

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 1798 - L2 Version 5
Chandra X-Ray Center

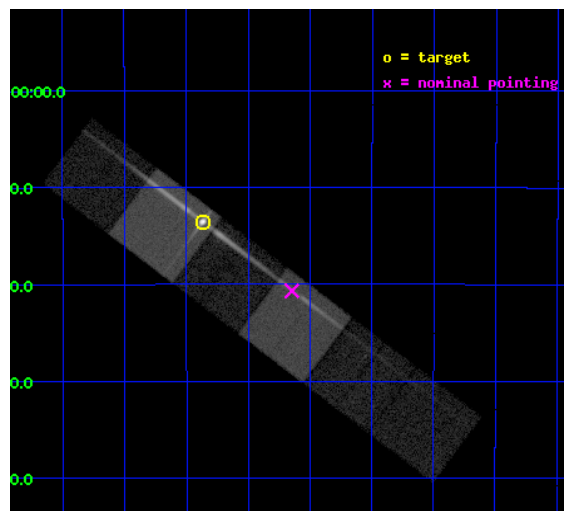
L2 Processing Date : Jan 11 2013

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1 Front

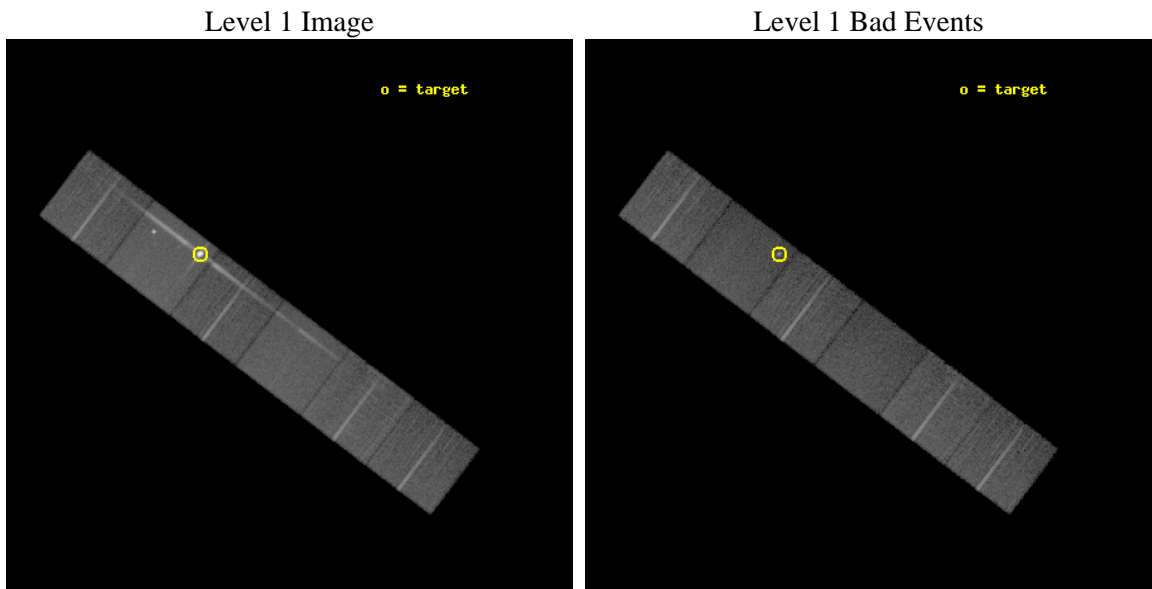
seq_num	390016	Sequence number
obs_id	1798	Observation id
title	GRATINGS CALIBRATION OBSERVATIONS OF PKS2155-304	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	PKS2155-304	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	329.716667	Observer's specified target RA [deg]
dec_targ	-30.225556	Observer's specified target Dec [deg]
ra_nom	329.53680874637	Nominal RA [deg]
dec_nom	-30.344671886307	Nominal Dec [deg]
roll_nom	37.077657118832	Nominal Roll [deg]
revision	5	Processing version of data
ontime	19756.759048149	Sum of GTIs [s]
livetime	19506.587068989	Livetime [s]
ontime4	19756.759048149	Sum of GTIs [s]
ontime5	19756.759048149	Sum of GTIs [s]
ontime6	19756.759048149	Sum of GTIs [s]
ontime7	19760.000018388	Sum of GTIs [s]
ontime8	19760.000018388	Sum of GTIs [s]
ontime9	19760.000018388	Sum of GTIs [s]
l2events	278017	Number of level 2 events



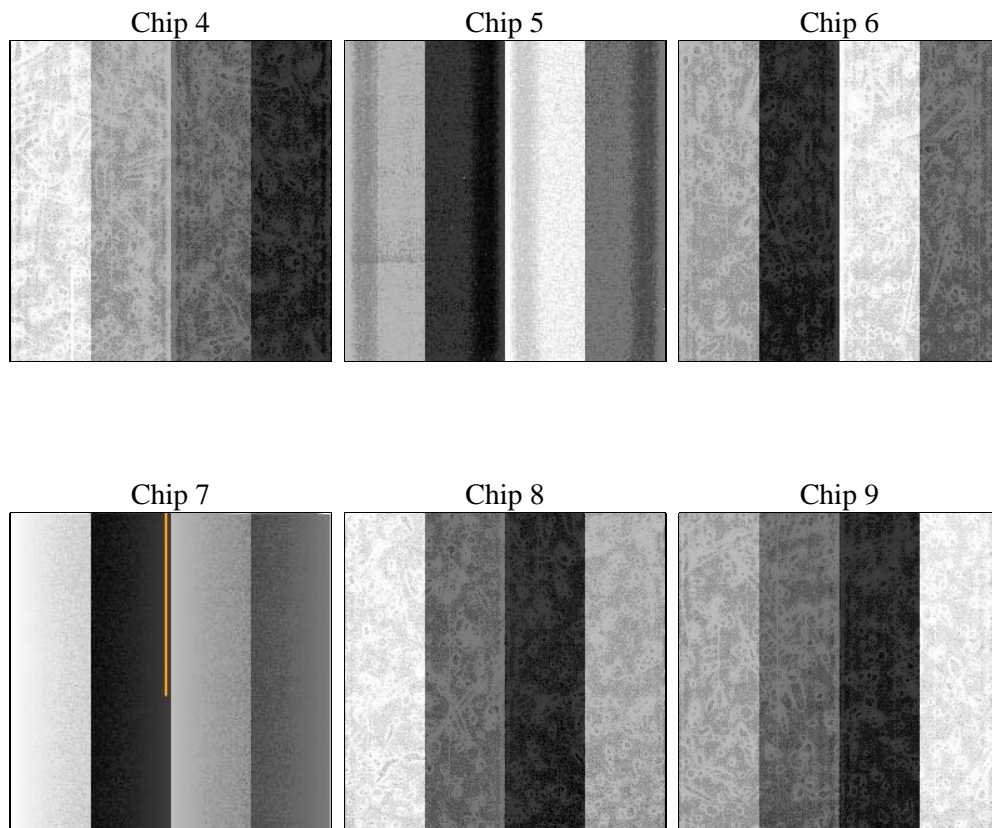
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	20000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	19756.759048149	Sum of GTIs [s]
caldbver	4.5.1.1	 	ontime4	19756.759048149	Sum of GTIs [s]
date	2012-08-31T13:40:38	Date and time of file creation	ontime5	19756.759048149	Sum of GTIs [s]
revision	4	Processing version of data	ontime6	19756.759048149	Sum of GTIs [s]
			ontime7	19760.000018388	Sum of GTIs [s]
			ontime8	19760.000018388	Sum of GTIs [s]
			ontime9	19760.000018388	Sum of GTIs [s]
			l1events	893812	Number of level 1 events

