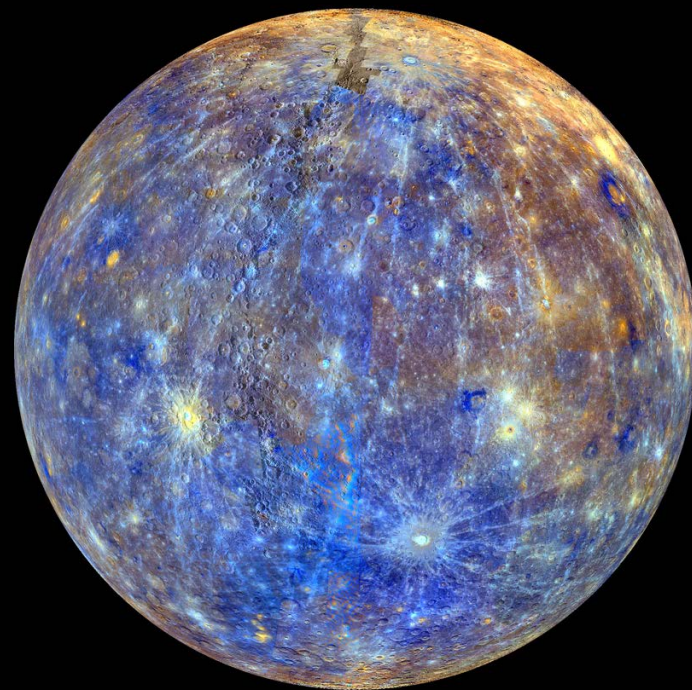


KS3: SPACE AND BEPICOLOMBO

MATERIAL PROVIDED BY THE SCHOOL OF PHYSICS AND ASTRONOMY
FOR MORE INFORMATION VISIT: [HTTPS://LE.AC.UK/BEPICOLOMBO](https://le.ac.uk/bepicolombo)

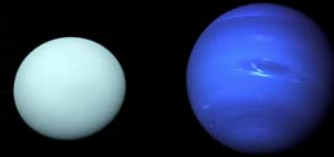
L



SPACE
&
BEPICOLOMBO

THERE ARE EIGHT PLANETS IN THE SOLAR SYSTEM (NOT TO SCALE)

HOW HOT DO YOU
THINK THE PLANETS
ARE?



WHICH PLANET DO WE
LIVE ON?

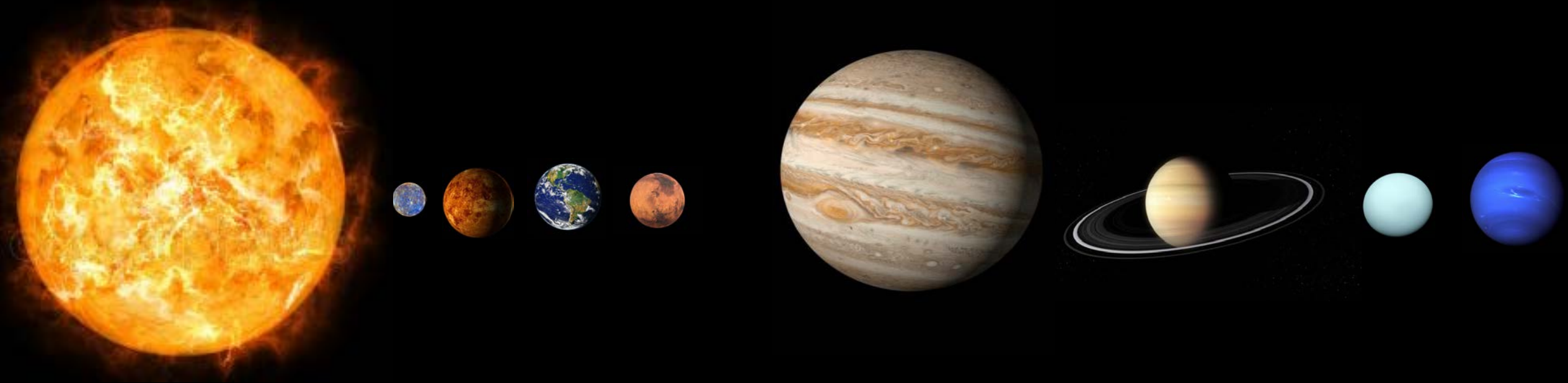
WHY DO WE EXPLORE
DIFFERENT PLANETS?

HOW LONG IS AN
EARTH YEAR?

WHAT ARE THE
DIFFERENCES IN HOW
THEY ALL LOOK?

THERE ARE EIGHT PLANETS IN THE SOLAR SYSTEM (NOT TO SCALE)

SUN



THERE ARE EIGHT PLANETS IN THE SOLAR SYSTEM (NOT TO SCALE)

SUN

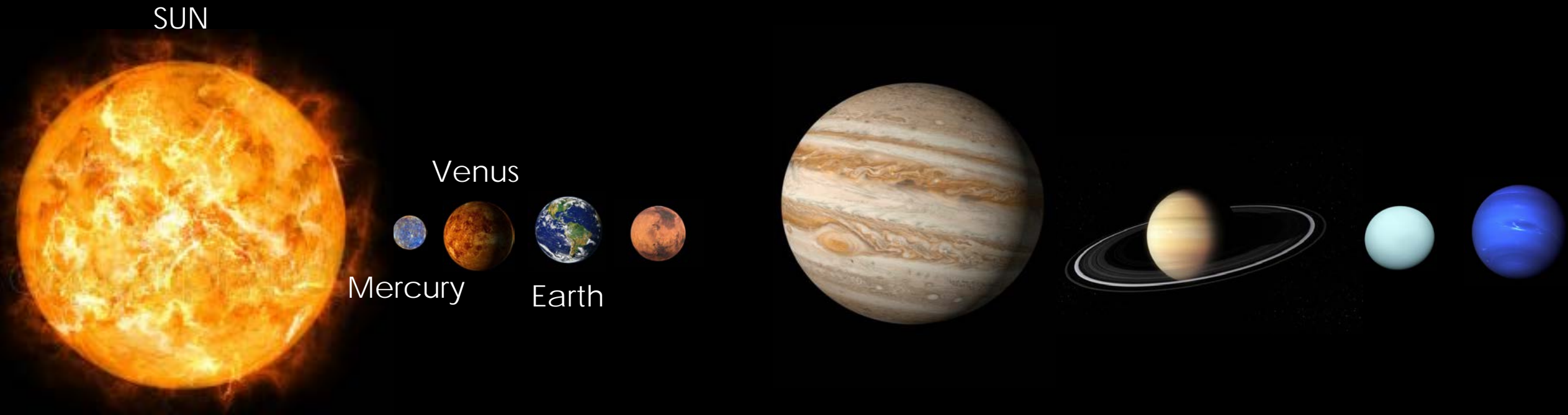


Mercury

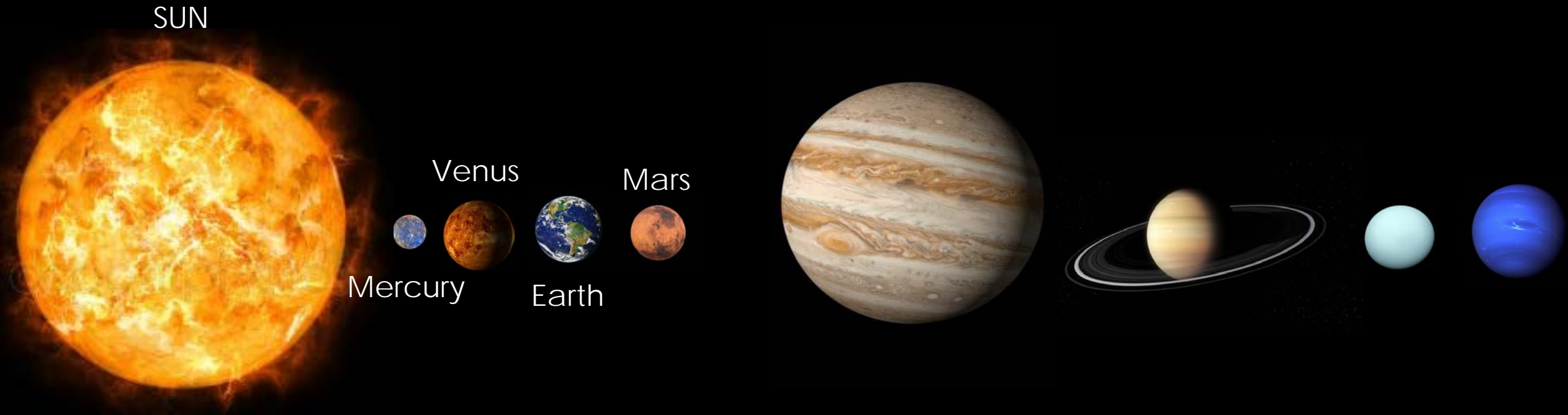
THERE ARE EIGHT PLANETS IN THE SOLAR SYSTEM (NOT TO SCALE)



