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# Press Releases

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December 7, 2016  
JAMSTEC



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## International Ocean Discovery Program (IODP) Expedition 366 - Mariana Convergent Margin & South Chamorro Seamount -

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The International Ocean Discovery Program (IODP<sup>\*1</sup>) will begin Expedition 366, "Mariana Convergent Margin & South Chamorro Seamount," by the *JOIDES Resolution*<sup>\*2</sup> on December 8, 2016.

Drilling a series of sites at the summit and flanks of three large serpentinite mud volcanoes in the Mariana forearc: Blue Moon Seamount; Big Blue Seamount and Celestial Seamount, it will establish long-term seafloor observatory sites by emplacing cased boreholes at summit (conduit) holes in these three mud volcanoes and removing the circulation obviation retrofit kit (CORK) body, which has been deployed on the South Chamorro Seamount during the Ocean Drilling Program 195<sup>\*3</sup> in 2001.

In this expedition, the scientist team aims to elucidate the origins of serpentine mud volcanoes and mechanisms of sunseafloor biosphere in extreme environments developed under these serpentine mud volcanos.

Participating members include four Japanese, along with 30 researchers from the U.S., European countries, China, Australia, South Korea and Brazil.

**\*1 The International Ocean Discovery Program (IODP)** is a multinational cooperative project that started in October 2013. The scientific drilling vessel *D/V Chikyu*, operated by Japan, and the *JOIDES Resolution*, operated by the U.S., are utilized for expeditions. There is also an option to charter mission-specific platforms from European countries. The mission of the IODP is to shed light on global environmental changes, the earth's mantle and crustal dynamics and tectonics, and the biosphere beneath the seafloor. It took over the Integrated Ocean Drilling Program carried out from October 2003 to 2013.

**\*2 The JOIDES Resolution** is the U.S. drilling vessel that participates in the IODP. Compared to the scientific deep-sea drilling vessel, the *Chikyu* by JAMSTEC, the *JOIDES Resolution* is used more often for drilling in shallow waters.



\*3 **ODP Expedition 195** was carried out from March to April 2001 as part of the framework of the Ocean Drilling Program (ODP), which was implemented between 1985 and 2003. There were four Japanese members including one co-chief scientist.

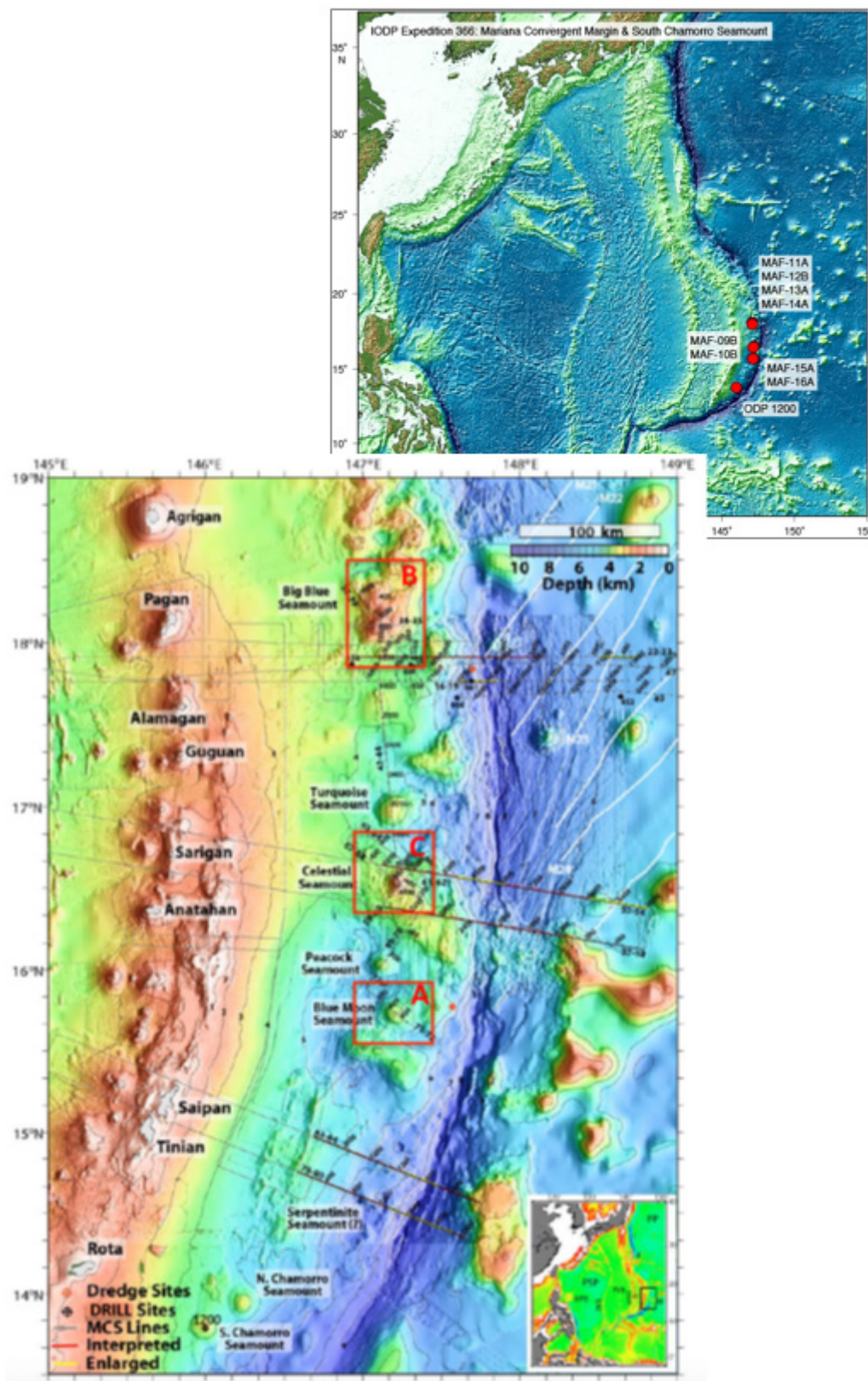


Figure 1. Drilling sites of Expedition. ODP 1200 is a previous drilled site, where the CORK will be recovered and advanced-type of CORKs will be installed. The drilling sites may be changed depending on the level of preparation, climate conditions, and progress. (quoted from the IODP website)

Table 1 Overview of Drilling Sites (order of drilling)

Site Name	Water Depth	Depth of penetration	Estimated time at site (days)
MAF-16A	4500 m	250 m	4.8
MAF-15A	3666 m	200 m	8.5
MAF-14A	3300 m	350 m	4.7
MAF-13A	2200 m	250 m	3.1
MAF-12B	1400 m	250 m	3.1
MAF-11A	1260 m	200 m	6.8
MAF-09B	2000 m	200 m	7.3
MAF-10B	3200 m	300 m	4.6

Contact:

(For IODP and this expedition)

Kae Takahashi, Research Support Division I, Research Support Department

(For press release)

Tsuyoshi Noguchi, Manager, Press Division, Public Relations