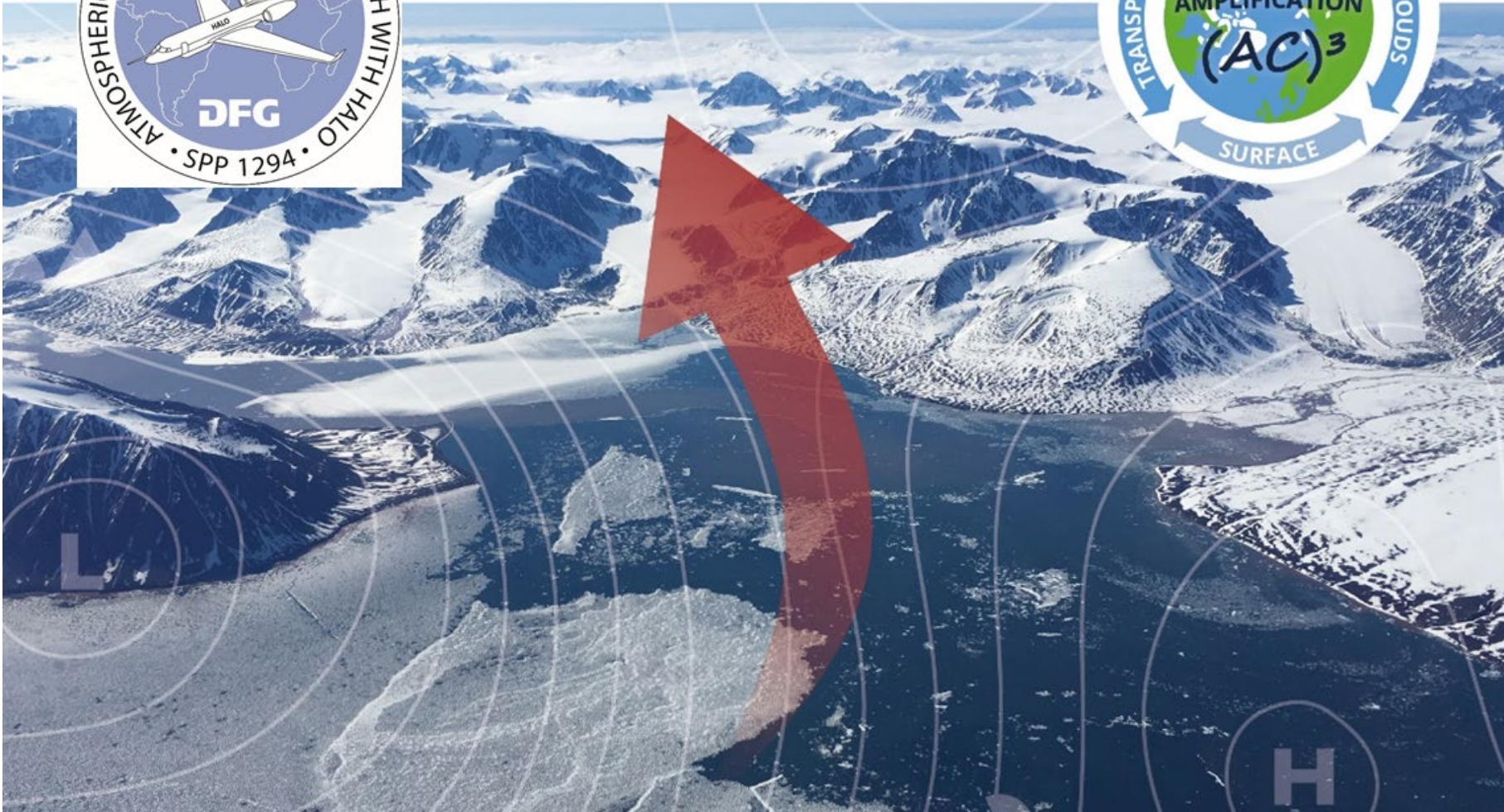


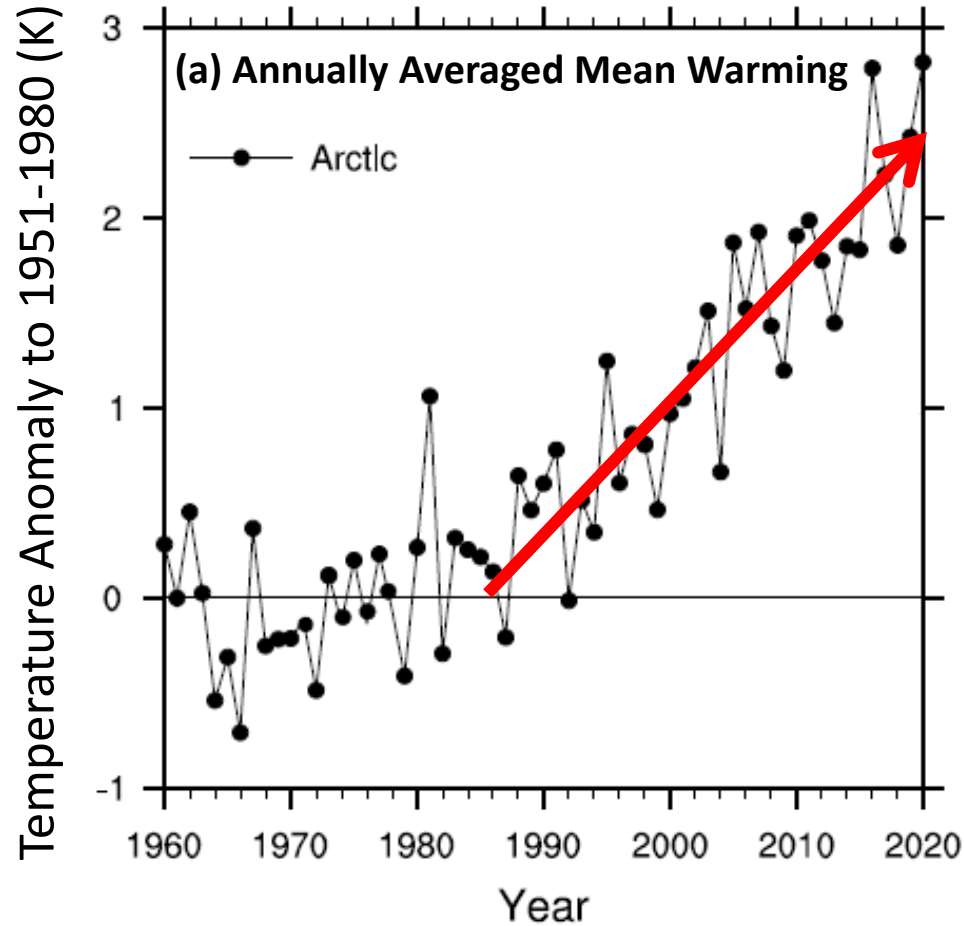
INTRODUCTION: HALO-(AC)³ Planning Meeting, 23 and 24 November 2021



Further Funding:
MPI Met Hamburg
DLR

Campaign Logo:





