NPFC-2025-SSC BFME06-IP09

Report of Japanese sea-floor visual survey in the Emperor Seamount area in 2025

Conducted from July 8 to August 1 in 2025

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Objective & Methods

Objective is...

- To identify the extent of VME indicators communities
 - → Suiko Seamount, Yuryaku Seamount
- To collect information on distribution of cold-water corals and other communities on Seamounts of the northern fishing area continued since 2023
 - → North Koko Seamount
- Resurvey of past survey sites in the Fishing Closed area
 - → C-H Seamount

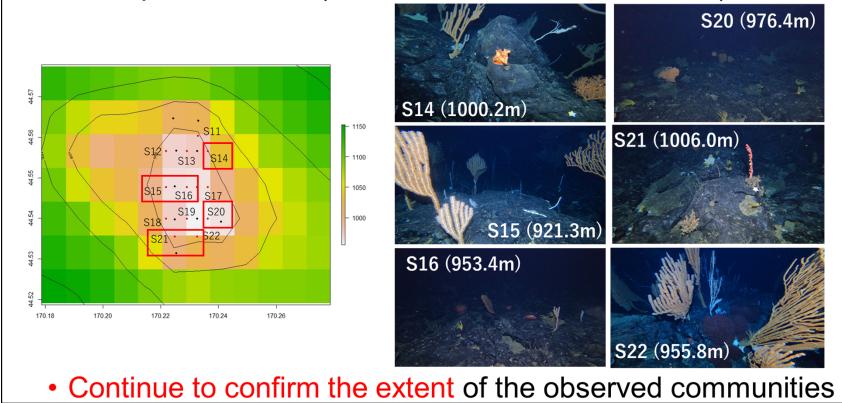
Drop camera system

- Comprised a GoPro digital camera used as video camera and LED light
- At each survey site, lowered down on the sea-floor five times to take sea-floor images on five neighboring locations site by site
- Kept on the sea-floor for 2 min at each touchdown



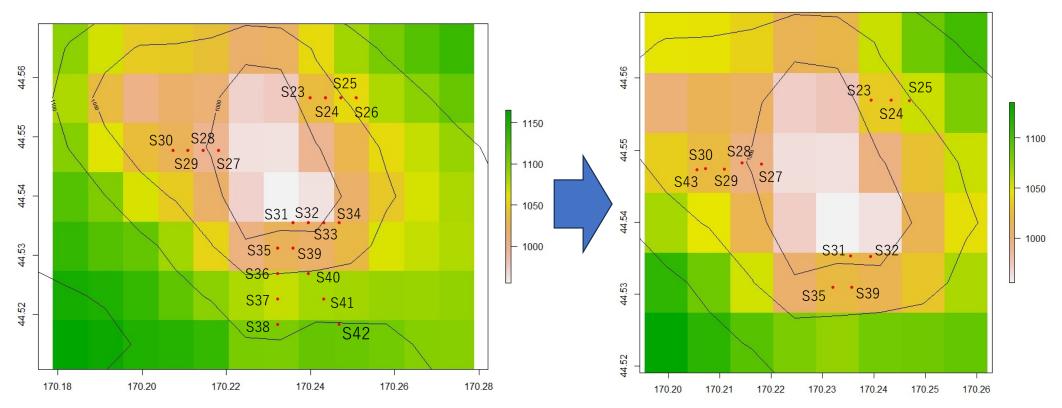
Results of survey of Northern Seamounts in 2024

Several species corals (S14, S15, S16, S20, S21, S22)



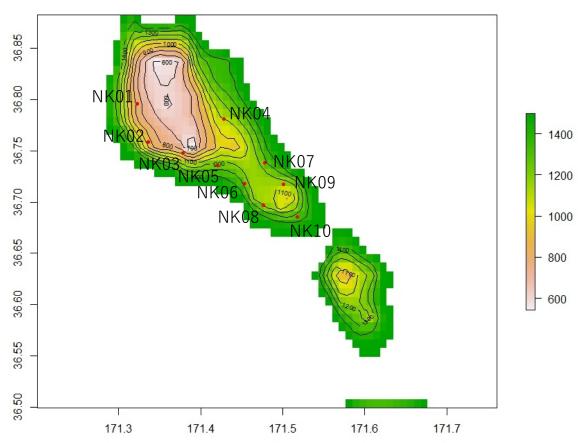
- The distribution status of Yomei and Ojin Seamount were identified
- Suiko Seamount will continue to be surveyed
- →To clarify the edges (east of S14, west of S15, east and south of S22)

