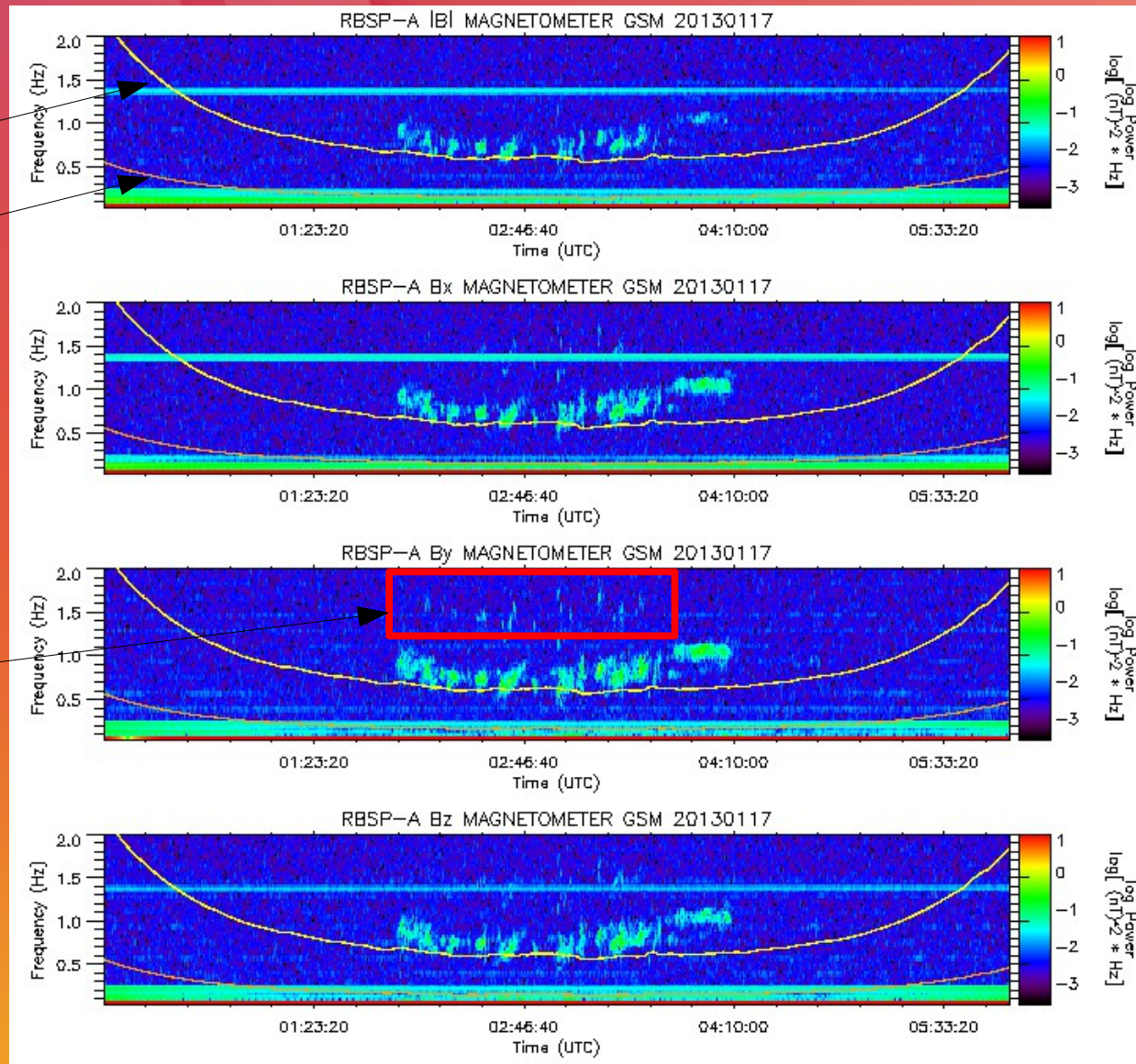


EMIC waves with harmonic signatures as indicators of the source region.

