



International Glaciological Society Symposium 2015, Cambridge

Contemporary ice-sheet dynamics: ocean interaction, meltwater, & non-linear effects

16th – 21st August 2015

Churchill College, Cambridge, United Kingdom



Programme

Programme Overview

Sunday 16th August

- Registration 14:00 – 19:00
- Icebreaker reception 19:30 – Barbeque in Churchill College grounds

Main week

Times	Monday	Tuesday	Wednesday	Thursday	Friday
07:30 – 09:00	Breakfast (if pre booked with Churchill accommodation)				
08:45 – 09:00	Welcome				
09:00 – 10:30	Session - talks	Session - talks	Session - talks	Session - talks	Session - talks
10:30 – 11:00	Tea Break	Tea Break	Tea Break	Tea Break	Tea Break
11:00 – 12:30	Session - talks	Session - talks	Session - talks	Session – talks + IGS AGM	Session - talks
12:30 – 12:40	Group photo				
12:30 – 14:00	Lunch	Lunch	Lunch	Lunch	Lunch
14:00 – 15:30	Session - talks	Session – posters – group A	Excursion – tour of Cambridge	Session – posters – group B	Session - talks
15:30 – 16:00	Tea Break	Tea Break		Tea Break	Tea Break
16:00 – 17:30	Session - talks	Session - talks	Free time	Session - talks	Session - talks
19:30	Dinner @Churchill (paid separately)	Dinner @Churchill (paid separately)	Symposium Banquet: Homerton College. Coach 18:00.	Dinner @Churchill (paid separately)	

Sponsored by:



Monday 17th August

8:00-8:40 Registration (continued from Sunday)

Session 1 Welcome + Continental shelf ocean processes

Times	Name	Title	ID
08:40 - 08:45	Andy Smith	Welcome from the Local Organising Committee, British Antarctic Survey (BAS)	
08:45 - 08:50	Tony Payne	Welcome from the Scientific Steering Committee	
08:50 - 08:55	Doug MacAyeal	Welcome from the IGS	
08:55 - 09:15	Duncan Wingham	Keynote speech from the Chief Executive of the Natural Environment Research Council (NERC)	
09:15 - 09:30	Elin Darelius	Circulation and hydrography in the Filchner Depression, Weddell Sea	73A1783
09:30 - 09:45	Heather Regan	Sources and fate of freshwater in the ocean west of the Antarctic Peninsula	73A1845
09:45 - 10:00	Laura Herraiz-Borreguero	Sensitivity of Antarctic Bottom Water formation to freshwater from sea ice and basal ice shelf meltwater using noble gases	73A1953
10:00 - 10:15	Louise Biddle	Identifying meltwater pathways in the Amundsen Sea	73A1823
10:15 - 10:30	Tae-Wan Kim	Interannual variation of cyclonic eddy in Amundsen Sea Polynya, Antarctica	73A1974

Break 10:30 - 11:00

Session 2 Ice shelves and ocean circulation

Times	Name	Title	ID
11:00 - 11:15	Svein Østerhus	Circulation and processes beneath the Ronne Ice Shelf, Antarctica	73A1970
11:15 - 11:30	Jennifer Graham	Modelling on-shelf ocean heat transport along the West Antarctic Peninsula	73A1839
11:30 - 11:45	Catherine Walker	Basal ice conditions under McMurdo Ice Shelf	73A1950
11:45 - 12:00	Oskar Glowacki	Passive underwater acoustics gives insight into glacier-ocean interactions	73A1808
12:00 - 12:15	Laurie Padman	Interannual climate response of large Antarctic ice shelves	73A1938
12:15 - 12:30	Olga Sargienko	Strong effects of thermodynamic interactions of the Antarctic ice shelves with the ocean circulation on the Southern Ocean and sea-ice formation in a global coupled ocean circulation model	73A1817

