



ICDP's Science Plan for 2014-2019

Thomas Wiersberg, Uli Harms, and Carola Knebel

GFZ German Research Centre for Geosciences, Scientific Drilling, Potsdam, Germany (wiers@gfz-potsdam.de)

The International Continental Scientific Drilling Program ICDP has played a primary role over the past two decades, uncovering geological secrets from beneath the continents. Even though this has been done very successfully still our planet is far from being understood. The need to drill has never been greater and with its new science plan ICDP wants to unravel the workings of planet earth, fixing the new program attention in a White Paper valid from 2014 to 2019.

ICDP's focus for the next term is laid on balancing the needs of science and society even stronger than in the past years, because this is the fundamental task mankind has to face in the 21st century. The challenges that can be addressed by scientific drilling are climate and ecosystem evolution, sustainable georesources, water quality and availability, as well as natural hazards. Cause these challenges are inextricably linked with the dynamics of planet earth ICDP addresses the geoprocesses condensed to 5 major themes in its White Paper. These themes are active faults and earthquakes, global cycles, heat and mass transfer, the deep biosphere, and cataclysmic events. For each of it is summarized what societal challenges are effected by and how they can be understood, what has been achieved by ICDP so far, what are the fundamental open questions left, and what are possible future scientific targets.

Furthermore the new ICDP Science Plan strengthens and expands ties between member countries and partner programs, invites and integrates early career researchers in upcoming ICDP activities, debates incorporation of industry partners into selected ICDP strategic activities for a science-driven mutual benefit and discusses new outreach measures to media, policy makers and the interested public.

By providing this information the new White Paper shall act as a roadmap for the international Earth Science community on one hand and at the same time shall serve as a docking station for the national funding agencies as well.