# January 17, 2013

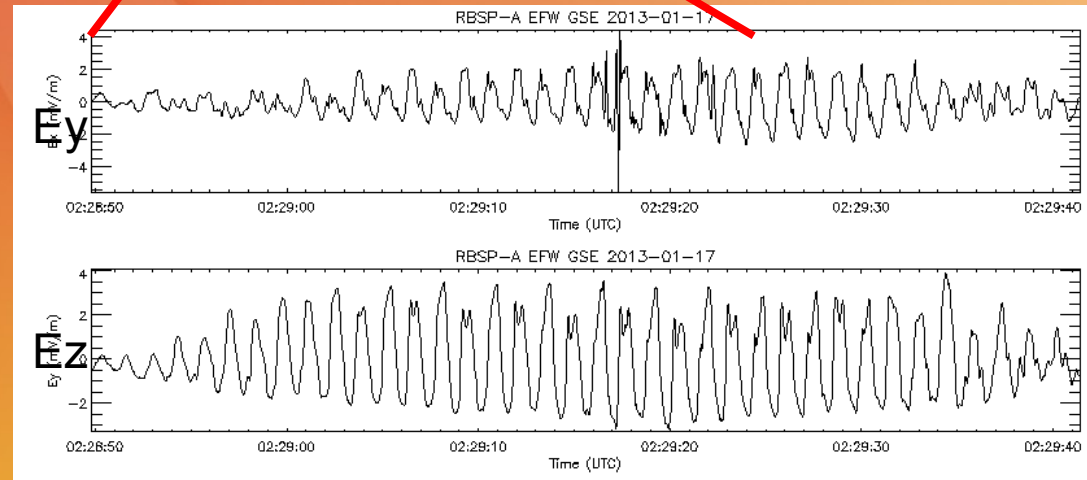
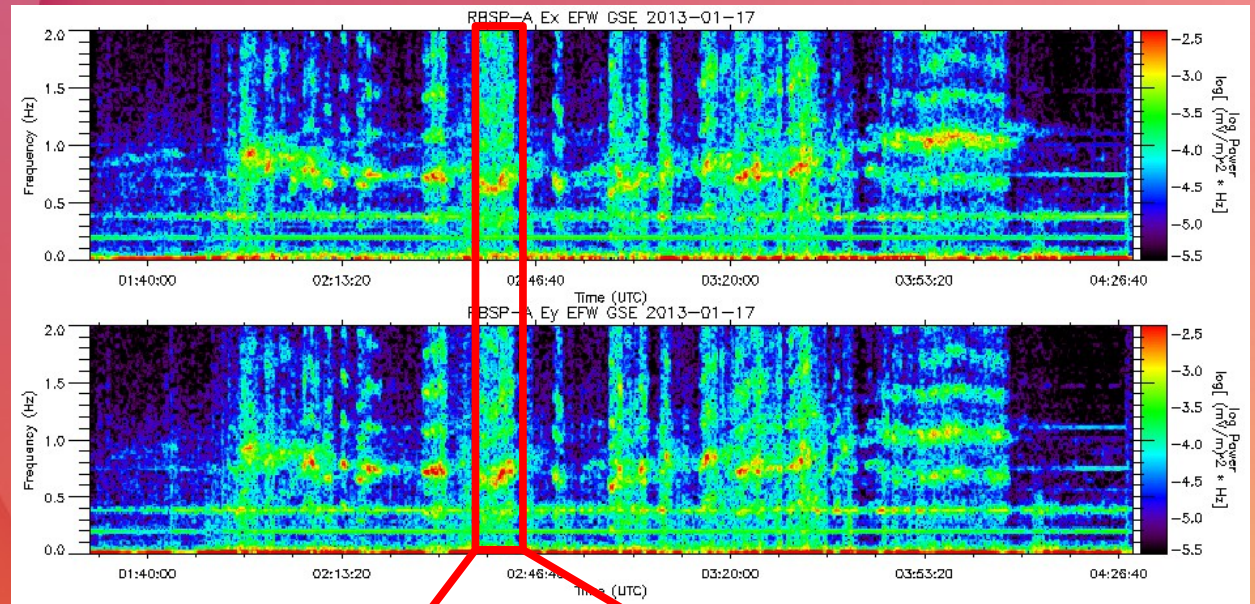
$\omega_{c,He^+}$

