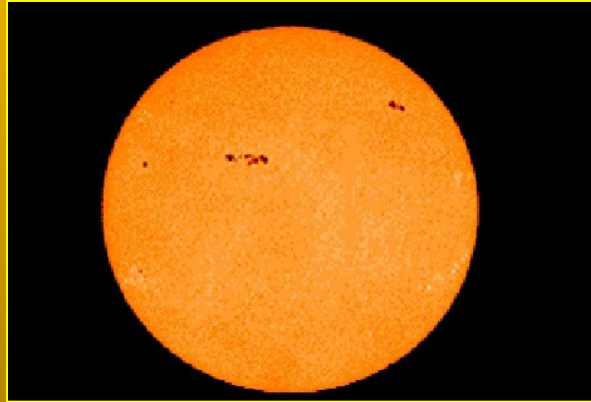




# Sun-Earth Connection:



# A New Perspective

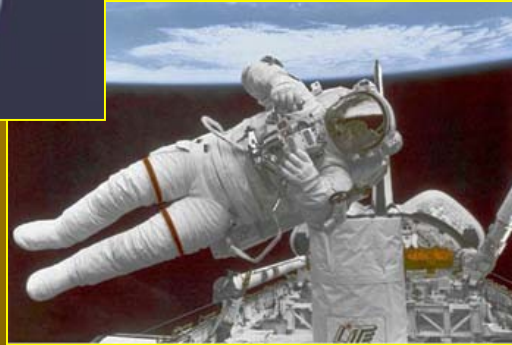


# Main Areas Of Research

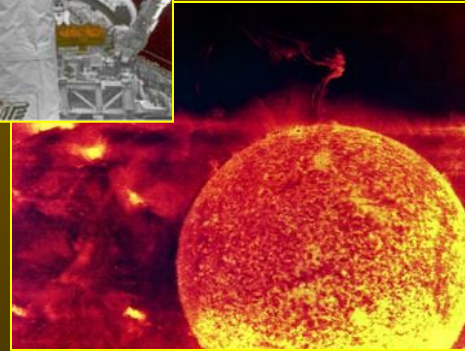
## *Earth Science*



## *Aerospace Technology*



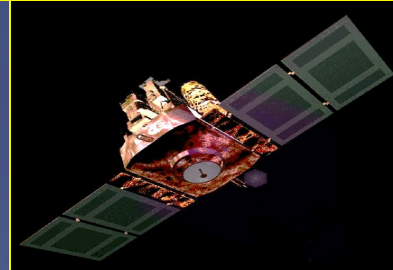
## *Space Science*



## *Human Exploration And Development Of Space*



# Importance of Space Technology

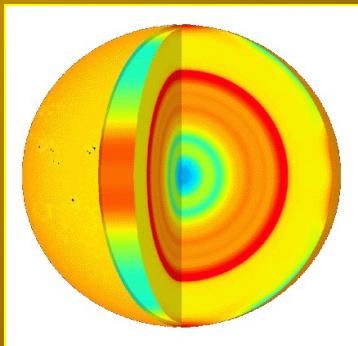
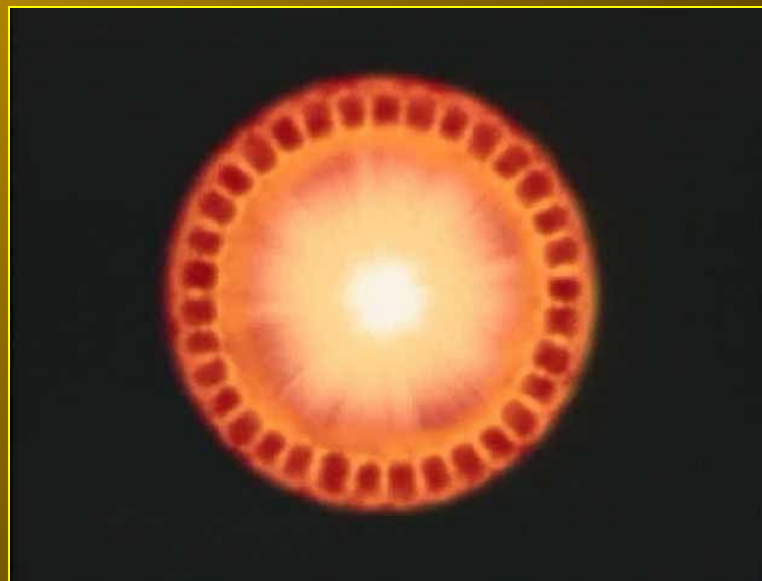
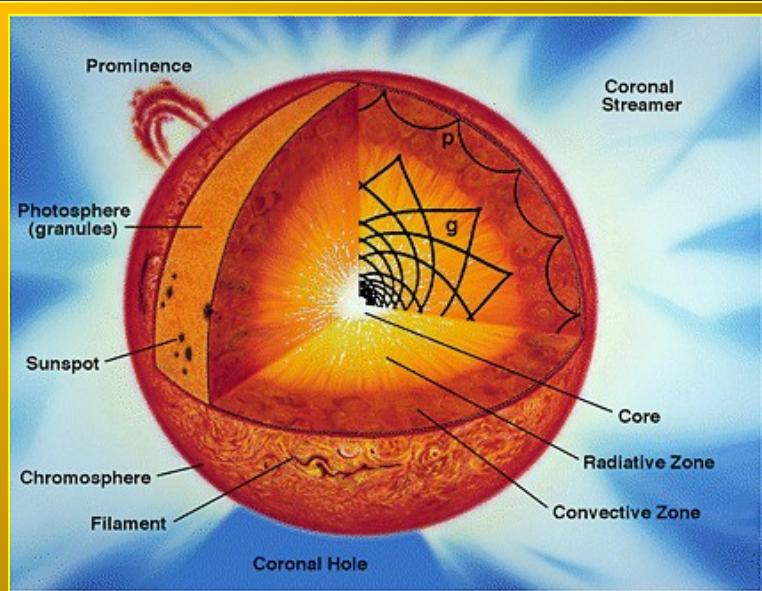


