

Duncan A. Young

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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	Ressearch 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

Publications Summary

Accepted papers over the last three years: 21 total; 7 as one of the first three authors

4 JSG student lead; 10 coauthorships

1 intern lead; 1 coauthorships

1 JSG postdoc lead; 2 coauthorships

Presentations over the last three years: 57 total; 36 as one of the first three authors

22 JSG student lead; 77 coauthorships

1 intern lead; 2 coauthorships

2 JSG postdoc lead; 5 coauthorships

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

Papers in Review

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

In review (4 papers):

- Wolfenbarger, N. S., D. D. Blankenship, **D. A. Young**, K. M. Scanlan, C. Chivers, D. Findlay, G. B. Steinbrügge, K. Chan, C. Grima, K. S. Soderlund and D. M. Schroeder, in review, Radar Characterization of Salt Layers in Europa's Ice Shell as a Window into Critical Ice-Ocean Exchange Processes, *Geophysical*

Research Letters

- Sanderson, R. J., N. Ross, K. Winter, R. G. Bingham, S. L. Callard, T. A. Jordan and **D. A. Young**, in review, Dated radar-stratigraphy between Dome A and South Pole, East Antarctica: old ice potential and ice sheet history, *Journal of Glaciology*
- Killingbeck, S., M. Unsworth, **D. A. Young**, A. Rutishauser, S. Yan, L. H. Beem, T. G. Richter, D. D. Blankenship, A. Dubnick, A. Criscitiello, Z. Vestrum, J. Greenbaum and C. Dow, in review, Integrating gravity, magnetic and magnetotelluric data over Devon Ice Cap, Canadian Arctic, to estimate the subglacial geology, *Journal of Geophysical Research (Solid Earth)*
- Blankenship, D. D., A. Moussessian, E. Chapin, **D. A. Young**, G. W. Patterson, J. J. Plaut, A. P. Freedman, D. M. Schroeder, C. Grima, G. Steinbrügge, K. M. Soderlund, T. Ray, T. G. Richter, L. Jones-Wilson, N. S. Wolfenbarger, K. M. Scanlan, C. Gerekos, K. Chan, I. Seker, M. S. Haynes, A. C. B. Mlinar, L. Bruzzone, B. A. Campbell, L. M. Carter, C. Elachi, Y. Gim, A. Hérique, H. Hussmann, W. Kofman, W. S. Kurth, M. Mastrogiovanni, W. B. McKinnon, J. M. Moore, F. Nimmo, C. Paty, D. Plettemeier, B. E. Schmidt, M. Y. Zolotov, P. M. Schenk, S. Collins, H. Figueroa, M. Fischman, E. Tardiff, A. Berkun, M. Paller, J. P. Hoffman, A. Kurum, G. Sadowy, K. B. Wheeler, E. Decrossas, Y. Hussein, C. Jin, F. Boldissar, N. Chamberlain, B. Hernandez, E. Maghsoudi, J. Mihaly, S. Worel, V. Singh, K. Pak, J. Tanabe, R. Johnson, M. Ashtijou, T. Alemu, M. Burke, B. Custodero, M. C. Tope, D. Hawkins, K. Aaron, G. T. Delory, P. S. Turin, D. L. Kirchner, K. Srinivasan, J. Xie, B. Ortloff, I. Tan, T. Noh, D. Clark, V. Duong, S. Joshi, J. Lee, E. Merida, R. Akbar, X. Duan, I. Fenni, M. Sanchez-Barbetta, C. Parashare, D. C. Howard, J. Newman, M. G. Cruz, N. J. Barabas, A. Amirahmadi, B. Palmer, R. S. Gawande, G. Milroy, R. Roberti, F. E. Leader, R. D. West, J. Martin, V. Venkatesh, V. Adumitroaie, C. Rains, C. Quach, J. E. Turner, C. M. O'Shea, S. D. Kempf, G. Ng, D. P. Buhl and T. J. Urban, in review, Radar for Europa Assessment and Sounding: Ocean to Near-surface (REASON), *Space Science Reviews*

Papers Published or Accepted (108)

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

2024 (2 papers):

- Daubar, I. J., A. G. Hayes, G. C. Collins, K. L. Craft, J. A. Rathbun, J. R. Spencer, D. Y. Wyrick, M. T. Bland, A. G. Davies, C. M. Ernst, S. M. Howell, E. J. Leonard, A. S. McEwen, J. M. Moore, C. B. Phillips, L. M. Prockter, L. C. Quick, J. E. C. Scully, J. M. Soderblom, S. M. Brooks, M. Cable, M. E. Cameron, K. Chan, C. J. Chivers, M. Choukroun, C. J. Cochrane, S. Diniega, A. J. Dombard, C. M. Elder, C. Gerekos, C. Glein, T. K. Greathouse, C. Grima, M. S. Gudipati, K. P. Hand, C. Hansen, P. Hayne, M. Hedman, K. Hughson, X. Jia, J. Lawrence, H. M. Meyer, K. Miller, R. Parekh, G. W. Patterson, D. M. Persaud, S. Piqueux, K. D. Rutherford, K. M. Scanlan, P. Schenk, B. Schmidt, D. Schroeder, G. Steinbrügge, A. Stern, G. Tobie, P. Withers, **D. A. Young**, B. Buratti, H. Korth, D. Senske and R. Pappalardo, 2024, Planned Geological Investigations of the Europa Clipper Mission, *Space Science Reviews*, 220, pp. 18, 10.1007/s11214-023-01036-z
- Geyer, A., A. D. R. J. L. Smellie, M. V. W. de Vries, K. S. Panter, A. Martin, J. Cooper, **D. Young**, M. Pompilio, P. R. Kyle and D. Blankenship, accepted, Volcanism in Antarctica: An assessment of the present state of research and future directions, *Journal of Volcanology and Geothermal Research*

2023 (5 papers):

- Jamieson, S. S. R., N. Ross, G. J. G. Paxman, F. J. Clubb, **D. A. Young**, S. Yan, J. Greenbaum, D. D. Blankenship 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, G. Tobie, J. B. Biersteker, **D. Young**, R. S. Park, G. Steinbrügge, F. Nimmo, S. M. Howell, J. C. Castillo-Rogez, M. L. Cable, J. N. Abrahams, M. T. Bland, C.

Chivers, C. J. Cochrane, A. J. Dombard, C. Ernst, A. Genova, **C. Gerekos**, C. Glein, C. D. Harris, H. C. F. C. Hay, P. O. Hayne, M. Hedman, H. Hussmann, X. Jia, K. Khurana, W. S. Kiefer, R. Kirk, M. Kivelson, J. Lawrence, E. J. Leonard, J. I. Lunine, E. Mazarico, T. B. McCord, A. McEwen, C. Paty, L. C. Quick, C. A. Raymond, K. D. Retherford, L. Roth, A. Rymer, J. Saur, K. Scanlan, D. M. Schroeder, D. A. Senske, W. Shao, K. Soderlund, E. Spiers, M. J. Styczinski, P. Tortora, S. D. Vance, M. N. Villarreal, B. P. Weiss, J. H. Westlake, P. Withers, **N. Wolfenbarger**, B. Buratti, H. Korth, R. T. Pappalardo 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

- Bodart, J. A., R. G. Bingham, **D. A. Young**, J. A. MacGregor, D. W. Ashmore, E. Quartini, A. S. Hein, D. G. Vaughan and D. D. Blankenship, 2023, High mid-Holocene accumulation rates over West Antarctica inferred from a pervasive ice-penetrating radar reflector, *The Cryosphere Discussions*, 17, 10.5194/tc-17-1497-2023
- Chan, K., C. Grima, A. Rutishauser, **D. A. Young**, R. Culberg 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, H. Pritchard, J. L. Bamber, R. Bell, C. Bianchi, R. Bingham, D. D. Blankenship, D. Callens, G. Casassa, G. Catania, K. Christianson, H. Conway, H. Corr, X. Cui, D. Damaske, V. Damn, R. Drews, G. Eagles, O. Eisen, F. Ferraccioli, R. Forsberg, S. Franke, S. Fujita, Y. Gim, P. Gogineni, J. Greenbaum, B. Hills, R. Hindmarsh, P. Holmlund, N. Holschuh, J. Holt, A. Humbert, R. Jacobel, D. Janssen, A. Jenkins, W. Jokat, T. Jordan, E. King, J. Kohler, W. Krabill, K. Langley, J. Lee, G. Leitchenkov, C. Leuschen, B. Luyendyk, J. MacGregor, E. MacKie, K. Matsuoka, M. Morlighem, J. Mouginot, F. Nitsche, Y. Nogi, O. Nost, J. Paden, F. Pattyn, S. Popov, M. Riger-Kusk, E. Rignot, D. Rippin, A. Rivera, N. Ross, A. Ruppel, D. Schroeder, M. Siegert, A. Smith, D. Steinhage, M. Studinger, B. Sun, I. Tabacco, B. Tinto, S. Urbini, D. Vaughan, B. Welch, D. Wilson, **D. Young** 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, M. R. Perry, S. P. Gulick, **R. C. Miller**, A. T. Russell, K. M. Scanlan, G. Steinbrugge, **D. A. Young**, S. D. Kempf, G. Ng, D. Buhl and D. D. Blankenship, 2022, Investigating the Martian Surface at Decametric Scale: Population, Distribution and Dimension of Hetereogeneities 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, **D. A. Young**, L. Li, A. Rutishauser, J. Guo, J. L. Roberts, T. D. van Ommen, M. J. Siegert 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**, **N. S. Wolfenbarger**, L. H. Beem, M. L. Skidmore, A. Dubnick 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, K. M. Scanlan, A. Stark, **D. A. Young**, C. Grima, G. Ng, D. P. Buhl, J. R. Voigt, T. Roatsch 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 (8 papers):

