

RACCONTARE L'AMBIENTE

Scienza, giornalismo, social

Earthrise to Earthset: how the planet's climate has changed since the photo that inspired the environmental movement

Published: April 7, 2026 3:38pm CEST



Earthrise. The view of the rising Earth as photographed by the Apollo 8 astronauts on December 24 1968 as they came from behind the Moon after the fourth nearside orbit. Nasa/William Anders

A new Earthset image has been captured by the crew of Artemis II, 58 years since the iconic Earthrise photograph taken by the crew of Apollo 8. Over these past six decades, the climate has changed dramatically.

"Oh my God, look at that picture over there! There's the Earth comin' up. Wow, is that pretty." That was Nasa astronaut [Bill Anders' reaction](#) to seeing the Earth appearing to rise above the lunar horizon as their Apollo 8 spacecraft came around the Moon on Christmas Eve 1968.

Theirs were the first human eyes to see our planet at such a distance and from another celestial body. As fellow astronaut [Jim Lovell said](#) a few hours later: "The Earth from here is a grand oasis in the big vastness of space."

That [original Earthrise image](#) is widely credited with helping to set the mainstream environmental movement in motion. Although I wasn't born when the Apollo 8 photo was taken, a framed print of it hangs above my desk as a reminder of the beauty and fragility of our planet.



Earthset: is the new photo from the far side of the Moon, captured on April 6 2026 by the crew of Artemis 2 as Earth dips behind the lunar horizon. Nasa

For me as a climate scientist, these photos, taken 58 years apart, inspire me to reflect on how the Earth's climate has changed in the interim.

Author

 **Nick Dunstone**
Climate Science Fellow, Met Office Hadley Centre

Disclosure statement

Nick Dunstone does not work for, consult, own shares in or receive funding from any company or organisation that would benefit from this article, and has disclosed no relevant affiliations beyond their academic appointment.

Partners

[View all partners](#)

DOI

<https://doi.org/10.64628/AB.9ly4nu6hp>







For me as a climate scientist, these photos, taken 58 years apart, inspire me to reflect on how the Earth's climate has changed in the interim.

The concentration of carbon dioxide (and other greenhouse gases) in our atmosphere has rapidly increased as a result of over half a century of continued and spreading industrial development, driven primarily by burning fossil fuels.

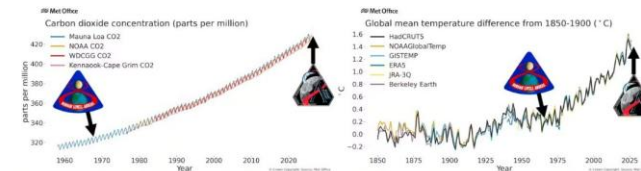
A weekly email with evidence-based analysis from Europe's best scholars

Get our newsletter

This is clearly illustrated by the [Keeling curve](#) – a graph that plots the continuous record of atmospheric CO₂ from Mauna Loa Observatory in Hawaii (started by Charles Keeling in 1958).

Read more: [Mauna Loa Observatory captured the reality of climate change. The US plans to shut it down](#)

This curve shows a steep and steady increase from approximately 320 parts per million (ppm) in 1968 to about 430ppm in 2026. This increase of over one-third in the total carbon dioxide in our atmosphere shows little sign of slowing down.



Observed timeseries of atmospheric carbon dioxide concentration and global mean surface temperature with added logos for the Apollo 8 and Artemis 2 missions. For latest updates on these and other key climate change indicators, visit the Met Office climate dashboard: <https://climate.metoffice.cloud/dashboard.html>

That additional blanket of greenhouse gases has increased the surface temperature of our planet. Data from the World Meteorological Organization shows how the global mean temperature record (the average temperature of the Earth's surface) has risen by approximately 1.2°C since the Apollo 8 Earthrise photo was taken. This represents most of the warming that has happened since the early industrial period in the mid-19th century.

While an average global temperature increase of 1.2°C may not sound large, it means that regional hot extremes and new records are now much more likely. For example, [my team's recent research](#) has shown that a 40°C day in the UK (first recorded on July 19 2022) is now over 20 times more likely than it was in the 1960s.

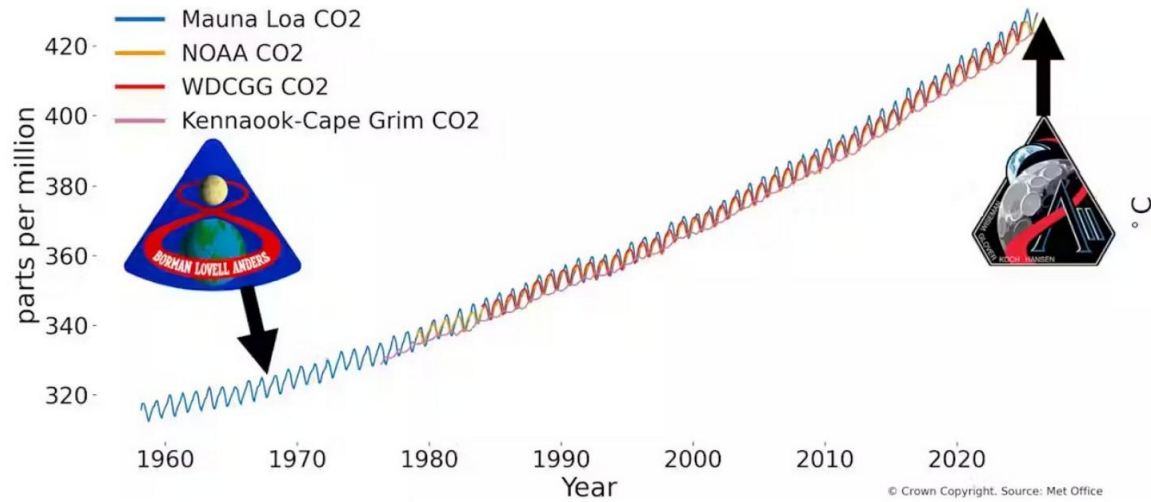
The global average temperature has surged in the past three years – most probably driven by a combination of internal climate variability and human-made emissions (including strong reductions in industrial aerosol particle emissions that largely act to cool the planet). In 2023, temperatures jumped from the previous record of 1.29°C (set in 2016) to 1.45°C above the early-industrial 1850-1900 baseline.

