## **OBSIP Experiment Archive**

**Year:** 2001

**Experiment Name:** Far-offset Airgun Imaging of the Mantle (FAIM)

**Principal Investigator(s):** Jim Gaherty

Dan Lizarralde

**Experiment Summary:** (Taken from the NSF Abstract Award #0002417): This project will investigate the seismic structure of oceanic mantle lithosphere using an active-source seismic refraction experiment along an 800-km-long transect in the Western Atlantic Ocean. The transect extends along a plate kinematic flow line that lies entirely within a single spreading-center segment, on lithosphere ranging from 87 to 145 million years old. The experiment will determine if the lithospheric mantle in the Atlantic is stratified, the magnitude and form of anisotropy over length scales of a few hundred kilometers, the constraints the character of oceanic Pn coda places on the nature of small-scale lateral heterogeneity, and the parameters that maximize the range at which mantle phases can be recorded using airgun source and ocean-bottom receivers.

## **Cruises:**

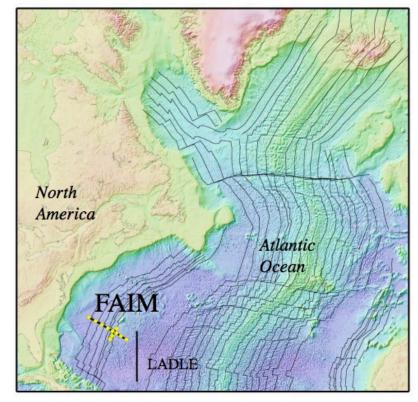
5/31/2001 - 6/30/2001: 20 SIO L-CHEAPO ocean-bottom seismometers are deployed for a refraction experiment the R/V Maurice Ewing.

## Data:

Data from all instruments deployed are archived under assembled data set ID# <u>03-006</u> at the IRIS DMC.

## **Downloads/Links:**

Cruise Report



Stations that are deployed as part of FAIM (yellow circles)