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Mauna Loa Solar Observatory Observer's Log  
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Fri Mar 30 16:05:58 GMT 2018

Year: 18 Doy: 089

Observer: waters

WEATHER COMMENT: waters: Fri Mar 30 16:35:56 GMT 2018

Temp 37F with windspeed at about 4-10 mph from the South-Southeast. Sky looks clear with vog at about 9,000ft.

\_\_\_\_end\_\_\_\_

Fri Mar 30 17:20:46 GMT 2018 SGS Alignment complete

Fri Mar 30 17:20:27 GMT 2018 CoMP occulter has been re-centered

Fri Mar 30 17:20:42 GMT 2018 Kcor Focus/alignment program exited

Fri Mar 30 17:21:55 GMT 2018 COMP Start Patrol on cookbook: synoptic-00012.cbk

Fri Mar 30 17:22:01 GMT 2018 COMP End Patrol

Fri Mar 30 17:22:25 GMT 2018 COMP Start Patrol on cookbook: waves-00003.cbk

Fri Mar 30 17:22:47 GMT 2018 COMP End Patrol

Fri Mar 30 17:23:41 GMT 2018 KCOR Start Synoptic Patrol

Fri Mar 30 17:23:52 GMT 2018 COMP Start Patrol on cookbook: synoptic-00012.cbk

GENERAL COMMENT BY waters: Fri Mar 30 17:26:05 GMT 2018

PM Blew off Kcor O1

\_\_\_\_end\_\_\_\_

GENERAL COMMENT BY waters: Fri Mar 30 17:26:08 GMT 2018

PM Blew off CoMP O1

\_\_\_\_end\_\_\_\_

Fri Mar 30 18:58:26 GMT 2018 COMP End Patrol

Fri Mar 30 18:59:09 GMT 2018 KCOR End Patrol

Fri Mar 30 19:01:15 GMT 2018 SGS Alignment complete

Fri Mar 30 19:00:31 GMT 2018 KCOR Start Synoptic Patrol

Fri Mar 30 19:09:20 GMT 2018 CoMP occulter has been re-centered

Fri Mar 30 19:09:21 GMT 2018 COMP Start Patrol on cookbook: synoptic-00012.cbk

Fri Mar 30 19:39:27 GMT 2018 COMP End Patrol

COMP COMMENT BY waters: Fri Mar 30 19:40:20 GMT 2018

Starting CoMP calibration tests.

\_\_\_\_end\_\_\_\_

Fri Mar 30 19:43:03 GMT 2018 KCOR End Patrol

Fri Mar 30 19:55:17 GMT 2018 COMP Start Patrol on cookbook: occulter-out.cbk

Fri Mar 30 20:00:38 GMT 2018 COMP End Patrol

Fri Mar 30 20:00:38 GMT 2018 COMP Start Patrol on cookbook: cal\_clear.cbk

Fri Mar 30 20:04:15 GMT 2018 COMP End Patrol

Fri Mar 30 20:10:35 GMT 2018 COMP Start Patrol on cookbook: occulter-out.cbk

Fri Mar 30 20:11:53 GMT 2018 COMP End Patrol

Fri Mar 30 20:11:54 GMT 2018 COMP Start Patrol on cookbook: cal\_clear.cbk

Fri Mar 30 20:17:33 GMT 2018 COMP End Patrol

Fri Mar 30 20:17:45 GMT 2018 COMP Start Patrol on cookbook: cal\_clear.cbk

Fri Mar 30 20:24:49 GMT 2018 COMP End Patrol

Fri Mar 30 20:24:50 GMT 2018 COMP Start Patrol on cookbook: pol\_in.cbk

Fri Mar 30 20:27:54 GMT 2018 COMP End Patrol

Fri Mar 30 20:27:54 GMT 2018 COMP Start Patrol on cookbook: cal\_pol.cbk

GENERAL COMMENT BY waters: Fri Mar 30 20:34:06 GMT 2018

Kcor field lens removed for inspection and blowing off. It was found to need a cleaning which will be scheudle at some po  
int later

