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# Remote Sensing of Tropospheric Aerosols over Ocean using A-Train Measurements.

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Within the A-Train constellation of satellites, POLDER/PARASOL and MODIS/AQUA are the two major sensors for retrieving aerosol properties from space. When MODIS is measuring the solar radiation reflected by the Earth-atmosphere system in up to seven useful channels, from 0.47 to 2.2$\mu$m, PARASOL is taking advantage of its capability to view the same pixel with different geometrical conditions and by measuring the polarized radiances in 3 channels, 0.49, 0.67 and 0.86$\mu$m. Both radiometers fly over the same area quasi simultaneously and combining all the measurements seems to be particularly attractive.
We first invert the PARASOL measurements over ocean and by using the retrieved aerosol properties, we can simulate the MODIS radiances in the channel 2.1$\mu$m that is not available on PARASOL. Comparisons between the simulated and the measured radiances are then informative on the additional information that MODIS can provide or not. The calibration issue and the corrections for gazeous absorption are considered. Results are presented over several regions where conclusions are different.