

DUNCAN A. YOUNG, Ph. D.

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Current appointment

University of Texas Institute for Geophysics	Research Scientist	2018-
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Previous appointments

University of Texas Institute for Geophysics	Research Associate	2013-2018
University of Texas Institute for Geophysics	Research Science Associate V	2007-2013

Professional preparation

University of Texas in Austin	Aerogeophysics	Postdoc 2005-2007
Adviser: Donald D. Blankenship		
University of Minnesota-Duluth	Planetary Science	Postdoc 2003-2004
Adviser: Vicki L. Hansen		
Southern Methodist University	Geology	Ph.D. 2003
Dissertation: " <i>Geological evolution of Venus' Lowlands: A Study of Rusalka Plantia, Venus</i> "		
Adviser: Vicki L. Hansen		
University of Canterbury	Earth Science	B.Sc (Hons first class), 1998
Dissertation: " <i>Segmentation of the Craigieburn Faultzone, Castle Hill Basin, North Canterbury</i> "		
Adviser: Jarg Pettinga		

Funded Projects (last three years):

Aerogeophysics co-lead and UTIG lead, "*COLDEX Science and Technology Center*", \$1,785k to UTIG; NSF; led by Oregon State University, collaborative with University of Washington, University of Kansas, University of Maine, UC-Irvine, Princeton University, Scripps Oceanographic Institute, Dartmouth, Brown and the University of Minnesota Duluth; 11 months for Young; 29.5 months for technical staff, 5 years of graduate student support.

UTIG lead for "*Collaborative Research: EarthCube Capabilities: Open Polar Radar (OPoRa) Software and Service*", \$425k to UTIG; NSF; collaborative with University of Kansas and Lamont-Doherty Earth Observatory; 4.5 months for PI Young; 6 months for technical staff, and 4 months for postdoc.

Co-Investigator for "*Radar for Europa Assessment and Sounding: Ocean to Near-surface (REASON)*" (NASA Europa Clipper Mission; \$22 million to UT over whole mission); in last three years ~12 months for Co-I Young; ~20 months of Technical Staff; ~36 month of postdoc;

Participated in the development of Vetlesen Antarctic Aerogeophysics Research project; \$900k over last three years, allocated to students, postdocs and technical staff.

Past Projects:

Principal Investigator for "*Collaborative Research: Southern Plateau Ice-sheet Characterization and Evolution of the Central Antarctic Plate (SPICECAP)*"; \$357k, NSF, collaborative with University of Minnesota Duluth, Scripps Oceanographic Institute, USGS, AAD, and IGE; in last three years ~1.5 months for PI Young; ~4 months for Technical Staff; ~17 months of postdoc

Co-Investigator for "*East Antarctic Grounding Line Experiment (EAGLE)*", \$824k, NSF, collaborative with

ACE-CRC, AAD and IGE; in last three years ~2.5 months for co-I Young; ~4 months for Technical Staff; ~12 months of postdoc.

Participant; *Antarctic Climate for Ecosystems Collaborative Research Center* (U Tasmania)

Principal Investigator for "*Geophysical Investigations of Marie Byrd Land Evolution*", \$1004k, NSF/GEO/PLR

Co-Investigator for "*That Un-Certain Thing: Estimating Basal Geometry Uncertainties Important to Projections of Thwaites Glacier Dynamics*", \$500k, NASA

Co-I/collaborator for Canadian Arctic Ice Caps, \$422k, NERC

Operation Ice Bridge Science Team member (NASA); Co-Investigator for "*East Antarctic Surface Elevation Observations for Operation IceBridge*", \$1.2 million, NASA (awarded 8/2009)

Co-Investigator for "*East Antarctic Surface Elevation Observations for Operation IceBridge: Year 2*", \$550k, NASA (awarded 4/2010)

Co-Investigator for "*International Collaborative Exploration of the Cryosphere through Aerogeophysical Profiling for Operation Ice Bridge (ICECAP/OIB): East Antarctica*", \$2.76 million, NASA (awarded)

Co-Investigator for "*Investigating the Cryospheric Evolution of the Central Antarctic Plate in support of WISSARD*", \$101k, NSF (awarded)

Research Experience

Missions (Operation Ice Bridge, Europa Clipper):

October 2018: Supported REASON's Antenna Critical Design Review

July 2018: Supported REASON's Electronics Critical Design Review

November-December 2018: Supported Europa Clipper's Integrated Wing Review

July 2018: Supported Europa Clipper's Preliminary Design Review

January-March 2018: Supported REASON's Preliminary Design Review

August 2015-: UTIG lead on REASON's science management with the Europa Clipper project

August 2015-: Instrument lead on the REASON's Science Data System development

August 2015 onward: Helped lead the science requirements development process for NASA's Europa Clipper Mission REASON instrument; member of the Europa Clipper Project Science Group.

2010-13: Member of Operation Ice Bridge Land Ice Science Team

Antarctic Field Work and Data Analysis

December 2016-January 2017: Field lead for six-week ICECAP/EAGLE survey of East Antarctic Ice Sheet, Antarctica

December 2015-February 2016: Field lead for two-month ICECAP II survey of East Antarctic Ice Sheet, Antarctica

December 2014: PI for six-week survey of Marie Byrd Land, Antarctica

January 2013: PI for 1 month survey of Marie Byrd Land, Antarctica

November-December 2012: Lead six-week field survey of East Antarctic Ice Sheet

November-December 2011: Lead two-month field survey of East Antarctic Ice Sheet

November 2010-January 2011: Lead three-month field survey of East Antarctic Ice Sheet

November 2009: Participated the design and field component of the survey of the Byrd Glacier Catchment, and led survey of Totten Glacier and George V Coast, Antarctica

December 2008: Participated in design and field component of the survey of the Totten Glacier Catchment, Antarctica

March 2005-: Investigating problems in glacial-lithospheric and ice-ocean coupling in Antarctica; planetary radar sounding studies

Oct. 2004-Feb. 2005: Participated in the UTIG AGASEA survey of the Thwaites Glacier Catchment, Antarctica

Arctic Field Work

April 2014: Field lead for 1 month survey of Canadian Ice Caps

May 2012: Lead two-week field survey of Greenland outlet glaciers

April 2011: Lead three-week field survey of Greenland outlet glaciers

Geological Mapping

1999-2004: Involved in U.S. Geological Survey planetary mapping program - radar based research in the Rusalka Plains of Venus with a focus on determining lowland resurfacing mechanisms; detailed investigation of Venus' deformation belts

1997: Geological and geomorphic field mapping & aerial photogeology of Castle Hill Basin, Canterbury, New Zealand.

Work with Students:

I have closely collaborated with four current JSG graduate students (Wei Wei*, Shuai Yan†, Natalie Wolfenbarger and Kristian Chan) and twelve former graduate students (Dr. E. Quartini*††, Dr. G. Muldoon*†, L. Lindzey*, Dr. C. Greene*†, Dr. M. Cavitte†, Dr. B. Gooch†, Dr. J. Greenbaum*†, Dr. B. Fredrick*†, Dr. D. Schroeder*, Dr. E. Leuro*, H. Danque*, Dr S. Carter, Dr. T. Damiani*, Dr. I. Filina* and S. Burris*), and managed thirteen undergraduate research associates working on polar research (Heidi Jackson, Larisa Liberty, Lauren SchwartzΔ, Will Foren, Aparna Chandrashekar, J. DeSantosΔ, A. Jones, M. Williams, B. AytonΔ, A. Rosale, J. FisherΔ and E. Powell*Δ). *worked with in field; Δplaced in graduate program; †co-supervisor; †committee

Service

UTIG Technical review committee (2020-)

UTIG Seminar committee (2019-)

UTIG Field Safety Chair (2021-)

Geophysics Editor for Advances in Polar Science (2016-)

Jackson School of Geosciences Equipment Committee (2013-2016; chair: 2019-)

UTIG Premium pay committee (2018)

Co-Convener of TACTICAL Antarctic heat Flow Workshop (March 2018)

Scientific Committee for Antarctic Research Antarctic Digital Magnetic Anomaly Project (ADMAP-2) steering committee (2015-)

Steering committee for the Scientific Committee for Antarctic Research Antarchitecture project

Site selection committee for the Rapid Access Ice Drill project

Chair and co-Convener of AGU Fall 2007 session "Radar Sounding of Planetary Ices"; Chair of AGU Fall 2003 session "Faulting and Fault-Related Processes on Planetary Surfaces II Posters"

Reviewer for the NSF Antarctic earth science and glaciology programs, the U.S.G.S. planetary mapping program, NASA Planetary Geology and Geophysics program, Cassini Data Analysis Program, P-DART and the Mars Data Analysis Program as well as Nature, JGR, GRL, Annals of Glaciology, Earth Science Reviews, Geology, IEEE Transactions on Geoscience and Remote Sensing, as well as a range of NSF and NASA programs.

President of the Southern Methodist University Geology Club (1999-2002)

Awards

UTIG Director's Circle of Excellence 2018; 2014; 2013

UTIG Outstanding Young Researcher Award 2012

UTIG Director's Circle of Excellence 2012

NASA Group Achievement Award for Operation Ice Bridge

NASA Group Achievement Award for the Ice Sheet Mass Balance Exercise

Professional Memberships:

International Glaciological Society (2012-);

American Geophysical Union (1999-);

Sigma Xi (2002-)

Publications and Presentations

Duncan A. Young

October 29, 2021

1 Summary

Postdocs indicated by *italic bold*, students and interns by underline.

Accepted papers over the last three years: 33 total; 9 as one of the first three authors
7 JSG student lead; 18 coauthorships
7 JSG postdoc lead; 20 coauthorships

Presentations over the last three years: 44 total; 23 as one of the first three authors
13 JSG student lead; 22 coauthorships
4 intern lead; 6 coauthorships
12 JSG postdoc lead; 42 coauthorships

2 Papers in Review

Papers in review (4):

- *Scanlan, K. M., D. A. Young* and D. D. Blankenship, in review, Radar Response of Europa Plume Fallout Deposits, *Icarus* | JSG postdoc lead
- *Liu-Schiaffini, M., G. Ng, C. Grima* and **D. Young**, in review, Ice Thickness from Deep Learning and Conditional Random Fields: Application to Ice Penetrating Radar Data with Radiometric Validation, *IEEE Transactions on Geoscience and Remote Sensing* | JSG student lead
- *Rutishauser, A., D. D. Blankenship, D. A. Young, N. S. Wolfenbarger, L. H. Beem, M. L. Skidmore, A. Dubnick* and A. S. Criscitiello, in review, Radar sounding survey over Devon Ice Cap indicates the potential for a diverse hypersaline subglacial hydrological environment, *The Cryosphere Discussions* | JSG postdoc lead; 1 student coauthor
- *Steinbrügge, G. B., M. S. Haynes, D. M. Schroeder, K. M. Scanlan, A. Stark, D. A. Young, C. Grima, G. Ng, D. P. Buhl, J. R. Voigt, T. Roatsch* and D. D. Blankenship, in review, Altimetry Measurements from Planetary Radar Sounders and Application to SHARAD on Mars, *IEEE Transactions on Geoscience and Remote Sensing* | JSG postdoc coauthor

