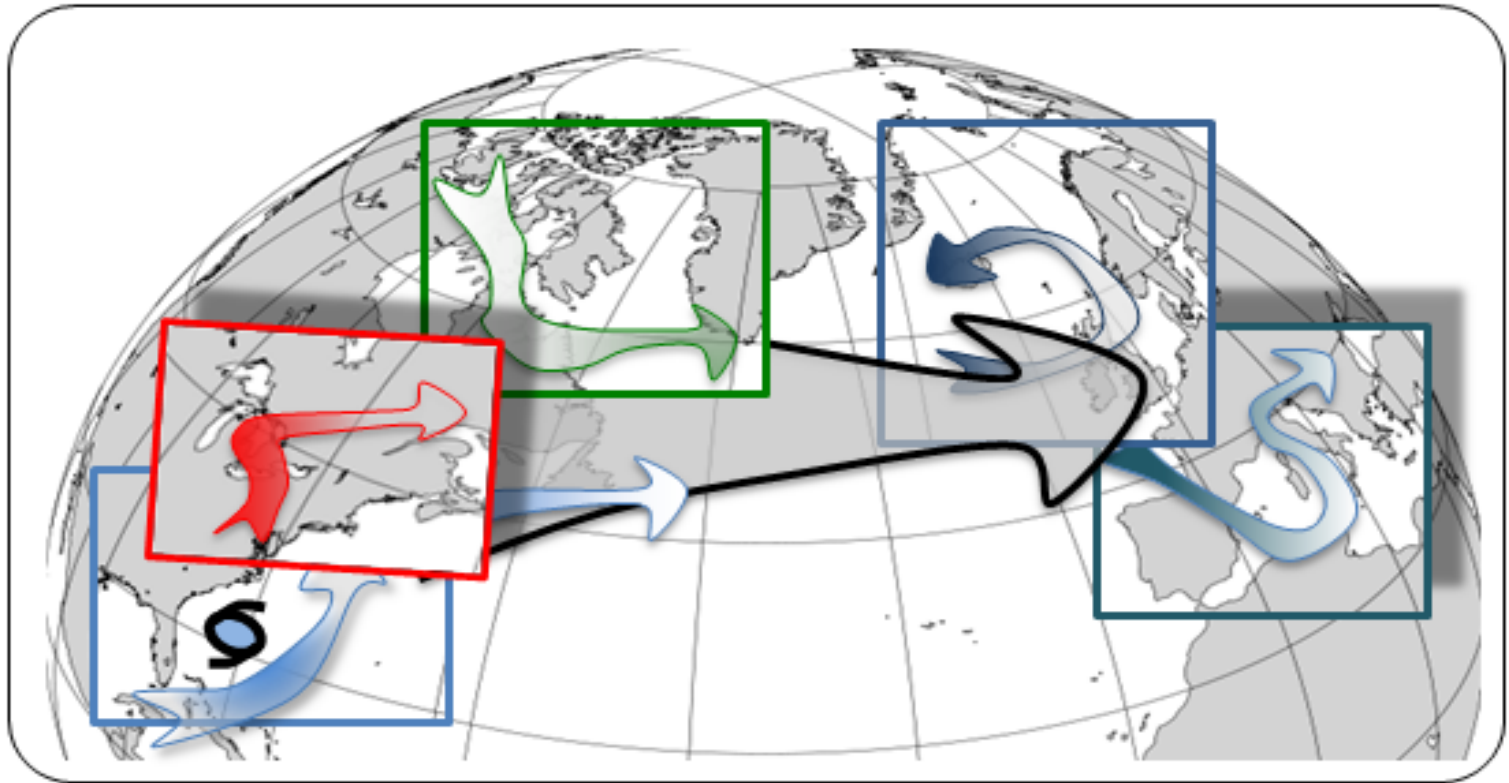


NAWDEX – General Planning Meeting

23 September 2016, Keflavik 11 UTC



NAWDEX – General Planning Meeting

23 September 2016, Keflavik 11 UTC

Key issues today

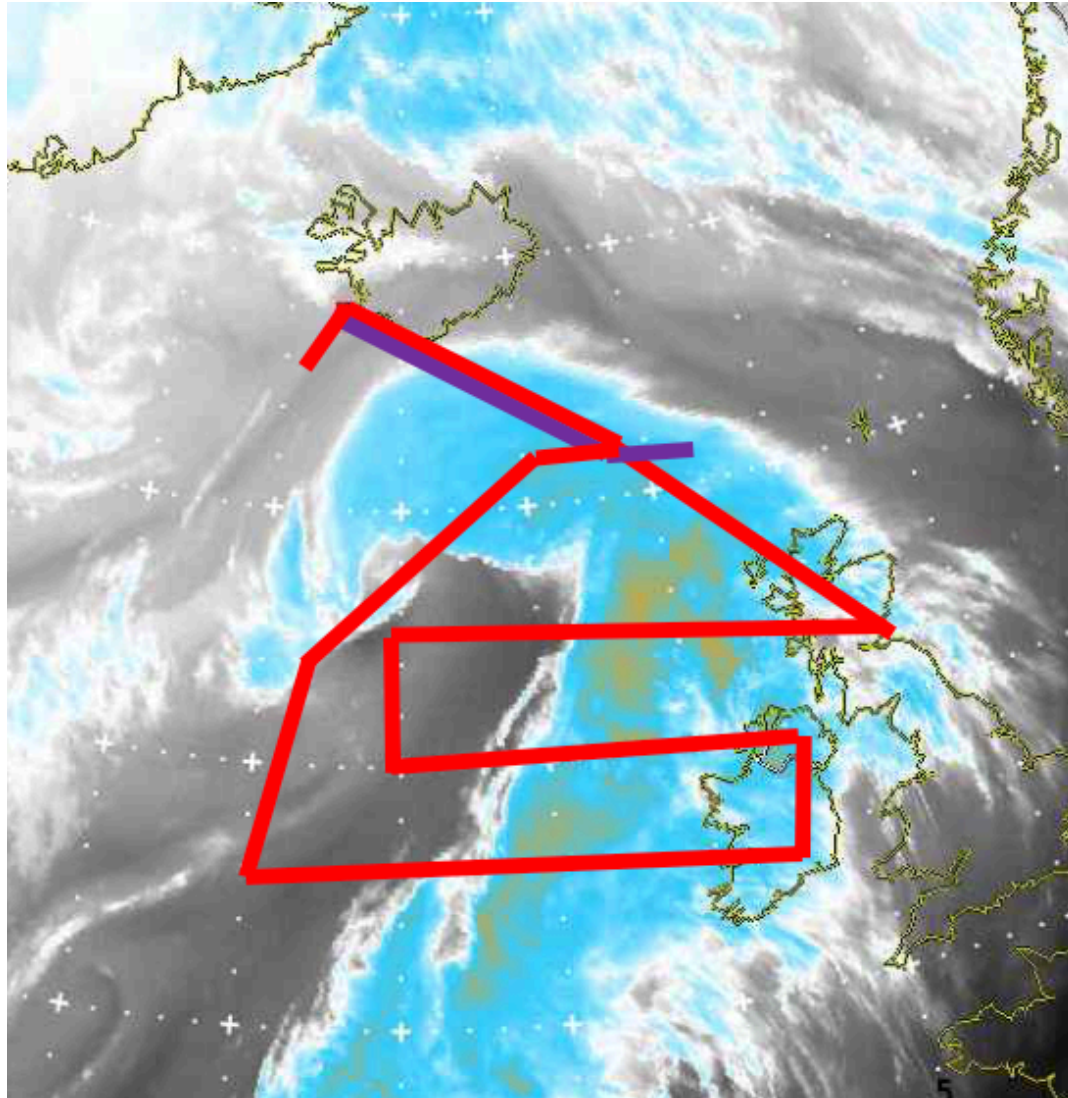
1. Today's exciting flights
2. Current situation & evolution until Wednesday 28 September
3. Discuss scenarios for flights on Monday.
4. Decide about NOTAM box.

