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--------------------------------------------------------------------------
           Mauna Loa Solar Observatory Observer's Log
--------------------------------------------------------------------------
         Tue Sep  7 16:42:19 GMT 2021
Year: 21  Doy: 250
Observer: mlso
GENERAL COMMENT BY mcotter: Tue Sep 07 16:50:45 GMT 2021
Opened windows upstairs
___end___
GENERAL COMMENT BY mcotter: Tue Sep 07 16:51:01 GMT 2021
PM Blew off Kcor O1
___end___
GENERAL COMMENT BY mcotter: Tue Sep 07 16:51:09 GMT 2021
PM Blew off UCoMP O1
___end___
WEATHER COMMENT: mcotter: Tue Sep 07 16:52:37 GMT 2021
Temp: 42.2f, Humidity: 12%, Pressure: 28.739in, Wind: 6mph from 188degs, Skies: Relatively clear skies but the sky is slig
htly hazy with an inversion layer visible on the horizon above Haleakala.
___end___
Tue Sep 07 16:54:36 GMT 2021 Running UCOMP Cookbook dark_80ms_2beam_16sums_BOTH.ckb line 0
UCoMP COMMENT BY mcotter: Tue Sep 07 16:54:58 GMT 2021
Ucomp instrument now running.
___end___
Tue Sep 07 16:56:01 GMT 2021 Running UCOMP Cookbook 530_Scan.ckb line 0
Tue Sep 07 16:59:35 GMT 2021 Running UCOMP Cookbook 637_Scan.ckb line 0
Tue Sep 07 17:02:34 GMT 2021 Running UCOMP Cookbook 656_Scan.ckb line 0
Tue Sep 07 17:05:32 GMT 2021 Running UCOMP Cookbook 691_Scan.ckb line 0
Tue Sep 07 17:08:29 GMT 2021 Running UCOMP Cookbook 706_Scan.ckb line 0
Tue Sep 07 17:11:26 GMT 2021 Running UCOMP Cookbook 789_Scan.ckb line 0
Tue Sep 07 17:13:48 GMT 2021 Kcor Focus/alignment program exited
Tue Sep 07 17:14:24 GMT 2021 Running UCOMP Cookbook 1074_Scan.ckb line 0
KCOR COMMENT BY mcotter: Tue Sep 07 17:16:36 GMT 2021
Kcor instrument now running.
SGS offsets: X(RA): -133. Y(Dec): 92.
Polarization checked good: Mid, Bright, Dark, Mid.
___end___
Tue Sep 07 17:17:23 GMT 2021 Running UCOMP Cookbook 1079_Scan.ckb line 0
Tue Sep 07 17:20:20 GMT 2021 Running UCOMP Cookbook 1083_Scan.ckb line 0
Tue Sep 07 17:23:17 GMT 2021 Running UCOMP Cookbook all_coronal_7_flats.ckb line 0
Tue Sep 07 17:46:54 GMT 2021 Running UCOMP Cookbook all_coronal_7.ckb line 0
Tue Sep 07 18:10:38 GMT 2021 Running UCOMP Cookbook all_coronal_7.ckb line 0
Tue Sep 07 18:16:50 GMT 2021 UCoMP Paused for clouds
Tue Sep 07 18:20:26 GMT 2021 UCoMP Restarted from pause
Tue Sep 07 18:20:54 GMT 2021 Kcor Focus/alignment program exited
Tue Sep 07 18:23:21 GMT 2021 Running UCOMP Cookbook all_coronal_7.ckb line 11
Tue Sep 07 18:39:10 GMT 2021 Running UCOMP Cookbook dark_80ms_2beam_16sums_BOTH.ckb line 0
Tue Sep 07 18:40:33 GMT 2021 Running UCOMP Cookbook 530_Pol_Calibrate.ckb line 0
Tue Sep 07 18:45:15 GMT 2021 Running UCOMP Cookbook 637_Pol_Calibrate.ckb line 0
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Tue Sep 07 18:49:36 GMT 2021 Running UCOMP Cookbook 656_Pol_Calibrate.ckb line 0
Tue Sep 07 18:53:56 GMT 2021 Running UCOMP Cookbook 691_Pol_Calibrate.ckb line 0
Tue Sep 07 18:58:25 GMT 2021 Running UCOMP Cookbook 706_Pol_Calibrate.ckb line 0
Tue Sep 07 19:02:45 GMT 2021 Running UCOMP Cookbook 789_Pol_Calibrate.ckb line 0
Tue Sep 07 19:07:05 GMT 2021 Running UCOMP Cookbook 1074_Pol_Calibrate.ckb line 0
Tue Sep 07 19:11:27 GMT 2021 Running UCOMP Cookbook 1079_Pol_Calibrate.ckb line 0
Tue Sep 07 19:15:48 GMT 2021 Running UCOMP Cookbook 1083_Pol_Calibrate.ckb line 0
Tue Sep 07 19:20:07 GMT 2021 Running UCOMP Cookbook sumtest-1074.ckb line 0
Tue Sep 07 19:25:07 GMT 2021 Running UCOMP Cookbook waves_1074_1hour.ckb line 0
Tue Sep 07 19:32:40 GMT 2021 Running UCOMP Cookbook waves_1074_1hour.ckb line 12
Tue Sep 07 19:48:54 GMT 2021 Running UCOMP Cookbook waves_1074_1hour.ckb line 40
Tue Sep 07 19:53:44 GMT 2021 Running UCOMP Cookbook waves_1074_1hour.ckb line 46
Tue Sep 07 20:08:11 GMT 2021 KCOR Start Calibration script: c:\kcor\mlso-calibration22deg-20171025.ini
Tue Sep 07 20:23:27 GMT 2021 KCOR End Calibration Script
Tue Sep 07 20:35:21 GMT 2021 Running UCOMP Cookbook dark_200_200_1sums_80ms.ckb line 0
