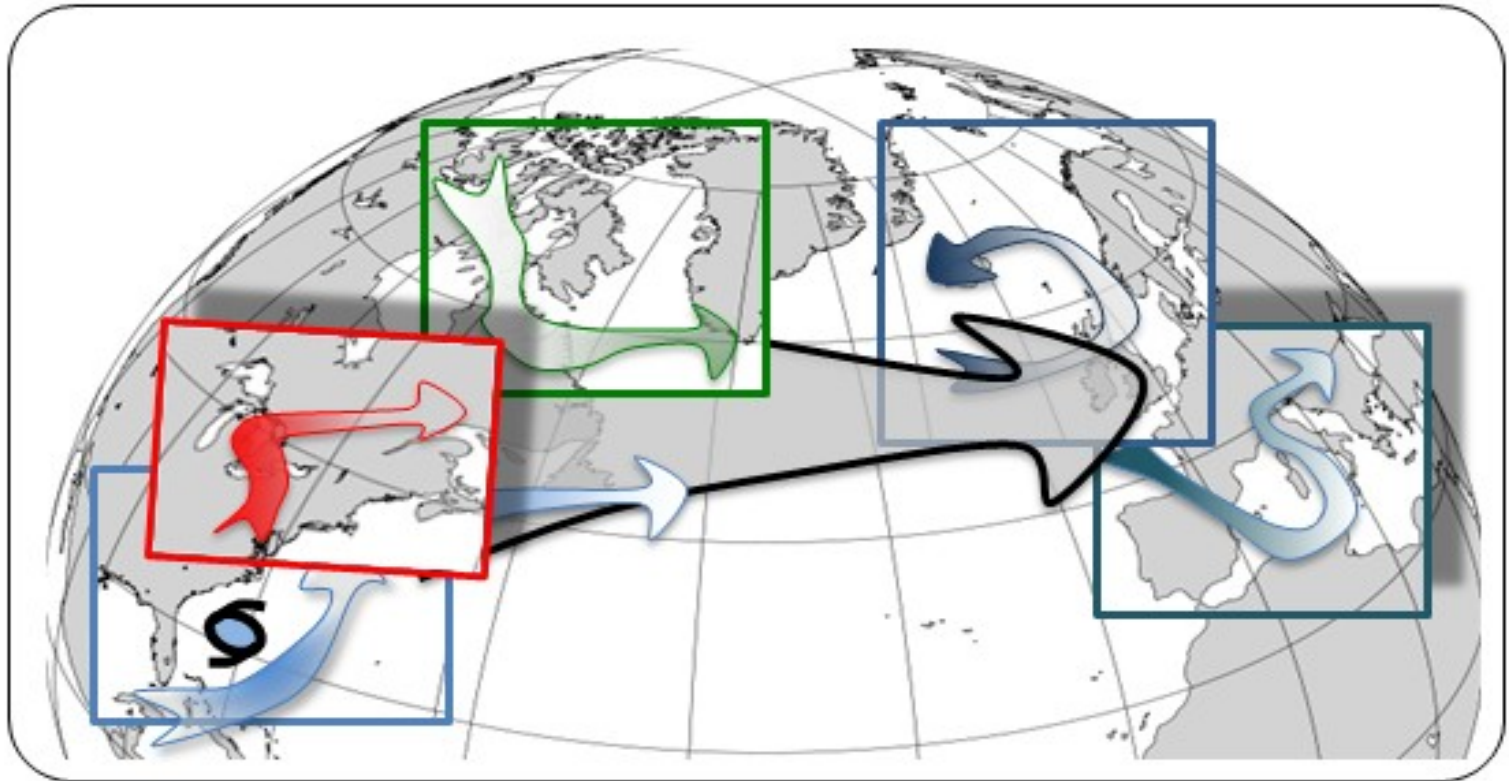


NAWDEX – Weather discussion

27 September 2016, Keflavik, Iceland



Agenda

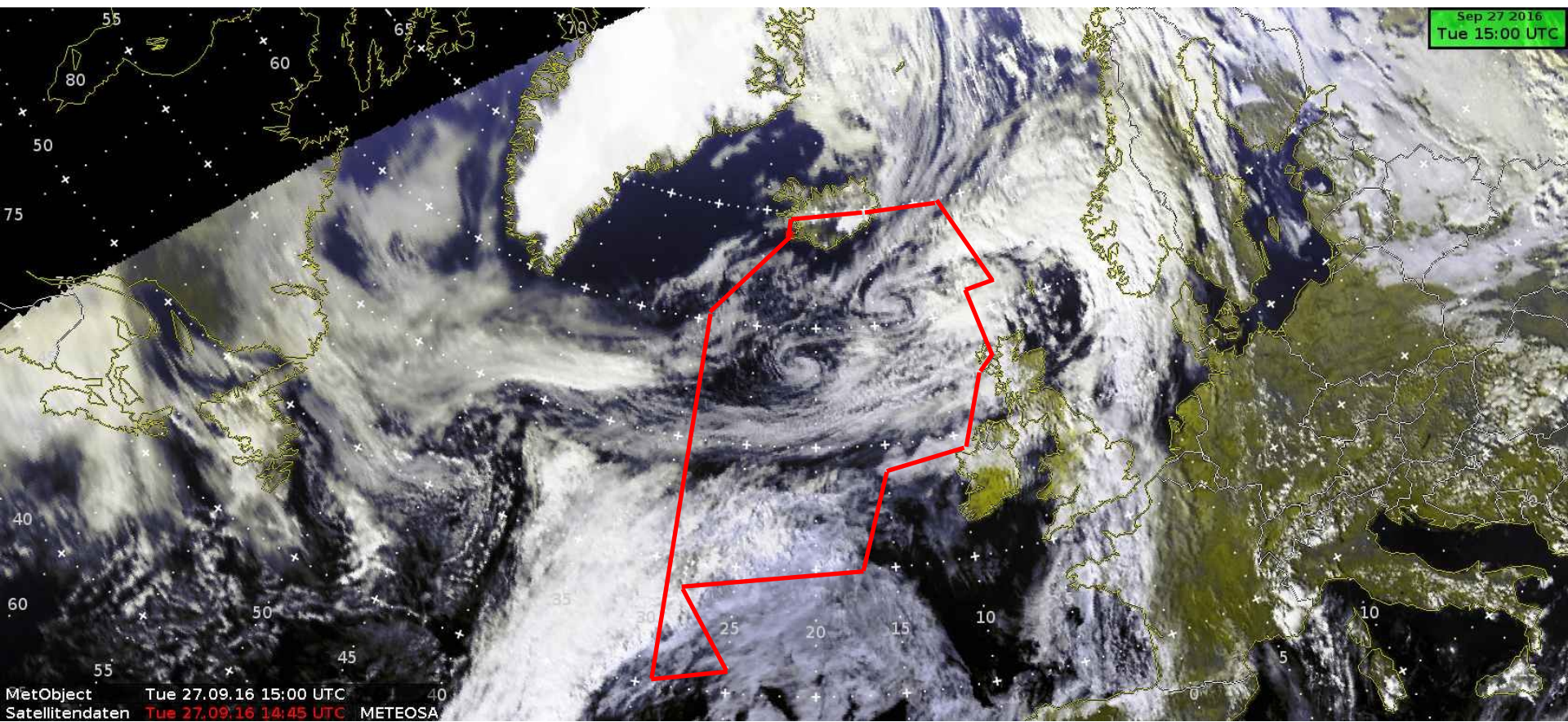
- Today's flights
- Radiosonde IOP
- Current synoptic situation and forecast until Sunday
- Additional radiosoundings over Europe

Today's flights

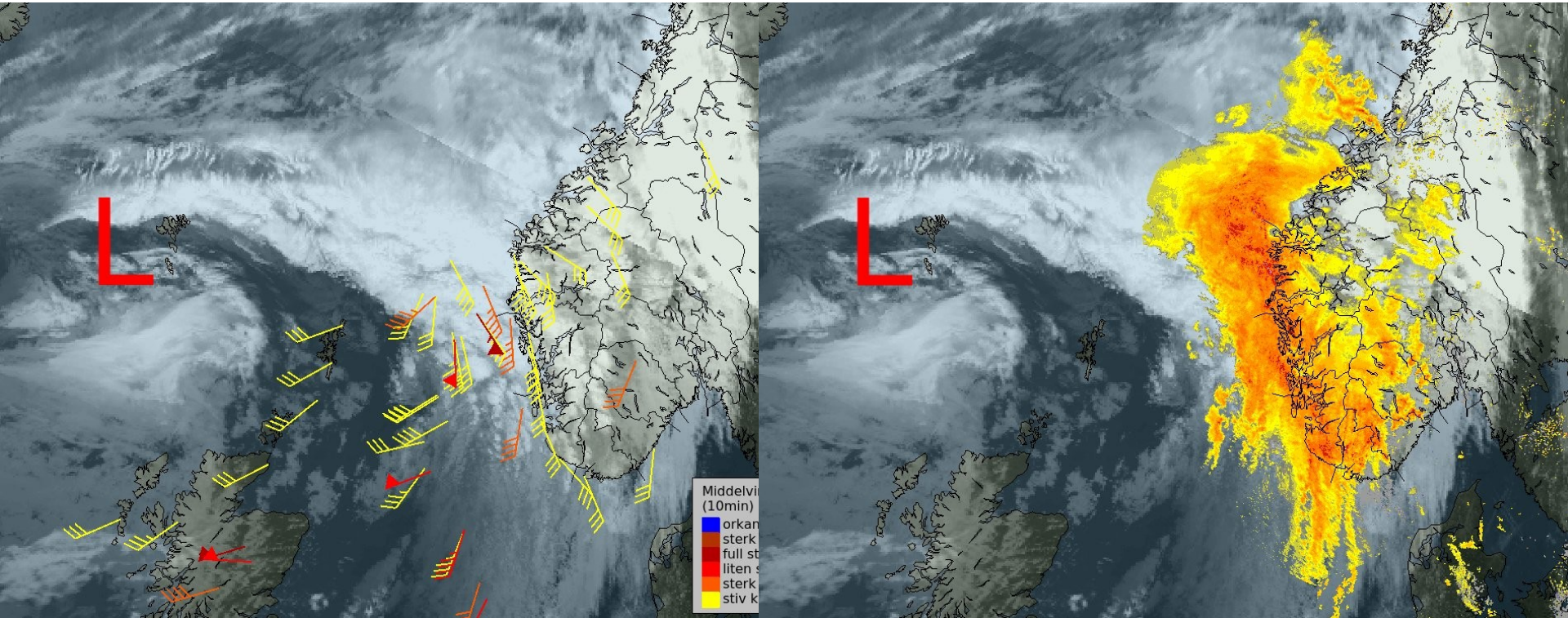
Falcon – UK FAAM BAE 146 coordination



HALO flight



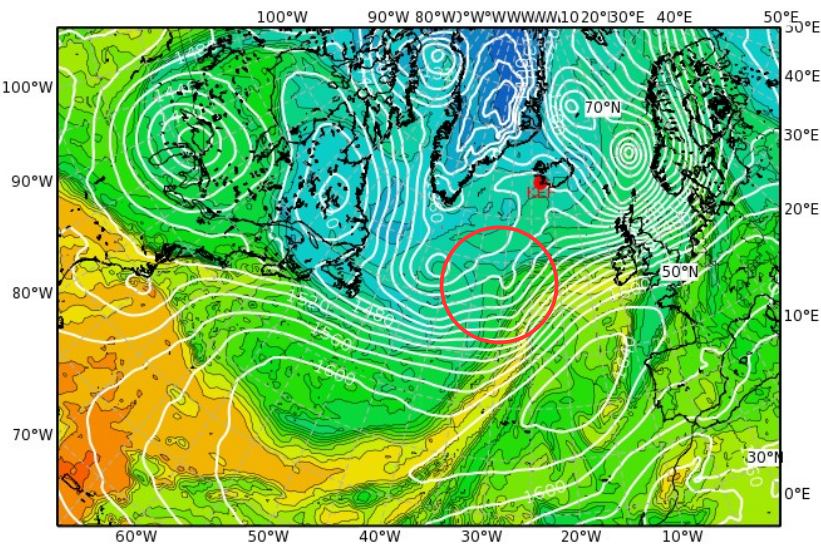
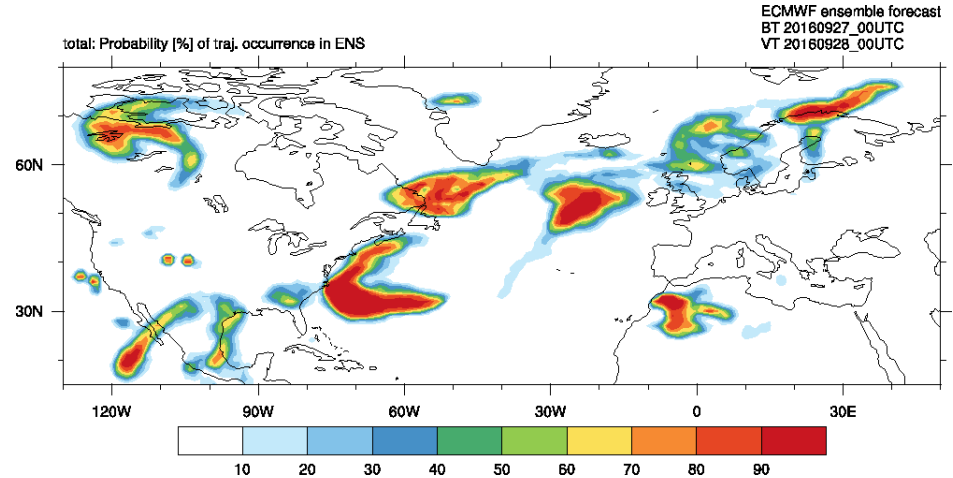
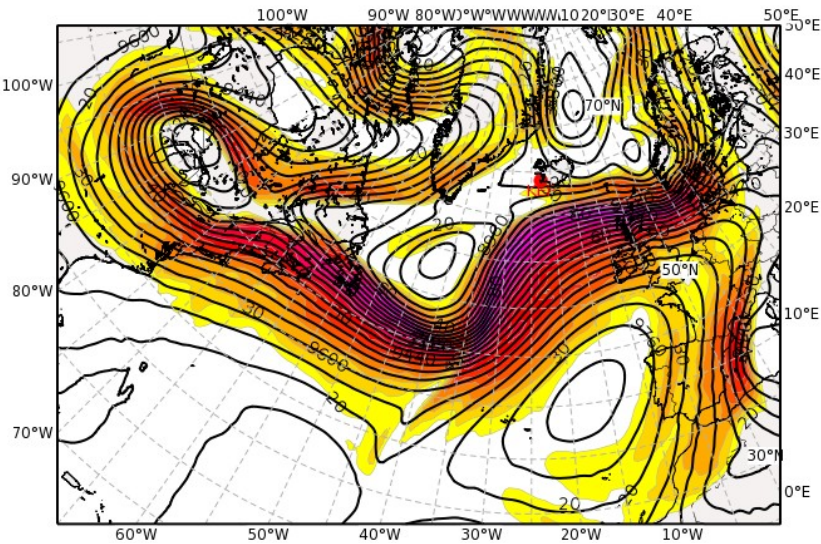
Downstream impact



