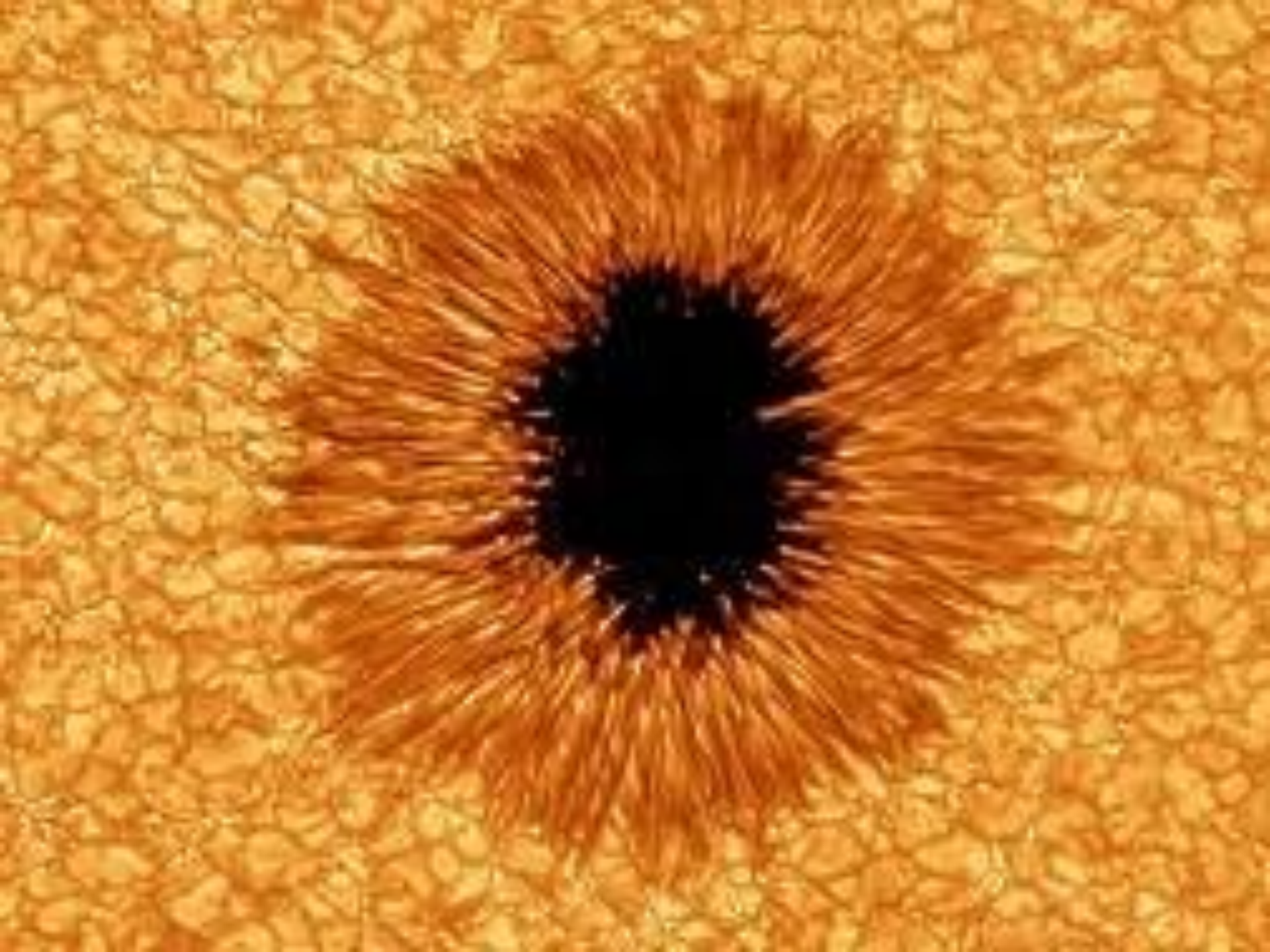


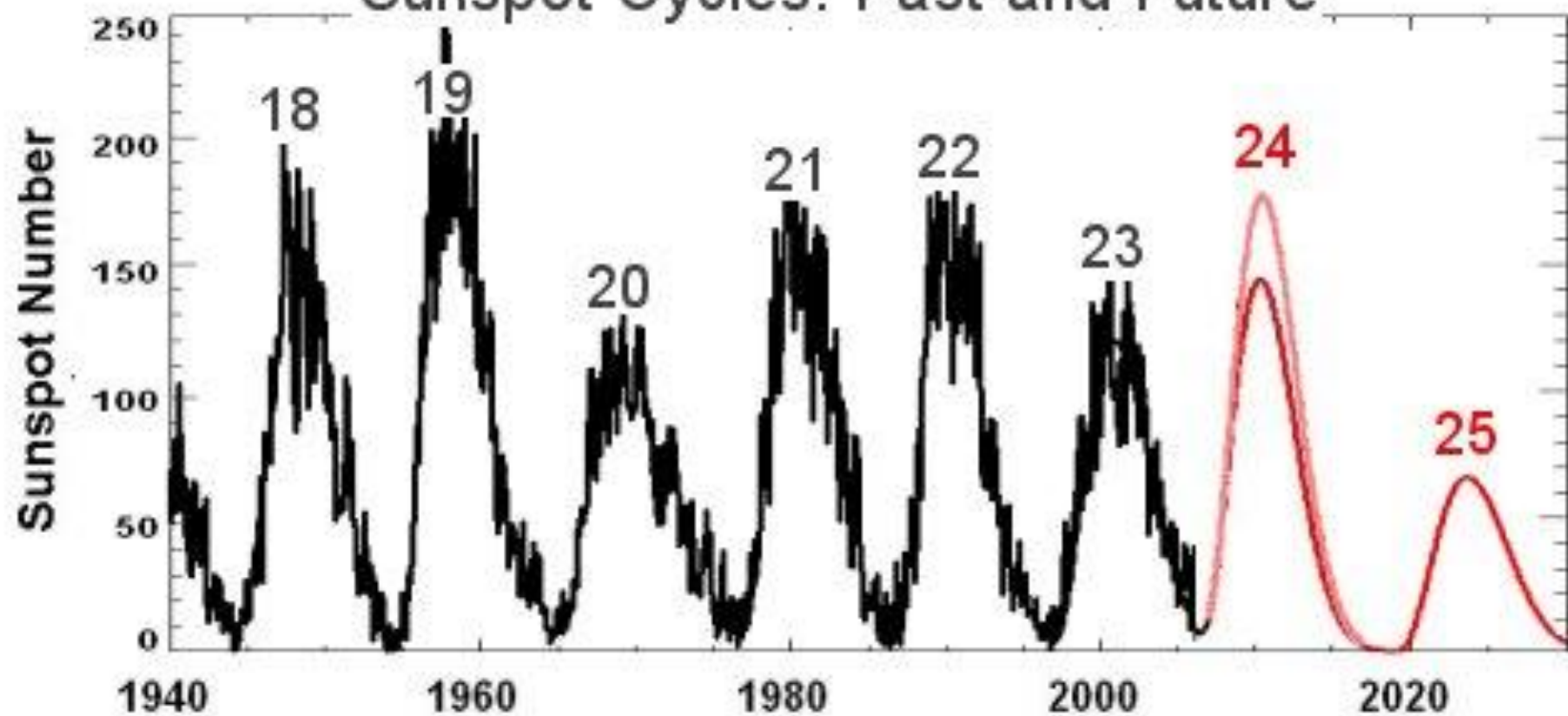
The  
inconsistent  
Sun

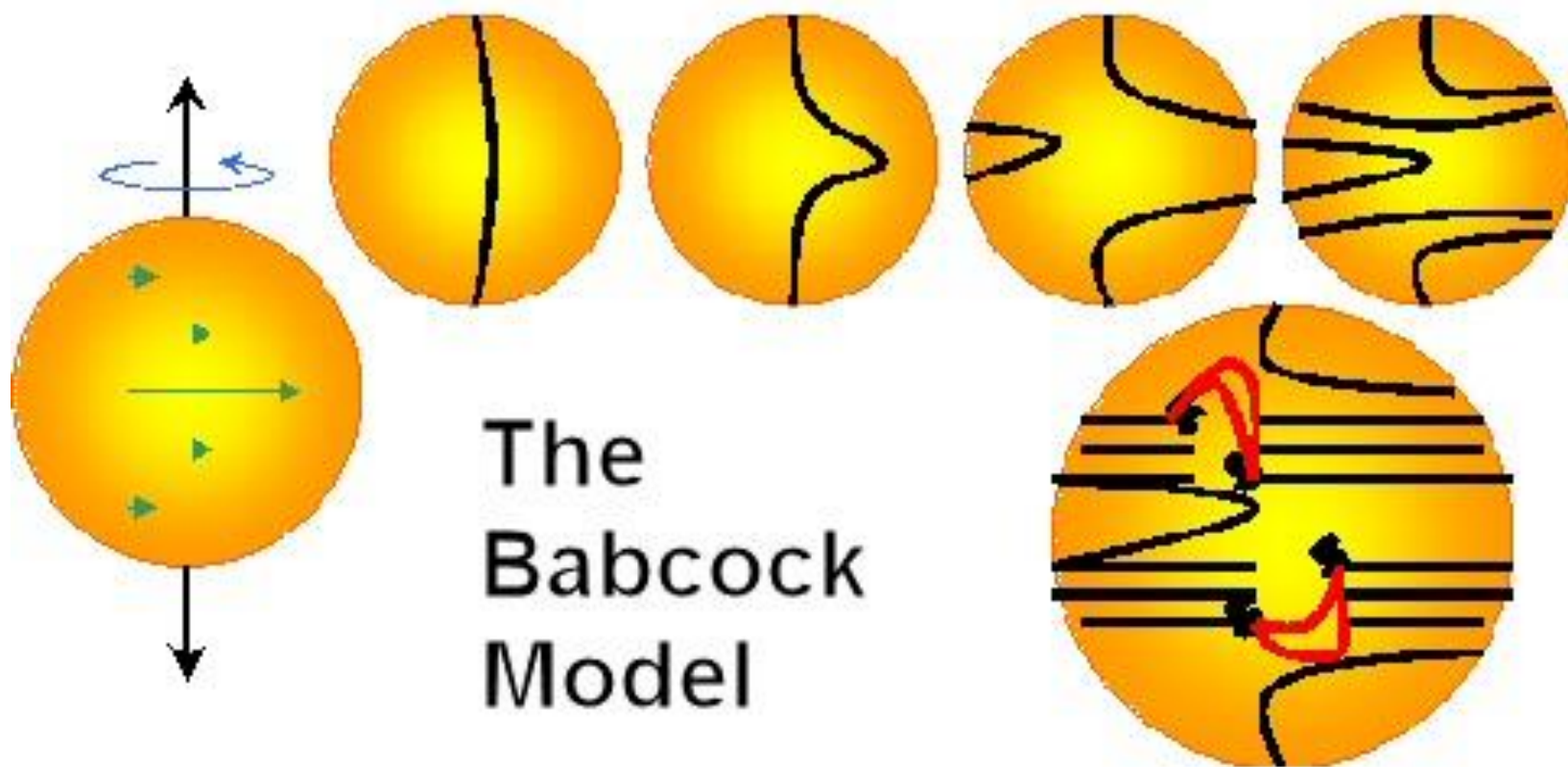






