

REAL TIME OCEAN OBSERVATIONS

Daily group work report of the 19/10/2016

We had fruitful and interactive discussion with the mentors of our group to discuss the plan of our practical exercises.

We discussed among ourselves to formulate questions based on the previous day's lectures. We clarified our doubts during the one-hour question-answer session.

During the coffee break most of the students displayed their posters on the boards and rest of them who were not ready had to rush to the library to get the color prints. Due to this stressful situation, most of them were not around during the starting talk given by Dr. A. Carrassi.

Dr. A. Carrassi talked about the ensemble data assimilation schemes. We learned that for Gaussian linear cases we can use ensemble Kalman filter and for non-Gaussian distribution and non-linear models we should use particle filter.

Prof. Ola M. Johannessen gave next talk. He talked about the influence of Greenland ice sheet melting on the Indian Ocean sea level variation. The contribution by different potential contributors to sea level change: thermal expansion, mountain glaciers, Greenland ice melt, Antarctic ice melt and Land water storage was discussed. The recent paper by DeConto and Pollard (2016) was given as an example of underestimation of contribution by Antarctica to the forecasts of global mean sea level.

During lunch break we had the opportunity to view all the posters and interact with the authors.

Oral presentation by all the participants followed in the post-lunch session. Franck, one of our group members, opened it. The presentations were set up in such a way that they started from dynamics of tropical Atlantic to cyclogenesis in Southern Indian Ocean, to Bay of Bengal sector etc. The presentations delivered there were based on modeling results, remote sensing datasets as well as in-situ datasets.

Dr. Anton Korosov delivered the last lecture of the day. He gave an overview of the Nansen Cloud system set up at NERSC. He also introduced Nansat: a python based

toolbox for processing 2D satellite Earth observation data. Anton also gave us some important links to the oceanographic datasets websites: Copernicus (Dr. Alberto Carrassi mentioned that TOPAZ model is also included to this system) and Climate Change Initiative (CCI, in particular, Ocean Color CCI).