

Droogte en overstroming

In Nederland en de wereld

Nieuwsfoto's: Extreme regenbuien en droogte

Snelweg A79 in Limburg op 14 juli 2021



[bron: NOS.nl nieuwsbericht 14 juli 2021](#)

De Rijn, Tolkamer 5 augustus 2022



[Bron: NU.nl nieuwsbericht 5 augustus 2022](#)

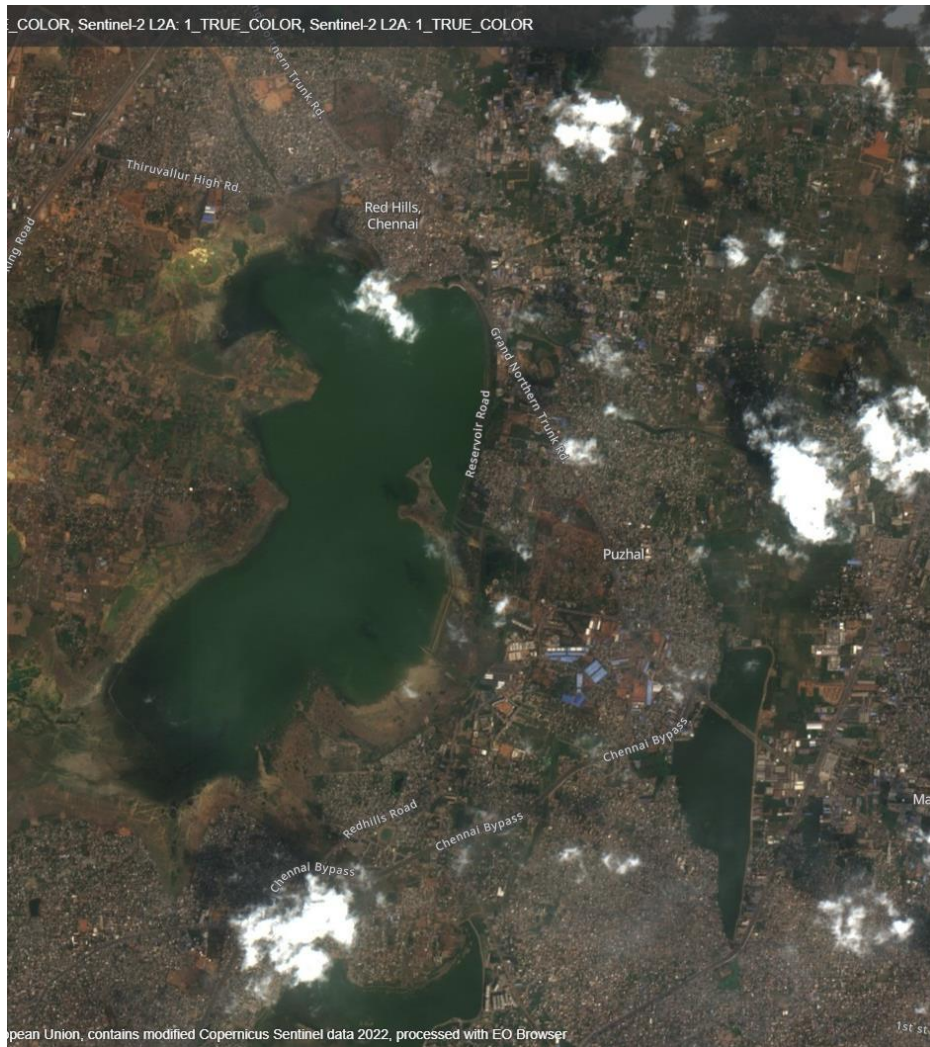
Vraag: Wat zijn je eigen ervaringen met extreme regen en droogte?

Satellietbeeld van droge zomer 2018 Nederland en Groot Brittannië (video)

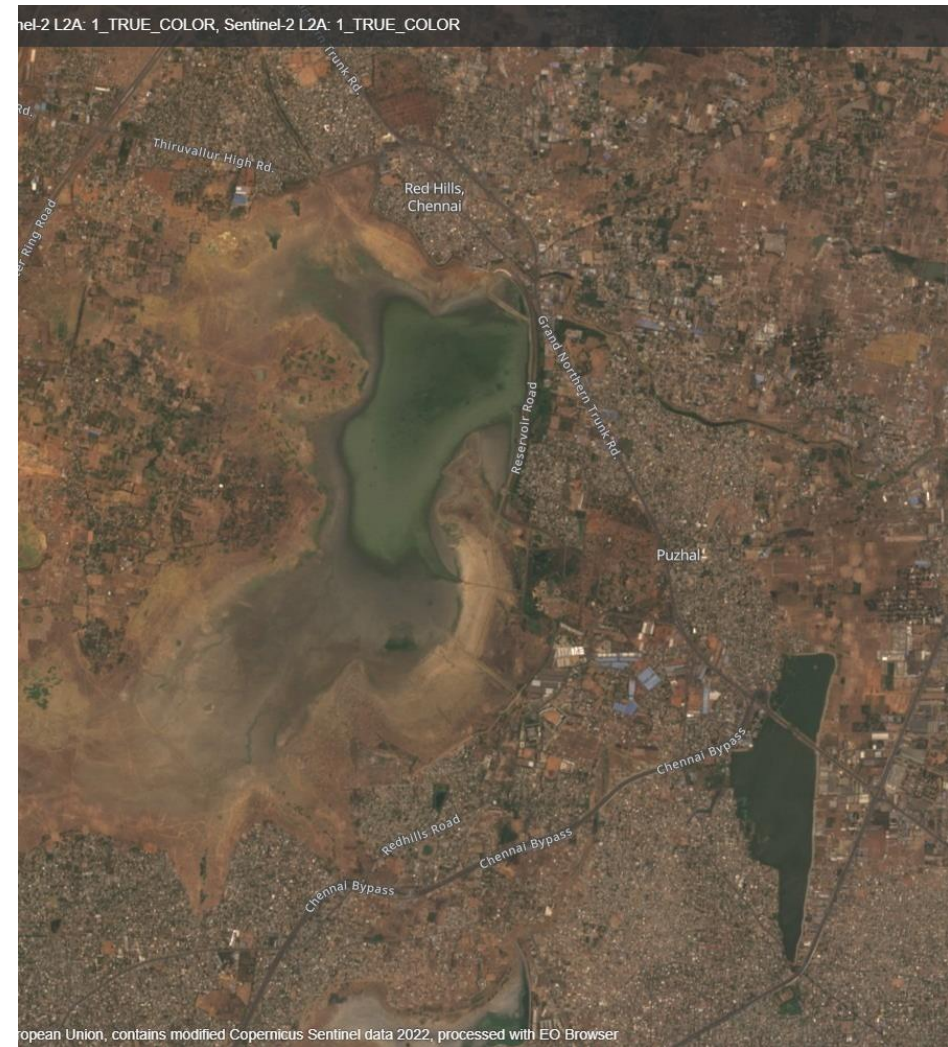


Bron: [ESA](#)

Chennai India, voor en na droogte



Voor: 5-2-2019



Na: 14-08-2019

Bron: [EO Browser: flood and droughts highlights](#)

