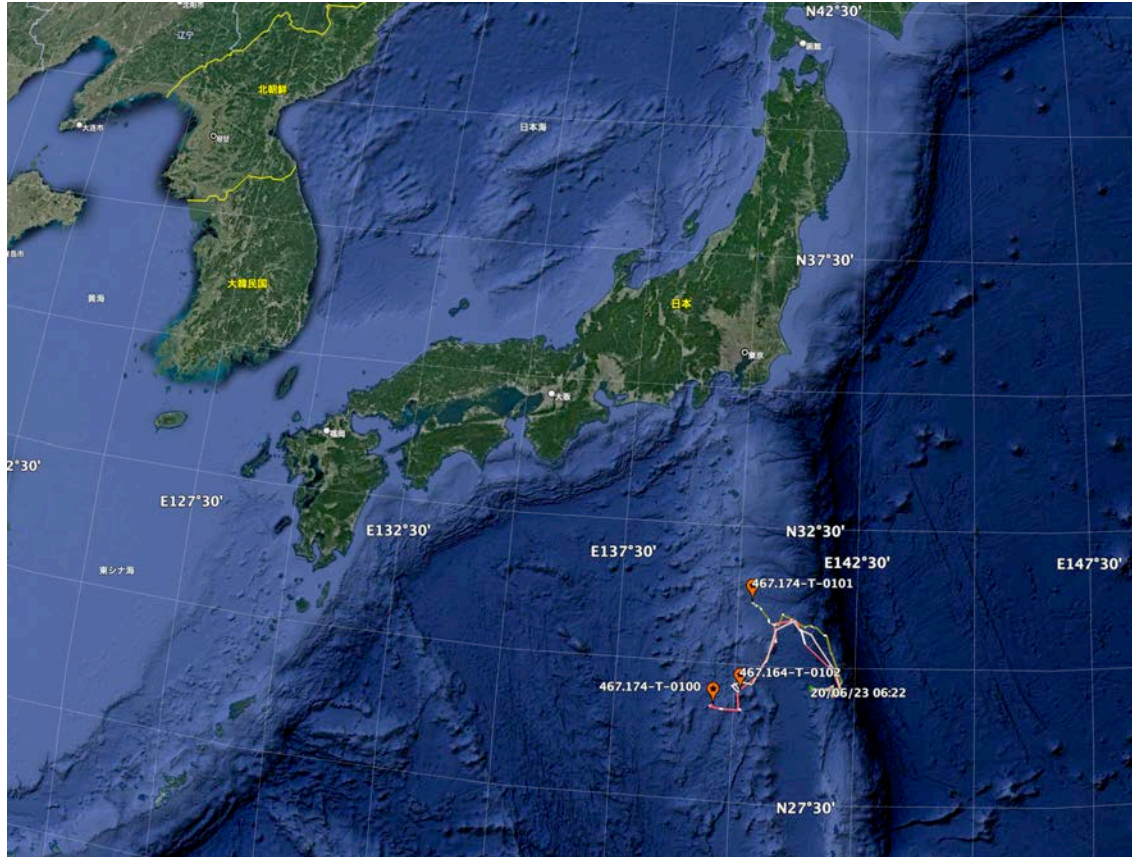


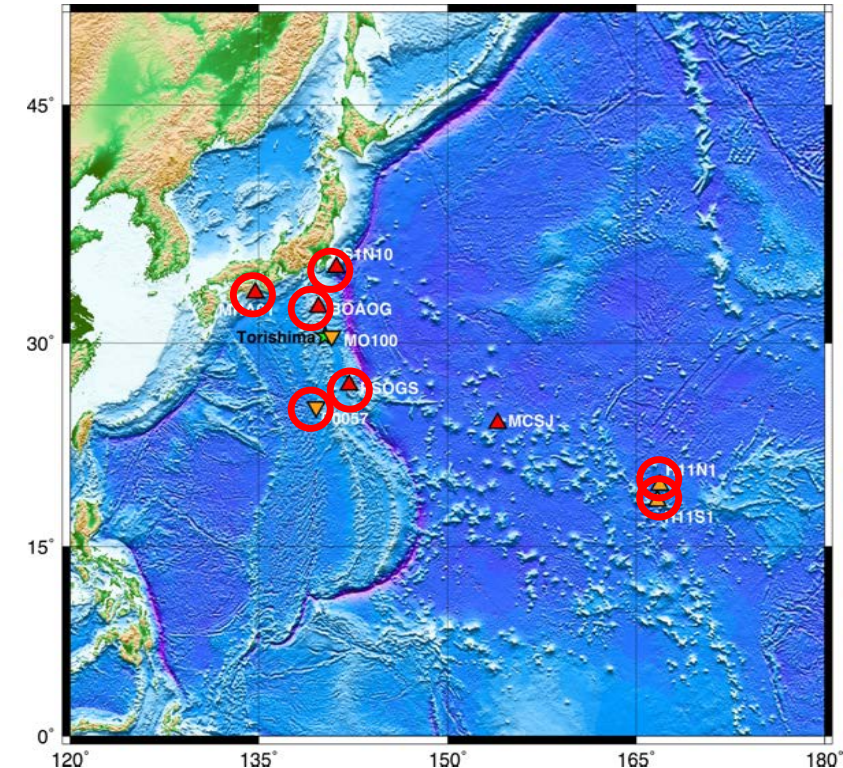
