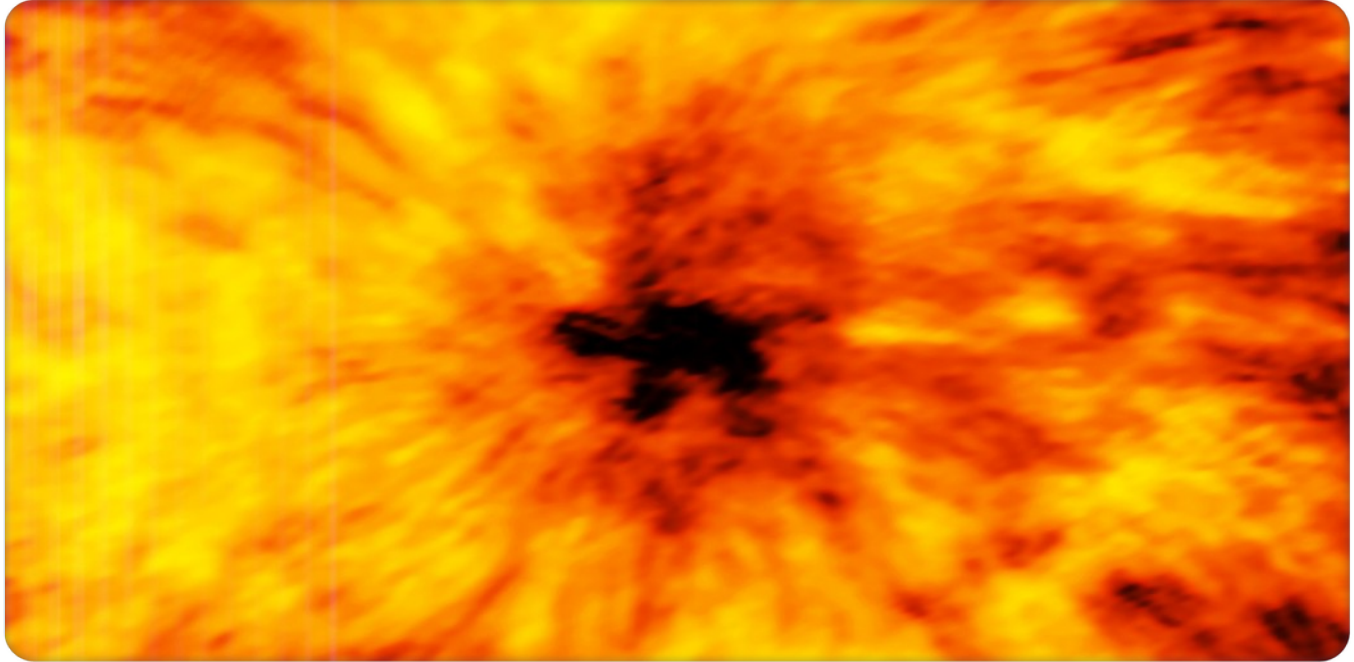




Seeing the Sun in a New Light



The ALMA telescope has just done something that you should never do yourself—stared directly at the Sun! The bright light of the Sun would damage your eyes.

In the past, people have even been blinded from looking at the Sun for too long. But ALMA doesn't have real eyes, it has very sensitive and expensive detectors, instead.

Although the detectors could be damaged by the bright light of the Sun, technicians took care to protect them from intense heat and bright, visible light. Only then did they dare to point the ALMA dishes in the direction of the Sun.

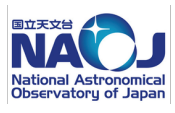
The light we see shining from the Sun, comes from its bright 'surface'. ALMA doesn't take pictures using visible light; it sees the Universe in a different type of light called 'radio'. Through ALMA's eyes, we see a hot layer of gas just above the surface of the Sun, instead. This is known as the "chromosphere" (pronounced 'kro-mo-sphere').

The picture above is one of the coolest (pun intended) new observations from ALMA, showing a large sunspot. Sunspots are slightly cooler patches on the Sun, that appear as dark spots. The lower temperatures are caused by strong magnetic fields.

Astronomers hope that ALMA observations of the Sun will provide them with more information on how the Sun behaves. It's very important to properly understand the Sun, after all, it's our main source of heat and light! Without the Sun, there could be no life on Earth.

COOL FACT

The sunspot that was photographed by ALMA on 18 December 2015 (seen in the picture above) is more than twice the size of Earth!



More information about EU-UNAWE Space Scoop: www.unawe.org/kids/