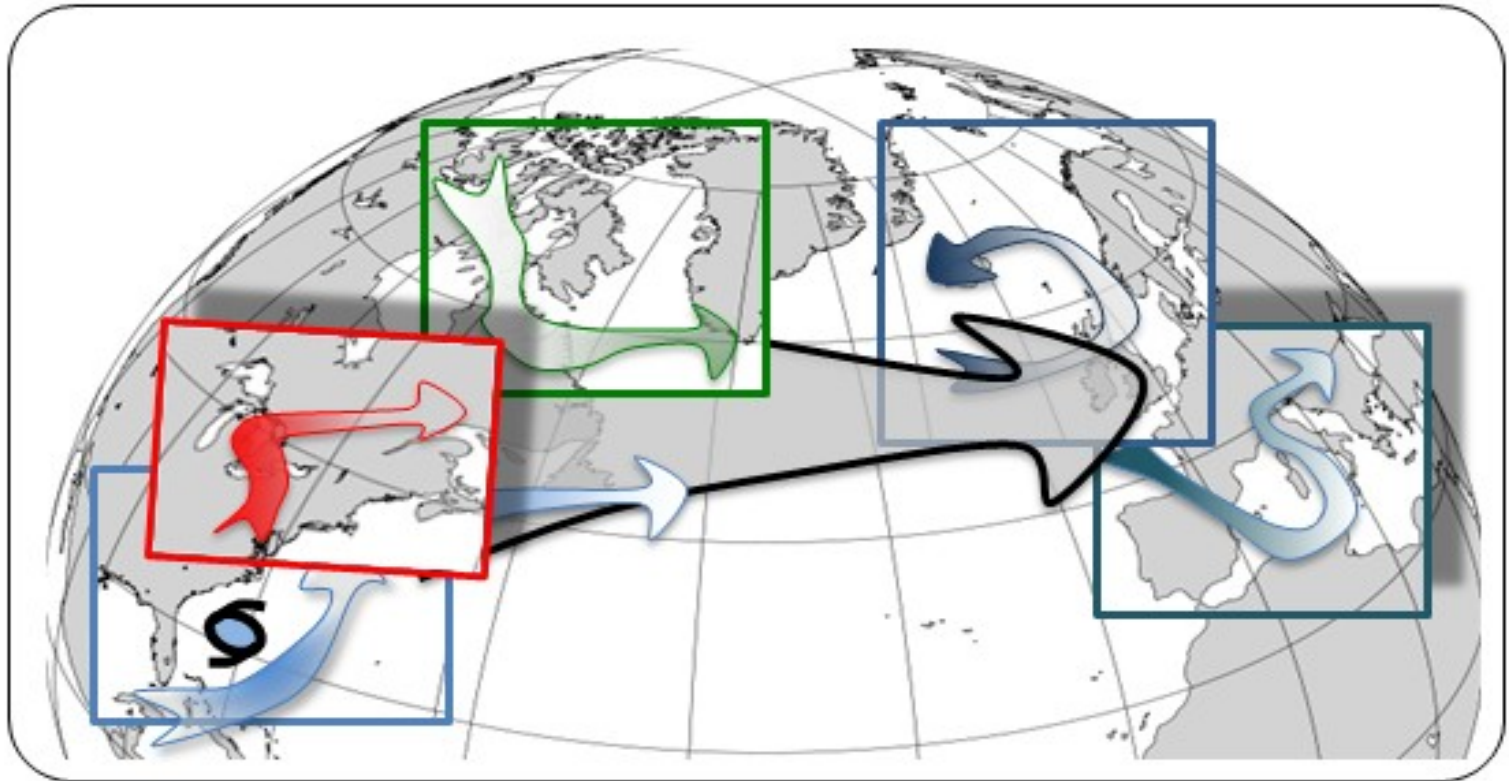


# NAWDEX – General Planning Meeting

21 September 2016, Keflavik 11 UTC



# NAWDEX – General Planning Meeting

21 September 2016, Keflavik 11 UTC

## Key issues today

1. Flight plan for today
2. Preliminary plan for coordinated flights UK FAAM BAE 146 and HALO for Friday

# NAWDEX – General Planning Meeting

21 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: information about flight options for the next days and update for planning for the next day with the latest forecast
5. Final discussion about flight pattern for next day (in case of 2 options)
6. Report of Ground-Based Observation coordinator
7. Announcement of tentative plans for Day+3
8. Coordination with other aircraft (Input from other groups)

# NAWDEX – General Planning Meeting

## WEATHER summary

21 September 2016, Keflavik 11 UTC

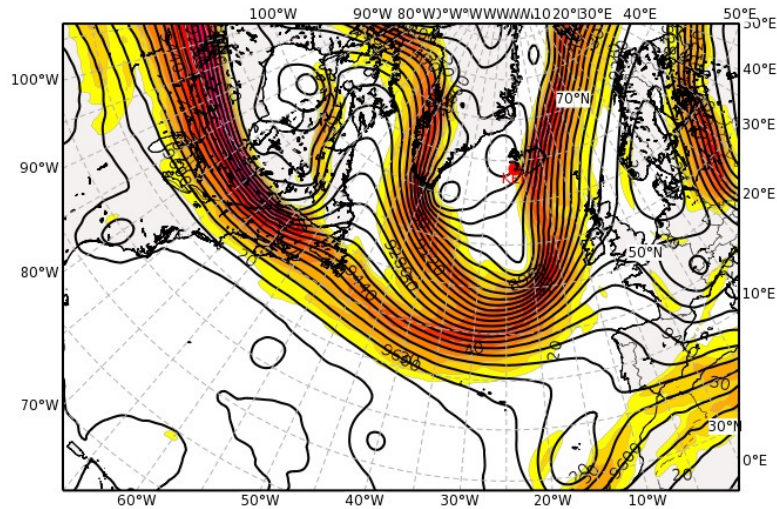
- Current situation & evolution until Monday 26 September
- **Today's mission**
- **Mission Friday 23 (Saturday 24?) September**
- Potential mission Monday-Wednesday



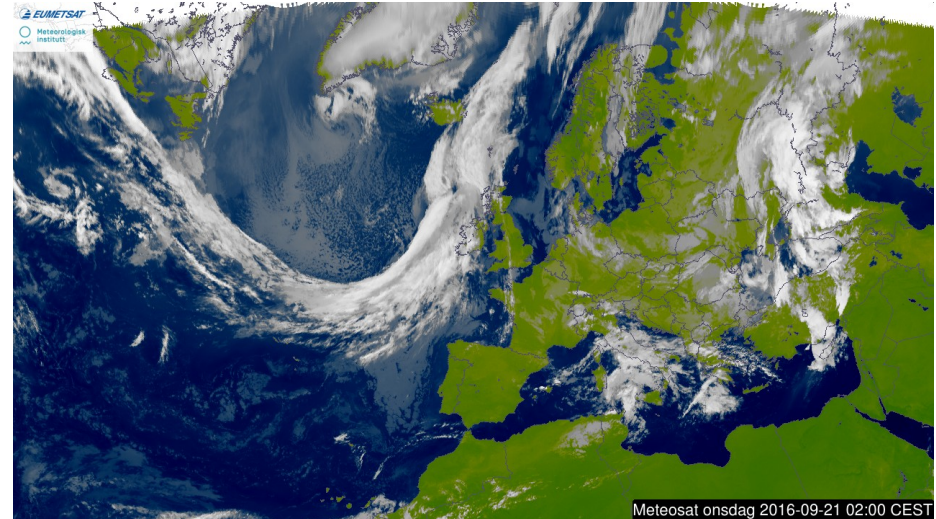
# Analysis – 21 Sep 2016, 00 UTC

Geopotential Height (m) & Horizontal Wind (m/s) at 300 hPa

Valid: Wed, 21 Sep 2016, 00 UTC (step 000 h from Wed, 21 Sep 2016, 00 UTC)

