

Statistical estimations of geomagnetic disturbances at Kakioka, Memambetsu and Kanoya

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We investigated scale of geomagnetic disturbances which can cause extremely large geomagnetically induced current with record of geomagnetic phenomena by The Japan Meteorological Agency with statistical analyses. In this presentation, we will show the following items,

1. an estimation of the scale of millennium magnetic storm calculated from 1932 cases of observations at Kakioka magnetic observatory.
2. estimations of the scale of millennium storm sudden commencements and sudden impulses calculated from 2848, 2408 and 2257 cases of observations at Kakioka, Memambetsu and Kanoya respectively.
3. probable geomagnetic disturbances suggested from one-minutes data of geomagnetic field at Kakioka, Memambetsu and Kanoya over about thirty years.

Keywords: magnetic storm, sudden impulse, storm sudden commencement, statistics, magnetic observatory