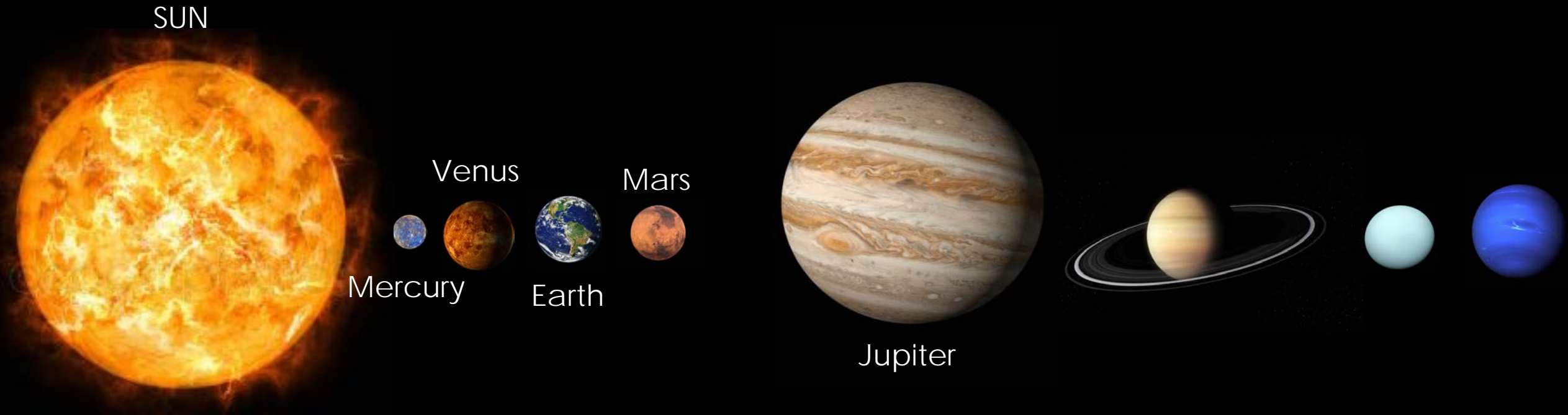
THERE ARE EIGHT PLANETS IN THE SOLAR SYSTEM (NOT TO SCALE)



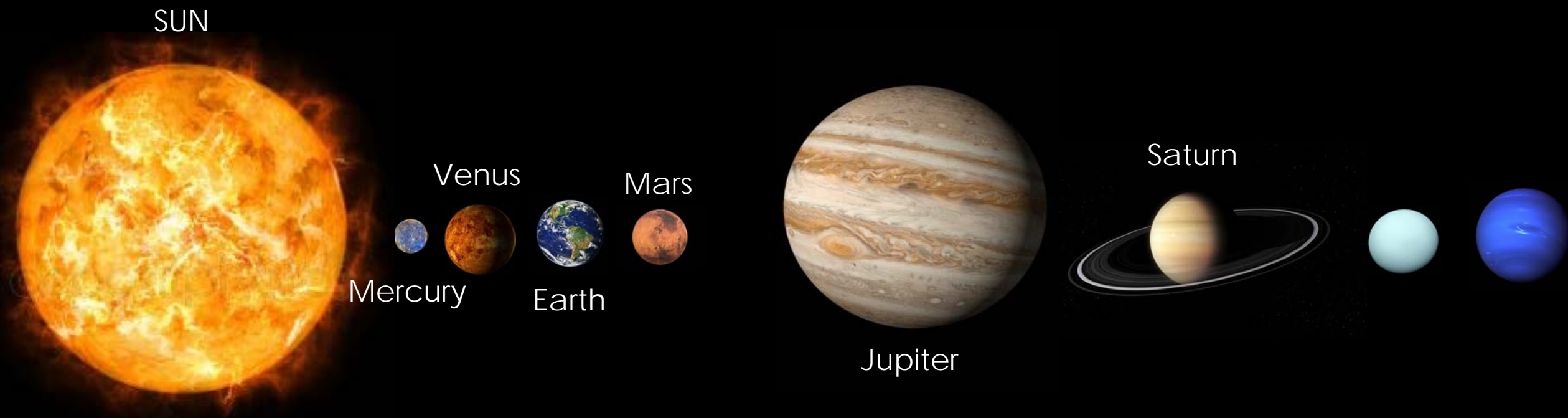
THERE ARE EIGHT PLANETS IN THE SOLAR SYSTEM (NOT TO SCALE)



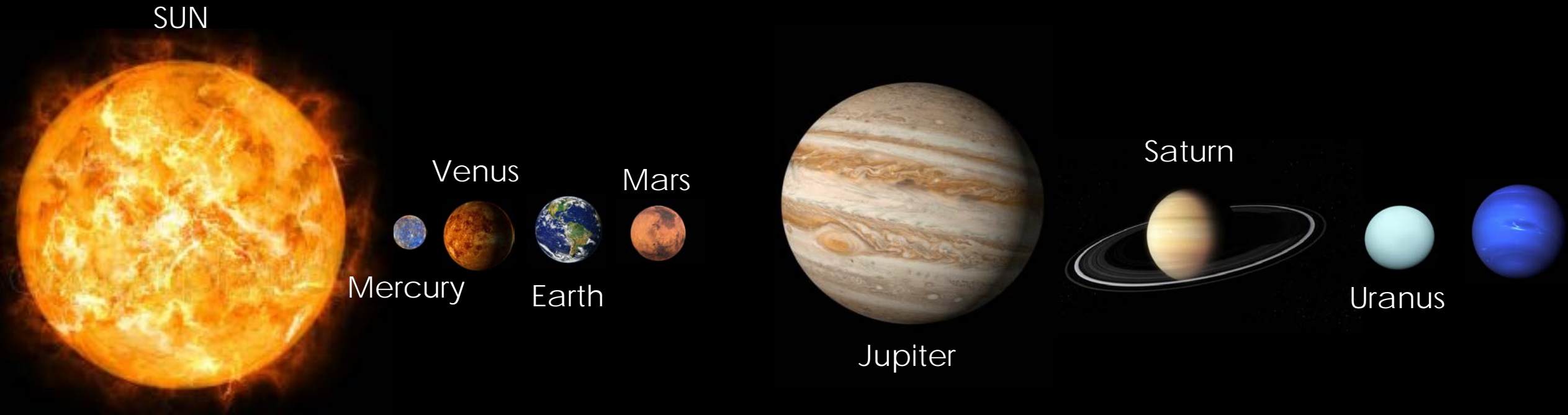
THERE ARE EIGHT PLANETS IN THE SOLAR SYSTEM (NOT TO SCALE)



THERE ARE EIGHT PLANETS IN THE SOLAR SYSTEM (NOT TO SCALE)



THERE ARE EIGHT PLANETS IN THE SOLAR SYSTEM (NOT TO SCALE)



THERE ARE EIGHT PLANETS IN THE SOLAR SYSTEM (NOT TO SCALE)

