

# Duncan A. Young

March 10, 2025

Institute For Geophysics • Jackson School of Geosciences • The University of Texas at Austin  
Austin TX 78758, United States of America  
Ph: +001 (512) 471 0485  
duncan@ig.utexas.edu

## Appointments

University of Texas Institute for Geophysics	Associate Research Professor	2023-
University of Texas Institute for Geophysics	Research Scientist	2018-2023
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 Institute for Geophysics	Polar Aerogeophysics (D. Blankenship)	Postdoc	2005-2007
University of Minnesota Duluth	Planetary Science (V. Hansen)	Postdoc	2003-2004
Southern Methodist University	Planetary Science (V. Hansen)	Ph.D	2003
University of Canterbury	Earth Science (J. Pettinga)	B.Sc (Hons)	1997

## Summary of Research Products over the last three years

**Accepted papers:** 19 total; 5 as one of the first three authors

2 JSG student lead; 6 coauthorships | 1 intern lead; 1 co. | 0 JSG postdoc lead; 1 co.

**Presentations:** 75 total; 47 as one of the first three authors

23 JSG student lead; 107 coauthorships | 3 intern lead; 4 co. | 2 JSG postdoc lead; 4 co.

**Released datasets:** 17 total; 13 as one of the first three authors

0 JSG student lead; 24 coauthorships

## Papers in Review

Postdocs indicated by *italic bold*, students and interns by underline. ■ planetary; ■ polar

### In review (3 papers):

■ Sailer, M. J., T. J. Fudge, J. D. Patterson, 3 others, and M. E. Kerr, submitted, Ice core site considerations from modeling CO<sub>2</sub> and O<sub>2</sub>/N<sub>2</sub> ratio diffusion in interior East Antarctica, *Climate of the Past* | 2 JSG student coauthors

■ **Young, D. A.**, J. D. Paden, S. Yan, 8 others, and D. D. Blankenship, submitted, Dome A basal ice truncated at an extensive geologic dichotomy in the South Pole Basin of East Antarctica, *Geophysical Research Letters* | 2 JSG student coauthors

■ Bingham, R. G., J. A. Bodart, M. G. P. Cavitte, 50 others, and A. Zuhr, in review, Antarctica's internal architecture: Progress towards developing a radiostratigraphically-informed age—depth model across the continental ice sheet, *EGUsphere*, 10.5194/egusphere-2024-2593 | 1 JSG student coauthor

## Papers Published or Accepted (116)

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

### 2025 (4 papers):

■ Pritchard, H. D., P. T. Fretwell, A. C. Fremand, 78 others, and A. Zirizzotti, 2025, Bedmap3 updated ice bed, surface and thickness gridded datasets for Antarctica, *Scientific Data*, 12, pp. 414, 10.1038/s41597-025-04672-y

■ Killingbeck, S. F., M. J. Unsworth, **D. A. Young**, 9 others, and C. F. Dow, 2025, Integrating Gravity, Magnetic, and Magnetotelluric Data Over Devon Ice Cap, Canadian Arctic, to Investigate the Subglacial Geology, *Journal of Geophysical Research: Solid Earth*, 130, pp. e2024JB028929, 10.1029/2024JB028929

■ Wolfenbarger, N. S., D. D. Blankenship, **D. A. Young**, 7 others, and D. M. Schroeder, 2025, Radar Characterization of Salt Layers in Europa's Ice Shell as a Window Into Critical Ice-Ocean Exchange Processes, *Geophysical Research Letters*, 52, pp. e2024GL109144, 10.1029/2024GL109144

■ Yan, S., M. R. Koutnik, D. D. Blankenship, 5 others, and M. J. Siegert, accepted, Holocene hydrological evolution of subglacial Lake Snow Eagle, East Antarctica implied by englacial radio-stratigraphy, *Journal of Glaciology*

### 2024 (3 papers):

■ Blankenship, D. D., A. Moussessian, E. Chapin, 105 others, and T. J. Urban, 2024, Radar for Europa Assessment and Sounding: Ocean to Near-Surface (REASON), *Space Science Reviews*, 220, pp. 51, 10.1007/s11214-024-01072-3

■ Daubar, I. J., A. G. Hayes, G. C. Collins, 57 others, and R. Pappalardo, 2024, Planned Geological Investigations of the Europa Clipper Mission, *Space Science Reviews*, 220, pp. 18, 10.1007/s11214-023-01036-z

■ Sanderson, R. J., N. Ross, K. Winter, 3 others, and **D. A. Young**, 2024, Dated radar-stratigraphy between Dome A and South Pole, East Antarctica: old ice potential and ice sheet history, *Journal of Glaciology*, 10.1017/jog.2024.60

### 2023 (6 papers):

■ Jamieson, S. S. R., N. Ross, G. J. G. Paxman, 5 others, and M. J. Siegert, 2023, An ancient river landscape preserved beneath the East Antarctic Ice Sheet, *Nature Communications*, 14, pp. 6507, 10.1038/s41467-023-42152-2 | 1 JSG student coauthor

■ Roberts, J. H., W. B. McKinnon, C. M. Elder, 58 others, and T. I. T. W. Group, 2023, Exploring the Interior of Europa with the Europa Clipper, *Space Science Reviews*, 219, pp. 46, 10.1007/s11214-023-00990-y | 2 JSG student and postdoc coauthors

■ Geyer, A., A. Di Roberto, J. L. Smellie, 7 others, and D. Blankenship, 2023, Volcanism in Antarctica: An assessment of the present state of research and future directions, *Journal of Volcanology and Geothermal Research*, 444, 107941, 10.1016/j.jvolgeores.2023.107941

■ Bodart, J. A., R. G. Bingham, **D. A. Young**, 5 others, and D. D. Blankenship, 2023, High mid-Holocene accumulation rates over West Antarctica inferred from a pervasive ice-penetrating radar reflector, *The Cryosphere*, 17, 10.5194/tc-17-1497-2023

■ Chan, K., C. Grima, A. Rutishauser, 2 others, and D. D. Blankenship, 2023, Spatial characterization of near-surface structure and meltwater runoff conditions across Devon Ice Cap from dual-frequency radar reflectivity, *The Cryosphere*, 17, 10.5194/tc-17-1839-2023 | JSG student lead

■ Frémand, A. C., P. Fretwell, J. A. Bodart, 73 others, and A. Zirizzotti, 2023, Antarctic Bedmap data: Findable, Accessible, Interoperable, and Reusable FAIR sharing of 60 years of ice bed, surface and thickness data, *Earth System Science Data*, 15, 10.5194/essd-15-2695-2023

**2022 (6 papers):**

- Grima, C., N. E. Putzig, B. Campbell, 10 others, and D. D. Blankenship, 2022, Investigating the Martian Surface at Decametric Scale: Population, Distribution and Dimension of Heterogeneities from Radar Statistics, *The Planetary Science Journal*, 3, 236, 10.3847/PSJ/ac9277 | 1 JSG student coauthor
- Yan, S., D. D. Blankenship, J. S. Greenbaum, 7 others, and B. Sun, 2022, A newly discovered subglacial lake in East Antarctica likely hosts a valuable sedimentary record, *Geology*, 50, pp. 949-953, 10.1130/G50009.1 | JSG student lead
- Scanlan, K. M., **D. A. Young**, and D. D. Blankenship, 2022, Non-Linear Radar Response to the Radial Structure of Europa Plume Fallout Deposits, *Icarus*, 378, 10.1016/j.icarus.2022.114935
- Liu-Schiaffini, M., G. Ng, C. Grima, and **D. Young**, 2022, 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*, 60, 5119014, 10.1109/TGRS.2022.3214147 | JSG student lead
- Rutishauser, A., D. D. Blankenship, **D. A. Young**, 4 others, and A. S. Criscitiello, 2022, Radar sounding survey over Devon Ice Cap indicates the potential for a diverse hypersaline subglacial hydrological environment, *The Cryosphere*, 16, 10.5194/tc-16-379-2022 | 1 JSG student coauthor
- Steinbrügge, G. B., M. S. Haynes, D. M. Schroeder, 8 others, and D. D. Blankenship, 2022, Altimetry Measurements from Planetary Radar Sounders and Application to SHARAD on Mars, *IEEE Transactions on Geoscience and Remote Sensing*, 60, pp. 1-14, 10.1109/TGRS.2021.3134638

