



# Climate Change Impacts on the Arctic, Antarctic and High Mountain Glaciers

Virtual

Wednesday 8<sup>th</sup> May 2024, 13:00 – 14:30

## Abstract

Climate change is having rapid and dramatic impacts on glacier ice and snow on ice sheets and global mountain glaciers. In the Arctic, the Greenland Ice Sheet is experiencing increased summer melt, and we are witnessing a great increase in ice discharged into the ocean. The Arctic sea ice extent is decreasing, exposing more dark ocean water which absorbs heat and amplifies warming. In the Antarctic, we are seeing rapid changes in the floating ice shelves that surround the continent, which are thinning and have increased surface melt, as well as recent sea-ice minima. The great outlet glaciers that drain the Antarctic Ice Sheet are also shrinking, driving global sea level rise. In the Himalaya and the Andes mountain ranges, hundreds of millions of people depend on glaciers for water, for irrigation, industry and domestic consumption. As the glaciers here shrink, they will provide less water for downstream populations, providing more tension in an already water-stressed region. Himalayan glaciers are frequently covered in rock debris, making their response to climatic changes highly non-linear and difficult to predict. Working at high-elevation is challenging but if models projecting future glacier change in the region are to be considered robust, the collection of field data is essential. This event will bring together experts in ice at the North and South Pole and at the world’s highest mountains for exciting talks and an engaging panel discussion in order to explore climate change at the world’s highest, most northern and most southerly points.

Meeting Organiser – Mr Steve Colwell & Prof. Bethan Davies

13:00	<b>Welcome and Introduction</b>	Prof. Liz Bentley
13:05	<b>Arctic</b>	Prof. James Lea, Liverpool
13:10	<b>Antarctic</b>	Dr Ella Gilbert, BAS Prof. Mike Bentley, Durham
13:20	<b>Himalaya/Mountains</b>	Dr Sihan Li, Sheffield Dr Hamish Pritchard
13:30	<b>Geopolitics</b>	James Jansen, FCO, London
13:40	<b>Panel Discussion</b>	All speakers
14:10	<b>Audience Q&amp;A</b>	
14:30	<b>Meeting close</b>	

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This meeting is part of the Royal Meteorological Society National Meetings programme, open to all, from expert to enthusiast, for topical discussions on the latest advances in weather and climate. Non-members are welcome to attend these meetings.