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Mauna Loa Solar Observatory Observer's Log  
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Sat Oct 31 16:44:51 GMT 1998

Year: 98 Doy: 304

Observer: koon

Sat Oct 31 16:46:03 GMT 1998	CHIP	Startup--Initializing new tape
Sat Oct 31 16:50:19 GMT 1998	MKIII	Start Patrol
Sat Oct 31 16:50:31 GMT 1998	PICS	Start Patrol
Sat Oct 31 16:50:31 GMT 1998	PICS	Start Patrol
Sat Oct 31 17:00:35 GMT 1998	PICS	Flat
Sat Oct 31 17:02:08 GMT 1998	PICS	End Flat
Sat Oct 31 17:02:50 GMT 1998	CHIP	Bias
Sat Oct 31 17:03:45 GMT 1998	CHIP	End Bias
Sat Oct 31 17:04:00 GMT 1998	CHIP	Water
Sat Oct 31 17:04:41 GMT 1998	CHIP	End Water
Sat Oct 31 18:00:37 GMT 1998	PICS	Flat
Sat Oct 31 18:01:48 GMT 1998	CHIP	Bias
Sat Oct 31 18:02:06 GMT 1998	PICS	End Flat
Sat Oct 31 18:02:47 GMT 1998	CHIP	End Bias
Sat Oct 31 18:03:01 GMT 1998	CHIP	Water
Sat Oct 31 18:03:41 GMT 1998	CHIP	End Water
Sat Oct 31 19:00:37 GMT 1998	PICS	Flat
Sat Oct 31 19:00:58 GMT 1998	CHIP	Bias
Sat Oct 31 19:02:10 GMT 1998	PICS	End Flat
Sat Oct 31 19:02:10 GMT 1998	PICS	End Flat
Sat Oct 31 19:02:19 GMT 1998	CHIP	Water
Sat Oct 31 19:02:56 GMT 1998	CHIP	End Water
Sat Oct 31 19:27:22 GMT 1998	MKIII	Start Cal
Sat Oct 31 19:47:48 GMT 1998	MKIII	Start Patrol
Sat Oct 31 20:00:47 GMT 1998	CHIP	Gain
Sat Oct 31 20:00:47 GMT 1998	CHIP	Gain
Sat Oct 31 20:02:27 GMT 1998	PICS	End Flat
Sat Oct 31 20:05:35 GMT 1998	CHIP	End Gain
Sat Oct 31 20:05:44 GMT 1998	CHIP	Bias
Sat Oct 31 20:06:34 GMT 1998	CHIP	End Bias
Sat Oct 31 20:06:44 GMT 1998	CHIP	Water
Sat Oct 31 20:07:20 GMT 1998	CHIP	End Water

\*\*PICS PROBLEM\*\* Sat Oct 31 20:37:18 GMT 1998

The occulting varies a lot more than it did before the MKIV installation. Probably due to Spar balance, I'll check balance when I get a chance.

\*\*PSPT PROBLEM\*\* Sat Oct 31 20:38:37 GMT 1998

I checked the relays in the dome controller box, nothing obviously wrong looking. There are 2 solid state relays (5vdc to 135vac) for computer control and 2 large mechanical relays for dome movement control. The 135 vac is strange and probably related to the 30 vac difference between Neutral and Ground that we have on the new wing due to the new isolation transformer. The mechanical relays sometimes chatter when the

box power switch is left on, this happens even if the computer control cable is disconnected from the solid state relays. Maybe those solid state relays are bad or maybe that elevated Neutral is causing a problem. I'll try to do some DMM measurements when the relays are chattering to see where the voltage change is coming from. Normal inputs are +5vdc for all 4 solid state relay wires and ~135 vac for all 4 mechanical relay wires (to coils) when the dome is at a state of rest and the power switch is on for the box and the PSPT program is running.

MKIV COMMENT: Sat Oct 31 20:57:30 GMT 1998

It looks like there is enough room for todays files, /local/d is only up to 70% full, from about 40% this morning.