Photo 12:30 **Group photograph to be taken**

Lunch 12:40 - 14:00

Session 3 Ocean processes beneath Pine Island ice shelf

Times	Name	Title	ID
14:00 - 14:15	Atsuhiko Muto	Subglacial bathymetry and sediment distribution beneath Pine Island Glacier ice shelf modeled using aerogravity and in situ geophysical data	73A1811
14:15 - 14:30	Satoshi Kimura	Ocean mixing beneath Pine Island Glacier Ice Shelf	73A1844
14:30 - 14:45	Lai Bun Lok	Year-long monitoring and imaging of Pine Island Glacier ice shelf using phase sensitive radar	73A1856
14:45 - 15:00	Pierre Dutrieux	Autonomous ocean observations beneath Pine Island Glacier Ice Shelf, West Antarctica	73A1886
15:00 - 15:15	Leo Peters	Seismic observations of ocean stratification beneath the Pine Island Glacier Ice Shelf, West Antarctica	73A1946
15:15 - 15:30	Benjamin Webber	Sustained ocean cooling observed in front of Pine Island Glacier in 2011-13	73A1880

Break 15:30 - 16:00

Session 4 Ice shelf processes

Times	Name	Title	ID
16:00 - 16:15	Oliver Marsh	Highly concentrated melting and channel formation at the grounding line of the southern Ross Ice Shelf	73A1812
16:15 - 16:30	Sophie Berger	SAR observation and inverse modelling of ice shelf pinning point dynamics and channel formation	73A1956
16:30 - 16:45	Reinhard Drews	The evolution of Antarctic ice-shelf channels in observations and models	73A1955
16:45 - 17:00	Karen Alley	Observations of basal melt channels on Antarctic ice shelves	73A1949
17:00 - 17:15	Sue Cook	Analysing fracture and calving on the Totten Ice Shelf	73A1898
17:15 - 17:30	Julia Christmann	On Calving Rates and the Determination of Critical Stress States at the Ice Front Vicinity of Antarctic Ice Shelves	73A1925

Tuesday 18th August

Session 5 Fjord and calving front processes

Times	Name	Title	ID
09:00 - 09:15	Fiamma Straneo	Patterns of variability in the Helheim Glacier/Sermilik Fjord system, SE Greenland: a 5 years synthesis	73A1885
09:15 - 09:30	Rebecca Jackson	Glacial fjord circulation: how is heat imported and meltwater exported?	73A1871
09:30 - 09:45	Tom Cowton	Controls on heat transport, submarine melting and ice mélange stability at Kangerdlugssuaq Fjord (east Greenland), from numerical modelling experiments	73A1848
09:45 - 10:00	Pierre Mathiot	Parametrization of melting along the calving face of Jacobshavn Glacier, Greenland.	73A1816
10:00 - 10:15	Janin Schaffer	Pathways of warm water to the 79°N-Glacier	73A1903
10:15 - 10:30	Eva Cougnon	Modelling the impact of a major calving event in a region of high Dense Shelf Water formation	73A1835

Break 10:30 - 11:00

Session 6 Fjord and calving front processes

Times	Name	Title	ID
11:00 - 11:15	Laura Stevens	Evidence of multiple distinct subglacial meltwater plumes observed using the REMUS-100 autonomous underwater vehicle	73A1865
11:15 - 11:30	Nicholas Beaird	Noble Gases Quantify Meltwater Distribution in a West Greenland Fjord	73A1872
11:30 - 11:45	Ellyn Enderlin	Submarine melting of icebergs in Sermilik Fjord, Southeast Greenland, based on satellite remote sensing and hydrographic observations	73A1878
11:45 - 12:00	Eleanor Darlington	Seasonal and interannual evolution of meltwater production, storage and discharge from a tidewater glacier: insights from in-situ and remotely sensed data	73A1907
12:00 - 12:15	Kenneth Mankoff	Ice melt rates in a subglacial outflow plume	73A1899
12:15 - 12:30	Donald Slater	Proglacial discharge plumes at tidewater glaciers: scalings for ice-ocean interaction from buoyant plume theory & time-lapse imagery	73A1939

Lunch 12:30 - 14:00

Session 7 Poster session – Group A

Break 15:30 - 16:00

Session 8 Calving and marine-terminating glacier dynamics

Times	Name	Title	ID
Slot	Name	Title	ID
16:00 - 16:15	Rachel Carr	Pan-Arctic controls on the rapid retreat of marine-terminating Arctic outlet glaciers	73A1809
16:15 - 16:30	Martin O'Leary	Observable consequences of calving laws	73A1914
16:30 - 16:45	Timothy Bartholomaeus	High-resolution velocity observations and model results reveal a strong bed at stable tidewater Rink Isbrae, West Greenland	73A1951
16:45 - 17:00	Shin Sugiyama	Glacier dynamics near the calving front of Bowdoin Glacier, northwestern Greenland	73A1902
17:00 - 17:15	Twila Moon	Variability of seasonal Greenland glacier velocities and implications for ice sheet sensitivity to ocean and surface meltwater changes	73A1864
17:15 - 17:30	Adrian Luckman	Surging and calving activity in Svalbard from an unusually dense series of velocity maps	73A1857

