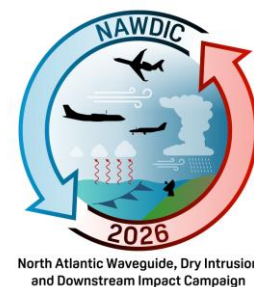


4th International NAWDIC Workshop 2026

12 – 14 October, Karlsruhe (Germany) and online
KIT Campus South, [Building 50.41, Seminar Room 045/046](#)

All times are given in CEST (UTC+2)



The International NAWDIC Workshop 2026 is financially supported by [HALO SPP 1294](#).

Lunch snacks, coffee breaks, and soft drinks will be provided free of charge. Costs for dinner need to be covered by the participants.

Monday, 12 October 2026

12:00 – 13:00 Arrival & Registration

13:00 – 13:10 Welcome & Introduction

13:10 – 14:00 NAWDIC Overview

Moderator: Annika Oertel

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|---------------|---|-----------------|
| 13:10 – 13:30 | NAWDIC Overview | t.b.d. |
| 13:30 – 13:45 | <i>The North Atlantic storm-track during the 2025-2026 winter and the NAWDIC field campaign</i> | Gwendal Rivière |
| 13:45 – 14:00 | <i>Three-dimensional visual analysis of NAWDIC cases with Met.3D</i> | Marc Rautenhaus |

14:00 – 14:45 Aircraft Instruments

Moderator: Annabell Weber

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|---------------|---|-------------------|
| 14:00 – 14:15 | <i>Airborne wind measurements during NAWDIC by the HEDWIG wind lidar: Examples from different flights and first quantitative comparison to vertical wind measurements by the cloud profiling radar on EarthCARE</i> | Benjamin Witschas |
| 14:15 – 14:30 | <i>Performance and Data Quality Analysis of HEDWIG Data with Validation Instruments</i> | Elina Köster |
| 14:30 – 14:45 | <i>Observing mesoscale variability with KITsondes during NAWDIC</i> | Bastian Kirsch |

14:45 – 15:30 Coffee Break

15:30 – 16:15 Ground-Based Observations

Moderator: Annabell Weber

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| 15:30 – 15:45 | <i>NAWDIC-KITcube (title t.b.d.)</i> | Andreas Wieser |
| 15:45 – 16:00 | <i>NAWDIC precipitation sampling network: Isotopic signatures and moisture sources of North Atlantic winter storms over Europe</i> | Iris Thurnherr |
| 16:00 – 16:15 | <i>Overview of extra radiosonde observations</i> | t.b.d. |

16:15 – 17:15 Upper-Tropospheric Processes

Moderator: Jannis Simon

16:15 – 16:30	<i>NURTURE (title t.b.d.)</i>	Steven Cavallo (online)
16:30 – 16:45	<i>Transport and mixing processes in the tropopause region associated with extratropical cyclones during NAWDIC campaign</i>	Stephan Kessler
16:45 – 17:00	<i>Evaluating the lower stratospheric moist bias using NAWDIC airborne lidar and radiosonde observations</i>	Andreas Schäfler
17:00 – 17:15	<i>NAWDIC-ICE: Linking cirrus cloud microphysical and radiative properties to small-scale turbulence and vertical winds</i>	Anja Stallmach

17:15 – 17:30 Discussion & Wrap-Up

19:00 Dinner at [Hoepfner Burghof](#) (Haid-und-Neu-Straße 18, Karlsruhe-Oststadt)

Tuesday, 13 October 2026

09:00 – 10:30 Windstorms

Moderator: Noy Klaider

09:00 – 09:15	<i>Investigating model errors during high-wind situations in extratropical cyclones using targeted ground-based observations from NAWDIC observations obtained during the NAWDIC campaign</i>	Viktoria Dürlich
09:15 – 09:30	<i>Goretti vs Kristin: contrasting dynamics of two NAWDIC sting-jet windstorms</i>	Ambrogio Volonté
09:30 – 09:45	<i>A low-cost identification method for sting jets in gridded data</i>	Lea Eisenstein
09:45 – 10:00	<i>Investigating meso-scale weather phenomena using PMAP at sub-kilometer resolution</i>	Jan Zibell
10:00 – 10:15	<i>Numerical modeling of storm Goretti using the Meso-NH model</i>	Camille Jarrousse
10:15 – 10:30	<i>Modeling mesoscale vortices observed in Storm Nils</i>	Florian Pantillon