**2021 (9 papers):**

- Steinbruegge, G., A. Romero-Wolf, S. Peters, 20 others, and **D. A. Young**, 2021, PRIME — A Passive Radar Sounding Concept for Io, *Bulletin of the AAS*, 53, 4 | 2 JSG student and postdoc coauthors
- Schroeder, D. M., N. L. Bienert, R. Culberg, 3 others, 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, 5 others, 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, 11 others, 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, 41 others, 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, 2 others, and D. D. Blankenship, 2021, Delay Doppler SAR Focusing and Quantitative Quality Control of Future REASON Data, *IEEE Journal Of Selected Topics In Applied Earth Observations And Remote Sensing*, 10.1109/JSTARS.2021.3072276 | JSG postdoc lead
- Beem, L. H., **D. A. Young**, J. S. Greenbaum, 3 others, 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, 10.1109/LGRS.2020.3007514
- 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 papers):**

- Aitken, A. R. A., L. N. Ramos, J. L. Roberts, 3 others, 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, 5 others, 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, 12 others, 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, 8 others, 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**, 4 others, 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, 9 others, 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**, 5 others, 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**, 2 others, 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, 7 others, 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

■ **Steinbrügge, G.**, J. R. Voigt, D. Schroeder, 7 others, 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

■ **Steinbrügge, G.**, J. R. Voigt, D. Schroeder, 7 others, 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

■ **Steinbrügge, G.**, J. R. Voigt, D. Schroeder, 7 others, 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

■ **Steinbrügge, G.**, J. R. Voigt, D. Schroeder, 7 others, 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 papers):

■ Morlighem, M., E. Rignot, T. Binder, 33 others, 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**, 2 others, 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

■ **Scanlan, K. M.**, C. Grima, **G. Steinbrügge**, 2 others, 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**, 4 others, 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

■ Grima, C., I. Koch, **J. S. Greenbaum**, 4 others, 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, 6 others, 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 | 2 JSG student and postdoc coauthors

■ Wang, B., B. Sun, J. Wang, 6 others, 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 | 2 JSG student and postdoc coauthors

■ Paxman, G. J. G., S. S. R. Jamieson, F. Ferraccioli, 5 others, 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

■ Paxman, G. J. G., S. S. R. Jamieson, F. Ferraccioli, 5 others, 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, 6 others, 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

10.1080/01431161.2019.1658238

**2018 (8 papers):**

- [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, 27 others, 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, 10.1093/climatesystem/dzy004 | JSG student lead](#)
- [Passalacqua, O., M. G. P. Cavitte, O. Gagliardini, 3 others, 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, 5 others, 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 Lieffering, B., F. Pattyn, M. G. Cavitte, 3 others, 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, 5 others, 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, 3 others, 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 (10 papers):**

- [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](#)
- [Parrenin, F., M. G. P. Cavitte, D. D. Blankenship, 8 others, and D. A. Young, 2017, Is there 1.5-million-year-old ice near Dome C, Antarctica?, \*The Cryosphere\*, 11, pp. 2427–2437, 10.5194/tc-11-2427-2017 | 1 JSG student coauthor](#)
- [Beem, L. H., M. G. P. Cavitte, D. D. Blankenship, 4 others, 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, 8 others, 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, 2 others, 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, 6 others, 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, 12 others, 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, 9 others, 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, 6 others, 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, 3 others, 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 papers):

■ Rutishauser, A., C. Grima, M. Sharp, 3 others, 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**, 2 others, 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, 8 others, 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, 3 others, 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, 3 others, and M. J. Siegert, 2016, Distribution 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, 4 others, 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, 11 others, 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

■ Cavitte, M. G. P., D. D. Blankenship, **D. A. Young**, 4 others, 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, 5 others, 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**, 2 others, and M. J. Siegert, 2016, The Australo-Antarctic Columbia to Gondwana transition, *Gondwana Research*, 29, 10.1016/j.gr.2014.10.019

### 2015 (3 papers):

■ Greenbaum, J. S., D. D. Blankenship, **D. A. Young**, 7 others, 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, 6 others, and **D. A. Young**, 2015, Basal topographic controls on rapid

retreat of Humboldt Glacier, northern Greenland, *Journal of Glaciology*, 61, pp. 137-150, 10.3189/2015JoG14J128

■ **Young, D. A.**, L. E. Lindzey, D. D. Blankenship, 7 others, 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, 10.3189/2015JoG14J048 | 2 JSG student coauthors

### 2014 (10 papers):

■ 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; 1 student coauthor

■ Le Meur, E., M. Sacchetti, S. Garambois, 13 others, 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, 6 others, and S. Anandakrishnan, 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, 5 others, 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, 3 others, 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 papers):

■ Palmer, S. J., J. A. Dowdeswell, P. Christoffersen, 3 others, 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, 4 others, 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, 6 others, 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, 56 others, 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 papers):

- Shepherd, A., E. R. Ivins, G. A. 43 others, and H. J. Zwally, 2012, A Reconciled Estimate of Ice-Sheet Mass Balance, *Science*, 338, pp. 1183–1189
- Golynsky, A., R. Bell, D. Blankenship, 9 others, 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, 6 others, 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, 9 others, 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 papers):

- Carter, S. P., H. A. Fricker, D. D. Blankenship, 3 others, 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, 8 others, 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**, 9 others, 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 papers):

- 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**, 2 others, 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 papers):

- Holt, J. W., A. Safaeinili, J. J. Plaut, 8 others, 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, 2 others, 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 papers):



■ Carter, S. P., D. D. Blankenship, M. E. Peters, 2 others, 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, 2 others, 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 papers):

■ Vaughan, D. G., H. F. J. Corr, F. Ferraccioli, 6 others, 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, 5 others, 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 paper):

■ 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 paper):

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

### 2000 (1 paper):

■ 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

## Awards

- UTIG Director's Circle of Excellence 2018; 2014; 2013
- UTIG Outstanding Young Researcher Award 2012
- NASA Group Achievement Award for Operation Ice Bridge
- NASA Group Achievement Award for the Ice Sheet Mass Balance Exercise

## Mentoring

### Graduate Students

I have worked with 4 current graduate students (Shokoufeh Khojeh<sup>†</sup>, Hunter E. Reeves<sup>†</sup>, Megan E. Kerr<sup>\*†††</sup>, Shivangini Singh<sup>\*††</sup>), and 18 past graduate students (Kristian Chan<sup>\*</sup>(2024), Shuai Yan<sup>†</sup>(2023), Natalie S. Wolfenbarger(2022), Wei Wei<sup>\*†</sup>(2021), Enrica Quartini<sup>\*††</sup>(2018), Gail R. Muldoon<sup>\*†</sup>(2017), Marie G. P. Cavitte<sup>†</sup>(2017), Chad A. Greene<sup>\*†</sup>(2017), Laura E. Lindzey<sup>\*</sup>(2017), Jamin S. Greenbaum<sup>\*†</sup>(2016), Brad C. Gooch<sup>†</sup>(2016), Bruce C. Fredrick<sup>\*†</sup>(2015), Dustin M. Schroeder<sup>\*</sup>(2014), Erick Leuro<sup>\*</sup>(2014), Svetlana Burris<sup>\*</sup>(2011), Theresa Damiani<sup>\*</sup>(2008), Sasha P. Carter(2008), Hunter A. Danque<sup>\*</sup>(2006)).

\*: worked with in field while in this role, †: served on committee, ††: co-supervised, †††: supervised

### Interns

I have worked with 5 current interns (Tim Elnitiarta, Hector Cordova, Jeansel Johnson-Ayala, Jason Bott, Alejandra Vega Gonzalez), and 14 past interns (Hoang Chu(2023), Tania Ortiz(2023), Daisy Gomez(2021), Miguel Liu-Schiaffini<sup>‡</sup>(2021), Mansa Sudunagunta<sup>‡</sup>(2020), Madeleine Marie Maylath<sup>‡</sup>(2019), Lauren N. Schwartz(2019), Aparna Chandrashekar<sup>‡</sup>(2018), Alyssa D. Jones(2018), Varun Sudunagunta<sup>‡</sup>(2018), Cassidy Curra<sup>‡</sup>(2015), Blake Karwoski<sup>‡</sup>(2015), Elena Arnold<sup>‡</sup>(2015), Evelyn M. Powell<sup>\*</sup>(2014)).

\*: worked with in field while in this role, ‡: started as high school student

### Postdocs

I have worked with 2 current postdocs (Leopold Desage, Duyi Li), and 7 past postdocs (Shuai Yan(2024), Christopher Gerekos(2024), Anja Rutishauser<sup>\*</sup>(2021), Kirk M. Scanlan(2021), Gregor B. Steinbrügge(2020), Jamin S. Greenbaum(2020), Lucas H. Beem<sup>\*</sup>(2019)).