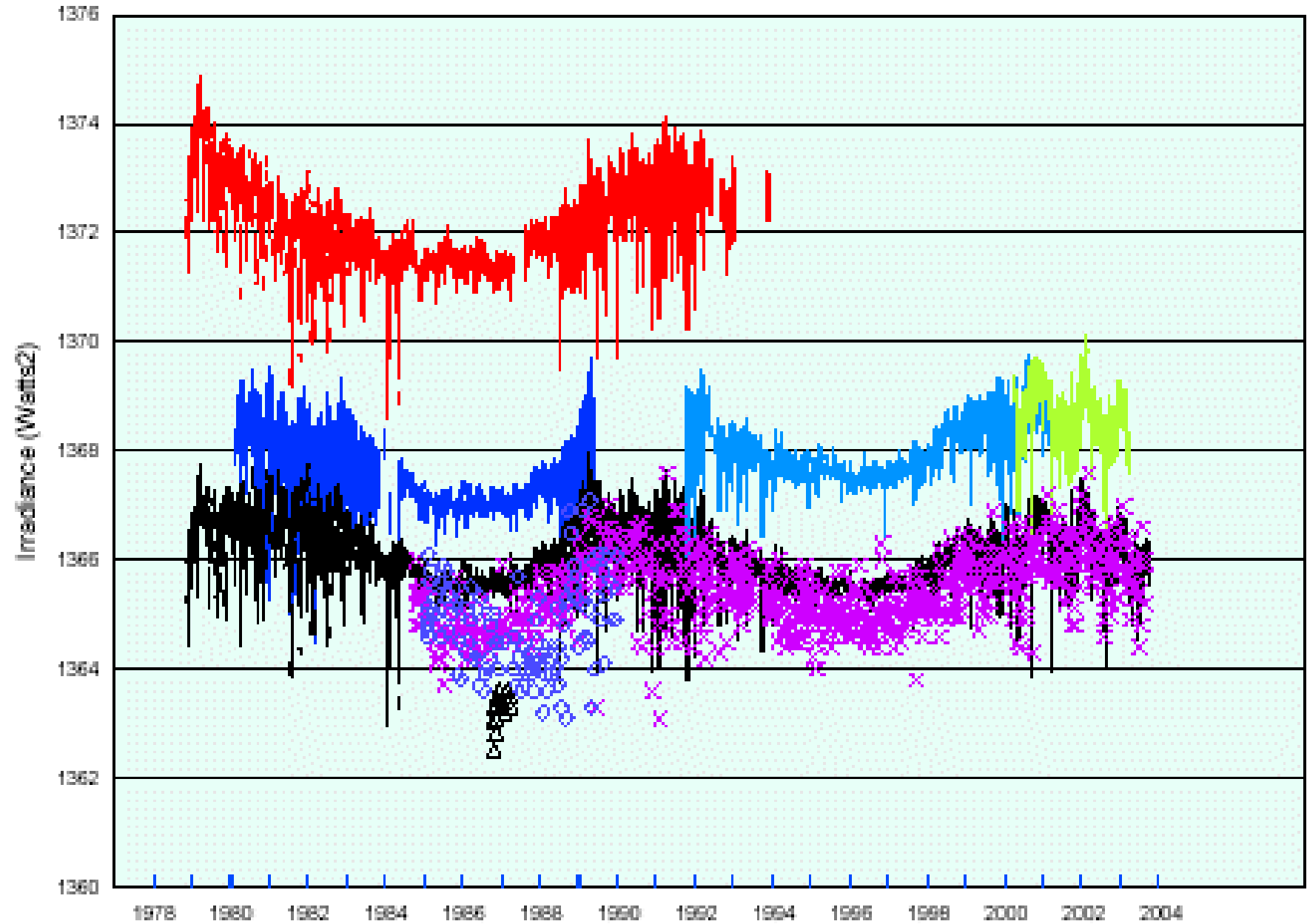
## Sunspot Cycles: Past and Future





The  
Babcock  
Model

# Total Solar Irradiance



Does  
it  
matter?







