

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 1796 - L2 Version 6
Chandra X-Ray Center

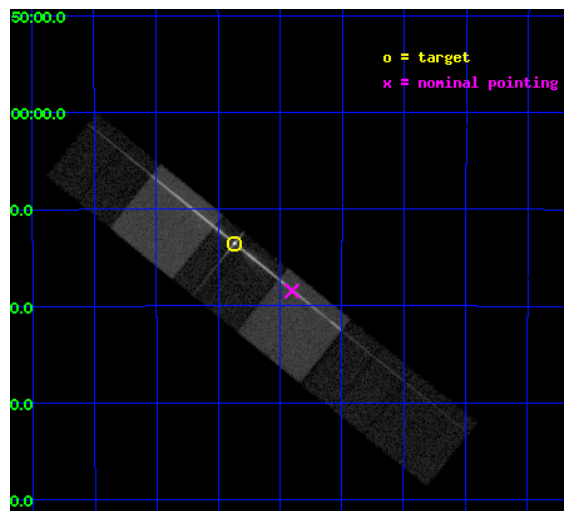
L2 Processing Date : Jan 10 2013

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1 Front

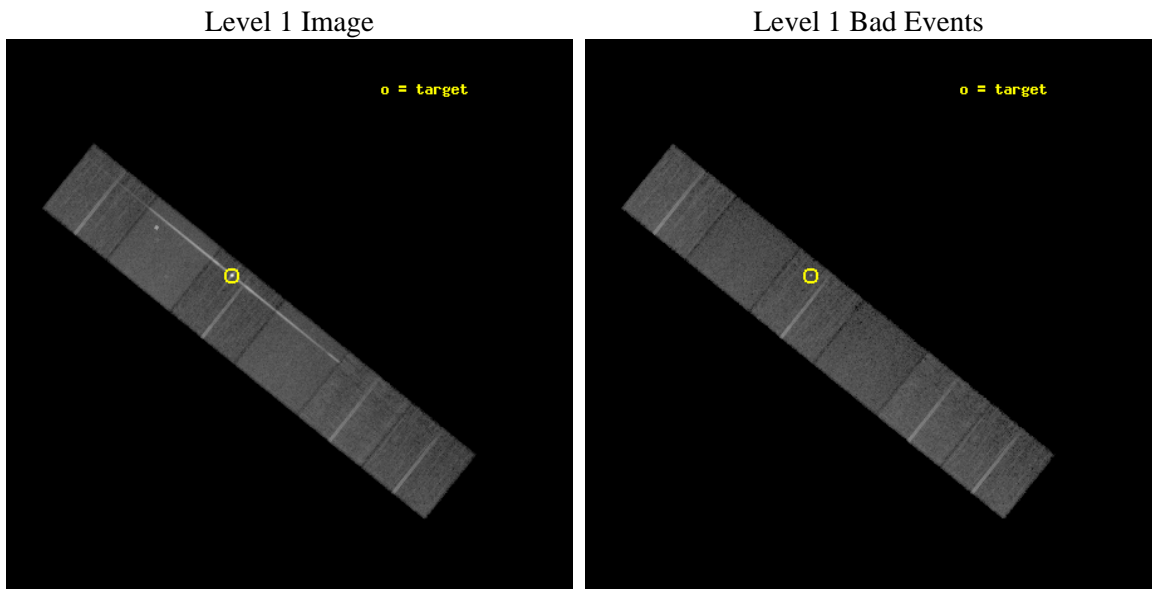
seq_num	390014	Sequence number
obs_id	1796	Observation id
title	GRATINGS CALIBRATION OBSERVATIONS OF PKS2155-304	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	PKS2155-304	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	329.716667	Observer's specified target RA [deg]
dec_targ	-30.225556	Observer's specified target Dec [deg]
ra_nom	329.60127795186	Nominal RA [deg]
dec_nom	-30.307572921781	Nominal Dec [deg]
roll_nom	38.794436667808	Nominal Roll [deg]
revision	6	Processing version of data
ontime	19756.618070379	Sum of GTIs [s]
livetime	19506.447876365	Livetime [s]
ontime4	19756.741190374	Sum of GTIs [s]
ontime5	19756.659110367	Sum of GTIs [s]
ontime6	19756.618070379	Sum of GTIs [s]
ontime7	19756.700150371	Sum of GTIs [s]
ontime8	19756.576900735	Sum of GTIs [s]
ontime9	19756.535960436	Sum of GTIs [s]
l2events	277823	Number of level 2 events



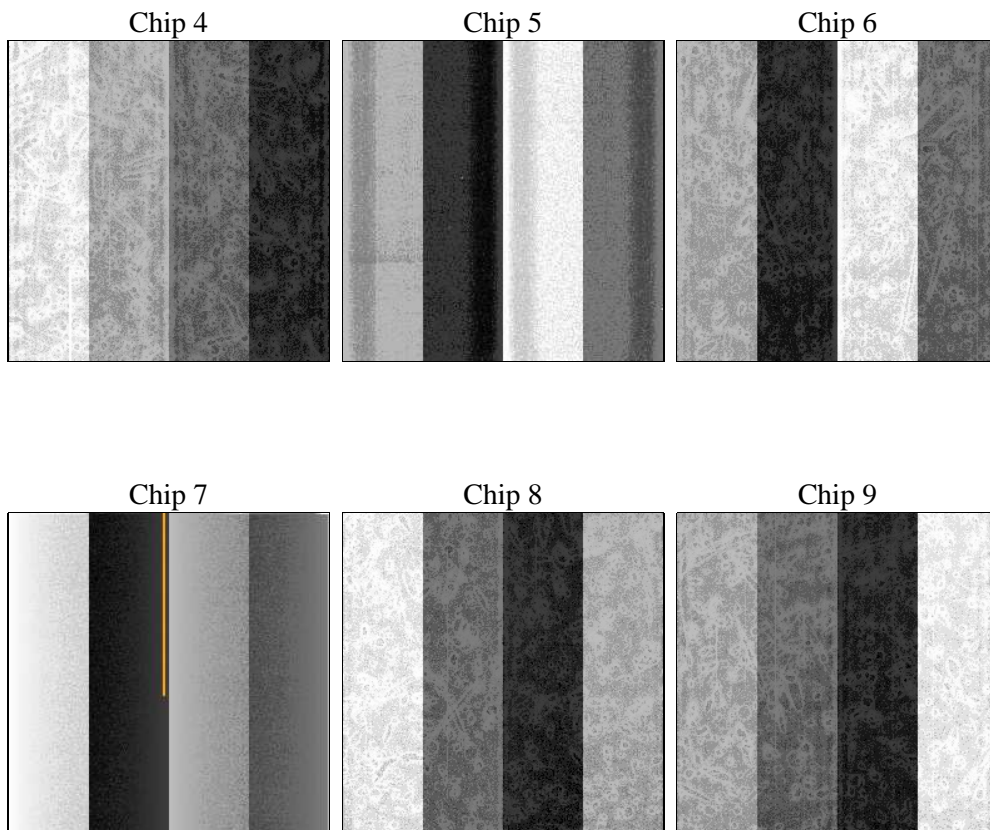
2 OBI

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	19756.618070379	Sum of GTIs [s]
caldbver	4.5.1.1	 	ontime4	19756.741190374	Sum of GTIs [s]
date	2012-08-31T14:27:48	Date and time of file creation	ontime5	19756.659110367	Sum of GTIs [s]
revision	4	Processing version of data	ontime6	19756.618070379	Sum of GTIs [s]
			ontime7	19756.700150371	Sum of GTIs [s]
			ontime8	19756.576900735	Sum of GTIs [s]
			ontime9	19756.535960436	Sum of GTIs [s]
			l1events	902458	Number of level 1 events

