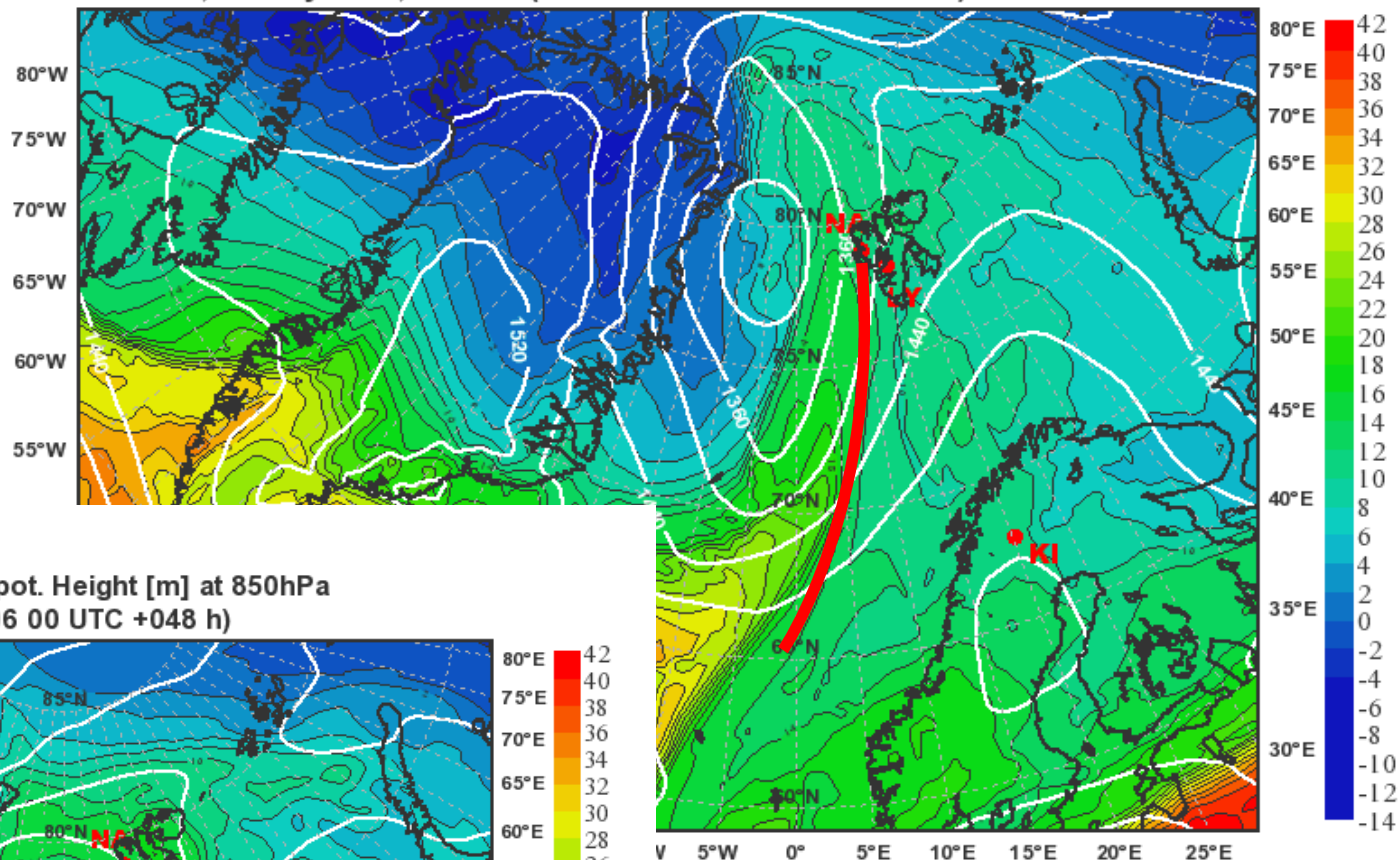


# **Weather Forecast**

**Wednesday May 06, 2010**

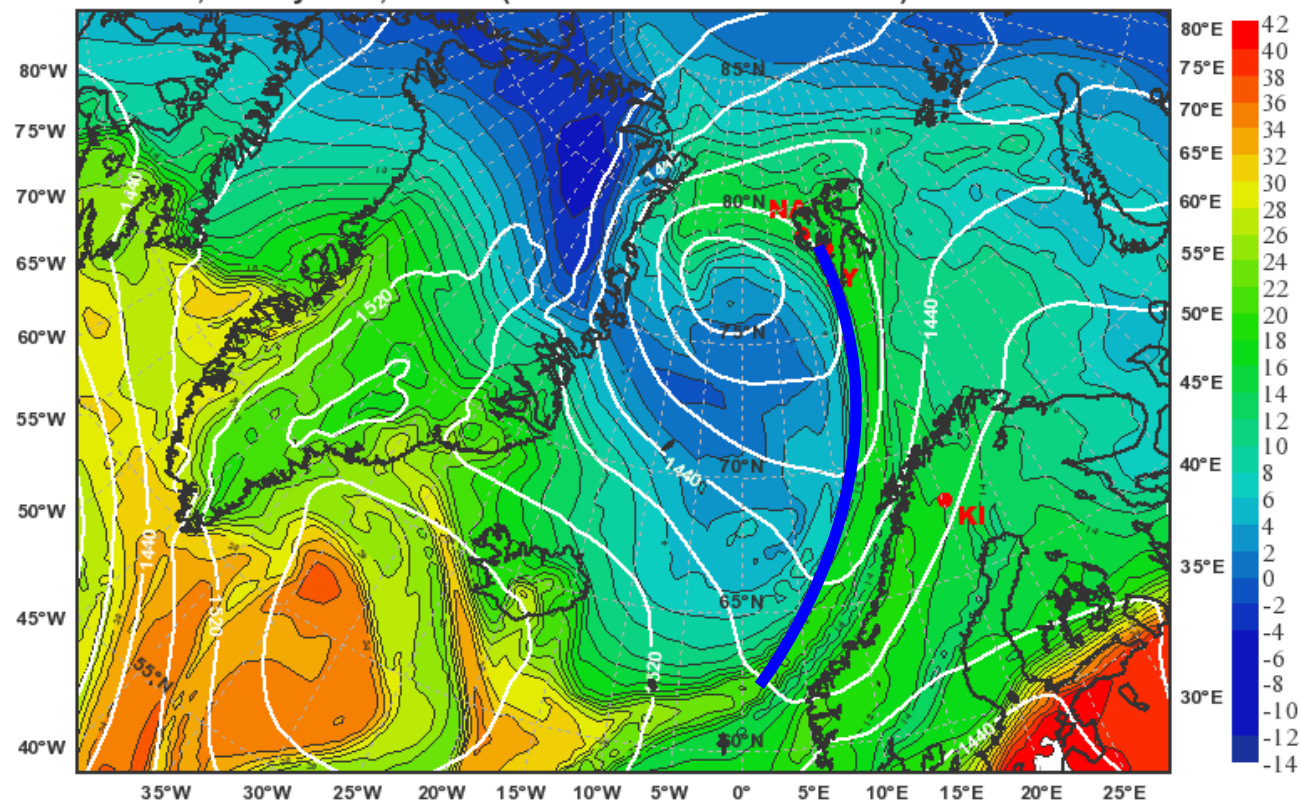
**Marc Rautenhaus, DLR/IPA**

Equivalent Potential Temperature [°C] & Geopot. Height [m] at 850hPa  
 valid: Fri, 07 May 2010, 00 UTC (init: 20100506 00 UTC +024 h)



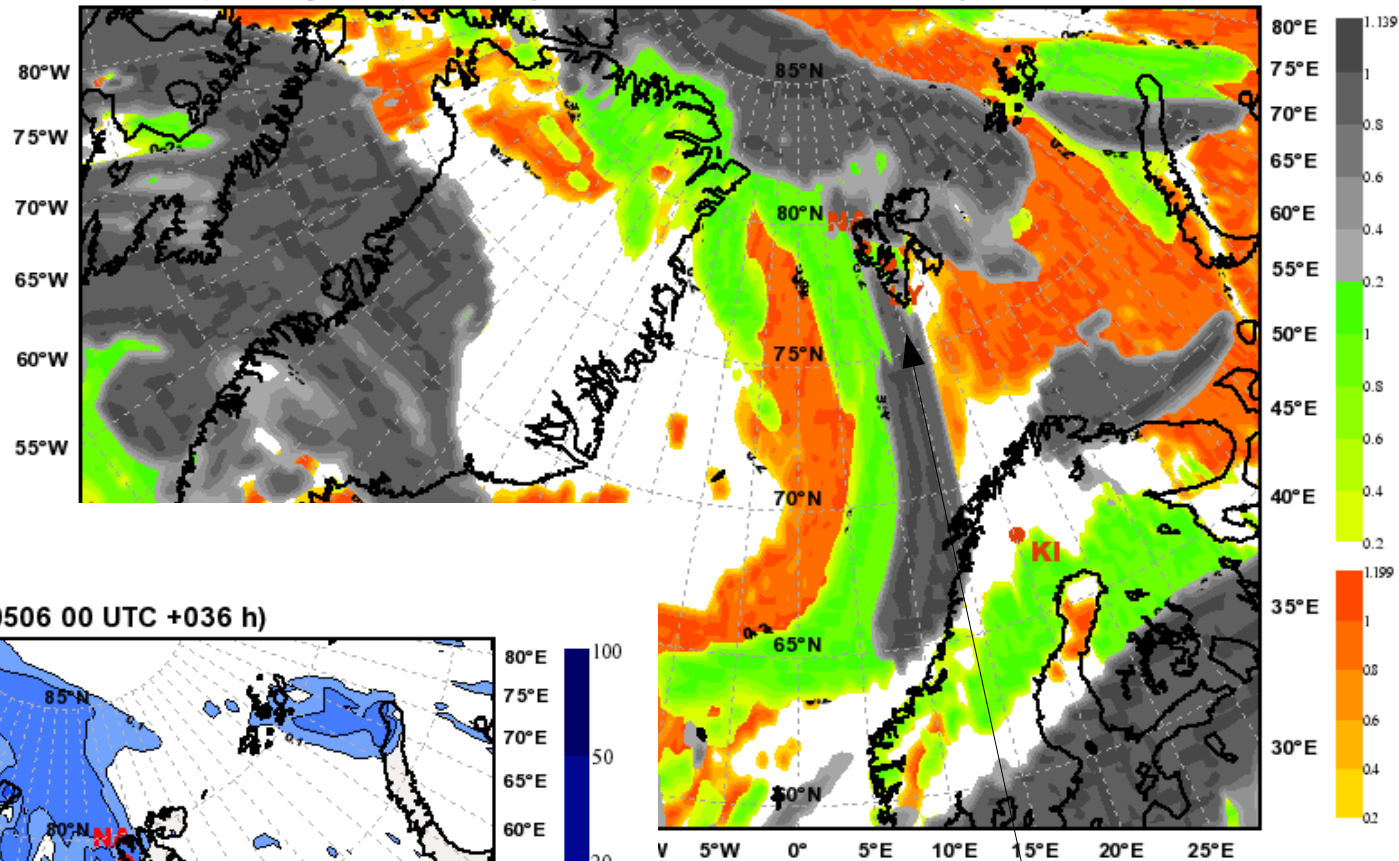
**Cold and warm front hit  
 LY around Fri 00 UTC  
 and Sat 00 UTC.**

Equivalent Potential Temperature [°C] & Geopot. Height [m] at 850hPa  
 valid: Sat, 08 May 2010, 00 UTC (init: 20100506 00 UTC +048 h)

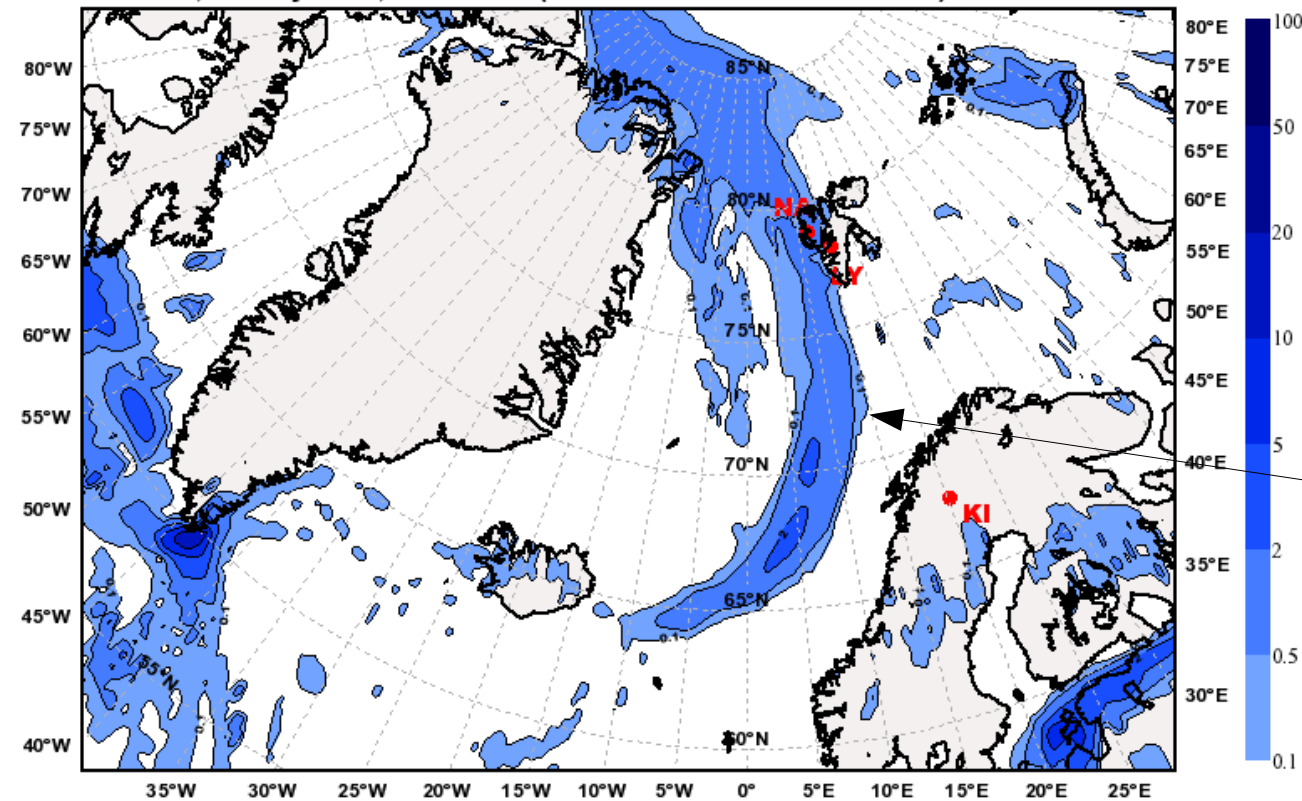


Thick clouds and some precipitation on Friday.

