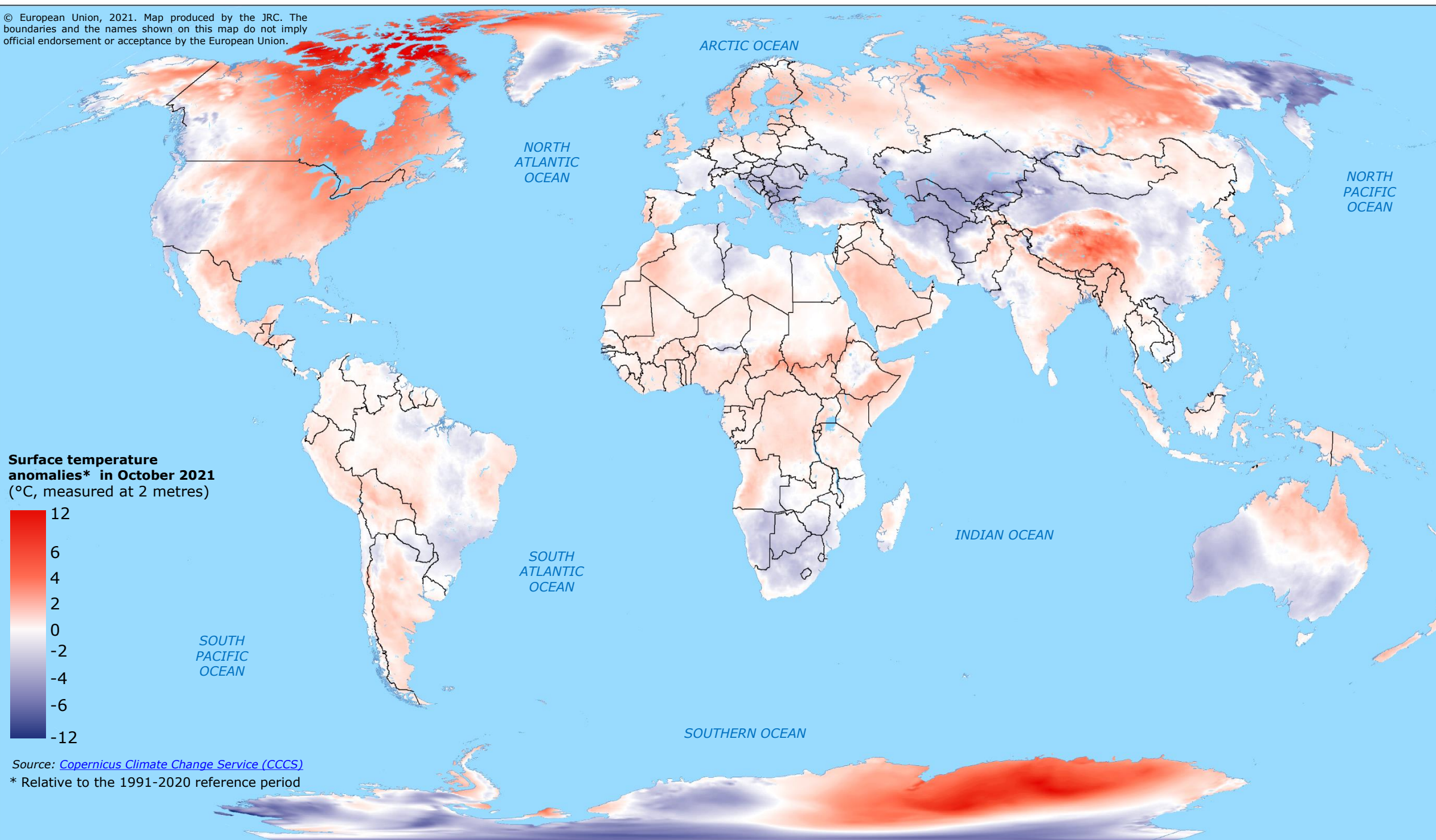
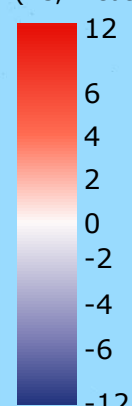


# World | Temperature Anomalies in October 2021

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Surface temperature anomalies\* in October 2021 (°C, measured at 2 metres)



Source: Copernicus Climate Change Service (CCCS)  
\* Relative to the 1991-2020 reference period

Globally, temperatures in October 2021 were 0.42°C warmer than the 1991-2020 average, and the month is estimated to be the third warmest October on the data record and only marginally cooler than October 2015 and 2019.

