

Variation characteristics of Jupiter's hectometric radiation during the HISAKI observation campaign in 2015

Hiroaki Misawa[1]; Fuminori Tsuchiya[2]; Tomoki Kimura[3]; Yasumasa Kasaba[4]; Atsushi Kumamoto[5]

[1] PPARC, Tohoku Univ.; [2] Planet. Plasma Atmos. Res. Cent., Tohoku Univ.; [3] RIKEN; [4] Tohoku Univ.; [5] Dept. Geophys, Tohoku Univ.

<http://pparc.gp.tohoku.ac.jp/>

Around Jupiter's opposition to the earth in 2015, a remote observation for Jupiter had been made continuously by the HISAKI satellite. In the period, sudden enhancement of Iogenic plasma emissions occurred in the middle of Jan., 2015 and the enhancement had lasted for more than two months. This phenomena would give important clues for investigation of drivers of Jupiter's magnetospheric activities.

We have analyzed Jupiter's hectometric radiations (HOM) by using the WIND spacecraft data for the period. HOM is known to be one of indicators reflecting Jupiter's global magnetospheric activities (Louarn et al., 2014 etc.), and to have some correlation with solar wind variations (Nakagawa et al., 2000 etc.). The preliminary analysis indicates that occurrence of HOM enhanced after the middle of Feb. and showed intermittent feature roughly correlating with activities of UV aurora detected with HISAKI. In the presentation, we will introduce results of comparison analyses among HOM, optical intensities of UV aurora and torus plasma, and solar wind properties, and will discuss variation characteristics of Jupiter's magnetosphere.

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