

Bomb Radiocarbon at the Source: Coral $\Delta^{14}\text{C}$ from Enewetak Atoll

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The seasonal $\Delta^{14}\text{C}$ history of surface waters in and around Enewetak Atoll (RMI) in the tropical western Pacific has been reconstructed from radiocarbon measurements on a *Porites* coral. Enewetak Atoll was a major nuclear test-site during the 1940-50s and this is the first coral-radiocarbon record produced in such proximity to a nuclear test site. We will present $\Delta^{14}\text{C}$ data from the pre-bomb (-60‰) to 1984 encompassing the bomb testing period. Individual bomb tests can be differentiated as well as the cumulative effect of multiple tests. The largest $\Delta^{14}\text{C}$ value in the coral came from the 1957 Oak test (34,840‰). The Oak test site was located ~2km west from the coral site. The coral did not display any growth effects from the nuclear bomb tests.