

地殻変動データベースシステムを活用したプロトン磁力計データサーバの構築

Development of Data Server for Proton Magnetometer with the Crustal Deformation Database System

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Recognized the importance of demagnetization monitoring to phreatic/hydrothermal eruptions, we have developed a data server system for proton magnetometer time-series data processings. PM201-SCS (Neo-Science, Co. Ltd.), one of the most popular proton magnetometer in Japan, is equipped with semi-real time data transfer system. The time-series data are transferred with an e-mail once a day through 3G network in the PM201-SCS. After receiving the e-mails from PM201-SCS at each site, the developed server right away performs the following data processing automatically: (1) diagnose status of each site's magnetometer, (2) convert the e-mail data into user-friendly formats including WIN-format (cf. <http://eoc.eri.u-tokyo.ac.jp/WIN/index.html>), (3) reduce noise, and (4) store the data in the Crustal Deformation Database system (CDD). CDD was developed by Yamaguchi et al., (2010), and user can use functions such as drawing and download the time-series from Web browser. Our server enables users to access the daily time-series through the CDD. In this presentation, we will introduce the details of the server using an example of time-series data observed around Zao volcano.

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