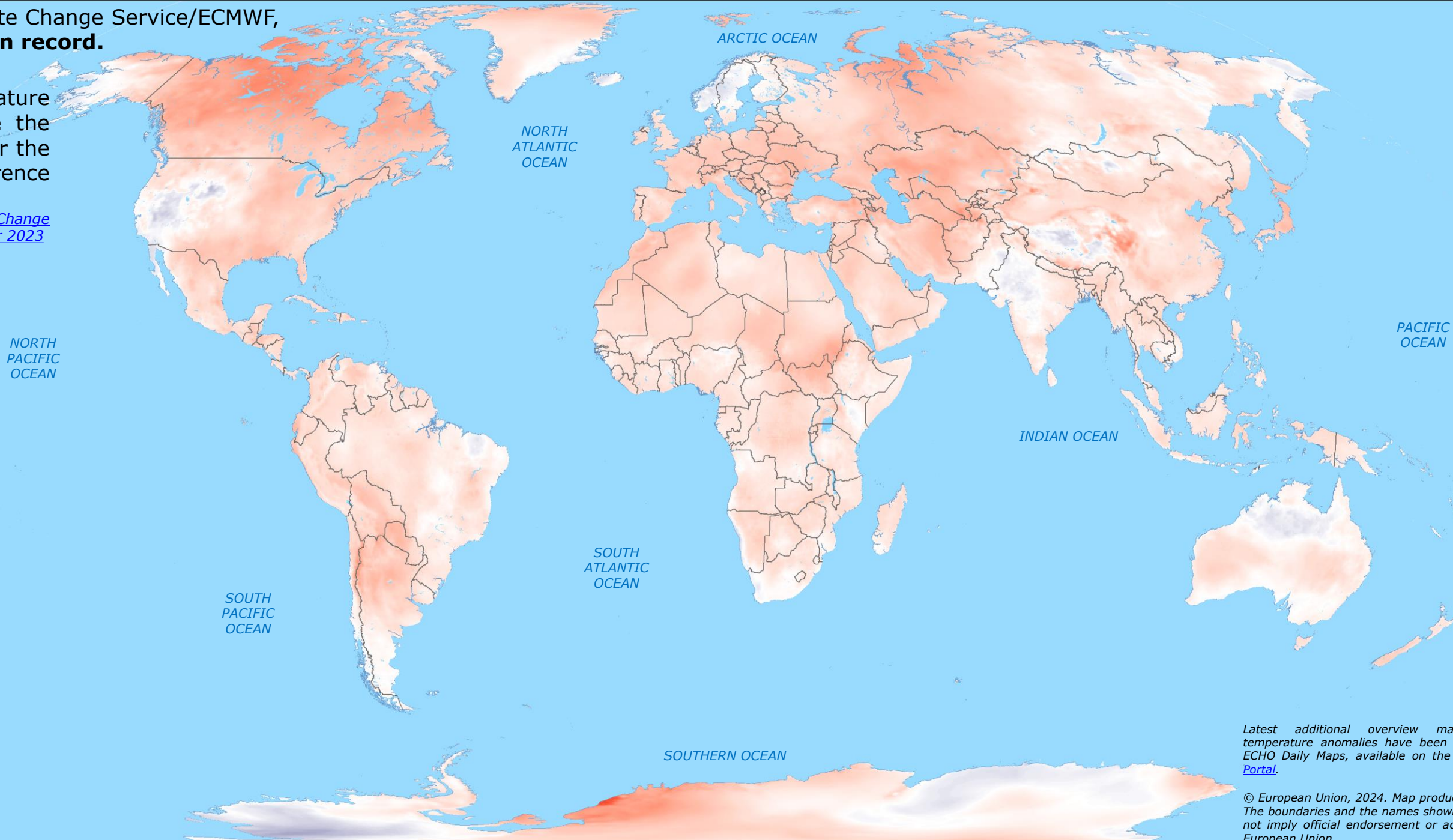


World | Temperature Anomalies in 2023

According to Copernicus Climate Change Service/ECMWF, **2023 is the warmest year on record.**

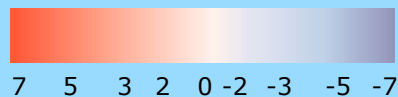
The global surface air temperature in **2023** was **0.60°C above** the yearly average temperature for the 1991-2020 average reference period.

Source: [Copernicus Climate Change Service/ECMWF: Surface air temperature for 2023](#)



Surface temperature anomalies* (°C) in 2023

Source: [Copernicus Climate Change Service \(CCCS\)](#)



