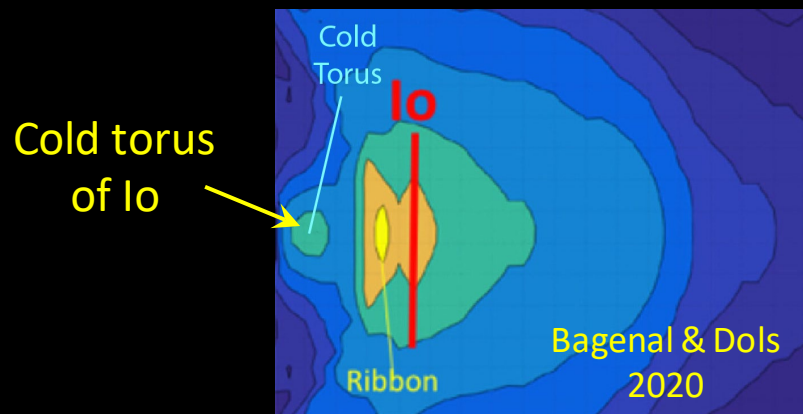


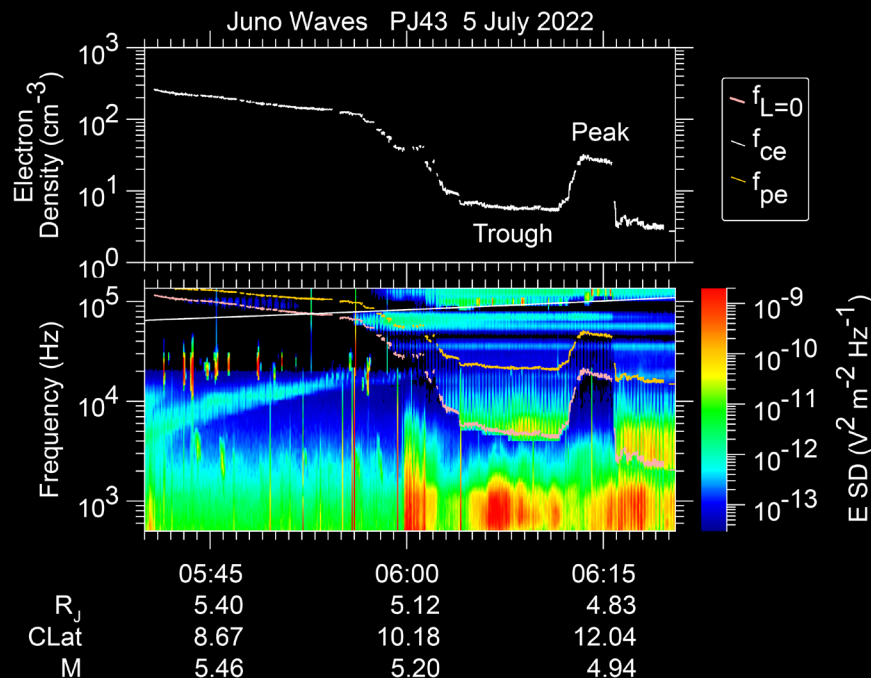


Juno Reveals a Surprising Feature of Io's Ethereal Cold Torus

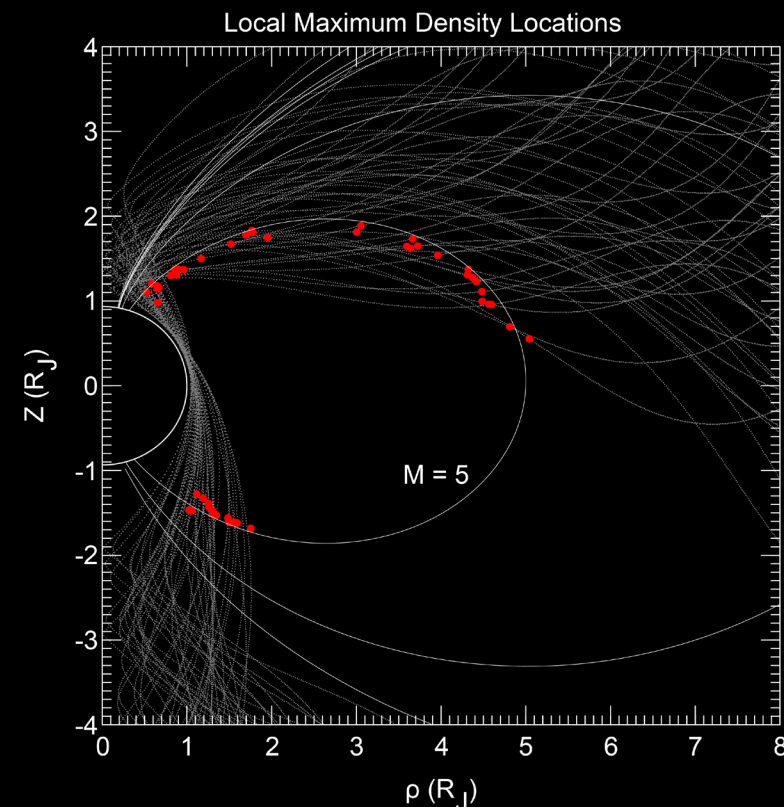
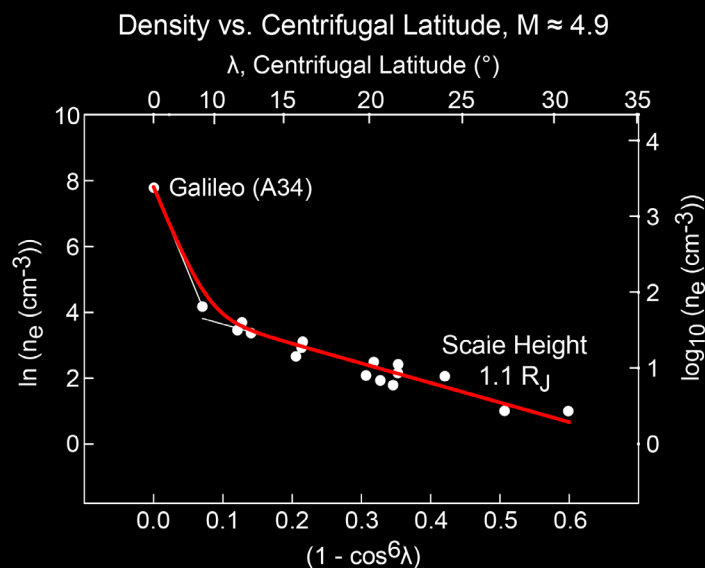


- Data from several mid-latitude crossings of the inner Io torus, provides density profiles with a significant new feature.
- The latitudinal extent of the feature, just inside the M=5 magnetic shell, is a substantial surprise.
- This feature is thought to be related to the 'cold torus' observed in optical observations of S^+ from Earth.

Juno Waves observes spectral features related to the plasma density



The feature's $\sim 1.1 R_J$ scale height suggests a light ion component elevated by ambipolar forces.



W. S. Kurth, et al., in preparation