Publishing a Special Issue of *Reports* from the volcano observatories in Latin America

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Peer-reviewed publications are the most common way of sharing scientific knowledge internationally. *Volcanica* is the only fully diamond open access journal in volcanology, publishing peer-reviewed articles without costs to authors or readers. As part of our wider journal mission, *Volcanica* also aims to address some of the biggest barriers in research publication and to increase accessibility to published, written research outputs. In this Editorial, we discuss *Volcanica*'s latest venture: to publish a complete Special Issue of *Reports*—one of our flagship publication formats designed specifically for cutting edge, direct observations from volcanoes^{*}—and to do so in both English and Spanish languages.

In this Special Issue we have worked with the Asociación Latinoamericana de MX 46 | 10 Volcanología (ALVO)[†] to publish peer-reviewed Reports written by representatives, managers, scientists, and researchers from the volcano observatories in all ten of the Latin American countries in which there is currently an official volcano monitoring program. From South to North, these are: Chile, Argentina, Peru, Ecuador, Colombia, Costa Rica, Nicaragua, El Salvador, Guatemala, and Mexico (Figure 1). The Reports are preceded by a preface written by ALVO's representatives [Forte et al. 2021, this issue].

This initiative and Special Issue is motivated by the need—identified by Latin CH 9 American volcanologists in ALVO and beyond for a reference volume detailing the volcano monitoring, volcano observatory, and volcano management activities in their region. This has also been a great opportunity to bring all Latin American volcano observatories together to collaborate on a common project on a regional scale. It was important to these stakeholders that such a reference publication should be easily and freely accessible to their respective communities, to the volcanological community more broadly, and to the interested general public.

A key part of 'accessible' in this context is associated with the language barrier of modern research publication, namely that the majority of research is published in English. Both *Volcanica* and ALVO noted that the linguistic Anglo-centrism of volcanology research is cast against the observation that English is not the first language for many communities living in areas of active volcanism [e.g. Farquharson and Wadsworth 2018]. Language is a core part of the documentation of primary observations of volcanic eruptions as well as the dissem-

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Taken together, observations from eruptions, results and lessons from volcano monitoring efforts, and volcanology research, all feed into the communication chain that results in improvements to the responses when there is a volcanic eruption. There are key advantages to having a single international language in which research is written and shared. But there are also key limitations associated with accessibility of research to a broad group of people. It is perhaps more important in volcanology than in some other disciplines simply because the research into volcanic activity can very often be associated with a particular region or place in which

ination of volcanology research results worldwide.

many people live with active volcanism and hence where volcanic risk reduction strategies need to be improved. Therefore, this Special Issue is published in both Spanish—the common official language of the countries in Latin America here represented—and English. The English version was reviewed by at least two international peers and, once accepted, the Spanish translation was verified by bilingual ALVO members and *Volcanica* editors. This endeavour therefore extends our existing and widely used dual-language abstract option at *Volcanica*, which has been a catalyst

^{*}https://www.jvolcanica.org/ojs/index.php/volcanica/about/
submissions

[†]https://vhub.org/groups/alvo/overview_english

Figure 1: [Previous page] An 'exploded view' of the 10 Latin American countries for which there is currently an official volcano monitoring program and for which a *Report* is published in this Special Issue. MX: Mexico; GU: Guatemala; NI: Nicaragua; ES: El Salvador; PM: Panama; CR: Costa Rica; CO: Colombia; EC: Ecuador; PE: Peru; BO: Bolivia; CH: Chile; and AR: Argentina. The numbers in red and grey refer to the total number of active and monitored volcanoes in the country, respectively.

for full dual-language publication in this Special Issue. We posit that language barriers to volcanology research need careful consideration moving forward. While this Special Issue shows us just how much additional effort is involved in coordinating multi-lingual publication, we hope that it goes some way to increasing accessibility to the information published here.

Volcanica's Report format is one designed with volcano observatory staff in mind. In our first Report published in 2018, members of the Instituto Geofísico de la Escuela Politécnica Nacional, Ecuador, worked with colleagues from Pennsylvania State University, U.S.A., and the Universidad Central del Ecuador, Ecuador, to document recent eruption activity from Fernandina and Sierra Negra volcanoes [Vasconez et al. 2018]. These Report articles aim to be short-format and are publications that can simply document observations, activity, monitoring advances in the field, methods, trialled evacuation procedures, etc. While we do not mandate that this article type must come from volcano observatory staff, we hope that it is appealing to members of monitoring organisations, as a primary, peer-reviewed mechanism to disseminate best-practice and front-line information from active volcanic areas. For these reasons, this format was the ideal forum for a Special Issue from volcano observatory staff, members, and affiliates in Latin America, and this made it easy for Volcanica to pursue this endeavour here-published with ALVO.

Publishing a dual-language issue places substantial additional work burdens on both the content authors and the editorial board and technical teams at a journal. In addition to the usual challenges in peer review and article production, challenges are associated with language translation verification, ensuring formatting and contextual consistency between *Reports* across the Special Issues, typesetting and copyediting in multiple languages. This Special Issue therefore involves a huge undertaking by a large group of people. Not only have observatory staff members cooperated and provided articles about their institute activities and volcanoes, they have sometimes collaborated across national institutes to provide a single voice for a given Latin American country. We note that there is a single exception, such that here we publish two articles associated with the monitoring of Peru's volcanic activity both within the

Peruvian national jurisdiction. In all cases, the members of these observatories collaborated with our editorial committee, editorial board, ALVO, and with our reviewers and technical teams, all while continuing their monitoring, teaching, technical duties and outreach activities.

We now take the opportunity to warmly acknowledge the following groups of people who have contributed to this issue.

- Our special guest editor, Pablo Forte, who was the initiator of this special issue and the bond between the observatory communities and the *Volcanica* editorial board.
- The reviewers who critically commented and corrected the *Reports* (in alphabetical order): Jenni Barclay, François Beauducel, Sonia Calvari, Robin Campion, Amy Donovan, Dolors Ferrés, Anthony Finizola, Nico Fournier, Christopher Harpel, Michael Heap, Alexandra Kushnir, John Lyons, Patricia Mothes, J. Maarten de Moor, Christina Neal, Natalie Ortiz, Jose Luis Palma, Matthew Patrick, Mike Poland, Dmitri Rouwet, Bill Rose, Pablo Samaniego, José Viramonte, Glyn Williams-Jones, and Heather Wright.
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Finally, in this Editorial, we conclude that the *Reports* contained within this Special Issue represent (1) an up-to-date state-of-the-art for the monitoring capacity, monitoring activities, and outstanding challenges faced by volcano observatories in Latin America; and (2) an attempt to address issues of accessibility of published information to a wide readership, including those for whom the information is perhaps most pertinent. Looking forward, Volcanica is committed to both exploring and deploying publication strategies that enable accessibility to be a core part of journal responsibility in research communities. We close by suggesting that grass-roots community-led journals such as Volcanica have the built-in flexibility required to nimbly respond to creative ideas put forward by the research communities they serve, and as such, we continue to welcome new suggestions for improving our publication offering for volcanology and related disciplines.

Yours volcanically,

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"Give me silence, water, hope. Give me struggle, iron, volcanoes."

– Pablo Neruda

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