



# KEPLER



## KEPLER online workshop for Early Career Researchers

17-18th February 2021

**This online workshop will be held through the video platform Zoom**

<https://met-no.zoom.us/j/9982678094>



Co-funded by the Horizon 2020 programme of the European Union



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### Introduction

The Horizon 2020 funded project KEPLER (Key Environmental monitoring for Polar Latitudes and European Readiness) is planning to host an online workshop 17-18th February for students and Early Career Researchers. The workshop and training sessions are free of charge.

This online workshop is open for students and Early Career Researchers within Earth Observation and who use data from Polar Regions. We will have social networking sessions, student presentations, and training sessions. The sessions are not just “sit and listening”, several of them are interactive with breakout rooms to create fruitful discussions. They are not longer than an hour and are mixed up with QA from the audience and case studies to keep people engaged.

KEPLER (Key Environmental monitoring for Polar Latitudes and European Readiness) is a multi-partner initiative, built around the operational European Ice Services and Copernicus information providers, to prepare a road map for Copernicus to deliver an improved European capacity for monitoring and forecasting the Polar Regions. Read more about the project here: <https://kepler-polar.eu>

### Video Conferencing etiquette

- Make use of the joining period time to test your connection before the meeting begins.
- Please have your name including and your organization in the NAME TAG
- Please ensure your microphone is muted during presentations to avoid unnecessary background noise.
- Please avoid interrupting presenters- if you have a question before the allocated question slots, please write it in the message box and we will address it after the presentation.
- Follow the agenda, and endeavor to minimize running overtime. If you have an off topic question, we have provided an opportunity to raise this at the end of the video conference.
- Be aware that some of the sessions will be recorded, this will be announced prior to start



## Programme

### Wednesday 17th February

| Time (UTC +1) | Title   | Presenter   |
|---------------|---|---|
| 0900          | Morning coffee, networking event  | Ole Jakob Hegelund (MET Norway)   |
| 0930          | Welcome and introduction  | Ole Jakob Hegelund (MET Norway)   |
| 0945          | General overview of the KEPLER Project  | PI Nick Hughes (MET Norway)   |
| 1015          | Break   |   |
| 1030          | Introduction to Copernicus and its services   | PI Nick Hughes (MET Norway)   |
| 1045          | ESA - Cryosphere Virtual Laboratory   | Eirik Malnes (NORCE),<br>Mikhail Itkin (NPI)                                    |
| 1100          | Lunch break   |   |
| 1200          | Panel discussion - with KEPLER WPL's, QA  | <b>Chair:</b> Richard Hall (Equinor),<br><b>Co-chair:</b> Shridhar Jawak (SIOS) |
| 1310          | Break/networking  |   |
| 1325          | <b>ECR/student - Arctic Case studies related to Copernicus</b>                                | <b>Chair:</b> Shridhar Jawak (SIOS)   |
| 1325          | Using SAR satellite imagery to understand the effects of sea ice deformation on ice thickness | Luisa von Albedyll (AWI)  |
| 1335          | The use of a Convolutional Neural Network (CNN) for sea/ice separation                        | Joakim L. Pedersen (MET Norway)   |
| 1350          | Case study using differential InSAR technique from Zackenberg valley, Greenland               | Lotte Wendt (ULUND)   |
| 1405          | Ice-edge prediction forecast modelling  | Bimochan Niraula (AWI)  |
| 1420          | Break   |   |
| 1435          | <b>Training session:</b> Geospatial training session in Python (part 1)                       | Nick Hughes (MET Norway)  |
| 1545          | Closing remarks day 1   | Ole Jakob Hegelund (MET Norway)   |



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Thursday 18th February

| Time (UTC +1) | Title  | Presenter  |
|---------------|--|--|
| 0900          | Coffee, networking event   | Ole Jakob Hegelund (MET Norway)  |
| 0930          | Introduction   | Ole Jakob Hegelund (MET Norway)  |
| 0935          | <b>Training session:</b> Geospatial processing in Python (part 2)  | Alistair Everett (MET Norway)  |
| 1035          | Break  |  |
| 1100          | Breakout rooms: How is your data applicable to your research?  | <b>Moderators:</b> Shridhar Jawak (SIOS), Penny Wagner (MET Norway), Ole Jakob Hegelund (MET Norway) |
| 1130          | <b>ECR/student - Polar Case studies related to Copernicus</b>  | <b>Chair:</b> Shridhar Jawak (SIOS)  |
| 1130          | Investigations of ice-caps on islands in Antarctica  | Anatolii Chernov<br>(National Antarctic Scientific Center of Ukraine)                                |
| 1145          | Case study from an Himalyan glacier  | Shanta Kumar (Central University of Himachal Pradesh)  |
| 1200          | Model-Data Fusion for improving quantification of CH <sub>4</sub> fluxes from Arctic wetlands with LPJ-GUESS | Jalisha Tk (ULUND)   |
| 1215          | Segmentation of Arctic sea ice based on Bayesian inference   | Christoph Herbert (Polytechnic University of Catalonia)  |
| 1230          | <b>Free time slot</b>  | TBD  |
| 1245          | Closing remarks day 2  | Ole Jakob Hegelund (MET Norway)  |