

References Cited:

Holocene CO₂ Variability and Underlying Trends

By Renee Hannon

Antarctic Ice Cores

[Ahn](#) J., and J. Brook, Atmospheric CO₂ over the last 1000 years: A high-resolution record from the West Antarctic Ice Sheet (WAIS) Divide ice core, *Global Biogeochemical Cycles*/Volume 26, issue 2, 2012.

Ahn J., Martin Wahlen, Bruce L. Deck, Ed J. Brook, Paul A. Mayewski, Kendrick C. Taylor, James W. C. White, A record of atmospheric CO₂ during the last 40,000 years from the Siple Dome, Antarctica ice core. 15 July 2004. AGU. <https://doi.org/10.1029/2003JD004415>.

Ahn, J., E.J. Brook, and C. Buizert, Response of atmospheric CO₂ to the abrupt cooling event 8200 years ago, *Geophys. Res. Lett.*, doi:10.1002/2013GL058177 (2014).

[Anklin](#), M., J. Schwander, B. Stauffer, J. Tschumi, A. Fuchs, J.M. Bamola, and D. Raynaud, CO₂ record between 40 and 8 kyr B.P. from the Greenland ice core project ice core, *J Geophys. Res.*, 102 (C12), 26539-26546, 1997.

Alley, R.B. 2004. GISP2 Ice Core Temperature and Accumulation Data. IGBP PAGES/World Data Center for Paleoclimatology

Data Contribution Series #2004-013.

ftp://ftp.ncdc.noaa.gov/pub/data/paleo/icecore/greenland/summit/gisp2/isotopes/gisp2_temp_accum_alley2000.txt

[Bauska](#), T.K.; Joos, F.; Mix, A.C.; Roth, R.; Ahn, J.; Brook, E.J., WAIS Divide Ice Core 1,200 Year Atmospheric CO₂ and d¹³CO₂ Data, 2015.

<ftp://ftp.ncdc.noaa.gov/pub/data/paleo/icecore/antarctica/wais2015co2.txt>

Bereiter et al. (2014), Revision of the EPICA Dome C CO₂ record from 800 to 600 kyr before present, *Geophysical Research Letters*, doi: 10.1002/2014GL061957.

<https://www1.ncdc.noaa.gov/pub/data/paleo/icecore/antarctica/antarctica2015co2.xls>. Note, IPCC AR6 references Bereiter et al (2015), pretty sure its 2014 not 2015.

[Indermuhle](#), A., T. F. Stocker, F. Joos, H. Fischer, H. J. Smith, M. Wahlen, B. Deck, D. Mastroianni, J. Tschumi, T. Blunier, R. Meyer & B. Stauffer, Holocene carbon-cycle dynamics based on CO₂ trapped in ice at Taylor Dome, Antarctica. *NATURE* | VOL 398 | 11 MARCH 1999.

Kawamura, K., F. Parrenin, L. Lisiecki, R. Uemura, F. Vimeux, J.P. Severinghaus, M. A. Hutterli, T. Nakazawa, S. Aoki, J. Jouzel, M. E. Raymo, K. Matsumoto, H. Nakata, H. Motoyama, S. Fujita, K. Goto-Azuma, Y. Fujii, and O. Watanabe. 2007. Northern Hemisphere forcing of climatic cycles in Antarctica over the past 360,000 years. *Nature*, Vol. 448, pp. 912-916. doi:10.1038/nature06015.

Marcott, S. A., Bauska, T. K., Buizert, C., Steig, E. J., Rosen, J. L., Cuffey, K. M., Fudge, T. J., Severinghaus, J. P., Ahn, J., Kalk, M. L., McConnell, J. R., Sowers, T., Taylor, K. C., White, J. W. C., and Brook, E. J.: Centennial-scale changes in the global carbon cycle during the last deglaciation, *Nature*, 514, 616–619, <https://doi.org/10.1038/nature13799>, 2014.