NAWDEX – General Planning Meeting

23 September 2016, Keflavik 11 UTC

1. Key information from previous flight (2 minutes)
2. Aircraft status report by FX-Operations
3. Instrument status report by Instrument Manager
4. Short weather summary
5. Discussion about flight patterns next Monday
6. Report of Ground-Based Observation coordinator
7. Announcement of tentative plans for Day+3
8. Coordination with other aircraft (Input from other groups)

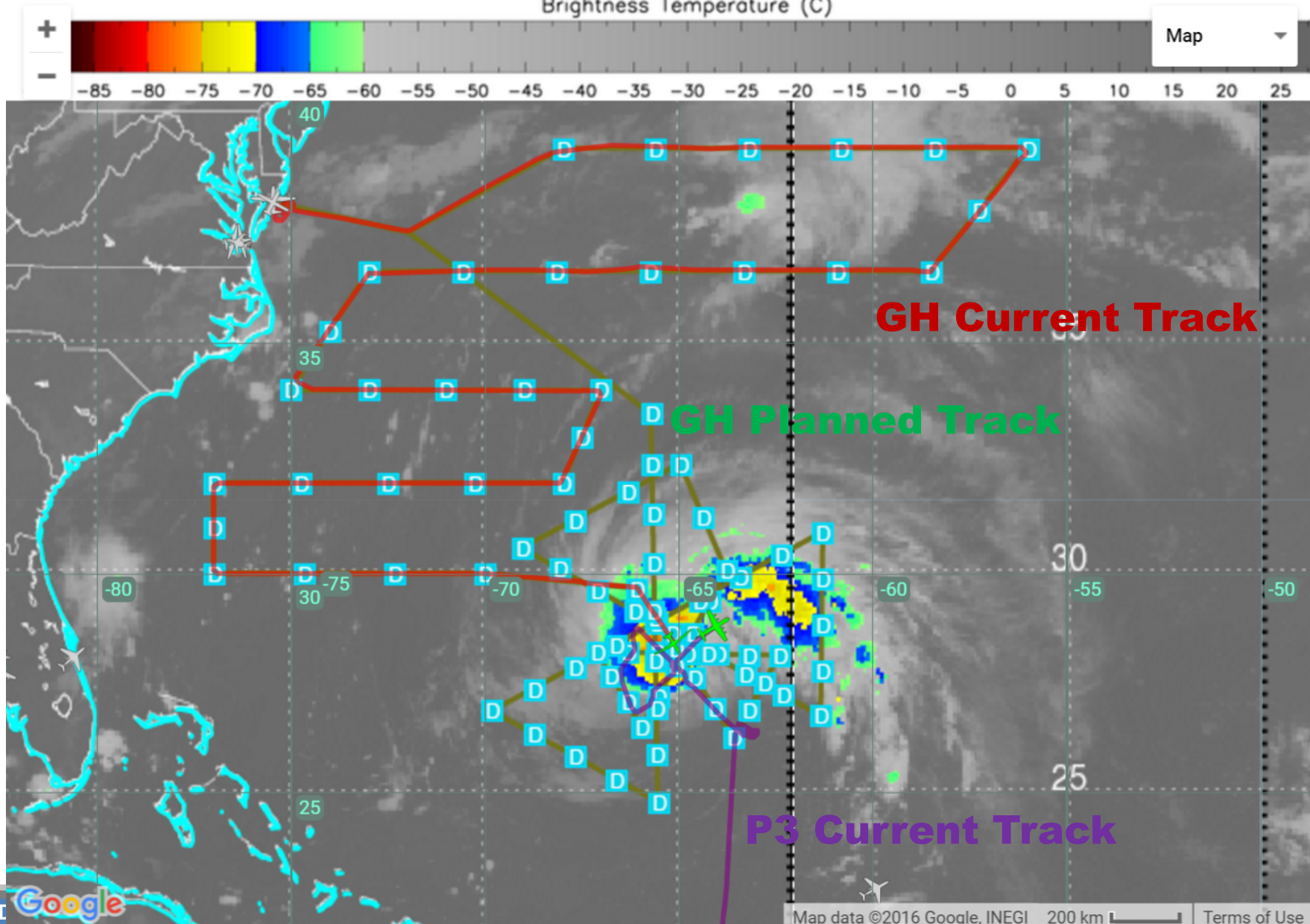
Exciting flights of HALO, Falcon and FAAM today



SHOUT Global HAWK Flight Over Karl

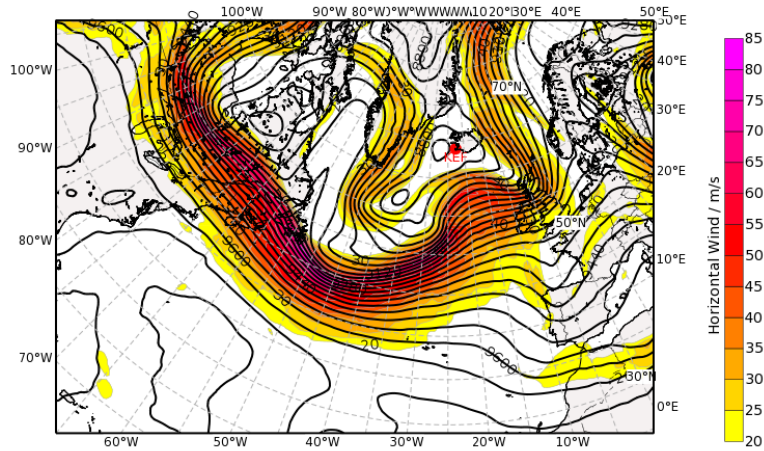
1000 UTC 23 September

Brightness Temperature (C)

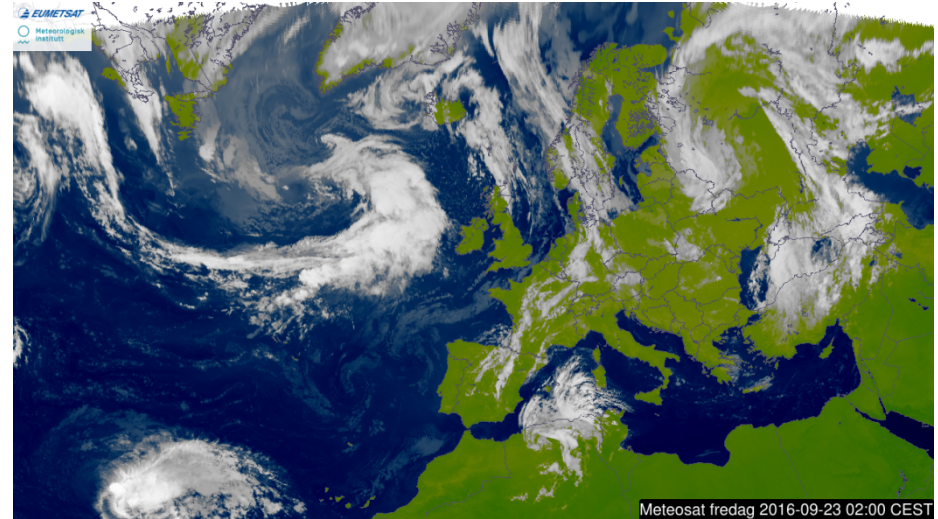


Analysis – 23 Sep 2016, 00 UTC

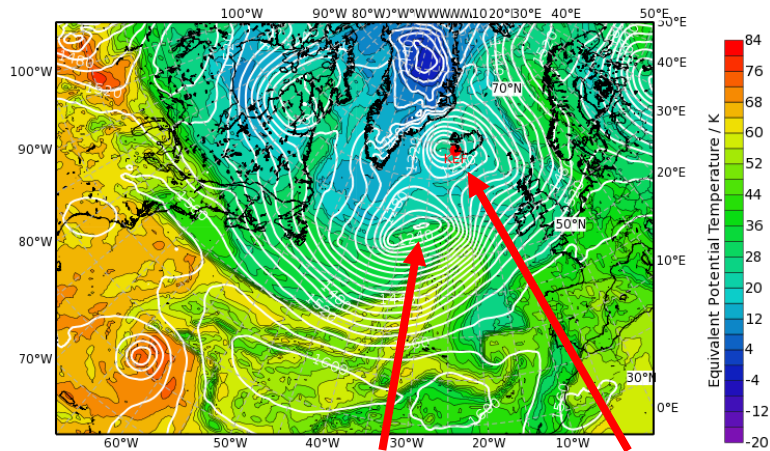
Geopotential Height (m) & Horizontal Wind (m/s) at 300 hPa
Valid: Fri, 23 Sep 2016, 00 UTC (step 000 h from Fri, 23 Sep 2016, 00 UTC)



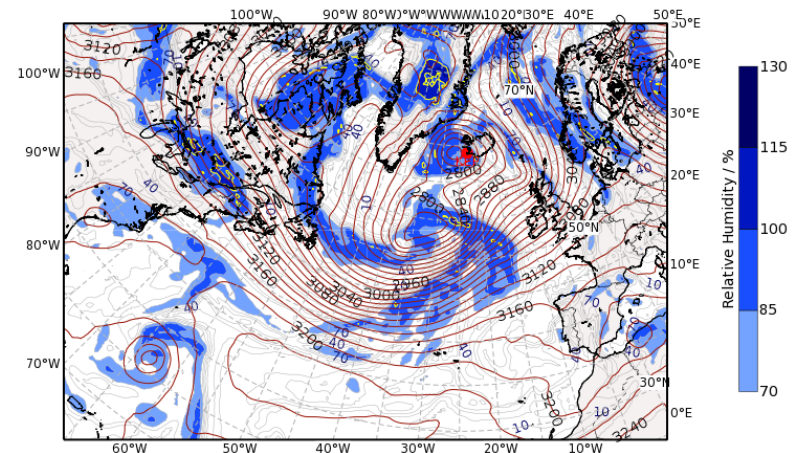
Z300, SAT
THE850, RH700



Equivalent Potential Temperature (degC) & Streamlines at 850 hPa
Valid: Fri, 23 Sep 2016, 00 UTC (step 000 h from Fri, 23 Sep 2016, 00 UTC)



