Triassic marine Os isotope record reconstructed from a pelagic chert succession, Sakahogi section, Mino Belt, southwest Japan

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Pelagic cherts preserved in accretionary complexes represent former seafloor sediment that can retain geochemical evidence of paleoceanographic conditions that predate the oldest extant oceanic crust. The ratio of Os isotopes in seawater, in particular, is of wide interest as a source of insight into notable geologic events such as oceanic anoxic events, rapid global warming episodes, and eruption of large igneous provinces, but marine Os isotope records from before 80 Ma are scarce. We present a record of secular variations of marine Os isotope ratios from a thick, continuous succession of Middle and Upper Triassic pelagic chert in the Sakahogi section of the Mino Belt accretionary complex.

Keywords: Chert, Re-Os isotope, Triassic, Accretionary complex, Mino Belt, Southwest Japan