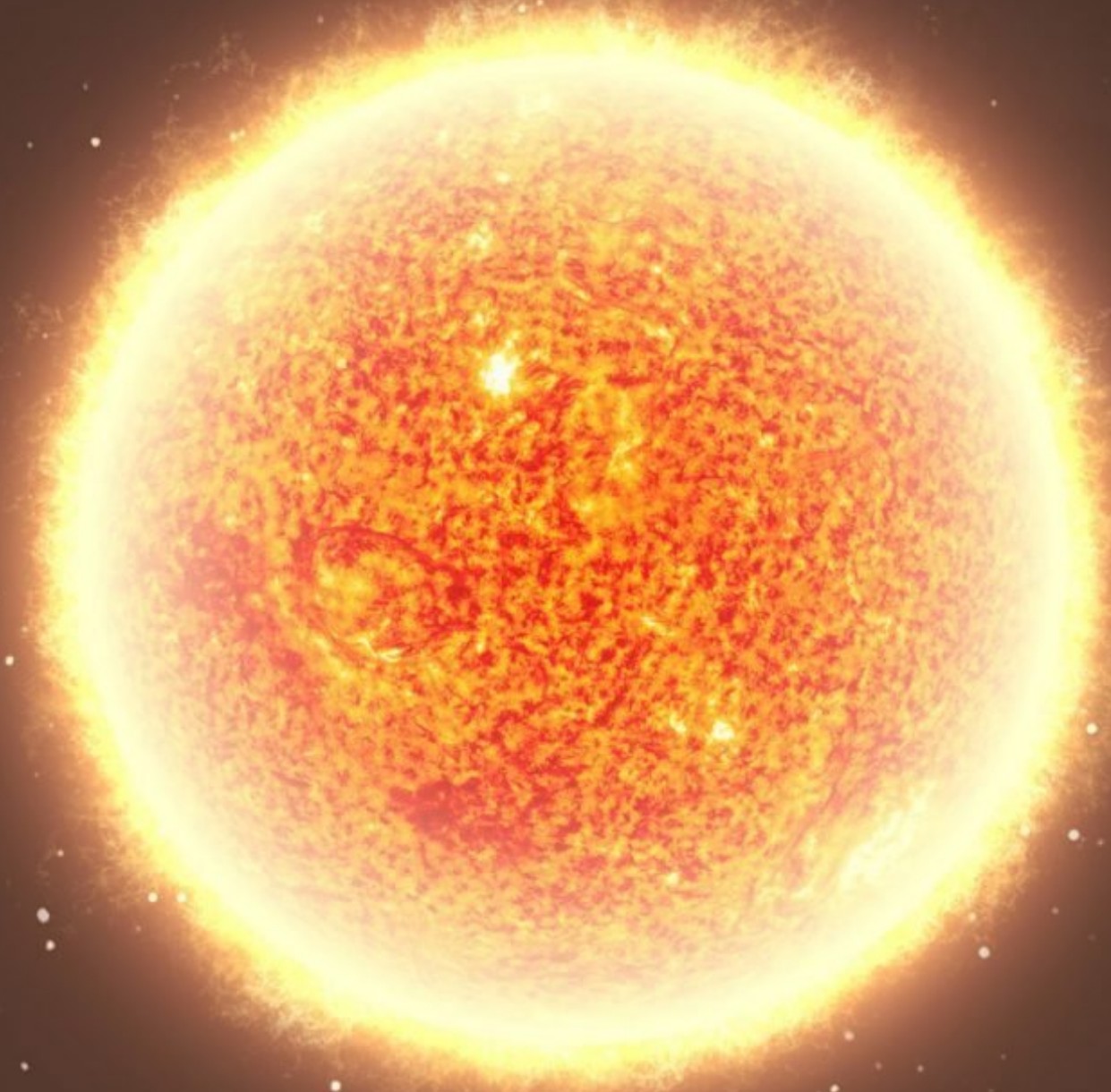
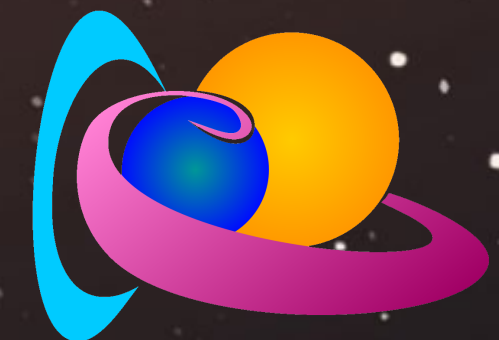


# LARGE SCALE PICTURE OF SPHERES Around the Earth

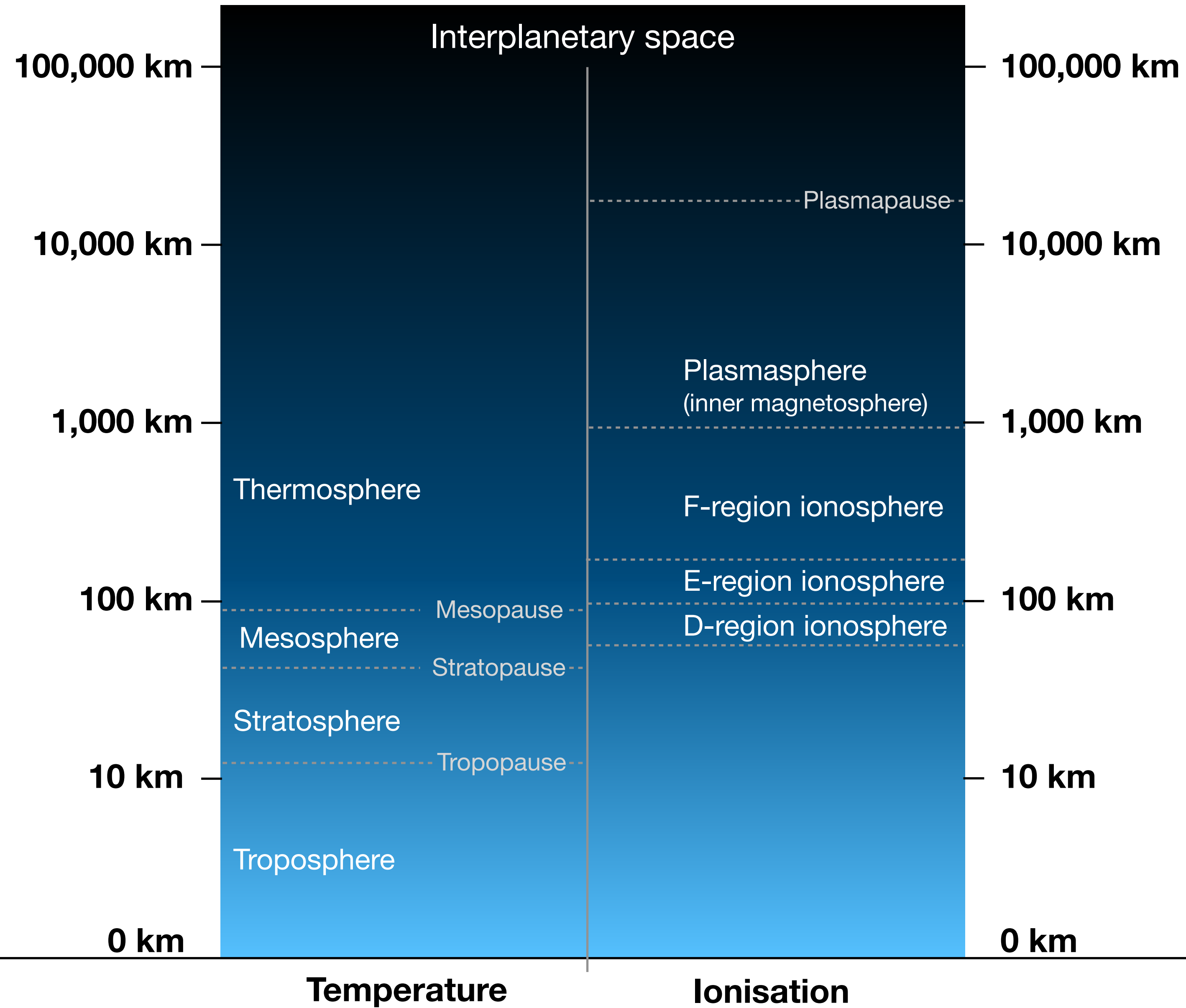
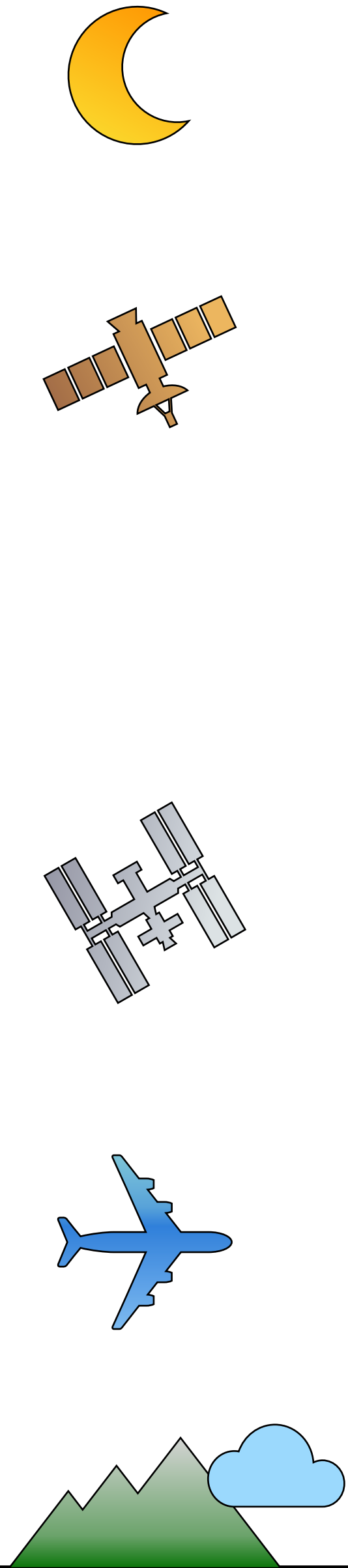


