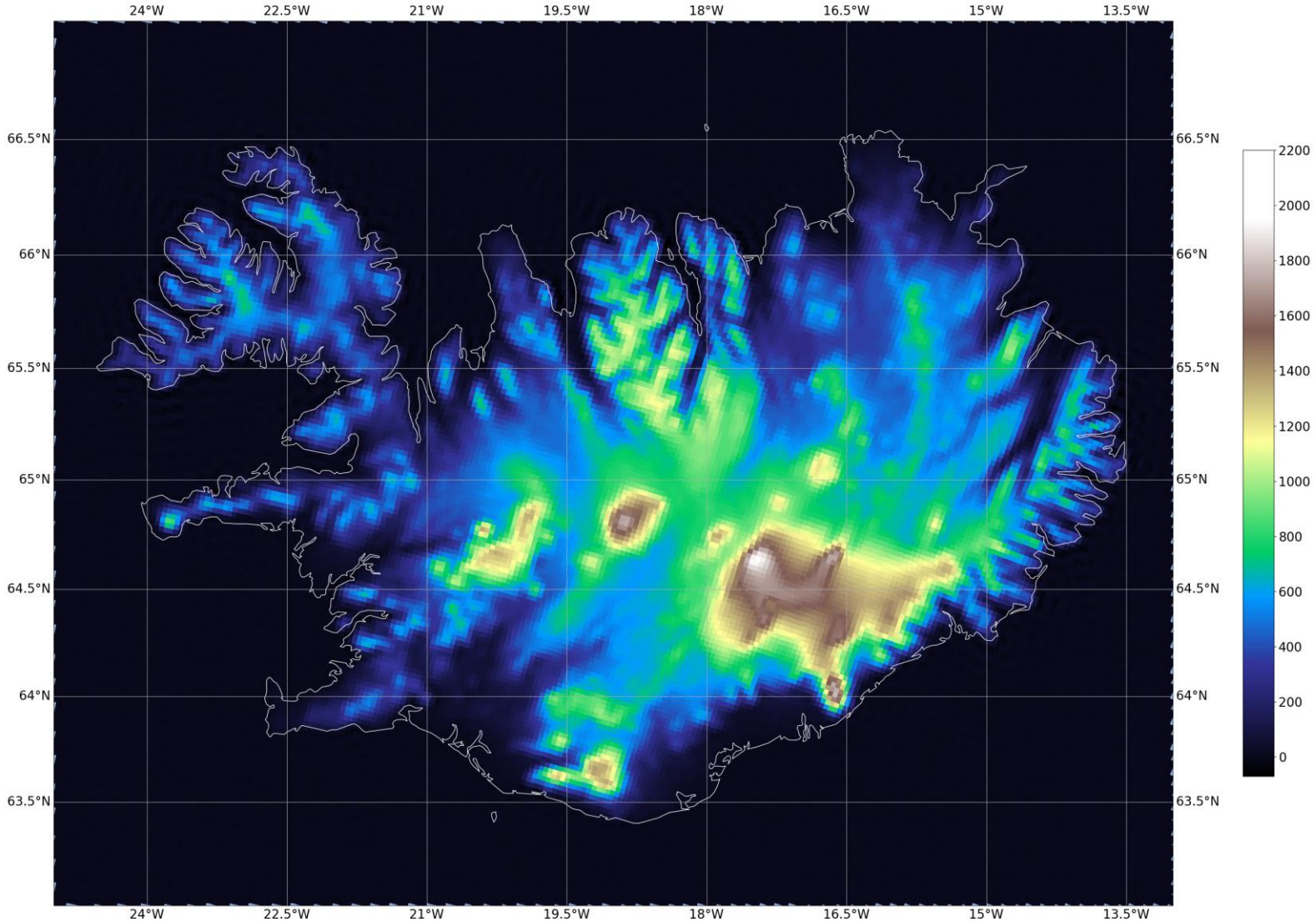
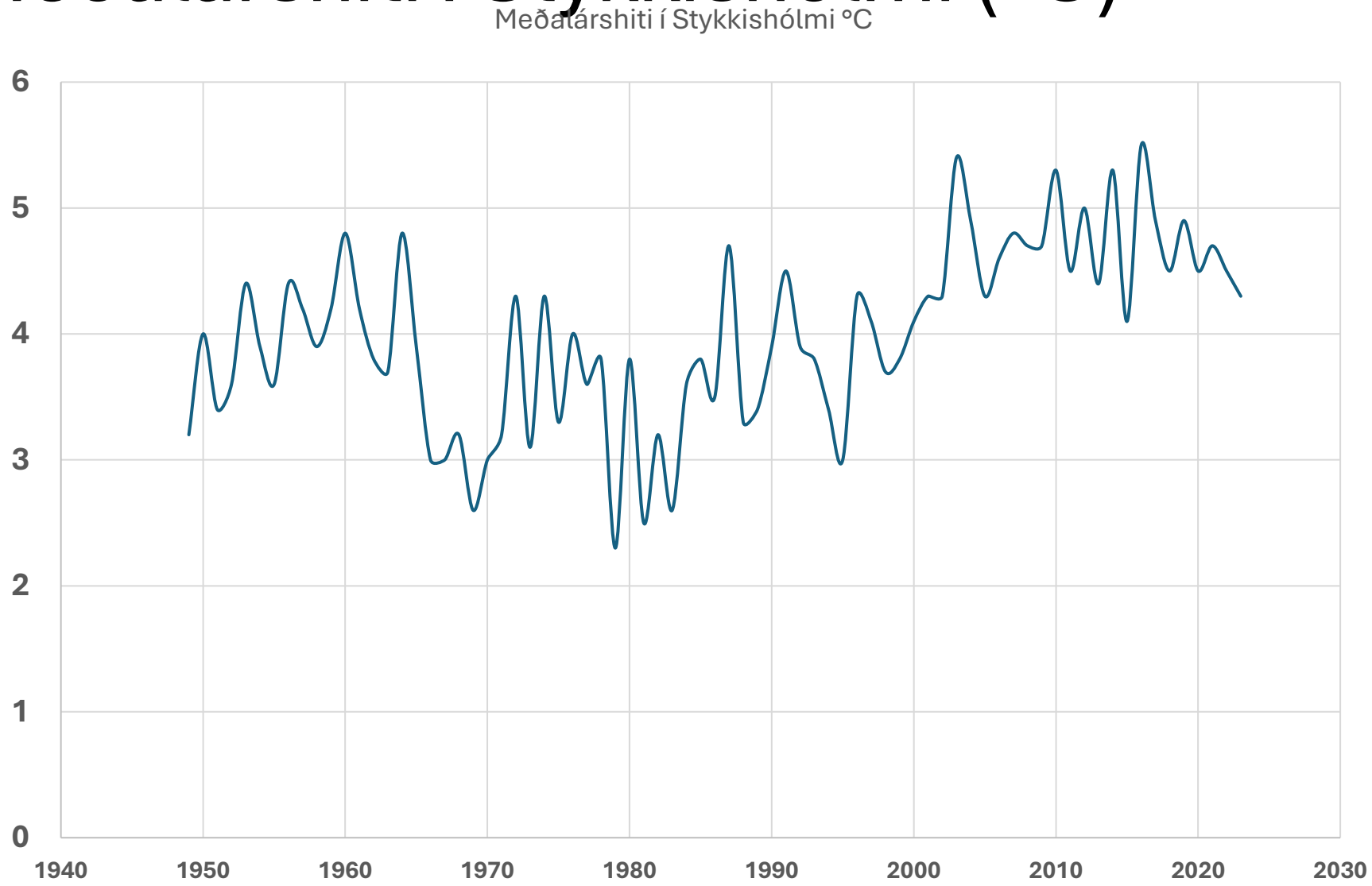
Nokkrir þættir í veðurfari á Íslandi 1992-2023

- Haraldur Ólafsson, Iman Rousta, Felix Vaccaro, Rémi Tain og Timothy Darjo

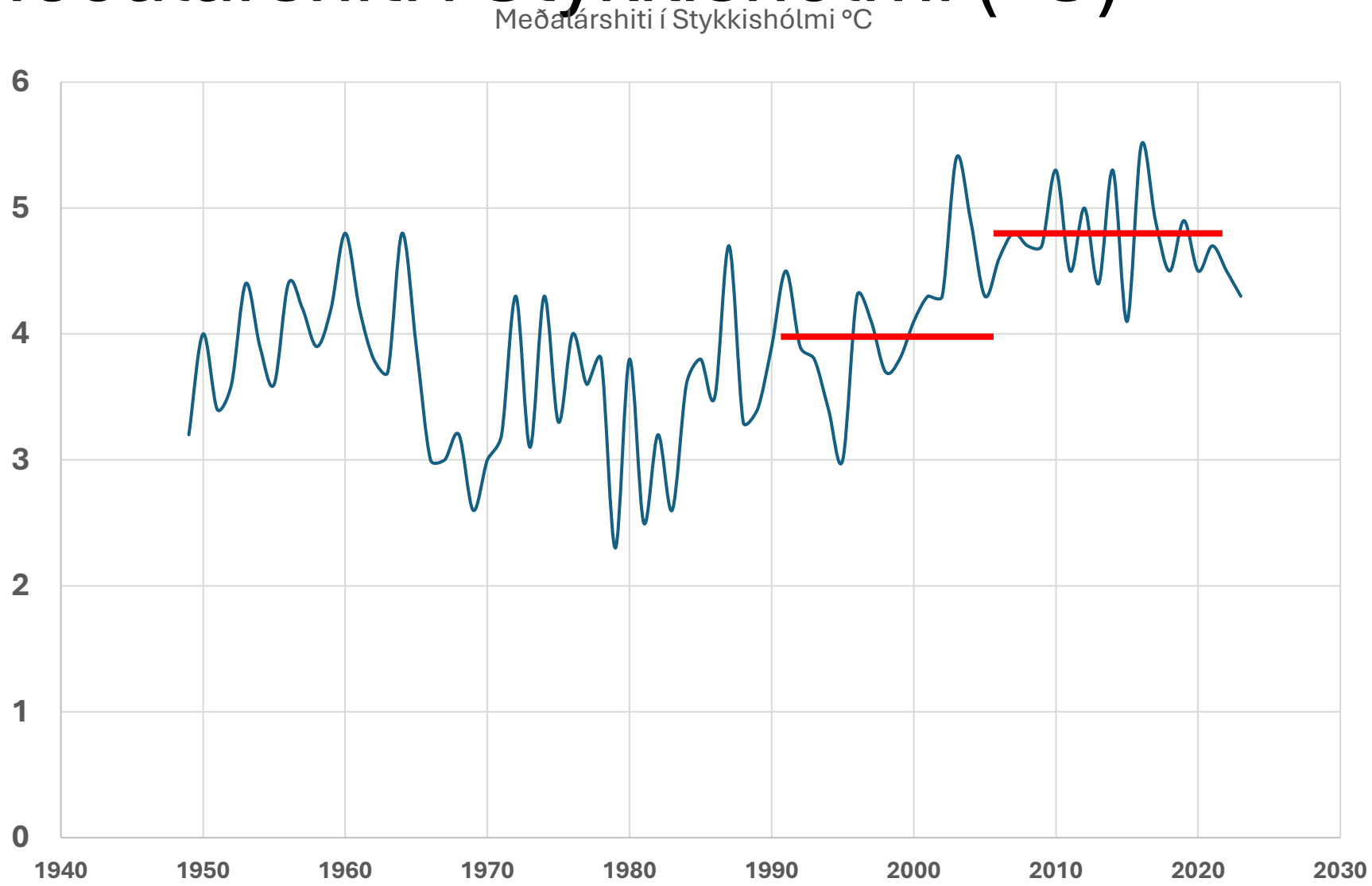
CARRA (dx=2,5 km) 1992-2023



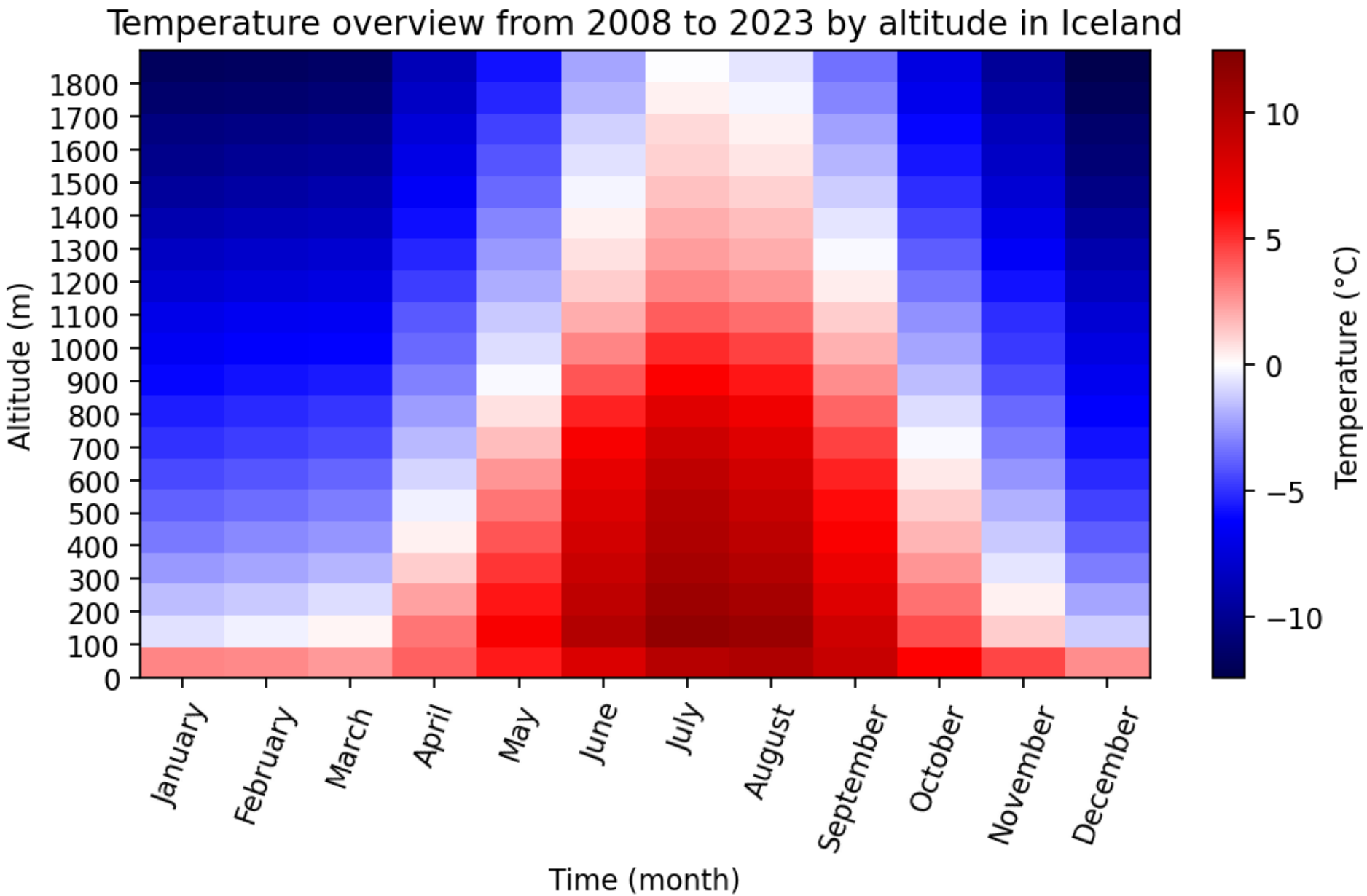
Meðalárshiti í Stykkishólmi (°C)

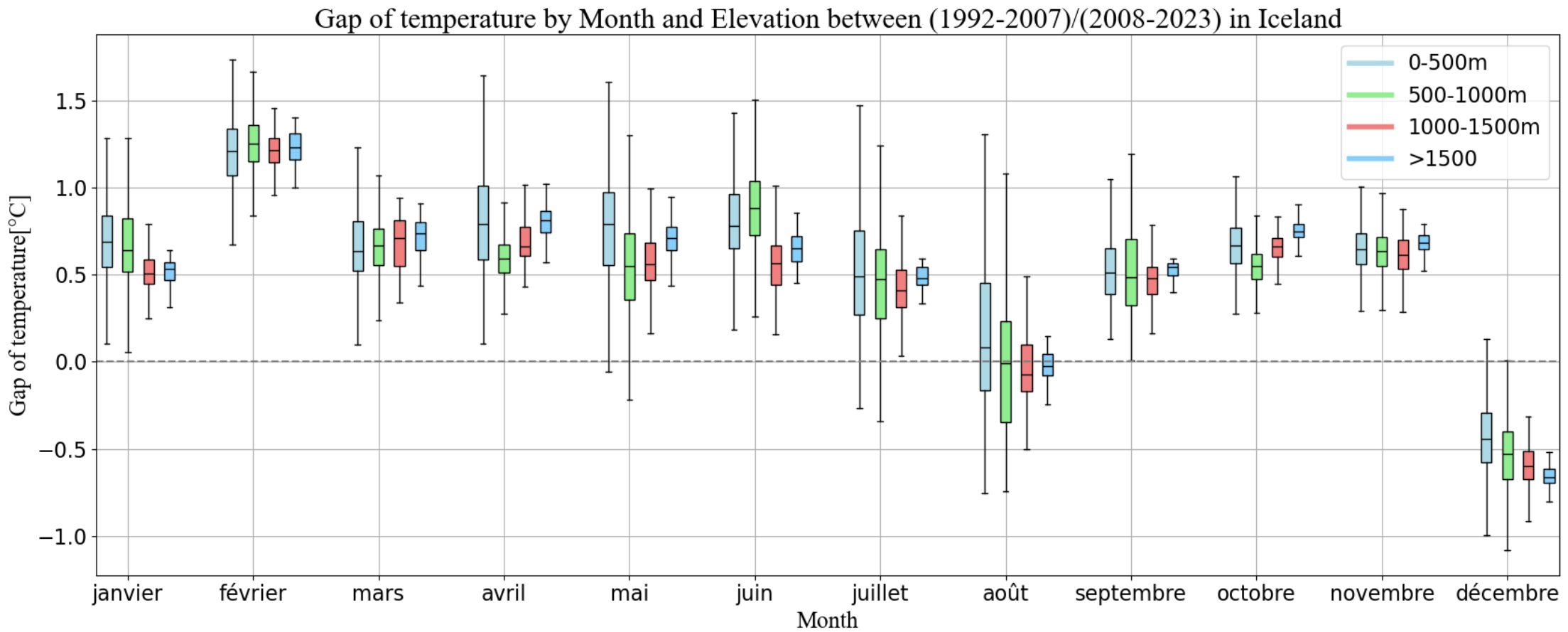


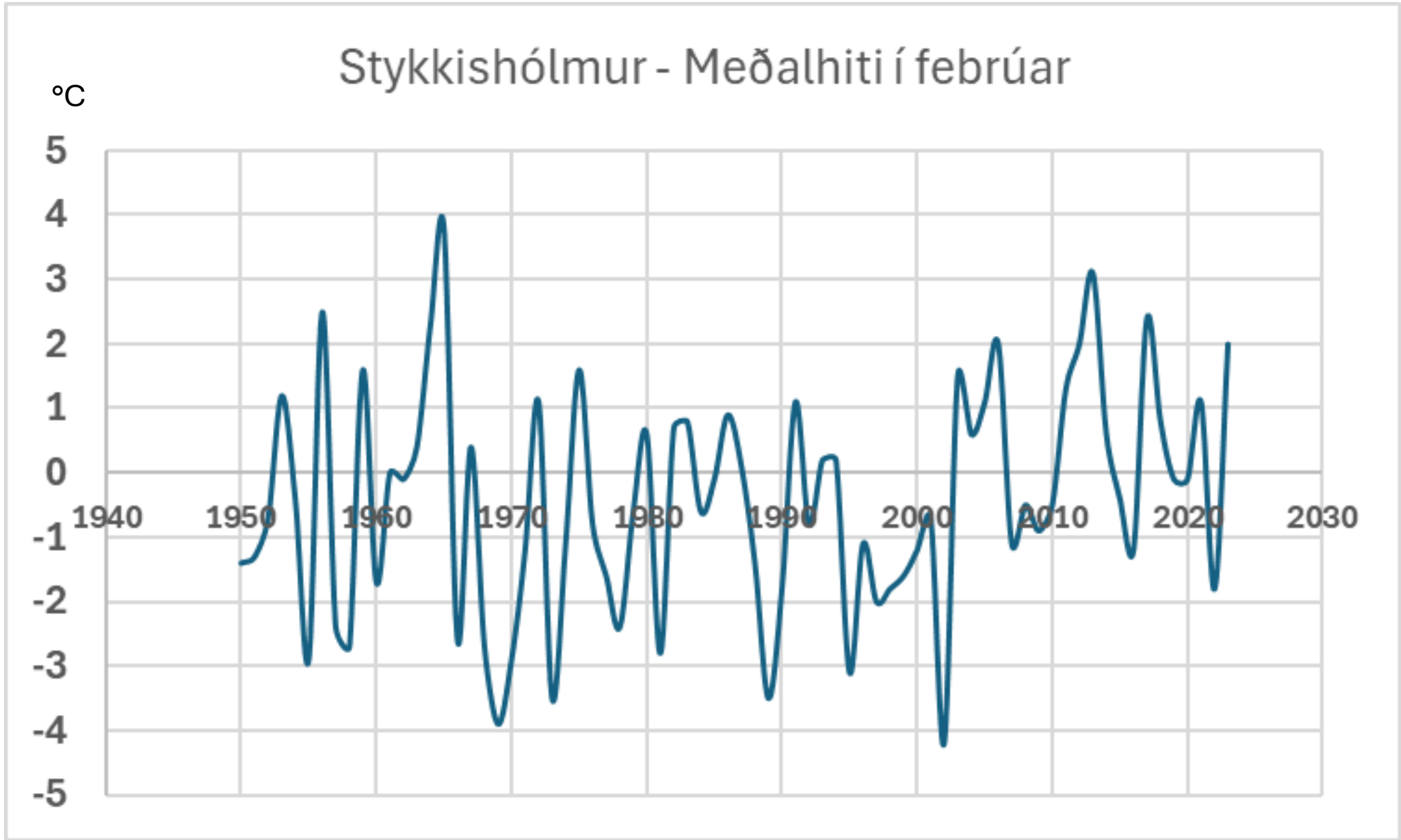
Meðalárshiti í Stykkishólmi (°C)