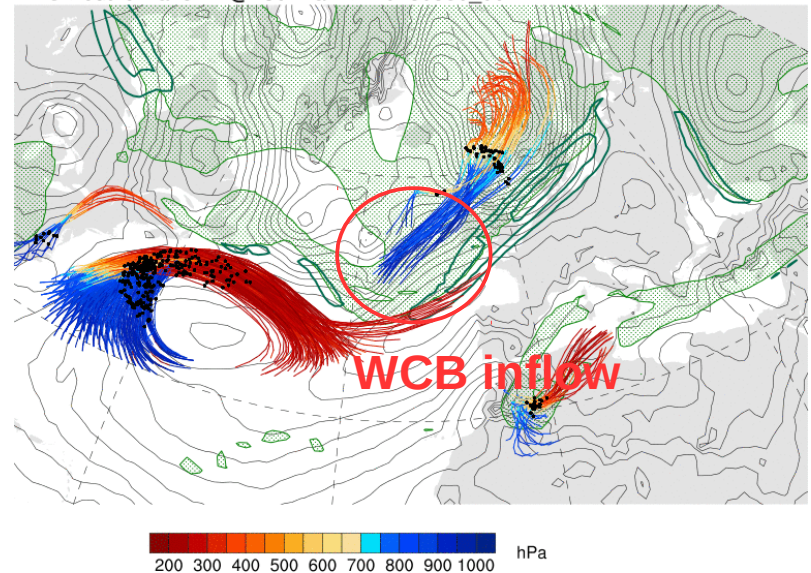
Current synoptic situation and forecast until Friday

Forecast – Wed, 28 Sep 2016, 00 UTC

Z300,THE850, WCB



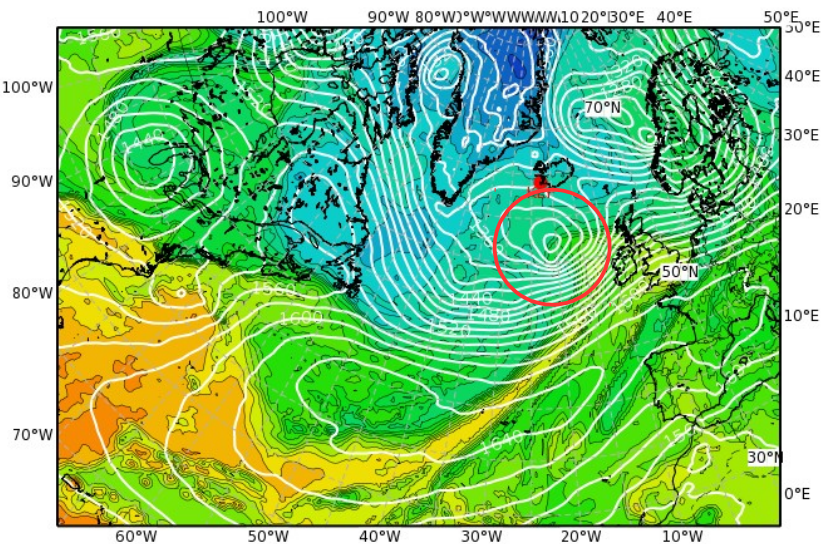
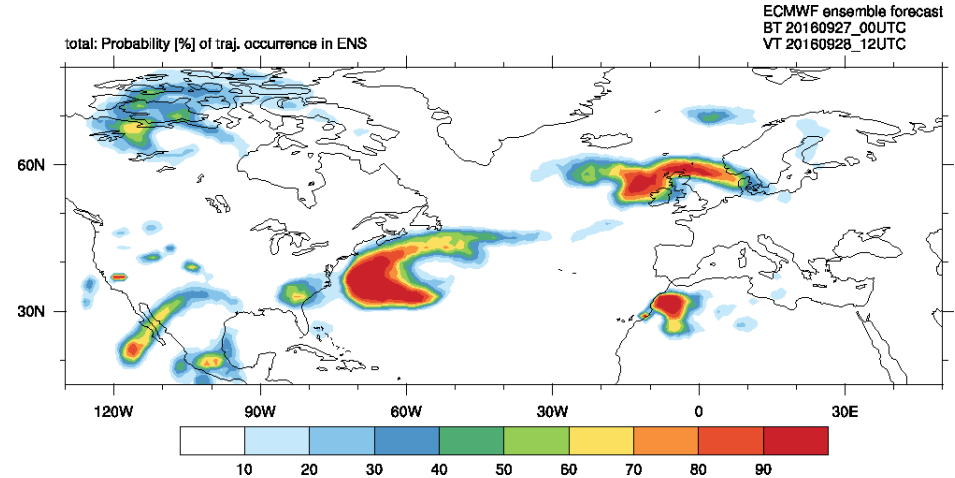
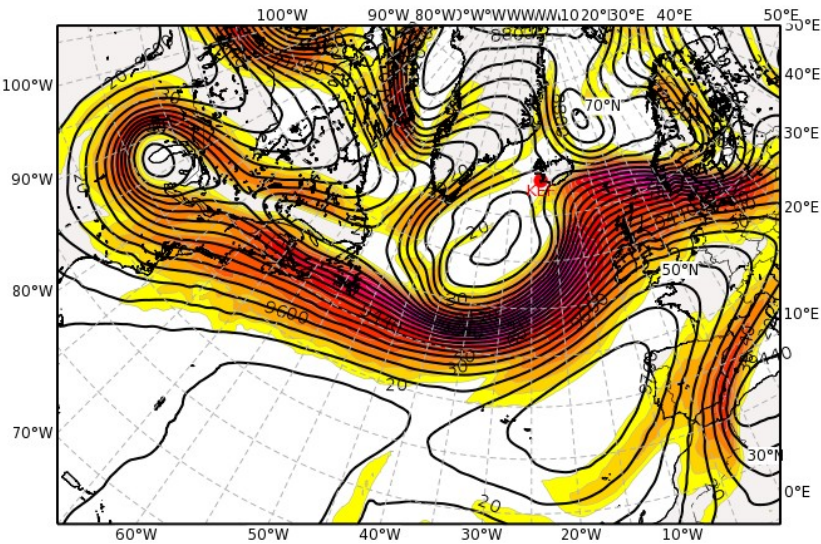
Trajectory start and SLP VT: 20160928_00
WCB outflow and PV@250hPa VT: 20160930_00



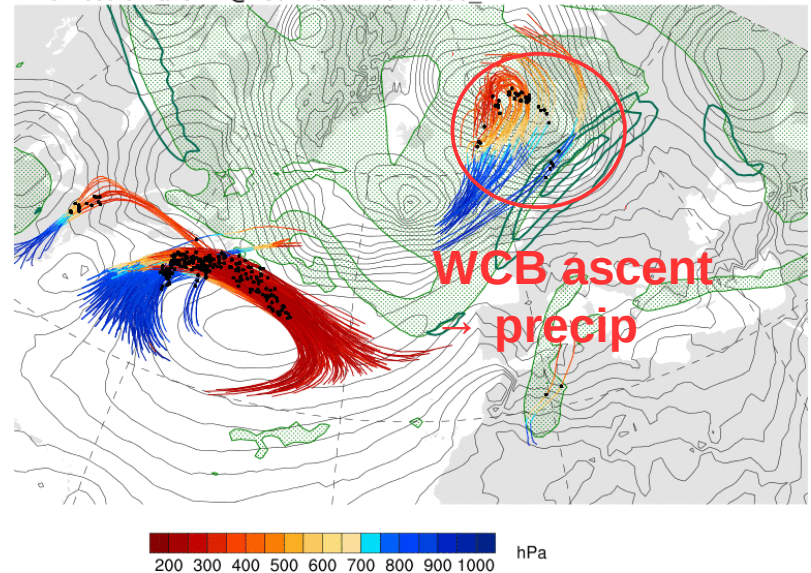
200 300 400 500 600 700 800 900 1000 hPa

Forecast – Wed, 28 Sep 2016, 12 UTC

Z300,THE850, WCB

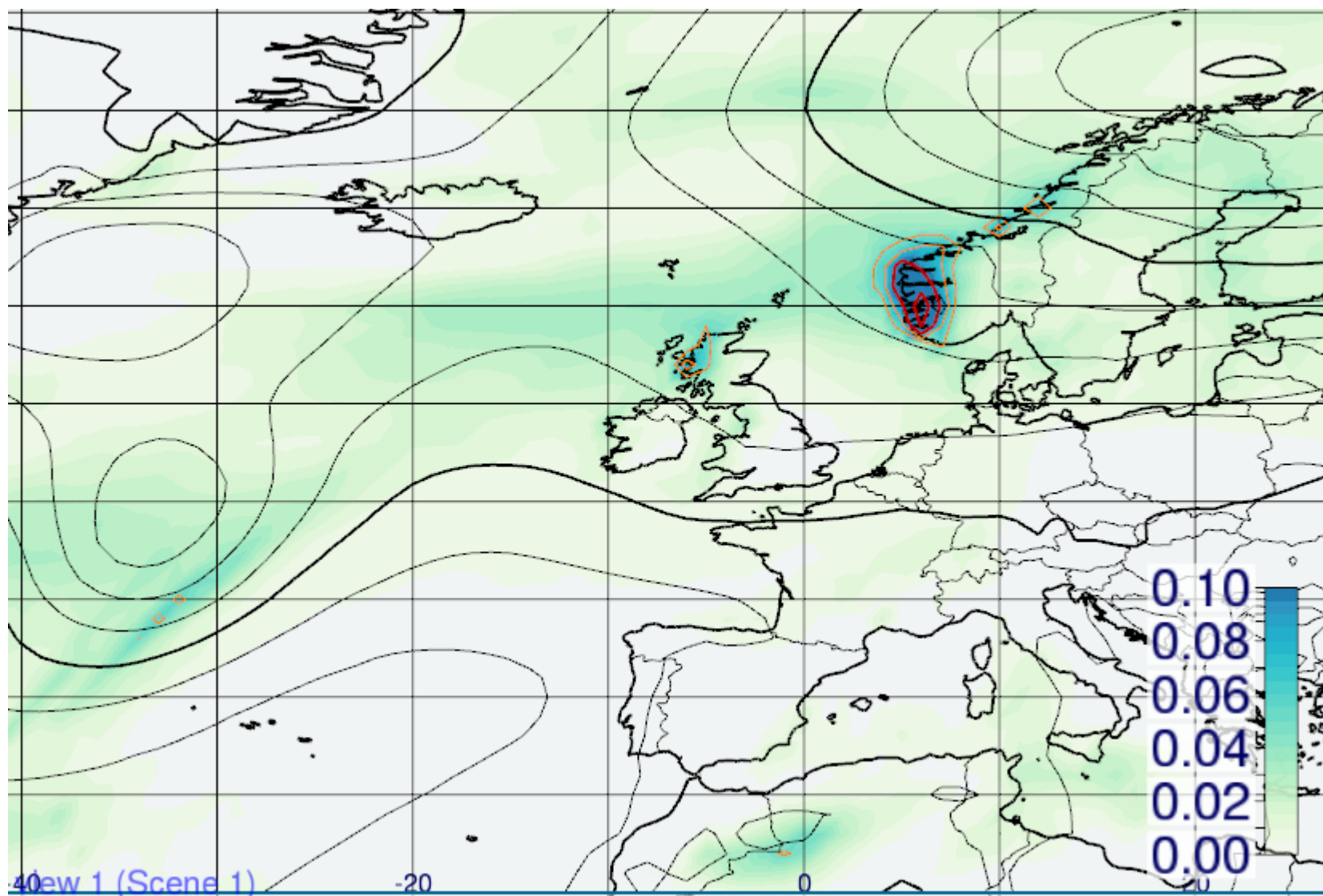


Trajectory start and SLP VT: 20160928_12
WCB outflow and PV@250hPa VT: 20160930_12