Petra Vanlommel  
Eelco Doornbos

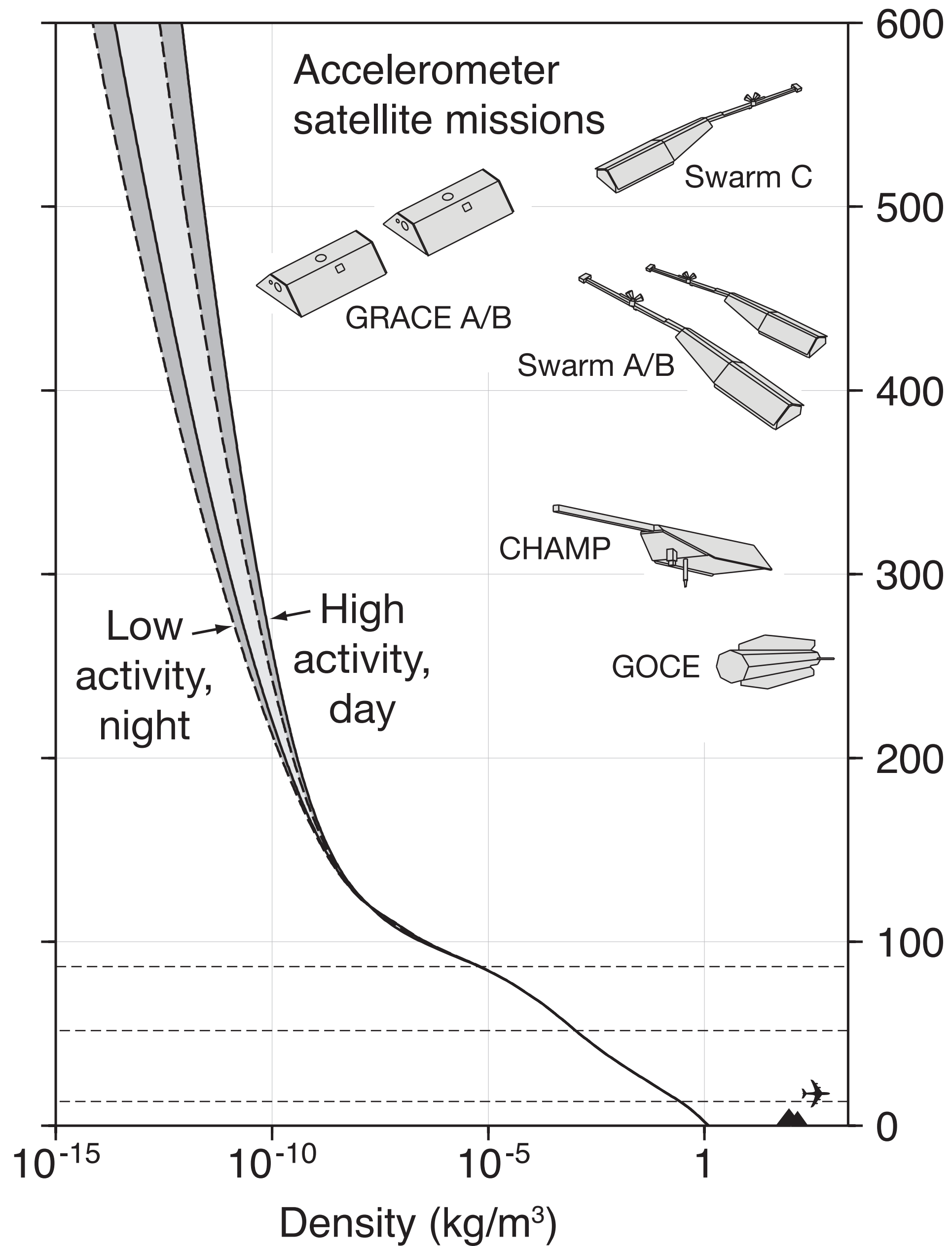
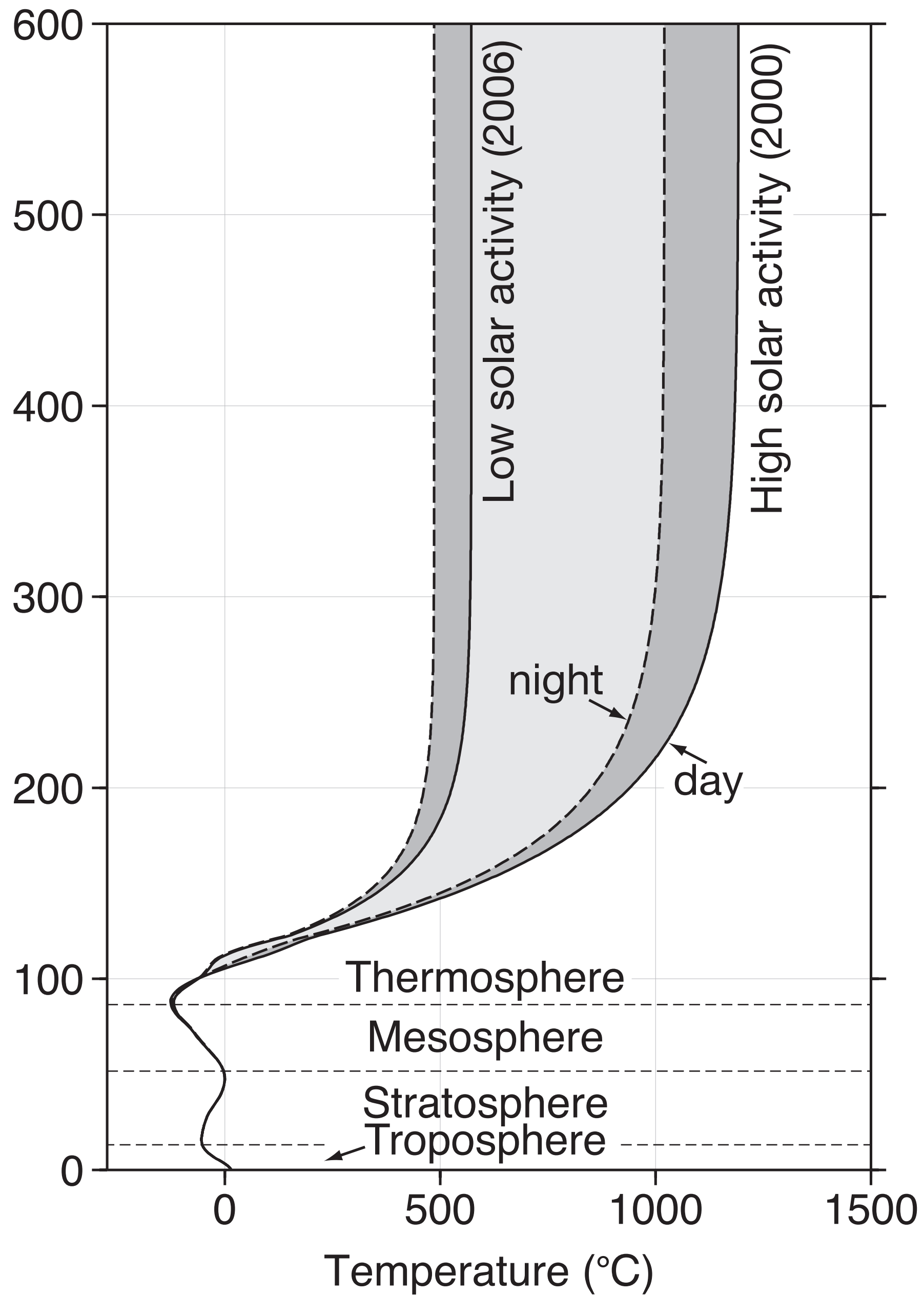


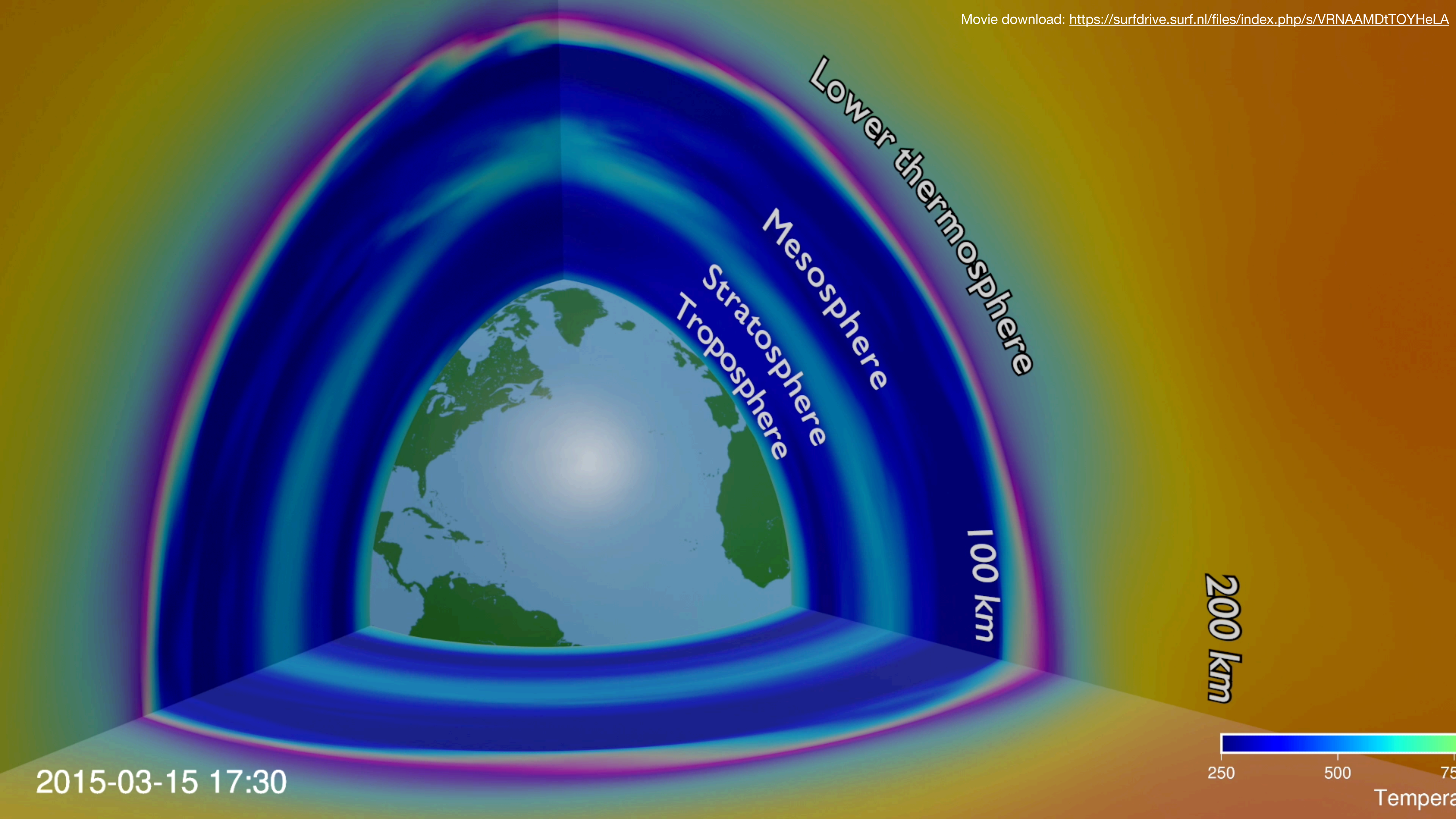
Solar-Terrestrial  
Centre of  
Excellence

# Classification and nomenclature of the terrestrial atmosphere



Altitude (km)





