
PUBLICATIONS

The following publications deal explicitly with analyses of the WAIS Divide ice core, WAIS Divide boreholes, and/or the WAIS Divide, Antarctica, field site.

1. Abbott PM, Niemeier U, Timmreck C, Riede F, McConnell JR, Severi M, Fischer H, Svensson A, Toohey M, Reinig F, SigL (2021) **Volcanic climate forcing preceding the inception of the Younger Dryas: Implications for tracing the Laacher See eruption**. Quaternary Science Reviews, 274. <https://doi.org/10.1016/j.quascirev.2021.107260>
2. Ahn J, Brook E, Howell K (2009) **A high-precision method for measurement of paleoatmospheric CO₂ in small polar ice samples**. Journal of Glaciology, 55(191), 499-506. <https://doi.org/10.3189/002214309788816731>
3. Ahn J, Brook EJ, Mitchell L, Rosen J, McConnell J, Taylor K, Etheridge D, Rubino M (2012) **Atmospheric CO₂ over the last 1000 years: A high-resolution record from the West Antarctic Ice Sheet (WAIS) Divide ice core**. Global Biogeochemical Cycles, 26, GB2027. <https://doi.org/10.1029/2011GB004247>
4. Arienzo MM, McConnell JR, Murphy LN, Chellman N, Das S, Kipfstuhl S, Mulvaney R (2017) **Holocene black carbon in Antarctica paralleled Southern Hemisphere climate**. Journal of Geophysical Research: Atmospheres, 122. <https://doi.org/10.1002/2017JD026599>
5. Aydin M, Britten GL, Montzka SA, Buizert C, Primeau F, Petrenko V, Battle MB, Nicewonger MR, Patterson J, Hmiel B, Saltzman ES (2020) **Anthropogenic Impacts on Atmospheric Carbonyl Sulfide Since the 19th Century Inferred From Polar Firn Air and Ice Core Measurements**. Journal of Geophysical Research: Atmospheres, 125, e2020JD033074. <https://doi.org/10.1029/2020JD033074>
6. Aydin M, Campbell JE, Fudge TJ, Cuffey KM, Nicewonger MR, Verhulst KR, Saltzman ES (2016) **Changes in atmospheric carbonyl sulfide over the last 54,000 years inferred from measurements in Antarctic ice cores**. Journal of Geophysical Research: Atmospheres, 121, 1943-1954. <https://doi.org/10.1002/2015JD024235>
7. Aydin M, Fudge TJ, Verhulst KR, Nicewonger MR, Waddington ED, Saltzman ES (2014) **Carbonyl sulfide hydrolysis in Antarctic ice cores and an atmospheric history for the last 8000 years**. Journal of Geophysical Research Atmospheres, 119(13), 8500-8514. <https://doi.org/10.1002/2014JD021618>
8. Aydin M, Verhulst KR, Saltzman ES, Battle MO, Montzka SA, Blake DR, Tang Q, Prather MJ (2011) **Recent decreases in fossil-fuel emissions of ethane and methane derived from firn air**. Nature, 476, 198-201. <https://doi.org/10.1038/nature10352>
9. Aydin M, Montzka SA, Battle MO, Williams MB, De Bruyn WJ, Butler JH, Verhulst KR, Tatum C, Gun BK, Plotkin DA (2010) **Post-coring entrapment of modern air in some shallow ice cores collected near the firn-ice transition: evidence from CFC-12 measurements in Antarctic firn air and ice cores**. Atmospheric Chemistry and Physics, 10, 5135-5144. <https://doi.org/10.5194/acp-10-5135-2010>
10. Banerjee A, Yeung LY, Murray LT, Tie X, Tierney JE, Legrande AN (2022) **Clumped-isotope constraint on upper-tropospheric cooling during the Last Glacial Maximum**. AGU Advances, 3, e2022AV000688, 1-15. <https://doi.org/10.1029/2022AV000688>

11. Banta JR, McConnell JR, Frey MF, Bales RC, Taylor K (2008) **Spatial and temporal variability in snow accumulation at the West Antarctic Ice Sheet Divide over recent centuries.** *Journal of Geophysical Research*, 113(D23102). <https://doi.org/10.1029/2008JD010235>
12. Barletta RE, Priscu JC, Mader HM, Jones WL, Roe CW (2012) **Chemical Analysis of Ice Vein Microenvironments: II. Analysis of Glacial Samples from Greenland and the Antarctic.** *Journal of Glaciology*, 58(212), 1109-1118. <https://doi.org/10.3189/2012JoG12J112>
13. Battle MO, Severinghaus JP, Sofen ED, Plotkin D, Orsi AJ, Aydin M, Montzka SA, Sowers T, Tans PP (2011) **Controls on the movement and composition of firn air at the West Antarctic Ice Sheet Divide.** *Atmospheric Chemistry and Physics*, 11, 11007-11021. <https://doi.org/10.5194/acp-11-11007-2011>
14. Bauer S E, Bausch A, Nazarenko L, Tsigaridis K, Xu B, Edwards R, Bisiaux M, McConnell J (2013) **Historic and future black carbon deposition on the three ice caps: Ice-core measurements and model simulations from 1850 to 2100.** *Journal of Geophysical Research Atmospheres*, 118, 7948-7961. <https://doi.org/10.1002/jgrd.50612>
15. Bauska TK, Baggenstos D, Brook EJ, Mix AC, Marcott SA, Petrenko VV, Schaefer H, Severinghaus JP, Lee JE (2016) **Carbon isotopes characterize rapid changes in atmospheric carbon dioxide during the last deglaciation.** *Proceedings of the National Academy of Sciences*, 113(13), 3465-3470. <https://doi.org/10.1073/pnas.1513868113>
16. Bauska TK, Joos F, Mix AC, Roth R, Ahn J, Brook EJ (2015) **Links between atmospheric carbon dioxide, the land carbon reservoir and climate over the past millennium.** *Nature Geoscience*, 8, 383-387. <https://doi.org/10.1038/ngeo2422>
17. Bauska TK, Marcott SA, Brook EJ (2021) **Abrupt changes in the global carbon cycle during the last glacial period.** *Nature Geoscience*, 14, 91-96. <https://doi.org/10.1038/s41561-020-00680-2>
18. Bereiter B, Kawamura K, Severinghaus JP (2018) **New methods for measuring atmospheric heavy noble gas isotope and elemental ratios in ice core samples.** *Rapid Communications in Mass Spectrometry*, 32, 801-814. <https://doi.org/10.1002/rcm.8099>
19. Bereiter B, Shackleton S, Baggenstos D, Kawamura K, Severinghaus J (2018) **Mean global ocean temperatures during the last glacial transition.** *Nature*, 553, 39-44. <https://doi.org/10.1038/nature25152>
20. Bisiaux MM, Edwards R, McConnell JR, Albert MR, Anschutz H, Neumann TA, Isaksson E, Penner JE (2012) **Variability of black carbon deposition to the East Antarctic Plateau, 1800-2000 AD.** *Atmospheric Chemistry and Physics*, 12, 3799-3808. <https://doi.org/10.5194/acp-12-3799-2012>
21. Bisiaux MM, Edwards R, McConnell JR, Curran MAJ, Van Ommen TD, Smith AM, Neumann TA, Pasteris DR, Penner JE, Taylor K (2012) **Changes in black carbon deposition to Antarctica from two high-resolution ice core records, 1850-2000 AD.** *Atmospheric Chemistry and Physics*, 12, 4107-4115. <https://doi.org/10.5194/acp-12-4107-2012>
22. Breton DJ, Koffman BG, Kurbatov AV, Kreutz KJ, Hamilton GS (2012) **Quantifying Signal Dispersion in a Hybrid Ice Core Melting System.** *Environmental Science & Technology*, 46(21), 11922-11928. <https://doi.org/10.1021/es302041k>

