

Updates on the IASI Atmospheric Sounding Mission: Observation of Local Pollution Events and Future Expectations

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The IASI mission onboard the MetOp-A and B satellites is now providing three or more tropospheric observations per day at any location. From the atmospheric spectra recorded by the instrument in the thermal infrared spectral range, concentrations of a series of trace gases can be monitored, enhanced levels of pollution can be detected, and particle type can be determined to some extent.

Recent studies have highlighted the possibility to detect key pollutants when special events occur (e.g. fires, volcanic eruptions) as well as above highly polluted areas for which observation can be made down to the surface level under specific conditions. I will show examples of recent results obtained for concentrations of CO, O₃, NH₃, SO₂ and ammonium sulfate, in several geographic locations.

Finally I will provide some information on what to expect on the European side for future tropospheric satellite soundings (2020 and after).

Monday, November 11th

3:15 PM – Refreshments

3:30 PM – Seminar

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