**Topic:** Thermospheric wind dynamics during geomagnetic storms and their influence on the coupled magnetosphere-ionosphere-thermosphere system

**Project Title:**
Thermospheric wind and the evolution of the ionospheric and magnetospheric electron and ion densities at altitudes below 4000 km during geomagnetic storms

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**Project Information:**
We propose a four-year data analysis and numerical simulation program to study how thermospheric winds influence the evolution of the ionospheric and magnetospheric electron and ion \((H^+, \text{He}^+, \text{O}^+\) densities during geomagnetic storms. We will use whistler mode radio sounding data and ray tracing simulations to obtain electron and ion densities and field aligned irregularities (FAI) at