- Schroeder, D. M., N. L. Bienert, R. Culberg, E. J. MacKie, T. O. Teisberg, W. Chu and **D. A. Young**, 2021, Glaciological Constraints on Link Budgets for Orbital Radar Sounding of Earth's Ice Sheets, in *2021 IEEE International Geoscience and Remote Sensing Symposium IGARSS*, eds: na, 10.1109/IGARSS47720.2021.9553237
- Chu, W., A. M. Hilger, R. Culberg, D. M. Schroeder, T. M. Jordan, H. Seroussi, **D. A. Young**, D. D. Blankenship and D. G. Vaughan, 2021, Multi-System Synthesis of Radar Sounding Observations of the Amundsen Sea Sector from the 2004-2005 Field Season, *Journal of Geophysical Research: Earth Surface*, 126, e2021JF006296, 10.1029/2021JF006296
- Cavitte, M. G. P., **D. A. Young**, R. Mulvaney, C. Ritz, J. S. Greenbaum, G. Ng, S. D. Kempf, E. Quartini, G. R. Muldoon, J. Paden, M. Frezzotti, J. L. Roberts, C. R. Tozer, D. M. Schroeder and D. D. Blankenship, 2021, A detailed radiostratigraphic data set for the central East Antarctic Plateau spanning from the Holocene to the mid-Pleistocene, *Earth System Science Data*, 13, 10.5194/essd-13-4759-2021 | *JSG student lead, JSG 1 student coauthors*
- MacGregor, J. A., L. N. Boisvert, B. Medley, A. A. Petty, J. P. Harbeck, R. E. Bell, J. B. Blair, E. Blanchard-Wrigglesworth, E. M. Buckley, M. S. Christoffersen, J. R. Cochran, B. M. Csathó, E. L. De Marco, R. T. Dominguez, M. A. Fahnestock, S. L. Farrell, S. P. Gogineni, J. S. Greenbaum, C. M. Hansen, M. A. Hofton, J. W. Holt, K. C. Jezek, L. S. Koenig, N. T. Kurtz, R. Kwok, C. F. Larsen, C. J. Leuschen, S. S. Manizade, S. Martin, T. A. Neumann, S. M. Nowicki, J. D. Paden, J. A. Richter-Menge, E. J. Rignot, F. Rodríguez-Morales, M. R. Siegfried, B. E. Smith, J. G. Sonntag, M. Studinger, K. J. Tinto, M. Truffer, T. P. Wagner, J. E. Woods, **D. A. Young** and J. K. Yungel, 2021, The scientific legacy of NASA's Operation IceBridge, *Reviews of Geophysics*, 10.1029/2020RG000712
- Scanlan, K. M., **D. A. Young**, G. B. Steinbrügge, S. D. Kempf, C. Grima and D. D. Blankenship, 2021, Delay Doppler SAR Focusing and Quantitative Quality Control of Future REASON Data, *IEEE 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, D. D. Blankenship, M. G. P. Cavitte, J. Guo and S. Bo, 2021, Aerogeophysical characterization of Titan Dome, East Antarctica, and potential as an ice core target, *The Cryosphere*, 15, 10.5194/tc-15-1719-2021 | *1 JSG student coauthor*
- Castelletti, D., D. M. Schroeder, T. M. Jordan and **D. A. 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, J. S. Greenbaum, L. M. Jong, **D. A. Young** and D. D. Blankenship, 2020, A Magnetic Data Correction Workflow for Sparse, Four-Dimensional Data, *Journal of Geophysical Research: Solid Earth*, 125, pp. e2020JB019825, 10.1029/2020JB019825
- Steinbrügge, G. B., J. R. Voigt, N. S. Wolfenbarger, C. Hamilton, K. S. Soderlund, **D. A. Young**, D. D. Blankenship, S. Vance and D. M. Schroeder, 2020, Brine Migration and Impact-Induced Cryovolcanism on Europa, *Geophysical Research Letters*, 47, pp. 1-10, 10.1029/2020GL090797 | *JSG postdoc lead; 1 student coauthor*
- Cui, X., H. Jeofry, J. S. Greenbaum, J. Guo, L. Li, L. E. Lindzey, F. A. Habbal, W. Wei, **D. A. Young**, N. Ross, M. Morlighem, L. M. Jong, J. L. Roberts, D. D. Blankenship, S. Bo and M. J. Siegert, 2020, Bed topography of Princess Elizabeth Land in East Antarctica, *Earth System Science Data*, 12, 10.5194/essd-12-2765-2020 | *2 JSG student coauthors*
- Wei, W., D. D. Blankenship, J. S. Greenbaum, N. Gourmelen, C. F. Dow, T. G. Richter, **C. A. Greene**, **D. A. Young**, S. Lee, T. Kim, W. S. Lee and K. M. Assmann, 2020, Getz Ice Shelf melt enhanced by freshwater

- discharge from beneath the West Antarctic Ice Sheet, *The Cryosphere*, 14, pp. 1399–1408, 10.5194/tc-14-1399-2020 | JSG student lead
- Gerekos, C., C. Grima, **G. B. Steinbrügge**, S. Thakur, **K. M. Scanlan**, **D. A. Young**, L. Bruzzone and D. D. Blankenship, 2020, Martian roughness analogues of Europan terrains for radar sounder investigations, *Icarus*, 10.1016/j.icarus.2020.114197 | 2 JSG postdocs coauthor
 - **Scanlan, K. M.**, **A. Rutishauser**, **D. A. Young** and D. D. Blankenship, 2020, Interferometric Discrimination of Cross-Track Bed Clutter in Ice-Penetrating Radar Sounding Data, *Annals of Glaciology*, 61, pp. 68–73, 10.1017/aog.2020.20 | JSG postdoc lead with 1 postdoc coauthors
 - Roberts, J. L., L. M. Jong, F. S. McCormack, M. A. Curran, A. D. Moy, D. Etheridge, J. S. Greenbaum, **D. A. Young**, S. J. Phipps, W. Xue, T. D. van Ommen, D. D. Blankenship and M. J. Siegert, 2020, Integral correlation for uneven and differently sampled data: Application to the Law Dome Antarctic climate record, *Scientific Reports*, 10, pp. 17477, 10.1038/s41598-020-74532-9
 - Lindzey, L. E., L. H. Beem, **D. A. Young**, E. Quartini, D. D. Blankenship, C. Lee, W. S. Lee, J. I. Lee and J. Lee, 2020, Aerogeophysical characterization of an active subglacial lake system in the David Glacier catchment, Antarctica, *The Cryosphere*, 14, pp. 2217–2233, 10.5194/tc-14-2217-2020 | JSG student lead, JSG 1 student coauthors
 - Dow, C. F., F. S. McCormack, **D. A. Young**, J. S. Greenbaum, J. L. Roberts and D. D. Blankenship, 2020, Totten Glacier subglacial hydrology determined from geophysics and modeling, *Earth and Planetary Science Letters*, 531, 10.1016/j.epsl.2019.115961
 - **Steinbrügge, G.**, J. R. Voigt, D. Schroeder, A. Stark, M. S. Haynes, **K. M. Scanlan**, C. Hamilton, **D. A. Young**, H. Hussmann, C. Grima and D. D. Blankenship, 2020, The Surface Roughness of Europa derived from Galileo Stereo Images, *Icarus*, 343, 10.1016/j.icarus.2020.113669 | JSG postdoc lead with 1 postdoc coauthors

2019 (7 papers):

