

Observing Conditions for Submillimeter Astronomy

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(Submitted on 28 Jul 2011)

Consistently superb observing conditions are crucial for achieving the scientific objectives of a telescope. Submillimeter astronomy is possible only at a few exceptionally dry sites, notably Mauna Kea, the Antarctic plateau, and the Chajnantor region in the high Andes east of San Pedro de Atacama in northern Chile. Long term measurements of 225 GHz and 350 μ m atmospheric transparency demonstrate all three locations enjoy significant periods of excellent observing conditions. Conditions on the Chajnantor plateau and at the South Pole are better more often than on Mauna Kea. Conditions are better during winter and at night. Near the summit of Cerro Chajnantor, conditions are better than on the Chajnantor plateau.

Subjects: **Instrumentation and Methods for Astrophysics (astro-ph.IM)**

Cite as: [arXiv:1107.5633](#) [astro-ph.IM]

(or [arXiv:1107.5633v1](#) [astro-ph.IM] for this version)

Submission history

From: Simon Radford [[view email](#)]

[v1] Thu, 28 Jul 2011 06:43:34 GMT (217kb,D)

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