

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 1797 - L2 Version 5
Chandra X-Ray Center

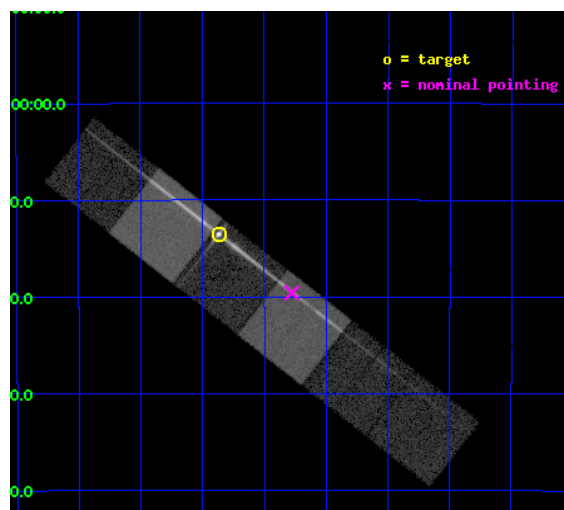
L2 Processing Date : Jan 11 2013

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1 Front

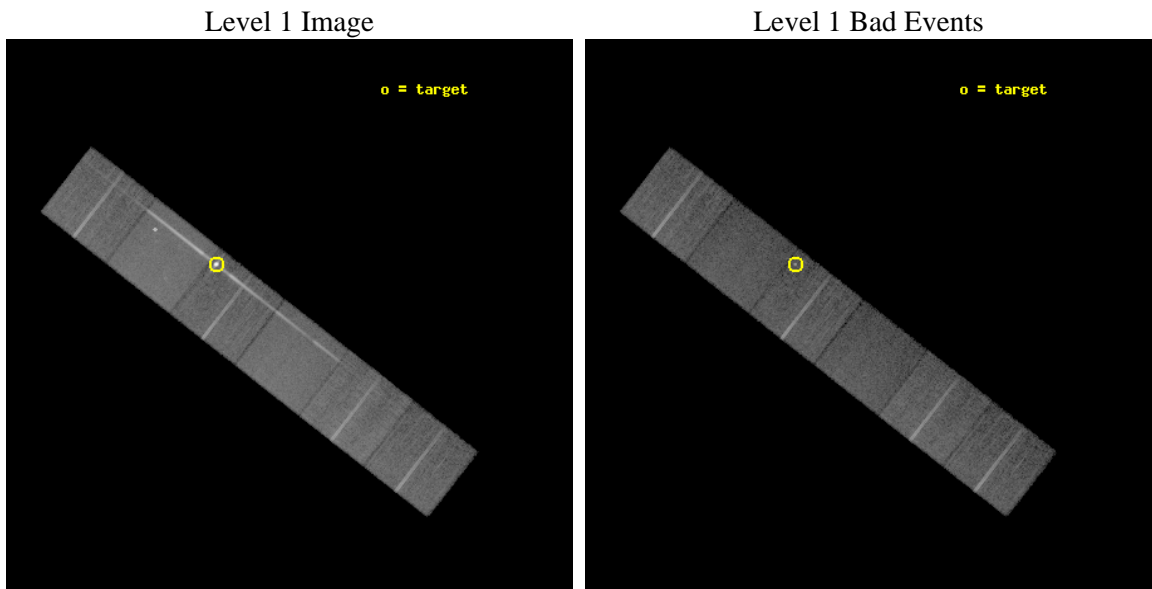
seq_num	390015	Sequence number
obs_id	1797	Observation id
title	GRATINGS CALIBRATION OBSERVATIONS OF PKS2155-304	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	PKS2155-304	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	329.716667	Observer's specified target RA [deg]
dec_targ	-30.225556	Observer's specified target Dec [deg]
ra_nom	329.56935034799	Nominal RA [deg]
dec_nom	-30.326537052476	Nominal Dec [deg]
roll_nom	37.935004173138	Nominal Roll [deg]
revision	5	Processing version of data
ontime	19750.318057999	Sum of GTIs [s]
livetime	19500.227638535	Livetime [s]
ontime4	19743.836077675	Sum of GTIs [s]
ontime5	19750.318057999	Sum of GTIs [s]
ontime6	19750.318057999	Sum of GTIs [s]
ontime7	19750.318057999	Sum of GTIs [s]
ontime8	19750.318057999	Sum of GTIs [s]
ontime9	19750.318057999	Sum of GTIs [s]
l2events	259014	Number of level 2 events



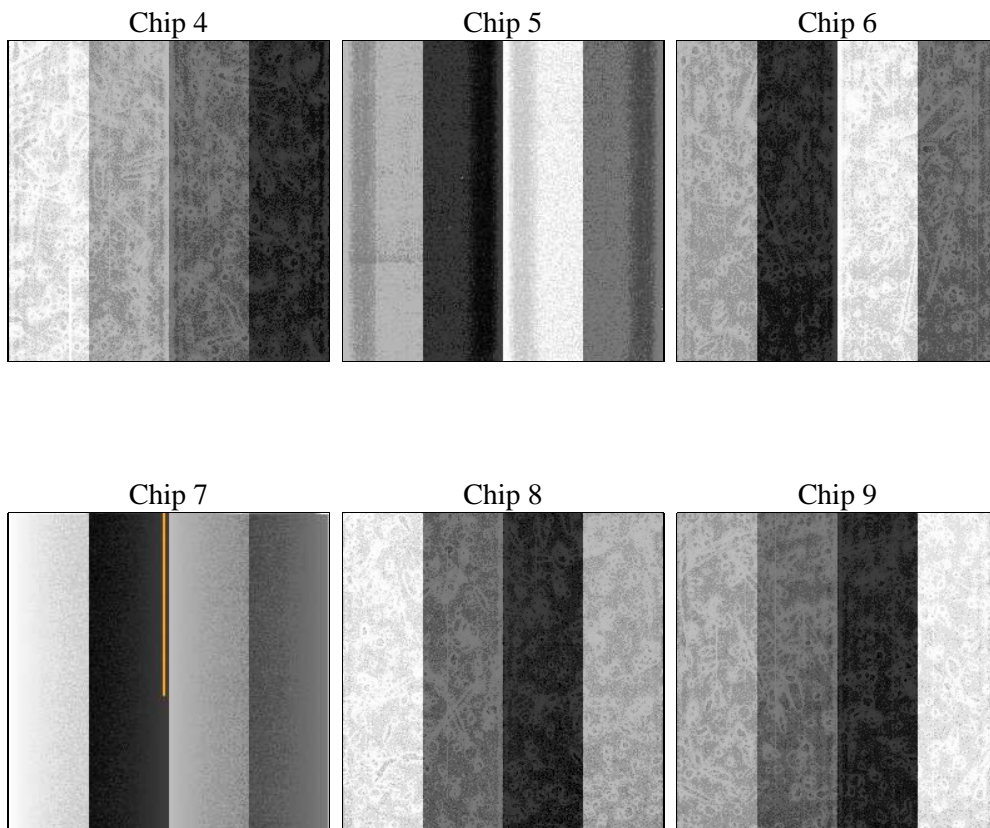
2 OBI

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	19750.318057999	Sum of GTIs [s]
caldbver	4.5.1.1	 	ontime4	19743.836077675	Sum of GTIs [s]
date	2012-08-31T13:41:48	Date and time of file creation	ontime5	19750.318057999	Sum of GTIs [s]
revision	4	Processing version of data	ontime6	19750.318057999	Sum of GTIs [s]
			ontime7	19750.318057999	Sum of GTIs [s]
			ontime8	19750.318057999	Sum of GTIs [s]
			ontime9	19750.318057999	Sum of GTIs [s]
			l1events	880042	Number of level 1 events

