



NAWDEX preparation workshop

DLR Oberpfaffenhofen

4 to 6 April 2016

- Aims:**
- 1) Refine flight strategies based on preparatory case studies
 - 2) Discussion of NAWDEX procedures and the interfaces between different groups (instruments, flight facility & flight planning)
 - 3) Information about local infrastructure

Monday, 4 April

12:30 – 17:30: Scientific Preparation Session – Part I: The aim is to recapitulate six preparatory cases provided in the NAWDEX CIP. After a presentation of preliminary flight tracks everybody is invited to present additional diagnostics and input to the cases.

- 12:30 – 12:45 Welcome
- 12:45 – 14:45 Case Studies – Part 1
- 14:45 – 15:15: Coffee break
- 15:15 – 17:00: Case Studies – Part 2
- 17:00 – 17:30: Discussion and decision on flight plans

Tuesday, 5 April

08:30 – 10:00: Scientific Preparation Session – Part II: Discussion about local organisation of the flight planning team, daily planning procedures, tasks, decision making

10:00 – 10:30: Coffee Break

10:30 – 17:30: Campaign Implementation Session:

- 10:30 – 11:00: specMACS (T. Kölling, T. Zinner)
- 11:00 – 12:00: Discussion about instrument requirements and constraints
- 12:00 – 13:00: Lunch
- 13:00 – 15:30: Information by the DLR flight facility

- NAWDEX schedule
- NAWDEX logistics
 - Accommodation
 - Airport/Hangar
 - Internet
 - Freight
 - Rental Cars
- Aircraft Operation over the North Atlantic
 - Permissions and typical proceedings
 - Flight performance of HALO and Falcon
 - Coordinated flights of both aircraft
 - Options for a transfer from NARVAL/Barbados via Azores
 - Presentation and discussion of preparatory cases
- Flight planning procedures

15:30 – 16:00: Coffee break

16:00 – 17:00: Ground observations (UK, F, CAN, Iceland, Norway, mobile radiosondes)

17:00 – 17:30: Coordination with the French aircraft

18:30 – Workshop Dinner

Wednesday, 6 April

08:30 – 11:00 Forecaster's Training Event: Presentation of forecasting products

- DLR ECMWF products (Andreas S., Andreas D.)
- ETH products (Maxi)
- Met3D (Marc)
- JGU Mainz forecasting products (Michael, Volkmar)
- UK forecasting products (John)
- French Forecasting Products (Gwendal)

11:00 – 12:00 Final discussion

Your input to the following items is needed:

1. Flight facility:

The **DLR FX** contributions are coordinated by Frank Probst and Stefan Hempe

2. Instrument PI's / operators:

- **ALL (WALES, HAMP (Radar+Radiometer), HALO-SR, Dropsondes, A2D, 2 μ Windlidar):** Please prepare 1-2 slides that show requirements and constraints for NAWDEX flight planning and aircraft operation. Please define special requirements for flight pattern or calibration flights. E.g.: How much distance is needed between aircraft and clouds for the lidars? How long does it take until the instrument is running? Where are the preferred altitudes? Please send me the slides until 3 April.
- **T. Kölling, T. Zinner (specMACS):** Please prepare a short presentation about specMACS (15 minutes) showing instrument capabilities, observed parameters, plans for post campaign data analysis, synergistic data of specMACS/radar/lidar

3. NAWDEX planning group:

Scientific Preparation Session:

- **Heini:** Summary of the preparatory cases
- **ALL:** if you want to contribute to the review of NAWDEX preparatory cases please prepare some slides for the different cases (30 minutes per case)

Additional ground-based observations:

- Get the latest status about the plans for extra ground based observations in different countries: **John** (UK, Iceland), **Gwendal** (France), **Andreas S.** (Canada, Norway), **Andreas D.** (extra mobile radiosondes)

Forecaster's Training Event:

- **Maxi, Marc, Michael, Volkmar, John, Gwendal, Andreas:** please prepare some slides (max. 15 min each) about the forecasting products for NAWDEX provided by your group. Try to answer: What is the purpose of the diagnostic? Where are the products available? When are the products available?

The latest CIP is available at:

http://www.pa.op.dlr.de/nawdex/documents/NAWDEX_Campaign_Implementation_Plan_v4.pdf