

Flight Planning

Andenes, 1 March 2008

Saturday

Andreas Dörnbrack

`http://www.pa.op.dlr.de/ipy\_thorpex`

Current Conditions

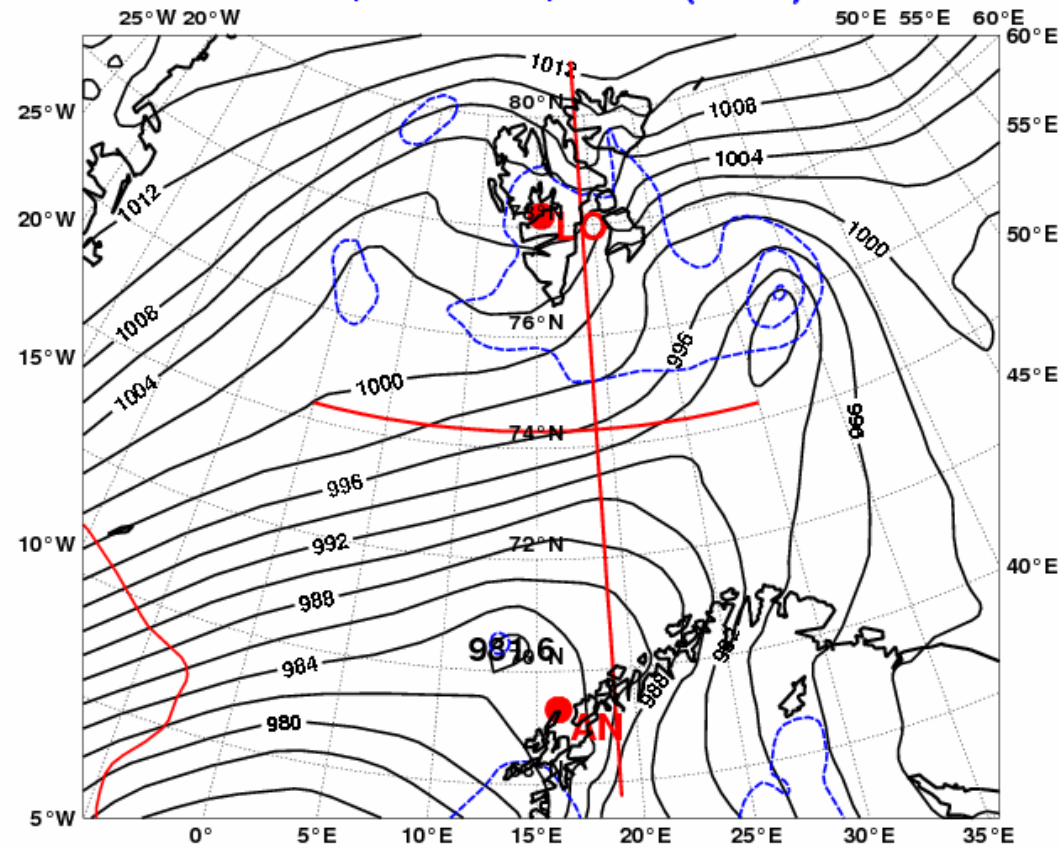
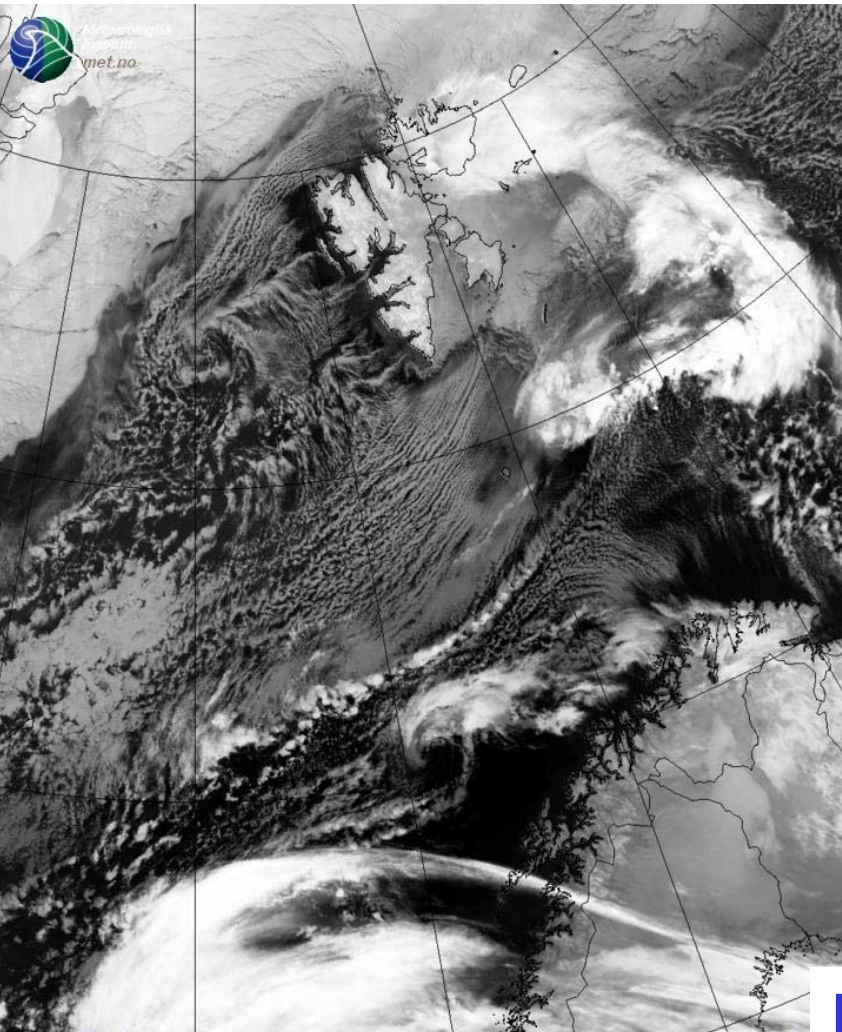
NOAA AVHRR Satellite Imagery