Overstroming in Madagascar 2020



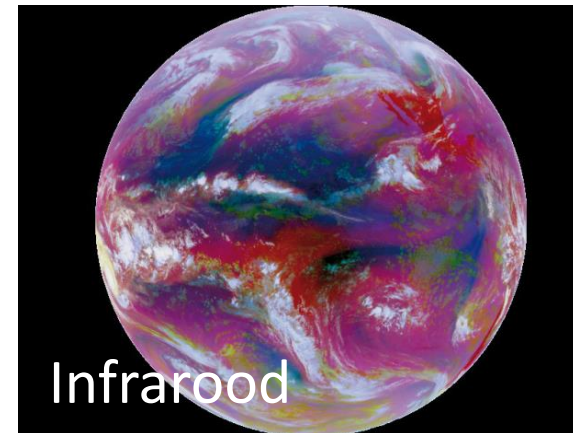
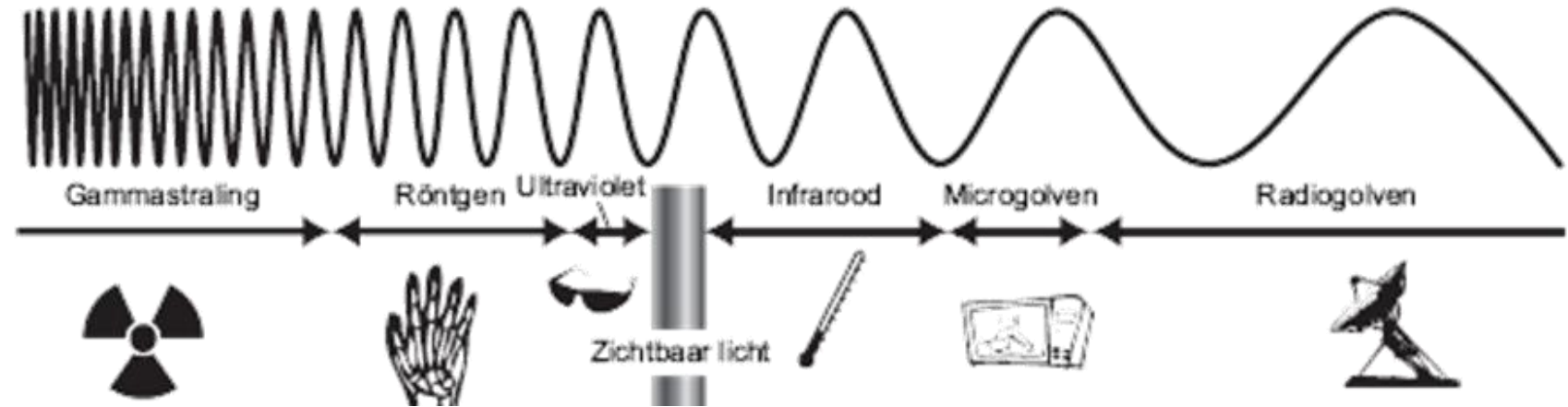
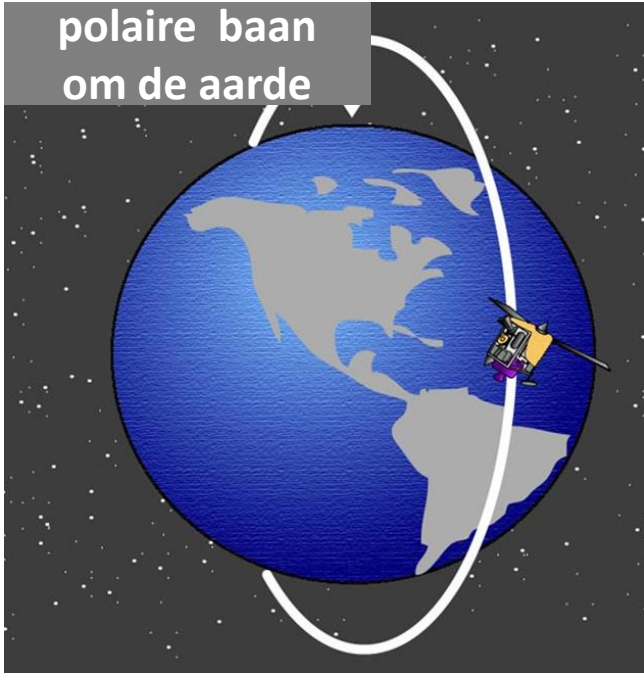
Voor: 18-01-2017

Na: 27-01-2020

Bron: [flickr](#)

Hoe satellietbeelden worden gemaakt

Satelliet draait om aarde en heeft sensoren



Overstroming in Omaha, Nebraska, Verenigde Staten



01-03-2018



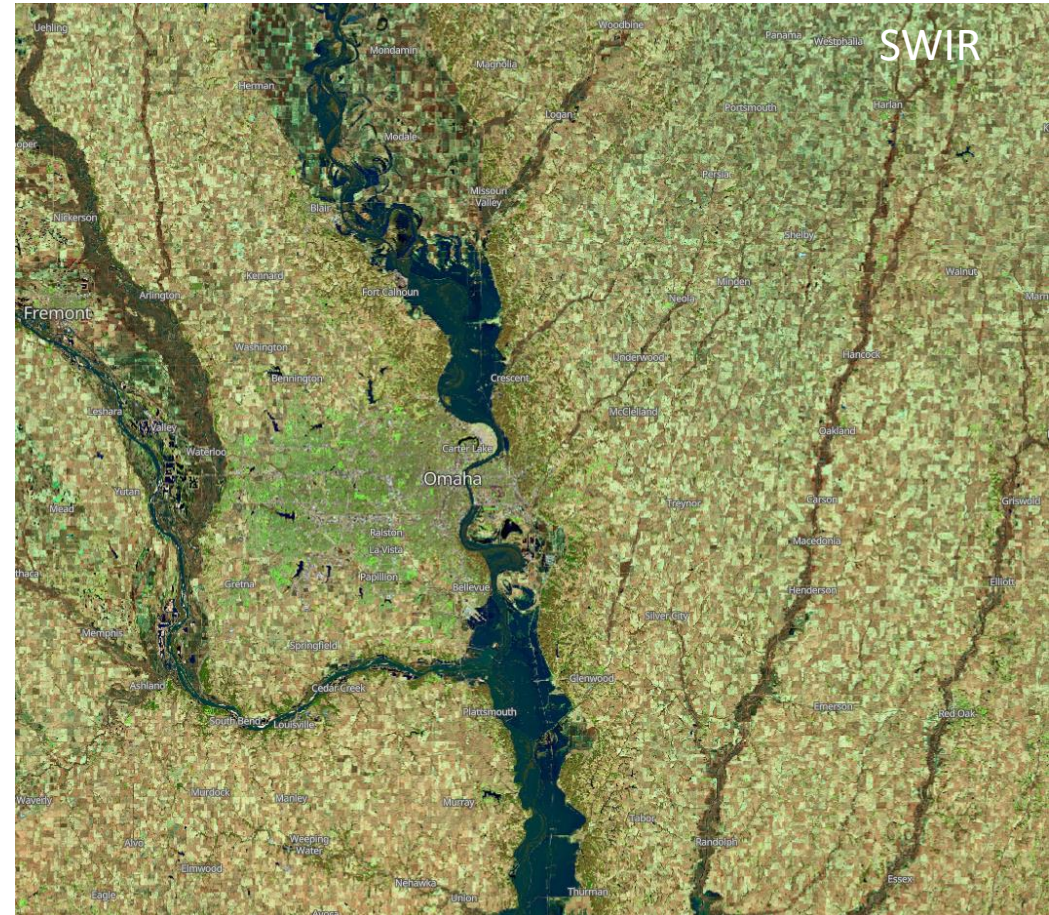
21-03-2018

Bron: [EO Browser: flood and droughts highlights](#)