Relative Humidity (%) and Z (m) at 700 hPa
Valid: Fri, 23 Sep 2016, 00 UTC (step 000 h from Fri, 23 Sep 2016, 00 UTC)

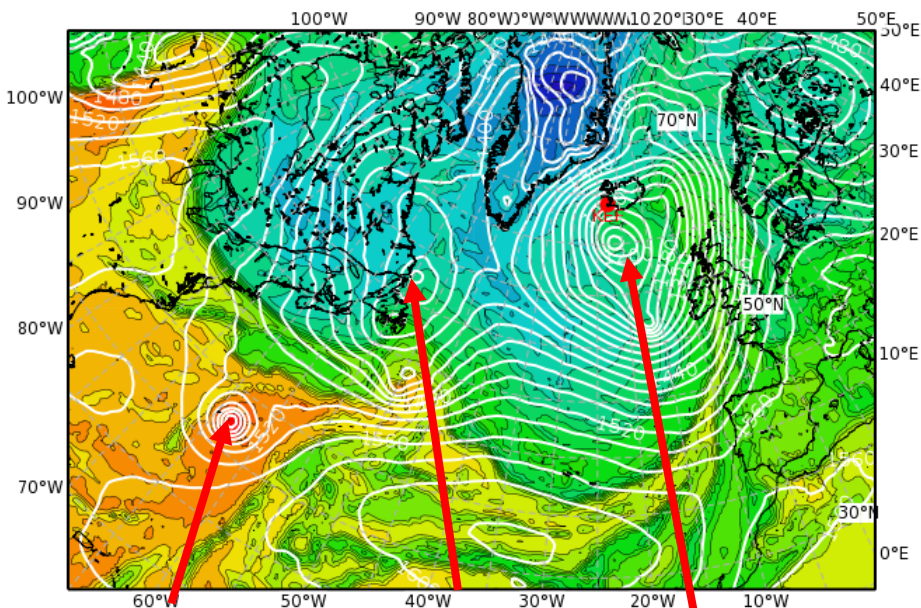


Vladiana **Ursula**

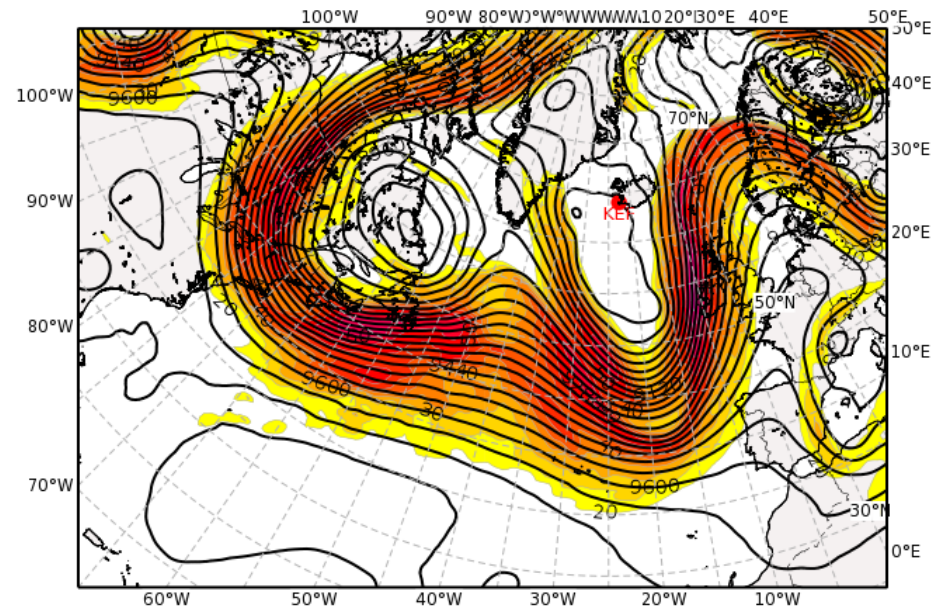
Forecast for Sat, 24 Sep 2016 12 UTC

THE850, Z300 BT23/00Z

Equivalent Potential Temperature (degC) & Streamlines at 850 hPa
Valid: Sat, 24 Sep 2016, 12 UTC (step 036 h from Fri, 23 Sep 2016, 00 UTC)



Geopotential Height (m) & Horizontal Wind (m/s) at 300 hPa
Valid: Sat, 24 Sep 2016, 12 UTC (step 036 h from Fri, 23 Sep 2016, 00 UTC)



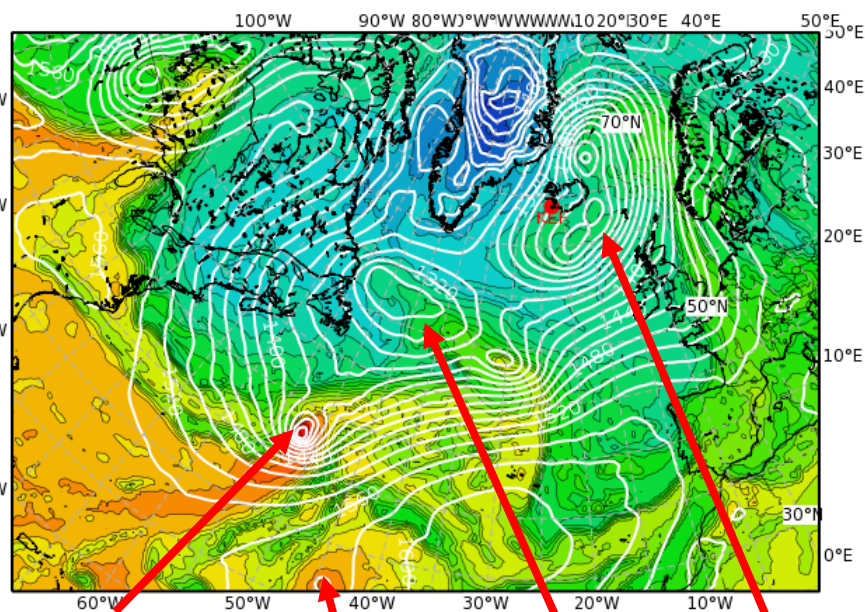
TC Karl DS cyclone

Vladiana

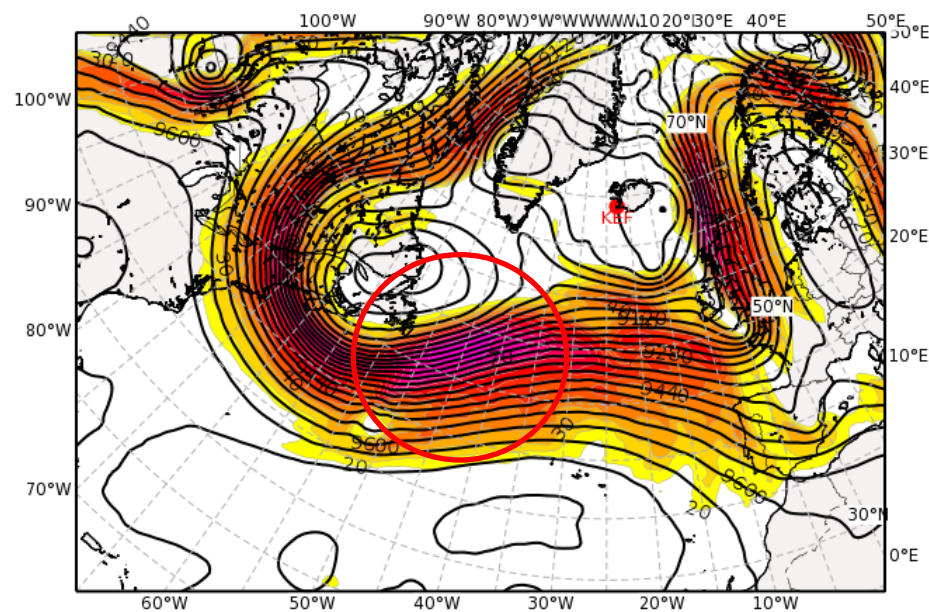
Forecast for Sun, 25 Sep 2016 12 UTC

THE850, Z300 BT23/00Z

Equivalent Potential Temperature (degC) & Streamlines at 850 hPa
Valid: Sun, 25 Sep 2016, 12 UTC (step 060 h from Fri, 23 Sep 2016, 00 UTC)



Geopotential Height (m) & Horizontal Wind (m/s) at 300 hPa
Valid: Sun, 25 Sep 2016, 12 UTC (step 060 h from Fri, 23 Sep 2016, 00 UTC)



