An end to undetected felling

A new alarm system based on radar satellites, developed by WUR, shows in detail where African tropical forest is being felled.

The system is called RADD, which stands for Radar for Detecting Deforestation. RADD uses radar images from the EU's Sentinel-1 satellite to detect disturbances to tropical forest. In this case, all of Africa's tropical rainforest. Illegal felling is a big problem there, says RADD project leader Johannes Reiche of the Geolab at WUR.

The images are precise to the nearest 10 metres and update themselves every 6 to 12 days

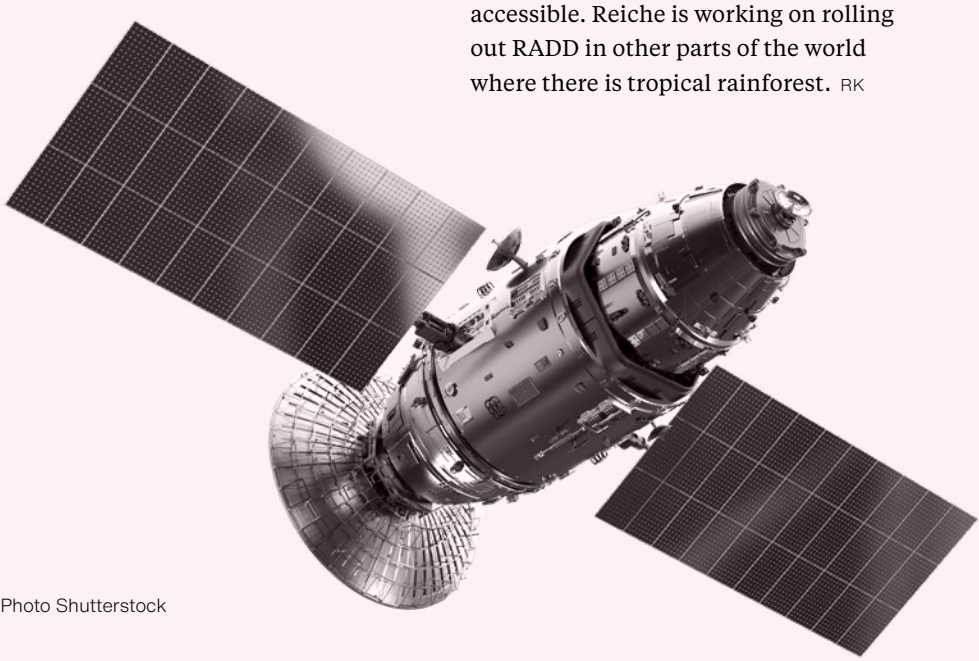
Satellites have long been used to observe disturbances to forest from space, using images that work with visible light. That doesn't work well in tropical rainforest, where clouds hide the forest from view for much of the time. Radar penetrates the clouds.

Reiche and his team developed an application that pinpoints precisely where a disturbance has taken place. The images are precise to the nearest 10 metres and update themselves every 6 to 12 days. That is still not quite 'catching them red-handed', but it comes close. 'The quicker the better, of course,' says Reiche. 'But in the past, there were sometimes several months between consecutive images.'

Google Search

In one and a half years (2019/2020), the new alarm system registered more than four million disturbances, representing a total of 1.4 million hectares of rainforest. About 80 per cent of those disturbances are small-scale selective felling. Most of this takes place in the dry season; the rainforest is barely accessible in the rainy season.

WUR developed the system together with Global Forest Watch. The app is implemented in Google Search Engine and the alerts are universally accessible. Reiche is working on rolling out RADD in other parts of the world where there is tropical rainforest. RK



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