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Poster
Given its current accuracy and maturity, altimetry is considered a fully operational observing system dedicated to various applications such as climate studies or operational oceanography. Altimeter measurements are corrected for several geophysical effects in order to isolate the oceanic variability, and the dynamic atmospheric correction (DAC) is an important one; this correction allows for the removal of high frequency variability induced by the atmospheric forcing and aliased by the altimetric measurements.

The high frequency part of the DAC is based on a barotropic model simulation forced by atmospheric pressure and winds (MOG2D; Carrère and Lyard 2003); the low frequency part is an inverse barometer response. A 20-day cutoff-period was chosen because it corresponds to the Nyquist period of T/P-Jason reference altimeters' sampling and because the variability is mostly barotropic in this high frequency band.

The purpose of the study is to improve the performances of the DAC for users of altimetry, and particularly for operational altimetry. Indeed, some errors remain in the Near Real Time/Real Time DAC corrections due to the use of a degraded filtering window (window decentered in past) or even the use of an IB instead of the DAC for the RT.

Model forecasts are now generated in RT using ECMWF operational forecasts. These model forecasts are used to improve the quality of the NRT correction, by re-centering the filtering window of the DAC, and to produce a new forecasted DAC which can be used for DUACS-RT products.
The impact of these new DAC corrections on altimeter level-2 products has been estimated and results show a strong improvement both for the NRT and the RT. The impact on higher levels products has also been investigated and preliminary results will be presented.

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