

Report on the IGS International Symposium on Glaciers and Ice Sheets Contribution to Sea-Level Change (Observations, Modelling and Prediction)

Held in Chamonix-Mont-Blanc, France, 26-30 May 2014

Summary of the Symposium

The IGS international Symposium in Chamonix was organised by the International Glaciological Society (IGS) and the Local Organising Committee (LOC) from LGGE. The Symposium took place in the Ecole Nationale de Ski et d'Alpinisme (ENSA), in Chamonix-Mont-Blanc, France.

A website containing all the information was setup and regularly updated (<http://www-lgge.obs.ujf-grenoble.fr/igs2014/>).

A total of 225 abstracts were submitted on the symposium website. Finally, 224 participants from 23 countries attended the symposium, among them 70 were students and 71 were women. It is worth noticing the high ratio (>1) of participants over the number of abstracts submitted, which is usually much lower for similar IGS symposia. The complete list of participants and their affiliations is given in Annexe 2. Due to this unexpected high number of participants, an overflow room was organised to limit the number of delegates in the amphitheatre, which had a limited capacity of 196 persons.

ENSA offered the possibility of lodging around 100 participants in their student-type rooms. The lodging option also included dinners at ENSA and breakfasts. Lunches for all participants were served in the ENSA cafeteria and were included in the registration fees.

The symposium consisted of 5 keynote lectures of 36 minutes (each day started with a keynote lecture), 68 oral presentations of 18 minutes and 2 poster sessions of 3 hours each (147 posters presented in total). The complete program of the workshop is given in Annexe 1.

On Sunday evening, an icebreaker reception was organised by ENSA in order to welcome all the participants.

On Monday evening the Seligman Crystal was awarded to Paul Duval. After an introduction by the IGS President, Doug MacAyeal, Paul Duval was presented with this prestigious award after which he presented an overview of his research.

On Wednesday afternoon, an excursion was organised for all participants, who had the choice of:

- taking the gondola up to the Aiguille du Midi (3842m) and having a guided tour by LGGE researchers,
- taking the Mont-Blanc train to access the Montenvers, viewing the Mer de Glace glacier, and visiting the glaciorium,
- taking the Mont-Blanc train to access the Montenvers and having a guided tour on the Mer de Glace and as well as having an overview of the measurements performed so far on this glacier by the LGGE.

On Wednesday evening, the Local Organising Committee and the journalist, Lise Barneoud, organised a public lecture for the city of Chamonix-Mont-Blanc. Approximately 100 persons attended the 2-hour conference. The speakers, Frank Pattyn (ULB), Eric Rignot (JPL), Delphine Six (LGGE), Christian Vincent (LGGE) and Isabella Zin (LTHE), explained to the

audience our current knowledge on the impact of climate warming from the poles to the Mont Blanc.

On Thursday evening was the symposium banquet which was held in the Majestic building in Chamonix.

Symposium Budget

Thanks to the symposium sponsors (see details below, total 21000€), we have been able to:

- offer a student sponsorship to 8 students, including free registration and free lodging (5120€)
- offer half-price for all other students and retired researchers (15950€)
- organize in parallel to the symposium a public lecture for the Chamonix population (1000€)

for a total of 22070€.

Incomes

Registration	Number	Registration	late fee 80€	Total	IGS share	LOC share
IGS members (400€)	103	41 200.00 €	1 360.00 €	42 560.00 €	15 475.00 €	27 085.00 €
LOC members (0€)	11	- €	- €	- €	1 440.00 €	1 440.00 €
Non-member (540€)	22	11 880.00 €	480.00 €	12 360.00 €	4 900.00 €	7 460.00 €
Student/retired-IGS (200€)	46	9 200.00 €	240.00 €	9 440.00 €	4 720.00 €	4 720.00 €
Acc. person 18+ (100€)	4	640.00 €	- €	640.00 €	90.00 €	550.00 €
Scientific Editor (400€)	3	1 200.00 €	80.00 €	1 280.00 €	460.00 €	820.00 €
Stud./retired - Non IGS (270€)	28	7 560.00 €	- €	7 560.00 €	3 780.00 €	3 780.00 €
Keynote speaker (200€)	5	1 000.00 €	80.00 €	1 080.00 €	750.00 €	330.00 €
Invited persons	4	- €	- €	- €	560.00 €	560.00 €
One day participants	2	275.00 €	- €	275.00 €	137.50 €	137.50 €
Total registration	224	72 955.00 €	2 240.00 €	75 195.00 €	32 312.50 €	42 882.50 €

