	5-1-9	N	N	6263	5020	4050	16.800	9	-3---	
IS - Iceland															
BAEGISARJOKULL	3059	IS0304	ISL	65.59	-18.37	5-3-0	N	N	1300	1120	960	1.700	1.4	2----	
BLAGNIPUIJOKULL	3130		ISL	64.72	-19.13	4-X-3	SW	SW	1700		740	51.5	11	2----	
BROKARJOKULL	3066	IS1427	ISL	64.25	-16.12	4-3-3	S	SE	1200		200	5	3	2----	
BRUARJOKULL	3067	IS2400	ISL	64.67	-16.17	4-3-3	N	N	1800	1260	590	1528	54	-3--6	
DRANGAJOKULL ICE CAP	6831		ISL	66.16	-22.25	3-0-0								---	
DYNGJUJOKULL	3068	IS2600	ISL	64.67	-17	4-2-3	N	N	200	1440	720	1060	46	-3---	
EYJABAKKAJOKULL	3069	IS2300	ISL	64.65	-15.58	4-2-3	N	NE	1565	1130	690	112	15	-3---	
FALLJOKULL	3071	IS1021	ISL	63.98	-16.75	4-3-3	W	W	2000		140	8	8	2----	
FLAAJOKULL	3078	IS1930A	ISL	64.363	-15.653	4-3-2	SE	SE	1520		50	180	29	2----	
FLAAJOKULL E 148	3076	IS1930C	ISL	64.363	-15.653	4-3-2	SE	SE	1520		50	180	29	2----	
GEITLANDSJOKULL	3128		ISL	64.598	-20.601	4-X-3	W	W	1420		800	8	2	----	
GLUUFURARJOKULL	3080	IS0103	ISL	65.72	-18.65	5-4-8	N	N	1350		600	3	2.5	2----	
HAGAFELLSJOKULL W	3082	IS0204	ISL	64.49	-20.41	4-3-3	SW	SW	1420		450	150	18	2----	
HEINABERGSJOKULL	3085		ISL	64.315	-15.808	4-2-4	E	E			60			2----	
HEINABERGSJOKULL H	3084	IS1829B	ISL	64.315	-15.808	4-2-4	E	E						2----	
HOFJSJOKULL E	3088	IS0510B	ISL	64.8	-18.58	4-3-3	E	E	1790	1185	600	212.3	19	-3-5-	
HOFJSJOKULL ICE CAP	6830		ISL	64.81	-18.82	3-0-0								---	
HOFJSJOKULL N	3089	IS0510A	ISL	64.95	-18.92	4-3-3	N	N	1725	1250	850	74.3	19.9	-3---	
HOFJSJOKULL SW	3090	IS0510C	ISL	64.72	-19.05	4-3-3	SW	SW	1775	1205	725	51.4	13	-3---	
HYRNINGSIJOKULL	3092	IS0100	ISL	64.81	-23.73	4-3-3	E	E	1445		700	2	2	----	
JOKULHALS	3093	IS0201	ISL	64.82	-23.75	4-3-3	E	E	1450	1000	820	11	3	2----	
KALDALONSIJOKULL	3095	IS0102	ISL	66.12	-22.29	4-3-3	SW	SW	900		140	37	6	2----	
KIRKJUKULL	3129		ISL	64.73	-19.85	4-3-3	SE	E	1450		700	30	8	2----	
KOLDUKVISLARI.	3096	IS2700	ISL	64.58	-17.83	4-3-3	NW	NW	2000	1420	900	300	27	-3---	
KOTLUJOKULL	3132		ISL	63.55	-18.82	4-X-3	SE	SE	1500		200	133	23	2----	
KVERKJOKULL	3097	IS2500	ISL	64.72	-16.65	4-3-3	N	NW	1920		900	29	11	2----	
LAMBAHRAUNSIJOKULL	3099	IS0409	ISL	64.97	-18.86	4-3-0	N	N						2----	
LANGJOKULL ICE CAP	3660		ISL	64.67	-20.1	3-0-0						957		-3--6	
MORSARJOKULL	3104	IS0318	ISL	64.09	-16.94	4-3-3	SW	SW	1380		180	30	10	2----	
MULAJOKULL S	3105	IS0311A	ISL	64.67	-18.66	4-3-2	SE	SE	1790		610	70	20	2----	
MULAJOKULL W	3106	IS0311B	ISL	64.67	-18.72	4-3-1	S	SE	1800	1300	600	100	19	2----	
MYRDALSIJOKULL ICE CAP	6832		ISL	63.66	-19.13	3-0-0								---	
NAUTHAGAJOKULL	3107	IS0210	ISL	64.65	-18.76	4-3-3	S	S	1780		630	25	18	2----	
REYKJAFJARDARJOKULL	3109	IS0300	ISL	66.2	-22.18	4-3-3	NE	NE	925		100	22	7	2----	
RJUPNABREKKUJOKULL	3136		ISL	64.72	-17.56	4-X-3	NW	NW	1940		1060			7	2----
SATUJOKULL	3110	IS0530	ISL	64.92	-18.83	4-3-3	N	N	1790		860	90.6	20	2----	
SKAFTAFELLSJOKULL	3113	IS0419	ISL	64.02	-16.9	4-2-3	SW	SW	1900		100	85	18	2----	
SKEIDARARJOKULL E1	3116	IS0117A	ISL	64.03	-17.09	4-3-2	S	S	1725		100	850	50	2----	
SKEIDARARJOKULL E2	3117	IS0117B	ISL	64.01	-17.11	4-3-2	S	S	1725		100	850	50	2----	
SKEIDARARJOKULL E3	3118	IS0117C	ISL	64.01	-17.14	4-3-2	S	S	1725		100	850	50	2----	
SKEIDARARJOKULL W	3119	IS0116	ISL	64.01	-17.37	4-3-2	S	S	1720		100	530	45	2----	
SOLHEIMAJOKULL W	3122	IS0113A	ISL	63.53	-19.37	4-3-3	SW	SW	1500		110	44	15	2----	
SVINAFELLSJOKULL	3124	IS0520A	ISL	63.99	-16.88	4-2-3	W	SW	2110		120	24	12	2----	
TUNGNAARJOKULL	3126	IS2214	ISL	64.32	-18.07	4-3-3	SW	W	1680	1220	690	345	39	23---	
VATNAJOKULL	3754		ISL	64.413	-16.811	3-0-0			2050		0	7708	20	---	
IT - Italy															
AGNELLO MER.	684	IT0029	CEU	45.147	6.9	6-4-0	NE	NE	3200	3010	3020	0.5	1.45	2----	
ALTA (VEDRETTA) / HOHENF.	632	IT0730	CEU	46.458	10.68	5-3-8	NE	N	3350	3059	2690	1.800	2	2----	
ANTELAO SUP.	643	IT0966	CEU	46.45	12.27	6-3-0	N	NE	3130	2465	2510	0.400	1.3	2----	
AQUILLE	1239	IT0138	CEU	45.525	7.151	6-4-X			3350		3080	0.200	0.8	2----	
ARGUERER MER.	1253	IT0200	CEU	45.703	6.842	X-X-X			2850		2700	0.200	0.6	2----	
ARGUERER SETT.	1254	IT0201	CEU	45.705	6.834	6-5-X			2900		2580	0.5	0.9	2----	
BASEI	611	IT0064	CEU	45.477	7.117	6-0-0	NE	NE	3320		2950	0.400	0.8	2----	
BASSA DELL' ORTLES / ORTLERF. NIEDERER	1128	IT0769	CEU	46.508	10.512	5-1-8			3560		2230	2.800	3	2----	
BELVEDERE (MACUGNAGA)	618	IT0325	CEU	45.950	7.911	5-2-5	NE	NE	4520		1780	5.600	6.05	2----	
BERTA	1295	IT0036	CEU	45.232	7.139	X-X-X			3200		2950	0.600	0.2	2----	
BESSANESE	1297	IT0040	CEU	45.3	7.12	5-3-2	SE	SE	3210		2585	1	2.55	2----	
BORS	2453	IT0311	CEU	45.889	7.871	X-X-X								2----	
BREUIL SETT.	1256	IT0203	CEU	45.725	6.816	X-X-X			3000		2900	0.600	0.8	2----	
BROGLIO	2375	IT0133	CEU	45.484	7.227	X-X-X								2----	
CALDERONE	1107	IT1006	CEU	42.471	13.567	6-4-0	NE	NE	2830	2730	2650	0	0.3	23-56	
CAMPO SETT.	1106	IT0997	CEU	46.431	10.108	6-4-6	W	W	3200	3000	2845	0.3	0.8	-3-5-	
CAPRA	1304	IT0061	CEU	45.447	7.118	6-4-X			2790		2480	0.200	0.9	2----	
CARESER	635	IT0701	CEU	46.451	10.709	6-3-8	S	S	3295	3076	2910	1.3	1	-345-	
CARRO OCCIDENT.	2358	IT0060	CEU	45.433	7.117	X-X-X								2----	
CASPOGGIO	628	IT0435	CEU	46.338	9.914	6-4-8	NW	NW	2985	2800	2725	0.800	1.1	2----	
CASSANDRA OR.	1185	IT0411	CEU	46.262	9.756	5-2-X			3100		2915	0.400	1.8	2----	
CASTELLI OR.	1162	IT0493	CEU	46.453	10.551	6-4-X			3050		2808	0.400	0.8	2----	
CEDEC	1165	IT0503	CEU	46.449	10.603	5-2-X	</								

GLACIER_NAME	WGMS_ID	PSFG_NR	REGION	LAT	LOE_CODE	EXP-ACC	EXP-ABL	ELEV-MAX	ELEV-MED	ELEV-MIN	AREA	LEN	DATA_TYPE
CHATEAU BLANC	1251	IT0181	CEU	45.654	7.024 X-X-X			3250		2710	2.200	2.4	2----
CIAMARELLA	1298	IT0043	CEU	45.326	7.133 6-4-X			3400		3095	0.700	0.9	2----
CIARDONEY	1264	IT0081	CEU	45.518	7.390 6-3-9	NE	E	3130		2850	0.6	1.7	234--
COL DELLA MARE I	1167	IT0506A	CEU	46.425	10.607 5-3-X			3700		2890	1	2.5	2----
COUPE DE MONEY	1271	IT0109	CEU	45.53	7.38 6-4-X			3600		2725	1.5	2	2----
CRODA ROSSA / ROTWANDF.	654	IT0828	CEU	46.733	10.984 6-3-8	N	N	3205	3002	2790	0.200	1	2----
DISGRAZIA	2503	IT0419	CEU	46.283	9.744 X-X-X			3000		2620			2----
DOSDE OR.	625	IT0473	CEU	46.392	10.219 6-4-6	N	N	3200	2850	2580	0.900	1.7	2----
DOSEGU	668	IT0512	CEU	46.374	10.548 5-2-6	SW	SW	3670	3260	2862	3.300	2.8	2----
DZASSET	2372	IT0113	CEU	45.538	7.274 X-X-X			3750		2950			2----
ENTRELOR SETT.	2377	IT0140	CEU	45.532	7.152 X-X-X								2----
FOND OCCID.	2380	IT0146	CEU	45.476	7.074 X-X-X			3000		2710			2----
FOND OR.	1243	IT0145	CEU	45.472	7.083 X-X-X			3300		2720	1.100	2.1	2----
FONTANA BIANCA / WEISSBRUNNF.	1507	IT0713	CEU	46.484	10.771 6-4-0	E	E	3350	3160	2850	0.4	1.151	2345-
FORNI	670	IT0507	CEU	46.400	10.586 5-2-9	N	NW	3678	3150	2510	20	5	2----
FORNO	2478	IT0349	CEU	46.379	8.329 X-X-X								2----
FOURNEAUX	1294	IT0027	CEU	45.110	6.844 X-X-X			3050		2850	0	0.6	2----
FRANE (VEDR. DELLE) / STEINSCHLAGF.	2624	IT0812	CEU	46.779	10.740 X-X-X								2----
GLIAIRETTA VAUDET	1248	IT0168	CEU	45.507	7.019 5-X-X			3300		2700	3.600	3.6	2----
GOLETTA	683	IT0148	CEU	45.497	7.055 5-2-0	N	N	3290	3055	2760	3	2.4	2----
GRAMES ORIENT. + CENTR. / GRAMSENF.	2599	IT0727	CEU	46.469	10.716 X-X-X								2----
OESTL. + ZENTR.													
GRAN NEYRON	1283	IT0127	CEU	45.550	7.264 5-2-X			3340		2340	1.100	1.7	2----
GRAN PARADISO	1235	IT0130	CEU	45.515	7.254 5-3-X			3980		2970	0.700	1.9	2----
GRAN PILASTRO (GHIAC. DEL) / GLIEDERF.	652	IT0893	CEU	46.973	11.717 5-3-8	SW	W	3370	2935	2500	2.600	3.7	2----
GRAN VAL	2374	IT0115	CEU	45.556	7.290 X-X-X								2----
GRAN VEDRETTA OCC. / HOCHF.	2634	IT0884	CEU	46.978	11.711 X-X-X								2----
GRAN VEDRETTA OR. / GRIESSF.	2633	IT0883	CEU	46.981	11.719 X-X-X								2----
GRAN ZEBRU (CENTRALE)	1164	IT0502	CEU	46.470	10.571 X-X-X			3400		2930	1	1.8	2----
GRAND CROUX CENTRALE	1273	IT0111	CEU	45.519	7.309 X-X-X			3300		2560	2	2.1	2----
GRAND ETRET	1238	IT0134	CEU	45.476	7.219 5-2-X			3100		2700	0.5	1.3	23-5-
GRUETTA ORIENT.	2418	IT0232	CEU	45.897	7.027 X-X-X								2----
HOHSAND SETT. (SABBIONE SETT.)	631	IT0357	CEU	46.4	8.3 6-2-0	NE	E	3180	2860	2550	2	2.87	2----
INDREN OCC.	1209	IT0306	CEU	45.895	7.856 5-3-X			4100		3050	1.700	2.5	2----
LA MARE (VEDRETTA DE)	636	IT0699	CEU	46.430	10.630 5-2-0	NE	NE	3586	3216	2662	2.9	3.5	234--
LAGAUN (Vedretta di) / LAGAUN FERNER	6823	IT0805	CEU	46.733	10.738 X-X-X								2----
LANA (VEDR. DI) / AEUSSERES LAHNER KEES	650	IT0913	CEU	47.068	12.212 5-2-9	NW	NW	3480	2720	2310	1.700	2.9	2----
LARES	1149	IT0634	CEU	46.129	10.603 6-7-6	E	NE	3463	3023	2600	6.200	3.7	2----
LASA / LAASER F.	2605	IT0743	CEU	46.539	10.697 X-X-X								2----
LAUSON	1275	IT0116	CEU	45.565	7.288 6-4-0	N	N	3370	3100	2965	0.5	1.05	2----
LAVACCIU	1285	IT0129	CEU	45.521	7.254 5-2-X			3770		2810	1.800	2.6	2----
LAVASSEY	1242	IT0144	CEU	45.478	7.106 6-4-X			3130		2700	1.5	1.9	2----
LUNGA (VEDRETTA) / LANGENF.	661	IT0733	CEU	46.468	10.619 5-2-9	NE	E	3371	3143	2700	1.6	2.44	2345-
LUPO	1138	IT0543	CEU	46.076	9.99 6-4-6	N	NW	2760	2565	2435	0.2	0.7	-3-5-
LYS	620	IT0304	CEU	45.9	7.83 5-1-5	SW	SW	4530	3732	2355	11.800	5.6	2----
MADACCIO (VEDR. DEL) / MADATSCHF.	1129	IT0771	CEU	46.508	10.48 5-2-X			3450		2380	3.200	2.2	2----
MALAVALLE (VEDR. DI) / UEBELTALF.	672	IT0875	CEU	46.948	11.185 5-1-5	E	E	3470	3007	2560	6	4.02	2345-
MANDRONE	664	IT0639	CEU	46.173	10.553 5-2-0	NE	NE	3436	3022	2530	12.400	5.38	2----
MARMOLADA CENTR.	676	IT0941	CEU	46.437	11.867 6-0-6	N	N	3340	2825	2720	2.600	1.5	2----
MARTELOT	1301	IT0049	CEU	45.379	7.171 6-5-X			2860		2450	0.200	0.8	2----
MAZIA (VEDR. DI) / MATSCHERF.	2620	IT0788	CEU	46.783	10.719 X-X-X								2----
MONCIAIR	1237	IT0132	CEU	45.492	7.236 6-5-X			3230		2850	0.5	0.7	2----
MONCORVE	1236	IT0131	CEU	45.5	7.25 6-2-2	NW	NW	3642	3158	2900	2.200	1.5	2----
MONEY	1272	IT0110	CEU	45.525	7.336 5-2-X			3600		2515	1.900	2.6	2----
MONTANDENE	1284	IT0128	CEU	45.537	7.260 6-4-X			3400		3100	1.200	1.3	2----
MONTARSO (VEDR. DI) / FEUERSTEINF.	2631	IT0880	CEU	46.967	11.252 X-X-X								2----
MORION OR.	1250	IT0180	CEU	45.629	7.027 5-3-X			3250		2720	0.900	2.1	2----
NEL CENTRALE	1303	IT0057	CEU	45.419	7.167 6-5-X			3200		2600	1.100	1.5	2----
NEVES OR. (GHIAC. DI) / NOEFESF. OESTL.	651	IT0902	CEU	46.98	11.8 6-3-8	S	S	3300	2990	2655	2.300	2.2	2----
NISCLI	677	IT0633	CEU	46.113	10.608 6-3-0	E	E	3200	2783	2590	0.700	1.5	2----
NOASCHETTA OCCID.	2359	IT0072A	CEU	45.504	7.278 X-X-X								2----
PALON DELLA MARE LOBO CENTR.	2533	IT0506B	CEU	46.411	10.603 X-X-X			3704					2----
PALON DELLA MARE LOBO OR.	2534	IT0506C	CEU	46.411	10.603 X-X-X								2----
PENDENTE (VEDR.) / HANGENDERF.	675	IT0876	CEU	46.966	11.225 5-2-0	S	S	2980	2785	2625	0.9	1.35	2345-
PERA CIAVAL	1296	IT0037	CEU	45.227	7.094 6-5-X			3200		3050	0.200	0.3	2----
PERCIA	1240	IT0139	CEU	45.471	7.201 6-4-X			3300		3000	0.300	0.8	2----
PIODE	619	IT0312	CEU	45.908	7.878 5-2-0	SE	SE	4436	3120	3470	2.5	2.65	2----
PIZZO FERRE	1181	IT0365	CEU	46.466	9.280 5-3-X			2990		2700	0.900	1.8	2----
PIZZO SCALINO	1187	IT0443	CEU	46.28	9.98 6-3-6	N	N	3100	2920	2585	1.900	2.1	2----
PLATTES DES CHAMOIS	1249	IT0172	CEU	45.535	7.000 X-X-X			3560		2700	0.700	1.3	2----
PREDAROSSA	1182	IT0408	CEU	46.256	9.740 5-3-X			3400		2625	0.900	2.5	2----
QUAIRA BIANCA (VEDR. DELLA) / WEISSKARF.	686	IT0889	CEU	46.547	10.859 5-2-0	SW	SW	3509	3132	2605	1.400	2.8	2----
RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	IT0930	CEU	46.903	12.096 6-3-6	N	N	3220	3000	2750	1.7	2.1	2345-
ROCCIA VIVA	2364	IT0078	CEU	45.514	7.333 X-X-X								2----
ROSIM (VEDR. DI) / ROSIMF.	610	IT0754	CEU	46.525	10.640 6-3-0	NW	W	3405	3215	2940	0.800	1.5	2----
ROSSO DESTRO	648	IT0920	CEU	47.03	12.2 5-3-6	W	W	3285	2838	2520	0.900	1.7	2----
RUTOR	612	IT0189	CEU	45.5	7.002 5-2-0	N	NW	3460	2998	2480	9.5	4.8	2----
SALDURA MER. (VEDR. DI) / SALDUR F. SUEDL.	1131	IT0794	CEU	46.742	10.728 6-4-X			3350		2850	0.400	1.3	2----
SCERSCEN INFERIORE	1186	IT0432	CEU	46.355	9.852 5-2-X			3400		2645	7	4.5	2----
SEA	1299	IT0046	CEU	45.336	7.141 5-3-X			3020		2710	0.600	1.9	2----
SENGIE SETT.	1267	IT0102	CEU	45.536	7.402 X-X-X			3280		2700	1	1	2----
SERANA (VEDR.) / SCHRANF.	634	IT0728	CEU	46.467	10.701 6-4-6	N	N	3335	3085	2810	1.200	1.6	2----
SFORZELLINA	667	IT0516	CEU	46.348	10.513 6-4-8	NW	NW	3120	2925	2795	0.4	0.7	2----
SISSONE	2506	IT0422	CEU	46.297	9.719 X-X-X			3100		2625			2----
SOCHESS TSANTELEINA	1244	IT0147	CEU	45.485	7.068 6-4-X			3450		2720	3.400	3.5	2----
SOLDA (VEDRETTA DI) / SULDENF.	660	IT0762	CEU	46.494	10.566 5-2-7	NE	NE	3900	2908	2410	6.5	4.2	2----
SURETTA MERID.	2488	IT0371	CEU	46.506	9.361 6-4-7	S	S	2925	2770	2688	0.2	0.7	-3-5-
TESSA (VEDR. DI) / TEXELF.	653	IT0829	CEU	46.73	10.98 6-3-2	N	NW	3300	2990	2698	0.800	1.8	2----
TIMORION	1282	IT0126	CEU	45.558	7.282 6-4-8	NW	NW	3485	3275	3150	0.4	0.85	23--
TORRENT	2384	IT0155	CEU	45.579	7.089 X-X-X			3100		2660			2----
TOULES	614	IT0221	CEU	45.83	6.93 6-4-0	SE	SE	3500	3050	2679	0.900	1.65	2----
TRAFOI (VEDR. DI) / TRAFOIER F.	2617	IT0770	CEU	46.503	10.497 X-X-X								2----
TRAJO	1278	IT0121	CEU	45.597	7.272 5-3-X			3500		2870	2.200	2.6	2----
TRIBOLAZIONE	1274	IT0112	CEU	45.521	7.284 6-4-X			3870		2785	5.800	2.1	2----

Table 1

GLACIER_NAME	WGMS_ID	PSFG_NR	REGION	LAT	LON	CODE	EXP-ACC	EXP-ABL	ELEV-MAX	ELEV-MED	ELEV-MIN	AREA	LEN	DATA_TYPE
ULTIMA (VEDR.) / ULTENMARKTF.	633	IT0729	CEU	46.465	10.690	6-4-8	N	N	3370	3115	2780	0.5	1.2	2----
VALEILLE	1268	IT0103	CEU	45.520	7.379	5-3-X			3380		2700	1.600	2.5	2----
VALLE DEL VENTO	649	IT0919	CEU	47.039	12.202	5-3-8	NW	NW	3050	2710	2445	0.400	1.2	2----
VAUDALETTA	2379	IT0142	CEU	45.518	7.135	X-X-X							2----	2----
VENEROCOLO	665	IT0581	CEU	46.164	10.506	5-3-9	NW	N	3280	2810	2570	1.5	2.2	2----
VENTINA	629	IT0416	CEU	46.27	9.77	5-3-6	NE	N	3500	2790	2230	2.400	3.7	2----
JP - Japan														
HAMAGURI YUKI	897	JP0001	ASN	36.6	137.62	7-3-0	NE	NE	2720		2690	0	0.07	3---
KE - Kenya														
LEWIS	695	KE0008	TRP	-0.157	37.314	5-3-3	SW	SW	4871	4804	4650	0.1	0.58	345-
KG - Kyrgyzstan														
ABRAMOV	732	KG4101	ASC	39.62	71.56	5-2-8	N	N	4918	4231	3659	24	7.8	2345-
BATYSH SOOK/SYEK ZAPADNIY	781	KG5082	ASC	41.79	77.75	5-3-8	N	N	4471	4217	3944	1.1	2.19	2345-
GLACIER NO. 354 (AKSHYRAK)	3889		ASC	41.799	78.151	5-2-8	NW	NW	4679	4168	3760	6.8	4.4	2345-
GLACIER NO. 599 (KJUNGEI ALA-TOO)	10402		ASC	42.793	76.867	5-3-8	NW	W	4300	4034	3738	1.5	2.1	345-
GOLUBIN	753	KG5060	ASC	42.46	74.495	5-3-8	NW	NW	4350	3837	3325	5.4	4.7	2345-
KARA-BATAKAK	813	KG5080	ASC	42.14	78.27	5-3-8	N	N	4829	3924	3275	2.5	3.21	234--
SARY TOR (NO.356)	805	KG5106	ASC	41.83	78.174	5-3-8	NE	NE	4800	4332	3950	2.6	4.05	234--
KZ - Kazakhstan														
TS.TUYUKSUYSKIY	817	KZ5075	ASC	43.05	77.08	5-3-6	N	N	4219	3822	3486	2.3	2.562	2345-
NO - Norway														
AALFOTBREEN	317	NO36204	SCA	61.75	5.65	4-3-6	NE	NE	1368	1230	890	4	2.9	34--
AUSTDALSBREEN	321	NO37323	SCA	61.815	7.352	4-2-4	SE	SE	1747	1495	1200	10.6	5.7	34--
AUSTERDALSBREEN	288	NO31220	SCA	61.62	6.93	4-3-8	SE	SE	1920	1600	390	26.8	8.5	2----
AUSTRE OKSTINDBREEN	3342		SCA	66.019	14.294	X-X-X	N	E	1710		750	6	2----	6 2----
BLOMSTOELSKARDSBREEN	3339		SCA	59.949	6.332	X-X-X	SW	SW	1632	1505	1012	22.4		234--
BOEDALSBREEN	2291	NO37219	SCA	61.77	7.12	4-3-8	NW	N						2----
BOEYABREEN	2297	NO33014	SCA	61.525	6.756	X-X-X	S	S						2----
BONDHUSBREA	318	NO20408	SCA	60.03	6.33	4-3-8	NW	NW	1636	1545	477	10.7	7.8	2----
BREIDABLIKBREA			SCA	60.07	6.37		NW	NW	1648	1500	1232	3.2	3.8	
BRENNDALSBREEN	2293	NO37109	SCA	61.685	6.933	4-3-8	W	W						2----
BRIKSDALSBREEN	314	NO37110	SCA	61.665	6.932	4-3-8	W	W	1910	1650	350	11.9	6	2----
BUERBREEN	315	NO21307	SCA	60.033	6.402	4-3-8	E	NE	1640		620	15.5	7.5	2----
CORNELIUSSENBREEN	3341		SCA	66.003	14.37	5-3-8	NE	E	1620		1080	2.3	2----	2 2----
ENGABREEN	298	NO67011	SCA	66.65	13.85	4-3-8	N	NW	1544	1220	111	36.2	11.5	234--
FAABERGSTOELSBREEN	289	NO31015	SCA	61.72	7.23	4-3-8	E	E	1810	1540	760	15	7	2----
GRAAFJELLSBREA	1320	NO2051	SCA	60.083	6.399	4-3-8	NW	NW	1647	1500	1049	8.1	5	2----
GRAASUBREEN	299	NO0547	SCA	61.657	8.6	6-7-6	NE	E	2284	2085	1833	2.1	2.3	34--
HANSEBREEN	322	NO36206	SCA	61.75	5.68	X-X-X	NE	N	1310	1150	927	2.8	2.5	34--
HAUGABREEN	4568	NO2298	SCA	61.687	6.716	X-X-X						10		2----
HELLSTUGUBREEN	300	NO0511	SCA	61.56	8.44	5-1-8	N	N	2229	1900	1482	2.9	3.4	234--
JUVFONNE	3661		SCA	61.677	8.351	X-X-X			1986	1886	1841	0.2	0.335	2-5-
KOPPANGSBREEN	2309		SCA	69.689	20.147	X-X-X								2----
LANGFIORDJOEKELEN	323	NO85008	SCA	70.128	21.735	4-3-8	SE	E	1050	850	302	3.2	4.2	234--
LEIRBREEN	301	NO0548	SCA	61.57	8.1	X-X-X	NW	NW	2070		1530	4.9	3.8	2----
MAARAADALSBREEN	4567	NO2430	SCA	61.933	7.422	X-X-X								2----
MIDTDALSBREEN	2295	NO4302	SCA	60.57	7.47	4-3-8	NE	NE	1862	1730	1380	7.1		2----
NIGARDSBREEN	290	NO31014	SCA	61.72	7.13	4-3-8	SE	SE	1952	1627	330	46.6	9.6	234--
REMBESDALSKAAGA	2296	NO22303	SCA	60.539	7.368	4-3-8	W	W	1854	1735	1066	17.3	8.1	234--
RUNDVASSBREEN	2670		SCA	67.299	16.057	4-X-X	NE	N	1525	1265	836	10.9		234--
STEGHOLT BREEN	313	NO31021	SCA	61.801	7.314	4-3-8	S	S	1900	1480	880	15.3	7.7	2----
STEINDALSBREEN	2310		SCA	69.393	19.902	X-X-X	E	E						2----
STORBREEN	302	NO0541	SCA	61.57	8.13	5-2-6	NE	NE	2102	1775	1400	5.1	2.93	234--
STORE SUPPHELLEBREEN	287	NO33014	SCA	61.52	6.8	4-0-8	S	S	1730		730	12	7	2----
STORJUVBREEN	2308		SCA	61.647	8.292	X-X-X	N	N						2----
STORSTEINSFJELLBREEN	1329	NO7381	SCA	68.22	17.92	5-2-8	E	SE	1850	1380	970	5.9	5.3	2----
STYGGEBREAN	4504	NO2608	SCA	61.64479	8.34078	5-1-X			2415	2034	1665	4.9	4	2----
STYGGEDALSBREEN	303	NO30720	SCA	61.473	7.885	5-2-6	N	N	2240	1650	1270	1.8	3.2	2----
SVELGJABREEN	3343		SCA	59.945	6.283	X-X-X	SW	SW	1632	1375	829	22.3		234--
SYDBREEN	3351		SCA	69.45	19.91	5-2-8	NE	E						2----
TROLLBERGDALSBREEN	316	NO68507	SCA	66.716	14.441	5-3-8	SE	SE	1300	1050	900	1.6	2.1	2----
TROLLRYKJEBREEN	3606		SCA	62.288	7.459	X-X-X	NE	NE						2----
TUFTEBREEN	3352		SCA	61.67	7.14	4-3-8	E	SE						2----
VETLE SUPPHELLEBREEN	3607		SCA	61.522	6.836	X-X-X	SE	S						2----
NP - Nepal														
MERA	3996		ASE	27.72	86.885	5-0-6	NE	N	6420	5615	4940	5.1	4.55	3---
POKALDE	3997		ASE	27.9	86.8	5-4-8	N	N	5660	5580	5430	0.1	0.47	3---
RIKHA SAMBA	1516	NP0012	ASE	28.82	83.49	5-3-8	S	SE	6515	5826	5416	5.3	5.4	3---
WEST CHANGRI NUP	10401		ASE	27.982	86.777	X-X-X	E	SE	5690	5505	5330	0.900		3--6
YALA	912	NP0004	ASE	28.25	85.62	6-3-6	SW	SW	5661	5372	5168	1.6	1.4	234--
NZ - New Zealand														
ADAMS	2923		NZL	-43.32	170.72	5-1-8	W	N	2470	1880	1295	10	6.6	2----
ALMER/SALISBURY	1548		NZL	-43.47	170.22	5-1-8	W	SW	2390	1865	1340	3.100	2.98	2----
ANDY	1590		NZL	-44.43	168.37	4-1-8	N	N	2190	1750	840	10.5	7.1	2----
ASHBURTON	1570		NZL	-43.37	170.97	5-3-9	S	S	2590	2085	1575	1.700	2.5	2----
AXIUS	2283		NZL	-44.17	168.98	6-4-8	W	W	2285	1920	1555	0.600	1.3	2----
BALFOUR	1604		NZL	-43.55	170.12	5-3-9	W	W	3305	1525	730	7	9.9	2----
BARLOW	1608		NZL	-43.3	170.63	6-2-9	W	W	2440	1705	1220	2.600	3.8	2----
BLAIR	1551		NZL	-43.95	169.72	6-7-8	SE	SE	2240	2015	1790	0.400	0.63	2----
BONAR	1587		NZL	-44.4	168.72	6-2-4	SW	W	3025	2090	1160	15.400	7.9	2----
BREWSTER	1597		NZL	-44.07	169.43	6-3-8	SW	SW	2399	2023	1676	2	2.69	23--
CAMERON	1565		NZL	-43.33	171	6-2-9	SW	SE	2470	1980	1380	2	3.1	2----
CROW	1564		NZL	-42.92	171.5	6-3-6	SE	S	2210	1940	1675	0.5	1.2	2----
DAINTY	2287		NZL	-43.23	170.89	6-4-8	W	W	2330	2040	1750	0.600	1.45	2----
DART	898		NZL	-44.45	168.6	5-3-9	SW	SW	2470	1770	1070	9.900	7.6	2----
DISPUTE	2286		NZL	-44.14	168.96	6-4-8	E	E	1720	1660	1600	0.300	0.85	2----
DONALD	2284		NZL	-44.24	168.87	6-2-8	SW	NW	2440	1980	1525	3.600	2.85	2----
DONNE	1585		NZL	-44.58	168.02	6-3-8	E	SE	2745	1615	1220	3.5	3.6	2----
DOUGLAS (KAR.)	1601		NZL	-43.68	170	5-2-4	SW	W	3160	1980	960	11.800	7.4	2----

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GLACIER_NAME	WGMS_ID	PSFG_NR	REGION	LAT	Lon	CODE	EXP-ACC	EXP-ABL	ELEV-MAX	ELEV-MED	ELEV-MIN	AREA	LEN	DATA_TYPE
FITZGERALD (GOD)	2278		NZL	-43.47	170.57	6-3-8	W	SW	2530	2165	1660	1.100	1.8	2---
FOX	1536		NZL	-43.53	170.15	5-2-8	NW	W	3500	1900	305	34.700	12.58	2---
FRANZ JOSEF	899		NZL	-43.5	170.22	5-2-8	NW	NW	2955	1690	425	32.600	10.469	2---
FRESHFIELD	2966		NZL	-43.58	170.19	5-2-9	E	E	2285	2010	1525	0.600	1.2	2---
GLENMARRY	1550		NZL	-44	169.88	6-4-8	S	S	2350	2180	2010	0.700	1.19	2---
GODLEY	1581		NZL	-43.43	170.57	5-2-4	S	SW	2440	1785	1130	15.900	8.6	2---
GREY & MAUD	1580		NZL	-43.45	170.48	5-1-4	SW	S	2440	1750	1065	10.900	7.2	2---
GUNN	1560		NZL	-44.76	168.09	6-3-8	SE	E	1860	1615	1495	0.800	1.25	2---
HORACE WALKER	1600		NZL	-43.67	169.97	5-3-8	W	SW	2455	2075	945	6	6.6	2---
IVORY	900		NZL	-43.133	170.926	6-4-4	S	S	1730	1510	1390	0.900	1.35	2---
KAHUTEA	1569		NZL	-43.02	171.38	6-3-8	S	SW	2300	2025	1740	0.800	1.6	2---
KEA	1545		NZL	-43.18	170.8	6-4-8	S	S	2030	1840	1650	1	0.95	2---
LA PEROUSE	1605		NZL	-43.57	170.12	5-3-9	NW	W	3320	1980	855	9.5	11.15	2---
LEEB-LORNTY	2288		NZL	-43.22	170.9	6-2-8	W	W	2635	2135	1190	3.5	3.3	2---
LYELL	1567		NZL	-43.28	170.83	5-2-9	S	E	2440	1720	1005	10.800	6.2	2---
MARION	1591		NZL	-44.47	168.48	6-2-8	W	N	2470	1905	1340	7	5.1	2---
MARMADUKE DIXON	1541		NZL	-42.98	171.38	6-4-8	E	SE	2100	1858	1615	0.800	1.7	2---
METAILLE	2998		NZL	-43.75	170.06	6-3-8	N	N	2375	2180	1800		2.3	2---
MUELLER	1575		NZL	-43.75	170.02	5-2-4	SE	SE	2895	1330	760	18.5	13.65	2---
MURCHISON	1578		NZL	-43.52	170.4	5-2-9	E	SW	3155	2080	1005	36.600	16.45	2---
PARK PASS	1559		NZL	-44.58	168.23	6-3-8	S	S	2200	1850	1500	3	2.63	2---
ROLLESTON	1538		NZL	-42.89	171.526	6-4-6	SE	SE	1900	1795	1727	0.1	0.36	-3-5-
SEPARATION	2279		NZL	-43.48	170.58	5-2-9	S	SW	2560	2025	1495	1.5	2.65	2---
SIEGE	1616		NZL	-43.27	170.53	5-3-8	SE	SE	2130	1750	1435	1.200	3.19	2---
SLADDEN	3611		NZL	-43.758	170.02	X-X-X								2---
SNOW WHITE	1588		NZL	-44.45	168.58	5-3-8	N	E	2425	1950	1220	5.5	5.5	2---
SNOWBALL	1589		NZL	-44.45	168.52	6-3-8	NW	W	2345	1905	1465	3.300	2.7	2---
SOUTH CAMERON	3019		NZL	-43.35	170.99	6-3-8	NE	NE	2620	2285	1980		1.2	2---
ST. JAMES	2274		NZL	-43.28	170.89	6-2-9	NE	E	2377	1645	1035	1	2.8	2---
STOCKING (TEWAEWAE)	3023		NZL	-43.68	170.07	6-3-8	SE	SE						2---
STRAUCHON	1599		NZL	-43.62	170.08	5-3-4	W	SW	2530	1745	960	3.600	5.8	2---
TASMAN	1074		NZL	-43.52	170.32	5-2-4	S	S	3690	2210	730	98.300	28.5	2---
THURNEYSON	1554		NZL	-44.17	169.6	6-2-6	S	S	2425	2085	1720	1.800	1.23	2---
VERTEBRAE 20	3033		NZL	-43.33	170.59	4-3-8	S	S	1645	1450	1160		1.8	2---
VICTORIA	3034		NZL	-43.5	170.17	5-3-9	W	W	2560	1890	1065	4.5	6.5	2---
WHITE	3037		NZL	-43	171.38	6-3-8	NE	NE	2320	2015	1710	0.600	1.8	2---
WHYMPER	1609		NZL	-43.48	170.37	5-3-9	NW	NE	2775	1780	790	6.600	7.2	2---
PE - Peru														
ARTESONRAJU	3292	PE0003	TRP	-8.95	-77.62	5-3-4	W	W	6050	5332	4700	3.6	3.54	234--
GAJAP-YANACARCO	223	PE0009	TRP	-9.83	-77.17	6-3-4	SE	SE	5200	5033	4958	1.200	0.789	2---
PASTORURI	224	PE0008	TRP	-9.9	-77.17	6-3-0	NW	NW	5100	5095	5061	1.200	0.31	2---
URUASHRAJU	221	PE0005	TRP	-9.58	-77.32	5-3-0	SW	SW	5650	5006	4689	2.100	2.034	2---
YANAMAREY	226	PE0004	TRP	-9.653	-77.271	5-2-0	SW	SW	5200	4961	4700	0.3	1.33	234--
PO - Poland														
POD BULA	1617	PL0111	CEU	49.185	20.08	7-5-6	NW	NW	1650		1610	0	0	2---
RU - Russia														
DJANKJAT	726	RU3010	CAU	43.194	42.761	5-2-9	N	NW	3729	3280	2722	2.7	3.4	-3--
GARABASHI	761	RU3031	CAU	43.3	42.47	0-0-8	SE	S	5000	3880	3300	4.4	5.8	-34--
SE - Sweden														
HYLLGLACIAEREN	344	SE0780	SCA	67.58	17.47	5-3-8	N	N	1820		1360	1.100	2.1	2---
ISFALLSGLACIAEREN	333	SE0787	SCA	67.915	18.568	5-3-6	E	E	1700		1250	1.200	1.9	2---
KARSOJJETNA	330	SE0798	SCA	68.358	18.321	5-3-8	NE	E	1500	1100	960	0.900	1.6	2---
MARMAGLACIAEREN	1461	SE0799	SCA	68.08	18.68	5-2-1	E	E	1740		1320	4	3.3	234--
MIKKAJEKNA	338	SE0766	SCA	67.4	17.7	5-1-8	S	S	1825		1000	6.900	3.7	2---
RABOTS GLACIAER	334	SE0785	SCA	67.91	18.5	5-2-8	NW	W	1930		1080	3.7	3.7	-34--
RIUKOJJETNA	342	SE0790	SCA	68.084	18.054	3-0-3	E	E	1440		1160	2.8	2.3	-34--
RUOPSOKJEKNA	340	SE0764	SCA	67.33	17.98	5-3-6	NE	N	1760		1150	3.200	3.4	2---
RUOTESJEKNA	337	SE0767	SCA	67.42	17.47	5-3-8	NE	N	1600		1050	4.600	3.9	2---
SALAJEKNA	341	SE0759	SCA	67.12	16.38	5-2-8	SE	S	1580		900	27.900	8.6	2---
STORGLACIAEREN	332	SE0788	SCA	67.903	18.568	5-2-8	E	E	1720		1140	2.9	3.4	-34--
SUOTTASJEKNA	336	SE0768	SCA	67.47	17.58	5-2-8	NE	N	1800		1130	7.200	3.7	2---
TARFALAGLACIAEREN	326	SE0791	SCA	67.935	18.645	6-7-0	E	E	1710		1380	1	0.7	-34--
VARTASJEKNA	339	SE0765	SCA	67.45	17.67	5-3-8	NE	NE	1800		1300	4.200	3.3	2---
SJ - Svalbard														
AUSTRE BROEGGERBREEN	292	SJ15504	SJM	78.888	11.831	5-2-9	NW	N	600	260	50	6.1	6	-3--
AUSTRE LOVENBREEN	3812		SJM	78.871	12.154	5-2-2	N	N	550	355	107	4.5	3.702	23--
HANSBREEN	306	SJ12419	SJM	77.077	15.63	4-2-4	S	S	510	255	0	56.7	15.404	234--
IRENBREEN	2669	SJ15402	SJM	78.665	12.125	X-X-X	NW	SW	650	340	125	4	3.86	-3--
KONGSVEGEN	1456	SJ15510	SJM	78.8	12.98	4-2-4	NW	NW	1050	500	0	101.9	27	-3--
KRONEBREEN	3504	SJ15511	SJM	78.967	13.183	4-2-4	S	W	1361		0	370		-3--
MIDTRE LOVENBREEN	291	SJ15506	SJM	78.881	12.048	5-2-9	NE	N	650	330	50	5.4	4.8	-3--
WALDEMARBREEN	2307	SJ15403	SJM	78.677	12.069	5-3-8	NW	SW	570	320	100	2.5	3.3	-3-5-
WERENSKIOLDBREEN	305	SJ12501	SJM	77.067	15.367	5-2-8	S	SW	750	400	40	27.1	8.75	-34--
US - United States of America														
BLACK RAPIDS	80	US0222	ALA	63.481	-146.507	5-1-7	N	E	3200	1750	800	289	43	---5-
BLUE GLACIER	210	US2126	WNA	47.819	-123.685	5-2-8	NE	N	2410	1815	1380	5.7	4.3	-3-5-
COLUMBIA (2057)	76	US2057	WNA	47.964	-121.349	6-4-8	S	S	1725	1600	1450	0.8	1.53	234--
DANIELS	83	US2052	WNA	47.57	-121.17	6-3-6	NE	NE	2300	2200	2075	0.4	0.55	-3--
DEMING	1368	US2009	WNA	48.766	-121.830	X-X-0	SW	SW	3230	2250	1340	5.17	2	---
EASTON	1367	US2008	WNA	48.759	-121.825	5-3-8	SW	S	2900	2200	1710	2.9	3.97	23--
EEL	188	US2113	WNA	47.73	-123.33	5-3-8	N	N	2090		1610	0.6	2	-3-5-
EKLUTNA	85	US0391	ALA	61.245	-148.988	5-3-8	N	N	2100	1373	580	29.5	10.2	-3-6
EKLUTNA EAST BRANCH	6829		ALA	61.225	-148.97	5-3-8	N	N	2100		580	13	10.2	-3-6
EKLUTNA WEST BRANCH	6828		ALA	61.225	-149.01	5-3-8	N	N	2100		580	16.5		-3-6
EMMONS	203	US2022	WNA	46.85	-121.72	5-3-9	NE	NE	4290		1480	11.3	2.8	-3-5-
GULKANA	90	US0200	ALA	63.281	-145.427	5-2-9	S	SW	2459	1840	1217	16.3	7.5	-3-5-
ICE WORM	82	US2054	WNA	47.55	-121.17	6-4-8	E	E	2080	2010	1900	0.1	0.46	-3--
LEMON CREEK	3334		ALA	58.387	-134.346	X-X-X	N	NW	1400	1100	750	10.3	5.94	234--
LOWER CURTIS	77	US2055	WNA	48.826	-121.622	6-4-8	W	W	1850	1630	1485	0.8	0.72	23--
LYNCH	81	US2056	WNA	47.57	-121.18	6-5-4	N	N	2300	2185	1900	0.6	0.99	-3--

Table 1

GLACIER_NAME	WGMS_ID	PSFG_NR	REGION	LAT	LON	CODE	EXP-ACC	EXP-ABL	ELEV-MAX	ELEV-MED	ELEV-MIN	AREA	LEN	DATA_TYPE
NISQUALLY	201	US2027	WNA	46.82	-121.74	5-2-9	S	S	4380		1480	6.7	2.9	-3-5-
NOISY CREEK	1666	US2078	WNA	48.674	-121.527	6-4-8	N	N	1920	1791	1680	0.5	1.14	-3-5-
NORTH KLAUWATTI	1664	US2076	WNA	48.573	-121.093	5-5-X	SE	SE	2400	1729	1730	1.5	2.77	-3-5-
RAINBOW	79	US2003	WNA	48.8	-121.77	6-3-8	E	E	2040	1750	1360	1.6	1.92	-3-5-
SANDALEE	1667	US2079	WNA	48.41	-120.79	6-4-5	N	N	2310	2154	1970	0.2	0.79	-3-5-
SHOLES	3295		WNA	48.814	-121.770	X-X-X	NE	NE	1960	1820	1690	0.9	0.94	23-5-
SILVER	1665	US2077	WNA	48.977	-121.24	6-4-8	N	NE	2710	2405	2100	0.4	0.925	-3-5-
SOUTH CASCADE	205	US2013	WNA	48.350	-121.055	5-3-8	N	N	2135	1920	1626	1.6	2.96	23-5-
SPERRY	218	US5001	WNA	48.63	-113.75	6-4-8	NW	NW	2789	2430	2261	0.8	1.21	-3-5-
TAKU	124	US1805	ALA	58.651	-134.278	4-2-2	SE	S	2000	1200	0	756.900	58.1	-3-5-
WOLVERINE	94	US0411	ALA	60.417	-148.904	5-3-8	S	S	1672	1310	436	15.9	8	-3-5-
YAWNING	75	US2050	WNA	48.447	-121.031	6-5-8	NE	NE	2100	1970	1880	0.3	0.65	-3-5-

PU	GLACIER_NAME	WGMS_ID	FROM	TO	METHOD	FV	INVESTIGATORS_(SPONS_AGENCY)
AQ - Antarctica							
AQ	BAHIA DEL DIABLO	2665	20149999	20149999	cG	ST	Ermolin E. (IAA-DG), Marinsek S. (IAA-DG), Seco J. (IAA-DG)
AQ	BAHIA DEL DIABLO	2665	20149999	20159999	cG	ST	Marinsek S. (IAA-DG), Seco J. (IAA-DG), Ermolin E. (IAA-DG)
AR - Argentina							
AR	BROWN SUPERIOR	3903	20140424	20150503	tG	-17	Cabrera G. (IANIGLA)
AR	CONCONTA NORTE	3902	20140423	20150506	tG	-20	Cabrera G. (IANIGLA)
AR	LOS AMARILLOS	3904	20140305	20150399	sM	-19	Cabrera G. (IANIGLA)
AT - Austria							
AT	ALPEINER F.	497		20141003		-14	Schießling P. (ÖAV)
AT	ALPEINER F.	497	20141003	20151003		-14	Schießling P. (ÖAV)
AT	BACHFALLEN F.	500		20140909		-9	Dünser F., Janz B. (ÖAV)
AT	BACHFALLEN F.	500	20140909	20150831		-27	Dünser F., Janz B. (ÖAV)
AT	BAERENKOPF K.	567		20140908		-7	Seitlinger G. (ÖAV)
AT	BERGLAS F.	496		20141003		-5	Schießling P. (ÖAV)
AT	BERGLAS F.	496	20141003	20151003		-5	Schießling P. (ÖAV)
AT	BIERTAL F.	481		20140929		-6	Groß G. (ÖAV)
AT	BIERTAL F.	481	20140929	20150921		-18	Groß G. (ÖAV)
AT	BRENNKOGL K.	528		20140904		-6	Seitlinger G. (ÖAV)
AT	BRENNKOGL K.	528	20140904	20150910		-17	Seitlinger G. (ÖAV)
AT	DAUNKOGEL F.	604		20140918		-9	Schießling P. (ÖAV)
AT	DAUNKOGEL F.	604	20140918	20150918		-9	Schießling P. (ÖAV)
AT	DIEM F.	513	20130922	20151003		-55	Schöpf R. (ÖAV)
AT	EISKAR G.	1632	20070907	20150906		7	Hohenwarter G. jun. (ÖAV)
AT	FERNAU F.	601		20140918		-29	Schießling P. (ÖAV)
AT	FERNAU F.	601	20140918	20150918		-29	Schießling P. (ÖAV)
AT	FIRMISAN F.	4337		20140909		-7	Strudl M. (ÖAV)
AT	FIRMISAN F.	4337	20140909	20150916		-33	Strudl M. (ÖAV)
AT	FREIWAND K.	564	20130910	20150916		-30	Lieb G. K. (ÖAV)
AT	FROSINITZ K.	579		20140919		-8	Lang J. (ÖAV)
AT	FROSINITZ K.	579	20140919	20150827		-30	Lang J. (ÖAV)
AT	GAISKAR F.	530		20140918		-5	Dünser F., Janz B. (ÖAV)
AT	GAISKAR F.	530	20140918	20150830		-16	Dünser F., Janz B. (ÖAV)
AT	GAISSBERG F.	508		20140907		-2	Schöpf R. (ÖAV)
AT	GAISSBERG F.	508	20140907	20150929		-13	Schöpf R. (ÖAV)
AT	GEPATSCH F.	522		20140917		-91	Noggler B. (ÖAV)
AT	GEPATSCH F.	522	20140917	20151011		-122	Noggler B. (ÖAV)
AT	GOESSNITZ K.	532		20140917		-3	Krobath M. (ÖAV)
AT	GOESSNITZ K.	532	20140917	20150831		-4	Krobath M. (ÖAV)
AT	GOLDBERG K.	1305		20140928		-3	Binder D. (ZAMG)
AT	GOLDBERG K.	1305	20140928	20151005		-8	Binder D. (ZAMG)
AT	GR. GOSAU G.	536		20140828		-3	Reingruber K. (ÖAV)
AT	GR. GOSAU G.	536	20140828	20150828		-10	Reingruber K. (ÖAV)
AT	GROSSELEND K.	542		20140825		-9	Knittel A. (ÖAV)
AT	GROSSELEND K.	542	20140825	20150824		-3	Knittel A. (ÖAV)
AT	GURGLER F.	511		20140905		2	Schöpf R. (ÖAV)
AT	GURGLER F.	511	20140905	20150922		-12	Schöpf R. (ÖAV)
AT	GUSLAR F.	490		20140829		-18	Span N. (ÖAV)
AT	GUSLAR F.	490	20140829	20150820		-18	Span N. (ÖAV)
AT	HALLSTAETTER G.	535		20140919		-7	Weichinger M., Reingruber K. (ÖAV)
AT	HALLSTAETTER G.	535	20140919	20150928		-22	Weichinger M., Reingruber K. (ÖAV)
AT	HINTEREIS F.	491		20140827		-20	Span N. (ÖAV)
AT	HINTEREIS F.	491	20140827	20150818		-31	Span N. (ÖAV)
AT	HOCHALM K.	538		20140814		-11	Knittel A. (ÖAV)
AT	HOCHALM K.	538	20140814	20150823		-10	Knittel A. (ÖAV)
AT	HOCHJOCH F.	492		20140826		-23	Span N. (ÖAV)
AT	HOCHJOCH F.	492	20140826	20150817		-27	Span N. (ÖAV)
AT	HORN K. (SCHOB.)	531		20140917		-3	Krobath M. (ÖAV)
AT	HORN K. (SCHOB.)	531	20140917	20150831		-9	Krobath M. (ÖAV)
AT	HORN K. (ZILLER)	589		20141020		-15	Friedrich R. (ÖAV)
AT	HORN K. (ZILLER)	589	20141020	20150930		-136	Friedrich R. (ÖAV)
AT	INN. PIRCHLKAR	505		20141019		-7	Schöpf R. (ÖAV)
AT	INN. PIRCHLKAR	505	20141019	20150913		-18	Schöpf R. (ÖAV)
AT	JAMTAL F.	480		20140908		-7	Groß G. (ÖAV)
AT	JAMTAL F.	480	20140908	20150916		-20	Groß G. (ÖAV)
AT	KALBERSPITZ K.	540		20140826		-9	Knittel A. (ÖAV)
AT	KALBERSPITZ K.	540	20140826	20150825		-10	Knittel A. (ÖAV)
AT	KALSER BAERENKOPF K.	2676		20140906		1	Seitlinger G. (ÖAV)
AT	KALSER BAERENKOPF K.	2676	20140906	20150911		-6	Seitlinger G. (ÖAV)
AT	KARLINGER K.	568		20140908		-6	Seitlinger G. (ÖAV)
AT	KLEINEISER K.	555		20150912		-10	Seitlinger G. (ÖAV)
AT	KLEINELEND K.	541		20140826		6	Knittel A. (ÖAV)
AT	KLEINELEND K.	541	20140826	20150825		-6	Knittel A. (ÖAV)
AT	KLEINFLEISS K.	547		20140927		3	Binder D. (ZAMG)
AT	KLEINFLEISS K.	547	20140927	20151006		-7	Binder D. (ZAMG)
AT	KLOSTERTALER M	485		20140907		-3	Groß G. (ÖAV)
AT	KLOSTERTALER M	485	20140907	20151002		-8	Groß G. (ÖAV)
AT	KRIMMLER K.	584		20140909		-5	Lang J. (ÖAV)
AT	KRIMMLER K.	584	20140909	20150909		-12	Lang J. (ÖAV)
AT	LANDECK K.	569		20150917		-18	Seitlinger G. (ÖAV)
AT	LANGTALER F.	510		20140905		0	Schöpf R. (ÖAV)
AT	LANGTALER F.	510	20140905	20150922		-18	Schöpf R. (ÖAV)
AT	LATSCH F.	4338		20140909		-22	Strudl M. (ÖAV)
AT	LATSCH F.	4338	20140909	20150916		-21	Strudl M. (ÖAV)
AT	MARZELL F.	515		20140917		-16	Schöpf R. (ÖAV)
AT	MARZELL F.	515	20140917	20150919		-13	Schöpf R. (ÖAV)
AT	MAURER K. (GLO.)	558		20141007		-4	Seitlinger G. (ÖAV)
AT	MAURER K. (GLO.)	558	20141007	20150916		-7	Seitlinger G. (ÖAV)
AT	MITTERKAR F.	487	20130902	20150912		-9	Schöpf R. (ÖAV)
AT	MUTMAL F.	506		20140918		-19	Schöpf R. (ÖAV)
AT	MUTMAL F.	506	20140918	20150919		-5	Schöpf R. (ÖAV)
AT	NIEDERJOCH F.	516		20140917		-16	Schöpf R. (ÖAV)
AT	NIEDERJOCH F.	516	20140917	20150919		-88	Schöpf R. (ÖAV)
AT	OCHSENTALER G.	483		20140906		-20	Groß G. (ÖAV)

Table 2

PU	GLACIER_NAME	WGMS_ID	FROM	TO	METHOD	FV INVESTIGATORS (SPONS_AGENCY)
AT	OCHSENTALER G.	483	20140906	20150831		-18 Groß G. (ÖAV)
AT	OEDENWINKEL K.	559		20140919		-16 Seitlinger G. (ÖAV)
AT	OEDENWINKEL K.	559	20140919	20150830		-22 Seitlinger G. (ÖAV)
AT	PASTERZE	566		20140908		-54 Lieb G. K. (ÖAV)
AT	PASTERZE	566	20140908	20150917		-54 Lieb G. K. (ÖAV)
AT	PFaffen F.	591		20140917		-3 Dünser F., Janz B. (ÖAV)
AT	PFaffen F.	591	20140917	20150830		-11 Dünser F., Janz B. (ÖAV)
AT	RETtenBACH F.	488		20140921		-3 Schöpf R. (ÖAV)
AT	RETtenBACH F.	488	20140921	20150906		-29 Schöpf R. (ÖAV)
AT	ROFENKAR F.	518		20140910		5 Schöpf R. (ÖAV)
AT	ROFENKAR F.	518	20140910	20150912		-9 Schöpf R. (ÖAV)
AT	ROTER KNOPF K.	3297		20140917		0 Krobath M. (ÖAV)
AT	ROTER KNOPF K.	3297	20140917	20150901		0 Krobath M. (ÖAV)
AT	ROtMOOS F.	509		20140906		-3 Schöpf R. (ÖAV)
AT	ROtMOOS F.	509	20140906	20150929		-15 Schöpf R. (ÖAV)
AT	SCHALF F.	514		20140918		-23 Schöpf R. (ÖAV)
AT	SCHALF F.	514	20140918	20150919		-56 Schöpf R. (ÖAV)
AT	SCHLADMINGER G.	534		20140928		-1 Weichinger M. (ÖAV)
AT	SCHLADMINGER G.	534	20140928	20151006		-2 Weichinger M. (ÖAV)
AT	SCHLAtEN K.	580		20140916		-15 Lang J. (ÖAV)
AT	SCHLAtEN K.	580	20140916	20150922		-60 Lang J. (ÖAV)
AT	SCHMIEDINGER K.	548		20140905		-15 Seitlinger G. (ÖAV)
AT	SCHMIEDINGER K.	548	20140905	20150909		-40 Seitlinger G. (ÖAV)
AT	SCHNEEGLOCKEN	525		20140907		-9 Groß G. (ÖAV)
AT	SCHNEEGLOCKEN	525	20140907	20150831		-12 Groß G. (ÖAV)
AT	SCHNEELOCH G.	533		20140829		0 Reingruber K. (ÖAV)
AT	SCHNEELOCH G.	533	20140829	20150827		-2 Reingruber K. (ÖAV)
AT	SCHWARZENBERG F.	501		20140906		-1 Dünser F., Janz B. (ÖAV)
AT	SCHWARZENBERG F.	501	20140906	20150910		-11 Dünser F., Janz B. (ÖAV)
AT	SCHWARZKARL K.	556		20140917		-1 Seitlinger G. (ÖAV)
AT	SCHWARZKARL K.	556	20140917	20150912		-27 Seitlinger G. (ÖAV)
AT	SCHWEIKERT F.	4336		20140918		-10 Strudl M. (ÖAV)
AT	SCHWEIKERT F.	4336	20140918	20150911		-17 Strudl M. (ÖAV)
AT	SEXEGERTEN F.	520		20140919		-16 Noggler B. (ÖAV)
AT	SEXEGERTEN F.	520	20140919	20151010		-16 Noggler B. (ÖAV)
AT	SIMILAUN F.	3296		20140917		-8 Schöpf R. (ÖAV)
AT	SIMILAUN F.	3296	20140917	20150919		-20 Schöpf R. (ÖAV)
AT	SIMONY K.	575		20140919		-8 Lang J. (ÖAV)
AT	SIMONY K.	575	20140919	20150826		-6 Lang J. (ÖAV)
AT	SPIEGEL F.	512		20140926		-8 Schöpf R. (ÖAV)
AT	SPIEGEL F.	512	20130922	20151003		-8 Schöpf R. (ÖAV)
AT	STUBACHER SONNBLICK K.	573		20140919		-5 Seitlinger G. (ÖAV)
AT	STUBACHER SONNBLICK K.	573	20140919	20150922		-12 Seitlinger G. (ÖAV)
AT	SULZTAL F.	503		20140906		-7 Dünser F., Janz B. (ÖAV)
AT	SULZTAL F.	503	20140906	20150830		-15 Dünser F., Janz B. (ÖAV)
AT	TASCHACH F.	519		20140919		-4 Noggler B. (ÖAV)
AT	TASCHACH F.	519	20140919	20151010		-101 Noggler B. (ÖAV)
AT	TOTENFELD	524		20140908		-6 Groß G. (ÖAV)
AT	TOTENFELD	524	20140908	20150916		-23 Groß G. (ÖAV)
AT	TOTENKOPF K.	2680		20140920		-2 Seitlinger G. (ÖAV)
AT	TOTENKOPF K.	2680	20140920	20150912		-5 Seitlinger G. (ÖAV)
AT	TRIEBENKARLAS F.	592		20140917		-13 Dünser F., Janz B. (ÖAV)
AT	TRIEBENKARLAS F.	592	20140917	20150829		-36 Dünser F., Janz B. (ÖAV)
AT	UMBAL K.	574		20140920		-22 Lang J. (ÖAV)
AT	UMBAL K.	574	20140920	20150826		-25 Lang J. (ÖAV)
AT	UNT. RIFFL K.	605		20140907		-2 Seitlinger G. (ÖAV)
AT	UNT. RIFFL K.	605	20140907	20150913		-11 Seitlinger G. (ÖAV)
AT	UNTERSULZBACH K.	582		20140918		-14 Lang J. (ÖAV)
AT	UNTERSULZBACH K.	582	20140918	20150916		-50 Lang J. (ÖAV)
AT	VERBORGENBERG F.	593		20141003		-1 Schießling P. (ÖAV)
AT	VERBORGENBERG F.	593	20141003	20151003		-1 Schießling P. (ÖAV)
AT	VERMUNT G.	482		20140906		-8 Groß G. (ÖAV)
AT	VERMUNT G.	482	20140906	20150912		-26 Groß G. (ÖAV)
AT	VERNAGT F.	489		20140829		-16 Span N. (ÖAV)
AT	VERNAGT F.	489	20140829	20150820		-23 Span N. (ÖAV)
AT	VILTRAGEN K.	581		20140916		-43 Lang J. (ÖAV)
AT	VILTRAGEN K.	581	20140916	20150922		-27 Lang J. (ÖAV)
AT	W. TRIPP K.	539		20140827		9 Knittel A. (ÖAV)
AT	W. TRIPP K.	539	20140827	20150826		-22 Knittel A. (ÖAV)
AT	WASSERFALLWINKL	565		20140909		-12 Lieb G. K. (ÖAV)
AT	WASSERFALLWINKL	565	20140909	20150916		-33 Lieb G. K. (ÖAV)
AT	WAXEGG K.	590		20141020		-8 Friedrich R. (ÖAV)
AT	WAXEGG K.	590	20141020	20150829		-20 Friedrich R. (ÖAV)
AT	WEISSEE F.	523		20140917		-25 Noggler B. (ÖAV)
AT	WEISSEE F.	523	20140917	20151011		-24 Noggler B. (ÖAV)
AT	WILDGERLOS	587		20140921		-21 Slupetzky W. (ÖAV)
AT	WILDGERLOS	587	20140921	20150806		-14 Slupetzky W. (ÖAV)
AT	WINKL K.	537		20140827		-19 Knittel A. (ÖAV)
AT	WINKL K.	537	20140827	20150826		5 Knittel A. (ÖAV)
AT	WURTEN K.	545	20131008	20140929	tG	0 Binder D., Reisenhofer S. (ZAMG)
AT	ZETTALUNITZ/MULLWITZ K.	578		20140906		-2 Lang J. (ÖAV)
AT	ZETTALUNITZ/MULLWITZ K.	578	20140906	20150827		-30 Lang J. (ÖAV)
BO - Bolivia						
BO	ZONGO	1503	20130918	20150916	cC	-27 Soruco A. (UMSA), Rabatel A. (LGGE), Sicart J. (IRD), Condom T. (IRD), Ginot P. (IRD)
CH - Switzerland						
CH	ALBIGNA	1674	20130927	20140902	t	-15 Blum M. (GR-Forest)
CH	ALBIGNA	1674	20140902	20150904	t	-17 Keiser M. (GR-Forest)
CH	ALLALIN	394	20130904	20141002	a	-9 Bauder A. (VAV)
CH	ALLALIN	394	20141002	20150921	a	-16 Bauder A. (VAV)
CH	ALPETLI (KANDER)	439	20130921	20140923	t	-24 Burgener U. (BE-Forest)
CH	ALPETLI (KANDER)	439	20140923	20150929	t	-24 Burgener U. (BE-Forest)
CH	AMMERTEN	435	20130922	20140911	t	0 Hodel W. (private)
CH	AMMERTEN	435	20140911	20150920	t	-3 Hodel W. (private)
CH	AROLLA (BAS)	377	20131028	20140929	t	-15 Fellay F. (VS-Forest)

PU	GLACIER_NAME	WGMS_ID	FROM	TO	METHOD	FV	INVESTIGATORS_(SPONS_AGENCY)
CH	AROLLA (BAS)	377	20140929	20151021	t	-16	Fellay F. (VS-Forest)
CH	BASODINO	463	20120911	20140909	t	-9	Soldati M. (TI-Forest)
CH	BASODINO	463	20140909	20150929	t	-25	Soldati M. (TI-Forest)
CH	BIFERTEN	422	20130824	20141004	t	-49	Klauser H. (private)
CH	BIFERTEN	422	20141004	20151003	t	18	Klauser H. (private)
CH	BLUEMLISALP	436	20130923	20140924	t	-101	Burgener U. (BE-Forest)
CH	BLUEMLISALP	436	20140924	20150921	t	-39	Burgener U. (BE-Forest)
CH	BOVEYRE	459	20131017	20141017	t	-27	Medico J. (VS-Forest)
CH	BOVEYRE	459	20141017	20151019	t	-27	Medico J. (VS-Forest)
CH	BRENEY	368	20130921	20140903	t	-6	Chabloz J. (private)
CH	BRENEY	368	20140903	20150830	t	-35	Chabloz J. (private)
CH	BRESCIANA	465	20110912	20141003	t	-29	Soldati M. (TI-Forest)
CH	BRUNEGG	384	20140908	20151007	t	-22	Brigger A. (VS-Forest)
CH	BRUNNI	427	20090928	20140828	t	-4	Planzer M. (UR-Forest)
CH	BRUNNI	427	20140828	20150826	t	-4	Planzer M. (UR-Forest)
CH	CALDERAS	403	20130815	20140825	t	-3	Bott G. (GR-Forest)
CH	CALDERAS	403	20140825	20151005	t	-6	Godly G. (GR-Forest)
CH	CAMBRENA	399	20130926	20140930	t	-6	Berchier G. (GR-Forest)
CH	CAMBRENA	399	20140930	20150818	t	-7	Berchier G. (GR-Forest)
CH	CAVAGNOLI	464	20120910	20140911	t	0	Soldati M. (TI-Forest)
CH	CAVAGNOLI	464	20140911	20150930	t	-13	Soldati M. (TI-Forest)
CH	CHEILLON	375	20131008	20141031	t	-11	Bourdin O. (VS-Forest)
CH	CHEILLON	375	20141031	20150930	t	-15	Bourdin O. (VS-Forest)
CH	CORBASSIERE	366	20130813	20141002	a	-53	Bauder A. (VAW)
CH	CORBASSIERE	366	20141002	20150921	a	-24	Bauder A. (VAW)
CH	CORNO	468	20131002	20141020	t	-16	Soldati M. (TI-Forest)
CH	CORNO	468	20141020	20150901	t	-16	Soldati M. (TI-Forest)
CH	CROSLINA	1681	20120914	20140915	t	-2	Soldati M. (TI-Forest)
CH	CROSLINA	1681	20140915	20150928	t	-4	Soldati M. (TI-Forest)
CH	DAMMA	429	20130906	20140920	t	-9	Planzer M. (UR-Forest)
CH	DAMMA	429	20140920	20150922	t	-26	Planzer M. (UR-Forest)
CH	EIGER	442	20130920	20140915	t	-7	Zumstein R. (BE-Forest)
CH	EIGER	442	20140915	20150925	t	-12	Schai R. (BE-Forest)
CH	FEE NORTH	392	20130926	20140924	t	-21	Andenmatten U. (VS-Forest)
CH	FEE NORTH	392	20140924	20151002	t	-45	Andenmatten U. (VS-Forest)
CH	FERPECLE	379	20131025	20141009	t	-13	Fellay F. (VS-Forest)
CH	FERPECLE	379	20141009	20151022	t	-25	Fellay F. (VS-Forest)
CH	FIESCHER	471	20121109	20150828	a	-210	Bauder A. (VAW)
CH	FINDELEN	389	20130820	20140827	a	-33	Bauder A. (VAW)
CH	FINDELEN	389	20140827	20150805	a	-62	Bauder A. (VAW)
CH	FIRNALPELI	424	20120925	20140828	t	8	Meier M. (OW-Forest)
CH	FIRNALPELI	424	20140828	20150910	t	0	Jäggi M. (OW-Forest)
CH	FORNO	396	20130909	20140904	t	-15	Blum M. (GR-Forest)
CH	FORNO	396	20140904	20150902	t	-35	Keiser M. (GR-Forest)
CH	GAMCHI	440	20130928	20140927	t	-50	Descloux R. (BE-Forest)
CH	GAMCHI	440	20140927	20151001	t	-387	Descloux R. (BE-Forest)
CH	GAULI	449	20130921	20140912	t	-51	Rohrer D. (BE-Forest)
CH	GAULI	449	20140912	20150921	t	-13	Rohrer D. (BE-Forest)
CH	GIETRO	367	20130904	20141002	a	-7	Bauder A. (VAW)
CH	GIETRO	367	20141002	20150921	a	-17	Bauder A. (VAW)
CH	GLAERNISCH	418	20130817	20140906	t	-7	Klauser H. (private)
CH	GLAERNISCH	418	20140906	20150929	t	-34	Klauser H. (private)
CH	GORNER	391	20131021	20141003	t	-30	Walther S. (VS-Forest)
CH	GORNER	391	20141003	20150921	t	-72	Walther S. (VS-Forest)
CH	GRAND DESERT	373	20130922	20140920	t	-6	Vouillamoz F. (VS-Forest)
CH	GRAND DESERT	373	20140920	20150919	t	-13	Vouillamoz F. (VS-Forest)
CH	GRAND PLAN NEVE	455	20130927	20140912	t	-4	Marlétaz J. (VD-Forest)
CH	GRAND PLAN NEVE	455	20140912	20151002	t	-12	Marlétaz J. (VD-Forest)
CH	GRIES	359	20130821	20140923	a	-38	Bauder A. (VAW)
CH	GRIES	359	20140923	20150831	a	-42	Bauder A. (VAW)
CH	GRIESS (KLAUSEN)	425	20130925	20141003	t	-8	Annen B. (UR-Forest)
CH	GRIESS (KLAUSEN)	425	20141003	20151001	t	-13	Annen B. (UR-Forest)
CH	GRIESSEN (OBWALDEN)	423	20120923	20140819	t	-8	Meier M. (OW-Forest)
CH	GRIESSEN (OBWALDEN)	423	20140819	20151002	t	-15	Jäggi M. (OW-Forest)
CH	GROSSER ALETSCHE	360	20130821	20140822	a	-32	Bauder A. (VAW)
CH	GROSSER ALETSCHE	360	20140822	20150826	a	-54	Bauder A. (VAW)
CH	HINTERSULZFIRN	419	20131002	20141009	t	-8	Schaller M. (GL-Forest)
CH	HINTERSULZFIRN	419	20141009	20151012	t	6	Kamm S. (GL-Forest)
CH	HOHLAUB	3332	20130904	20141002	a	-2	Bauder A. (VAW)
CH	HOHLAUB	3332	20141002	20150921	a	-4	Bauder A. (VAW)
CH	KALTWASSER	363	20130926	20140926	t	-14	Schmidhalter M. (VS-Forest)
CH	KALTWASSER	363	20140926	20150930	t	-6	Schmidhalter M. (VS-Forest)
CH	KEHLEN	431	20130905	20140919	t	-303	Planzer M. (UR-Forest)
CH	KEHLEN	431	20140919	20150921	t	-31	Planzer M. (UR-Forest)
CH	KESSIEN	393	20130904	20141002	a	-4	Bauder A. (VAW)
CH	KESSIEN	393	20141002	20150921	a	-3	
CH	LAEMMERN (WILDSTRUBEL)	437	20130914	20140929	t	-12	Coleman Brantschen E. (BE-Forest)
CH	LAEMMERN (WILDSTRUBEL)	437	20140929	20150911	t	-16	Coleman Brantschen E. (BE-Forest)
CH	LANG	386	20131009	20140904	t	-14	Henzen H. (VS-Forest)
CH	LANG	386	20140904	20151110	t	-16	Henzen H. (VS-Forest)
CH	LAVAZ	416	20130830	20140917	t	-3	Lutz R. (GR-Forest)
CH	LAVAZ	416	20140917	20150821	t	-16	Lutz R. (GR-Forest)
CH	LENTA	414	20130830	20140829	t	-34	Riedi B. (GR-Forest)
CH	LIMMERN	421	20130925	20141005	t	-21	Steinberger U. (private)
CH	LIMMERN	421	20141005	20150930	t	-10	Steinberger U. (private)
CH	LISCHANA	400	20130815	20150915	t	-128	Feuerstein G. (GR-Forest)
CH	MOIRY	380	20131025	20140912	t	-6	Stoebener P. (VS-Forest)
CH	MOIRY	380	20140912	20150923	t	-30	
CH	MOMING	381	20131025	20141006	t	-8	Stoebener P. (VS-Forest)
CH	MOMING	381	20141006	20150929	t	-4	Stoebener P. (VS-Forest), Chevalier G. (VS-Forest)
CH	MONT DURAND	369	20140912	20150827	t	-5	Chabloz J. (private)
CH	MONT MINE	378	20131025	20141009	t	-15	Fellay F. (VS-Forest)
CH	MONT MINE	378	20141009	20151022	t	-14	Fellay F. (VS-Forest)
CH	MORTERATSCH	1673	20131003	20141013	t	-22	Bott G. (GR-Forest)
CH	MORTERATSCH	1673	20141013	20151017	t	-164	Godly G. (GR-Forest)
CH	OBBERER GRINDELWALD	444	20130923	20140923	a	-12	Bauder A. (VAW)

Table 2

PU	GLACIER_NAME	WGMS_ID	FROM	TO	METHOD	FV	INVESTIGATORS_(SPONS_AGENCY)
CH	OBERER GRINDELWALD	444	20140923	20150805	a	2	Bauder A. (VAW)
CH	OTEMMA	370	20130920	20140908	t	-33	Chabloz J. (private)
CH	OTEMMA	370	20140908	20150829	t	-24	Chabloz J. (private)
CH	PALUE	398	20130925	20140929	t	-1	Berchier G. (GR-Forest)
CH	PALUE	398	20140929	20150925	t	-24	Berchier G. (GR-Forest)
CH	PANEYROSSE	456	20130928	20140917	t	-9	Marlétaz J. (VD-Forest)
CH	PANEYROSSE	456	20140917	20150930	t	-7	Marlétaz J. (VD-Forest)
CH	PARADIES	412	20130911	20140909	t	2	Fisler C. (GR-Forest)
CH	PARADIES	412	20140909	20151005	t	-24	Fisler C. (GR-Forest)
CH	PARADISINO (CAMPO)	397	20130926	20140930	t	-8	Berchier G. (GR-Forest)
CH	PARADISINO (CAMPO)	397	20140930	20150928	t	-17	Berchier G. (GR-Forest)
CH	PIZOL	417	20131009	20141007	t	1	Brandes T. (SG-Forest)
CH	PIZOL	417	20141007	20151009	t	-10	
CH	PLATTALVA	420	20130924	20141005	t	-18	Steinegger U. (private)
CH	PLATTALVA	420	20141005	20151001	t	-20	Steinegger U. (private)
CH	PORCHABELLA	410	20130911	20140923	t	-11	Bearth T. (GR-Forest)
CH	PORCHABELLA	410	20140923	20150909	t	-15	Bearth T. (GR-Forest)
CH	PRAPIO	453	20130927	20140927	t	5	Binggeli J. (VD-Forest)
CH	PRAPIO	453	20140927	20150827	t	-1	Binggeli J. (VD-Forest)
CH	PUNTEGLIAS	415	20130920	20140916	t	-1	Buchli C. (GR-Forest)
CH	PUNTEGLIAS	415	20140916	20150922	t	-27	Buchli C. (GR-Forest)
CH	RAETZLI (PLAINE MORTE)	434	20140923	20150805	a	-4	Bauder A. (VAW)
CH	RHONE	473	20130923	20140923	a	-28	Bauder A. (VAW)
CH	RHONE	473	20140923	20150805	a	-6	Bauder A. (VAW)
CH	RIED	387	20140914	20151010	t	-30	Rovina P. (VS-Forest)
CH	ROSEG	406	20130910	20141016	t	-40	Bott G. (GR-Forest)
CH	ROSEG	406	20141016	20151014	t	4	Godly G. (GR-Forest)
CH	ROTFIRN NORD	430	20130905	20140919	t	-22	Planzer M. (UR-Forest)
CH	ROTFIRN NORD	430	20140919	20150921	t	-14	Planzer M. (UR-Forest)
CH	SALEINA	458	20131016	20140918	t	-30	Medico J. (VS-Forest)
CH	SALEINA	458	20140918	20151001	t	-29	Medico J. (VS-Forest)
CH	SANKT ANNA	432	20130906	20140926	t	-9	Eggimann L. (UR-Forest)
CH	SANKT ANNA	432	20140926	20151002	t	-13	Eggimann L. (UR-Forest)
CH	SARDONA	407	20130925	20140929	t	-10	Brandes T. (SG-Forest)
CH	SARDONA	407	20140929	20150929	t	-19	Nigg S. (SG-Forest)
CH	SCALETTA	1680	20130907	20140908	t	0	Teufen B. (private)
CH	SCHWARZ	438	20120928	20140930	t	-959	Coleman Brantschen E. (BE-Forest)
CH	SCHWARZ	438	20140930	20150912	t	-100	Coleman Brantschen E. (BE-Forest)
CH	SCHWARZBERG	395	20130904	20141002	a	-16	Bauder A. (VAW)
CH	SCHWARZBERG	395	20141002	20150921	a	-23	Bauder A. (VAW)
CH	SEEWJINEN	3333	20130904	20141002	a	-1	Bauder A. (VAW)
CH	SEEWJINEN	3333	20141002	20150921	a	-13	Bauder A. (VAW)
CH	SESVENNA	401	20130821	20140825	t	-6	Feuerstein G. (GR-Forest)
CH	SESVENNA	401	20140825	20150821	t	-15	Feuerstein G. (GR-Forest)
CH	SEX ROUGE	454	20130904	20140911	t	1	Binggeli J. (VD-Forest)
CH	SEX ROUGE	454	20140911	20150806	t	-4	Binggeli J. (VD-Forest)
CH	SILVRETTA	408	20130822	20140927	a	-7	Bauder A. (VAW)
CH	SILVRETTA	408	20140927	20150807	a	-7	Bauder A. (VAW)
CH	STEIN	448	20130922	20140907	t	-88	Rohrer D. (BE-Forest)
CH	STEIN	448	20140907	20150913	t	-99	Rohrer D. (BE-Forest)
CH	STEINLIMMI	447	20130922	20140907	t	-89	Rohrer D. (BE-Forest)
CH	STEINLIMMI	447	20140907	20150913	t	-39	Rohrer D. (BE-Forest)
CH	SURETTA	411	20130920	20140930	t	-9	Fisler C. (GR-Forest)
CH	SURETTA	411	20140930	20150908	t	0	Fisler C. (GR-Forest)
CH	TIATSCHA	402	20130823	20140911	t	-36	Bott G. (GR-Forest)
CH	TIATSCHA	402	20140927	20150807	a	-1	Bauder A. (VAW)
CH	TIEFEN	433	20130922	20140926	t	-30	Eggimann L. (UR-Forest)
CH	TIEFEN	433	20140926	20151002	t	-37	Eggimann L. (UR-Forest)
CH	TORTIN GLACIER DE (MONT FORT)	372	20131009	20140928	t	-17	Vouillamoz F. (VS-Forest)
CH	TORTIN GLACIER DE (MONT FORT)	372	20140928	20150927	t	-15	Vouillamoz F. (VS-Forest)
CH	TRIENT	457	20130922	20140906	t	-41	Ehinger J. (private)
CH	TRIENT	457	20140906	20150927	t	-4	Ehinger J. (private)
CH	TRIFT (GADMEN)	446	20130822	20140923	a	1	Bauder A. (VAW)
CH	TRIFT (GADMEN)	446	20140923	20150805	a	-3	Bauder A. (VAW)
CH	TSANFLEURON	371	20131022	20141002	t	-19	Fellay F. (VS-Forest)
CH	TSANFLEURON	371	20141002	20151023	t	-20	Fellay F. (VS-Forest)
CH	TSCHIERVA	405	20130910	20141016	t	-67	Bott G. (GR-Forest)
CH	TSCHIERVA	405	20141016	20151014	t	-28	Godly G. (GR-Forest)
CH	TSCHINGEL	441	20130926	20140916	t	-14	Zumstein R. (BE-Forest)
CH	TSCHINGEL	441	20140916	20150922	t	-8	Schai R. (BE-Forest)
CH	TSEUDET	364	20131017	20141014	t	-14	Medico J. (VS-Forest)
CH	TSEUDET	364	20141014	20151019	t	-11	Medico J. (VS-Forest)
CH	TSIDIJORE NOUVE	376	20131028	20140929	t	-8	Fellay F. (VS-Forest)
CH	TSIDIJORE NOUVE	376	20140929	20151021	t	-10	Fellay F. (VS-Forest)
CH	TURTMANN (WEST)	385	20140908	20151007	t	-133	Brigger A. (VS-Forest)
CH	UNTERER GRINDELWALD	443	20130923	20140923	a	-472	Bauder A. (VAW)
CH	UNTERER GRINDELWALD	443	20140923	20150805	a	-450	Bauder A. (VAW)
CH	VALLEGGIA	467	20120918	20140911	t	-6	Soldati M. (TI-Forest)
CH	VALLEGGIA	467	20140911	20150930	t	-5	Soldati M. (TI-Forest)
CH	VALSOREY	365	20131017	20141014	t	-19	Medico J. (VS-Forest)
CH	VALSOREY	365	20141014	20151019	t	-19	Medico J. (VS-Forest)
CH	VERSTANKLA	409	20130830	20140904	t	-9	Oertig D. (GR-Forest)
CH	VERSTANKLA	409	20140904	20150828	t	-18	Oertig D. (GR-Forest)
CH	VORAB	413	20130920	20140930	t	-10	Kalberer M. (GR-Forest)
CH	VORAB	413	20140930	20151009	t	-18	Kalberer M. (GR-Forest)
CH	WALLENBUR	428	20131008	20141002	t	-43	Kläger P. (UR-Forest)
CH	WALLENBUR	428	20141002	20150929	t	-30	Kläger P. (UR-Forest)
CH	ZINAL	382	20120916	20140912	t	-30	Stoebener P. (VS-Forest)
CH	ZINAL	382	20140912	20151012	t	-10	Chevalier G. (VS-Forest)
CL - Chile							
CL	AMARILLO	3905	20140305	20150399	sM	-14	Cabrera G. (IANIGLA)
CL	GUANACO	3983	20149999	20140314	sC	-3	Rivera A. (CECS)
CL	MELIMOYU ESTE	4434	19769999	20149999	sP	-1152	