<http://met.no>

ECMWF T799/L91 Forecasts

http://www.pa.op.dlr.de/ipy_thorpex

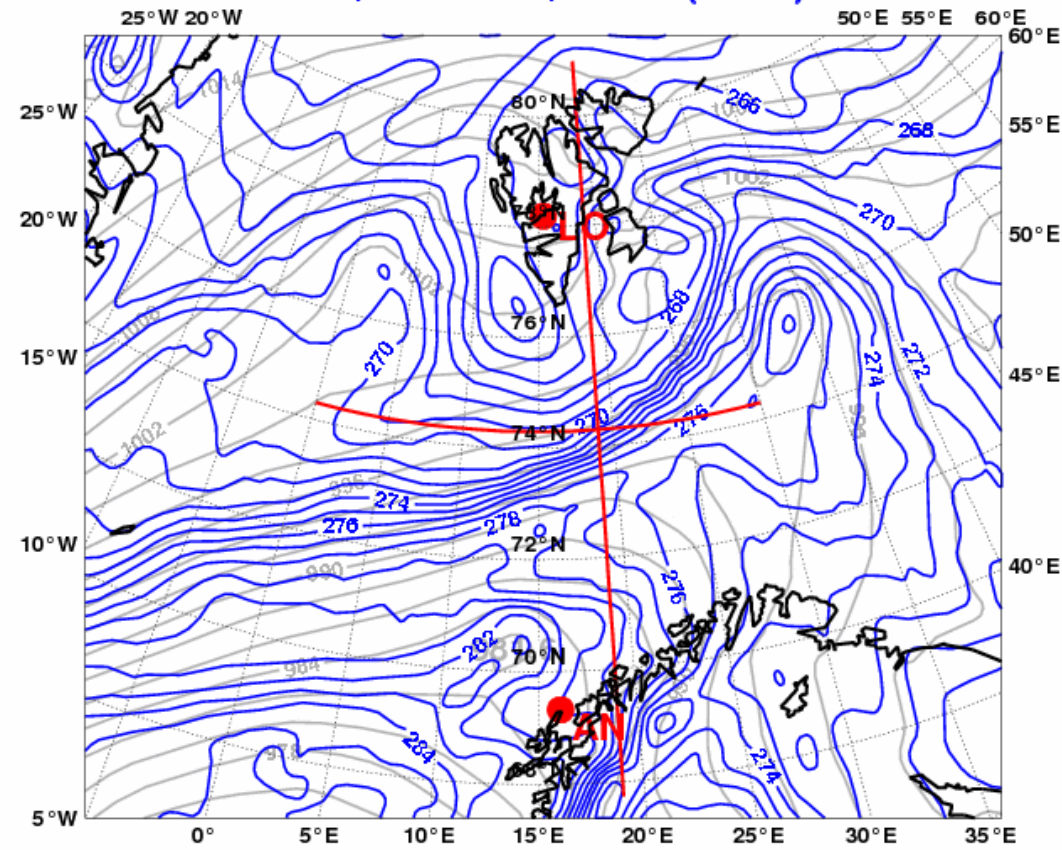
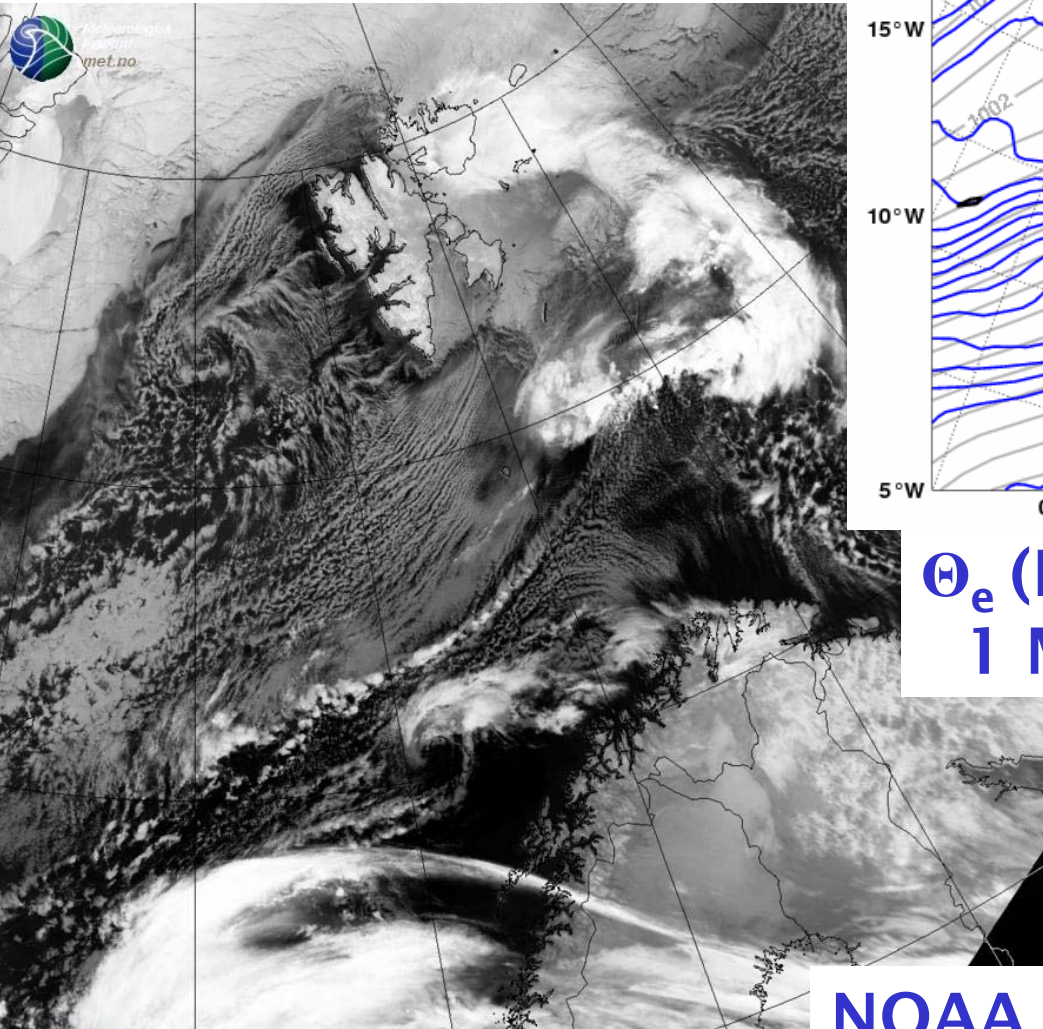
VT: Sat, 01 Mar 08, 03 UT (+15 h)



MSL Pressure (hPa)
1 Mar 2008 03 UTC (+15 h)

NOAA IR - 1 Mar 2008 0339 UTC

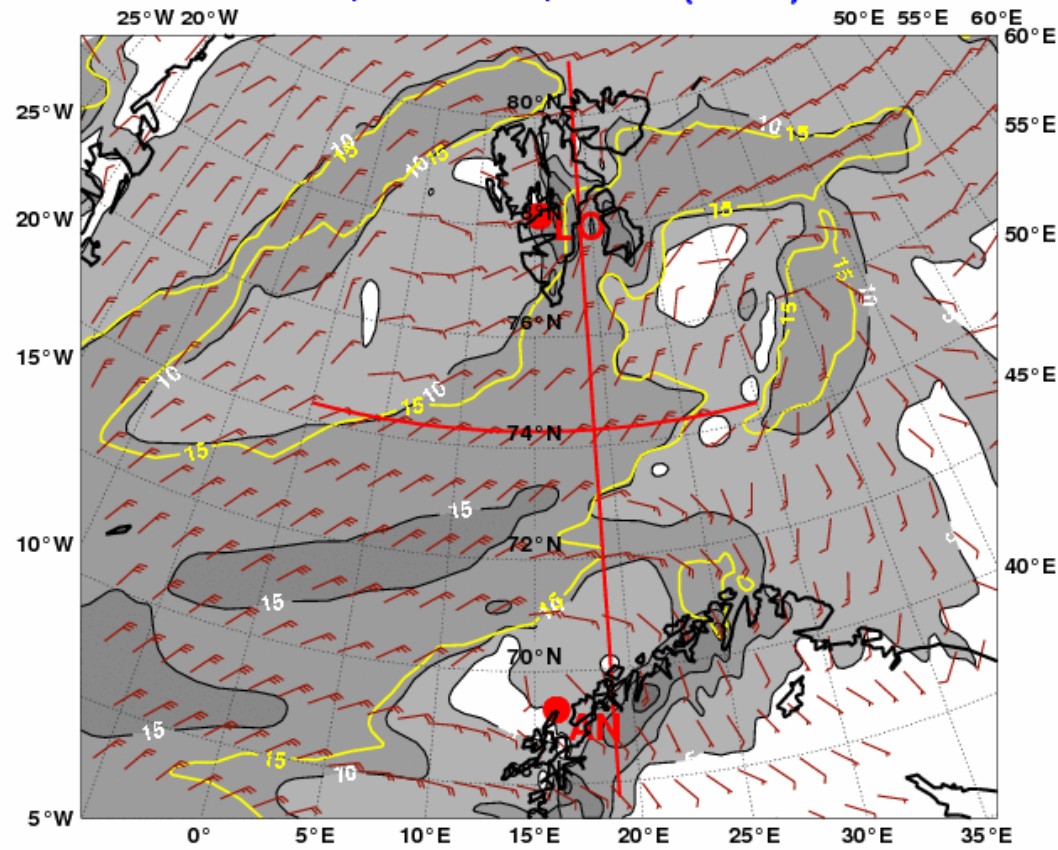
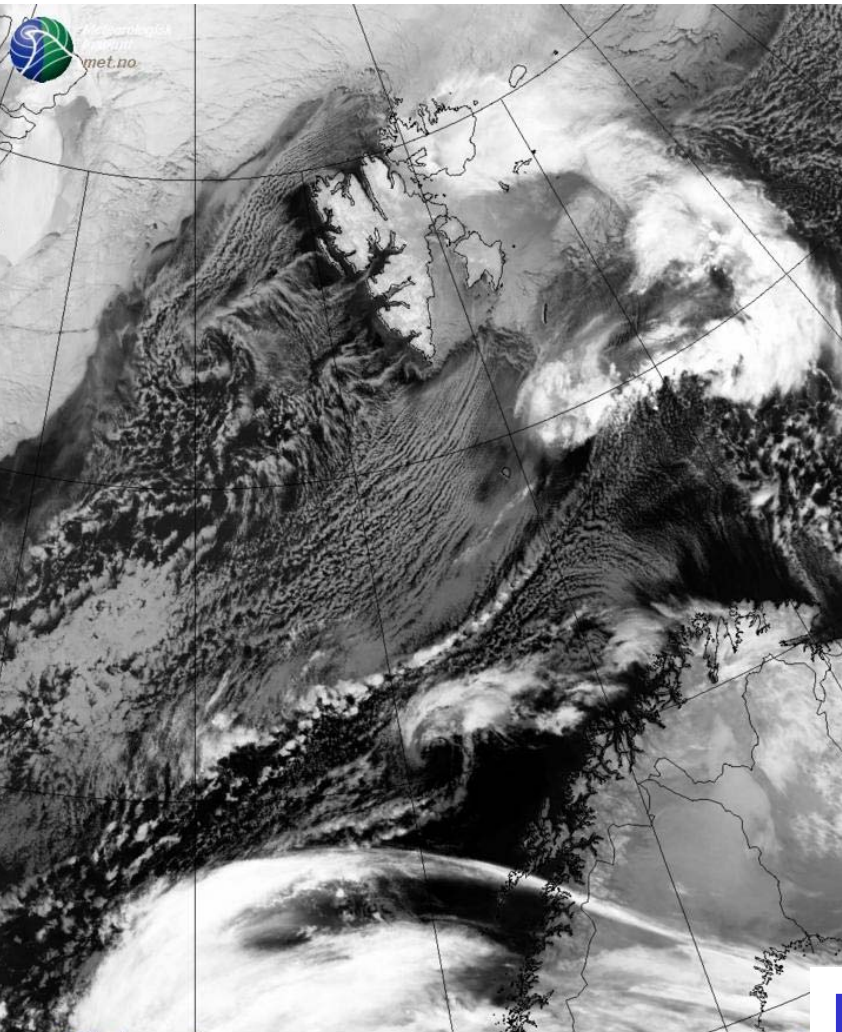
VT: Sat, 01 Mar 08, 03 UT (+15 h)



