

ESA Earth Observation for Air Quality Monitoring

Space for Twin Cities webinar

19 November 2020

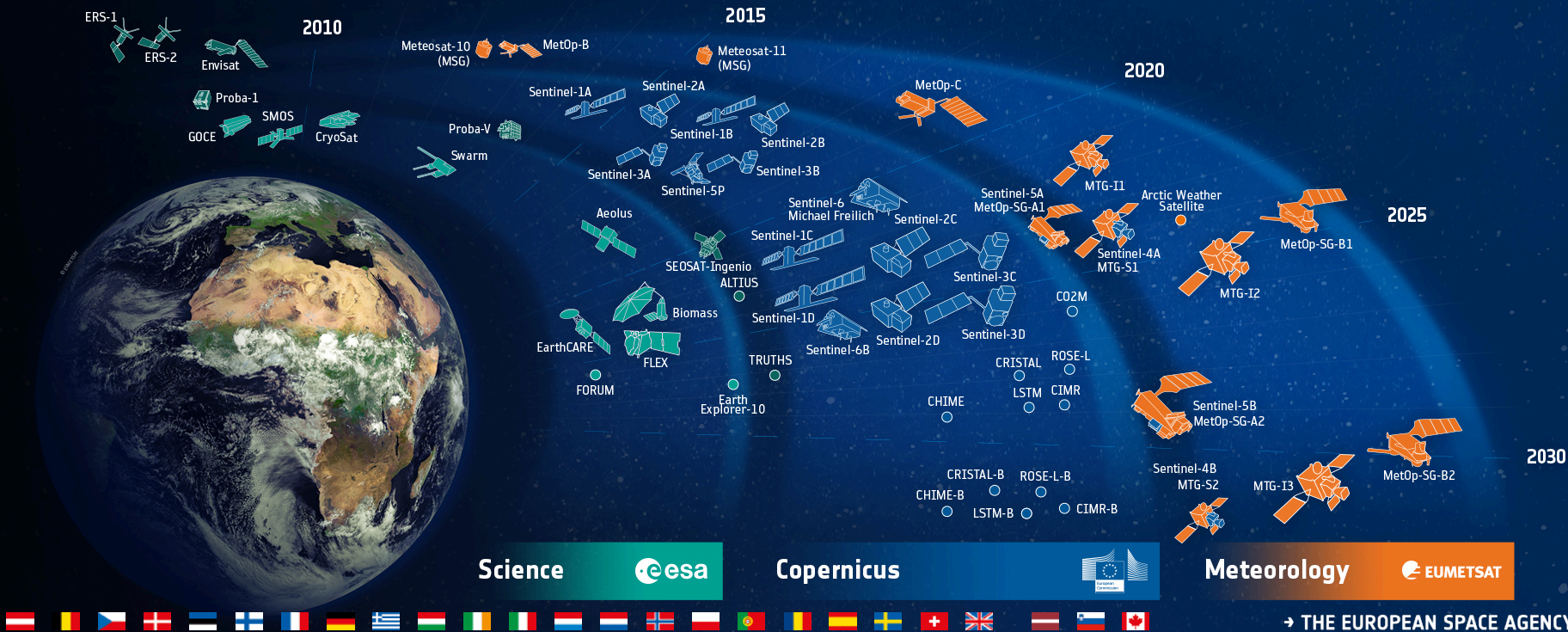
Robert Meisner, ESA

Earth observation outreach & phi-experience coordinator

