

Results from recent Jason dives on Mariana Arc volcanoes: Submarine Ring of Fire 2006

R/V Melville

April 18 – May 13, 2006

Guam to Japan

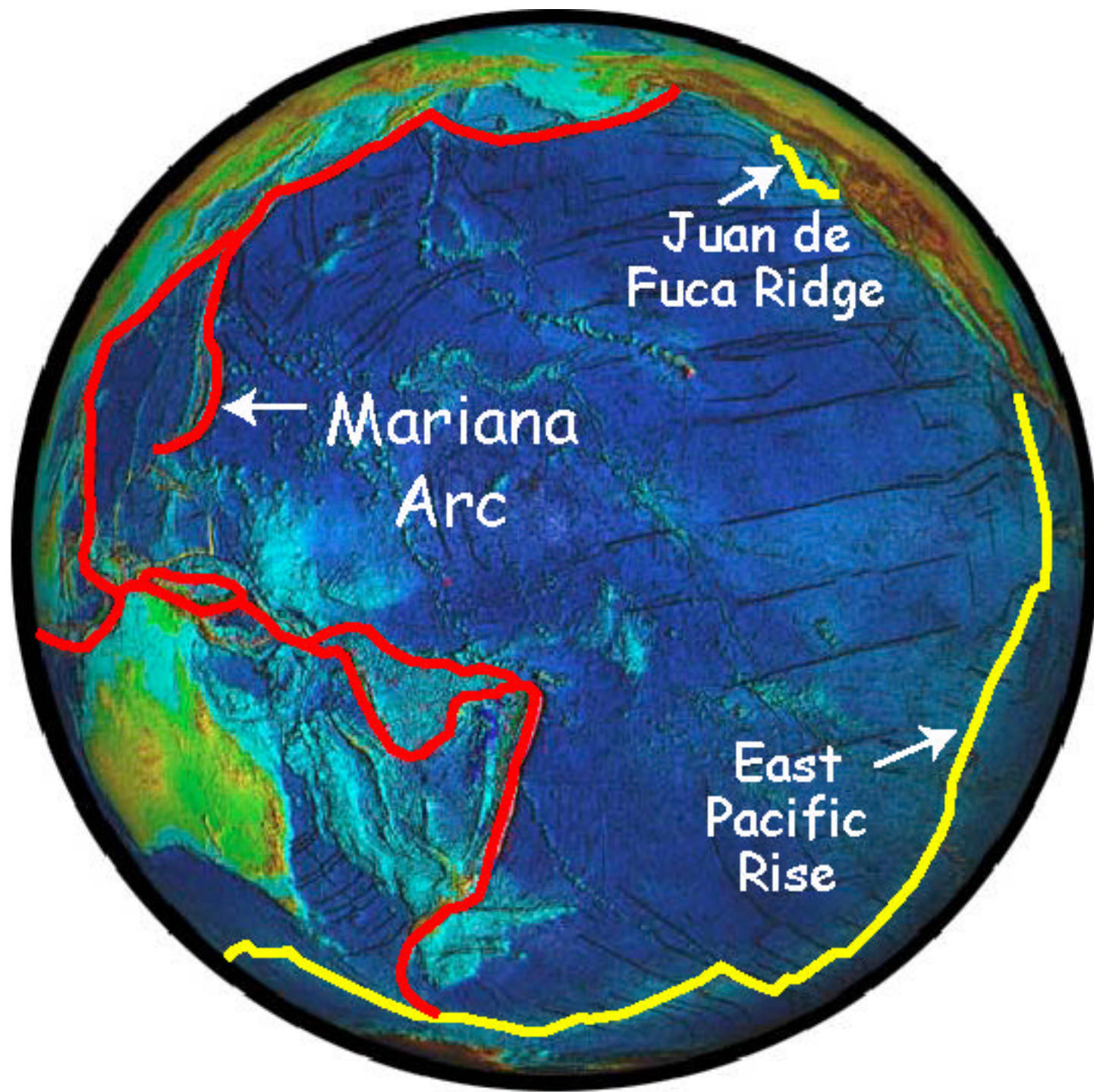
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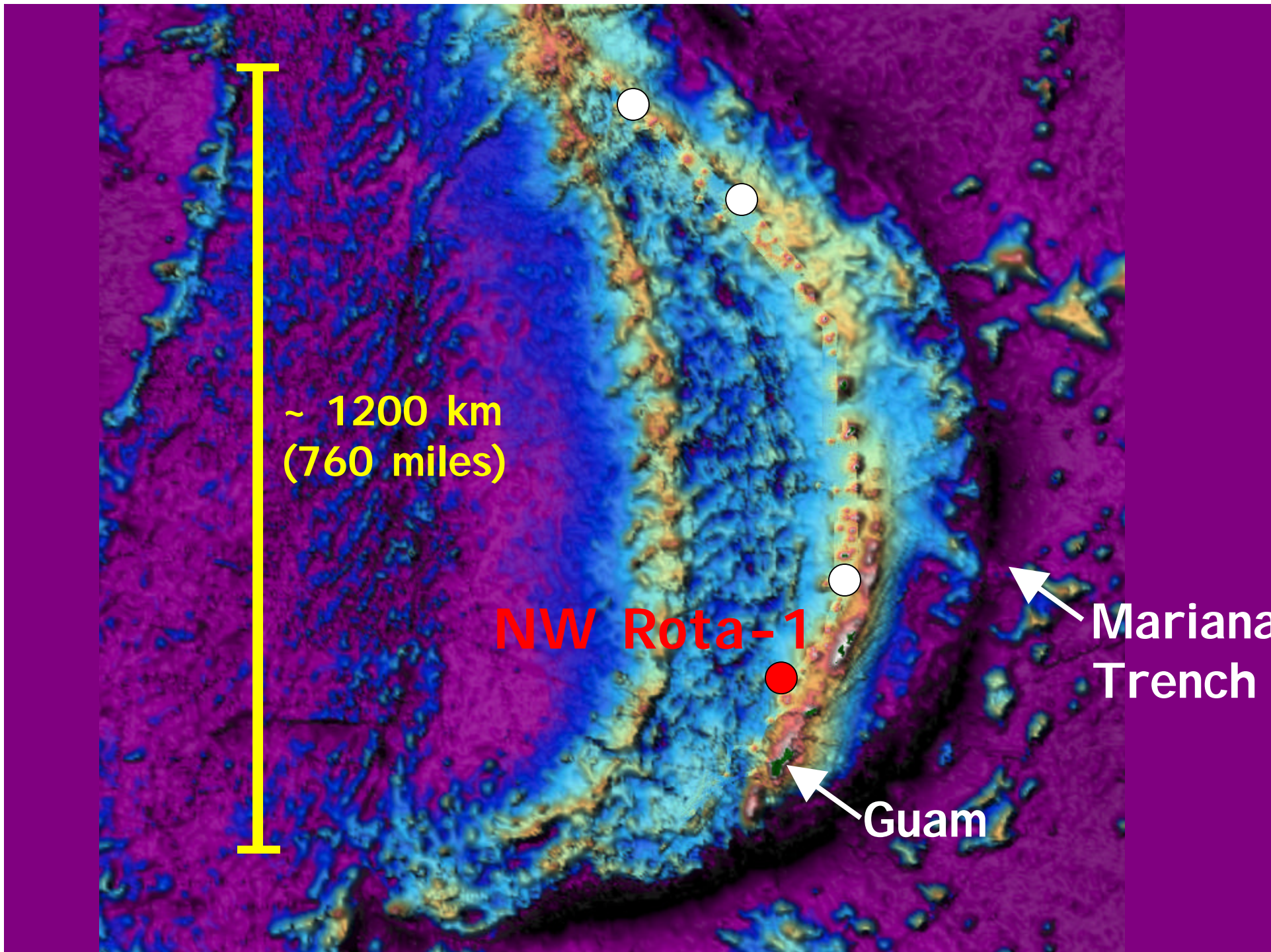
NOAA Office of Ocean Exploration

NOAA VENTS Program

Purpose

- **WOW!** Exciting results from exploration of hydrothermal activity on submarine arc volcanoes
- Assessment of new equipment on Jason and feedback from a new user





