

The Nearest Star: Our Sun

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Tombaugh Observatory
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View Cancer to Fight Cancer



- The NMSU astronomy graduate students and faculty have formed a Relay for Life team to raise money for the American Cancer Society. The ACS funds cancer research and treatment.
- The astronomy graduate students will be walking all night during the Relay for Life Event on April 17.
- We are accepting voluntary donations tonight which all go **directly** to the ACS.

We welcome ...

- The Astronomical Society of Las Cruces
100 Hours of Astronomy



- Las Cruces Catholic School students



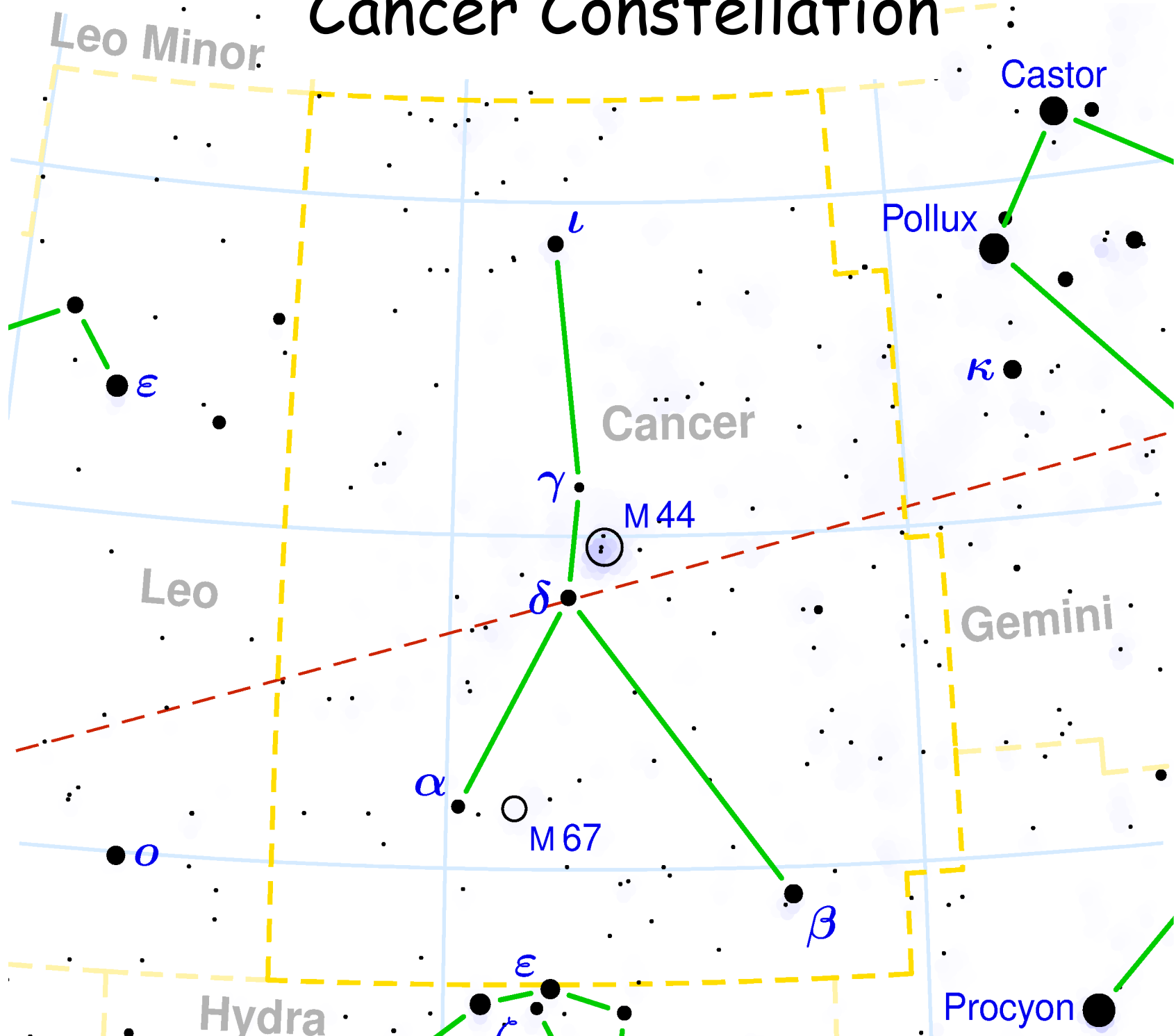
- *Gilead McGahee* from Alma d'Arte High School providing ambient music

- The citizens of Las Cruces!