Reference period: 1951-1980
data provided by NASA
K. Block, J. Quaas



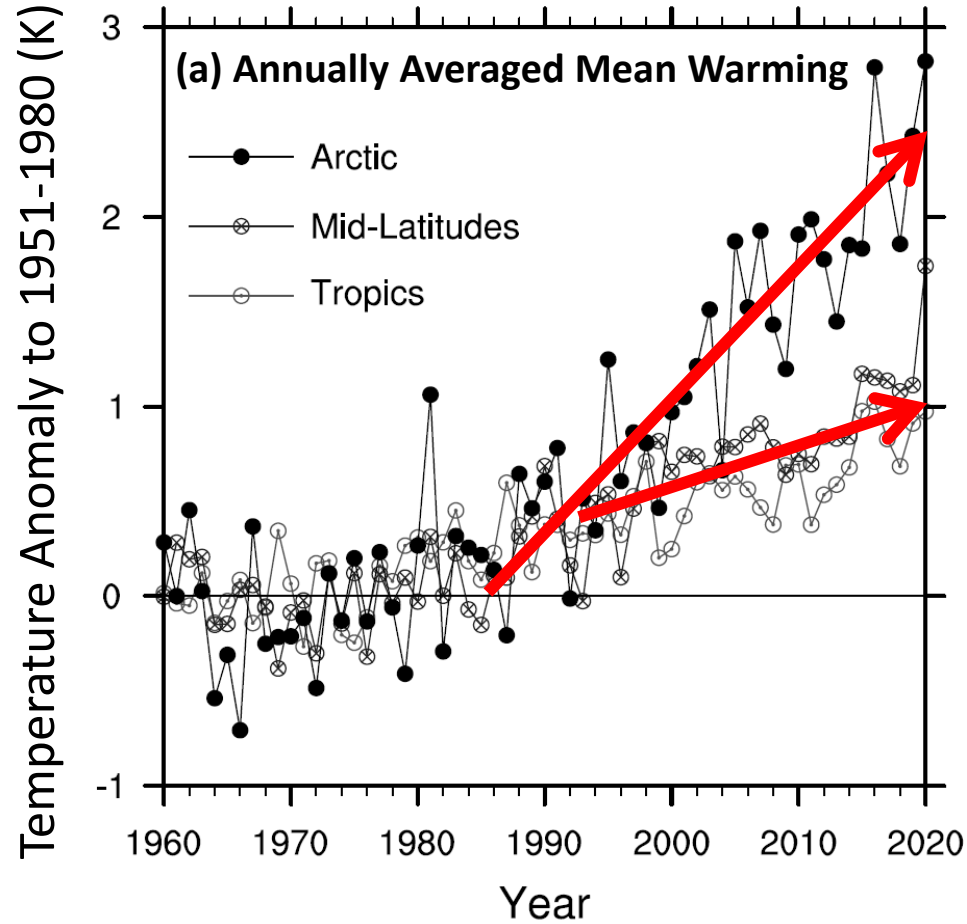
