

Procedure to Remove 2.5m Wind Baffle

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Cautionary Notes

- **This operation requires 5 people.**
 - **If the telescope runs away at any time, engage an e-stop button immediately.**
 - **The following weather conditions must be met:**
 - No threat of precipitation
 - Sustained wind speed < 35 MPH for 15 minutes
 - Wind gusts for instrument changes < 25 MPH
 - Dew point depression: $\geq 4^{\circ}\text{F}$ or 2°C
 - Dust count < 10,000 units
 - Check for condensation regularly when the dew point depression is less than 8°F or 6°C . Close the enclosure if condensation is found on rails, building skin, or the top of the doghouse.
 - Do not push the dust limit and the dew point limit at the same time. If the dust counts are near the stated limit, it is best to have a dew point depression of $> 18^{\circ}\text{F}$ or 20°C .
 - Safety wear (recommended): rubber-soled shoes, hard hat.
 - Only people trained by observatory staff may execute this procedure.
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Equipment Required

Protective tarp or tent (large enough to encompass the WB); Location: rent or construct

Wind Baffle Pendant Control; Location: 2.5m enclosure

Hydraulic Jacks; Location: 3.5m enclosure ground level

Wheels (for wind baffle); Location: 2.5m storage trailer

Jackscrews; Location: 3,5m enclosure ground level

Scrap wood to protect the wind baffle frame from the jackscrews

Initial State of Telescope

- All instruments removed (excluding the spectrographs) and safely stowed.
 - Spectrograph corrector removed and safely stowed.
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Procedure

Note: stow all items mentioned in procedure in the plug plate lab.

1. Take the telescope to zenith under computer control (so the telescope is centered in the wind baffle).
2. Pin the telescope at the zenith.
3. Engage an E-stop.
4. Run the counterweights all the way down (a reading of approx. number 25).
5. Using the labeled turnbuckles stowed on north wall racks, shackle the wind baffle to the telescope both at the east and west ends; leave a little slack.
6. Remove the lower light baffles and stow. **Note: you may omit this step if you are going to leave the M2 truss on the telescope.**
7. Attach the wind baffle pendant control to the altitude axis.
8. Unpin the telescope.
9. Release all E-stops.

10. Release the altitude brake.
11. Lower the wind baffle with the pendant.
12. When you get low enough, engage an E-stop and attach the wheels to the wind baffle.
13. Release the E-stop and finish lowering the wind baffle; go until the wind baffle altitude shock absorber is fully compressed (the body of the shock absorber just touches the plate on the fork) or the wheels are firmly on the ground, whichever comes first.
14. Engage an E-stop.
15. Protecting the frame with scrap wood, support the wind baffle frame (the white, non-removable part) fore and aft with jackscrews,
16. Tie the wind baffle frame to the eyebolt at the southeast corner of the fork. If the eyebolt is missing, remount it. Use a crane strap and shackle and leave enough slack for approximately 1 foot of motion.
17. Remove all wires attached to the wind baffle.
18. Remove the flat field petals and stow.
19. Unbolt the wind baffle from the support frame, using the hydraulic jacks to aid in alignment.
20. Remove the wind baffle and protect from the weather (tent or tarp).

Document History

2001-08-10 first public release. R. Owen.

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