



Integrated Drill Core Data Analysis Tools

Ronald Conze (1), Josh Reed (2), Yu-Chung Chen (3), and Frank Krysiak (4)

(1) Operational Support Group ICDP, GFZ German Research Centre for Geosciences, Telegrafenberg, D-14473 Potsdam, Germany, e-mail: conze@gfz-potsdam.de, (2) University of Nebraska at Lincoln, Department of Geosciences, 126 Bessey Hall, Lincoln, NE 68588-0340, U.S.A. , (3) University of Illinois at Chicago, Electronic Visualization Laboratory, U.S.A. , (4) Smartcube, Puschkinallee 48, D-12435 Berlin, Germany

Data management in scientific drilling programs such IODP, ICDP, and ANDRILL is applied to capture drilling and science data during an expedition and for long-term data storage and dissemination. Currently data management tools are linked directly with capture and visualization applications to allow for both, a two-way flow of data between the database and the applications, and an integrated data environment. The new system has meanwhile been tested by recent IODP and ICDP projects. The components comprise the Expedition Drilling Information System (ExpeditionDIS) used for data acquisition, PSICAT, the Paleontological Stratigraphic Interval Construction and Analysis Tool, for graphical editing and viewing of core description diagrams, and Corelyzer as part of CoreWall for scalable, extensible visualization, developed to enhance the study of geological cores. This interoperable configuration of tools provides an excellent all-in-one toolbox for core analysis.