15 in operation

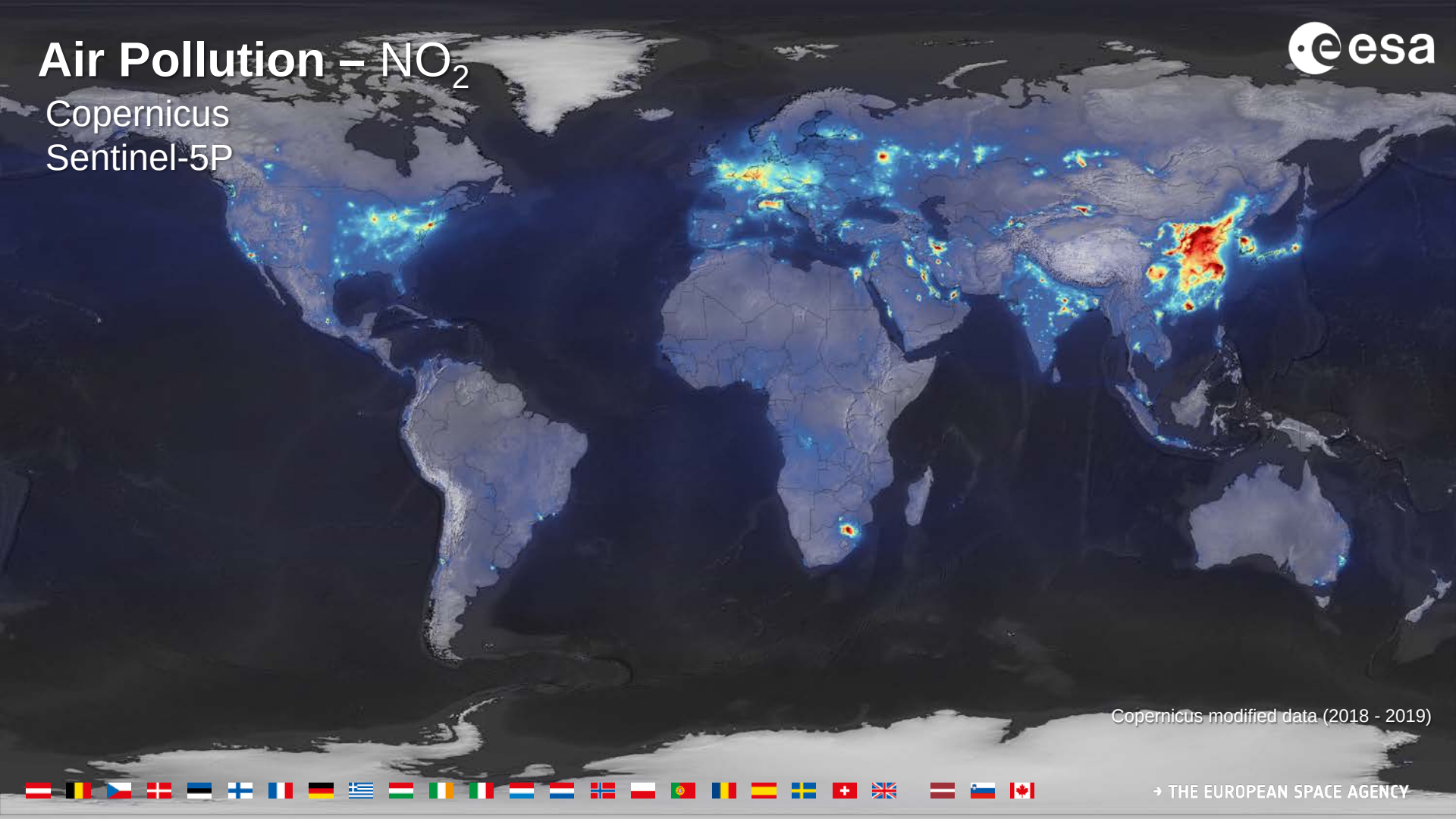
40 under development

13 under preparation



Air Pollution – NO₂

Copernicus
Sentinel-5P



Copernicus modified data (2018 - 2019)



