Image: Copernicus Sentinel-2A captures Brazil

April 14 2017

Credit: contains modified Copernicus Sentinel data (2016), processed by ESA,

Sentinel-2A takes us over central-eastern Brazil – more specifically where the Bahia, Tocantins and Goiás states meet.

Click on the box in the lower-right corner to view this image at its full 10 m resolution directly in your browser.

Here we can see a large, flat plateau blanked with fields benefiting from rich soils and an apparent abundance of water, before falling off into a green, hilly valley (left). The straight lines in the image are roads, such as the highway running in a nearly straight line from the centre-top to bottom of the image.

The area is particularly known for soybean production. The country's soybean output has increased by more than 3000% since the 1970s, and Brazil is the second largest global producer of soybeans after the US.

Other crops in this area include corn, coffee and cotton.

A distinctive feature in this image is the circles – mainly at the centre. These shapes were created by a central-pivot irrigation system, where a long water pipe rotates around a well at the centre of each plot. The varying colours show different types of crop, or different stages of growth.

The two-satellite Sentinel-2 mission is designed to monitor changing lands, including crop type and health. While the first satellite has been in orbit since 2015, its Sentinel-2B twin was launched on 7 March. Together, the satellites will provide new images of Earth's land surfaces every five days.

Provided by European Space Agency