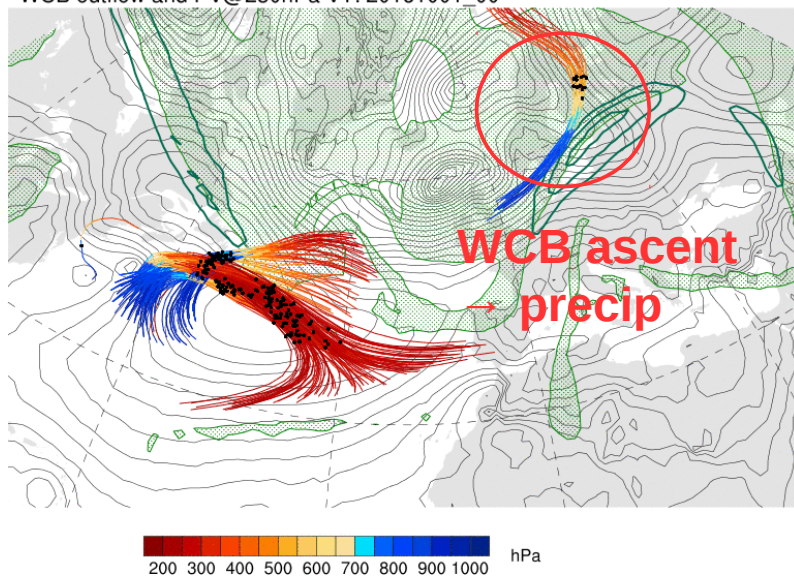
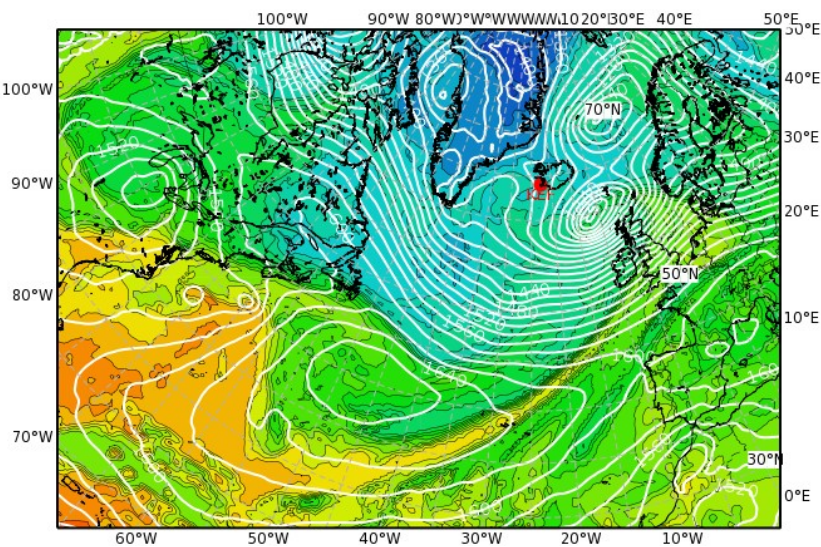
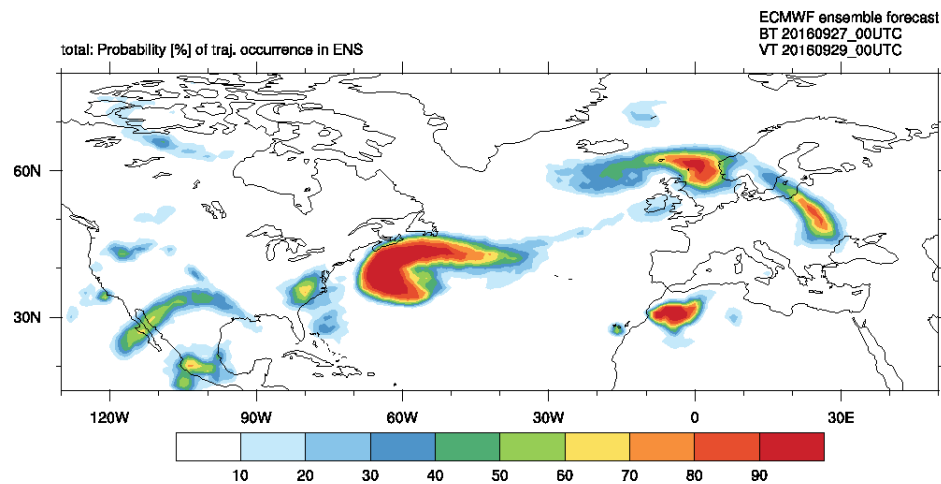
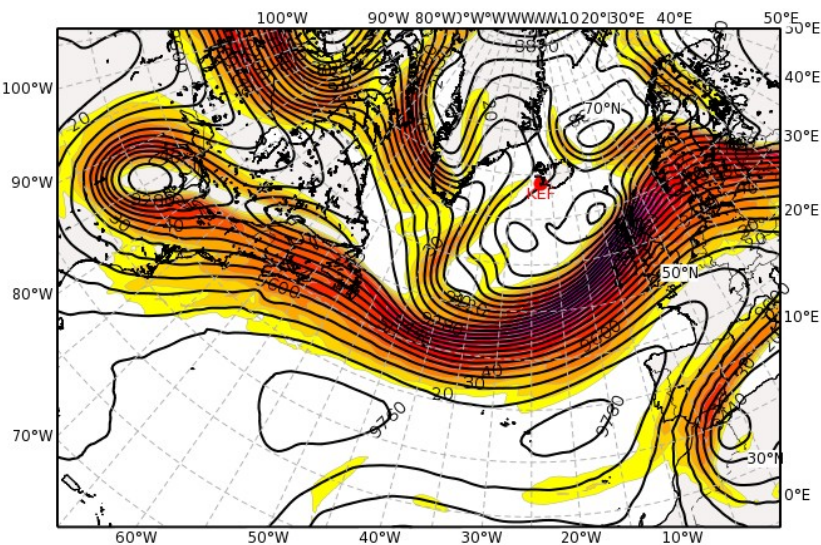
200 300 400 500 600 700 800 900 1000 hPa

Forecast – Ensemble mean of accumulated precip until Saturday



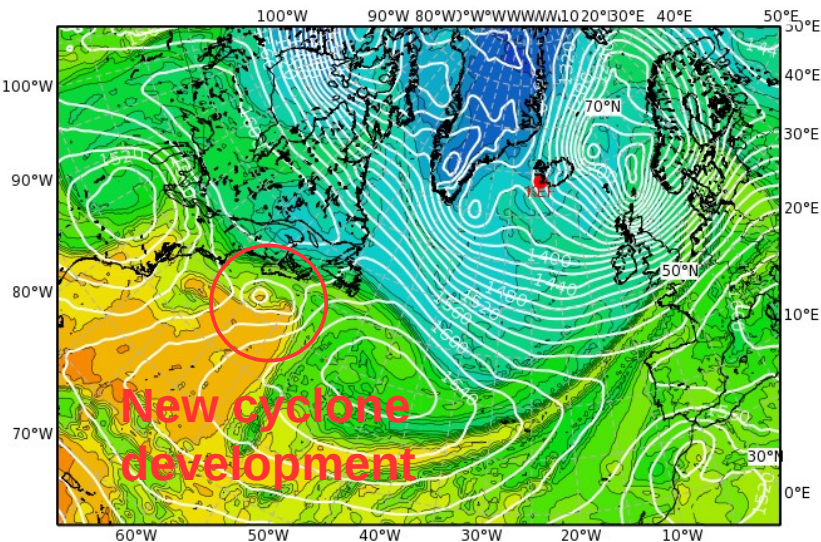
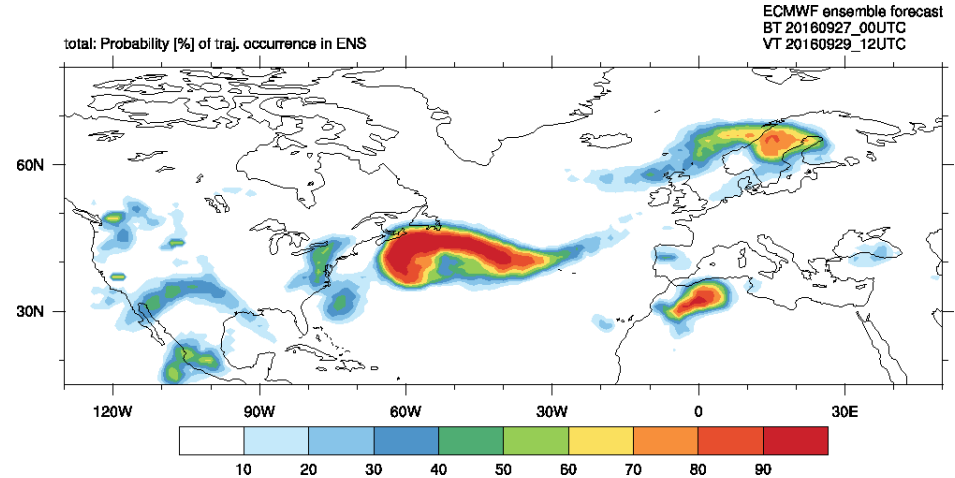
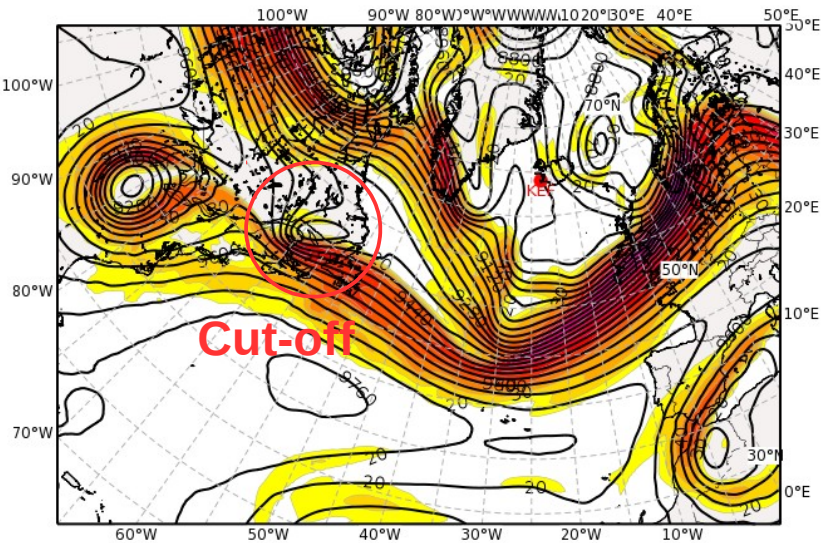
Forecast – Thu, 29 Sep 2016, 00 UTC

Z300,THE850, WCB

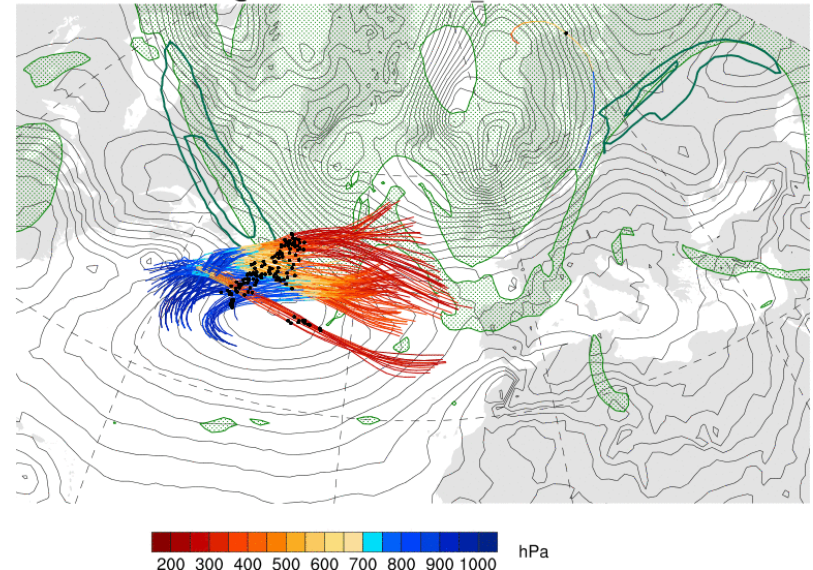


Forecast – Thu, 29 Sep 2016, 12 UTC

Z300,THE850, WCB

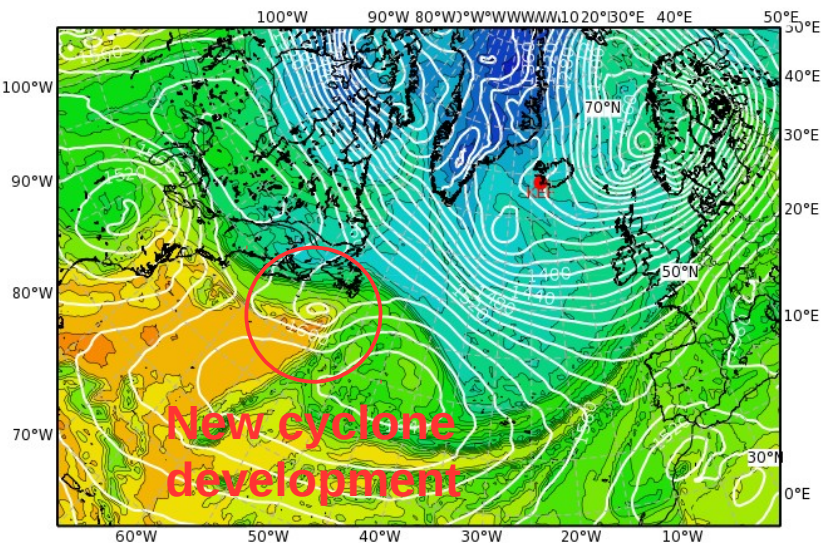
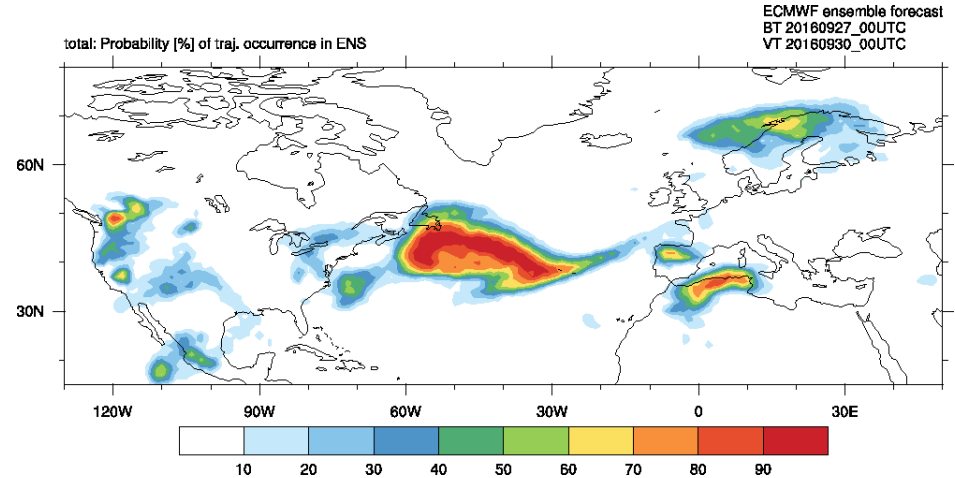
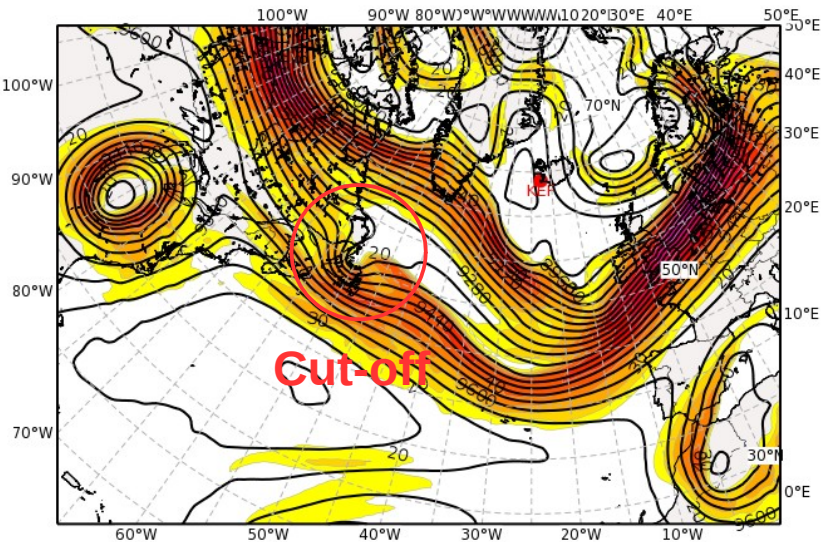


Trajectory start and SLP VT: 20160929_12
WCB outflow and PV@250hPa VT: 20161001_12