\*: worked with in field while in this role

## Projects

### Active Projects

- Co-I on 1715414 'Radar for Europa Assessment and Sounding: Ocean to Near-surface (REASON): Science Operations and Investigation', 2024-2034, \$28,994,598, NASA/Jet Propulsion Laboratory
- Co-I, Institutional Lead, Aerogeophysics Co-Lead on 2019719 'Center for Oldest Ice Exploration (COLDEX)', 2021-2026, \$1,784,744, National Science Foundation
- Participant on 'Antarctic Aerogeophysical Data Analysis Gift', 2019-2025, \$1,900,000, G. Unger Vetlesen Foundation
- Co-PI, Institutional Lead on 2127606 'Collaborative Research: EarthCube Capabilities: Open Polar Radar (OPoRa) Software and Service', 2021-2025, \$425,137, National Science Foundation
- Co-I on AAP 4511 'ICECAP-EAGLE', 2019-2025, in kind, Australian Antarctic Program

### Past Projects

- Co-I on NNM16AA26C 'Radar for Europa Assessment and Sounding: Ocean to Near-surface (REASON) Phase A-D', 2016-2024, \$7,710,593, NASA/Marshall Space Flight Center
- PI on 1711184 'Europa Inspiring Clipper: Opportunities for Next-generation Scientists (ICONS)', 2024-2024, \$27,050, Jet Propulsion Laboratory/National Aeronautical and Space Administration
- Co-PI on 'K-NOW/Thwaites Glacier 2023-24', 2023-2024, \$150,000, Korean Polar Research Institute
- Co-PI on 'LIONESS/Thwaites Glacier 2021-22', 2021-2022, \$130,531, Korean Polar Research Institute
- PI on 1443690 'Collaborative Research: Southern Plateau Ice-sheet Characterization and Evolution of the Central Antarctic Plate (SPICECAP)', 2017-2021, \$428,418, National Science Foundation
- Co-I on AAP 4346 'ICECAP II', 2015-2019, in kind, Australian Antarctic Program
- Co-I on 1543452 'East Antarctic Grounding Line Experiment (EAGLE)', 2016-2019, \$839,487, National Science Foundation
- Project partner on NE/K004999/1 'Airborne geophysical investigations of conditions at the bed of fast-flowing outlet glaciers of large Canadian Arctic ice caps', 2013-2016, \$422,000, National Environmental Research Council (UK)/Scott Polar Research Institute
- PI on 1043761 'Geophysical Investigations of Marie Byrd Land Evolution (GIMBLE)', 2012-2015, \$1,004,386, National Science Foundation
- Co-I on AAP 4077 'ICECAP: The current state and thinning of the ice sheet in the Australian Antarctic Territory', 2012-2015, in kind, Australian Antarctic Program
- Co-I on NNX11AH89G 'That Un-Certain Thing: Estimating Basal Geometry Uncertainties Important to Projections of Thwaites Glacier Dynamics', 2011-2015, \$730,196, National Aeronautical and Space Administration
- Co-I on NNX11AD33G 'International Collaborative Exploration of the Cryosphere through Aerogeophysical

*Profiling for Operation Ice Bridge (ICECAP/OIB): East Antarctica*, 2010-2014, \$3,259,605, National Aeronautical and Space Administration

■ Co-I on NNG10HP06C *'Operation Ice Bridge: ICECAP'*, 2010-2011, \$1,127,304, NASA/Goddard Space Flight Center

■ Co-I on NNX09AR52G *'East Antarctic Surface Elevation Observations for Operation IceBridge'*, 2009-2011, \$1,632,643, National Aeronautical and Space Administration

## Field Work

15 polar expeditions/27 months in the field.

- 2023-2024 (Antarctica): Field lead for 58 days at McMurdo Station and South Pole Station for COLDEX.
- 2022-2023 (Antarctica): Field lead for 68 days at McMurdo Station and South Pole Station for COLDEX.
- 2016-2017 (Antarctica): Field lead for 52 days at Casey Station for ICECAPII/EAGLE.
- 2015-2016 (Antarctica): Field lead for 65 days at Casey Station, Dumont d'Urville Station, Davis Station, and Concordia Station for ICECAPII/EAGLE.
- 2014 (Antarctica): Field lead for 44 days at McMurdo Station and WAIS Divide Camp for GIMBLE.
- 2014 (Greenland): Field lead for 14 days at Qaanaaq for CAGE.
- 2013 (Antarctica): Field lead for 35 days at McMurdo Station and Byrd Surface Camp for GIMBLE.
- 2012 (Antarctica): Field lead for 45 days at Casey Station and McMurdo Station for ICECAP/OIB.
- 2012 (Greenland): Field lead for 14 days at Qaanaaq for GROGG.
- 2011 (Antarctica): Field lead for 59 days at Casey Station, Dumont d'Urville Station, Concordia Station, and McMurdo Station for ICECAP/OIB.
- 2011 (Greenland): 21 days at Ilulissat for GROGG.
- 2010-2011 (Antarctica): Field lead for 96 days at Casey Station, Mario Zuchelli Station, and McMurdo Station for ICECAP/OIB.
- 2009-2010 (Antarctica): Field lead for 77 days at Casey Station, Dumont d'Urville Station, and McMurdo Station for ICECAP/OIB.
- 2008-2009 (Antarctica): 50 days at Casey Station, Dumont d'Urville Station, and McMurdo Station for ICECAP/IPY.
- 2004-2005 (Antarctica): 114 days at Thwaites Glacier and McMurdo Station for AGASEA.

## Service

- Member of UTIG Insitutional Postdoc Review committee (2025)
- Member of third year review committee (2024)
- Member of the Center for Oldest Ice Exploration Executive Committe (2024-)
- Member of the UTIG Annual Performace Evaluation Committee (2024-2026)
- Member of the JSG Graduate Studies Committee (2022-)
- Working Group member of the 2022 Advancing IDEA in Planetary Science Conference (2022)
- UTIG Postdoc Fellowship Committee (2024-)
- UTIG Field Safety Committee (2016-2023), Chair from 2022
- UTIG Technical Staff Review Committee (2020-2023)
- UTIG Seminar Committee (2019-2022)
- UTIG Premium Pay Committee (2018)
- Jackson School of Geosciences Equipment Committee (2013-2016; 2019-2023), Chair from 2019
- Judge for Jackson School of Geosciences Graduate Research Sympoisum (2018,2019,2020,2021,2025)
- Host for six UTIG Friday Seminar Speakers in last 3 years
- Geophysics Editor for Advances in Polar Science (2016-)
- Co-Convener of TACTICAL Antarctic heat Flow Workshop (March 2018)

- Scientific Committee for Antarctic Research Antarctic Digital Magnetic Anomaly Project (ADMMap-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)

## Invited Presentations

- 2024 (Workshop): *Airborne geophysics (ice & solid-earth): An overview for the 2nd RAID workshop*, Second Rapid Access Ice Drilling Workshop, Herndon, VA
- 2024 (Workshop): *Careers in Academia (Panelist)*, Europa Inspiring Clipper: Opportunities for Next-generation Scientists (ICONS) workshop, Jet Propulsion Laboratory, CA
- 2024 (Public): *Antarctica and Beyond*, Tiny Talks Volume 3, Austin, TX
- 2024 (Public): *COLDEX Airborne and The Search for Antarctica's Million Year Old Ice*, Amundsen-Scott South Pole Station
- 2023 (Public): *The Search for Antarctica's Million Year Old Ice*, Amundsen-Scott South Pole Station
- 2022 (Seminar): *The search for 'old ice' in Antarctica*, Trinity University Geology Departmental Seminar
- 2022 (Plenary): *Challenges and Opportunities for GPR beyond Earth (Panelist)*, 19th International Conference on Ground Penetrating Radar, Boulder, CO (Remote)
- 2022 (Public): *The Search for Antarctica's Million Year Old Ice*, Northwest Austin Rotary Club
- 2019 (Closed): *Prospecting for Ancient Ice in Antarctica*, Jackson School of Geosciences Advisory Council Meeting, Online
- 2018 (Public): *Sounding The Near-Surface With Ice Penetrating Radar*, 2018 New Zealand Space Challenge, Christchurch, New Zealand
- 2017 (Workshop): *Status of the Little Dome C 'Old Ice A' aerogeophysical dataset analysis*, Oldest Ice Site Selection meeting, Montebaur, Germany
- 2017 (Workshop): *Working with Multiple Datasets*, AntArchitecture workshop on englacial layer compilation, Edinburgh, Scotland
- 2016 (Workshop): *Subglacial access site selection*, Subglacial Access Working Group, Herndon, Virginia
- 2016 (Workshop): *Results from Little Dome C*, Oldest Ice Site Selection meeting, Hobart, Australia
- 2015 (Workshop): *The context for Dome C subglacial water systems*, Oldest Ice Reconnaissance Workshop, Grenoble, France
- 2015 (Plenary): *Airborne Observations For The Context For Subglacial Water Systems*, Subglacial Antarctic lake exploration: first results and future plans, The Royal Society, Chicheley Hall, United Kingdom
- 2014 (Public): *WHAT'S UNDER WAIS? Looking for hotspots under the West Antarctic Ice Sheet using airborne geophysics*, WAIS Divide Camp
- 2014 (Public): *Antarctica Now: Hot Science in a Changing World*, SXSW Eco, Austin, Tx
- 2014 (Workshop): *Basler Aerogeophysics*, NSF/NASA Instrumentation for Polar Glaciology and Geophysics Research Workshop, Baltimore, MD
- 2014 (Plenary): *Site Selection From Radar Sounding: Key Questions And Paths Forward*, 6th Open Science Conference, SCAR, Auckland, New Zealand
- 2013 (Invited): *Geologic Controls On The Architecture Of The Antarctic Ice Sheet's Basal Interface: New Results From West And East Antarctica From Long Range Geophysics*, 2013 American Geophysical Union Fall

