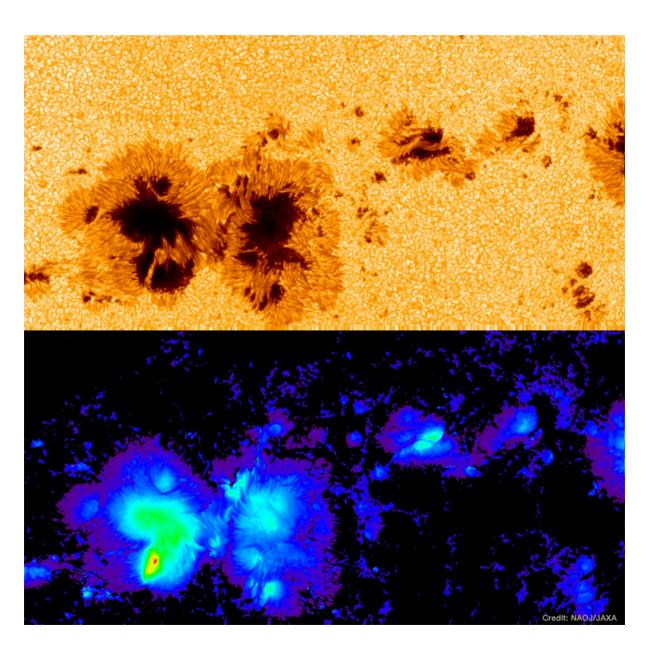


Sunspots or Beauty Spots: The Sun's More Attractive Than Ever!

Feb. 23, 2018







Most of us are familiar with magnets; they decorate our fridges and guide our compasses. But have you ever wondered how they work?

Each magnet produces something called a "magnetic field". This is an invisible region around the magnet where it can pull or push other objects. For example, with fridge magnets, the magnet pulls on the fridge door.

Their cool power means magnets appear in all sorts of places. You can find them in computers, microwaves and even in space! Our Sun is a giant magnet.

Most of the time the Sun's magnetic field is pretty weak; about a hundred times weaker than a fridge magnet! But scientists just measured a patch of the Sun's magnetic field that's two times stronger than normal! It was the strongest magnetic field ever measured directly on the surface of the Sun.

These two pictures show the ultra magnetic patch of the Sun. It's filled with dark <u>sunspots</u>. These are cooler patches of the Sun but they have super strong magnetic fields.

While the top picture is a normal photograph of the Sun, the bottom shows the Sun's magnetic field. The colour tells us how strong the magnetic field is: blue parts are weak magnets and red parts are strong magnets.

The Sun's magnetic field also shoots particles off its surface. This causes "<u>space weather</u>" that can damage satellites, interrupt radio signals and endanger astronauts. So, understanding magnetic fields and how they change is crucial!



On Earth, it's gravity, not the magnetic field that sticks you to the floor. We'd notice Earth's magnetic field much more if its gravity weren't so strong.

This Space Scoop is based on a Press Release from NAOJ. NAOJ













This website was produced by funding from the European Community's Horizon 2020 Programme under grant agreement no 638653