



What Big Eyes You Have



Big telescopes are very powerful and zoom in on objects in the Universe that can't be seen using just our eyes or small telescopes. But if astronomers want to photograph large areas of the sky, then they usually use small telescopes instead.

Astronomers often talk about the size of the area captured in a space photo by how much room the objects in it take up in the night sky. The night sky is shaped like half of a ball, which spans 180 degrees from East to West and North to South, going over your head. This means that how much room objects take up in the night sky is measured in degrees – just like when you measure angles in a semi-circle using a protractor! For example, the Full Moon takes up about half of a degree in the night sky.

Most big telescopes can only capture an area of the night sky that is much smaller than 1 degree wide. For these tiny regions, astronomers use a different measurement, called an arc-minute. There are 60 arc-minutes in 1 degree.

However, a big telescope called the VST took the new photo shown above, which shows a full degree of sky. This telescope is 2.6-metres wide, which is huge! Yet, it was able to capture hundreds of galaxies over a large area of the sky. The secret behind this powerful telescope's ability to photograph such a big area is its special 268-megapixel camera.

Being able to photograph big parts of the night sky will help astronomers to search for objects in space that haven't been discovered yet.

COOL FACT



You can use your hands to measure angles in the night sky. When you hold your hand out at arm's length, your little finger covers about 1 degree, which is more than double the size as the Full Moon! Does that surprise you?