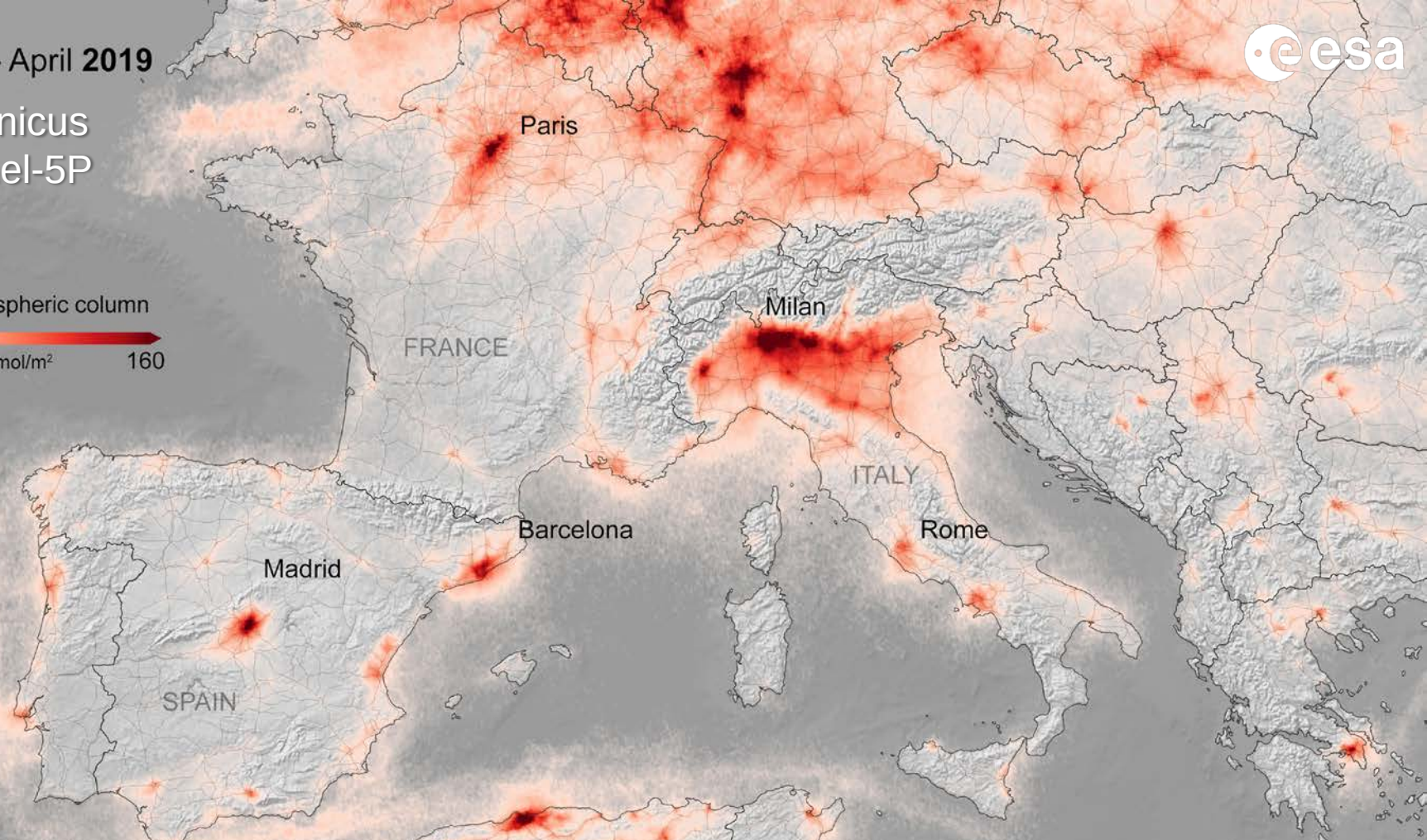
→ THE EUROPEAN SPACE AGENCY

March - April 2019

Copernicus Sentinel-5P