- Morlighem, M., E. Rignot, T. Binder, D. Blankenship, R. Drews, G. Eagles, O. Eisen, F. Ferraccioli, R. Forsberg, P. Fretwell, V. Goel, **J. S. Greenbaum**, H. Gudmundsson, J. Guo, V. Helm, C. Hofstede, I. Howat, A. Humbert, W. Jokat, N. B. Karlsson, W. S. Lee, K. Matsuoka, R. Millan, J. Mouginot, J. Paden, F. Pattyn, J. Roberts, S. Rosier, A. Ruppel, H. Seroussi, E. C. Smith, D. Steinhage, B. Sun, M. R. v. d. Broeke, T. D. van Ommen, M. van Wessem and **D. A. Young**, 2019, Deep glacial troughs and stabilizing ridges unveiled beneath the margins of the Antarctic ice sheet, *Nature Geoscience*, 10.1038/s41561-019-0510-8 | JSG postdoc coauthor
- **Scanlan, K. M.**, C. Grima, **G. Steinbrügge**, S. D. Kempf, **D. A. Young** and D. D. Blankenship, 2019, Geometric determination of ionospheric total electron content from dual frequency radar sounding measurements, *Planetary and Space Science*, 10.1016/j.pss.2019.07.010 | JSG postdoc lead with 1 postdoc coauthors
- Grima, C., I. Koch, **J. S. Greenbaum**, K. S. Soderlund, D. D. Blankenship, **D. A. Young**, D. M. Schroeder and S. Fitzsimons, 2019, Surface and Basal Boundary Conditions at the Southern McMurdo and Ross Ice Shelves, Antarctica, *Journal of Glaciology*, 65, pp. 675–688, 10.1017/jog.2019.44 | JSG postdoc coauthor
- Wang, B., B. Sun, J. Wang, **J. Greenbaum**, J. Guo, L. Lindzey, X. Cui, **D. A. Young**, D. D. Blankenship and M. J. Siegert, 2019, Removal of ‘strip noise’ in airborne radio-echo sounding data using combined wavelet and 2D DFT filtering, *Annals of Glaciology*, 10.1017/aog.2019.4 | 2 JSG student and postdoc coauthors
- Paxman, G. J. G., S. S. R. Jamieson, F. Ferraccioli, M. J. Bentley, N. Ross, A. B. Watts, G. Leitchenkov, E. Armadillo and **D. Young**, 2019, Lithospheric flexure and landscape evolution in the Wilkes Subglacial Basin and Transantarctic Mountains of East Antarctica, *Journal of Geophysical Research*, 10.1029/2018JF004705
- McCormack, F. S., J. L. Roberts, L. M. Jong, **D. A. Young** and **L. H. Beem**, 2019, A short note on DEM smoothing and driving stresses, *Polar Record*, 38, 3498, 10.33265/polar.v38.3498 | JSG postdoc coauthor
- Harcourt, W. D., S. J. Palmer, D. T. Mansell, A. Le Brocq, O. Bartlett, N. Gourmelen, P. Tepes, J. A. Dowdeswell, D. D. Blankenship and **D. A. Young**, 2019, Subglacial controls on dynamic thinning at

Trinity-Wykeham Glacier, Nunavut, Canada, *International Journal of Remote Sensing*, 10.1080/01431161.2019.1658238

2018 (8 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, D. A. Golynsky, R. R. B. von Frese, D. A. Young, D. D. Blankenship, J. W. Holt, S. V. Ivanov, A. V. Kiselev, V. N. Masolov, G. Eagles, K. Gohl, W. Jokat, D. Damaske, C. Finn, A. Aitken, R. E. Bell, E. Armadillo, T. A. Jordan, J. S. Greenbaum, E. Bozzo, G. Caneva, R. Forsberg, M. Ghidella, J. Galindo-Zaldivar, F. Bohoyo, Y. M. Martos, Y. Nogi, E. Quartini and H. R. Kim, 2018, New Magnetic Anomaly Map of the Antarctic, *Geophysical Research Letters*, 45, 10.1029/2018GL078153 | 2 JSG student and postdoc coauthors
- Muldoon, G. R., C. S. Jackson, D. A. Young and D. D. Blankenship, 2018, Bayesian estimation of englacial radar chronology in Central West Antarctica, *Dynamics and Statistics of the Climate System*, 3, pp. dzy004, 10.1093/climatesystem/dzy004 | JSG student lead
- Passalacqua, O., M. G. P. Cavitte, O. Gagliardini, F. Gillet-Chaulet, F. Parrenin, C. Ritz and D. A. Young, 2018, Brief communication: "Oldest Ice" patches diagnosed 37 km southwest of Dome C, East Antarctica, *The Cryosphere*, 12, 10.5194/tc-12-2167-2018 | 1 JSG student coauthor
- Rutishauser, A., D. D. Blankenship, M. Sharp, M. L. Skidmore, J. S. Greenbaum, C. Grima, D. M. Schroeder, J. A. Dowdeswell and D. A. Young, 2018, Discovery of a hypersaline subglacial lake complex beneath Devon Ice Cap, Canadian Arctic, *Science Advances*, 4, 4, 10.1126/sciadv.aar4353 | JSG postdoc lead with 1 postdoc coauthor
- Van Liefferinge, B., F. Pattyn, M. G. Cavitte, N. B. Karlsson, D. A. Young, J. Sutter and O. Eisen, 2018, Promising Oldest Ice sites in East Antarctica based on thermodynamical modelling, *The Cryosphere*, 12, 10.5194/tc-2017-276 | 1 JSG student coauthor
- Dow, C. F., W. S. Lee, J. S. Greenbaum, C. A. Greene, D. D. Blankenship, K. Poinar, A. L. Forrest, D. A. Young and C. J. Zapp, 2018, Basal channels drive active surface hydrology and transverse ice shelf fracture, *Science Advances*, 4, 6, 10.1126/sciadv.aoa7212 | 2 JSG student and postdoc coauthors
- Cavitte, M. G. P., F. Parrenin, C. Ritz, D. A. Young, D. D. Blankenship, M. Frezzotti and J. L. Roberts, 2018, Stable accumulation patterns around Dome C, East Antarctica, over the last glacial cycle, *The Cryosphere*, 12, 10.5194/tc-12-1401-2018 | JSG student lead

2017 (9 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
- Beem, L. H., M. G. P. Cavitte, D. D. Blankenship, S. P. Carter, D. A. Young, G. R. Muldoon, C. S. Jackson and M. J. Siegert, 2017, Ice-flow reorganization within the East Antarctic Ice Sheet deep interior, *Geological Society, London, Special Publications*, 461, 10.1144/SP461.14 | JSG postdoc lead; 2 student coauthors
- Young, D. A., J. L. Roberts, C. Ritz, M. Frezzotti, E. Quartini, M. G. P. Cavitte, C. R. Tozer, D. Steinhage, S. Urbini, H. F. J. Corr, T. Van Ommen and D. D. Blankenship, 2017, High resolution boundary conditions of an old ice target near Dome C, Antarctica, *The Cryosphere*, 11, 10.5194/tc-11-1897-2017 | 2 JSG student coauthors
- Graham, F. S., J. L. Roberts, B. K. Galton-Fenzi, D. Young, D. Blankenship and M. J. Siegert, 2017, A high-resolution synthetic bed elevation grid of the Antarctic continent, *Earth System Science Data*, 9, pp. 267–279, 10.5194/essd-9-267-2017
- Winter, A., D. Steinhage, E. J. Arnold, D. D. Blankenship, M. G. P. Cavitte, H. F. J. Corr, J. D. Paden, S. Urbini, D. A. Young and O. Eisen, 2017, Comparison of measurements from different radio-echo sounding systems and synchronization with the ice core at Dome C, Antarctica, *The Cryosphere*, 11, pp. 653–668, 10.5194/tc-11-653-2017 | 1 JSG student coauthor

- Roberts, J. L., B. K. Galton-Fenzi, F. S. Paolo, C. Donnelly, D. E. Gwyther, L. Padman, **D. Young**, R. Warner, **J. Greenbaum**, H. A. Fricker, A. J. Payne, S. Cornford, A. Le Brocq, T. van Ommen, D. Blankenship and M. Siegert, 2017, Ocean forced variability of Totten Glacier mass loss, *Geological Society of London, Special Publication*, 461, 10.1144/SP461.6 | *JSG postdoc coauthor*
- Roberts, J., M. Curran, S. Poynter, A. Moya, T. van Ommen, T. Vance, C. Tozer, F. Graham, **D. Young**, C. Plummer, J. Pedro, D. Blankenship and M. Siegert, 2017, Correlation confidence limits for unevenly sampled data, *Computers & Geosciences*, 104, 10.1016/j.cageo.2016.09.011
- Castelletti, D., D. M. Schroeder, S. Hensley, C. Grima, G. Ng, **D. Young**, Y. Gim, L. Bruzzone, A. Moussessian and D. D. Blankenship, 2017, An Interferometric Approach to Cross-Track Clutter Detection in Two Channel VHF Radar Sounders, *IEEE Transactions on Geoscience and Remote Sensing*, 10.1109/TGRS.2017.2721433
- Gillespie, M. K., W. Lawson, W. Rack, B. Anderson, D. D. Blankenship, **D. A. Young** and J. W. Holt, 2017, Geometry and ice discharge of the Darwin-Hatherton glacial system, Transantarctic Mountains, *Journal of Glaciology*, 63, pp. 959–972, 10.1017/jog.2017.60

2016 (13 papers):

