
Mauna Loa Solar Observatory Observer's Log

Wed Mar 2 17:38:50 GMT 2022

Year: 22 Doy: 061

Observer: berkey

WEATHER COMMENT: berkey: Wed Mar 02 17:39:11 GMT 2022

Temp: 44.2f, Humidity: 10%, Pressure: 28.691in, Wind: 6mph from 88deg, Skies: clear
____end____

Wed Mar 02 17:40:51 GMT 2022 UCoMP Restarted from pause

GENERAL COMMENT BY berkey: Wed Mar 02 17:44:45 GMT 2022

PM Blew off Kcor 01

____end____

GENERAL COMMENT BY berkey: Wed Mar 02 17:44:49 GMT 2022

PM Blew off UCoMP 01

____end____

Wed Mar 02 17:45:46 GMT 2022 Running UCOMP Cookbook all_wavelength_coronal_flat.cbk line 0

Wed Mar 02 17:46:55 GMT 2022 Kcor Focus/alignment program exited

Wed Mar 02 18:08:32 GMT 2022 KCOR Start Synoptic Patrol

GENERAL COMMENT BY berkey: Wed Mar 02 18:08:56 GMT 2022

____end____

****Possible CME in Progress berkey**** : Wed Mar 02 18:24:35 GMT 2022

Observers report with high confidence a CME seeing launching near PA60 with a minimum width of 90 at UT time 18:00Ut ,event was already in progress at start of observing.

____end____

Wed Mar 02 18:59:18 GMT 2022 Running UCOMP Cookbook all_wavelength_coronal.cbk line 0

UCoMP COMMENT BY berkey: Wed Mar 02 19:16:42 GMT 2022

Just noticed UCoMP images had pixel value identically zero. Not sure how long this was happening. Power cycling cameras to try and address this.

____end____

Wed Mar 02 19:17:37 GMT 2022 Running UCOMP Cookbook all_wavelength_coronal_flat.cbk line 0

KCOR COMMENT BY berkey: Wed Mar 02 19:24:22 GMT 2022

Changed the kcor alignment calculation algorithm, to automatically set is threshold to be used.

Perviously an observer needed to manually set the threshold value to decide which pixels to use in the barycenter calculation. It was found after some experimentation the bary center algorithm worked best when the threshold was tweaked to include ~3000 (on) pixels in the barycenter calculation. Given an occulter radius of about 180pixels this gives us a bright ring ~3 pixels wide to centroid on.

In the new code we the observer specifics the number of pixels to use in the threshold. And then code calculates a threshold value to include that many pixels.

With the new changes in place the guiding performance seems to be working well; using 3,000 pixels in the calculation.

And it has been observed that we optimum threshold value to centroid on 3000 pixels has changed from about -200 at 17:50 ut to ~8500 at 19:20UT. It is expected that this value will increase to ~20,000 as the aerosols increase later in the day.

____end____

GENERAL COMMENT BY berkey: Wed Mar 02 19:29:37 GMT 2022

Power cycling the cameras fixed UCoMP.

____end____

Wed Mar 02 19:33:55 GMT 2022 Running UCOMP Cookbook all_wavelength_coronal.cbk line 0

Wed Mar 02 20:03:10 GMT 2022 Running UCOMP Cookbook all_wavelength_coronal.cbk line 0

Wed Mar 02 20:19:34 GMT 2022 KCOR End Patrol

Wed Mar 02 20:19:35 GMT 2022 KCOR Start Calibration script: c:\kcor\mlso-calibration22deg-20171025.ini

Wed Mar 02 20:31:38 GMT 2022 Running UCOMP Cookbook all_wavelength_coronal.cbk line 0

Wed Mar 02 20:34:49 GMT 2022 KCOR End Calibration Script

Wed Mar 02 20:35:06 GMT 2022 KCOR Start Synoptic Patrol

Wed Mar 02 20:35:06 GMT 2022 KCOR Start Synoptic Patrol

Wed Mar 02 20:59:39 GMT 2022 Running UCOMP Cookbook all_wavelength_coronal_flat.cbk line 0

Wed Mar 02 21:15:07 GMT 2022 Running UCOMP Cookbook waves_1074_1hour.cbk line 0

GENERAL COMMENT BY berkey: Wed Mar 02 21:19:48 GMT 2022

Low clouds to the west of the observatory.

____end____

Wed Mar 02 21:30:16 GMT 2022 KCOR End Patrol

Wed Mar 02 21:30:18 GMT 2022 KCOR End Patrol

Wed Mar 02 21:30:19 GMT 2022 UCoMP Paused for clouds

Wed Mar 02 21:33:14 GMT 2022 UCoMP Restarted from pause

GENERAL COMMENT BY berkey: Wed Mar 02 21:33:42 GMT 2022

Shutting down for clouds and electrical work.

____end____

Wed Mar 02 23:32:15 GMT 2022 Kcor Focus/alignment program exited

GENERAL COMMENT BY berkey: Wed Mar 02 23:38:47 GMT 2022

Facility power restored everything looks to have come back properly.

Gordon was unable to get the phase protection working. So for now we have bypasses that equipment. On the next maintenance cycle facilities will build up a test some new phase protection equipment to be installed at that time.

The current behavior is such that if any power phase is online at the edge of the building that phase will be available inside the building. If the phase protection was operating if we lost any phase at the edge of the building all 3 phases would be down inside, until all 3 phases were online and stable for 5 minutes.

____end____

ONSITE STAFF: berkey