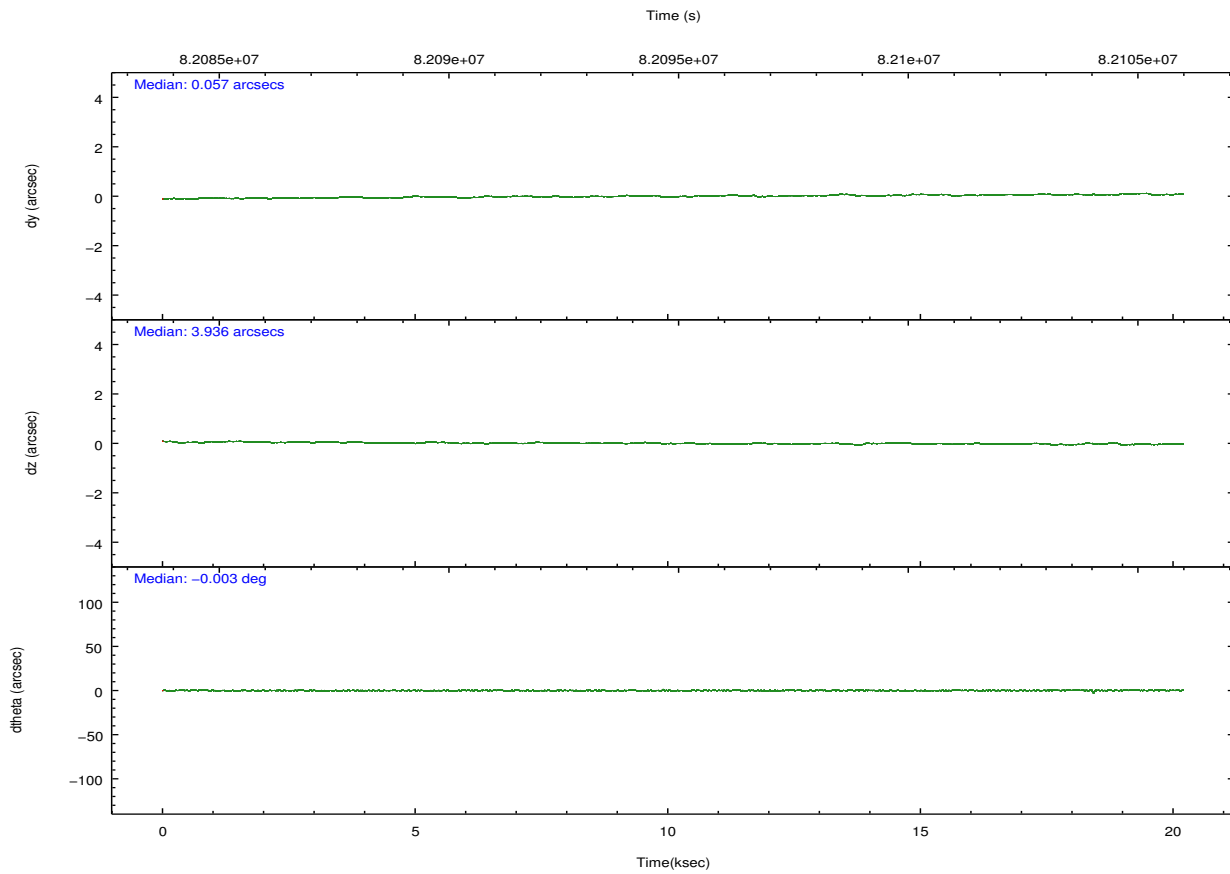
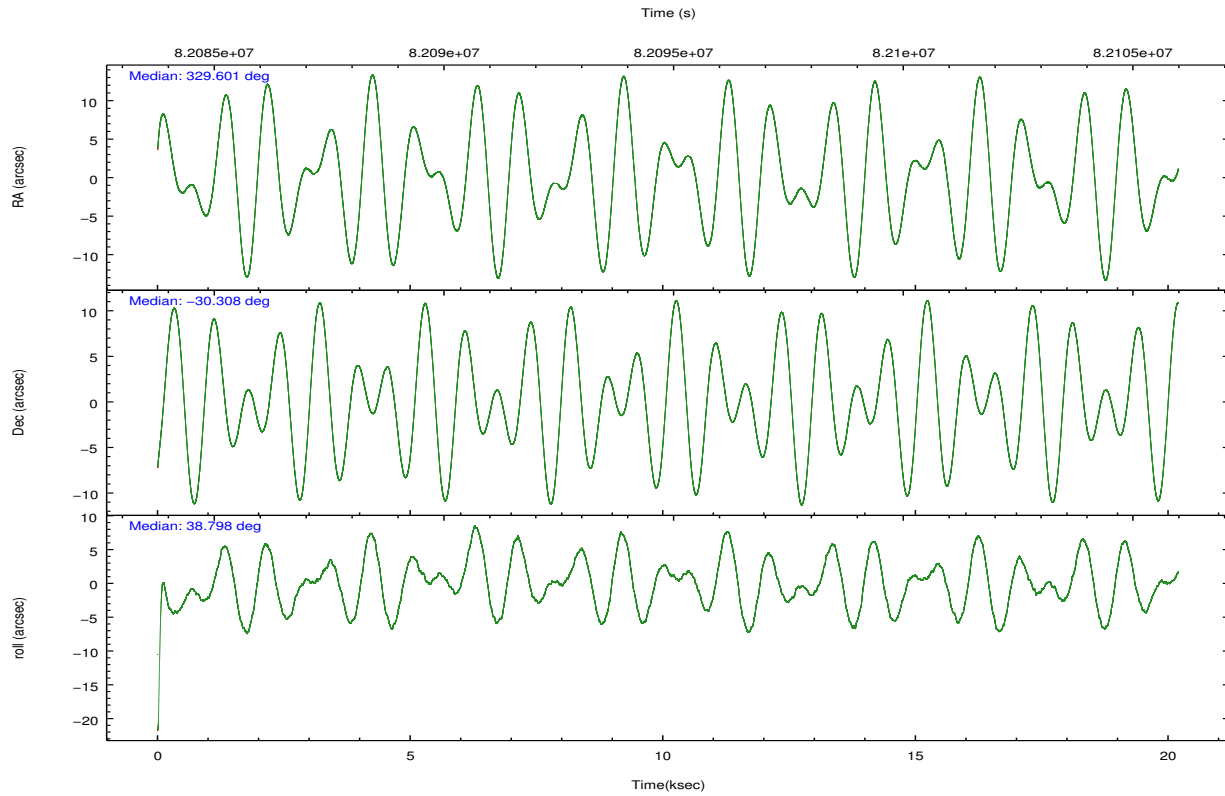
2.1.4 Events

	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	128492	182819	178661	154861	144185	113440	grade 0 events	6545	22999	58393	13752	9142	5471
rejected events	114093	81639	101513	80051	116341	100446		5%	12%	32%	8%	6%	4%
rejected %	88%	44%	56%	51%	80%	88%	grade 1 events	68	240	900	120	88	45
								0%	0%	0%	0%	0%	0%
							grade 2 events	3086	28061	8656	15298	5837	2571
								2%	15%	4%	9%	4%	2%
							grade 3 events	1277	6085	3181	7240	2915	1308
								0%	3%	1%	4%	2%	1%
							grade 4 events	1205	5925	3130	7010	2589	1200
								0%	3%	1%	4%	1%	1%
							grade 5 events	3885	11731	4839	13353	5801	4679
								3%	6%	2%	8%	4%	4%
							grade 6 events	2290	38127	3805	31518	7362	2445
								1%	20%	2%	20%	5%	2%
							grade 7 events	110136	69651	95757	66570	110451	95721
								85%	38%	53%	42%	76%	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	329.589962	329.6012779518637	Subarray requested	NONE	NONE
[deg] Pointing Dec	-30.333169	-30.30757292178095	Alternating exposures requested	N	N
[deg] Pointing Roll	38.632112	38.79443666780834	[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)	82084983.184000	82084453.06157701			
Observation start date	2000-08-08T01:21:59	2000-08-08T01:14:13			
[s] Observation end time (MET)	82104983.184000	82105117.06234699			
Observation end date	2000-08-08T06:55:19	2000-08-08T06:58:37			
Read mode	TIMED	TIMED			

