TODO JUNE RUN

- check Pat Com target : DT scan with hexapod (?) (hot spot)
- automatic coma removal
- click-n-go con esapodo
- procurare MD x TT gestion con meg 18

ANALISI DATI CT:

- ~~RON~~ DARK : { mappe Δ dark / °C ; ~~mappe mappa Ø in fun T~~ ; fit Δ dark / °C } — rosso ~ 1.4 ADU/°C ; blu ~ -1.5 ADU/°C ; verde ~ ±0.5 ADU/°C
- JITTER ~~[struck]~~ POSITION: VS T
- RON : OK
- SLOPE OFFSET : plottare 2D - fit Ø
- TT slope VS T

TODO:
misurare FoV LGSW
scan con sorg ext
plot flusso VS POS

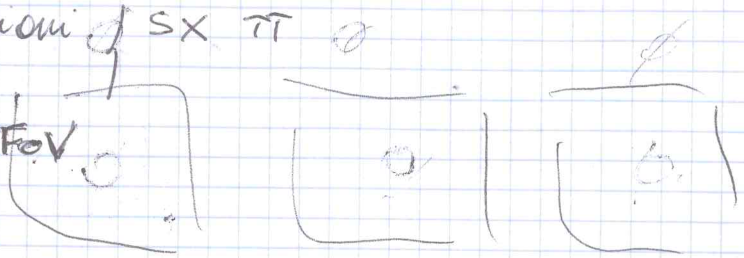
PX su striscia 245;69
247;71

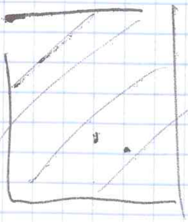
Procedure CT:

1) diodes OFF
2) restart LGSW
3) check SH w/o light
4) dark acq
5) measure RON
6) ~~[struck]~~ diodes to HF
7) set PI to nominal
8) set PUP Mot to nominal
9) acq slope OFFSET
10) SH in HF
11) ~~[struck]~~ diodes LF
12) SH in LF
13) diodes HF
14) PCT
15) turn PC OFF

→ check LGSW con LAB 110V
→ ~~ex~~change HVC
→ presentazioni } SX TT

→ Pat Com } FoV
→ LGSW





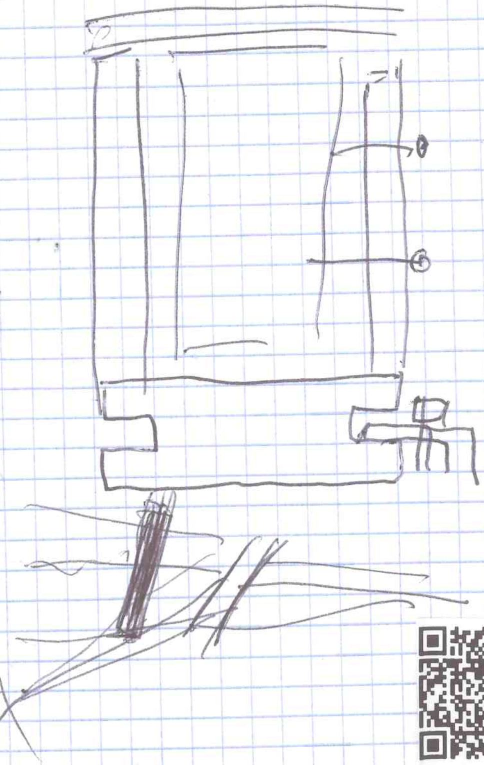
390

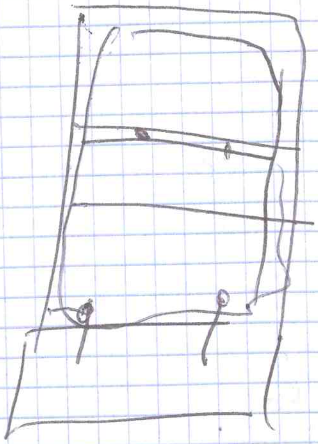
TO CHECK
- BCU warning 3.3V (riportare linea su PS)
- diagramma X identificare HW in TWIKI
- mandare MARTIN log errore property crawler
- Ricontrollare MEDIAN dark frame

