

THE ONE PLANET  
SUMMIT  
FOR GLACIERS AND POLES

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NOVEMBER 8-10, 2023

First international summit dedicated  
to glaciers and poles



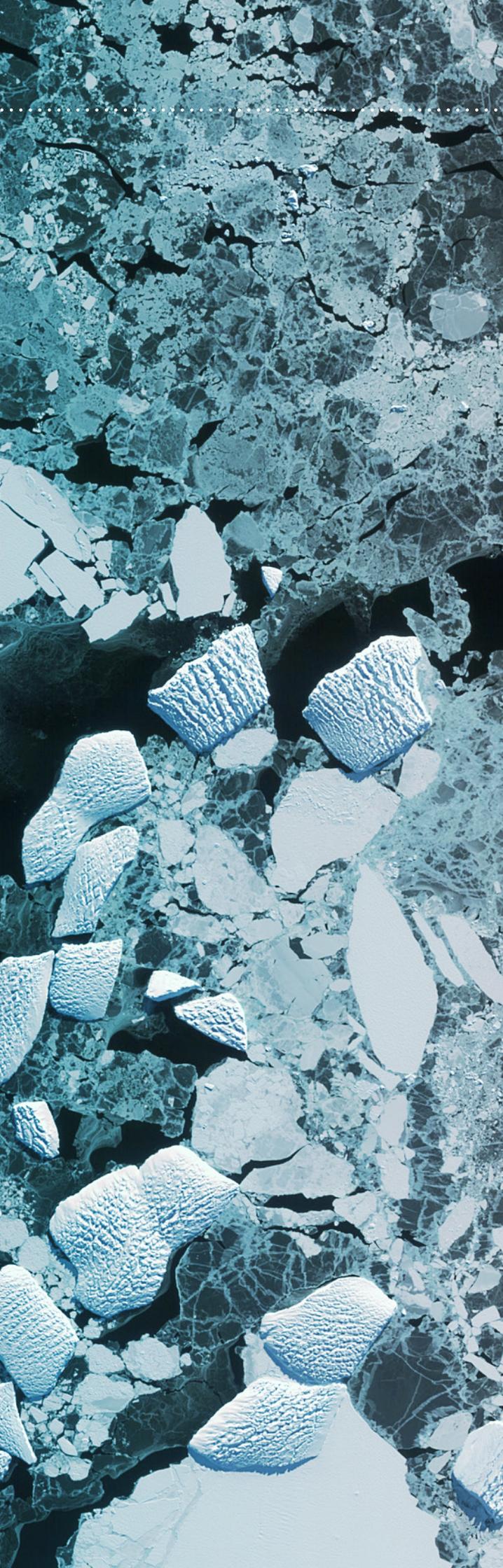
Extract from France's Polar  
Strategy for 2030

## « Equilibrium in extremes »

« As a comprehensive and committed polar actor and a force for equilibrium, France wants to develop a strategic prospective study of the polar regions, to be shared as widely as possible with the international community. The study will make a robust and concerted assessment of and response to safety and stability risks, especially those associated with climate change and geopolitical tensions. In view of this, France proposes to organize an international conference on the poles on homeground, in consultation with the countries concerned, in the spring of 2023. The conference will bring together all the players who are ready to become involved in issues relating to science and climate topics, as well as compliance with governance in these regions. »

● **Source : Polar strategy**

[www.gouvernement.fr/upload/media/default/0001/01/2022\\_04\\_strategie\\_polaire\\_de\\_la\\_france\\_a\\_horizon\\_2030.pdf](http://www.gouvernement.fr/upload/media/default/0001/01/2022_04_strategie_polaire_de_la_france_a_horizon_2030.pdf)



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« Poles, like glaciers, are part of the French imagination. From Kerguelen to Dumont d'Urville, from Paul-Emile Victor to Jean Malaurie and Jean-Louis Etienne, poles have inspired the heroism, courage and determination of generations of explorers and scientists. The same is true of our national territory, as glaciers bear the imprint of legends and exploits, the dreams of artists and the ice axes of mountaineers. Through poles and glaciers, the quest for knowledge and beauty, of victories over oneself rather than over nature, of pride and universal aspiration, has been written. It is this same spirit that we aim to bring together during the three days of the One Planet Summit on poles and glaciers in Paris.

For today, these territories, where the human spirit has learned to measure the limits of its powers and strength, require the same propensity to go beyond national interests, as well as a great deal of wisdom and commitment to protecting them. Hundreds of scientists from all over the world, along with representatives of governments and civil society, will be meeting in Paris to take stock of a major phenomenon - the accelerating collapse of the cryosphere. Melting ice and rising sea levels are already putting hundreds of millions of lives at risk.