Sponsors

ESF MicorDICE	10 000.00 €
Labex OSUG@2020	5 000.00 €
Foundation Eau, Neige et Glace	2 000.00 €
ARC3 Rhone-Alpes	4 000.00 €

Lodging fees at ENSA	23 247.00 €
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Total Incomes for LOC

87 129.50 €

Outcomes

8 invited students (registration + lodging)	5 120.00 €
LOC - lodging ENSA + travels	3 002.75 €
Excursion tickets	6 226.00 €
Paul Duval dinner	1 150.00 €
Paul Duval travel + lodging	493.50 €
ENSA	47 776.11 €
Majestic room (Banquet)	624.00 €
Banquet dinner	12 375.00 €
USB memory sticks offered to participants	975.00 €
Visit to Chamonix before the symposium	249.95 €
Communication / display	2 802.53 €
Bus transfert Chamonix - Grenoble	1 181.82 €
Switch VGA	328.40 €
Book offered to participants	1 200.00 €
Voice amplifier for excursion	59.88 €
Rent of a truck	468.00 €
mailing China	102.32 €
informatic cables	300.00 €
Journalist public conference	1 000.00 €
bank transfer fees	76.58 €
small material / bureautic	461.29 €
LGGE administration (8% sponsors)	880.00 €

Total Outcomes

86 853.13 €

Balance

276.37 €

Split of the ENSA invoice

Icebreaker	5 520.00 €
Lunches	11 685.00 €
Coffee-breaks	2 791.36 €
Room renting + videoprojection	2 730.00 €
Lodging + Dinner	25 049.75 €
Total	47 776.11 €

Annexe 1: Program of the Symposium

Sunday 25 May 2014

16:00–19:00 Registration

19:30 Icebreaker

Monday 26 May 2014

8:00–8.30 Registration

8:30 Symposium opening

Session : *Estimation of the contribution of glaciers and ice-sheets to sea level change*

Chair: Olivier Gagliardini

9:06 Invited speaker: Antony PAYNE, 70A0915: Ice sheets and sea-level projections in the Fifth Assessment Report of the IPCC

9:42 Stefan LIGTENBERG, 70A0952: Validating modeled firn densification rates using repeat-track airborne radar data

10:00–10:30 Coffee

Session : *Estimation of the contribution of glaciers and ice-sheets to sea level change*

Chair: Jonathan Bamber

10:30 Tómas JÓHANNESSON, 70A1138: A simple mass-balance model to calculate ice-volume changes of Icelandic glaciers for glacial isostatic adjustment modelling

10:48 Regine HOCK, 70A1107: The response of the Juneau Icefield, Alaska, to climate change

11:06 Hrafnhildur HANNESDÓTTIR, 70A1021: Glacier variations of SE-Vatnajökull Iceland 1890–2010

11:24 Ruth MOTTRAM, 70A1131: Present day and future projections of the surface mass balance of the Greenland Ice Sheet using the EC-Earth and HIRHAM5 Global and regional climate models

11:42 Cécile AGOSTA, 70A1122: Estimating Antarctic ice sheet surface mass balance contribution to future sea level rise using the regional atmospheric climate model MAR

12:00–13:30 Lunch

Session : *Estimation of the contribution of glaciers and ice-sheets to sea level change*

Chair: Regine Hock

14:00 Christine S. HVIDBERG, 70A1130: Surface elevation change by GPS in North Greenland, 2007–12

14:18 Fuyuki SAITO, 70A1009: Sensitivity of response of the Greenland ice sheet to global warming on surface mass balance and initialization methods

14:36 Jonathan BAMBER, 70A1031: Spatio-temporal modelling of Antarctic mass balance from multi-satellite observations

14:54 Thomas FLAMENT, 70A1028: Long term survey of Antarctica with repeat altimetry: ERS1/2, EnviSat, SARAL