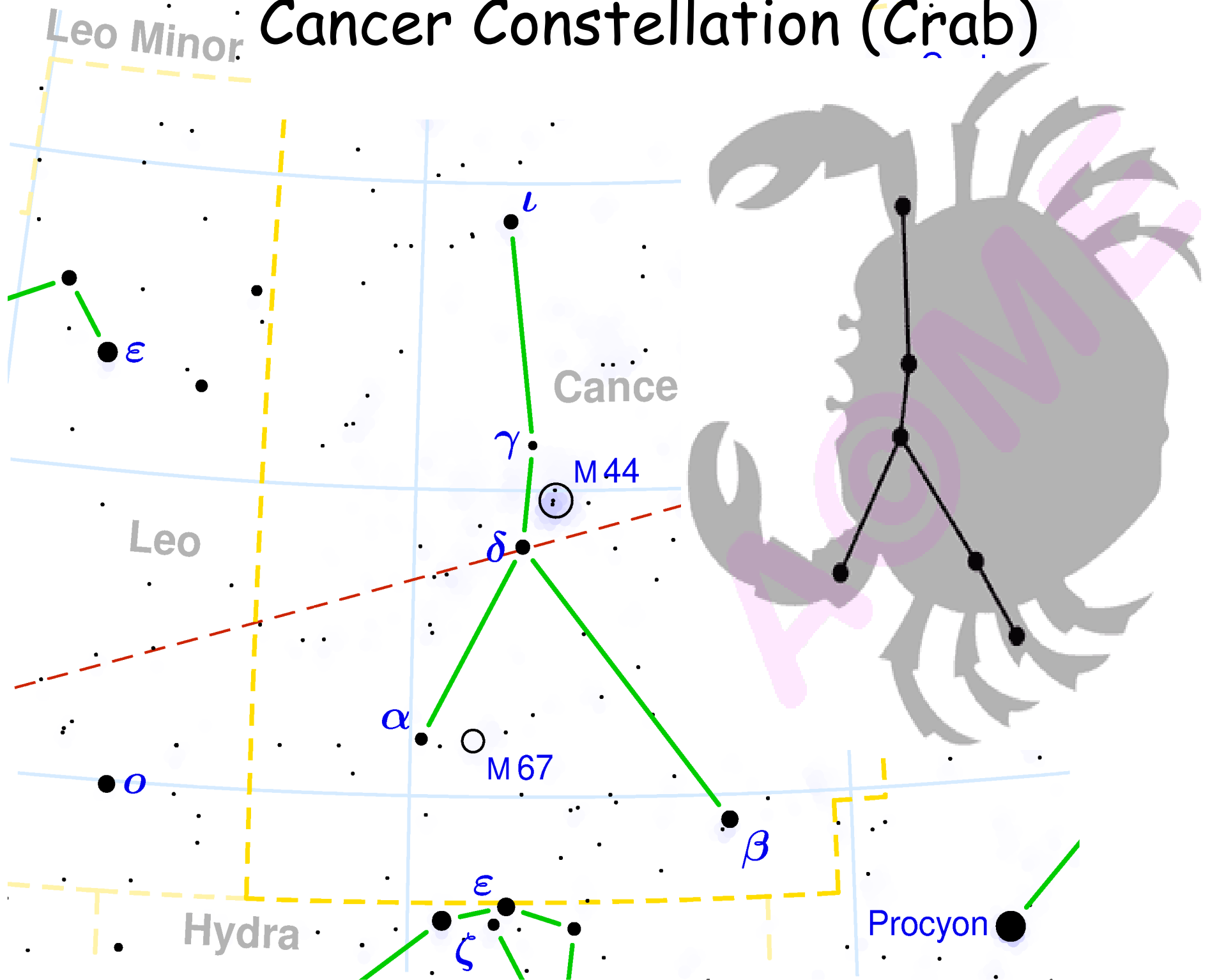
Objects to See Tonight

- The Moon - What phase is it in?
- Saturn
- Cancer Constellation - Iota Cancri binary star system [300]
- Open star clusters (M67 [3000], Beehive [600])
- Pleiades [400], another open cluster (Taurus)