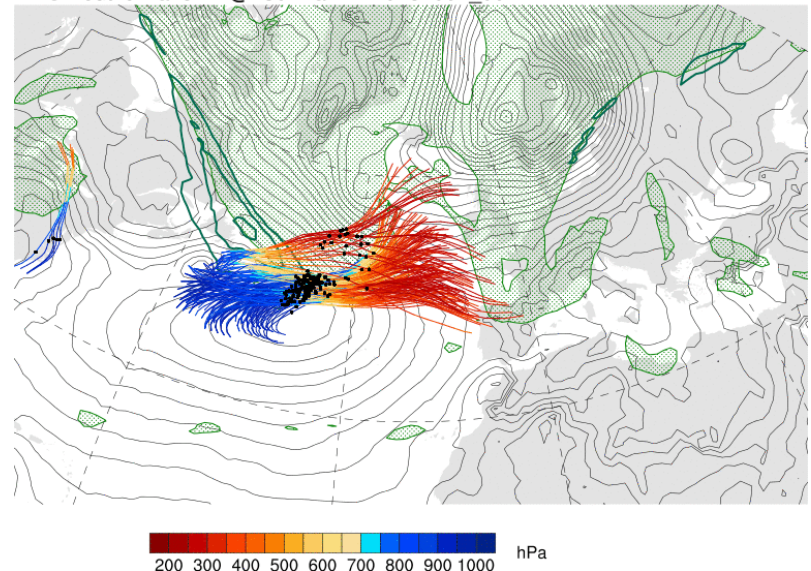


Forecast – Fri, 30 Sep 2016, 00 UTC

Z300,THE850, WCB

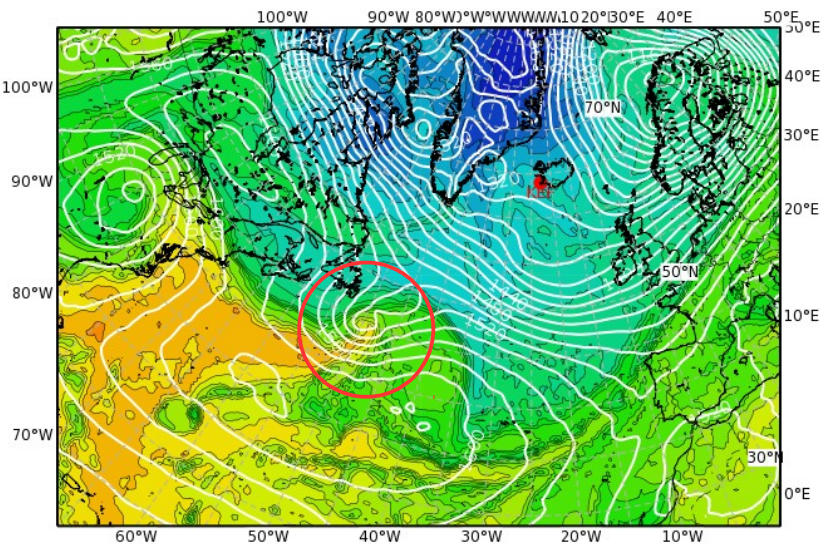
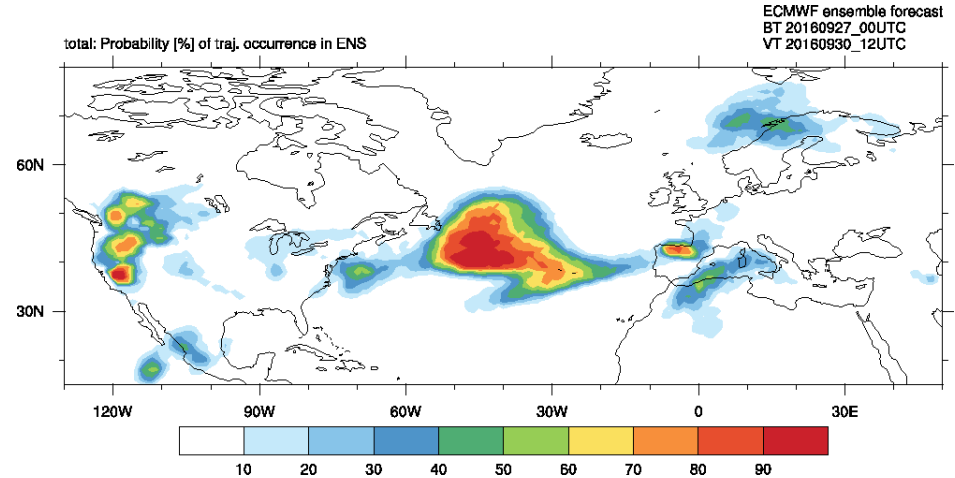
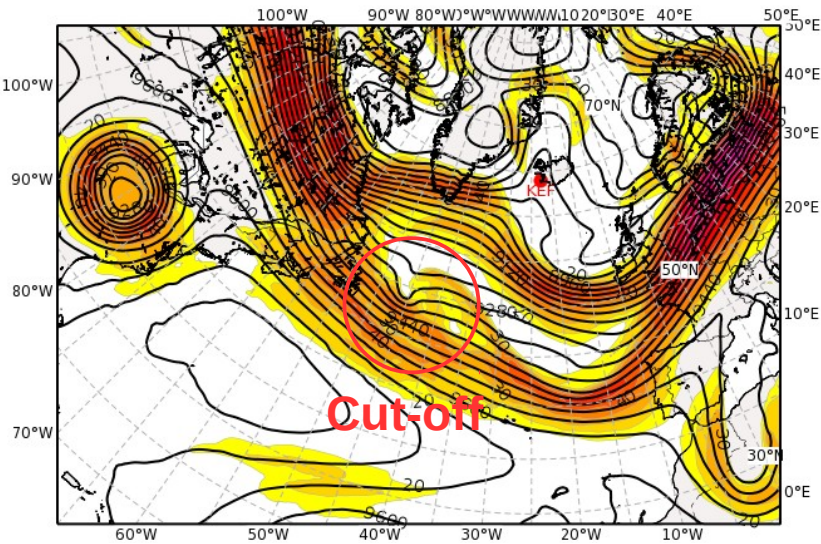


Trajectory start and SLP VT: 20160930_00
WCB outflow and PV@250hPa VT: 20161002_00

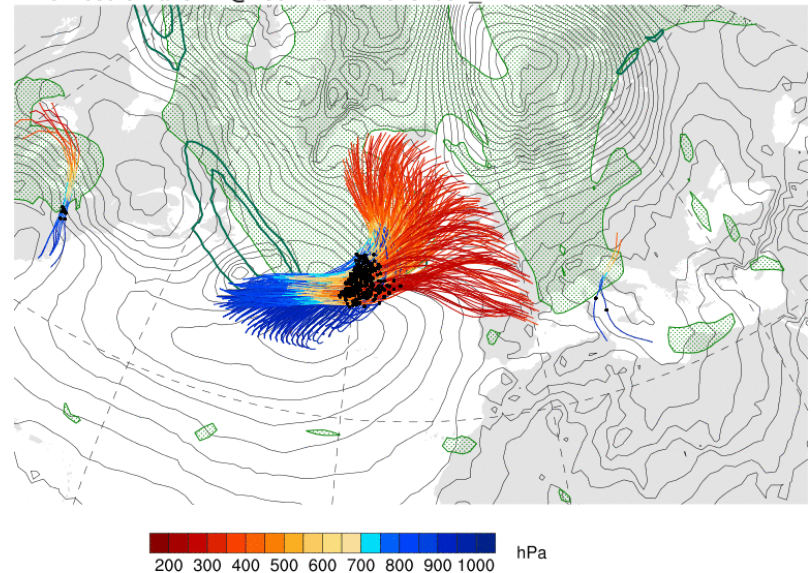


Forecast – Fri, 30 Sep 2016, 12 UTC

Z300,THE850, WCB

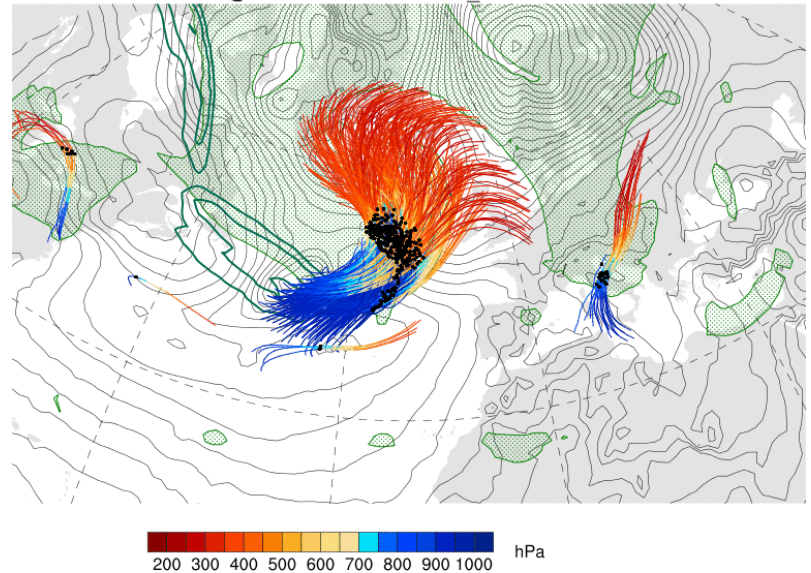
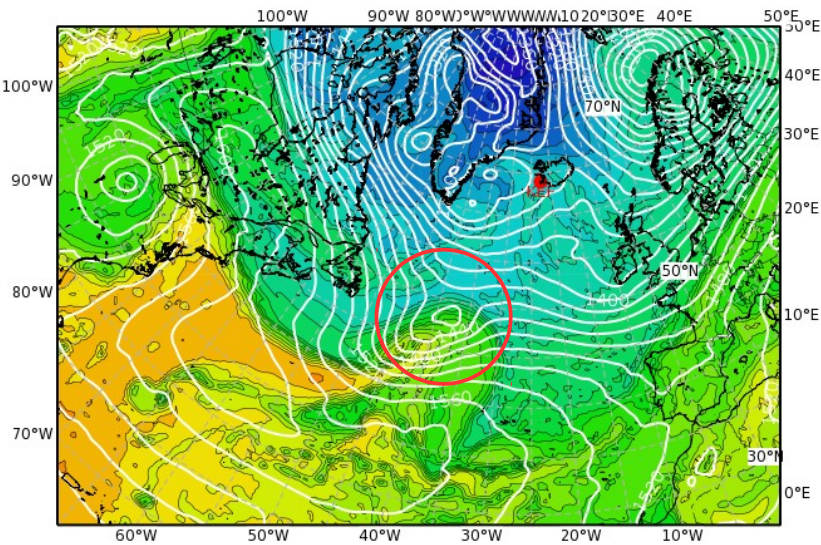
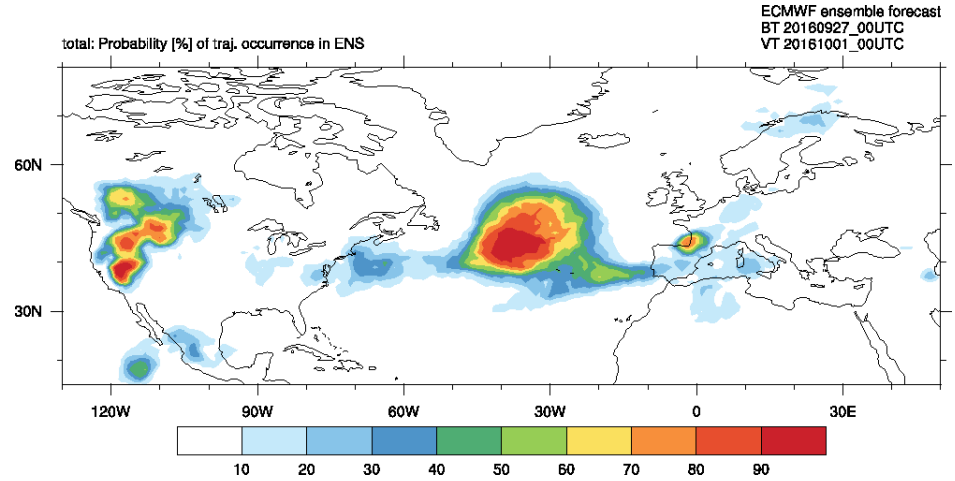
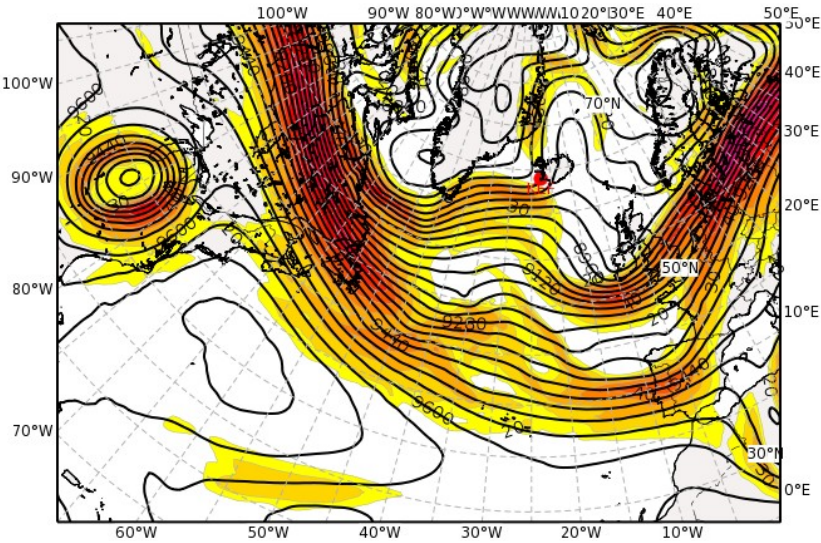


Trajectory start and SLP VT: 20160930_12
WCB outflow and PV@250hPa VT: 20161002_12



