
Mauna Loa Solar Observatory Observer's Log

Thu Mar 27 16:55:45 GMT 2003

Year: 03 Doy: 086

Observer: stueben

WEATHER COMMENT: Thu Mar 27 16:59:02 GMT 2003

Thin cirrus cover most of the sky, south wind 5-10mph, temp 40F.

Thu Mar 27 17:03:14 GMT 2003 PICS Start Patrol

Thu Mar 27 17:03:17 GMT 2003 CHIP Start Patrol

Thu Mar 27 17:15:44 GMT 2003 CHIP End Patrol

Thu Mar 27 17:16:31 GMT 2003 PICS End Patrol

WEATHER COMMENT: Thu Mar 27 17:15:34 GMT 2003

Sky transmission below 400, guiding poor, idling PICS, CHIP.

PSPT COMMENT: Thu Mar 27 17:57:05 GMT 2003

Modified pspt.ini and axis.c and recompiled pspt.exe as requested by Alice.
Starting up observations now.

A NEW TAPE HAS BEEN PUT INTO KAIEE DLT DRIVE, Thu Mar 27 18:01:56 GMT 2003

PSPT COMMENT: Thu Mar 27 18:29:22 GMT 2003

Observing, the cirrostratus is fairly thick though.

WEATHER COMMENT: Thu Mar 27 18:29:57 GMT 2003

Cirrostratus is still too thick for the spar to track the sun.

PSPT COMMENT: Thu Mar 27 18:49:18 GMT 2003

I stopped observations because there were messages about the image intensity being too low. But the initial pointing wasn't too far away from the norm lately, and tracking looked good.

Thu Mar 27 19:36:16 GMT 2003 CHIP Start Patrol

Thu Mar 27 19:36:37 GMT 2003 PICS Start Patrol

WEATHER COMMENT: Thu Mar 27 19:36:45 GMT 2003

Cirrus have thinned somewhat, starting PICS, CHIP.

WEATHER COMMENT: Thu Mar 27 22:58:11 GMT 2003

Orographic clouds are starting to pass over.

Thu Mar 27 23:27:18 GMT 2003 MKIV Start Patrol

MKIV COMMENT: Thu Mar 27 23:27:23 GMT 2003

Centered occulting, trying to get data through a cloud hole.

Thu Mar 27 23:36:00 GMT 2003 MKIV End Patrol

MKIV PROBLEM: Thu Mar 27 23:36:21 GMT 2003

First CCW scan stopped at around 45 degrees then continued, I clicked on the "Idle" field at the end of the CCW scan, then it scanned normally in CW direction all the way to the normal stopping point at end of CW scan - this happened on Tuesday too I think. After it stopped I cycled the KCC power switch at the bottom of the Rack - to see if this resets things as well as cycling the main power switch above the KCC to fix this problem. The VxWorks startup logo came up at least 5 times on the akamai window without the program starting normally, and the Sony monitor showed a strange kind of grayscale checkerboard pattern. Tried cycling the low KCC power switch again, waited about 20 seconds compared to about 12 seconds on the first attempt before turning back on - this time it started up normally.

****MKIV PROBLEM****: Thu Mar 27 23:49:50 GMT 2003

Stopped at 41 degrees in CCW direction, so just cycling that low KCC power switch didn't fix the scanning problem. Next I'll try the usual fix of cycling the main power switch located above the KCC.

WEATHER COMMENT: Thu Mar 27 23:54:38 GMT 2003

Very cloudy now.

Fri Mar 28 00:02:07 GMT 2003 MKIV End Patrol

****MKIV PROBLEM****: Thu Mar 27 23:59:23 GMT 2003

The barrel stalled at the end of the CCW scan like it does sometimes lately. I couldn't get it going again by jiggling the barrel but I could get it going again by turning the stepper motor until the barrel went beyond a certain point in the CW direction. Note that the backlash is in the CCW direction wwhen you jiggle the barrel after it stalls after a CCW scan. This time I clicked on "Idle" while the CCW scan was still going and after the stall at the end of that CCW the next CW scan stopped at around 320 instead of the normal stopping position of 176. So it seems like where it stops to Idle depends on whether you click on "Idle" during or at the end of a bad CCW scan. The added factor this last time was that stall at the end of the CCW scan - so a clear pattern isn't a sure thing yet.