3 Published or Accepted (95)

2021 (8):

- *Schroeder, D. M., N. L. Bienert, R. Culberg, E. J. MacKie, T. O. Teisberg, W. Chu* and **D. A. Young**, 2021, Glaciological Constraints on Link Budgets for Orbital Radar Sounding of Earth's Ice Sheets, in *2021 IEEE International Geoscience and Remote Sensing Symposium IGARSS*, eds: na, 10.1109/IGARSS47720.2021.9553237
- *Chu, W., A. M. Hilger, R. Culberg, D. M. Schroeder, T. M. Jordan, H. Seroussi, D. A. Young, D. D. Blankenship* and D. G. Vaughan, 2021, Multi-System Synthesis of Radar Sounding Observations of the Amundsen Sea Sector from the 2004-2005

Field Season, *Journal of Geophysical Research: Earth Surface*, 126, e2021JF006296, 10.1029/2021JF006296

- Cavitte, M. G. P., **D. A. Young**, R. Mulvaney, C. Ritz, J. S. Greenbaum, G. Ng, S. D. Kempf, E. Quartini, G. R. Muldoon, J. Paden, M. Frezzotti, J. L. Roberts, C. R. Tozer, D. M. Schroeder and D. D. Blankenship, 2021, A detailed radiostratigraphic data set for the central East Antarctic Plateau spanning from the Holocene to the mid-Pleistocene, *Earth System Science Data*, 13, 10.5194/essd-13-4759-2021 | *JSG student lead, JSG 1 student coauthors*
- MacGregor, J. A., L. N. Boisvert, B. Medley, A. A. Petty, J. P. Harbeck, R. E. Bell, J. B. Blair, E. Blanchard-Wrigglesworth, E. M. Buckley, M. S. Christoffersen, J. R. Cochran, B. M. Csathó, E. L. De Marco, R. T. Dominguez, M. A. Fahnestock, S. L. Farrell, S. P. Gogineni, J. S. Greenbaum, C. M. Hansen, M. A. Hofton, J. W. Holt, K. C. Jezek, L. S. Koenig, N. T. Kurtz, R. Kwok, C. F. Larsen, C. J. Leuschen, S. S. Manizade, S. Martin, T. A. Neumann, S. M. Nowicki, J. D. Paden, J. A. Richter-Menge, E. J. Rignot, F. Rodríguez-Morales, M. R. Siegfried, B. E. Smith, J. G. Sonntag, M. Studinger, K. J. Tinto, M. Truffer, T. P. Wagner, J. E. Woods, **D. A. Young** and J. K. Yungel, 2021, The scientific legacy of NASA's Operation IceBridge, *Reviews of Geophysics*, 10.1029/2020RG000712
- Scanlan, K. M., D. A. Young**, G. B. Steinbrügge, S. D. Kempf, C. Grima and D. D. Blankenship, 2021, Delay Doppler SAR Focusing and Quantitative Quality Control of Future REASON Data, *IEEE Transactions on Geoscience and Remote Sensing*, 10.1109/JSTARS.2021.3072276 | *JSG postdoc lead*
- Beem, L. H., **D. A. Young**, J. S. Greenbaum, D. D. Blankenship, M. G. P. Cavitte, J. Guo and S. Bo, 2021, Aerogeophysical characterization of Titan Dome, East Antarctica, and potential as an ice core target, *The Cryosphere*, 15, 10.5194/tc-15-1719-2021 | *1 JSG student coauthor*
- Castelletti, D., D. M. Schroeder, T. M. Jordan and **D. Young**, 2021, Permanent Scatterers in Repeat-Pass Airborne VHF Radar Sounder for Layer-Velocity Estimation, *IEEE Geoscience and Remote Sensing Letters*, 18, pp. 1766-1770
- Quartini, E., D. D. Blankenship and **D. A. Young**, 2021, Active subglacial volcanism in West Antarctica, in *Volcanism in Antarctica: 200 Million Years of Subduction, Rifting and Continental Break-up*, 55, eds: Smellie, J. L., Panter K. S. and Geyer, A., 10.1144/M55-2019-3 | *JSG student lead*

2020 (10):

- Aitken, A. R. A., L. N. Ramos, J. L. Roberts, J. S. Greenbaum, L. M. Jong, **D. A. Young** and D. D. Blankenship, 2020, A Magnetic Data Correction Workflow for Sparse, Four-Dimensional Data, *Journal of Geophysical Research: Solid Earth*, 125, pp. e2020JB019825, 10.1029/2020JB019825
- Steinbrügge, G. B.**, J. R. Voigt, N. S. Wolfenbarger, C. Hamilton, K. S. Soderlund, **D. A. Young**, D. D. Blankenship, S. Vance and D. M. Schroeder, 2020, Brine Migration and Impact-Induced Cryovolcanism on Europa, *Geophysical Research Letters*, 47, pp. 1-10, 10.1029/2020GL090797 | *JSG postdoc lead; 1 student coauthor*
- Cui, X., H. Jeofry, J. S. Greenbaum, J. Guo, L. Li, L. E. Lindzey, F. A. Habbal, W. Wei, **D. A. Young**, N. Ross, M. Morlighem, L. M. Jong, J. L. Roberts, D. D. Blankenship, S. Bo and M. J. Siegert, 2020, Bed topography of Princess Elizabeth Land in East Antarctica, *Earth System Science Data*, 12, 10.5194/essd-12-2765-2020 | *2 JSG student coauthors*
- Wei, W., D. D. Blankenship, J. S. Greenbaum, N. Gourmelen, C. F. Dow, T. G. Richter, **C. A. Greene, D. A. Young**, S. Lee, T. Kim, W. S. Lee and K. M. Assmann, 2020, Getz Ice Shelf melt enhanced by freshwater discharge from beneath the West Antarctic Ice Sheet, *The Cryosphere*, 14, pp. 1399-1408, 10.5194/tc-14-1399-2020 | *JSG student lead*
- Gerekos, C., C. Grima, **G. B. Steinbrügge**, S. Thakur, **K. M. Scanlan, D. A. Young**, L. Bruzzone and D. D. Blankenship, 2020, Martian roughness analogues of European terrains for radar sounder investigations, *Icarus*, 10.1016/j.icarus.2020.114197 | *2 JSG postdocs coauthor*
- Scanlan, K. M., A. Rutishauser, D. A. Young** and D. D. Blankenship, 2020, Interferometric Discrimination of Cross-Track Bed Clutter in Ice-Penetrating Radar Sounding Data, *Annals of Glaciology*, 61, pp. 68-73, 10.1017/aog.2020.20 | *JSG postdoc lead with 1 postdoc coauthors*
- Roberts, J. L., L. M. Jong, F. S. McCormack, M. A. Curran, A. D. Moy, D. Etheridge, J. S. Greenbaum, **D. A. Young**, S. J. Phipps, W. Xue, T. D. van Ommen, D. D. Blankenship and M. J. Siegert, 2020, Integral correlation for uneven and differently sampled data: Application to the Law Dome Antarctic climate record, *Scientific Reports*, 10, pp. 17477, 10.1038/s41598-020-74532-9
- Lindzey, L. E., L. H. Beem, **D. A. Young**, E. Quartini, D. D. Blankenship, C. Lee, W. S. Lee, J. I. Lee and J. Lee, 2020, Aerogeophysical characterization of an active subglacial lake system in the David Glacier catchment, Antarctica, *The Cryosphere*, 14, pp. 2217-2233, 10.5194/tc-14-2217-2020 | *JSG student lead, JSG 1 student coauthors*
- Dow, C. F., F. S. McCormack, **D. A. Young**, J. S. Greenbaum, J. L. Roberts and D. D. Blankenship, 2020, Totten Glacier subglacial hydrology determined from geophysics and modeling, *Earth and Planetary Science Letters*, 531, 10.1016/j.epsl.2019.115961

•**Steinbrügge, G.**, J. R. Voigt, D. Schroeder, A. Stark, M. S. Haynes, **K. M. Scanlan**, C. Hamilton, **D. A. Young**, H. Hussmann, C. Grima and D. D. Blankenship, 2020, The Surface Roughness of Europa derived from Galileo Stereo Images, *Icarus*, 343, 10.1016/j.icarus.2020.113669 | *JSG postdoc lead with 1 postdoc coauthors*

2019 (7):

•Morlighem, M., E. Rignot, T. Binder, D. Blankenship, R. Drews, G. Eagles, O. Eisen, F. Ferraccioli, R. Forsberg, P. Fretwell, V. Goel, **J. S. Greenbaum**, H. Gudmundsson, J. Guo, V. Helm, C. Hofstede, I. Howat, A. Humbert, W. Jokat, N. B. Karlsson, W. S. Lee, K. Matsuoka, R. Millan, J. Mouginot, J. Paden, F. Pattyn, J. Roberts, S. Rosier, A. Ruppel, H. Seroussi, E. C. Smith, D. Steinhage, B. Sun, M. R. v. d. Broeke, T. D. van Ommen, M. van Wessem and **D. A. Young**, 2019, Deep glacial troughs and stabilizing ridges unveiled beneath the margins of the Antarctic ice sheet, *Nature Geoscience*, 10.1038/s41561-019-0510-8 | *JSG postdoc coauthor*

•**Scanlan, K. M.**, C. Grima, **G. Steinbrügge**, S. D. Kempf, **D. A. Young** and D. D. Blankenship, 2019, Geometric determination of ionospheric total electron content from dual frequency radar sounding measurements, *Planetary and Space Science*, 10.1016/j.pss.2019.07.010 | *JSG postdoc lead with 1 postdoc coauthors*

•Grima, C., I. Koch, **J. S. Greenbaum**, K. S. Soderlund, D. D. Blankenship, **D. A. Young**, D. M. Schroeder and S. Fitzsimons, 2019, Surface and Basal Boundary Conditions at the Southern McMurdo and Ross Ice Shelves, Antarctica, *Journal of Glaciology*, 65, pp. 675-688, 10.1017/jog.2019.44 | *JSG postdoc coauthor*

•Wang, B., B. Sun, J. Wang, **J. Greenbaum**, J. Guo, L. Lindzey, X. Cui, **D. A. Young**, D. D. Blankenship and M. J. Siegert, 2019, Removal of 'strip noise' in airborne radio-echo sounding data using combined wavelet and 2D DFT filtering, *Annals of Glaciology*, 10.1017/aog.2019.4 | *JSG postdoc lead; 1 student coauthor*

•Paxman, G. J. G., S. S. R. Jamieson, F. Ferraccioli, M. J. Bentley, N. Ross, A. B. Watts, G. Leitchenkov, E. Armadillo and **D. Young**, 2019, Lithospheric flexure and landscape evolution in the Wilkes Subglacial Basin and Transantarctic Mountains of East Antarctica, *Journal of Geophysical Research*, 10.1029/2018JF004705

•McCormack, F. S., J. L. Roberts, L. M. Jong, **D. A. Young** and **L. H. Beem**, 2019, A short note on DEM smoothing and driving stresses, *Polar Record*, 38, 3498, 10.33265/polar.v38.3498 | *JSG postdoc coauthor*