Θ_e (K) and MSL Pressure (hPa)
1 Mar 2008 03 UTC (+15 h)

NOAA IR - 1 Mar 2008 0339 UTC

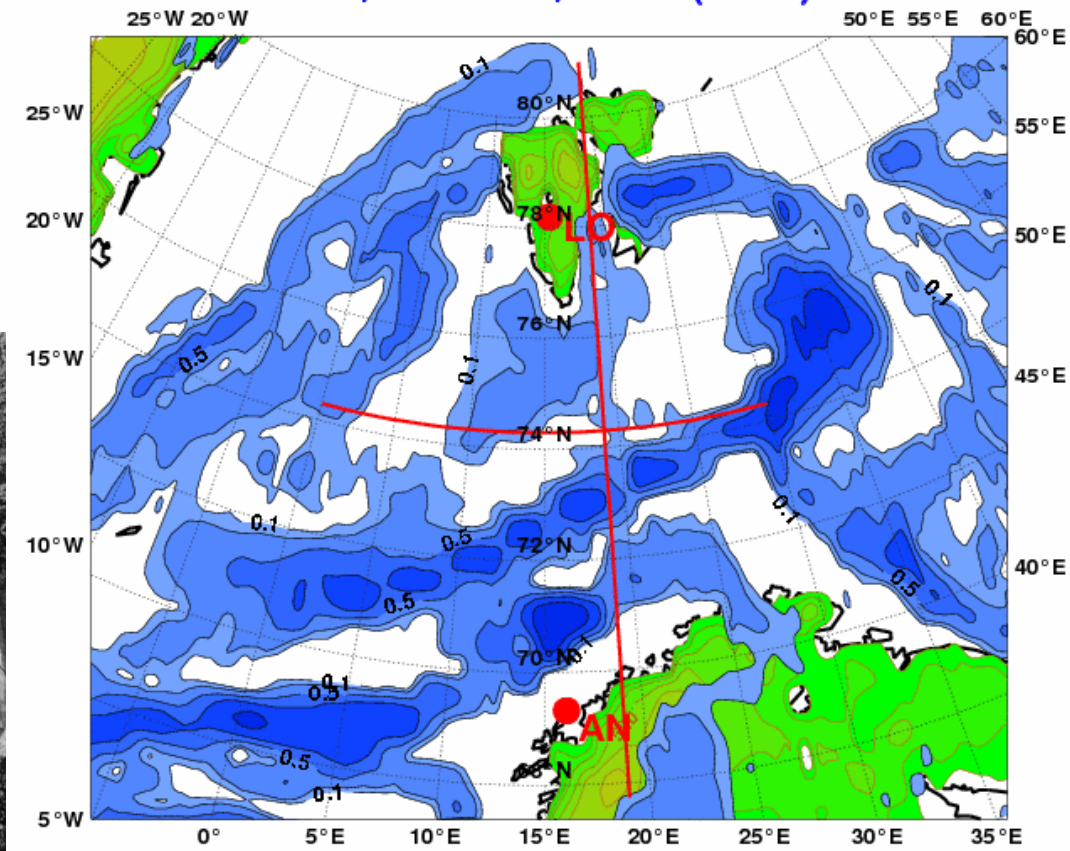
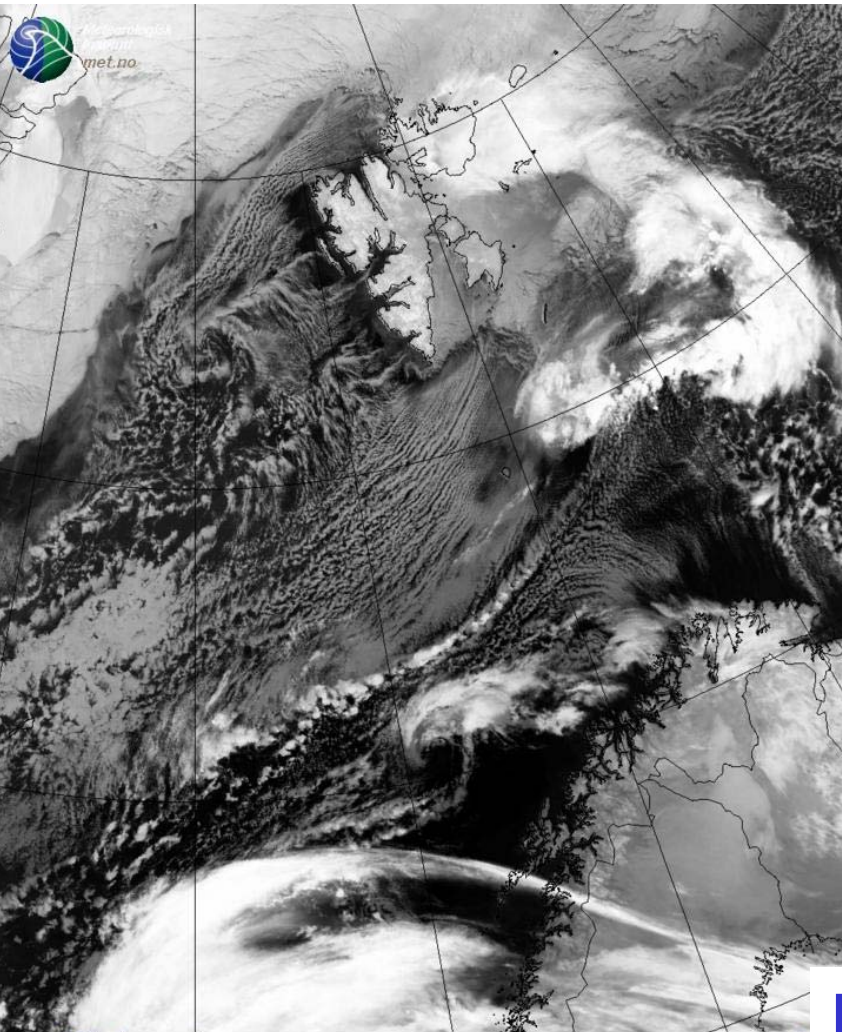
VT: Sat, 01 Mar 08, 03 UT (+15 h)



