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The IBM-1 drill site has been proposed to determine the lithology and composition of Layer 2 of the oceanic crustal basement on which the Izu-Bonin-Mariana (IBM) Arc was initiated, and recover the pyroclastic record from Layer 1 of this crust, from which we will determine the nature of the petrological and geochemical evolution of the first 30 million years of Arc history. The IBM-1 is located at the intersection of crossing multi-channel seismic lines in the Amami Sankaku Basin, located to the east of the Amami Plateau and west of the northern Kyushu-Palau Ridge. The specific aims here are threefold: Recover sediments from the 1300 m sedimentary section observed on Multi Channel Seismic Reflection profiles. The lower part of the sedimentary section should preserve a valuable record of paleo-oceanographic conditions in easternmost Tethys during the late Mesozoic, including possible oceanic anoxic events, and earliest Paleogene. Above this the sediments should include pyroclastic debris that record conditions during IBM Arc inception and evolution, possible evolution of the Ryukyu Arc and the history of Asian monsoon/aridity. Our current understanding of these initial stages is a period of at least 7-8 million years dominated in the forearc by boninitic and low-K tholeiitic magmatism. It remains to be tested whether this type of magmatism persisted across the full width of the nascent Arc. We expect the sedimentary record at IBM-1 to preserve evidence of how the upper plate responded to subduction initiation, including possible uplift (unconformities; erosion). The response of the overriding plate during the initial stages of subduction initiation is predicted to result from forced convergence (uplift) vs. spontaneous nucleation of the subduction zone. Above this the sedimentary record should preserve the Paleogene history of IBM arc evolution, as tephra and as volcaniclastic units shed from KPR volcanoes. We plan to penetrate into basement in order to recover samples of oceanic crust to determine its petrological, geochemical, and age characteristics.