**Better Observation Of The Sun And Earth**

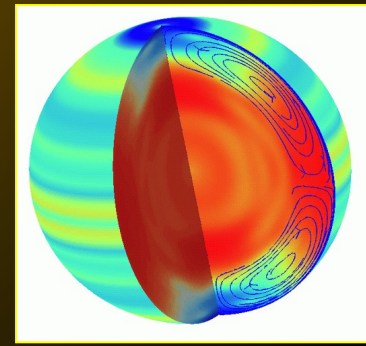




# Sun's Internal Structure

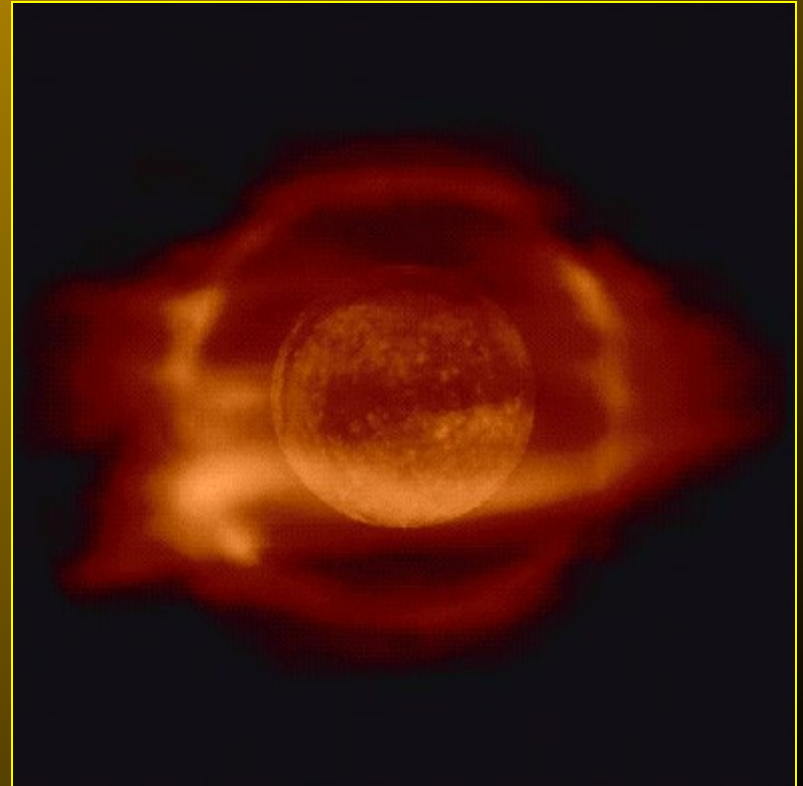
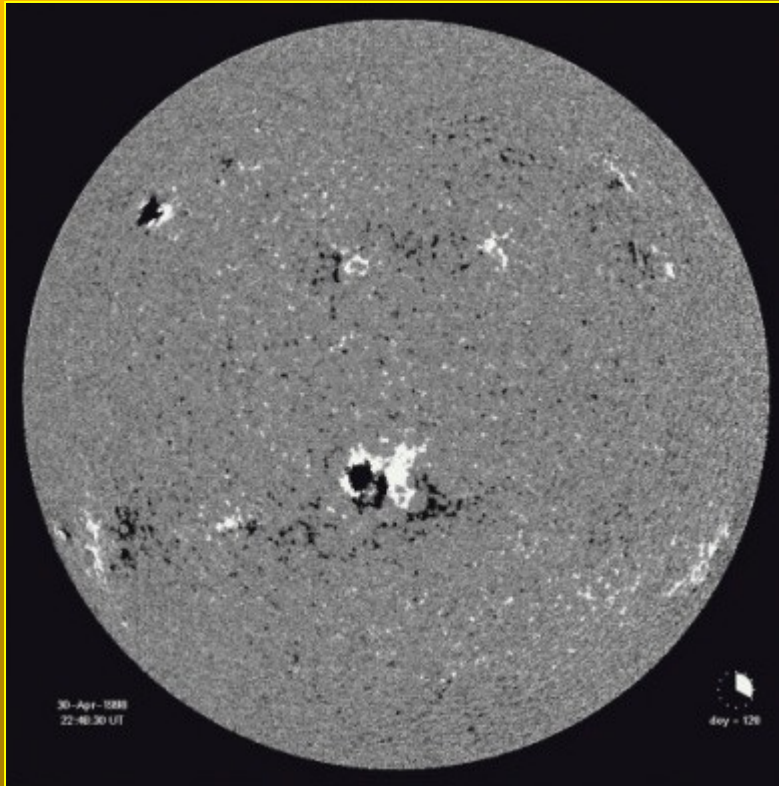


The globes to the left and right represent variations in temperature and rotation of the Sun based on MDI data.





