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------------------------------------------------------------------------
          Mauna Loa Solar Observatory Observer's Log
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        Wed May 11 16:14:15 GMT 2016
Year: 16  Doy: 132
Observer: waters
WEATHER COMMENT: waters: Wed May 11 16:14:20 GMT 2016
Temp 37F with windspeed at about 6mph from the West-Southwest. It seems a little bright at the moment but otherwise, clear
 sky.
___end___
KCOR COMMENT BY berkey: Wed May 11 17:02:51 GMT 2016
Its summer in Kcor land. Small 991.6" occulter installed this morning (a few weeks late).
___end___
Wed May 11 17:38:56 GMT 2016 COMP Start Patrol on cookbook: synoptic-00002.cbk
GENERAL COMMENT BY waters: Wed May 11 18:04:55 GMT 2016
Refocused the aftend and the occulter station using the normal Comp observering procedures.We then installed that Baader A
stroSolar filter t=2.6e-4 on the front end of Comp telescope. The occulter station was removed from the beam train where w
e used the center occulter sub vi aand o1 relative move engineer GUI to move the O1 across its focus range. Peaking the va
lue of image sharpness, we found no descenable change in sharpness or image quality below half mm steps. We ultimately fou
nd the best focus at 32mm. After the focus was done, we removed the Baader filter and the occulter station was reinstalled
.
___end___
CoMP COMMENT BY waters: Wed May 11 18:34:32 GMT 2016
Reviewing the headers for data collected so far this morning, the ND seems to be updating just fine but when it first init
ializes it to zero which is not a filter wheel position.
___end___
Wed May 11 18:34:49 GMT 2016 KCOR Start Synoptic Patrol
Wed May 11 18:35:28 GMT 2016 SGS Alignment complete
Wed May 11 18:58:48 GMT 2016 KCOR End Patrol
Wed May 11 18:59:36 GMT 2016 KCOR Start Synoptic Patrol
Wed May 11 19:17:09 GMT 2016 KCOR End Patrol
Wed May 11 19:17:18 GMT 2016 KCOR Start Synoptic Patrol
Wed May 11 19:18:05 GMT 2016 KCOR End Patrol
Wed May 11 19:19:03 GMT 2016 KCOR Start Synoptic Patrol
Wed May 11 19:21:35 GMT 2016 KCOR End Patrol
Wed May 11 19:23:09 GMT 2016 KCOR Start Synoptic Patrol
GENERAL COMMENT BY waters: Wed May 11 19:24:53 GMT 2016
The sky is alternating between bright and dark at the moment.
___end___
Wed May 11 19:26:08 GMT 2016 KCOR End Patrol
Wed May 11 19:28:39 GMT 2016 CoMP Paused for clouds
Wed May 11 19:38:34 GMT 2016 CoMP Restarted from pause
Wed May 11 19:38:44 GMT 2016 KCOR Start Synoptic Patrol
Wed May 11 19:39:31 GMT 2016 KCOR End Patrol
Wed May 11 19:40:14 GMT 2016 CoMP Paused for clouds
GENERAL COMMENT BY waters: Wed May 11 19:40:29 GMT 2016
Sucker hole; Comp and Kcor idled.
___end___
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Wed May 11 20:14:49 GMT 2016 CoMP Restarted from pause
Wed May 11 20:14:49 GMT 2016 COMP End Patrol
Wed May 11 20:16:44 GMT 2016 COMP Start Patrol on cookbook: synoptic-00002.cbk
Wed May 11 20:17:41 GMT 2016 COMP End Patrol
CoMP COMMENT BY berkey: Wed May 11 20:20:26 GMT 2016
Changed observing code to initalize the ND filter position. Looks like this change is getting captured in the headers.
NOTES from Ben's email: We ran a check to make sure the headers knew the proper nd filter which was actually wrong in the
header (value=0 when it should be 8) after starting up the comp VI since we didn't initialize the value properly. The code
 to update the header after it moves (for 1083) was correct and updated things. The effect of this is the ndfilter was ba
d for the first couple flats and 1079/1074 observations at the start of the day.   But this has now been fixed so now th
e ndfilter keyword should be correct all the time.
___end___
Wed May 11 20:35:01 GMT 2016 COMP Start Patrol on cookbook: synoptic-00002.cbk
Wed May 11 20:36:15 GMT 2016 COMP End Patrol
GENERAL COMMENT BY berkey: Wed May 11 20:38:12 GMT 2016
We have stopped observing and closed the dome for the moment.
___end___
Wed May 11 20:39:10 GMT 2016 COMP Start Patrol on cookbook: synoptic-00002.cbk
Wed May 11 20:40:14 GMT 2016 COMP End Patrol
Wed May 11 20:46:47 GMT 2016 COMP Start Patrol on cookbook: synoptic-00002.cbk
Wed May 11 20:47:48 GMT 2016 COMP End Patrol
Wed May 11 20:54:41 GMT 2016 COMP Start Patrol on cookbook: synoptic-00002.cbk
Wed May 11 20:55:29 GMT 2016 COMP End Patrol
Wed May 11 21:00:32 GMT 2016 COMP Start Patrol on cookbook: synoptic-00002.cbk
Wed May 11 21:03:02 GMT 2016 COMP End Patrol
CoMP COMMENT BY berkey: Wed May 11 21:11:07 GMT 2016
Added the O1 focus postion of the primary CoMP header as O1FOCS position is in mm. We expect this postion to remain const
ant for the duration of the CoMP experiment but since it is possible that it Could move we will poll it.
___end___
Wed May 11 21:42:40 GMT 2016 COMP Start Patrol on cookbook: distortion.cbk
Wed May 11 21:48:13 GMT 2016 COMP End Patrol
CoMP COMMENT BY berkey: Wed May 11 22:13:27 GMT 2016
Rotated the CoMP camera and translated reimaging lens to give the best fitting of the 2 images to the CoMP array.
___end___
CoMP COMMENT BY berkey: Wed May 11 22:15:31 GMT 2016
A set of distortion grid data + one dark was taken with the opal in, and occulting disk removed. Data should be between 2
1:42-21:48. Rain apporached the observatory so the last few images in the last recipe may be cut short due to closing of
the dome and moving of the spar.