Total Cloud Cover  
valid: Fri, 07 May 2010, 12 UTC (init: 20100506 00 UTC +036 h)

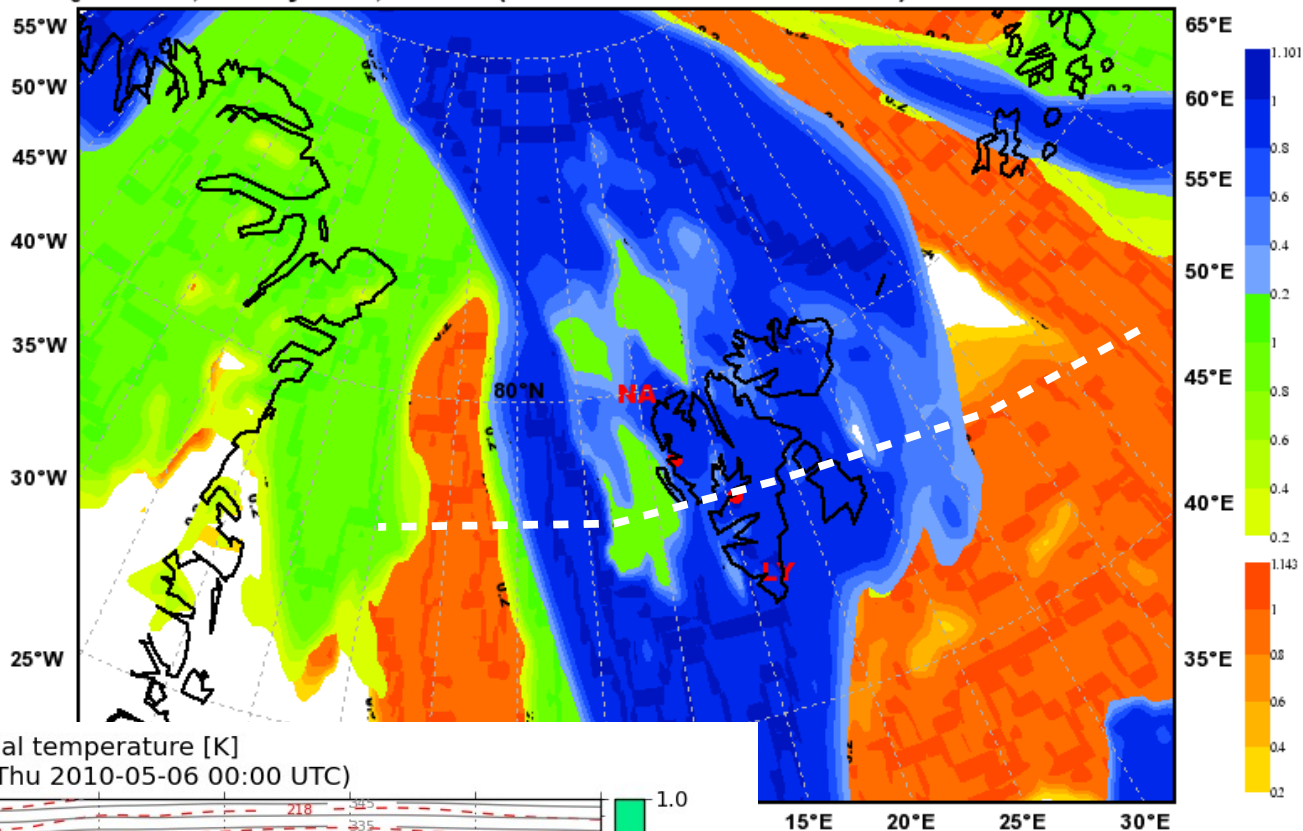


Total Precipitation [mm]  
valid: Fri, 07 May 2010, 09-12 UTC (init: 20100506 00 UTC +036 h)



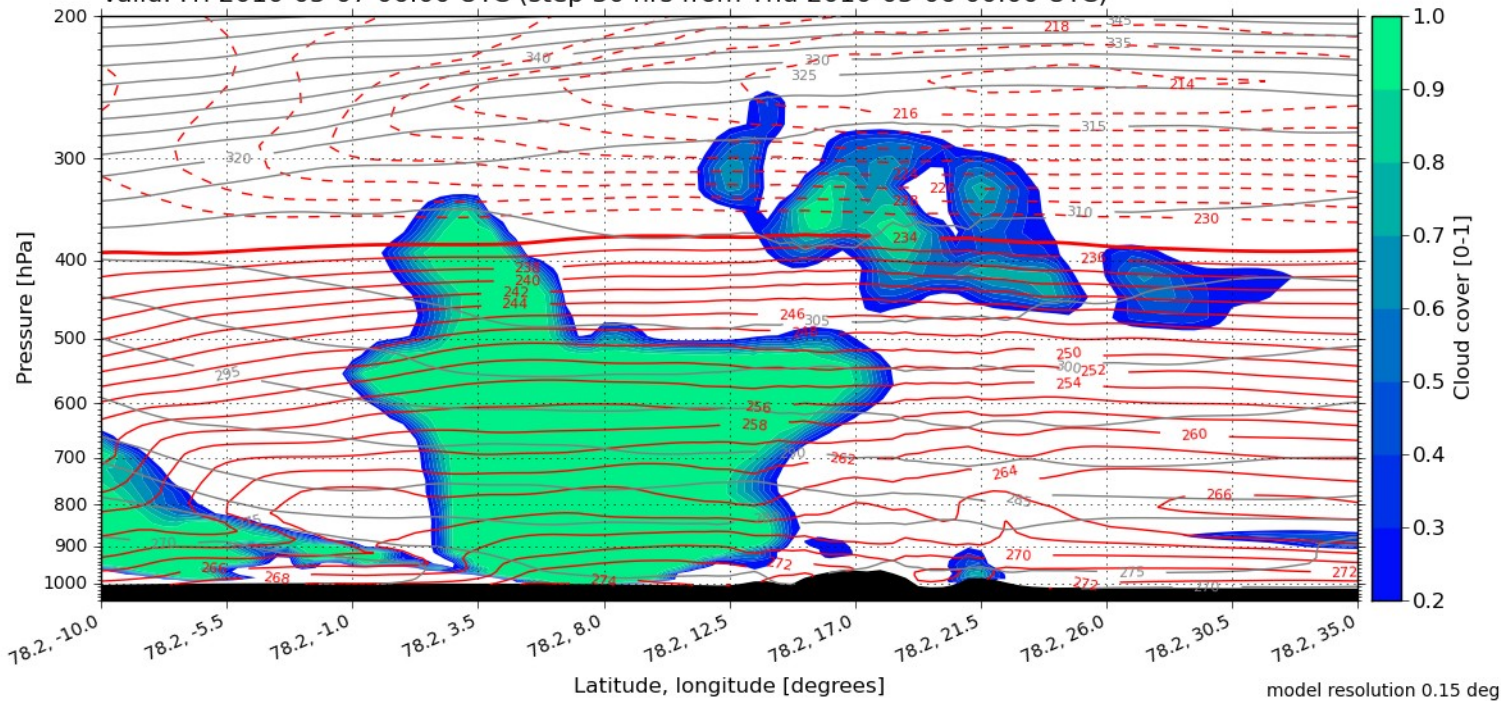
Front

Total Cloud Cover  
Valid: Fri, 07 May 2010, 06 UTC (init: 20100506 00 UTC +030 h)

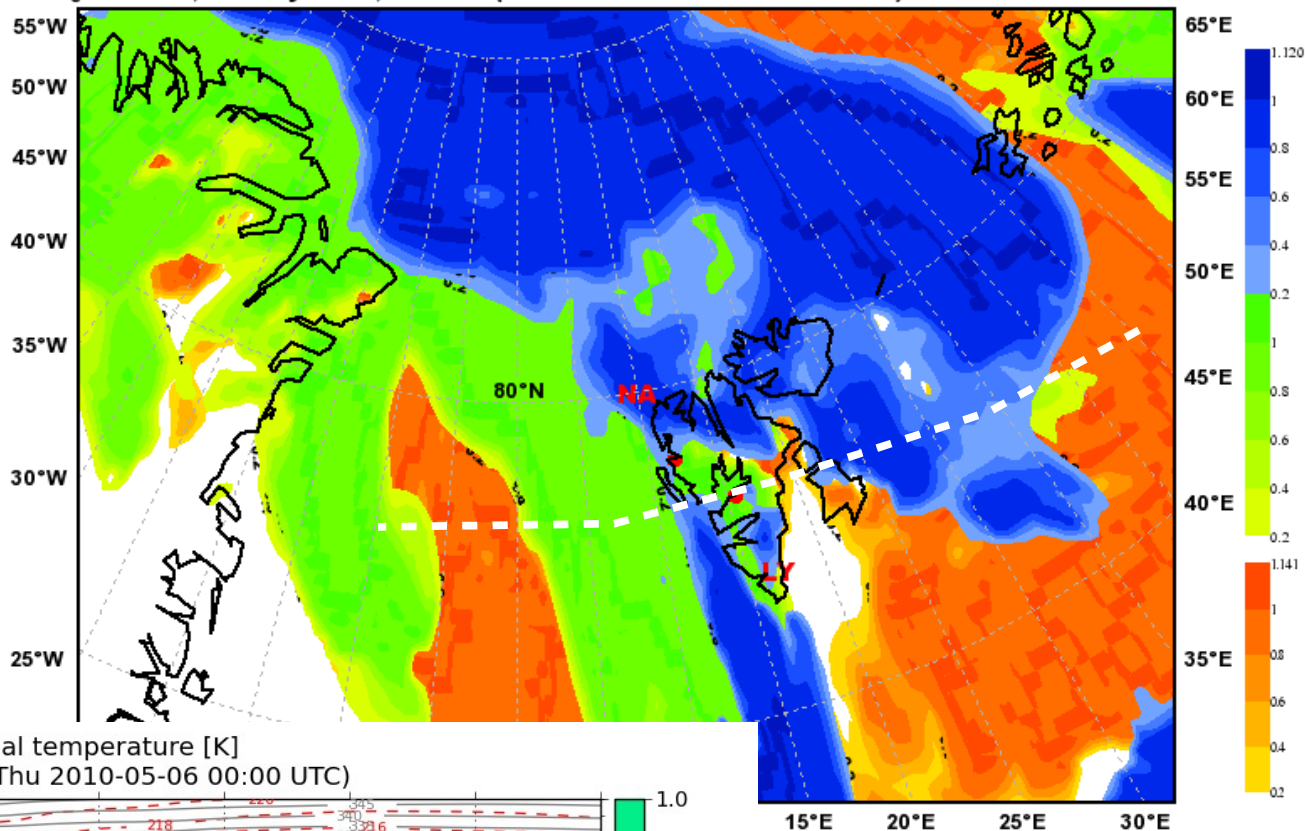


## E-W along 78N

Cloud cover [0-1] with temperature [K] and potential temperature [K]  
Valid: Fri 2010-05-07 06:00 UTC (step 30 hrs from Thu 2010-05-06 00:00 UTC)

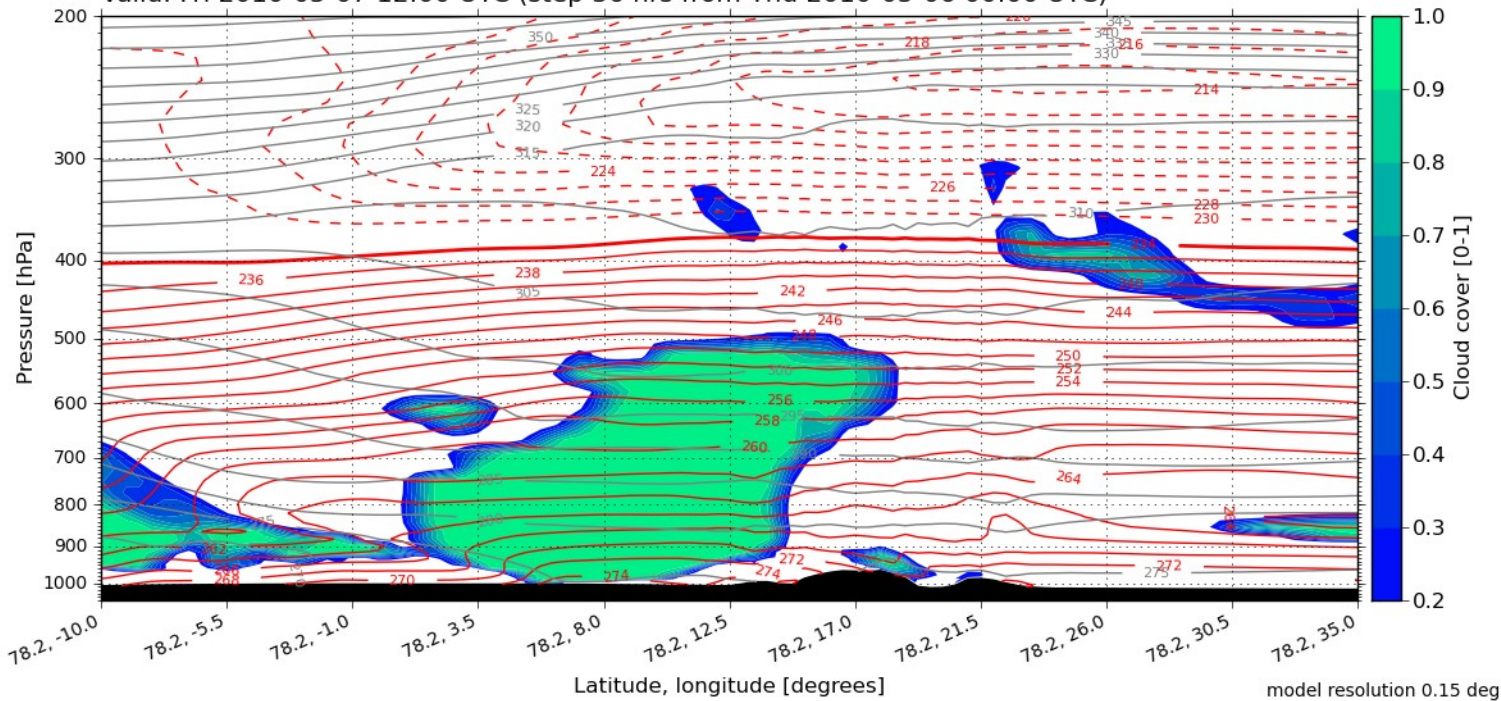


Total Cloud Cover  
Valid: Fri, 07 May 2010, 12 UTC (init: 20100506 00 UTC +036 h)

