M144-008 Room: 201B Time: May 17 14:00-14:15

Source characteristics of Jovian Quasi-Periodic burst2

Tomoki Kimura[1]; Akira Morioka[2]; Hiroaki Misawa[3]; Fuminori Tsuchiya[4]; Hiromasa Nozawa[5]

[1] Planet.Plasma Atmos.Res.Cent.,Tohoku.Univ; [2] Planet. Plasma and Atmos. Res. Cent.,Tohoku Univ.; [3] PPARC, Tohoku Univ.; [4] Planet. Plasma Atmos. Res. Cent., Tohoku Univ.; [5] Rikkyo University

http://pparc.geophys.tohoku.ac.jp/index.html

Ulysses had the Ulysses had the Distant encounter event in February 2004, when Ulysses approached to Jupiter within 0.8[AU]. The spacecraft passed through the planet from north to south, and observed Jovian radio waves from quite wide range of latitude (80-10[deg]) in a few months. In this study, we analyzed statistical occurrence characteristics of QP40 burst using spectrum data provided by Ulysses/URAP. The latitudinal distribution of the QP40 burst was disclosed for the first time. The time interval analysis between impulses shows two major component of 10-25min and ~35 min period same as the previous analysis with Ulysses' first Jovian flyby [MacDowall et al., 1993]. The start of QP40 burst impulse groups has a clear dependence on the subsolar point longitude, which means that QP40 groups are triggered at a particular phase of the planetary rotation. The average intensity distribution of QP40 burst also shows unique CML dependence. Solar wind fluctuation has strong effect on daily QP40 occurrence same as other planetary radio emission.