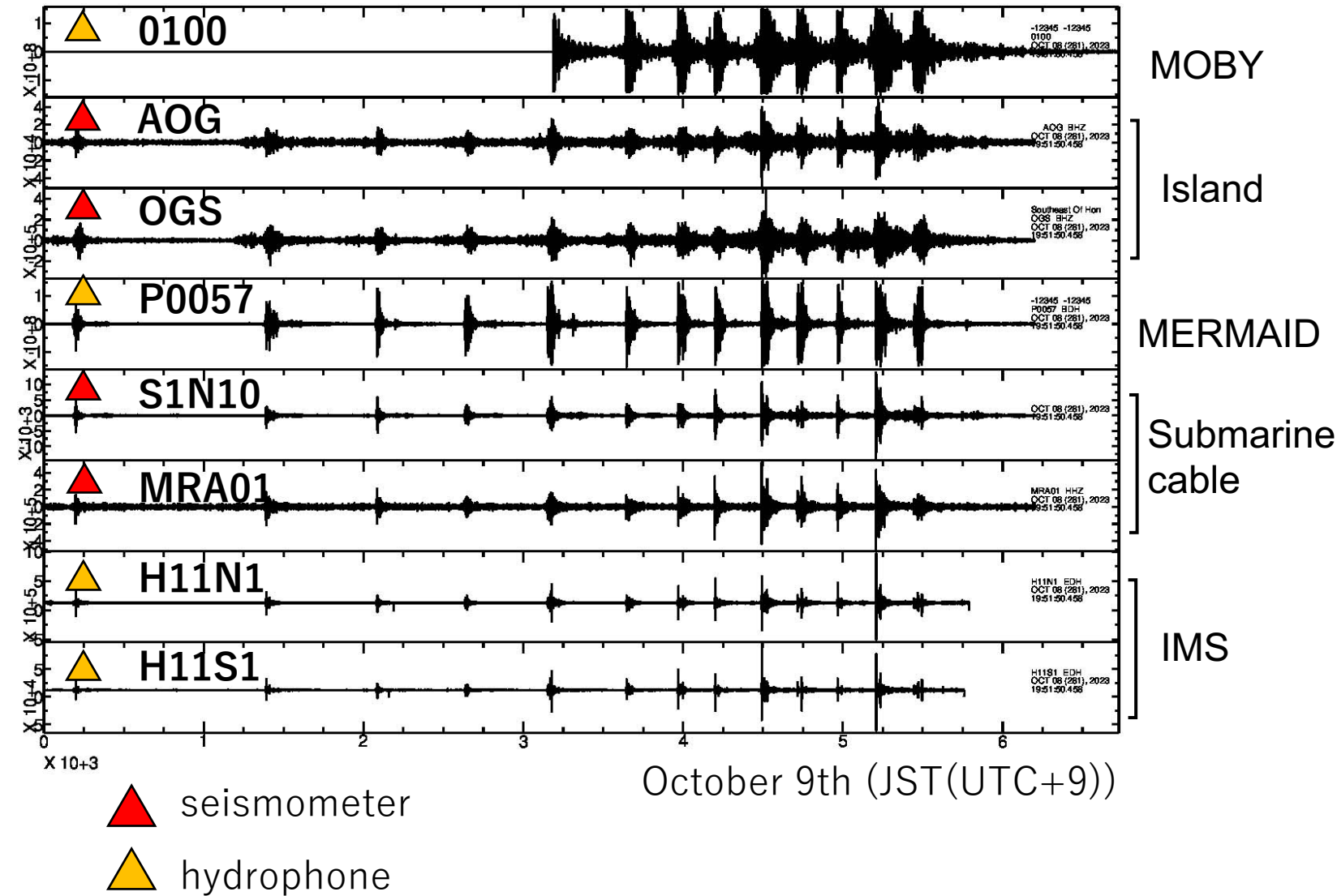
June, 2023

