



## **Comparison of Modis and Eta profiles of atmospheric parameters in coastal zones with radiosonde data**

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The quality of atmospheric profiles gathered by the spaceborne Moderate Resolution Imaging Spectroradiometer (Modis) sensor onboard the Terra platform and predicted by the Eta atmospheric circulation model are assessed against corresponding radiosonde (RS) measurements. The quality analysis is carried out on a statistical basis taking as reference the radiosoundings collected at two coastal stations, namely Ajaccio (France) and Pratica di Mare (Italy), during the spring 2000. Both Eta predictions and Modis retrievals compare well with RS data and their relative agreement is good. Although, as expected, the profiles of the analyzed quantities, namely temperature and moisture for both Modis and Eta outputs and horizontal wind components predicted by Eta model, could not follow the largest fluctuations measured by RS, their averages are reproduced with a satisfactory degree of reliability. These results encourage the perspective to exploit remote measurements from space of atmospheric parameters as input to operative circulation models, such as Eta, for reliable forecasts and detailed monitoring on global scale of the atmospheric structure and dynamics.