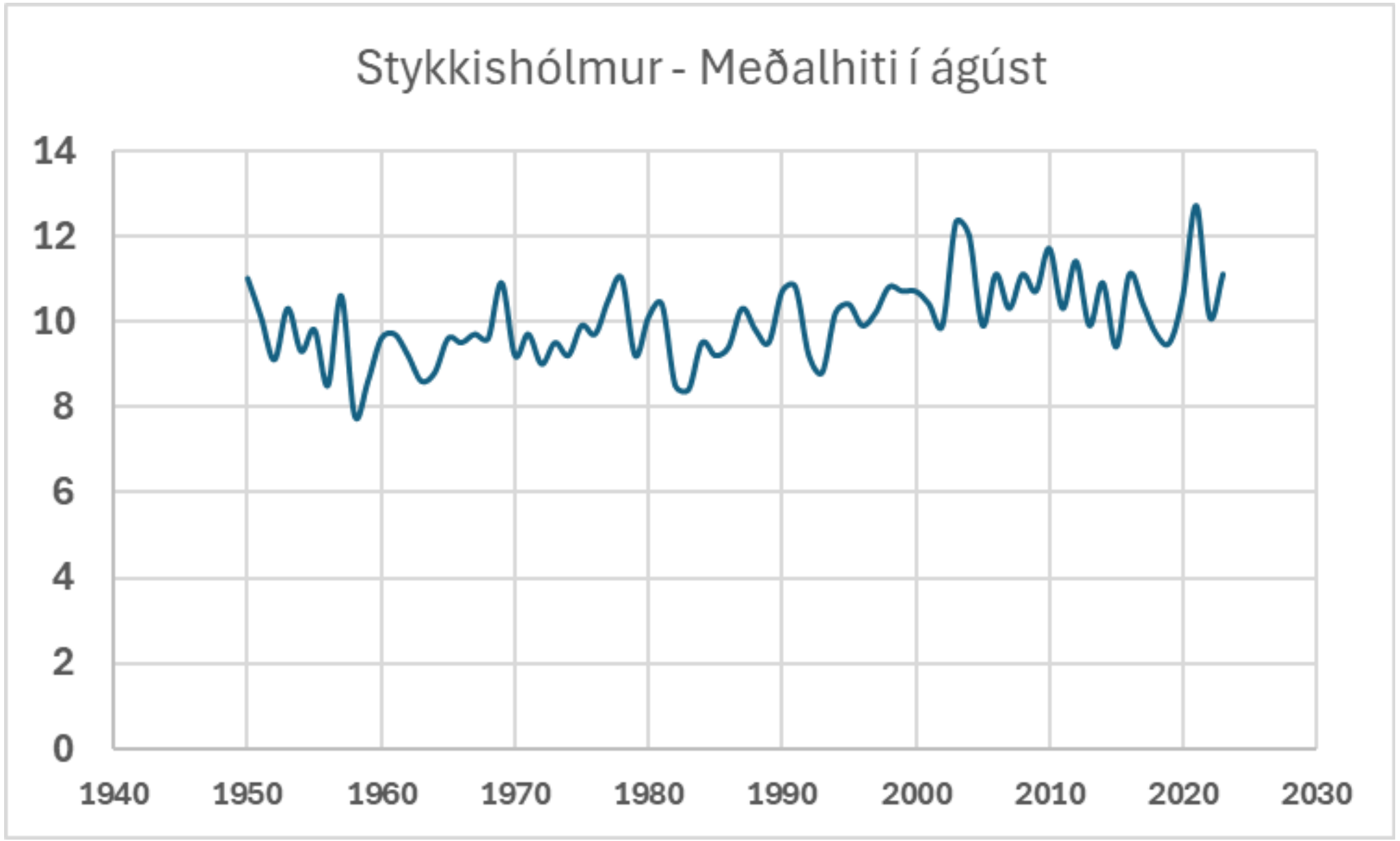

6
5
4
3
2
1
0
1940
2020
2030

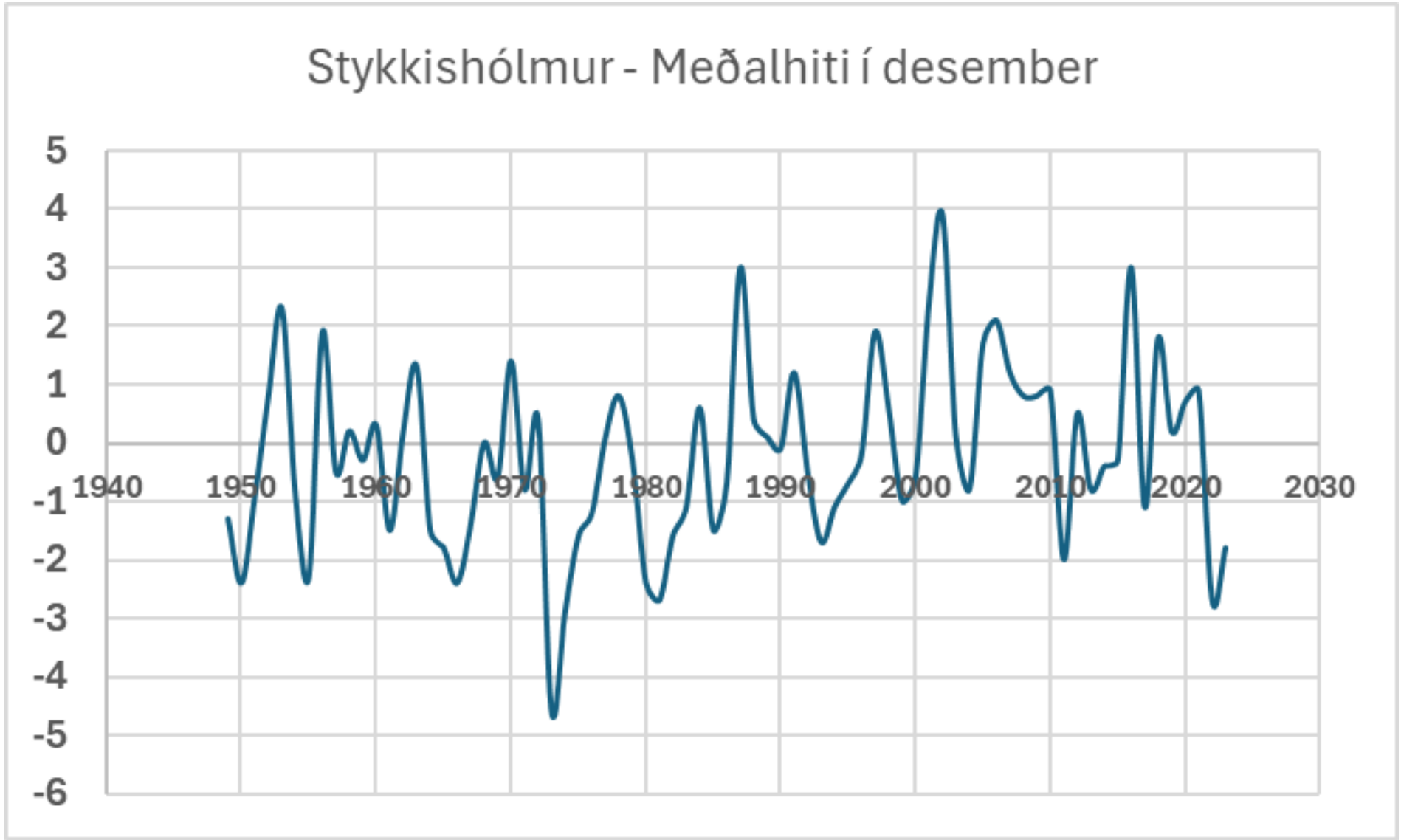

Temperature overview from 2008 to 2023 by altitude in Iceland
Altitude (m)
1800
1700
1600
1500
1400
1300
1200
1100
1000
900
800
700
600
500
400
300
200
100
0
January
February
March
April
May
June
July
August
September
October
November
December
Time (month)
10
5
0
−5
−10
Temperature (°C)

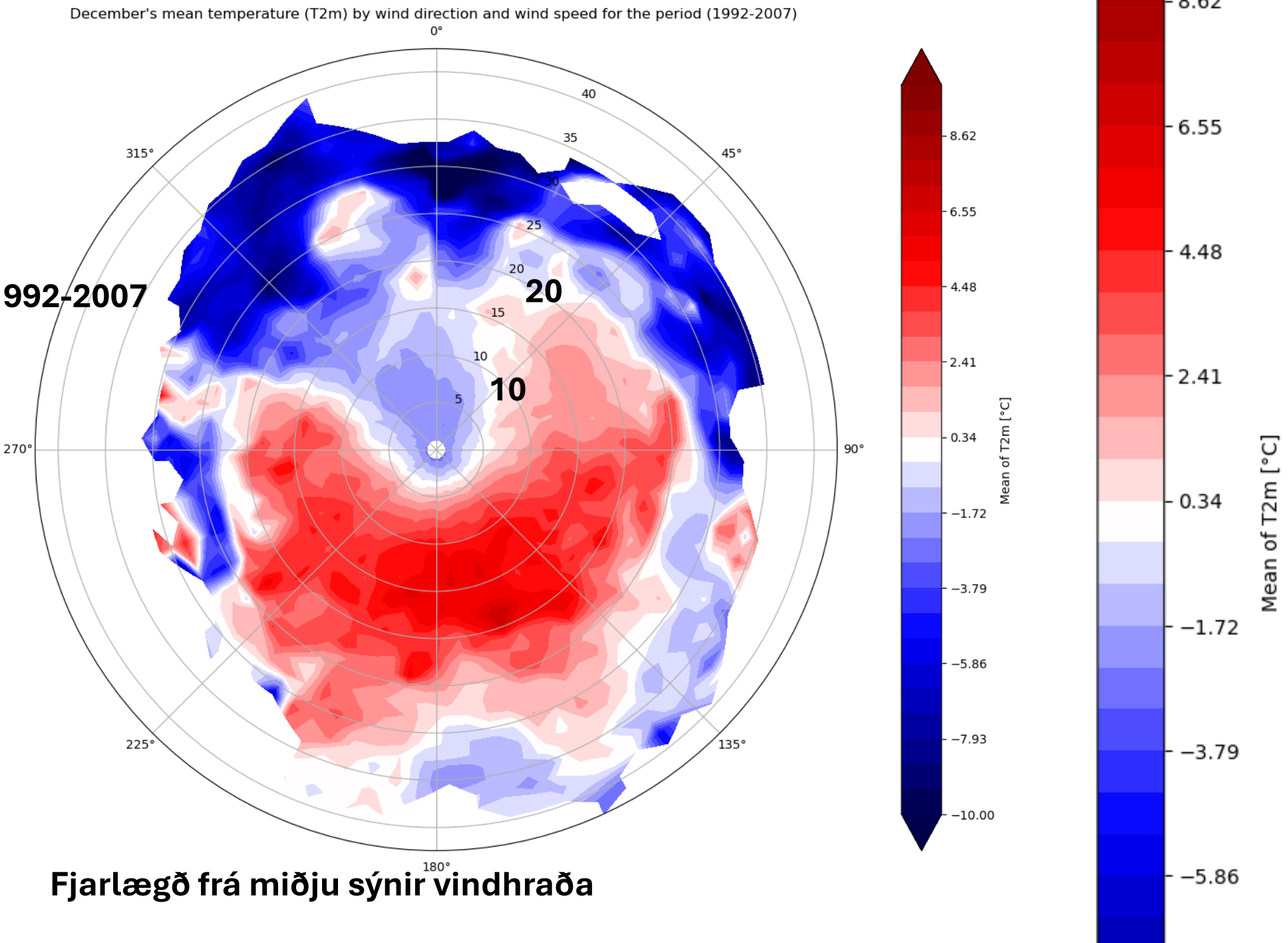

Gap of temperature by Month and Elevation between (1992-2007)/(2008-2023) in Iceland
0-500m
500-1000m
1000-1500m
>1500
Gap of temperature[°C]
1.5
1.0
0.5
0.0
−0.5
−1.0
janvier
février
mars
avril
mai
juin
juillet
août
septembre
octobre
novembre
décembre
Month


Stykkishólmur - Meðalhiti í febrúar
°C
5
4
3
2
1
0
-1
-2
-3
-4
-5
1940
1950
1960
1970
1980
1990
2000
2010
2020
2030

°C


Stykkishólmur - Meðalhiti í ágúst
14
12
10
8
6
4
2
0
1940
1950
1960
1970
1980
1990
2000
2010
2020
2030


Stykkishólmur - Meðalhiti í desember
5
4
3
2
1
0
-1
-2
-3
-4
-5
-6
1940
1950
1960
1970
1980
1990
2000
2010
2020
2030

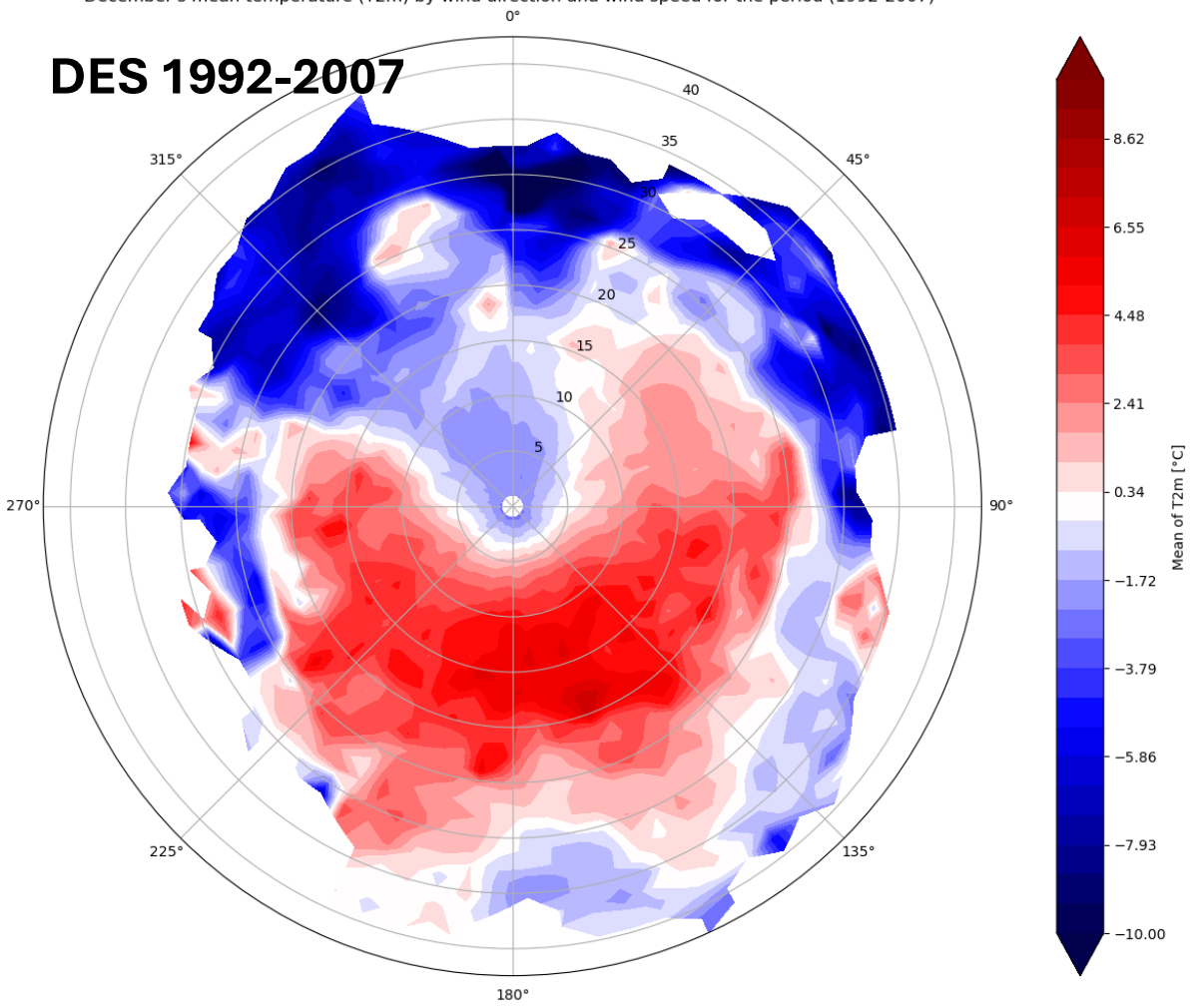


DES 1992-2007

Fjarlægð frá miðju sýnir vindhraða

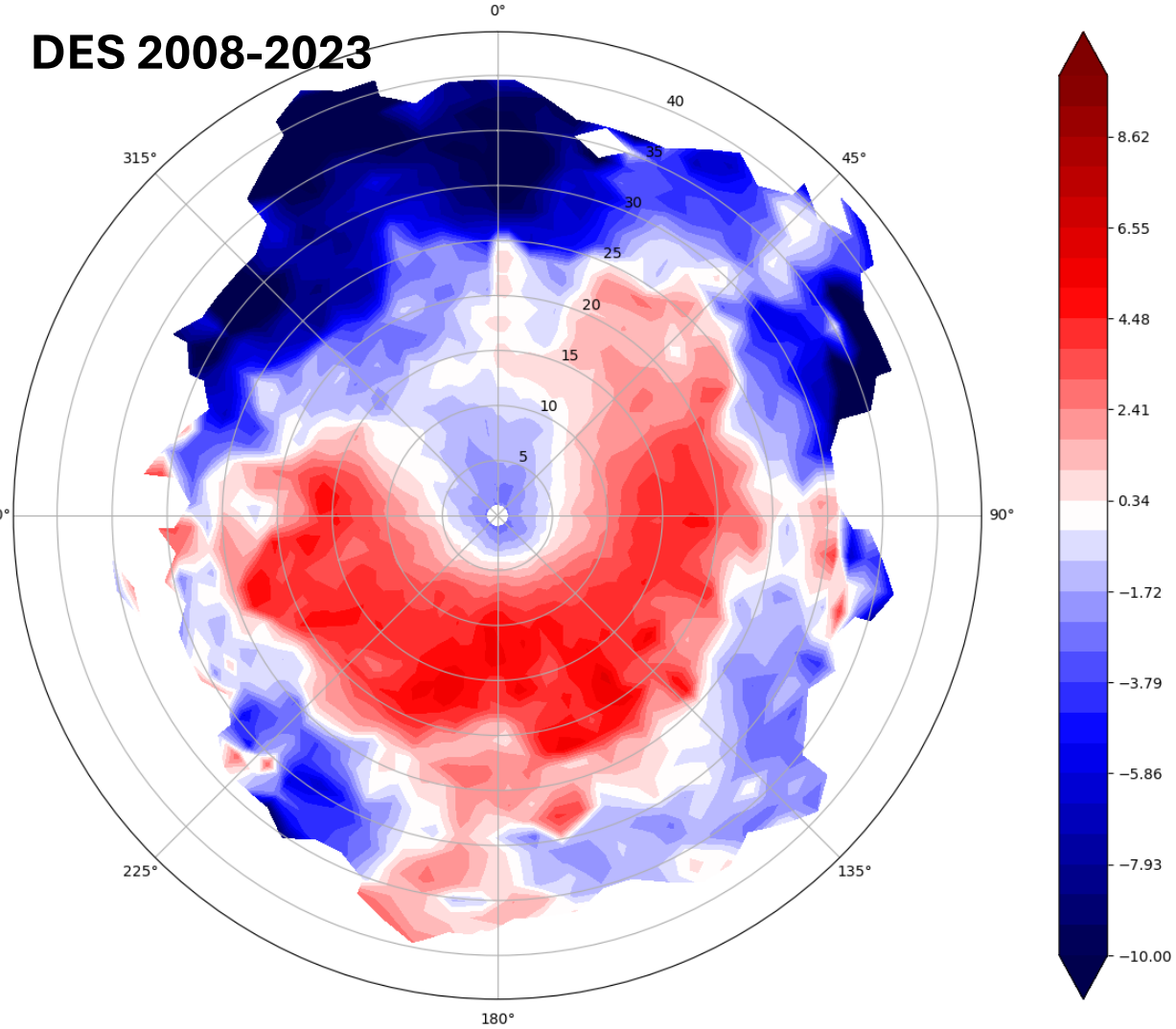
December's mean temperature (T2m) by wind direction and wind speed for the period (1992-2007)

