

RACE dashboard now available

June 5 2020



The 'Rapid Action Coronavirus Earth observation' dashboard, also known as RACE, provides access to key environmental, economic and social indicators to measure the impact of the coronavirus lockdown and monitor post-lockdown recovery. The RACE dashboard can be accessed [here](#). Credit: ESA

The coronavirus pandemic constitutes an unprecedented challenge with severe societal and socio-economic consequences. In order to shed new light on these changes taking place, ESA and the European Commission have worked closely together to create the 'Rapid Action Coronavirus

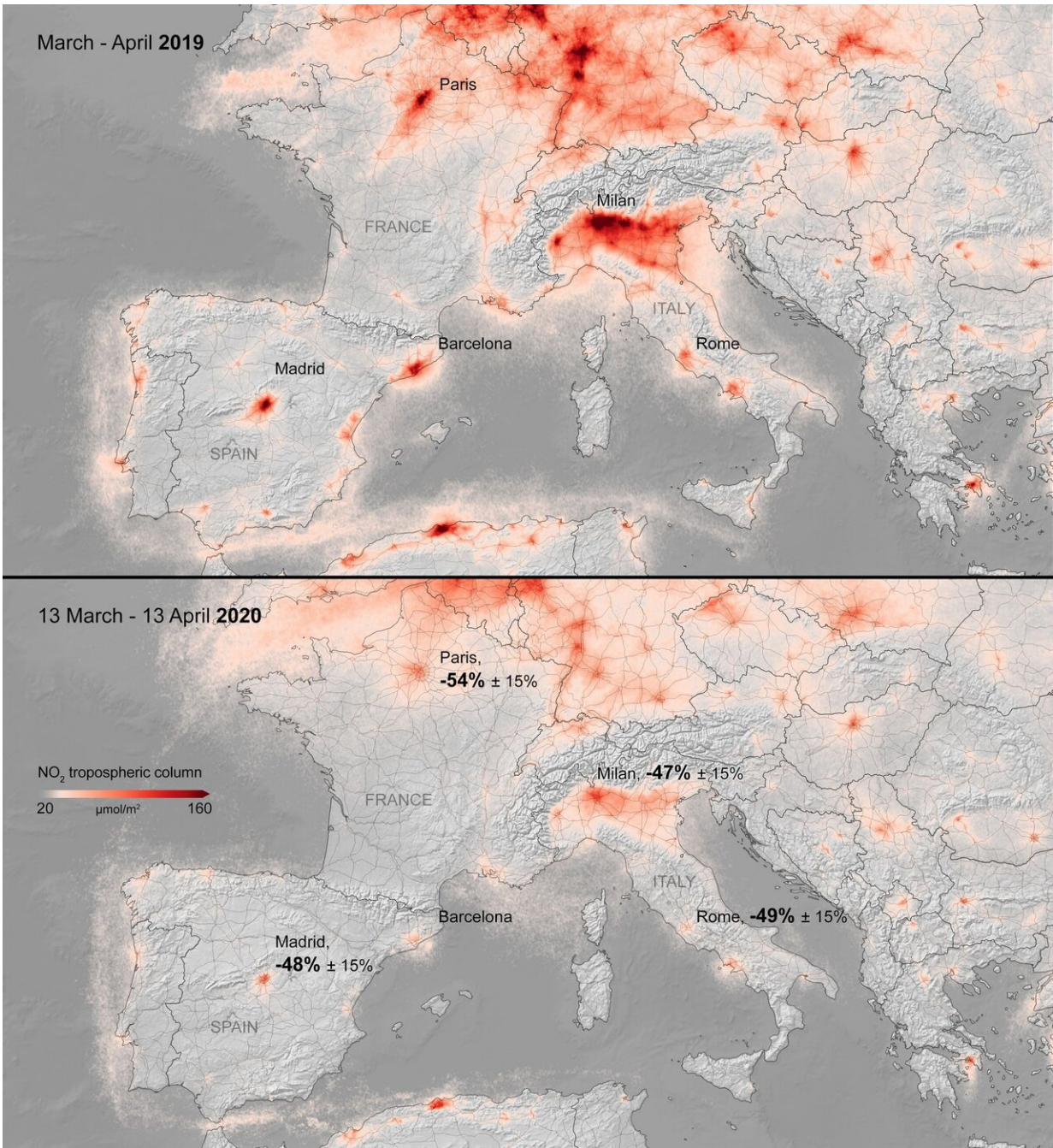
Earth observation' dashboard—also known as RACE. The platform, which was unveiled today during an online event, uses Earth observation satellite data to measure the impact of the coronavirus lockdown and monitor post-lockdown recovery.

The dashboard allows for the monitoring of key environmental parameters—such as air and water quality changes, economic and human activities including industry, shipping, construction, traffic, as well as agricultural productivity.

One of the platform's features allows for the tracking of air pollution worldwide. Using data from the Copernicus Sentinel-5P satellite, the map shows the averaged nitrogen dioxide concentrations over major cities and regions across the world.

The RACE dashboard also shows how artificial intelligence can be used to monitor economic indicators. ESA's Director for Earth Observation, Josef Aschbacher, presented two examples of how the combination of [artificial intelligence](#) along with commercial satellite data can be used to monitor production changes in the volume of cars at a car manufacturer in Germany, as well as the monitoring of plane traffic at Barcelona Airport.

Josef Aschbacher comments, "Unique data from space are pivotal in supporting crisis management during the coronavirus pandemic. In response to this, I am happy to announce the collaboration between ESA and the European Commission in order to help support Europe both now, and during, the economic reboot.



Using data from the Copernicus Sentinel-5P satellite, the maps show the averaged nitrogen dioxide concentrations over major cities and regions across the world. This mapping service is provided as part of the Sentinel-5P Product Algorithm Laboratory (S5P-PAL) – an ongoing project funded by the European Commission. Credit: contains modified Copernicus Sentinel data (2019-20), processed by KNMI/ESA

"Europe has excellent world-class Earth observation capabilities and we are glad to provide it for the benefit of European and global citizens. The Copernicus program, together with ESA Earth observation programs, are sources of vast economic and societal benefits. Across all European countries and ESA Member States, the RACE dashboard showcases examples of how Earth observation data can illustrate both socio-economic and environmental changes."

He continues, "Over the following months, the RACE dashboard will be expanded to monitor additional sites across Europe and will be enriched with new data provided by the Copernicus Sentinels and Third Party Missions."

Pierre Delsaux, European Commission's Deputy Director General for Defence Industry and Space added, "The tool that we launched today proves the significant potential and versatility of the EU space program and its contribution to the ambitions of a green, resilient and modern Europe. Space is a strategic sector for the EU, for our resilience and strategic autonomy. RACE shows the role that the EU Space Program can play for Europe's sustainable, long-term recovery."

The RACE [dashboard](#) not only includes data provided by the Copernicus Sentinels and ESA Third Party Missions, but also includes contributions from Aerospacelab, Airbus, BIRA-IASB, e-GEOS, CNR ISMAR, EarthPulse, ECMWF, EMSA, EOX, Euro Data Cube, GMV, ICEEYE, KNMI, KSAT, Mundi Web Services, Planetek Hellas, RHEA, SERCO, S&T, S5P PAL, SEN4CAP, Sen4Stat, Sinergise, SISTEMA, SPACEKNOW, SRON, UCLouvain, University of Bremen and Vodafone.

More information: The RACE dashboard can be accessed here:

race.esa.int/

Provided by European Space Agency

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