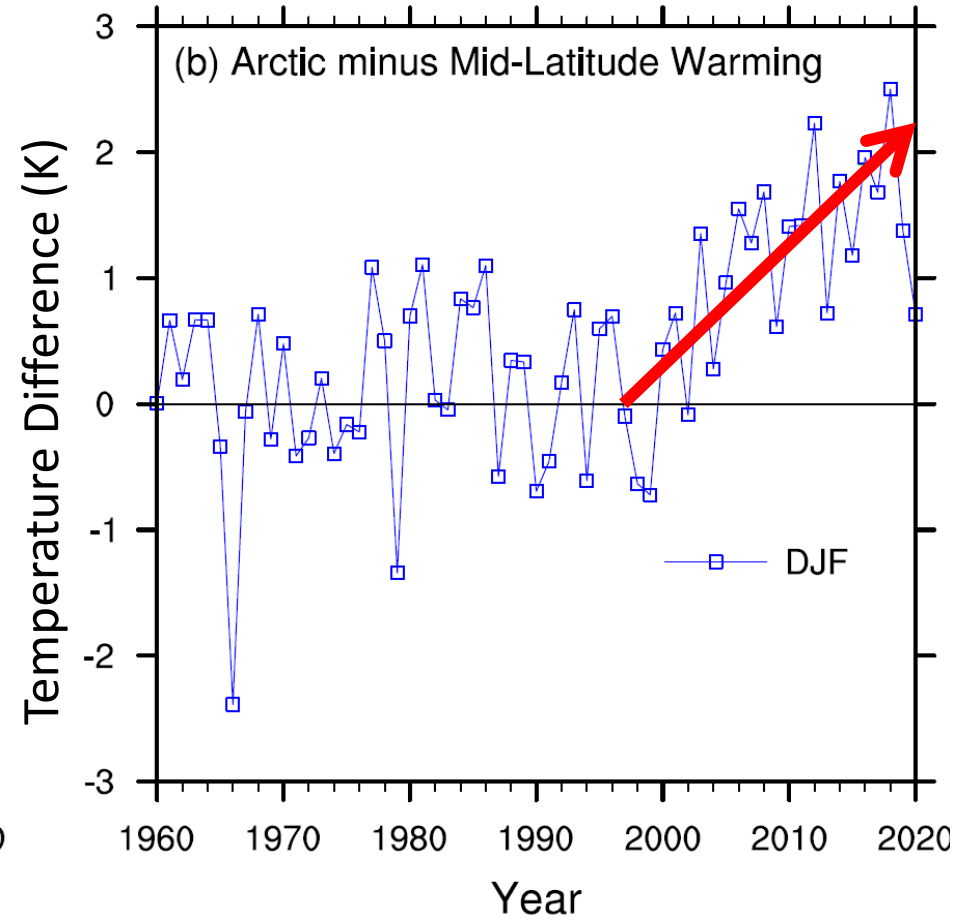
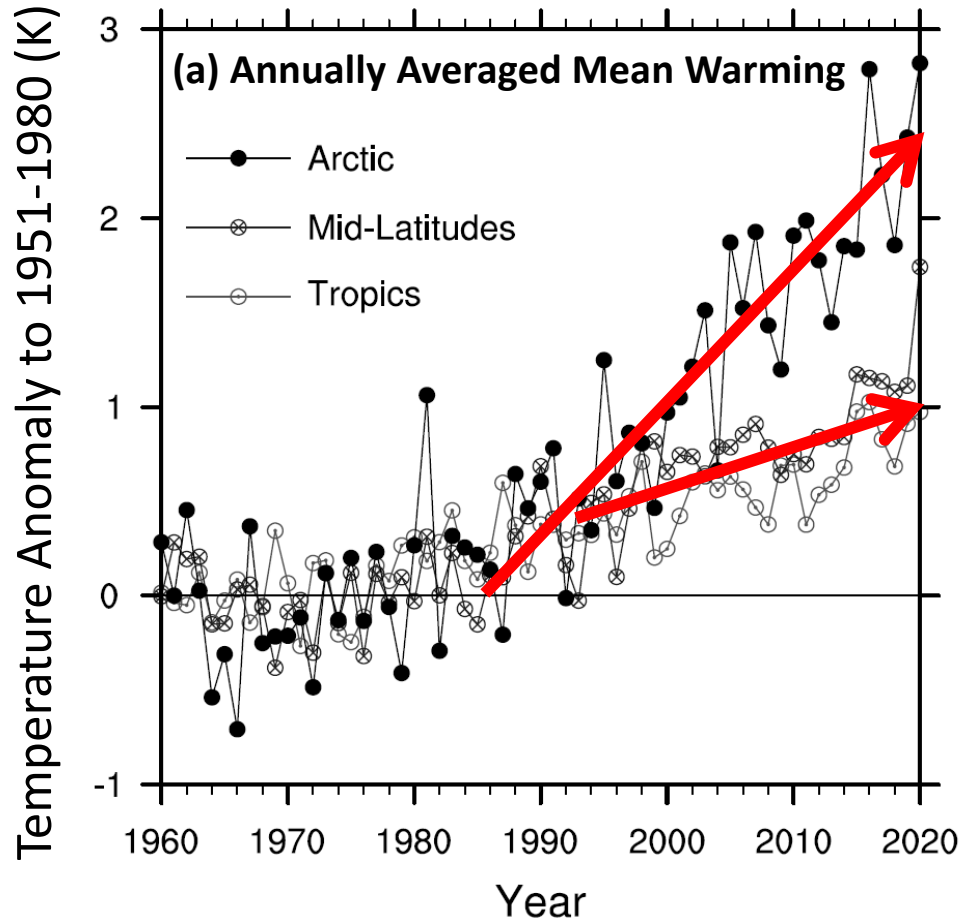


