



## **Working with local communities in the Caribbean to develop a smartphone app for near real-time hazard observations and decision-support.**

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The British Geological Survey (BGS) has been working with the UWI Seismic Research Centre (SRC), the National Emergency Management Organisation (NEMO) of St. Vincent and the Grenadines and St. Vincent community members to develop a citizen science app and decision-support system for collecting and sharing observations of natural hazards and their impacts in near real-time. The work follows on from the development of the myVolcano app, which was designed by BGS in response to the 2010 Eyafjallajökull and 2011 Grímsvötn eruptions for collecting distal, trans-boundary volcanic ash fall samples. A further desk study in 2015 and a participatory workshop in St. Vincent in 2017 were undertaken to identify priorities for app development to benefit scientists, Disaster Risk Managers, citizens in St. Vincent and the Grenadines and the wider Caribbean.

Based on the workshop outcomes, since October 2017 we have been developing a new, multi-faceted system for collecting, managing and sharing observations of natural hazards and environmental phenomena. The system includes: (1) a smartphone app primarily designed for reporting natural hazard observations and for gaining a 'quick glance' at the status of hazards in your area; (2) an observation management system for use by decision makers and scientists to manage and respond to incoming observations; and (3) a public web portal for viewing and downloading data gathered by the app and for more complex data visualisation.

Whilst the initial system is being developed for use in St. Vincent and the Grenadines (by incorporating local data and being managed locally), it will be possible to 'customise' subsequent versions for use in any other country or hazard setting.