R004-P04
ポスター 4 ：11/26　AM1/AM2 （9:00-12:00）

西太平洋赤道域 IODP U1490 の深海底堆積物の約 900〜1800 万年前の相対古地磁気強度

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Relative paleointensity from the Miocene section of IODP Site U1490 deep-sea sediment in the western equatorial Pacific

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We present relative paleointensity (RPI) results from the Miocene section of International Ocean Discovery Program Site U1490, and compare them with existing published RPI data from the early to middle Cenozoic. Detailed magnetostratigraphic studies are critical for providing a long-term record of Miocene RPI variations in the Equatorial Pacific. Our sample are taken from the northern part of Eauripik Rise in the western equatorial Pacific, characterized by current-controlled bedforms. Paleomagnetic measurements were conducted at a resolution of 1 cm on U-channel samples from the spliced section to obtain a high-resolution magnetostratigraphic record. Stepwise demagnetization of the natural remanent magnetization produced a well-defined magnetostratigraphy spanning approximately 9 million years, between the upper boundaries of Chron C5En (18.056 Ma) and Chron C4An (8.771 Ma), in accordance with the geomagnetic polarity timescales (GPTS: Gradstein et al., 2012) and the biostratigraphy of the cores (U1490). Rock magnetic analyses revealed that the sediments in the interval of current-controlled bedforms are suitable for reliable RPI estimates since the magnetic minerals in the sediments are mainly of biogenic origin. We found rod-shaped magnetofossils up to 1 mm in length in the sediments. Outside of this interval, reductive dissolution of magnetic minerals has occurred. Our RPI data is of exceptionally high quality, comparable to the long-term RPI record from IODP Expedition 320/321's Pacific Equatorial Age Transect (PEAT) during the early to middle Miocene, as reported by Ohneiser et al. (2013). In the presentation, we will show the comparison of our RPI records with the RPI results from Ohneiser et al. (2013) in Miocene, Channell and Lanci (2014) in late Oligocene to early Miocene, Tauxe and Hartl (1997) in Oligocene, and Yamamoto et al., (2014; 2022) in Eocene to extent global RPI stacks before 2Ma.