Meeting, San Francisco, CA

- 2013 (Public): *Under the Antarctic ice*, Byrd Surface Camp
- 2011 (Plenery): *Under the Antarctic ice: New data in the East, new approaches in the West*, 2011 West Antarctic Workshop, Loveland, CO
- 2011 (Plenery): *Unveiling the Antarctic Continent*, XI International Symposium on Antarctic Earth Sciences, Edinburgh UK
- 2008 (Seminar): *The future of the West Antarctic Ice Sheet: New constraints from airborne geophysics*, Southern Methodist University, Dallas, TX
- 2008 (Seminar): *Subglacial architecture of Thwaites Glacier, West Antarctica: Implications for sea level change*, University of Swansea, UK
- 2004 (Seminar): *Strain localization and tectonic interactions within Venus's lowlands Constraints from mapping and altimetry*, Lunar and Planetary Institute, Houston TX
- 2004 (Public): *Mars! New insights from the Martian rovers Spirit and Opportunity*, Marshall W. Alworth Planetarium, Duluth MN

## Conference Abstracts (184)

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

### 2025 (5 abstracts):

- **Young, D. A.**, S. Singh, M. E. Kerr, and D. D. Blankenship, 2025, At the origin: investigations of the deep interior of the East Antarctic Ice Sheet, *UTIG 2025 Symposium* | 2 JSG student coauthors
- **Young, D. A.**, S. Yan, A. Vega Gonzalez, 6 others, and D. D. Blankenship, 2025, Using delay doppler processing to separate stratigraphic and basal ice at Dome A, Antarctica, *European Geoscience Union General Assembly 2025* | 2 JSG student coauthors
- Singh, S., **D. A. Young**, D. D. Blankenship, and B. Hills, 2025, Investigating fabric signatures in the South Pole - Dome A sector, Antarctica, *European Geoscience Union General Assembly 2025* | JSG student lead
- Desage, L., K. Chan, C. Grima, **D. A. Young**, and D. D. Blankenship, 2025, Assessing Clutter Impacts on Reflectometry for Europa with an Antarctic Terrestrial Analogue, *Lunar and Planetary Science Conference 56*
- Hills, B. H., M. R. Siegfried, **D. A. Young**, 3 others, and D. M. Schroeder, 2025, A birefringence correction for multi-frequency radar sounding, *IGARSS 2025 - 2025 IEEE International Geoscience and Remote Sensing Symposium* | 1 JSG student coauthor

### 2024 (28 abstracts):

- Singh, S., **D. A. Young**, S. Yan, 7 others, and D. D. Blankenship, 2024, Radiostratigraphic Implications for Ice Flow in the South Pole - Dome A District, East Antarctica, *2024 Fall Meeting, AGU, Washington, D.C., 9-13 December* | JSG student lead, JSG 1 student coauthors
- **Young, D. A.**, J. D. Paden, M. Kerr, 14 others, and the COLDEX Community, 2024, Unveiling the southern flank of Antarctica's Dome A using integrated geophysics, *Proceedings of the American Geophysical Union Fall Meeting 2024* | 2 JSG student coauthors
- **Young, D. A.**, J. D. Paden, K. J. Tinto, K. Christianson, and the Open Polar Radar team, 2024, Progress in the Open Polar Radar (OPR) project: making ice sheet sounding data visible, *Proceedings of the American Geophysical Union Fall Meeting 2024*
- Blankenship, D. D., **D. A. Young**, K. Chan, 8 others, and H. Reeves, 2024, Anticipating the Subsurface of Europa's Ice Shell: Strange? or Perhaps Familiar, *2024 AGU Fall Meeting* | 1 JSG student coauthor
- Wilbur, E., J. D. Maurer, D. Shapero, 6 others, and T. J. Fudge, 2024, Assessing the Role of Bed Roughness in Possible Mechanical Decoupling of a Basal Ice Unit Across the Flank of Dome A, East Antarctica, *2024 AGU Fall Meeting* | 1 JSG student coauthor

- Booth, J., L. Lindzey, T. J. Fudge, 2 others, and S. Yan, 2024, Basal Ice Analysis Using Ice-Penetrating Radar Data in East Antarctica, *2024 AGU Fall Meeting*
- Elnitiarta, T., S. Yan, A. Vega Gonzalez, 4 others, and D. D. Blankenship, 2024, Comparison of Basal Unit Thickness Measured by Different Airborne Radar Systems in the Dome A Region, *2024 AGU Fall Meeting* | 1 JSG student coauthor
- Grima, C., K. M. Soderlund, J. Greenbaum, 6 others, and N. S. Wolfenbarger, 2024, Diagnosing Ice-Water Processes with Radar Reflectometry: A Demonstration at Lake Vostok, Antarctica, *2024 AGU Fall Meeting*
- Sailer, M., T. J. Fudge, J. Patterson, 3 others, and M. Kerr, 2024, Diffusion of CO<sub>2</sub> and O<sub>2</sub>/N<sub>2</sub> Signals in 1.5-Million-Year-Old Ice in East Antarctica, *2024 AGU Fall Meeting* | 2 JSG student coauthors
- Goodge, J. W., C. M. Fanning, C. M. Fisher, 3 others, and D. A. Young, 2024, Isotopic and Geophysical Evidence for a Grenville-age Lithosphere Suture Transecting the Paleo-Pacific Rift Margin of East Antarctica, *2024 AGU Fall Meeting* | 1 JSG student coauthor
- Cordova, H., M. Kerr, D. A. Young, 4 others, and D. D. Blankenship, 2024, Mapping Subglacial Lakes Along Southern Flank of Dome A: Constraints on Geothermal Heat Flow, *2024 AGU Fall Meeting* | 2 JSG student coauthors
- Vega Gonzalez, A., S. Yan, D. A. Young, 6 others, and D. D. Blankenship, 2024, Radar Characterization of East Antarctic Basal Ice: Findings from COLDEX Data on the Southern Flank of Dome A, *2024 AGU Fall Meeting* | 3 JSG student coauthors
- Ayala, J. J., K. Chan, D. D. Blankenship, and D. A. Young, 2024, Terrestrial Analogs for Fracture, Collapse and Refreezing in Europa's Chaos Terrains, *2024 AGU Fall Meeting*
- Beem, L. H., D. D. Blankenship, V. Goel, 8 others, and G. Ng, 2024, Characterization of Martin Peninsula and Elephant Moraine, Antarctica, by Helicopter Based Geophysical Observations, *3rd US Ice Core Community Meeting*
- Kerr, M. E., D. A. Young, S. Yan, and D. D. Blankenship, 2024, Plans to probe the crust underlying a potential old ice coring site under the southern flank of Dome A, Antarctica, *2024 Generalist Electromechanics for Applied Researchers Workshop* | JSG student lead
- Yan, S., D. Blankenship, D. Young, 4 others, and M. Kerr, 2024, Geophysical characterization of the basal ice layer at the southern flank of Dome A, *3rd US Ice Core Community Meeting* | 2 JSG student coauthors
- Yan, S., M. Koutnik, D. Blankenship, 5 others, and M. Siegert, 2024, Using englacial radio-stratigraphy to investigate the Holocene evolution of a major subglacial lake in East Antarctica, *2024 Antarchitecture Workshop*
- Singh, S., D. Young, S. Yan, 5 others, and D. Blankenship., 2024, Leveraging radiostratigraphy in the South Pole Basin - Dome A district to test the hypothesis of former enhanced flow, *XIth SCAR 2024 Open Science Meeting* | JSG student lead, JSG 1 student coauthors
- Young, D., J. Paden, M. Kerr, 13 others, and E. Brook., 2024, Airborne mapping of South Pole Basin and the southern Gambertsev Subglacial Mountains from an old ice perspective: results of the COLDEX airborne program., *2024 Antarchitecture Workshop* | 2 JSG student coauthors
- Singh, S., D. Young, S. Yan, 5 others, and D. Blankenship., 2024, Englacial stratigraphy at the southern flank of Dome A, *2024 Antarchitecture Workshop* | JSG student lead, JSG 1 student coauthors
- Young, D., J. Paden, M. Kerr, 13 others, and E. Brook., 2024, Airborne mapping of South Pole Basin and the southern Gambertsev Subglacial Mountains from an old ice perspective: results of the COLDEX airborne program., *XIth SCAR 2024 Open Science Meeting* | 2 JSG student coauthors
- Yan, S., D. Blankenship, D. Young, 4 others, and M. Kerr, 2024, Geophysical characterization of the basal ice layer at the southern flank of Dome A, *2024 Antarchitecture Workshop* | 2 JSG student coauthors
- Ferraccioli, F., G. Eagles, J. Greenbaum, 4 others, and M. Siegert, 2024, Aerogeophysical views of a major vulnerable marine-based sector of the East Antarctic Ice Sheet: the Wilkes Subglacial Basin, *EGU General Assembly 2024*
- Fudge, T., M. Koutnik, D. Young, 4 others, and M. Kerr, 2024, Stability of interior East Antarctic wind scour and ice flow on glacial-interglacial timescales, *EGU General Assembly 2024* | 2 JSG student coauthors
- Kerr, M., D. Young, W. Shen, 5 others, and D. Blankenship, 2024, Are there thick sediments within South Pole Basin? Investigating the lithology of SPB using COLDEX airborne geophysics, *EGU General Assembly*

