
Mauna Loa Solar Observatory Observer's Log

Fri Mar 7 17:24:07 GMT 1997
Year: 97 Doy: 066
Observer: koon
WEATHER COMMENT: Fri Mar 7 17:24:12 GMT 1997
Clear sky, wind=15 mph from the SE, temp=38 F.
Fri Mar 7 17:24:48 GMT 1997 CHIP Startup--Initializing new tape
Fri Mar 7 17:28:34 GMT 1997 dPMon Start Patrol
Fri Mar 7 17:28:34 GMT 1997 CHIP CHIP Start Patrol
COMMENT: Fri Mar 7 17:42:11 GMT 1997
Excavation work going on below us for NOAA, luckily the wind is in our favor. I'll keep a lookout for potential dust problems.
Fri Mar 7 18:02:00 GMT 1997 dPMon Flat
Fri Mar 7 18:02:03 GMT 1997 CHIP Bias
Fri Mar 7 18:02:47 GMT 1997 CHIP End Bias
Fri Mar 7 18:02:57 GMT 1997 dPMon End Flat
Fri Mar 7 18:02:55 GMT 1997 CHIP Water
Fri Mar 7 18:03:24 GMT 1997 CHIP End Water
Fri Mar 7 19:01:08 GMT 1997 CHIP Bias
Fri Mar 7 19:01:51 GMT 1997 CHIP End Bias
Fri Mar 7 19:01:58 GMT 1997 CHIP Water
Fri Mar 7 19:02:30 GMT 1997 CHIP End Water
LOW-L COMMENT: Fri Mar 7 18:52:00 GMT 1997
Regarding the guiding problem that Eric mentioned in yesterday's log, it didn't sound like there was a slippage problem between the motor/encoder and the lightfeed head because he mentioned that the motor was constantly running, which indicates that the motor can't drive the head for some reason. To check I drove the head to various locations and checked where the encoder thought it was, it checked out correctly, if there was slippage then the head might stay still although the encoder would think it was moving the head, and an RA of 38.6 probably wouldn't point at zenith like it should, but all worked as it should. So I tried to run the head through its range of movement and found that it would stop at -28 is RA although I was trying to point to -40, I went outside and could hear the motor running as Eric had mentioned, so something was preventing movement beyond -28 in RA as the head was trying to point down to the sunrise location. I found that the conduit clamp for the flex conduit (which rotates with the head) was hitting the lightfeed mount and couldn't get past it. The motor kept trying to run until I pointed it to a location in the other direction. So the lightfeed head was probably stuck that way early yesterday morning as it tried to point to the sunrise, then it stayed stuck until Eric turned it off. I bent the conduit clamp back into shape and tightened the screw holding it. When I tried to go through -28 again it worked OK, so I went through the entire range of motion and found out how the clamp probably got bent. When the head points to sunrise a small cable on the conduit was snagging on the head mount and pulling at the conduit which then eventually

bent the clamp enough to stop the RA motion completely, so I repositioned the
cable out of the way. This probably was also the cause of the mysterious
motor/encoder slippage problems that we had earlier in the year, it makes
sense that there must have been some kind of additional load on the motor
to cause the setscrew to loose its grip. Also the cable snagging probably
caused some of the conduit splitting that continues to plague us.   So now
the head moves freely and the data are going to tape again.
Fri Mar 7 19:42:54 GMT 1997   dPMon   Start Patrol
DPMON COMMENT: Fri Mar 7 19:42:54 GMT 1997
Stalled in sync mode, used Kill/Run to restart.
WEATHER COMMENT: Fri Mar 7 19:43:47 GMT 1997
Thick orographic clouds are creeping up the East slope towards MLSO.
WEATHER COMMENT: Fri Mar 7 19:50:58 GMT 1997
Water vapor ahead of visible clouds is already degrading data.
Fri Mar 7 20:00:58 GMT 1997   dPMon   Flat
Fri Mar 7 20:01:53 GMT 1997   dPMon   End Flat
Fri Mar 7 20:03:05 GMT 1997   CHIP   Gain
WEATHER COMMENT: Fri Mar 7 20:03:56 GMT 1997
Water vapor gone, data look good again.
Fri Mar 7 20:07:27 GMT 1997   CHIP   End Gain
Fri Mar 7 20:07:37 GMT 1997   CHIP   Bias
Fri Mar 7 20:08:18 GMT 1997   CHIP   End Bias
Fri Mar 7 20:08:28 GMT 1997   CHIP   Water
Fri Mar 7 20:08:56 GMT 1997   CHIP   End Water
Fri Mar 7 21:00:53 GMT 1997   dPMon   Flat
Fri Mar 7 21:01:02 GMT 1997   CHIP   Bias
Fri Mar 7 21:01:49 GMT 1997   dPMon   End Flat
Fri Mar 7 21:01:52 GMT 1997   CHIP   End Bias
Fri Mar 7 21:02:02 GMT 1997   CHIP   Water
Fri Mar 7 21:02:35 GMT 1997   CHIP   End Water
WEATHER COMMENT: Fri Mar 7 22:01:49 GMT 1997
Wind is starting to come from a more Northerly direction, closing dome due
to danger of getting dust blown into it.
Fri Mar 7 22:03:21 GMT 1997   CHIP   Bias
Fri Mar 7 22:04:11 GMT 1997   CHIP   End Bias
Fri Mar 7 22:04:18 GMT 1997   CHIP   Water
Fri Mar 7 22:04:46 GMT 1997   CHIP   End Water
Fri Mar 7 22:26:01 GMT 1997   CHIP   CHIP End Patrol
Fri Mar 7 22:39:13 GMT 1997   CHIP   ending tape
COMMENT: Fri Mar 7 22:58:44 GMT 1997
Activity report:
QP: 44; 62-77; 125-137; 240-255; 294.
No coronal activity.

TAPES:
******
MKIII: H001512
DPMON: P00839

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CHIP: C00257
LOWL: L00444 in drive #0
SCAN-LOG
SCAN-LOG  17:30:03.   3/7/97 DOY 66
    17:34:42      17:37:52      17:41:04      17:44:13      17:47:23
    17:50:33      17:53:44      17:56:54      18:00:06      18:03:17
    18:06:30      18:09:41      18:12:54      18:16:06      18:19:19
    18:22:32      18:25:47      18:28:59      1843 0 CL     18:49:06
    1859 15CL     19:09:06      19:16:52      19:20:06      19:23:22
    19:26:36      19:29:51      19:33:06      19:36:23      19:39:37
    19:42:59      19:46:14      19:49:30      19:52:45      19:56:01
    19:59:15      20:02:31      20:05:47      20:09:04      20:12:21
    20:15:38      20:18:53      20:22:09      20:25:25      20:28:42
    20:31:58      20:35:15      20:38:30      20:41:47      20:45:02
    20:48:19      20:51:35      20:54:57      20:58:12      21:01:29
    21:04:45      21:08:03      21:11:18      21:14:35      21:17:50
    21:21:06      21:24:21      21:27:41      21:30:57      21:34:14
    21:37:29      21:40:45      21:44:00      21:47:16      21:50:31
    21:53:47      21:57:02      22:00:17
  0 ERRORS
OK
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