

# NORTHERN LIGHTS

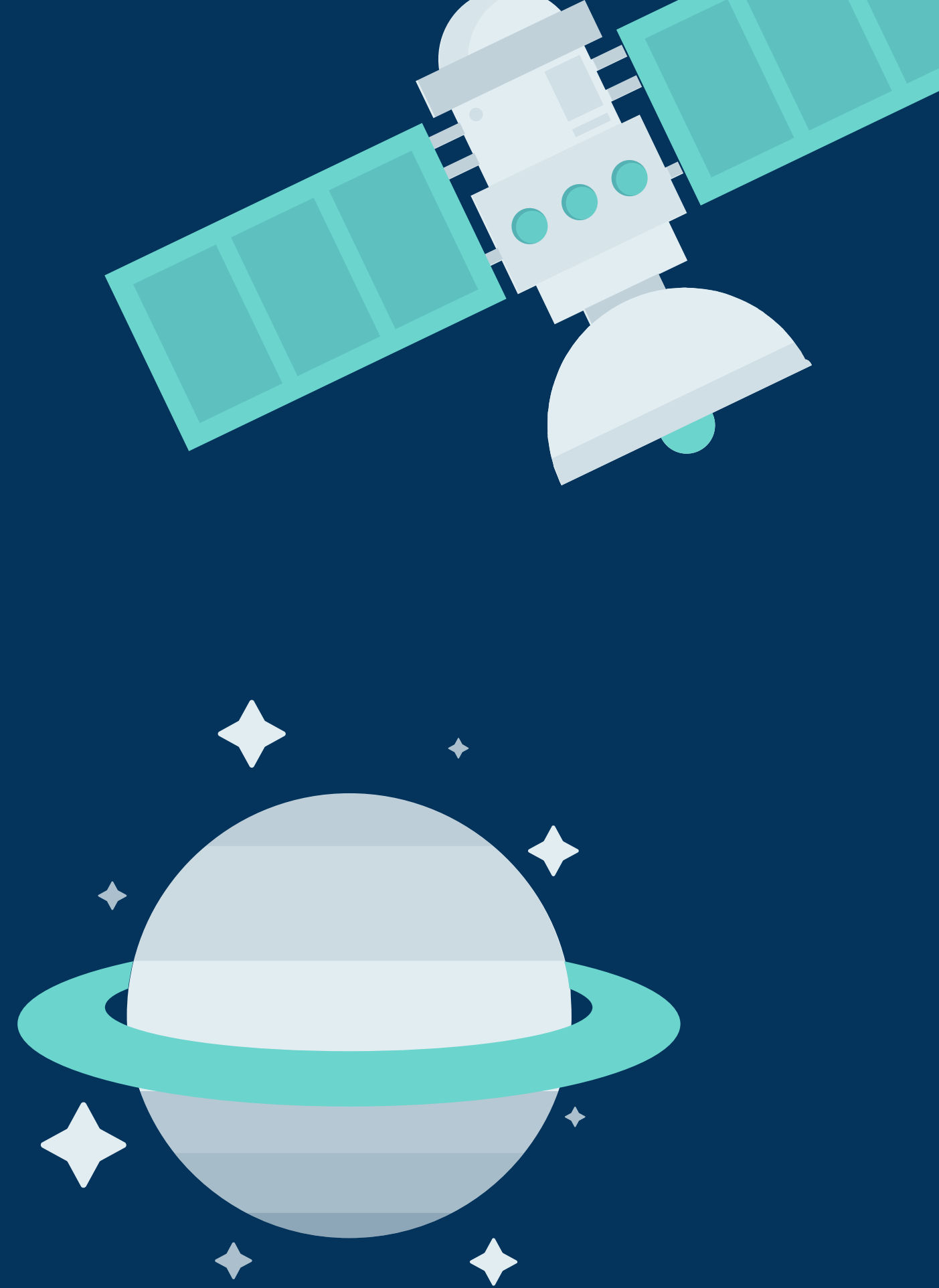
Aurora Borealis



# History

## Galileo Galilei

- Gave the name “aurora borealis”: 1619
  - =>Aurora : Roman goddess of dawn
  - =>Boreas : Greek god of the north wind