Suiko Seamount



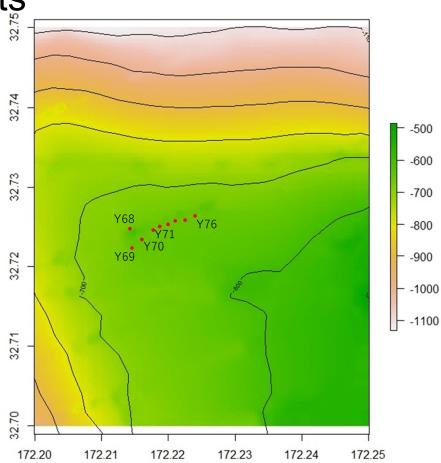
- Planed survey at 20 sites based on the results of 2023 and 2024 surveys
- Conducted at 16 sites until the edge of the communities was confirmed

North Koko Seamounts



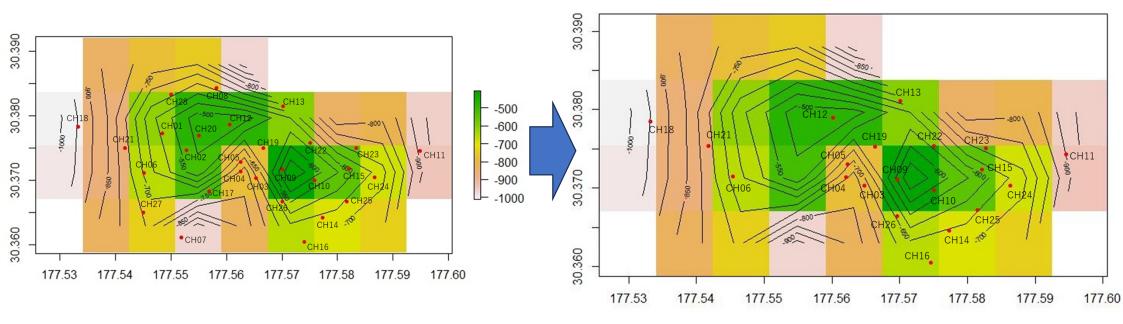
- Survey data are very limited
- Conducted survey at 10 sites

Yuryaku Seamounts



Conducted survey at 9 sites based on results of past survey

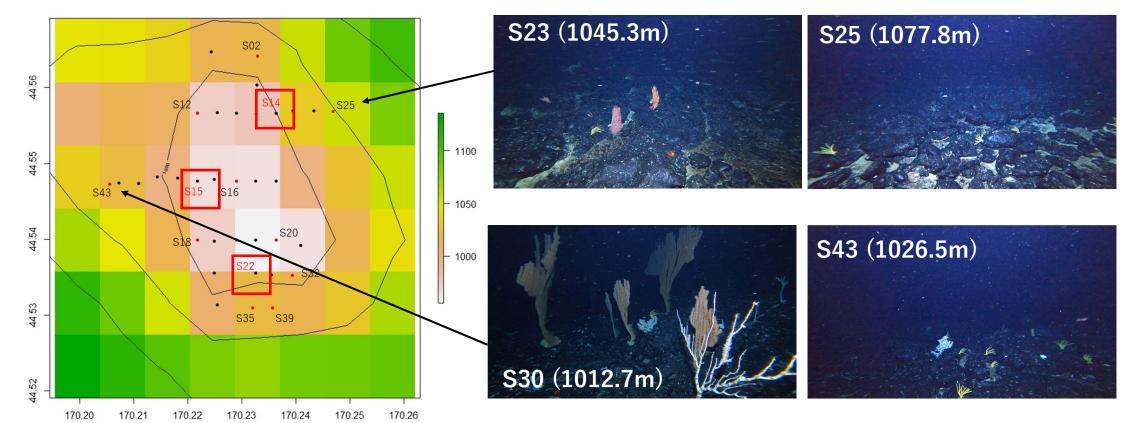
C-H Seamounts



- Planed survey at 28 sites based on the sites of past surveys
- Conducted survey at 20 sites in C-H Seamount due to ship time

