



pastglobalchanges.org/2k

Dear colleagues,

We hope this circular finds you safe and well in these challenging and uncertain times! In this circular, you will find some news and a list of recent publications related to the 2k Network. Stay tuned for information about a teleconference in February 2021, information about a 2k seminar series, and updates from the active Phase 3 projects coming in our next circular!

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This circular is sent to all 2k mailing list subscribers. Feel free to forward it to interested colleagues with a link to the [PAGES 2k list](#) where they can sign up to receive future circulars. You can unsubscribe at any time [here](#) or contact Sarah. All previous circulars are available online on the [PAGES 2k Network](#) website.

Best wishes from the 2k coordinators,

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1 – Upcoming 2k Network webinar for ECRs

Join us on 18 November 2020, 20:00 UTC to learn more about Phase 3 of the 2k Network! We will present an overview of current activities and also a look towards the future. PAGES 2k Network coordinators and project leaders will give an introduction to this working group and present some of the current and upcoming activities. This webinar is aimed at early-career researchers, but all are welcome. If you're not able to tune in at that time, the recording will be made available on the [ECN YouTube channel](#).

For more information: pastglobalchanges.org/calendar/upcoming/127-pages/2086-web-2k-20

2 – Results of the 2k Network community survey

Thank you to everyone who participated in this survey! A summary of the results has been published in the PAGES Magazine:

<http://www.pastglobalchanges.org/products/pages-magazine/13142>

3 – Sign up to the PAGES database!

Are you interested in paleosciences beyond the scope of PAGES2k? Sign up to join PAGES' People Database. That way you can keep up to date with international paleo news and events via our short monthly e-news, receive electronic or hard copies of Past Global Changes Magazine, search for 5,000+ paleoscientists by name, country, institute, program, or scientific expertise, and also explore ways to work with other members of the PAGES community. You can provide as much or as little information as you would like, by filling in the orange tabs near the top of the form. <http://pastglobalchanges.org/people/people-database/join-pages>

4 – Funding for 2k workshops

While the majority of interactions among and between the Phase 3 projects happens online and alongside larger conferences, limited funding is available from PAGES for meetings.

Only official 2k projects can apply for funding, which they can do by submitting a proposal following the guidelines here:

<http://www.pastglobalchanges.org/my-pages/meeting-support/pages-wg-mtg-support-req>

We invite you to contact the 2k Network coordinators prior to submitting your proposal.

The next deadline for PAGES 2k workshop proposals is **12 April 2021**.

5 – 2k publications (2018-2020)

Bothe O & Zorita E (2020) Proxy surrogate reconstructions for Europe and the estimation of their uncertainties, *Climate of the Past* 16(1): 341-369, <https://doi.org/10.5194/cp-16-341-2020>

Bothe O, Wagner S and Zorita E (2019) Inconsistencies between observed, reconstructed, and simulated precipitation indices for England since the year 1650 CE, *Climate of the Past* 15: 307-334, <https://doi.org/10.5194/cp-15-307-2019>

Bracegirdle TJ, Colleoni F, Abram NJ, Bertler NAN, Dixon DA, England M, Favier V, Fogwill CJ, Fyfe JC, Goodwin I, Goosse H, Hobbs W, Jones JM, Keller ED, Khan AL, Phipps SJ, Raphael MN, Russell J, Sime L, Thomas ER, van den Broeke MR and Wainer I (2019) Back to the Future: Using Long-Term Observational and Paleo-Proxy Reconstructions to Improve Model Projections of Antarctic Climate, *Geosciences* 9(6): 255, <https://doi.org/10.3390/geosciences9060255>

Dätwyler C, Abram NJ, Grosjean M, Wahl ER & Neukom R (2019) El Niño–Southern Oscillation variability, teleconnection changes and responses to large volcanic eruptions since AD 1000, *International Journal of Climatology* 39(5): 2711-2724, <https://doi.org/10.1002/joc.5983>

Dätwyler C, Grosjean M, Steiger NJ & Neukom R (2020) Teleconnections and relationship between the El Niño–Southern Oscillation (ENSO) and the Southern Annular Mode (SAM) in reconstructions and models over the past millennium, *Climate of the Past* 16(2): 743-756, <https://doi.org/10.5194/cp-16-743-2020>

Gil-Guirado S, Gómez-Navarro JJ & Montávez JP (2019) The weather behind words – new methodologies for integrated hydrometeorological reconstruction through documentary sources, *Climate of the Past* 15: 1303-1325, <https://doi.org/10.5194/cp-15-1303-2019>

Guevara-Murua A, Williams CA, Hendy EJ & Imbach P (2018) 300 years of hydrological records and societal responses to droughts and floods on the Pacific coast of Central America, *Climate of the Past* 14: 175-191, <https://doi.org/10.5194/cp-14-175-2018>

