

Geo-Science

Ge-1	Observation of the Earth's free oscillation and tide with a superconducting grameter at Ny-Ålesund	
	Tadahiro SATO (Natl. Astro. Obs.)	85
Ge-2	Ocean Bottom Seismographic Survey in the Arctic Ocean in the summer of 2002	
	Hideki SHIMAMURA (Hokkaido Univ.)	86

Title: Observation of the Earth's free oscillation and tide with a superconducting grameter at Ny-Ålesund**Discipline:** Geo-Science**Field leader:** Tadahiro SATO**Institution:** Division of Earth Rotation, National Astronomical Observatory of Japan**Address:** 2-12 Hoshigaoka, Mizusawa, Iwate, 023-0861 JAPAN**TEL & E-mail:** +81-197-22-7137, tsato@miz.nao.ac.jp**Programme:** Superconducting gravimetry**Principal Investigator:** Tadahiro SATO**Proj. Period:** 1999 - 2003**Institution:** National Astronomical Observatory of Japan**Co-research Institution & Scientist (out of JPN):** Norwegian Mapping Authority:
Hans-Peter Plag

Planned field activity**Invest. Area:** Ny-Ålesund**Field Period:****Logistics:** Continuous observation using, Superconducting gravimeter (SG), absolute gravimeter and VLBI at observatory in Ny-Ålesund**Description:** [purpose] Secular gravity change at Ny-Ålesund

[outline] verification of the secular gravity change observed by the SG with an absolute gravimeter FG5

Participants: T. Sato, Hans-Peter Plag, O. Francice

Field activity of previous year**Invest. Area:****Field Period:****Logistics:****Description:****Number of participants:** 2

* See "Japanese Arctic Research Directory in 2001" P. 101

Title: Ocean Bottom Seismographic Survey in the Arctic Ocean in the summer of 2002

Discipline: Geo-Science

Field leader: Hideki SHIMAMURA

Institution: Institute of Seismology and Volcanology, Hokkaido University

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Programme: Ocean Bottom Seismographic Survey in the Arctic Ocean in the summer of 2002

Principal Investigator: Hideki SHIMAMURA

Proj. Period: 2001 - 2004

Institution: Institute of Seismology and Volcanology, Hokkaido University

Co-research Institution & Scientist (out of JPN): Solid Earth Physics, University of Bergen (Norway): Rolf Mjelde

Planned field activity

Invest. Area: Greenland Fracture Zone (Knipovich Ridge)

Field Period: Aug. -Sep. 2002

Logistics: R/v Hookon Mosby

Description: [purpose] Research on Greenland Fracture Zone whose origin has not yet been clarifies whether it is of Continental Origin or of Oceanic Origin, which has a key to elucidate the history of opening of North Atlantic Ocean

[outline] 20 OBS will be brought from Japan and deployed by Norwegian research vessel Haakon Mosby. Then controlled source seismological experiment to study subbottom structure down to 40-60km will be made.

Participants: Hideki Shimamura, Yoshio Murai, Yuuichi Nishimura, Ami Yamada, Rolf Mjelde

Field activity of previous year

Invest. Area: North Atlantic (Kolbeinsey Ridge, north off Iceland)

Field Period:

Logistics: Natural earthquake observation and controlled source seismology experiments by use of OBS

Description: joint data processing and analysis by Japan, Norway and Iceland scientists of the data collected until 2000.

Number of participants: 12

* See "Japanese Arctic Research Directory in 2001" P. 102