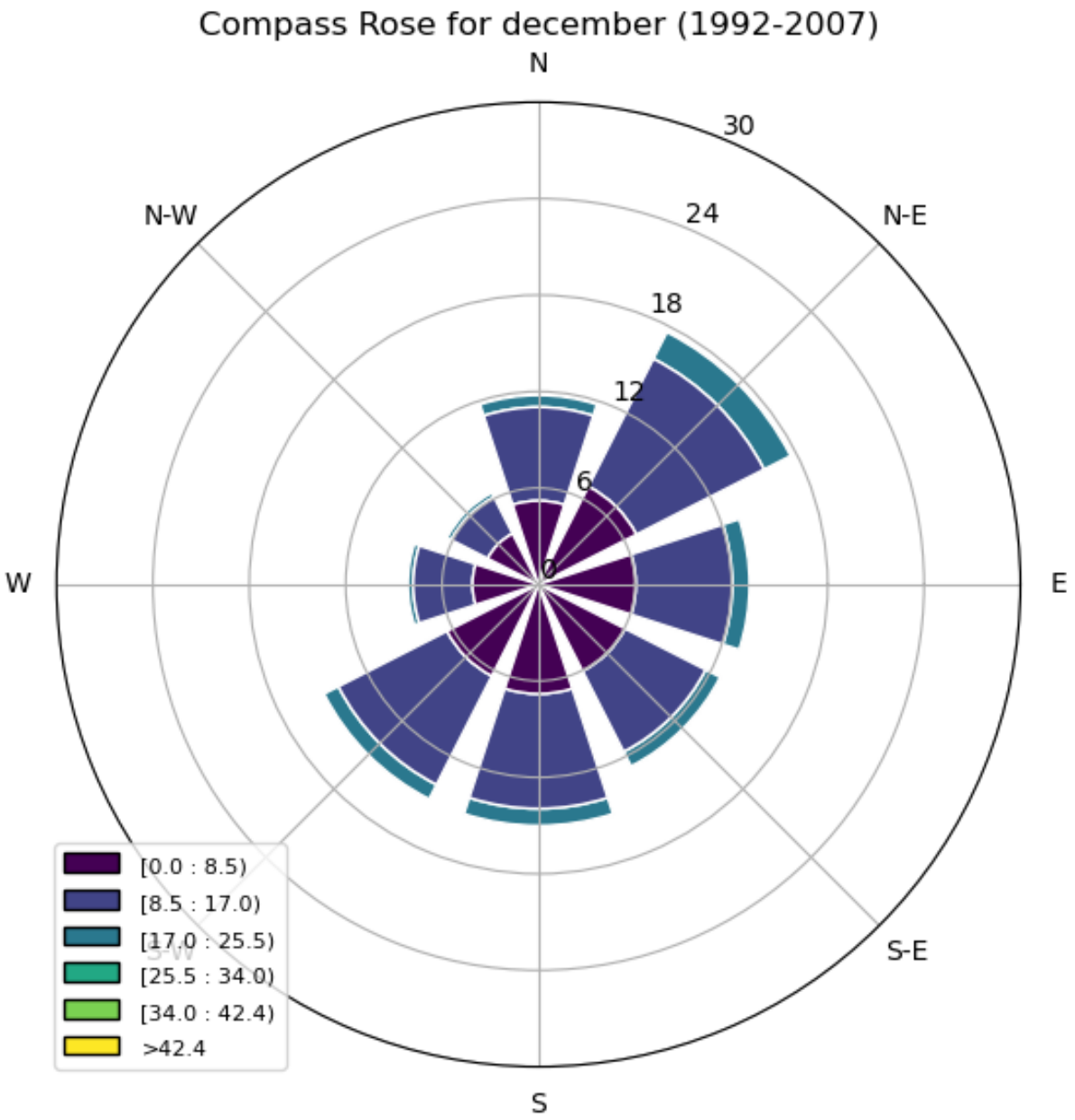
DES 1992-2007

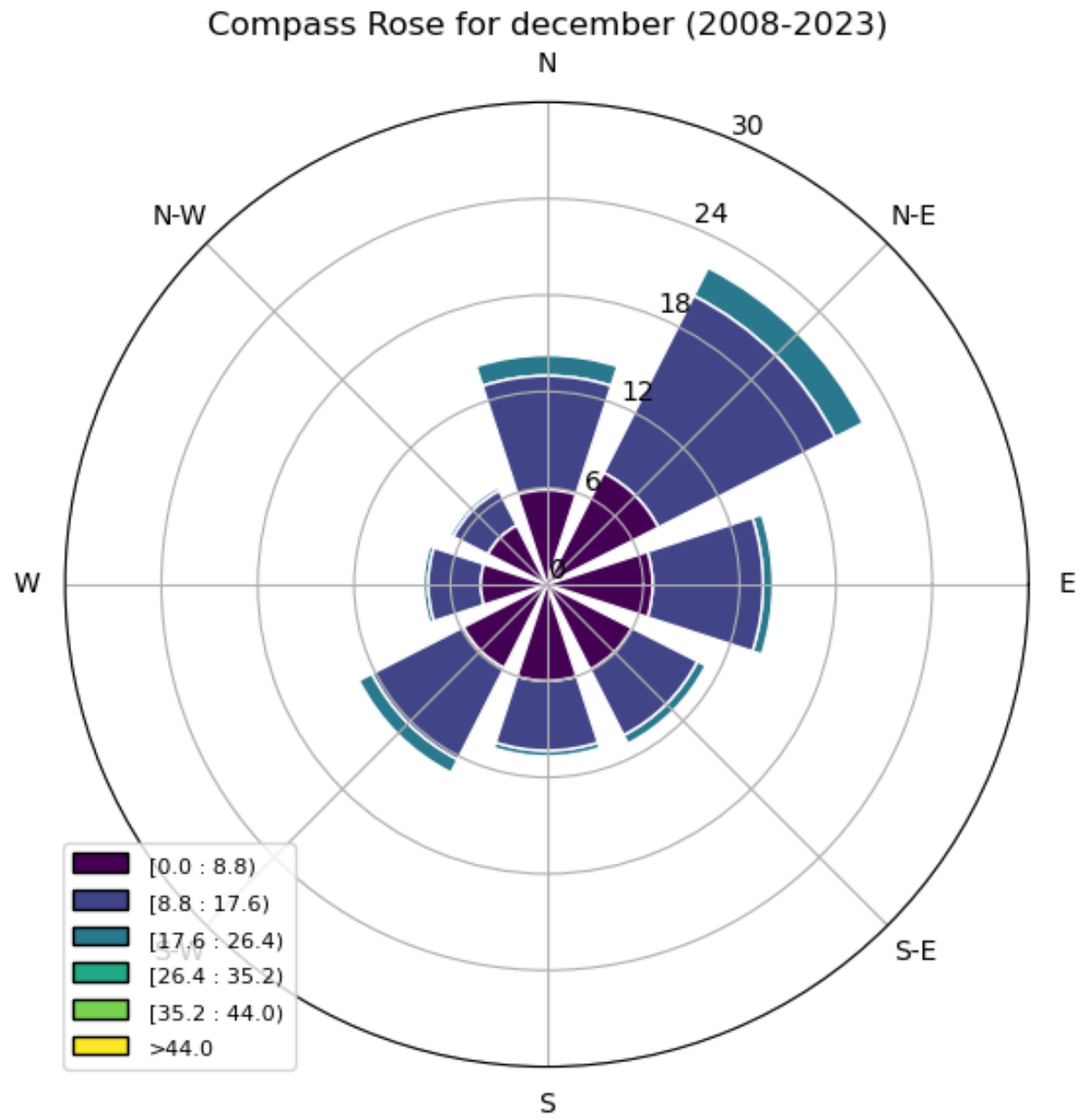


December's mean temperature (T2m) by wind direction and wind speed for the period (2008-2023)

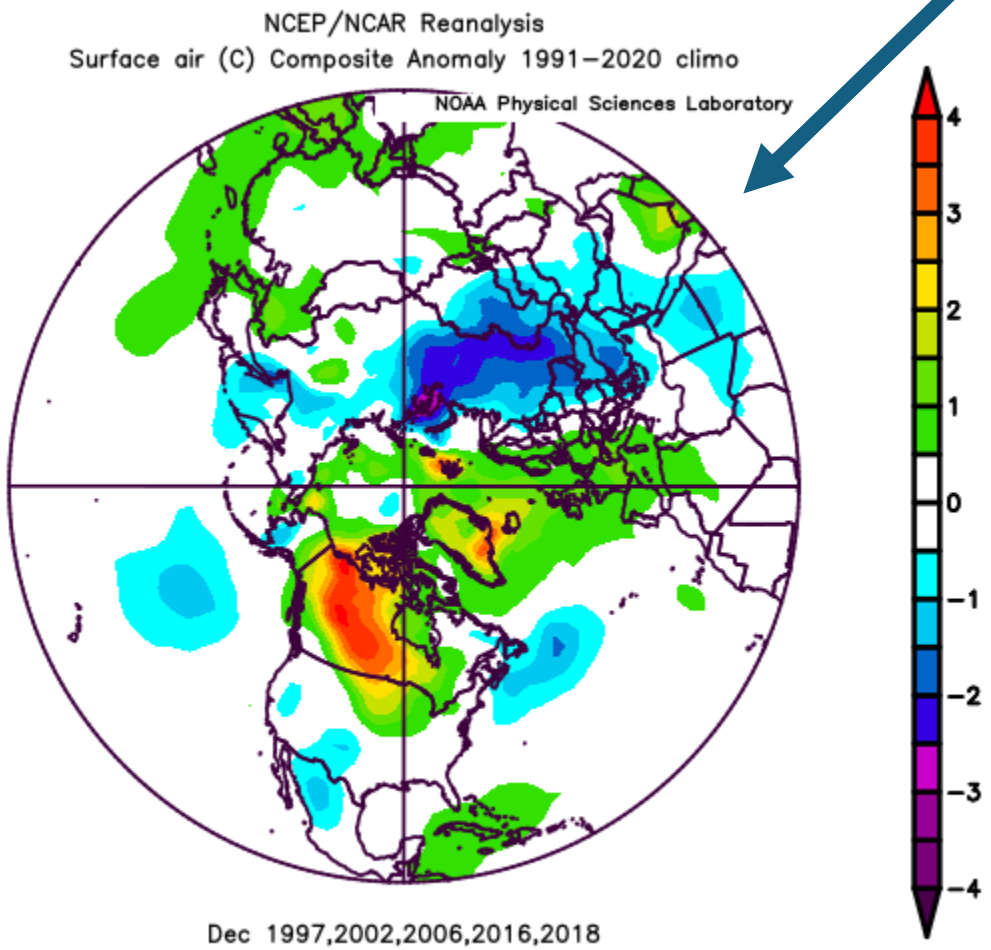
DES 2008-2023

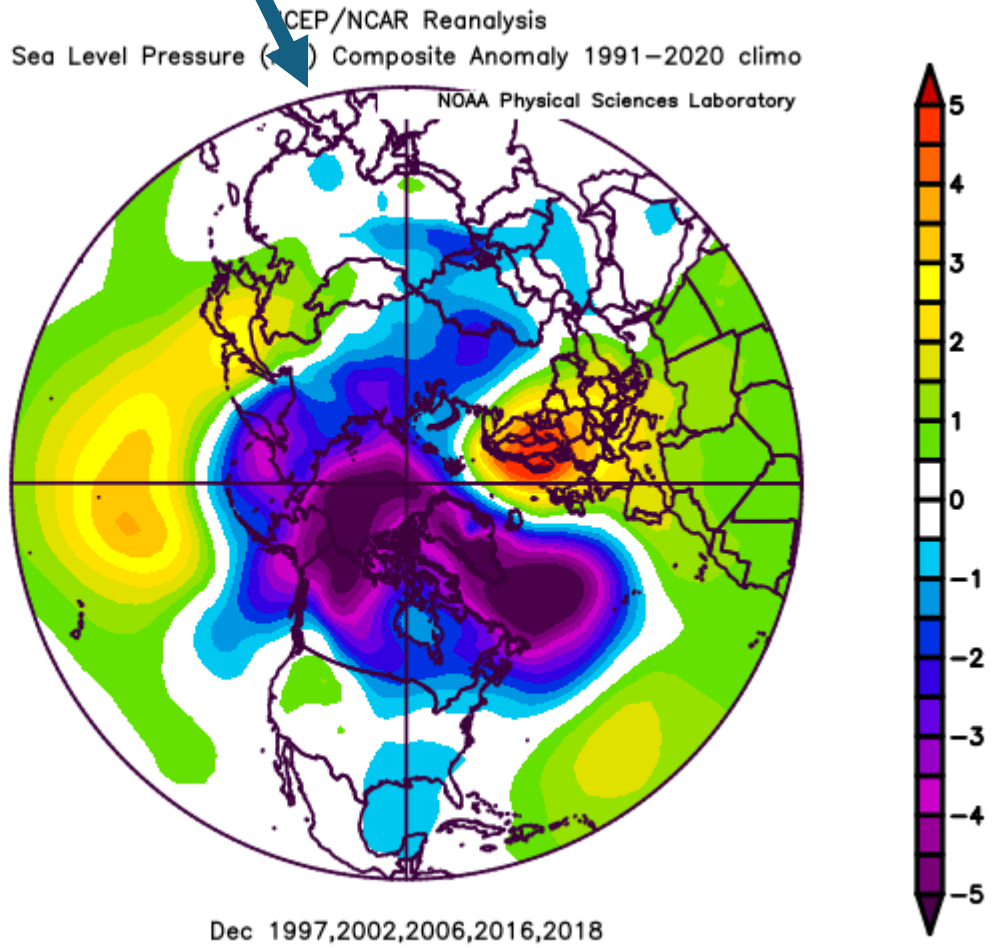



Compass Rose for december (1992-2007)
N
N-E
E
S-E
S
S-W
W
N-W
0
6
12
18
24
30
[0.0 : 8.5)
[8.5 : 17.0)
[17.0 : 25.5)
[25.5 : 34.0)
[34.0 : 42.4)
>42.4

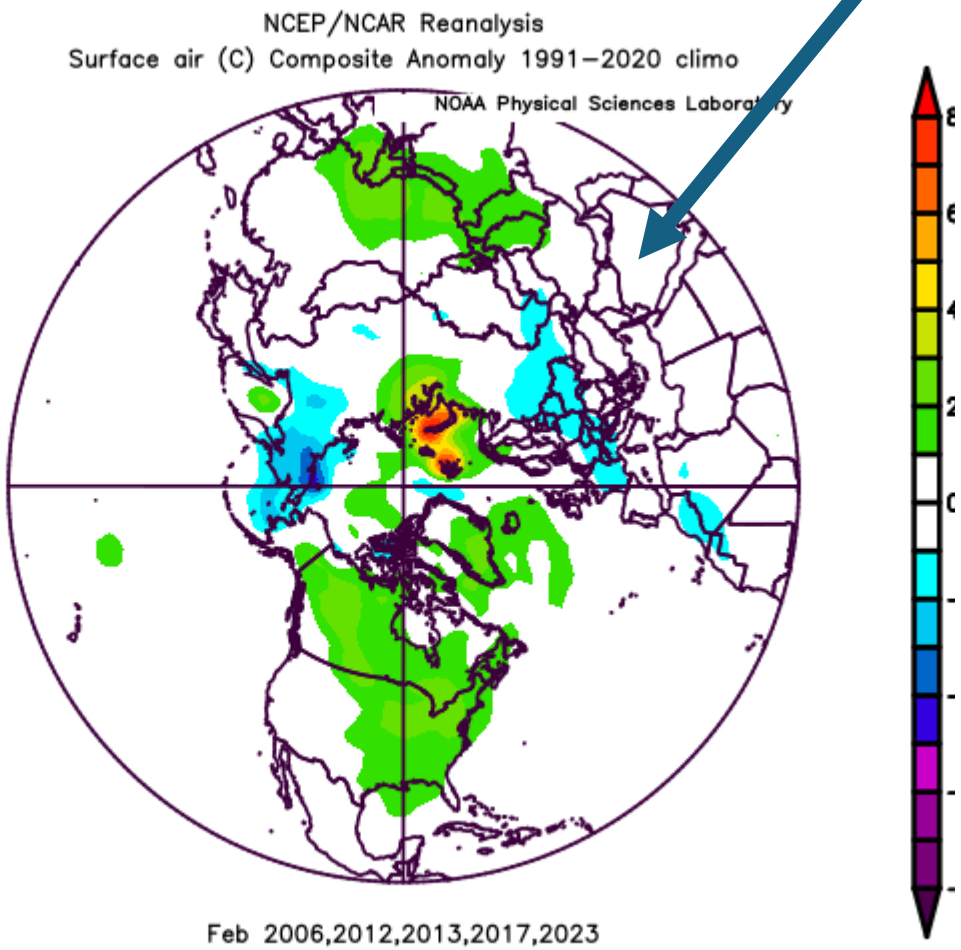

Compass Rose for december (2008-2023)
N
N-E
E
S-E
S
S-W
W
N-W
0
6
12
18
24
30
[0.0 : 8.8)
[8.8 : 17.6)
[17.6 : 26.4)
[26.4 : 35.2)
[35.2 : 44.0)
>44.0

