

Broadband seismic deployments in Antarctica: IPY contribution to lithosphere and Earth's interior of Gondwana supercontinent

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Deployment of broadband seismic stations on the Antarctica continent is an ambitious project to improve the spatial resolution of seismic data across the Antarctic Plate. The project has several components, including 1) process-oriented experiments such as 3D-arrays; 2) evolving regional arrays; and 3) a permanent backbone network. Temporary broadband stations deployed on outcrops and continental ice sheet around East Antarctica - African continents will contribute strongly to IPY related major programs such as the LEGENDS, IGCP-559, POLER observation NETwork (POLENET) (IPY 185) and the Antarctica's Gamburtsev Province (AGAP)/GAMSEIS (IPY 147). The observed data during IPY will be available from library servers (ex., POLARIS of NIPR), and sent to world data centres (IRIS/DMS, PACIFIC21), and to AMD/JCADM of the SCAR/ANTEC. In addition to lithospheric studies, data from the large span arrays of broadband stations will allow more detailed investigations of the Earth's deep interior under high southern latitudes.