PU	GLACIER_NAME	WGMS_ID	FROM	TO	METHOD	FV	INVESTIGATORS_(SPONS_AGENCY)
CN - China							
CN	PARLUNG NO. 94	3987	20130622	20141002	tG	-19	Li S. (CAS/ITPR), Yang W. (CAS/ITPR)
CN	PARLUNG NO. 94	3987		20159999	tG	-X	Li S. (CAS/ITPR), Yang W. (CAS/ITPR)
CN	URUMQI GLACIER NO. 1	853	20130829	20140831	tG	-8	Wang P. (CAREERI), Xu C. (CAREERI)
CN	URUMQI GLACIER NO. 1	853	20140903	20150828	tG	-8	Wang P. (CAREERI), Xu C. (CAREERI)
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20130829	20140831	tG	-8	Wang P. (CAREERI), Xu C. (CAREERI)
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20140903	20150828	tG	-8	Wang P. (CAREERI), Xu C. (CAREERI)
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20130829	20140831	tG	-4	Wang P. (CAREERI), Xu C. (CAREERI)
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20140903	20150828	tG	-4	Wang P. (CAREERI), Xu C. (CAREERI)
CO - Colombia							
CO	CONEJERAS	2721	20161130	20161130	tM	0	Ceballos Lievano J. (IDEAM)
CO	RITACUBA BLANCO	2763	20161130	20161130	tM	0	Ceballos Lievano J. (IDEAM)
CO	RITACUBA BLANCO	2763	20161130	20161130	tM	0	Ceballos Lievano J. (IDEAM)
EC - Ecuador							
EC	ANTIZANA15ALPHA	1624	20140111	20150801	tG	-7	Cáceres Correa B. (INAMHI)
ES - Spain							
ES	MALADETA	942	20130925	20140926	t	0	Cobos G. (UPV)
ES	MALADETA	942	20140926	20151023	cC	-25	Cobos G. (UPV)
FR - France							
FR	ARGENTIERE	354	20150915	20130913		-34	Vincent C. (CNRS), Six D. (CNRS)
FR	BLANC	351	20130912	20141001		0	Thibert E. (IRSTEA)
FR	BLANC	351	20141001	20150930		-10	Thibert E. (IRSTEA)
FR	BOSSONS	355	20130915	20140915		0	Vincent C. (CNRS), Six D. (CNRS)
FR	BOSSONS	355	20140915	20150915		-3	Six D. (CNRS), Vincent C. (CNRS)
FR	MER DE GLACE	353	20130914	20140903		-46	Vincent C. (CNRS), Six D. (CNRS)
FR	MER DE GLACE	353	20140903	20150915		-37	Six D. (CNRS), Vincent C. (CNRS)
FR	OSSOUE	2867	20131006	20141011	tG	0	René P. (AM)
FR	OSSOUE	2867	20141011	20151010	cC	-24	René P. (AM)
FR	SAINT SORLIN	356	20132108	20150824		-44	Six D. (CNRS), Vincent C. (CNRS)
FR	TRE LA TETE	1314	20129999	20149999		-182	Moreau L. (GLACIOLAB)
GE - Georgia							
GE	ABANO	767	19899999	20141015	sG	-1500	Tielidze L. (SRNSF)
GE	ADISHI	4551	19899999	20141015	sG	-533	Tielidze L. (SRNSF)
GE	BOKO	4560	19899999	20141015	sG	-683	Tielidze L. (SRNSF)
GE	BUBA	4561	19899999	20141015	sG	-229	Tielidze L. (SRNSF)
GE	CHACHI	765	19899999	20141015	sG	-326	Tielidze L. (SRNSF)
GE	CHALAATI	1110	19899999	20141015	sG	-655	Tielidze L. (SRNSF)
GE	CHANCHAKHI	4562	19899999	20141015	sG	-985	Tielidze L. (SRNSF)
GE	DEVORAKI NORTH	766	19899999	20141015	sG	-800	Tielidze L. (SRNSF)
GE	DOLRA	4543	19899999	20141015	sG	-717	Tielidze L. (SRNSF)
GE	EDENA BIGGER	4556	19899999	20141015	sG	-1025	Tielidze L. (SRNSF)
GE	GERGETI	768	19899999	20141015	sG	-910	Tielidze L. (SRNSF)
GE	GULI	4545	19899999	20141015	sG	-635	Tielidze L. (SRNSF)
GE	KHALDE	4552	19899999	20141015	sG	-296	Tielidze L. (SRNSF)
GE	KIBESHA	772	19899999	20141015	sG	-617	Tielidze L. (SRNSF)
GE	KIRTISHO	4559	19899999	20141015	sG	-466	Tielidze L. (SRNSF)
GE	KORULDASHI	783	19899999	20141015	sG	-555	Tielidze L. (SRNSF)
GE	KVITLODI	4549	19899999	20141015	sG	-1291	Tielidze L. (SRNSF)
GE	LABODA	4558	19899999	20141015	sG	-265	Tielidze L. (SRNSF)
GE	LAILA	4555	19899999	20141015	sG	-1145	Tielidze L. (SRNSF)
GE	LEADASHTI NORTH	4541	19899999	20141015	sG	-910	Tielidze L. (SRNSF)
GE	LEKHZIRI	1111	19899999	20141015	sG	-1450	Tielidze L. (SRNSF)
GE	MARUKHI SOUTH	4537	19899999	20141015	sG	-526	Tielidze L. (SRNSF)
GE	MNA	769	19899999	20141015	sG	-1571	Tielidze L. (SRNSF)
GE	NAMKVANI	4554	19899999	20141015	sG	-740	Tielidze L. (SRNSF)
GE	PSISHI	4536	19899999	20141015	sG	-391	Tielidze L. (SRNSF)
GE	SAKENI	4539	19899999	20141015	sG	-790	Tielidze L. (SRNSF)
GE	SHDAVLERI	4540	19899999	20141015	sG	-377	Tielidze L. (SRNSF)
GE	SHKHARA	4553	19899999	20141015	sG	-311	Tielidze L. (SRNSF)
GE	SOPRUJU SOUTH	4538	19899999	20141015	sG	-102	Tielidze L. (SRNSF)
GE	SUATISI CENTRAL	770	19899999	20141015	sG	-755	Tielidze L. (SRNSF)
GE	SUATISI EASTERN	4564	19899999	20141015	sG	-555	Tielidze L. (SRNSF)
GE	SUATISI WESTERN	4563	19899999	20141015	sG	-651	Tielidze L. (SRNSF)
GE	TBILISA	724	19899999	20141015	sG	-476	Tielidze L. (SRNSF)
GE	TSANERI SOUTH	4550	19899999	20141015	sG	-1195	Tielidze L. (SRNSF)
GE	USHBA SOUTH	773	19899999	20141015	sG	-734	Tielidze L. (SRNSF)
GE	ZOPKHITO	4557	19899999	20141015	sG	-714	Tielidze L. (SRNSF)
GL - Greenland							
GL	MITTIVAKKAT	1629	20139999	20149999		-14	Knudsen N. (DESA)
IS - Iceland							
IS	BAEGISARJOKULL	3059	20100901	20150910	tG	SN	Helgason J. (IGS-IMO)
IS	BLAGNIPJOKULL	3130	20131019	20141103	tG	-11	Haraldsson E. (IGS-IMO)
IS	BROKARJOKULL	3066	20131019	20151026	tG	-53	Pálsson B. (IGS-IMO)
IS	FALLJOKULL	3071	20131020	20142010	tG	-40	Þorlákssdóttir S. (IGS-IMO)
IS	FALLJOKULL	3071	20141020	20151027	tG	-110	Þorlákssdóttir S. (IGS-IMO)
IS	FLAAJOKULL	3078	20139999	20149999	tG	-10	Pálsson B. (IGS-IMO)
IS	FLAAJOKULL	3078	20141020	20151015	tG	-79	Pálsson B. (IGS-IMO)
IS	FLAAJOKULL E 148	3076	20131018	20141019	tG	-16	Pálsson B. (IGS-IMO)
IS	FLAAJOKULL E 148	3076	20141019	20151015	tG	-6	Pálsson B. (IGS-IMO)
IS	GEITLANDSJOKULL	3128	20130928	20140906	tG	-41	Kristinsson B. (IGS-IMO)
IS	GEITLANDSJOKULL	3128	20140906	20150906	tG	SN	Kristinsson B. (IGS-IMO)
IS	GLJUFURARJOKULL	3080	20130907	20140913	tG	SN	Hjartarson K. (IGS-IMO)
IS	HAGAFELLSJOKULL W	3082	20130928	20151018	tG	-109	Sigurðsson E. (IGS-IMO)
IS	HEINABERGSJOKULL	3085	20121024	20151125	tG	-175	Guðmundsson E. (IGS-IMO)
IS	HEINABERGSJOKULL H	3084	20139999	20149999	tG	-42	
IS	HEINABERGSJOKULL H	3084	20141023	20151125	tG	53	Guðmundsson E. (IGS-IMO)
IS	HYRNINGSJOKULL	3092	20130904	20140903	tG	-30	Haraldsson H. (IGS-IMO)
IS	HYRNINGSJOKULL	3092	20140903	20150917	tG	SN	Haraldsson H. (IGS-IMO)

Table 2

PU	GLACIER_NAME	WGMS_ID	FROM	TO	METHOD	FV INVESTIGATORS (SPONS_AGENCY)
IS	JOKULHALS	3093	20130904	20140903	tG	-156 Haraldsson H. (IGS-IMO)
IS	JOKULHALS	3093	20140903	20150917	tG	SN Haraldsson H. (IGS-IMO)
IS	KALDALONSIJOKULL	3095	20130906	20140904	tG	SN Adalsteinsson I. (IGS-IMO)
IS	KALDALONSIJOKULL	3095	20140904	20150911	tG	SN Matthiasson V. (IGS-IMO)
IS	KIRKJUIJOKULL	3129	20131019	20141103	tG	-32 Haraldsson E. (IGS-IMO)
IS	KOTLUJOKULL	3132	20131008	20140928	tG	0 Jensson S. (IGS-IMO)
IS	KVERKJOKULL	3097	20100914	20150902	tG	115 Þorláksson D. (IGS-IMO)
IS	LAMBAHRAUNSIJOKULL	3099	20130928	20140907	tG	-28 Skúlason B. (IGS-IMO)
IS	LAMBAHRAUNSIJOKULL	3099	20140907	20150927	tG	SN Kárason V. (IGS-IMO)
IS	MORSARJOKULL	3104	20130928	20140920	tG	-7 Kristjánsson R. (IGS-IMO)
IS	MORSARJOKULL	3104	20140907	20150907	tG	-75 Kristjánsson R. (IGS-IMO)
IS	MULAJOKULL S	3105	20131012	20140913	tG	-35 Jónsson L. (IGS-IMO)
IS	MULAJOKULL S	3105	20140913	20150926	tG	-35 Jónsson L. (IGS-IMO)
IS	MULAJOKULL W	3106	20130920	20140913	tG	-7 Jónsson L. (IGS-IMO)
IS	MULAJOKULL W	3106	20140913	20150926	tG	-5 Jónsson L. (IGS-IMO)
IS	NAUTHAGAJOKULL	3107	20130920	20140913	tG	-14 Jónsson L. (IGS-IMO)
IS	NAUTHAGAJOKULL	3107	20140913	20150926	tG	-5 Jónsson L. (IGS-IMO)
IS	REYKJAFJARDARJOKULL	3109	20130818	20140920	tG	-25 Jóhannesson P. (IGS-IMO)
IS	REYKJAFJARDARJOKULL	3109	20140920	20150919	tG	-7 Jóhannesson P. (IGS-IMO)
IS	RJUPNABREKKUJOKULL	3136	20101309	20150912	tG	-159
IS	SATUJOKULL	3110	20130928	20141011	tG	-35 Skúlason B. (IGS-IMO)
IS	SATUJOKULL	3110	20141011	20150927	tG	34 Kárason V. (IGS-IMO)
IS	SKAFTAFELLSJOKULL	3113	20130928	20141020	tG	-65 Kristjánsson R. (IGS-IMO)
IS	SKAFTAFELLSJOKULL	3113	20141020	20151026	tG	-20 Þorlákssdóttir S. (IGS-IMO)
IS	SKEIDARARJOKULL E1	3116	20130928	20140921	tG	-89 Kristjánsson R. (IGS-IMO)
IS	SKEIDARARJOKULL E1	3116	20140921	20150907	tG	85 Kristjánsson R. (IGS-IMO)
IS	SKEIDARARJOKULL E2	3117	20130928	20140921	tG	-2 Kristjánsson R. (IGS-IMO)
IS	SKEIDARARJOKULL E2	3117	20140921	20150907	tG	80 Kristjánsson R. (IGS-IMO)
IS	SKEIDARARJOKULL E3	3118	20130928	20140922	tG	-91 Kristjánsson R. (IGS-IMO)
IS	SKEIDARARJOKULL E3	3118	20140922	20151017	tG	12 Kristjánsson R. (IGS-IMO)
IS	SKEIDARARJOKULL W	3119	20131124	20141029	tG	-180 Jónsson H. (IGS-IMO)
IS	SOLHEIMAJOKULL W	3122	20131012	20141018	tG	-115 Gunnlaugsson E. (IGS-IMO)
IS	SOLHEIMAJOKULL W	3122	20141018	20151017	tG	-58 Gunnlaugsson E. (IGS-IMO)
IS	SVINAFELLSJOKULL	3124	20131022	20141017	tG	2 Þorlákssdóttir S. (IGS-IMO)
IS	SVINAFELLSJOKULL	3124	20141017	20151026	tG	0 Þorlákssdóttir S. (IGS-IMO)
IS	TUNGNAARJOKULL	3126	20131026	20141109	tG	-101 Hilmarsson S. (IGS-IMO)
IS	TUNGNAARJOKULL	3126	20141109	20151003	tG	-49 Hilmarsson S. (IGS-IMO)
IT - Italy						
IT	AGNELLO MER.	684	20120908	20150826	tG	-12 Tron M. (CGI)
IT	ALTA (VEDRETTA) / HOHENF.	632	20131003	20140831	tG	-6 Perini G. (CGI), Saccon G. (CGI)
IT	ALTA (VEDRETTA) / HOHENF.	632	20140831	20150828	tG	-15 Perini G. (CGI)
IT	ANTELAO SUP.	643	20130822	20141020	tG	-5 Perini G. (CGI)
IT	ANTELAO SUP.	643	20141020	20150812	tG	-3 Perini G. (CGI)
IT	AQUILLE	1239	20130906	20140922	tG	-7 Nicolino M. (CGI), Chevrère R. (CGI)
IT	AQUILLE	1239	20140922	20150921	tG	-12 Nicolino M. (CGI), Chevrère R. (CGI)
IT	ARGUEREY MER.	1253	20110927	20140828	tG	-29 Chiarle M. (CGI), Nigrelli G. (CGI)
IT	ARGUEREY MER.	1253	20140828	20150827	tG	-35 Chiarle M. (CGI), Nigrelli G. (CGI)
IT	ARGUEREY SETT.	1254	20110927	20140828	tG	-2 Chiarle M. (CGI), Nigrelli G. (CGI)
IT	ARGUEREY SETT.	1254	20140828	20150827	tG	-X Chiarle M. (CGI), Nigrelli G. (CGI)
IT	BASEI	611	20110927	20140828	tG	0 Fornengo F. (CGI), Alberto P. (CGI)
IT	BASEI	611	20140828	20150828	tG	-5 Fornengo F. (CGI), Alberto P. (CGI)
IT	BASSA DELL' ORTLES / ORTLERF. NIEDERER	1128	20130817	20140908	tG	-25 Barison G. (SGAA), Seppi R. (SGAA), Peer L. (SGAA)
IT	BASSA DELL' ORTLES / ORTLERF. NIEDERER	1128	20140908	20150804	tG	-19 Barison G. (SGAA), Seppi R. (SGAA), Sampieri R. (SGAA)
IT	BELVEDERE (MACUGNAGA)	618	20130921	20141019	tG	-17 Tamburini A. (CGI), Walter A. (CGI), Versaci S. (CGI), Mortara G. (CGI)
IT	BELVEDERE (MACUGNAGA)	618	20141019	20150925	tG	-1 Tamburini A. (CGI), Walter A. (CGI), Versaci S. (CGI), Mortara G. (CGI)
IT	BERTA	1295	20130829	20140828	tG	0 Rogliardo F. (CGI)
IT	BERTA	1295	20140828	20150826	tG	0 Rogliardo F. (CGI)
IT	BESSANESE	1297	20130905	20140903	tG	-2 Rogliardo F. (CGI)
IT	BESSANESE	1297	20140903	20150915	tG	-4 Rogliardo F. (CGI)
IT	BORS	2453	20110902	20150831	tG	0 Piccini P. (CGI), Cilenti R. (CGI)
IT	BREUIL SETT.	1256	20140821	20150821	tG	-9 Viotti A. (CGI), Chiarle M. (CGI)
IT	BROGLIO	2375	20121001	20151012	tG	-28 Miravalle R. (CGI)
IT	CALDERONE	1107	20130914	20140913	tR	0 Pecci M. (CGI), Pecci M. (ITAC)
IT	CALDERONE	1107	20140913	20150912	xX	0 Pecci M. (CGI), Pecci M. (ITAC), d'Aquila P. (CNSAS), Cappelletti D. (CGI), Caira T. (ITAC), Iurisci C. (ITAC)
IT	CAPRA	1304	20130919	20140821	tG	-6 Bertoglio V. (CGI), Vergnano G. (CGI)
IT	CAPRA	1304	20140821	20150817	tG	-15 Bertoglio V. (CGI), Cerrato C. (CGI)
IT	CARRO OCCIDENT.	2358	20120921	20140913	tG	0 Bertoglio V. (CGI), Vergnano G. (CGI)
IT	CARRO OCCIDENT.	2358	20140913	20150821	tG	-4 Bertoglio V. (CGI), Vergnano G. (CGI)
IT	CASPOGGIO	628	20130914	20140914	tG	-3 Alberti S. (SGL)
IT	CASPOGGIO	628	20140914	20150920	tG	-7 Alberti S. (SGL)
IT	CASSANDRA OR.	1185	20130920	20141002	tG	4 De Zaiacono M. (SGL)
IT	CASSANDRA OR.	1185	20141002	20150930	tG	-4 De Zaiacono M. (SGL)
IT	CASTELLI OR.	1162	20090906	20140921	tG	-63 Rocca P. (SGL)
IT	CEDEC	1165	20130906	20140920	tG	-5 Colombarolli D. (SGL)
IT	CEDEC	1165	20140920	20151001	tG	-20 Colombarolli D. (SGL), Fioletti M. (SGL)
IT	CEVEDALE FORCOLA / FUERKELEF.	663	20130901	20140831	tG	-54 Perini G. (CGI), Saccon G. (CGI)
IT	CEVEDALE FORCOLA / FUERKELEF.	663	20140831	20150828	tG	-39 Perini G. (CGI)
IT	CEVEDALE PRINCIPALE / ZUFALLF.	662	20130901	20140831	tG	-20 Perini G. (CGI), Saccon G. (CGI)
IT	CEVEDALE PRINCIPALE / ZUFALLF.	662	20140831	20150828	tG	-16 Perini G. (CGI)
IT	CHATEAU BLANC	1251	20140927	20150827	tG	-4 Perona S. (CGI)
IT	CIAMARELLA	1298	20130904	20140902	tG	-2 Rogliardo F. (CGI)
IT	CIAMARELLA	1298	20140902	20150920	tG	-8 Rogliardo F. (CGI)
IT	CIARDONEY	1264	20130913	20140922	cC	0 Mercalli L. (SMI), Cat Berro D. (SMI)
IT	CIARDONEY	1264	20140922	20150915	cC	-24 Mercalli L. (SMI), Berro D. (SMI), Fornengo F. (SMI)
IT	COL DELLA MARE I	1167	20090912	20140830	tG	-7 Cola G. (SGL)
IT	COUPE DE MONEY	1271	20130913	20140906	tG	-4 Bertoglio V. (CGI), Borre P. (CGI)
IT	COUPE DE MONEY	1271	20140906	20150924	tG	-10 Bertoglio V. (CGI), Borre P. (CGI)
IT	CRODA ROSSA / ROTWANDF.	654	20131003	20140919	tG	-4 Benetton S. (CGI)
IT	CRODA ROSSA / ROTWANDF.	654	20140919	20150928	tG	-4 Benetton S. (CGI), Benetton G. (CGI)
IT	DISGRAZIA	2503	20130914	20140913	tG	0 Neri G. (SGL)
IT	DISGRAZIA	2503	20140913	20150912	tG	-5 Neri G. (SGL)
IT	DOSDE OR.	625	20120908	20140913	tG	-31 Pagliardi P. (SGL), Toffaletti A. (SGL)
IT	DOSDE OR.	625	20140913	20150913	tG	-16 Toffaletti A. (SGL)
IT	DOSEGU	668	20130830	20140827	tG	-5 Borghi A. (SGL)

PU	GLACIER_NAME	WGMS_ID	FROM	TO	METHOD	FV	INVESTIGATORS_(SPONS_AGENCY)
IT	DOSEGU	668	20140827	20150920	tG	-20	Borghi A. (SGL)
IT	DZASSET	2372	20130914	20140907	tG	-3	Bertoglio V. (CGI), Borre P. (CGI)
IT	DZASSET	2372	20140907	20150925	tG	-4	Bertoglio V. (CGI), Borre P. (CGI), Gerard Y. (CGI)
IT	ENTRELOSETT.	2377	20130921	20140916	tG	0	Rossotto A. (CGI), Peretti F. (CGI)
IT	ENTRELOSETT.	2377	20140916	20150909	tG	-11	Rossotto A. (CGI), Peretti F. (CGI)
IT	FOND OCCID.	2380	20130914	20140831	tG	0	Pollicini F. (CGI), Borney S. (CGI)
IT	FOND OCCID.	2380	20140831	20150907	tG	-6	Pollicini F. (CGI), Borney S. (CGI)
IT	FOND OR.	1243	20130914	20140831	tG	-1	Pollicini F. (CGI), Borney S. (CGI)
IT	FOND OR.	1243	20140831	20150907	tG	-8	Pollicini F. (CGI), Borney S. (CGI)
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	20141004	20150829	tG	-10	Barison G. (SGAA), Seppi R. (SGAA), Sartori G. (SGAA), Arervo B. (SGAA)
IT	FORNI	670	20130908	20140904	tG	-26	Cola G. (SGL)
IT	FORNI	670	20140904	20150928	tG	-59	Cola G. (SGL)
IT	FORNO	2478	20070920	20150920	tG	-93	Valisa P. (SGL)
IT	FOURNEAUX	1294	20070909	20140914	tG	-2	Tron M. (SGL)
IT	FRANE (VEDR. DELLE) / STEINSLAGF.	2624	20130924	20141003	tG	-4	Greco G. (SGAA), Le Pera L. (SGAA)
IT	FRANE (VEDR. DELLE) / STEINSLAGF.	2624	20141003	20150831	tG	0	Greco G. (SGAA), Teti B. (SGAA)
IT	GLIAIRETTA VAUDET	1248	20130910	20140827	tG	-8	Pollicini F. (CGI)
IT	GLIAIRETTA VAUDET	1248	20140827	20150822	tG	-36	Pollicini F. (CGI)
IT	GOLETTA	683	20130921	20140914	tG	-5	Pollicini F. (CGI), Borney S. (CGI)
IT	GOLETTA	683	20140914	20150920	tG	-32	Pollicini F. (CGI), Borney S. (CGI)
IT	GRAMES ORIENT. + CENTR. / GRAMSENF. OESTL. + ZENTR.	2599	20130903	20140903	tG	-4	Bruschi P. (SGAA)
IT	GRAMES ORIENT. + CENTR. / GRAMSENF. OESTL. + ZENTR.	2599	20140903	20150907	tG	-15	Bruschi P. (SGAA)
IT	GRAN NEYRON	1283	20130817	20140906	tG	-12	Vallet V. (CGI)
IT	GRAN NEYRON	1283	20140906	20150904	tG	-5	Vallet V. (CGI)
IT	GRAN PARADISO	1235	20120915	20150920	tG	-1	Bertoglio V. (CGI), Borre P. (CGI), Massoni D. (CGI), Vergnano G. (CGI)
IT	GRAN PILASTRO (GHAC. DEL) / GLIEDERF.	652	20130928	20141809	tG	-9	Bertinotti I. (SGAA)
IT	GRAN PILASTRO (GHAC. DEL) / GLIEDERF.	652	20141809	20150912	tG	-33	Bertinotti I. (SGAA)
IT	GRAN VAL	2374	20120920	20140908	tG	-12	Borre P. (CGI)
IT	GRAN VEDRETTA OCC. / HOCHF.	2634	20120908	20140904	tG	0	Bertinotti I. (SGAA)
IT	GRAN VEDRETTA OCC. / HOCHF.	2634	20140904	20150915	tG	-41	Bertinotti I. (SGAA)
IT	GRAN VEDRETTA OR. / GRIESSF.	2633	20130824	20140904	tG	0	Bertinotti I. (SGAA)
IT	GRAN VEDRETTA OR. / GRIESSF.	2633	20140904	20150915	tG	-9	Bertinotti I. (SGAA)
IT	GRAN ZEBRU (CENTRALE)	1164	20130906	20140920	tG	-6	Colombaroli D. (SGL)
IT	GRAN ZEBRU (CENTRALE)	1164	20140920	20151001	tG	-1	Colombaroli D. (SGL)
IT	GRAND CROUX CENTR.	1273	20130914	20140914	tG	-1	Bertoglio V. (CGI), Borre P. (CGI)
IT	GRAND ETRET	1238	20130921	20140921	tG	-19	Walter A. (CGI), Bertoglio V. (CGI)
IT	GRAND ETRET	1238	20140921	20150919	tG	-28	Bertoglio V. (CGI), Borre P. (CGI), Massoni D. (CGI), Vergnano G. (CGI)
IT	GRUETTA ORIENT.	2418	20120916	20140824	tG	-4	Gadin G. (CGI)
IT	GRUETTA ORIENT.	2418	20140824	20150920	tG	-17	Gadin G. (CGI)
IT	HOHSAND SETT. (SABBIONE SETT.)	631	20130821	20140907	tG	-20	Ossola R. (CGI)
IT	HOHSAND SETT. (SABBIONE SETT.)	631	20140907	20150827	tG	-31	Ossola R. (CGI)
IT	INDREN OCC.	1209	20130905	20150920	tG	-3	Piccini P. (CGI)
IT	LA MARE (VEDRETTA DE)	636	20130831	20140828	tG	-5	Carturan L. (CGI), Voltolini C. (CGI)
IT	LA MARE (VEDRETTA DE)	636	20140828	20150831	tG	-17	Carturan L. (CGI), Voltolini C. (CGI)
IT	LAGAUN (Vedretta di) / LAGAUN FERNER	6823	20130903	20141011	tG	-2	Barison G. (SGAA), Rosan R. (SGAA)
IT	LAGAUN (Vedretta di) / LAGAUN FERNER	6823	20141011	20150912	tG	-30	Barison G. (SGAA), Rosan R. (SGAA), Rosa S. (SGAA), Sampieri R. (SGAA)
IT	LANA (VEDR. DI) / AEUSSERES LAHNER KEES	650	20090911	20140928	tG	-227	Valcanover E. (CGI), Valcanover R. (CGI)
IT	LANA (VEDR. DI) / AEUSSERES LAHNER KEES	650	20140928	20150812	tG	-3	Mattiato M. (SGAA), Casagrande R. (SGAA)
IT	LARES	1149	20110911	20141030	tG	-160	Marchetti F. (SAT), Flemi Z. (SAT)
IT	LASA / LAASER F.	2605	20131004	20141014	tG	-45	Saltriti A. (SGAA)
IT	LAUSON	1275	20130910	20140910	tG	-9	Grosa M. (CGI)
IT	LAUSON	1275	20140910	20150910	tG	-14	Grosa M. (CGI)
IT	LAVACCIU	1285	20130826	20140913	tG	-9	Nicolussi S. (CGI)
IT	LAVACCIU	1285	20140913	20150909	tG	-19	Nicolussi S. (CGI)
IT	LAVASSEY	1242	20130914	20140831	tG	-11	Pollicini F. (CGI), Borney S. (CGI)
IT	LAVASSEY	1242	20140831	20150907	tG	-24	Pollicini F. (CGI), Borney S. (CGI)
IT	LUNGA (VEDRETTA) / LANGENF.	661	20130831	20140830	tG	-34	Perini G. (CGI), Saccon G. (CGI)
IT	LUNGA (VEDRETTA) / LANGENF.	661	20140830	20150827	tG	-16	Perini G. (CGI)
IT	LYS	620	20130927	20141027	tG	-3	Freppaz M. (CGI), Godone D. (CGI)
IT	LYS	620	20141027	20151008	tG	-15	Freppaz M. (CGI), Hudek C. (CGI)
IT	MADACCIO (VEDR. DEL) / MADATSCHF.	1129	20130921	20140924	tG	-9	Barison G. (SGAA), Seppi R. (SGAA)
IT	MADACCIO (VEDR. DEL) / MADATSCHF.	1129	20140924	20150804	tG	-9	Barison G. (SGAA), Seppi R. (SGAA), Sampieri R. (SGAA)
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	20130924	20140929	tG	-51	Franchi G. (CGI)
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	20140929	20150927	tG	-10	Franchi G. (CGI)
IT	MANDRONE	664	20130901	20140917	tG	-2	Marchetti F. (SAT), Bertoldi S. (SAT)
IT	MARMOLADA CENTR.	676	20130921	20140905	tG	0	Varotto M. (CGI), Zanella M. (CGI)
IT	MARMOLADA CENTR.	676	20140905	20150909	tG	0	Varotto M. (CGI), Zanella M. (CGI)
IT	MARTELOT	1301	20120820	20140820	tG	0	Rogliardo F. (CGI)
IT	MARTELOT	1301	20140820	20150822	tG	-1	Rogliardo F. (CGI)
IT	MAZIA (VEDR. DI) / MATSCHERF.	2620	20130916	20140927	tG	-9	Greco G. (SGAA), Tosi P. (SGAA)
IT	MAZIA (VEDR. DI) / MATSCHERF.	2620	20140927	20150921	tG	-15	Greco G. (SGAA), Tosi P. (SGAA), Le Pera L. (SGAA)
IT	MONCIAIR	1237	20130909	20140916	tG	-2	Vallet R. (CGI)
IT	MONCIAIR	1237	20140916	20150920	tG	-2	Bertoglio V. (CGI), Borre P. (CGI), Massoni D. (CGI), Vergnano G. (CGI)
IT	MONCORVE	1236	20130920	20140914	tG	-4	Massoni D. (CGI), Vallet R. (CGI)
IT	MONCORVE	1236	20140914	20150920	tG	-26	Bertoglio V. (CGI), Borre P. (CGI), Massoni D. (CGI), Vergnano G. (CGI)
IT	MONEY	1272	20130913	20140906	tG	-1	Bertoglio V. (CGI)
IT	MONEY	1272	20140906	20150924	tG	-52	Bertoglio V. (CGI), Borre P. (CGI)
IT	MONTANDEYNE	1284	20130825	20140909	tG	-3	Nicolussi S. (CGI)
IT	MONTANDEYNE	1284	20140909	20150908	tG	-29	Nicolussi S. (CGI)
IT	MONTARSO (VEDR. DI) / FEUERSTEINF.	2631	20130904	20150901	tG	-36	Bertinotti I. (SGAA)
IT	MORION OR.	1250	20130914	20140920	tG	-12	Bettio M. (CGI)
IT	MORION OR.	1250	20140920	20150920	tG	-29	Bettio M. (CGI)
IT	NEL CENTRALE	1303	20120821	20150828	tG	-8	Bertoglio V. (CGI), Vergnano G. (CGI)
IT	NEVES OR. (GHAC. DI) / NOEFESF. OESTL.	651	20130923	20140929	tG	-9	Franchi G. (SGL)
IT	NEVES OR. (GHAC. DI) / NOEFESF. OESTL.	651	20140929	20150921	tG	-29	Franchi G. (SGL)
IT	NISCLI	677	20120909	20140914	tG	-21	Marchetti F. (SAT)
IT	NOASCHETTA OCCID.	2359	20120829	20150927	tG	-4	Miravalle R. (CGI), Cerrato C. (CGI), Permulian R. (CGI)
IT	PALON DELLA MARE LOBO CENTR.	2533	20130913	20140921	tG	-13	Cola G. (SGL)
IT	PALON DELLA MARE LOBO CENTR.	2533	20140921	20151012	tG	-24	Farinella L. (SGL)
IT	PALON DELLA MARE LOBO OR.	2534	20130913	20140921	tG	-3	Cola G. (SGL)
IT	PALON DELLA MARE LOBO OR.	2534	20140921	20151012	tG	-28	Farinella L. (SGL)
IT	PENDENTE (VEDR.) / HANGENDERF.	675	20130924	20140929	tG	-1	Franchi G. (CGI)

Table 2

PU	GLACIER_NAME	WGMS_ID	FROM	TO	METHOD	FV INVESTIGATORS (SPONS_AGENCY)
IT	PENDENTE (VEDR.) / HANGENDERF.	675	20140929	20150927	tG	-7 Franchi G. (CGI)
IT	PERA CIAVAL	1296	20130831	20140827	tG	0 Rogliardo F. (CGI)
IT	PERA CIAVAL	1296	20140827	20150827	tG	-15 Rogliardo F. (CGI)
IT	PERCIA	1240	20130822	20140920	tG	-2 Nicolino M. (CGI), Chevère R. (CGI)
IT	PERCIA	1240	20140920	20150915	tG	-14 Nicolino M. (CGI), Chevère R. (CGI)
IT	PIODE	619	20131031	20141020	tG	-143 Piccini P. (CGI), Antonietti O. (CGI)
IT	PIODE	619	20141020	20151109	tG	-5 Piccini P. (CGI), Antonietti O. (CGI), Viani C. (CGI)
IT	PIZZO FERRE	1181	20130919	20140928	tG	-5 Congiu E. (SGL)
IT	PIZZO FERRE	1181	20140928	20150918	tG	-9 Pironi L. (SGL)
IT	PIZZO SCALINO	1187	20130913	20140922	tG	-10 Butti M. (SGL)
IT	PIZZO SCALINO	1187	20140922	20150921	tG	-31 Rocca P. (SGL)
IT	PLATTES DES CHAMOIS	1249	20130910	20140902	tG	-7 Pollicini F. (CGI)
IT	PREDAROSSA	1182	20130831	20140906	tG	-2 Urso M. (SGL)
IT	PREDAROSSA	1182	20140906	20150906	tG	-42 Urso M. (SGL)
IT	QUAIRA BIANCA (VEDR. DELLA) / WEISSKARF.	686	20130908	20140918	tG	-5 Bertinotti I. (SGAA)
IT	QUAIRA BIANCA (VEDR. DELLA) / WEISSKARF.	686	20140918	20150912	tG	-33 Bertinotti I. (SGL)
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	20130907	20140907	tG	-387 Cibir G. (CGI)
IT	ROCCIA VIVA	2364	20131009	20141002	tG	-4 Bertoglio V. (CGI)
IT	ROCCIA VIVA	2364	20141002	20150925	tG	-9 Miravalle R. (CGI), Caminada C. (CGI)
IT	ROSIM (VEDR. DI) / ROSIMF.	610	20130829	20140914	tG	4 Barison G. (SGAA), Cassina A. (SGAA)
IT	ROSIM (VEDR. DI) / ROSIMF.	610	20140914	20150827	tG	-11 Barison G. (SGAA), Sampieri R. (SGAA)
IT	ROSSO DESTRO	648	20100909	20140927	tG	-87 Valcanover E. (CGI), Valcanover R. (CGI)
IT	ROSSO DESTRO	648	20140927	20150909	tG	-56 Serandrei Barbero R. (CGI)
IT	RUTOR	612	20130906	20140910	tG	-11 Garino R. (CGI)
IT	RUTOR	612	20140910	20150906	tG	-16 Garino R. (CGI)
IT	SALDURA MER. (VEDR. DI) / SALDUR F. SUEDL.	1131	20130923	20141010	tG	-8 Greco G. (SGAA), La Pera L. (SGAA)
IT	SALDURA MER. (VEDR. DI) / SALDUR F. SUEDL.	1131	20141010	20150907	tG	-7 Greco G. (SGAA), La Pera L. (SGAA), Teti B. (SGAA)
IT	SCERSCEN INFERIORE	1186	20130914	20140919	tG	-11 Salvetti A. (SGL)
IT	SCERSCEN INFERIORE	1186	20140919	20151009	tG	-145 De Zaiacom M. (SGL)
IT	SEA	1299	20130921	20140913	tG	-9 Rogliardo F. (CGI)
IT	SEA	1299	20140913	20150909	tG	-12 Rogliardo F. (CGI)
IT	SENGIE SETT.	1267	20120928	20140926	tG	-6 Bertoglio V. (CGI), Borre P. (CGI)
IT	SENGIE SETT.	1267	20140926	20150906	tG	-1 Bertoglio V. (CGI), Borre P. (CGI), Mazza E. (CGI)
IT	SERANA (VEDR.) / SCHRANF.	634	20130924	20140924	tG	-8 Bruschi P. (SGAA)
IT	SERANA (VEDR.) / SCHRANF.	634	20140924	20150908	tG	-17 Bruschi P. (SGAA)
IT	SFORZELLINA	667	20130928	20140914	tG	-5 Smiraglia C. (CGI), Scotti R. (CGI)
IT	SFORZELLINA	667	20140914	20150822	tG	-6 Smiraglia C. (CGI)
IT	SISSONE	2506	20130922	20140829	tG	0 Almasio A. (SGL)
IT	SISSONE	2506	20140829	20150829	tG	0 Almasio A. (SGL)
IT	SOCHES TSANTELEINA	1244	20130914	20140831	tG	-7 Pollicini F. (CGI), Borney S. (CGI)
IT	SOCHES TSANTELEINA	1244	20140831	20150907	tG	-25 Pollicini F. (CGI), Borney S. (CGI)
IT	SOLDA (VEDRETTA DI) / SULDENF.	660	20120903	20150827	tG	-39 Sartori S. (SGAA), Seppi R. (SGAA), Rosa S. (SGAA), Rosan R. (SGAA)
IT	TESSA (VEDR. DI) / TEXELF.	653	20131003	20140919	tG	-3 Benetton S. (CGI), Benetton G. (CGI)
IT	TESSA (VEDR. DI) / TEXELF.	653	20140919	20150928	tG	-6 Benetton S. (CGI), Benetton G. (CGI)
IT	TIMORION	1282	20130905	20141102	tG	-8 Cerise S. (CGI)
IT	TIMORION	1282	20140923	20150915	tG	-6 Morra di Cella U. (ARPA)
IT	TORRENT	2384	20130901	20140817	tG	-16 Pollicini F. (CGI)
IT	TORRENT	2384	20140817	20150820	tG	-8 Pollicini F. (CGI)
IT	TOULES	614	20130831	20140823	tG	-15 Fusinaz A. (CGI), Fusinaz A. (CGI)
IT	TOULES	614	20140823	20150824	tG	-30 Fusinaz A. (CGI), Fusinaz A. (CGI)
IT	TRAFOI (VEDR. DI) / TRAFIOIER F.	2617	20130817	20140908	tG	-14 Barison G. (SGAA), Seppi R. (SGAA)
IT	TRAFOI (VEDR. DI) / TRAFIOIER F.	2617	20140908	20150804	tG	-2 Barison G. (SGAA), Seppi R. (SGAA), Sampieri R. (SGAA)
IT	TRAJO	1278	20130905	20140912	tG	-3 Borre P. (CGI)
IT	TRAJO	1278	20140912	20150910	tG	-20 Borre P. (CGI)
IT	TRIBOLAZIONE	1274	20120909	20140907	tG	-28 Bertoglio V. (CGI), Borre P. (CGI)
IT	TRIBOLAZIONE	1274	20140907	20150925	tG	-20 Bertoglio V. (CGI), Borre P. (CGI), Gerard Y. (CGI)
IT	ULTIMA (VEDR.) / ULTENMARKTF.	633	20130924	20140924	tG	-20 Bruschi P. (SGAA)
IT	ULTIMA (VEDR.) / ULTENMARKTF.	633	20140924	20150908	tG	-10 Bruschi P. (SGAA)
IT	VALEILLE	1268	20130927	20140927	tG	-4 Bertoglio V. (CGI), Borre P. (CGI)
IT	VALEILLE	1268	20140927	20150905	tG	-4 Bertoglio V. (CGI), Borre P. (CGI)
IT	VALLE DEL VENTO	649	20110907	20140927	tG	-13 Valcanover E. (SGAA), Valcanover R. (SGAA)
IT	VALLE DEL VENTO	649	20140927	20150909	tG	-12 Serandrei Barbero R. (CGI)
IT	VAUDALETTA	2379	20130921	20150908	tG	-10 Rossetto A. (CGI)
IT	VENEROCOLO	665	20130831	20130831	tG	4 Gussoni M. (SGL)
IT	VENTINA	629	20130917	20140927	tG	-24 Colombo N. (SGL), Gussoni M. (SGL)
IT	VENTINA	629	20140927	20150927	tG	-40 Colombo N. (SGL), De Zaiacom M. (SGL)
KG - Kyrgyzstan						
KG	ABRAMOV	732	20139999	20149999		-27
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20139999	20149999		-9
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20149999	20159999		-9
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20149999		-22
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20149999	20159999		-45
KG	GOLUBIN	753	20139999	20149999		-32
KG	GOLUBIN	753	20149999	20159999		-25
KG	KARA-BATAK	813	20089999	20150725	cC	-64 Popovnin V. (TshMRC), Satykanov R. (TshMRC), Ermenbayev B. (TshMRC)
KG	SARY TOR (NO.356)	805	20140925	20150906	tG	-14 Popovnin V. (TshMRC), Satykanov R. (TshMRC), Ermenbayev B. (TshMRC)
KZ - Kazakhstan						
KZ	TS.TUYUKSUYSKIY	817	20130822	20140825	tG	-35 Kasatkin N. (IGNANKaz)
KZ	TS.TUYUKSUYSKIY	817	20140825	20150825	tG	-49 Kasatkin N. (IGNANKaz)
NO - Norway						
NO	AUSTERDALSBREEN	288	20130812	20140809	tG	-25 Elvehøy H. (NVE), Solnes P. (NVE)
NO	AUSTERDALSBREEN	288	20140809	20150810	tG	-180 Elvehøy H. (NVE), Solnes P. (NVE)
NO	AUSTRE OKSTINDBREEN	3342	20130928	20140830	tG	-30 Elvehøy H. (NVE), Nessengmo K. (NVE)
NO	AUSTRE OKSTINDBREEN	3342	20140830	20150906	tG	-17 Elvehøy H. (NVE), Nessengmo K. (NVE)
NO	BLOMSTOELSKARDSBREEN	3339	20130920	20140916	tG	-2 Elvehøy H. (SUNK), Probert J. (SUNK)
NO	BLOMSTOELSKARDSBREEN	3339	20140916	20151016	tG	7 Elvehøy H. (NVE), Probert J. (NVE)
NO	BOEDALS BREEN	2291	20121020	20140922	tG	-455 Elvehøy H. (NVE), Briksdal E. (NVE)
NO	BOEDALS BREEN	2291	20140922	20150814	tG	0 Elvehøy H. (NVE), Briksdal E. (NVE)
NO	BOEYABREEN	2297	20131001	20141016	tG	-65 Kjelland P. (NGM)

PU	GLACIER_NAME	WGMS_ID	FROM	TO	METHOD	FV	INVESTIGATORS_(SPONS_AGENCY)
NO	BONDHUSBREA	318	20130926	20141003	tG	-2	Knutsen G. (STAK)
NO	BONDHUSBREA	318	20141003	20151012	tG	-14	Elvehøy H. (NVE), Knutsen G. (NVE)
NO	BRENDALSBBREEN	2293	20121110	20141019	tG	-55	Elvehøy H. (NVE), Briksdal E. (NVE)
NO	BRENDALSBBREEN	2293	20141019	20151031	tG	-29	Elvehøy H. (NVE), Briksdal R. (NVE)
NO	BRIKSDALSBBREEN	314	20131109	20141001	tG	0	Nesje A. (NVE), Briksdal E. (NVE)
NO	BRIKSDALSBBREEN	314	20141001	20150913	tG	0	Nesje A. (NVE)
NO	BUERBBREEN	315	20130724	20151008	tG	-20	Elvehøy H. (NVE), Buer M. (NVE)
NO	CORNELIUSSENBBREEN	3341	20130928	20140830	tG	-10	Elvehøy H. (NVE), Nessengmo K. (NVE)
NO	CORNELIUSSENBBREEN	3341	20140830	20150906	tG	3	Elvehøy H. (NVE), Nessengmo K. (NVE)
NO	ENGABBBREEN	298	20131021	20141014	tG	-56	Elvehøy H. (STAK)
NO	ENGABBBREEN	298	20141014	20151027	tG	-6	Elvehøy H. (NVE)
NO	FAABERGSTOELSBREEN	289	20130925	20141006	tG	-68	Elvehøy H. (NVE), Åsen K. (NVE)
NO	FAABERGSTOELSBREEN	289	20141006	20150908	tG	1	Elvehøy H. (NVE), Åsen K. (NVE)
NO	GRAAFJELLSBREA	1320	20130926	20141002	tG	-120	Elvehøy H. (STAK), Knutsen G. (STAK)
NO	GRAAFJELLSBREA	1320	20141002	20151014	tG	5	Elvehøy H. (NVE), Knutsen G. (NVE)
NO	HAUGABBBREEN	4568	20131018	20141002	tG	-13	Kjelland P. (NGM)
NO	HAUGABBBREEN	4568	20141002	20150929	tG	-7	Kjelland P. (NVE)
NO	HELLSTUGUBBBREEN	300	20130910	20140916	tG	-13	Andreassen L. (NVE)
NO	HELLSTUGUBBBREEN	300	20140916	20150923	tG	-3	Andreassen L. (NVE)
NO	JUVFONNE	3661	20130911	20140909	tG	-25	Andreassen L. (NVE)
NO	KOPPANGSBBREEN	2309	20130930	20141025	tG	-17	Elvehøy H. (NVE), Skirnisson D. (NVE)
NO	LANGFIORDJOEKELEN	323	20130807	20140924	tG	-51	Elvehøy H. (NVE), Ekker R. (NVE)
NO	LANGFIORDJOEKELEN	323	20140924	20150806	tG	6	Elvehøy H. (NVE), Andreassen L. (NVE)
NO	LEIRBBREEN	301	20131010	20141002	tG	-21	Elvehøy H. (NVE), Bakke D. (NVE)
NO	LEIRBBREEN	301	20141002	20151009	tG	-34	Elvehøy H. (NVE), Bakke D. (NVE)
NO	MAARAADALSBBREEN	4567	20131001	20141006	tG	-21	Elvehøy H. (NVE)
NO	MAARAADALSBBREEN	4567	20141006	20151005	tG	-6	Elvehøy H. (NVE)
NO	MIDTDALSBBREEN	2295	20130827	20140825	tG	-18	Nesje A. (DES)
NO	MIDTDALSBBREEN	2295	20140825	20150919	tG	19	Nesje A. (NVE)
NO	NIGARDSBBREEN	290	20131010	20140925	tG	-52	Elvehøy H. (NVE), Åsen K. (NVE)
NO	NIGARDSBBREEN	290	20140925	20150928	tG	-39	Elvehøy H. (NVE), Åsen K. (NVE)
NO	REMBESDALSKAAGA	2296	20130926	20141015	tG	-13	Elvehøy H. (STAK), Riber S. (STAK)
NO	REMBESDALSKAAGA	2296	20141015	20151014	tG	0	Elvehøy H. (NVE)
NO	RUNDVASSBBREEN	2670	20130927	20140923	tG	-31	Elvehøy H. (SISO), Kjølmoen B. (SISO)
NO	STEGHOLTBBREEN	313	20130925	20141003	tG	-2	Elvehøy H. (NVE), Loe E. (NVE)
NO	STEGHOLTBBREEN	313	20141003	20151014	tG	-8	Elvehøy H. (NVE), Barfod E. (NVE)
NO	STEINDALSBBREEN	2310	20130913	20141012	tG	-21	Elvehøy H. (NVE), Skirnisson D. (NVE)
NO	STEINDALSBBREEN	2310	20141012	20150822	tG	-12	Elvehøy H. (NVE), Skirnisson D. (NVE)
NO	STORBBREEN	302	20130912	20140918	tG	-13	Andreassen L. (NVE)
NO	STORE SUPPHELLEBBREEN	287	20131001	20141002	tG	-18	Kjelland P. (NGM)
NO	STORJUVBBREEN	2308	20130920	20140912	tG	-10	Elvehøy H. (NVE), Bakke D. (NVE)
NO	STORJUVBBREEN	2308	20140912	20150929	tG	-1	Elvehøy H. (NVE), Bakke D. (NVE)
NO	STORSTEINSFJELLBBREEN	1329	20130907	20140907	tG	-6	Elvehøy H. (NVE), Sommerseth J. (NVE)
NO	STORSTEINSFJELLBBREEN	1329	20140907	20151018	tG	0	Elvehøy H. (NVE), Sommerseth J. (NVE)
NO	STYGGEBREAN	4504	20131015	20141016	tG	-18	Elvehøy H. (NMC), Bakke D. (NMC)
NO	STYGGEDALSBBREEN	303	20131010	20141007	tG	-15	Elvehøy H. (NVE), Jackson M. (NVE)
NO	STYGGEDALSBBREEN	303	20141007	20151013	tG	5	Elvehøy H. (NVE)
NO	SVELGIABBBREEN	3343	20130920	20140916	tG	-1	Elvehøy H. (SUNK), Probert J. (SUNK)
NO	SVELGIABBBREEN	3343	20140916	20151016	tG	3	Elvehøy H. (NVE), Probert J. (NVE)
NO	SYDBBBREEN	3351	20130712	20140630	tG	-3	Elvehøy H. (NVE), Berg H. (NVE)
NO	SYDBBBREEN	3351	20140630	20150723	tG	-21	Elvehøy H. (NVE), Berg H. (NVE)
NO	TROLLBERGDALSBBREEN	316	20120906	20140830	tG	-44	Elvehøy H. (NVE), Karlsen J. (NVE)
NO	TROLLKYRKJEBBBREEN	3606	20110822	20140907	tG	-26	Elvehøy H. (NVE), Klokk T. (NVE)
NO	TROLLKYRKJEBBBREEN	3606	20140907	20151011	tG	-5	Elvehøy H. (NVE), Klokk T. (NVE)
NO	TUFTBBREEN	3352	20130927	20141003	tG	-30	Elvehøy H. (NVE), Åsen K. (NVE)
NO	TUFTBBREEN	3352	20141003	20150906	tG	-5	Elvehøy H. (NVE), Åsen K. (NVE)
NO	VETLE SUPPHELLEBBREEN	3607	20131015	20141014	tG	-31	Kjelland P. (NGM)
NO	VETLE SUPPHELLEBBREEN	3607	20141014	20151016	tG	8	Kjelland P. (NVE)
NP - Nepal							
NP	YALA	912	20120508	20140505	tG	-13	Joshi S. (ICIMOD)
NP	YALA	912	20140505	20160506	tG	-8	Joshi S. (ICIMOD)
NZ - New Zealand							
NZ	ADAMS	2923	20130312	20140311	aX	-X	Chinn T. (NIWA)
NZ	ALMER/SALISBURY	1548	20130312	20140311	aX	-X	Chinn T. (NIWA)
NZ	ANDY	1590	20120399	20140311	aX	-X	Chinn T. (NIWA)
NZ	ASHBURTON	1570	20130312	20140311	aX	-X	Chinn T. (NIWA)
NZ	AXIUS	2283	20130312	20140311	aX	-X	Chinn T. (NIWA)
NZ	BALFOUR	1604	20130312	20140311	aX	U	Chinn T. (NIWA)
NZ	BALFOUR	1604	20130312	20150314	aX	ST	Chinn T. (NIWA)
NZ	BARLOW	1608	20130312	20140311	aX	+X	
NZ	BARLOW	1608	20140311	20150314	aX	ST	Chinn T. (NIWA)
NZ	BLAIR	1551	20130312	20140311	aX	ST	Chinn T. (NIWA)
NZ	BLAIR	1551	20120311	20150315	aX	ST	
NZ	BONAR	1587	20129999	20140311	aX	-X	Chinn T. (NIWA)
NZ	BREWSTER	1597	20130321	20140408	tG	-18	Anderson B. (ARC)
NZ	BREWSTER	1597	20140408	20150314	aP	-27	Anderson B. (ARC)
NZ	CAMERON	1565	20120311	20150315	aX	-X	
NZ	CROW	1564	20130312	20140311	aX	-X	Chinn T. (NIWA)
NZ	CROW	1564	20140311	20150314	aX	-X	
NZ	DAINTY	2287	20130312	20140311	aX	ST	Chinn T. (NIWA)
NZ	DART	898	20130312	20150314	aX	-X	
NZ	DISPUTE	2286	20130312	20140311	aX	U	Chinn T. (NIWA)
NZ	DONALD	2284	20130312	20140311	aX	-X	Chinn T. (NIWA)
NZ	DONNE	1585	20129999	20140311	aX	-X	Chinn T. (NIWA)
NZ	DONNE	1585	20130312	20150314	aX	-X	
NZ	DOUGLAS (KAR.)	1601	20130312	20150314	aX	-X	
NZ	FITZGERALD (GOD)	2278	20130312	20140311	aX	-X	Chinn T. (NIWA)
NZ	FITZGERALD (GOD)	2278	20140311	20150315	aX	-X	
NZ	FOX	1536	20130821	20140310	aP	-51	Purdie H. (UCant/DG), Anderson B. (ARC), Chinn T. (LHIC), Owens I. (UCant/DG)
NZ	FOX	1536	20140310	20150423	aP	-250	Purdie H. (UCant/DG)
NZ	FRANZ JOSEF	899	20121014	20140309	aP	-324	Purdie H. (UCant/DG), Anderson B. (ARC), Chinn T. (LHIC), Owens I. (UCant/DG)
NZ	FRANZ JOSEF	899	20140309	20150314	aP	-120	Anderson B. (ARC)
NZ	FRESHFIELD	2966	20130312	20140311	aX	-X	Chinn T. (NIWA)
NZ	FRESHFIELD	2966	20140311	20150315	aX	-X	

Table 2

PU	GLACIER_NAME	WGMS_ID	FROM	TO	METHOD	FV	INVESTIGATORS_(SPONS_AGENCY)
NZ	GLENMARY	1550	20130312	20140311	aX	ST	Chinn T. (NIWA)
NZ	GODLEY	1581	20130312	20140311	aX	-X	Chinn T. (NIWA)
NZ	GODLEY	1581	20140311	20150315		-X	
NZ	GREY & MAUD	1580	20069999	20140311	aX	U	Chinn T. (NIWA)
NZ	GREY & MAUD	1580	20140311	20150315		-X	
NZ	GUNN	1560	20130312	20140311	aX	U	Chinn T. (NIWA)
NZ	GUNN	1560	20130312	20150314		-X	
NZ	HORACE WALKER	1600	20130312	20150314		-X	
NZ	IVORY	900	20130312	20140311	aX	ST	Chinn T. (NIWA)
NZ	KAHUTEA	1569	20140311	20150315		-X	
NZ	KEA	1545	20130312	20140311	aX	ST	Chinn T. (NIWA)
NZ	LA PEROUSE	1605	20130312	20150314		ST	
NZ	LEEB-LORNTY	2288	20130312	20140311	aX	ST	Chinn T. (NIWA)
NZ	LYELL	1567	20140311	20150315		-X	
NZ	MARION	1591	20130312	20140311	aX	-X	Chinn T. (NIWA)
NZ	MARMADUKE DIXON	1541	20140311	20150315		-X	
NZ	METALILLE	2998	20130312	20140311	aX	-X	Chinn T. (NIWA)
NZ	MUELLER	1575	20130312	20140311	aX	-X	Chinn T. (NIWA)
NZ	MUELLER	1575	20140311	20150315		-X	
NZ	MURCHISON	1578	20130312	20140311	aX	-X	Chinn T. (NIWA)
NZ	MURCHISON	1578	20140311	20150315		-X	
NZ	PARK PASS	1559	20120399	20140311	aX	-X	Chinn T. (NIWA)
NZ	PARK PASS	1559	20140311	20150314		-X	
NZ	SEPARATION	2279	20130312	20140311	aX	-X	Chinn T. (NIWA)
NZ	SIEGE	1616	20130312	20140311	aX	-X	Chinn T. (NIWA)
NZ	SIEGE	1616	20140311	20150314		-X	
NZ	SLADDEN	3611	20130312	20140311	aX	-X	Chinn T. (NIWA)
NZ	SLADDEN	3611	20140311	20150315		-X	
NZ	SNOW WHITE	1588	20130312	20140311	aX	-X	Chinn T. (NIWA)
NZ	SNOW WHITE	1588	20140311	20150314		-X	
NZ	SNOWBALL	1589	20130312	20140311	aX	ST	Chinn T. (NIWA)
NZ	SNOWBALL	1589	20140311	20150314		ST	
NZ	SOUTH CAMERON	3019	20140311	20150315		-X	
NZ	ST. JAMES	2274	20140311	20150315		ST	
NZ	STOCKING (TEWAEWAE)	3023	20130312	20140311	aX	-X	Chinn T. (NIWA)
NZ	STOCKING (TEWAEWAE)	3023	20140311	20150315		ST	
NZ	STRAUCHON	1599	20130312	20140311	aX	U	Chinn T. (NIWA)
NZ	TASMAN	1074	20130312	20140311	aX	-X	Chinn T. (NIWA)
NZ	TASMAN	1074	20140311	20150315		-X	
NZ	THURNEYSON	1554	20140311	20150315		ST	
NZ	VERTEBRAE 20	3033	20130312	20140311	aX	ST	Chinn T. (NIWA)
NZ	VICTORIA	3034	20130312	20140311	aX	-X	Chinn T. (NIWA)
NZ	VICTORIA	3034	20140311	20150315		-X	
NZ	WHITE	3037	20130312	20140311	aX	ST	Chinn T. (NIWA)
NZ	WHITE	3037	20140311	20150315		ST	
NZ	WHYMPER	1609	20130312	20140311	aX	-X	Chinn T. (NIWA)
PE - Peru							
PE	ARTESONRAJU	3292	20139999	20149999		-3	Coachin Rapre A. (UGRH/ANA)
PE	GAJAP-YANACARCO	223	20139999	20149999		-22	Coachin Rapre A. (UGRH/ANA)
PE	PASTORURI	224	20139999	20149999		-4	Coachin Rapre A. (UGRH/ANA)
PE	URUASHRAJU	221	20139999	20149999		-16	Coachin Rapre A. (UGRH/ANA)
PE	YANAMAREY	226	20139999	20149999		-3	Coachin Rapre A. (UGRH/ANA)
PL - Poland							
PL	POD BULA	1617	20131005	20141003	tG	-13	Nitychoruk J. (PIPS)
SE - Sweden							
SE	HYLLGLACIAEREN	344	20120810	20140811		-10	Mercer A. (INK)
SE	ISFALLSGLACIAEREN	333	20130808	20140813	tG	-50	Holmlund P. (INK)
SE	KARSOJJETNA	330	20080908	20140816		-126	Holmlund P. (INK)
SE	MARMAGLACIAEREN	1461	20130810	20140809	tG	-22	Holmlund P. (INK)
SE	MIKKAJEKNA	338	20130805	20150815	tG	-29	Holmlund P. (INK)
SE	RUOPSOKJEKNA	340	20130811	20150815	tG	-30	Holmlund P. (INK)
SE	RUOTESJEKNA	337	20110813	20140811	tG	-41	Mercer A. (INK)
SE	SALAJEKNA	341	20130818	20140811		-69	Mercer A. (INK)
SE	SALAJEKNA	341	20140811	20150820	tG	-64	Holmlund P. (INK)
SE	SUOTTASJEKNA	336	20110813	20140811		-35	Mercer A. (INK)
SE	VARTASJEKNA	339	20120813	20140811		-75	Mercer A. (INK)
SJ - Svalbard							
SJ	AUSTRE LOVENBREEN	3812	20131002	20140930	tC	-9	Bernard E. (CNRS), Griselin M. (CNRS), Tolle F. (CNRS), Friedt J. (CNRS)
SJ	HANSBREEN	306	20130824	20140820	sC	-250	Błaszczuk M. (US/FES)
SJ	HANSBREEN	306	20140820	20150915	sP	-20	Błaszczuk M. (US/FES)
US - United States of America							
US	COLUMBIA (2057)	76	20130801	20150804	tG	-30	Pelto M. (NCGCP)
US	DEMING	1368	20110811	20140806	tG	-130	Pelto M. (NCGCP)
US	EASTON	1367	20130811	20140806	tG	-8	Pelto M. (NCGCP)
US	EASTON	1367	20140806	20150814	tG	-34	Pelto M. (NCGCP)
US	LEMON CREEK	3334	20140923	20150826	sM	-6	McNeil C. (USGS)
US	LOWER CURTIS	77	20130804	20150812	tG	-28	Pelto M. (NCGCP)
US	SHOLES	3295	20100810	20140810	tG	-37	Pelto M. (NCGCP)
US	SHOLES	3295	20140810	20150807	tG	-13	Pelto M. (NCGCP)
US	SOUTH CASCADE	205	20130914	20141108	sP	-22	Whorton E. (USGS), Bachmann M. (USGS)
US	SOUTH CASCADE	205	20141108	20151014	sP	-19	Whorton E. (USGS), Bachmann M. (USGS)

APPENDIX - Table 3

MASS BALANCE SUMMARY DATA 2014–2015

PU	Political unit, alphabetic 2-digit country code (cf. www.iso.org)
GLACIER NAME	Name of the glacier in capital letters, cf. Appendix Table 1
WGMS ID	Key identifier of the glacier, cf. Appendix Table 1
SYS	System of glaciological measurement (cf. Cogley et al., 2011) FLO: floating-date system FXD: fixed-date system STR: stratigraphic system COM: combined system; usually of STR and FXD according to Mayo et al. (1972) OTH: other system
FROM	Starting date of balance year, in the format YYYYMMDD*
TO	Ending date of balance year, in the format YYYYMMDD*
AREA	Glacier area (in km ²) used for calculation of specific balances
BW	Specific winter balance in mm water equivalent
BS	Specific summer balance in mm water equivalent
BA	Specific annual balance in mm water equivalent
ELA	Equilibrium line altitude in metres above sea level
AAR	Ratio of accumulation area to total area of the glacier in percent
INVESTIGATORS (SPONS_AGENCY)	Names of the investigators and their sponsoring agencies (cf. Section 8)

*Unknown month or day are each replaced by „99“

PU	GLACIER_NAME	WGMS_ID	SYS	FROM	TO	AREA	BW	BS	BA	ELA	AAR	INVESTIGATORS_(SPONS_AGENCY)
AQ - Antarctica												
AQ	BAHIA DEL DIABLO	2665	COM	20130301	20140228	12.9			190	325	62	Ermolin E. (IAA-DG), Marinsek S. (IAA-DG), Seco J. (IAA-DG)
AQ	BAHIA DEL DIABLO	2665	COM	20140301	20150228	12.9			25	380	52	Marinsek S. (IAA-DG), Seco J. (IAA-DG), Ermolin E. (IAA-DG)
AQ	HURD	3367	COM	20140123	20140206	4.03	670	-270	400	0	100	Navarro F. (UPM/ETSIT)
AQ	HURD	3367	COM	20141204	20150205	4.03	940	-380	560	0	100	Navarro F. (UPM/ETSIT)
AQ	JOHNSONS	3366	COM	20140123	20140206	5.36	750	-160	590	0	100	Navarro F. (UPM/ETSIT)
AQ	JOHNSONS	3366	COM	20141205	20150202	5.36	1100	-350	750	0	100	Navarro F. (UPM/ETSIT)
AR - Argentina												
AR	BROWN SUPERIOR	3903		2013	2014				-1359	>5180	0	Cabrera G. (IANIGLA), Leiva J. (IANIGLA)
AR	BROWN SUPERIOR	3903	COM	20140425	20150504	0.18	-204	-2125	-2387	>5115	0	Cabrera G. (IANIGLA)
AR	CONCONTA NORTE	3902		2013	2014				-1783	>5150	0	Cabrera G. (IANIGLA), Leiva J. (IANIGLA)
AR	CONCONTA NORTE	3902	COM	20140423	20150506	0.07	-160	-2632	-2890	>5125	0	Cabrera G. (IANIGLA)
AR	LOS AMARILLOS	3904		2013	2014				-950	>5550	0	Cabrera G. (IANIGLA), Leiva J. (IANIGLA)
AR	LOS AMARILLOS	3904	COM	20140428	20150514	0.78	-235	-861	-1097	>4915	0	Cabrera G. (IANIGLA)
AR	MARTIAL ESTE	2000	COM	20130331	20140404	0.09	950	-384	566	1028	86	Iturraspe R. (DRH-TDF/CADIC), Strelin J. (IAA-UNC)
AR	MARTIAL ESTE	2000	COM	20140404	20150331	0.09	771	-929	-157	1072	51	Iturraspe R. (IAA-UNC), Strelin J. (UNTDF)
AT - Austria												
AT	GOLDBERG K.	1305		2013	2014		1720	-1201	519			Hynek B. (ZAMG)
AT	HALLSTAETTER G.	535	FXD	20131001	20140930	2.835	1275	-1549	-274	2551	57	Hartl L. (FGUA), Stocker-Waldhuber M. (FGUA), Fischer A. (FGUA), Reingruber K. (FGUA), Helfricht K. (FGUA)
AT	HALLSTAETTER G.	535	FXD	20141001	20150930	2.83	2120	-4174	-2054	>2910	2	Hartl L. (FGUA), Reingruber K. (FGUA)
AT	HINTEREIS F.	491	FXD	20131001	20140930	6.66	1372	-1494	-122	2990	61	Prinz R. (ACINN), Galos S. (ACINN), Kaser G. (ACINN)
AT	HINTEREIS F.	491		20141001	20150930	6.66	1367	-3049	-1682		17	Galos S. (ACINN), Covi F. (ACINN), Kaser G. (ACINN)
AT	JAMTAL F.	480	FXD	20131001	20140930	3.08	1095	-1667	-572	2923	34	Fischer A. (HD/LT), Markl G. (HD/LT)
AT	JAMTAL F.	480	FXD	20141001	20150930	3.07	1226	-3242	-2016	>3200	0	Fischer A. (HD/LT)
AT	KESSELWAND F.	507	FXD	20131001	20140930	3.61			459	3109	78	Galos S. (ACINN), Prinz R. (ACINN), Kaser G. (ACINN)
AT	KESSELWAND F.	507	FXD	20141001	20150930	3.61			-1169		12	Galos S. (ACINN), Covi F. (ACINN), Kaser G. (ACINN)
AT	KLEINFLEISS K.	547		2013	2014		1850	-1850	0			Hynek B. (ZAMG)
AT	OBERSULZBACH K.	583	FXD	20131001	20140930	2.17	1317	-1469	-152	2812	67	Seiser B. (HD/SB), Fischer A. (HD/SB)
AT	OBERSULZBACH K.	583	FXD	20141001	20150930	1.99	1250	-2817	-1567	3110	38	Seiser B. (HD/SB)
AT	PASTERZE	566	COM	20130925	20140923	16.28			-509	2860	69	Hynek B. (ZAMG), Neureiter A. (ZAMG)
AT	PASTERZE	566	COM	20140923	20151012	16.28			-1434	3075	32	Hynek B. (ZAMG), Neureiter A. (ZAMG)
AT	STUBACHER SONNBLICK K.	573	STR	20130910	20141022	0.99			274	2740	76	Slupetzky H. (HD/SB)
AT	STUBACHER SONNBLICK K.	573	STR	20141023	20150919	0.93			-2734	2995	1	Slupetzky H. (HD/SB), Wiesenegger H. (HD/SB)
AT	VERNAGT F.	489		20130924	20140924	7.36			-144	3127	57	Braun L. (CGGBAS), Mayer C. (CGGBAS)
AT	VERNAGT F.	489		2014	2015	7.3	868	-2136	-1268	3241	15	Braun L. (CGGBAS), Mayer C. (CGGBAS)
AT	WURTEN K.	545	COM	20131008	20140929	0.33			-380	2650	37	Reisenhofer S. (ZAMG)
AT	WURTEN K.	545	COM	20140929	20150930	0.33			-1275	2700	12	Reisenhofer S. (ZAMG)
AT	ZETTALUNITZ/MULLWITZ K.	578	FXD	20131001	20140930	2.93	1161	-1044	117	3044	59	Stocker-Waldhuber M. (HD/LT), Fischer A. (HD/LT)
AT	ZETTALUNITZ/MULLWITZ K.	578		20141001	20150930	2.8	1367	-2966	-1599	>3470	9	Stocker-Waldhuber M. (HD/LT)
BO - Bolivia												
BO	CHARQUINI SUR	2667	FXD	20130924	20140826	0.31			-310	5207	21	Soruco A. (UMSA), Rabatel A. (LGGE), Sicart J. (IRD), Condom T. (IRD), Ginot P. (IRD)
BO	CHARQUINI SUR	2667	FXD	20140826	20150904	0.31			78	5190	21	Soruco A. (UMSA), Rabatel A. (LGGE), Sicart J. (IRD), Condom T. (IRD), Ginot P. (IRD)
BO	ZONGO	1503	FXD	20130919	20140901	1.89			-97	5392	60	Soruco A. (UMSA), Rabatel A. (LGGE), Sicart J. (IRD), Condom T. (IRD), Ginot P. (IRD)
BO	ZONGO	1503	FXD	20140901	20150903	1.89			368	5317	68	Soruco A. (UMSA), Rabatel A. (LGGE), Sicart J. (IRD), Condom T. (IRD), Ginot P. (IRD)
CA - Canada												
CA	DEVON ICE CAP NW	39	STR	20140510	20150414	1668	174	-408	-246	1381	27	Burgess D. (GSC)
CA	DEVON ICE CAP NW	39	STR	20150414	20160504	1668	123	-518	-395	1554	13	Burgess D. (GSC)
CA	HELM	45		2014	2015				-2500	>2200	0	Demuth M. (GSC), Ednie M. (GSC)
CA	MEIGHEN ICE CAP	16	STR	20140417	20150427	60	225	-168	57	<90	100	Burgess D. (GSC)
CA	MEIGHEN ICE CAP	16	STR	20150427	20160420	58	148	-1040	-892	>260	0	Burgess D. (GSC)
CA	MELVILLE SOUTH ICE CAP	3690	STR	20140424	20150502	51	196	-355	-159	>715	0	Burgess D. (GSC)
CA	MELVILLE SOUTH ICE CAP	3690	STR	20150502	20160426	51	184	-1332	-1148	>715	0	Burgess D. (GSC)
CA	PEYTO	57		2013	2014				-1630	3008	1	Demuth M. (GSC)
CA	PEYTO	57		2014	2015				-1538	>3190	0	Demuth M. (GSC)
CA	PLACE	41		2014	2015				-1590	2470	70	Demuth M. (GSC), Ednie M. (GSC)
CA	WHITE	0	STR	20131001	20140930	38.54			-417	1329	25	Thomson L. (Uottawa/DG), Copland L. (Uottawa/DG), Ecclestone M. (TU/G), Cogley J. (TU/G)
CA	WHITE	0	STR	20141001	20150930	38.54			-693	1375	17	Thomson L. (Uottawa/DG), Ecclestone M. (TU/G), Copland L. (Uottawa/DG), Cogley J. (TU/G)
CH - Switzerland												
CH	ADLER	3801	FLO	20130925	20140927	2.01	975	-745	230	3355	65	Huss M. (DGUF), Salzmann N. (DGUF), Leysinger-Vieli G. (GIUZ)
CH	ADLER	3801	FLO	20140927	20150921	2.01	985	-1363	-378	3495	42	Huss M. (DGUF), Salzmann N. (DGUF), Leysinger-Vieli G. (GIUZ)
CH	ALLALIN	394		20130829	20140902	9.71	1359		77	3285	59	Bauder A. (VAW), Huss M. (VAW)
CH	ALLALIN	394	FLO	20140902	20150921	9.66			-656	3385	48	Bauder A. (VAW), Huss M. (VAW)
CH	BASODINO	463	FLO	20130913	20140926	2.28	1728	-1978	-250	2920	30	Kappenberger G. (private)
CH	BASODINO	463	FLO	20140926	20150926	1.84	1928	-3273	-1345	3125	1	Kappenberger G. (private)
CH	CLARIDENFIRN	2660		20130906	20140915	5.13	1439		-501	2885	44	Steinberger U. (VAW), Kappenberger G. (VAW), Huss M. (VAW), Bauder A. (VAW)
CH	CLARIDENFIRN	2660	FLO	20140915	20151011	4.55	1690	-3052	-1362	2935	27	Steinberger U. (VAW), Kappenberger G. (VAW), Huss M. (VAW), Bauder A. (VAW)
CH	CORBASSIERE	366		20130925	20140908	16.01	1202		-221	3085	62	Bauder A. (VAW), Huss M. (VAW)
CH	CORBASSIERE	366	FLO	20140908	20150908	15.17			-1449	3555	17	Bauder A. (VAW), Huss M. (VAW)
CH	CORVATSCH SOUTH	4535	FLO	20130831	20140830	0.23	1099	-978	120	3267	41	Fischer M. (DGUF)
CH	CORVATSCH SOUTH	4535	FLO	20141004	20150919	0.23	812	-2455	-1643	3347	1	Fischer M. (DGUF), Huss M. (DGUF)
CH	FINDELEN	389	FLO	20130925	20140927	12.88	1258	-1099	159	3185	70	Huss M. (DGUF), Salzmann N. (DGUF), Leysinger-Vieli G. (GIUZ)
CH	FINDELEN	389	FLO	20140927	20150921	12.88	1197	-1803	-606	3305	54	Huss M. (DGUF), Salzmann N. (DGUF), Leysinger-Vieli G. (GIUZ)
CH	GRETTO	367		20130925	20140908	5.43	1373		-198	3225	52	Bauder A. (VAW), Huss M. (VAW)
CH	GRETTO	367	FLO	20140908	20150908	5.32			-1271	3355	14	Bauder A. (VAW), Huss M. (VAW)
CH	GRIES	359	FLO	20130929	20140910	4.97	1620	-2230	-610	3000	35	Funk M. (VAW), Bauder A. (VAW)
CH	GRIES	359	FLO	20140910	20150908	4.43	1764	-3477	-1713	3255	0	Bauder A. (VAW), Funk M. (VAW)
CH	HOHLAUB	3332		20130829	20140902	2.14	1377		-53	3185	54	Bauder A. (VAW), Huss M. (VAW)
CH	HOHLAUB	3332	FLO	20140902	20150921	2.14			-1010	3465	19	Bauder A. (VAW), Huss M. (VAW)
CH	MURTEL	4339	FLO	20130901	20140831	0.3	1441	-1013	427	3162	72	Fischer M. (DGUF)
CH	MURTEL	4339	FLO	20141004	20150919	0.3	1076	-1978	-902	3222	20	Fischer M. (DGUF), Huss M. (DGUF)
CH	PIZOL	417	FLO	20130923	20140920	0.07	1148	-2371	-1223	2760	1	Huss M. (DGUF)
CH	PIZOL	417	FLO	20140920	20150927	0.07	1856	-3357	-1501	2777	1	Huss M. (DGUF)

Table 3

PU	GLACIER_NAME	WGMS_ID	SYS	FROM	TO	AREA	BW	BS	BA	ELA	AAR	INVESTIGATORS (SPONS_AGENCY)	
CH	PLAINE MORTE	4246	FLO	20131002	20140928	7.88	1014	-1972	-958	2805	3	Huss M. (DGUF)	
CH	PLAINE MORTE	4246	FLO	20140928	20151023	7.55	1235	-3630	-2395	2935	0	Huss M. (DGUF)	
CH	RHONE	473	FLO	20130927	20140912	15.81	1195	-1578	-383	2905	57	Bauder A. (VAW)	
CH	RHONE	473	FLO	20140910	20150910	15.57	1723	-2806	-1083	2995	45	Bauder A. (VAW)	
CH	SANKT ANNA	432	FLO	20131002	20140923	0.2	1881	-2319	-438	2792	14	Fischer M. (DGUF)	
CH	SANKT ANNA	432	FLO	20140923	20150928	0.19	1801	-3278	-1477	2917	0	Fischer M. (DGUF), Huss M. (DGUF)	
CH	SCHWARZBACH	4340	FLO	20130907	20140924	0.06	2065	-2607	-541	2812	14	Fischer M. (DGUF)	
CH	SCHWARZBACH	4340	FLO	20140924	20150928	0.05	2203	-3461	-1258	2832	1	Fischer M. (DGUF), Huss M. (DGUF)	
CH	SCHWARZBERG	395	FLO	20130829	20140902	5.17	1789		-9	3035	52	Bauder A. (VAW), Huss M. (VAW)	
CH	SCHWARZBERG	395	FLO	20140902	20150921	0.84			-1331	3225	22	Bauder A. (VAW), Huss M. (VAW)	
CH	SEX ROUGE	454	FLO	20130914	20140922	0.27	1176	-1789	-613	2832	10	Fischer M. (DGUF)	
CH	SEX ROUGE	454	FLO	20140922	20150920	0.27	1447	-3660	-2213	2882	0	Fischer M. (DGUF), Huss M. (DGUF)	
CH	SILVRETTE	408	FLO	20130922	20140920	2.71	1100	-2050	-950	2975	10	Funk M. (VAW), Bauder A. (VAW)	
CH	SILVRETTE	408	FLO	20140920	20150925	2.68	1397	-3046	-1649	3025	1	Bauder A. (VAW)	
CH	TSANFLEURON	371	FLO	20130913	20140911	2.65	1383	-2025	-642	2836	22	Huss M. (DGUF)	
CH	TSANFLEURON	371	FLO	20140911	20150921	2.62	1565	-4309	-2744	2975	0	Salzmann N. (DGUF), Huss M. (DGUF)	
CH - Chile													
CL	AMARILLO	3905		2013	2014					-1319	>5300	0	Cabrera G. (IANIGLA), Leiva J. (IANIGLA)
CL	AMARILLO	3905	COM	20140426	20150514	0.17	-139	-1241	-1393	>5160	0	Cabrera G. (IANIGLA)	
CL	ECHAURREN NORTE	1344		2013	2014		1960	-2900	-940				Barcaza G. (DGA)
CL	ECHAURREN NORTE	1344		2014	2015		1180	-2900	-1720				Barcaza G. (DGA)
CL	GUANACO	3983	COM	20130401	20140331	1.64	70	-950	-880				Rivera A. (CECS)
CL	GUANACO	3983		2014	2015	1.6			-1130				Rivera A. (CECS)
CN - China													
CN	PARLUNG NO. 94	3987	FLO	20131005	20141002	2.36				-1116	5435	19	Li S. (CAS/ITPR), Yang W. (CAS/ITPR)
CN	PARLUNG NO. 94	3987	FLO	20141002	20150929	2.36				-653	5403	29	Li S. (CAS/ITPR), Yang W. (CAS/ITPR)
CN	URUMQI GLACIER NO. 1	853	FXD	20130829	20140901	1.62	127	-312	-185	4050	49	Li H. (CAREERI)	
CN	URUMQI GLACIER NO. 1	853	FXD	20140901	20150902	1.59	173	-988	-815	4165	19	Li H. (CAREERI)	
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	FXD	20130829	20140901	1.03	119	-347	-228	3995	50	Li H. (CAREERI)	
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	FXD	20140901	20150828	1.02	161	-1093	-932	4147	12	Li H. (CAREERI)	
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	FXD	20130829	20140901	0.59	140	-249	-109	4105	48	Li H. (CAREERI)	
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	FXD	20140901	20150902	0.57	194	-801	-607	4196	31	Li H. (CAREERI)	
CO - Colombia													
CO	CONEJERAS	2721	FXD	20140101	20141231	0.2				-4082	>4950	0	Ceballos Lievano J. (IDEAM)
CO	CONEJERAS	2721	FXD	20150101	20151231	0.2				-5599	>5003	0	Ceballos Lievano J. (IDEAM)
CO	RITACUBA BLANCO	2763	FXD	20140101	20141231	0.36				-119	5028	47	Ceballos Lievano J. (IDEAM)
CO	RITACUBA BLANCO	2763	FXD	20150101	20151231	0.36				-887	5130	8	Ceballos Lievano J. (IDEAM)
EC - Ecuador													
EC	ANTIZANA15ALPHA	1624	FXD	20140111	20150108	0.3				-267	5127	64	Cáceres Correa B. (INAMHI)
EC	ANTIZANA15ALPHA	1624		20150101	20151231					-305	5122	71	Cáceres Correa B. (INAMHI)
ES - Spain													
ES	MALADETA	942	FXD	20130925	20140926	0.25	2533	-2455	78	3090	58	Cobos G. (UPV), Pedrero A. (I75SA), Lastrada E. (SPESA), Conejo J. (I75SA)	
ES	MALADETA	942	FXD	20140926	20151023	0.24	1887	-3647	-1760	>3200	0	Cobos G. (UPV)	
FR - France													
FR	ARGENTIERE	354	STR	20131017	20141014					-720			Vincent C. (CNRS), Six D. (CNRS)
FR	ARGENTIERE	354	STR	20141014	20150925					-2480			Six D. (CNRS), Vincent C. (CNRS)
FR	GEBROULAZ	352	STR	20131009	20140925					-270			Vincent C. (CNRS), Six D. (CNRS)
FR	GEBROULAZ	352	STR	20140925	20151023					-2080			Six D. (CNRS), Vincent C. (CNRS)
FR	OSSOUE	2867	STR	20131006	20141011		3080	-3390	-310	3100			René P. (AM)
FR	OSSOUE	2867	STR	20141011	20151010		2590	-4870	-2280				René P. (AM)
FR	SAINT SORLIN	356	STR	20131004	20140927					-1340			Vincent C. (CNRS), Six D. (CNRS)
FR	SAINT SORLIN	356	STR	20140927	20151009					-2980			Vincent C. (CNRS), Six D. (CNRS)
FR	SARENNES	357	STR	20131018	20141104		1410	-3320	-1910				Thibert E. (IRSTEA)
FR	SARENNES	357	FLO	20141104	20151012		877	-4297	-3420	>2973	0		Thibert E. (IRSTEA)
FR	TRE LA TETE	1314	FLO	20139999	20140930	8				-460	3050	53	Moreau L. (GLACIOLAB)
GL - Greenland													
GL	FREYA	3350	FLO	20130814	20140818	5.3	1104	-710	394	<270	94		Hynek B. (ZAMG)
GL	FREYA	3350	FLO	20140818	20150817	5.3	935	-838	97	670	70		Hynek B. (ZAMG)
GL	MITTIVAKKAT	1629		2013	2014	15.9				-1200	750	11	Knudsen N. (DESA), Mernild S. (CECS), Markussen T. (GEUS Geology), Andersen M. (GEUS Geology)
GL	MITTIVAKKAT	1629		2014	2015	15.94	1620	-1420	200	450	71		Knudsen N. (DESA), Mernild S. (CECS), Markussen T. (GEUS Geology), Andersen M. (GEUS Geology)
GL	QASIGIANNGUIT	4566		20131004	20140903	0.71	802			-324	920	20	Abermann J. (GEM-CB)
GL	QASIGIANNGUIT	4566		20140903	20150907	0.71	1328			217	750	62	Abermann J. (GEM-CB)
IN - India													
IN	CHHOTA SHIGRI	2921		2013	2014					-80	5010	54	Ramanathan A. (JNU/SES)
IS - Iceland													
IS	BRUARIJOKULL	3067		2013	2014	1525	1915	-1949	-34	1210	63		Pálsson F. (IES), Gunnarsson A. (NPC)
IS	BRUARIJOKULL	3067		2014	2015		2087	-1043	1044	1050	77		Pálsson F. (IES), Gunnarsson A. (NPC)
IS	DYNGJUIJOKULL	3068		2013	2014	1060	1706	-1535	171	1278	70		Pálsson F. (IES), Gunnarsson A. (NPC)
IS	DYNGJUIJOKULL	3068		2014	2015		2223	-754	1469	1130	79		Pálsson F. (IES), Gunnarsson A. (NPC)
IS	EYJABAKKAJOKULL	3069		2013	2014	112	2292	-2645	-353	1126	52		Pálsson F. (IES), Gunnarsson A. (NPC)
IS	EYJABAKKAJOKULL	3069		2014	2015		2263	-1529	734	1020	65		Pálsson F. (IES), Gunnarsson A. (NPC)
IS	HOFSJOKULL E	3088	FLO	20131008	20141009	212.27	1360	-2350	-990	1240	42		Þorsteinsson P. (IMO)
IS	HOFSJOKULL E	3088	FLO	20141009	20151008	212.27	1950	-1100	850	1030	66		Þorsteinsson P. (IMO)
IS	HOFSJOKULL N	3089	FLO	20131009	20141008	81.6	1460	-2410	-950	1350	36		Þorsteinsson P. (IMO)
IS	HOFSJOKULL N	3089	FLO	20141008	20151009	74.31	1720	-1290	430	1170	65		Þorsteinsson P. (IMO)
IS	HOFSJOKULL SW	3090	FLO	20131009	20141010	51.5	1260	-2250	-990	1375	44		Þorsteinsson P. (IMO)
IS	HOFSJOKULL SW	3090	FLO	20141008	20151008	51.37	2360	-980	1380	1150	70		Þorsteinsson P. (IMO)
IS	KOLDUKVISLARI	3096		2013	2014	300	1224	-2101	-877	1520	43		Pálsson F. (IES), Gunnarsson A. (NPC)
IS	KOLDUKVISLARI	3096		2014	2015		2061	-987	1074	1220	74		Pálsson F. (IES), Gunnarsson A. (NPC)
IS	LANGJOKULL ICE CAP	3660		2013	2014	880	1463	-3413	-1950		8		Pálsson F. (IES), Gunnarsson A. (NPC)
IS	LANGJOKULL ICE CAP	3660		2014	2015		2438	-2025	413		65		Pálsson F. (IES), Gunnarsson A. (NPC)
IS	TUNGNAARJOKULL	3126		2013	2014	345	1372	-2906	-1535	1415	28		Pálsson F. (IES), Gunnarsson A. (NPC)
IS	TUNGNAARJOKULL	3126		2014	2015		1964	-1768	196	1125	61		Pálsson F. (IES), Gunnarsson A. (NPC)