Distortion grid was then removed and occulting disk restored to its nonimal location.
___end___
CoMP COMMENT BY berkey: Wed May 11 23:34:15 GMT 2016
Note the Distortion grid data has flags set for polarizer and retarder in. The calpol/retarder recipes were used for klud
ge ways to keep the instrument safe while pulling the occulting stage in and out.
___end___
Thu May 12 00:02:26 GMT 2016 COMP Start Patrol on cookbook: occulter-out.cbk
Thu May 12 00:02:45 GMT 2016 COMP End Patrol
Thu May 12 00:02:45 GMT 2016 COMP Start Patrol on cookbook: cal_clear.cbk

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Thu May 12 00:03:41 GMT 2016 COMP End Patrol
Thu May 12 00:05:30 GMT 2016 COMP Start Patrol on cookbook: occulter-out.cbk
Thu May 12 00:05:52 GMT 2016 COMP End Patrol
Thu May 12 00:05:52 GMT 2016 COMP Start Patrol on cookbook: occulter-out.cbk
Thu May 12 00:06:14 GMT 2016 COMP End Patrol
Thu May 12 00:06:15 GMT 2016 COMP Start Patrol on cookbook: cal_clear.cbk
Thu May 12 00:09:48 GMT 2016 COMP End Patrol
Thu May 12 00:10:19 GMT 2016 COMP Start Patrol on cookbook: occulter-out.cbk
Thu May 12 00:16:55 GMT 2016 COMP Start Patrol on cookbook: synoptic-00002.cbk
Thu May 12 00:17:21 GMT 2016 COMP End Patrol
Thu May 12 00:17:39 GMT 2016 COMP Start Patrol on cookbook: occulter-out.cbk
Thu May 12 00:18:48 GMT 2016 COMP End Patrol
Thu May 12 00:23:39 GMT 2016 COMP Start Patrol on cookbook: occulter-out.cbk
Thu May 12 00:24:40 GMT 2016 COMP End Patrol
Thu May 12 00:27:14 GMT 2016 COMP Start Patrol on cookbook: synoptic-00002.cbk
Thu May 12 00:27:42 GMT 2016 COMP End Patrol
Thu May 12 00:29:15 GMT 2016 COMP Start Patrol on cookbook: occulter-out.cbk
Thu May 12 00:29:37 GMT 2016 COMP End Patrol
Thu May 12 00:29:37 GMT 2016 COMP Start Patrol on cookbook: occulter-out.cbk
Thu May 12 00:29:59 GMT 2016 COMP End Patrol
Thu May 12 00:30:00 GMT 2016 COMP Start Patrol on cookbook: cal_clear.cbk
Thu May 12 00:38:12 GMT 2016 COMP Start Patrol on cookbook: occulter-out.cbk
Thu May 12 00:38:41 GMT 2016 COMP End Patrol
Thu May 12 00:38:41 GMT 2016 COMP Start Patrol on cookbook: occulter-out.cbk
Thu May 12 00:40:37 GMT 2016 COMP End Patrol
Thu May 12 00:44:07 GMT 2016 COMP Start Patrol on cookbook: occulter-out.cbk
Thu May 12 00:44:32 GMT 2016 COMP End Patrol
Thu May 12 00:44:32 GMT 2016 COMP Start Patrol on cookbook: occulter-out.cbk
Thu May 12 00:44:45 GMT 2016 COMP End Patrol
CoMP COMMENT BY berkey: Thu May 12 00:55:14 GMT 2016
Added a recipe/cookbook to safely allow the occulter stage to be added and removed from the telescope via promts to the ob
server.  This should let us do better calibrations without risking the optics.  To ask the observer change the occulter ma
ke the datatype=10, and wavelenght 0 for occulter out 1 for in.

Took a little bit to get it working.  Under current archetechture the CoMP code doens't use a common data type for the rec
ipe type in the vairious sub-vi.  I was seeing an annoying issue that the adjust filterwheel sub-vi didn't know about the
occulter so it assumed the ENUM only went up to 9 not 10 and told the recipe processor we were trying to move the NDFilter
 not prompt for the occulter.  All is good no lesson relearned.
___end___
Thu May 12 00:55:55 GMT 2016 COMP Start Patrol on cookbook: synoptic-00002.cbk
Thu May 12 01:02:34 GMT 2016 COMP End Patrol
CoMP COMMENT BY berkey: Thu May 12 01:05:44 GMT 2016
Cropico may be acting up again.  Computer is not reading values and the unit is not scanning though the probes.  Yesterday
 when we had this problem we changed the COM5 to have hardware flow control in max.   Looks like we just got lucky the las
t couple times and it happend to startup in the right mode.

We will try again tommrow.  Running before the rain gets heavier.
___end___
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CoMP COMMENT BY berkey: Thu May 12 01:08:02 GMT 2016
CoMP camera was warm this morning and warmed up again this afternoon. Hopefully it just didn't get filled yesterday other
wise we will have to get the pump back out and pump the dewar down.
___end___