**Snow, Water, Ice and Permafrost in the Arctic** (SWIPA 2017)

The Arctic is a regulator of global climate and is warming more than twice as fast as the rest of the planet





What is the future role of the Arctic in the world climate system? Will the Arctic turn from a carbon sink to a source of greenhouse gasses?

What will happen when fresher meltwater overlaying the Arctic Ocean is released? How much will Arctic glaciers, icecaps and the Greenland Ice Sheet contribute to sea level rise?

How will Arctic changes effect mid-latitude weather?

Need to prioritize research to improve confidence in predictions of change and their consequences

## **Need to understand interactions** between different components of the system – the devil is in the detail

## amap.no/swipa2017



ARCTIC COUNCIL