

Transient Tracers and Interannual Variability in the Pacific Subtropical Cell

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A modeling study of transient tracers in the upper ocean is being conducted using the ORCA model at the LSCE. The focus of the study is on the dynamical processes which control both the mean state and the interannual variability in the transient tracer signature of the upper Pacific Ocean. The transient tracers used for this study are radiocarbon and

CFCs, and the ocean model is forced with NCEP reanalysis fields over the period 1948-1999. Model output is being validated using WOCE measurements as well as monthly radiocarbon time series measured from tropical corals, and implications for Interannual variability in the carbon cycle are discussed.