

Canadian Report to FDSN Working Group V

1. POLARIS Consortium

POLARIS is a Canadian university-government-industry geophysical consortium, formed in 2000, that is focused on investigation of the structure and dynamics of the Earth's lithosphere, earthquake ground motion, and geomagnetic hazards.

1.1 Real-time POLARIS seismic network

- current station locations are covered in the Canadian Seismic Station Report submitted to FDSN and on the FDSN web site
- all data are open and available from the Canadian National Data Centre (CNDC) via AutoDRM & NetDC

1.2 POLARIS Equipment Available

The following POLARIS equipment will become available for re-deployment this summer:

- POLARIS broadband seismograph stations, with real-time data access via Internet or VSAT; suitable for remote operations using solar-powered stations and satellite communications
- POLARIS audio-frequency and broadband magnetotelluric (MT) instruments and roving long-period MT instruments

Researchers are invited to submit applications to make use of this POLARIS equipment. For more details, visit the POLARIS website: <http://www.polarisnet.ca>

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2. Taurus Portable Seismographs

- GSC owns 101 units, all with L4A short period sensors. Three new BB sensors were recently purchased for the Lorita experiment. Lorita data will not be available until post-2013.
- UBC owns 46 units under POLARIS. About 30 have BB sensors. Currently deployed in central BC. Data for the first 2 years have been provided to the CNDC, but require format conversion and QC before archiving and dissemination.
- Carleton University owns 6 units under POLARIS, all with BB sensors. Two are currently deployed at the Sudbury Neutrino Observatory (SNO) and sending real-time data over the Internet to the CNDC.

For broadband Taurus deployments, we are short of broadband seismometers and power supply components such as batteries, chargers, solar panels, etc.