



## ICDP's Drilling Information System goes Mobile (mDIS)

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The Drilling Information System (DIS) of the International Continental Scientific Drilling Program ICDP is a software for capturing essential data about geological samples, the drilling progress, and for curating related datasets such as images and geophysical well logs. DIS was developed in 1998, and has been refined over many years. Now in version 5, the DIS was (and still is) being used by more than 100 expert users in more than 50 scientific drilling projects and core repositories. However, the DIS was a client-server application tied to specific versions of the Windows and Office platforms that are non-free, and, more importantly, are no longer supported by Microsoft.

Therefore, we have developed an entirely new DIS, called mDIS, built with open-source software. Development goals of the new version were platform- independence, a modern look, responsive design and the ability to run on mobile devices.

The template-driven workflows, which were characteristic for the older Windows-based DIS, are still a key feature of the rewritten system. In particular, a workflow for customizing data entry forms and reports still allows trained users to design and generate data tables, as well as all necessary elements of the user interface.

Technically, mDIS is a database backed web application built on a LAMP stack (Linux, Apache, MariaDB, PHP). On the client side, mDIS is based on a Javascript framework (VueJS) that, in conjunction with the Yii PHP framework, allows for reactive two-way data binding. mDIS components can be deployed in desktop environments and on servers. On mobile devices, mDIS will be able to run as a Progressive Web App (PWA), which works almost like a native app. mDIS will have REST application programming interfaces (APIs) for third-party application developers and external data providers. These APIs can be used for importing data from legacy DIS installations.

In April 2019, mDIS is available as a beta release.