



Copernicus

Data for the future

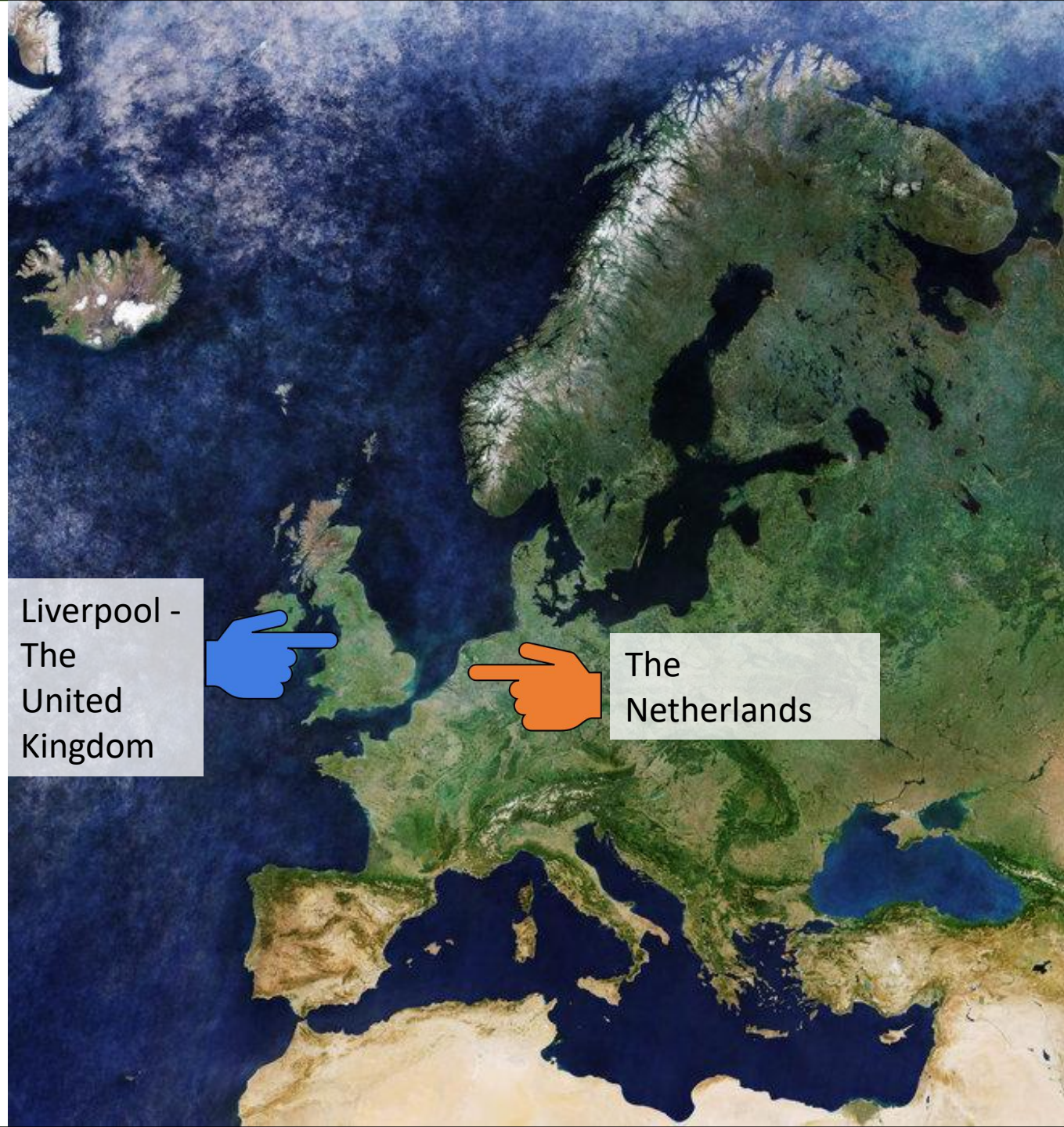
Chris Atherton

Senior Research Engagement Officer

TICAL 01/09/2021

Public

www.geant.org



Liverpool -
The
United
Kingdom



The
Netherlands



an inconvenient truth

A GLOBAL WARNING



“Totally Shockingly Fascinating.
Everyone should see this film right now.”