Kaufman DS & PAGES 2k special-issue editorial team (2018) Technical note: Open-paleo-data implementation pilot – the PAGES 2k special issue, *Climate of the Past* 14: 593-600, <https://doi.org/10.5194/cp-14-593-2018>

Konecky BL, McKay NP, Churakova (Sidorova) OV, Comas-Bru L, Dassié EP, DeLong KL, Falster GM, Fischer MJ, Jones MD, Jonkers L, Kaufman DS, Leduc G, Managave SR, Martrat B, Opel T, Orsi AJ, Partin JW, Sayani HR, Thomas EK, Thompson DM, Tyler JJ, Abram NJ, Atwood AR, Cartapanis O, Conroy JL, Curran MA, Dee SG, Deininger M, Divine DV, Kern Z, Porter TJ, Stevenson SL, von Gunten L & Iso2k Project Members (2020) The Iso2k database: a

global compilation of paleo- $\delta^{18}\text{O}$ and $\delta^2\text{H}$ records to aid understanding of Common Era climate, *Earth System Science Data* 12(3): 2261-2288, <https://doi.org/10.5194/essd-12-2261-2020>

Konecky BL, Comas-Bru L, Dassié E, DeLong K & Partin JW (2018) Piecing Together the Big Picture on Water and Climate, *Eos* 99, <https://doi.org/10.1029/2018EO095283>

Linderholm HW, Nicolle M, Francus P, Gajewski K, Helama S, Korhola A, Solomina O, Yu Z, Zhang P, D'Andrea WJ, Debret M, Divine DV, Gunnarson BE, Loader NJ, Massei N, Seftigen K, Thomas EK, Werner J, Andersson S, Berntsson A, Luoto TP, Nevalainen L, Saarni S & Väiliranta M (2018) Arctic hydroclimate variability during the last 2000 years: current understanding and research challenges, *Climate of the Past* 14: 473-514, <https://doi.org/10.5194/cp-14-473-2018>

Ljungqvist FC, Seim A, Krusic PJ, González-Rouco JF, Werner JP, Cook ER, Zorita E, Luterbacher J, Xoplaki E, Destouni G, García-Bustamante E, Melo Aguilar CA, Seftigen K, Wang J, Gagen MH, Esper J, Solomina O, Fleitmann D & Büntgen U (2019) European warm-season temperature and hydroclimate since 850 CE, *Environmental Research Letters* 14(8): 084015, <https://doi.org/10.1088/1748-9326/ab2c7e>

Moffa-Sánchez P, Moreno-Chamarro E, Reynolds DJ, Ortega P, Cunningham L, Swingedouw D, Amrhein DE, Halfar J, Jonkers L, Jungclaus JH, Perner K, Wanamaker A & Yeager S (2019) Variability in the northern North Atlantic and Arctic oceans across the last two millennia: A review, *Paleoceanography and Paleoclimatology* 34(6): 1399-1436, <https://doi.org/10.1029/2018PA003508>

Neukom R, Barboza LA, Erb MP, Shi F, Emile-Geay J, Evans MN, Franke J, Kaufman DS, Lücke L, Rehfeld K, Schurer A, Zhu F, Brönnimann S, Hakim GJ, Henley BJ, Ljungqvist FC, McKay N, Valler V & von Gunten L (2019) Consistent multidecadal variability in global temperature reconstructions and simulations over the Common Era, *Nature Geoscience* 12: 643-649, <https://doi.org/10.1038/s41561-019-0400-0>

Neukom R, Steiger N, Gómez-Navarro JJ, Wang J & Werner JP (2019) No evidence for globally coherent warm and cold periods over the pre-industrial Common Era, *Nature* 571: 550-554, <https://doi.org/10.1038/s41586-019-1401-2>

Nicolle M, Debret M, Massei N, Colin C, deVernal A, Divine D, Werner JP, Hormes A, Korhola A & Linderholm H (2018) Climate variability in the subarctic area for the last 2 millennia, *Climate of the Past* 14: 101-116, <https://doi.org/10.5194/cp-14-101-2018>

Pinke Z, Pow S & Kern Z (2019) Volcanic mega-eruptions may trigger major cholera outbreaks, *Climate Research* 79(2): 151-162, <https://doi.org/10.3354/cr01587>

Routson CC, McKay NP, Kaufman DS, Erb MP, Goose H, Shuman BN, Rodysill JR & Ault T (2019) Mid-latitude net precipitation decreased with Arctic warming during the Holocene, *Nature* 538: 83-87, <https://doi.org/10.1038/s41586-019-1060-3>