TABLE 2. Amplification factors (annual averages).

Region	1990–2020	2010–2020
Arctic/Mid-Latitudes	1.82	2.02
Arctic/Tropics	2.45	2.77
Arctic/Global	2.32	2.48

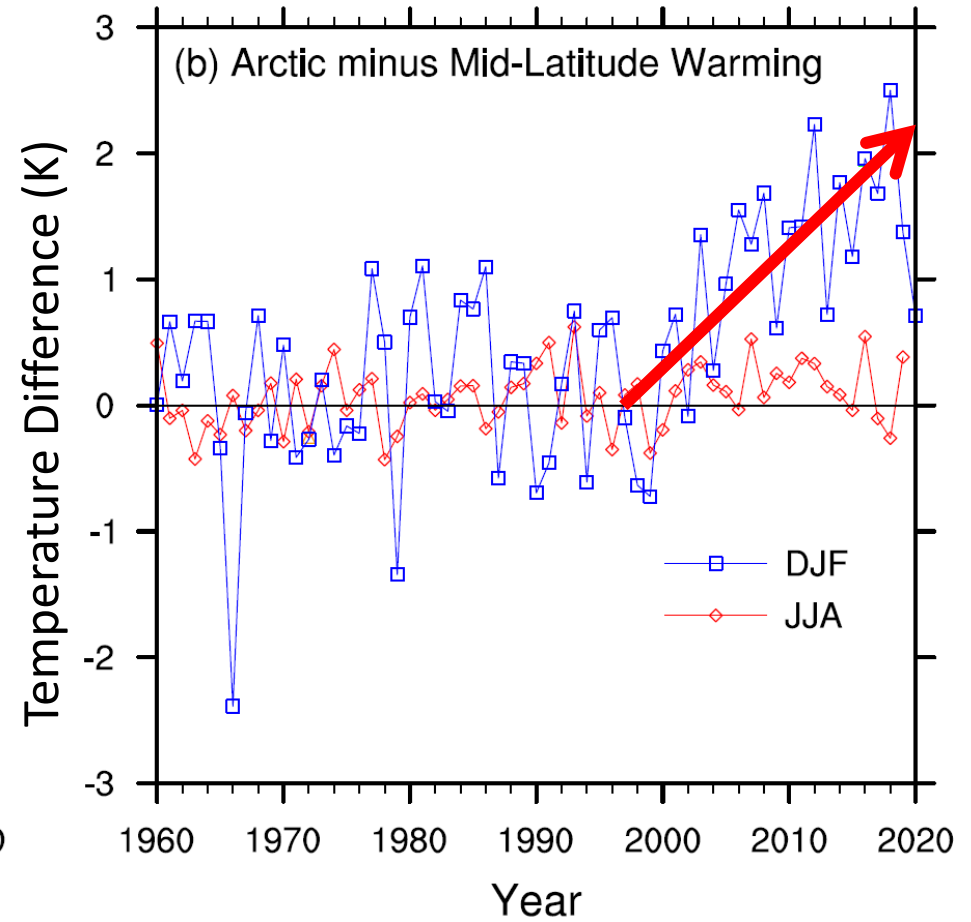
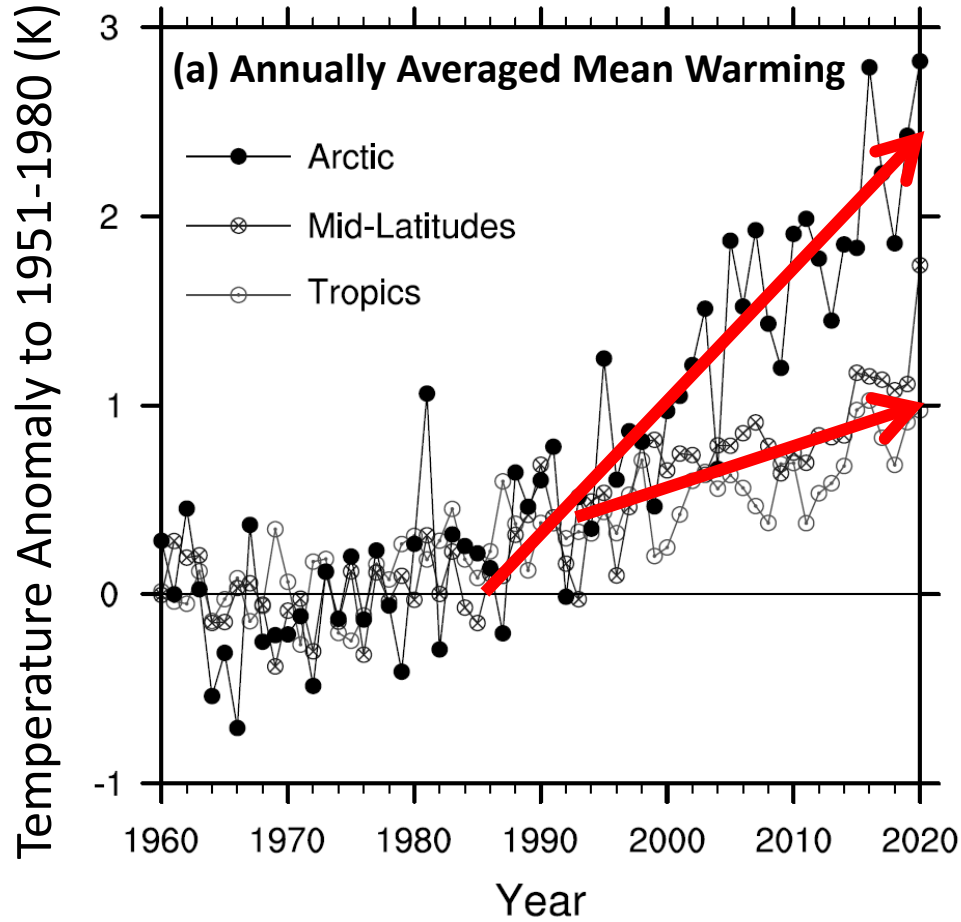