•Harcourt, W. D., S. J. Palmer, D. T. Mansell, A. Le Brocq, O. Bartlett, N. Gourmelen, P. Tepes, J. A. Dowdeswell, D. D. Blankenship and **D. A. Young**, 2019, Subglacial controls on dynamic thinning at Trinity-Wykeham Glacier, Nunavut, Canada, *International Journal of Remote Sensing*, 10.1080/01431161.2019.1658238

2018 (8):

•Greene, C. A., **D. A. Young**, D. E. Gwyther, B. K. Galton-Fenzi and D. D. Blankenship, 2018, Seasonal dynamics of Totten Ice Shelf controlled by sea ice buttressing, *The Cryosphere*, 12, pp. 2869-2882, 10.5194/tc-12-2869-2018 | *JSG student lead*

•Golynsky, A. V., F. Ferraccioli, J. K. Hong, D. A. Golynsky, R. R. B. von Frese, **D. A. Young**, D. D. Blankenship, J. W. Holt, S. V. Ivanov, A. V. Kiselev, V. N. Masolov, G. Eagles, K. Gohl, W. Jokat, D. Damaske, C. Finn, A. Aitken, R. E. Bell, E. Armadillo, T. A. Jordan, **J. S. Greenbaum**, E. Bozzo, G. Caneva, R. Forsberg, M. Ghidella, J. Galindo-Zaldivar, F. Bohoyo, Y. M. Martos, Y. Nogi, E. Quartini and H. R. Kim, 2018, New Magnetic Anomaly Map of the Antarctic, *Geophysical Research Letters*, 45, 10.1029/2018GL078153 | 2 *JSG student and postdoc coauthors*

•Muldoon, G. R., C. S. Jackson, **D. A. Young** and D. D. Blankenship, 2018, Bayesian estimation of englacial radar chronology in Central West Antarctica, *Dynamics and Statistics of the Climate System*, 3, pp. dzy004, climatesystem/dzy004 | *JSG student lead*

•Passalacqua, O., **M. G. P. Cavitte**, O. Gagliardini, F. Gillet-Chaulet, F. Parrenin, C. Ritz and **D. A. Young**, 2018, Brief communication: "Oldest Ice" patches diagnosed 37 km southwest of Dome C, East Antarctica, *The Cryosphere*, 12, 10.5194/tc-12-2167-2018 | 1 *JSG student coauthor*

•**Rutishauser, A.**, D. D. Blankenship, M. Sharp, M. L. Skidmore, **J. S. Greenbaum**, C. Grima, D. M. Schroeder, J. A. Dowdeswell and **D. A. Young**, 2018, Discovery of a hypersaline subglacial lake complex beneath Devon Ice Cap, Canadian Arctic, *Science Advances*, 4, 4, 10.1126/sciadv.aar4353 | *JSG postdoc lead with 1 postdoc coauthors*

•Van Liefferinge, B., F. Pattyn, **M. G. Cavitte**, N. B. Karlsson, **D. A. Young**, J. Sutter and O. Eisen, 2018, Promising Oldest Ice sites in East Antarctica based on thermodynamical modelling, *The Cryosphere*, 12, 10.5194/tc-2017-276 | 1 *JSG student coauthor*

•Dow, C. F., W. S. Lee, **J. S. Greenbaum**, **C. A. Greene**, D. D. Blankenship, K. Poinar, A. L. Forrest, **D. A. Young** and C. J. Zapp,

2018, Basal channels drive active surface hydrology and transverse ice shelf fracture, *Science Advances*, 4, 6, 10.1126/sciadv.aao7212 | 2 JSG student and postdoc coauthors

•Cavitte, M. G. P., F. Parrenin, C. Ritz, **D. A. Young**, D. D. Blankenship, M. Frezzotti and J. L. Roberts, 2018, Stable accumulation patterns around Dome C, East Antarctica, over the last glacial cycle, *The Cryosphere*, 12, 10.5194/tc-12-1401-2018 | JSG student lead

2017 (9):

•Schroeder, D. M., A. M. Hilger, J. D. Paden, **D. A. Young** and H. F. J. Corr, 2017, Ocean access beneath the southwest tributary of Pine Island Glacier, West Antarctica, *Annals of Glaciology*, 10.1017/aog.2017.45

•Beem, L. H., M. G. P. Cavitte, D. D. Blankenship, S. P. Carter, **D. A. Young**, G. R. Muldoon, C. S. Jackson and M. J. Siegert, 2017, Ice-flow reorganization within the East Antarctic Ice Sheet deep interior, *Geological Society, London, Special Publications*, 461, 10.1144/SP461.14 | JSG postdoc lead; 2 student coauthors

•**Young**, D. A., J. L. Roberts, C. Ritz, M. Frezzotti, E. Quartini, M. G. P. Cavitte, C. R. Tozer, D. Steinhage, S. Urbini, H. F. J. Corr, T. Van Ommen and D. D. Blankenship, 2017, High resolution boundary conditions of an old ice target near Dome C, Antarctica, *The Cryosphere*, 11, 10.5194/tc-11-1897-2017 | 2 JSG student coauthors

•Graham, F. S., J. L. Roberts, B. K. Galton-Fenzi, **D. Young**, D. Blankenship and M. J. Siegert, 2017, A high-resolution synthetic bed elevation grid of the Antarctic continent, *Earth System Science Data*, 9, pp. 267–279, 10.5194/essd-9-267-2017

•Winter, A., D. Steinhage, E. J. Arnold, D. D. Blankenship, M. G. P. Cavitte, H. F. J. Corr, J. D. Paden, S. Urbini, **D. A. Young** and O. Eisen, 2017, Comparison of measurements from different radio-echo sounding systems and synchronization with the ice core at Dome C, Antarctica, *The Cryosphere*, 11, pp. 653–668, 10.5194/tc-11-653-2017 | 1 JSG student coauthor

•Roberts, J. L., B. K. Galton-Fenzi, F. S. Paolo, C. Donnelly, D. E. Gwyther, L. Padman, **D. Young**, R. Warner, J. Greenbaum, H. A. Fricker, A. J. Payne, S. Cornford, A. Le Brocq, T. van Ommen, D. Blankenship and M. Siegert, 2017, Ocean forced variability of Totten Glacier mass loss, *Geological Society of London, Special Publication*, 461, 10.1144/SP461.6 | JSG postdoc coauthor

•Roberts, J., M. Curran, S. Poynter, A. Moya, T. van Ommen, T. Vance, C. Tozer, F. Graham, **D. Young**, C. Plummer, J. Pedro, D. Blankenship and M. Siegert, 2017, Correlation confidence limits for unevenly sampled data, *Computers & Geosciences*, 104, 10.1016/j.cageo.2016.09.011

•Castelletti, D., D. M. Schroeder, S. Hensley, C. Grima, G. Ng, **D. Young**, Y. Gim, L. Bruzzone, A. Moussessian and D. D. Blankenship, 2017, An Interferometric Approach to Cross-Track Clutter Detection in Two Channel VHF Radar Sounders, *IEEE Transactions on Geoscience and Remote Sensing*, 10.1109/TGRS.2017.2721433

•Gillespie, M. K., W. Lawson, W. Rack, B. Anderson, D. D. Blankenship, **D. A. Young** and J. W. Holt, 2017, Geometry and ice discharge of the Darwin-Hatherton glacial system, Transantarctic Mountains, *Journal of Glaciology*, 63, pp. 959–972, 10.1017/jog.2017.60

2016 (13):

•Rutishauser, A., C. Grima, M. Sharp, D. D. Blankenship, **D. A. Young**, F. Cawkwell and J. A. Dowdeswell, 2016, Characterizing near-surface firn using the scattered signal component of the glacier surface return from airborne radio-echo sounding, *Geophysical Research Letters*, 43, pp. 12502–12510, 10.1002/2016GL071230

•Maritati, A., A. R. A. Aitken, **D. A. Young**, J. L. Roberts, D. D. Blankenship and M. J. Siegert, 2016, The tectonic development and erosion of the Knox Subglacial Sedimentary Basin, East Antarctica, *Geophysical Research Letters*, 43, pp. 10,728–10,737, 10.1002/2016GL071063

•Vance, T. R., J. L. Roberts, A. D. Moy, M. A. J. Curran, C. R. Tozer, A. J. E. Gallant, N. J. Abram, T. D. van Ommen, **D. A. Young**, C. Grima, D. D. Blankenship and M. J. Siegert, 2016, Optimal site selection for a high-resolution ice core record in East Antarctica, *Climate of the Past*, 12, pp. 595–610, 10.5194/cp-12-595-2016

•Schroeder, D. M., H. Seroussi, W. Chu and **D. A. Young**, 2016, Adaptively constraining radar attenuation and temperature across the Thwaites Glacier catchment using bed echoes, *Journal of Glaciology*, 10.1017/jog.2016.100

•Grima, C., J. S. Greenbaum, E. J. Lopez Garcia, K. M. Soderlund, A. Rosales, D. D. Blankenship and **D. A. Young**, 2016, Radar detection of the brine extent at McMurdo Ice Shelf, Antarctica, and its control by snow accumulation, *Geophysical Research Letters*, 43, pp. 7011-7018, 10.1002/2016GL069524 | 1 JSG student coauthor

•Frederick, B. C., **D. A. Young**, D. D. Blankenship, T. G. Richter, S. D. Kempf, F. Ferraccioli and M. J. Siegert, 2016, Distribu-

tion of subglacial sediments across the Wilkes Subglacial Basin, East Antarctica, *Journal of Geophysical Research: Earth Surface*, 121,pp. 790–813, 10.1002/2015JF003760

•Aitken, A. R. A., J. L. Roberts, T. D. van Ommen, **D. A. Young**, N. R. Golledge, J. S. Greenbaum, D. D. Blankenship and M. J. Siegert, 2016, Repeated large-scale retreat and advance of Totten Glacier indicated by inland bed erosion, *Nature*, 533,pp. 385–389 | 1 JSG student coauthor

•Gooch, B. T., **D. A. Young** and D. D. Blankenship, 2016, Potential groundwater and heterogeneous heat source contributions to ice sheet dynamics in critical submarine basins of East Antarctica, *Geochemistry, Geophysics, Geosystems*, 17,pp. 395–409, 10.1002/2015GC006117

•Scheinert, M., F. Ferraccioli, J. Schwabe, R. Bell, M. Studinger, D. Damaske, W. Jokat, N. Aleshkova, T. Jordan, G. Leitchenkov, D. D. Blankenship, T. M. Damiani, **D. Young**, J. R. Cochran and T. D. Richter, 2016, New Antarctic Gravity Anomaly Grid for Enhanced Geodetic and Geophysical Studies in Antarctica, *Geophysical Research Letters*, 43,pp. 600-610, 10.1002/2015GL067439

•Cavitt, M. G. P., D. D. Blankenship, **D. A. Young**, D. M. Schroeder, F. Parrenin, E. Le Meur, J. A. MacGregor and M. J. Siegert, 2016, Deep radiostratigraphy of the East Antarctic Plateau: connecting the Dome C and Vostok ice core sites, *Journal of Glaciology*, 62,pp. 323-334, 10.1017/jog.2016.11 | JSG student lead

