G209-007

Room: 101A

Preliminary results of sea-level and paleoceanography changes using radiocarbon dates on corals and algae from IODP 310 core

Yusuke Yokoyama[1]; Mariko Harada[1]; Mayuri Inoue[2]; Jun'ichi Okuno[3]; Hiroyuki Matsuzaki[4]

[1] Dept. Earth & Planet. Sci., Univ. Tokyo; [2] ORI; [3] ERI, Univ. Tokyo; [4] MALT, Univ. Tokyo

http://www.eps.s.u-tokyo.ac.jp

Quaternary (past 1.7 Ma) is characterized as frequent variations in climate including orbital forced glacial and interglacial changes. During the last a couple of decades, ice cores taken form both polar regions revealed millennial scale rapid climate changes which was caused by interactions amongst Earth surface systems such as cryosphere, ocean and atmosphere. Ice sheets fluctuations have been thought as major player of the system so that reconstructing precise magnitude and timing is a key to understand the climate system. Integrated Ocean Drilling Project (IODP) leg 310 was conducted at Tahiti and the drilled offshore underwater reef structure to obtain deglacial sea-level records. The leg has 2 co-chiefs, Drs Iryu (Tohoku Univ.) and Camoin (CEREGE) and successfully recovered the last deglacial facies. Extensive effort has been conducted currently to produce the data of paleoclimate during mainly the last 20,000 years and I will present preliminary results which our group is working on including radiocarbon dating of corals and algae in the cores and discuss Tahiti sea-level data for paleo sea-level reconstructions.