

MMT Observatory Closure Policy

June 2005

Weather can change suddenly at the summit of Mount Hopkins and must be checked before opening and monitored during observations. The telescope operator (T.O.) has the responsibility for determining whether to open, and for closing should conditions warrant. The operator may choose to close the facility at any time because of weather or other situations such as power failure, equipment failure, injury, fire or other emergency. This policy serves as a guideline; however, the operator has final authority in the decision to open or close.

Safe opening conditions:

- No imminent threat of precipitation either from the sky or from accumulation on the enclosure
- No imminent threat of lightning
- Wind speeds less than 40 mph sustained
 - Note: for winds over 30 mph we recommend observing an object downwind to shelter the telescope from wind buffet
- Relative humidity less than 95% for 10 minutes or MORE* depending on conditions subject to judgment of the T.O.
- Aerosol content deemed safe by the flashlight test
- No danger of thermal shock to primary:
 - Average primary mirror temperature within 10 C of ambient temperature
 - Temperature gradients within primary mirror less than 5 C

Closure conditions:

- Imminent threat of precipitation or lightning
- Sustained wind speeds 40 mph or over, or gusts of 50 mph
- Relative humidity 95% or LESS* depending on conditions subject to judgment of the T.O.
- Dust levels 3000 $\mu\text{g}/\text{m}^3$ or greater
- Any other conditions that warrant closure in the operator's judgment.

**Consideration will be given for the soft coatings on the f/5 corrector, temporal behavior of weather patterns, likelihood of slant precipitation, likelihood of building condensation blowing onto the primary mirror, etc. Hole chasing is discouraged and attempted solely at the discretion of the T.O.*

The MMT Observatory has several instruments that measure wind speed, humidity, and airborne dust. These are located in the chamber and around the site. Sensors occasionally fail, and even functional instruments will generally not agree, so the most conservative value should be taken (e.g. highest wind speed, or highest RH). If you dispute a closure decision, please make a note in your observer's report, or contact the observatory director.

PLEASE DO NOT ARGUE WITH THE OPERATOR.