

On the intensity of the 3-10 Hz magnetic fluctuations observed by Kaguya near the moon

WATANABE, Yusuke^{1*} ; TERUI, Kousuke¹ ; KAGAWA, Shogo¹ ; NAKAGAWA, Tomoko¹ ; TSUNAKAWA, Hideo²

¹Information and Communication Engineering, Tohoku Institute of Technology, ²Department of Earth and Planetary Sciences, Tokyo Institute of Technology

Possible relationship were examined between the power of the non-monochromatic fluctuations of the magnetic field over the frequency range of 3 - 10 Hz observed by Kaguya at an altitude of 100 km above the lunar surface and the speed of the incident solar wind observed by ACE, but none was found. Instead, control by magnetic connection between the spacecraft and the lunar surface was found. Intense wave activity was observed during the magnetic connection to the magnetic anomaly. The wave activity disappeared when the spacecraft was magnetically disconnected from the lunar surface, even when the detection of protons reflected by the moon persisted. It suggests that the wave was generated below the spacecraft altitude.