
Mauna Loa Solar Observatory Observer's Log

Tue Mar 2 18:48:33 GMT 2010
Year: 10 Doy: 061
Observer: koon
WEATHER COMMENT: Tue Mar 2 18:49:05 GMT 2010
Clear sky, wind=15mph from the SE, temp=42F.
___end___
COMMENT: Tue Mar 2 20:40:35 GMT 2010
Balanced spar, ran coolant thru CHIP - no leaks, rebalancing spar due to liquid in hoses. Adjusted and tied cable loops b
efore spar.
___end___
Tue Mar 2 20:57:07 GMT 2010 MKIV Start Patrol
Tue Mar 2 21:21:10 GMT 2010 MKIV End Patrol
Tue Mar 2 23:23:37 GMT 2010 MKIV End Patrol
COMMENT: Wed Mar 3 02:09:08 GMT 2010
Done for today, CoMP is hooked up and checked out, will align it tomorrow.
Mk4 has some problems, the signal is low, I'll check out the signal and data
cables tomorrow with Allen. CHIP still needs to be aligned, Coronado is
aligned and focused.
___end___
Wed Mar 3 02:13:31 GMT 2010
MkIV

20_57.rawmk4 21_12.rawmk4 22_42.rawmk4 22_56.rawmk4 23_11.rawmk4
21_00.rawmk4 21_15.rawmk4 22_45.rawmk4 22_59.rawmk4 23_14.rawmk4
21_03.rawmk4 21_17.rawmk4 22_48.rawmk4 23_02.rawmk4 23_17.rawmk4
21_06.rawmk4 22_35.rawmk4 22_50.rawmk4 23_05.rawmk4 23_20.rawmk4
21_09.rawmk4 22_39.rawmk4 22_53.rawmk4 23_08.rawmk4

J. Burkepile:
Adding on work report from Pete Nelson:

Hi all,

We had another good day, though a bit slower in pace. Much was
accomplished. We did a precision balancing of the spar which now looks
very good. Andy finished the electronic connection of CoMP and also
finished dressing all of the cables and the electronics rack. Great job
Andy! Steve was able to verify that all of CoMP's systems were working.
The camera was cooled and the fiber optic link also tested.

H-alpha was mounted to the telescope, aligned, focused, and the pass-band
centered. It is ready to take data. The focus might need some fine
adjustment (its very sensitive) but otherwise things look very good. We
tweaked the exposure times which seem to be optimal at about 200us for the
disk exposure and 5000us for the limb. We have a cadence of 10 seconds at

the moment. The observers with work with Joan etc. to get the best final parameters.

We measured the back focal length of the MkIV objective to be 2528.4 +/-1 mm. Note that the effective focal length (used for calculating the plate scale) must be run through Zemax. I'll do this when I get home. The effective focal length will probably be about 1cm longer than the back focal length.

Darryl and Ben tried to get good data out of the MkIV today. Some small pie wedges of the scans looked normal, but there's still something loose someplace. He will work with Allen tomorrow to get the rest of the bugs sorted out. There's all likelihood that it will be fixed without major issues. I tightened the camera mount which was very slightly loose. This may be the source of the drifting hairline heights - we'll just have to see when the system comes up. I was not able to examine the actual hairlines as these are buried deep within the instrument and would require a significant dissassembly to get to.

We tried to get the image back on CHIP but there's still some misalignment we don't understand. We plan to take the cover off tomorrow afternoon to try to align the optics manually. Again, there doesn't seem to be any major malfunction and we are certain we can get it back on line. We just need to see how the thing is aligned. We have yet to test if Alice's signs are right.

Ben has proven to be very handy at computers during the deployment. He came up to speed very quickly with the LabView program for H-alpha and also helped us get an H-alpha terminal in the dome using Win XP remote desktop. He also dug into the MkIV code with great enthusiasm. It was a pleasure working with him these pass few days.

Tomorrow the priority still goes to CoMP. With the spar balanced we should be able to get a rough alignment of CoMP. It would be great to get this done so Steve can concentrate on final commissioning and training on his next visit (TBD). Darryl and Allen will concentrate on the MkIV in the morning then CHIP in the afternoon (CHIP is only really accessible in the afternoon). Andy and I will work on cleanup and support.

Thanks all!

Pete