# **Observer Contract - The User's Responsibility**

Observers are expected to arrive on the mountain no later than the night before their observing run. In exceptional cases, arrival on the day the observing run begins may be necessary but then arrival must be in sufficient time (i.e., several hours before sunset) to allow the instrument to be set up and checked out and any problems reported.

The Observer Contract must be signed by the primary observer and a McDonald staff member before the telescope may be used by the primary observer.

### In case of an accident with the telescope:

If there is a collision between the telescope or instrument and <u>any</u> part of the dome or anything within the dome, the telescope <u>must</u> be left where it is at the point of contact, with drive turned off, and a member of the staff <u>must</u> be called immediately. Note that both the 107in and the 82in have collision avoidance charts on the back of the laminated page with web addresses. Ask for help understanding these if they are not clear.

## **Instrument problems:**

Each instrument has staff assigned who are responsible for that instrument. Please refer to the list of people to call that is posted on the bulletin board. If you are uncertain if something is functioning correctly, call. The observer should check out their instrument and telescope *each afternoon* so that any problems can be detected and reported prior to staff going home for the evening.

### **Instrument Safety:**

The primary observer or their designee must have been trained previously to use the telescope and the instrument. This includes any limits of where in the sky an instrument can be safely used. If an observer is uncertain about operation, call the appropriate staff member.

#### Weather Rules:

Weather conditions should be monitored with the "wx" command or with any of the dedicated weather monitors. All domes <u>must</u> close if weather rules dictate that <u>any</u> dome be closed. The weather rules for closing are:

<u>Precipitation</u>: All domes must be closed immediately whenever there is any form of precipitation or if precipitation is imminent.

<u>Humidity</u>: Above 90% humidity, the observer should monitor conditions. Telescope domes should be closed if condensation is detected on any interior surfaces or if condensation is dripping in from the slit opening. If the average humidity is 95% or higher, all domes are to be closed.

### Wind:

| 5 min<br>average speed | Single Gusts   | Action   |
|------------------------|--|--|
| >50 mph                | >55mph<br>or 3 gusts of 50mph in a 5<br>minute interval <sup>*</sup> | Close immediately (no exceptions!)   |
| 45-50 mph              | >50mph   | Work downwind; be prepared to close  |
| 40-45 mph              | >45mph   | Turn downwind at observer's earliest convenience.                          |
| 35-40mph               | >40mph   | Close shutter/windscreens to minimum opening possible for the observations |

\* The wx program will keep track of this and report it – observers should check wx whenever the winds are high.

<u>Dust</u>: Domes and mirror covers should be closed if high dust conditions are reported. If the dust monitor reports counts >100,000, domes <u>must</u> be closed. Between 50,000 and 100,000, observers should monitor the conditions with the "dust flashlight". Observers should ask for training on what constitutes a dust detection with the flashlight. Note that the dust sensor will not read when the humidity is above 85%. This does <u>not</u> mean the observer can ignore the dust. Use the flashlight.

<u>Upon closing</u>: Any observer who closes because of weather conditions should notify the other domes about the conditions. If one dome is required to close, all domes should close.

<u>Reopening</u>: After closing a dome due to weather, the observer must wait a minimum of 30 minutes with conditions at a safe level before reopening.

I acknowledge the above rules governing weather closures and safety and agree that I will operate the telescope in a safe manner. I understand that failure to follow the above rules will result in my being forbidden from using the telescope for a period of time set by the Director.

Observer signature and date

I acknowledge that I have reviewed these safety and weather rules with the above observer and have pointed out the list of staff members responsible for each instrument and the call lists for emergencies.

McDonald Staff member who presented this form and date