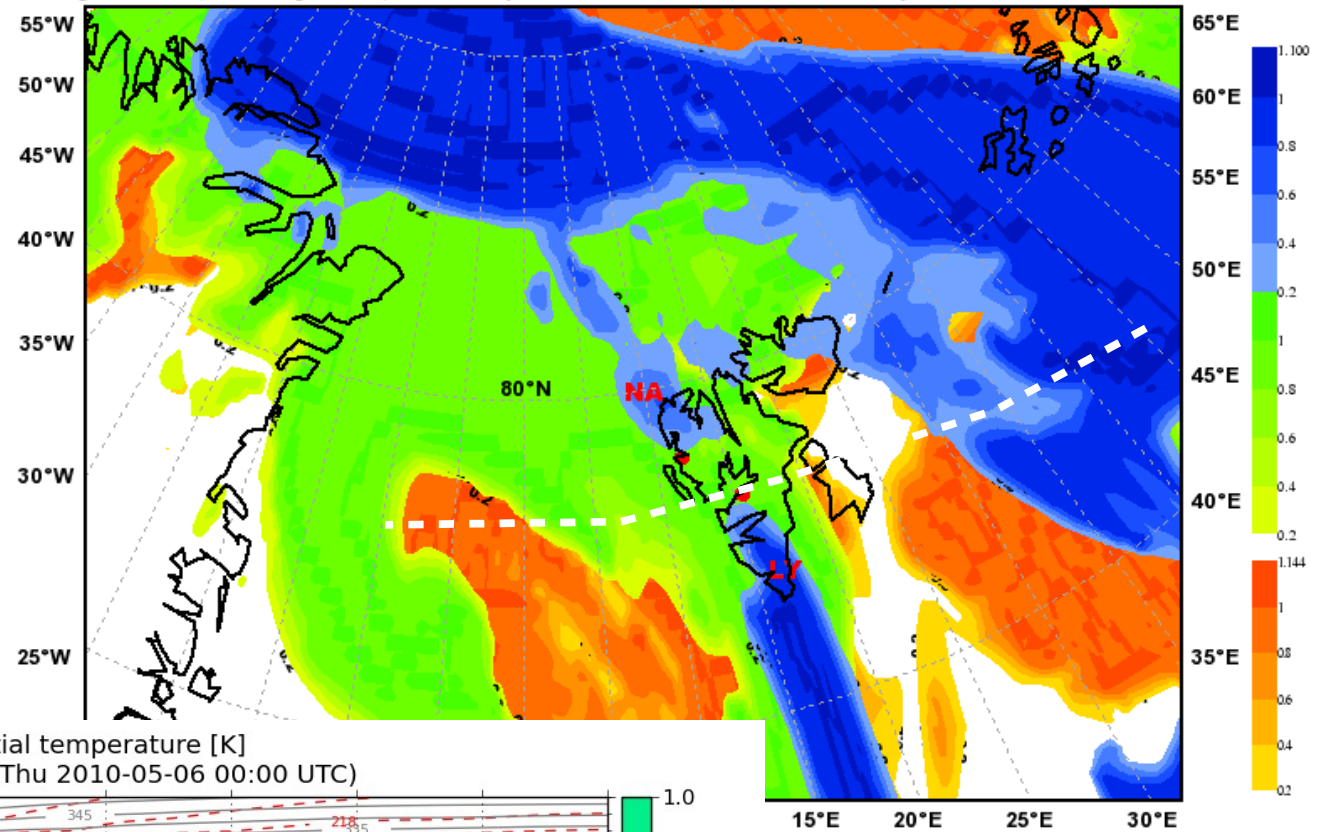


## E-W along 78N

Cloud cover [0-1] with temperature [K] and potential temperature [K]  
Valid: Fri 2010-05-07 12:00 UTC (step 36 hrs from Thu 2010-05-06 00:00 UTC)

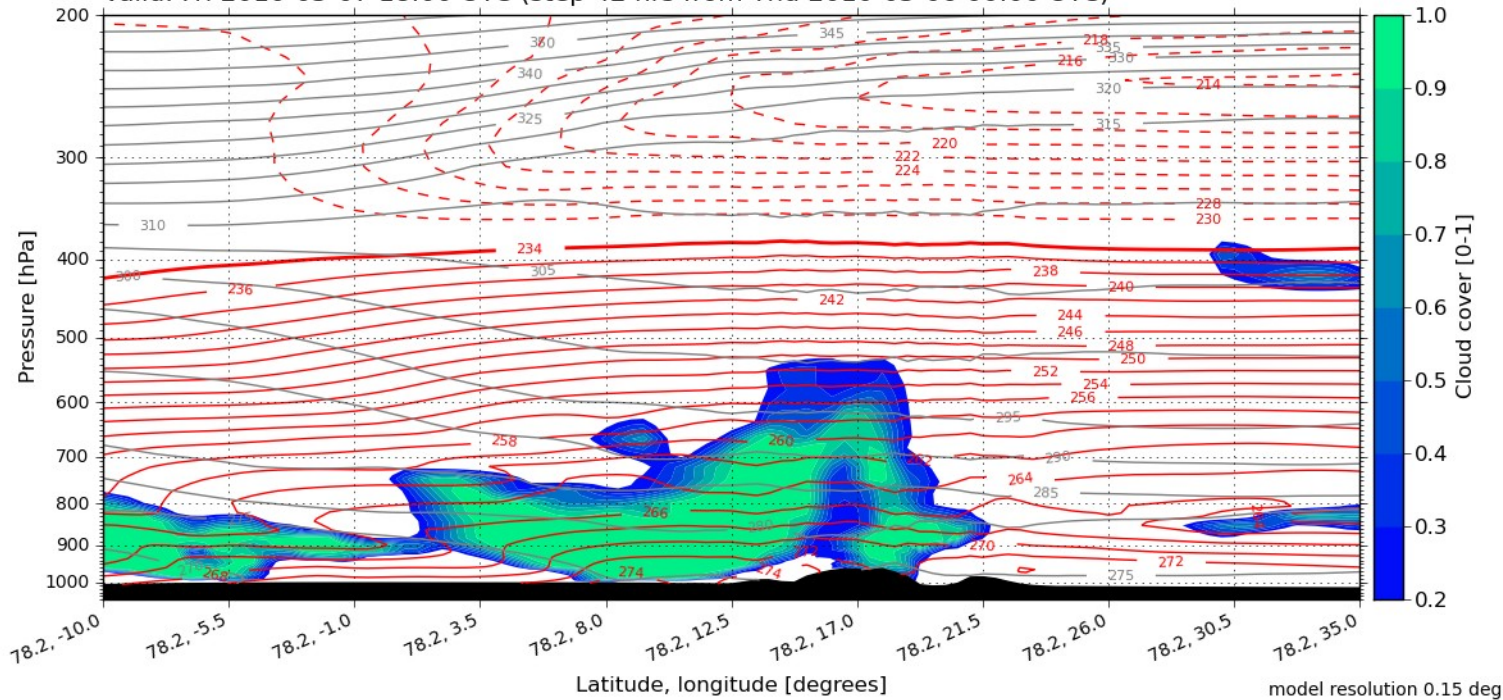


**Total Cloud Cover**  
 Valid: Fri, 07 May 2010, 18 UTC (init: 20100506 00 UTC +042 h)



## E-W along 78N

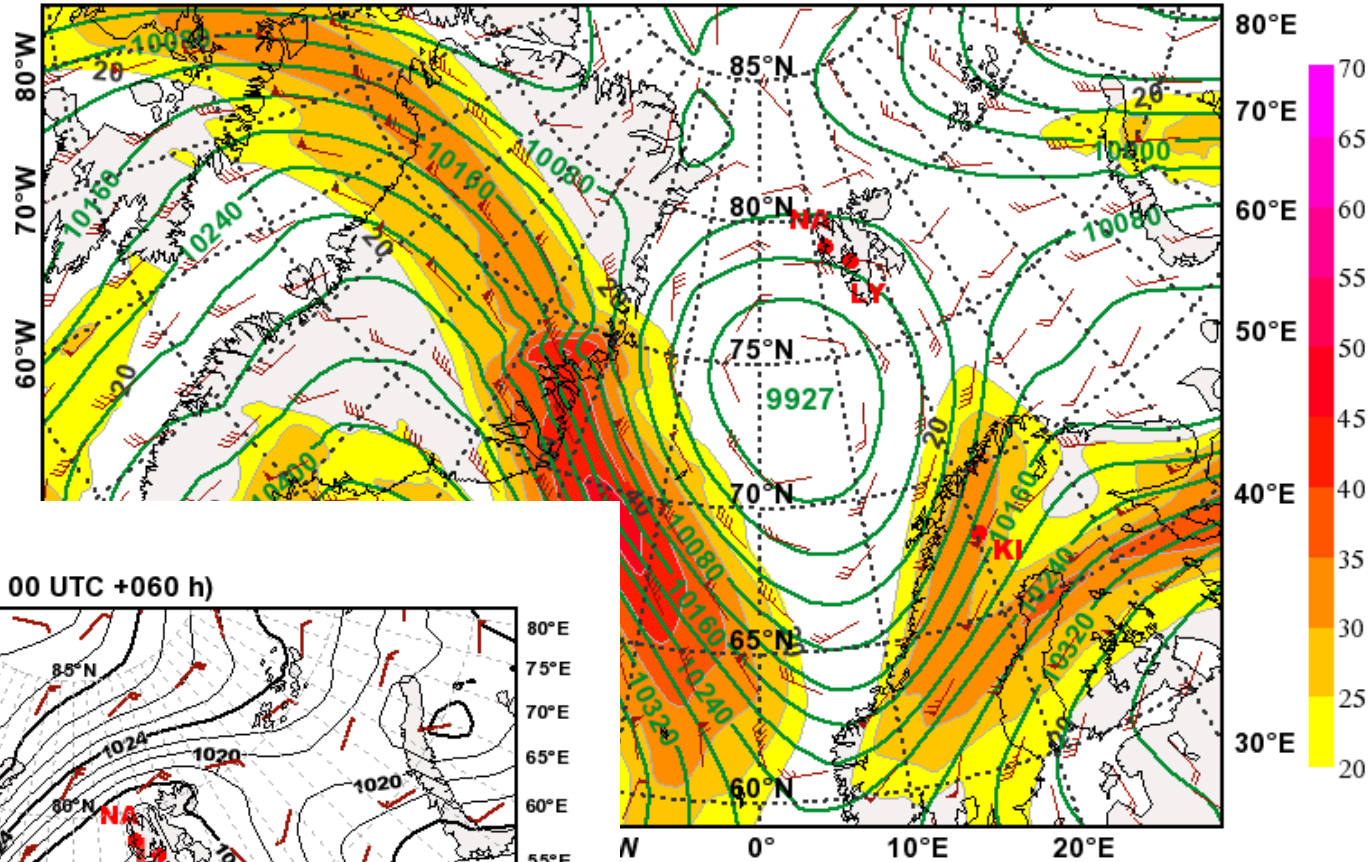
Cloud cover [0-1] with temperature [K] and potential temperature [K]  
 Valid: Fri 2010-05-07 18:00 UTC (step 42 hrs from Thu 2010-05-06 00:00 UTC)



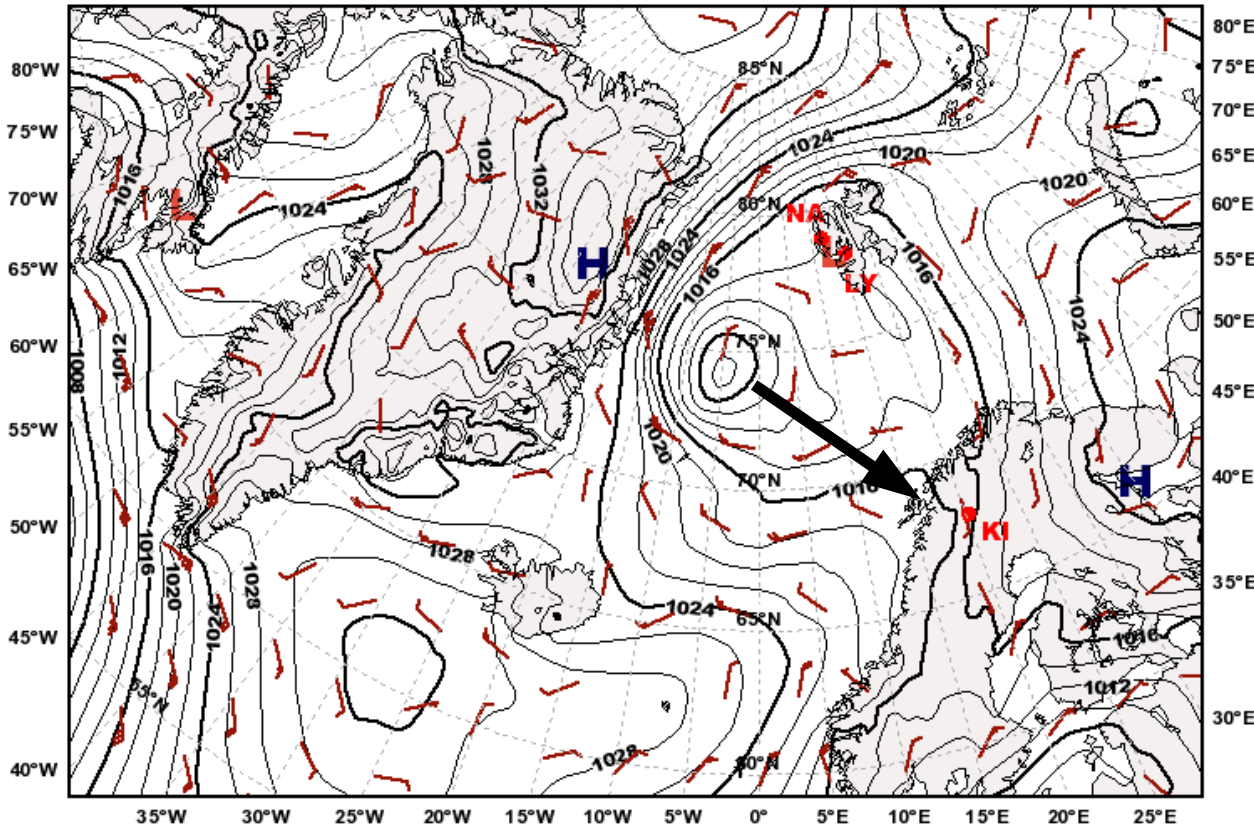
model resolution 0.15 deg

**Saturday: Cyclone transported southeastward by upper level flow.**

**Geopotential Height (m) & Horizontal Wind (m/s) at 250hPa**  
 valid: Sat, 08 May 2010, 12 UTC (init: 20100506 00 UTC +060 h)

