Exoplanet Atmospheric Characterization Project: WIRO Supplement

Updated: 5/5/17

**Increased Restriction on Humidity:**

humidity must be <70% to make successful observations

**Filter Wheel Notes:**

1) The filter wheel must be in place ~5 seconds before exposure time start for an image to write with the correct 'FILTER' keyword. This does not mean you should ever wait to start a new exposure. You may move the filter wheel to the next images filter after the first 3 seconds of the ~20 second readout after the exposure is completely over for the current image. To maximize assurance of the filter both during and after the night, purposefully make similarly responding filters (ex. g and r) slightly different in exposure times (ex. 40 s and 42 s) and make sure your log file is always 100% accurate.

2) The wheel can 'miss' setting into a filter -- this must be immediately fixed before the exposure is started.

Notice the current encoder position is displayed and the filter wheels have encoders next to their names in the dropdown menu. From your current position figure out which filter is 'after' your desired filter and slew the filter wheel towards that filter. During this slew reslew to the desired filter after the current position passes the desired filter.

If this happens repeatedly over a night include it in your nightly report 'equipment problems' with comments on in situ weather conditions (frost likely?) and telescope orientation (H.A.)