
Mauna Loa Solar Observatory Observer's Log

Tue Oct 12 16:18:50 GMT 2021

Year: 21 Doy: 285

Observer: lisapg

WEATHER COMMENT: lisapg: Tue Oct 12 16:21:04 GMT 2021

Temp: 44.1f with wind speed at about 17-23mph from the South-Southeast. Sky covered in cumulus clouds at present and very wet close to the observatory. Waiting for better conditions before opening.

___end___

UCoMP COMMENT BY berkey: Tue Oct 12 21:11:04 GMT 2021

Changed the way we talk to the cameras when reading out temps or writing things like exposure time/frame rates. We had been waiting for fixed amounts of time between writing as waiting for results. We now kind of poll the camera for updates.

This might save 5-6 seconds per recipe. Running closed dome tests to see if the code behavior is still c

___end___

Tue Oct 12 21:18:56 GMT 2021 Running UCOMP Cookbook dark_80ms_2beam_16sums_BOTH.cbk line 0

Tue Oct 12 21:20:12 GMT 2021 Running UCOMP Cookbook 637_Scan.cbk line 0

Tue Oct 12 21:22:43 GMT 2021 Running UCOMP Cookbook 656_Scan.cbk line 0

Tue Oct 12 21:24:53 GMT 2021 Running UCOMP Cookbook 789_Scan.cbk line 0

Tue Oct 12 21:27:05 GMT 2021 Running UCOMP Cookbook 1074_Scan.cbk line 0

Tue Oct 12 21:29:19 GMT 2021 Running UCOMP Cookbook 1079_Scan.cbk line 0

Tue Oct 12 21:31:19 GMT 2021 Running UCOMP Cookbook 1083_Scan.cbk line 0

Tue Oct 12 21:33:21 GMT 2021 Running UCOMP Cookbook all_wavelength_coronal_flat.cbk line 0

UCoMP COMMENT BY berkey: Tue Oct 12 21:42:14 GMT 2021

Something went wrong with the temps; seeing -8 and 105C....

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Tue Oct 12 21:45:18 GMT 2021 Running UCOMP Cookbook dark_80ms_2beam_16sums_BOTH.cbk line 0

Tue Oct 12 21:46:34 GMT 2021 Running UCOMP Cookbook 637_Scan.cbk line 0

Tue Oct 12 21:48:34 GMT 2021 Running UCOMP Cookbook 656_Scan.cbk line 0

Tue Oct 12 21:50:35 GMT 2021 Running UCOMP Cookbook 789_Scan.cbk line 0

Tue Oct 12 21:52:37 GMT 2021 Running UCOMP Cookbook 1074_Scan.cbk line 0

Tue Oct 12 21:54:50 GMT 2021 Running UCOMP Cookbook 1079_Scan.cbk line 0

Tue Oct 12 21:57:00 GMT 2021 Running UCOMP Cookbook 1083_Scan.cbk line 0

Tue Oct 12 21:59:11 GMT 2021 Running UCOMP Cookbook all_wavelength_coronal_flat.cbk line 0

Tue Oct 12 22:24:34 GMT 2021 Running UCOMP Cookbook all_wavelength_coronal.cbk line 0

Tue Oct 12 22:26:00 GMT 2021 Running UCOMP Cookbook waves_1074_1hour.cbk line 0

GENERAL COMMENT BY lisapg: Tue Oct 12 22:57:17 GMT 2021

Raining

___end___

Tue Oct 12 23:24:21 GMT 2021 Running UCOMP Cookbook dark_200_1sums_80ms.cbk line 0

Tue Oct 12 23:29:21 GMT 2021 Running UCOMP Cookbook all_wavelength_coronal_flat.cbk line 0

Tue Oct 12 23:53:35 GMT 2021 Running UCOMP Cookbook waves_1074_1hour.cbk line 0

Wed Oct 13 00:49:38 GMT 2021 Running UCOMP Cookbook dark_200_1sums_80ms.cbk line 0

Wed Oct 13 00:59:22 GMT 2021 Running UCOMP Cookbook waves_1074_1hour.cbk line 0

Wed Oct 13 01:23:45 GMT 2021 Running UCOMP Cookbook waves_1074_1hour.cbk line 0

Wed Oct 13 02:10:00 GMT 2021 Running UCOMP Cookbook dark_80ms_2beam_16sums_BOTH.cbk line 0

Wed Oct 13 02:11:15 GMT 2021 Running UCOMP Cookbook 637_Scan.cbk line 0

Wed Oct 13 02:13:51 GMT 2021 Running UCOMP Cookbook 656_Scan.cbk line 0
Wed Oct 13 02:15:28 GMT 2021 Running UCOMP Cookbook waves_1074_1hour.cbk line 0
UCOMP COMMENT BY berkey: Wed Oct 13 03:03:30 GMT 2021
Working to optimize the UCOMP software:

Before starting a waves 1074, 3wave,2beam,11 sums recipes took on average 30.4 seconds to run.

Editing the camera temp correction to retrieve the ADC coefficients once per run of the observing code (instead of every temp read) and changing the serial communication with the cameras from one where we sent a command and waited a period of time before reading to a more constant polling until the the command has finished. Got the time down to an average of 27.8 seconds per run.

Re-ordering operations involved with setting up an observation as well as allowing concurrent operations of some work. Move the average time down to 26.8.

If we disable the polling of the calpol/calret/and calopitcs the time can be brought down to 26.4 seconds for a 1074 waves. Right now I think we need to keep this polling to make sure the header is up today, but longer term we should look at moving this out of the run-recipe function.

____end____

ONSITE STAFF: lisapg