
Mauna Loa Solar Observatory Observer's Log

Sat Apr 16 17:33:49 GMT 2022

Year: 22 Doy: 106

Observer: berkey

WEATHER COMMENT: berkey: Sat Apr 16 17:33:52 GMT 2022

Temp: 41.2f, Humidity: 48%, Pressure: 28.639in, Wind: 3mph from 292degs, Skies: heavy o
vercast.

___end___

UCoMP COMMENT BY berkey: Sat Apr 16 17:34:20 GMT 2022

Doing some ucomp engineering to see if we can speed the time between extensions in a fi
ts file.

___end___

GENERAL COMMENT BY berkey: Sat Apr 16 17:34:22 GMT 2022

___end___

Sat Apr 16 17:42:02 GMT 2022 Running UCOMP Cookbook waves_1074_1hour.cbk line 0

Sat Apr 16 18:19:13 GMT 2022 Running UCOMP Cookbook waves_1074_1hour.cbk line 0

Sat Apr 16 20:29:06 GMT 2022 Running UCOMP Cookbook waves_1074_1hour.cbk line 0

GENERAL COMMENT BY berkey: Sat Apr 16 21:20:46 GMT 2022

PM Blew off UCoMP O1 with soap and water.

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GENERAL COMMENT BY berkey: Sat Apr 16 21:21:20 GMT 2022

multiple power fluctuations over the past few minutes.

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GENERAL COMMENT BY berkey: Sat Apr 16 22:05:06 GMT 2022

Starting to get fog.

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UCoMP COMMENT BY berkey: Sat Apr 16 22:35:32 GMT 2022

We were able to shave about 1 second of overhead time off of the 1074 waves measurement
s.

It was taking an average of 34.3 seconds build a fits file that is now dow to about 33.
3 seconds. A zero overhead time would be about 32.9seconds (this time includes only ca
mera integration time, camera read time and lyot filter relaxation time).

The changed made to do this were:

To optimize he way we get camera temps, the 4 measurements were done serially with 4 fu
nction calls (and need to be done while we aren't taking data. The calls are now done
in parallel between the two cameras in one function that collects all 4 values.

The LCVR ini files are now read once when the UCoMP controller is started instead of on
ce per recipe. (These ini files change every few months when Steve changes offsets.).

Moved a check of the CAL optics positions to be a little earlier in the recipe code, to
get it out of the fast critical path to triggering camera reads. This was a very smal
l change I don't think it actually improved performance.

___end___

UCoMP COMMENT BY Observer: Sat Apr 16 23:42:27 GMT 2022

Fixed a bug in the ucomp mech-controller that wouldn't let the O1 home.

Homing now seems to be working from the controller, and should be run from that locatio
n if/when it appears the O1 is not behaving well.

While we call it homing, it technically resets the controller and then finds the home s
witch so it is als like rebooting the mDrive motor.

___end___

ONSITE STAFF: berkey