



Sea Ice Thickness Uncertainty Workshop

Purpose

In the framework of the SIN'XS project (<https://sinxs.noveltis.fr/>), we propose this highly interactive and practical workshop to bring together experts who measure sea ice thickness to consider the uncertainties associated with measurements from satellites, aircraft and in situ sensors following the approach in the Quality Assurance Framework for Earth Observation (www.qa4eo.org).

We will work together through the first two steps of the five-step approach to uncertainties: we will consider the different measurands for the different types of measurement, establish a measurement model in mathematical notation and produce uncertainty tree diagrams showing the traceability of the information in the model. We will consider satellite observations (the 'thematic data product' (TDP)) and the supporting sub-orbital measurements (the 'fiducial reference measurements' (FRM)), as well as the necessary transformations needed to compare different measurements (representation uncertainties).



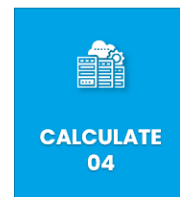
Define the measurand and measurement function



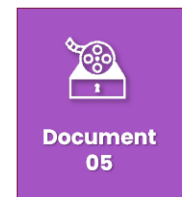
Establish the traceability with a diagram



Evaluate each source of uncertainty and fill out an effects table



Calculate the product and its uncertainty

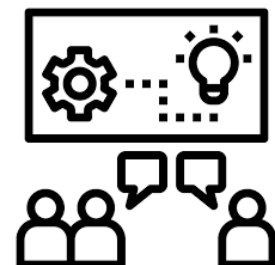


Document relevant information for present and future users

At the end of the workshop, we'll have some diagrams and equations, which will get drawn up attractively over the summer and made available to all participants.

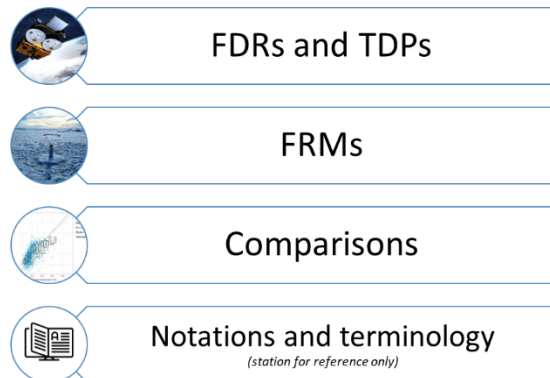
Workshop format

At the end of the International Symposium on Sea Ice conference week, we'll want something different, and this workshop aims to be different. It will consist of two 45-minute discussions around posters with pens in hand. We'll build on each other's ideas and edit it there and then. There will also be drinks and nibbles to sustain us through the activity.

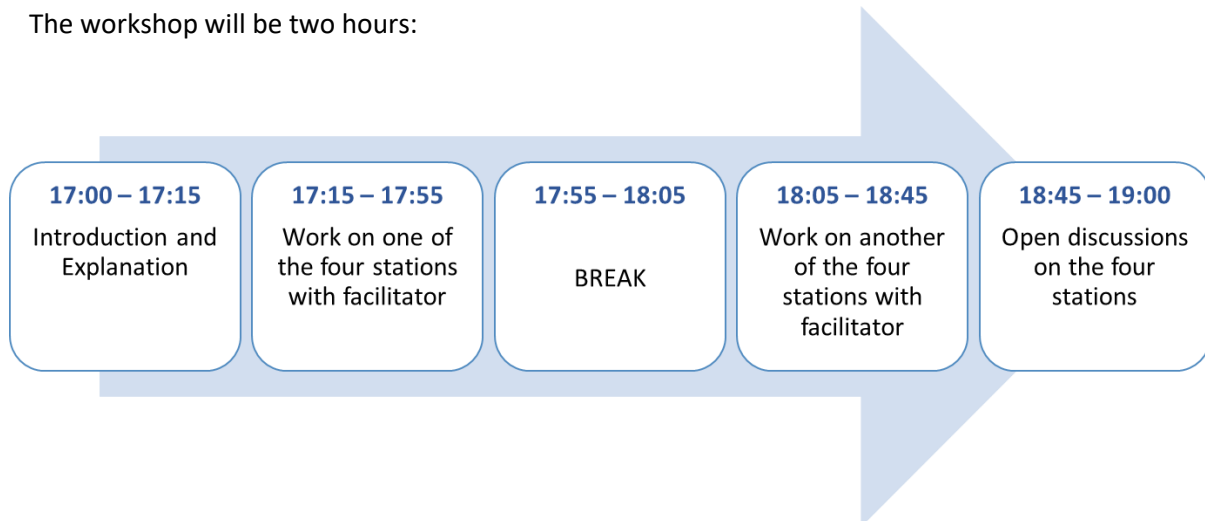


Workshop plan

The workshop will be a very interactive workshop, with posters to write on put up around the room. There will be four “stations”:



The workshop will be two hours:



Wrap up and conclusion

The SIN^{XS} consortium, helped with NPL, will tidy up and collate all the material for documenting, and all the results will be shared with the workshop participants, and presented during the next SIN^{XS} Workshop, to be held in Autumn.



Contact

Need more information? Please contact us through our “Contact form” available here: <https://sinxs.noveltis.fr/contact/>

This meeting is organized by the SIN^{XS} consortium, and animated by NPL, with a kind participation from DTU. The SIN^{XS} project is funded by ESA.