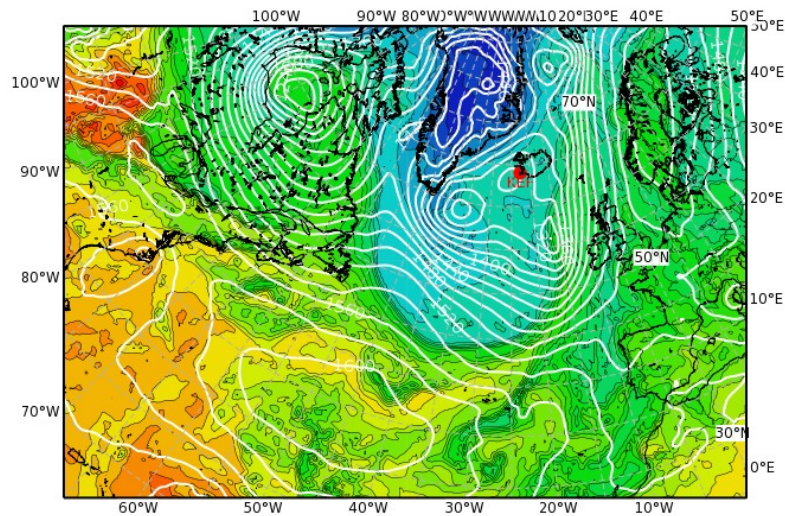


## Z300, SAT THE850, RH700



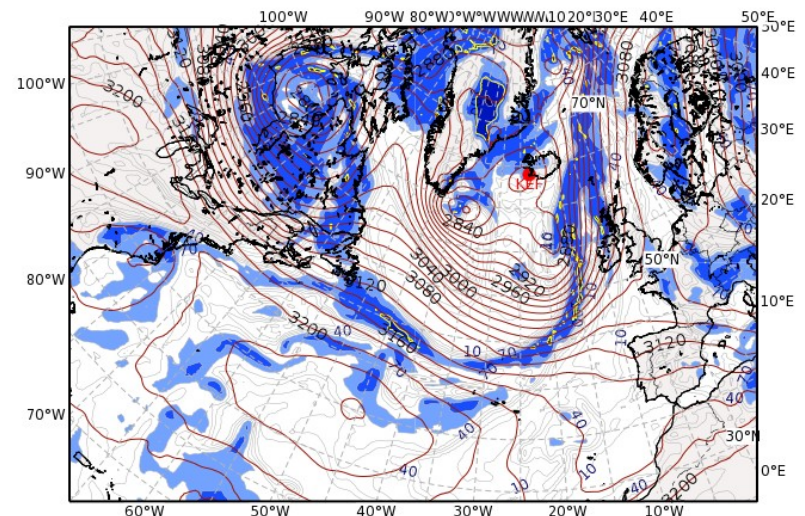
Equivalent Potential Temperature (degC) & Streamlines at 850 hPa

Valid: Wed, 21 Sep 2016, 00 UTC (step 000 h from Wed, 21 Sep 2016, 00 UTC)



Relative Humidity (%) and Z (m) at 700 hPa

Valid: Wed, 21 Sep 2016, 00 UTC (step 000 h from Wed, 21 Sep 2016, 00 UTC)

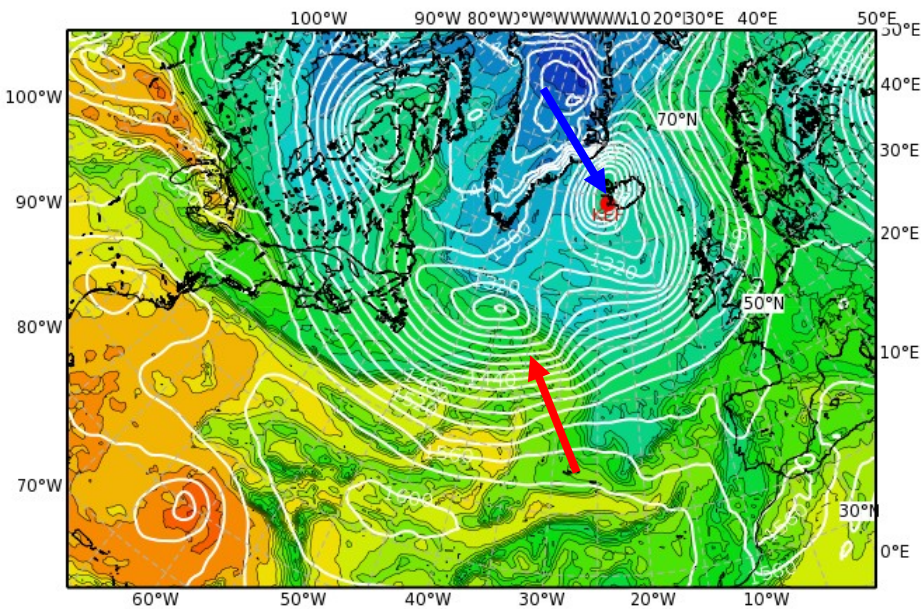




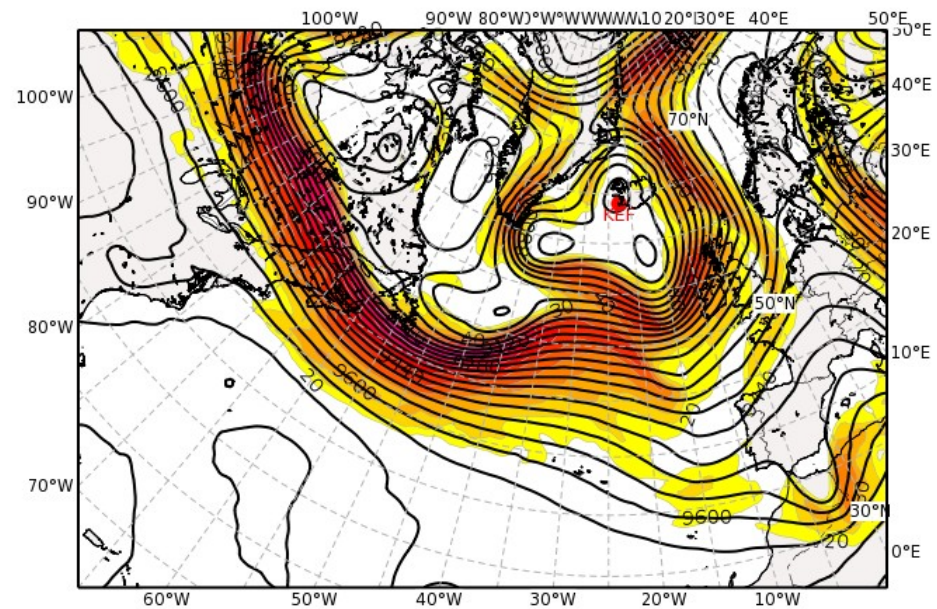
# Forecast for Thu, 22 Sep 2016 12 UTC

THE850, Z300 BT21/00Z

Equivalent Potential Temperature (degC) & Streamlines at 850 hPa  
Valid: Thu, 22 Sep 2016, 12 UTC (step 036 h from Wed, 21 Sep 2016, 00 UTC)



