

GEO WEEK & MINISTERIAL SUMMIT 2023

Flash Talk

#TheEarthTalks



science & innovation

Department:
Science and Innovation
REPUBLIC OF SOUTH AFRICA



GEO WEEK
2023 MINISTERIAL
SUMMIT

GEO GROUP ON
EARTH OBSERVATIONS



**GEO
WEEK
2023
MINISTERIAL
SUMMIT**

#TheEarthTalks GEO WEEK & Ministerial Summit 2023

The Copernicus Land Monitoring Service

sensing the pulse of the Earth from global to local scale



Andreas Brink, JRC - EC

06/11/2023, 11:40 – 11:50, room: Orchid



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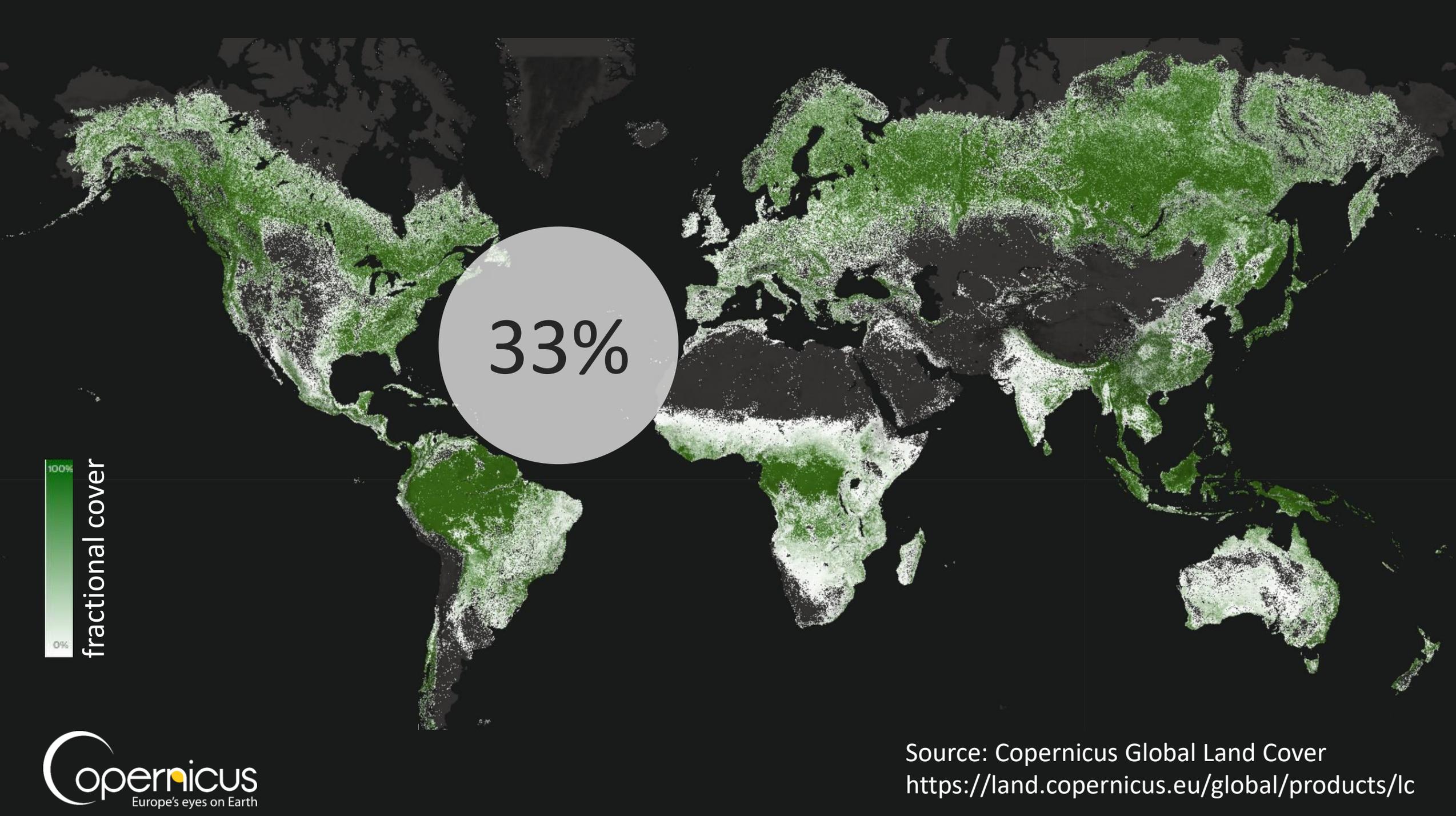


An aerial photograph of a terraced vineyard. The terraces are arranged in a grid-like pattern across a hillside, with rows of grapevines visible. The colors of the terraces vary, ranging from dark purple to bright green, likely due to different grape varieties or stages of growth. A circular white overlay is positioned on the left side of the image, containing the text "86%".

86%

An aerial photograph showing a landscape divided into agricultural fields and a dense forest. The fields on the left are organized in neat, rectangular rows, some appearing to be planted with crops like corn. The forest on the right is a thick, green canopy of trees. A semi-transparent white box is overlaid on the left side of the image, containing text.