~ 1200 km
(760 miles)

NW Rota-1

Mariana
Trench

Guam



Brimstone Pit
560 m depth

NW Rota-1 Volcano

2003: CTDs & mapping

2004: ROPOS dives

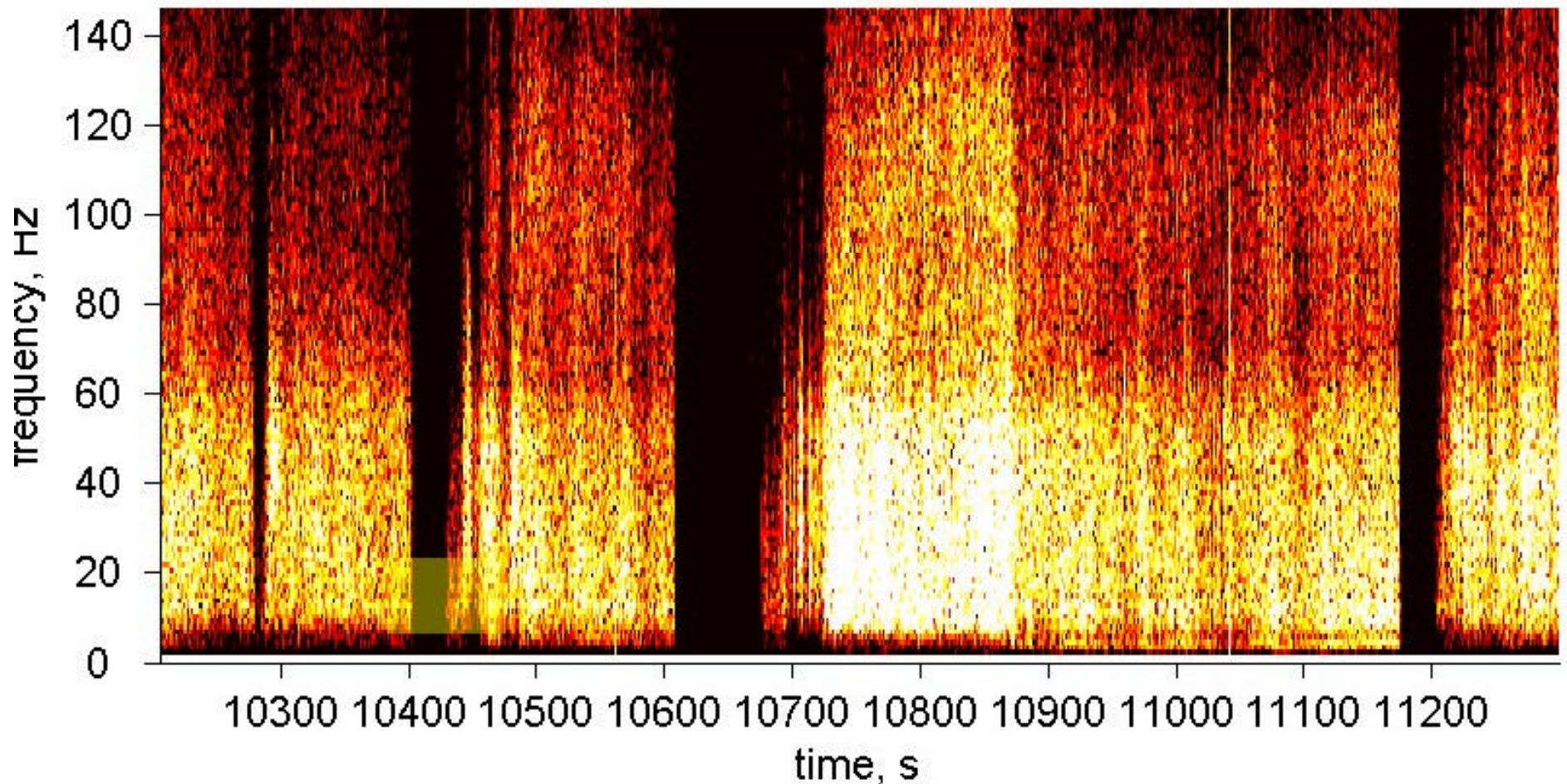
2005: HyperDolphin dives
(Nature paper)