Sat Oct 31 21:00:36 GMT 1998 PICS Flat  
Sat Oct 31 21:01:47 GMT 1998 CHIP Bias  
Sat Oct 31 21:02:08 GMT 1998 PICS End Flat  
Sat Oct 31 21:02:42 GMT 1998 CHIP End Bias  
Sat Oct 31 21:03:10 GMT 1998 CHIP Water  
Sat Oct 31 21:04:01 GMT 1998 CHIP End Water

\*\*PSPT PROBLEM\*\* Sat Oct 31 21:58:49 GMT 1998

I checked the voltages at the relays when the directional relay was chattering, the solid state relay was closing the switch on the high voltage output side even though the input wires both stayed at +5 volts. So that solid stae relay needs to be replaced, I can't see any brand but the model number is OAC5-A. Cycling the power to the box resets the bad relay switch back to the open position.

CHIP End Bias  
Sat Oct 31 22:03:00 GMT 1998 CHIP Water  
Sat Oct 31 22:03:40 GMT 1998 CHIP End Water  
Sat Oct 31 22:18:08 GMT 1998 MKIII End Patrol  
Sat Oct 31 22:24:26 GMT 1998 PICS End Patrol  
Sat Oct 31 22:24:34 GMT 1998 CHIP CHIP End Patrol  
Sat Oct 31 22:27:46 GMT 1998 CHIP ending tape  
COMMENT: Sat Oct 31 22:47:57 GMT 1998

TAPES:

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PICS: P01332

CHIP: C00717

LOWL: L00553 in drive #0.

MKIV: 98304

Sat Oct 31 22:49:15 GMT 1998

MkIII

16_50.rawmk3	17_55.rawmk3	19_01.rawmk3	20_17.rawmk3	21_22.rawmk3
16_53.rawmk3	17_59.rawmk3	19_04.rawmk3	20_20.rawmk3	21_25.rawmk3
16_57.rawmk3	18_02.rawmk3	19_07.rawmk3	20_23.rawmk3	21_29.rawmk3
17_00.rawmk3	18_05.rawmk3	19_11.rawmk3	20_27.rawmk3	21_32.rawmk3

17_03.rawmk3	18_08.rawmk3	19_14.rawmk3	20_30.rawmk3	21_35.rawmk3
17_06.rawmk3	18_12.rawmk3	19_17.rawmk3	20_33.rawmk3	21_39.rawmk3
17_10.rawmk3	18_15.rawmk3	19_20.rawmk3	20_37.rawmk3	21_42.rawmk3
17_13.rawmk3	18_18.rawmk3	19_24.rawmk3	20_40.rawmk3	21_45.rawmk3
17_16.rawmk3	18_22.rawmk3	19_30.rawmk3	20_43.rawmk3	21_48.rawmk3
17_19.rawmk3	18_25.rawmk3	19_37.rawmk3	20_46.rawmk3	21_52.rawmk3
17_23.rawmk3	18_28.rawmk3	19_44.rawmk3	20_50.rawmk3	21_55.rawmk3
17_26.rawmk3	18_31.rawmk3	19_47.rawmk3	20_53.rawmk3	21_58.rawmk3
17_29.rawmk3	18_35.rawmk3	19_51.rawmk3	20_56.rawmk3	22_01.rawmk3
17_33.rawmk3	18_38.rawmk3	19_54.rawmk3	20_59.rawmk3	22_05.rawmk3
17_36.rawmk3	18_41.rawmk3	19_57.rawmk3	21_03.rawmk3	22_08.rawmk3
17_39.rawmk3	18_44.rawmk3	20_01.rawmk3	21_06.rawmk3	22_11.rawmk3
17_42.rawmk3	18_48.rawmk3	20_04.rawmk3	21_09.rawmk3	22_15.rawmk3
17_46.rawmk3	18_51.rawmk3	20_07.rawmk3	21_12.rawmk3	c19_27.rawmk3
17_49.rawmk3	18_54.rawmk3	20_10.rawmk3	21_16.rawmk3	c19_34.rawmk3
17_52.rawmk3	18_58.rawmk3	20_14.rawmk3	21_19.rawmk3	c19_41.rawmk3