

First observation of the moon shadow caused by the heavy cosmic ray nuclei

Thanks to the huge effective area and strong composition discrimination of KM2A, the moon shadow caused by the heavy cosmic ray nuclei have been observed with -14σ by using 2022, 2023 KM2A data in the energy range about 50TeV. The westward shift of the shadow is about 0.4 degree, while the shift in the north-south direction is about 0.06 degree. In this poster, the details including the mean energy, the mean z and its application will be introduced.

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