15:12 Jérémie MOUGINOT, 70A1041: Sustained increase in ice discharge from the Amundsen Sea Embayment, West Antarctica, from 1973 to 2013

15:30–16:00 Coffee

Session : *Ice body and rheology/Calving*

Chair: Kees van der Veen

16:00 Jeremy BASSIS, 70A1126: A simple damage evolution law for ice shelves

16:18 Brad LIPOVSKY, 70A1133: Seismicity from hydraulic fractures in glaciers and ice sheets
16:36 Adam TREVERROW, 70A0954: A comparison of ice flow relations for ice-sheet modelling
16:54 Jean KRUG, 70A1060: Investigating the impact of melange on glacier dynamics
17:12 Fabien GILLET-CHAULET, 70A0989: Could the non-linear creep behaviour observed at low stresses be associated with the yield stress of ice?
17:30 Presentation of the Seligman Crystal to Paul Duval

Tuesday 27 May 2014

Session : *Surface mass balance*

Chair: Eric Brun

8:30 Invited speaker: Michiel VAN DEN BROEKE, 70A0968: Ice-sheet climates
9:06 Brooke MEDLEY, 70A1086: A widespread increase in West Antarctic snow accumulation and its impact on ice-sheet surface elevation change
9:24 Charlotte LANG, 70A1016: Future projections of the Greenland ice sheet (GrIS) mass balance over 2006–2100 using the regional climate MAR model coupled with the ice sheet GRISLI model
9:42 Horst MACHGUTH, 70A1078: Three distinct meltwater retention regimes in the West Greenland percolation zone revealed by comprehensive field studies

10:00–10:30 Coffee

Session : *Surface mass balance/Basal melting*

Chair: Tavi Murray

10:30 Roberta SCIASCIA, 70A1037: Modelling the role of oceanic and glacial forcings on the submarine melting of an East Greenland outlet glacier
10:48 Richard FORSTER, 70A1094: Greenland firn aquifer extent, volume and stability from in-situ measurements, airborne radar, and modeling
11:06 William COLGAN, 70A0967: Greenland high-elevation mass balance: reviewing the assumption of reference period equilibrium
11:24 Jan LENAERTS, 70A0962: Climate and SMB around Antarctic ice rises – a combined modeling and observational approach
11:42 Eric BRUN, 70A1027: Observation and modelling of Greenland Ice Sheet albedo and consequences on the projections of the ice-sheet surface mass balance

12:00–13:30 Lunch

Session : *Surface mass balance/Basal melting*

Chair: Jesse Johnson

14:00 Peter KUIPERS MUNNEKE, 70A0994: The Greenland firn layer: explaining the presence of perennial aquifers, and modelling firn response to a warming climate
14:18 Adam CANDY 70A1106: Towards an adaptive resolution multiscale model of Pine Island Glacier ice shelf ocean cavity
14:36 Shin SUGIYAMA, 70A1020: Thermal structures in proglacial lakes in the Southern Patagonia Icefield
14:54 Satoshi KIMURA, 70A0916: The effect of meltwater plumes on the melting of a vertical glacier face
15:12 Ian FENTY, 70A1144: Monitoring ocean heat variability around the Greenland Ice Sheet: insights from numerical models
15:30–18.30 Poster Session A

Chair: Frank Pattyn

Wednesday 28 May 2014

Session : *Basal processes*

Chair: Gaël Durand

8:30 Invited speaker: Gwenn FLOWERS, 70A1118: A current perspective on modelling subglacial hydrology

9:06 Christian SCHOOF, 70A1119: Oscillatory subglacial drainage dynamics

9:24 Teresa KYRKE-SMITH, 70A0931: Subglacial hydrology and the formation of ice streams

9:42 Ian HEWITT, 70A1014: Consistent modelling of subglacial drainage and sliding

10:00–10:30 Coffee

Session : *Basal processes*

Chair: Shin Sugiyama

10:30 Olga SERGIENKO, 70A1109: Organized, band-like structures in driving and basal stresses of the Antarctic and Greenland ice sheets

10:48 Marianne HASELOFF, 70A1039: Modelling the dynamics of ice stream shear margins

11:06 Alexander ROBEL, 70A1003: Rapid grounding line migration induced by internal ice-stream variability

