EVALUATION OF GEOMAGNETIC PARAMETERS DUE TO SOLAR WIND EVENTS

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ABSTRACT

Space weather occurs in the area between the Earth and the Sun and refers to the disturbances and storms that swirl through space, which could have adverse effects on human activities. Besides causing beautiful auroras, these storms can damage satellite broadcasts, disable electrical power systems and disrupt cell phone communication systems. These disturbances are caused by solar activities that cause variations of electromagnetic fields and energetic particle fluxes. This project focuses is to evaluate which parameters mostly affected during geomagnetic event such as geomagnetic storms. The raw data are taken from MAGDAS unit at Davao, Philippine and Manado, Indonesia which supplied by Space Environment Research Center (SERC) Kyushu University, Japan. The data is then analyzed using MATLAB program. The variations of the events are based on Disturbance Storm Time Index (Dst index) for 24th August 2005, 31st August 2005 and 11th September 2005 are taken from World Data Centre for Geomagnetism, Kyoto University.

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