•Jamieson, S. S. R., N. Ross, J. S. Greenbaum, **D. A. Young**, A. R. Aitken, J. L. Roberts, D. D. Blankenship, B. Sun and M. J. Siegert, 2016, An extensive subglacial lake and canyon system in Princess Elizabeth Land, East Antarctica, *Geology*, 44,pp. 87–90, 10.1130/G37220.1 | 1 JSG student coauthor

•**Young, D. A.**, D. M. Schroeder, D. D. Blankenship, S. D. Kempf and E. Quartini, 2016, The distribution of basal water between Antarctic subglacial lakes from radar sounding, *Philosophical Transactions of the Royal Society A*, 374,pp. 1-21, 10.1098/rsta.2014.0297 | 1 JSG student coauthor

•Aitken, A. R. A., P. G. Betts, **D. A. Young**, D. D. Blankenship, J. L. Roberts and M. J. Siegert, 2016, The Australo-Antarctic Columbia to Gondwana transition, *Gondwana Research*, 29, 10.1016/j.gr.2014.10.019

2015 (3):

•Greenbaum, J. S., D. D. Blankenship, **D. A. Young**, T. G. Richter, J. L. Roberts, A. R. A. Aitken, B. Legresy, D. M. Schroeder, R. C. Warner, T. D. van Ommen and M. J. Siegert, 2015, Ocean access to a cavity beneath Totten Glacier in East Antarctica, *Nature Geosciences*, 8, 10.1038/ngeo2388 | JSG student lead

•Carr, J. R., A. Vieli, C. Stokes, S. Jamieson, S. Palmer, P. Christoffersen, J. Dowdeswell, F. Nick, D. D. Blankenship and **D. A. Young**, 2015, Basal topographic controls on rapid retreat of Humboldt Glacier, northern Greenland, *Journal of Glaciology*, 61,pp. 137-150, 10.3189/2015JogG14J128

•**Young, D. A.**, L. E. Lindzey, D. D. Blankenship, J. S. Greenbaum, A. Garcia de Gorordo, S. D. Kempf, J. L. Roberts, R. C. Warner, T. van Ommen, M. J. Siegert and E. Le Meur, 2015, Land-ice elevation changes from photon counting swath altimetry: First applications over the Antarctic ice sheet, *Journal of Glaciology*, 61,pp. 17-28, 10.3189/2015JogG14J048 | 2 JSG student coauthors

2014 (10):

•Damiani, T. M., T. A. Jordan, F. Ferraccioli, **D. A. Young** and D. D. Blankenship, 2014, Variable crustal thickness beneath Thwaites Glacier revealed from airborne gravimetry, possible implications for geothermal heat flux in West Antarctica, *Earth and Planetary Science Letters*, 407,pp. 109 - 122, 10.1016/j.epsl.2014.09.023

•Schroeder, D. M., D. D. Blankenship, **D. A. Young**, A. E. Witus and J. B. Anderson, 2014, Airborne radar sounding evidence for deformable sediments and outcropping bedrock beneath Thwaites Glacier, West Antarctica, *Geophysical Research Letters*, 41,pp. 7200-7208, 10.1002/2014GL061645 | JSG student lead

•**Grima, C.**, D. D. Blankenship, **D. A. Young** and D. M. Schroeder, 2014, Surface slope control on firn density at Thwaites Glacier, West Antarctica: Results from airborne radar sounding, *Geophysical Research Letters*, 41,pp. 6787-6794, 10.1002/2014GL061635 | JSG postdoc lead; 1 student coauthor

•**Grima, C.**, D. M. Schroeder, D. D. Blankenship and **D. A. Young**, 2014, Planetary landing zone reconnaissance using ice-penetrating radar data: Concept validation in Antarctica, *Planetary and Space Science*, 103, 10.1016/j.pss.2014.07.018 | JSG postdoc lead; 2 student coauthors

•Le Meur, E., M. Sacchetti, S. Garambois, E. Berthier, A. S. Drouet, G. Durand, **D. Young**, J. S. Greenbaum, D. D. Blankenship, J. W. Holt, E. Rignot, J. Mouginot, Y. Gim, D. Kirchner, B. de Fleurian, O. Gagliardini and F. Gillet-Chaulet, 2014, Two

independent methods for mapping the grounding line of an outlet glacier; example from the Astrolabe Glacier, Terre Adélie, Antarctica, *The Cryosphere*, 8, 10.5194/tc-8-1331-2014 | 1 JSG student coauthor

- Schroeder, D. M., D. D. Blankenship, **D. A. Young** and E. Quartini, 2014, Evidence for elevated and spatially variable geothermal flux beneath the West Antarctic Ice Sheet, *Proceedings of the National Academies of Science*, 111, pp. 9070-9072, 10.1073/pnas.1405184111 | JSG student lead, JSG 1 student coauthors
- Fudge, T., H. B. Conway, G. A. Catania, D. D. Blankenship, K. Christianson, I. R. Joughin, B. Smith, S. D. Kempf, **D. A. Young** and S. Anandkrishnan, 2014, Identifying flowlines and limitations of flux analyses in the interior of Thwaites Glacier, Antarctica, *Annals of Glaciology*, 55, pp. 107-114, 10.3189/2014AoG67A033
- Aitken, A. R. A., **D. A. Young**, F. Ferraccioli, P. G. Betts, J. S. Greenbaum, T. G. Richter, J. L. Roberts, D. D. Blankenship and M. J. Siegert, 2014, The subglacial geology of Wilkes Land, East Antarctica, *Geophysical Research Letters*, 41, 10.1002/2014GL059405 | 1 JSG student coauthor
- Wright, A., **D. Young**, J. Bamber, J. Dowdeswell, A. Payne, D. Blankenship and M. Siegert, 2014, Subglacial hydrological connectivity within the Byrd Glacier catchment, *Journal of Glaciology*, 60, pp. 345-352, 10.3189/2014JoG13J014
- Goff, J. A., E. M. Powell, **D. A. Young** and D. D. Blankenship, 2014, Conditional simulation of Thwaites Glacier bed topography for flow models: Incorporating inhomogeneous statistics and channelized morphology, *Journal of Glaciology*, 60, pp. 635-646, 10.3189/2014JoG13J200 | 1 JSG student coauthor

2013 (5):

- Palmer, S. J., J. A. Dowdeswell, P. Christoffersen, **D. A. Young**, D. D. Blankenship, J. S. Greenbaum and T. J. Benham, 2013, Greenland subglacial lakes detected by radar, *Geophysical Research Letters*, 40, 10.1002/2013GL058383 | 1 JSG student coauthor
- MacGregor, J. A., G. A. Catania, H. B. Conway, D. M. Schroeder, I. R. Joughin, **D. A. Young**, S. D. Kempf and D. D. Blankenship, 2013, Weak bed control of the eastern shear margin of Thwaites Glacier, *Journal of Glaciology*, 59, pp. 900-912, 10.3189/2013JoG13J050 | 1 JSG student coauthor
- Lough, A. C., D. A. Wiens, C. G. Barcheck, S. Anandkrishnan, R. C. Aster, D. D. Blankenship, A. D. Huerta, A. Nyblade, **D. A. Young** and T. J. Wilson, 2013, Seismic Detection of an Active Subglacial Magmatic Complex in Marie Byrd Land, Antarctica, *Nature Geoscience*, 6, 10.1038/ngeo1992
- Schroeder, D. M., D. D. Blankenship and **D. A. Young**, 2013, Evidence for a water system transition beneath Thwaites Glacier, West Antarctica, *Proceedings of the National Academy of Sciences*, 10.1073/pnas.1302828110 | JSG student lead
- Fretwell, P., H. D. Pritchard, D. G. Vaughan, J. L. Bamber, N. E. Barrand, R. Bell, C. Bianchi, R. G. Bingham, D. D. Blankenship, G. Casassa, G. Catania, D. Callens, H. Conway, A. J. Cook, H. F. J. Corr, D. Damaske, V. Damm, F. Ferraccioli, R. Forsberg, S. Fujita, Y. Gim, P. Gogineni, J. A. Griggs, R. C. A. Hindmarsh, P. Holmlund, J. W. Holt, R. W. Jacobel, A. Jenkins, W. Jokat, T. Jordan, E. C. King, J. Kohler, W. Krabill, M. Riger-Kusk, K. A. Langley, G. Leitchenkov, C. Leuschen, B. P. Luyendyk, K. Matsuoka, J. Mouginot, F. O. Nitsche, Y. Nogi, O. A. Nost, S. V. Popov, E. Rignot, D. M. Rippin, A. Rivera, J. Roberts, N. Ross, M. J. Siegert, A. M. Smith, D. Steinhage, M. Studinger, S. Bo, B. K. Tinto, B. C. Welch, D. Wilson, **D. A. Young**, X. Cui and A. Zirizzotti, 2013, Bedmap2: improved ice bed, surface and thickness datasets for Antarctica, *The Cryosphere*, 7, 10.5194/tc-7-375-2013

2012 (4):

- Shepherd, A., E. R. Ivins, G. A., V. R. Barletta, M. J. Bentley, S. Bettadpur, K. H. Briggs, D. H. Bromwich, R. Forsberg, N. Galin, M. Horwath, S. Jacobs, I. Joughin, M. A. King, J. T. M. Lenaerts, J. Li, S. R. M. Ligtenberg, A. Luckman, S. B. Luthcke, M. McMillan, R. Meister, G. Milne, J. Mouginot, A. Muir, J. P. Nicolas, J. Paden, A. J. Payne, H. Pritchard, E. Rignot, H. Rott, L. S. Sørensen, T. A. Scambos, B. Scheuchl, E. J. O. Schrama, B. Smith, A. V. Sundal, J. H. van Angelen, W. J. van de Berg, M. R. van den Broeke, D. G. Vaughan, I. Velicogna, J. Wahr, P. L. Whitehouse, D. J. Wingham, D. Yi, **D. Young** and H. J. Zwally, 2012, A Reconciled Estimate of Ice-Sheet Mass Balance, *Science*, 338, pp. 1183-1189
- Golynsky, A., R. Bell, D. Blankenship, D. Damaske, F. Ferraccioli, C. Finn, D. Golynsky, S. Ivanov, W. Jokat, V. Masolov, S. Riedel, R. von Frese and **D. Young**, 2012, Air and shipborne magnetic surveys of the Antarctic into the 21st century, *Tectonophysics*, 585, 10.1016/j.tecto.2012.02.017
- Ross, N., R. G. Bingham, H. F. Corr, F. Ferraccioli, T. A. Jordan, A. Le Brocq, D. M. Rippin, **D. A. Young**, D. D. Blankenship and M. J. Siegert, 2012, Steep reverse bed slope at the grounding line of the Weddell Sea sector in West Antarctica, *Nature*

Geoscience, 5, 10.1038/ngeo1468

•Wright, A. P., **D. A. Young**, J. L. Roberts, D. M. Schroeder, J. L. Bamber, J. A. Dowdeswell, N. W. Young, A. M. Le Brocq, R. C. Warner, A. J. Payne, D. D. Blankenship, T. D. van Ommen and M. J. Siegert, 2012, Evidence of a hydrological connection between the ice divide and ice sheet margin in the Aurora Subglacial Basin, East Antarctica, *Journal of Geophysical Research*, 117, F01033, 10.1029/2011JF002066 | 1 JSG student coauthor