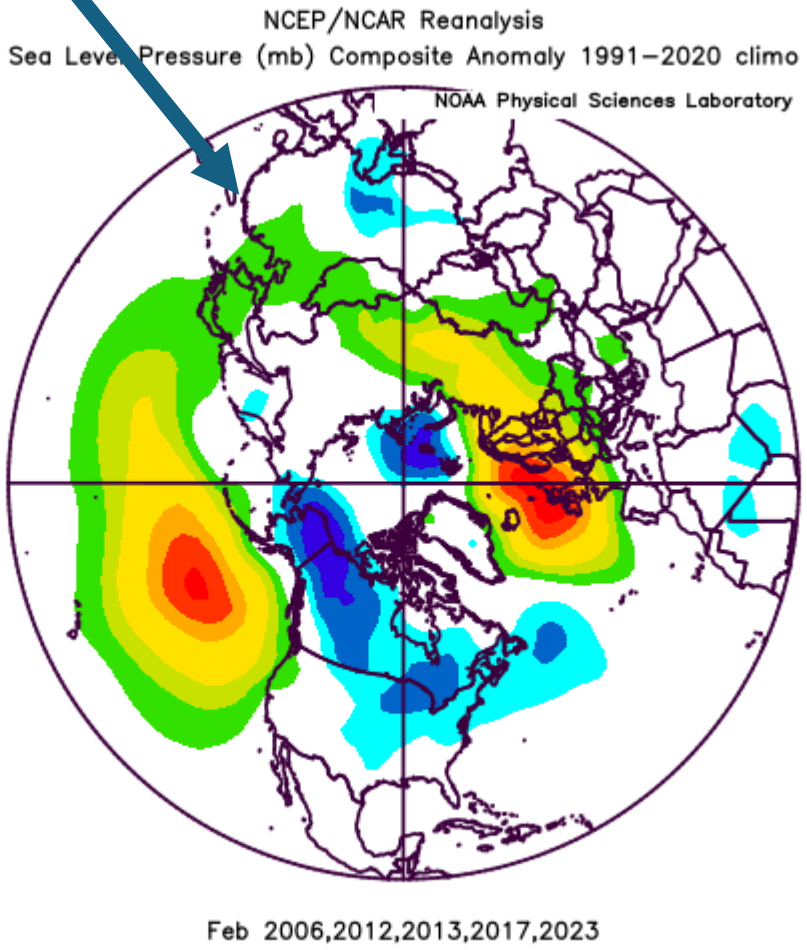
Hlýr desember – Frávik í T 2m og MSLP

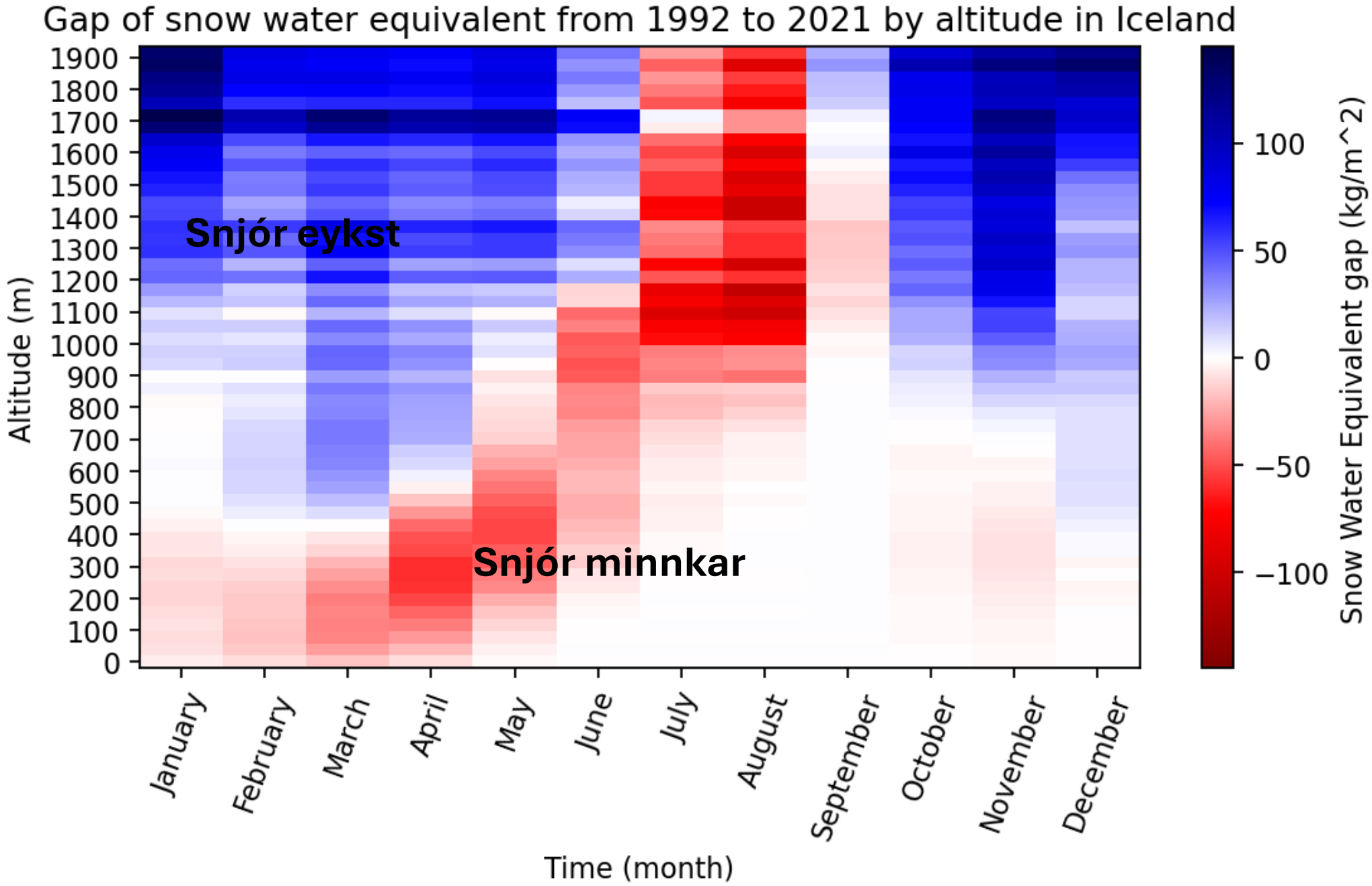




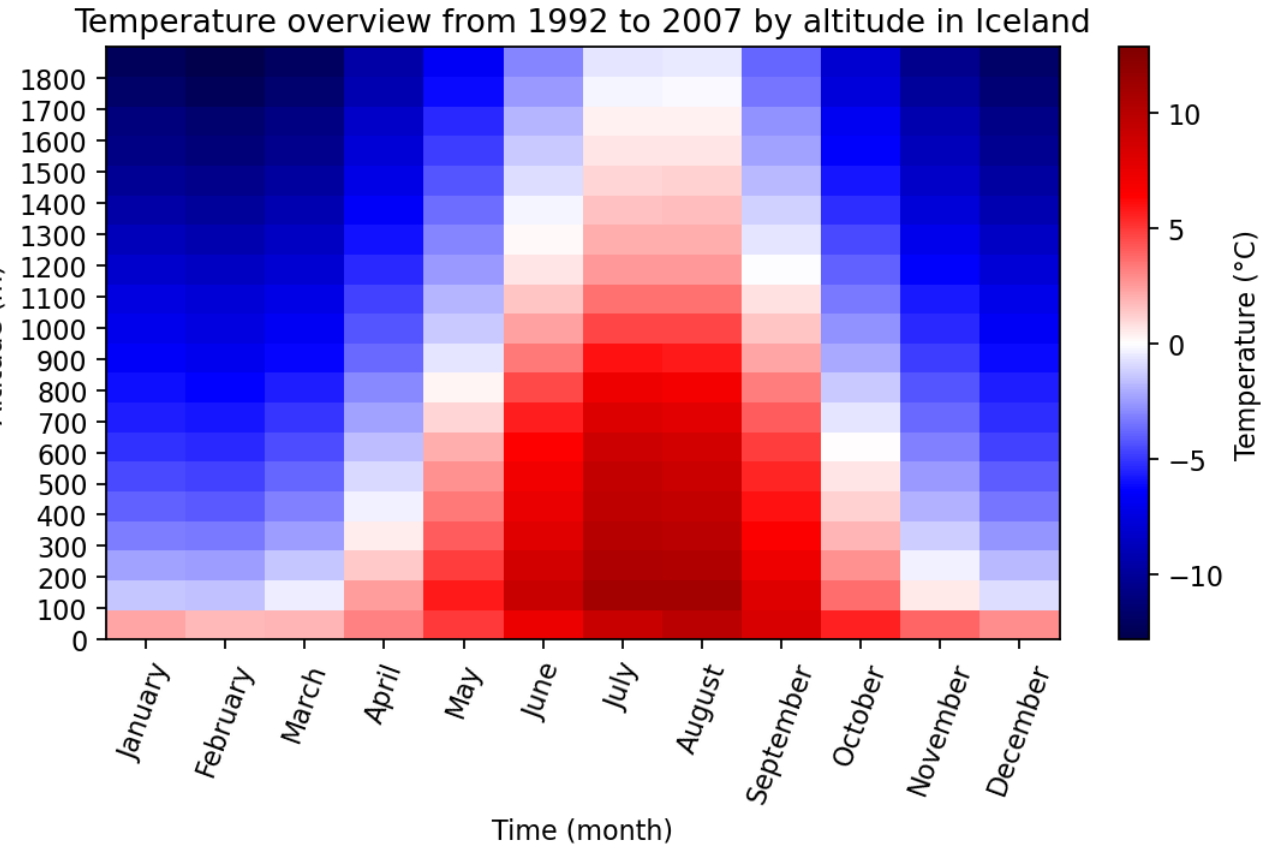
Hlýr febrúar – Frávik í T2m og MSLP

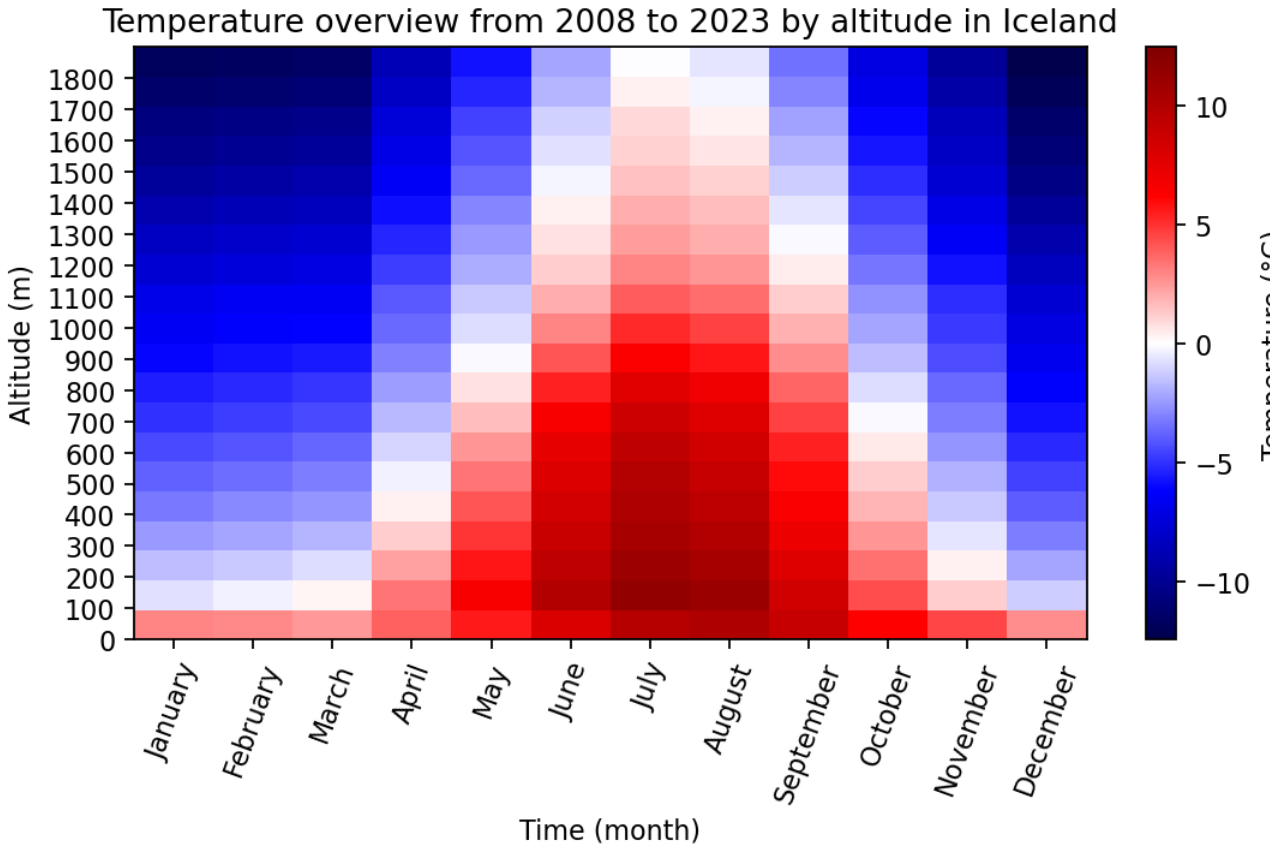


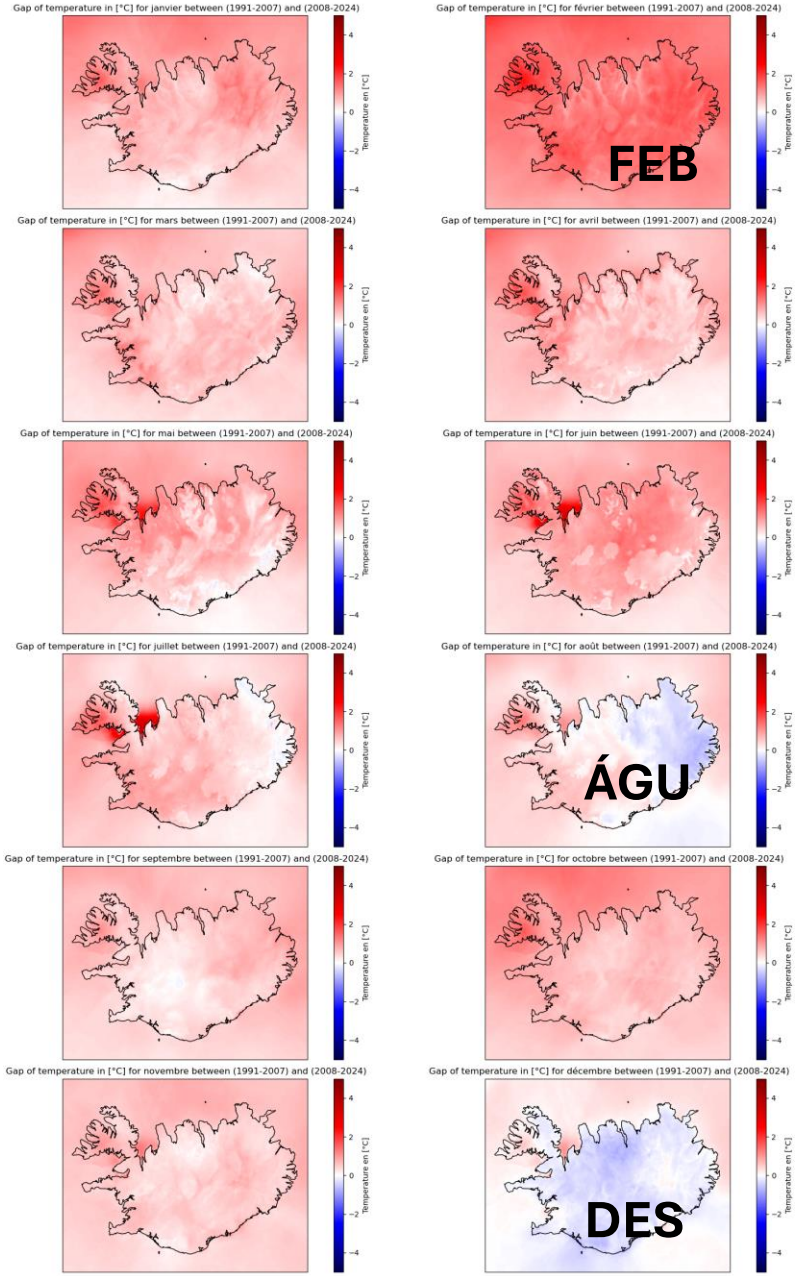


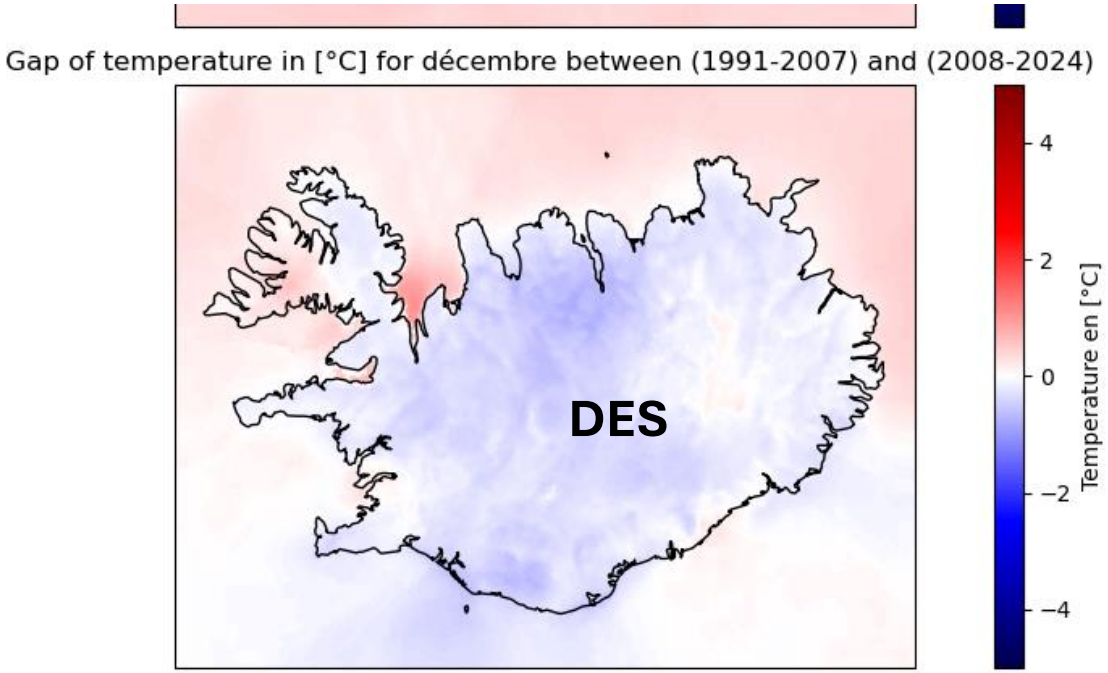

Gap of snow water equivalent from 1992 to 2021 by altitude in Iceland
Snjór eykst
Snjór minnkar
Altitude (m)
1900
1800
1700
1600
1500
1400
1300
1200
1100
1000
900
800
700
600
500
400
300
200
100
0
January
February
March
April
May
June
July
August
September
October
November
December
Time (month)
100
50
0
−50
−100
Snow Water Equivalent gap (kg/m^2)