2024 | JSG student lead, JSG 1 student coauthors

■ Singh, S., **D. Young**, S. Yan, 6 others, and D. Blankenship, 2024, Optimizing rapid access englacial sampling location to date deep radiostratigraphy for old ice, *EGU General Assembly 2024* | JSG student lead, JSG 1 student coauthors

■ **Young, D.**, J. Paden, M. Kerr, 15 others, and E. Brook, 2024, Comprehensive multi frequency airborne mapping of the southern flank of Dome A: results of the COLDEX airborne program, *EGU General Assembly 2024* | 2 JSG student coauthors

■ Bott, J., D. Blankenship, S. Yan, L. Beem, and **D. Young**, 2024, The Potential Role of Anomalous Geothermal Flux for Enhanced Basal Melting and Suppressed Ice Velocity at Haynes Glacier, West Antarctica, *EGU General Assembly 2024* | JSG student lead

### 2023 (25 abstracts):

■ Matsuoka, K., R. Clifton, X. Cui, 16 others, and **D. Young**, 2023, Lessons learned from past aerogeophysical collaborations for effectively launching new pan-Antarctic RINGS surveys., *Proceedings of the COMNAP Symposium 2023 Antarctic Innovations and Collaborations*

■ Singh, S., **D. A. Young**, S. Yan, 5 others, and D. D. Blankenship, 2023, Radiostratigraphic connection between the South Pole and Hercules Dome, *WAIS Workshop 2023* | JSG student lead, JSG 3 student coauthors

■ Kerr, M., **D. A. Young**, S. Yan, 2 others, and D. D. Blankenship, 2023, Characterizing the Subglacial Hydrology of the South Pole Basin, Antarctica Using COLDEX Airborne Geophysics, *Fall 2023 AGU Meetings Abstracts* | JSG student lead, JSG 2 student coauthors

■ Singh, S., **D. A. Young**, D. D. Blankenship, 6 others, and H. Chu, 2023, Englacial Stratigraphy at the Southern Flank of Dome A, Antarctica Derived Using Airborne Radar-Sounding Surveys: A COLDEX Perspective, *Fall 2023 AGU Meetings Abstracts* | JSG student lead, JSG 2 student coauthors

■ Vega González, A., S. Yan, **D. A. Young**, 3 others, and D. D. Blankenship, 2023, Mapping Basal Layer Thickness Variability across the Southern Flank of Dome A, East Antarctica, *Fall 2023 AGU Meetings Abstracts* | 3 JSG student coauthors

■ Yan, S., M. Koutnik, D. D. Blankenship, 5 others, and M. Siegert, 2023, Investigating the Holocene evolution of a major subglacial lake in East Antarctica, *Fall 2023 AGU Meetings Abstracts* | JSG student lead

■ Sailer, M., T. J. Fudge, J. Patterson, 3 others, and M. Kerr, 2023, Modeling atmospheric gas diffusion for ice core site selection between the South Pole and Dome A, *Fall 2023 AGU Meetings Abstracts* | 2 JSG student coauthors

■ Bott, J., D. D. Blankenship, S. Yan, and **D. A. Young**, 2023, Potential Sources of a Velocity Anomaly at the Grounding Line of Haynes Glacier, *Fall 2023 AGU Meetings Abstracts* | JSG student lead, JSG 1 student coauthors

■ Chu, H., **D. A. Young**, S. Yan, and D. D. Blankenship, 2023, Investigate Englacial Radio Energy Attenuation at the IceCube Neutrino Detector in the South Pole, *Fall 2023 AGU Meetings Abstracts* | 1 JSG student coauthor

■ Blankenship, D. D., A. Moussessian, E. Chapin, 36 others, and T. Urban, 2023, Radar for Europa Assessment and Sounding: Ocean to Near-surface (REASON), *Fall 2023 AGU Meetings Abstracts* | 3 JSG student and postdoc coauthors

■ **Young, D.**, J. Paden, M. Kerr, 11 others, and E. Brook, 2023, The initial COLDEX aerogeophysical survey of Southern Dome A: overview and prospects, *INStabilities and Thresholds in ANTArctica Conference 2023* | 2 JSG student coauthors

■ Kerr, M., **D. Young**, S. Yan, 3 others, and A. Vega-González, 2023, Characterizing the Subglacial Hydrology of the South Pole Basin, Antarctica Using COLDEX Airborne Geophysics, *COLDEX Annual Meeting 2023* | JSG student lead, JSG 2 student coauthors

■ **Young, D.**, M. Kerr, G. Echeverry, 21 others, and E. Barberena, 2023, The Initial Coldex Aerogeophysical Survey of Southern Dome A: Overview And Prospects, *COLDEX Annual Meeting 2023* | 4 JSG student coauthors

■ Wolfenbarger, N. S., K. M. Scanlan, D. Findlay, 2 others, and D. D. Blankenship, 2023, Detecting Fossil

Brines Within Europa's Ice Shell Using Ice-Penetrating Radar, *Brines Across the Solar System: Ancient and Future Brines* | JSG student lead, JSG 1 student coauthors

■ Blankenship, D. D., **D. A. Young**, K. Chan, 2 others, and G. B. Steinbrügge, 2023, Exploring Europa, Jupiter's Ocean World: A View from Earth, *EGU General Assembly 2023* | 3 JSG student and postdoc coauthors

■ Kerr, M., **D. Young**, T. G. Richter, 9 others, and S. Yan, 2023, Geophysical mapping of the southern flank of Dome A, Antarctica: Initial results from the inaugural COLDEX airborne survey, *INStabilities and Thresholds in ANTArctica Conference 2023* | JSG student lead, JSG 2 student coauthors

■ Singh, S., **D. A. Young**, D. D. Blankenship, 4 others, and S. Yan, 2023, Englacial stratigraphy at Dome A, Antarctica derived using airborne radar- sounding surveys: A COLDEX perspective, *National Conference on Polar Sciences 2023* | JSG student lead, JSG 2 student coauthors

■ **Young, D.**, J. Paden, M. Kerr, 11 others, and E. Brook, 2023, The initial COLDEX aerogeophysical survey of Southern Dome A: Overview and prospects, *INStabilities and Thresholds in ANTArctica Conference 2023* | 2 JSG student coauthors

