Paleoclimatology

Paleoclimatology/paleoceanography are disciplines that document variability in fundamental parameters controlling the global energy balance and how that variability affects ecosystems and biogeochemical cycles. Paleoclimate records are used to determine processes of climate change and are important to predict responses to global warming. Paleoceanography evolved as a research emphasis at CGIS because high-resolution seismic reflection profiles, geophysical logs, and physical property measurements on cored sediments are critical in defining the shallow sedimentary environment in which paleoclimate records (i.e., sediment cores) are collected in both marine and lacustrine settings. Also, geophysical data allow the extrapolation of depositional events defined at a single site to the surrounding region.

CGISS scientists have participated in several international oceanographic expeditions to better define how the oceans have participated in climate change and are working on other sediment records from terrestrial basins of the Pacific Northwest.

Selected References