$\omega_{c,O^+}$

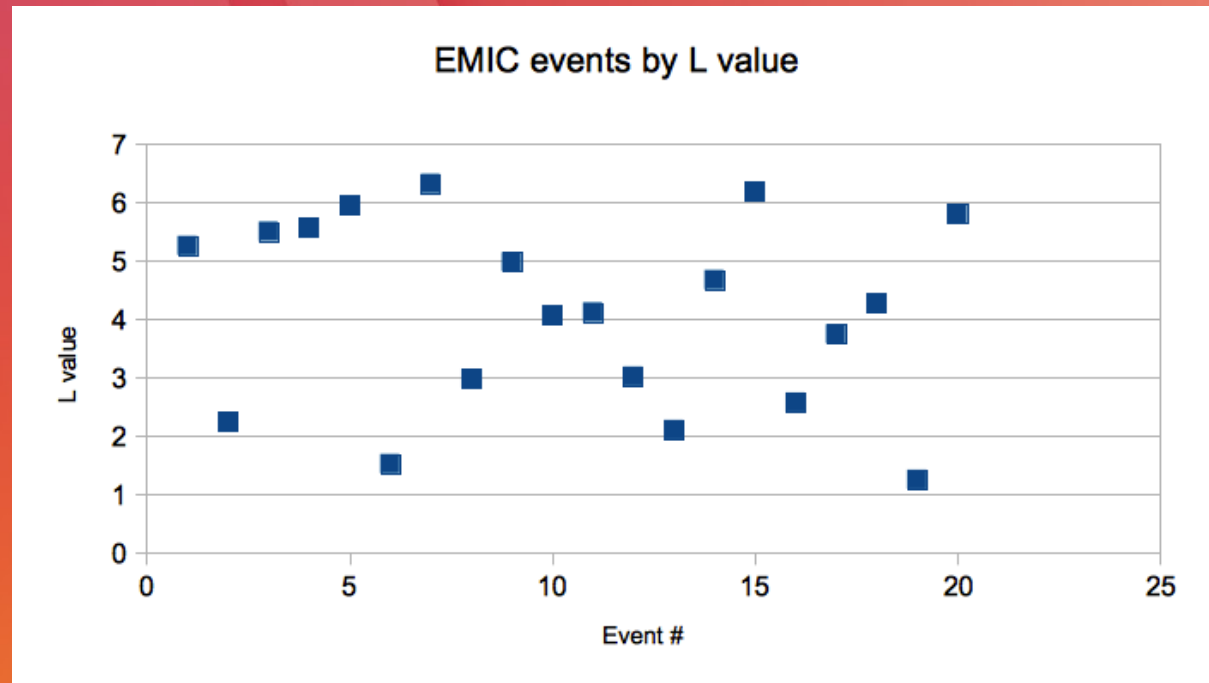


# Electric Field

- More harmonics are visible
- Harmonics seem to be super-imposed on waveform
- More checks needed to verify electric field