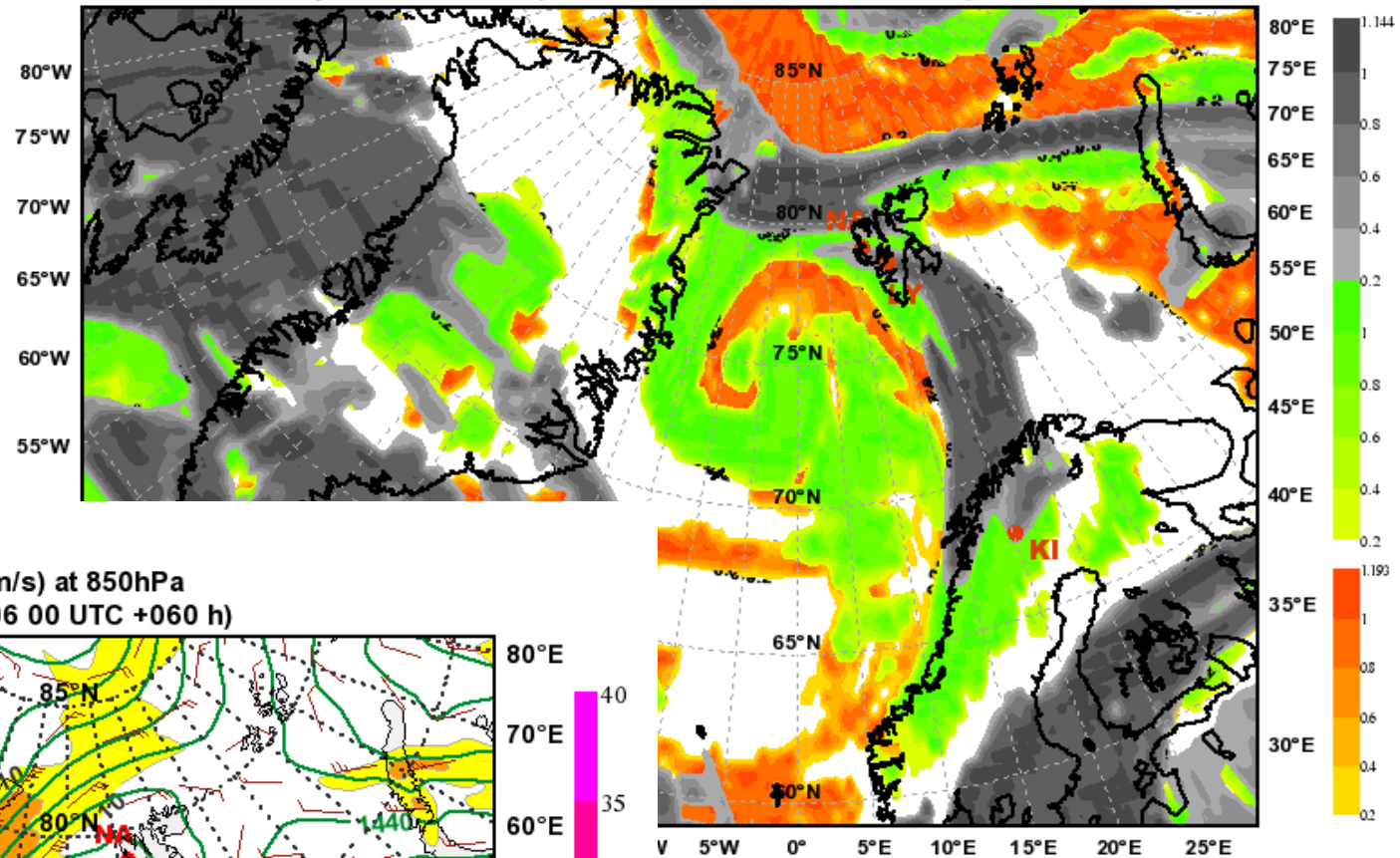


**Mean Sea Level Pressure**  
 valid: Sat, 08 May 2010, 12 UTC (init: 20100506 00 UTC +060 h)

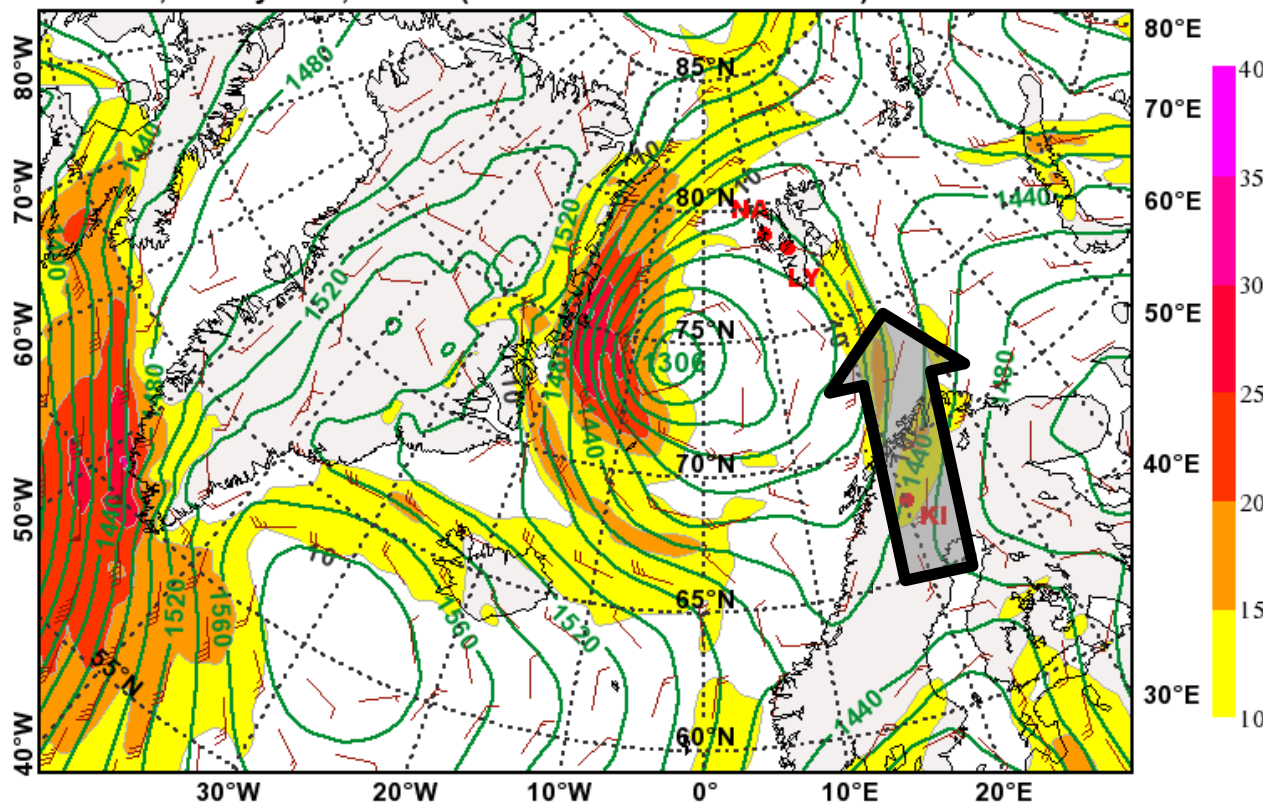


Saturday: Still humid,  
many clouds.

Total Cloud Cover  
valid: Sat, 08 May 2010, 12 UTC (init: 20100506 00 UTC +060 h)



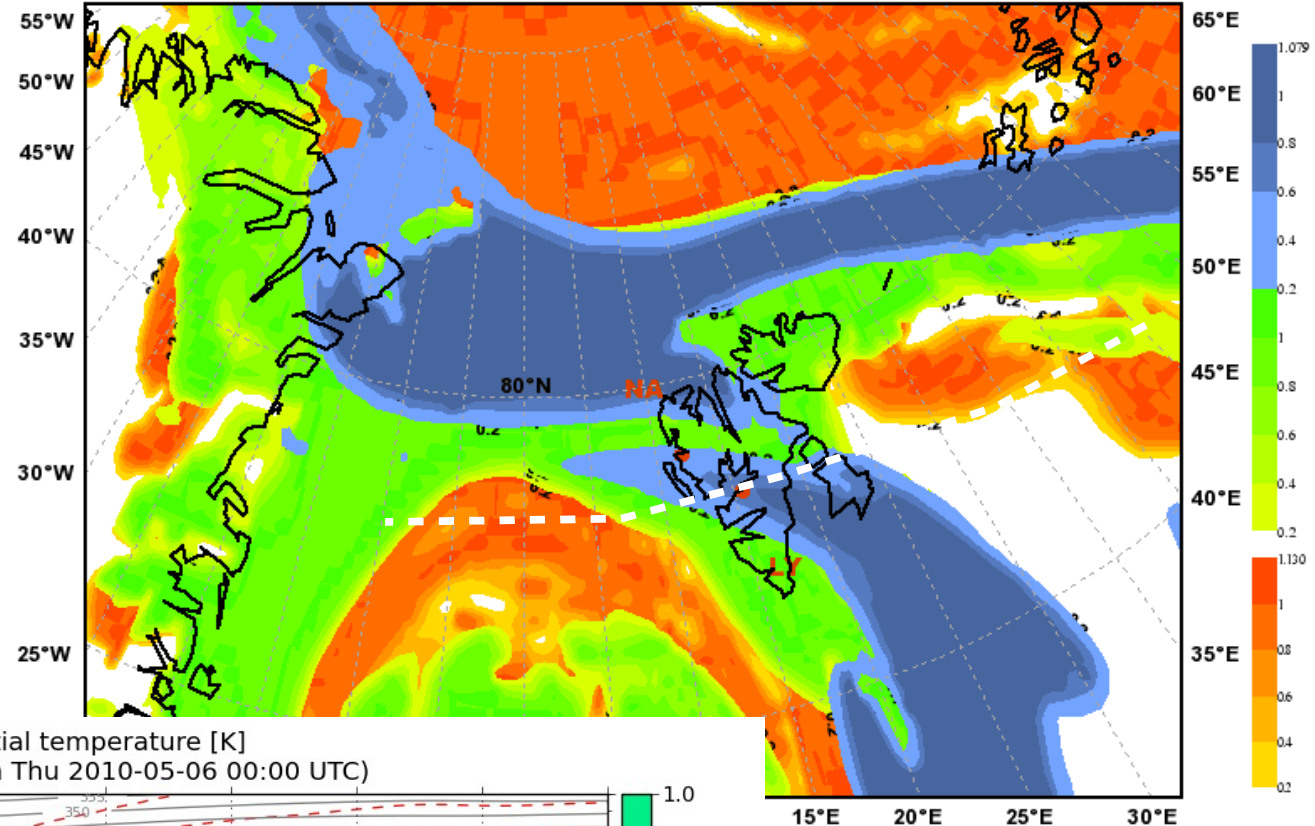
Geopotential Height (m) & Horizontal Wind (m/s) at 850hPa  
valid: Sat, 08 May 2010, 12 UTC (init: 20100506 00 UTC +060 h)



Moist and warm air  
advected from the  
south.

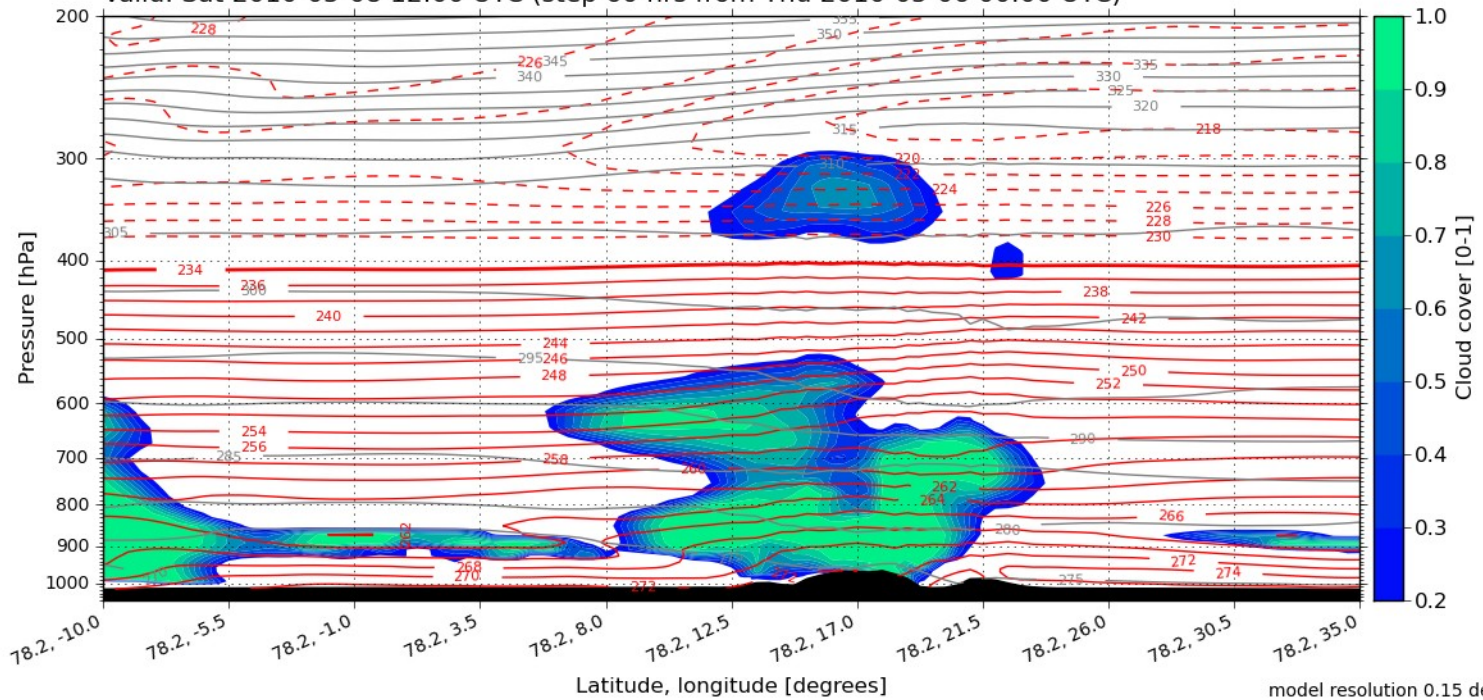


Total Cloud Cover  
Valid: Sat, 08 May 2010, 12 UTC (init: 20100506 00 UTC +060 h)

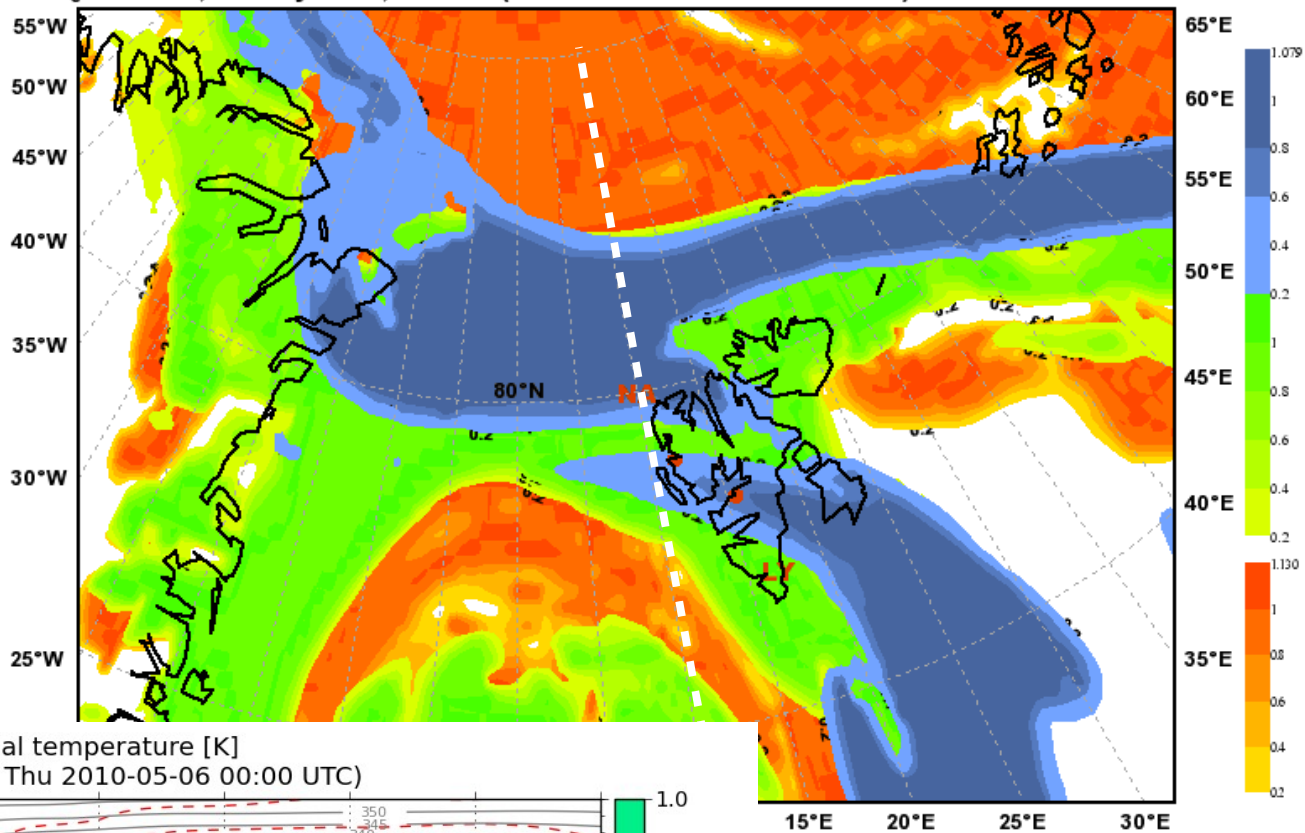


### E-W along 78N

Cloud cover [0-1] with temperature [K] and potential temperature [K]  
Valid: Sat 2010-05-08 12:00 UTC (step 60 hrs from Thu 2010-05-06 00:00 UTC)