2015-03-15 17:30

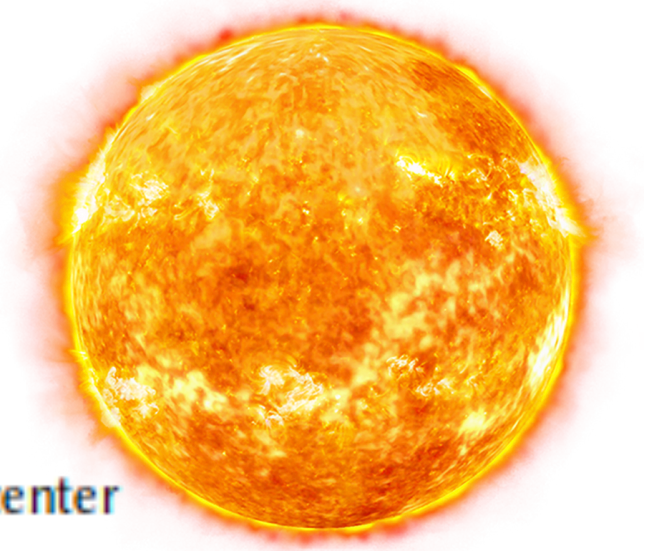
250

500

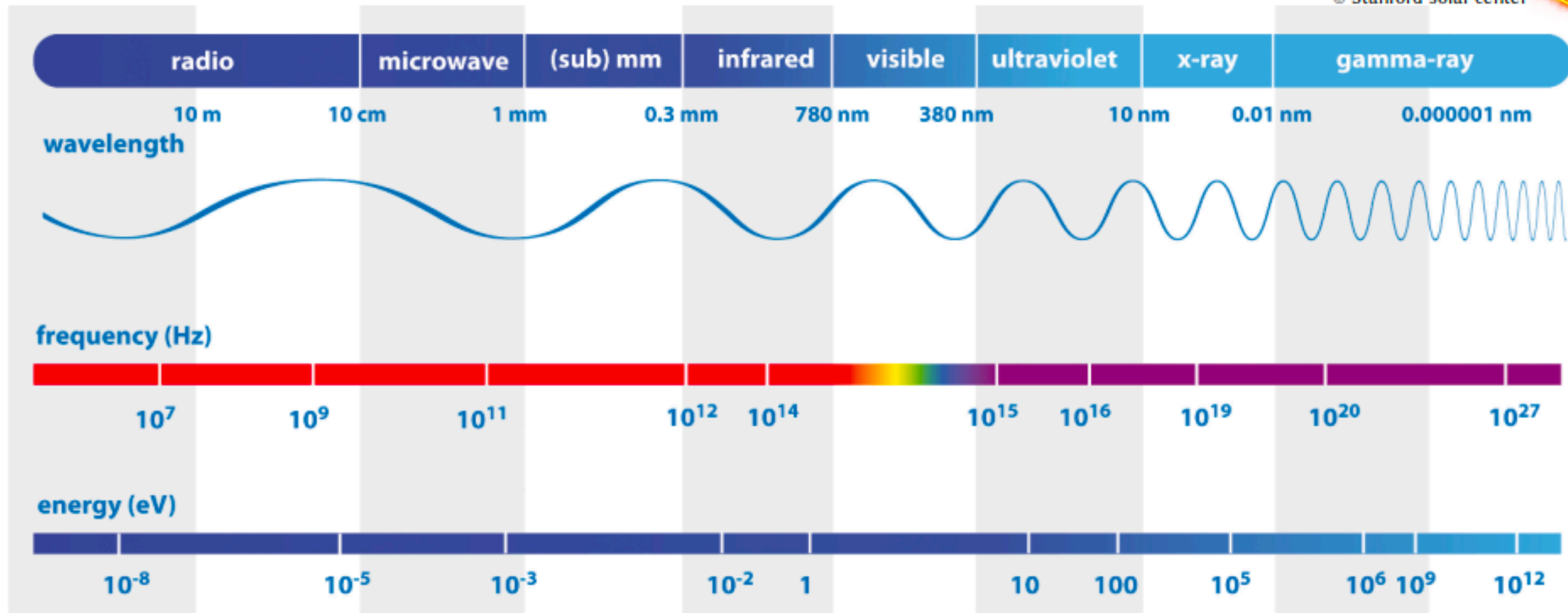
750

Tempera

# THE SOLAR ELECTROMAGNETIC SPECTRUM



© Stanford solar center



does not affect the thermosphere (much), but affected by the ionosphere

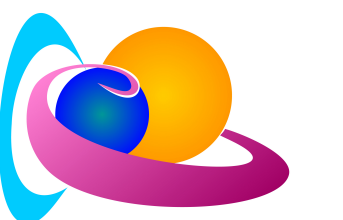
causes heating of the thermosphere

photo-dissociating radiation

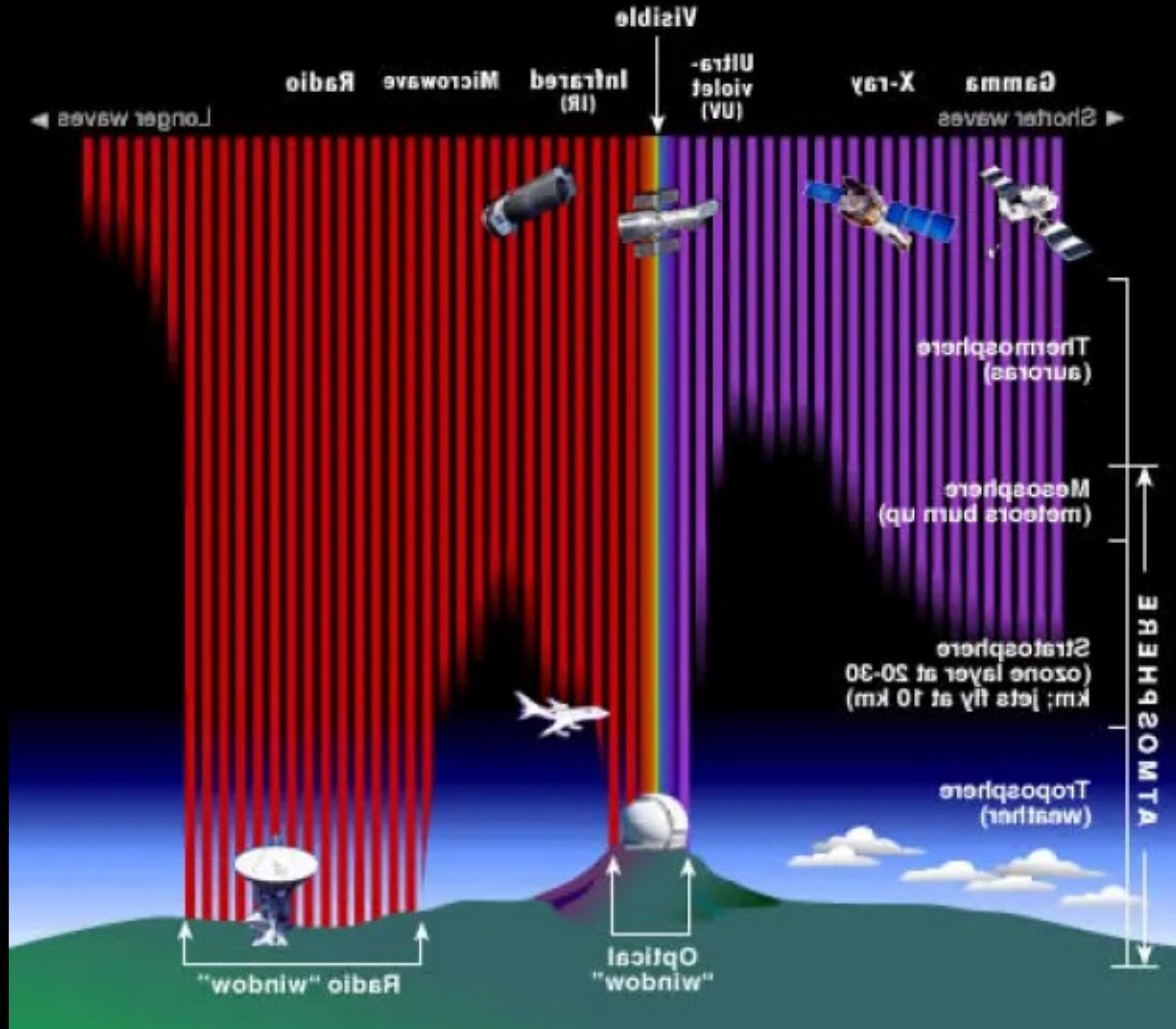
ionising radiation

ionising radiation (lower altitude)

