Contribution ID: **23**   Type: **not specified**

Ocean data assimilation

Friday, 26 May 2023 10:20 (1 hour)

This lecture provides an overview of a typical ocean data assimilation system for initialization and re-analyses application. The lecture uses as an example the ECMWF ocean data assimilation system, which is based the NEMOVAR (3Dvar FGAT). This will be used to discuss design of the assimilation cycle, formulation of error covariances, observations assimilated and evaluation procedure, among others.

By the end of the lecture students should be able to:

• describe the different components involved in an ocean data assimilation system
• list the commonalities and differences between ocean and atmosphere data assimilation
• describe the basics of the physical ocean observing system
• explain the essential multivariate relationships between ocean variables
• identify the limitations of the existing systems.

Presenter: ZUO, Hao (ECMWF)