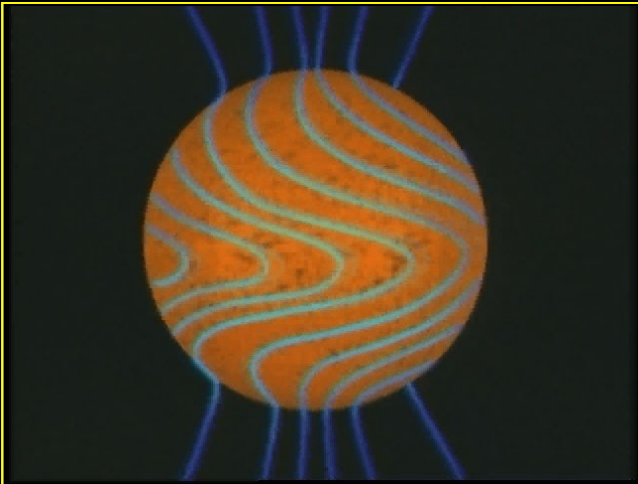
# Surface And Atmosphere Of The Sun



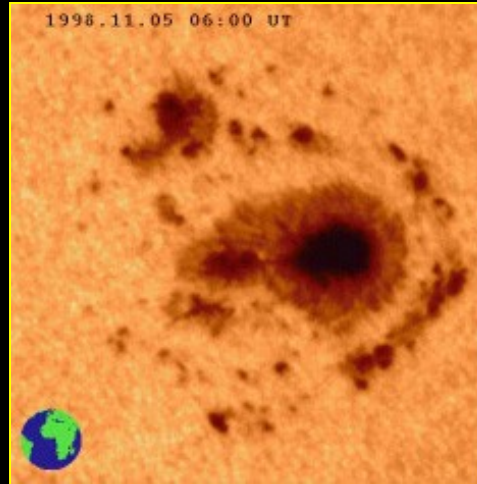


# Sunspots

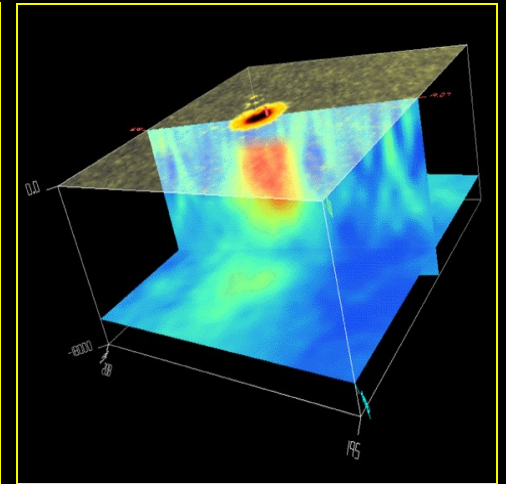
### Sun's Magnetic Field



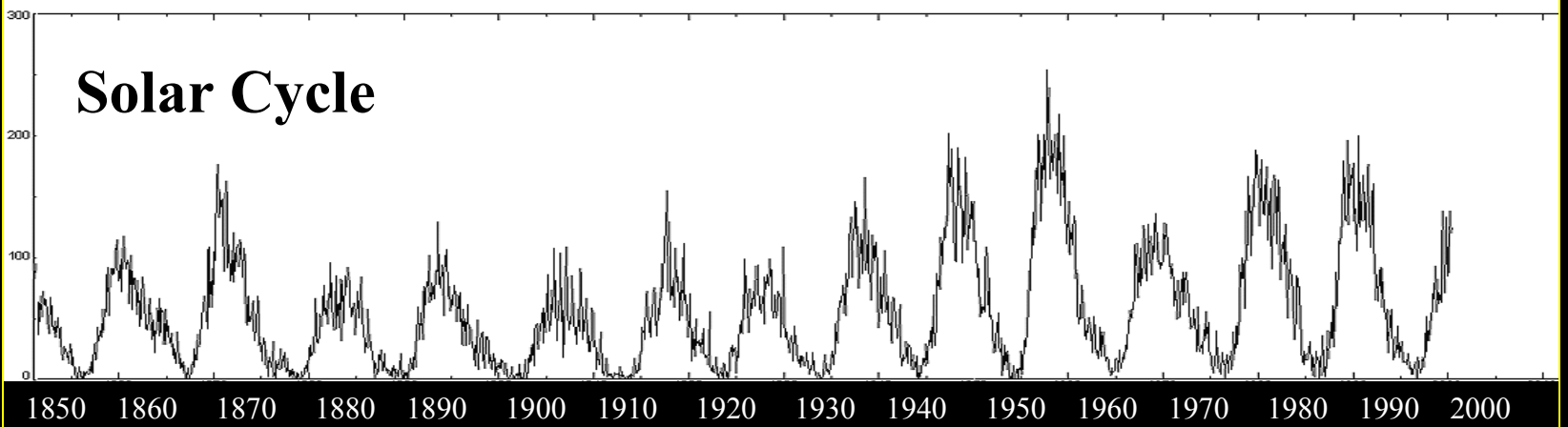
### Sunspots



### Sunspot Structure



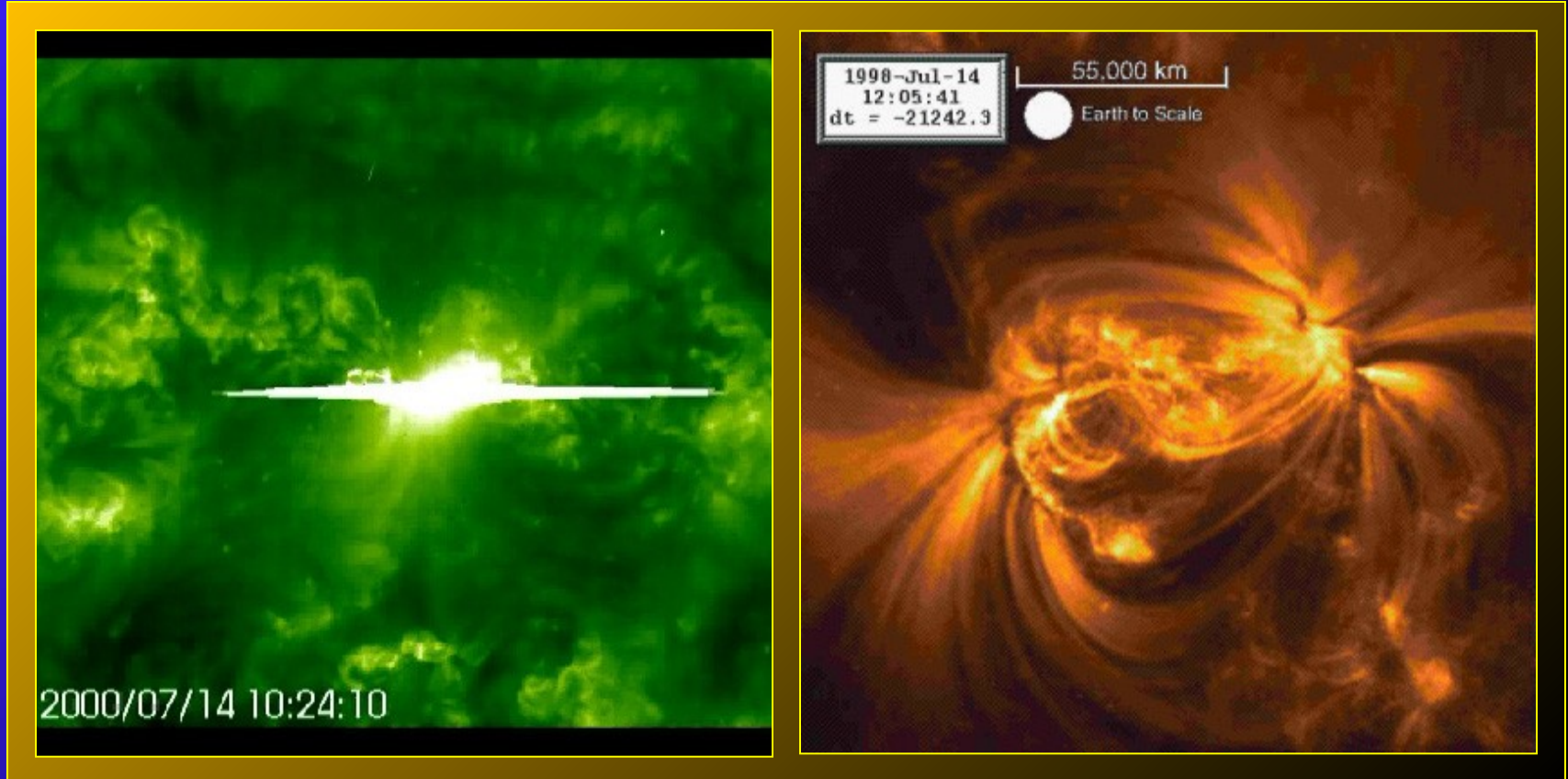
