Supporting Information for "Juno's multi-instruments observations during the flybys of auroral bright spots in Jupiter's polar aurorae"

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1. Figures S1 to S6

Introduction

The additional information provided here are the electric field spectral density in details. We also over-plotted the electron and proton cyclotron frequencies to focus on the intensifications between these two characteristic frequencies. The E/cB ratio plots are provided to categorize the wave types.

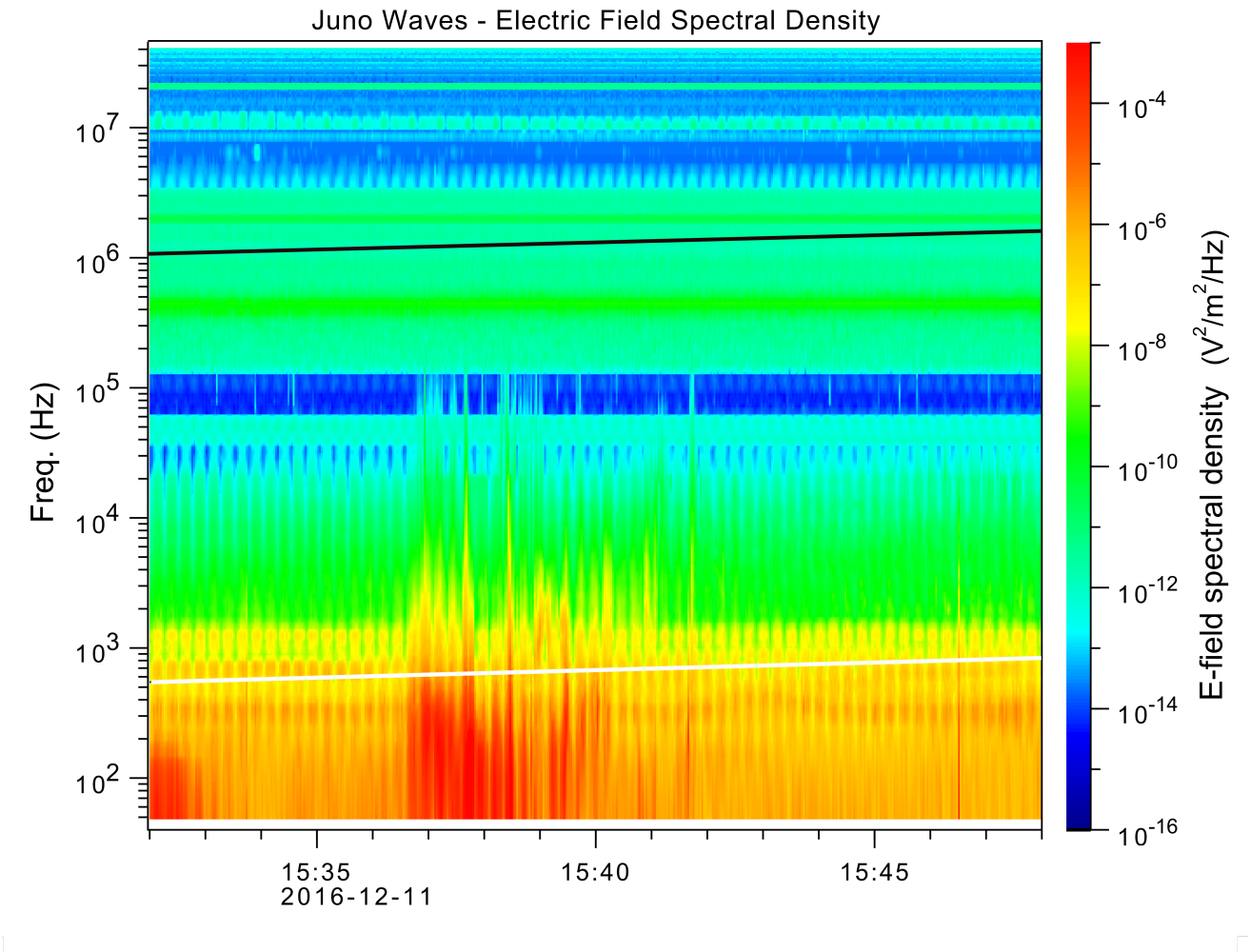

Figure S1. Electric field spectral density from whistler mode wave observations taken by Juno Waves instrument over the Jovian polar regions during PJ3. The black line indicates the range of electron cyclotron frequency and the white line indicates the range of the proton cyclotron frequency.