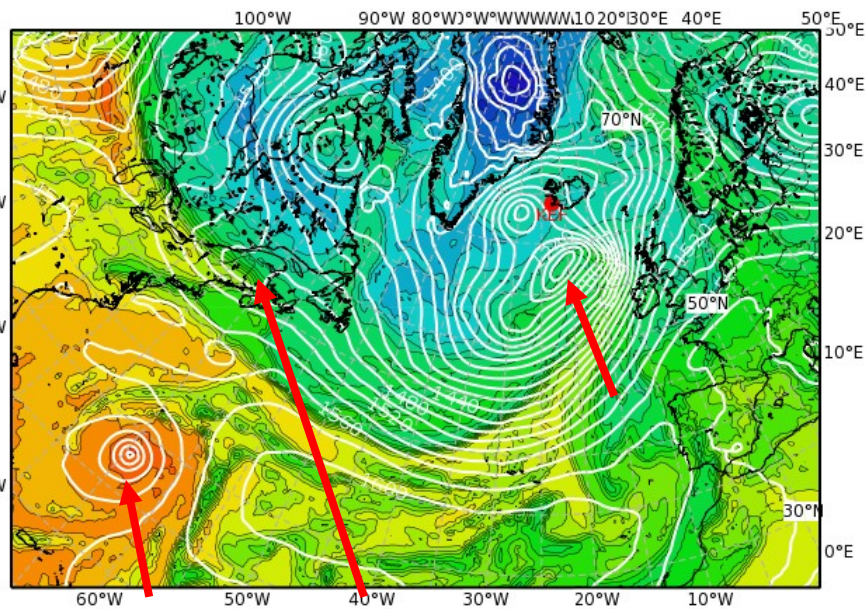
Geopotential Height (m) & Horizontal Wind (m/s) at 300 hPa  
Valid: Thu, 22 Sep 2016, 12 UTC (step 036 h from Wed, 21 Sep 2016, 00 UTC)



# Forecast for Fri, 23 Sep 2016 12 UTC

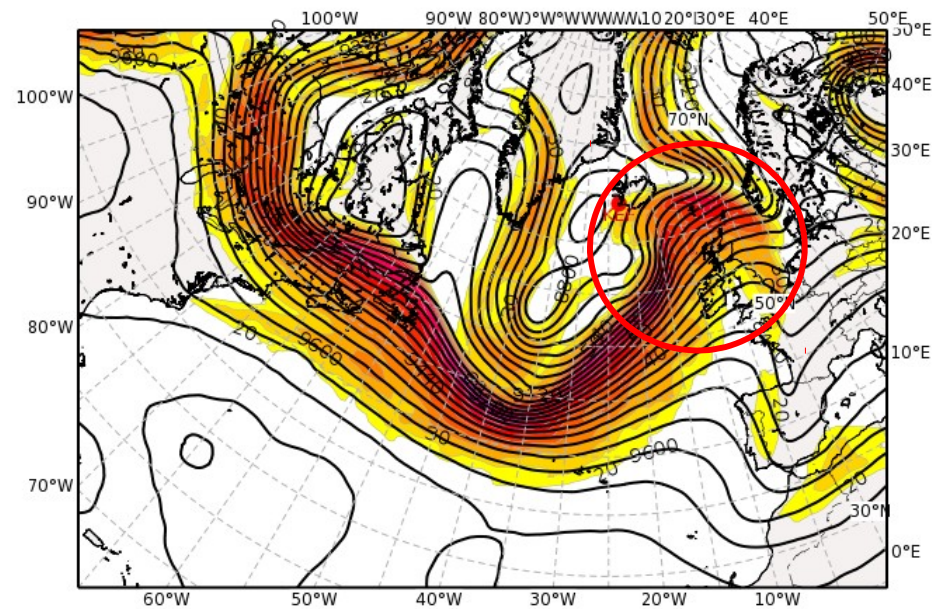
THE850, Z300 BT21/00Z

Equivalent Potential Temperature (degC) & Streamlines at 850 hPa  
Valid: Fri, 23 Sep 2016, 12 UTC (step 060 h from Wed, 21 Sep 2016, 00 UTC)



TC Karl DS cyclone

Geopotential Height (m) & Horizontal Wind (m/s) at 300 hPa  
Valid: Fri, 23 Sep 2016, 12 UTC (step 060 h from Wed, 21 Sep 2016, 00 UTC)