PU	GLACIER_NAME	WGMS_ID	SYS	FROM	TO	AREA	BW	BS	BA	ELA	AAR	INVESTIGATORS_(SPONS_AGENCY)
IT - Italy												
IT	CALDERONE	1107	COM	20130914	20140913	0.04	5978					Pecci M. (CGI)
IT	CALDERONE	1107	COM	20140913	20150912	0.04	3107					Pecci M. (CGI), Pecci M. (ITAC), d'Aquila P. (CNSAS), Cappelletti D. (CGI), Caira T. (ITAC), Iurisci C. (ITAC)
IT	CAMPO SETT.	1106	FLO	20131006	20140927	0.3			37	3025		57 Scotti R. (SGL), Colombarolli D. (SGL), Ortelli M. (SGL)
IT	CAMPO SETT.	1106	FLO	20140927	20150920	0.3			-1799	3090		13 Scotti R. (SGL), Colombarolli D. (SGL), Bera A. (SGL)
IT	CARESER	635	FLO	20130928	20140925	1.58	1576	-1707	-131	3061		48 Carturan L. (UP/TeSAF)
IT	CARESER	635	FLO	20140925	20150919	1.31	878	-3353	-2475	>3275		0 Carturan L. (UP/TeSAF), Trenti A. (MeteoTrentino)
IT	CIARDONEY	1264	COM	20130913	20140922	0.57	1850	-2410	-560	3050		25 Mercalli L. (SMI), Cat Berro D. (SMI), Fornengo F. (SMI)
IT	CIARDONEY	1264	COM	20140922	20150915	0.57	1731	-3562	-1831	>3150		0 Mercalli L. (SMI), Berro D. (SMI), Fornengo F. (SMI)
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	FXD	20130925	20140928	0.4	1842	-1375	467	2875		1 Dinale R. (UI/HA), Di Lullo A. (UI/HA)
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	FXD	20140928	20150922	0.4	1196	-2487	-1291	>3400		0 Dinale R. (UI/HA), Di Lullo A. (UI/HA)
IT	GRAND ETRET	1238		2013	2014	0.53			-569			Bertoglio V. (CGI)
IT	GRAND ETRET	1238		20140999	20150919	0.53	1452	-3243	-1791	>3100		0 Bertoglio V. (CGI)
IT	LA MARE (VEDRETTA DE)	636	FLO	20130914	20140909	2.06	1509	-679	830	3012		86 Carturan L. (UP/TeSAF)
IT	LA MARE (VEDRETTA DE)	636	FLO	20140909	20150912	2.06	755	-2070	-1315	>3586		5 Carturan L. (UP/TeSAF)
IT	LUNGA (VEDRETTA) / LANGENF.	661	FXD	20131001	20140930	1.6	1642	-1200	442	<2973		78 Galos S. (UI/HA)
IT	LUNGA (VEDRETTA) / LANGENF.	661		2014	2015				-1727			Galos S. (UI/HA)
IT	LUPO	1138	FLO	20130928	20141008	0.2	3993	-2624	1369	2435		99 Scotti R. (SGL), Hagg W. (SGL), Ortelli M. (SGL)
IT	LUPO	1138	FLO	20141008	20151113	0.2	3074	-4635	-1561	>2760		8 Scotti R. (SGL), Hagg W. (SGL), Bulanti D. (SGL), De Zaiacomio M. (SGL), Ortelli M. (SGL)
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	FLO	20130924	20140929	6.03	1592	-1559	34	3011		45 Franchi G. (UI/HA), Rossi G. (UI/HA)
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	FLO	20140929	20150927	6	1439	-2652	-1213	3220		19 Franchi G. (UI/HA), Rossi G. (UI/HA)
IT	PENDENTE (VEDR.) / HANGENDERF.	675	FLO	20130924	20140929	8.82	175	-186	-11	2834		31 Franchi G. (UI/HA), Rossi G. (UI/HA)
IT	PENDENTE (VEDR.) / HANGENDERF.	675	FLO	20140929	20150927	0.85	1702	-3202	-1500	2962		0 Franchi G. (UI/HA), Rossi G. (UI/HA)
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	FXD	20130924	20140926	1.82	1498	-1353	146	3000		51 Dinale R. (UI/HA), Di Lullo A. (UI/HA)
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	FXD	20140926	20151001	1.7	1037	-2658	-1622	>3325		0 Dinale R. (UI/HA), Di Lullo A. (UI/HA)
IT	SURETTA MERID.	2488	FLO	20131009	20141007	0.16			378	2755		66 Scotti R. (SGL), Villa F. (SGL), Hagg W. (SGL), Bulanti D. (SGL)
IT	SURETTA MERID.	2488	FLO	20141007	20150927	0.16	2584	-3493	-909	2825		16 Scotti R. (SGL), Villa F. (SGL), Hagg W. (SGL), Bulanti D. (SGL), Rampazzo R. (SGL)
IT	TIMORION	1282		2013	2014				-155			Morra di Cella U. (ARPA)
IT	TIMORION	1282	FLO	20140923	20150915	0.45	900	-2370	-1470	>3485		0 Morra di Cella U. (ARPA)
JP - Japan												
JP	HAMAGURI YUKI	897		20130927	20141008			-6596				Fujita K. (DHAS), Fukui K. (DHAS)
JP	HAMAGURI YUKI	897		20141008	20151009		6929	-7258	-329			Fujita K. (DHAS), Fukui K. (DHAS)
KE - Kenya												
KE	LEWIS	695	FLO	20130308	20140223	0.11			-934	>4871		Prinz R. (ACINN)
KG - Kyrgyzstan												
KG	ABRAMOV	732	FLO	20130816	20140818	24.01	1234	-1900	-665	4245		47 Barandun M. (DGUF)
KG	ABRAMOV	732	FLO	20140818	20150827	24.01	2049	-2083	-33	4185		62 Barandun M. (DGUF)
KG	BATYSH SOOK/SYEK ZAPADNIY	781	FLO	20130826	20140829	1.11	63	-499	-435	4275		31 Kenzhebaev R. (CAIAG), Barandun M. (DGUF), Kronenberg M. (DGUF), Azisov E. (CAIAG)
KG	BATYSH SOOK/SYEK ZAPADNIY	781		2014	2015				-499			Kenzhebaev R. (CAIAG), Barandun M. (DGUF), Kronenberg M. (DGUF), Azisov E. (CAIAG)
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	FLO	20130825	20140827	6.41	158		-675	4265		29 Kronenberg M. (DGUF), Barandun M. (DGUF), Farinotti D. (WSL), Azisov E. (CAIAG), Usubaliev R. (CAIAG)
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	FLO	20140827	20150809	6.79	167	-803	-635	4265		28 Barandun C. (DGUF), Usubaliev R. (CAIAG), Azisov E. (CAIAG), Hoelzle M. (DGUF)
KG	GLACIER NO. 599 (KJUNGEI ALA-TOO)	10402	FLO	20140620	20150619	1.53			-62	4031		62 Azisov E. (CAIAG), Usubaliev R. (CAIAG), Osmonov A. (CAIAG), Daiyrov M. (CAIAG)
KG	GOLUBIN	753	FLO	20130723	20140903	5.45	558	-2557	-1999	4245		2 Azisov E. (CAIAG), Barandun M. (DGUF), Usubaliev R. (CAIAG), Kronenberg M. (DGUF), Vorogushyn S. (GFZ Potsdam)
KG	GOLUBIN	753	FLO	20140903	20150814	5.44	550	-1221	-671	4115		28 Azisov E. (CAIAG), Barandun M. (DGUF), Usubaliev R. (CAIAG), Kronenberg M. (DGUF), Vorogushyn S. (GFZ Potsdam)
KG	KARA-BATKAK	813	STR	20139999	20140916	2.78	340	-1290	-950			Popovnin V., Satykanov R., Shatrin V. (all: TshMRC)
KG	KARA-BATKAK	813	STR	20140916	20150922	2.74	500	-1380	-880	4070		34 Popovnin V., Satykanov R., Shatrin V. (all: TshMRC)
KG	SARY TOR (NO.356)	805	STR	20149999	20150905	2.65	420	-1240	-820	>4800		0 Popovnin V., Satykanov R., Shatrin V. (all: TshMRC)
KZ - Kazakhstan												
KZ	TS.TUYUKSUYSKIY	817	STR	20131010	20140919	2.28	195	-1283	-1088	3920		29 Kasatkin N. (IGNANKaz)
KZ	TS.TUYUKSUYSKIY	817	STR	20140920	20150919	2.27	654	-1407	-756	3900		31 Kasatkin N. (IGNANKaz)
NO - Norway												
NO	AALFOTBREEN	317	STR	20130925	20141015	3.97	3638	-5291	-1653	>1368		0 Kjellmoen B. (NVE)
NO	AALFOTBREEN	317	STR	20141015	20151016	3.97	4209	-2810	1400	1020		96 Kjellmoen B. (NVE)
NO	AUSTDALSBREEN	321	STR	20130925	20141002	10.63	2142	-3497	-1355	>1747		0 Elvehøy H. (NVE)
NO	AUSTDALSBREEN	321	STR	20141002	20151014	10.63	2527	-1805	722	1371		81 Elvehøy H. (NVE)
NO	BLOMSTOELSKARDSBREEN	3339	STR	20130924	20141014	22.4	3465	-3559	-94	1470		58 Kjellmoen B. (NVE)
NO	BLOMSTOELSKARDSBREEN	3339	STR	20141014	20151014	22.4	3412	-1421	1991	1250		86 Kjellmoen B. (NVE)
NO	ENGABREEN	298	STR	20131021	20141014	36.25	2587	-3477	-890	1250		43 Elvehøy H. (NVE)
NO	ENGABREEN	298	STR	20141014	20151027	36.25	3267	-2614	653	1093		75 Elvehøy H. (NVE)
NO	GRAASUBREEN	299	STR	20130913	20140910	2.12	893	-2061	-1169			Andreassen L. (NVE)
NO	GRAASUBREEN	299	STR	20140910	20150922	2.12	770	-477	293			Andreassen L. (NVE)
NO	HANSEBREEN	322	STR	20130925	20141015	2.75	3540	-5654	-2114	>1310		0 Kjellmoen B. (NVE)
NO	HANSEBREEN	322	STR	20141015	20151016	2.75	4076	-3069	1007	<927		100 Kjellmoen B. (NVE)
NO	HELLSTUGUBREEN	300	STR	20130910	20140916	2.9	1113	-2333	-1220	2075		8 Andreassen L. (NVE)
NO	HELLSTUGUBREEN	300	STR	20140916	20150923	2.9	1201	-727	475	1770		79 Andreassen L. (NVE)
NO	LANGFIORDJOEKELEN	323	STR	20131107	20140924	3.22	2359	-3139	-780	>1050		0 Kjellmoen B. (NVE)
NO	LANGFIORDJOEKELEN	323	STR	20140924	20150923	3.22	1884	-2682	-797	1025		6 Kjellmoen B. (NVE)
NO	NIGARDSBREEN	290	STR	20130925	20141117	46.61	2726	-3070	-343	1550		67 Kjellmoen B. (NVE)
NO	NIGARDSBREEN	290	STR	20141117	20151014	46.61	3065	-1353	1712	1310		92 Kjellmoen B. (NVE)
NO	REMBESDALSKAAKA	2296	STR	20130926	20141023	17.26	2167	-3461	-1295	>1854		0 Elvehøy H. (NVE)
NO	REMBESDALSKAAKA	2296	STR	20141023	20151014	17.26	3000	-1830	1170	1570		87 Elvehøy H. (NVE)
NO	RUNDVASSBREEN	2670	STR	20130927	20140923	10.94	1797	-2588	-791	1335		26 Kjellmoen B. (NVE)
NO	RUNDVASSBREEN	2670	STR	20140923	20151007	10.94	2125	-2145	-20	1230		58 Kjellmoen B. (NVE)
NO	STORBREEN	302	STR	20130912	20140918	5.14	1573	-2739	-1166	1870		19 Andreassen L. (NVE)
NO	STORBREEN	302	STR	20140918	20150909	5.14	1515	-1029	487	1575		89 Andreassen L. (NVE)
NO	SVELGIABREEN	3343	STR	20130924	20141014	22.35	3303	-3761	-458	1460		34 Kjellmoen B. (NVE)
NO	SVELGIABREEN	3343	STR	20141014	20151014	22.35	3464	-1628	1836	1140		86 Kjellmoen B. (NVE)

Table 3

PU	GLACIER_NAME	WGMS_ID	SYS	FROM	TO	AREA	BW	BS	BA	ELA	AAR	INVESTIGATORS_(SPONS_AGENCY)
NP - Nepal												
NP	MERA	3996		20131122	20141208	5.05				-200	5550	59 Wagon P. (IRD)
NP	MERA	3996		20141208	20151208	5.05				-20	5430	74 Wagon P. (IRD)
NP	POKALDE	3997		20131204	20141120	0.09				-1230	5655	2 Wagon P. (IRD)
NP	POKALDE	3997		20141120	20151201	0.09				-700	5615	20 Wagon P. (IRD)
NP	RIKHA SAMBA	1516	FLO	20131002	20141108	5.32				-451	5888	38 Stumm D. (ICIMOD)
NP	RIKHA SAMBA	1516	FLO	20141108	20151005	5.32				-525	5896	37 Stumm D. (ICIMOD)
NP	WEST CHANGRI NUP	10401		20131202	20141124	0.92				-1330	5620	4 Wagon P. (IRD)
NP	WEST CHANGRI NUP	10401		20141124	20151126	0.92				-1280	5570	18 Wagon P. (IRD)
NP	YALA	912	FLO	20131117	20141113	1.61				-642	5435	34 Stumm D. (ICIMOD)
NP	YALA	912	FLO	20141113	20151126	1.61				-903	5466	24 Stumm D. (ICIMOD)
NZ - New Zealand												
NZ	BREWSTER	1597	FLO	20130321	20140408	2.03	2682	-2212	470	1896	49	Anderson B. (ARC), Cullen N. (DGUO-NZ), Sirguyev P. (DGUO-NZ)
NZ	BREWSTER	1597	FLO	20140408	20150317	2.03	2492	-2277	215	1911	43	Anderson B. (ARC), Cullen N. (DGUO-NZ), Sirguyev P. (DGUO-NZ)
NZ	ROLLESTON	1538	FLO	20130314	20140322	0.11	2899	-2937	-38	1801	62	Kerr T. (private), Purdie H. (UCant/DG)
NZ	ROLLESTON	1538	FLO	20140322	20150320	0.11	2909	-2252	657	1786	63	Kerr T. (private), Purdie H. (UCant/DG)
PE - Peru												
PE	ARTESONRAJU	3292		2013	2014	3.63				-341	5043	59 Coachin Rapre A. (UGRH/ANA)
PE	ARTESONRAJU	3292		2014	2015	3.61				-372		Coachin Rapre A. (UGRH/ANA)
PE	YANAMAREY	226		2013	2014	0.16				-1407	4902	19 Coachin Rapre A. (UGRH/ANA)
PE	YANAMAREY	226		2014	2015	0.26				-563		Coachin Rapre A. (UGRH/ANA)
RU - Russia												
RU	DJANKUAT	726	STR	20130923	20140923	2.69	2340	-3710	-1370			Popovnin V. (MGU)
RU	DJANKUAT	726	STR	20140924	20150922	2.69	2580	-3590	-1010			Popovnin V. (MGU)
RU	GARABASHI	761	STR	20130999	20140999		1034	-1954	-920	4000	30	Rototayeva O. (IGRAN), Nosenko G. (IGRAN), Tarasova L. (IGRAN), Kerimov A. (IGRAN)
SE - Sweden												
SE	MARMAGLACIAEREN	1461	COM	2013	20140910	3.96	980	-2340	-1370	1755	0	Pettersson R. (DES/UU)
SE	MARMAGLACIAEREN	1461	COM	2014	20150906	3.96	1380	-1360	20	1365	45	Pettersson R. (DES/UU)
SE	RABOTS GLACIAER	334	COM	2014	20150910	3.67	1100	-943	-43	1370	41	Jansson P. (INK)
SE	RIUKOJITNA	342	COM	2014	20150908	2.79	1410	-1370	40	1345	54	Jansson P. (INK)
SE	STORGLACIAEREN	332	COM	2013	2014	2.9	1510	-2400	-890	1500	31	Holmlund P. (INK), Jansson P. (INK)
SE	STORGLACIAEREN	332	COM	2014	20150920	2.9	1460	-820	640	1370	71	Jansson P. (INK)
SE	TARFALAGLACIAEREN	326	COM	2014	20150904	1.01	1510	-900	610	1380	100	Jansson P. (INK)
SJ - Svalbard												
SJ	AUSTRE BROEGGERBREEN	292		2013	2014		830	-810	10	310	33	Kohler J. (NPI)
SJ	AUSTRE BROEGGERBREEN	292		2014	2015		640	-1240	-610	433	9	Kohler J. (NPI)
SJ	AUSTRE BROEGGERBREEN	3812	COM	2013	2014		759	-749	10	369	62	Bernard E. (CNRS TheMA), Griselin M. (CNRS TheMA), Tolle F. (CNRS TheMA), Friedt J. (CNRS TheMA)
SJ	HANSBREEN	306	STR	20130915	20141112	56.74	936	-1213	-277		54	Glowacki P. (PAS), Petlicki M. (PAS)
SJ	HANSBREEN	306	STR	20141112	20151008	56.74	1002	-1438	-436		54	Petlicki M. (PAS)
SJ	IRENEBREEN	2669	STR	2013	2014					-687	438	10 Sobota I. (FES NCU)
SJ	IRENEBREEN	2669	STR	2014	2015					-1335	594	1 Sobota I. (FES NCU)
SJ	KONGSVEGEN	1456		2013	2014		620	-480	140	492	55	Kohler J. (NPI)
SJ	KONGSVEGEN	1456		2014	2015		760	-920	-160	563	37	Kohler J. (NPI)
SJ	KRONEBREEN	3504		2013	2014		460	-380	80	626	53	Kohler J. (NPI)
SJ	KRONEBREEN	3504		2014	2015		670	-730	-60	701	36	Kohler J. (NPI)
SJ	MIDTRE LOVENBREEN	291		2013	2014		770	-750	30	321	41	Kohler J. (NPI)
SJ	MIDTRE LOVENBREEN	291		2014	2015		730	-1180	-450	409	16	Kohler J. (NPI)
SJ	WALDEMARBREEN	2307	STR	2013	2014					-576	385	16 Sobota I. (FES NCU)
SJ	WALDEMARBREEN	2307	STR	2014	2015					-1439	526	0 Sobota I. (FES NCU)
SJ	WERENSKIOLDBREEN	305	FXD	20140414	20140901	27.11	1326	-960	366	775	0	Ignatiuk D. (US/FES), Laska M. (US/FES)
SJ	WERENSKIOLDBREEN	305	FXD	20140901	20150920	27.11	885	-1590	-705	775	0	Ignatiuk D. (US/FES), Laska M. (US/FES)
US - United States of America												
US	BLUE GLACIER	210		2013	2014		2800	-4210	-1410			Larrabee M. (NCNP)
US	BLUE GLACIER	210	COM	20141003	20150928	5.68	2510	-4800	-2300	2100	30	Larrabee M. (NCNP), Riedel J. (NCNP)
US	COLUMBIA (2057)	76	FXD	20130928	20140927	0.84				-500	1580	51 Pelto M. (JIRP)
US	COLUMBIA (2057)	76	FXD	20140927	20150927	0.82				-3480	>	0 Pelto M. (JIRP)
US	DANIELS	83	FXD	20130922	20140928					-550		54 Pelto M. (NCGCP)
US	DANIELS	83	FXD	20140928	20150928					-3080	>	0 Pelto M. (NCGCP)
US	EASTON	1367	FXD	20130929	20140928					-1300	2150	46 Pelto M. (NCGCP)
US	EASTON	1367	FXD	20140928	20150928					-2780	2280	26 Pelto M. (NCGCP)
US	EEL	188		2013	2014		4190	-4270	-70			Larrabee M. (NCNP)
US	EEL	188	COM	20141003	20150928	0.64	1520	-5260	-3740	2200	2	Larrabee M. (NCNP), Riedel J. (NCNP)
US	EKLUTNA	85		2013	2014		1730	-2570	-840			
US	EKLUTNA	85		2014	2015		860	-2200	-1340			
US	EKLUTNA EAST BRANCH	6829		2013	2014		1680	-2530	-850			
US	EKLUTNA EAST BRANCH	6829		2014	2015		920	-2240	-1320			
US	EKLUTNA WEST BRANCH	6828		2013	2014		1790	-2610	-820			
US	EKLUTNA WEST BRANCH	6828		2014	2015		790	-2160	-1370			
US	EMMONS	203		2013	2014		2330	-3660	-1330			Larrabee M. (NCNP)
US	EMMONS	203	COM	20141009	20151006	11.27	2410	-3670	-1260	2820	35	Larrabee M. (NCNP), Riedel J. (NCNP)
US	GULKANA	90	FLO	20130819	20140824	16.4	1100	-1300	-300			Sass L. (USGS-F), O'Neel S. (USGS-F)
US	GULKANA	90	FLO	20140824	20150908	16.3	700	-2200	-1500			Sass L. (USGS-F), O'Neel S. (USGS-F)
US	ICE WORM	82	FXD	20130922	20140928					-320		60 Pelto M. (NCGCP)
US	ICE WORM	82	FXD	20140928	20150928					-3250	>	0 Pelto M. (NCGCP)
US	LEMON CREEK	3334	COM	20130925	20141010	11.6				-1825	1200	3 Pelto M. (JIRP), McNeil C. (JIRP)
US	LEMON CREEK	3334	COM	20141014	20151013	11.6				-2270	1275	3 Pelto M. (JIRP), McNeil C. (JIRP)
US	LOWER CURTIS	77	FXD	20130929	20140927					-1350	1640	36 Pelto M. (NCGCP)
US	LOWER CURTIS	77	FXD	20140927	20150927					-3400	>	0 Pelto M. (NCGCP)
US	LYNCH	81	FXD	20130922	20140928					-850		48 Pelto M. (NCGCP)
US	LYNCH	81	FXD	20140928	20150928					-2850		0 Pelto M. (NCGCP)
US	NISQUALLY	201		2013	2014		2920	-3560	-650			Larrabee M. (NCNP)
US	NISQUALLY	201	COM	20141002	20151005	6.67	3170	-4020	-840	3075	26	Larrabee M. (NCNP), Riedel J. (NCNP)
US	NOISY CREEK	1666		2013	2014		4250	-4430	-180			Larrabee M. (NCNP)
US	NOISY CREEK	1666	COM	20140929	20150922	0.46	2080	-5630	-3550	>1690	0	Larrabee M. (NCNP), Riedel J. (NCNP)
US	NORTH KLAUWATTI	1664		2013	2014		3870	-4080	-210			Larrabee M. (NCNP)
US	NORTH KLAUWATTI	1664	COM	20141002	20150923	1.48	3020	-5330	-2300	2300	1	Larrabee M. (NCNP), Riedel J. (NCNP)
US	RAINBOW	79	FXD	20130921	20140926					-1940	2000	32 Pelto M. (NCGCP)

PU	GLACIER_NAME	WGMS_ID	SYS	FROM	TO	AREA	BW	BS	BA	ELA	AAR	INVESTIGATORS_(SPONS_AGENCY)
US	RAINBOW	79	FXD	20140926	20150929				-3450	2075	5	Pelto M. (NCGCP)
US	SANDALEE	1667		2013	2014		2940	-3100	-220			Larrabee M. (NCNP)
US	SANDALEE	1667	COM	20141002	20150922	0.18	2450	-4440	-2000	>2310	0	Larrabee M. (NCNP), Riedel J. (NCNP)
US	SHOLES	3295	FXD	20130921	20140926				-1530		30	Pelto M. (NCGCP)
US	SHOLES	3295	FXD	20140926	20150926				-3050	>	0	Pelto M. (NCGCP)
US	SILVER	1665		2013	2014		2400	-2670	-270			Larrabee M. (NCNP)
US	SILVER	1665	COM	20141002	20150923	0.4	2340	-3400	-1060	2470	22	Larrabee M. (NCNP), Riedel J. (NCNP)
US	SOUTH CASCADE	205	COM	20141009	20150930	1.65	2175	-4893	-2717			Whorton E. (USGS), Bachmann M. (USGS)
US	SPERRY	218	COM	20130927	20140918	0.82	3190	-3130	60			Fagre D. (USGS-GNP), Clark A. (USGS-GNP)
US	SPERRY	218	COM	20140918	20150922	0.82	2790	-4010	-1220			Fagre D. (USGS-GNP), Clark A. (USGS-GNP)
US	TAKU	124	COM	20130925	20141010				-600	1080		Pelto M. (JIRP), McNeil C. (JIRP)
US	TAKU	124	COM	20141014	20151013				-860	1175		Pelto M. (JIRP), McNeil C. (JIRP)
US	WOLVERINE	94	FLO	20130917	20141002	16	1600	-3100	-1500			Sass L. (USGS-F), O'Neel S. (USGS-F)
US	WOLVERINE	94		2014	2015	15.9	2000	-2700	-700			O'Neel S. (USGS-F), Sass L. (USGS-F)
US	YAWNING	75	FXD	20130928	20140925				-1650	1875	32	Pelto M. (NCGCP)
US	YAWNING	75	FXD	20140925	20150928				-3360	>	0	Pelto M. (NCGCP)

APPENDIX - Table 4

MASS BALANCE VERSUS ELEVATION DATA 2014–2015

PU	Political unit, alphabetic 2-digit country code (cf. www.iso.org)
GLACIER NAME	Name of the glacier in capital letters, cf. Appendix Table 1
WGMS ID	Key identifier of the glacier, cf. Appendix Table 1
YEAR	Balance year
ELEV FROM	Lower boundary of elevation interval in metres above sea level
ELEV TO	Upper boundary of elevation interval in metres above sea level
AREA	Area of elevation interval in square kilometres
BW	Specific winter balance of elevation interval in mm water equivalent
BS	Specific summer balance of elevation interval in mm water equivalent
BA	Specific annual balance of elevation interval in mm water equivalent

PU	GLACIER_NAME	WGMS_ID	YEAR	ELEV_FROM	ELEV_TO	AREA	BW	BS	BA
AQ - Antarctica									
AQ	BAHIA DEL DIABLO	2665	2014	562	630				600
AQ	BAHIA DEL DIABLO	2665	2014	488	562				550
AQ	BAHIA DEL DIABLO	2665	2014	412	488				470
AQ	BAHIA DEL DIABLO	2665	2014	338	412				250
AQ	BAHIA DEL DIABLO	2665	2014	262	338				-100
AQ	BAHIA DEL DIABLO	2665	2014	188	262				-180
AQ	BAHIA DEL DIABLO	2665	2014	112	188				-200
AQ	BAHIA DEL DIABLO	2665	2014	38	112				-600
AQ	BAHIA DEL DIABLO	2665	2015	562	630				400
AQ	BAHIA DEL DIABLO	2665	2015	488	562				350
AQ	BAHIA DEL DIABLO	2665	2015	412	488				600
AQ	BAHIA DEL DIABLO	2665	2015	338	412				-100
AQ	BAHIA DEL DIABLO	2665	2015	262	338				-400
AQ	BAHIA DEL DIABLO	2665	2015	188	262				-800
AQ	BAHIA DEL DIABLO	2665	2015	112	188				-1100
AQ	BAHIA DEL DIABLO	2665	2015	38	112				-1300
AR - Argentina									
AR	BROWN SUPERIOR	3903	2015	5101	5115	0.030	-1335	-1298	-2805
AR	BROWN SUPERIOR	3903	2015	5080	5101	0.032	73	-2010	-1896
AR	BROWN SUPERIOR	3903	2015	5070	5080	0.016	26	-2048	-2082
AR	BROWN SUPERIOR	3903	2015	5062	5070	0.011	161	-1980	-1819
AR	BROWN SUPERIOR	3903	2015	5039	5062	0.026	34	-1808	-1981
AR	BROWN SUPERIOR	3903	2015	5022	5039	0.021	-43	-2325	-2368
AR	BROWN SUPERIOR	3903	2015	5015	5022	0.009	-102	-2898	-3000
AR	BROWN SUPERIOR	3903	2015	4965	5015	0.031	14	-3032	-3018
AR	CONCONTA NORTE	3902	2015	5069	5125	0.016	-78	-3211	-3305
AR	CONCONTA NORTE	3902	2015	5058	5069	0.008	-238	-3247	-3341
AR	CONCONTA NORTE	3902	2015	5053	5058	0.004	82	-3175	-3269
AR	CONCONTA NORTE	3902	2015	5036	5053	0.011	-94	-3103	-3197
AR	CONCONTA NORTE	3902	2015	5017	5036	0.010	-196	-2479	-2803
AR	CONCONTA NORTE	3902	2015	4986	5017	0.013	-442	-1410	-1852
AR	CONCONTA NORTE	3902	2015	4950	4986	0.008	55	-2176	-2839
AR	LOS AMARILLOS	3904	2015	5400	5535	0.149	-94	-540	-706
AR	LOS AMARILLOS	3904	2015	5349	5400	0.097	-315	-702	-1017
AR	LOS AMARILLOS	3904	2015	5325	5349	0.049	-247	-578	-850
AR	LOS AMARILLOS	3904	2015	5292	5325	0.076	-213	-1080	-1293
AR	LOS AMARILLOS	3904	2015	5267	5292	0.068	-255	-493	-748
AR	LOS AMARILLOS	3904	2015	5259	5267	0.024	-289	-518	-876
AR	LOS AMARILLOS	3904	2015	5242	5259	0.047	-247	-419	-666
AR	LOS AMARILLOS	3904	2015	5211	5242	0.073	-391	-1080	-1471
AR	LOS AMARILLOS	3904	2015	5153	5211	0.066	-175	-608	-783
AR	LOS AMARILLOS	3904	2015	4915	5153	0.130	-26	-878	-904
AR	MARTIAL ESTE	2000	2014	1160	1180	0.002	630	-230	400
AR	MARTIAL ESTE	2000	2014	1140	1160	0.005	700	-245	455
AR	MARTIAL ESTE	2000	2014	1120	1140	0.008	780	-270	510
AR	MARTIAL ESTE	2000	2014	1100	1120	0.012	890	-155	735
AR	MARTIAL ESTE	2000	2014	1080	1100	0.015	1220	-205	1015
AR	MARTIAL ESTE	2000	2014	1060	1080	0.016	1180	-250	930
AR	MARTIAL ESTE	2000	2014	1040	1060	0.014	1100	-240	860
AR	MARTIAL ESTE	2000	2014	1020	1040	0.011	940	-530	410
AR	MARTIAL ESTE	2000	2014	1000	1020	0.008	410	-1310	-900
AR	MARTIAL ESTE	2000	2014	980	1000	0.002	390	-1440	-1050
AR	MARTIAL ESTE	2000	2014	960	980	0.001	370	-1570	-1200
AR	MARTIAL ESTE	2000	2015	1160	1180	0.002	600	-500	100
AR	MARTIAL ESTE	2000	2015	1140	1160	0.005	650	-500	150
AR	MARTIAL ESTE	2000	2015	1120	1140	0.007	720	-520	200
AR	MARTIAL ESTE	2000	2015	1100	1120	0.011	800	-555	245
AR	MARTIAL ESTE	2000	2015	1080	1100	0.015	1090	-618	472
AR	MARTIAL ESTE	2000	2015	1060	1080	0.016	910	-880	30
AR	MARTIAL ESTE	2000	2015	1040	1060	0.013	750	-1160	-410
AR	MARTIAL ESTE	2000	2015	1020	1040	0.013	580	-1360	-780
AR	MARTIAL ESTE	2000	2015	1000	1020	0.008	500	-1575	-1075
AR	MARTIAL ESTE	2000	2015	980	1000	0.002	450	-1605	-1155
AR	MARTIAL ESTE	2000	2015	960	980	0.001	400	-1630	-1230
AT - Austria									
AT	HALLSTAETTER G.	535	2014	2850	2900	0.01	1798	-1170	628
AT	HALLSTAETTER G.	535	2014	2800	2850	0.027	1800	-1175	625
AT	HALLSTAETTER G.	535	2014	2750	2800	0.036	1787	-1314	473
AT	HALLSTAETTER G.	535	2014	2700	2750	0.166	1503	-1030	473
AT	HALLSTAETTER G.	535	2014	2650	2700	0.315	1470	-1056	414
AT	HALLSTAETTER G.	535	2014	2600	2650	0.564	1444	-1058	386
AT	HALLSTAETTER G.	535	2014	2550	2600	0.492	1381	-1363	18
AT	HALLSTAETTER G.	535	2014	2500	2550	0.372	1261	-1533	-272
AT	HALLSTAETTER G.	535	2014	2450	2500	0.361	1119	-1824	-705
AT	HALLSTAETTER G.	535	2014	2400	2450	0.252	918	-2205	-1287
AT	HALLSTAETTER G.	535	2014	2350	2400	0.218	911	-2942	-2031
AT	HALLSTAETTER G.	535	2014	2300	2350	0.168	744	-3284	-2540
AT	HALLSTAETTER G.	535	2014	2250	2300	0.079	741	-3491	-2750
AT	HALLSTAETTER G.	535	2014	2200	2250	0.026	800	-3550	-2750
AT	HALLSTAETTER G.	535	2015	2850	2900	0.01	2800	-3056	-256
AT	HALLSTAETTER G.	535	2015	2800	2850	0.027	2800	-2863	-63
AT	HALLSTAETTER G.	535	2015	2750	2800	0.036	2800	-2927	-127
AT	HALLSTAETTER G.	535	2015	2700	2750	0.166	2764	-3017	-253
AT	HALLSTAETTER G.	535	2015	2650	2700	0.315	2639	-3176	-537
AT	HALLSTAETTER G.	535	2015	2600	2650	0.564	2475	-3714	-1239
AT	HALLSTAETTER G.	535	2015	2550	2600	0.492	2135	-4444	-2309
AT	HALLSTAETTER G.	535	2015	2500	2550	0.372	2134	-4749	-2615
AT	HALLSTAETTER G.	535	2015	2450	2500	0.361	1908	-4825	-2917
AT	HALLSTAETTER G.	535	2015	2400	2450	0.252	1358	-4721	-3363
AT	HALLSTAETTER G.	535	2015	2350	2400	0.218	1108	-4740	-3632
AT	HALLSTAETTER G.	535	2015	2300	2350	0.168	1073	-4842	-3769
AT	HALLSTAETTER G.	535	2015	2250	2300	0.079	765	-4515	-3750

Table 4

PU	GLACIER_NAME	WGMS_ID	YEAR	ELEV_FROM	ELEV_TO	AREA	BW	BS	BA
AT	HALLSTAETTER G.	535	2015	2200	2250	0.026	612	-4362	-3750
AT	HINTEREIS F.	491	2014	3700	3750	0.002	1125	-500	625
AT	HINTEREIS F.	491	2014	3650	3700	0.02	1125	-500	625
AT	HINTEREIS F.	491	2014	3600	3650	0.026	1125	-500	625
AT	HINTEREIS F.	491	2014	3550	3600	0.019	1125	-481	644
AT	HINTEREIS F.	491	2014	3500	3550	0.015	1126	-575	551
AT	HINTEREIS F.	491	2014	3450	3500	0.061	1183	-405	778
AT	HINTEREIS F.	491	2014	3400	3450	0.118	1262	-300	962
AT	HINTEREIS F.	491	2014	3350	3400	0.237	1499	-381	1118
AT	HINTEREIS F.	491	2014	3300	3350	0.396	1609	-347	1262
AT	HINTEREIS F.	491	2014	3250	3300	0.413	1602	-333	1269
AT	HINTEREIS F.	491	2014	3200	3250	0.427	1567	-565	1002
AT	HINTEREIS F.	491	2014	3150	3200	0.538	1493	-653	839
AT	HINTEREIS F.	491	2014	3100	3150	0.607	1489	-776	713
AT	HINTEREIS F.	491	2014	3050	3100	0.631	1431	-1034	397
AT	HINTEREIS F.	491	2014	3000	3050	0.51	1418	-1262	155
AT	HINTEREIS F.	491	2014	2950	3000	0.401	1412	-1478	-66
AT	HINTEREIS F.	491	2014	2900	2950	0.416	1300	-1608	-308
AT	HINTEREIS F.	491	2014	2850	2900	0.35	1299	-1913	-615
AT	HINTEREIS F.	491	2014	2800	2850	0.295	1380	-2456	-1077
AT	HINTEREIS F.	491	2014	2750	2800	0.242	1157	-2689	-1532
AT	HINTEREIS F.	491	2014	2700	2750	0.319	1125	-3267	-2142
AT	HINTEREIS F.	491	2014	2650	2700	0.225	1059	-3992	-2933
AT	HINTEREIS F.	491	2014	2600	2650	0.169	897	-4416	-3519
AT	HINTEREIS F.	491	2014	2550	2600	0.129	849	-4673	-3823
AT	HINTEREIS F.	491	2014	2500	2550	0.073	677	-5648	-4971
AT	HINTEREIS F.	491	2014	2450	2500	0.019	625	-5975	-5350
AT	HINTEREIS F.	491	2015	3700	3750	0.002	512	-1238	-725
AT	HINTEREIS F.	491	2015	3650	3700	0.02	685	-1560	-874
AT	HINTEREIS F.	491	2015	3600	3650	0.026	863	-1551	-687
AT	HINTEREIS F.	491	2015	3550	3600	0.019	900	-1396	-496
AT	HINTEREIS F.	491	2015	3500	3550	0.015	762	-1744	-982
AT	HINTEREIS F.	491	2015	3450	3500	0.061	1498	-1807	-309
AT	HINTEREIS F.	491	2015	3400	3450	0.118	1418	-1838	-419
AT	HINTEREIS F.	491	2015	3350	3400	0.237	1533	-1793	-259
AT	HINTEREIS F.	491	2015	3300	3350	0.396	1610	-1648	-38
AT	HINTEREIS F.	491	2015	3250	3300	0.413	1638	-1991	-354
AT	HINTEREIS F.	491	2015	3200	3250	0.427	1614	-2388	-773
AT	HINTEREIS F.	491	2015	3150	3200	0.538	1592	-2367	-775
AT	HINTEREIS F.	491	2015	3100	3150	0.607	1485	-2501	-1016
AT	HINTEREIS F.	491	2015	3050	3100	0.631	1476	-2628	-1152
AT	HINTEREIS F.	491	2015	3000	3050	0.51	1465	-2875	-1410
AT	HINTEREIS F.	491	2015	2950	3000	0.401	1403	-2947	-1544
AT	HINTEREIS F.	491	2015	2900	2950	0.416	1284	-3052	-1768
AT	HINTEREIS F.	491	2015	2850	2900	0.35	1235	-3428	-2192
AT	HINTEREIS F.	491	2015	2800	2850	0.295	1175	-3776	-2602
AT	HINTEREIS F.	491	2015	2750	2800	0.242	1150	-4342	-3192
AT	HINTEREIS F.	491	2015	2700	2750	0.319	1069	-4976	-3907
AT	HINTEREIS F.	491	2015	2650	2700	0.225	993	-5527	-4534
AT	HINTEREIS F.	491	2015	2600	2650	0.169	768	-5739	-4971
AT	HINTEREIS F.	491	2015	2550	2600	0.129	616	-5998	-5382
AT	HINTEREIS F.	491	2015	2500	2550	0.073	536	-6469	-5933
AT	HINTEREIS F.	491	2015	2450	2500	0.019	375	-7958	-7582
AT	JAMTAL F.	480	2014	3100	3200	0.004	1196	-577	619
AT	JAMTAL F.	480	2014	3000	3100	0.223	1286	-947	339
AT	JAMTAL F.	480	2014	2900	3000	0.702	1164	-1071	93
AT	JAMTAL F.	480	2014	2800	2900	0.671	1123	-1393	-270
AT	JAMTAL F.	480	2014	2700	2800	0.66	1033	-1657	-624
AT	JAMTAL F.	480	2014	2600	2700	0.492	1085	-2241	-1156
AT	JAMTAL F.	480	2014	2500	2600	0.274	928	-3086	-2158
AT	JAMTAL F.	480	2014	2400	2500	0.058	847	-3526	-2679
AT	JAMTAL F.	480	2015	3100	3200	0.004	1200	-2950	-1750
AT	JAMTAL F.	480	2015	3000	3100	0.222	1297	-2791	-1494
AT	JAMTAL F.	480	2015	2900	3000	0.701	1220	-2774	-1554
AT	JAMTAL F.	480	2015	2800	2900	0.669	1170	-2933	-1763
AT	JAMTAL F.	480	2015	2700	2800	0.659	1256	-3205	-1949
AT	JAMTAL F.	480	2015	2600	2700	0.486	1278	-3627	-2349
AT	JAMTAL F.	480	2015	2500	2600	0.274	1180	-4467	-3287
AT	JAMTAL F.	480	2015	2400	2500	0.056	1121	-5710	-4589
AT	KESSELWAND F.	507	2014	3450	3500	0.018			815
AT	KESSELWAND F.	507	2014	3400	3450	0.032			714
AT	KESSELWAND F.	507	2014	3350	3400	0.032			569
AT	KESSELWAND F.	507	2014	3300	3350	0.185			1079
AT	KESSELWAND F.	507	2014	3250	3300	0.591			1146
AT	KESSELWAND F.	507	2014	3200	3250	0.801			824
AT	KESSELWAND F.	507	2014	3150	3200	0.719			676
AT	KESSELWAND F.	507	2014	3100	3150	0.507			160
AT	KESSELWAND F.	507	2014	3050	3100	0.424			-328
AT	KESSELWAND F.	507	2014	3000	3050	0.171			-717
AT	KESSELWAND F.	507	2014	2950	3000	0.073			-1536
AT	KESSELWAND F.	507	2014	2900	2950	0.049			-2303
AT	KESSELWAND F.	507	2014	2850	2900	0.006			-2999
AT	KESSELWAND F.	507	2015	3450	3500	0.018			-765
AT	KESSELWAND F.	507	2015	3400	3450	0.032			-714
AT	KESSELWAND F.	507	2015	3350	3400	0.032			-677
AT	KESSELWAND F.	507	2015	3300	3350	0.185			-372
AT	KESSELWAND F.	507	2015	3250	3300	0.591			-120
AT	KESSELWAND F.	507	2015	3200	3250	0.801			-667
AT	KESSELWAND F.	507	2015	3150	3200	0.719			-885
AT	KESSELWAND F.	507	2015	3100	3150	0.507			-1507
AT	KESSELWAND F.	507	2015	3050	3100	0.424			-2159
AT	KESSELWAND F.	507	2015	3000	3050	0.171			-3430
AT	KESSELWAND F.	507	2015	2950	3000	0.073			-4512
AT	KESSELWAND F.	507	2015	2900	2950	0.049			-4540
AT	KESSELWAND F.	507	2015	2850	2900	0.006			-5017
AT	OBERSULZBACH K.	583	2014	3350	3400	0.017	1777	-765	1012

PU	GLACIER_NAME	WGMS_ID	YEAR	ELEV_FROM	ELEV_TO	AREA	BW	BS	BA
AT	OBERSULZBACH K.	583	2014	3300	3350	0.06	1836	-626	1210
AT	OBERSULZBACH K.	583	2014	3250	3300	0.069	1863	-548	1315
AT	OBERSULZBACH K.	583	2014	3200	3250	0.082	1840	-446	1394
AT	OBERSULZBACH K.	583	2014	3150	3200	0.165	1680	-606	1074
AT	OBERSULZBACH K.	583	2014	3100	3150	0.158	1573	-979	594
AT	OBERSULZBACH K.	583	2014	3050	3100	0.091	1500	-1136	364
AT	OBERSULZBACH K.	583	2014	3000	3050	0.099	1447	-1001	446
AT	OBERSULZBACH K.	583	2014	2950	3000	0.12	1309	-851	458
AT	OBERSULZBACH K.	583	2014	2900	2950	0.189	1234	-936	298
AT	OBERSULZBACH K.	583	2014	2850	2900	0.307	1256	-1077	179
AT	OBERSULZBACH K.	583	2014	2800	2850	0.155	1257	-1222	35
AT	OBERSULZBACH K.	583	2014	2750	2800	0.139	1163	-1506	-343
AT	OBERSULZBACH K.	583	2014	2700	2750	0.123	1105	-2251	-1146
AT	OBERSULZBACH K.	583	2014	2650	2700	0.046	1100	-2583	-1483
AT	OBERSULZBACH K.	583	2014	2600	2650	0.048	1100	-3005	-1905
AT	OBERSULZBACH K.	583	2014	2550	2600	0.105	1038	-3312	-2274
AT	OBERSULZBACH K.	583	2014	2500	2550	0.108	887	-3527	-2640
AT	OBERSULZBACH K.	583	2014	2450	2500	0.064	615	-3833	-3218
AT	OBERSULZBACH K.	583	2014	2400	2450	0.021	500	-3750	-3250
AT	OBERSULZBACH K.	583	2015	3350	3400	0.018	1568	-874	694
AT	OBERSULZBACH K.	583	2015	3300	3350	0.065	1621	-844	777
AT	OBERSULZBACH K.	583	2015	3250	3300	0.061	1600	-833	767
AT	OBERSULZBACH K.	583	2015	3200	3250	0.08	1533	-826	707
AT	OBERSULZBACH K.	583	2015	3150	3200	0.16	1521	-1012	509
AT	OBERSULZBACH K.	583	2015	3100	3150	0.154	1543	-1403	140
AT	OBERSULZBACH K.	583	2015	3050	3100	0.088	1500	-1667	-167
AT	OBERSULZBACH K.	583	2015	3000	3050	0.096	1477	-1597	-120
AT	OBERSULZBACH K.	583	2015	2950	3000	0.113	1309	-1404	-95
AT	OBERSULZBACH K.	583	2015	2900	2950	0.172	1165	-1666	-501
AT	OBERSULZBACH K.	583	2015	2850	2900	0.296	1252	-2561	-1309
AT	OBERSULZBACH K.	583	2015	2800	2850	0.146	1258	-4262	-3004
AT	OBERSULZBACH K.	583	2015	2750	2800	0.128	1180	-5100	-3920
AT	OBERSULZBACH K.	583	2015	2700	2750	0.111	1100	-5543	-4443
AT	OBERSULZBACH K.	583	2015	2650	2700	0.045	100	-4850	-4750
AT	OBERSULZBACH K.	583	2015	2600	2650	0.048	100	-4850	-4750
AT	OBERSULZBACH K.	583	2015	2550	2600	0.098	1077	-5827	-4750
AT	OBERSULZBACH K.	583	2015	2500	2550	0.087	838	-5588	-4750
AT	OBERSULZBACH K.	583	2015	2450	2500	0.027	700	-5450	-4750
AT	OBERSULZBACH K.	583	2015	2400	2450	0	700	-5450	-4750
AT	PASTERZE	566	2014	3500	3600	0.000			16
AT	PASTERZE	566	2014	3400	3500	0.141			214
AT	PASTERZE	566	2014	3300	3400	0.647			355
AT	PASTERZE	566	2014	3200	3300	1.547			433
AT	PASTERZE	566	2014	3100	3200	2.640			785
AT	PASTERZE	566	2014	3000	3100	3.118			1073
AT	PASTERZE	566	2014	2900	3000	2.297			766
AT	PASTERZE	566	2014	2800	2900	1.398			-620
AT	PASTERZE	566	2014	2700	2800	0.713			-1055
AT	PASTERZE	566	2014	2600	2700	0.453			-1865
AT	PASTERZE	566	2014	2500	2600	0.287			-2906
AT	PASTERZE	566	2014	2400	2500	0.237			-3198
AT	PASTERZE	566	2014	2300	2400	0.703			-4283
AT	PASTERZE	566	2014	2200	2300	1.067			-4186
AT	PASTERZE	566	2014	2100	2200	0.899			-4670
AT	PASTERZE	566	2014	2000	2100	0.139			-4798
AT	PASTERZE	566	2015	3500	3600	0			-81
AT	PASTERZE	566	2015	3400	3500	0.141			61
AT	PASTERZE	566	2015	3300	3400	0.647			225
AT	PASTERZE	566	2015	3200	3300	1.547			284
AT	PASTERZE	566	2015	3100	3200	2.64			170
AT	PASTERZE	566	2015	3000	3100	3.118			-34
AT	PASTERZE	566	2015	2900	3000	2.297			-431
AT	PASTERZE	566	2015	2800	2900	1.398			-1579
AT	PASTERZE	566	2015	2700	2800	0.713			-1879
AT	PASTERZE	566	2015	2600	2700	0.453			-2364
AT	PASTERZE	566	2015	2500	2600	0.287			-4246
AT	PASTERZE	566	2015	2400	2500	0.237			-4985
AT	PASTERZE	566	2015	2300	2400	0.703			-5993
AT	PASTERZE	566	2015	2200	2300	1.067			-5551
AT	PASTERZE	566	2015	2100	2200	0.899			-5921
AT	PASTERZE	566	2015	2000	2100	0.139			-5939
AT	VERNAGT F.	489	2014	3500	3550	0.004			86
AT	VERNAGT F.	489	2014	3450	3500	0.010			131
AT	VERNAGT F.	489	2014	3400	3450	0.145			410
AT	VERNAGT F.	489	2014	3350	3400	0.170			277
AT	VERNAGT F.	489	2014	3300	3350	0.193			214
AT	VERNAGT F.	489	2014	3250	3300	0.312			250
AT	VERNAGT F.	489	2014	3200	3250	0.785			394
AT	VERNAGT F.	489	2014	3150	3200	0.855			278
AT	VERNAGT F.	489	2014	3100	3150	1.087			181
AT	VERNAGT F.	489	2014	3050	3100	1.121			-8
AT	VERNAGT F.	489	2014	3000	3050	1.010			-301
AT	VERNAGT F.	489	2014	2950	3000	0.853			-729
AT	VERNAGT F.	489	2014	2900	2950	0.513			-1272
AT	VERNAGT F.	489	2014	2850	2900	0.267			-1507
AT	VERNAGT F.	489	2014	2800	2850	0.032			-1166
AT	VERNAGT F.	489	2015	3500	3550	0.004			1
AT	VERNAGT F.	489	2015	3450	3500	0.01			8
AT	VERNAGT F.	489	2015	3400	3450	0.145			144
AT	VERNAGT F.	489	2015	3350	3400	0.17			-27
AT	VERNAGT F.	489	2015	3300	3350	0.193			-83
AT	VERNAGT F.	489	2015	3250	3300	0.312			-113
AT	VERNAGT F.	489	2015	3200	3250	0.785			-162
AT	VERNAGT F.	489	2015	3150	3200	0.855			-432
AT	VERNAGT F.	489	2015	3100	3150	1.087			-736
AT	VERNAGT F.	489	2015	3050	3100	1.121			-1297

Table 4

PU	GLACIER_NAME	WGMS_ID	YEAR	ELEV_FROM	ELEV_TO	AREA	BW	BS	BA
AT	VERNAGT F.	489	2015	3000	3050	1.009			-1911
AT	VERNAGT F.	489	2015	2950	3000	0.85			-2488
AT	VERNAGT F.	489	2015	2900	2950	0.505			-3087
AT	VERNAGT F.	489	2015	2850	2900	0.237			-3354
AT	VERNAGT F.	489	2015	2800	2850	0.023			-3612
AT	WURTEN K.	545	2014	2750	2800	0.001			680
AT	WURTEN K.	545	2014	2700	2750	0.016			437
AT	WURTEN K.	545	2014	2650	2700	0.129			190
AT	WURTEN K.	545	2014	2600	2650	0.122			-503
AT	WURTEN K.	545	2014	2550	2600	0.059			-1541
AT	WURTEN K.	545	2014	2500	2550	0.002			-2520
AT	WURTEN K.	545	2015	2750	2800	0.001			42
AT	WURTEN K.	545	2015	2700	2750	0.016			-6
AT	WURTEN K.	545	2015	2650	2700	0.129			-208
AT	WURTEN K.	545	2015	2600	2650	0.122			-1763
AT	WURTEN K.	545	2015	2550	2600	0.059			-3408
AT	WURTEN K.	545	2015	2500	2550	0.002			-3232
AT	ZETTALUNITZ/MULLWITZ K.	578	2014	3400	3450	0.024	700	-530	170
AT	ZETTALUNITZ/MULLWITZ K.	578	2014	3350	3400	0.118	751	-152	599
AT	ZETTALUNITZ/MULLWITZ K.	578	2014	3300	3350	0.199	982	-304	678
AT	ZETTALUNITZ/MULLWITZ K.	578	2014	3250	3300	0.293	1069	-705	364
AT	ZETTALUNITZ/MULLWITZ K.	578	2014	3200	3250	0.364	1287	-347	940
AT	ZETTALUNITZ/MULLWITZ K.	578	2014	3150	3200	0.281	1453	-303	1150
AT	ZETTALUNITZ/MULLWITZ K.	578	2014	3100	3150	0.238	1422	-607	815
AT	ZETTALUNITZ/MULLWITZ K.	578	2014	3050	3100	0.243	1329	-998	331
AT	ZETTALUNITZ/MULLWITZ K.	578	2014	3000	3050	0.271	1177	-1386	-209
AT	ZETTALUNITZ/MULLWITZ K.	578	2014	2950	3000	0.248	1188	-1641	-453
AT	ZETTALUNITZ/MULLWITZ K.	578	2014	2900	2950	0.266	1016	-2021	-1005
AT	ZETTALUNITZ/MULLWITZ K.	578	2014	2850	2900	0.179	1037	-1866	-829
AT	ZETTALUNITZ/MULLWITZ K.	578	2014	2800	2850	0.104	965	-1994	-1029
AT	ZETTALUNITZ/MULLWITZ K.	578	2014	2750	2800	0.065	806	-2747	-1941
AT	ZETTALUNITZ/MULLWITZ K.	578	2014	2700	2750	0.038	787	-3237	-2450
AT	ZETTALUNITZ/MULLWITZ K.	578	2014	2650	2700	0	900	-3650	-2750
AT	ZETTALUNITZ/MULLWITZ K.	578	2015	3400	3450	0.01	800	-1050	-250
AT	ZETTALUNITZ/MULLWITZ K.	578	2015	3350	3400	0.114	915	-1128	-213
AT	ZETTALUNITZ/MULLWITZ K.	578	2015	3300	3350	0.191	1191	-1769	-578
AT	ZETTALUNITZ/MULLWITZ K.	578	2015	3250	3300	0.274	1377	-2121	-744
AT	ZETTALUNITZ/MULLWITZ K.	578	2015	3200	3250	0.369	1795	-2124	-329
AT	ZETTALUNITZ/MULLWITZ K.	578	2015	3150	3200	0.272	1732	-2185	-453
AT	ZETTALUNITZ/MULLWITZ K.	578	2015	3100	3150	0.221	1583	-2424	-841
AT	ZETTALUNITZ/MULLWITZ K.	578	2015	3050	3100	0.228	1361	-2915	-1554
AT	ZETTALUNITZ/MULLWITZ K.	578	2015	3000	3050	0.252	1119	-3481	-2362
AT	ZETTALUNITZ/MULLWITZ K.	578	2015	2950	3000	0.233	1067	-4041	-2974
AT	ZETTALUNITZ/MULLWITZ K.	578	2015	2900	2950	0.244	1162	-4453	-3291
AT	ZETTALUNITZ/MULLWITZ K.	578	2015	2850	2900	0.184	1302	-4331	-3029
AT	ZETTALUNITZ/MULLWITZ K.	578	2015	2800	2850	0.115	1342	-4285	-2943
AT	ZETTALUNITZ/MULLWITZ K.	578	2015	2750	2800	0.059	1277	-4890	-3613
AT	ZETTALUNITZ/MULLWITZ K.	578	2015	2700	2750	0.028	1007	-5585	-4578
AT	ZETTALUNITZ/MULLWITZ K.	578	2015	2650	2700	0.004	900	-5650	-4750
BO - Bolivia									
BO	CHARQUINI SUR	2667	2014	5350	5400	0.002			349
BO	CHARQUINI SUR	2667	2014	5300	5350	0.011			349
BO	CHARQUINI SUR	2667	2014	5250	5300	0.037			270
BO	CHARQUINI SUR	2667	2014	5200	5250	0.048			290
BO	CHARQUINI SUR	2667	2014	5150	5200	0.093			-507
BO	CHARQUINI SUR	2667	2014	5100	5150	0.087			-507
BO	CHARQUINI SUR	2667	2014	5050	5100	0.026			-1212
BO	CHARQUINI SUR	2667	2014	5000	5050	0.004			-1742
BO	CHARQUINI SUR	2667	2015	5350	5400	0.002			951
BO	CHARQUINI SUR	2667	2015	5300	5350	0.011			951
BO	CHARQUINI SUR	2667	2015	5250	5300	0.037			951
BO	CHARQUINI SUR	2667	2015	5200	5250	0.048			649
BO	CHARQUINI SUR	2667	2015	5150	5200	0.093			-280
BO	CHARQUINI SUR	2667	2015	5100	5150	0.087			-166
BO	CHARQUINI SUR	2667	2015	5050	5100	0.026			-427
BO	CHARQUINI SUR	2667	2015	5000	5050	0.004			-689
BO	ZONGO	1503	2014	5900	6000	0.063			1050
BO	ZONGO	1503	2014	5800	5900	0.105			1050
BO	ZONGO	1503	2014	5700	5800	0.187			1050
BO	ZONGO	1503	2014	5600	5700	0.261			757
BO	ZONGO	1503	2014	5500	5600	0.296			464
BO	ZONGO	1503	2014	5400	5500	0.219			170
BO	ZONGO	1503	2014	5300	5400	0.156			-123
BO	ZONGO	1503	2014	5200	5300	0.138			-416
BO	ZONGO	1503	2014	5100	5200	0.257			-709
BO	ZONGO	1503	2014	5000	5100	0.183			-2911
BO	ZONGO	1503	2014	4900	5000	0.028			-4875
BO	ZONGO	1503	2015	5900	6000	0.063			1157
BO	ZONGO	1503	2015	5800	5900	0.105			1157
BO	ZONGO	1503	2015	5700	5800	0.187			1157
BO	ZONGO	1503	2015	5600	5700	0.261			1227
BO	ZONGO	1503	2015	5500	5600	0.296			999
BO	ZONGO	1503	2015	5400	5500	0.219			570
BO	ZONGO	1503	2015	5300	5400	0.156			141
BO	ZONGO	1503	2015	5200	5300	0.138			-288
BO	ZONGO	1503	2015	5100	5200	0.257			-717
BO	ZONGO	1503	2015	5000	5100	0.182			-1174
BO	ZONGO	1503	2015	4900	5000	0.026			-1631
CA - Canada									
CA	WHITE	0	2014	1775	1800	0.008			228
CA	WHITE	0	2014	1750	1775	0.038			228
CA	WHITE	0	2014	1725	1750	0.059			228
CA	WHITE	0	2014	1700	1725	0.077			228
CA	WHITE	0	2014	1675	1700	0.076			228

PU	GLACIER_NAME	WGMS_ID	YEAR	ELEV_FROM	ELEV_TO	AREA	BW	BS	BA
CA	WHITE	0	2014	1650	1675	0.103			228
CA	WHITE	0	2014	1625	1650	0.197			228
CA	WHITE	0	2014	1600	1625	0.184			228
CA	WHITE	0	2014	1575	1600	0.263			228
CA	WHITE	0	2014	1550	1575	0.446			228
CA	WHITE	0	2014	1525	1550	0.493			228
CA	WHITE	0	2014	1500	1525	0.628			206
CA	WHITE	0	2014	1475	1500	0.736			182
CA	WHITE	0	2014	1450	1475	0.802			157
CA	WHITE	0	2014	1425	1450	1.092			131
CA	WHITE	0	2014	1400	1425	1.225			103
CA	WHITE	0	2014	1375	1400	1.412			73
CA	WHITE	0	2014	1350	1375	1.421			43
CA	WHITE	0	2014	1325	1350	1.575			11
CA	WHITE	0	2014	1300	1325	1.335			-22
CA	WHITE	0	2014	1275	1300	1.370			-56
CA	WHITE	0	2014	1250	1275	1.666			-91
CA	WHITE	0	2014	1225	1250	1.278			-127
CA	WHITE	0	2014	1200	1225	1.277			-164
CA	WHITE	0	2014	1175	1200	1.233			-203
CA	WHITE	0	2014	1150	1175	1.328			-242
CA	WHITE	0	2014	1125	1150	1.271			-282
CA	WHITE	0	2014	1100	1125	1.177			-323
CA	WHITE	0	2014	1075	1100	1.128			-364
CA	WHITE	0	2014	1050	1075	1.020			-407
CA	WHITE	0	2014	1025	1050	0.859			-450
CA	WHITE	0	2014	1000	1025	0.734			-494
CA	WHITE	0	2014	975	1000	0.802			-538
CA	WHITE	0	2014	950	975	0.877			-583
CA	WHITE	0	2014	925	950	0.537			-629
CA	WHITE	0	2014	900	925	0.455			-675
CA	WHITE	0	2014	875	900	0.476			-721
CA	WHITE	0	2014	850	875	0.749			-768
CA	WHITE	0	2014	825	850	0.541			-815
CA	WHITE	0	2014	800	825	0.4			-862
CA	WHITE	0	2014	775	800	0.302			-910
CA	WHITE	0	2014	750	775	0.275			-958
CA	WHITE	0	2014	725	750	0.250			-1006
CA	WHITE	0	2014	700	725	0.236			-1055
CA	WHITE	0	2014	675	700	0.630			-1103
CA	WHITE	0	2014	650	675	0.290			-1151
CA	WHITE	0	2014	625	650	0.214			-1200
CA	WHITE	0	2014	600	625	0.455			-1248
CA	WHITE	0	2014	575	600	0.493			-1296
CA	WHITE	0	2014	550	575	0.292			-1345
CA	WHITE	0	2014	525	550	0.190			-1393
CA	WHITE	0	2014	500	525	0.206			-1440
CA	WHITE	0	2014	475	500	0.203			-1488
CA	WHITE	0	2014	450	475	0.277			-1535
CA	WHITE	0	2014	425	450	0.2			-1582
CA	WHITE	0	2014	400	425	0.145			-1628
CA	WHITE	0	2014	375	400	0.175			-1674
CA	WHITE	0	2014	350	375	0.254			-1720
CA	WHITE	0	2014	325	350	0.402			-1765
CA	WHITE	0	2014	300	325	0.211			-1809
CA	WHITE	0	2014	275	300	0.113			-1853
CA	WHITE	0	2014	250	275	0.117			-1896
CA	WHITE	0	2014	225	250	0.352			-1938
CA	WHITE	0	2014	200	225	0.269			-1980
CA	WHITE	0	2014	175	200	0.367			-2021
CA	WHITE	0	2014	150	175	0.128			-2060
CA	WHITE	0	2014	125	150	0.080			-2100
CA	WHITE	0	2014	100	125	0.057			-2138
CA	WHITE	0	2014	75	100	0.015			-2138
CA	WHITE	0	2015	1775	1800	0.008			428
CA	WHITE	0	2015	1750	1775	0.038			428
CA	WHITE	0	2015	1725	1750	0.059			428
CA	WHITE	0	2015	1700	1725	0.077			428
CA	WHITE	0	2015	1675	1700	0.076			428
CA	WHITE	0	2015	1650	1675	0.103			428
CA	WHITE	0	2015	1625	1650	0.197			428
CA	WHITE	0	2015	1600	1625	0.184			428
CA	WHITE	0	2015	1575	1600	0.263			428
CA	WHITE	0	2015	1550	1575	0.446			428
CA	WHITE	0	2015	1525	1550	0.493			428
CA	WHITE	0	2015	1500	1525	0.628			362
CA	WHITE	0	2015	1475	1500	0.736			296
CA	WHITE	0	2015	1450	1475	0.802			230
CA	WHITE	0	2015	1425	1450	1.092			164
CA	WHITE	0	2015	1400	1425	1.225			98
CA	WHITE	0	2015	1375	1400	1.412			33
CA	WHITE	0	2015	1350	1375	1.421			-33
CA	WHITE	0	2015	1325	1350	1.575			-98
CA	WHITE	0	2015	1300	1325	1.335			-162
CA	WHITE	0	2015	1275	1300	1.370			-227
CA	WHITE	0	2015	1250	1275	1.666			-291
CA	WHITE	0	2015	1225	1250	1.278			-355
CA	WHITE	0	2015	1200	1225	1.277			-419
CA	WHITE	0	2015	1175	1200	1.233			-482
CA	WHITE	0	2015	1150	1175	1.328			-545
CA	WHITE	0	2015	1125	1150	1.271			-608
CA	WHITE	0	2015	1100	1125	1.177			-670
CA	WHITE	0	2015	1075	1100	1.128			-732
CA	WHITE	0	2015	1050	1075	1.020			-794
CA	WHITE	0	2015	1025	1050	0.859			-855
CA	WHITE	0	2015	1000	1025	0.734			-916

Table 4

PU	GLACIER_NAME	WGMS_ID	YEAR	ELEV_FROM	ELEV_TO	AREA	BW	BS	BA
CA	WHITE	0	2015	975	1000	0.802			-976
CA	WHITE	0	2015	950	975	0.877			-1036
CA	WHITE	0	2015	925	950	0.537			-1096
CA	WHITE	0	2015	900	925	0.455			-1155
CA	WHITE	0	2015	875	900	0.476			-1214
CA	WHITE	0	2015	850	875	0.749			-1272
CA	WHITE	0	2015	825	850	0.541			-1330
CA	WHITE	0	2015	800	825	0.4			-1388
CA	WHITE	0	2015	775	800	0.302			-1445
CA	WHITE	0	2015	750	775	0.275			-1501
CA	WHITE	0	2015	725	750	0.250			-1557
CA	WHITE	0	2015	700	725	0.236			-1612
CA	WHITE	0	2015	675	700	0.630			-1667
CA	WHITE	0	2015	650	675	0.290			-1721
CA	WHITE	0	2015	625	650	0.214			-1775
CA	WHITE	0	2015	600	625	0.455			-1828
CA	WHITE	0	2015	575	600	0.493			-1881
CA	WHITE	0	2015	550	575	0.292			-1933
CA	WHITE	0	2015	525	550	0.190			-1984
CA	WHITE	0	2015	500	525	0.206			-2035
CA	WHITE	0	2015	475	500	0.203			-2085
CA	WHITE	0	2015	450	475	0.277			-2135
CA	WHITE	0	2015	425	450	0.2			-2184
CA	WHITE	0	2015	400	425	0.145			-2232
CA	WHITE	0	2015	375	400	0.175			-2279
CA	WHITE	0	2015	350	375	0.254			-2326
CA	WHITE	0	2015	325	350	0.402			-2372
CA	WHITE	0	2015	300	325	0.211			-2418
CA	WHITE	0	2015	275	300	0.113			-2462
CA	WHITE	0	2015	250	275	0.117			-2506
CA	WHITE	0	2015	225	250	0.352			-2550
CA	WHITE	0	2015	200	225	0.269			-2592
CA	WHITE	0	2015	175	200	0.367			-2634
CA	WHITE	0	2015	150	175	0.128			-2675
CA	WHITE	0	2015	125	150	0.080			-2715
CA	WHITE	0	2015	100	125	0.057			-2715
CA	WHITE	0	2015	75	100	0.015			-2715
CH - Switzerland									
CH	ADLER	3801	2014	4100	4200	0.004	529	135	664
CH	ADLER	3801	2014	4000	4100	0.014	554	118	672
CH	ADLER	3801	2014	3900	4000	0.046	671	129	800
CH	ADLER	3801	2014	3800	3900	0.104	872	194	1066
CH	ADLER	3801	2014	3700	3800	0.177	1041	178	1219
CH	ADLER	3801	2014	3600	3700	0.209	1175	46	1221
CH	ADLER	3801	2014	3500	3600	0.249	1159	-208	951
CH	ADLER	3801	2014	3400	3500	0.316	1042	-607	435
CH	ADLER	3801	2014	3300	3400	0.421	926	-966	-40
CH	ADLER	3801	2014	3200	3300	0.248	850	-1607	-757
CH	ADLER	3801	2014	3100	3200	0.119	831	-2301	-1470
CH	ADLER	3801	2014	3000	3100	0.099	786	-2352	-1566
CH	ADLER	3801	2014	2900	3000	0.004	757	-2546	-1789
CH	ADLER	3801	2015	4100	4200	0.004	565	-53	512
CH	ADLER	3801	2015	4000	4100	0.014	657	-46	611
CH	ADLER	3801	2015	3900	4000	0.046	876	-8	868
CH	ADLER	3801	2015	3800	3900	0.104	903	-73	830
CH	ADLER	3801	2015	3700	3800	0.177	1152	-69	1083
CH	ADLER	3801	2015	3600	3700	0.209	878	-535	343
CH	ADLER	3801	2015	3500	3600	0.249	986	-786	200
CH	ADLER	3801	2015	3400	3500	0.316	945	-1278	-333
CH	ADLER	3801	2015	3300	3400	0.421	1015	-1570	-555
CH	ADLER	3801	2015	3200	3300	0.248	1027	-2414	-1387
CH	ADLER	3801	2015	3100	3200	0.119	1030	-3085	-2055
CH	ADLER	3801	2015	3000	3100	0.099	952	-3688	-2736
CH	ADLER	3801	2015	2900	3000	0.004	856	-4057	-3201
CH	ALLALIN	394	2014	4100	4180	0.091	810		728
CH	ALLALIN	394	2014	4000	4100	0.181	928		835
CH	ALLALIN	394	2014	3900	4000	0.291	1046		890
CH	ALLALIN	394	2014	3800	3900	0.449	1133		900
CH	ALLALIN	394	2014	3700	3800	0.518	1238		951
CH	ALLALIN	394	2014	3600	3700	0.838	1354		896
CH	ALLALIN	394	2014	3500	3600	0.949	1448		830
CH	ALLALIN	394	2014	3400	3500	1.063	1495		624
CH	ALLALIN	394	2014	3300	3400	1.005	1477		318
CH	ALLALIN	394	2014	3200	3300	1.592	1445		-130
CH	ALLALIN	394	2014	3100	3200	0.739	1411		-330
CH	ALLALIN	394	2014	3000	3100	0.717	1364		-723
CH	ALLALIN	394	2014	2900	3000	0.483	1302		-1261
CH	ALLALIN	394	2014	2800	2900	0.604	1236		-1910
CH	ALLALIN	394	2014	2700	2800	0.183	1201		-2107
CH	ALLALIN	394	2014	2656	2700	0.01	1158		-1975
CH	ALLALIN	394	2015	4100	4200	0.091			401
CH	ALLALIN	394	2015	4000	4100	0.181			446
CH	ALLALIN	394	2015	3900	4000	0.291			442
CH	ALLALIN	394	2015	3800	3900	0.449			406
CH	ALLALIN	394	2015	3700	3800	0.518			404
CH	ALLALIN	394	2015	3600	3700	0.838			293
CH	ALLALIN	394	2015	3500	3600	0.949			175
CH	ALLALIN	394	2015	3400	3500	1.063			23
CH	ALLALIN	394	2015	3300	3400	1.005			98
CH	ALLALIN	394	2015	3200	3300	1.592			-546
CH	ALLALIN	394	2015	3100	3200	0.739			-1056
CH	ALLALIN	394	2015	3000	3100	0.717			-2006
CH	ALLALIN	394	2015	2900	3000	0.486			-3100
CH	ALLALIN	394	2015	2800	2900	0.583			-3895
CH	ALLALIN	394	2015	2700	2800	0.157			-4092

PU	GLACIER_NAME	WGMS_ID	YEAR	ELEV_FROM	ELEV_TO	AREA	BW	BS	BA
CH	ALLALIN	394	2015	2600	2700	0.002			-3878
CH	BASODINO	463	2014	3000	3100	0.48	1806		350
CH	BASODINO	463	2014	2900	3000	0.56	1806		150
CH	BASODINO	463	2014	2800	2900	0.55	1720		-400
CH	BASODINO	463	2014	2700	2800	0.45	1634		-750
CH	BASODINO	463	2014	2600	2700	0.24	1584		-1100
CH	BASODINO	463	2015	3100	3200	0.059	1481		-1295
CH	BASODINO	463	2015	3000	3100	0.314	1882		-711
CH	BASODINO	463	2015	2900	3000	0.528	1968		-744
CH	BASODINO	463	2015	2800	2900	0.429	1911		-2326
CH	BASODINO	463	2015	2700	2800	0.36	1982		-1534
CH	BASODINO	463	2015	2600	2700	0.141	1985		-1510
CH	BASODINO	463	2015	2500	2600	0.01	1980		-2114
CH	CLARIDENFIRN	2660	2014	3200	3207	0.001	0		0
CH	CLARIDENFIRN	2660	2014	3100	3200	0.034	1024		-144
CH	CLARIDENFIRN	2660	2014	3000	3100	0.265	1486		323
CH	CLARIDENFIRN	2660	2014	2900	3000	1.599	1410		44
CH	CLARIDENFIRN	2660	2014	2800	2900	1.285	1541		37
CH	CLARIDENFIRN	2660	2014	2700	2800	0.79	1504		-443
CH	CLARIDENFIRN	2660	2014	2600	2700	0.942	1395		-800
CH	CLARIDENFIRN	2660	2014	2500	2600	0.204	1024		-5870
CH	CLARIDENFIRN	2660	2014	2440	2500	0.01	940		-46987
CH	CLARIDENFIRN	2660	2015	3200	3300	0.006	0	0	0
CH	CLARIDENFIRN	2660	2015	3100	3200	0.031	1363	-1370	-7
CH	CLARIDENFIRN	2660	2015	3000	3100	0.194	1788	-1606	182
CH	CLARIDENFIRN	2660	2015	2900	3000	1.498	1678	-2278	-600
CH	CLARIDENFIRN	2660	2015	2800	2900	1.304	1794	-2758	-964
CH	CLARIDENFIRN	2660	2015	2700	2800	0.693	1670	-3471	-1801
CH	CLARIDENFIRN	2660	2015	2600	2700	0.755	1602	-4692	-3090
CH	CLARIDENFIRN	2660	2015	2500	2600	0.071	1189	-8193	-7004
CH	CORBASSIERE	366	2015	4300	4400	0.006			-7
CH	CORBASSIERE	366	2015	4200	4300	0.079			109
CH	CORBASSIERE	366	2015	4100	4200	0.241			134
CH	CORBASSIERE	366	2015	4000	4100	0.533			123
CH	CORBASSIERE	366	2015	3900	4000	0.224			237
CH	CORBASSIERE	366	2015	3800	3900	0.247			271
CH	CORBASSIERE	366	2015	3700	3800	0.31			213
CH	CORBASSIERE	366	2015	3600	3700	0.416			139
CH	CORBASSIERE	366	2015	3500	3600	0.923			-55
CH	CORBASSIERE	366	2015	3400	3500	1.364			-260
CH	CORBASSIERE	366	2015	3300	3400	2.344			-622
CH	CORBASSIERE	366	2015	3200	3300	1.552			-971
CH	CORBASSIERE	366	2015	3100	3200	1.009			-1080
CH	CORBASSIERE	366	2015	3000	3100	1.649			-1770
CH	CORBASSIERE	366	2015	2900	3000	0.889			-2075
CH	CORBASSIERE	366	2015	2800	2900	0.664			-2393
CH	CORBASSIERE	366	2015	2700	2800	0.71			-3386
CH	CORBASSIERE	366	2015	2600	2700	1.087			-4305
CH	CORBASSIERE	366	2015	2500	2600	0.48			-4476
CH	CORBASSIERE	366	2015	2400	2500	0.36			-5157
CH	CORBASSIERE	366	2015	2300	2400	0.08			-5383
CH	CORVATSCH SOUTH	4535	2014	3400	3450	0.002	1148	-282	865
CH	CORVATSCH SOUTH	4535	2014	3350	3400	0.013	1241	-369	871
CH	CORVATSCH SOUTH	4535	2014	3300	3350	0.031	1238	-581	657
CH	CORVATSCH SOUTH	4535	2014	3250	3300	0.070	1099	-972	126
CH	CORVATSCH SOUTH	4535	2014	3200	3250	0.061	1004	-1099	-95
CH	CORVATSCH SOUTH	4535	2014	3150	3200	0.023	996	-1245	-248
CH	CORVATSCH SOUTH	4535	2014	3100	3150	0.008	1177	-1239	-62
CH	CORVATSCH SOUTH	4535	2014	3050	3100	0.009	1189	-1405	-216
CH	CORVATSCH SOUTH	4535	2014	3000	3050	0.005	1141	-1223	-82
CH	CORVATSCH SOUTH	4535	2014	2950	3000	0.003	1128	-1508	-380
CH	CORVATSCH SOUTH	4535	2015	3300	3350	0.031	885	-1680	-795
CH	CORVATSCH SOUTH	4535	2015	3250	3300	0.070	786	-2398	-1612
CH	CORVATSCH SOUTH	4535	2015	3200	3250	0.061	745	-2933	-2188
CH	CORVATSCH SOUTH	4535	2015	3150	3200	0.023	883	-2891	-2008
CH	CORVATSCH SOUTH	4535	2015	3100	3150	0.008	901	-2651	-1750
CH	CORVATSCH SOUTH	4535	2015	3050	3100	0.009	864	-2942	-2078
CH	CORVATSCH SOUTH	4535	2015	3000	3050	0.005	877	-2345	-1468
CH	CORVATSCH SOUTH	4535	2015	2950	3000	0.003	874	-2896	-2022
CH	FINDELEN	389	2014	3900	4000	0.011	1030	256	1286
CH	FINDELEN	389	2014	3800	3900	0.252	1059	120	1179
CH	FINDELEN	389	2014	3700	3800	0.301	988	-45	943
CH	FINDELEN	389	2014	3600	3700	0.439	1194	-74	1120
CH	FINDELEN	389	2014	3500	3600	1.608	1464	-104	1360
CH	FINDELEN	389	2014	3400	3500	2.358	1528	-327	1201
CH	FINDELEN	389	2014	3300	3400	1.945	1421	-630	791
CH	FINDELEN	389	2014	3200	3300	1.834	1329	-889	440
CH	FINDELEN	389	2014	3100	3200	1.736	1147	-1476	-329
CH	FINDELEN	389	2014	3000	3100	0.977	991	-2203	-1212
CH	FINDELEN	389	2014	2900	3000	0.578	839	-3029	-2190
CH	FINDELEN	389	2014	2800	2900	0.338	726	-3516	-2790
CH	FINDELEN	389	2014	2700	2800	0.218	583	-4589	-4006
CH	FINDELEN	389	2014	2600	2700	0.259	454	-5871	-5417
CH	FINDELEN	389	2014	2500	2600	0.028	363	-6204	-5841
CH	FINDELEN	389	2015	3900	4000	0.011	571	-270	301
CH	FINDELEN	389	2015	3800	3900	0.252	710	-366	344
CH	FINDELEN	389	2015	3700	3800	0.301	759	-439	320
CH	FINDELEN	389	2015	3600	3700	0.439	1154	-339	815
CH	FINDELEN	389	2015	3500	3600	1.608	1266	-501	765
CH	FINDELEN	389	2015	3400	3500	2.358	1428	-696	732
CH	FINDELEN	389	2015	3300	3400	1.945	1360	-1015	345
CH	FINDELEN	389	2015	3200	3300	1.834	1229	-1459	-230
CH	FINDELEN	389	2015	3100	3200	1.736	1227	-2447	-1220
CH	FINDELEN	389	2015	3000	3100	0.977	982	-3540	-2558
CH	FINDELEN	389	2015	2900	3000	0.578	892	-4468	-3576
CH	FINDELEN	389	2015	2800	2900	0.338	825	-5235	-4410

Table 4

PU	GLACIER_NAME	WGMS_ID	YEAR	ELEV_FROM	ELEV_TO	AREA	BW	BS	BA
CH	FINDELEN	389	2015	2700	2800	0.218	619	-6607	-5988
CH	FINDELEN	389	2015	2600	2700	0.259	623	-7821	-7198
CH	FINDELEN	389	2015	2500	2600	0.028	462	-8691	-8229
CH	GIETRO	367	2014	3800	3820	0.012	1194		1443
CH	GIETRO	367	2014	3700	3800	0.113	1182		1374
CH	GIETRO	367	2014	3600	3700	0.104	1205		1292
CH	GIETRO	367	2014	3500	3600	0.104	1352		1293
CH	GIETRO	367	2014	3400	3500	0.173	1445		1164
CH	GIETRO	367	2014	3300	3400	1.011	1433		661
CH	GIETRO	367	2014	3200	3300	1.598	1438		188
CH	GIETRO	367	2014	3100	3200	0.988	1400		-359
CH	GIETRO	367	2014	3000	3100	0.919	1341		-1261
CH	GIETRO	367	2014	2900	3000	0.243	1198		-2169
CH	GIETRO	367	2014	2800	2900	0.082	995		-3236
CH	GIETRO	367	2014	2700	2800	0.058	758		-4346
CH	GIETRO	367	2014	2619	2700	0.025	652		-5185
CH	GIETRO	367	2015	3800	3900	0.009			266
CH	GIETRO	367	2015	3700	3800	0.116			278
CH	GIETRO	367	2015	3600	3700	0.121			265
CH	GIETRO	367	2015	3500	3600	0.117			234
CH	GIETRO	367	2015	3400	3500	0.173			95
CH	GIETRO	367	2015	3300	3400	0.916			-284
CH	GIETRO	367	2015	3200	3300	1.641			-601
CH	GIETRO	367	2015	3100	3200	0.993			-1526
CH	GIETRO	367	2015	3000	3100	0.881			-2805
CH	GIETRO	367	2015	2900	3000	0.234			-4081
CH	GIETRO	367	2015	2800	2900	0.076			-5367
CH	GIETRO	367	2015	2700	2800	0.046			-6136
CH	GRIES	359	2014	3300	3307	0.001	2215		1621
CH	GRIES	359	2014	3200	3300	0.076	2082		1161
CH	GRIES	359	2014	3100	3200	0.243	1953		698
CH	GRIES	359	2014	3000	3100	1.484	1827		234
CH	GRIES	359	2014	2900	3000	0.957	1705		-233
CH	GRIES	359	2014	2800	2900	0.612	1587		-701
CH	GRIES	359	2014	2700	2800	0.351	1473		-1171
CH	GRIES	359	2014	2600	2700	0.316	1362		-1644
CH	GRIES	359	2014	2500	2600	0.767	1255		-2118
CH	GRIES	359	2014	2415	2500	0.167	1152		-2594
CH	GRIES	359	2015	3200	3300	0.071	1000		-1255
CH	GRIES	359	2015	3100	3200	0.206	1619		-645
CH	GRIES	359	2015	3000	3100	1.418	1864		-760
CH	GRIES	359	2015	2900	3000	0.977	1884		-1206
CH	GRIES	359	2015	2800	2900	0.566	1861		-1864
CH	GRIES	359	2015	2700	2800	0.296	1799		-2302
CH	GRIES	359	2015	2600	2700	0.178	1660		-2978
CH	GRIES	359	2015	2500	2600	0.613	1452		-3865
CH	GRIES	359	2015	2400	2500	0.106	1479		-4512
CH	HOHLAUB	3332	2014	4000	4022	0.004	582		299
CH	HOHLAUB	3332	2014	3900	4000	0.028	702		532
CH	HOHLAUB	3332	2014	3800	3900	0.074	904		597
CH	HOHLAUB	3332	2014	3700	3800	0.069	940		631
CH	HOHLAUB	3332	2014	3600	3700	0.063	1050		746
CH	HOHLAUB	3332	2014	3500	3600	0.118	1343		884
CH	HOHLAUB	3332	2014	3400	3500	0.172	1489		806
CH	HOHLAUB	3332	2014	3300	3400	0.279	1537		532
CH	HOHLAUB	3332	2014	3200	3300	0.294	1488		208
CH	HOHLAUB	3332	2014	3100	3200	0.373	1456		-135
CH	HOHLAUB	3332	2014	3000	3100	0.405	1389		-757
CH	HOHLAUB	3332	2014	2900	3000	0.241	1316		-1378
CH	HOHLAUB	3332	2014	2850	2900	0.018	1180		-1635
CH	HOHLAUB	3332	2015	4000	4100	0.004			-283
CH	HOHLAUB	3332	2015	3900	4000	0.028			53
CH	HOHLAUB	3332	2015	3800	3900	0.074			-11
CH	HOHLAUB	3332	2015	3700	3800	0.069			60
CH	HOHLAUB	3332	2015	3600	3700	0.063			199
CH	HOHLAUB	3332	2015	3500	3600	0.118			229
CH	HOHLAUB	3332	2015	3400	3500	0.172			78
CH	HOHLAUB	3332	2015	3300	3400	0.279			-302
CH	HOHLAUB	3332	2015	3200	3300	0.294			-759
CH	HOHLAUB	3332	2015	3100	3200	0.373			-1209
CH	HOHLAUB	3332	2015	3000	3100	0.405			-1955
CH	HOHLAUB	3332	2015	2900	3000	0.241			-2568
CH	HOHLAUB	3332	2015	2800	2900	0.018			-2725
CH	MURTEL	4339	2014	3250	3300	0.011	2311	-293	2017
CH	MURTEL	4339	2014	3200	3250	0.106	1761	-772	989
CH	MURTEL	4339	2014	3150	3200	0.114	1218	-1092	126
CH	MURTEL	4339	2014	3100	3150	0.051	1197	-1251	-53
CH	MURTEL	4339	2014	3050	3100	0.019	1140	-1641	-501
CH	MURTEL	4339	2014	3000	3050	0.001	1305	-1629	-323
CH	MURTEL	4339	2015	3250	3300	0.011	1702	-1043	659
CH	MURTEL	4339	2015	3200	3250	0.106	1393	-1470	-77
CH	MURTEL	4339	2015	3150	3200	0.114	912	-2086	-1174
CH	MURTEL	4339	2015	3100	3150	0.054	786	-2627	-1841
CH	MURTEL	4339	2015	3050	3100	0.017	731	-2946	-2215
CH	PIZOL	417	2014	2750	2800	0.005	1386	-2113	-727
CH	PIZOL	417	2014	2700	2750	0.018	1233	-2103	-870
CH	PIZOL	417	2014	2650	2700	0.032	1091	-2496	-1405
CH	PIZOL	417	2014	2600	2650	0.011	1069	-2571	-1502
CH	PIZOL	417	2015	2750	2800	0.005	1990	-2733	-743
CH	PIZOL	417	2015	2700	2750	0.018	2002	-2838	-836
CH	PIZOL	417	2015	2650	2700	0.032	1812	-3653	-1841
CH	PIZOL	417	2015	2600	2650	0.011	1679	-3645	-1966
CH	PLAINE MORTE	4246	2014	2900	3000	0.029	969	-782	187
CH	PLAINE MORTE	4246	2014	2800	2900	0.223	1104	-1234	-130
CH	PLAINE MORTE	4246	2014	2700	2800	5.634	1021	-1900	-879
CH	PLAINE MORTE	4246	2014	2600	2700	1.831	989	-2265	-1276