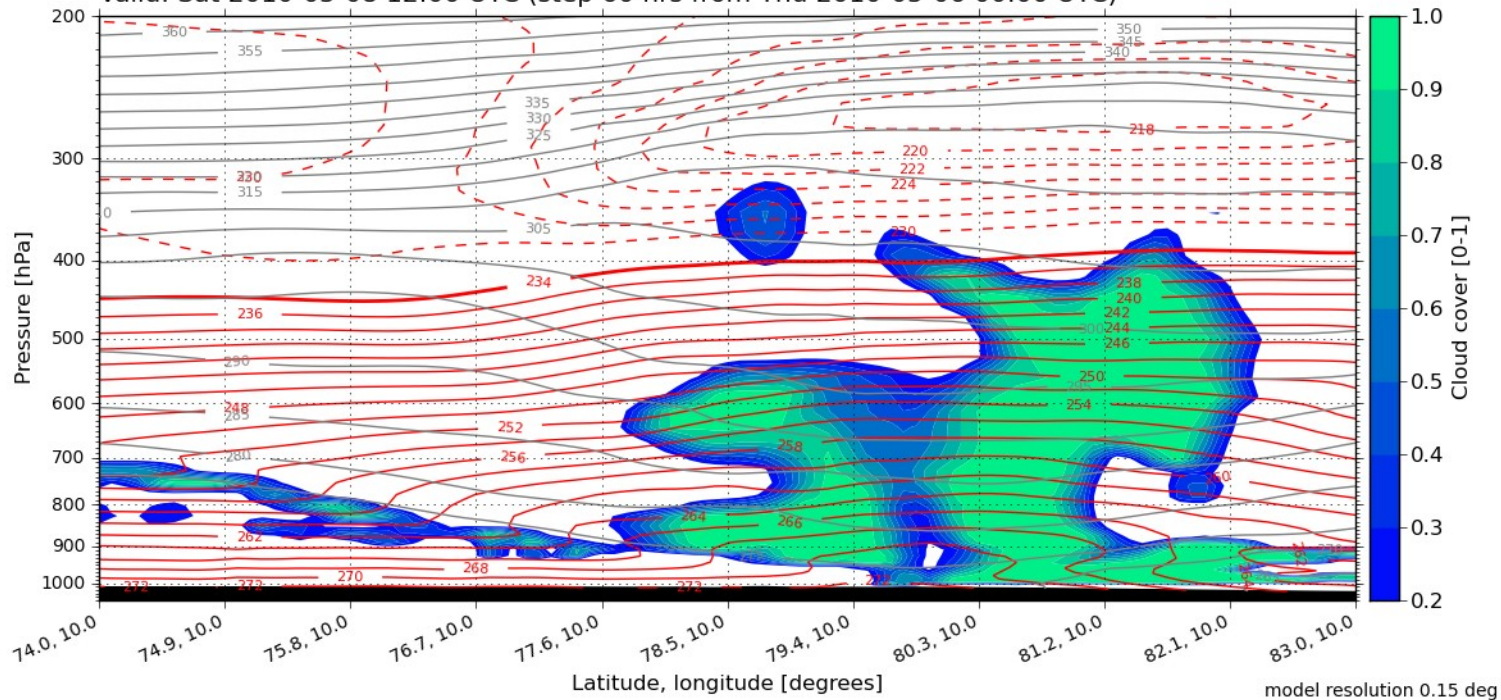


Total Cloud Cover  
Valid: Sat, 08 May 2010, 12 UTC (init: 20100506 00 UTC +060 h)

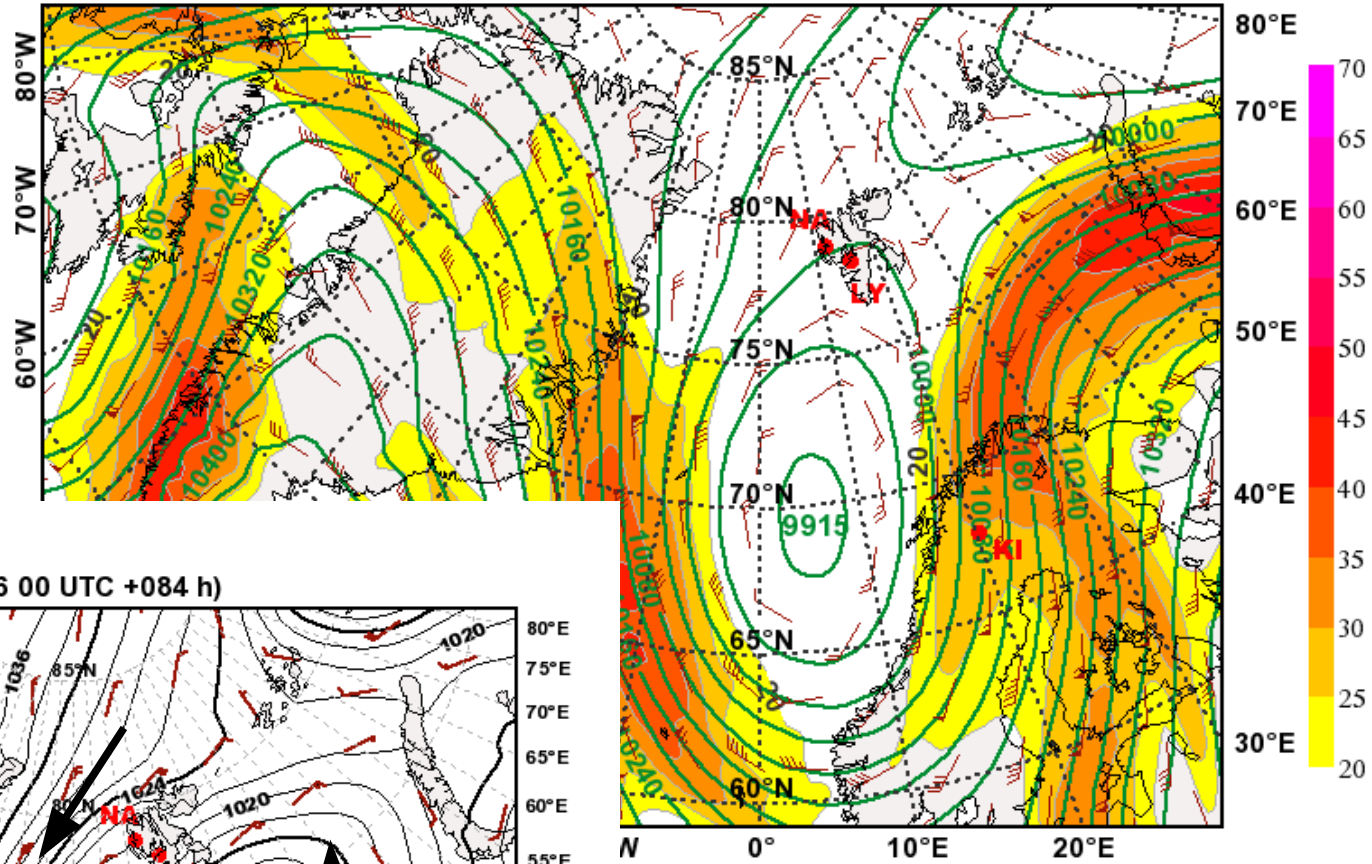


## N-S along 10E

Cloud cover [0-1] with temperature [K] and potential temperature [K]  
Valid: Sat 2010-05-08 12:00 UTC (step 60 hrs from Thu 2010-05-06 00:00 UTC)

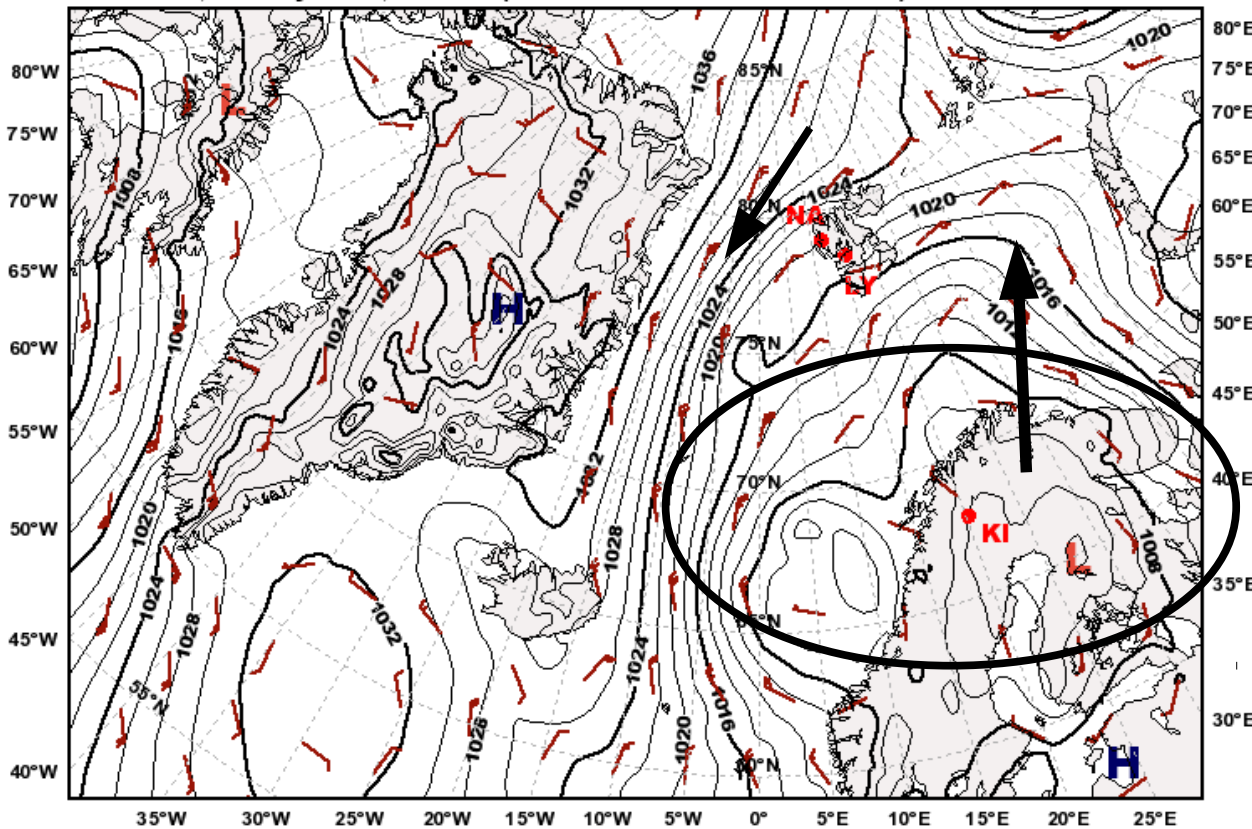


Geopotential Height (m) & Horizontal Wind (m/s) at 250hPa  
 valid: Sun, 09 May 2010, 12 UTC (init: 20100506 00 UTC +084 h)



**Sunday: Merges with another low pressure region over Scandinavia, moves northeastward.**

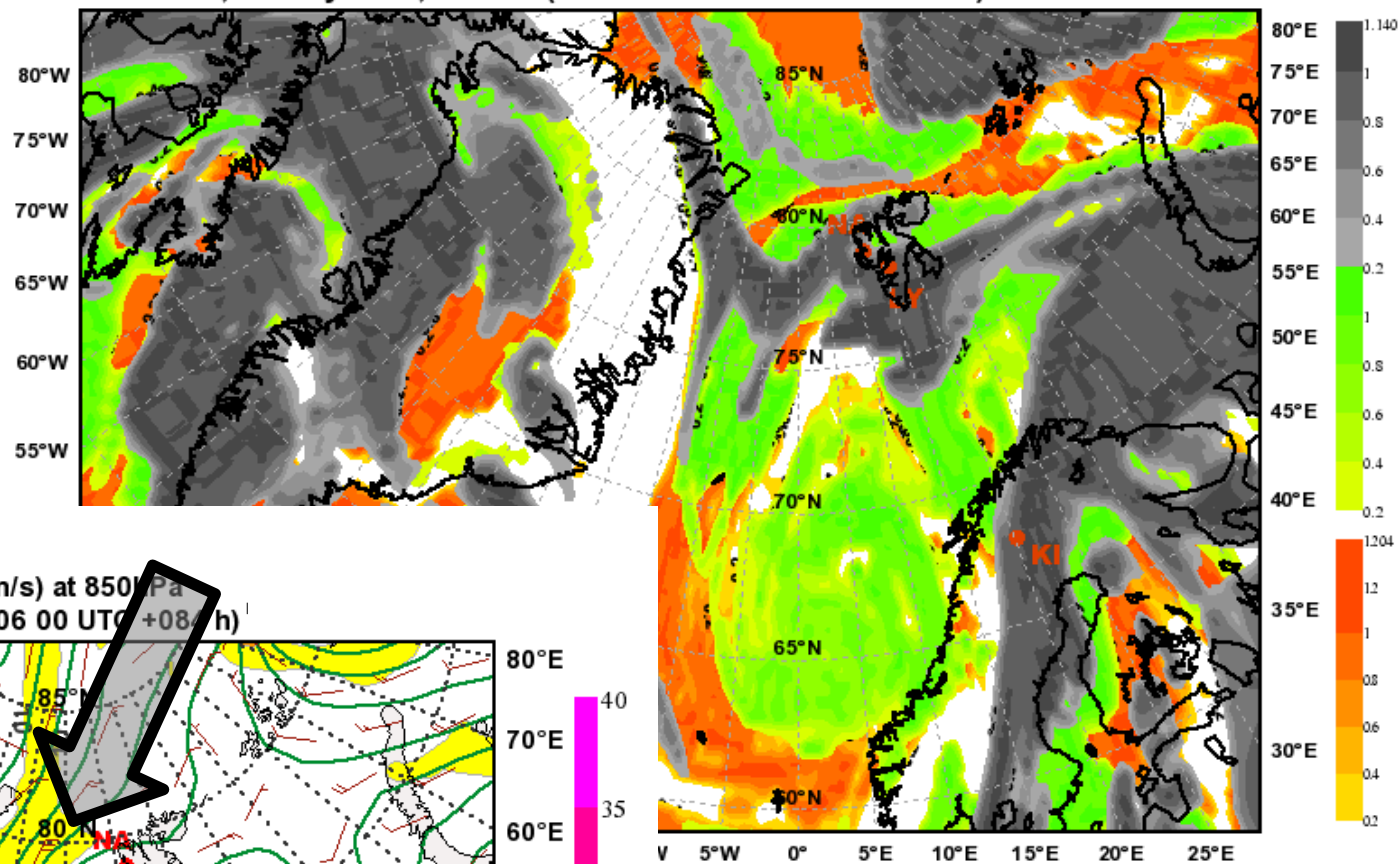
Mean Sea Level Pressure  
 valid: Sun, 09 May 2010, 12 UTC (init: 20100506 00 UTC +084 h)