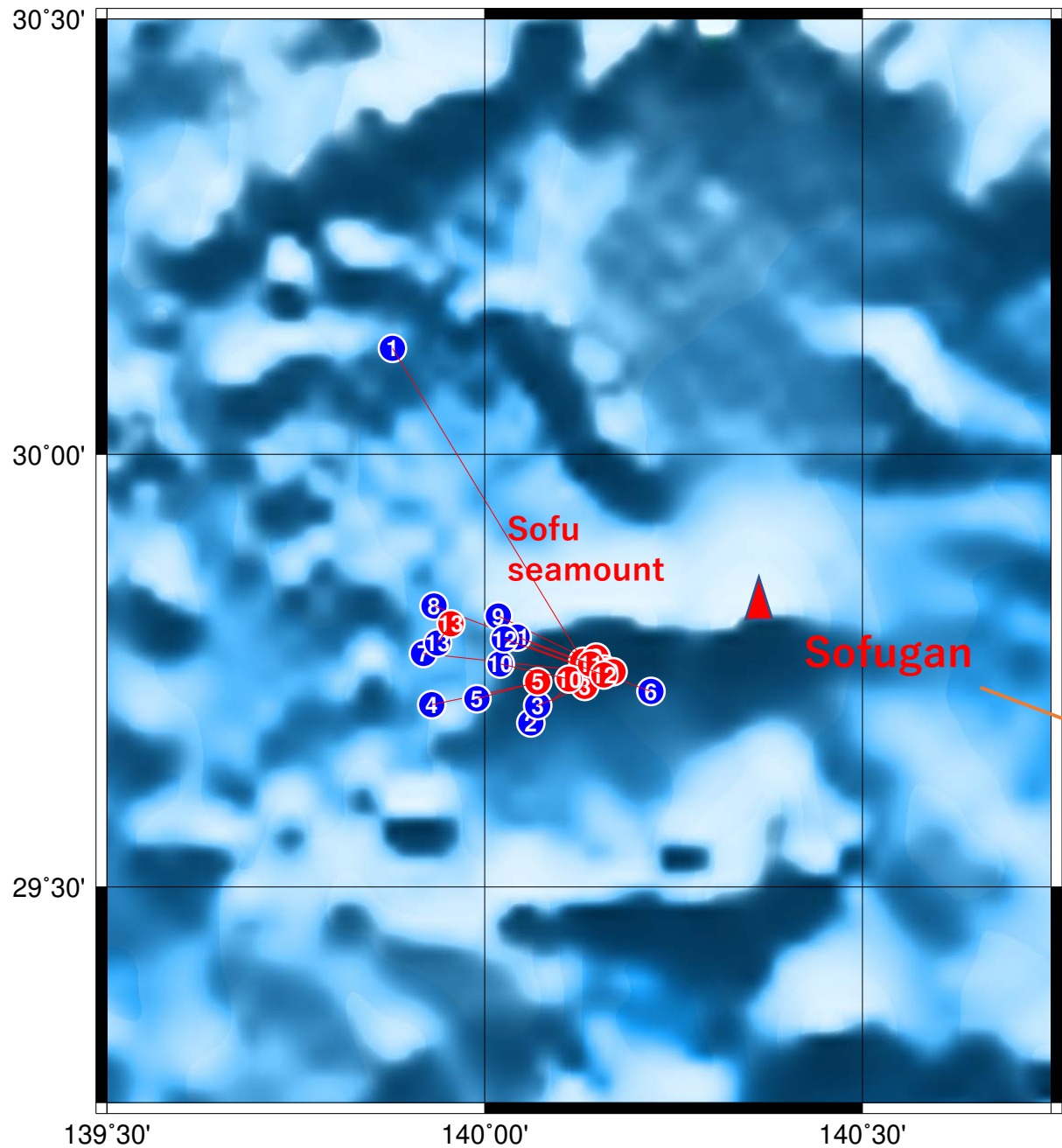
3 MOBYs (1 PRINCETON and 2 JAMSTEC) were launched



MOBY is a float equipped with a CTD and a hydrophone. One of JMATEC MOBY is equipped with only CTD.

