

THE CLIMATE EMERGENCY REQUIRES THE REVERSAL OF PRIORITIES

A famous Ecole Polytechnique graduate on all television sets is calling for a halt to all air travel to save the planet with only four flights per life. But AIRLINE PILOTS have the opportunity to put an end to the unbearable Climate Runaway that our planet suffers year after year without stopping air transport.

The MIT, Massachusetts Institute of Technology Cambridge Research University, located near Boston, has defined a schedule in 2023 to **achieve the goals of sustainable aviation by 2030**. There are five years left to chart a new future for aviation. (See the study carried out on <https://report.aiazero.org/>). Indeed, they have identified that the impact on the global climate of stratospheric aviation trails is **an accelerator of global warming**. And there is an urgent need to address this Acceleration of Global Warming as a priority without going through decarbonization with SAF fuels. There is a reversal of priorities, first of all we deal with stratospheric water vapour and secondarily with carbon dioxide.

In France and Europe, climate change is on a trend of +3 to +4°C from 2030. And the government has published the PNACC-3 to adapt to a warming of +4°C in 2100.

As early as 2019, I also identified that Global Air Transport is at the origin of the climate runaway that we are currently experiencing. In August 2019, I filed a patent with the INPI to fight against global warming and excess water vapour. **The title of my invention is, Coastal Weather Management Facility.** On April 21, 2023, the INPI recognized the accuracy of my work and issued me the national certificate. On April 3, 2024, it is the turn of the European Patent Office in Munich to recognize my work and I have been granted a Single European Patent.

In a direct reading of NASA's hemispheric temperature records, linear variations can be seen at the beginning of global warming and then, since 1992, differential variations in temperatures in the Northern Hemisphere compared to the Southern Hemisphere. In mathematics, a linear variation is equivalent to solving an equation with an unknown and for a differential variation we must solve a differential equation with two unknowns. Thus we see:

- on the one hand, that the greenhouse gas CO₂ is the main cause of the Initial and Linear Global Warming (unknown RC) of the two hemispheres. This is visible as early as 1967 on the NASA/GISS/GISTEMP v4 temperature curve.

- and on the other hand, that the greenhouse gas solely responsible for runaway climate change (unknown EC) is none other than water vapour. What can be seen on the same curve, the runaway climate began in 1992. And this is confirmed by the MIT publication of April 2023.

I proposed a calculation of the PARCEL of water vapor (Acceleration Power of Global Warming and/or Localized Runaway) as a function of the temperature variation:

Var T +1°C. +2°C +3°C. +4°C. +5°C

Parcel 2,53 5,23 8,97 11,21 14,52

Average simulation parcel equal to 10 between 2 and 5°C.

Some figures in 2022, it was calculated that 12,700 billion tons of water vapor were suspended in the atmosphere for a positive temperature variation of 1.21°C compared to the end of the 19th beginning of the 20th century. In 2023, this temperature climbed to 1.36°C and an additional 133.4 billion tons of water vapor accumulated in the atmosphere.

In 2024, the hottest year of the century, the thermometer jumped to 1.57°C and the atmosphere stored an additional 195.5 billion tonnes of water vapour.

In summary, for the two main greenhouse gases, in billions of tonnes in the atmosphere, we find

Water vapor H₂O / Carbon dioxide CO₂

Billion tonnes Billion tonnes Proportion

Greenhouse effect 60% 26% x 2.308

2022 > 12,700 3258 x 3,898

2023 > + 133.4 36.8 x 3.625

2024 > + 195.5 37.4 x 5.227

The acceleration in 2024 is phenomenal and in the mass ratio, the additional annual mass of water vapor suspended in the atmosphere is more than 5 times that of CO₂. Extreme weather events in 2024:

Dry since 1970, the refilling of Lake Iriqui in southern Morocco by torrential rains in the Sahara. Abundant snow in the Al-Jawf desert in Saudi Arabia has raised questions among climate scientists.