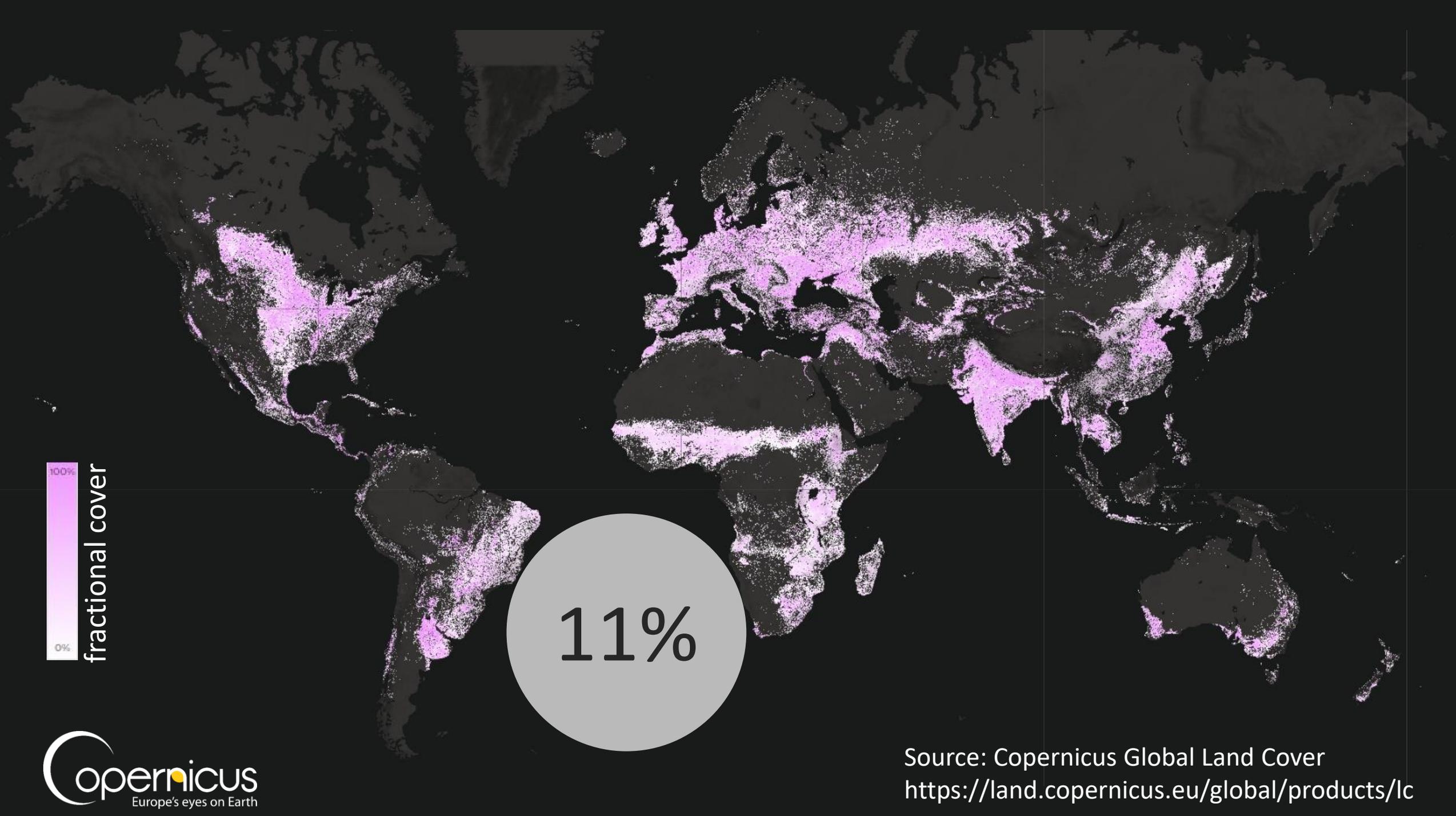
420 Mha forest lost
in 30 years



33%

100%
0%

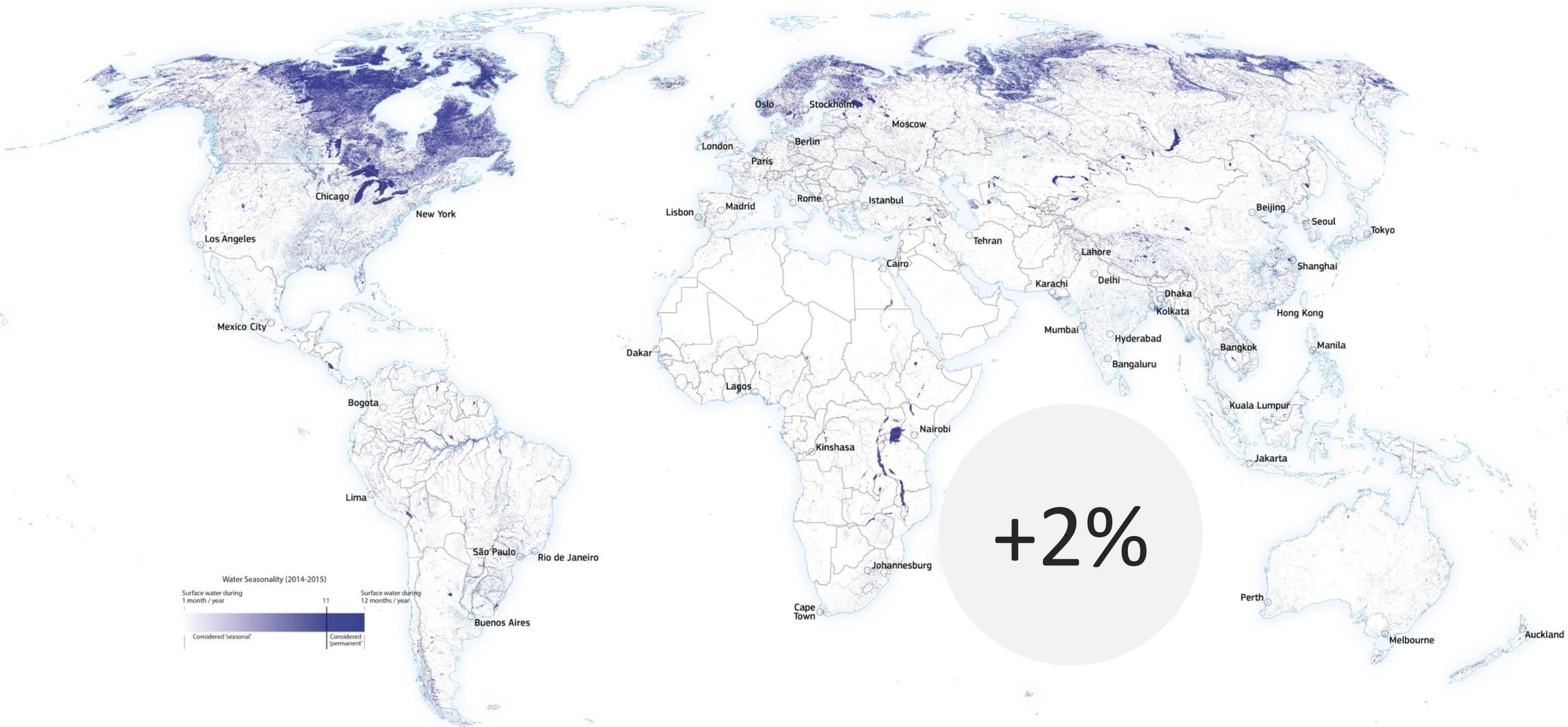
fractional cover



