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Some results from SAR monitoring of China Seas

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As part of the final results of Project Id. 5316 "Demonstrating SAR and optical sensor monitoring of Chinese Seas", some results from SAR monitoring of China Seas are given in this presentation: (1) more than 400 SAR images are collected, processed and analyzed to retrieve ocean surface wind fields of the coastal waters near Zhejiang Province; (2) the spatial-temporal distribution, and the source and propagation path of internal waves in South China Sea are analyzed based on more than 2,500 SAR and optical remote sensing images; (3) the relationship between typhoons and typhoon induced storms are analyzed based on SAR and MODIS data, multi-satellite altimeter significant wave height data (from GFO, TOPEX / Poseidon, Jason-1 and Envisat etc.), QuikSCAT scatterometer wind field data and ECMWF significant wave height and wind field re-analysis data.

Dragon project id

07 MONITORING CHINA SEAS (ID. 5316)

合成孔径雷达对中国海监测的一些结果

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作为项目"合成孔径雷达和光学传感器对中国海监测"的最终结果一部分,本文给出了利用合成孔径雷达对中国海监测的部分结果:(1)以浙江沿海为主要研究海域,收集并处理了研究海域SAR图像400余景,进行了基于SAR遥感影像的近海海面风场反演研究,得到了该海域海面风场的月平均、季平均和年平均结果;(2)以南海为主要研究海域,对南海内波的时空分布以及内波发生源和传播路径进行了研究,利用2500余景SAR和光学遥感影像更新了南海海洋内波时空分布图,给出了几个主要内波发生源和传播路径;(3)利用SAR和MODIS数据、多源卫星高度计(GFO、TOPEX/Poseidon、Jason-1和Envisat)有效波高融合数据、QuikSCAT散射计风场数据以及ECMWF有效波高和风场再分析数据给出了几个台风与所引发的台风浪的关系。