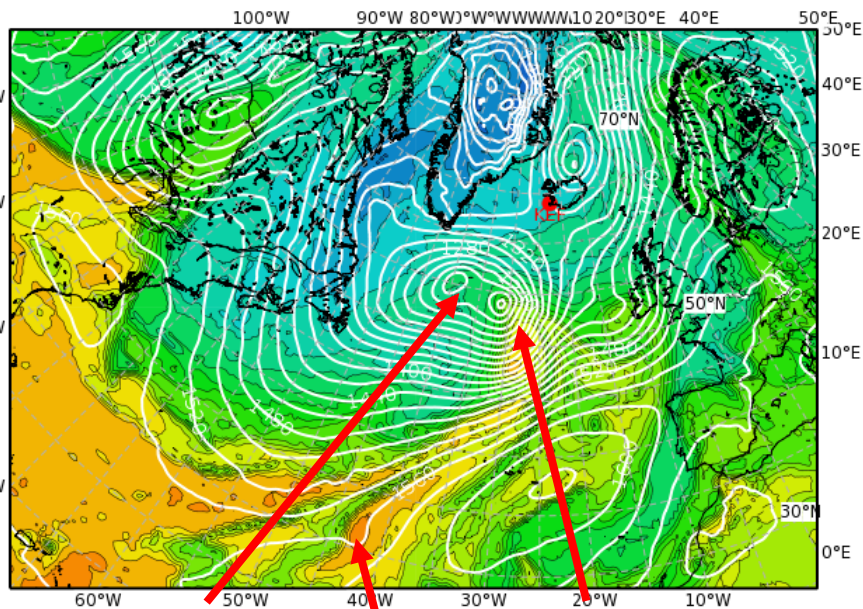
TC Karl
TC Lisa
DS cyclone Vladiana

- windy conditions north of UK

Forecast for Mon, 26 Sep 2016 12 UTC

THE850, Z300 BT23/00Z

Equivalent Potential Temperature (degC) & Streamlines at 850 hPa
Valid: Mon, 26 Sep 2016, 12 UTC (step 084 h from Fri, 23 Sep 2016, 00 UTC)

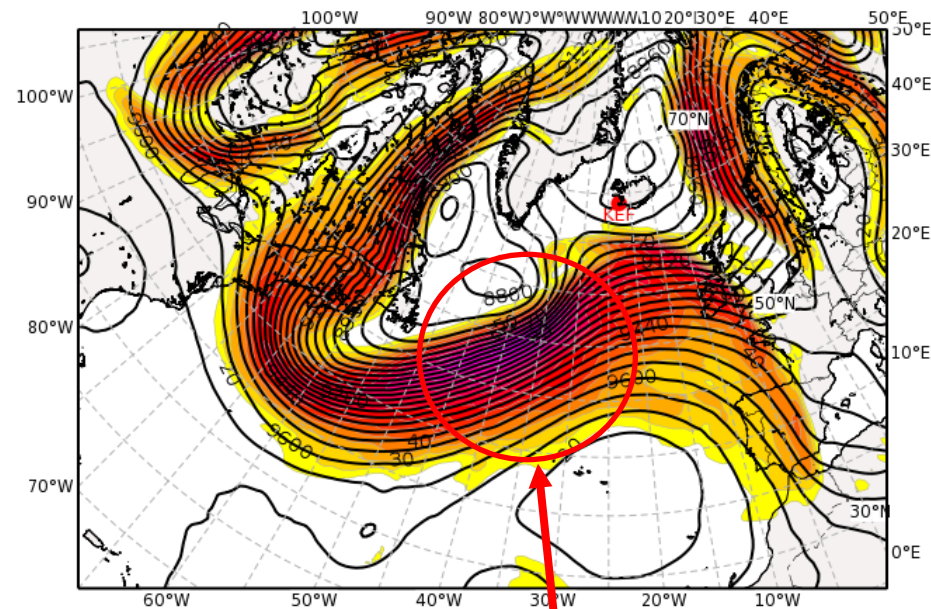


DS cyclone

TC Karl

TC Lisa

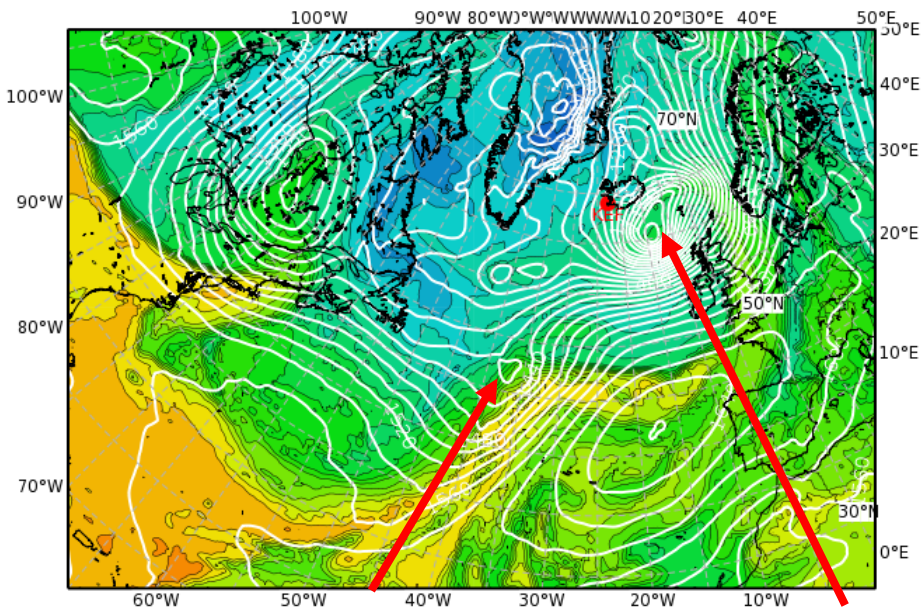
Geopotential Height (m) & Horizontal Wind (m/s) at 300 hPa
Valid: Mon, 26 Sep 2016, 12 UTC (step 084 h from Fri, 23 Sep 2016, 00 UTC)



Extremely strong jet

- Precipitation & windy conditions in UK and Ireland

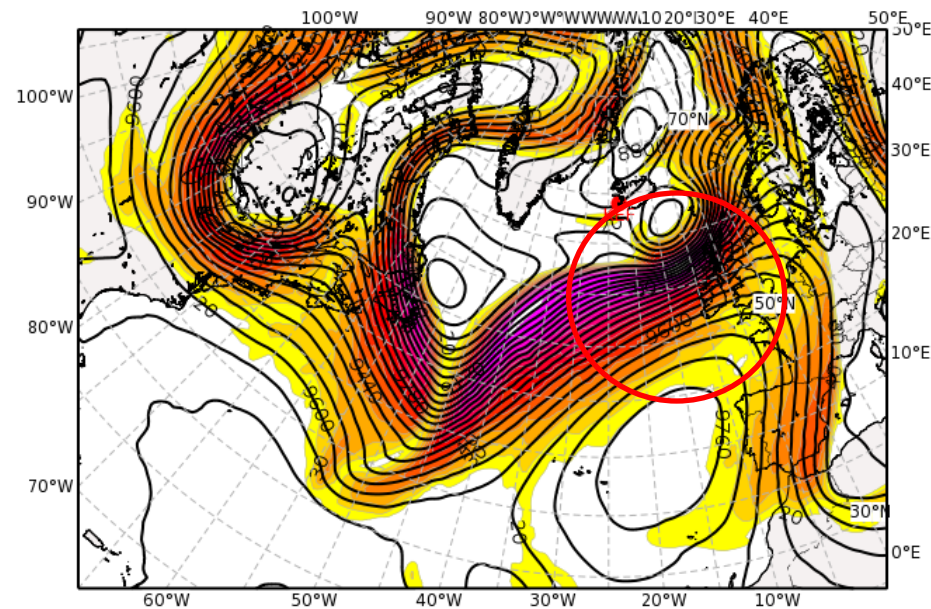
Equivalent Potential Temperature (degC) & Streamlines at 850 hPa
Valid: Tue, 27 Sep 2016, 12 UTC (step 108 h from Fri, 23 Sep 2016, 00 UTC)



new cyclone

**DS cyclone
and Ex-TC Karl**

Geopotential Height (m) & Horizontal Wind (m/s) at 300 hPa
Valid: Tue, 27 Sep 2016, 12 UTC (step 108 h from Fri, 23 Sep 2016, 00 UTC)