11:24 Marion BOUGAMONT, 70A1075: Greenland ice flow controlled by soft bed response to surface meltwater drainage

11:42 Timothy CREYTS, 70A1134: Branch, shift, or step? transitions in planform development of distributed, sheet-like water systems

12:00–13:30 Lunch

14:00 Mid-week excursions

Thursday 29 May 2014

Session : *A new generation of ice-sheet models*

Chair: Doug Macayeal

8:30 Invited speaker: Eric RIGNOT, 70A1140: Big data for advanced ice sheet modeling

9:06 Martin O'LEARY, 70A0937: How to build a better bed: assimilating repeat surface observations to reconstruct the basal topography of Helheim Glacier, Greenland

9:24 Robert ARTHERN, 70A1095: Glaciological inversions and their regularization

9:42 Jesse JOHNSON, 70A1036: Using data assimilation methods to explore the role of longitudinal stress gradients in Greenland outlet glacier flow

10:00–10:30 Coffee

Session : *A new generation of ice-sheet models*

Chair: Christian Schoof

10:30 Mathieu MORLIGHEM, 70A1040: Bed topography under the Greenland ice sheet based on mass conservation

10:48 Nanna KARLSSON, 70A1049: Using a simple ice flow model to investigate the large-scale spatial variability of the subglacial system of Northern Greenland

11:06 Lauren ANDREWS, 70A0936: Direct observations of evolving subglacial drainage beneath the Greenland ice sheet

11:24 C.J. VAN DER VEEN, 70A1096: Beyond back stress: model experiments investigating the role of gradients in longitudinal stress modulating glacier flow
11:42 Poul CHRISTOFFERSEN, 70A1100: Hydrologic budgets for ice streams on the West Antarctic Siple Coast
12:00–13:30 Lunch
Session : *Ice body and rheology*
Chair: Christine Hvidberg
14:00 Josefin AHLKRONA, 70A1135: The Fast Full Stokes Method (FFS) applied to the Greenland Ice Sheet
14:18 Jonathan KINGSLAKE, 70A1148: The first remotely sensed full-depth measurements of ice-sheet flow
14:36 Neil ROSS, 70A0959: Concentrated englacial shear over rigid basal ice, West Antarctica: implications for modelling and ice-sheet flow
14:54 Dustin SCHROEDER, 70A0914: Radar-sounding observations of basal water, sediments, and geothermal heat flux and their implications for the past and future sea-level contribution of the Amundsen Sea sector of West Antarctica
15:12 Joseph MacGREGOR, 70A0926: Radiostratigraphy of the Greenland ice sheet
15:30–18.30 Poster Session B
Chair: Richard Hindmarsh
19:30 Symposium Banquet

Friday 30 May 2014

Session : *Estimation of the contribution of glaciers and ice-sheets to sea level change*

Chair: Catherine Ritz

8:30 Invited speaker: Terry WILSON, 70A1149: The POLENET-ANET integrated GPS and seismology approach to understanding glacial isostatic adjustment and ice mass change in Antarctica

9:06 David POLLARD, 70A0977: Modeling past and future ice retreat in Antarctic subglacial basins

9:24 Lev TARASOV, 70A1112: The global GLAC-1c deglaciation chronology, meltwater pulse 1-a, and a question of missing ice

9:42 Reinhard CALOV, 70A1089: Using palaeoclimate constraints for simulations of the Greenland ice sheet contribution to future sea level rise

10:00–10:30 Coffee

Session : *Ice body and rheology/Calving*

Chair: Hilmar Guðmundsson

10:30 Neal IVERSON, 70A1007: Low-relief transverse moraines of the Des Moines Lobe of the Laurentide ice sheet as indicators of surging

10:48 Martin P. LÜTHI, 70A0938: Horizontal stress transfer controls mass transport in the Greenland ablation area

11:06 Beáta CSATHÓ, 70A1127: Beyond back stress: dynamics of Greenland Outlet glaciers from altimetry record

11:24 Mac CATHLES, 70A1136: Iceberg capsize hydrodynamics and the source of glacial earthquakes

11:42 Martina SCHÄFER, 70A0966: Effect of elevation feedback in coupling a climatic mass-balance model to an ice-flow model: Vestfonna ice cap, Nordaustlandet/Svalbard

12:00–13:30 Lunch

Session : *Grounding line dynamics*

Chair: Leigh Stearns

14:00 G. Hilmar GUDMUNDSSON, 70A1142: What can we learn about glacier flow by observing and modelling tidally induced motion?

