Characteristics of VLF/ELF Waves in the Plasmasphere from Magnetic Equator to Middle -Latitudes

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There have been some reports on the satellite observation of seismic radio activity in the plasmasphere. Detection of such weak radiation is possible only in the region from magnetic equator to middle-latitudes, while local plasma wave activity in this region has not been sufficiently investigated. We use the AKEBONO plasma wave data and analyze the averaged local ELF/VLF activities and evaluate the minimum radio power from the source under the ionosphere for the satellite detection. We confirm the strong wave activity at the lower-hybrid frequency and weaker ones in the other range. Estimated minimum VLF power for satellite detection is about 10-100W. We also search the seismic radio activities in the data observed in 1989-90, but do not confirm the enhancement of ELF/VLF activities.