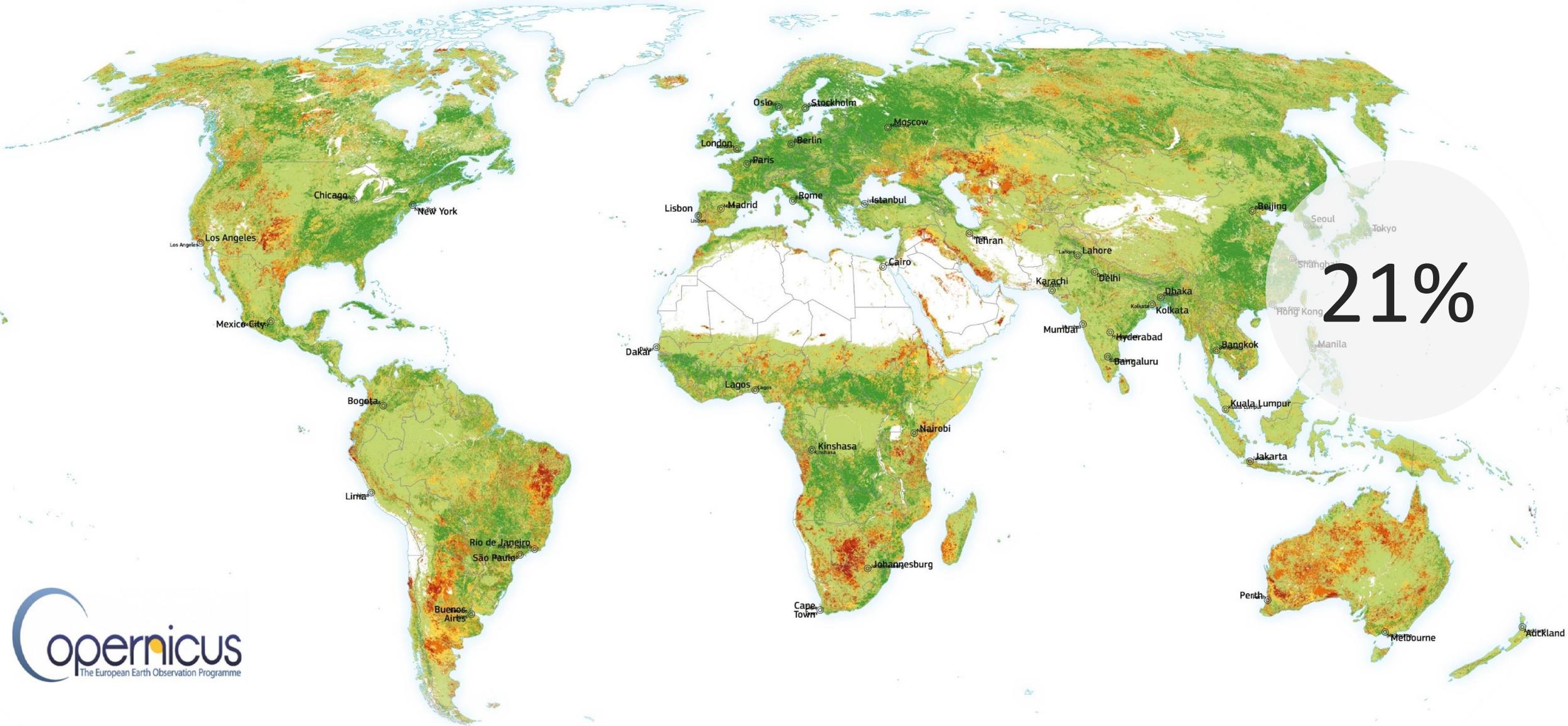
100%
0%

fractional cover

11%



Source: Global Surface Water Explorer
<https://global-surface-water.appspot.com/>