NO₂ tropospheric column
20  160
μmol/m²



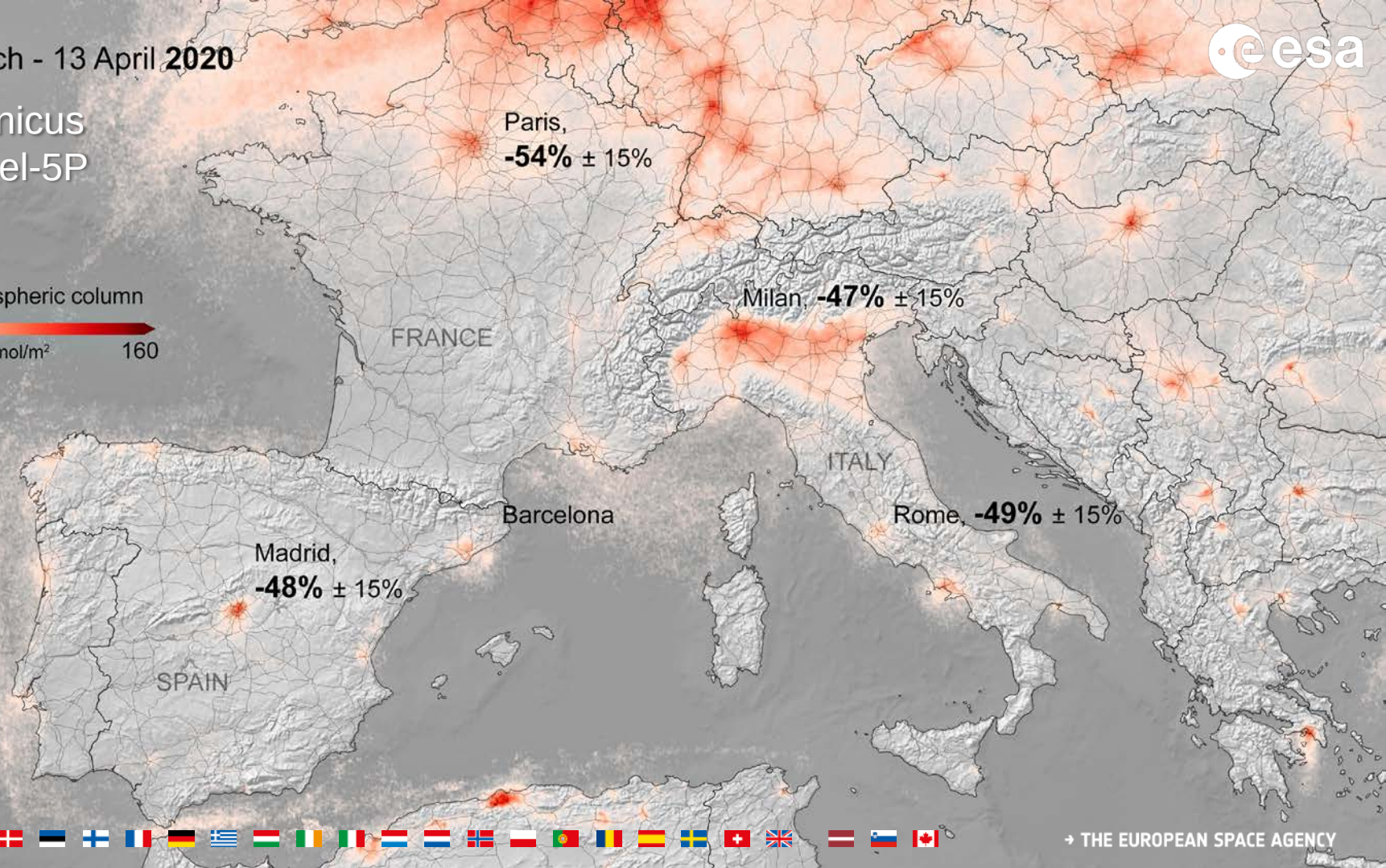
→ THE EUROPEAN SPACE AGENCY

13 March - 13 April 2020