14:18 Adrian LUCKMAN, 70A0993: Calving rates and controls of Svalbard tidewater glaciers

14:36 Tavi MURRAY, 70A1063: Dynamics of glacier calving at Helheim Glacier, South-East Greenland

14:54 Véronique DANSEREAU, 70A1025: Simulation of sub-ice-shelf melt rates in a general circulation model: velocity-dependent transfer and the role of friction

15:12 Knut CHRISTIANSON, 70A1045: The role of grounding-zone processes in sea-level rise

15:30–16:00 Coffee

Session : *Grounding line dynamics*

Chair: Frank Pattyn

16:00 Guillaume JOUVET, 70A1026: Modelling the trajectory of the corpses of mountaineers who disappeared in 1926 on Aletsch glacier

16:18 Emmanuel LE MEUR, 70A1018: Improved location of the grounding line of an Antarctic outlet glacier from combined hydrostatic and kinematic methods

16:36 Erin PETTIT, 70A0970: Differing ice dynamics across the Antarctic Peninsula

16:54 Helmut ROTT, 70A1056: Evolution of Antarctic Peninsula outlet glaciers after disintegration of Northern Larsen Ice Shelf

17:12 XIE Huan, 70A1050: Experimental results of grounding line change analysis of the Antarctic ice shelves using MODIS, ICESat and InSAR data

17:30 Symposium closes

Annexe 2: List of participants

Name	Affiliation
Abe, Takahiro	Hokkaido University
Agosta, Cécile	University of Liège
Ahlkrona, Josefin	University of Uppsala
Åkesson, Henning	University of Bergen
Andrews, Lauren	University of Texas at Austin
Arthern, Robert J	British Antarctic Survey
Ashmore, David W.	University of Aberdeen
Åström, Jan	CSC – IT Center for Science Ltd
Bamber, Jonathan L	University of Bristol
Banwell, Alison F.	University of Cambridge
Barnéoud, Lise	Scientific journalist
Bassis, Jeremy	University of Michigan
Benn, Douglas I.	University Centre in Svalbard
Benoit, Lionel	IGN
Berger, Sophie	Free University of Brussels
Berthier, Etienne	OMP LEGOS
Bevan, Suzanne L.	Swansea University
Blumstein, Denis	CNES/LEGOS
Borstad, Christopher P.	Jet Propulsion Laboratory
Bougamont, Marion	University of Cambridge
Bourgeois, Elsa	LEGOS
Braun, Matthias	University of Erlangen Nürnberg
Brun, Eric	METEO FRANCE/CNRS
Buckingham, Louise	International Glaciological Society
Callens, Denis	Free University of Brussels
Calov, Reinhard	Potsdam Institute for Climate Impact Research
Candy, Adam	Imperial College London
Cathles, L. Mac	University of Michigan

Cavitte, Marie	University of Texas
Christianson, Knut	New York University
Christoffersen, Poul	University of Cambridge
Clark, Chris D.	University of Sheffield
Clemens, Ellen	Accompanying Joel Harrington
Clemenzi, Ilaria	ETH Zurich
Colgan, William T.	Geological Survey of Denmark and Greenland
Cook, Sue	University Centre in Svalbard
Cornford, Stephen L.	University of Bristol
Cowton, Tom R.	University of Sheffield
Creyts, Timothy T.	Columbia University
Cui Xiangbin	Polar Research Institute of China
Curtaz, Michèle	Foundation 'Montagna sicura'
Dansereau, Veronique	Massachusetts Institute of Technology
Davies, Bethan	University of Reading
Davies, Damon	University of Edinburgh
De Fleurian, Basile	University of California Irvine
De Rydt, Jan	British Antarctic Survey
Depoorter, Mathieu	University of Bristol
Durand, Gaël	LGGE
Duval, Paul	LGGE
Edwards, Laura A.	University of Manchester
Engelhardt, Markus	University of Oslo
Evatt, Geoff	University of Manchester
Faillottaz, Jérôme	University of Zürich
Favier, Lionel	Free University of Brussels
Feng Tiantian	Tongji University
Fenty, Ian	California Institute of Technology
Flament, Thomas	University of Grenoble
Flowers, Gwenn E.	Simon Fraser University