2.3 Aspect

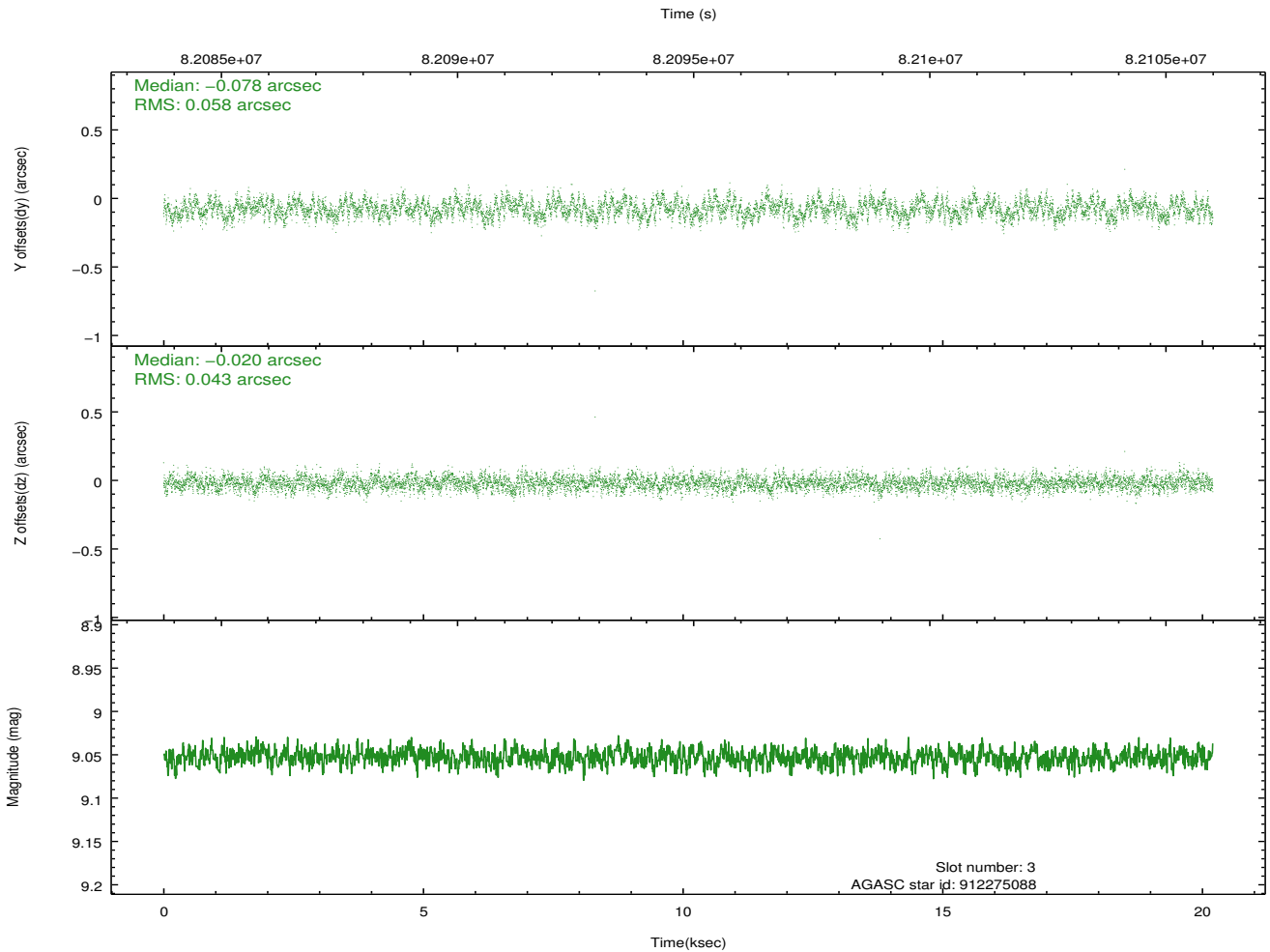
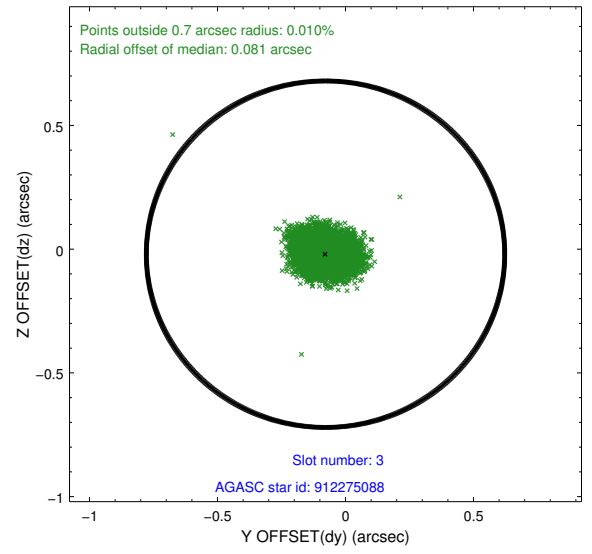
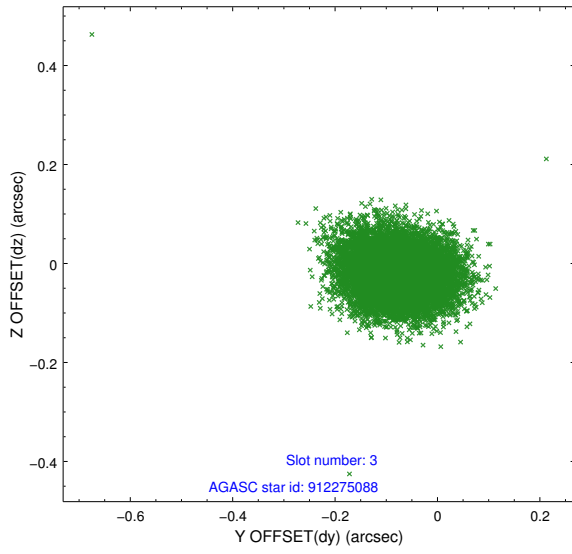


