

Publication list

Peer Reviewed Publications (Google Scholar h-index = 13, i10-index = 13, citations: 395)

2023

21. Bonilla, E. X., Mickley, L. J., **Beaudon, E.**, Thompson, L. G., Rodriguez, W. E., Cruz Encarnación, R., Whicker, C. A., Flanner, M. G., Scmitt, C. G., and Ginot, P. (2023) Contribution of biomass burning to black carbon deposition on Andean glaciers: Consequences for radiative forcing, *Environmental Research Letters*, 18, 024031.

2022

20. Thompson, L. G., Severinghaus, J. P., Yao, T., Davis, M. E., Mosley-Thompson, E., **Beaudon, E.**, Sierra-Hernández, and M. R., Porter, S. E. (2022) Use of $\delta^{18}\text{O}_{\text{atm}}$ in dating a Tibetan ice core record of Holocene/Late Glacial climate. *Proceedings of the National Academy of Sciences*, 119(45), e2205545119.
19. **Beaudon, E.**, Sheets, J. M., Martin, E., Sierra-Hernández, M. R., Mosley-Thompson, E., and Thompson, L. G. (2022) Aeolian dust preserved in the Guliya ice cap (Northwestern Tibet): a promising paleo-environmental messenger. *Geosciences*. 12(10), 366.
18. Sierra-Hernández, M. R., **Beaudon, E.**, Porter, S. E., Mosley-Thompson, E., and Thompson, L. G. (2022) Increased fire activity in Alaska since the 1980s: evidence from an ice core-derived black carbon record. *Journal of Geophysical Research, Atmospheres*, 127(2).

2021

17. Barker, J. D., Kaspari, S., Gabrielli, P., Wegner, A., **Beaudon, E.**, Sierra-Hernández, M. R., and Thompson, L.G., (2021) Drought-induced biomass burning as a source of black carbon to the Central Himalaya since 1781 CE as reconstructed from the Dasuopu Ice Core, *Atmospheric Chemistry and Physics*, 21,5615-5633.

2020

16. Gabrielli, P., Wegner, A., Sierra-Hernandez, M.R., **Beaudon, E.**, Davis, E.M., Barker, J., Thompson, L.G., (2020) Early atmospheric contamination on the top of the Himalayas since the onset of the European Industrial Revolution. *Proceedings of the National Academy of Sciences*, 117(8), 3967-3973.

2019

15. Sierra-Hernandez, M.R., **Beaudon, E.**, Gabrielli, P., Thompson, L.G., (2019) 21st Century Asian air pollution impacts glacier in northwestern Tibet. *Atmospheric Chemistry and Physics*, 19, 1–12.

2018

14. Thompson, L.G., Yao, T.D., Davis, M., Mosley-Thompson, Wu, G., Porter, S., Xu, B., Lin, P-N., Wang, N., **Beaudon, E.**, Duan, K., Sierra-Hernandez, M.R., and Kenny, D., (2018) Ice Core Records of Climate Variability on the Tibetan Plateau with Emphasis on the Guliya Ice Cap, western Kunlun Mountains. *Quaternary Science Reviews*, 188, 1-14.

13. Sierra-Hernandez, M.R., Gabrielli, P., **Beaudon, E.**, Wegner, A., Thompson, L.G., (2018) Atmospheric Depositions of Natural and Anthropogenic Trace Elements on the Guliya Ice Cap (Northwestern Tibetan Plateau) during the last 340 years. *Atmospheric Environment*, 176, 91-102.

2017

12. Thompson, L. G., Davis, M. E., Mosley-Thompson, E., **Beaudon, E.**, Kutuzov, S., Lin, P-N., Mikhailenko V. N., Mountain, K. R., (2017) Impacts of recent warming and the 2015/16 El Niño on tropical Peruvian ice fields. *Journal of Geophysical Research: Atmospheres*, 122.
11. **Beaudon, E.**, Gabrielli, P., Sierra-Hernandez, M.R., Wegner, A., Thompson, L.G., (2017) Central Tibetan Plateau atmospheric trace metals contamination: a 500-year record from the Puruogangri ice core, *Science of the Total Environment*, D-17-02397.
10. Aarons, S.M., Aciego, S.M., Arendt, C.A., Blakwoski, M.A., Steigmeyer, A., Gabrielli, P., Sierra-Hernandez, R., **Beaudon, E.**, Delmonte, B., Baccolo, G., Pratt, K., May, N., (2017) Dust composition changes from Taylor Glacier (East Antarctica) during the last Glacial-Interglacial transition: a multi-proxy approach, *Journal of Quaternary Science Review*, D-16-00282.