*"That's me, there"*

# Game addict kids hit by 'extinct' bone disease

By EMMA MORTON, Health and Science Editor

Published: 13 Nov 2010



[Add a comment \(43\)](#)



**CRIPPLING** bone disease rickets has made a comeback - because kids are staying indoors playing video games instead of playing in the sunshine.

The condition - rife in gloomy 19th-century slums but w

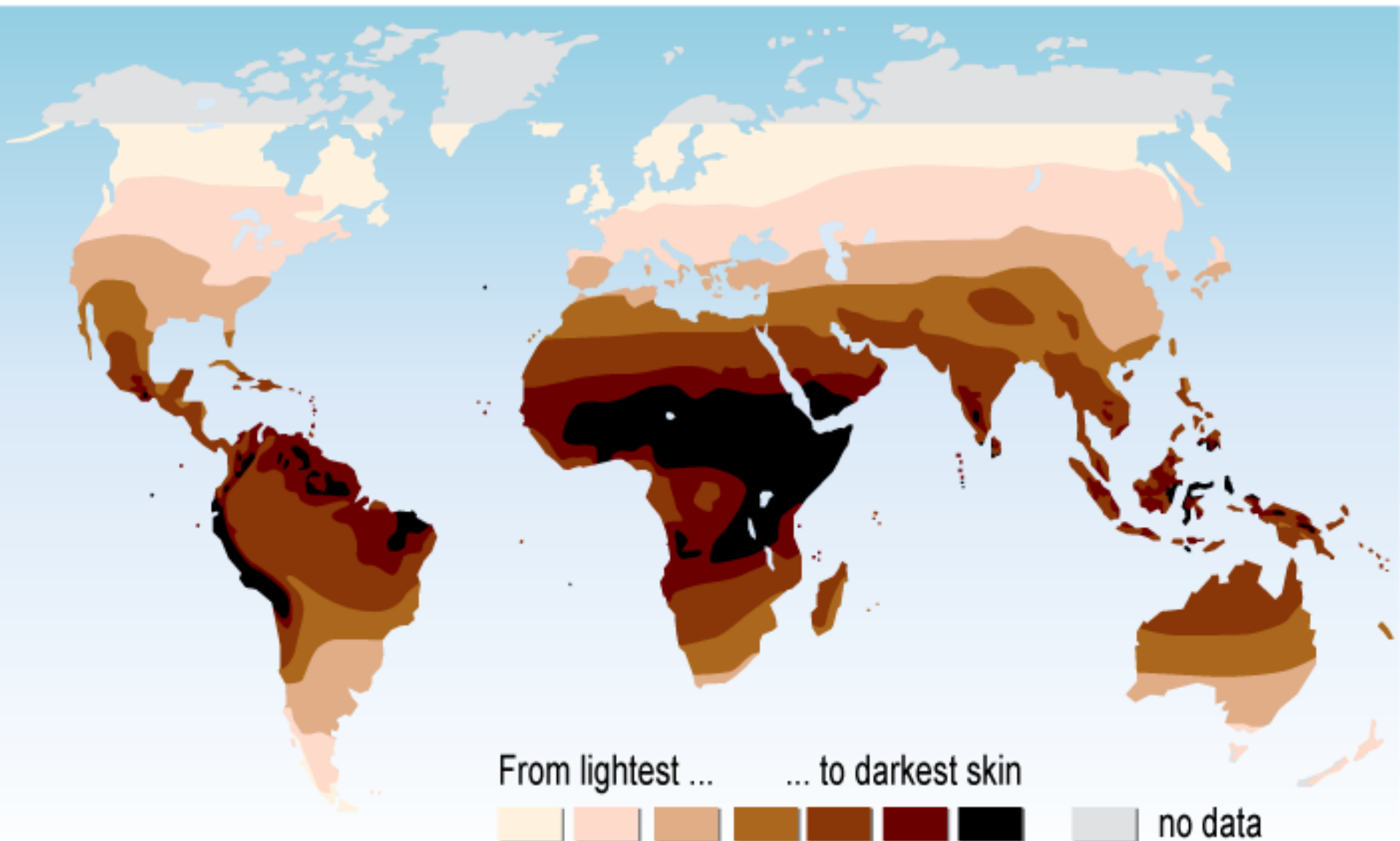






# Skin colour map for indigenous people

Predicted from multiple environmental factors

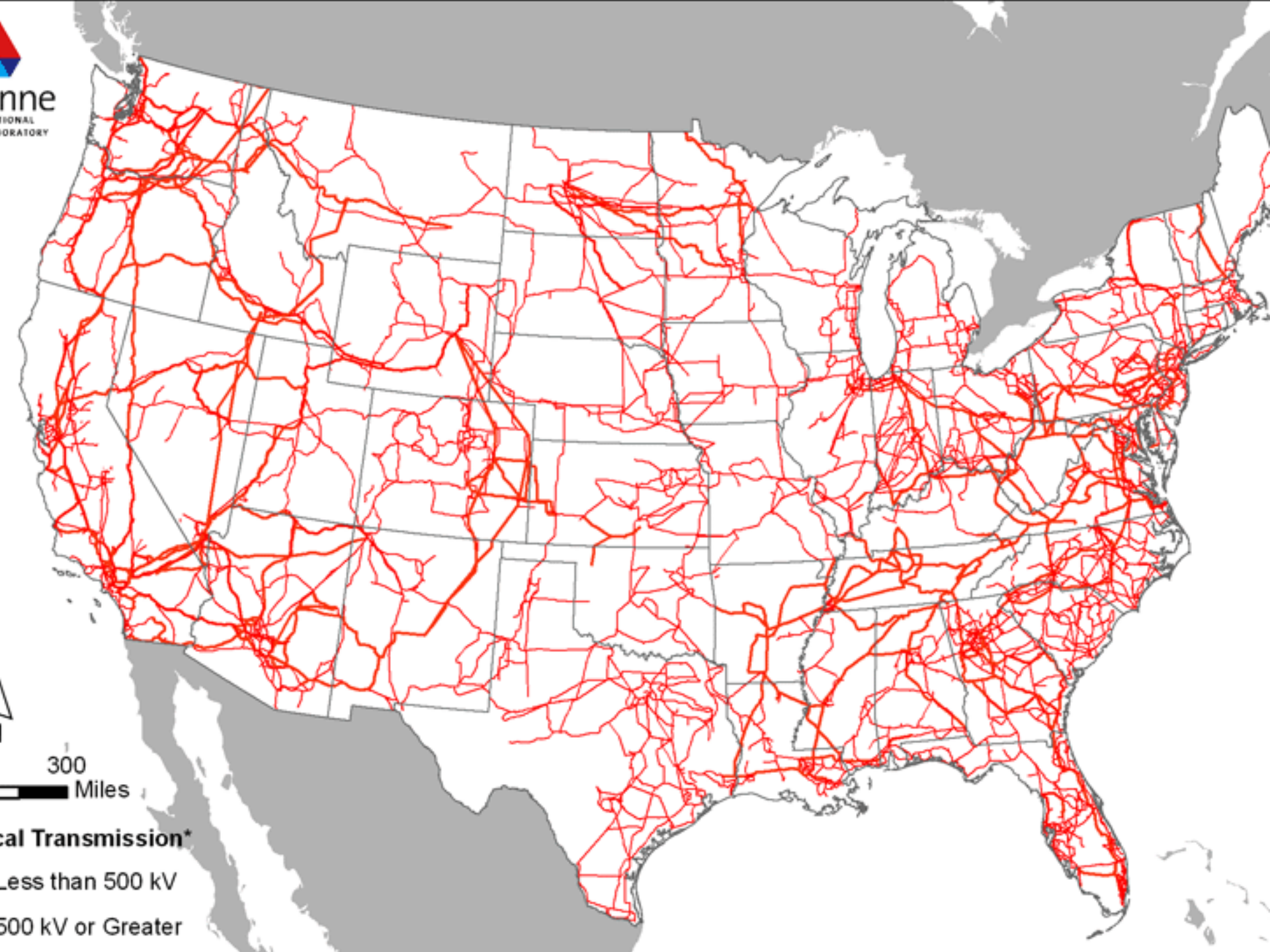












onne  
TIONAL  
ORATORY

300  
Miles

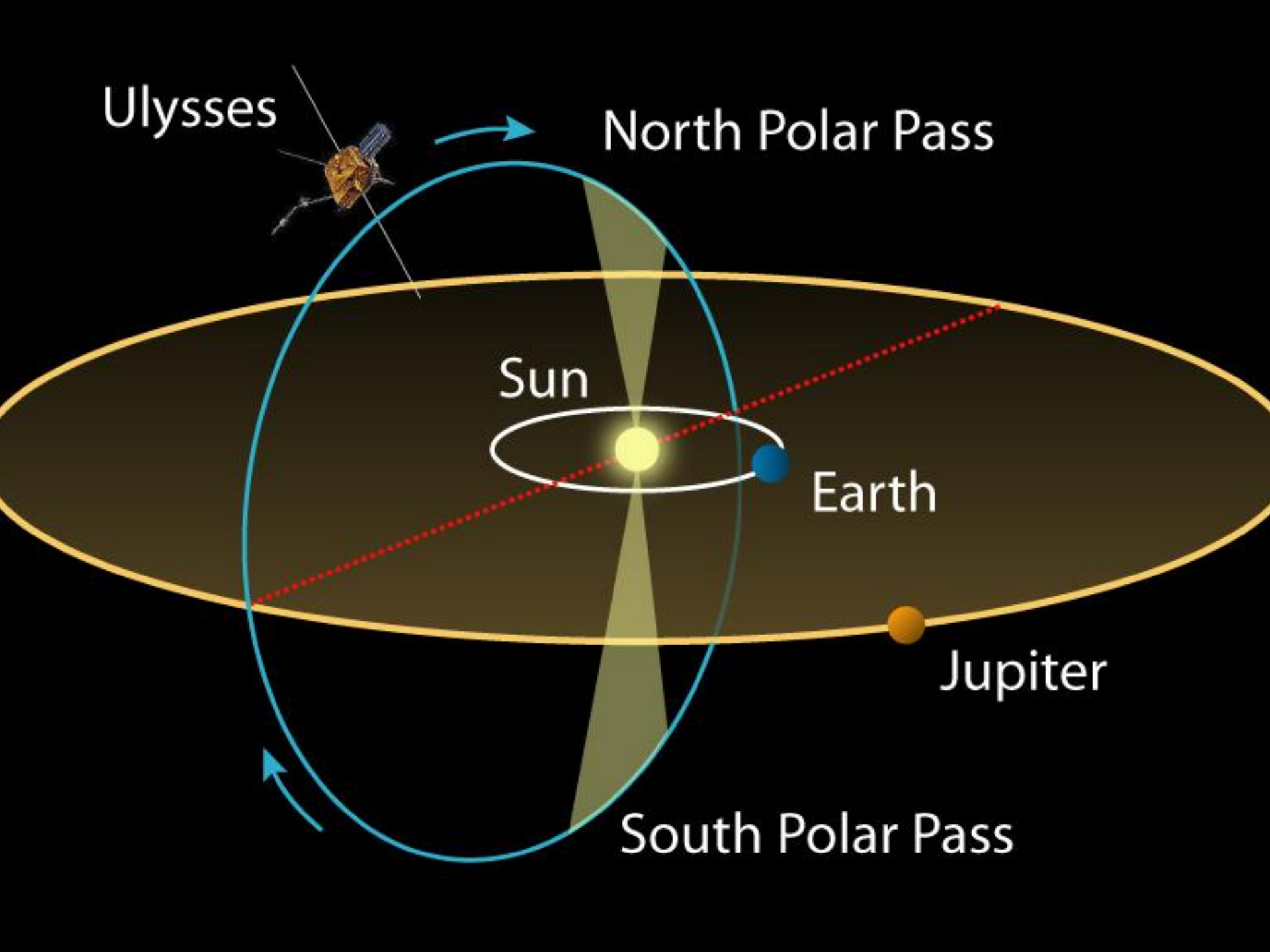
Electrical Transmission\*  
Less than 500 kV  
500 kV or Greater







What can  
we do  
about it?