This record was then immediately broken in 2024 – the first year to temporarily exceed 1.5°C. Going beyond that boundary in a single year doesn't mean we have breached the 1.5°C target set by the 2015 Paris climate agreement, which is generally accepted to refer to a 20-year average. However, it does highlight how rapidly we are now approaching that level of warming.

Read more: [Record January heat suggests La Niña may be losing its ability to keep global](#)

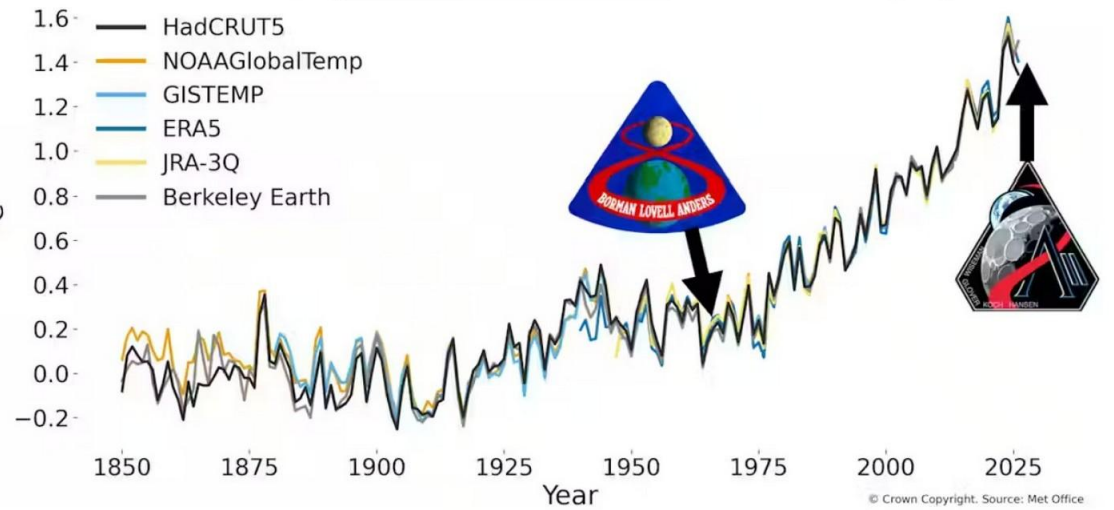
Met Office

Carbon dioxide concentration (parts per million)



Met Office

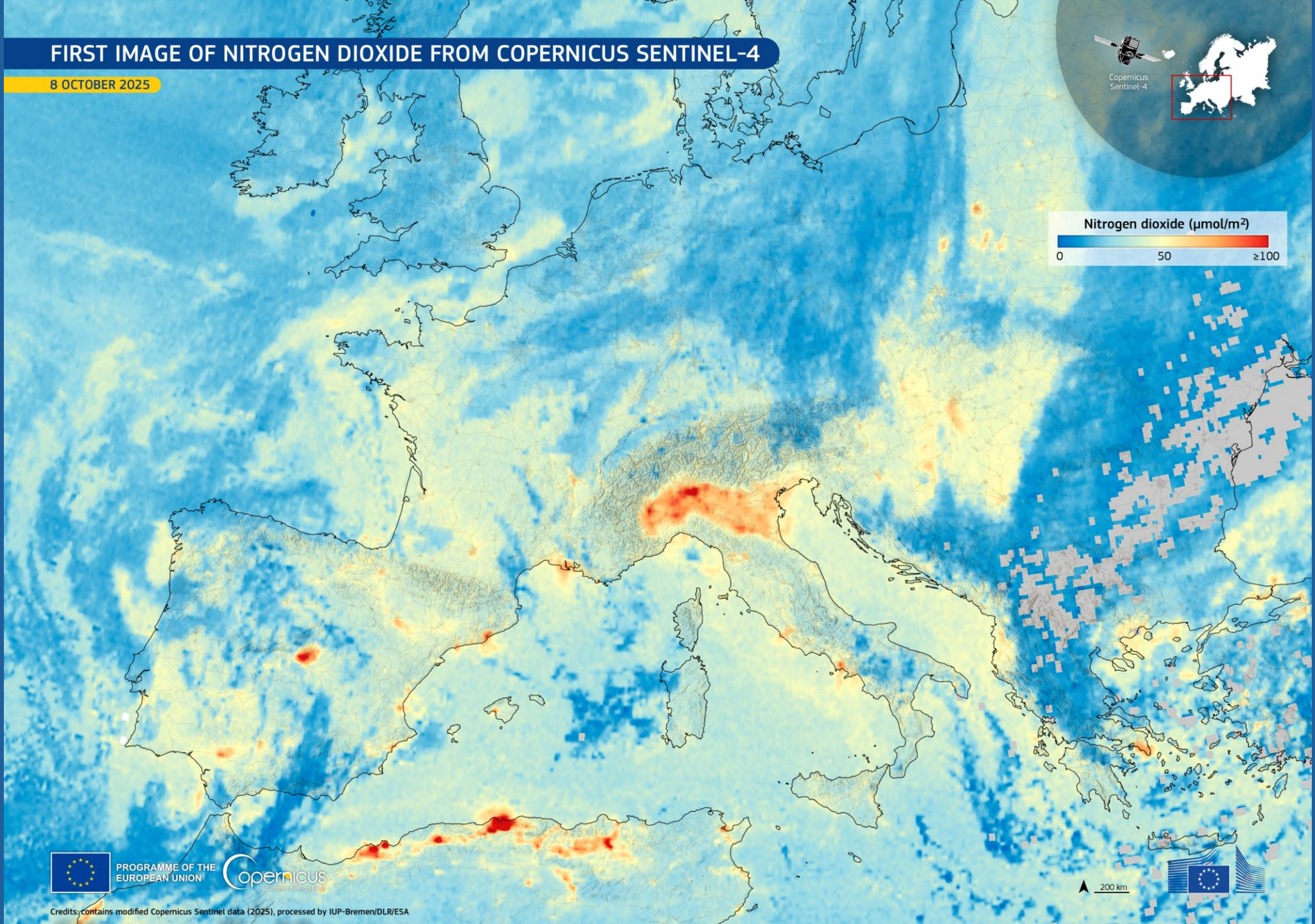
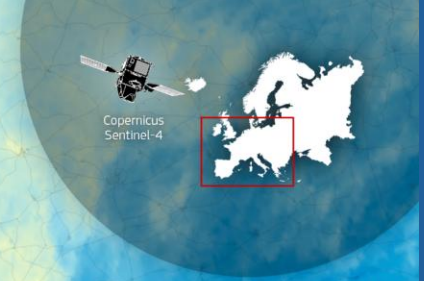
Global mean temperature difference from 1850-1900 (° C)





