

Recent activity of DOI-minting in the international community of geomagnetism

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Data-DOI (digital object identifier), data publication, and data citation will promote “Open Science”. Recognizing their importance, solar-terrestrial physics (STP) data centers in Japan have been working to mint DOI to their database. We participated from October 2014 in a 1-year pilot program for DOI-minting to science data launched by Japan Link Center, which is one of the DOI registration agencies. In the pilot program, a procedure of the DOI-minting for STP data was established. As a result of close collaboration with Japan Link Center, the first case of data-DOI in Japan (doi:10.17591/55838dbd6c0ad) was created in June 2015. The first case of data citation in Japan was also made. As of February 2018, there are 18 data-DOIs for the STP data in Japan. Geomagnetic field data have DOIs for the Dst index (doi:10.17593/14515-74000), the AE index (doi:10.17593/15031-54800), the Wp index (doi:10.17593/13437-46800), and magnetotelluric Data at Muroto, Japan (doi:10.17593/13882-05900).

In the International Association of Geomagnetism and Aeronomy (IAGA), STP domain scientists who are working for data centers or observatories started discussion about DOI-minting to their data and a task force was formed in August 2013. In the latest IAGA assembly that was held at Cape Town in August 2017, the task force reported about "Present Status of DOI-minting to Geomagnetic Data/Indices" that is available from <https://www.ngdc.noaa.gov/IAGA/vdat/>. The report found that there are different types of activities of DOI-minting in individual data centers or observatories. The international effort will be continued for DOI-minting to scientific data in geomagnetism.