Mauna Loa Solar Observatory Observer's Log

Tue Jun 17 16:48:23 GMT 1997

Year: 97 Doy: 168

Observer: koon

WEATHER COMMENT: Tue Jun 17 16:48:33 GMT 1997

Clear sky, no wind, temp=52 F.

Tue Jun 17 16:49:00 GMT 1997 CHIP Startup--Initializing new tape

Tue Jun 17 16:52:49 GMT 1997 dPMon Start Patrol

CHIP Start Patrol Tue Jun 17 16:52:52 GMT 1997 CHIP

Tue Jun 17 17:01:57 GMT 1997 dPMon Flat Tue Jun 17 17:02:51 GMT 1997 dPMon

End Flat Tue Jun 17 17:03:05 GMT 1997 Bias

CHIP

Tue Jun 17 17:03:49 GMT 1997 CHIP End Bias

Tue Jun 17 17:03:59 GMT 1997 CHIP Water

Tue Jun 17 17:04:36 GMT 1997 CHIP End Water

Tue Jun 17 17:36:05 GMT 1997 dPMon Start Patrol

DPMON COMMENT: Tue Jun 17 17:37:06 GMT 1997

Had an "OPTICS BUSY" crash, cleared with Kill/Run. I've been up in the dome trying to figure out some things about the way the Spar is guiding, so image occulting is going to change now and then.

Tue Jun 17 18:01:37 GMT 1997 dPMon Start Patrol

Tue Jun 17 18:35:11 GMT 1997 CHIP CHIP Start Patrol

Tue Jun 17 18:37:48 GMT 1997 dPMon Start Patrol

Tue Jun 17 18:44:02 GMT 1997 CHIP Start Patrol CHIP

DPMON COMMENT: Tue Jun 17 18:01:35 GMT 1997

Had another "Optics: Busy" crash, couldn't get Run to work, messages kept saying "Make MCC ready", also CHIP had the same crash, both of those symptoms point to a loose connection at an ethernet transceiver. So I wiggled the connections to the ethernet transceivers while trying to "ping" Kii and Nene until the ping got through. Both Kii and Nene observing programs crashed again until I positioned the ethernet transceiver so that there wasn't any strain on the cables. I marked the cable that appears to have a flaky BNC connector on it.

COMMENT: Tue Jun 17 18:49:40 GMT 1997

From my Spar quider and MKIII O1 quider testing it looks like the Spar is guiding very well but the range of the MKIII O1 guider is insufficient (due to those missing teeth on the Driving Gear) to keep the sun well occulted throughout the day. We either have to pick a time that we want good guiding (currently adjusted for after 2100 ut) or we have to adjust the Spar guider throughout the day and then adjust the dPMon occulting as necessary, I'll try this latter technique first.

Tue Jun 17 19:01:56 GMT 1997 Flat dPMon Tue Jun 17 19:02:50 GMT 1997 dPMon End Flat Tue Jun 17 19:03:11 GMT 1997 CHIP Bias Tue Jun 17 19:04:02 GMT 1997 CHIP End Bias Tue Jun 17 19:04:12 GMT 1997 CHIP Water

Tue Jun 17 19:04:51 GMT 1997 CHIP End Water

COMMENT: Tue Jun 17 19:17:29 GMT 1997

I adjusted the Spar guider so that the MKIII O1 guiders are semi-stable near the center of their travel.

DPMON COMMENT: Tue Jun 17 19:20:43 GMT 1997

I had to readjust the occulting due to the change in Spar guiding.

MKIII COMMENT: Tue Jun 17 19:21:11 GMT 1997

Occulting looks very good now.

COMMENT: Tue Jun 17 19:37:19 GMT 1997

Extended the dome slot. After repointing on the sun I found that I had to adjust the Spar guiding again so that the MKIII Ol guiding wouldn't be at a limit. When the sun was blocked by the dome the MKIII guiders took off and the N-S guider (which is the one with the bad gear) got out of adjustment due to gear slippage, this explains why Donna noticed that the "smudge" was occurring just after I adjusted the dome slot because that is when the Ol guider lost its guiding center. So we will have to adjust the Spar guiding after the dome slot extensions each day, and probably at least one other time at the start of the day once the Spar is guiding on the sun. Adjustments to the N-S adjusting screw are small, about plus or minus 1/4 revolution, and the MKIII Ol guiders react fairly quickly once you get the right screw position, so this procedure takes one or two minutes at most.

MKIII COMMENT: Tue Jun 17 19:59:24 GMT 1997

I noticed that the Y-axis readout needle was pegged at the top of the scale, I went up into the dome and saw that the image was too far South on the occulting disk. I adjusted the Spar guiding again to improve this occulting.