**Northeasterly winds west of Svalbard.**

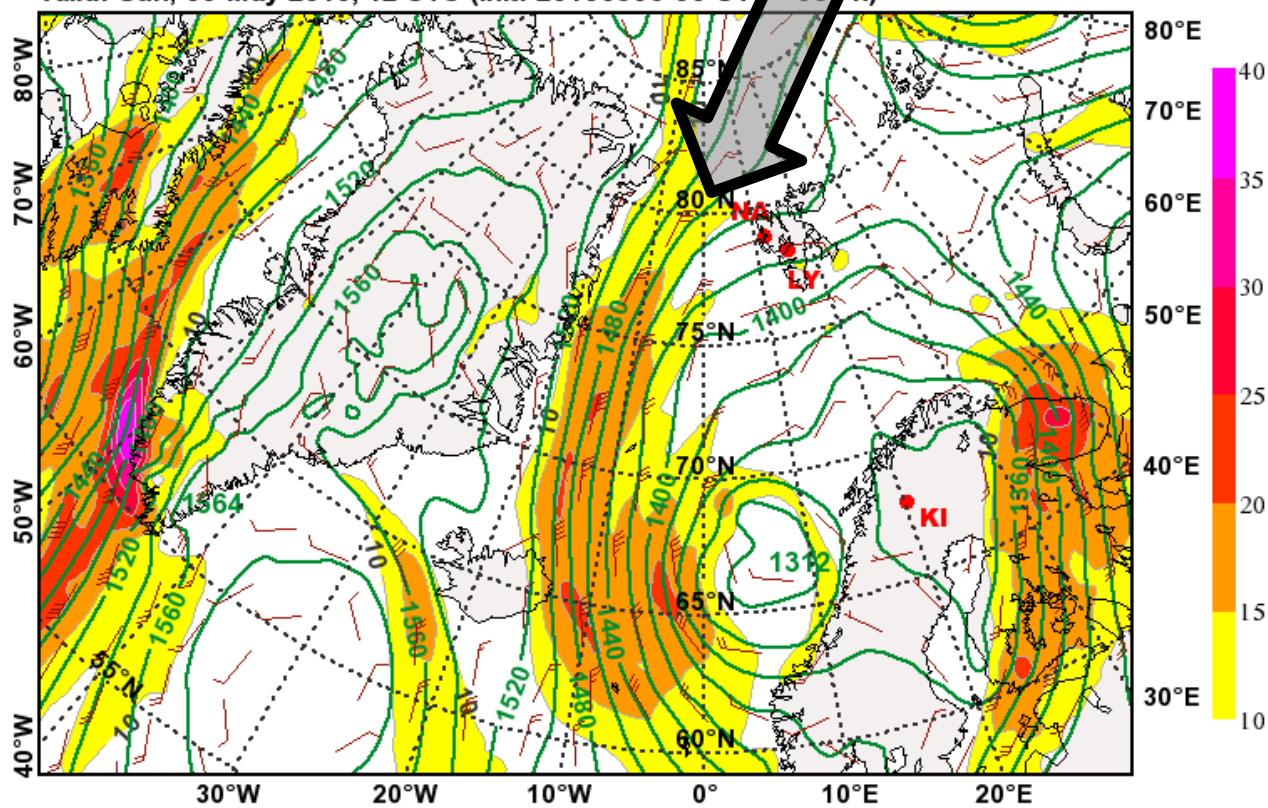
### Total Cloud Cover

valid: Sun, 09 May 2010, 12 UTC (init: 20100506 00 UTC +084 h)



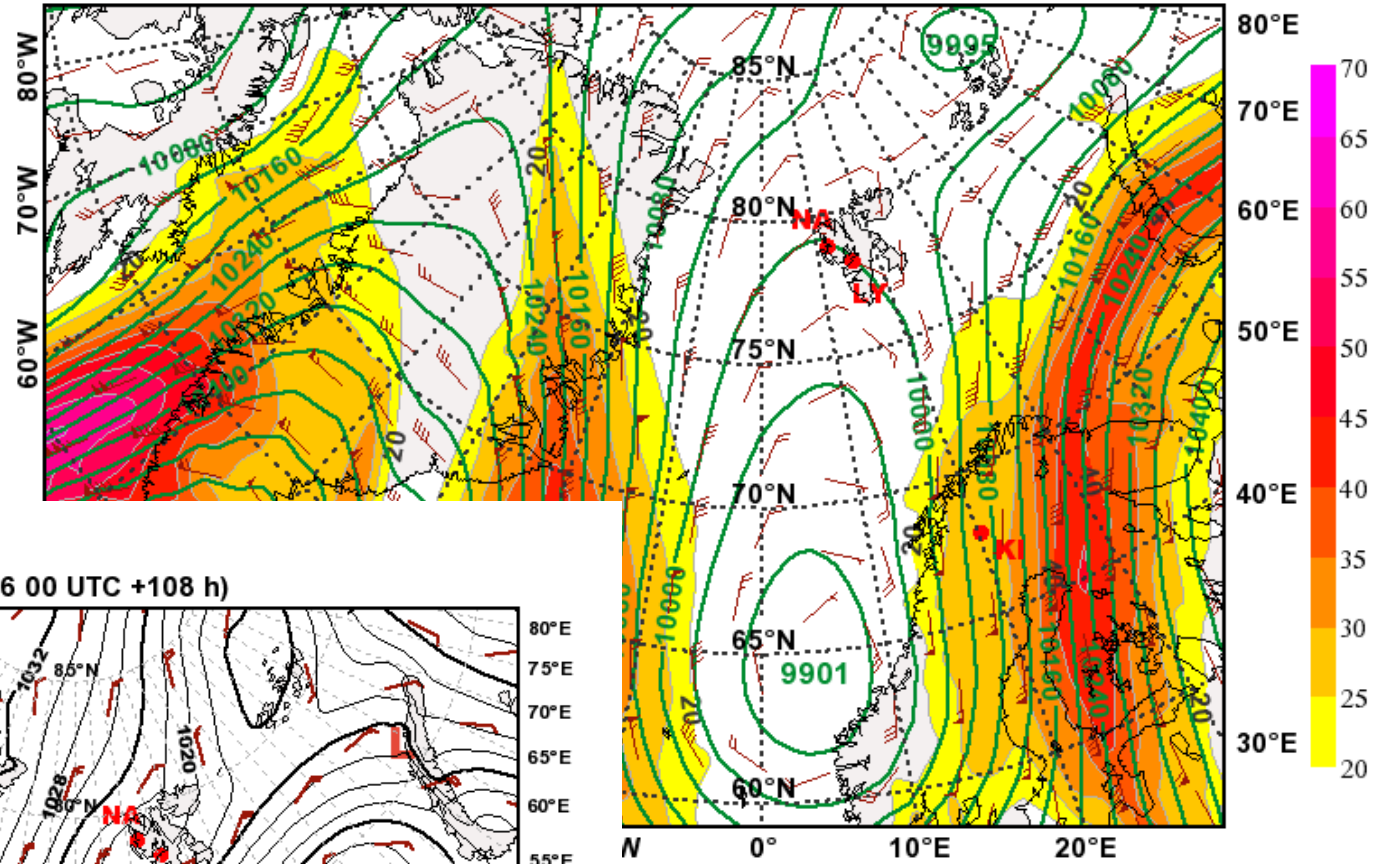
### Geopotential Height (m) & Horizontal Wind (m/s) at 850 Pa

valid: Sun, 09 May 2010, 12 UTC (init: 20100506 00 UTC +084 h)

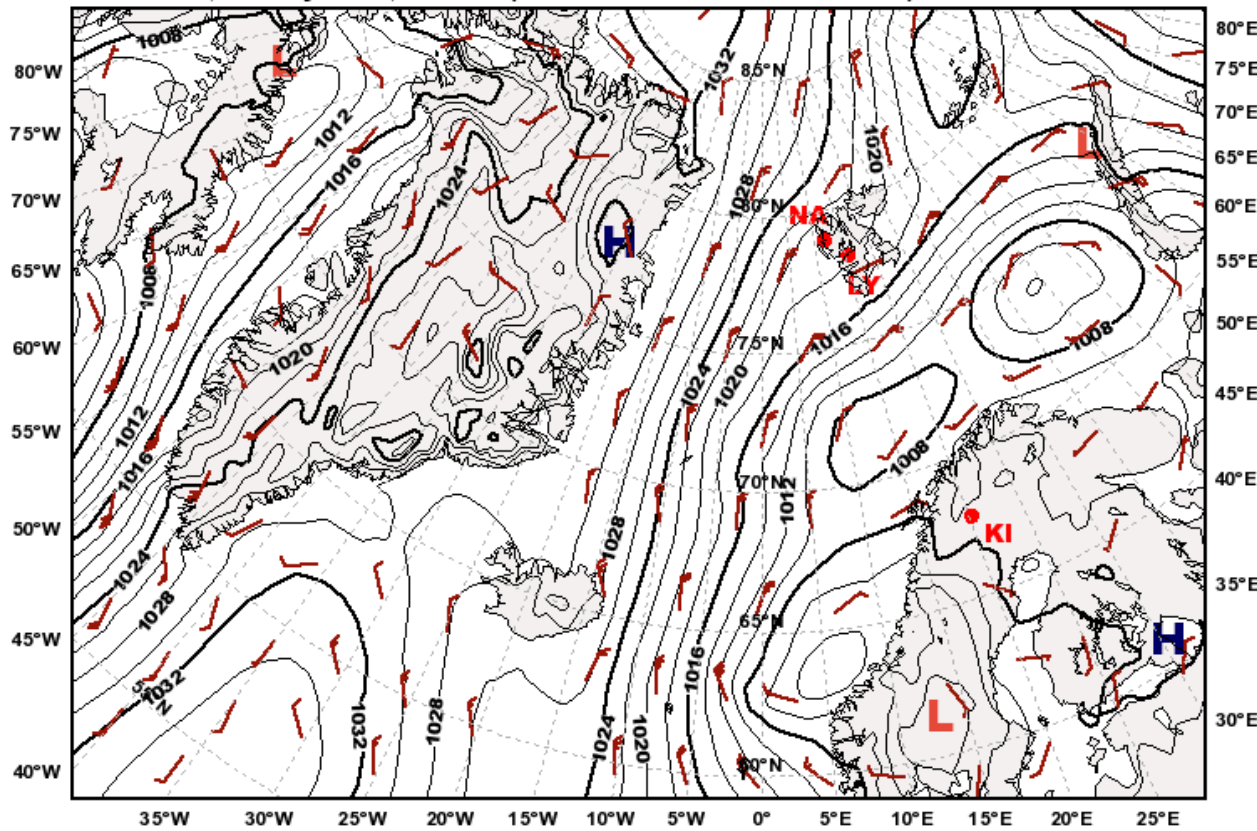


**Monday: Northerly flow  
flow around Svalbard.**

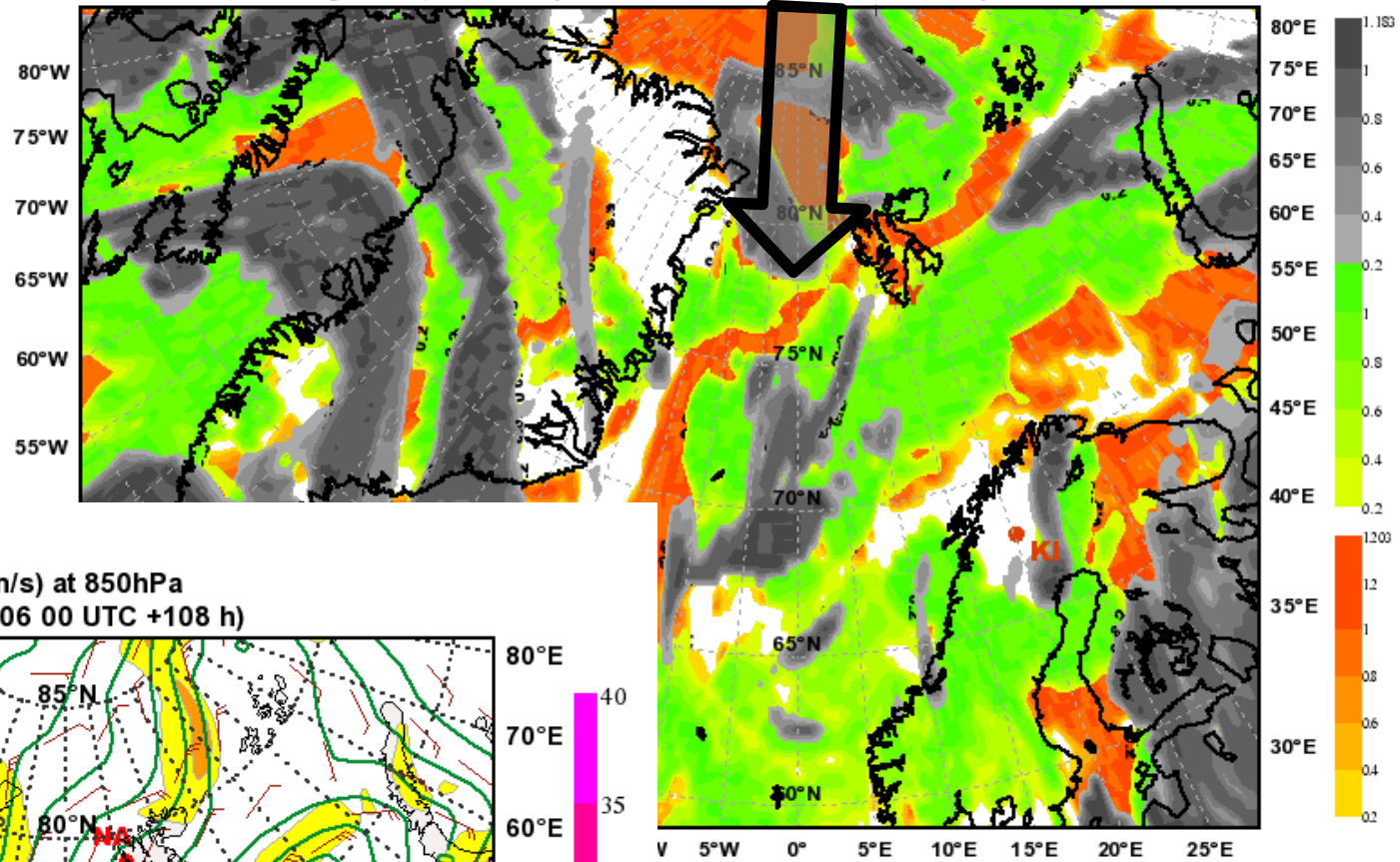
**Geopotential Height (m) & Horizontal Wind (m/s) at 250hPa**  
valid: Mon, 10 May 2010, 12 UTC (init: 20100506 00 UTC +108 h)