Wednesday 19th August

Session 9 Grounding lines and ice-stream dynamics

Times	Name	Title	ID
09:00 - 09:15	Gunter Leguy	Parameterization of basal hydrology near grounding lines: parameter sensitivity and transient results in one- and three-dimensional ice sheet models	73A1790
09:15 - 09:30	Martin Wearing	Investigating the Flow Dynamics at Ice Shelf Calving Fronts	73A1786
09:30 - 09:45	Sebastian Rosier	Insights into ice stream dynamics through modelling their response to tidal forcing	73A1793
09:45 - 10:00	Rupert Gladstone	Marine ice sheet model resolution depends on basal processes	73A1869
10:00 - 10:15	Tim Hodson	Grounding zone sediment accumulation and tidewater and ice shelf stability	73A1940
10:15 - 10:30	Roij Sarag	Marine ice-sheet dynamics investigated using laboratory experiments	73A1897

Break 10:30 - 11:00

Session 10 Ice flow dynamics

Times	Name	Title	ID
11:00 - 11:15	Robert Athern	Flow speed within the Antarctic ice sheet and its controls inferred from satellite observations.	73A1850
11:15 - 11:30	Felix Ng	The pattern of flow convergence across Antarctic ice-stream networks	73A1831
11:30 - 11:45	Brad Lipovsky	Ice stream stick-slip: Dynamic rupture simulations	73A1876
11:45 - 12:00	Chris Borstad	Observational constraints for a generalized constitutive relation for ice creep with damage	73A1874
12:00 - 12:15	Jenny Suckale	A virtual laboratory for understanding shear margin dynamics	73A1821
12:15 - 12:30	Dustin Schroeder	Characterizing the Attenuation and Temperature Structure of Thwaites Glacier, West Antarctica	73A1789

Lunch 12:30 - 14:00

Excursion 14:00 - 16:00 Walking tour of historic Cambridge city centre. Meet at Churchill college entrance (Porter's Lodge)

Banquet 18:00 – 23:00 Symposium Banquet at Homerton College. Coach leaves outside Churchill 18:00. Drinks from 18:30. Dinner served 20:00. Dinner speech by Prof. Jane Francis, Director of the British Antarctic Survey

Thursday 20th August

Session 11 Pine Island Glacier

Times	Name	Title	ID
09:00 - 09:15	Robert Bingham	New high resolution views of the bed of Pine Island Glacier, West Antarctica	73A1854
09:15 - 09:30	Alex Brisbane	Bed properties beneath the tributaries of Pine Island Glacier from seismic investigations	73A1825
09:30 - 09:45	Damon Davies	Temporal changes in basal conditions of Pine Island Glacier, West Antarctica, from repeat radar surveys.	73A1922
09:45 - 10:00	Knut Christianson	External forcing modulates Pine Island Glacier flow	73A1913
10:00 - 10:15	Daniel Goldberg	Committed near-future retreat of Smith, Pope, and Kohler Glaciers inferred from transient model calibration	73A1935
10:15 - 10:30	Isabel Nias	Instability and sensitivity of the Amundsen Sea ice streams	73A1852

Break 10:30 - 11:00

Session 12 Subglacial lakes

Times	Name	Title	ID
11:00 - 11:15	Martin Siegert	Radio-Echo Sounding of Active Subglacial Lakes in Institute Ice Stream, West Antarctica	73A1779
11:15 - 11:30	Andrés Rivera	Detail mapping of a new Subglacial Lake at the ice divide between Institute Ice Stream and Minnesota Glacier in West Antarctica	73A1900
11:30 - 11:45	Catherine Walker	Extraterrestrial Glaciology: The role of Subsurface lakes and basal fractures in ice shell-ocean interactions on Jupiter's moon Europa	73A1961
11:45 - 12:30	IGS	IGS Annual General Meeting (all welcome)	