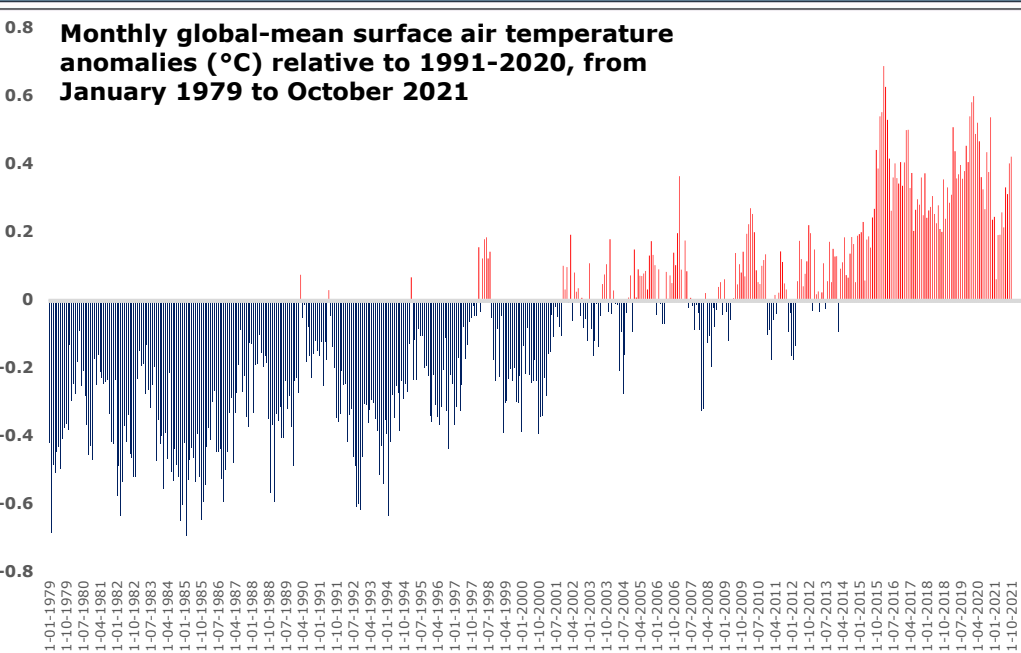
In Europe, temperatures were warmer than the 1991-2020 average over many northern regions. For instance, in Norway, temperatures were at 1.9° C above the October average, as reported by the Norwegian Meteorological Institute ([MET Norway](#)). Conversely, it was colder than the 1991-2020 average particularly in southeastern Europe.

Warmer than average temperatures occurred also over northern and eastern North America, particularly over northern Canada. In addition, northern Russia, the Tibetan Plateau, most of central Africa, the Arabian Peninsula, northern Australia and eastern Antarctica reported above average temperatures as well.

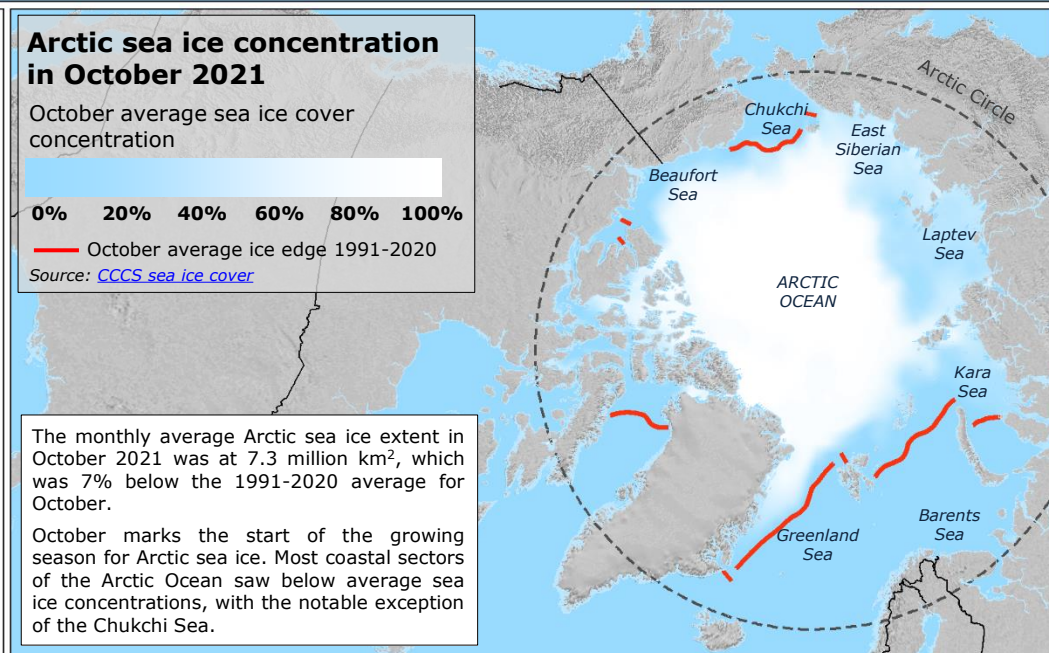
Colder than average temperatures occurred in an area extending eastward from eastern Europe across the Caspian region and to western China. Other regions with below-average temperatures include far east Russia, southern Greenland, south-western United States, southern Africa, southern and western Australia, and western Antarctica.