SUN



Mercury

Venus

Earth

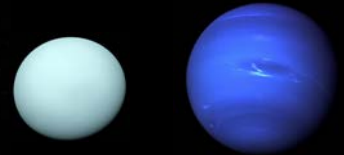
Mars



Jupiter



Saturn



Uranus

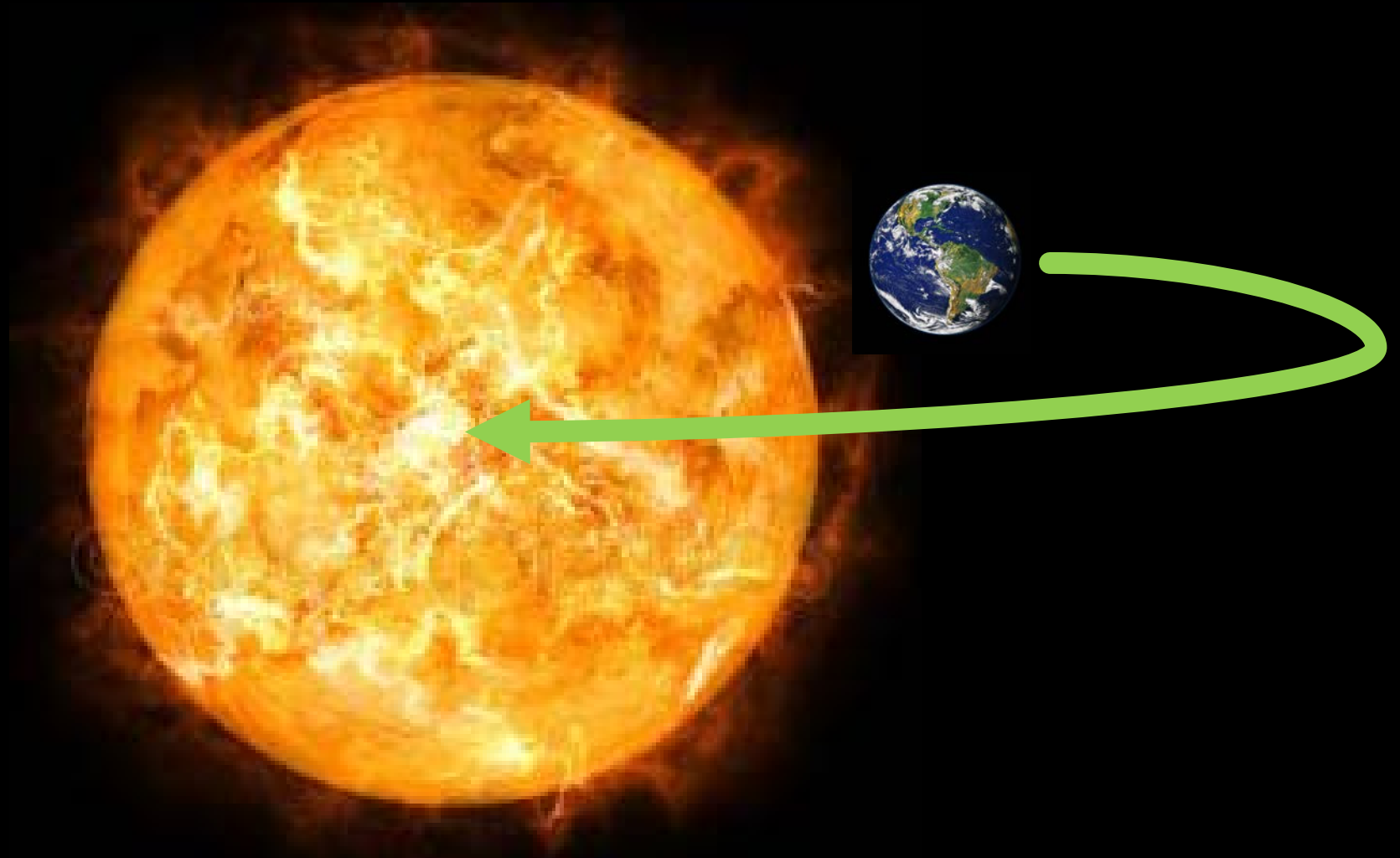
Neptune

HOW WOULD
MERCURY'S WEATHER
DIFFER TO EARTH'S?

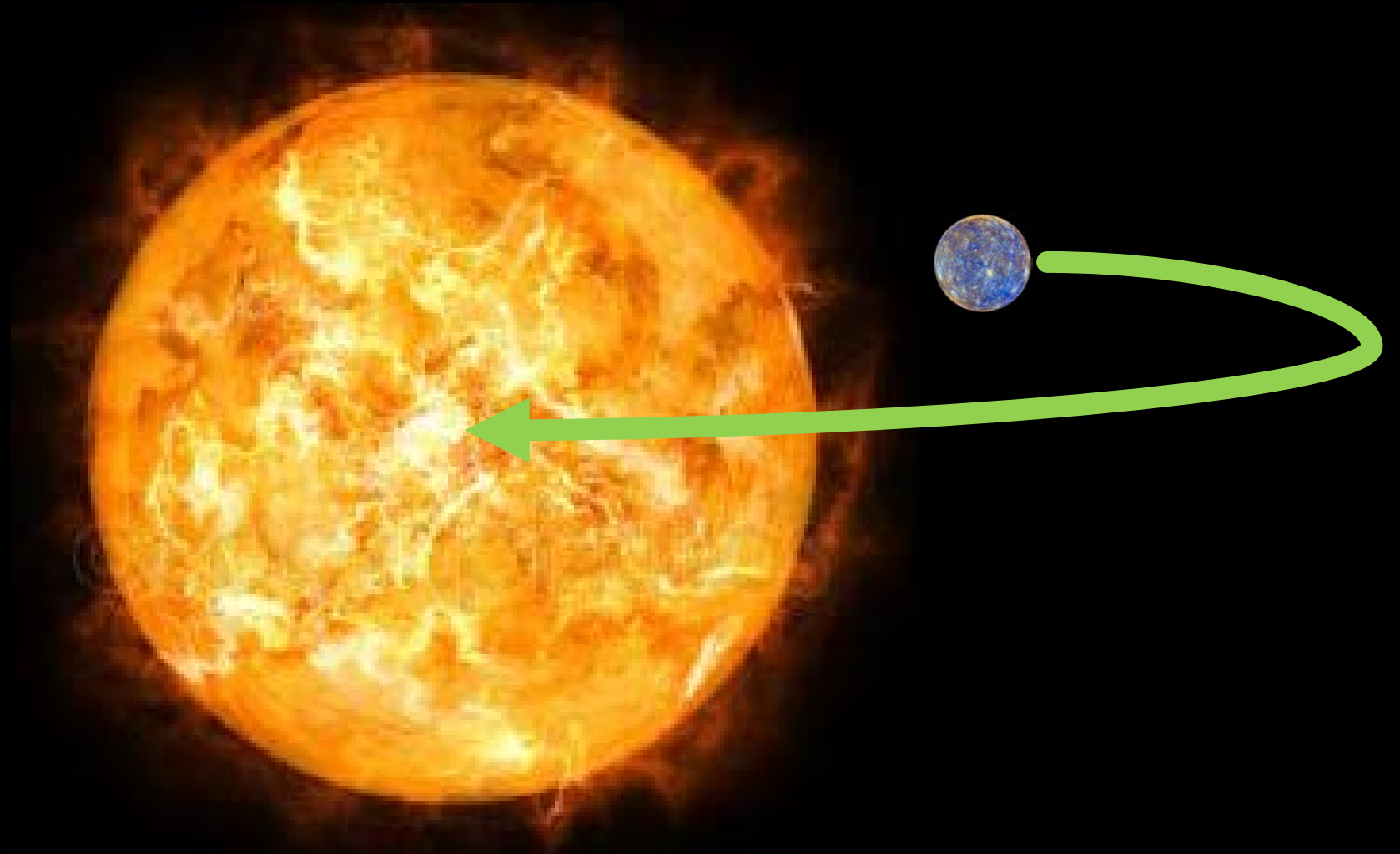
WHY DOES EARTH
HAVE GREEN ON IT,
AND THE OTHER
PLANETS DON'T?

