LATE QUATERNARY SEDIMENTATION IN ANTARCTICA'S PALMER DEEP

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The Antarctic Peninsula is one of Earth's most dynamic regions. Here, ecologic and ice systems respond rapidly to climate change. To better understand the natural variability of the region's climate, we examined marine sediment cores obtained by the ODP and by the RV Laurence M. Gould. Over 50 m of Holocene sediments were obtained from the Palmer Deep, an ice-bound depression on the continental shelf. I will compare our sedimentary results to ice core records and will focus on specific climatic events, such as the Little Ice Age, Neoglacial, Hypsithermal, and the transition from the Bølling/Allerød to the Younger Dryas. I will also discuss the relative timing of atmosphere/ ocean changes between the northern and southern high latitudes. Dr. Domack has been investigating the marine geology and paleoenvironmental record of a wide variety of Antarctic regions since 1978. He was a shore-based contributor to Leg 119 (Prydz Bay) and a ship-board participant on Leg 178 (Antarctic Peninsula).