



Lunar Dust Experiment (LDEX)

The Lunar Dust Experiment (LDEX) is an impact ionization dust detector. It measures the mass of individual dust grains with $m \ge 1.7 \times 10^{-16}$ kg (radius, $r_g \ge 0.3 \mu m$) for impact speeds ≈ 1.7 km/s and also measures the collective current due to grains below the threshold for individual detection, enabling the search for dust grains with $r_g \approx 0.1 \mu m$ over the terminators (see <u>Document</u>). LDEX is either **ON** or **OFF** - No other operational modes.



Useful Mission Documents (also found in Document)

<u>Software Interface Specification (SIS)</u> — Description of the instrument and data structures <u>Calibration Document</u> — Description of the calibration methods <u>As-Flown Index</u> — List of intended observations in order of acquisition

Archive Bundle Contents

- <u>Document</u> Directory containing the document collection, which includes refereces to refereed journals using this instrument, and information about calibration and explanation of data structures.
- **Raw Data** Directory containing the raw data files.

<u>Header</u> information <u>Sample</u> product

<u>Reduced Data</u> – Directory containing processed data files.

<u>Header</u> information <u>Sample</u> product

Other Useful Products for Interpreting the Data

<u>References</u> — Publications by team members (*also found in <u>Document</u>*)
<u>Other Potential Relevant Data</u> — Data that may be relevant from missions other than LADEE
<u>SPICE</u> — Archived LADEE SPICE ancillary data providing observation geometry (positions, orientations, instrument pointing, time conversions, etc.) are available from the <u>PDS NAIF Node</u>.