Lofthiti og hæð netpunkta

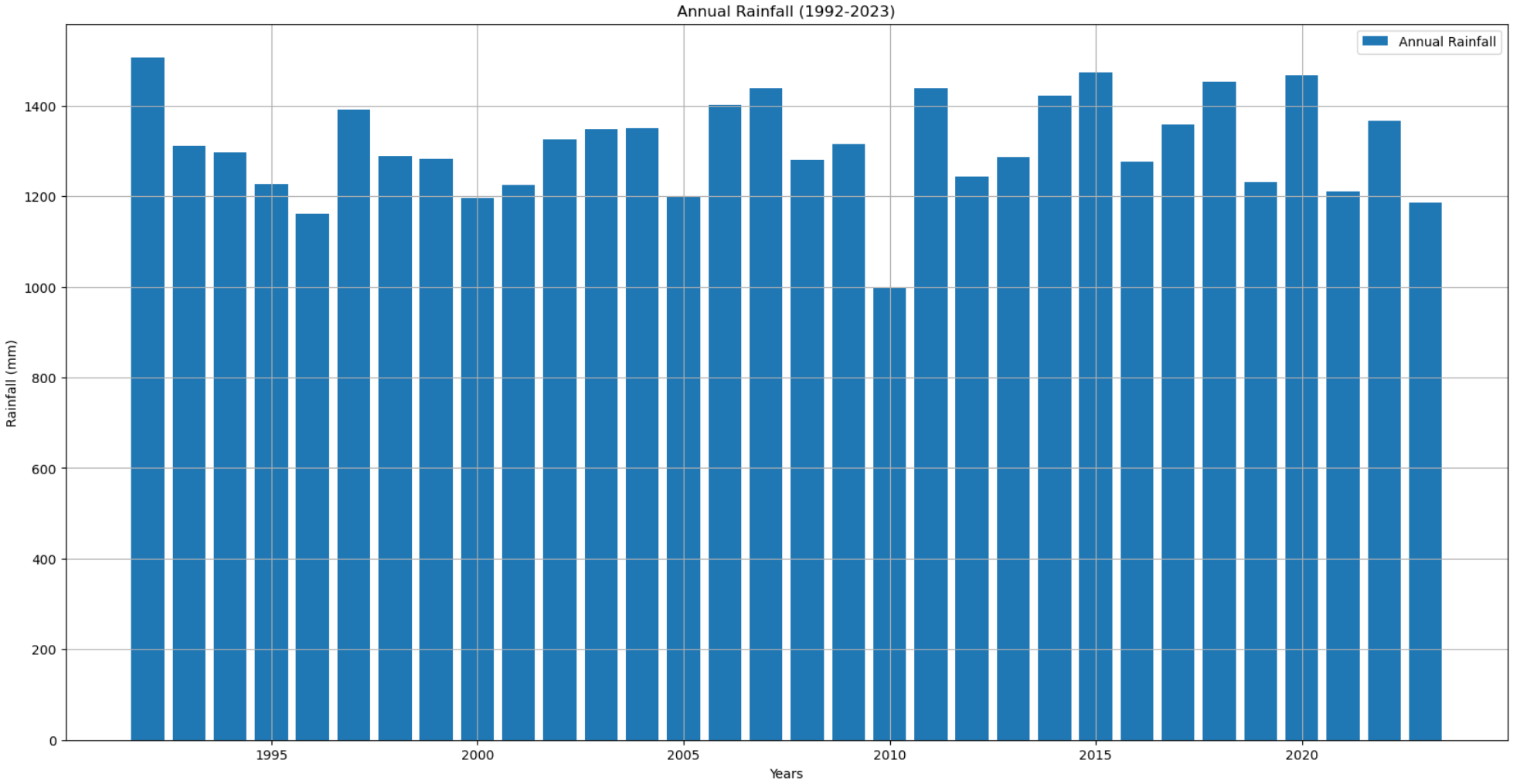




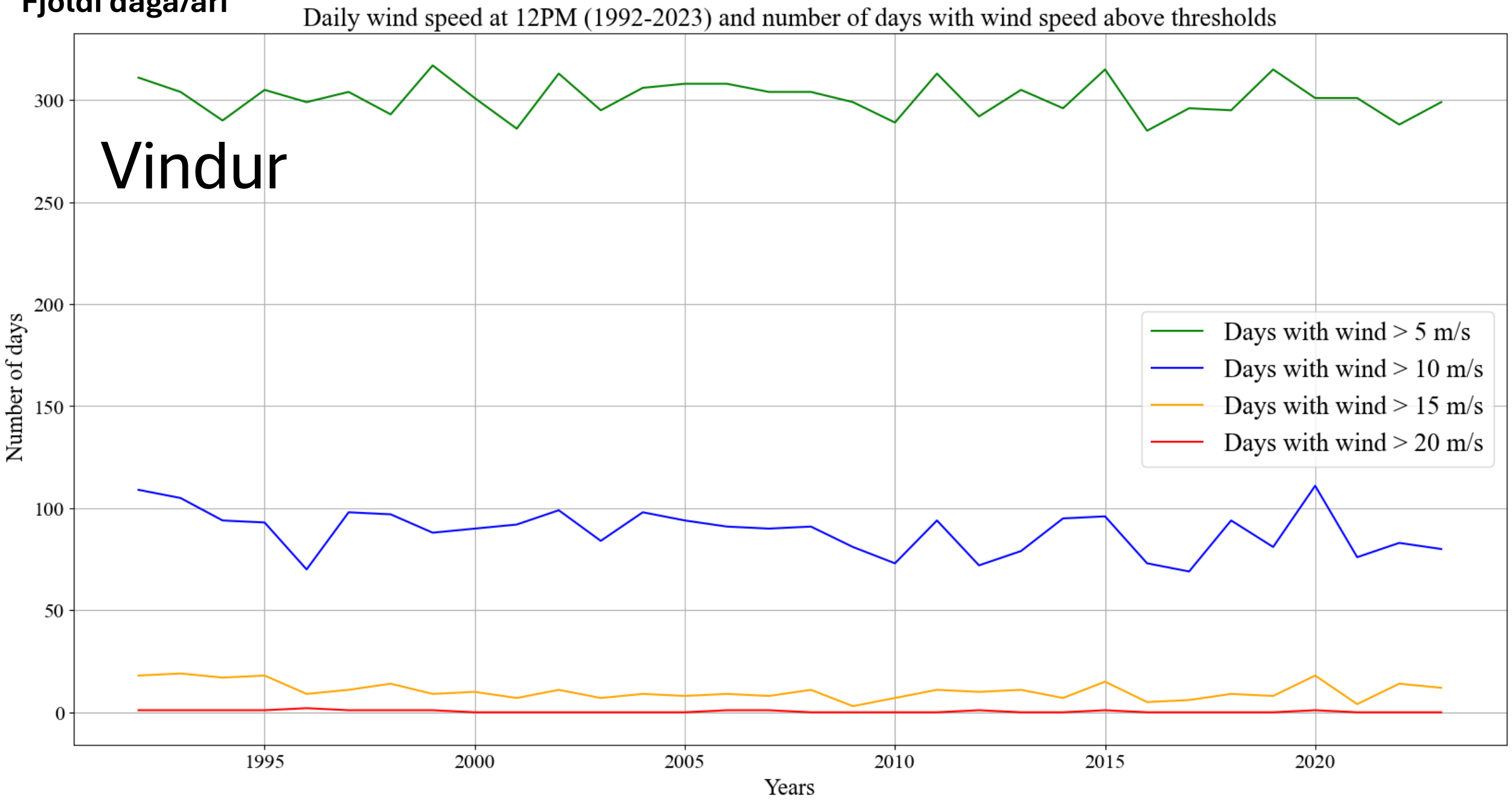

Gap of temperature in [°C] for janvier between (1991-2007) and (2008-2024)
Gap of temperature in [°C] for février between (1991-2007) and (2008-2024)
FEB
Gap of temperature in [°C] for mars between (1991-2007) and (2008-2024)
Gap of temperature in [°C] for avril between (1991-2007) and (2008-2024)
Gap of temperature in [°C] for mai between (1991-2007) and (2008-2024)
Gap of temperature in [°C] for juin between (1991-2007) and (2008-2024)
Gap of temperature in [°C] for juillet between (1991-2007) and (2008-2024)
Gap of temperature in [°C] for août between (1991-2007) and (2008-2024)
ÁGU
Gap of temperature in [°C] for septembre between (1991-2007) and (2008-2024)
Gap of temperature in [°C] for octobre between (1991-2007) and (2008-2024)
Gap of temperature in [°C] for novembre between (1991-2007) and (2008-2024)
Gap of temperature in [°C] for décembre between (1991-2007) and (2008-2024)
DES
Temperature en [°C]


Gap of temperature in [°C] for décembre between (1991-2007) and (2008-2024)
DES
4
2
0
−2
−4
Temperature en [°C]

Ársúrkoma

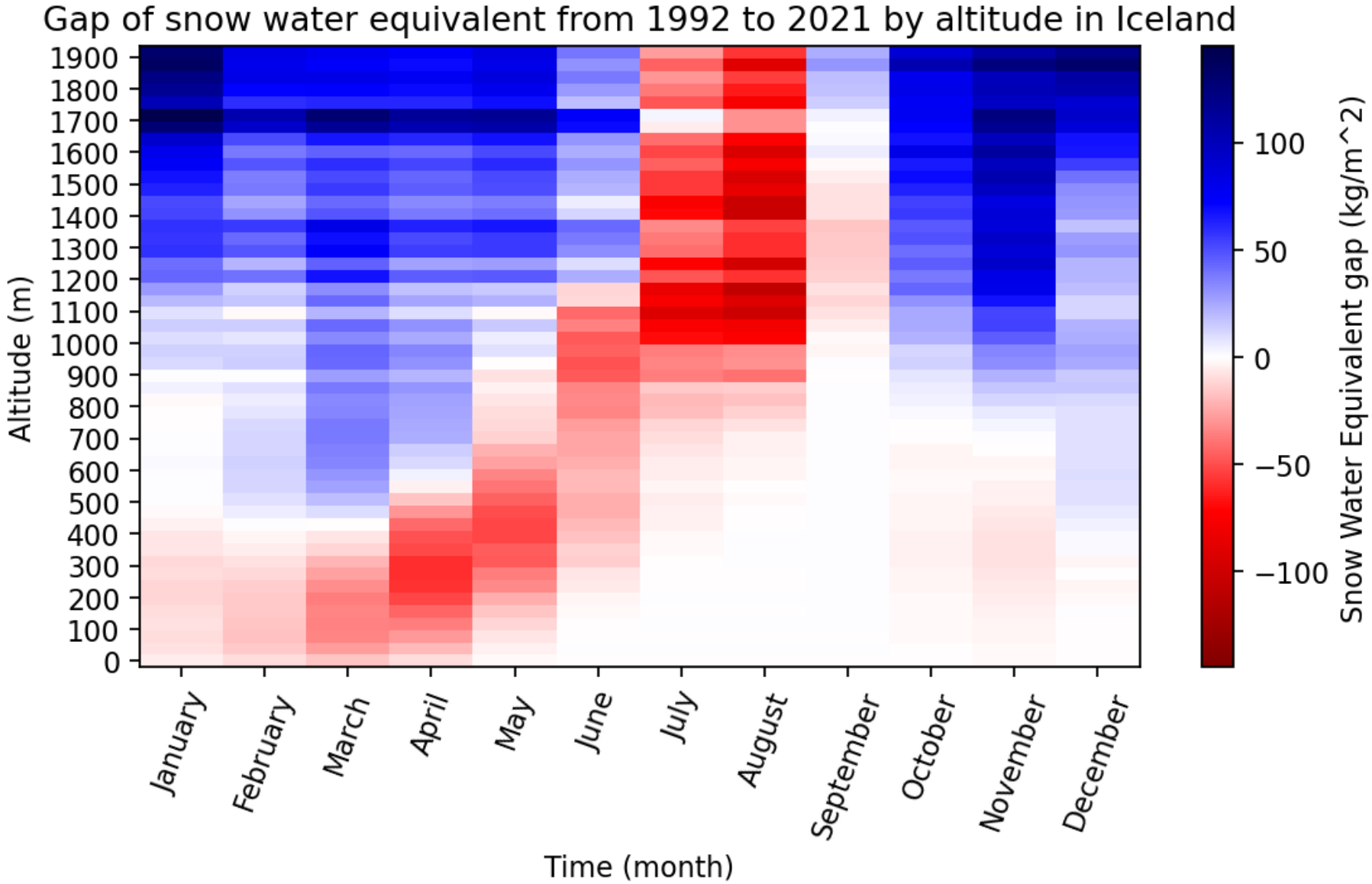

Annual Rainfall (1992-2023)
Annual Rainfall
Rainfall (mm)
0
200
400
600
800
1000
1200
1400
1995
2000
2005
2010
2015
2020
Years

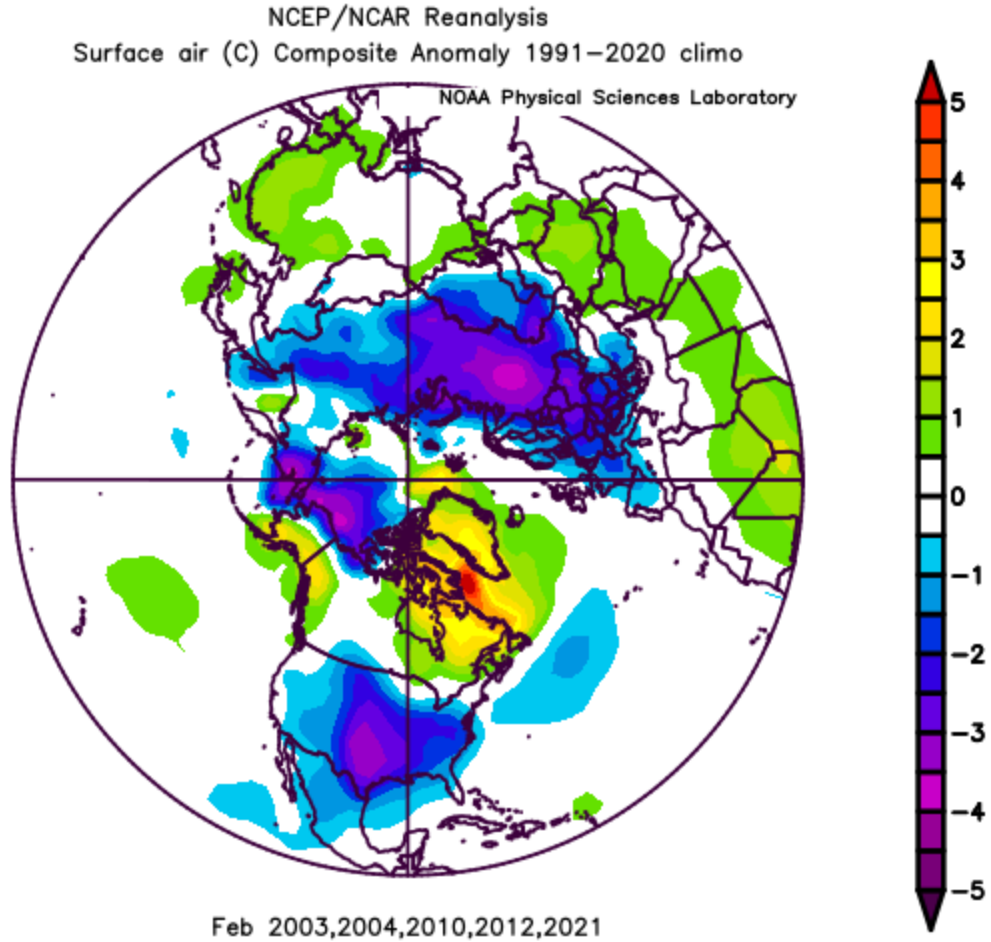
Fjöldi daga/ári



Nokkur helstu atriði um veðurfar sl. 3 áratugi

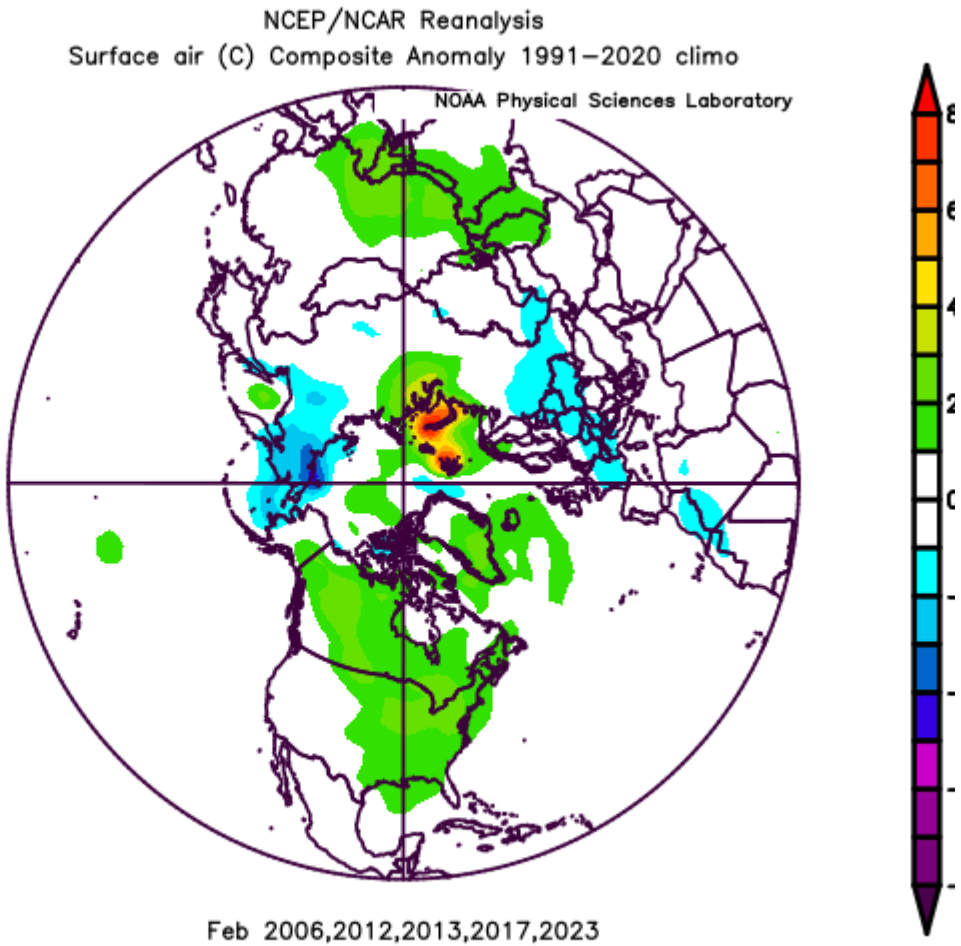
- Meðalofthiti á Íslandi hefur hækkað um tæpa gráðu 1992-2023
- Febrúar hefur hitnað mikið, en desember kólnað. Það tengist breytileika í tíðni vindátta
- Veturinn er næst því að vera flatbotna á lægsta láglendi
- Leitni í úrkomu og vindi virðist engin
- Snjór ofan um 500 m eykst lítillega að vetrarlagi, en minnkar þar fyrir neðan
- Það er vandamál í NV-lands í CARRA

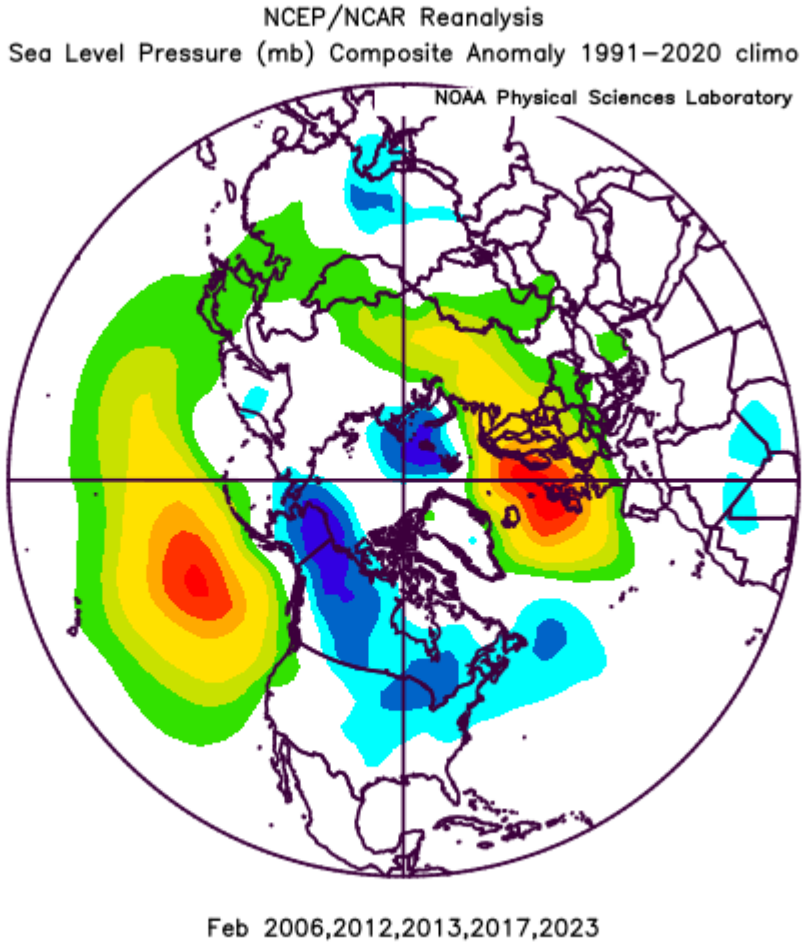

Gap of snow water equivalent from 1992 to 2021 by altitude in Iceland
Altitude (m)
1900
1800
1700
1600
1500
1400
1300
1200
1100
1000
900
800
700
600
500
400
300
200
100
0
January
February
March
April
May
June
July
August
September
October
November
December
Time (month)
100
50
0
−50
−100
Snow Water Equivalent gap (kg/m^2)