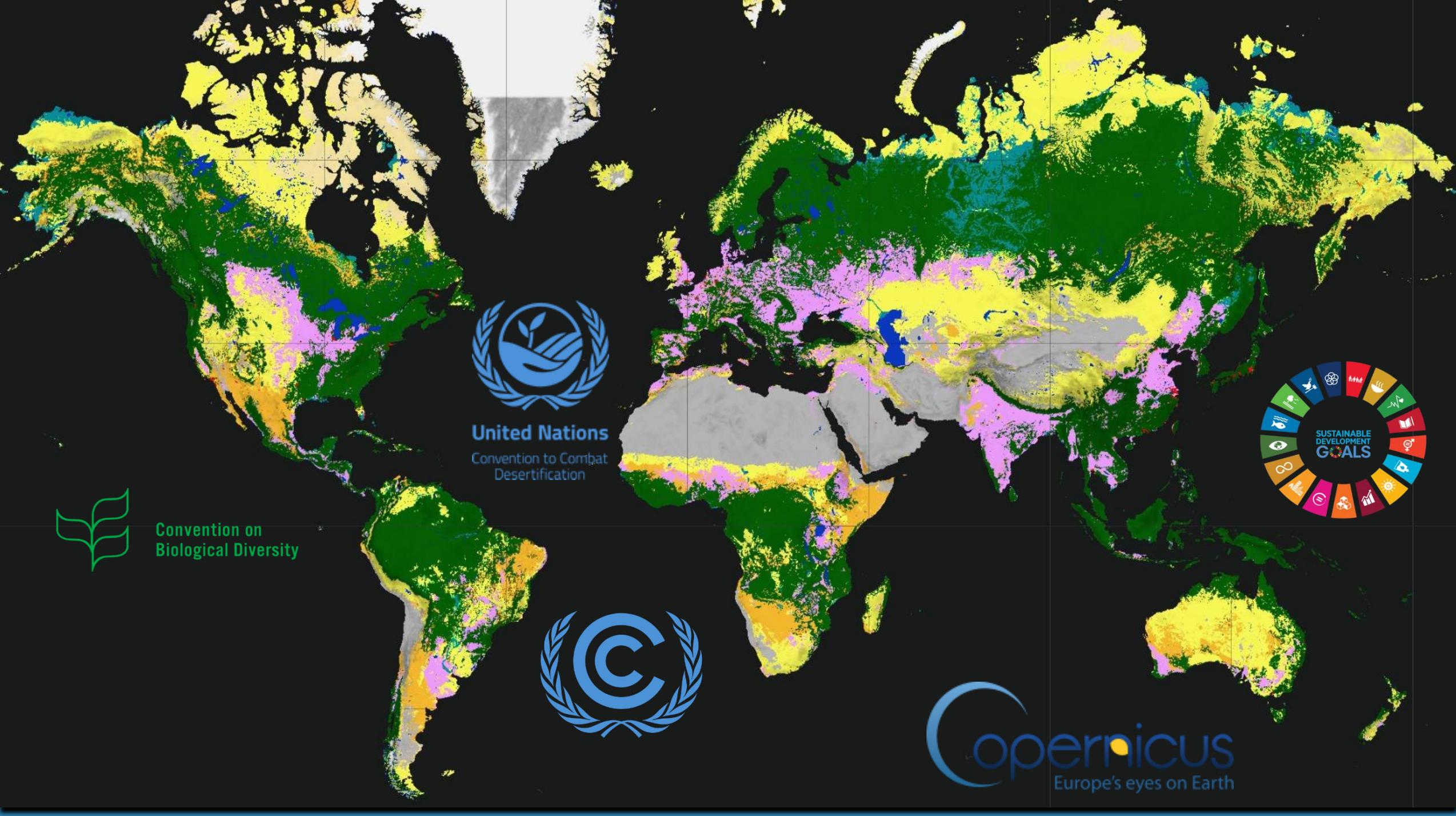


21%



- Persistent severe decline in productivity
- Persistent moderate decline in productivity
- Stable, but stressed; persistent strong inter-annual productivity variations
- Stable productivity
- Persistent increase in productivity

