

# AntarcticArray Seismic Deployments and their Contribution to Deep Interior & Dynamics of the Earth

# Masaki Kanao[1]

[1] NIPR

<http://www.isc.nipr.ac.jp/~kanao>

Antarctic Array is an ambitious program to improve seismic instrumentation on and around the Antarctic continent. A long-term science plan designed to improve the understanding of the structure and evolution of the Antarctic Plate with Antarctic Array as a center-piece is currently under development.

Discussions at the ANTEC (Siena, Italy, 2001) and SEAP (Structure and Evolution of the Antarctic Plate, Boulder, Colorado, 2003) workshops have led to the development of a strategy to radically improve our knowledge of the deep structure of the Antarctic plate and the degree of neotectonic activity within it. This strategy has several components, including 1) process-oriented experiments; 2) an active source system; 3) evolving regional arrays; and 4) an enhanced permanent backbone network.

The 50-year anniversary of the International Geophysical Year (IGY, 1957-1958) is less than 5 years off. The 2007-2008 field season may be a good target to initiate an Antarctic Geophysical Decade (2007-2017).