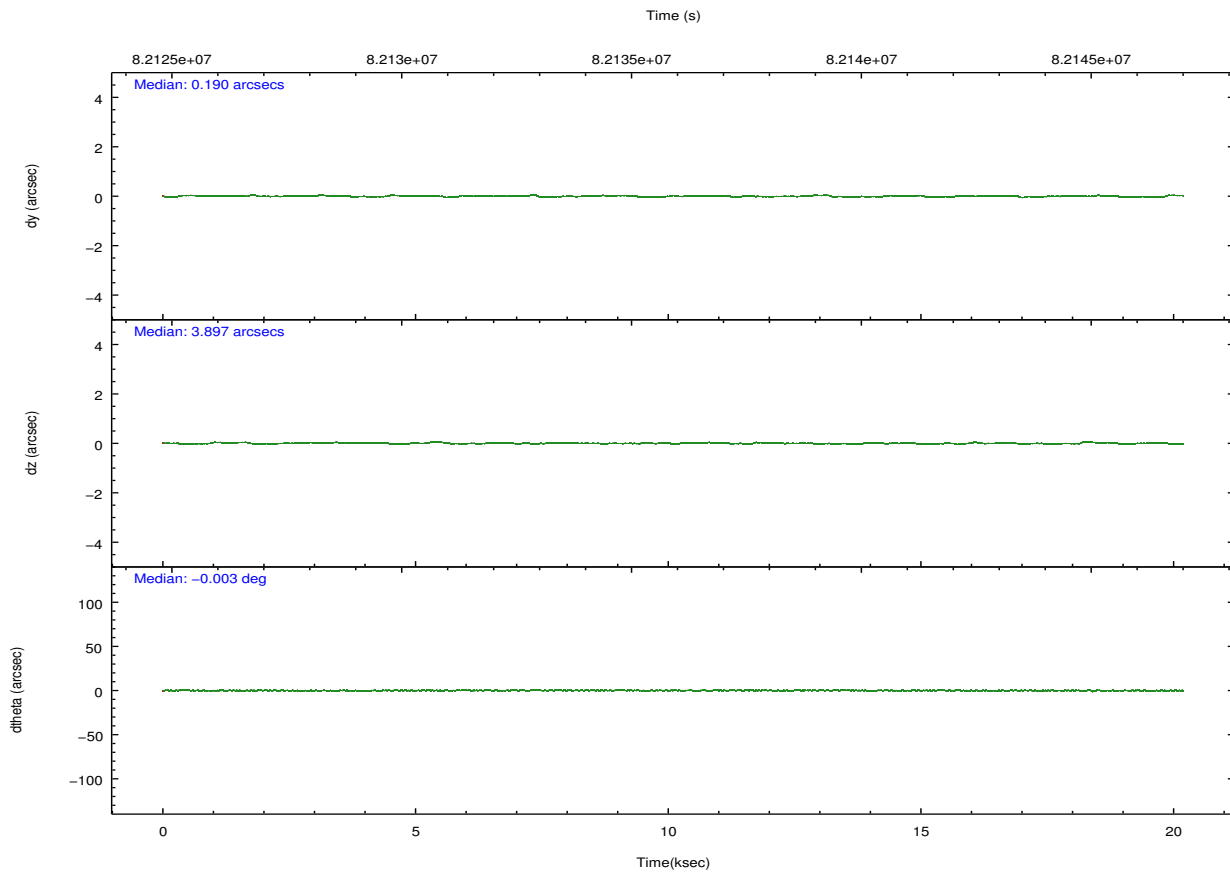
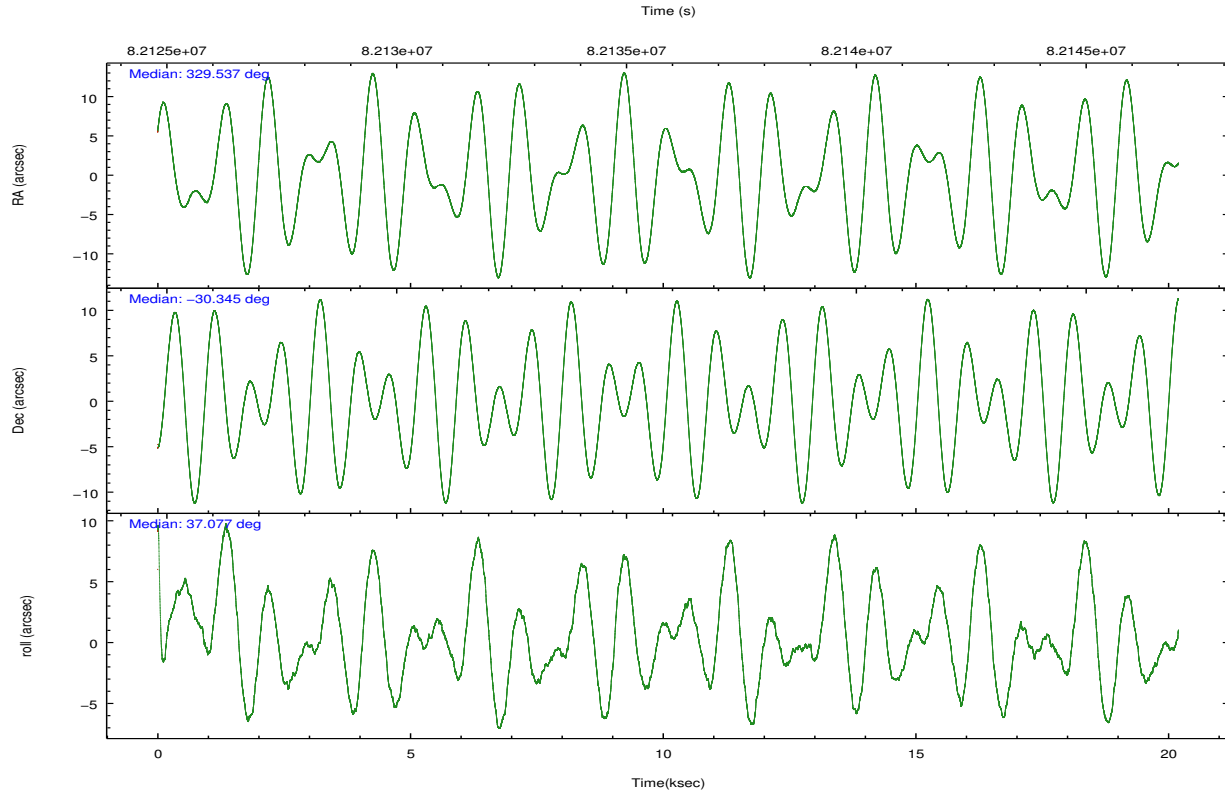
2.1.4 Events

	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	125616	240553	128892	143963	141673	113115	grade 0 events	7645	51791	19100	10174	8558	5153
rejected events	110020	81991	99970	80022	115056	100344		6%	21%	14%	7%	6%	4%
rejected %	87%	34%	77%	55%	81%	88%	grade 1 events	53	578	90	130	87	44
								0%	0%	0%	0%	0%	0%
							grade 2 events	3173	41669	3897	12347	5534	2623
								2%	17%	3%	8%	3%	2%
							grade 3 events	1319	10852	1661	5652	2860	1267
								1%	4%	1%	3%	2%	1%
							grade 4 events	1224	11138	1701	5717	2680	1261
								0%	4%	1%	3%	1%	1%
							grade 5 events	3804	12348	4537	13045	5689	4660
								3%	5%	3%	9%	4%	4%
							grade 6 events	2237	43136	2568	30063	6986	2468
								1%	17%	1%	20%	4%	2%
							grade 7 events	106161	69041	95338	66835	109279	95639
								84%	28%	73%	46%	77%	84%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-456789	ACIS-456789	Obspar file type	PREDICTED	ACTUAL
Grating	LETG	LETG	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	329.524598	329.536808746366	Subarray requested	NONE	NONE
[deg] Pointing Dec	-30.369961	-30.34467188630716	Alternating exposures requested	N	N
[deg] Pointing Roll	36.914848	37.07765711883221	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-182.131972	-182.1344861297048			
[mm] SIM translation stage offset	-8.000551	-7.998036453302973			
[s] Observation start time (MET)	82126003.184000	82125626.800612			
Observation start date	2000-08-08T12:45:39	2000-08-08T12:40:26			
[s] Observation end time (MET)	82146003.184000	82147600.751431			
Observation end date	2000-08-08T18:18:59	2000-08-08T18:46:40			
Read mode	TIMED	TIMED			