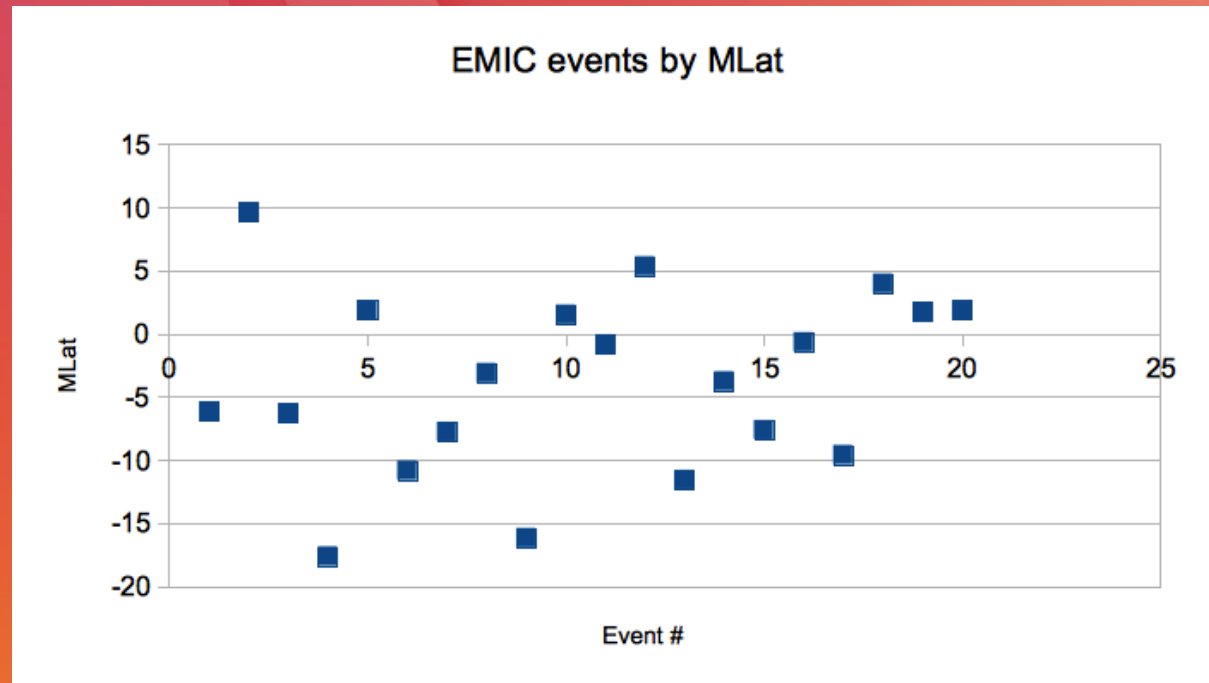


# Occurrence in L



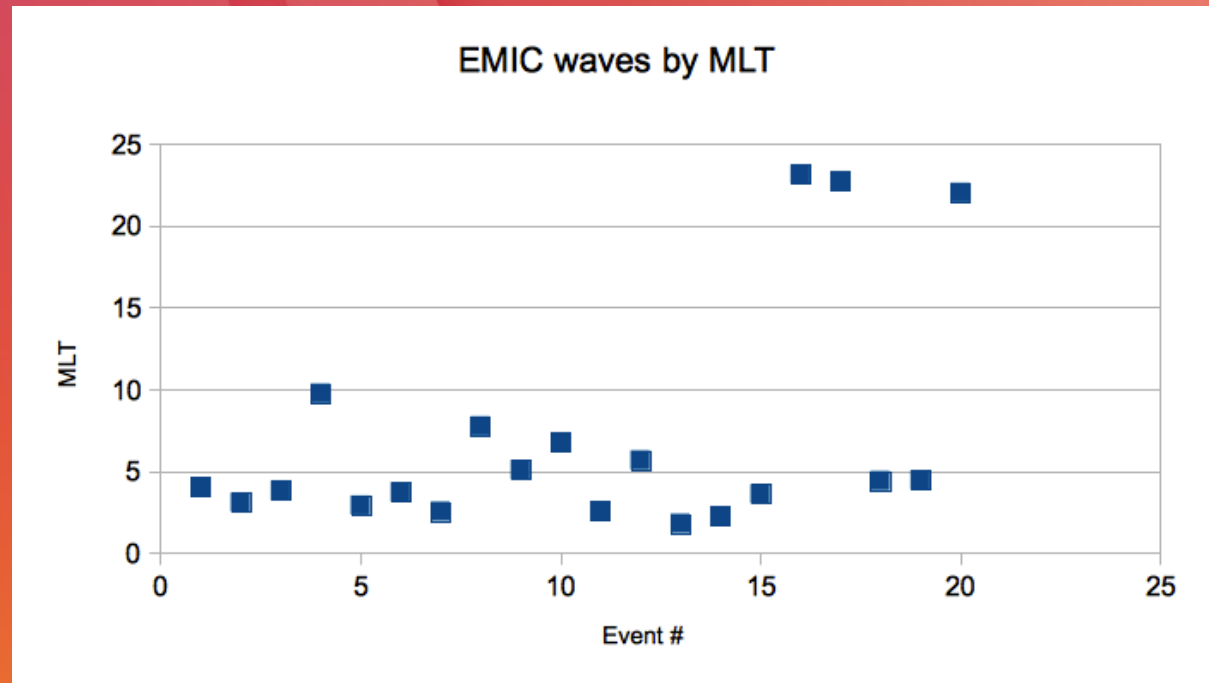
- 20 events between August 2012 and March 2013
- Event numbers are chronological
- Harmonics are seen at all L covered by the spacecraft

# Occurrence in MLat



- Harmonics are seen at all MLat covered by the spacecraft

# Occurrence in MLT



- Harmonics are seen at all MLT covered by the spacecraft.
- As apogee precesses, harmonics should be visible between 10 and 21 UT as well.