

Extremely High Frequency (~30 Hz) EMIC Wave Observed

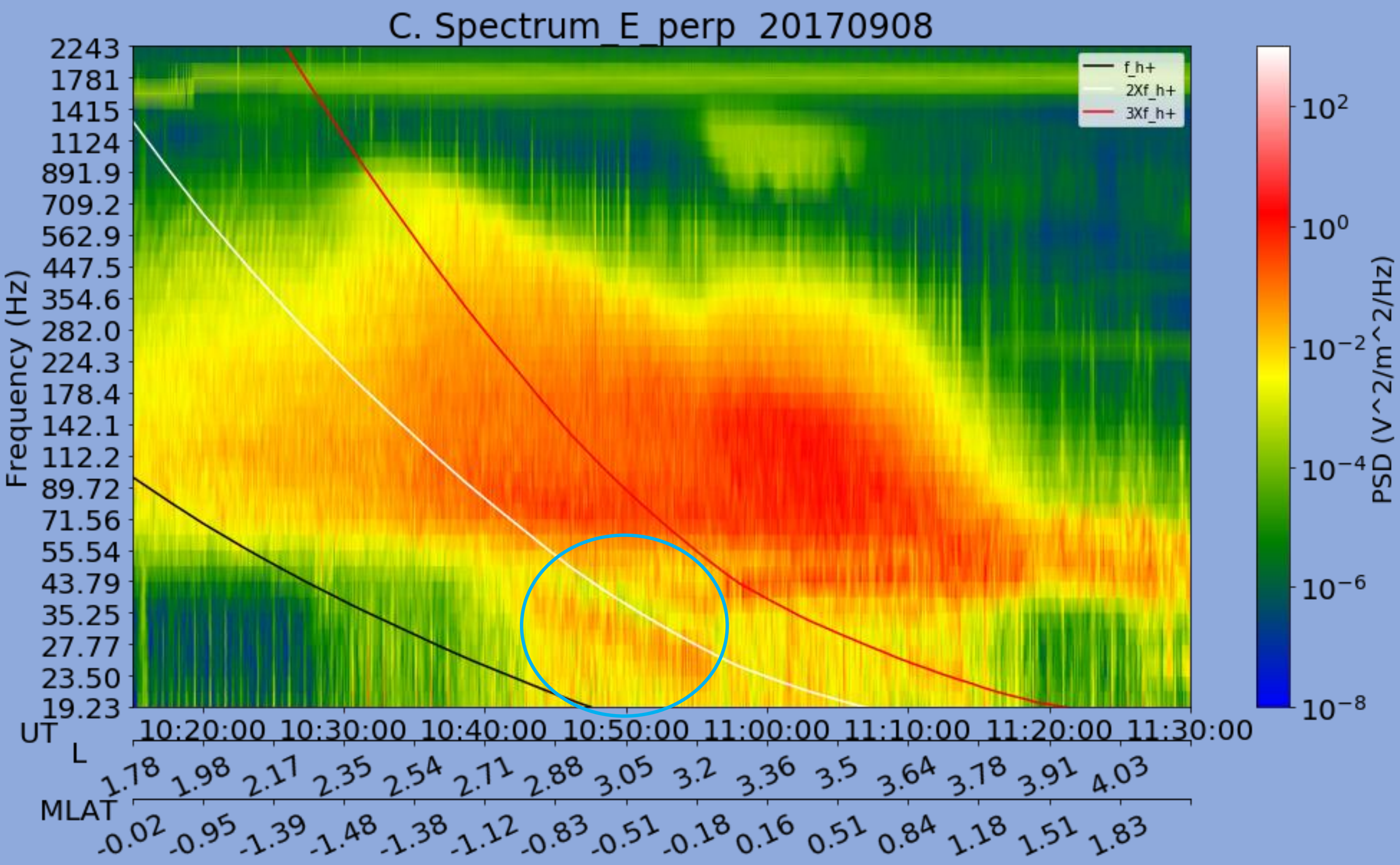
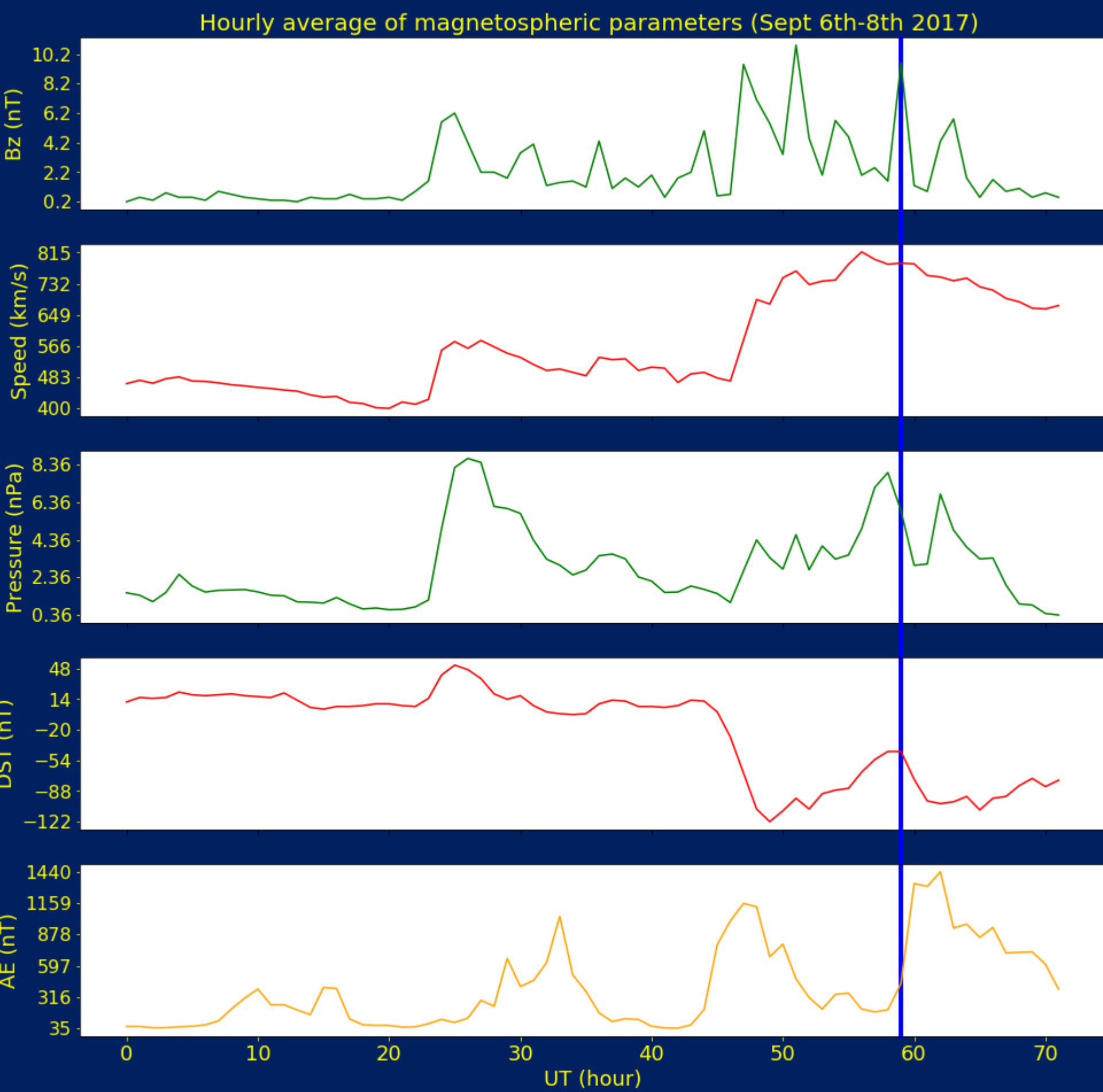
Jaya Joseph ¹, Allison Jaynes ¹, Maria Usanova ²

¹ University of Iowa, ² University of Colorado Boulder

Table 1. Comparing current EMIC observation with typical case

Wave properties	This observation	Typical
Frequency	~ 30 Hz	0.1 – 5 Hz
Wave normal angle (θ_k)	20°- 40°	20°- 30°
Polarization	Left hand ($\epsilon < 0$)	Left hand ($\epsilon < 0$)
Location	~ 0.5° Mag Lat; L ~ 3	±11° Lat; L > 4

Magnetospheric parameters



Chain of Wave-particle events observed in the region of Magnetosphere to Ionosphere on September 8th, 2017