Climate bombs devastated the northwest of the American continent in November. Closer to home, the cold drops at altitude in France and especially in Spain with torrential rains and torrents of mud have spread terror in the population by destroying everything, cities, roads and

bridges. We must no longer hide from the fact that water vapour is a natural phenomenon and does not affect the climate.

Decarbonizing human activities a little is necessary but is no longer enough, it is necessary to DEHYDRATE A LOT and it is much easier and above all, by far, the least expensive.

In the details and according to the readings on the NASA temperature curve (see graph below) we note: The reference period being 1951-1980, we can see that over 41 years from 1880 to 1921 the Southern Hemisphere is slightly less cold than the Northern Hemisphere, the coldest year being 1916 with a temperature difference of -0.6°C .

Then over 46 years from 1920 to 1966 we see the beginning of global warming in the Northern Hemisphere with a negative gap until 1930 and then the gap becomes slightly positive on average until 1966, the year of the end of Air Transport with propeller planes and the beginning of jet planes.

From 1967 to 1990, global warming began to be visible and the difference was between 0.2°C and 0.6°C , the hottest year being 1990. And in addition, we see that the Southern Hemisphere is slightly warmer than the Northern Hemisphere.

While the temperature difference in the Southern Hemisphere follows the same gentle and linear slope with a difference that goes from 0°C in 1970 to 0.6°C in 2022. That is a temperature increase of 0.1154°C every 10 years. Both hemispheres have the same carbon dioxide content, CO₂. If this greenhouse gas were the only one responsible for global warming, the two hemispheres would have, on average, more or less the same climate change as they had from 1880 to 1990 in the space of 110 years. We can thus deduce that Global Warming in the Southern Hemisphere is essentially of carbon dioxide CO₂ origin.

On the other hand, from 1992, the temperature difference in the Northern Hemisphere spiralled from 0.2°C to 1.44°C in 31 years, i.e. an insane slope of 0.4°C every 10 years. Global warming in the Northern Hemisphere is currently accelerating by 3.5 times that of the Southern Hemisphere, which will give a temperature difference of between +5.25°C and +7°C for a temperate country like France in 2100. This is very far from the PNACC-3 (National Plan for Adaptation to Climate Change) and its 51 measures to adapt to +4°C. We have to face the facts, the other greenhouse gas solely responsible for runaway climate change is none other than the water vapor injected by man into the lower stratosphere.

It was the explosion of the underwater volcano HUNGA TONGA, which propelled 140 million tons of water vapor into the stratosphere of the southern hemisphere on January 15, 2022, that revealed this extremely violent climatic fact. In 2023, the Southern Hemisphere warmed by 0.23°C, 20 times more than its historical average.

The human activities generating CO₂ through the use of fossil fuels coal, oil or gas are identical in both hemispheres, the only human activity that deposits water vapor, 300 million tons between 9 and 13 km altitude in the lower stratosphere, is Air Transport and the very significant proportion is **93% of flights in the Northern Hemisphere and only 7% of flights in the Southern Hemisphere.**

Every year in the Northern Hemisphere, the deposition of water vapor from high-altitude jet aircraft is more than twice that injected by the explosion of the HUNGA TONGA.

The only solution to make this water vapor neutral for the climate is to imperatively limit the cruising level of global air transport to less than 8000 meters from 40° north or south latitude to the Pole, and between

8,000 meters and 11,000 meters on the rest of the globe between '-40° AND +40° latitude.

It should be noted that Regional Air Transport, which uses turboprop aircraft of the ATR 42 or 72 type, whose ceiling is precisely 7600 meters, does not participate in the climate runaway and their emission of water vapor at low altitude is totally neutral, as for the cooling of nuclear power plants.

Other evidence of the dramatic influence of air transport water vapour on the climate has been identified.

During the covid 19 epidemic, from December 2019 to December 2020, global air transport was brought to a total halt and NASA's temperature readings over the Arctic mark an average temperature drop of more than 2 degrees. Similarly, the surveys of the Arctic ice extent on the nsidc.org site show that this ice extent melted strongly from 2016 to 2020 and that since 2021 this ice extent has been reformed following the non-overflight of the Arctic Ocean by World Air Transport. It should be noted that with the war in Ukraine, flying over the Arctic Ocean is prohibited.

