

Fault rocks analysis from Taiwan Chelungpu-fault drilling project, Hole B

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The Taiwan Chelungpu-fault Drilling Project (TCDP) was undertaken in 2002 to understand the physics and the faulting mechanism of the Chi-Chi earthquake. TCDP drilled two cored holes, Hole A (total depth 2003.00 m) and Hole B (total depth 1352.60 m). In Hole B, cores were recovered only from between 948.42 and 1352.60 m, and nondestructive continuous physical property measurements and mesoscopic observations of the cores were performed in Kochi Core Center, Japan. Hirono et al. (2006, 2007) reported three dominant fault zones, FZB1136 (fault zone around 1136 m depth in Hole B), FZB1194, and FZB1243, within the Chinshui Shale in Hole B core samples (Fig. 2) and interpreted as segments of the Chelungpu fault. In addition, microstructural analysis, detection of heat signal, and chemical analysis of fault-related samples from Hole B are proceeding. We will summarize these preliminary results.