In the morning of October 9th Japan time, a tsunami was observed along the Pacific coast of Japan even though no large earthquake was observed. However, before the tsunami, strong T-phases were repeatedly observed.





13 T-phase events were relocated using relative traveltimes between every two stations of the peaks on enveloped waveforms.

Relocated events are concentrated within a circle with a diameter of 10 km except for the 13th event.

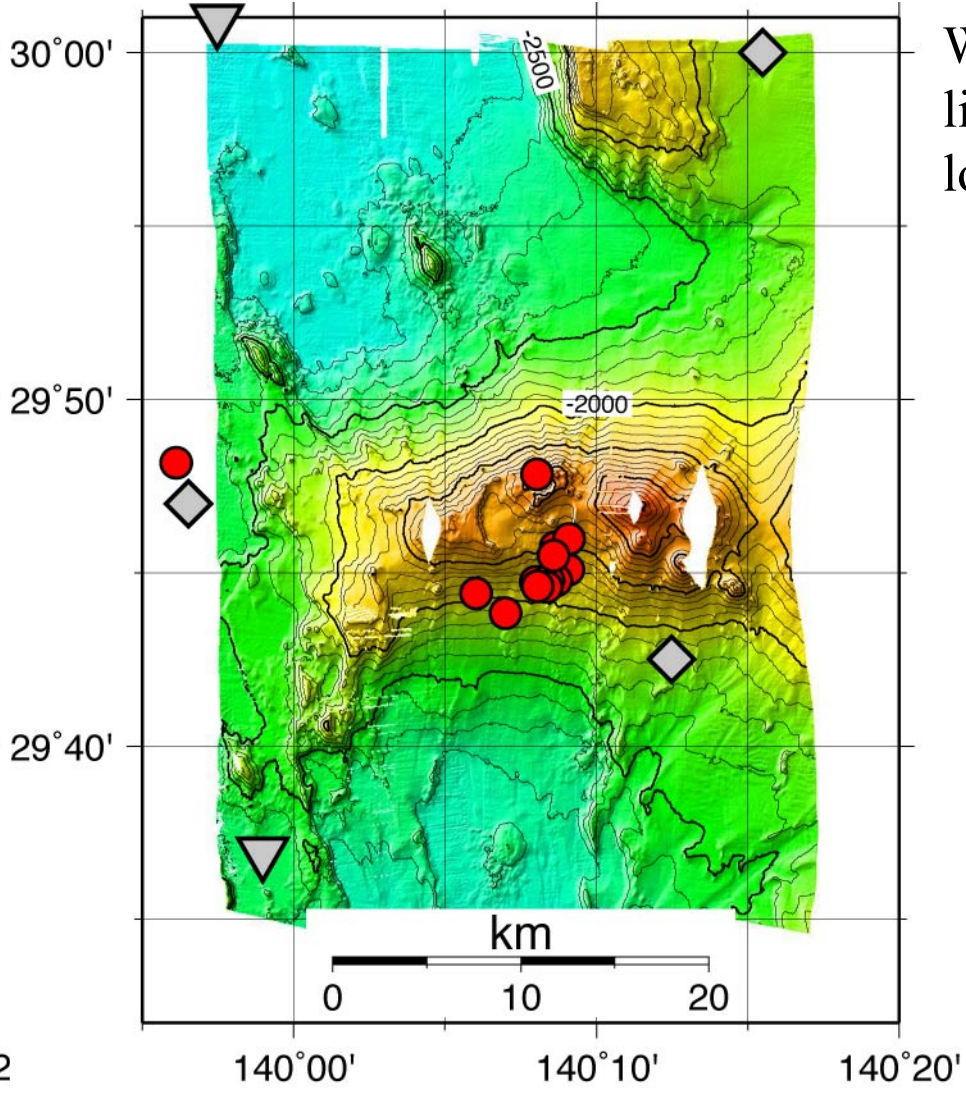
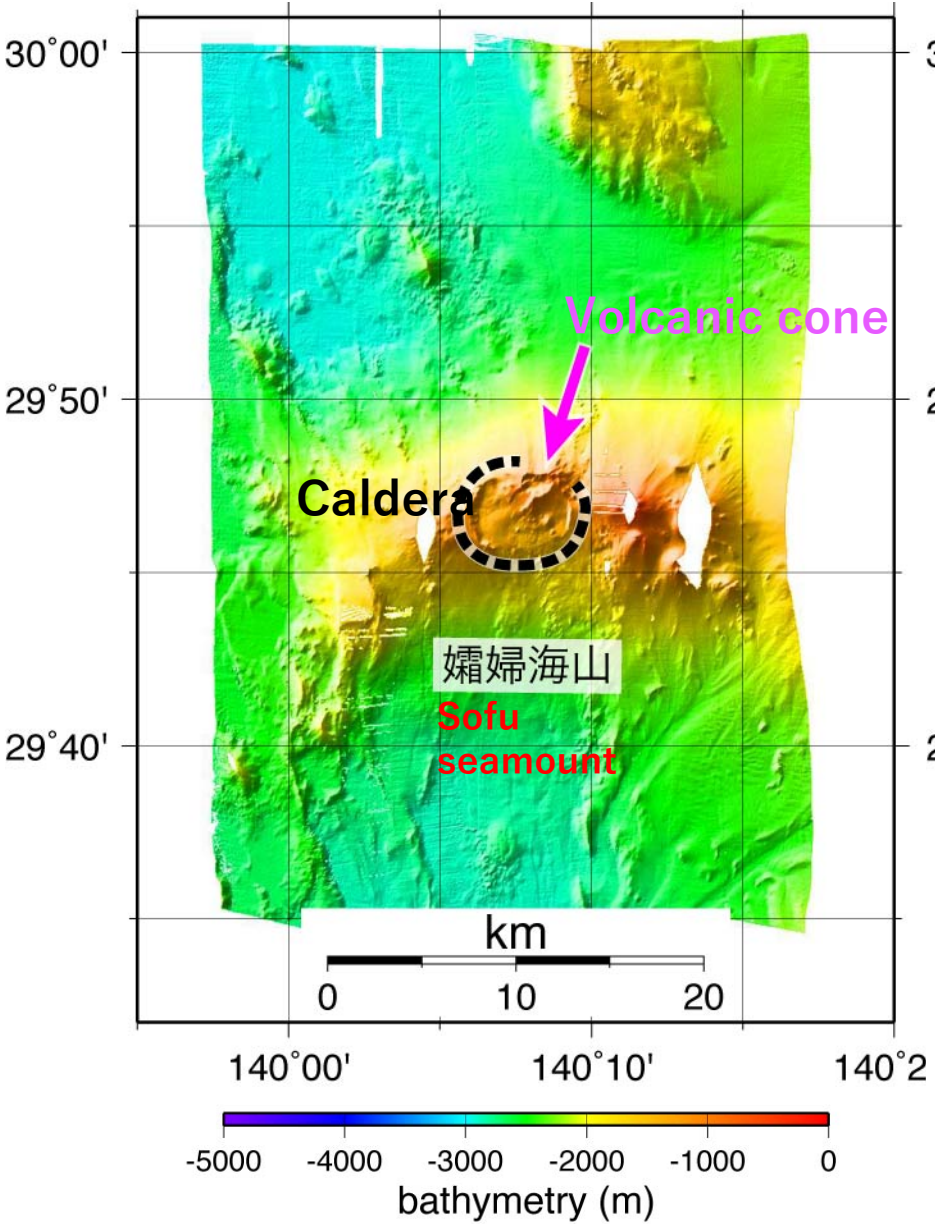


JAMSTEC suddenly decided to survey this area where Sofu seamount is located on the west of Sofugan

