## E109-006

## **Room: 202**

## Propagation analysis of kilometric continuum by Geotail and Image simultaneous observations

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Kilometric continuum radiation is the high frequency extension of escaping continuum emissions in the frequency range from 100 kHz to 800 kHz. It was first identified with the GEOTAIL Plasma Wave Instrument (PWI) and has been observed with various satellites. The NTC is generated in the free space L-O mode above the local electron plasma frequency from sources at or very near the plasmapause. Kilometric continuum is not merely a high frequency extension and has triggered new investigations since this range is higher than the maximum plasma frequencies of a few hundred kHz observed at the plasmapause. This is believed to be generated in events separate from the lower frequency non-thermal continuum.

Recent GEOTAIL and IMAGE simultaneous observations indicated that KC

is observed in a wide range of latitudes including the equatorial region contrary to the linear mode conversion theory. In order to understand the observations, we tried to identify the propagation modes by IMAGE observations. Mainly the O mode has been received so far.