

	NAWDEX 2016 Planning summary	Date: 05 October 2016 Author:
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NAWDEX 2016 - Planning summary

The repair work and tests at HALO could be successfully completed and the aircraft is ready again for the next IOPs. SAFIRE could fly today despite the very strong surface winds in Keflavik. Further flights are planned for tomorrow (06 Oct) with HALO and on Friday (07 Oct) with HALO, FALCON and SAFIRE.

Synoptic evolution

- **Thu 06 Oct:** A Tropopause Polar Vortex (TPV) potentially formed by radiative processes in the Arctic moves along the waveguide and is located between Greenland and Newfoundland
- **Fri 07 Oct:** The mature TPV is located southeast of Greenland in a broad trough, which shows some WCB activity between Iceland and Greenland.

Flights on Wednesday 05 October

FALCON has a day off today. SAFIRE will fly in the afternoon. The potential HALO flight in the afternoon into the WCB ascent region is cancelled due to the high surface winds in Keflavik and because of the interesting flight options for Thu and Fri.

IOP9 on Thursday 06 October

Two options for HALO flights were presented and the discussion at the General Meeting led to the following decision:

- Sampling of TPV anomaly with several transects at two altitudes (climb to higher FL in Newfoundland airspace)
- Main aim of this mission is to measure the horizontal and vertical moisture structure in the region of the TPV and downstream

IOP10 on Friday 07 October

Coordinated flights are planned with all three aircraft in the afternoon

- SAFIRE aims to measure an atmospheric river structure near Iceland
- FALCON will measure winds between Iceland and the trough further west with the now mature TPV
- HALO will first do a coordinated leg with SAFIRE in the region of strong moisture transport west of Iceland, then an A-Train underpass towards Greenland in a region with weak WCB ascent, and then fly to the centre of the upper-level through where HALO will meet FALCON for a common flight leg back to Iceland (with dropsondes).

Further announcements:

- tomorrow: maintenance work at the FALCON; down day for SAFIRE

Who were the responsible persons:

- Scientific Manager: Heini Wernli
- Technical Manager: Katrin Witte
- Chief Forecaster: Andreas Schäfler / Jacopo Ripoldi
- Instrument Manager: Manuel Gutleben
- Coordinator Ground-Based Observations: John Methven
- Mission scientists for HALO on Thu: Martina Bramberger (mission scientist), Julian Quinting (Ground Support)