Lunch 12:30 - 14:00

Session 13 Poster session – Group B

Break 15:30 - 16:00

Session 14 Grounding line migration and ice sheet dynamics

Times	Name	Title	ID
16:00 - 16:15	Gaël Durand	Reducing uncertainties in projections of Antarctic ice mass loss	73A1952
16:15 - 16:30	Johannes Fürst	Susceptibility of the Antarctic ice sheet to changes in ice shelf buttressing	73A1841
16:30 - 16:45	Bas de Bour	Coupled ice sheet – sea level modelling: On the stability of marine ice sheets and the interaction with relative sea-level change	73A1908
16:45 - 17:00	Bea Csatho	Evolution of Antarctic Ice Dynamics from ICESat	73A1948
17:00 - 17:15	Jamin Greenbaum	Controls on the Sabrina Coast grounding line, East Antarctica	73A1923
17:15 - 17:30	Jonathan Kingslake	Dating ice-rise formation in the Ronne Ice Shelf region, West Antarctica, using ice-penetrating radars	73A1830

Friday 21st August

Session 15 Antarctic Peninsula and Patagonia

Times	Name	Title	ID
09:00 - 09:15	Ted Scambos	Pre-disintegration precursors to the Larsen Ice Shelf disintegrations: the climate-ocean conspiracy	73A1933
09:15 - 09:30	Thorsten Seehaus	Changes in ice dynamics of tributary glaciers of former Larsen-A and Prince-Gustav-Channel Ice Shelf (Antarctic Peninsula)	73A1820

09:30 - 09:45	Jan De Rydt	Modelling the response of the Larsen B glaciers after ice shelf collapse	73A1912
09:45 - 10:00	Melchior van Wessem	A model study of the mass balance and firn structure of ice shelves in the Antarctic Peninsula	73A1928
10:00 - 10:15	Helen Fricker	Is Larsen-C ice shelf ungrounding from Bawden Ice Rise?	73A1972
10:15 - 10:30	Carlos Moffat	The Ocean's Influence on Glacier Retreat in Patagonia	73A1860

Break 10:30 - 11:00

Session 16 Greenland

Times	Name	Title	ID
11:00 - 11:15	Beata Csatho	Greenland outlet glacier dynamics from a complete remote sensing elevation change record	73A1944
11:15 - 11:30	Denis Felikson	External forcing and geometric controls on surface elevation changes of central-west Greenland outlet glaciers	73A1921
11:30 - 11:45	Thomas Jordan	Determining the basal properties and englacial temperature of the Greenland ice sheet from radio echo sounding	73A1824
11:45 - 12:00	Alistair Everett	Annual supraglacial lake drainage linked to plume formation at Helheim Glacier, south east Greenland	73A1901
12:00 - 12:15	Ruth Mottram	Greenland Ice Sheet - Ocean – Atmosphere interactions in a fully coupled GCM (EC-Earth – PISM), evaluated using high resolution regional climate modelling and observations	73A1942
12:15 - 12:30	Reinhard Calov	Uncertainty in the contribution of the Greenland ice sheet to future sea level rise assessed with an integrated approach	73A1868

Lunch 12:30 - 14:00

Session 17 Ice sheet and climate modelling

Times	Name	Title	ID
14:00 - 14:15	Jeff Ridley	Water properties at the Antarctic shelf edge in high resolution climate models	73A1827
14:15 - 14:30	Alon Stern	Iceberg interactions in a coupled GCM	73A1819
14:30 - 14:45	Chris Little	Developing observationally-constrained, regime-specific projections of basal melting	73A1862
14:45 - 15:00	Xylar Asay-Davis	Design and sample results from the ISOMIP+ (ocean-only) and MISOMIP (coupled ice sheet-ocean) intercomparison projects	73A1798
15:00 - 15:15	Victor Tsai	Marine Ice-Sheet Profiles & Stability under Coulomb Basal Conditions	73A1813
15:15 - 15:30	Tosten Albrecht	Modeling today's sea-level contribution of glacial Antarctica	73A1941

