Procedure to Close 2.5-meter Enclosure

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The proper method to close the telescope enclosure

CAUTIONARY NOTES:

Only those persons having a purpose and are trained by observatory staff may operate the enclosure. Once trained, your name is posted near the telescope status board in the enclosure and on the web-based training list.

THE ENCLOSURE TAKES NEARLY 20 MINUTES TO CLOSE

THIS OPERATION MUST BE DONE WITH A MINIMUM OF TWO PEOPLE

THIS PROCEDURE IS TO BE ACCOMPLISHED IF THE FOLLOWING WEATHER CONDITIONS EXIST:

ENGINEERING:
THREAT of precipitation
Sustained wind speed > 35 MPH for 15 minutes
Wind gusts for instrument changes > 25 MPH
Dew point depression: < = 4ºF or 2ºC
Dust count > 10,000 units

OBSERVING:

THREAT of precipitation
Sustained wind speed > 30 MPH for 15 minutes
Wind gusts for instrument changes > 25 MPH
Dew point depression < = 4ºF or 2ºC
Dust Count > 3,000 units

Checks for condensation must be made regularly when less than 8ºF or 6ºC. Close the enclosure if condensation found on rails, building skin, or top of the doghouse.

Do not push the dust limit and the dew point limit at the same time. If the counts are over the stated limit, it is best to have a depression of > 18ºF or 20ºC.

SAFETY WEAR: (recommended) rubber-soled shoes, safety goggles

MANDATORY WALK AROUND:

CLOSE THE ENCLOSURE HATCH DOORS

Be sure NOTHING obstructs building motion, inside or outside. Also check the building rails inside and out.

Inside the enclosure, make a check of the floor to the south of the south safety tape and north of the north safety tape, and clear everyhing out of those areas, including the PHONE.

SAFETY WEAR: rubber-soled shoes, hard hat

EQUIPMENT INVOLVED IN THIS PROCEDURE

Building pins; Location: northwest and southwest corners of the enclosure. Appearance: both pins hang from their individual cable lanyards screwed to the vertical beam. Located close enough to the holes for insertion when building closed.

Stow position indicator lights; Location: mounted on the fork tine directly behind the MCP computer. Appearance: hese are two green indicator lights mounted to a small plastic box which in turn is mounted to the tine.

PROCEDURE: accomplish in numerical order

1. Move the telescope to stow position in azimuth. Be sure the doghouse won't run into anything as it swings around and the telescope altitude is high enough not to hit anything as it moves in azimuth. The azimuth "Stow Position Indicator" lights will turn on when the telescope is properly positioned.

2. With the telescope in the azimuth stow position, bring the altitude down to 6º. Make sure there is nothing in front of the telescope when it comes down. The 15º stop will automatically retract when the telescope reaches 17.6º.

3. Apply both the altitude and azimuth axis brakes.

4. Engage an E-stop button. The recommended E-stop button is the north windscreen E-stop button due to its convenience to the MCP computer and also its ability to be seen through an open enclosure. This button can be seen at all times when the building is moving closed.

5. Make sure the west door is fully open. Ensure that the altitude and azimuth brakes are engaged using the MCP computer controls.

6. Move the building west toward the telescope. You may start out fast. You MUST change to slow speed just before you track over the telescope. This provides a much shorter coasting distance (6-8 inches) should you need to stop quickly. You may go back to fast after the west door clears the back of the telescope. Be aware of the coasting distance as you come up to the building stops.

7. With the enclosure against the west stops, insert both building pins.

8. Close the enclosure overhead doors. If the wind is from the west, close the west door first. If the wind is from the east, close the east door first.

9. Verify that at least one E-stop button is pushed in near the telescope. The recommended E-stop button is the north windscreen MCP computer E-stop button due to its convenience to the MCP computer and also its ability to be seen through an open enclosure. This button can be seen at all times from east and west enclosure controllers.

10. Update the status of the telescope on the whiteboard in the Ops building near the door to the 3.5m telescope arcade.

END OF PROCEDURE