Geographical Information Systems and Lunar Exploration: Analogues of Terrestrial Applications

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On Earth, the applications of GIS are many and proliferating; common applications include resource mapping, predictive modelling, topographic analysis, and route prediction.

Such applications seem of high utility for lunar exploration, yet a complete GIS for the moon has yet to be constructed. This is particularly unfortunate considering the high number of quality data sets we have for the moon.

Building on earlier work by Coombs, Meisburger, and Nettles**, this talk will outline how the terrestrial applications of GIS described above could be usefully applied to the moon. Such applications include predicting the location of useful materials, determining most useful landing sites, and creating digital elevation models, allowing virtual educational explorations.

** C.R. Coombs; J.L. Meisburger, J.W. Nettles (1998) Another Look at Taurus Littrow: An Interactive GIS Database. New Views of the Moon, LPI, Houston, TX, September, 1998.