Melting permafrost brings with it major risks of CO2 release and potential new pandemic threats. The disappearance of glaciers represents an immense challenge for the populations that depend on them, particularly for access to fresh water. All of humanity is therefore concerned. By the end of this century, two billion people will be threatened.

The cryosphere is an essential resource for our planet's equilibrium. We cannot watch its collapse in silence. Even if geopolitical tensions are intensifying on an international scale, we have one imperative: to preserve these spaces as havens of peace, scientific cooperation and environmental ambition, while respecting the sovereignty of all.

This first world summit on poles and glaciers will be an opportunity for the scientific community, politicians, non-governmental organizations, indigenous peoples and explorers, as well as the general public, to spring into action. It will be an opportunity to commit to the targets of the Paris Agreement, to increase scientific cooperation to better understand the interactions between climate and the cryosphere, to protect ecosystems, and to better adapt to the consequences of melting ice, which have already materialized.

*In an international environment where our points of reference are being shaken up, in the face of the return of war and the denial of our common rules, let's use this Summit to demonstrate that we are still capable of writing a new page in this great polar and glacier story, made up of progress, adventure, transmission and universal cooperation.»*

**Emmanuel Macron**

*President of the Republic*

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*Glaciers and poles are the actors and first victims of climate change. Climate regulation, sea level, preservation of the biodiversity: all the planet's inhabitants depend on them, directly or indirectly. Preserving them is first and foremost a question of mitigating global warming : they contribute to stabilize the global climate and their disappearance would lead to unpredictable consequences for life on earth.*

*But we also need to adapt to the inevitable consequences of the loss of part of the cryosphere, be it sea level-rise, the prevention of glacial risks or disruptions to the great water cycle.*

*In addition to their ecological dimension, these polar territories crystallize the contemporary challenges we face: energy, industrial and geostrategic issues. Far from being the sole concern of the countries bordering them, the Arctic and Antarctic are now global issues. The same applies for glaciers, whose widespread melting is having major cross-border consequences.*

*This One Planet - Polar Summit is an invaluable opportunity to unite in a world of rivalries to preserve these areas vital to humanity, and to prepare together to face the consequences of climate change, some of which are already irreversible.*

**Christophe Béchu**

*Minister for Ecological Transition  
and Territorial Cohesion*

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*The ecological transition carried by the government is based on scientific knowledge. For over 100 years, France has supported exploration, observation and research missions in the polar regions. Given poles' key role in climate dynamics, and the impact of melting polar and glaciers ice on living organisms, research data is now more vital than ever to understanding, forecasting and taking action. This summit is a reminder of how essential international scientific cooperation is if we are to meet these challenges as quickly as possible.*

**Sylvie Retailleau**

*Minister for Higher Education  
and Research*

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# ONE PLANET POLAR SUMMIT

## A need for scientific cooperation and political ambition for glaciers and poles

Today, the Arctic and Antarctic are major strategic areas on which the planet's equilibrium largely depends. Like the oceans to which they are intrinsically linked, the North and South Poles play a central role in regulating climate and preserving biodiversity. Actors and first victims of climate change, they are also sounding the alarm. The state of the glacial worlds and high plateaus is no less worrying; they show the extent to which the collapse of the cryosphere on a global scale can have effects on populations, ecosystems as a whole, water resources, sea-level rise...

If the phenomenon of the cryosphere's collapse is quasi-irreversible, the world's leaders must take it into account, in a way that is commensurate with the scale of involved challenges and disasters already on the horizon, to enable ecosystems and populations to adapt.

The effects of climate disruption, with the Arctic and Antarctic warming up dramatically and the Greenland ice sheet and sea ice melting, as well as the Antarctic glaciers and other emblematic glaciers such as the Himalayas and Kilimanjaro, justify an exceptional and concerted mobilization of the international community.

France has just adopted its first National Polar Strategy for 2022. It not only provides new resources for our scientific research, the ambition and amount of which the President of the Republic will announce on this occasion, but also sets a number of objectives on an international scale, including the organization in France in 2023 of the first « international polar summit » in the format of a One Planet Summit.

### First international summit dedicated to glaciers and poles

The 2023 edition of the Paris Peace Forum «Seeking Common Grounds in a World of Rivalry» will host this first international conference at a time when, subject to growing geopolitical tensions and increasing economic exploitation, the already fragile glacial and polar worlds are today threatened in their ecosystems.

The One Planet - Polar Summit, at the initiative of H.E. Emmanuel Macron, will set up an international cooperation movement to study, prevent and adapt to the accelerated erosion of the cryosphere, which includes the poles (Arctic, Antarctic), ice caps, permafrost, where massive quantities of CO<sup>2</sup> are stored, and glaciers.