-
23. Buizert C and Schmittner A (2015) **Southern Ocean control of glacial AMOC stability and Dansgaard-Oeschger interstadial duration**. *Paleoceanography*, 30(12), 1595-1612. <https://doi.org/10.1002/2015PA002795>
 24. Buizert C and Severinghaus JP (2016) **Dispersion in deep polar firn driven by synoptic-scale surface pressure variability**. *The Cryosphere*, 10, 2099-2111. <https://doi.org/10.5194/tc-10-2099-2016>
 25. Buizert C, Cuffey KM, Severinghaus JP, Baggenstos D, Fudge TJ, Steig EJ, Markle BR, Winstrup M, Rhodes RH, Brook EJ, Sowers TA, Clow GD, Cheng H, Edwards RL, Sigl M, McConnell JR, Taylor KC (2015) **The WAIS Divide deep ice core WD2014 chronology - Part 1: Methane synchronization (68-31 ka BP) and the gas age-ice age difference**. *Climate of the Past*, 11, 153-173. <https://doi.org/10.5194/cp-11-153-2015>
 26. Buizert C, Fudge TJ, Roberts WHG, Steig EJ, Sherriff-Tadano S, Ritz C, Lefebvre E, Edwards J, Kawamura K, Oyabu I, Motoyama H, Kahle EC, Jones TR, Abe-Ouchi A, Obase T, Martin C, Corr H, Severinghaus JP, Beaudette R, Epifanio JA, Brook EJ, Martin K, Chappellaz J, Aoki S, Nakazawa T, Sowers TA, Alley RB, Ahn J, Sigl M, Severi M, Dunbar NW, Svensson A, Fegyveresi JM, He C, Liu Z, Zhu J, Otto-Bliesner BL, Lipenkov VY, Kageyama M, Schwander J (2021) **Antarctic surface temperature and elevation during the Last Glacial Maximum**. *Science*, 372(6546), 1097-1101. <https://doi.org/10.1126/science.abd2897>
 27. Buizert C, Shackleton S, Severinghaus JP, Roberts WHG, Seltzer A, Bereiter B, Kawamura K, Baggenstos D, Orsi AJ, Oyabu I, Birner B, Morgan JD, Brook EJ, Etheridge DM, Thornton D, Bertler N, Pyne RL, Mulvaney R, Mosley-Thompson E, Neff PD, Petrenko VV (2023) **The new Kr-86 excess ice core proxy for synoptic activity: West Antarctic storminess possibly linked to Intertropical Convergence Zone (ITCZ) movement through the last deglaciation**. *Climate of the Past*, 19, 579-606. <https://doi.org/10.5194/cp-19-579-2023>
 28. Buizert C, Sigl M, Severi M, Markle BR, Wettstein JJ, McConnell JR, Pedro JB, Sodemann H, Goto-Azuma K, Kawamura K, Fujita S, Motoyama H, Hirabayashi M, Uemura R, Stenni B, Parrenin F, He F, Fudge TJ, Steig EJ (2018) **Abrupt ice-age shifts in southern westerly winds and Antarctic climate forced from the north**. *Nature*, 563, 681-685. <https://doi.org/10.1038/s41586-018-0727-5>
 29. Buizert C, Sowers T, Blunier T (2013) **Assessment of diffusive isotopic fractionation in polar firn, and application to ice core trace gas records**. *Earth and Planetary Science Letters*, 361, 110-119. <https://doi.org/10.1016/j.epsl.2012.11.039>
 30. Casto-Bogges LD, Golozar M, Butterworth AL, Mathies RA (2021) **Optimization of Fluorescence Labeling of Trace Analytes: Application to Amino Acid Biosignature Detection with Pacific Blue**. *Analytical Chemistry*, 1-8. <https://doi.org/10.1021/acs.analchem.1c04465>
 31. Chan WS, Mah ML, Voigt DE, Fitzpatrick JJ, Talghader JJ (2014) **Crystal orientation measurements using transmission and backscattering**. *Journal of Glaciology*, 60(224), 1135-1139. <https://doi.org/10.3189/2014JoG14J071>
 32. Cole-Dai J, Ferris DG, Kennedy JA, Sigl M, McConnell JR, Fudge TJ, Geng L, Maselli OJ, Taylor KC, Souney JM (2021) **Comprehensive record of volcanic eruptions in the Holocene**
-

-
- (11,000 years) from the WAIS Divide, Antarctica ice core.** Journal of Geophysical Research: Atmospheres, 126, e2020JD032855. <https://doi.org/10.1029/2020JD032855>
33. Cole-Dai C, Ferris DG, Lanciki A, Savarino J, Thiemens MH, McConnell JR (2013) **Two likely stratospheric volcanic eruptions in the 1450s C.E. found in a bipolar, subannually dated 800 year ice core record.** Journal of Geophysical Research Atmospheres, 118, 7459-7466. <https://doi.org/10.1002/jgrd.50587>
34. Cole-Dai C, Ferris D, Lanciki A, Savarino J, Baroni M, Thiemens M (2009) **Cold decade (AD 1810-1819) caused by Tambora (1815) and another (1809) stratospheric volcanic eruption.** Geophysical Research Letters, 36(L22703). <https://doi.org/10.1029/2009GL040882>
35. Conway H and Rasmussen LA (2009) **Recent thinning and migration of the Western Divide, central West Antarctica.** Geophysical Research Letters, 36(L12502). <https://doi.org/10.1029/2009GL038072>
36. Cuffey KM, Clow GD, Steig EJ, Buizert C, Fudge TJ, Koutnik M, Waddington ED, Alley RA, Severinghaus JP (2016) **Deglacial temperature history of West Antarctica.** Proceedings of the National Academy of Sciences, 113(50), 14249-1425. <https://doi.org/10.1073/pnas.1609132113>
37. D'Andrilli J, Foreman CM, Sigl M, Priscu JC, McConnell JR (2017) **A 21 000-year record of fluorescent organic matter markers in the WAIS Divide ice core.** Climate of the Past, 13, 533-544. <https://doi.org/10.5194/cp-13-533-2017>
38. D'Andrilli J, Smith HJ, Dierer M, Foreman CM (2017) **Climate driven carbon and microbial signatures through the last ice age.** Geochemical Perspectives Letters, 4, 29-34. <https://doi.org/10.7185/geochemlet.1732>
39. Dunbar NW, Iverson NA, Van Eaton AR, Sigl M, Alloway BV, Kurbatov AV, Mastin LG, McConnell JR, Wilson CJN (2017) **New Zealand supereruption provides time marker for the Last Glacial Maximum in Antarctica.** Scientific Reports, 7:12238. <https://doi.org/10.1038/s41598-017-11758-0>
40. Dütsch M, Blossey PN, Steig EJ, Nusbaumer JM (2019) **Nonequilibrium fractionation during ice cloud formation in iCAM5: Evaluating the common parameterization of supersaturation as a linear function of temperature.** Journal of Advances in Modeling Earth Systems, 11, 3777- 3793. <https://doi.org/10.1029/2019MS001764>
41. Dyonisius MN, Petrenko VV, Smith AM, Hua Q, Yang B, Schmitt J, Beck J, Seth B, Bock M, Hmiel B, Vimont I, Menking JA, Shackleton SA, Baggenstos D, Bauska TK, Rhodes RH, Sperlich P, Beaudette R, Harth C, Kalk M, Brook EJ, Fischer H, Severinghaus JP, Weiss RF (2020) **Old carbon reservoirs were not important in the deglacial methane budget.** Science, 367, 907-910. <https://doi.org/10.1126/science.aax0504>
42. Fegyveresi J, Alley R, Voigt D, Fitzpatrick J, Wilen L (2019) **Instruments and methods: A case study of ice core bubbles as strain indicators.** Annals of Glaciology, 60(78), 8-19. <https://doi.org/10.1017/aog.2018.23>
43. Fegyveresi JM, Alley RB, Fitzpatrick JJ, Cuffey KM, McConnell JR, Voigt DE, Spencer MK, Stevens NT (2016) **Five millennia of surface temperatures and ice core bubble**
-