FIRST IMAGE OF NITROGEN DIOXIDE FROM COPERNICUS SENTINEL-4

8 OCTOBER 2025



PROGRAMME OF THE
EUROPEAN UNION



Credits: contains modified Copernicus Sentinel data (2025), processed by IUP-Bremen/DLR/ESA

200 km



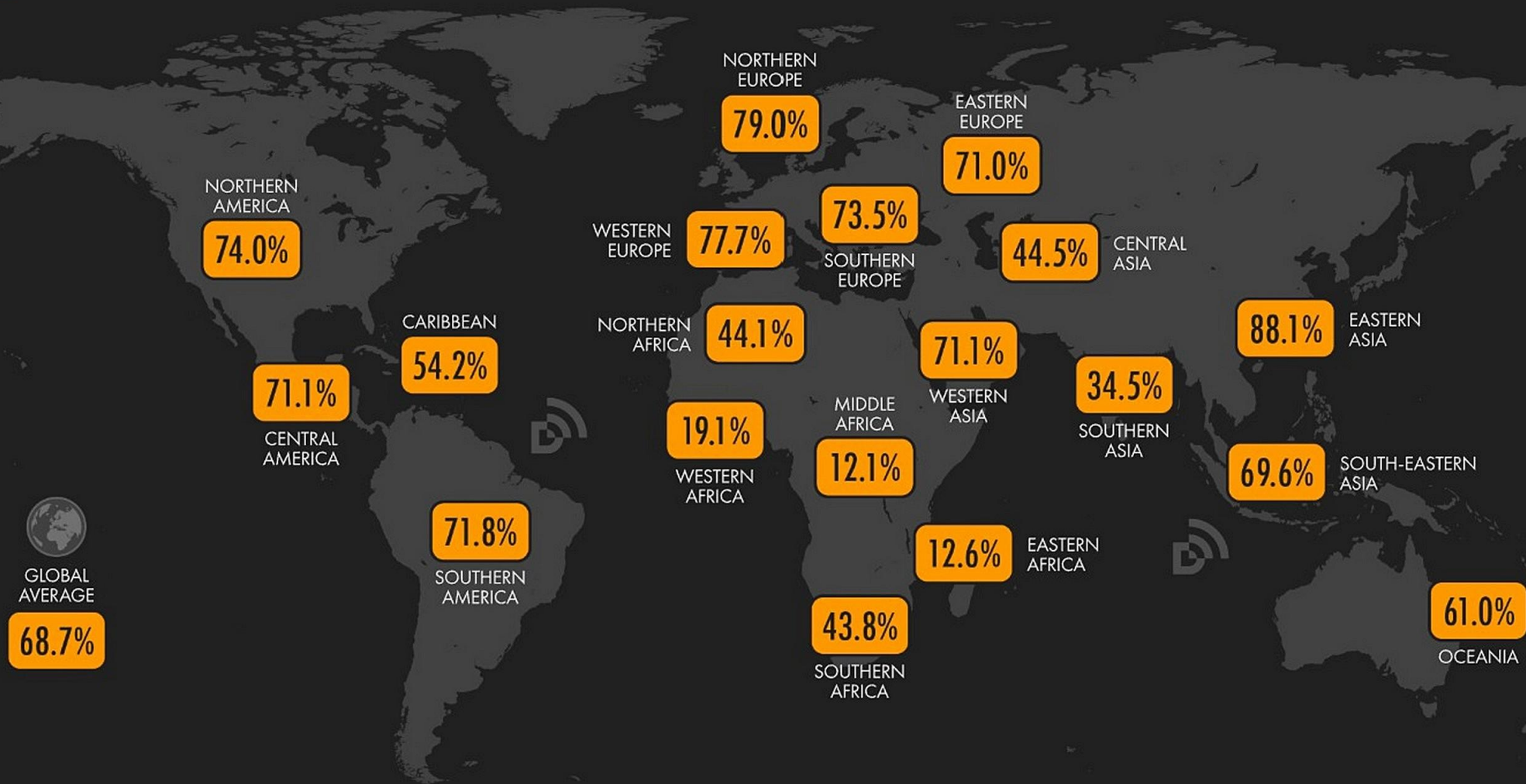
OCT
2025

SOCIAL MEDIA USE vs. TOTAL POPULATION

SOCIAL MEDIA USER IDENTITIES AS A PERCENTAGE OF THE TOTAL POPULATION (NOTE: USER IDENTITIES MAY NOT REPRESENT UNIQUE INDIVIDUALS)



GLOBAL OVERVIEW



OCT
2025

ITALY

OVERVIEW OF THE ADOPTION AND USE OF CONNECTED DEVICES AND SERVICES

NOTE: SIGNIFICANT REVISIONS TO SOURCE DATA MAY DISTORT VALUES FOR CHANGE OVER TIME. FIGURES SHOWN HERE ARE **NOT DIRECTLY COMPARABLE** WITH VALUES PUBLISHED IN PREVIOUS REPORTS.