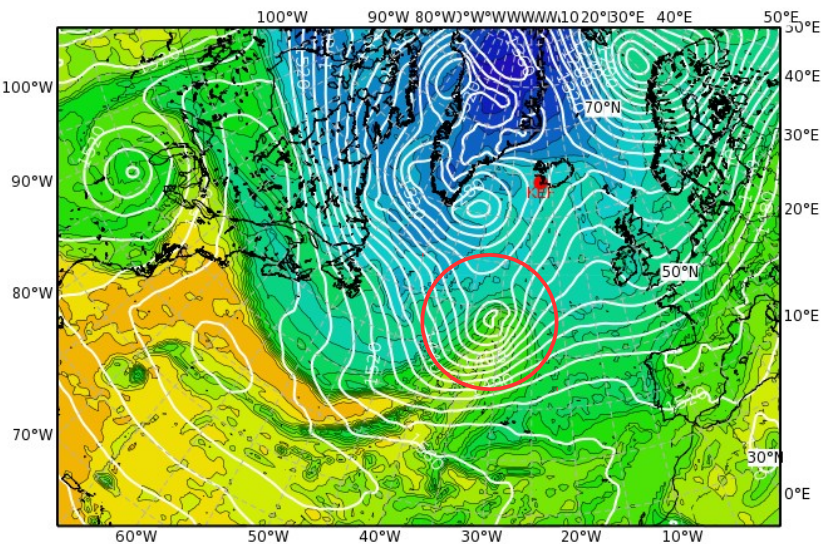
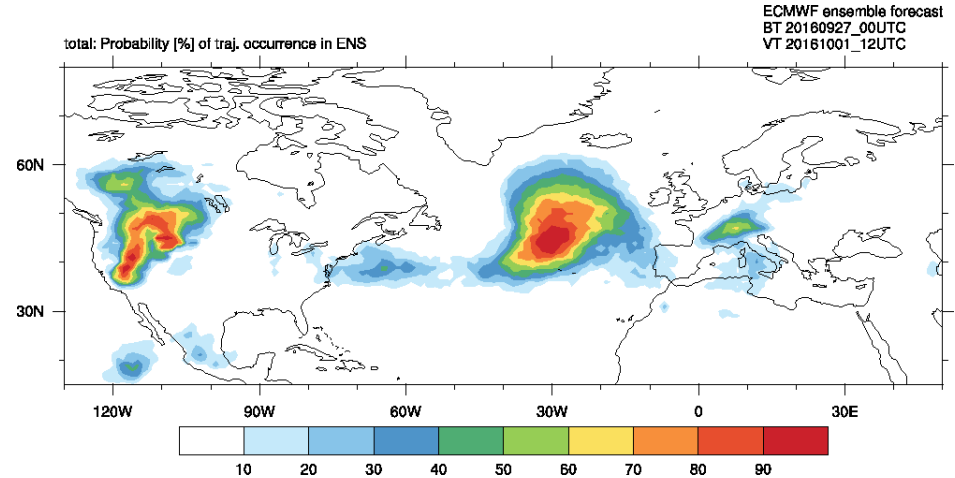
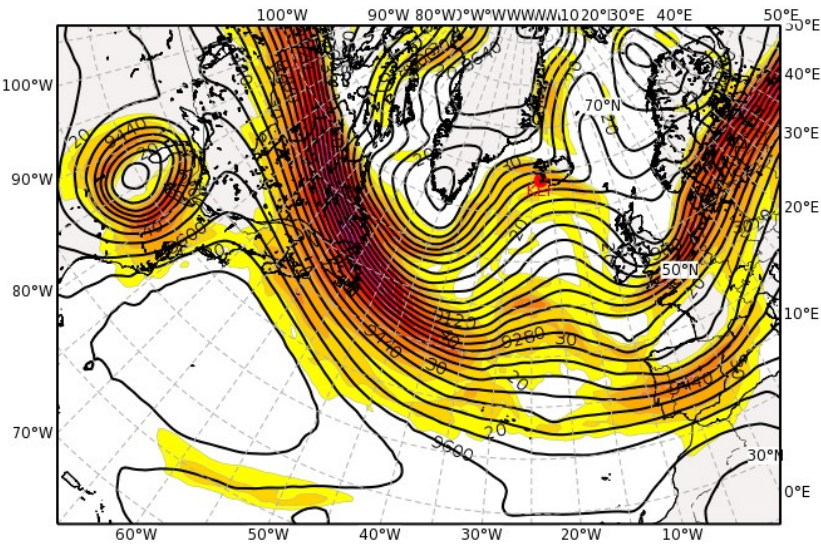
Forecast – Sat, 01 Oct 2016, 00 UTC

Z300,THE850, WCB

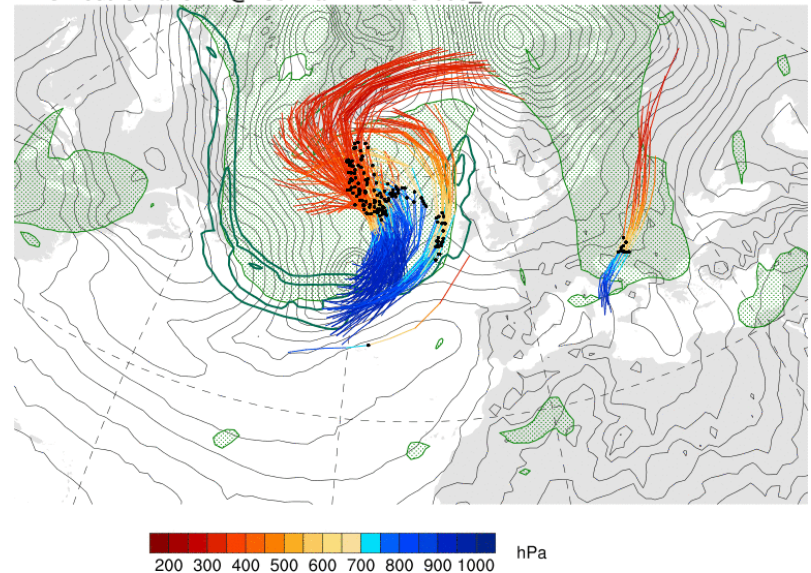


Forecast – Sat, 01 Oct 2016, 12 UTC

Z300,THE850, WCB

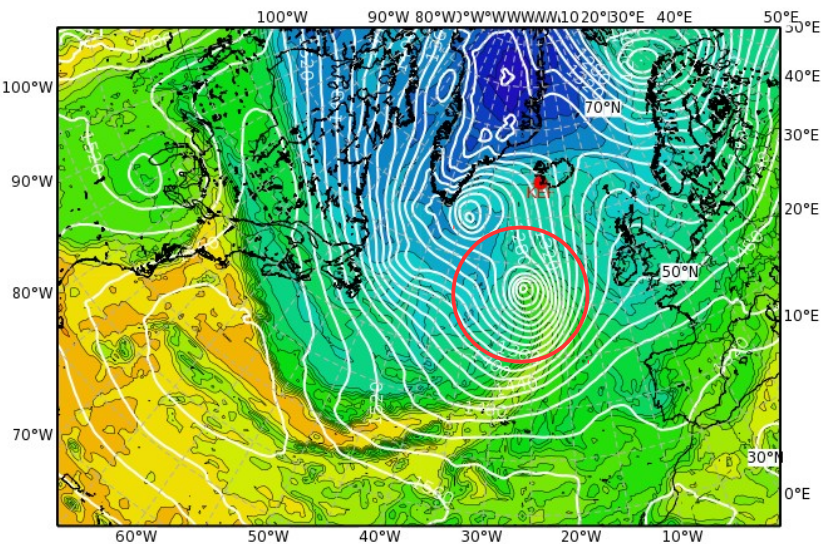
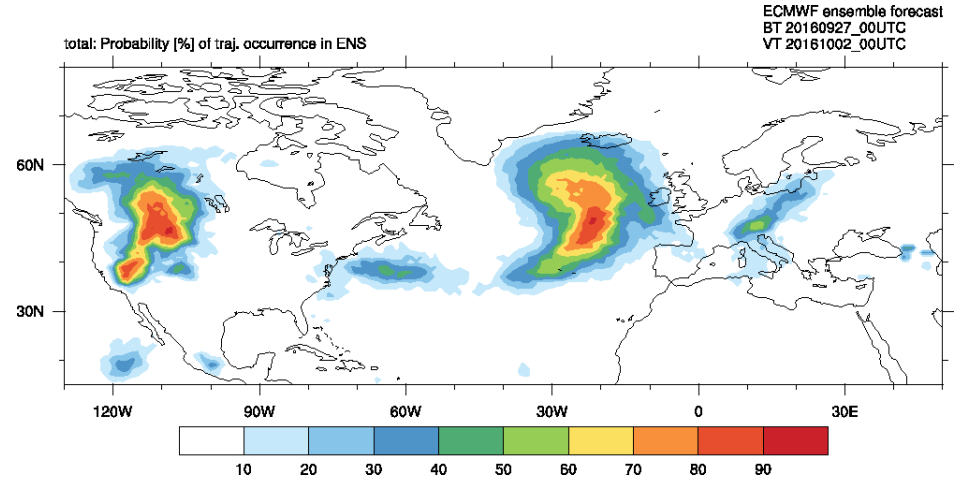
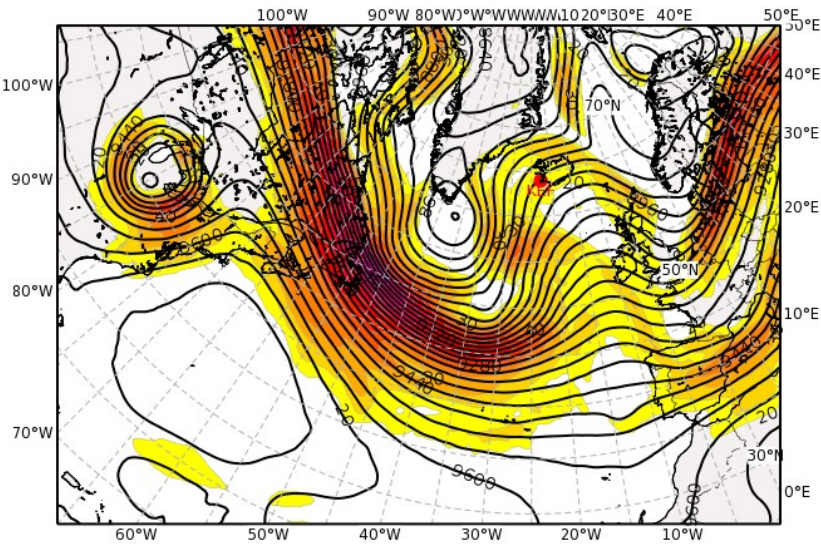


Trajectory start and SLP VT: 20161001_12
WCB outflow and PV@250hPa VT: 20161003_12

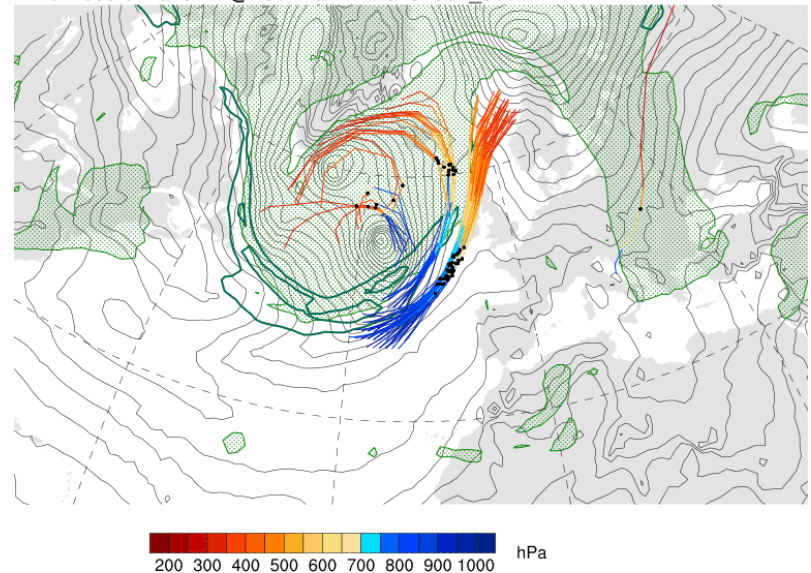


Forecast – Sun, 02 Oct 2016, 00 UTC

Z300,THE850, WCB



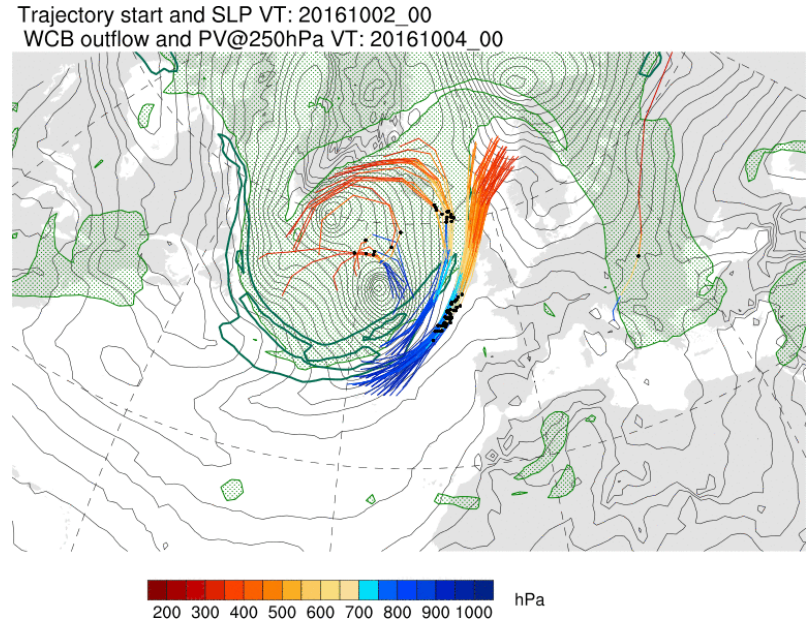
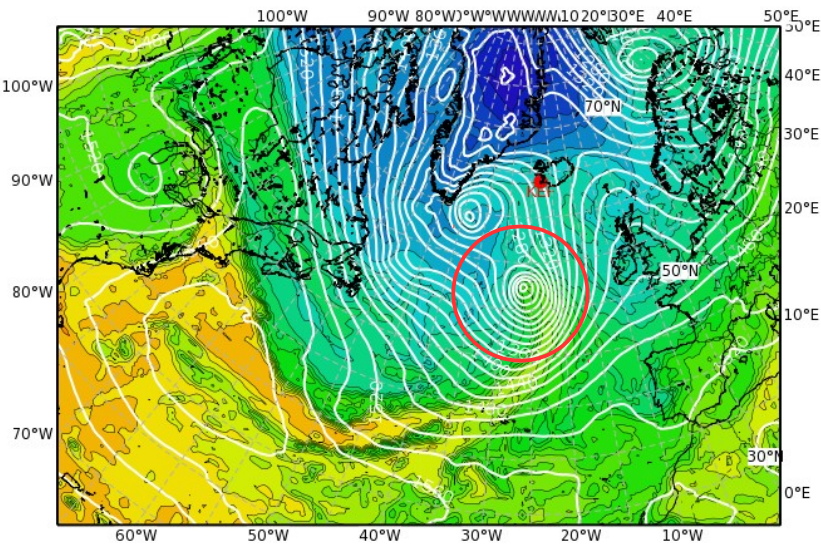
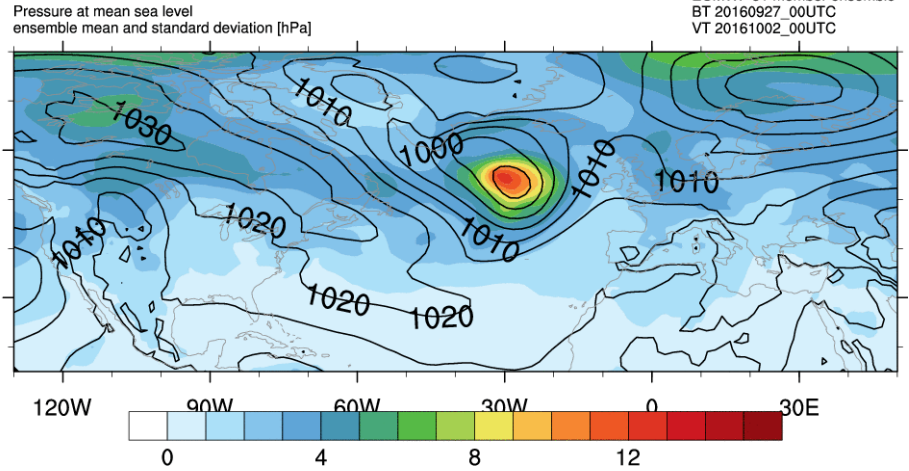
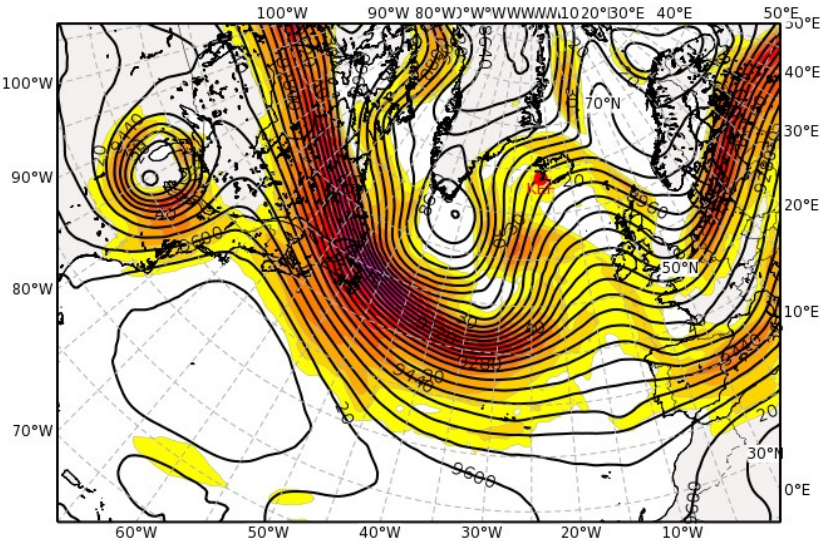
Trajectory start and SLP VT: 20161002_00
WCB outflow and PV@250hPa VT: 20161004_00