Source: Land Productivity Dynamics WAD, 2018
<https://wad.jrc.ec.europa.eu/>



United Nations
Convention to Combat
Desertification



**Convention on
Biological Diversity**



Copernicus
Europe's eyes on Earth



Food and Agriculture Organization of the United Nations

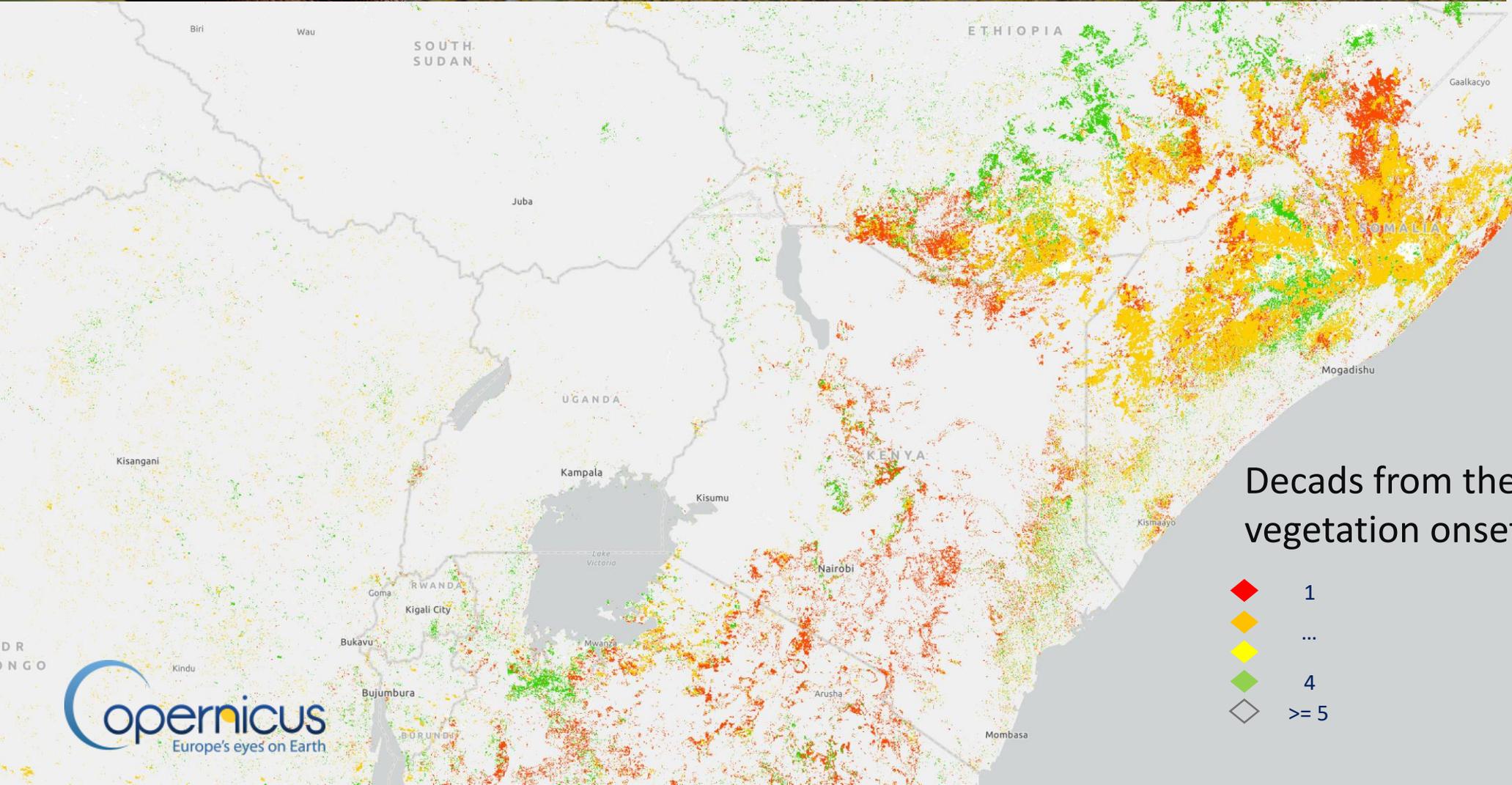
Locust Hub

UPDATED: Locust Watch



Locust Hub

An Initiative of the Food and Agriculture Organization of the United Nations



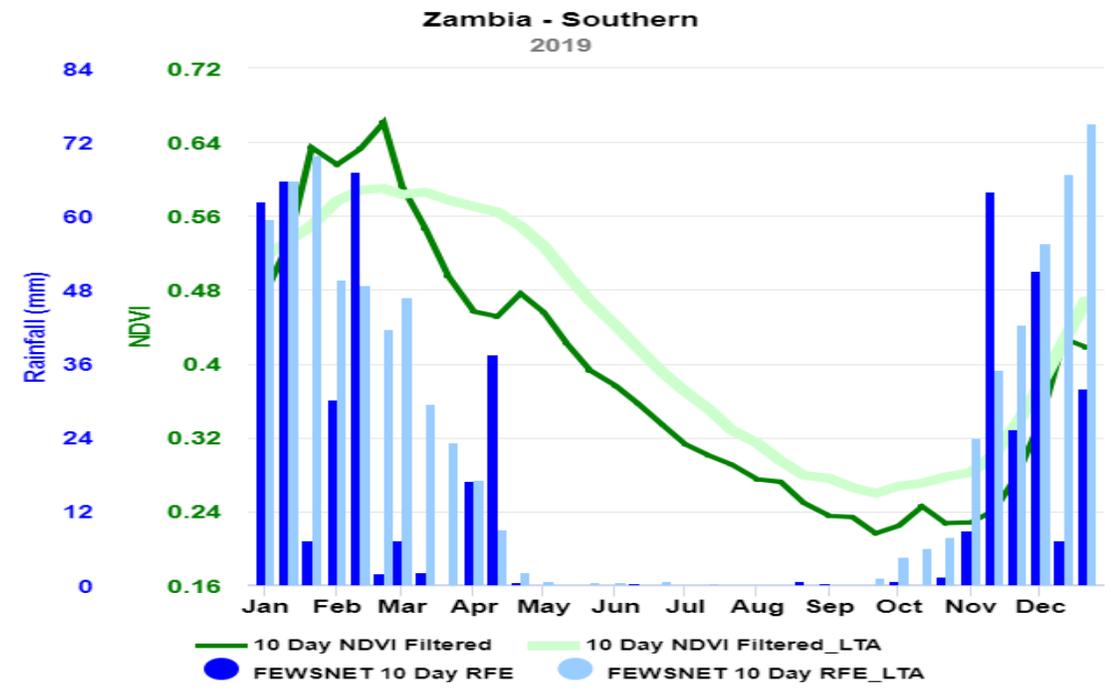
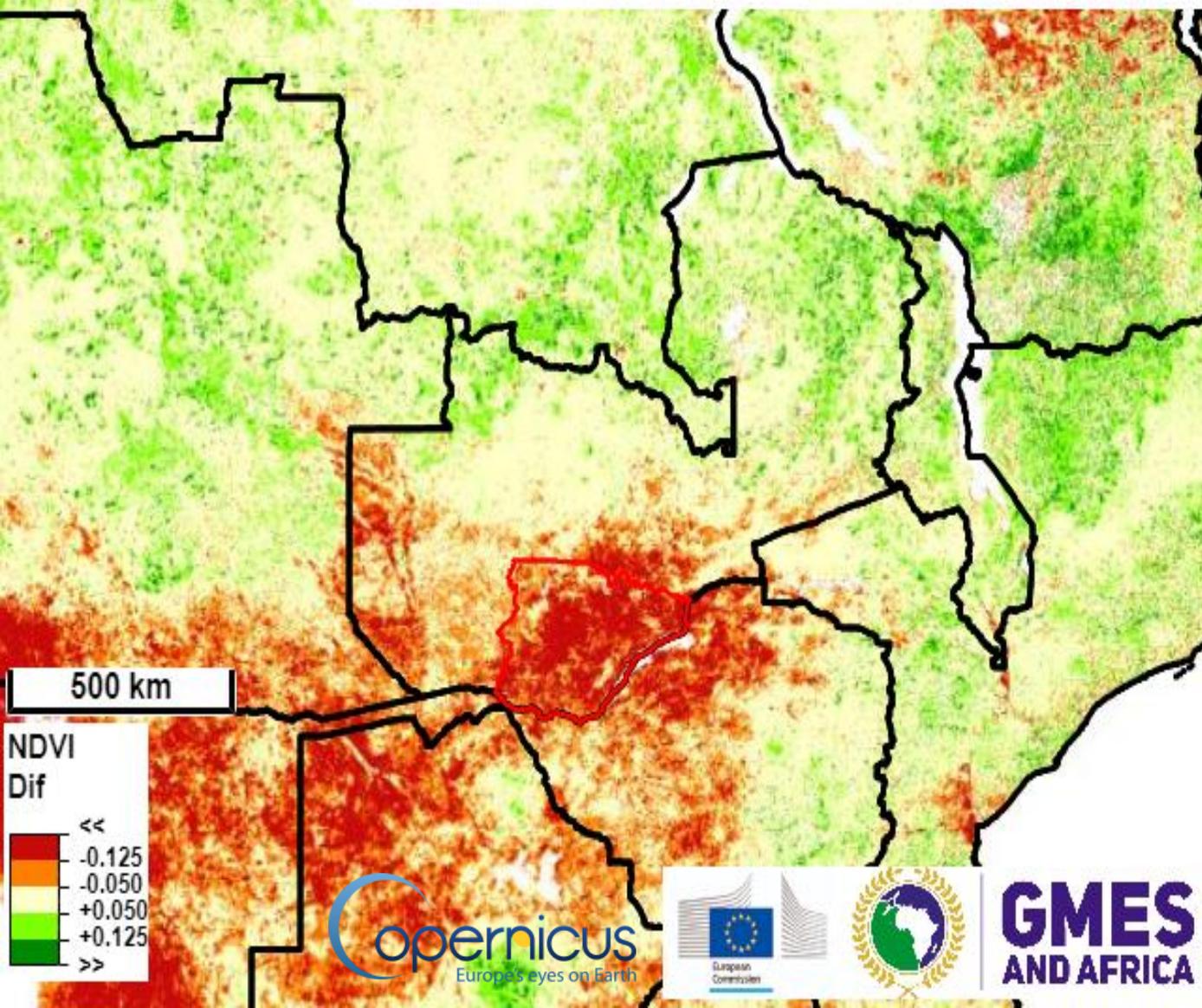
Decads from the vegetation onset