Slot Statistics

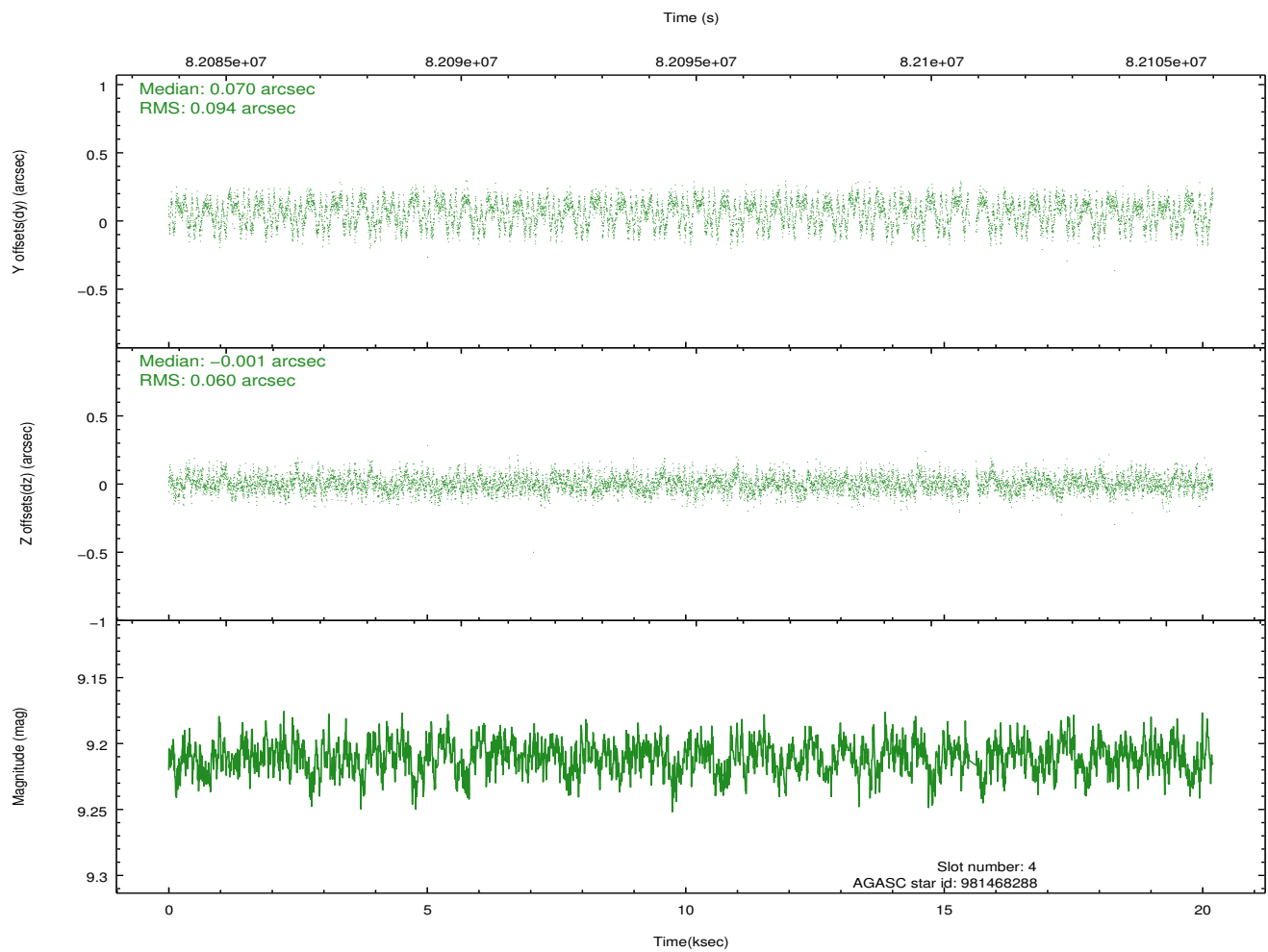
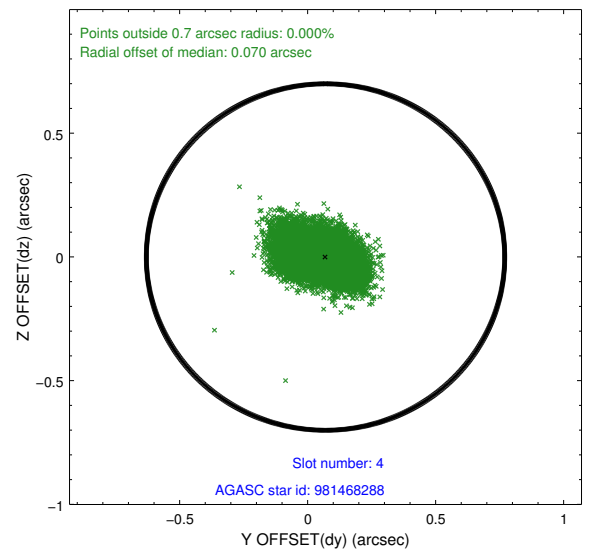
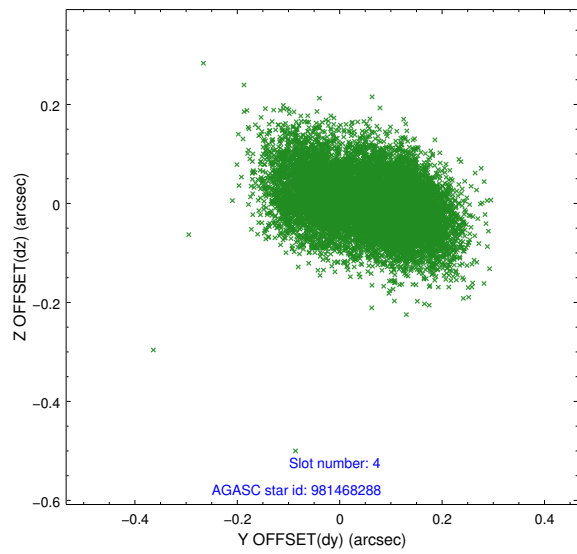
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	4927	-0.057	-0.108	0.007	0.011	0.000000	0.000000	-752.13	-1889.88
1	FID	ACIS-S-4	7.18	4925	0.076	0.056	0.006	0.011	0.000000	0.000000	2161.23	18.48
2	FID	ACIS-S-5	7.22	4925	-0.051	0.060	0.007	0.013	0.000000	0.000000	-1804.70	12.43
3	GUIDE	912275088	9.05	9849	-0.078	-0.020	0.077	0.123	329.619228	-29.738698	1407.47	1615.38
4	GUIDE	981468288	9.21	9784	0.070	-0.001	0.119	0.191	328.608359	-30.257017	-2221.39	2110.46
5	GUIDE	981478152	9.40	9844	-0.035	0.039	0.080	0.129	329.415589	-30.057192	195.26	1116.03
6	GUIDE	981468128	9.35	9791	0.076	-0.042	0.077	0.127	329.756350	-30.158334	797.23	168.79
7	GUIDE	981469488	9.60	9847	-0.022	0.021	0.085	0.139	329.261199	-30.045155	-153.90	1449.27

2.4 Star Slots

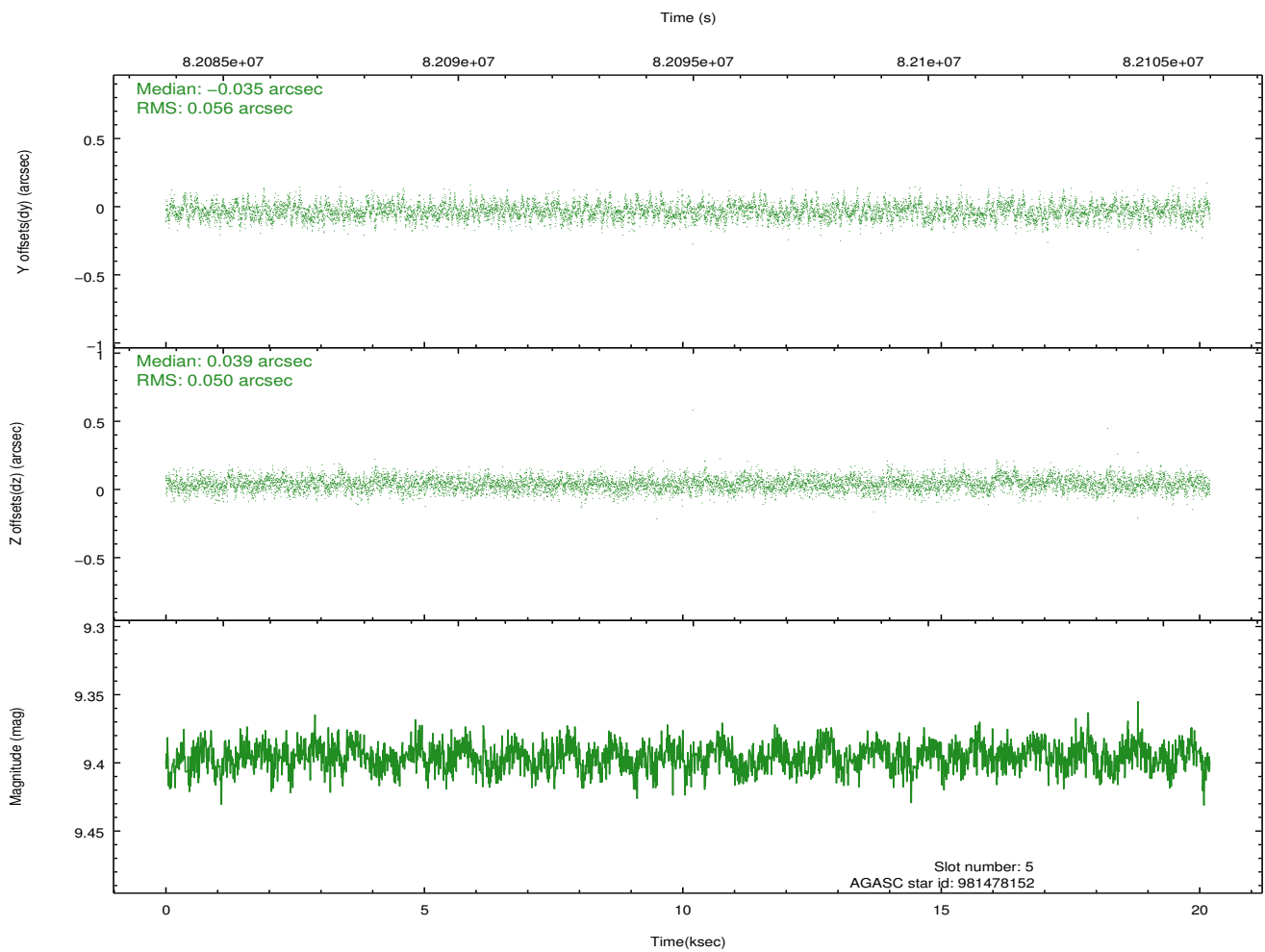
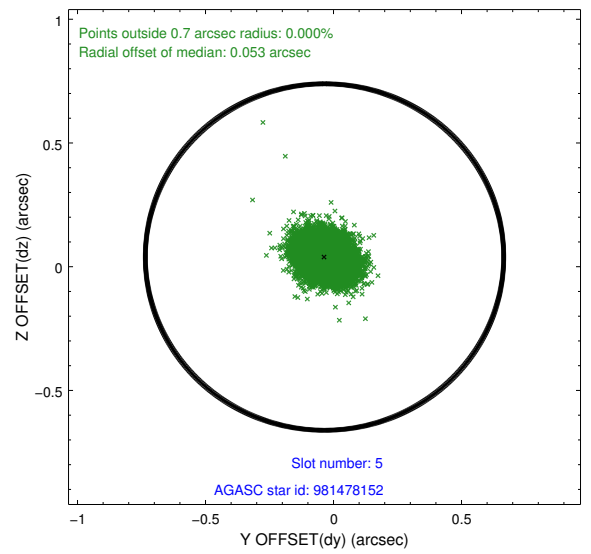
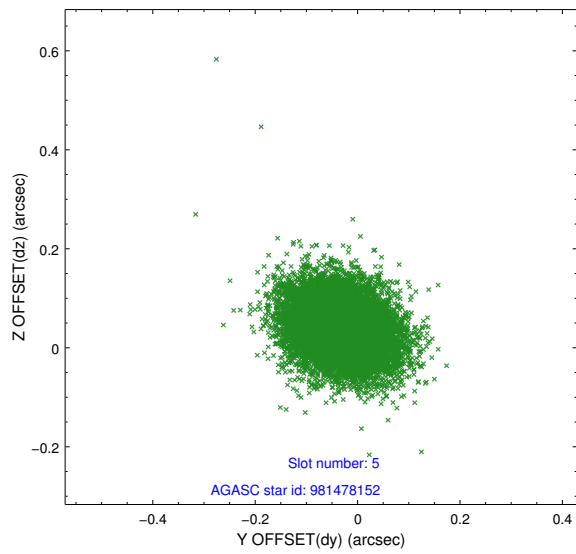
2.4.1 Slot 3



