STUDY ON THE PHENOMENA OF IONOSPHERIC AND GEOMAGNETIC VARIATIONS BY SOLAR ACTIVITIES : DEVELOPMENT OF A SYSTEMATIC MODEL

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Solar activities ejecting high energy particles influence satellites and satellite communications as well as perturb geomagnetic fields. To understand space environments near the Earth being influenced by the Sun, we must study about the magnetosphere and the ionosphere beforehand. To study this issue, we investigate some ionospheric models, atmospheric models and geomagnetic field models : IRI(International Reference Ionosphere), PIM(Parameterized Ionospheric Model) and IGRF(International Geomagnetic Reference Field). We develop the models and build a web site to serve IRI, PIM and IGRF model on the internet so that one can easily get information of daily and global ionospheric and geomagnetic variations.