- Rutishauser, A., C. Grima, M. Sharp, D. D. Blankenship, **D. A. Young**, F. Cawkwell and J. A. Dowdeswell, 2016, Characterizing near-surface firn using the scattered signal component of the glacier surface return from airborne radio-echo sounding, *Geophysical Research Letters*, 43, pp. 12502–12510, 10.1002/2016GL071230
- Maritati, A., A. R. A. Aitken, **D. A. Young**, J. L. Roberts, D. D. Blankenship and M. J. Siegert, 2016, The tectonic development and erosion of the Knox Subglacial Sedimentary Basin, East Antarctica, *Geophysical Research Letters*, 43, pp. 10,728–10,737, 10.1002/2016GL071063
- Vance, T. R., J. L. Roberts, A. D. Moy, M. A. J. Curran, C. R. Tozer, A. J. E. Gallant, N. J. Abram, T. D. van Ommen, **D. A. Young**, C. Grima, D. D. Blankenship and M. J. Siegert, 2016, Optimal site selection for a high-resolution ice core record in East Antarctica, *Climate of the Past*, 12, pp. 595–610, 10.5194/cp-12-595-2016
- Schroeder, D. M., H. Seroussi, W. Chu and **D. A. Young**, 2016, Adaptively constraining radar attenuation and temperature across the Thwaites Glacier catchment using bed echoes, *Journal of Glaciology*, 10.1017/jog.2016.100
- Grima, C., **J. S. Greenbaum**, E. J. Lopez Garcia, K. M. Soderlund, A. Rosales, D. D. Blankenship and **D. A. Young**, 2016, Radar detection of the brine extent at McMurdo Ice Shelf, Antarctica, and its control by snow accumulation, *Geophysical Research Letters*, 43, pp. 7011–7018, 10.1002/2016GL069524 | 1 *JSG student coauthor*
- Frederick, B. C., **D. A. Young**, D. D. Blankenship, T. G. Richter, S. D. Kempf, F. Ferraccioli and M. J. Siegert, 2016, 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, **D. A. Young**, N. R. Golledge, **J. S. Greenbaum**, D. D. Blankenship and M. J. Siegert, 2016, Repeated large-scale retreat and advance of Totten Glacier indicated by inland bed erosion, *Nature*, 533, pp. 385–389 | 1 *JSG student coauthor*
- Gooch, B. T., **D. A. Young** and D. D. Blankenship, 2016, Potential groundwater and heterogeneous heat source contributions to ice sheet dynamics in critical submarine basins of East Antarctica, *Geochemistry, Geophysics, Geosystems*, 17, pp. 395–409, 10.1002/2015GC006117
- Scheinert, M., F. Ferraccioli, J. Schwabe, R. Bell, M. Studinger, D. Damaske, W. Jokat, N. Aleshkova, T. Jordan, G. Leitchenkov, D. D. Blankenship, T. M. Damiani, **D. Young**, J. R. Cochran and T. D. Richter, 2016, New Antarctic Gravity Anomaly Grid for Enhanced Geodetic and Geophysical Studies in Antarctica, *Geophysical Research Letters*, 43, pp. 600–610, 10.1002/2015GL067439
- Cavitte, M. G. P., D. D. Blankenship, **D. A. Young**, D. M. Schroeder, F. Parrenin, E. Le Meur, J. A. MacGregor and M. J. Siegert, 2016, Deep radiostratigraphy of the East Antarctic Plateau: connecting the Dome C and Vostok ice core sites, *Journal of Glaciology*, 62, pp. 323–334, 10.1017/jog.2016.11 | *JSG student lead*

- Jamieson, S. S. R., N. Ross, J. S. Greenbaum, **D. A. Young**, A. R. Aitken, J. L. Roberts, D. D. Blankenship, B. Sun and M. J. Siegert, 2016, An extensive subglacial lake and canyon system in Princess Elizabeth Land, East Antarctica, *Geology*, 44, pp. 87–90, 10.1130/G37220.1 | 1 JSG student coauthor
- **Young, D. A.**, D. M. Schroeder, D. D. Blankenship, S. D. Kempf and E. Quartini, 2016, The distribution of basal water between Antarctic subglacial lakes from radar sounding, *Philosophical Transactions of the Royal Society A*, 374, pp. 1-21, 10.1098/rsta.2014.0297 | 1 JSG student coauthor
- Aitken, A. R. A., P. G. Betts, **D. A. Young**, D. D. Blankenship, J. L. Roberts and M. J. Siegert, 2016, The Australo-Antarctic Columbia to Gondwana transition, *Gondwana Research*, 29, 10.1016/j.gr.2014.10.019

2015 (3 papers):

- Greenbaum, J. S., D. D. Blankenship, **D. A. Young**, T. G. Richter, J. L. Roberts, A. R. A. Aitken, B. Legresy, D. M. Schroeder, R. C. Warner, T. D. van Ommen and M. J. Siegert, 2015, Ocean access to a cavity beneath Totten Glacier in East Antarctica, *Nature Geosciences*, 8, 10.1038/ngeo2388 | JSG student lead
- Carr, J. R., A. Vieli, C. Stokes, S. Jamieson, S. Palmer, P. Christoffersen, J. Dowdeswell, F. Nick, D. D. Blankenship and **D. A. Young**, 2015, Basal topographic controls on rapid retreat of Humboldt Glacier, northern Greenland, *Journal of Glaciology*, 61, pp. 137-150, 10.3189/2015JoG14J128
- **Young, D. A.**, L. E. Lindzey, D. D. Blankenship, J. S. Greenbaum, A. Garcia de Gorordo, S. D. Kempf, J. L. Roberts, R. C. Warner, T. van Ommen, M. J. Siegert and E. Le Meur, 2015, Land-ice elevation changes from photon counting swath altimetry: First applications over the Antarctic ice sheet, *Journal of Glaciology*, 61, pp. 17-28, 10.3189/2015JoG14J048 | 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. Sacchettini, S. Garambois, E. Berthier, A. S. Drouet, G. Durand, **D. Young**, J. S. Greenbaum, D. D. Blankenship, J. W. Holt, E. Rignot, J. Mouginot, Y. Gim, D. Kirchner, B. de Fleurian, O. Gagliardini and F. Gillet-Chaulet, 2014, Two independent methods for mapping the grounding line of an outlet glacier; example from the Astrolabe Glacier, Terre Adélie, Antarctica, *The Cryosphere*, 8, 10.5194/tc-8-1331-2014 | 1 JSG student coauthor
- Schroeder, D. M., D. D. Blankenship, **D. A. Young** and E. Quartini, 2014, Evidence for elevated and spatially variable geothermal flux beneath the West Antarctic Ice Sheet, *Proceedings of the National Academies of Science*, 111, pp. 9070-9072, 10.1073/pnas.1405184111 | JSG student lead, JSG 1 student coauthors
- Fudge, T., H. B. Conway, G. A. Catania, D. D. Blankenship, K. Christianson, I. R. Joughin, B. Smith, S. D. Kempf, **D. A. Young** and S. 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, P. G. Betts, J. S. Greenbaum, T. G. Richter, J. L. Roberts, D. D. Blankenship and M. J. Siegert, 2014, The subglacial geology of Wilkes Land, East Antarctica, *Geophysical Research Letters*, 41, 10.1002/2014GL059405 | 1 JSG student coauthor
- Wright, A., **D. Young**, J. Bamber, J. Dowdeswell, A. Payne, D. Blankenship and M. Siegert, 2014,

Subglacial hydrological connectivity within the Byrd Glacier catchment, *Journal of Glaciology*, 60,pp. 345–352, 10.3189/2014JoG13J014

• Goff, J. A., E. M. Powell, **D. A. Young** and D. D. Blankenship, 2014, Conditional simulation of Thwaites Glacier bed topography for flow models: Incorporating inhomogeneous statistics and channelized morphology, *Journal of Glaciology*, 60,pp. 635–646, 10.3189/2014JoG13J200 | 1 JSG student coauthor

2013 (5 papers):

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

2012 (4 papers):

- Shepherd, A., E. R. Ivins, G. A. V. R. Barletta, M. J. Bentley, S. Bettadpur, K. H. Briggs, D. H. Bromwich, R. Forsberg, N. Galin, M. Horwath, S. Jacobs, I. Joughin, M. A. King, J. T. M. Lenaerts, J. Li, S. R. M. Ligtenberg, A. Luckman, S. B. Luthcke, M. McMillan, R. Meister, G. Milne, J. Mouginot, A. Muir, J. P. Nicolas, J. Paden, A. J. Payne, H. Pritchard, E. Rignot, H. Rott, L. S. Sørensen, T. A. Scambos, B. Scheuchl, E. J. O. Schrama, B. Smith, A. V. Sundal, J. H. van Angelen, W. J. van de Berg, M. R. van den Broeke, D. G. Vaughan, I. Velicogna, J. Wahr, P. L. Whitehouse, D. J. Wingham, D. Yi, **D. A. Young** and H. J. Zwally, 2012, A Reconciled Estimate of Ice-Sheet Mass Balance, *Science*, 338,pp. 1183–1189
- Golynsky, A., R. Bell, D. Blankenship, D. Damaske, F. Ferraccioli, C. Finn, D. Golynsky, S. Ivanov, W. Jokat, V. Masolov, S. Riedel, R. von Frese and **D. A. Young**, 2012, Air and shipborne magnetic surveys of the Antarctic into the 21st century, *Tectonophysics*, 585, 10.1016/j.tecto.2012.02.017
- Ross, N., R. G. Bingham, H. F. Corr, F. Ferraccioli, T. A. Jordan, A. Le Brocq, D. M. Rippin, **D. A. Young**, D. D. Blankenship and M. J. Siegert, 2012, Steep reverse bed slope at the grounding line of the Weddell Sea sector in West Antarctica, *Nature Geoscience*, 5, 10.1038/ngeo1468
- Wright, A. P., **D. A. Young**, J. L. Roberts, **D. M. Schroeder**, J. L. Bamber, J. A. Dowdeswell, N. W. Young, A. M. Le Brocq, R. C. Warner, A. J. Payne, D. D. Blankenship, T. D. van Ommen and M. J. Siegert, 2012, Evidence of a hydrological connection between the ice divide and ice sheet margin in the Aurora Subglacial Basin, East Antarctica, *Journal of Geophysical Research*, 117, F01033, 10.1029/2011JF002066 | 1 JSG student coauthor

