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Lunar Polar Region, Lunar Water

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The lunar polar regions are often referred to be attractive as locations for a lunar exploration target, and where humans start colonization. The reasons of the assertion are for instance, first, water "must" be present in some permanently shadowed areas near the poles, and second, there are locations near the poles where the sun illuminates in long duration time, supplying energy continuously, and third the stable temperature conditions could be attained which is very convenient for astronauts and instrument to operate. However, these reasons should be reconsidered with recent observation results attained by SELENE, LRO, and other lunar explorers. On the other hand, the scientific interests on the regions have been highly grown. In this presentation, we outlook and discuss the new views of the lunar polar region.

Keywords: moon, exploration, polar region, water, ice, SELENE