2.3 Aspect

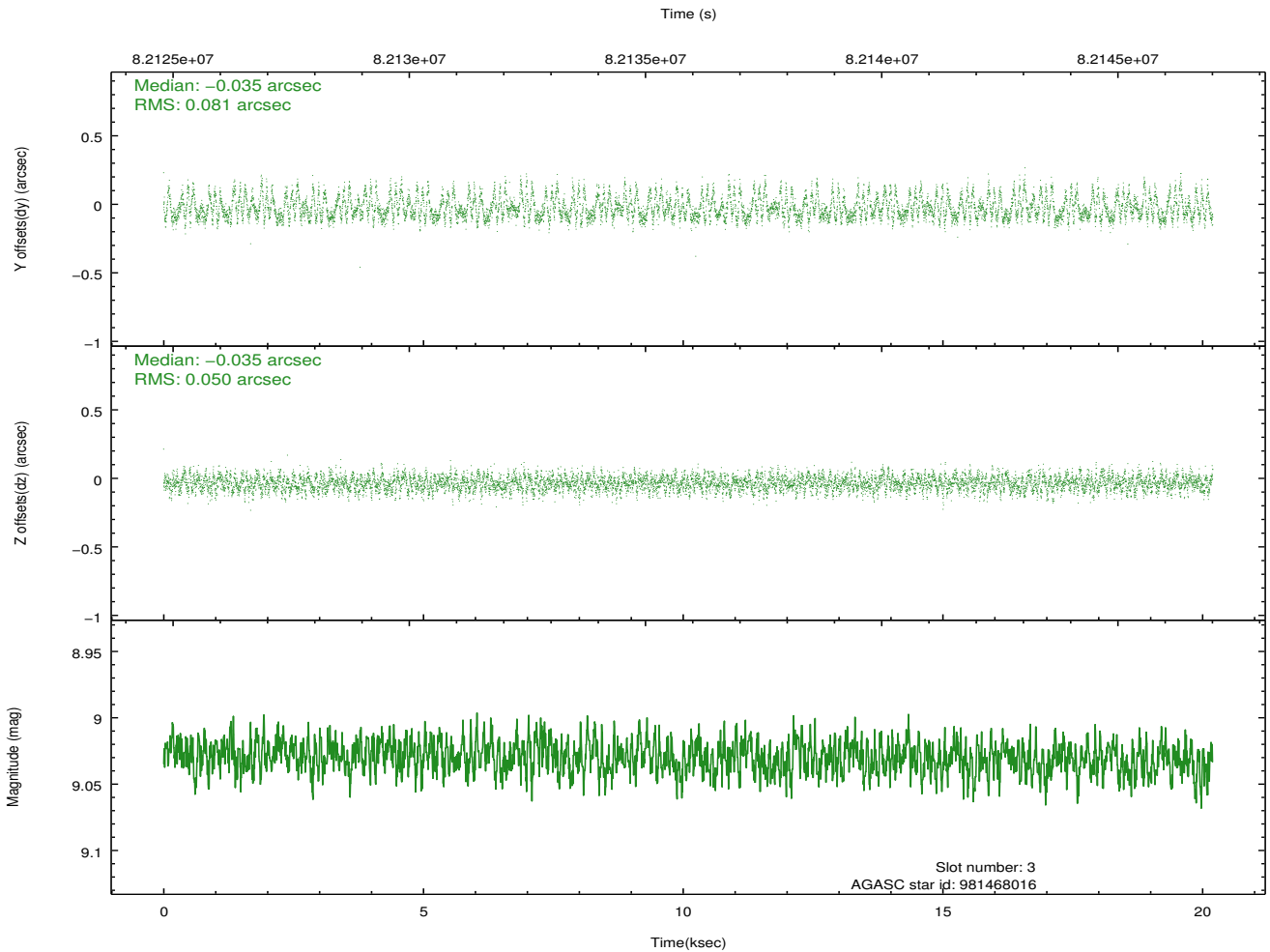
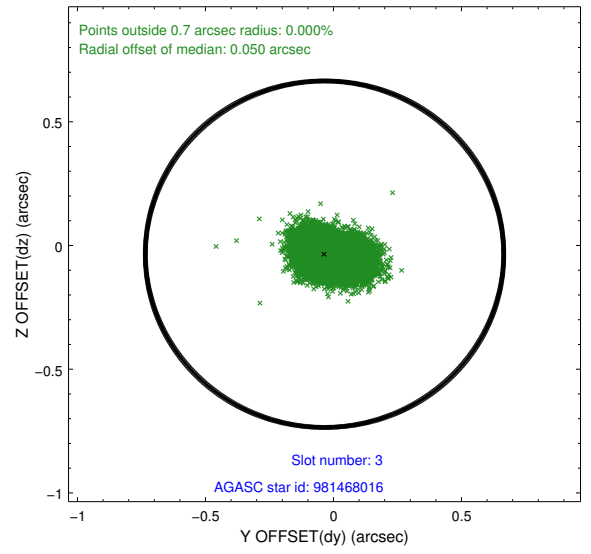
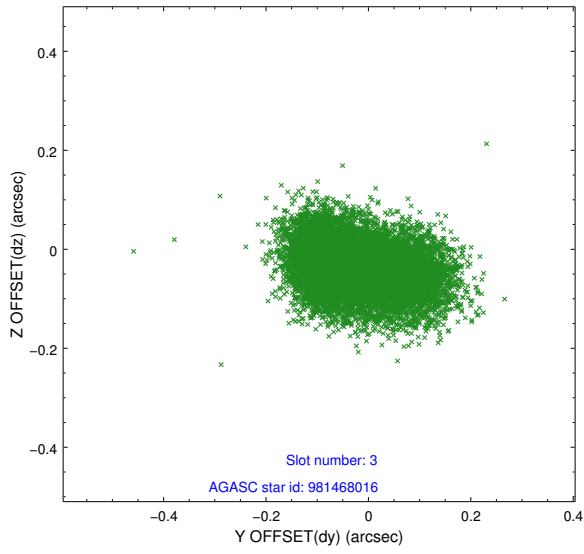


Slot Statistics

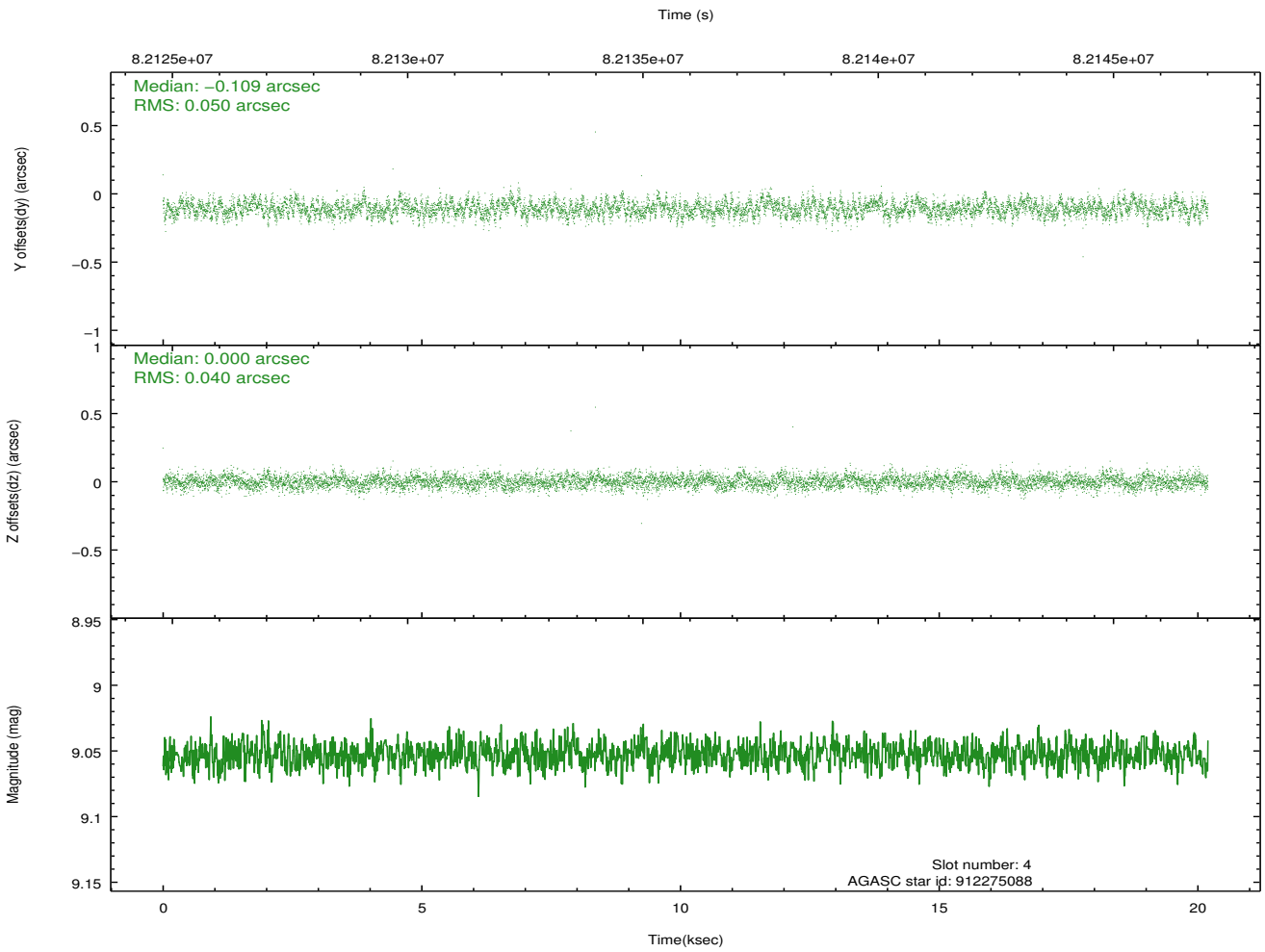
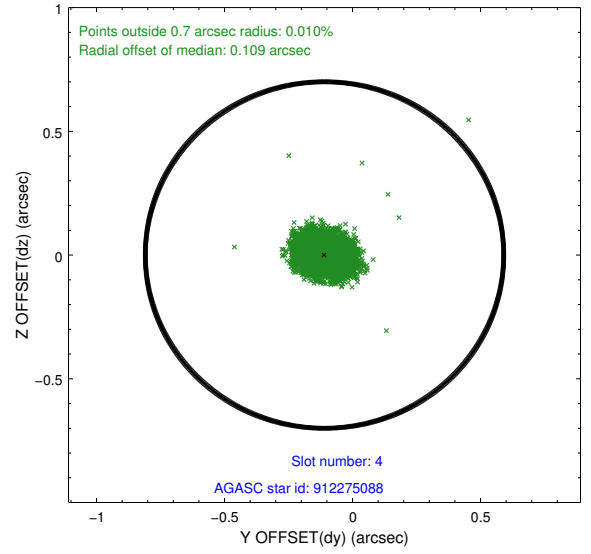
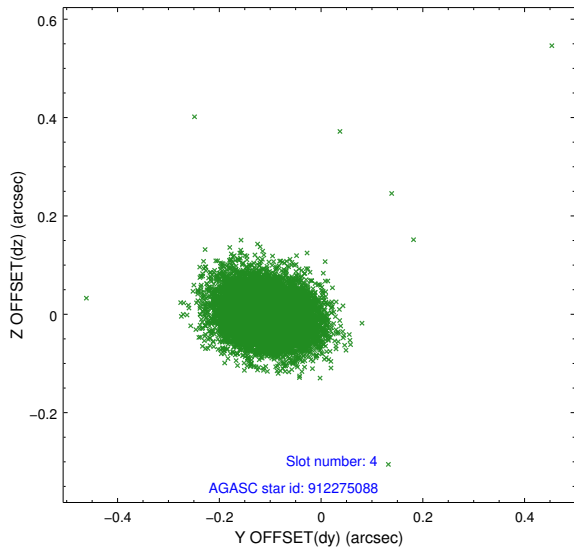
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	4925	-0.055	-0.114	0.007	0.011	0.000000	0.000000	-752.27	-1889.84
1	FID	ACIS-S-4	7.18	4925	0.080	0.057	0.005	0.010	0.000000	0.000000	2161.09	18.52
2	FID	ACIS-S-5	7.22	4926	-0.056	0.065	0.007	0.012	0.000000	0.000000	-1804.84	12.48
3	GUIDE	981468016	9.03	9848	-0.035	-0.035	0.101	0.169	328.842457	-30.034984	-979.34	2236.11
4	GUIDE	912275088	9.05	9849	-0.109	0.000	0.067	0.110	329.619228	-29.738698	1601.23	1639.67
5	GUIDE	981468288	9.21	9850	0.096	0.039	0.119	0.198	328.608359	-30.257017	-2040.46	2027.41
6	GUIDE	981478152	9.39	9848	-0.018	0.036	0.082	0.134	329.415589	-30.057192	404.42	1104.55
7	GUIDE	981468128	9.36	9849	0.068	-0.042	0.078	0.127	329.756350	-30.158334	1034.07	175.52