-
- characteristics from the WAIS Divide deep core, West Antarctica.** *Paleoceanography*, 31(3), 416-433. <https://doi.org/10.1002/2015PA002851>
44. Fegyveresi JM, Alley RB, Muto A, Orsi AJ, Spencer MK (2018) **Surface formation, preservation, and history of low-porosity crusts at the WAIS Divide site, West Antarctica.** *The Cryosphere*, 12, 325-341. <https://doi.org/10.5194/tc-12-325-2018>
45. Fegyveresi JM, Alley RB, Spencer MK, Fitzpatrick JJ, Steig EJ, White JWC, McConnell JR, Taylor KC (2011) **Late-Holocene climate evolution at the WAIS Divide site, West Antarctica: bubble number-density estimates.** *Journal of Glaciology*, 57(204), 629-638. <https://doi.org/10.3189/002214311797409677>
46. Fegyveresi JM, Alley RB, Voigt DE, Fitzpatrick JJ, Wilen, LA (2018) **Instruments and methods: A case study of ice core bubbles as strain indicators.** *Annals of Glaciology*, 1-12. <https://doi.org/10.1017/aog.2018.23>
47. Fitzpatrick JJ, Voigt DE, Fegyveresi JM, Stevens NT, Spencer MK, Cole-Dai J, Alley RB, Jardine GE, Cravens ED, Wilen LA, Fudge TJ, McConnell JR (2014) **Physical properties of the WAIS Divide ice core.** *Journal of Glaciology*, 60(224), 1181-1198. <https://doi.org/10.3189/2014JoG14J100>
48. Frieler K, Clark PU, He F, Buizert C, Reese R, Ligtenberg SRM, van den Broeke MR, Winkelmann R, Levermann A (2015) **Consistent evidence of increasing Antarctic accumulation with warming.** *Nature Climate Change*, 5, 348-352. <https://doi.org/10.1038/nclimate2574>
49. Fudge TJ, Markle BR, Cuffey K, Buizert C, Taylor K, Steig EJ, Waddington E, Conway H, Koutnik M (2016) **Variable relationship between accumulation and temperature in West Antarctica for the past 31,000 years.** *Geophysical Research Letters*, 43(8), 3795-3803. <https://doi.org/10.1002/2016GL068356>
50. Fudge TJ, Taylor KC, Waddington EW, Fitzpatrick JJ, Conway H (2016) **Electrical stratigraphy of the WAIS Divide ice core: Identification of centimeter-scale irregular layering.** *Journal of Geophysical Research: Earth Surface*, 121, 1218-1229. <https://doi.org/10.1002/2016JF003845>
51. Fudge TJ, Waddington ED, Conway H, Lundin JMD, Taylor K (2014) **Interpolation methods for Antarctic ice-core timescales: application to Byrd, Siple Dome and Law Dome ice cores.** *Climate of the Past*, 10, 1195-1209. <https://doi.org/10.5194/cp-10-1195-2014>
52. Gibson CJ, Johnson JA, Shturmakov AJ, Mortensen NB, Goetz JJ (2014) **Replicate ice-coring system architecture: mechanical design.** *Annals of Glaciology*, 55(68), 165-172. <https://doi.org/10.3189/2014AoG68A019>
53. Gkinis V, Holme C, Kahle E, Stevens M, Steig E, Vinther B (2021) **Numerical experiments on firn isotope diffusion with the Community Firn Model.** *Journal of Glaciology*, 1-23. <https://doi.org/10.1017/jog.2021.1>
54. Goddard PB, Tabor CR, Jones TR (2021) **Utilizing Ice Core and Climate Model Data to Understand Seasonal West Antarctic Variability.** *Journal of Climate*, 1-55. <https://doi.org/10.1175/JCLI-D-20-0822.1>
-

-
55. Goodwin ID, Browning S, Lorrey AM, Mayewski PA, Phipps SJ, Bertler NA, Edwards RP, Cohen TJ, van Ommen T, Curran C, Barr C, Stager JC (2014) **A reconstruction of extratropical Indo-Pacific sea-level pressure patterns during the Medieval Climate Anomaly**. *Climate Dynamics*, 43(5-6), 1197-1219. <https://doi.org/10.1007/s00382-013-1899-1>
 56. Gregory SA, Albert MR, Baker I (2014) **Impact of physical properties and accumulation rate on pore close-off in layered firn**. *The Cryosphere*, 8, 91-105. <https://doi.org/10.5194/tc-8-91-2014>
 57. Guillet S, Corona C, Oppenheimer C, Lavigne F, Khodri M, Ludlow F, Sigl M, Toohey M, Atkins PS, Yang Z, Muranaka T, Horikawa N, Stoffel M (2023) **Lunar eclipses illuminate timing and climate impact of medieval volcanism**. *Nature* 616, 90–95. <https://doi.org/10.1038/s41586-023-05751-z>
 58. Hillenbrand C-D, Smith JA, Hodell DA, Greaves M, Poole CR, Kender S, Williams M, Andersen TJ, Jernas PE, Elderfield H, Klages JP, Roberts SJ, Gohl K, Larter RD, Kuhn G (2017) **West Antarctic Ice Sheet retreat driven by Holocene warm water incursions**. *Nature*, 547, 43-48. <https://doi.org/10.1038/nature22995>
 59. Horgan HJ, Anandakrishnan S, Alley RB, Burkett PG, Peters LE (2011) **Englacial seismic reflectivity: imaging crystal-orientation fabric in West Antarctica**. *Journal of Glaciology*, 57(204), 639-650. <https://doi.org/10.3189/002214311797409686>
 60. Hu J, Yan Y, Yeung LY, Dee SG (2022) **Sublimation origin of negative deuterium excess observed in snow and ice samples from McMurdo Dry Valleys and Allan Hills Blue Ice Areas, East Antarctica**. *Journal of Geophysical Research: Atmospheres*, 127, e2021JD035950. <https://doi.org/10.1029/2021JD035950>
 61. Iverson NA, Kalteyer D, Dunbar NW, Kurbatov A, Yates M (2016) **Advancements and best practices for analysis and correlation of tephra and cryptotephra in ice**. *Quaternary Geochronology*. <https://doi.org/10.1016/j.quageo.2016.09.008>
 62. Iverson NA, Lieb-Lappen R, Dunbar NW, Obbard R, Kim E, Golden E (2017) **The first physical evidence of subglacial volcanism under the West Antarctic Ice Sheet**. *Scientific Reports*, 7:11457. <https://doi.org/10.1038/s41598-017-11515-3>
 63. Jiang S, Cox TS, Cole-Dai J, Peterson KM, Shi G (2016) **Trends of perchlorate in Antarctic snow: Implications for atmospheric production and preservation in snow**. *Geophysical Research Letters*, 43, 9913-9919. <https://doi.org/10.1002/2016GL070203>
 64. Johnson JA, Mason WP, Shturmakov AJ, Haman ST, Sendelbach PJ, Mortensen NB, Augustin L, Dahnert KR (2007) **A new 122mm electromechanical drill for deep ice-sheet coring (DISC): 5. Experience during Greenland field testing**. *Annals of Glaciology*, 47, 54-60. <https://doi.org/10.3189/172756407786857730>
 65. Johnson JA, Mortensen NB, Gibson CJ, Goetz JJ, Shturmakov AJ (2014) **Replicate ice-coring system testing**. *Annals of Glaciology*, 55(68), 331-338. <https://doi.org/10.3189/2014AoG68A034>
 66. Jones TR, Cuffey KM, Roberts WHG, Markle BR, Steig EJ, Max Stevens CM, Valdes PJ, Fudge TJ, Sigl M, Hughes AG, Morris V, Vaughn BH, Garland J, Vinther BM, Rozmiarek KS, Brashear
-

