

WHT Dome Venting Procedure

The aim is to keep the dome temperature, and thereby the primary mirror temperature, as low as possible avoiding mirror seeing during the night. Day time dome venting should be attempted if weather permits and Local Air Temperature is significant below Internal Temperature.

Under no circumstances must direct sun light fall upon the telescope or into the dome enclosure.

Procedure:

Weather must be good and stable

- the sky must be reasonably clear (no risk of rain) AND
- 'Local %RH (Outside Relative Humidity) must be below 70% AND
- 'Wind speed' must be below 50 km/h AND
- no Sahara dust must be present

AND Local Air Temperature must be at least 2 degrees below Internal Temperature

~10:00, after LN2 dewar filling (dome/crane) and if there are no operational constraints operations will:

- Rotate the dome to 300° and leave it in LOCAL MODE
- Open the dome top shutter 4m (approximately the width of the shutter)
- Run all vent fans
- Switch the MET system humidity alarm to >75%
- Check at least every hour the meteorological conditions haven't changed

12:00

- Stop the vent fans and close the shutter

~15:00, after the DE checks, the DE will:

- Rotate the dome to 60° and leave it in LOCAL MODE
- Open the dome top shutter 4m (approximately the width of the shutter)
- Run all vent fans
- Switch the MET system humidity alarm to >75%
- Check at least every hour the meteorological conditions haven't changed
- Inform the observer on arrival

Before the DE goes down for dinner

- Stop the vent fans and close the shutter

After dinner, on arrival of TO, depending on observers requirements, the TO will:

- Rotate the dome to 90° and leave it in LOCAL MODE
- Open the dome top shutter 4m (approximately the width of the shutter)
- Run all vent fans
- Switch the MET system humidity alarm to >75%
- Check at least every hour the meteorological conditions haven't changed
- Before start of observing switch dome back to REMOTE