2.4 Star Slots

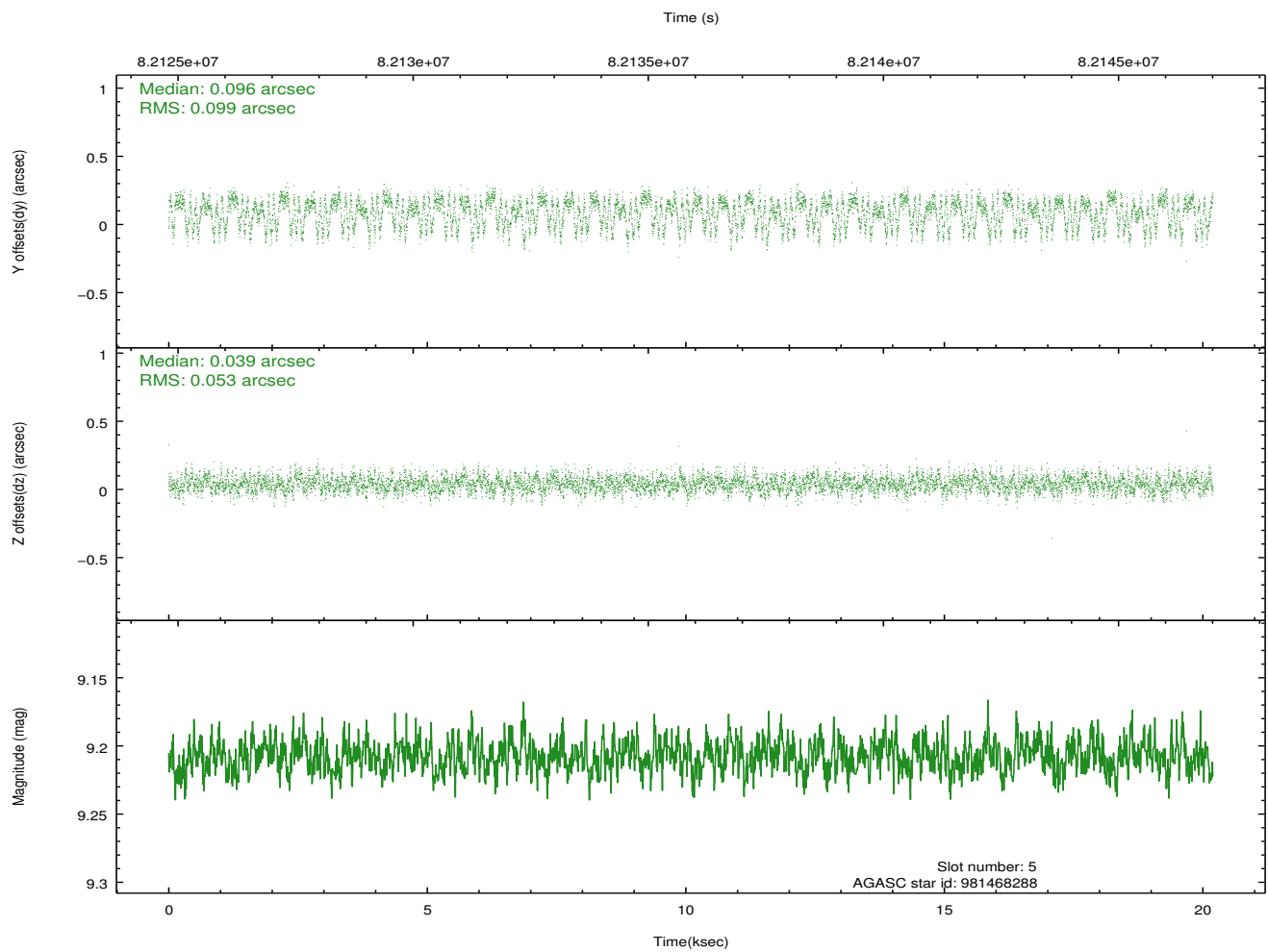
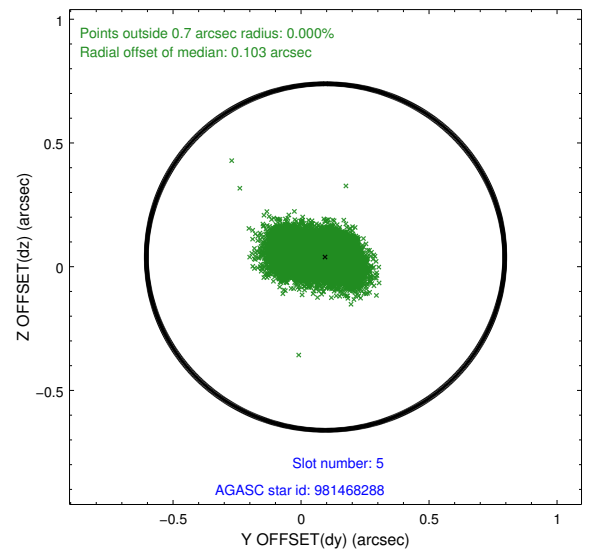
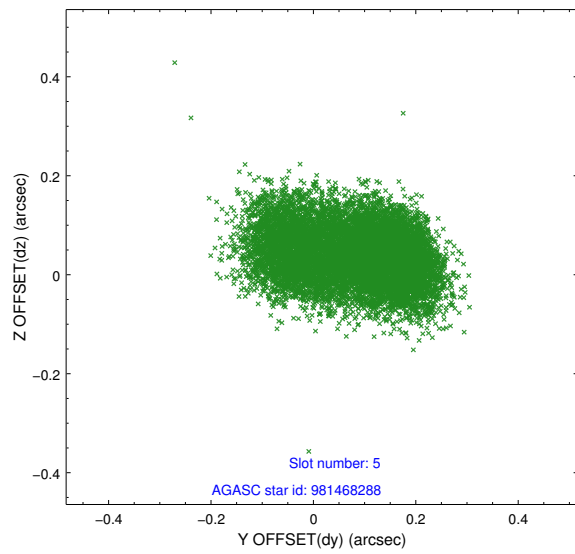
2.4.1 Slot 3