### Solar Cycle





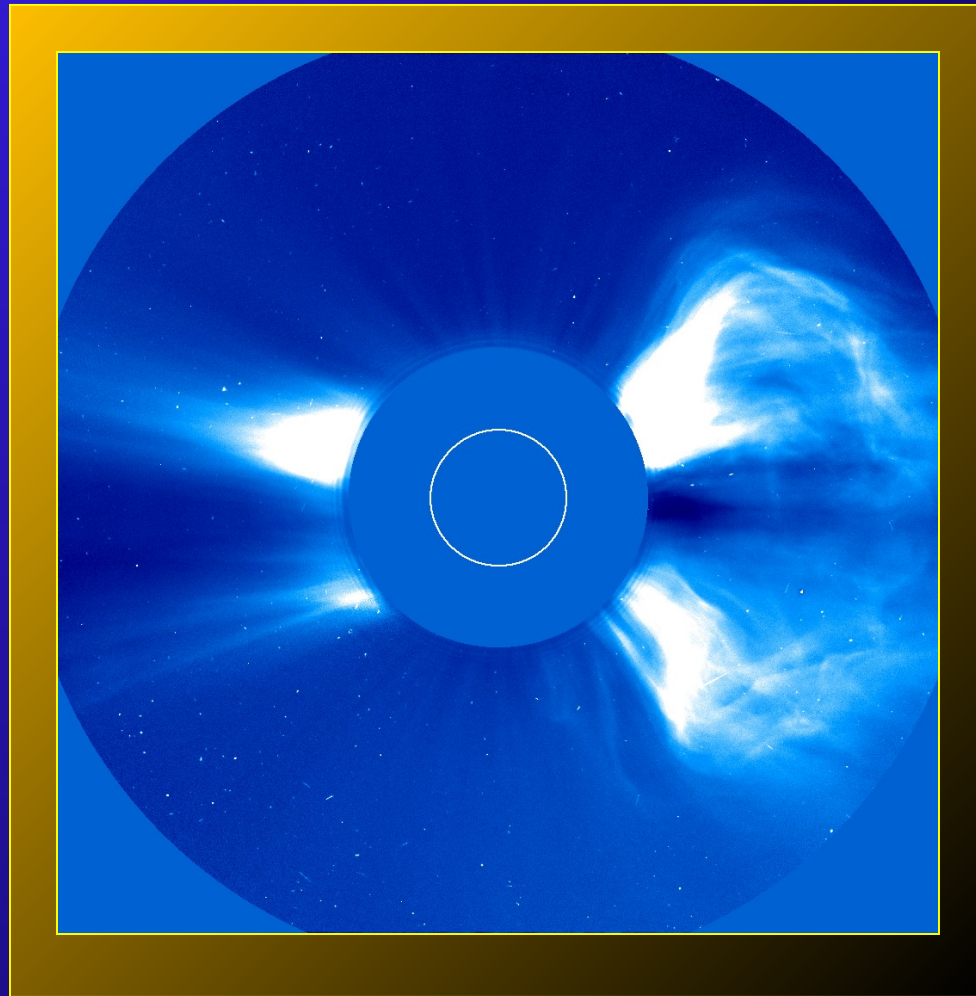


# Solar Flares





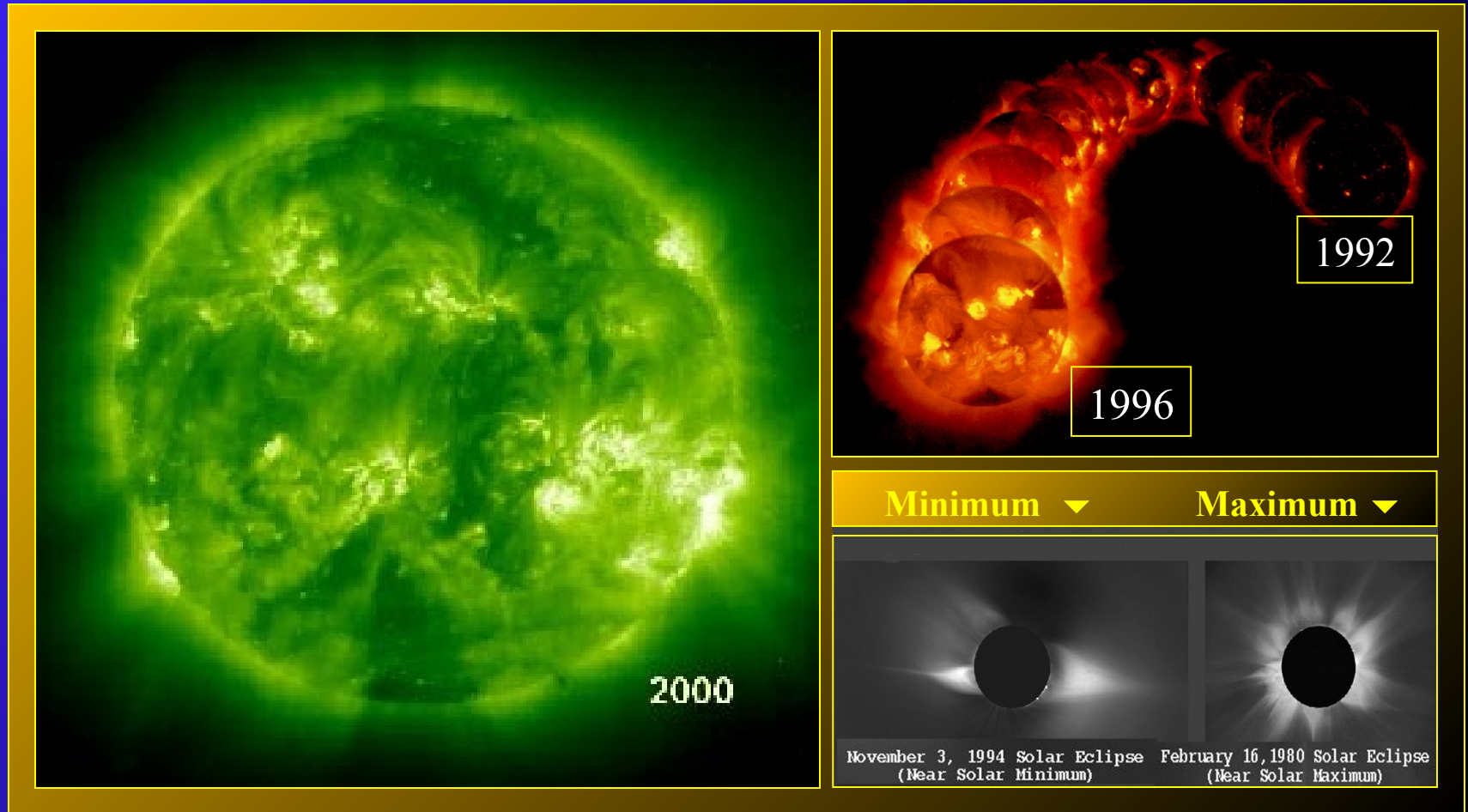
# Coronal Mass Ejections





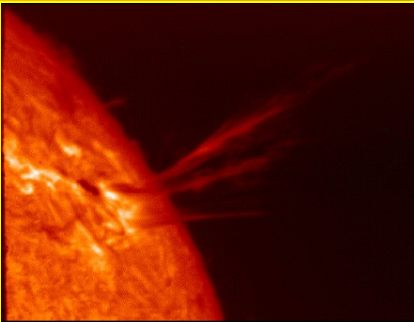


# Solar Cycles

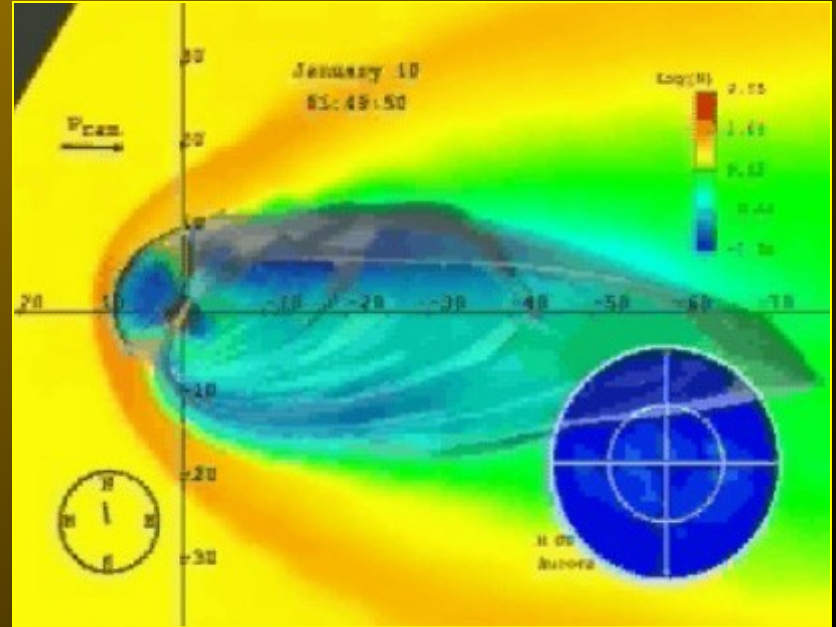
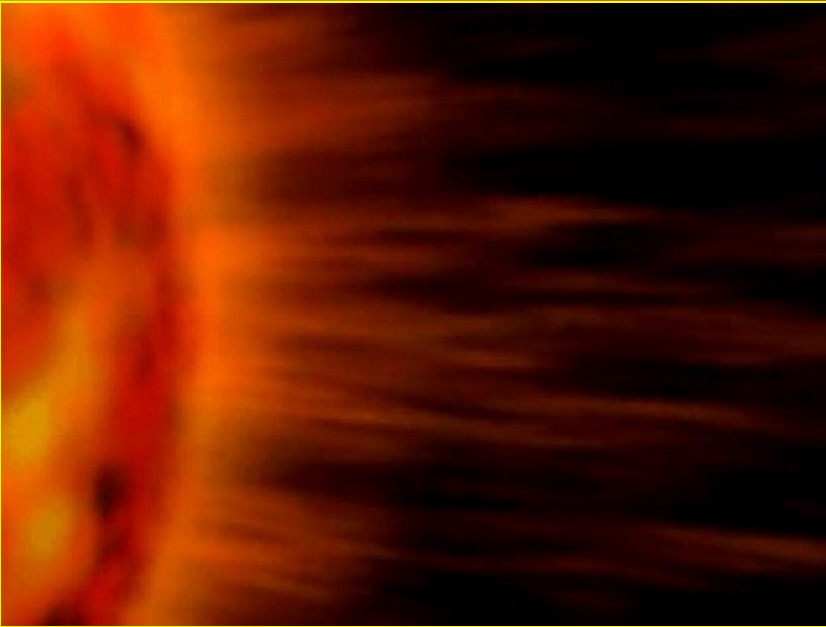
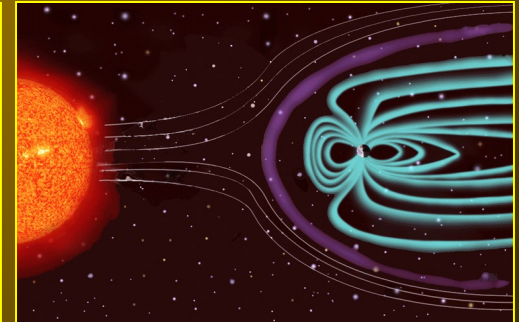




