



## **Validation of the FOAM-NEMO system in the Indian Ocean**

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An investigation into the accuracy of near surface temperature and salinity in the Met Office 1/4 degree open ocean FOAM-NEMO system in the Indian Ocean. Validation has been performed in four regions of interest; Gulf of Oman, Northern Arabian Sea, Gulf of Aden and Somali Sea. These regions present particular challenges for a forecasting system: the near surface temperature and salinity is affected by the strong diurnal cycle and in the two Gulfs the salinity is affected by water from Persian Gulf and Red Sea respectively. Using the "class 4" metrics methodology defined by GODAE OceanView, summary statistics have been produced for both analyses and forecasts using profile observations. The likely causes of the largest errors are proposed and recommendations are made for improving forecasts in future versions of the system.