Ulysses

North Polar Pass

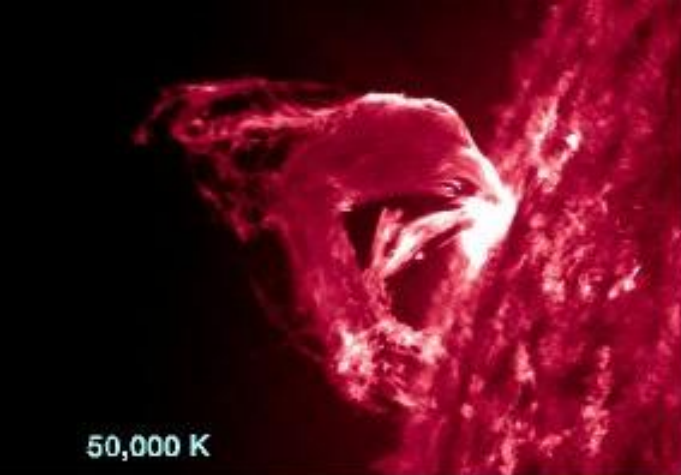
Sun

Earth

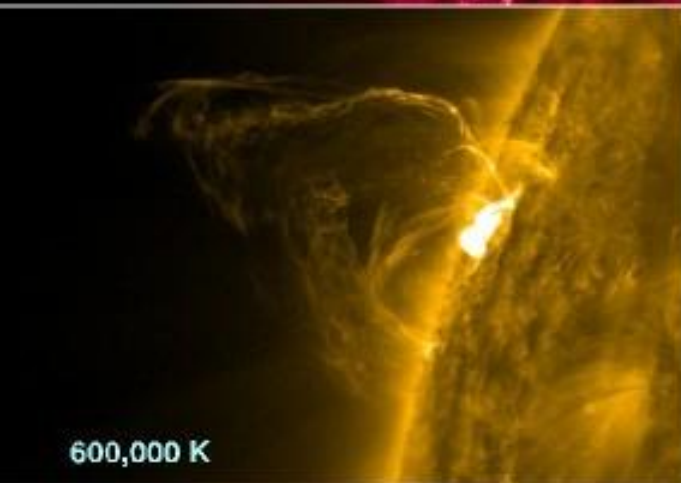
Jupiter

South Polar Pass

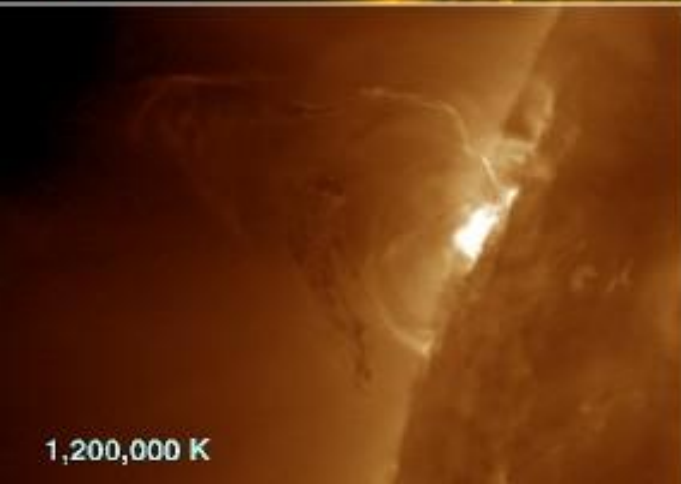




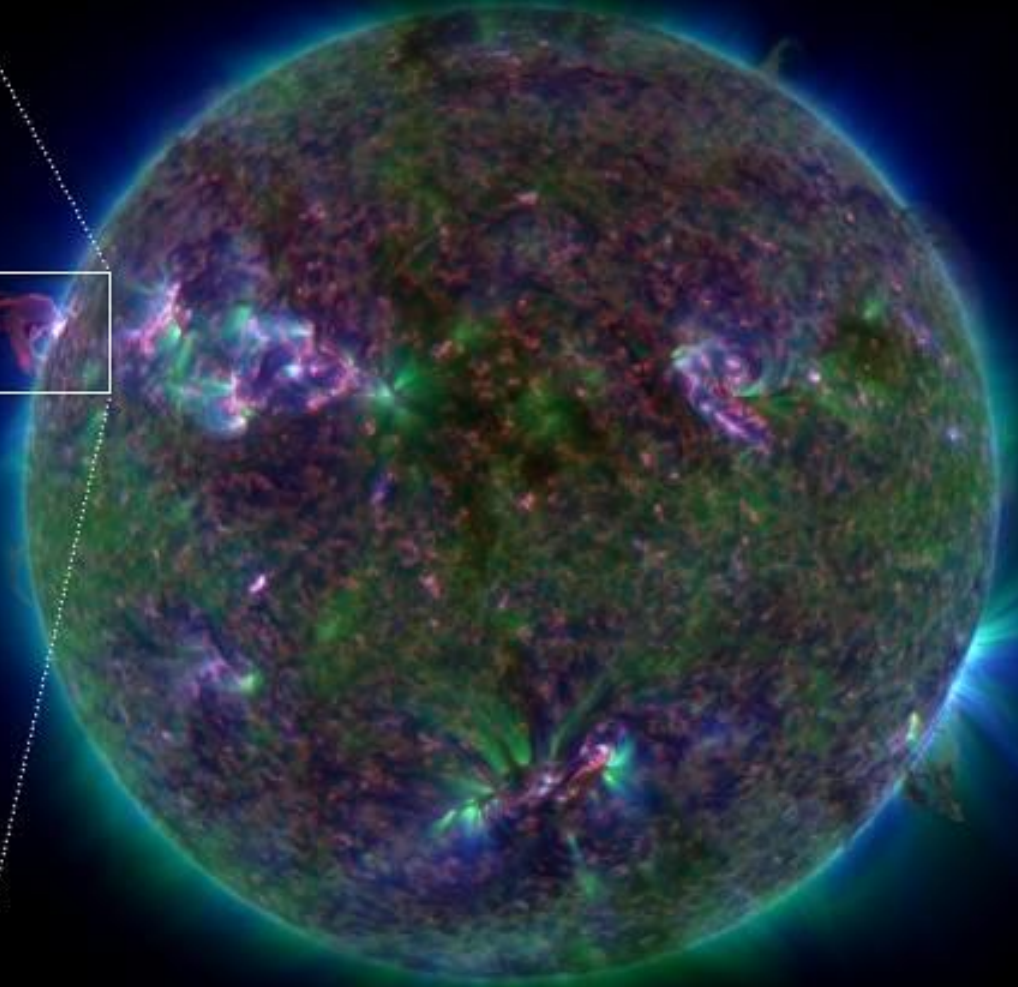
50,000 K



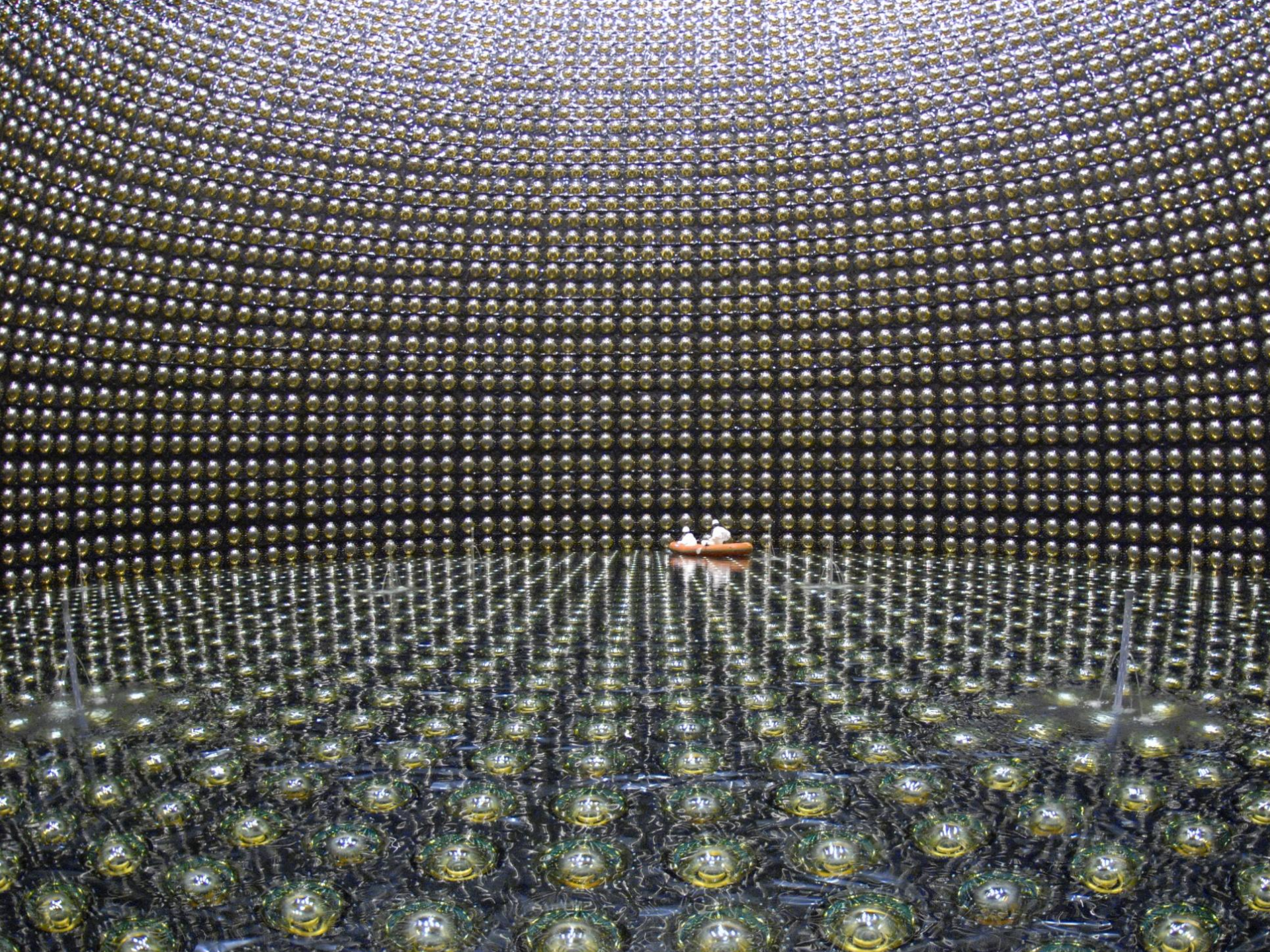