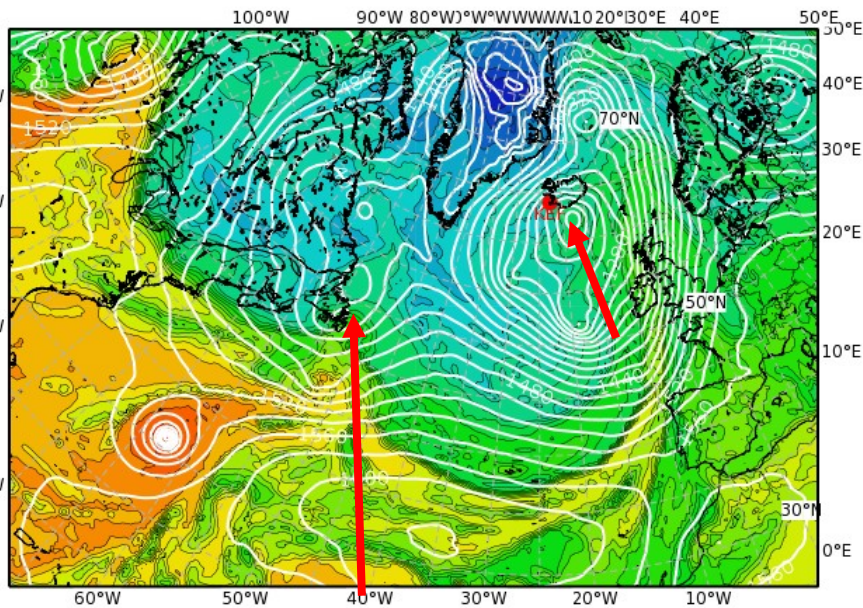




# Forecast for Sat, 24 Sep 2016 12 UTC

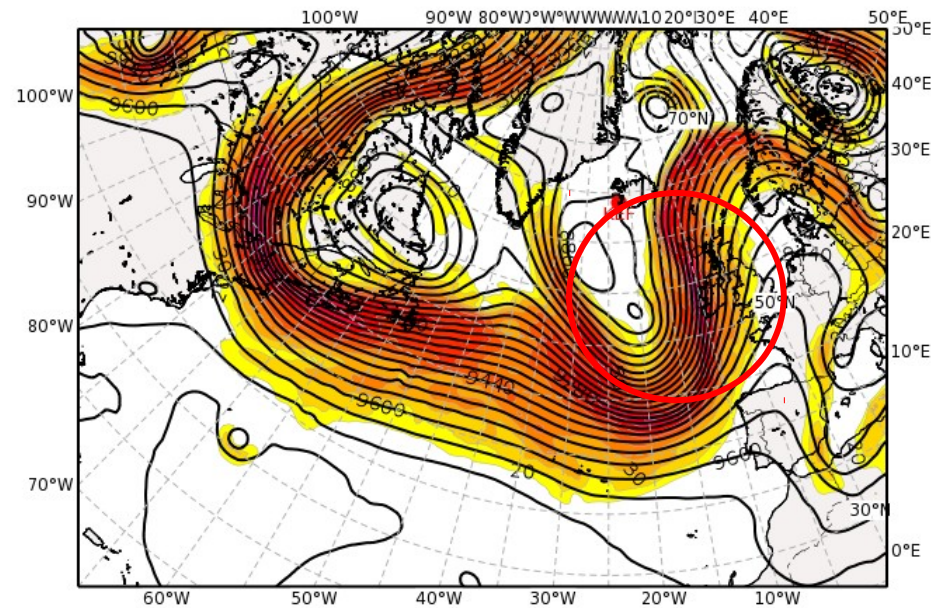
THE850, Z300 BT21/00Z

Equivalent Potential Temperature (degC) & Streamlines at 850 hPa  
Valid: Sat, 24 Sep 2016, 12 UTC (step 084 h from Wed, 21 Sep 2016, 00 UTC)



**TC Karl DS cyclone**

Geopotential Height (m) & Horizontal Wind (m/s) at 300 hPa  
Valid: Sat, 24 Sep 2016, 12 UTC (step 084 h from Wed, 21 Sep 2016, 00 UTC)



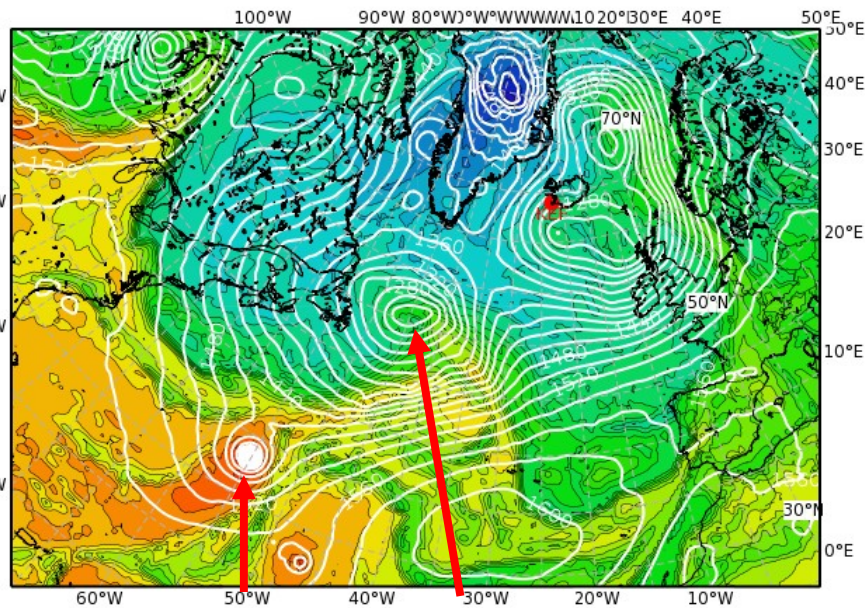
- Heavy precipitation & windy conditions in UK and Ireland



# Forecast for Sun, 25 Sep 2016 12 UTC

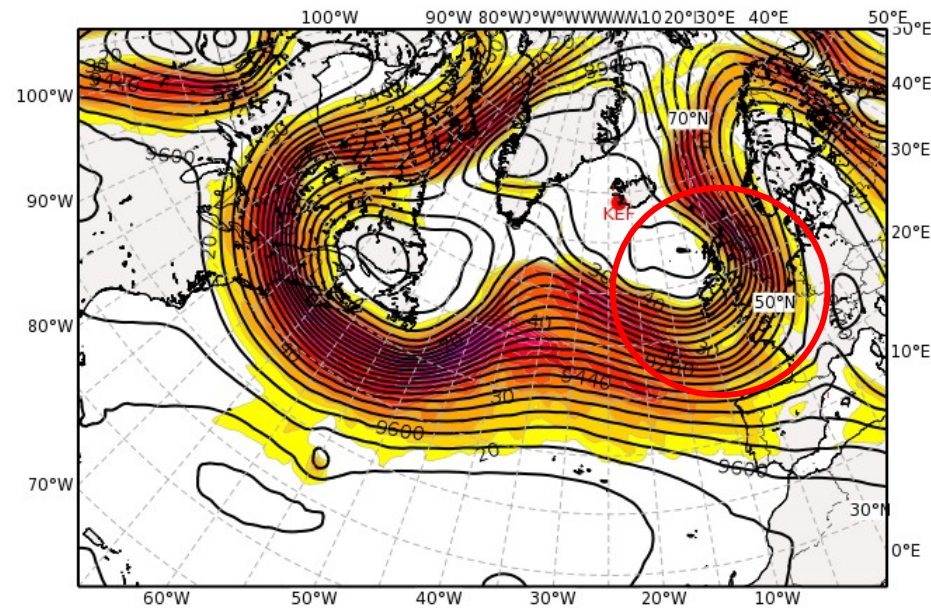
THE850, Z300 BT21/00Z

Equivalent Potential Temperature (degC) & Streamlines at 850 hPa  
Valid: Sun, 25 Sep 2016, 12 UTC (step 108 h from Wed, 21 Sep 2016, 00 UTC)



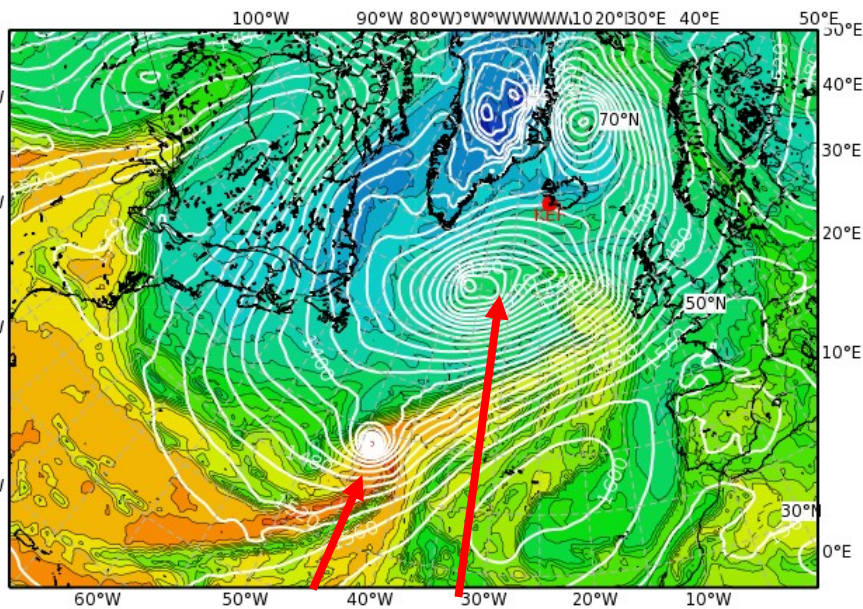
**TC Karl**    **DS cyclone**

Geopotential Height (m) & Horizontal Wind (m/s) at 300 hPa  
Valid: Sun, 25 Sep 2016, 12 UTC (step 108 h from Wed, 21 Sep 2016, 00 UTC)