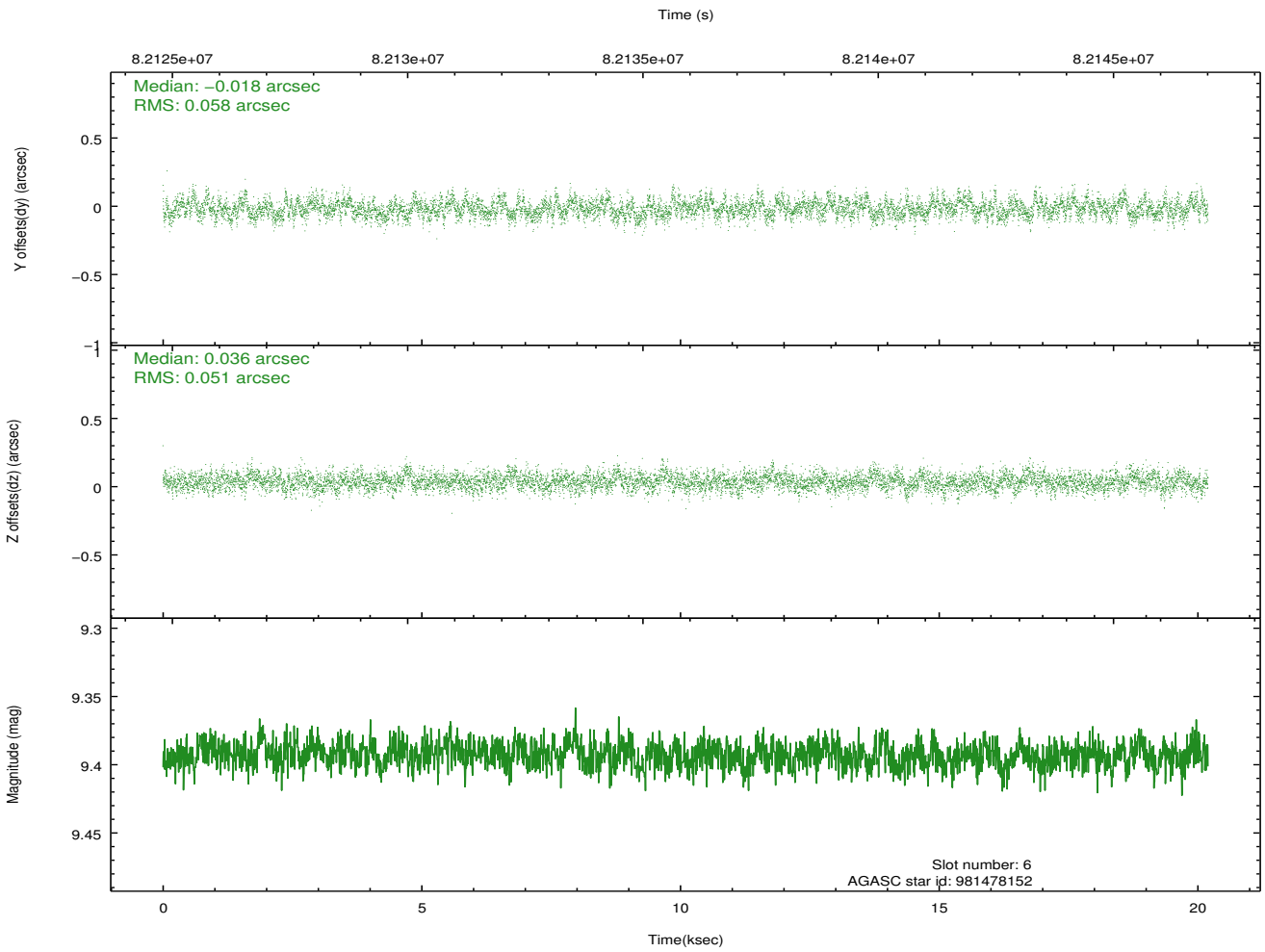
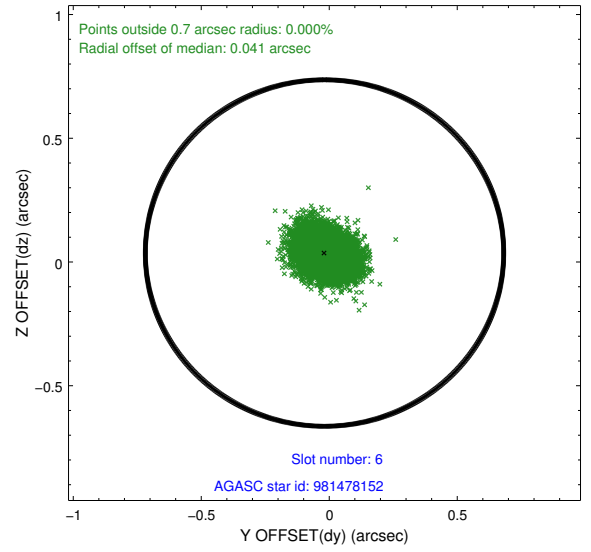
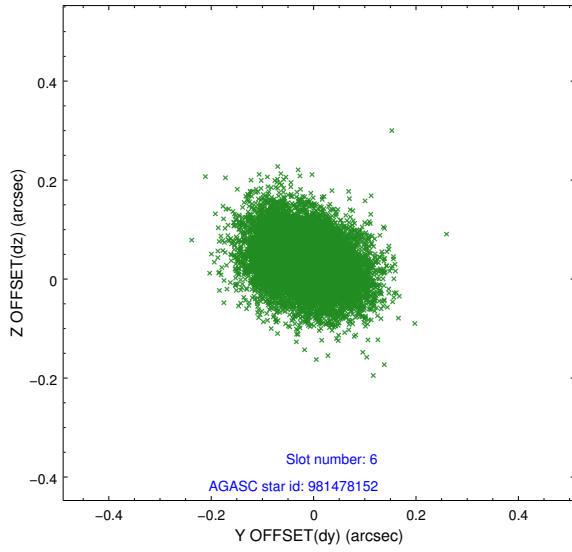
2.4.2 Slot 4



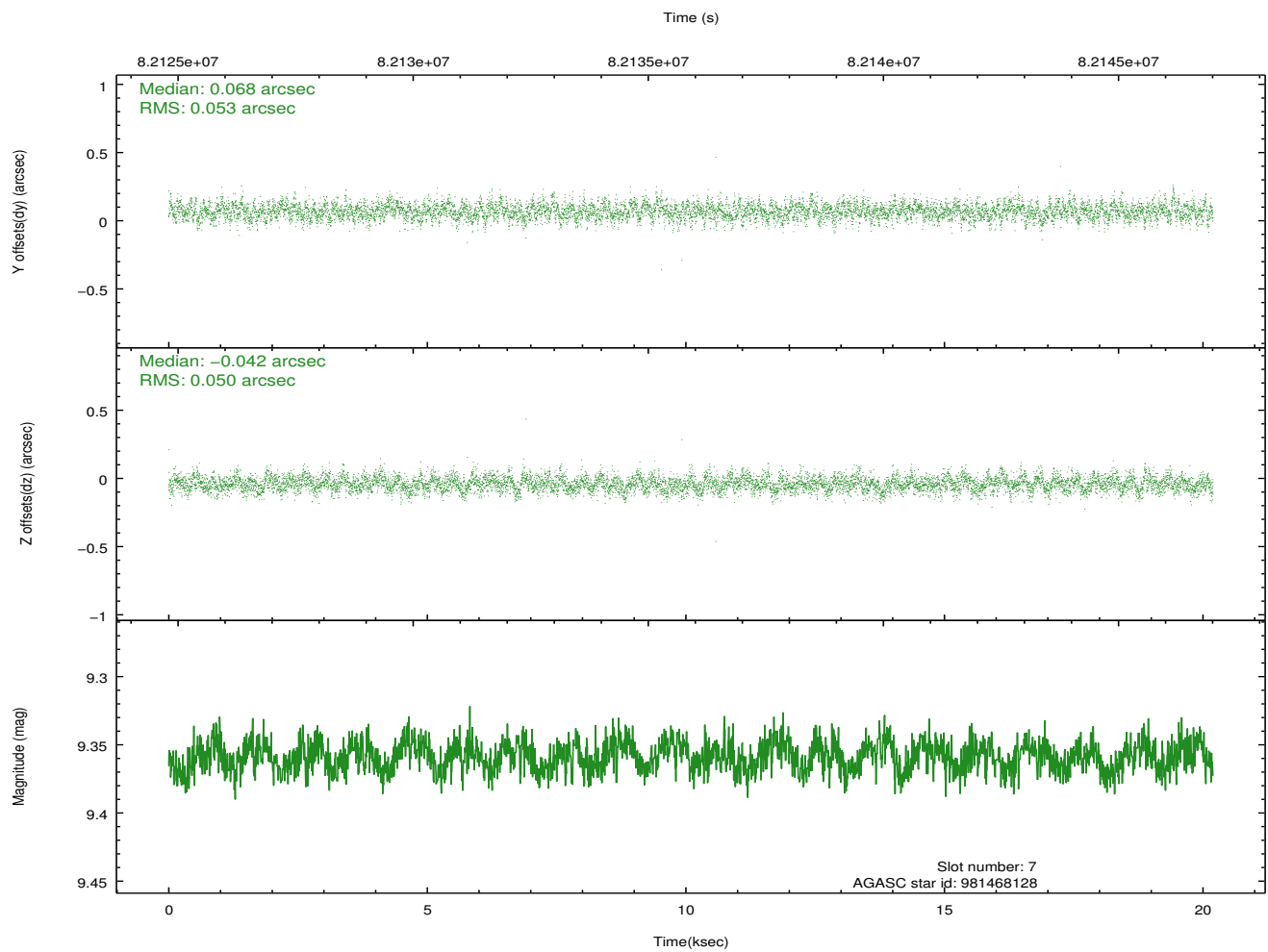
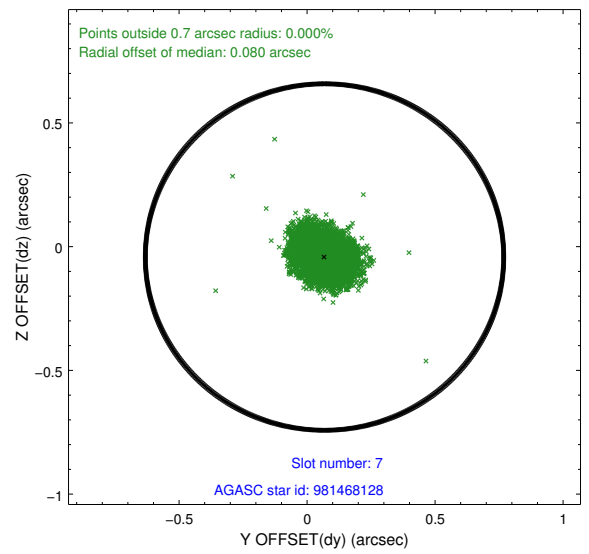
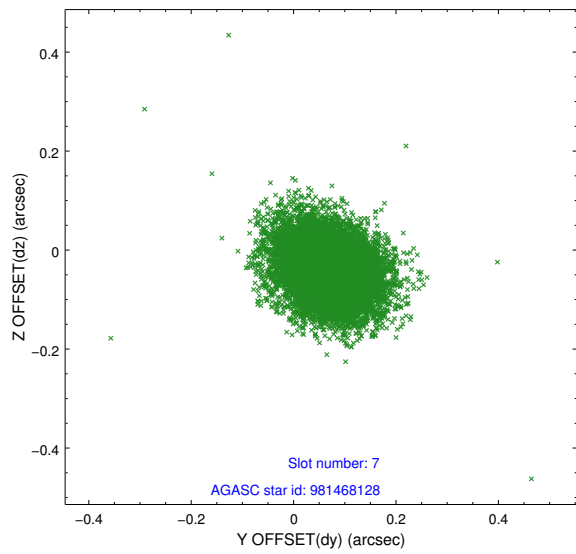
2.4.3 Slot 5



