

Chorus waves are a major controlling factor in the loss of ring current and radiation belt electrons during active times. One form in which this loss is thought to occur is microbursts, which are observed on low altitude satellites and balloons as impulsive electron precipitation events. Past observations have shown a broad correlation in time and MLT of chorus and microbursts. In addition, nonlinear theories of chorus/electron interactions provide a possible mechanism through which this loss occurs. However, due to the small scale size of chorus wave (phase) coherence – on the order of 10-100 km across a magnetic field line – a direct comparison of chorus and microbursts requires a near perfect magnetic conjunction of an equatorial satellite traversing the chorus source and a low altitude payload capable of observing loss cone electrons. We present fortuitous simultaneous observations on Van Allen Probe A and a FIREBIRD II cubesat showing a clear one-one correspondence of chorus wave packets and microbursts. A comparison of observations to theory suggests that cyclotron resonance is likely the cause for the electron scattering, observed from 250 keV (the lower limit of FIREBIRD II) up to 850 keV. Our results confirm and provide insight to the idea that chorus waves cause electron microbursts, which constitute a major loss mechanism of the radiation belts.