10:30 – 11:15 Coffee Break

11:15 – 12:15 Atmospheric Rivers & Moist Processes

Moderator: Valentina Ortiz-Guzmán

11:15 – 11:30	<i>Improving Forecasts of Atmospheric Rivers and their impacts across the Northern Hemisphere through the Global Atmospheric River Reconnaissance Program Demonstration</i>	Peyton Capute
11:30 – 11:45	<i>The Impact of Additional Atmospheric River Dropsonde Observations on the IFS and ICON Forecasts During the NAWDIC Campaign</i>	Magdalena Kracheletz
11:45 – 12:00	<i>Validation of vertical moisture structure in cold sectors of extratropical cyclones based on airborne lidar observations obtained during the NAWDIC campaign</i>	Annabell Weber

12:00 – 12:15	<i>Quantifying the contribution of precipitation and cloud re-evaporation to the atmospheric water vapor measured by D-ILAB during NAWDIC</i>	Lena Fasnacht
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12:15 – 14:00 Group Photo & Lunch Break

14:00 – 15:30 Poster Session

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| 1) | <i>Mesoscale moisture cycling structures observed around boundary layer clouds on the Cessna F406 D-ILAB and at KITcube in the context of NAWDIC cyclones</i> | Franziska Aemisegger |
| 2) | <i>Relating Atmospheric Structural Regimes from AR Recon and Features Observed during NAWDIC</i> | Noah Barton |
| 3) | <i>Moisture source of a North Atlantic warm conveyor belt</i> | Rémi Bouffet-Klein |
| 4) | <i>How does a climate model represent Diabatic Rossby Waves?</i> | Hannah Burgaud |
| 5) | <i>Deep stratospheric air intrusions and their connection to wildfires</i> | Yarden Cristal |
| 6) | <i>Lagrangian analysis and process attribution of moisture uptakes in North Atlantic dry intrusions using LEMUR</i> | Patricia Gribi |
| 7) | <i>Warm conveyor belt moisture sources in the IFS Ensemble forecast</i> | Valentina Ortiz-Guzmán |
| 8) | <i>FISH water vapor and ice water content observations in WCB outflow during NAWDIC</i> | Christian Rolf |
| 9) | <i>Moisture Structure and Origin of Dry Intrusions: A Case Study from the NAWDIC-HALO Campaign</i> | Jannis Simon |

15:30 – 16:00 Coffee Break

16:00 – 17:00 Dry-Intrusion & Boundary-Layer Processes

Moderator: Hannah Burgaud

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| 16:00 – 16:15 | <i>Dry intrusion - cold front interaction observed during IOP "Killaloe"</i> | Kam Lam Yeung |
| 16:15 – 16:30 | <i>In-Situ Evidence of Boundary-Layer Rolls Beneath a Mid-Level Jet?</i> | Johan Hedman |
| 16:30 – 16:45 | <i>The PV signature of dry intrusions reaching the boundary layer in NAWDIC</i> | Leehi Magaritz Ronen |
| 16:45 – 17:00 | <i>Role of a dry intrusion in the formation of strong winds within an extratropical cyclone observed during the NAWDIC field campaign</i> | Sacha Czernichow |

17:00 – 17:15 Discussion & Wrap-Up

19:00 Dinner at [Badisch Brauhaus](#) (Stephanienstraße 38-40, Karlsruhe)

Wednesday, 14 October 2026

09:00 – 10:30 Breakout Group Discussions

Moderator: Shira Raveh-Rubin

Topic

- 1) Model Inter-comparison:
 - Coordination of simulation setups
 - DICHOTOMI case studies
 - ...
- 2) Data Management:
 - Publication of data sets (HALO DB, EDP, ...)
 - Conventions & best practices
 - Challenges & open questions
 -
- 3) Quicklooks & NWP Products:
 - Sharing of available products
 - Coordination of trajectory calculations
 - ...

Group Moderators

Florian Pantillon,
Viktoria Dürlich

Corinna Rebman,
Bastian Kirsch

Andreas Schäfler,
Valentina Ortiz-
Guzmán

10:30 – 11:15 Coffee Break

11:15 – 12:30 Breakout Group Wrap-Up

Moderator: Shira Raveh-Rubin

- 11:15 – 11:45 Reports from Breakout Groups
- 11:45 – 12:30 General Discussion

12:30 – 14:00 Lunch Break

14:00 – 14:30 Campaign Overview Paper

Moderator: Andreas Schäfler, Bastian Kirsch

14:30 – 15:00 Final Discussion & Wrap-Up

Moderator: Julian Quinting

15:00 End of Workshop