

Characteristics of plasma bubble obtained with Dynamics Explorer Langmuir Probe data

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Plasma bubble is a kind of local irregularity of ionosphere observed in the equatorial anomaly region (near geomagnetic equator, $\pm 15^\circ$ in geomagnetic latitude). Some of this bubble raise from lower to upper ionosphere (higher than 1000km on the equator). This phenomena is one of the main cause of cycle slips or signal loss of lock on GPS and SBAS (Satellite-Based Augmentation System) receivers. In this study, we will analyze Langmuir probe data obtained with Dynamics Explorer-2 satellite. This satellite launced on August 1981 in the polar orbit (Inc. Ang. 89.9°). Our purpose of this study is to research the characteristics of plasma bubble for revealing the glowing mechanism.