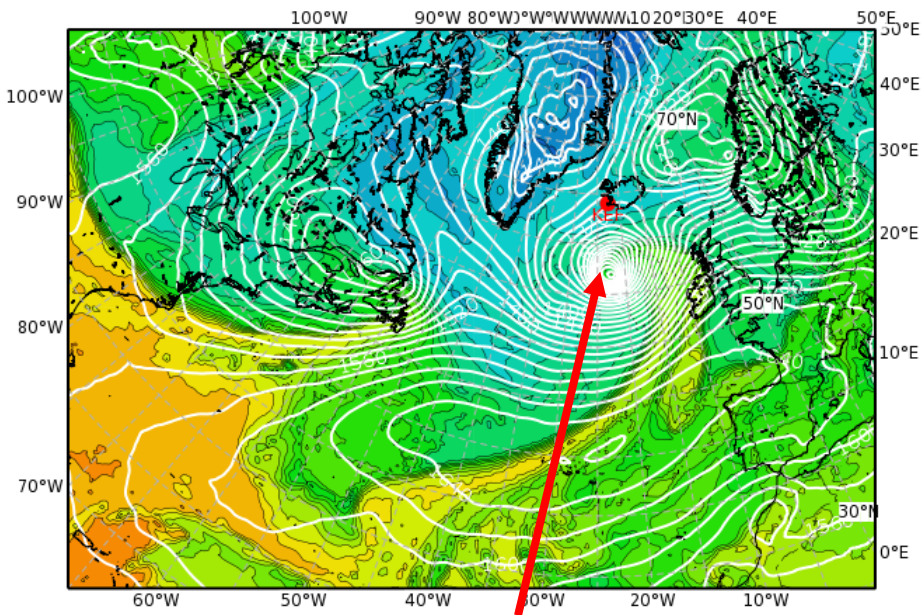


- Stormy conditions in UK, Ireland, Norway

Forecast for Wed, 28 Sep 2016 12 UTC

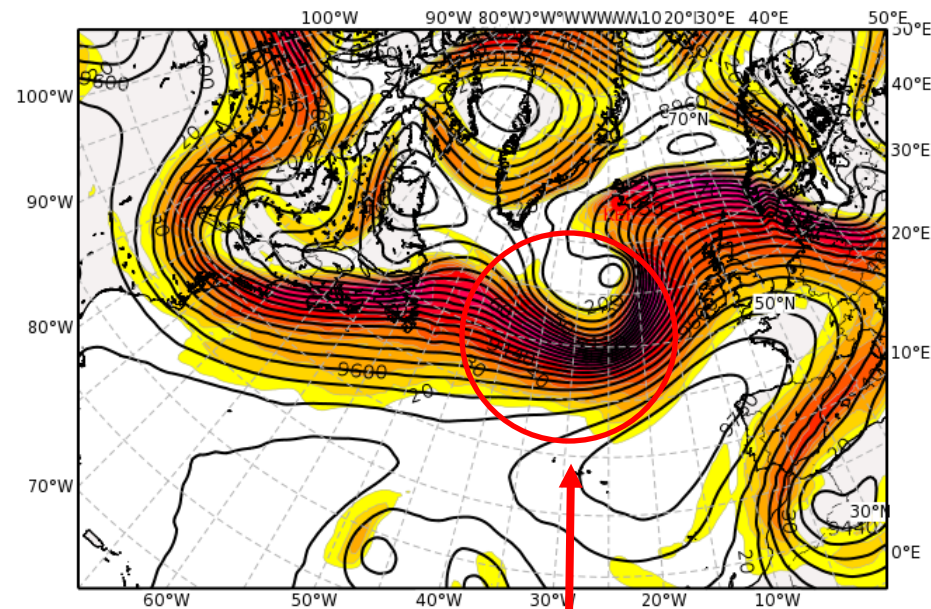
THE850, Z300 BT23/00Z

Equivalent Potential Temperature (degC) & Streamlines at 850 hPa
Valid: Wed, 28 Sep 2016, 12 UTC (step 132 h from Fri, 23 Sep 2016, 00 UTC)



new cyclone

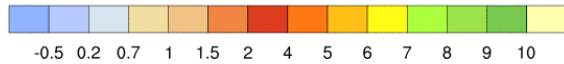
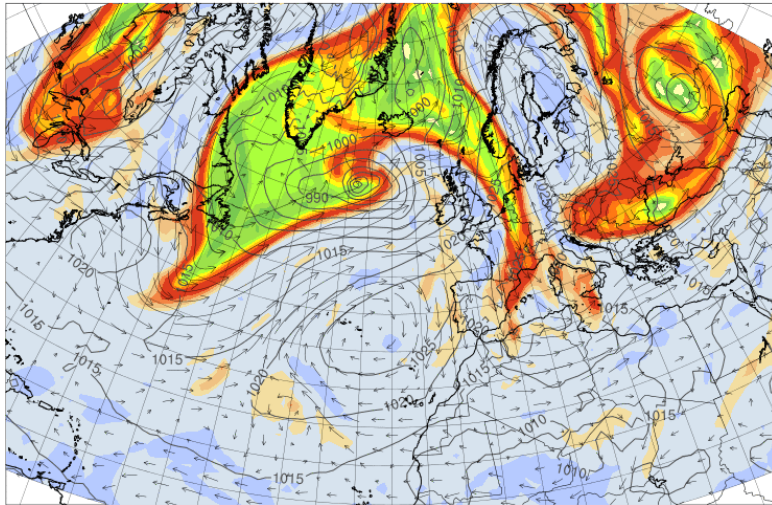
Geopotential Height (m) & Horizontal Wind (m/s) at 300 hPa
Valid: Wed, 28 Sep 2016, 12 UTC (step 132 h from Fri, 23 Sep 2016, 00 UTC)



Extremely strong jet

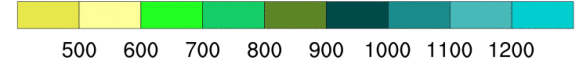
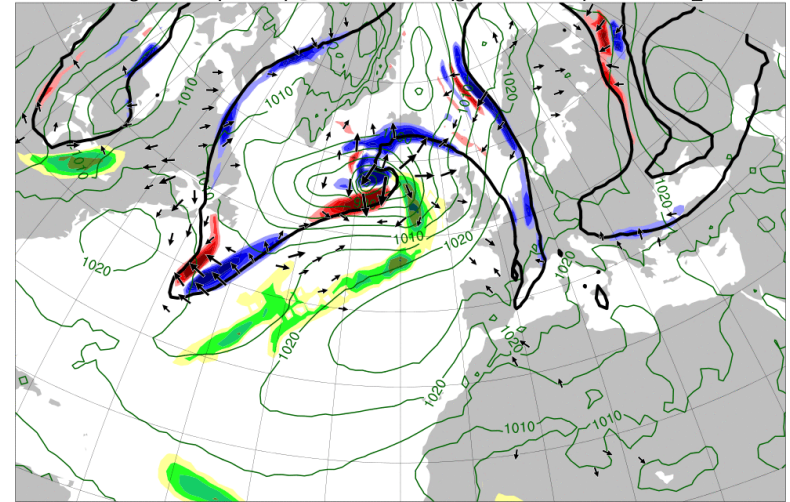
Outlook for Monday, 26 September, 21 UTC

PV@325K at 20160926_21

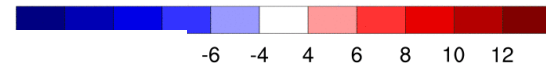


pvu

2 PVU (black contour), PV advection through divergent wind (shading), divergent wind (vectors) @325K and MSLP (green contours) at 20160926_21

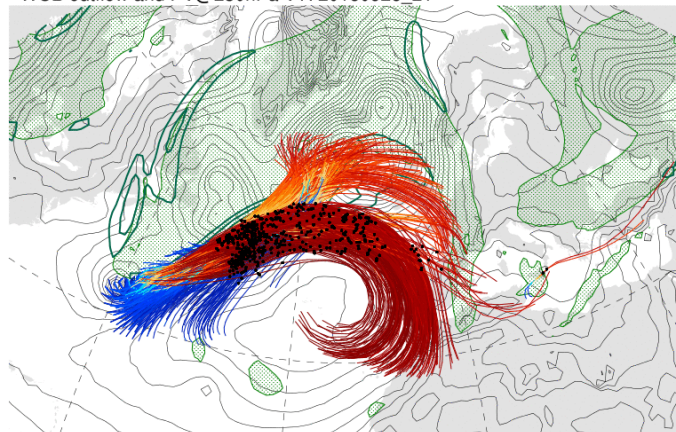


kg/(m s)



PVU/d

Trajectory start and SLP VT: 20160924_21
WCB outflow and PV@250hPa VT: 20160926_21



hPa

VT Mon 26/21 UTC

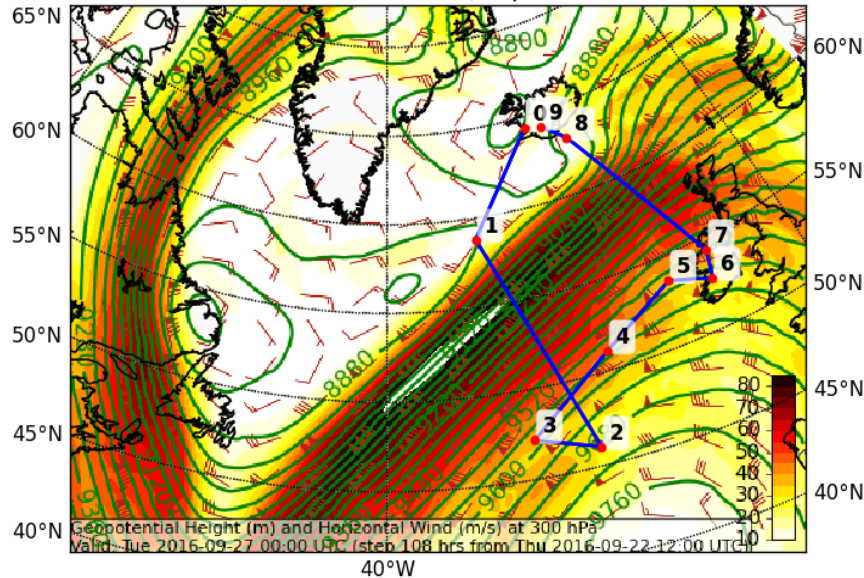
Scenario for Falcon:

**Measure TP structure,
PV advection by divergent
wind, and WCB outflow
associated with TC Karl and
DS cyclone.**

Outlook for Monday, 26 September, 18 UTC: Scenario 1 for HALO

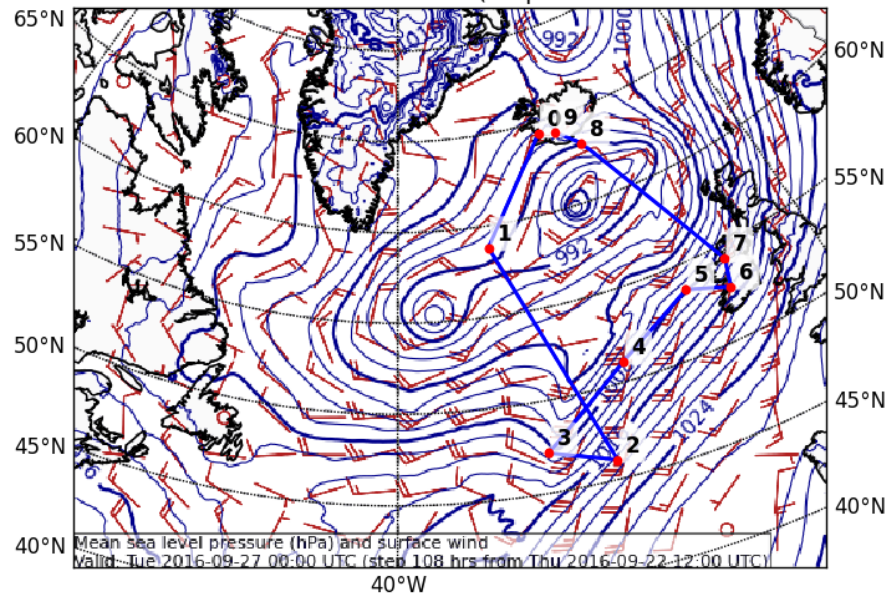
Geopotential Height (m) and Horizontal Wind (m/s) (Wind Speed 10-85 m/s) at 300 (hPa)

Valid: Di 2016-09-27 00:00 UTC (step 108 hrs from Do 2016-09-22 12:00 UTC)



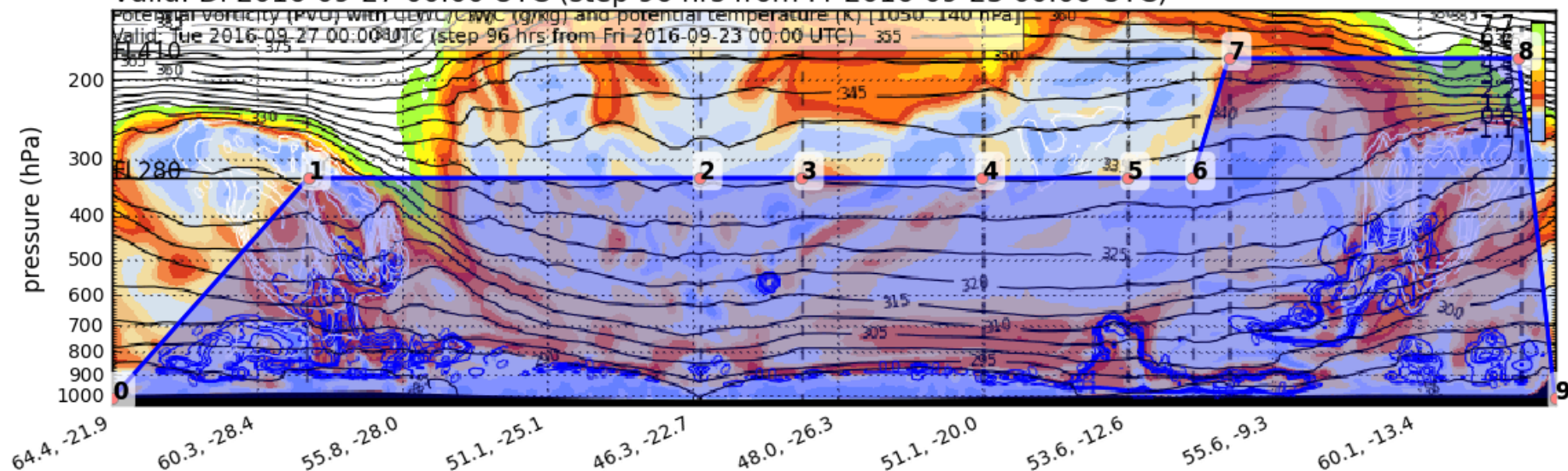
Mean Sea Level Pressure (hPa)

Valid: Di 2016-09-27 00:00 UTC (step 108 hrs from Do 2016-09-22 12:00 UTC)



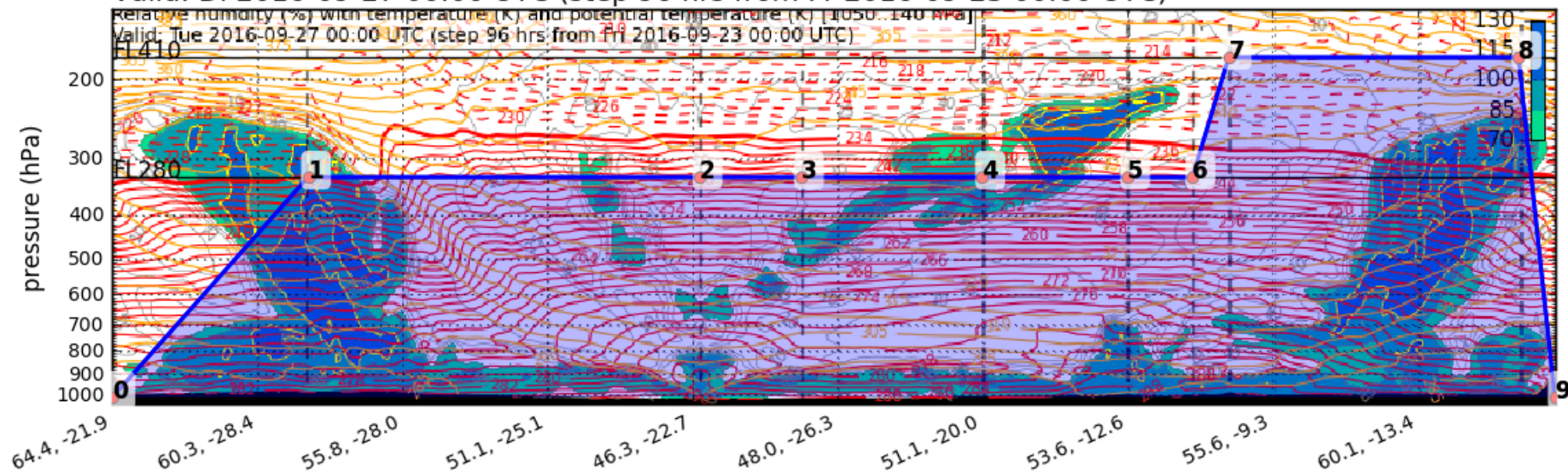
Potential vorticity (PVU) vertical section (Northern Hemisphere)

Valid: Di 2016-09-27 00:00 UTC (step 96 hrs from Fr 2016-09-23 00:00 UTC)

