4.What were our research facility

Facilities we took in R/V Natsushima Cruise

1) To observe the sea bottom right after the Sumatran Earthquake using ROV Hyper- Dolphin
2) To monitor the aftershocks locally by an Ocean Bottom Seismometer (OBS) array system
3) To better understand bathymetry of the area taking high-resolution multi-narrow beam echo sounder with single channel seismic profiler

Research Vessel **R/V Natsushima**
led by Captain Y. Saito

R/V Natsushima (1981)

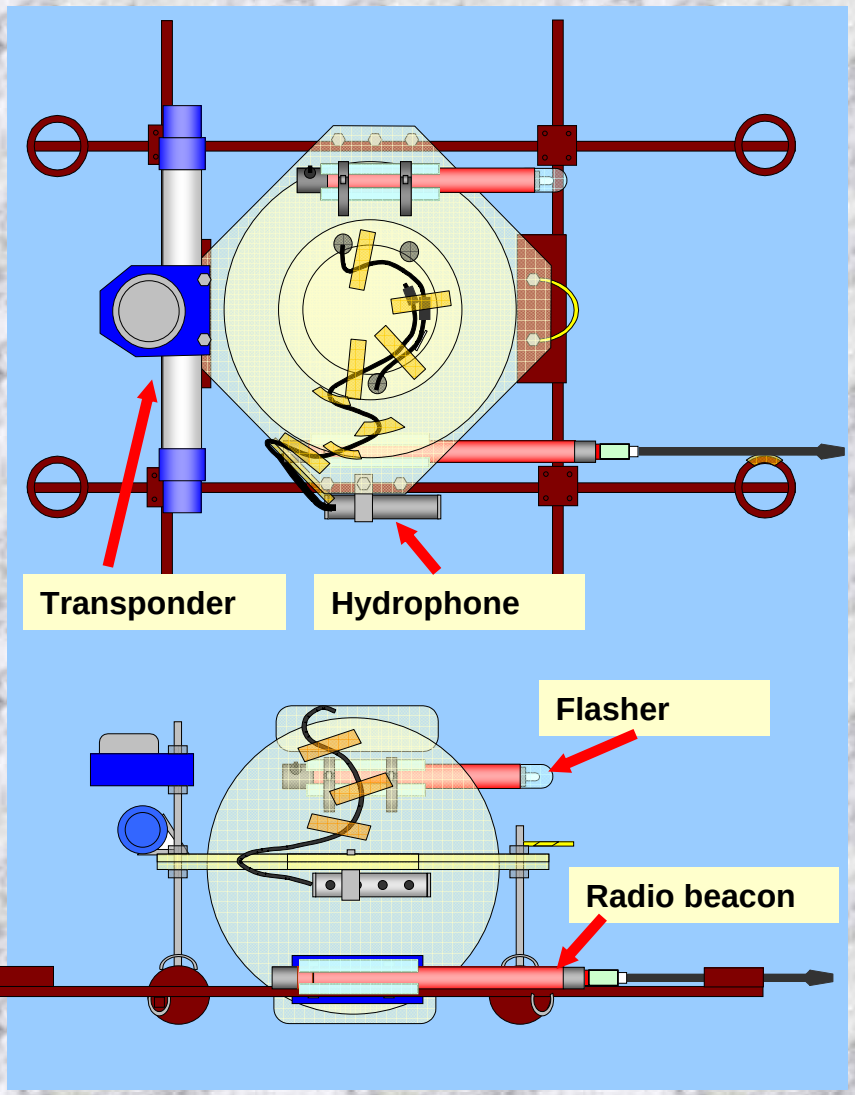
- Length: 67.4m
- Breadth : 13.0m
- Depth : 6.3m
- Draft : 3.6m
- Gross Tonnage : 1,739 t

