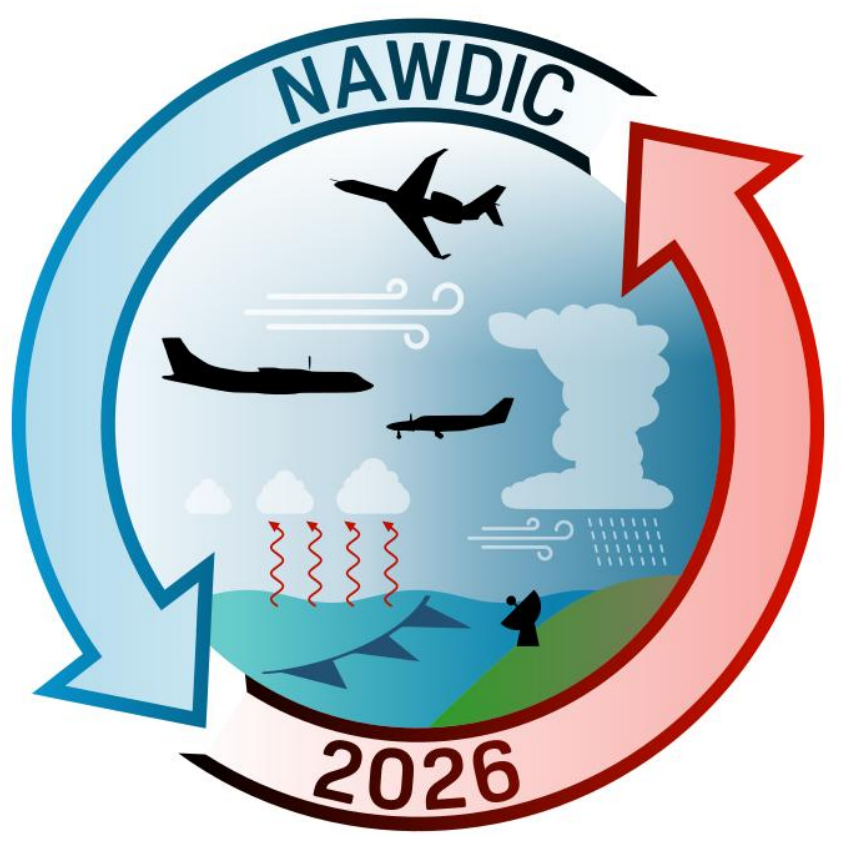


The European University Radiosonde Partnership (EUROP) and its contribution to the NAWDIC field campaign

Jacopo Riboldi¹, Alexandre M. Ramos², Bastian Kirsch², David Lavers³, Julian Quinting⁴

¹ETH, Zurich, Switzerland | ²IMKTRO, KIT, Germany (alexandre.ramos@kit.edu, bastian.kirsch@kit.edu) | ³ECMWF, Reading, United Kingdom | ⁴University of Cologne, Germany