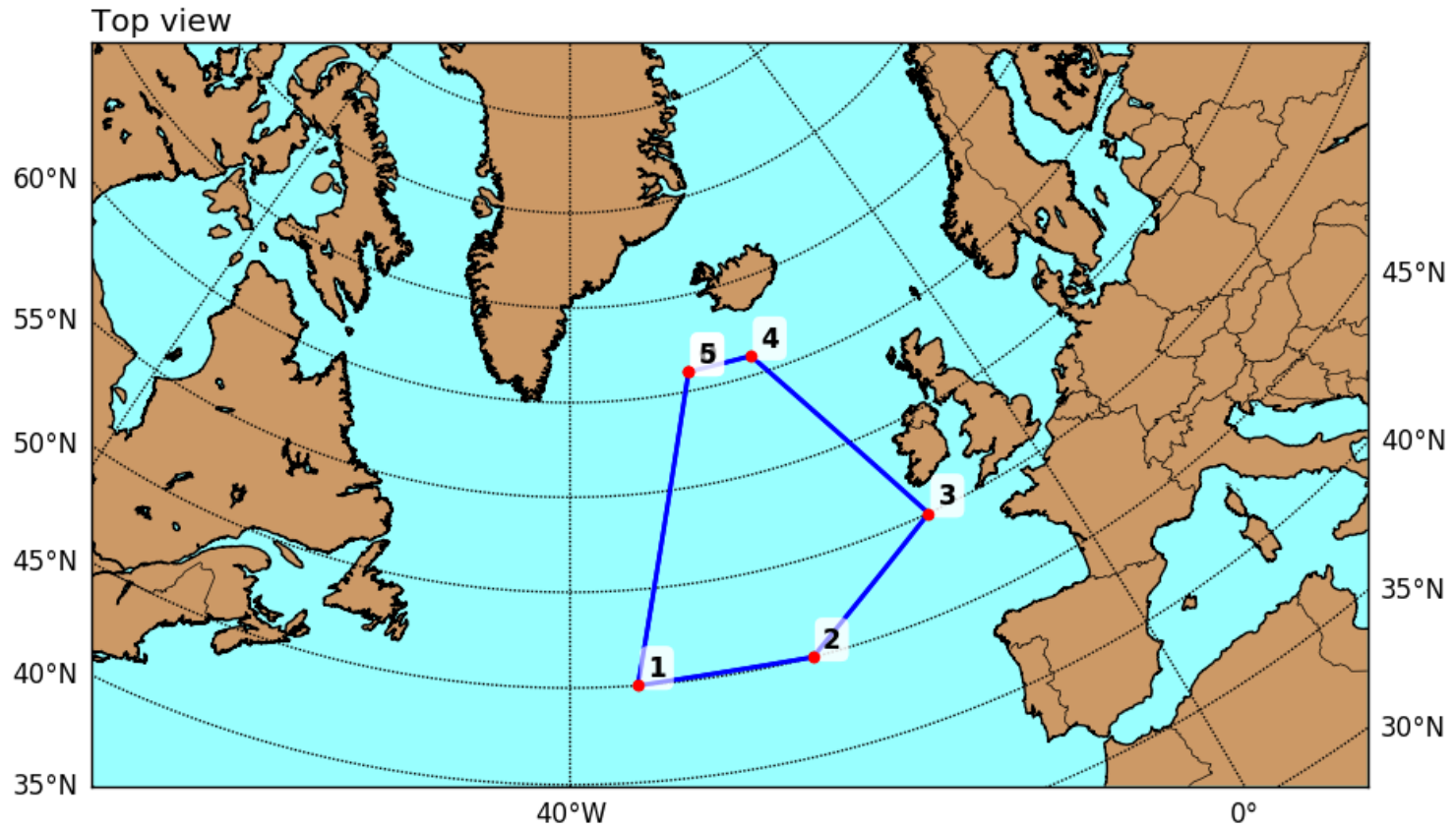


Relative humidity (%) vertical section

Valid: Di 2016-09-27 00:00 UTC (step 96 hrs from Fr 2016-09-23 00:00 UTC)

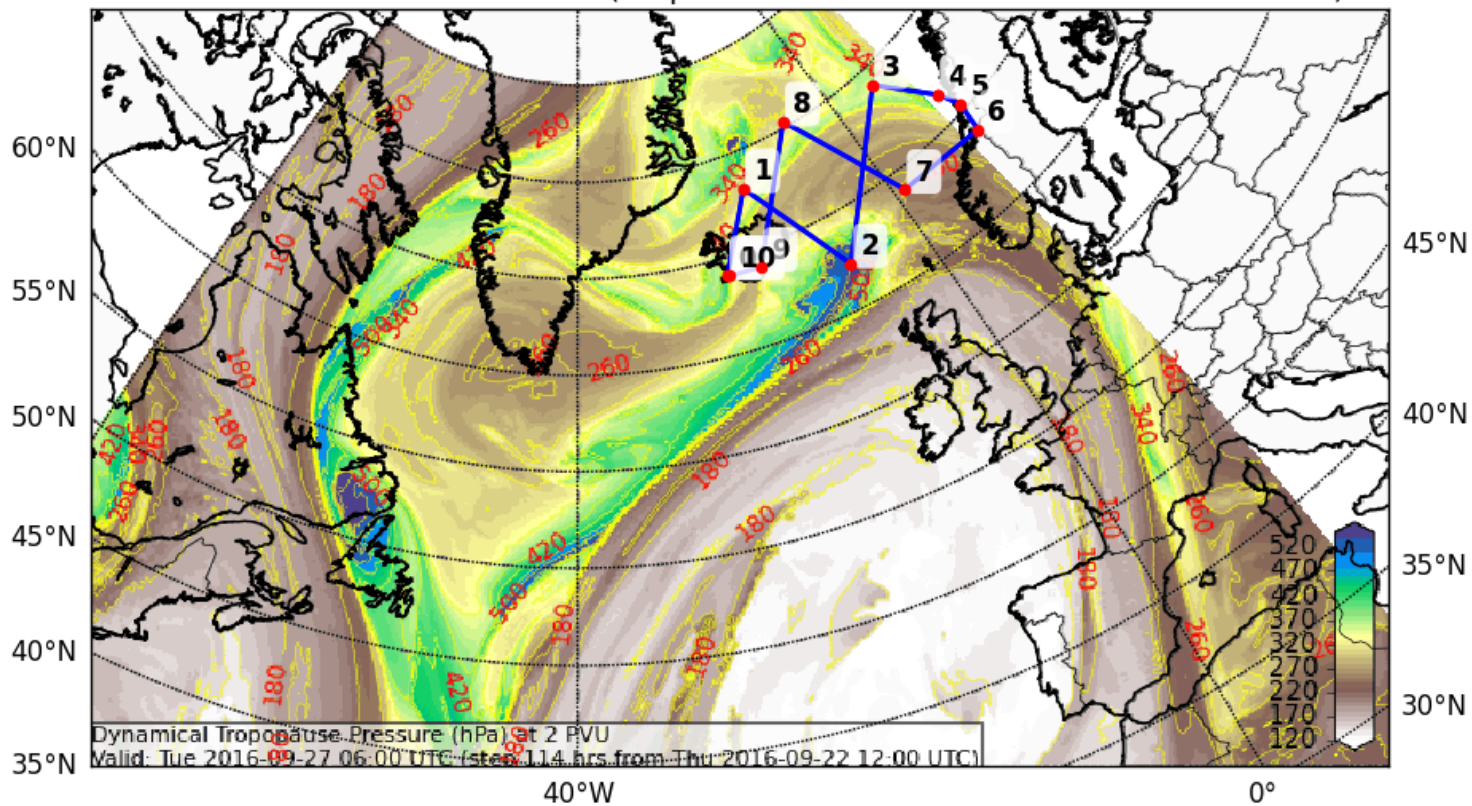


NOTAM



EPSG:77760320

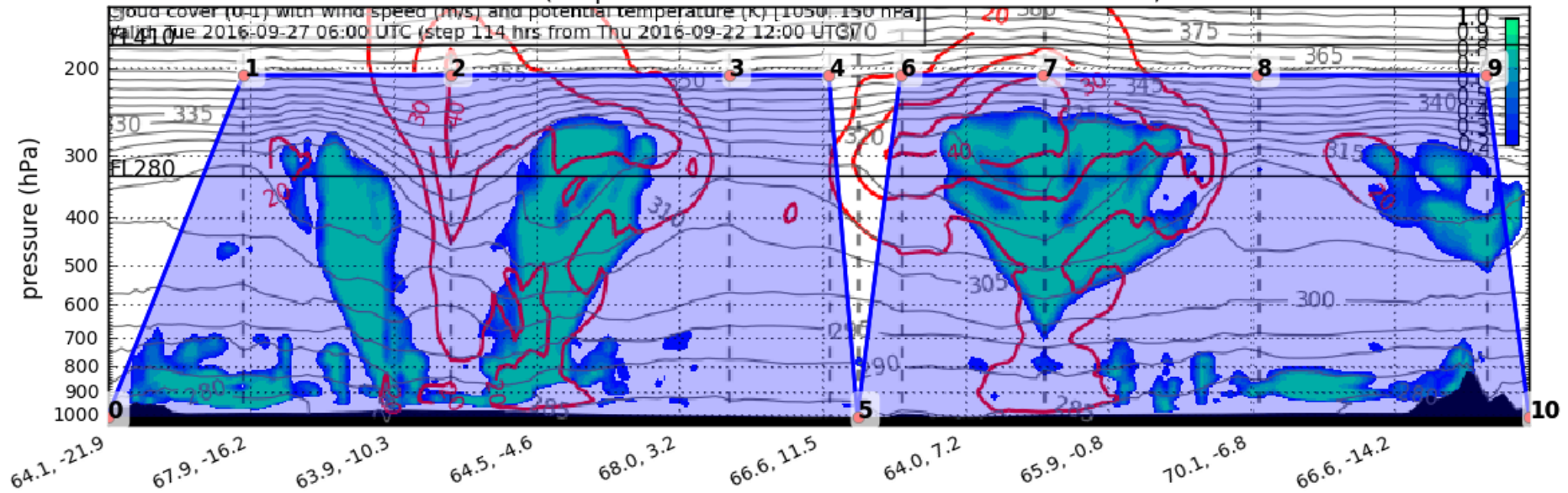
Dynamical Tropopause (Pressure (hPa)) at 2000 (10^{-3} PVU)
 Valid: Di 2016-09-27 06:00 UTC (step 114 hrs from Do 2016-09-22 12:00 UTC)