PU	GLACIER_NAME	WGMS_ID	YEAR	ELEV_FROM	ELEV_TO	AREA	BW	BS	BA
CH	PLAINE MORTE	4246	2014	2500	2600	0.152	951	-2409	-1458
CH	PLAINE MORTE	4246	2014	2400	2500	0.009	1022	-2327	-1305
CH	PLAINE MORTE	4246	2015	2900	3000	0.026	1253	-1498	-245
CH	PLAINE MORTE	4246	2015	2800	2900	0.121	1241	-2284	-1043
CH	PLAINE MORTE	4246	2015	2700	2800	5.106	1229	-3561	-2332
CH	PLAINE MORTE	4246	2015	2600	2700	2.139	1248	-3861	-2613
CH	PLAINE MORTE	4246	2015	2500	2600	0.153	1232	-4072	-2840
CH	PLAINE MORTE	4246	2015	2400	2500	0.006	1229	-3938	-2709
CH	RHONE	473	2014	3500	3596	0.334	1178		1434
CH	RHONE	473	2014	3400	3500	0.795	1364		1613
CH	RHONE	473	2014	3300	3400	0.951	1457		1557
CH	RHONE	473	2014	3200	3300	1.456	1464		1333
CH	RHONE	473	2014	3100	3200	1.534	1353		894
CH	RHONE	473	2014	3000	3100	1.878	1369		671
CH	RHONE	473	2014	2900	3000	2.171	1388		342
CH	RHONE	473	2014	2800	2900	2.154	1276		-423
CH	RHONE	473	2014	2700	2800	1.069	1065		-1571
CH	RHONE	473	2014	2600	2700	0.936	799		-2733
CH	RHONE	473	2014	2500	2600	1.139	739		-3376
CH	RHONE	473	2014	2400	2500	0.639	633		-3851
CH	RHONE	473	2014	2300	2400	0.484	481		-3982
CH	RHONE	473	2014	2209	2300	0.268	474		-4629
CH	RHONE	473	2015	3500	3600	0.334	1770		1059
CH	RHONE	473	2015	3400	3500	0.795	2124		1355
CH	RHONE	473	2015	3300	3400	0.951	2254		1271
CH	RHONE	473	2015	3200	3300	1.456	2198		925
CH	RHONE	473	2015	3100	3200	1.534	2064		480
CH	RHONE	473	2015	3000	3100	1.884	2055		207
CH	RHONE	473	2015	2900	3000	2.171	2014		-250
CH	RHONE	473	2015	2800	2900	2.21	1803		-1208
CH	RHONE	473	2015	2700	2800	1.068	1243		-2840
CH	RHONE	473	2015	2600	2700	0.957	766		-4176
CH	RHONE	473	2015	2500	2600	1.019	874		-4860
CH	RHONE	473	2015	2400	2500	0.549	740		-5720
CH	RHONE	473	2015	2300	2400	0.508	696		-5662
CH	RHONE	473	2015	2200	2300	0.134	777		-5739
CH	SANKT ANNA	432	2014	2900	2950	0.001	1233	-2251	-1017
CH	SANKT ANNA	432	2014	2850	2900	0.016	1902	-2310	-408
CH	SANKT ANNA	432	2014	2800	2850	0.042	2196	-2147	49
CH	SANKT ANNA	432	2014	2750	2800	0.04	2231	-2103	127
CH	SANKT ANNA	432	2014	2700	2750	0.046	1757	-2377	-619
CH	SANKT ANNA	432	2014	2650	2700	0.037	1469	-2601	-1131
CH	SANKT ANNA	432	2014	2600	2650	0.012	1448	-2521	-1073
CH	SANKT ANNA	432	2015	2900	2950	0.001	1145	-2615	-1470
CH	SANKT ANNA	432	2015	2850	2900	0.016	1667	-3115	-1448
CH	SANKT ANNA	432	2015	2800	2850	0.042	1913	-3068	-1155
CH	SANKT ANNA	432	2015	2750	2800	0.04	1907	-3077	-1170
CH	SANKT ANNA	432	2015	2700	2750	0.046	1955	-3000	-1045
CH	SANKT ANNA	432	2015	2650	2700	0.037	1501	-3903	-2402
CH	SANKT ANNA	432	2015	2600	2650	0.012	1594	-4088	-2494
CH	SCHWARZBACH	4340	2014	2800	2850	0.013	2163	-2587	-423
CH	SCHWARZBACH	4340	2014	2750	2800	0.032	2103	-2542	-438
CH	SCHWARZBACH	4340	2014	2700	2750	0.011	1844	-2815	-970
CH	SCHWARZBACH	4340	2015	2800	2850	0.013	2309	-3009	-700
CH	SCHWARZBACH	4340	2015	2750	2800	0.031	2194	-3569	-1375
CH	SCHWARZBACH	4340	2015	2700	2750	0.007	2053	-3793	-1740
CH	SCHWARZBERG	395	2014	3500	3566	0.058	1733		1789
CH	SCHWARZBERG	395	2014	3400	3500	0.229	1978		1985
CH	SCHWARZBERG	395	2014	3300	3400	0.368	2013		1763
CH	SCHWARZBERG	395	2014	3200	3300	0.648	1994		1361
CH	SCHWARZBERG	395	2014	3100	3200	0.793	1931		815
CH	SCHWARZBERG	395	2014	3000	3100	0.854	1850		171
CH	SCHWARZBERG	395	2014	2900	3000	1.188	1724		-685
CH	SCHWARZBERG	395	2014	2800	2900	0.681	1532		-1753
CH	SCHWARZBERG	395	2014	2700	2800	0.323	1327		-2601
CH	SCHWARZBERG	395	2014	2669	2700	0.027	1212		-3259
CH	SCHWARZBERG	395	2015	3500	3600	0.949			497
CH	SCHWARZBERG	395	2015	3400	3500	1.063			498
CH	SCHWARZBERG	395	2015	3300	3400	1.005			332
CH	SCHWARZBERG	395	2015	3200	3300	1.592			81
CH	SCHWARZBERG	395	2015	3100	3200	0.739			-388
CH	SCHWARZBERG	395	2015	3000	3100	0.717			-1180
CH	SCHWARZBERG	395	2015	2900	3000	0.486			-2101
CH	SCHWARZBERG	395	2015	2800	2900	0.583			-3011
CH	SCHWARZBERG	395	2015	2700	2800	0.157			-4133
CH	SCHWARZBERG	395	2015	2600	2700	0.002			-4586
CH	SEX ROUGE	454	2014	2850	2900	0.011	1633	-1198	434
CH	SEX ROUGE	454	2014	2800	2850	0.166	1184	-1786	-601
CH	SEX ROUGE	454	2014	2750	2800	0.086	1096	-1877	-780
CH	SEX ROUGE	454	2014	2700	2750	0.007	1245	-1738	-493
CH	SEX ROUGE	454	2015	2850	2900	0.011	1730	-2639	-909
CH	SEX ROUGE	454	2015	2800	2850	0.166	1605	-3647	-2042
CH	SEX ROUGE	454	2015	2750	2800	0.086	1144	-3792	-2648
CH	SEX ROUGE	454	2015	2700	2750	0.007	960	-3945	-2985
CH	SILVRETТА	408	2014	3000	3096	0.125	1178		263
CH	SILVRETТА	408	2014	2900	3000	0.575	1109		-77
CH	SILVRETТА	408	2014	2800	2900	0.57	1065		-763
CH	SILVRETТА	408	2014	2700	2800	0.66	1056		-1123
CH	SILVRETТА	408	2014	2600	2700	0.392	1039		-1559
CH	SILVRETТА	408	2014	2500	2600	0.365	936		-2054
CH	SILVRETТА	408	2014	2468	2500	0.022	1053		-2338
CH	SILVRETТА	408	2015	3000	3100	0.117	1184		-1049
CH	SILVRETТА	408	2015	2900	3000	0.583	1430		-671
CH	SILVRETТА	408	2015	2800	2900	0.576	1404		-978
CH	SILVRETТА	408	2015	2700	2800	0.663	1432		-1820
CH	SILVRETТА	408	2015	2600	2700	0.392	1365		-2552

Table 4

PU	GLACIER_NAME	WGMS_ID	YEAR	ELEV_FROM	ELEV_TO	AREA	BW	BS	BA
CH	SILVRETTA	408	2015	2500	2600	0.338	1378		-3220
CH	SILVRETTA	408	2015	2400	2500	0.016	1310		-3423
CH	TSANFLEURON	371	2014	2900	3000	0.058	1423	-1280	143
CH	TSANFLEURON	371	2014	2800	2900	0.863	1559	-1596	-37
CH	TSANFLEURON	371	2014	2700	2800	1.143	1331	-2064	-733
CH	TSANFLEURON	371	2014	2600	2700	0.51	1176	-2765	-1589
CH	TSANFLEURON	371	2014	2500	2600	0.073	1041	-3586	-2545
CH	TSANFLEURON	371	2015	2900	3000	0.06	1439	-3072	-1633
CH	TSANFLEURON	371	2015	2800	2900	0.918	1520	-3881	-2361
CH	TSANFLEURON	371	2015	2700	2800	1.126	1647	-4314	-2667
CH	TSANFLEURON	371	2015	2600	2700	0.457	1490	-5155	-3665
CH	TSANFLEURON	371	2015	2500	2600	0.058	1405	-5581	-4176
CL - Chile									
CL	AMARILLO	3905	2015	5258	5315	0.021	-255	-560	-815
CL	AMARILLO	3905	2015	5243	5258	0.015	-417	-457	-874
CL	AMARILLO	3905	2015	5220	5243	0.029	148	-1255	-1107
CL	AMARILLO	3905	2015	5206	5220	0.017	-357	-1053	-1410
CL	AMARILLO	3905	2015	5194	5206	0.020	-289	-970	-1259
CL	AMARILLO	3905	2015	5180	5194	0.019	-170	-923	-1216
CL	AMARILLO	3905	2015	5160	5180	0.052	-34	-2005	-2039
CN - China									
CN	PARLUNG NO. 94	3987	2014	5580	5635	0.009			400
CN	PARLUNG NO. 94	3987	2014	5540	5580	0.027			400
CN	PARLUNG NO. 94	3987	2014	5500	5540	0.094			400
CN	PARLUNG NO. 94	3987	2014	5460	5500	0.196			399
CN	PARLUNG NO. 94	3987	2014	5420	5460	0.222			59
CN	PARLUNG NO. 94	3987	2014	5380	5420	0.341			-437
CN	PARLUNG NO. 94	3987	2014	5340	5380	0.324			-828
CN	PARLUNG NO. 94	3987	2014	5300	5340	0.408			-1381
CN	PARLUNG NO. 94	3987	2014	5260	5300	0.252			-1812
CN	PARLUNG NO. 94	3987	2014	5220	5260	0.210			-2258
CN	PARLUNG NO. 94	3987	2014	5180	5220	0.107			-2622
CN	PARLUNG NO. 94	3987	2014	5140	5180	0.118			-3258
CN	PARLUNG NO. 94	3987	2014	5100	5140	0.039			-3962
CN	PARLUNG NO. 94	3987	2014	5075	5100	0.010			-4200
CN	PARLUNG NO. 94	3987	2015	5580	5635	0.009			600
CN	PARLUNG NO. 94	3987	2015	5540	5580	0.027			600
CN	PARLUNG NO. 94	3987	2015	5500	5540	0.094			600
CN	PARLUNG NO. 94	3987	2015	5460	5500	0.196			600
CN	PARLUNG NO. 94	3987	2015	5420	5460	0.222			362
CN	PARLUNG NO. 94	3987	2015	5380	5420	0.341			-33
CN	PARLUNG NO. 94	3987	2015	5340	5380	0.324			-373
CN	PARLUNG NO. 94	3987	2015	5300	5340	0.408			-817
CN	PARLUNG NO. 94	3987	2015	5260	5300	0.252			-1334
CN	PARLUNG NO. 94	3987	2015	5220	5260	0.210			-1722
CN	PARLUNG NO. 94	3987	2015	5180	5220	0.107			-1848
CN	PARLUNG NO. 94	3987	2015	5140	5180	0.118			-2491
CN	PARLUNG NO. 94	3987	2015	5100	5140	0.039			-3228
CN	PARLUNG NO. 94	3987	2015	5075	5100	0.010			-3400
CN	URUMQI GLACIER NO. 1	853	2014	4400	4445	0.023	342	360	702
CN	URUMQI GLACIER NO. 1	853	2014	4350	4400	0.031	330	365	695
CN	URUMQI GLACIER NO. 1	853	2014	4300	4350	0.043	305	357	662
CN	URUMQI GLACIER NO. 1	853	2014	4250	4300	0.036	297	368	665
CN	URUMQI GLACIER NO. 1	853	2014	4200	4250	0.044	279	254	533
CN	URUMQI GLACIER NO. 1	853	2014	4150	4200	0.123	259	68	327
CN	URUMQI GLACIER NO. 1	853	2014	4100	4150	0.189	245	-23	222
CN	URUMQI GLACIER NO. 1	853	2014	4050	4100	0.249	188	-147	41
CN	URUMQI GLACIER NO. 1	853	2014	4000	4050	0.237	120	-284	-164
CN	URUMQI GLACIER NO. 1	853	2014	3950	4000	0.186	72	-394	-322
CN	URUMQI GLACIER NO. 1	853	2014	3900	3950	0.187	-10	-612	-622
CN	URUMQI GLACIER NO. 1	853	2014	3850	3900	0.166	-33	-846	-879
CN	URUMQI GLACIER NO. 1	853	2014	3800	3850	0.077	-71	-1249	-1320
CN	URUMQI GLACIER NO. 1	853	2014	3752	3800	0.027	-139	-1436	-1575
CN	URUMQI GLACIER NO. 1	853	2015	4450	4482	0.012	282	246	528
CN	URUMQI GLACIER NO. 1	853	2015	4400	4450	0.023	276	229	505
CN	URUMQI GLACIER NO. 1	853	2015	4350	4400	0.034	268	169	437
CN	URUMQI GLACIER NO. 1	853	2015	4300	4350	0.038	261	108	369
CN	URUMQI GLACIER NO. 1	853	2015	4250	4300	0.034	253	69	322
CN	URUMQI GLACIER NO. 1	853	2015	4200	4250	0.083	244	-80	164
CN	URUMQI GLACIER NO. 1	853	2015	4150	4200	0.179	224	-360	-136
CN	URUMQI GLACIER NO. 1	853	2015	4100	4150	0.21	167	-621	-454
CN	URUMQI GLACIER NO. 1	853	2015	4050	4100	0.255	189	-933	-744
CN	URUMQI GLACIER NO. 1	853	2015	4000	4050	0.206	202	-1199	-997
CN	URUMQI GLACIER NO. 1	853	2015	3950	4000	0.17	169	-1405	-1236
CN	URUMQI GLACIER NO. 1	853	2015	3900	3950	0.197	94	-1595	-1501
CN	URUMQI GLACIER NO. 1	853	2015	3850	3900	0.096	61	-2064	-2003
CN	URUMQI GLACIER NO. 1	853	2015	3800	3850	0.051	15	-2693	-2678
CN	URUMQI GLACIER NO. 1	853	2015	3787	3800	0.006	-51	-3299	-3350
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2014	4200	4225	0.011	299	9	308
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2014	4150	4200	0.079	268	7	275
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2014	4100	4150	0.117	273	5	278
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2014	4050	4100	0.137	231	10	241
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2014	4000	4050	0.139	173	-48	125
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2014	3950	4000	0.136	121	-197	-76
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2014	3900	3950	0.154	30	-458	-428
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2014	3850	3900	0.154	-11	-788	-799
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2014	3800	3850	0.077	-71	-1249	-1320
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2014	3752	3800	0.027	-139	-1436	-1575
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2015	4250	4252	0.001	249	57	306
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2015	4200	4250	0.043	244	-53	191
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2015	4150	4200	0.12	223	-286	-63
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2015	4100	4150	0.117	184	-407	-223
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2015	4050	4100	0.15	180	-798	-618
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2015	4000	4050	0.136	187	-1055	-868

PU	GLACIER_NAME	WGMS_ID	YEAR	ELEV_FROM	ELEV_TO	AREA	BW	BS	BA
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2015	3950	4000	0.131	201	-1257	-1056
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2015	3900	3950	0.175	115	-1500	-1385
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2015	3850	3900	0.091	73	-2024	-1951
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2015	3800	3850	0.051	15	-2693	-2678
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	2015	3787	3800	0.006	-51	-3299	-3350
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2014	4400	4445	0.023	342	360	702
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2014	4350	4400	0.031	330	365	695
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2014	4300	4350	0.043	305	357	662
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2014	4250	4300	0.036	297	368	665
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2014	4200	4250	0.034	273	331	604
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2014	4150	4200	0.044	242	178	420
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2014	4100	4150	0.072	200	-69	131
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2014	4050	4100	0.112	136	-340	-204
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2014	4000	4050	0.099	45	-616	-571
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2014	3950	4000	0.05	-62	-924	-986
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2014	3900	3950	0.033	-194	-1329	-1523
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2014	3848	3900	0.013	-297	-1569	-1866
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2015	4450	4482	0.012	282	246	528
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2015	4400	4450	0.023	276	229	505
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2015	4350	4400	0.034	268	169	437
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2015	4300	4350	0.038	261	108	369
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2015	4250	4300	0.034	253	69	322
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2015	4200	4250	0.039	244	-109	135
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2015	4150	4200	0.059	226	-509	-283
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2015	4100	4150	0.093	146	-891	-745
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2015	4050	4100	0.105	203	-1127	-924
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2015	4000	4050	0.07	232	-1480	-1248
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2015	3950	4000	0.039	62	-1900	-1838
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2015	3900	3950	0.022	-75	-2361	-2436
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	2015	3883	3900	0.005	-147	-2775	-2922
CO - Colombia									
CO	CONEJERAS	2721	2014	4825	4895	0.020			-2054
CO	CONEJERAS	2721	2014	4765	4825	0.116			-4167
CO	CONEJERAS	2721	2014	4735	4765	0.042			-4072
CO	CONEJERAS	2721	2014	4700	4735	0.023			-5468
CO	CONEJERAS	2721	2015	4825	4895	0.02			-3373
CO	CONEJERAS	2721	2015	4765	4825	0.116			-5719
CO	CONEJERAS	2721	2015	4735	4765	0.042			-5561
CO	CONEJERAS	2721	2015	4700	4735	0.022			-7015
CO	RITACUBA BLANCO	2763	2014	5120	5170	0.037			657
CO	RITACUBA BLANCO	2763	2014	5080	5120	0.048			647
CO	RITACUBA BLANCO	2763	2014	5020	5080	0.086			462
CO	RITACUBA BLANCO	2763	2014	4960	5020	0.085			-285
CO	RITACUBA BLANCO	2763	2014	4920	4960	0.048			-367
CO	RITACUBA BLANCO	2763	2014	4820	4920	0.058			-1655
CO	RITACUBA BLANCO	2763	2015	5120	5170	0.037			-578
CO	RITACUBA BLANCO	2763	2015	5080	5120	0.048			-548
CO	RITACUBA BLANCO	2763	2015	5020	5080	0.086			-436
CO	RITACUBA BLANCO	2763	2015	4960	5020	0.085			-733
CO	RITACUBA BLANCO	2763	2015	4920	4960	0.048			-1635
CO	RITACUBA BLANCO	2763	2015	4820	4920	0.058			-1643
EC - Ecuador									
EC	ANTIZANA15ALPHA	1624	2014	5600	5760	0.038			800
EC	ANTIZANA15ALPHA	1624	2014	5500	5600	0.023			800
EC	ANTIZANA15ALPHA	1624	2014	5400	5500	0.029			800
EC	ANTIZANA15ALPHA	1624	2014	5300	5400	0.034			300
EC	ANTIZANA15ALPHA	1624	2014	5200	5300	0.034			150
EC	ANTIZANA15ALPHA	1624	2014	5100	5200	0.058			0
EC	ANTIZANA15ALPHA	1624	2014	5000	5100	0.02			-1080
EC	ANTIZANA15ALPHA	1624	2014	4960	5000	0.021			-2034
EC	ANTIZANA15ALPHA	1624	2014	4910	4960	0.022			-2880
EC	ANTIZANA15ALPHA	1624	2014	4880	4910	0.012			-3050
EC	ANTIZANA15ALPHA	1624	2014	4860	4880	0.004			-3630
ES - Spain									
ES	MALADETA	942	2014	3188	3213	0.006	4360	-2511	1849
ES	MALADETA	942	2014	3163	3188	0.021	3839	-2422	1417
ES	MALADETA	942	2014	3138	3163	0.035	3318	-2332	986
ES	MALADETA	942	2014	3113	3138	0.035	2796	-2242	554
ES	MALADETA	942	2014	3088	3113	0.035	2275	-2152	123
ES	MALADETA	942	2014	3063	3088	0.032	1754	-2063	-309
ES	MALADETA	942	2014	3038	3063	0.029	2163	-2281	-118
ES	MALADETA	942	2014	3013	3038	0.014	2106	-2345	-239
ES	MALADETA	942	2014	2988	3013	0.013	2050	-2409	-359
ES	MALADETA	942	2014	2963	2988	0.011	1801	-2853	-1051
ES	MALADETA	942	2014	2938	2963	0.007	1552	-3296	-1743
ES	MALADETA	942	2014	2913	2938	0.006	2143	-4228	-2085
ES	MALADETA	942	2014	2888	2913	0.004	2314	-4915	-2602
ES	MALADETA	942	2014	2863	2888	0.002	2485	-5603	-3119
ES	MALADETA	942	2014	2838	2863	0.002	2655	-6291	-3635
ES	MALADETA	942	2015	3188	3213	0.006	1945	-3286	-1341
ES	MALADETA	942	2015	3163	3188	0.020	1932	-3358	-1426
ES	MALADETA	942	2015	3138	3163	0.034	1920	-3430	-1510
ES	MALADETA	942	2015	3113	3138	0.035	1907	-3502	-1595
ES	MALADETA	942	2015	3088	3113	0.036	1895	-3574	-1679
ES	MALADETA	942	2015	3063	3088	0.031	1882	-3646	-1764
ES	MALADETA	942	2015	3038	3063	0.026	1870	-3785	-1915
ES	MALADETA	942	2015	3013	3038	0.014	1857	-3890	-2033
ES	MALADETA	942	2015	2988	3013	0.009	1845	-3996	-2151
ES	MALADETA	942	2015	2963	2988	0.009	1830	-4268	-2438
ES	MALADETA	942	2015	2938	2963	0.006	1815	-4541	-2726
ES	MALADETA	942	2015	2913	2938	0.004	1805	-3959	-2154
ES	MALADETA	942	2015	2888	2913	0.003	1792	-3804	-2011
ES	MALADETA	942	2015	2863	2888	0.003	1780	-3649	-1869

Table 4

PU	GLACIER_NAME	WGMS_ID	YEAR	ELEV_FROM	ELEV_TO	AREA	BW	BS	BA
ES	MALADETA	942	2015	2838	2863	0.001	1767	-3494	-1727
GL - Greenland									
GL	FREYA	3350	2014	1300	1400	0.001	974	-882	92
GL	FREYA	3350	2014	1200	1300	0.155	854	-681	173
GL	FREYA	3350	2014	1100	1200	0.190	828	-649	179
GL	FREYA	3350	2014	1000	1100	0.278	971	-674	297
GL	FREYA	3350	2014	900	1000	0.633	1182	-693	489
GL	FREYA	3350	2014	800	900	0.804	1171	-639	532
GL	FREYA	3350	2014	700	800	1.064	1128	-667	461
GL	FREYA	3350	2014	600	700	1.073	1135	-706	429
GL	FREYA	3350	2014	500	600	0.586	1074	-870	204
GL	FREYA	3350	2014	400	500	0.370	1035	-908	127
GL	FREYA	3350	2014	300	400	0.136	1147	-524	623
GL	FREYA	3350	2014	200	300	0.014	1264	-818	446
GL	FREYA	3350	2015	1300	1400	0.001	326	-134	192
GL	FREYA	3350	2015	1200	1300	0.155	414	-202	212
GL	FREYA	3350	2015	1100	1200	0.190	540	-283	257
GL	FREYA	3350	2015	1000	1100	0.278	777	-504	273
GL	FREYA	3350	2015	900	1000	0.633	1039	-641	398
GL	FREYA	3350	2015	800	900	0.804	1140	-659	481
GL	FREYA	3350	2015	700	800	1.064	1087	-702	385
GL	FREYA	3350	2015	600	700	1.073	957	-1039	-82
GL	FREYA	3350	2015	500	600	0.586	813	-1285	-472
GL	FREYA	3350	2015	400	500	0.370	735	-1534	-799
GL	FREYA	3350	2015	300	400	0.136	449	-598	-149
GL	FREYA	3350	2015	200	300	0.014	555	-1208	-653
GL	MITTIVAKKAT	1629	2015	800	865	0.67			1250
GL	MITTIVAKKAT	1629	2015	700	800	2.21			1100
GL	MITTIVAKKAT	1629	2015	600	700	3.91			500
GL	MITTIVAKKAT	1629	2015	500	600	2.95			350
GL	MITTIVAKKAT	1629	2015	400	500	3.02			-50
GL	MITTIVAKKAT	1629	2015	300	400	1.94			-650
GL	MITTIVAKKAT	1629	2015	200	300	1.03			-1250
GL	MITTIVAKKAT	1629	2015	180	200	0.21			-1750
GL	QASIGIANNGUIT	4566	2014	1000	1020	0.027	744		29
GL	QASIGIANNGUIT	4566	2014	980	1000	0.021	744		29
GL	QASIGIANNGUIT	4566	2014	960	980	0.027	744		29
GL	QASIGIANNGUIT	4566	2014	940	960	0.060	744		29
GL	QASIGIANNGUIT	4566	2014	920	940	0.065	744		29
GL	QASIGIANNGUIT	4566	2014	900	920	0.065	654		-111
GL	QASIGIANNGUIT	4566	2014	880	900	0.089	838		-72
GL	QASIGIANNGUIT	4566	2014	860	880	0.046	840		-147
GL	QASIGIANNGUIT	4566	2014	840	860	0.028	843		-221
GL	QASIGIANNGUIT	4566	2014	820	840	0.025	846		-296
GL	QASIGIANNGUIT	4566	2014	800	820	0.041	849		-371
GL	QASIGIANNGUIT	4566	2014	780	800	0.041	852		-445
GL	QASIGIANNGUIT	4566	2014	760	780	0.070	855		-520
GL	QASIGIANNGUIT	4566	2014	740	760	0.062	857		-987
GL	QASIGIANNGUIT	4566	2014	720	740	0.037	860		-1482
GL	QASIGIANNGUIT	4566	2014	700	720	0.011	836		-1559
GL	QASIGIANNGUIT	4566	2015	1000	1020	0.027	1750		333
GL	QASIGIANNGUIT	4566	2015	980	1000	0.021	1750		333
GL	QASIGIANNGUIT	4566	2015	960	980	0.027	1750		333
GL	QASIGIANNGUIT	4566	2015	940	960	0.060	1750		333
GL	QASIGIANNGUIT	4566	2015	920	940	0.065	1499		333
GL	QASIGIANNGUIT	4566	2015	900	920	0.065	1145		287
GL	QASIGIANNGUIT	4566	2015	880	900	0.089	1199		177
GL	QASIGIANNGUIT	4566	2015	860	880	0.046	1203		205
GL	QASIGIANNGUIT	4566	2015	840	860	0.028	1207		233
GL	QASIGIANNGUIT	4566	2015	820	840	0.025	1211		260
GL	QASIGIANNGUIT	4566	2015	800	820	0.041	1215		288
GL	QASIGIANNGUIT	4566	2015	780	800	0.041	1219		315
GL	QASIGIANNGUIT	4566	2015	760	780	0.070	1223		343
GL	QASIGIANNGUIT	4566	2015	740	760	0.062	1227		21
GL	QASIGIANNGUIT	4566	2015	720	740	0.037	1166		-352
GL	QASIGIANNGUIT	4566	2015	700	720	0.011	993		-473
IT - Italy									
IT	CARESER	635	2014	3250	3300	0.015	2132	-1631	502
IT	CARESER	635	2014	3200	3250	0.037	1920	-1579	341
IT	CARESER	635	2014	3150	3200	0.086	1724	-1521	203
IT	CARESER	635	2014	3100	3150	0.219	1543	-1480	63
IT	CARESER	635	2014	3050	3100	0.689	1608	-1451	157
IT	CARESER	635	2014	3000	3050	0.223	1560	-1900	-339
IT	CARESER	635	2014	2950	3000	0.246	1432	-2324	-893
IT	CARESER	635	2014	2900	2950	0.064	1411	-2533	-1121
IT	CARESER	635	2014	2850	2900	0.000	1391	-2531	-1139
IT	CARESER	635	2015	3250	3300	0.009	1592	-2946	-1354
IT	CARESER	635	2015	3200	3250	0.028	1512	-3086	-1574
IT	CARESER	635	2015	3150	3200	0.069	1229	-3109	-1881
IT	CARESER	635	2015	3100	3150	0.188	817	-3160	-2343
IT	CARESER	635	2015	3050	3100	0.649	825	-3155	-2330
IT	CARESER	635	2015	3000	3050	0.198	908	-3455	-2546
IT	CARESER	635	2015	2950	3000	0.137	840	-4287	-3447
IT	CARESER	635	2015	2900	2950	0.033	776	-4767	-3990
IT	CIARDONEY	1264	2014	3120	3160	0.055	2324	-1874	450
IT	CIARDONEY	1264	2014	3080	3120	0.168	2018	-2193	-175
IT	CIARDONEY	1264	2014	3020	3080	0.154	1733	-2116	-383
IT	CIARDONEY	1264	2014	2910	3020	0.09	1560	-2674	-1114
IT	CIARDONEY	1264	2014	2850	2910	0.101	1733	-3299	-1566
IT	CIARDONEY	1264	2015	3120	3160	0.055	2373	3042	-669
IT	CIARDONEY	1264	2015	3080	3120	0.168	1886	3235	-1349
IT	CIARDONEY	1264	2015	3020	3080	0.154	1638	3339	-1701
IT	CIARDONEY	1264	2015	2910	3020	0.09	1310	3372	-2062
IT	CIARDONEY	1264	2015	2850	2910	0.101	1638	4901	-3263

PU	GLACIER_NAME	WGMS_ID	YEAR	ELEV_FROM	ELEV_TO	AREA	BW	BS	BA
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2014	3300	3350	0.011	1500	-700	800
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2014	3250	3300	0.027	1770	-964	806
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2014	3200	3250	0.080	1899	-1065	834
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2014	3150	3200	0.118	1840	-1357	483
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2014	3100	3150	0.084	1763	-1518	245
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2014	3050	3100	0.044	1949	-1876	73
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2014	3000	3050	0.028	1919	-1823	96
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2014	2950	3000	0.005	1999	-1138	861
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2014	2900	2950	0.002	2000	-1184	816
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2014	2850	2900	0	2000	-1550	450
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2015	3300	3350	0.011	808	-2158	-1350
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2015	3250	3300	0.027	1260	-2613	-1353
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2015	3200	3250	0.080	1321	-2604	-1283
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2015	3150	3200	0.118	1220	-2394	-1174
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2015	3100	3150	0.084	1040	-2150	-1110
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2015	3050	3100	0.044	1131	-2628	-1497
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2015	3000	3050	0.028	1211	-3051	-1839
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2015	2950	3000	0.005	1876	-3920	-2044
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2015	2900	2950	0.002	2100	-3131	-1031
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	2015	2850	2900	0	2100	-2550	-450
IT	LA MARE (VEDRETTE DE)	636	2014	3550	3600	0.010	891	76	967
IT	LA MARE (VEDRETTE DE)	636	2014	3500	3550	0.073	1051	355	1406
IT	LA MARE (VEDRETTE DE)	636	2014	3450	3500	0.112	1174	186	1360
IT	LA MARE (VEDRETTE DE)	636	2014	3400	3450	0.126	1309	-159	1150
IT	LA MARE (VEDRETTE DE)	636	2014	3350	3400	0.125	1415	-118	1298
IT	LA MARE (VEDRETTE DE)	636	2014	3300	3350	0.165	1503	-29	1474
IT	LA MARE (VEDRETTE DE)	636	2014	3250	3300	0.202	1570	-239	1331
IT	LA MARE (VEDRETTE DE)	636	2014	3200	3250	0.347	1616	-573	1043
IT	LA MARE (VEDRETTE DE)	636	2014	3150	3200	0.327	1641	-886	755
IT	LA MARE (VEDRETTE DE)	636	2014	3100	3150	0.174	1649	-1150	498
IT	LA MARE (VEDRETTE DE)	636	2014	3050	3100	0.117	1634	-1442	193
IT	LA MARE (VEDRETTE DE)	636	2014	3000	3050	0.096	1601	-1495	106
IT	LA MARE (VEDRETTE DE)	636	2014	2950	3000	0.077	1544	-1831	-287
IT	LA MARE (VEDRETTE DE)	636	2014	2900	2950	0.038	1481	-1982	-501
IT	LA MARE (VEDRETTE DE)	636	2014	2850	2900	0.013	1376	-1496	-120
IT	LA MARE (VEDRETTE DE)	636	2014	2800	2850	0.021	1259	-1705	-446
IT	LA MARE (VEDRETTE DE)	636	2014	2750	2800	0.014	1124	-2408	-1283
IT	LA MARE (VEDRETTE DE)	636	2014	2700	2750	0.011	959	-2264	-1305
IT	LA MARE (VEDRETTE DE)	636	2014	2650	2700	0.011	817	-2357	-1540
IT	LA MARE (VEDRETTE DE)	636	2015	3550	3600	0.010	793	-1298	-505
IT	LA MARE (VEDRETTE DE)	636	2015	3500	3550	0.073	848	-1495	-647
IT	LA MARE (VEDRETTE DE)	636	2015	3450	3500	0.112	882	-1429	-547
IT	LA MARE (VEDRETTE DE)	636	2015	3400	3450	0.126	909	-1477	-567
IT	LA MARE (VEDRETTE DE)	636	2015	3350	3400	0.125	918	-1409	-491
IT	LA MARE (VEDRETTE DE)	636	2015	3300	3350	0.165	911	-1283	-372
IT	LA MARE (VEDRETTE DE)	636	2015	3250	3300	0.202	887	-1507	-621
IT	LA MARE (VEDRETTE DE)	636	2015	3200	3250	0.347	846	-1735	-888
IT	LA MARE (VEDRETTE DE)	636	2015	3150	3200	0.327	796	-2175	-1379
IT	LA MARE (VEDRETTE DE)	636	2015	3100	3150	0.174	721	-2683	-1962
IT	LA MARE (VEDRETTE DE)	636	2015	3050	3100	0.117	629	-3265	-2636
IT	LA MARE (VEDRETTE DE)	636	2015	3000	3050	0.096	524	-3253	-2729
IT	LA MARE (VEDRETTE DE)	636	2015	2950	3000	0.077	398	-3172	-2775
IT	LA MARE (VEDRETTE DE)	636	2015	2900	2950	0.038	279	-3431	-3153
IT	LA MARE (VEDRETTE DE)	636	2015	2850	2900	0.013	107	-2741	-2635
IT	LA MARE (VEDRETTE DE)	636	2015	2800	2850	0.021	-68	-3769	-3837
IT	LA MARE (VEDRETTE DE)	636	2015	2750	2800	0.014	-255	-4036	-4291
IT	LA MARE (VEDRETTE DE)	636	2015	2700	2750	0.011	-472	-4099	-4570
IT	LA MARE (VEDRETTE DE)	636	2015	2650	2700	0.011	-651	-3214	-3865
IT	LUNGA (VEDRETTE) / LANGENF.	661	2014	3350	3400	0.009	1364	-314	1050
IT	LUNGA (VEDRETTE) / LANGENF.	661	2014	3300	3350	0.057	1696	-208	1488
IT	LUNGA (VEDRETTE) / LANGENF.	661	2014	3250	3300	0.233	1564	-300	1264
IT	LUNGA (VEDRETTE) / LANGENF.	661	2014	3200	3250	0.321	1520	-672	848
IT	LUNGA (VEDRETTE) / LANGENF.	661	2014	3150	3200	0.161	1631	-855	776
IT	LUNGA (VEDRETTE) / LANGENF.	661	2014	3100	3150	0.178	1778	-832	946
IT	LUNGA (VEDRETTE) / LANGENF.	661	2014	3050	3100	0.214	1684	-1173	511
IT	LUNGA (VEDRETTE) / LANGENF.	661	2014	3000	3050	0.100	1682	-1821	-139
IT	LUNGA (VEDRETTE) / LANGENF.	661	2014	2950	3000	0.075	1828	-1817	11
IT	LUNGA (VEDRETTE) / LANGENF.	661	2014	2900	2950	0.066	1755	-2065	-310
IT	LUNGA (VEDRETTE) / LANGENF.	661	2014	2850	2900	0.063	1727	-2552	-825
IT	LUNGA (VEDRETTE) / LANGENF.	661	2014	2800	2850	0.043	1721	-3190	-1469
IT	LUNGA (VEDRETTE) / LANGENF.	661	2014	2750	2800	0.051	1585	-3796	-2211
IT	LUNGA (VEDRETTE) / LANGENF.	661	2014	2700	2750	0.031	1427	-4374	-2947
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2014	3400	3470	0.081	1767	-337	1430
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2014	3350	3400	0.14	2048	-340	1708
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2014	3300	3350	0.162	1767	-359	1444
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2014	3250	3300	0.13	1729	-402	1327
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2014	3200	3250	0.251	2009	-321	1688
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2014	3150	3200	0.612	2087	-329	1758
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2014	3100	3150	0.568	1648	-1504	144
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2014	3050	3100	0.567	1766	-1573	193
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2014	3000	3050	0.608	1640	-1935	-295
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2014	2950	3000	0.579	1486	-1876	-390
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2014	2900	2950	0.429	1355	-1968	-613
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2014	2850	2900	0.765	1408	-1950	-542
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2014	2800	2850	0.429	1498	-2190	-692
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2014	2750	2800	0.327	1325	-2215	-890
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2014	2700	2750	0.145	1350	-2843	-1493
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2014	2650	2700	0.205	637	-2158	-1521
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2014	2500	2650	0.029	500	-2200	-1700
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2015	3400	3470	0.081	1683	-261	1422
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2015	3350	3400	0.14	1698	-915	783
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2015	3300	3350	0.162	1706	-1103	603
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2015	3250	3300	0.13	1587	-983	604
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2015	3200	3250	0.251	1575	-1522	53
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2015	3150	3200	0.612	1477	-1365	112
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2015	3100	3150	0.568	1441	-2573	-1132

Table 4

PU	GLACIER_NAME	WGMS_ID	YEAR	ELEV_FROM	ELEV_TO	AREA	BW	BS	BA
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2015	3050	3100	0.567	1641	-2851	-1210
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2015	3000	3050	0.608	1463	-2936	-1473
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2015	2950	3000	0.579	1354	-2923	-1569
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2015	2900	2950	0.429	1343	-3075	-1732
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2015	2850	2900	0.765	1445	-3053	-1608
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2015	2800	2850	0.429	1340	-3070	-1730
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2015	2750	2800	0.327	1277	-3423	-2146
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2015	2700	2750	0.145	1252	-4240	-2988
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2015	2650	2700	0.205	899	-4184	-3285
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	2015	2560	2650	0.029	500	-4000	-3500
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2014	2950	2980	0.004	2355	-1755	600
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2014	2900	2950	0.05	2242	-1894	348
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2014	2850	2900	0.166	1903	-1872	31
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2014	2800	2850	0.137	2325	-2194	131
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2014	2750	2800	0.188	1868	-2117	-249
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2014	2700	2750	0.212	1543	-1723	-180
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2014	2650	2700	0.088	1158	-1698	-540
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2014	2625	2650	0.006	963	-2133	-1170
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2015	2950	2980	0.004	1912	-2000	-88
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2015	2900	2950	0.05	1912	-2157	-245
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2015	2850	2900	0.166	1784	-2784	-1000
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2015	2800	2850	0.137	1776	-3135	-1359
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2015	2750	2800	0.188	1764	-3638	-1874
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2015	2700	2750	0.212	1625	-3264	-1639
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2015	2650	2700	0.088	1367	-3613	-2246
IT	PENDENTE (VEDR.) / HANGENDERF.	675	2015	2625	2650	0.006	1577	-3900	-2323
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2014	3200	3250	0.016	1672	-954	718
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2014	3150	3200	0.178	1783	-1198	585
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2014	3100	3150	0.216	1684	-941	743
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2014	3050	3100	0.257	1626	-958	668
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2014	3000	3050	0.263	1518	-1122	396
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2014	2950	3000	0.244	1460	-1622	-162
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2014	2900	2950	0.25	1338	-1488	-151
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2014	2850	2900	0.198	1285	-1704	-418
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2014	2800	2850	0.141	1317	-2029	-712
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2014	2750	2800	0.03	1203	-1922	-718
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2014	2700	2750	0.021	1400	-1506	-106
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2014	2650	2700	0.011	1210	-1343	-133
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2015	3200	3250	0.016	1171	-2277	-1107
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2015	3150	3200	0.178	1196	-2342	-1147
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2015	3100	3150	0.215	1306	-2411	-1105
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2015	3050	3100	0.257	1221	-2576	-1355
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2015	3000	3050	0.263	1061	-2315	-1254
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2015	2950	3000	0.244	966	-2320	-1353
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2015	2900	2950	0.242	810	-2839	-2028
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2015	2850	2900	0.156	793	-3398	-2605
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2015	2800	2850	0.110	783	-3813	-3030
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	2015	2750	2800	0.015	743	-4239	-3496
KE - Kenya									
KE	LEWIS	695	2014	4850	4900	0.014			-220
KE	LEWIS	695	2014	4800	4850	0.043			-414
KE	LEWIS	695	2014	4750	4800	0.02			-1051
KE	LEWIS	695	2014	4700	4750	0.022			-1818
KE	LEWIS	695	2014	4650	4700	0.009			-2093
KG - Kyrgyzstan									
KG	ABRAMOV	732	2014	4900	5000	0.030	772	-251	521
KG	ABRAMOV	732	2014	4800	4900	0.097	734	-139	594
KG	ABRAMOV	732	2014	4700	4800	0.132	826	-227	598
KG	ABRAMOV	732	2014	4600	4700	0.275	931	-305	626
KG	ABRAMOV	732	2014	4500	4600	0.999	1104	-572	532
KG	ABRAMOV	732	2014	4400	4500	2.367	1410	-833	576
KG	ABRAMOV	732	2014	4300	4400	4.492	1478	-1101	376
KG	ABRAMOV	732	2014	4200	4300	5.342	1451	-1413	37
KG	ABRAMOV	732	2014	4100	4200	4.451	1299	-2238	-938
KG	ABRAMOV	732	2014	4000	4100	2.640	1060	-2889	-1829
KG	ABRAMOV	732	2014	3900	4000	1.63	741	-3463	-2722
KG	ABRAMOV	732	2014	3800	3900	0.964	425	-4340	-3914
KG	ABRAMOV	732	2014	3700	3800	0.497	241	-5108	-4866
KG	ABRAMOV	732	2014	3600	3700	0.091	180	-5235	-5054
KG	ABRAMOV	732	2015	4900	5000	0.02	1125	-175	949
KG	ABRAMOV	732	2015	4800	4900	0.09	1179	-168	1011
KG	ABRAMOV	732	2015	4700	4800	0.13	1300	-263	1036
KG	ABRAMOV	732	2015	4600	4700	0.26	1484	-422	1062
KG	ABRAMOV	732	2015	4500	4600	0.99	1797	-761	1036
KG	ABRAMOV	732	2015	4400	4500	2.37	2301	-1040	1260
KG	ABRAMOV	732	2015	4300	4400	4.46	2415	-1227	1188
KG	ABRAMOV	732	2015	4200	4300	5.32	2381	-1769	611
KG	ABRAMOV	732	2015	4100	4200	4.44	2154	-2247	-92
KG	ABRAMOV	732	2015	4000	4100	2.66	1805	-2879	-1073
KG	ABRAMOV	732	2015	3900	4000	1.64	1324	-3823	-2498
KG	ABRAMOV	732	2015	3800	3900	0.97	847	-4599	-3751
KG	ABRAMOV	732	2015	3700	3800	0.49	610	-5408	-4798
KG	ABRAMOV	732	2015	3600	3700	0.1	545	-5551	-5005
KG	BATYSH SOOK/SYEK ZAPADNIY	781	2014	4400	4500	0.076	76	104	181
KG	BATYSH SOOK/SYEK ZAPADNIY	781	2014	4300	4400	0.201	137	229	367
KG	BATYSH SOOK/SYEK ZAPADNIY	781	2014	4200	4300	0.326	83	-186	-102
KG	BATYSH SOOK/SYEK ZAPADNIY	781	2014	4100	4200	0.297	29	-773	-743
KG	BATYSH SOOK/SYEK ZAPADNIY	781	2014	4000	4100	0.166	8	-1469	-1460
KG	BATYSH SOOK/SYEK ZAPADNIY	781	2014	3900	4000	0.040	-6	-1788	-1795
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2014	4600	4700	0.041	245		491
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2014	4500	4600	0.163	263		484
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2014	4400	4500	0.374	271		400
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2014	4300	4400	0.698	269		245
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2014	4200	4300	1.434	222		-150

PU	GLACIER_NAME	WGMS_ID	YEAR	ELEV_FROM	ELEV_TO	AREA	BW	BS	BA
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2014	4100	4200	1.576	164		-619
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2014	4000	4100	1.126	73		-1315
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2014	3900	4000	0.641	20		-1831
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2014	3800	3900	0.325	-3		-2401
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2014	3700	3800	0.034	-12		-3616
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2015	4600	4650	0.015	255	104	360
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2015	4500	4600	0.157	273	72	346
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2015	4400	4500	0.63	282	-8	274
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2015	4300	4400	1.04	280	-127	153
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2015	4200	4300	1.583	232	-419	-187
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2015	4100	4200	1.659	173	-790	-617
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2015	4000	4100	0.852	81	-1290	-1209
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2015	3900	4000	0.568	29	-1642	-1613
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2015	3800	3900	0.259	8	-1960	-1951
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	2015	3780	3800	0.027	10	-2594	-2584
KG	GLACIER NO. 599 (KJUNGEI ALA-TOO)	10402	2015	4200	4300	0.164			2250
KG	GLACIER NO. 599 (KJUNGEI ALA-TOO)	10402	2015	4100	4200	0.184			1514
KG	GLACIER NO. 599 (KJUNGEI ALA-TOO)	10402	2015	4000	4100	0.605			199
KG	GLACIER NO. 599 (KJUNGEI ALA-TOO)	10402	2015	3900	4000	0.405			-1088
KG	GLACIER NO. 599 (KJUNGEI ALA-TOO)	10402	2015	3800	3900	0.154			-2382
KG	GLACIER NO. 599 (KJUNGEI ALA-TOO)	10402	2015	3700	3800	0.02			-2750
KG	GOLUBIN	753	2014	4300	4400	0.012	523	-1167	-644
KG	GOLUBIN	753	2014	4200	4300	0.276	684	-1227	-543
KG	GOLUBIN	753	2014	4100	4200	0.537	701	-1400	-699
KG	GOLUBIN	753	2014	4000	4100	1.084	805	-1756	-951
KG	GOLUBIN	753	2014	3900	4000	1.063	707	-2294	-1587
KG	GOLUBIN	753	2014	3800	3900	0.963	681	-2691	-2010
KG	GOLUBIN	753	2014	3700	3800	0.303	515	-2873	-2358
KG	GOLUBIN	753	2014	3600	3700	0.593	266	-3834	-3568
KG	GOLUBIN	753	2014	3500	3600	0.360	33	-4219	-4186
KG	GOLUBIN	753	2014	3400	3500	0.223	-559	-4714	-5273
KG	GOLUBIN	753	2014	3300	3400	0.034	-463	-5031	-5494
KG	GOLUBIN	753	2015	4300	4400	0.012	535	-677	-142
KG	GOLUBIN	753	2015	4200	4300	0.276	717	-696	21
KG	GOLUBIN	753	2015	4100	4200	0.537	735	-725	10
KG	GOLUBIN	753	2015	4000	4100	1.084	842	-797	45
KG	GOLUBIN	753	2015	3900	4000	1.063	722	-1021	-299
KG	GOLUBIN	753	2015	3800	3900	0.963	682	-1188	-506
KG	GOLUBIN	753	2015	3700	3800	0.303	489	-1363	-874
KG	GOLUBIN	753	2015	3600	3700	0.593	209	-1930	-1721
KG	GOLUBIN	753	2015	3500	3600	0.360	-74	-2170	-2244
KG	GOLUBIN	753	2015	3400	3500	0.224	-765	-2428	-3193
KG	GOLUBIN	753	2015	3300	3400	0.029	-722	-2601	-3323
KG	KARA-BATKAK	813	2014	4200	4900	0.475	200		
KG	KARA-BATKAK	813	2014	4100	4200	0.363	610		
KG	KARA-BATKAK	813	2014	4000	4100	0.296	660		
KG	KARA-BATKAK	813	2014	3900	4000	0.305	230		
KG	KARA-BATKAK	813	2014	3800	3900	0.391	230		
KG	KARA-BATKAK	813	2014	3700	3800	0.242	270		
KG	KARA-BATKAK	813	2014	3600	3700	0.148	540		
KG	KARA-BATKAK	813	2014	3500	3600	0.157	230		
KG	KARA-BATKAK	813	2014	3400	3500	0.33	260	-2240	-1980
KG	KARA-BATKAK	813	2014	3300	3400	0.072	240	-2720	-2480
KG	KARA-BATKAK	813	2015	4200	4900	0.475	410	-30	380
KG	KARA-BATKAK	813	2015	4100	4200	0.363	670	-190	480
KG	KARA-BATKAK	813	2015	4000	4100	0.296	640	-770	-130
KG	KARA-BATKAK	813	2015	3900	4000	0.305	380	-1320	-940
KG	KARA-BATKAK	813	2015	3800	3900	0.391	610	-1870	-1260
KG	KARA-BATKAK	813	2015	3700	3800	0.242	600	-1830	-1230
KG	KARA-BATKAK	813	2015	3600	3700	0.148	540	-2220	-1680
KG	KARA-BATKAK	813	2015	3500	3600	0.157	260	-2870	-2610
KG	KARA-BATKAK	813	2015	3400	3500	0.33	310	-2970	-2660
KG	KARA-BATKAK	813	2015	3300	3400	0.032	300	-3610	-3310
KG	SARY TOR (NO.356)	805	2015	4500	4800	0.378	580	-820	-240
KG	SARY TOR (NO.356)	805	2015	4400	4500	0.351	570	-840	-270
KG	SARY TOR (NO.356)	805	2015	4300	4400	0.726	410	-1060	-650
KG	SARY TOR (NO.356)	805	2015	4200	4300	0.425	360	-1220	-860
KG	SARY TOR (NO.356)	805	2015	4100	4200	0.409	310	-1610	-1300
KG	SARY TOR (NO.356)	805	2015	4000	4100	0.305	270	-1930	-1660
KG	SARY TOR (NO.356)	805	2015	3900	4000	0.054	170	-2630	-2460
KZ - Kazakhstan									
KZ	TS.TUYUKSUYSKIY	817	2014	4100	4200	0.161	86	58	144
KZ	TS.TUYUKSUYSKIY	817	2014	4000	4100	0.314	148	-28	120
KZ	TS.TUYUKSUYSKIY	817	2014	3900	4000	0.233	186	-6	180
KZ	TS.TUYUKSUYSKIY	817	2014	3800	3900	0.315	220	-923	-703
KZ	TS.TUYUKSUYSKIY	817	2014	3750	3800	0.307	208	-1663	-1455
KZ	TS.TUYUKSUYSKIY	817	2014	3700	3750	0.389	196	-2035	-1839
KZ	TS.TUYUKSUYSKIY	817	2014	3650	3700	0.233	169	-2133	-1964
KZ	TS.TUYUKSUYSKIY	817	2014	3600	3650	0.103	263	-2224	-1961
KZ	TS.TUYUKSUYSKIY	817	2014	3550	3600	0.122	303	-2543	-2240
KZ	TS.TUYUKSUYSKIY	817	2014	3500	3550	0.099	280	-2925	-2645
KZ	TS.TUYUKSUYSKIY	817	2015	4100	4200	0.161	291	-113	178
KZ	TS.TUYUKSUYSKIY	817	2015	4000	4100	0.314	539	-336	203
KZ	TS.TUYUKSUYSKIY	817	2015	3900	4000	0.233	677	-427	251
KZ	TS.TUYUKSUYSKIY	817	2015	3800	3900	0.312	808	-1078	-270
KZ	TS.TUYUKSUYSKIY	817	2015	3750	3800	0.31	759	-1838	-1079
KZ	TS.TUYUKSUYSKIY	817	2015	3700	3750	0.386	703	-2016	-1313
KZ	TS.TUYUKSUYSKIY	817	2015	3650	3700	0.236	654	-2206	-1551
KZ	TS.TUYUKSUYSKIY	817	2015	3600	3650	0.1	550	-2105	-1555
KZ	TS.TUYUKSUYSKIY	817	2015	3550	3600	0.124	637	-2511	-1874
KZ	TS.TUYUKSUYSKIY	817	2015	3500	3550	0.095	593	-2702	-2109
NO - Norway									
NO	AALFOTBREEN	317	2014	1300	1368	0.902	3475	-4600	-1125

Table 4

PU	GLACIER_NAME	WGMS_ID	YEAR	ELEV_FROM	ELEV_TO	AREA	BW	BS	BA
NO	AALFOTBREEN	317	2014	1250	1300	0.782	3650	-4750	-1100
NO	AALFOTBREEN	317	2014	1200	1250	0.699	3725	-5025	-1300
NO	AALFOTBREEN	317	2014	1150	1200	0.577	3725	-5450	-1725
NO	AALFOTBREEN	317	2014	1100	1150	0.448	3800	-5950	-2150
NO	AALFOTBREEN	317	2014	1050	1100	0.295	3750	-6450	-2700
NO	AALFOTBREEN	317	2014	1000	1050	0.183	3475	-6950	-3475
NO	AALFOTBREEN	317	2014	950	1000	0.075	3125	-7450	-4325
NO	AALFOTBREEN	317	2014	890	950	0.014	2750	-8025	-5275
NO	AALFOTBREEN	317	2015	1300	1368	0.902	4025	-2250	1775
NO	AALFOTBREEN	317	2015	1250	1300	0.782	4200	-2475	1725
NO	AALFOTBREEN	317	2015	1200	1250	0.699	4300	-2700	1600
NO	AALFOTBREEN	317	2015	1150	1200	0.577	4375	-2950	1425
NO	AALFOTBREEN	317	2015	1100	1150	0.448	4400	-3250	1150
NO	AALFOTBREEN	317	2015	1050	1100	0.295	4325	-3575	750
NO	AALFOTBREEN	317	2015	1000	1050	0.183	4025	-3925	100
NO	AALFOTBREEN	317	2015	950	1000	0.075	3500	-4275	-775
NO	AALFOTBREEN	317	2015	890	950	0.014	2900	-4675	-1775
NO	AUSTDALSBREEN	321	2014	1700	1747	0.126	2200	-2800	-600
NO	AUSTDALSBREEN	321	2014	1650	1700	0.139	2250	-2750	-500
NO	AUSTDALSBREEN	321	2014	1600	1650	0.182	2300	-2700	-400
NO	AUSTDALSBREEN	321	2014	1550	1600	1.892	2400	-2700	-300
NO	AUSTDALSBREEN	321	2014	1500	1550	2.792	2400	-2800	-400
NO	AUSTDALSBREEN	321	2014	1450	1500	1.604	2400	-3100	-700
NO	AUSTDALSBREEN	321	2014	1400	1450	1.378	2000	-3400	-1400
NO	AUSTDALSBREEN	321	2014	1350	1400	0.931	1700	-3800	-2100
NO	AUSTDALSBREEN	321	2014	1300	1350	0.821	1500	-4300	-2800
NO	AUSTDALSBREEN	321	2014	1250	1300	0.536	1500	-4900	-3400
NO	AUSTDALSBREEN	321	2014	1200	1250	0.228	1300	-5500	-4200
NO	AUSTDALSBREEN	321	2015	1700	1747	0.126	2600	-1250	1350
NO	AUSTDALSBREEN	321	2015	1650	1700	0.139	2700	-1300	1400
NO	AUSTDALSBREEN	321	2015	1600	1650	0.182	2800	-1300	1500
NO	AUSTDALSBREEN	321	2015	1550	1600	1.892	2900	-1350	1550
NO	AUSTDALSBREEN	321	2015	1500	1550	2.792	2800	-1400	1400
NO	AUSTDALSBREEN	321	2015	1450	1500	1.604	2700	-1450	1250
NO	AUSTDALSBREEN	321	2015	1400	1450	1.378	2500	-1700	800
NO	AUSTDALSBREEN	321	2015	1350	1400	0.931	2000	-1950	50
NO	AUSTDALSBREEN	321	2015	1300	1350	0.821	1800	-2350	-550
NO	AUSTDALSBREEN	321	2015	1250	1300	0.536	1650	-2800	-1150
NO	AUSTDALSBREEN	321	2015	1200	1250	0.228	1500	-3250	-1750
NO	BLOMSTOELSKARDBREEN	3339	2014	1600	1632	1.166	4150	-2900	1250
NO	BLOMSTOELSKARDBREEN	3339	2014	1550	1600	6.335	3825	-3000	825
NO	BLOMSTOELSKARDBREEN	3339	2014	1500	1550	4.131	3600	-3150	450
NO	BLOMSTOELSKARDBREEN	3339	2014	1450	1500	2.192	3375	-3350	25
NO	BLOMSTOELSKARDBREEN	3339	2014	1400	1450	1.556	3350	-3575	-25
NO	BLOMSTOELSKARDBREEN	3339	2014	1350	1400	1.755	3275	-3825	-550
NO	BLOMSTOELSKARDBREEN	3339	2014	1300	1350	1.458	3100	-4100	-1000
NO	BLOMSTOELSKARDBREEN	3339	2014	1250	1300	0.781	3000	-4400	-1400
NO	BLOMSTOELSKARDBREEN	3339	2014	1200	1250	1.278	2950	-4725	-1775
NO	BLOMSTOELSKARDBREEN	3339	2014	1150	1200	1.003	2900	-5050	-2150
NO	BLOMSTOELSKARDBREEN	3339	2014	1100	1150	0.445	2700	-5400	-2700
NO	BLOMSTOELSKARDBREEN	3339	2014	1012	1100	0.304	1900	-5900	-4000
NO	BLOMSTOELSKARDBREEN	3339	2015	1600	1632	1.166	3925	-650	3275
NO	BLOMSTOELSKARDBREEN	3339	2015	1550	1600	6.335	3800	-725	3075
NO	BLOMSTOELSKARDBREEN	3339	2015	1500	1550	4.131	3625	-850	2775
NO	BLOMSTOELSKARDBREEN	3339	2015	1450	1500	2.192	3450	-1050	2400
NO	BLOMSTOELSKARDBREEN	3339	2015	1400	1450	1.556	3300	-1350	1950
NO	BLOMSTOELSKARDBREEN	3339	2015	1350	1400	1.755	3150	-1750	1400
NO	BLOMSTOELSKARDBREEN	3339	2015	1300	1350	1.458	3025	-2200	825
NO	BLOMSTOELSKARDBREEN	3339	2015	1250	1300	0.781	2925	-2650	275
NO	BLOMSTOELSKARDBREEN	3339	2015	1200	1250	1.278	2825	-3050	-225
NO	BLOMSTOELSKARDBREEN	3339	2015	1150	1200	1.003	2650	-3400	-750
NO	BLOMSTOELSKARDBREEN	3339	2015	1100	1150	0.445	2375	-3725	-1350
NO	BLOMSTOELSKARDBREEN	3339	2015	1012	1100	0.304	1875	-4150	-2275
NO	ENGABREEN	298	2014	1500	1544	0.048	3050	-2300	750
NO	ENGABREEN	298	2014	1400	1500	2.129	3400	-2400	1000
NO	ENGABREEN	298	2014	1300	1400	9.241	3500	-2600	900
NO	ENGABREEN	298	2014	1200	1300	8.044	3000	-3000	0
NO	ENGABREEN	298	2014	1100	1200	7.572	2350	-3500	-1150
NO	ENGABREEN	298	2014	1000	1100	4.607	1700	-4100	-2400
NO	ENGABREEN	298	2014	900	1000	2.431	1250	-4800	-3550
NO	ENGABREEN	298	2014	800	900	0.797	950	-5700	-4750
NO	ENGABREEN	298	2014	700	800	0.455	700	-6550	-5850
NO	ENGABREEN	298	2014	600	700	0.285	500	-7400	-6900
NO	ENGABREEN	298	2014	500	600	0.245	300	-8250	-7950
NO	ENGABREEN	298	2014	400	500	0.144	100	-9100	-9000
NO	ENGABREEN	298	2014	300	400	0.099	-100	-9900	-10000
NO	ENGABREEN	298	2014	200	300	0.117	-350	-10700	-11050
NO	ENGABREEN	298	2014	111	200	0.035	-600	-11500	-12100
NO	ENGABREEN	298	2015	1500	1544	0.048	3700	-1800	1900
NO	ENGABREEN	298	2015	1400	1500	2.129	4000	-1900	2100
NO	ENGABREEN	298	2015	1300	1400	9.241	4100	-2100	2000
NO	ENGABREEN	298	2015	1200	1300	8.044	3600	-2400	1200
NO	ENGABREEN	298	2015	1100	1200	7.572	3100	-2700	400
NO	ENGABREEN	298	2015	1000	1100	4.607	2700	-3000	-300
NO	ENGABREEN	298	2015	900	1000	2.431	2200	-3300	-1100
NO	ENGABREEN	298	2015	800	900	0.797	1700	-3700	-2000
NO	ENGABREEN	298	2015	700	800	0.455	1150	-4100	-2950
NO	ENGABREEN	298	2015	600	700	0.285	600	-4500	-3900
NO	ENGABREEN	298	2015	500	600	0.245	50	-4900	-4850
NO	ENGABREEN	298	2015	400	500	0.144	-500	-5350	-5850
NO	ENGABREEN	298	2015	300	400	0.099	-1050	-5800	-6850
NO	ENGABREEN	298	2015	200	300	0.117	-1550	-6200	-7750
NO	ENGABREEN	298	2015	111	200	0.035	-2000	-6600	-8600
NO	ENGABREEN	298	2015	100	200	0.091	-2100	-6350	-8450
NO	GRAASUBREEN	299	2014	2250	2283	0.031	951	-1600	-649
NO	GRAASUBREEN	299	2014	2200	2250	0.153	822	-1800	-978

PU	GLACIER_NAME	WGMS_ID	YEAR	ELEV_FROM	ELEV_TO	AREA	BW	BS	BA
NO	GRAASUBREEN	299	2014	2150	2200	0.255	841	-2080	-1239
NO	GRAASUBREEN	299	2014	2100	2150	0.353	525	-2200	-1675
NO	GRAASUBREEN	299	2014	2050	2100	0.362	813	-2150	-1337
NO	GRAASUBREEN	299	2014	2000	2050	0.405	795	-2100	-1305
NO	GRAASUBREEN	299	2014	1950	2000	0.32	1251	-2050	-799
NO	GRAASUBREEN	299	2014	1900	1950	0.127	1404	-1950	-546
NO	GRAASUBREEN	299	2014	1833	1900	0.113	1251	-1800	-549
NO	GRAASUBREEN	299	2015	2250	2283	0.031	1260	-200	1060
NO	GRAASUBREEN	299	2015	2200	2250	0.153	460	-300	160
NO	GRAASUBREEN	299	2015	2150	2200	0.255	720	-240	480
NO	GRAASUBREEN	299	2015	2100	2150	0.353	400	-400	0
NO	GRAASUBREEN	299	2015	2050	2100	0.362	670	-600	70
NO	GRAASUBREEN	299	2015	2000	2050	0.405	750	-600	150
NO	GRAASUBREEN	299	2015	1950	2000	0.32	1020	-550	470
NO	GRAASUBREEN	299	2015	1900	1950	0.127	1250	-500	750
NO	GRAASUBREEN	299	2015	1833	1900	0.113	1490	-500	990
NO	HANSEBREEN	322	2014	1250	1310	0.496	3400	-5225	-1825
NO	HANSEBREEN	322	2014	1200	1250	0.418	3800	-5400	-1600
NO	HANSEBREEN	322	2014	1150	1200	0.474	3775	-5575	-1800
NO	HANSEBREEN	322	2014	1100	1150	0.543	3525	-5750	-2225
NO	HANSEBREEN	322	2014	1050	1100	0.495	3250	-5925	-2675
NO	HANSEBREEN	322	2014	1000	1050	0.206	3325	-6100	-2775
NO	HANSEBREEN	322	2014	950	1000	0.098	3900	-6300	-2400
NO	HANSEBREEN	322	2014	927	950	0.02	4100	-6450	-2350
NO	HANSEBREEN	322	2015	1250	1310	0.496	4100	-2625	1475
NO	HANSEBREEN	322	2015	1200	1250	0.418	4450	-2800	1650
NO	HANSEBREEN	322	2015	1150	1200	0.474	4350	-2975	1375
NO	HANSEBREEN	322	2015	1100	1150	0.543	4025	-3150	875
NO	HANSEBREEN	322	2015	1050	1100	0.495	3675	-3350	325
NO	HANSEBREEN	322	2015	1000	1050	0.206	3650	-3575	75
NO	HANSEBREEN	322	2015	950	1000	0.098	4150	-3800	350
NO	HANSEBREEN	322	2015	927	950	0.02	4550	-3975	575
NO	HELLSTUGUBREEN	300	2014	2150	2229	0.02	1240	-1120	120
NO	HELLSTUGUBREEN	300	2014	2100	2150	0.08	1270	-1350	-80
NO	HELLSTUGUBREEN	300	2014	2050	2100	0.291	1467	-1470	-3
NO	HELLSTUGUBREEN	300	2014	2000	2050	0.181	1493	-1650	-157
NO	HELLSTUGUBREEN	300	2014	1950	2000	0.307	1399	-1820	-421
NO	HELLSTUGUBREEN	300	2014	1900	1950	0.603	1246	-2060	-814
NO	HELLSTUGUBREEN	300	2014	1850	1900	0.373	991	-2250	-1259
NO	HELLSTUGUBREEN	300	2014	1800	1850	0.332	883	-2500	-1617
NO	HELLSTUGUBREEN	300	2014	1750	1800	0.157	727	-2850	-2123
NO	HELLSTUGUBREEN	300	2014	1700	1750	0.088	983	-3100	-2117
NO	HELLSTUGUBREEN	300	2014	1650	1700	0.139	876	-3220	-2344
NO	HELLSTUGUBREEN	300	2014	1600	1650	0.114	864	-3500	-2636
NO	HELLSTUGUBREEN	300	2014	1550	1600	0.124	664	-3900	-3236
NO	HELLSTUGUBREEN	300	2014	1500	1550	0.083	650	-4200	-3550
NO	HELLSTUGUBREEN	300	2014	1482	1500	0.011	550	-4400	-3850
NO	HELLSTUGUBREEN	300	2015	2150	2229	0.02	1520	30	1550
NO	HELLSTUGUBREEN	300	2015	2100	2150	0.08	1510	-40	1470
NO	HELLSTUGUBREEN	300	2015	2050	2100	0.291	1500	-100	1400
NO	HELLSTUGUBREEN	300	2015	2000	2050	0.181	1252	-100	1152
NO	HELLSTUGUBREEN	300	2015	1950	2000	0.307	1274	-274	1000
NO	HELLSTUGUBREEN	300	2015	1900	1950	0.603	1239	-489	750
NO	HELLSTUGUBREEN	300	2015	1850	1900	0.373	1174	-574	600
NO	HELLSTUGUBREEN	300	2015	1800	1850	0.332	1185	-785	400
NO	HELLSTUGUBREEN	300	2015	1750	1800	0.157	1279	-1229	50
NO	HELLSTUGUBREEN	300	2015	1700	1750	0.088	1163	-1263	-100
NO	HELLSTUGUBREEN	300	2015	1650	1700	0.139	1133	-1483	-350
NO	HELLSTUGUBREEN	300	2015	1600	1650	0.114	935	-1785	-850
NO	HELLSTUGUBREEN	300	2015	1550	1600	0.124	713	-2163	-1450
NO	HELLSTUGUBREEN	300	2015	1500	1550	0.083	520	-2370	-1850
NO	HELLSTUGUBREEN	300	2015	1482	1500	0.011	400	-2500	-2100
NO	LANGFJORDJOEKELLEN	323	2014	1000	1050	0.417	2400	-2425	-25
NO	LANGFJORDJOEKELLEN	323	2014	950	1000	0.467	2425	-2475	-50
NO	LANGFJORDJOEKELLEN	323	2014	900	950	0.376	2525	-2625	-100
NO	LANGFJORDJOEKELLEN	323	2014	850	900	0.362	2600	-2800	-200
NO	LANGFJORDJOEKELLEN	323	2014	800	850	0.232	2600	-2975	-375
NO	LANGFJORDJOEKELLEN	323	2014	750	800	0.217	2500	-3175	-675
NO	LANGFJORDJOEKELLEN	323	2014	700	750	0.267	2300	-3375	-1075
NO	LANGFJORDJOEKELLEN	323	2014	650	700	0.203	2175	-3600	-1425
NO	LANGFJORDJOEKELLEN	323	2014	600	650	0.168	2100	-3825	-1725
NO	LANGFJORDJOEKELLEN	323	2014	550	600	0.128	2050	-4050	-2000
NO	LANGFJORDJOEKELLEN	323	2014	500	550	0.121	2000	-4300	-2300
NO	LANGFJORDJOEKELLEN	323	2014	450	500	0.095	1975	-4550	-2575
NO	LANGFJORDJOEKELLEN	323	2014	400	450	0.096	1950	-4800	-2850
NO	LANGFJORDJOEKELLEN	323	2014	350	400	0.049	1925	-5050	-3125
NO	LANGFJORDJOEKELLEN	323	2014	302	350	0.018	1900	-5300	-3400
NO	LANGFJORDJOEKELLEN	323	2015	1000	1050	0.417	1950	-1950	0
NO	LANGFJORDJOEKELLEN	323	2015	950	1000	0.467	1950	-2075	-125
NO	LANGFJORDJOEKELLEN	323	2015	900	950	0.376	2000	-2200	-200
NO	LANGFJORDJOEKELLEN	323	2015	850	900	0.362	2075	-2350	-275
NO	LANGFJORDJOEKELLEN	323	2015	800	850	0.232	2150	-2500	-350
NO	LANGFJORDJOEKELLEN	323	2015	750	800	0.217	2075	-2675	-600
NO	LANGFJORDJOEKELLEN	323	2015	700	750	0.267	1900	-2875	-975
NO	LANGFJORDJOEKELLEN	323	2015	650	700	0.203	1750	-3075	-1325
NO	LANGFJORDJOEKELLEN	323	2015	600	650	0.168	1725	-3300	-1575
NO	LANGFJORDJOEKELLEN	323	2015	550	600	0.128	1650	-3575	-1925
NO	LANGFJORDJOEKELLEN	323	2015	500	550	0.121	1500	-3850	-2350
NO	LANGFJORDJOEKELLEN	323	2015	450	500	0.095	1350	-4125	-2775
NO	LANGFJORDJOEKELLEN	323	2015	400	450	0.096	1300	-4400	-3100
NO	LANGFJORDJOEKELLEN	323	2015	350	400	0.049	1275	-4700	-3425
NO	LANGFJORDJOEKELLEN	323	2015	302	350	0.018	1325	-4975	-3650
NO	NIGARDSBREEN	290	2014	1900	1952	0.277	2825	-2025	800
NO	NIGARDSBREEN	290	2014	1800	1900	4.579	2650	-2200	450
NO	NIGARDSBREEN	290	2014	1700	1800	9.051	2775	-2425	350
NO	NIGARDSBREEN	290	2014	1600	1700	12.722	2875	-2600	275

Table 4

PU	GLACIER_NAME	WGMS_ID	YEAR	ELEV_FROM	ELEV_TO	AREA	BW	BS	BA
NO	NIGARDSBREEN	290	2014	1500	1600	8.724	2850	-2850	0
NO	NIGARDSBREEN	290	2014	1400	1500	5.612	2875	-3250	-375
NO	NIGARDSBREEN	290	2014	1300	1400	2.015	2850	-3900	-1050
NO	NIGARDSBREEN	290	2014	1200	1300	0.751	2675	-4700	-2025
NO	NIGARDSBREEN	290	2014	1100	1200	0.354	2375	-5525	-3150
NO	NIGARDSBREEN	290	2014	1000	1100	0.495	2050	-6400	-4350
NO	NIGARDSBREEN	290	2014	900	1000	0.424	1700	-7250	-5550
NO	NIGARDSBREEN	290	2014	800	900	0.482	1325	-8050	-6725
NO	NIGARDSBREEN	290	2014	700	800	0.294	950	-8775	-7825
NO	NIGARDSBREEN	290	2014	600	700	0.385	550	-9450	-8900
NO	NIGARDSBREEN	290	2014	500	600	0.268	175	-10075	-9900
NO	NIGARDSBREEN	290	2014	400	500	0.123	-150	-10675	-10825
NO	NIGARDSBREEN	290	2014	330	400	0.055	-500	-11175	-11675
NO	NIGARDSBREEN	290	2015	1900	1952	0.277	3950	-275	3675
NO	NIGARDSBREEN	290	2015	1800	1900	4.579	3725	-500	3225
NO	NIGARDSBREEN	290	2015	1700	1800	9.051	3400	-800	2600
NO	NIGARDSBREEN	290	2015	1600	1700	12.722	3225	-1050	2175
NO	NIGARDSBREEN	290	2015	1500	1600	8.724	3175	-1350	1825
NO	NIGARDSBREEN	290	2015	1400	1500	5.612	2900	-1700	1200
NO	NIGARDSBREEN	290	2015	1300	1400	2.015	2425	-2075	350
NO	NIGARDSBREEN	290	2015	1200	1300	0.751	2025	-2525	-500
NO	NIGARDSBREEN	290	2015	1100	1200	0.354	1725	-2975	-1250
NO	NIGARDSBREEN	290	2015	1000	1100	0.495	1450	-3425	-1975
NO	NIGARDSBREEN	290	2015	900	1000	0.424	1175	-3900	-2725
NO	NIGARDSBREEN	290	2015	800	900	0.482	925	-4375	-3450
NO	NIGARDSBREEN	290	2015	700	800	0.294	675	-4875	-4200
NO	NIGARDSBREEN	290	2015	600	700	0.385	450	-5350	-4900
NO	NIGARDSBREEN	290	2015	500	600	0.268	225	-5850	-5625
NO	NIGARDSBREEN	290	2015	400	500	0.123	50	-6350	-6300
NO	NIGARDSBREEN	290	2015	330	400	0.055	-75	-6725	-6800
NO	REMBESDALSKAAGA	2296	2014	1850	1854	0.029	2400	-2750	-350
NO	REMBESDALSKAAGA	2296	2014	1800	1850	3.213	2500	-2749	-249
NO	REMBESDALSKAAGA	2296	2014	1750	1800	3.992	2500	-2796	-296
NO	REMBESDALSKAAGA	2296	2014	1700	1750	4.048	2350	-2996	-646
NO	REMBESDALSKAAGA	2296	2014	1650	1700	2.281	2200	-3300	-1100
NO	REMBESDALSKAAGA	2296	2014	1600	1650	0.957	1750	-3800	-2050
NO	REMBESDALSKAAGA	2296	2014	1550	1600	0.545	1500	-4400	-2900
NO	REMBESDALSKAAGA	2296	2014	1500	1550	0.535	1350	-5000	-3650
NO	REMBESDALSKAAGA	2296	2014	1450	1500	0.336	1300	-5400	-4100
NO	REMBESDALSKAAGA	2296	2014	1400	1450	0.197	1200	-5800	-4600
NO	REMBESDALSKAAGA	2296	2014	1350	1400	0.108	1100	-6200	-5100
NO	REMBESDALSKAAGA	2296	2014	1300	1350	0.074	1000	-6600	-5600
NO	REMBESDALSKAAGA	2296	2014	1250	1300	0.199	900	-7000	-6100
NO	REMBESDALSKAAGA	2296	2014	1200	1250	0.262	800	-7400	-6600
NO	REMBESDALSKAAGA	2296	2014	1150	1200	0.333	700	-7800	-7100
NO	REMBESDALSKAAGA	2296	2014	1100	1150	0.143	600	-8200	-7600
NO	REMBESDALSKAAGA	2296	2014	1066	1100	0.012	500	-8500	-8000
NO	REMBESDALSKAAGA	2296	2015	1850	1854	0.029	2600	-1100	1500
NO	REMBESDALSKAAGA	2296	2015	1800	1850	3.213	3000	-1200	1800
NO	REMBESDALSKAAGA	2296	2015	1750	1800	3.992	3450	-1400	2050
NO	REMBESDALSKAAGA	2296	2015	1700	1750	4.048	3250	-1600	1650
NO	REMBESDALSKAAGA	2296	2015	1650	1700	2.281	3100	-1800	1300
NO	REMBESDALSKAAGA	2296	2015	1600	1650	0.957	2650	-2050	600
NO	REMBESDALSKAAGA	2296	2015	1550	1600	0.545	2400	-2350	50
NO	REMBESDALSKAAGA	2296	2015	1500	1550	0.535	2300	-2650	-350
NO	REMBESDALSKAAGA	2296	2015	1450	1500	0.336	2200	-2950	-750
NO	REMBESDALSKAAGA	2296	2015	1400	1450	0.197	2150	-3250	-1100
NO	REMBESDALSKAAGA	2296	2015	1350	1400	0.108	2100	-3600	-1500
NO	REMBESDALSKAAGA	2296	2015	1300	1350	0.074	1950	-3950	-2000
NO	REMBESDALSKAAGA	2296	2015	1250	1300	0.199	1800	-4300	-2500
NO	REMBESDALSKAAGA	2296	2015	1200	1250	0.262	1650	-4650	-3000
NO	REMBESDALSKAAGA	2296	2015	1150	1200	0.333	1500	-5000	-3500
NO	REMBESDALSKAAGA	2296	2015	1100	1150	0.143	1300	-5350	-4050
NO	REMBESDALSKAAGA	2296	2015	1066	1100	0.012	1200	-5600	-4400
NO	RUNDVASSBREEN	2670	2014	1450	1525	0.167	2625	-1950	675
NO	RUNDVASSBREEN	2670	2014	1400	1450	0.188	2650	-2025	625
NO	RUNDVASSBREEN	2670	2014	1350	1400	1.922	2475	-2125	350
NO	RUNDVASSBREEN	2670	2014	1300	1350	1.793	2150	-2250	-100
NO	RUNDVASSBREEN	2670	2014	1250	1300	1.943	1750	-2400	-650
NO	RUNDVASSBREEN	2670	2014	1200	1250	0.782	1525	-2575	-1050
NO	RUNDVASSBREEN	2670	2014	1150	1200	0.837	1425	-2775	-1350
NO	RUNDVASSBREEN	2670	2014	1100	1150	1.752	1350	-3000	-1650
NO	RUNDVASSBREEN	2670	2014	1050	1100	1.326	1275	-3275	-2000
NO	RUNDVASSBREEN	2670	2014	1000	1050	0.105	1225	-3575	-2350
NO	RUNDVASSBREEN	2670	2014	950	1000	0.057	1175	-3900	-2725
NO	RUNDVASSBREEN	2670	2014	900	950	0.04	1125	-4250	-3125
NO	RUNDVASSBREEN	2670	2014	836	900	0.024	1075	-4700	-3625
NO	RUNDVASSBREEN	2670	2015	1450	1525	0.167	3100	-1300	1800
NO	RUNDVASSBREEN	2670	2015	1400	1450	0.188	3150	-1425	1725
NO	RUNDVASSBREEN	2670	2015	1350	1400	1.922	2900	-1550	1350
NO	RUNDVASSBREEN	2670	2015	1300	1350	1.793	2500	-1700	800
NO	RUNDVASSBREEN	2670	2015	1250	1300	1.943	2200	-1875	325
NO	RUNDVASSBREEN	2670	2015	1200	1250	0.782	2050	-2100	-50
NO	RUNDVASSBREEN	2670	2015	1150	1200	0.837	1850	-2375	-525
NO	RUNDVASSBREEN	2670	2015	1100	1150	1.752	1550	-2700	-1150
NO	RUNDVASSBREEN	2670	2015	1050	1100	1.326	1275	-3075	-1800
NO	RUNDVASSBREEN	2670	2015	1000	1050	0.105	1125	-3450	-2325
NO	RUNDVASSBREEN	2670	2015	950	1000	0.057	1050	-3850	-2800
NO	RUNDVASSBREEN	2670	2015	900	950	0.04	975	-4250	-3275
NO	RUNDVASSBREEN	2670	2015	836	900	0.024	900	-4725	-3825
NO	STORBREEN	302	2014	2050	2102	0.004	2500	-1050	1450
NO	STORBREEN	302	2014	2000	2050	0.095	2400	-1280	1120
NO	STORBREEN	302	2014	1950	2000	0.179	2280	-1500	780
NO	STORBREEN	302	2014	1900	1950	0.29	2078	-1750	328
NO	STORBREEN	302	2014	1850	1900	0.345	2000	-1980	20
NO	STORBREEN	302	2014	1800	1850	0.753	1650	-2260	-610

PU	GLACIER_NAME	WGMS_ID	YEAR	ELEV_FROM	ELEV_TO	AREA	BW	BS	BA
NO	STORBREEN	302	2014	1750	1800	0.866	1613	-2520	-907
NO	STORBREEN	302	2014	1700	1750	0.681	1413	-2750	-1337
NO	STORBREEN	302	2014	1650	1700	0.548	1705	-3020	-1315
NO	STORBREEN	302	2014	1600	1650	0.312	1541	-3300	-1759
NO	STORBREEN	302	2014	1550	1600	0.495	1275	-3550	-2275
NO	STORBREEN	302	2014	1500	1550	0.263	1059	-3800	-2741
NO	STORBREEN	302	2014	1450	1500	0.176	798	-4100	-3302
NO	STORBREEN	302	2014	1400	1450	0.135	600	-4300	-3700
NO	STORBREEN	302	2015	2050	2102	0.004	1836	-450	1386
NO	STORBREEN	302	2015	2000	2050	0.095	1836	-500	1336
NO	STORBREEN	302	2015	1950	2000	0.179	1870	-550	1320
NO	STORBREEN	302	2015	1900	1950	0.29	2056	-600	1456
NO	STORBREEN	302	2015	1850	1900	0.345	1932	-670	1262
NO	STORBREEN	302	2015	1800	1850	0.753	1652	-750	902
NO	STORBREEN	302	2015	1750	1800	0.866	1700	-850	850
NO	STORBREEN	302	2015	1700	1750	0.681	1372	-980	392
NO	STORBREEN	302	2015	1650	1700	0.548	1318	-1080	238
NO	STORBREEN	302	2015	1600	1650	0.312	1453	-1190	263
NO	STORBREEN	302	2015	1550	1600	0.495	1332	-1360	-28
NO	STORBREEN	302	2015	1500	1550	0.263	1047	-1700	-653
NO	STORBREEN	302	2015	1450	1500	0.176	844	-2050	-1206
NO	STORBREEN	302	2015	1400	1450	0.135	750	-2400	-1650
NO	SVELGJABREEN	3343	2014	1600	1632	1.157	4250	-2975	1275
NO	SVELGJABREEN	3343	2014	1550	1600	1.847	4125	-3100	1025
NO	SVELGJABREEN	3343	2014	1500	1550	2.868	3825	-3250	575
NO	SVELGJABREEN	3343	2014	1450	1500	2.084	3525	-3400	125
NO	SVELGJABREEN	3343	2014	1400	1450	1.821	3275	-3550	-275
NO	SVELGJABREEN	3343	2014	1350	1400	2.702	3100	-3700	-600
NO	SVELGJABREEN	3343	2014	1300	1350	1.986	3050	-3850	-800
NO	SVELGJABREEN	3343	2014	1250	1300	1.554	3050	-4000	-950
NO	SVELGJABREEN	3343	2014	1200	1250	1.527	3025	-4150	-1125
NO	SVELGJABREEN	3343	2014	1150	1200	1.478	2975	-4300	-1325
NO	SVELGJABREEN	3343	2014	1100	1150	0.933	2875	-4450	-1575
NO	SVELGJABREEN	3343	2014	1050	1100	1.197	2750	-4600	-1850
NO	SVELGJABREEN	3343	2014	1000	1050	0.639	2525	-4750	-2225
NO	SVELGJABREEN	3343	2014	950	1000	0.34	2250	-4900	-2650
NO	SVELGJABREEN	3343	2014	900	950	0.142	2150	-5050	-2900
NO	SVELGJABREEN	3343	2014	829	900	0.071	2100	-5225	-3125
NO	SVELGJABREEN	3343	2015	1600	1632	1.157	4000	-700	3300
NO	SVELGJABREEN	3343	2015	1550	1600	1.847	4025	-775	3250
NO	SVELGJABREEN	3343	2015	1500	1550	2.868	4075	-900	3175
NO	SVELGJABREEN	3343	2015	1450	1500	2.084	4050	-1025	3025
NO	SVELGJABREEN	3343	2015	1400	1450	1.821	3850	-1175	2675
NO	SVELGJABREEN	3343	2015	1350	1400	2.702	3600	-1350	2250
NO	SVELGJABREEN	3343	2015	1300	1350	1.986	3375	-1550	1825
NO	SVELGJABREEN	3343	2015	1250	1300	1.554	3175	-1800	1375
NO	SVELGJABREEN	3343	2015	1200	1250	1.527	3000	-2100	900
NO	SVELGJABREEN	3343	2015	1150	1200	1.478	2825	-2450	375
NO	SVELGJABREEN	3343	2015	1100	1150	0.933	2650	-2800	-150
NO	SVELGJABREEN	3343	2015	1050	1100	1.197	2475	-3175	-700
NO	SVELGJABREEN	3343	2015	1000	1050	0.639	2325	-3525	-1200
NO	SVELGJABREEN	3343	2015	950	1000	0.34	2175	-3900	-1725
NO	SVELGJABREEN	3343	2015	900	950	0.142	2025	-4250	-2225
NO	SVELGJABREEN	3343	2015	829	900	0.071	1875	-4700	-2825
NP - Nepal									
NP	YALA	912	2014	5600	5661	0.041			2288
NP	YALA	912	2014	5550	5600	0.078			1600
NP	YALA	912	2014	5500	5550	0.122			994
NP	YALA	912	2014	5450	5500	0.23			435
NP	YALA	912	2014	5400	5450	0.221			-103
NP	YALA	912	2014	5350	5400	0.219			-690
NP	YALA	912	2014	5300	5350	0.259			-1265
NP	YALA	912	2014	5250	5300	0.223			-1822
NP	YALA	912	2014	5200	5250	0.187			-2343
NP	YALA	912	2014	5168	5200	0.049			-2669
NP	YALA	912	2015	5600	5661	0.041			1723
NP	YALA	912	2015	5550	5600	0.078			1115
NP	YALA	912	2015	5500	5550	0.122			579
NP	YALA	912	2015	5450	5500	0.23			75
NP	YALA	912	2015	5400	5450	0.221			-414
NP	YALA	912	2015	5350	5400	0.219			-936
NP	YALA	912	2015	5300	5350	0.259			-1467
NP	YALA	912	2015	5250	5300	0.223			-1960
NP	YALA	912	2015	5200	5250	0.187			-2427
NP	YALA	912	2015	5168	5200	0.049			-2711
PE - Peru									
PE	ARTESONRAJU	3292	2014	5400	5600	0.469			1446
PE	ARTESONRAJU	3292	2014	5350	5400	0.234			1536
PE	ARTESONRAJU	3292	2014	5300	5350	0.239			1510
PE	ARTESONRAJU	3292	2014	5250	5300	0.222			1459
PE	ARTESONRAJU	3292	2014	5200	5250	0.250			1222
PE	ARTESONRAJU	3292	2014	5150	5200	0.26			825
PE	ARTESONRAJU	3292	2014	5100	5150	0.233			524
PE	ARTESONRAJU	3292	2014	5050	5100	0.243			214
PE	ARTESONRAJU	3292	2014	5000	5050	0.184			-323
PE	ARTESONRAJU	3292	2014	4950	5000	0.290			-607
PE	ARTESONRAJU	3292	2014	4900	4950	0.218			-1261
PE	ARTESONRAJU	3292	2014	4820	4900	0.266			-1840
PE	ARTESONRAJU	3292	2014	4790	4820	0.185			-3603
PE	ARTESONRAJU	3292	2014	4760	4790	0.139			-4870
PE	ARTESONRAJU	3292	2014	4730	4760	0.120			-6122
PE	ARTESONRAJU	3292	2014	4700	4730	0.082			-6983
PE	ARTESONRAJU	3292	2015	5400	5450	0.428			1147
PE	ARTESONRAJU	3292	2015	5350	5400	0.246			1801