In Antarctica in 2021, the ice extent remained within the average observed from 2011 to 2020. In 2022, following the explosion of the Hunga Tonga

submarine volcano, we are seeing an accelerated melting of the sea ice with a record low in 2023. In 2024, the amount of water vapour in the upper atmosphere is less because it is evacuated over time, and the ice in the Antarctic ice pack is reforming.

On the readings of the state of the Alpine glaciers, which the University of Zurich provides on the website Glamos.ch it can be seen, during the Covid 19 epidemic and the cessation of Air Transport, that since December 2019 the melting of the Alpine glaciers has been significantly reduced and above all that during the year 2020 the melting of the Alpine glaciers has practically stopped.

To close the hole in the ozone layer in the upper atmosphere that scientists have observed since 1970, in 1987 twenty-four countries and the EEC signed the Montreal Protocol. The text prohibits the use of chlorofluorocarbon substances CFCs, used as refrigerants, solvents and as propellants in sprays. Forty years later, all the countries of the world have ratified the agreement and the ozone layer that protects the planet is being reconstituted. We have a similar problem solve.

We must be aware that the PNACC-3 is insufficient. From the moment the cause of the runaway climate is finally identified, it is imperative to lower the cruising level of planes below 8000 meters to save the Alpine glaciers, the poles and the High Seas at the COP 30 (conferences of the Parties) of the United Nations in Belem in November 2025.

To do this, in the Europe and Middle East zone to encompass the glaciers of the Alps and the Mediterranean Sea in accelerated overheating on a trend of +3° to +4°C, it is necessary from January 2026 that the national airline AIR FRANCE and its AIRLINE PILOTS propose and set up an experimental laboratory as suggested by MIT to limit the level of flight to less than 8000 meters. Zero water vapour in the stratosphere is thus possible in Europe from 2027 and then in the rest of the world, to achieve the objectives of sustainable aviation in 2030.

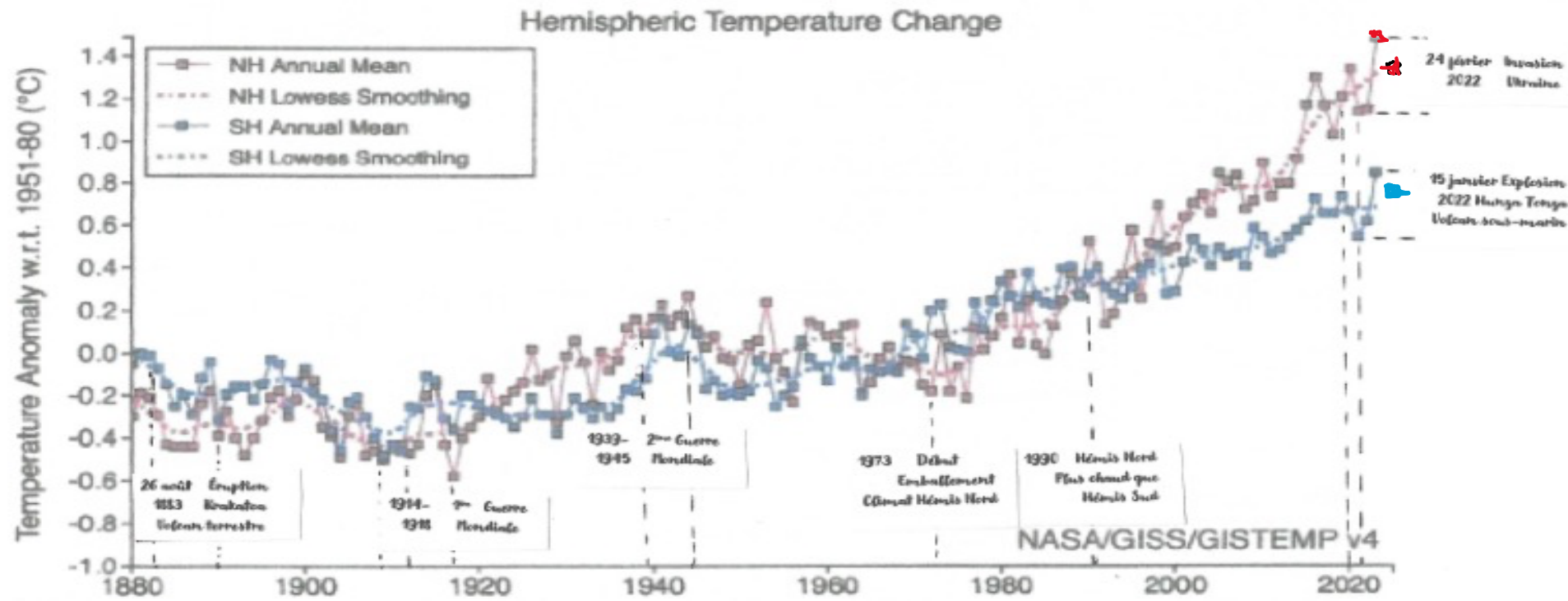
And moreover, we must keep reason and also limit the future growth of air transport between 1 and 2%, 4.5 billion passengers in 2019 and a forecast of 9 billion in 2050 in 25 years, it is untenable for the planet.