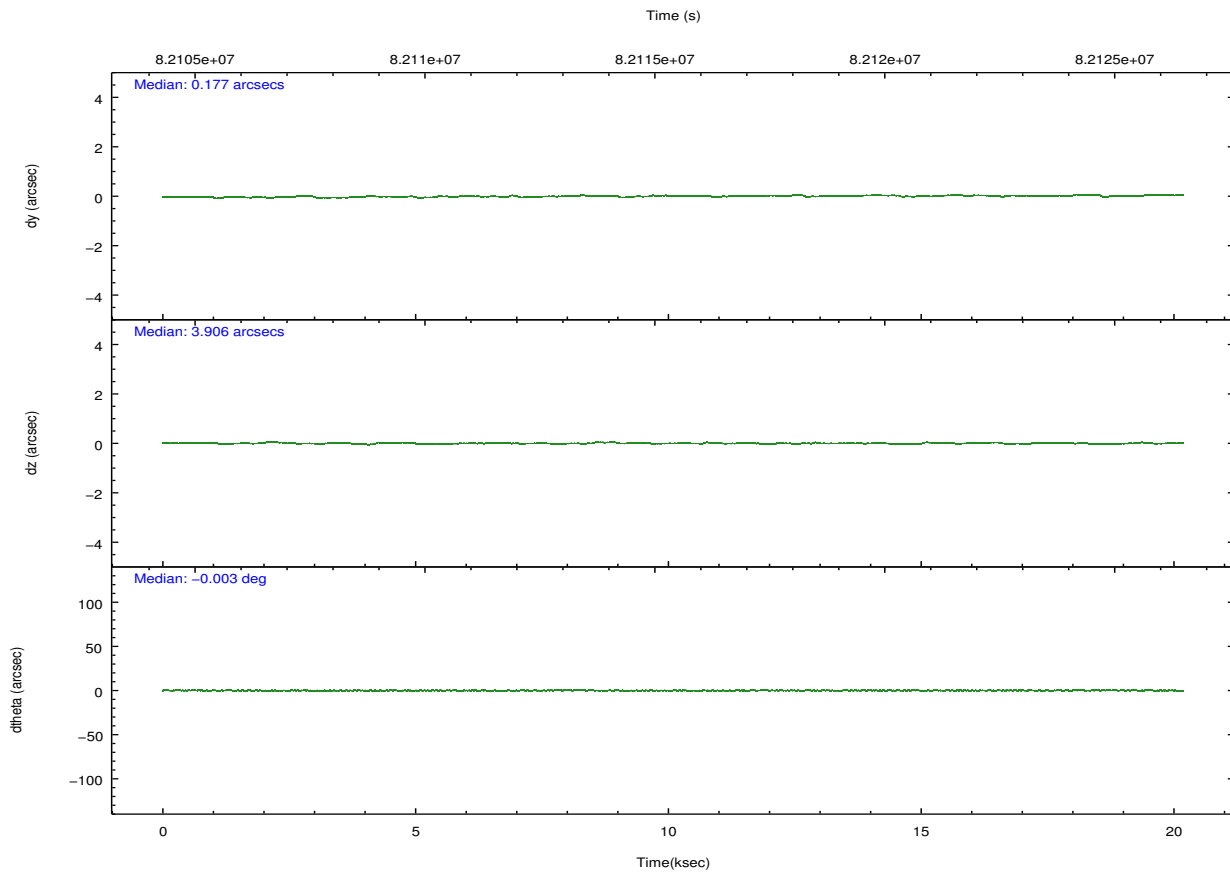
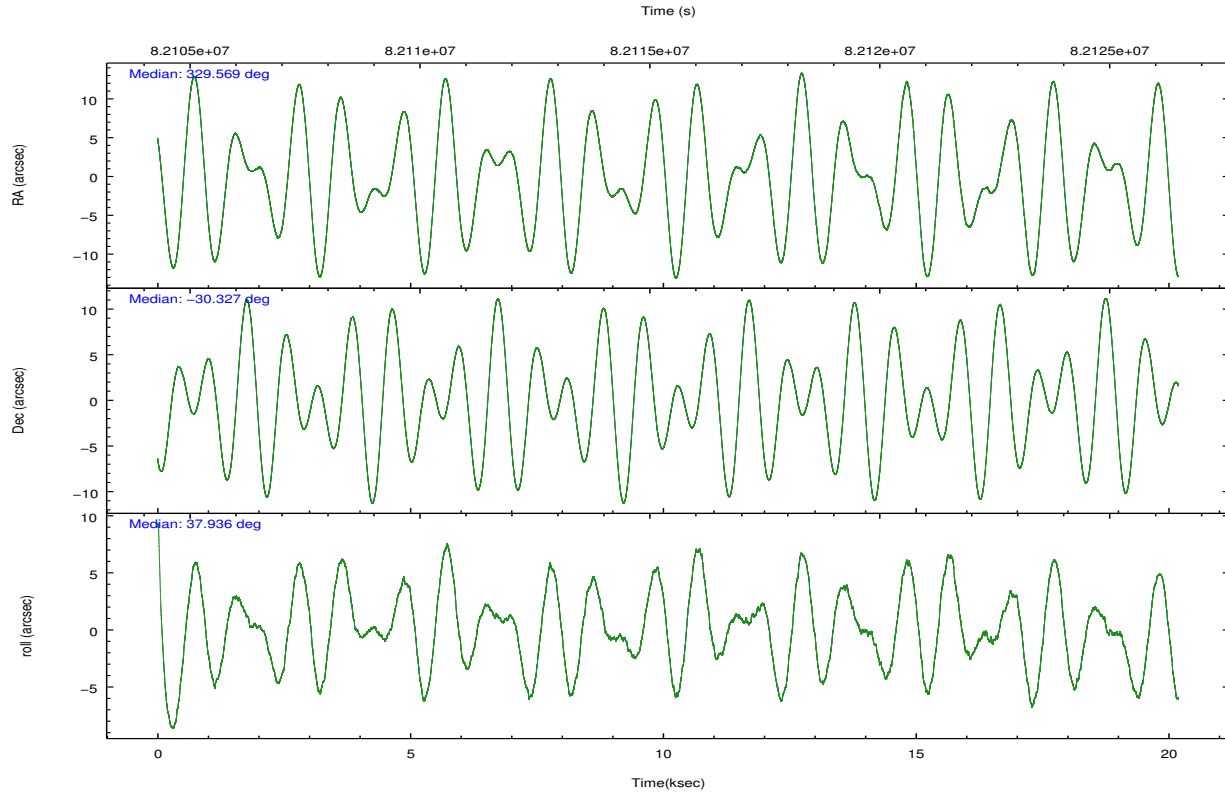
2.1.4 Events

	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	126577	185644	165110	148198	144881	109632	grade 0 events	6814	23087	48674	11665	9035	5306
rejected events	111988	81256	100969	80309	117007	96655		5%	12%	29%	7%	6%	4%
rejected %	88%	43%	61%	54%	80%	88%	grade 1 events	66	232	414	132	83	54
								0%	0%	0%	0%	0%	0%
							grade 2 events	3178	28831	7006	13351	5894	2519
								2%	15%	4%	9%	4%	2%
							grade 3 events	1226	6662	2571	6245	3165	1352
								0%	3%	1%	4%	2%	1%
							grade 4 events	1172	6385	2567	6156	2767	1263
								0%	3%	1%	4%	1%	1%
							grade 5 events	3903	11748	4635	13403	5674	4534
								3%	6%	2%	9%	3%	4%
							grade 6 events	2201	39474	3348	30494	7023	2545
								1%	21%	2%	20%	4%	2%
							grade 7 events	108017	69225	95895	66752	111240	92059
								85%	37%	58%	45%	76%	83%

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	329.557612	329.5693503479868	Subarray requested	NONE	NONE
[deg] Pointing Dec	-30.351966	-30.32653705247581	Alternating exposures requested	N	N
[deg] Pointing Roll	37.772453	37.93500417313795	[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)	82105493.184000	82105117.06234699			
Observation start date	2000-08-08T07:03:49	2000-08-08T06:58:37			
[s] Observation end time (MET)	82125493.184000	82125626.800612			
Observation end date	2000-08-08T12:37:09	2000-08-08T12:40:26			
Read mode	TIMED	TIMED			

