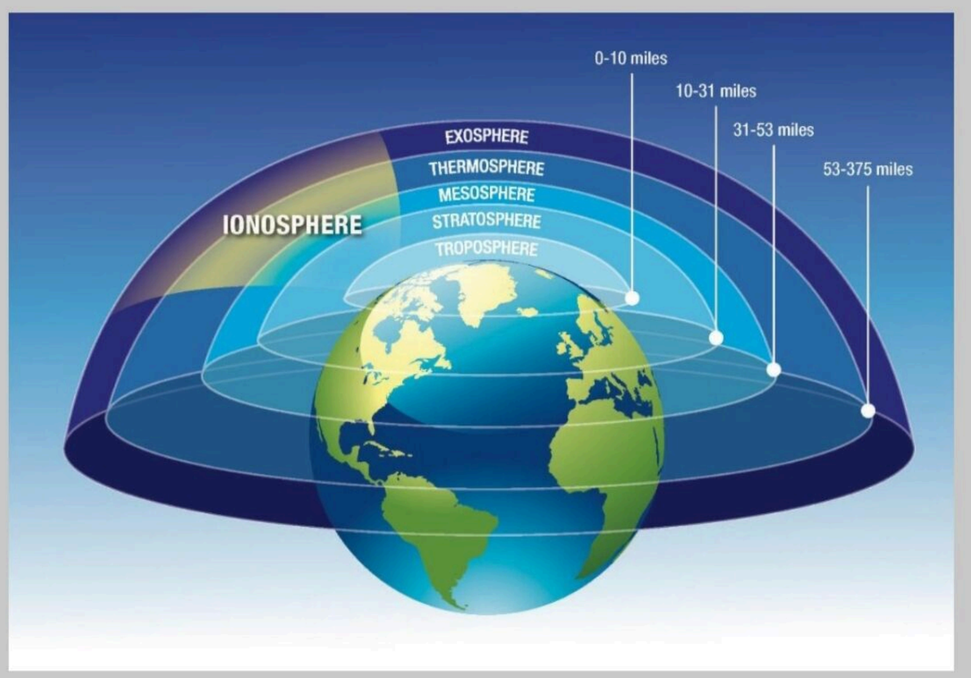
Entrenched theory states that the aurora heats the middle and lower thermosphere and that the resulting vertical convection is the principal driver of thermospheric churn.



Sunlight breaks atmospheric molecules apart, knocking off electrons and leaving behind a sea of charged electrons and ions. This population of electrically charged particles is the ionosphere. Image by Mary Pat Hrybyk-Keith, NASA Goddard Space Flight Center

Two two-stage, 42-foot Terrier-Improved Malemute rockets will respectively launch from Poker Flat about 15 minutes and an hour after an auroral substorm begins. A four-stage, 70-foot four-stage Black Brant XII rocket will launch about 45 minutes after the second rocket.

