
Mauna Loa Solar Observatory Observer's Log

Tue Dec 11 17:01:28 GMT 2001

Year: 01 Doy: 345 Observer: yasukawa

WEATHER COMMENT: Tue Dec 11 17:01:35 GMT 2001

Cool, clear, south wind.

COMMENT: Tue Dec 11 17:08:51 GMT 2001 Waiting for sky tx to clear the dome wall.

Tue Dec 11 17:15:59 GMT 2001 MKIV Start Patrol
Tue Dec 11 17:16:01 GMT 2001 CHIP Start Patrol
Tue Dec 11 17:16:11 GMT 2001 PICS Start Patrol

PSPT COMMENT: Tue Dec 11 17:19:22 GMT 2001

Observations started.

PSPT PROBLEM: Tue Dec 11 17:21:12 GMT 2001

Dome did not point correctly. I will need to redo the dome ephmeris calibration.

PSPT PROBLEM: Tue Dec 11 17:24:00 GMT 2001

Spar did not point correctly either, redoing gdr ephmcal too.

PSPT PROBLEM: Tue Dec 11 17:32:43 GMT 2001

Spar ended up pointing low after gdr ephmcal--almost as if it was calibrated for an hour earlier. Shut-down to determine if the spar and dome returns to correct stow positions. They did. Re-Start-up.

PSPT COMMENT: Tue Dec 11 17:40:31 GMT 2001

Startup pointed dome a OK, but somewhat behind center (spar is right of center).

Spar pointed close enough for guider to acquire image. Observation restarted.

PSPT PROBLEM: Tue Dec 11 17:48:00 GMT 2001

Daily Obs did not pull image to center during initial loop.

PSPT COMMENT: Tue Dec 11 17:51:22 GMT 2001

Image pulled to center at end of initial loop during centering routine before the wait for next loop.

Tue Dec 11 18:02:55 GMT 2001 CHIP LSD
Tue Dec 11 18:04:13 GMT 2001 PICS Flat
Tue Dec 11 18:05:13 GMT 2001 CHIP End LSD

Tue Dec 11 18:05:27 GMT 2001 CHIP BiasLSD

Tue Dec 11 18:06:25 GMT 2001 CHIP End BiasLSD

Tue Dec 11 18:06:33 GMT 2001 CHIP Bias
Tue Dec 11 18:07:21 GMT 2001 PICS End Flat
Tue Dec 11 18:07:26 GMT 2001 CHIP End Bias
Tue Dec 11 18:10:17 GMT 2001 MKIV End Patrol
Tue Dec 11 18:10:27 GMT 2001 MKIV Start Cal

GONG COMMENT: Tue Dec 11 18:19:52 GMT 2001

Going down to GONG to do weekly PM.

Tue Dec 11 18:29:10 GMT 2001 MKIV End Cal

Tue Dec 11 18:29:20 GMT 2001 MKIV Start Patrol

GONG COMMENT: Tue Dec 11 18:50:02 GMT 2001

Back from GONG.

Stopped observation to install test software. Tue Dec 11 19:03:06 GMT 2001 CHIP **PSPT PROBLEM**: Tue Dec 11 19:00:27 GMT 2001 Some of the images in the last loop looked either badly out of focus or contained image motion. Multiple-soft images of active regions point to image motion more than a focus problem like we had before where two of three wavelengths were in focus and one was not due to slippage of the focus mechanism. This time all three wavelengths were smeared. This problem appears intermittent. Last image at abort was sharp. We will need to look into this at a later time. Tue Dec 11 19:05:25 GMT 2001 CHIP End LSD Tue Dec 11 19:05:40 GMT 2001 BiasLSD CHIP Tue Dec 11 19:06:39 GMT 2001 End BiasLSD CHIP Tue Dec 11 19:06:52 GMT 2001 Bias CHIP Tue Dec 11 19:07:50 GMT 2001 CHIP End Bias **PSPT PROBLEM**: Tue Dec 11 19:32:55 GMT 2001 After installing Alice's test software, I tried starting by centering image. Program stalled at first step. I killed runPspt.pro and restarted with Pspt and then Center Image again. Dome ran to wrong position. Tue Dec 11 20:00:58 GMT 2001 CHIP LSD Tue Dec 11 20:03:17 GMT 2001 End LSD CHIP Tue Dec 11 20:03:28 GMT 2001 CHIP BiasLSD **PSPT PROBLEM**: Tue Dec 11 19:54:14 GMT 2001 Apparently when one exits pspt.pro on the PC, the current RA and DEC values must be lost. Unless one starts up with the "home-then-position" quider and dome routine contained in "Start-up" command, the ephemeris doesn't know where the dome and spar are when trying to point the quider or dome. Since the dome will want to go to its erroneous position when reconnecting the computer interface cable after moving it anywhere manually (with cable unplugged), I left it where it wanted to stay but I repositioned the spar to its stow position and then restarted Pspt by first killing runPspt.pro, restarting Pspt on sparc, then selecting Start-up on the qui. This time spar and dome pointed (relatively) correctly. Daily Obs started up correctly, quickly centering the image and running thru its program. Tue Dec 11 20:04:22 GMT 2001 CHIP End BiasLSD Tue Dec 11 20:04:45 GMT 2001 CHIP Bias PSPT COMMENT: Tue Dec 11 20:04:08 GMT 2001 PSPT started up running Alice's modified pspt.exe nicely, beginning with the flat-field routine (started at 19:50 UT). Tue Dec 11 20:05:48 GMT 2001 CHIP End Bias **PSPT PROBLEM**: Tue Dec 11 20:08:16 GMT 2001 Images have been in-focus and stable. **PSPT PROBLEM**: Tue Dec 11 20:25:56 GMT 2001 After CaK flat field routine, program tried to center image. Program ran thru two 10-try attempts but could not lock on even though spar looked well pointed. Blue(?) image looked out of focus or unstable. After the end of the second attempt, guider locked on and program continued on with Red(?) flat

