

Sentinel-5P satellite helps our planet stay healthy



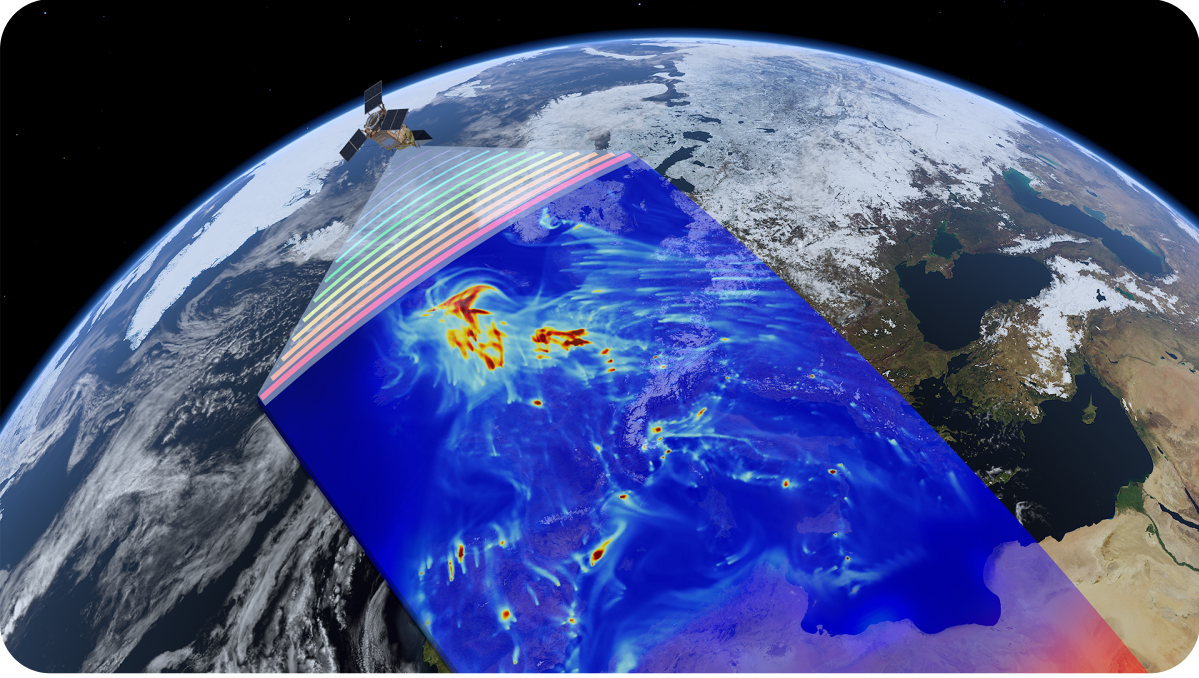
Sentinel-5P is in the background, behind lots of mission scientists and engineers

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ESA is preparing to launch a new satellite, called Sentinel-5P. It will be the latest member of a whole family of Sentinel satellites orbiting Earth. Their mission is to watch over our planet to help keep us, and our world, healthy and safe!

Sentinel-5P will orbit 824km above Earth's surface – twice as high as the International Space Station. It is about the size of a car, and will be in operation for at least seven years.



Instruments onboard the satellite will study Earth's air to check how clean it is

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Sentinel-5P's specialty is atmosphere monitoring. The atmosphere is the blanket of air that surrounds Earth. It is very important to us because it is what we breathe! So we want to make sure that the atmosphere is clean.

To study Earth's atmosphere, Sentinel-5P has a special instrument called Tropomi. This can be used to see which gases are present in the atmosphere, such as nitrogen dioxide, ozone, methane, and carbon monoxide. Too much of certain gases is bad for our health, and could be a sign that there is a lot of pollution.



Sentinel-5P will orbit Earth

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Sentinel-5P will continually orbit the Earth and sweep its sensors over our entire planet once every day. That means that we will have up-to-date information about the atmosphere and how it is changing. Scientists plan to use the data gathered by Sentinel-5P to help us better understand our atmosphere, keep Earth healthy, and perhaps make new and exciting discoveries!

Cool fact: If a volcano erupts, Sentinel-5P will track any ash that is blasted out, watching to see where it goes and warning aircraft to steer clear.

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