Development of ILOM (In-situ Lunar Orientation Measurement) Telescope and some technical problems

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ILOM project provides a new type of observation of lunar forcee and free librations with 1-milli-arc-second star positioning accuracy. Feasibility study and development of technology are made in order to put a PZT telescope with a focal length of 2m and an aperture of 20cm on the lunar surface. It has a beam splitter which enables observations of both the polar and the equatorial stars for the purposes of positioning and other astronomical observations.

Developments of a thermal simulation model of a tube and a mercury pool, optical analysis of an objective and thermal analysies of the tube and the mercury pool have been made so far.