# Solar Wind

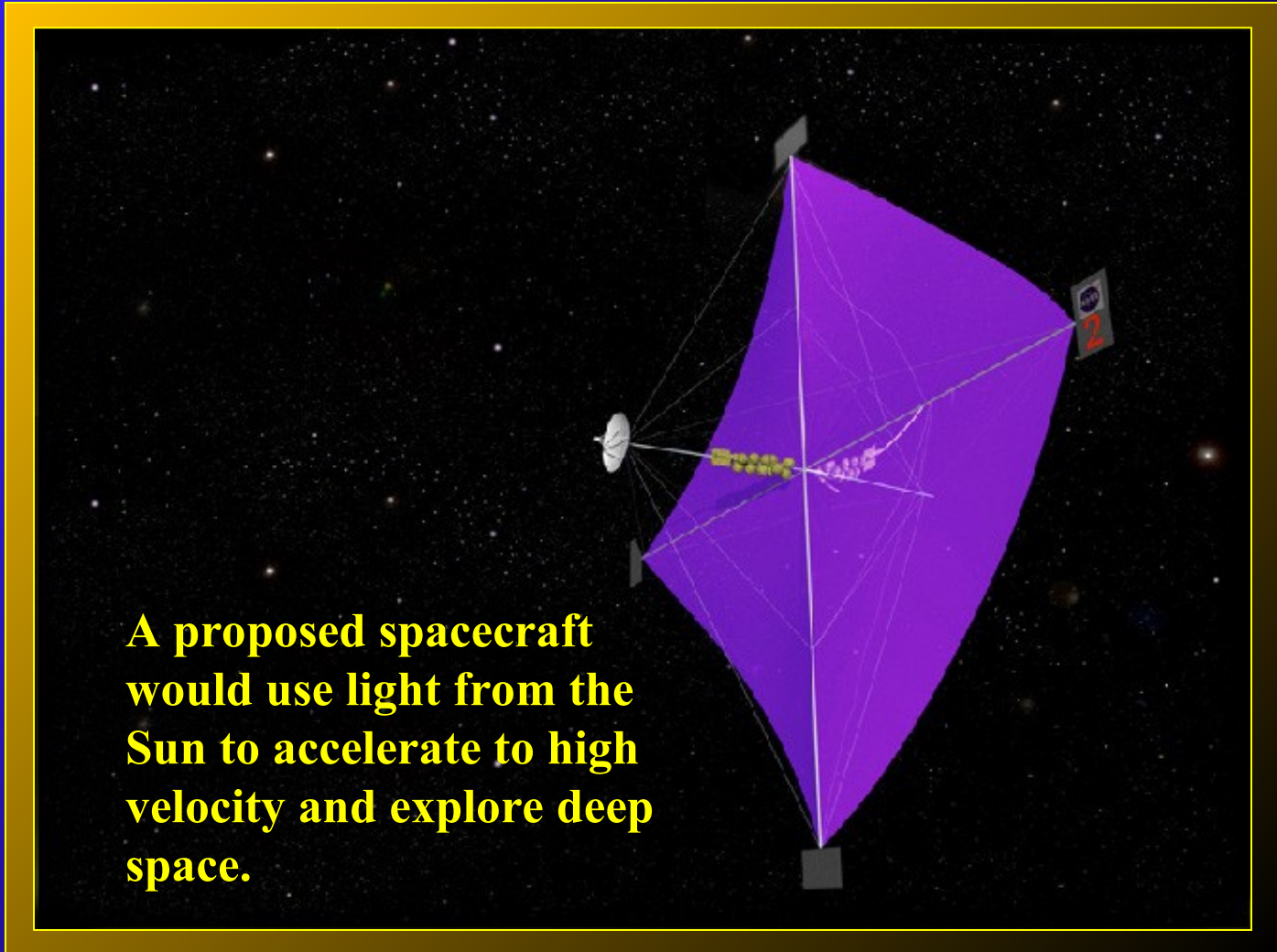


**The solar wind consists of plasma that is continually being released from the Sun.**





# Solar Sail Interstellar Exploration

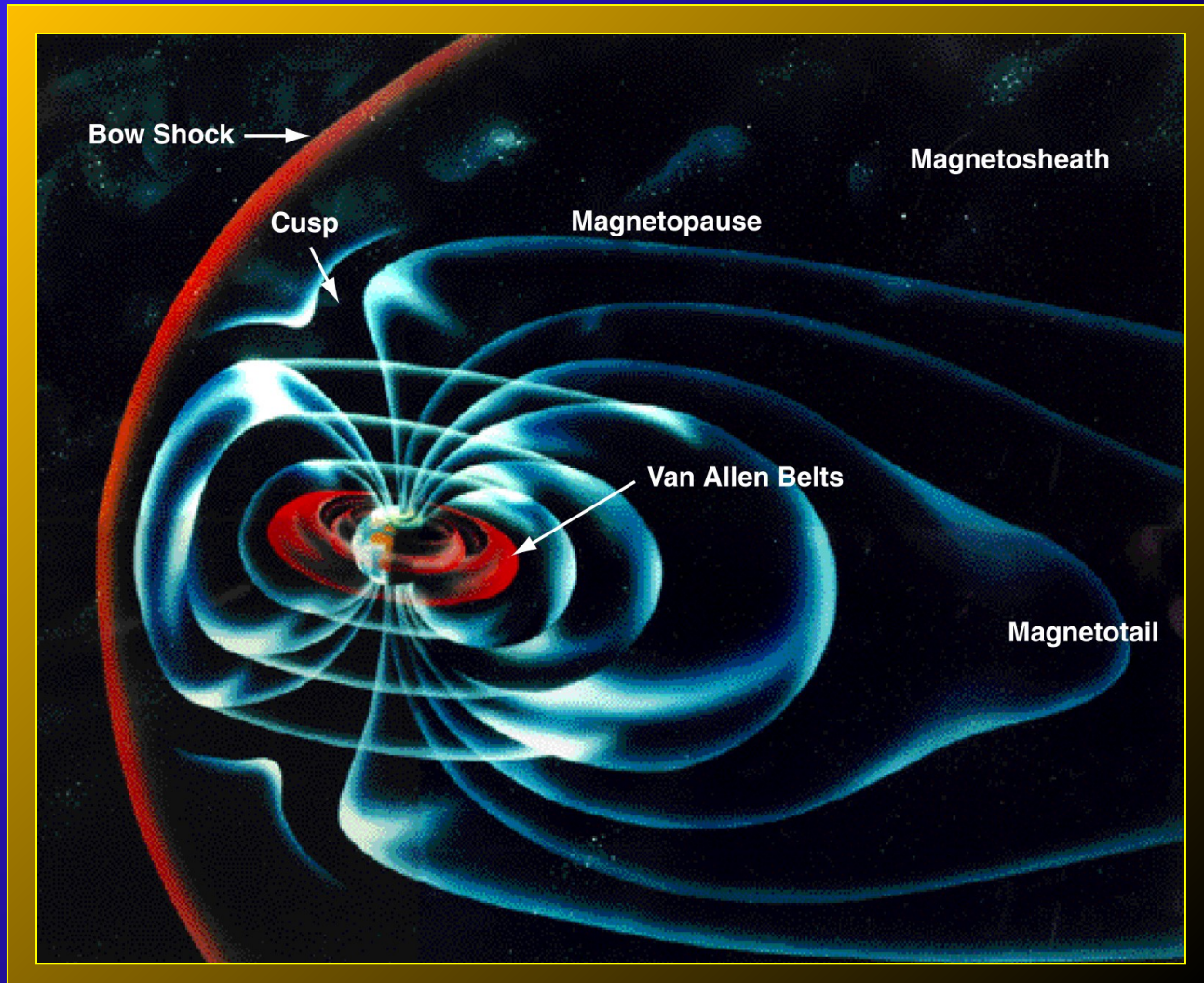