2.3 Aspect

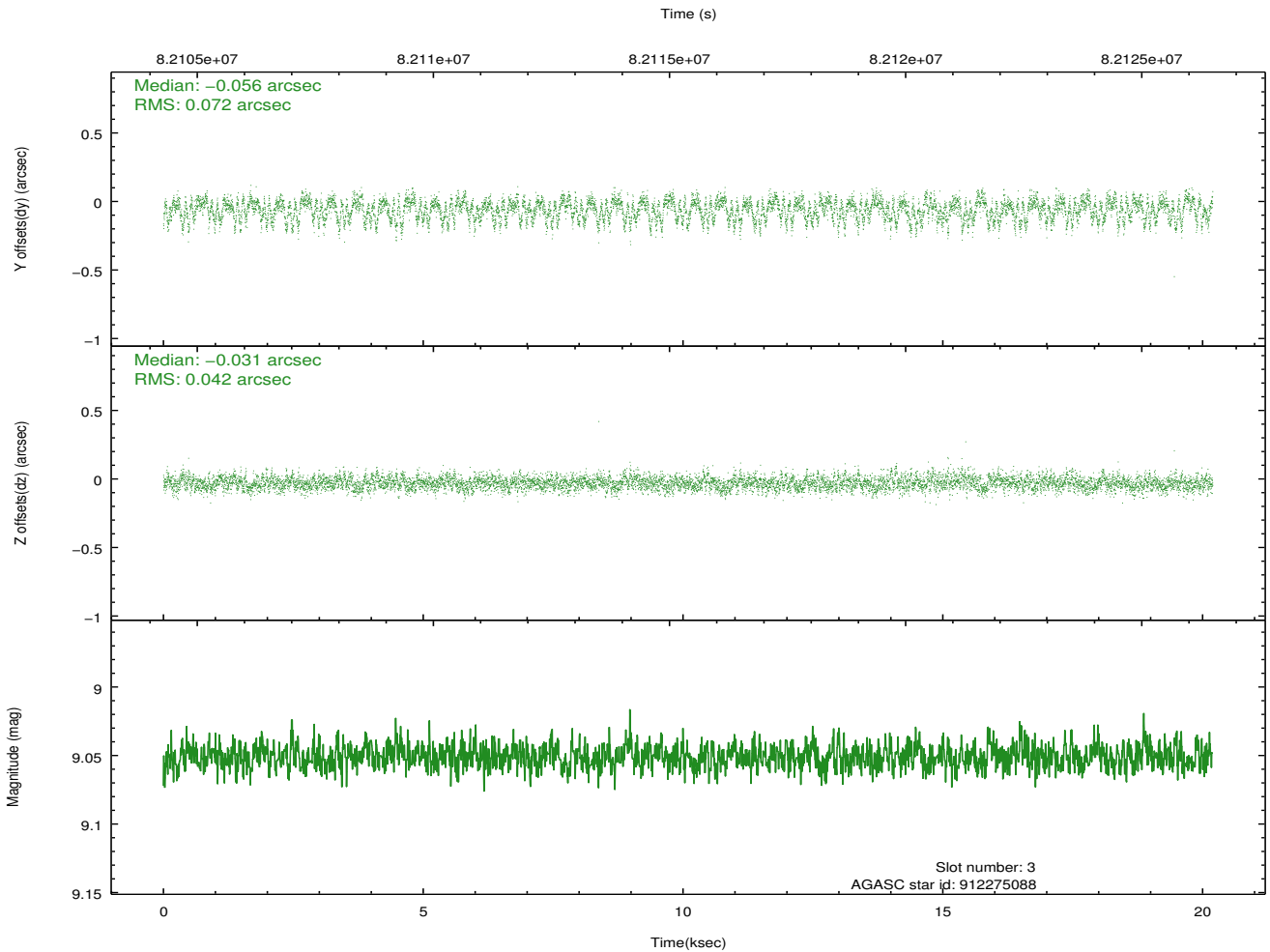
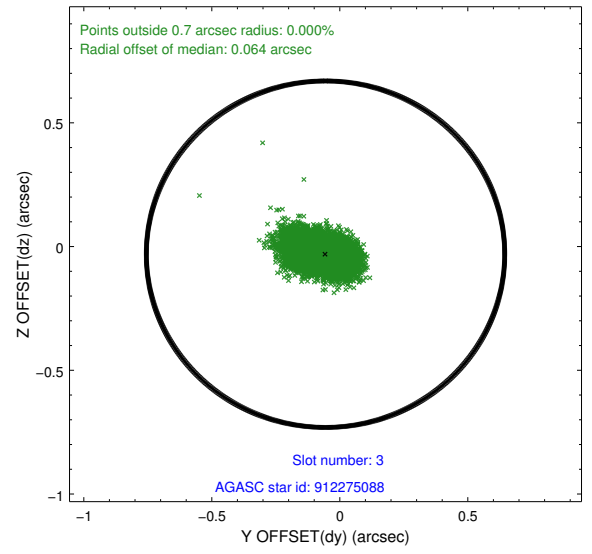
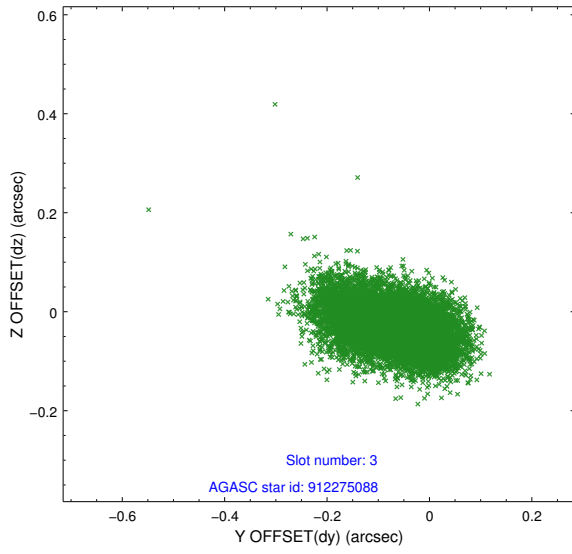


Slot Statistics

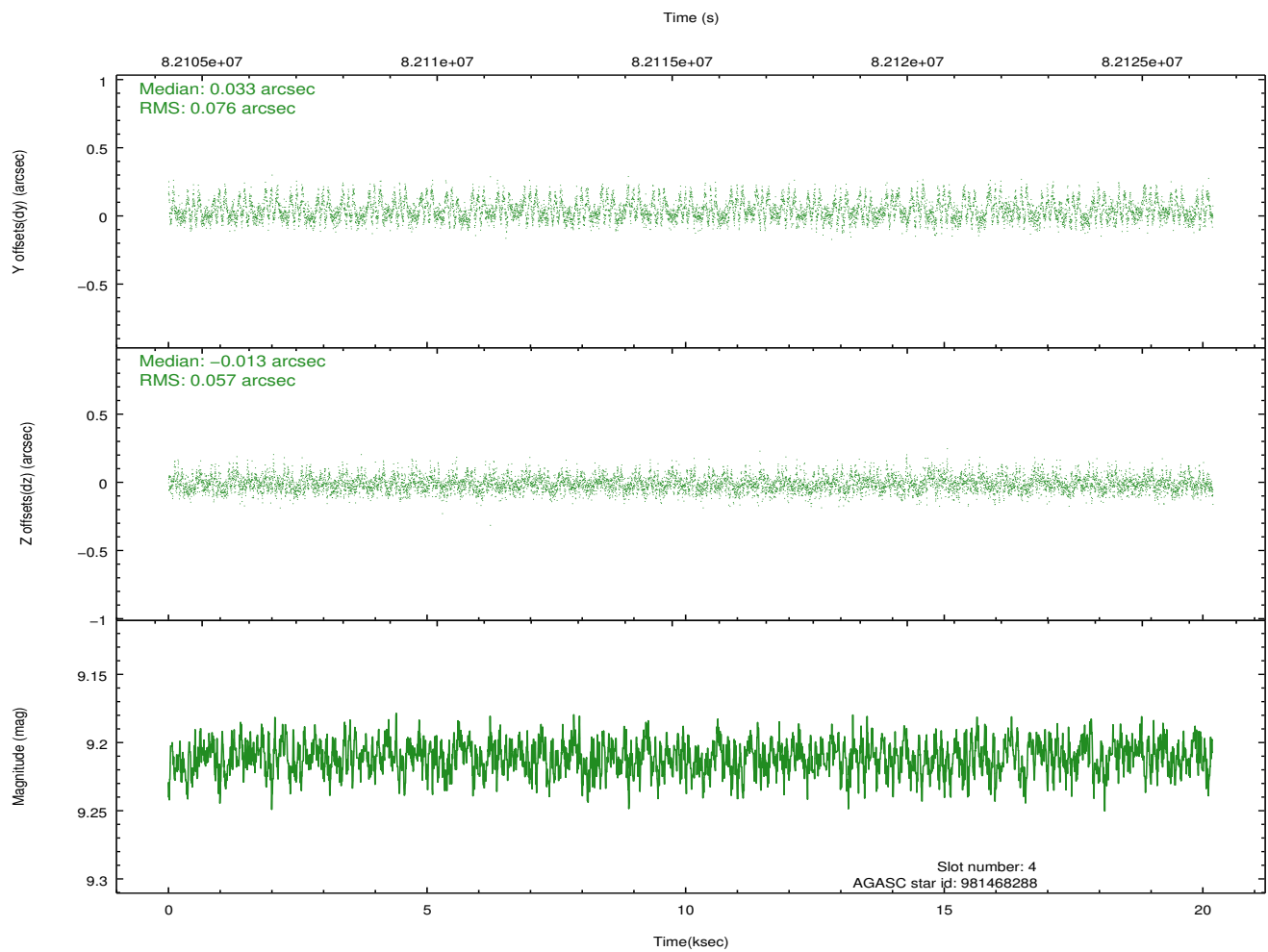
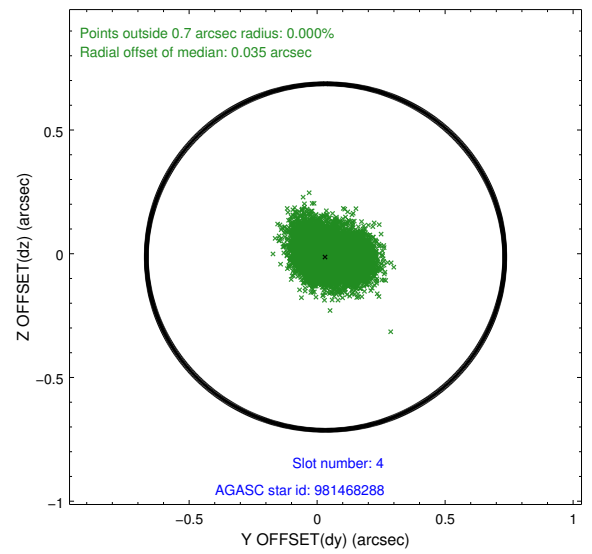
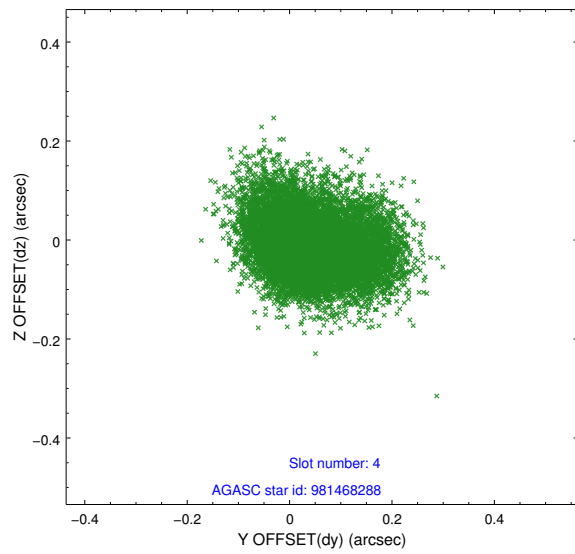
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	4922	-0.055	-0.110	0.007	0.011	0.000000	0.000000	-752.25	-1889.85
1	FID	ACIS-S-4	7.18	4922	0.077	0.056	0.005	0.010	0.000000	0.000000	2161.11	18.51
2	FID	ACIS-S-5	7.22	4922	-0.054	0.062	0.007	0.011	0.000000	0.000000	-1804.82	12.47
3	GUIDE	912275088	9.05	9842	-0.056	-0.031	0.087	0.149	329.619228	-29.738698	1504.67	1627.50
4	GUIDE	981468288	9.21	9845	0.033	-0.013	0.100	0.166	328.608359	-30.257017	-2131.09	2069.03
5	GUIDE	981478152	9.40	9844	-0.035	0.041	0.078	0.125	329.415589	-30.057192	299.96	1110.33
6	GUIDE	981468128	9.36	9841	0.048	-0.020	0.071	0.115	329.756350	-30.158334	915.86	172.14
7	GUIDE	981469488	9.60	9843	0.010	0.020	0.084	0.137	329.261199	-30.045155	-54.05	1438.38