Copernicus Sentinel-5P

NO₂ tropospheric column
20  160
μmol/m²



California wildfires

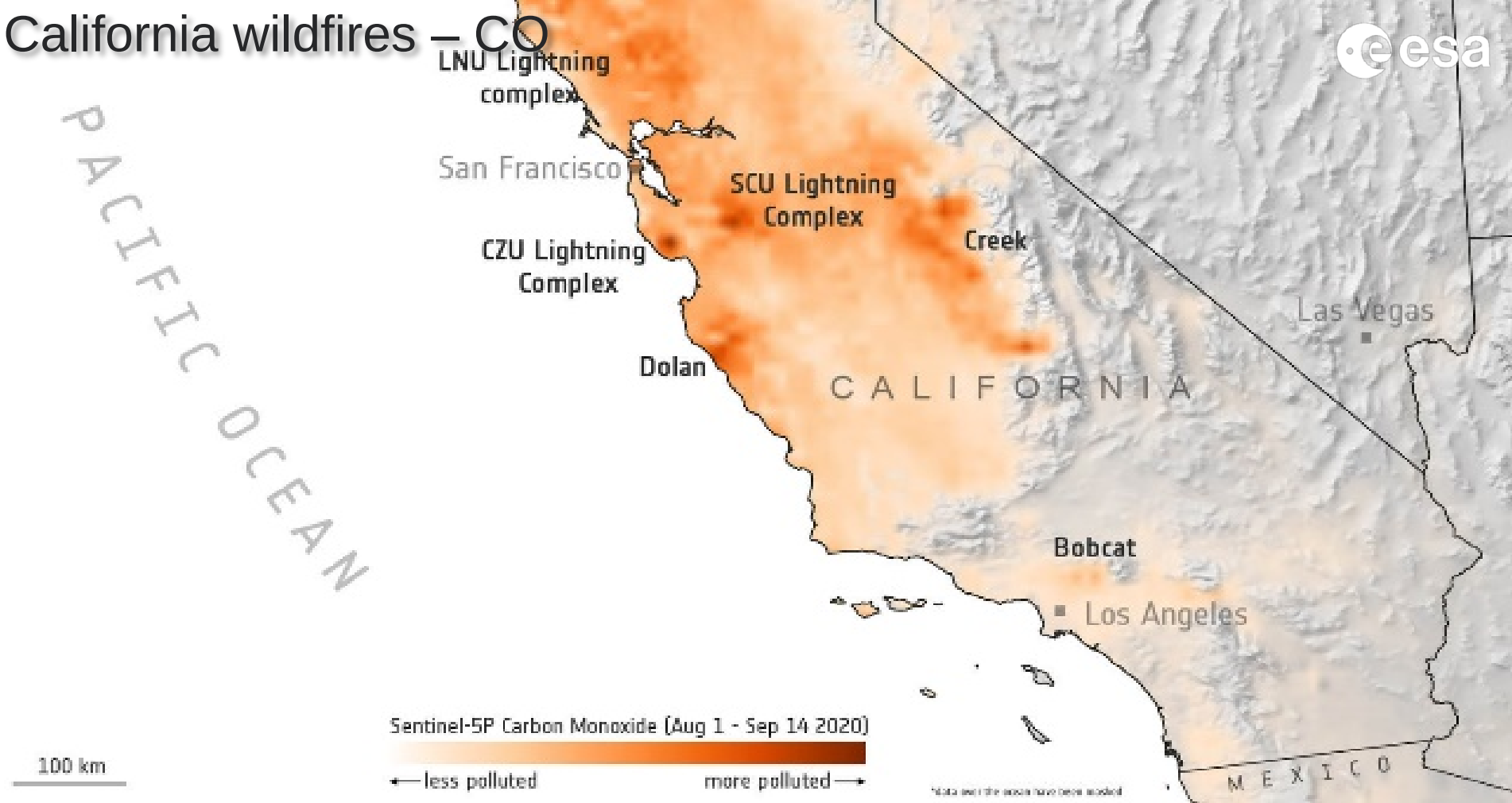