Surface Wind + Gusts
1 Mar 2008 03 UTC (+15 h)

NOAA IR - 1 Mar 2008 0339 UTC

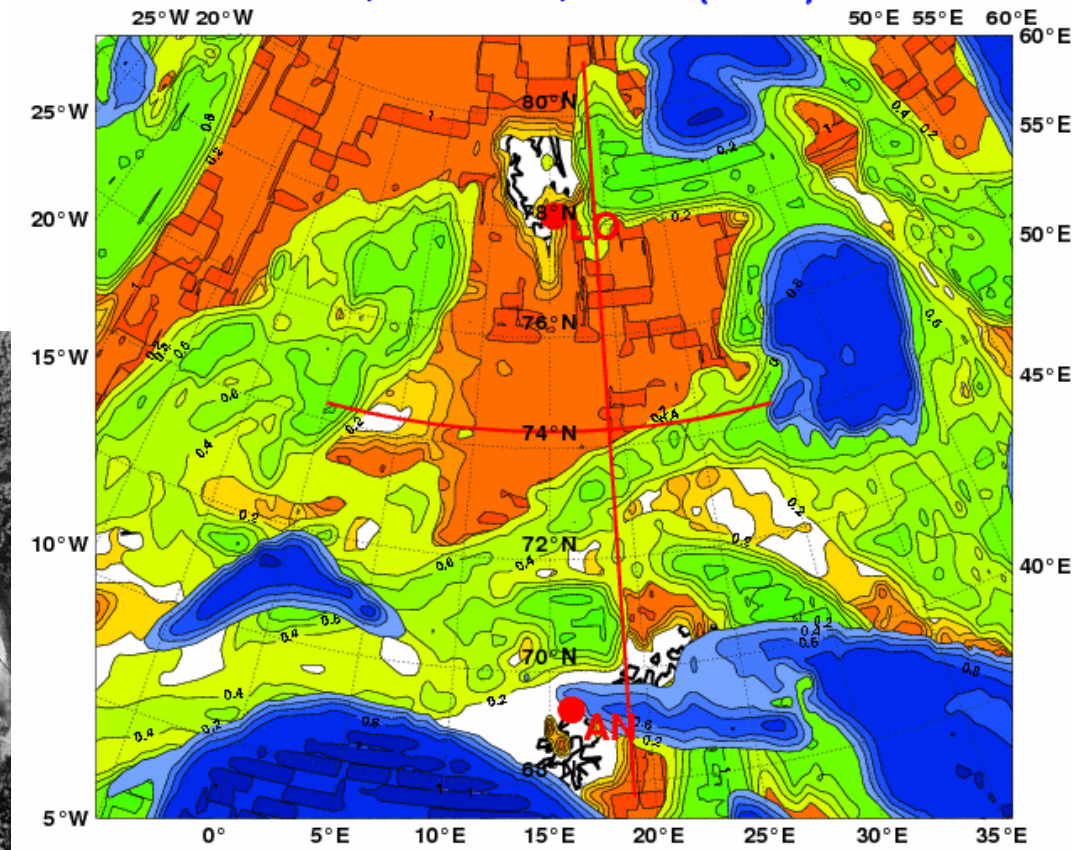
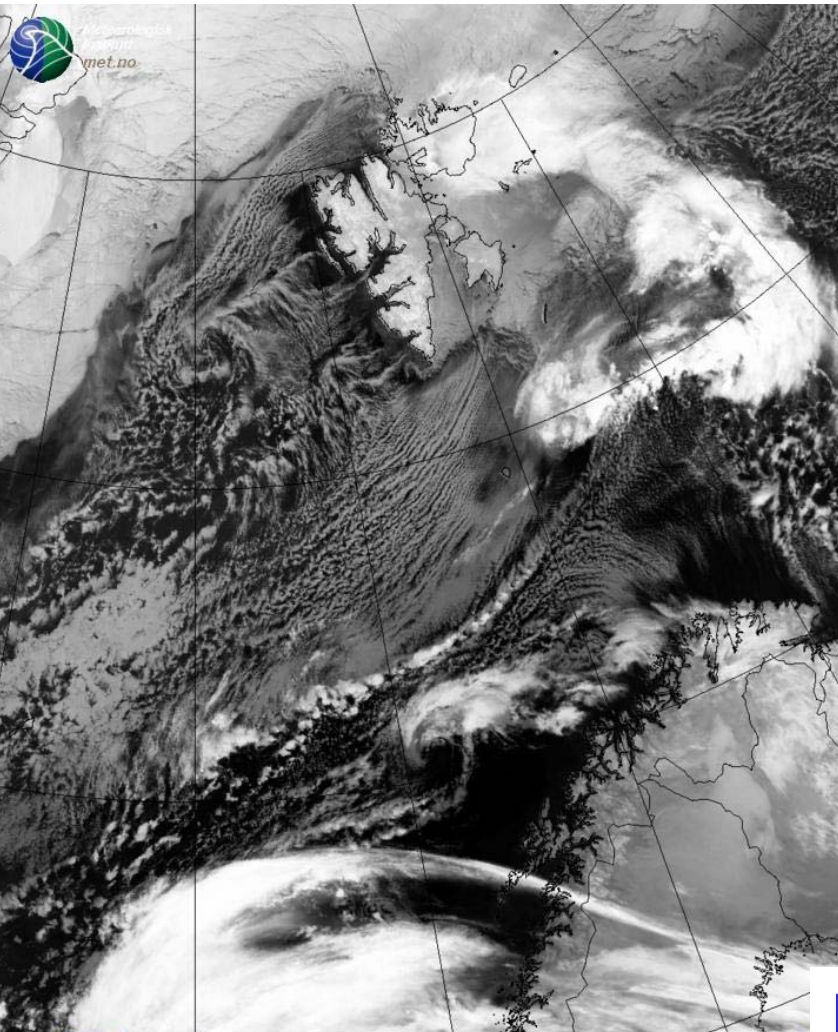
VT: Sat, 01 Mar 08, 03 UT (+15 h)



Total Precip
1 Mar 2008 03 UTC (+15 h)

