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operation and maintenance of the Botswana Seismological Network (BSN) stations including Lessons learned from the COVID-19 pandemic crisis.

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Botswana Seismological Network(BSN) have deployed a countrywide state-of-the-art network of 21 autonomously recording broadband stations. The sensors deployed in the BSN are the Streckeisen and the Nanometrics Trillium 120. A relatively low cost in-house developed NARS Dataloggers developed by the seismology group and the Instrumental group of the Physics department of Utrecht University is used in the BSN together with the new de facto standard Centaur Digital Recorders developed by Nanometrics. For timing the NARS Datalogger uses the Trimble Acutime Gold GPS smart antenna. The BSN is powered by solar energy with the use of a smart charge controller that regulates power. Mobile network communication systems are used to provide continuous remote access. This communication system allows us to connect to the stations remotely via SSH, SFTP and VNC to do remote maintenance, upgrades and to check for the state of health of the stations(SOH). Remote Access to the stations and the use of automated scripts is our new norm of getting the SOH, downloading data and managing most of the routine processes during this Covid-19 crisis. The BSN stations are integrated by Seiscomp3 with the IMS and regional stations to improve location of local and regional earthquakes.

Promotional text

The Abstracts shares ideas with other NDC's how we operate and maintain our network stations. The Abstract is also open to improvements and changes after learning from other Institutions.

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