



1984-06-24, Landsat 5



2010-05-15, Landsat 5



2023-10-07, Sentinel-2; yellow: border of indigenous land.

Rondônia is one of the states of Brazil, located in the southwestern part of the Amazon basin. The state has seen a quick population increase from about 40,000 inhabitants in 1950 to more than 1.8 million in 2021. This development went hand in hand with the change in the vegetation cover. Originally almost 90% of the surface was covered by rainforest, but in the meanwhile it has become one of the best known examples of deforestation in the Amazon basin. In Only about one third of the area is currently covered by forests.

The satellite images show the development around the small town of Campo Novo de Rondônia, which in 2020 had a population of about 14,200. The image series shows how the deforestation is initiated with the construction of roads, along which settlers start to clear the forests to gain agricultural land.

Only in the southern part of the area shown in the satellite images forests have remained – this is a part of the Uru-Eu-Uaw-Uaw Indigenous Territory, which was established by the government of Brazil to protect the indigenous population. First contact with one of the tribes living here, the Uru-Eu-Uaw-Uaw people, happened as late as 1981.







1991-06-28, Landsat 5 – Detail with typical fishbone structures.

### Exercises

- Look at the satellite image from **1984**. Describe the structures you can identify. Is the area strongly affected by human activities? If so, where?
- Compare this image with the satellite images from **2010** and **2023**. Describe the changes you can identify. Which large parts can you separate in the satellite image?
- In the 2023 image, look at the overlay “Indigenous Territory”. How does this layer correspond with your findings?
- Look at the detail satellite image of 1991. Describe the changes you can identify with respect to the originally untouched forest. What are the first activities in formerly untouched forest areas, how do the activities continue?

### Additional Material

Year	Population
1950	39.935
1960	70.232
1970	111.064
1980	491.069
1996	1.229.306
2010	1.562.409
2021	1.815.278

(Population data: Instituto Brasileiro de Geografia e Estatística (IBGE))



Forest clearing in Amazonia (photograph: [Amazônia Real](#))



### Links and Sources

- ESA Eduspace: [https://www.esa.int/SPECIALS/Eduspace\\_Environment\\_EN/SEMFTY4XX2H\\_0.html](https://www.esa.int/SPECIALS/Eduspace_Environment_EN/SEMFTY4XX2H_0.html)
- ESA Animation: [https://www.esa.int/Applications/Observing\\_the\\_Earth/Earth\\_from\\_Space\\_Adeus\\_Amazon](https://www.esa.int/Applications/Observing_the_Earth/Earth_from_Space_Adeus_Amazon)
- ESA Climate Change Initiative: <https://cfs.climate.esa.int/index.html#/stories/story-34/1>
- Atlas of Humanity: <https://www.atlasofhumanity.org/urueuwauwau>