HOW LONG DOES IT
TAKE MERCURY TO
ORBIT THE EARTH?

EARTH TAKES 365 DAYS TO ORBIT THE SUN



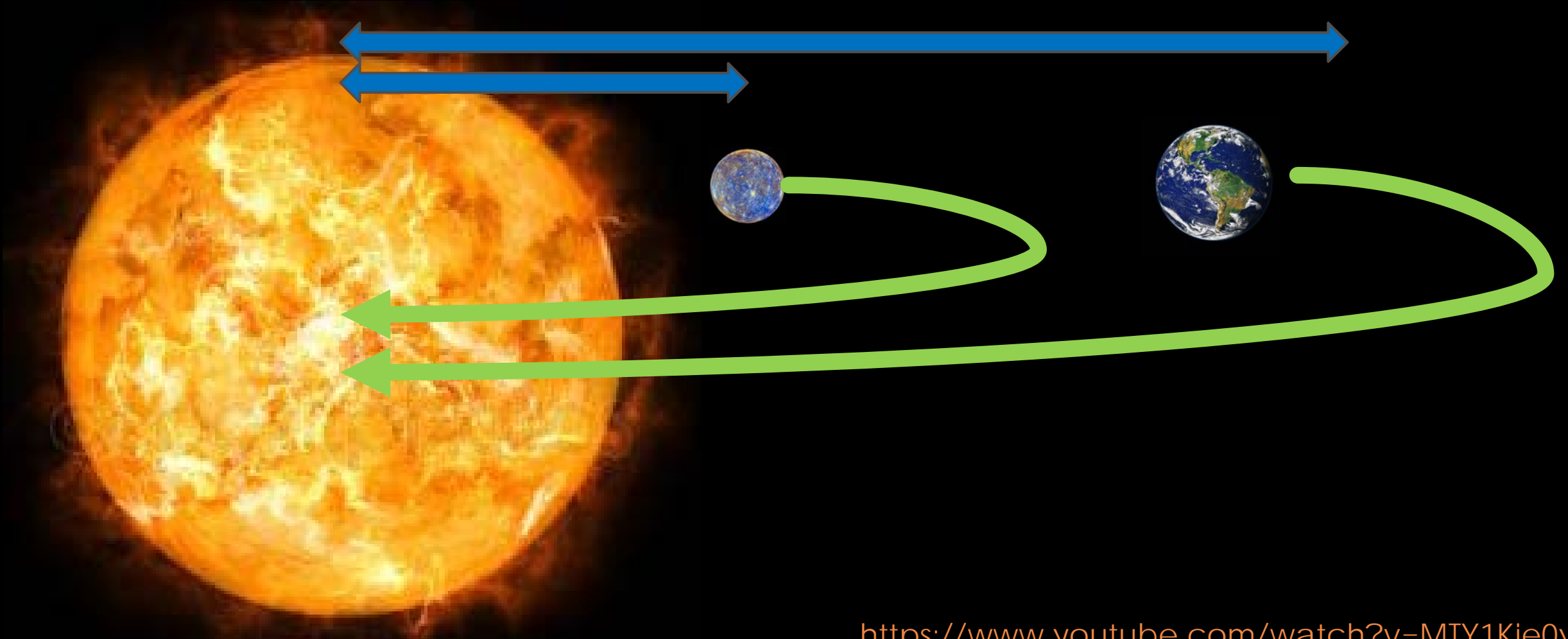
MERCURY TAKES 88 DAYS TO ORBIT THE SUN



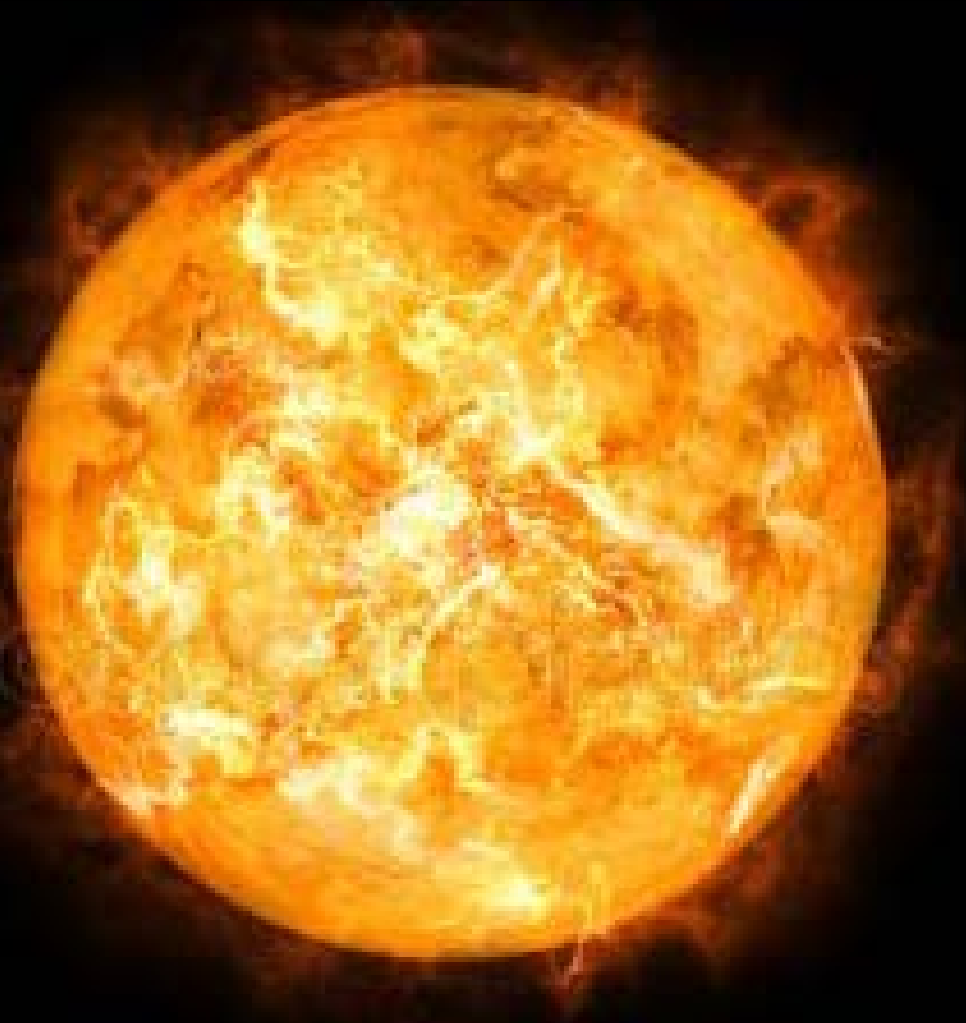
WHY DON'T WE FALL OFF THE EARTH?