And subsequently, by 2050, some of the countries listed in my study will have to implement this European unitary patent to fight against water vapour and residual global warming, to maintain the bearable temperature difference set in Paris by the COP 21 of 2015 between 1.5° and 2°C in 2100.

Hoping to have convinced people of the importance of the fight against stratospheric water vapour, we can continue to fly with our superb machines without shame and satisfy the desire to travel of our passengers.

Gino SCATOLIN, CDB AF retired

Patent <https://www.piufortavi.com/> website



Annual and five-year lowess smooth anomalies (vs. 1951-1980) separately for the Northern and Southern Hemispheres based on land and ocean data. Figure also available as a [PNG](#), [PDF](#), [HTML](#), [plain text](#) and [CSV](#) (data columns 2, 3), or [Generate PNG](#) of the visualization's current state.

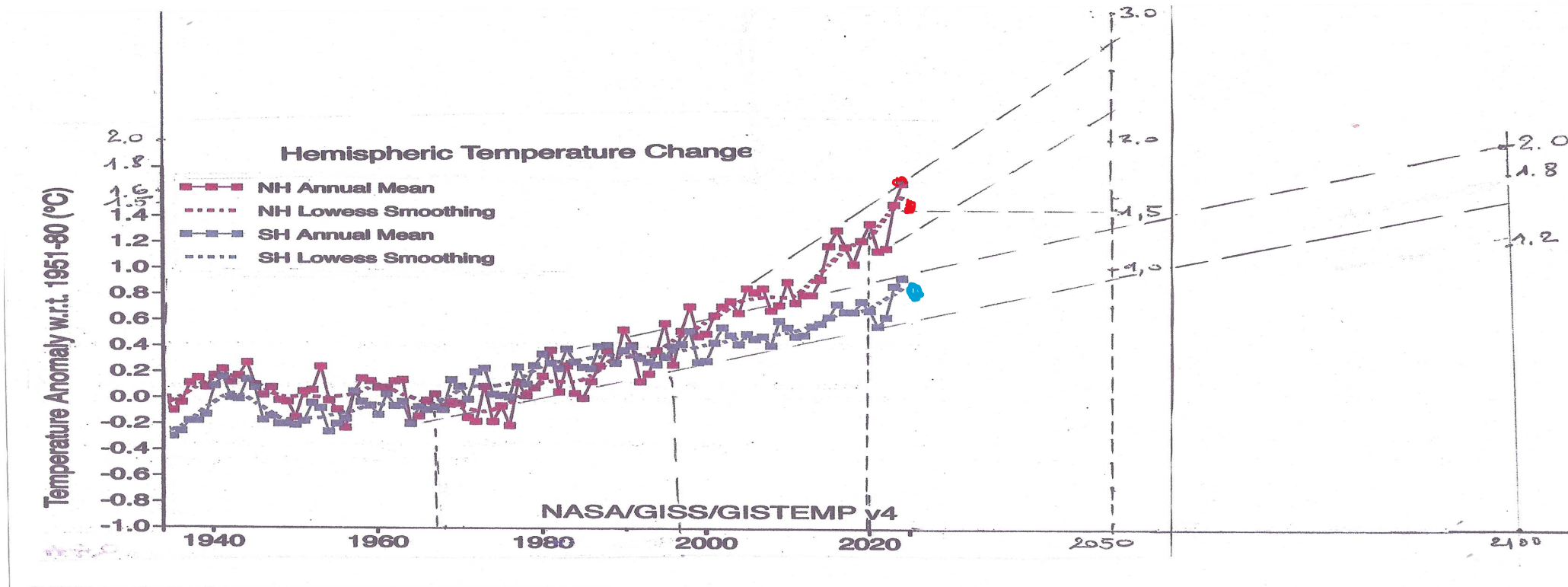
[Global Monthly Mean Surface Temperature Change](#)