Tue Sep 07 20:40:26 GMT 2021 Running UCOMP Cookbook all_coronal_7_flats.ckb line 0
Tue Sep 07 21:04:13 GMT 2021 Running UCOMP Cookbook all_coronal_7.ckb line 0
Tue Sep 07 21:27:55 GMT 2021 Running UCOMP Cookbook all_coronal_7.ckb line 0
Tue Sep 07 21:51:17 GMT 2021 Running UCOMP Cookbook all_coronal_7.ckb line 0
Tue Sep 07 22:14:42 GMT 2021 Running UCOMP Cookbook all_coronal_7.ckb line 0
GENERAL COMMENT BY mcotter: Tue Sep 07 22:27:11 GMT 2021
The Pointing Error Estimate GUI shows a graph that typically is round in appearance, as it is being continuously updated w
ith pointing error feedback estimates  from the RA & Dec amplifiers in real time. Currently the graph is showing  just a s
traight line, up & down, of the RA feedback. The voltage scales for the estimates update automatically, so the feed back f
rom the Dec must be significantly smaller than that of the RA causing the graticules of the RA to be of a larger value giv
ing the appearance of a line to appear straight up and down. The RA may be physically slipping, or perhaps the rollers nee
d to be cleaned. So far the data from Kcor and Ucomp is coming in good so I do not feel there is a need to pause the spar
to check or make adjustment to the RA mechanism at this time. If clouds come in and I need to pause observing I will make
an inspection of the RA and adjust as necessary.
___end___
WEATHER COMMENT: mcotter: Tue Sep 07 22:33:03 GMT 2021
Temp: 52.3f, Humidity: 74%, Pressure: 28.698in, Wind: 7mph from 339degs, Skies: Orthographic clouds have moved into the ob
serving area from the west. Altocumulus clouds are beginning to form above the observatory.
___end___
KCOR COMMENT BY mcotter: Tue Sep 07 22:33:33 GMT 2021
Kcor has been paused at this time due to cloud coverage.
___end___
UCoMP COMMENT BY mcotter: Tue Sep 07 22:34:09 GMT 2021
Ucomp has been paused at this time due to cloud coverage.
___end___
**GENERAL PROBLEM COMMENT BY mcotter** : Tue Sep 07 23:21:23 GMT 2021
Because of the traces I saw previously for the Pointing Error Estimates I did a visual inspection of the RA mechanism. The
 rollers are showing some signs of particulate matter collecting and being adhered to the various roller surfaces of the m
echanism. I cleaned as much of the roller surfaces as I was able to reach without disassembling the unit, but I could stil
l see small areas where there is wear and more particles sticking to the rollers. I then adjusted the clutch pad tension a
nd increased the torque very slightly that is required to move against the pad. I moved the spar a few time back and forth
 by hand and it felt smooth and of course slightly tighter. I then homed the Dec and afterwards realigned on the Sun. The
Pointing Error Estimate graph now appears as it normally does; somewhat round in appearance.
```

I will continue to monitor the RA Mechanism and check it more often to see if more particles are collecting on any of the roller surfaces. I think that if the rollers are kept reasonably clean the unit should continue to operate normally until a more thorough cleaning and assessment of the roller surfaces can be made when the assembly is scheduled to be rebuilt in December 2021.
___end___
GENERAL COMMENT BY mcotter: Tue Sep 07 23:22:18 GMT 2021
Clouds have increased dramatically. The dome Shutter doors and windows are now closed.
___end___
GENERAL COMMENT BY mcotter: Wed Sep 08 00:12:29 GMT 2021
Emptied trash container in control room.
___end___
GENERAL COMMENT BY mcotter: Wed Sep 08 00:12:52 GMT 2021
Started cleaning the PSPT room.
___end___
GENERAL COMMENT BY mcotter: Wed Sep 08 00:26:31 GMT 2021
Beautiful morning with clear skies. Clouds came in around midday and it got progressively worse until the instruments needed to be stopped and the dome closed. The clouds seem like they are beginning to break up overhead, but they quickly form again and wisp around.
The sky remains too bright to operate the instruments.
___end___
ONSITE STAFF: mcotter