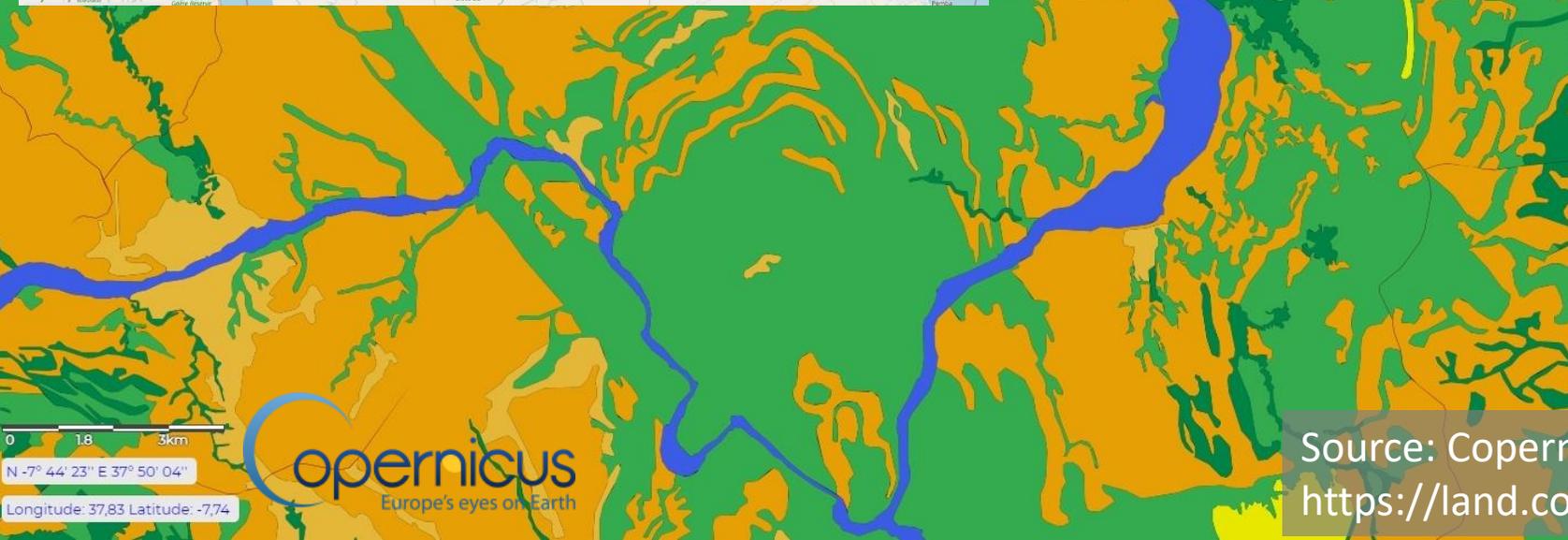
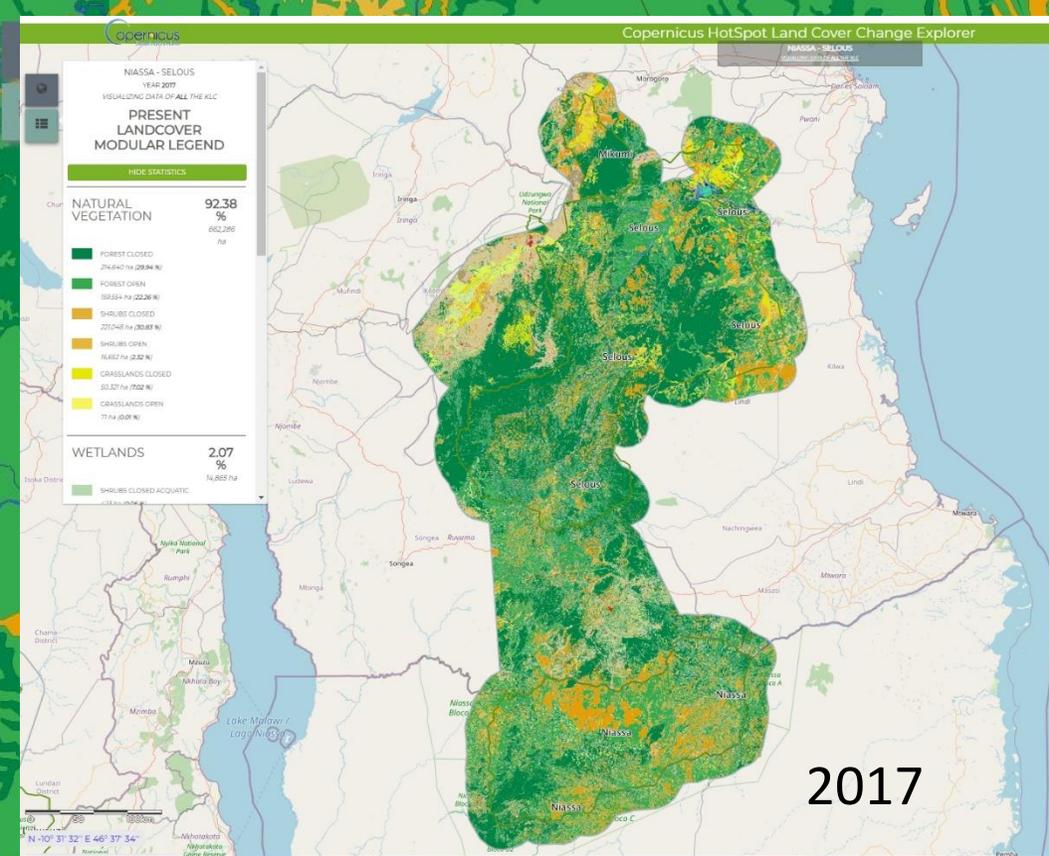
- ◆ 1
- ◆ ...
- ◆ 4
- ◆ >= 5

Source: JRC, 2023



Zambia
 Southern
 SPOT.VGT/PROBA.V - NDVI - 10 Day NDVI filtered DIF to LTA
 01-04-2019

