Project: **1084**

Project title: **Applicate**

Principal investigator: **Claudia Hinrichs**

Report period: **2021-09-01 to 2022-10-31**

APPLICATE project

The EU project APPLICATE has ended with a successful final project review in April 2021. We contributed with our modelling results to the following deliverable reports:

- D2.5 Final Report on model developments and their evaluation in coupled mode,
- D2.7 Synthesis on priorities for future model developments for coupled models,
- D5.6 Report on integrated added-value from APPLICATE on weather and climate prediction and projection,
- D5.7 Synthesis report on priorities for future forecasting system development,
- and to the final project review.

This project also contributed to the following publications in 2021 and 2022:

- Hinrichs, C., Wang, Q., Koldunov, N., Mu, L., Semmler, T., Sidorenko, D., & Jung, T. (2021). Atmospheric wind biases: A challenge for simulating the Arctic Ocean in coupled models? *Journal of Geophysical Research: Oceans*, 126, e2021JC017565. https://doi.org/10.1029/2021JC017565
- Khosravi, N., Wang, Q., Koldunov, N., Hinrichs, C., Semmler, T., Danilov, S., & Jung, T. (2022). The Arctic Ocean in CMIP6 models: Biases and projected changes in temperature and salinity. Earth's Future, 10, e2021EF002282. https://doi.org/10.1029/2021EF002282
- Ortega, P., Blockley, E. W., Køltzow, M., Massonnet, F., Sandu, I., Svensson, G., ... & Jung, T. (2022). Improving Arctic weather and seasonal climate prediction: recommendations for future forecast systems evolution from the European project APPLICATE. Bulletin of the American Meteorological Society.