- Paul Wilson, GQ



tenthingstodo

Want to do something to help stop global warming?

Here are 10 simple things you can do and how much carbon dioxide you'll save doing them.

change a light

Replacing one regular light bulb with a compact fluorescent light will save 150 pounds of carbon dioxide per year.

drive less

Walk, bike, carpool or take metro transit more often. You'll save one pound of carbon dioxide for every mile you don't drive!

recycle more

You can save 2,400 pounds of carbon dioxide per year by recycling just half of your household waste.

check your tires

Keeping your tires inflated properly can improve gas mileage by more than 3%. Every gallon of gasoline saved keeps 20 pounds of carbon dioxide out of the atmosphere!

use less hot water

It takes a lot of energy to heat water. Use less hot water by installing a low-flow showerhead (350 pounds of CO₂ saved per year) and washing your clothes in cold or warm water (500 pounds saved per year).

avoid products with a lot of packaging

You can save 1,200 pounds of carbon dioxide if you cut down your garbage by 10%.

adjust your thermostat

Moving your thermostat down just 2 degrees in winter and up 2 degrees in summer could save about 2,000 pounds of carbon dioxide per year.

plant a tree

A single tree will absorb one ton of carbon dioxide over its lifetime.

turn off electronic devices

Simply turning off your television, DVD player, stereo, and computer when you're not using them will save thousands of pounds of carbon dioxide per year.

be a part of the solution

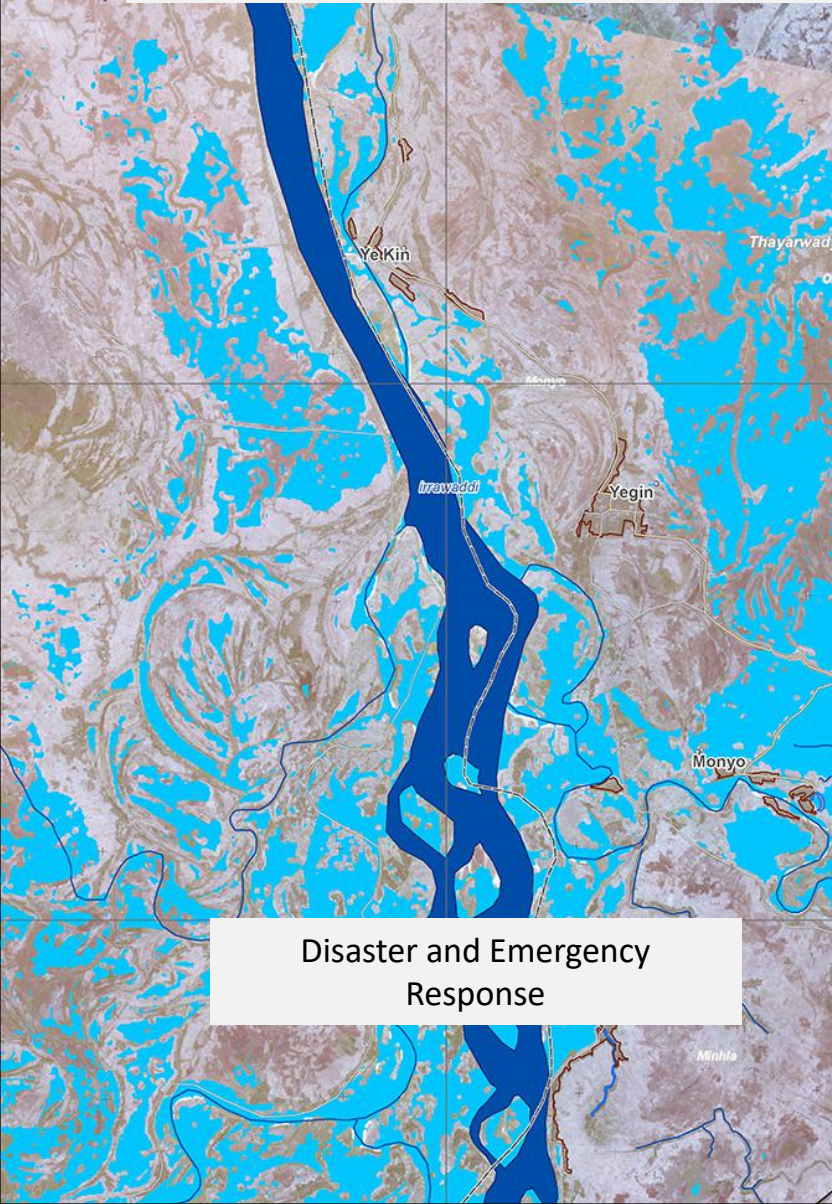
Learn more and get active at www.ClimateCrisis.net.