Overstroming in Omaha, Nebraska, Verenigde Staten



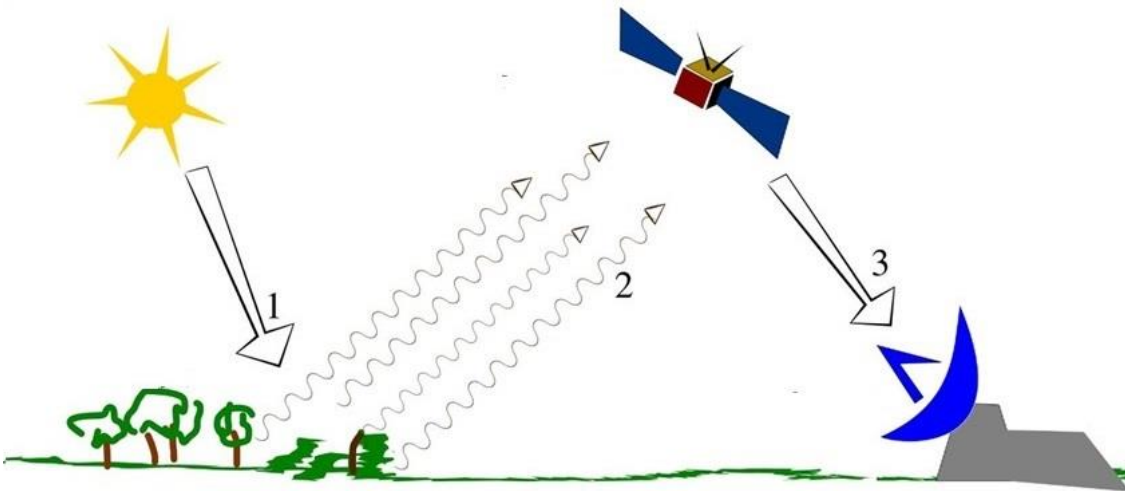
01-03-2018



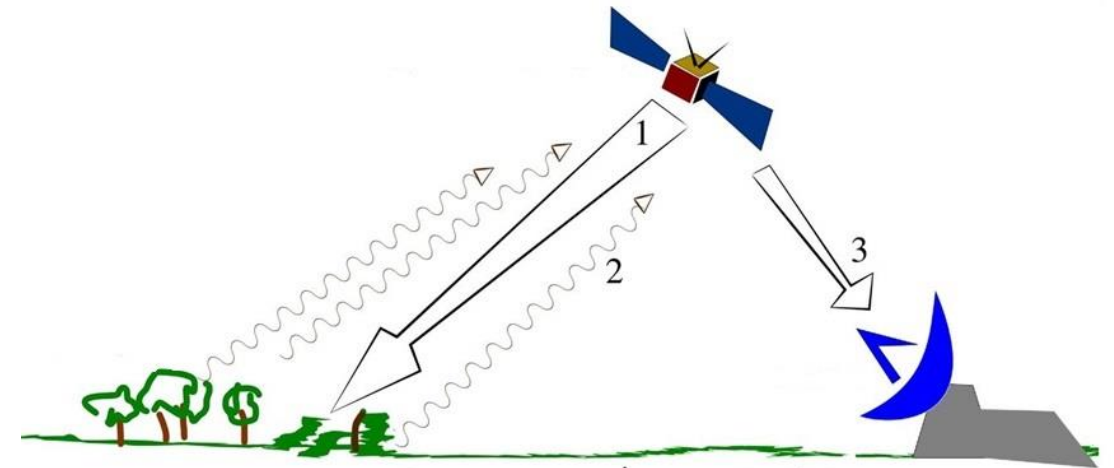
21-03-2018

Bron: [EO Browser: flood and droughts highlights](#)

Passief: kijken naar gereflecteerde straling van de zon, of eigen straling van de aarde

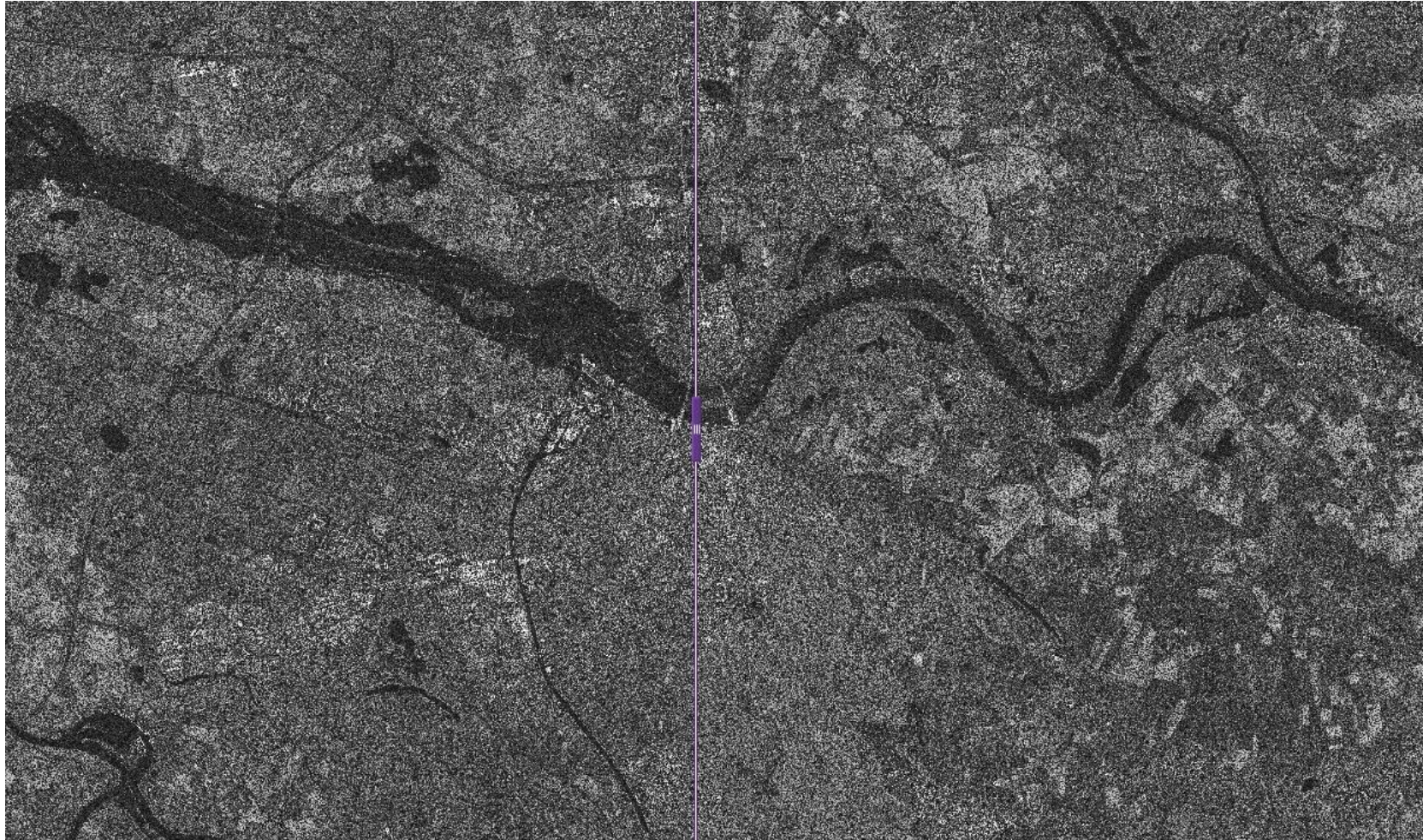


Actief: zenden een signaal uit en meten de reflectie daarvan (bijv. radar of laser)



