

# Atmosphere Working Group (AWG)



US Delegates: Gijs de Boer (CU), Muyin Wang (UW)

# IASC-AWG Group Scope

## **Core Scientific Foci:**

- Arctic Energy Budget, clouds, and surface fluxes
- Arctic Air Pollution
- Atmosphere coupling within the Arctic system
- Arctic Weather extremes
- Role of the Arctic in the global climate system

## **Overarching Pillars:**

- Atmosphere in the coupled Arctic System
- Arctic Climate, Weather, and Predictability
- Arctic Pollution, Socio-Economic, and Environmental Change

# IASC-AWG Current Projects/Activities

IASC Service Medal awarded to **Markus Rex, Matthew Shupe (CU), and Klaus Dethloff** for their achievements in initializing and leading the MOSAiC expedition. The roles they played in ensuring the realization and success of the MOSAiC programme are unparalleled in their contributions to Arctic science, international cooperation, and community leadership.

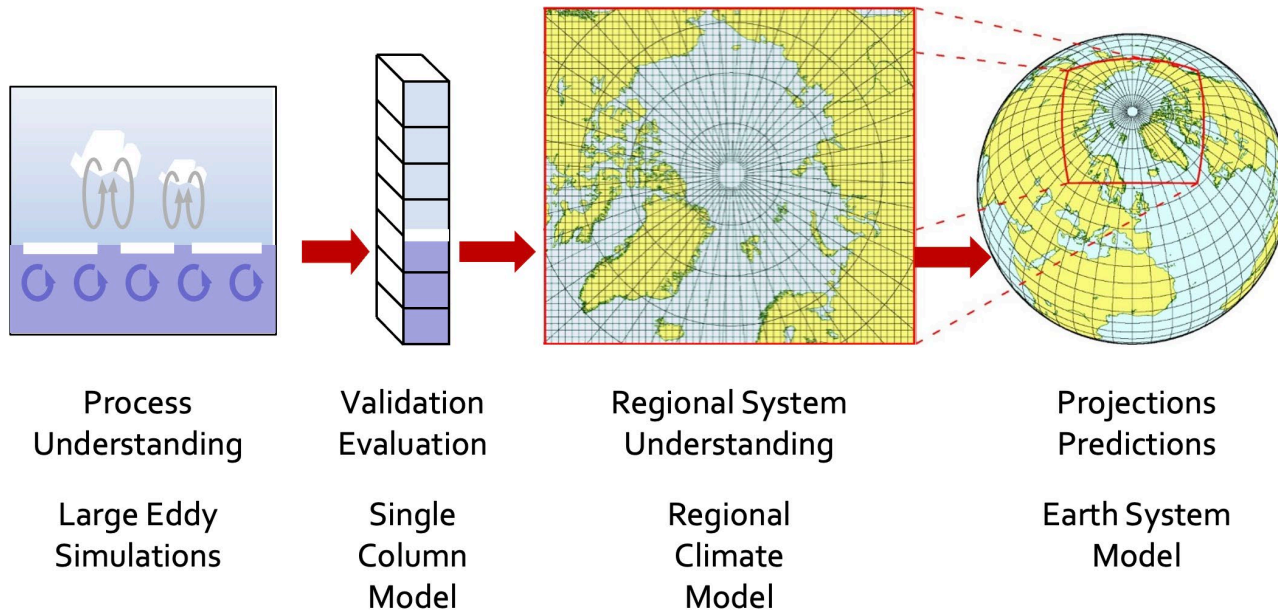
IASC Medal 2024 was awarded to **Dr. James Overland (NOAA/PMEL)** for outstanding long-lasting achievements to improve interdisciplinary knowledge, particularly on the linkages between changes in the Arctic and the weather in mid-latitudes and ensuring this information becomes widely available through his ability to present complex information in an accessible way and his critical role in the formation of the IASC Atmosphere Working Group.

# IASC-AWG Current Projects/Activities

Rinke, A	Third MOSAiC Science conference
Ganzeveld L	MOSAiC: improved BL modeling in climate models
Pätzold F.	HELiPOD at MOSAiC - status of data and first results [virtual]
Tjernström M.	ARTofMELT spring 2023 expedition
Arnold S.	Air Pollution in the Arctic workshop update
Schmale J.	Arctic Geoengineering – 1st workshop [virtual]
Wang M.	Polar Vortex Workshop Update
Kristiansen J.	Introducing the WMO Polar Prediction Project (PCAPS) [virtual]
Thomas J.	CERTAINTY introduction and overview
Decesari S.	CleanCloud introduction and overview
Schmale J.	GreenFjord: Greenland fjord ecosystems & changing climate [virtual]
Ganzeveld L.	Dutch Arctic Scientific Activities Update