■ Singh, S., **D. A. Young**, D. D. Blankenship, 4 others, and S. Yan, 2023, Linking South Pole and Dome A using englacial stratigraphy: A COLDEX perspective, *US Ice Core Open Science Meeting* | JSG student lead, JSG 2 student coauthors

■ Yan, S., D. Blankenship, M. R. Koutnik, T. J. Fudge, and **D. A. Young**, 2023, A few things to look out for in radargrams while hunting for continuous old ice core, *US Ice Core Open Science Meeting* | JSG student lead

■ **Young, D.**, J. Paden, M. Kerr, 11 others, and E. Brook, 2023, The initial COLDEX aerogeophysical survey of Southern Dome A: Overview and prospects, *US Ice Core Open Science Meeting* | 2 JSG student coauthors

■ Kerr, M., **D. Young**, T. G. Richter, 9 others, and S. Yan, 2023, COLDEX geophysical mapping of the southern flank of Dome A, Antarctica, *US Ice Core Open Science Meeting* | JSG student lead, JSG 2 student coauthors

■ Jamieson, S. S., N. Ross, G. J. Paxman, 6 others, and M. J. Siegert, 2023, An ancient river landscape preserved beneath the East Antarctic Ice Sheet, *INSTANT 2023: Instabilities and Thresholds in Antarctica* | 1 JSG student coauthor

■ Kerr, M., **D. Young**, T. G. Richter, 9 others, and S. Yan, 2023, Geophysical mapping of the southern flank of Dome A, Antarctica: Initial results from the inaugural COLDEX airborne survey, *IUGG Berlin 2023* | JSG student lead, JSG 2 student coauthors

■ **Young, D.**, J. Paden, M. Kerr, 11 others, and E. Brook, 2023, The initial COLDEX aerogeophysical survey of Southern Dome A: Overview and prospects, *IUGG Berlin 2023* | 2 JSG student coauthors

## 2022 (17 abstracts):

■ **Young, D. A.**, S. Yan, J. D. Paden, 18 others, and E. J. Brook, 2022, The COLDEX regional aerogeophysical survey for oldest ice core candidate site selection: plans for 2022/23, *Fall AGU Meeting* | 2 JSG student coauthors

■ Findlay, D., N. S. Wolfenbarger, C. Chivers, D. D. Blankenship, and **D. A. Young**, 2022, Thickness of Salt Layers Precipitated from Sills in Europa's Shallow Subsurface, *Fall AGU Meeting* | JSG student lead, JSG 1 student coauthors

■ Yan, S., D. D. Blankenship, **D. A. Young**, 8 others, and M. J. Siegert, 2022, Aero-geophysical constraints on the crustal structure of the western margin of the Aurora Subglacial Basin, East Antarctica, *Fall AGU Meeting* | JSG student lead

■ Yan, S., D. D. Blankenship, M. Kerr, 2 others, and **D. A. Young**, 2022, Geologic controls on subglacial thermal conditions and old ice preservation from a COLDEX perspective – insights from East Antarctic airborne geophysical surveying, *Fall AGU Meeting* | JSG student lead, JSG 1 student coauthors

■ Grima, C., N. E. Putzig, B. A. Campbell, 10 others, and D. D. Blankenship, 2022, Martian roughness at 15-m scale from radar statistics, *53rd Lunar and Planetary Science Conference* | 1 JSG student coauthor

■ **Gerekos, C.**, M. S. Haynes, **D. A. Young**, and D. D. Blankenship, 2022, REASON Cluttergrams of Cilix Ridged Plains Using a Novel Simulator Based on a Rough Facet Integral Formulation, *53rd Lunar and Planetary Science Conference* | JSG postdoc lead



- **Young, D.**, 2022, UTIG's Lessons Learned for Rings, *RINGS Action Group Workshop*
- Beem, L. H., C. Pierce, **D. A. Young**, 2 others, and W. S. Lee, 2022, LIONESS Aerial Geophysics, 2022 *LIONESS meeting*
- Ritz, C., M. Cavitte, O. Eisen, 8 others, and B. van Liefferinge, 2022, The Oldest Ice Challenge, lessons from the site selection at Little Dome C, *3rd IPICS Open Science Conference*
- Roberts, J. L., L. M. Jong, M. Curran, 17 others, and **D. Young**, 2022, Site Selection For Australia's Million Year Ice Project, *3rd IPICS Open Science Conference*
- Paden, J., K. Tinto, **D. Young**, 8 others, and H. Talasila, 2022, Open Polar Radar: Standardizing Radargram Referencing, Processing and Access, *RINGS Action Group Workshop*
- Paden, J., K. Tinto, **D. Young**, and K. Christianson, 2022, Open Polar Radar Software and Services Organization, *2022 Earthcube Annual Meeting*
- **Gerekos, C.**, G. Steinbrügge, M. Haynes, **D. Young**, and a. D. Blankenship, 2022, Assessing the detectability of subsurface events beneath European multi-ring basins with an interferometric radar sounder: Test-simulations on a Martian crater, *Europlanet Science Congress 2022* | JSG postdoc lead
- Yan, S., D. D. Blankenship, L. H. Beem, J. S. Greenbaum, and **D. A. Young**, 2022, Geologic controls on subglacial thermal conditions and old ice preservation – insights from East Antarctic airborne geophysical surveying, *US Ice Core Open Science Meeting* | JSG student lead
- **Young, D. A.**, J. R. Paden, J. S. Greenbaum, 18 others, and E. Brook, 2022, The aerogeophysical contribution for COLDEX oldest ice core site selection, *US Ice Core Open Science Meeting* | 1 JSG student coauthor
- Bodart, J. A., R. Bingham, **D. Young**, D. Blankenship, and D. and Vaughan, 2022, Quantifying Holocene Accumulation Rates from Ice-Core Dated Internal Layers from Radio-Echo Sounding Data over the West Antarctic Ice Sheet, *EGU General Assembly Conference Abstracts*
- Chan, K., C. Grima, A. Rustishauser, 2 others, and D. D. Blankenship, 2022, Ice layer detection, distribution, and thickness in the near-surface firn on Devon Ice Cap: a new dual-frequency radar characterization approach, *EGU General Assembly Conference Abstracts* | JSG student lead

### 2021 (9 abstracts):

- Yan, S., D. Blankenship, **D. Young**, 5 others, and S. Bo, 2021, A widespread subglacial hydrology system detected by airborne geophysics survey in Princess Elizabeth Land, East Antarctica, *AGU Fall Meeting Abstracts* | JSG student lead
- Bingham, R., J. Bodart, D. Ashmore, 4 others, and J. MacGregor, 2021, AntArchitecture: towards the widespread linking of Antarctic ice-core records using radiostratigraphy, *AGU Fall Meeting Abstracts*
- Conger, A., J. Greenbaum, D. Schroeder, 6 others, and D. Blankenship, 2021, Investigating a subglacial hydrological transition near the grounding zone of Totten Glacier, East Antarctica, *AGU Fall Meeting Abstracts*
- Paden, J., K. Tinto, **D. Young**, 6 others, and T. Jordan, 2021, Open Polar Radar Software and Services to Standardize Radar Echograms and Integrate into a Geospatial Database, *AGU Fall Meeting Abstracts*
- Pierce, C., L. H. Beem, **D. A. Young**, 2 others, 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**, 2 others, and W. S. Lee, 2021, Repeat radar survey and basal evolution of Thwaites Glacier, West Antarctica, *The 26th International Symposium on Polar Sciences*
- Yan, S., D. D. Blankenship, **D. A. Young**, 5 others, 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, 5 others, 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**, 6 others, 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 (9 abstracts):**

- Young, D., D. Blankenship, N. Wolfenbarger, 3 others, and . S. Team, 2020, An Ensemble of Point Models Approach for Science Verification and Validation for Europa Clipper's Reason (Radar for Europa Assessment and Sounding: Ocean to Near-Surface) Investigation, *51st Annual Lunar and Planetary Science Conference* | 2 JSG student coauthors
- Lowe, M., F. Ferraccioli, E. Armadillo, 3 others, 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, 5 others, 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
- Voigt, J., G. Steinbrügge, N. Wolfenbarger, 5 others, and D. Blankenship, 2020, Melt Mobilization on Europa and its Application to Manannán Crater, *Lunar and Planetary Science Conference* | 2 JSG student and 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**, 2 others, 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 abstracts):**