Table 4

PU	GLACIER_NAME	WGMS_ID	YEAR	ELEV_FROM	ELEV_TO	AREA	BW	BS	BA
PE	ARTESONRAJU	3292	2015	5300	5350	0.255			1725
PE	ARTESONRAJU	3292	2015	5250	5300	0.233			1698
PE	ARTESONRAJU	3292	2015	5200	5250	0.253			1304
PE	ARTESONRAJU	3292	2015	5150	5200	0.272			943
PE	ARTESONRAJU	3292	2015	5100	5150	0.229			753
PE	ARTESONRAJU	3292	2015	5050	5100	0.249			598
PE	ARTESONRAJU	3292	2015	5000	5050	0.188			-58
PE	ARTESONRAJU	3292	2015	4950	5000	0.298			-481
PE	ARTESONRAJU	3292	2015	4840	4950	0.386			-1598
PE	ARTESONRAJU	3292	2015	4820	4840	0.120			-3069
PE	ARTESONRAJU	3292	2015	4800	4820	0.112			-4111
PE	ARTESONRAJU	3292	2015	4780	4800	0.094			-5168
PE	ARTESONRAJU	3292	2015	4760	4780	0.075			-6384
PE	ARTESONRAJU	3292	2015	4740	4760	0.067			-7398
PE	ARTESONRAJU	3292	2015	4720	4740	0.066			-8605
PE	ARTESONRAJU	3292	2015	4700	4720	0.042			-9534
PE	YANAMAREY	226	2014	4950	5150	0.008			1287
PE	YANAMAREY	226	2014	4920	4950	0.024			260
PE	YANAMAREY	226	2014	4890	4920	0.028			-428
PE	YANAMAREY	226	2014	4860	4890	0.016			-242
PE	YANAMAREY	226	2014	4830	4860	0.019			-1067
PE	YANAMAREY	226	2014	4800	4830	0.019			-1830
PE	YANAMAREY	226	2014	4770	4800	0.02			-2731
PE	YANAMAREY	226	2014	4740	4770	0.011			-3439
PE	YANAMAREY	226	2014	4710	4740	0.013			-4367
PE	YANAMAREY	226	2014	4678	4710	0.005			-4535
PE	YANAMAREY	226	2015	5070	5100	0.001			1000
PE	YANAMAREY	226	2015	5040	5070	0.008			978
PE	YANAMAREY	226	2015	5010	5040	0.023			853
PE	YANAMAREY	226	2015	4980	5010	0.027			748
PE	YANAMAREY	226	2015	4950	4980	0.029			736
PE	YANAMAREY	226	2015	4920	4950	0.030			693
PE	YANAMAREY	226	2015	4890	4920	0.025			131
PE	YANAMAREY	226	2015	4860	4890	0.026			-764
PE	YANAMAREY	226	2015	4830	4860	0.022			-1207
PE	YANAMAREY	226	2015	4800	4830	0.021			-1704
PE	YANAMAREY	226	2015	4770	4800	0.021			-2487
PE	YANAMAREY	226	2015	4740	4770	0.013			-3217
PE	YANAMAREY	226	2015	4710	4740	0.011			-3661
PE	YANAMAREY	226	2015	4700	4710	0.006			-4207
RU - Russia									
RU	GARABASHI	761	2014	4600	5000		185	-35	150
RU	GARABASHI	761	2014	4500	4600		285	-126	159
RU	GARABASHI	761	2014	4400	4500		373	-204	169
RU	GARABASHI	761	2014	4300	4400		415	-259	156
RU	GARABASHI	761	2014	4200	4300		532	-350	182
RU	GARABASHI	761	2014	4100	4200		812	-460	352
RU	GARABASHI	761	2014	4000	4100		1331	-538	793
RU	GARABASHI	761	2014	3900	4000		1553	-1121	432
RU	GARABASHI	761	2014	3800	3900		1086	-2185	-1099
RU	GARABASHI	761	2014	3700	3800		992	-2844	-1852
RU	GARABASHI	761	2014	3600	3700		1151	-3534	-2383
RU	GARABASHI	761	2014	3500	3600		1411	-4002	-2591
RU	GARABASHI	761	2014	3400	3500		1250	-4555	-3305
RU	GARABASHI	761	2014	3300	3400		1004	-5111	-4107
SE - Sweden									
SE	MARMAGLACIAEREN	1461	2014	1780	1800	0.001	1070	-1120	-60
SE	MARMAGLACIAEREN	1461	2014	1760	1780	0.005	1270	-1200	70
SE	MARMAGLACIAEREN	1461	2014	1740	1760	0.017	1260	-1290	-30
SE	MARMAGLACIAEREN	1461	2014	1720	1740	0.031	1230	-1380	-160
SE	MARMAGLACIAEREN	1461	2014	1700	1720	0.040	1220	-1490	-260
SE	MARMAGLACIAEREN	1461	2014	1680	1700	0.104	1210	-1590	-380
SE	MARMAGLACIAEREN	1461	2014	1660	1680	0.206	1170	-1680	-510
SE	MARMAGLACIAEREN	1461	2014	1640	1660	0.193	1100	-1780	-680
SE	MARMAGLACIAEREN	1461	2014	1620	1640	0.314	1010	-1880	-870
SE	MARMAGLACIAEREN	1461	2014	1600	1620	0.323	890	-1970	-1090
SE	MARMAGLACIAEREN	1461	2014	1580	1600	0.190	800	-2070	-1270
SE	MARMAGLACIAEREN	1461	2014	1560	1580	0.228	710	-2180	-1470
SE	MARMAGLACIAEREN	1461	2014	1540	1560	0.346	620	-2280	-1660
SE	MARMAGLACIAEREN	1461	2014	1520	1540	0.367	510	-2370	-1860
SE	MARMAGLACIAEREN	1461	2014	1500	1520	0.186	740	-2470	-1730
SE	MARMAGLACIAEREN	1461	2014	1480	1500	0.196	800	-2570	-1780
SE	MARMAGLACIAEREN	1461	2014	1460	1480	0.253	900	-2670	-1780
SE	MARMAGLACIAEREN	1461	2014	1440	1460	0.217	1120	-2760	-1640
SE	MARMAGLACIAEREN	1461	2014	1420	1440	0.159	1230	-2870	-1640
SE	MARMAGLACIAEREN	1461	2014	1400	1420	0.150	1400	-2970	-1570
SE	MARMAGLACIAEREN	1461	2014	1380	1400	0.147	1570	-3070	-1500
SE	MARMAGLACIAEREN	1461	2014	1360	1380	0.143	1600	-3160	-1560
SE	MARMAGLACIAEREN	1461	2014	1340	1360	0.098	1610	-3260	-1650
SE	MARMAGLACIAEREN	1461	2014	1320	1340	0.051	1570	-3340	-1760
SE	MARMAGLACIAEREN	1461	2015	1780	1800	0.001	1620	-980	640
SE	MARMAGLACIAEREN	1461	2015	1760	1780	0.005	1950	-1000	950
SE	MARMAGLACIAEREN	1461	2015	1740	1760	0.017	2050	-1030	1010
SE	MARMAGLACIAEREN	1461	2015	1720	1740	0.031	1990	-1060	930
SE	MARMAGLACIAEREN	1461	2015	1700	1720	0.040	1940	-1090	850
SE	MARMAGLACIAEREN	1461	2015	1680	1700	0.104	1900	-1130	770
SE	MARMAGLACIAEREN	1461	2015	1660	1680	0.206	1880	-1160	730
SE	MARMAGLACIAEREN	1461	2015	1640	1660	0.193	1730	-1190	540
SE	MARMAGLACIAEREN	1461	2015	1620	1640	0.314	1530	-1220	320
SE	MARMAGLACIAEREN	1461	2015	1600	1620	0.323	1350	-1250	110
SE	MARMAGLACIAEREN	1461	2015	1580	1600	0.190	1330	1280	50
SE	MARMAGLACIAEREN	1461	2015	1560	1580	0.228	1110	-1310	-200
SE	MARMAGLACIAEREN	1461	2015	1540	1560	0.346	1090	-1340	-250
SE	MARMAGLACIAEREN	1461	2015	1520	1540	0.367	1080	-1370	-280

PU	GLACIER_NAME	WGMS_ID	YEAR	ELEV_FROM	ELEV_TO	AREA	BW	BS	BA
SE	MARMAGLACIAEREN	1461	2015	1500	1520	0.186	1140	-1400	-260
SE	MARMAGLACIAEREN	1461	2015	1480	1500	0.196	1080	-1430	-360
SE	MARMAGLACIAEREN	1461	2015	1460	1480	0.253	1130	-1460	-330
SE	MARMAGLACIAEREN	1461	2015	1440	1460	0.217	1340	-1490	-150
SE	MARMAGLACIAEREN	1461	2015	1420	1440	0.159	1500	-1520	-20
SE	MARMAGLACIAEREN	1461	2015	1400	1420	0.150	1580	-1550	20
SE	MARMAGLACIAEREN	1461	2015	1380	1400	0.147	1610	-1590	30
SE	MARMAGLACIAEREN	1461	2015	1360	1380	0.143	1620	-1620	0
SE	MARMAGLACIAEREN	1461	2015	1340	1360	0.098	1630	-1650	-10
SE	MARMAGLACIAEREN	1461	2015	1320	1340	0.051	1630	-1670	-40
SE	RABOTS GLACIAER	334	2015	1920	1940	0.001	1220	500	1720
SE	RABOTS GLACIAER	334	2015	1900	1920	0.003	1210	450	1660
SE	RABOTS GLACIAER	334	2015	1880	1900	0.004	1190	390	1580
SE	RABOTS GLACIAER	334	2015	1860	1880	0.004	1190	330	1520
SE	RABOTS GLACIAER	334	2015	1840	1860	0.004	1190	270	1460
SE	RABOTS GLACIAER	334	2015	1820	1840	0.004	1180	210	1390
SE	RABOTS GLACIAER	334	2015	1800	1820	0.005	1200	150	1350
SE	RABOTS GLACIAER	334	2015	1780	1800	0.006	1260	90	1350
SE	RABOTS GLACIAER	334	2015	1760	1780	0.008	1300	30	1330
SE	RABOTS GLACIAER	334	2015	1740	1760	0.013	1270	-30	1240
SE	RABOTS GLACIAER	334	2015	1720	1740	0.018	1240	-90	1140
SE	RABOTS GLACIAER	334	2015	1700	1720	0.022	1240	-150	1080
SE	RABOTS GLACIAER	334	2015	1680	1700	0.026	1220	-210	1010
SE	RABOTS GLACIAER	334	2015	1660	1680	0.030	1200	-270	930
SE	RABOTS GLACIAER	334	2015	1640	1660	0.038	1200	-330	860
SE	RABOTS GLACIAER	334	2015	1620	1640	0.043	1190	-390	800
SE	RABOTS GLACIAER	334	2015	1600	1620	0.052	1180	-450	730
SE	RABOTS GLACIAER	334	2015	1580	1600	0.055	1200	-520	680
SE	RABOTS GLACIAER	334	2015	1560	1580	0.073	1190	-580	620
SE	RABOTS GLACIAER	334	2015	1540	1560	0.083	1270	-640	630
SE	RABOTS GLACIAER	334	2015	1520	1540	0.135	1310	-700	620
SE	RABOTS GLACIAER	334	2015	1500	1520	0.157	1290	-760	540
SE	RABOTS GLACIAER	334	2015	1480	1500	0.214	1170	-820	350
SE	RABOTS GLACIAER	334	2015	1460	1480	0.182	1060	-880	180
SE	RABOTS GLACIAER	334	2015	1440	1460	0.125	1000	-940	60
SE	RABOTS GLACIAER	334	2015	1420	1440	0.110	1030	-1000	30
SE	RABOTS GLACIAER	334	2015	1400	1420	0.104	1100	-1060	40
SE	RABOTS GLACIAER	334	2015	1380	1400	0.126	1170	-1120	40
SE	RABOTS GLACIAER	334	2015	1360	1380	0.260	1180	-1180	0
SE	RABOTS GLACIAER	334	2015	1340	1360	0.247	1070	-1240	-170
SE	RABOTS GLACIAER	334	2015	1320	1340	0.177	1020	-1300	-280
SE	RABOTS GLACIAER	334	2015	1300	1320	0.141	1060	-1360	-300
SE	RABOTS GLACIAER	334	2015	1280	1300	0.149	1100	-1420	-330
SE	RABOTS GLACIAER	334	2015	1260	1280	0.226	1070	-1480	-420
SE	RABOTS GLACIAER	334	2015	1240	1260	0.186	1010	-1540	-530
SE	RABOTS GLACIAER	334	2015	1220	1240	0.179	1070	-1600	-530
SE	RABOTS GLACIAER	334	2015	1200	1220	0.141	960	-1660	-710
SE	RABOTS GLACIAER	334	2015	1180	1200	0.096	810	-1720	-920
SE	RABOTS GLACIAER	334	2015	1160	1180	0.073	770	-1780	-1010
SE	RABOTS GLACIAER	334	2015	1140	1160	0.062	890	-2	-950
SE	RABOTS GLACIAER	334	2015	1120	1140	0.046	1100	-1900	-810
SE	RABOTS GLACIAER	334	2015	1100	1120	0.031	1240	-1960	-720
SE	RABOTS GLACIAER	334	2015	1080	1100	0.014	1310	-2010	-710
SE	RIUKOJJETNA	342	2015	1420	1440	0.526	1270	-1130	140
SE	RIUKOJJETNA	342	2015	1400	1420	0.315	1390	-1190	200
SE	RIUKOJJETNA	342	2015	1380	1400	0.292	1420	-1260	160
SE	RIUKOJJETNA	342	2015	1360	1380	0.284	1430	-1320	110
SE	RIUKOJJETNA	342	2015	1340	1360	0.271	1430	-1390	40
SE	RIUKOJJETNA	342	2015	1320	1340	0.297	1390	-1460	-70
SE	RIUKOJJETNA	342	2015	1300	1320	0.288	1450	-1520	-70
SE	RIUKOJJETNA	342	2015	1280	1300	0.222	1490	-1590	-100
SE	RIUKOJJETNA	342	2015	1260	1280	0.147	1510	-1650	-140
SE	RIUKOJJETNA	342	2015	1240	1260	0.077	1530	-1720	-180
SE	RIUKOJJETNA	342	2015	1220	1240	0.032	1560	-1780	-220
SE	RIUKOJJETNA	342	2015	1200	1220	0.019	1610	-1850	-240
SE	RIUKOJJETNA	342	2015	1180	1200	0.016	1660	-1920	-260
SE	RIUKOJJETNA	342	2015	1160	1180	0.005	1690	-1970	-280
SE	STORGLACIAEREN	332	2014	1840	1860	0.001	3920	-1120	2800
SE	STORGLACIAEREN	332	2014	1820	1840	0.001	3910	-1120	2790
SE	STORGLACIAEREN	332	2014	1800	1820	0.003	3770	-1180	2590
SE	STORGLACIAEREN	332	2014	1780	1800	0.006	3740	-1190	2540
SE	STORGLACIAEREN	332	2014	1760	1780	0.007	3620	-1200	2420
SE	STORGLACIAEREN	332	2014	1740	1760	0.008	3630	-1190	2440
SE	STORGLACIAEREN	332	2014	1720	1740	0.011	3620	-1180	2440
SE	STORGLACIAEREN	332	2014	1700	1720	0.031	2960	-1460	1510
SE	STORGLACIAEREN	332	2014	1680	1700	0.052	2820	-1530	1290
SE	STORGLACIAEREN	332	2014	1660	1680	0.070	2790	-1490	1290
SE	STORGLACIAEREN	332	2014	1640	1660	0.100	2930	-1400	1530
SE	STORGLACIAEREN	332	2014	1620	1640	0.147	2900	-1340	1560
SE	STORGLACIAEREN	332	2014	1600	1620	0.128	2510	-1310	1200
SE	STORGLACIAEREN	332	2014	1580	1600	0.114	2060	-1390	670
SE	STORGLACIAEREN	332	2014	1560	1580	0.118	1740	-1560	190
SE	STORGLACIAEREN	332	2014	1540	1560	0.094	1660	-1770	-110
SE	STORGLACIAEREN	332	2014	1520	1540	0.089	1690	-1870	-180
SE	STORGLACIAEREN	332	2014	1500	1520	0.170	1860	-1780	80
SE	STORGLACIAEREN	332	2014	1480	1500	0.181	1610	-1910	-310
SE	STORGLACIAEREN	332	2014	1460	1480	0.097	1190	-2440	-1250
SE	STORGLACIAEREN	332	2014	1440	1460	0.057	1380	-2640	-1260
SE	STORGLACIAEREN	332	2014	1420	1440	0.051	1480	-2760	-1280
SE	STORGLACIAEREN	332	2014	1400	1420	0.096	1330	-2830	-1490
SE	STORGLACIAEREN	332	2014	1380	1400	0.168	1080	-2900	-1810
SE	STORGLACIAEREN	332	2014	1360	1380	0.284	870	-2840	-1970
SE	STORGLACIAEREN	332	2014	1340	1360	0.277	720	-3020	-2290
SE	STORGLACIAEREN	332	2014	1320	1340	0.143	690	-3260	-2570
SE	STORGLACIAEREN	332	2014	1300	1320	0.086	820	-3440	-2630
SE	STORGLACIAEREN	332	2014	1280	1300	0.073	770	-3440	-2670

Table 4

PU	GLACIER_NAME	WGMS_ID	YEAR	ELEV_FROM	ELEV_TO	AREA	BW	BS	BA
SE	STORGLACIAEREN	332	2014	1260	1280	0.074	560	-3640	-3080
SE	STORGLACIAEREN	332	2014	1240	1260	0.060	770	-3870	-3100
SE	STORGLACIAEREN	332	2014	1220	1240	0.046	920	-3800	-2880
SE	STORGLACIAEREN	332	2014	1200	1220	0.033	850	-3970	-3110
SE	STORGLACIAEREN	332	2014	1180	1200	0.017	780	-4080	-3310
SE	STORGLACIAEREN	332	2014	1160	1180	0.008	780	-4150	-3370
SE	STORGLACIAEREN	332	2014	1140	1160	0.004	720	-4120	-3400
SE	STORGLACIAEREN	332	2015	1840	1860	0.001	2630	-100	2530
SE	STORGLACIAEREN	332	2015	1820	1840	0.001	2620	-100	2510
SE	STORGLACIAEREN	332	2015	1800	1820	0.003	2470	-140	2330
SE	STORGLACIAEREN	332	2015	1780	1800	0.006	2430	-140	2290
SE	STORGLACIAEREN	332	2015	1760	1780	0.007	2350	-130	2220
SE	STORGLACIAEREN	332	2015	1740	1760	0.008	2340	-130	2210
SE	STORGLACIAEREN	332	2015	1720	1740	0.011	2300	-130	2170
SE	STORGLACIAEREN	332	2015	1700	1720	0.031	1960	-180	1770
SE	STORGLACIAEREN	332	2015	1680	1700	0.052	1870	-220	1660
SE	STORGLACIAEREN	332	2015	1660	1680	0.070	1840	-240	1600
SE	STORGLACIAEREN	332	2015	1640	1660	0.100	1930	-250	1680
SE	STORGLACIAEREN	332	2015	1620	1640	0.147	1930	-240	1680
SE	STORGLACIAEREN	332	2015	1600	1620	0.128	1870	-240	1630
SE	STORGLACIAEREN	332	2015	1580	1600	0.114	1830	-280	1550
SE	STORGLACIAEREN	332	2015	1560	1580	0.118	1710	-430	1280
SE	STORGLACIAEREN	332	2015	1540	1560	0.094	1620	-470	1150
SE	STORGLACIAEREN	332	2015	1520	1540	0.089	1670	-470	1200
SE	STORGLACIAEREN	332	2015	1500	1520	0.170	1870	-420	1450
SE	STORGLACIAEREN	332	2015	1480	1500	0.181	1690	-590	1100
SE	STORGLACIAEREN	332	2015	1460	1480	0.097	1320	-880	440
SE	STORGLACIAEREN	332	2015	1440	1460	0.057	1370	-980	390
SE	STORGLACIAEREN	332	2015	1420	1440	0.051	1590	-1010	580
SE	STORGLACIAEREN	332	2015	1400	1420	0.096	1460	-1010	450
SE	STORGLACIAEREN	332	2015	1380	1400	0.168	1270	-1050	220
SE	STORGLACIAEREN	332	2015	1360	1380	0.284	1090	-1070	20
SE	STORGLACIAEREN	332	2015	1340	1360	0.277	1000	-1190	-190
SE	STORGLACIAEREN	332	2015	1320	1340	0.143	1000	-1240	-240
SE	STORGLACIAEREN	332	2015	1300	1320	0.086	1110	-1250	-140
SE	STORGLACIAEREN	332	2015	1280	1300	0.073	1150	-1330	-180
SE	STORGLACIAEREN	332	2015	1260	1280	0.074	870	-1520	-650
SE	STORGLACIAEREN	332	2015	1240	1260	0.060	1120	-1720	-600
SE	STORGLACIAEREN	332	2015	1220	1240	0.046	1280	-1710	-430
SE	STORGLACIAEREN	332	2015	1200	1220	0.033	1310	-1920	-610
SE	STORGLACIAEREN	332	2015	1180	1200	0.017	1460	-2010	-550
SE	STORGLACIAEREN	332	2015	1160	1180	0.008	1230	-2000	-770
SE	STORGLACIAEREN	332	2015	1140	1160	0.004	1550	-1970	-420
SE	TARFALAGLACIAEREN	326	2015	1780	1800	0.001	360	-360	0
SE	TARFALAGLACIAEREN	326	2015	1760	1780	0.008	380	-380	0
SE	TARFALAGLACIAEREN	326	2015	1740	1760	0.004	610	-430	190
SE	TARFALAGLACIAEREN	326	2015	1720	1740	0.018	980	-470	500
SE	TARFALAGLACIAEREN	326	2015	1700	1720	0.026	1260	-520	740
SE	TARFALAGLACIAEREN	326	2015	1680	1700	0.027	1420	-560	860
SE	TARFALAGLACIAEREN	326	2015	1660	1680	0.031	1470	-600	870
SE	TARFALAGLACIAEREN	326	2015	1640	1660	0.036	1540	-650	890
SE	TARFALAGLACIAEREN	326	2015	1620	1640	0.044	1680	-690	980
SE	TARFALAGLACIAEREN	326	2015	1600	1620	0.064	1750	-740	1010
SE	TARFALAGLACIAEREN	326	2015	1580	1600	0.055	1760	-780	980
SE	TARFALAGLACIAEREN	326	2015	1560	1580	0.067	1710	-820	890
SE	TARFALAGLACIAEREN	326	2015	1540	1560	0.062	1630	-870	760
SE	TARFALAGLACIAEREN	326	2015	1520	1540	0.074	1610	-910	690
SE	TARFALAGLACIAEREN	326	2015	1500	1520	0.082	1460	-960	500
SE	TARFALAGLACIAEREN	326	2015	1480	1500	0.086	1470	-1000	470
SE	TARFALAGLACIAEREN	326	2015	1460	1480	0.085	1390	-1050	340
SE	TARFALAGLACIAEREN	326	2015	1440	1460	0.080	1380	-1090	290
SE	TARFALAGLACIAEREN	326	2015	1420	1440	0.082	1490	-1130	350
SE	TARFALAGLACIAEREN	326	2015	1400	1420	0.064	1520	-1180	350
SE	TARFALAGLACIAEREN	326	2015	1380	1400	0.010	1550	-1210	340
SJ - Svalbard									
SJ	HANSBREEN	306	2014	450	500	6.71	1170	-780	390
SJ	HANSBREEN	306	2014	400	450	7.39	1250	-520	730
SJ	HANSBREEN	306	2014	350	400	8.103	1120	-1080	40
SJ	HANSBREEN	306	2014	300	350	8.555	940	-900	40
SJ	HANSBREEN	306	2014	250	300	8.25	830	-1110	-330
SJ	HANSBREEN	306	2014	200	250	6.578	740	-1640	-900
SJ	HANSBREEN	306	2014	150	200	5.125	730	-1930	-1200
SJ	HANSBREEN	306	2014	100	150	3.817	570	-2040	-1470
SJ	HANSBREEN	306	2014	0	100	2.215	320	-2850	-2530
SJ	HANSBREEN	306	2015	450	500	6.71	1494	-1005	489
SJ	HANSBREEN	306	2015	400	450	7.39	1384	-736	648
SJ	HANSBREEN	306	2015	350	400	8.103	1240	-952	288
SJ	HANSBREEN	306	2015	300	350	8.555	1040	-1088	-48
SJ	HANSBREEN	306	2015	250	300	8.25	820	-1563	-743
SJ	HANSBREEN	306	2015	200	250	6.578	660	-1749	-1089
SJ	HANSBREEN	306	2015	150	200	5.125	660	-1992	-1332
SJ	HANSBREEN	306	2015	100	150	3.817	388	-2575	-2187
SJ	HANSBREEN	306	2015	0	100	2.215	330	-2571	-2241
SJ	WERENSKIOLDBREEN	305	2014	600	750	0.757	1693	-142	1552
SJ	WERENSKIOLDBREEN	305	2014	500	600	3.564	1563	-432	1132
SJ	WERENSKIOLDBREEN	305	2014	400	500	7.385	1433	-722	712
SJ	WERENSKIOLDBREEN	305	2014	300	400	7.658	1303	-1012	292
SJ	WERENSKIOLDBREEN	305	2014	200	300	4.243	1173	-1302	-128
SJ	WERENSKIOLDBREEN	305	2014	100	200	2.610	1043	-1592	-548
SJ	WERENSKIOLDBREEN	305	2014	0	100	0.895	913	-1882	-968
SJ	WERENSKIOLDBREEN	305	2015	600	750	0.757	1508	-742	766
SJ	WERENSKIOLDBREEN	305	2015	500	600	3.564	1288	-1042	246
SJ	WERENSKIOLDBREEN	305	2015	400	500	7.385	1068	-1342	-274
SJ	WERENSKIOLDBREEN	305	2015	300	400	7.658	848	-1642	-794
SJ	WERENSKIOLDBREEN	305	2015	200	300	4.243	628	-1942	-1314

PU	GLACIER_NAME	WGMS_ID	YEAR	ELEV_FROM	ELEV_TO	AREA	BW	BS	BA
SJ	WERENSKIOLDBREEN	305	2015	100	200	2.610	408	-2242	-1834
SJ	WERENSKIOLDBREEN	305	2015	0	100	0.895	188	-2542	-2354
US - United States of America									
US	COLUMBIA (2057)	76	2014	1700	1800	0.05			1000
US	COLUMBIA (2057)	76	2014	1650	1700	0.13			600
US	COLUMBIA (2057)	76	2014	1600	1650	0.28			100
US	COLUMBIA (2057)	76	2014	1550	1600	0.19			-1400
US	COLUMBIA (2057)	76	2014	1500	1550	0.13			-2300
US	COLUMBIA (2057)	76	2014	1450	1500	0.06			-4100
US	COLUMBIA (2057)	76	2015	1700	1800	0.04			-2600
US	COLUMBIA (2057)	76	2015	1650	1700	0.13			-2800
US	COLUMBIA (2057)	76	2015	1600	1650	0.28			-3100
US	COLUMBIA (2057)	76	2015	1550	1600	0.19			-3700
US	COLUMBIA (2057)	76	2015	1500	1550	0.13			-4300
US	COLUMBIA (2057)	76	2015	1450	1500	0.05			-5100
US	LEMON CREEK	3334	2014	1200	1250	2.1			0
US	LEMON CREEK	3334	2014	1150	1200	2.3			-200
US	LEMON CREEK	3334	2014	1100	1150	1.2			-700
US	LEMON CREEK	3334	2014	1050	1100	1.6			-1500
US	LEMON CREEK	3334	2014	1000	1050	1.2			-2500
US	LEMON CREEK	3334	2014	950	1000	0.7			-3500
US	LEMON CREEK	3334	2014	900	950	0.8			-4000
US	LEMON CREEK	3334	2014	850	900	1			-5000
US	LEMON CREEK	3334	2014	750	850	0.7			-5500
US	LEMON CREEK	3334	2015	1200	1250	2.1			-600
US	LEMON CREEK	3334	2015	1150	1200	2.3			-900
US	LEMON CREEK	3334	2015	1100	1150	1.2			-1100
US	LEMON CREEK	3334	2015	1050	1100	1.6			-2100
US	LEMON CREEK	3334	2015	1000	1050	1.2			-3000
US	LEMON CREEK	3334	2015	950	1000	0.7			-3800
US	LEMON CREEK	3334	2015	900	950	0.8			-4500
US	LEMON CREEK	3334	2015	850	900	1			-5000
US	LEMON CREEK	3334	2015	750	850	0.7			-5500

APPENDIX - Table 5

MASS BALANCE POINT DATA 2014–2015

PU	Political unit, alphabetic 2-digit country code (cf. www.iso.org)
GLACIER NAME	Name of the glacier in capital letters, cf. Appendix Table 1
WGMS ID	Key identifier of the glacier, cf. Appendix Table 1
FROM	Starting date measurements in format YYYYMMDD*
TO	Ending date measurements in format YYYYMMDD*
POINT_ID	Key identifier of the measurement point
LAT	Latitude of measurement point in decimal degrees north (positive) or south (negative)
LON	Longitude of measurement point in decimal degrees east (positive) or west (negative)
ELEV	Elevation of the measurement point in metres above sea level
MB	Surface mass balance in mm water equivalent
MB_CODE	BW = Winter balance in mm water equivalent BS = Summer balance in mm water equivalent BA = Annual balance in mm water equivalent IN = Balance at index point

*Unknown month or day are each replaced by „99“

PU	GLACIER_NAME	WGMS_ID	FROM	TO POINT_ID	LAT	LON	ELEV	MB MB_CODE
AQ - Antarctica								
AQ	BAHIA DEL DIABLO	2665	20140301	20150228 21			637	100 BA
AQ	BAHIA DEL DIABLO	2665	20140301	20150228 19			588	400 BA
AQ	BAHIA DEL DIABLO	2665	20140301	20150228 20			553	420 BA
AQ	BAHIA DEL DIABLO	2665	20140301	20150228 18			551	490 BA
AQ	BAHIA DEL DIABLO	2665	20140301	20150228 22			519	320 BA
AQ	BAHIA DEL DIABLO	2665	20140301	20150228 17			515	470 BA
AQ	BAHIA DEL DIABLO	2665	20140301	20150228 16			505	360 BA
AQ	BAHIA DEL DIABLO	2665	20140301	20150228 14			464	550 BA
AQ	BAHIA DEL DIABLO	2665	20140301	20150228 13			458	470 BA
AQ	BAHIA DEL DIABLO	2665	20140301	20150228 12			456	720 BA
AQ	BAHIA DEL DIABLO	2665	20140301	20150228 15			445	1120 BA
AQ	BAHIA DEL DIABLO	2665	20140301	20150228 11			442	570 BA
AQ	BAHIA DEL DIABLO	2665	20140301	20150228 10			398	-180 BA
AQ	BAHIA DEL DIABLO	2665	20140301	20150228 9			375	-330 BA
AQ	BAHIA DEL DIABLO	2665	20140301	20150228 8			288	-410 BA
AQ	BAHIA DEL DIABLO	2665	20140301	20150228 7			273	-750 BA
AQ	BAHIA DEL DIABLO	2665	20140301	20150228 6			272	-760 BA
AQ	BAHIA DEL DIABLO	2665	20140301	20150228 5			270	-400 BA
AQ	BAHIA DEL DIABLO	2665	20140301	20150228 4			205	-790 BA
AQ	BAHIA DEL DIABLO	2665	20140301	20150228 3			167	-850 BA
AQ	BAHIA DEL DIABLO	2665	20140301	20150228 2			139	-970 BA
AQ	BAHIA DEL DIABLO	2665	20140301	20150228 1			100	-1310 BA
AR - Argentina								
AR	BROWN SUPERIOR	3903	20139999	20149999 54-I-12			5118	-1564 BA
AR	BROWN SUPERIOR	3903	20139999	20149999 56-12			5092	-1148 BA
AR	BROWN SUPERIOR	3903	20139999	20149999 55-12			5068	-1700 BA
AR	BROWN SUPERIOR	3903	20139999	20149999 58-12			5059	68 BA
AR	BROWN SUPERIOR	3903	20139999	20149999 51-11			5050	-1590 BA
AR	BROWN SUPERIOR	3903	20139999	20149999 59-12			5016	-1258 BA
AR	BROWN SUPERIOR	3903	20139999	20149999 52-12			5010	-1301 BA
AR	BROWN SUPERIOR	3903	20139999	20149999 510-13			4997	-1594 BA
AR	BROWN SUPERIOR	3903	20140424	20141210 55	-29.985	-69.642	5066	26 BW
AR	BROWN SUPERIOR	3903	20140424	20141211 54	-29.986	-69.643	5115	-1335 BW
AR	BROWN SUPERIOR	3903	20140424	20141211 56	-29.984	-69.643	5091	73 BW
AR	BROWN SUPERIOR	3903	20140424	20150504 54	-29.986	-69.643	5115	-2805 BA
AR	BROWN SUPERIOR	3903	20140424	20150505 56	-29.984	-69.643	5091	-1896 BA
AR	BROWN SUPERIOR	3903	20140424	20150505 55	-29.985	-69.642	5066	-2082 BA
AR	BROWN SUPERIOR	3903	20140425	20141210 58	-29.982	-69.642	5059	161 BW
AR	BROWN SUPERIOR	3903	20140425	20141210 51	-29.983	-69.642	5050	34 BW
AR	BROWN SUPERIOR	3903	20140425	20141210 59	-29.983	-69.641	5011	-43 BW
AR	BROWN SUPERIOR	3903	20140425	20141210 52	-29.982	-69.640	5009	-102 BW
AR	BROWN SUPERIOR	3903	20140425	20141210 510	-29.981	-69.640	4989	14 BW
AR	BROWN SUPERIOR	3903	20140425	20150503 51	-29.983	-69.642	5050	-1981 BA
AR	BROWN SUPERIOR	3903	20140425	20150504 58	-29.982	-69.642	5059	-1819 BA
AR	BROWN SUPERIOR	3903	20140425	20150504 59	-29.983	-69.641	5011	-2368 BA
AR	BROWN SUPERIOR	3903	20140425	20150504 52	-29.982	-69.640	5009	-3000 BA
AR	BROWN SUPERIOR	3903	20140425	20150504 510	-29.981	-69.640	4989	-3018 BA
AR	CONCONTA NORTE	3902	20139999	20149999 N6-12			5072	-1989 BA
AR	CONCONTA NORTE	3902	20139999	20149999 N7-12			5065	-901 BA
AR	CONCONTA NORTE	3902	20139999	20149999 N5-12			5062	-2654 BA
AR	CONCONTA NORTE	3902	20139999	20149999 N8-12			5052	-1964 BA
AR	CONCONTA NORTE	3902	20139999	20149999 N1-I-12			5038	-2401 BA
AR	CONCONTA NORTE	3902	20139999	20149999 N9-12			5014	-1496 BA
AR	CONCONTA NORTE	3902	20139999	20149999 N4-12			4958	-1301 BA
AR	CONCONTA NORTE	3902	20140423	20141211 N6	-29.976	-69.645	5074	-78 BW
AR	CONCONTA NORTE	3902	20140423	20141211 N7	-29.977	-69.645	5065	-238 BW
AR	CONCONTA NORTE	3902	20140423	20141211 N5	-29.976	-69.645	5057	82 BW
AR	CONCONTA NORTE	3902	20140423	20141212 N8	-29.975	-69.645	5049	-94 BW
AR	CONCONTA NORTE	3902	20140423	20141212 N1	-29.975	-69.645	5036	-196 BW
AR	CONCONTA NORTE	3902	20140423	20141212 N9	-29.974	-69.643	5007	-442 BW
AR	CONCONTA NORTE	3902	20140423	20141212 N4	-29.975	-69.642	4954	55 BW
AR	CONCONTA NORTE	3902	20140423	20150506 N6	-29.976	-69.645	5074	-3305 BA
AR	CONCONTA NORTE	3902	20140423	20150506 N7	-29.977	-69.645	5065	-3341 BA
AR	CONCONTA NORTE	3902	20140423	20150506 N5	-29.976	-69.645	5057	-3269 BA
AR	CONCONTA NORTE	3902	20140423	20150506 N8	-29.975	-69.645	5049	-3197 BA
AR	CONCONTA NORTE	3902	20140423	20150506 N1	-29.975	-69.645	5036	-2803 BA
AR	CONCONTA NORTE	3902	20140423	20150506 N9	-29.974	-69.643	5007	-1852 BA
AR	CONCONTA NORTE	3902	20140423	20150506 N4	-29.975	-69.642	4954	-2839 BA
AR	LOS AMARILLOS	3904	20139999	20149999 L13-12			5443	-842 BA
AR	LOS AMARILLOS	3904	20139999	20149999 L2-10			5360	-961 BA
AR	LOS AMARILLOS	3904	20139999	20149999 L1-12			5352	-850 BA
AR	LOS AMARILLOS	3904	20139999	20149999 L10-12			5309	-1139 BA
AR	LOS AMARILLOS	3904	20139999	20149999 L8-12			5278	-876 BA
AR	LOS AMARILLOS	3904	20139999	20149999 L9-12			5278	-808 BA
AR	LOS AMARILLOS	3904	20139999	20149999 L3-09			5250	-672 BA
AR	LOS AMARILLOS	3904	20139999	20149999 L4-II-12			5238	-1403 BA
AR	LOS AMARILLOS	3904	20139999	20149999 L7-12			5208	-621 BA
AR	LOS AMARILLOS	3904	20139999	20149999 L6-12			5198	-519 BA
AR	LOS AMARILLOS	3904	20139999	20149999 L5-I-12			5122	-1097 BA
AR	LOS AMARILLOS	3904	20140427	20141219 L13	-29.297	-69.998	5441	-94 BW
AR	LOS AMARILLOS	3904	20140427	20141219 L2	-29.296	-69.995	5358	-315 BW
AR	LOS AMARILLOS	3904	20140427	20141219 L1	-29.298	-69.997	5351	-247 BW
AR	LOS AMARILLOS	3904	20140427	20141219 L10	-29.297	-69.993	5306	-213 BW
AR	LOS AMARILLOS	3904	20140427	20141219 L8	-29.297	-69.991	5277	-255 BW
AR	LOS AMARILLOS	3904	20140427	20141219 L9	-29.299	-69.995	5277	-289 BW
AR	LOS AMARILLOS	3904	20140427	20150514 L13	-29.297	-69.998	5441	-706 BA
AR	LOS AMARILLOS	3904	20140427	20150514 L2	-29.296	-69.995	5358	-1017 BA
AR	LOS AMARILLOS	3904	20140427	20150514 L1	-29.298	-69.997	5351	-850 BA
AR	LOS AMARILLOS	3904	20140427	20150514 L10	-29.297	-69.993	5306	-1293 BA
AR	LOS AMARILLOS	3904	20140427	20150514 L9	-29.299	-69.995	5277	-876 BA
AR	LOS AMARILLOS	3904	20140427	20150514 L8	-29.297	-69.991	5277	-748 BA
AR	LOS AMARILLOS	3904	20140428	20141219 L3	-29.299	-69.993	5250	-247 BW
AR	LOS AMARILLOS	3904	20140428	20141219 L4	-29.301	-69.995	5236	-391 BW

Table 5

PU	GLACIER_NAME	WGMS_ID	FROM	TO	POINT_ID	LAT	LON	ELEV	MB	MB_CODE
AR	LOS AMARILLOS	3904	20140428	20141219	L7	-29.298	-69.990	5206	-175	BW
AR	LOS AMARILLOS	3904	20140428	20141219	L6	-29.299	-69.991	5198	-175	BW
AR	LOS AMARILLOS	3904	20140428	20141219	L5	-29.300	-69.988	5120	-26	BW
AR	LOS AMARILLOS	3904	20140428	20150514	L3	-29.299	-69.993	5250	-666	BA
AR	LOS AMARILLOS	3904	20140428	20150514	L4	-29.301	-69.995	5236	-1471	BA
AR	LOS AMARILLOS	3904	20140428	20150514	L7	-29.298	-69.990	5206	-783	BA
AR	LOS AMARILLOS	3904	20140428	20150514	L6	-29.299	-69.991	5198	-783	BA
AR	LOS AMARILLOS	3904	20140428	20150514	L5	-29.300	-69.988	5120	-904	BA
AR	MARTIAL ESTE	2000	20130331	20131105	11	-54.781	-68.405	1113	848	BW
AR	MARTIAL ESTE	2000	20130331	20131105	7	-54.781	-68.404	1096	1059	BW
AR	MARTIAL ESTE	2000	20130331	20131105	6	-54.781	-68.405	1092	1104	BW
AR	MARTIAL ESTE	2000	20130331	20131105	5	-54.782	-68.405	1090	1220	BW
AR	MARTIAL ESTE	2000	20130331	20131105	9	-54.781	-68.403	1077	1158	BW
AR	MARTIAL ESTE	2000	20130331	20131105	10	-54.781	-68.402	1072	990	BW
AR	MARTIAL ESTE	2000	20130331	20131105	4	-54.782	-68.404	1065	1197	BW
AR	MARTIAL ESTE	2000	20130331	20131105	8	-54.781	-68.403	1065	1030	BW
AR	MARTIAL ESTE	2000	20130331	20131105	1	-54.781	-68.402	1033	1326	BW
AR	MARTIAL ESTE	2000	20130331	20131105	3	-54.782	-68.403	1029	1079	BW
AR	MARTIAL ESTE	2000	20130331	20131105	2	-54.782	-68.402	1025	403	BW
AR	MARTIAL ESTE	2000	20130331	20140404	11	-54.781	-68.405	1113	660	BA
AR	MARTIAL ESTE	2000	20130331	20140404	7	-54.781	-68.404	1096	935	BA
AR	MARTIAL ESTE	2000	20130331	20140404	6	-54.781	-68.405	1092	1150	BA
AR	MARTIAL ESTE	2000	20130331	20140404	5	-54.782	-68.405	1090	1242	BA
AR	MARTIAL ESTE	2000	20130331	20140404	9	-54.781	-68.403	1077	906	BA
AR	MARTIAL ESTE	2000	20130331	20140404	10	-54.781	-68.402	1072	655	BA
AR	MARTIAL ESTE	2000	20130331	20140404	8	-54.781	-68.403	1065	837	BA
AR	MARTIAL ESTE	2000	20130331	20140404	4	-54.782	-68.404	1065	1058	BA
AR	MARTIAL ESTE	2000	20130331	20140404	1	-54.781	-68.402	1033	780	BA
AR	MARTIAL ESTE	2000	20130331	20140404	3	-54.782	-68.403	1029	354	BA
AR	MARTIAL ESTE	2000	20130331	20140404	2	-54.782	-68.402	1025	-765	BA
AR	MARTIAL ESTE	2000	20131105	20140404	11	-54.781	-68.405	1113	-188	BS
AR	MARTIAL ESTE	2000	20131105	20140404	7	-54.781	-68.404	1096	-124	BS
AR	MARTIAL ESTE	2000	20131105	20140404	6	-54.781	-68.405	1092	46	BS
AR	MARTIAL ESTE	2000	20131105	20140404	5	-54.782	-68.405	1090	22	BS
AR	MARTIAL ESTE	2000	20131105	20140404	9	-54.781	-68.403	1077	-252	BS
AR	MARTIAL ESTE	2000	20131105	20140404	10	-54.781	-68.402	1072	-335	BS
AR	MARTIAL ESTE	2000	20131105	20140404	4	-54.782	-68.404	1065	-139	BS
AR	MARTIAL ESTE	2000	20131105	20140404	8	-54.781	-68.403	1065	-193	BS
AR	MARTIAL ESTE	2000	20131105	20140404	1	-54.781	-68.402	1033	-546	BS
AR	MARTIAL ESTE	2000	20131105	20140404	3	-54.782	-68.403	1029	-725	BS
AR	MARTIAL ESTE	2000	20131105	20140404	2	-54.782	-68.402	1025	-1168	BS
AR	MARTIAL ESTE	2000	20140404	20141101	11	-54.781	-68.405	1112	780	BW
AR	MARTIAL ESTE	2000	20140404	20141101	7	-54.781	-68.404	1096	877	BW
AR	MARTIAL ESTE	2000	20140404	20141101	6	-54.781	-68.405	1092	1019	BW
AR	MARTIAL ESTE	2000	20140404	20141101	5	-54.782	-68.405	1090	1111	BW
AR	MARTIAL ESTE	2000	20140404	20141101	9	-54.781	-68.403	1077	755	BW
AR	MARTIAL ESTE	2000	20140404	20141101	10	-54.781	-68.402	1072	835	BW
AR	MARTIAL ESTE	2000	20140404	20141101	8	-54.781	-68.403	1065	993	BW
AR	MARTIAL ESTE	2000	20140404	20141101	4	-54.782	-68.404	1065	892	BW
AR	MARTIAL ESTE	2000	20140404	20141101	1	-54.781	-68.402	1033	626	BW
AR	MARTIAL ESTE	2000	20140404	20141101	3	-54.782	-68.403	1029	610	BW
AR	MARTIAL ESTE	2000	20140404	20141101	2	-54.782	-68.402	1025	503	BW
AR	MARTIAL ESTE	2000	20140404	20150331	11	-54.781	-68.405	1112	218	BA
AR	MARTIAL ESTE	2000	20140404	20150331	7	-54.781	-68.404	1096	464	BA
AR	MARTIAL ESTE	2000	20140404	20150331	6	-54.781	-68.405	1092	475	BA
AR	MARTIAL ESTE	2000	20140404	20150331	5	-54.782	-68.405	1090	390	BA
AR	MARTIAL ESTE	2000	20140404	20150331	9	-54.781	-68.403	1077	-28	BA
AR	MARTIAL ESTE	2000	20140404	20150331	10	-54.781	-68.402	1072	-122	BA
AR	MARTIAL ESTE	2000	20140404	20150331	8	-54.781	-68.403	1065	158	BA
AR	MARTIAL ESTE	2000	20140404	20150331	4	-54.782	-68.404	1065	0	BA
AR	MARTIAL ESTE	2000	20140404	20150331	1	-54.781	-68.402	1033	-660	BA
AR	MARTIAL ESTE	2000	20140404	20150331	3	-54.782	-68.403	1029	-768	BA
AR	MARTIAL ESTE	2000	20140404	20150331	2	-54.782	-68.402	1025	-1044	BA
AR	MARTIAL ESTE	2000	20141101	20150331	11	-54.781	-68.405	1112	-562	BS
AR	MARTIAL ESTE	2000	20141101	20150331	7	-54.781	-68.404	1096	-413	BS
AR	MARTIAL ESTE	2000	20141101	20150331	6	-54.781	-68.405	1092	-544	BS
AR	MARTIAL ESTE	2000	20141101	20150331	5	-54.782	-68.405	1090	-721	BS
AR	MARTIAL ESTE	2000	20141101	20150331	9	-54.781	-68.403	1077	-783	BS
AR	MARTIAL ESTE	2000	20141101	20150331	10	-54.781	-68.402	1072	-957	BS
AR	MARTIAL ESTE	2000	20141101	20150331	4	-54.782	-68.404	1065	-892	BS
AR	MARTIAL ESTE	2000	20141101	20150331	8	-54.781	-68.403	1065	-835	BS
AR	MARTIAL ESTE	2000	20141101	20150331	1	-54.781	-68.402	1033	-1286	BS
AR	MARTIAL ESTE	2000	20141101	20150331	3	-54.782	-68.403	1029	-1378	BS
AR	MARTIAL ESTE	2000	20141101	20150331	2	-54.782	-68.402	1025	-1547	BS
AT - Austria										
AT	HINTEREIS F.	491	20131001	20140430	WJ	46.797	10.743	3170	1460	BW
AT	HINTEREIS F.	491	20131001	20140430	LJF	46.810	10.755	3089	1273	BW
AT	HINTEREIS F.	491	20131001	20140430	TE	46.791	10.748	3047	1629	BW
AT	HINTEREIS F.	491	20131001	20140430	L613	46.803	10.773	2740	980	BW
AT	HINTEREIS F.	491	20131001	20140430	AWS	46.814	10.789	2530	865	BW
AT	HINTEREIS F.	491	20131001	20140930	SSJ	46.788	10.739	3240	1606	BA
AT	HINTEREIS F.	491	20131001	20140930	WJ	46.797	10.743	3170	897	BA
AT	HINTEREIS F.	491	20131001	20140930	TE_Bambus	46.790	10.749	3047	383	BA
AT	HINTEREIS F.	491	20131001	20140930	TE	46.791	10.748	3047	499	BA
AT	HINTEREIS F.	491	20131001	20140930	TE12	46.791	10.750	3025	77	BA
AT	HINTEREIS F.	491	20131001	20140930	202	46.811	10.761	3008	-357	BA
AT	HINTEREIS F.	491	20131001	20140930	101	46.794	10.752	2989	-415	BA
AT	HINTEREIS F.	491	20131001	20140930	93	46.793	10.756	2950	-316	BA
AT	HINTEREIS F.	491	20131001	20140930	94	46.792	10.758	2938	-325	BA
AT	HINTEREIS F.	491	20131001	20140930	98	46.794	10.757	2937	-367	BA
AT	HINTEREIS F.	491	20131001	20140930	L309	46.793	10.757	2934	-386	BA
AT	HINTEREIS F.	491	20131001	20140930	73	46.795	10.760	2904	-409	BA
AT	HINTEREIS F.	491	20131001	20140930	89	46.793	10.762	2897	-761	BA
AT	HINTEREIS F.	491	20131001	20140930	95	46.792	10.762	2892	-611	BA
AT	HINTEREIS F.	491	20131001	20140930	96	46.793	10.764	2886	-483	BA

PU	GLACIER_NAME	WGMS_ID	FROM	TO	POINT_ID	LAT	Lon	ELEV	MB	MB_CODE
AT	HINTEREIS F.	491	20131001	20140930	L413	46.794	10.764	2878	-836	BA
AT	HINTEREIS F.	491	20131001	20140930	79	46.795	10.764	2878	-1214	BA
AT	HINTEREIS F.	491	20131001	20140930	88	46.795	10.767	2853	-1060	BA
AT	HINTEREIS F.	491	20131001	20140930	97	46.795	10.769	2848	-1079	BA
AT	HINTEREIS F.	491	20131001	20140930	72	46.798	10.766	2831	-1382	BA
AT	HINTEREIS F.	491	20131001	20140930	L513	46.798	10.770	2819	-1336	BA
AT	HINTEREIS F.	491	20131001	20140930	71	46.800	10.767	2785	-1346	BA
AT	HINTEREIS F.	491	20131001	20140930	69	46.801	10.772	2780	-1719	BA
AT	HINTEREIS F.	491	20131001	20140930	61	46.802	10.769	2757	-1672	BA
AT	HINTEREIS F.	491	20131001	20140930	L613	46.803	10.773	2740	-2070	BA
AT	HINTEREIS F.	491	20131001	20140930	51	46.806	10.772	2711	-2285	BA
AT	HINTEREIS F.	491	20131001	20140930	64	46.806	10.777	2707	-2619	BA
AT	HINTEREIS F.	491	20131001	20140930	87	46.806	10.775	2703	-2520	BA
AT	HINTEREIS F.	491	20131001	20140930	L713	46.808	10.778	2671	-3177	BA
AT	HINTEREIS F.	491	20131001	20140930	50	46.808	10.781	2654	-3879	BA
AT	HINTEREIS F.	491	20131001	20140930	42	46.810	10.779	2646	-3276	BA
AT	HINTEREIS F.	491	20131001	20140930	L813	46.810	10.782	2626	-3204	BA
AT	HINTEREIS F.	491	20131001	20140930	41	46.811	10.786	2591	-3969	BA
AT	HINTEREIS F.	491	20131001	20140930	38	46.812	10.784	2589	-3474	BA
AT	HINTEREIS F.	491	20131001	20140930	L913	46.813	10.787	2570	-3987	BA
AT	HINTEREIS F.	491	20131001	20140930	22	46.815	10.791	2532	-4869	BA
AT	HINTEREIS F.	491	20131001	20140930	27a	46.814	10.790	2521	-5391	BA
AT	HINTEREIS F.	491	20131001	20140930	L1013	46.816	10.792	2502	-5337	BA
AT	HINTEREIS F.	491	20141001	20150430	HEJ	46.792	10.735	3330	1535	BW
AT	HINTEREIS F.	491	20141001	20150430	WJ	46.797	10.743	3170	1934	BW
AT	HINTEREIS F.	491	20141001	20150430	LJF	46.810	10.755	3089	1914	BW
AT	HINTEREIS F.	491	20141001	20150430	TE	46.791	10.748	3047	1670	BW
AT	HINTEREIS F.	491	20141001	20150430	L6	46.803	10.773	2740	1028	BW
AT	HINTEREIS F.	491	20141001	20150430	AWS	46.814	10.789	2530	571	BW
AT	HINTEREIS F.	491	20141001	20150930	108	46.803	10.746	3434	-2398	BA
AT	HINTEREIS F.	491	20141001	20150930	HEJ	46.792	10.735	3330	723	BA
AT	HINTEREIS F.	491	20141001	20150930	SST	46.797	10.737	3280	625	BA
AT	HINTEREIS F.	491	20141001	20150930	SSJ	46.788	10.739	3240	686	BA
AT	HINTEREIS F.	491	20141001	20150930	107	46.799	10.745	3213	-2415	BA
AT	HINTEREIS F.	491	20141001	20150930	106	46.796	10.740	3205	-1920	BA
AT	HINTEREIS F.	491	20141001	20150930	207	46.811	10.756	3175	-960	BA
AT	HINTEREIS F.	491	20141001	20150930	B22	46.808	10.753	3160	526	BA
AT	HINTEREIS F.	491	20141001	20150930	WKJ	46.797	10.742	3155	243	BA
AT	HINTEREIS F.	491	20141001	20150930	105	46.794	10.742	3139	-2190	BA
AT	HINTEREIS F.	491	20141001	20150930	109	46.798	10.749	3137	-1744	BA
AT	HINTEREIS F.	491	20141001	20150930	B1	46.791	10.742	3120	482	BA
AT	HINTEREIS F.	491	20141001	20150930	104	46.793	10.745	3095	-1594	BA
AT	HINTEREIS F.	491	20141001	20150930	TE_Bambus	46.790	10.749	3047	-1020	BA
AT	HINTEREIS F.	491	20141001	20150930	TE12	46.791	10.750	3025	-1538	BA
AT	HINTEREIS F.	491	20141001	20150930	202	46.811	10.761	3008	-1586	BA
AT	HINTEREIS F.	491	20141001	20150930	101	46.794	10.752	2987	-1965	BA
AT	HINTEREIS F.	491	20141001	20150930	103	46.791	10.754	2976	-1744	BA
AT	HINTEREIS F.	491	20141001	20150930	99	46.794	10.756	2945	-1893	BA
AT	HINTEREIS F.	491	20141001	20150930	L3/09	46.793	10.757	2934	-2061	BA
AT	HINTEREIS F.	491	20141001	20150930	98	46.794	10.757	2932	-2085	BA
AT	HINTEREIS F.	491	20141001	20150930	94	46.792	10.758	2929	-1844	BA
AT	HINTEREIS F.	491	20141001	20150930	L3/07	46.793	10.759	2918	-1752	BA
AT	HINTEREIS F.	491	20141001	20150930	73	46.795	10.760	2900	-2025	BA
AT	HINTEREIS F.	491	20141001	20150930	89	46.793	10.762	2893	-2311	BA
AT	HINTEREIS F.	491	20141001	20150930	95	46.792	10.762	2892	-2234	BA
AT	HINTEREIS F.	491	20141001	20150930	201	46.811	10.768	2891	-3597	BA
AT	HINTEREIS F.	491	20141001	20150930	L4/07	46.794	10.764	2878	-2499	BA
AT	HINTEREIS F.	491	20141001	20150930	79	46.795	10.764	2872	-2847	BA
AT	HINTEREIS F.	491	20141001	20150930	88	46.795	10.767	2848	-2737	BA
AT	HINTEREIS F.	491	20141001	20150930	97	46.795	10.769	2845	-2316	BA
AT	HINTEREIS F.	491	20141001	20150930	72	46.798	10.766	2831	-2955	BA
AT	HINTEREIS F.	491	20141001	20150930	L5/09	46.798	10.770	2819	-3165	BA
AT	HINTEREIS F.	491	20141001	20150930	71	46.800	10.767	2780	-2943	BA
AT	HINTEREIS F.	491	20141001	20150930	69	46.801	10.772	2780	-3165	BA
AT	HINTEREIS F.	491	20141001	20150930	61	46.802	10.769	2751	-3582	BA
AT	HINTEREIS F.	491	20141001	20150930	L6/07	46.803	10.773	2740	-3651	BA
AT	HINTEREIS F.	491	20141001	20150930	51	46.806	10.772	2711	-3993	BA
AT	HINTEREIS F.	491	20141001	20150930	64	46.806	10.777	2700	-4647	BA
AT	HINTEREIS F.	491	20141001	20150930	87	46.806	10.775	2698	-4305	BA
AT	HINTEREIS F.	491	20141001	20150930	L7/97	46.808	10.778	2671	-4479	BA
AT	HINTEREIS F.	491	20141001	20150930	50	46.808	10.781	2654	-5334	BA
AT	HINTEREIS F.	491	20141001	20150930	42	46.810	10.779	2646	-4689	BA
AT	HINTEREIS F.	491	20141001	20150930	L8/07	46.810	10.782	2626	-4935	BA
AT	HINTEREIS F.	491	20141001	20150930	41	46.811	10.786	2591	-5517	BA
AT	HINTEREIS F.	491	20141001	20150930	38	46.812	10.784	2589	-4959	BA
AT	HINTEREIS F.	491	20141001	20150930	L9/07	46.813	10.787	2570	-5592	BA
AT	HINTEREIS F.	491	20141001	20150930	27a	46.814	10.790	2521	-5283	BA
AT	HINTEREIS F.	491	20141001	20150930	L10/15	46.815	10.792	2496	-7446	BA
AT	KESSELWAND F.	507	20131001	20140930	P46	46.852	10.787	3293	1287	BA
AT	KESSELWAND F.	507	20131001	20140930	KWF13	46.847	10.794	3208	-388	BA
AT	KESSELWAND F.	507	20131001	20140930	KWF12	46.844	10.789	3179	619	BA
AT	KESSELWAND F.	507	20131001	20140930	KWF10	46.841	10.789	3157	-63	BA
AT	KESSELWAND F.	507	20131001	20140930	KWF9	46.842	10.794	3128	-137	BA
AT	KESSELWAND F.	507	20131001	20140930	KWF8	46.839	10.795	3088	-156	BA
AT	KESSELWAND F.	507	20131001	20140930	KWF4	46.834	10.796	3083	-803	BA
AT	KESSELWAND F.	507	20131001	20140930	KWF6	46.840	10.799	3071	-701	BA
AT	KESSELWAND F.	507	20131001	20140930	KWF5	46.837	10.796	3071	-523	BA
AT	KESSELWAND F.	507	20131001	20140930	KWF3	46.836	10.801	3027	-1029	BA
AT	KESSELWAND F.	507	20131001	20140930	KWF2	46.836	10.803	2993	-1356	BA
AT	KESSELWAND F.	507	20131001	20140930	KWF1	46.836	10.806	2963	-2793	BA
AT	KESSELWAND F.	507	20141001	20150930	KWF19/15	46.853	10.787	3308	-348	BA
AT	KESSELWAND F.	507	20141001	20150930	51	46.852	10.784	3288	270	BA
AT	KESSELWAND F.	507	20141001	20150930	52	46.850	10.782	3266	418	BA
AT	KESSELWAND F.	507	20141001	20150930	53	46.848	10.782	3253	79	BA
AT	KESSELWAND F.	507	20141001	20150930	KWF17/15	46.849	10.789	3239	-428	BA
AT	KESSELWAND F.	507	20141001	20150930	KWF18/15	46.846	10.782	3237	-418	BA

Table 5

PU	GLACIER_NAME	WGMS_ID	FROM	TO POINT_ID	LAT	LON	ELEV	MB	MB_CODE
AT	KESSELWAND F.	507	20141001	20150930 KWF13/14	46.847	10.794	3208		-2672 BA
AT	KESSELWAND F.	507	20141001	20150930 KWF16/15	46.841	10.786	3181		-1685 BA
AT	KESSELWAND F.	507	20141001	20150930 KWF12/14	46.844	10.789	3179		-448 BA
AT	KESSELWAND F.	507	20141001	20150930 KWF10/14	46.841	10.789	3157		-1907 BA
AT	KESSELWAND F.	507	20141001	20150930 KWF11/15	46.843	10.795	3141		-1324 BA
AT	KESSELWAND F.	507	20141001	20150930 KWF14/15	46.834	10.792	3136		-2407 BA
AT	KESSELWAND F.	507	20141001	20150930 KWF09/14	46.842	10.794	3128		-1469 BA
AT	KESSELWAND F.	507	20141001	20150930 KWF07/15	46.839	10.792	3109		-1966 BA
AT	KESSELWAND F.	507	20141001	20150930 KWF15/15	46.837	10.791	3107		-1627 BA
AT	KESSELWAND F.	507	20141001	20150930 KWF08/14	46.839	10.795	3088		-1604 BA
AT	KESSELWAND F.	507	20141001	20150930 KWF04/14	46.834	10.796	3083		-2912 BA
AT	KESSELWAND F.	507	20141001	20150930 KWF06/14	46.840	10.799	3071		-2445 BA
AT	KESSELWAND F.	507	20141001	20150930 KWF05/14	46.837	10.796	3071		-2085 BA
AT	KESSELWAND F.	507	20141001	20150930 KWF03/14	46.836	10.801	3027		-3781 BA
AT	WURTEN K.	545	20139999	20149999 9	47.038	13.009	2641		-360 BA
AT	WURTEN K.	545	20139999	20149999 11	47.038	13.008	2636		-405 BA
AT	WURTEN K.	545	20139999	20149999 12	47.038	13.007	2612		-1008 BA
AT	WURTEN K.	545	20139999	20149999 7	47.040	13.005	2610		-396 BA
AT	WURTEN K.	545	20139999	20149999 5	47.037	13.005	2583		-315 BA
AT	WURTEN K.	545	20139999	20149999 6	47.039	13.004	2575		-2556 BA
AT	WURTEN K.	545	20139999	20149999 3	47.037	13.004	2568		-1215 BA
AT	WURTEN K.	545	20139999	20149999 2	47.038	13.003	2555		-1557 BA
AT	WURTEN K.	545	20139999	20149999 1	47.038	13.003	2541		-2142 BA
AT	WURTEN K.	545	20149999	20159999 9	47.038	13.009	2641		-824 BA
AT	WURTEN K.	545	20149999	20159999 11	47.038	13.008	2636		-1926 BA
AT	WURTEN K.	545	20149999	20159999 12	47.038	13.007	2612		-1053 BA
AT	WURTEN K.	545	20149999	20159999 7	47.040	13.005	2610		-3204 BA
AT	WURTEN K.	545	20149999	20159999 5	47.037	13.005	2583		-1890 BA
AT	WURTEN K.	545	20149999	20159999 6	47.039	13.004	2575		-3105 BA
AT	WURTEN K.	545	20149999	20159999 3	47.037	13.004	2568		-3150 BA
AT	WURTEN K.	545	20149999	20159999 2	47.038	13.003	2555		-3375 BA
AT	WURTEN K.	545	20149999	20159999 1	47.038	13.003	2541		-2718 BA
BO - Bolivia									
BO	CHARQUINI SUR	2667	20139999	20149999 PIT1	8197574	595816	5283		349 BA
BO	CHARQUINI SUR	2667	20139999	20149999 PIT2	8197577	595692	5245		270 BA
BO	CHARQUINI SUR	2667	20139999	20149999 PIT3	8197496	595701	5222		290 BA
BO	CHARQUINI SUR	2667	20139999	20149999 1L	8197371	595721	5174		-575 BA
BO	CHARQUINI SUR	2667	20139999	20149999 5F	8197416	595682	5172		-569 BA
BO	CHARQUINI SUR	2667	20139999	20149999 7K	8197452	595638	5169		-487 BA
BO	CHARQUINI SUR	2667	20139999	20149999 2J	8197375	595660	5157		-398 BA
BO	CHARQUINI SUR	2667	20139999	20149999 6D	8197383	595592	5142		-478 BA
BO	CHARQUINI SUR	2667	20139999	20149999 3K	8197461	595353	5092		-535 BA
BO	CHARQUINI SUR	2667	20139999	20149999 15J	8197384	595332	5061		-1212 BA
BO	CHARQUINI SUR	2667	20139999	20149999 17J	8197444	595095	4999		-1742 BA
BO	CHARQUINI SUR	2667	20149999	20159999 Pit 1	8197574	595816	5283		951 BA
BO	CHARQUINI SUR	2667	20149999	20159999 Pit 2	8197577	595692	5245		602 BA
BO	CHARQUINI SUR	2667	20149999	20159999 Pit 3	8197496	595701	5222		696 BA
BO	CHARQUINI SUR	2667	20149999	20159999 1L	8197371	595720	5173		-280 BA
BO	CHARQUINI SUR	2667	20149999	20159999 2J	8197374	595658	5156		-35 BA
BO	CHARQUINI SUR	2667	20149999	20159999 6D	8197383	595591	5141		-297 BA
BO	CHARQUINI SUR	2667	20149999	20159999 15J	8197381	595329	5058		-689 BA
BO	ZONGO	1503	20139999	20149999 PIT1	82012171	590943	5654		1050 BA
BO	ZONGO	1503	20139999	20149999 X4	8200213	591256	5193		125 BA
BO	ZONGO	1503	20139999	20149999 X1	8200191	591263	5188		252 BA
BO	ZONGO	1503	20139999	20149999 17T	8200024	591314	5182		-514 BA
BO	ZONGO	1503	20139999	20149999 1N	8200058	591502	5129		-674 BA
BO	ZONGO	1503	20139999	20149999 XX2	8200058	591520	5126		-930 BA
BO	ZONGO	1503	20139999	20149999 4U	8200059	591593	5115		-601 BA
BO	ZONGO	1503	20139999	20149999 5U	8199895	591490	5104		-1918 BA
BO	ZONGO	1503	20139999	20149999 18T	8199958	591614	5103		-1415 BA
BO	ZONGO	1503	20139999	20149999 7U	8199936	591858	5069		-2332 BA
BO	ZONGO	1503	20139999	20149999 XIX	8199900	592005	5055		-3489 BA
BO	ZONGO	1503	20139999	20149999 XXII	8199976	592432	4939		-4875 BA
BO	ZONGO	1503	20149999	20159999 PIT1	8201371	590722	5791		1157 BA
BO	ZONGO	1503	20149999	20159999 PIT2	8201083	590946	5628		1227 BA
BO	ZONGO	1503	20149999	20159999 PIT3	8201376	591090	5623		999 BA
BO	ZONGO	1503	20149999	20159999 X1	8200182	591273	5189		-356 BA
BO	ZONGO	1503	20149999	20159999 15T	8200079	591327	5178		-564 BA
BO	ZONGO	1503	20149999	20159999 4U	8200044	591608	5111		-183 BA
BO	ZONGO	1503	20149999	20159999 5U	8199895	591490	5104		-1765 BA
BO	ZONGO	1503	20149999	20159999 2W	8199915	591594	5100		-1174 BA
CA - Canada									
CA	DEVON ICE CAP NW	39	20130999	20140510 H	75.369	-82.670	1829		193 BW
CA	DEVON ICE CAP NW	39	20130999	20140510 FH	75.381	-82.728	1769		193 BW
CA	DEVON ICE CAP NW	39	20130999	20140510 F	75.386	-82.763	1737		193 BW
CA	DEVON ICE CAP NW	39	20130999	20140510 EF	75.394	-82.804	1707		186 BW
CA	DEVON ICE CAP NW	39	20130999	20140510 E	75.405	-82.855	1687		185 BW
CA	DEVON ICE CAP NW	39	20130999	20140510 DE	75.412	-82.906	1663		183 BW
CA	DEVON ICE CAP NW	39	20130999	20140510 D	75.422	-82.947	1638		165 BW
CA	DEVON ICE CAP NW	39	20130999	20140510 K	75.431	-82.994	1592		157 BW
CA	DEVON ICE CAP NW	39	20130999	20140510 ML	75.450	-83.089	1507		157 BW
CA	DEVON ICE CAP NW	39	20130999	20140510 M	75.454	-83.103	1491		158 BW
CA	DEVON ICE CAP NW	39	20130999	20140510 N / OM	75.474	-83.208	1398		158 BW
CA	DEVON ICE CAP NW	39	20130999	20140510 O	75.487	-83.278	1363		158 BW
CA	DEVON ICE CAP NW	39	20130999	20140510 ICS	75.492	-83.308	1343		158 BW
CA	DEVON ICE CAP NW	39	20130999	20140510 DSG10	75.510	-83.256	1305		174 BW
CA	DEVON ICE CAP NW	39	20130999	20140510 DVT1	75.502	-83.348	1297		201 BW
CA	DEVON ICE CAP NW	39	20130999	20140510 DSG92	75.515	-83.237	1283		161 BW
CA	DEVON ICE CAP NW	39	20130999	20140510 DSG91	75.525	-83.196	1239		165 BW
CA	DEVON ICE CAP NW	39	20130999	20140510 DVT2	75.511	-83.401	1202		219 BW
CA	DEVON ICE CAP NW	39	20130999	20140510 DSG91B	75.529	-83.184	1198		171 BW
CA	DEVON ICE CAP NW	39	20130999	20140510 DVT6	75.515	-83.417	1197		192 BW
CA	DEVON ICE CAP NW	39	20130999	20140510 DVT7	75.517	-83.433	1152		171 BW
CA	DEVON ICE CAP NW	39	20130999	20140510 DVT8.1	75.522	-83.453	1121		231 BW

PU	GLACIER_NAME	WGMS_ID	FROM	TO POINT_ID	LAT	LONG	ELEV	MB	MB_CODE
CA	DEVON ICE CAP NW	39	20130999	20140510 DVT9	75.526	-83.471	1103	171	BW
CA	DEVON ICE CAP NW	39	20130999	20140510 DSG9	75.533	-83.163	1102	178	BW
CA	DEVON ICE CAP NW	39	20130999	20140510 DVT10.2	75.540	-83.519	1050	182	BW
CA	DEVON ICE CAP NW	39	20130999	20140510 DVT10.4	75.550	-83.552	1001	270	BW
CA	DEVON ICE CAP NW	39	20130999	20140510 DVT11	75.558	-83.593	962	223	BW
CA	DEVON ICE CAP NW	39	20130999	20140510 DVT12	75.564	-83.603	931	154	BW
CA	DEVON ICE CAP NW	39	20130999	20140510 DSG73	75.567	-83.155	831	177	BW
CA	DEVON ICE CAP NW	39	20130999	20140510 DSG72	75.588	-83.141	768	149	BW
CA	DEVON ICE CAP NW	39	20130999	20140510 DSG70	75.605	-83.108	675	108	BW
CA	DEVON ICE CAP NW	39	20130999	20140510 DSG6	75.615	-83.088	622	112	BW
CA	DEVON ICE CAP NW	39	20130999	20140510 DSG52	75.645	-83.194	499	154	BW
CA	DEVON ICE CAP NW	39	20130999	20140510 DSG53	75.633	-83.134	460	142	BW
CA	DEVON ICE CAP NW	39	20130999	20140510 DSG51	75.666	-83.252	388	150	BW
CA	DEVON ICE CAP NW	39	20130999	20140510 DSG5	75.671	-83.258	369	150	BW
CA	DEVON ICE CAP NW	39	20130999	20140510 DSG4AWS	75.691	-83.242	315	131	BW
CA	DEVON ICE CAP NW	39	20130999	20140510 DSG4A	75.693	-83.250	312	133	BW
CA	DEVON ICE CAP NW	39	20130999	20140510 DSG3	75.699	-83.230	292	151	BW
CA	DEVON ICE CAP NW	39	20130999	20140510 DSG2	75.706	-83.190	231	113	BW
CA	DEVON ICE CAP NW	39	20130999	20140510 DSG1	75.723	-83.179	179	160	BW
CA	DEVON ICE CAP NW	39	20130999	20140510 DSG1B	75.727	-83.171	157	137	BW
CA	DEVON ICE CAP NW	39	20130999	20140510 DSG0	75.732	-83.194	137	155	BW
CA	DEVON ICE CAP NW	39	20130999	20140999 H	75.369	-82.670	1829	203	BA
CA	DEVON ICE CAP NW	39	20130999	20140999 FH	75.381	-82.728	1769	203	BA
CA	DEVON ICE CAP NW	39	20130999	20140999 F	75.386	-82.763	1737	203	BA
CA	DEVON ICE CAP NW	39	20130999	20140999 EF	75.394	-82.804	1707	196	BA
CA	DEVON ICE CAP NW	39	20130999	20140999 E	75.405	-82.855	1687	200	BA
CA	DEVON ICE CAP NW	39	20130999	20140999 DE	75.412	-82.906	1663	198	BA
CA	DEVON ICE CAP NW	39	20130999	20140999 D	75.422	-82.947	1638	180	BA
CA	DEVON ICE CAP NW	39	20130999	20140999 K	75.431	-82.994	1592	125	BA
CA	DEVON ICE CAP NW	39	20130999	20140999 ML	75.450	-83.089	1507	94	BA
CA	DEVON ICE CAP NW	39	20130999	20140999 M	75.454	-83.103	1491	63	BA
CA	DEVON ICE CAP NW	39	20130999	20140999 N / OM	75.474	-83.208	1398	-32	BA
CA	DEVON ICE CAP NW	39	20130999	20140999 O	75.487	-83.278	1363	-24	BA
CA	DEVON ICE CAP NW	39	20130999	20140999 ICS	75.492	-83.308	1343	-9	BA
CA	DEVON ICE CAP NW	39	20130999	20140999 DSG10	75.510	-83.256	1305	-89	BA
CA	DEVON ICE CAP NW	39	20130999	20140999 DVT1	75.502	-83.348	1297	-151	BA
CA	DEVON ICE CAP NW	39	20130999	20140999 DSG92	75.515	-83.237	1283	-196	BA
CA	DEVON ICE CAP NW	39	20130999	20140999 DSG91	75.525	-83.196	1239	-258	BA
CA	DEVON ICE CAP NW	39	20130999	20140999 DVT2	75.511	-83.401	1202	-116	BA
CA	DEVON ICE CAP NW	39	20130999	20140999 DSG91B	75.529	-83.184	1198	-214	BA
CA	DEVON ICE CAP NW	39	20130999	20140999 DVT6	75.515	-83.417	1197	-169	BA
CA	DEVON ICE CAP NW	39	20130999	20140999 DVT7	75.517	-83.433	1152	-249	BA
CA	DEVON ICE CAP NW	39	20130999	20140999 DVT8.1	75.522	-83.453	1121	-267	BA
CA	DEVON ICE CAP NW	39	20130999	20140999 DVT9	75.526	-83.471	1103	-312	BA
CA	DEVON ICE CAP NW	39	20130999	20140999 DSG9	75.533	-83.163	1102	-347	BA
CA	DEVON ICE CAP NW	39	20130999	20140999 DVT10.2	75.540	-83.519	1050	-142	BA
CA	DEVON ICE CAP NW	39	20130999	20140999 DVT10.4	75.550	-83.552	1001	-134	BA
CA	DEVON ICE CAP NW	39	20130999	20140999 DVT11	75.558	-83.593	962	-294	BA
CA	DEVON ICE CAP NW	39	20130999	20140999 DVT12	75.564	-83.603	931	-436	BA
CA	DEVON ICE CAP NW	39	20130999	20140999 DSG73	75.567	-83.155	831	-623	BA
CA	DEVON ICE CAP NW	39	20130999	20140999 DSG72	75.588	-83.141	768	-454	BA
CA	DEVON ICE CAP NW	39	20130999	20140999 DSG70	75.605	-83.108	675	-846	BA
CA	DEVON ICE CAP NW	39	20130999	20140999 DSG6	75.615	-83.088	622	-846	BA
CA	DEVON ICE CAP NW	39	20130999	20140999 DSG52	75.645	-83.194	499	-632	BA
CA	DEVON ICE CAP NW	39	20130999	20140999 DSG53	75.633	-83.134	460	-668	BA
CA	DEVON ICE CAP NW	39	20130999	20140999 DSG51	75.666	-83.252	388	-641	BA
CA	DEVON ICE CAP NW	39	20130999	20140999 DSG5	75.671	-83.258	369	-837	BA
CA	DEVON ICE CAP NW	39	20130999	20140999 DSG4AWS	75.691	-83.242	315	-837	BA
CA	DEVON ICE CAP NW	39	20130999	20140999 DSG4A	75.693	-83.250	312	-837	BA
CA	DEVON ICE CAP NW	39	20130999	20140999 DSG3	75.699	-83.230	292	-632	BA
CA	DEVON ICE CAP NW	39	20130999	20140999 DSG2	75.706	-83.190	231	-917	BA
CA	DEVON ICE CAP NW	39	20130999	20140999 DSG1	75.723	-83.179	179	-908	BA
CA	DEVON ICE CAP NW	39	20130999	20140999 DSG1B	75.727	-83.171	157	-819	BA
CA	DEVON ICE CAP NW	39	20130999	20140999 DSG0	75.732	-83.194	137	-890	BA
CA	DEVON ICE CAP NW	39	20140510	20140999 H	75.369	-82.670	1829	10	BS
CA	DEVON ICE CAP NW	39	20140510	20140999 FH	75.381	-82.728	1769	10	BS
CA	DEVON ICE CAP NW	39	20140510	20140999 F	75.386	-82.763	1737	10	BS
CA	DEVON ICE CAP NW	39	20140510	20140999 EF	75.394	-82.804	1707	10	BS
CA	DEVON ICE CAP NW	39	20140510	20140999 E	75.405	-82.855	1687	15	BS
CA	DEVON ICE CAP NW	39	20140510	20140999 DE	75.412	-82.906	1663	15	BS
CA	DEVON ICE CAP NW	39	20140510	20140999 D	75.422	-82.947	1638	15	BS
CA	DEVON ICE CAP NW	39	20140510	20140999 K	75.431	-82.994	1592	-31	BS
CA	DEVON ICE CAP NW	39	20140510	20140999 ML	75.450	-83.089	1507	-63	BS
CA	DEVON ICE CAP NW	39	20140510	20140999 M	75.454	-83.103	1491	-95	BS
CA	DEVON ICE CAP NW	39	20140510	20140999 N / OM	75.474	-83.208	1398	-190	BS
CA	DEVON ICE CAP NW	39	20140510	20140999 O	75.487	-83.278	1363	-182	BS
CA	DEVON ICE CAP NW	39	20140510	20140999 ICS	75.492	-83.308	1343	-167	BS
CA	DEVON ICE CAP NW	39	20140510	20140999 DSG10	75.510	-83.256	1305	-263	BS
CA	DEVON ICE CAP NW	39	20140510	20140999 DVT1	75.502	-83.348	1297	-352	BS
CA	DEVON ICE CAP NW	39	20140510	20140999 DSG92	75.515	-83.237	1283	-357	BS
CA	DEVON ICE CAP NW	39	20140510	20140999 DSG91	75.525	-83.196	1239	-423	BS
CA	DEVON ICE CAP NW	39	20140510	20140999 DVT2	75.511	-83.401	1202	-335	BS
CA	DEVON ICE CAP NW	39	20140510	20140999 DSG91B	75.529	-83.184	1198	-385	BS
CA	DEVON ICE CAP NW	39	20140510	20140999 DVT6	75.515	-83.417	1197	-362	BS
CA	DEVON ICE CAP NW	39	20140510	20140999 DVT7	75.517	-83.433	1152	-420	BS
CA	DEVON ICE CAP NW	39	20140510	20140999 DVT8.1	75.522	-83.453	1121	-498	BS
CA	DEVON ICE CAP NW	39	20140510	20140999 DVT9	75.526	-83.471	1103	-482	BS
CA	DEVON ICE CAP NW	39	20140510	20140999 DSG9	75.533	-83.163	1102	-525	BS
CA	DEVON ICE CAP NW	39	20140510	20140999 DVT10.2	75.540	-83.519	1050	-325	BS
CA	DEVON ICE CAP NW	39	20140510	20140999 DVT10.4	75.550	-83.552	1001	-403	BS
CA	DEVON ICE CAP NW	39	20140510	20140999 DVT11	75.558	-83.593	962	-517	BS
CA	DEVON ICE CAP NW	39	20140510	20140999 DVT12	75.564	-83.603	931	-590	BS
CA	DEVON ICE CAP NW	39	20140510	20140999 DSG73	75.567	-83.155	831	-800	BS
CA	DEVON ICE CAP NW	39	20140510	20140999 DSG72	75.588	-83.141	768	-603	BS
CA	DEVON ICE CAP NW	39	20140510	20140999 DSG70	75.605	-83.108	675	-953	BS
CA	DEVON ICE CAP NW	39	20140510	20140999 DSG6	75.615	-83.088	622	-957	BS