- Orion Nebula [1000]

Cancer Constellation



Cancer Constellation (Crab)



Much of the light you'll see is coming from stars

What if we could see a star very close up?

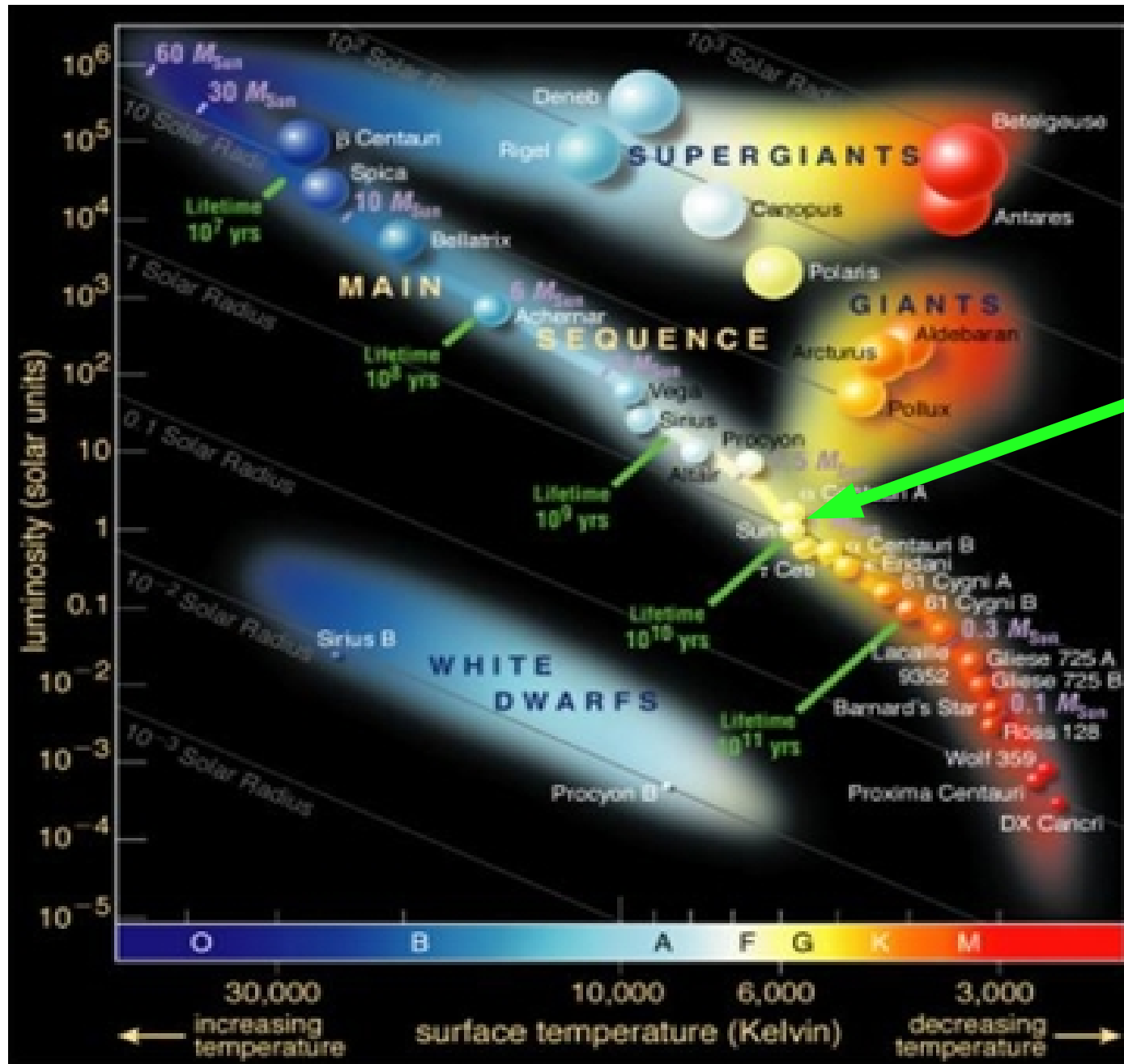
What might it look like?