**A proposed spacecraft would use light from the Sun to accelerate to high velocity and explore deep space.**



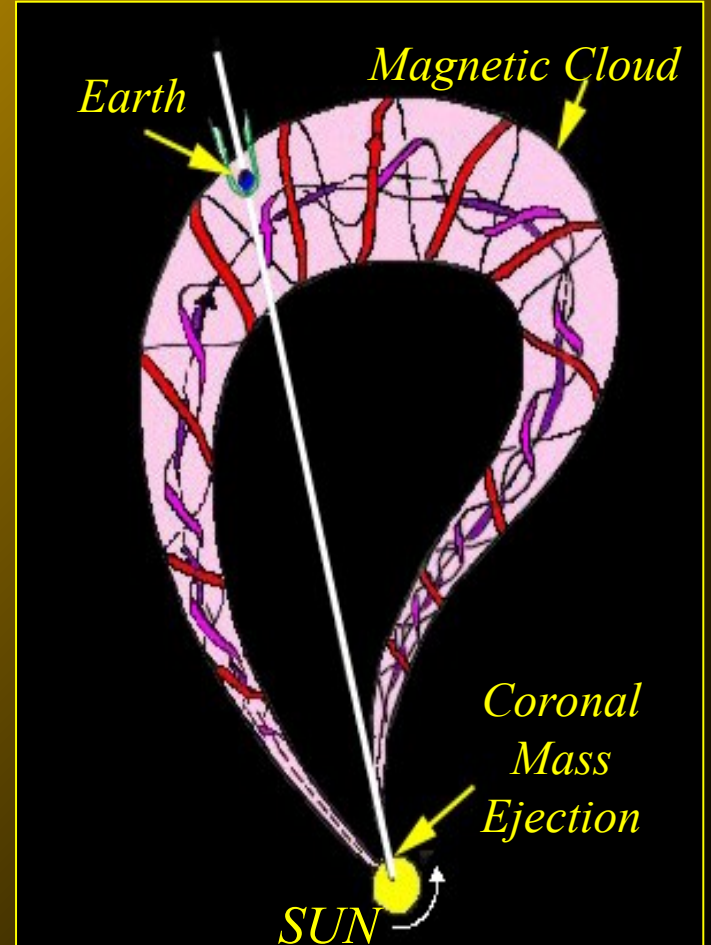
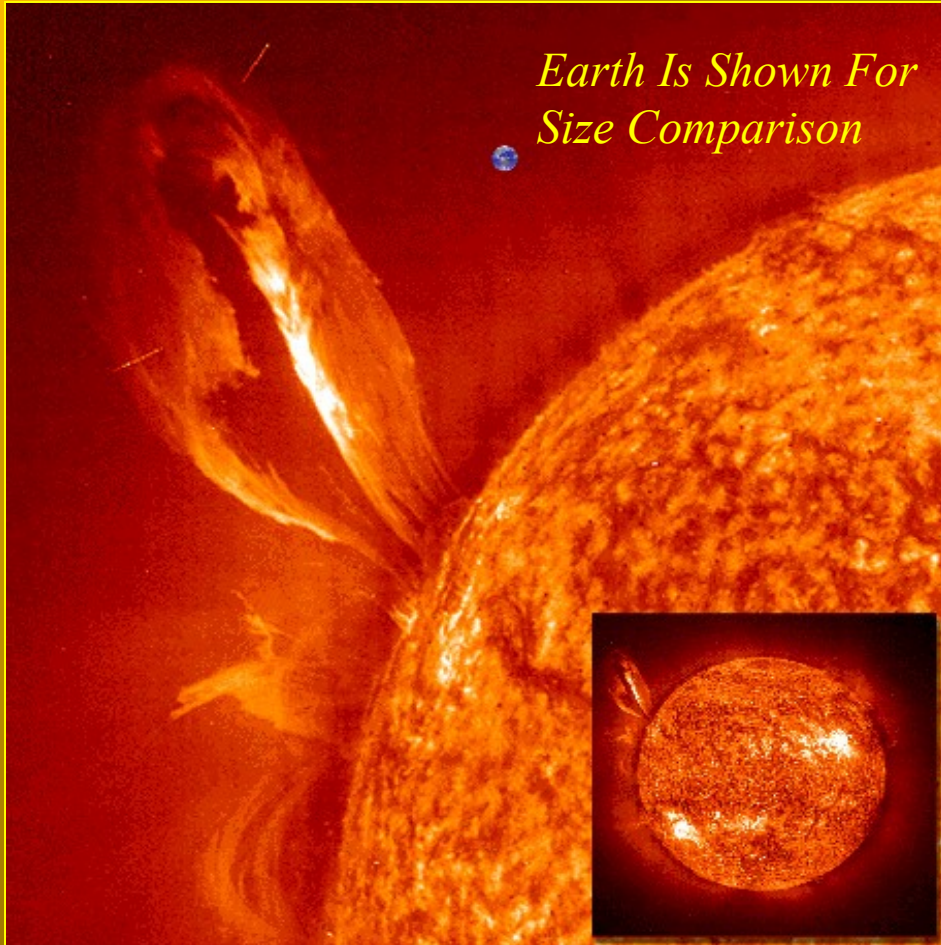


