

Chinese Continental Scientific Drilling Project

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The Chinese Continental Scientific Drilling Program (CCSD) has been approved as a national key scientific engineering project by Chinese government and as an international project by ICDP. A 5000-m-deep scientific drillhole will be drilled in the Donghai area of the Dabie-Sulu ultrahigh pressure metamorphic (UHPM) belt, eastern-central China. The CCSD aims to reveal deep geological processes and dynamics of the convergent plate boundary, to understand the mechanism of formation and exhumation of UHPM rocks, to test geophysical data in the deep structure and composition of the crust, and to establish a long-term laboratory for study of the deep continental crust. The project consists of three components: (1) deep geological telemetry, including geological and geophysical investigations; (2) drilling and well-logging, including two holes. A pilot hole will be drilled to a depth of 2,000 m and full coring. The 5000 m main hole will be drilled near the pilot-hole site. It will penetrate the target layer of high-velocity and high-density material. Part coring and well-logging will be performed and in-situ chemical and fluid experiments will be conducted; (3) long-term observation laboratory. Basic facilities for long-term observation of geophysical fields and geological experiments will be built around the main and the pilot holes.

The CCSD project will be carried out between 2000 and 2004, excluding the investigations for site-selection and pre-pilot hole, which have already been completed. The pilot hole will be drilled in the end of this year, and the main hole the end of 2001.