## Mauna Loa Solar Observatory Observer's Log \_\_\_\_\_\_ Fri Aug 27 16:33:58 GMT 1999 Year: 99 Doy: 239 Observer: yasukawa WEATHER COMMENT: Fri Aug 27 16:34:46 GMT 1999 Cool, clear, light southeast wind. Fri Aug 27 16:35:18 GMT 1999 Startup--Initializing new tape CHIP Fri Aug 27 16:39:34 GMT 1999 PTCS Start Patrol Fri Aug 27 16:39:58 GMT 1999 CHIP CHIP Start Patrol Fri Aug 27 16:44:07 GMT 1999 MKIV Start Patrol \*\*MKIV PROBLEM\*\*: Fri Aug 27 16:48:33 GMT 1999 Bright regions on east and west, due to pre-sunrise condition (looking at the dome wall) is streaky, dark regions not streaked. Not sure if this is an effect of all the changes going on with MKIV but it shouldn't hurt to reset the KCC while MKIV is still domed out. Fri Aug 27 16:56:37 GMT 1999 MKIV Start Patrol \*\*MKIV PROBLEM\*\*: Fri Aug 27 16:59:32 GMT 1999 Streaks gone. Fri Aug 27 17:01:49 GMT 1999 Bias CHIP Fri Aug 27 17:02:38 GMT 1999 CHIP End Bias Fri Aug 27 17:02:46 GMT 1999 CHIP Water Fri Aug 27 17:03:22 GMT 1999 CHIP End Water \*\*MKIV PROBLEM\*\*: Fri Aug 27 17:08:22 GMT 1999 Did a Cancel KccRead, then a KccRead & to pick up a new MKIV display for nahenahe. Noticed that barrel stopped after first scan, this occurred before the Cancels. David is currently trying to get things to work. \*\*MKIV PROBLEM\*\*: Fri Aug 27 17:18:09 GMT 1999 Barrel stalled again. Downloading new version of code again. Fri Aug 27 17:26:12 GMT 1999 MKIV Start Patrol \*\*MKIV PROBLEM\*\*: Fri Aug 27 17:53:42 GMT 1999 David removed routine using raw data from the code and the program now works. Barrel is scanning and the MKIV gif images are being displayed on nahenahe--very nice! Fri Aug 27 18:00:48 GMT 1999 Bias CHIP Fri Aug 27 18:01:45 GMT 1999 End Bias CHIP Fri Aug 27 18:02:05 GMT 1999 PICS Flat Fri Aug 27 18:02:05 GMT 1999 PICS Flat Fri Aug 27 18:02:46 GMT 1999 CHIP End Water Fri Aug 27 18:04:41 GMT 1999 PICS End Flat MKIV COMMENT: Fri Aug 27 18:29:49 GMT 1999 Calibration pau. Installing prime focus height mask to document new alignment. MKIV COMMENT: Fri Aug 27 18:35:48 GMT 1999 Height mask in place, taking a couple of coronal scans. Fri Aug 27 18:36:21 GMT 1999 MKIV Start Patrol

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Fri Aug 27 18:43:17 GMT 1999
                                MKIV
                                        End Patrol
Fri Aug 27 18:43:37 GMT 1999
                                MKIV
                                        Start Patrol
MKIV COMMENT: Fri Aug 27 18:44:05 GMT 1999
Running height mask test with opal in.
MKIV COMMENT: Fri Aug 27 18:50:09 GMT 1999
height mask test pau. Removing mask.
Fri Aug 27 18:55:10 GMT 1999
                                        Start Patrol
MKIV COMMENT: Fri Aug 27 18:55:17 GMT 1999
Resuming patrol until time to reconfigure dome shutter.
Fri Aug 27 19:02:54 GMT 1999
                                CHTP
Fri Aug 27 19:03:04 GMT 1999
                                         polarization calibration
                                PICS
Fri Aug 27 19:03:56 GMT 1999
                                         End Bias
                                CHIP
Fri Aug 27 19:04:06 GMT 1999
                                CHIP
                                         Water
Fri Aug 27 19:04:42 GMT 1999
                                         End Water
                                CHIP
COMMENT: Fri Aug 27 19:05:57 GMT 1999
Stopping to reconfigure dome shutter.
Fri Aug 27 19:07:39 GMT 1999
                                CHIP
                                         CHIP End Patrol
Fri Aug 27 19:09:00 GMT 1999
                                MKIV
                                        End Patrol
Fri Aug 27 19:13:48 GMT 1999
                                PICS
                                         End Patrol
Fri Aug 27 19:28:40 GMT 1999
                                MKIV
                                        Start Patrol
COMMENT: Fri Aug 27 19:28:45 GMT 1999
Starting MKIII/IV and CHIP.