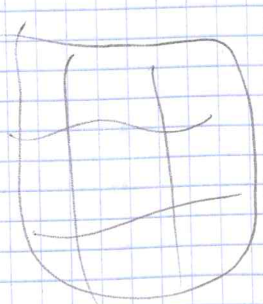
ricedere SR di portare | charge measuring device 9/6
| ion gun

te commissioning DX TT:en bscWR.
> filter x mag 18 su TT
OCI 2 back in fall '15
-TABLE needs to be pinned
mbiare connettori Stocchi su manifold SX
ute 29 to 32 completely to clean room
configure ext IP of SX workstation
ders@lbto.org → x shipment
heck clean room connections
220V transformer
ds pipes (mancano connettori PNCCD)
entize Hours per altri Rectus
S + Steve for ports config in clean room (TT SX)
heck with EP chi fa cosa su TT?
X-LGSW installation wait feedback from SR
pare PI shippare!
dd cables to spare list e su TWIKI } foto + label con barcodes
ek PI cables SX ~~maninare~~ → etichettare | BCU PI 0 | YEL PI 7 | RED PI 8
heck SX-LGSW worklist serial number | MENIR 230B & | NE 230B
SW drawings SX
~~[illegible]~~ DWG
PDF

120



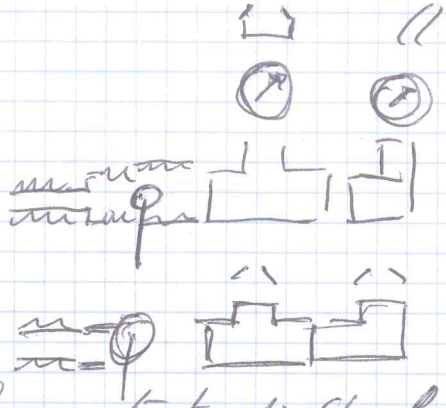




ARGOS
CablePiezoBCU7
aowiki.arcetri.astro.it/ARGOSP...

ARGOS
CablePiezoBCU0
aowiki.arcetri.astro.it/ARGOSP...

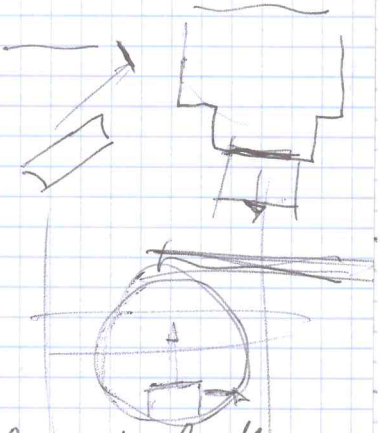
tubo 1/4" 2 x 1.5m
2 x 1.2m
2 x 1.0m
2 x 30 cm



4 x T 3/8" (DX)

⇒ abbiamo già un manifold da lab con tanto di Straub
Bisogna riconfigurare SX manifold x telescopio

- Comprare
  - gamma isolante 09 x 16
  - velcro x coperto camera
  - gamma grande x apertura Pot Cam

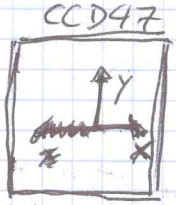


29/6

14:00 we start system, close on LGSW only and check QC (one quadrant seems to have bad behaviour, no light)

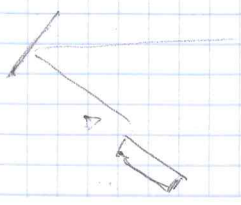
we try to acquire QC DARK: [187, 130, 141, 107] 40s integration
LUCI rotator @ -60° (or 300°) in such a way to have xy stages parallel to pixel lines in CCD47

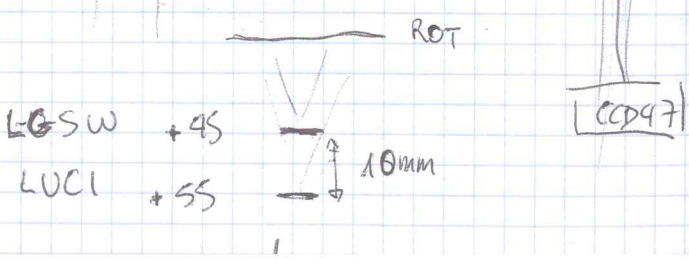
- before we had [230, 110, 160, 110]



Then FLAT FIELD using dome light
we have relative efficiency of: [83; 98; 87; 11] %
this is incompatible with old measurement
GILLES goes up (fiber #4 was not properly plugged)
new measurement: [83; 98; 86; 100] % → good!