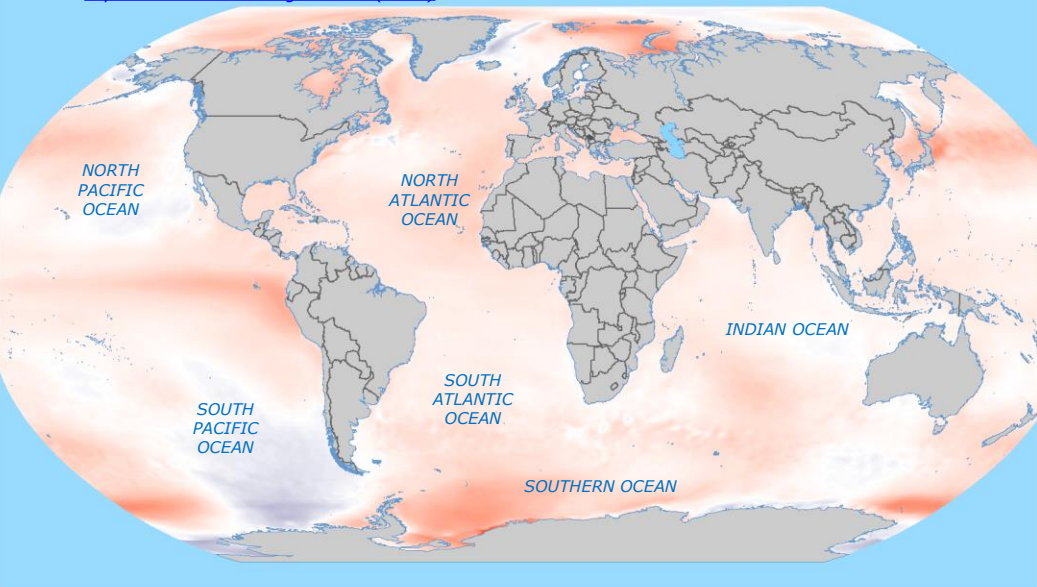
*Relative to the 1991-2020 reference period

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, 2024. 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.

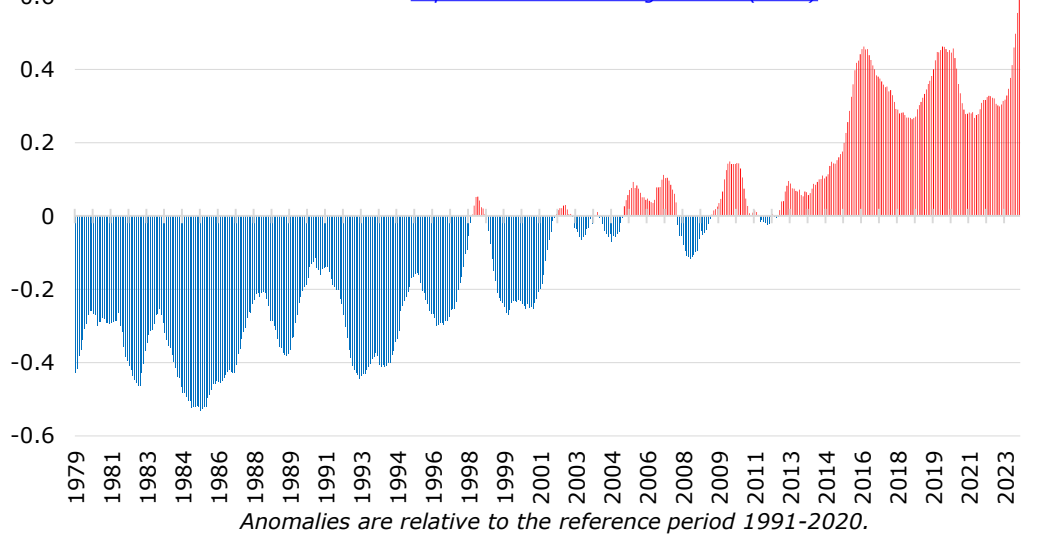
Sea surface temperature anomalies* (°C) in 2023

Source: [Copernicus Climate Change Service \(CCCS\)](#)



Twelve-month global-mean surface air temperature anomalies

monthly values from January 1979 to December 2023.
Source: [Copernicus Climate Change Service \(CCCS\)](#)



European monthly surface air temperature anomalies

monthly values from January 1979 to December 2023.
Source: [Copernicus Climate Change Service \(CCCS\)](#), JRC

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Jan	-0.11	0.16	0.79	0.57	0.44	0.59	0.51	1.07	0.97	0.21	0.99
Feb	0.24	0.34	0.65	0.74	0.28	0.39	0.78	1.16	0.70	0.41	0.90
Mar	-0.03	0.75	0.58	0.70	0.38	0.06	1.05	1.19	0.56	0.38	1.00
Apr	-0.04	0.84	0.49	0.77	0.26	0.27	0.93	1.16	0.48	0.42	1.05
May	-0.03	0.79	0.50	0.80	0.20	0.46	0.73	1.13	0.50	0.48	1.03
Jun	-0.02	0.71	0.52	0.87	0.19	0.45	0.86	1.05	0.55	0.49	0.96
Jul	-0.05	0.75	0.47	0.92	0.12	0.57	0.72	1.06	0.69	0.43	0.93
Aug	-0.05	0.72	0.55	0.86	0.15	0.61	0.67	1.08	0.63	0.57	0.90
Sep	-0.12	0.80	0.59	0.86	0.09	0.69	0.60	1.17	0.50	0.56	1.14
Oct	-0.10	0.77	0.52	0.85	0.16	0.72	0.60	1.22	0.39	0.71	1.08
Nov	-0.11	0.75	0.60	0.65	0.24	0.76	0.63	1.27	0.31	0.78	1.01
Dec	0.11	0.74	0.75	0.45	0.34	0.70	0.79	1.19	0.15	0.87	1.02

Anomalies are relative to the reference period 1991-2020.
**Maximum, average and minimum of surface air temperature anomalies over 2013-2023.