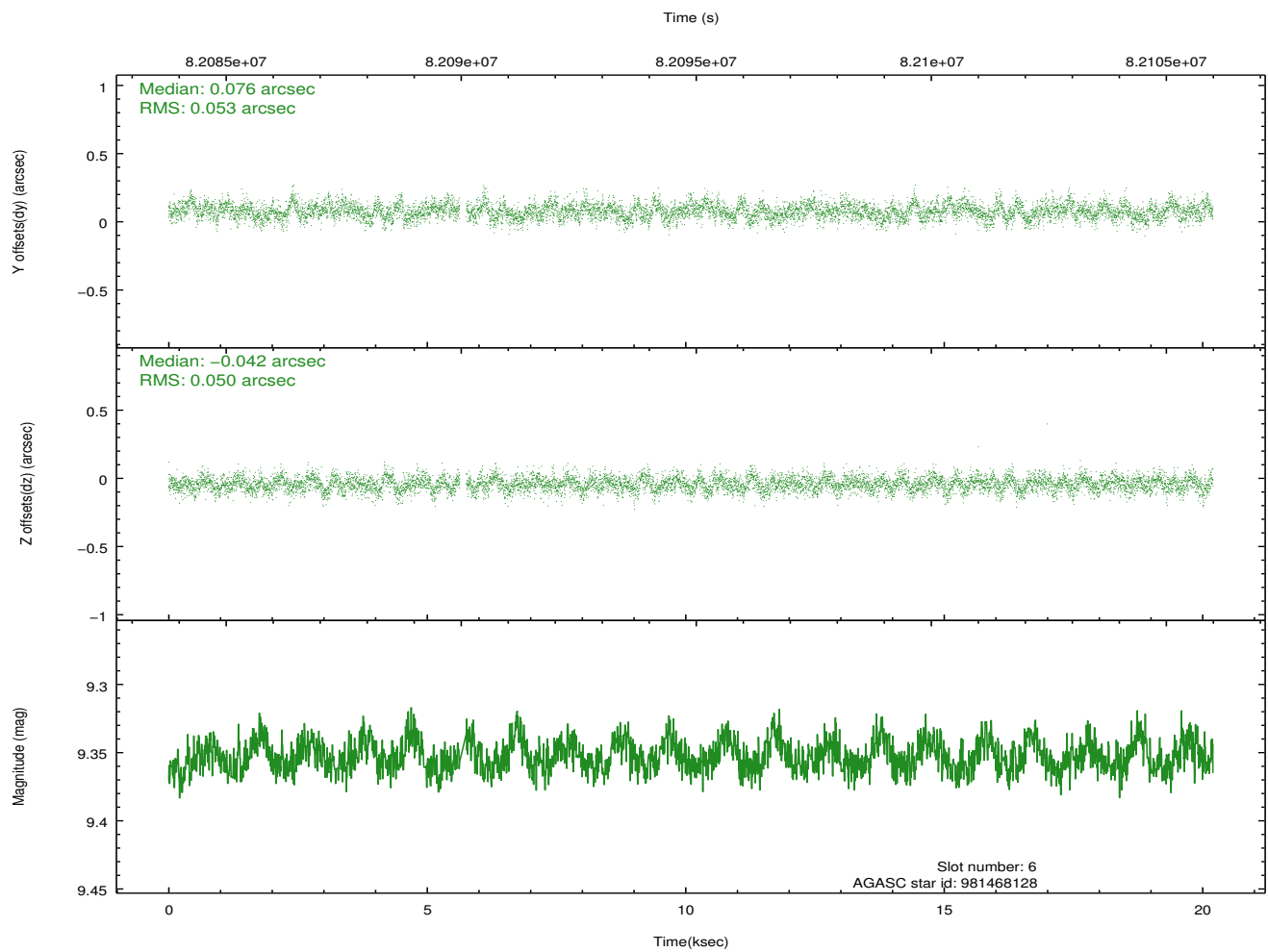
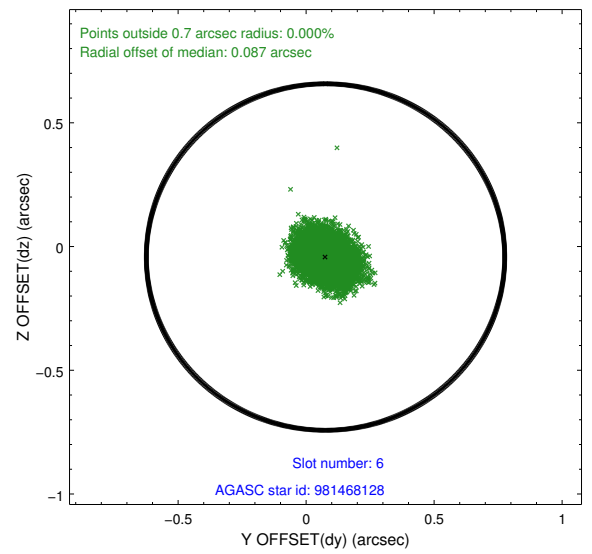
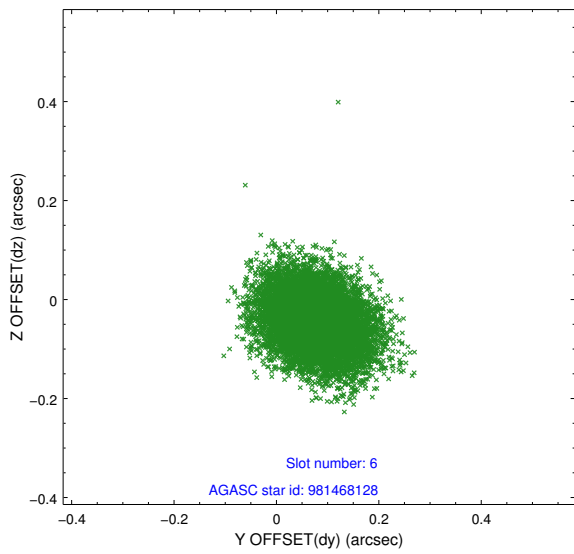
2.4.2 Slot 4



