

Large Lunar Telescope construction, an example

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This paper will sketch a scenario and describe the infrastructure required for the construction and operation of a 25 m infrared telescope in Shackleton Crater at the South Pole of the Moon. It will describe the humans and robots required to build it and what possibilities it will offer. Required technology development and possible precursors will be discussed. This talk will show where we could go with focused efforts to develop the lunar surface for multiple purposes like mining, science and exploration. The focus of this talk will be the astronomical observatory to be erected, it will however show an infrastructure that can be used for much more. The study was done at the Colorado School of Mines and conducted for NASA's Revolutionary AeroSpace Concepts program.

This talk will be relevant to several areas of lunar development and exploration as covered during the conference. It will address issues such as power, communication, transportation, that need to be in place before such an undertaking can take place. It will also address the expected lunar environment, the positive and negative aspects of it and how to deal with those aspects.