

The radiolarian biostratigraphy in east equatorial Pacific Ocean (IODP Exp. 321 Site U1338)

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The radiolarian biostratigraphy has been already performed on 119 core catchers and core (mostly two per core) on shipboard. We examined 172 additional material (mostly four per core) collected for establishing the higher resolution biostratigraphy of radiolarians.

A total of 291 samples were collected from Hole U1338A. The sampling interval was about 1.5 to 3.0 m. The samples were processed with hydrochloric acid and hydrogen peroxide, and washed through the 63 micro meter sieve. The residues were dried and mounted on the slide glass with Canada balsam. Total of 500-1000 individuals were observed at each sample.

The radiolarian assemblages of Site U1338 show good to moderate preservation except in the lowermost portion (lower Miocene). Tropical radiolarian biostratigraphy was used for establishing the radiolarian zones of Site U1338. The radiolarian stratigraphy spans the interval from the uppermost part of Zone RN16-17 (late Pleistocene) to uppermost part of RN3 (early Miocene). Fifty eight radiolarian biostratigraphic datum events have been recognized in Site U1338. The biostratigraphy of radiolarians generally agree with the shipboard biostratigraphic data of other microfossils: nannofossil, foraminifera and diatom except for some small inconsistencies.

Keywords: Radiolaria, Biostratigraphy, east equatorial Pacific Ocean