2.4 Star Slots

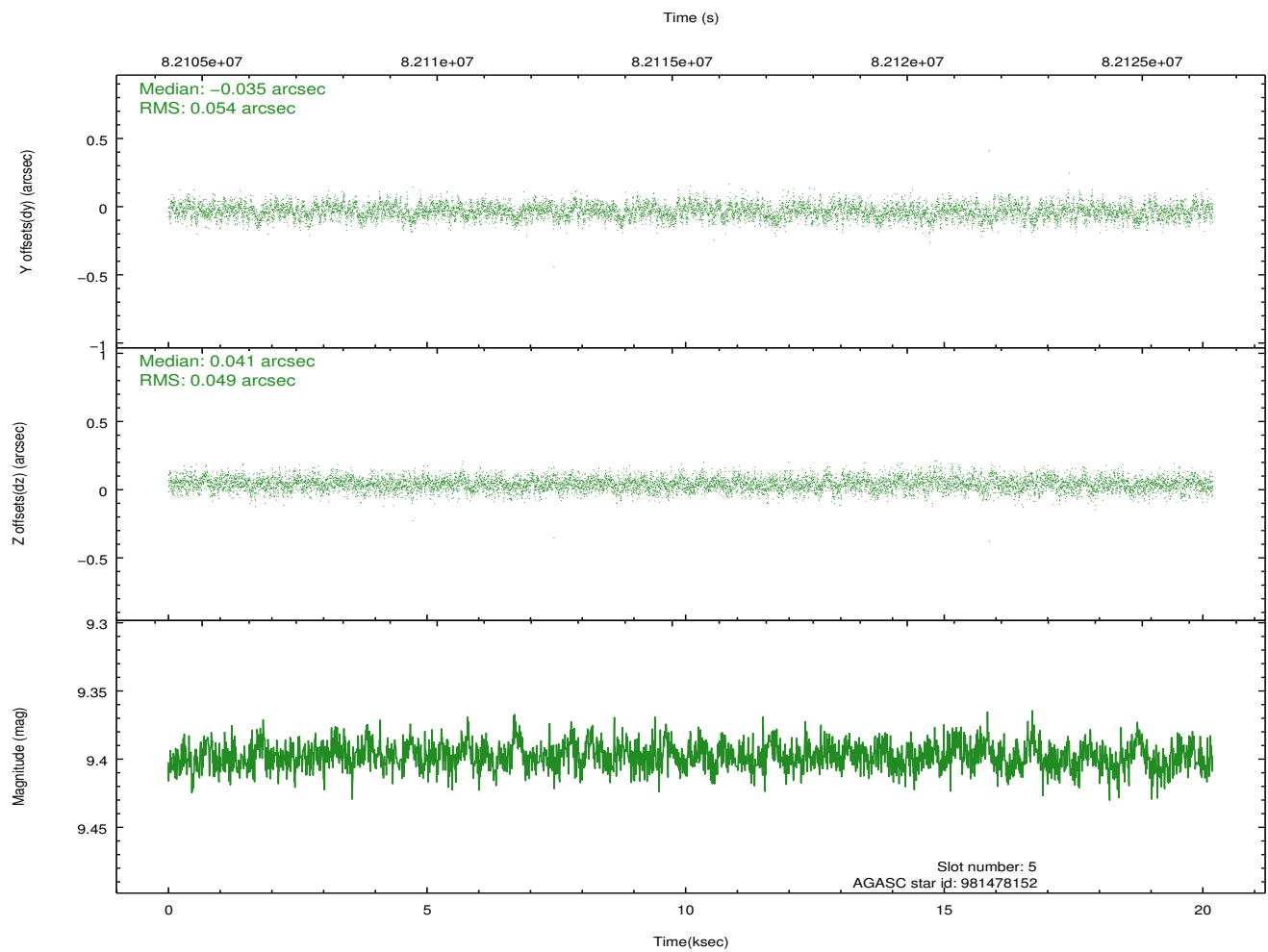
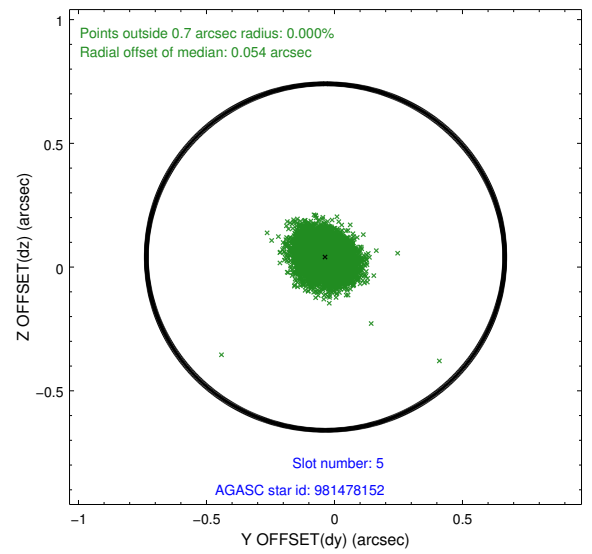
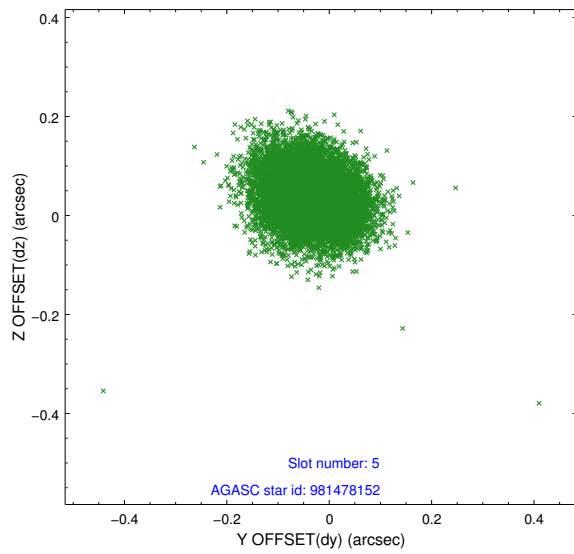
2.4.1 Slot 3