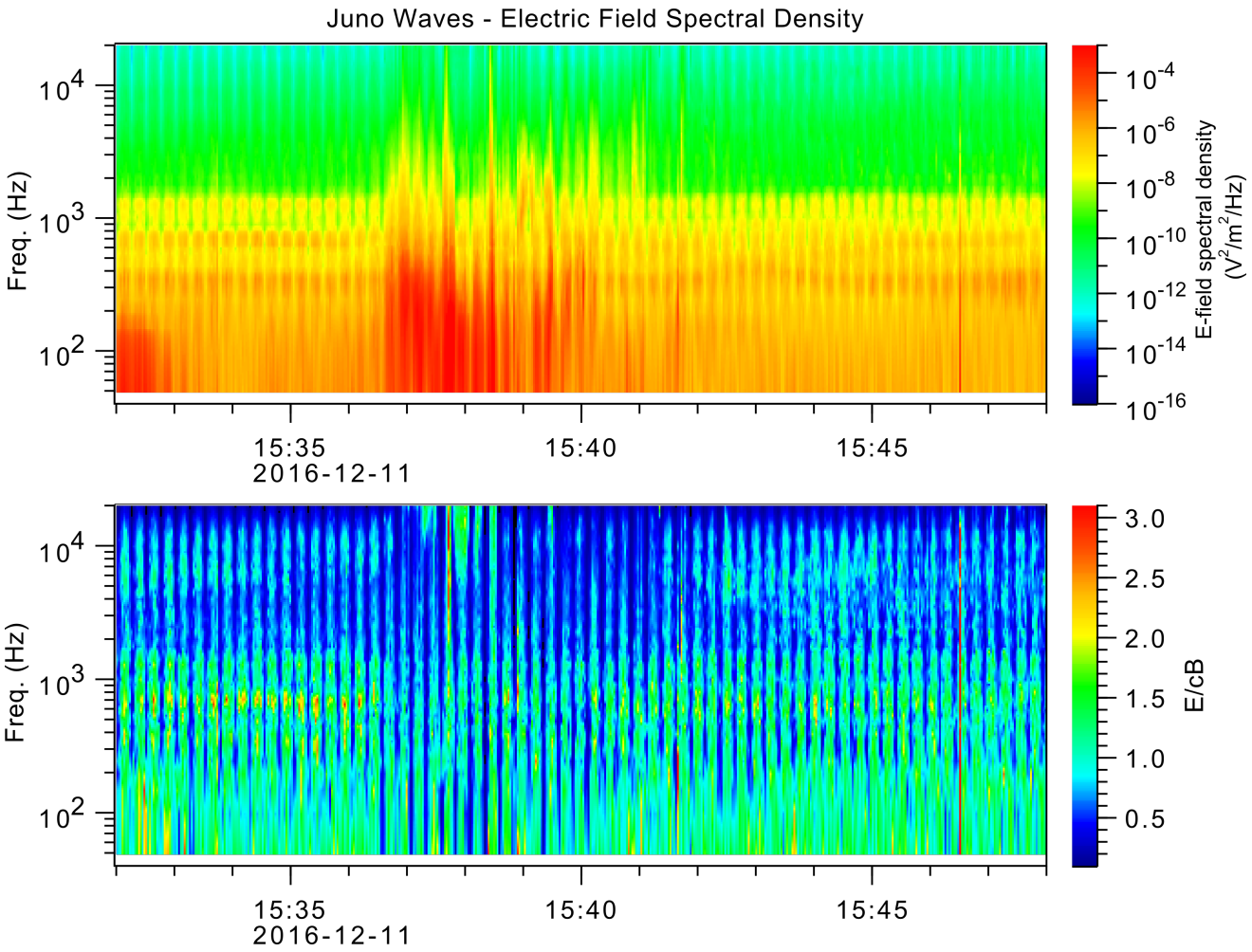

Figure S2. (Top) Electric field spectral density from whistler mode wave observations taken by Juno Waves instrument over the Jovian polar regions during PJ3. (Bottom) Frequency-time spectrogram of the E/cB ratio.