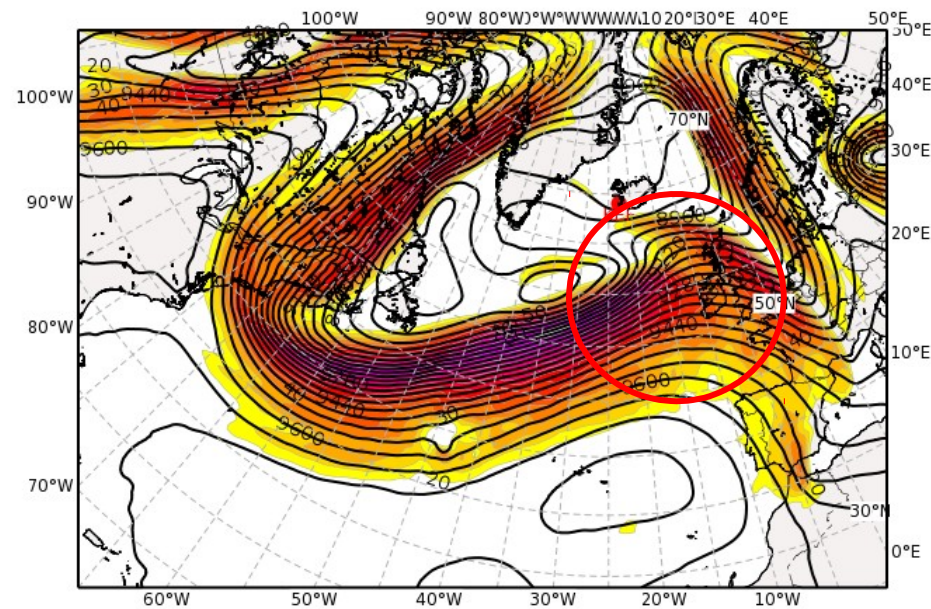
- Heavy precipitation & windy conditions in Norway coastal regions

Equivalent Potential Temperature (degC) & Streamlines at 850 hPa  
Valid: Mon, 26 Sep 2016, 12 UTC (step 132 h from Wed, 21 Sep 2016, 00 UTC)



**TC Karl** **DS cyclone**

Geopotential Height (m) & Horizontal Wind (m/s) at 300 hPa  
Valid: Mon, 26 Sep 2016, 12 UTC (step 132 h from Wed, 21 Sep 2016, 00 UTC)

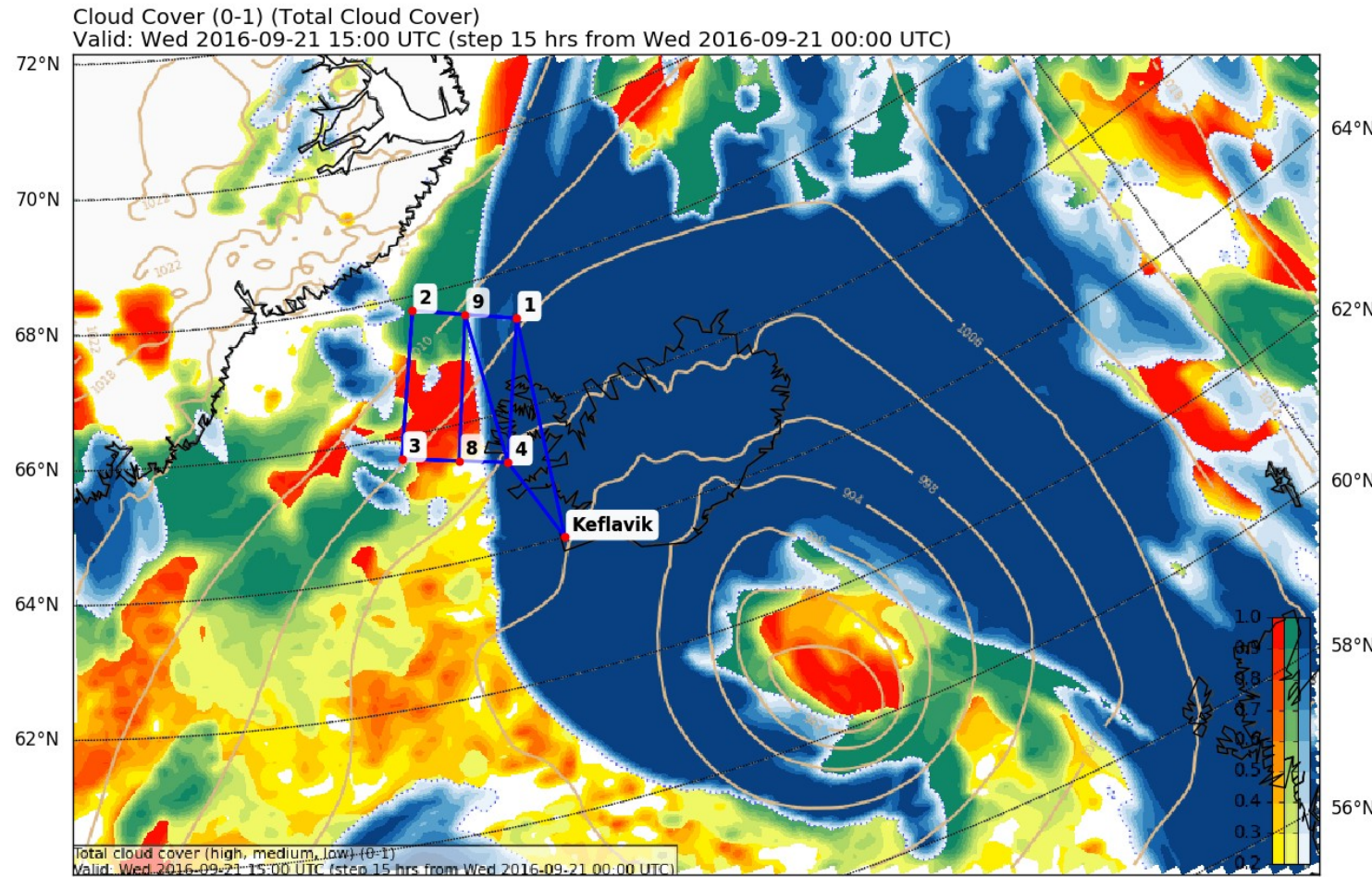


- Heavy precipitation & windy conditions in Northern UK, Ireland, Scotland
- Affecting North Sea region on Tu