2011 (3):

•Carter, S. P., H. A. Fricker, D. D. Blankenship, J. V. Johnson, W. H. Lipscomb, S. F. Price and **D. A. Young**, 2011, Modeling 5 years of subglacial lake activity in the MacAyeal Ice Stream (Antarctica) catchment through assimilation of ICESat laser altimetry, *Journal of Glaciology*, 57, pp. 1098-1112, 10.3189/002214311798843421

•**Young, D. A.**, A. P. Wright, J. L. Roberts, R. C. Warner, N. W. Young, J. S. Greenbaum, D. M. Schroeder, J. W. Holt, D. E. Sugden, D. D. Blankenship, T. D. van Ommen and M. J. Siegert, 2011, A dynamic early East Antarctic Ice Sheet suggested by ice covered fjord landscapes, *Nature*, 474, 10.1038/nature10114 | 2 JSG student coauthors

•Roberts, J. L., R. C. Warner, **D. Young**, A. Wright, T. D. van Ommen, D. D. Blankenship, M. Siegert, N. W. Young, I. E. Tabacco, A. Forieri, A. Passerini, A. Zirizzotti and M. Frezzotti, 2011, Refined broad-scale sub-glacial morphology of Aurora Subglacial Basin and East Antarctica derived by an ice-dynamics-based interpolation scheme, *The Cryosphere*, 5, 10.5194/tc-5-551-2011

2009 (3):

•Carter, S. P., D. D. Blankenship, **D. A. Young** and J. W. Holt, 2009, Using radar-sounding data to identify the distribution and sources of subglacial water: application to Dome C, East Antarctica, *Journal of Glaciology*, 55, pp. 1025-1040, 10.3189/002214309790794931 | JSG student lead

•Carter, S. P., D. D. Blankenship, **D. A. Young**, M. E. Peters, J. W. Holt and M. J. Siegert, 2009, Dynamic distributed drainage implied by the flow evolution of the 1996–1998 Adventure Trench subglacial lake discharge, *Earth and Planetary Science Letters*, 283, pp. 24-37, 10.1016/j.epsl.2009.03.019 | JSG student lead

•Blankenship, D. D., **D. A. Young**, W. Moore and J. C. Moore, 2009, Radar Sounding of Europa's Subsurface Properties and Processes: The View from Earth, in *Europa*, eds: Pappalardo, R. and McKinnon, W. and Khurana, K.

2008 (4):

•Holt, J. W., A. Safaeinili, J. J. Plaut, J. W. Head, R. J. Phillips, R. Seu, S. D. Kempf, P. Choudhary, **D. A. Young**, N. E. Putzig, D. Biccari and Y. Gim, 2008, Radar sounding evidence for buried glaciers in the southern mid-latitudes of Mars, *Science*, 322, 10.1126/science.1164246

•Diehl, T. M., J. W. Holt, D. D. Blankenship, **D. A. Young**, T. A. Jordan and F. Ferraccioli, 2008, First airborne gravity results over the Thwaites Glacier catchment, West Antarctica, *Geochemistry, Geophysics, Geosystems*, 8, Q04011, 10.1029/2007GC001878 | JSG student lead

•**Young, D. A.**, S. D. Kempf, D. D. Blankenship, J. W. Holt and D. L. Morse, 2008, New airborne laser altimetry over the Thwaites Glacier Catchment, West Antarctica, *Geochemistry, Geophysics, Geosystems*, 9, pp. Q06006, 10.1029/2007GC001935

•Chen, J. L., C. J. L. Wilson, B. D. Tapley, D. D. Blankenship and **D. A. Young**, 2008, Antarctic Regional Ice Loss Rates From GRACE, *Earth and Planetary Science Letters*, 266, pp. 140-148, 10.1016/j.epsl.2007.10.057

2007 (3):

•Carter, S. P., D. D. Blankenship, M. E. Peters, **D. A. Young**, J. W. Holt and D. L. Morse, 2007, Radar-based subglacial lake classification in Antarctica, *Geochemistry, Geophysics, Geosystems*, 8, pp. 1-20, 10.1029/2006GC001408 | JSG student lead

•Peters, M. E., D. D. Blankenship, S. P. Carter, **D. A. Young**, S. D. Kempf and J. W. Holt, 2007, Along-track Focusing of Airborne Radar Sounding Data From West Antarctica for Improving Basal Reflection Analysis and Layer Detection, *IEEE Transactions on Geoscience and Remote Sensing*, 45, pp. 2725-2736, 10.1109/TGRS.2007.897416 | 1 JSG student coauthor

•Bingham, R. G., M. J. Siegert, **D. A. Young** and D. D. Blankenship, 2007, Organised flow from the South Pole to the Filchner-Ronne ice shelf: an assessment of balance velocities in interior East Antarctica using radio-echo sounding data, *Journal of Geophysical Research*, 112, F03S27, 10.1029/2006JF000556

2006 (2):

•Vaughan, D. G., H. F. J. Corr, F. Ferraccioli, N. Frearson, A. O'Hare, D. Mach, J. Holt, D. Blankenship, D. Morse and **D. Young**, 2006, New Boundary Conditions for the West Antarctic Ice Sheet: Subglacial Topography beneath Pine Island Glacier, *Geophysical Research Letters*, 33, L09501, 10.1029/2005GL025588

•Holt, J. W., D. D. Blankenship, D. L. Morse, **D. A. Young**, M. E. Peters, S. D. Kempf, T. G. Richter, D. G. Vaughan and H. Corr, 2006, New boundary conditions for the West Antarctic Ice Sheet: Subglacial topography of the Thwaites and Smith Glacier catchments, *Geophysical Research Letters*, 33, L09502, 10.1029/2005GL025561

2005 (1):

•**Young, D. A.** and V. L. Hansen, 2005, Poludnista Dorsa, Venus: History and Context of a Deformation Belt, *Journal of Geophysical Research*, 110, E, 10.1029/2004JE002280

2003 (1):

•**Young, D. A.** and V. L. Hansen, 2003, Geological Map of the Rusalka Planitia quadrangle (V-25), Venus, *United States Geological Survey*

2000 (1):

•DeShon, H. R., **D. A. Young** and V. L. Hansen, 2000, Geologic evolution of southern Rusalka Planitia, Venus, *Journal of Geophysical Research*, 105, pp. 6983-6995, 10.1029/1999JE001155

4 Conference Abstracts (103)

2021 (6):

•Pierce, C., L. H. Beem, **D. A. Young**, D. D. Blankenship, C. Lee and W. S. Lee, 2021, Basal reflectivity and scattering of Thwaites Glacier, West Antarctica, *The 26th International Symposium on Polar Sciences*

•Beem, L. H., C. Pierce, **D. A. Young**, D. D. Blankenship, C. Lee and W. S. Lee, 2021, Repeat radar survey and basal evolution of Thwaites Glacier, West Antarctica, *The 26th International Symposium on Polar Sciences*

•Conger, A., J. S. Greenbaum, D. M. Schroeder, C. F. Dow, F. McCormack, T. Pelle, **D. A. Young**, L. M. Jong, J. L. Roberts and D. D. Blankenship, 2021, Investigating a subglacial hydrological transition near the grounding zone of Totten Glacier, East Antarctica, *Fall AGU Meeting*

•Yan, S., D. D. Blankenship, **D. A. Young**, J. S. Greenbaum, J. Guo, L. Li, J. L. Roberts, T. D. van Ommen and S. Bo, 2021, Englacial stratigraphy over a newly discovered widespread subglacial hydrology system in Princess Elizabeth Land, East Antarctica, *Fall AGU Meeting | JSG student lead*

•Wei, W., D. D. Blankenship, C. A. Greene, J. S. Greenbaum, **D. A. Young**, S. Bo, J. Guo, T. D. van Ommen and J. L. Roberts, 2021, A new bathymetry surrounding and beneath the West Ice Shelf in East Antarctica, *Fall AGU Meeting | JSG student lead*

•Yan, S., D. D. Blankenship, **D. A. Young**, J. S. Greenbaum, L. Li, **A. Rutishauser**, J. Guo, J. L. Roberts, T. D. v. Ommen and a. B. Sun, 2021, A large tectonic-controlled subglacial lake with ocean drainage in Princess Elizabeth Land, East Antarctica, *EGU General Assembly 2021 | JSG student lead*

2020 (7):

- Lowe, M., F. Ferraccioli, E. Armadillo, **D. A. Young**, D. D. Blankenship, M. J. Siegert and a. J. Ebbing, 2020, New study targets modelling crust and lithosphere heterogeneity in the Wilkes Subglacial Basin of East Antarctica, *AGU Fall Meeting Abstracts*
- Steinbrügge, G.**, D. M. Schroeder, M. Haynes, **K. M. Scanlan**, **D. A. Young**, C. Grima, A. Stark, H. Hussmann and D. D. Blankenship, 2020, Altimetry from Planetary Radar Sounders, *AGU Fall Meeting Abstracts* | *JSG postdoc lead with 1 postdoc coauthors*
- Scanlan, K. M.**, **G. Steinbrügge**, C. Grima, **D. A. Young** and D. D. Blankenship, 2020, Impact of 1-Bit Sampling of Radar Sounding Data for Deep Space Applications: Demonstration at Mars and Implications for Europa, *AGU Fall Meeting Abstracts* | *JSG postdoc lead with 1 postdoc coauthors*
- Blankenship, D., E. Quartini and **D. Young**, 2020, Active subglacial volcanism in West Antarctica as assessed by airborne geophysics: Distribution and context, *EGU General Assembly Conference Abstracts* | *1 JSG student coauthor*
- Blankenship, D., E. Quartini and **D. Young**, 2020, Active subglacial volcanism in West Antarctica as assessed by airborne geophysics: Distribution and context, *SCAR Open Science Meeting* | *1 JSG student coauthor*
- Murthy, C., J. S. Greenbaum, **D. A. Young** and D. D. Blankenship, 2020, Comparing different methods for measurement of geothermal heat flux in East Antarctica, *Fall AGU Meeting* | *JSG student lead*
- Liu-Schiaffini, M., G. Ng, **A. Rutishauser**, D. P. Buhl, J. S. Greenbaum and **D. A. Young**, 2020, Application of deep learning techniques to ice sheet surface and bed interface detection, *Fall AGU Meeting* | *JSG student lead*

2019 (17):