600,000 K

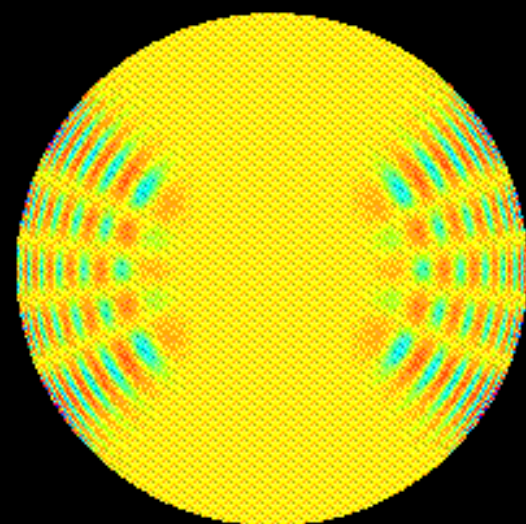
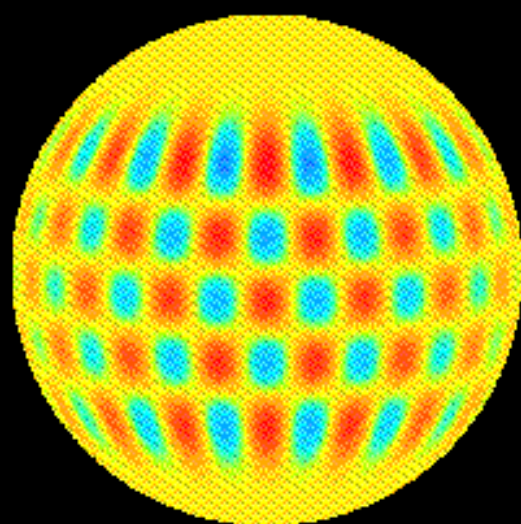
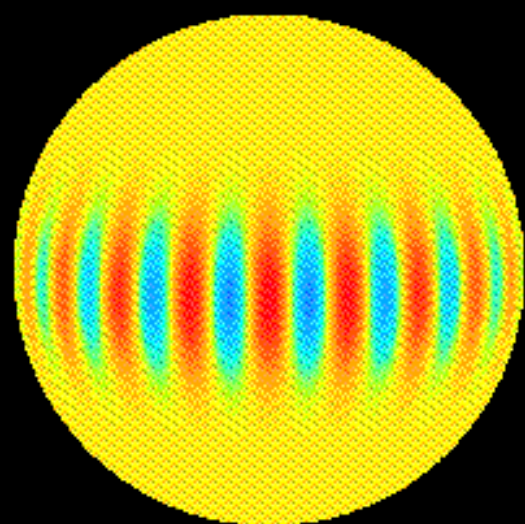


1,200,000 K



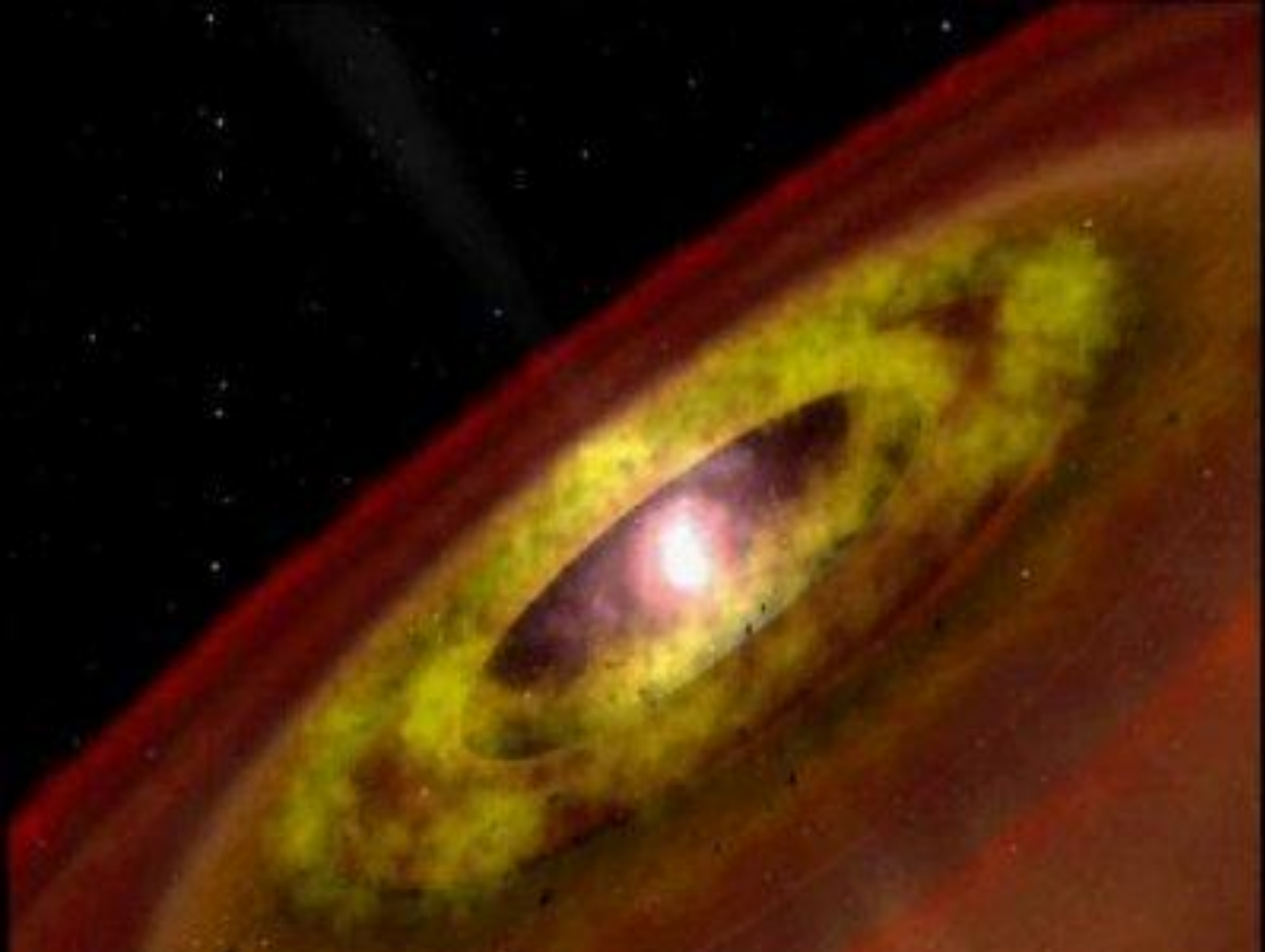
**Observing Solar Eruptions  
with the Solar Dynamics Observatory**