[HTTPS://WWW.YOUTUBE.COM/WATCH?V=BLPTF_NqIQI](https://www.youtube.com/watch?v=BLPTF_NqIQI)

GRAVITY FROM THE SUN IS STRONGER ON MERCURY

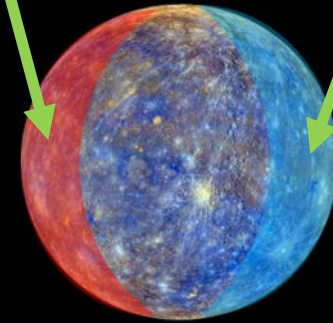


TEMPERATURE EXTREMES



400 °C

-170 °C



2 times hotter than

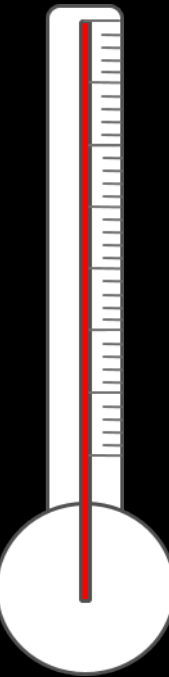
10 times colder than



Pizza oven



Antarctica

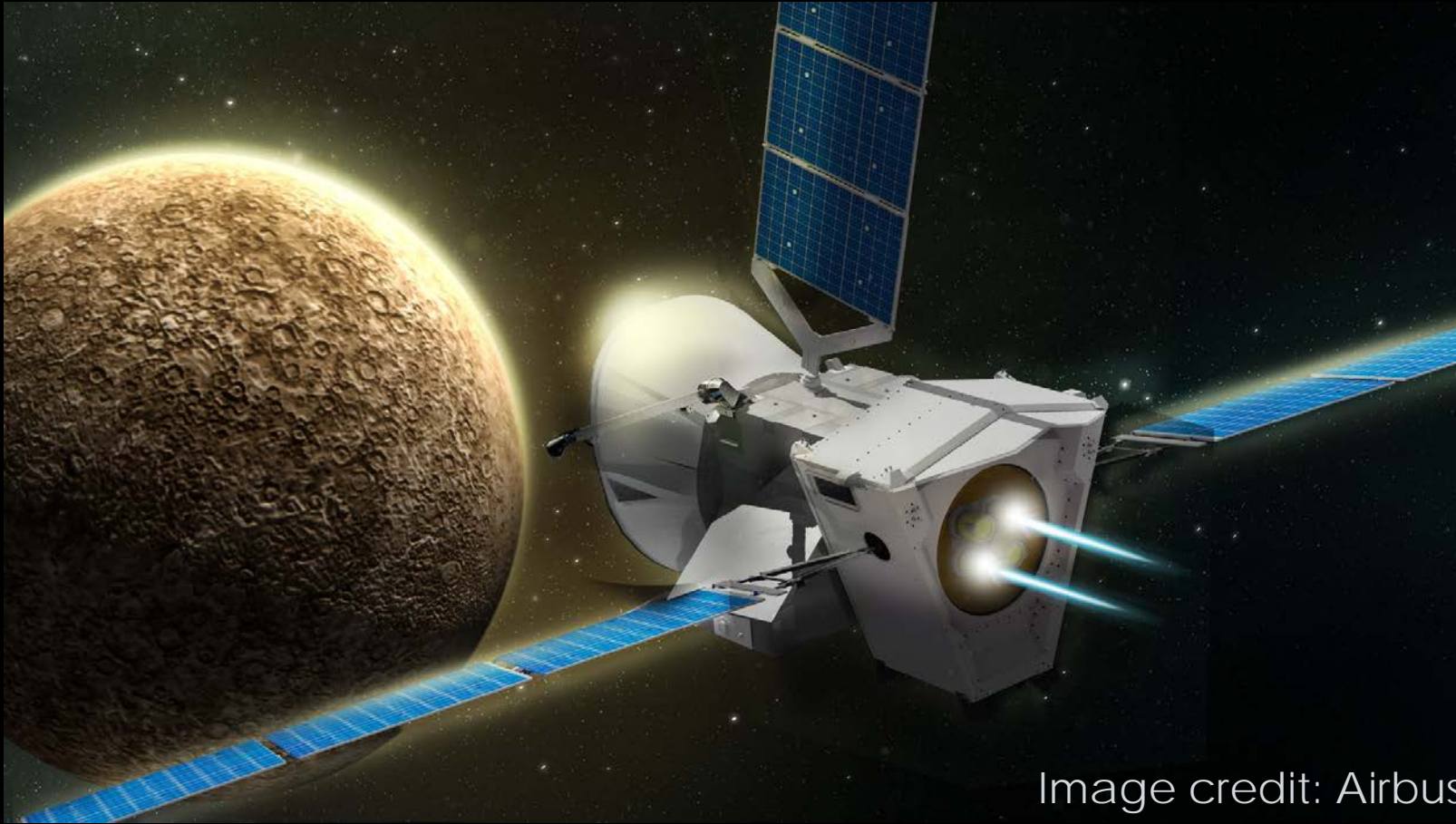


BEPICOLOMBO MISSION TO MERCURY

WHAT IS MERCURY
MADE OUT OF?

WHY DOES MERCURY
HAVE A MAGNETIC
FIELD?

<https://www.youtube.com/watch?v=MKEcanjC0eM&>

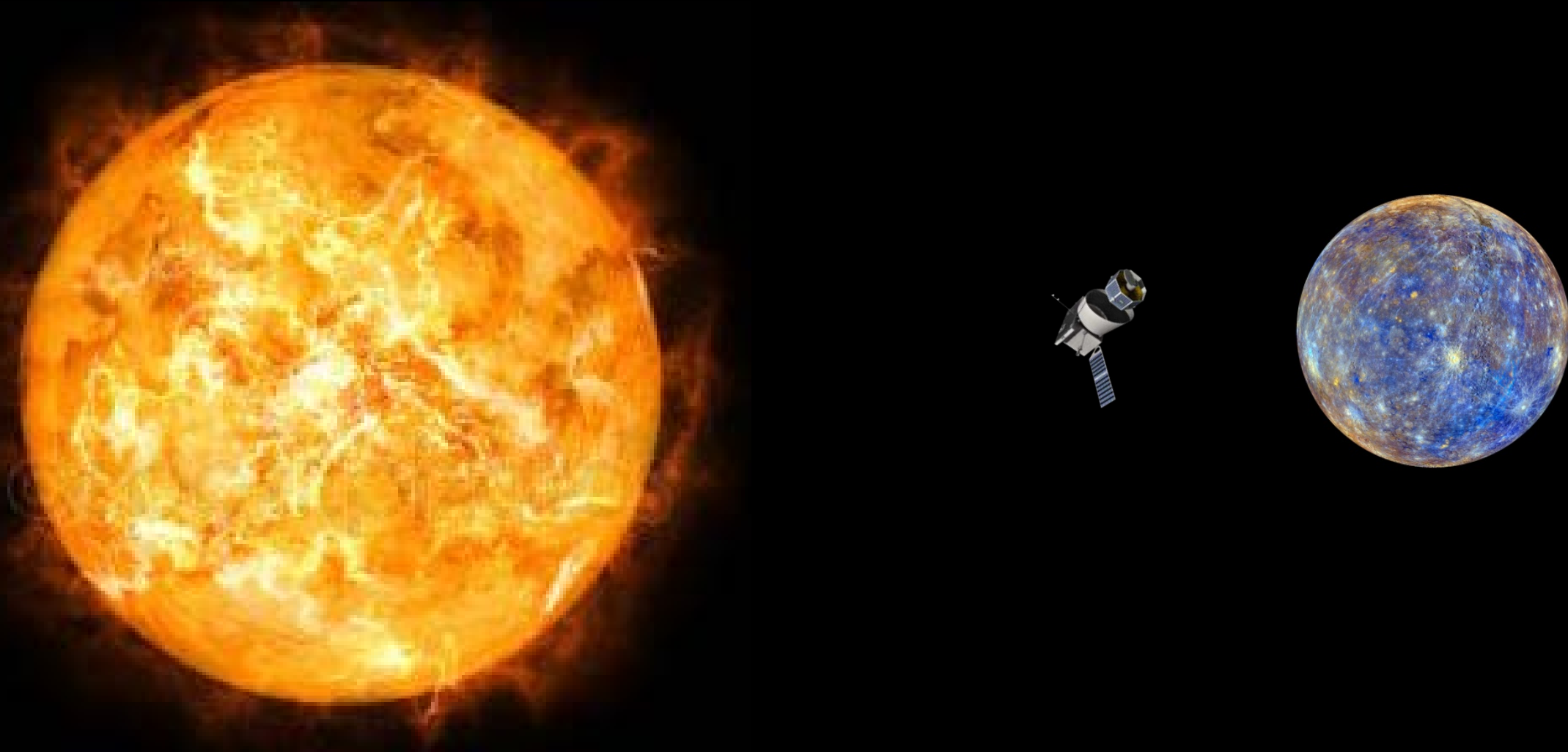


WHY IS THE CORE OF
MERCURY SO LARGE?