- Grima, C., **G. B. Steinbrügge**, **K. M. Scanlan**, **D. A. Young**, N. E. Putzig, M. R. Perry, B. A. Campbell, S. D. Kempf and D. D. Blankenship, 2019, Deciphering the Martian Surface and Near-Surface with Radar Statistics, *50th Lunar and Planetary Science Conference* | *2 JSG postdocs coauthor*
- Steinbrügge, G. B.**, **S. K. M.**, **D. A. Young**, C. Grima, S. D. Kempf and D. D. Blankenship, 2019, SHARAD Radar Altimetry and Geodesy, *50th Lunar and Planetary Science Conference* | *JSG postdoc lead*
- Scanlan, K. M.**, **D. A. Young**, C. Grima, **G. B. Steinbrügge**, S. D. Kempf and D. D. Blankenship, 2019, Englacial Radar Attenuation Rates in the Promethei Lingula Area of the Martian South Polar Layered Deposits, *50th Lunar and Planetary Science Conference* | *JSG postdoc lead with 1 postdoc coauthors*
- Young, D. A.**, C. Grima, **G. Steinbrügge**, **K. M. Scanlan**, S. D. Kempf and D. D. Blankenship, 2019, REASON for Europa: data products and algorithms, *IGS 2019 Five Decades of Radioglaciology Symposium* | *2 JSG postdocs coauthor*
- Scanlan, K. M.**, **G. B. Steinbrügge**, S. D. Kempf, C. Grima, **D. A. Young** and D. D. Blankenship, 2019, Alternative strategies for synthetic aperture radar focusing of orbital radar sounding measurements, *IGS 2019 Five Decades of Radioglaciology Symposium* | *JSG postdoc lead with 1 postdoc coauthors*
- Young, D. A.**, J. A. Bodart, E. Quartini, R. G. Bingham, D. M. Schroeder and D. D. Blankenship, 2019, Integrating englacial reflectors across the Amundsen Sea Embayment: A progress report, *WAIS Workshop 2019* | *1 JSG student coauthor*
- Lee, C., W. S. Lee, S. Yoon, T. Kim, Y. Park, S. Yun, K. W. Nicholls, **D. A. Young**, L. Beam and D. D. Blankenship, 2019, Seasonal Variability of Basal Melt under the Nansen Ice Shelf, Antarctica, *Fall AGU Meeting*
- Park, I., E. K. Jin, K. K. Lee, W. S. Lee, M. Morlighem, C. Lee, **D. A. Young**, D. D. Blankenship, L. Beam, **J. S. Greenbaum**, J. L. Roberts and S. Bo, 2019, Sea level projections using ice sheet model based on RCP scenarios at David Glacier, East Antarctica, *Fall AGU Meeting* | *JSG postdoc lead with 1 postdoc coauthors*
- Indrigo, C., P. L. Wray, C. F. Dow, D. Mueller, W. S. Lee, **D. A. Young**, **J. S. Greenbaum**, D. D. Blankenship and M. Morlighem, 2019, The role of basal channels and fractures in the stability of ice bodies in Terra Nova Bay, East Antarctica, *Fall AGU Meeting* | *JSG postdoc coauthor*
- Scanlan, K. M.**, **L. Beem**, C. Grima, D. Buhl, **D. A. Young** and D. D. Blankenship, 2019, Differentiating Subglacial Drainage Patterns through the Depolarization of Airborne Radar Sounding Measurements, *Fall AGU Meeting* | *JSG postdoc lead with 1 postdoc coauthors*
- Murthy, C., **J. S. Greenbaum**, **D. A. Young** and D. D. Blankenship, 2019, Determining an Optimal Window Size for Accurate Curie Depth Measurements in Antarctica, *Fall AGU Meeting* | *JSG student lead*
- Yan, S., D. D. Blankenship, **J. S. Greenbaum**, J. Guo, L. Li, **D. A. Young**, J. L. Roberts, T. D. van Ommen and S. Bo, 2019, Integrated Airborne Geophysics Survey over a Newly-discovered Subglacial Lake in Princess Elizabeth Land, East Antarctica, *Fall AGU Meeting* | *JSG postdoc lead; 1 student coauthor*

- **Young, D. A., J. S. Greenbaum, D. D. Blankenship, M. J. Siegert, J. L. Roberts, T. D. van Ommen, A. Aitken, C. Grima, E. Le Meur and T. I. collaboration, 2019, ICECAP's contribution to NASA's Operation IceBridge in East Antarctica, *Fall AGU Meeting* | JSG postdoc coauthor**
- **Cavitte, M., D. Young, C. Ritz, F. Parrenin, R. Mulvaney, M. Frezzotti, J. Rix, J. Roberts and D. Blankenship, 2019, Internal ice-penetrating radar stratigraphy at the Little Dome C Oldest Ice site, *IGS Symposium on Radioglaciology* | JSG student lead**
- **Young, D., J. Greenbaum, L. Beem, J. Roberts and D. Blankenship, 2019, The subglacial roughness of Antarctica in a global context, *IGS Symposium on Radioglaciology* | 2 JSG postdocs coauthor**
- **Rutishauser, A., D. D. Blankenship, L. Beem, J. Greenbaum, D. A. Young, C. Grima, L. N. Schwartz, J. A. Foran and A. Criscitiello, 2019, New radar-sounding investigations over the hypersaline subglacial lakes beneath Devon Ice Cap, Canadian Arctic, *IGS Symposium on Radioglaciology* | JSG postdoc lead; 1 student coauthor**
- **Quartini, E., D. Young, M. Sudunagunta, D. Schroeder and D. Blankenship, 2019, Assessing the affect of subaerial volcanism on englacial attenuation in West Antarctica, *IGS Symposium on Radioglaciology* | JSG student lead, JSG 1 student coauthors**

2018 (14):

- **Young, D. A., C. Grima, G. Steinbrügge, K. Scanlen, S. D. Kempf and D. D. Blankenship, 2018, REASON For Europa: Data products and algorithms, *Fall AGU Meeting* | JSG postdoc coauthor**
- **Rutishauser, A., D. D. Blankenship, L. H. Beem, J. S. Greenbaum, D. A. Young, C. Grima and A. S. Criscitiello, 2018, New insights from an airborne geophysical survey over the hypersaline subglacial lakes beneath Devon Ice Cap, Canadian Arctic, *AGU Fall Meeting Abstracts* | JSG postdoc lead with 2 postdoc coauthors**
- **Sudunagunta, M., E. Quartini, D. A. Young and D. D. Blankenship, 2018, Mapping Volcanic Ejecta Using Airborne Ice-Penetrating Radar In Marie Byrd Land, Antarctica, *Fall AGU Meeting* | JSG student lead, JSG 1 student coauthors**
- **Chan, K., C. Grima, D. D. Blankenship, K. M. Soderlund and D. A. Young, 2018, Dielectric Brine-Ice Mixtures on Europa, and the Need for New Experiments, *Europa Deep Dive 2: Composition 2018* | JSG student lead**
- **Wolfenbarger, N. S., D. D. Blankenship, K. M. Soderlund, D. A. Young and C. Grima, 2018, Leveraging terrestrial marine ice cores to constrain the composition of ice on Europa, *Europa Deep Dive 2: Composition 2018* | JSG student lead**
- **Young, D. A., E. Quartini, T. G. Richter and D. D. Blankenship, 2018, Constraints on the Evolution of the Marie Byrd Land Dome Topography, *POLAR2018 SCAR/IASC Open Science Conference* | 1 JSG student coauthor**
- **Young, D. A., J. S. Greenbaum, L. H. Beem, D. D. Blankenship, G. R. Muldoon, S. D. Kempf, J. L. Roberts, C. Ritz, M. J. Siegert and T. van Ommen, 2018, Bedrock Roughness in Antarctica: Connections to Subglacial Water and Basal Slip, *POLAR2018 SCAR/IASC Open Science Conference* | 3 JSG student and postdoc coauthors**
- **Greene, C. A., D. A. Young, D. E. Gwyther, B. K. Galton-Fenzi, J. S. Greenbaum and D. D. Blankenship, 2018, Seasonal Control on Totten Ice Shelf Dynamics by Sea Ice Buttressing, *POLAR2018 SCAR/IASC Open Science Conference* | JSG student lead**
- **Wei, W., J. S. Greenbaum, D. D. Blankenship, T. G. Richter, D. A. Young, S. Lee, W. Lee, A. Wählin and K. Assmann, 2018, On the Bathymetry of Getz Ice Shelf Cavity from Airborne Gravity Data Inversion, *POLAR2018 SCAR/IASC Open Science Conference* | JSG student lead**
- **Quartini, E., D. Young and D. D. Blankenship, 2018, The Distribution of Crustal Heating in West Antarctica from Aeromagnetics, *POLAR2018 SCAR/IASC Open Science Conference* | JSG student lead**
- **Beem, L. H., L. E. Lindzey, E. Quartini, D. A. Young, J. S. Greenbaum, C. F. Dow, W. S. Lee, S. H. Lee and D. D. Blankenship, 2018, Subglacial hydrology and ice shelf processes from helicopter-based geophysical observations, Amundsen and Western Ross Sea Sectors, West Antarctica, *2018 WAIS Workshop* | JSG postdoc lead; 2 student coauthors**
- **Wei, W., J. S. Greenbaum, N. Gourmelen, C. F. Dow, T. G. Richter, D. A. Young, S. H. Lee, W. S. Lee, A. Wählin, K. Assmann and D. D. Blankenship, 2018, The bathymetric and subglacial hydrological context for basal melting of the Getz Ice Shelf, West Antarctica, *2018 WAIS Workshop* | JSG student lead**
- **Cavitte, M. G. P., C. Ritz, F. Parrenin, R. Mulvaney, D. A. Young, M. Frezzotti, J. Rix, D. D. Blankenship and J. L. Roberts, 2018, Internal ice-penetrating radar stratigraphy at the Little Dome C Oldest Ice site, *EGU General Assembly 2018* | JSG student lead**
- **Beem, L. H., D. A. Young, D. D. Blankenship, J. S. Greenbaum, G. R. Muldoon, J. L. Roberts, C. Ritz, G. Jingxue and S. Bo, 2018, New Aerogeophysical Survey of Titan Dome and Ice-core Drilling Potential, *POLAR2018 SCAR/IASC Open Science Conference* | JSG postdoc lead; 1 student coauthor**

2017 (11):