Neftel, A., H. Friedli, E. Moor, H. Löttscher, H. Oeschger, U. Siegenthaler, B. Stauffer: Historical Carbon Dioxide Record from the Siple Station Ice Core. 1994. <https://cdiac.ess-dive.lbl.gov/trends/co2/siple.html>

Oyabu, I., Kawamura, K., Kitamura, K., Dallmayr, R., Kitamura, A., Sawada, C., Severinghaus, J. P., Beaudette, R., Sugawara, S., Ishidoya, S., Dahl-Jensen, D., Goto-Azuma, K., Aoki, S., Nakazawa, New technique for high-precision, simultaneous measurements of CH₄, N₂O and CO₂ concentrations; isotopic and elemental ratios of N₂, O₂ and Ar; and total air content in ice cores by wet extraction. 2020-12-15, <https://amt.copernicus.org/articles/13/6703/2020>.

[Rubino](#), M., Etheridge, D. M., Thornton, D. P., Howden, R., Allison, C. E., Francey, R. J., Langenfelds, R. L., Steele, L. P., Trudinger, C. M., Spencer, D. A., Curran, M. A. J., van Ommen, T. D., and Smith, A. M.: Revised records of atmospheric trace gases CO₂, CH₄, N₂O, and δ¹³C-CO₂ over the last 2000 years from Law Dome, Antarctica, Earth Syst. Sci. Data, 11, 473–492, <https://doi.org/10.5194/essd-11-473-2019>, 2019.

Siegenthaler, U. et. al. EPICA Dronning Maud Land CO₂ Data for the Last Millennium, 2005. <https://www1.ncdc.noaa.gov/pub/data/paleo/icecore/antarctica/maud/edml-co2-2005.txt>

Greenland Ice Core References

[Anklin](#), M., J. Schwander, B. Stauffer, J. Tschumi, A. Fuchs, J.M. Bamola, and D. Raynaud, CO₂ record between 40 and 8 kyr B.P. from the Greenland ice core project ice core, J Geophys. Res., 102 (C12), 26539-26546, 1997.

[Barnola](#), J.-M., M. Anklin, I Porcheron, D. Raynaud, I Schwander, and B. Stauffer, CO₂ evolution during the last millennium as recorded by Antarctic and Greenland ice, Tellus, 47B, 264-272, 1995.

[Scherelis](#), Victoria. An investigation of the fidelity of records of past carbon dioxide variations in Greenland ice cores. Poster session. CEOAS, Oregon State University, Covallis, Oregon. 2017.

J. [Tschumi](#) and B.Stauffer, Reconstructing of the past atmospheric CO₂ concentrations based on ice-core analyses: open questions due to in situ production of CO₂ in the ice. Cambridge University Press: 2000.

Plant Stomatal References

[Jessen](#), C. A., Rundgren, M., Björck, S. and Hammarlund, D. 2005. Abrupt climatic changes and an unstable transition into a late Holocene Thermal Decline: a multiproxy record from southern Sweden. J. Quaternary Sci., Vol. 20 pp. 349–362. ISSN 0267-8179.

[Steinhorsdottir](#), M. Barbara Wohlfarth, Malin E.Kylander, Maarten Blaauw, Paula J.Reimer. Stomatal proxy record of CO₂ concentrations from the last termination suggests an important role for CO₂ at climate change transitions. Quaternary Science Reviews, Volume 68, 15 May 2013, Pages 43-58.

Van [Hoof](#), Thomas, Friederike Wagner-Cremer, Wolfram M. Kürschner, and Henk Visscher. A role for atmospheric CO₂ in preindustrial climate forcing. PNAS October 14, 2008 105 (41) 15815-15818; <https://doi.org/10.1073/pnas.0807624105>.

Wagner, Friederike, Bent Aaby, and Henk Visscher. Rapid atmospheric CO₂ changes associated with the 8,200-years-B.P. cooling event. PNAS September 17, 2002 99 (19) 12011-12014;
<https://doi.org/10.1073/pnas.182420699>.

[Wagner](#) F, Kouwenberg LLR, van Hoof TB, Visscher H (2004) Reproducibility of Holocene atmospheric CO₂ records based on stomatal frequency. Quat Sci Rev 23:1947–1954.