EUROP WEBPAGE



Contact

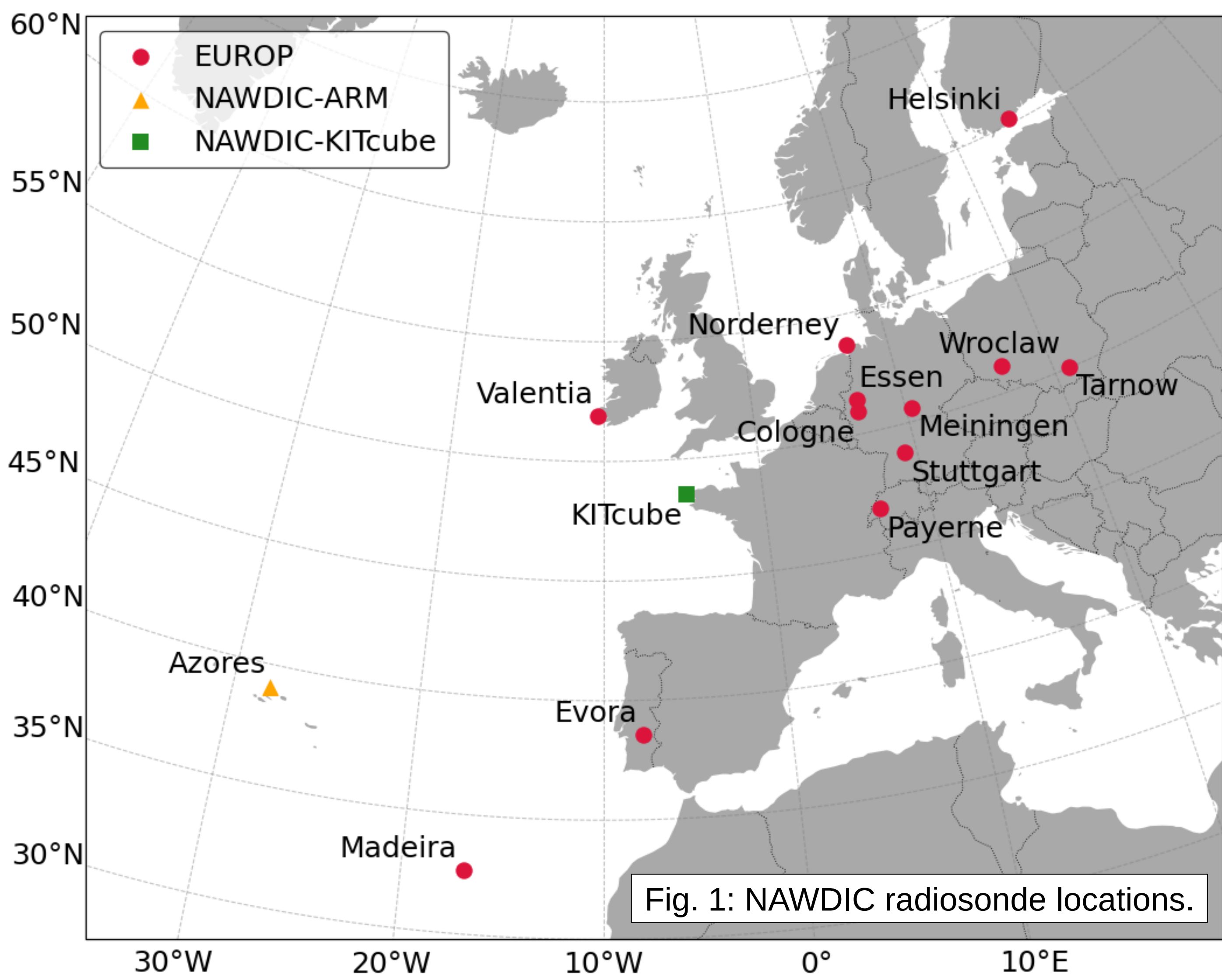
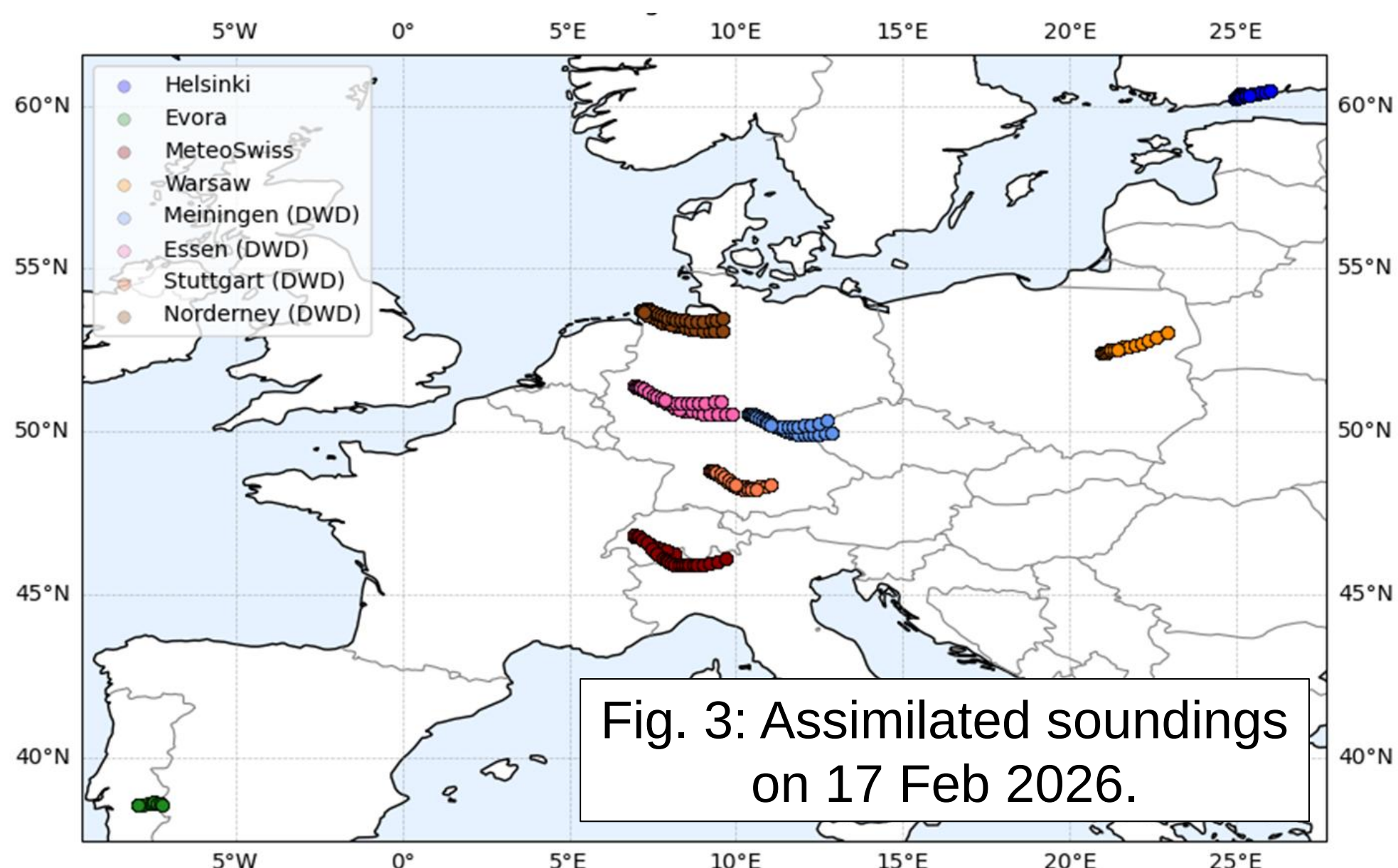
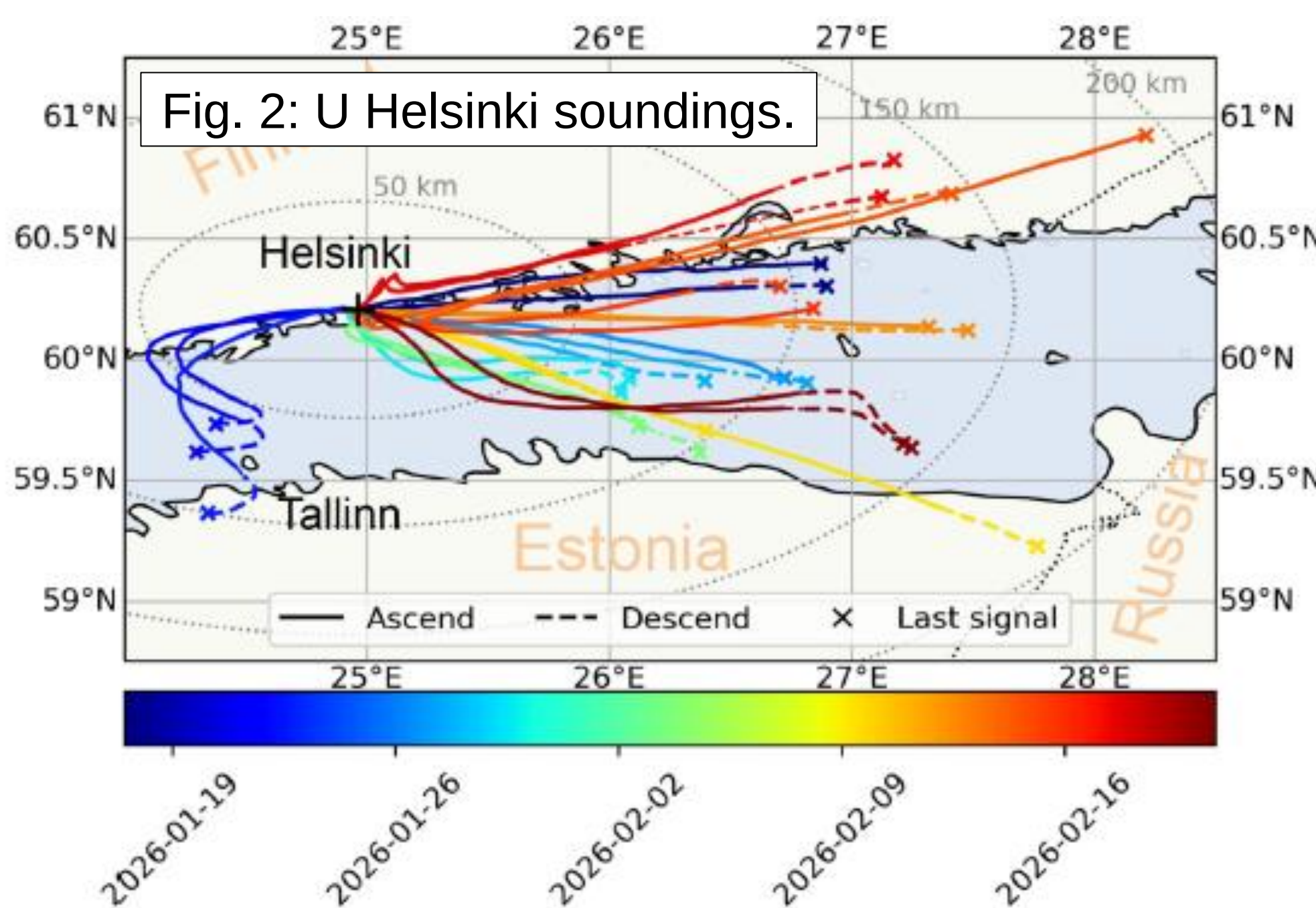
If you are interested in participating in future activities of EUROP, please **subscribe to the EUROP mailing list** by sending an empty e-mail with the subject "subscribe europ [your first name] [your last name]" to sympa@lists.kit.edu.