-
- CA, White JWC (2023) **Seasonal temperatures in West Antarctica during the Holocene.** *Nature*, 613, 292-297. <https://doi.org/10.1038/s41586-022-05411-8>
67. Jones TR, Cuffey KM, White JWC, Steig EJ, Buizert C, Markle BR, McConnell JR, Sigl M (2017) **Water Isotope Diffusion in the WAIS Divide Ice Core During the Holocene and Last Glacial.** *Journal of Geophysical Research: Earth Surface*, 122, 290-309. <https://doi.org/10.1002/2016JF003938>
68. Jones TR, Roberts WHG, Steig EJ, Cuffey KM, Markle BR, White JWC (2018) **Southern Hemisphere climate variability forced by Northern Hemisphere ice-sheet topography.** *Nature*, 554, 351-355. <https://doi.org/10.1038/nature24669>
69. Jones TR, White JWC, Steig EJ, Vaughn BH, Morris V, Gkinis V, Markle BR, Schoenemann SW (2017) **Improved methodologies for continuous-flow analysis of stable water isotopes in ice cores.** *Atmospheric Measurement Technologies*, 10, 617-632. <https://doi.org/10.5194/amt-10-617-2017>
70. Jongebloed UA, Schauer AJ, Cole-Dai J, Larrick CG, Porter WC, Tashmim L, Zhai S, Salimi S, Edouard SR, Geng L, Alexander B (2023) **Industrial-era decline in Arctic methanesulfonic acid is offset by increased biogenic sulfate aerosol.** *Proceedings of the National Academy of Sciences*. <https://doi.org/10.1073/pnas.2307587120>
71. Kluskiewicz D, Waddington E, Anandakrishnan S, Voigt D, Matsuika K, McCarthy M (2017) **Sonic methods for measuring crystal orientation fabric in ice, and results from the West Antarctic ice sheet (WAIS) Divide.** *Journal of Glaciology*, 1-15. <https://doi.org/10.1017/jog.2017.20>
72. Koffman BG, Dowd EG, Osterberg EC, Ferris DG, Hartman LH, Wheatley SD, Kurbatov AV, Wong GJ, Markle BR, Dunbar NW, Kreutz KJ, Yates Y (2017) **Rapid transport of ash and sulfate from the 2011 Puyehue-Cordón Caulle (Chile) eruption to West Antarctica.** *Journal of Geophysical Research: Atmospheres*, 122. <https://doi.org/10.1002/2017JD026893>
73. Koffman BG, Handley MJ, Osterberg EC, Wells ML, Kreutz KJ (2014) **Dependence of ice-core relative trace-element concentration on acidification.** *Journal of Glaciology*, 60(219), 103-112. <https://doi.org/10.3189/2014JoG13J137>
74. Koffman BG, Kreutz KJ, Breton DJ, Kane EJ, Winski DA, Birkel SD, Kurbatov AV, Handley MJ (2014) **Centennial-scale variability of the Southern Hemisphere westerly wind belt in the eastern Pacific over the past two millennia.** *Climate of the Past*, 10, 1125-1144. <https://doi.org/10.5194/cp-10-1125-2014>
75. Koffman BG, Kreutz KJ, Kurbatov AV, Dunbar NW (2013) **Impact of known local and tropical volcanic eruptions of the past millennium on the WAIS Divide microparticle record.** *Geophysical Research Letters*, 40(17), 4712-4716. <https://doi.org/10.1002/grl.50822>
76. Koutnik M, Fudge TJ, Conway H, Waddington E, Neumann T, Cuffey K, Buizert C, Taylor K (2016) **Holocene accumulation and ice flow near the West Antarctic Ice Sheet Divide ice-core site.** *Journal of Geophysical Research: Earth Surface*, 121, 1-18. <https://doi.org/10.1002/2015JF003668>
77. Kunasek SA, Alexander B, Steig EJ, Sofen ED, Jackson TL, Thiemens MH, McConnell JR, Gleason DJ, Amos HM (2010) **Sulfate sources and oxidation chemistry over the past 230**
-