A major scientific conference will be held on November 8 and 9 at the National Museum of Natural History to address to policy-makers the first international scientific updated report on the cryosphere as a whole, in order to step up research on the cryosphere, better protect the environment in these areas, and launch new actions to adapt to climate change, particularly sea-level rise. Sequences, also producing reports and recommendations, will bring together explorers and operators of the polar and glacial regions, NGOs and foundations committed to protecting the cryosphere, and representatives of indigenous people and local communities.

Ministers responsible for research and environment will be meeting on November 9 at the Museum to highlight numerous bilateral or plurilateral cooperation initiatives, as well as launching, with the support of UNESCO and the World Meteorological Organization, the decade of polar research. More than forty countries are now mobilizing to meet the challenge of cryospheric collapse.

The heads of State and government will meet on November 10 in the Museum's Grand Gallery of Evolution. They will be able to hear the international scientific community's findings and projections on melting ice, recommendations from civil society actors, and adopt the Paris

Call for glaciers and poles, structuring international scientific cooperation and the preservation of the 1.5°C target a few weeks before COP28.

The declaration will also provide an opportunity to launch a major coalition of coastal communities united in the face of rising sea levels, co-led by the mayor of Nice city and host of the United Nations Ocean Conference in 2025, Christian Estrosi.

This high-level segment on November 10 will first take the form of a work meeting on the first floor of the Grand Gallery of Evolution of the National Museum of Natural History, bringing together heads of State and government, representatives of international organizations and non-governmental organizations, coastal communities, as well as representatives of the scientific community and indigenous people and local communities.

This will be followed by the presentation of the Paris Call for glaciers and poles to all One Planet - Polar Summit participants by the French President and his hosts.

#### **Olivier Poivre d'Arvor, French Ambassador for poles and the ocean**

#### **Paul-Bertrand Baretts, Special Envoy to the Minister for Europe and Foreign Affairs and One Planet Summits Secretary general**

## CRYOSPHERE

### WHAT IS THE CRYOSPHERE ?

*The cryosphere comprises the frozen components of the Earth system, located mainly on and below the surface of land: snow cover, glaciers, ice caps (ice sheets), floating ice shelves, sea ice, permafrost (on land but also under the shallow Arctic seas), etc.*

Global warming due to human activity has been causing a widespread collapse of the cryosphere for several decades.

The summer retreat of Arctic sea ice has reached a level not seen for at least 1000 years. **In 2019, Arctic sea ice reached its annual minimum extent of 4.15 million km<sup>2</sup>**, a deficit of 33% compared with the 1981-2010 average. **This was accompanied by a loss of more than 10 million km<sup>2</sup> between March and October, considered to be the fourth highest since 1981.**

Glacier retreat (excluding the large Antarctic and Greenland ice caps) has also reached a level not seen for 2000 years. Since the year 2000, **glaciers have lost an average of 267 billion tonnes of ice per year, with the loss accelerating every year.**

## PERMAFROST

### WHAT IS PERMAFROST ?

*Permafrost is a perpetually frozen ground that forms the invisible part of the cryosphere. Permafrost stores twice as much CO<sub>2</sub> as the current atmosphere.*

In permafrost zones, scientists have observed a widespread increase in temperature, **up to 1°C in the Arctic in the first 30 meters over the last few decades.** With a warming of less than 2°C above pre-industrial levels, around 25% of surface permafrost will thaw by 2100. This thaw could cause around 16% of the temperature rise by 2300, by adding the greenhouse gases CO<sub>2</sub> and CH<sub>4</sub> to the atmosphere through the decomposition of organic matter.

This rise in temperature, linked to the thawing of permafrost, would **increase global warming and the risk of natural disasters.**

## NORTH AND SOUTH POLES

Global warming due to human activity is estimated by scientists at 1.15°C over the decade 2013-2022 compared with 1850-1900. **This warming is much higher at the poles, which are vulnerable areas, with a combined Arctic and Antarctic average of 1.65°C.**

In the Arctic, sea ice extent has been declining considerably during both summer and winter periods since the 1970s. **Based on projections, the annual minimum Arctic sea ice extent will fall below 1 million km<sup>2</sup> at least once before 2050.**

**The Greenland ice sheet has lost 4,890 billion tonnes (Gt) of ice since 1990, increasing global sea-level by 13.5 mm. This loss of mass is becoming increasingly severe, having reached 243 Gt per year between 2010 and 2019, compared with 39 Gt per year between 1992 and 1999.**

In the Antarctic, although warming is slower, sea ice extent reached an exceptionally low level in 2023, with **winter extension around 17% lower than in recent decades. The Antarctic ice cap lost around 2,670 Gt of ice between 1992 and 2020, with a mass loss of 148 Gt/year between 2010 and 2019, compared with 49 Gt/year between 1992 and 1999.**