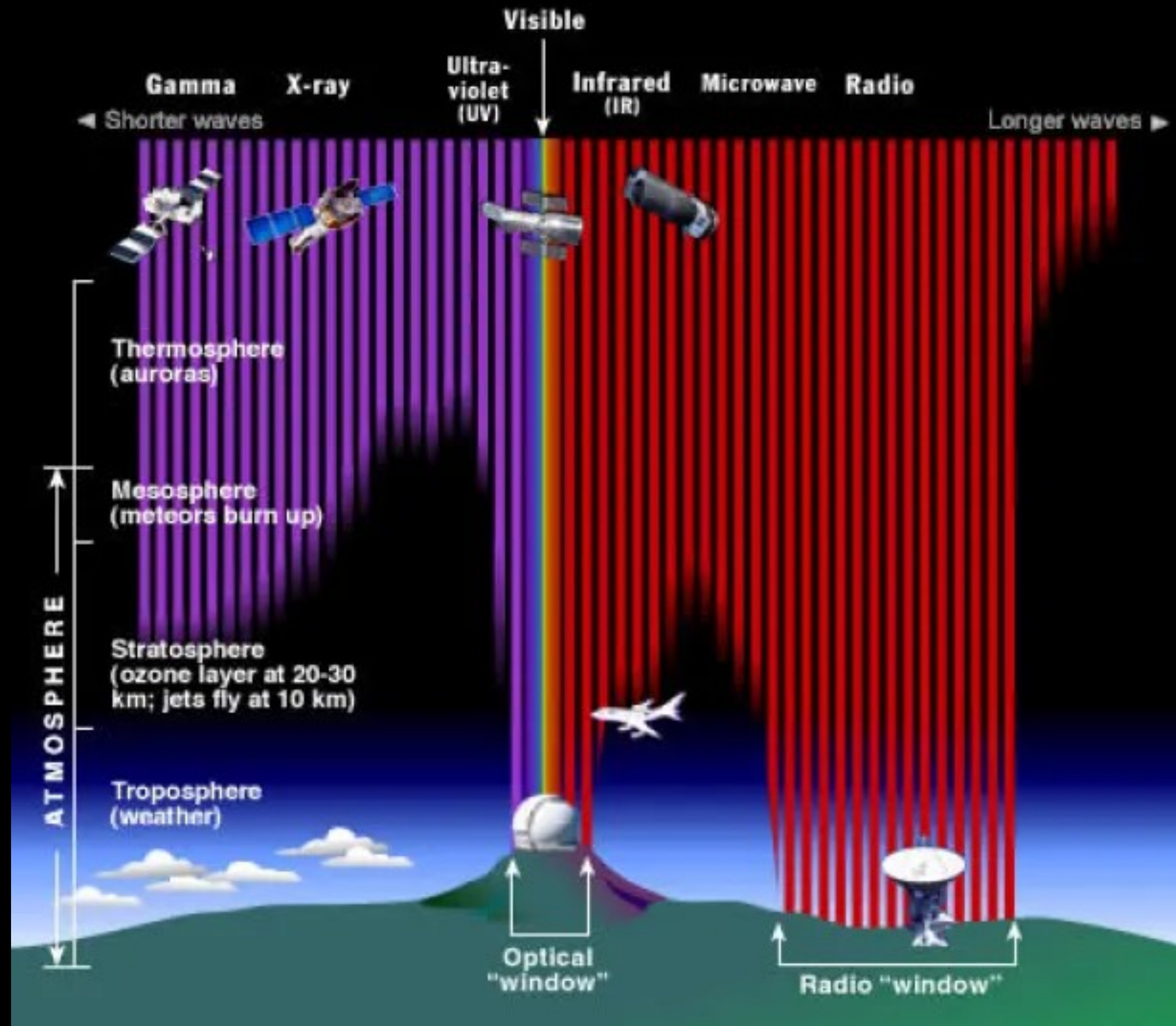
also ionising radiation, but low flux



# ELECTROMAGNETIC RADIATION PENETRATION DEPTH



# ELECTROMAGNETIC RADIATION PENETRATION DEPTH

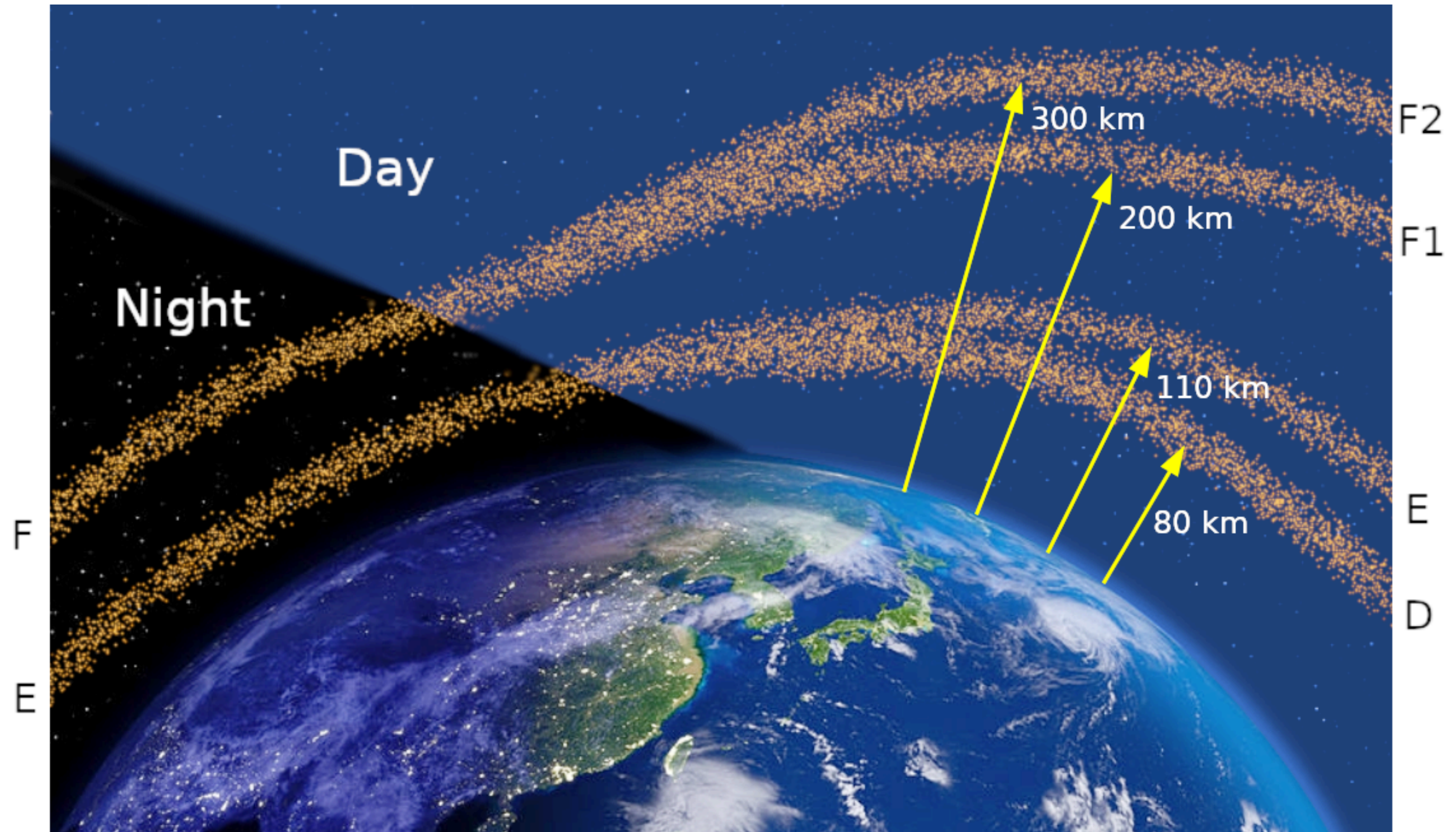


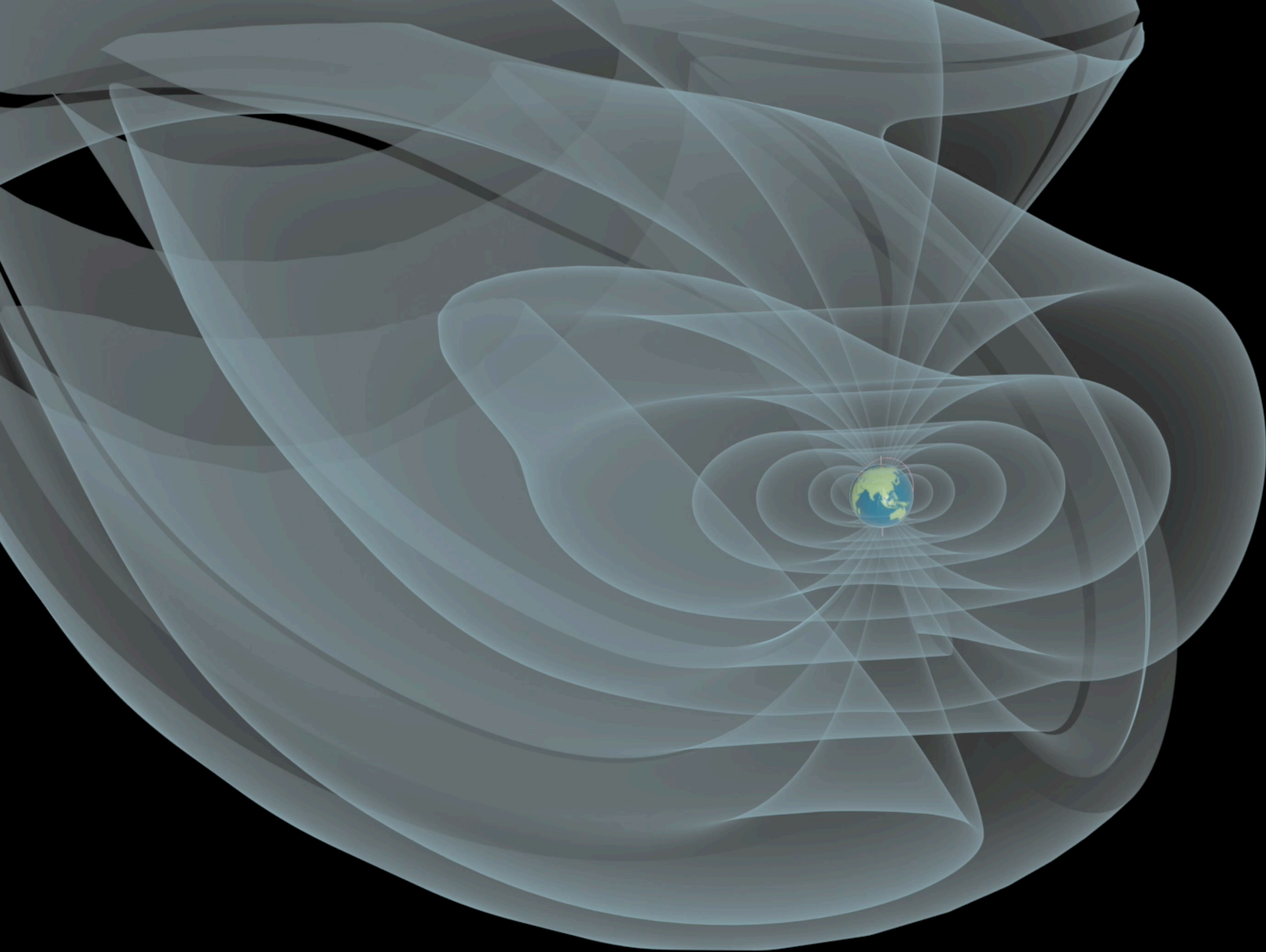
# Ionosphere

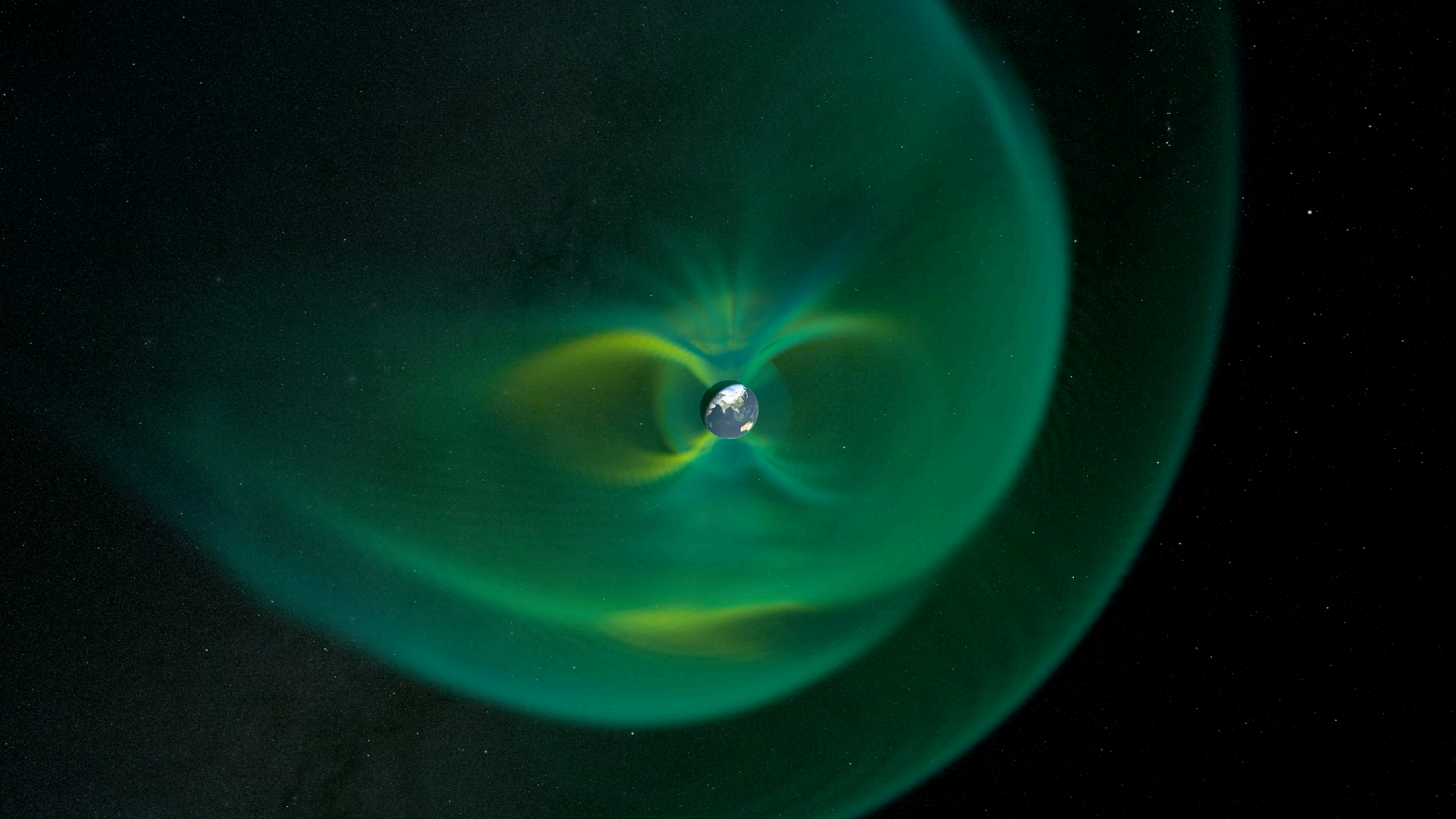
Atmospheric layer with free electrons.