-
- years from sulfur and oxygen isotopes of sulfate in a West Antarctic ice core.** *Journal of Geophysical Research*, 115(D18313). <https://doi.org/10.1029/2010JD013846>
78. Küttel M, Steig EJ, Ding Q, Monaghan AJ, Battisti DS (2012) **Seasonal climate information preserved in West Antarctic ice core water isotopes: relationships to temperature, large-scale circulation, and sea ice.** *Climate Dynamics*, 39(7-8), 1841-1857. <https://doi.org/10.1007/s00382-012-1460-7>
79. Laird CM, Blake WA, Matsuoka K, Conway H, Allen CT, Leuschen CJ, Gogineni S (2009) **Deep Ice Stratigraphy and Basal Conditions in Central West Antarctica Revealed by Coherent Radar.** *IEEE Geoscience and Remote Sensing Letters*. <https://doi.org/10.1109/LGRS.2009.2032304>
80. Lamarque JF, Dentener F, McConnell J, Ro CU, Shaw M, Vet R, Bergmann D, Cameron-Smith P, Dalsoren S, Doherty R, Faluvegi G, Ghan SJ, Josse B, Lee YH, MacKenzie IA, Plummer D, Shindell DT, Skeie RB, Stevenson DS, Strode S, Zeng G, Curran M, Dahl-Jensen D, Das S, Fritzsche D, Nolan M (2013) **Multi-model mean nitrogen and sulfur deposition from the Atmospheric Chemistry and Climate Model Intercomparison Project (ACCMIP): Evaluation historical and projected changes.** *Atmospheric Chemistry and Physics*, 13, 7997-8018. <https://doi.org/10.5194/acp-13-7997-2013>
81. Lamarque JF, McConnell JR, Shindell DT, Orlando JJ, Tyndall GS (2011) **Understanding the drivers for the 20th century change of hydrogen peroxide in Antarctic ice-cores.** *Geophysical Research Letters*, 38(L04810). <https://doi.org/10.1029/2010GL045992>
82. Lee MJ, Kyle PR, Iverson NA, Lee JI, Han Y (2019) **Rittmann volcano, Antarctica as the source of a widespread 1252±2 CE tephra layer in Antarctica ice.** *Earth and Planetary Science Letters*, 521, 169-176. <https://doi.org/10.1016/j.epsl.2019.06.002>
83. Lee YH, Lamarque JF, Flanner MG, Jiao C, Shindell DT, Berntsen T, Bisiaux MM, Cao J, Collins WJ, Curran M, Edwards R, Faluvegi G, Ghan S, Horowitz LW, McConnell JR, Ming J, Myhre G, Nagashima T, Naik V, Tumbold ST, Skeie RB, Sudo K, Takemura T, Thevenon F, Xu B, Yoon J-H (2013) **Evaluation of preindustrial to present-day black carbon and its albedo forcing from ACCMIP (Atmospheric Chemistry and Climate Model Intercomparison Project).** *Atmospheric Chemistry and Physics*, 13, 2607-2634. <https://doi.org/10.5194/acp-13-2607-2013>
84. Liu P, Kaplan J, Mickley LJ, Li Y, Chellman NJ, Arienzo MM, Kodros JK, Pierce JR, Sigl M, Freitag J, Mulvaney R, Curran MAJ, McConnell JR (2021) **Improved estimates of preindustrial biomass burning reduce the magnitude of aerosol climate forcing in the Southern Hemisphere.** *Science Advances*, 7(22), eabc1379. <https://doi.org/10.1126/sciadv.abc1379>
85. Lowry DP, Han HK, Golledge NR, Gomez N, Johnson KM, McKay RM (2024) **Ocean cavity regime shift reversed West Antarctic grounding line retreat in the late Holocene.** *Nature Communications*, 15, 3176. <https://doi.org/10.1038/s41467-024-47369-3>
86. Manning JG, Ludlow F, Stine AR, Boos WR, Sigl M, Marlon JR (2017) **Volcanic suppression of Nile summer flooding triggers revolt and constrains interstate conflict in ancient Egypt.** *Nature Communications*, 8, 900, 1-9. <https://doi.org/10.1038/s41467-017-00957-y>
87. Marcott SA, Bauska TK, Buizert C, Steig EJ, Rosen JL, Cuffey KM, Fudge TJ, Severinghaus JP, Ahn J, Kalk M, McConnell JR, Sowers T, Taylor KC, White JWC, Brook EJ (2014) **Centennial-**
-

-
- scale changes in the global carbon cycle during the last deglaciation.** *Nature*, 514, 616-619. <https://doi.org/10.1038/nature13799>
88. Markle BR and Steig E J (2022) **Improving temperature reconstructions from ice-core water-isotope records.** *Climate of the Past*, 18, 1321-1368. <https://doi.org/10.5194/cp-18-1321-2022>
89. Markle BR, Steig EJ, Buizert C, Schoenemann SW, Bitz CM, Fudge TJ, Pedro JB, Ding Q, Jones TR, White JWC, Sowers T (2017) **Global atmospheric teleconnections during Dansgaard-Oeschger events.** *Nature Geoscience*, 10, 36-40. <https://doi.org/10.1038/ngeo2848>
90. Markle BR, Steig EJ, Roe GH, Winckler G, McConnell JR (2018) **Concomitant variability in high-latitude aerosols, water isotopes and the hydrologic cycle.** *Nature Geoscience*, 11, 853-859. <https://doi.org/10.1038/s41561-018-0210-9>
91. Masclin S, Frey MM, Rogge WF, Bales RC (2013) **Atmospheric nitric oxide and ozone at the WAIS Divide deep coring site: a discussion of local sources and transport in West Antarctica.** *Atmospheric Chemistry and Physics*, 13, 8857-8877. <https://doi.org/10.5194/acp-13-8857-2013>
92. Mason WP, Shturmakov AJ, Johnson JA, Haman ST (2007) **A new 122mm electromechanical drill for deep ice-sheet coring (DISC): 2. Mechanical design.** *Annals of Glaciology*, 47, 35-40. <https://doi.org/10.3189/172756407786857640>
93. Matsuoka K, Morse D, Raymond CF (2010) **Estimating englacial radar attenuation using depth profiles of the returned power, central West Antarctica.** *Journal of Geophysical Research*, 115(F02012). <https://doi.org/10.1029/2009JF001496>
94. Matsuoka K, Power D, Fujita S, Raymond CF (2012) **Rapid development of anisotropic ice-crystal-alignment fabrics inferred from englacial radar polarimetry, central West Antarctica.** *Journal of Geophysical Research*, 117(F03029). <https://doi.org/10.1029/2012JF002440>
95. McConnell JR, Aristarain AJ, Banta RJ, Edwards PR, Simoes JC (2007) **20th-Century doubling in dust archived in an Antarctic Peninsula ice core parallels climate change and desertification in South America.** *Proceedings of the National Academy of Sciences*, 104(14), 5743-5748. <https://doi.org/10.1073/pnas.0607657104>
96. McConnell JR, Burke A, Dunbar NW, Kohler P, Thomas JL, Arienzo MM, Chellman NJ, Maselli OJ, Sigl M, Adkins JF, Baggenstos D, Burkhart JF, Brook EJ, Buizert C, Cole-Dai J, Fudge TJ, Knorr G, Graf H-F, Grieman MM, Iverson N, McGwire KC, Mulvaney R, Paris G, Rhodes RH, Saltzman ES, Severinghaus JP, Steffensen JP, Taylor KC, Winckler G (2017) **Synchronous volcanic eruptions and abrupt climate change ~17.7 ka plausibly linked by stratospheric ozone depletion.** *Proceedings of the National Academy of Sciences*, 114(38), 10035-10040. <https://doi.org/10.1073/pnas.1705595114>
97. McConnell JR, Chellman NJ, Mulvaney R, Eckhardt S, Stohl A, Plunkett G, Kipfstuhl S, Freitag J, Isaksson E, Gleason KE, Brugger SO, McWethy DB, Abram NJ, Liu P, Aristarain AJ (2021) **Hemispheric black carbon increase after the 13th-century Māori arrival in New Zealand.** *Nature* 598, 82–85. <https://doi.org/10.1038/s41586-021-03858-9>
-

