

# The PRIMI 2009 summer cruise: multiplatform observation of oil spills in the Central Mediterranean Sea.

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We report the results of an oceanographic cruise organized in the framework of the ASI-PRIMI project on oil-spill dispersion monitoring and forecasting. During the cruise, carried out in the summer of 2009, oil spills were detected in the Central Mediterranean using microwave and optical satellite observations. The cruise plan was organized so as to have the ship within the selected image frame at acquisition time, so as to maximize the possibility to reach and sample spills identified in satellite data. Several oil spills were sampled in situ with onboard radar, lidar and optical measurements, and surface water samples were collected to assess oil type. Lagrangian experiments were also organized to verify the performance of the PRIMI forecasting system in tracking the spill and to assess the role of wind and currents in spill drift. Preliminary results indicate the robustness of the spill detecting and forecasting system, and that future work combining satellite and in situ data is necessary to assess the spill severity from the oil spill signature in satellite imagery.