Table 5

PU	GLACIER_NAME	WGMS_ID	FROM	TO POINT_ID	LAT	LON	ELEV	MB	MB_CODE
CA	DEVON ICE CAP NW	39	20140510	20140999 DSG52	75.645	-83.194	499	-785	BS
CA	DEVON ICE CAP NW	39	20140510	20140999 DSG53	75.633	-83.134	460	-810	BS
CA	DEVON ICE CAP NW	39	20140510	20140999 DSG51	75.666	-83.252	388	-790	BS
CA	DEVON ICE CAP NW	39	20140510	20140999 DSG5	75.671	-83.258	369	-986	BS
CA	DEVON ICE CAP NW	39	20140510	20140999 DSG4AWS	75.691	-83.242	315	-968	BS
CA	DEVON ICE CAP NW	39	20140510	20140999 DSG4A	75.693	-83.250	312	-970	BS
CA	DEVON ICE CAP NW	39	20140510	20140999 DSG3	75.699	-83.230	292	-783	BS
CA	DEVON ICE CAP NW	39	20140510	20140999 DSG2	75.706	-83.190	231	-1030	BS
CA	DEVON ICE CAP NW	39	20140510	20140999 DSG1	75.723	-83.179	179	-1068	BS
CA	DEVON ICE CAP NW	39	20140510	20140999 DSG1B	75.727	-83.171	157	-956	BS
CA	DEVON ICE CAP NW	39	20140510	20140999 DSG0	75.732	-83.194	137	-1045	BS
CA	MEIGHEN ICE CAP	16	20130999	20140417 32	79.931	-99.115	253	206	BW
CA	MEIGHEN ICE CAP	16	20130999	20140417 31	79.937	-99.121	252	210	BW
CA	MEIGHEN ICE CAP	16	20130999	20140417 33	79.929	-99.104	249	170	BW
CA	MEIGHEN ICE CAP	16	20130999	20140417 26	79.961	-99.134	240	212	BW
CA	MEIGHEN ICE CAP	16	20130999	20140417 25	79.961	-99.162	240	204	BW
CA	MEIGHEN ICE CAP	16	20130999	20140417 27	79.962	-99.119	231	219	BW
CA	MEIGHEN ICE CAP	16	20130999	20140417 24	79.960	-99.185	225	223	BW
CA	MEIGHEN ICE CAP	16	20130999	20140417 21	79.968	-99.147	222	228	BW
CA	MEIGHEN ICE CAP	16	20130999	20140417 37	79.939	-99.073	220	193	BW
CA	MEIGHEN ICE CAP	16	20130999	20140417 28	79.963	-99.106	220	240	BW
CA	MEIGHEN ICE CAP	16	20130999	20140417 20	79.973	-99.140	216	215	BW
CA	MEIGHEN ICE CAP	16	20130999	20140417 35	79.976	-99.156	213	212	BW
CA	MEIGHEN ICE CAP	16	20130999	20140417 33a	79.919	-99.107	208	219	BW
CA	MEIGHEN ICE CAP	16	20130999	20140417 23	79.962	-99.210	206	248	BW
CA	MEIGHEN ICE CAP	16	20130999	20140417 34	79.980	-99.100	185	232	BW
CA	MEIGHEN ICE CAP	16	20130999	20140417 35a	79.977	-99.235	182	279	BW
CA	MEIGHEN ICE CAP	16	20130999	20140417 16	80.000	-99.103	175	227	BW
CA	MEIGHEN ICE CAP	16	20130999	20140417 14	80.001	-99.157	172	242	BW
CA	MEIGHEN ICE CAP	16	20130999	20140417 30	79.962	-99.059	160	253	BW
CA	MEIGHEN ICE CAP	16	20130999	20140417 34a	79.972	-99.057	160	229	BW
CA	MEIGHEN ICE CAP	16	20130999	20140417 17	80.000	-99.092	160	214	BW
CA	MEIGHEN ICE CAP	16	20130999	20140417 13	80.004	-99.205	156	217	BW
CA	MEIGHEN ICE CAP	16	20130999	20140417 12	80.005	-99.247	153	223	BW
CA	MEIGHEN ICE CAP	16	20130999	20140417 18	80.000	-99.049	152	242	BW
CA	MEIGHEN ICE CAP	16	20130999	20140417 11	80.005	-99.274	143	215	BW
CA	MEIGHEN ICE CAP	16	20130999	20140417 21a	79.962	-99.314	139	246	BW
CA	MEIGHEN ICE CAP	16	20130999	20140417 35b	79.979	-99.321	135	207	BW
CA	MEIGHEN ICE CAP	16	20130999	20140417 9	80.019	-99.158	130	247	BW
CA	MEIGHEN ICE CAP	16	20130999	20140417 8	80.017	-99.107	124	212	BW
CA	MEIGHEN ICE CAP	16	20130999	20140417 10	80.006	-99.312	123	211	BW
CA	MEIGHEN ICE CAP	16	20130999	20140417 5	80.031	-99.203	106	254	BW
CA	MEIGHEN ICE CAP	16	20130999	20140999 32	79.931	-99.115	253	24	BA
CA	MEIGHEN ICE CAP	16	20130999	20140999 31	79.937	-99.121	252	12	BA
CA	MEIGHEN ICE CAP	16	20130999	20140999 33	79.929	-99.104	249	42	BA
CA	MEIGHEN ICE CAP	16	20130999	20140999 26	79.961	-99.134	240	72	BA
CA	MEIGHEN ICE CAP	16	20130999	20140999 25	79.961	-99.162	240	12	BA
CA	MEIGHEN ICE CAP	16	20130999	20140999 27	79.962	-99.119	231	132	BA
CA	MEIGHEN ICE CAP	16	20130999	20140999 24	79.960	-99.185	225	120	BA
CA	MEIGHEN ICE CAP	16	20130999	20140999 21	79.968	-99.147	222	60	BA
CA	MEIGHEN ICE CAP	16	20130999	20140999 37	79.939	-99.073	220	144	BA
CA	MEIGHEN ICE CAP	16	20130999	20140999 28	79.963	-99.106	220	66	BA
CA	MEIGHEN ICE CAP	16	20130999	20140999 20	79.973	-99.140	216	12	BA
CA	MEIGHEN ICE CAP	16	20130999	20140999 35	79.976	-99.156	213	54	BA
CA	MEIGHEN ICE CAP	16	20130999	20140999 33a	79.919	-99.107	208	-30	BA
CA	MEIGHEN ICE CAP	16	20130999	20140999 23	79.962	-99.210	206	36	BA
CA	MEIGHEN ICE CAP	16	20130999	20140999 34	79.980	-99.100	185	126	BA
CA	MEIGHEN ICE CAP	16	20130999	20140999 35a	79.977	-99.235	182	108	BA
CA	MEIGHEN ICE CAP	16	20130999	20140999 16	80.000	-99.103	175	36	BA
CA	MEIGHEN ICE CAP	16	20130999	20140999 14	80.001	-99.157	172	192	BA
CA	MEIGHEN ICE CAP	16	20130999	20140999 30	79.962	-99.059	160	30	BA
CA	MEIGHEN ICE CAP	16	20130999	20140999 17	80.000	-99.092	160	12	BA
CA	MEIGHEN ICE CAP	16	20130999	20140999 34a	79.972	-99.057	160	48	BA
CA	MEIGHEN ICE CAP	16	20130999	20140999 13	80.004	-99.205	156	36	BA
CA	MEIGHEN ICE CAP	16	20130999	20140999 12	80.005	-99.247	153	168	BA
CA	MEIGHEN ICE CAP	16	20130999	20140999 18	80.000	-99.049	152	108	BA
CA	MEIGHEN ICE CAP	16	20130999	20140999 11	80.005	-99.274	143	84	BA
CA	MEIGHEN ICE CAP	16	20130999	20140999 21a	79.962	-99.314	139	18	BA
CA	MEIGHEN ICE CAP	16	20130999	20140999 35b	79.979	-99.321	135	36	BA
CA	MEIGHEN ICE CAP	16	20130999	20140999 9	80.019	-99.158	130	114	BA
CA	MEIGHEN ICE CAP	16	20130999	20140999 8	80.017	-99.107	124	-6	BA
CA	MEIGHEN ICE CAP	16	20130999	20140999 10	80.006	-99.312	123	24	BA
CA	MEIGHEN ICE CAP	16	20130999	20140999 5	80.031	-99.203	106	72	BA
CA	MEIGHEN ICE CAP	16	20140417	20140999 32	79.931	-99.115	253	-182	BS
CA	MEIGHEN ICE CAP	16	20140417	20140999 31	79.937	-99.121	252	-198	BS
CA	MEIGHEN ICE CAP	16	20140417	20140999 33	79.929	-99.104	249	-128	BS
CA	MEIGHEN ICE CAP	16	20140417	20140999 26	79.961	-99.134	240	-140	BS
CA	MEIGHEN ICE CAP	16	20140417	20140999 25	79.961	-99.162	240	-192	BS
CA	MEIGHEN ICE CAP	16	20140417	20140999 27	79.962	-99.119	231	-87	BS
CA	MEIGHEN ICE CAP	16	20140417	20140999 24	79.960	-99.185	225	-103	BS
CA	MEIGHEN ICE CAP	16	20140417	20140999 21	79.968	-99.147	222	-168	BS
CA	MEIGHEN ICE CAP	16	20140417	20140999 37	79.939	-99.073	220	-49	BS
CA	MEIGHEN ICE CAP	16	20140417	20140999 28	79.963	-99.106	220	-174	BS
CA	MEIGHEN ICE CAP	16	20140417	20140999 20	79.973	-99.140	216	-203	BS
CA	MEIGHEN ICE CAP	16	20140417	20140999 35	79.976	-99.156	213	-158	BS
CA	MEIGHEN ICE CAP	16	20140417	20140999 33a	79.919	-99.107	208	-249	BS
CA	MEIGHEN ICE CAP	16	20140417	20140999 23	79.962	-99.210	206	-212	BS
CA	MEIGHEN ICE CAP	16	20140417	20140999 34	79.980	-99.100	185	-106	BS
CA	MEIGHEN ICE CAP	16	20140417	20140999 35a	79.977	-99.235	182	-171	BS
CA	MEIGHEN ICE CAP	16	20140417	20140999 16	80.000	-99.103	175	-191	BS
CA	MEIGHEN ICE CAP	16	20140417	20140999 14	80.001	-99.157	172	-50	BS
CA	MEIGHEN ICE CAP	16	20140417	20140999 34a	79.972	-99.057	160	-181	BS
CA	MEIGHEN ICE CAP	16	20140417	20140999 17	80.000	-99.092	160	-202	BS
CA	MEIGHEN ICE CAP	16	20140417	20140999 30	79.962	-99.059	160	-223	BS
CA	MEIGHEN ICE CAP	16	20140417	20140999 13	80.004	-99.205	156	-181	BS
CA	MEIGHEN ICE CAP	16	20140417	20140999 12	80.005	-99.247	153	-55	BS

PU	GLACIER_NAME	WGMS_ID	FROM	TO	POINT_ID	LAT	Lon	ELEV	MB	MB_CODE
CA	MEIGHEN ICE CAP	16	20140417	20140999	18	80.000	-99.049	152	-134	BS
CA	MEIGHEN ICE CAP	16	20140417	20140999	11	80.005	-99.274	143	-131	BS
CA	MEIGHEN ICE CAP	16	20140417	20140999	21a	79.962	-99.314	139	-228	BS
CA	MEIGHEN ICE CAP	16	20140417	20140999	35b	79.979	-99.321	135	-171	BS
CA	MEIGHEN ICE CAP	16	20140417	20140999	9	80.019	-99.158	130	-133	BS
CA	MEIGHEN ICE CAP	16	20140417	20140999	8	80.017	-99.107	124	-218	BS
CA	MEIGHEN ICE CAP	16	20140417	20140999	10	80.006	-99.312	123	-187	BS
CA	MEIGHEN ICE CAP	16	20140417	20140999	5	80.031	-99.203	106	-182	BS
CA	MELVILLE SOUTH ICE CAP	3690	20130999	20140424	23	75.455	-114.944	716	163	BW
CA	MELVILLE SOUTH ICE CAP	3690	20130999	20140424	17	75.46	-115.003	708	150	BW
CA	MELVILLE SOUTH ICE CAP	3690	20130999	20140424	AWS	75.461	-114.995	707	172	BW
CA	MELVILLE SOUTH ICE CAP	3690	20130999	20140424	25	75.450	-114.935	707	165	BW
CA	MELVILLE SOUTH ICE CAP	3690	20130999	20140424	27	75.451	-114.900	703	173	BW
CA	MELVILLE SOUTH ICE CAP	3690	20130999	20140424	22	75.447	-114.966	696	159	BW
CA	MELVILLE SOUTH ICE CAP	3690	20130999	20140424	35	75.450	-115.015	690	198	BW
CA	MELVILLE SOUTH ICE CAP	3690	20130999	20140424	28	75.439	-114.895	676	192	BW
CA	MELVILLE SOUTH ICE CAP	3690	20130999	20140424	18	75.432	-114.970	650	180	BW
CA	MELVILLE SOUTH ICE CAP	3690	20130999	20140424	16	75.432	-115.001	641	199	BW
CA	MELVILLE SOUTH ICE CAP	3690	20130999	20140424	15	75.436	-115.059	636	203	BW
CA	MELVILLE SOUTH ICE CAP	3690	20130999	20140424	6	75.395	-115.073	635	160	BW
CA	MELVILLE SOUTH ICE CAP	3690	20130999	20140424	14	75.428	-114.939	635	195	BW
CA	MELVILLE SOUTH ICE CAP	3690	20130999	20140424	13	75.426	-115.003	631	223	BW
CA	MELVILLE SOUTH ICE CAP	3690	20130999	20140424	10.1	75.422	-115.010	623	242	BW
CA	MELVILLE SOUTH ICE CAP	3690	20130999	20140424	10	75.414	-115.018	621	191	BW
CA	MELVILLE SOUTH ICE CAP	3690	20130999	20140424	5	75.403	-115.058	621	288	BW
CA	MELVILLE SOUTH ICE CAP	3690	20130999	20140424	11	75.422	-114.966	620	182	BW
CA	MELVILLE SOUTH ICE CAP	3690	20130999	20140424	8	75.416	-114.952	608	261	BW
CA	MELVILLE SOUTH ICE CAP	3690	20130999	20140424	4	75.398	-115.019	606	179	BW
CA	MELVILLE SOUTH ICE CAP	3690	20130999	20140424	7	75.412	-114.984	590	220	BW
CA	MELVILLE SOUTH ICE CAP	3690	20130999	20140424	24	75.406	-114.979	581	245	BW
CA	MELVILLE SOUTH ICE CAP	3690	20130999	20140424	1.1	75.392	-114.949	553	178	BW
CA	MELVILLE SOUTH ICE CAP	3690	20130999	20140999	23	75.455	-114.944	716	-62	BA
CA	MELVILLE SOUTH ICE CAP	3690	20130999	20140999	17	75.46	-115.003	708	-196	BA
CA	MELVILLE SOUTH ICE CAP	3690	20130999	20140999	25	75.450	-114.935	707	-169	BA
CA	MELVILLE SOUTH ICE CAP	3690	20130999	20140999	AWS	75.461	-114.995	707	-249	BA
CA	MELVILLE SOUTH ICE CAP	3690	20130999	20140999	27	75.451	-114.900	703	-160	BA
CA	MELVILLE SOUTH ICE CAP	3690	20130999	20140999	22	75.447	-114.966	696	-205	BA
CA	MELVILLE SOUTH ICE CAP	3690	20130999	20140999	35	75.450	-115.015	690	-223	BA
CA	MELVILLE SOUTH ICE CAP	3690	20130999	20140999	28	75.439	-114.895	676	-89	BA
CA	MELVILLE SOUTH ICE CAP	3690	20130999	20140999	18	75.432	-114.970	650	-231	BA
CA	MELVILLE SOUTH ICE CAP	3690	20130999	20140999	16	75.432	-115.001	641	-125	BA
CA	MELVILLE SOUTH ICE CAP	3690	20130999	20140999	15	75.436	-115.059	636	-205	BA
CA	MELVILLE SOUTH ICE CAP	3690	20130999	20140999	14	75.428	-114.939	635	-89	BA
CA	MELVILLE SOUTH ICE CAP	3690	20130999	20140999	6	75.395	-115.073	635	-223	BA
CA	MELVILLE SOUTH ICE CAP	3690	20130999	20140999	13	75.426	-115.003	631	-116	BA
CA	MELVILLE SOUTH ICE CAP	3690	20130999	20140999	10.1	75.422	-115.010	623	-45	BA
CA	MELVILLE SOUTH ICE CAP	3690	20130999	20140999	5	75.403	-115.058	621	9	BA
CA	MELVILLE SOUTH ICE CAP	3690	20130999	20140999	10	75.414	-115.018	621	-329	BA
CA	MELVILLE SOUTH ICE CAP	3690	20130999	20140999	11	75.422	-114.966	620	-98	BA
CA	MELVILLE SOUTH ICE CAP	3690	20130999	20140999	8	75.416	-114.952	608	-62	BA
CA	MELVILLE SOUTH ICE CAP	3690	20130999	20140999	4	75.398	-115.019	606	-196	BA
CA	MELVILLE SOUTH ICE CAP	3690	20130999	20140999	7	75.412	-114.984	590	-98	BA
CA	MELVILLE SOUTH ICE CAP	3690	20130999	20140999	24	75.406	-114.979	581	-98	BA
CA	MELVILLE SOUTH ICE CAP	3690	20130999	20140999	1.1	75.392	-114.949	553	-401	BA
CA	MELVILLE SOUTH ICE CAP	3690	20140424	20140999	23	75.455	-114.944	716	-225	BS
CA	MELVILLE SOUTH ICE CAP	3690	20140424	20140999	17	75.46	-115.003	708	-346	BS
CA	MELVILLE SOUTH ICE CAP	3690	20140424	20140999	AWS	75.461	-114.995	707	-421	BS
CA	MELVILLE SOUTH ICE CAP	3690	20140424	20140999	25	75.450	-114.935	707	-334	BS
CA	MELVILLE SOUTH ICE CAP	3690	20140424	20140999	27	75.451	-114.900	703	-333	BS
CA	MELVILLE SOUTH ICE CAP	3690	20140424	20140999	22	75.447	-114.966	696	-363	BS
CA	MELVILLE SOUTH ICE CAP	3690	20140424	20140999	35	75.450	-115.015	690	-421	BS
CA	MELVILLE SOUTH ICE CAP	3690	20140424	20140999	28	75.439	-114.895	676	-281	BS
CA	MELVILLE SOUTH ICE CAP	3690	20140424	20140999	18	75.432	-114.970	650	-412	BS
CA	MELVILLE SOUTH ICE CAP	3690	20140424	20140999	16	75.432	-115.001	641	-323	BS
CA	MELVILLE SOUTH ICE CAP	3690	20140424	20140999	15	75.436	-115.059	636	-408	BS
CA	MELVILLE SOUTH ICE CAP	3690	20140424	20140999	6	75.395	-115.073	635	-382	BS
CA	MELVILLE SOUTH ICE CAP	3690	20140424	20140999	14	75.428	-114.939	635	-284	BS
CA	MELVILLE SOUTH ICE CAP	3690	20140424	20140999	13	75.426	-115.003	631	-338	BS
CA	MELVILLE SOUTH ICE CAP	3690	20140424	20140999	10.1	75.422	-115.010	623	-286	BS
CA	MELVILLE SOUTH ICE CAP	3690	20140424	20140999	10	75.414	-115.018	621	-520	BS
CA	MELVILLE SOUTH ICE CAP	3690	20140424	20140999	5	75.403	-115.058	621	-279	BS
CA	MELVILLE SOUTH ICE CAP	3690	20140424	20140999	11	75.422	-114.966	620	-280	BS
CA	MELVILLE SOUTH ICE CAP	3690	20140424	20140999	8	75.416	-114.952	608	-323	BS
CA	MELVILLE SOUTH ICE CAP	3690	20140424	20140999	4	75.398	-115.019	606	-375	BS
CA	MELVILLE SOUTH ICE CAP	3690	20140424	20140999	7	75.412	-114.984	590	-318	BS
CA	MELVILLE SOUTH ICE CAP	3690	20140424	20140999	24	75.406	-114.979	581	-343	BS
CA	MELVILLE SOUTH ICE CAP	3690	20140424	20140999	1.1	75.392	-114.949	553	-578	BS
CA	WHITE	0	20131001	20140930	JGC1	79.538	-90.990	1519	138	BA
CA	WHITE	0	20131001	20140930	CJA1	79.534	-91.028	1480	93	BA
CA	WHITE	0	20131001	20140930	LP2	79.532	-91.019	1459	122	BA
CA	WHITE	0	20131001	20140930	WPA1	79.536	-90.932	1457	162	BA
CA	WHITE	0	20131001	20140930	WPA2	79.533	-90.936	1415	116	BA
CA	WHITE	0	20131001	20140930	DCP1	79.530	-90.999	1411	130	BA
CA	WHITE	0	20131001	20140930	LP4	79.527	-90.979	1374	107	BA
CA	WHITE	0	20131001	20140930	WPA3	79.529	-90.945	1341	144	BA
CA	WHITE	0	20131001	20140930	EXTRA	79.526	-90.968	1324	187	BA
CA	WHITE	0	20131001	20140930	JGC2	79.523	-90.956	1295	106	BA
CA	WHITE	0	20131001	20140930	WPA4	79.522	-90.946	1265	99	BA
CA	WHITE	0	20131001	20140930	WPA5	79.519	-90.96	1261	98	BA
CA	WHITE	0	20131001	20140930	L1	79.520	-90.927	1238	128	BA
CA	WHITE	0	20131001	20140930	QMARK	79.517	-90.899	1228	-306	BA
CA	WHITE	0	20131001	20140930	BLUE2	79.512	-90.882	1170	-189	BA
CA	WHITE	0	20131001	20140930	L16A	79.505	-90.847	1041	-477	BA
CA	WHITE	0	20131001	20140930	L16Z	79.505	-90.847	1041	-414	BA
CA	WHITE	0	20131001	20140930	L18	79.497	-90.824	901	-720	BA
CA	WHITE	0	20131001	20140930	L19	79.495	-90.816	866	-841	BA

Table 5

PU	GLACIER_NAME	WGMS_ID	FROM	TO	POINT_ID	LAT	LON	ELEV	MB	MB_CODE
CA	WHITE	0	20131001	20140930	L20	79.494	-90.811	861	-1053	BA
CA	WHITE	0	20131001	20140930	WG9	79.488	-90.789	747	-1075	BA
CA	WHITE	0	20131001	20140930	LP5	79.484	-90.781	726	-1120	BA
CA	WHITE	0	20131001	20140930	WG8A	79.480	-90.771	702	-940	BA
CA	WHITE	0	20131001	20140930	WG8	79.480	-90.771	702	-976	BA
CA	WHITE	0	20131001	20140930	CWGT	79.477	-90.764	668	-1080	BA
CA	WHITE	0	20131001	20140930	CWGEx	79.473	-90.747	625	-1224	BA
CA	WHITE	0	20131001	20140930	WG7	79.469	-90.755	597	-1134	BA
CA	WHITE	0	20131001	20140930	LP6	79.466	-90.736	556	-1575	BA
CA	WHITE	0	20131001	20140930	LP8	79.459	-90.716	482	-1683	BA
CA	WHITE	0	20131001	20140930	WG6	79.454	-90.704	394	-1435	BA
CA	WHITE	0	20131001	20140930	LP9	79.451	-90.693	367	-1453	BA
CA	WHITE	0	20131001	20140930	ST6	79.446	-90.670	298	-1795	BA
CA	WHITE	0	20131001	20140930	ST4A	79.441	-90.648	242	-1750	BA
CA	WHITE	0	20131001	20140930	WG4	79.437	-90.649	199	-1840	BA
CA	WHITE	0	20131001	20140930	WG5	79.440	-90.628	195	-2124	BA
CA	WHITE	0	20131001	20140930	LP10	79.436	-90.628	180	-2421	BA
CA	WHITE	0	20131001	20140930	ST2	79.436	-90.639	176	-1876	BA
CA	WHITE	0	20131001	20140930	WG3	79.435	-90.658	150	-2178	BA
CA	WHITE	0	20131001	20140930	WG1	79.433	-90.649	122	-2884	BA
CA	WHITE	0	20140505	20150430	JGC1	79.538	-90.990	1519	119	BA
CA	WHITE	0	20140505	20150430	CJA1	79.534	-91.028	1480	188	BA
CA	WHITE	0	20140505	20150430	LP2	79.532	-91.019	1459	119	BA
CA	WHITE	0	20140505	20150430	WPA1	79.536	-90.932	1457	190	BA
CA	WHITE	0	20140505	20150430	WPA2	79.533	-90.936	1415	97	BA
CA	WHITE	0	20140505	20150430	DCP1	79.530	-90.999	1411	119	BA
CA	WHITE	0	20140505	20150430	LP4	79.527	-90.979	1374	95	BA
CA	WHITE	0	20140505	20150430	WPA3	79.529	-90.945	1341	147	BA
CA	WHITE	0	20140505	20150430	EXTRA	79.526	-90.968	1324	91	BA
CA	WHITE	0	20140505	20150430	JGC2	79.523	-90.956	1295	79	BA
CA	WHITE	0	20140505	20150430	WPA4	79.522	-90.946	1265	87	BA
CA	WHITE	0	20140505	20150430	WPA5	79.519	-90.96	1261	28	BA
CA	WHITE	0	20140505	20150430	L1	79.520	-90.927	1238	-315	BA
CA	WHITE	0	20140505	20150430	QMARK	79.517	-90.899	1228	-360	BA
CA	WHITE	0	20140505	20150430	BLUE2	79.512	-90.882	1170	-490	BA
CA	WHITE	0	20140505	20150430	L16A	79.505	-90.847	1041	-1116	BA
CA	WHITE	0	20140505	20150430	L18	79.497	-90.824	901	-1449	BA
CA	WHITE	0	20140505	20150430	L19	79.495	-90.816	866	-1350	BA
CA	WHITE	0	20140505	20150430	L20	79.488	-90.789	861	-1557	BA
CA	WHITE	0	20140505	20150430	WG9A	79.488	-90.789	747	-1471	BA
CA	WHITE	0	20140505	20150430	WG8	79.480	-90.771	702	-1737	BA
CA	WHITE	0	20140505	20150430	CWGT	79.477	-90.764	668	-1764	BA
CA	WHITE	0	20140505	20150430	CWGEx	79.473	-90.747	625	-1845	BA
CA	WHITE	0	20140505	20150430	WG7	79.469	-90.755	597	-1768	BA
CA	WHITE	0	20140505	20150430	LP8	79.459	-90.716	466	-2133	BA
CA	WHITE	0	20140505	20150430	LP9	79.451	-90.693	456	-1926	BA
CA	WHITE	0	20140505	20150430	WG6	79.454	-90.704	398	-2038	BA
CA	WHITE	0	20140505	20150430	LP6	79.466	-90.736	392	-2151	BA
CA	WHITE	0	20140505	20150430	ST6	79.446	-90.670	298	-2493	BA
CA	WHITE	0	20140505	20150430	ST4	79.441	-90.648	242	-2016	BA
CA	WHITE	0	20140505	20150430	WG4	79.437	-90.649	199	-2232	BA
CA	WHITE	0	20140505	20150430	WG5	79.440	-90.628	195	-2560	BA
CA	WHITE	0	20140505	20150430	LP10	79.436	-90.628	180	-2659	BA
CA	WHITE	0	20140505	20150430	ST2	79.436	-90.639	176	-2574	BA
CA	WHITE	0	20140505	20150430	WG3	79.435	-90.658	150	-3370	BA
CH - Switzerland										
CH	ADLER	3801	20130925	20140409	Ag-600	46.011	7.874	3339	1010	BW
CH	ADLER	3801	20130925	20140409	Ag-600o	46.011	7.871	3330	940	BW
CH	ADLER	3801	20130925	20140409	Ag-400	46.011	7.866	3247	840	BW
CH	ADLER	3801	20130925	20140409	Ag-300	46.011	7.861	3131	1130	BW
CH	ADLER	3801	20130925	20140409	Ag-200	46.010	7.858	3076	780	BW
CH	ADLER	3801	20130925	20140927	Ag-600	46.011	7.874	3339	50	BA
CH	ADLER	3801	20130925	20140927	Ag-600o	46.011	7.871	3330	-450	BA
CH	ADLER	3801	20130925	20140927	Ag-400	46.011	7.866	3247	-750	BA
CH	ADLER	3801	20130925	20140927	Ag-300	46.011	7.861	3131	-1450	BA
CH	ADLER	3801	20130925	20140927	Ag-200	46.010	7.858	3076	-1700	BA
CH	ADLER	3801	20140409	20140927	Ag-600	46.011	7.874	3339	-960	BS
CH	ADLER	3801	20140409	20140927	Ag-600o	46.011	7.871	3330	-1390	BS
CH	ADLER	3801	20140409	20140927	Ag-400	46.011	7.866	3247	-1590	BS
CH	ADLER	3801	20140409	20140927	Ag-300	46.011	7.861	3131	-2580	BS
CH	ADLER	3801	20140409	20140927	Ag-200	46.010	7.858	3076	-2480	BS
CH	ADLER	3801	20140927	20150409	Ag-600	46.011	7.874	3339	1150	BW
CH	ADLER	3801	20140927	20150409	Ag-400	46.011	7.866	3242	1000	BW
CH	ADLER	3801	20140927	20150409	Ag-200	46.010	7.858	3076	900	BW
CH	ADLER	3801	20140927	20150921	Ag-600	46.011	7.874	3339	-500	BA
CH	ADLER	3801	20140927	20150921	Ag-400	46.011	7.866	3242	-1600	BA
CH	ADLER	3801	20140927	20150921	Ag-200	46.010	7.858	3076	-2790	BA
CH	ALLALIN	394	20130829	20140902	9	46.031	7.918	3370	490	BA
CH	ALLALIN	394	20130829	20140902	8	46.031	7.918	3370	490	BA
CH	ALLALIN	394	20130829	20140902	6	46.040	7.911	3221	-441	BA
CH	ALLALIN	394	20130829	20140902	7	46.040	7.911	3221	-441	BA
CH	ALLALIN	394	20130829	20140902	5	46.048	7.933	2862	-2700	BA
CH	ALLALIN	394	20130829	20140902	4	46.047	7.933	2842	-1980	BA
CH	ALLALIN	394	20130829	20140902	3	46.047	7.934	2833	-1980	BA
CH	ALLALIN	394	20130829	20140902	2	46.046	7.934	2833	-1530	BA
CH	ALLALIN	394	20130829	20140902	1	46.045	7.935	2829	-2700	BA
CH	ALLALIN	394	20140902	20150921	106	46.031	7.918	3370	319	BA
CH	ALLALIN	394	20140902	20150921	100b	46.040	7.911	3221	-1224	BA
CH	ALLALIN	394	20140902	20150921	100a	46.040	7.911	3219	-666	BA
CH	ALLALIN	394	20140902	20150921	105	46.048	7.933	2862	-4500	BA
CH	ALLALIN	394	20140902	20150921	104	46.047	7.933	2842	-4140	BA
CH	ALLALIN	394	20140902	20150921	103	46.047	7.934	2833	-4500	BA
CH	ALLALIN	394	20140902	20150921	101	46.045	7.935	2829	-4500	BA
CH	BASODINO	463	20140926	20150831	15	46.415	8.471	3020	-1440	BA
CH	BASODINO	463	20140926	20150831	8	46.413	8.474	3020	90	BA

PU	GLACIER_NAME	WGMS_ID	FROM	TO POINT_ID	LAT	Lon	ELEV	MB	MB_CODE
CH	BASODINO	463	20140926	20150831 12	46.414	8.476	2970	-140	BA
CH	BASODINO	463	20140926	20150831 14	46.416	8.479	2874	-1428	BA
CH	BASODINO	463	20140926	20150831 16	46.420	8.475	2848	-1728	BA
CH	BASODINO	463	20140926	20150831 2	46.418	8.480	2792	-2440	BA
CH	BASODINO	463	20140926	20150831 9	46.417	8.487	2738	-1292	BA
CH	BASODINO	463	20140926	20150831 10	46.417	8.492	2680	-1819	BA
CH	BASODINO	463	20140926	20150831 11	46.416	8.496	2586	-1080	BA
CH	BASODINO	463	20149999	20150525 8	46.413	8.474	3020	2300	BW
CH	BASODINO	463	20149999	20150525 15	46.415	8.471	3020	1900	BW
CH	BASODINO	463	20149999	20150525 12	46.414	8.476	2970	1900	BW
CH	BASODINO	463	20149999	20150525 14	46.416	8.479	2874	1750	BW
CH	BASODINO	463	20149999	20150525 16	46.420	8.475	2848	1850	BW
CH	BASODINO	463	20149999	20150525 2	46.418	8.480	2792	1700	BW
CH	BASODINO	463	20149999	20150525 9	46.417	8.487	2738	1700	BW
CH	BASODINO	463	20149999	20150525 10	46.417	8.492	2680	2300	BW
CH	BASODINO	463	20149999	20150525 11	46.416	8.496	2586	2250	BW
CH	CLARIDENFIRN	2660	20130906	20140518 2	46.844	8.889	2894	1882	BW
CH	CLARIDENFIRN	2660	20130906	20140518 1	46.855	8.911	2679	1840	BW
CH	CLARIDENFIRN	2660	20130906	20140915 2	46.844	8.889	2894	837	BA
CH	CLARIDENFIRN	2660	20130906	20140915 1	46.855	8.911	2679	-212	BA
CH	CLARIDENFIRN	2660	20140518	20140915 2	46.844	8.889	2894	-1045	BS
CH	CLARIDENFIRN	2660	20140518	20140915 1	46.855	8.911	2679	-2052	BS
CH	CLARIDENFIRN	2660	20140915	20150514 U	46.844	8.889	2889	2294	BW
CH	CLARIDENFIRN	2660	20140915	20150514 L	46.855	8.911	2667	1901	BW
CH	CLARIDENFIRN	2660	20140915	20151011 U	46.844	8.889	2889	348	BA
CH	CLARIDENFIRN	2660	20140915	20151011 L	46.855	8.911	2667	-2133	BA
CH	CORBASSIERE	366	20130925	20140908 7	45.989	7.300	2660	-2835	BA
CH	CORBASSIERE	366	20130925	20140908 6	45.989	7.302	2655	-2925	BA
CH	CORBASSIERE	366	20130925	20140908 5	45.990	7.304	2653	-2763	BA
CH	CORBASSIERE	366	20130925	20140908 4	45.994	7.299	2630	-3447	BA
CH	CORBASSIERE	366	20130925	20140908 3	45.999	7.288	2476	-2574	BA
CH	CORBASSIERE	366	20130925	20140908 2	46.000	7.291	2473	-4041	BA
CH	CORBASSIERE	366	20130925	20140908 1	46.000	7.290	2469	-3591	BA
CH	CORBASSIERE	366	20140908	20150908 625	45.989	7.300	2637	-4635	BA
CH	CORBASSIERE	366	20140908	20150908 623	45.989	7.302	2634	-4284	BA
CH	CORBASSIERE	366	20140908	20150908 621	45.990	7.304	2631	-4752	BA
CH	CORBASSIERE	366	20140908	20150908 670	45.994	7.299	2597	-5175	BA
CH	CORBASSIERE	366	20140908	20150908 722	46.000	7.291	2436	-5967	BA
CH	CORBASSIERE	366	20140908	20150908 725	45.999	7.288	2430	-3735	BA
CH	CORBASSIERE	366	20140908	20150908 723	46.000	7.290	2429	-5256	BA
CH	CORVATSC SOUTH	4535	20130831	20140415 COR212	46.415	9.822	3322	860	BW
CH	CORVATSC SOUTH	4535	20130831	20140415 COR1013	46.414	9.822	3297	1590	BW
CH	CORVATSC SOUTH	4535	20130831	20140415 COR112	46.416	9.822	3292	940	BW
CH	CORVATSC SOUTH	4535	20130831	20140415 COR312	46.416	9.823	3288	940	BW
CH	CORVATSC SOUTH	4535	20130831	20140415 COR412	46.417	9.824	3258	1110	BW
CH	CORVATSC SOUTH	4535	20130831	20140415 TSL_a	46.417	9.824	3255	1110	BW
CH	CORVATSC SOUTH	4535	20130831	20140415 TSL_b	46.418	9.825	3240	1110	BW
CH	CORVATSC SOUTH	4535	20130831	20140415 COR512	46.419	9.826	3221	910	BW
CH	CORVATSC SOUTH	4535	20130831	20140415 COR612	46.420	9.826	3212	840	BW
CH	CORVATSC SOUTH	4535	20130831	20140415 COR712	46.420	9.827	3186	1090	BW
CH	CORVATSC SOUTH	4535	20130831	20140415 COR812	46.420	9.828	3156	1090	BW
CH	CORVATSC SOUTH	4535	20130831	20140415 COR912	46.421	9.828	3100	1400	BW
CH	CORVATSC SOUTH	4535	20130831	20140830 COR212	46.415	9.822	3322	100	BA
CH	CORVATSC SOUTH	4535	20130831	20140830 COR1013	46.414	9.822	3297	350	BA
CH	CORVATSC SOUTH	4535	20130831	20140830 COR112	46.416	9.822	3292	400	BA
CH	CORVATSC SOUTH	4535	20130831	20140830 COR312	46.416	9.823	3288	190	BA
CH	CORVATSC SOUTH	4535	20130831	20140830 COR412	46.417	9.824	3258	100	BA
CH	CORVATSC SOUTH	4535	20130831	20140830 TSL_a	46.417	9.824	3255	-250	BA
CH	CORVATSC SOUTH	4535	20130831	20140830 TSL_b	46.418	9.825	3240	-250	BA
CH	CORVATSC SOUTH	4535	20130831	20140830 COR512	46.419	9.826	3221	-250	BA
CH	CORVATSC SOUTH	4535	20130831	20140830 COR612	46.420	9.826	3212	0	BA
CH	CORVATSC SOUTH	4535	20130831	20140830 COR712	46.420	9.827	3186	-290	BA
CH	CORVATSC SOUTH	4535	20130831	20140830 COR812	46.420	9.828	3156	-170	BA
CH	CORVATSC SOUTH	4535	20130831	20140830 COR912	46.421	9.828	3100	80	BA
CH	CORVATSC SOUTH	4535	20140415	20140830 COR212	46.415	9.822	3322	-760	BS
CH	CORVATSC SOUTH	4535	20140415	20140830 COR1013	46.414	9.822	3297	-1240	BS
CH	CORVATSC SOUTH	4535	20140415	20140830 COR112	46.416	9.822	3292	-540	BS
CH	CORVATSC SOUTH	4535	20140415	20140830 COR312	46.416	9.823	3288	-750	BS
CH	CORVATSC SOUTH	4535	20140415	20140830 COR412	46.417	9.824	3258	-1010	BS
CH	CORVATSC SOUTH	4535	20140415	20140830 TSL_a	46.417	9.824	3255	-1360	BS
CH	CORVATSC SOUTH	4535	20140415	20140830 TSL_b	46.418	9.825	3240	-1360	BS
CH	CORVATSC SOUTH	4535	20140415	20140830 COR512	46.419	9.826	3221	-1160	BS
CH	CORVATSC SOUTH	4535	20140415	20140830 COR612	46.420	9.826	3212	-840	BS
CH	CORVATSC SOUTH	4535	20140415	20140830 COR712	46.420	9.827	3186	-1380	BS
CH	CORVATSC SOUTH	4535	20140415	20140830 COR812	46.420	9.828	3156	-1260	BS
CH	CORVATSC SOUTH	4535	20140415	20140830 COR912	46.421	9.828	3100	-1320	BS
CH	CORVATSC SOUTH	4535	20141004	20150419 312	46.416	9.823	3288	640	BW
CH	CORVATSC SOUTH	4535	20141004	20150419 712	46.420	9.827	3186	1060	BW
CH	CORVATSC SOUTH	4535	20141004	20150419 812	46.420	9.828	3156	1060	BW
CH	CORVATSC SOUTH	4535	20141004	20150919 312	46.416	9.823	3288	-1670	BA
CH	CORVATSC SOUTH	4535	20141004	20150919 712	46.420	9.827	3186	-2070	BA
CH	CORVATSC SOUTH	4535	20141004	20150919 812	46.420	9.828	3156	-1870	BA
CH	FINDELEN	389	20130925	20140409 FI-1020	45.982	7.879	3449	1900	BW
CH	FINDELEN	389	20130925	20140409 FI-1010	45.996	7.891	3341	1290	BW
CH	FINDELEN	389	20130925	20140409 FI-910	46.000	7.882	3258	1190	BW
CH	FINDELEN	389	20130925	20140409 FI-940	45.989	7.872	3249	1280	BW
CH	FINDELEN	389	20130925	20140409 FI-810	46.001	7.869	3150	780	BW
CH	FINDELEN	389	20130925	20140409 FI-800	45.996	7.868	3116	1020	BW
CH	FINDELEN	389	20130925	20140409 FI-820	45.994	7.859	3088	980	BW
CH	FINDELEN	389	20130925	20140409 FI-700	46.000	7.858	3036	1000	BW
CH	FINDELEN	389	20130925	20140409 FI-610	46.006	7.856	2952	1150	BW
CH	FINDELEN	389	20130925	20140409 FI-500	46.007	7.853	2909	830	BW
CH	FINDELEN	389	20130925	20140409 FI-400	46.009	7.845	2802	550	BW
CH	FINDELEN	389	20130925	20140409 FI-320	46.008	7.839	2705	490	BW
CH	FINDELEN	389	20130925	20140409 FI-310	46.010	7.837	2691	290	BW
CH	FINDELEN	389	20130925	20140409 FI-200	46.010	7.830	2623	370	BW

Table 5

PU	GLACIER_NAME	WGMS_ID	FROM	TO POINT_ID	LAT	LON	ELEV	MB	MB_CODE
CH	FINDELEN	389	20130925	20140927 FI-1020	45.982	7.879	3449	1640	BA
CH	FINDELEN	389	20130925	20140927 FI-1010	45.996	7.891	3341	1010	BA
CH	FINDELEN	389	20130925	20140927 FI-910	46.000	7.882	3258	400	BA
CH	FINDELEN	389	20130925	20140927 FI-940	45.989	7.872	3249	350	BA
CH	FINDELEN	389	20130925	20140927 FI-810	46.001	7.869	3150	-930	BA
CH	FINDELEN	389	20130925	20140927 FI-800	45.996	7.868	3116	-610	BA
CH	FINDELEN	389	20130925	20140927 FI-820	45.994	7.859	3088	-890	BA
CH	FINDELEN	389	20130925	20140927 FI-700	46.000	7.858	3036	-1320	BA
CH	FINDELEN	389	20130925	20140927 FI-610	46.006	7.856	2952	-2110	BA
CH	FINDELEN	389	20130925	20140927 FI-500	46.007	7.853	2909	-2350	BA
CH	FINDELEN	389	20130925	20140927 FI-400	46.009	7.845	2802	-3550	BA
CH	FINDELEN	389	20130925	20140927 FI-320	46.008	7.839	2705	-5260	BA
CH	FINDELEN	389	20130925	20140927 FI-310	46.010	7.837	2691	-4410	BA
CH	FINDELEN	389	20130925	20140927 FI-200	46.010	7.830	2623	-6120	BA
CH	FINDELEN	389	20140409	20140927 FI-1020	45.982	7.879	3449	-260	BS
CH	FINDELEN	389	20140409	20140927 FI-1010	45.996	7.891	3341	-280	BS
CH	FINDELEN	389	20140409	20140927 FI-910	46.000	7.882	3258	-790	BS
CH	FINDELEN	389	20140409	20140927 FI-940	45.989	7.872	3249	-930	BS
CH	FINDELEN	389	20140409	20140927 FI-810	46.001	7.869	3150	-1710	BS
CH	FINDELEN	389	20140409	20140927 FI-800	45.996	7.868	3116	-1630	BS
CH	FINDELEN	389	20140409	20140927 FI-820	45.994	7.859	3088	-1870	BS
CH	FINDELEN	389	20140409	20140927 FI-700	46.000	7.858	3036	-2320	BS
CH	FINDELEN	389	20140409	20140927 FI-610	46.006	7.856	2952	-3260	BS
CH	FINDELEN	389	20140409	20140927 FI-500	46.007	7.853	2909	-3180	BS
CH	FINDELEN	389	20140409	20140927 FI-400	46.009	7.845	2802	-4100	BS
CH	FINDELEN	389	20140409	20140927 FI-320	46.008	7.839	2705	-5750	BS
CH	FINDELEN	389	20140409	20140927 FI-310	46.010	7.837	2691	-4700	BS
CH	FINDELEN	389	20140409	20140927 FI-200	46.010	7.830	2623	-6490	BS
CH	FINDELEN	389	20140927	20150409 FI-1020	45.982	7.879	3450	1300	BW
CH	FINDELEN	389	20140927	20150409 FI-1010	45.996	7.892	3345	1330	BW
CH	FINDELEN	389	20140927	20150409 FI-910	46.000	7.882	3255	1370	BW
CH	FINDELEN	389	20140927	20150409 FI-940	45.989	7.872	3247	1130	BW
CH	FINDELEN	389	20140927	20150409 FI-810	46.001	7.869	3146	1240	BW
CH	FINDELEN	389	20140927	20150409 FI-800	45.995	7.869	3122	1360	BW
CH	FINDELEN	389	20140927	20150409 FI-800o	45.996	7.868	3116	1310	BW
CH	FINDELEN	389	20140927	20150409 FI-820	45.995	7.859	3086	970	BW
CH	FINDELEN	389	20140927	20150409 FI-700	46.000	7.858	3035	1060	BW
CH	FINDELEN	389	20140927	20150409 FI-610	46.006	7.857	2961	1010	BW
CH	FINDELEN	389	20140927	20150409 FI-500	46.006	7.854	2917	900	BW
CH	FINDELEN	389	20140927	20150409 FI-320	46.008	7.839	2705	630	BW
CH	FINDELEN	389	20140927	20150409 FI-310	46.010	7.838	2694	640	BW
CH	FINDELEN	389	20140927	20150409 FI-200	46.010	7.830	2623	630	BW
CH	FINDELEN	389	20140927	20150921 FI-1020	45.982	7.879	3450	1240	BA
CH	FINDELEN	389	20140927	20150921 FI-1010	45.996	7.892	3345	660	BA
CH	FINDELEN	389	20140927	20150921 FI-910	46.000	7.882	3255	-250	BA
CH	FINDELEN	389	20140927	20150921 FI-940	45.989	7.872	3247	-170	BA
CH	FINDELEN	389	20140927	20150921 FI-810	46.001	7.869	3146	-2010	BA
CH	FINDELEN	389	20140927	20150921 FI-800	45.995	7.869	3122	-1280	BA
CH	FINDELEN	389	20140927	20150921 FI-800o	45.996	7.868	3116	-930	BA
CH	FINDELEN	389	20140927	20150921 FI-820	45.995	7.859	3086	-2330	BA
CH	FINDELEN	389	20140927	20150921 FI-700	46.000	7.858	3035	-2610	BA
CH	FINDELEN	389	20140927	20150921 FI-610	46.006	7.857	2961	-3560	BA
CH	FINDELEN	389	20140927	20150921 FI-500	46.006	7.854	2917	-3880	BA
CH	FINDELEN	389	20140927	20150921 FI-320	46.008	7.839	2705	-7030	BA
CH	FINDELEN	389	20140927	20150921 FI-310	46.010	7.838	2694	-5730	BA
CH	FINDELEN	389	20140927	20150921 FI-200	46.010	7.830	2623	-7780	BA
CH	GIETRO	367	20130925	20140908 9	45.983	7.389	3308	290	BA
CH	GIETRO	367	20130925	20140908 8	45.987	7.395	3255	225	BA
CH	GIETRO	367	20130925	20140908 7	45.992	7.390	3191	-168	BA
CH	GIETRO	367	20130925	20140908 6	45.999	7.382	3060	-846	BA
CH	GIETRO	367	20130925	20140908 5	46.002	7.372	2926	-2439	BA
CH	GIETRO	367	20130925	20140908 4	46.003	7.370	2873	-2790	BA
CH	GIETRO	367	20130925	20140908 3	46.002	7.368	2809	-3942	BA
CH	GIETRO	367	20130925	20140908 2	46.002	7.367	2774	-4203	BA
CH	GIETRO	367	20130925	20140908 1	46.001	7.366	2690	-4554	BA
CH	GIETRO	367	20140908	20150908 1	45.983	7.389	3300	-728	BA
CH	GIETRO	367	20140908	20150908 2	45.987	7.395	3248	-532	BA
CH	GIETRO	367	20140908	20150908 4	45.992	7.390	3187	-1275	BA
CH	GIETRO	367	20140908	20150908 5	45.999	7.382	3054	-2997	BA
CH	GIETRO	367	20140908	20150908 107	46.002	7.372	2931	-4653	BA
CH	GIETRO	367	20140908	20150908 101	46.002	7.371	2873	-4257	BA
CH	GIETRO	367	20140908	20150908 102	46.002	7.369	2825	-6525	BA
CH	GIETRO	367	20140908	20150908 103	46.002	7.369	2806	-6345	BA
CH	GIETRO	367	20140908	20150908 104	46.001	7.368	2774	-5985	BA
CH	GRIES	359	20140910	20150908 113	46.433	8.317	3031	-730	BA
CH	GRIES	359	20140910	20150908 111	46.431	8.318	3030	-1110	BA
CH	GRIES	359	20140910	20150908 112	46.432	8.318	3028	-890	BA
CH	GRIES	359	20140910	20150908 102	46.434	8.323	2997	-1150	BA
CH	GRIES	359	20140910	20150908 101	46.435	8.322	2990	-1460	BA
CH	GRIES	359	20140910	20150908 92	46.436	8.327	2958	-1260	BA
CH	GRIES	359	20140910	20150908 91	46.437	8.327	2951	-1160	BA
CH	GRIES	359	20140910	20150908 81	46.438	8.332	2902	-2370	BA
CH	GRIES	359	20140910	20150908 82	46.438	8.336	2871	-1960	BA
CH	GRIES	359	20140910	20150908 71	46.440	8.341	2773	-2070	BA
CH	GRIES	359	20140910	20150908 61	46.441	8.342	2714	-3380	BA
CH	GRIES	359	20140910	20150908 51	46.445	8.340	2608	-3550	BA
CH	GRIES	359	20140910	20150908 52	46.445	8.341	2601	-2700	BA
CH	GRIES	359	20140910	20150908 41	46.448	8.346	2552	-3990	BA
CH	GRIES	359	20140910	20150908 42	46.448	8.346	2552	-4080	BA
CH	GRIES	359	20140910	20150908 31	46.450	8.350	2535	-3740	BA
CH	GRIES	359	20140910	20150908 22	46.451	8.353	2510	-4870	BA
CH	GRIES	359	20140910	20150908 21	46.452	8.354	2499	-4730	BA
CH	GRIES	359	20149999	20150422 113	46.433	8.317	3031	1680	BW
CH	GRIES	359	20149999	20150422 111	46.431	8.318	3030	1920	BW
CH	GRIES	359	20149999	20150422 112	46.432	8.318	3028	1920	BW
CH	GRIES	359	20149999	20150422 102	46.434	8.323	2997	1900	BW

PU	GLACIER_NAME	WGMS_ID	FROM	TO POINT_ID	LAT	LON	ELEV	MB	MB_CODE
CH	GRIES	359	20149999	20150422 101	46.435	8.322	2990	1870	BW
CH	GRIES	359	20149999	20150422 92	46.436	8.327	2958	1820	BW
CH	GRIES	359	20149999	20150422 91	46.437	8.327	2951	1750	BW
CH	GRIES	359	20149999	20150422 81	46.438	8.332	2902	1780	BW
CH	GRIES	359	20149999	20150422 82	46.438	8.336	2871	1800	BW
CH	GRIES	359	20149999	20150422 71	46.440	8.341	2773	1700	BW
CH	GRIES	359	20149999	20150422 61	46.441	8.342	2714	1700	BW
CH	GRIES	359	20149999	20150422 51	46.445	8.340	2608	1510	BW
CH	GRIES	359	20149999	20150422 52	46.445	8.341	2601	1700	BW
CH	GRIES	359	20149999	20150422 42	46.448	8.346	2552	1490	BW
CH	GRIES	359	20149999	20150422 41	46.448	8.346	2552	1490	BW
CH	GRIES	359	20149999	20150422 31	46.450	8.350	2535	1540	BW
CH	GRIES	359	20149999	20150422 22	46.451	8.353	2510	1440	BW
CH	GRIES	359	20149999	20150422 21	46.452	8.354	2499	1660	BW
CH	HOHLAUB	3332	20130829	20140902 1	46.057	7.922	3032	-864	BA
CH	HOHLAUB	3332	20140902	20150921 110	46.057	7.922	3032	-2070	BA
CH	MURTEL	4339	20130901	20140415 MUR412	46.407	9.822	3211	1570	BW
CH	MURTEL	4339	20130901	20140415 MUR613	46.407	9.823	3201	1760	BW
CH	MURTEL	4339	20130901	20140415 MUR713	46.408	9.823	3197	1450	BW
CH	MURTEL	4339	20130901	20140415 MUR312	46.409	9.825	3178	1490	BW
CH	MURTEL	4339	20130901	20140415 MUR212	46.409	9.826	3142	1550	BW
CH	MURTEL	4339	20130901	20140415 MUR513	46.410	9.827	3119	1360	BW
CH	MURTEL	4339	20130901	20140415 MUR112	46.411	9.828	3100	1360	BW
CH	MURTEL	4339	20130901	20140831 MUR412	46.407	9.822	3211	740	BA
CH	MURTEL	4339	20130901	20140831 MUR613	46.407	9.823	3201	390	BA
CH	MURTEL	4339	20130901	20140831 MUR713	46.408	9.823	3197	770	BA
CH	MURTEL	4339	20130901	20140831 MUR312	46.409	9.825	3178	200	BA
CH	MURTEL	4339	20130901	20140831 MUR212	46.409	9.826	3142	50	BA
CH	MURTEL	4339	20130901	20140831 MUR513	46.410	9.827	3119	200	BA
CH	MURTEL	4339	20130901	20140831 MUR112	46.411	9.828	3100	-320	BA
CH	MURTEL	4339	20140415	20140831 MUR412	46.407	9.822	3211	-830	BS
CH	MURTEL	4339	20140415	20140831 MUR613	46.407	9.823	3201	-1370	BS
CH	MURTEL	4339	20140415	20140831 MUR713	46.408	9.823	3197	-680	BS
CH	MURTEL	4339	20140415	20140831 MUR312	46.409	9.825	3178	-1290	BS
CH	MURTEL	4339	20140415	20140831 MUR212	46.409	9.826	3142	-1500	BS
CH	MURTEL	4339	20140415	20140831 MUR513	46.410	9.827	3119	-1160	BS
CH	MURTEL	4339	20140415	20140831 MUR112	46.411	9.828	3100	-1680	BS
CH	MURTEL	4339	20141004	20150419 412	46.407	9.822	3211	1170	BW
CH	MURTEL	4339	20141004	20150419 713	46.408	9.823	3197	1230	BW
CH	MURTEL	4339	20141004	20150419 312	46.409	9.825	3178	910	BW
CH	MURTEL	4339	20141004	20150419 212	46.409	9.826	3142	1060	BW
CH	MURTEL	4339	20141004	20150419 513	46.410	9.827	3119	810	BW
CH	MURTEL	4339	20141004	20150419 112	46.411	9.828	3100	740	BW
CH	MURTEL	4339	20141004	20150919 412	46.407	9.822	3211	-700	BA
CH	MURTEL	4339	20141004	20150919 713	46.408	9.823	3197	-740	BA
CH	MURTEL	4339	20141004	20150919 312	46.409	9.825	3178	-1080	BA
CH	MURTEL	4339	20141004	20150919 212	46.409	9.826	3142	-1690	BA
CH	MURTEL	4339	20141004	20150919 513	46.410	9.827	3119	-2080	BA
CH	MURTEL	4339	20141004	20150919 112	46.411	9.828	3100	-2210	BA
CH	OBERAAR	451	20130928	20140926 OA2	46.537	8.225	2394	-3960	IN
CH	OBERAAR	451	20140926	20150805 OA2	46.537	8.226	2408	-2745	IN
CH	OBERAAR	451	20150805	20150926 OA2	46.537	8.226	2410	-1782	IN
CH	PIZOL	417	20130923	20140331 312	46.958	9.388	2776	1660	BW
CH	PIZOL	417	20130923	20140331 712	46.959	9.388	2752	1200	BW
CH	PIZOL	417	20130923	20140331 912	46.959	9.390	2713	1010	BW
CH	PIZOL	417	20130923	20140331 211	46.960	9.389	2691	1090	BW
CH	PIZOL	417	20130923	20140331 513	46.960	9.389	2675	990	BW
CH	PIZOL	417	20130923	20140331 812	46.960	9.390	2671	950	BW
CH	PIZOL	417	20130923	20140331 813	46.960	9.390	2668	1050	BW
CH	PIZOL	417	20130923	20140331 413	46.961	9.389	2657	1050	BW
CH	PIZOL	417	20130923	20140331 112	46.961	9.390	2629	1140	BW
CH	PIZOL	417	20130923	20140920 312	46.958	9.388	2776	-950	BA
CH	PIZOL	417	20130923	20140920 712	46.959	9.388	2752	-1380	BA
CH	PIZOL	417	20130923	20140920 912	46.959	9.390	2713	-1170	BA
CH	PIZOL	417	20130923	20140920 211	46.960	9.389	2691	-1140	BA
CH	PIZOL	417	20130923	20140920 513	46.960	9.389	2675	-1490	BA
CH	PIZOL	417	20130923	20140920 812	46.960	9.390	2671	-1500	BA
CH	PIZOL	417	20130923	20140920 813	46.960	9.390	2668	-1710	BA
CH	PIZOL	417	20130923	20140920 413	46.961	9.389	2657	-2310	BA
CH	PIZOL	417	20130923	20140920 112	46.961	9.390	2629	-1310	BA
CH	PIZOL	417	20140331	20140920 312	46.958	9.388	2776	-2610	BS
CH	PIZOL	417	20140331	20140920 712	46.959	9.388	2752	-2580	BS
CH	PIZOL	417	20140331	20140920 912	46.959	9.390	2713	-2180	BS
CH	PIZOL	417	20140331	20140920 211	46.960	9.389	2691	-2230	BS
CH	PIZOL	417	20140331	20140920 513	46.960	9.389	2675	-2480	BS
CH	PIZOL	417	20140331	20140920 812	46.960	9.390	2671	-2450	BS
CH	PIZOL	417	20140331	20140920 813	46.960	9.390	2668	-2760	BS
CH	PIZOL	417	20140331	20140920 413	46.961	9.389	2657	-3360	BS
CH	PIZOL	417	20140331	20140920 112	46.961	9.390	2629	-2450	BS
CH	PIZOL	417	20140920	20150511 914	46.959	9.389	2714	2020	BW
CH	PIZOL	417	20140920	20150511 611	46.959	9.390	2709	1970	BW
CH	PIZOL	417	20140920	20150511 211	46.960	9.389	2691	1860	BW
CH	PIZOL	417	20140920	20150511 514	46.960	9.388	2676	2000	BW
CH	PIZOL	417	20140920	20150511 814	46.960	9.390	2667	1530	BW
CH	PIZOL	417	20140920	20150511 414	46.961	9.389	2661	1550	BW
CH	PIZOL	417	20140920	20150511 114	46.961	9.390	2630	1530	BW
CH	PIZOL	417	20140920	20150927 914	46.959	9.389	2714	-1640	BA
CH	PIZOL	417	20140920	20150927 611	46.959	9.390	2709	-700	BA
CH	PIZOL	417	20140920	20150927 211	46.960	9.389	2691	-1300	BA
CH	PIZOL	417	20140920	20150927 514	46.960	9.388	2676	-1750	BA
CH	PIZOL	417	20140920	20150927 814	46.960	9.390	2667	-2070	BA
CH	PIZOL	417	20140920	20150927 414	46.961	9.389	2661	-3280	BA
CH	PIZOL	417	20140920	20150927 114	46.961	9.390	2630	-1860	BA
CH	PLAINE MORTE	4246	20131002	20140328 plm3-11	46.380	7.510	2724	1200	BW
CH	PLAINE MORTE	4246	20131002	20140328 plm1-14	46.378	7.488	2709	1080	BW
CH	PLAINE MORTE	4246	20131002	20140328 plm6-14	46.381	7.496	2695	1070	BW

Table 5

PU	GLACIER_NAME	WGMS_ID	FROM	TO	POINT_ID	LAT	LON	ELEV	MB	MB_CODE
CH	PLAINE MORTE	4246	20131002	20140328	plm5-11	46.386	7.504	2674	1070	BW
CH	PLAINE MORTE	4246	20131002	20140928	plm3-11	46.380	7.510	2724	-680	BA
CH	PLAINE MORTE	4246	20131002	20140928	plm1-14	46.378	7.488	2709	-1440	BA
CH	PLAINE MORTE	4246	20131002	20140928	plm6-14	46.381	7.496	2695	-1180	BA
CH	PLAINE MORTE	4246	20131002	20140928	plm5-11	46.386	7.504	2674	-1160	BA
CH	PLAINE MORTE	4246	20140328	20140928	plm3-11	46.380	7.510	2724	-1880	BS
CH	PLAINE MORTE	4246	20140328	20140928	plm1-14	46.378	7.488	2709	-2520	BS
CH	PLAINE MORTE	4246	20140328	20140928	plm6-14	46.381	7.496	2695	-2250	BS
CH	PLAINE MORTE	4246	20140328	20140928	plm5-11	46.386	7.504	2674	-2230	BS
CH	PLAINE MORTE	4246	20140928	20150410	plm3-14	46.380	7.510	2721	1310	BW
CH	PLAINE MORTE	4246	20140928	20150410	plm1-14	46.378	7.488	2703	1260	BW
CH	PLAINE MORTE	4246	20140928	20150410	plm6-14	46.381	7.496	2691	1300	BW
CH	PLAINE MORTE	4246	20140928	20150410	plm5-11	46.386	7.504	2670	1390	BW
CH	PLAINE MORTE	4246	20140928	20151023	plm3-14	46.380	7.510	2721	-2220	BA
CH	PLAINE MORTE	4246	20140928	20151023	plm1-14	46.378	7.488	2703	-2890	BA
CH	PLAINE MORTE	4246	20140928	20151023	plm6-14	46.381	7.496	2691	-2480	BA
CH	PLAINE MORTE	4246	20140928	20151023	plm5-11	46.386	7.504	2670	-2620	BA
CH	RHONE	473	20140910	20150422	1404	46.612	8.396	2748	1463	BW
CH	RHONE	473	20140910	20150422	1405	46.605	8.385	2606	732	BW
CH	RHONE	473	20140910	20150422	1406	46.595	8.384	2470	827	BW
CH	RHONE	473	20140910	20150422	1407	46.589	8.387	2363	855	BW
CH	RHONE	473	20140910	20150422	1423	46.587	8.387	2325	1121	BW
CH	RHONE	473	20140910	20150422	1408	46.585	8.387	2301	1340	BW
CH	RHONE	473	20140910	20150422	1409	46.583	8.386	2254	1093	BW
CH	RHONE	473	20140910	20150422	1410	46.582	8.385	2235	1012	BW
CH	RHONE	473	20140910	20150910	1404	46.612	8.396	2748	-2057	BA
CH	RHONE	473	20140910	20150910	1405	46.605	8.385	2606	-4310	BA
CH	RHONE	473	20140910	20150910	1406	46.595	8.384	2470	-5576	BA
CH	RHONE	473	20140910	20150910	1407	46.589	8.387	2363	-5950	BA
CH	RHONE	473	20140910	20150910	1423	46.587	8.387	2325	-5627	BA
CH	RHONE	473	20140910	20150910	1408	46.585	8.387	2301	-5109	BA
CH	RHONE	473	20140910	20150910	1409	46.583	8.386	2254	-5228	BA
CH	RHONE	473	20140910	20150910	1410	46.582	8.385	2235	-5296	BA
CH	RHONE	473	20140911	20150422	1401	46.647	8.403	3236	1995	BW
CH	RHONE	473	20140911	20150422	1402	46.641	8.400	3124	2104	BW
CH	RHONE	473	20140911	20150422	1403	46.632	8.393	2931	1948	BW
CH	RHONE	473	20140911	20150422	1412	46.623	8.398	2845	1867	BW
CH	RHONE	473	20140911	20150909	1402	46.641	8.400	3124	1094	BA
CH	RHONE	473	20140911	20150909	1403	46.632	8.393	2931	894	BA
CH	RHONE	473	20140911	20150909	1412	46.623	8.398	2845	-1284	BA
CH	RHONE	473	20140911	20150910	1401	46.647	8.403	3236	1306	BA
CH	SANKT ANNA	432	20131002	20140410	STA813	46.596	8.598	2855	1510	BW
CH	SANKT ANNA	432	20131002	20140410	Akk5	46.596	8.601	2806	1960	BW
CH	SANKT ANNA	432	20131002	20140410	Akk4	46.597	8.603	2804	2100	BW
CH	SANKT ANNA	432	20131002	20140410	STA112	46.597	8.601	2790	2210	BW
CH	SANKT ANNA	432	20131002	20140410	Akk2	46.597	8.602	2771	2140	BW
CH	SANKT ANNA	432	20131002	20140410	STA212	46.598	8.602	2735	1630	BW
CH	SANKT ANNA	432	20131002	20140410	STA612	46.599	8.603	2705	1630	BW
CH	SANKT ANNA	432	20131002	20140410	STA312	46.599	8.601	2701	1700	BW
CH	SANKT ANNA	432	20131002	20140410	STA712	46.600	8.600	2681	1630	BW
CH	SANKT ANNA	432	20131002	20140410	STA412	46.600	8.602	2666	1100	BW
CH	SANKT ANNA	432	20131002	20140410	STA913	46.601	8.601	2638	1470	BW
CH	SANKT ANNA	432	20131002	20140923	STA813	46.596	8.598	2855	-960	BA
CH	SANKT ANNA	432	20131002	20140923	Akk5	46.596	8.601	2806	340	BA
CH	SANKT ANNA	432	20131002	20140923	Akk4	46.597	8.603	2804	330	BA
CH	SANKT ANNA	432	20131002	20140923	STA112	46.597	8.601	2790	-70	BA
CH	SANKT ANNA	432	20131002	20140923	Akk2	46.597	8.602	2771	90	BA
CH	SANKT ANNA	432	20131002	20140923	STA212	46.598	8.602	2735	-170	BA
CH	SANKT ANNA	432	20131002	20140923	STA612	46.599	8.603	2705	-1100	BA
CH	SANKT ANNA	432	20131002	20140923	STA312	46.599	8.601	2701	-740	BA
CH	SANKT ANNA	432	20131002	20140923	STA712	46.600	8.600	2681	-960	BA
CH	SANKT ANNA	432	20131002	20140923	STA412	46.600	8.602	2666	-1580	BA
CH	SANKT ANNA	432	20131002	20140923	STA913	46.601	8.601	2638	-1220	BA
CH	SANKT ANNA	432	20140410	20140923	STA813	46.596	8.598	2855	-2470	BS
CH	SANKT ANNA	432	20140410	20140923	Akk5	46.596	8.601	2806	-1620	BS
CH	SANKT ANNA	432	20140410	20140923	Akk4	46.597	8.603	2804	-1770	BS
CH	SANKT ANNA	432	20140410	20140923	STA112	46.597	8.601	2790	-2280	BS
CH	SANKT ANNA	432	20140410	20140923	Akk2	46.597	8.602	2771	-2050	BS
CH	SANKT ANNA	432	20140410	20140923	STA212	46.598	8.602	2735	-1800	BS
CH	SANKT ANNA	432	20140410	20140923	STA612	46.599	8.603	2705	-2730	BS
CH	SANKT ANNA	432	20140410	20140923	STA312	46.599	8.601	2701	-2440	BS
CH	SANKT ANNA	432	20140410	20140923	STA712	46.600	8.600	2681	-2590	BS
CH	SANKT ANNA	432	20140410	20140923	STA412	46.600	8.602	2666	-2680	BS
CH	SANKT ANNA	432	20140410	20140923	STA913	46.601	8.601	2638	-2690	BS
CH	SANKT ANNA	432	20140923	20150415	814	46.596	8.598	2858	1420	BW
CH	SANKT ANNA	432	20140923	20150415	112	46.597	8.601	2790	1830	BW
CH	SANKT ANNA	432	20140923	20150415	212	46.598	8.602	2735	1850	BW
CH	SANKT ANNA	432	20140923	20150415	612	46.599	8.603	2705	1700	BW
CH	SANKT ANNA	432	20140923	20150415	312	46.599	8.601	2701	1760	BW
CH	SANKT ANNA	432	20140923	20150415	712	46.600	8.600	2681	1660	BW
CH	SANKT ANNA	432	20140923	20150415	414	46.600	8.602	2675	1270	BW
CH	SANKT ANNA	432	20140923	20150415	1014	46.600	8.601	2656	1360	BW
CH	SANKT ANNA	432	20140923	20150415	913	46.601	8.601	2638	1620	BW
CH	SANKT ANNA	432	20140923	20150928	814	46.596	8.598	2858	-1870	BA
CH	SANKT ANNA	432	20140923	20150928	112	46.597	8.601	2790	-1170	BA
CH	SANKT ANNA	432	20140923	20150928	212	46.598	8.602	2735	-850	BA
CH	SANKT ANNA	432	20140923	20150928	612	46.599	8.603	2705	-1810	BA
CH	SANKT ANNA	432	20140923	20150928	312	46.599	8.601	2701	-1360	BA
CH	SANKT ANNA	432	20140923	20150928	712	46.600	8.600	2681	-2090	BA
CH	SANKT ANNA	432	20140923	20150928	414	46.600	8.602	2675	-3000	BA
CH	SANKT ANNA	432	20140923	20150928	1014	46.600	8.601	2656	-2920	BA
CH	SANKT ANNA	432	20140923	20150928	913	46.601	8.601	2638	-2920	BA
CH	SCHWARZBACH	4340	20130907	20140411	Akk3	46.596	8.610	2808	1960	BW
CH	SCHWARZBACH	4340	20130907	20140411	Akk1	46.596	8.612	2800	2430	BW
CH	SCHWARZBACH	4340	20130907	20140411	SWZ212	46.596	8.610	2796	1930	BW
CH	SCHWARZBACH	4340	20130907	20140411	SWZ112	46.597	8.612	2757	1570	BW

PU	GLACIER_NAME	WGMS_ID	FROM	TO	POINT_ID	LAT	Lon	ELEV	MB	MB_CODE
CH	SCHWARZBACH	4340	20130907	20140924	Akk3	46.596	8.610	2808	-170	BA
CH	SCHWARZBACH	4340	20130907	20140924	Akk1	46.596	8.612	2800	150	BA
CH	SCHWARZBACH	4340	20130907	20140924	SWZ212	46.596	8.610	2796	-310	BA
CH	SCHWARZBACH	4340	20130907	20140924	SWZ112	46.597	8.612	2757	-1530	BA
CH	SCHWARZBACH	4340	20140411	20140924	Akk3	46.596	8.610	2808	-2130	BS
CH	SCHWARZBACH	4340	20140411	20140924	Akk1	46.596	8.612	2800	-2280	BS
CH	SCHWARZBACH	4340	20140411	20140924	SWZ212	46.596	8.610	2796	-2240	BS
CH	SCHWARZBACH	4340	20140411	20140924	SWZ112	46.597	8.612	2757	-3100	BS
CH	SCHWARZBACH	4340	20140924	20150415	212	46.596	8.610	2793	2210	BW
CH	SCHWARZBACH	4340	20140924	20150415	314	46.596	8.612	2785	2000	BW
CH	SCHWARZBACH	4340	20140924	20150415	114	46.597	8.612	2760	1830	BW
CH	SCHWARZBACH	4340	20140924	20150928	212	46.596	8.610	2793	-980	BA
CH	SCHWARZBACH	4340	20140924	20150928	314	46.596	8.612	2785	-1460	BA
CH	SCHWARZBACH	4340	20140924	20150928	114	46.597	8.612	2760	-2510	BA
CH	SCHWARZBERG	395	20130829	20140902	2	46.016	7.933	2858	-1827	BA
CH	SCHWARZBERG	395	20130829	20140902	1	46.021	7.936	2780	-2079	BA
CH	SCHWARZBERG	395	20140902	20150921	124	46.008	7.930	2981	-2016	BA
CH	SCHWARZBERG	395	20140902	20150921	120	46.016	7.933	2858	-2970	BA
CH	SCHWARZBERG	395	20140902	20150921	123	46.021	7.936	2780	-3726	BA
CH	SEX ROUGE	454	20130914	20140417	SER612	46.327	7.216	2835	1350	BW
CH	SEX ROUGE	454	20130914	20140417	SER713	46.327	7.213	2810	1130	BW
CH	SEX ROUGE	454	20130914	20140417	SER312	46.329	7.216	2806	1020	BW
CH	SEX ROUGE	454	20130914	20140417	SER212	46.327	7.214	2804	850	BW
CH	SEX ROUGE	454	20130914	20140417	SER512	46.328	7.212	2785	1050	BW
CH	SEX ROUGE	454	20130914	20140417	SER412	46.330	7.215	2777	900	BW
CH	SEX ROUGE	454	20130914	20140922	SER612	46.327	7.216	2835	-200	BA
CH	SEX ROUGE	454	20130914	20140922	SER713	46.327	7.213	2810	-670	BA
CH	SEX ROUGE	454	20130914	20140922	SER312	46.329	7.216	2806	-520	BA
CH	SEX ROUGE	454	20130914	20140922	SER212	46.327	7.214	2804	-1030	BA
CH	SEX ROUGE	454	20130914	20140922	SER512	46.328	7.212	2785	-800	BA
CH	SEX ROUGE	454	20130914	20140922	SER412	46.330	7.215	2777	-1090	BA
CH	SEX ROUGE	454	20140417	20140922	SER612	46.327	7.216	2835	-1550	BS
CH	SEX ROUGE	454	20140417	20140922	SER713	46.327	7.213	2810	-1800	BS
CH	SEX ROUGE	454	20140417	20140922	SER312	46.329	7.216	2806	-1540	BS
CH	SEX ROUGE	454	20140417	20140922	SER212	46.327	7.214	2804	-1880	BS
CH	SEX ROUGE	454	20140417	20140922	SER512	46.328	7.212	2785	-1850	BS
CH	SEX ROUGE	454	20140417	20140922	SER412	46.330	7.215	2777	-1990	BS
CH	SEX ROUGE	454	20140922	20150421	714	46.327	7.213	2810	1080	BW
CH	SEX ROUGE	454	20140922	20150421	312	46.329	7.216	2806	1380	BW
CH	SEX ROUGE	454	20140922	20150421	212	46.327	7.214	2804	1430	BW
CH	SEX ROUGE	454	20140922	20150421	512	46.328	7.212	2785	780	BW
CH	SEX ROUGE	454	20140922	20150920	714	46.327	7.213	2810	-2300	BA
CH	SEX ROUGE	454	20140922	20150920	312	46.329	7.216	2806	-2020	BA
CH	SEX ROUGE	454	20140922	20150920	212	46.327	7.214	2804	-1950	BA
CH	SEX ROUGE	454	20140922	20150920	512	46.328	7.212	2785	-2950	BA
CH	SILVRETTE	408	20140920	20150925	1411	46.851	10.071	2718	-1930	BA
CH	SILVRETTE	408	20140920	20150925	1205	46.855	10.076	2712	-1913	BA
CH	SILVRETTE	408	20140920	20150925	1218	46.854	10.072	2683	-2159	BA
CH	SILVRETTE	408	20140920	20150925	1406	46.857	10.069	2613	-3026	BA
CH	SILVRETTE	408	20140920	20150926	1301	46.846	10.085	2978	-1160	BA
CH	SILVRETTE	408	20140920	20150926	1402	46.849	10.087	2954	-960	BA
CH	SILVRETTE	408	20140920	20150926	1110	46.847	10.081	2932	-1360	BA
CH	SILVRETTE	408	20140920	20150926	1403	46.851	10.085	2902	64	BA
CH	SILVRETTE	408	20140920	20150926	1404	46.854	10.084	2815	-1528	BA
CH	SILVRETTE	408	20140920	20150926	1317	46.856	10.081	2770	-1488	BA
CH	SILVRETTE	408	20140920	20150926	1216	46.852	10.079	2761	-1989	BA
CH	SILVRETTE	408	20140921	20150925	1312	46.854	10.067	2588	-2244	BA
CH	SILVRETTE	408	20140921	20150925	1407	46.857	10.064	2562	-3018	BA
CH	SILVRETTE	408	20140921	20150925	1413	46.855	10.061	2533	-3927	BA
CH	SILVRETTE	408	20140921	20150925	1408	46.856	10.060	2518	-2882	BA
CH	SILVRETTE	408	20140921	20150925	1409	46.856	10.058	2491	-3417	BA
CH	SILVRETTE	408	20149999	20150504	1301	46.846	10.085	2986	1344	BW
CH	SILVRETTE	408	20149999	20150504	1402	46.849	10.087	2955	1455	BW
CH	SILVRETTE	408	20149999	20150504	1110	46.847	10.081	2932	1411	BW
CH	SILVRETTE	408	20149999	20150504	1403	46.851	10.085	2887	1291	BW
CH	SILVRETTE	408	20149999	20150504	1315	46.849	10.077	2859	1282	BW
CH	SILVRETTE	408	20149999	20150504	1404	46.854	10.084	2803	1242	BW
CH	SILVRETTE	408	20149999	20150504	1317	46.856	10.081	2772	1113	BW
CH	SILVRETTE	408	20149999	20150504	1411	46.851	10.071	2730	1348	BW
CH	SILVRETTE	408	20149999	20150504	1205	46.855	10.076	2714	1348	BW
CH	SILVRETTE	408	20149999	20150504	1406	46.857	10.069	2605	1308	BW
CH	SILVRETTE	408	20149999	20150504	1312	46.854	10.067	2600	1322	BW
CH	SILVRETTE	408	20149999	20150504	1407	46.857	10.064	2546	1421	BW
CH	SILVRETTE	408	20149999	20150504	1413	46.855	10.061	2538	1230	BW
CH	SILVRETTE	408	20149999	20150504	1408	46.856	10.059	2528	1299	BW
CH	SILVRETTE	408	20149999	20150504	1409	46.856	10.057	2488	1348	BW
CH	SILVRETTE	408	20149999	20150505	1216	46.852	10.079	2768	1362	BW
CH	SILVRETTE	408	20149999	20150505	1218	46.854	10.072	2695	1313	BW
CH	TSANFLEURON	371	20130913	20140417	ts2-12	46.317	7.217	2850	1750	BW
CH	TSANFLEURON	371	20130913	20140417	ts3-12	46.315	7.223	2804	1310	BW
CH	TSANFLEURON	371	20130913	20140417	ts4-12	46.324	7.231	2718	1390	BW
CH	TSANFLEURON	371	20130913	20140417	ts5-12	46.322	7.234	2688	1270	BW
CH	TSANFLEURON	371	20130913	20140417	ts6-12	46.324	7.241	2603	1280	BW
CH	TSANFLEURON	371	20130913	20140911	ts2-12	46.317	7.217	2850	130	BA
CH	TSANFLEURON	371	20130913	20140911	ts3-12	46.315	7.223	2804	-230	BA
CH	TSANFLEURON	371	20130913	20140911	ts4-12	46.324	7.231	2718	-640	BA
CH	TSANFLEURON	371	20130913	20140911	ts5-12	46.322	7.234	2688	-1420	BA
CH	TSANFLEURON	371	20130913	20140911	ts6-12	46.324	7.241	2603	-2470	BA
CH	TSANFLEURON	371	20140417	20140911	ts2-12	46.317	7.217	2850	-1620	BS
CH	TSANFLEURON	371	20140417	20140911	ts3-12	46.315	7.223	2804	-1540	BS
CH	TSANFLEURON	371	20140417	20140911	ts4-12	46.324	7.231	2718	-2030	BS
CH	TSANFLEURON	371	20140417	20140911	ts5-12	46.322	7.234	2688	-2690	BS
CH	TSANFLEURON	371	20140417	20140911	ts6-12	46.324	7.241	2603	-3750	BS
CH	TSANFLEURON	371	20140911	20150420	ts2-12	46.317	7.217	2850	1350	BW
CH	TSANFLEURON	371	20140911	20150420	ts1-14	46.323	7.225	2756	1530	BW
CH	TSANFLEURON	371	20140911	20150420	ts5-14	46.322	7.234	2684	1460	BW

Table 5

PU	GLACIER_NAME	WGMS_ID	FROM	TO	POINT_ID	LAT	LON	ELEV	MB	MB_CODE
CH	TSANFLEURON	371	20140911	20150420	ts6-14	46.324	7.240	2607	1570	BW
CH	TSANFLEURON	371	20140911	20150921	ts2-12	46.317	7.217	2850	-2100	BA
CH	TSANFLEURON	371	20140911	20150921	ts1-14	46.323	7.225	2756	-2370	BA
CH	TSANFLEURON	371	20140911	20150921	ts5-14	46.322	7.234	2684	-3720	BA
CH	TSANFLEURON	371	20140911	20150921	ts6-14	46.324	7.240	2607	-3970	BA
CL - Chile										
CL	AMARILLO	3905	20139999	20149999	A1-09			5242	-493	BA
CL	AMARILLO	3905	20139999	20149999	A7-12			5230	-60	BA
CL	AMARILLO	3905	20139999	20149999	A6-12			5212	-1301	BA
CL	AMARILLO	3905	20139999	20149999	A2-4-09			5183	-1309	BA
CL	AMARILLO	3905	20139999	20149999	A8-12			5180	-578	BA
CL	AMARILLO	3905	20139999	20149999	A4-13			5169	-774	BA
CL	AMARILLO	3905	20139999	20149999	A5-12			5153	-2491	BA
CL	AMARILLO	3905	20140426	20141218	A1	-29.302	-70	5241	-255	BW
CL	AMARILLO	3905	20140426	20141218	A7	-29.302	-70.002	5230	-417	BW
CL	AMARILLO	3905	20140426	20141218	A6	-29.303	-69.999	5211	148	BW
CL	AMARILLO	3905	20140426	20141218	A2	-29.304	-70.002	5181	-357	BW
CL	AMARILLO	3905	20140426	20141218	A8	-29.304	-70.003	5179	-289	BW
CL	AMARILLO	3905	20140426	20141218	A4	-29.304	-70.000	5168	-170	BW
CL	AMARILLO	3905	20140426	20141218	A5	-29.304	-70.002	5151	-34	BW
CL	AMARILLO	3905	20140426	20150514	A1	-29.302	-70	5241	-815	BA
CL	AMARILLO	3905	20140426	20150514	A7	-29.302	-70.002	5230	-874	BA
CL	AMARILLO	3905	20140426	20150514	A6	-29.303	-69.999	5211	-1107	BA
CL	AMARILLO	3905	20140426	20150514	A2	-29.304	-70.002	5181	-1410	BA
CL	AMARILLO	3905	20140426	20150514	A8	-29.304	-70.003	5179	-1259	BA
CL	AMARILLO	3905	20140426	20150514	A4	-29.304	-70.000	5168	-1216	BA
CL	AMARILLO	3905	20140426	20150514	A5	-29.304	-70.002	5151	-2039	BA
CN - China										
CN	PARLUNG NO. 94	3987	20131005	20141002	6	29.389	96.975	5264	-1947	BA
CN	PARLUNG NO. 94	3987	20131005	20141002	7	29.389	96.974	5260	-1950	BA
CN	PARLUNG NO. 94	3987	20131005	20141002	5	29.391	96.973	5240	-2334	BA
CN	PARLUNG NO. 94	3987	20131005	20141002	4	29.393	96.974	5190	-2745	BA
CN	PARLUNG NO. 94	3987	20131005	20141002	3	29.395	96.974	5160	-3351	BA
CN	PARLUNG NO. 94	3987	20131005	20141002	2	29.397	96.973	5120	-3764	BA
CN	PARLUNG NO. 94	3987	20131005	20141002	1	29.399	96.973	5081	-4347	BA
CN	PARLUNG NO. 94	3987	20141002	20150929	11	29.385	96.976	5325	-480	BA
CN	PARLUNG NO. 94	3987	20141002	20150929	10	29.386	96.976	5292	-929	BA
CN	PARLUNG NO. 94	3987	20141002	20150929	9	29.388	96.975	5266	-1437	BA
CN	PARLUNG NO. 94	3987	20141002	20150929	8	29.391	96.974	5232	-1876	BA
CN	PARLUNG NO. 94	3987	20141002	20150929	7	29.393	96.974	5190	-1805	BA
CN	PARLUNG NO. 94	3987	20141002	20150929	6	29.395	96.974	5160	-2401	BA
CN	PARLUNG NO. 94	3987	20141002	20150929	5	29.395	96.973	5159	-2013	BA
CN	PARLUNG NO. 94	3987	20141002	20150929	4	29.395	96.974	5158	-3015	BA
CN	PARLUNG NO. 94	3987	20141002	20150929	3	29.397	96.973	5122	-2687	BA
CN	PARLUNG NO. 94	3987	20141002	20150929	2	29.397	96.973	5119	-3276	BA
CN	PARLUNG NO. 94	3987	20141002	20150929	1	29.398	96.973	5093	-3739	BA
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20130829	20140502	K			4100	280	BW
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20130829	20140502	J			4080	250	BW
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20130829	20140502	H3	43.105	86.809	4066	215	BW
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20130829	20140502	I	43.105	86.807	4056	200	BW
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20130829	20140502	H1	43.106	86.805	4049	10	BW
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20130829	20140502	H2	43.105	86.807	4048	194	BW
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20130829	20140502	G3	43.107	86.810	4007	231	BW
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20130829	20140502	G1	43.108	86.807	4006	7	BW
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20130829	20140502	G2	43.108	86.808	3999	57	BW
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20130829	20140502	F3	43.109	86.811	3975	189	BW
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20130829	20140502	F1	43.109	86.808	3967	120	BW
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20130829	20140502	F2	43.109	86.809	3962	140	BW
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20130829	20140502	E3	43.110	86.811	3933	20	BW
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20130829	20140502	E1	43.111	86.808	3932	-20	BW
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20130829	20140502	E2	43.110	86.809	3932	4	BW
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20130829	20140502	D1	43.114	86.810	3886	-11	BW
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20130829	20140502	D2	43.114	86.812	3876	-30	BW
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20130829	20140502	D3	43.114	86.813	3863	49	BW
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20130829	20140502	C3	43.116	86.813	3843	-69	BW
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20130829	20140502	C2	43.115	86.815	3805	-30	BW
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20130829	20140502	B1	43.116	86.814	3804	-200	BW
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20130829	20140502	B3	43.115	86.816	3799	-172	BW
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20130829	20140502	B2	43.115	86.816	3793	-250	BW
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20130829	20140502	A	43.116	86.816	3771	-138	BW
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20130829	20140502	C1			4100	-100	BW
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20130829	20140901	K			4100	501	BA
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20130829	20140901	J			4080	120	BA
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20130829	20140901	H3	43.105	86.809	4066	222	BA
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20130829	20140901	I	43.105	86.807	4056	111	BA
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20130829	20140901	H1	43.106	86.805	4049	-264	BA
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20130829	20140901	H2	43.105	86.807	4048	46	BA
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20130829	20140901	G3	43.107	86.810	4007	172	BA
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20130829	20140901	G1	43.108	86.807	4006	-160	BA
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20130829	20140901	G2	43.108	86.808	3999	-150	BA
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20130829	20140901	F3	43.109	86.811	3975	83	BA
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20130829	20140901	F1	43.109	86.808	3967	21	BA
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20130829	20140901	F2	43.109	86.809	3962	443	BA
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20130829	20140901	E3	43.110	86.811	3933	-230	BA
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20130829	20140901	E2	43.110	86.809	3932	-345	BA
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20130829	20140901	E1	43.111	86.808	3932	-620	BA
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20130829	20140901	D1	43.114	86.810	3886	-705	BA
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20130829	20140901	D2	43.114	86.812	3876	-893	BA
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20130829	20140901	D3	43.114	86.813	3863	-797	BA
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20130829	20140901	C3	43.116	86.813	3843	-1719	BA
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20130829	20140901	C1	43.115	86.815	3805	-1037	BA
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20130829	20140901	B3	43.116	86.814	3804	-2192	BA
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20130829	20140901	B2	43.115	86.816	3799	-2249	BA
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20130829	20140901	B1	43.115	86.816	3793	-1768	BA