Forster, Richard R.	University of Utah
Furuya, Masato	Hokkaido University
Gacitúa, Guisella	Centro de Estudios Científicos
Gagliardini, Olivier	LGGE
Ganopolski, Andrey	Potsdam Institute for Climate Impact Research
Giesen, Rianne H.	University of Utrecht
Gilbert, Adrien	LGGE
Gillet-Chaulet, Fabien	LGGE
Goldberg, Daniel N.	University of Edinburgh
Gong, Yongmei	University of Lapland
Gudmundsson, G. Hilmar	British Antarctic Survey
Guo Jingxue	Polar Research Institute of China
Gutowski, Gail	University of Texas at Austin
Hannesdóttir, Hrafnhildur	University of Iceland
Harrington, Joel	University of Wyoming
Haseloff, Marianne	University of British Columbia
Heimbach, Patrick	Massachusetts Institute of Technology
Heinemann, Malte	Pennsylvania State University
Helm, Veit	University of Hamburg
Helsen, Michiel	University of Utrecht
Hewitt, Ian J.	University of Oxford
Hindmarsh, Richard C.A.	British Antarctic Survey
Hock, Regine	University of Alaska
Hooke, Ann	Accompanying Roger Hooke
Hooke, Roger LeB.	University of Maine
Hvidberg, Christine S.	University of Copenhagen
Iverson, Neal R.	Iowa State University
Jacka, Jo	International Glaciological Society
Jacobel, Robert W.	St Olaf's College
Jacobel, Pamala	Accompanying Robert Jacobel

Jansen, Daniela	Alfred Wegener Institute
Jóhannesson, Tómas	Icelandic Meteorological Office
Johnson, Jesse V.	University of Montana
Jouvet, Guillaume	Free University of Berlin
Karlsson, Nanna B.	University of Copenhagen
Katz, Richard	University of Oxford
Kienholz, Christian	University of Alaska
Kimura, Satoshi	British Antarctic Survey
Kingslake, Jonathan	British Antarctic Survey
Kjeldsen, Kristian Kjellerup	University of Copenhagen
Konovalov, Vladimir	Russian Academy of Sciences
Koutnik, Michelle	University of Washington
Koziol, Conrad	Scott Polar Research Institute
Krug, Jean	LGGE
Kuipers Munneke, Peter	Institute of Marine and Atmospheric Research Utrecht
Kyrke Smith, Teresa M.	University of Oxford
Lang, Charlotte	University of Liège
Lardeux, Pierre	Aberystwyth University
Le Meur, Emmanuel	LGGE
Lecavalier, Benoit	Memorial University of Newfoundland
Leclercq, Paul	University of Oslo
Lee, Victoria	University of Bristol
Lefeuvre, Pierre M.	University of Oslo
Leguy, Gunter	New Mexico Tech
Lenaerts, Jan T.M.	University of Utrecht
Leysinger Vieli, Gwendolyn	University of Zürich Irchel
Ligtenberg, Stefan R.M.	University of Utrecht
Lindbäck, Katrin	Uppsala University
Lipovsky, Brad	Stanford University
Logan, Liz	University of Texas at Austin

Luckman, Adrian	Swansea University
Lüthi, Martin P	University of Zurich
MacAyeal, Douglas R.	University of Chicago
McCracken, Reba	Iowa State University
MacGregor, Joseph A.	University of Texas at Austin
Macheret, Yuri Ya.	Russian Academy of Sciences
Machguth, Horst	Danish Technical University
Magnússon, Eyjólfur	University of Iceland
Magnússon, Magnús Már	International Glaciological Society
Marinsek, Sebastian	Antartic Institute of Argentina
Markov, Alexey	Jilin University
Martin, Daniel	Lawrence Berkeley National Laboratory
Medley, Brooke	NASA Goddard Space Flight Center
Meister, Rakia	Danish Technical University
Melvold, Kjetil	Norwegian Water Resources & Energy Directorate
Merino, Nacho	LGGE
Miège, Clément	University of Utah
Montagnat, Maurine	LGGE
Moreau, Luc	Chamonix Glaciology Association
Morlighem, Mathieu	University of California Irvine
Mosbeux, Cyrille	University of Grenoble
Mottram, Ruth H.	Danish Meteorological Institute
Mouginot, Jérémie	University of California Irvine
Muresan, Ioana S.	Technical University of Denmark
Murray, Tavi	Swansea University
Navarro, Francisco J.	Polytechnic University of Madrid
Nias, Isabel	University of Bristol
Nick, Faezeh M.	University Centre in Svalbard
Nielsen, Lisbeth T.	University of Copenhagen