NOAA IR - 1 Mar 2008 0339 UTC

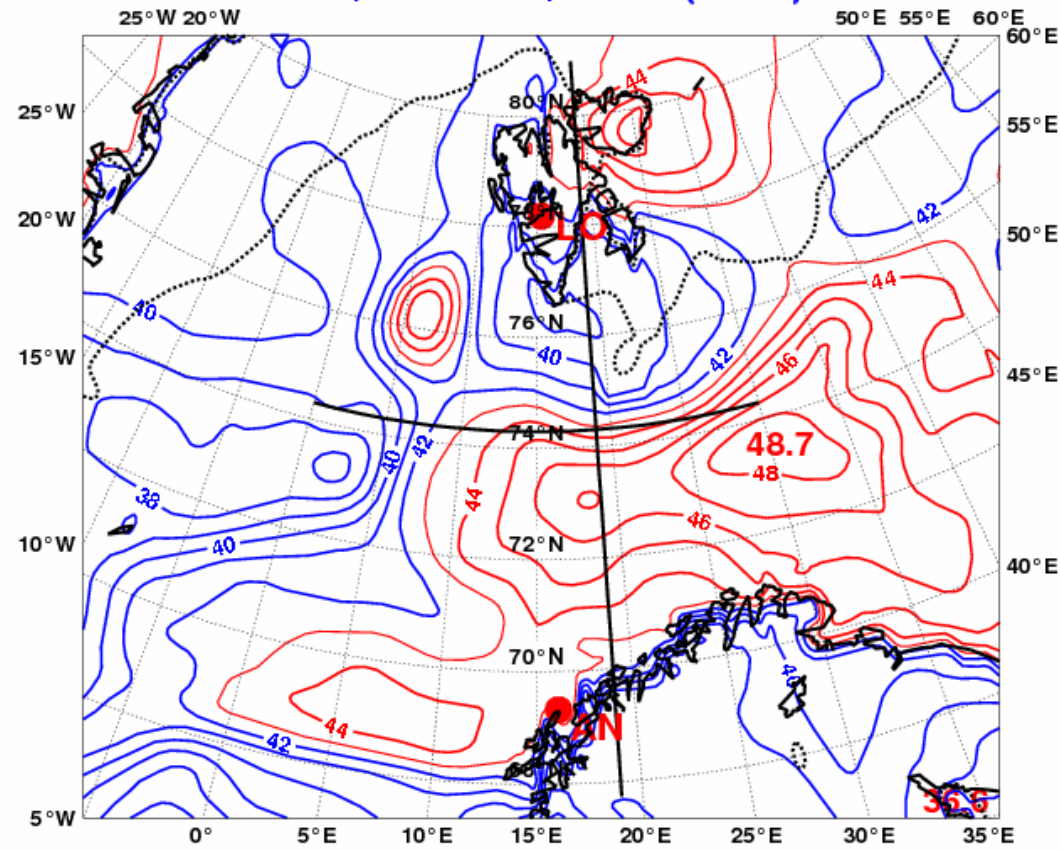
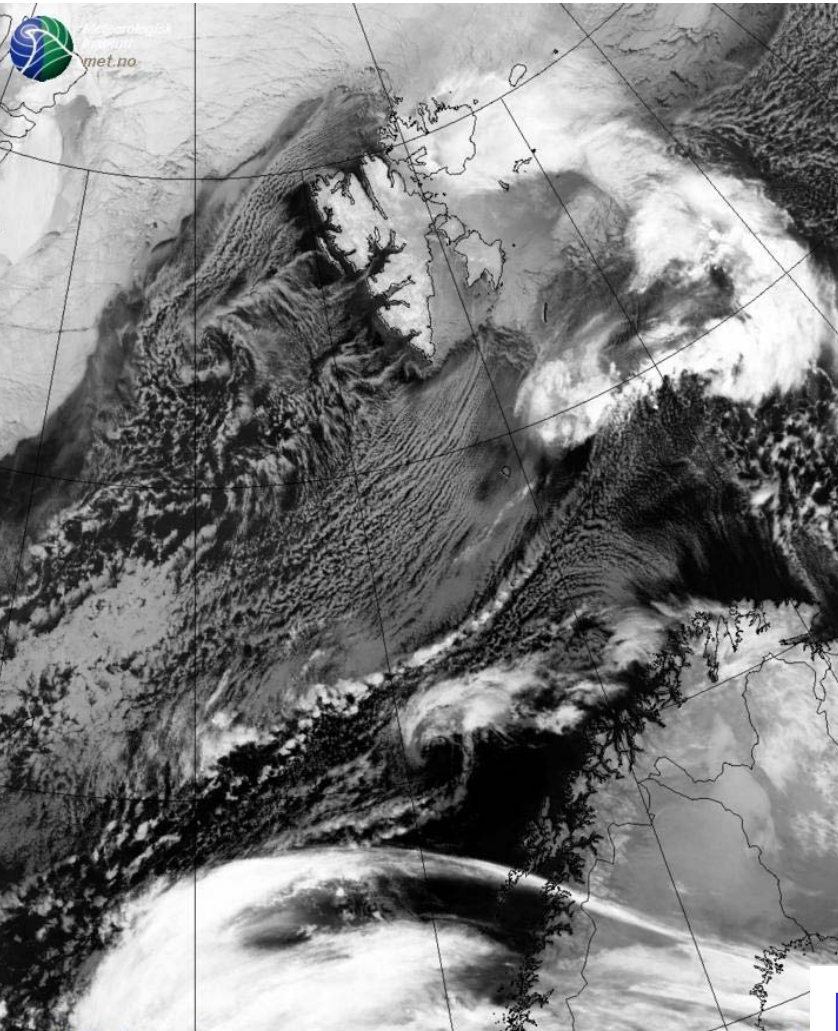
VT: Sat, 01 Mar 08, 03 UT (+15 h)



Cloud Cover
1 Mar 2008 03 UTC (+15 h)

NOAA IR - 1 Mar 2008 0339 UTC

VT: Sat, 01 Mar 08, 03 UT (+15 h)



T_{500hPa} -SST (K)
1 Mar 2008 03 UTC (+15 h)

