The 9 December 2019 eruption of Whakaari / White Island, New Zealand: Volcano science, monitoring, response and key learnings

## and Abstract\* of your presentation (up to 300 words)

Whakaari / White Island is a stratovolcano 48 km offshore of the North Island of New Zealand, which erupted suddenly at 14:11 on 9 December 2019 while visitors were on island, with tragic consequences. This presentation will give background on Whakaari, explore the eruption itself, and discuss the monitoring, science and emergency response. We will also cover the wider New Zealand volcanology and volcano hazard management context. This eruption is the deadliest volcanic disaster in New Zealand in over 50 years and one of the most complex and challenging responses to an eruption many New Zealand volcanologists have been involved in. In this presentation, we provide a narrative of how the events unfolded, lay out the competing tensions at play during the crisis response, and detail how science played a central role in the operations beyond providing regular updates on volcanic activity. Finally, we discuss some initial key learnings from this eruption, and question assumptions about the role of volcano observatories in times of crisis. This presentation is on behalf of the wider monitoring and science team, and developed in collaboration with our emergency management colleagues. Our thoughts are with those killed and injured, and their families and friends.