地球科学輻合ゼミナール

(2013年度 前期 第5回)のご案内

Japan Trench Fast Drilling Project (JFAST): 2011年東北地震の巨大滑りを理解するための掘削調査　その2

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Last year in July I reported that we had not been able to install the temperature sensors to measure the frictional heat for the 2011 earthquake because of operational difficulties. Since that time, we successfully deployed the temperature instruments and retrieved them in April. We have collected data that indicates very low frictional stress on the fault during the rupture of the earthquake.　IODP Expedition 343, Japan Trench Fast Drilling Project (JFAST), sailed from April 1 to May 24, 2012, with the main goal of investigating the area of very large fault dis placement during the 2011 Tohoku, Japan earthquake. A borehole site near the Japan Tre nch was chosen with the objective of reaching the main slip zone of the earthquake at a depth of 800 to 1000 meters below seafloor (mbsf).

6月5日(水)　午後4:30～午後6:00

場所: 理学研究科6号館 303号室

Huge fault displacements (30 to 50 meters) on this portion of the megathrust are thought to be largely responsible for the tsunami that devastated much of the coast of northeast Honshu, so understanding o f the fault properties and rupture mechanisms of this area is a primary research issue for the earthquake. For these investigations, temperature measurements were made in the immediate vicinity of the fault to determine the level of dynamic friction during the earthquake. Core sampling also provides direct observations of the physical prope rties of fault-zone material.