16:30: fibers 1 and 2 are swapped on the AGW patch panel
17:00: fibers adjusted we close the ⏚ loop on the QC





ore on since morning. We run a PCT

15 06 30 _ 025624 } 107; 111; 138 slight pattern on blue
_ 025749

_ 025951 } 107; 111; 138 diodes ~~fluxes~~
_ 030117 currents : [0.1; 0.1; 0.03]

0/6

10:00 spot ore within LGSW, we have strong coma, we must flatten

_ save a plot : 20150630_ARGOS_LGSW.sav

XA :		
-1.1	-51
-7.9	245
-2.144	

OARD : -69.9
-47.6
~~[illegible]~~ 33.3

LUCI ROT @ 300 deg

loop closed on LGSW best focus on FLAO (evaluated from truth sensor)
FW1 ~~[illegible]~~ with 50-50%

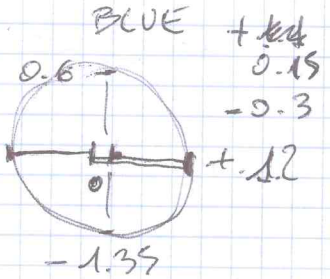
↓

ramid centered on LGSW FoV (we call it ∅;∅)

ABOARD [mm]		TN	FLUXES		
∅	∅	20150630_172142	5000	4600	4600
.6	∅	172601	5300	4700	200
.9	∅	–	5000	∅	∅
2	∅	172740	4000	∅	∅
5	∅	–	∅	∅	∅
0.6	~~0.6~~ ∅	172950	5800	4000	4500
1.2	~~1.2~~ ∅	173109	∅	∅	3800
1.8	~~1.8~~ ∅	173146	∅	∅	∅
	0.6	173327	3600	1300	4500
	0.9		∅	∅	3800

ϕ	1.2	–	ϕ	ϕ	1000
ϕ	1.5	–	ϕ	ϕ	ϕ
ϕ	-0.3	–	5000	4800	2500
ϕ	-0.6	–	5000	4600	ϕ
ϕ	-0.9	–	4200	4600	ϕ
ϕ	-1.2	–	1200	4500	ϕ
ϕ	-1.5	–	ϕ	3400	ϕ
ϕ	-1.8	–	ϕ	ϕ	ϕ

BLUE offset WRT ~~center~~ ϕ;ϕ [+0,15 ; -0.3]



We go out focus on the Pat Cam moving by +3mm in x and y

BOARD [mm]		TN	Wrt PATCAM
+3.0	ϕ	174789	204 ; 127
-3.0	ϕ	175231	156 ; 128

BLUE center
-69.75
-47.9

⇓

central pixel seems to be [180 ; 128] on Blue Pat Cam

We also evaluate the plate scale on Blue Pat Cam: 6 mm = 10" ≡ 48 px (bin 4)

⇒ 0.208"/px

wrt the manual hot spot (detected by eye) we are out of [0.6 ; 0.4]"

11:00 we check the best focus on WC1 using N30 and FLAO BIN 1 REC = 20130125_161348

BIN 2 REC = 20130916_221257 — because the dome light does not allow BIN 1

We take images on N30, while moving Z stage

o o o

YELLOW offset WRT Pϕ : X: +0.75 − 0.9 = -0.12

Y: 0.75 − 1.35 = -0.45

⇒ YELLOW CENTER = [-70.0 ; -48.0]

RED offset WRT Pϕ : X: 0.7 − 1.5 = -0.8

Y: 1.35 − 0.45 = 0.9

RED center = [-70.7; -46.7]

o oo

check the old LUCI images taken with FLAO BIN 1
img v70% SR . Z stage was @ 55 mm, rotator @ 210°
LUCI2.20150404.0173.fits

we move the LUCI rotator to 210 deg, 55 mm Z seems still the best focus position
take a scan between 50 and 60 mm
best seems to be 56.25 mm
take 20 darks with n30 and then we move to n3.75

go back to Pot Com hotspot : we close on FLAO BIN 2 with ARGOS

BOARD POS [mm]		TH	PAT ~~YELLOW~~ CAM	
R Ø	Ø	213449	none	
3.0	Ø	213706	199; 107	
3.0	Ø	213951	158; 130	
			[178; 118]	YELLOW FoV CENTER

BOARD POS [mm]				
-70.7	-46.7	214304	none	
-67.7	-46.7	214531	205; 128	
-73.7	-46.7	214813	158; 121	
			[181; 124]	RED FoV CENTER

ed seems not so fine ... we try again the scan. we start on [-70.7; -46.7] and we take the stage pos @ which we ave Ø flux on red.