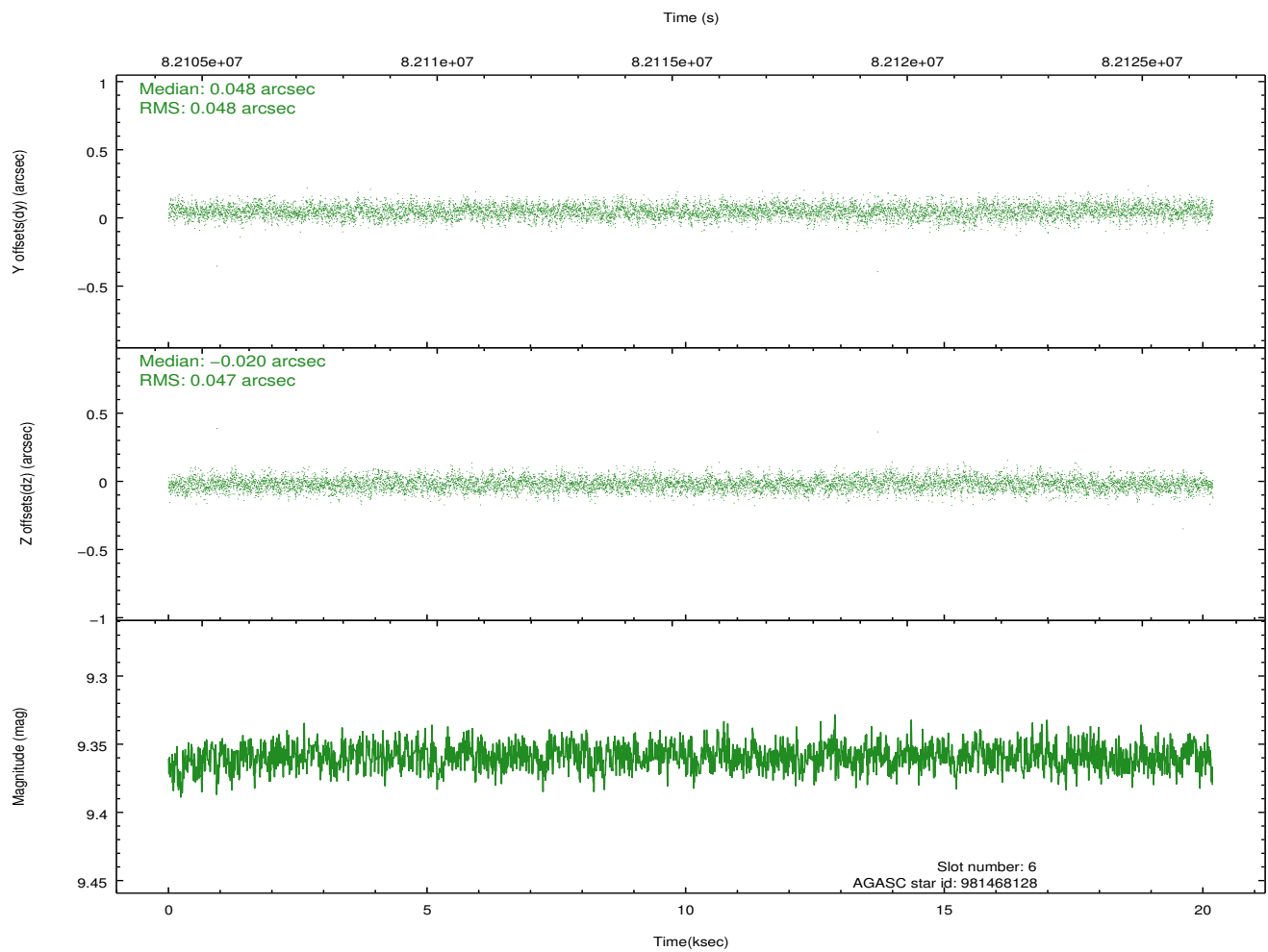
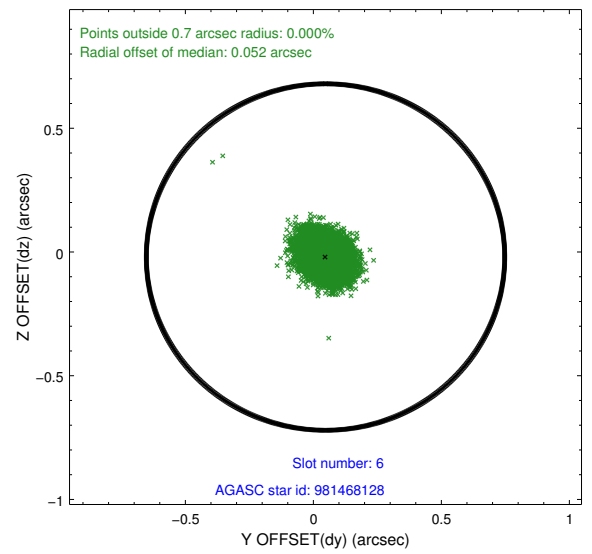
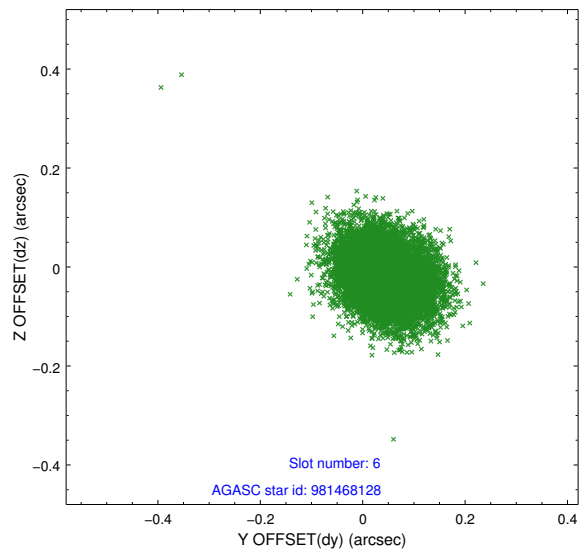
2.4.2 Slot 4



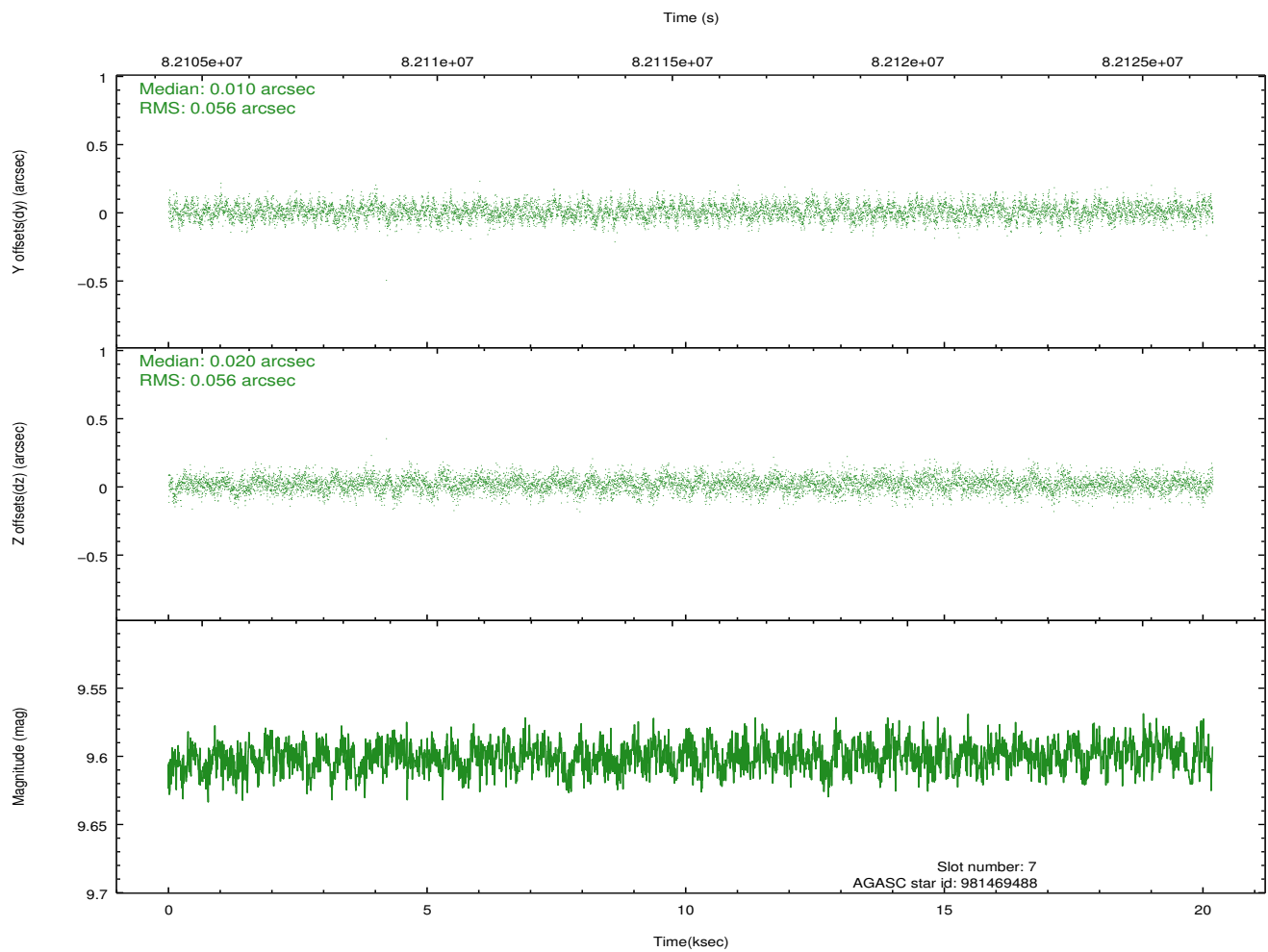
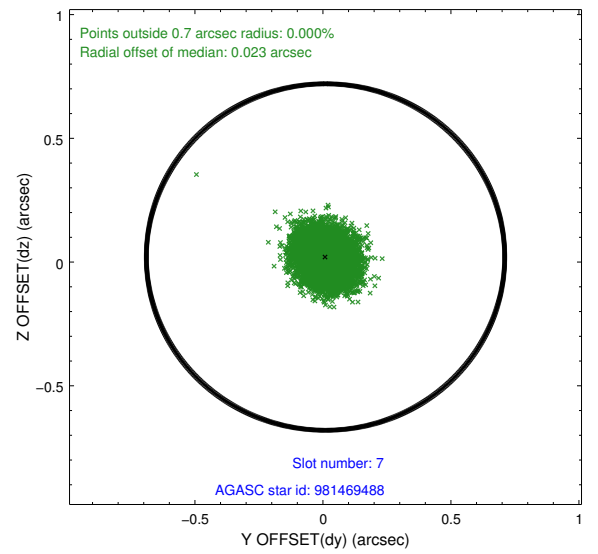
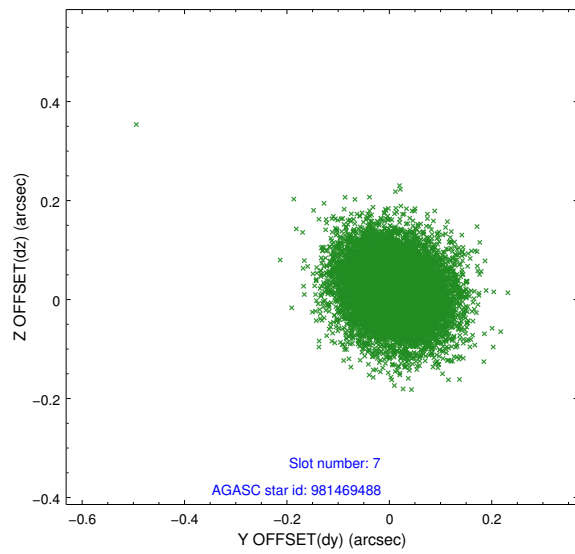
2.4.3 Slot 5



