RESTORATION OF APOLLO DATA FOR FUTURE LUNAR MISSION PLANNING

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The Planetary Data System (PDS) Lunar Data Node at the National Space Science Data Center (NSSDC) is engaged in an ongoing effort to restore Apollo data and supporting documentation and make them available in usable formats to researchers and mission planners. Much of these data represent the only long-term data collected from the surface of the Moon, and as such are critical to understanding the effects of the lunar environment on all aspects of extended missions. The original Apollo data are primarily stored on computer tapes in obsolete formats or on microfilm, photographic and other hard copy media. These data are being transferred to standard digital formats and archived through the PDS.

We have currently archived data from the Apollo Cold Cathode Ion Gage (Apollo 14,15) and Solar Wind Spectrometer (12,15) through PDS. The X-Ray Spectrometer (15,16) and Soil Mechanics Penetrometer (15,16) have gone through reviews. We are also working on data from the Dust Detector Experiment (14,15), Active Seismic Experiment (16,17), Charged Particle Lunar Environment Experiment (14), Traverse Gravimeter (17), Infrared Radiometer (17), Lunar Atmospheric Composition Experiment (17), and collaborating on LASER-funded efforts to restore Surface and Orbital Magnetometer (12,15,16), Heat Flow (15,17), and Suprathermal Ion Detector Experiment (14,15) data. Future plans include the Lunar Sounder (17), Gamma-Ray Spectrometer (15,16), Lunar Ejecta And Meteorite Experiment (17), Alpha Particle Spectrometer (15,16), Far Ultraviolet Spectrometer (17), Subsatellite Lunar Particles (15,16), and Mass Spectrometer (15,16). Additional data will be included as resources permit.

Presenter Information

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