Nisancioglu, Kerim	University of Bergen
O'Leary, Martin	Swansea University
Otero, Jaime	Polytechnic University of Madrid
Parkes, David	University of Innsbruck
Pattyn, Frank	Free University of Brussels
Payne, Antony J.	University of Bristol
Pettit, Erin C.	University of Alaska Fairbanks
Peyaud, Vincent	LGGE
Philip, Armelle	LGGE
Poinar, Kristin	University of Washington
Pollard, David	Pennsylvania State University
Pritchard, Hamish	British Antarctic Survey
Qiao Gang	Tongji University
Reveillet, Marion	LGGE
Rignot, Eric	University of California Irvine
Ritz, Catherine B.	LGGE
Robel, Alexander	Harvard University
Ross, Neil	Newcastle University
Rott, Helmut	University of Innsbruck
Rückamp, Martin	Alfred Wegener Institute
Saito, Fuyuki	Japan Agency for Marine Earth Science and Technology
Scaioni, Marco	Tongji University
Schaefer, Marius R.	Austral University of Chile
Schäfer, Martina	Finnish Meteorological Institute
Schellenberger, Thomas	University of Oslo
Schenk, Toni	University at Buffalo
Schroeder, Dustin	University of Texas at Austin
Sciascia, Roberta	Massachusetts Institute of Technology
Seehaus, Thorsten C.	FAU Erlangen Nürnberg
Sergienko, Olga V.	Princeton University

Shuman, Christopher A	University of Maryland Baltimore County
Simpson, Matthew J.R.	Norwegian Mapping Authority
Slater, Donald	University of Edinburgh
Sole, Andrew	University of Sheffield
Solgaard, Anne M.	Niels Bohr Institute
Sommers, Aleah	University of Colorado at Boulder
Stearns, Leigh A.	University of Kansas
Sugiyama, Shin	Hokkaido University
Tang Xueyuan	Polar Research Institute of China
Tarasov, Lev	Memorial University of Newfoundland
Tian Yixiang	Tongji University
Timmermann, Ralph	Alfred Wegener Institute
Todd, Joe	Scott Polar Research Institute
Tong Xiaohua	Tongji University
Välisuo, Ilona	Finnish Meteorological Institute
Vallot, Dorothée	Uppsala University
Van As, Dirk	GEUS
Van den Broeke, Michiel R.	University of Utrecht
Van der Veen, Cornelis J.	University of Kansas
Van Liefferinge, Brice	Free University of Brussels
Van Wychen, Wesley	University of Ottawa
Verfaillie, Deborah	LGGE
Vieli, Andreas	University of Zürich
Vincent, Christian	LGGE
Vladimirova, Diana	St Petersburg State University
Wang, Xianwei	New York University Abu Dhabi
Warner, Roland C.	Antarctic Climate and Ecosystems CRC
Weiss, Jérôme	CNRS
Welty, Ethan Z.	University of Colorado
Werder, Mauro	University of Bristol

Whipple, Matthew	University of Bristol
Whitehouse, Pippa	University of Durham
Williams, Christopher	Swansea University
Williams, Rosie	British Antarctic Survey
Wilson, Terry	Ohio State University
Winberry, J. Paul	Central Washington University
Wuite, Jan	ENVEO IT GmbH
Xie Huan	Tongji University
Yang, Shuting	Danish Meteorological Institute
Ye Wenkai	Tongji University
Zekollari, Harry	Free University of Brussels
Ziemen, Florian	Geophysical Institute
Zoet, Lucas	Iowa State University
Zwinger, Thomas	CSC – IT Center for Science Ltd