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## Generation mechanism of the 100-second magnetic field variations observed by Kaguya

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Kaguya/LMAG often detected low-frequency magnetic variation of 100-sec periods when the moon was in the solar wind. The low frequency waves were examined by using the 1-sec averaged magnetic field data obtained by Kaguya/LMAG during the period from January 1, 2008 to November 30, 2008. The data were Fourier transformed every 600 sec. The waves were observed in 10 percent of the observation period. The dominant frequency was 0.01 Hz. The waves were observed at the terminator and the magnetic anomaly of the moon. The waves are supposed to be generated by the protons reflected by the moon through cyclotron resonance with the MHD waves in the solar wind.

Keywords: Moon, Kaguya, MHD wave, magnetic field, MAP/PACE LMAG, solar wind