Figure 1. Volcanic arcs, backarc basins, and seafloor drilling sites of the Philippine Sea region (modified from Taylor, 1992). Relative plate motions from Seno et al. (1993).

Figure 2. A textbook X-section of the central Mariana margin & postulated aspects of mantle flow and melt distribution (from Stern, 1998). Subducted slab position is based on teleseismicity.

Figure 3. Block diagram of the central Mariana convergent margin from the Pacific plate on the east to the Mariana Trough on the west showing inferred crustal structure and location of DSDP Leg 60 sites (from Fryer and Hussong, 1981). Line Drawing of MCS profile above shows forearc stratigraphy and structure (from Mrozowski and Hayes, 1980).

From Taylor (UofH)/Klemperer (Stanford)/Wiens (WUSTL)/Hildebrand (SIO) proposal to NSF-MARGINS, January 2000.