Shuman BN, Routson C, McKay N, Fritz S, Kaufman D, Kirby ME, Nolan C, Pederson GT & St-Jacques J-M (2018) Placing the Common Era in a Holocene context: millennial to centennial patterns and trends in the hydroclimate of North America over the past 2000 years, *Climate of the Past* 14: 665-686, <https://doi.org/10.5194/cp-14-665-2018>

St. George S (2019) The aberrant global synchrony of present-day warming, *Nature* 571: 483-484, <https://doi.org/10.1038/d41586-019-02179-2>

Thomas ER, Allen CS, Etourneau J, King ACF, Severi M, Winton HL, Mueller J, Crosta X & Peck VL (2019) Antarctic Sea Ice Proxies from Marine and Ice Core Archives Suitable for Reconstructing Sea Ice over the Past 2000 Years, *Geosciences* 9(12): 506, <https://doi.org/10.3390/geosciences9120506>

Turney CSM, McGregor HV, Francus P, Abram N, Evans MN, Goose H, von Gunten L, Kaufman D, Linderholm H, Loutre M-F & Neukom R (2019) Introduction to the Special Issue on Climate of the Past 2000 Years: Global and Regional Syntheses, *Climate of the Past* 15: 611-615, <https://doi.org/10.5194/cp-15-611-2019>

Turney CSM, McGregor HV, Francus P, Abram N, Evans MN, Goose H, von Gunten L, Kaufman D, Linderholm H, Loutre M-F and Neukom R (2019) Introduction to the special issue "Climate of the past 2000 years: regional and trans-regional syntheses", *Climate of the Past* 15: 611-615, <https://doi.org/10.5194/cp-15-611-2019>

Wang PK, Lin K-HE, Liao Y-C, Liao H-M, Lin Y-S, Hsu C-T, Hsu S-M, Wan C-W, Lee S-Y, Fan I-C, Tan P-H & Ting T-T (2018) Construction of the REACHES climate database based on historical documents of China, *Scientific Data* 5: 180288, <https://doi.org/10.1038/sdata.2018.288>

Wang Y, Huai B, Thomas ER, Broeke MR, Wessem JM and Schlosser E (2019) A New 200-Year Spatial Reconstruction of West Antarctic Surface Mass Balance, *Journal of Geophysical Research: Atmospheres* 124(10): 5282-5295, <https://doi.org/10.1029/2018jd029601>

Xu C, Sano M, Priyadarshan Dimri A, Ramesh R, Nakatsuka T, Shi F & Guo Z (2018) Decreasing Indian summer monsoon on the northern Indian sub-continent during the last 180 years: evidence from five tree-ring cellulose oxygen isotope chronologies, *Climate of the Past* 14: 653-664, <https://doi.org/10.5194/cp-14-653-2018>

Zhong Y, Jahn A, Miller GH & Geirsdottir A (2018) Asymmetric cooling of the Atlantic and Pacific Arctic during the past two millennia: A dual observation-modeling study, *Geophysical Research Letters* 45(22): 12497-12505, <https://doi.org/10.1029/2018GL079447>

To view all 2k products, visit the 2k website:

<http://pastglobalchanges.org/science/wg/2k-network/intro>

Please let us know if you see any gaps or errors, and send us any meeting documents (e.g. presentations and posters) to post on the PAGES 2k webpage to create a complete archive of an event or activity. See an example [here](#).

Don't forget to acknowledge "... Past Global Changes (PAGES) ..." or the 2k Network (e.g. "the ideas/data in this paper were assembled/developed/discussed by the PAGES 2k working group" or "This is a contribution to the PAGES 2k working group) in publications that draw ideas arising from PAGES-funded meetings. Only products containing a proper acknowledgment can be recognized as PAGES' products. The recommended acknowledgement is: "This study was undertaken by members of the 2k Network, a working group of the Past Global Changes (PAGES) project, which in turn received support from the Swiss Academy of Sciences and the Chinese Academy of Sciences."

6 – Upcoming PAGES 2k events

18 November 2020, 20:00 UTC, online

2k Network webinar: Phase 3 overview

<http://pastglobalchanges.org/calendar/upcoming/127-pages/2086-web-2k-20>

No registration required

1-17 December 2020, online

AGU Fall Meeting

2k session [PP030](#), [PP031](#), [PP033](#), [PP034](#): Climate of the Common Era

<http://pastglobalchanges.org/calendar/upcoming/127-pages/2025-agu-2020>

7-12 April 2021, online

EGU General Assembly (vEGU21: Gather Online)

2k session [CL1.1](#): Studying the climate of the last two millennia

<http://pastglobalchanges.org/calendar/upcoming/127-pages/2034-vegu21>

Abstract deadline: 13 January 2021

More upcoming meetings can be found at: pastglobalchanges.org/calendar