

Date: 04 October 2016

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NAWDEX 2016 - Planning summary

Today's mission with HALO has been cancelled due to ongoing technical problems. A HALO flight for Wednesday looks unlikely due to the ongoing technical issue. Falcon took off this morning with a 15 minute delay and will take off for a second mission after refuelling at 13:10 UTC (IOP 8). The next possible missions are planned for tomorrow (05 Oct) with HALO and Safire and Thursday (05 Oct) with Halo and Safire.

Today's schedule:

• There will be a weather discussion at 16:00UTC

Weather evolution:

- **Wed, 05 Oct:** The former diabatic Rossby Wave is located at the southern tip of Greenland. The system's WCB outflow is building up the ridge over Scandinavia and moisture is still being advected to the Icelandic region.
- **Thu, 06 Oct:** The leading edge of the trough is located over Iceland and will force orographic precipitation on the windward side of Iceland and Greenland

IOP 9 on Wednesday 05 October:

HALO: (Status unknown)

- sampling of a cyclone south of Iceland evolved from a diabatic Rossby wave
- first fly at a lower FL to be able to drop sondes in the vicinity of the cyclone (18)
- cross the cyclone centre 2 times to sample the structure of the centre and the moisture structure in the region of maximum moisture transport east of the centre
- traverse northward along the WCB until 61N to climb from FL280 to FL410 traverse again southward and capture the WCB outflow and the structure of the centre and tropopause region from above take off: 11:00 UTC
- Safire: there will be a coordinated flight leg at the end of the flight track to capture the WCB outflow region. It will be discussed if Safire will drop sondes during this coordinated leg

The high wind conditions forecasted for tomorrow (Wed) may be problematic for the door and aircraft

The HALO status is unknown and considered unlikely to be available due to the technical issue.

IOP 10 on Thursday 06 October:

HALO

 sample structure of mixed phase clouds and orographic precipitation at the windward eastern coast of Greenland



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- potential coordinated flight leg with Safire on the way back to Iceland while Satellite underpass
- sample orographic precipitation at the windward side of Iceland
- Who were the responsible persons:

o Scientific Manager: Jim Doyle

Chief Forecaster: Andreas SchäflerInstrument Manager: Manuel Gutleben

Coordinator Ground-Based Observations: Jacob Maddison

o Mission Scientists: **Tue 4. Oct**: Christian Keil (HALO), Maxi Böttcher (Ground Support)

HALO cancelled

Wed 5. Oct: Martina Bramberger (HALO), Julian Quinting (Ground

Support) HALO status unknown

Thu 6. Oct: Martina Bramberger (HALO), Julian Quinting (Ground

Support)

Further announcements:

- Today's mission with HALO had to be cancelled due to technical problems
- Tomorrow's mission with HALO is in question (appears unlikely)
- The status and availability of HALO beyond today is unknown at this time.
- Wednesday is a down day for Falcon