Melting ice in the polar regions has **unprecedented consequences for biodiversity and local populations.** Irreversible change in the polar zones is causing major changes in the behavior of the species they shelter, and threatening their survival. In 2022, for example, the retreat of sea ice in the Antarctic had a disastrous impact on the reproduction of polar species, particularly emperor penguins. **Between 2018 and 2022, 30% of Antarctic's 62 emperor penguin colonies will have been affected by the partial or total loss of summer sea ice. British Antarctic Survey researchers have estimated that more than 90% of the colonies will have disappeared by the end of the 21st century.**

Indigenous populations living in the polar regions are also seeing their way of life made more vulnerable by the collapse of the cryosphere, in terms of culture and identity as well as health and safety. The melting ice notably threatens to cause major tensions over the **distribution of fishing resources.**

## GLACIERS

The melting of the cryosphere in mountainous areas has led to a major retreat of glaciers since the end of the 19th century. **Glacier mass loss was around 20% higher between 2021 and 2022 than over the whole of the last decade. Cumulative thickness loss of mountain glaciers since the 1970s averages almost 30 meters.**

With a global warming approaching 1.5°C, **scientists predict that half of today's glaciers will disappear in the course of the 21st century.** These changes also have a significant impact on the risk of natural disasters and on ecosystems. Reduced snow cover and the melting of permafrost at high altitudes, particularly in rocky cliffs, have **increased the risk of landslides, glacier detachment and flooding, endangering not only high-altitude species but also local populations.**

Declining glacier water flows affect **economic activities linked to agriculture or hydropower, and accentuate tensions over the distribution and availability of water** in regions where almost **2 billion people depend on glacier water runoff.**

## SEA-LEVEL RISE

### SOURCES

#### Valérie Masson-Delmotte

« *State of scientific knowledge concerning the cryosphere* »

#### GIEC :

[climat.be/changements-climatiques/changements-observees/rapports-du-giec/2019-rapport-special-sur-l-ocean-et-la-cryosphere](https://climat.be/changements-climatiques/changements-observees/rapports-du-giec/2019-rapport-special-sur-l-ocean-et-la-cryosphere)

#### GIEC :

[www.ipcc.ch/report/sixth-assessment-report-cycle/](https://www.ipcc.ch/report/sixth-assessment-report-cycle/)

#### Communications Earth and Environment :

[www.nature.com/articles/s43247-023-00927-x](https://www.nature.com/articles/s43247-023-00927-x)

#### World Meteorological Organization :

[public.wmo.int/fr/ressources/bulletin/les-r%C3%A9gions-les-plus-%C3%A9loign%C3%A9es-et-les-plus-glaciales-du-globe-les-donn%C3%A9es-sur-la](https://public.wmo.int/fr/ressources/bulletin/les-r%C3%A9gions-les-plus-%C3%A9loign%C3%A9es-et-les-plus-glaciales-du-globe-les-donn%C3%A9es-sur-la)

#### Météo France :

[meteofrance.com/actualites/planete/arctique-la-fonte-des-glaces-de-mer-sacclere](https://meteofrance.com/actualites/planete/arctique-la-fonte-des-glaces-de-mer-sacclere)

#### CNRS :

[www.cnrs.fr/fr/presse/fonte-des-glaciers-une-cartographie-complete-revele-lacceleration](https://www.cnrs.fr/fr/presse/fonte-des-glaciers-une-cartographie-complete-revele-lacceleration)

#### Nature :

[www.nature.com/articles/s41586-021-03427-0](https://www.nature.com/articles/s41586-021-03427-0)

The melting of part of the cryosphere, in particular the glaciers and ice sheets of Greenland and the Antarctic, **is responsible for around 50% of sea-level rise, in addition to the thermal expansion of the oceans.** Between 1992-1999 and 2010-2019, the contribution of melting continental ice to the acceleration in sea-level rise **quadrupled, and is gradually becoming the main cause.**

Over the last decade 2013-2022, the rate of rise in average sea-level has increased by **4.62 mm per year.** By 2050, scientists estimate that **most Maldives islands will have already disappeared.** At this rate, around **one billion people living in low-lying coastal regions will be exposed** to the consequences of rising sea-levels. **If all Antarctic sea ice were to disappear over the coming tens of millennia, sea-level could rise by as much as 58 meters.**

Moreover, the southern ocean is warming. It currently absorbs near than 25% of the CO<sub>2</sub> emitted by human activity every year. It also captures almost two-thirds of the excess heat produced by greenhouse gas emissions since 1970, and will be able to absorb 5 to 7 times more by 2100. **Rising polar sea and ocean temperatures could have unprecedented consequences for the collapse of the cryosphere,** particularly in the Arctic and Antarctic regions, and for marine biodiversity and local populations.