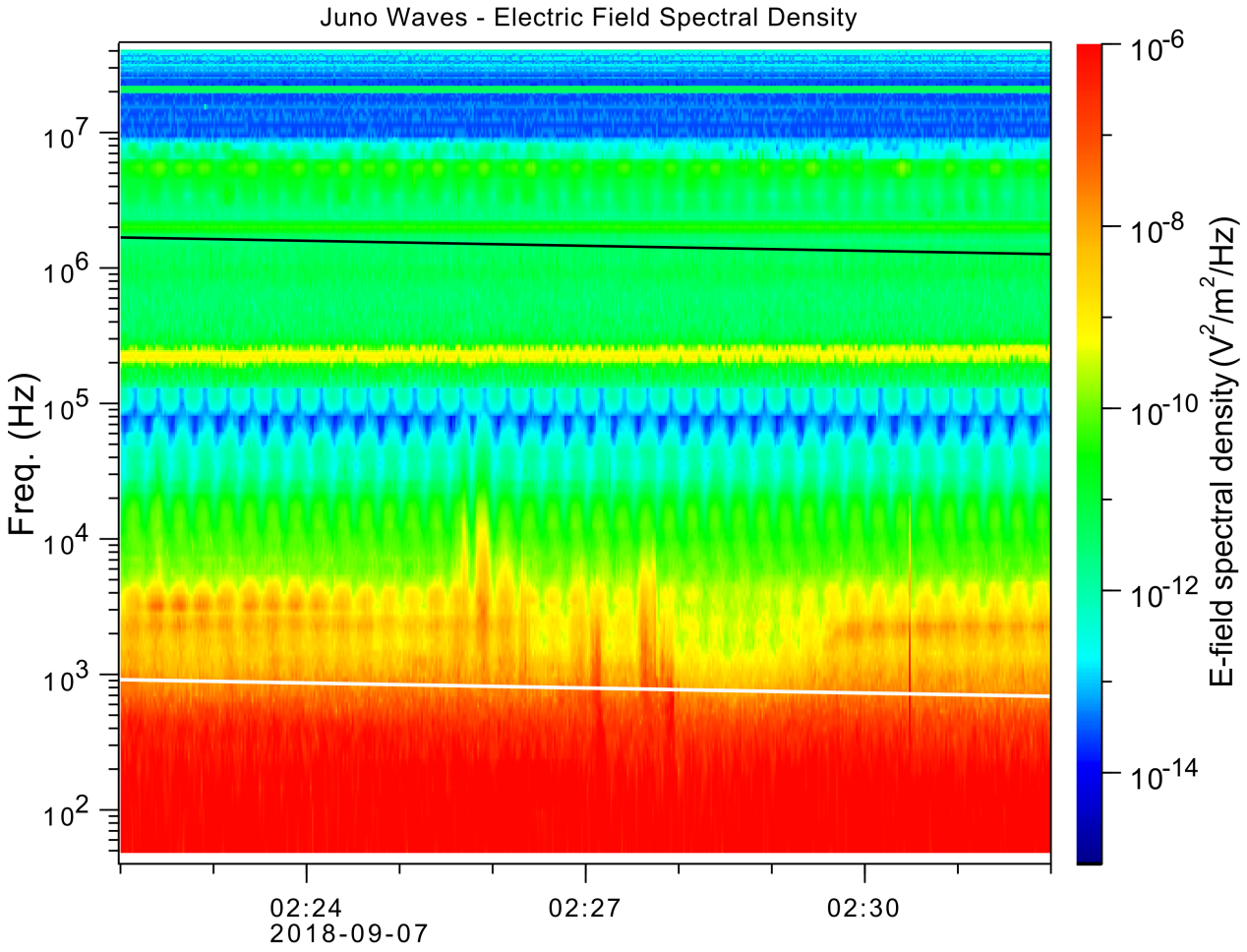

Figure S3. Electric field spectral density from whistler mode wave observations taken by Juno Waves instrument over the Jovian polar regions during PJ3. The black line indicates the range of electron cyclotron frequency and the white line indicates the range of the proton cyclotron frequency.

