Evolution of the plasmaspheric bulge during low geomagnetic activity observed by remotesensing technique

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In-situ observations enable us to understand the characteristics of the plasmasphere. However, it provides only the information along the orbit of the satellite. Therefore, the entire plasmasphere cannot be understood from in-situ observations.

The extreme ultraviolet (EUV) imager on board the IMAGE satellite provides global images of the Earth's plasmasphere. By using EUV image, we investigated the influence of geomagnetic activity on the location of the plasmapause and the evolution of the plasmaspheric bulge.