

## 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 M (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 and Howell K (2009) A high-precision method for measurement of paleoatmospheric CO<sub>2</sub> in small polar ice samples. *Journal of Glaciology*, 55(191), 499-506, 10.3189/002214309788816731
3. Ahn J, Brook EJ, Mitchell L, Rosen J, McConnell J, Taylor K, Etheridge D and Rubino M (2012) Atmospheric CO<sub>2</sub> over the last 1000 years: A high-resolution record from the West Antarctic Ice Sheet (WAIS) Divide ice core. *Global Biogeochemical Cycles*, 26, GB2027, 10.1029/2011GB004247
4. Arienz MM, McConnell JR, Murphy LN, Chellman N, Das S, Kipfstuhl S and Mulvaney R (2017) Holocene black carbon in Antarctica paralleled Southern Hemisphere climate. *J. Geophys. Res. Atmos.*, 122, 10.1002/2017JD026599
5. Aydin M, Britten GL, Montzka SA, Buzert C, Primeau FW, Petrenko VV, Battle MO, 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. *Earth and Space Science Open Archive*. 10.1002/essoar.10503126.1
6. Aydin M, Campbell JE, Fudge TJ, Cuffey KM, Nicewonger MR, Verhulst KR and 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, 10.1002/2015JD024235
7. Aydin M, Fudge TJ, Verhulst KR, Nicewonger MR, Waddington ED and 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, 10.1002/2014JD021618
8. Aydin M, Verhulst KR, Saltzman ES, Battle MO, Montzka SA, Blake DR, Tang Q and Prather MJ (2011) Recent decreases in fossil-fuel emissions of ethane and methane derived from firn air. *Nature*, 476, 198-201, 10.1038/nature10352
9. Aydin M, Montzka SA, Battle MO, Williams MB, De Bruyn WJ, Butler JH, Verhulst KR, Tatum C, Gun BK and 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, 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 and 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), 10.1029/2008JD010235
12. Barletta RE, Priscu JC, Mader HM, Jones WL and 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, 10.3189/2012JoG12J112
13. Battle MO, Severinghaus JP, Sofen ED, Plotkin D, Orsi AJ, Aydin M, Montzka SA, Sowers T and 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, 10.5194/acp-11-11007-2011

14. Bauer S E, Bausch A, Nazarenko L, Tsigaridis K, Xu B, Edwards R, Bisiaux M and 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, 10.1002/jgrd.50612
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16. Bauska TK, Joos F, Mix AC, Roth R, Ahn J and Brook EJ (2015) Links between atmospheric carbon dioxide, the land carbon reservoir and climate over the past millennium. *Nature Geoscience*, 8, 383-387, 10.1038/ngeo2422
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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 Commun Mass Spectrom*, 32, 801-814, <https://doi.org/10.1002/rcm.8099>
19. Bereiter B, Shackleton S, Baggensos D, Kawamura K, Severinghaus J (2018) Mean global ocean temperatures during the last glacial transition, *Nature*, 553, 39-44, 10.1038/nature25152
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24. Buizert C and Severinghaus JP (2016) Dispersion in deep polar firn driven by synoptic-scale surface pressure variability, *The Cryosphere*, 10, 2099-2111, 10.5194/tc-10-2099-2016
25. Buizert C, Cuffey KM, Severinghaus JP, Baggensos 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 and 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, 10.5194/cp-11-153-2015
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- 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>
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  - 30. Casto-Boggess 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>
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  - 35. Conway H and Rasmussen LA (2009) Recent thinning and migration of the Western Divide, central West Antarctica. *Geophysical Research Letters*, 36(L12502), 10.1029/2009GL038072
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