The small *Reticulofenestra* event/*R. pseudoumbilicus* paracme revisited -new data from IODP Expedition 359

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At tropical and sub-tropical latitudes within late Miocene Zone NN10, *Reticulofenestra* specimens larger than about 5 microns abruptly disappear from the fossil record at about 8.8Ma. This event was first recognized independently by Young (1990) and Rio *et al.* (1990) and was termed respectively the small *Reticulofenestra* event and the *Reticulofenestra pseudoumbilicus* paracme. The event has since been shown to be essentially global at low latitudes and an excellent biostratigraphic marker, and it was adopted as a marker event in the zonation of Backman *et al.* (2012). It also appears to be the most prominent in a succession of abrupt size reduction events exhibited by reticulofenestrids in the Cenozoic.

IODP expedition 359 drilled the Maldives carbonate system in the western Indian Ocean, which appears to be the region in which the event is best developed, and both Young (1990) and Rio *et al.* (1990) based their studies on material from this area. The event was well developed in an interval with a high sedimentation rate and low reworking at IODP site 1467. This site provides an excellent opportunity to review the pattern of disappearance and compare it to that seen at other events. These data will also be used to review the nature of such events and their potential significance as indicators of environmental change.

References

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