PSPT COMMENT: Tue Dec 11 19:00:02 GMT 2001

field routine. Images looked sharp. **PSPT PROBLEM**: Tue Dec 11 20:45:43 GMT 2001 After flat field routine finished, progam waited for 2037 UT and started up by trying to center image. It ran thru a 10-try failed attempt, again spar looked like it was pointed correctly, displayed an unstable image, and ran thru another failed 10-try attempt. Guider and mirror servos were turned off by program and program attempted to start observing without the guider and mirror. Program stalled and did not continue. Clock on qui is still running--it stops for the usual crashes. PC is still responsive -- I can enter and delete characters. **PSPT PROBLEM**: Tue Dec 11 20:52:38 GMT 2001 Program resumed by itself at 2050 UT. Images were stable byt not centered (gdr and mir are off?). Tue Dec 11 21:01:01 GMT 2001 **PSPT PROBLEM**: Tue Dec 11 21:01:27 GMT 2001 After 2050 routine, program waited for 2100. At 2057 it started a centering routine which ran smoothely and then it went back to wait mode for 2100. At 2100, it started up a data routine which is running smoothely, images are stable and sharp. Tue Dec 11 21:03:18 GMT 2001 End LSD CHIP Tue Dec 11 21:03:32 GMT 2001 CHIP BiasLSD Tue Dec 11 21:04:19 GMT 2001 CHIP End BiasLSD Tue Dec 11 21:04:34 GMT 2001 CHIP Bias Tue Dec 11 21:05:20 GMT 2001 End Bias CHIP PSPT COMMENT: Tue Dec 11 21:12:20 GMT 2001 2100 routine and 2110 routine ran smmothely, images were sharp and stable. Stopped observing to reinstall original pspt.exe. Shutting down PSPT so that I can restart from stowed position. PSPT COMMENT: Tue Dec 11 21:22:54 GMT 2001 Copied c:\pspt\save\pspt.exe (working version) back into c:\pspt (overwriting Alice's test version) an restarting with Start-up. **PSPT PROBLEM**: Tue Dec 11 21:26:59 GMT 2001 Start-up crashed (clock stopped) after Homing XY Stage step. Killed runPspt.pro, Restarting with Startup again. PSPT COMMENT: Tue Dec 11 21:39:57 GMT 2001 Second Startup attempt ran smoothely. Dome pointed slightly behind where it should, spar ended up looking into the right edge of the slot slightly, and the spar pointed so that the image was slightly off the top of the display area. Dome could use another ephemeris calibration tomorrow morning to touch up the position. The quider locked onto sun as soon as Daily obs began running. Images look sharp and stable. PSPT COMMENT: Tue Dec 11 21:52:46 GMT 2001 Observations stopped for the day. Shutdown went well. Dome and spar stowed in the usual locations. **PSPT PROBLEM**: Tue Dec 11 21:57:53 GMT 2001 Alice figured out that some of the problems we experienced today is because the old version of pspt.exe remains memory resident even though the

program is overwritten. Clue was PC is never turned off at night and pspt.exe

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comes up automatically at boot up. Rebooted PC as requested by Alice.
Tue Dec 11 22:03:25 GMT 2001
                                 CHIP
                                          End LSD
Tue Dec 11 22:03:34 GMT 2001
                                 CHIP
                                          BiasLSD
**PICS PROBLEM**: Tue Dec 11 22:02:07 GMT 2001
Ah rats! PICS filter wheel may be slipping again, No vignetting, but
qui is showing timeout when going to clear station. May be encoder not
engaging due to slippage.
Tue Dec 11 22:04:14 GMT 2001
                                          End Patrol
                                 PICS
Tue Dec 11 22:04:17 GMT 2001
                                          End BiasLSD
                                 CHIP
Tue Dec 11 22:04:35 GMT 2001
                                 CHIP
                                          Bias
Tue Dec 11 22:05:21 GMT 2001
                                 CHIP
                                          End Bias
                                         End Patrol
Tue Dec 11 22:07:24 GMT 2001
                                 MKIV
Tue Dec 11 22:07:40 GMT 2001
                                 CHIP
                                          End Patrol
Tue Dec 11 22:11:22 GMT 2001
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