



# NAWDEX Workshop 2018

28 February - 2 March 2018

LMU Munich, Geschwister-Scholl-Platz 1, Room A119

A joint workshop of the DFG HALO-SPP 1294: "High Altitude and Long Range Research Aircraft (HALO)" and DFG SFB/TRR165: "Waves to Weather"

## Wednesday, 28 February 2018

**11:45-13:00 Lunch**

**13:00-13:15 Introduction & Aims**

**13:15-15:00 Session 1 – Instrument-driven studies**

- 13:15-13:30 Quitterie Cazenave – Ice microphysics for the HALO/FAAM/Falcon leg: A lidar-lidar perspective
- 13:30-13:45 Florian Ewald – Ice microphysics for the HALO/FAAM/Falcon leg: Closure Study and comparisons to in-situ
- 13:45-14:00 Julien Delanoë – Updates on French Falcon 20 data
- 14:00-14:15 Kevin Wolf – Comparison of SMART Measurements and ECRAD Simulations
- 14:15-14:30 Tobias Kölling – From cloud surface geometry towards droplet effective radius
- 14:30-14:45 Heike Konow – Cloud Regimes during NAWDEX
- 14:45-15:00 Discussion

**15:00-15:45 Coffee**

**15:45-18:15 Session 2 – Instrument-driven / whole campaign studies**

- 15:45-16:00 Oliver Lux – A2D wind lidar observations and comparison with HALO and SAFIRE data
- 16:00-16:15 Andreas Schäfler – Comparison of observed winds with ECMWF analyses
- 16:15-16:30 John Methven – Statistics of low static stability layers using all the radiosondes
- 16:30-16:45 Matthias Schindler – The impact of dropsonde and extra radiosonde observations during the field campaigns NAWDEX and SHOUT in autumn 2016
- 16:45-17:00 George Craig – Predictability barriers
- 17:00-17:15 Oscar Martinez-Alvarado – Forecast error for the Met Office model during the whole NAWDEX period
- 17:15-17:30 Jim Doyle – Predictability Characteristics during NAWDEX
- 17:30-17:45 Christian Grams – NAWDEX-related research on large-scale weather regimes
- 17:45-18:00 Marc Rautenhaus – Visual analysis options for NAWDEX cases using Met.3D
- 18:00-18:15 Discussion

**19:30 Dinner at HeimWerk**



**Thursday, 1 March 2018**

**8:45-10:00 Session 3 – IOP 9 Sanchez (Christian Keil)**

- 8:45-8:55 Christian Keil – Overview
- 8:55-9:10 Maxi Böttcher – Processes near the break-off zone of Sanchez
- 9:10-9:25 Hanin Binder – Cut-off Sanchez and its downstream impact over southern France - verification of probabilistic Météo-France forecasts
- 9:25-9:40 Philippe Arbogast – Links between Cut-Off Sanchez and heavy precipitation over the Gulf of Lion using mesoscale ensembles
- 9:40-10:00 Discussion

**10:00-10:45 Coffee**

**10:45-12:00 Session 4 – IOP 3 Vladiana (Chair: Maxi Böttcher)**

- 10:45-11:00 Maxi Böttcher – Overview
- 11:00-11:15 Annika Oertel – Cyclone Vladiana - satellite observations of embedded convection in WCBs
- 11:15-11:30 Aiko Voigt – ICON Simulations of IOP3 Vladiana
- 11:30-11:45 Elisa Spreizer – Diabatic processes in Vladiana based on Lagrangian diagnostics
- 11:45-12:00 Discussion

**12:00-13:15 Lunch**

**13:15-15:00 Session 5 – IOP 6 Stalactite Cyclone (Chair: Gwendal Riviere)**

- 13:15-13:20 Gwendal Rivière – Overview
- 13:20-13:35 Gwendal Rivière – The representation of the stalactite cyclone and Scandinavian blocking in Météo-France ensemble forecasts and comparison with RALI observations
- 13:35-13:50 Oscar Martinez-Alvarado – Development and life cycle of the Stalactite cyclone from a theta-PV perspective
- 13:50-14:05 Jacob Madisson – The influence of the Stalactite cyclone on the predictability of the Scandinavian block
- 14:05-14:20 Jessica Vial – tba
- 14:20-14:35 Nicolas Blanchard – Impact of diabatic processes on the Stalactite cyclone as view from a Meso-NH convection-permitting simulation and RASTA observations
- 14:35-15:00 Discussion

**15:00-15:45 Coffee**

**15:45-16:45 Session 6 – IOP 10 Thor (Chair: John Methven)**

- 15:45-16:00 John Methven – Overview
- 16:00-16:15 Daniel Steinfeld – The sensitivity of block Thor to changes in latent heating



