DAY 7 **Day 05 may (125)** **Ewout/Bernard**		**Theme: twilight and dome flats for old and new filters, gain template to check final FIERA filter setting, monitoring script/illumination correction work**		
Seq	**Local time**	**Activity**	**Comment**	
Flat125 1-7	7:33	Twilight flats Johnson V	High wind conditions, pointing SE, ass end in the wind	
Flat125 8-13	7:38	Twilight flats Johnson B		
Flat125 14	8:04	Quick check		
Flat125 15	8:08	Dome flat Stromgren V	Test for exposure time. 60 secs, ~50000 ADU, we'll keep it.	
Flat125 16-20	8:10	Dome flats Stromgren V	To be checked whether it looks like u' dome flats.	
Flat125 21-40	8:20	Gain z'		
Bias125 3-4	8:41	Read noise	Noticed that lamps on ground floor of dome are on. May have been on during dome flats and gain.	
Bias125 5-14	8:42	Bias		
			Tried to start some domeflats, but the lamp failed to initialize properly again.	
Flat125 42-46	9:06	Dome flats g' 3s	Maximizing exposure level: good	
Flat125 47-51	9:12	Dome flats r' 0.8s	Maximizing exposure level: good	

Flat125 52-56	9:18	Dome flats i' 0.8s	Maximizing exposure level: good	
Flat125 57-61	9:24	Dome flats z' 4.0s	Maximizing exposure level: NOT GOOD. Saturation in 85-88.	
			*Old hardware components (video boards) reinserted by Olaf/Christoph, replacement capacitors inserted yesterday are apparently different value from originals. Originals are back in. (**Changed from yesterday!**)*	

	16:00	Meeting (Ewout notes)	– Andrea:
			  – Guiding issues
			  – Tonight try to run IA and AG CCDs alongside mosaic.
			– Dietrich:
			  – Issues with #91: a bit is stuck. Histogram of pixel values shows gaussian around bias value, but peak at 255. Videoboard replaced by Olaf, to try to solve this.
			  – The checkerboard artifacts noted by Dietrich are likely caused by synchronization issues.
			  – Fiber illumination test of AG/IA CCDs: Olaf concludes this is not electronic crosstalk, but rather reflected light.
			– Edwin:
			  – No OBJECT in headers. OB/TPL does not let you set it. Use p2pp3 + OT + BOB to do this. Steffen will give crash course.
			– Bernard:
			  – ICS is busy during readout and merging. If Andrea can improve this, the operations can be more	

			efficient. – Some new filters inserted “for demonstration tomorrow”? – Ismo: – HD replacement on IWS success: now 850GB.	
		Meeting (John notes)	-Andrea B. -guiding appears to be working, but needs refining, Thomas S. can help -Koen -closed dome, took darks -Ewout -one chip with dark current, old capacitors back in place (**different from yesterday!**) -Edwin -flat fields investigation reveals much scattered light, will need to be properly characterized, all are circularly symetric except in u -Dietrich -use aux CCDs to help characterize flat fielding, use as probe -RTD not easily seen on IWS -Thomas -startup scripts should make this happen -object names not set -Stefan -need to use P2PP instead of manual BoB, will give class, can be done from anywhere -Ewout -twilight flats in B and V, used manual	

			lamps for dome flats: stromgren v, g, r, i, z, -Bernard -ICS is sometimes busy during readout causing merging delays, Andrea B. will look at -cabinate alarm researched, appears to be solved by modified flow rates -filter work under way: e.g., repeatability -Dietrich -FIERAs 1 and 3 out of sync, possilbly causing electronic noise -fiber tests revealed no apparent cross talk, but may be wrong, John to sync with Bernard -Thomas -A/C, LN2 issues -IT person -HDD replacement successful: 825GB on IWS -Edwin -need u sky flats -need Leo triplet in g and in i -Andrea -tests with full mosaic (36 CCDs) to check for interference -Ewout -who opens telescope? Tonight Thomas, tomorrow one other	

NIGHT 7 **Night 05/06 may (125/126)** **Ewout/Koen early, John/Edwin late**		**Theme: first half guiding tests, image quality tests, bright stars tests. conditions: clear, but a little windy, seeing > 1”**		
Seq	**Local time**	**Activity**	**Comment**	
Flat125 62-67	19:25	Twilight template in u		
Flat125 68-73	19:35	Twilight template in ugri		
Flat125 74-83	19:55	Twilight flat i	0.5 sec exposure is test, >0.5 sec exposures calculated, includes a manually set 60 sec test	
Obs125 36	20:55	Guiding testing		
Obs126 1-5	21:00	Guiding testing		
Obs126 6	22:10	Pre-focus sequence in g 7 sec		
Focus126 1	22:10	Focus template in g 7 sec		
Obs126 7	22:20	Pre-focus sequence in g 7 sec		
Focus126 2	22:20	Focus template in g 7 sec		
Obs126 8-12	22:25	Dither n=5 in g 300 sec	Move to Leo field	
Obs126 13-17	23:00	Dither n=5 in i 300 sec		

Obs126 18	23:35	Guiding testing		
Bias126 1-2	23:50	2 biases with dome moving	Filter r in place instead of opaque	
			Within the following focus sequences Koen has done image analysis CCDs aquisitions that will not appear in the standard archive	
Obs126 19-20	00:00	2 pre-focus exposures in r 7 sec		
Focus126 3	00:05	Focus sequence in r 7 sec		
Obs126 21	01:10	Pre-focus exposure in r 7 sec		
Focus126 4	01:10	Focus sequence in r 7 sec		
Obs126 22	01:30	Pre-focus exposure in r 7 sec		
Focus126 5	01:30	Focus sequence in r 7 sec		
Obs126 23	02:50	Pre-focus exposure in r 7 sec		
Focus126 6	02:50	Focus sequence in r 7 sec		
Std126 1-6	03:30	Polar Field	New OB Polar_master_key Z exposure time is 150 sec instead of 115 sec- should be fixed	
Obs126 24-28	04:10	Hercules 2 dither in g 1500 sec	Move to Hercules 2. Satellite trail (07:28:46.777)	
Obs126 29-33	04:40	Hercules 2 dither in r 1500 sec	Satellite trail (07:42:53.505)	

Std126 7-12	05:25	SA 110	New OB Landalt_SA_110_Master_Key seeing 2”	
Obs126 34-37	06:10	Bright star experiment (mag 4.6)	Offset to each detector. Offset too small (arcsec instead of arcmin)	
Obs126 38-44	06:25	Bright star experiment (mag 1.6)	Offsets seem too large	
Obs126 45-52	06:35	Bright star experiment	It appears that negative offsets are not allowed. Ask Andrea about the rules.	
Obs126 53-60	07:05	Bright star experiment	Exactly the same incorrect behavior than previous attempt	