200 300 400 500 600 700 800 900 1000 hPa

Forecast – Sun, 02 Oct 2016, 00 UTC

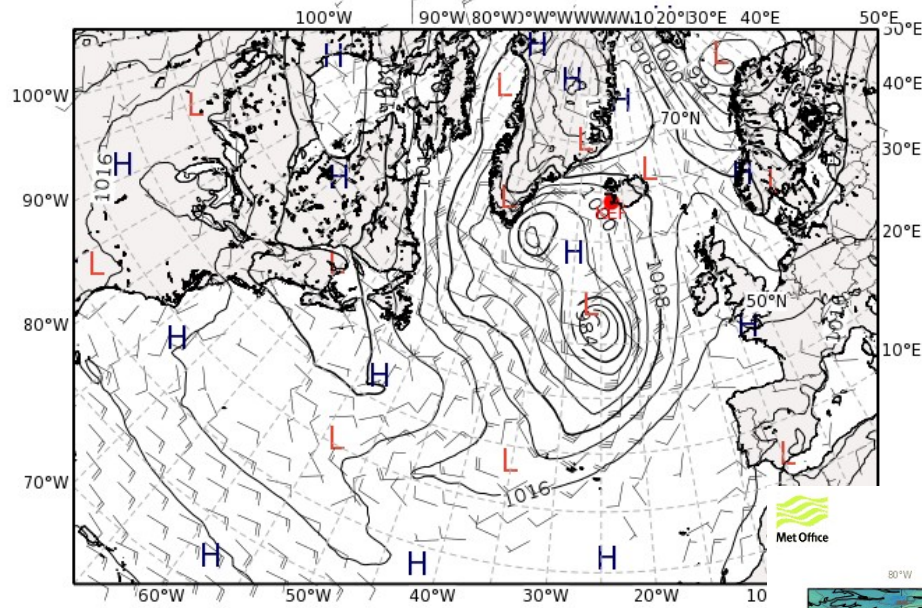
Z300,THE850, WCB



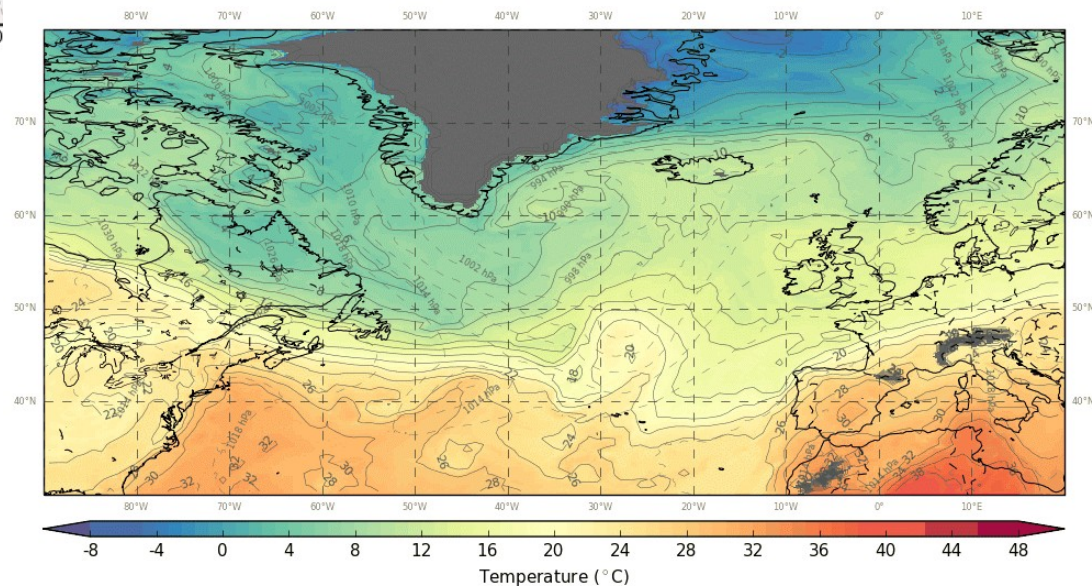
Forecast – Sun, 02 Oct 2016, 00 UTC

Mean Sea Level Pressure (hPa)

Valid: Sun, 02 Oct 2016, 00 UTC (step 120 h from Tue, 27 Sep 2016, 00 UTC)

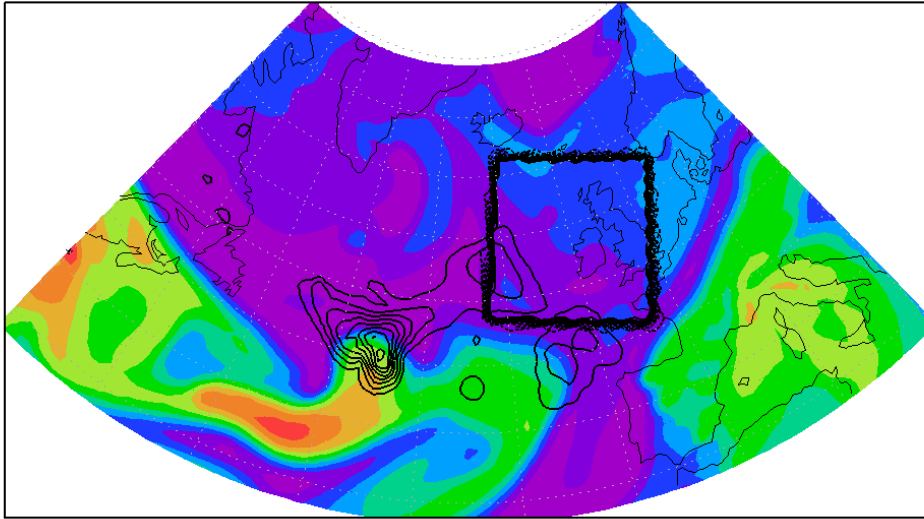


Met Office Oper. Global: Potential Temperature (°C) at 850 hPa
2016/10/02 00Z T+120 from 2016/09/27 00Z

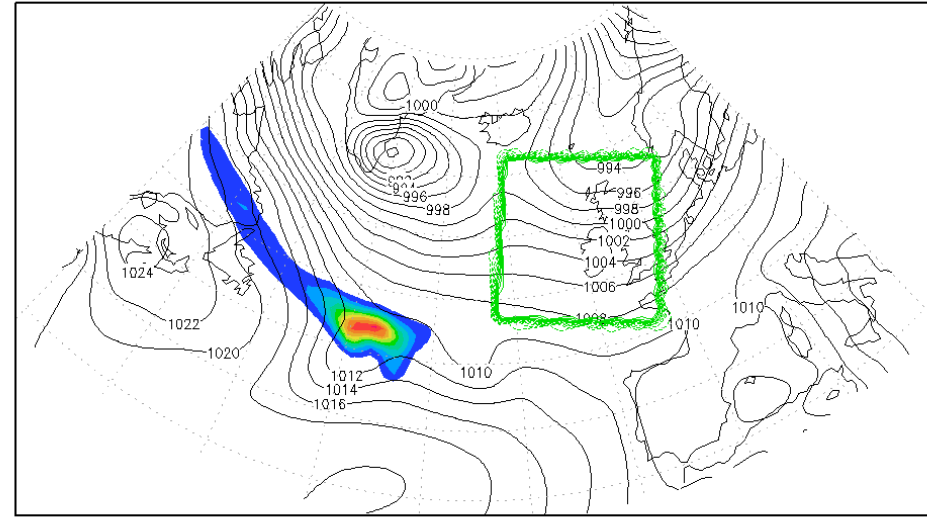


COAMPS Sensitivity (24h) Valid 18Z 1 Oct. Saturday (Box over UK)

700-hPa Water Vapor (shading)
Integrated Moisture Sensitivity (contours)



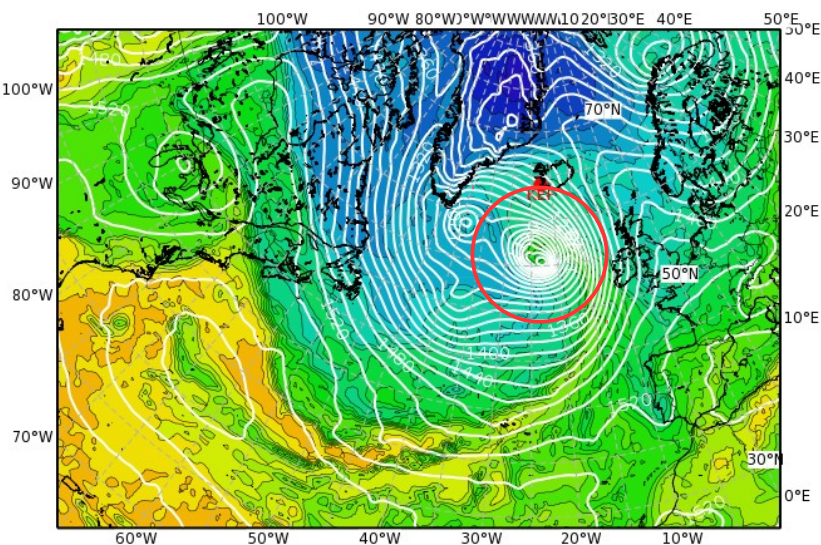
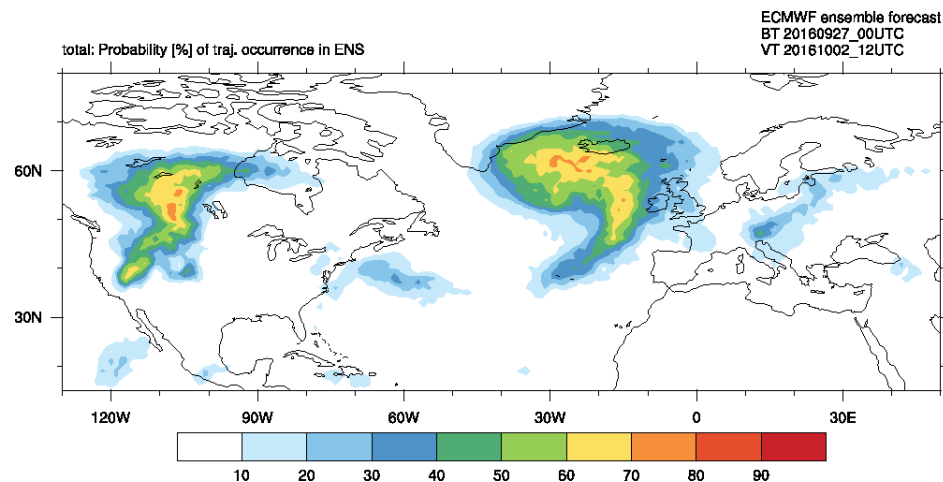
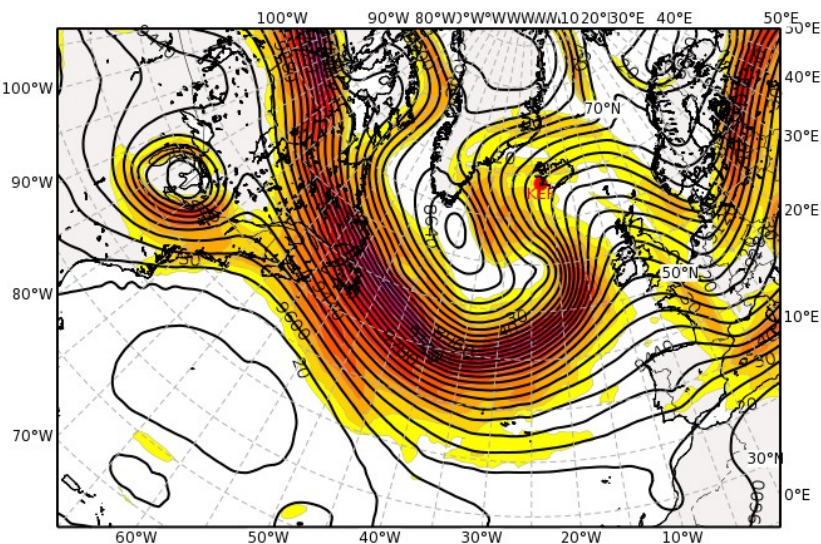
SLP (contour)
Integrated Total Energy (Shading)