2.4.4 Slot 6

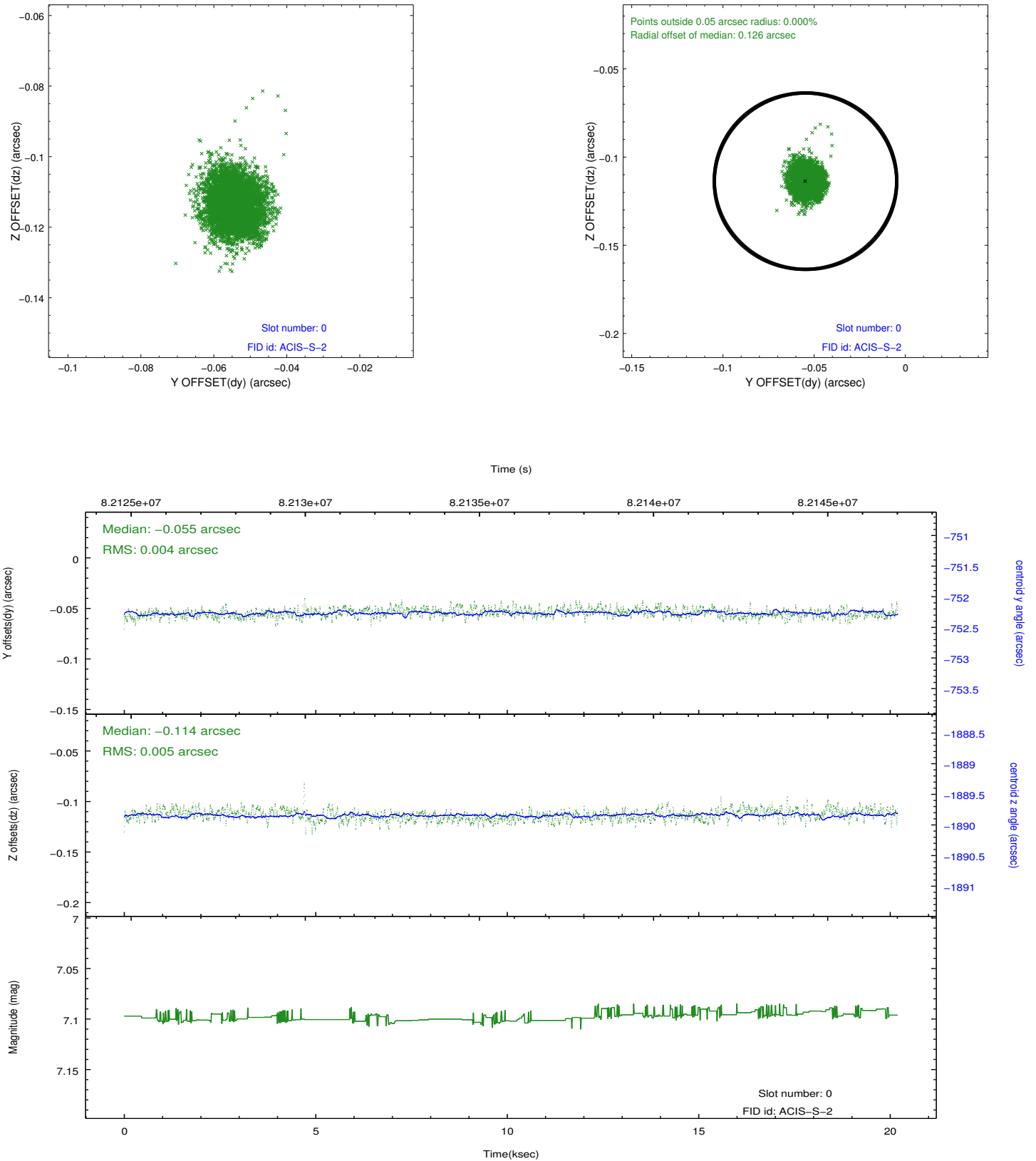


2.4.5 Slot 7

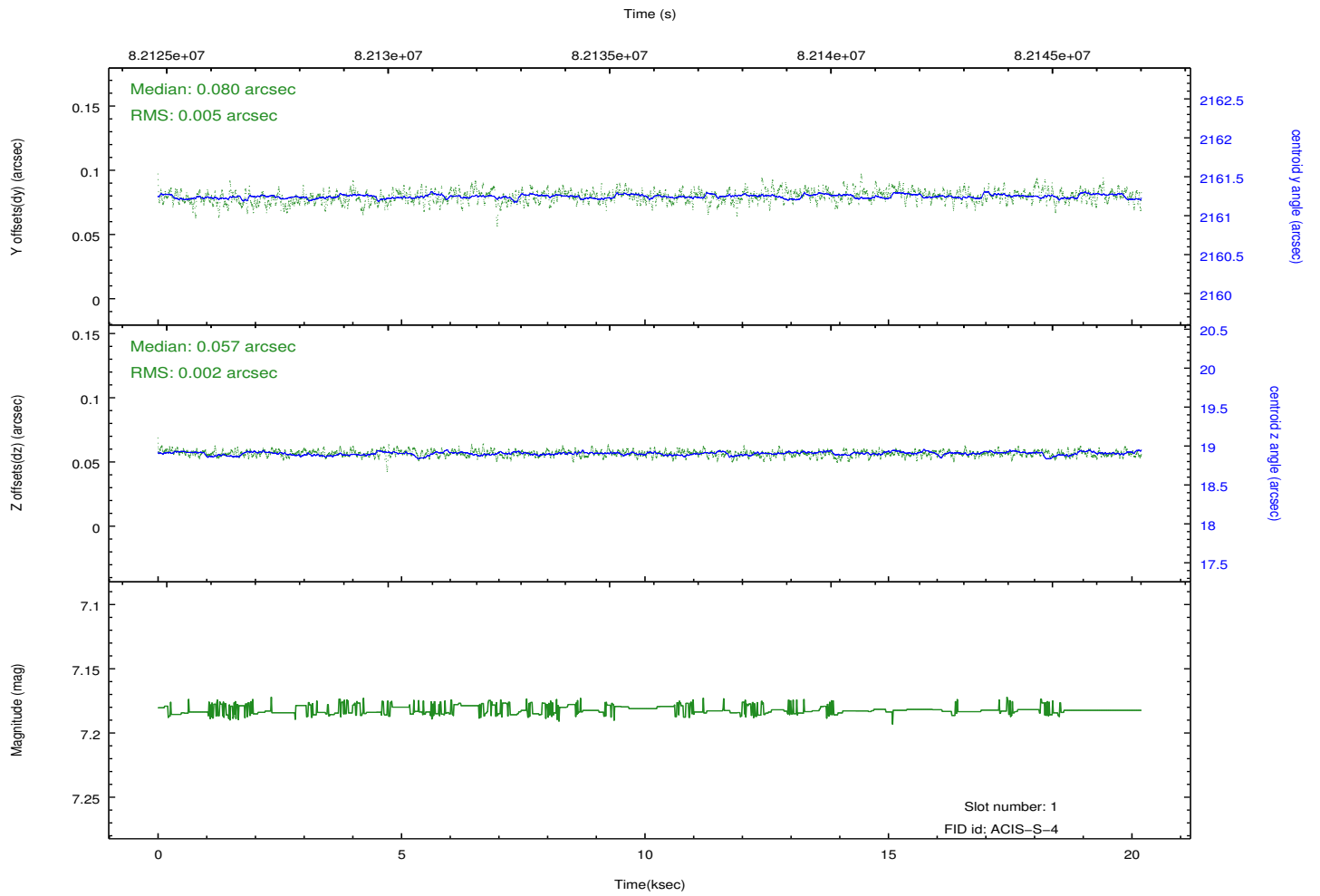
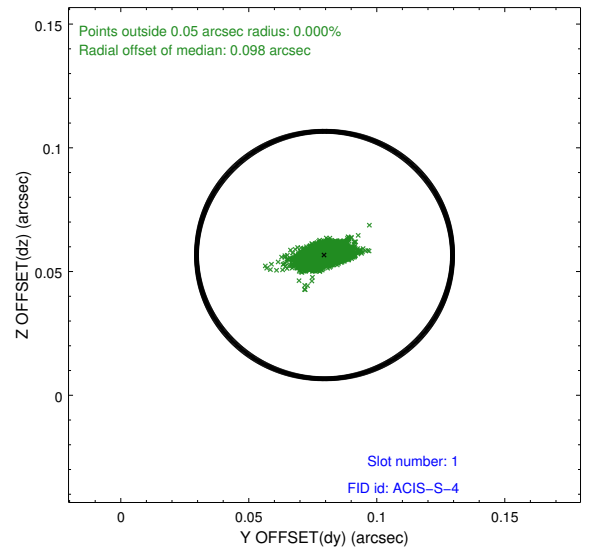
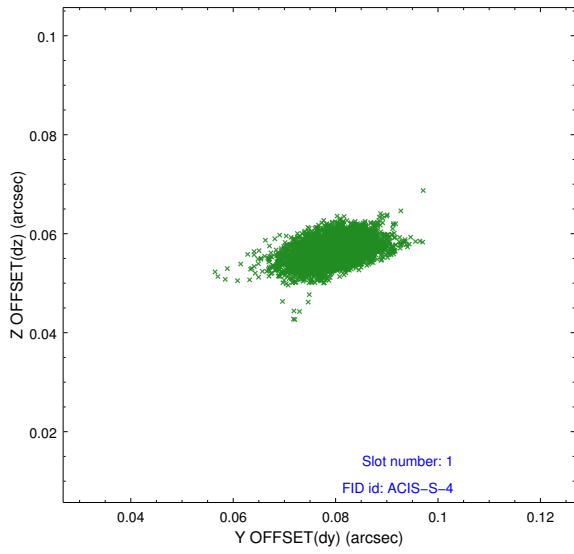