NOAA IR - 1 Mar 2008 0339 UTC

Conditions at 12 UTC

ECMWF T799/L91 Forecasts

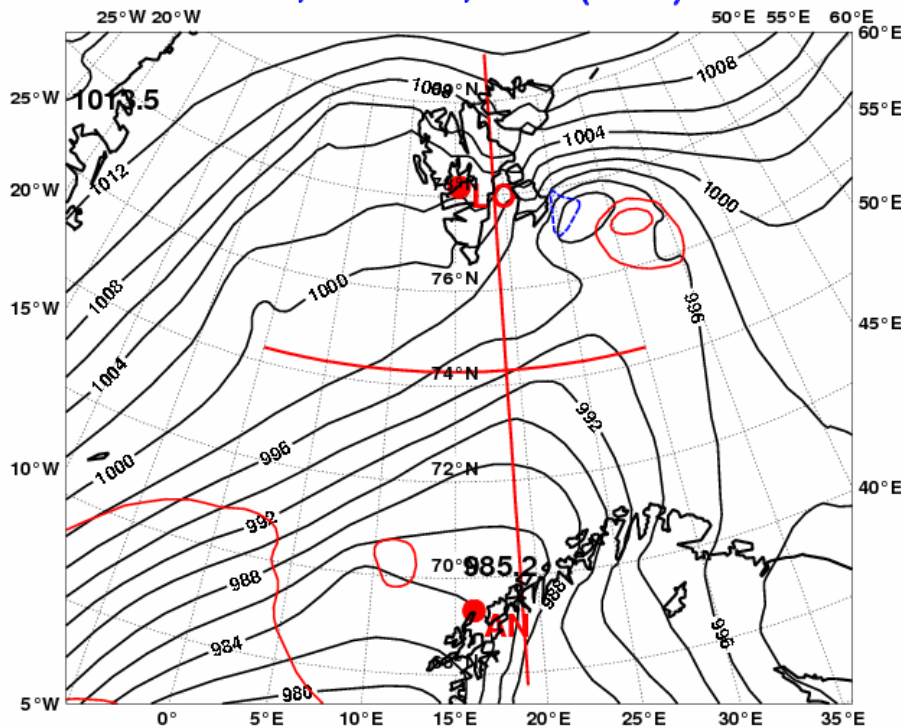
http://www.pa.op.dlr.de/ipy_thorpex

Regional Conditions

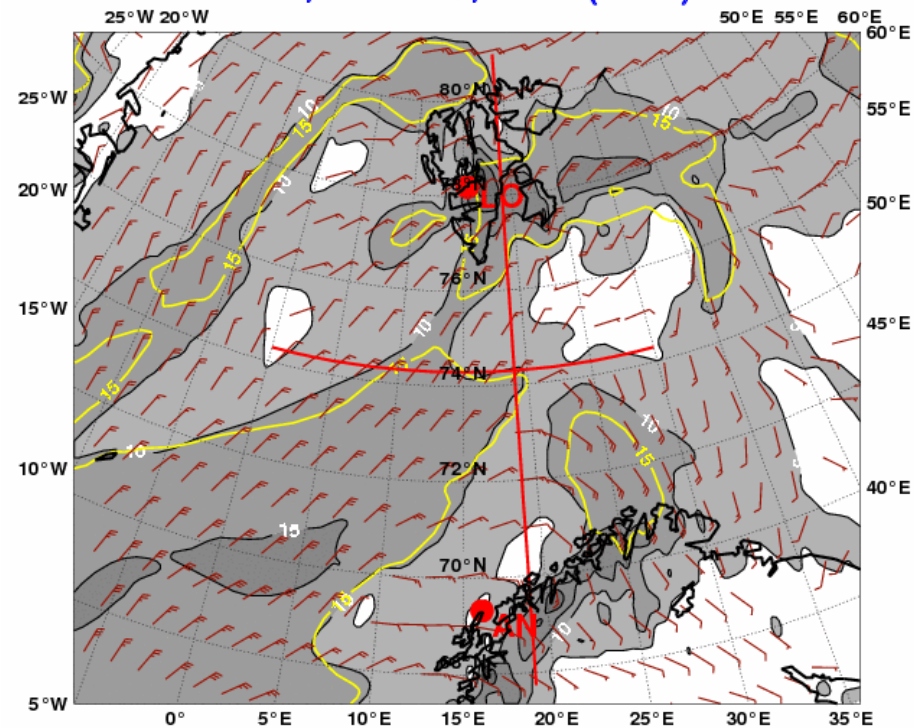
(based on ECMWF T799/L91 Forecasts)

Saturday 1 March 2008 12 UTC (+24 h)

VT: Sat, 01 Mar 08, 12 UT (+24 h)



VT: Sat, 01 Mar 08, 12 UT (+24 h)



MSL Pressure (hPa), Tendency (hPa/3 h)

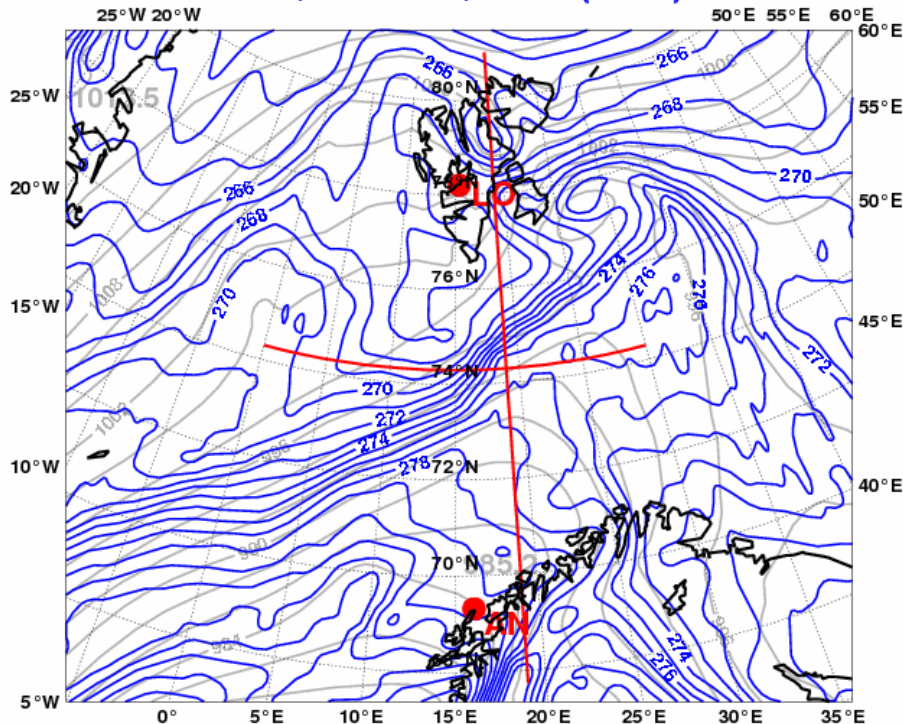
Wind at 10 m and Gusts > 15m/s (yellow)

Regional Conditions

(based on ECMWF T799/L91 Forecasts)

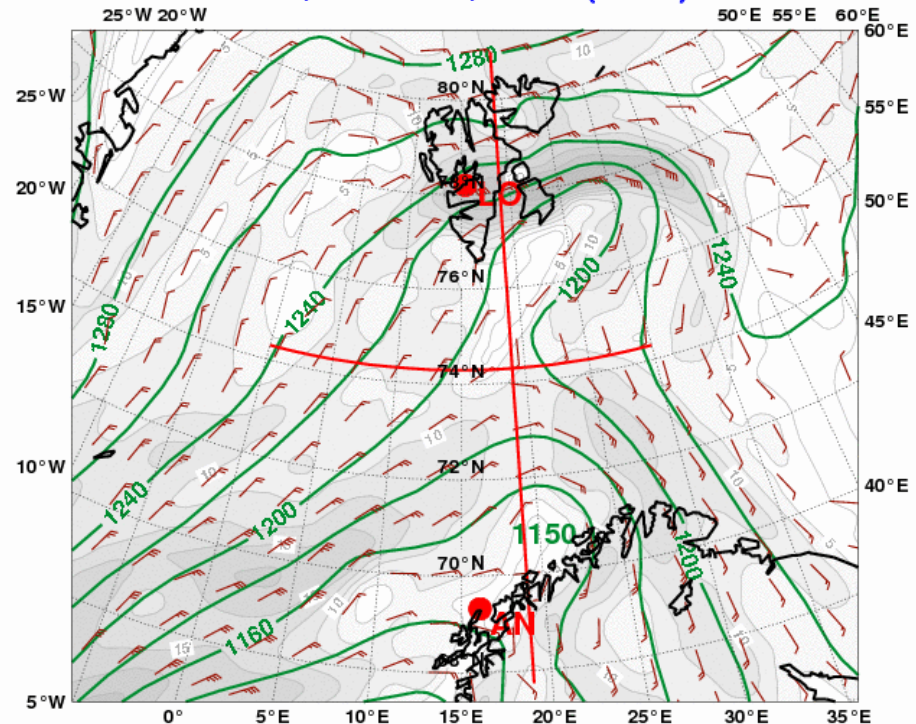
Saturday 1 March 2008 12 UTC (+24 h)

VT: Sat, 01 Mar 08, 12 UT (+24 h)



Θ_e (K) at 850 hPa

VT: Sat, 01 Mar 08, 12 UT (+24 h)



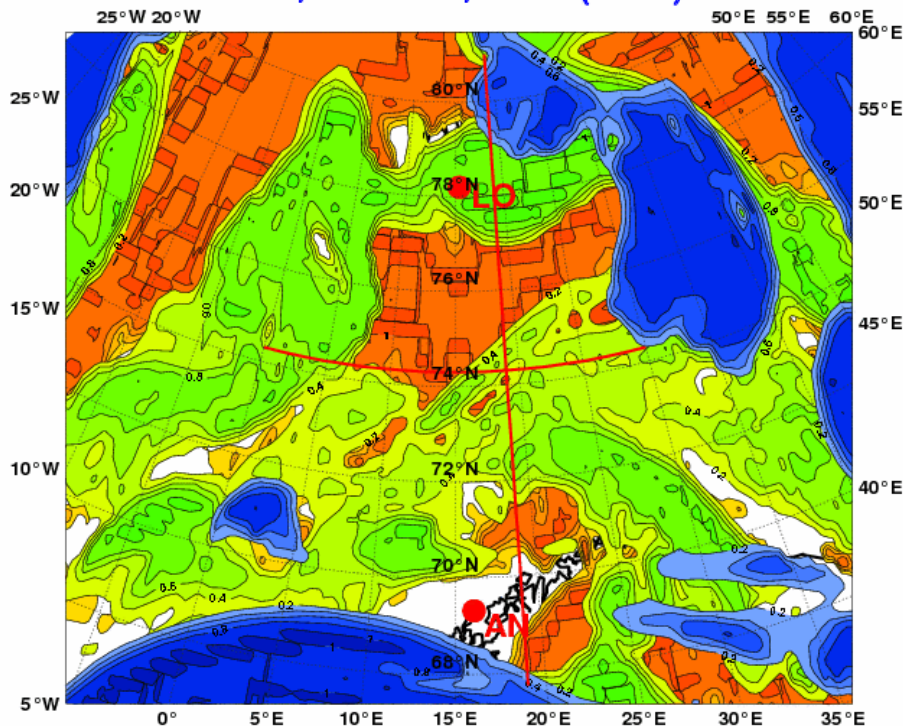
Wind (m/s) and Z (m) at 850 hPa

Regional Conditions

(based on ECMWF T799/L91 Forecasts)