Results -Suiko Seamount-

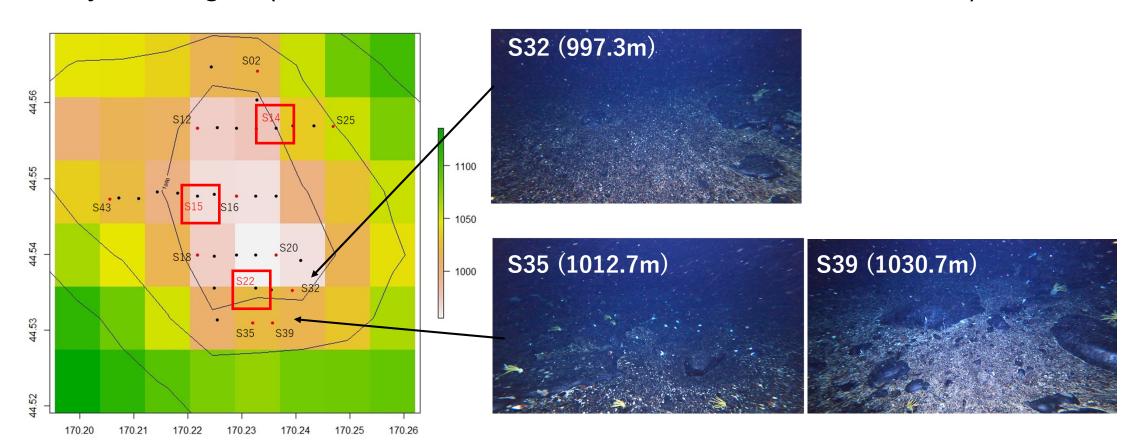
Clarify the edges (east of S14, west of S15, east and south of S22)



- Edges were defined as the sites where corals were no longer observed
 *Black dots show the past survey
 - *S02, S12, S18, S20 and S16 are already revealed edges in the past surveys

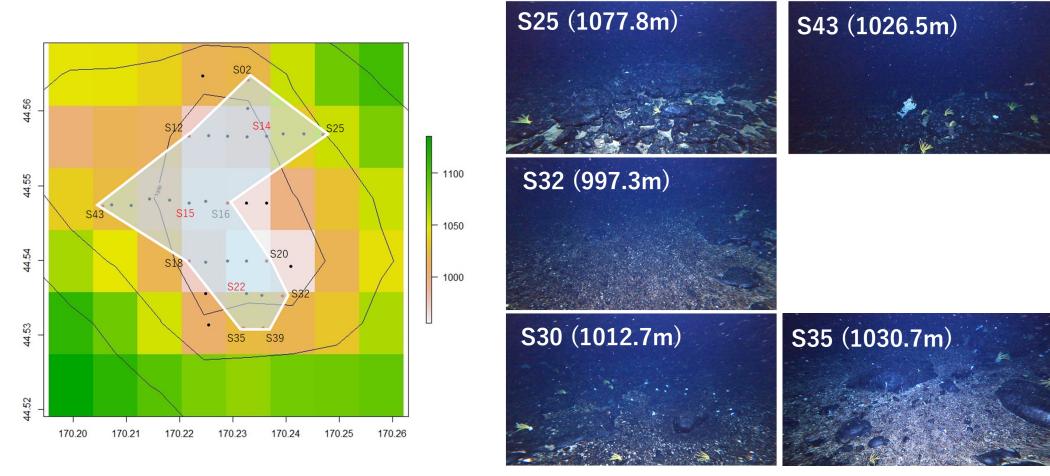
Results -Suiko Seamount-

Clarify the edges (east of S14, west of S15, east and south of S22)