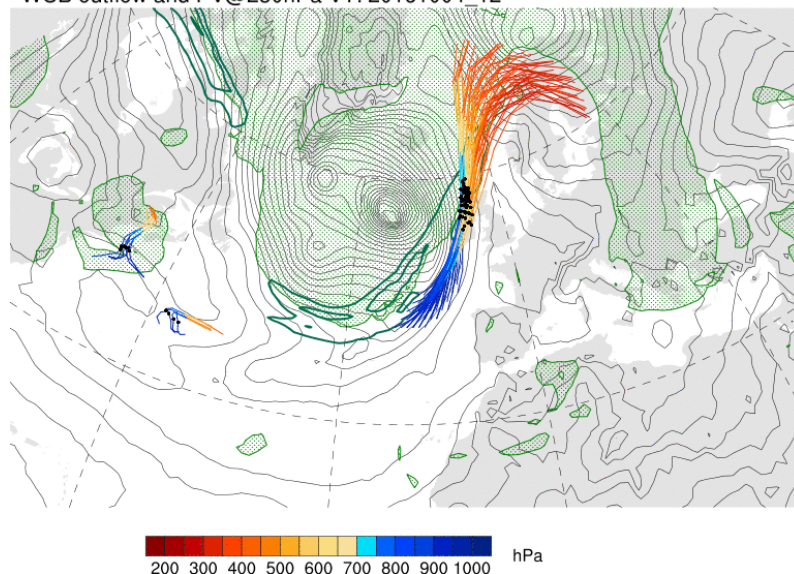
**Sensitivity centered on open wave at northern edge of moisture plume.
Forecast is further south and an open wave rather than a closed low,
compared to ECMWF deterministic forecast.**

Forecast – Sun, 02 Oct 2016, 12 UTC

Z300, PV330, THE850, WCB



Trajectory start and SLP VT: 20161002_12
WCB outflow and PV@250hPa VT: 20161004_12