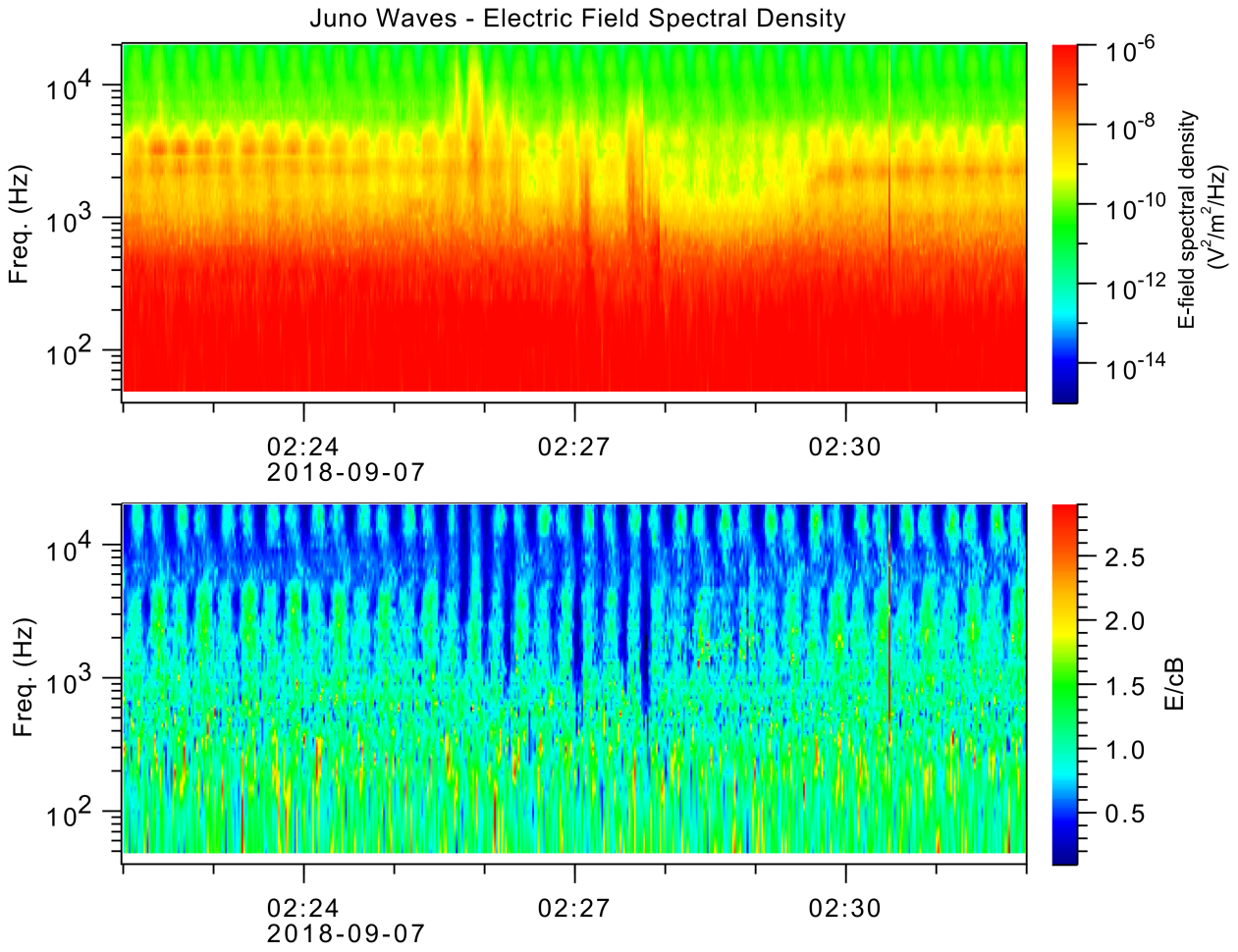

Figure S4. (Top) Electric field spectral density from whistler mode wave observations taken by Juno Waves instrument over the Jovian polar regions during PJ15. (Bottom) Frequency-time spectrogram of the E/cB ratio.

