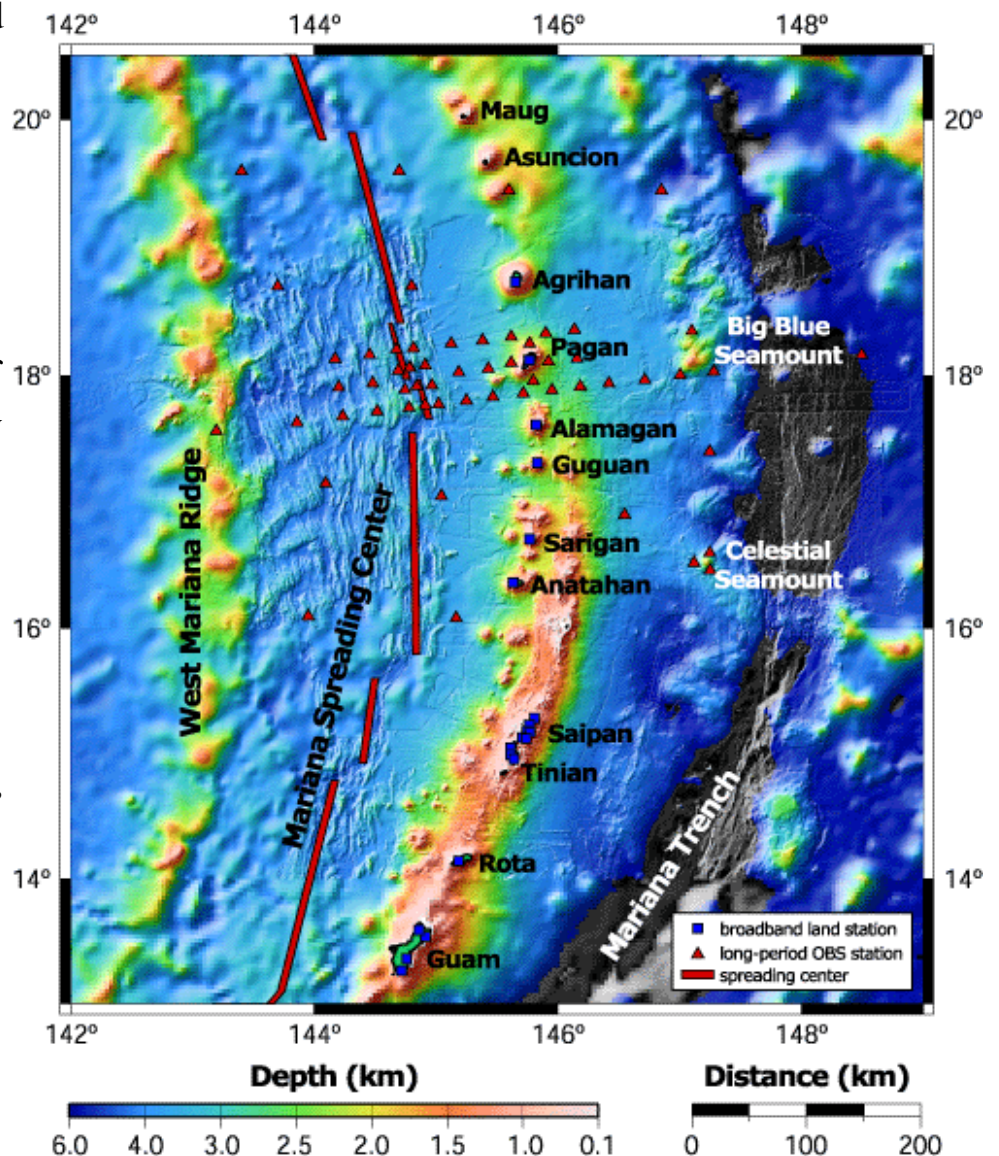


# OBSIP Experiment Archive

<b>Year:</b>	2003
<b>Experiment Name:</b>	Multi-Scale Seismic Imaging of the Mariana Subduction Factory
<b>Principal Investigator(s):</b>	Doug Wiens (WUSTL)

**Experiment Summary:** (Taken from the NSF Abstract Award #0001938): An integrated multi-institutional effort of multi-scale seismic imaging of the Mariana Subduction Factory (MSF). The PIs will conduct multi-channel seismic reflection profiling, controlled-source wide-angle reflection/refraction profiling and passive recording of local and teleseismic earthquakes through OBS deployment to be carried out with Japanese investigators. The data will provide a comprehensive velocity and attenuation, structural and stratigraphic image of the MSF. The principal objectives of the study are to understand: 1) velocity and attenuation structure of the mantle, 2) large-scale flow of the mantle wedge, 3) velocity structure of the subducting oceanic crust, 4) seismic stratigraphy and structure of the forearc, arc and remnant arc, 5) the magma chamber below the volcanoes, 6) a possible double seismic zone, and 7) updip and downdip limits of the seismogenic zone. The study will also help in the planning and eventual drilling in the Mariana island arc system.

*Continued Next Page*



# OBSIP Experiment Archive

...Continued

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## **Cruises:**

*April 2003 - May 2003:*

40 LDEO instruments were deployed via the R/V Ewing.

*2004:*

40 LDEO instruments were recovered.

## **Data:**

Data from all OBSIP instruments deployed are archived under temporary network code [YY](#) at the IRIS DMC.

## **Downloads/Links:**

[Experiment Website](#)