2006: Jason dives

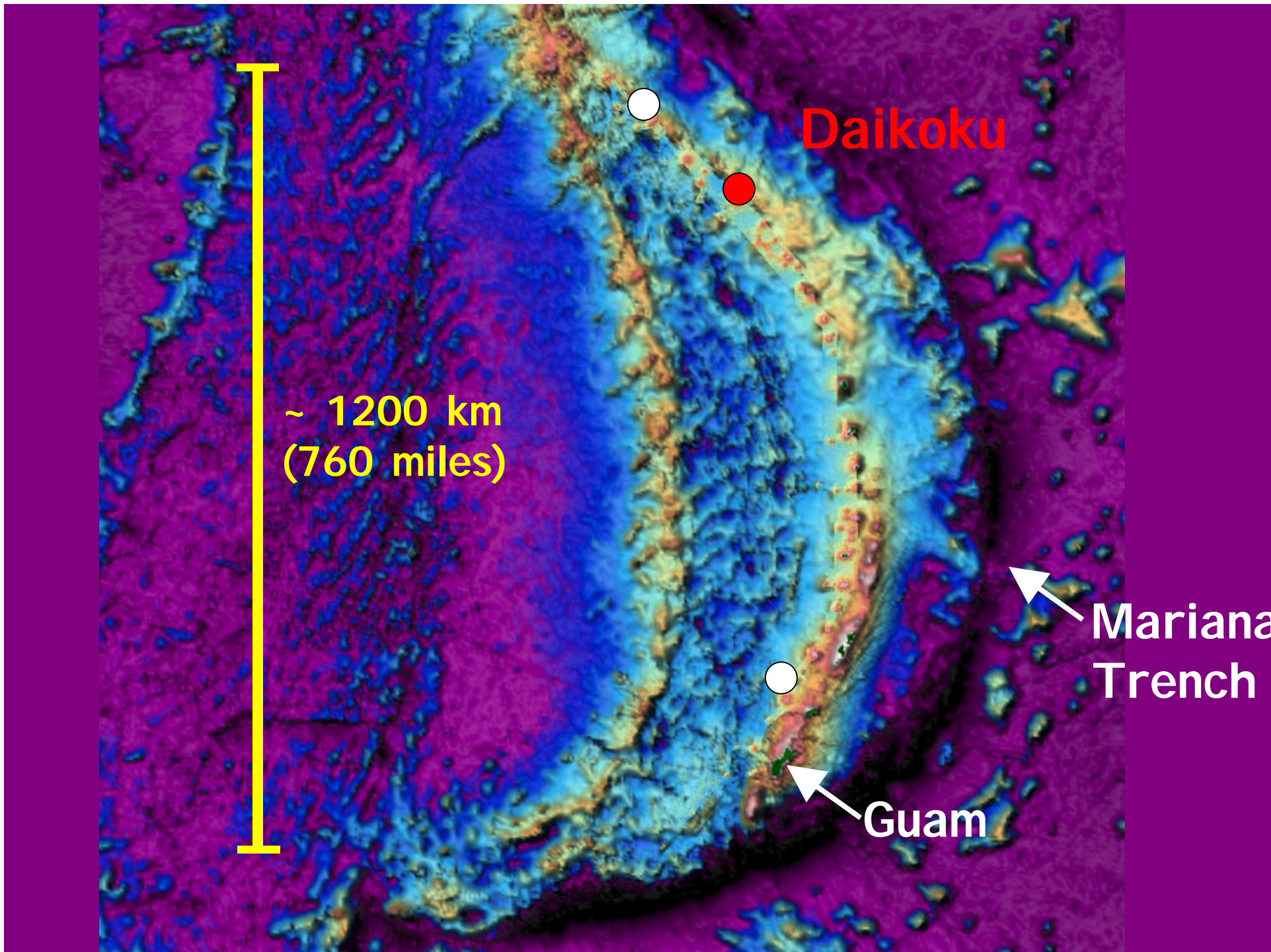
~ 1 km

QuickTime™ and a
Sorenson Video 3 decompressor
are needed to see this picture.

