



## **Paleocene Radiolaria from DSDP Leg 36 - Site 329, Maurice Ewing Bank, Malvinas Plateau: biostratigraphic response**

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The carbonatic succession of the Maurice Ewing Bank in the Malvinas Plateau, presents records of remarkable paleoceanographic changes in the South Atlantic Ocean, and documents the interval between its opening and the stabilization of the circumpolar current. A report of the Paleocene radiolarian fauna recovered in the Cores 33 and 32 (Section 4) of the DSDP Leg 36 - Site 329 is presented herein. The samples, composed mainly by micritic limestones, were chemically treated with a solution of hydrogen peroxide (H<sub>2</sub>O<sub>2</sub>) and sodium hexametaphosphate (Na<sub>16</sub>P<sub>14</sub>O<sub>43</sub>). Afterward, they were soaked in a solution of chloridric acid (HCl). The studied microfauna shows low diversity and abundance and is composed by the genera *Amphisphaera*, *Haliomma*, *Amphymenium*, *Spongodiscus*, *Lithelius*, *Dictyomitra*, *Dendrospyrus*, *Bathropyramis* and *Siphocampe*. The original biostratigraphic framework proposed for the DSDP Leg 36 - Site 329 (based on nannofossils and foraminifers) assigns a Paleocene age to the rocks of the Cores 33 and 32 (Section 4). Radiolarian absence in the Paleocene-Oligocene interval is due to the poor preservation of the specimens. However, the co-occurrence of *Amphisphaera priva* (Foreman) Hollis and *Dictyomitra andersoni* (Campbell and Clark) Foreman allows us to sustain at least a Late Paleocene age for the Core 33. The assemblages recovered in the Cores 33 and 32 (Section 4) exhibit some similarity with Paleocene faunas reported in the New Zealand region. Forthcoming studies based on this radiolarian microfauna can provide relevant paleoceanographic data about the South Atlantic Ocean during the Late Paleocene.

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