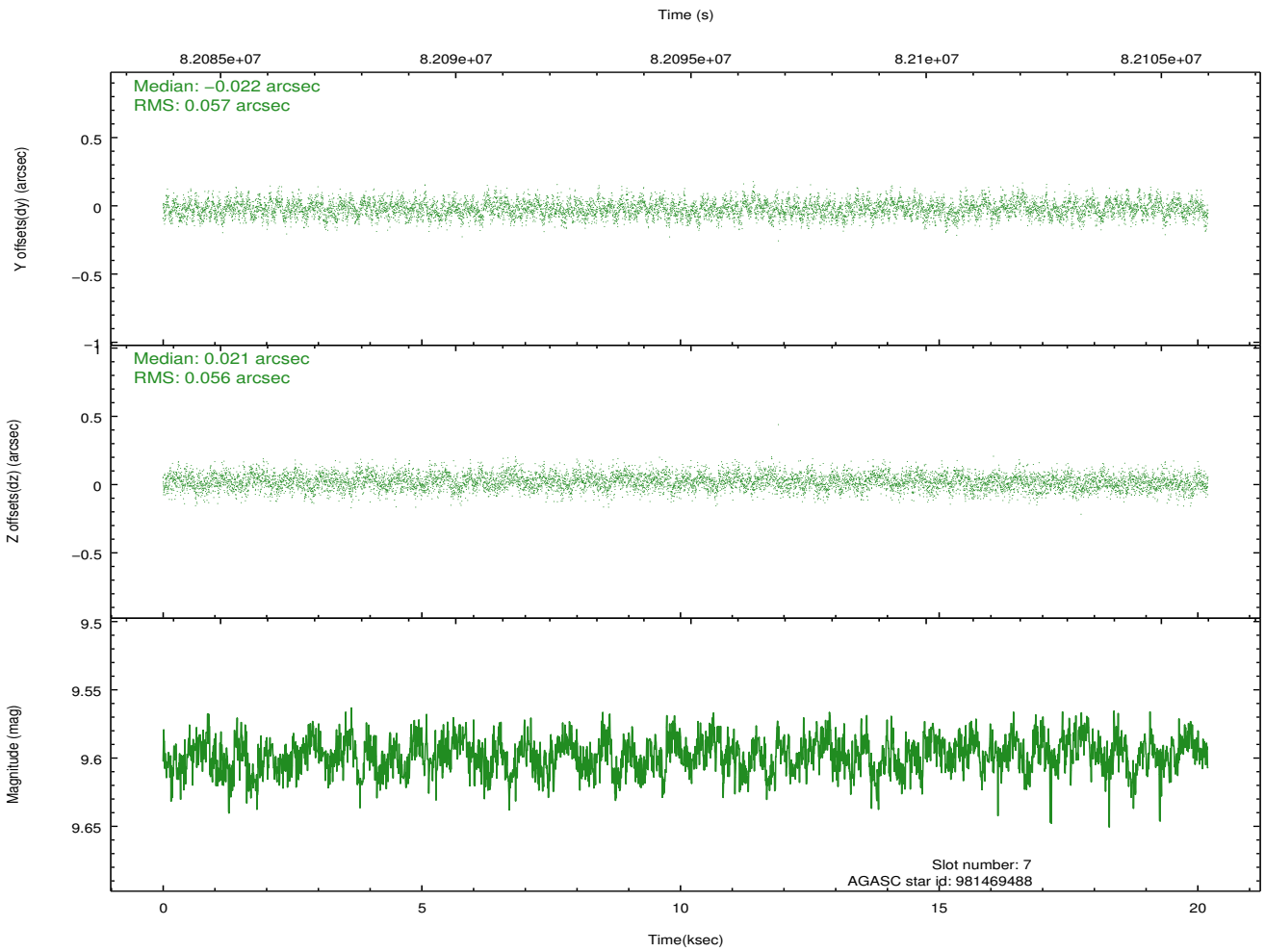
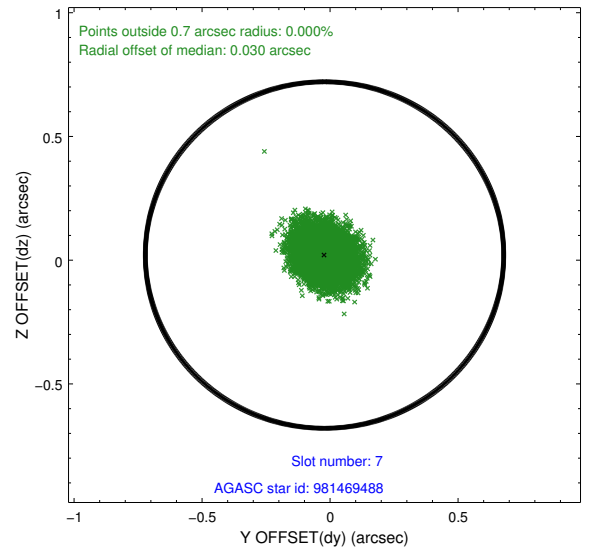
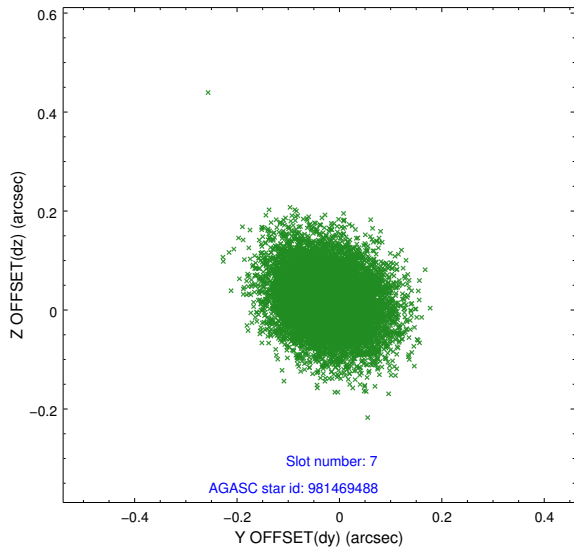
2.4.3 Slot 5