10 September 2020

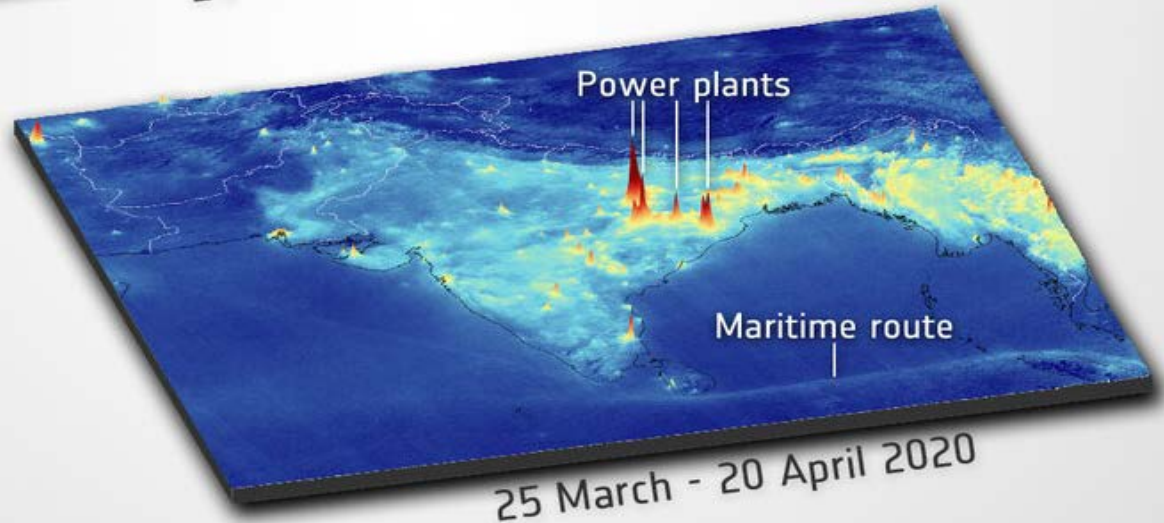
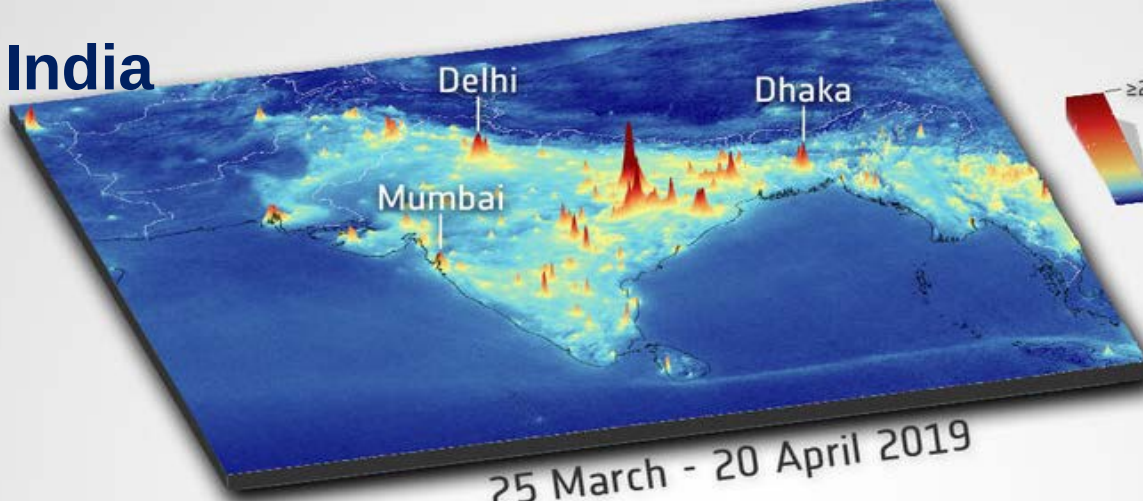