ITALY

TOTAL
POPULATION



59.1
MILLION

YEAR-ON-YEAR CHANGE

-0.3%
-203 THOUSAND

URBANISATION

72.7%

CELLULAR MOBILE
CONNECTIONS



67.7
MILLION

YEAR-ON-YEAR CHANGE

-13.7%
-11 MILLION

TOTAL vs. POPULATION

114%

INDIVIDUALS USING
THE INTERNET



53.1
MILLION

YEAR-ON-YEAR CHANGE

-0.3%
-182 THOUSAND

TOTAL vs. POPULATION

89.9%

SOCIAL MEDIA
USER IDENTITIES



41.2
MILLION

YEAR-ON-YEAR CHANGE

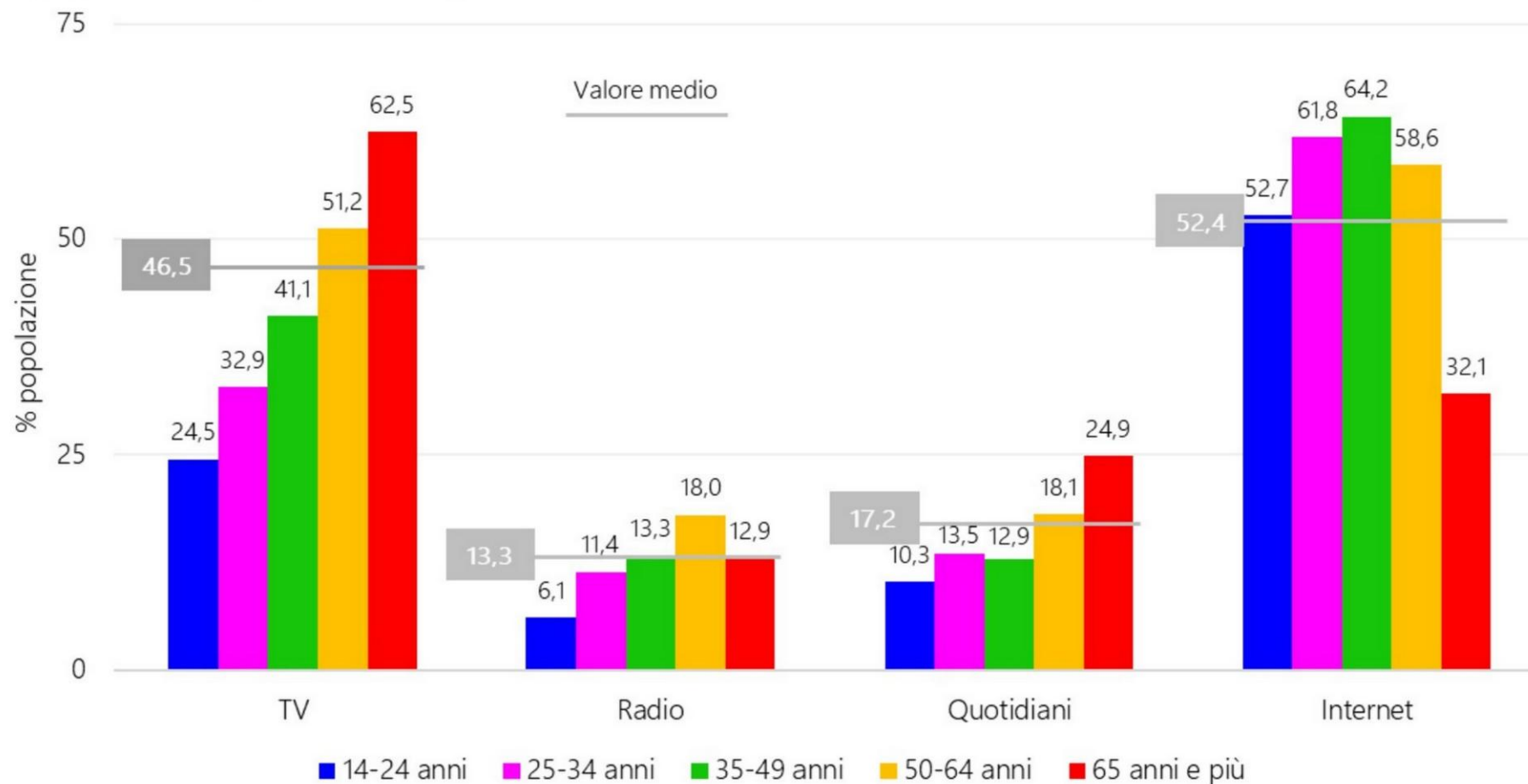
-2.4%
-1.0 MILLION

TOTAL vs. POPULATION

69.7%

SOURCES: UNITED NATIONS; GOVERNMENT AUTHORITIES; GSMA INTELLIGENCE; ITU; EUROSTAT; CNNIC; PLATFORM RESOURCES; OCDH; BETA RESEARCH CENTER; KEPIOS ANALYSIS. **ADVISORY:** SOCIAL MEDIA USER IDENTITIES MAY **NOT** REPRESENT UNIQUE INDIVIDUALS. **COMPARABILITY:** SOURCE CHANGES AND BASE REVISIONS. FIGURES ARE **NOT COMPARABLE** WITH PREVIOUS REPORTS. GLOBAL DATASETS MAY USE DIFFERENT SOURCES vs. LOCAL AND REGIONAL DATA, SO SUMS MAY NOT CORRELATE. **IMPORTANT:** NEGATIVE VALUES MAY INDICATE SOURCE CORRECTIONS, AND **MAY NOT** REPRESENT DECREASES IN ACTUAL ADOPTION OR USE. WHERE YEAR-ON-YEAR CHANGE IS "[N/A]", COMPARISONS WITH HISTORICAL DATA WILL PRODUCE **INACCURATE RESULTS**. SEE [NOTES ON DATA](#).

Figura 2 – Consumo informativo per mezzo di comunicazione e fasce di età
(% popolazione, anno 2023)