NCEP/NCAR Reanalysis
Surface air (C) Composite Anomaly 1991–2020 climo
NOAA Physical Sciences Laboratory
Feb 2003,2004,2010,2012,2021
5
4
3
2
1
0
−1
−2
−3
−4
−5

Február

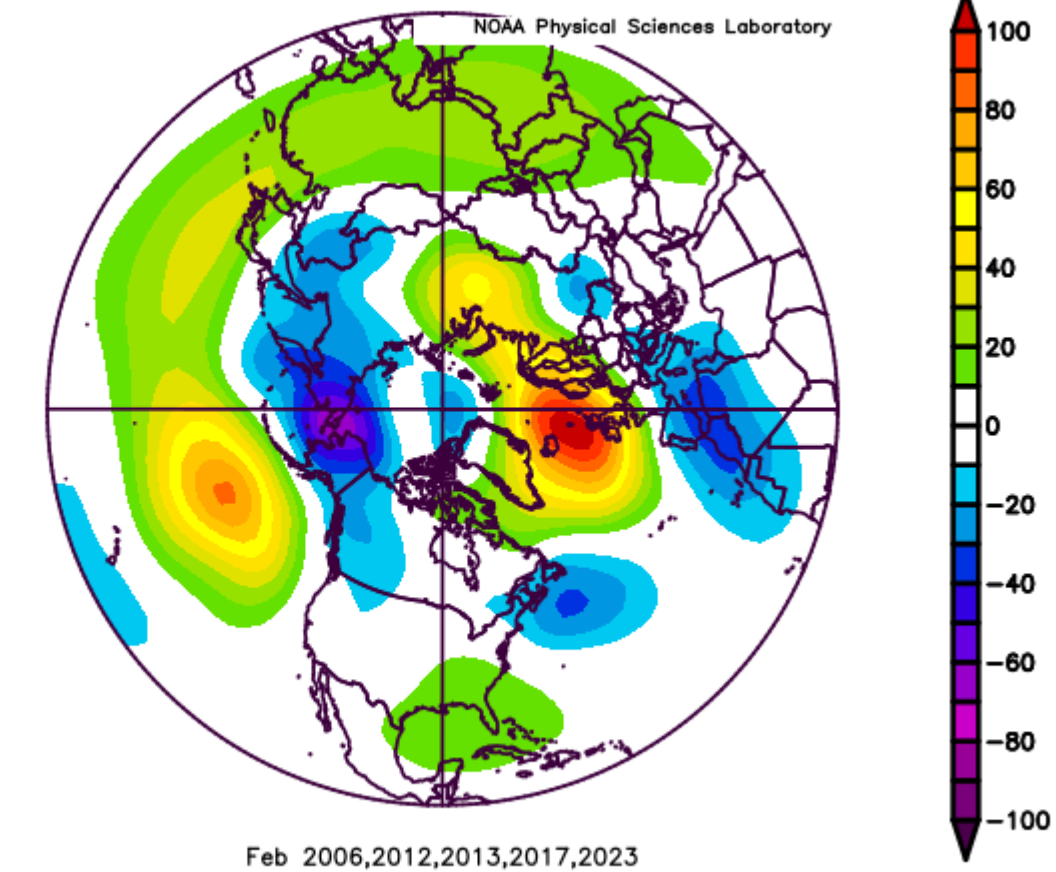
Hlýr febrúar





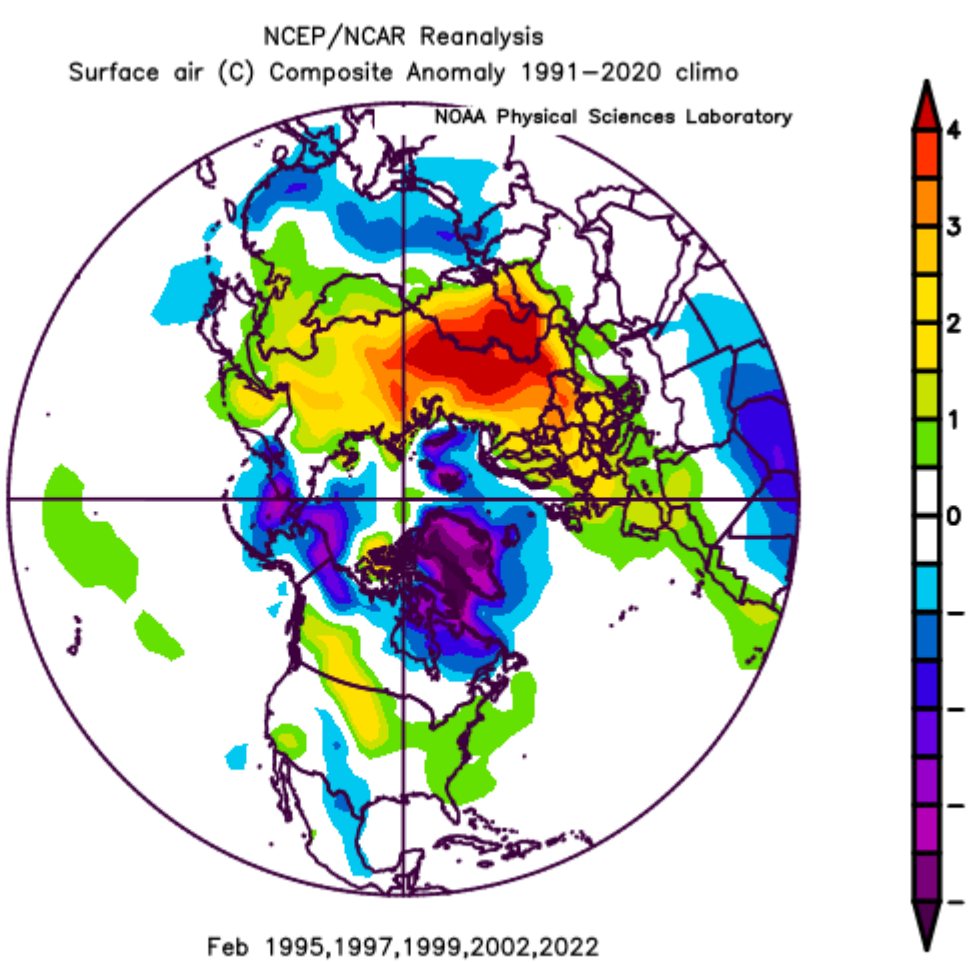
NCEP/NCAR Reanalysis

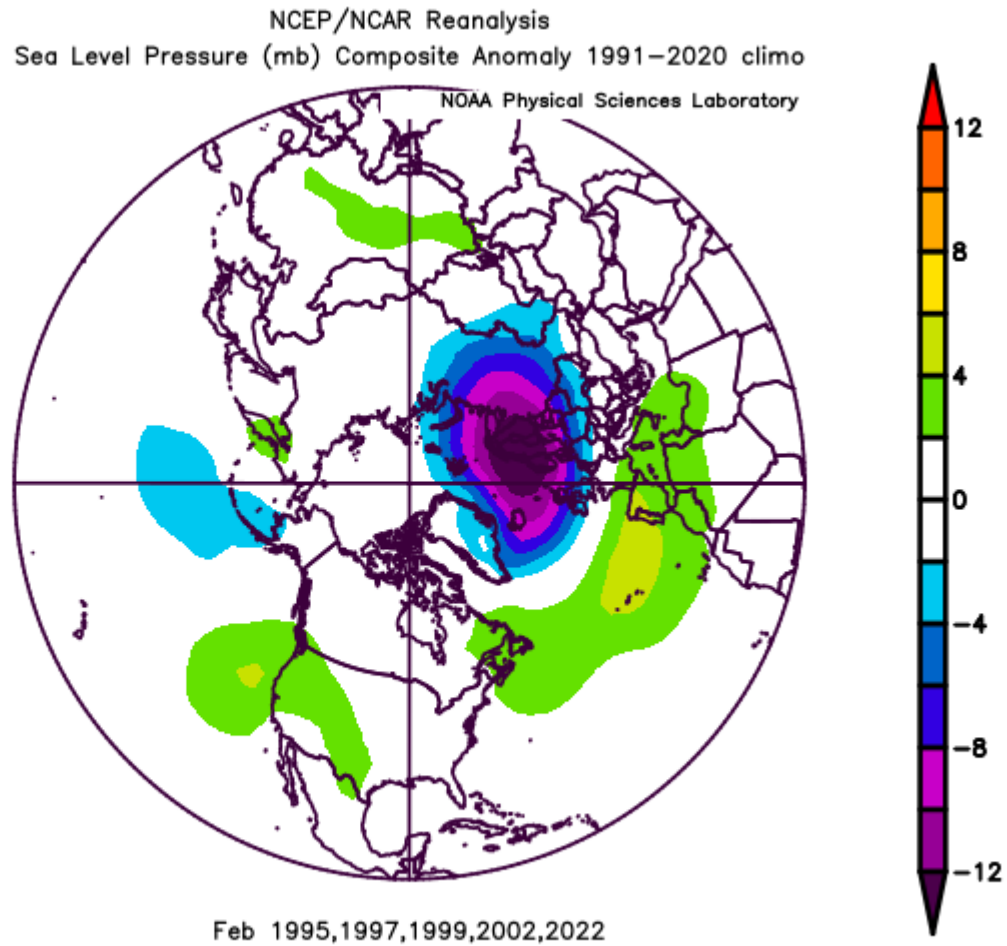
500mb Geopotential Height (m) Composite Anomaly 1991–2020 climo



Feb 2006,2012,2013,2017,2023

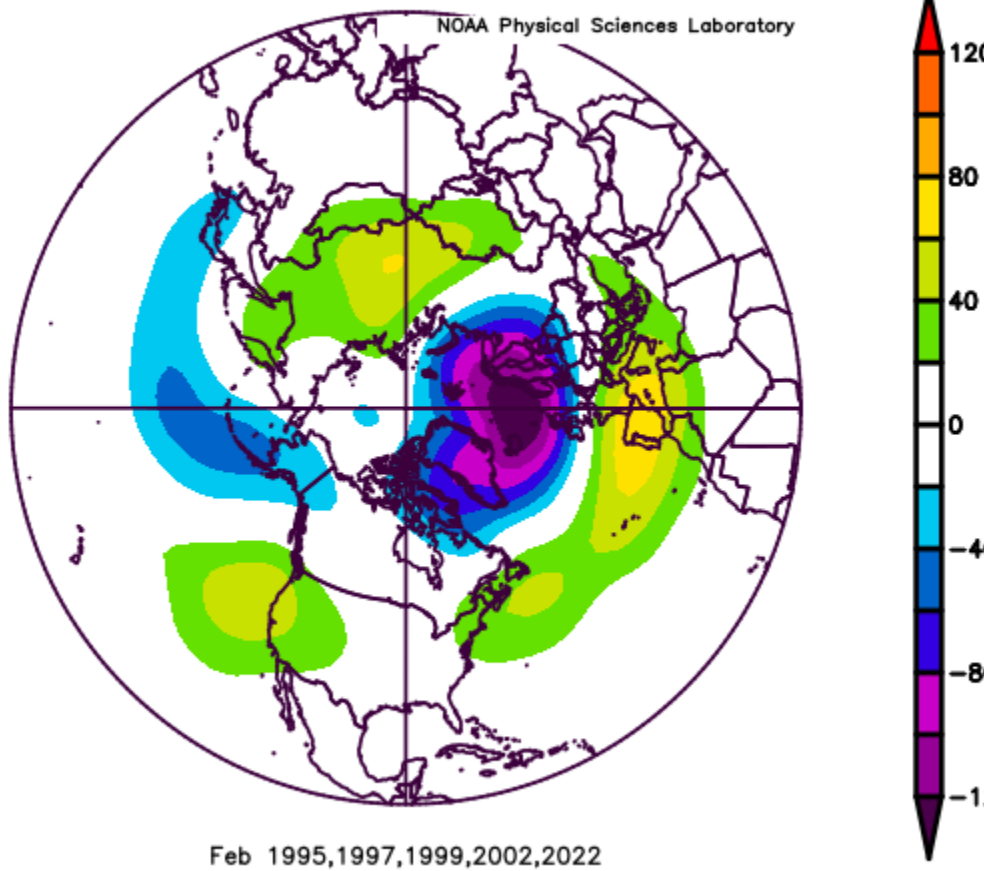
Kaldur febrúar





NCEP/NCAR Reanalysis

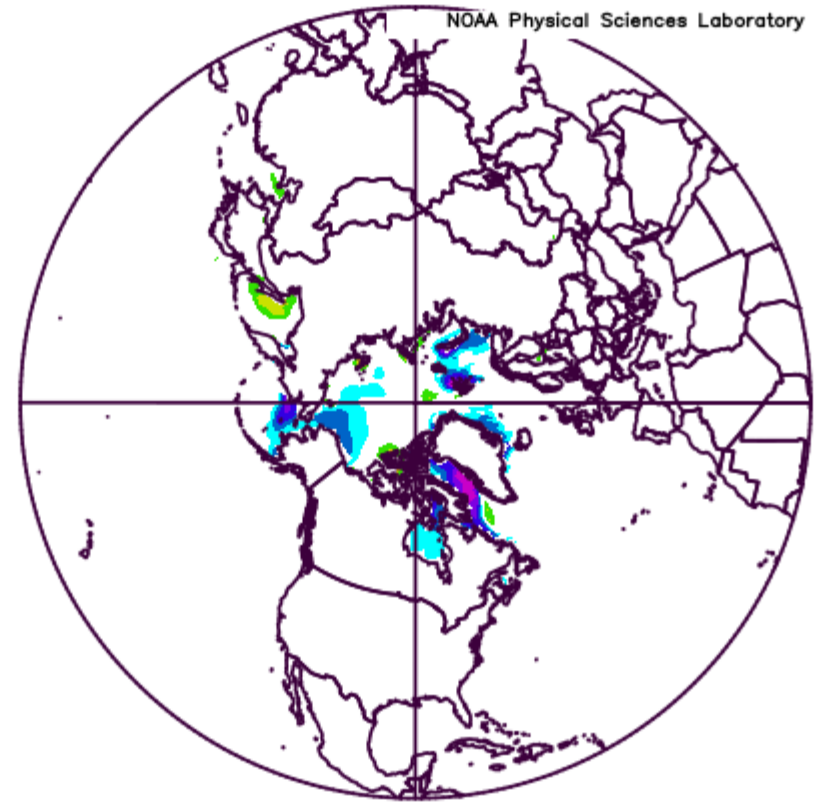
500mb Geopotential Height (m) Composite Anomaly 1991–2020 climo



Feb 1995,1997,1999,2002,2022

NCEP/NCAR Reanalysis

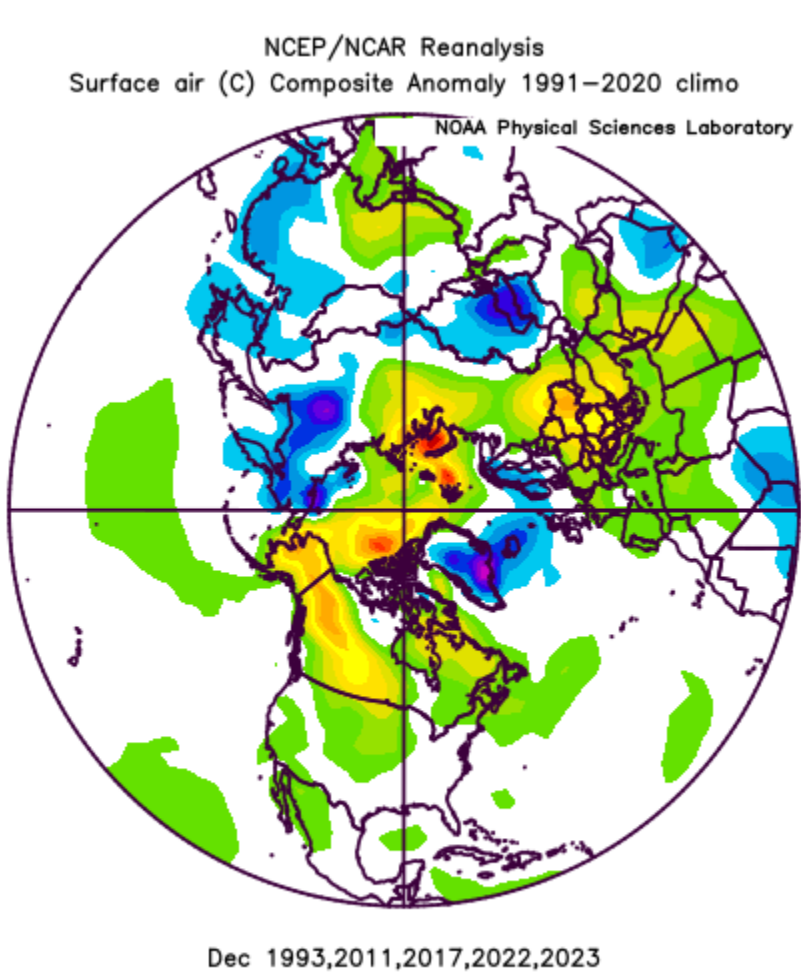
Surface Skin Temperature(SST) (K) Composite Anomaly 1991–2020 climo