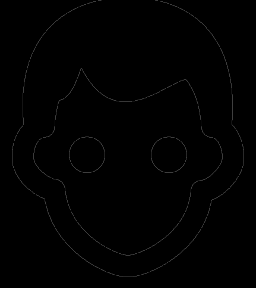
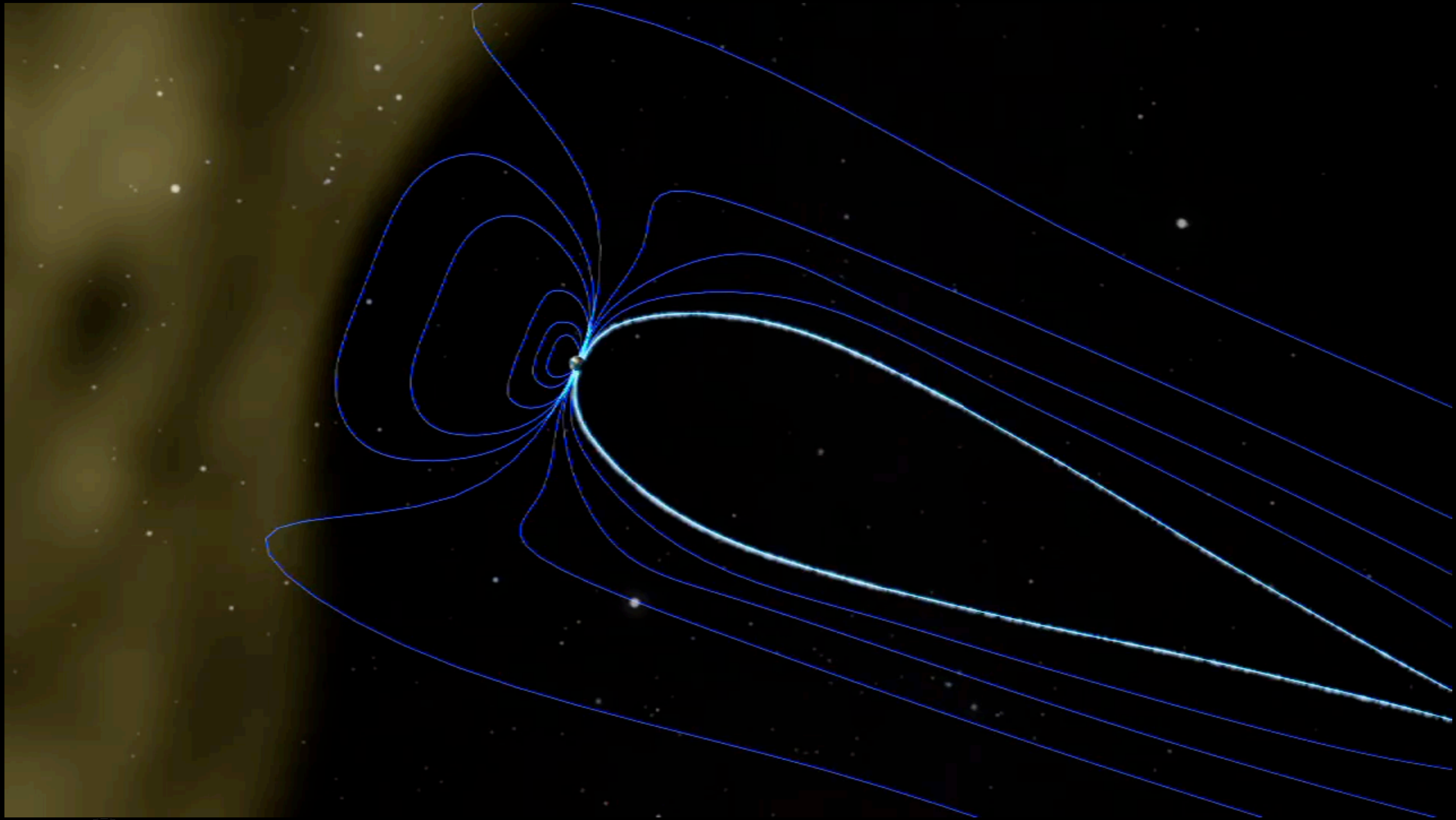
Ionisation by solar x-ray, extreme ultraviolet radiation and particle radiation.