# Earth's Magnetosphere





# Coronal Mass Ejections: Crossing the Earth's Path







# Coronal Mass Ejections: Impact On Earth



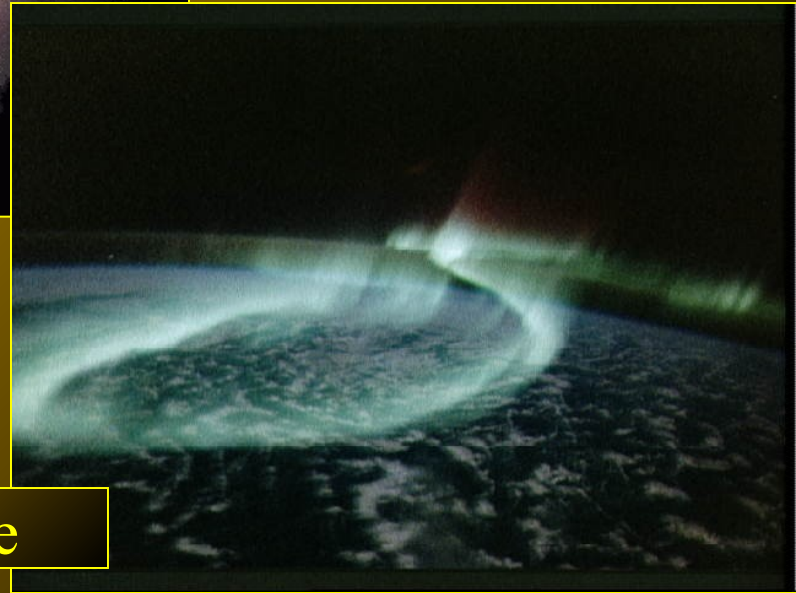




# Aurora: Points of View



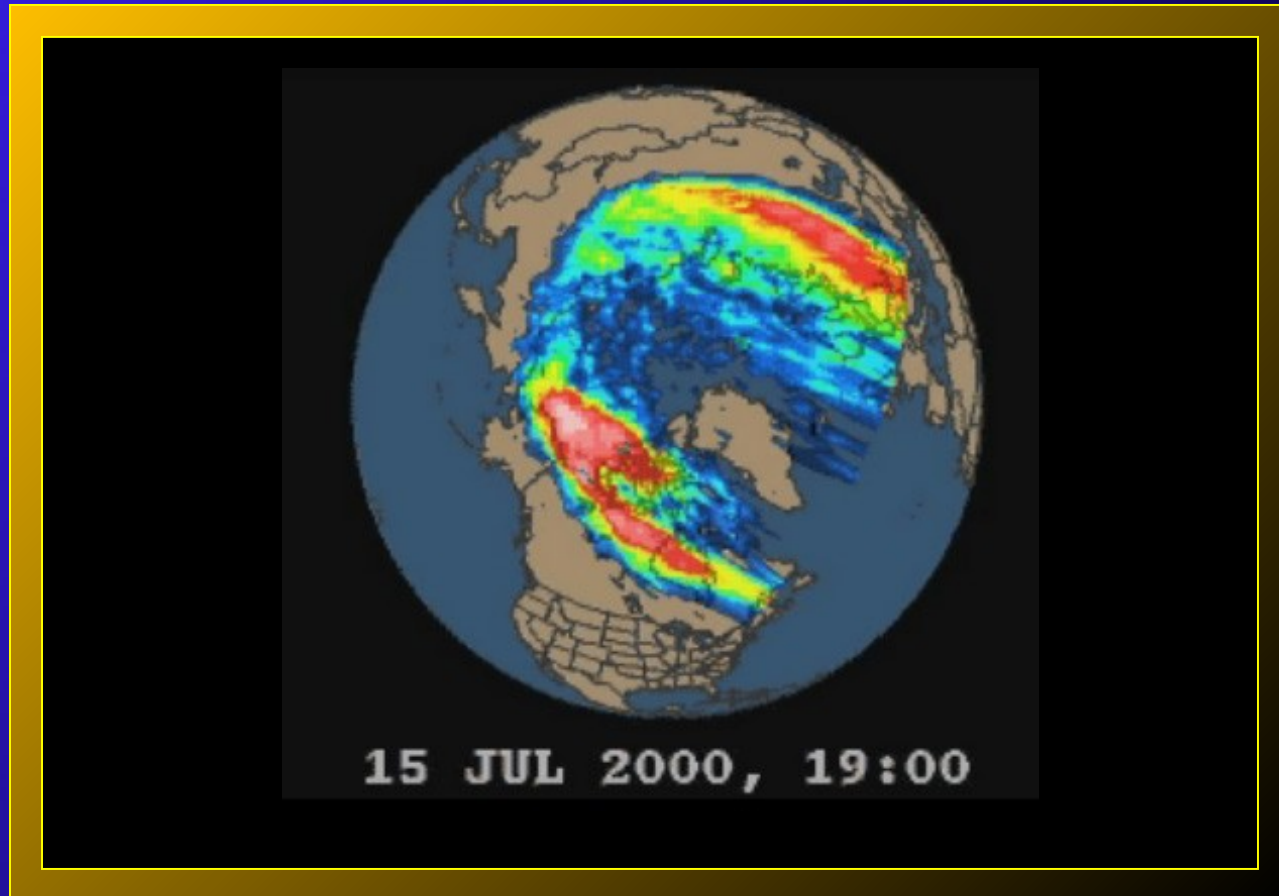
View From Earth



View From Space

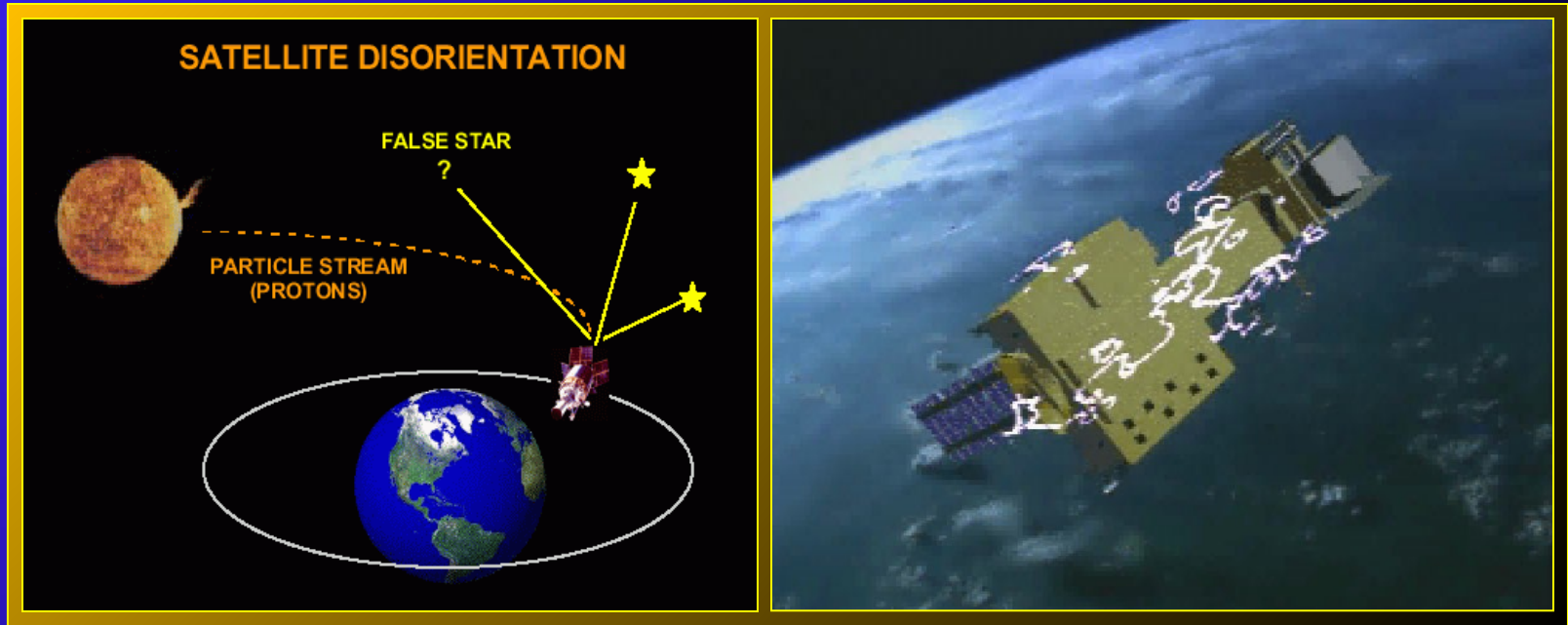


# Aurora: Lights in Motion





# Space Weather : Effects On Orbiting Spacecraft







# Space Weather : Effects On Satellite Sensors





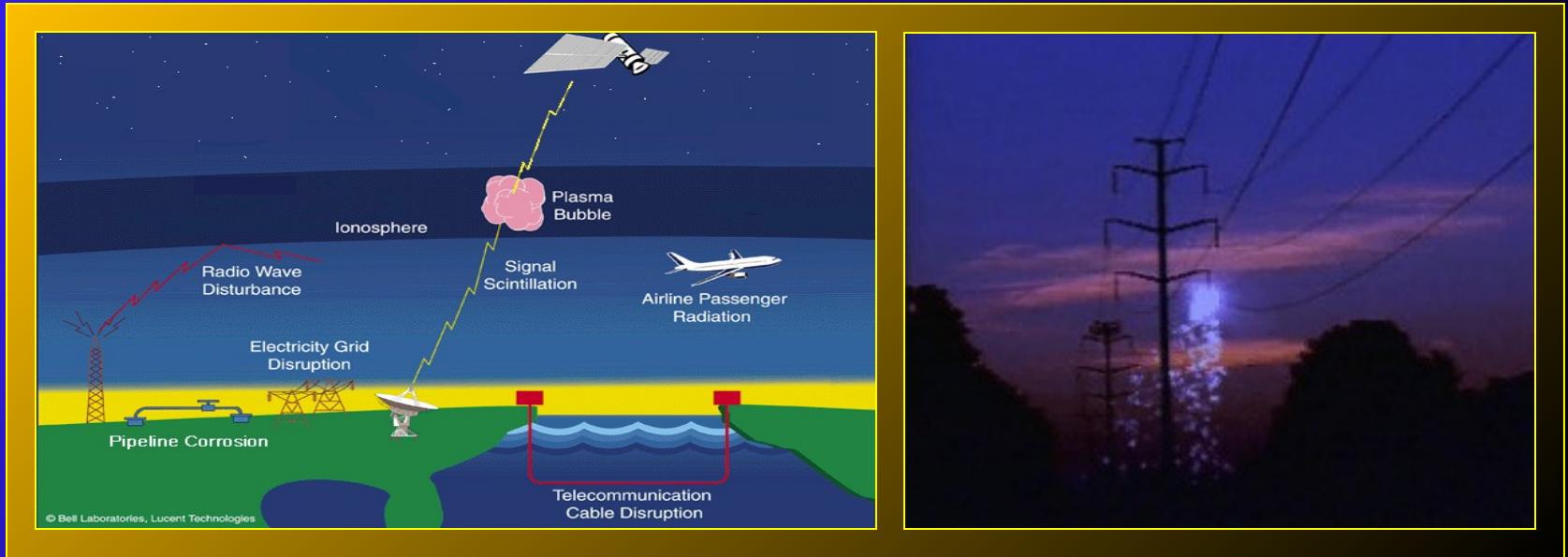
# Solar Storms: Effects on Humans in Space