2011 (3 papers):

- Carter, S. P., H. A. Fricker, D. D. Blankenship, J. V. Johnson, W. H. Lipscomb, S. F. Price and **D. A. Young**, 2011, Modeling 5 years of subglacial lake activity in the MacAyeal Ice Stream (Antarctica) catchment through assimilation of ICESat laser altimetry, *Journal of Glaciology*, 57, pp. 1098-1112, 10.3189/00221431179843421
- **Young, D. A.**, A. P. Wright, J. L. Roberts, R. C. Warner, N. W. Young, J. S. Greenbaum, D. M. Schroeder, J. W. Holt, D. E. Sugden, D. D. Blankenship, T. D. van Ommen and M. J. Siegert, 2011, A dynamic early East Antarctic Ice Sheet suggested by ice covered fjord landscapes, *Nature*, 474, 10.1038/nature10114 | 2 JSG student coauthors
- Roberts, J. L., R. C. Warner, **D. A. Young**, A. Wright, T. D. van Ommen, D. D. Blankenship, M. Siegert, N. W. Young, I. E. Tabacco, A. Forieri, A. Passerini, A. Zirizzotti and M. Frezzotti, 2011, Refined broad-scale sub-glacial morphology of Aurora Subglacial Basin and East Antarctica derived by an ice-dynamics-based interpolation scheme, *The Cryosphere*, 5, 10.5194/tc-5-551-2011

2009 (3 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**, M. E. Peters, J. W. Holt and M. J. Siegert, 2009, Dynamic distributed drainage implied by the flow evolution of the 1996–1998 Adventure Trench subglacial lake discharge, *Earth and Planetary Science Letters*, 283, pp. 24-37, 10.1016/j.epsl.2009.03.019 | JSG student lead
- Blankenship, D. D., **D. A. Young**, W. Moore and J. C. Moore, 2009, Radar Sounding of Europa's Subsurface Properties and Processes: The View from Earth, in *Europa*, eds: Pappalardo, R. and McKinnon, W. and Khurana, K.

2008 (4 papers):

- Holt, J. W., A. Safaeinili, J. J. Plaut, J. W. Head, R. J. Phillips, R. Seu, S. D. Kempf, P. Choudhary, **D. A. Young**, N. E. Putzig, D. Biccari and Y. Gim, 2008, Radar sounding evidence for buried glaciers in the southern mid-latitudes of Mars, *Science*, 322, 10.1126/science.1164246
- Diehl, T. M., J. W. Holt, D. D. Blankenship, **D. A. Young**, T. A. Jordan and F. Ferraccioli, 2008, First airborne gravity results over the Thwaites Glacier catchment, West Antarctica, *Geochemistry, Geophysics, Geosystems*, 8, Q04011, 10.1029/2007GC001878 | JSG student lead
- **Young, D. A.**, S. D. Kempf, D. D. Blankenship, J. W. Holt and D. L. Morse, 2008, New airborne laser altimetry over the Thwaites Glacier Catchment, West Antarctica, *Geochemistry, Geophysics, Geosystems*, 9, pp. Q06006, 10.1029/2007GC001935
- Chen, J. L., C. J. L. Wilson, B. D. Tapley, D. D. Blankenship and **D. A. Young**, 2008, Antarctic Regional Ice Loss Rates From GRACE, *Earth and Planetary Science Letters*, 266, pp. 140-148, 10.1016/j.epsl.2007.10.057

2007 (3 papers):

- Carter, S. P., D. D. Blankenship, M. E. Peters, **D. A. Young**, J. W. Holt and D. L. Morse, 2007, Radar-based subglacial lake classification in Antarctica, *Geochemistry, Geophysics, Geosystems*, 8, pp. 1-20, 10.1029/2006GC001408 | JSG student lead
- Peters, M. E., D. D. Blankenship, S. P. Carter, **D. A. Young**, S. D. Kempf and J. W. Holt, 2007, Along-track Focusing of Airborne Radar Sounding Data From West Antarctica for Improving Basal Reflection Analysis and Layer Detection, *IEEE Transactions on Geoscience and Remote Sensing*, 45, pp. 2725-2736, 10.1109/TGRS.2007.897416 | 1 JSG student coauthor
- Bingham, R. G., M. J. Siegert, **D. A. Young** and D. D. Blankenship, 2007, Organised flow from the South Pole to the Filchner-Ronne ice shelf: an assessment of balance velocities in interior East Antarctica using

radio-echo sounding data, *Journal of Geophysical Research*, 112, F03S27, 10.1029/2006JF000556

2006 (2 papers):

- Vaughan, D. G., H. F. J. Corr, F. Ferraccioli, N. Frearson, A. O'Hare, D. Mach, J. Holt, D. Blankenship, D. Morse and **D. Young**, 2006, New Boundary Conditions for the West Antarctic Ice Sheet: Subglacial Topography beneath Pine Island Glacier, *Geophysical Research Letters*, 33, L09501, 10.1029/2005GL025588
- Holt, J. W., D. D. Blankenship, D. L. Morse, **D. A. Young**, M. E. Peters, S. D. Kempf, T. G. Richter, D. G. Vaughan and H. Corr, 2006, New boundary conditions for the West Antarctic Ice Sheet: Subglacial topography of the Thwaites and Smith Glacier catchments, *Geophysical Research Letters*, 33, L09502, 10.1029/2005GL025561

2005 (1 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

Mentoring

Graduate Students

I have worked closely with 3 current graduate students (Megan E. Kerr^{*†††}, Shivangini Singh^{*†††}, Kristian Chan^{*}), and 17 past graduate students (Shuia Yan[†](2023), Natalie S. Wolfenbarger(2022), Wei Wei^{*†}(2021), Enrica Quartini^{*††}(2018), Gail R. Muldoon^{*†}(2017), Marie G. P. Cavitte[†](2017), Chad A. Greene^{*†}(2017), Laura E. Lindzey^{*}(2017), Jamin S. Greenbaum^{*†}(2016), Brad C. Gooch[†](2016), Bruce C. Fredrick^{*†}(2015), Dustin M. Schroeder^{*}(2014), Erick Leuro^{*}(2014), Svetlana Burris^{*}(2011), Theresa Damiani^{*}(2008), Sasha P. Carter(2008), Hunter A. Danque^{*}(2006)).

^{*}: worked with in field while in this role, [†]: served on committee, ^{††}: co-supervised, ^{†††}: supervised

Interns

I have worked closely with 3 current interns (Jason Bott, Hoang Chu, Tania Ortiz), and 13 past interns (Alejandra Vega Gonzalez(2023), Daisy Gomez(2021), Miguel Liu-Schiaffini[‡](2021), Mansa Sudunagunta[‡](2020), Madeleine Marie Maylath[‡](2019), Lauren N. Schwartz(2019), Aparna Chandrashekhar[‡](2018), Alyssa D. Jones(2018), Varun Sudunagunta[‡](2018), Cassidy Curra[‡](2015), Blake Karwoski[‡](2015), Elena Arnold[‡](2015), Evelyn M. Powell^{*}(2014)).

^{*}: worked with in field while in this role, [‡]: started as high school student

Postdocs

I have worked closely with 2 current postdocs (Shuia Yan, Christopher Gerekos), and 5 past postdocs (Anja Rutishausher^{*}(2021), Kirk M. Scanlan(2021), Gregor B. Steinbrügge(2020), Jamin S. Greenbaum(2020), Lucas H. Beem^{*}(2019)).

^{*}: worked with in field while in this role

Projects

Active Projects

- Co-I, Institutional Lead, Aerogeophysics Co-Lead on 2019719 '*Center for Oldest Ice Exploration (COLDEX)*', 2021-2026, \$1,784,744, National Science Foundation
- Co-I on AAP 4511 '*ICECAP-EAGLE*', 2019-2025, in kind, Australian Antarctic Program
- 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
- Participant on '*Antarctic Aerogeophysical Data Analysis Gift*', 2019-2024, \$1,700,000, G. Unger Vetlesen Foundation
- Co-PI, Institutional Lead on 2127606 '*Collaborative Research: EarthCube Capabilities: Open Polar Radar (OPoRa) Software and Service*', 2021-2024, \$425,137, National Science Foundation
- Co-PI on '*K-NOW/Thwaites Glacier 2023-24*', 2023-2024, \$150,000, Korean Polar Research Institute

Past Projects

- 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 Zucchelli 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 the Center for Oldest Ice Exploration Executive Committee (2024-)
- Member of the UTIG Annual Performance 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 Technical Staff Review Committee (2020-2023)
- UTIG Seminar Committee (2019-2022)
- UTIG Field Safety Committee (2016-), Chair from 2022
- UTIG Premium Pay Committee (2018)
- Jackson School of Geosciences Equipment Committee (2013-2016; 2019-), Chair from 2019
- Reviewer for Jackson School of Geosciences Graduate Research Symposium (2018, 2019, 2020, 2021)
- Host for six UTIG Friday Seminar Speakers in last 3 years
- Geophysics Editor for Advances in Polar Science (2016-)
- Co-Convenor of TACTICAL Antarctic heat Flow Workshop (March 2018)
- Scientific Committee for Antarctic Research Antarctic Digital Magnetic Anomaly Project (ADMAP-2) steering committee (2015-)
- Steering committee for the Scientific Committee for Antarctic Research Antarchitecte project
- Site selection committee for the Rapid Access Ice Drill project
- Chair and co-Convenor 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 (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): *WHATS 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 (Plenary): *Under the Antarctic ice: New data in the East, new approaches in the West*, 2011 West Antarctic Workshop, Loveland, CO
- 2011 (Plenary): *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 (157)