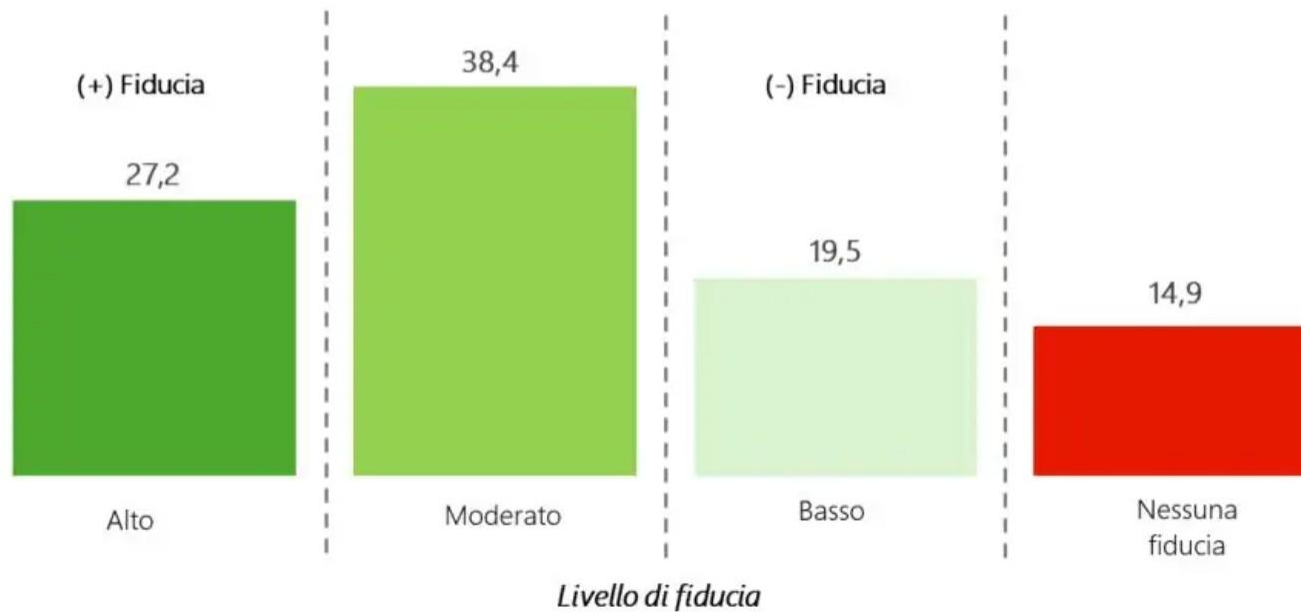


Fonte: AGCOM, Osservatorio sul sistema dell'informazione

Figura 2 – Fiducia nei mezzi di comunicazione

(popolazione %, 2024)

Tutti i mezzi di comunicazione



Il 65,6% della popolazione dichiara di avere un livello di fiducia moderata o alta in almeno un mezzo di informazione; un terzo nutre alta fiducia. I mezzi tradizionali (televisione, radio e carta stampata) risultano le fonti informative in cui i cittadini ripongono maggiore fiducia

Social media ices out Trump over climate change claims as US braces for record cold

Updated: Jan. 24, 2026, 8:33 a.m. | Published: Jan. 24, 2026, 8:24 a.m.



President Donald Trump holds a binder clip as he speaks during a press briefing at the White House in Washington, Tuesday, Jan. 20, 2026. (AP Photo/Mark Schiefelbein) AP

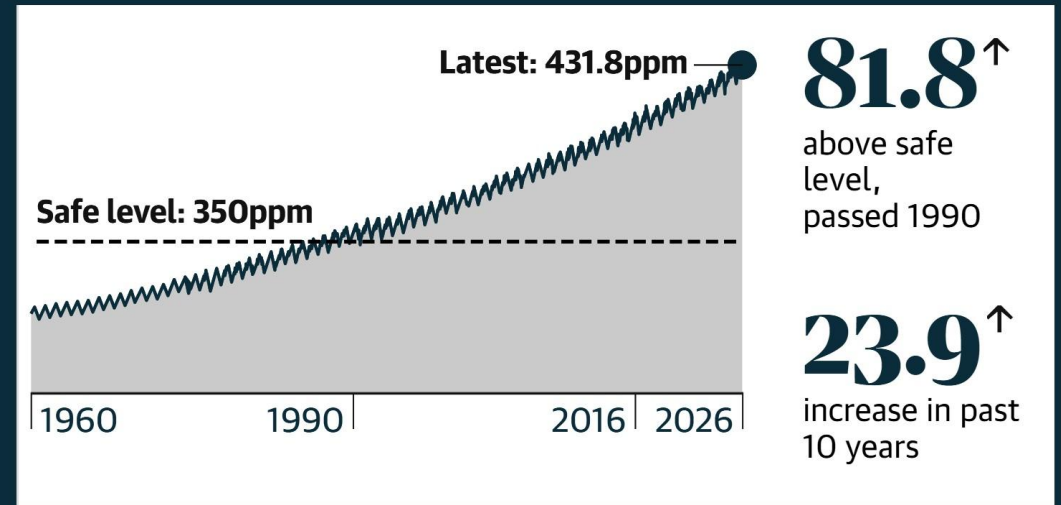
CO2 tracker

The most important number of the climate crisis:

431.8

atmospheric CO2 in parts per million, 8 April 2026

Source: NOAA. Chart baseline is 280ppm - the preindustrial average. Safe level a stabilisation scenario set out by IPCC. Daily average CO2 value at Mauna Loa.



Climate crisis

US weather

US had hottest March on record as nation faced 'unprecedented' heat

The continental US registered its most abnormally hot month in 132 years of records, according to NOAA data



Environment

Bitten by snakes 200 times - on purpose: US man's quest to help deliver new antivenom



Climate crisis

Mass drowning of chicks puts emperor penguins at risk of extinction



Trump administration

Trump's EPA chief Zeldin gives keynote speech at climate-denying group's event



Climate crisis

'Non-survivable': heatwaves are already breaching human limits, with worse to come, study finds