Reference period: 1951-1980
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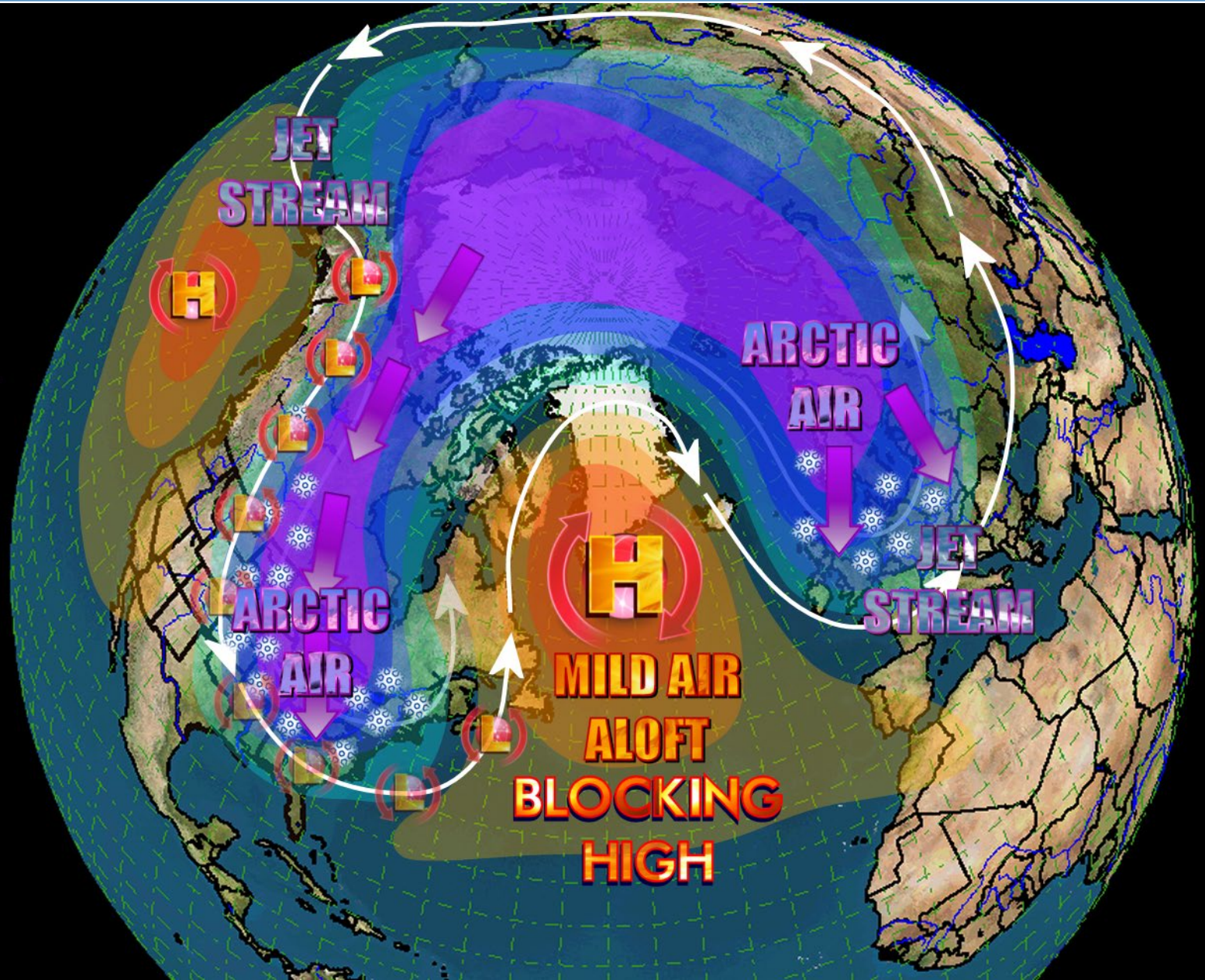
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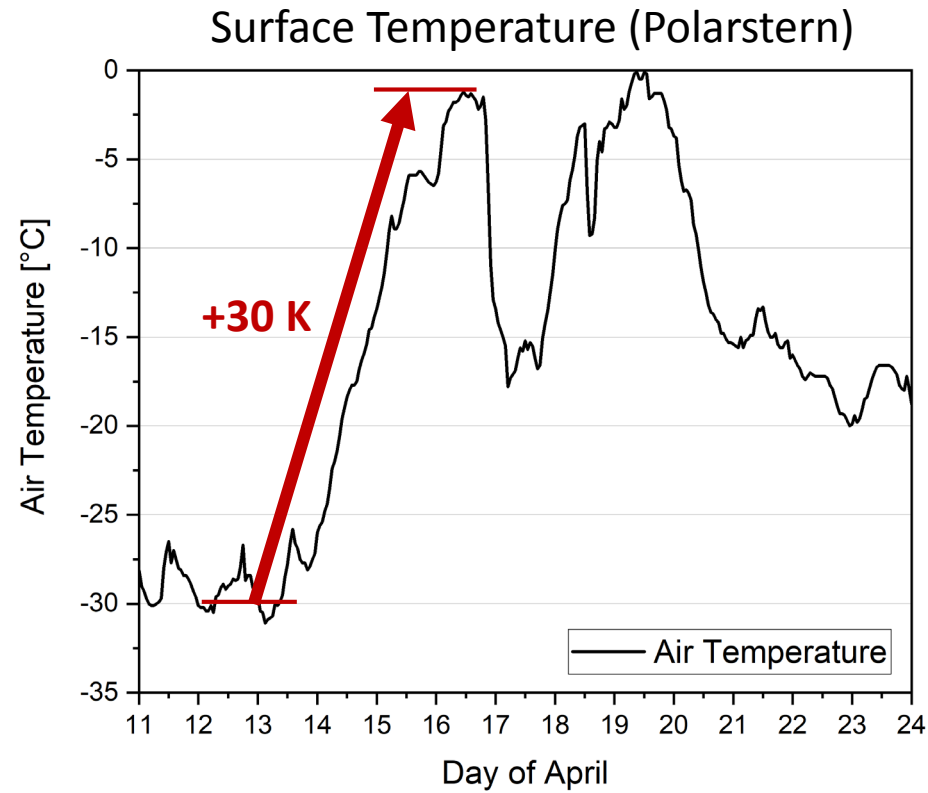