Bron: Arkarjun, [CC BY-SA 3.0](https://creativecommons.org/licenses/by-sa/3.0/)
via Wikimedia Commons

Actieve meting door radar: Overstroming Nijmegen februari 2021



10-2-2021

24-12-2020

[Bron: Satellietdataportaal.nl](https://www.satellietdataportaal.nl)

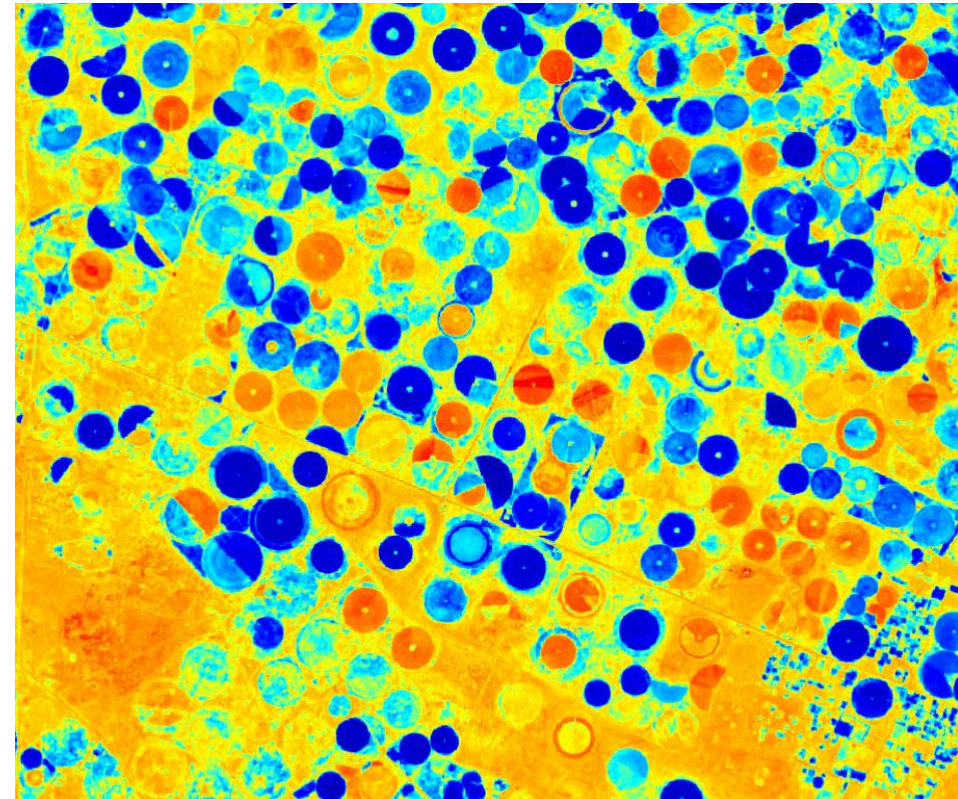
Irrigatie in Saudi-Arabië

True color

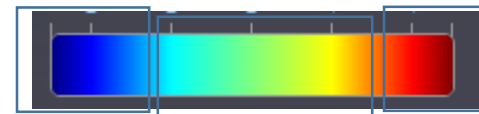


Bron: [ESA/EO browser](#)