The Sun

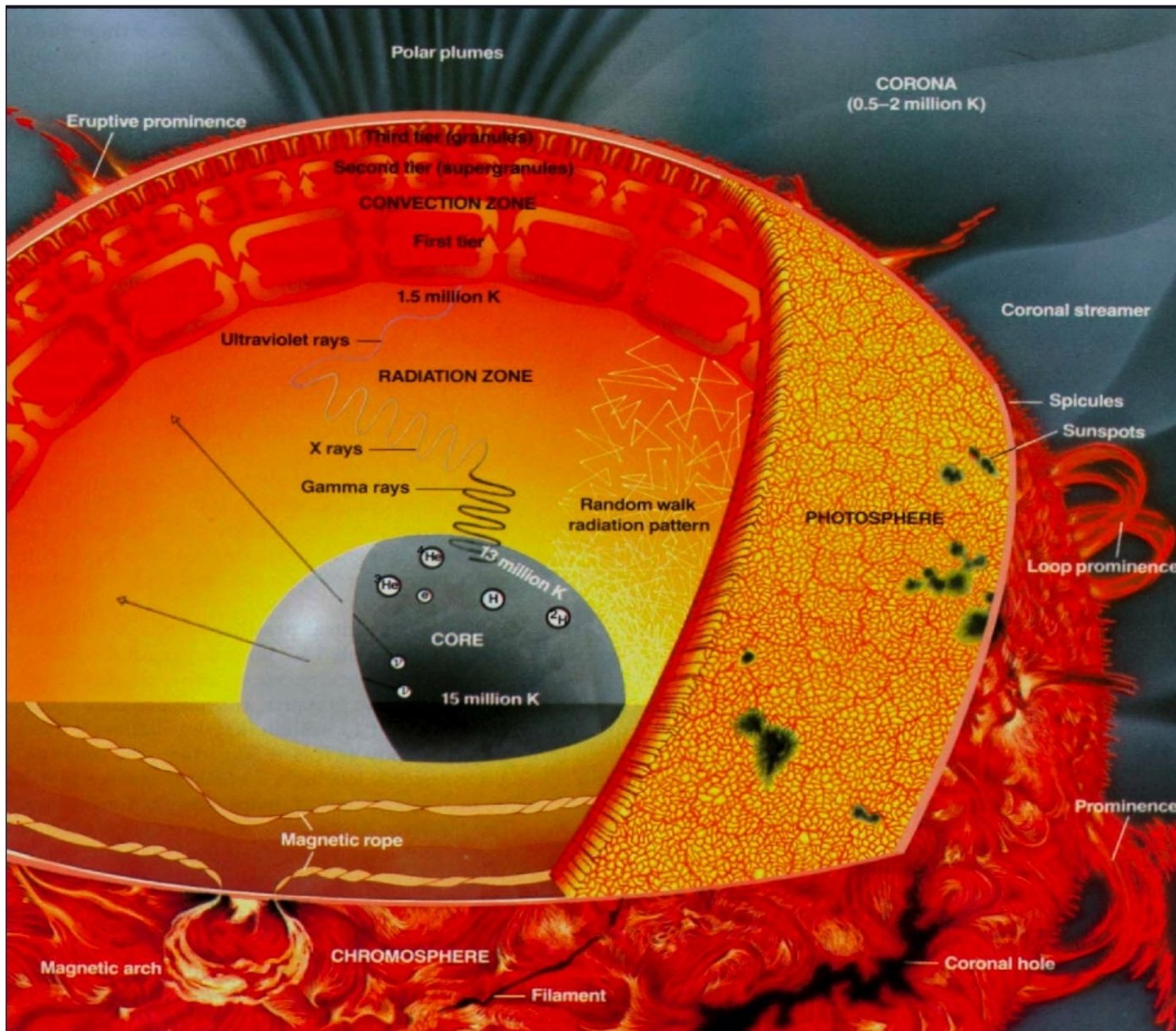
Where is the Sun now?