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data provided by NASA
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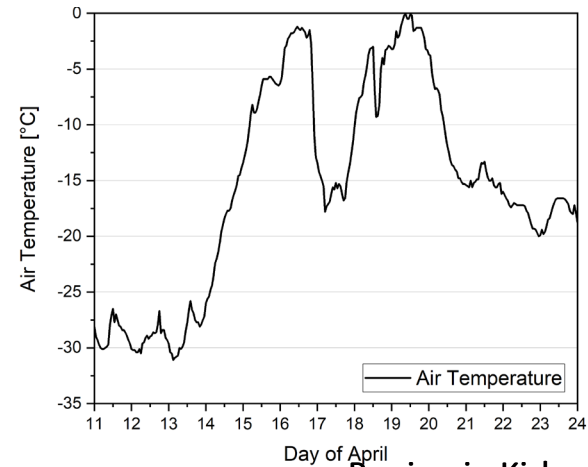
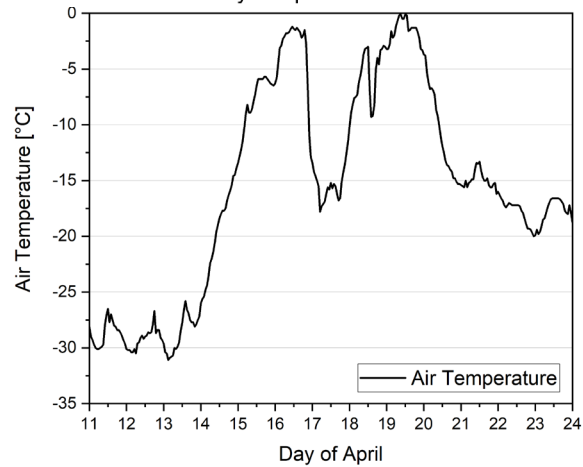
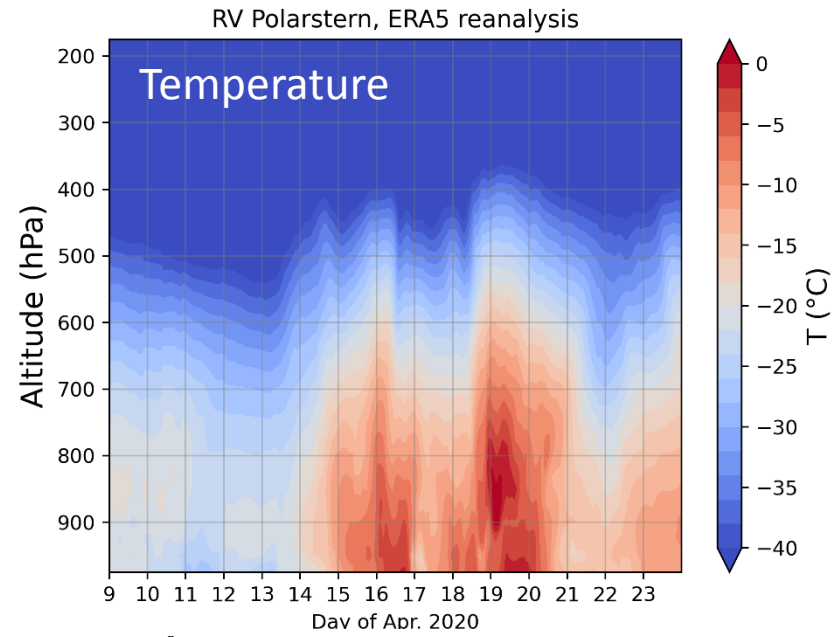
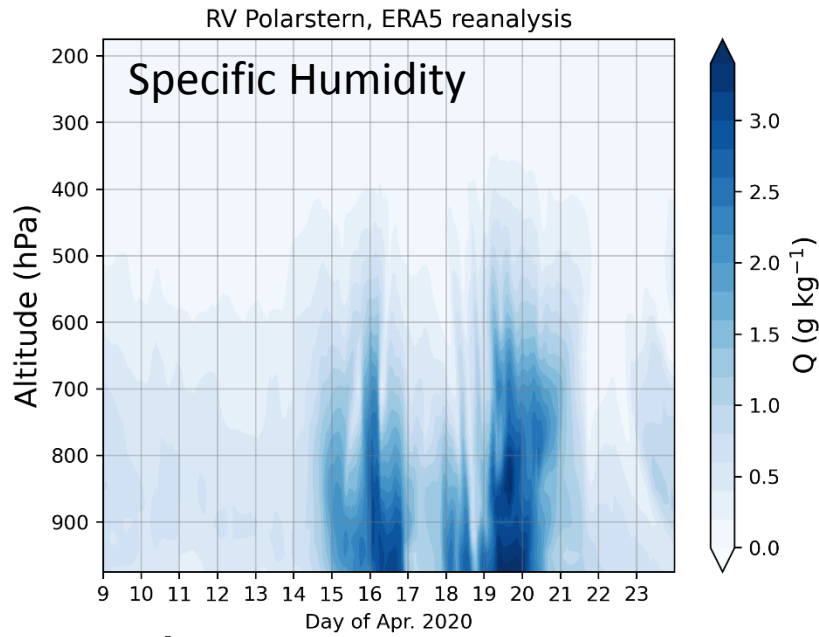