Climate crisis

US weather

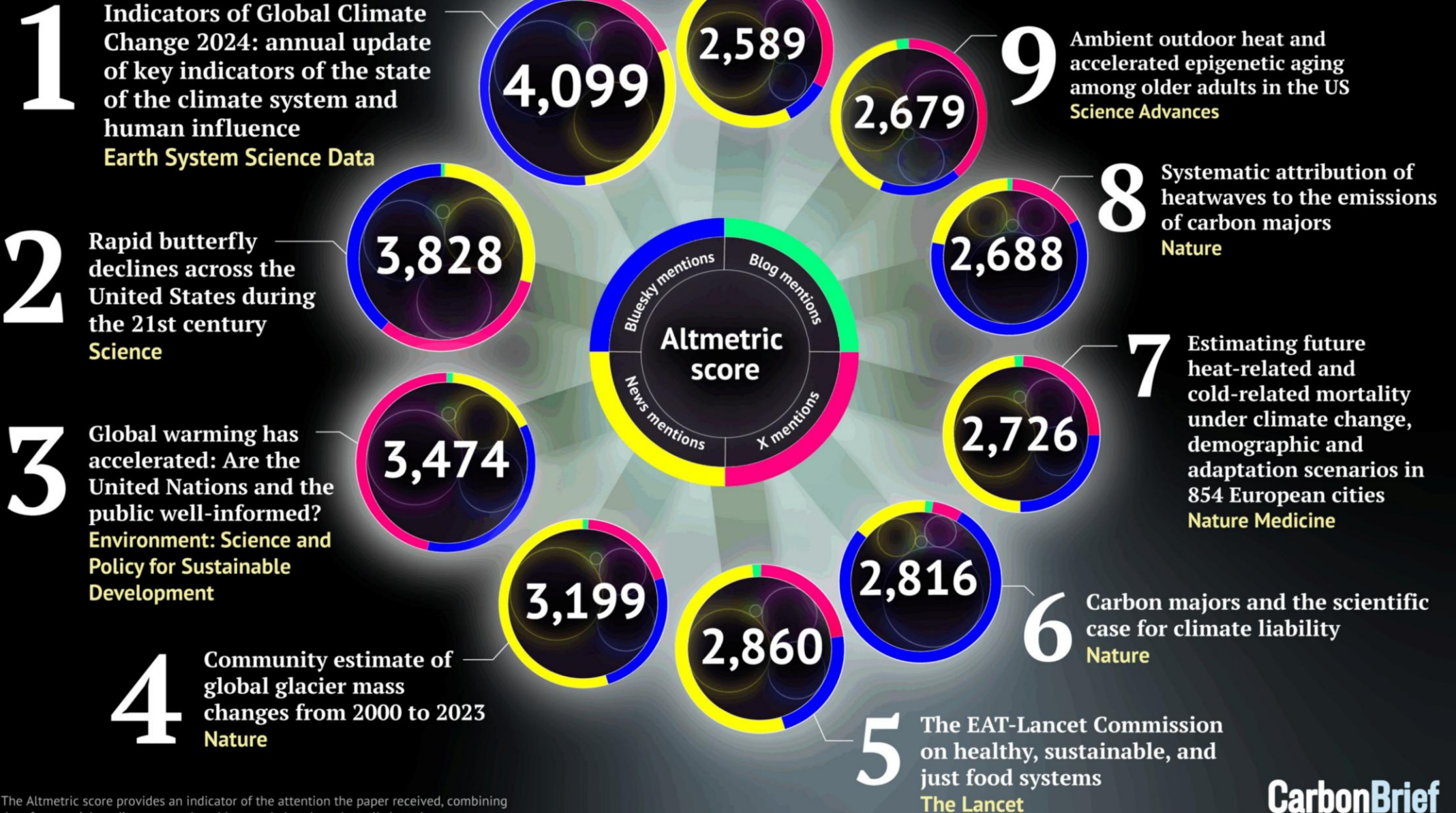
US had hottest March on record as nation faced 'unprecedented' heat

The continental US registered its most abnormally hot month in 132 years of records, according to NOAA data



The top 10 climate papers in 2025

For news and social media attention



The Altmetric score provides an indicator of the attention the paper received, combining data from social media, news outlets, blogs and elsewhere (not all shown).

Climate crisis

'Non-survivable': heatwaves are already breaching human limits, with worse to come, study finds

Analysis of six extreme heatwaves found when temperature and humidity were accounted for, all were potentially deadly for older people

Graham Readfearn
Environment and climate correspondent

Wed 8 Apr 2026 17:00 CEST

Share

Prefer the Guardian on Google



Scientists examined six extreme heatwaves, applying a new model of human survivability that considers the body's ability to stay cool depending on age. Pictured: a woman drinks water during a heatwave in Phoenix, Arizona, in July 2023. Photograph: Patrick T Fallon/AFP/Getty Images

Extreme heat is already creating "non-survivable" conditions for humans in heatwaves that have killed thousands and likely many more, according to new research that warns people are more susceptible to rising temperatures than first thought.

Scientists re-examined six extreme heatwaves between 2003 and 2024 and found that when temperature, humidity and the body's ability to stay cool were accounted for, all were potentially deadly for older people.

The absolute limit for humans to survive had been assumed to be a six-hour

Advertisement

SCIENZE

In cinque punti, due grafici e tre video le temperature nel 2025

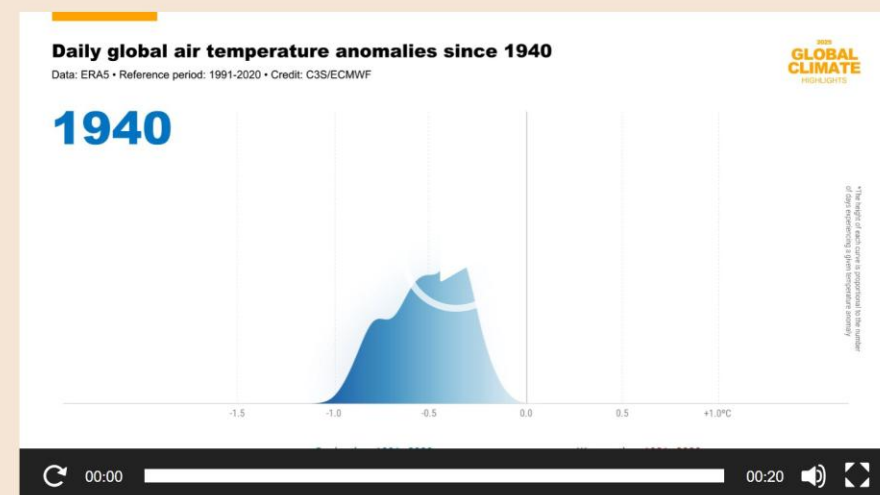
Infodata | 31 Gennaio 2026

Le temperature continuano a salire, gli oceani restano eccezionalmente caldi e i ghiacci polari toccano nuovi minimi. Il nuovo rapporto del *Copernicus Climate Change Service* conferma che il pianeta si trova ormai stabilmente a circa **+1,47°C rispetto all'era preindustriale**, con la media del triennio 2023-2025 che per la prima volta supera la soglia simbolica di **1,5°C** fissata dall'Accordo di Parigi. In un contesto di ondate di calore, incendi e inondazioni record, il 2025 rappresenta un altro segnale del cambiamento climatico in accelerazione.