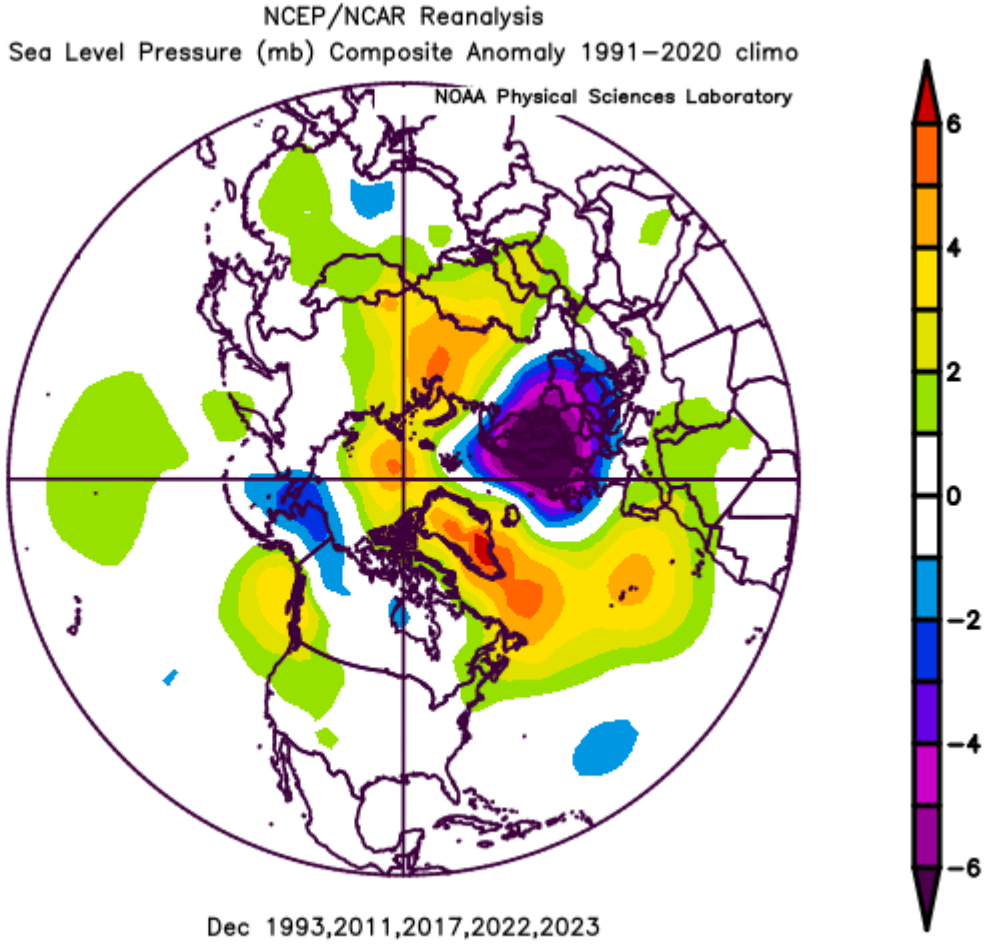


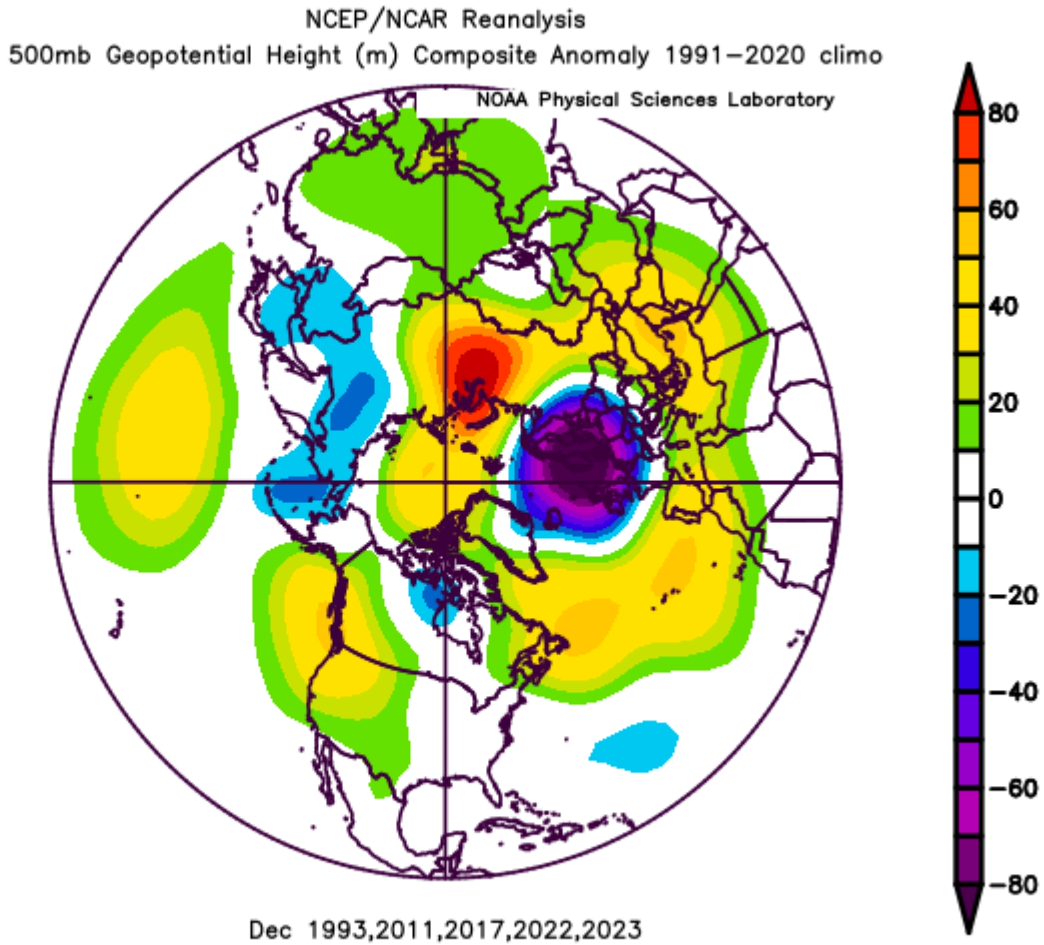
Feb 1995,1997,1999,2002,2022

desember

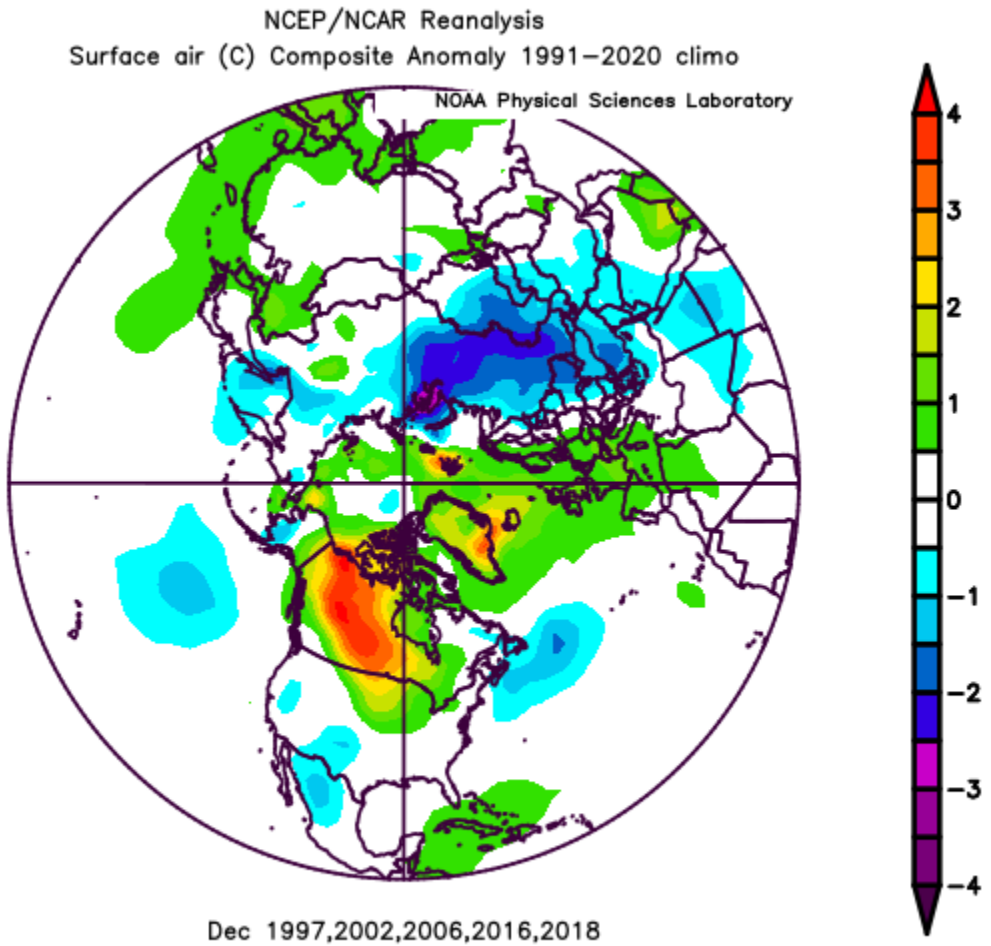
Kaldur desember

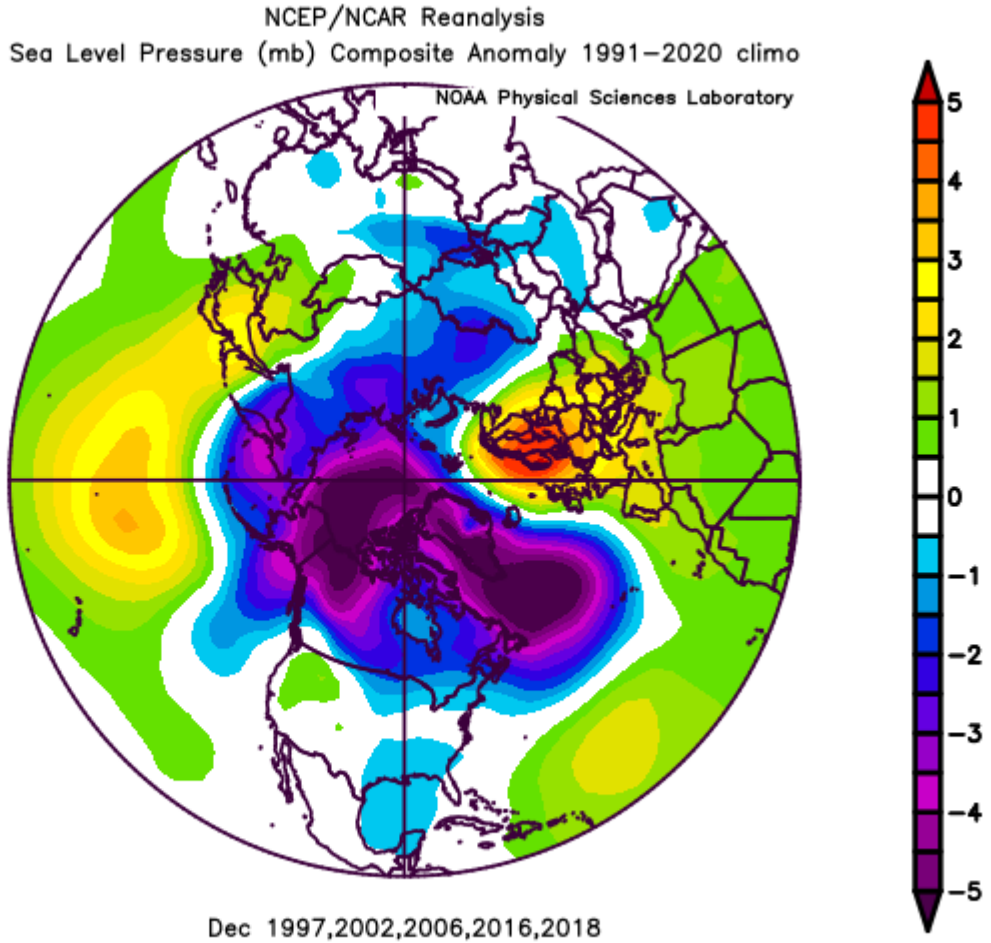




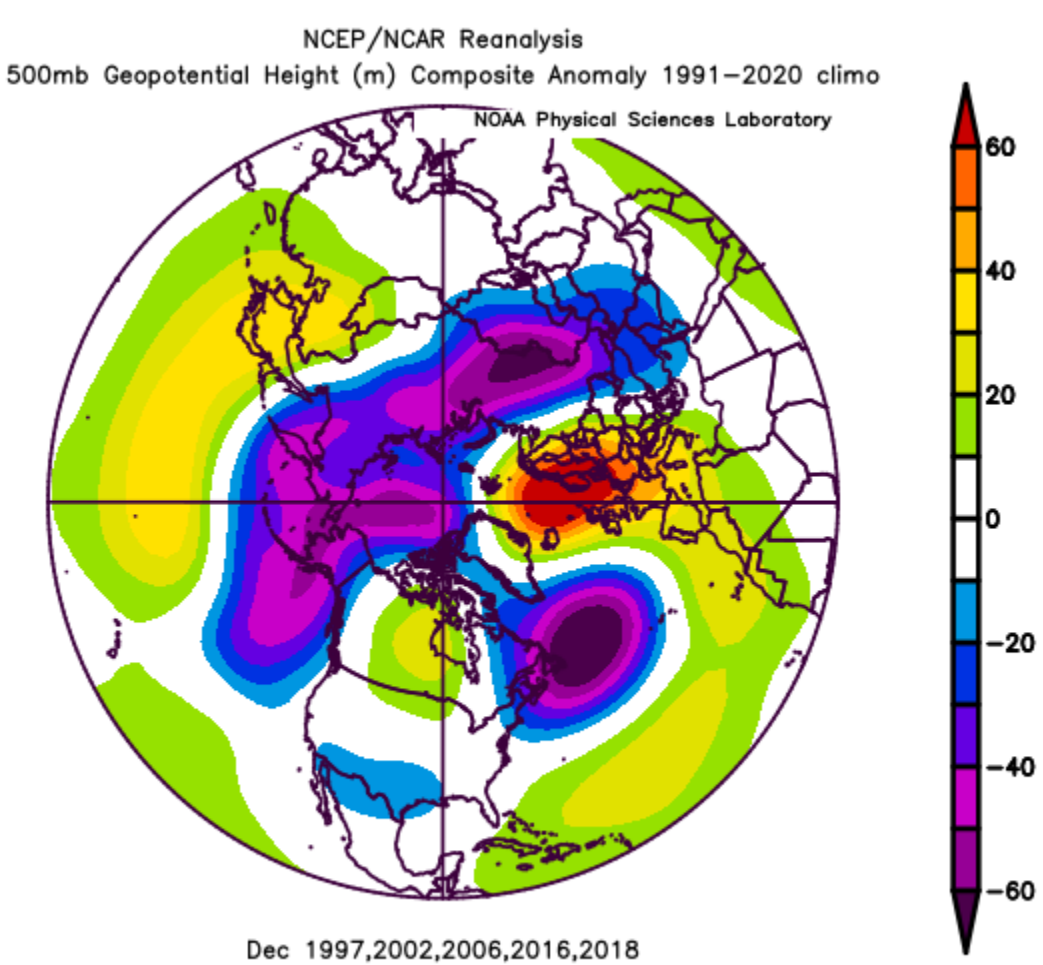

NCEP/NCAR Reanalysis
500mb Geopotential Height (m) Composite Anomaly 1991–2020 climo
NOAA Physical Sciences Laboratory
Dec 1993,2011,2017,2022,2023
80
60
40
20
0
−20
−40
−60
−80