2.4.4 Slot 6

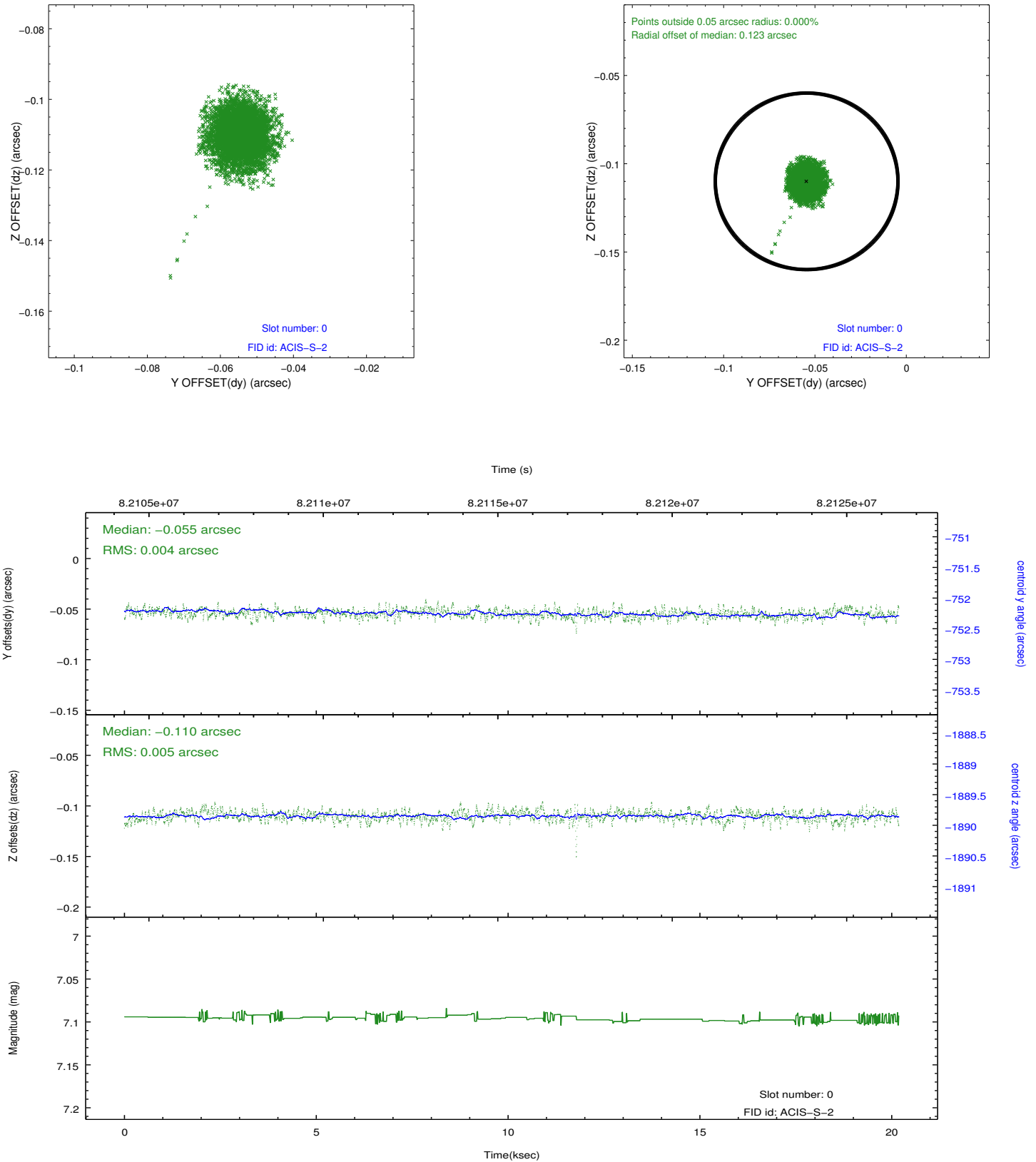


2.4.5 Slot 7

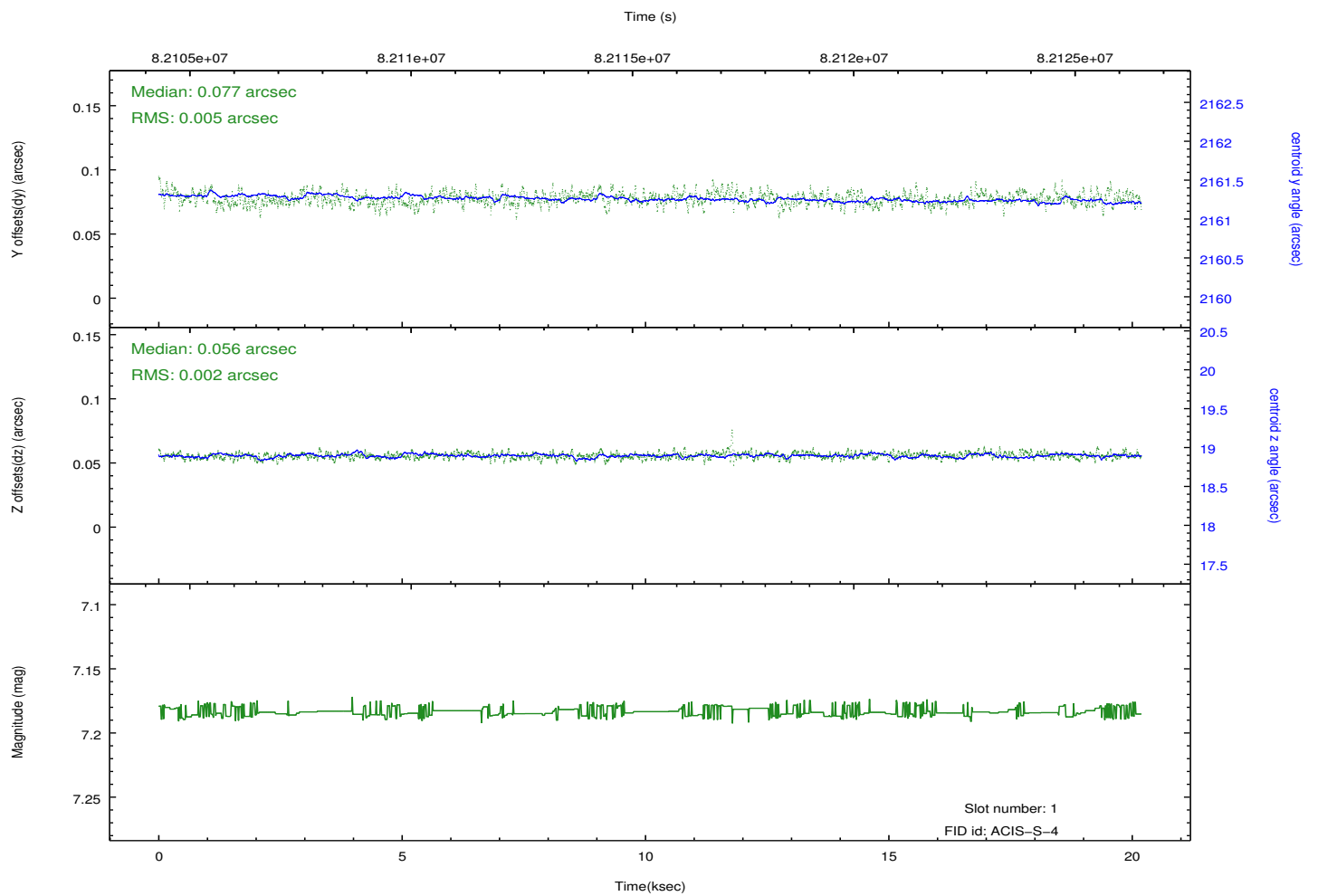
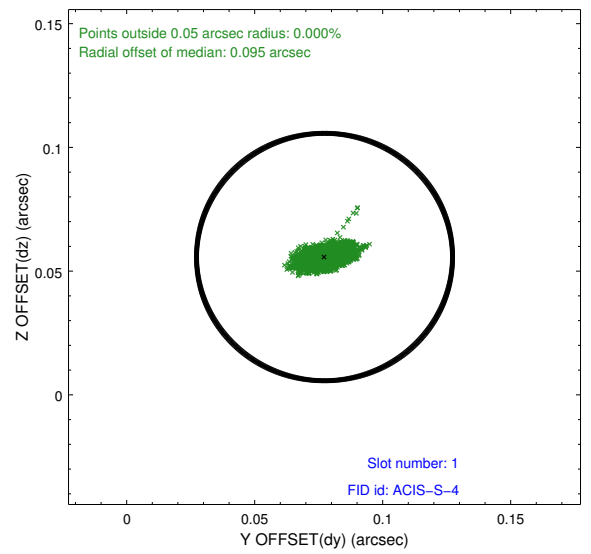
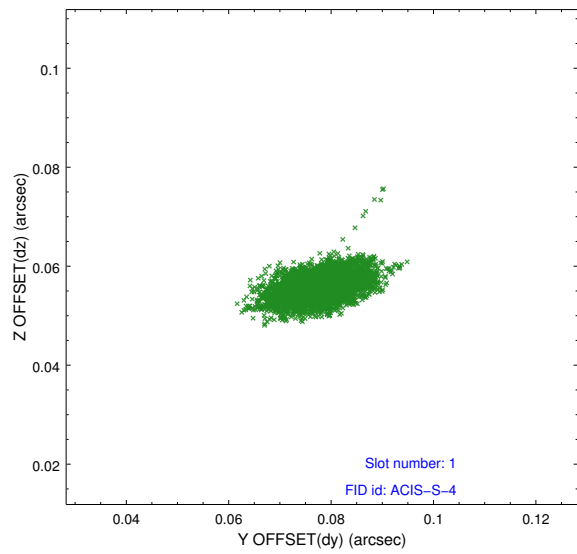