- Grima, C., **G. B. Steinbrügge, K. M. Scanlan**, 5 others, and D. D. Blankenship, 2019, Deciphering the Martain 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**, 2 others, 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, 2 others, 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**, 2 others, 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, 2 others, 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, 2 others, 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, 6 others, 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, 8 others, 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 coauthor
- Indrigo, C., P. L. Wray, C. F. Dow, 5 others, 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, 2 others, 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, 5 others, and S. Bo, 2019, Integrated Airborne Geophysics Survey over a Newly-discovered Subglacial Lake in Princess Elizabeth Land, East Antarctica, *Fall AGU Meeting* | JSG student lead**

■ **Young, D. A., J. S. Greenbaum, D. D. Blankenship, 6 others, 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, 5 others, 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, 5 others, 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 (15 abstracts):

■ **Blankenship, D., T. Ray, J. Plaut, 12 others, and . S. Team, 2018, REASON for Europa, *42nd COSPAR Scientific Assembly***

■ **Young, D. A., C. Grima, G. Steinbrügge, 2 others, 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, 3 others, 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, 6 others, 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, 2 others, 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, 5 others, 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 Aeromagnetism, *POLAR2018 SCAR/IASC Open Science Conference* | JSG student lead

■ **Beem, L. H.,** L. E. Lindzey, E. Quartini, 5 others, 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, 7 others, 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,** 5 others, 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, 5 others, 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 abstracts):

■ **Cui, X., B. Sun, J. Guo,** 4 others, and **D. Young,** 2017, A new airborne geophysical platform and its application in the Princess Elizabeth Land during CHINARE 32 and 33 in East Antarctica, *EGU General Assembly Conference Abstracts* | 2 JSG student and postdoc coauthors

■ **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, 5 others, 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,** 11 others, and a. P. Heimbach, 2017, The East Antarctic Grounding Line Experiment: Aerogeophysics for coastal bathymetry and subglacial freshwater discharge in East Antarctica, *POGO OASIS 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,** 9 others, 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,** 11 others, 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

■ **Young, D. A.,** D. D. Blankenship, **M. P. G. Cavitte,** 8 others, 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,** 2 others, 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,** 5 others, 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,** 4 others, 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,** 8 others, 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 (9 abstracts):

■ [Sudunagunta, V.](#), [S. Ballal](#), [R. Albach](#), 4 others, and [D. Blankenship](#), 2016, Englacial layer mapping correlation and consistency techniques: an example from airborne ice penetrating radar profiles in West Antarctica, *2016 Fall AGU Meeting* | 4 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, *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](#), 5 others, 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](#), 8 others, 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](#), 5 others, 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 abstract):

■ [Young, D. A.](#), 2015, Airborne Observations for the Context for Subglacial Water Systems, *Subglacial Antarctic lake exploration: first results and future plans*

### 2014 (3 abstracts):

■ [Blankenship, D. D.](#), [D. A. Young](#), [J. S. Greenbaum](#), 3 others, and [M. J. Siegert](#), 2014, East Antarctic land-ice/ocean networks: progress and questions, *Fall AGU Meeting* | 1 JSG student coauthor

■ [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](#), 2 others, and [D. D. Blankenship](#), 2014, Structure of the Marie Byrd Land crustal province from GIMBLE aerogeophysics, *SCAR Open Science Meeting* | 3 JSG student coauthors

### 2013 (6 abstracts):

■ [Curra, C.](#), [E. Arnold](#), [B. Karwowski](#), 3 others, 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 3 student coauthors

■ [Young, D. A.](#), [D. D. Blankenship](#), [J. S. Greenbaum](#), 3 others, 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, 3 others, 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, 8 others, and D. D. Blankenship, 2013, Deep troughs dissect the Marie Byrd Land subglacial highland: Initial results of the GIMBLE survey, *WAIS Workshop 2013* | 6 JSG student coauthors

### 2012 (7 abstracts):

■ 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, 11 others, 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, 3 others, 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, 3 others, 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, 7 others, and D. Blankenship, 2012, New Aerogeophysical Observations of the East Antarctic Coastline, *XXXII SCAR and Open Science Conference* | JSG student lead

### 2011 (1 abstract):

■ 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 abstracts):

■ Young, D. A., D. D. Blankenship, S. D. Kempf, 2 others, 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, 5 others, 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, 7 others, and the ICECAP 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 abstracts):

- **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**, 2 others, 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, 9 others, 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 abstracts):

- Holt, J. W., D. D. Blankenship, F. Ferraccioli, 3 others, 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, 2 others, 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 abstracts):

- **Young, D. A.**, D. D. Blankenship, J. W. Holt, 3 others, 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 abstract):

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

### 2003 (1 abstract):

- **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 abstracts):

- **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 abstracts):**

- **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 abstracts):**

- **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*

**Datasets (45)**

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

**2025 (6 datasets):**

- Yan, S., D. D. Blankenship, A. Vega Gonzalez, 2 others, and **D. A. Young**, 2025, Basal Ice Unit Thickness Mapped by the NSF COLDEX MARFA Ice Penetrating Radar, , 10.15784/601912, | 2 *JSG student coauthors*
- **Young, D. A.**, J. D. Paden, J. S. Greenbaum, 6 others, and S. D. Kempf, 2025, COLDEX VHF MARFA Open Polar Radar radargrams, , 10.18738/T8/NEF2XM, | 2 *JSG student coauthors*
- **Young, D.**, G. Ng, and S. D. Kempf, 2025, NSF COLDEX/Open Polar Radar Example Delay Doppler Classification of Englacial Reflectors, , 10.18738/T8/DM10IG,
- **Young, D. A.**, J. P. Paden, S. Yan, 6 others, and D. D. Blankenship, 2025, NSF COLDEX Ice Penetrating Radar Derived Grids of the Southern Flank of Dome C, , 10.18738/T8/M77ANK, | 2 *JSG student coauthors*
- **Young, D.**, M. E. Kerr, S. Singh, 4 others, and D. D. Blankenship, 2025, NSF COLDEX 2022-23 Level 2 Basal Specularity Content Profiles, , 10.18738/T8/6T5JS6, | 2 *JSG student coauthors*
- **Young, D.**, M. E. Kerr, S. Singh, 4 others, and D. D. Blankenship, 2025, NSF COLDEX 2023-24 Level 2 Basal Specularity Content Profiles, , 10.18738/T8/KHUT1U, | 2 *JSG student coauthors*

**2024 (9 datasets):**

- **Young, D. A.**, D. D. Blankenship, J. S. Greenbaum, 9 others, and S. Kempf, 2024, Geophysical Investigations of Marie Byrd Land Lithospheric Evolution (GIMBLE) Airborne VHF Radar Transects: 2012/2013 and 2014/2015, , 10.18738/T8/BMXUHX,
- **Young, D. A.**, D. D. Blankenship, J. Greenbaum, 4 others, and K. Chan, 2024, NSF COLDEX Raw MARFA Ice Penetrating Radar data, , 10.15784/601768, | 1 *JSG student coauthor*
- Richter, T. G., A. Rutishauser, D. P. Buhl, 2 others, and D. D. Blankenship, 2024, SEARCH<sup>Arctic</sup> CMG GT-2A Gravimeter Level 2 Geolocated Free Air Gravity Disturbance Transect Data, , 10.18738/T8/OQWRKP,
- Rutishauser, A., D. D. Blankenship, A. S. Criscitiello, 6 others, and N. S. Wolfenbarger, 2024, SEARCH<sup>Arctic</sup> Level 2 Geometrics 823A Cesium Magnetometer Geolocated Magnetic Anomaly Transect Data, , 10.18738/T8/EJONHJ,
- **Young, D. A.**, G. Ng, M. E. Kerr, 5 others, and D. D. Blankenship, 2024, NSF COLDEX 2023-24 Riegl Laser Altimeter Level 2 Geolocated Surface Elevation Triplets, , 10.18738/T8/PNBFOL, | 2 *JSG student coauthors*
- **Young, D. A.**, D. P. Buhl, J. S. Greenbaum, 6 others, and S. D. Kempf, 2024, NSF COLDEX 2022-23 Riegl Laser Altimeter Level 2 Geolocated Surface Elevation Triplets, , 10.18738/T8/99IEOG, | 2 *JSG student coauthors*
- **Young, D. A.**, J. D. Paden, J. S. Greenbaum, 7 others, and S. D. Kempf, 2024, COLDEX Open Polar Radar