         CHIP Start Patrol
HIP
PICS COMMENT: Fri Aug 27 19:29:11 GMT 1999
Setting up PICS for Hartman mask focus test.
PICS COMMENT: Fri Aug 27 19:30:58 GMT 1999
Will begin by testing software routine and taking a set of focus data
with micrometer setting at "original" setting of 15373.5
Hartman mask 3 cm. wide placed across middle of O1 in east/west direction.
Fri Aug 27 19:34:10 GMT 1999
                                PICS
                                         Start Focus
Fri Aug 27 19:40:31 GMT 1999
                                PICS
                                         End Focus
Fri Aug 27 19:42:23 GMT 1999
                                PICS
                                         Start Focus
Fri Aug 27 19:45:23 GMT 1999
                                PICS
                                         End Focus
PICS COMMENT: Fri Aug 27 19:47:12 GMT 1999
Focus program needed modification to get the prompts to work but it
would not pause for data entry and prompts. We decided to do the data
entry via phone and use abort to stop the program as end did not work.
Pausing test to determine which way camera moves per micrometer entry
and to set camera forward of current focus.
PICS COMMENT: Fri Aug 27 20:02:53 GMT 1999
Founf directional info on sheet of paper that was hiding under the
notepad. A jog of micrometer UP, moves the camera to the rear.
Moved the camera forward 1000 microns and will begin test at
14365.9 and move in +200 micron increments (approximately).
Fri Aug 27 20:07:22 GMT 1999
                                CHIP
                                         End Gain
Fri Aug 27 20:07:36 GMT 1999
                                CHIP
                                         Bias
Fri Aug 27 20:07:51 GMT 1999
                                PICS
                                         Start Focus
Fri Aug 27 20:08:29 GMT 1999
                                CHIP
                                         End Bias
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Fri Aug 27 20:08:43 GMT 1999
                               CHIP
                                        Water
Fri Aug 27 20:09:18 GMT 1999 CHIP
                                        End Water
PICS COMMENT: Fri Aug 27 20:12:29 GMT 1999
David modified the program, meanwhile, so that I could run the test
from the cmdtool window. Tested it and it works so test is proceeding.
PICS COMMENT: Fri Aug 27 20:23:30 GMT 1999
Ran from 14365 back to 15373. Running +1000 microns beyond old setting now.
PICS COMMENT: Fri Aug 27 20:37:19 GMT 1999
OK, ran thru micrometer settings. Focus on disk looked good between 15373 and
15573(approximate). I will try 3 more settings, approximately
15273, 15473, and 15673.... uh, maybe one more at 15873.
PICS COMMENT: Fri Aug 27 20:41:14 GMT 1999
pushed camera forward to new micrometer setting 15264 and will work back
again.
PICS COMMENT: Fri Aug 27 20:51:26 GMT 1999
OK, test is pau. Setting focus back close to where it was, securing
camera, replacing covers, and removing Hartman mask.
Fri Aug 27 21:01:16 GMT 1999
                               CHIP
                                        Bias
Fri Aug 27 21:02:14 GMT 1999
                              CHIP
                                        End Bias
Fri Aug 27 21:02:31 GMT 1999
                             CHIP
                                        Water
Fri Aug 27 21:03:17 GMT 1999 CHIP
                                        End Water
COMMENT: Fri Aug 27 21:06:36 GMT 1999
Jostled spar around putting covers back on PICS.
MKIII/MKIV and CHIP hourly images probably hosed.
PICS COMMENT: Fri Aug 27 21:07:41 GMT 1999
PICS back close to original focus. Focus at 15371.3
Fri Aug 27 21:08:56 GMT 1999 PICS
                                        Start Patrol
PICS COMMENT: Fri Aug 27 21:16:46 GMT 1999
Focus test images are stored on disk in Boulder with the micrometer
settings attached to the files. These will be analyzed there probably
using an IDL program to determine the best focus.
MKIV COMMENT: Fri Aug 27 21:34:36 GMT 1999
Stopped, doing an End Day to initialize the barrel and then resetting
the KCC to pick up latest version of David's software for test.
Fri Aug 27 21:39:08 GMT 1999
                              MKIV
                                       Start Patrol
MKIV COMMENT: Fri Aug 27 21:39:18 GMT 1999
Starting up Patrol with the new KCC software version.