2.5 FID Slots

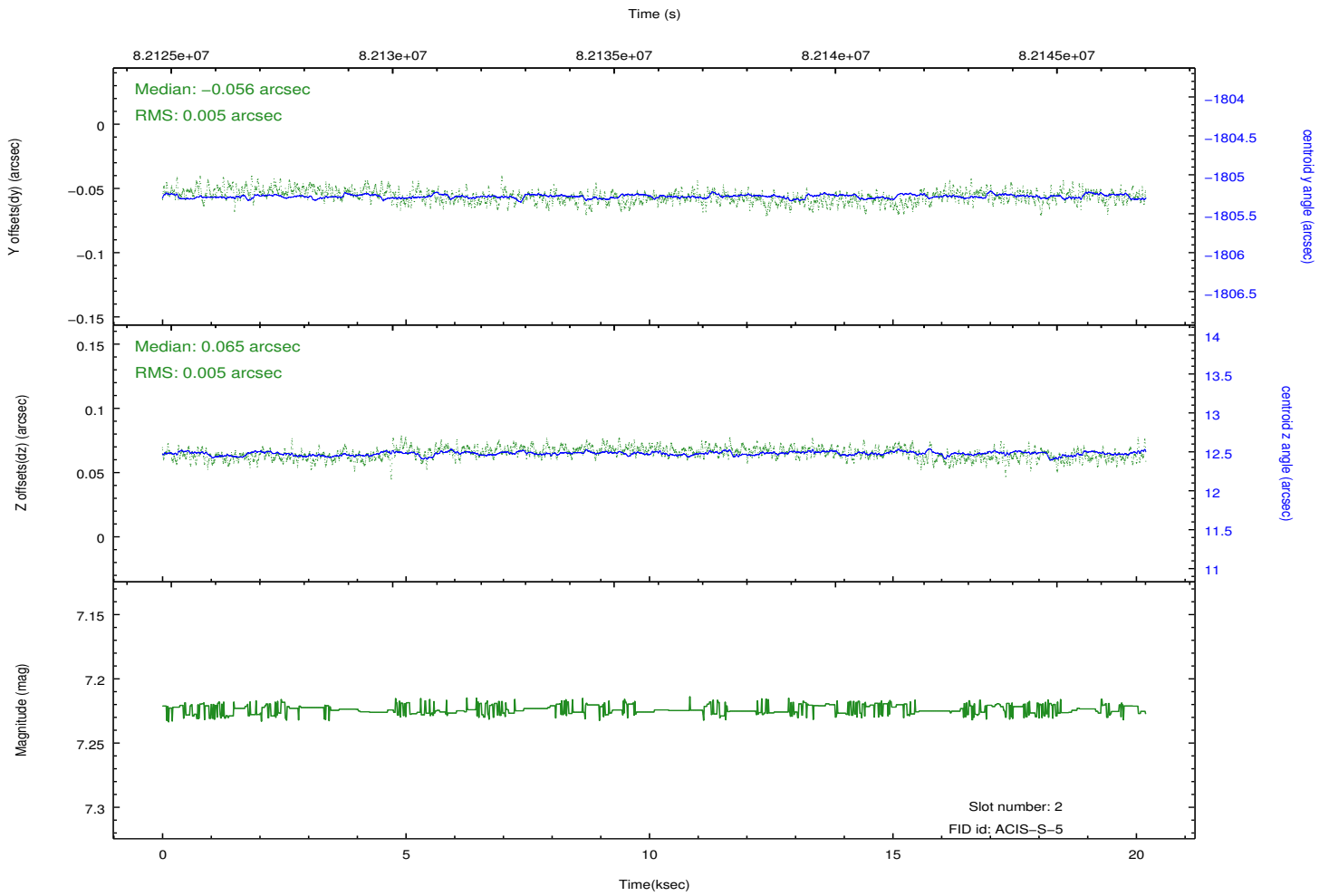
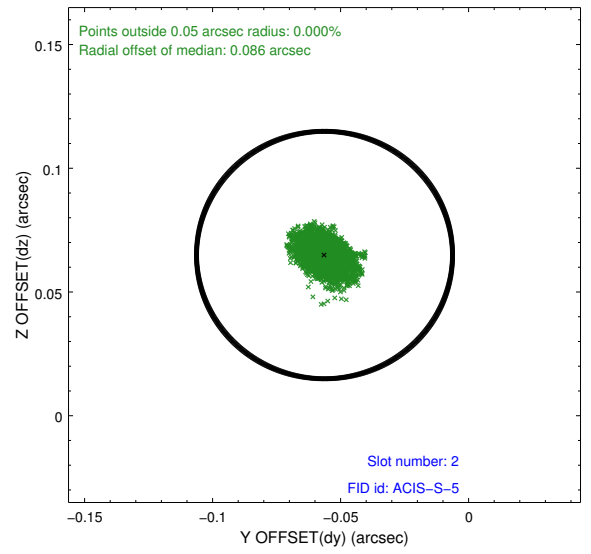
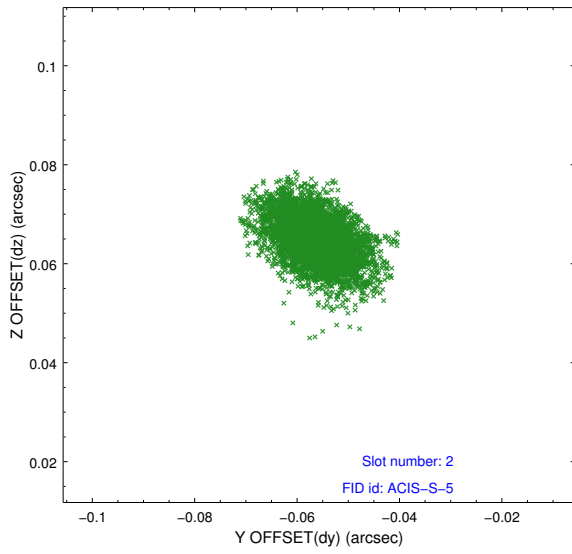
2.5.1 Slot 0