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

2024 (6 abstracts):

- Ferraccioli, F., G. Eagles, J. Greenbaum, E. Armadillo, **D. Young**, D. Blankenship, G. Paxman 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**, S. Singh, N. Holschuh, S. Yan, D. Blankenship 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, G. Ng, S. Singh, D. Buhl, J. Greenbaum, S. Yan 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, G. Ng, D. Buhl, A. Vega Gonzalez, M. Kerr, J. Greenbaum, S. Kempf 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, S. Singh, S. Kaundinya, S. Yan, A. Vega González, J. Greenbaum, D. Buhl, G. Ng, K. Chan, B. Schroeder, G. Echeverry, T. Richter, S. Kempf, F. Rodriguez-Morales, R. Hale, D. Blankenship 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*

2023 (25 abstracts):

- Matsuoka, K., R. Clifton, X. Cui, G. Eagles, O. Eisen, F. Ferraccioli, R. Forsberg, J. Greenbaum, J. Guldahl, L. Jong, T. Jordan, W. S. Lee, C. Leuschen, S. Lidstrom, J. MacGregor, J. Roberts, D. Steinhage, B. Sun, K. Tinto 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, D. P. Buhl, S. D. Kempf, M. E. Kerr, K. Chan, G. C. Ng 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, S. Singh, T. J. Fudge 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, D. Buhl, S. D. Kempf, G. Ng, S. Yan, M. Kerr, A. V. Gonzalez 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*
- Gonzalez, A. V., S. Yan, **D. A. Young**, M. Kerr, S. Singh, S. D. Kempf 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, **D. A. Young**, J. Greenbaum, J. L. Roberts, T. D. van Ommen, S. Bo 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, **D. A. Young**, S. Singh, D. D. Blankenship 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 | 1 JSG student coauthor*
- 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, **D. A. Young**, G. Patterson, J. Plaut, A. P. Freedman, D. M. Schroeder, C. Grima, G. Steinbruegge, K. M. Soderlund, T. L. Ray, T. G. Richter, L. Jones-Wilson, N. S. Wolfenbarger, K. Scanlan, C. Gerekos, K. Chan, I. Seker, M. Haynes, A. Barr, L. Bruzzone, B. A. Campbell, L. M. Carter, C. Elachi, Y. Gim, A. Herique, H. Hussmann, W. W. Kofman, W. S. Kurth, M. Mastrogiovanni, W. B. McKinnon, J. M. Moore, F. Nimmo, C. S. Paty, D. Plettemeier, B. Schmidt, M. Y.

- Zolotov, P. Schenk 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, S. Singh, S. Kaundinya, D. Buhl, J. Greenbaum, D. Blankenship, G. Ng, S. Kempf, P. Neff, T. J. Fudge, M. Koutnik, J. Severinghaus 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**, T. J. Fudge, D. Blankenship, **S. Singh** 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, D. Buhl, **K. Chan**, **S. Singh**, A. V. González, W. Chu, G. Ng, **S. Yan**, S. Kempf, T. Richter, D. Blankenship, J. Greenbaum, J. Paden, F. Rodriguez-Morales, S. Kaundinya, L. Taylor, R. Hale, S. Jacob, B. Schroder, T. Ortiz, P. Nnadi, C. Anderson 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, **D. A. Young**, D. M. Schroeder 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**, N. S. Wolfenbarger, **C. Gerekos** 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, D. D. Blankenship, D. Buhl, **K. Chan**, J. Greenbaum, S. Kaundinya, S. Kempf, M. Liu-Schiavini, G. Ng, J. Paden 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, S. D. Kempf, D. P. Buhl, G. Ng, **M. Kerr** 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**, S. Singh, S. Kaundinya, D. Buhl, J. Greenbaum, D. Blankenship, G. Ng, S. Kempf, P. Neff, T. Fudge, M. Koutnik, J. Severinghaus 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, S. D. Kempf, D. P. Buhl, G. Ng, **M. Kerr** 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.**, a. 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**, S. Singh, S. Kaundinya, D. Buhl, J. Greenbaum, D. Blankenship, G. Ng, S. Kempf, P. Neff, T. Fudge, M. Koutnik, J. Severinghaus 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, D. D. Blankenship, D. Buhl, **K. Chan**, J. Greenbaum, S. Kaundinya, S. Kempf, M. Liu-Schiavini, G. Ng, J. Paden 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, F. Clubb, **S. Yan**, **D. Young**, D. Blankenship, J. Greenbaum, J. Roberts 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, D. D. Blankenship, D. Buhl, **K. Chan**, J. Greenbaum, S. Kaundinya, S. Kempf, M. Liu-Schiavini, G. Ng, J. Paden 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, S. Singh, S. Kaundinya, D. Buhl, J. Greenbaum, D. Blankenship, G. Ng, S. Kempf, P. Neff, T. Fudge, M. Koutnik, J. Severinghaus 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, J. S. Greenbaum, D. D. Blankenship, D. Buhl, G. Ng, M. Kerr, S. Kaundinya, F. Rodriguez-Morales, R. Hale, E. J. Arnold, J. W. Goodge, M. Koutnik, T. J. Fudge, K. A. Christianson, H. Conway, D. P. Winebrenner, N. Holschuh, P. D. Neff, J. P. Severinghaus 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**, J. S. Greenbaum, S. S. R. Jamieson, N. Ross, G. J. G. Paxman, F. J. Clubb, J. L. Roberts, T. D. van Ommen, S. Bo 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, L. Beem, J. S. Greenbaum 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, M. R. Perry, S. P. Gulick, R. C. Miller, A. T. Russell, K. M. Scanlan, G. Steinbrügge, **D. A. Young**, S. D. Kempf, G. Ng, D. Buhl 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**, D. D. Blankenship, C. Lee and W. S. Lee, 2022, LIONESS Aerial Geophysics, *2022 LIONESS meeting*

• Ritz, C., M. Cavitte, O. Eisen, M. Frezzotti, C. M. Garcia, R. Mulvaney, F. Parrenin, J. Rix, J. Roberts, L. Vittuari, **D. Young** 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, A. Moy, J. Pedro, T. van Ommen, D. Blankenship, M. P. G. Cavitte, D. Dahl-Jensen, O. Eisen, V. Helm, P. Gogineni, B. V. Liefferinge, D. Lilien, H. Miller, R. Mulvaney, F. Parrenin, C. Ritz, D. Steinhage, D. Taylor and **D. Young**, 2022, Site Selection For Australia's Million Year Ice Project, *3rd IPICS Open Science Conference*

• Paden, J., K. Tinto, **D. Young**, K. Christianson, T. Jordan, A. Fremand, J. Bodart, O. Eisen, J. Li, S. Kempf, G. Ng 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 Europan 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, D. D. Blankenship, D. P. Buhl, G. Ng, S. Yan, D. Gomez, S. Kaundinya, F. Rodriguez-Morales, R. Hale, E. J. Arnold, J. Goodge, M. Koutnik, T. J. Fudge, K.

Christianson, H. Conway, D. Winebrenner, N. D. Holschuh, P. Neff, J. Severinghaus 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. 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, **D. A. Young**, R. Culberg 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**, J. Greenbaum, J. Guo, L. Li, J. Roberts, T. van Ommen 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, **D. Young**, N. Karlsson, N. Ross, O. Eisen 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, C. Dow, F. McCormack, T. Pelle, **D. Young**, L. Jong, J. Roberts 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**, K. Christianson, D. Schroeder, M. Rahmehoonfar, J. Li, H. M. Talasila, O. Eisen 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**, D. D. Blankenship, C. Lee and W. S. Lee, 2021, Basal reflectivity and scattering of Thwaites Glacier, West Antarctica, *The 26th International Symposium on Polar Sciences*
- Beem, L. H., C. Pierce, **D. A. Young**, D. D. Blankenship, C. Lee and W. S. Lee, 2021, Repeat radar survey and basal evolution of Thwaites Glacier, West Antarctica, *The 26th International Symposium on Polar Sciences*
- Yan, S., D. D. Blankenship, **D. A. Young**, J. S. Greenbaum, J. Guo, L. Li, J. L. Roberts, T. D. van Ommen and S. Bo, 2021, Englacial stratigraphy over a newly discovered widespread subglacial hydrology system in Princess Elizabeth Land, East Antarctica, *Fall AGU Meeting* | JSG student lead
- Wei, W., D. D. Blankenship, C. A. Greene, J. S. Greenbaum, **D. A. Young**, S. Bo, J. Guo, T. D. van Ommen and J. L. Roberts, 2021, A new bathymetry surrounding and beneath the West Ice Shelf in East Antarctica, *Fall AGU Meeting* | JSG student lead
- Yan, S., D. D. Blankenship, **D. A. Young**, J. S. Greenbaum, L. Li, **A. Rutishauser**, J. Guo, J. L. Roberts, T. D. van Ommen and a. B. Sun, 2021, A large tectonic-controlled subglacial lake with ocean drainage in Princess Elizabeth Land, East Antarctica, *EGU General Assembly 2021* | JSG student lead