# IASC-AWG Current Projects/Activities



## 5<sup>th</sup> PACES Open Science Meeting

Host: University of Helsinki & Finnish Meteorological Institute



FINNISH METEOROLOGICAL  
INSTITUTE



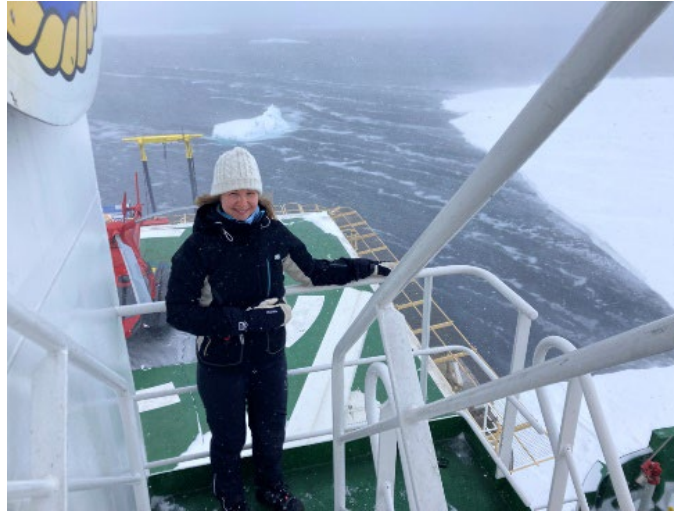
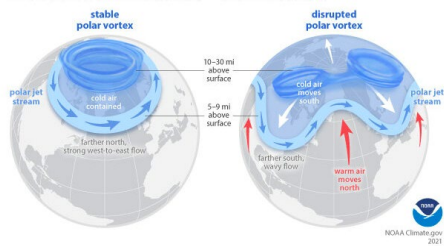
[www.iasc.info](http://www.iasc.info)



# IASC-AWG Current Projects/Activities

## Workshop on the Influence of the Lower Stratospheric Polar Vortex on Cold Air Outbreaks under Climate Warming

11-13 Sept. 2023  
University of Lincoln,  
Lincoln, UK



2 keynotes speaks

6 Early Career Researchers –  
supported by IASC AWG funding

One remote participation

One poster presentation



**Geoengineering to save the Arctic? Assessing potential efficacy, impacts and ethical considerations across rightholders, stakeholders, and scientific disciplines.**

26 March 2024  
Workshop at ASSW 2024

- Pre-workshop leg work completed
- Two scenarios selected for case studies
- ASSW participants welcome to attend and contribute to workshop



# IASC-AWG Critical Issues Being Discussed

- ❑ Further support the Arctic science community, such as support the next generation of scientists (ECRs), foster international collaboration and advance cross-national projects (e.g., YOPP, MOSAiC, PACES).
- ❑ AWG engagement with ICARP-IV  
AWG members were encouraged to support the ICARP-IV process, and the importance of integrating a wide variety of regional perspectives to ICARP was highlighted

**Sourav Chatterjee** (India, named) and **Muyin Wang** (USA, alternate) are the AWG representative to the ICARP IV International Steering Committee. Approximately 10 meeting participants were members of one of the RPTs (mostly in RPT 1, but also RPT 2 & 7). AWG Chair **Gijs de Boer** is on the ICARP IV local organizing committee.



# AWG: 2024 Priorities

Support the *Arctic Atmospheric Science Community* to:

- Advance **understanding of the Arctic system**, particularly under the AWG's three pillars:
  1. Atmosphere in the coupled Arctic system
  2. Arctic Climate, Weather, and Predictability
  3. Arctic Pollution, socio-economic and environmental change
- Develop a **new generation of Arctic atmospheric scientists**
- Foster **international coordination and cooperation**, and
- Advance **collaborative projects and initiatives** that cross national boundaries

Formally adopt a framework that clearly **outlines how we support** this community [implementation plan]

Enhance the value proposition of AWG activities to **increase AWG member engagement and improve meeting attendance**

Foster a collaborative environment that involves **all AWG nations**

*Strategic Plan:* [https://iasc.info/images/working-groups/atmosphere/AWG\\_plan\\_23.pdf](https://iasc.info/images/working-groups/atmosphere/AWG_plan_23.pdf)





# IASC-AWG Future Directions

## U.S. Representatives & Group Scope

## Critical Issues Being Discussed

- What are the primary issues (international or domestic with international relevance) among your working groups and research communities that are important for the PRB to be aware of?

## Current Projects/Activities

- Where is your working group most active currently?
- What are priority areas of focus in projects/activities?

## Future Directions

- What areas are on the horizon for your working group for both the near and longer term?
- Is there anything PRB can do to support these areas?