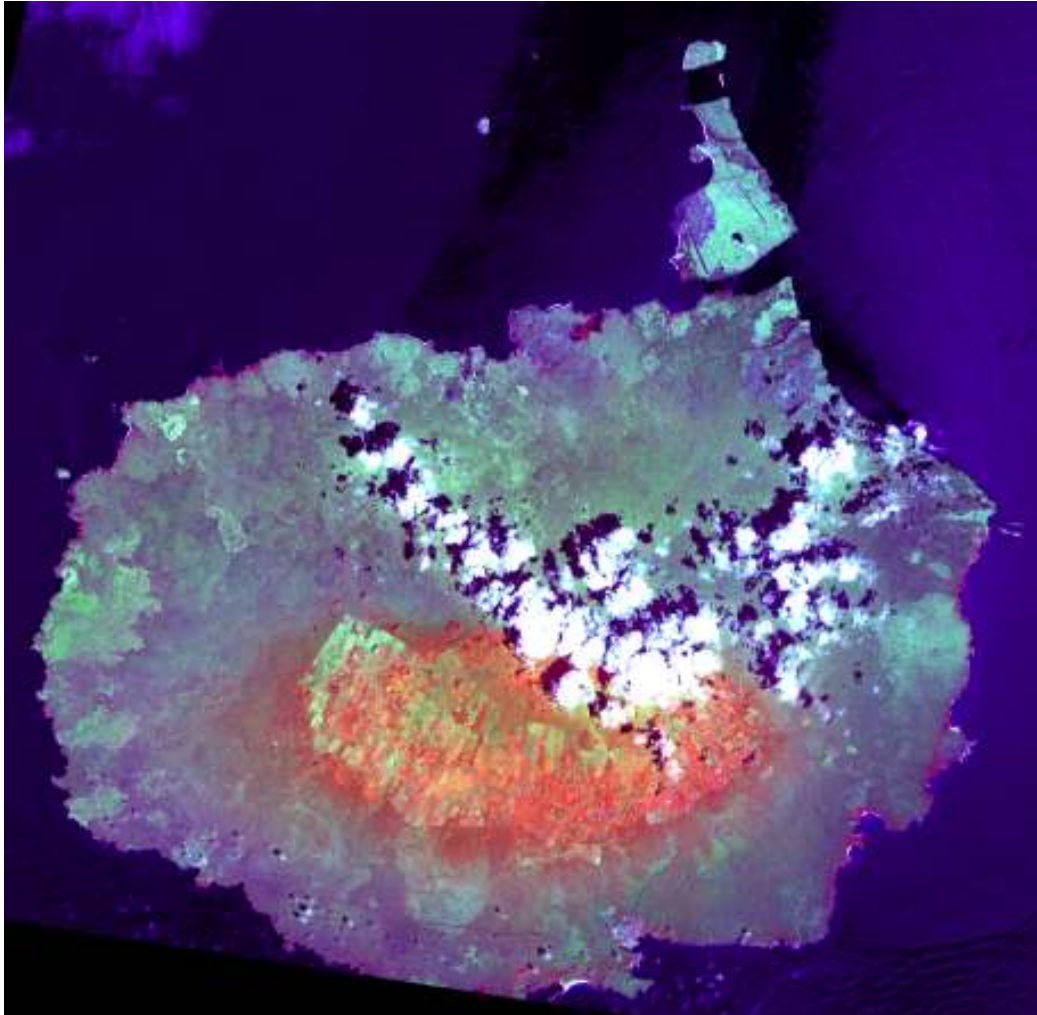


### Santa Cruz from space



*The satellite image is recorded by the French satellite SPOT covering the island Santa Cruz in the Galapagos Islands.*

The image shows Santa Cruz in false colors. We see white clouds above the central part of the island. The town Puerto Ayora is seen in the south and the airport on the island Baltra is seen in the north.

The different vegetation zones of the island are seen as concentric bands of vegetation zones focused around the peak of the central island. The coastal regions are characterized by arid vegetation shown in different shades of green and violet. At higher altitude the image is dominated by red colors which are due to lush vegetation, corresponding to the scalesia and micinia zones



The cropped areas are clearly seen on the southern slopes at high altitude. The individual field patches are colored dependent upon the crop type that was present at the time of image recording.

Along the coastline the mangrove is shown with bright red color. The beach Bahia Tortuga southwest of Puerto Ayora is clearly identified by the fine sand.

#### **Technical information:**

The image is recorded 5 January 2000 by the satellite SPOT. Here the image is given the color combination 142 that shows false colors. Red color is given to the near-infrared channel, green color is given to the middle-infrared channel and blue color is given to the red channel. This color combination is chosen to enhance the variations in the image. In this way it is possible to discern between surfaces that all have a unique spectral signature.

Channel	Spectral band	Electromagnetic spectrum
1	0,78 – 0,89 $\mu\text{m}$	Near-infrared
2	0,61 – 0,68 $\mu\text{m}$	Red
3	0,50 – 0,59 $\mu\text{m}$	Green
4	1,58 – 1,75 $\mu\text{m}$	Middle-infrared

The image is produced using the image processing software LEOWorks that is produced for teaching as part of the ESA project Eduspace. It is free to download from: <http://www.eduspace.esa.int/>

Source: Spot Image and ESA

**Satellite Eye for Galathea 3** follows the Galathea 3 expeditionen with images from ESA's ENVISAT satellite and other Earth observing satellites. See the images in Google Earth together with the educational material in form of projects and cases at [http://www.satelliteeye.dk/index\\_uk.htm](http://www.satelliteeye.dk/index_uk.htm)

The image is part the series of Weekly Images. Each week a new relevant image is shown in relationship to the expedition route.