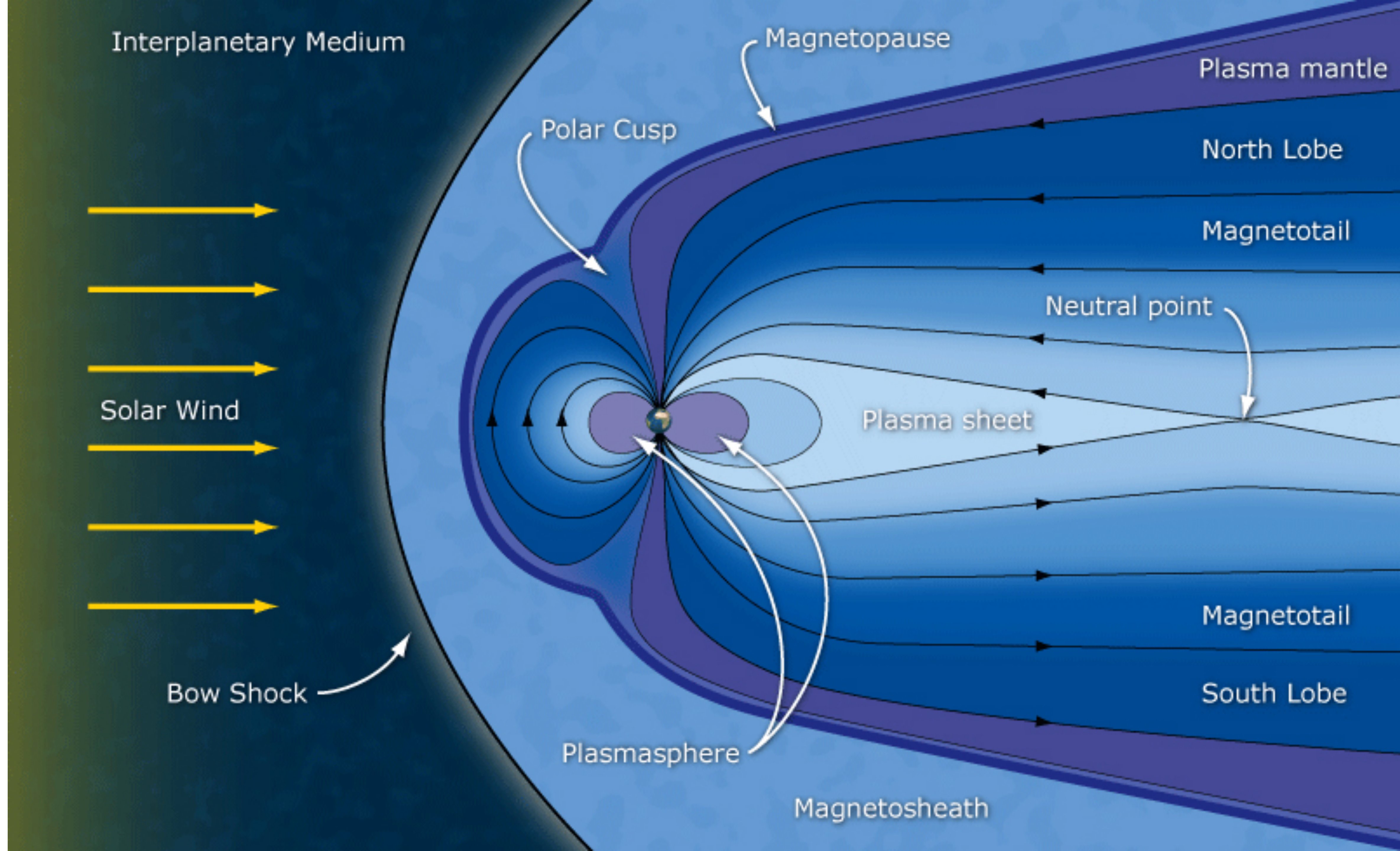
# Ionosphere

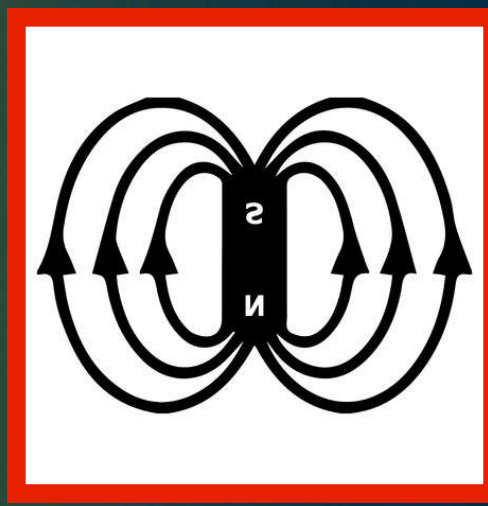












Primary Medium

Magnetopause

Plasma mantle

Polar Cusp

North Lobe

Magnetotail

Solar Wind

Neutral point

Plasma sheet

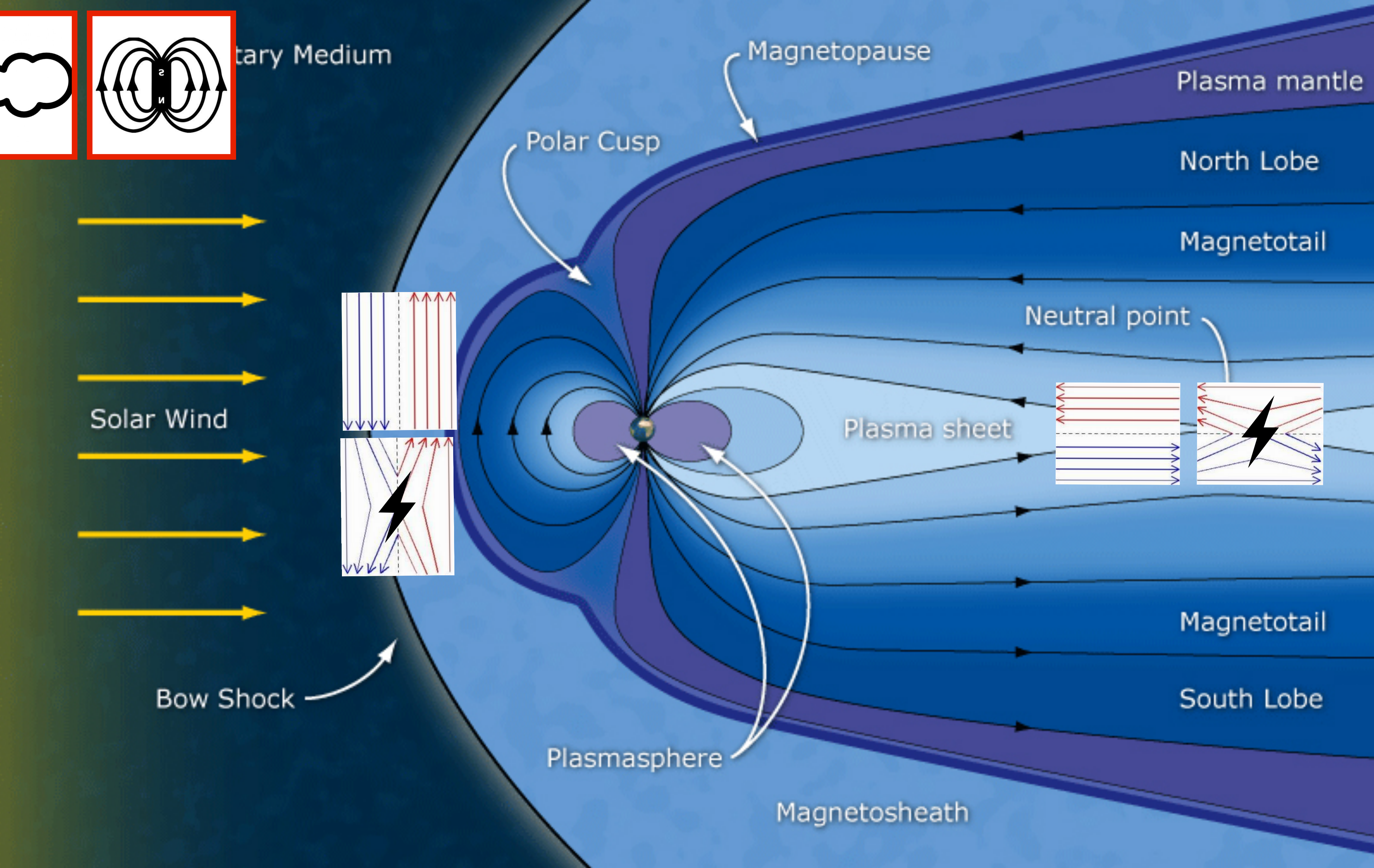
Bow Shock

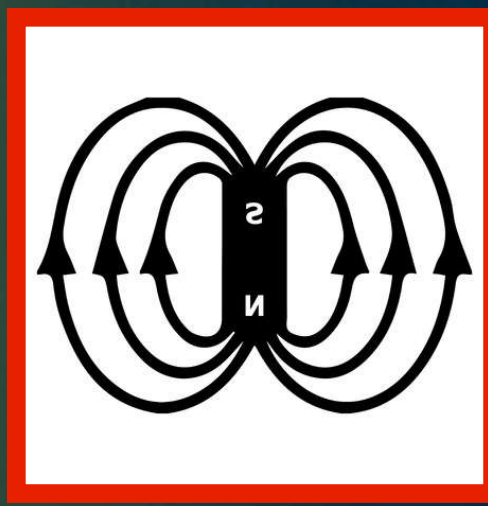
Magnetotail

South Lobe

Plasmasphere

Magnetosheath





Interplanetary Medium

Magnetopause

Plasma mantle

Polar Cusp

North Lobe

Magnetotail

Neutral point

Solar Wind