# Flight pattern for today

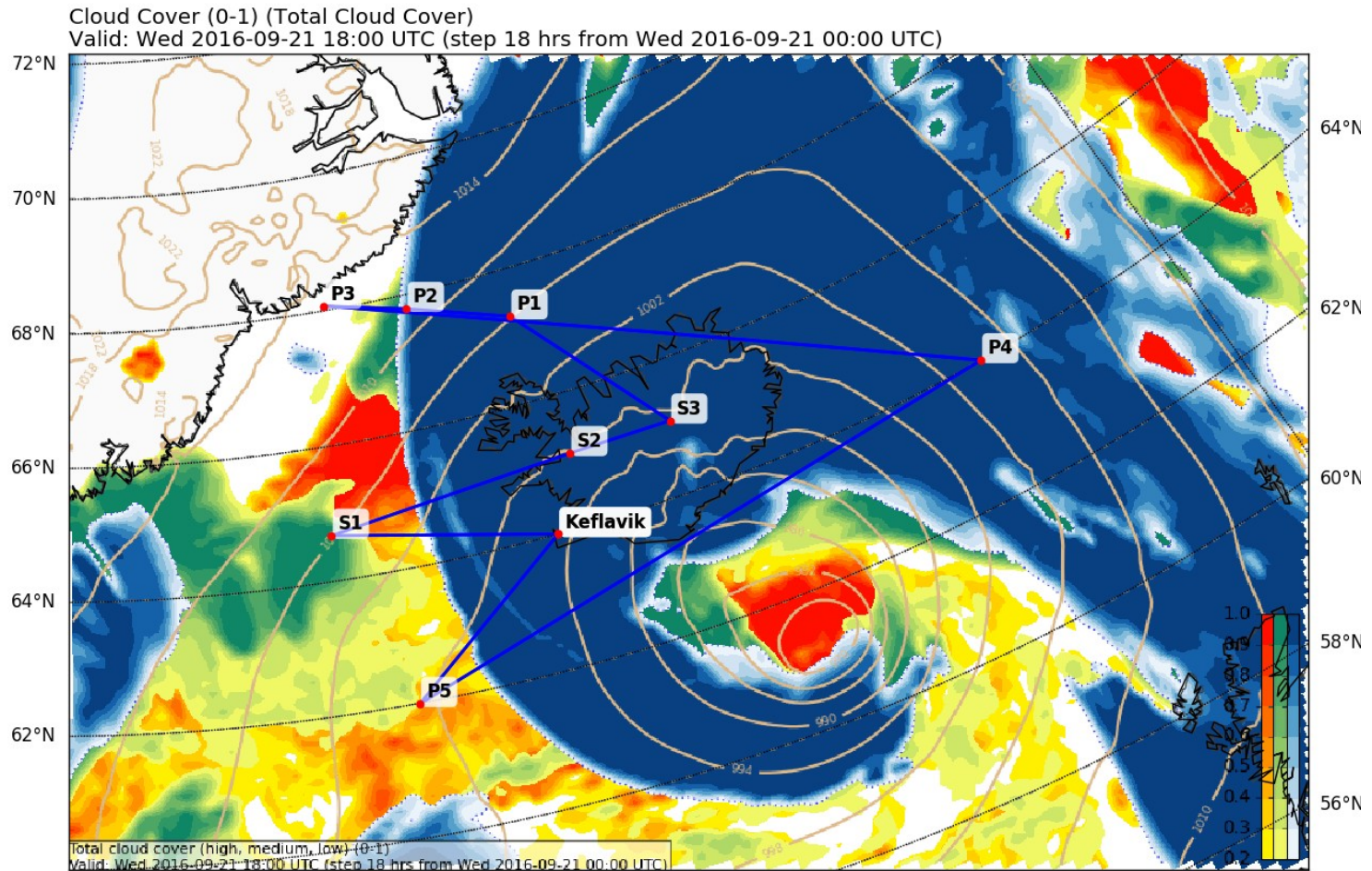
# FALCON





# Flight pattern for today

# HALO

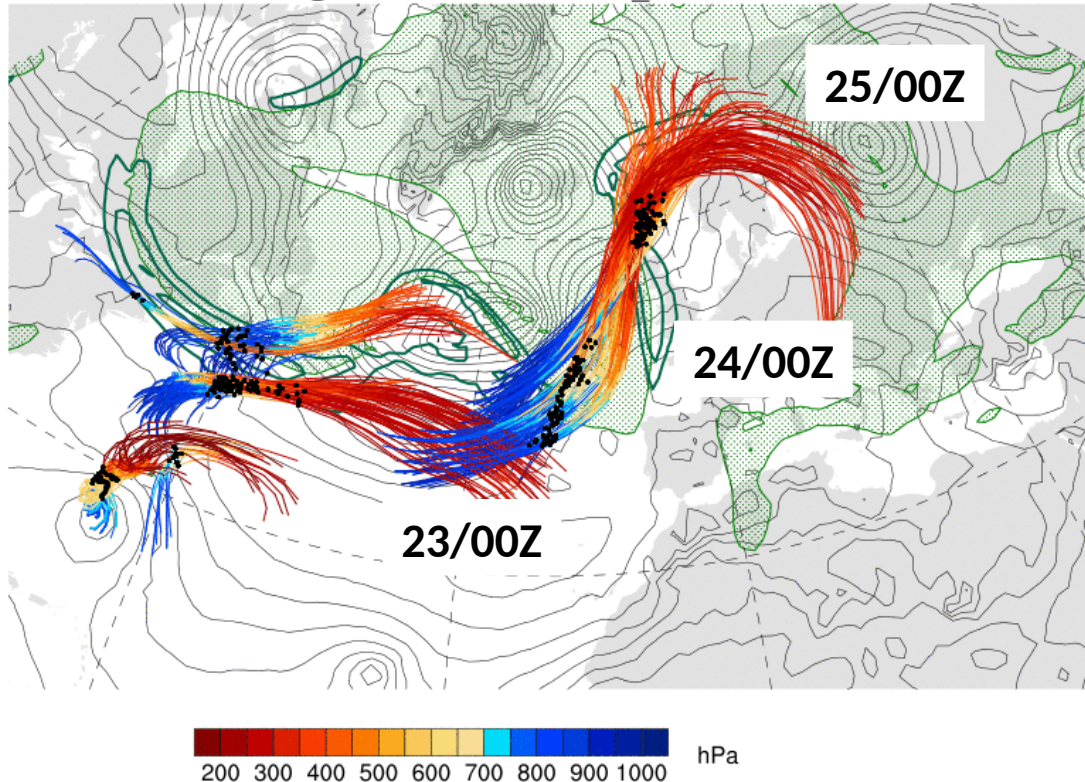


# Friday 23 (Saturday 24?) September: Lagrangian measurement of WCB

## WCB probabilities

BT20/12Z