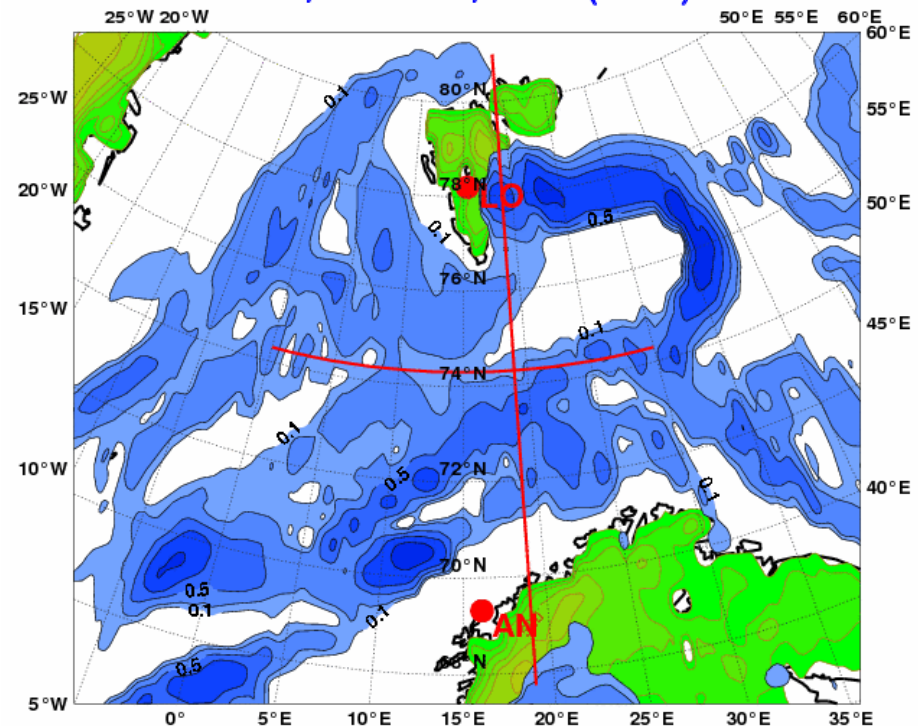
Saturday 1 March 2008 12 UTC (+24 h)

VT: Sat, 01 Mar 08, 12 UT (+24 h)



High, Medium, Low Cloud Cover

VT: Sat, 01 Mar 08, 12 UT (+24 h)



Precipitation (mm/3h)

Suggestion for Saturday Flights

1. Flight: Targeting in predicted sensitive areas

FL 270 ... 290

2. Flight: Mapping Tropopause Anomaly above
Svalbard and Polar Low Development
offshore Norway

FL 270 ... 290

ECMWF-SAP based on TE-SVs (molst TL95) and Z500

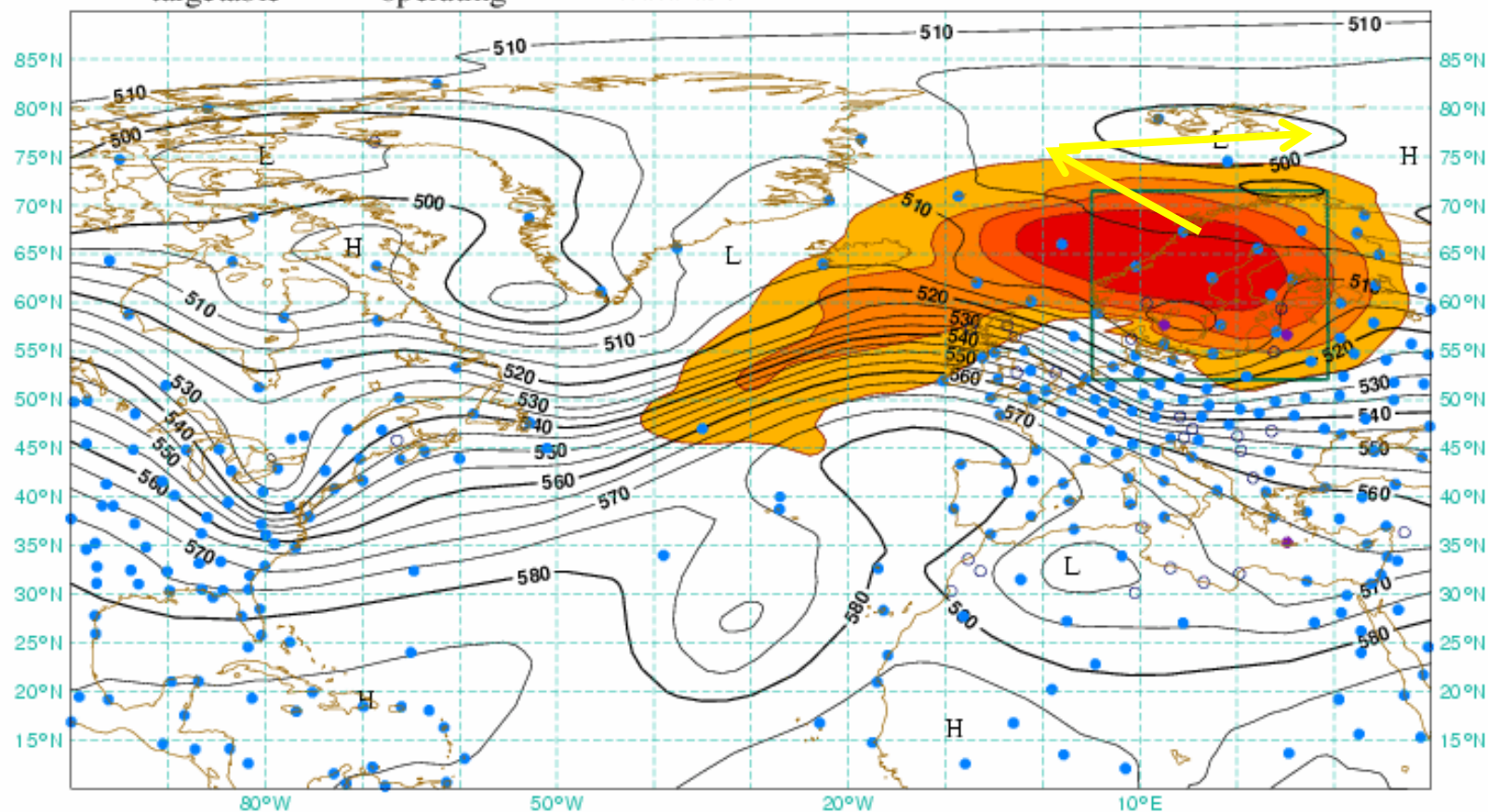
Valid time: 20080301, 12 UT (Targeting Time)

Shading: areas of 8, 4, 2, 1 $\times 10^6 \text{ km}^2$

trajectory Initialized from fc 20080229, 00 UT +36 h

Targ. time: 20080301, 12 UT / Verif. time: 20080302, 00 UT (opt: 12h)

• targetable • operating ○ not available



UKMO-SAP based on MOGREPS15-Initialised ETKF summary map and Z500 (black solid contour)