So what?



3 Global Challenges



Disaster and Emergency Response



Sustainable Development



Climate Change

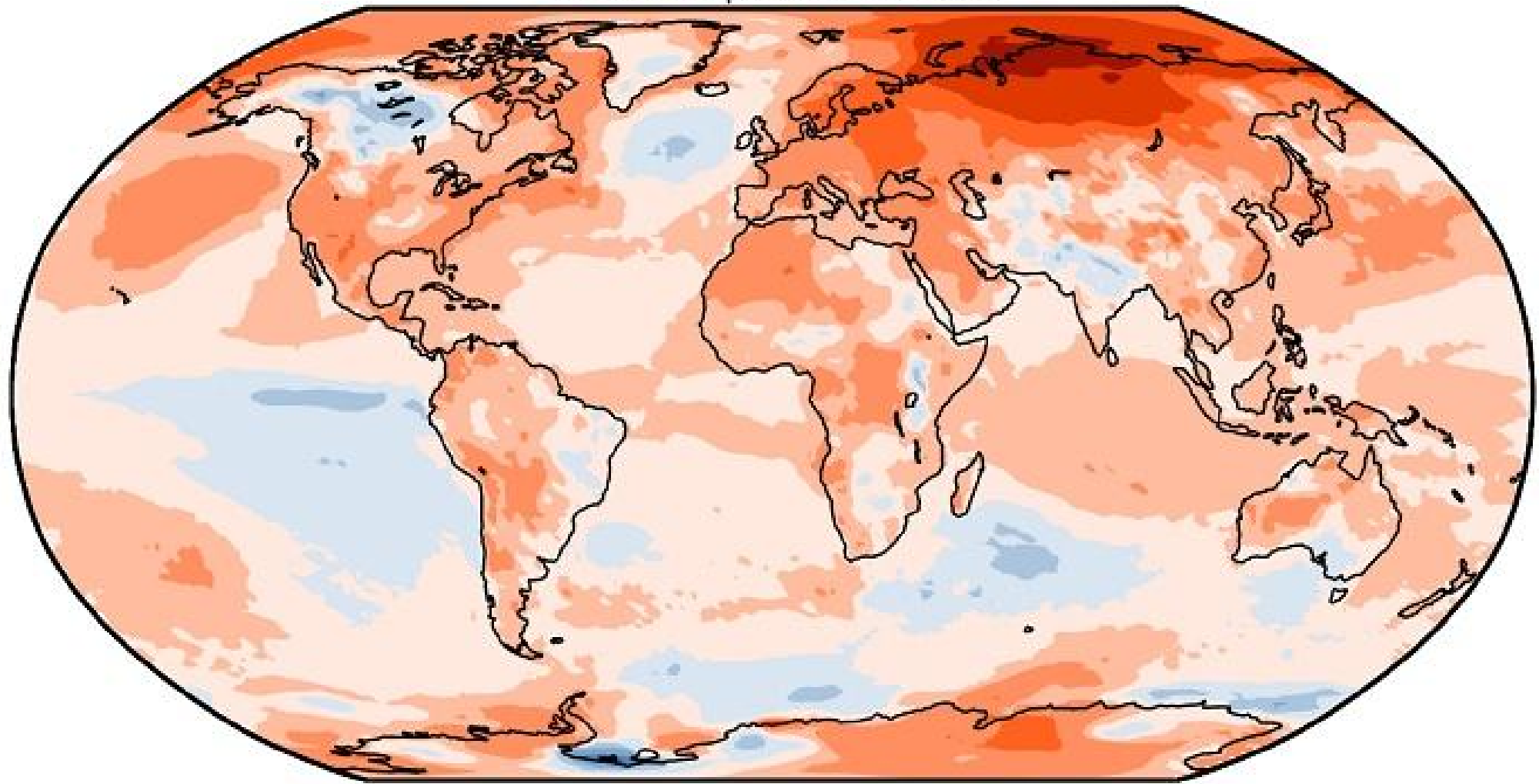


**Arul
Sea**



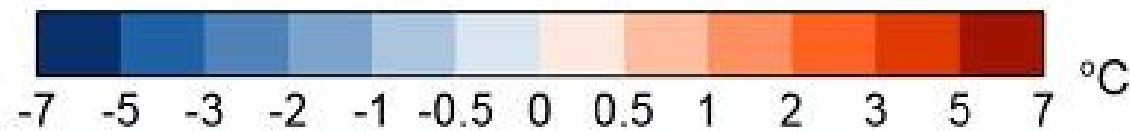
Surface air temperature anomaly 2020

Reference period: 1981-2010



Data source: ERA5

Credit: C3S/ECMWF



Better Information

=

Better decisions



Security



Marine



Emergency



Land



Atmosphere



Climate Change

**FULL, FREE AND OPEN
ACCESS TO DATA**

Who is behind Copernicus



Inter-governmental Organisation



Copernicus Partners

In collaboration with:

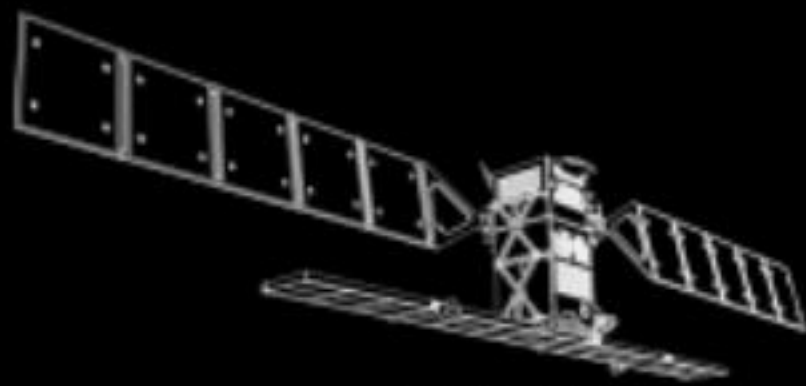




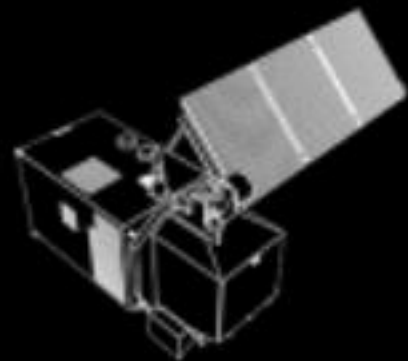
sentinel-5



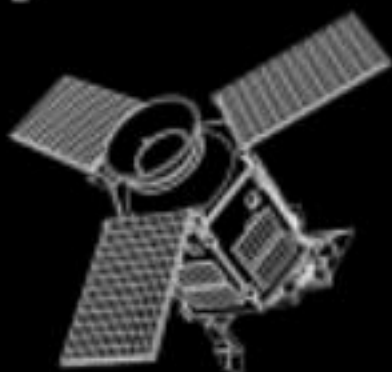
sentinel-6



sentinel-1



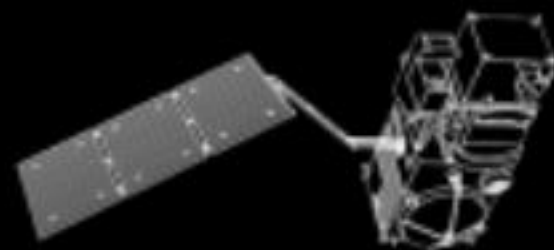
sentinel-2



sentinel-5p



sentinel-4



sentinel-3

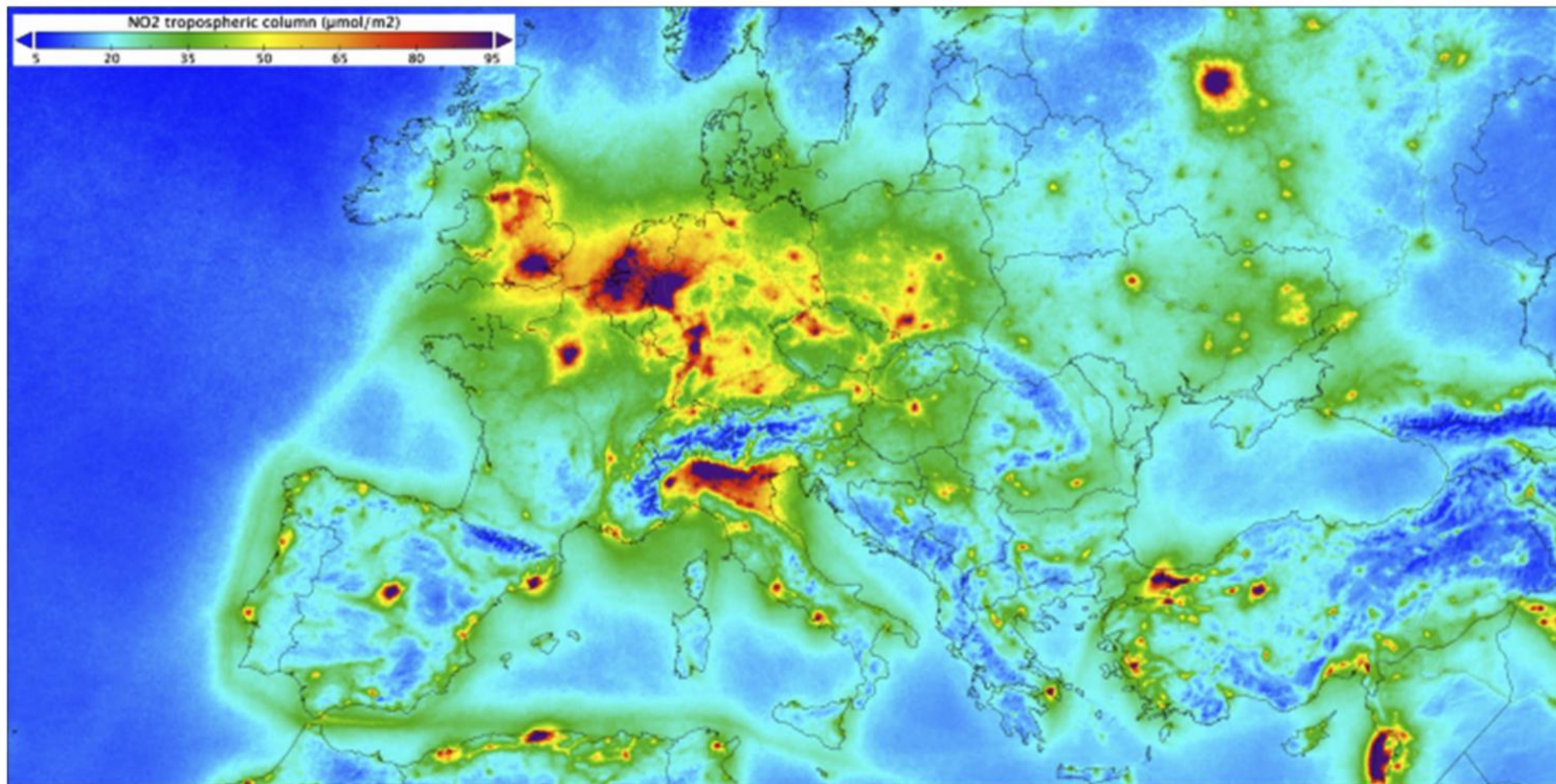
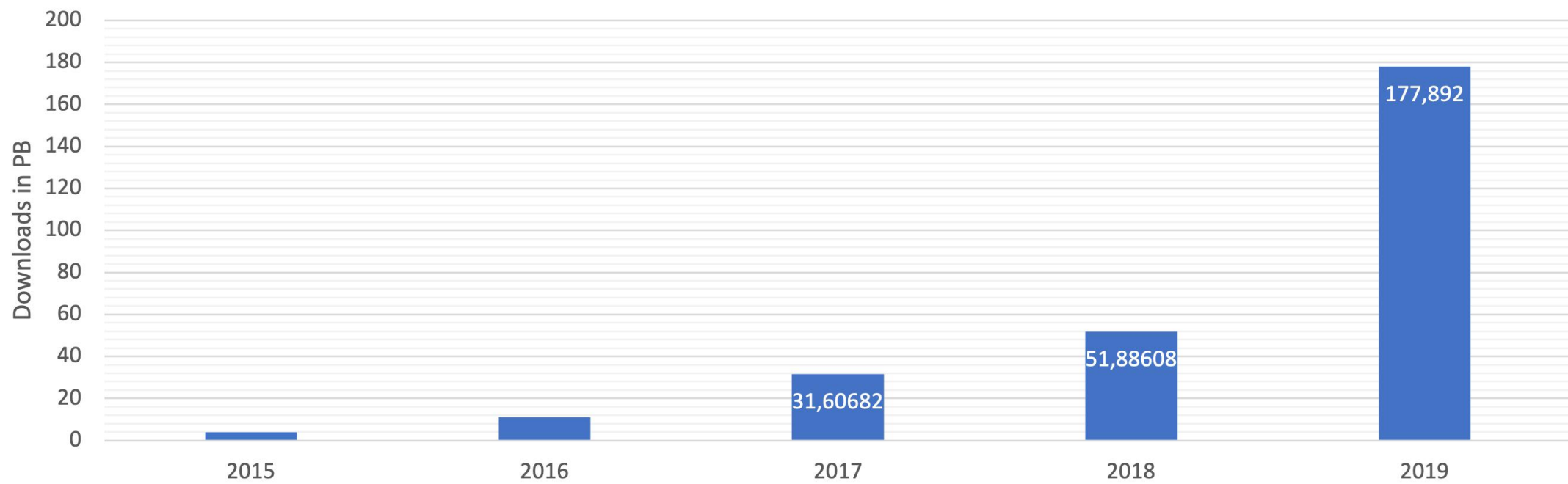
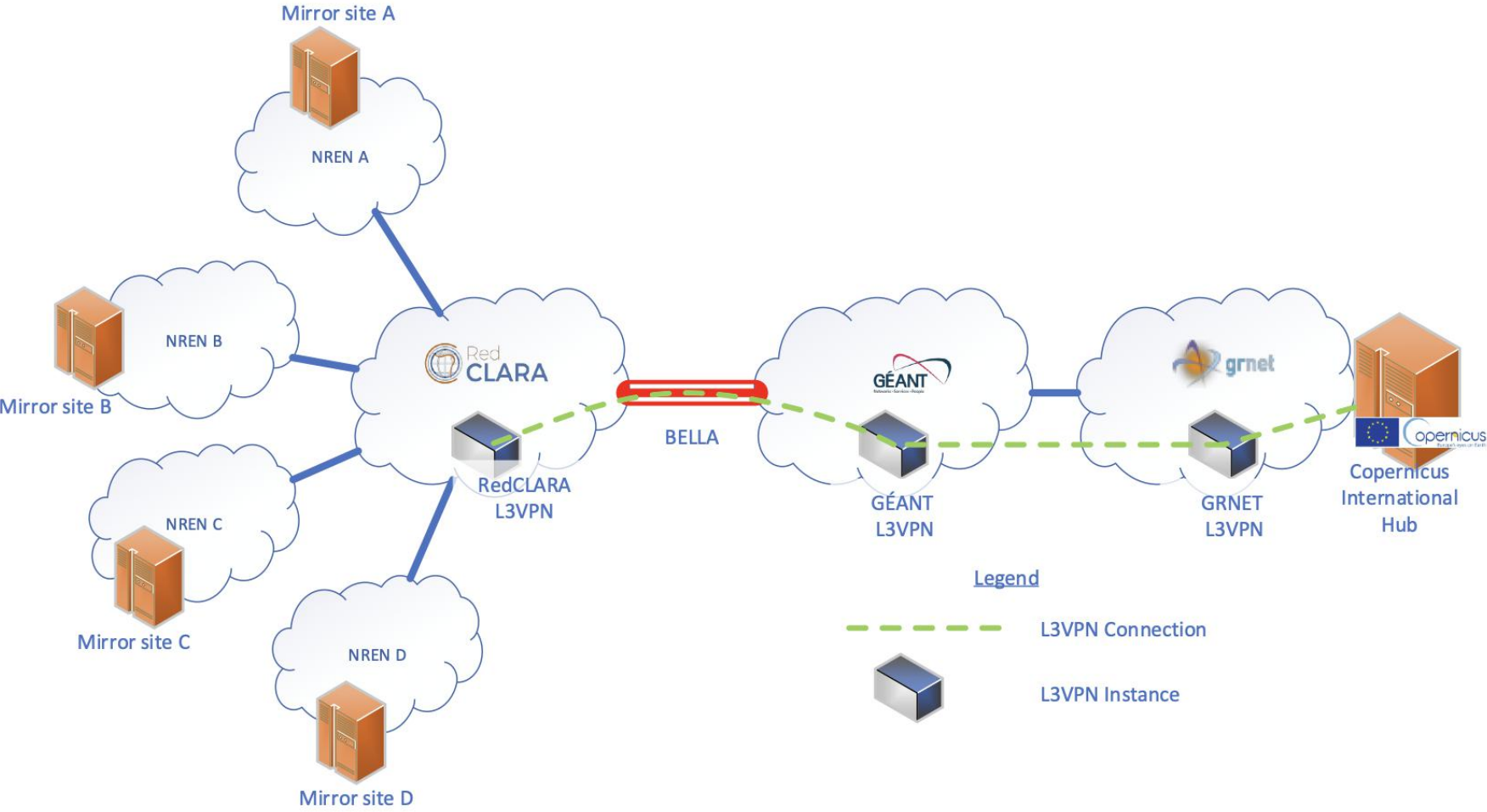


Figure 10: High levels of nitrogen dioxide over Europe, shown on a map generated from Sentinel-5P measurements between April and September 2018 [contains modified Copernicus Sentinel data (2018-2019), processed by KNMI / ESA]

Copernicus Download Growth



Moving Copernicus data from Europe to Latin America



<https://geant.box.com/s/lmf3q6b6xryvfj7hwtg5ovnhxnm5pkgt>



**What may the future
hold?**

Where to find this data

- Brazil – <http://www.dgi.inpe.br/>
- Chile - <https://copernicus-chile.cl/>
- Open Access hub – <https://SCIHUB.COPERNICUS.EU>
- Copernicus Services - <https://www.copernicus.eu/en/copernicus-services>
- EUMETSAT - <https://www.eumetsat.int/who-we-work/access-copernicus-data>

12 Things we can all do – a updated list

Speak up

Power your home
with renewable
energy

Weatherise

Invest in energy-
efficient
appliances

Reduce water
waste

Eat the food you
buy

Buy better bulbs

Pull the plug

Drive fuel-efficient
vehicles

Maintain your ride

Rethink: planes,
trains and
automobiles

Shrink your
carbon profile

**An opportunity
for the future**



Thank you

Any questions?

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