Ecco **in cinque punti** cosa emerge dal rapporto *Global Climate Highlights 2025*.

1. Il terzo anno più caldo di sempre

Il 2025 si è chiuso con una temperatura media globale di **14,97°C**, pari a **+0,59°C sopra la media 1991-2020** e **+1,47°C rispetto al periodo preindustriale**. Solo il 2023 e il 2024 sono stati più caldi. Il 2024 resta l'anno record, il primo con una media annuale oltre la soglia di 1,5°C. Tutti gli ultimi undici anni, dal 2015 al 2025, rientrano tra i più caldi mai registrati.

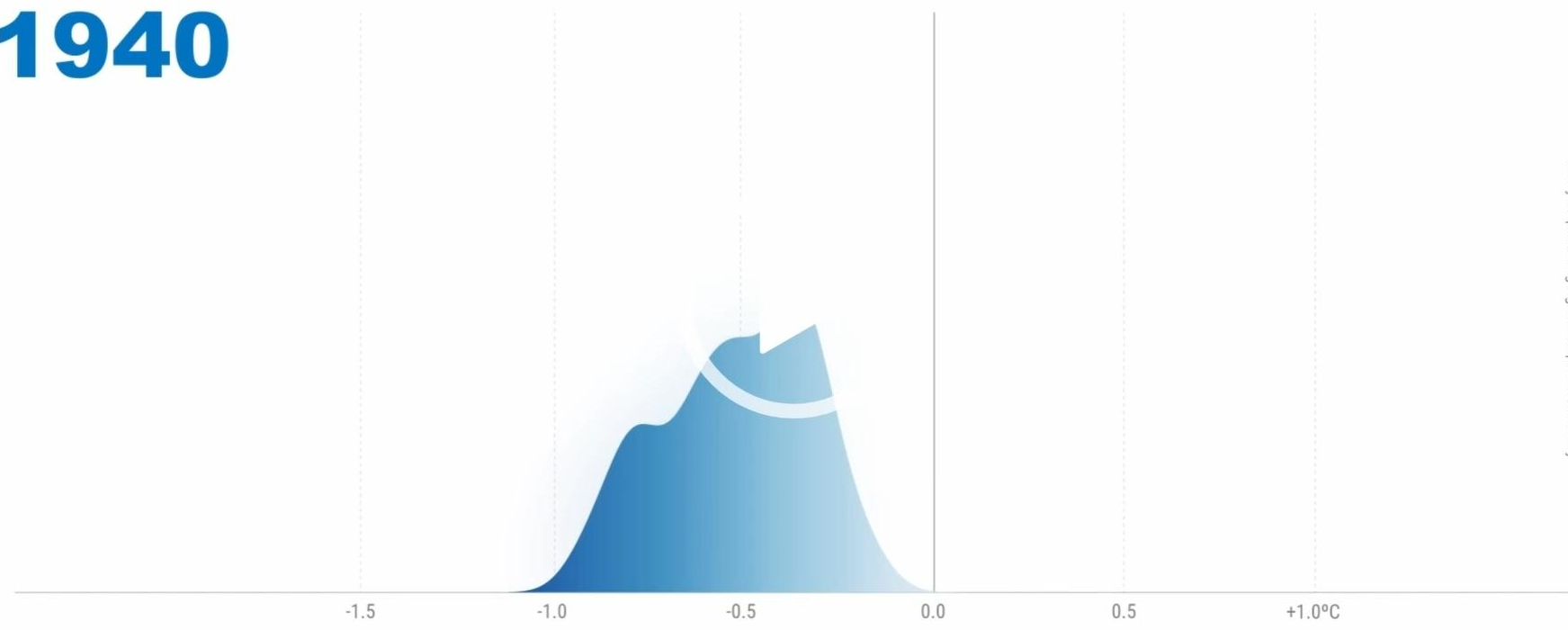


Daily global air temperature anomalies since 1940

Data: ERA5 • Reference period: 1991-2020 • Credit: C3S/ECMWF

2025
**GLOBAL
CLIMATE**
HIGHLIGHTS

1940



*The height of each curve is proportional to the number of days experiencing a given temperature anomaly



