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Mauna Loa Solar Observatory Observer's Log

Fri Jan 9 17:28:48 GMT 1998 Year: 98 Doy: 009 Observer: yasukawa WEATHER COMMENT: Fri Jan 9 17:29:26 GMT 1998 In thin cirrus, cold, light southwest wind. Fri Jan 9 17:34:35 GMT 1998 CHIP Startup--Initializing new tape Fri Jan 9 17:35:37 GMT 1998 MKIII Start Patrol Fri Jan 9 17:36:24 GMT 1998 CHIP CHIP Start Patrol Start Patrol Fri Jan 9 17:36:41 GMT 1998 PICS Fri Jan 9 18:01:04 GMT 1998 CHIP Bias Fri Jan 9 18:02:07 GMT 1998 CHIP End Bias Fri Jan 9 18:02:15 GMT 1998 PICS Flat Fri Jan 9 18:02:24 GMT 1998 CHIP Water Fri Jan 9 18:03:12 GMT 1998 CHIP End Water Fri Jan 9 18:03:55 GMT 1998 PICS End Flat MKIII COMMENT: Fri Jan 9 18:04:28 GMT 1998 MKIII data no good at this time due to thin cirrus. I will continue to run in case holes occur. Fri Jan 9 19:00:17 GMT 1998 PICS Flat Fri Jan 9 19:01:10 GMT 1998 CHIP Bias Fri Jan 9 19:01:42 GMT 1998 PICS End Flat Fri Jan 9 19:02:21 GMT 1998 CHIP End Bias Fri Jan 9 19:02:30 GMT 1998 CHIP Water Fri Jan 9 19:03:21 GMT 1998 End Water CHIP Fri Jan 9 20:00:06 GMT 1998 PICS Flat Fri Jan 9 20:01:04 GMT 1998 Gain CHIP Fri Jan 9 20:01:30 GMT 1998 End Flat PICS Fri Jan 9 20:06:54 GMT 1998 CHIP End Gain Fri Jan 9 20:07:04 GMT 1998 CHIP Bias Fri Jan 9 20:07:58 GMT 1998 CHIP End Bias Fri Jan 9 20:08:12 GMT 1998 CHIP Water Fri Jan 9 20:08:56 GMT 1998 CHIP End Water Fri Jan 9 21:00:14 GMT 1998 PICS Flat Fri Jan 9 21:01:04 GMT 1998 CHIP Bias Fri Jan 9 21:01:40 GMT 1998 PICS End Flat Fri Jan 9 21:02:19 GMT 1998 End Bias CHIP Fri Jan 9 21:02:29 GMT 1998 CHIP Water Fri Jan 9 21:03:20 GMT 1998 CHIP End Water COMMENT: Fri Jan 9 21:44:18 GMT 1998 GUIDER OSCILLATION INVESTIGATION:

Hmmmm.... Since the day's coronal data is shot due to cirrus, I tried disconnecting the output of the stepper drivers to the Ol guider motors. I did this for both X and Y axis and then individually. What I found was when the X-axis stepper motor was stopped, the spar guider right

ascension monitor signal stopped oscillating as much as it has been. It oscillates a little. but the oscillation is more random, like it is just correcting for normal buffetting and seeing, etc. My thinking is that the spar guider RA oscillation is a result of the vibration caused by the X-axis chatter of the Ol guider stepper, or the resulting X-axis motion of the Ol's mass. Next step would be to try and reduce the gain of the Ol guider X-axis output to reduce or eliminate the vibration. One intermediate test would be to disconnect the Ol guider all together to on a good day to determine if the Ol guider is really needed for good data.

Fri Jan 9 22:00:15 GMT 1998 PICS Flat Fri Jan 9 22:01:02 GMT 1998 Bias CHIP Fri Jan 9 22:01:40 GMT 1998 PICS End Flat Fri Jan 9 22:01:59 GMT 1998 End Bias CHIP Fri Jan 9 22:02:09 GMT 1998 CHIP Water Fri Jan 9 22:02:55 GMT 1998 CHIP End Water Fri Jan 9 22:09:37 GMT 1998 PICS End Patrol Fri Jan 9 22:09:37 GMT 1998 PICS End Patrol Fri Jan 9 22:12:43 GMT 1998 CHIP ending tape COMMENT: Fri Jan 9 22:13:00 GMT 1998 Tapes: MKIII: no data PICS: P01081 CHIP: C00469 LOWL: L00491 Fri Jan 9 22:14:21 GMT 1998 Mkttt