

The tests are done in GHRIL room at WHT, La Palma, cooler=8 degree,

- 1). measure the dark current (assume gain=0.6e/ADU)
 - master: swpedcam12s.fits, swpedcam110s.fits, 15 e/pixel/second
 - slave : swpedcam22s.fits, swpedcam210s.fits, 15.6 e/pixel/second
- 2).take gain measure, and ask Derek for naomigain (I could not run at here)
 - ////////////////////////////////////
 - Check (5:35,5:35) in each set you send me and got the following results:-
 - slave gain for that quadrant = 0.53 e/ADU
 - master gain = 0.55 e/ADU
 - ////////////////////////////////////
 - take noise measurement again
- a). change back with Ingrid controller working
 - /home/xg/naomi_image/testimage/
 - Mater controller===master cable====master header, mastertry0.fits (HIH,SET=200)
 - Slave controller===slave cable====slaver header, slavetry0.fits (HIH,SET=200)
 - noise is same as before
- b). change back with Ingrid controller off, not see much difference
 - Mater controller===master cable====master header, mastertry1.fits (HIH,SET=200)
 - Slave controller===slave cable====slaver header, slavetry1.fits (HIH,SET=200)
 - switch on Ingrid controller again
- c). swap clock cable for master and slave, the video cable kept unchanged,
 - not make much difference
 - Mater controller===slver clk cable====master header,
 - Slave controller===master clk cable====slaver header,
- d). swap controller, get better noise
 - Mater controller===slave cable====slaver header, msCtrlSlhdHih.fits (HIH,SET=200),
 - msCtrlSlhdSlw.fits (SLW,SET=200)
 - Slave controller===master cable====master header
 - slCtrlMshdHih.fits (HIH,SET=200),
 - slCtrlMshdSlw.fits (SLW,SET=200)
- e). change Slaver controller Timing board setup into master setup (Clk, EPROM, sync)
 - change Master controller Timing board setup into slave setup (Clk, EPROM, sync)
 - test noise again, get similar to d). Now, the configuration (re-labeled)
 - Mater controller===master cable====master header, newmasterHih.fits (HIH,SET=200),
 - newmasterSlw.fits (SLW,SET=200)
 - Slave controller===slave cable====slaver header
 - newslaveHih.fits (HIH,SET=200),
 - newslaveSlw.fits (SLW,SET=200)

The NOISE results (take master/slave gain=0.55e/ADU)

imstat	[6:36,44:74]	[53:83,44:74]	[53:83,6:36]	[6:36,6:36]
newmasterHih.fits	4.79	4.16	4.27	5.45
newmasterSlw.fits	4.08	3.07	3.23	3.71
newslaveHih.fits	4.77	4.15	5.04	4.79
newslaveSlw.fits	4.04	3.48	3.60	4.82
msCtrlSlhdHih.fits	4.53	3.99	4.76	4.93
msCtrlSlhdSlw.fits	3.84	3.15	3.67	4.77
slCtrlMshdHih.fits	4.48	3.75	4.06	5.21
slCtrlMshdSlw.fits	4.08	2.99	3.29	3.69
mastertry0.fits	4.91	4.25	4.71	7.52
slavetry0.fits	4.11	3.83	4.07	3.91

the noise at high speed under new configuration is near as good as at ATC test. finely turning needs much more access time of WFS camera, which is not possible at the commissioning stage. Maybe