Break 15:30 - 16:00

Session 18 Ice sheet modelling

Times	Name	Title	ID
16:00 - 16:15	David Pollard	Large-Ensemble modeling of last deglacial and future variations of the Antarctic Ice Sheet	73A1780
16:15 - 16:30	Johannes Sutter	Antarctic Eemian ice sheet-shelf dynamics controlled by sustained ocean warming	73A1873
16:30 - 16:45	Frank Pattyn	Ensemble predictions of future Antarctic mass loss with the FETISH model	73A1954
16:45 - 17:00	Daniel Martin	Response of the Antarctic Ice Sheet to a Warming Ocean Using the POPSICLES Coupled Ice Sheet-Ocean Model	73A1884
17:00 - 17:15	Nicholas Holschuh	Discriminating between Steady-State and Transient Controls on Englacial Structures	73A1805
17:15 - 17:30	Ian Hewitt	A new model for polythermal ice	73A1945
17:30 - 17:45	CLOSE	Closing remarks – Magus Magnusson	

Set-up: From midday on Monday 17th. | In attendance: Tuesday 18th afternoon 13:30-15:30. | Take down: by 9am Wednesday.

No.	Presenting author	Title	ID
Continental shelf ocean processes			
A1	Inga J. Smith	Sea-ice formation on continental shelves: a comparison of water mass signals near an Antarctic ice shelf and off the Alaskan coast	73A1788
A2	Joakim Kjellsson	Sensitivity of the recent increase in Antarctic sea ice in ocean models	73A1826
A3	Marta Kasper	Impact of highly resolved atmospheric forcing on the Southern Ocean circulation using the Finite Element Sea-ice Ocean Model (FESOM)	73A1847
A4	Georges Djoumna	Internal wave-driven mixing on the Amundsen Sea Shelf, West Antarctica	73A1890
A5	Helen Mallett	Seasonal water mass properties in the Amundsen Sea, Antarctica, using seal-borne tags	73A1906
A6	Agneta Fransson	Feedbacks of glacial water and primary production on the carbonate system and ocean acidification state in the Djimphna Sound, northeast Greenland	73A1916
Integrated understanding of the processes linking oceans and ice sheets			
A7	Ashley York	Marine- and land-terminating glacier retreat in Disko and Uummanaq Bays, West Greenland, 1985–2014	73A1870
A8	Nacho Merino	Impact of observed changes in Antarctic ice sheet mass balance on southern ocean properties and sea ice	73A1893
A9	Gregory Leonard	Multichannel acoustic backscattering of frazil ice: a case study in McMurdo Sound, Antarctica	73A1930
A10	Svein Østerhus	Long-term observing system for the oceanic regime of the Filchner–Ronne Ice Shelf, Antarctica	73A1971
A11	Agneta Fransson	Effect of glacial drainage water on the CO ₂ system and ocean acidification state in an Arctic tidewater-glacier fjord during two contrasting years	73A1976
Sub-ice-shelf processes and environment			
A12	Oliver Huhn	Evidence for increase basal ice-shelf melting in the Weddell Sea from oceanic noble-gas observations, 1990–2013	73A1800
A13	Ted Scambos	Measuring changes in the vicinity of the Seal Nunataks ice shelf remnant from imagery and altimetry	73A1807
A14	Rupert Gladstone	A simple parameterization of ice-shelf basal melting for long-term, large-scale simulations of the Antarctic ice sheet	73A1818
A15	Ruth Mugford	High-resolution modelling of ocean circulation and melt rates beneath the Filchner–Ronne Ice Shelf	73A1829
A16	Craig McConnochie	Dissolution by turbulent compositional convection of ice-shelf fronts & sides of tabular icebergs	73A1832