PU	GLACIER_NAME	WGMS_ID	FROM	TO POINT_ID	LAT	Lon	ELEV	MB	MB_CODE
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20130829	20140901 A	43.116	86.816	3771	-1769	BA
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20130829	20140901 C1				-993	BA
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20140502	20140901 K			4100	221	BS
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20140502	20140901 J			4080	-130	BS
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20140502	20140901 H3	43.105	86.809	4066	7	BS
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20140502	20140901 I	43.105	86.807	4056	-89	BS
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20140502	20140901 H1	43.106	86.805	4049	-274	BS
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20140502	20140901 H2	43.105	86.807	4048	-148	BS
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20140502	20140901 G3	43.107	86.810	4007	-59	BS
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20140502	20140901 G1	43.108	86.807	4006	-167	BS
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20140502	20140901 G2	43.108	86.808	3999	-207	BS
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20140502	20140901 F3	43.109	86.811	3975	-106	BS
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20140502	20140901 F1	43.109	86.808	3967	-99	BS
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20140502	20140901 F2	43.109	86.809	3962	303	BS
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20140502	20140901 E3	43.110	86.811	3933	-250	BS
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20140502	20140901 E1	43.111	86.808	3932	-600	BS
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20140502	20140901 E2	43.110	86.809	3932	-349	BS
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20140502	20140901 D1	43.114	86.810	3886	-694	BS
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20140502	20140901 D2	43.114	86.812	3876	-863	BS
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20140502	20140901 D3	43.114	86.813	3863	-846	BS
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20140502	20140901 C2	43.116	86.813	3843	-1650	BS
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20140502	20140901 C3	43.115	86.815	3805	-1007	BS
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20140502	20140901 B1	43.116	86.814	3804	-1992	BS
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20140502	20140901 B3	43.115	86.816	3799	-2077	BS
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20140502	20140901 B2	43.115	86.816	3793	-1518	BS
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20140502	20140901 A	43.116	86.816	3771	-1631	BS
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20140502	20140901 C1				-893	BS
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20140901	20150828 H3	43.105	86.809	4066	-460	BA
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20140901	20150828 I	43.105	86.807	4056	-276	BA
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20140901	20150828 H2	43.105	86.807	4048	-953	BA
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20140901	20150828 F1	43.109	86.808	3967	-1527	BA
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20140901	20150828 F2	43.109	86.809	3962	-1153	BA
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20140901	20150828 E3	43.110	86.811	3933	-781	BA
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20140901	20150828 E2	43.110	86.809	3932	-1360	BA
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20140901	20150828 D2	43.114	86.812	3876	-1612	BA
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20140901	20150828 D3	43.114	86.813	3863	-1537	BA
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20140901	20150828 C2	43.116	86.813	3843	-2305	BA
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20140901	20150828 C1	43.116	86.812	3832	-2367	BA
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20140901	20150828 B3	43.115	86.815	3805	-1678	BA
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20140901	20150828 B2	43.115	86.816	3799	-3439	BA
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20140901	20150828 A	43.116	86.816	3771	-3331	BA
CN	URUMQI GLACIER NO. 1 E-BRANCH	1511	20140901	20150828 K				144	BA
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20130829	20140502 J			4150	150	BW
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20130829	20140502 I	43.116	86.801	4115	330	BW
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20130829	20140502 H1	43.118	86.801	4088	-25	BW
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20130829	20140502 H2	43.117	86.802	4084	88	BW
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20130829	20140502 H3	43.117	86.803	4083	234	BW
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20130829	20140502 G1	43.119	86.804	4055	100	BW
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20130829	20140502 G3	43.117	86.805	4045	174	BW
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20130829	20140502 G2	43.117	86.805	4039	150	BW
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20130829	20140502 F3	43.117	86.807	4023	69	BW
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20130829	20140502 F1	43.119	86.805	4017	24	BW
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20130829	20140502 E2	43.118	86.806	4015	0	BW
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20130829	20140502 E1	43.119	86.808	3968	-135	BW
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20130829	20140502 E3	43.119	86.808	3959	20	BW
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20130829	20140502 D2	43.118	86.809	3954	-91	BW
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20130829	20140502 D3	43.119	86.810	3917	-225	BW
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20130829	20140502 D1	43.118	86.811	3912	-200	BW
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20130829	20140502 C2	43.118	86.811	3904	-444	BW
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20130829	20140502 C1	43.119	86.811	3902	16	BW
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20130829	20140502 B1	43.119	86.811	3895	-329	BW
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20130829	20140502 A	43.119	86.812	3875	-400	BW
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20130829	20140502 D1				-208	BW
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20130829	20140901 J			4150	604	BA
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20130829	20140901 I	43.116	86.801	4115	-322	BA
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20130829	20140901 H1	43.118	86.801	4088	-150	BA
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20130829	20140901 H2	43.117	86.802	4084	19	BA
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20130829	20140901 H3	43.117	86.803	4083	-206	BA
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20130829	20140901 G1	43.119	86.804	4055	-458	BA
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20130829	20140901 G3	43.117	86.805	4045	-7	BA
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20130829	20140901 G2	43.117	86.805	4039	-202	BA
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20130829	20140901 F3	43.117	86.807	4023	-253	BA
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20130829	20140901 F1	43.119	86.805	4017	-439	BA
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20130829	20140901 F2	43.118	86.806	4015	-406	BA
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20130829	20140901 E1	43.119	86.808	3968	-1428	BA
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20130829	20140901 E3	43.119	86.808	3959	-1270	BA
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20130829	20140901 E2	43.118	86.809	3954	-907	BA
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20130829	20140901 D2	43.119	86.810	3917	-1669	BA
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20130829	20140901 D3	43.118	86.811	3912	-1394	BA
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20130829	20140901 C2	43.118	86.811	3904	-2025	BA
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20130829	20140901 C1	43.119	86.811	3902	-1404	BA
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20130829	20140901 B1	43.119	86.811	3895	-1998	BA
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20130829	20140901 A	43.119	86.812	3875	-2254	BA
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20130829	20140901 D1				-1519	BA
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20140502	20140901 J			4150	454	BS
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20140502	20140901 I	43.116	86.801	4115	-652	BS
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20140502	20140901 H1	43.118	86.801	4088	-125	BS
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20140502	20140901 H2	43.117	86.802	4084	-69	BS
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20140502	20140901 H3	43.117	86.803	4083	-440	BS
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20140502	20140901 G1	43.119	86.804	4055	-558	BS
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20140502	20140901 G3	43.117	86.805	4045	-181	BS
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20140502	20140901 G2	43.117	86.805	4039	-352	BS
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20140502	20140901 F1	43.117	86.807	4023	-322	BS
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20140502	20140901 F3	43.119	86.805	4017	-463	BS
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20140502	20140901 F2	43.118	86.806	4015	-406	BS
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20140502	20140901 E1	43.119	86.808	3968	-1293	BS

Table 5

PU	GLACIER_NAME	WGMS_ID	FROM	TO	POINT_ID	LAT	LON	ELEV	MB	MB_CODE
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20140502	20140901	E2	43.119	86.808	3959	-1290	BS
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20140502	20140901	E3	43.118	86.809	3954	-816	BS
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20140502	20140901	D2	43.119	86.810	3917	-1444	BS
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20140502	20140901	D3	43.118	86.811	3912	-1194	BS
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20140502	20140901	C2	43.118	86.811	3904	-1581	BS
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20140502	20140901	C1	43.119	86.811	3902	-1420	BS
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20140502	20140901	B1	43.119	86.811	3895	-1669	BS
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20140502	20140901	A	43.119	86.812	3875	-1854	BS
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20140502	20140901	D1				-1311	BS
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20140901	20150902	H1	43.118	86.801	4088	-980	BA
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20140901	20150902	H2	43.117	86.802	4084	-760	BA
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20140901	20150902	G1	43.119	86.804	4055	-996	BA
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20140901	20150902	G3	43.117	86.805	4045	-567	BA
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20140901	20150902	G2	43.117	86.805	4039	-970	BA
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20140901	20150902	F3	43.117	86.807	4023	-950	BA
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20140901	20150902	F1	43.119	86.805	4017	-1135	BA
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20140901	20150902	F2	43.118	86.806	4015	-1055	BA
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20140901	20150902	E1	43.119	86.808	3968	-1571	BA
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20140901	20150902	E2	43.119	86.808	3959	-1772	BA
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20140901	20150902	E3	43.118	86.809	3954	-1711	BA
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20140901	20150902	D1	43.120	86.810	3918	-2390	BA
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20140901	20150902	D2	43.119	86.810	3917	-1968	BA
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20140901	20150902	D3	43.118	86.811	3912	-2324	BA
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20140901	20150902	C2	43.118	86.811	3904	-2964	BA
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20140901	20150902	C1	43.119	86.811	3902	-2143	BA
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20140901	20150902	B1	43.119	86.811	3895	-2955	BA
CN	URUMQI GLACIER NO. 1 W-BRANCH	1512	20140901	20150902	A	43.119	86.812	3875	-2988	BA
CO - Colombia										
CO	CONEJERAS	2721	20140101	20141231	14	4.816	-75.373	4895	-1818	BA
CO	CONEJERAS	2721	20140101	20141231	13	4.816	-75.373	4829	-2290	BA
CO	CONEJERAS	2721	20140101	20141231	10	4.813	-75.370	4785	-3574	BA
CO	CONEJERAS	2721	20140101	20141231	12	4.808	-75.371	4770	-4645	BA
CO	CONEJERAS	2721	20140101	20141231	11	4.809	-75.372	4765	-4282	BA
CO	CONEJERAS	2721	20140101	20141231	9	4.812	-75.371	4752	-3791	BA
CO	CONEJERAS	2721	20140101	20141231	7	4.813	-75.372	4745	-4419	BA
CO	CONEJERAS	2721	20140101	20141231	8	4.811	-75.372	4745	-4006	BA
CO	CONEJERAS	2721	20140101	20141231	4	4.815	-75.372	4704	-5535	BA
CO	CONEJERAS	2721	20140101	20141231	6	4.814	-75.371	4703	-5547	BA
CO	CONEJERAS	2721	20140101	20141231	5	4.815	-75.371	4698	-5322	BA
CO	CONEJERAS	2721	20140103	20141203	14	4.816	-75.373	4895	-1760	BA
CO	CONEJERAS	2721	20140103	20141203	13	4.816	-75.373	4829	-2037	BA
CO	CONEJERAS	2721	20140103	20141203	10	4.813	-75.370	4785	-3264	BA
CO	CONEJERAS	2721	20140103	20141203	12	4.808	-75.371	4770	-5212	BA
CO	CONEJERAS	2721	20140103	20141203	11	4.809	-75.372	4765	-4025	BA
CO	CONEJERAS	2721	20140103	20141203	9	4.812	-75.371	4752	-3645	BA
CO	CONEJERAS	2721	20140103	20141203	7	4.813	-75.372	4745	-4106	BA
CO	CONEJERAS	2721	20140103	20141203	8	4.811	-75.372	4745	-3675	BA
CO	CONEJERAS	2721	20140103	20141203	4	4.815	-75.372	4704	-5355	BA
CO	CONEJERAS	2721	20140103	20141203	6	4.814	-75.371	4703	-5279	BA
CO	CONEJERAS	2721	20140103	20141203	5	4.815	-75.371	4698	-5124	BA
CO	CONEJERAS	2721	20150101	20151231	14	4.816	-75.373	4895	-2979	BA
CO	CONEJERAS	2721	20150101	20151231	13	4.816	-75.373	4829	-3766	BA
CO	CONEJERAS	2721	20150101	20151231	10	4.813	-75.370	4785	-5528	BA
CO	CONEJERAS	2721	20150101	20151231	12	4.808	-75.371	4770	-5676	BA
CO	CONEJERAS	2721	20150101	20151231	11	4.809	-75.372	4765	-5953	BA
CO	CONEJERAS	2721	20150101	20151231	9	4.812	-75.371	4752	-5196	BA
CO	CONEJERAS	2721	20150101	20151231	7	4.813	-75.372	4745	-5822	BA
CO	CONEJERAS	2721	20150101	20151231	8	4.811	-75.372	4745	-5665	BA
CO	CONEJERAS	2721	20150101	20151231	4	4.815	-75.372	4704	-7352	BA
CO	CONEJERAS	2721	20150101	20151231	6	4.814	-75.371	4703	-7121	BA
CO	CONEJERAS	2721	20150101	20151231	5	4.815	-75.371	4698	-6573	BA
CO	RITACUBA BLANCO	2763	20140101	20141231	10	6.495	-72.307	5151	657	BA
CO	RITACUBA BLANCO	2763	20140101	20141231	9	6.495	-72.309	5110	647	BA
CO	RITACUBA BLANCO	2763	20140101	20141231	7	6.495	-72.311	5060	482	BA
CO	RITACUBA BLANCO	2763	20140101	20141231	8	6.495	-72.311	5055	442	BA
CO	RITACUBA BLANCO	2763	20140101	20141231	6	6.494	-72.313	5010	-150	BA
CO	RITACUBA BLANCO	2763	20140101	20141231	5	6.495	-72.313	5004	-420	BA
CO	RITACUBA BLANCO	2763	20140101	20141231	4	6.495	-72.315	4956	-671	BA
CO	RITACUBA BLANCO	2763	20140101	20141231	3	6.494	-72.315	4947	-62	BA
CO	RITACUBA BLANCO	2763	20140101	20141231	2	6.495	-72.317	4885	-1707	BA
CO	RITACUBA BLANCO	2763	20140101	20141231	1	6.494	-72.317	4872	-1602	BA
CO	RITACUBA BLANCO	2763	20150101	20151231	10	6.495	-72.307	5151	-578	BA
CO	RITACUBA BLANCO	2763	20150101	20151231	9	6.495	-72.309	5110	-548	BA
CO	RITACUBA BLANCO	2763	20150101	20151231	7	6.495	-72.311	5060	-426	BA
CO	RITACUBA BLANCO	2763	20150101	20151231	8	6.495	-72.311	5055	-446	BA
CO	RITACUBA BLANCO	2763	20150101	20151231	6	6.494	-72.313	5010	-1172	BA
CO	RITACUBA BLANCO	2763	20150101	20151231	5	6.495	-72.313	5004	-293	BA
CO	RITACUBA BLANCO	2763	20150101	20151231	4	6.495	-72.315	4956	-1658	BA
CO	RITACUBA BLANCO	2763	20150101	20151231	3	6.494	-72.315	4947	-1613	BA
CO	RITACUBA BLANCO	2763	20150101	20151231	2	6.495	-72.317	4885	-1630	BA
CO	RITACUBA BLANCO	2763	20150101	20151231	1	6.494	-72.317	4872	-1656	BA
FR - France										
FR	TRE LA TETE	1314	20139999	20140930	12			3500	2000	BA
FR	TRE LA TETE	1314	20139999	20140930	11			3400	1800	BA
FR	TRE LA TETE	1314	20139999	20140930	10			3300	1500	BA
FR	TRE LA TETE	1314	20139999	20140930	9			3200	1000	BA
FR	TRE LA TETE	1314	20139999	20140930	8			3100	500	BA
FR	TRE LA TETE	1314	20139999	20140930	7			2900	-1000	BA
FR	TRE LA TETE	1314	20139999	20140930	6			2770	-2000	BA
FR	TRE LA TETE	1314	20139999	20140930	5			2675	-2500	BA
FR	TRE LA TETE	1314	20139999	20140930	4			2550	-1800	BA
FR	TRE LA TETE	1314	20139999	20140930	3			2450	-1800	BA
FR	TRE LA TETE	1314	20139999	20140930	2			2350	-4200	BA
FR	TRE LA TETE	1314	20139999	20140930	1			2200	-2700	BA

PU	GLACIER_NAME	WGMS_ID	FROM	TO POINT_ID	LAT	LON	ELEV	MB MB_CODE
GL - Greenland								
GL	A.P. OLSEN ICE CAP	4576	20130811	20140726 220_8	74.643	-21.484	879	-220 IN
GL	A.P. OLSEN ICE CAP	4576	20130811	20140726 220_6	74.639	-21.428	823	-820 IN
GL	A.P. OLSEN ICE CAP	4576	20130811	20140726 220_5	74.632	-21.400	749	-940 IN
GL	A.P. OLSEN ICE CAP	4576	20130811	20140726 220_4	74.628	-21.370	679	-1450 IN
GL	A.P. OLSEN ICE CAP	4576	20130811	20140726 220_3	74.624	-21.385	676	-1370 IN
GL	A.P. OLSEN ICE CAP	4576	20130811	20140726 220_2	74.619	-21.365	620	-1290 IN
GL	A.P. OLSEN ICE CAP	4576	20130811	20140726 220_1	74.617	-21.360	550	-1680 IN
GL	FREYA	3350	20130814	20140427 335BW	74.369	-20.843	982	1265 BW
GL	FREYA	3350	20130814	20140427 330BW	74.364	-20.809	971	1265 BW
GL	FREYA	3350	20130814	20140427 331BW	74.365	-20.810	948	1042 BW
GL	FREYA	3350	20130814	20140427 334BW	74.371	-20.837	939	1097 BW
GL	FREYA	3350	20130814	20140427 336BW	74.370	-20.837	934	1265 BW
GL	FREYA	3350	20130814	20140427 328BW	74.366	-20.806	933	1265 BW
GL	FREYA	3350	20130814	20140427 333BW	74.370	-20.824	885	1265 BW
GL	FREYA	3350	20130814	20140427 332BW	74.367	-20.814	882	1265 BW
GL	FREYA	3350	20130814	20140427 337BW	74.372	-20.817	856	1135 BW
GL	FREYA	3350	20130814	20140427 338BW	74.374	-20.805	831	1023 BW
GL	FREYA	3350	20130814	20140427 339BW	74.375	-20.799	823	1265 BW
GL	FREYA	3350	20130814	20140427 340BW	74.379	-20.802	793	1023 BW
GL	FREYA	3350	20130814	20140427 325BW	74.380	-20.816	779	1116 BW
GL	FREYA	3350	20130814	20140427 341BW	74.379	-20.826	778	1265 BW
GL	FREYA	3350	20130814	20140427 342BW	74.384	-20.823	726	1116 BW
GL	FREYA	3350	20130814	20140427 343BW	74.386	-20.819	714	1042 BW
GL	FREYA	3350	20130814	20140427 344BW	74.387	-20.834	686	1097 BW
GL	FREYA	3350	20130814	20140427 345BW	74.388	-20.846	676	1265 BW
GL	FREYA	3350	20130814	20140818 12	74.373	-20.810	837	810 BA
GL	FREYA	3350	20130814	20140818 12BA	74.373	-20.810	837	810 BA
GL	FREYA	3350	20130814	20140818 13	74.375	-20.806	817	540 BA
GL	FREYA	3350	20130814	20140818 13BA	74.375	-20.806	817	540 BA
GL	FREYA	3350	20130814	20140818 11BA	74.374	-20.808	816	486 BA
GL	FREYA	3350	20130814	20140818 11	74.374	-20.808	816	486 BA
GL	FREYA	3350	20130814	20140818 14	74.377	-20.802	796	390 BA
GL	FREYA	3350	20130814	20140818 14BA	74.377	-20.802	796	390 BA
GL	FREYA	3350	20130814	20140818 10BA	74.376	-20.810	796	594 BA
GL	FREYA	3350	20130814	20140818 10	74.376	-20.810	796	594 BA
GL	FREYA	3350	20130814	20140818 15	74.377	-20.807	793	648 BA
GL	FREYA	3350	20130814	20140818 15BA	74.377	-20.807	793	648 BA
GL	FREYA	3350	20130814	20140818 9BA	74.377	-20.813	783	582 BA
GL	FREYA	3350	20130814	20140818 9	74.377	-20.813	783	582 BA
GL	FREYA	3350	20130814	20140818 16BA	74.379	-20.819	782	600 BA
GL	FREYA	3350	20130814	20140818 16	74.379	-20.819	782	600 BA
GL	FREYA	3350	20130814	20140818 8	74.379	-20.814	781	108 BA
GL	FREYA	3350	20130814	20140818 8BA	74.379	-20.814	781	108 BA
GL	FREYA	3350	20130814	20140818 17	74.381	-20.814	768	570 BA
GL	FREYA	3350	20130814	20140818 17BA	74.381	-20.814	768	570 BA
GL	FREYA	3350	20130814	20140818 18BA	74.383	-20.811	755	300 BA
GL	FREYA	3350	20130814	20140818 18	74.383	-20.811	755	300 BA
GL	FREYA	3350	20130814	20140818 20	74.384	-20.815	748	450 BA
GL	FREYA	3350	20130814	20140818 20BA	74.384	-20.815	748	450 BA
GL	FREYA	3350	20130814	20140818 21	74.384	-20.823	726	480 BA
GL	FREYA	3350	20130814	20140818 21BA	74.384	-20.823	726	480 BA
GL	FREYA	3350	20130814	20140818 22	74.384	-20.827	716	486 BA
GL	FREYA	3350	20130814	20140818 22BA	74.384	-20.827	716	486 BA
GL	FREYA	3350	20130814	20140818 23	74.385	-20.828	709	414 BA
GL	FREYA	3350	20130814	20140818 23BA	74.385	-20.828	709	414 BA
GL	FREYA	3350	20130814	20140818 24	74.387	-20.825	699	558 BA
GL	FREYA	3350	20130814	20140818 24BA	74.387	-20.825	699	558 BA
GL	FREYA	3350	20130814	20140818 25	74.388	-20.833	684	402 BA
GL	FREYA	3350	20130814	20140818 25BA	74.388	-20.833	684	402 BA
GL	FREYA	3350	20130814	20140818 26	74.389	-20.835	674	378 BA
GL	FREYA	3350	20130814	20140818 26BA	74.389	-20.835	674	378 BA
GL	FREYA	3350	20130814	20140818 27	74.391	-20.837	664	324 BA
GL	FREYA	3350	20130814	20140818 27BA	74.391	-20.837	664	324 BA
GL	FREYA	3350	20130814	20140818 28	74.392	-20.834	662	810 BA
GL	FREYA	3350	20130814	20140818 28BA	74.392	-20.834	662	810 BA
GL	FREYA	3350	20130814	20140818 30	74.391	-20.843	653	252 BA
GL	FREYA	3350	20130814	20140818 30BA	74.391	-20.843	653	252 BA
GL	FREYA	3350	20130814	20140818 31BA	74.390	-20.846	652	264 BA
GL	FREYA	3350	20130814	20140818 31	74.390	-20.846	652	264 BA
GL	FREYA	3350	20130814	20140818 29	74.392	-20.842	648	180 BA
GL	FREYA	3350	20130814	20140818 29BA	74.392	-20.842	648	180 BA
GL	FREYA	3350	20130814	20140818 32BA	74.391	-20.851	639	318 BA
GL	FREYA	3350	20130814	20140818 32	74.391	-20.851	639	318 BA
GL	FREYA	3350	20130814	20140818 33BA	74.393	-20.855	627	228 BA
GL	FREYA	3350	20130814	20140818 33	74.393	-20.855	627	228 BA
GL	FREYA	3350	20130814	20140818 34	74.392	-20.860	624	570 BA
GL	FREYA	3350	20130814	20140818 34BA	74.392	-20.860	624	570 BA
GL	FREYA	3350	20130814	20140818 35	74.394	-20.858	612	300 BA
GL	FREYA	3350	20130814	20140818 35BA	74.394	-20.858	612	300 BA
GL	FREYA	3350	20130814	20140818 36BA	74.395	-20.852	586	240 BA
GL	FREYA	3350	20130814	20140818 36	74.395	-20.852	586	240 BA
GL	FREYA	3350	20130814	20140818 38BA	74.396	-20.861	580	210 BA
GL	FREYA	3350	20130814	20140818 38	74.396	-20.861	580	210 BA
GL	FREYA	3350	20130814	20140818 39	74.395	-20.865	577	276 BA
GL	FREYA	3350	20130814	20140818 39BA	74.395	-20.865	577	276 BA
GL	FREYA	3350	20130814	20140818 40	74.396	-20.869	571	390 BA
GL	FREYA	3350	20130814	20140818 40BA	74.396	-20.869	571	390 BA
GL	FREYA	3350	20130814	20140818 41BA	74.397	-20.868	542	42 BA
GL	FREYA	3350	20130814	20140818 41	74.397	-20.868	542	42 BA
GL	FREYA	3350	20130814	20140818 42	74.398	-20.868	530	336 BA
GL	FREYA	3350	20130814	20140818 42BA	74.398	-20.868	530	336 BA
GL	FREYA	3350	20130814	20140818 3BA	74.398	-20.867	527	-54 BA
GL	FREYA	3350	20130814	20140818 3	74.398	-20.867	527	-54 BA
GL	FREYA	3350	20130814	20140818 50BA	74.402	-20.883	448	210 BA

Table 5

PU	GLACIER_NAME	WGMS_ID	FROM	TO	POINT_ID	LAT	LON	ELEV	MB	MB_CODE
GL	FREYA	3350	20130814	20140818	50	74.402	-20.883	448		210 BA
GL	FREYA	3350	20130814	20140818	2aBA	74.403	-20.883	441		72 BA
GL	FREYA	3350	20130814	20140818	2a	74.403	-20.883	441		72 BA
GL	FREYA	3350	20130814	20140818	48	74.404	-20.888	403		270 BA
GL	FREYA	3350	20130814	20140818	48BA	74.404	-20.888	403		270 BA
GL	FREYA	3350	20130814	20140818	47BA	74.405	-20.891	381		930 BA
GL	FREYA	3350	20130814	20140818	47	74.405	-20.891	381		930 BA
GL	FREYA	3350	20130814	20140818	46	74.405	-20.892	362		630 BA
GL	FREYA	3350	20130814	20140818	46BA	74.405	-20.892	362		630 BA
GL	FREYA	3350	20130814	20140818	45	74.406	-20.895	330		660 BA
GL	FREYA	3350	20130814	20140818	45BA	74.406	-20.895	330		660 BA
GL	FREYA	3350	20140818	20150506	15	74.380	-20.816	779		1098 BW
GL	FREYA	3350	20140818	20150506	1	74.381	-20.818	767		1027 BW
GL	FREYA	3350	20140818	20150506	2	74.382	-20.821	740		869 BW
GL	FREYA	3350	20140818	20150506	3	74.384	-20.826	716		1304 BW
GL	FREYA	3350	20140818	20150506	4	74.386	-20.832	693		1067 BW
GL	FREYA	3350	20140818	20150506	5	74.389	-20.840	670		948 BW
GL	FREYA	3350	20140818	20150506	6	74.392	-20.851	637		928 BW
GL	FREYA	3350	20140818	20150506	7	74.394	-20.857	609		909 BW
GL	FREYA	3350	20140818	20150506	8	74.396	-20.861	572		770 BW
GL	FREYA	3350	20140818	20150506	9	74.398	-20.868	525		869 BW
GL	FREYA	3350	20140818	20150506	10	74.400	-20.876	486		830 BW
GL	FREYA	3350	20140818	20150506	11	74.403	-20.882	444		794 BW
GL	FREYA	3350	20140818	20150506	12	74.404	-20.888	396		387 BW
GL	FREYA	3350	20140818	20150506	13	74.406	-20.895	329		435 BW
GL	FREYA	3350	20140818	20150506	14	74.406	-20.896	312		810 BW
GL	FREYA	3350	20140818	20150817	51	74.364	-20.808	961		535 BA
GL	FREYA	3350	20140818	20150817	10	74.367	-20.807	919		162 BA
GL	FREYA	3350	20140818	20150817	13	74.369	-20.817	864		653 BA
GL	FREYA	3350	20140818	20150817	9	74.372	-20.813	855		394 BA
GL	FREYA	3350	20140818	20150817	14	74.375	-20.818	804		724 BA
GL	FREYA	3350	20140818	20150817	15	74.377	-20.801	797		675 BA
GL	FREYA	3350	20140818	20150817	8a	74.376	-20.810	797		605 BA
GL	FREYA	3350	20140818	20150817	8	74.379	-20.816	780		432 BA
GL	FREYA	3350	20140818	20150817	7	74.387	-20.830	696		270 BA
GL	FREYA	3350	20140818	20150817	5	74.393	-20.847	642		-750 BA
GL	FREYA	3350	20140818	20150817	4	74.392	-20.858	632		216 BA
GL	FREYA	3350	20140818	20150817	6a	74.395	-20.848	593		1080 BA
GL	FREYA	3350	20140818	20150817	3	74.398	-20.867	527		-837 BA
GL	FREYA	3350	20140818	20150817	2a	74.403	-20.883	441		-912 BA
GL	FREYA	3350	20140818	20150817	1a	74.406	-20.890	363		313 BA
GL	MITTIVAKKAT	1629	20130824	20140824	260_150	65.709	-37.767	703		-1960 BA
GL	MITTIVAKKAT	1629	20130824	20140824	260_130	65.706	-37.774	646		-1180 BA
GL	MITTIVAKKAT	1629	20130824	20140824	260_120	65.705	-37.785	626		-1360 BA
GL	MITTIVAKKAT	1629	20130824	20140824	260_110	65.704	-37.793	589		-940 BA
GL	MITTIVAKKAT	1629	20130824	20140824	260_IV (105)	65.694	-37.817	485		-1010 BA
GL	MITTIVAKKAT	1629	20130824	20140824	260_II (103)	65.698	-37.816	480		-1410 BA
GL	MITTIVAKKAT	1629	20130824	20140824	260_82	65.686	-37.838	390		-1490 BA
GL	MITTIVAKKAT	1629	20130824	20140824	260_85	65.696	-37.844	380		-2070 BA
GL	MITTIVAKKAT	1629	20130824	20140824	260_81	65.692	-37.843	374		-2590 BA
GL	MITTIVAKKAT	1629	20130824	20140824	260_83	65.694	-37.843	372		-2650 BA
GL	MITTIVAKKAT	1629	20130824	20140824	260_70	65.689	-37.850	327		-2090 BA
GL	MITTIVAKKAT	1629	20130824	20140824	260_60	65.687	-37.859	304		-2720 BA
GL	MITTIVAKKAT	1629	20130824	20140824	260_50	65.685	-37.867	266		-2960 BA
GL	MITTIVAKKAT	1629	20130824	20140824	260_40	65.684	-37.874	188		-3470 BA
GL	MITTIVAKKAT	1629	20130824	20140824	260_41	65.686	-37.876	187		-2440 BA
GL	MITTIVAKKAT	1629	20130824	20140824	260_42	65.682	-37.873	181		-2030 BA
GL	QAANAAQ ICE CAP	4575	20130720	20140801	126_Q06	77.526	-69.076	968		300 IN
GL	QAANAAQ ICE CAP	4575	20130804	20140801	126_Q05	77.516	-69.110	839		-90 IN
GL	QAANAAQ ICE CAP	4575	20130804	20140803	126_Q04	77.510	-69.138	739		-380 IN
GL	QAANAAQ ICE CAP	4575	20130804	20140803	126_Q03	77.502	-69.172	584		-1140 IN
GL	QAANAAQ ICE CAP	4575	20130804	20140803	126_Q02	77.498	-69.212	427		-1290 IN
GL	QAANAAQ ICE CAP	4575	20130804	20140803	126_Q01	77.491	-69.251	243		-1550 IN
GL	QASIGIANNGUIT	4566	20131004	20140521	8	64.156	-51.356	942		831 BW
GL	QASIGIANNGUIT	4566	20131004	20140521	7	64.157	-51.355	915		618 BW
GL	QASIGIANNGUIT	4566	20131004	20140521	6	64.158	-51.355	891		838 BW
GL	QASIGIANNGUIT	4566	20131004	20140521	3	64.161	-51.355	739		824 BW
GL	QASIGIANNGUIT	4566	20131004	20140521	4	64.161	-51.358	729		995 BW
GL	QASIGIANNGUIT	4566	20131004	20140521	5	64.161	-51.361	729		750 BW
GL	QASIGIANNGUIT	4566	20131004	20140521	2	64.162	-51.359	714		859 BW
GL	QASIGIANNGUIT	4566	20131004	20140521	1	64.164	-51.358	692		733 BW
GL	QASIGIANNGUIT	4566	20140521	20140903	8	64.156	-51.356	941		-699 BS
GL	QASIGIANNGUIT	4566	20140521	20140903	7	64.157	-51.355	915		-737 BS
GL	QASIGIANNGUIT	4566	20140521	20140903	6	64.158	-51.355	890		-910 BS
GL	QASIGIANNGUIT	4566	20140521	20140903	3	64.161	-51.355	738		-1868 BS
GL	QASIGIANNGUIT	4566	20140521	20140903	4	64.161	-51.358	729		-2354 BS
GL	QASIGIANNGUIT	4566	20140521	20140903	5	64.161	-51.362	726		-2739 BS
GL	QASIGIANNGUIT	4566	20140521	20140903	2	64.162	-51.359	712		-2470 BS
GL	QASIGIANNGUIT	4566	20140521	20140903	1	64.164	-51.358	690		-2056 BS
GL	QASIGIANNGUIT	4566	20140903	20150520	6	64.156	-51.356	941		1750 BW
GL	QASIGIANNGUIT	4566	20140903	20150520	5	64.157	-51.355	915		1134 BW
GL	QASIGIANNGUIT	4566	20140903	20150520	4	64.158	-51.355	890		1199 BW
GL	QASIGIANNGUIT	4566	20140903	20150520	3	64.161	-51.355	738		1230 BW
GL	QASIGIANNGUIT	4566	20140903	20150520	2	64.162	-51.359	712		1034 BW
GL	QASIGIANNGUIT	4566	20140903	20150520	1	64.164	-51.358	690		811 BW
GL	QASIGIANNGUIT	4566	20150520	20150907	6	64.156	-51.356	941		-1395 BS
GL	QASIGIANNGUIT	4566	20150520	20150907	5	64.157	-51.355	915		-825 BS
GL	QASIGIANNGUIT	4566	20150520	20150907	4	64.158	-51.355	890		-1022 BS
GL	QASIGIANNGUIT	4566	20150520	20150907	3	64.161	-51.355	738		-1457 BS
GL	QASIGIANNGUIT	4566	20150520	20150907	2	64.162	-51.359	712		-1611 BS
GL	QASIGIANNGUIT	4566	20150520	20150907	1	64.164	-51.358	690		-811 BS
IS - Iceland										
IS	HOFSJOKULL E	3088	20131008	20141009	H18	64.809	18.869	1792		3314 BA
IS	HOFSJOKULL E	3088	20131008	20141009	HSA17	64.794	18.844	1695		2400 BA
IS	HOFSJOKULL E	3088	20131008	20141009	HSA16	64.783	18.834	1615		2093 BA

PU	GLACIER_NAME	WGMS_ID	FROM	TO POINT_ID	LAT	LON	ELEV	MB	MB_CODE
IS	HOFJSJOKULL E	3088	20131008	20141009 HSA15	64.839	18.708	1452	1253	BA
IS	HOFJSJOKULL E	3088	20131008	20141009 HSA13	64.813	18.653	1245	894	BA
IS	HOFJSJOKULL E	3088	20131008	20141009 HSA11	64.790	18.596	1039	-2187	BA
IS	HOFJSJOKULL E	3088	20131008	20141009 HSA9	64.770	18.543	872	-4177	BA
IS	HOFJSJOKULL E	3088	20131008	20141009 HSA8	64.758	18.516	734	-5324	BA
IS	HOFJSJOKULL E	3088	20141009	20151007 H18	64.809	18.869	1792	4503	BA
IS	HOFJSJOKULL E	3088	20141009	20151007 HSA17	64.794	18.844	1695	3708	BA
IS	HOFJSJOKULL E	3088	20141009	20151007 HSA16	64.783	18.834	1615	2845	BA
IS	HOFJSJOKULL E	3088	20141009	20151007 HSA15	64.839	18.708	1452	3337	BA
IS	HOFJSJOKULL E	3088	20141009	20151007 HSA13	64.813	18.653	1245	3194	BA
IS	HOFJSJOKULL E	3088	20141009	20151007 HSA11	64.790	18.596	1039	-426	BA
IS	HOFJSJOKULL E	3088	20141009	20151007 HSA9	64.770	18.543	872	-456	BA
IS	HOFJSJOKULL E	3088	20141009	20151007 HSA8	64.758	18.516	734	-4035	BA

IT - Italy

IT	CALDERONE	1107	20130914	20140913 2	42.472	13.567	2798		
IT	CALDERONE	1107	20130914	20140913 1	42.474	13.568	2658		
IT	CAMPO SETT.	1106	20131006	20140927 1	46.429	10.116	3080	1100	BA
IT	CAMPO SETT.	1106	20131006	20140927 62	46.430	10.115	3050	297	BA
IT	CAMPO SETT.	1106	20131006	20140927 61	46.429	10.114	3005	330	BA
IT	CAMPO SETT.	1106	20131006	20140927 60	46.429	10.113	3000	192	BA
IT	CAMPO SETT.	1106	20131006	20140927 33	46.430	10.111	2970	-630	BA
IT	CAMPO SETT.	1106	20131006	20140927 4	46.430	10.108	2900	264	BA
IT	CAMPO SETT.	1106	20131006	20140927 5	46.431	10.108	2895	-1125	BA
IT	CARESER	635	20130928	20140524 10C	46.452	10.688	3262	2025	BW
IT	CARESER	635	20130928	20140524 5B	46.458	10.708	3161	1710	BW
IT	CARESER	635	20130928	20140524 10A	46.450	10.689	3147	1635	BW
IT	CARESER	635	20130928	20140524 9C	46.449	10.688	3130	1414	BW
IT	CARESER	635	20130928	20140524 5L	46.455	10.715	3092	1576	BW
IT	CARESER	635	20130928	20140524 7B	46.449	10.723	3083	1710	BW
IT	CARESER	635	20130928	20140524 6A	46.454	10.721	3077	1595	BW
IT	CARESER	635	20130928	20140524 6L	46.451	10.721	3070	1635	BW
IT	CARESER	635	20130928	20140524 13B	46.453	10.698	3060	1389	BW
IT	CARESER	635	20130928	20140524 3B	46.452	10.717	3052	1635	BW
IT	CARESER	635	20130928	20140524 7A	46.449	10.719	3039	1735	BW
IT	CARESER	635	20130928	20140524 8E	46.450	10.715	3002	1462	BW
IT	CARESER	635	20130928	20140524 8D	46.450	10.714	2988	1365	BW
IT	CARESER	635	20130928	20140524 9B	46.449	10.700	2970	1462	BW
IT	CARESER	635	20130928	20140524 2D	46.451	10.710	2963	1389	BW
IT	CARESER	635	20130928	20140524 2C	46.450	10.710	2954	1293	BW
IT	CARESER	635	20130928	20140925 5B	46.458	10.708	3161	143	BA
IT	CARESER	635	20130928	20140925 10A	46.450	10.689	3147	0	BA
IT	CARESER	635	20130928	20140925 9C	46.449	10.688	3130	-42	BA
IT	CARESER	635	20130928	20140925 5L	46.455	10.715	3092	9	BA
IT	CARESER	635	20130928	20140925 7B	46.449	10.723	3083	432	BA
IT	CARESER	635	20130928	20140925 6A	46.454	10.721	3077	401	BA
IT	CARESER	635	20130928	20140925 6L	46.451	10.721	3070	80	BA
IT	CARESER	635	20130928	20140925 13B	46.453	10.698	3060	-779	BA
IT	CARESER	635	20130928	20140925 3B	46.452	10.717	3052	9	BA
IT	CARESER	635	20130928	20140925 7A	46.449	10.719	3039	70	BA
IT	CARESER	635	20130928	20140925 8E	46.450	10.715	3002	-855	BA
IT	CARESER	635	20130928	20140925 9B	46.449	10.700	2970	-1148	BA
IT	CARESER	635	20130928	20140925 2D	46.451	10.710	2963	-945	BA
IT	CARESER	635	20140524	20140925 5B	46.458	10.708	3161	-1567	BS
IT	CARESER	635	20140524	20140925 10A	46.450	10.689	3147	-1635	BS
IT	CARESER	635	20140524	20140925 9C	46.449	10.688	3130	-1455	BS
IT	CARESER	635	20140524	20140925 5L	46.455	10.715	3092	-1566	BS
IT	CARESER	635	20140524	20140925 7B	46.449	10.723	3083	-1278	BS
IT	CARESER	635	20140524	20140925 6A	46.454	10.721	3077	-1195	BS
IT	CARESER	635	20140524	20140925 6L	46.451	10.721	3070	-1555	BS
IT	CARESER	635	20140524	20140925 13B	46.453	10.698	3060	-2168	BS
IT	CARESER	635	20140524	20140925 3B	46.452	10.717	3052	-1626	BS
IT	CARESER	635	20140524	20140925 7A	46.449	10.719	3039	-1665	BS
IT	CARESER	635	20140524	20140925 8E	46.450	10.715	3002	-2317	BS
IT	CARESER	635	20140524	20140925 9B	46.449	10.700	2970	-2610	BS
IT	CARESER	635	20140524	20140925 2D	46.451	10.710	2963	-2334	BS
IT	CARESER	635	20140925	20150525 5B	46.458	10.708	3161	849	BW
IT	CARESER	635	20140925	20150525 10A	46.450	10.689	3147	958	BW
IT	CARESER	635	20140925	20150525 10D	46.450	10.689	3146	876	BW
IT	CARESER	635	20140925	20150525 9C	46.449	10.688	3130	1072	BW
IT	CARESER	635	20140925	20150525 9D	46.448	10.689	3116	849	BW
IT	CARESER	635	20140925	20150525 5L	46.455	10.715	3092	796	BW
IT	CARESER	635	20140925	20150525 7B	46.449	10.723	3083	903	BW
IT	CARESER	635	20140925	20150525 6A	46.454	10.721	3077	571	BW
IT	CARESER	635	20140925	20150525 6L	46.451	10.721	3070	796	BW
IT	CARESER	635	20140925	20150525 13B	46.453	10.698	3060	849	BW
IT	CARESER	635	20140925	20150525 3B	46.452	10.717	3052	1101	BW
IT	CARESER	635	20140925	20150525 7A	46.449	10.719	3039	903	BW
IT	CARESER	635	20140925	20150525 8E	46.450	10.715	3002	693	BW
IT	CARESER	635	20140925	20150525 8D	46.450	10.714	2988	595	BW
IT	CARESER	635	20140925	20150525 2B	46.449	10.700	2970	1072	BW
IT	CARESER	635	20140925	20150525 9D	46.451	10.710	2963	770	BW
IT	CARESER	635	20140925	20150919 10D	46.450	10.689	3146	-2338	BA
IT	CARESER	635	20140925	20150919 9C	46.449	10.688	3130	-1926	BA
IT	CARESER	635	20140925	20150919 9D	46.448	10.689	3116	-2660	BA
IT	CARESER	635	20140925	20150919 5L	46.455	10.715	3092	-2376	BA
IT	CARESER	635	20140925	20150919 6A	46.454	10.721	3077	-2732	BA
IT	CARESER	635	20140925	20150919 6L	46.451	10.721	3070	-2298	BA
IT	CARESER	635	20140925	20150919 13B	46.453	10.698	3060	-3231	BA
IT	CARESER	635	20140925	20150919 3B	46.452	10.717	3052	-2277	BA
IT	CARESER	635	20140925	20150919 7A	46.449	10.719	3039	-2099	BA
IT	CARESER	635	20140925	20150919 8E	46.450	10.715	3002	-3519	BA
IT	CARESER	635	20140925	20150919 2D	46.451	10.710	2963	-3906	BA
IT	CARESER	635	20150525	20150919 10D	46.450	10.689	3146	-3214	BS
IT	CARESER	635	20150525	20150919 9C	46.449	10.688	3130	-2998	BS
IT	CARESER	635	20150525	20150919 9D	46.448	10.689	3116	-3508	BS

Table 5

PU	GLACIER_NAME	WGMS_ID	FROM	TO	POINT_ID	LAT	LON	ELEV	MB	MB_CODE
IT	CARESER	635	20150525	20150919	5L	46.455	10.715	3092	-3172	BS
IT	CARESER	635	20150525	20150919	6A	46.454	10.721	3077	-3303	BS
IT	CARESER	635	20150525	20150919	6L	46.451	10.721	3070	-3094	BS
IT	CARESER	635	20150525	20150919	13B	46.453	10.698	3060	-4080	BS
IT	CARESER	635	20150525	20150919	3B	46.452	10.717	3052	-3378	BS
IT	CARESER	635	20150525	20150919	7A	46.449	10.719	3039	-3002	BS
IT	CARESER	635	20150525	20150919	8E	46.450	10.715	3002	-4212	BS
IT	CARESER	635	20150525	20150919	2D	46.451	10.710	2963	-4676	BS
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	20130925	20140928	3/07	46.488	10.768	3205	607	BA
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	20130925	20140928	2/07	46.486	10.769	3193	898	BA
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	20130925	20140928	8/10	46.483	10.772	3168	554	BA
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	20130925	20140928	16/07	46.485	10.771	3157	238	BA
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	20130925	20140928	21/07	46.482	10.774	3120	132	BA
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	20130925	20140928	7/09	46.484	10.773	3112	370	BA
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	20130925	20140928	9/10	46.486	10.772	3109	201	BA
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	20130925	20140928	6/09	46.482	10.775	3077	20	BA
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	20130925	20140928	10/09	46.486	10.774	3061	-63	BA
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	20130925	20140928	23/11	46.486	10.775	3047	213	BA
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	20130925	20140928	22/10	46.485	10.775	3030	166	BA
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	20130925	20140928	20/13	46.482	10.776	3020	-45	BA
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	20130925	20140928	12/08	46.486	10.776	3013	319	BA
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	20130925	20140928	11/13	46.482	10.777	2996	144	BA
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	20130925	20140928	14/07	46.482	10.778	2943	1782	BA
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	20130925	20140928	15/06	46.483	10.780	2901	466	BA
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	20140928	20150922	1/07	46.483	10.770	3219	-1355	BA
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	20140928	20150922	3/07	46.488	10.768	3205	-882	BA
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	20140928	20150922	2/07	46.486	10.769	3193	-1380	BA
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	20140928	20150922	8/10	46.483	10.772	3168	-1208	BA
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	20140928	20150922	16/07	46.485	10.771	3157	-1075	BA
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	20140928	20150922	21/07	46.482	10.774	3120	-1135	BA
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	20140928	20150922	7/09	46.484	10.773	3112	-1362	BA
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	20140928	20150922	9/10	46.486	10.772	3109	-858	BA
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	20140928	20150922	6/09	46.482	10.775	3077	-1132	BA
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	20140928	20150922	10/09	46.486	10.774	3061	-1822	BA
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	20140928	20150922	23/11	46.486	10.775	3047	-1840	BA
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	20140928	20150922	22/10	46.485	10.775	3030	-1220	BA
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	20140928	20150922	20/13	46.482	10.776	3020	-2520	BA
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	20140928	20150922	12/08	46.486	10.776	3013	-337	BA
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	20140928	20150922	11/13	46.482	10.777	2996	-2120	BA
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	20140928	20150922	14/07	46.482	10.778	2943	-1829	BA
IT	FONTANA BIANCA / WEISSBRUNNF.	1507	20140928	20150922	15/06	46.483	10.780	2901	-466	BA
IT	GRAND ETRET	1238	20140999	20150525	P7			3035	1314	BW
IT	GRAND ETRET	1238	20140999	20150525	P6			3035	1676	BW
IT	GRAND ETRET	1238	20140999	20150525	P5			2955	1334	BW
IT	GRAND ETRET	1238	20140999	20150525	P4			2880	1879	BW
IT	GRAND ETRET	1238	20140999	20150525	P3			2840	1129	BW
IT	GRAND ETRET	1238	20140999	20150525	P2			2780	1162	BW
IT	GRAND ETRET	1238	20140999	20150525	P1			2725	1291	BW
IT	GRAND ETRET	1238	20140999	20150919	P6			3035	-1201	BA
IT	GRAND ETRET	1238	20140999	20150919	P5			3035	-2523	BA
IT	GRAND ETRET	1238	20140999	20150919	P7			2955	-1479	BA
IT	GRAND ETRET	1238	20140999	20150919	P4			2880	-1496	BA
IT	GRAND ETRET	1238	20140999	20150919	P3			2840	-2228	BA
IT	GRAND ETRET	1238	20140999	20150919	P2			2780	-2610	BA
IT	GRAND ETRET	1238	20140999	20150919	P1			2725	-2419	BA
IT	LUNGA (VEDRETТА) / LANGENF.	661	20131001	20140430	26	46.458	10.612	3411	1275	BW
IT	LUNGA (VEDRETТА) / LANGENF.	661	20131001	20140430	25	46.459	10.610	3364	1105	BW
IT	LUNGA (VEDRETТА) / LANGENF.	661	20131001	20140430	23	46.463	10.613	3288	1619	BW
IT	LUNGA (VEDRETТА) / LANGENF.	661	20131001	20140430	31	46.461	10.605	3280	1489	BW
IT	LUNGA (VEDRETТА) / LANGENF.	661	20131001	20140430	30	46.462	10.609	3270	1684	BW
IT	LUNGA (VEDRETТА) / LANGENF.	661	20131001	20140430	24	46.464	10.612	3261	1392	BW
IT	LUNGA (VEDRETТА) / LANGENF.	661	20131001	20140430	32	46.465	10.602	3241	2042	BW
IT	LUNGA (VEDRETТА) / LANGENF.	661	20131001	20140430	21	46.465	10.608	3224	1030	BW
IT	LUNGA (VEDRETТА) / LANGENF.	661	20131001	20140430	22	46.464	10.605	3223	1475	BW
IT	LUNGA (VEDRETТА) / LANGENF.	661	20131001	20140430	20	46.467	10.605	3169	1626	BW
IT	LUNGA (VEDRETТА) / LANGENF.	661	20131001	20140430	33	46.473	10.606	3144	2200	BW
IT	LUNGA (VEDRETТА) / LANGENF.	661	20131001	20140430	34	46.468	10.607	3139	1863	BW
IT	LUNGA (VEDRETТА) / LANGENF.	661	20131001	20140430	29	46.470	10.606	3113	1656	BW
IT	LUNGA (VEDRETТА) / LANGENF.	661	20131001	20140430	18	46.471	10.607	3087	2001	BW
IT	LUNGA (VEDRETТА) / LANGENF.	661	20131001	20140430	16	46.47	10.609	3080	1447	BW
IT	LUNGA (VEDRETТА) / LANGENF.	661	20131001	20140430	13a	46.472	10.610	3054	1637	BW
IT	LUNGA (VEDRETТА) / LANGENF.	661	20131001	20140430	15	46.473	10.609	3045	1807	BW
IT	LUNGA (VEDRETТА) / LANGENF.	661	20131001	20140430	27	46.473	10.611	3005	1797	BW
IT	LUNGA (VEDRETТА) / LANGENF.	661	20131001	20140430	14	46.473	10.613	2963	1822	BW
IT	LUNGA (VEDRETТА) / LANGENF.	661	20131001	20140430	12	46.471	10.616	2908	1523	BW
IT	LUNGA (VEDRETТА) / LANGENF.	661	20131001	20140430	28	46.472	10.617	2882	1754	BW
IT	LUNGA (VEDRETТА) / LANGENF.	661	20131001	20140430	11	46.471	10.617	2880	1458	BW
IT	LUNGA (VEDRETТА) / LANGENF.	661	20131001	20140430	9	46.471	10.619	2832	1544	BW
IT	LUNGA (VEDRETТА) / LANGENF.	661	20131001	20140430	8	46.471	10.621	2805	1730	BW
IT	LUNGA (VEDRETТА) / LANGENF.	661	20131001	20140430	10	46.473	10.620	2785	1629	BW
IT	LUNGA (VEDRETТА) / LANGENF.	661	20131001	20140430	5a	46.472	10.622	2763	1650	BW
IT	LUNGA (VEDRETТА) / LANGENF.	661	20131001	20140430	7	46.473	10.622	2761	1393	BW
IT	LUNGA (VEDRETТА) / LANGENF.	661	20131001	20140430	6	46.473	10.623	2727	1456	BW
IT	LUNGA (VEDRETТА) / LANGENF.	661	20131001	20140430	4a	46.473	10.624	2719	1301	BW
IT	LUNGA (VEDRETТА) / LANGENF.	661	20131001	20140930	26	46.458	10.612	3411	1035	BA
IT	LUNGA (VEDRETТА) / LANGENF.	661	20131001	20140930	25	46.459	10.610	3364	731	BA
IT	LUNGA (VEDRETТА) / LANGENF.	661	20131001	20140930	23	46.463	10.613	3288	1627	BA
IT	LUNGA (VEDRETТА) / LANGENF.	661	20131001	20140930	31	46.461	10.605	3280	1213	BA
IT	LUNGA (VEDRETТА) / LANGENF.	661	20131001	20140930	24	46.462	10.609	3270	1393	BA
IT	LUNGA (VEDRETТА) / LANGENF.	661	20131001	20140930	30	46.464	10.612	3261	1035	BA
IT	LUNGA (VEDRETТА) / LANGENF.	661	20131001	20140930	32	46.465	10.602	3241	1008	BA
IT	LUNGA (VEDRETТА) / LANGENF.	661	20131001	20140930	21	46.465	10.608	3224	293	BA
IT	LUNGA (VEDRETТА) / LANGENF.	661	20131001	20140930	22	46.464	10.605	3223	860	BA
IT	LUNGA (VEDRETТА) / LANGENF.	661	20131001	20140930	20	46.467	10.605	3169	506	BA
IT	LUNGA (VEDRETТА) / LANGENF.	661	20131001	20140930	33	46.473	10.606	3144	938	BA
IT	LUNGA (VEDRETТА) / LANGENF.	661	20131001	20140930	34	46.468	10.607	3139	1078	BA

PU	GLACIER_NAME	WGMS_ID	FROM	TO	POINT_ID	LAT	LONG	ELEV	MB	MB_CODE
IT	LUNGA (VEDRETTA) / LANGENF.	661	20131001	20140930	29	46.470	10.606	3113	752	BA
IT	LUNGA (VEDRETTA) / LANGENF.	661	20131001	20140930	18	46.471	10.607	3087	772	BA
IT	LUNGA (VEDRETTA) / LANGENF.	661	20131001	20140930	16	46.47	10.609	3080	185	BA
IT	LUNGA (VEDRETTA) / LANGENF.	661	20131001	20140930	13a	46.472	10.610	3054	364	BA
IT	LUNGA (VEDRETTA) / LANGENF.	661	20131001	20140930	15	46.473	10.609	3045	456	BA
IT	LUNGA (VEDRETTA) / LANGENF.	661	20131001	20140930	27	46.473	10.611	3005	130	BA
IT	LUNGA (VEDRETTA) / LANGENF.	661	20131001	20140930	14	46.473	10.613	2963	-438	BA
IT	LUNGA (VEDRETTA) / LANGENF.	661	20131001	20140930	12	46.471	10.616	2908	-859	BA
IT	LUNGA (VEDRETTA) / LANGENF.	661	20131001	20140930	28	46.472	10.617	2882	-807	BA
IT	LUNGA (VEDRETTA) / LANGENF.	661	20131001	20140930	11	46.471	10.617	2880	-1153	BA
IT	LUNGA (VEDRETTA) / LANGENF.	661	20131001	20140930	9	46.471	10.619	2832	-1599	BA
IT	LUNGA (VEDRETTA) / LANGENF.	661	20131001	20140930	8	46.471	10.621	2805	-2351	BA
IT	LUNGA (VEDRETTA) / LANGENF.	661	20131001	20140930	10	46.473	10.620	2785	-1538	BA
IT	LUNGA (VEDRETTA) / LANGENF.	661	20131001	20140930	5a	46.472	10.622	2763	-2663	BA
IT	LUNGA (VEDRETTA) / LANGENF.	661	20131001	20140930	7	46.473	10.622	2761	-2793	BA
IT	LUNGA (VEDRETTA) / LANGENF.	661	20131001	20140930	6	46.473	10.623	2727	-3050	BA
IT	LUNGA (VEDRETTA) / LANGENF.	661	20131001	20140930	4a	46.473	10.624	2719	-2331	BA
IT	LUPO	1138	20130928	20141008	67	46.074	9.992	2613	1638	BA
IT	LUPO	1138	20130928	20141008	68	46.074	9.993	2612	1913	BA
IT	LUPO	1138	20130928	20141008	62	46.074	9.989	2606	1968	BA
IT	LUPO	1138	20130928	20141008	4	46.074	9.992	2605	1645	BA
IT	LUPO	1138	20130928	20141008	69	46.074	9.992	2603	1665	BA
IT	LUPO	1138	20130928	20141008	63	46.074	9.990	2588	2122	BA
IT	LUPO	1138	20130928	20141008	66	46.074	9.991	2588	1280	BA
IT	LUPO	1138	20130928	20141008	61	46.075	9.989	2586	1473	BA
IT	LUPO	1138	20130928	20141008	65	46.074	9.991	2584	1115	BA
IT	LUPO	1138	20130928	20141008	64	46.074	9.990	2579	2270	BA
IT	LUPO	1138	20130928	20141008	70	46.074	9.992	2577	1775	BA
IT	LUPO	1138	20130928	20141008	5	46.074	9.99	2575	2176	BA
IT	LUPO	1138	20130928	20141008	60	46.076	9.987	2571	1610	BA
IT	LUPO	1138	20130928	20141008	71	46.075	9.992	2559	1665	BA
IT	LUPO	1138	20130928	20141008	72	46.075	9.991	2557	1610	BA
IT	LUPO	1138	20130928	20141008	1	46.075	9.991	2555	1416	BA
IT	LUPO	1138	20130928	20141008	73	46.075	9.991	2552	1473	BA
IT	LUPO	1138	20130928	20141008	74	46.075	9.991	2548	1225	BA
IT	LUPO	1138	20130928	20141008	75	46.075	9.991	2546	1610	BA
IT	LUPO	1138	20130928	20141008	76	46.075	9.990	2544	1335	BA
IT	LUPO	1138	20130928	20141008	78	46.075	9.990	2543	290	BA
IT	LUPO	1138	20130928	20141008	2	46.075	9.991	2543	1453	BA
IT	LUPO	1138	20130928	20141008	77	46.075	9.990	2540	290	BA
IT	LUPO	1138	20130928	20141008	79	46.076	9.989	2536	813	BA
IT	LUPO	1138	20130928	20141008	80	46.076	9.988	2535	675	BA
IT	LUPO	1138	20130928	20141008	81	46.076	9.988	2521	950	BA
IT	LUPO	1138	20130928	20141008	82	46.076	9.989	2506	675	BA
IT	LUPO	1138	20130928	20141008	83	46.076	9.989	2500	675	BA
IT	LUPO	1138	20130928	20141008	3	46.077	9.990	2499	-135	BA
IT	LUPO	1138	20130928	20141008	84	46.076	9.990	2499	785	BA
IT	LUPO	1138	20130928	20141008	85	46.077	9.989	2480	1445	BA
IT	LUPO	1138	20130928	20141008	86	46.077	9.989	2466	1225	BA
IT	LUPO	1138	20130928	20141008	89	46.078	9.989	2457	2023	BA
IT	LUPO	1138	20130928	20141008	87	46.078	9.990	2453	1555	BA
IT	LUPO	1138	20130928	20141008	88	46.078	9.990	2450	1400	BA
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	20130924	20140929	P20	46.571	11.096	3403	1430	BA
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	20130924	20140929	P21	46.571	11.096	3357	1430	BA
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	20130924	20140929	P16	46.580	11.112	3240	1670	BA
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	20130924	20140929	P15	46.575	11.111	3174	748	BA
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	20130924	20140929	P22	46.573	11.102	3158	2044	BA
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	20130924	20140929	P24	46.574	11.103	3149	431	BA
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	20130924	20140929	P25	46.574	11.103	3131	-125	BA
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	20130924	20140929	P14	46.575	11.111	3131	401	BA
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	20130924	20140929	P13	46.571	11.103	3122	200	BA
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	20130924	20140929	P10	46.574	11.105	3045	705	BA
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	20130924	20140929	P09	46.573	11.105	3030	342	BA
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	20130924	20140929	P08	46.573	11.106	3009	-627	BA
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	20130924	20140929	P07	46.572	11.110	2987	-996	BA
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	20130924	20140929	P19	46.562	11.111	2985	338	BA
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	20130924	20140929	P18	46.563	11.106	2935	-87	BA
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	20130924	20140929	P06	46.571	11.110	2892	-800	BA
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	20130924	20140929	P17	46.564	11.106	2877	-700	BA
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	20130924	20140929	P13	46.561	11.113	2877	93	BA
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	20130924	20140929	P05	46.566	11.111	2850	-917	BA
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	20130924	20140929	P12	46.562	11.114	2826	-340	BA
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	20130924	20140929	P11	46.564	11.114	2768	-619	BA
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	20130924	20140929	P03	46.565	11.114	2760	-1160	BA
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	20130924	20140929	P02	46.565	11.116	2710	-1458	BA
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	20130924	20140929	P01	46.566	11.121	2660	-1521	BA
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	20130924	20140929	P04	46.566	11.112	1812	-917	BA
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	20140929	20150927	P20	46.571	11.096	3403	1422	BA
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	20140929	20150927	P21	46.571	11.096	3357	900	BA
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	20140929	20150927	P16	46.580	11.112	3240	90	BA
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	20140929	20150927	P15	46.575	11.111	3174	-840	BA
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	20140929	20150927	P22	46.573	11.102	3158	366	BA
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	20140929	20150927	P24	46.574	11.103	3149	-1666	BA
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	20140929	20150927	P25	46.574	11.103	3131	-1845	BA
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	20140929	20150927	P14	46.575	11.111	3131	-826	BA
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	20140929	20150927	P23	46.571	11.103	3122	-567	BA
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	20140929	20150927	P10	46.574	11.105	3045	-1484	BA
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	20140929	20150927	P09	46.573	11.105	3030	-1176	BA
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	20140929	20150927	P08	46.573	11.106	3009	-1575	BA
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	20140929	20150927	P07	46.572	11.110	2987	-1935	BA
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	20140929	20150927	P19	46.562	11.111	2985	-1259	BA
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	20140929	20150927	P18	46.563	11.106	2935	-1278	BA
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	20140929	20150927	P06	46.571	11.110	2892	-2025	BA
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	20140929	20150927	P13	46.561	11.113	2877	-1236	BA
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	20140929	20150927	P17	46.564	11.106	2877	-1575	BA
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	20140929	20150927	P05	46.566	11.111	2850	-1953	BA

Table 5

PU	GLACIER_NAME	WGMS_ID	FROM	TO	POINT_ID	LAT	LON	ELEV	MB	MB_CODE
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	20140929	20150927	P12	46.562	11.114	2826	-1521	BA
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	20140929	20150927	P11	46.564	11.114	2768	-1935	BA
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	20140929	20150927	P03	46.565	11.114	2760	-2358	BA
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	20140929	20150927	P02	46.565	11.116	2710	-2988	BA
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	20140929	20150927	P01	46.566	11.121	2660	-3285	BA
IT	MALAVALLE (VEDR. DI) / UEBELTALF.	672	20140929	20150927	P04	46.566	11.112	1812	-1863	BA
IT	PENDENTE (VEDR.) / HANGENDERF.	675	20130924	20140929	P84	46.964	11.216	2865	129	BA
IT	PENDENTE (VEDR.) / HANGENDERF.	675	20130924	20140929	P49	46.965	11.218	2850	374	BA
IT	PENDENTE (VEDR.) / HANGENDERF.	675	20130924	20140929	P86	46.966	11.238	2826	-540	BA
IT	PENDENTE (VEDR.) / HANGENDERF.	675	20130924	20140929	P76	46.965	11.233	2797	-270	BA
IT	PENDENTE (VEDR.) / HANGENDERF.	675	20130924	20140929	P50	46.966	11.222	2770	-612	BA
IT	PENDENTE (VEDR.) / HANGENDERF.	675	20130924	20140929	P85	46.967	11.230	2754	-261	BA
IT	PENDENTE (VEDR.) / HANGENDERF.	675	20130924	20140929	P81	46.967	11.225	2718	-126	BA
IT	PENDENTE (VEDR.) / HANGENDERF.	675	20130924	20140929	P80	46.965	11.225	2689	-360	BA
IT	PENDENTE (VEDR.) / HANGENDERF.	675	20130924	20140929	P79	46.963	11.225	2660	-1080	BA
IT	PENDENTE (VEDR.) / HANGENDERF.	675	20140929	20150927	P84	46.964	11.216	2863	-665	BA
IT	PENDENTE (VEDR.) / HANGENDERF.	675	20140929	20150927	P49	46.965	11.218	2841	-728	BA
IT	PENDENTE (VEDR.) / HANGENDERF.	675	20140929	20150927	P86	46.966	11.238	2816	-1791	BA
IT	PENDENTE (VEDR.) / HANGENDERF.	675	20140929	20150927	P76	46.965	11.233	2792	-1710	BA
IT	PENDENTE (VEDR.) / HANGENDERF.	675	20140929	20150927	P85	46.967	11.230	2760	-1377	BA
IT	PENDENTE (VEDR.) / HANGENDERF.	675	20140929	20150927	P50	46.966	11.222	2756	-2601	BA
IT	PENDENTE (VEDR.) / HANGENDERF.	675	20140929	20150927	P81	46.967	11.225	2714	-1179	BA
IT	PENDENTE (VEDR.) / HANGENDERF.	675	20140929	20150927	P80	46.965	11.225	2680	-1908	BA
IT	PENDENTE (VEDR.) / HANGENDERF.	675	20140929	20150927	P79	46.963	11.225	2655	-2322	BA
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	20130924	20140926	27/09	46.900	12.099	3159	323	BA
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	20130924	20140926	13/08	46.902	12.091	3147	748	BA
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	20130924	20140926	26/09	46.902	12.094	3113	780	BA
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	20130924	20140926	12/08	46.903	12.099	3105	689	BA
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	20130924	20140926	9/08	46.904	12.097	3067	699	BA
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	20130924	20140926	14/08	46.904	12.093	3050	323	BA
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	20130924	20140926	10/08	46.903	12.103	3045	742	BA
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	20130924	20140926	7/08	46.904	12.101	3040	463	BA
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	20130924	20140926	16/08	46.906	12.092	2987	-242	BA
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	20130924	20140926	5/08	46.906	12.103	2980	-194	BA
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	20130924	20140926	8/08	46.905	12.105	2977	-199	BA
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	20130924	20140926	17/08	46.907	12.096	2975	-174	BA
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	20130924	20140926	19/08	46.908	12.092	2931	50	BA
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	20130924	20140926	11/08	46.906	12.106	2923	-164	BA
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	20130924	20140926	24/09	46.909	12.092	2914	-159	BA
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	20130924	20140926	4/08	46.907	12.103	2898	-63	BA
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	20130924	20140926	18/08	46.910	12.097	2878	-199	BA
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	20130924	20140926	23/12	46.910	12.094	2870	-756	BA
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	20130924	20140926	3/12	46.908	12.101	2865	-377	BA
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	20130924	20140926	3/08	46.909	12.101	2833	-754	BA
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	20130924	20140926	22/10	46.912	12.097	2828	-830	BA
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	20130924	20140926	20/10	46.913	12.095	2812	-839	BA
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	20130924	20140926	21/10	46.915	12.096	2770	-75	BA
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	20130924	20140926	2/10	46.911	12.102	2723	-1049	BA
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	20130924	20140926	1/12	46.913	12.102	2678	-1353	BA
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	20140926	20151001	27/09	46.900	12.099	3159	-1264	BA
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	20140926	20151001	13/08	46.902	12.091	3147	-1098	BA
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	20140926	20151001	26/09	46.902	12.094	3113	-761	BA
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	20140926	20151001	12/08	46.903	12.099	3105	-1222	BA
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	20140926	20151001	9/08	46.904	12.097	3067	-1795	BA
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	20140926	20151001	14/08	46.904	12.093	3050	-1839	BA
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	20140926	20151001	10/08	46.903	12.103	3045	-1406	BA
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	20140926	20151001	7/15	46.904	12.101	3040	-1251	BA
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	20140926	20151001	16/13	46.906	12.092	2987	-1276	BA
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	20140926	20151001	5/08	46.906	12.103	2980	-1506	BA
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	20140926	20151001	8/08	46.905	12.105	2977	-1160	BA
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	20140926	20151001	17/13	46.907	12.096	2971	-892	BA
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	20140926	20151001	18/08	46.910	12.097	2931	-2178	BA
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	20140926	20151001	11/12	46.906	12.105	2923	-2225	BA
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	20140926	20151001	23/12	46.910	12.094	2914	-3065	BA
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	20140926	20151001	24/13	46.909	12.092	2910	-2307	BA
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	20140926	20151001	4/08	46.907	12.103	2898	-2085	BA
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	20140926	20151001	3/12	46.908	12.101	2865	-2275	BA
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	20140926	20151001	21/15	46.914	12.096	2828	-3481	BA
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	20140926	20151001	22/13	46.912	12.097	2822	-3124	BA
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	20140926	20151001	19/08	46.908	12.092	2812	-1931	BA
IT	RIES OCC. (VEDR. DI) / RIESERF. WESTL.	645	20140926	20151001	20/10	46.913	12.095	2770	-3134	BA
IT	SURETTA MERID.	2488	20131009	20141007	52	46.506	9.363	2840	303	BA
IT	SURETTA MERID.	2488	20131009	20141007	4	46.507	9.364	2830	853	BA
IT	SURETTA MERID.	2488	20131009	20141007	51	46.506	9.365	2810	605	BA
IT	SURETTA MERID.	2488	20131009	20141007	53	46.506	9.365	2795	1815	BA
IT	SURETTA MERID.	2488	20131009	20141007	50	46.507	9.364	2790	275	BA
IT	SURETTA MERID.	2488	20131009	20141007	2	46.505	9.364	2775	495	BA
IT	SURETTA MERID.	2488	20131009	20141007	3	46.505	9.363	2770	-90	BA
IT	SURETTA MERID.	2488	20131009	20141007	33	46.505	9.363	2765	-450	BA
IT	SURETTA MERID.	2488	20131009	20141007	1	46.504	9.364	2760	-405	BA
KE - Kenya										
KE	LEWIS	695	20130308	20140223	1	-0.155	37.315	4855	-1418	BA
KE	LEWIS	695	20130308	20140223	2	-0.156	37.315	4840	-150	BA
KE	LEWIS	695	20130308	20140223	7	-0.156	37.316	4837	-276	BA
KE	LEWIS	695	20130308	20140223	4	-0.155	37.315	4828	-306	BA
KE	LEWIS	695	20130308	20140223	5	-0.156	37.315	4828	-140	BA
KE	LEWIS	695	20130308	20140223	6	-0.156	37.315	4825	-280	BA
KE	LEWIS	695	20130308	20140223	8	-0.157	37.315	4820	-504	BA
KE	LEWIS	695	20130308	20140223	9	-0.157	37.315	4806	-600	BA
KE	LEWIS	695	20130308	20140223	11	-0.156	37.314	4805	-689	BA
KE	LEWIS	695	20130308	20140223	10	-0.156	37.315	4804	-531	BA
KE	LEWIS	695	20130308	20140223	16	-0.157	37.314	4758	-981	BA
KE	LEWIS	695	20130308	20140223	19	-0.156	37.313	4738	-2165	BA
KE	LEWIS	695	20130308	20140223	20	-0.157	37.314	4733	-1364	BA
KE	LEWIS	695	20130308	20140223	18	-0.157	37.314	4733	-682	BA

PU	GLACIER_NAME	WGMS_ID	FROM	TO	POINT_ID	LAT	LONG	ELEV	MB	MB_CODE
KE	LEWIS	695	20130308	20140223	22	-0.158	37.313	4707	-1963	BA
KE	LEWIS	695	20130308	20140223	24	-0.157	37.313	4697	-1989	BA
KE	LEWIS	695	20130308	20140223	26	-0.158	37.313	4675	-2354	BA
KG - Kyrgyzstan										
KG	ABRAMOV	732	20130816	2014818	ABRAC02	39.596	71.556	4398	670	BA
KG	ABRAMOV	732	20130816	2014818	ABRAC03	39.619	71.523	4294	190	BA
KG	ABRAMOV	732	20130816	2014818	ABRAC01	39.603	71.572	4253	-90	BA
KG	ABRAMOV	732	20130816	2014818	ABRAC04	39.610	71.531	4217	-280	BA
KG	ABRAMOV	732	20130816	2014818	ABR13	39.621	71.548	4057	-1800	BA
KG	ABRAMOV	732	20130816	2014818	ABR12	39.624	71.548	4045	-2210	BA
KG	ABRAMOV	732	20130816	2014818	ABR14	39.619	71.554	4032	-1290	BA
KG	ABRAMOV	732	20130816	2014818	ABR16	39.625	71.565	4006	-2290	BA
KG	ABRAMOV	732	20130816	2014818	ABR15	39.622	71.560	4005	-2200	BA
KG	ABRAMOV	732	20130816	2014818	ABR11	39.627	71.560	3971	-2670	BA
KG	ABRAMOV	732	20130816	2014818	ABR09	39.633	71.558	3938	-2820	BA
KG	ABRAMOV	732	20130816	2014818	ABR10	39.631	71.566	3928	-3650	BA
KG	ABRAMOV	732	20130816	2014818	ABR08	39.632	71.562	3918	-3290	BA
KG	ABRAMOV	732	20130816	2014818	ABR07	39.635	71.563	3896	-3190	BA
KG	ABRAMOV	732	20130816	2014818	ABR06	39.640	71.565	3850	-4180	BA
KG	ABRAMOV	732	20130816	2014818	ABR04	39.644	71.562	3828	-4090	BA
KG	ABRAMOV	732	20130816	2014818	ABR03	39.644	71.565	3818	-4180	BA
KG	ABRAMOV	732	20130816	2014818	ABR02	39.644	71.567	3818	-4720	BA
KG	ABRAMOV	732	20130816	2014818	ABR05	39.649	71.565	3758	-5420	BA
KG	ABRAMOV	732	20130816	2014818	ABR01	39.651	71.566	3724	-5370	BA
KG	ABRAMOV	732	20140818	20150827	ABRAC01	39.596	71.557	4394	1450	BA
KG	ABRAMOV	732	20140818	20150827	ABRAC02	39.619	71.523	4288	830	BA
KG	ABRAMOV	732	20140818	20150827	ABRAC03	39.604	71.572	4253	700	BA
KG	ABRAMOV	732	20140818	20150827	ABR13	39.621	71.548	4057	-1430	BA
KG	ABRAMOV	732	20140818	20150827	ABR14	39.619	71.554	4032	-1130	BA
KG	ABRAMOV	732	20140818	20150827	ABR16	39.625	71.565	4006	-2070	BA
KG	ABRAMOV	732	20140818	20150827	ABR15	39.622	71.560	4005	-1070	BA
KG	ABRAMOV	732	20140818	20150827	ABR11	39.627	71.560	3971	-2480	BA
KG	ABRAMOV	732	20140818	20150827	ABR09	39.633	71.558	3938	-2980	BA
KG	ABRAMOV	732	20140818	20150827	ABR10	39.631	71.566	3928	-3200	BA
KG	ABRAMOV	732	20140818	20150827	ABR08	39.632	71.562	3918	-3170	BA
KG	ABRAMOV	732	20140818	20150827	ABR07	39.635	71.563	3896	-2980	BA
KG	ABRAMOV	732	20140818	20150827	ABR06	39.641	71.565	3850	-3870	BA
KG	ABRAMOV	732	20140818	20150827	ABR04	39.644	71.562	3828	-4310	BA
KG	ABRAMOV	732	20140818	20150827	ABR02	39.644	71.567	3818	-4580	BA
KG	ABRAMOV	732	20140818	20150827	ABR03	39.644	71.565	3818	-4230	BA
KG	ABRAMOV	732	20140818	20150827	ABR05	39.649	71.565	3758	-5200	BA
KG	ABRAMOV	732	20140818	20150827	ABR01	39.651	71.566	3724	-5050	BA
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20130826	20140829	AC2	77.751	41.778	4464	70	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20130826	20140829	AC1	77.749	41.781	4303	480	BA
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20130826	20140829	SZ10	77.751	41.786	4195	-540	BA
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20130826	20140829	SZ08	77.751	41.787	4182	-670	BA
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20130826	20140829	SZ09	77.751	41.788	4153	-630	BA
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20130826	20140829	SZ04	77.750	41.791	4103	-1220	BA
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20130826	20140829	SZ05	77.748	41.792	4088	-1240	BA
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20130826	20140829	SZ07	77.750	41.793	4045	-1890	BA
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20130826	20140829	SZ02	77.749	41.794	4031	-1560	BA
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20130826	20140829	SZ01	77.750	41.796	3998	-1730	BA
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829	a161	77.751	41.778	4464	70	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829	163	77.751	41.778	4458	80	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829	a164	77.751	41.778	4457	70	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829	sz1	77.750	41.778	4455	80	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829	a162	77.752	41.778	4454	70	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829	508	77.750	41.778	4450	70	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829	509	77.749	41.778	4439	30	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829	168	77.750	41.779	4433	210	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829	a166	77.749	41.778	4426	70	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829	a167	77.749	41.779	4424	70	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829	510	77.749	41.779	4418	40	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829	169	77.749	41.779	4416	100	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829	511	77.749	41.779	4412	140	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829	171	77.748	41.779	4409	10	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829	170	77.749	41.779	4409	70	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829	512	77.748	41.779	4407	90	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829	513	77.748	41.779	4403	90	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829	173	77.748	41.779	4403	130	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829	514	77.748	41.779	4399	90	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829	174	77.748	41.779	4398	130	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829	178	77.747	41.780	4394	110	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829	515	77.748	41.779	4394	70	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829	175	77.749	41.779	4392	200	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829	519	77.747	41.780	4390	90	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829	176	77.748	41.779	4390	200	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829	516	77.747	41.780	4387	70	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829	177	77.748	41.779	4385	140	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829	181	77.747	41.780	4381	110	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829	520	77.748	41.780	4367	440	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829	522	77.749	41.780	4363	490	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829	182	77.747	41.780	4363	160	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829	521	77.748	41.780	4361	520	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829	183	77.748	41.780	4357	370	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829	184	77.748	41.780	4354	370	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829	185	77.749	41.780	4352	340	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829	523	77.750	41.780	4351	400	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829	186	77.750	41.780	4351	340	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829	187	77.750	41.780	4343	400	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829	525	77.751	41.780	4341	390	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829	524	77.750	41.780	4341	540	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829	529	77.750	41.780	4331	500	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829	527	77.751	41.780	4330	450	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829	528	77.751	41.780	4330	360	BW

PU	GLACIER_NAME	WGMS_ID	FROM	TO POINT_ID	LAT	LOX	ELEV	MB	MB_CODE
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 232	77.751	41.786	4191	40	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 233	77.751	41.786	4189	80	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 234	77.750	41.786	4189	200	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 580	77.752	41.787	4187	70	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 235	77.749	41.786	4185	100	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 581	77.751	41.787	4183	70	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 583	77.751	41.787	4182	50	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 582	77.751	41.787	4182	50	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 236	77.749	41.786	4179	70	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 237	77.748	41.787	4173	100	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 585	77.752	41.788	4172	80	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 584	77.751	41.787	4172	40	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 586	77.752	41.788	4168	70	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 238	77.748	41.787	4167	60	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 239	77.747	41.788	4163	110	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 589	77.752	41.788	4162	60	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 587	77.751	41.788	4161	10	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 588	77.751	41.788	4160	50	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 240	77.748	41.788	4157	60	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 590	77.751	41.788	4156	60	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 591	77.751	41.788	4153	60	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 592	77.751	41.789	4152	40	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 593	77.751	41.789	4151	10	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 594	77.749	41.788	4151	40	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 241	77.751	41.789	4148	50	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 242	77.749	41.788	4145	40	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 243	77.750	41.788	4143	10	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 244	77.749	41.788	4141	40	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 595	77.750	41.789	4140	30	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 248	77.747	41.790	4140	60	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 245	77.749	41.789	4140	30	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 247	77.747	41.789	4136	100	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 599	77.750	41.790	4136	10	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 596	77.749	41.789	4134	10	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 246	77.748	41.789	4133	10	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 600	77.751	41.790	4132	40	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 601	77.751	41.790	4132	0	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 249	77.748	41.790	4125	70	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 250	77.748	41.790	4125	10	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 602	77.750	41.790	4119	30	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 251	77.749	41.790	4117	10	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 603	77.749	41.790	4110	70	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 604	77.749	41.791	4107	10	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 607	77.750	41.791	4103	20	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 605	77.750	41.791	4103	10	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 606	77.750	41.791	4100	10	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 608	77.749	41.792	4087	10	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 609	77.748	41.792	4082	50	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 610	77.748	41.792	4077	10	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 611	77.750	41.792	4072	0	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 612	77.747	41.793	4071	40	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 611	77.747	41.793	4071	80	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 613	77.748	41.793	4066	50	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 615	77.750	41.793	4065	0	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 614	77.748	41.793	4062	10	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 613	77.750	41.793	4061	10	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 614	77.751	41.793	4060	0	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 615	77.748	41.793	4055	80	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 610	77.750	41.793	4054	0	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 616	77.747	41.794	4054	140	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 612	77.751	41.793	4051	0	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 617	77.750	41.794	4041	0	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 612	77.751	41.794	4038	0	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 618	77.750	41.794	4034	0	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 613	77.750	41.795	4026	0	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 619	77.751	41.794	4021	10	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 619	77.749	41.795	4012	0	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 614	77.750	41.795	4000	0	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 615	77.750	41.796	3996	0	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 618	77.749	41.796	3983	10	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 617	77.750	41.797	3981	0	BW
KG	BATYSH SOOK/SYEK ZAPADNIY	781	20140516	20140829 616	77.750	41.796	3977	10	BW
KG	GLACIER NO. 354 (AKSHYRAK)	3889	20130825	20140827 AK16	41.795	78.158	4047	-1430	BA
KG	GLACIER NO. 354 (AKSHYRAK)	3889	20130825	20140827 AK15	41.798	78.153	4000	-1670	BA
KG	GLACIER NO. 354 (AKSHYRAK)	3889	20130825	20140827 AK5	41.799	78.151	3968	-1750	BA
KG	GLACIER NO. 354 (AKSHYRAK)	3889	20130825	20140827 AK4	41.802	78.147	3921	-1780	BA
KG	GLACIER NO. 354 (AKSHYRAK)	3889	20130825	20140827 AK7	41.804	78.149	3909	-2470	BA
KG	GLACIER NO. 354 (AKSHYRAK)	3889	20130825	20140827 AK6	41.803	78.145	3890	-2220	BA
KG	GLACIER NO. 354 (AKSHYRAK)	3889	20130825	20140827 AK3	41.805	78.145	3873	-2120	BA
KG	GLACIER NO. 354 (AKSHYRAK)	3889	20130825	20140827 AK8	41.806	78.146	3853	-2970	BA
KG	GLACIER NO. 354 (AKSHYRAK)	3889	20130825	20140827 AK9	41.806	78.141	3841	-2410	BA
KG	GLACIER NO. 354 (AKSHYRAK)	3889	20130825	20140827 AK2	41.807	78.142	3823	-2180	BA
KG	GLACIER NO. 354 (AKSHYRAK)	3889	20130825	20140827 AK11	41.808	78.143	3801	-3060	BA
KG	GLACIER NO. 354 (AKSHYRAK)	3889	20130825	20140827 AK1	41.809	78.140	3769	-3880	BA
KG	GLACIER NO. 354 (AKSHYRAK)	3889	20139999	20140514 74	41.779	78.166	4524	133	BW
KG	GLACIER NO. 354 (AKSHYRAK)	3889	20139999	20140514 73	41.780	78.166	4487	109	BW
KG	GLACIER NO. 354 (AKSHYRAK)	3889	20139999	20140514 76	41.780	78.166	4460	138	BW
KG	GLACIER NO. 354 (AKSHYRAK)	3889	20139999	20140514 72	41.780	78.165	4459	70	BW
KG	GLACIER NO. 354 (AKSHYRAK)	3889	20139999	20140514 71	41.781	78.165	4444	64	BW
KG	GLACIER NO. 354 (AKSHYRAK)	3889	20139999	20140514 77	41.780	78.167	4441	112	BW
KG	GLACIER NO. 354 (AKSHYRAK)	3889	20139999	20140514 78	41.780	78.167	4439	39	BW
KG	GLACIER NO. 354 (AKSHYRAK)	3889	20139999	20140514 79	41.780	78.168	4432	55	BW
KG	GLACIER NO. 354 (AKSHYRAK)	3889	20139999	20140514 70	41.781	78.165	4431	64	BW
KG	GLACIER NO. 354 (AKSHYRAK)	3889	20139999	20140514 80	41.780	78.168	4429	74	BW
KG	GLACIER NO. 354 (AKSHYRAK)	3889	20139999	20140514 81	41.781	78.169	4425	118	BW
KG	GLACIER NO. 354 (AKSHYRAK)	3889	20139999	20140514 82	41.781	78.169	4424	75	BW