- USGS
- Relocated using T-phase relative traveltimes



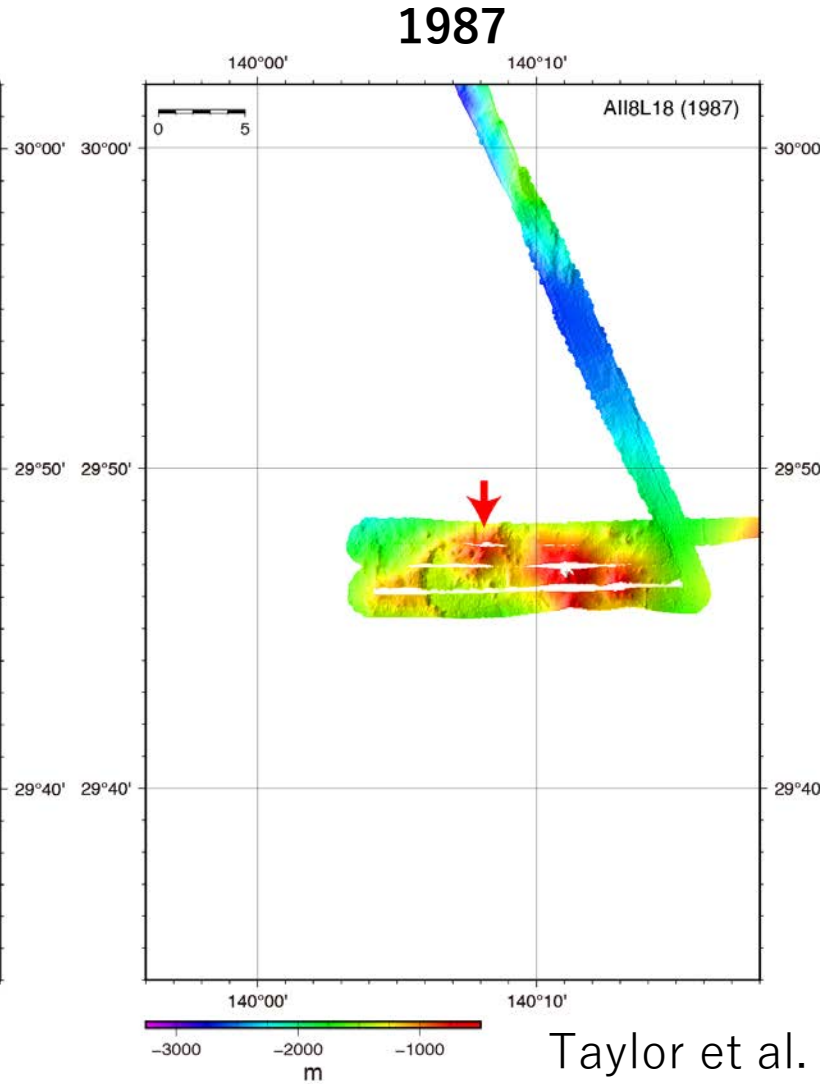
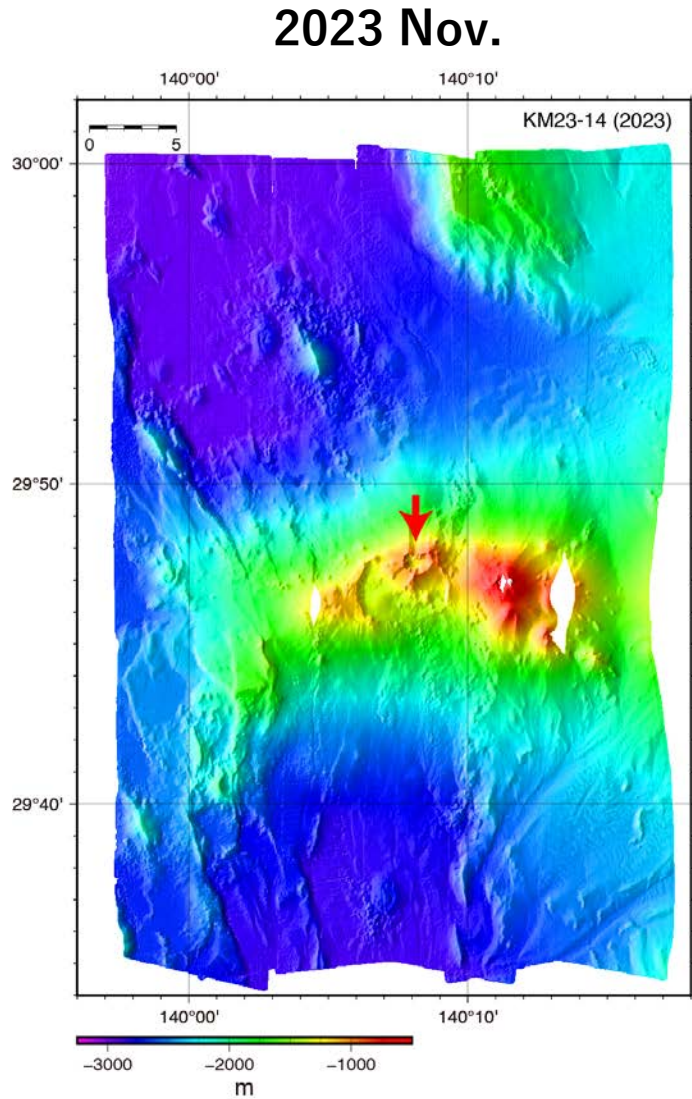
Multi beam survey revealed the detailed bathymetry.



