

GEOMAGNETIC OBSERVATIONS IN INDONESIA CARRIED OUT BY MGA (BMG)

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Geomagnetic observations in Indonesia were started officially in 1866 together with meteorological observations, called Koninklijk Magnetisch en Meteorologisch Observatorium at Jakarta. In 1901 the magnetic observation was moved to Bogor, Kuyper island (1928) and Tangerang (1964) respectively. At present there are five geomagnetic observatories of BMG, i.e. Tangerang (TNG), Tuntungan (TUN), Tondano (MND), Pelabuhan Ratu (PEL) and Kupang (KUP). We are planning to build magnetic observatory in Papua. Magnetic data are used for the purposes of:

Aviation and Shipping Navigation,

Direction navigation needs magnetic declination data at a site to be corrected to compass needle pointing the true north,

Topographic Map,

Large scale topographic map must include the notation of magnetic declination on each piece of map,

Geological and Geophysical Survey,

Every geological and geophysical survey using magnetic method need daily geomagnetic variation data recorded at geomagnetic observatory. The data are used to correct field data during survey,

Radio Communication,

Geomagnetic storms can influence HF radio propagation in many areas,

Seismo-electromagnetic Research.

To support International Geomagnetic Reference Field (IGRF) in the frame of international data exchange with International Association of Geomagnetism and Aeronomy (IAGA) and World Data Center (WDC) and Geosciences Australian (GA), and British Geological Survey (BGS).

geomagnetic