**More than a quarter of the world's population is directly threatened** by the impacts of climate change on the cryosphere and the ocean. **Coastal regions are currently home to 28% of the world's population, 11% of whom live less than 10 meters above sea-level, and almost 10% in Arctic and high mountain regions.**



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WELCOME COFFEE AT THE MUSEUM AND BADGES RETRIEVAL 08:00 – 09:00

	<b>Amphithéâtre Verniquet</b> (315 people) Translation: french/english	<b>Auditorium de la grande galerie de l'évolution</b> (120 people) Translation: french/english	<b>Amphithéâtre de la galerie de paléontologie</b> (60 people) English only
09:00 10:15	<b>High-level sequence</b>	<b>Broadcast of the opening session</b>	<b>Broadcast of the opening session</b>
	Welcome address by Gilles Bloch, President of the National Museum of Natural History Presentation with Angel Gurria, President of the Paris Peace Forum, and the different actors and partners of the Summit «One Planet - Polar Summit: manua» by Paul-Bertrand Baret, Secretary general of the One Planet Summits, Pascal Lamy, President of Antarctica 2020, and Olivier Poivre d'Arvor, French Ambassador for poles and the ocean Statements by Jean Jouzel and Valérie Masson-Delmotte, paleoclimatologists, and Florence Colléoni, paleoclimatologist and ice sheet modeler		
10:30 11:45	<b>Scientific findings</b> Statements by SCAR, IASC, IACS and WMO Statement by indigenous people and local populations	<b>Circle of Explorers</b> The Impact of Climate Change on Polar and Glacial Regions	
12:00 13:15	<b>Meeting of scientists : preparation of policy recommendations</b>		
	<b>Break-out groups</b> : Glaciers, water cycle and sea level	<b>Break-out groups</b> : Sea ice, ocean, life and atmosphere	<b>Break-out groups</b> : Permafrost and georisks
13:30 14:15	Lunch offered on the Museum site	<b>Post-glacial ecosystems and territorial approaches ?</b> Statements by Sarah El Haïry, Secretary of State for Biodiversity and project managers on glaciers biodiversity	Lunch offered on the Museum site

LUNCH OFFERED ON THE MUSEUM SITE 14:15 – 14:45

14:45 16:15	<b>Meeting of scientists : preparation of policy recommendations</b>		
	<b>Break-out groups</b> : Glaciers, water cycle and sea level	<b>Break-out groups</b> : Sea ice, ocean, life and atmosphere	<b>Break-out groups</b> : Permafrost and georisks
16:30 17:45	<b>Scientific Plenary session</b> Brief presentation by the moderator of each group Synthesis of possible coordinated actions benefiting the three main disciplines: Antje Boetius, Jérôme Chappellaz (Scientific Advisory Board co-chairs)	<b>Human stakes</b> <b>climate change in poles and glaciers and its direct impacts on populations</b> Statements by NGOs, civil society and indigenous people and local populations	<b>Circle of Explorers</b> Documenting Climate Change in Polar and Glacial Regions
18:00 19:30	<b>Circle of Explorers</b> The Call to Action to Save the Cryosphere	<b>Financing action for the cryosphere</b> Statements by invested fundations	

RECEPTION OFFERED BY THE ALBEDO FOUNDATION,  
under the auspices of the CNRS Fondation, chaired by Frederik Paulsen, National Museum of Natural History, by invitation only due to limited seating capacity

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## WELCOME COFFEE AT THE MUSEUM 08:30 – 09:00