- Chan, K., C. Grima, D. D. Blankenship, **D. A. Young** and K. M. Soderlund, 2017, Mobilization of Near-Surface Brine on Europa, *Europa Deep Dive I 2017* | JSG student lead
- Wei, W., **J. S. Greenbaum**, D. D. Blankenship, T. G. Richter, **D. A. Young**, S. Lee, J. Eom, A. Wåhlin and K. Assmann, 2017, The bathymetry of Getz Ice Shelf cavity from airborne gravity data inversion, *31st Forum for Research into Ice Shelf Processes (FRISP)* | JSG student lead
- **Greenbaum, J. S.**, D. D. Blankenship, **D. A. Young**, T. D. van Ommen, S. Bo, E. Lemeur, G. Durand, J. L. Roberts, G. Jingxue, **L. H. Beem**, F. Graham, L. Jong, **W. Wei**, C. Y. Grima and a. P. Heimbach, 2017, The East Antarctic Grounding Line Experiment: Aerogeophysics for coastal bathymetry and subglacial freshwater discharge in East Antarctica, *POGO OASIIS WG: Observing and Understanding the Ocean beneath Antarctic Sea Ice and Ice Shelves*. | JSG postdoc lead; 1 student coauthor
- **Greenbaum, J. S.**, C. Grima, D. Schroeder, C. Dow, **D. Young**, J. Roberts, R. Warner, D. Gwyther, B. Huber, A. Leventer, T. van Ommen, M. Siegert and D. Blankenship, 2017, Surface and basal melting of the Totten Glacier Ice Shelf, East Antarctica, *31st Forum for Research into Ice Shelf Processes (FRISP) Workshop* | JSG postdoc lead
- **Greenbaum, J. S.**, D. D. Blankenship, **D. A. Young**, T. D. van Ommen, S. Bo, E. Lemeur, G. Durand, J. L. Roberts, G. Jingxue, **L. H. Beem**, F. Graham, L. Jong, **W. Wei**, C. Y. Grima and a. P. Heimbach, 2017, Fixed-wing and helicopter gravity and radar sounding for bathymetry and subglacial freshwater discharge in East and West Antarctica, *Workshop on Airborne Geodesy and Geophysics with Focus on Polar Applications* | JSG postdoc lead; 1 student coauthor
- Parrenin, F., **M. G. P. Cavitte**, D. D. Blankenship, J. Chappellaz, H. Fischer, O. Gagliardini, V. Masson-Delmotte, O. Pas-salacqua, C. Ritz, J. Roberts, M. J. Siegert and **D. A. Young**, 2017, Is there 1.5-million-year-old ice near Dome C, Antarctica?, *EGU General Assembly Conference Abstracts* | 1 JSG student coauthor
- **Young, D. A.**, D. D. Blankenship, **M. P. G. Cavitte**, E. Quartini, **G. M. Muldoon**, J. L. Roberts, T. van Ommen, C. Ritz, F. Parrenin, **L. H. Beem**, T. G. Richter and **J. S. Greenbaum**, 2017, Surveying subglacial massifs in Antarctica for geodynamics and old ice: Case studies from Marie Byrd Land and little Dome C, *International Workshop on Polar Airborne Geodesy and Geophysics* | 5 JSG student and postdoc coauthors
- Muldoon, G. R., C. S. Jackson, **D. A. Young**, E. Quartini, **M. G. P. Cavitte** and D. D. Blankenship, 2017, Sensitivity of simulated englacial isochrones to uncertain subglacial boundary conditions in central West Antarctica: Implications for detecting changes in ice dynamics, *EGU General Assembly Conference Abstracts* | JSG student lead, JSG 2 student coauthors
- **Beem, L.**, J. Roberts, C. Ritz, T. Richter, **D. Young**, S. Kempf, **M. Cavitte**, B. Gooch and D. Blankenship, 2017, Groundwater flow modulation of basal heat budget and melt rates near Dome C, Antarctica, *EGU General Assembly Conference Abstracts* | JSG postdoc lead; 1 student coauthor
- **Cavitte, M.**, F. Parrenin, C. Ritz, D. Blankenship, **D. Young**, M. Frezzotti, J. Roberts and T. van Ommen, 2017, Stability of the accumulation pattern around Dome C over the last glacial cycle, *EGU General Assembly Conference Abstracts* | JSG student lead
- **Young, D.**, D. Blankenship, **L. Beem**, **M. Cavitte**, E. Quartini, L. Lindzey, C. Jackson, J. Roberts, C. Ritz, M. Siegert, **J. Greenbaum** and B. Frederick, 2017, The roughness of grounded ice sheet beds: Case studies from high resolution radio echo sounding studies in Antarctica, *EGU General Assembly Conference Abstracts* | 5 JSG student and postdoc coauthors

2016 (8):

- Muldoon, G. R., C. S. Jackson, **D. A. Young** and D. D. Blankenship, 2016, The Inside Scoop: Intermodel comparison of englacial layers in the central West Antarctic Ice Sheet and how simulations compare to the real deal, *AGU Fall Meeting Abstracts* | JSG student lead
- **Young, D. A.**, E. Quartini, **G. M. Muldoon** and D. D. Blankenship, 2016, Results of the GIMBLE aerogeophysical survey of coastal Marie Byrd Land, *2016 WAIS Workshop* | 2 JSG student coauthors
- Muldoon, G. R., C. S. Jackson, **D. A. Young** and D. D. Blankenship, 2016, The Inside Scoop: Intermodel comparison of englacial layers in the central West Antarctic Ice Sheet and how simulations compare to the real deal, *Fall AGU Meeting* | JSG student lead
- **Cavitte, M. G.**, D. D. Blankenship, F. P. Duncan A. Young, C. Ritz, J. L. Roberts, T. van Ommen, D. M. Schroeder, M. J. Siegert and E. L. Meur., 2016, Old ice and the stability of the Byrd-Totten region, *Second IPICS Open Science Conference* | JSG student lead
- **Young, D. A.**, J. L. Roberts, D. D. Blankenship, T. van Ommen, M. J. Seigert, **M. G. P. Cavitte**, C. Ritz, F. Parrenin, E. Quartini, M. Frezzotti, F. Habbal and a. G. Ng, 2016, Status of detailed ICECAP aerogeophysical surveying for old ice at Dome C,

IPICS Second Open Science Conference | 2 JSG student coauthors

- **Young, D. A.**, J. L. Roberts, C. Ritz, M. Frezzoti, E. Quartini, B. T. Gooch, C. A. Greene, T. van Ommen and D. D. Blankenship, 2016, High-resolution subglacial hydrology of a potential old ice target near Dome C, Antarctica, *SCAR Open Science Meeting* | 2 JSG student coauthors
- Lindzey, L. E., **D. A. Young**, J. S. Greenbaum, S. D. Kempf and D. D. Blankenship, 2016, Surface Characterization Using a Photon Counting Lidar in East Antarctica, *SCAR Open Science Meeting* | JSG student lead, JSG 1 student coauthors
- Quartini, E., **D. A. Young**, D. M. Schroeder and D. D. Blankenship, 2016, An evaluation of geothermal flux along a subglacial volcano in the Executive Committee Range, *SCAR Open Science Meeting* | JSG student lead

2015 (1):

- **Young, D. A.**, 2015, Airborne Observations for the Context for Subglacial Water Systems, *Subglacial Antarctic lake exploration: first results and future plans*

2014 (3):

- Blankenship, D. D., **D. A. Young**, J. S. Greenbaum, J. L. Roberts, T. D. van Ommen, A. Aitken and M. J. Siegert, 2014, East Antarctic land-ice/ocean networks: progress and questions, *Fall AGU Meeting* | JSG student lead, JSG 1 student coauthors
- **Young, D. A.**, D. D. Blankenship, D. M. Schroeder, J. S. Greenbaum and C. Grima, 2014, Site selection from radar sounding: key questions and paths forward, *SCAR Open Science Meeting 2014* | 3 JSG student and postdoc coauthors
- **Young, D. A.**, E. Quartini, E. M. Powell, D. M. Schroeder, T. G. Richter and D. D. Blankenship, 2014, Structure of the Marie Byrd Land crustal province from GIMBLE aerogeophysics, *SCAR Open Science Meeting* | JSG student lead, JSG 3 student coauthors

2013 (6):

- Curra, C., E. Arnold, B. Karwoski, C. Grima, D. M. Schroeder, **D. A. Young** and D. D. Blankenship, 2013, Enhancing Europa surface characterization with ice penetrating radar: A Comparative study in Antarctica, *Fall AGU Meeting* | JSG student lead, JSG 4 student coauthors
- **Young, D. A.**, D. D. Blankenship, J. S. Greenbaum, T. G. Richter, A. R. A. Aitken, M. J. Siegert and J. L. Roberts, 2013, Geologic controls on the architecture of the Antarctic Ice Sheet's basal interface: New results from West and East Antarctica from long range geophysics (Invited), *Fall AGU Meeting* | 1 JSG student coauthor
- Quartini, E., E. M. Powell, T. Richter, T. Damiani, S. Stadnik, **D. A. Young** and D. D. Blankenship, 2013, Understanding the thermal and tectonic evolution of Marie Byrd Land from a reanalysis of airborne geophysical data in the West Antarctic Rift System, *Fall AGU Meeting* | JSG student lead, JSG 2 student coauthors
- **Young, D. A.**, D. D. Blankenship, S. D. Kempf and C. A. Greene, 2013, How well can we determine ice thickness? Examples from Thwaites Glacier, *2nd International Symposium on Radioglaciology* | 1 JSG student coauthor
- Schroeder, D. M., D. D. Blankenship, R. K. Raney and **D. A. Young**, 2013, Buried information: constraining bed geometry and material from the Doppler-dependent radar-scattering function, *2nd International Symposium on Radioglaciology* | JSG student lead
- **Young, D. A.**, E. M. Powell, T. G. Richter, J. S. Greenbaum, G. R. Gutowski, C. A. Greene, G. Ng, S. D. Kempf, E. Quartini, A. D. Jones, A. Roseles and D. D. Blankenship, 2013, Deep troughs dissect the Marie Byrd Land subglacial highland: Initial results of the GIMBLE survey, *WAIS Workshop 2013* | JSG student lead, JSG 6 student coauthors

2012 (7):

- DeSanto, J. B., D. D. Blankenship, **D. A. Young**, L. L. Lavier and E. Choi, 2012, Evaluating transience of a potential geothermal heat flux anomaly beneath a tributary ice stream of Thwaites Glacier, West Antarctica, *2012 Fall Meeting*
- **Young, D. A.**, D. D. Blankenship and J. W. Holt, 2012, GIMBLE: Geophysical Investigations of Marie Byrd Land Evolution: a new airborne survey of the linchpin of the West Antarctic Ice Sheet, *WAIS Workshop 2012*

- Goff, J. A., E. M. Powell, **D. A. Young** and D. D. Blankenship, 2012, Conditional simulation of Thwaites Glacier bed topography for flow models: Incorporating inhomogeneous statistics and channelized morphology, *AGU Fall Meeting Abstracts* | 1 JSG student coauthor
- Young, D. A.**, J. L. Roberts, A. P. Wright, J. S. Greenbaum, S. D. Kempf, G. Ng, T. G. Richter, J. W. Holt, E. Le Meur, D. M. Schroeder, R. C. Warner, N. W. Young, D. D. Blankenship, T. van Ommen and M. Siegert, 2012, ICECAP data over the periphery of East Antarctic: A new view of a crucial ice sheet, *XXXII SCAR and Open Science Conference* | 2 JSG student coauthors
- Richter, T., **D. Young**, S. Kempf, J. Greenbaum, T. van Ommen, M. Siegert and D. Blankenship, 2012, ICECAP Airborne Gravimetry over East Antarctica, 2008 to 2012, *XXXII SCAR and Open Science Conference* | 1 JSG student coauthor
- Ferraccioli, F., E. Armadillo, T. Jordan, **D. Young**, L. Anderson, D. Blankenship and M. J. Siegert, 2012, Paleoproterozoic suturing and extent of Neoproterozoic rifting revealed in interior East Antarctica, *XXXII SCAR and Open Science Conference*
- Greenbaum, J., J. Roberts, **D. Young**, T. Richter, E. Le Meur, R. Warner, N. Young, G. Durand, T. van Ommen, M. Siegert and D. Blankenship, 2012, New Aerogeophysical Observations of the East Antarctic Coastline, *XXXII SCAR and Open Science Conference* | JSG student lead

2011 (1):

- Frederick, B. C., **D. A. Young** and D. D. Blankenship, 2011, Subglacial Sediment Distribution in the Aurora Basin, East Antarctica: Implications for Ice Sheet and Eustatic models, *11th International Symposium on Antarctic Earth Sciences* | JSG student lead