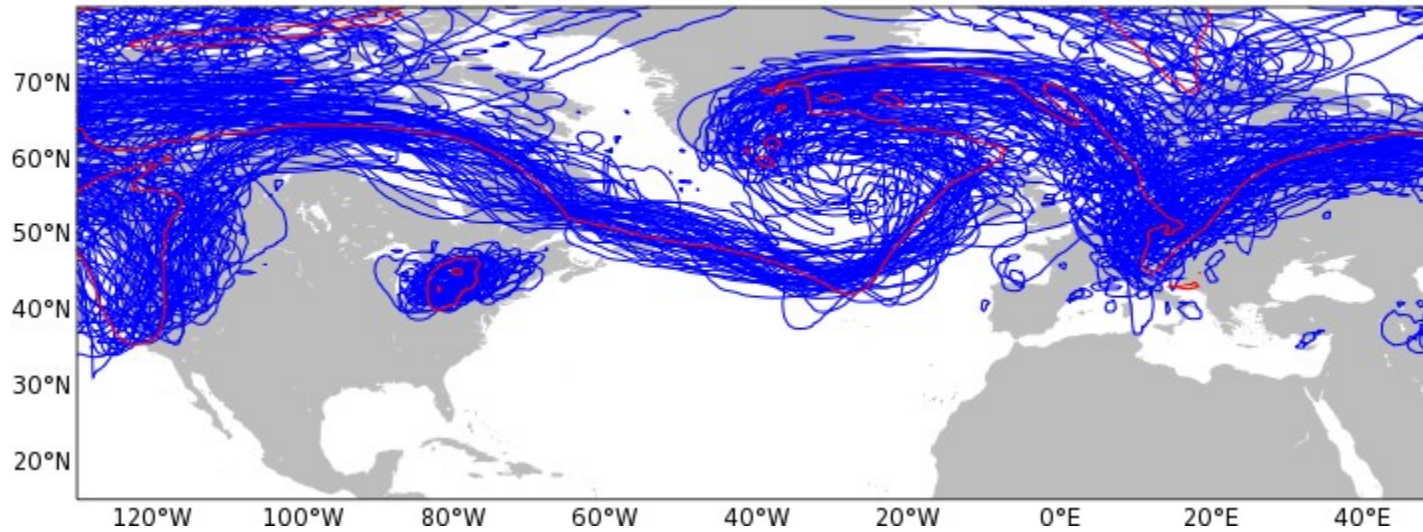


Predictability – last week vs this week

ECMWF ENSEMBLE FC

BT: 20160927 00UTC, VT: 20161003 00UTC

blue: perturbed, red: control

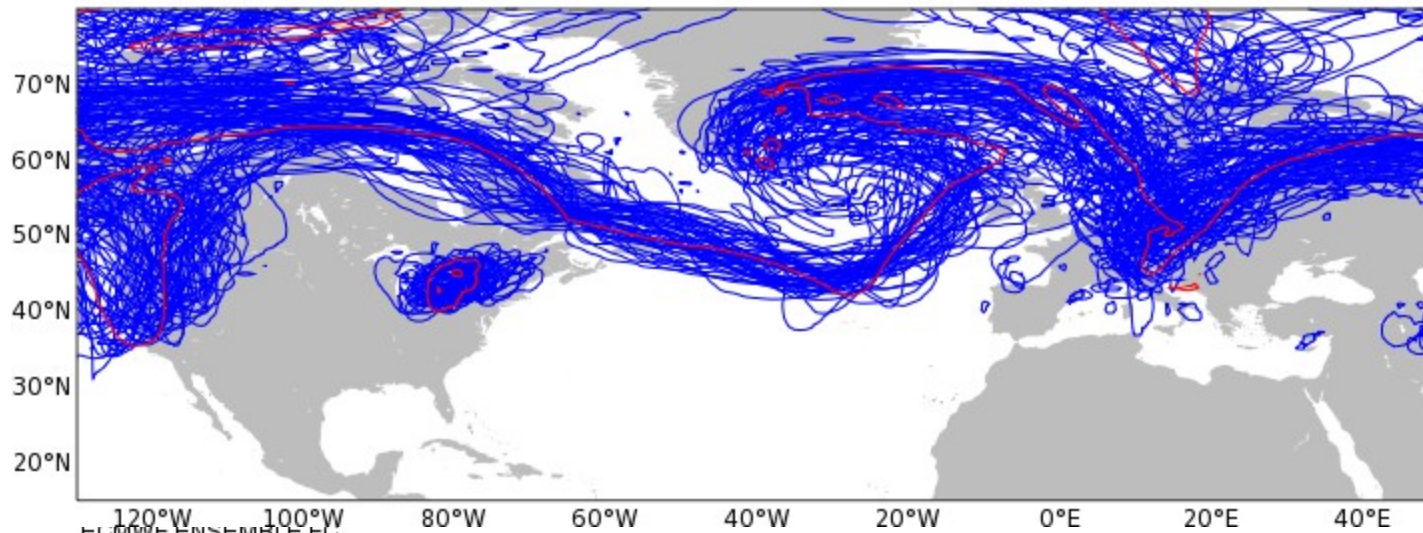


Predictability – last week vs this week

ECMWF ENSEMBLE FC

BT: 20160927 00UTC, VT: 20161003 00UTC

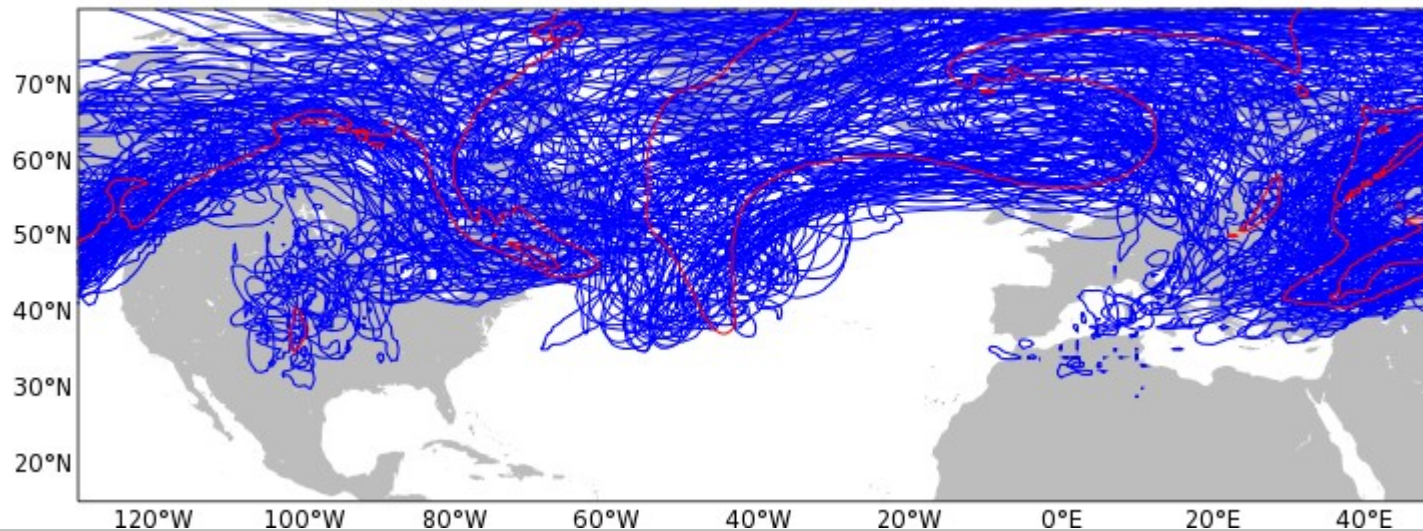
blue: perturbed, red: control



ECMWF ENSEMBLE FC

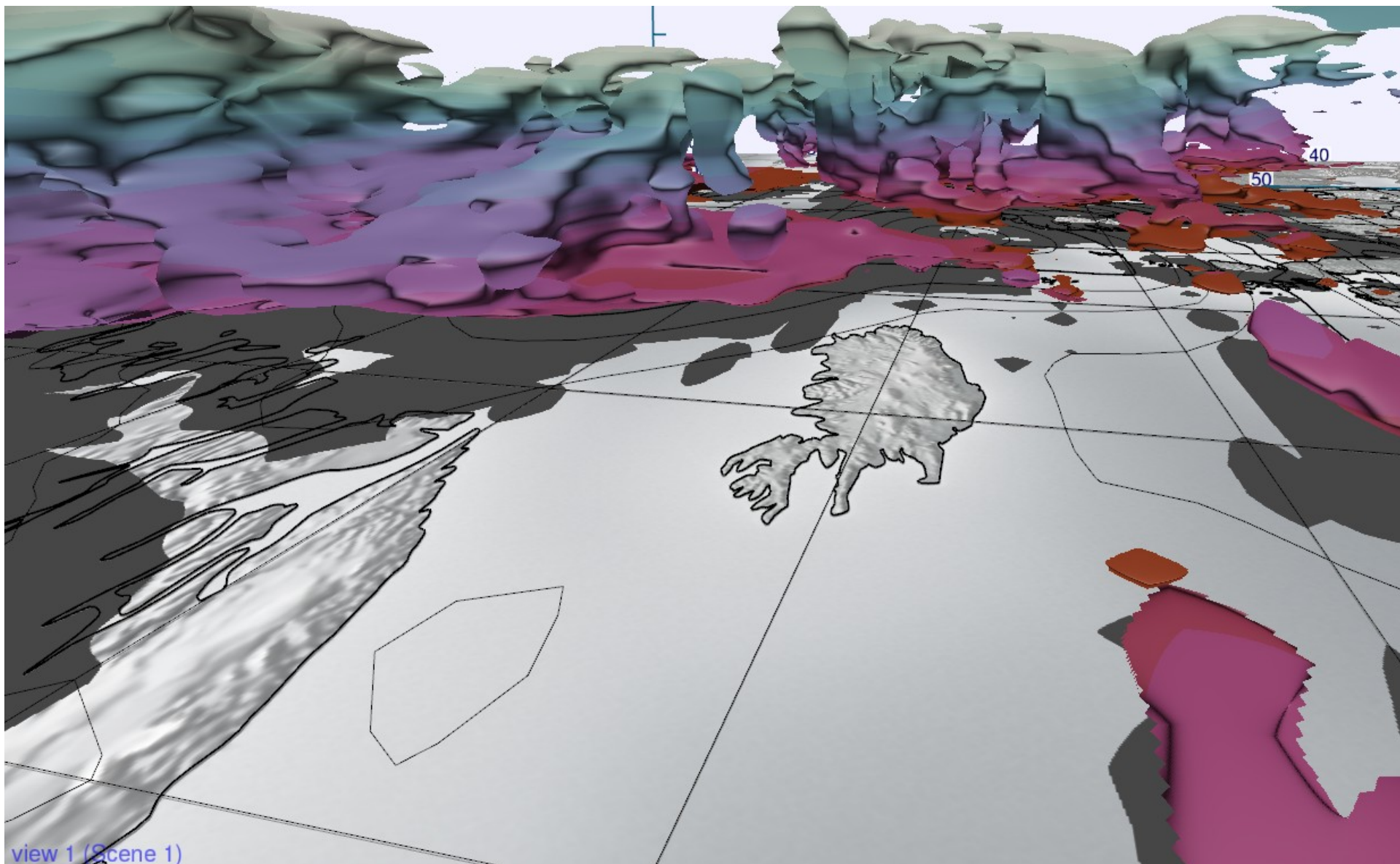
BT: 20160922 00UTC, VT: 20160928 00UTC

blue: perturbed, red: control



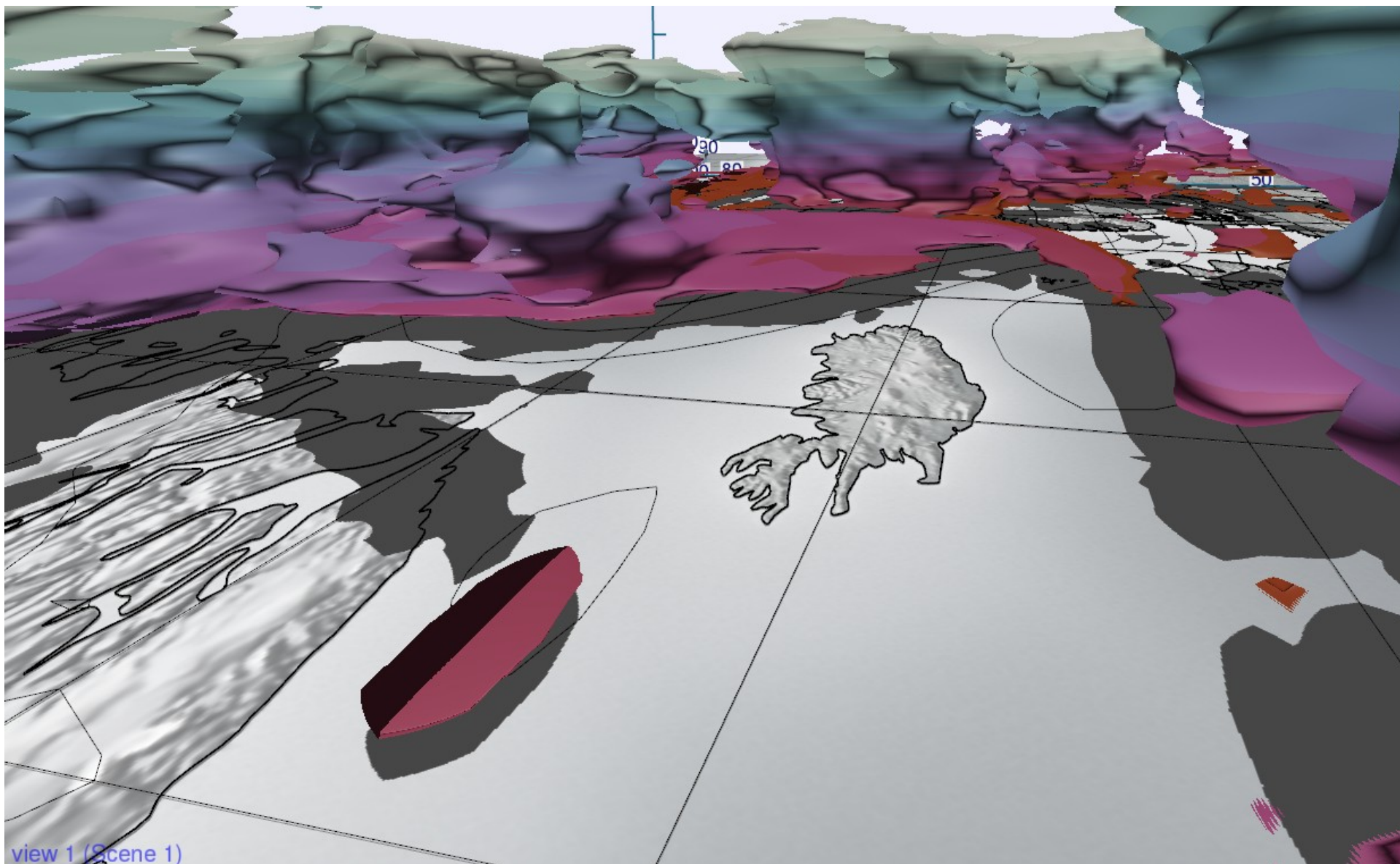
Additional radiosoundings over Europe

Cloudiness – tomorrow 00 UTC



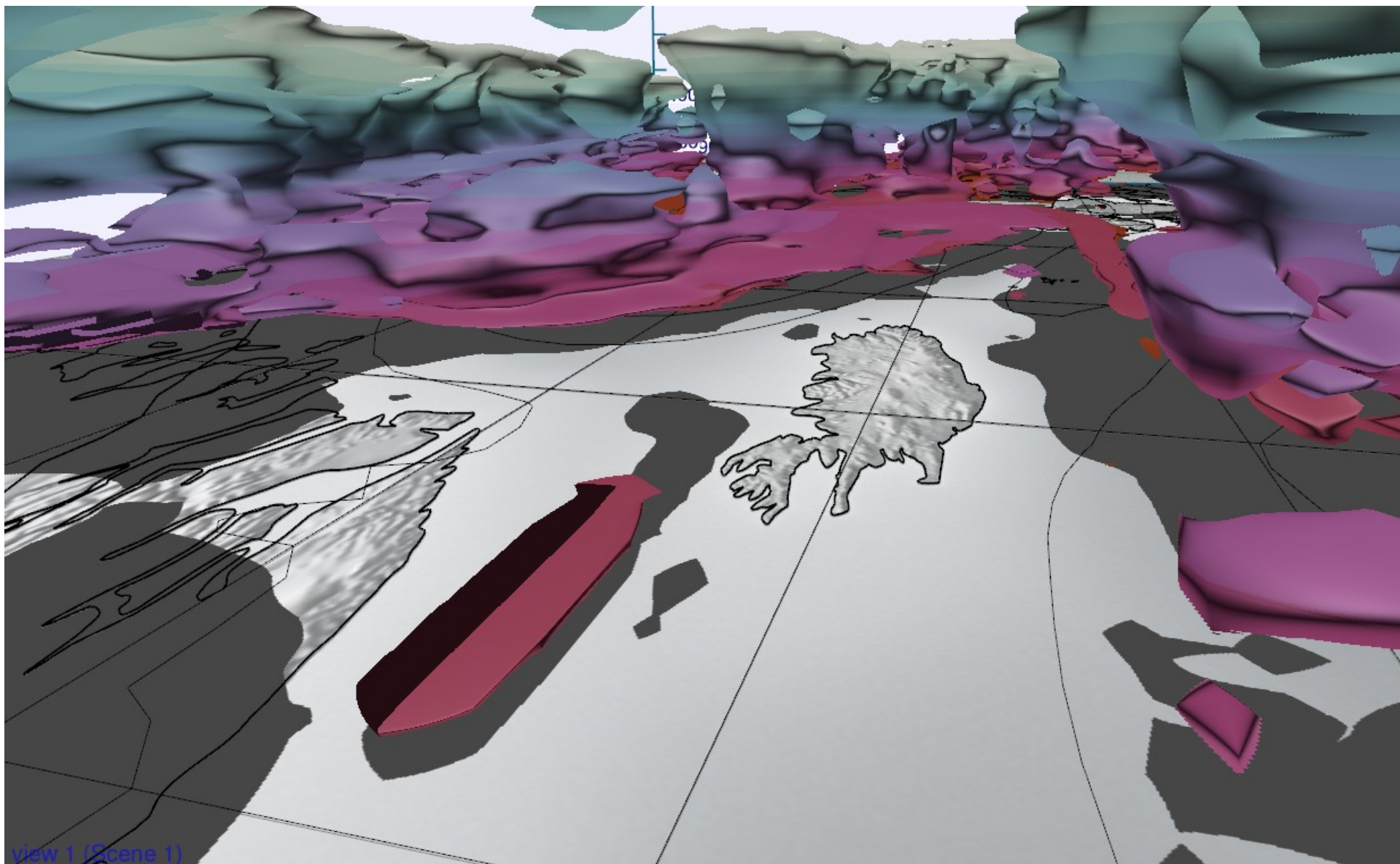
Aurora forecast: 4/9 active

Cloudiness – tomorrow 06 UTC



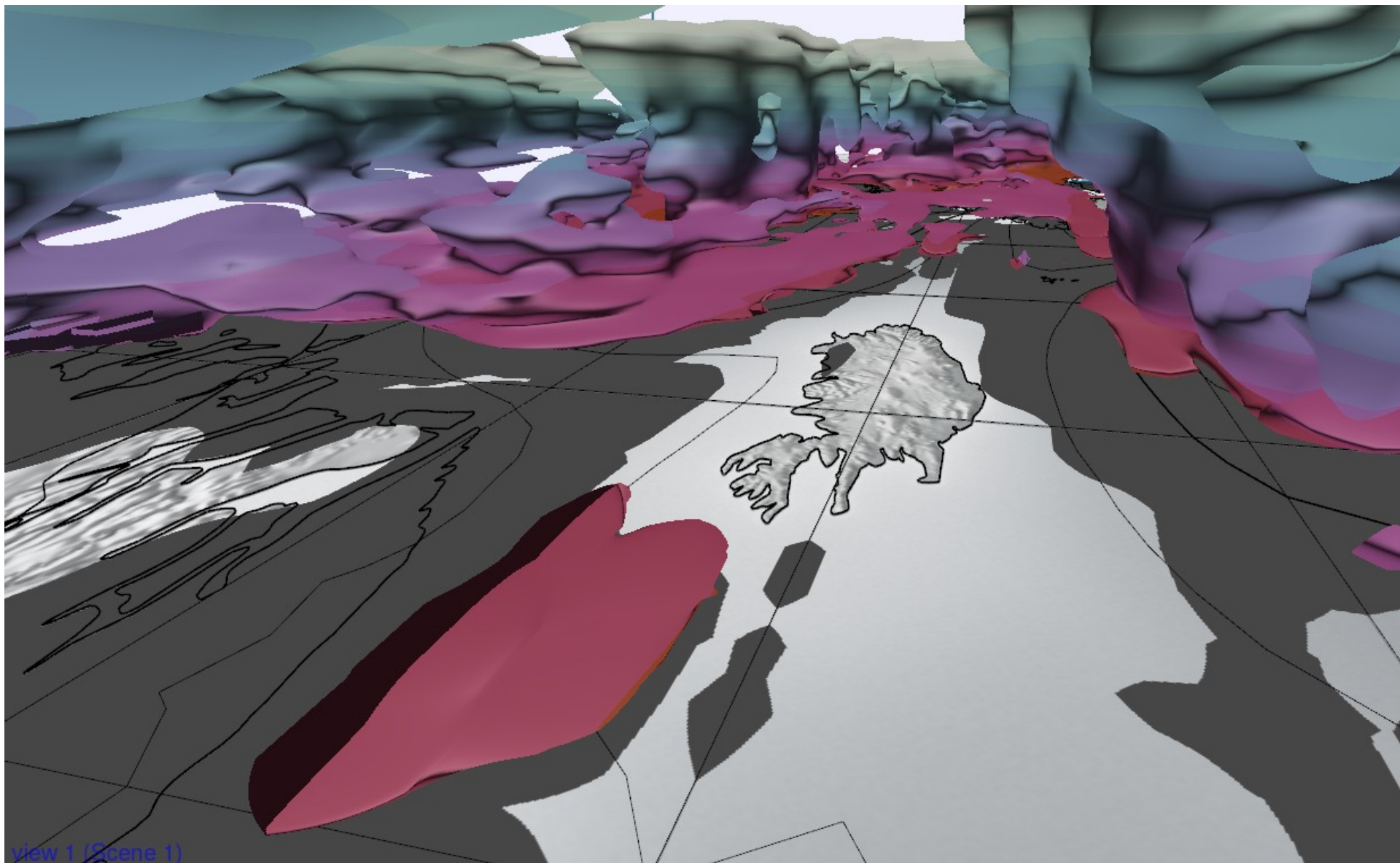
Aurora forecast: 4/9 active

Cloudiness – tomorrow 12 UTC



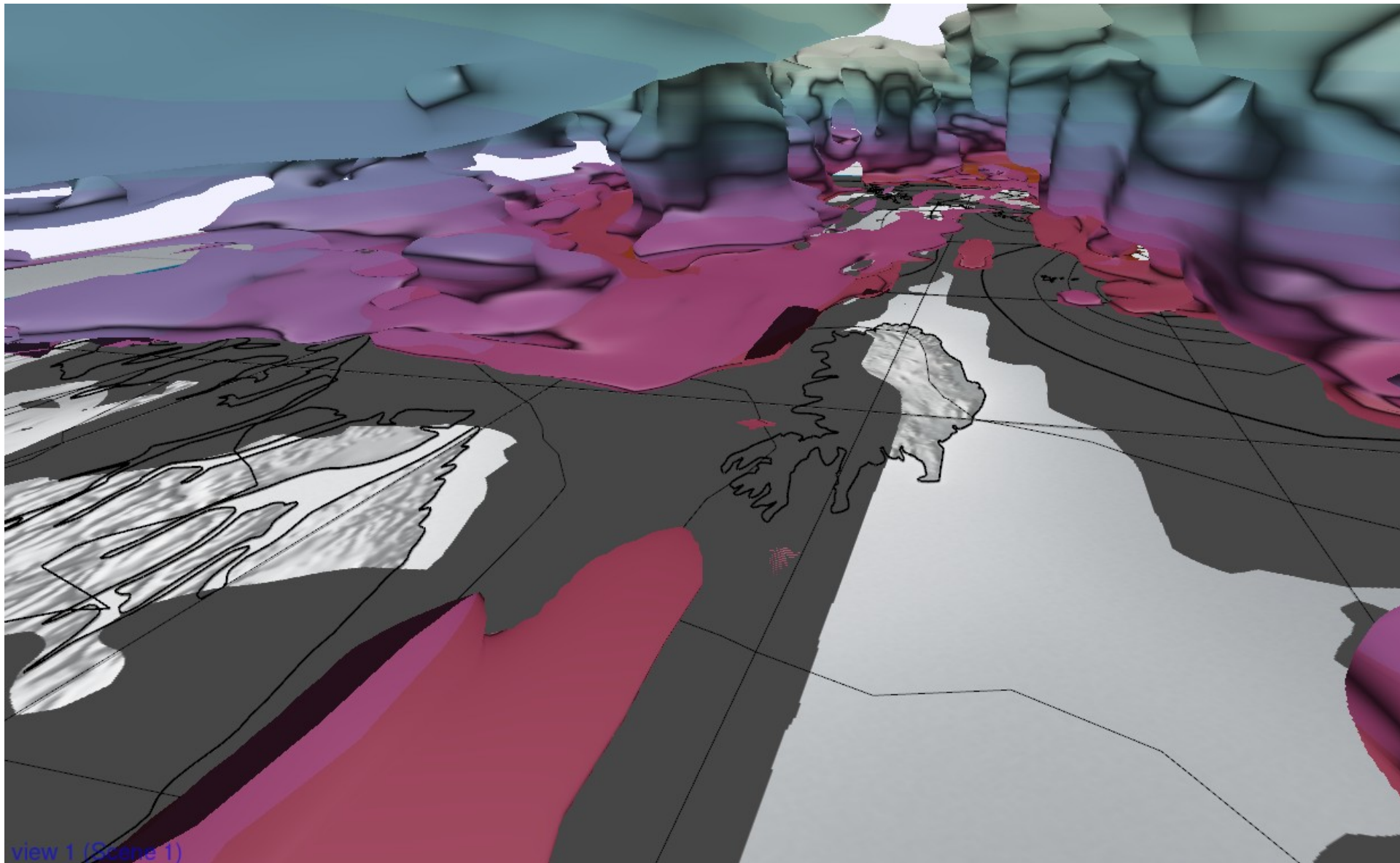
Aurora forecast: 4/9 active

Cloudiness – tomorrow 18 UTC



Aurora forecast: 4/9 active

Cloudiness – Thursday 00 UTC



Aurora forecast: 6/9 very high

Summary

- Radiosonde IOP today and tomorrow
- Falcon calibration flight on Wednesday
- HALO down-day on Wednesday
- Falcon down-day on Thursday
- OPS Center down-day on Wednesday. No general planning meeting/weather discussion tomorrow.
- Possible HALO flight on Saturday into WCB inflow region
- Possible HALO/Falcon flights on Sunday into WCB outflow region