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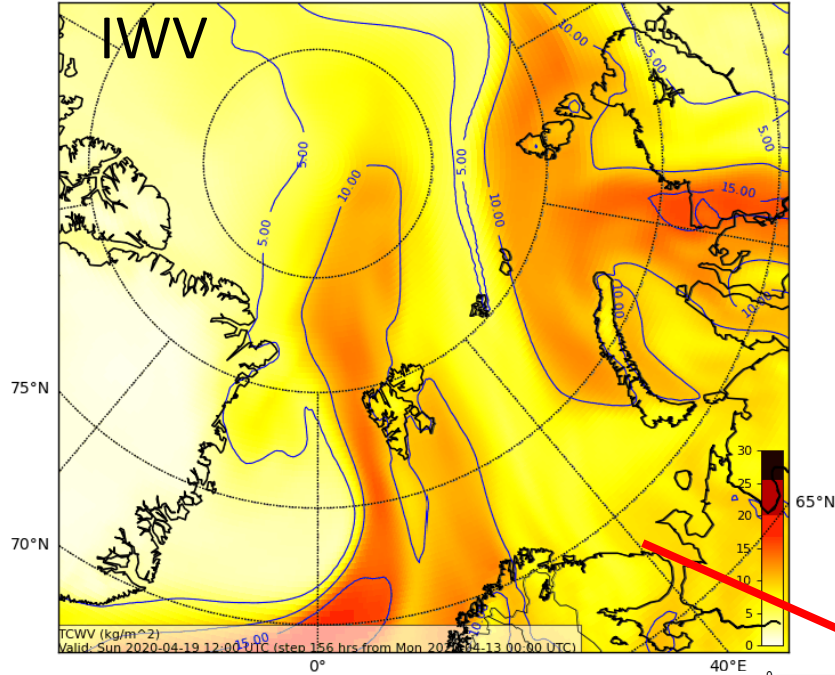


