

The source region of the kilometric radiation associated with "Donkey Ear" phenomena

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The 11 years observation of Akebono satellite in the plasmasphere reveals radiation of electromagnetic waves from the plasmasphere. The electromagnetic radiations are generated near the magnetic equator region of the density depression region associated with the Donkey Ear structure of the plasmasphere. This radiation exists in the frequency range from 100 to 800 kHz. The generation mechanism is expected as the mode conversion process from the EPWAT via Z-mode wave. We estimate that the minimum altitude of this radiation source region is 2600 km in plasmasphere.