2.5 FID Slots

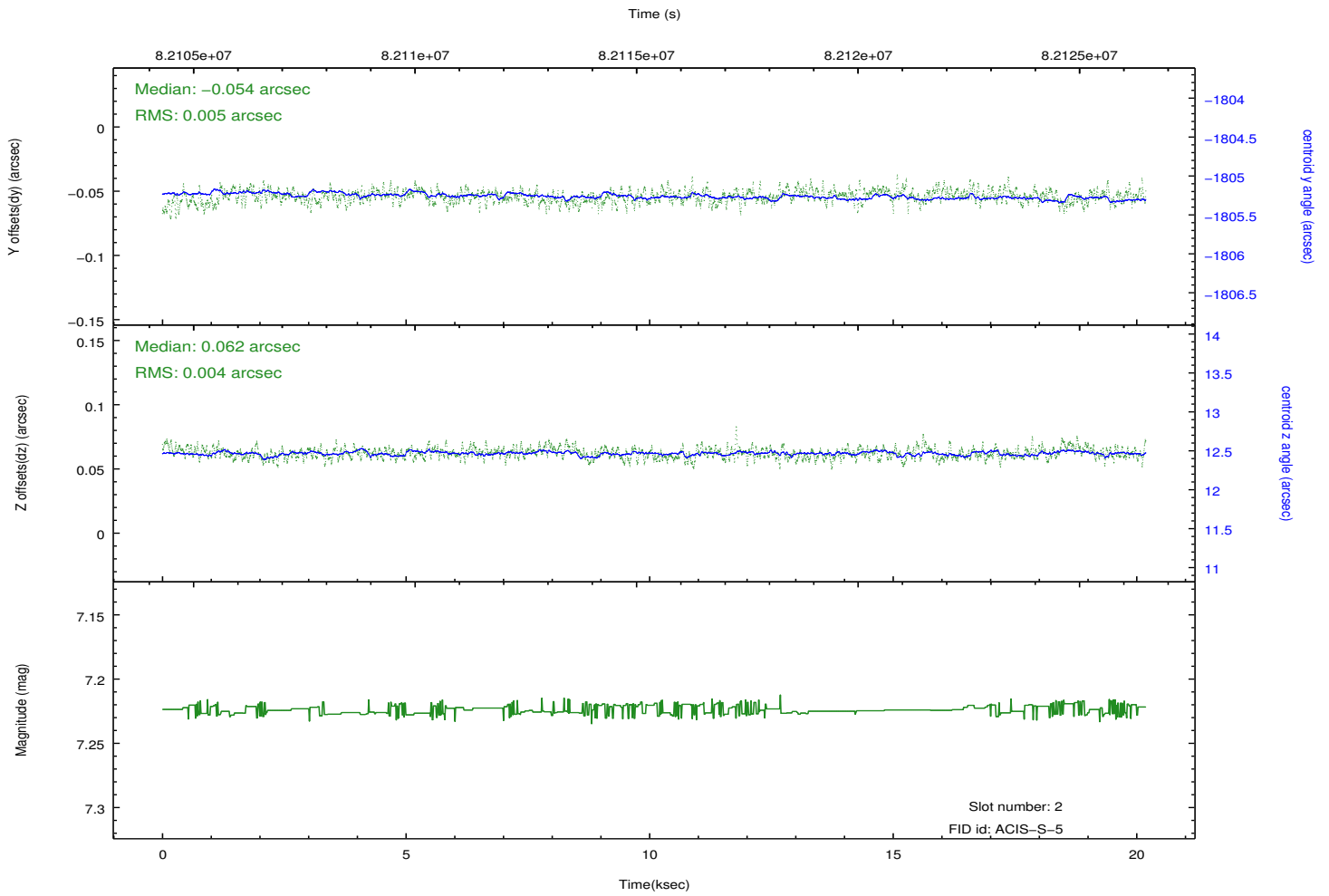
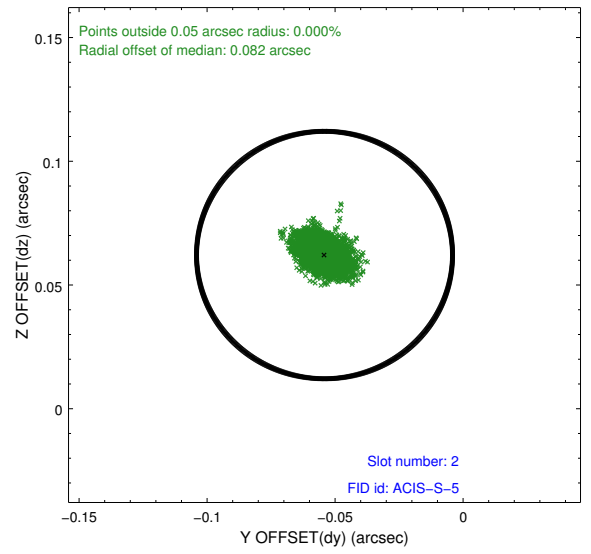
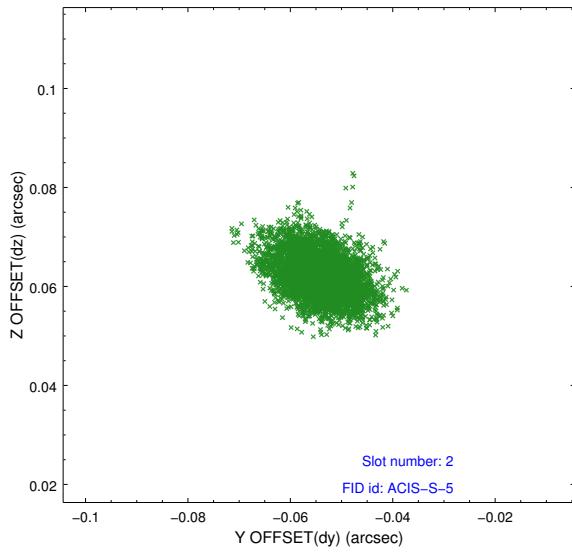
2.5.1 Slot 0