16:15-16:30 Henrike Wilms – Strong turbulence during IOP10: Analysis of aircraft in-situ data and Large Eddy Simulations

16:30-16:45 Discussion

**16:45-17:00 Session 7 – IOP 8/10 TPV (Chair: Sue Gray)**

16:45-16:55 Sue Gray – Overview

16:55-17:10 Heini Wernli – Synoptic overview and Lagrangian analyses for IOP 8

17:10-17:30 Discussion

**18:30 Dinner at Solo Pizza**

**Friday, 2 March 2018**

**8:45-10:00 Session 8 – IOP 4 Karl (Chair: Michael Riemer)**

8:45-9:00 Michael Riemer – Overview

9:00-9:15 Christian Euler – Air mass transport during the extratropical transition of Karl

9:15-9:30 Marlene Baumgart – PV error growth for Karl

9:30-9:45 Ben Harvey – Diabatic processes in jet stream and ridge development in IOP4/IOP5

9:45-10:00 Discussion

**10:00-10:45 Coffee**

**10:45-11:10 Session 9 – IOP 5 Walpurga (Chair: Andreas Schäfler)**

10:45-11:00 Andreas Schäfler – Overview

11:00-11:10 Discussion

**11:10-11:35 Session 10 – IOP 1 Ian**

11:10-11:25 Claudio Sanchez – Processes and predictability of ET Ian

11:25-11:35 Discussion

**11:35-13:00 Session 11 – Final Discussion**

NAWDEX papers, etc.

**13:00 Packed lunch**



## Participants

**Florian Ewald** (DLR)  
**Silke Groß** (DLR)  
**Martin Hagen** (DLR)  
**Eleni Marinou** (DLR)  
**Oliver Lux** (DLR)  
**Oliver Reitebuch** (DLR)  
**Andreas Schäfler** (DLR)  
**Henrike Wilms** (DLR)  
**Martin Wirth** (DLR)  
**Benjamin Witschas** (DLR)  
**Maxi Böttcher** (ETH Zurich)  
**Annika Oertel** (ETH Zurich)  
**Elisa Spreizer** (ETH Zurich)  
**Daniel Steinfeld** (ETH Zurich)  
**Heini Wernli** (ETH Zurich)  
**Dragos Ene** (INOE)  
**Dominik Büeler** (KIT Karlsruhe)  
**Christian Grams** (KIT Karlsruhe)  
**Julian Quinting** (KIT Karlsruhe)  
**Aiko Voigt** (KIT Karlsruhe)  
**Nicolas Blanchard**  
(Laboratoire d'Aerologie Toulouse)  
**Jean-Pierre Chaboureau**  
(Laboratoire d'Aerologie Toulouse)  
**Julien Delanoë** (LATMOS/IPSL/UVSQ Paris)  
**Quitterie Cazenave** (LATMOS/DLR)  
**David Flack** (LMD Paris)  
**Gwendal Riviere** (LMD Paris)  
**Jessica Vial** (LMD Paris)  
**Hanin Binder** (LMD Paris)  
**Thomas Birner** (LMU Munich)  
**Lucie Chabert** (LMU Munich)  
**George Craig** (LMU Munich)  
**Federico Grazzini** (LMU Munich)  
**Christian Keil** (LMU Munich)  
**Tobias Kölling** (LMU Munich)  
**Audine Laurian** (LMU Munich)  
**Bernhard Mayer** (LMU Munich)  
**Matthias Schindler** (LMU Munich)  
**Tobias Selz** (LMU Munich)  
**Tobias Zinner** (LMU Munich)  
**Martin Weissmann** (LMU Munich)  
**Claudio Sanchez** (Met Office, Exeter)  
**Philippe Arbogast** (Météo France, CNRM/GMAP/RECYF, Toulouse)  
**Bruno Joly** (Météo France, NRM/GMAP/RECYF, Toulouse)  
**Marie Mazoyer** (Météo France, CNRM/GMAP/RECYF, Toulouse)  
**Jim Doyle** (NRL Monterey)  
**Marc Rautenhaus** (TU Munich)  
**Marek Jacob** (University of Cologne)  
**Heike Konow** (University of Hamburg)  
**Annette Miltenberger**  
(University of Leeds)  
**Kevin Wolf** (University of Leipzig)  
**Marlene Baumgart** (University of Mainz)  
**Christian Euler** (University of Mainz)  
**Paolo Ghinassi** (University of Mainz)  
**Michael Riemer** (University of Mainz)  
**Volkmar Wirth** (University of Mainz)  
**Suzanne Gray** (University of Reading)  
**Ben Harvey** (University of Reading)  
**Jacob Madisson** (University of Reading)  
**Oscar Martinez-Alvarado**  
(University of Reading)  
**John Methven** (University of Reading)