

-----  
Mauna Loa Solar Observatory Observer's Log  
-----

Sat May 23 17:15:35 GMT 1998

Year: 98 Doy: 143

Observer: koon

WEATHER COMMENT: Sat May 23 17:15:37 GMT 1998

Thin cirrostratus overcast, wind=5 mph from the NE, temp=48 F.

Sat May 23 17:20:26 GMT 1998 CHIP CHIP Start Patrol

Sat May 23 17:20:26 GMT 1998 CHIP CHIP Start Patrol

MKIII COMMENT: Sat May 23 17:21:07 GMT 1998

Will wait for clouds to clear before starting this one.

PSPT COMMENT: Sat May 23 17:59:13 GMT 1998

Haosheng was working on the instrument via the net and called to ask me to put the dome under computer control. When I did that the dome ran past the "home" (initialization position and kept going. I stopped it and unplugged the computer control cable so I could manually point the dome back on the right side of the home position. But manual control will only turn the dome in one direction, the wrong direction, no matter which way I turn the switch. I will look into this new problem.

Sat May 23 18:02:38 GMT 1998 PICS End Flat

Sat May 23 18:03:05 GMT 1998 CHIP Bias

Sat May 23 18:04:03 GMT 1998 CHIP End Bias

Sat May 23 18:04:10 GMT 1998 CHIP Water

Sat May 23 18:04:50 GMT 1998 CHIP End Water

Sat May 23 18:04:58 GMT 1998 CHIP Velocity

Sat May 23 18:06:12 GMT 1998 CHIP End Velocity

PSPT COMMENT: Sat May 23 18:40:44 GMT 1998

One of the contacts on the "direction" mechanical switch inside the dome control box was sticking, this is probably what caused the circuit breaker to trip yesterday. So the dome could only turn in one direction. I freed the switch contact and tested it, no problems, now dome works in both directions.

1998 CHIP End Water

Sat May 23 19:03:11 GMT 1998 CHIP Velocity

Sat May 23 19:04:23 GMT 1998 CHIP End Velocity

PSPT COMMENT: Sat May 23 19:05:33 GMT 1998

I also moved the declination limit switch activating disk because it was activating the limit switch and preventing the telescope from pointing far enough North. The sector in the disk is too small to handle the yearly travel of the sun in declination so Haosheng will have their machine shop build a new disk for us to install.

COMMENT: Sat May 23 19:59:49 GMT 1998

Extended the dome slot.

Sat May 23 20:01:14 GMT 1998 PICS Flat

Sat May 23 20:02:03 GMT 1998 CHIP Gain

Sat May 23 20:02:39 GMT 1998 PICS End Flat

Sat May 23 20:08:07 GMT 1998 CHIP End Gain

Sat May 23 20:08:15 GMT 1998 CHIP Bias  
 Sat May 23 20:09:08 GMT 1998 CHIP End Bias  
 Sat May 23 20:09:15 GMT 1998 CHIP Water  
 Sat May 23 20:09:53 GMT 1998 CHIP End Water  
 Sat May 23 20:10:01 GMT 1998 CHIP Velocity  
 Sat May 23 20:11:13 GMT 1998 CHIP End Velocity  
 Sat May 23 21:01:18 GMT 1998 PICS Flat  
 Sat May 23 21:02:44 GMT 1998 PICS End Flat  
 Sat May 23 21:03:05 GMT 1998 CHIP Bias  
 Sat May 23 21:04:02 GMT 1998 CHIP End Bias  
 Sat May 23 21:04:10 GMT 1998 CHIP Water  
 Sat May 23 21:04:53 GMT 1998 CHIP End Water  
 Sat May 23 21:05:00 GMT 1998 CHIP Velocity  
 Sat May 23 21:06:16 GMT 1998 CHIP End Velocity  
 Sat May 23 22:01:03 GMT 1998 CHIP Bias  
 Sat May 23 22:01:16 GMT 1998 PICS Flat  
 Sat May 23 22:02:02 GMT 1998 CHIP End Bias  
 Sat May 23 22:02:10 GMT 1998 CHIP Water  
 Sat May 23 22:02:41 GMT 1998 PICS End Flat  
 Sat May 23 22:02:50 GMT 1998 CHIP End Water  
 Sat May 23 22:02:58 GMT 1998 CHIP Velocity  
 Sat May 23 22:04:13 GMT 1998 CHIP End Velocity

COMMENT: Sat May 23 22:55:55 GMT 1998

The dome was blocking the instruments so I had to rotate it all the way around to the West Position to clear the sun, its that time of year again when the sun travels North of our lattitude.

1998 CHIP Water  
 Sat May 23 23:03:59 GMT 1998 CHIP End Water  
 Sat May 23 23:04:10 GMT 1998 CHIP Velocity  
 Sat May 23 23:05:24 GMT 1998 CHIP End Velocity  
 Sat May 23 23:07:57 GMT 1998 PICS End Patrol

PSPT COMMENT: Sat May 23 23:14:17 GMT 1998

I found out that the declination drive was stalling due to overtight gear meshing, after loosening the mesh the drive worked very well, that solved the problem of not being able to point to far North declinations. I also found out that if the dec is driven too far the motor stalls as the cables start to push against the mount, that started happening as I was adjusting the dec drive. That position is farther North than we'll ever need to point so I moved the telescope a little to the south of that and set the dec limit switch to be activated there. Haosheng and I also talked about ways to move the dome without an ephemeris for this time of year to prevent blocking the sun. We may try a plan tomorrow. PSPT should be up and running again now. We also calibrated the pointing after the limit switch adjustment.

Sat May 23 23:33:50 GMT 1998 CHIP ending tape

COMMENT: Sat May 23 23:39:29 GMT 1998

TAPES:

\*\*\*\*\*

MKIII: Too cloudy for data.

PICS: P01198

CHIP: C00590

LOWL: L00518 in temp drive #0

Sat May 23 23:42:44 GMT 1998

MkIII