2020 (9 abstracts):

- Young, D., D. Blankenship, N. Wolfenbarger, K. Soderlund, C. Grima, K. Chan 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, **D. A. Young**, D. D. Blankenship, M. J. Siegert and a. J. Ebbing, 2020, New study targets modelling crust and lithosphere heterogeneity in the Wilkes Subglacial Basin of East Antarctica, *AGU Fall Meeting Abstracts*
- Steinbrügge, G., D. M. Schroeder, M. Haynes, **K. M. Scanlan**, **D. A. Young**, C. Grima, A. Stark, H. Hussmann and D. D. Blankenship, 2020, Altimetry from Planetary Radar Sounders, *AGU Fall Meeting Abstracts* | JSG postdoc lead with 1 postdoc coauthors
- **Scanlan, K. M.**, **G. Steinbrügge**, C. Grima, **D. A. Young** and D. D. Blankenship, 2020, Impact of 1-Bit Sampling of Radar Sounding Data for Deep Space Applications: Demonstration at Mars and Implications

for Europa, *AGU Fall Meeting Abstracts* | JSG postdoc lead with 1 postdoc coauthors

- Voigt, J., G. Steinbrügge, N. Wolfenbarger, C. Hamilton, K. Soderlund, **D. Young**, S. Vance, D. Schroeder 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-Schiavini, M., G. Ng, A. Rutishauser, D. P. Buhl, J. S. Greenbaum and **D. A. Young**, 2020, Application of deep learning techniques to ice sheet surface and bed interface detection, *Fall AGU Meeting* | JSG student lead

2019 (17 abstracts):

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

Princess Elizabeth Land, East Antarctica, *Fall AGU Meeting* | JSG student lead

• **Young, D. A., J. S. Greenbaum**, D. D. Blankenship, M. J. Siegert, J. L. Roberts, T. D. van Ommen, A. Aitken, C. Grima, E. Le Meur and T. I. collaboration, 2019, ICECAP's contribution to NASA's Operation IceBridge in East Antarctica, *Fall AGU Meeting* | JSG postdoc coauthor

• **Cavitte, M., D. Young**, C. Ritz, F. Parrenin, R. Mulvaney, M. Frezzotti, J. Rix, J. Roberts and D. Blankenship, 2019, Internal ice-penetrating radar stratigraphy at the Little Dome C Oldest Ice site, *IGS Symposium on Radioglaciology* | JSG student lead

• **Young, D., J. Greenbaum, L. Beem**, J. Roberts and D. Blankenship, 2019, The subglacial roughness of Antarctica in a global context, *IGS Symposium on Radioglaciology* | 2 JSG postdocs coauthor

• **Rutishauser, A.**, D. D. Blankenship, **L. Beem, J. Greenbaum, D. A. Young**, C. Grima, **L. N. Schwartz**, J. A. Foran and A. Criscitiello, 2019, New radar-sounding investigations over the hypersaline subglacial lakes beneath Devon Ice Cap, Canadian Arctic, *IGS Symposium on Radioglaciology* | JSG postdoc lead; 1 student coauthor

• **Quartini, E., D. Young, M. Sudunagunta**, D. Schroeder and D. Blankenship, 2019, Assessing the affect of subaerial volcanism on englacial attenuation in West Antarctica, *IGS Symposium on Radioglaciology* | JSG student lead, JSG 1 student coauthors

2018 (15 abstracts):

• Blankenship, D., T. Ray, J. Plaut, A. Moussessian, W. Patterson, A. Romero-Wolf, C. Grima, **D. Young**, K. Soderlund, Y. Gim, D. Schroeder, A. Freedman, S. Collins, E. Chapin, J. Hoffman and . S. Team, 2018, REASON for Europa, *42nd COSPAR Scientific Assembly*

• **Young, D. A.**, C. Grima, **G. Steinbri  ge**, K. Scanlen, S. D. Kempf and D. D. Blankenship, 2018, REASON For Europa: Data products and algorithms, *Fall AGU Meeting* | JSG postdoc coauthor

• **Rutishauser, A.**, D. D. Blankenship, **L. H. Beem, J. S. Greenbaum, D. A. Young**, C. Grima and A. S. Criscitiello, 2018, New insights from an airborne geophysical survey over the hypersaline subglacial lakes beneath Devon Ice Cap, Canadian Arctic, *AGU Fall Meeting Abstracts* | JSG postdoc lead with 2 postdoc coauthors

• **Sudunagunta, M., E. Quartini, D. A. Young** and D. D. Blankenship, 2018, Mapping Volcanic Ejecta Using Airborne Ice-Penetrating Radar In Marie Byrd Land, Antarctica, *Fall AGU Meeting* | JSG student lead, JSG 1 student coauthors

• **Chan, K.**, C. Grima, D. D. Blankenship, K. M. Soderlund and **D. A. Young**, 2018, Dielectric Brine-Ice Mixtures on Europa, and the Need for New Experiments, *Europa Deep Dive 2: Composition 2018* | JSG student lead

• **Wolfenbarger, N. S.**, D. D. Blankenship, K. M. Soderlund, **D. A. Young** and C. Grima, 2018, Leveraging terrestrial marine ice cores to constrain the composition of ice on Europa, *Europa Deep Dive 2: Composition 2018* | JSG student lead

• **Young, D. A.**, **E. Quartini**, T. G. Richter and D. D. Blankenship, 2018, Constraints on the Evolution of the Marie Byrd Land Dome Topography, *POLAR2018 SCAR/IASC Open Science Conference* | 1 JSG student coauthor

• **Young, D. A., J. S. Greenbaum, L. H. Beem**, D. D. Blankenship, **G. R. Muldoon**, S. D. Kempf, J. L. Roberts, C. Ritz, M. J. Siegert and T. van Ommen, 2018, Bedrock Roughness in Antarctica: Connections to Subglacial Water and Basal Slip, *POLAR2018 SCAR/IASC Open Science Conference* | 3 JSG student and postdoc coauthors

• **Greene, C. A., D. A. Young**, D. E. Gwyther, B. K. Galton-Fenzi, **J. S. Greenbaum** and D. D. Blankenship, 2018, Seasonal Control on Totten Ice Shelf Dynamics by Sea Ice Buttressing, *POLAR2018 SCAR/IASC Open Science Conference* | JSG student lead

• **Wei, W., J. S. Greenbaum**, D. D. Blankenship, T. G. Richter, **D. A. Young**, S. Lee, W. Lee, A. W  hlin and K. Assmann, 2018, On the Bathymetry of Getz Ice Shelf Cavity from Airborne Gravity Data Inversion, *POLAR2018 SCAR/IASC Open Science Conference* | JSG student lead

• **Quartini, E., D. Young** and D. D. Blankenship, 2018, The Distribution of Crustal Heating in West Antarctica from Aeromagnetics, *POLAR2018 SCAR/IASC Open Science Conference* | JSG student lead

- Beem, L. H., L. E. Lindzey, E. Quartini, D. A. Young, J. S. Greenbaum, C. F. Dow, W. S. Lee, S. H. Lee and D. D. Blankenship, 2018, Subglacial hydrology and ice shelf processes from helicopter-based geophysical observations, Amundsen and Western Ross Sea Sectors, West Antarctica, 2018 WAIS Workshop | JSG postdoc lead; 2 student coauthors
- Wei, W., J. S. Greenbaum, N. Gourmelen, C. F. Dow, T. G. Richter, D. A. Young, S. H. Lee, W. S. Lee, A. Wählén, K. Assmann and D. D. Blankenship, 2018, The bathymetric and subglacial hydrological context for basal melting of the Getz Ice Shelf, West Antarctica, 2018 WAIS Workshop | JSG student lead
- Cavitte, M. G. P., C. Ritz, F. Parrenin, R. Mulvaney, D. A. Young, M. Frezzotti, J. Rix, D. D. Blankenship and J. L. Roberts, 2018, Internal ice-penetrating radar stratigraphy at the Little Dome C Oldest Ice site, EGU General Assembly 2018 | JSG student lead
- Beem, L. H., D. A. Young, D. D. Blankenship, J. S. Greenbaum, G. R. Muldoon, J. L. Roberts, C. Ritz, G. Jingxue and S. Bo, 2018, New Aerogeophysical Survey of Titan Dome and Ice-core Drilling Potential, POLAR2018 SCAR/IASC Open Science Conference | JSG postdoc lead; 1 student coauthor

2017 (11 abstracts):

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

2017, Stability of the accumulation pattern around Dome C over the last glacial cycle, *EGU General Assembly Conference Abstracts* | *JSG student lead*

- **Young, D.**, D. Blankenship, L. Beem, M. Cavitte, E. Quartini, L. Lindzey, C. Jackson, J. Roberts, C. Ritz, M. Siegert, J. Greenbaum and B. Frederick, 2017, The roughness of grounded ice sheet beds: Case studies from high resolution radio echo sounding studies in Antarctica, *EGU General Assembly Conference Abstracts* | 5 *JSG student and postdoc coauthors*

