## **Upper Atmospheric and Ionospheric Physics**

(4.3 Atmospheric Science)

## 4.3.1.3 Dynamics and Energetics of the Lower Thermosphere in Aurora



## 4.3.1.4 Anomalous electron heating in the Sq current focus





## SUMMARY

- High T<sub>e</sub> layer was observed in the Sq current focus.
- The T<sub>a</sub> was observed to increase by ~500 K at 97- 102 km altitude.
- Enhancement of the electron density perturbation was significantly observed in and above the high temperature layer, which may be due to the field-aligned electron beam.