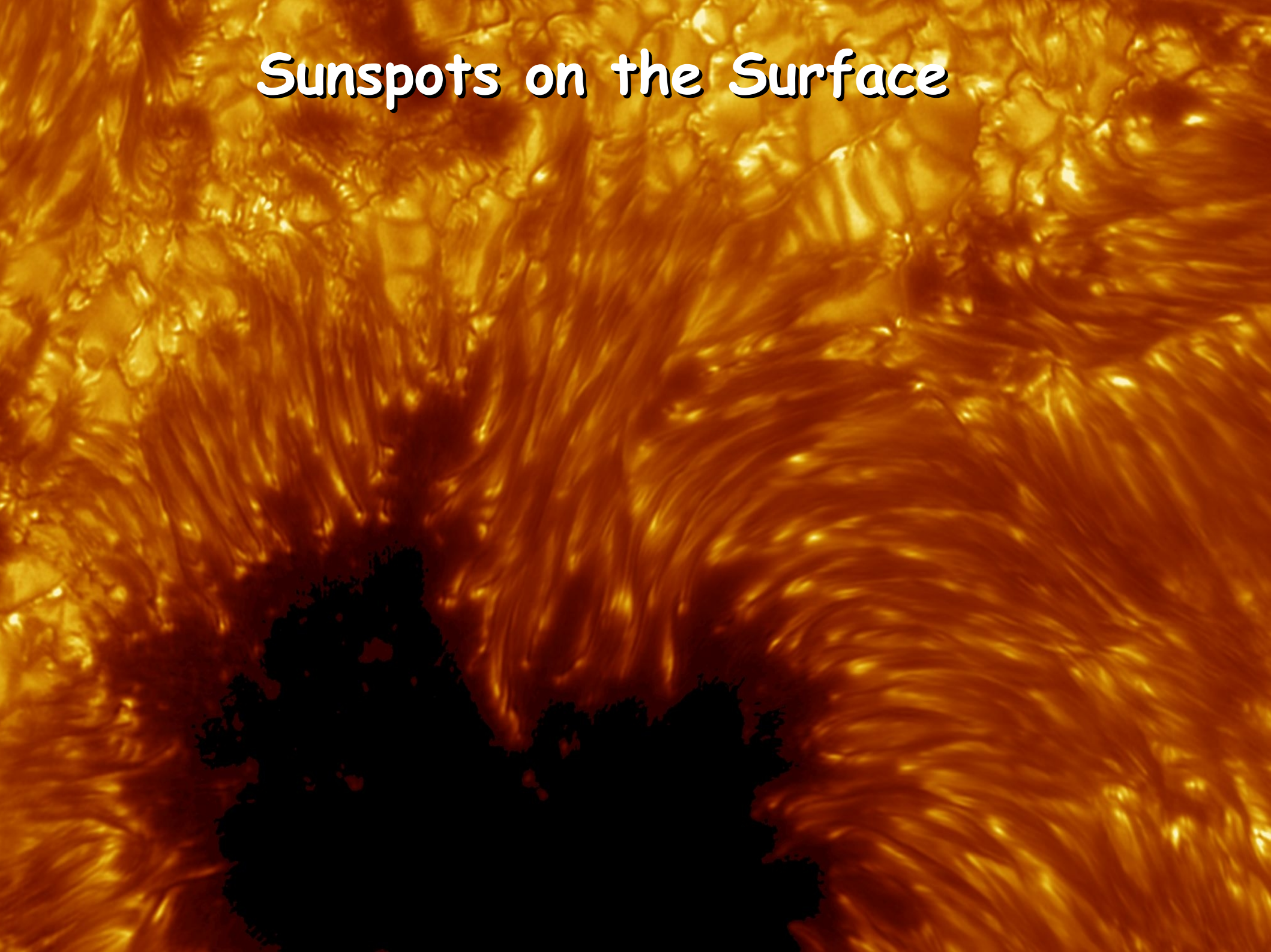
Is the Sun a Strange Star?