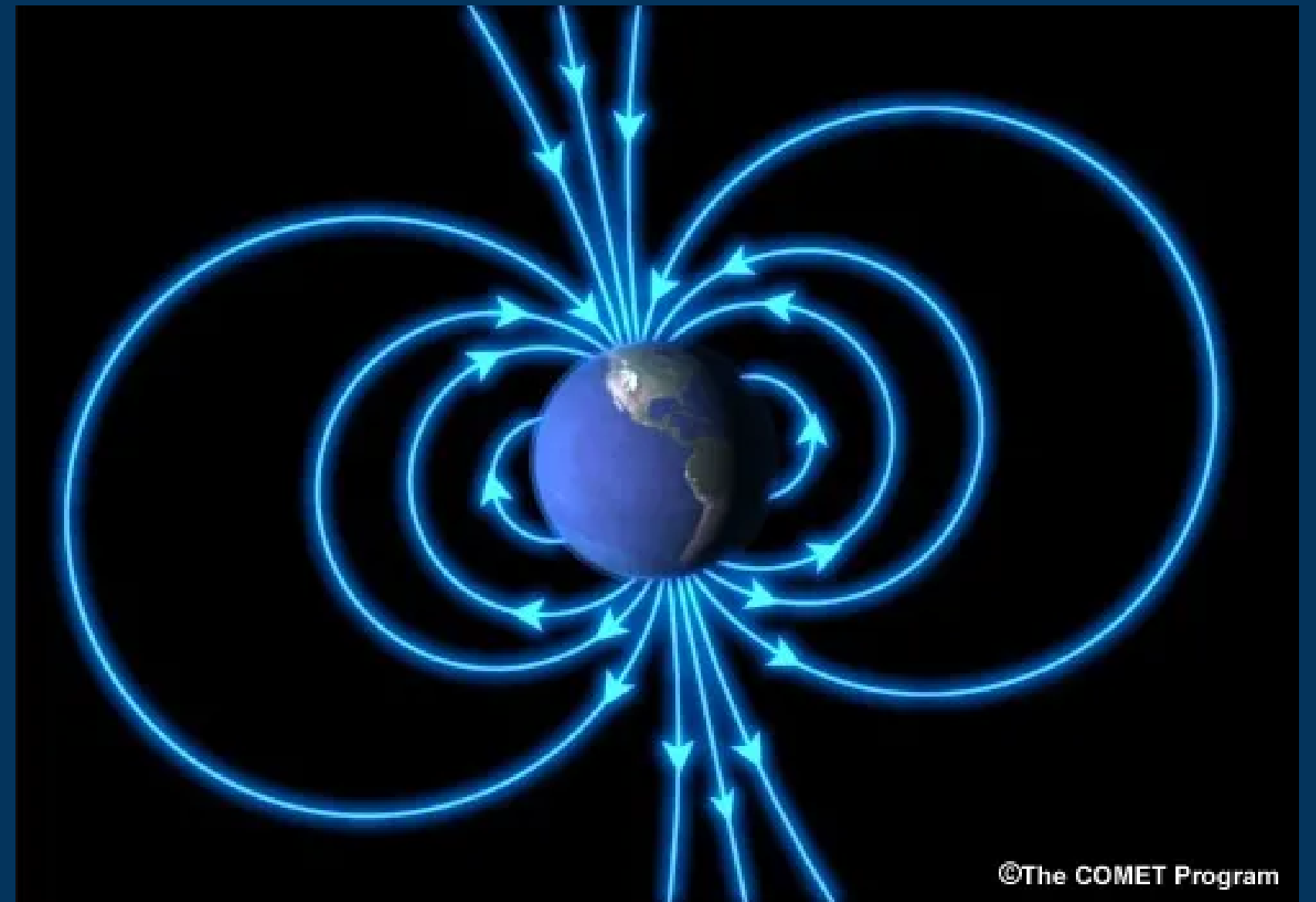




## Northern Light Phenomenon

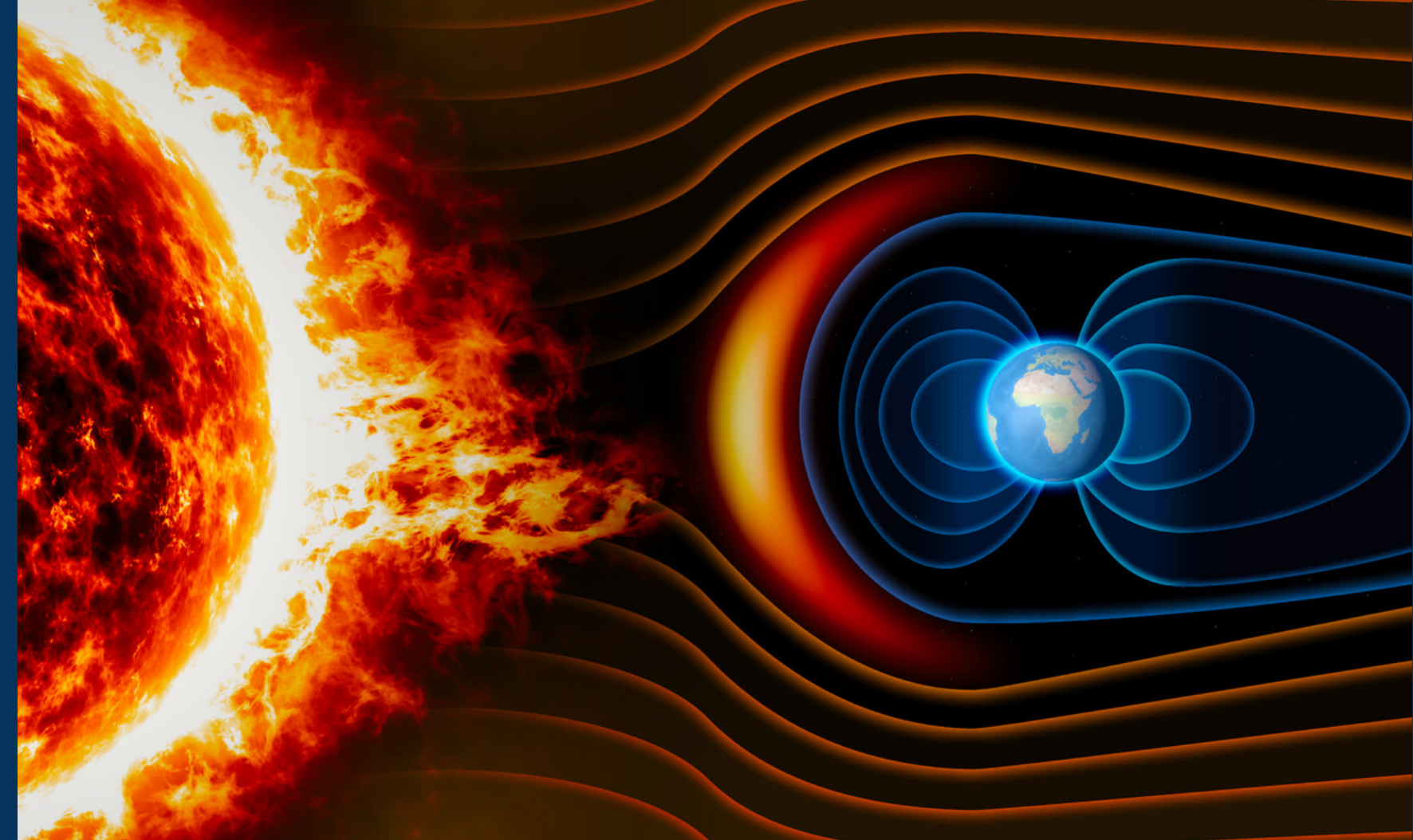
# EARTH'S MAGNETOSPHERE

EXTENDING 65000KM INTO SPACE

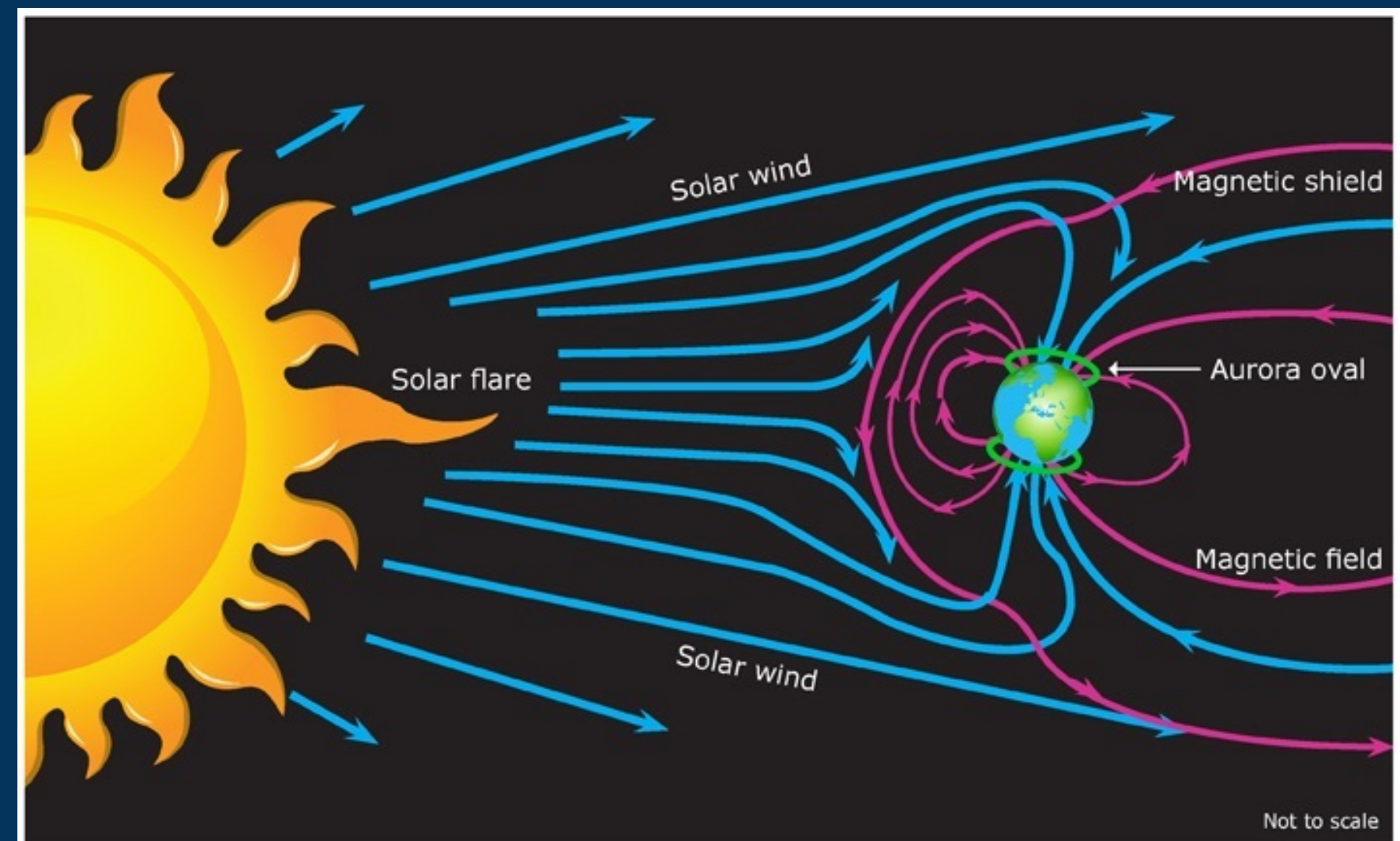


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# Solar winds



# NORTHERN LIGHTS

Colors







## **Green**

high concentrations of oxygen molecules (100 to 300 kilometers)



## **Red**

oxygen is less concentrated and excited at a higher frequency (300 to 400 km)



Violet      Bleu      Cyan      Vert      Jaune      Orange      Rouge

→

Petites longueurs d'ondes      Grandes longueurs d'ondes





## **Blue and Purple**

high solar activity  
solar particles collide with  
nitrogen ( 100km)



## **Pink and Yellow**

high solar activity  
mixture of red auroras with green  
or blue auroras.

# NORTHERN LIGHTS

Conclusion



# THANK YOU FOR LISTENING

SOURCES: SPACE.COM / WIKIPEDIA.US  
GOOGLE.IMAGE