Moisture Index



Genoeg water

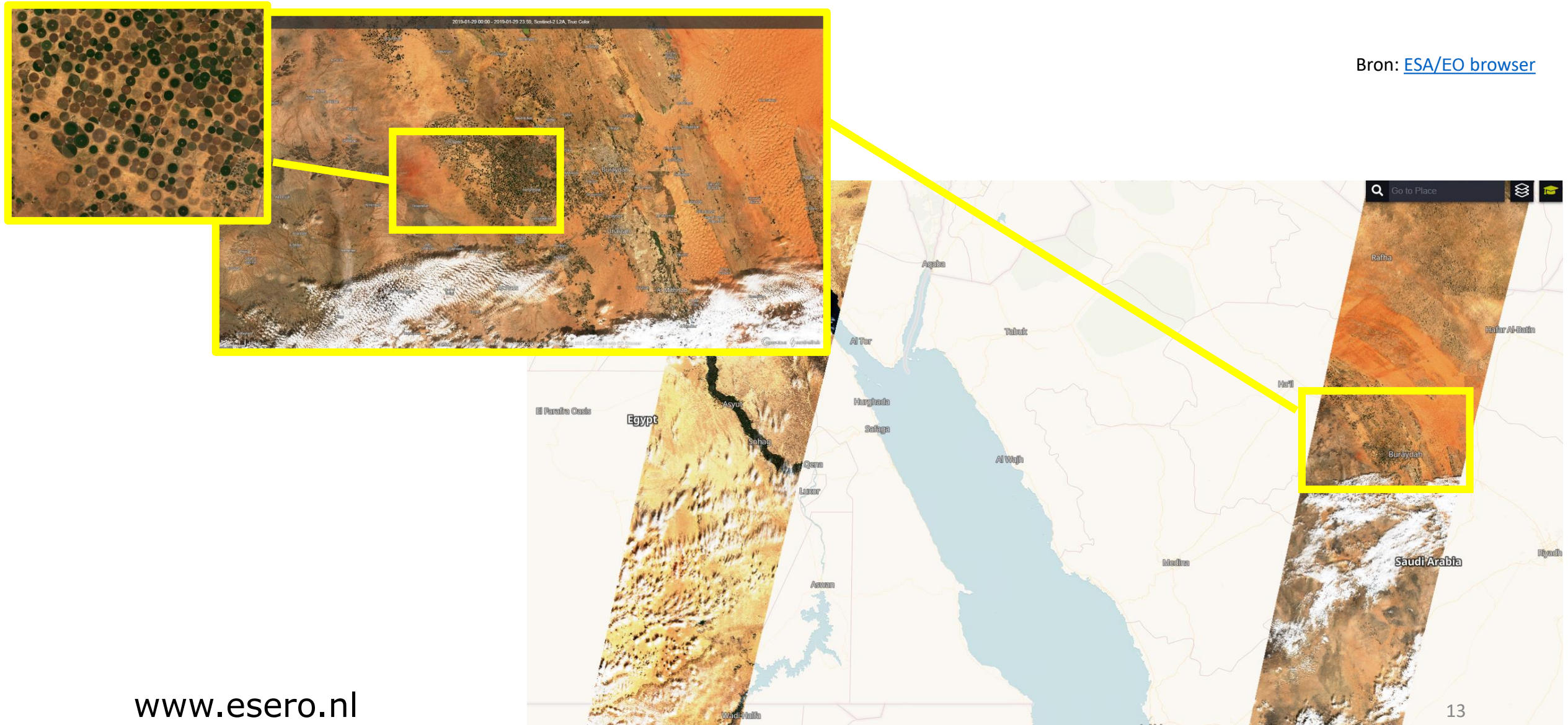


Droge grond

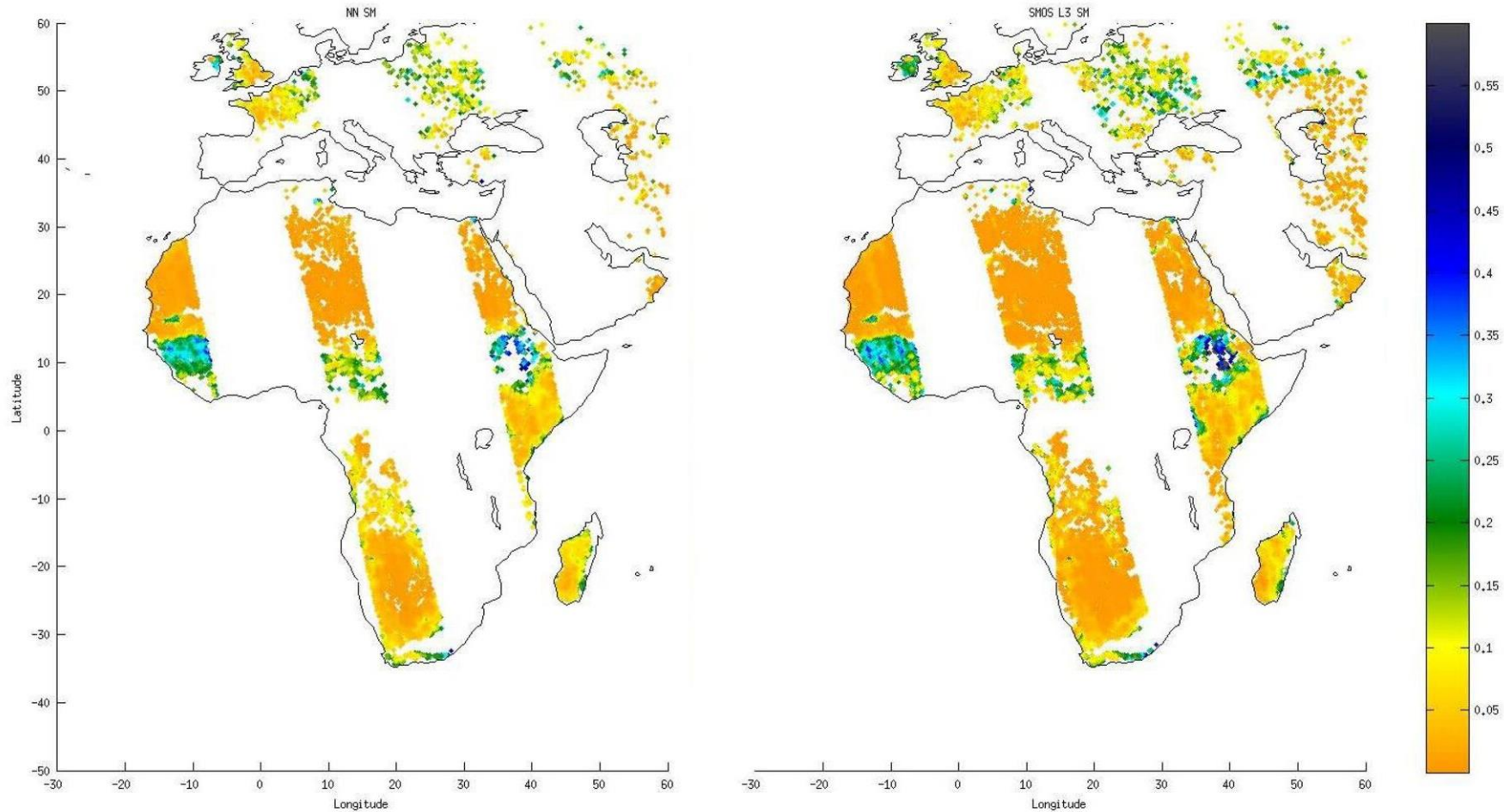
Te weinig water

Irrigatie in Saudi-Arabië: uitgezoomd

Bron: [ESA/EO browser](#)



Waarom zijn deze satellietbeelden gestreept?



Bodemvochtmeting door SMOS
Bron: [ESA](https://www.esa.int)

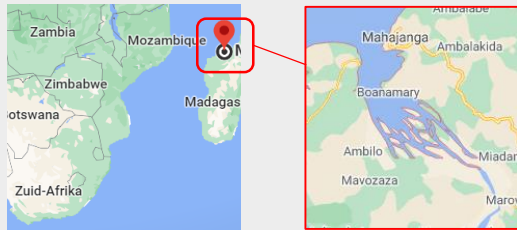
Polaire baan van de satelliet (video)



Opdracht

Maak een infographic

Overstroming door zware regenval in Madagscar eind januari 2020



Bron: Googlemaps

Overstromingen in Madagaskar

24 januari 2020, 14:50



In [Madagaskar](#) zijn sinds het begin van deze week minstens dertien mensen gestorven door overstromingen. Meer dan 47.000 mensen op het eiland voor de zuidoostkust van Afrika zijn getroffen door storm.

Bron: Weeronline



true color true color

Bron: EO-Browser

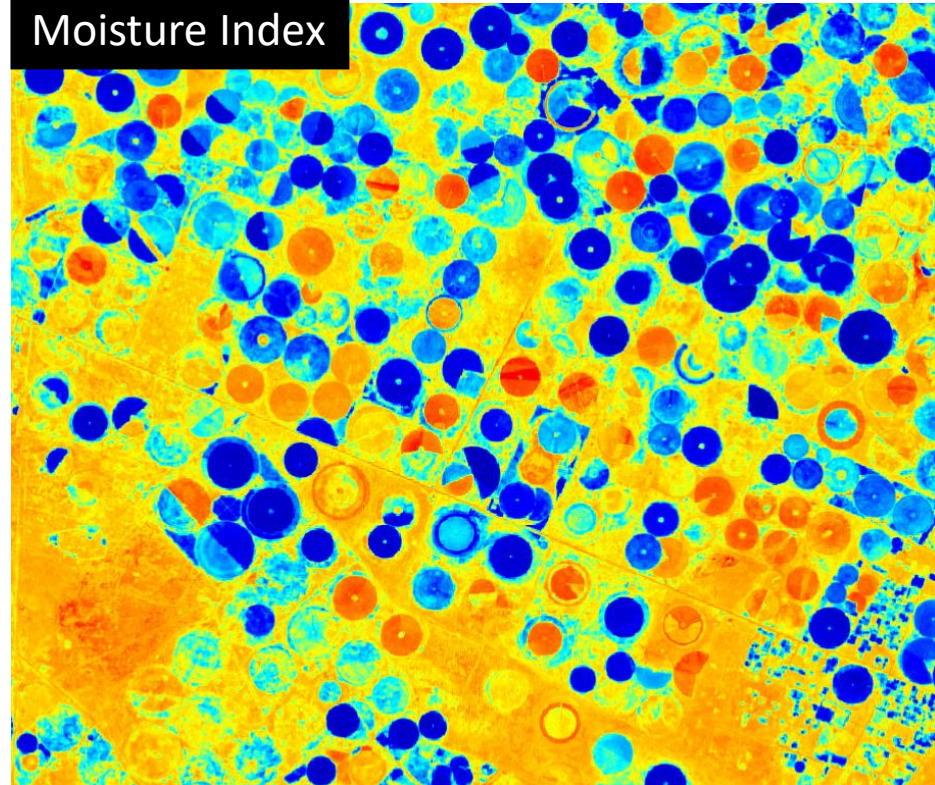
Legenda infographic

Laten zien welk beeld er is gebruikt.