2009 (3):

- Young, D. A.**, D. D. Blankenship, S. D. Kempf, J. B. DeSantos, M. R. Williams and J. W. Holt, 2009, Variation in Subglacial Roughness in West Antarctica: How do we interpret causality in the context of sediments?, *WAIS Workshop 2009*
- Blankenship, D. D., M. J. Siegert, T. van Ommen, **D. A. Young**, J. L. Roberts, J. Holt, A. P. Wright, R. C. Warner and N. Young, 2009, ICECAP Season 1: Implications for the oldest ice and future plans, *IPICS Workshop on Science and Technology for the Next Generation of International Ice Coring*
- Young, D. A.**, D. D. Blankenship, M. J. Siegert, T. van Ommen, J. L. Roberts, J. W. Holt, T. G. Richter, A. P. Wright, R. C. Warner, N. Young and t. I. team, 2009, Reconnaissance of the Aurora Subglacial Basin: The IPY season of the ICECAP project, *International Symposium on Glaciology in the International Polar Year*

2008 (4):

- Young, D. A.**, D. D. Blankenship, S. Kempf and J. W. Holt, 2008, Airborne radar reveals restrictions on ice streaming at Thwaites Glacier, Antarctica, *International symposium on radioglaciology and its applications*
- Carter, S. P., D. D. Blankenship, **D. A. Young**, M. E. Peters, J. W. Holt and M. J. Siegert, 2008, Dynamic distributed drainage implied by the flow evolution of the 1997-1999 Adventure Trench subglacial outburst flood, *SCAR/IASC IPY Open Science Conference* | JSG student lead
- Blankenship, D. D., M. J. Siegert, T. van Ommen, J. Bamber, I. Dalziel, J. Dowdeswell, J. W. Holt, L. Lavwer, A. Payne, J. Roberts, R. Warner, N. Young and **D. A. Young**, 2008, Investigating the cryospheric evolution of the central Antarctic plate: A long range aerogeophysical survey of East Antarctica's subglacial basins, *SCAR/IASC IPY Open Science Conference*
- Young, D. A.**, D. D. Blankenship, S. D. Kempf and J. W. Holt, 2008, Radar imaging of ice stream beds at regional and local scales: A comparison of Thwaites Glacier and the Siple Coast, *International Symposium on Radioglaciology and its applications*

2007 (3):

- Holt, J. W., D. D. Blankenship, F. Ferraccioli, D. G. Vaughan, **D. A. Young**, S. D. Kempf and T. M. Diehl, 2007, New aeromagnetic results from the Thwaites Glacier catchment, West Antarctica, *Antarctica: A Keystone in a Changing World – Online Proceedings of the 10th ISAES X* | 1 JSG student coauthor

- **Young, D. A.**, D. D. Blankenship and J. W. Holt, 2007, Subglacial Roughness of the West Antarctic Ice Sheet, *Antarctica: A Keystone in a Changing World – Online Proceedings of the 10th ISAES*
- Diehl, T., D. Blankenship, J. Holt, **D. Young**, T. Jordan and F. Ferraccioli, 2007, Exposing Subglacial Sediments Across West Antarctica with Isostatic Gravity Anomalies, *Antarctica: A Keystone in a Changing World – Online Proceedings of the 10th ISAES X* | JSG student lead

2006 (2):

- **Young, D. A.**, D. D. Blankenship, J. W. Holt, D. L. Morse, E. Leuro, S. D. Kempf and M. E. Peters, 2006, Surface state of Thwaites Glacier and implications for its stress state from airborne laser altimetry and radar sounding, *EGU General Assembly Conference Abstracts* | 1 JSG student coauthor
- **Young, D. A.**, D. D. Blankenship and M. E. Peters, 2006, Sub-Kilometer Scale Basal Roughness of the Siple Coast Ice Streams, West Antarctic Ice Sheet, *Fall AGU Meeting*

2004 (1):

- **Young, D. A.**, 2004, Constraints on Deformation Belts Evolution on Venus, *35th Lunar and Planetary Science Conference*

2003 (1):

- **Young, D. A.**, 2003, Geological Evolution of Venusian Deformation Belts : Examples from Poludnista Dorsa and Oya Dorsa and Implications, *Eos Transactions, 84(46), Fall Meeting Supplement*

2002 (3):

- **Young, D. A.**, 2002, Polygonal Fabrics on Venus Polygenetic, Positive and Primary?, *33th Lunar and Planetary Science Conference*
- Hansen, V. L., **D. A. Young**, N. P. Lang and L. F. Bleamaster III, 2002, The Plains of Aphrodite: Geohistory and Modes of Volcanic Resurfacing, Venus, *33th Lunar and Planetary Science Conference*
- **Young, D. A.**, L. F. Bleamaster and V. L. Hansen, 2002, Volcanism in Contractional Deformation Belts on Venus: Evidence for Point Source Crustal Melting?, *2002 Western Pacific Geophysics Meeting*

2001 (2):

- **Young, D. A.** and V. L. Hansen, 2001, Rusalka Complete: Geology of a Venusian Planitia, *32th Lunar and Planetary Science Conference*
- **Young, D. A.**, 2001, Regional Lineament Patterns in Rusalka Planitia, *32th Lunar and Planetary Science Conference*

2000 (2):

- **Young, D. A.**, L. F. I. Bleamaster and H. V. L., 2000, The plains of Aphrodite: A sampling of volcanic resurfacing styles on Venus, *Eos Transactions, 81(48), Fall Meeting Supplement*
- **Young, D. A.** and V. L. Hansen, 2000, Initial Mapping of the Rusalka Planitia Quadrangle (V25), Venus, *31th Lunar and Planetary Science Conference*

Teaching Experience

1998-2002: Teaching Assistant for "Earth Systems Science", "The Solar System" and "Earth Materials I"; Southern Methodist University
1997-1998: Teaching Assistant for "Advanced Structural Geology" and "Introductory Geology"; University of Canterbury, New Zealand

Workshops/Activities

October 2017: BE-OI workshop; Montebaur, Germany
July 2017: AntArchitecture workshop, Edinburgh, Scotland
April 2017: ADMAP-2 Steering Committee Meeting; Vienna, Austria
March 2017: RAID Workshop; San Diego, California
October 2016: BE-OI workshop; Grenoble, France
October 2016: WAIS workshop; Virginia
August 2016: ADMAP-2 Steering Committee Meeting; Kuala Lumpur, Malaysia
August 2016: ICECAP-2 Global Innovation Initiative Science Meeting; Kuala Lumpur, Malaysia
July 2016: Europa Clipper Project Science Group Meeting; Ann Arbor, Michigan
May 2016: Subglacial Access Working Group; Herndon, Virginia
April 2016: Europa Clipper Project Science Group Meeting; Pasadena, California
March 2016: Old Ice Site Selection Meeting; Hobart, Australia
August 2015: Europa Multiple Flyby Mission Project Science Group Meeting and Project Kickoff Meeting
July 2015: ADMAP workshop, Goa, India
July 2015: Global Innovation Initiative ICECAP2 meeting in Goa, India
April 2015: EUROPICS oldest ice site selection meeting in Grenoble, France
October 2014: NSF/NASA Instrumentation For Polar Glaciology And Geophysics Research Workshop; Steering committee, Linthicum Heights, Maryland
June 2013: IceBridge Antarctica planning meeting, Irvine, California
June 2012: IceBridge Antarctica planning meeting, Seattle, Washington
February 2012: Foreign Commonwealth Office (UK) supported proposal planning trip to Edinburgh, UK
January 2012: IceBridge Greenland planning meeting, Greenbelt, Maryland
June 2011: IceBridge Antarctica planning meeting, Irving, California
July 2010: IceBridge Antarctica planning meeting, Seattle, Washington
September 2009: ICECAP II joint planning meeting, Hobart, Australia
July 2009: IPICS breakout groups on Eemian and 1.5 million year old ice, Corvallis, Oregon
July 2008: BEDMAP II meeting, St. Petersburg, Russia
July 2008: AGAP meeting, St. Petersburg, Russia
July 2008: Subglacial Access working group meeting, St. Petersburg, Russia
May 2006: Second meeting of the Venus Exploration and Analysis Group (VEXAG); Pasadena, CA
October 2005: Outer Planets Assessment Group (OPAG); Washington, DC
August 2007: "Preparing for an Academic Career in the Geosciences: Workshop for Graduate Students and Post-Doctoral Fellows" University of Wisconsin, Madison
August 2004: 16th JPL Annual Planetary Science Summer School, Pasadena CA
1999: NASA PG & G Volcanism Workshop, Hawai'i, Hawaii; Jet Propulsion Laboratory Surface Coatings Workshop, Hilo, Hawaii.

Field work details:

2016-17: ICECAP/EAGLE aerogeophysical survey from Casey, East Antarctica (52 days)

2015-16: ICECAP II aerogeophysical survey from Casey, Davis, Dome C and Dumont d'Urville, East Antarctica (65 days)

- 2014 GIMBLE aerogeophysical survey from WAIS Divide Camp, West Antarctica (44 days)
- 2014 Canadian Ice Caps aerogeophysical survey from Qaanaaq, Greenland (14 days)
- 2013 GIMBLE aerogeophysical survey from Byrd Camp, West Antarctica (35 days)
- 2012 ICECAP/Ice Bridge aerogeophysical survey from McMurdo, Casey and Davis, East Antarctica (45 days)
- 2012 GROGG aerogeophysical survey from Qaanaaq, Greenland (14 days)
- 2011 ICECAP/Ice Bridge aerogeophysical survey from McMurdo, Casey, Concordia and Cap Prudhomme, East Antarctica (59 days)
- 2011 GROGG aerogeophysical survey from Ilulissat, Greenland (21 days)
- 2010-11 ICECAP/Ice Bridge aerogeophysical survey from McMurdo, Casey in East Antarctica (96 days)
- 2009-10 ICECAP/Ice Bridge aerogeophysical survey from McMurdo, Casey and Cap Prudhomme, East Antarctica (77 days)
- 2008-09 ICECAP aerogeophysical survey from McMurdo, Casey in East Antarctica (50 days)
- 2004-5 AGASEA aerogeophysical survey over Thwaites Glacier, West Antarctica (114 days)
- 1996-7 Geological mapping in Southern Alps, New Zealand

OUTREACH

Media:

Interviewed for National Geographic June 2017 issue

Interviewed for E&E News web story on government shutdown effects of science (October 2013);

Interviewed for NBC News web story on IODP results from Wilkes Land (July 2013); NSF web interview about ICECAP results (June 2011); Email interview with Charles Choi (Our Amazing Planet) for MSNBC story about ICECAP results; Contributed to IceBridge blog at NASA.gov (January 2010)

http://blogs.nasa.gov/cm/blog/IceBridge.blog/posts/post_1262185033960.html

Interviewed for ICECAP story at Casey for the Melbourne Age, Australia (December 2009)

<http://www.theage.com.au/national/cold-case-mystery-20100108-1yyq.html>

Interviewed for KXAN story on ICECAP (October 24, 2008); and SPACE.com for Mars story (July 1999)