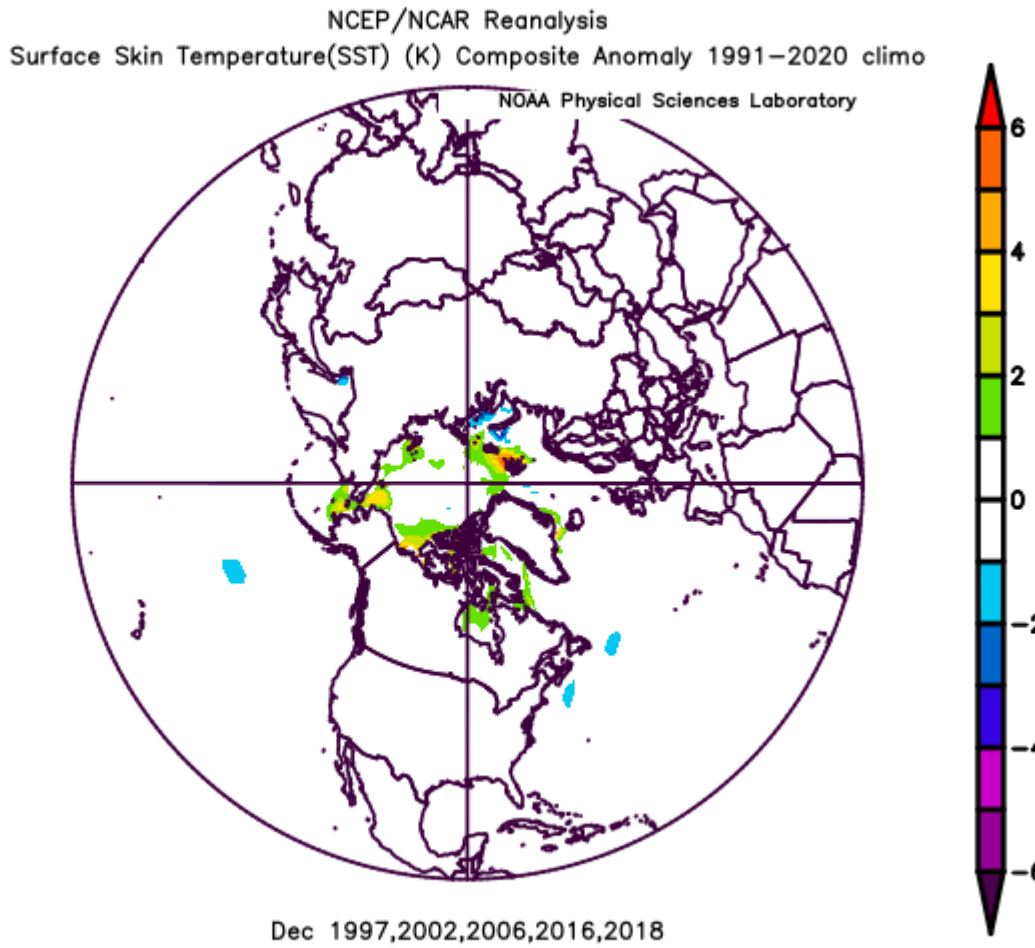
Hlýr desember



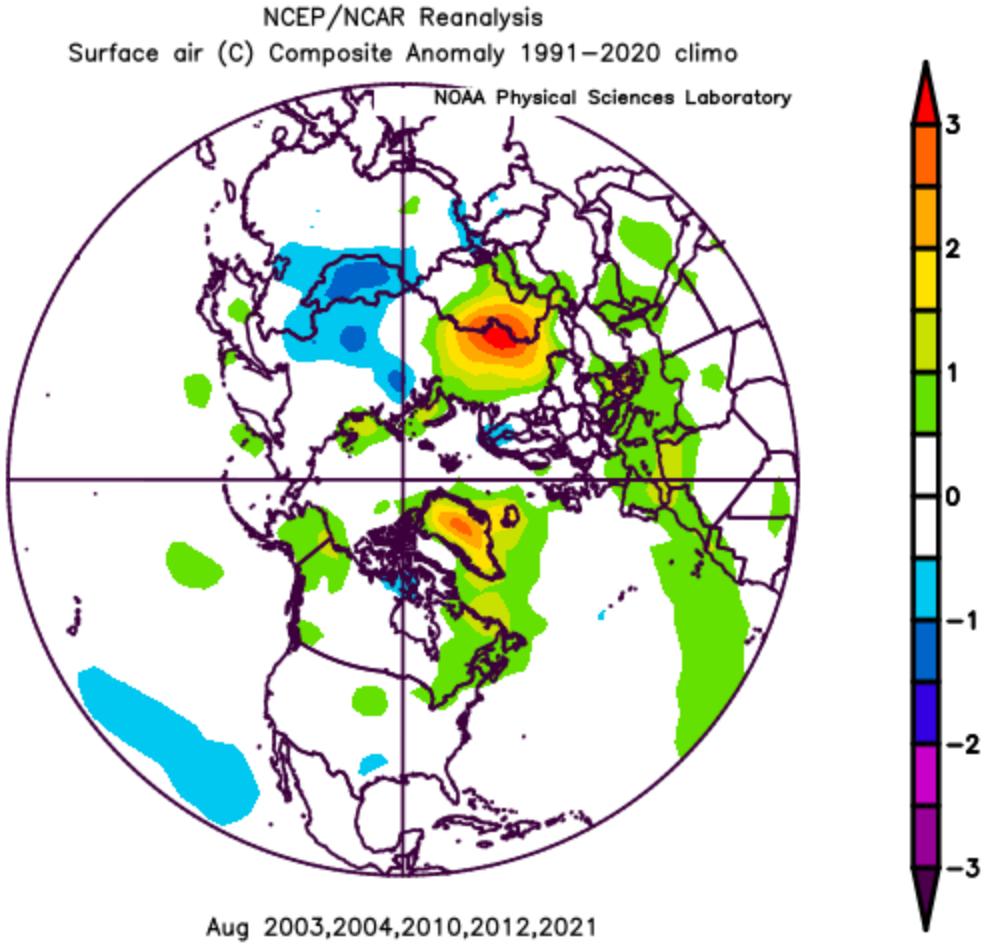


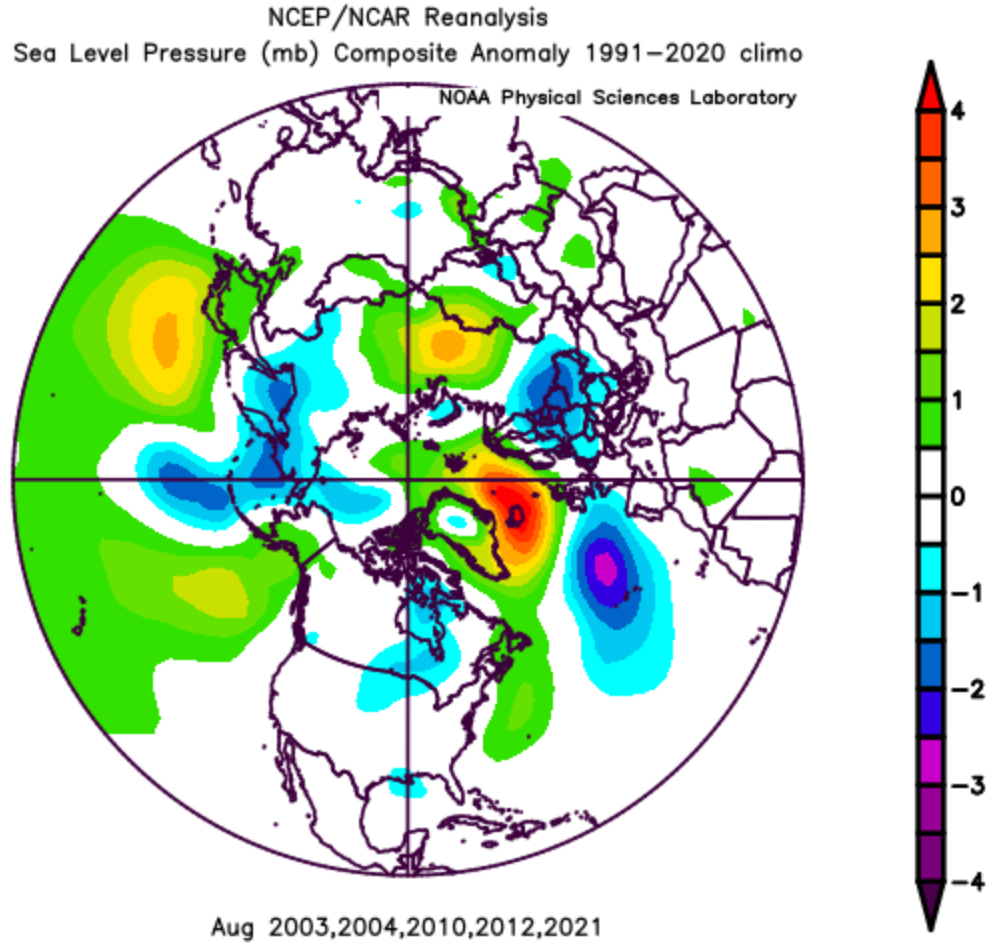
Hlýr desember

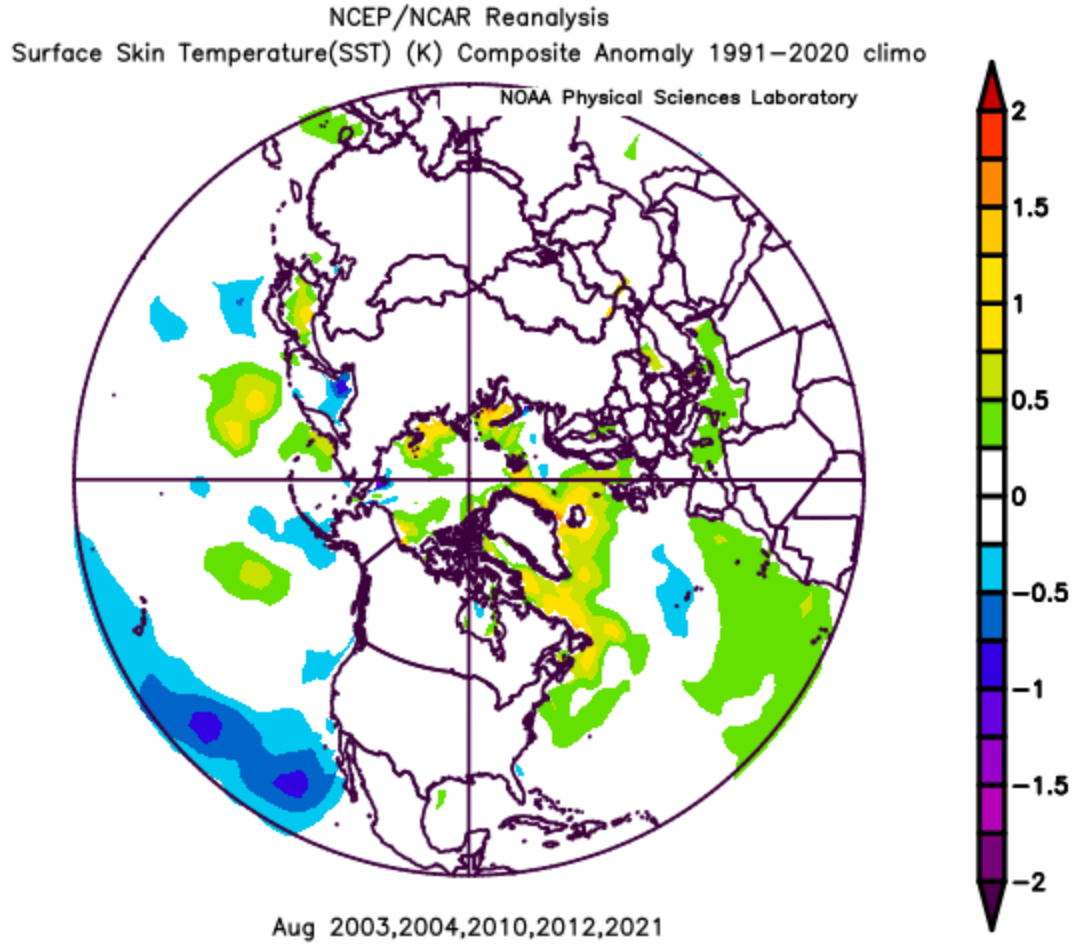


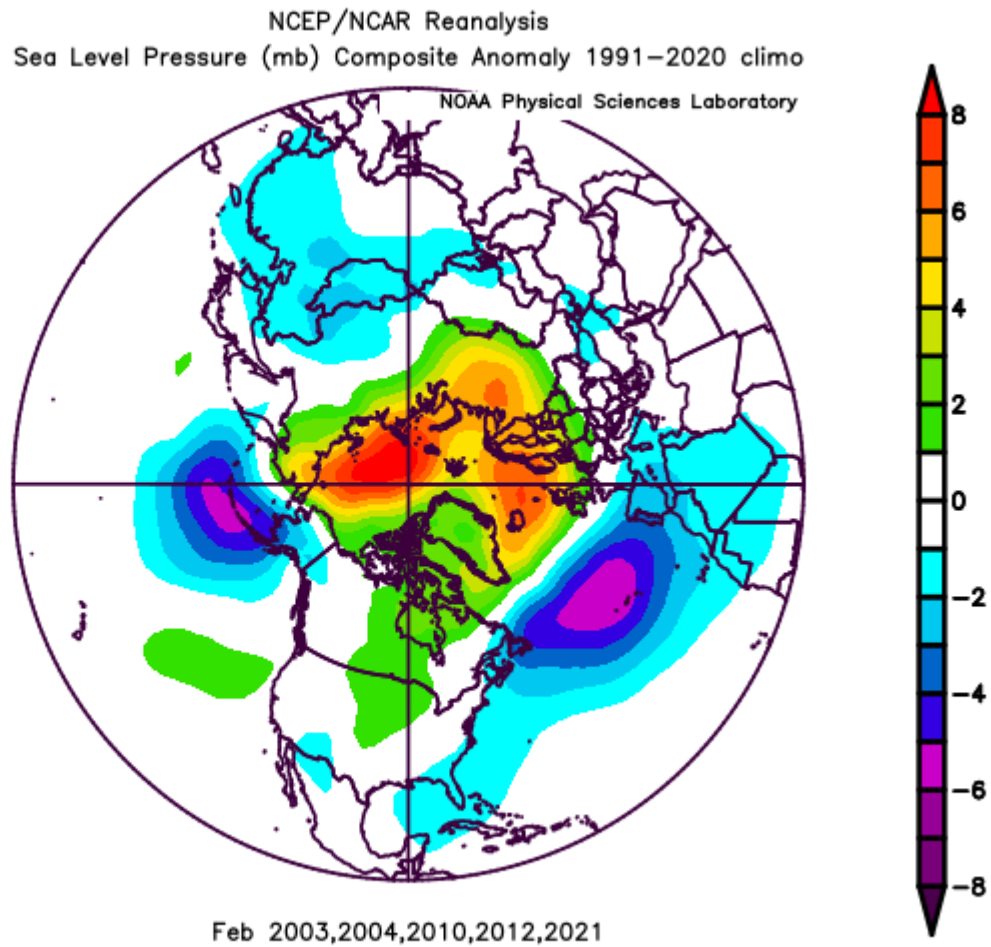


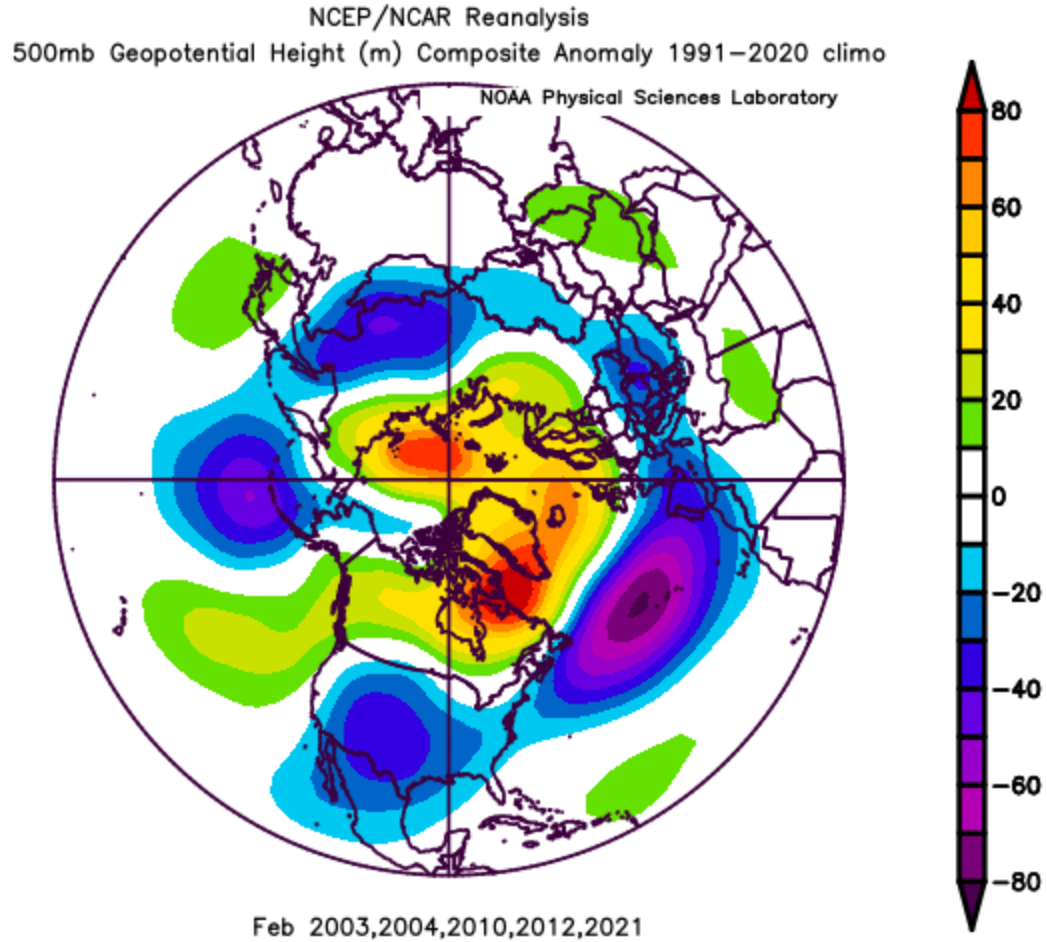
ágúst


NCEP/NCAR Reanalysis
Surface air (C) Composite Anomaly 1991–2020 climo
NOAA Physical Sciences Laboratory
3
2
1
0
−1
−2
−3
Aug 2003,2004,2010,2012,2021


NCEP/NCAR Reanalysis
Sea Level Pressure (mb) Composite Anomaly 1991–2020 climo
NOAA Physical Sciences Laboratory
Aug 2003,2004,2010,2012,2021
4
3
2
1
0
−1
−2
−3
−4

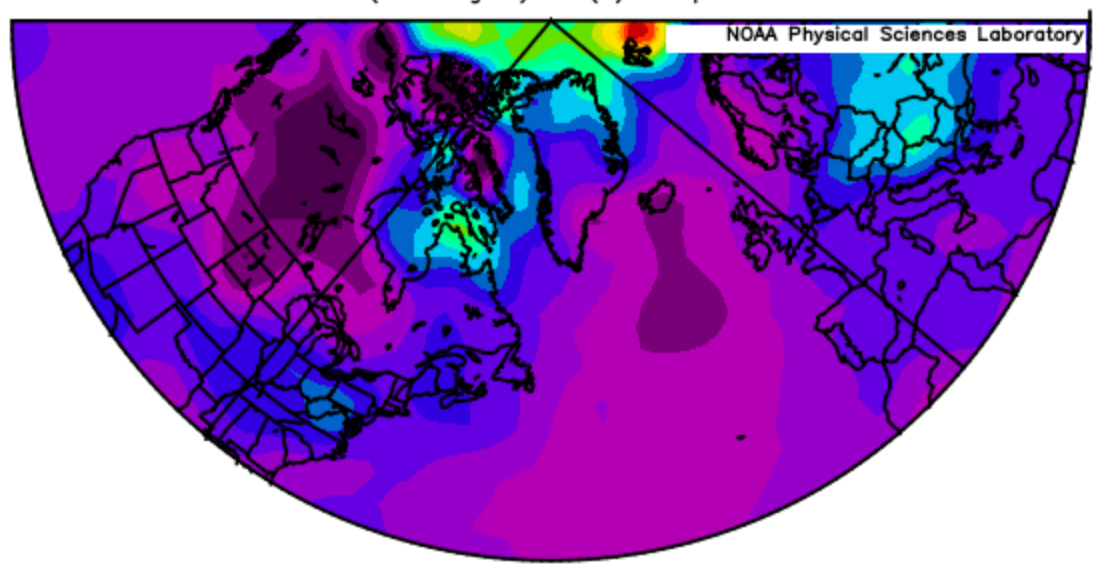

NCEP/NCAR Reanalysis
Surface Skin Temperature(SST) (K) Composite Anomaly 1991−2020 climo
NOAA Physical Sciences Laboratory
2
1.5
1
0.5
0
−0.5
−1
−1.5
−2
Aug 2003,2004,2010,2012,2021


NCEP/NCAR Reanalysis
Sea Level Pressure (mb) Composite Anomaly 1991–2020 climo
NOAA Physical Sciences Laboratory
8
6
4
2
0
−2
−4
−6
−8
Feb 2003,2004,2010,2012,2021

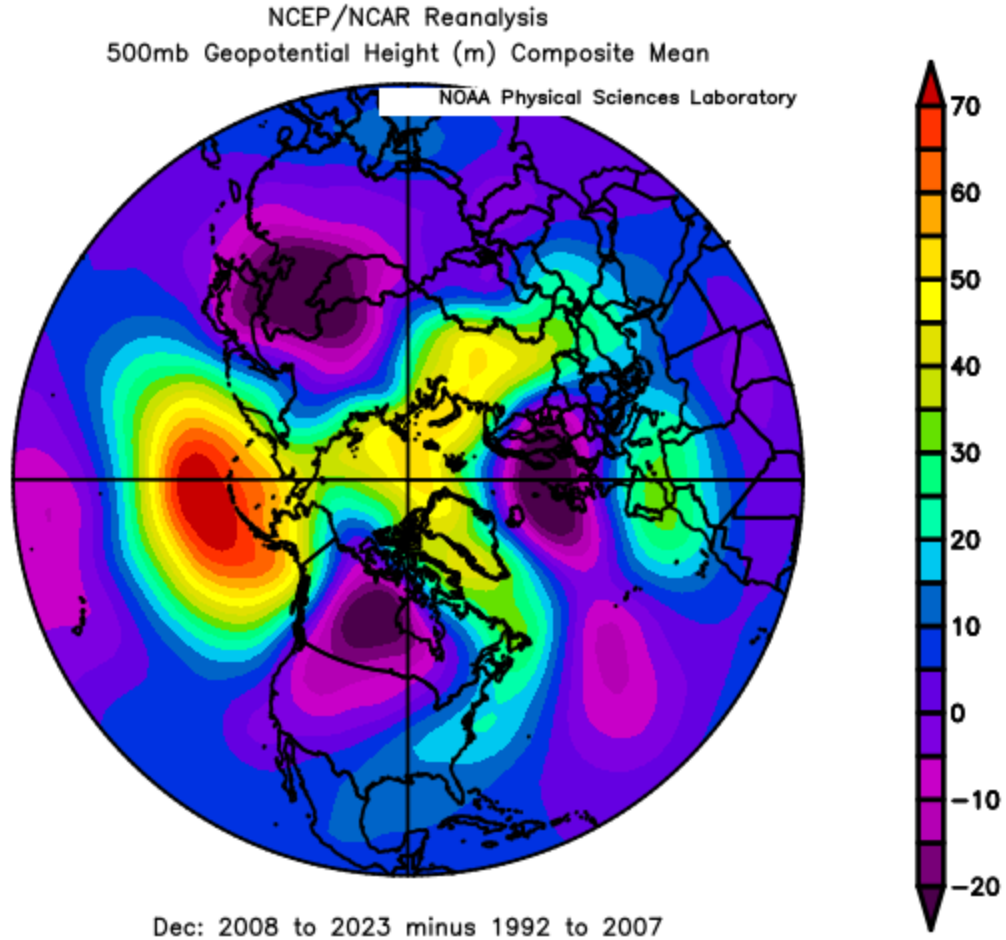

NCEP/NCAR Reanalysis
500mb Geopotential Height (m) Composite Anomaly 1991–2020 climo
NOAA Physical Sciences Laboratory
80
60
40
20
0
−20
−40
−60
−80
Feb 2003,2004,2010,2012,2021

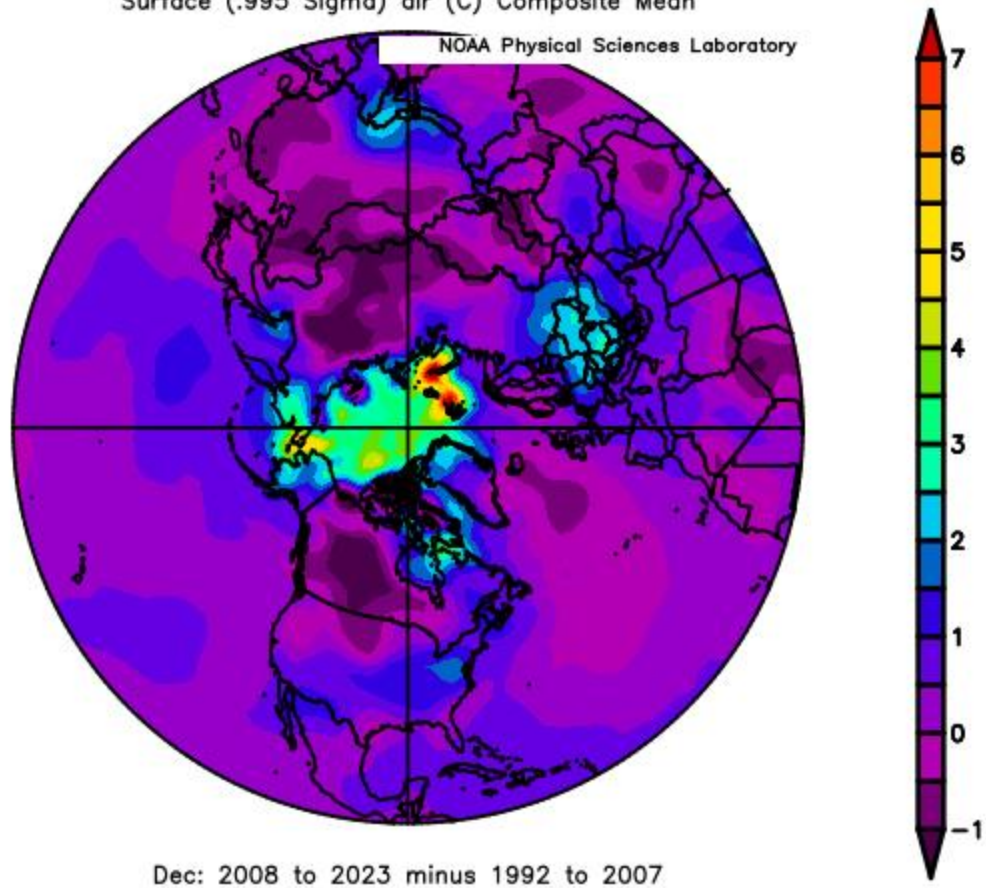
NCEP/NCAR Reanalysis

Surface (.995 Sigma) air (C) Composite Mean



Dec: 2008 to 2023 minus 1992 to 2007


NCEP/NCAR Reanalysis
500mb Geopotential Height (m) Composite Mean
NOAA Physical Sciences Laboratory
70
60
50
40
30
20
10
0
−10
−20
Dec: 2008 to 2023 minus 1992 to 2007


NCEP/NCAR Reanalysis
Surface (.995 Sigma) air (C) Composite Mean
NOAA Physical Sciences Laboratory
7
6
5
4
3
2
1
0
−1
Dec: 2008 to 2023 minus 1992 to 2007