



## **Energetic ions modulation by ULF wave in the duskside flank of magnetosphere observed by Double star TC-1**

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Energetic ion (5eV-30keV) flux variations associated with ultralow frequency (ULF) waves in the duskside flank were observed during a very quiet period when Double star TC-1 pass near 0230 MLT on Oct. 17, 2004. A clear association between Pc 5 waves and periodic variations of ion fluxes is observed. The observed magnetic ULF pulsations and ion fluxes are dominated by the poroidal mode. The pitch angle modulations of energetic ions from different energy channels are observed and show different features. The pitch angle modulation suggests that the ULF wave can excite the energetic ions bouncing resonance at around 25 keV.