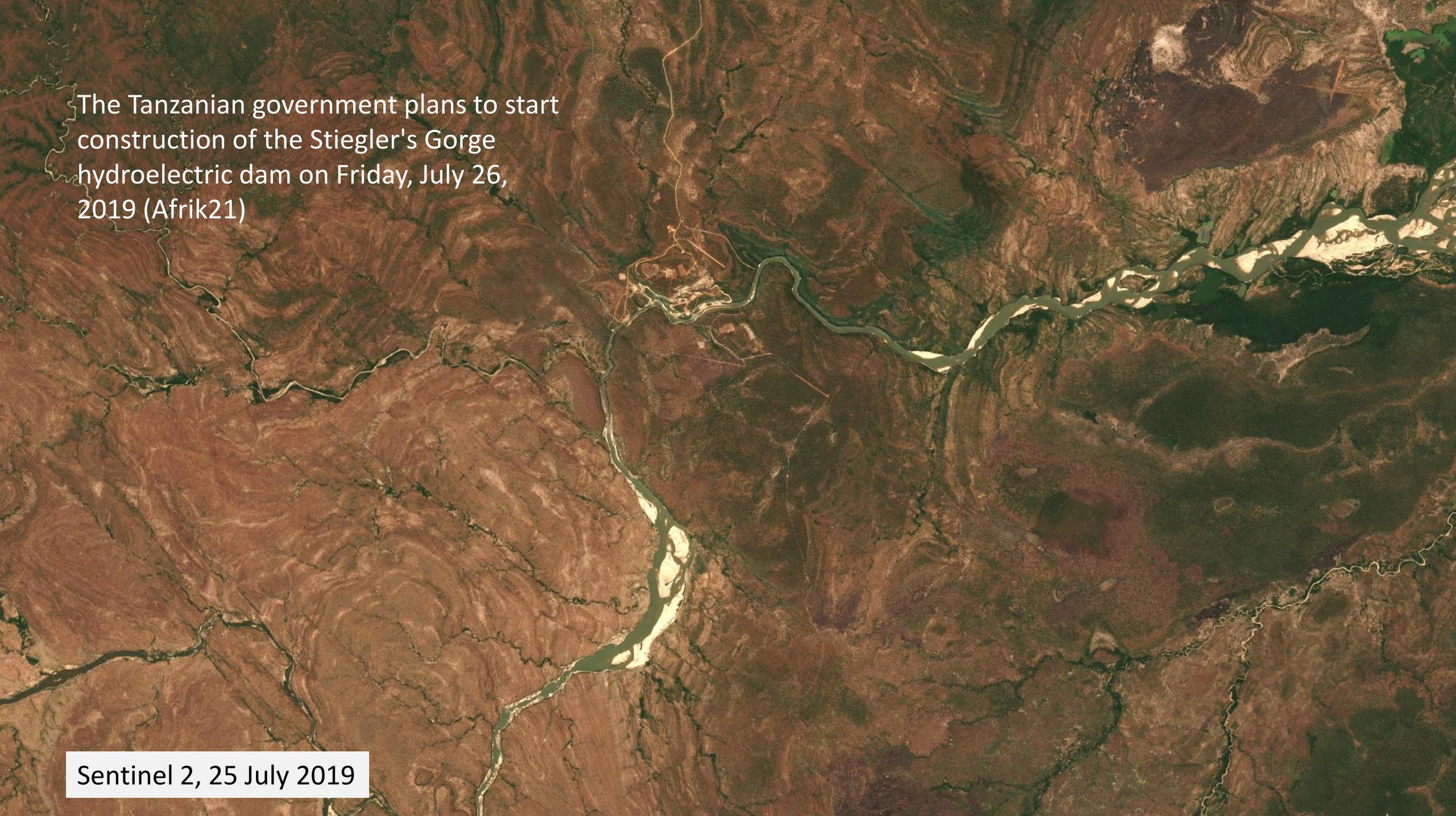




**UNESCO World Heritage Convention
Decision 42 COM 7A.56
Selous Game Reserve (United
Republic of Tanzania) (N 199bis),
2018**

Expresses its grave concern about the State Party's decision to develop the Stiegler's Gorge hydropower project, and in particular the tendering of logging rights for 143,638 ha within the property, considers that the resulting large-scale deforestation represents a clear potential danger to the property in accordance with Paragraph 180 of the Operational Guidelines, and decides to add this issue to the justification for the continued inclusion of the property on the List of World Heritage in Danger;

Source: Copernicus High Resolution Hot Spot Monitoring
<https://land.copernicus.eu/global/hsm>

A satellite image showing a wide, winding river valley in a rugged, brownish landscape. The river is light-colored, likely due to sediment, and flows through a deep, narrow gorge. The surrounding terrain is characterized by intricate patterns of erosion and small-scale vegetation. The overall scene is captured from an elevated perspective, highlighting the topographic complexity of the region.

The Tanzanian government plans to start construction of the Stiegler's Gorge hydroelectric dam on Friday, July 26, 2019 (Afrik21)

Sentinel 2, 25 July 2019



Sentinel 2, 07 October 2021



Sentinel 2 mosaic, July 2023

Partners and Affiliations

65+ industry partners --- 350+ experts




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6-10 NOVEMBER

CAPE TOWN, SOUTH AFRICA



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