**Mean Sea Level Pressure**  
valid: Mon, 10 May 2010, 12 UTC (init: 20100506 00 UTC +108 h)

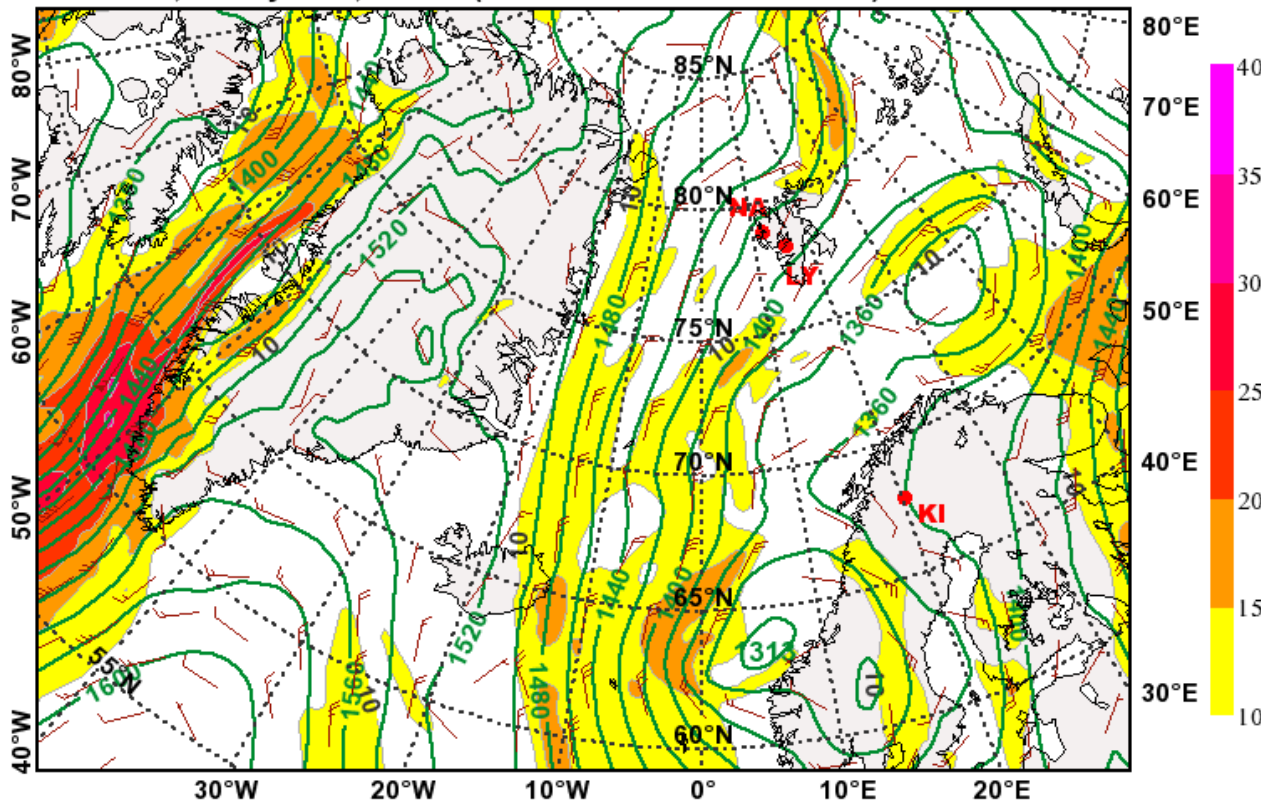


**Total Cloud Cover**  
 valid: Mon, 10 May 2010, 12 UTC (init: 20100506 00 UTC +108 h)



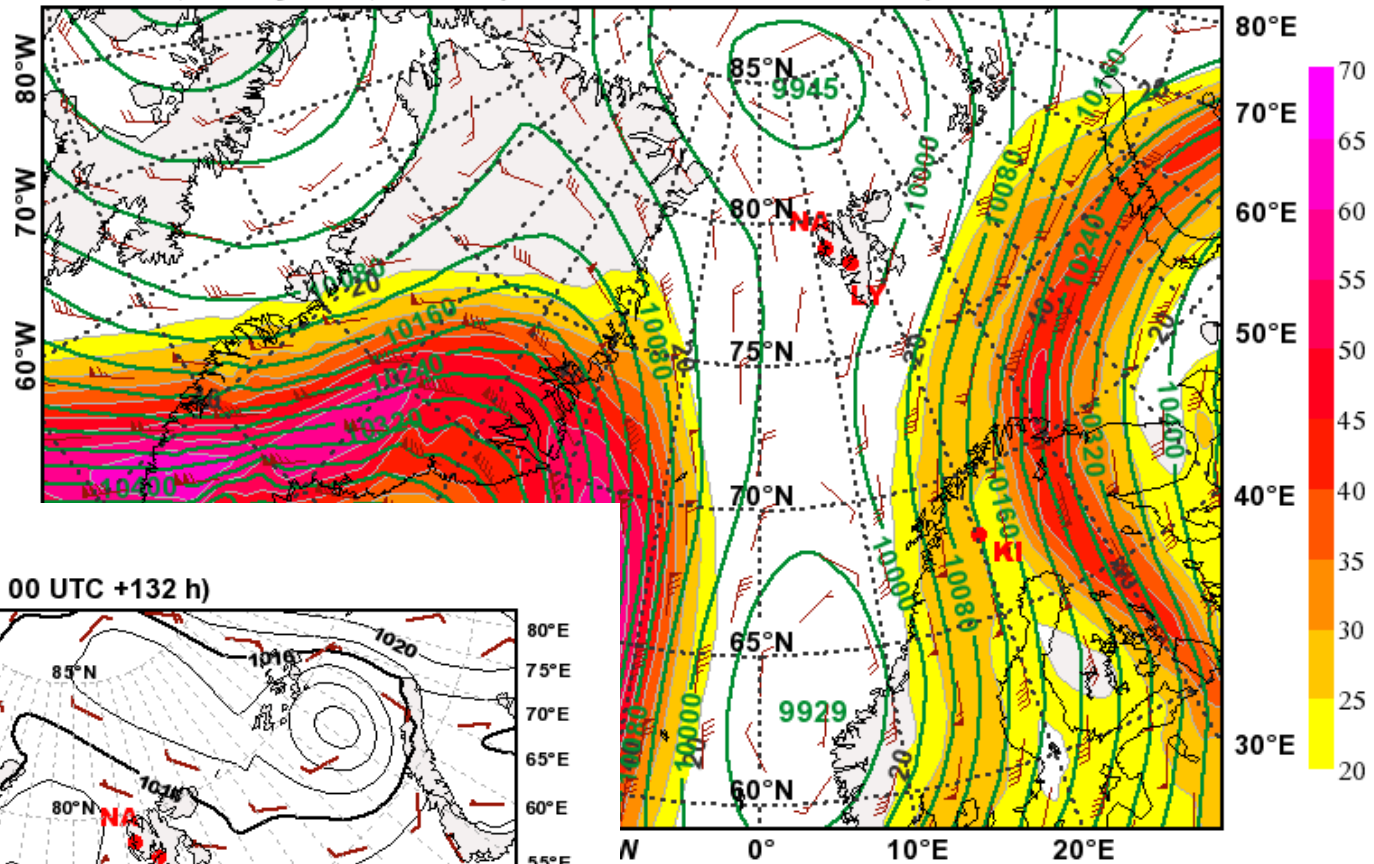
**Monday: Northerly flow at 850hPa around Svalbard. Could be good for measurements if not too many upper level clouds are forming.**

**Geopotential Height (m) & Horizontal Wind (m/s) at 850hPa**  
 valid: Mon, 10 May 2010, 12 UTC (init: 20100506 00 UTC +108 h)

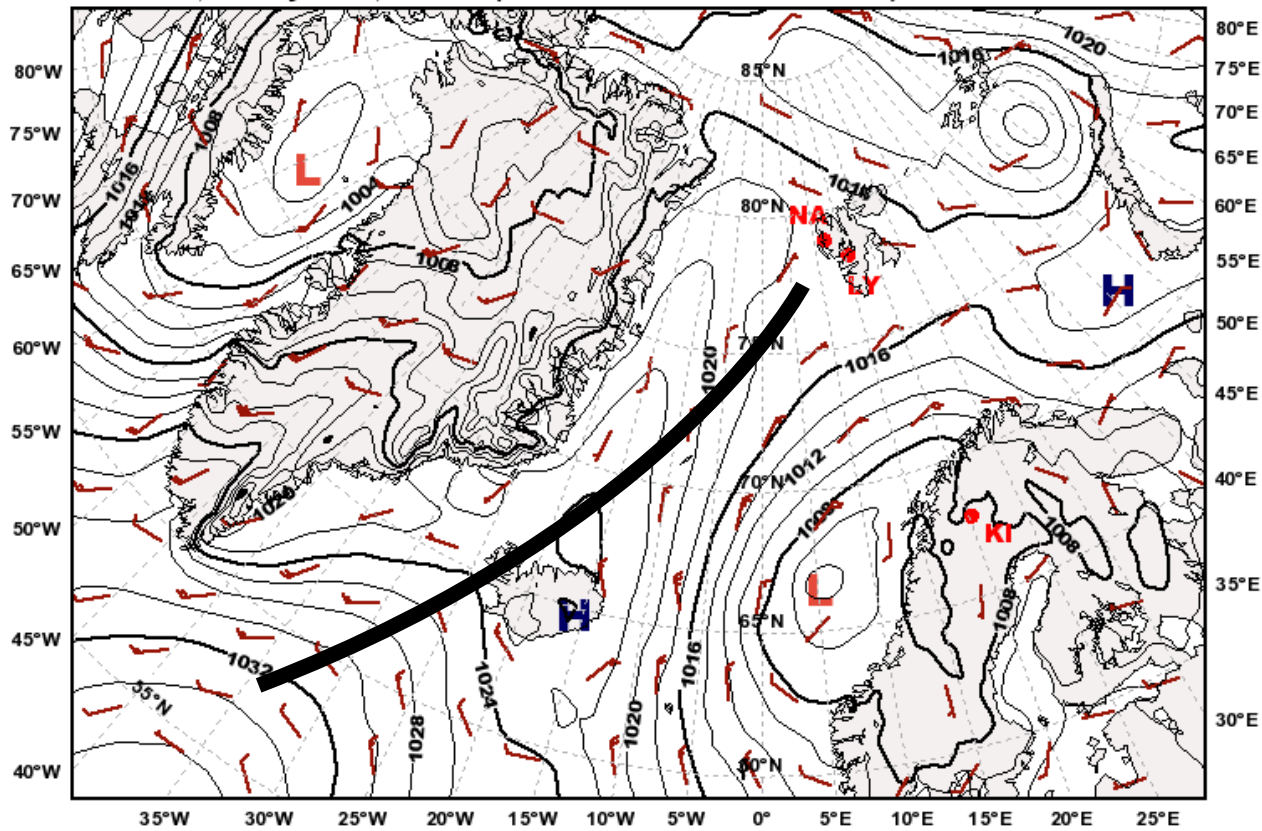


Geopotential Height (m) & Horizontal Wind (m/s) at 250hPa  
 valid: Tue, 11 May 2010, 12 UTC (init: 20100506 00 UTC +132 h)

Tuesday: Weak high pressure influence.

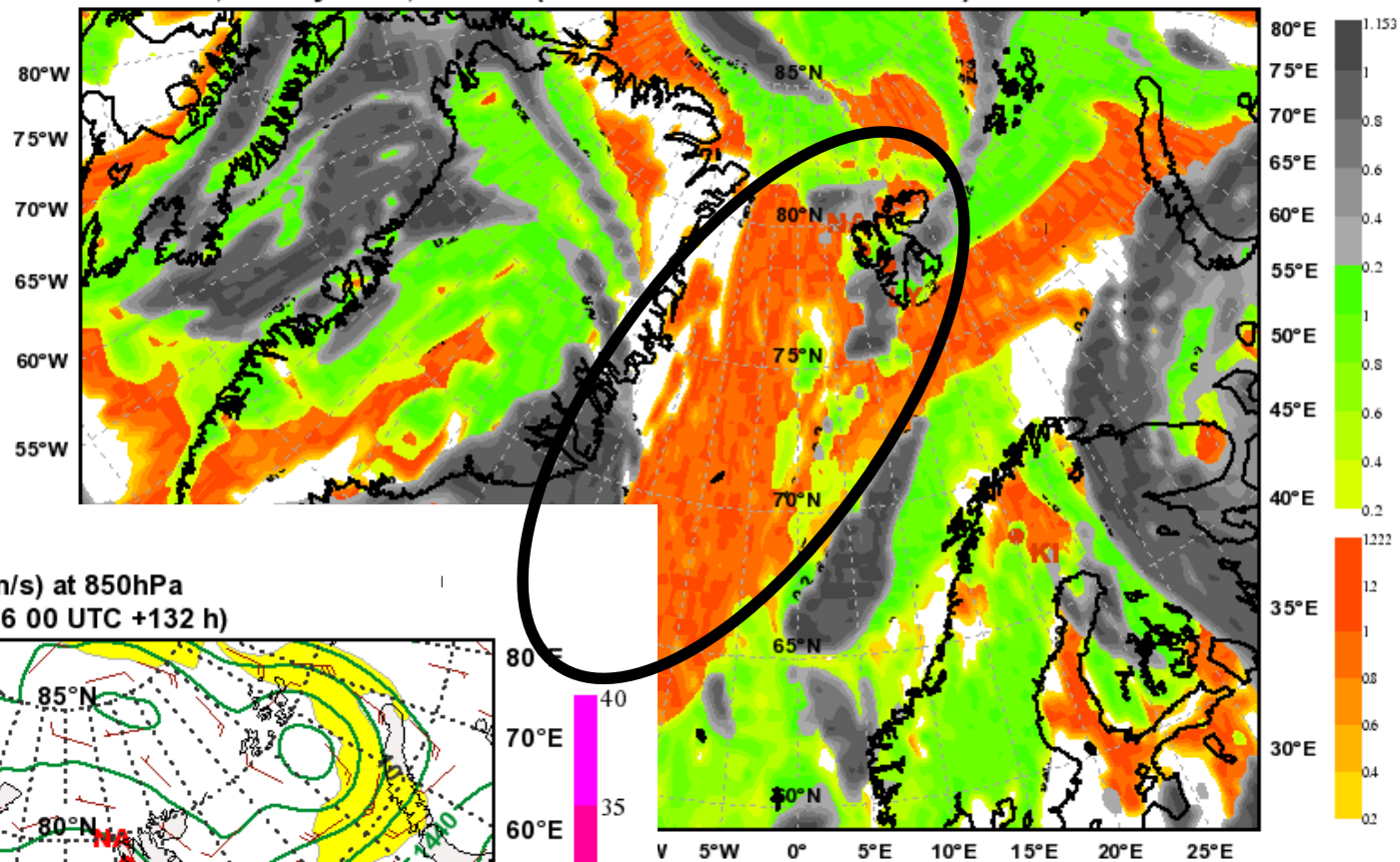


Mean Sea Level Pressure  
 valid: Tue, 11 May 2010, 12 UTC (init: 20100506 00 UTC +132 h)