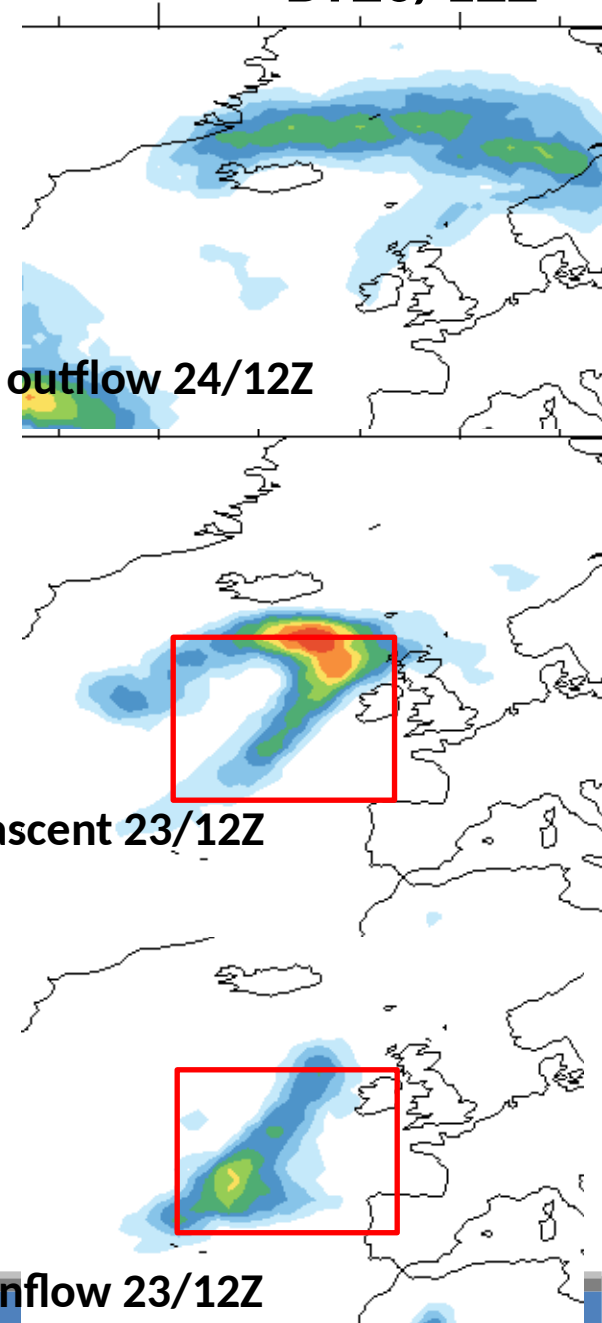
Trajectory start and SLP VT: 20160923\_00  
WCB outflow and PV@250hPa VT: 20160925\_00



WCB outflow 24/12Z

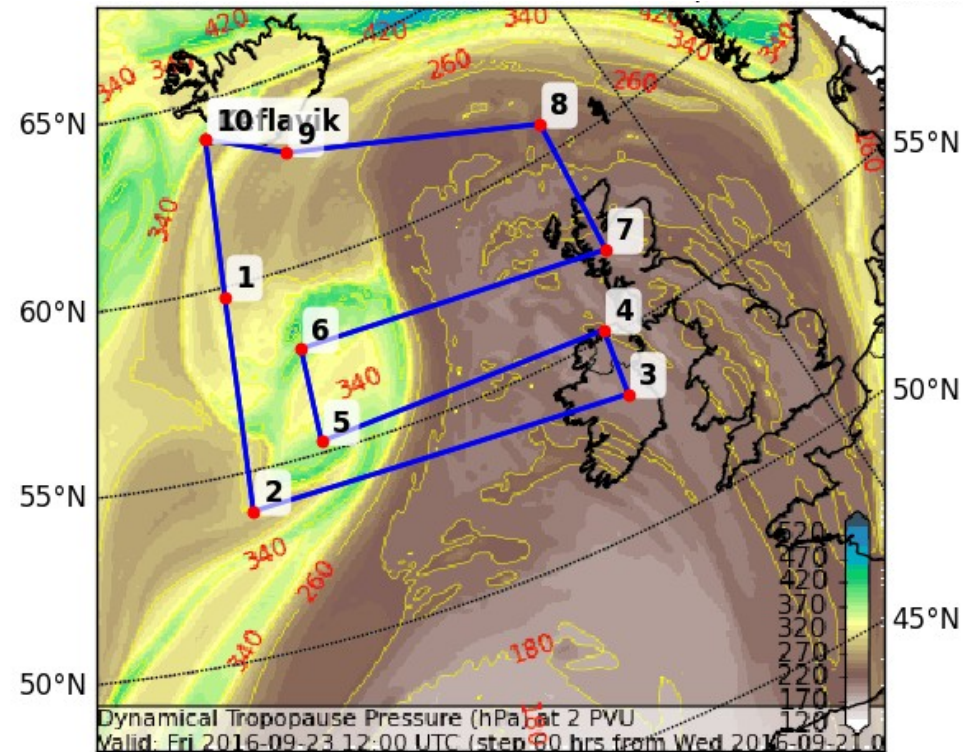
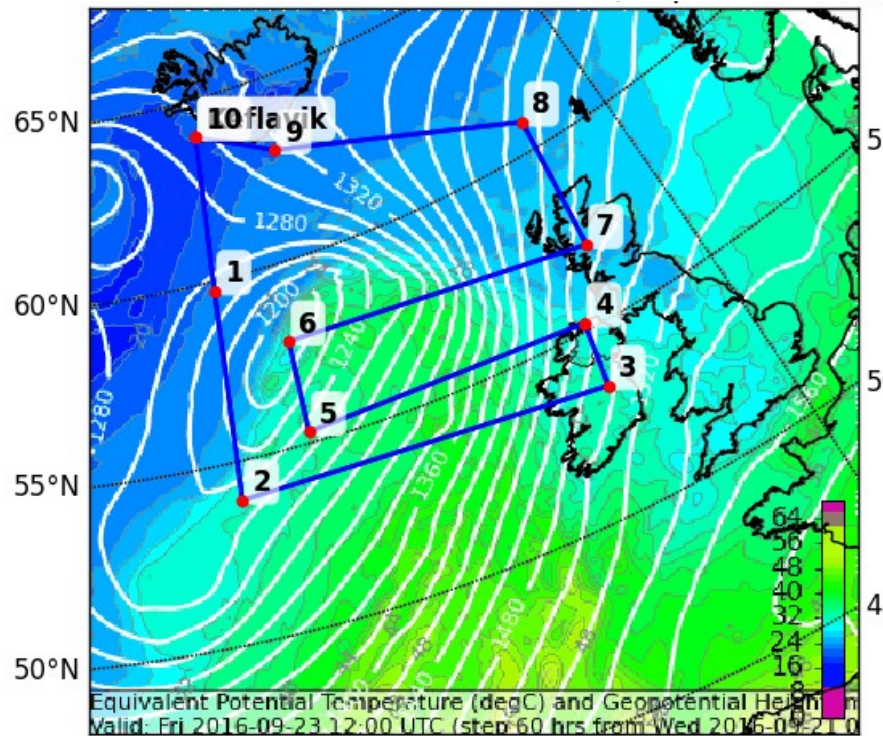
WCB ascent 23/12Z