A17	Craig McConnochie	The turbulent convective plume at ice-shelf fronts and the sides of tabular icebergs	73A1833
A18	David Gwyther	Using idealized models to explore uncertainties in ice-shelf–ocean interaction	73A1834
A19	Nat Wilson	Heat flow pathways at 79North	73A1875
A20	Nicolas Jourdain	Melting ice shelves in the Amundsen Sea Embayment: role of poleward shifting winds and changing cavity geometries	73A1881
A21	Hilmar Gudmundsson	Testing a new physically based parameterization of ocean-induced melting	73A1892
A22	Pat Langhorne	Sea-ice indices of ice-shelf ‘health’	73A1896
A23	Laura Herraiz-Borreguero	Circulation of modified Circumpolar Deep Water and basal melt beneath the Amery Ice Shelf, East Antarctica	73A1909
A24	Andrew Wells	Heat transfer regimes for the buoyant flow of meltwater next to ice shelves and submerged glacier termini	73A1936
A25	Catherine Walker	The ice–ocean interface; a dynamic boundary (the effects of treating ice as a porous medium)	73A1943
A26	Britney Schmidt	Icfein: a new small modular AUV for polar under-ice exploration	73A1958
A27	Deb Shoosmith	Oceanographic observations at the Dotson Ice Shelf front, West Antarctica, and calculations of basal melting	73A1963
A28	Kaitlin Alexander	Projections of ice-shelf basal melting and sub-ice-shelf circulation changes in a warming climate	73A1975
A29	Mike Williams	Four years at Coulman High: what do a long term mooring and a model tell us about the oceanography and ice shelf melt near the front of the Ross Ice Shelf?	73A1979
Tidewater glacier and ice-shelf stability			
A30	Xianwei Wang	Disintegration mechanism of Mertz Ice Tongue revealed by sea-floor topography	73A1791
A31	Rachel Carr	Multi-decadal retreat of Novaya Zemlya outlet glaciers in response to climatic forcing	73A1810
A32	Henning Åkesson	Fjord geometry and marine outlet glacier stability on centennial timescales	73A1814
A33	Francisco Navarro	Controls on the front positions of tidewater glaciers	73A1837
A34	Catherine Walker	Monitoring rift activity on the Filchner–Ronne, Amery and Ross ice shelves and their role in ice-shelf–ocean interaction	73A1879
A35	Masahiro Minowa	Seasonal variations in the thermal structures of proglacial lakes in the Southern Patagonia Icefield	73A1894
A36	Catherine Walker	Tracking the propagation of crevasses in Helheim Glacier in Greenland	73A1960
A37	Victoria Lee	Assessing the impact of iceberg calving using an ice-sheet model for present-day	73A1964
Transport of ocean heat across the continental shelf break			
A38	Karen Assmann	Transport pathways of Circumpolar Deep Water on the Amundsen continental shelf	73A1822
A39	Stefanie Semper	Seasonal resonance in the diurnal frequency band on the continental slope in the southern Weddell Sea: do shelf waves enhance tidal eddy kinetic energy?	73A1836
A40	Kjersti Daae	Interaction of the Weddell Sea continental shelf with the Antarctic coastal current and the Antarctic slope front – an idealized model study	73A1977
A41	Tore Hattermann	Seasonal variability of the Antarctic slope front and implications for onshore eddy heat transport in the southeastern Weddell Sea	73A1978