[Annual Mean Temperature Change in the United States](#)

[Seasonal Mean Temperature Change](#)

Temperatures of both the Northern and Southern Hemispheres, NASA

archives



2050 and 2100 projections of temperatures in both hemispheres if we do not stop the runaway climate

Northern Hemisphere climate runaway from 2005 to 2025

Notes:

Since the annual low in 2020 of **10.150** million km², the Arctic sea ice is replenishing in 2021 given the halt in the deposition of water vapor produced by the non-overflight of the Arctic Ocean by the World Air Transport for the Far East following the covid 19 pandemic. But the outbreak of the war in Ukraine in February 2022 is once again increasing the melting of the sea ice. In 2023 and 2024, its extent will return to its 2007 and 2012 values.

Arctic sea ice extent in MKm²

| | Janu | Febru | March | April | May | June | July | Augu | Septe | Octob | Novem | Decem | Annual |
|-------------|-------|--------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| 2005 | 13.66 | 14.37 | 14.69 | 14.09 | 12.91 | 11.16 | 8.649 | 6.301 | 5.504 | 7.352 | 10.22 | 12.23 | 10.907 |
| 2006 | 13.47 | 14.33 | 14.42 | 13.91 | 12.52 | 10.92 | 8.46 | 6.496 | 5.862 | 7.541 | 9.659 | 11.96 | 10.773 |
| 2007 | 13.7 | 14.51 | 14.54 | 13.85 | 12.78 | 11.22 | 7.943 | 5.342 | 4.267 | 6.04 | 9.76 | 12.03 | 10.474 |
| 2008 | 13.89 | 14.95 | 15.18 | 14.35 | 12.97 | 11.21 | 8.678 | 5.913 | 4.687 | 7.35 | 10.34 | 12.36 | 10.978 |
| 2009 | 13.91 | 14.81 | 14.98 | 14.5 | 13.19 | 11.32 | 8.465 | 6.136 | 5.262 | 6.92 | 9.772 | 12.2 | 10.932 |
| 2010 | 13.74 | 14.58 | 15.14 | 14.66 | 12.87 | 10.59 | 8.075 | 5.875 | 4.865 | 6.984 | 9.614 | 11.83 | 10.711 |
| 2011 | 13.46 | 14.36 | 14.55 | 14.11 | 12.68 | 10.75 | 7.724 | 5.503 | 4.561 | 6.465 | 9.772 | 12.15 | 10.483 |
| 2012 | 13.73 | 14.55 | 15.2 | 14.63 | 13.01 | 10.67 | 7.672 | 4.723 | 3.566 | 5.886 | 9.388 | 12.01 | 10.406 |