Fri Mar 28 00:11:26 GMT 2003 CHIP End Patrol

COMMENT: Fri Mar 28 00:11:35 GMT 2003

Pausing obs due to clouds.

Fri Mar 28 00:11:54 GMT 2003 MKIV Start Patrol

Fri Mar 28 00:13:42 GMT 2003 PICS End Patrol

Fri Mar 28 00:27:03 GMT 2003 MKIV End Patrol

Fri Mar 28 00:29:11 GMT 2003 MKIV Start Patrol

****MKIV PROBLEM****: Fri Mar 28 00:23:41 GMT 2003

Haven't cycled the main power to fix the problem yet, we're trying other things first. It is still doing partial scans, after stopping at 41 degrees on a CCW scan it continued and before it reached the end of the scan the "Idle" button was selected, after that the CCW scan completed and the CW scan started right away - so there is no pattern of stalling at the end of a bad CCW scan if the "Idle" is selected while that CCW scan is still in progress but since the CW scan just Idled at 318 instead of 176 it looks like there may be a relationship between when you click on "Idle" during a bad CCW scan and where the barrel stops for its Idling.

Fri Mar 28 00:39:21 GMT 2003 MKIV End Patrol

Fri Mar 28 00:40:13 GMT 2003 MKIV Start Patrol

****MKIV PROBLEM****: Fri Mar 28 00:37:08 GMT 2003

Clicked on "Idle" right at the end of the CCW scan, then the barrel stalled in that position. Allen noticed that the speed for the barrel was 30 instead of 240, so he used the GUI to click on 240 and the barrel started up after the speed fields showed "stop" then "240" in the GUI.

****MKIV PROBLEM****: Fri Mar 28 00:42:37 GMT 2003

Note that during the bad scan modes when the barrel turns around at the end of either a CW or CCW scan the CW or CCW LEDs flash on then off then back on and the scans continue in the direction indicated by those Drive and Request LEDs.

Fri Mar 28 00:52:05 GMT 2003 MKIV End Patrol
Fri Mar 28 00:52:18 GMT 2003 MKIV Start Patrol

MKIV PROBLEM:
Fri Mar 28 00:52:14 GMT 2003

This time during a bad CCW scan I waited until after the end of the CCW scan to click on "Idle", but the barrel stalled at the end of the CCW scan, after getting it going by clicking on 240 in the GUI, then it Idled at 318 instead of going to the normal 176 Idling position.

MKIV PROBLEM:
Fri Mar 28 01:03:51 GMT 2003

Going CW we watched the GUI to see what the speeds were, at around 200 going CW we saw a glitch where the highlighted speed scrolled all the way to 30 or maybe "stop" then quickly went back up to the normal 240. Also doing the CW scan there was a difference in actual speed before and after the incorrect stopping point - it moved about 1 degree per second going CW then stopped at 318 then moved at about 2 degrees per second (normal speed) after it continued from there until it reached the end of the CW scan at 176. Note that all of the scans during this testing are bad partial scans. I've just noticed that same speed variation when going in the CCW direction on a bad scan, it starts slow until it gets to the 41 degree erroneous stopping point then continues the CCW scan at the regular faster speed.

MKIV PROBLEM:
Fri Mar 28 01:31:04 GMT 2003

Saw a similar stall pattern at the end of a CW scan for a chnage. It was stalled and the CCW Drive and Request LEDs were lit and the GUI screen showed "Barrel CCW" speed was on 30 instead of 240, clicking on 240 ended the stall and the barrel started on its CCW scan.

WEATHER COMMENT (entered after ending the log):

Thick fog has moved in.

Fri Mar 28 01:35:53 GMT 2003

MkIV

00_11.rawmk4 00_40.rawmk4 01_02.rawmk4 01_21.rawmk4 23_46.rawmk4
00_20.rawmk4 00_45.rawmk4 01_06.rawmk4 01_27.rawmk4 23_50.rawmk4
00_29.rawmk4 00_52.rawmk4 01_11.rawmk4 23_27.rawmk4
00_33.rawmk4 00_57.rawmk4 01_16.rawmk4 23_31.rawmk4