



## **REPORT ON ANTVOLC WORKSHOP IN BARCELONA, 22-24 NOVEMBER 2017**

The second AntVolc Workshop was convened at Barcelona & hosted by the Institute of Earth Sciences Jaume Almera (ICTJA-CSIC), 22-24 November 2017. It attracted > 30 participants, from Spain, Italy, Portugal, New Zealand, Poland & UK. The local organisers were: Adelina Geyer, Guillem Gisbert, Domenico Doronzo, Dario Pedrazzi and Laura Becerril. A programme for the meeting is displayed on the AntVolc web pages (<https://antvolcscar.wordpress.com/2nd-antvolc-workshop/>). Much of the meeting revolved around 2 days of scheduled talks, of which there were 20 orals (incl. three invited talks) plus several posters. The contributions described the results of a wide range of current volcanic-related investigations, both published and unpublished, with particular attention on Deception Island, which is a major focus of Spanish research. All the talks were well presented and generated lively discussions but a particularly noteworthy presentation was that discussing atmospheric modelling of the most recent eruption of Deception Island. It showed that, because of its peripheral geographical position relative to continental Antarctica, tephra from the volcano can escape the polar vortex and influence the southern continents as well as aircraft directly overflying Antarctica. The results of the study should help to convince sceptical funding organisations that Antarctica's volcanoes have an important role that is immediately relevant to the present. In addition, three of the talks were about related research on adjacent continents (South America & New Zealand), which is a new and very welcome extension of AntVolc's interests and will encourage a more outward-looking approach to group activities. Ample time was allowed for discussions at the end of each day, and also took place during lunch & coffee breaks, over dinner and on the final day during a field trip to see the Cenozoic volcanics of the La Garrotxa Volcanic Field.

John Smellie (AntVolc Chair) also presented an overview of Antarctic volcanism and the present and future state of AntVolc. AntVolc now has > 100 members, from 11 countries (Spain, Italy, New Zealand, USA, UK, Argentina, Germany, South Korea, Japan, Australia, Poland). His review also included a progress report on the three major AntVolc deliverables thus far identified (& on which AntVolc will ultimately be judged by SCAR): The new online database of tephra analyses, by Nelia Dunbar and Andrei Kurbatov and others, is now accessible (<http://www.tephrochronology.org/AntT/about.html>) and additional funding (from NSF) is being sought to complete it. The comprehensive scientific review volume and database on '200 million years of Antarctic volcanism' is underway (since May 2017); it has three editors (John Smellie, Kurt Panter, Adelina Geyer) and 17 lead authors of 29 chapters, and it will be published as a Geological Society of London Memoir, probably in early–middle 2019. Work on the SCAR White Paper will commence in late 2018, probably with a planning workshop near that time. It will build on the results of the new science review volume. The White Paper is an important document and must have input from as many members of AntVolc as possible so that all views on future directions are included. Finally, it was pointed out that although the lifetime of AntVolc is currently defined as approximately 6 years (from 2015), if the membership wishes to extend that period new objectives will need to be identified to give AntVolc (perhaps under new name) a new lease of life. It is likely that SCAR will also require a fresh proposal to authorise the extension of AntVolc but the procedure is unlikely to be onerous.

Bullet points (i.e. **other matters raised**; in no order):

- All members should encourage new members to join, especially if they are from countries active in Antarctica that are not currently represented in AntVolc. E.g. French volcanologists are working on Erebus but are not yet involved in AntVolc. We are also particularly keen to involve participants from South American countries, but interested participants from all countries are welcome.
- We might also attract members from unrepresented nations by sending a global email invitation to join the group via SCAR national representatives or national geo-reps.
- Can we get AntVolc included in new SCAR research programmes? AntVolc is probably too small to justify its own research programme but it can play an important part in

others. We should try and place AntVolc members at planning meetings when new SCAR projects are discussed (e.g. SERCE, PAIS). New SCAR projects will be discussed at Davos SCAR-OSC.

- Should we hold preliminary scoping discussions on the AntVolc White Paper at Davos (19-23 June 2018)? An AntVolc meeting room has been booked.
- 2020 is the date of the next SCAR-OSC. It might be a good time & location to present the outcome (or initial views) of the SCAR White Paper that AntVolc will be drafting (on the present state of Antarctic volcanic-related research and future directions; led by Adelina Geyer).
- Can we establish a link between the new Antarctic tephra database and the IAVCEI commission on tephra (INTAV – i.e. International Focus Group on Tephrochronology and Volcanism)?
- Should we propose an IAVCEI Commission for Polar Volcanism? It would enhance international visibility and possibly attract some funding. IAVCEI is linked to IUGG, which is linked to SCAR.
- Should we propose a special issue of a specialist journal, e.g. JVGR, focussed on Antarctic volcanism, e.g. tephrochronology, especially in ice cores, perhaps linked to a dedicated AntVolc workshop? Or on any other topic.
- Do we need a page on social media, e.g. Twitter, Facebook etc? BUT it needs to be kept active, thus significant work for somebody. OR do we give access to everybody in AntVolc so they can contribute individually. But it still needs to be overseen by somebody. *Volunteer(s)*?
- We are required to send a short report of the Barcelona workshop (with photos?) to our SCAR parent Geosciences Science Group. This report shall suffice & it will also be placed on the AntVolc website to ensure maximum outreach.
- In addition, we should send a short report on the Barcelona workshop to IAVCEI, with photos. Paola del Carlo has volunteered to do this. *We can combine this with our SCAR report.*
- All AntVolc members: add acknowledgment of AntVolc to their Antarctic-related papers (e.g. ‘This paper is sponsored by the SCAR Expert Group, AntVolc, as part of its brief to promote research of Antarctic volcanism’), and use the AntVolc logo in all

Antarctic volcanism presentations (orals/posters). I attach a copy of the logo with this report for any members who do not have it already.

- We should investigate getting the SCAR logo inserted into the new volume on Antarctic volcanism – SCAR has an agreement with the GeoSoc, so should be possible.
- In addition to VolcanoListServe, AntVolc should advertise relevant meetings on CRYOLIST too (as already done by JS for POLAR2018).
- Add SCAR group leaders (e.g. SERCE, PAIS, ANTEC) to our circulation list to keep them advised of our activities.

***ANY COMMENTS FROM MEMBERS CONCERNING ANY OF THE ABOVE ARE WELCOME AND SHOULD BE EMAILED TO JOHN SMELLIE (JLS55@LE.AC.UK) AND ADELINA GEYER (AGEYERTRAVER@GMAIL.COM)***