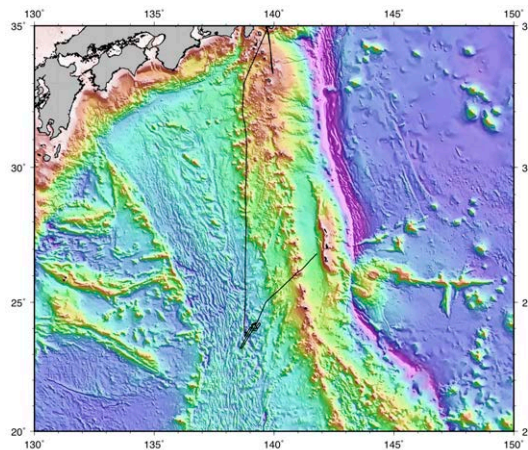


## Cruise Summary

### 1. Cruise Information

- Cruise ID           YK18-07
- Name of vessel    Yokosuka
- Title of the cruise MOWALL-PVB: Moho Observation along transform fault WALLs in the Parece Vela backarc spreading axis
- Chief scientist [Affiliation]           Kyoko OKINO [The University of Tokyo]
- Representative of the Science Party    Kyoko OKINO [The University of Tokyo]
- Cruise period     14 June 2018 – 24 June 2018
- Ports of departure / call / arrival Yokosuka/Futami
- Research area                            southern Shikoku Basin, Philippine Sea

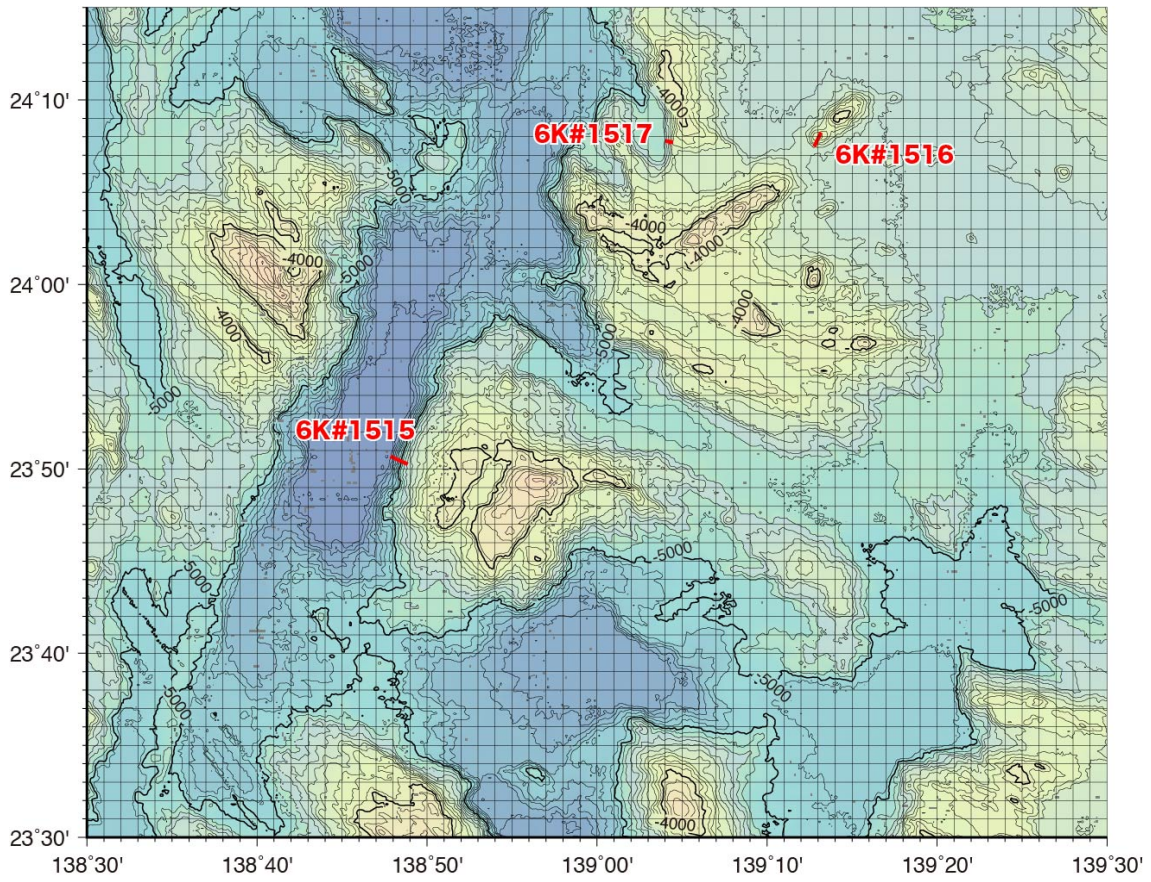


### 2. Overview of the Observation

- Overview of the observation

[Objectives] The aims of MOWALL (Moho Observation along transform fault WALLs) project is to understand the spatio-temporal variation of oceanic crust formation and the geochemical/geophysical constraints of undelaying mantle by filed observations along oceanic transforms. We try to detect (1) the change/variation of chemical compositions of oceanic crust and mantle, and (2) the variation of crustal thickness along transform faults walls. The spreading axis of the Parece Vela backarc basin, the Parece Vela Rift, is highly segmented by many transform faults and some oceanic core complexes and smooth seafloors exists near the failed rift. These structures (OCCs and SSs) are considered to indicate low melt supply condition, so it is the good target to detect the variation of structure and mantle condition under the large variation of melt supply.

[Outline] Due to bad weather and request from Japan Self Defense Force, we are forced to change the target area to southernmost Shikoku Basin, where a couple of OCCs are located. We conducted three dives; an oceanic core complex, neighboring steep escarpment and enigmatic small volcanic hill to understand the variation of oceanic crust in backarc basin. The dive points are shown below.



**Locations of 6K-1515, 1516 and 1517 in southernmost Shikoku Basin.**