INVESTIGATION ON INDUCED EARTH'S ELECTROMAGNETIC ULTRA-LOW FREQUENCY (ULF) VARIATIONS

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ABSTRACT

Earth Electromagnetic Ultra Low Frequency (ULF) mechanism has its own advantages and uniqueness that is not well interrogate by the society. Thus, this investigation aimed to investigate factors that induce geomagnetic ULF variation and its behavioral characteristics. Besides, the project aimed to classify the geomagnetic pulsation for each factor. Furthermore, the investigation is divided into two parts which are exogenous (external sources) and endogenous (internal sources) events. The characterizations involve parameters during quiet and disturbed period of space weather condition and geomagnetic data for exogenous and endogenous events respectively. Study is conducted by analyzing the extracted from Magnetic Data Acquisition System (MAGDAS) in Circum-pan Pacific Magnetometer Network (CPMN). From the analysis, the result shows that each geomagnetic pulsation has significant relationship towards solar wind event due to different factor triggering events. The result also shows that higher continuous geomagnetic pulsation, Pc correspond well with exogenous events which is in contrast with lower continuous geomagnetic pulsation, Pc that correspond well with endogenousevents.

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