True color



Moisture Index



Als je geen true color beeld gebruikt, uitleg van de kleuren (legenda)



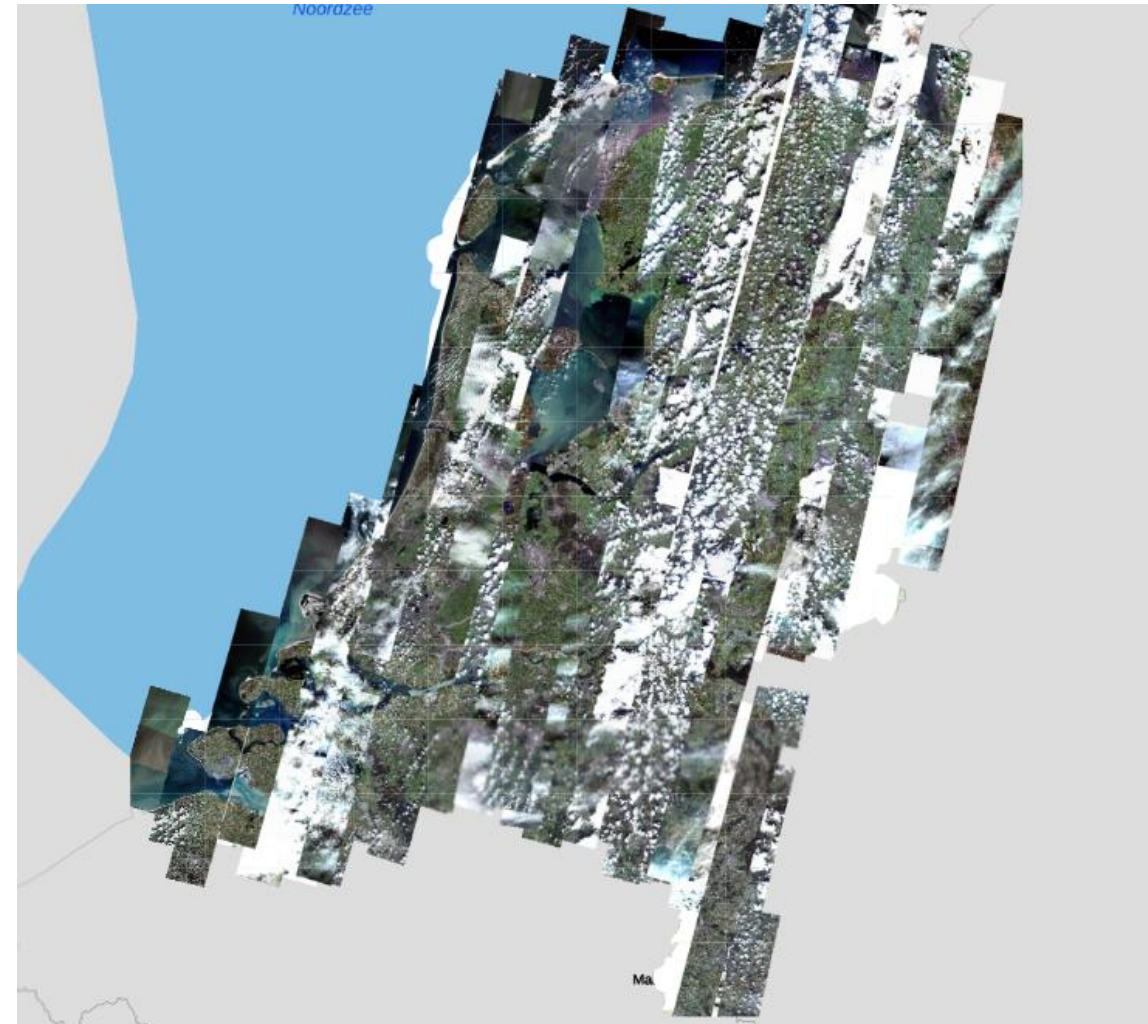
Beeld downloaden van satellietdataportaal www.satellietdataportaal.nl

The screenshot shows the esero satellite data portal interface. At the top, there is a navigation bar with the Netherlands Space Office logo and menu items: KAART, HOE, OVER ONS, LAGEN, ZOEKGEBIED 1, FILTERS, ACTIES 5, and Mijn portaal. Below the navigation bar is a map of the Netherlands. A yellow box highlights the 'ZOEKGEBIED 1' dropdown menu. An arrow points from this box to a search panel on the right. The search panel has a 'Handmatig zoeken' section with a search box containing 'nijmegen' and a '2' next to it. Below this is a 'Vormen uploaden' section with a 'Bestand kiezen' button and a note 'max 4mb | ± 4.000 points'. Another arrow points from the search panel to a zoomed-in satellite image of Nijmegen. A third arrow points from the zoomed-in image to a timeline on the left. The timeline is a vertical bar with circular icons representing satellite images taken at different dates: 4-0-2021, 01 mei, 01 jun, 01 jul, 01 aug, 01 sep, 01 okt, and 1-0-2021. A yellow box highlights the timeline, and a label '4 Satellietbeelden kiezen uit tijdlijn' points to it. The zoomed-in satellite image shows a detailed view of Nijmegen, with a blue location pin and a yellow box around it. A label '3 inzoomen' points to this box. The map in the background shows various cities and rivers, with a yellow box around the 'ZOEKGEBIED 1' dropdown menu.

Tip:

