

Minutes of the 2nd CLIVASH2k meeting on Antarctica Na⁺ and SO₄²⁻ data collection, 19 January 2021

Chairs: Liz Thomas (UK) and Diana Vladimirova (UK)

List of participants: Rachael Rhodes (UK), Yuko Motizuki (Japan), Holly Winton (NZ), Dominic Winski (US), Mirko Severi (Italy), Rita Traversi (Italy), Amy King (UK), Dan Dixon (US), Marie Cavitte (Belgium), Helen Hoffman (UK), Mackenzie Grieman (UK), Hugues Goose (Belgium), Alexey Ekaykin (Russia), Michael Sigl (Switzerland), Elizabeth Isakkson (Norway), Joe McConnell (US), Nathan Chellman (US), Daniele Udy (NZ), Tessa Vance (Aus), Sarah Jackson (Aus), Dieter Tetzner (UK), Daniel Emanuelsson (UK), Sarah Eggleston (PAGES, Switzerland), Tom Andersson (AI/ UK), Raffaella Tolotti (Italy).

Notes:

1. The chairs introduced the CLIVASH2k data call and the progress so far. A map of submitted data sets and its time spans are available in "meeting 19Jan CLIVASH2k.pdf"
2. What data is missing? Call to participants to identify missing data on the map and suggest who could be contacted to request it.

Yuko - missing data DF coastal area

Elisabeth Isaksson - DML coastal Indian; check on Swedish and Finnish snow pit data

Hugues - Belgium group 5 yr published coastal DML

Tessa - Mayewski 2017 Law Dome 5yr res

(<https://www.sciencedirect.com/science/article/pii/S0277379116305479>); this one has summer (Dec-Mar) record spanning AD 1000-2012

<https://agupubs.onlinelibrary.wiley.com/doi/full/10.1002/2014GL062447>

Joe - Norw-US traverse

Dieter - Mt Johns West Antarctica (Jefferson Simoes, Brazil) =

https://www.scielo.br/scielo.php?script=sci_arttext&pid=S2317-48892018000400853 - Mount Johns apparently goes back to 1882 AD, Sodium sulphate - reference to Clim.past to Joel Savarino

Michael - Grenoble group Joel Savarino has data from 5 replicate cores at Dome C - Clim. Past, 12, 103–113, 2016, www.clim-past.net/12/103/2016/ doi:10.5194/cp-12-103-2016 - all full 2k as far as I know

Holly – check ISOL-ICE

Mirko - Italian records, detailed timescale?

Liz - Bruce Plateau, Peninsula?

Dan Dixon + King George island

Daniel - James Ross Island

Action on all participants to contact those in your networks to request additional data.

3. Storing and sharing data:

Sarah - PAGES - setting up a shared disk.

At this stage the group need a shared space to work on the data. Once formatted and published we will submit to a recognised data centre for long-term storage.

Danielle - This might only be available in Australia but is similar to dropbox - <https://www.aarnet.edu.au/network-and-services/cloud-services/cloudstor>

4. Phase 1 of data processing:

Fluxes OR concentration - for that we need sub annual resolution and snow accumulation, so we better go with concentration. Concentrations do not work inland though. Models operate with fluxes.

Comparison with winds might be of interest.

We will send around a list of tasks to assign "tasks list.xlsx".

A consistent timescale - volcanic peaks or $\delta^{18}\text{O}$ and acc. Suggestions that records be placed on a common age-scale (Joe) matched with volcanic peaks.

5. Further steps:

We will set up small focus zoom session on each of the tasks once people sign up for them. Meeting will be followed by monthly update emails.