



MERCATOR and its applications

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Mercator Océan is the French ocean forecast service provider (www.mercator-ocean.fr). It has been created by 6 French organisations -CNES, CNRS, Ifremer, IRD, Météo France and SHOM- in order to serve their needs in terms of marine environment prediction. It is also the provider of global ocean forecasting in the Mersea GMES project. It operates real-time numerical physical models coupled to data assimilation schemes, and provides every week analysis and a 2-week forecast of the ocean state. Its resolution is 3 to 4 nautical miles in the North Atlantic and Mediterranean, and 2° all around the globe. Horizontal resolution upgrade to 1/2° is planned for the globe by mid 2005. Mercator Océan serves a wide range of applications from institutional (including research) to commercial. After a brief presentation of the Mercator organization and its systems, we will present you several examples of results of application developed by application centres in different institutes collaborating with Mercator Océan. These applications will include oil drift prediction, seasonal forecasting, coastal modelling and underwater acoustics. We will show the positive impact of using Mercator Océan products as input to these applications.