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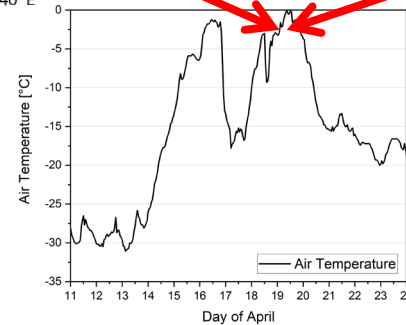
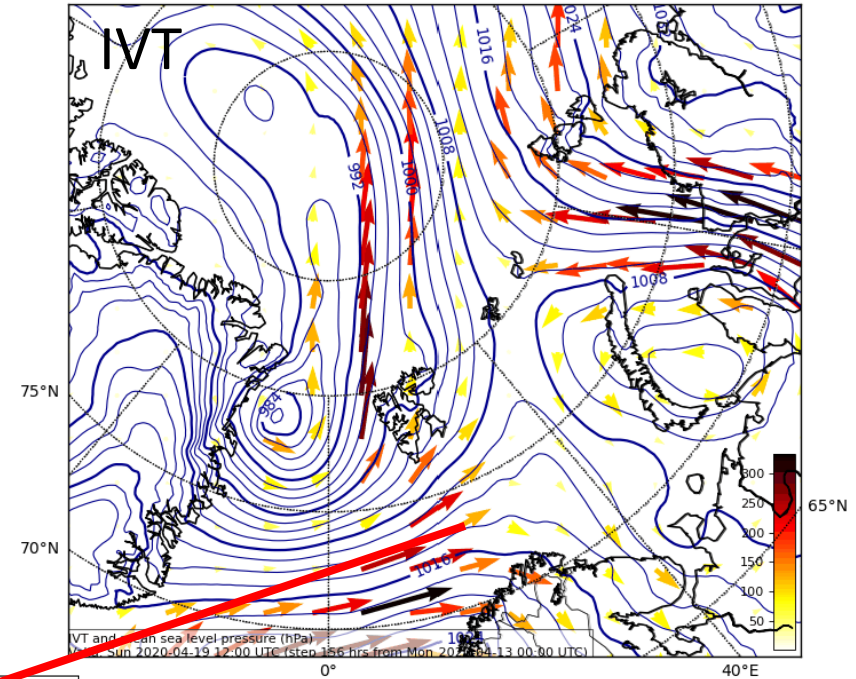


Integrated Water Vapor (IWV) and Integrated Water Vapor Transport (IVT)

IWV (kg/m^2)
Valid: So 2020-04-19 12:00 UTC (step 156 hrs from Mo 2020-04-13 00:00 UTC)



IVT ($\text{kg m}^{-1} \text{s}^{-1}$) and Mean Sea Level Pressure (hPa)
Valid: So 2020-04-19 12:00 UTC (step 156 hrs from Mo 2020-04-13 00:00 UTC)



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- How do clouds and aerosols evolve in a transforming air mass?
- What controls moisture loss (precipitation, aerosol)?
- What sustains mixed-phase clouds: Moisture from above or below?
- What are the typical rates, at which inflowing warm air masses cool?
- What processes control the time scale for the cooling & warming of WAIs and CAOs?
- What is the magnitude of radiative warming due to WAIs?