BOARD		RED flux	DIREC	
70.7	-46.7	2200		
70.7	-45.8	Ø	+Y	ΔY = 2.4 mm / 0.6 "/mm = 4"
70.7	-48.2	Ø	-Y	middle = 47mm
70.7	-47.0	2200		
69.3	-47.0	Ø	+X	ΔX = 2.5 mm = 4.2"
71.8	-47.0	Ø	-X	

EST FOV CENTER @ [-70.55; -47.0]

BOARD		TM	PAT CAM
-73.55	-47.0	220453	159 ; 123
-67.55	-47.0	220759	205 ; 130

182 ; 126 | RED FoV CENTER

We go to the center of RED FOV [-70.7; -47.0] take the PI offset

PI RED -4.02 ; -0.61
PUP RED 473 ; 663

We center on YELLOW and take the PI OFFSET -2.0 ; 3.2
PUP YEL 270; 722

PI BLUE : -3.06 ; 0.2
PUP " : 768 ; 514

new PatCam target 20150701-075500

15:45

We try the new TM reconstructor — previous was 20141130_013400

REC TAG	TM
TCoG48 BIN 2	225001 ; 225032
GLAO 1, PYR bin 2	230904 ; 231504
~~GLAO 2, PYR bin 2~~	

} seem the same

Mirror PANIC @ 2015-06-30 23:16:34

PCT 20150701_020735 ; 020902 } 94 ; 113 ; 125

We also update the PI initial position : old one is 20141130_042700
NEW PI INITIAL POSITION : 20150701_080100.fits

1/7 10:00 cal unit deployed

We start from new REC test : we load GLAO 2 PYR BIN2

REC TAG	TM
GLAO 2, PYR bin 2	20150701_182848 (broken)

Mirror PANIC ERROR 20150701_182855

We try to open the ADSEC cabinet door: we go to horizon and then look to zenith

12:45: look to cabinet

GLAO 2 PYR BIN2: 20150701_195943
-195503

GLAO 1 PYR BIN2: -195720
-195738

TCoG98 PYR BIN2: -195919
-195932

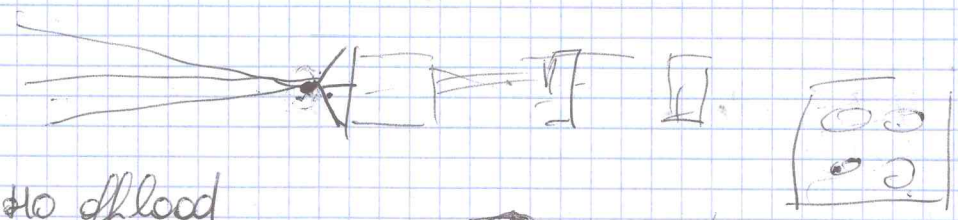
We move to QC hot spot detection on CCD47:
we close the TT loop on QC, FW1 dichroic 700-1000
FW2 QC mirror
then we pause the loop and we exchange the filter on FW2
We move to 50-50 on FW1

loop closed on QC: BOARD @ -70.3
-47.4
39.3

FW1 50-50
DICHROIC 700-1000

CCD 47 BIN 4	HOT PX	
QC MIRROR	127; 133	
EMPTY	129; 127	516 508

We try to close the loop on CUCI N30 to check the LGSW peshomene
with pyr copointing we have piezo @ -2.20; 0.06
since the co-pointing angle is not good @ BIN 4 we switch to BIN 2: 100 Hz, 6 λ/D
piezo offset: -2.20; 0.25



pbl with TS HO offload

We go to 56.5 and we take
LGSW SLOPE OFFSET: 2015

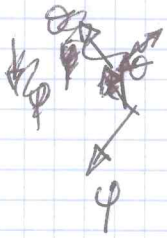
19:00 FLAO BIN 1 and we save a flat
ADSEC FLAT: 20150701 - 400 modes. sav

20:00 PCT : 20150702_030018 | 90; 109; 118
030140 |

new LGSW DARK: 20150702_030717

21:30 we point @ NGC 6764

ABS EN 19801 17202 20170 LM1 POS



TN 20150702_055820

we optimize the image running TS DIMM ν 1.0"

20150702_060102

We reduce PC to 500 ms

060320

We run TT gain optimization

back to PC opening 1000 ms, low gain but high face on mirror

061833 ←

062157

we run QC autogain ν 1.0 → 063412 G = 1.0; 0.45; 0.35

063508 → probably loses lost

FoV

BOARD POS center -74; -50; 59.5

broken ← 085640 G = 0.01; ∅; ∅

085715

085748 → broken

085932 G = 1.5; 0.45; 0.4

085953

spot re optimized → 091701 G = 0.1, ∅, ∅ & LUCI: 0.84"

092228 G = 1.2, 0.9, 0.35

092259

Since we are having super bright spots we check PC:

PCT: 20150702_094052 | ν 100 ÷ 150

092133 |

We move to Hippercos star

PYR TT TN: M 04293 | QC

M 2845 |

M 4925

no way! we always loose the edges of the pupil