2.4.4 Slot 6

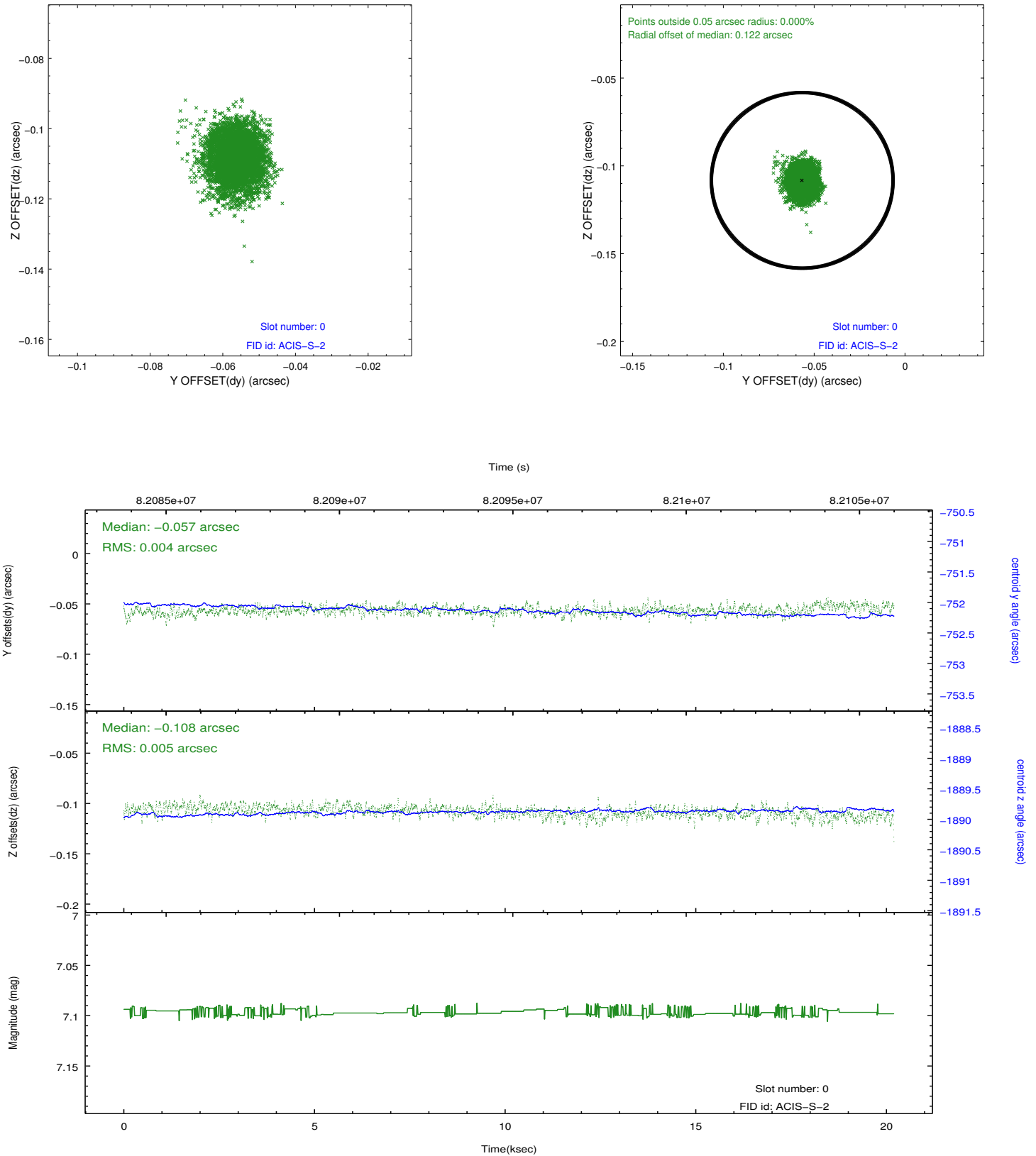


2.4.5 Slot 7

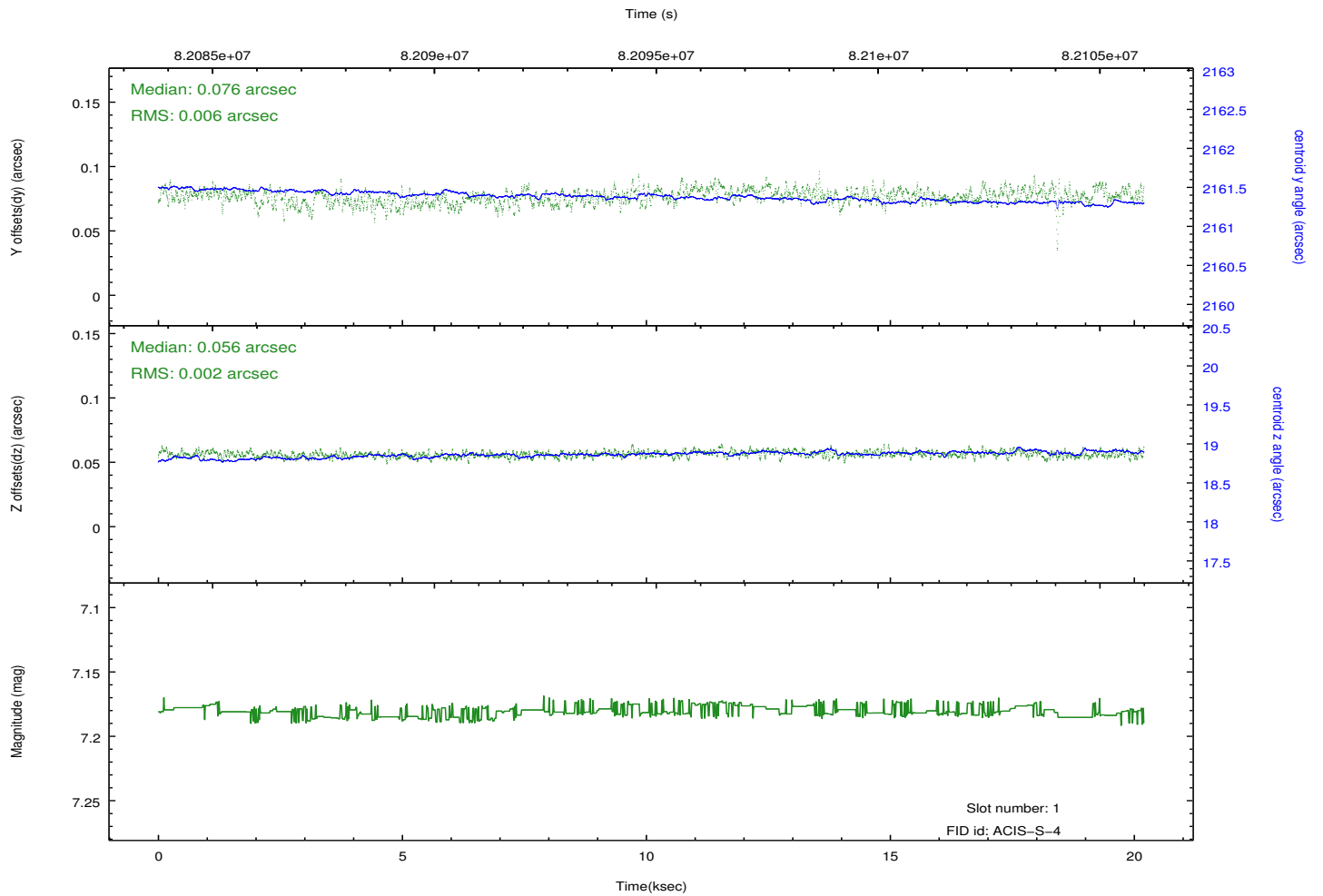
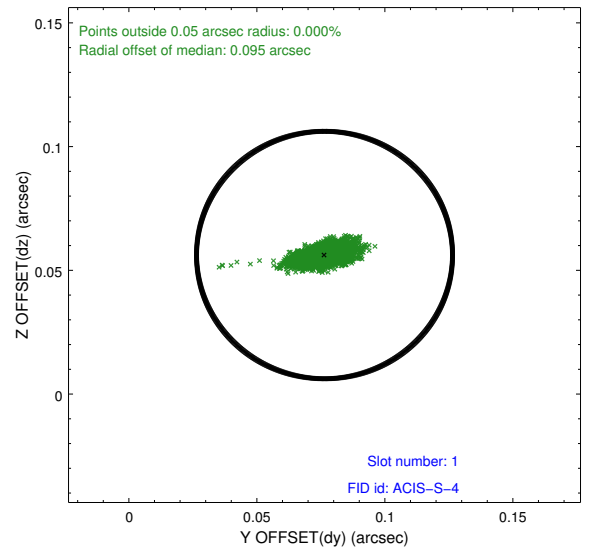
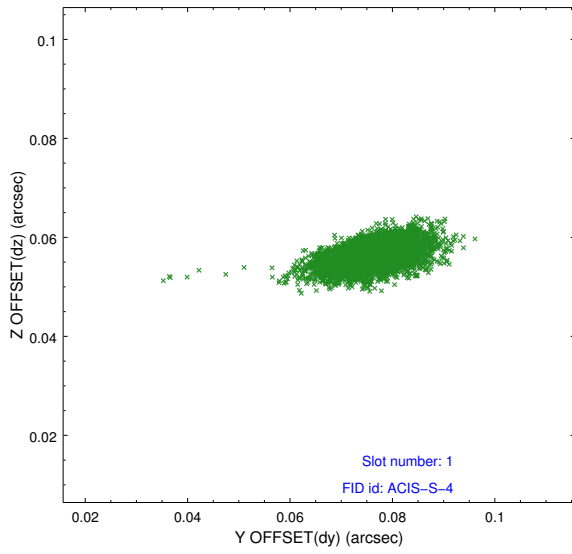