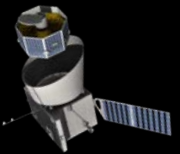
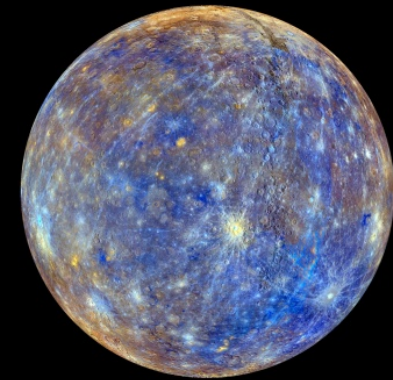
HOW DID MERCURY
FORM?

Image credit: Airbus

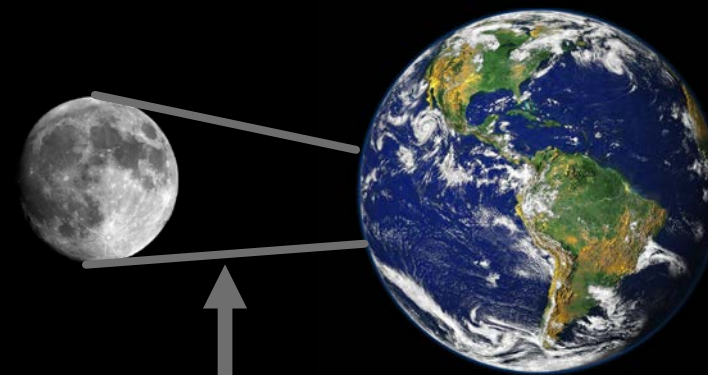
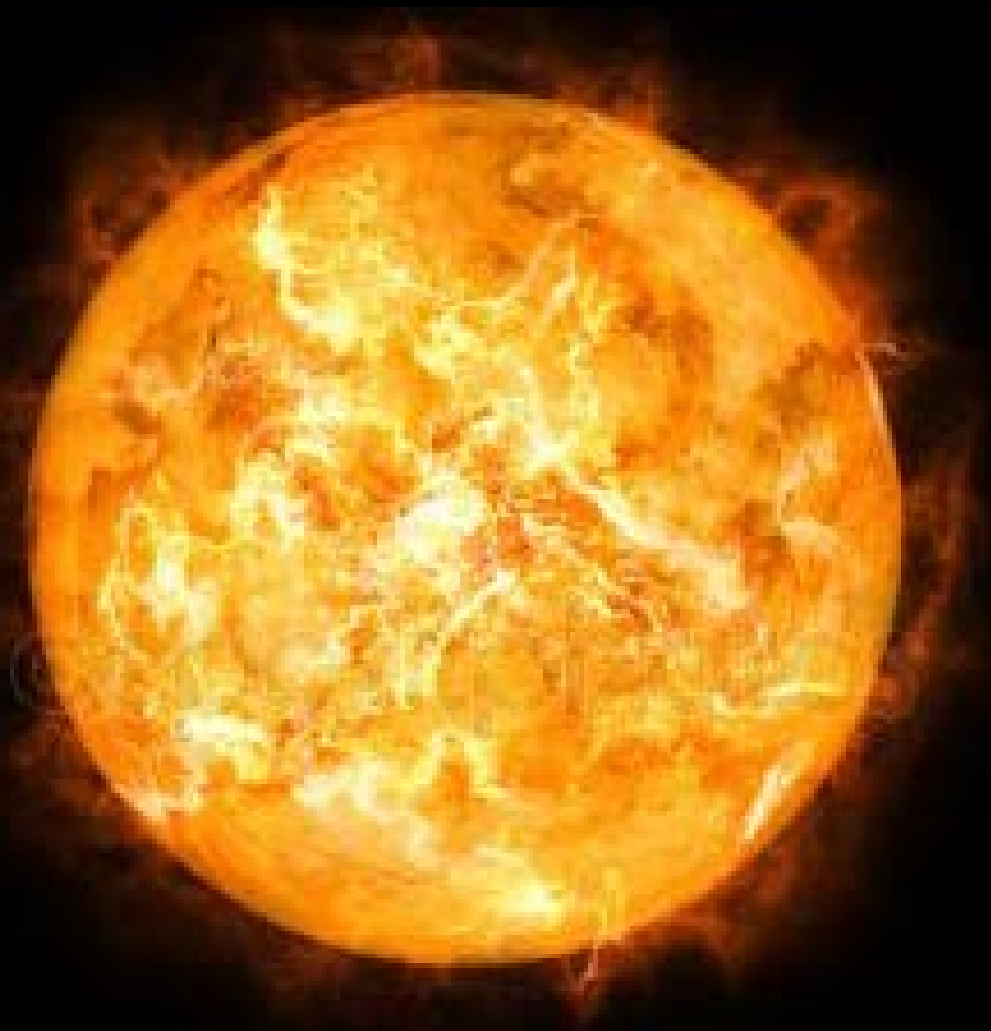
TEMPERATURE EXTREMES FOR THE MISSION



TEMPERATURE EXTREMES FOR THE MISSION

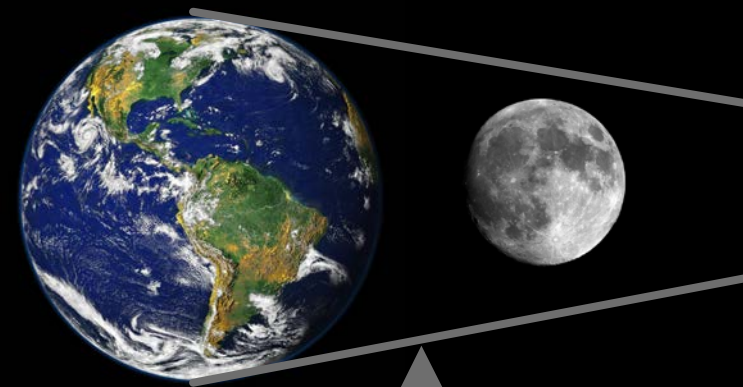
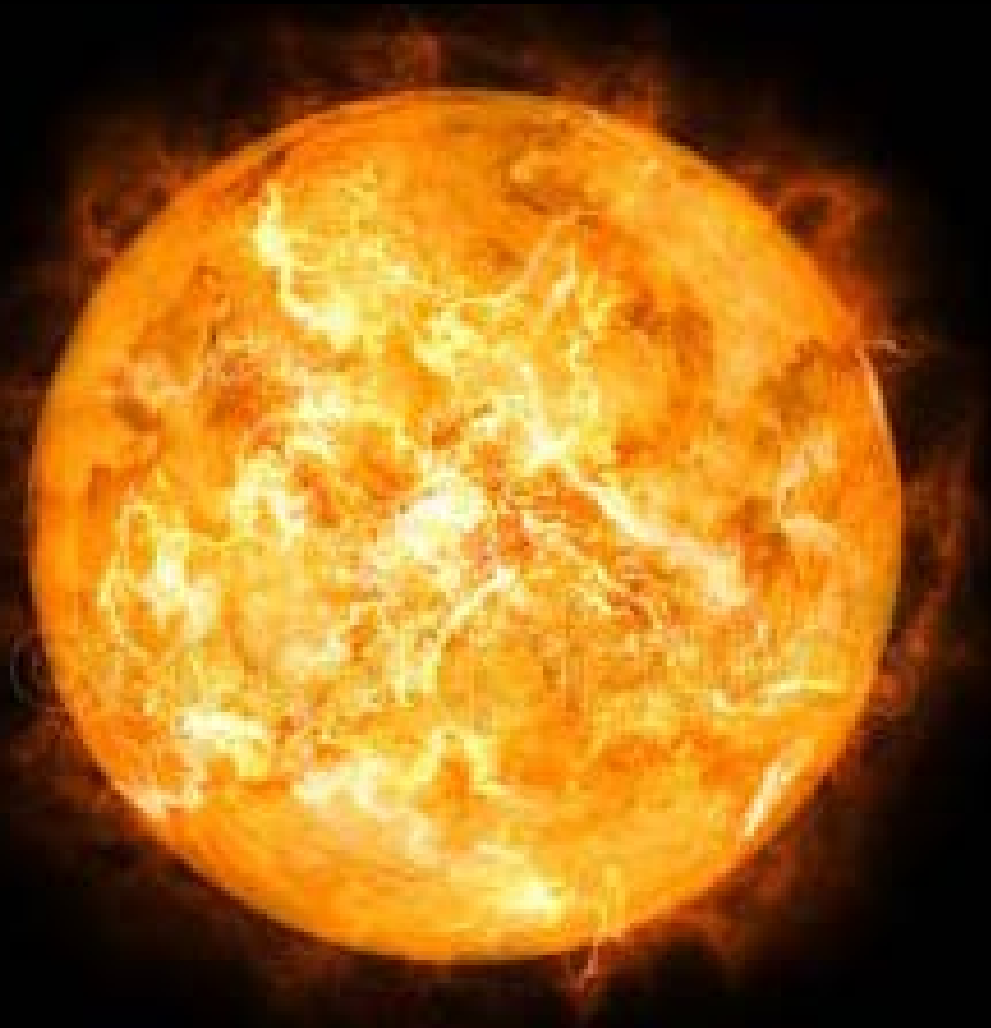