2015

9. Vega, C.P., Pohjola, V.A., **Beaudon, E.**, Claremar, B., van Pelt, W.J.J., Pettersson, R., Issakson, E., Martma, T., Schwikowski, M. and Bøggild, C.E., (2015) A synthetic ice core approach to estimate ion relocation in an ice field site experiencing periodical melt; a case study on Lomonosovfonna, Svalbard, *The Cryosphere*, 9, 5053-5095.

2013

8. Ruppel, M. M., Isaksson, E., Ström, J., **Beaudon, E.**, Svensson, J., Pedersen, C. A., and Korhola, A., (2014) Unexpected increase in elemental carbon values over the last 30 years observed in a Svalbard ice core, *Atmospheric Chemistry and Physics. Discussions*, 14, 11447–11460.
7. **Beaudon, E.**, Moore, J.C., Martma, T., Pohjola, V.A., Van de Wal, R., Kohler, J., Isaksson, E., (2013) Lomonosovfonna and Holtedahlfonna ice cores reveal east-west disparities of the Spitsbergen environment since AD 1700, *Journal of Glaciology*, Vol. 59, No. 218.

2012

6. Moore, J. C., **Beaudon, E.**, S. Kang, D. Divine, E. Isaksson, V. A. Pohjola, and R. S. W. van de Wal, (2012) Statistical extraction of volcanic sulphate from non-polar ice cores, *Journal of Geophysical Research*, 117, D03306.

2011

5. Möller, M., Möller, R., **Beaudon, E.**, Mattila, O.-P., Finkelnburg, R., Braun, M., Grabiec, M., Jonsell, U., Luks, B., Puczko, D., Scherer, D. and Schneider, C., (2011) Snowpack characteristics of Vestfonna and De Geerfonna (Nordaustlandet, Svalbard) – a spatiotemporal analysis based on multiyear snow-pit data, *Geografiska Annaler, Series A: Physical Geography*, 93, 273–285.
4. **Beaudon, E.**, Arppe, L., Jonsell, U., Martma, T., Möller, M., Pohjola, V.A., Scherer, D. and Moore, J.C., (2011) Spatial and temporal variability of net accumulation from shallow cores from Vestfonna ice cap (Nordaustlandet, Svalbard), *Geografiska Annaler: Series A, Physical Geography*, 93, 287–299.

2010

3. **Beaudon, E.**, (2010) Ionic budget of snow on Vestfonna ice cap (Svalbard), *Arctic Centre Series*.

2009

2. **Beaudon, E.** and Moore, J., (2009) Frost flower chemical signature in winter snow on Vestfonna ice cap (Nordaustlandet, Svalbard), *The Cryosphere*, 3 (2), 147–154.

2005

1. **Beaudon, E.**, Martelat, J.E., Amórtegui, A., Lapiere, H., Jaillard, E., (2005) Métabasites de la Cordillère Occidentale d'Equateur, témoins du soubassement océanique des Andes d'Equateur, *C.R. Géosciences, Tectonique*, 337, 6, 625-634.

Peer Reviewed Publications Under Review

submitted on December 2022

22. Ruppel, M. M., Khedr, M., Liu, X., **Beaudon, E.**, Szidat, S., Tunved, P., Ström, J., Koponen, H., Sippula, O., Isaksson, E., Gallet, J.-C., Hermanson, M., Manninen, S., Schnelle-Kreis, J., Organic Compounds, Radiocarbon, Trace Elements and Atmospheric Transportation Illuminating Sources of Elemental Carbon in a 300-year Svalbard Ice Core, *Journal of Geophysical Research, Atmospheres*.

Ph.D. thesis

Beaudon, E. Glaciochemical Evidence of Spatial and Temporal Environmental Variability across Svalbard, (2012) *Arctic Centre Reports* 58, Lapland University Press: Rovaniemi 2012. ISBN 978-952-484-562-5.