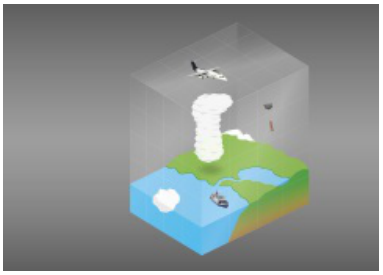

Contribution ID: **32** Type: **Poster presentation**

Ensemble Forecast Sensitivity to Observations (EFSO) technique for global observing system experiments (OSEs)

A global atmospheric data assimilation system called ALEDAS comprised of AFES (Atmospheric GCM) and the LETKF has been developed in our research team to generate an experimental global ensemble reanalysis called ALERA2. The ALERA2 and ALEDAS have been used to conduct several OSE studies to assess impacts of special observations obtained during some observational campaigns, especially on the Arctic and subtropical oceans. We have also performed some predictability studies by using the ensemble reanalysis and/or the OSE reanalyses as initial values for AFES. Recently, a diagnostic technique called Ensemble Forecast Sensitivity to Observations (EFSO) which can quantify how much each observation has improved or degraded the forecast without a data denial OSE experiment (in offline) has been implemented into ALEDAS. In our presentation, we will discuss that estimation by EFSO is compared with actual data denial experiments and can be useful for global OSE researches.

Primary authors: YAMAZAKI, Akira (JAMSTEC); Dr MIYOSHI, Takemasa (RIKEN); Prof. ENOMOTO, Takeshi (Kyoto University); Dr KOMORI, Nobumasa (JAMSTEC); INOUE, Jun (National Institute of Polar Research)

Presenter: YAMAZAKI, Akira (JAMSTEC)

Track Classification: Workshop: Observational campaigns for better weather forecasts