Table 5

PU	GLACIER_NAME	WGMS_ID	FROM	TO	POINT_ID	LAT	LON	ELEV	MB	MB_CODE
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	69	41.781	78.165	4422	64	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	83	41.781	78.170	4420	127	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	84	41.781	78.169	4417	41	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	85	41.781	78.169	4415	142	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	86	41.781	78.168	4411	98	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	87	41.781	78.168	4406	134	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	89	41.781	78.167	4403	87	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	88	41.781	78.167	4403	109	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	67	41.781	78.165	4402	50	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	68	41.781	78.165	4402	50	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	90	41.781	78.166	4398	96	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	91	41.782	78.165	4392	61	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	92	41.781	78.166	4390	72	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	93	41.781	78.166	4385	90	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	94	41.781	78.167	4384	79	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	66	41.782	78.165	4381	33	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	95	41.781	78.167	4379	59	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	96	41.782	78.168	4376	55	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	97	41.782	78.168	4372	90	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	98	41.782	78.169	4370	39	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	99	41.782	78.169	4369	35	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	65	41.783	78.165	4368	42	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	102	41.782	78.168	4357	79	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	104	41.782	78.167	4352	61	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	105	41.782	78.166	4348	59	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	64	41.783	78.165	4347	57	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	106	41.783	78.165	4344	59	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	107	41.783	78.165	4338	41	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	63	41.784	78.165	4334	48	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	108	41.783	78.165	4334	52	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	109	41.783	78.166	4332	46	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	110	41.783	78.167	4328	42	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	62	41.784	78.165	4325	31	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	111	41.783	78.167	4325	63	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	349	78.185	41.796	4325	70	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	348	78.185	41.796	4325	52	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	351	78.184	41.796	4324	63	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	350	78.184	41.796	4324	2	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	347	78.186	41.797	4324	54	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	112	41.783	78.168	4322	59	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	113	41.783	78.168	4321	46	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	SP4W	41.783	78.167	4320	362	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	352	78.185	41.797	4319	2	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	346	78.186	41.797	4319	63	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	345	78.186	41.797	4319	90	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	61	41.785	78.166	4317	28	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	344	78.186	41.797	4316	48	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	SP2W	41.797	78.185	4314	454	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	353	78.185	41.797	4313	46	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	354	78.185	41.797	4311	38	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	343	78.186	41.797	4311	57	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	355	78.185	41.797	4310	38	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	60	41.785	78.166	4309	15	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	342	78.186	41.798	4308	84	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	341	78.185	41.798	4308	46	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	356	78.185	41.798	4307	28	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	340	78.185	41.798	4306	134	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	357	78.185	41.798	4305	46	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	338	78.185	41.798	4301	54	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	120	41.784	78.169	4301	18	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	121	41.784	78.169	4298	22	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	358	78.184	41.798	4298	33	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	359	78.184	41.798	4295	29	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	122	41.784	78.169	4295	26	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	59	41.786	78.166	4293	46	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	337	78.185	41.799	4293	30	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	336	78.185	41.799	4292	37	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	360	78.184	41.799	4290	26	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	335	78.185	41.799	4290	31	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	123	41.783	78.169	4289	37	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	333	78.185	41.800	4289	32	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	361	78.184	41.799	4286	24	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	372	78.182	41.803	4286	22	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	330	78.185	41.801	4286	2	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	331	78.185	41.801	4285	1	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	373	78.182	41.803	4285	28	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	124	41.783	78.170	4284	61	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	374	78.182	41.803	4284	22	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	362	78.184	41.799	4283	19	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	125	41.783	78.170	4282	46	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	329	78.184	41.800	4282	24	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	365	78.184	41.800	4280	13	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	369	78.183	41.801	4280	18	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	375	78.182	41.802	4280	14	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	58	41.786	78.166	4279	63	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	368	78.183	41.801	4278	24	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	328	78.183	41.800	4278	17	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	366	78.183	41.800	4277	14	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	126	41.783	78.171	4277	77	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	367	78.183	41.800	4277	14	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	327	78.183	41.800	4275	12	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	376	78.182	41.801	4275	15	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	127	41.783	78.172	4273	75	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	SP1W	41.800	78.183	4273	125	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	377	78.182	41.801	4270	14	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	378	78.182	41.801	4269	13	BW

PU	GLACIER_NAME	WGMS_ID	FROM	TO POINT_ID	LAT	LON	ELEV	MB	MB_CODE
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 379	78.181	41.800	4267	13	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 371	78.182	41.802	4266	23	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 380	78.181	41.800	4264	15	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 381	78.181	41.800	4263	15	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 382	78.181	41.799	4261	13	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 383	78.181	41.799	4261	13	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 384	78.181	41.798	4258	13	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 385	78.181	41.798	4256	17	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 386	78.181	41.797	4256	18	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 387	78.180	41.797	4254	18	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 388	78.180	41.797	4250	10	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 57	41.786	78.166	4246	59	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 389	78.179	41.797	4244	13	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 390	78.179	41.797	4240	16	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 56	41.786	78.167	4238	68	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 391	78.178	41.798	4236	26	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 392	78.178	41.798	4231	15	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 393	78.177	41.798	4228	12	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 55	41.786	78.166	4224	68	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 394	78.177	41.798	4223	3	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 395	78.176	41.798	4219	2	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 396	78.176	41.798	4216	14	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 398	78.175	41.797	4215	14	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 397	78.176	41.797	4215	19	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 SP3W	41.797	78.175	4214	269	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 399	78.175	41.797	4213	8	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 370	78.182	41.802	4212	16	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 450	78.155	41.784	4210	34	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 54	41.787	78.167	4210	70	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 400	78.175	41.797	4210	13	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 403	78.174	41.797	4209	11	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 454	78.154	41.784	4209	44	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 455	78.155	41.784	4209	45	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 456	78.155	41.784	4209	41	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 458	78.156	41.784	4209	35	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 401	78.174	41.797	4208	19	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 402	78.174	41.797	4208	17	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 404	78.174	41.797	4208	15	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 453	78.154	41.784	4208	37	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 459	78.155	41.784	4208	32	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 452	78.153	41.784	4206	35	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 460	78.155	41.784	4206	29	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 405	78.173	41.797	4205	13	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 461	78.155	41.784	4205	23	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 451	78.153	41.784	4205	22	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 462	78.154	41.784	4203	20	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 406	78.173	41.797	4201	12	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 450	78.153	41.785	4201	32	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 463	78.154	41.784	4201	20	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 464	78.154	41.785	4199	18	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 407	78.172	41.797	4198	17	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 449	78.153	41.785	4197	32	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 465	78.154	41.785	4196	15	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 466	78.155	41.785	4194	13	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 448	78.153	41.785	4193	15	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 53	41.787	78.166	4193	52	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 408	78.172	41.798	4192	11	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 467	78.154	41.785	4192	18	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 447	78.153	41.785	4191	19	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 468	78.154	41.786	4190	17	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 469	78.154	41.786	4188	19	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 446	78.153	41.786	4187	16	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 470	78.153	41.786	4185	17	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 409	78.171	41.798	4184	7	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 445	78.153	41.786	4183	15	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 52	41.787	78.166	4182	37	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 471	78.153	41.786	4181	17	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 444	78.153	41.786	4181	15	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 410	78.171	41.799	4178	9	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 472	78.153	41.786	4176	14	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 443	78.152	41.786	4175	24	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 411	78.170	41.798	4175	3	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 SP5W	41.786	78.152	4175	205	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 473	78.154	41.787	4174	13	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 474	78.154	41.787	4171	12	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 412	78.170	41.798	4170	10	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 475	78.154	41.787	4168	19	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 413	78.170	41.798	4167	7	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 476	78.154	41.787	4163	15	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 414	78.169	41.799	4162	2	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 415	78.169	41.799	4159	11	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 416	78.169	41.798	4156	3	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 477	78.154	41.788	4156	14	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 417	78.169	41.798	4152	5	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 478	78.153	41.788	4150	13	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 419	78.169	41.797	4149	7	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 418	78.169	41.797	4149	1	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 420	78.169	41.797	4147	10	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 421	78.168	41.796	4144	1	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 479	78.153	41.788	4143	13	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 480	78.153	41.789	4139	7	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 481	78.153	41.789	4137	15	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 482	78.154	41.790	4128	17	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 483	78.154	41.790	4120	6	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 484	78.154	41.790	4117	9	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514 485	78.155	41.790	4113	9	BW

Table 5

PU	GLACIER_NAME	WGMS_ID	FROM	TO	POINT_ID	LAT	LON	ELEV	MB	MB_CODE
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	486	78.155	41.790	4111	10	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	487	78.155	41.790	4108	7	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	488	78.154	41.791	4104	11	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	489	78.154	41.791	4103	16	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	424	78.165	41.795	4088	2	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	423	78.165	41.795	4088	2	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	422	78.165	41.795	4088	0	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	425	78.165	41.795	4087	7	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	426	78.164	41.795	4085	8	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	427	78.164	41.795	4083	9	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	490	78.156	41.791	4082	16	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	428	78.163	41.795	4081	6	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	491	78.156	41.791	4080	13	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	429	78.163	41.795	4078	10	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	492	78.157	41.791	4077	10	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	430	78.162	41.794	4074	2	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	493	78.157	41.791	4074	17	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	494	78.156	41.791	4071	12	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	431	78.161	41.794	4069	8	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	495	78.157	41.791	4068	12	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	496	78.157	41.792	4066	13	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	432	78.161	41.794	4064	2	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	497	78.157	41.792	4063	10	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	433	78.160	41.794	4059	5	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	498	78.157	41.792	4059	6	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	499	78.157	41.792	4056	6	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	500	78.157	41.793	4054	8	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	501	78.156	41.793	4050	6	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	502	78.156	41.793	4048	10	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	503	78.156	41.793	4047	2	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140514	504	78.156	41.794	4045	0	BW
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140827	SP02	41.783	78.167	4320	200	BA
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20139999	20140827	SP01	41.800	78.185	4288	80	BA
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20140827	20150809	AK002	41.781	78.165	4461	-2040	BA
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20140827	20150809	AK001	41.783	78.167	4332	-2850	BA
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20140827	20150809	AKsp5	41.783	78.171	4278	220	BA
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20140827	20150809	AKsp3	41.795	78.158	4048	440	BA
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20140827	20150809	AKsp2	41.798	78.153	4003	500	BA
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20140827	20150809	AK007	41.799	78.151	3968	-1860	BA
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20140827	20150809	AK006	41.802	78.147	3921	-1850	BA
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20140827	20150809	AK009	41.804	78.149	3912	-2210	BA
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20140827	20150809	AK008	41.803	78.145	3892	-2290	BA
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20140827	20150809	AK005	41.805	78.145	3874	-1510	BA
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20140827	20150809	AK011	41.806	78.146	3858	-2490	BA
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20140827	20150809	AK015	41.806	78.141	3841	-1300	BA
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20140827	20150809	AK004	41.807	78.142	3826	-1680	BA
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20140827	20150809	AK016	41.808	78.143	3807	-700	BA
KG	GLACIER NO. 354 (AKSHIYRAK)	3889	20140827	20150809	AK003	41.809	78.141	3778	-2560	BA
KG	GLACIER NO. 599 (KJUNGEI ALA-TOO)	10402	20140620	20150619	SnowPit02	42.793	76.867	4031	575	BA
KG	GLACIER NO. 599 (KJUNGEI ALA-TOO)	10402	20140620	20150619	SnowPit01	42.795	76.865	3997	280	BA
KG	GLACIER NO. 599 (KJUNGEI ALA-TOO)	10402	20140620	20150619	OK07	42.796	76.854	3890	-2394	BA
KG	GLACIER NO. 599 (KJUNGEI ALA-TOO)	10402	20140620	20150619	OK08	42.796	76.855	3886	-1755	BA
KG	GLACIER NO. 599 (KJUNGEI ALA-TOO)	10402	20140620	20150619	OK06	42.795	76.854	3886	-1431	BA
KG	GLACIER NO. 599 (KJUNGEI ALA-TOO)	10402	20140620	20150619	OK05	42.794	76.854	3858	-1908	BA
KG	GLACIER NO. 599 (KJUNGEI ALA-TOO)	10402	20140620	20150619	OK04	42.793	76.853	3842	-2000	BA
KG	GLACIER NO. 599 (KJUNGEI ALA-TOO)	10402	20140620	20150619	OK02	42.792	76.852	3811	-2079	BA
KG	GLACIER NO. 599 (KJUNGEI ALA-TOO)	10402	20140620	20150619	OK03	42.792	76.852	3810	-1773	BA
KG	GLACIER NO. 599 (KJUNGEI ALA-TOO)	10402	20140620	20150619	OK01	42.791	76.849	3770	-2115	BA
KG	GOLUBIN	753	20130723	20140903	snow pit 2	42.448	74.506	3969	0	BA
KG	GOLUBIN	753	20130723	20140903	snow pit 1	42.452	74.504	3940	0	BA
KG	GOLUBIN	753	20130723	20140903	GOL05	42.470	74.489	3490	-4914	BA
KG	GOLUBIN	753	20130723	20140903	GOL06	42.471	74.489	3480	-5040	BA
KG	GOLUBIN	753	20130723	20140903	GOL02	42.472	74.488	3461	-5211	BA
KG	GOLUBIN	753	20140903	20150814	2	42.444	74.506	4064	301	BA
KG	GOLUBIN	753	20140903	20150814	103	42.444	74.506	4054	780	BA
KG	GOLUBIN	753	20140903	20150814	104	42.445	74.506	4046	823	BA
KG	GOLUBIN	753	20140903	20150814	105	42.445	74.506	4032	1083	BA
KG	GOLUBIN	753	20140903	20150814	106	42.446	74.506	4020	563	BA
KG	GOLUBIN	753	20140903	20150814	107	42.446	74.506	4009	953	BA
KG	GOLUBIN	753	20140903	20150814	108	42.447	74.506	3992	823	BA
KG	GOLUBIN	753	20140903	20150814	109	42.447	74.506	3991	606	BA
KG	GOLUBIN	753	20140903	20150814	110	42.447	74.506	3987	736	BA
KG	GOLUBIN	753	20140903	20150814	111	42.447	74.506	3983	0	BA
KG	GOLUBIN	753	20140903	20150814	GOL14	42.464	74.494	3620	-3456	BA
KG	GOLUBIN	753	20140903	20150814	GOL13	42.463	74.491	3610	-3411	BA
KG	GOLUBIN	753	20140903	20150814	GOL12	42.464	74.490	3597	-3456	BA
KG	GOLUBIN	753	20140903	20150814	GOL10	42.465	74.492	3594	-3420	BA
KG	GOLUBIN	753	20140903	20150814	GOL03	42.467	74.489	3546	-3294	BA
KG	GOLUBIN	753	20140903	20150814	GOL04	42.469	74.489	3532	-3312	BA
KG	GOLUBIN	753	20140903	20150814	GOL05	42.470	74.489	3508	-5112	BA
KG	GOLUBIN	753	20140903	20150814	GOL06	42.471	74.489	3503	-5022	BA
KG	GOLUBIN	753	20140903	20150814	GOL07	42.471	74.489	3482	-5022	BA
KG	GOLUBIN	753	20140903	20150814	GOL02	42.472	74.487	3475	-5022	BA
KG	GOLUBIN	753	20140903	20150814	GOL01	42.472	74.488	3468	-5022	BA
KG	GOLUBIN	753	20140903	20150814	GOL08	42.473	74.485	3434	-5256	BA
KG	GOLUBIN	753	20140903	20150814	GOL09	42.474	74.484	3412	-5274	BA
KZ - Kazakhstan										
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	1	43.040	77.075	3774	171	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	11	43.041	77.075	3766	190	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	2	43.040	77.077	3764	204	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	3	43.040	77.078	3762	202	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	4	43.040	77.078	3760	230	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	12	43.041	77.076	3755	215	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	5	43.040	77.079	3754	253	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	13	43.041	77.077	3749	210	BW

PU	GLACIER_NAME	WGMS_ID	FROM	TO	POINT_ID	LAT	Lon	ELEV	MB	MB_CODE
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	21	43.042	77.075	3747	213	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	14	43.041	77.078	3745	212	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	23	43.041	77.078	3742	207	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	15	43.041	77.080	3741	225	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	16	43.041	77.081	3741	201	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	24	43.041	77.079	3740	187	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	34	43.042	77.079	3738	154	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	33	43.042	77.078	3738	175	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	25	43.041	77.080	3737	218	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	32	43.042	77.077	3737	215	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	22	43.042	77.077	3736	216	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	26	43.041	77.081	3734	176	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	31	43.043	77.076	3734	222	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	43	43.043	77.079	3733	186	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	42	43.043	77.078	3732	197	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	35	43.042	77.081	3732	128	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	41	43.043	77.077	3731	198	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	36	43.042	77.082	3729	160	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	59	43.044	77.086	3728	263	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	44	43.043	77.081	3722	205	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	51	43.044	77.076	3721	213	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	45	43.042	77.082	3719	168	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	52	43.044	77.077	3718	226	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	53	43.044	77.079	3716	180	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	54	43.044	77.079	3710	192	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	56	43.044	77.082	3707	208	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	58	43.044	77.084	3706	210	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	55	43.044	77.081	3702	218	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	57	43.044	77.083	3701	158	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	61	43.046	77.077	3697	285	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	62	43.046	77.078	3694	209	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	69	43.045	77.084	3694	236	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	63	43.046	77.079	3692	210	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	710	43.046	77.084	3688	120	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	68	43.045	77.084	3687	151	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	65	43.046	77.082	3686	176	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	64	43.045	77.081	3685	198	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	67	43.045	77.083	3682	218	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	71	43.047	77.078	3681	219	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	72	43.047	77.079	3679	173	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	79	43.046	77.084	3678	196	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	78	43.046	77.083	3677	169	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	73	43.047	77.080	3675	156	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	76	43.047	77.082	3674	99	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	75	43.047	77.081	3674	190	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	77	43.046	77.083	3673	190	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	74	43.047	77.081	3671	173	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	87	43.047	77.082	3669	94	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	86	43.047	77.082	3668	181	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	81	43.048	77.079	3666	196	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	88	43.047	77.083	3665	246	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	85	43.048	77.081	3664	148	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	82	43.048	77.079	3663	165	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	83	43.048	77.080	3662	166	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	84	43.048	77.081	3660	163	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	91	43.049	77.079	3651	378	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	96	43.048	77.083	3650	102	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	94	43.049	77.081	3648	345	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	95	43.048	77.083	3648	147	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	92	43.049	77.080	3647	390	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	93	43.049	77.081	3646	377	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	101	43.049	77.079	3644	422	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	103	43.049	77.080	3640	220	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	105	43.049	77.082	3640	251	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	104	43.049	77.081	3640	310	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	102	43.049	77.080	3639	306	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	107	43.049	77.084	3635	225	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	106	43.049	77.083	3634	232	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	111	43.050	77.079	3618	407	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	115	43.050	77.083	3617	330	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	112	43.050	77.080	3616	475	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	117	43.050	77.084	3616	337	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	114	43.050	77.082	3614	320	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	113	43.050	77.081	3614	352	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	116	43.050	77.083	3613	317	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	124	43.051	77.082	3595	311	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	125	43.051	77.083	3593	295	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	121	43.051	77.079	3592	647	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	123	43.051	77.082	3592	341	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	122	43.051	77.081	3588	414	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	131	43.052	77.079	3581	411	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	134	43.052	77.082	3580	224	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	132	43.052	77.080	3580	312	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	133	43.052	77.081	3580	260	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	135	43.052	77.083	3578	232	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	143	43.052	77.081	3573	196	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	142	43.052	77.081	3572	258	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	141	43.052	77.079	3572	450	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	136	43.052	77.083	3572	406	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	144	43.052	77.082	3568	288	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	137	43.052	77.084	3566	243	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	145	43.052	77.083	3563	220	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	152	43.053	77.081	3559	273	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	146	43.052	77.084	3557	324	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	151	43.053	77.080	3557	431	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	147	43.052	77.084	3552	276	BW

Table 5

PU	GLACIER_NAME	WGMS_ID	FROM	TO	POINT_ID	LAT	LON	ELEV	MB	MB_CODE
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	153	43.053	77.081	3551	285	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	154	43.053	77.082	3549	283	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	155	43.053	77.083	3547	183	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	156	43.053	77.083	3544	190	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	157	43.053	77.084	3541	255	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	158	43.053	77.085	3535	340	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	161	43.055	77.081	3525	397	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	163	43.055	77.083	3517	328	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	162	43.055	77.082	3517	354	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	164	43.055	77.083	3516	204	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140430	165	43.054	77.084	3514	133	BW
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	1	43.040	77.075	3774	-1620	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	11	43.041	77.075	3766	-1764	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	2	43.040	77.077	3764	-1539	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	3	43.040	77.078	3762	-1476	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	4	43.040	77.078	3760	-1215	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	12	43.041	77.076	3755	-1584	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	5	43.040	77.079	3754	-990	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	13	43.041	77.077	3749	-1701	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	21	43.042	77.075	3747	-1656	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	14	43.041	77.078	3745	-1647	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	23	43.041	77.078	3742	-1638	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	16	43.041	77.081	3741	-1710	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	15	43.041	77.080	3741	-1737	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	24	43.041	77.079	3740	-1935	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	34	43.042	77.079	3738	-2106	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	33	43.042	77.078	3738	-1944	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	32	43.042	77.077	3737	-1746	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	25	43.041	77.080	3737	-2115	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	22	43.042	77.077	3736	-1512	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	26	43.041	77.081	3734	-2079	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	31	43.043	77.076	3734	-1701	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	43	43.043	77.079	3733	-1539	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	42	43.043	77.078	3732	-1665	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	35	43.042	77.081	3732	-2142	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	41	43.043	77.077	3731	-1728	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	36	43.042	77.082	3729	-1917	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	59	43.044	77.086	3728	-1854	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	44	43.043	77.081	3722	-1341	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	51	43.044	77.076	3721	-1989	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	45	43.042	77.082	3719	-1665	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	52	43.044	77.077	3718	-2574	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	53	43.044	77.079	3716	-1773	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	54	43.044	77.079	3710	-1872	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	56	43.044	77.082	3707	-1809	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	58	43.044	77.084	3706	-1989	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	55	43.044	77.081	3702	-1755	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	57	43.044	77.083	3701	-2340	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	61	43.046	77.077	3697	-1944	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	62	43.046	77.078	3694	-1908	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	69	43.045	77.084	3694	-1890	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	63	43.046	77.079	3692	-2079	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	710	43.046	77.084	3688	-2088	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	68	43.045	77.084	3687	-1809	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	65	43.046	77.082	3686	-1665	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	64	43.045	77.081	3685	-2106	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	67	43.045	77.083	3682	-1935	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	71	43.047	77.078	3681	-2187	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	72	43.047	77.079	3679	-1881	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	79	43.046	77.084	3678	-1926	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	78	43.046	77.083	3677	-1746	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	73	43.047	77.080	3675	-1773	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	76	43.047	77.082	3674	-2097	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	75	43.047	77.081	3674	-1764	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	77	43.046	77.083	3673	-1926	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	74	43.047	77.081	3671	-1854	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	87	43.047	77.082	3669	-2016	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	86	43.047	77.082	3668	-1836	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	81	43.048	77.079	3666	-2313	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	88	43.047	77.083	3665	-2142	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	85	43.048	77.081	3664	-1656	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	82	43.048	77.079	3663	-2151	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	83	43.048	77.080	3662	-2043	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	84	43.048	77.081	3660	-1926	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	91	43.049	77.079	3651	-2178	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	96	43.048	77.083	3650	-2151	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	95	43.048	77.083	3648	-1755	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	94	43.049	77.081	3648	-1746	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	92	43.049	77.080	3647	-2178	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	93	43.049	77.081	3646	-1782	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	101	43.049	77.079	3644	-2263	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	104	43.049	77.081	3640	-2007	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	103	43.049	77.080	3640	-2061	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	105	43.049	77.082	3640	-1557	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	102	43.049	77.080	3639	-2394	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	107	43.049	77.084	3635	-1971	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	106	43.049	77.083	3634	-1773	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	111	43.050	77.079	3618	-1494	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	115	43.050	77.083	3617	-1953	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	117	43.050	77.084	3616	-2538	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	112	43.050	77.080	3616	-1539	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	113	43.050	77.081	3614	-1755	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	114	43.050	77.082	3614	-1989	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	116	43.050	77.083	3613	-2538	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	124	43.051	77.082	3595	-2106	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	125	43.051	77.083	3593	-2655	BA

PU	GLACIER_NAME	WGMS_ID	FROM	TO	POINT_ID	LAT	LONG	ELEV	MB	MB_CODE
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	121	43.051	77.079	3592	-1386	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	123	43.051	77.082	3592	-1989	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	122	43.051	77.081	3588	-1827	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	131	43.052	77.079	3581	-1998	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	132	43.052	77.082	3580	-2142	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	134	43.052	77.081	3580	-2214	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	132	43.052	77.080	3580	-2394	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	135	43.052	77.083	3578	-2061	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	143	43.052	77.081	3573	-2556	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	142	43.052	77.081	3572	-2565	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	141	43.052	77.079	3572	-2394	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	146	43.052	77.083	3572	-2133	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	136	43.052	77.082	3568	-1998	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	137	43.052	77.084	3566	-2592	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	145	43.052	77.083	3563	-2124	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	152	43.053	77.081	3559	-2457	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	151	43.053	77.080	3557	-2367	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	146	43.052	77.084	3557	-2439	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	147	43.052	77.084	3552	-2646	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	153	43.053	77.081	3551	-2232	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	154	43.053	77.082	3549	-2232	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	155	43.053	77.083	3547	-2385	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	156	43.053	77.083	3544	-2556	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	157	43.053	77.084	3541	-3087	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	158	43.053	77.085	3535	-2655	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	161	43.055	77.081	3525	-2637	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	162	43.055	77.082	3517	-2502	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	163	43.055	77.083	3517	-2565	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	164	43.055	77.083	3516	-2709	BA
KZ	TS.TUYUKSUYSKIY	817	20131010	20140919	165	43.054	77.084	3514	-3123	BA
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	1	43.040	77.075	3774	-1791	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	11	43.041	77.075	3766	-1954	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	2	43.040	77.077	3764	-1743	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	3	43.040	77.078	3762	-1678	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	4	43.040	77.078	3760	-1445	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	12	43.041	77.076	3755	-1799	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	5	43.040	77.079	3754	-1243	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	13	43.041	77.077	3749	-1911	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	21	43.042	77.075	3747	-1869	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	14	43.041	77.078	3745	-1859	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	23	43.041	77.078	3742	-1845	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	15	43.041	77.080	3741	-1962	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	16	43.041	77.081	3741	-1911	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	24	43.041	77.079	3740	-2122	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	33	43.042	77.078	3738	-2119	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	34	43.042	77.079	3738	-2260	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	25	43.041	77.080	3737	-2333	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	32	43.042	77.077	3737	-1961	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	22	43.042	77.077	3736	-1728	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	26	43.041	77.081	3734	-2255	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	31	43.043	77.076	3734	-1923	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	43	43.043	77.079	3733	-1725	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	35	43.042	77.081	3732	-2270	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	42	43.043	77.078	3732	-1862	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	41	43.043	77.077	3731	-1926	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	36	43.042	77.082	3729	-2077	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	59	43.044	77.086	3728	-2117	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	44	43.043	77.081	3722	-1546	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	51	43.044	77.076	3721	-2202	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	45	43.042	77.082	3719	-1833	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	52	43.044	77.077	3718	-2800	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	53	43.044	77.079	3716	-1953	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	54	43.044	77.079	3710	-2064	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	56	43.044	77.082	3707	-2017	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	58	43.044	77.084	3706	-2199	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	55	43.044	77.081	3702	-1973	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	57	43.044	77.083	3701	-2498	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	61	43.046	77.077	3697	-2229	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	69	43.045	77.084	3694	-2126	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	62	43.046	77.078	3694	-2117	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	63	43.046	77.079	3692	-2289	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	710	43.046	77.084	3688	-2208	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	68	43.045	77.084	3687	-1960	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	65	43.046	77.082	3686	-1841	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	64	43.045	77.081	3685	-2304	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	67	43.045	77.083	3682	-2153	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	71	43.047	77.078	3681	-2406	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	72	43.047	77.079	3679	-2054	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	79	43.046	77.084	3678	-2122	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	78	43.046	77.083	3677	-1915	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	73	43.047	77.080	3675	-1929	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	75	43.047	77.081	3674	-1954	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	76	43.047	77.082	3674	-2196	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	77	43.046	77.083	3673	-2116	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	74	43.047	77.081	3671	-2027	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	87	43.047	77.082	3669	-2110	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	86	43.047	77.082	3668	-2017	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	81	43.048	77.079	3666	-2509	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	88	43.047	77.083	3665	-2388	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	85	43.048	77.081	3664	-1804	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	82	43.048	77.079	3663	-2316	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	83	43.048	77.080	3662	-2209	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	84	43.048	77.081	3660	-2089	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	91	43.049	77.079	3651	-2556	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	96	43.048	77.083	3650	-2253	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	95	43.048	77.083	3648	-1902	BS

Table 5

PU	GLACIER_NAME	WGMS_ID	FROM	TO	POINT_ID	LAT	LON	ELEV	MB	MB_CODE
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	94	43.049	77.081	3648	-2091	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	92	43.049	77.080	3647	-2568	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	93	43.049	77.081	3646	-2159	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	101	43.049	77.079	3644	-2685	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	105	43.049	77.082	3640	-1808	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	104	43.049	77.081	3640	-2317	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	103	43.049	77.080	3640	-2281	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	102	43.049	77.080	3639	-2700	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	107	43.049	77.084	3635	-2196	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	106	43.049	77.083	3634	-2005	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	111	43.050	77.079	3618	-1901	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	115	43.050	77.083	3617	-2283	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	117	43.050	77.084	3616	-2875	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	112	43.050	77.080	3616	-2014	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	114	43.050	77.082	3614	-2309	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	113	43.050	77.081	3614	-2107	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	116	43.050	77.083	3613	-2855	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	124	43.051	77.082	3595	-2417	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	125	43.051	77.083	3593	-2950	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	123	43.051	77.082	3592	-2330	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	121	43.051	77.079	3592	-2033	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	122	43.051	77.081	3588	-2241	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	131	43.052	77.079	3581	-2409	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	132	43.052	77.080	3580	-2706	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	133	43.052	77.081	3580	-2474	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	134	43.052	77.082	3580	-2366	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	135	43.052	77.083	3578	-2293	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	143	43.052	77.081	3573	-2752	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	142	43.052	77.081	3572	-2823	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	141	43.052	77.079	3572	-2844	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	136	43.052	77.083	3572	-2539	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	144	43.052	77.082	3568	-2286	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	137	43.052	77.084	3566	-2835	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	145	43.052	77.083	3563	-2344	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	152	43.053	77.081	3559	-2730	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	146	43.052	77.084	3557	-2763	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	151	43.053	77.080	3557	-2798	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	147	43.052	77.084	3552	-2922	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	153	43.053	77.081	3551	-2517	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	154	43.053	77.082	3549	-2515	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	155	43.053	77.083	3547	-2568	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	156	43.053	77.083	3544	-2746	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	157	43.053	77.084	3541	-3342	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	158	43.053	77.085	3535	-2995	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	161	43.055	77.081	3525	-3034	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	162	43.055	77.082	3517	-2856	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	163	43.055	77.083	3517	-2893	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	164	43.055	77.083	3516	-2913	BS
KZ	TS.TUYUKSUYSKIY	817	20140430	20140919	165	43.054	77.084	3514	-3256	BS
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	1	77.075	43.040	3773	747	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	11	77.075	43.041	3764	713	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	2	77.077	43.040	3762	803	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	3	77.078	43.040	3761	783	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	4	77.078	43.040	3758	798	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	12	77.076	43.041	3754	750	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	5	77.079	43.040	3752	722	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	13	77.077	43.041	3748	740	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	14	77.078	43.041	3745	740	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	21	77.075	43.042	3745	779	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	23	77.078	43.041	3741	708	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	24	77.079	43.041	3740	653	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	16	77.081	43.041	3740	653	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	15	77.080	43.041	3740	680	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	33	77.078	43.042	3737	715	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	25	77.080	43.041	3736	788	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	32	77.077	43.042	3736	737	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	34	77.079	43.042	3736	738	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	22	77.077	43.042	3735	698	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	31	77.076	43.043	3733	741	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	26	77.081	43.041	3733	659	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	43	77.079	43.043	3731	640	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	42	77.078	43.043	3730	783	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	35	77.081	43.042	3730	581	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	41	77.077	43.043	3729	658	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	36	77.082	43.042	3727	677	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	59	77.086	43.044	3726	659	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	51	77.076	43.044	3720	745	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	44	77.081	43.043	3720	657	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	45	77.082	43.043	3718	694	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	52	77.077	43.044	3716	933	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	53	77.079	43.044	3714	667	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	54	77.079	43.044	3708	658	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	56	77.082	43.044	3705	638	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	58	77.084	43.044	3705	718	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	55	77.081	43.044	3700	770	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	57	77.083	43.044	3699	587	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	61	77.077	43.046	3695	747	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	69	77.084	43.045	3693	790	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	62	77.078	43.046	3692	685	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	63	77.079	43.046	3690	670	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	80	77.084	43.046	3687	604	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	68	77.084	43.045	3685	552	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	65	77.082	43.046	3684	696	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	64	77.081	43.046	3683	746	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	67	77.083	43.046	3681	753	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	71	77.078	43.047	3680	683	BW

PU	GLACIER_NAME	WGMS_ID	FROM	TO	POINT_ID	LAT	LON	ELEV	MB	MB_CODE
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	79	77.084	43.046	3677	785	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	72	77.079	43.047	3677	681	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	78	77.083	43.046	3675	629	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	73	77.080	43.047	3673	672	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	75	77.081	43.047	3672	686	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	76	77.082	43.047	3672	586	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	77	77.083	43.047	3671	691	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	74	77.081	43.047	3669	676	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	86	77.082	43.048	3666	389	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	87	77.082	43.047	3666	257	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	81	77.079	43.048	3664	776	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	88	77.083	43.047	3663	453	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	85	77.081	43.048	3662	641	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	82	77.079	43.048	3661	750	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	83	77.080	43.048	3659	696	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	84	77.081	43.048	3658	718	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	91	77.079	43.049	3649	597	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	96	77.083	43.048	3648	332	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	94	77.081	43.049	3645	658	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	92	77.080	43.049	3645	632	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	95	77.083	43.048	3645	391	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	93	77.081	43.049	3644	687	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	101	77.079	43.049	3642	760	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	104	77.081	43.049	3638	554	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	102	77.080	43.049	3637	580	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	103	77.080	43.049	3637	399	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	105	77.082	43.049	3637	521	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	107	77.084	43.049	3633	751	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	106	77.083	43.049	3631	408	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	111	77.079	43.050	3616	650	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	115	77.083	43.050	3615	363	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	117	77.084	43.050	3614	424	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	112	77.080	43.050	3613	732	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	114	77.082	43.050	3612	416	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	113	77.081	43.050	3611	662	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	116	77.083	43.050	3610	488	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	124	77.082	43.051	3593	667	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	121	77.079	43.051	3590	827	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	123	77.082	43.051	3590	593	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	125	77.083	43.051	3590	826	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	122	77.081	43.051	3586	566	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	131	77.079	43.052	3580	758	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	134	77.082	43.052	3578	584	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	133	77.081	43.052	3578	533	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	132	77.080	43.052	3578	675	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	135	77.083	43.052	3575	596	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	143	77.081	43.052	3571	516	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	141	77.079	43.052	3570	751	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	142	77.081	43.052	3570	582	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	136	77.083	43.052	3569	594	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	144	77.082	43.052	3565	585	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	137	77.084	43.052	3563	608	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	145	77.083	43.052	3560	506	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	152	77.081	43.053	3557	611	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	151	77.080	43.053	3555	829	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	124	77.084	43.052	3554	582	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	147	77.084	43.052	3550	585	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	153	77.081	43.053	3549	683	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	154	77.082	43.053	3546	604	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	155	77.083	43.053	3544	537	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	156	77.084	43.053	3541	502	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	157	77.084	43.053	3538	540	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	161	77.081	43.055	3523	771	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	162	77.082	43.055	3515	669	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	163	77.083	43.055	3515	642	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	164	77.083	43.055	3513	569	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150602	165	77.084	43.054	3511	415	BW
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	1	77.075	43.040	3773	-1206	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	11	77.075	43.041	3764	-1116	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	2	77.077	43.040	3762	-777	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	3	77.078	43.040	3761	-1080	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	4	77.078	43.040	3758	-711	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	12	77.076	43.041	3754	-1323	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	5	77.079	43.040	3752	-1341	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	13	77.077	43.041	3748	-1062	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	21	77.075	43.042	3745	-1080	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	14	77.078	43.041	3745	-1251	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	23	77.078	43.041	3741	-1206	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	24	77.079	43.041	3740	-1494	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	16	77.081	43.041	3740	-1404	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	15	77.080	43.041	3740	-1305	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	33	77.078	43.042	3737	-1215	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	34	77.079	43.042	3736	-1413	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	25	77.080	43.041	3736	-1134	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	32	77.077	43.042	3736	-1278	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	22	77.077	43.042	3735	-1206	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	26	77.081	43.041	3733	-1620	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	31	77.076	43.043	3733	-1188	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	43	77.079	43.043	3731	-1179	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	35	77.081	43.042	3730	-1620	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	42	77.078	43.043	3730	-1413	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	41	77.077	43.043	3729	-1260	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	36	77.082	43.042	3727	-1539	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	59	77.086	43.044	3726	-1323	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	51	77.076	43.044	3720	-1359	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	44	77.081	43.043	3720	-1197	BA

Table 5

PU	GLACIER_NAME	WGMS_ID	FROM	TO	POINT_ID	LAT	LON	ELEV	MB	MB_CODE
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	45	77.082	43.043	3718	-1224	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	52	77.077	43.044	3716	-1008	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	53	77.079	43.044	3714	-1305	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	54	77.079	43.044	3708	-1404	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	56	77.084	43.044	3705	-1296	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	58	77.082	43.044	3705	-1611	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	55	77.081	43.044	3700	-1494	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	57	77.083	43.044	3699	-1656	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	61	77.077	43.046	3695	-1530	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	69	77.084	43.045	3693	-1422	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	62	77.078	43.046	3692	-1539	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	63	77.079	43.046	3690	-1422	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	80	77.084	43.046	3687	-1764	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	68	77.084	43.045	3685	-1422	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	65	77.082	43.046	3684	-1224	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	64	77.081	43.046	3683	-2016	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	67	77.083	43.046	3681	-1386	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	71	77.078	43.047	3680	-1386	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	79	77.084	43.046	3677	-1287	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	72	77.079	43.047	3677	-1539	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	78	77.083	43.046	3675	-1512	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	73	77.080	43.047	3673	-1476	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	76	77.082	43.047	3672	-1476	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	77	77.081	43.047	3672	-1593	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	75	77.083	43.047	3671	-1782	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	74	77.081	43.047	3669	-1620	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	86	77.082	43.048	3666	-1944	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	87	77.082	43.047	3666	-2007	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	81	77.079	43.048	3664	-1521	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	88	77.083	43.047	3663	-1710	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	85	77.081	43.048	3662	-1287	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	82	77.079	43.048	3661	-1548	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	83	77.080	43.048	3659	-1449	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	84	77.081	43.048	3658	-1368	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	91	77.079	43.049	3649	-1584	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	96	77.083	43.048	3648	-1746	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	95	77.083	43.048	3645	-1449	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	94	77.081	43.049	3645	-1332	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	92	77.080	43.049	3645	-1404	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	93	77.081	43.049	3644	-1359	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	101	77.079	43.049	3642	-1314	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	104	77.081	43.049	3638	-1242	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	103	77.080	43.049	3637	-1845	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	105	77.082	43.049	3637	-1458	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	102	77.080	43.049	3637	-1647	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	107	77.084	43.049	3633	-1206	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	106	77.083	43.049	3631	-1692	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	111	77.079	43.050	3616	-1530	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	115	77.083	43.050	3615	-1854	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	117	77.084	43.050	3614	-2097	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	112	77.080	43.050	3613	-1224	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	114	77.082	43.050	3612	-1755	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	113	77.081	43.050	3611	-1359	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	116	77.083	43.050	3610	-1998	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	124	77.082	43.051	3593	-1737	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	121	77.079	43.051	3590	-1053	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	125	77.083	43.051	3590	-1863	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	123	77.082	43.051	3590	-1746	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	122	77.081	43.051	3586	-1620	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	131	77.079	43.052	3580	-1809	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	133	77.081	43.052	3578	-2070	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	132	77.080	43.052	3578	-1818	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	134	77.082	43.052	3578	-1863	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	135	77.083	43.052	3575	-1845	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	143	77.081	43.052	3571	-2178	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	142	77.081	43.052	3570	-2250	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	141	77.079	43.052	3570	-1782	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	136	77.083	43.052	3569	-2151	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	144	77.082	43.052	3565	-1746	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	137	77.084	43.052	3563	-1935	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	145	77.083	43.052	3560	-2025	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	152	77.081	43.053	3557	-2070	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	151	77.080	43.053	3555	-1503	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	146	77.084	43.052	3554	-2421	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	147	77.084	43.052	3550	-2070	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	153	77.081	43.053	3549	-1602	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	154	77.082	43.053	3546	-2196	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	155	77.083	43.053	3544	-1953	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	156	77.084	43.053	3541	-2250	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	157	77.084	43.053	3538	-2367	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	161	77.081	43.055	3523	-2043	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	163	77.083	43.055	3515	-2241	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	162	77.082	43.055	3515	-2043	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	164	77.083	43.055	3513	-2394	BA
KZ	TS.TUYUKSUYSKIY	817	20140920	20150919	165	77.084	43.054	3511	-2043	BA
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	1	77.075	43.040	3773	-1953	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	11	77.075	43.041	3764	-1829	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	2	77.077	43.040	3762	-1580	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	3	77.078	43.040	3761	-1863	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	4	77.078	43.040	3758	-1509	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	12	77.076	43.041	3754	-2073	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	5	77.079	43.040	3752	-2063	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	13	77.077	43.041	3748	-1802	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	14	77.078	43.041	3745	-1991	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	21	77.075	43.042	3745	-1859	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	23	77.078	43.041	3741	-1914	BS

PU	GLACIER_NAME	WGMS_ID	FROM	TO	POINT_ID	LAT	LON	ELEV	MB	MB_CODE
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	15	77.080	43.041	3740	-1985	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	24	77.079	43.041	3740	-2147	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	16	77.081	43.041	3740	-2057	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	33	77.078	43.042	3737	-1930	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	25	77.080	43.041	3736	-1922	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	32	77.077	43.042	3736	-2015	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	34	77.079	43.042	3736	-2151	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	22	77.077	43.042	3735	-1904	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	26	77.081	43.041	3733	-2279	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	31	77.076	43.043	3733	-1929	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	43	77.079	43.043	3731	-1819	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	42	77.078	43.043	3730	-2196	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	35	77.081	43.042	3730	-2201	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	41	77.077	43.043	3729	-1918	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	36	77.082	43.042	3727	-2216	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	59	77.086	43.044	3726	-1982	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	51	77.076	43.044	3720	-2104	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	44	77.081	43.043	3720	-1854	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	45	77.082	43.043	3718	-1918	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	52	77.077	43.044	3716	-1941	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	53	77.079	43.044	3714	-1972	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	54	77.079	43.044	3708	-2062	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	58	77.084	43.044	3705	-2014	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	56	77.082	43.044	3705	-2249	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	55	77.081	43.044	3700	-2264	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	57	77.083	43.044	3699	-2243	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	61	77.077	43.046	3695	-2277	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	69	77.084	43.045	3693	-2212	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	62	77.078	43.046	3692	-2224	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	63	77.079	43.046	3690	-2092	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	80	77.084	43.046	3687	-2368	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	68	77.084	43.045	3685	-1974	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	65	77.082	43.046	3684	-1920	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	64	77.081	43.046	3683	-2762	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	67	77.083	43.046	3681	-2139	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	71	77.078	43.047	3680	-2069	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	79	77.084	43.046	3677	-2072	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	72	77.079	43.047	3677	-2220	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	78	77.083	43.046	3675	-2141	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	73	77.080	43.047	3673	-2148	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	75	77.081	43.047	3672	-2279	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	76	77.082	43.047	3672	-2062	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	77	77.083	43.047	3671	-2473	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	74	77.081	43.047	3669	-2296	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	87	77.082	43.047	3666	-2264	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	86	77.082	43.048	3666	-2333	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	81	77.079	43.048	3664	-2297	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	88	77.083	43.047	3663	-2163	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	85	77.081	43.048	3662	-1928	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	82	77.079	43.048	3661	-2298	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	83	77.080	43.048	3659	-2145	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	84	77.081	43.048	3658	-2086	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	91	77.079	43.049	3649	-2181	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	96	77.083	43.048	3648	-2078	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	92	77.080	43.049	3645	-2036	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	95	77.083	43.048	3645	-1840	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	94	77.081	43.049	3645	-1990	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	93	77.081	43.049	3644	-2046	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	101	77.079	43.049	3642	-2074	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	104	77.081	43.049	3638	-1796	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	105	77.082	43.049	3637	-1979	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	103	77.080	43.049	3637	-2244	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	102	77.080	43.049	3637	-2227	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	107	77.084	43.049	3633	-1957	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	106	77.083	43.049	3631	-2100	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	111	77.079	43.050	3616	-2180	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	115	77.083	43.050	3615	-2217	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	117	77.084	43.050	3614	-2521	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	112	77.080	43.050	3613	-1956	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	114	77.082	43.050	3612	-2171	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	113	77.081	43.050	3611	-2021	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	116	77.083	43.050	3610	-2486	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	124	77.082	43.051	3593	-2404	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	125	77.083	43.051	3590	-2689	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	121	77.079	43.051	3590	-1880	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	123	77.082	43.051	3590	-2339	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	122	77.081	43.051	3586	-2186	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	131	77.079	43.052	3580	-2567	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	132	77.080	43.052	3578	-2493	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	133	77.081	43.052	3578	-2603	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	134	77.082	43.052	3578	-2447	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	135	77.083	43.052	3575	-2441	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	143	77.081	43.052	3571	-2694	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	141	77.079	43.052	3570	-2533	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	142	77.081	43.052	3570	-2832	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	136	77.083	43.052	3569	-2745	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	144	77.082	43.052	3565	-2331	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	137	77.084	43.052	3563	-2543	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	147	77.083	43.052	3560	-2531	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	152	77.081	43.053	3557	-2681	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	151	77.080	43.053	3555	-2332	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	146	77.084	43.052	3554	-3003	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	147	77.084	43.052	3550	-2655	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	153	77.081	43.053	3549	-2285	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	154	77.082	43.053	3546	-2800	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	155	77.083	43.053	3544	-2490	BS

Table 5

PU	GLACIER_NAME	WGMS_ID	FROM	TO	POINT_ID	LAT	LON	ELEV	MB	MB_CODE
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	156	77.084	43.053	3541	-2752	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	157	77.084	43.053	3538	-2907	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	161	77.081	43.055	3523	-2814	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	163	77.083	43.055	3515	-2883	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	162	77.082	43.055	3515	-2712	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	164	77.083	43.055	3513	-2963	BS
KZ	TS.TUYUKSUYSKIY	817	20150602	20150919	165	77.084	43.054	3511	-2458	BS
NO - Norway										
NO	JUVFONNE	3661	20130911	20140512	2	61.677	8.351	1882	1210	IN
NO	JUVFONNE	3661	20130911	20140909	2	61.677	8.351	1882	-2300	IN
NO	JUVFONNE	3661	20140909	20150513	2	61.677	8.351	1880	1460	IN
NO	JUVFONNE	3661	20140909	20150911	2	61.677	8.351	1880	570	IN
NZ - New Zealand										
NZ	ROLLESTON	1538	20130314	20131107	top	-42.889	171.526	1812	3499	BW
NZ	ROLLESTON	1538	20130314	20131107	mid/top	-42.889	171.527	1797	2692	BW
NZ	ROLLESTON	1538	20130314	20131107	mid/bottom	-42.890	171.527	1759	1939	BW
NZ	ROLLESTON	1538	20130314	20140322	top	-42.889	171.526	1812	660	BA
NZ	ROLLESTON	1538	20130314	20140322	mid/top	-42.889	171.527	1797	18	BA
NZ	ROLLESTON	1538	20130314	20140322	mid/bottom	-42.890	171.527	1759	-1926	BA
NZ	ROLLESTON	1538	20131107	20140322	top	-42.889	171.526	1812	-2839	BS
NZ	ROLLESTON	1538	20131107	20140322	mid/top	-42.889	171.527	1797	-2674	BS
NZ	ROLLESTON	1538	20131107	20140322	mid/bottom	-42.890	171.527	1759	-3865	BS
NZ	ROLLESTON	1538	20140322	20141213	top	-42.889	171.527	1812	3234	BW
NZ	ROLLESTON	1538	20140322	20141213	mid/top	-42.889	171.527	1800	2880	BW
NZ	ROLLESTON	1538	20140322	20141213	bottom	-42.890	171.527	1757	1781	BW
NZ	ROLLESTON	1538	20141213	20150320	top	-42.889	171.527	1812	-2585	BS
NZ	ROLLESTON	1538	20141213	20150320	mid/top	-42.889	171.527	1800	-2880	BS
NZ	ROLLESTON	1538	20141213	20150320	mid/bottom	-42.890	171.527	1783	-2890	BS
NZ	ROLLESTON	1538	20141213	20150320	bottom	-42.890	171.527	1757	-3615	BS
SJ - Svalbard										
SJ	WALDEMARBREEN	2307	20130999	20140999	16			429	129	BA
SJ	WALDEMARBREEN	2307	20130999	20140999	15			389	-253	BA
SJ	WALDEMARBREEN	2307	20130999	20140999	14			348	-387	BA
SJ	WALDEMARBREEN	2307	20130999	20140999	13			322	-567	BA
SJ	WALDEMARBREEN	2307	20130999	20140999	12			300	-207	BA
SJ	WALDEMARBREEN	2307	20130999	20140999	11			278	-1089	BA
SJ	WALDEMARBREEN	2307	20130999	20140999	10			270	-568	BA
SJ	WALDEMARBREEN	2307	20130999	20140999	9			264	-612	BA
SJ	WALDEMARBREEN	2307	20130999	20140999	8			243	-792	BA
SJ	WALDEMARBREEN	2307	20130999	20140999	6			233	-685	BA
SJ	WALDEMARBREEN	2307	20130999	20140999	5			212	-1108	BA
SJ	WALDEMARBREEN	2307	20130999	20140999	4			209	-639	BA
SJ	WALDEMARBREEN	2307	20130999	20140999	3			205	-1072	BA
SJ	WALDEMARBREEN	2307	20130999	20140999	2			183	-2071	BA
SJ	WALDEMARBREEN	2307	20130999	20140999	1			177	-1549	BA
SJ	WALDEMARBREEN	2307	20130999	20140999	7			136	-1162	BA
SJ	WALDEMARBREEN	2307	20140999	20150999	15			429	-486	BA
SJ	WALDEMARBREEN	2307	20140999	20150999	14			366	-1341	BA
SJ	WALDEMARBREEN	2307	20140999	20150999	13			347	-1152	BA
SJ	WALDEMARBREEN	2307	20140999	20150999	12			321	-1341	BA
SJ	WALDEMARBREEN	2307	20140999	20150999	11			299	-1341	BA
SJ	WALDEMARBREEN	2307	20140999	20150999	10			276	-1971	BA
SJ	WALDEMARBREEN	2307	20140999	20150999	9			268	-1710	BA
SJ	WALDEMARBREEN	2307	20140999	20150999	8			264	-1350	BA
SJ	WALDEMARBREEN	2307	20140999	20150999	7			243	-1521	BA
SJ	WALDEMARBREEN	2307	20140999	20150999	5			231	-1557	BA
SJ	WALDEMARBREEN	2307	20140999	20150999	4			210	-2255	BA
SJ	WALDEMARBREEN	2307	20140999	20150999	3			175	-2376	BA
SJ	WALDEMARBREEN	2307	20140999	20150999	2			162	-2745	BA
SJ	WALDEMARBREEN	2307	20140999	20150999	6			136	-1764	BA
SJ	WALDEMARBREEN	2307	20140999	20150999	1			132	-2475	BA
US - United States of America										
US	BLACK RAPIDS	80	20139999	20149999	8km	63.437	-146.501	1892	594	IN
US	BLACK RAPIDS	80	20139999	20149999	14km	63.482	-146.501	1715	-630	IN
US	BLACK RAPIDS	80	20139999	20149999	20km	63.483	-146.383	1498	-2581	IN
US	BLACK RAPIDS	80	20139999	20149999	L22km	63.457	-146.333	1466	-2313	IN
US	BLACK RAPIDS	80	20149999	20159999	8km	63.437	-146.501	1892	71	IN
US	BLACK RAPIDS	80	20149999	20159999	L22km	63.457	-146.333	1463	-3250	IN
US	BLUE GLACIER	210	20139999	20149999	2			2140	200	BA
US	BLUE GLACIER	210	20139999	20149999	2			2140	3350	BW
US	BLUE GLACIER	210	20139999	20149999	3			2060	2350	BW
US	BLUE GLACIER	210	20139999	20149999	3			2060	-520	BA
US	BLUE GLACIER	210	20139999	20149999	4			1720	2400	BW
US	BLUE GLACIER	210	20139999	20149999	5			1590	-3330	BA
US	BLUE GLACIER	210	20139999	20149999	5			1590	1840	BW
US	BLUE GLACIER	210	20139999	20149999	6			1450	1220	BW
US	BLUE GLACIER	210	20139999	20149999	6			1450	-6570	BA
US	BLUE GLACIER	210	20149999	20149999	2			2140	-3320	BS
US	BLUE GLACIER	210	20149999	20149999	3			2060	-2870	BS
US	BLUE GLACIER	210	20149999	20149999	5			1590	-5170	BS
US	BLUE GLACIER	210	20149999	20149999	6			1450	-7780	BS
US	BLUE GLACIER	210	20150420	20150928	18A	47.800	-123.703	2253	2580	BA
US	BLUE GLACIER	210	20150420	20150928	18S	47.800	-123.703	2253	-2130	BS
US	BLUE GLACIER	210	20150420	20150928	18W	47.800	-123.703	2253	4700	BW
US	BLUE GLACIER	210	20150420	20150928	28W	47.807	-123.709	2144	4380	BW
US	BLUE GLACIER	210	20150420	20150928	28S	47.807	-123.709	2144	-3280	BS
US	BLUE GLACIER	210	20150420	20150928	28A	47.807	-123.709	2144	1100	BA
US	BLUE GLACIER	210	20150420	20150928	38S	47.814	-123.703	2062	-4170	BS
US	BLUE GLACIER	210	20150420	20150928	38W	47.814	-123.703	2062	2560	BW
US	BLUE GLACIER	210	20150420	20150928	38A	47.814	-123.703	2062	-1610	BA
US	BLUE GLACIER	210	20150420	20150928	48W	47.809	-123.692	1720	1470	BW

PU	GLACIER_NAME	WGMS_ID	FROM	TO POINT_ID	LAT	LON	ELEV	MB	MB_CODE
US	BLUE GLACIER	210	20150420	20150928 4BS	47.809	-123.692	1720	-6410	BS
US	BLUE GLACIER	210	20150420	20150928 4BA	47.809	-123.692	1720	-4940	BA
US	BLUE GLACIER	210	20150420	20150928 5BW	47.817	-123.685	1588	430	BW
US	BLUE GLACIER	210	20150420	20150928 5BS	47.817	-123.685	1588	-5820	BS
US	BLUE GLACIER	210	20150420	20150928 5BA	47.817	-123.685	1588	-5390	BA
US	BLUE GLACIER	210	20150420	20150928 6BA	47.824	-123.691	1467	-7910	BA
US	BLUE GLACIER	210	20150420	20150928 6BW	47.824	-123.691	1467	150	BW
US	BLUE GLACIER	210	20150420	20150928 6BS	47.824	-123.691	1467	-8060	BS
US	EEL	188	20139999	20149999 1			1940	1290	BA
US	EEL	188	20139999	20149999 1			1940	4850	BW
US	EEL	188	20139999	20149999 2			1855	4950	BW
US	EEL	188	20139999	20149999 2			1855	930	BA
US	EEL	188	20139999	20149999 3			1800	-320	BA
US	EEL	188	20139999	20149999 3			1800	4120	BW
US	EEL	188	20139999	20149999 4			1710	2420	BW
US	EEL	188	20139999	20149999 4			1710	-2960	BA
US	EEL	188	20149999	20149999 1			1940	-3560	BS
US	EEL	188	20149999	20149999 2			1855	-4020	BS
US	EEL	188	20149999	20149999 3			1800	-4440	BS
US	EEL	188	20149999	20149999 4			1710	-5380	BS
US	EEL	188	20150420	20150928 1BA	47.722	-123.339	1943	-156	BA
US	EEL	188	20150420	20150928 1BS	47.722	-123.339	1943	-3640	BS
US	EEL	188	20150420	20150928 1BW	47.722	-123.339	1943	2090	BW
US	EEL	188	20150420	20150928 2BA	47.726	-123.340	1855	-3680	BA
US	EEL	188	20150420	20150928 2BS	47.726	-123.340	1855	-5330	BS
US	EEL	188	20150420	20150928 2BW	47.726	-123.340	1855	1660	BW
US	EEL	188	20150420	20150928 3BW	47.730	-123.340	1768	1230	BW
US	EEL	188	20150420	20150928 3BA	47.730	-123.340	1768	-4920	BA
US	EEL	188	20150420	20150928 3BS	47.730	-123.340	1768	-6150	BS
US	EEL	188	20150420	20150928 4BW	47.733	-123.342	1679	420	BW
US	EEL	188	20150420	20150928 4BS	47.733	-123.342	1679	-7130	BS
US	EEL	188	20150420	20150928 4BA	47.733	-123.342	1679	-6710	BA
US	EMMONS	203	20139999	20149999 1			3089	3360	BW
US	EMMONS	203	20139999	20149999 1			3089	1040	BA
US	EMMONS	203	20139999	20149999 2			2806	310	BA
US	EMMONS	203	20139999	20149999 2			2806	2920	BW
US	EMMONS	203	20139999	20149999 3			1970	-5530	BA
US	EMMONS	203	20139999	20149999 3			1970	1790	BW
US	EMMONS	203	20139999	20149999 4			1720	-9210	BA
US	EMMONS	203	20139999	20149999 4			1720	710	BW
US	EMMONS	203	20139999	20149999 4A			1716	960	BW
US	EMMONS	203	20139999	20149999 4A			1716	-2670	BA
US	EMMONS	203	20139999	20149999 5			1573	-2740	BA
US	EMMONS	203	20139999	20149999 5			1573	540	BW
US	EMMONS	203	20149999	20149999 1			3089	-2320	BS
US	EMMONS	203	20149999	20149999 2			2806	-2610	BS
US	EMMONS	203	20149999	20149999 3			1970	-7320	BS
US	EMMONS	203	20149999	20149999 4			1720	-9920	BS
US	EMMONS	203	20149999	20149999 4A			1716	-3630	BS
US	EMMONS	203	20149999	20149999 5			1573	-3280	BS
US	EMMONS	203	20150430	20151006 3BW	46.874	-121.694	1891	840	BW
US	EMMONS	203	20150430	20151006 3BS	46.874	-121.694	1891	-8350	BS
US	EMMONS	203	20150430	20151006 3BA	46.874	-121.694	1891	-7510	BA
US	EMMONS	203	20150430	20151006 4BW	46.879	-121.680	1725	190	BW
US	EMMONS	203	20150430	20151006 4BS	46.879	-121.680	1725	-10020	BS
US	EMMONS	203	20150430	20151006 4BA	46.879	-121.680	1725	-9830	BA
US	EMMONS	203	20150430	20151006 4ABS	46.881	-121.681	1721	-2030	BS
US	EMMONS	203	20150430	20151006 4ABA	46.881	-121.681	1721	-2030	BA
US	EMMONS	203	20150430	20151006 4ABW	46.881	-121.681	1721	0	BW
US	EMMONS	203	20150430	20151006 5BA	46.888	-121.675	1563	-1830	BA
US	EMMONS	203	20150430	20151006 5BS	46.888	-121.675	1563	-1830	BS
US	EMMONS	203	20150430	20151006 5BW	46.888	-121.675	1563	0	BW
US	EMMONS	203	20150507	20150928 1BA	46.866	-121.736	3089	1240	BA
US	EMMONS	203	20150507	20150928 1BS	46.866	-121.736	3089	-2720	BS
US	EMMONS	203	20150507	20150928 1BW	46.866	-121.736	3089	3960	BW
US	EMMONS	203	20150507	20150928 2BA	46.870	-121.729	2807	550	BA
US	EMMONS	203	20150507	20150928 2BS	46.870	-121.729	2807	-3420	BS
US	EMMONS	203	20150507	20150928 2BW	46.870	-121.729	2807	3970	BW
US	GULKANA	90	20130826	20140417 A	63.259	-145.429	1337	70	BW
US	GULKANA	90	20130827	20140415 D	63.285	-145.385	1846	1360	BW
US	GULKANA	90	20130827	20140417 B	63.286	-145.410	1683	1080	BW
US	GULKANA	90	20140415	20140824 D	63.285	-145.385	1846	-700	BS
US	GULKANA	90	20140417	20140824 B	63.286	-145.410	1683	-1470	BS
US	GULKANA	90	20140417	20140825 A	63.259	-145.429	1337	-3360	BS
US	GULKANA	90	20140824	20150414 D	63.285	-145.385	1845	750	BW
US	GULKANA	90	20140824	20150414 B	63.286	-145.410	1682	780	BW
US	GULKANA	90	20140825	20150416 AU	63.265	-145.417	1448	330	BW
US	GULKANA	90	20140825	20150923 AU	63.265	-145.417	1448	-4040	BS
US	GULKANA	90	20150414	20150923 B	63.286	-145.410	1682	-2580	BS
US	GULKANA	90	20150414	20150924 D	63.285	-145.385	1845	-1080	BS
US	NISQUALLY	201	20139999	20149999 1			3387	280	BA
US	NISQUALLY	201	20139999	20149999 1			3387	2480	BW
US	NISQUALLY	201	20139999	20149999 2			2959	2960	BW
US	NISQUALLY	201	20139999	20149999 2			2959	-390	BA
US	NISQUALLY	201	20139999	20149999 3			2179	3600	BW
US	NISQUALLY	201	20139999	20149999 3			2179	-1680	BA
US	NISQUALLY	201	20139999	20149999 4			1859	-3100	BA
US	NISQUALLY	201	20139999	20149999 4			1859	3190	BW
US	NISQUALLY	201	20139999	20149999 4A			1856	-680	BA
US	NISQUALLY	201	20139999	20149999 4A			1856	3100	BW
US	NISQUALLY	201	20139999	20149999 5			1759	2430	BW
US	NISQUALLY	201	20139999	20149999 5			1759	-3020	BA
US	NISQUALLY	201	20149999	20149999 1			3387	-2200	BS
US	NISQUALLY	201	20149999	20149999 2			2959	-3350	BS
US	NISQUALLY	201	20149999	20149999 3			2179	-5280	BS
US	NISQUALLY	201	20149999	20149999 4			1859	-6280	BS

Table 5

PU	GLACIER_NAME	WGMS_ID	FROM	TO	POINT_ID	LAT	LON	ELEV	MB	MB_CODE
US	NISQUALLY	201	20149999	20149999	4A			1856		-3790 BS
US	NISQUALLY	201	20149999	20149999	5			1759		-5450 BS
US	NISQUALLY	201	20150409	20150926	3BW	46.818	-121.740	2178		4040 BW
US	NISQUALLY	201	20150409	20150926	3BA	46.818	-121.740	2178		-2150 BA
US	NISQUALLY	201	20150409	20150926	3BS	46.818	-121.740	2178		-6190 BS
US	NISQUALLY	201	20150409	20150926	4BA	46.808	-121.742	1853		-6590 BA
US	NISQUALLY	201	20150409	20150926	4BS	46.808	-121.742	1853		-8460 BS
US	NISQUALLY	201	20150409	20150926	4BW	46.808	-121.742	1853		1880 BW
US	NISQUALLY	201	20150409	20150926	4ABS	46.806	-121.739	1850		-2730 BS
US	NISQUALLY	201	20150409	20150926	4ABA	46.806	-121.739	1850		-1000 BA
US	NISQUALLY	201	20150409	20150926	4ABW	46.806	-121.739	1850		1720 BW
US	NISQUALLY	201	20150409	20151005	5BS	46.803	-121.743	1753		-3470 BS
US	NISQUALLY	201	20150409	20151005	5BA	46.803	-121.743	1753		-2800 BA
US	NISQUALLY	201	20150409	20151005	5BW	46.803	-121.743	1753		670 BW
US	NISQUALLY	201	20150526	20150922	2BA	46.832	-121.734	2946		-50 BA
US	NISQUALLY	201	20150526	20150922	2BS	46.832	-121.734	2946		-3520 BS
US	NISQUALLY	201	20150526	20150922	2BW	46.832	-121.734	2946		3460 BW
US	NISQUALLY	201	20150527	20150922	1BA	46.845	-121.736	3407		830 BA
US	NISQUALLY	201	20150527	20150922	1BS	46.845	-121.736	3407		-3010 BS
US	NISQUALLY	201	20150527	20150922	1BW	46.845	-121.736	3407		3840 BW
US	NOISY CREEK	1666	20150419	20150922	1BW	48.670	-121.53	1818		2500 BW
US	NOISY CREEK	1666	20150419	20150922	1BA	48.670	-121.53	1818		-2960 BA
US	NOISY CREEK	1666	20150419	20150922	1BS	48.670	-121.53	1818		-5460 BS
US	NOISY CREEK	1666	20150419	20150922	2BW	48.672	-121.529	1772		1890 BW
US	NOISY CREEK	1666	20150419	20150922	2BS	48.672	-121.529	1772		-5210 BS
US	NOISY CREEK	1666	20150419	20150922	2BA	48.672	-121.529	1772		-3320 BA
US	NOISY CREEK	1666	20150419	20150922	3BW	48.674	-121.528	1740		1860 BW
US	NOISY CREEK	1666	20150419	20150922	3BS	48.674	-121.528	1740		-6310 BS
US	NOISY CREEK	1666	20150419	20150922	3BA	48.674	-121.528	1740		-4460 BA
US	NOISY CREEK	1666	20150419	20150922	4BW	48.676	-121.527	1704		1820 BW
US	NOISY CREEK	1666	20150419	20150922	4BS	48.676	-121.527	1704		-5910 BS
US	NOISY CREEK	1666	20150419	20150922	4BA	48.676	-121.527	1704		-4090 BA
US	NORTH KLAUWATTI	1664	20139999	20149999	2			2196		4030 BW
US	NORTH KLAUWATTI	1664	20139999	20149999	2			2196		500 BA
US	NORTH KLAUWATTI	1664	20139999	20149999	3			2080		440 BA
US	NORTH KLAUWATTI	1664	20139999	20149999	3			2080		4160 BW
US	NORTH KLAUWATTI	1664	20139999	20149999	4			1916		-2420 BA
US	NORTH KLAUWATTI	1664	20139999	20149999	4			1916		3310 BW
US	NORTH KLAUWATTI	1664	20139999	20149999	5			1826		3270 BW
US	NORTH KLAUWATTI	1664	20139999	20149999	5			1826		-3120 BA
US	NORTH KLAUWATTI	1664	20149999	20149999	2			2196		-3530 BS
US	NORTH KLAUWATTI	1664	20149999	20149999	3			2080		-3720 BS
US	NORTH KLAUWATTI	1664	20149999	20149999	4			1916		-5720 BS
US	NORTH KLAUWATTI	1664	20149999	20149999	5			1826		-6390 BS
US	NORTH KLAUWATTI	1664	20150419	20150923	1BW	48.578	-121.106	2312		3870 BW
US	NORTH KLAUWATTI	1664	20150419	20150923	1BS	48.578	-121.106	2312		-3890 BS
US	NORTH KLAUWATTI	1664	20150419	20150923	1BA	48.578	-121.106	2312		-20 BA
US	NORTH KLAUWATTI	1664	20150419	20150923	2BW	48.574	-121.097	2196		2990 BW
US	NORTH KLAUWATTI	1664	20150419	20150923	2BS	48.574	-121.097	2196		-4820 BS
US	NORTH KLAUWATTI	1664	20150419	20150923	2BA	48.574	-121.097	2196		-1830 BA
US	NORTH KLAUWATTI	1664	20150419	20150923	3BW	48.571	-121.093	2080		3190 BW
US	NORTH KLAUWATTI	1664	20150419	20150923	3BS	48.571	-121.093	2080		-5090 BS
US	NORTH KLAUWATTI	1664	20150419	20150923	3BA	48.571	-121.093	2080		-1890 BA
US	NORTH KLAUWATTI	1664	20150419	20150923	4BW	48.571	-121.087	1916		2200 BW
US	NORTH KLAUWATTI	1664	20150419	20150923	4BS	48.571	-121.087	1916		-7620 BS
US	NORTH KLAUWATTI	1664	20150419	20150923	4BA	48.571	-121.087	1916		-5420 BA
US	NORTH KLAUWATTI	1664	20150419	20150923	5BA	48.568	-121.083	1826		-7340 BA
US	NORTH KLAUWATTI	1664	20150419	20150923	5BS	48.568	-121.083	1826		-9010 BS
US	NORTH KLAUWATTI	1664	20150419	20150923	5BW	48.568	-121.083	1826		1670 BW
US	SANDALEE	1667	20139999	20149999	1			2256		2820 BW
US	SANDALEE	1667	20139999	20149999	1			2256		80 BA
US	SANDALEE	1667	20139999	20149999	2			2178		10 BA
US	SANDALEE	1667	20139999	20149999	2			2178		2940 BW
US	SANDALEE	1667	20139999	20149999	3			2066		2710 BW
US	SANDALEE	1667	20139999	20149999	3			2066		-900 BA
US	SANDALEE	1667	20139999	20149999	4			1996		-600 BA
US	SANDALEE	1667	20139999	20149999	4			1996		3390 BW
US	SANDALEE	1667	20149999	20149999	1			2256		-2750 BS
US	SANDALEE	1667	20149999	20149999	2			2178		-2930 BS
US	SANDALEE	1667	20149999	20149999	3			2066		-3610 BS
US	SANDALEE	1667	20149999	20149999	4			1996		-3990 BS
US	SANDALEE	1667	20150419	20150922	1BA	48.407	-120.790	2254		-1710 BA
US	SANDALEE	1667	20150419	20150922	1BS	48.407	-120.790	2254		-3970 BS
US	SANDALEE	1667	20150419	20150922	1BW	48.407	-120.790	2254		2260 BW
US	SANDALEE	1667	20150419	20150922	2BW	48.409	-120.789	2178		2380 BW
US	SANDALEE	1667	20150419	20150922	2BA	48.409	-120.789	2178		-1770 BA
US	SANDALEE	1667	20150419	20150922	2BS	48.409	-120.789	2178		-4150 BS
US	SANDALEE	1667	20150419	20150922	3BA	48.411	-120.790	2066		-3220 BA
US	SANDALEE	1667	20150419	20150922	3BS	48.411	-120.790	2066		-5460 BS
US	SANDALEE	1667	20150419	20150922	3BW	48.411	-120.790	2066		2240 BW
US	SANDALEE	1667	20150419	20150922	4BA	48.413	-120.790	1996		-2150 BA
US	SANDALEE	1667	20150419	20150922	4BS	48.413	-120.790	1996		-5230 BS
US	SANDALEE	1667	20150419	20150922	4BW	48.413	-120.790	1996		3080 BW
US	SILVER	1665	20139999	20149999	1			2538		2420 BW
US	SILVER	1665	20139999	20149999	1			2538		620 BA
US	SILVER	1665	20139999	20149999	2			2402		-190 BA
US	SILVER	1665	20139999	20149999	2			2402		2270 BW
US	SILVER	1665	20139999	20149999	3			2286		2880 BW
US	SILVER	1665	20139999	20149999	3			2286		50 BA
US	SILVER	1665	20139999	20149999	4			2198		2050 BW
US	SILVER	1665	20139999	20149999	4			2198		-1710 BA
US	SILVER	1665	20149999	20149999	1			2538		-1800 BS
US	SILVER	1665	20149999	20149999	2			2402		-2460 BS
US	SILVER	1665	20149999	20149999	3			2286		-2830 BS
US	SILVER	1665	20149999	20149999	4			2198		-3750 BS
US	SILVER	1665	20150504	20150923	1BW	48.972	-121.238	2538		3420 BW

PU	GLACIER_NAME	WGMS_ID	FROM	TO POINT_ID	LAT	LON	ELEV	MB	MB_CODE
US	SILVER	1665	20150504	20150923 1BS	48.972	-121.238	2538	-2160	BS
US	SILVER	1665	20150504	20150923 1BA	48.972	-121.238	2538	1250	BA
US	SILVER	1665	20150504	20150923 2BS	48.973	-121.241	2422	-3160	BS
US	SILVER	1665	20150504	20150923 2BW	48.973	-121.241	2422	2070	BW
US	SILVER	1665	20150504	20150923 2BA	48.973	-121.241	2422	-1090	BA
US	SILVER	1665	20150504	20150923 3BS	48.974	-121.243	2286	-4020	BS
US	SILVER	1665	20150504	20150923 3BA	48.974	-121.243	2286	-1950	BA
US	SILVER	1665	20150504	20150923 3BW	48.974	-121.243	2286	2070	BW
US	SILVER	1665	20150504	20150923 4BA	48.976	-121.244	2200	-2440	BA
US	SILVER	1665	20150504	20150923 4BW	48.976	-121.244	2200	1890	BW
US	SILVER	1665	20150504	20150923 4BS	48.976	-121.244	2200	-4340	BS
US	SOUTH CASCADE	205	20131027	20140514 A_2014	48.349	-121.046	2072	3566	BW
US	SOUTH CASCADE	205	20131027	20140514 B_2014	48.347	-121.052	2029	4167	BW
US	SOUTH CASCADE	205	20131027	20140514 C_2014	48.352	-121.055	1949	3922	BW
US	SOUTH CASCADE	205	20131027	20140514 E_2014	48.358	-121.060	1835	3133	BW
US	SOUTH CASCADE	205	20131027	20140514 D_2014	48.358	-121.060	1835	3133	BW
US	SOUTH CASCADE	205	20131027	20140514 F_2014	48.363	-121.062	1729	2533	BW
US	SOUTH CASCADE	205	20131027	20140514 G_2014	48.364	-121.061	1663	1700	BW
US	SOUTH CASCADE	205	20131027	20141008 B_2014	48.347	-121.052	2029	783	BA
US	SOUTH CASCADE	205	20131027	20141008 C_2014	48.352	-121.055	1949	320	BA
US	SOUTH CASCADE	205	20131027	20141008 E_2014	48.358	-121.060	1835	-765	BA
US	SOUTH CASCADE	205	20131027	20141008 D_2014	48.358	-121.060	1835	-819	BA
US	SOUTH CASCADE	205	20131027	20141009 F_2014	48.363	-121.062	1729	-3201	BA
US	SOUTH CASCADE	205	20131027	20141009 G_2014	48.364	-121.061	1663	-6318	BA
US	SOUTH CASCADE	205	20140514	20141008 B_2015	48.347	-121.052	2029	-3384	BS
US	SOUTH CASCADE	205	20140514	20141008 C_2014	48.352	-121.055	1949	-3602	BS
US	SOUTH CASCADE	205	20140514	20141008 D_2014	48.358	-121.060	1835	-3952	BS
US	SOUTH CASCADE	205	20140514	20141008 E_2014	48.358	-121.060	1835	-3898	BS
US	SOUTH CASCADE	205	20140514	20141009 F_2014	48.363	-121.062	1729	-5734	BS
US	SOUTH CASCADE	205	20140514	20141009 G_2014	48.364	-121.061	1663	-8018	BS
US	SOUTH CASCADE	205	20141109	20150529 A_2015	48.349	-121.046	2067	2349	BW
US	SOUTH CASCADE	205	20141109	20150529 B_2015	48.348	-121.052	2025	3867	BW
US	SOUTH CASCADE	205	20141109	20150529 C_2015	48.352	-121.055	1954	1984	BW
US	SOUTH CASCADE	205	20141109	20150529 E_2015	48.359	-121.060	1826	1714	BW
US	SOUTH CASCADE	205	20141109	20150529 D_2015	48.358	-121.060	1826	1714	BW
US	SOUTH CASCADE	205	20141109	20150530 F_2015	48.363	-121.062	1735	500	BW
US	SOUTH CASCADE	205	20141109	20150930 A_2015	48.349	-121.046	2067	-2420	BA
US	SOUTH CASCADE	205	20141109	20150930 B_2015	48.348	-121.052	2025	-7	BA
US	SOUTH CASCADE	205	20141109	20150930 C_2015	48.352	-121.055	1954	-2622	BA
US	SOUTH CASCADE	205	20141109	20150930 D_2015	48.358	-121.060	1826	-3681	BA
US	SOUTH CASCADE	205	20141109	20150930 E_2015	48.359	-121.060	1826	-3555	BA
US	SOUTH CASCADE	205	20141109	20150930 F_2015	48.363	-121.062	1735	-7203	BA
US	SOUTH CASCADE	205	20150529	20150930 A_2015	48.349	-121.046	2067	-4769	BS
US	SOUTH CASCADE	205	20150529	20150930 B_2015	48.348	-121.052	2025	-3874	BS
US	SOUTH CASCADE	205	20150529	20150930 C_2015	48.352	-121.055	1954	-4606	BS
US	SOUTH CASCADE	205	20150529	20150930 E_2015	48.359	-121.060	1826	-5269	BS
US	SOUTH CASCADE	205	20150529	20150930 D_2015	48.358	-121.060	1826	-5395	BS
US	SOUTH CASCADE	205	20150530	20150930 F_2015	48.363	-121.062	1735	-7703	BS
US	SPERRY	218	20130927	20140611 4	48.620	-113.759	2525	4380	BW
US	SPERRY	218	20130927	20140611 7	48.622	-113.755	2467	2830	BW
US	SPERRY	218	20130927	20140611 3	48.623	-113.759	2447	2630	BW
US	SPERRY	218	20130927	20140611 5	48.623	-113.763	2447	2040	BW
US	SPERRY	218	20130927	20140611 1	48.625	-113.758	2362	2990	BW
US	SPERRY	218	20130927	20140611 6	48.626	-113.753	2354	2820	BW
US	SPERRY	218	20130927	20140611 2	48.626	-113.755	2326	3010	BW
US	SPERRY	218	20130927	20140918 4	48.620	-113.759	2525	1310	BA
US	SPERRY	218	20130927	20140918 7	48.622	-113.755	2467	-50	BA
US	SPERRY	218	20130927	20140918 3	48.623	-113.759	2447	-820	BA
US	SPERRY	218	20130927	20140918 5	48.623	-113.763	2447	-1370	BA
US	SPERRY	218	20130927	20140918 1	48.625	-113.758	2362	-380	BA
US	SPERRY	218	20130927	20140918 6	48.626	-113.753	2354	-310	BA
US	SPERRY	218	20130927	20140918 2	48.626	-113.755	2326	-110	BA
US	SPERRY	218	20140611	20140918 4	48.620	-113.759	2525	-3070	BS
US	SPERRY	218	20140611	20140918 7	48.622	-113.755	2467	-2880	BS
US	SPERRY	218	20140611	20140918 5	48.623	-113.763	2447	-3410	BS
US	SPERRY	218	20140611	20140918 3	48.623	-113.759	2447	-3450	BS
US	SPERRY	218	20140611	20140918 1	48.625	-113.758	2362	-3380	BS
US	SPERRY	218	20140611	20140918 6	48.626	-113.753	2354	-3140	BS
US	SPERRY	218	20140611	20140918 2	48.626	-113.755	2326	-3130	BS
US	SPERRY	218	20140918	20150525 8	48.620	-113.757	2567	4220	BW
US	SPERRY	218	20140918	20150525 4	48.620	-113.759	2525	3250	BW
US	SPERRY	218	20140918	20150525 7	48.622	-113.755	2467	2570	BW
US	SPERRY	218	20140918	20150525 3	48.623	-113.759	2447	2920	BW
US	SPERRY	218	20140918	20150525 5	48.623	-113.763	2447	1990	BW
US	SPERRY	218	20140918	20150525 1	48.625	-113.758	2362	2460	BW
US	SPERRY	218	20140918	20150525 6	48.626	-113.753	2354	2370	BW
US	SPERRY	218	20140918	20150525 2	48.626	-113.755	2326	2340	BW
US	SPERRY	218	20140918	20150922 8	48.620	-113.757	2567	890	BA
US	SPERRY	218	20140918	20150922 4	48.620	-113.759	2525	-400	BA
US	SPERRY	218	20140918	20150922 7	48.622	-113.755	2467	-1560	BA
US	SPERRY	218	20140918	20150922 5	48.623	-113.763	2447	-2630	BA
US	SPERRY	218	20140918	20150922 3	48.623	-113.759	2447	-1990	BA
US	SPERRY	218	20140918	20150922 1	48.625	-113.758	2362	-1880	BA
US	SPERRY	218	20140918	20150922 6	48.626	-113.753	2354	-2000	BA
US	SPERRY	218	20140918	20150922 2	48.626	-113.755	2326	-2020	BA
US	SPERRY	218	20150525	20150922 8	48.620	-113.757	2567	-3330	BS
US	SPERRY	218	20150525	20150922 4	48.620	-113.759	2525	-3650	BS
US	SPERRY	218	20150525	20150922 7	48.622	-113.755	2467	-4130	BS
US	SPERRY	218	20150525	20150922 5	48.623	-113.763	2447	-4620	BS
US	SPERRY	218	20150525	20150922 3	48.623	-113.759	2447	-4910	BS
US	SPERRY	218	20150525	20150922 1	48.625	-113.758	2362	-4330	BS
US	SPERRY	218	20150525	20150922 6	48.626	-113.753	2354	-4370	BS
US	SPERRY	218	20150525	20150922 2	48.626	-113.755	2326	-4360	BS
US	WOLVERINE	94	20130824	20140423 AU	60.381	-148.918	623	-1140	BW
US	WOLVERINE	94	20130827	20140422 C	60.420	-148.921	1295	2110	BW
US	WOLVERINE	94	20130828	20140424 B	60.404	-148.907	1064	580	BW

Table 5

PU	GLACIER_NAME	WGMS_ID	FROM	TO	POINT_ID	LAT	LON	ELEV	MB	MB_CODE
US	WOLVERINE	94	20140422	20140903	C	60.420	-148.921	1295	-1960	BS
US	WOLVERINE	94	20140423	20140905	AU	60.381	-148.918	623	-7720	BS
US	WOLVERINE	94	20140424	20140905	B	60.404	-148.907	1063	-3290	BS
US	WOLVERINE	94	20140903	40150423	C	60.420	-148.921	1295	2450	BW
US	WOLVERINE	94	20140905	20150424	B	60.404	-148.907	1063	1020	BW
US	WOLVERINE	94	20140905	20150425	AU	60.381	-148.918	619	340	BW
US	WOLVERINE	94	20150423	20150901	C	60.420	-148.921	1295	-1780	BS
US	WOLVERINE	94	20150424	20150901	B	60.404	-148.907	1063	-3070	BS
US	WOLVERINE	94	20150425	20150902	AU	60.381	-148.918	619	-7100	BS

APPENDIX - Table 6

CHANGES IN AREA, VOLUME AND THICKNESS FROM GEODETIC SURVEYS 2014–2015

PU	Political unit, alphabetic 2-digit country code (cf. www.iso.org)
GLACIER NAME	Name of the glacier in capital letters, cf. Appendix Table 1
WGMS ID	Key identifier of the glacier, cf. Appendix Table 1
FROM	Date of the first geodetic survey, in the format YYYYMMDD*
TO	Date of the second geodetic survey, in the format YYYYMMDD*
AREA	Glacier area (in km ²) at the data of the second geodetic survey
AREA CHG	Change in area between the surveys in 1,000 square metres
THICKNESS CHG	Change in thickness between the surveys in millimetres
VOLUME CHG	Change in volume between the surveys in 1,000 cubic metres
INVESTIGATORS (SPONS_AGENCY)	Names of the investigators and their sponsoring agencies (cf. Section 9)

*Unknown month or day are each replaced by „99“

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PU	GLACIER_NAME	WGMS_ID	FROM	TO	AREA	AREA_CHG	THICKNESS_CHG	VOLUME_CHG	Investigators_(SPONS_AGENCY)
AR - Argentina									
AR	BROWN SUPERIOR	3903	20140424	20150503	0.18	-7	-2652	-331	Cabrera G. (IANIGLA)
AR	CONCONTA NORTE	3902	20140423	20150506	0.07	-8	-3211	-239	Cabrera G. (IANIGLA)
AR	LOS AMARILLOS	3904	20140305	20150399	0.78	-72	-1219	-994	Cabrera G. (IANIGLA)
BO - Bolivia									
BO	CHARQUINI SUR	2667	20130924	20140826	0.31	0	-2709		GREATICE Team
BO	CHARQUINI SUR	2667	20140826	20150904	0.31	0	1939		GREATICE Team
BO	ZONGO	1503	20130919	20140901	1.89	0	-4493		GREATICE Team
BO	ZONGO	1503	20140901	20150903	1.89	0	2598		GREATICE Team
CA - Canada									
CA	GRINNELL	2668	19520821	20140803	106.30	-25500	-61114	-3248227	Papasodoro C. (U. Sherbrooke)
CA	TERRA NIVEA	4534	20070803	20140820	146.10	-9100	-13885	-2091715	Papasodoro C. (U. Sherbrooke)
CA	WHITE	0	19600802	20140710	38.54	2533	-10911	-434331	Thomson L. (Uottawa/DG)
CH - Switzerland									
CH	OBERAAR	451	20099999	20150806	3.65		-1160		Ramp A., Joerg P.C., Zemp M. (UZH)
CL - Chile									
CL	AMARILLO	3905	20140305	20150399	0.17	-13	-1548	-278	Cabrera G. (IANIGLA)
CO - Colombia									
CO	CONEJERAS	2721	20140101	20150101	0.20	-517	-4539		Ceballos Lievano J. (IDEAM)
CO	CONEJERAS	2721	20150101	20160101	0.20	-110	-6211		Ceballos Lievano J. (IDEAM)
CO	RITACUBA BLANCO	2763	20140101	20150101	0.36	0	-511		Ceballos Lievano J. (IDEAM)
CO	RITACUBA BLANCO	2763	20150101	20160101	0.36	0	-680		Ceballos Lievano J. (IDEAM)
IS - Iceland									
IS	BRUARJOKULL	3067	20101001	20150930	1528.00		-1832		Gourmelen N. (U. Edinburgh)
IS	DRANGAJOKULL ICE CAP	6831	20101001	20150930	195.00		-1282		Gourmelen N. (U. Edinburgh)
IS	HOFJOKULL ICE CAP	6830	20101001	20150930	763.00		-3211		Gourmelen N. (U. Edinburgh)
IS	LANGJOKULL ICE CAP	3660	20101001	20150930	957.00		-4023		Gourmelen N. (U. Edinburgh)
IS	MYRDALSJOKULL ICE CAP	6832	20101001	20150930	605.00		-1900		Gourmelen N. (U. Edinburgh)
IS	VATNAJOKULL	3754	20101001	20150930	7708.00		-2515	-19385620	Gourmelen N. (U. Edinburgh)
IT - Italy									
IT	CALDERONE	1107	20130914	20140913	0.04	0	417	22268	Massimo Pecci (Italian Glaciological Committee)
NP - Nepal									
NP	WEST CHANGRI NUP	10401	20091028	20151122	0.89	-70	-7910		
US - United States of America									
US	EKLUTNA	85	20100916	20150824			-4200		
US	EKLUTNA EAST BRANCH	6829	20100916	20150824			-4100		
US	EKLUTNA WEST BRANCH	6828	20100916	20150824			-4375		