

The New Botswana Seismological Network (BSN): Developments in detection of seismic events in Southern Africa and beyond

Launched during the period between 2000 and 2001, the Botswana Seismological Network (BSN) project involved the installation of seven accelerometric stations distributed across the seismically active Okavango delta region (ODR) in northwestern Botswana. The network was deployed for long-term monitoring of seismic activity in the ODR to improve our understanding of the causes of earthquakes and enable better assessment of seismic-related hazards and risks in the area. Due to operational challenges, those BSN stations were de-installed in 2016. Currently, the BSN system has been revitalized through the deployment of a set of 21 new broadband seismographic stations nationwide. The digital network was installed through a collaborative project between the Botswana Geoscience Institute (BGI) and the Netherlands based University of Twente (UT) and the Utrecht University (UU). At the end of the project in March 2018, ownership of the stations was transferred to the BGI to reconstitute the BSN. The new BSN is telemetered continuously to the BGI server via the Seiscomp3 acquisition system and integrated with IMS and other regional stations to enhance detection of regional and teleseismic events. Both Data and bulletins are shared to the Incorporated Research Institutions for Seismology (IRIS) and the International Seismological Center (ISC) respectively.

Primary author: NTIBINYANE, Onkgopotse (Botswana Geoscience Institute)

Presenter: NTIBINYANE, Onkgopotse (Botswana Geoscience Institute)

Track Classification: Theme 4. Performance Optimization