2.5.2 Slot 1

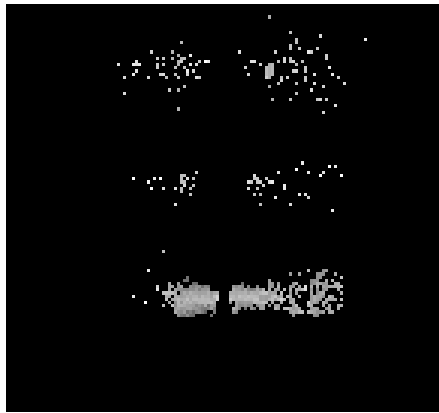


2.5.3 Slot 2

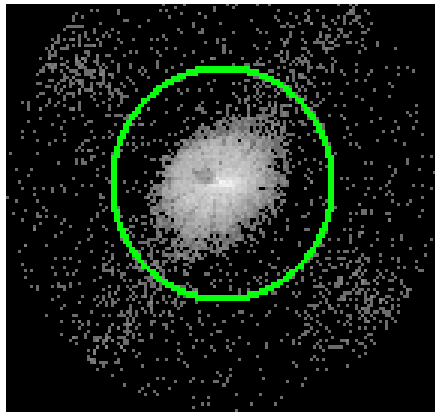


3 Gratings

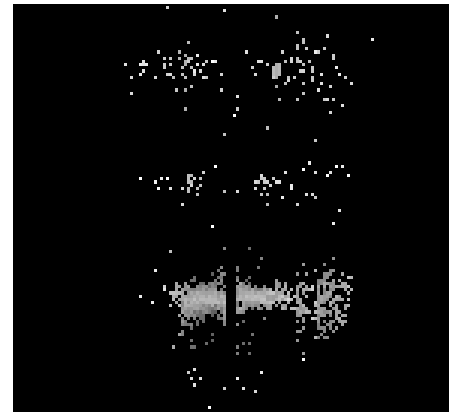
3.1 LETG Arm



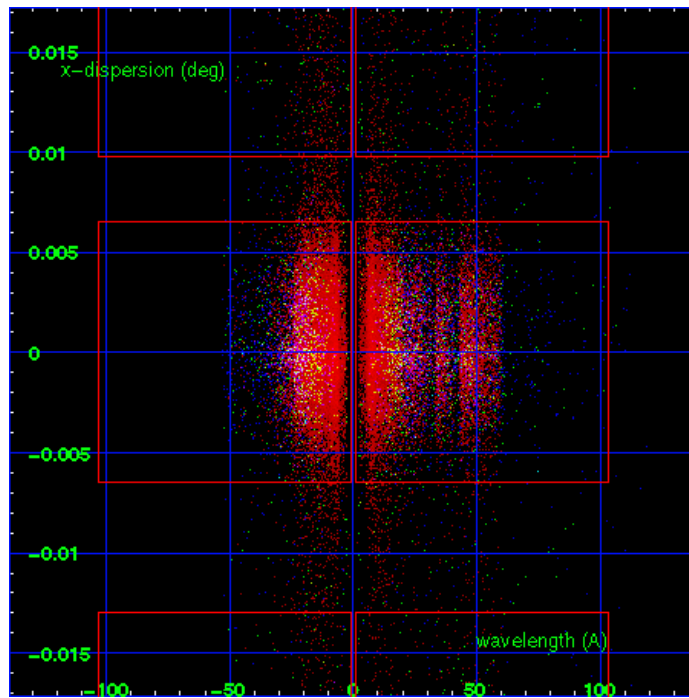
LETG Order Sort 123



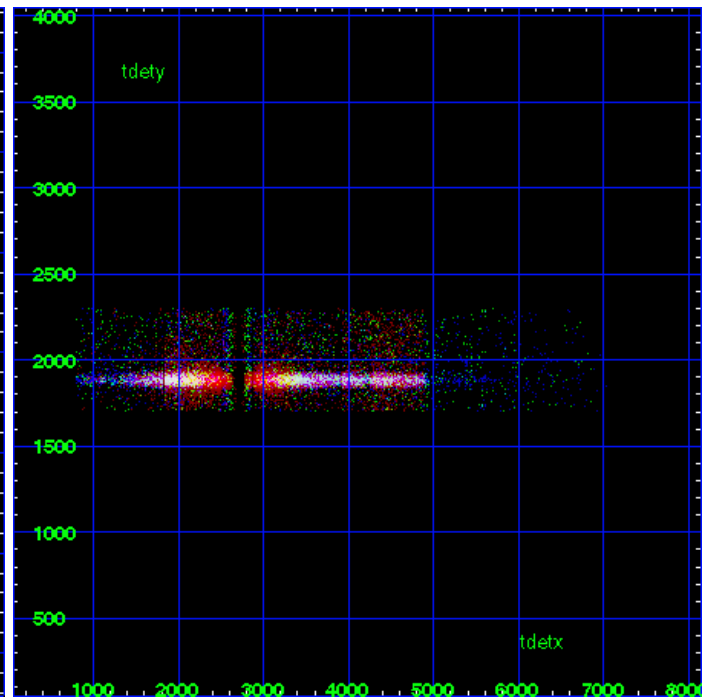
LETG Zero Order



LETG Order Sort ALL

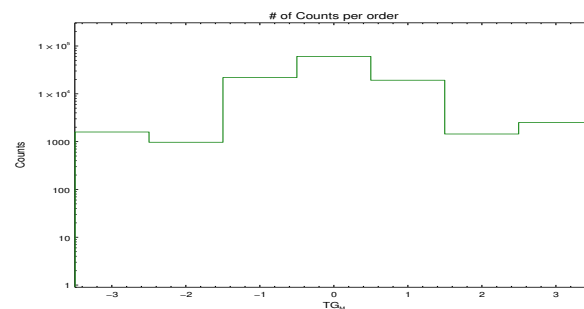


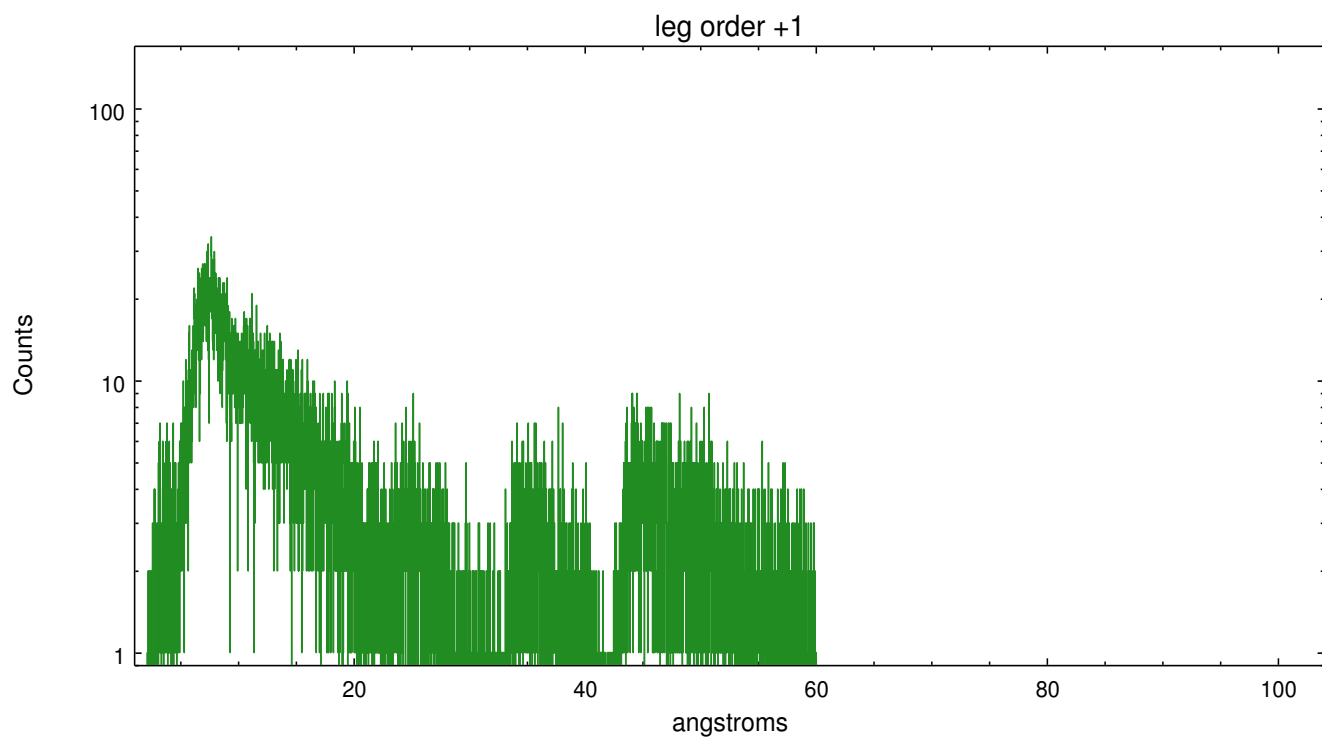
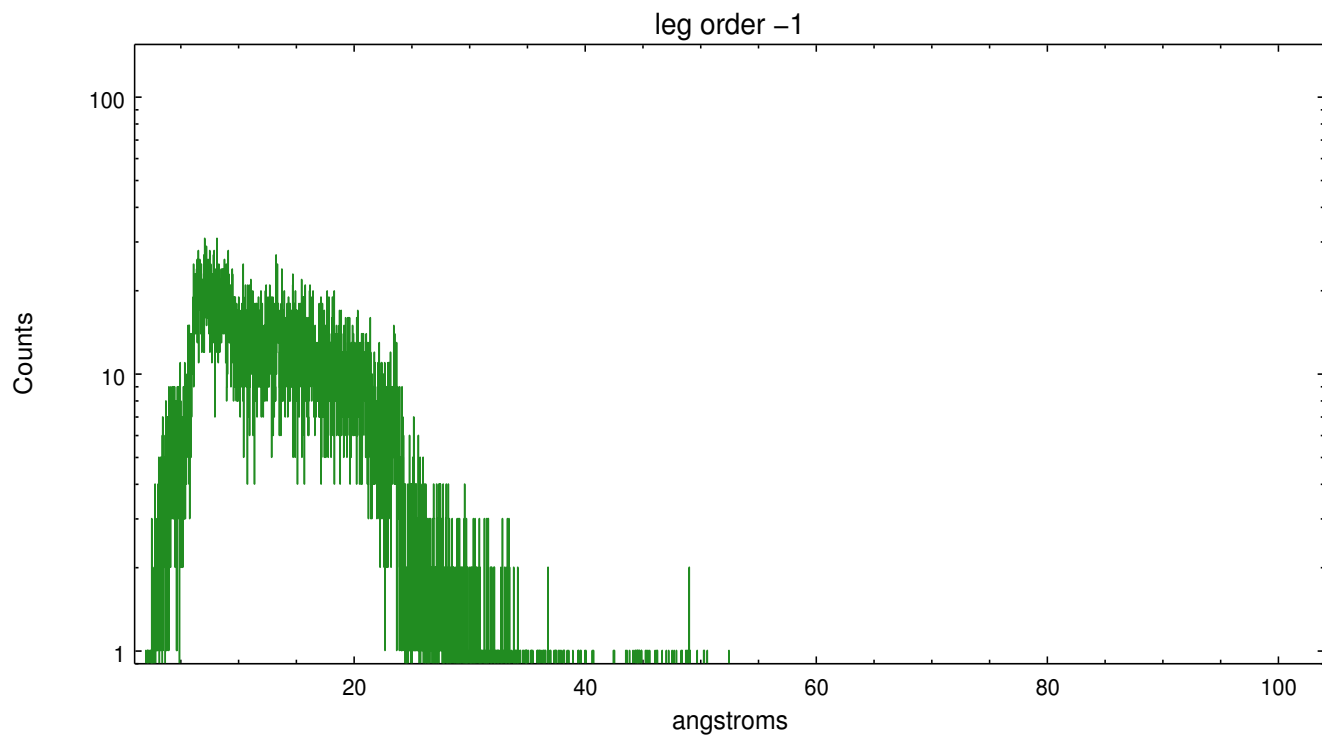
Spot Image LETG



Full Detector LETG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	1593	970	22025	61076	19347	1447	2514





A Summary

A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2013.01.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	19.66

A.2 Comments

Far off-axis --- required custom region parameters;

Warning: the grating line-spread-function is not calibrated off-axis;
there is no valid grating RMF data for this observation.