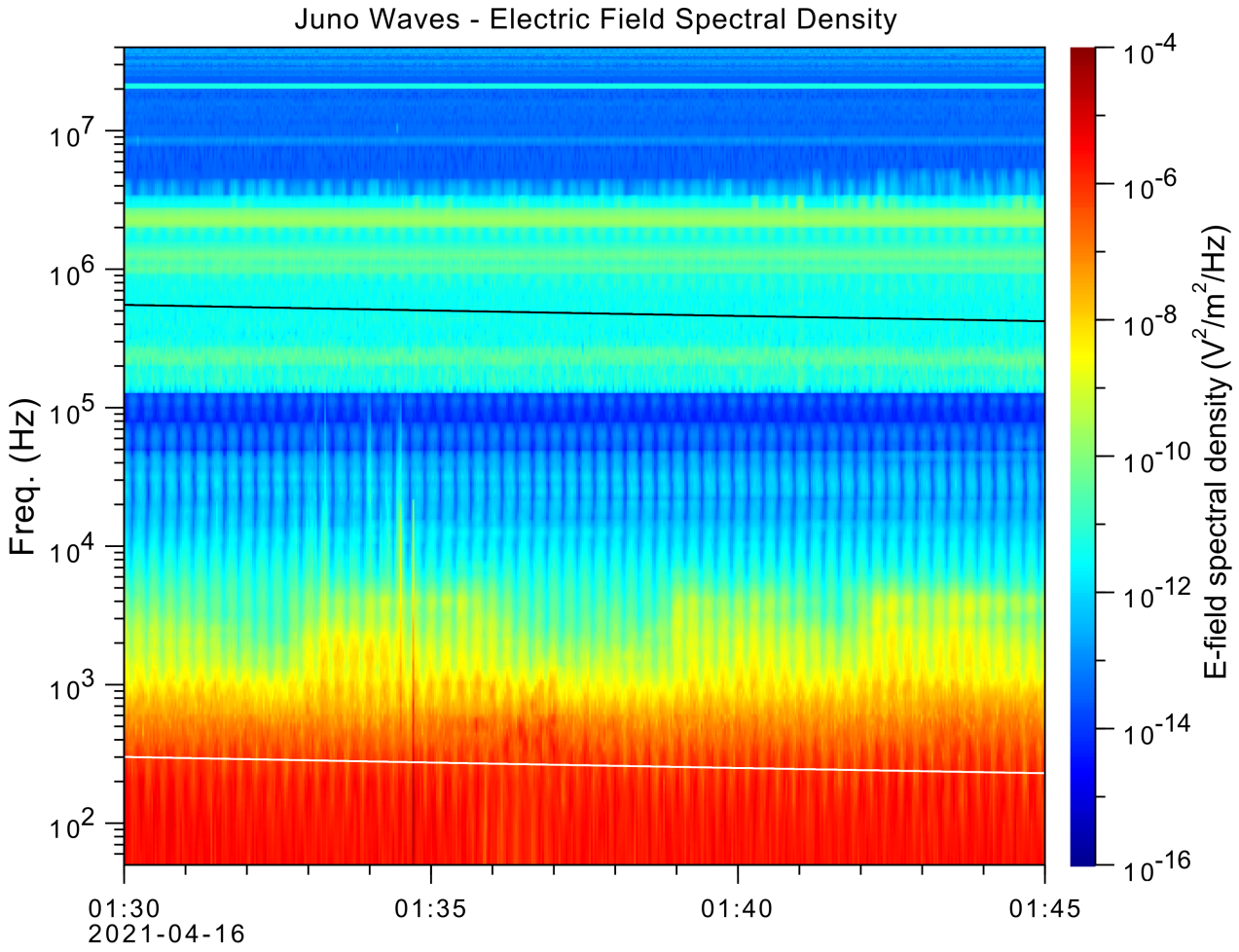

Figure S5. Electric field spectral density from whistler mode wave observations taken by Juno Waves instrument over the Jovian polar regions during PJ33. The black line indicates the range of electron cyclotron frequency and the white line indicates the range of the proton cyclotron frequency.