2016 (8 abstracts):

- Muldoon, G. R., C. S. Jackson, **D. A. Young** and D. D. Blankenship, 2016, The Inside Scoop: Intermodel comparison of englacial layers in the central West Antarctic Ice Sheet and how simulations compare to the real deal, *AGU Fall Meeting Abstracts* | *JSG student lead*
- **Young, D. A.**, E. Quartini, G. M. Muldoon and D. D. Blankenship, 2016, Results of the GIMBLE aerogeophysical survey of coastal Marie Byrd Land, *2016 WAIS Workshop* | 2 *JSG student coauthors*
- Muldoon, G. R., C. S. Jackson, **D. A. Young** and D. D. Blankenship, 2016, The Inside Scoop: Intermodel comparison of englacial layers in the central West Antarctic Ice Sheet and how simulations compare to the real deal, *Fall AGU Meeting* | *JSG student lead*
- Cavitte, M. G., D. D. Blankenship, F. P. Duncan A. Young, C. Ritz, J. L. Roberts, T. van Ommen, D. M. Schroeder, M. J. Siegert and E. L. Meur, 2016, Old ice and the stability of the Byrd-Totten region, *Second IPICS Open Science Conference* | *JSG student lead*
- **Young, D. A.**, J. L. Roberts, D. D. Blankenship, T. van Ommen, M. J. Seigert, M. G. P. Cavitte, C. Ritz, F. Parrenin, E. Quartini, M. Frezzotti, F. Habbal and a. G. Ng, 2016, Status of detailed ICECAP aerogeophysical surveying for old ice at Dome C, *IPICS Second Open Science Conference* | 2 *JSG student coauthors*
- **Young, D. A.**, J. L. Roberts, C. Ritz, M. Frezzotti, E. Quartini, B. T. Gooch, C. A. Greene, T. van Ommen and D. D. Blankenship, 2016, High-resolution subglacial hydrology of a potential old ice target near Dome C, Antarctica, *SCAR Open Science Meeting* | 2 *JSG student coauthors*
- Lindzey, L. E., **D. A. Young**, J. S. Greenbaum, S. D. Kempf and D. D. Blankenship, 2016, Surface Characterization Using a Photon Counting Lidar in East Antarctica, *SCAR Open Science Meeting* | *JSG student lead*, *JSG 1 student coauthors*
- Quartini, E., **D. A. Young**, D. M. Schroeder and D. D. Blankenship, 2016, An evaluation of geothermal flux along a subglacial volcano in the Executive Committee Range, *SCAR Open Science Meeting* | *JSG student lead*

2015 (1 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, J. L. Roberts, T. D. van Ommen, A. Aitken and M. J. Siegert, 2014, East Antarctic land-ice/ocean networks: progress and questions, *Fall AGU Meeting* | 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, D. M. Schroeder, T. G. Richter and D. D. Blankenship, 2014, Structure of the Marie Byrd Land crustal province from GIMBLE aerogeophysics, *SCAR Open Science Meeting* | 3 *JSG student coauthors*

2013 (6 abstracts):

- Curra, C., E. Arnold, B. Karwoski, C. Grima, D. M. Schroeder, **D. A. Young** and D. D. Blankenship, 2013, Enhancing Europa surface characterization with ice penetrating radar: A Comparative study in Antarctica, *Fall AGU Meeting* | JSG student lead, JSG 3 student coauthors
- **Young, D. A.**, D. D. Blankenship, J. S. Greenbaum, T. G. Richter, A. R. A. Aitken, M. J. Siegert and J. L. Roberts, 2013, Geologic controls on the architecture of the Antarctic Ice Sheet's basal interface: New results from West and East Antarctica from long range geophysics (Invited), *Fall AGU Meeting* | 1 JSG student coauthor
- Quartini, E., E. M. Powell, T. Richter, T. Damiani, S. Stadnik, **D. A. Young** and D. D. Blankenship, 2013, Understanding the thermal and tectonic evolution of Marie Byrd Land from a reanalysis of airborne geophysical data in the West Antarctic Rift System, *Fall AGU Meeting* | JSG student lead, JSG 2 student coauthors
- **Young, D. A.**, D. D. Blankenship, S. D. Kempf and C. A. Greene, 2013, How well can we determine ice thickness? Examples from Thwaites Glacier, *2nd International Symposium on Radioglaciology* | 1 JSG student coauthor
- Schroeder, D. M., D. D. Blankenship, R., K. Raney and **D. A. Young**, 2013, Buried information: constraining bed geometry and material from the Doppler-dependent radar-scattering function, *2nd International Symposium on Radioglaciology* | JSG student lead
- **Young, D. A.**, E. M. Powell, T. G. Richter, J. S. Greenbaum, G. R. Gutowski, C. A. Greene, G. Ng, S. D. Kempf, E. Quartini, A. D. Jones, A. Roseles and D. D. Blankenship, 2013, Deep troughs dissect the Marie Byrd Land subglacial highland: Initial results of the GIMBLE survey, *WAIS Workshop 2013* | 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, J. S. Greenbaum, S. D. Kempf, G. Ng, T. G. Richter, J. W. Holt, E. Le Meur, D. M. Schroeder, R. C. Warner, N. W. Young, D. D. Blankenship, T. van Ommen and M. Siegert, 2012, ICECAP data over the periphery of East Antarctic: A new view of a crucial ice sheet, *XXXII SCAR and Open Science Conference* | 2 JSG student coauthors
- Richter, T., **D. Young**, S. Kempf, J. Greenbaum, T. van Ommen, M. Siegert and D. Blankenship, 2012, ICECAP Airborne Gravimetry over East Antarctica, 2008 to 2012, *XXXII SCAR and Open Science Conference* | 1 JSG student coauthor
- Ferraccioli, F., E. Armadillo, T. Jordan, **D. Young**, L. Anderson, D. Blankenship and M. J. Siegert, 2012, Paleoproterozoic suturing and extent of Neoproterozoic rifting revealed in interior East Antarctica, *XXXII SCAR and Open Science Conference*
- Greenbaum, J., J. Roberts, **D. Young**, T. Richter, E. Le Meur, R. Warner, N. Young, G. Durand, T. van Ommen, M. Siegert and D. Blankenship, 2012, New Aerogeophysical Observations of the East Antarctic Coastline, *XXXII SCAR and Open Science Conference* | JSG student lead

2011 (1 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, J. B. DeSantos, M. R. Williams and J. W. Holt, 2009, Variation in Subglacial Roughness in West Antarctica: How do we interpret causality in the context of sediments?, *WAIS Workshop 2009*
- Blankenship, D. D., M. J. Siegert, T. van Ommen, **D. A. Young**, J. L. Roberts, J. Holt, A. P. Wright, R. C. Warner and N. Young, 2009, ICECAP Season 1: Implications for the oldest ice and future plans, *IPICS Workshop on Science and Technology for the Next Generation of International Ice Coring*
- **Young, D. A.**, D. D. Blankenship, M. J. Siegert, T. van Ommen, J. L. Roberts, J. W. Holt, T. G. Richter, A. P. Wright, R. C. Warner, N. Young and t. I. team, 2009, Reconnaissance of the Aurora Subglacial Basin: The IPY season of the ICECAP project, *International Symposium on Glaciology in the International Polar Year*

2008 (4 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**, M. E. Peters, J. W. Holt and M. J. Siegert, 2008, Dynamic distributed drainage implied by the flow evolution of the 1997-1999 Adventure Trench subglacial outburst flood, *SCAR/IASC IPY Open Science Conference | JSG student lead*
- Blankenship, D. D., M. J. Siegert, T. van Ommen, J. Bamber, I. Dalziel, J. Dowdeswell, J. W. Holt, L. Lavwer, A. Payne, J. Roberts, R. Warner, N. Young and **D. A. Young**, 2008, Investigating the cryospheric evolution of the central Antarctic plate: A long range aerogeophysical survey of East Antarctica's subglacial basins, *SCAR/IASC IPY Open Science Conference*
- **Young, D. A.**, D. D. Blankenship, S. D. Kempf and J. W. Holt, 2008, Radar imaging of ice stream beds at regional and local scales: A comparison of Thwaites Glacier and the Siple Coast, *International Symposium on Radioglaciology and its applications*

2007 (3 abstracts):

- Holt, J. W., D. D. Blankenship, F. Ferraccioli, D. G. Vaughan, **D. A. Young**, S. D. Kempf and T. M. Diehl, 2007, New aeromagnetic results from the Thwaites Glacier catchment, West Antarctica, *Antarctica: A Keystone in a Changing World – Online Proceedings of the 10th ISAES X | 1 JSG student coauthor*
- **Young, D. A.**, D. D. Blankenship and J. W. Holt, 2007, Subglacial Roughness of the West Antarctic Ice Sheet, *Antarctica: A Keystone in a Changing World – Online Proceedings of the 10th ISAES*
- Diehl, T., D. Blankenship, J. Holt, **D. Young**, T. Jordan and F. Ferraccioli, 2007, Exposing Subglacial Sediments Across West Antarctica with Isostatic Gravity Anomalies, *Antarctica: A Keystone in a Changing World – Online Proceedings of the 10th ISAES X | JSG student lead*

2006 (2 abstracts):

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

2004 (1 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 Contractual 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. Bleamster 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*