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Oral

The satellite wave observations are very helpful in order to improve the sea state forecast and better understanding of some physical processes at the sea surface. The operational wave forecasting system of Météo-France is composed by the wave model MFWAM and the assimilation suite which uses routinely the significant wave heights provided by altimeters. Since the launch of SARAL/Altika, 6 months of wave data have been analysed and tested in order to prepare their use in the operational forecasting system. Several assimilation runs have been conducted and validated with independent wave data such the wave buoys and altimeters (not assimilated). The results show positive impact of Altika significant wave heights on the wave analysis and forecast. The bias and root mean square errors of wave height are significantly reduced after the assimilation. It has been clearly shown that the conjointly use of Altika and Jason-2 induces a normalised scatter index of significant wave height of less than 9 % in tropics ocean area. Assimilation tests have been also performed for regional wave models (MFWAM-Laréunion). Preliminary results will be discussed in this paper. Furthermore the impact of Saral/Altika wave data is examined during hurricane season.

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