Set-up: From midday on Wednesday 19th. | In attendance: Thursday 20th afternoon 13:30-15:30. | Take down: by 5pm Friday.

No.	Presenting author	Title	ID
Dynamics and stability of ice sheets			
B1	Bethan Davies	Modelled glacier response to centennial temperature and precipitation trends on the Antarctic Peninsula	73A1797
B2	Lionel Favier	Antarctic ice-rise formation, evolution and stability	73A1838
B3	Lisbeth T. Nielsen	Ice flow pattern and dynamical evolution of the Greenland ice sheet during the last deglaciation	73A1840
B4	Teresa Kyrke-Smith	A new 3-D full-Stokes model as a tool for basal inversions	73A1842
B5	Johannes H. Bondzio	Modelling the dynamic response of Jakobshavn Isbræ, West Greenland, to calving rate perturbations	73A1858
B6	Emma C. Smith	Ice fabric characteristics from shear-wave anisotropy using passive icequakes in Rutford Ice Stream, West Antarctica	73A1859
B7	Mark Pittard	Simulations testing the thermal regime of an ice sheet on a regional domain	73A1866
B8	Carlo Licciulli	Supplementing ice-core time series at a small-scale Alpine glacier with a 3-D full-Stokes ice flow model using Elmer/Ice	73A1882
B9	Stephen Cornford	1000 year adaptive mesh simulations of Antarctic ice dynamics	73A1887
B10	Yixiang Tian	Validation of Antarctic coastline products	73A1888
B11	Trevor Faulkner	The Weichselian deglaciation of central Scandinavia	73A1895
B12	Rodrigo Zamora	Bed radar reflectivity measurements at Institute Ice Stream and the ice divide between Minnesota, Pine Island and Rutford Glaciers in West Antarctica	73A1904
B13	José Uribe	Radar survey at the triple divide Institute Ice Stream, Pine Island and Minnesota Glaciers, West Antarctica	73A1905
B14	Tun Jan Young	Resolving flow and deformation of Store Glacier, West Greenland, using phase-sensitive FMCW radar	73A1911
B15	Felix Ng	Modelling the steady-state crystal size of deforming ice	73A1915
B16	Daniela Jansen	Observed propagation of a large rift in the Larsen C ice shelf: rift development and possible consequences for the stability of the ice shelf	73A1924
B17	Elizabeth Morris	Measurements of snow density, accumulation and compaction along the iSTAR traverse, Pine Island Glacier, Antarctica	73A1937
B18	Peter Nienow	Rapid growth and persistence of efficient subglacial drainage under kilometre thick Greenland ice	73A1947
B19	Catherine Ritz	Observationally constrained projections of Antarctic ice sheet instability	73A1957
B20	Huan Xie	Grounding line change analysis of the Antarctic ice shelves using existing grounding line products, satellite altimetry and topographic data	73A1965
B21	Tiantian Feng	Comparison of Antarctic surface elevation model products in representative regions	73A1967
B22	Shijie Liu	Ice flow velocity estimation from ZY-3 and Landsat satellite imagery: an experimental test in Fisher Glacier, East Antarctica	73A1968
Ice-sheet/stream/shelf glaciology			
B23	William Lipscomb	Simulating marine ice sheets with the Community Ice Sheet Model	73A1794
B24	Robert Jacobel	Imaging basal crevasses at the grounding line of Whillans Ice Stream, West Antarctica	73A1806
B25	Frazer Christie	Landsat- and InSAR-derived grounding-line dynamics in the Bellingshausen Sea sector of West Antarctica	73A1843
B26	Thomas Kleiner	The thermal structure of the Recovery Glacier drainage basin, Antarctica, derived from three-dimensional numerical flow modelling	73A1849
B27	Adrian Luckman	Föhn winds on Larsen C ice shelf generate an unusually massive ice layer	73A1853
B28	Robert Arthern	Exploring the use of transformation group priors and the method of maximum relative entropy for Bayesian glaciological inversions	73A1855
B29	Colin R. Meyer	Adding antiplane shear to Röthlisberger channels	73A1863
B30	Fuyuki Saito	Development of a numerical ice-sheet/ice-shelf model ICIES: numerical exercises in ice-sheet simulation	73A1867
B31	Matthew Siegfried	Rapid subglacial water system evolution triggered by a subglacial flood in West Antarctica	73A1883
B32	Bernd Kulesa	Seismic evidence of widespread firn compaction on the Larsen C ice shelf, Antarctic Peninsula	73A1919
B33	Christina Hulbe	Flow variation of Bindschadler and MacAyeal Ice Streams at decadal timescales	73A1926
B34	Daniela Jansen	Observations and modelling of centimetre-scale folding in the NEEM ice core	73A1927
B35	Sam Royston	Modelling ice streams in the northern Antarctic Peninsula	73A1932
B36	Gang Qiao	Feature-based image matching for Antarctic ice flow measurement using DISP images from the 1960s	73A1969
B37	Francisca Bown	Glaciological mass-balance measurements along oversnow traverses in West Antarctica	73A1973
Integrated understanding of the processes linking oceans and ice sheets			
B38	Allen Pope	Investigating elevation change in the Bellingshausen sector of the West Antarctic ice sheet	73A1828
B39	James Jordan	Coupling ice-ocean models using MITgcm	73A1846
B40	Jan De Rydt	Pine Island Glacier retreat through the asynchronous coupling of an ice and ocean model	73A1910
B41	Sophie Nowicki	An overview of the ISMIP6 effort	73A1917
B42	Janin Schaffer	RTopo-2: a global high-resolution dataset of ice-sheet topography, cavity geometry and ocean bathymetry	73A1931
B43	Sainan Sun	Impact of basal melt rate on ice flow through the Totten ice shelf	73A1962
B44	Tony Payne	Simulating the dynamics of Helheim Glacier with a crevasse-depth calving criterion & 2-D ice-flow model	73A1981