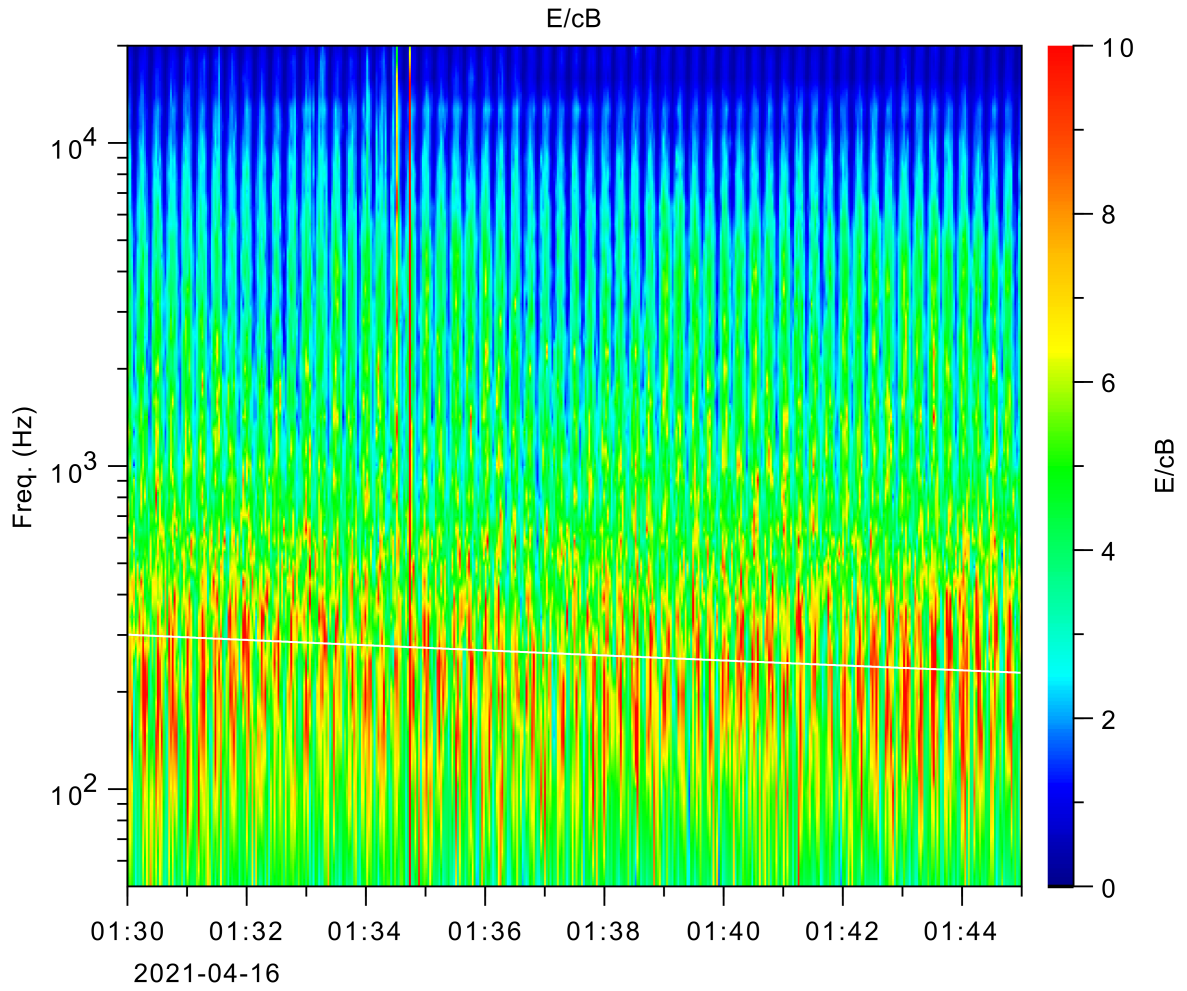

Figure S6. Frequency-time spectrogram of the E/cB ratio during PJ33. The white line indicates the range of the proton cyclotron frequency.