We discovered a caldera-like terrain. T-phase sources locate around the caldera.

● T-phase sources

But..., in fact, a survey of this area was conducted 36 years ago. And a caldera and volcanic cone were found.



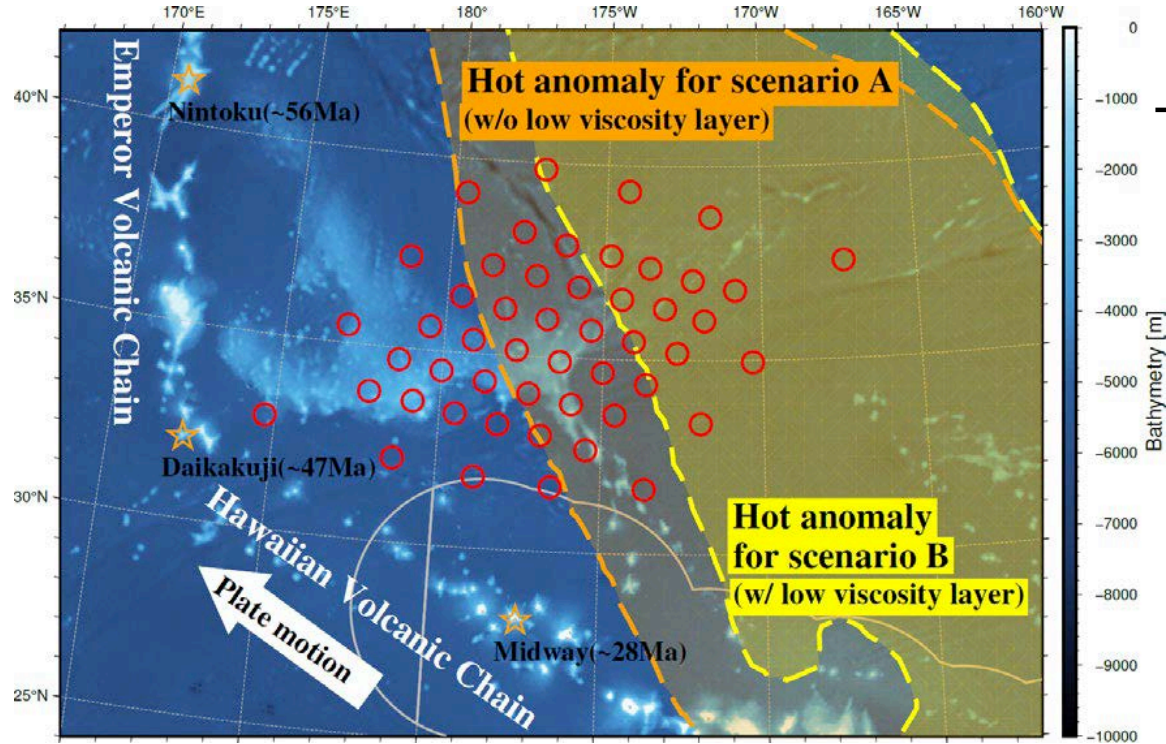
There is a subsidence by several hundred meters at the center of the volcanic cone.

However We don't know whether the subsidence is related to the T-phases and Tsunami yet in October 2023.

Taylor et al. 1992

Plan

- In 2025, 4 MERMAIDs will be launched around the junction between Hawaiian and Emperor volcanic chains



There is a project to deploy 50 BBOBS and OBEM

○ 50 OBS & OBEM

- In May 2024, I intend to apply for a Japanese scientific fund of up to 200 million Japanese yen. But I don't have a solid idea yet. I am looking for ideas and collaborators.