

Digitization of analog magnetograms and creating the database

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One-minute data of geomagnetic fields at Kakioka Magnetic Observatory have been released since 1976. Older data are one-hour values read by hand from analog magnetograms with torsion magnetic variometers. No one-minute data before around 1970 are published in the world.

We have developed a method to automatically convert from images of magnetograms to numerical data, and we are now extracting one-minute digital data from 1924 to 1975. That digitized data have been released via website of Kakioka Magnetic Observatory and of World Data Center for Geomagnetism, Kyoto. In this talk, we will introduce the procedure of digitization, assessments of the precision and database specifications.

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