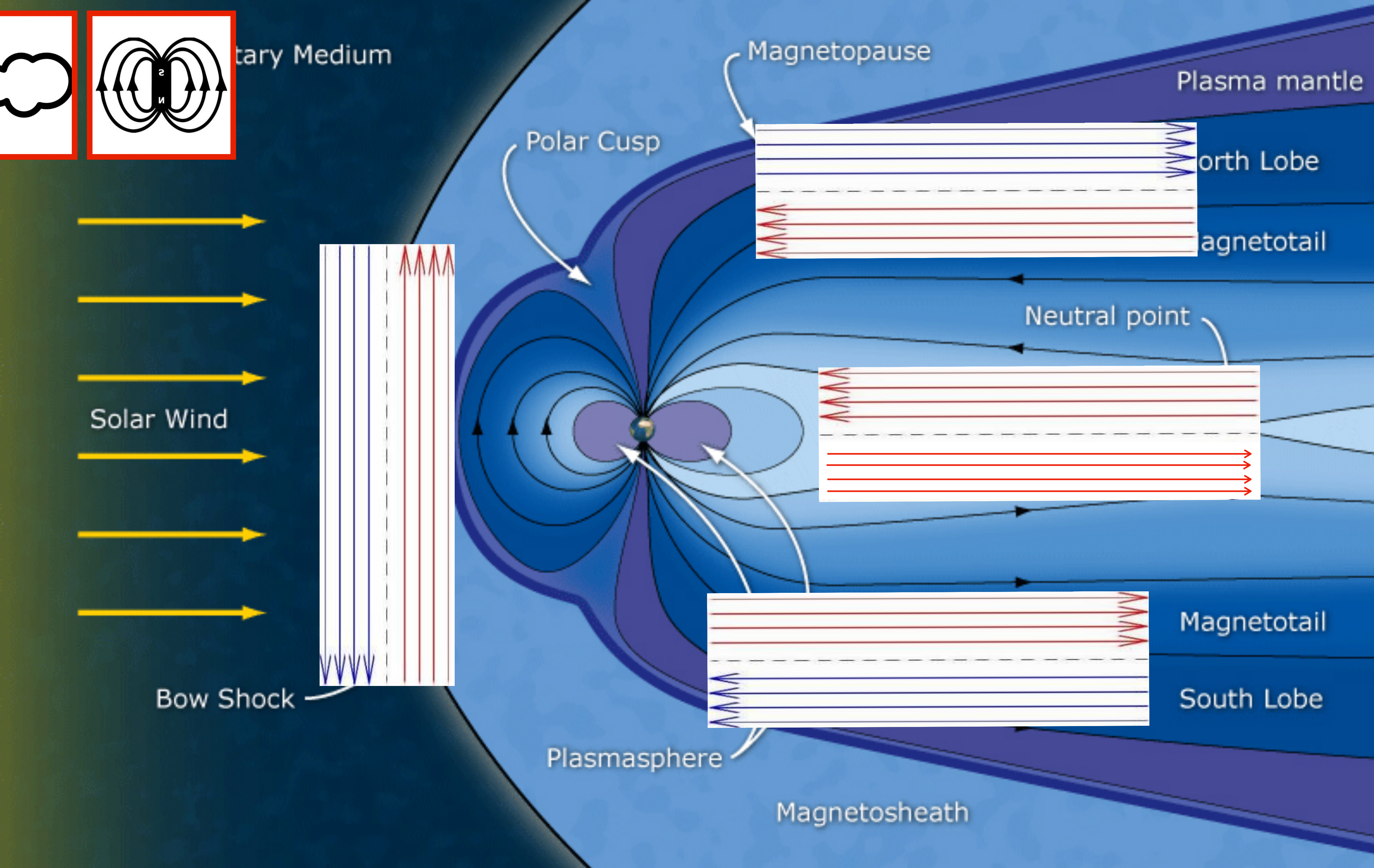
Bow Shock

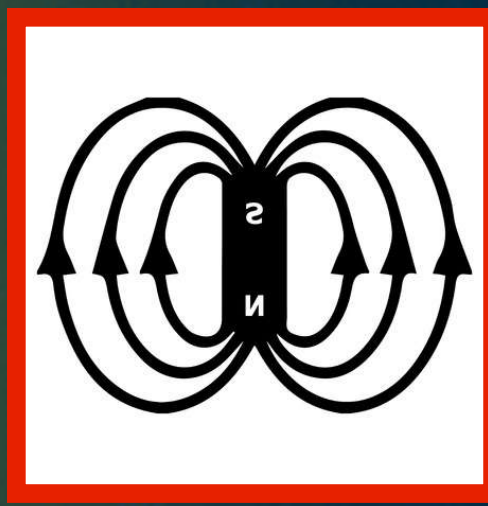
Plasmasphere

Magnetosheath

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Interplanetary Medium

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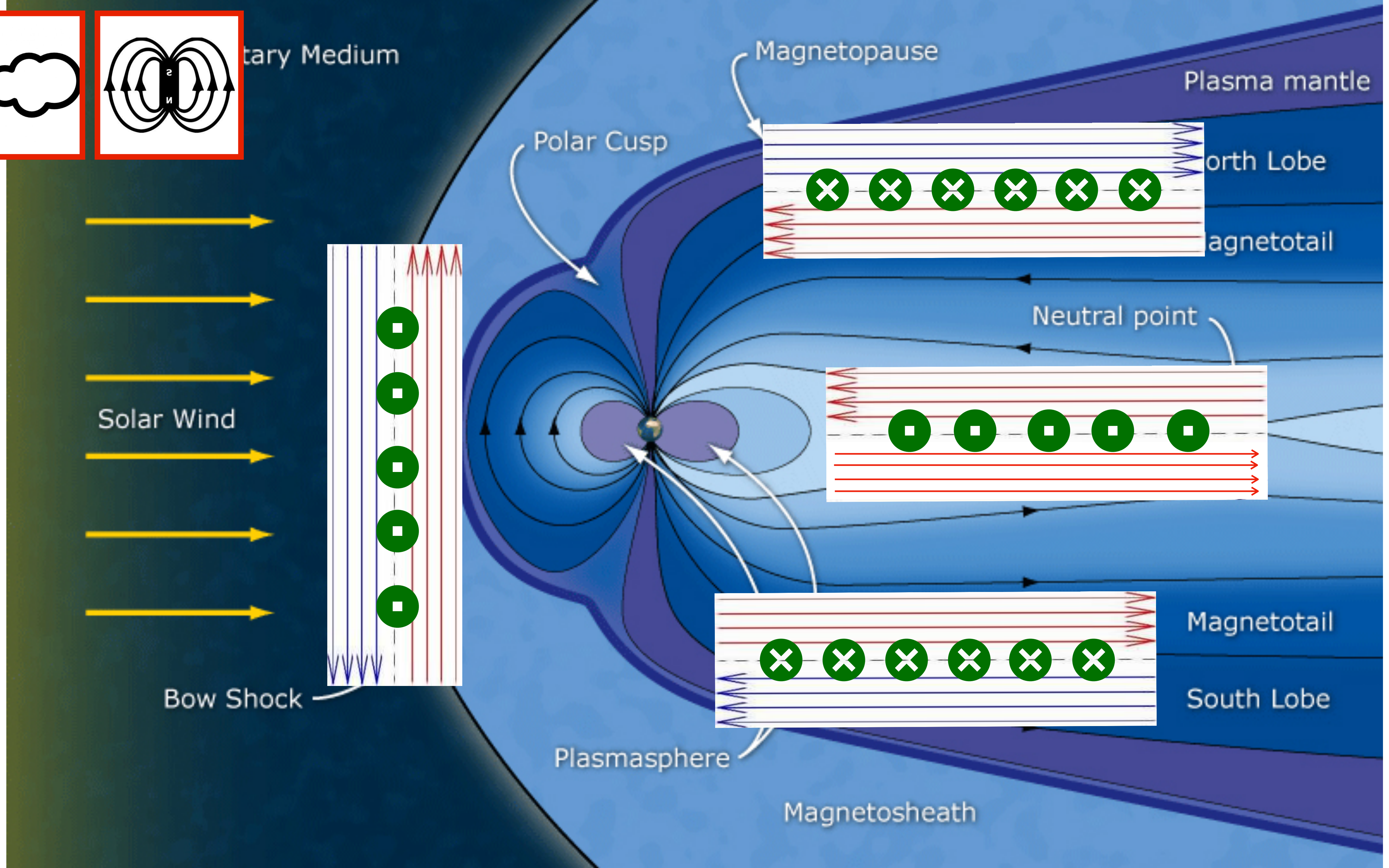
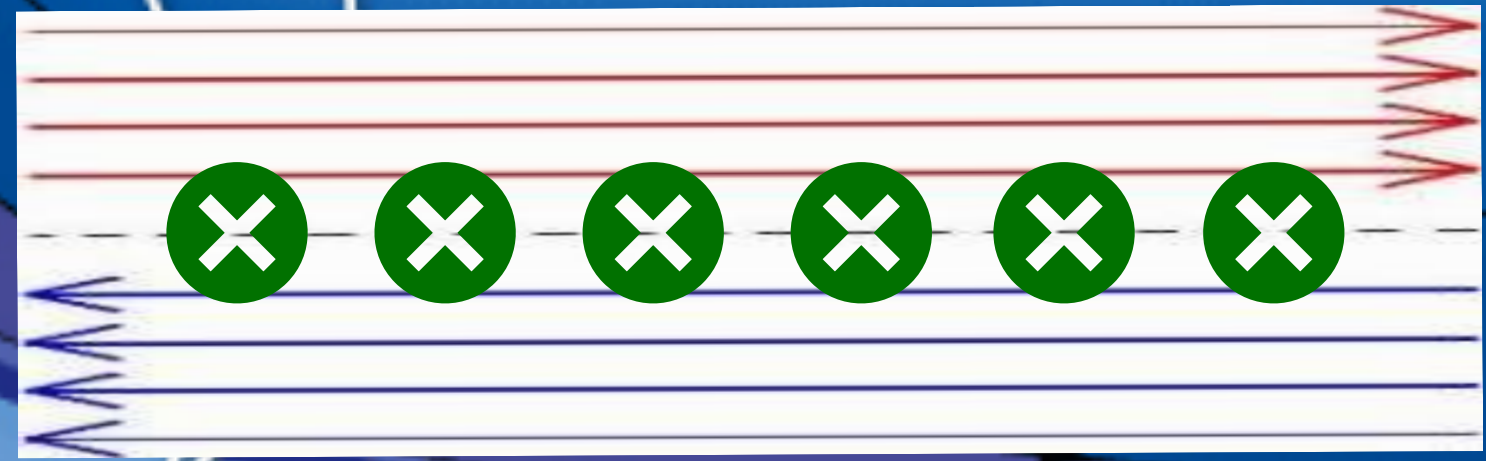
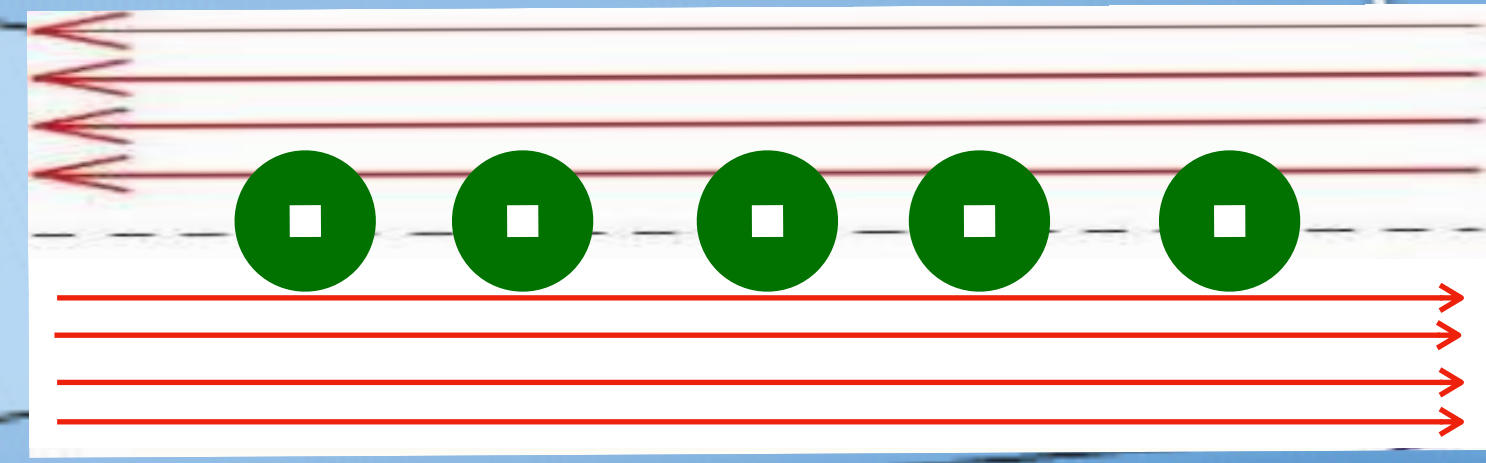
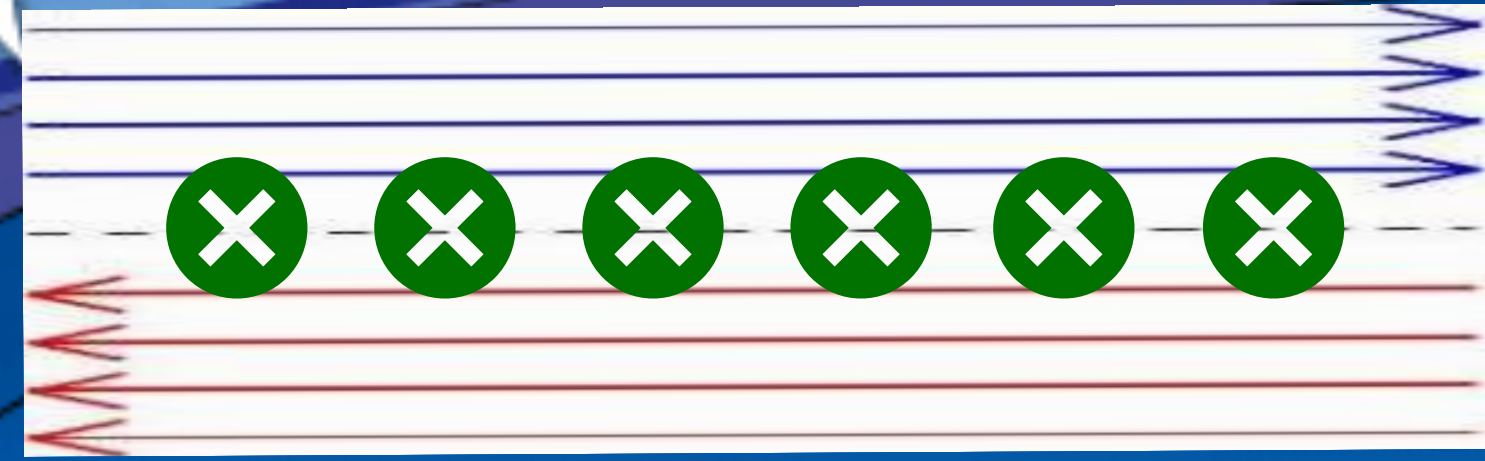
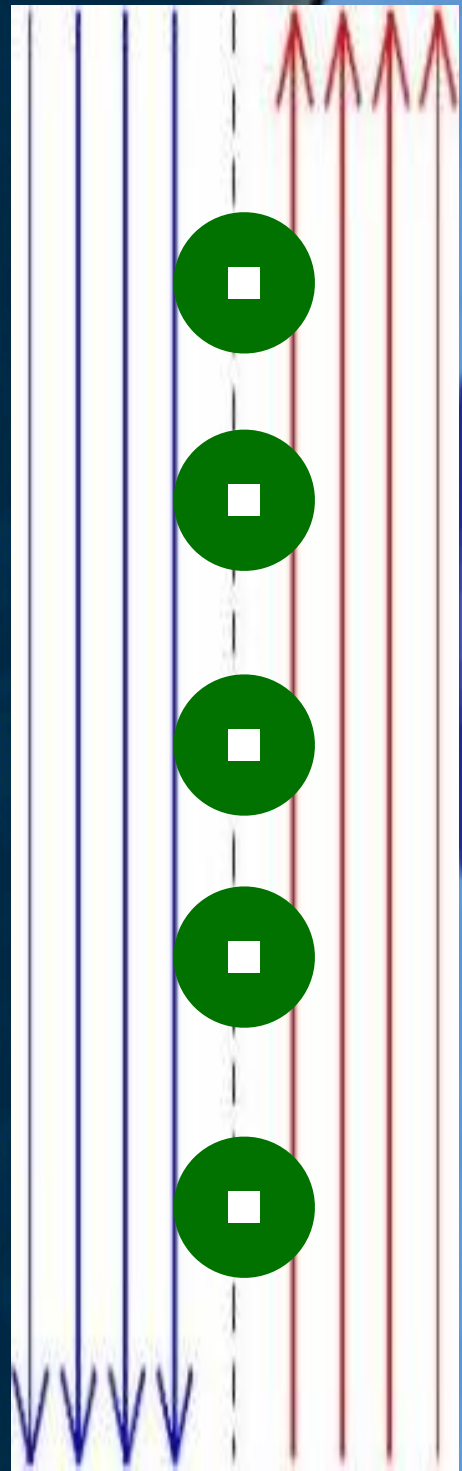
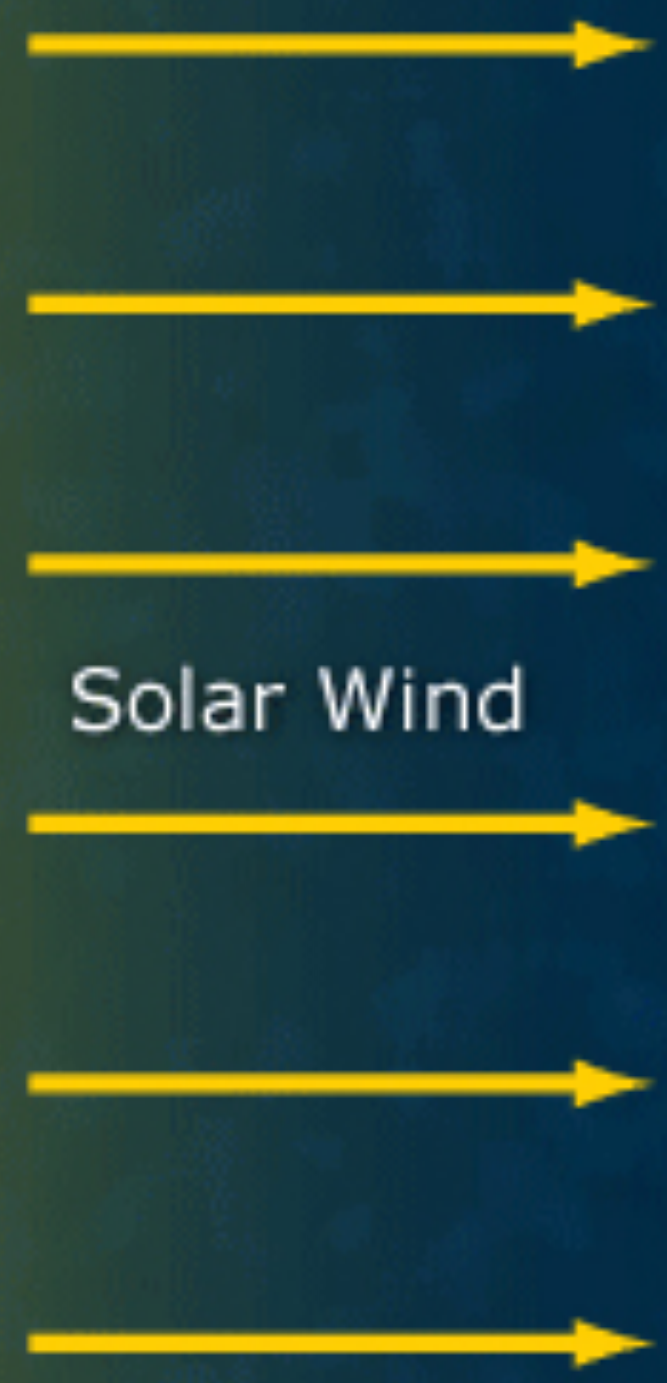
Bow Shock

