

**APOLLO SURFACE MAGNETIC FIELD DATA: STATISTICAL VARIABILITY AND DEPENDENCE ON SOLAR WIND CONDITIONS.** C. Armstrong<sup>1</sup> and P. J. Chi<sup>1</sup>, <sup>1</sup>UCLA Department of Earth Planetary and Space Sciences, Los Angeles, California.

The Apollo 12, 15 and 16 missions included the Lunar Surface Magnetometer (LSM) experiment, and the LSM data collected during 1969 – 1975 will continue to be the major source of lunar surface magnetic field observations before long-duration geophysical stations can be established on the Moon again. After a recent effort restoring all Apollo magnetic field records from the original formats, we are now reorganizing the LSM database to enhance its user-friendliness. The restored LSM data also allow re-analyses of the Moon-solar wind interaction at the three Apollo sites with different degrees of crustal magnetization. In this poster, we present a statistical analysis on the LSM data in the solar wind, in the lunar wake, and in the Earth's magnetotail. We also examine the relationship between the solar wind condition and the surface magnetic response when the station is located on the sunward side in the solar wind. Our initial results show that the solar wind dynamic pressure has the clearest correlation with the lunar surface magnetic field.