

A40c **Study of satellite anomalies and space weather**

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Geosynchronous satellite anomalies are occurred by the space weather phenomena. We examined three indexes of space weather. They are magneto-pause that balance solar wind and magnetosphere(GMC: Geosynchronous Magnetopause Crossing), DST index that indicated to magnetic storm and AE index that indicated to influx of energy from sun wind for magnetosphere.

We looked at the effect DST index and AE index variation on satellites anomalies how we use ONMI2 1 hour data. DST index is examined between the frequency of satellites anomalies and magnetic storm occurred. AE index is integrate in day why examine between the frequency of satellites anomalies and influx of energy for magnetosphere growing value.

The result is that the more the magneto-pause is compressed, the more the frequency of satellites anomalies is increased exponentially. DST index the smaller value, the more frequency of satellites anomalies is increased exponentially. Integration AE index the more growth, the more frequency of satellites anomalies is increased.

The magnetopause position will be used as an index to prevent geosynchronous satellite anomalies from space environment disturbances on geosynchronous satellite operation.