# Solar Storms: Effects On Societal Systems

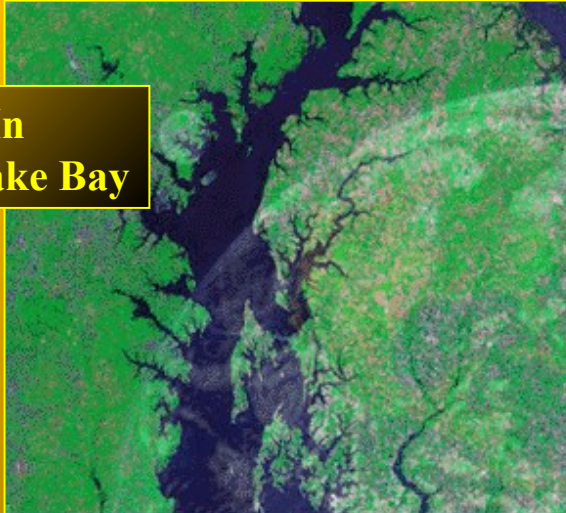






# The Sun's Energy: Driver of Earth Weather

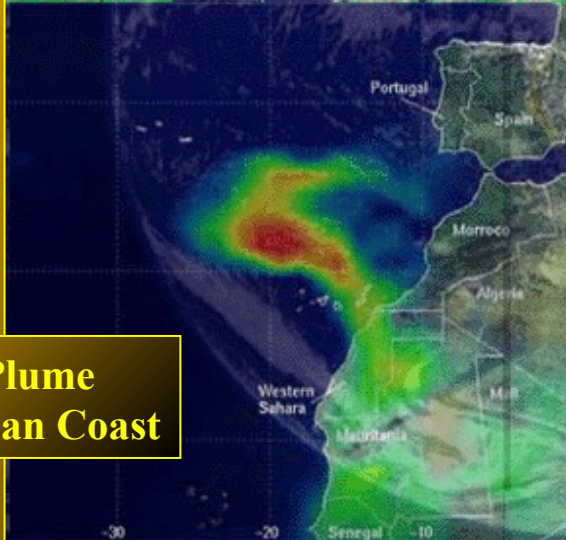
Water Level In  
The Chesapeake Bay



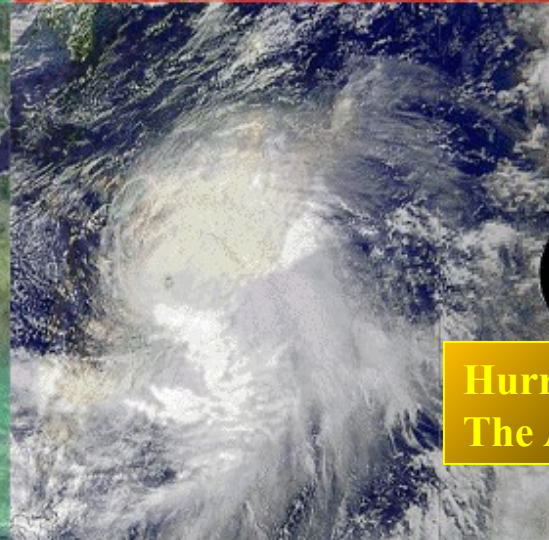
Infrared Image Of  
Atlanta, Georgia



Sahara Dust Plume  
Off The African Coast

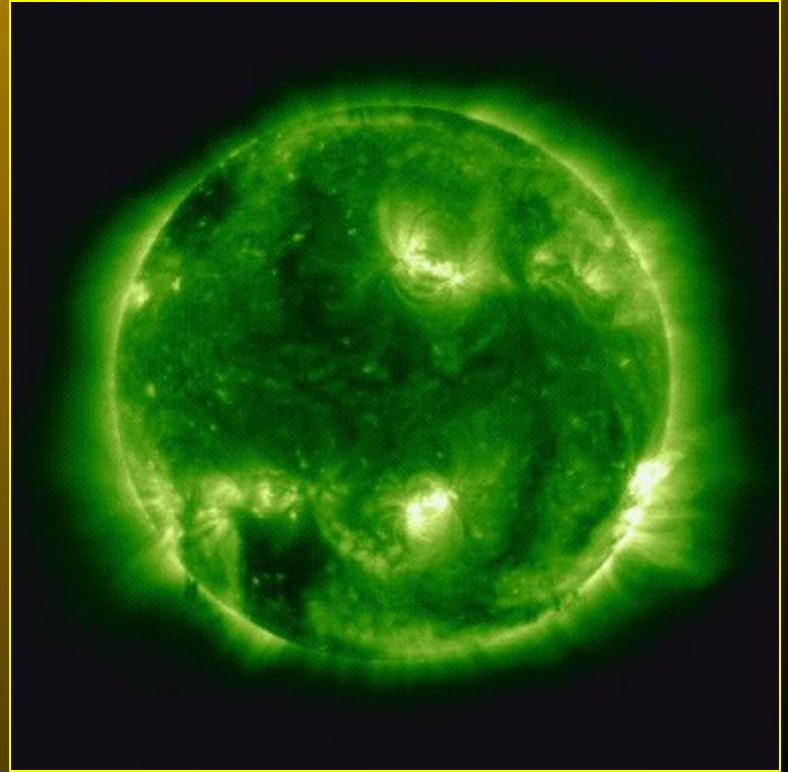
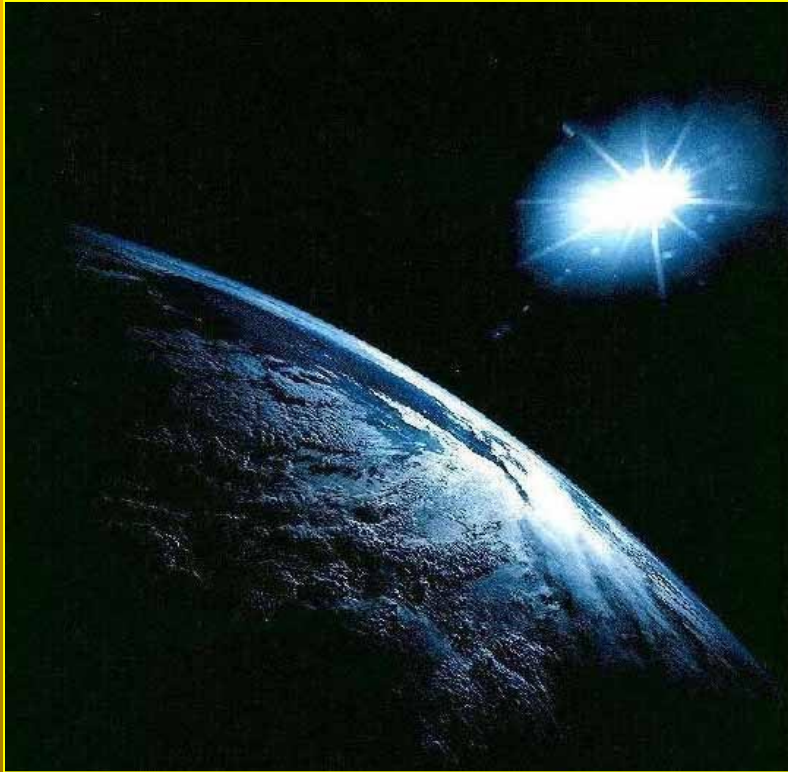


Hurricane In  
The Atlantic Ocean





# Sun-Earth Connection





**The End**