-
98. McConnell JR, Maselli OJ, Sigl M, Vallelonga P, Neumann T, Anschutz H, Bales RC, Curran MAJ, Das SB, Edwards R, Kipfstuhl S, Layman L, Thomas ER (2014) **Antarctic-wide array of high-resolution ice core records reveals pervasive lead pollution began in 1889 and persists today**. *Scientific Reports*, 4, 5848. <https://doi.org/10.1038/srep05848>
 99. McGwire KC, Hargreaves GM, Alley RB, Popp TJ, Reusch DB, Spencer MK, Taylor KC (2008) **An integrated system for optical imaging of ice cores**. *Cold Regions Science and Technology*, 53(2), 216-228. <https://doi.org/10.1016/j.coldregions.2007.08.007>
 100. McGwire KC, McConnell JR, Alley RB, Banta JR, Hargreaves GM, Taylor KC (2008) **Dating annual layers of a shallow Antarctic ice core with an optical scanner**. *Journal of Glaciology*, 54(188). <https://doi.org/10.3189/002214308787780021>
 101. McGwire KC, Taylor KC, Banta JR, McConnell JR (2011) **Identifying Annual Peaks in Dielectric Profiles with a Selection Curve**. *Journal of Glaciology*, 57(204), 763-769. <https://doi.org/10.3189/002214311797409721>
 102. Mekhaldi F, McConnell J, Adolphi F, Arienzo M, Chellman N, Maselli O, Moy AD, Plummer C, Sigl M, Muscheler R (2017) **No coincident nitrate enhancement events in polar ice cores following the largest known solar storms**. *Journal of Geophysical Research: Atmospheres*, 122, 11,900-11,913. <https://doi.org/10.1002/2017JD027325>
 103. Mekhaldi F, Muscheler R, Adolphi F, Aldahan A, Beer J, McConnell JR, Possnert G, Sigl M, Svensson A, Synal H-A, Welten KC, Woodruff TE (2015) **Multiradionuclide evidence for the solar origin of the cosmic-ray events of AD 774/5 and 993/4**. *Nature Communications*, 6:8611. <https://doi.org/10.1038/ncomms9611>
 104. Melton JR, Whiticar MJ, Eby P (2011) **Stable carbon isotope ratio analyses on trace methane from ice samples**. *Chemical Geology*, 288(3-4), 88-96. <https://doi.org/10.1016/j.chemgeo.2011.03.003>
 105. Mischler JA, Sowers TA, Alley RB, Battle M, McConnell JR, Mitchell L, Popp T, Sofen E, Spencer MK (2009) **Carbon and hydrogen isotopic composition of methane over the last 1000 years**. *Global Biogeochemical Cycles*, 23(GB4024). <https://doi.org/10.1029/2009GB003460>
 106. Mitchell L, Brook E, Lee JE, Buizert C, Sowers T (2013) **Constraints on the Late Holocene Anthropogenic Contribution to the Atmospheric Methane Budget**. *Science*, 342(6161), 964- 966. <https://doi.org/10.1126/science.1238920>
 107. Mitchell LE, Brook EJ, Sowers T, McConnell JR (2011) **Multidecadal variability of atmospheric methane, 1000-1800 C.E.** *Journal of Geophysical Research*, 116(G02007). <https://doi.org/10.1029/2010JG001441>
 108. Mitchell LE, Buizert C, Brook EJ, Breton DJ, Fegyveresi J, Baggenstos D, Orsi A, Severinghaus J, Alley RB, Albert M, Rhodes RH, McConnell JR, Sigl M, Maselli O, Gregory S, Ahn J (2015) **Observing and modeling the influence of layering on bubble trapping in polar firn**. *Journal of Geophysical Research*, 120(6), 2558-2574. <https://doi.org/10.1002/2014JD022766>
 109. Morse DL, Blankenship DD, Waddington ED, Neumann TA (2002) **A site for deep ice coring in West Antarctica: Results from aerogeophysical surveys and thermal-kinematic modeling**. *Annals of Glaciology*, 35, 36-44. <https://doi.org/10.3189/172756402781816636>
-

-
110. Mortensen NB, Goetz JJ, Gibson CJ, Johnson JA, Shturmakov AJ (2014) **Replicate ice-coring system architecture: electrical, electronic and software design**. *Annals of Glaciology*, 55(68), 156-164. <https://doi.org/10.3189/2014AoG68A014>
 111. Mortensen NB, Johnson JA, Shturmakov AJ (2014) **Precision cable winch level wind for deep ice-coring systems**. *Annals of Glaciology*, 55(68), 99-104. <https://doi.org/10.3189/2014AoG68A013>
 112. Mortensen NB, Sendelbach PJ, Shturmakov AJ (2007) **A new 122mm electromechanical drill for deep ice-sheet coring (DISC): 3. Control, electrical and electronics design**. *Annals of Glaciology*, 47, 41-50. <https://doi.org/10.3189/172756407786857668>
 113. Neumann TA, Conway H, Price SF, Waddington ED, Catania GA, Morse DL (2008) **Holocene accumulation and ice sheet dynamics in central West Antarctica**. *Journal of Geophysical Research*, 113(F02018). <https://doi.org/10.1029/2007JF000764>
 114. Nicewonger MR, Aydin M, Prather MJ, Saltzman ES (2018) **Large changes in biomass burning over the last millennium inferred from paleoatmospheric ethane in polar ice cores**. *Proceedings of the National Academy of Sciences*, 115(49), 12413-12418. <https://doi.org/10.1073/pnas.1807172115>
 115. Nicewonger MR, Aydin M, Prather MJ, Saltzman ES (2020) **Extracting a history of global fire emissions for the past millennium from ice core records of acetylene, ethane, and methane**. *Journal of Geophysical Research: Atmospheres*, 125, e2020JD032932. <https://doi.org/10.1029/2020JD032932>
 116. Nicewonger MR, Aydin M, Prather MJ, Saltzman ES (2020) **Reconstruction of paleofire emissions over the past millennium from measurements of ice core acetylene**. *Geophysical Research Letters*, 47, e2019GL085101. <https://doi.org/10.1029/2019GL085101>
 117. Nicewonger MR, Verhulst KR, Aydin M, Saltzman ES (2015) **Preindustrial atmospheric ethane levels inferred from polar ice cores: a constraint on the geologic sources of atmospheric ethane and methane**. *Geophysical Research Letters*, 43(1), 214-221. <https://doi.org/10.1002/2015GL066854>
 118. Orsi AJ, Cornuelle BD, Severinghaus JP (2012) **Little Ice Age cold interval in West Antarctica: Evidence from borehole temperature at the West Antarctic Ice Sheet (WAIS) Divide**. *Geophysical Research Letters*, 39(L09710). <https://doi.org/10.1029/2012GL051260>
 119. Orsi AJ, Kawamura K, Fegyveresi JM, Headly MA, Alley RB, Severinghaus JP (2015) **Differentiating bubble-free layers from melt layers in ice cores using noble gases**. *Journal of Glaciology*, 61(227), 585-594. <https://doi.org/10.3189/2015JoG14J237>
 120. Pasteris D, McConnell JR, Edwards R, Isaksson E, Albert MR (2014) **Acidity decline in Antarctic ice cores during the Little Ice Age linked to changes in atmospheric nitrate and sea salt concentrations**. *Journal of Geophysical Research*, 119(9), 5640-5652. <https://doi.org/10.1002/2013JD020377>
 121. Pedro JB, Bostock HC, Bitz CM, He F, Vandergoes MJ, Steig EJ, Chase BM, Krause CE, Rasmussen SO, Markle BR, Cortese G (2015) **The spatial extent and dynamics of the Antarctic Cold Reversal**. *Nature Geoscience*, 9, 51-56. <https://doi.org/10.1038/ngeo2580>
-

