

Construction and use of a database for analogue records and documents

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Continuous magnetic observation started in 19th century, and after the IGY (International Geophysical Year, 1957-1958), the observation spreads worldwide and the data have been collected at World Data Centers (WDCs). It is only from middle of 1980s when the digital magnetometer became popular and the data were taken in digital form, hence we still have much more volume (i.e., periods x observatories) of data in analogue form and they are very valuable if we can use them online. At the WDC for Geomagnetism, Kyoto, we have been constructing a database of analogue magnetograms in digital image format and trying to digitize them. Through the construction and use of the database, we realized that the documents which describe the observation technique etc. also need to be online. In this paper, we introduce recent status of the database construction and show an example of the use for a study of tsunami effect on magnetic field at 1960 Great Chile Earthquake.