1. What is EUROP?

- EUROP is a collaborative network of European universities and weather services initiated to support the NAWDIC field campaign in Jan/Feb 2026 with **coordinated radiosonde launches** (Fig.1, Tab.1).
- Based on a grassroots approach, EUROP combines **scientific research, international collaboration and student engagement** in an operational field campaign.
- This initiative aims to obtain additional radiosonde observations from several European institutions, which are intended to be **assimilated into operational forecasting systems**, including ECMWF.
- EUROP is entirely **self-funded** and all costs for consumables (sondes, balloon, helium) and personnel are covered by the partners.
- EUROP was developed as the European twin project of the Collaborative Universities Severe Weather Project – Atmospheric River Reconnaissance (CUSP-ARR) in North America.

2. What has EUROP achieved?

- At least 145 radiosondes were launched in support of NAWDIC IOPs in Jan/Feb 2026 (Tab. 1, Fig. 2).
- Observations of the last IOP (17 Feb) were successfully assimilated into ECMWF operational forecasts (Fig. 3).
- In total, 30 student helpers were involved (23 at University of Helsinki, 7 at University of Evora).
- Collaborative efforts during NAWDIC have established the foundation for future EUROP activities.



Tab. 1: EUROP partners and number of radiosonde launches (* = in addition to operational launches).

EUROP Partner	Location(s)	Launches
University of Helsinki	Helsinki	23
University of Cologne	Cologne	2
University of Évora	Évora	14
MeteoSwiss	Payerne	21
Observatório Oceânico da Madeira/ ARDITI	Madeira	0
Polish Institute of Meteorology and Water Management (IMGW-PIB)	Wrocław, Tarnów	22*
Met Éireann	Valentia	28*
German Weather Service	Essen, Norderney, Meiningen, Stuttgart	35*
Total		145

3. Challenges

- Technical challenges related to sounding software and receiver configuration
- Data loss due to GPS jamming (Helsinki)
- Country-specific challenges related to permissions and licenses
- Delayed registration of WIGOS station identifiers which only allowed the assimilation of data from Helsinki and Evora for the last NAWDIC IOP

4. Next Steps

- Contribute to the upcoming NURTURE and AR Recon campaigns in winter 2026/2027, supporting the objectives of the Global Atmospheric River Reconnaissance Program (GARRP)
- Strengthen and expand the EUROP network by fostering new partnerships with universities across Europe
- Explore new funding opportunities to support the future growth of EUROP

Acknowledgements

We gratefully acknowledge all participating universities, students, researchers and ECMWF whose enthusiasm, commitment and voluntary efforts made EUROP possible. Their contributions were essential to the success of this grassroots initiative and the coordinated radiosonde launches conducted during NAWDIC 2026.

In memory of our colleague Victoria Sinclair (University of Helsinki), whose dedication, enthusiasm, and collaborative spirit were an inspiration to all involved in the NAWDIC–EUROP initiative.