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**Research Article**

**Regionalized Lunar South Pole Surface I  
System Analysis**

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**Abstract**

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Apollo missions utilized Earth-based assets for navigation, since th  
view from the Earth. The new exploration campaign to the lunar  
but the extent to which a navigation system comprised solely of l  
navigation solutions in this region is unknown. This article prese  
surface navigation analysis of the performance of multiple luna  
network assets, and combinations thereof. Results show that kine  
by the Earth-based deep space network stations. Also, the surface  
as a two-way navigation system, or as a one-way navigation syst  
the position solution over a short duration of time with navig.  
constellation.

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