

NAWDEX 2016 - Planning summary

Today, the Halo is flying to measure the intensification of the post-Karl cyclone. Tomorrow, Tuesday 27.09. a coordinated flight with Falcon and FAAM as well as a flight with Halo is planned.

The schedule for today is the detailed planning of the flights (coordinated flight with Falcon and FAAM + flight with Halo) that will take place tomorrow, Tuesday 27. September. At 16UTC there will be a weather discussion.

IOP5 on Tuesday 27 September

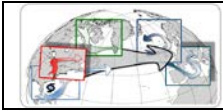
- The Falcon will sample an upper-level cutoff and the BAE146 will measure a cold front downstream of Ex-Karl. The Halo will sample a region of strong moisture flux partially associated with the former tropical storm Lisa.

Falcon & FAAM BAE146:

- Falcon is flying from Keflavik to Faroe Islands to meet the FAAM at 1040 UTC for a coordinated flight leg with a southbound leg near Scotland.
- Due to predicted high wind speeds, FAAM will fly directly to the meeting point on a leg shifted slightly eastward.
- FAAM will drop approximately 20 dropsondes on the south-bound coordinated flight leg at FL280.
- Falcon will cross the wind maximum of the jet stream 2 times at FL360.
- Communication will take place between the Falcon and FAAM pilots including the details of the meeting point.
- Take-off time of Falcon: 0920UTC

Halo flight:

- The Halo will sample the cutoff process of the PV-streamer in southward direction to reach the region of moisture inflow in a developing warm conveyor belt
- A zig-zag pattern will be flown along the moist inflow region to capture the low level moisture which will ascend in the following days. Flight level will be FL280 for deployment of the dropsondes (~20) in the region of strong moisture flux.
- Entrance of Irish airspace and will rise to FL410
- On the transit north, the cutoff region will be crossed a second time
- Detailed flight panning with pilots will take place at 12UTC today
- Scientific Manager: Jim Doyle
- Chief Forecaster: Julian Quinting
- Instrument Manager: Manuel Gutleben
- Coordinator Ground-Based Observations: Leo Shaffin
- HALO Mission Scientists: Hannin Binder (Halo), Oliver Reitebuch (Falcon), Andreas Schäfler and Christian Keil (Ground Support)



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**Date: 26 September 2016
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Radiosonde IOP on Tuesday and Wednesday (27 and 28. September)

- Additional Radiosondes will be launched from Keflavik at 00UTC and 06UTC
- Strong curvature in the upper-level jet and diffluence may be forcing the gravity waves
- Data will be sent on the GTS

Further points from discussion:

- The next flight opportunity will be on Fri/Sat when a rapidly developing cyclone is forecast to occur
- The clear sky conditions on Wednesday will allow for a calibration flight with Falcon above Icelandic glaciers on Wednesday (further discussion tomorrow)
- No flight planned for Halo on Wed. or Thu.