

JOI/USSAC
Distinguished Lecturer Series
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DEEP-SEA DRILLING CONFIRMS AND EVALUATES NON-ACCRETIONARY AND EROSION PROCESSES AT SUBDUCTION ZONES

Dr. David W. Scholl, U.S. Geological Survey

Dr. Scholl has been involved with the Deep Sea Drilling Project (DSDP) and ODP nearly from the initiation of both programs and served as JOI/USSAC chairman from 1987 to 1989. Taking a global approach, Dr. Scholl will discuss the role of DSDP and ODP drilling in testing the theory that the processes of sediment subduction and erosion occur at convergent margins. Deep sea drilling has verified that the bulk of oceanic sediment entering a subduction zone is not accreted to the margin but is subducted to great depths, and that the margin's rock framework is eroded by subduction processes. Dr. Scholl will explore some intriguing questions concerning the fate of subducted sediment and eroded crustal material, the bulk of which seems to be recycled to the mantle, as well as reasons why accretionary prisms do not always form at subduction zones.