



## **Exploiting the outcome of FUTUREVOLC: The 2014-2015 rifting event, effusive eruption and gradual caldera collapse at Bardarbunga volcanic system, Iceland**

Freysteinn Sigmundsson (1), Kristin S. Vogfjord (2), Magnus T. Gudmundson (1), Benedikt G. Ofeigsson (2), Stéphanie Dumont (1), Michelle Parks (1), Kristin Jonsdottir (2), Andrew Hooper (3), Sigrun Hreinsdottir (4), Elias Rafn Heimissson (1), Robert White (5), Thorbjorg Agustsdottir (5), Chris Bean (6), Susan C. Loughlin (7), Einar Petur Heidarsson (8), Sara Barsotti (2), Matthew Roberts (2), Maurizio Ripepe (9), Evgenia Ilyinskaya (3), and Futurevolc Consortium (10)

(1) University of Iceland, Nordic Volcanological Center, Institute of Earth Sciences, Reykjavik, Iceland (fs@hi.is), (2) Icelandic Meteorological Office, IS-150 Reykjavík, Iceland, (3) School of Earth and Environment, University of Leeds, Leeds, LS2 9JT, UK, (4) GNS Science, Avalon 5010, Lower Hutt, New Zealand, (5) Dept. Earth Sciences, University of Cambridge, Madingley Road, Cambridge CB3 0EZ, UK, (6) Dublin Institute for Advanced Studies, Dublin, (7) British Geological Survey, UK, (8) Department of Civil Protection and Emergency Management, National Commissioner of the Icelandic Police, (9) University of Florence, Italy, (10) FP7 EU project

Activity in the Bardarbunga volcanic system in Iceland 2014-2015 included major lava eruption (~1.5 km<sup>3</sup>) and gradual caldera collapse (~66 m), connected by a 50-km-long laterally injected dyke that formed mostly over 2-4 weeks after onset of activity on 16 August 2014. This rifting event is the main magmatic activity studied by the FUTUREVOLC project, a 3.5 year, 26-partner project funded by FP7 Environment Programme of the European Commission, addressing topic "Long-term monitoring experiment in geologically active regions of Europe prone to natural hazards: the Supersite concept. The project end is 31 March 2016 and it had aims to (i) establish an innovative volcano monitoring system and strategy, (ii) develop new methods for near real-time integration of multi-parametric datasets, (iii) apply a seamless transdisciplinary approach to further scientific understanding of magmatic processes, and (iv) to improve delivery, quality and timeliness of transdisciplinary information from monitoring scientists to civil protection. A review will be presented on how FUTUREVOLC has contributed to the response and study of the Bardarbunga activity and other events in Iceland during the project period.