	Amphithéâtre Verniquet	Auditorium de la grande galerie de l'évolution	Amphithéâtre de la galerie de paléontologie
09:00 10:15	<b>Meeting of scientists : preparation of policy recommendations</b> <b>Break-out groups</b> : Addressing local responses to cryosphere risks: best practices in science, infrastructure and communication	<b>Adapting coastal cities and regions to rising sea level</b> Statements by the Ocean & Climate Platform and launch of a coalition in the run-up to the United Nations Ocean Conference in Nice in 2025	<b>Circle of Explorers</b> Adventure in Polar and Glacial Regions
10:30 11:45	<b>Fauna and flora in poles and glaciers : a crucial biodiversity at risk facing climate warming</b> Statements by NGOs, civil society and indigenous people and local populations	<b>A singular work in endangered regions</b> Statements by polar operators	
12:00 13:15	<b>Plenary session</b> Presentations of the various works Presentations by the Scientific Advisory Board, NGOs, indigenous people and local populations, explorers, foundations and operators	<b>Broadcast of the Plenary Session</b>	<b>Broadcast of the Plenary Session</b>
<b>LUNCH OFFERED ON THE MUSEUM SITE 13:15 – 14:00</b>			
14:00 14:45	Lunch offered on the Museum site	<b>Poles and glaciers : Vision 2050</b> Statements by experts of other disciplines	Lunch offered on the Museum site
15:00 16:00	<b>Opening by Sylvie Retailleau, Minister for Higher Education and Research, and Christophe Béchu, Minister for Ecological Transition and Territorial Cohesion</b>		
	Restitution of the reports by chairs : scientific report, NGOs and IPLCs, foundations, explorers and operators	<b>Broadcast of the ministerial sequence</b>	<b>Broadcast of the ministerial sequence</b>
16:00 17:30	<b>Statements by Ministers and State representatives</b> Exchanges with rapporteurs and personalities	<b>Broadcast of the ministerial sequence</b>	<b>Broadcast of the ministerial sequence</b>
17:30 18:30	<b>From Science to policy</b> - Statements by personalities - Conclusion by Ambassador Olivier Poivre d'Arvor	<b>Broadcast of the ministerial sequence</b>	<b>Broadcast of the ministerial sequence</b>

**PREVIEW SCREENING OF LUC JACQUET'S NEW FILM « ANTARCTICA CALLING »,  
by invitation only due to limited seating capacity**

## 10 novembre

**13:00 - 14:30 : Closed work meeting** Work meeting with heads of State and government and international organizations, scientists, representatives of indigenous peoples and local populations, explorers of poles and glaciers and mayors of coastal cities

**14:30 - 15:00 : Presentation of the Paris Call for poles and glaciers** Announcement by the President of the Republic of the One Planet - Polar Summit political declaration - Family photo of heads of state and government and international organizations - Exchange at the National Museum of Natural History

## MEMBERS OF THE SUMMIT'S SCIENTIFIC ADVISORY BOARD

### ● ANTJE BOETIUS – CO-CHAIR

*Antje Boetius is a polar and deep-sea researcher and Director of the Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research. She has led numerous international polar expeditions with a focus on the effects of climate change on ecosystems, and advises politics and society as a member of Germany's National Academy.*

### ● JÉRÔME CHAPPELLAZ – CO-CHAIR

*Jérôme Chappellaz is a glaciologist, geochemist and paleoclimatologist. He is Professor at the Swiss Federal Institute of Technology in Lausanne (EPFL), Director of Research at CNRS, former Director of the French Polar Institute Paul-Emile Victor (IPEV) and Chairman of the Ice Memory Foundation.*

### ● LISS MARIE ANDREASSEN

*Liss Marie Andreassen is a research professor in glaciology at the Norwegian Water Resources and Energy Directorate (NVE) and President of the International Association of Cryospheric Sciences (IACS).*

### ● NICOLE BIEBOW

*Nicole Biebow is Chairwoman of the European Polar Board and Head of the International Cooperation Unit at the Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research in Germany. She is also Coordinator of the EU-PolarNet 2 and of the EU-funded Arctic Research Icebreaker Consortium (ARICE).*

### ● STEVEN CHOWN

*Steven Chown is Professor of Biological Sciences at Monash University in Australia. He is also the former Chairman of the international Scientific Committee on Antarctic Research (SCAR).*

### ● GWENN FLOWERS

*Gwenn Flowers is Professor in the Department of Earth Sciences at Simon Fraser University in Canada and President of the International Glaciological Society (IGS).*

### ● YEADONG KIM

*Yeadong Kim is a geophysicist serving as President of the Scientific Committee on Antarctic Research (SCAR). He is also the former Director of the Korean Polar Research Institute (KOPRI) and Chair of the Korean National Committee on Polar Research.*

### ● VALÉRIE MASSON-DELMOTTE

*Valérie Masson-Delmotte is a paleoclimatologist and research director at the Climate and Environment Sciences Laboratory (LSCE) of the French Alternative Energies and Atomic Energy Commission (CEA). She is also the former vice-chairman of the IPCC AR6 WG1.*

### ● THAMBAN MELOTH

*Thamban Meloth is specialized on cryosphere, paleoclimatology and Himalayan glaciology. He is Director of the National Centre for Polar and Ocean Research (NCPOR) in India.*

### ● JENNIFER MERCER

*Jennifer Mercer, specialized in Earth Science, is Chairwoman of the Forum of Arctic Research Operators (FARO). She is also Section Head for Arctic Science at the US National Science Foundation.*

### ● DAHE QIN

*Dahe Qin is specialized in cryosphere, climatology and geography. He is Academician of the Chinese Academy of Sciences, chairman of the Executive Committee of the Asian Geographic Society and the former co-chair of IPCC AR4&5 WG1.*