| 2013 | 13.7 | 14.72 | 15.03 | 14.3 | 13 | 11.36 | 8.132 | 6.014 | 5.208 | 7.455 | 9.939 | 12.18 | 10.897 |
| 2014 | 13.65 | 14.42 | 14.76 | 14.09 | 12.7 | 11.03 | 8.108 | 6.078 | 5.22 | 7.232 | 10.12 | 12.35 | 10.79 |
| 2015 | 13.6 | 14.4 | 14.37 | 13.89 | 12.47 | 10.88 | 8.378 | 5.599 | 4.616 | 6.966 | 9.846 | 12.05 | 10.566 |
| 2016 | 13.46 | 14.2 | 14.4 | 13.68 | 11.92 | 10.41 | 7.938 | 5.371 | 4.528 | 6.082 | 8.658 | 11.46 | 10.163 |
| 2017 | 13.19 | 14.12 | 14.29 | 13.75 | 12.63 | 10.76 | 7.939 | 5.481 | 4.822 | 6.767 | 9.493 | 11.74 | 10.393 |
| 2018 | 13.08 | 13.97 | 14.3 | 13.7 | 12.23 | 10.78 | 8.268 | 5.615 | 4.785 | 6.134 | 9.823 | 11.86 | 10.355 |
| 2019 | 13.57 | 14.39 | 14.57 | 13.43 | 12.19 | 10.59 | 7.589 | 5.026 | 4.364 | 5.735 | 9.353 | 11.9 | 10.201 |
| 2020 | 13.64 | 14.64 | 14.73 | 13.62 | 12.34 | 10.59 | 7.294 | 5.07 | 4.001 | 5.334 | 8.985 | 11.73 | 10.15 |
| 2021 | 13.5 | 14.39 | 14.66 | 13.79 | 12.68 | 10.77 | 7.647 | 5.715 | 4.952 | 6.816 | 9.83 | 12.15 | 10.552 |
| 2022 | 13.87 | 14.61 | 14.59 | 13.99 | 12.88 | 10.88 | 8.287 | 5.95 | 4.897 | 6.657 | 9.725 | 11.89 | 10.661 |
| 2023 | 13.36 | 14.19 | 14.43 | 13.92 | 12.82 | 10.99 | 8.207 | 5.514 | 4.381 | 6.412 | 9.682 | 11.98 | 10.469 |
| 2024 | 13.92 | 14.61 | 14.87 | 14.04 | 12.74 | 10.85 | 7.87 | 5.13 | 4.351 | 5.934 | 9.146 | 11.41 | 10.391 |
| 2025 | 13.11 | 13.75 | 14.12 | 13.83 | 12.49 | 10.41 | 7.66 | 5.413 | 4.747 | 6.317 | 8.775 | 11.22 | 10.130 |
| 2026 | 13.11 | 14,098 | 14,131 | 13,568 | | | | | | | | | |

Antarctic Global Warming from 2005 to 2025-

Notes

Between 2005 and 2021, fluctuations around 11.5 million Km² but since the explosion on 15/02/2022 of the underwater volcano HUNGA TONGA, there has been a sharp drop in this area of more than 1 million Km² (-7.5% in 2022 and -15% in 2023) and a very marked warming of the southern hemisphere which is not linked to CO₂ but to the 140 million tons of water vapor propelled into the stratosphere

