

THE EASTERN PACIFIC OCEAN DURING THE LAST GLACIAL MAXIMUM

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The present and the last glacial maximum time-slices from five deep-sea cores from the Panama Basin (eastern Pacific Ocean) were studied for planktonic and benthonic foraminifera, calcareous nannofossils, radiolarians, and palynology. Preliminary results on 20 core-tops and deep-sea cores TR163-11, TR163-33, TR163-38, ODP 506B, and ODP 677B permitted the reconstruction of sea-surface temperature (SST) by means of an improved modern analogue technique MAT database. Sea-surface salinity (SSS) was reconstructed from the residuals of the $\delta^{18}\text{O}$ signal and the SST MAT reconstruction, whereas paleoproductivity was derived from faunal analyses of planktonic foraminifera, coccolithophorids, radiolaria, and benthonic foraminifera. The Panama Basin is considered as a critical region for the comprehension of global climate change and the circulation of the World Ocean. Despite extensive work in the area, this contribution is the first integrated attempt to reconstruct SST and SSS for the last glacial maximum in the region. The interoceanic transport of water vapor between the Atlantic and the Pacific during the last glacial maximum is inferred through SSS variations, whereas, the path and intensity of the wind field regimes is inferred through upwelling indicators and pollen content. The role of both, SSS and wind field regime, on the global circulation of the