ECLIPSES



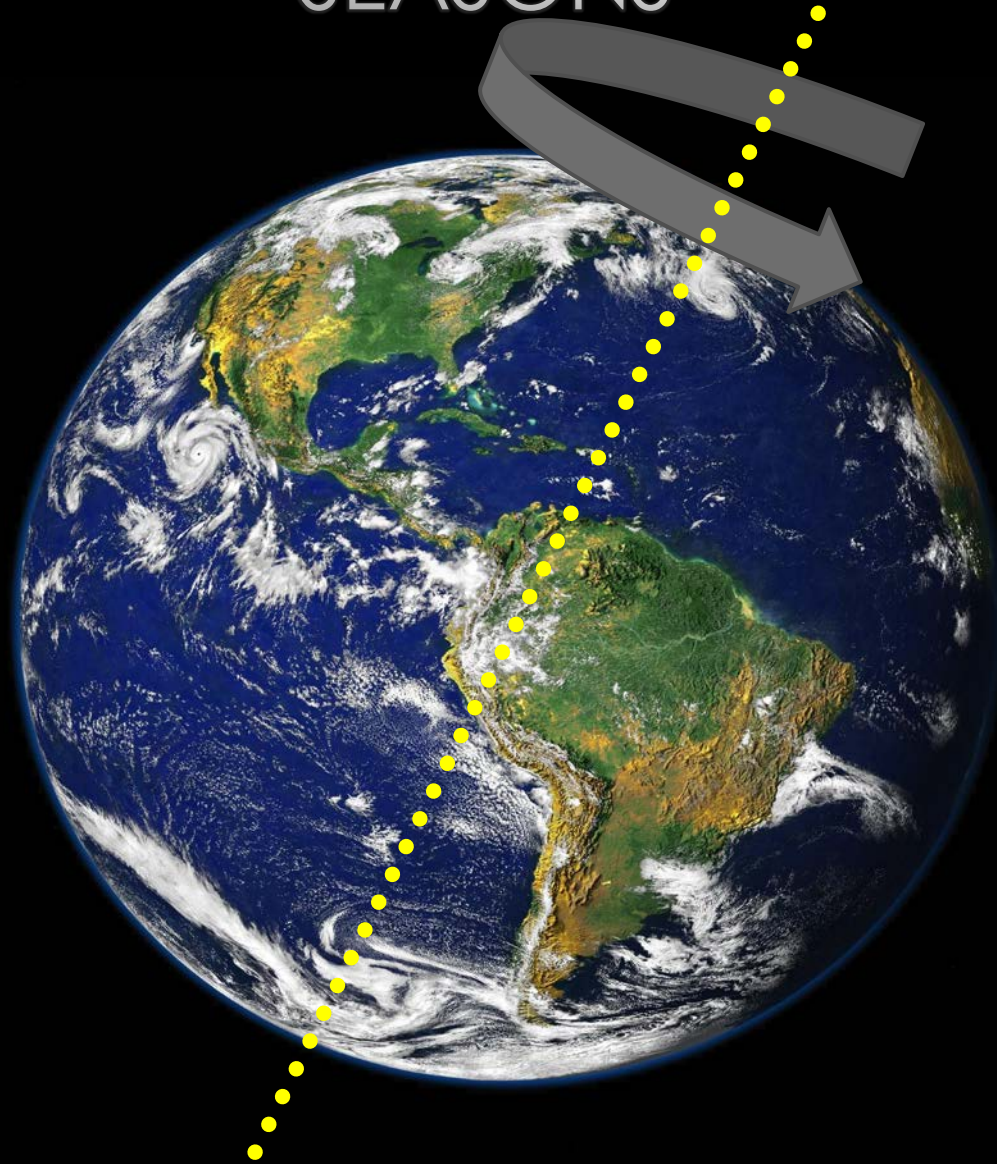
Moon's shadow

ECLIPSES



Earth's shadow

SEASONS



SEASONS

Where will it be hot?

Where will it be cold?

