Here's the list of all the keywords which were *originally* querried in the middle with MOIRCS. We modified it during the nuMOIRCS upgrade in Dec 2015.

move these queries to start of exposure

```
"DOM-HUM","101","%8.1f","Humidity measured in the dome (%)"
"DOM-PRS","102","%8.2f","Atmospheric pressure in the dome (hPa)"
"DOM-TMP","103","%8.2f","Temperature measured in the dome (K)"
"DOM-WND","104","%8.2f","Wind velocity in the dome (m/s)"
"OUT-HUM","105","%8.1f","Humidity measured outside of the dome (%)"
"OUT-PRS","106","%8.2f","Atmospheric pressure outside of the dome (hPa)"
"OUT-TMP","107","%8.2f","Temperature measured outside of the dome (K)"
"OUT-WND","108","%8.2f","Wind velocity outside of the dome (m/s)"
"SEEING","109","%8.2f","StarSize FWHM at telescope focus (arcsec)"
"WEATHER","110","%-8s","Weather condition"
"AUTOGUID","307","%-8s","Auto guide on/off"
"DET-TMP","327","%6.2f","Detector temperature (K)"
"OBSERVER","504","%-8s","Name(s) of observers"
"M2-TYPE","704","%-8s","Type of the Secondary Mirror (Opt/IR)"
"AG-PRB1","705","%20.3f","AG probe radial position (mm)"
```

These can be calculated based on the SAM time at the start of exposure (in the SAM populated header). The values are FOR the middle of the exposure, but they are determined AFTER the exposure

```
"HST","807","%-8s","HST at typical time (HH:MM:SS.SS)"
"LST","808","%-8s","LST at typical time (HH:MM:SS.SS)"
"MJD","809","%20.8f","Modified Julian date at typical time"
"UT","810","%-8s","UTC at typical time (HH:MM:SS.SS)"
"SECZ","816","%20.3f","SEC(Zenith Distance) at start of exp."
"ZD","817","%20.5f","Zenith Distance at start of exp. (deg)"
```

"AG-PRB2","706","%20.3f","AG probe rotation position (degree)"

move to start of exposure and edit the comment

```
"INSROT","703","%8.3f","Instrument Rotator angle at start of exp. (deg)" "ALTITUDE","707","%10.5f","Altitude of telescope at start of exp. (deg)" "AZIMUTH","708","%10.5f","Azimuth of telescope at start of exp. (deg)" "AIRMASS","801","%20.3f","Air mass at start of exposure"
```

2018-05-22

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