Antarctic sea ice extent in MKm²

| | Janu | Febru | March | April | May | June | July | August | Septem | Octob | Novem | Decem | Annual |
|------|-------|-------|-------|-------|-------|-------|-------|--------|--------|-------|-------|-------|--------|
| 2005 | 4.752 | 2.97 | 4.082 | 7.032 | 10.29 | 13.29 | 16.16 | 17.92 | 18.81 | 18.48 | 16.32 | 9.68 | 11.695 |
| 2006 | 4.164 | 2.651 | 3.215 | 6.01 | 9.456 | 13.35 | 16.11 | 18.1 | 19.09 | 18.73 | 16.23 | 9.854 | 11.461 |
| 2007 | 4.673 | 2.905 | 3.835 | 6.418 | 9.648 | 13.29 | 15.96 | 17.68 | 18.86 | 18.51 | 15.89 | 11.98 | 11.687 |
| 2008 | 6.414 | 3.895 | 5.284 | 8.242 | 11.05 | 14.06 | 16.1 | 17.65 | 18.15 | 17.99 | 16.25 | 11.51 | 12.239 |
| 2009 | 5.707 | 2.991 | 4.441 | 7.798 | 10.93 | 13.91 | 16.26 | 18.1 | 18.96 | 18.3 | 15.85 | 10.74 | 12.049 |
| 2010 | 4.958 | 3.106 | 3.847 | 6.715 | 10.64 | 14.41 | 16.92 | 18.61 | 18.8 | 18.65 | 16.76 | 11.27 | 12.107 |
| 2011 | 4.512 | 2.519 | 3.368 | 6.097 | 10.09 | 13.33 | 15.75 | 17.81 | 18.74 | 18.22 | 15.76 | 11.2 | 11.501 |
| 2012 | 5.654 | 3.553 | 4.55 | 7.309 | 10.46 | 13.55 | 16.3 | 18.1 | 19.21 | 18.59 | 16.11 | 10.39 | 12.004 |
| 2013 | 5.543 | 3.836 | 5.017 | 7.623 | 10.92 | 14.16 | 16.81 | 18.66 | 19.39 | 19.02 | 16.87 | 11.85 | 12.524 |
| 2014 | 6.327 | 3.843 | 4.901 | 8.343 | 11.52 | 14.69 | 17.11 | 18.91 | 19.76 | 19 | 16.39 | 11.93 | 12.776 |
| 2015 | 6.852 | 3.799 | 4.964 | 8.373 | 11.72 | 14.48 | 16.78 | 17.75 | 18.44 | 18.41 | 16.18 | 10.66 | 12.414 |
| 2016 | 4.689 | 2.79 | 4.069 | 7.222 | 10.1 | 13.24 | 16.02 | 17.89 | 18.15 | 17.46 | 14.22 | 8.279 | 11.202 |
| 2017 | 3.784 | 2.288 | 2.699 | 5.436 | 9.014 | 12.41 | 15.3 | 17.22 | 17.91 | 17.78 | 15.11 | 9.482 | 10.749 |
| 2018 | 4.211 | 2.326 | 3.54 | 6.033 | 9.321 | 12.89 | 15.7 | 17.42 | 17.96 | 17.73 | 15.1 | 9.188 | 11 |
| 2019 | 3.868 | 2.655 | 3.169 | 5.718 | 8.852 | 12.25 | 15.3 | 17.48 | 18.34 | 17.94 | 15 | 9.409 | 10.876 |
| 2020 | 4.598 | 2.92 | 4.003 | 6.662 | 9.871 | 13.28 | 15.72 | 17.76 | 18.84 | 18.49 | 16.23 | 10.58 | 11.602 |
| 2021 | 4.777 | 2.892 | 4.484 | 7.132 | 10.4 | 13.54 | 16.45 | 18.19 | 18.51 | 17.69 | 15.04 | 9.245 | 11.579 |
| 2022 | 3.935 | 2.213 | 2.859 | 5.948 | 9.418 | 12.22 | 14.99 | 17.05 | 18.06 | 17.47 | 15.16 | 8.839 | 10.726 |
| 2023 | 3.296 | 1.978 | 2.838 | 5.538 | 8.447 | 11.12 | 13.57 | 15.58 | 16.89 | 16.28 | 14.38 | 8.765 | 9.931 |
| 2024 | 4.047 | 2.187 | 3.221 | 6.253 | 9.363 | 11.85 | 14.2 | 16.41 | 17.15 | 16.65 | 14.31 | 9.593 | 10.461 |
| 2025 | 4.693 | 2.218 | 3.002 | 6.173 | 9.273 | 12.11 | 14.67 | 16.5 | 17.64 | 16.97 | 14.58 | 9.219 | 10.663 |
| 2026 | 4.492 | 2,912 | 3,568 | 6,178 | | | | | | | | | |