**MKIV PROBLEM**: Fri Aug 27 21:42:41 GMT 1999
There were two radial dropouts on first pass. Access Fault occurred
after stop of first scan. Message follows:
send time
/local/d/Data/MkIII/21 39.rawmk3
Access Fault
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Program Counter: 0x00073380 Status Register: 0x3004 Access Address :  $0 \times 04040443$  Special Status: 0x0125 Task: 0x398ae4 "Dalsa" /local/d/Data/MkIV/21 39.rawmk4 \*\*MKIV PROBLEM\*\*: Fri Aug 27 21:44:11 GMT 1999 Barrel not starting up again. \*\*MKIV PROBLEM\*\*: Fri Aug 27 21:47:04 GMT 1999 Downloaded the current version again, resetting KCC to pick it back up. Fri Aug 27 21:50:53 GMT 1999 MKIV Start Patrol MKIV COMMENT: Fri Aug 27 21:51:01 GMT 1999 barrel initialized, starting Patrol. \*\*MKIV PROBLEM\*\*: Fri Aug 27 21:51:59 GMT 1999 Image is not being written to display. Queueing up Idle. \*\*MKIV PROBLEM\*\*: Fri Aug 27 21:57:04 GMT 1999 No gif image on nahenahe either, just a dark screen. Scan did turn around OK. Stopped at end correctly. No image with last scan either. Fri Aug 27 22:00:48 GMT 1999 CHIP Bias Fri Aug 27 22:01:40 GMT 1999 CHIP End Bias Fri Aug 27 22:01:50 GMT 1999 CHIP Water Fri Aug 27 22:02:28 GMT 1999 CHIP End Water \*\*MKIV PROBLEM\*\*: Fri Aug 27 22:04:00 GMT 1999 David had no clue as to what went wrong, we supposedly had the program that was working loaded. Resetting KCC and trying again. \*\*MKIV PROBLEM\*\*: Fri Aug 27 22:05:55 GMT 1999 Could a "4p" I typed in while cursor was in akamai window by mistake, did not do a return because Messages were flying by at the time, cause program to screw up??? Fri Aug 27 22:07:38 GMT 1999 MKIV Start Patrol \*\*MKIV PROBLEM\*\*: Fri Aug 27 22:08:28 GMT 1999 KCC display is back. I almost did it again... mouse had moved cursor into akamai window unbeknownst to me, and I started typing a log entry. fortunately David has the system \*IN USE\* via rlogin. Nothing got written to akamai window by that screw-up. Fri Aug 27 22:11:26 GMT 1999 PICS End Patrol Fri Aug 27 22:11:26 GMT 1999 PICS End Patrol Fri Aug 27 22:12:43 GMT 1999 ending tape CHIP COMMENT: Fri Aug 27 22:16:01 GMT 1999 Tapes MKIV: 99-239 PICS: P01531 CHIP: C00907 LOWL: L00622 in drive 0 Fri Aug 27 22:21:24 GMT 1999

16\_44.rawmk3 18\_04.rawmk3 19\_39.rawmk3 20\_31.rawmk3 21\_23.rawmk3

MkTTT

16_47.rawmk3	18_11.rawmk3	19_42.rawmk3	20_34.rawmk3	21_26.rawmk3
16_56.rawmk3	18_18.rawmk3	19_46.rawmk3	20_38.rawmk3	21_30.rawmk3
17_12.rawmk3	18_25.rawmk3	19_49.rawmk3	20_41.rawmk3	21_39.rawmk3
17_26.rawmk3	18_36.rawmk3	19_53.rawmk3	20_45.rawmk3	21_51.rawmk3
17_29.rawmk3	18_39.rawmk3	19_56.rawmk3	20_48.rawmk3	21_54.rawmk3
17_33.rawmk3	18_43.rawmk3	20_00.rawmk3	20_51.rawmk3	22_07.rawmk3
17_36.rawmk3	18_47.rawmk3	20_03.rawmk3	20_55.rawmk3	22_11.rawmk3
17_40.rawmk3	18_55.rawmk3	20_06.rawmk3	20_58.rawmk3	c18_07.rawmk3
17_43.rawmk3	18_58.rawmk3	20_10.rawmk3	21_02.rawmk3	c18_14.rawmk3
17_46.rawmk3	19_02.rawmk3	20_13.rawmk3	21_05.rawmk3	c18_21.rawmk3
17_50.rawmk3	19_05.rawmk3	20_17.rawmk3	21_09.rawmk3	
17_53.rawmk3	19_28.rawmk3	20_20.rawmk3	21_12.rawmk3	
17_57.rawmk3	19_32.rawmk3	20_24.rawmk3	21_16.rawmk3	
18_00.rawmk3	19_35.rawmk3	20_27.rawmk3	21_19.rawmk3	