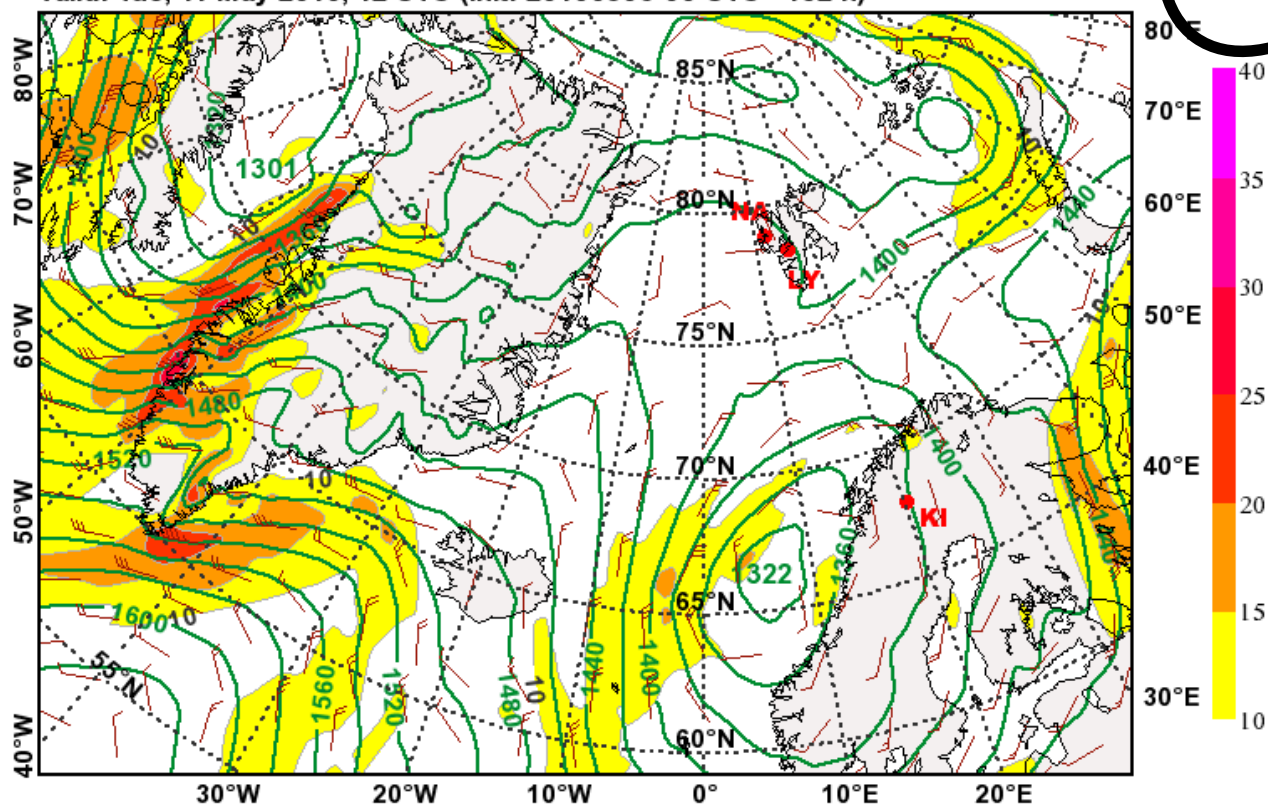
### Total Cloud Cover

valid: Tue, 11 May 2010, 12 UTC (init: 20100506 00 UTC +132 h)



### Geopotential Height (m) & Horizontal Wind (m/s) at 850hPa

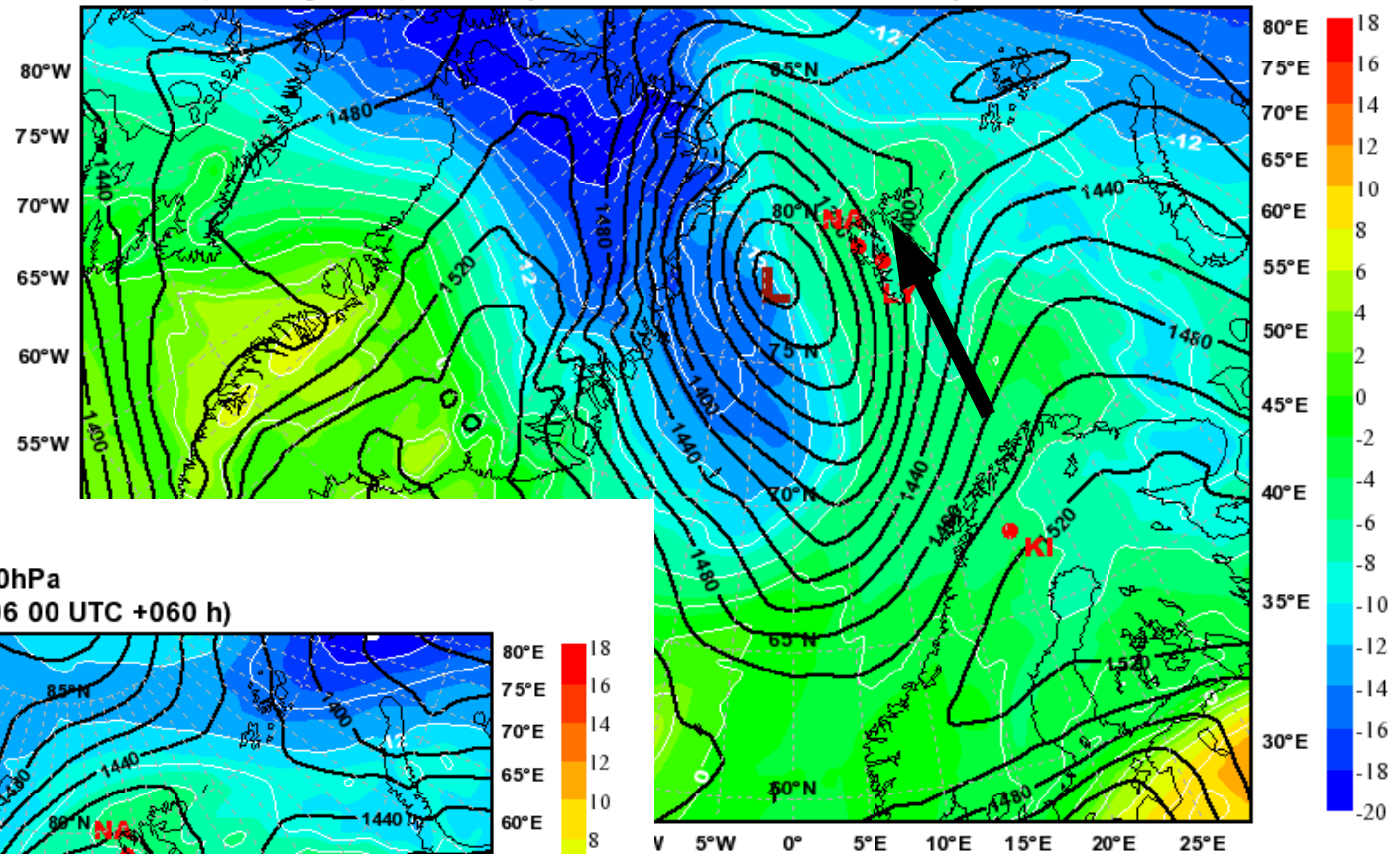
valid: Tue, 11 May 2010, 12 UTC (init: 20100506 00 UTC +132 h)



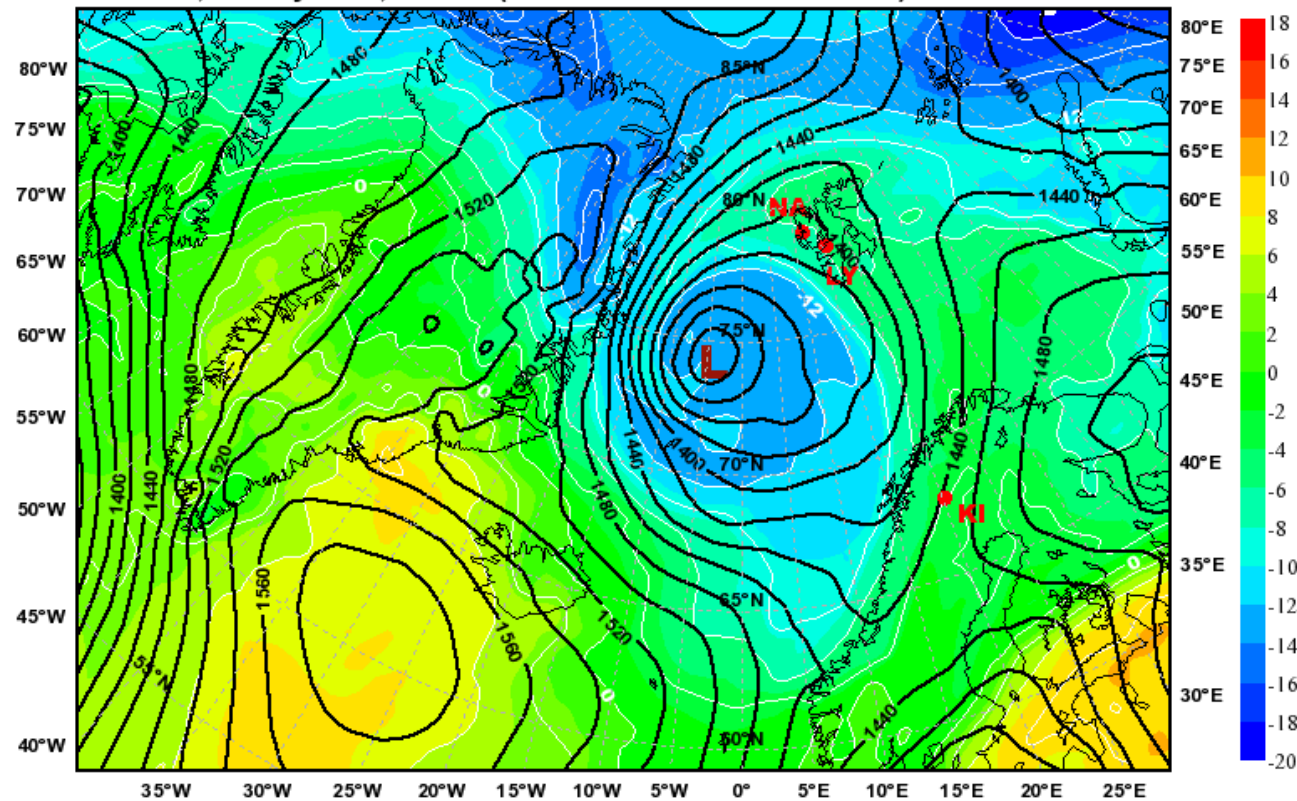


Warm air advection  
towards Svalbard.

Temperature [ $^{\circ}\text{C}$ ] and Geopotential [m] at 850hPa  
valid: Fri, 07 May 2010, 12 UTC (init: 20100506 00 UTC +036 h)

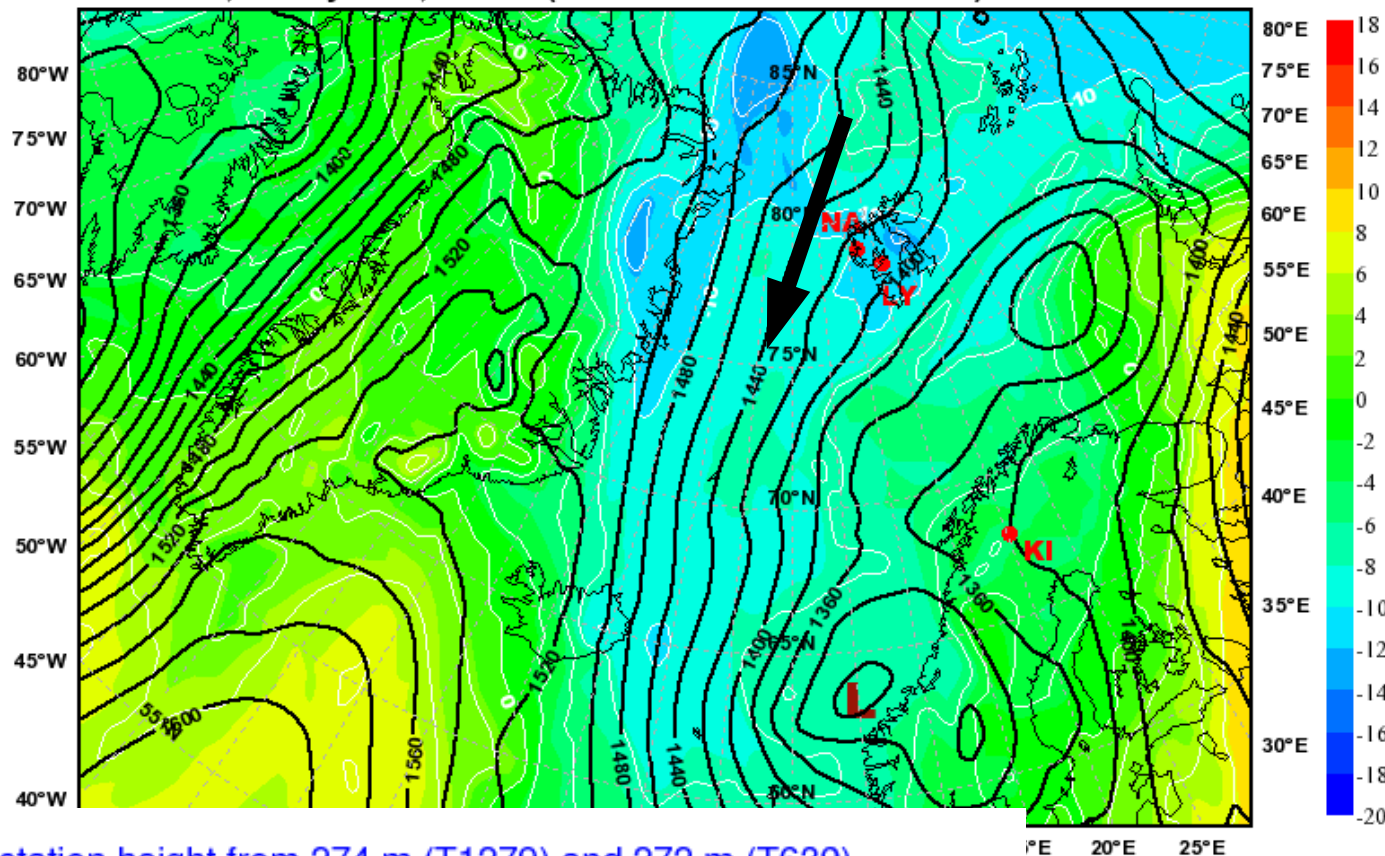


Temperature [ $^{\circ}\text{C}$ ] and Geopotential [m] at 850hPa  
valid: Sat, 08 May 2010, 12 UTC (init: 20100506 00 UTC +060 h)



Temperature [°C] and Geopotential [m] at 850hPa  
 valid: Mon, 10 May 2010, 12 UTC (init: 20100506 00 UTC +108 h)

Slightly colder  
 transported south by  
 northerly flow at the  
 beginning of next week.



2m Temperature (°C) reduced to the station height from 274 m (T1279) and 272 m (T639)