Plasmasphere

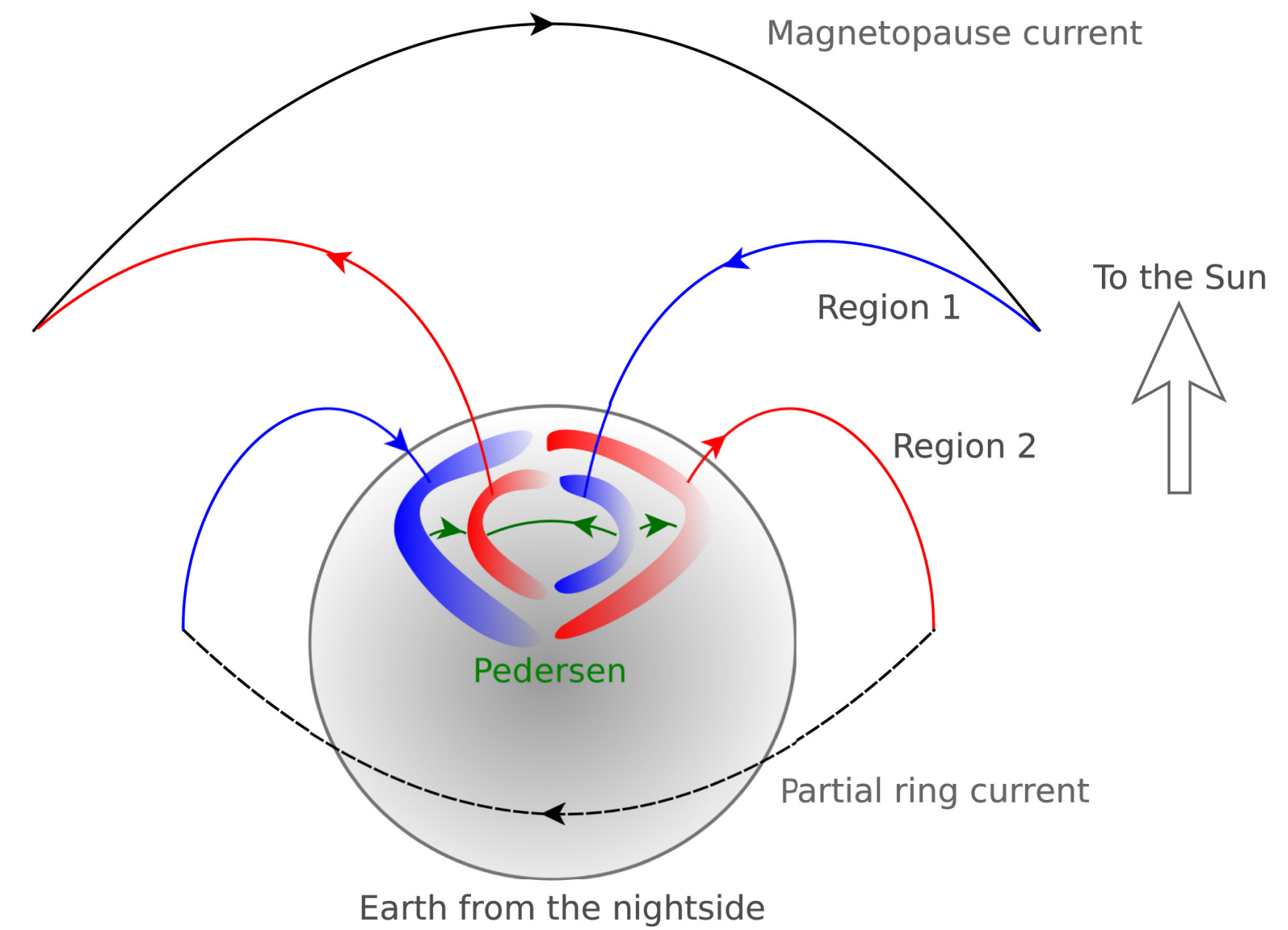
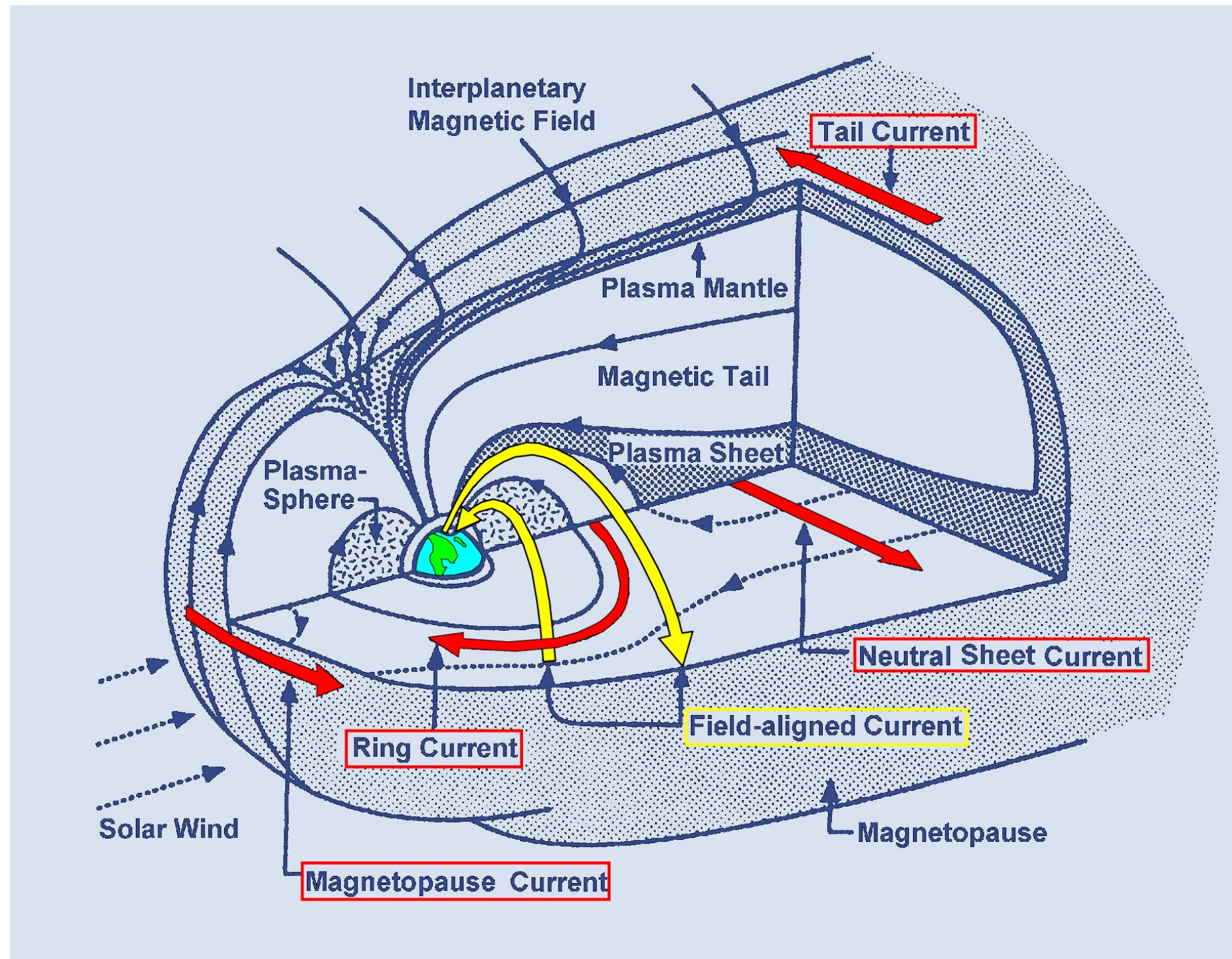
Magnetosheath

Magnetotail

South Lobe



# Currents



Space Weather - When solar energy meets the Earth's spheres.

