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Chorus wave activity observed at marginal condition of electron temperature anisotropy instability in the inner magnetosphere

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Whistler chorus mode waves observed in the inner magnetosphere are believed to be caused by the free energy of electron temperature anisotropy, which is created by injections or plasma convection from the magnetotail. To investigate this, we analyzed electron temperature anisotropy data from the Arase satellite, specifically electron data (LEP-e and MEP-e) observed from March 2017 to October 2019. As presented in the last SGEPS meeting, we identified the marginal condition of the whistler anisotropy instability in the data obtained near the magnetic equator. The data points near the marginal condition are found within a limited region of $L_m=5\sim 6$, $MLT=23\sim 6$, and $MLAT=-10\sim +10$, which is consistent with the higher occurrence region of the whistler chorus wave in the inner magnetosphere. Moreover, the duration during which the marginal condition is only a few minutes. In our presentation, we will report a statistical analysis of chorus wave activity observed by the PWE when the marginal condition is identified.