MARFA Airborne Radar Data, , 10.18738/T8/J38CO5, | 2 *JSG student coauthors*

■ **Young, D. A.**, S. Singh, M. E. Kerr, 2 others, and D. D. Blankenship, 2024, COLDEX Unfocused Airborne VHF Radar Transects: 2023-2024 South Pole Field Season, , 10.18738/T8/FV6VNT, | 2 *JSG student coauthors*

■ **Young, D. A.**, J. S. Greenbaum, M. E. Kerr, 6 others, and D. D. Blankenship, 2024, COLDEX Unfocused Airborne VHF Radar Transects: 2022-2023 South Pole Field Season, , 10.18738/T8/XPMLCC, | 2 *JSG student coauthors*

### 2023 (2 datasets):

■ Sanderson, R. J., N. Ross, K. Winter, 3 others, and **D. A. Young**, 2023, Dated radar stratigraphy between Dome A and South Pole, East Antarctica, derived from AGAP North PASIN (2008-2009) and PolarGAP PASIN2 (2015-2016) surveys, , 10.5285/cfab639-991a-422f-9caa-7793c195d316,

■ **Young, D. A.**, D. P. Buhl, J. S. Greenbaum, 6 others, and S. D. Kempf, 2023, 2022 COLDEX Riegl Laser Altimeter L2 Geolocated Surface Elevation Triplets, , 10.18738/T8/99IEOG, | 3 *JSG student coauthors*

### 2021 (5 datasets):

■ Chu, W., A. M. Hilger, R. Culberg, 5 others, and D. G. Vaughan, 2021, Radar Sounding Observations of the Amundsen Sea Embayment, 2004-2005, , 10.15784/601436, None

■ **Young, D.**, J. Roberts, D. Blankenship, 3 others, and M. Frezzotti, 2021, ICECAP radargrams in support of the international old ice search at Dome C - 2016,, , 10.26179/5wkf-7361, | 1 *JSG student coauthor*

■ **Young, D. A.**, D. D. Blankenship, J. Roberts, 3 others, and D. Schroeder, 2021, ICECAP Basal Interface Specularity Content Profiles: IPY and OIB, , 10.15784/601371,

■ Beem, L. H., **D. A. Young**, J. Greenbaum, 4 others, and S. Bo, 2021, Titan Dome, East Antarctica, Aerogeophysical Survey, , 10.15784/601437, | 1 *JSG student coauthor*

### 2020 (3 datasets):

■ Benham, T. J., P. Christoffersen, J. A. Dowdeswell, 3 others, and S. J. Palmer, 2020, Airborne geophysical data from the Queen Elizabeth Islands, Canadian Arctic, 2014, , 10.5285/D31550DE-13C2-4779-AA10-9E0A43BBEB1A,

■ Cavitte, M. G. P., **D. A. Young**, R. Mulvaney, 11 others, and D. D. Blankenship, 2020, Ice-penetrating radar internal stratigraphy over Dome C and the wider East Antarctic Plateau, , 10.15784/601411, | *JSG student lead, JSG 1 student coauthors*

■ **Young, D. A.**, J. Roberts, D. D. Blankenship, 10 others, and C. Ritz, 2020, ICECAP: High resolution survey of the Little Dome C region in support of the IPICS Old Ice goal, , 10.15784/601355, | 2 *JSG student coauthors*

### 2018 (1 dataset):

■ Blankenship, D., J. Roberts, **J. Greenbaum**, 3 others, and **L. Beem**, 2018, EAGLE/ICECAP II RADARGRAMS, , 10.26179/5bcff4afc287d, | 2 *JSG postdocs coauthor*

### 2017 (8 datasets):

■ Blankenship, D. D., S. D. Kempf, **D. A. Young**, 9 others, and M. J. Siegert., 2017, IceBridge HiCARS 2 L1B Time-Tagged Echo Strength Profiles, , 10.5067/0I7PFBVQOGO5, | *JSG postdoc coauthor*

■ Blankenship, D. D., S. D. Kempf, **D. A. Young**, 9 others, and J. W. Holt, 2017, IceBridge HiCARS 1 L1B Time-Tagged Echo Strength Profiles, , 10.5067/W2KXX0MYNJ9G, | *JSG postdoc coauthor*

■ **Young, D. A.**, D. D. Blankenship, S. D. Kempf, 2 others, and E. M. Powell, 2017, Ice thickness and related data over central Marie Byrd Land, West Antarctica (GIMBLE.GR2HI2), , 10.15784/601001, | 2 *JSG student coauthors*

■ Young, D. A., E. Quartini, and D. D. Blankenship, 2017, Magnetic anomaly data over central Marie Byrd Land, West Antarctica (GIMBLE.GMGEO2), , 10.15784/601002, | 1 JSG student coauthor

■ Young, D. A., T. G. Richter, E. M. Powell, E. Quartini, and D. D. Blankenship, 2017, Gravity disturbance data over central Marie Byrd Land, West Antarctica (GIMBLE.GGCMG2), , 10.15784/601003, | 1 JSG student coauthor

■ Golynsky, A. V., D. A. Golynsky, F. Ferraccioli, 27 others, and J. Hong, 2017, ADMAP-2: Magnetic Anomaly Map of the Antarctic, , 10.22663/ADMAP.V2, | 1 JSG student coauthor

■ Blankenship, D. D., S. D. Kempf, D. A. Young, 9 others, and M. J. Siegert, 2017, IceBridge HiCARS 1 L2 Geolocated Ice Thickness, , 10.5067/F5FGUT9F5089, | JSG postdoc coauthor

■ Blankenship, D. D., S. D. Kempf, D. A. Young, 9 others, and M. J. Siegert., 2017, IceBridge HiCARS 2 L2 Geolocated Ice Thickness, , 10.5067/9EBR2T0VXUDG, | JSG postdoc coauthor

### 2016 (1 dataset):

■ Scheinert, M., F. Ferraccioli, J. Schwabe, 11 others, and T. Richter, 2016, Antarctic free-air and complete Bouguer gravity anomaly grid, , 10.1594/PANGAEA.848168,

### 2014 (3 datasets):

■ Blankenship, D. D., D. A. Young, S. D. Kempf, 3 others, and J. L. Roberts, 2014, ICECAP HiCARS 2 L1B Geolocated Radar Records, , 10.5067/GLKDY1Q6HIMP, | 2 JSG student coauthors

■ Blankenship, D. D., D. A. Young, T. G. Richter, and J. S. Greenbaum., 2014, IceBridge CMG GT-1A Gravimeter L2 Geolocated Free Air Gravity Disturbances, , 10.5067/3X4CIKKSQRU, | 1 JSG student coauthor

■ Blankenship, D. D., D. A. Young, S. D. Kempf, 3 others, and J. L. Roberts, 2014, ICECAP HiCARS 1 L1B Geolocated Radar Records, , 10.5067/W2KXX0MYNJ9G, | 2 JSG student coauthors

### 2013 (3 datasets):

■ Fretwell, P., H. D. Pritchard, D. G. Vaughan, 56 others, and A. Zirizzotti, 2013, BEDMAP2 - Ice thickness, bed and surface elevation for Antarctica - gridding products, , 10.5194/tc-7-375-2013,

■ Blankenship, D. D., S. D. Kempf, and D. A. Young., 2013, IceBridge CMG 1A Dynamic Gravity Meter Time-Tagged L1B Vertical Accelerations, ,

■ Blankenship, D. D., D. A. Young, L. E. Lindzey, and S. D. Kempf, 2013, IceBridge Merged Photon Counting Lidar/Profiler Surface Slope and Elevations, , | 1 JSG student coauthor

### 2012 (2 datasets):

■ Blankenship, D. D., D. A. Young, and S. D. Kempf, 2012, IceBridge Riegl Laser Altimeter L2 Geolocated Surface Elevation Triplets, , 10.5067/JV9DENETK13E,

■ Blankenship, D. D., D. A. Young, J. W. Holt, and S. D. Kempf, 2012, AGASEA Ice Thickness Profile Data from the Amundsen Sea Embayment, Antarctica, , 10.7265/N5W95730,

### 2011 (1 dataset):

■ Blankenship, D. D., S. D. Kempf, and D. A. Young, 2011, IceBridge Geometrics 823A Cesium Magnetometer L2 Geolocated Magnetic Anomalies, , 10.5067/TO7WLC72UMAQ,

### 2008 (1 dataset):

■ Young, D. A., S. D. Kempf, D. D. Blankenship, J. W. Holt, and D. L. Morse, 2008, Airborne Laser Altimetry of the Thwaites Glacier Catchment, West Antarctica, , 10.7265/N5HD7SK8,