

Application of realtime geomagnetic field data at World Data Center for Geomagnetism, Kyoto

NOSE, Masahito^{1*}, IYEMORI, Toshihiko¹, TAKEDA, Masahiko¹, TOH, Hiroaki¹

¹Data Analysis Center for Geomagnetism and Space Magnetism, Graduate School of Science, Kyoto Uni.

World Data Center for Geomagnetism, Kyoto (WDC Kyoto), which is operated by Data Analysis Center for Geomagnetism and Space Magnetism, Kyoto University, has been providing a leading data service for over 30 years. With the help of recent advances in computing, WDC Kyoto started to collect 1-min geomagnetic field data in quasi-realtime via the GMS satellite/the Internet from 1993. Kakioka magnetic observatory is one of the earliest observatories that transfer data in quasi-realtime. At present, even 1-sec geomagnetic field data are delivered from some observatories to WDC Kyoto with a few minute delay via the Internet. Such collected data are mainly used (1) to display geomagnetic field variations in realtime (i.e., to display realtime magnetograms), (2) to compute the realtime Dst and AE indices, and (3) to automatically detect a specific phenomenon related to substorms in realtime. These 3 products are available from the web page of WDC Kyoto (<http://wdc.kugi.kyoto-u.ac.jp>). In this talk, we will introduce the logistics of realtime data handling at WDC Kyoto and discuss its future perspective.