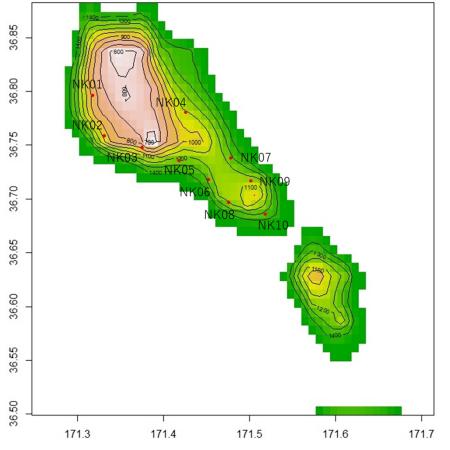
- *Black dots show the past survey
 - *S02, S12, S18, S20 and S16 are already revealed edges in the past surveys

Conclusion -Suiko Seamount-



- Identify all direction edges
 - → Potential VME range has been clarified in Suiko Seamount

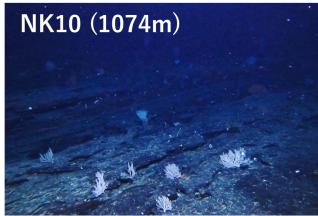
Results -North Koko Seamount-





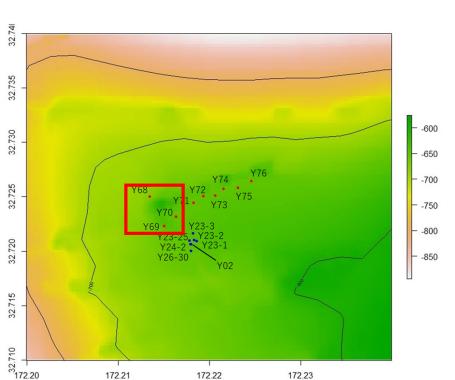




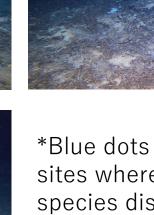


- Only NK10 confirmed some corals
- Confirmed different fauna depending on site
 - → Continue collecting distribution information

Results – Yuryaku Seamount-







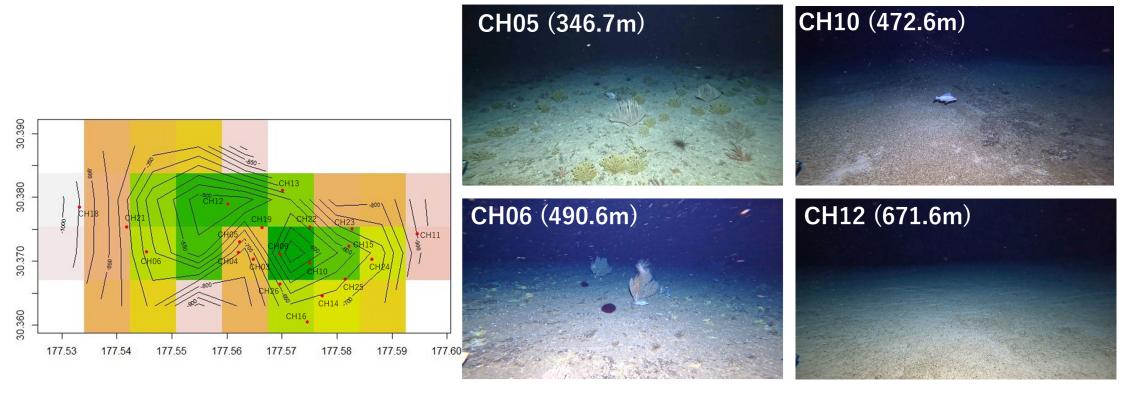
Y69 (671.6m)



*Blue dots show survey sites where indicator species distribution has confirmed in the past surveys

- Y68, Y69 and Y70 were confirmed some corals
- That density was very low
 - →It is considered that there will be no further extent to northward

Results - C-H Seamount -



- Some sites showed an increase in density of corals and other benthos
- Sites with low/no coral and benthos in past survey have not changed
 - → Continue resurvey the remaining sites