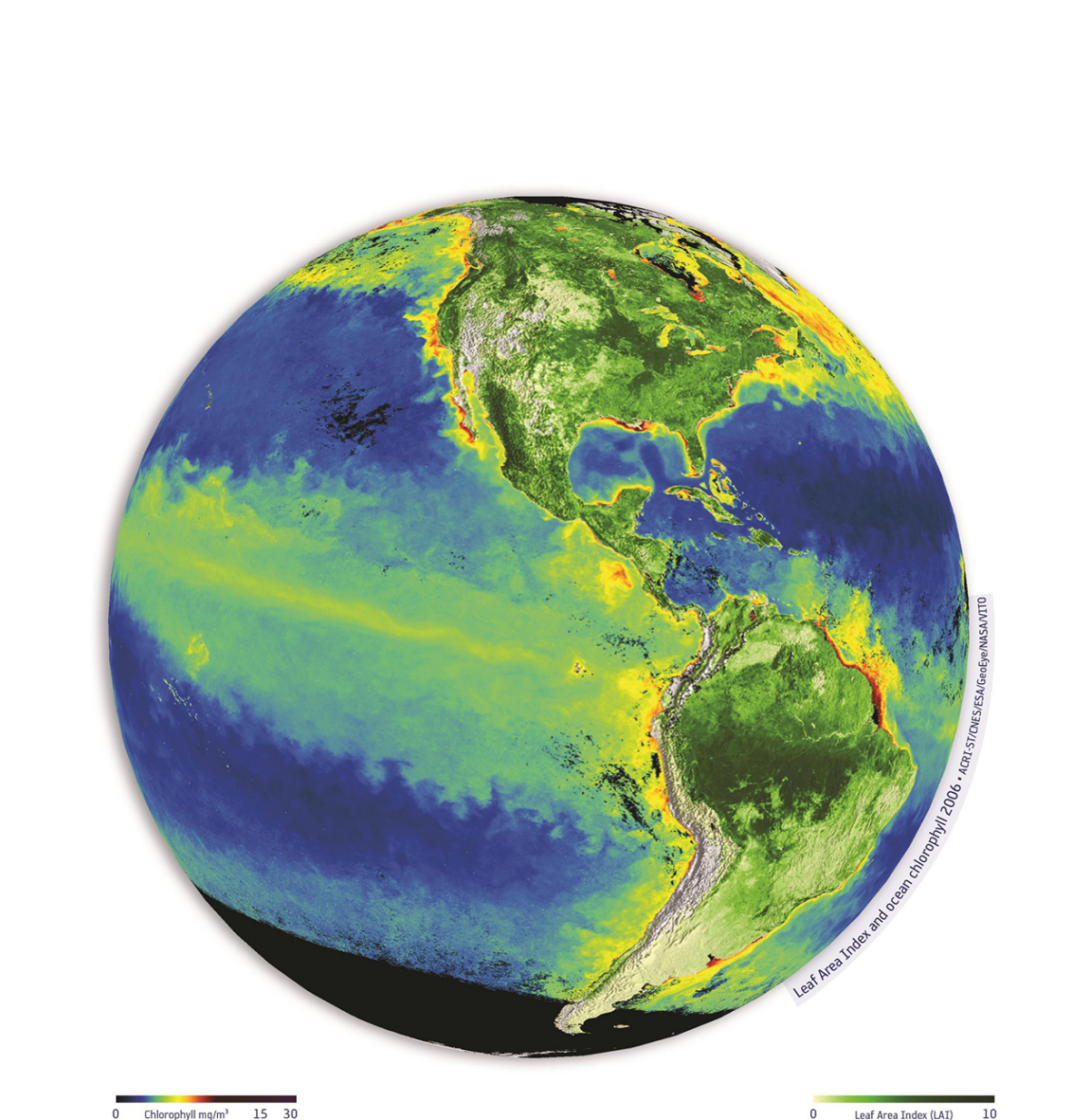


Sentinel-3 getting ready to watch over Earth

Earth



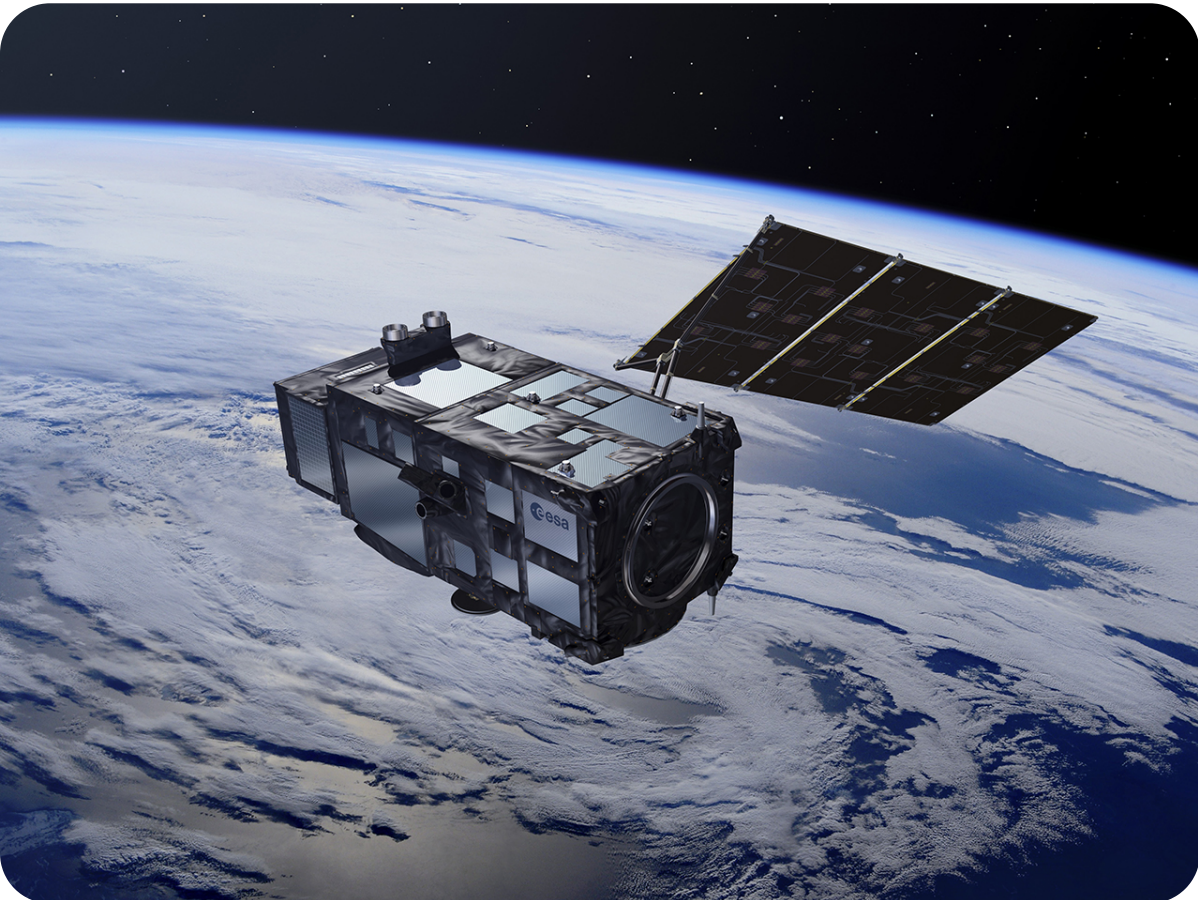
Sentinel-3 will monitor Earth's oceans and create maps to show how healthy sea life is

[Access the image](#)

09 February 2016

On 16 February an ESA satellite called Sentinel-3 will blast up into orbit around Earth! Sentinel-3 is the latest in a fleet of advanced satellites whose mission is to study our planet's land, oceans, and atmosphere.

Sentinel-3's focus will be our oceans. Covering 70% of the planet, monitoring oceans is a way for us to check how healthy the Earth is. What happens in the seas impacts us no matter where we live. Our planet's water is an important resource, and one we need to protect.



Sentinel-3

[Access the image](#)

Sentinel-3 will orbit over 800km above Earth's surface – that's even further from the Earth than the International Space Station, which orbits our planet at around 400 km. From this vantage point the satellite will measure the temperature, colour, and height of the sea surface, as well as the thickness of sea ice. These measurements are really important because we can use them to track how the sea level is changing, how much pollution is present, and how healthy sea life is.

When not monitoring the ocean, Sentinel-3 will help its fellow satellite Sentinel-2 by watching the Earth's land. It will measure the heights of lakes and rivers, and even track dangerous wildfires.

There are already two Sentinel satellites in orbit, and four more are planned after Sentinel-3. Each satellite will work for at least seven years. Mission scientists are hopeful that they will work for even longer though, and have supplied enough fuel to keep the satellites going for 12 years of constant operation!

Cool fact: The rocket that will take Sentinel-3 into orbit is a modified SS-19 intercontinental ballistic missile. This was originally designed as a weapon of war, but has been converted to peaceful purposes. This is very fitting given Sentinel-3's mission to protect Earth!

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