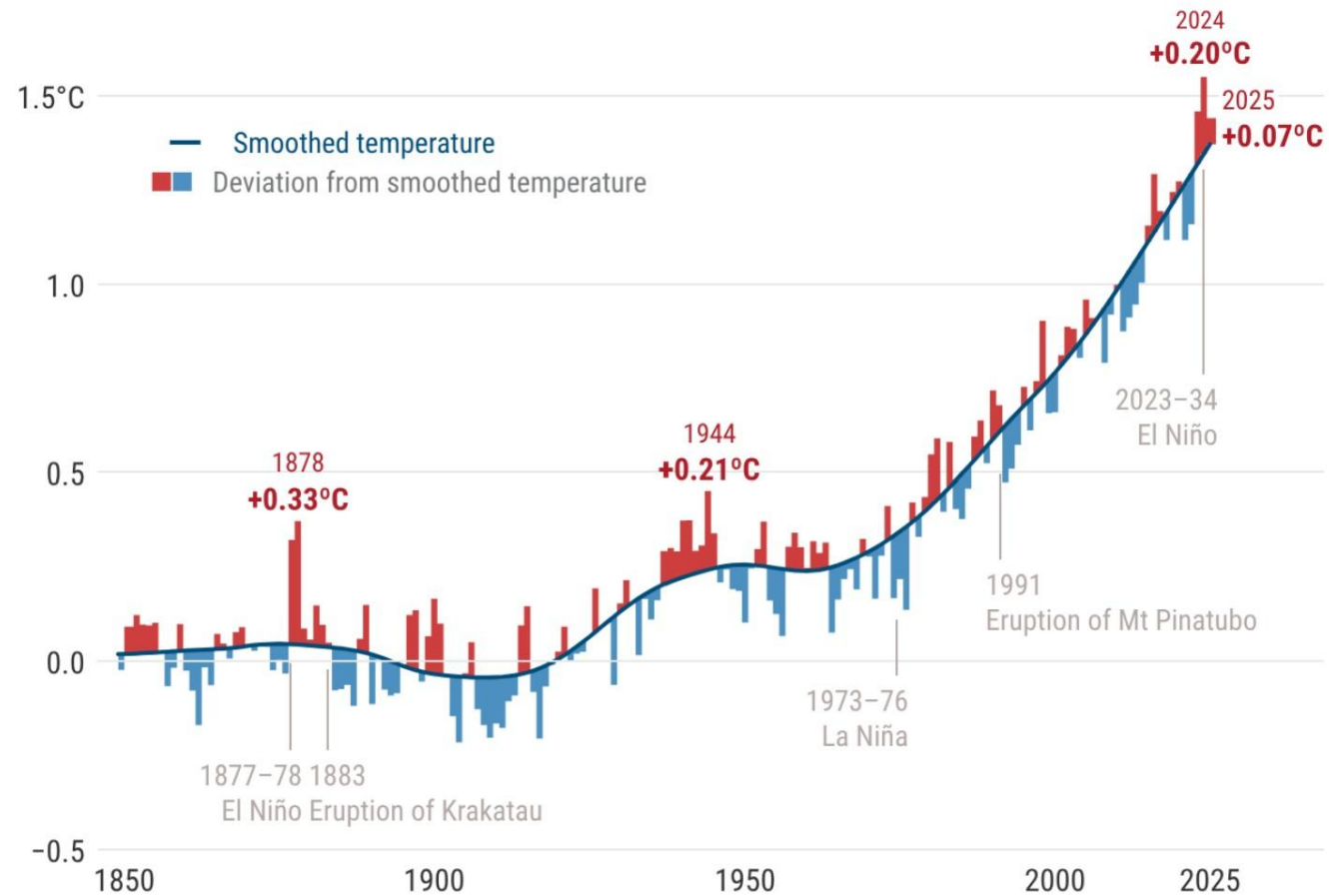
00:00



00:20



By how much do annual global temperatures deviate from evolving climatological averages?



Only a sample of some of the most important natural events are highlighted.

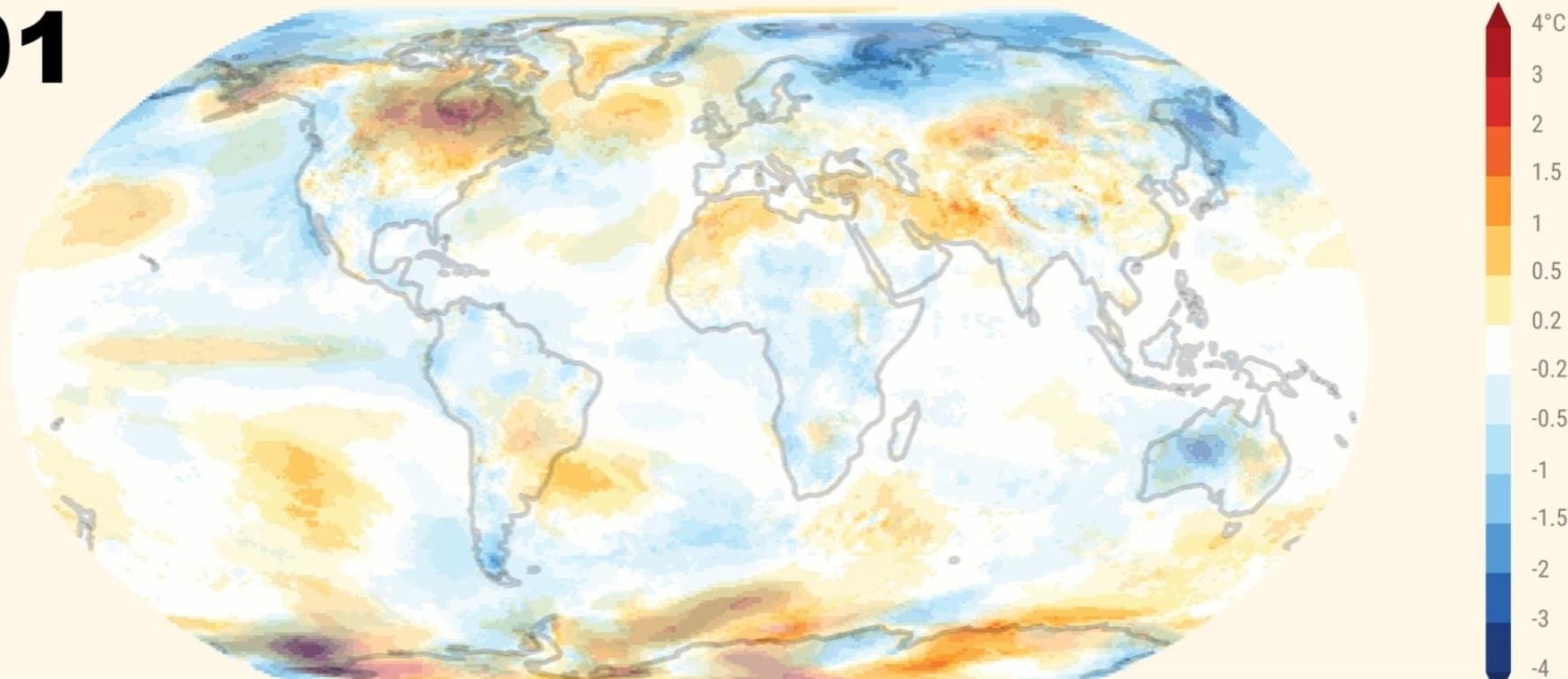
Data: average of Berkeley Earth, ERA5, GISTEMPv4, HadCRUT5, JRA-3Q, NOAA GlobalTempv6 • Reference period: pre-industrial (1850–1900) • Credit: C3S/ECMWF

Annual surface air temperature anomaly from 2001 to 2025

Data: ERA5 • Reference period: 1991–2020 • Credit: C3S/ECMWF

2025
**GLOBAL
CLIMATE**
HIGHLIGHTS

2001





Global mean temperature 1850-2025

Difference from 1850-1900 average

