

Glenn J. Aveni
Contamination Control Engineer
Jet Propulsion Laboratory

**CONTAMINATION CONTROL FOR THE EARTH OBSERVING SYSTEM (EOS) MULTI-
ANGLE IMAGING SPECTRO-RADIOMETER (MISR)**

ABSTRACT

The contamination control activity performed for the Multi-Angle Imaging Spectro-Radiometer (MISR) consisted of an overall system analysis for susceptibility to molecular and particulate contamination from both internal and external sources at the most sensitive sensor wavelength. This analysis considered the system long and short term radiometric stability requirements, the expected sources of contaminants, the transport of those contaminants to the sensors, and the expected effects of those contaminants on sensitive surfaces. The derived requirements, including specific budgets, and a plan to meet them during assembly, test and storage were documented in the EOS MISR Contamination Control Plan. The final phase of control came from monitoring the hardware (recording data and implementing cleaning procedures) during assembly and thermal vacuum testing prior to shipment to the EOS integrator.

The activity described in this abstract was carried out by the Jet Propulsion Laboratory, California Institute of Technology, under a contract with NASA.

*molecular contamination
non-volatile residue
signal-throughput
degradation
transport factors
flux
fluence
TQCM*