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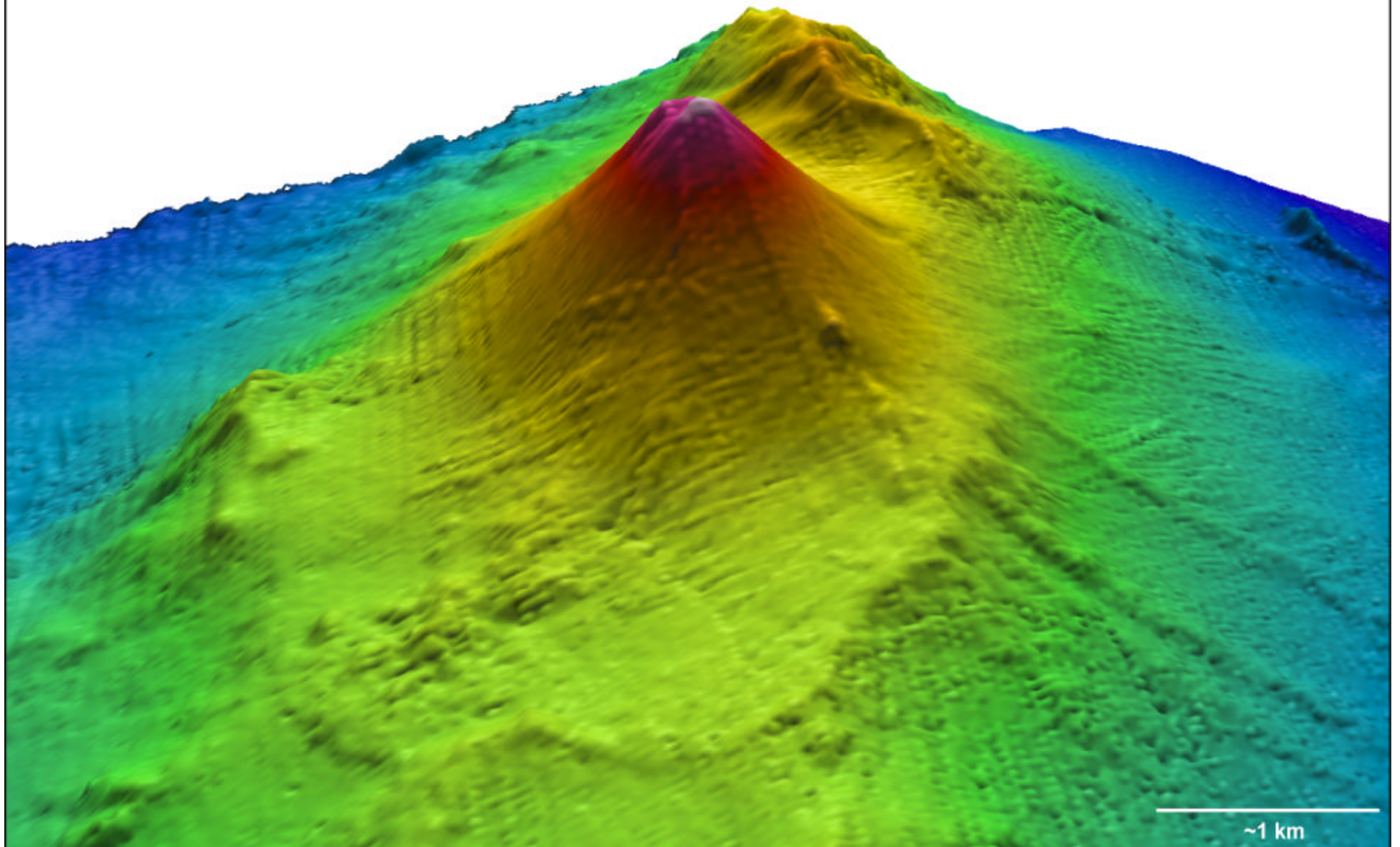
Daikoku

~ 1200 km
(760 miles)