### ● JEFFERSON SIMOES

*Jefferson Simoes is Professor of glaciology and polar geography at the Universidade Federal do Rio Grande do Sul (UFGRS) and Director of the Brazilian National Institute for Cryospheric Science. He is also Vice-President of the Scientific Committee on Antarctic Research (SCAR).*

## PARTNERS INSTITUTIONS FOR THE PREPARATION OF THE SUMMIT

### World Meteorological Organization (OMM)

The World Meteorological Organization is a specialized agency of the United Nations created in 1950. The organization is dedicated to international cooperation and coordination in the study of the state and behavior of the Earth's atmosphere, its interactions with land and oceans, weather and climate, and the distribution of water resources. Its missions are vital to our understanding of climate change and its impacts on ecosystems, so that we can better apprehend, mitigate and adapt to it.

### United Nations Educational, Scientific and Cultural Organization (Unesco)

UNESCO is a United Nations agency that seeks to build peace through international cooperation in education, science and culture. UNESCO's programs contribute to achieving the sustainable development goals defined in the Agenda 2030 adopted by the United Nations General Assembly in 2015.

### Intergovernmental Oceanographic Commission (COI)

The Intergovernmental Oceanographic Commission of UNESCO was founded in 1960 to promote international cooperation in marine science and to improve the management of oceans, coasts and marine resources. As a body with functional autonomy within UNESCO, the organization aims to ensure the proper coordination of marine research programs among its 150 member states, and to promote peace and sustainable development through its action. The IOC is also responsible for coordinating the United Nations Decade of Ocean Sciences for Sustainable Development (2021-2030).

### International Cryosphere Climate Initiative (ICCI)

The International Cryosphere Climate Initiative (ICCI) is a network of experts and researchers created in 2009 following COP15 in Copenhagen. The network is dedicated to preserving the cryosphere and finding solutions for adapting to the climate emergency. ICCI experts work closely with governments and international organizations to help them implement public policies directly related to the collapse of the cryosphere and its consequences for the planet. It notably hosts the Ambition on Melting Ice launched at COP 27.

### International Association of Cryospheric Sciences (IACS)

Created in 2007, the International Association of Cryospheric Sciences (IACS) is the youngest association of the International Union of Geodesy and Geophysics. Its mission is to promote research in cryospheric sciences in Norway and worldwide, by facilitating cooperation between the main public and academic stakeholders in the polar and glacial regions. It aims to improve public education and awareness of the challenges facing the cryosphere.

### Association of Polar Early Career Scientists (Apeccs)

The Association of Polar Early Career Scientists was formed in 2007 following its merger with the International Polar Year Youth Steering Committee. The organization brings together undergraduate, graduate and PhD students, early career professionals and educators from around the world specializing in issues related to the polar and alpine regions, and the cryosphere more generally. Its mission is to provide a platform for the international polar scientific community to collaborate and train the researchers of tomorrow.

### **World Glaciers Monitoring Service (WGMS)**

The World Glaciers Monitoring Service was created in 1984 with the ambition of providing an international platform dedicated to the in-situ observation of glaciers and their evolution in the face of climate change. The organization's mission is to collect and disseminate glaciological, geomorphological and geological data and information on glaciers and their evolution, with the aim of providing its partners and political decision-makers with concrete scientific analyses. The WGMS is a service of the International Association of the Cryospheric Sciences of the International Union of Geodesy and Geophysics of the International Council for Science.

### **International Centre for Integrated Mountain Development (Icimod)**

The International Centre for Integrated Mountain Development is an intergovernmental institution established in 1983 by Afghanistan, Bangladesh, Bhutan, China, India, Myanmar, Nepal and Pakistan. It is currently based in Kathmandu, Nepal, and works to preserve Himalayan environments, peoples and cultures. In addition to promoting multidisciplinary research on the Himalayan region, ICIMOD's mission is to advise local governments on the implementation of their development policies. The center is also dedicated to raising international awareness of the challenges faced daily by thousands of the region's inhabitants.

### **Arctic Circle**

Arctic Circle is an organization co-founded by former President of the Republic of Iceland Olafur Ragnar Grimsson in 2013. Its secretariat is located in Reykjavik, Iceland. Its mission is primarily to promote dialogue and collaboration between international stakeholders such as political leaders, business leaders, scientists and environmental experts and representatives of indigenous peoples around the challenges brought about by climate change and melting ice in the Arctic.

### **European Space Agency (ESA)**

The European Space Agency was set up in 1975, bringing together 22 European member states committed to the peaceful exploration of space for the benefit of mankind. A quarter of its activities are funded by the European Union and the European Organization for the Exploitation of Meteorological Satellites (EUMETSAT). Its mission also includes satellite observation and data restitution on the evolution of the cryosphere in polar and glacial regions.