EPSG:77760320

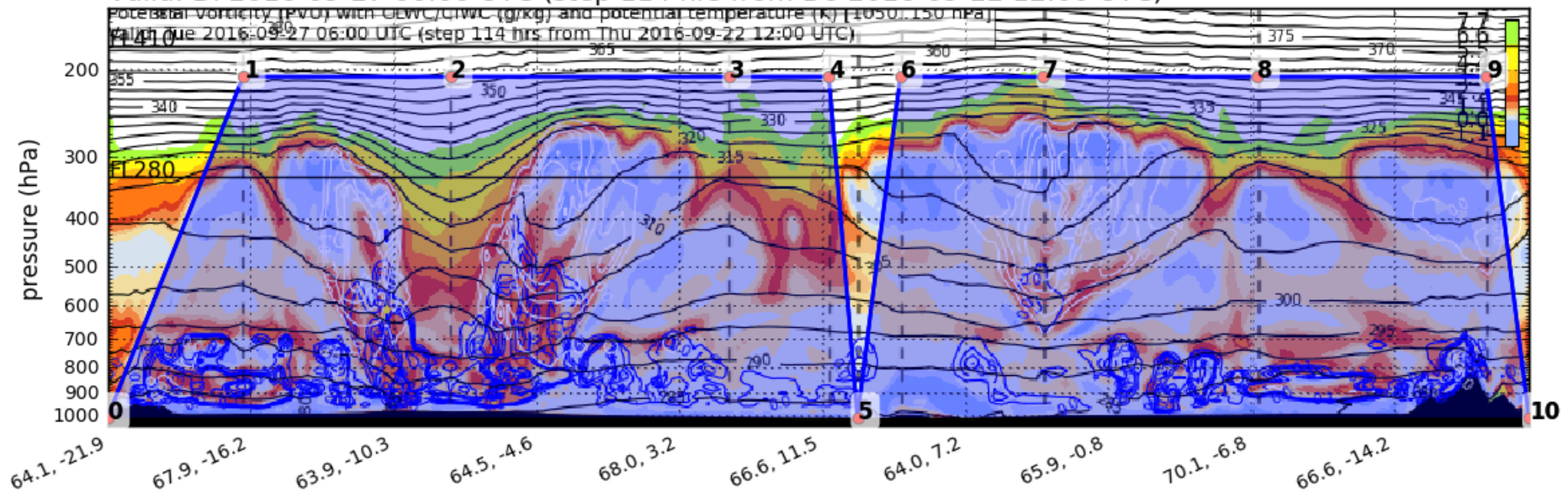
Cloud Cover (0-1) and Wind Speed (m/s) Vertical Section

Valid: Di 2016-09-27 06:00 UTC (step 114 hrs from Do 2016-09-22 12:00 UTC)



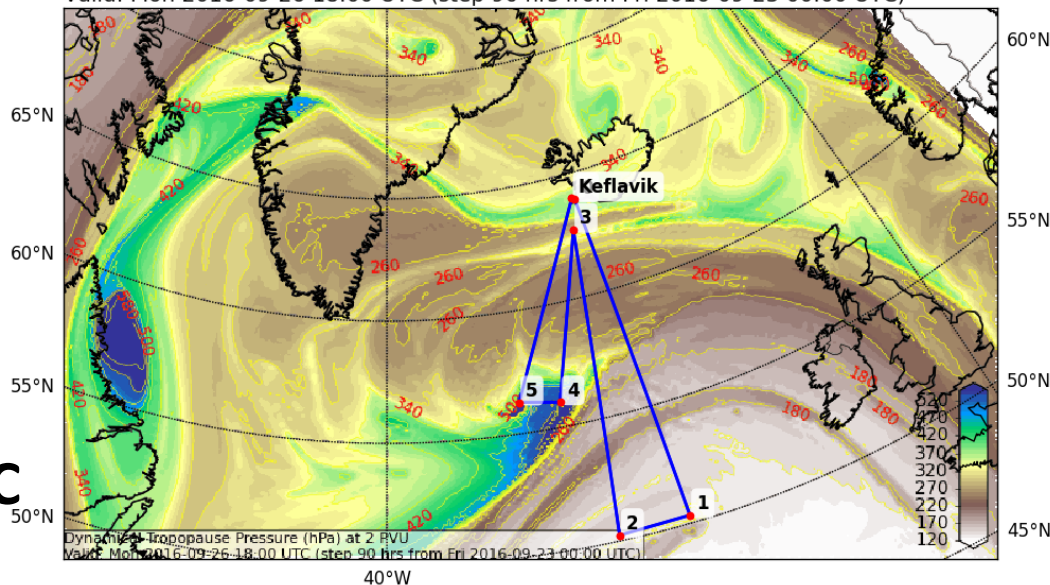
Potential Vorticity (PVU) Vertical Section (Northern Hemisphere)

Valid: Di 2016-09-27 06:00 UTC (step 114 hrs from Do 2016-09-22 12:00 UTC)



Outlook for Monday, 26 September, 18 UTC: Scenario 2 for HALO

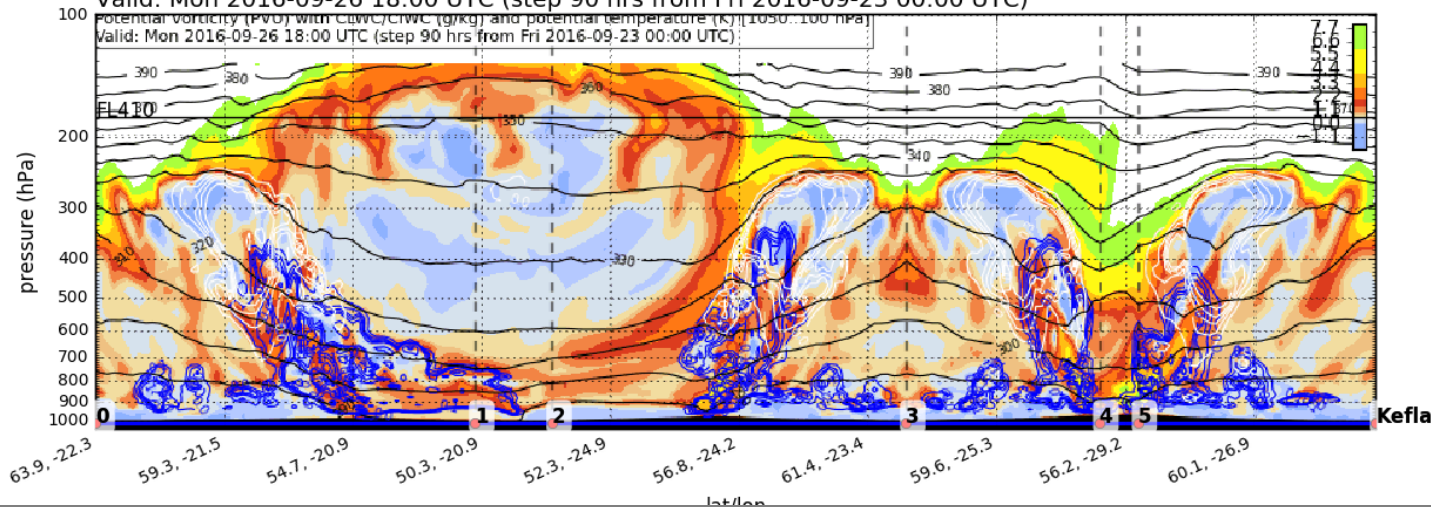
Dynamical Tropopause (Pressure (hPa)) at 2000 (10^{-3} PVU)
Valid: Mon 2016-09-26 18:00 UTC (step 90 hrs from Fri 2016-09-23 00:00 UTC)



VT Mon 26/18 UTC

EPSG:77760320

Potential Vorticity (PVU) Vertical Section (Northern Hemisphere)
Valid: Mon 2016-09-26 18:00 UTC (step 90 hrs from Fri 2016-09-23 00:00 UTC)



Summary plans

- Exciting mission today
- Saturday day off
- Most likely next mission on Monday, 26 September
 - **Today: define NOTAM box**
 - Preliminary flight plan