

	<b>NAWDEX 2016</b> <b>Planning summary</b>	<b>Date: Oct. 01, 2016</b> <b>Author: H. Wernli, M. Bramberger</b>
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## NAWDEX 2016 - Planning summary

**IOP6 was planned for today, but unfortunately HALO had to return one hour after takeoff because of a technical problem. For tomorrow, Sun 02 Oct, coordinated flights are planned with FALCON and SAFIRE between Iceland and Greenland.**

The schedule for today is a **weather discussion** at 16 UTC.

The main topics of the General Meeting were the situation of HALO, the flights on Sun 02 Oct, and the outlook to the first half of next week.

### **IOP6 on Sat 01 Oct**

- HALO took off early this morning as planned, heading towards an intense cyclone near 35W/50N, but due to technical problems had to return after about one hour.

The Mission Scientists for this flight were: Florian Baur (flying), Pila Bussmann, Andreas Schäfler, Julian Quinting (Ground support).

### **IOP7 on Sun 02 Oct**

- As we heard just after the General Meeting, HALO cannot fly on Sunday.
- The morning flights of FALCON and SAFIRE are scheduled as planned yesterday (coordinated flights near the Greenland east coast), with takeoff at about 8:30 UTC. SAFIRE will drop sondes (that originally were planned for HALO).
- In the afternoon, SAFIRE will do a second flight with an A-Train overpass.

### **Weather forecast for the next days**

- Sat 01 Oct: Intense cyclone near 35W/50N with a interesting structure in the WV satellite imagery (strong dry slot and also "dark eye" in the cyclone center due to very intense upper-level PV anomaly; weaker lee cyclone developing near Greenland)
- Sun 02 Oct: Strong ridge amplification due to the cyclone, which further intensifies and approaches Iceland; in the evening strong surface winds near Iceland; downstream trough formation over Europe
- Mon 03 Oct: Still very strong surface winds near Iceland (>20 m/s); heavy precipitation over Europe due to upper-level trough / cutoff system; over the central North Atlantic a strong jet forms with a weak frontal wave developing at 45N
- Tue 04 Oct: The frontal wave shows a rapid development (maybe with a DRW-like behavior) with a very intense WCB
- Wed 05 Oct: The frontal wave undergoes rapid deepening SW of Iceland, again leading to very intense surface winds near Iceland: a new subtropical cyclone forms in the western North Atlantic; over Europe the cutoff splits and leads to potentially intense precipitation (the EFI is high on Wed and Thu in several places in central and eastern Europe and in Iceland)
- Thu 06 Oct: TC Matthew approaches the US East Coast; its track is still uncertain but it likely recurves; east of Iceland a very strong jet evolves with an intense WCB

### **Flight options from Mon 03 Oct onwards**

- No flights are planned on Mon 03, also because of the predicted strong surface winds near Iceland
- Flight plans for potential flights with HALO and FALCON on Tue, Wed and Thu are developed today and tomorrow
- Flights on Wed might be hampered by very strong surface winds

**Radiosonde Task Team (RTT)**

- For alerting additional radiosoundings (EUMETNET), an RTT is suggested, such that the plans are developed in a more coordinated way between the different partners.
- The current members of the RTT are Andreas Schäfler, Carolyn Reynolds, Jacob Maddison, Gwendal Rivière and Michael Riemer – of course this team is open to input from all others
- The RTT is asked to briefly meet with the Chief Forecast in the early afternoon for coordination with flight plans; at the 16 UTC meeting, the RTT will present their plans
- The RTT should alert some stations well in advance (up to 3 days)

**Radiosonde IOP in Keflavik**

- Martina Bramberger plans a second radiosonde mission on Sun/Mon with launches at 12 and 18 UTC 02 Oct, and 06, 12 and 18 UTC 03 Oct
- Christian Euler and potentially 3 colleagues from ETH/Uni Bern will help with the launches