

Climate science pioneer Claude Lorius, dies at 91

March 23 2023



French glaciologist Claude Lorius was one of the first scientists to provide proof of human caused global warming.

Leading glaciologist Claude Lorius, whose Antarctica discoveries in the 1980s helped prove humanity's role in global warming, has died at 91.

Lorius died on Tuesday morning in the French region of Burgundy, according to Jerome Chappellaz, a palaeoclimatologist and former colleague of his.

The French publisher Arthaud, which produced the glaciologist's memoirs, also announced his death in a statement.

A great scientist, "Claude was also of the finest calibre of polar expedition adventurers", said the famous French explorer Jean-Louis Etienne in a video posted on Twitter.

In 1955, fresh out of university, Lorius responded to an obscure advert to partake in a mission for the International Geophysical Year—a global research program dedicated to revealing the icy continent's mysteries.

After two months of sailing and four weeks of traversing [rough terrain](#), Lorius reached the Antarctica Charcot base, 320 kilometres (200 miles) inland.

"I did not choose science, I chose adventure," said the pioneering climatologist, born in 1932, in a past interview with AFP.

"We were extraordinarily lucky since Antarctica is the best place to bear witness to the planet's environmental problems" said Lorius.

He and two others stayed there for a year, confined to a cramped "burrow" with limited supplies and a faulty radio for communication, with temperatures at -40 degrees Celsius (-40 Fahrenheit) outside.

"We were cut off from the rest of the world for months, that's when I learned how to live together and how to show solidarity," he said.

Ice cube inspiration

Claude Lorius led 22 expeditions in Greenland and Antarctica, where he lived on and off for six years.



A documentary on his work showed at the 2015 Cannes Film Festival.

In the 1970s, Lorius began to suspect human involvement in the planet's warming.

But it wasn't until a 1984 expedition at the most remote Russian Antarctic base, Vostok, that Lorius was able to study ice cores drilled deep into the frozen polar landscape and confirm his suspicions.

He is perhaps most internationally renowned for research, published in 1987, into [air bubbles](#) trapped in the ice, which allowed scientists to look back over 160,000 years' worth of glacial records.

In 1965, an [ice cube](#) snatched from a sample core and submerged in his whiskey provided Lorius with a revelation: the ice contained air bubbles full of ancient air.

"I remember looking at the blue colour of the little ice cubes melting in the glass and as I saw the bubbles rise," said Lorius in an interview with the Independent newspaper in 2016.

"I realised the scientific potential of analysing the trapped air."

This research showed that while [carbon dioxide](#) had varied slightly over time, the concentrations of the greenhouse gas had rocketed as temperatures rose since the middle of the 19th century—the dawn of the Industrial Revolution.

French research agency CNRS said that left "no room for doubt" that the

warming was caused by the pollution from human activities.

From then on, Lorius dedicated himself to mobilising the fight against [global warming](#).

He was an inaugural expert of the Intergovernmental Panel on Climate Change (IPCC) after the UN expert group was created in 1988.

In 2002, along with colleague and friend Jean Jouzel, he was awarded the CNRS gold medal.

Lorius was also the first Frenchmen to receive the prestigious Blue Planet Prize.

Lorius returned to Antarctica in his eighties to feature in director Luc Jacquet's documentary "Ice and the Sky" showcasing the explorer's extraordinary career. The film premiered at the closing ceremony of the 2015 Cannes Film Festival.

© 2023 AFP

Citation: Climate science pioneer Claude Lorius, dies at 91 (2023, March 23) retrieved 26 April 2024 from <https://phys.org/news/2023-03-climate-science-claude-lorius-dies.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.