Let's look a bit closer at the Sun



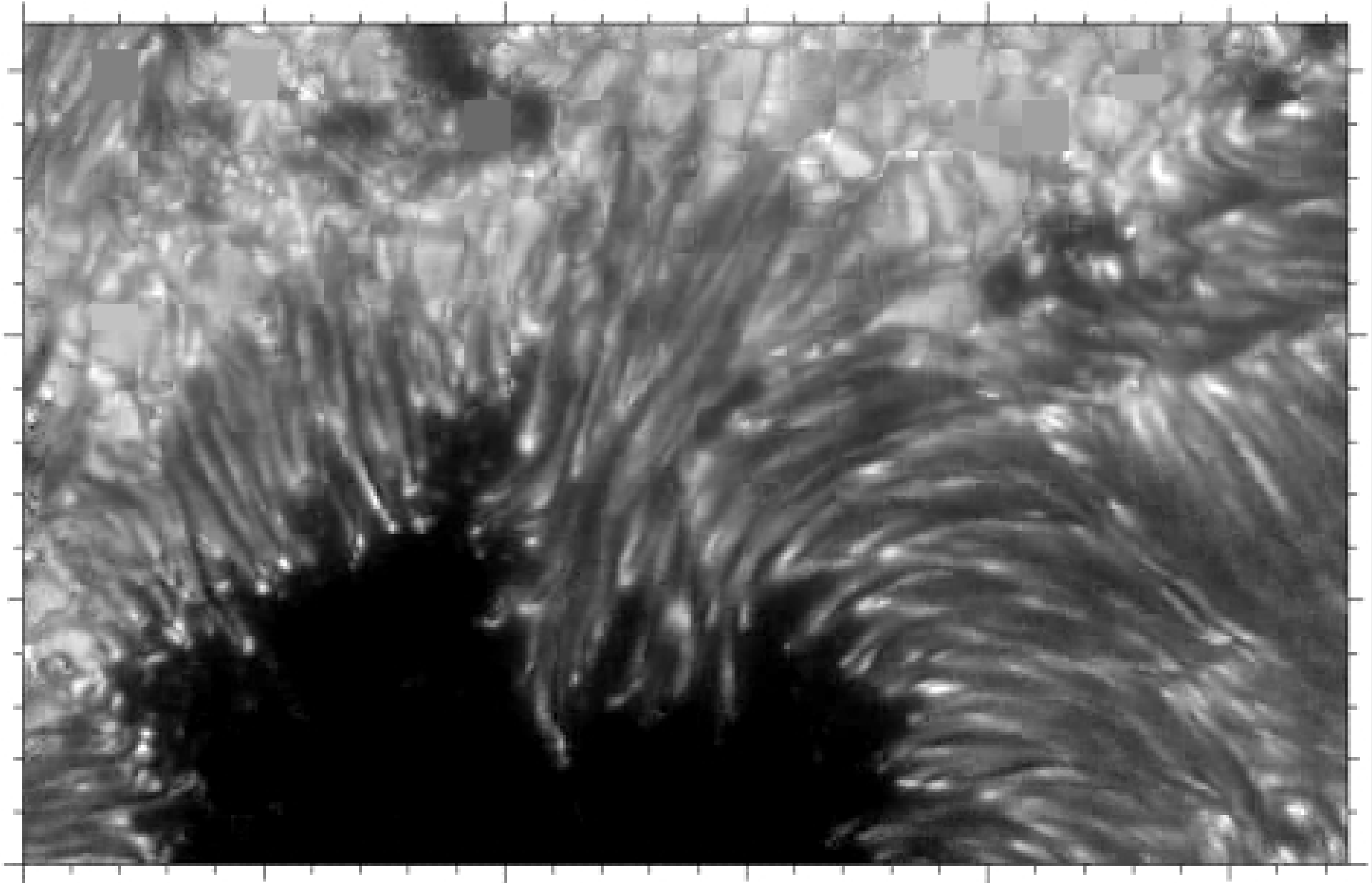
Sunspots on the Surface



Sunspot Evolution

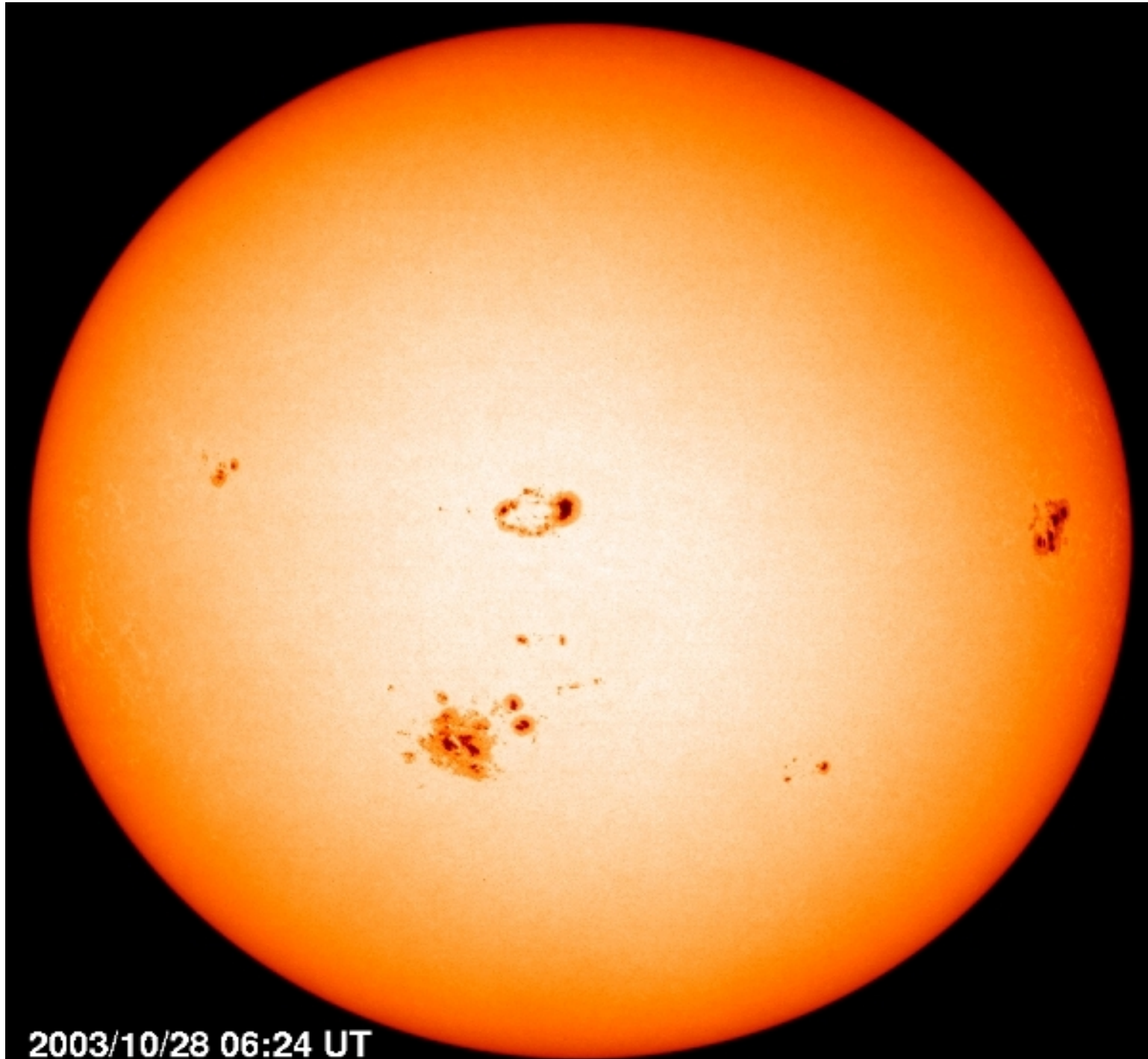
G-Band, 15 July 2002, Swedish 1-m solar telescope

