

# **NAWDEX 2016 - Planning summary**

- No research flights are planned until Saturday, 1 October.
- Tomorrow (Wednesday), 28. September, there will be a calibration flight with Falcon.
- Tomorrow (Wednesday), 28. September will be a down day for the NAWDEX forecast and flight planning teams and for the HALO crew. Thursday 29 September will be a down day for the Falcon staff.

## The schedule for today:

• weather discussion at 16:00 UTC

HALO mission yesterday went very well. The dry intrusion was sampled using the LIDAR system and dropsondes were deployed in this region. The last flight leg had to be slightly adjusted to capture the dry intrusion which was moving a little bit faster than forecasted.

A short quicklook session from the Monday and Tuesday missions will take place on Thursday 16UTC at the beginning of the weather discussion.

## Falcon flight today (Tuesday), 27. September:

- LIDAR issues with the instrument were worked out before take-off
- There was some confusion about the coordinated flight plan with the FAAM BAE146. The waypoint 1 location was changed shortly before take-off for unknown reasons. It is recommended that we establish a single contact person for the FAAM missions so that better communication can take place for NAWDEX coordinated missions.
- The aircraft meeting point at 10:30 UTC at WP1 near the Faroe Islands was successful

## HALO flight today (Tuesday), 27. September:

- aircraft take off time was 11:30 UTC
- all instruments are functioning fine

## Falcon Lidar calibration flight tomorrow (Wednesday), 28. September:

- there will be clear skies during the morning until the early afternoon
- calibration flights will be performed above an Icelandic glacier south-east of Reykjavik
- Take-off time: 9:00 UTC
- NOTAM-Box between 10:00 UTC and 12:00 UTC

## Radiosonde IOP for Gravity Waves (Tuesday-Wednesday)

• Enhanced radiosonde launches by NAWDEX scientists at Keflavik are taking place today and tomorrow to sample possible non-orographic gravity wave activity.



#### Radiosonde observations between Thursday (29 September) through Saturday (1<sup>st</sup> October)

• Additional radiosondes will be launched over central Europe to document where possible the evolution of the moist inflow region following the HALO flights and to obtain verification measurements in regions of high-impact weather further downstream where the moist atmospheric river arrives above central Europe.

#### Schedule for the next days:

- Tomorrow, Wednesday 28 September:
  - Scheduled down-Day for HALO crew and forecasting team
  - No general and weather forecast meetings
- Thursday, 29 September:
  - Scheduled down-Day for Falcon crew
  - Plan is for flight planning for possible missions on Saturday, 1<sup>st</sup> October with HALO and on Sunday, 2<sup>nd</sup> October with Falcon and HALO to sample a rapidly developing cyclone and warm conveyor belt, which will be south of Iceland by the weekend.

#### Further comments based on the discussion:

- Two consecutive flights with 9-h or longer flight duration are too long for the pilots and crew. It is recommended to conduct one shorter and one longer flight in such situation. This will be taken into account when planning for future missions.
- We need to identify the key point of contact for collaboration with British FAAM BAE146
- We need to improve the coordination when a new person is running the dropsonde system on the HALO to make sure: i) the person is fully trained, and ii) the person is aware ahead of time of their role.