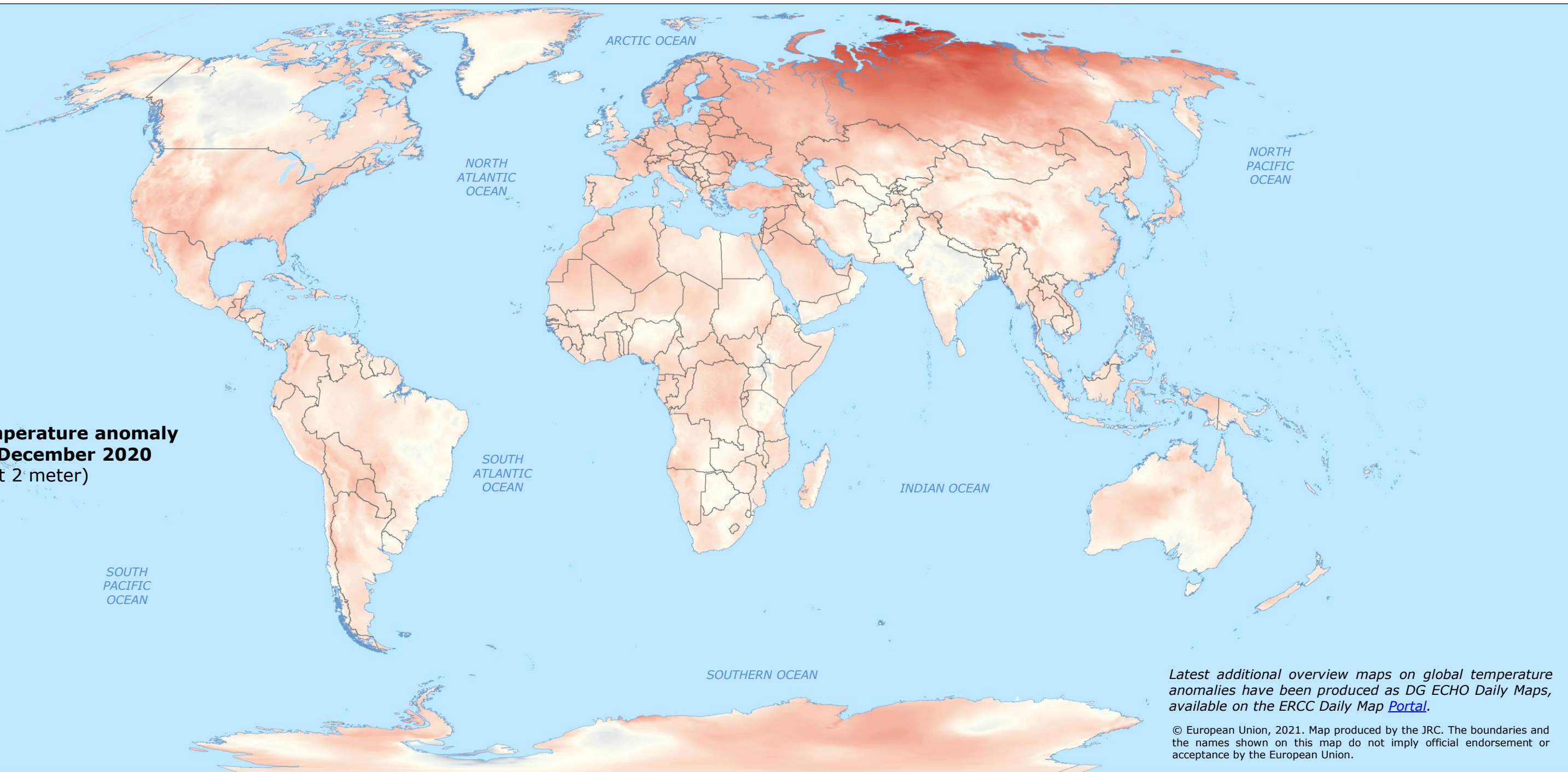
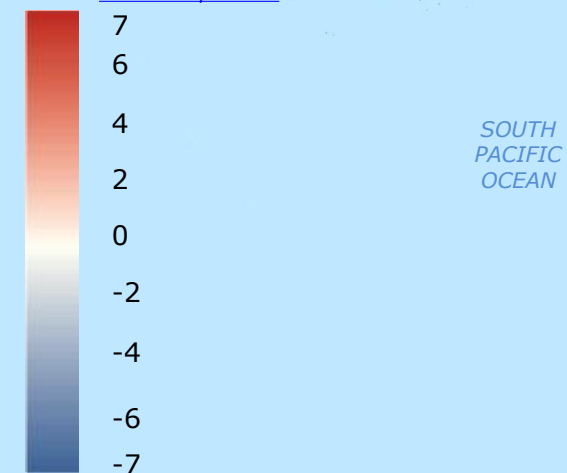


World Temperature Anomalies in 2020

Surface air temperature anomaly for January to December 2020 (°C, measured at 2 meter)

Source: [Climate Copernicus](#)



Latest additional overview maps on global temperature anomalies have been produced as DG ECHO Daily Maps, available on the ERCC Daily Map [Portal](#).

© European Union, 2021. Map produced by the JRC. The boundaries and the names shown on this map do not imply official endorsement or acceptance by the European Union.

Globally, 2020 was one of the three warmest years on record, tied with 2016, the previous warmest year. Several datasets concur that 2011-2020 became the warmest decade recorded.