Tue Jun 17 20:01:59 GMT 1997 dPMon Flat DPMON COMMENT: Tue Jun 17 20:01:40 GMT 1997

I had to adjust the occulting due to a change in Spar guiding.

Tue Jun 17 20:02:56 GMT 1997 dPMon End Flat Tue Jun 17 20:03:04 GMT 1997 CHIP Gain Tue Jun 17 20:07:36 GMT 1997 CHIP End Gain Tue Jun 17 20:07:43 GMT 1997 CHIP Bias Tue Jun 17 20:08:23 GMT 1997 CHIP End Bias

Tue Jun 17 20:08:33 GMT 1997 CHIP Water

Tue Jun 17 20:09:02 GMT 1997 CHIP End Water

MKIII COMMENT: Tue Jun 17 20:52:51 GMT 1997

The guider Y-axis (N-S) pushrod is pushed toward the Spar and the motor is at its limit, but the occulting looks good.

MKIII COMMENT: Tue Jun 17 20:56:04 GMT 1997

Forgot to mention that neither guider readout needle is pegged though they are moving slightly.

Tue Jun 17 21:01:04 GMT 1997 CHIP Bias Tue Jun 17 21:02:02 GMT 1997 Flat dPMon Tue Jun 17 21:01:56 GMT 1997 CHIP End Bias Tue Jun 17 21:02:07 GMT 1997 CHIP Water Tue Jun 17 21:02:40 GMT 1997 CHIP End Water Tue Jun 17 21:03:02 GMT 1997 dPMon End Flat

```
MKIII COMMENT: Tue Jun 17 21:17:24 GMT 1997
Depletion noticed between 2024 and 2043 at PA=310. Very noticeable, but
maybe this is due to irregular O1/Spar guiding?
Tue Jun 17 22:03:04 GMT 1997
                                CHIP
                                          Bias
Tue Jun 17 22:03:50 GMT 1997
                                          End Bias
                                CHIP
Tue Jun 17 22:03:57 GMT 1997
                                CHIP
                                          Water
Tue Jun 17 22:04:32 GMT 1997
                                CHIP
                                          End Water
DPMON COMMENT: Tue Jun 17 22:10:31 GMT 1997
I just noticed that the Patrol was stalled with Program: K-Corona.
Did Kill/Run so that I could shut down all more elegantly.
Tue Jun 17 22:13:45 GMT 1997
                                CHIP
                                          CHIP End Patrol
Tue Jun 17 22:15:51 GMT 1997
                                          ending tape
                                 CHIP
COMMENT: Tue Jun 17 22:12:00 GMT 1997
Activity report:
OP: 55; 102; 130; 150; 235; 270.
No coronal activity.
TAPES:
*****
MKIII: H01582
DPMON: P00913
CHIP: C00334
LOWL: L00460 in drive #0
SCAN-LOG
SCAN-LOG 16:53:37. 6/17/97 DOY 168
    16:59:03
                  17:02:18
                                17:05:33
                                               17:08:49
                                                             17:12:03
   17:15:17
                  17:18:31
                                17:21:44
                                               17:24:55
                                                             17:28:08
                  17:34:32
                                17:37:43
    17:31:19
                                               17:40:57
                                                             17:44:09
    17:47:23
                  17:50:36
                                17:53:52
                                               17:57:03
                                                             18:00:16
    18:03:26
                  18:06:37
                                18:09:47
                                               18:12:59
                                                             18:16:09
    18:19:20
                  18:22:30
                                18:25:41
                                               18:28:51
                                                             18:32:02
    18:35:12
                  18:38:23
                                18:41:33
                                               18:44:44
                                                             18:47:54
    18:51:05
                  18:54:15
                                18:57:26
                                               19:00:36
                                                             19:03:51
    19:07:01
                  19:10:13
                                19:13:23
                                               19:16:35
                                                             19:19:45
    19:22:58
                  19:26:09
                                19:29:21
                                               19:32:31
                                                             19:35:43
    1949 0 CL
                  19:59:02
                                 2004 15CL
                                               20:13:49
                                                             20:20:59
    20:24:11
                  20:27:27
                                20:30:37
                                               20:33:51
                                                             20:37:03
    20:40:15
                  20:43:26
                                20:46:39
                                               20:49:49
                                                             20:53:01
    20:56:11
                  20:59:22
                                21:02:33
                                               21:05:50
                                                             21:09:03
    21:12:16
                  21:15:27
                                21:18:45
                                               21:21:55
                                                             21:25:07
                                21:34:43
    21:28:20
                  21:31:32
                                               21:37:55
                                                             21:41:06
    21:44:18
                  21:47:30
                                21:50:44
                                               21:53:57
                                                             21:57:14
                  22:03:46
                                               22:10:15
    22:00:27
                                22:06:57
  0 ERRORS
```