Mariana
Trench

Guam

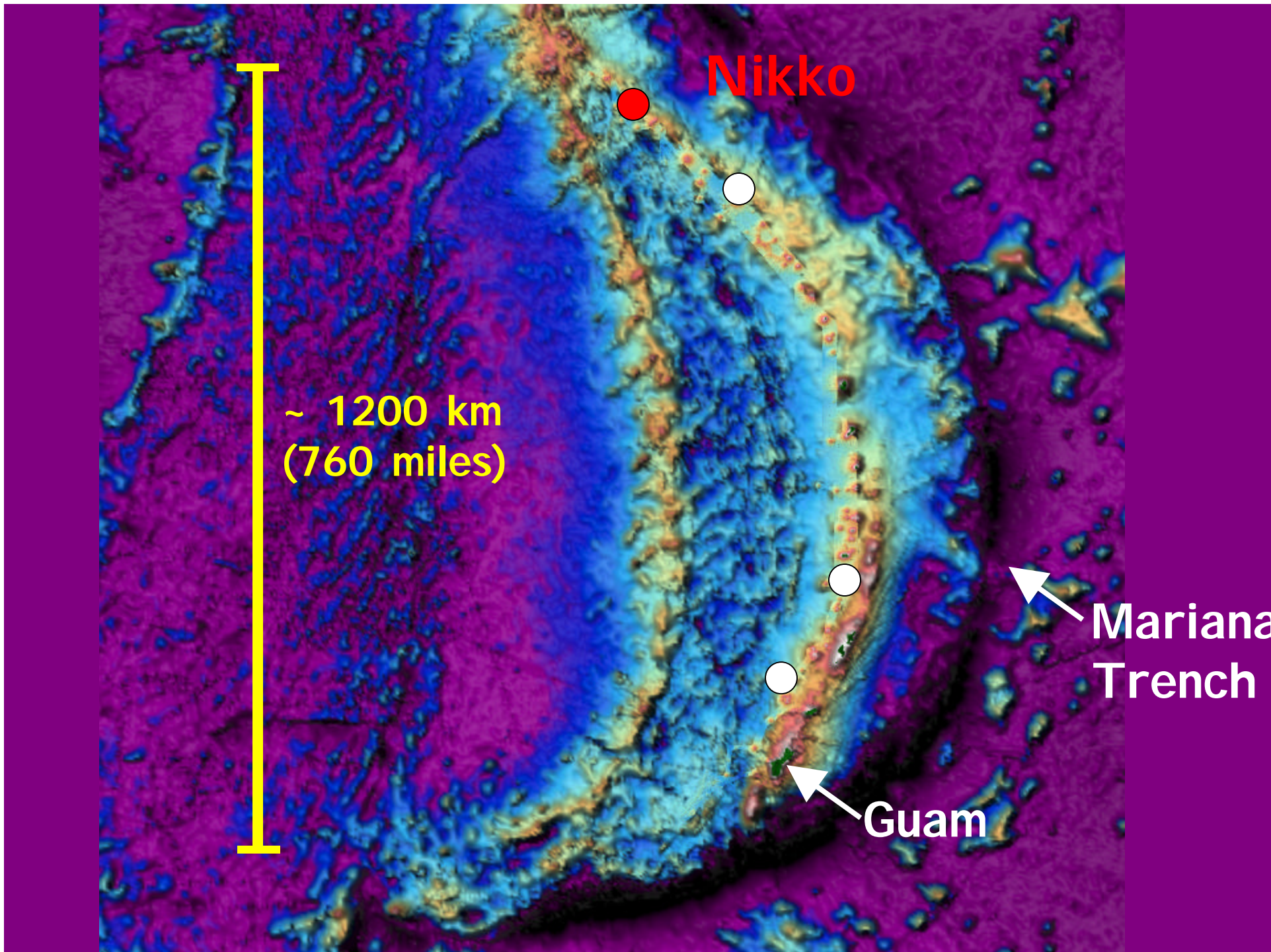
Daikoku Volcano



Looking towards the east. 2 times vertical exaggeration. Depths range from 320 - 2500 meters.