WCB inflow 23/12Z





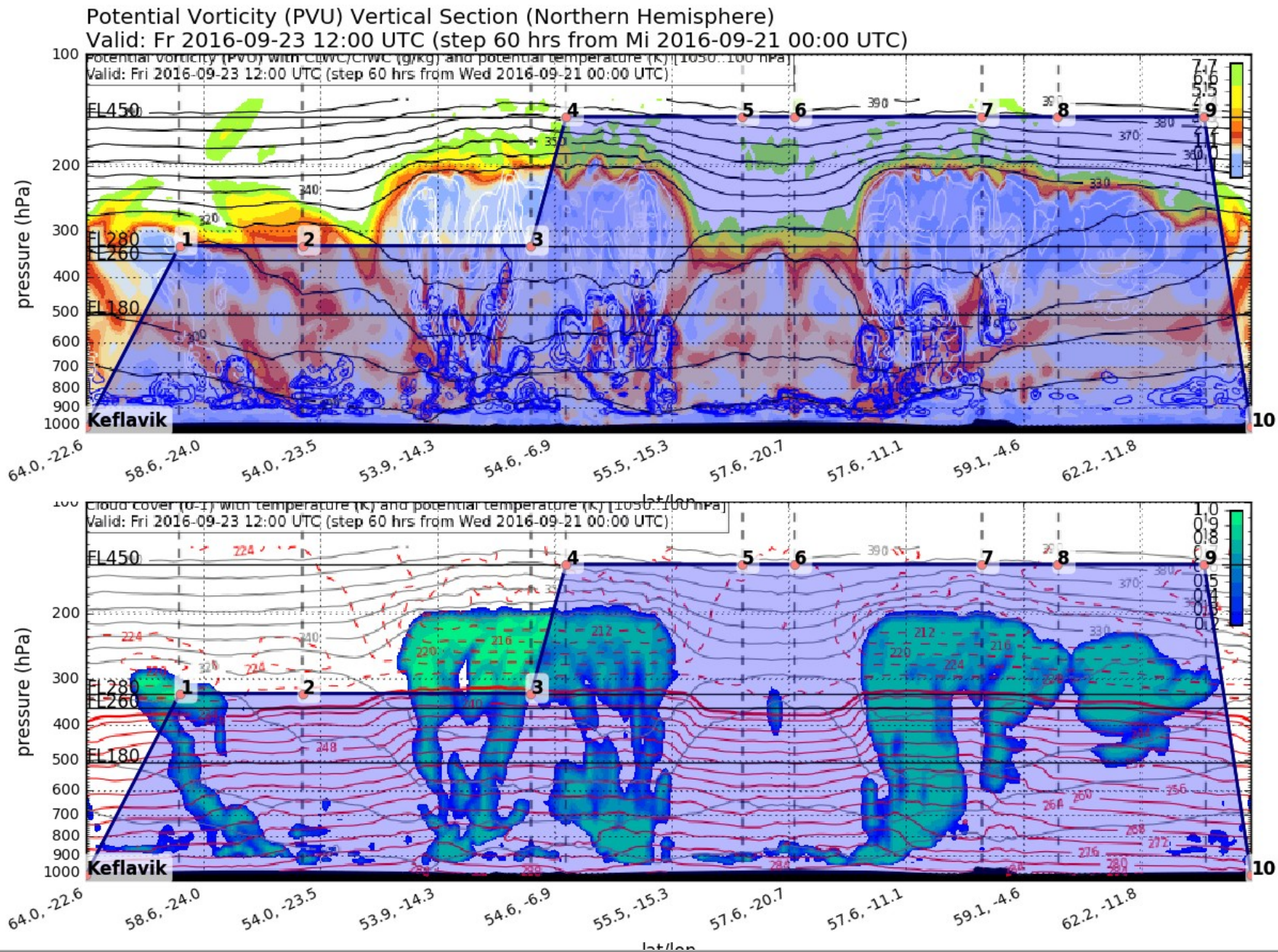
# Flight planning for Friday 23 September 2016



- Flight length: 6100 km (point 0-3 at FL 280) □ too long?
- Flight centered around 12 UTC
- Coordinated flight with FAAM leg 4-5 □ timing to be decided tomorrow

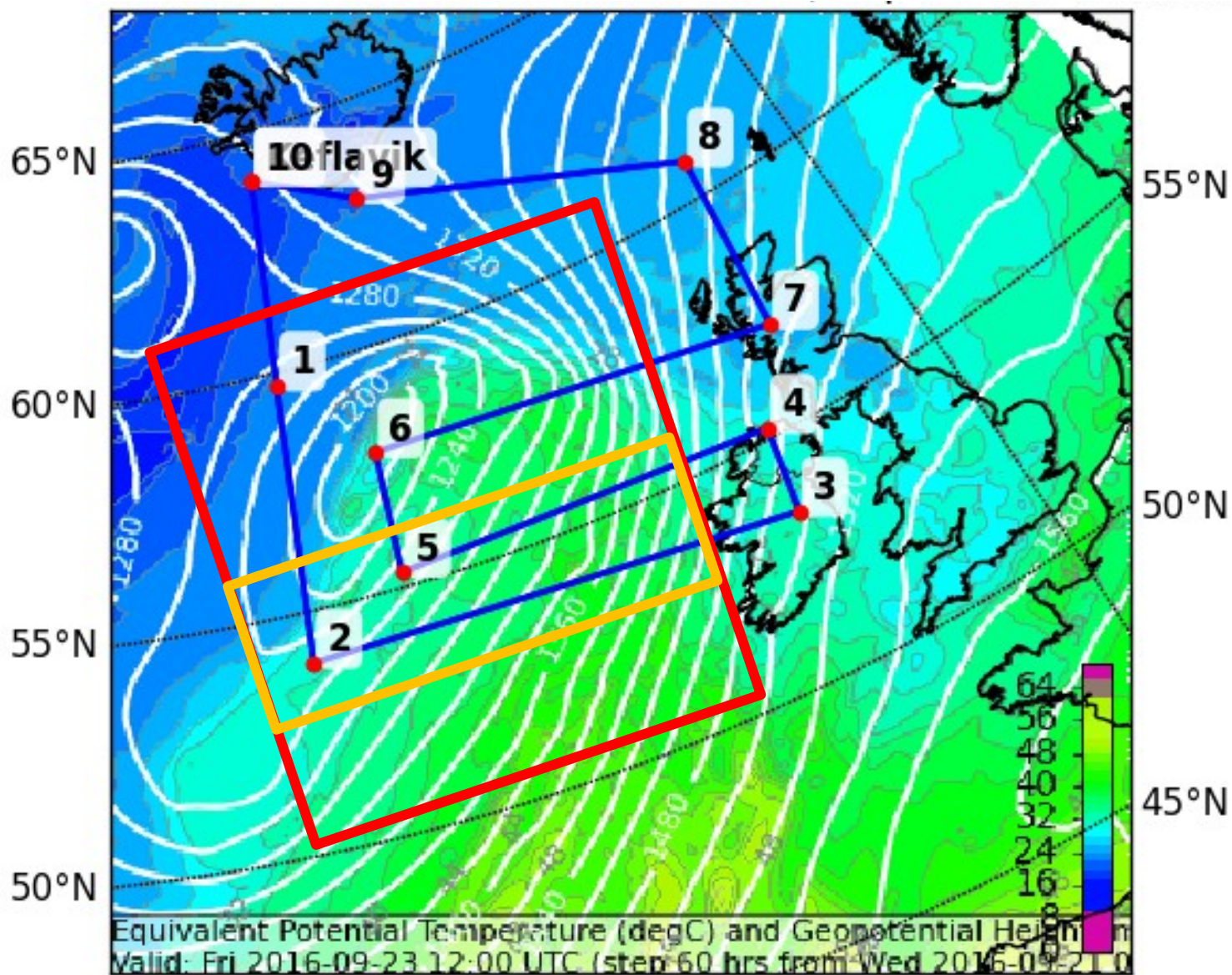


# Flight planning for Friday 23 September 2016





# NOTAM Box?



# Summary plans

- **Next mission today**
  - **FALCON** flight remains unchanged
  - **HALO** almost unchanged (eastern leg slightly moved toward the north)
- **WCB ascent measurements Friday 23 September**
  - **HALO** on Friday in NOTAM region, dropsondes, **meet UK FAAM BAE 146** west of Ireland
- **Option for flight on Saturday to measure WCB outflow**
  - **HALO and/or FALCON** Saturday outflow Iceland/North of UK
- **Outlook Sunday – Wednesday :**
  - 2 Systems: DS cyclone and TC Karl, strong WCB activity
  - Likely several flights in period Monday-Thursday