Source: Copernicus Climate Change Service: Surface air temperature for October 2021

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



Monthly global-mean surface air temperature anomalies (°C) relative to 1991-2020, from January 1979 to October 2021



### Arctic sea ice concentration in October 2021

October average sea ice cover concentration

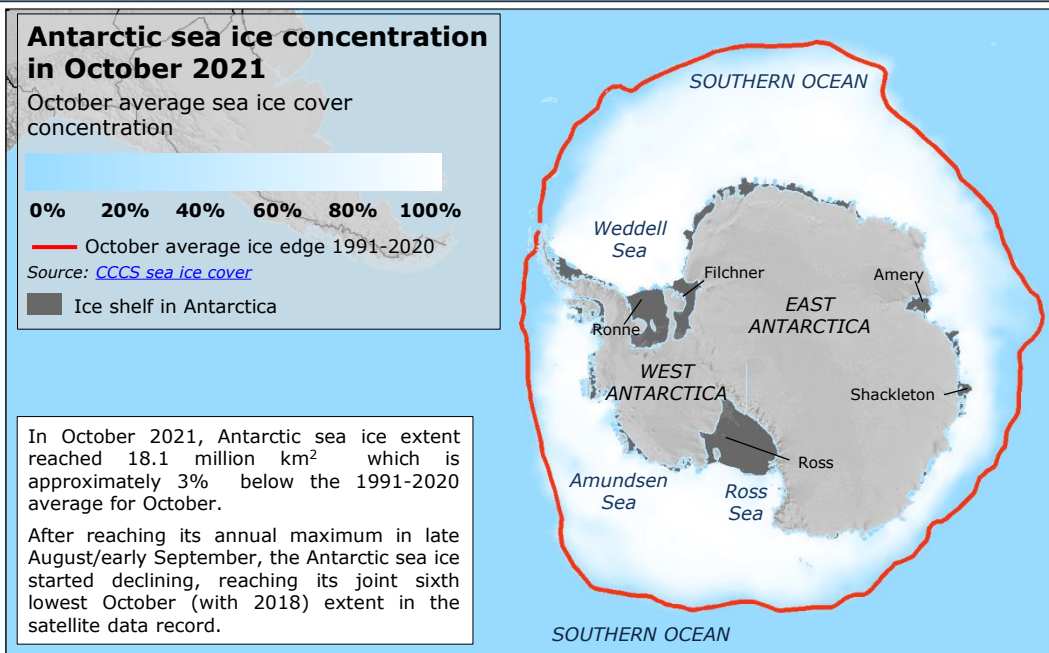
0% 20% 40% 60% 80% 100%

— October average ice edge 1991-2020

Source: CCCS sea ice cover

The monthly average Arctic sea ice extent in October 2021 was at 7.3 million km<sup>2</sup>, which was 7% below the 1991-2020 average for October.

October marks the start of the growing season for Arctic sea ice. Most coastal sectors of the Arctic Ocean saw below average sea ice concentrations, with the notable exception of the Chukchi Sea.



### Antarctic sea ice concentration in October 2021

October average sea ice cover concentration

0% 20% 40% 60% 80% 100%

— October average ice edge 1991-2020

Source: CCCS sea ice cover

■ Ice shelf in Antarctica

In October 2021, Antarctic sea ice extent reached 18.1 million km<sup>2</sup> which is approximately 3% below the 1991-2020 average for October.

After reaching its annual maximum in late August/early September, the Antarctic sea ice started declining, reaching its joint sixth lowest October (with 2018) extent in the satellite data record.