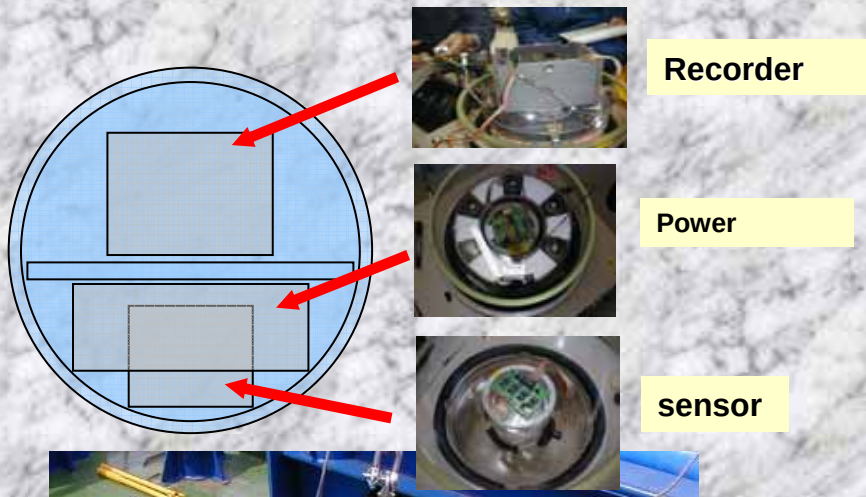
Remotely Operated Vehicle (ROV)
Hyper-Dolphin
led by K. Mitsufuji

Hyper-Dolphin(1999)

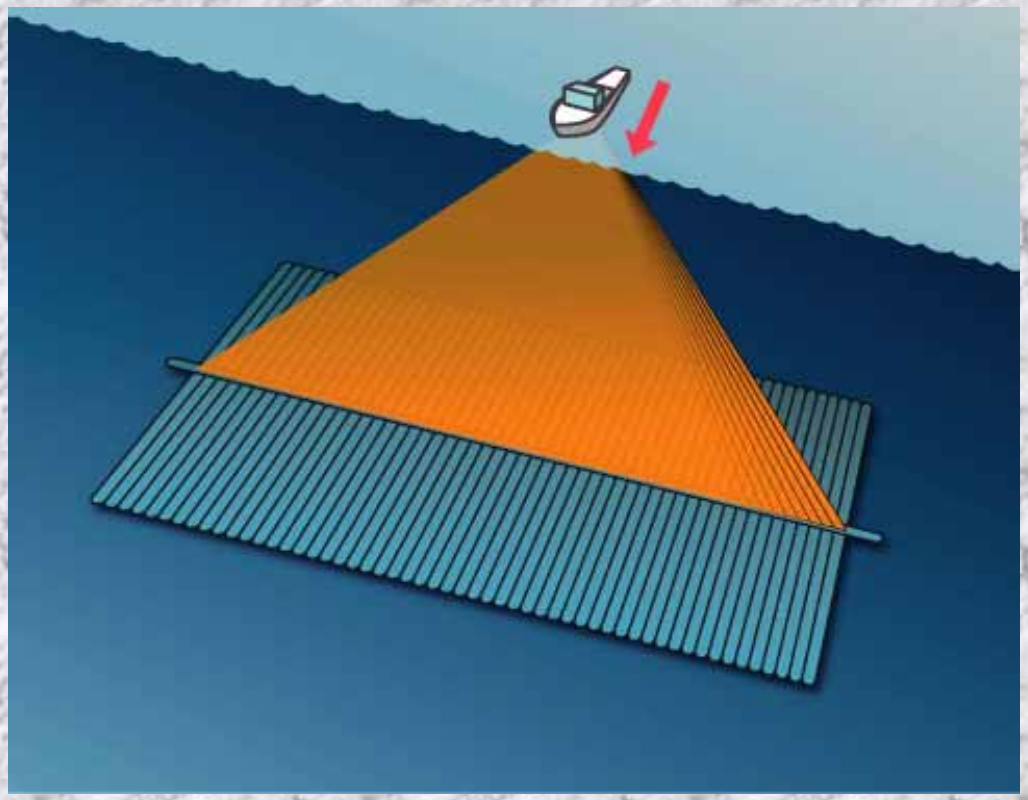
Length:	3.0m
Breadth :	2.0m
Height :	2.3m
Depth Capability :	3,000m
Weight (air) :	3.8 t

Ocean Bottom Seismometer





Multi-narrow Beam Echo Sounder



Wave length :
50 kHz
Swath Angle :
150 deg.
Footprint deg:
1.5 deg. by 1.5 deg.

Function :
Depth contours and backscatter mappings