-
122. Pedro JB, Martin T, Steig EJ, Jochum M, Park W, Rasmussen SO (2016) **Southern Ocean deep convection as a driver of Antarctic warming events**. *Geophysical Research Letters*, 43, 2192-2199. <https://doi.org/10.1002/2016GL067861>
 123. Piva SB, Barker SJ, Iverson NA, Winton VHL, Bertler NAN, Sigl M, Wilson CJN, Dunbar NW, Kurbatov AV, Carter L, Charlier BLA, Newnham RM (2023) **Volcanic glass from the 1.8 ka Taupō eruption (New Zealand) detected in Antarctic ice at ~ 230 CE**. *Scientific Reports*, 13, 16720. <https://doi.org/10.1038/s41598-023-42602-3>
 124. Price BP (2010) **Microbial life in martian ice: A biotic origin of methane on Mars?**. *Planetary and Space Science*, 58(10), 1199-1206. <https://doi.org/10.1016/j.pss.2010.04.013>
 125. Price PB and Bay RC (2012) **Marine bacteria in deep Arctic and Antarctic ice cores: a proxy for evolution in oceans over 300 million generations**. *Biogeosciences*, 9, 3799-3815. <https://doi.org/10.5194/bg-9-3799-2012>
 126. Price PB, Rohde RA, Bay RC (2009) **Fluxes of microbes, organic aerosols, dust, sea-salt Na ions, non-sea-salt Ca ions, and methanesulfonate onto Greenland and Antarctic ice**. *Biogeosciences*, 6, 479-486. <https://doi.org/10.5194/bg-6-479-2009>
 127. Priscu JC, Christner BC, Foreman CM, Royston-Bishop G (2007) **ICE CORE METHODS | Biological Material**. *Encyclopedia of Quaternary Science*, 1156-1166. <https://doi.org/10.1016/B0-44-452747-8/00335-5>
 128. Priscu JC, Tulaczyk S, Studinger M, Kennicutt II MC, Christner BC, Foreman CM (2008) **Antarctic subglacial water: origin, evolution, and ecology**. *Polar Lakes and Rivers* (Edited by W.F. Vincent and J. Laybourn-Parry; Oxford University Press) <https://doi.org/10.1093/acprof:oso/9780199213887.003.0007>
 129. Rhodes RH, Brook EJ, Chiang JCH, Blunier T, Maselli OJ, McConnell JR, Romanini D, Severinghaus JP (2015) **Enhanced tropical methane production in response to iceberg discharge in the North Atlantic**. *Science*, 348(6238), 1016-1019. <https://doi.org/10.1126/science.1262005>
 130. Rhodes RH, Brook EJ, McConnell JR, Blunier T, Sime CL, Fain X, Mulvaney R (2017) **Atmospheric methane variability: Centennial-scale signals in the Last Glacial Period**. *Global Biogeochemical Cycles*, 31. <https://doi.org/10.1002/2016GB005570>
 131. Rhodes RH, Fain X, Brook EJ, McConnell JR, Maselli OJ, Sigl M, Edwards J, Buizert C, Blunier T, Chappellaz J, Freitag J (2016) **Local artifacts in ice core methane records caused by layered bubble trapping and in situ production: a multi-site investigation**. *Climate of the Past*, 12, 1061-1077. <https://doi.org/10.5194/cp-12-1061-2016>
 132. Rhodes RH, Fain X, Stowasser C, Blunier T, Chappellaz J, McConnell JR, Romanini D, Mitchell LE, Brook EJ (2013) **Continuous methane measurements from a late Holocene Greenland ice core: Atmospheric and in-situ signals**. *Earth and Planetary Science Letters*, 368, 9-19. <https://doi.org/10.1016/j.epsl.2013.02.034>
 133. Riddell-Young B, Rosen J, Brook E, Buizert C, Martin K, Lee J, Edwards J, Muhl M, Schmitt J, Fischer H, Blunier T (2023) **Atmospheric methane variability through the Last Glacial Maximum and deglaciation mainly controlled by tropical sources**. *Nature Geoscience*. <https://doi.org/10.1038/s41561-023-01332-x>
-

-
134. Rohde RA and Price PB (2007) **Correction: Diffusion-controlled metabolism for long-term survival of single isolated microorganisms trapped within ice crystals**. Proceedings of the National Academy of Sciences, 104(52), 21021-21021. <https://doi.org/10.1073/pnas.0710898105>
 135. Rohde RA and Price PB (2007) **Diffusion-controlled metabolism for long-term survival of single isolated microorganisms trapped within ice crystals**. Proceedings of the National Academy of Sciences, 104(42), 16592-16597. <https://doi.org/10.1073/pnas.0708183104>
 136. Rohde RA, Price PB, Bay RC, Bramall NE (2008) **In situ microbial metabolism as a cause of gas anomalies in ice**. Proceedings of the National Academy of Sciences, 105(25), 8667-8672. <https://doi.org/10.1073/pnas.0803763105>
 137. Santibáñez PA, Maselli OJ, Greenwood MC, Grieman MM, Saltzman ES, McConnell JR, Priscu JC (2018) **Prokaryotes in the WAIS Divide ice core reflect source and transport changes between Last Glacial Maximum and the early Holocene**. Global Change Biology. <https://doi.org/10.1111/gcb.14042>
 138. Santibáñez PA, McConnell JR, Priscu JC (2016) **A flow cytometric method to measure prokaryotic records in ice cores: an example from the West Antarctic Ice Sheet Divide drilling site**. Journal of Glaciology, 62(234), 655-673. <https://doi.org/10.1017/jog.2016.50>
 139. Sapart CJ, Monteil G, Prokopiou M, Van de Wal RSW, Kaplan JO, Sperlich P, Krumhardt KM, van der Veen C, Houweling S, Krol MC, Blunier T, Sowers T, Martinerie P, Witrant E, Dahl-Jensen D, Rockmann T (2012) **Natural and anthropogenic variations in methane sources during the past two millennia**. Nature, 490, 85-88. <https://doi.org/10.1038/nature11461>
 140. Schoenemann SW, Steig EJ, Ding Q, Markle BR, Schauer AJ (2014) **Triple water-isotopologue record from WAIS Divide, Antarctica: controls on glacial-interglacial changes in $^{17}\text{O}_{\text{excess}}$ of precipitation**. Journal of Geophysical Research Atmospheres, 119(14), 8741-8763. <https://doi.org/10.1002/2014JD021770>
 141. Seltzer AM, Buizert C, Baggenstos D, Brook E J, Ahn J, Yang J-W, Severinghaus JP (2017) **Does $\delta^{18}\text{O}$ of O_2 record meridional shifts in tropical rainfall?** Climate of the Past, 13, 1323-1338. <https://doi.org/10.5194/cp-13-1323-2017>
 142. Shackleton S, Menking JA, Brook E, Buizert C, Dyonisius MN, Petrenko VV, Baggenstos D, Severinghaus JP (2021) **Evolution of mean ocean temperature in Marine Isotope Stage 4**. Climate of the Past, 17, 2273-2289. <https://doi.org/10.5194/cp-17-2273-2021>
 143. Shturmakov AJ, Lebar DA, Bentley CR (2014) **DISC drill and replicate coring system: a new era in deep ice drilling engineering**. Annals of Glaciology, 55(68), 189-198. <https://doi.org/10.3189/2014AoG68A017>
 144. Shturmakov AJ, Lebar DA, Mason WP, Bentley CR (2007) **A new 122mm electromechanical drill for deep ice-sheet coring (DISC): 1. Design concepts**. Annals of Glaciology, 47, 28-34. <https://doi.org/10.3189/172756407786857811>
 145. Shturmakov AJ and Sendelbach PJ (2007) **A new 122mm electromechanical drill for deep ice-sheet coring (DISC): 4. Drill cable**. Annals of Glaciology, 47, 51-53. <https://doi.org/10.3189/172756407786857802>
-