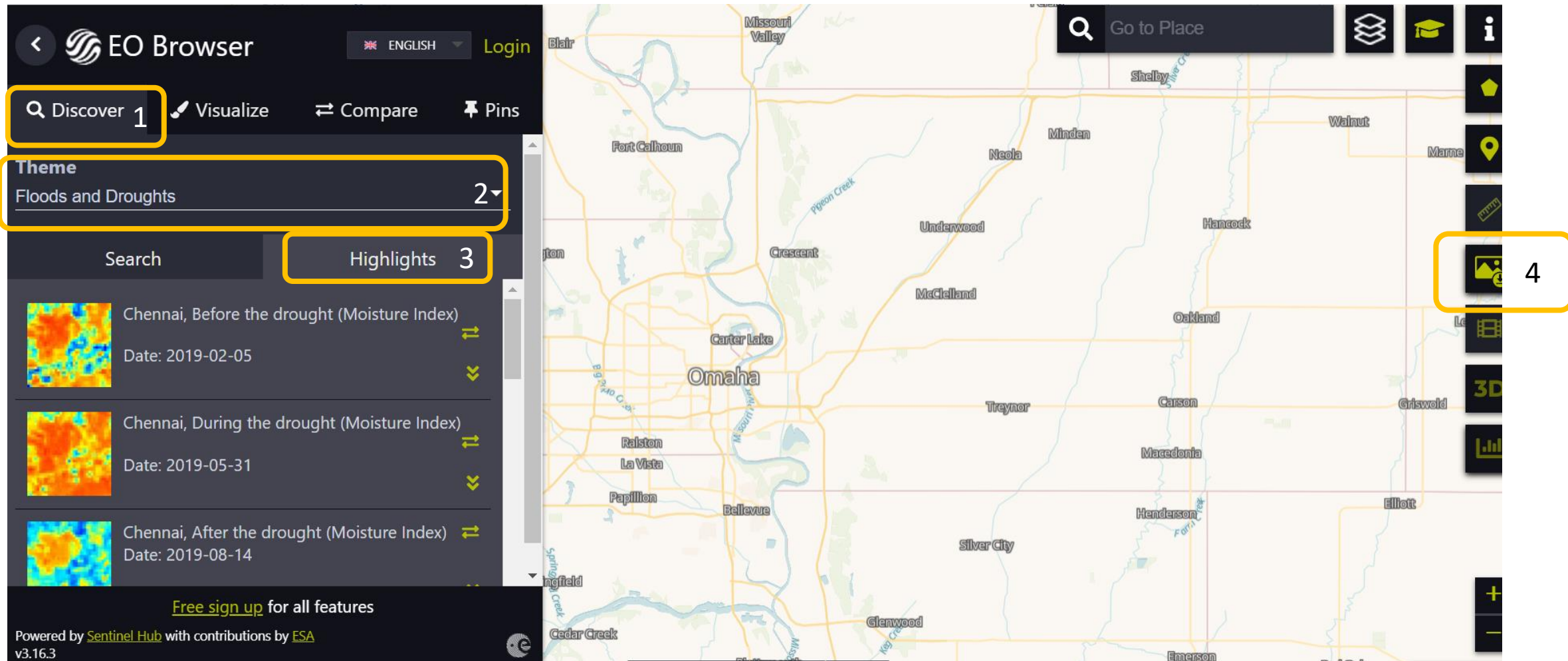
Neem een klein gebied en zoom in.

Anders krijg je mozaïeken of samengestelde beelden.



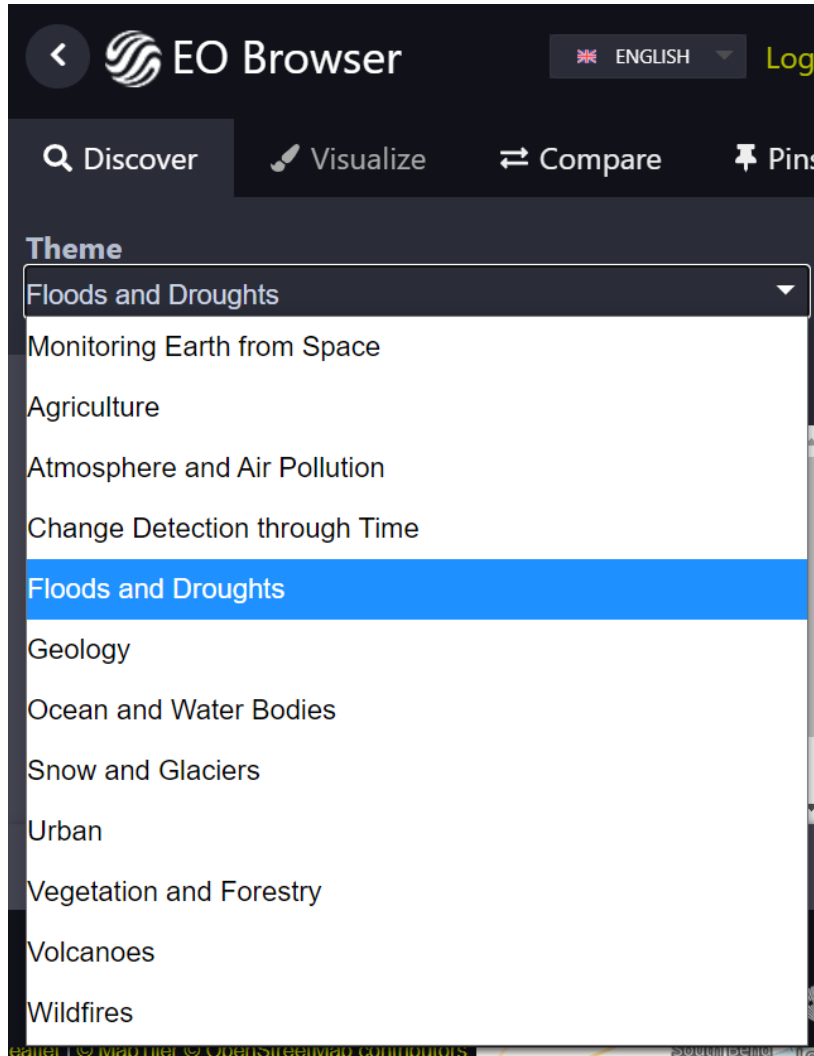
Beeld downloaden van EO browser

EO browser



The screenshot displays the EO Browser interface. The top navigation bar includes the EO Browser logo, a language selector set to 'ENGLISH', and a 'Login' button. Below this, a search bar contains the text 'Discover 1'. The main sidebar on the left features a 'Theme' dropdown menu set to 'Floods and Droughts 2', a 'Search' section, and a 'Highlights 3' section. The 'Highlights' section lists three items: 'Chennai, Before the drought (Moisture Index)' dated 2019-02-05, 'Chennai, During the drought (Moisture Index)' dated 2019-05-31, and 'Chennai, After the drought (Moisture Index)' dated 2019-08-14. A 'Free sign up for all features' link is visible at the bottom of the sidebar. The main map area shows a satellite view of Omaha, Nebraska, with various city names and geographical features. A search bar at the top right of the map area contains the text 'Go to Place'. On the right side of the map, a vertical toolbar contains several icons, with the 'Download' icon (a camera) highlighted by a yellow box and labeled '4'. The bottom of the interface shows the text 'Powered by Sentinel Hub with contributions by ESA v3.16.3'.