00:17:18

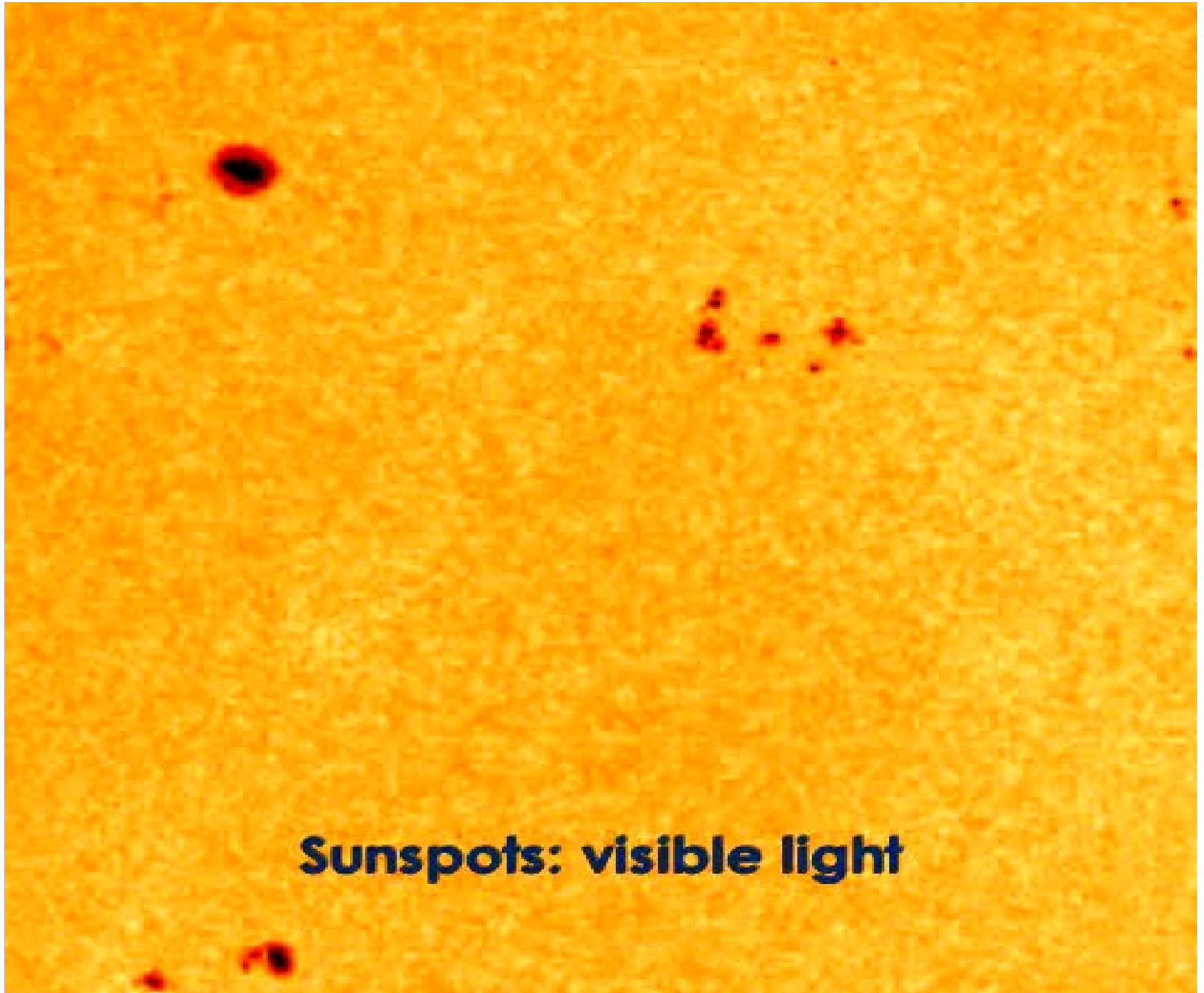


distance in units of 1000 kilometers

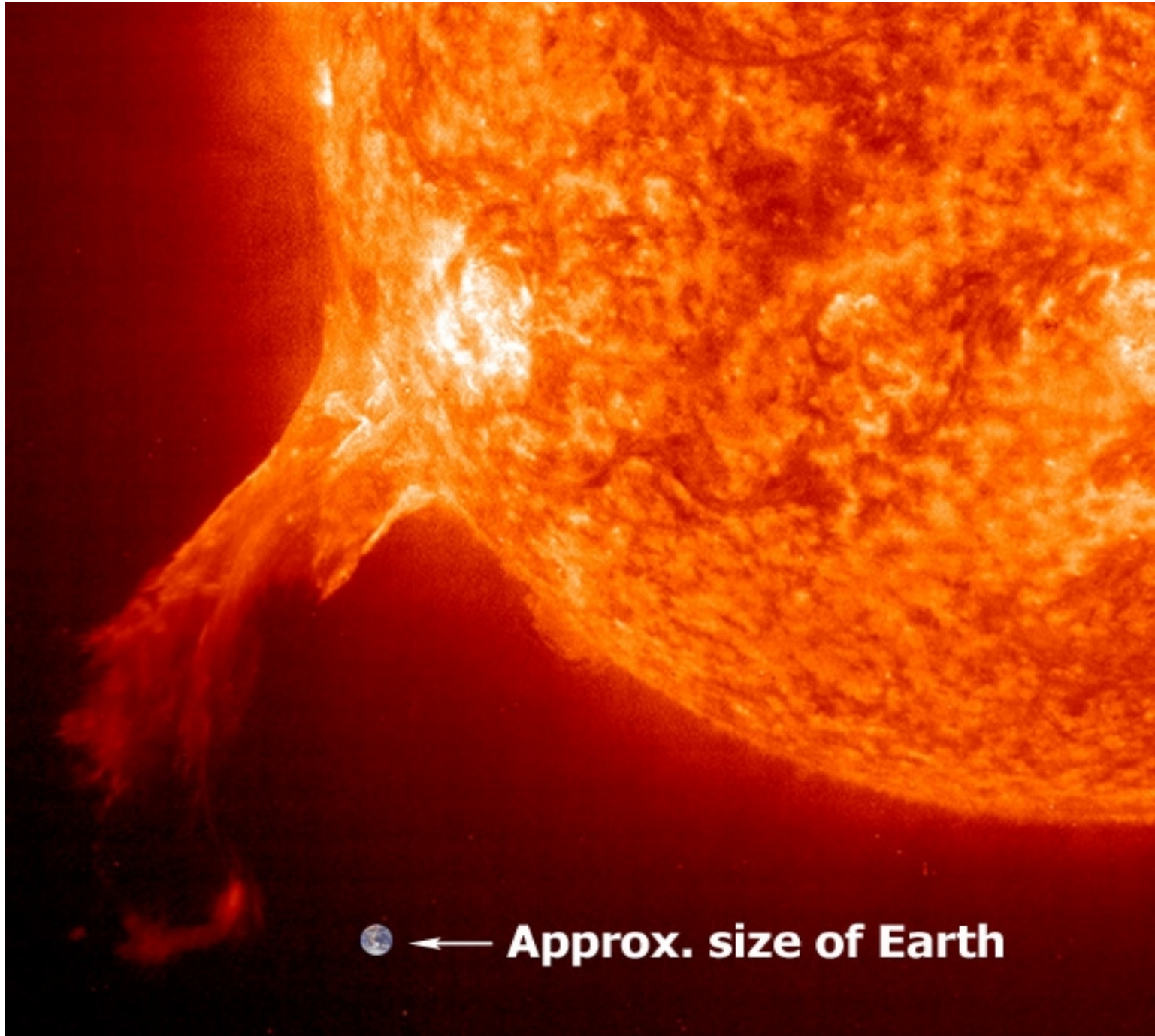
Standard view of the Sun with sunspots



View of the Sun in different "light"



The Sun, and most stars are BIG!