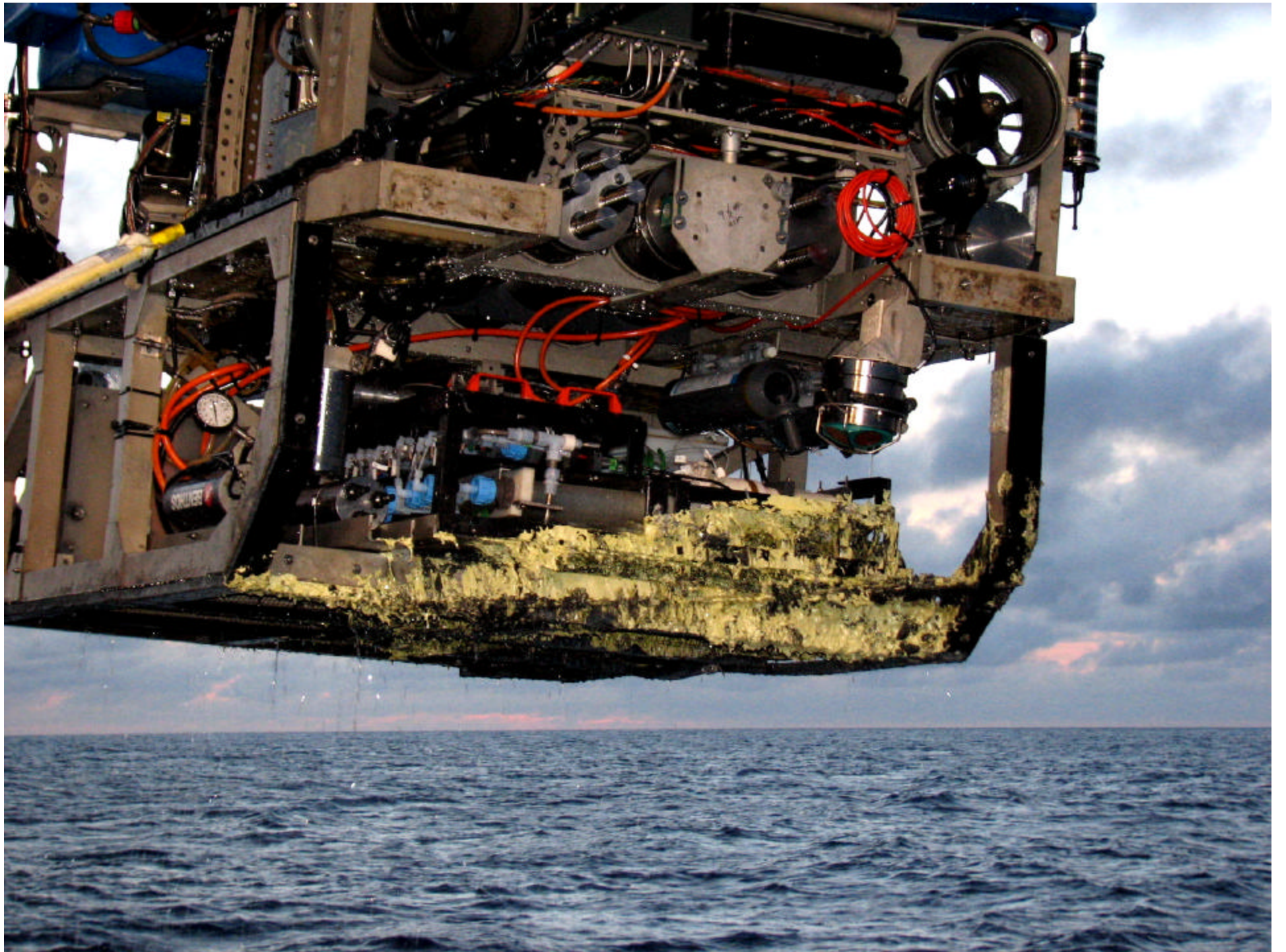
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Report on Jason operations

- Vehicle and crew very capable
- Room for improvement:
 - LBL navigation
 - 3-chip video camera
 - Digital Still Camera
 - Suction sampler

<http://oceanexplorer.noaa.gov/explorations/06fire/>