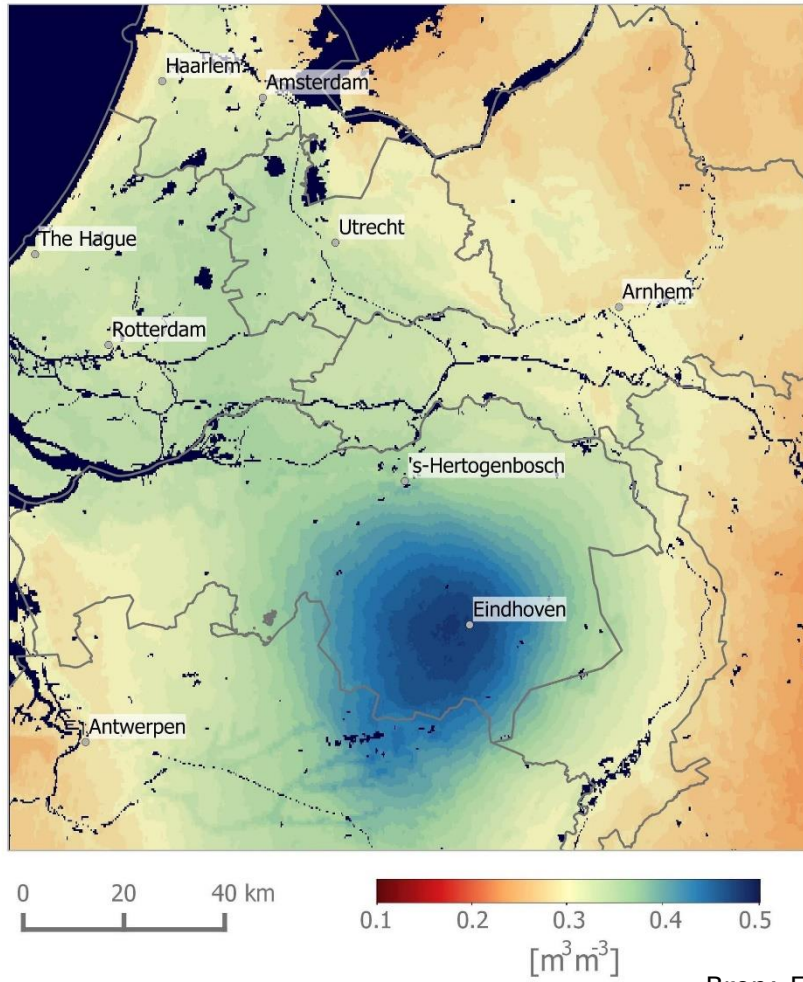
Thema's EO Browser



Verdieping

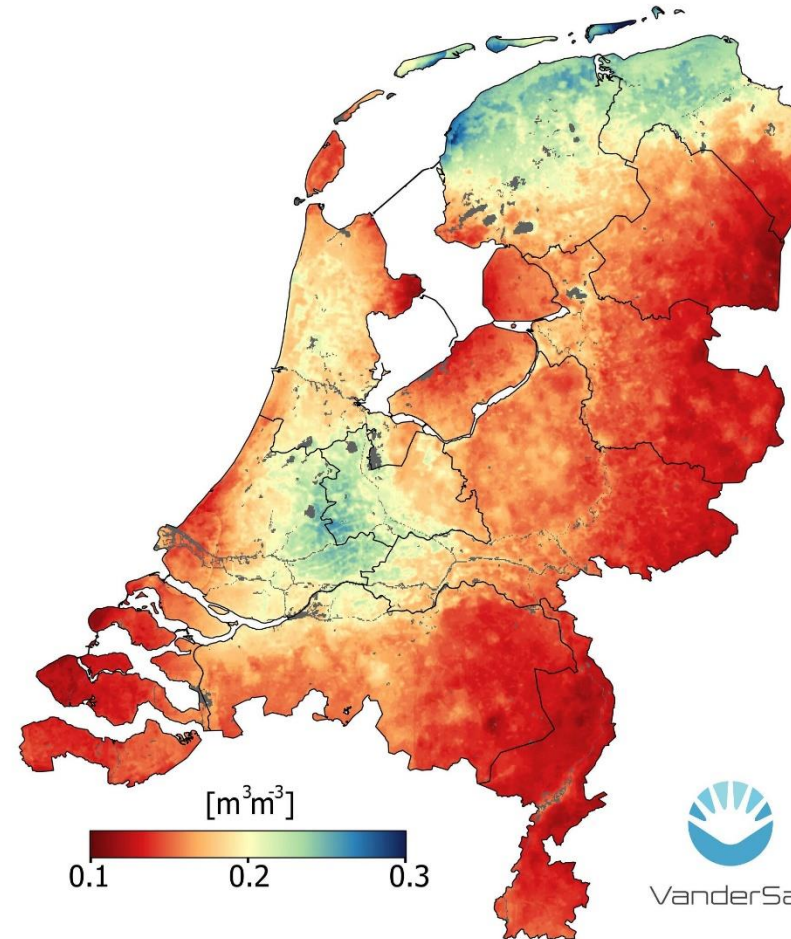
Rekenen met bodemvochtdata

Veel regen in 2016



Bron: ESA

Juni 2017

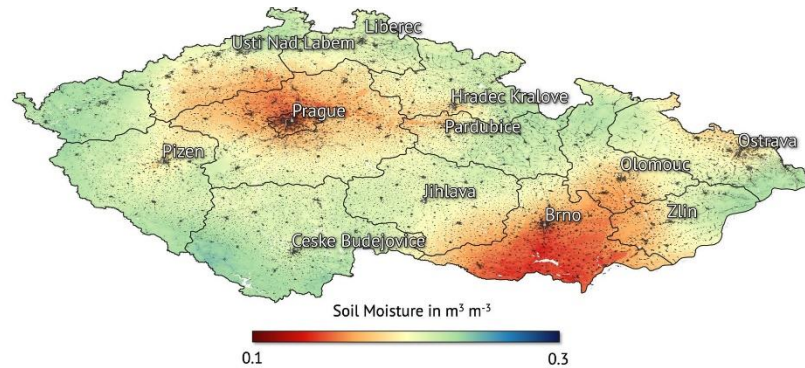



VanderSat

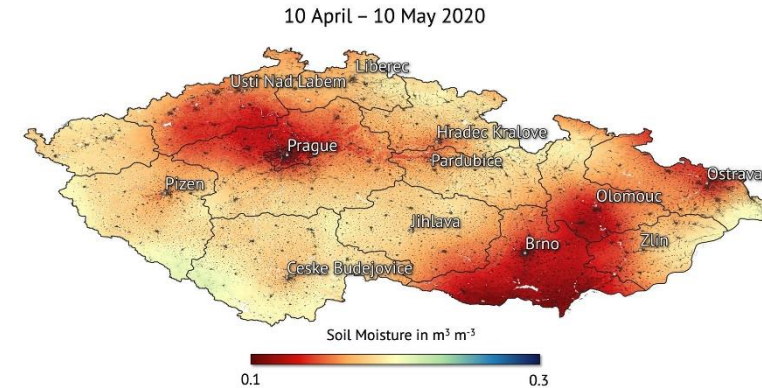
Bron: VanderSat/ESA

Rekenen met bodemvochtdata Tsjechië

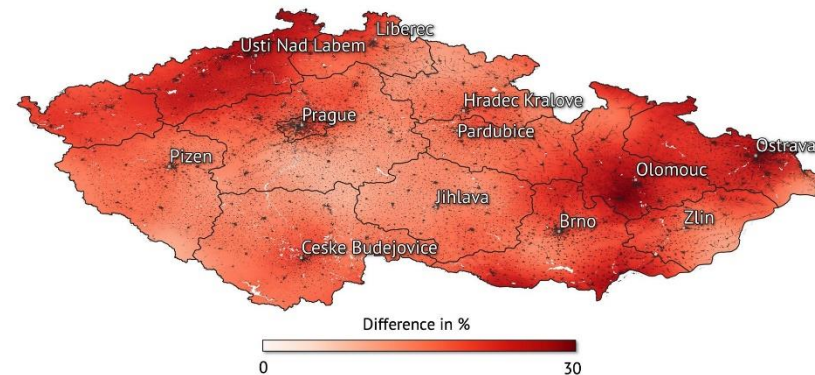
Gemiddelde over 5 jaar in de periode 10 april t/m 10 mei 2015-2020



Alleen: 10 april t/m 10 mei 2020



Afwijking tot het gemiddelde in 2020



Data afwijkende bodemvochtcijfers jun-sep 2021 (video)