7 December 2017

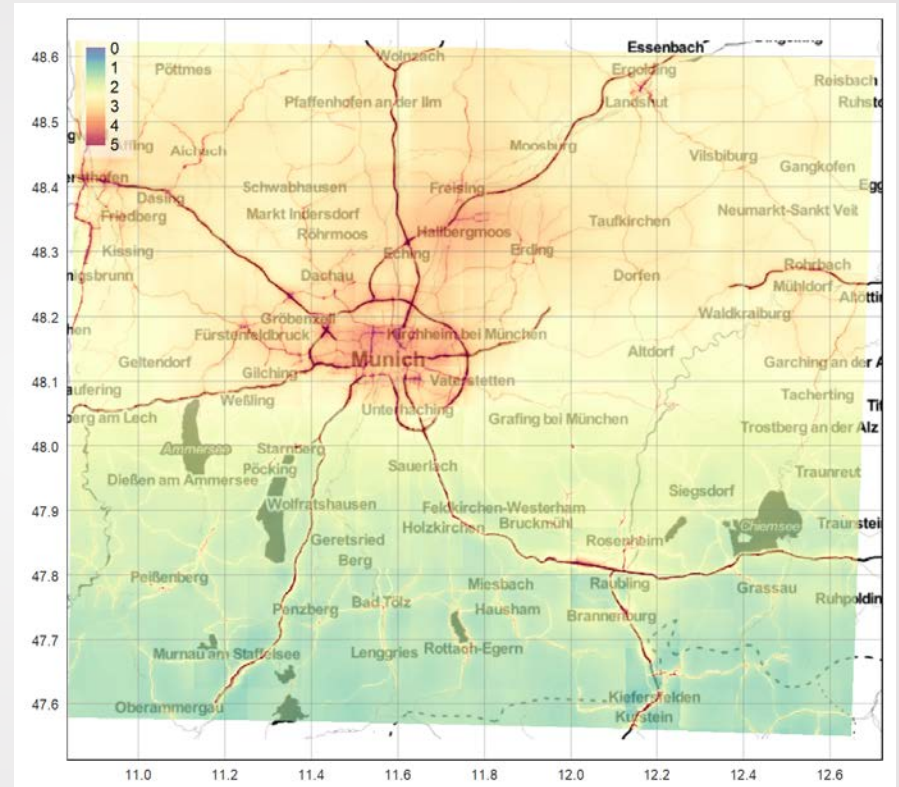
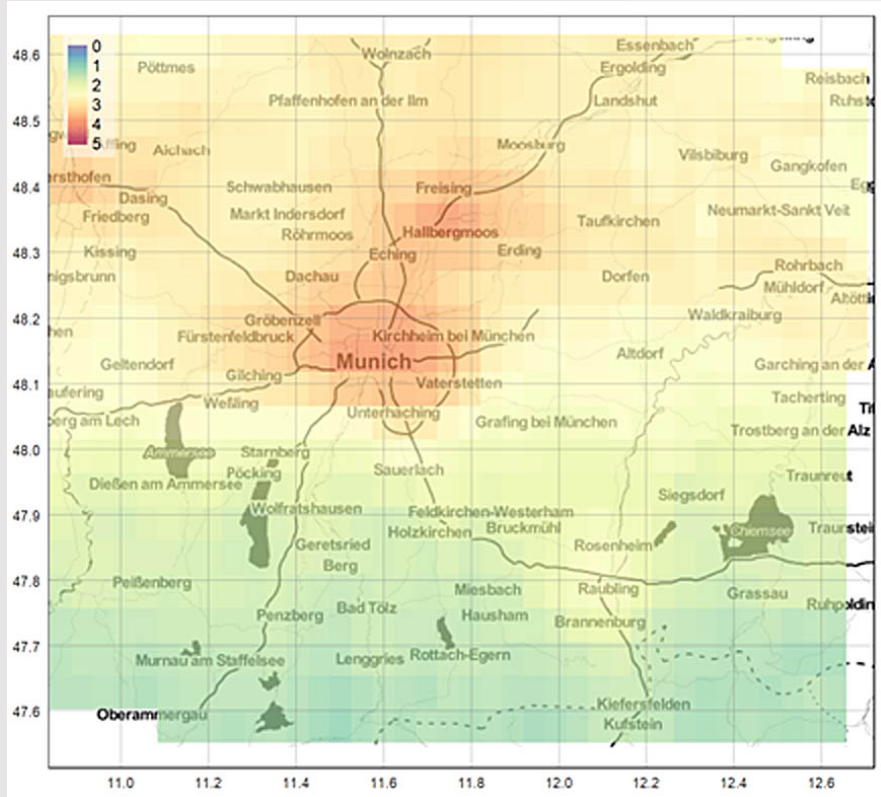
California wildfires – CO



NO₂ over India



NO₂ over Munich, Germany



Downscaled NO₂ map to 125 m by 125m resolution based on geostatistics

Thank you for your attention!

www.esa.int