Variability of delta-14C of coral From Ishigaki Island

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Massive, hermatypic corals which live in the tropical-subtropical regions grow with annual density bands. Time-series analysis of 14C concentration in coral annual bands give us an information for the variability of DI14C concentration in ocean surface layer which is controlled by the CO2 exchange process between atmosphere, surface and intermediate ocean. The 100-year old massive coral was collected from Yasurazaki, Ishigaki Island in 1993 and its 14C concentration for eight epochs from 1950-1985 were measured by the accelerator mass spectrometer (AMS). The delta-14C results show remarkable change between pre- and post-bomb periods.