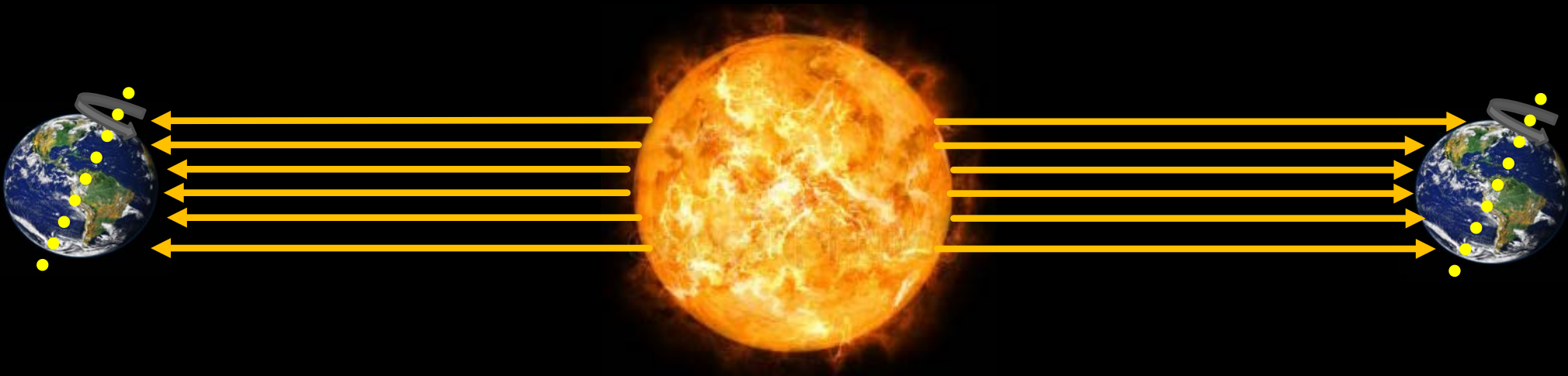


*Northern hemisphere

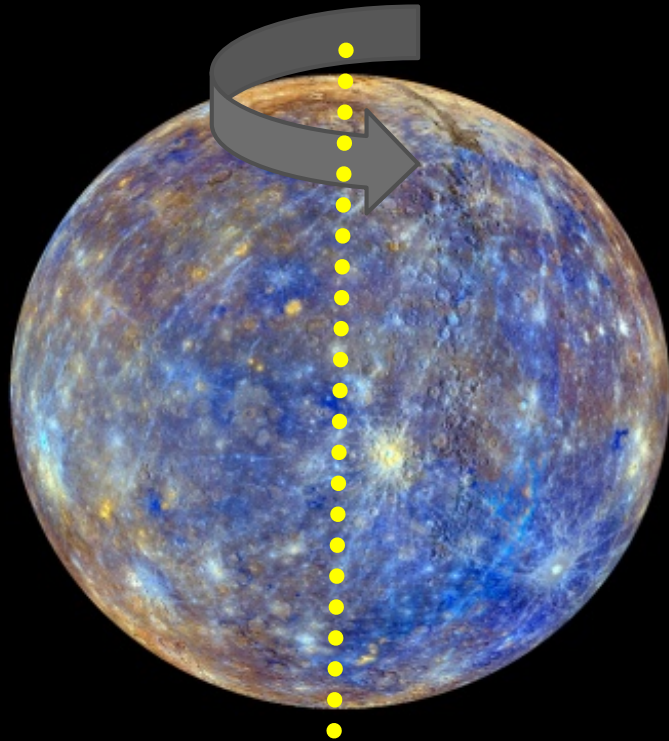
SEASONS*

Summer

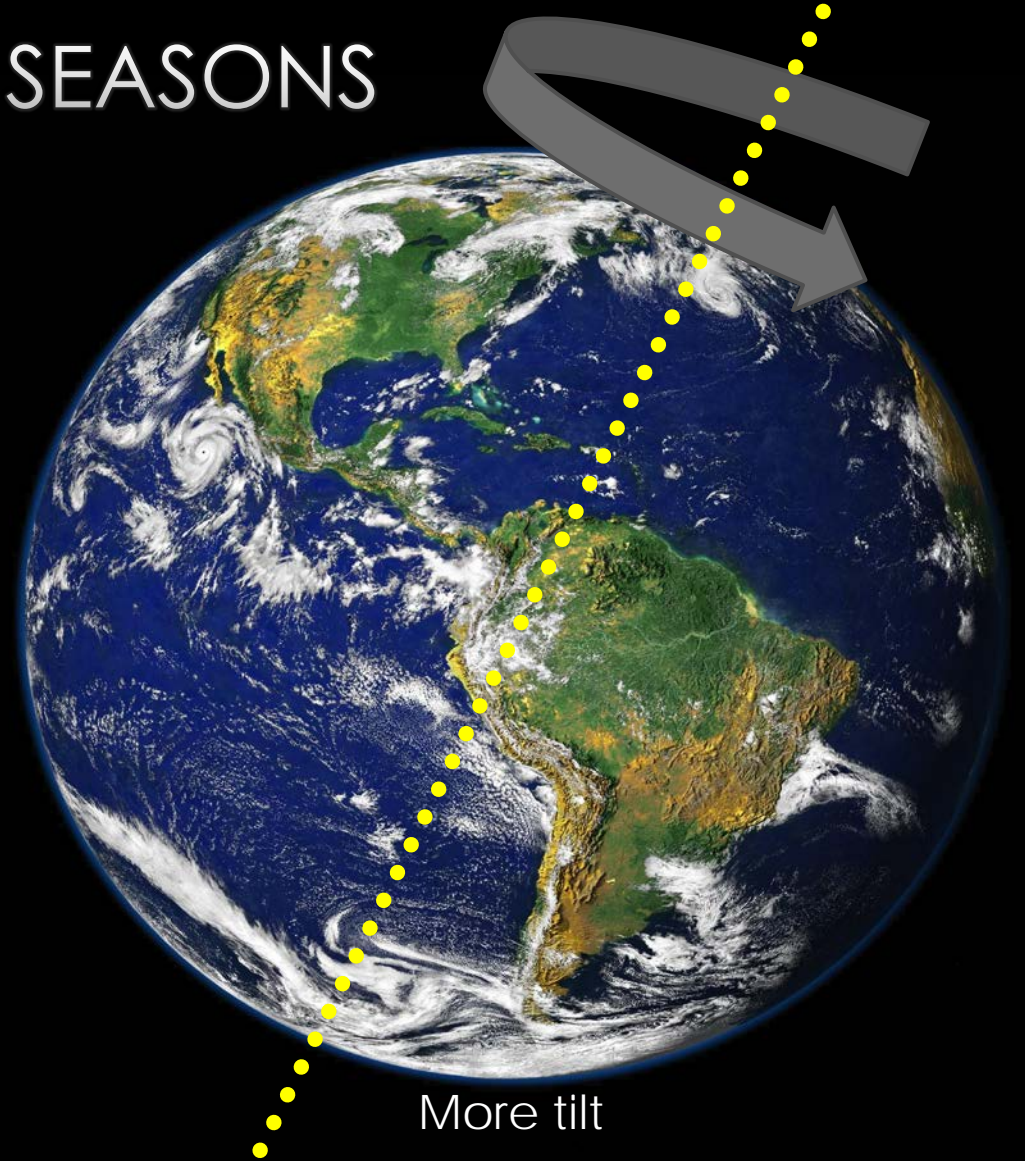
Winter



DIFFERENCE IN SEASONS



Hardly any tilt



More tilt

Mercury does have seasonal effects due to its non-circular orbit around the Sun

HOURS OF THE DAY

Summer times



5:00 am

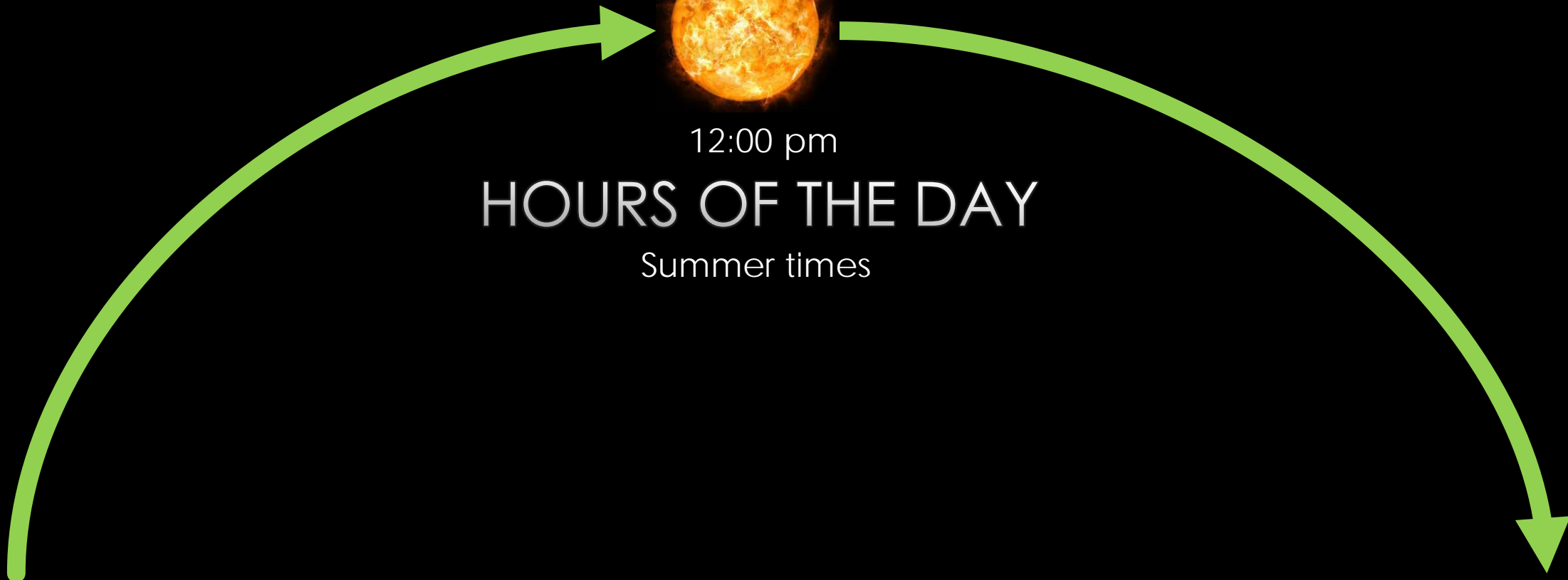




12:00 pm

HOURS OF THE DAY

Summer times



HOURS OF THE DAY

Summer times



9:15 pm





12:00 pm

HOURS OF THE DAY

Summer times



5:00 am



9:15 pm





11:50 pm

HOURS OF THE DAY

Winter times



7:40 am



3:50 pm