-
146. Sigl M, Fudge TJ, Winstrup M, Cole-Dai J, Ferris D, McConnell JR, Taylor KC, Welten KC, Woodruff TE, Adolphi F, Bisiaux M, Brook EJ, Buizert C, Caffee MW, Dunbar NW, Edwards R, Geng L, Iverson N, Koffman B, Layman L, Maselli OJ, McGwire K, Muscheler R, Nishiizumi K, Pasteris DR, Rhodes RH, Sowers TA (2016) **The WAIS Divide deep ice core WD2014 chronology - Part 2: Annual-layer counting (0-31 ka BP)**. *Climate of the Past*, 12, 769-786. <https://doi.org/10.5194/cp-12-769-2016>
147. Sigl M, McConnell JR, Toohey M, Curran M, Das SB, Edwards R, Isaksson E, Kawamura K, Kipfstuhl S, Kruger K, Layman L, Maselli O, Motizuki Y, Motoyama H, Pasteris DR, Severi M (2014) **Insights from Antarctica on volcanic forcing during the Common Era**. *Nature Climate Change*, 1-5. <https://doi.org/10.1038/nclimate2293>
148. Sigl M, McConnell JR, Layman L, Maselli O, McGwire K, Pasteris D, Dahl-Jensen D, Steffensen JP, Vinther B, Edwards R, Mulvaney R, Kipfstuhl S (2013) **A new bipolar ice core record of volcanism from WAIS Divide and NEEM and implications for climate forcing of the last 2000 years**. *Journal of Geophysical Research*, 118, 1151-1169. <https://doi.org/10.1029/2012JD018603>
149. Sigl M, Toohey M, McConnell JR, Cole-Dai J, Severi M (2022) **Volcanic stratospheric sulfur injections and aerosol optical depth during the Holocene (past 11 500 years) from a bipolar ice-core array**. *Earth System Science Data*, 14, 3167-3196. <https://doi.org/10.5194/essd-14-3167-2022>
150. Sigl M, Winstrup M, McConnell JR, Welten KC, Plunkett G, Ludlow F, Büntgen U, Caffee M, Chellman N, Dahl-Jensen D, Fischer H, Kipfstuhl S, Kostick C, Maselli OJ, Mekhaldi F, Mulvaney R, Muscheler R, Pasteris DR, Pilcher JR, Salzer M, Schüpbach S, Steffensen JP, Vinther BM, Woodruff TE (2015) **Timing and climate forcing of volcanic eruptions for the past 2,500 years**. *Nature*, 543-549. <https://doi.org/10.1038/nature14565>
151. Sinnl G, Adolphi F, Christl M, Welten KC, Woodruff T, Caffee M, Svensson A, Muscheler R, Rasmussen SO (2023) **Synchronizing ice-core and U / Th timescales in the Last Glacial Maximum using Hulu Cave ¹⁴C and new ¹⁰Be measurements from Greenland and Antarctica**. *Climate of the Past*, 19, 1153-1175. <https://doi.org/10.5194/cp-19-1153-2023>
152. Slawny KR, Johnson JA, Mortensen NB, Gibson CJ, Goetz JJ, Shturmakov AJ, Lebar, DA, Wendricks AW (2014) **Production drilling at WAIS Divide**. *Annals of Glaciology*, 55(68), 147-155. <https://doi.org/10.3189/2014AoG68A018>
153. Sofen ED, Alexander B, Kunasek SA (2011) **The impact of anthropogenic emissions on atmospheric sulfate production pathways, oxidants, and ice core $\Delta^{17}\text{O}(\text{SO}_4^{2-})$** . *Atmospheric Chemistry and Physics*, 11, 3565-3578. <https://doi.org/10.5194/acp-11-3565-2011>
154. Sofen ED, Alexander B, Steig EJ, Thiemens MH, Kunasek SA, Amos HM, Schauer AJ, Hastings MG, Bautista J, Jackson TL, Vogel LE, McConnell JR, Pasteris DR, Saltzman ES (2014) **WAIS Divide ice core suggests sustained changes in the atmospheric formation pathways of sulfate and nitrate since the 19th century in the extratropical Southern Hemisphere**. *Atmospheric Chemistry and Physics*, 14, 5749-5769. <https://doi.org/10.5194/acp-14-5749-2014>
-

-
155. Souney JM, Twickler MS, Hargreaves GM, Bencivengo BM, Kippenhan MJ, Johnson JA, Cravens ED, Neff PD, Nunn RM, Orsi AJ, Popp TJ, Rhoades JF, Vaughn BH, Voigt DE, Wong GJ, Taylor KC (2014) **Core handling and processing for the WAIS Divide ice-core project**. *Annals of Glaciology*, 55(68), 15-26. <https://doi.org/10.3189/2014AoG68A008>
 156. Sowers T (2010) **Atmospheric methane isotope records covering the Holocene period**. *Quaternary Science Reviews*, 29, 213-221. <https://doi.org/10.1016/j.quascirev.2009.05.023>
 157. Steig EJ and Orsi AJ (2013) **The heat is on in Antarctica**. *Nature Geoscience*, 6, 87-88. <https://doi.org/10.1038/ngeo1717>
 158. Steig EJ, Ding Q, White JWC, Kuttel M, Rupper SB, Neumann TA, Neff PD, Gallant AJE, Mayewski PA, Taylor KC, Hoffman G, Dixon D, Schoenemann SW, Markle BR, Fudge TJ, Schneider DP, Schauer AJ, Teel RP, Vaughn BH, Burgener L, Williams J, Korotkikh E (2013) **Recent climate and ice-sheet changes in West Antarctica compared with the past 2,000 years**. *Nature Geoscience*, 6, 372-375. <https://doi.org/10.1038/ngeo1778>
 159. Taylor K (2016) **Introduction to special section on the WAIS Divide Special Issue of Paleooceanography**. *Paleooceanography*, 31, 1474-1478. <https://doi.org/10.1002/2016PA002995>
 160. Thomas ER, Vladimirova DO, Tetzner DR, Emanuelsson BD, Chellman N, Dixon DA, Goose H, Grieman MM, King ACF, Sigl M, Udy DG, Vance TR, Winski DA, Winton VHL, Bertler NAN, Hori A, Laluraj CM, McConnell JR, Motizuki Y, Takahashi K, Motoyama H, Nakai Y, Schwanck F, Simões JC, Lindau FGL, Severi M, Traversi R, Wauthy S, Xiao C, Yang J, Mosely-Thompson E, Khodzher TV, Golobokova LP, Ekaykin AA (2023) **Ice core chemistry database: an Antarctic compilation of sodium and sulfate records spanning the past 2000 years**. *Earth System Science Data*, 15, 2517-2532. <https://doi.org/10.5194/essd-15-2517-2023>
 161. WAIS Divide Project Members (2013) **Onset of deglacial warming in West Antarctica driven by local orbital forcing**. *Nature*, 500, 440-444. <https://doi.org/10.1038/nature12376>
 162. WAIS Divide Project Members (2015) **Precise inter polar phasing of abrupt climate change during the last ice age**. *Nature*, 520, 661-665. <https://doi.org/10.1038/nature14401>
 163. Woodruff TE, Welten KC, Caffee MW, Nishiizumi K (2013) **Interlaboratory comparison of ¹⁰Be concentrations in two ice cores from Central West Antarctica**. *Nuclear Instruments and Methods in Physics Research B*, 294, 77-80. <https://doi.org/10.1016/j.nimb.2012.08.033>