### **International Arctic Science Committee (IASC)**

The International Arctic Science Committee (IASC) is a non-governmental scientific organization founded in 1990 by the eight Arctic countries to encourage and facilitate cooperation in all fields of expertise related to the Arctic region. Today, it promotes interdisciplinary and international research aimed at a better understanding of the Arctic and its role in the Earth system. IASC currently has 23 member countries involved in polar research.

### **Science Committee of Antarctic Research (Scar)**

The Science Committee of Antarctic Research is an organization of the International Science Council created in 1958. It ensures the development and coordination of scientific research in Antarctica and the Southern Ocean at international level. SCAR works to understand the Antarctic's role in the Earth system, and provides objective and independent scientific advice at Antarctic Treaty consultative meetings and to international organizations such as the IPCC and the United Nations Framework Convention on Climate Change (UNFCCC).

### **Oceanographic Institute of Monaco (IOM)**

The Oceanographic Institute - Albert I, Prince of Monaco, Foundation was founded in 1906 by Prince Albert I. Since its inception, its ambition has been to bring together scientific, political, economic, academic and community experts, as well as the general public, to protect the

ocean. It implements a large number of environmental mediation initiatives through the Oceanographic Museum of Monaco and the Maison de l'Océan in Paris, both attached to the institute. The aim of these initiatives is to promote oceanographic science to as many people as possible, through art and collective and individual commitment.

### **Alfred Wegener Institute (AWI)**

The Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research was founded in 1980 after the German meteorologist, climatologist and geologist Alfred Wegener. It is based in Bermerhaven, Germany. The Institute's main mission is to conduct research in the Arctic, Antarctic and high-latitude oceans, and to understand the consequences of climate change on these environments.

### **Polar Institute Paul-Emile Victor (IPEV)**

The French Polar Institute Paul-Emile Victor was created in January 1992 under the name French Institute for polar research and technology, following the merger of the French Polar Expeditions – Paul-Emile Victor Missions and the French Southern and Antarctic Lands Research Mission. Its mission is to implement French scientific research projects in the polar regions, and to ensure their international influence. The institute coordinates scientific and logistical operations related to infrastructure and scientific equipment made available to researchers and adapted to the challenging environmental conditions in the field.

### **National Committee for Arctic and Antarctic Research (CNFRAA)**

The French National Committee for Arctic and Antarctic Research (CNFRAA) was created in 1984. In addition to representing France on the Scientific Committee on Antarctic Research (SCAR), the CNFRAA promotes French scienti-

fic research in the polar and sub-polar regions, and France's collaboration with international institutions with expertise in the field. On a national level, it encourages the work of young researchers in a wide range of disciplines.

# Voyage au pôle Sud

*The new documentary from Luc Jacquet,  
director of March of the Penguins,  
Oscar winner for best documentary film in 2006*

**Screened at Luxor on November 9 as part of  
One Planet - Polar Summit**

In 1991, Luc Jacquet set off on his first mission to Antarctica. Thirty years later, he returns to where it all began for him. An invitation to travel to the heart of a wild and grandiose nature that has never ceased to fascinate mankind and attract the greatest explorers.

*Press kit and further  
information available [here](#).*

## Ice Memory

According to scientific projections, the majority of the world's glaciers are destined to deteriorate significantly or even disappear before the end of the 21st century. The Ice Memory Foundation is an international initiative to document and safeguard the heritage of glaciers threatened by global warming. The foundation's main mission is to take core samples from selected glaciers in order to preserve the information they contain, with the aim of informing scientific experts and political decision-makers about past and future climate phenomena. These activities are essential if we are to implement policies that meet ecosystem adaptation needs. Ice Memory brings together scientific, institutional and private stakeholders to preserve the environment in the polar and glacial regions.

## Ocean Rise&Resilience

The Sea'Ties coalition, launched at the One Ocean Summit in 2022, is an international initiative bringing together elected representatives from over 40 coastal cities impacted by rising sea-levels. Its aim is to highlight the importance of local response to climate change, through the development of new public policies and appropriate adaptation solutions for local populations. According to current scientific projections, the global rise in sea and ocean levels could reach 1.10 meters by 2100, exposing more than a billion people to the devastating consequences of climate change. In the run-up to the United Nations Ocean Conference, co-organized by France and Costa Rica in Nice in 2025, the coalition is set to expand in order to propose concrete adaptation solutions to this phenomenon. The One Planet—Polar Summit will be a stepping stone towards this scaling-up, in particular by highlighting the indisputable link and the need for joint solutions between melting ice and rising sea-levels.

## Contacts presse

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