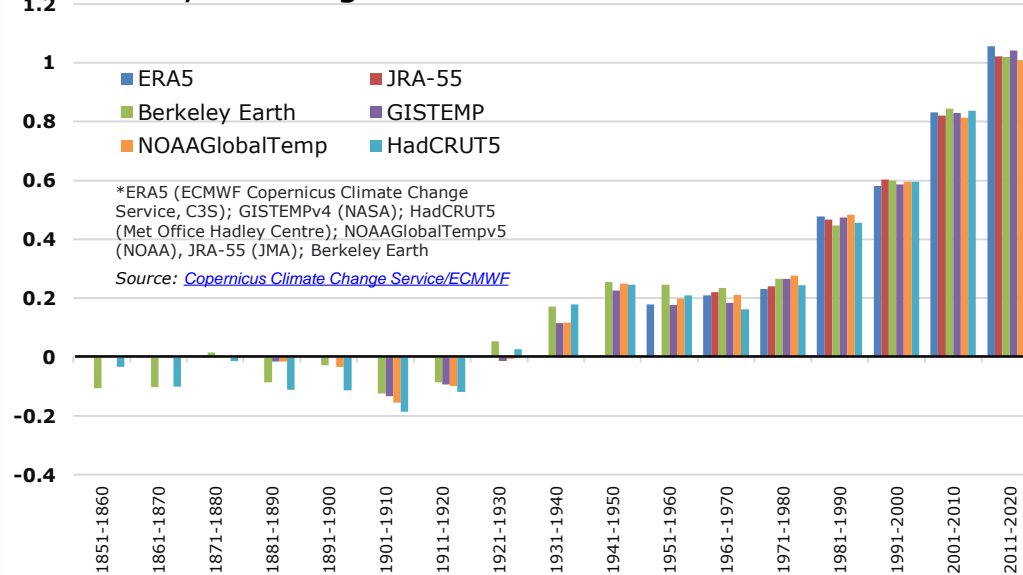
According to the Copernicus Climate Change Service ([C3S](#)), 2020 was 0.6°C warmer than the standard 1981-2010 reference period and around 1.25°C above the 1850-1900 period. In 2020, the largest annual temperature deviation from the 1981-2010 average was concentrated over the Arctic and northern Siberia, reaching to over 6°C above average.

In Europe, 2020 became the warmest year on record at 1.6°C above the 1981-2010 reference period, and 0.4°C above 2019, the previous warmest year.

Temperature anomalies were factors contributing to persistent heat and wildfires in Siberia (Daily Map of [9 Dec 2020](#)), as well as low Arctic sea ice extent (Daily Map of [21 Sept 2020](#)). In 2020, the Arctic sea ice cover decreased to the second lowest extent (after 2012), since modern record-keeping began in the late 1970s, as reported by [NASA/NSDC](#).

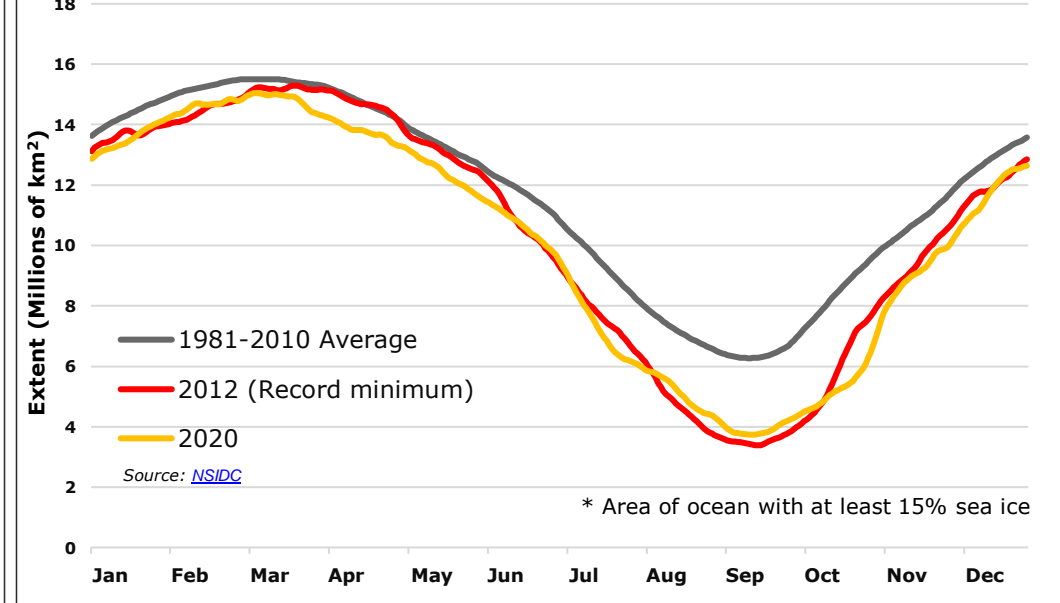
Source: [WMO](#), [WMO](#), [NASA/NSDC](#), [Copernicus Climate Change Service/ECMWF](#)

Decadal global mean surface temperature change (°C) since 1851, according to different datasets*



*ERA5 (ECMWF Copernicus Climate Change Service, C3S); GISTEMPv4 (NASA); HadCRUT5 (Met Office Hadley Centre); NOAA GlobalTemp5 (NOAA); JRA-55 (JMA); Berkeley Earth
Source: [Copernicus Climate Change Service/ECMWF](#)

Arctic sea ice extent*



Source: [NSIDC](#)
* Area of ocean with at least 15% sea ice