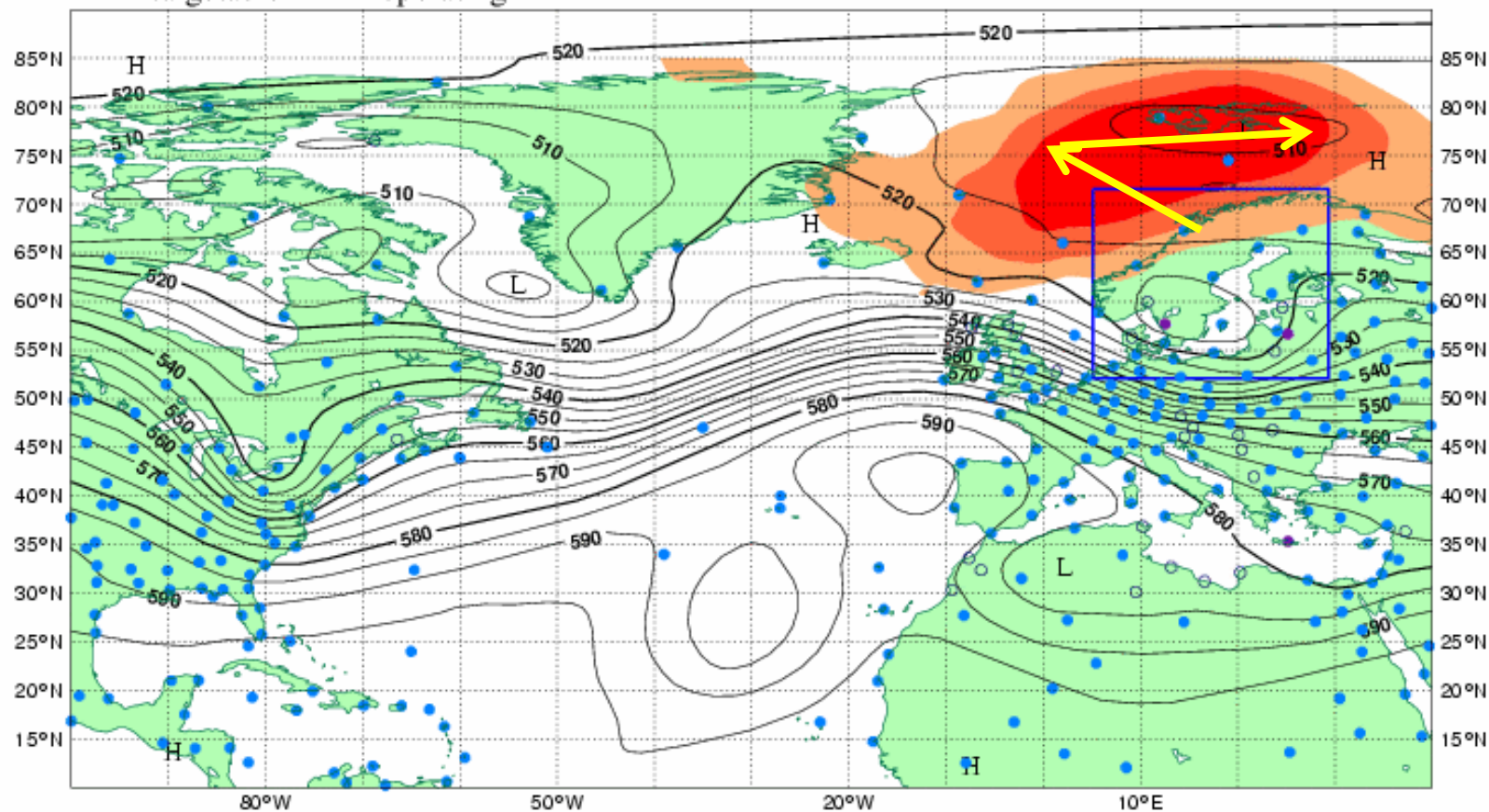
Valid time: 20080301, 12UT

Shading: areas of $8, 4, 2, 1 \times 10^6 \text{ km}^2$

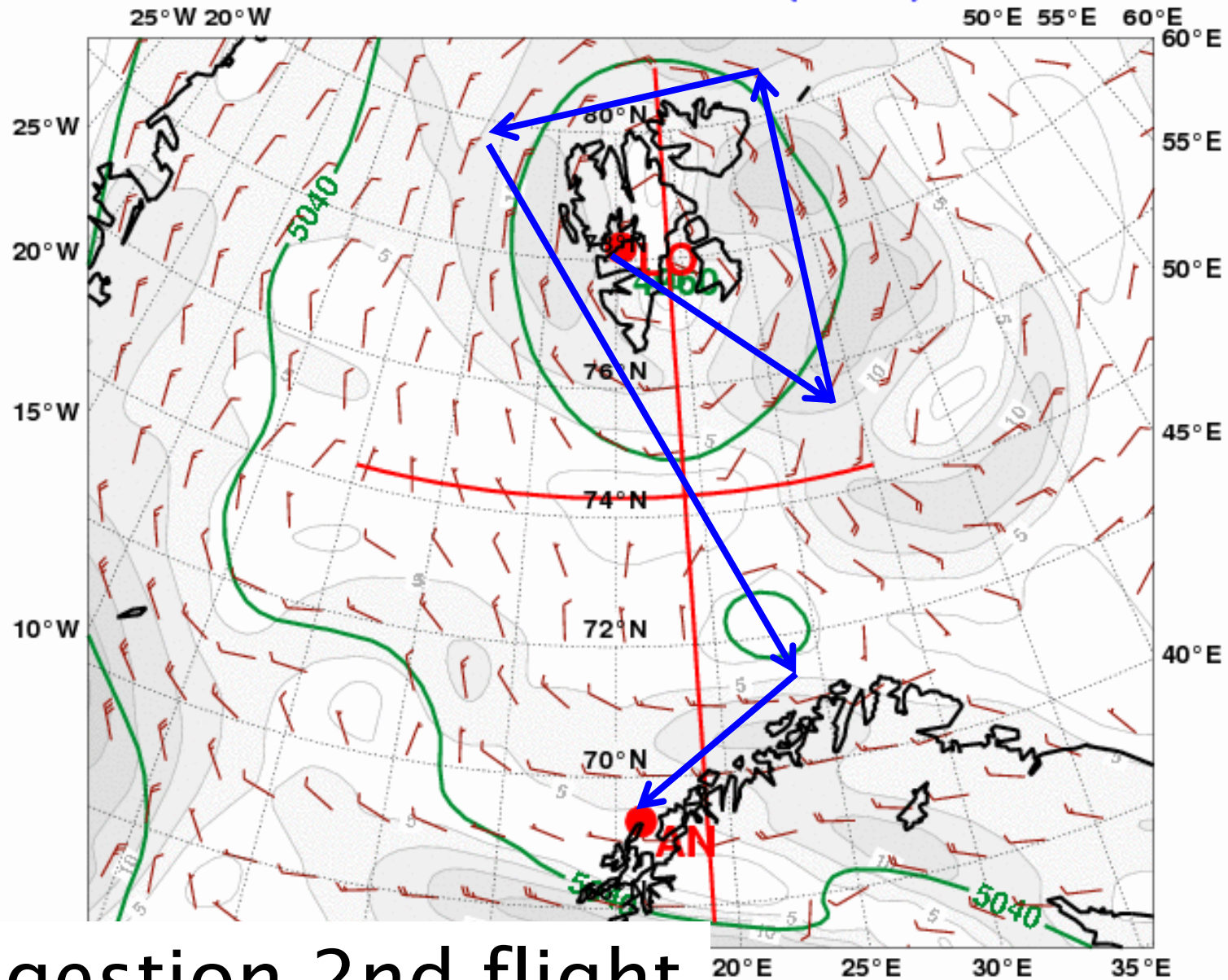
Trajectory Initialised from fc 20080229, 0 +36h (Lead time)

Targ. time: 20080301, 12UT / Verif. time : 20080302, 0UT (opt:12)

• targetable • operating ○ not available



VT: Sat, 01 Mar 08, 12 UT (+24 h)



Suggestion 2nd flight

Wind (m/s) and Z (m) at 500 hPa