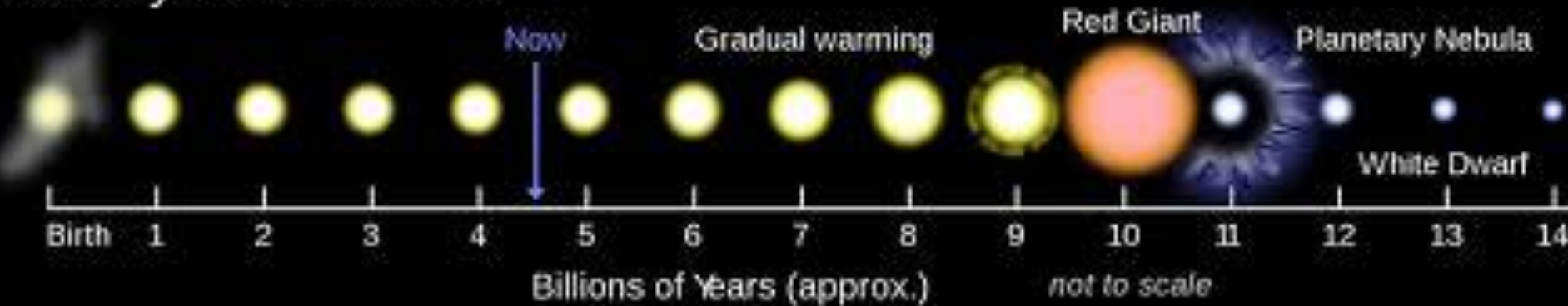








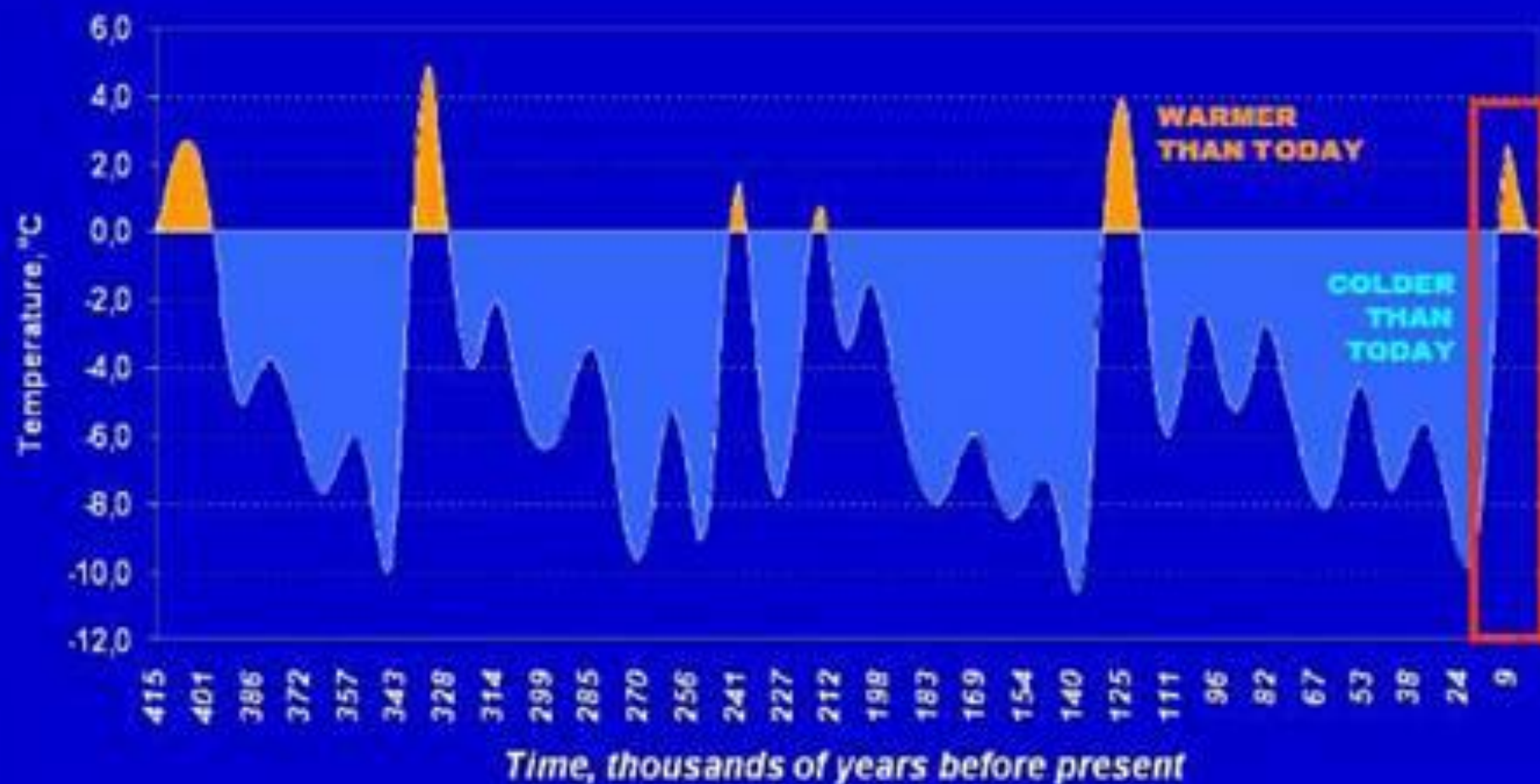
# Life Cycle of the Sun



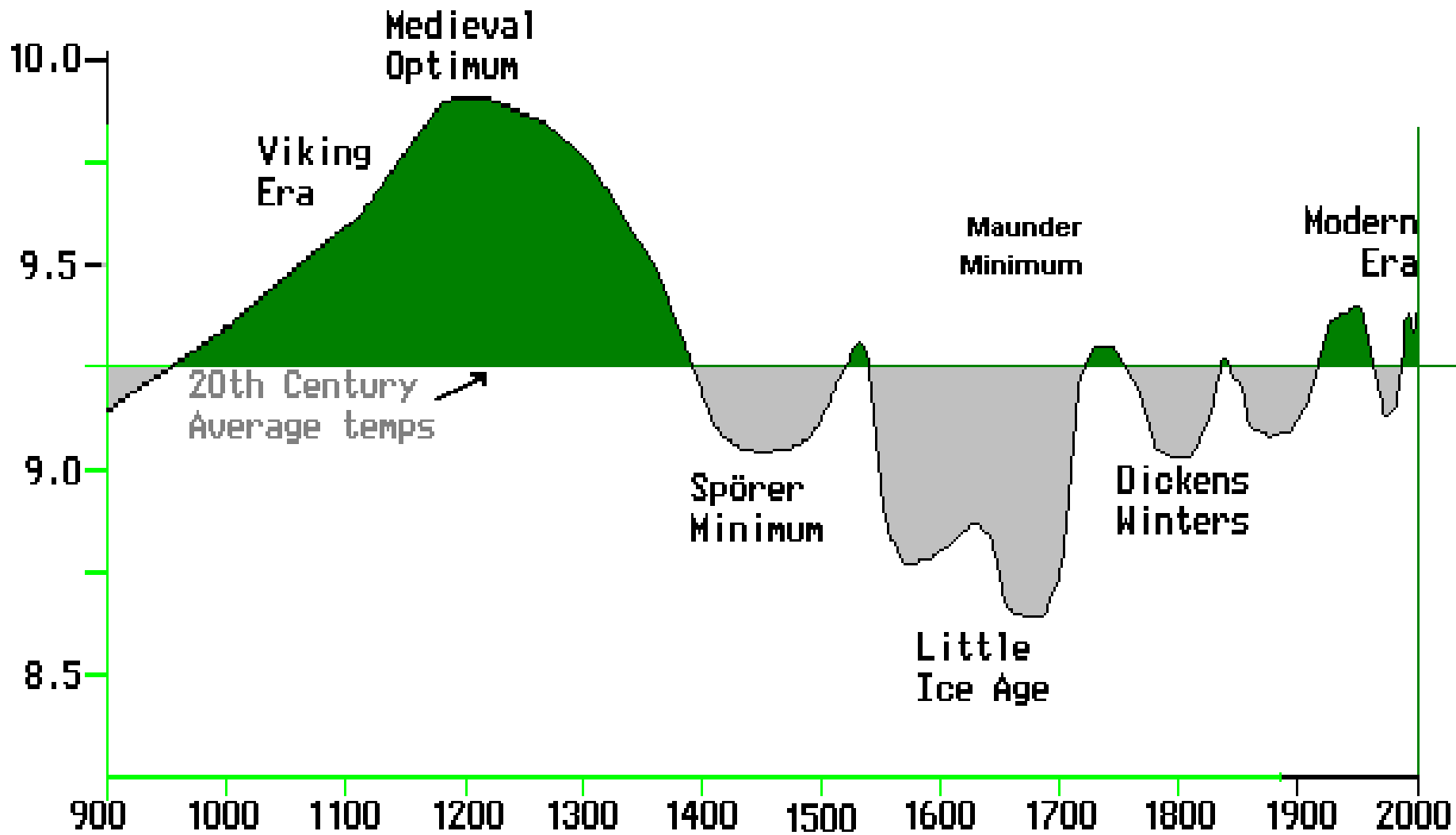




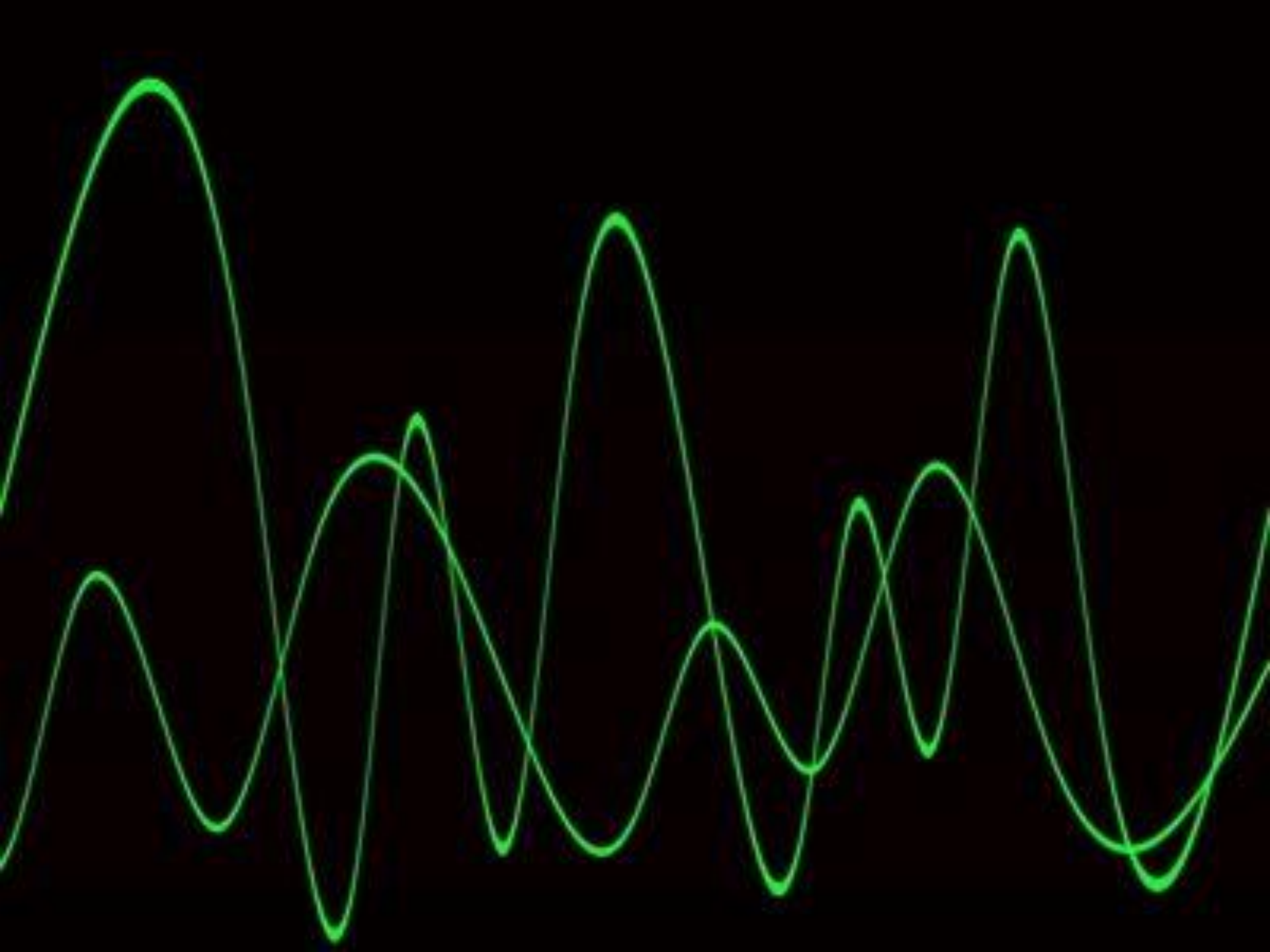
# Long-term climatic (Milankovitch) cycles over last 415 000 years from the Vostok ice core



Deg. C.







I II

*p*

III IV

*cresc.* *f* *dimin.*

V

*p* *cresc.* *f* *dimin.*