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Performances of JEM-EUSO

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Designed as the first mission exploring the Ultra High Energy Universe from space, JEM-EUSO will monitor the Earth's atmosphere to record UV (300-400 nm) tracks generated by Extensive Air Showers produced by UHECR primaries. In this contribution, the expected performances of JEM-EUSO will be reviewed. In particular, by detailed simulation studies performed with realistic trigger and reconstruction efficiencies, the observational duty cycle and rôle of clouds are calculated. The estimate of aperture and exposure, as well as of the expected angular, energy, and Xmax resolutions will be presented. In addition, the obtained performance will be discussed in the context of the scientific goals of the JEM-EUSO mission.

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