\_\_\_\_end\_\_\_\_

Fri Mar 30 20:36:31 GMT 2018 KCOR Start Synoptic Patrol  
Fri Mar 30 20:52:07 GMT 2018 COMP End Patrol  
Fri Mar 30 20:52:07 GMT 2018 COMP Start Patrol on cookbook: ret\_in.cbk  
Fri Mar 30 20:52:11 GMT 2018 KCOR End Patrol  
Fri Mar 30 20:54:24 GMT 2018 COMP End Patrol  
Fri Mar 30 20:54:25 GMT 2018 COMP Start Patrol on cookbook: cal\_pol\_ret.cbk  
Fri Mar 30 20:55:21 GMT 2018 KCOR Start Synoptic Patrol  
Fri Mar 30 21:18:38 GMT 2018 COMP End Patrol  
Fri Mar 30 21:18:38 GMT 2018 COMP Start Patrol on cookbook: ret\_out.cbk  
Fri Mar 30 21:19:00 GMT 2018 KCOR End Patrol  
Fri Mar 30 21:20:48 GMT 2018 COMP End Patrol  
Fri Mar 30 21:20:48 GMT 2018 COMP Start Patrol on cookbook: cal\_pol.cbk  
Fri Mar 30 21:22:14 GMT 2018 KCOR Start Synoptic Patrol  
Fri Mar 30 21:44:33 GMT 2018 KCOR End Patrol  
Fri Mar 30 21:45:00 GMT 2018 COMP End Patrol  
Fri Mar 30 21:45:00 GMT 2018 COMP Start Patrol on cookbook: pol\_out.cbk  
Fri Mar 30 21:46:31 GMT 2018 COMP End Patrol  
Fri Mar 30 21:46:32 GMT 2018 COMP Start Patrol on cookbook: cal\_clear.cbk  
Fri Mar 30 21:49:50 GMT 2018 KCOR Start Synoptic Patrol  
Fri Mar 30 21:53:41 GMT 2018 COMP End Patrol  
Fri Mar 30 21:53:41 GMT 2018 COMP Start Patrol on cookbook: occulter-in.cbk  
Fri Mar 30 21:53:56 GMT 2018 COMP End Patrol  
Fri Mar 30 21:55:12 GMT 2018 COMP Start Patrol on cookbook: diffuser.cbk  
Fri Mar 30 21:59:56 GMT 2018 KCOR End Patrol  
Fri Mar 30 22:22:01 GMT 2018 COMP End Patrol  
Fri Mar 30 22:23:04 GMT 2018 Kcor sees an SGS Guiding Error closing lens cover  
Fri Mar 30 22:23:05 GMT 2018 KCOR End Patrol  
Fri Mar 30 22:29:14 GMT 2018 Kcor sees an SGS Guiding Error closing lens cover  
Fri Mar 30 22:29:17 GMT 2018 KCOR End Patrol  
Fri Mar 30 22:29:37 GMT 2018 COMP Start Patrol on cookbook: distort.cbk  
Fri Mar 30 22:44:27 GMT 2018 COMP End Patrol  
Fri Mar 30 22:44:28 GMT 2018 COMP Start Patrol on cookbook: distort.cbk  
Fri Mar 30 22:47:20 GMT 2018 Kcor sees an SGS Guiding Error closing lens cover  
Fri Mar 30 22:47:22 GMT 2018 KCOR End Patrol  
Fri Mar 30 22:47:36 GMT 2018 Kcor sees an SGS Guiding Error closing lens cover  
Fri Mar 30 22:47:37 GMT 2018 KCOR End Patrol  
Fri Mar 30 22:49:21 GMT 2018 COMP End Patrol  
Fri Mar 30 22:51:53 GMT 2018 SGS Alignment complete  
Fri Mar 30 22:59:18 GMT 2018 Kcor Focus/alignment program exited  
Fri Mar 30 22:59:31 GMT 2018 CoMP occulter has been re-centered  
Fri Mar 30 22:59:40 GMT 2018 COMP Start Patrol on cookbook: synoptic-00012.cbk  
Fri Mar 30 23:00:39 GMT 2018 Kcor Focus/alignment program exited

WEATHER COMMENT: waters: Fri Mar 30 23:02:53 GMT 2018

Did meridian flip for shabar.

\_\_\_end\_\_\_

Fri Mar 30 23:03:58 GMT 2018 KCOR Start Synoptic Patrol

Fri Mar 30 23:18:15 GMT 2018 CoMP Paused for clouds

Fri Mar 30 23:46:26 GMT 2018 KCOR End Patrol

GENERAL COMMENT BY waters: Fri Mar 30 23:47:02 GMT 2018  
Science should have been unchecked from 23:18 GMT

\_\_\_end\_\_\_

GENERAL COMMENT BY waters: Fri Mar 30 23:48:22 GMT 2018

Closing the dome for some low clouds.

\_\_\_end\_\_\_

Sat Mar 31 01:42:37 GMT 2018 CoMP Restarted from pause

Sat Mar 31 01:42:38 GMT 2018 CoMP End Patrol

CoMP COMMENT BY berkey: Sat Mar 31 02:03:20 GMT 2018

Took comp calibrations today.

Polarization, Diffuser/opal, and distortion.

For the polarization and diffuser tests the Occulter was removed from the beam but the occulter mount/field stop were left in place. For the distortion test the occulter assembly was removed and the distortion grid was installed in its place.

The Diffuser test used the Badder astro filter  $t=2.6e-4@1074.6\text{nm}$  ND filter.

Weather degraded over the course of the test becoming too poor for observing within about 20 minutes of the end of the calibrations. Volcanic smog/so<sub>2</sub> was tasted in the air within about 30 minutes of the start of the good polarization calibration, with obvious cloud textures passing over the site in the building camera. In spite of all this I think conditions were "ok" for the tests, at no point was there any obvious sky polarization by eye or halos around the sun.

The polarization test got off to a bad start. Initially we removed the entire occulter assembly, but this appeared to be the wrong thing to do as the 2 beams were blending together without a field stop. The test was stopped at 20:04ut. And a second test was started with no occulter but the field stop in place. This ran for 6 minutes before we lost guiding due to hitting the ladder at 20:17ut. The cal\_clear step was restarted at 20:17 with the cal\_clear.cbk and this should be considered the start of the polarization calibration test. This test ended at 21:53 with the end of a second cal\_clear cookbook.

The diffuser/opal test started at 21:55UT and ran without incident (other than the degrading weather)

The Distortion test started at 22:44UT with a little difficulty getting started; trying to figure out steps needed to safely re-focus the instrument on the distortion grid. I think I have a safe procedure now but we will want to think about this a little more for UCOMP.

We are now down to 9 (7 once people have had time to look at the data) more observign days with COMP and some marginal weather in the forecast so if there are any issues with the data we should retake what we can at the earliest possible opportunity.

\_\_\_end\_\_\_

GENERAL COMMENT BY waters: Sat Mar 31 02:19:16 GMT 2018

Gave a tour to four people earlier today, right after the comp calis. They really enjoyed it!!

\_\_\_end\_\_\_

GENERAL COMMENT BY waters: Sat Mar 31 02:21:02 GMT 2018

The field lens inspection/air clean moved some spots but did not remove all of them. Will need a cleaning.  
\_\_\_\_end\_\_\_\_

ONSITE STAFF: berkey, waters