Mauna Loa Solar Observatory Observer's Log _____ Mon Oct 14 16:47:26 GMT 2013 Year: 13 Doy: 287 Observer: berkey WEATHER COMMENT: berkey: Mon Oct 14 16:47:36 GMT 2013 temp 36f, wind 5 mph from SW, patchy cirrus with thicker clouds banks stacked up to the south east Last nights thunderstor m on the east slopes of manua loa semed to bring some ice to the raod end Mon Oct 14 16:57:24 GMT 2013: PSPT Start Patrol KCOR COMMENT BY mlso: Mon Oct 14 17:04:53 GMT 2013 For some reason setting the exposure time to 500ms in the kcor free running code causes labview to instantly exit. Unlike a normal labview crash there is no error message or any other feedback propograted to the user, the labview qui's just in stantly disapper. end KCOR COMMENT BY mlso: Mon Oct 14 17:20:19 GMT 2013 I noticed the trigger delay is back to 0 ms for both cameras. I believe this must have got reset with the power outage on kcor a last week (or the week before) ____end Mon Oct 14 18:27:51 GMT 2013: PSPT Start Patrol GENERAL OBSERVATORY COMMENT BY mlso: Mon Oct 14 19:58:07 GMT 2013 Doing guider engineering this morning. Cirrus is starting to thin, hopefully we can get some science a bit later. end KCOR COMMENT BY mlso: Mon Oct 14 21:40:31 GMT 2013 Changed the default triggers to 2.0ms end Mon Oct 14 23:14:22 GMT 2013: PSPT Abort Patrol Mon Oct 14 23:14:26 GMT 2013: PSPT Abort Patrol GENERAL OBSERVATORY COMMENT BY mlso: Mon Oct 14 23:20:33 GMT 2013 Domes are closed end KCOR COMMENT BY mlso: Tue Oct 15 02:29:30 GMT 2013 One more day with no science data ;(end KCOR COMMENT BY mlso: Tue Oct 15 02:29:42 GMT 2013 Added a guider zero point offset feature to SGS. This adds two (ra and dec) floating point controls to the enginnering GUI. This control is and will be limited to small va lue currently +/-0.1 but with some more testing I think we can tighten this down by at least a factor of 10. Every time the PID loop is triggered this guider zero offset is summed with the "observing" setpoint and sent to the PID 1 oop. The guider zeropoint is also subtracted from the input Quad Cell Voltage values for everything expect the PID loop. This means the Save form GUI's server output and pointing error esimates are based on this offset location, while the PID sees all the "raw" values. From what I can tell under crummy skys this seems to work pretty well. The SGS server output also pushes this quider setpoint value after the LOOP closed fraction value.

I have also changed K-cor observing code to consume these two values and produce two new fits header keywords: SGSRAZR and SGSDECZR. Testing seems to suggest that these values don't currently get written into the fits file properly. And are a

lways zero. This should be ok for the next day or two as the default values for the guider zero point are 0 in the SGS co de anyway.

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