2.5.2 Slot 1

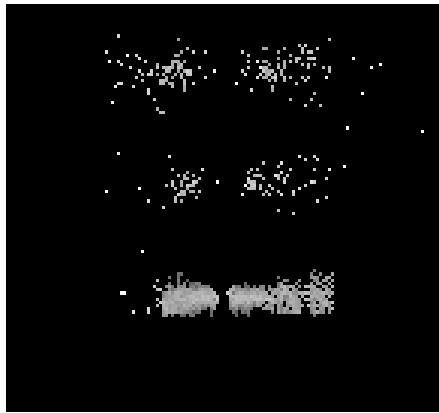


2.5.3 Slot 2

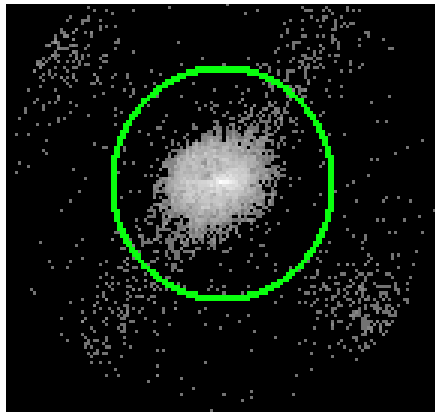


3 Gratings

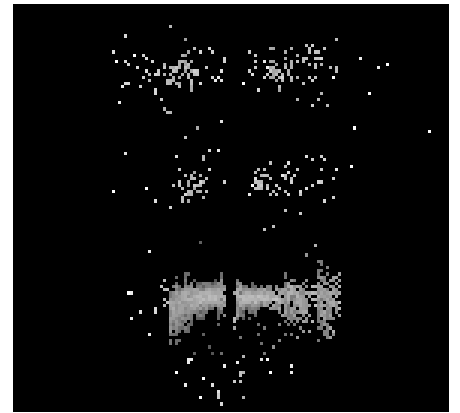
3.1 LETG Arm



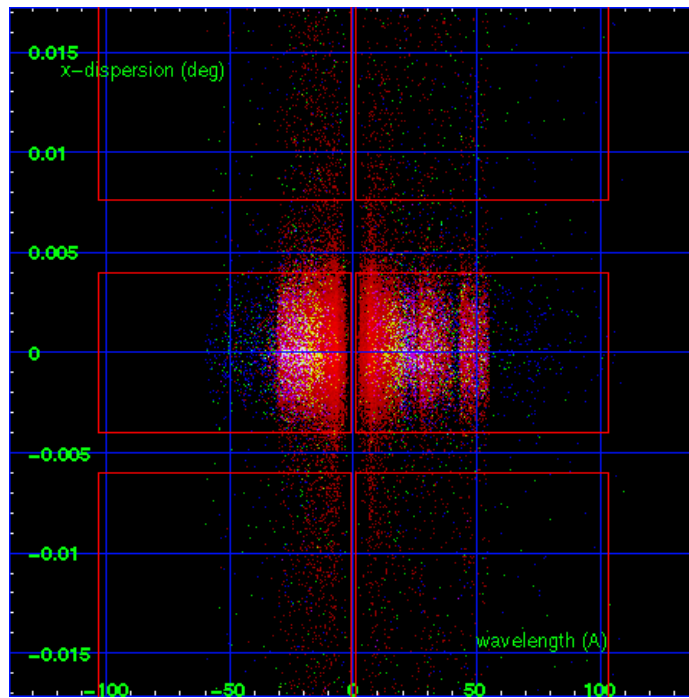
LETG Order Sort 123



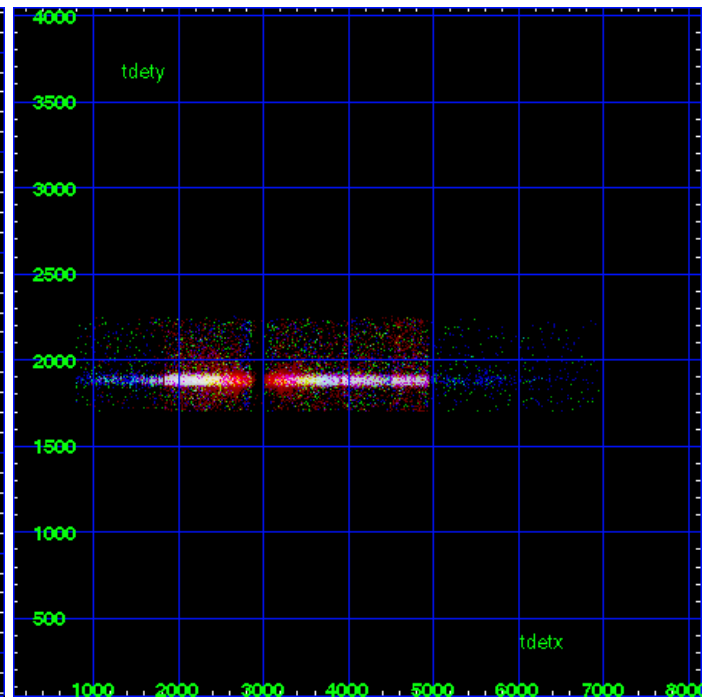
LETG Zero Order



LETG Order Sort ALL

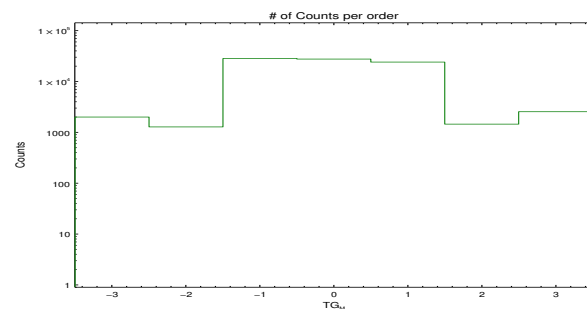


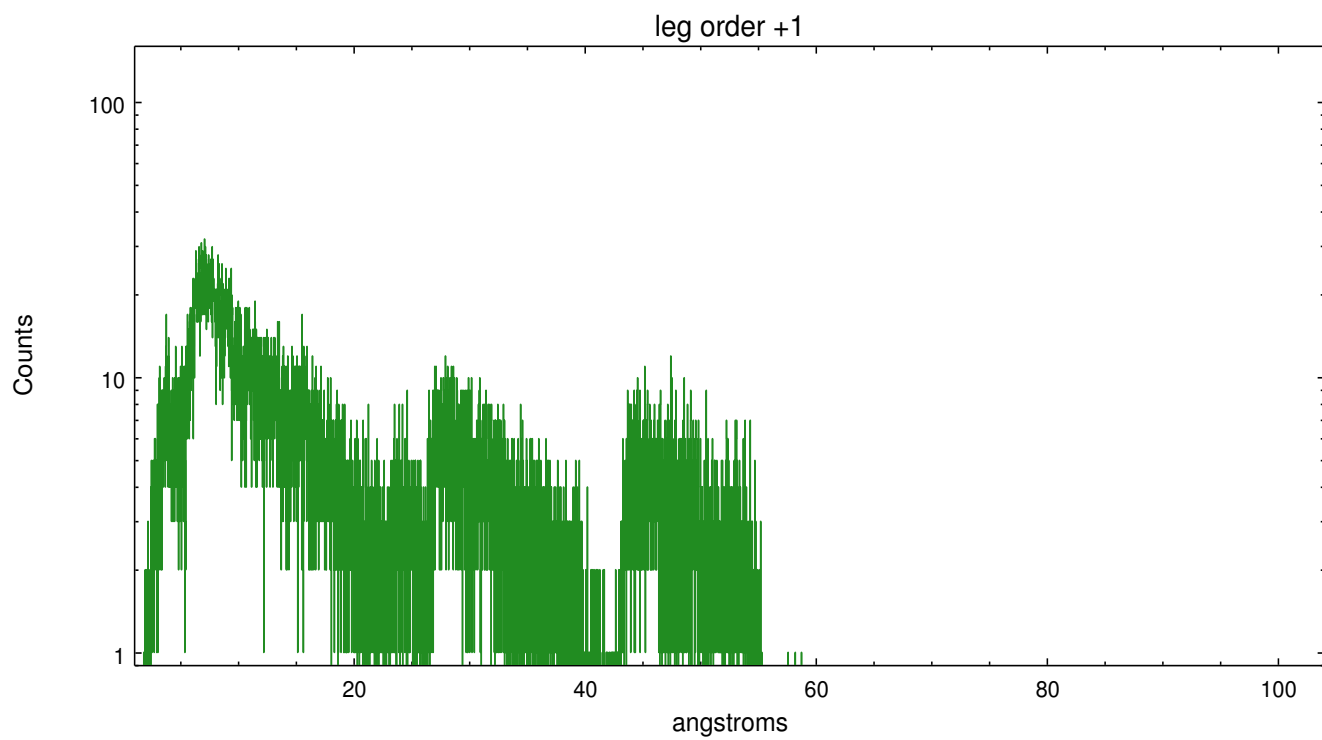
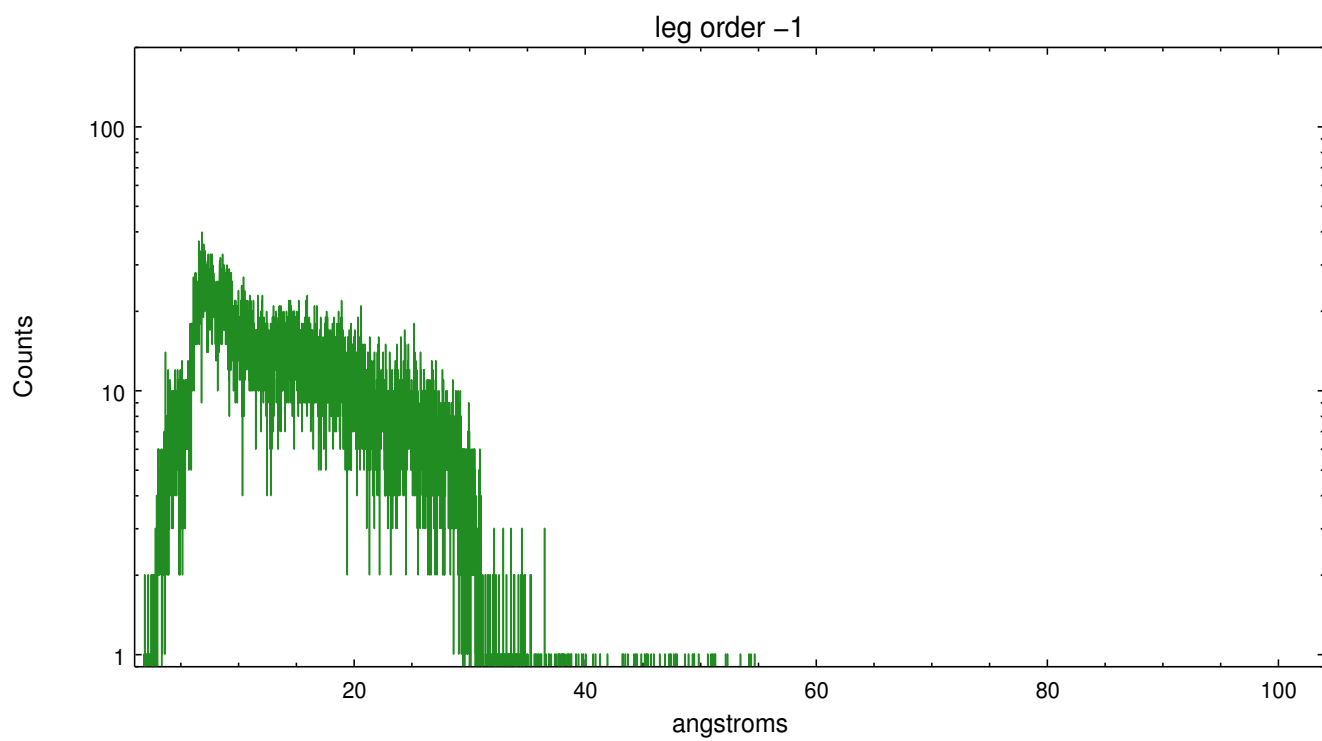
Spot Image LETG



Full Detector LETG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	2006	1283	28502	27798	24259	1454	2558





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	19.753

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.