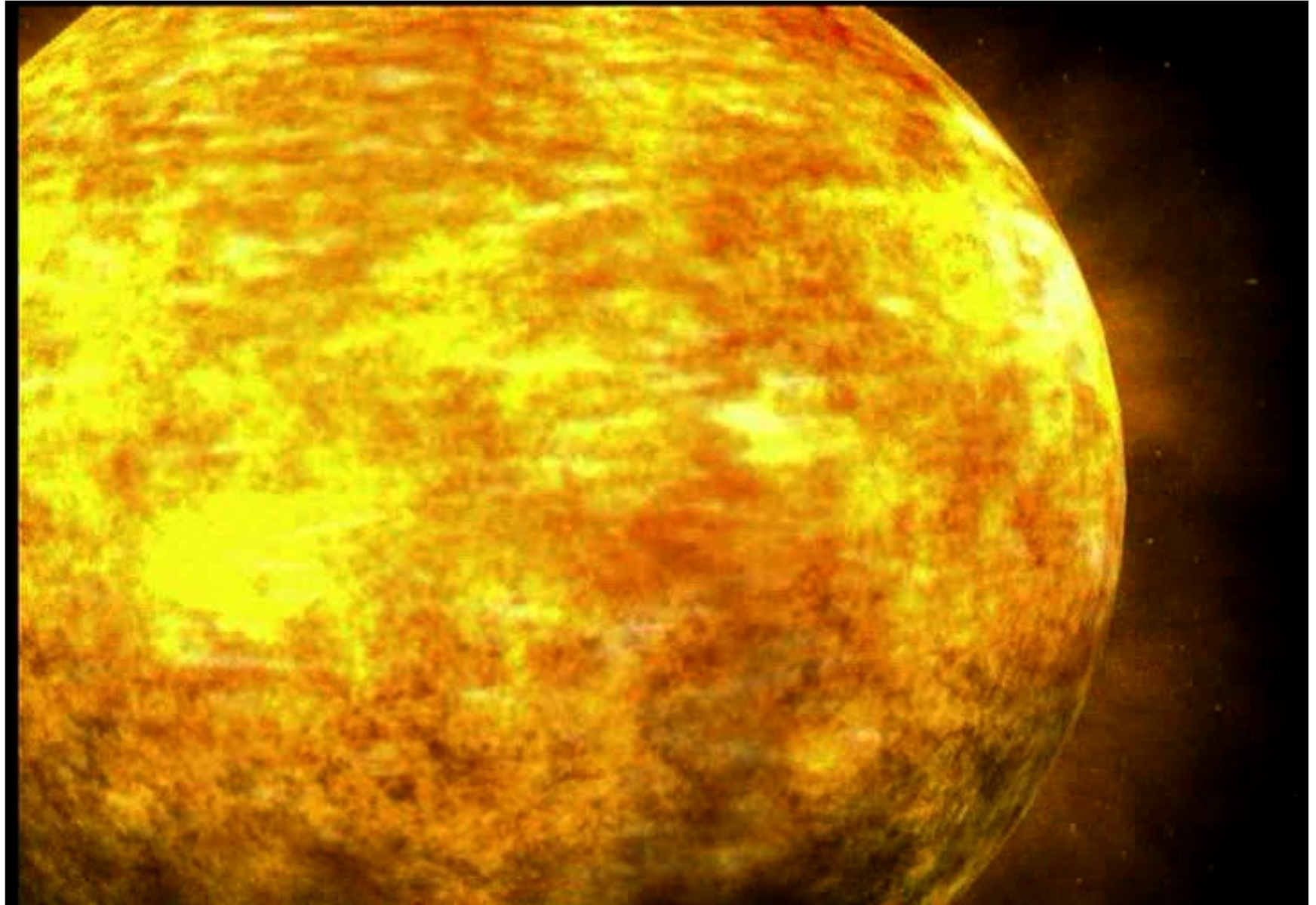


Why is the Sun interesting?

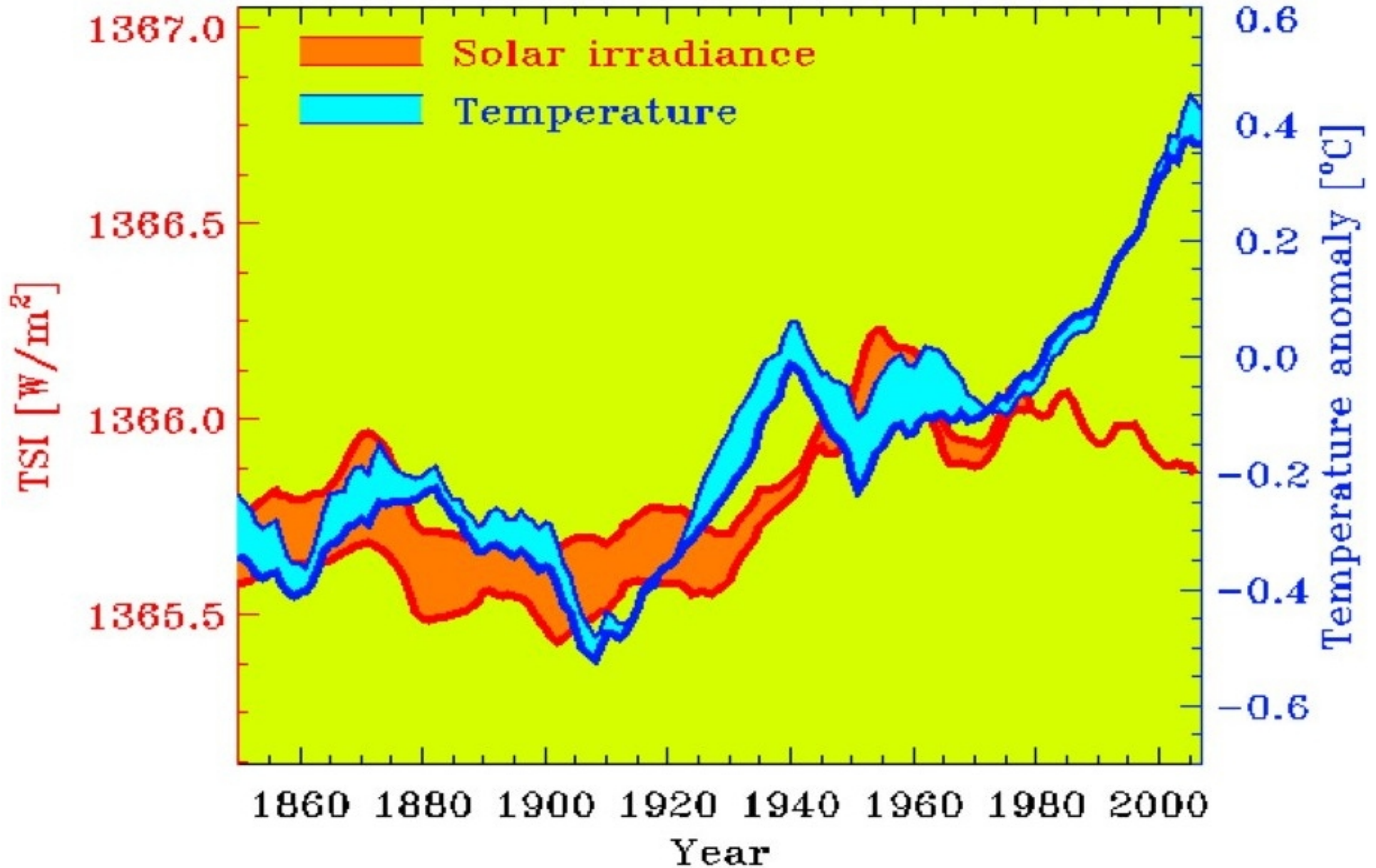
It affects Earth in so many ways!

- Keeps our planet warm
- Provides light for plants and animals
- Source of energy

Sometimes the Sun is violent



But it is not causing the planet to heat up more than usual!



It's likely that similar things occur in other planetary systems with stars just like our Sun.

Keep that in mind when you are observing other stars

Thank you and please enjoy the night sky!!

And the day sky tomorrow!