2.5 FID Slots

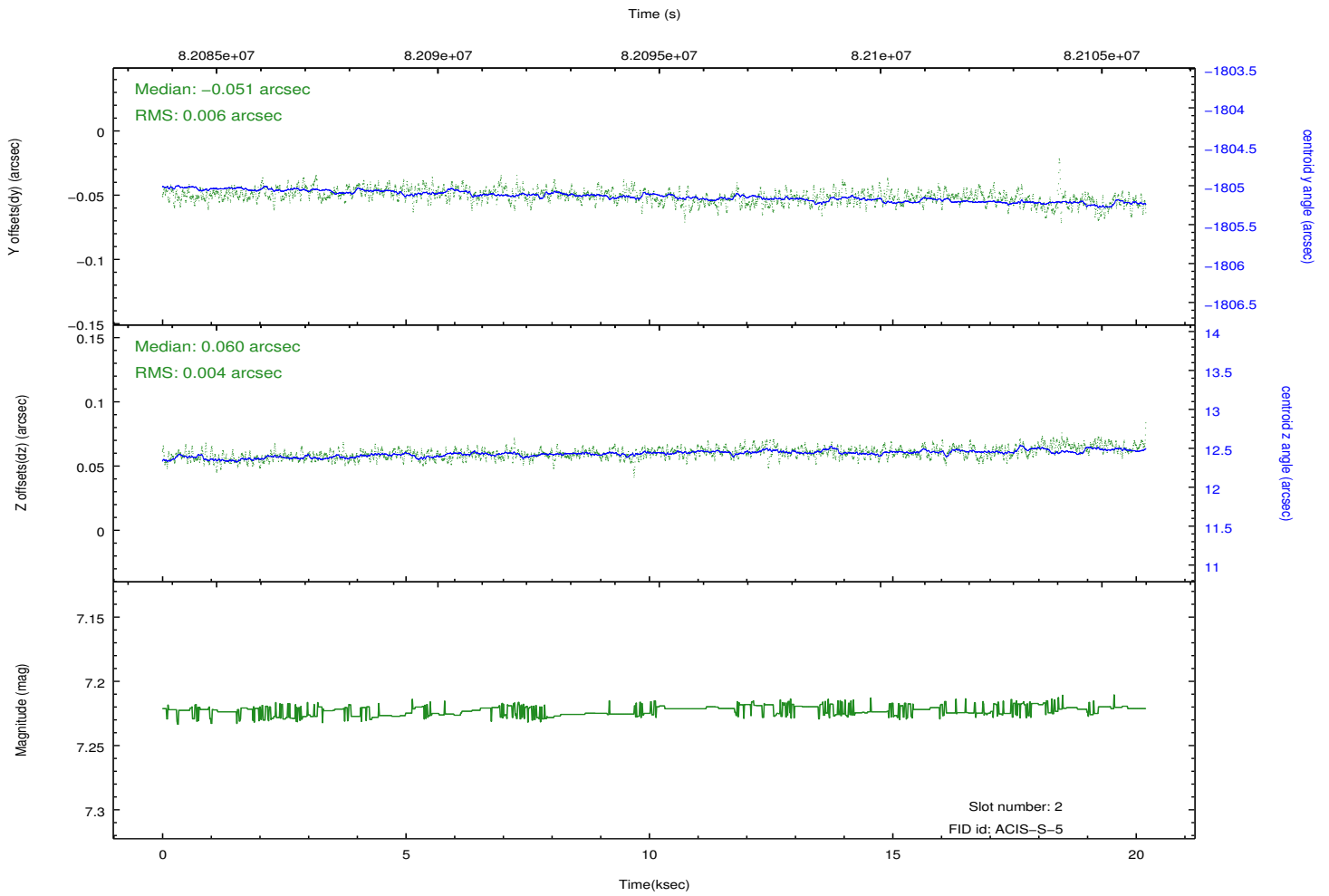
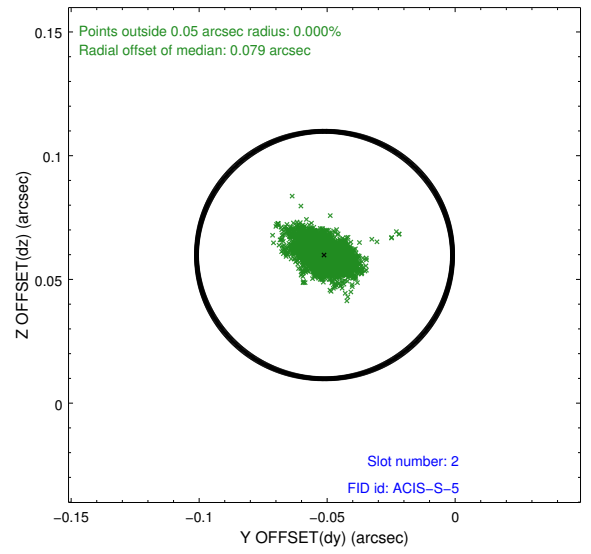
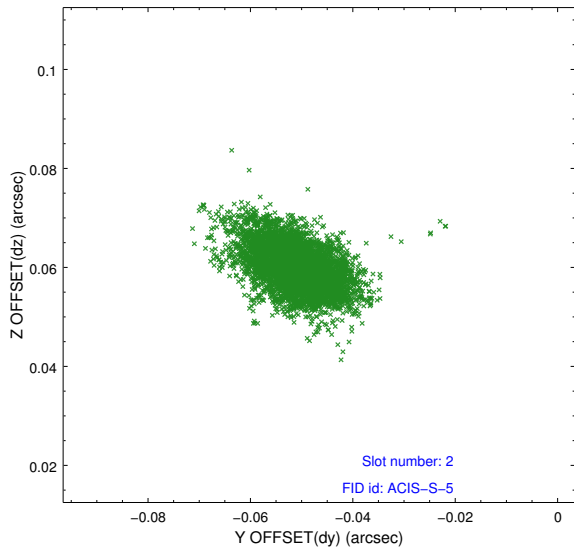
2.5.1 Slot 0



2.5.2 Slot 1

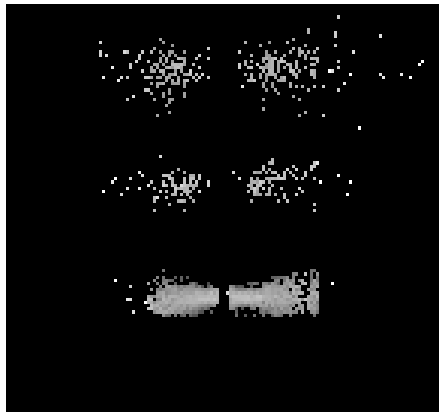


2.5.3 Slot 2

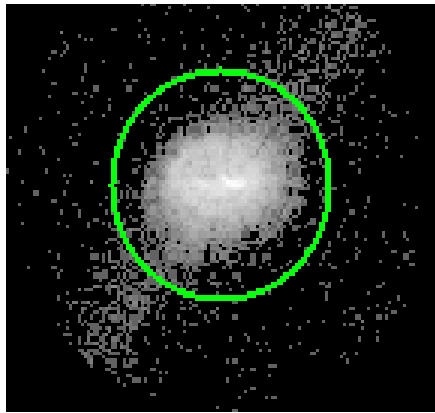


3 Gratings

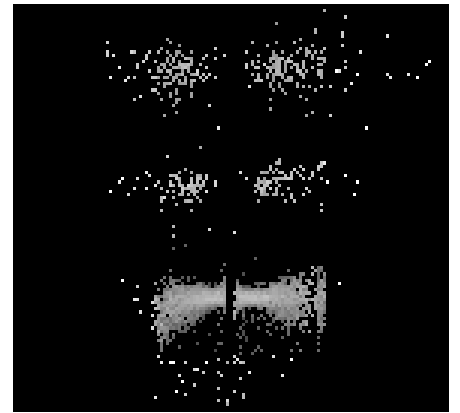
3.1 LETG Arm



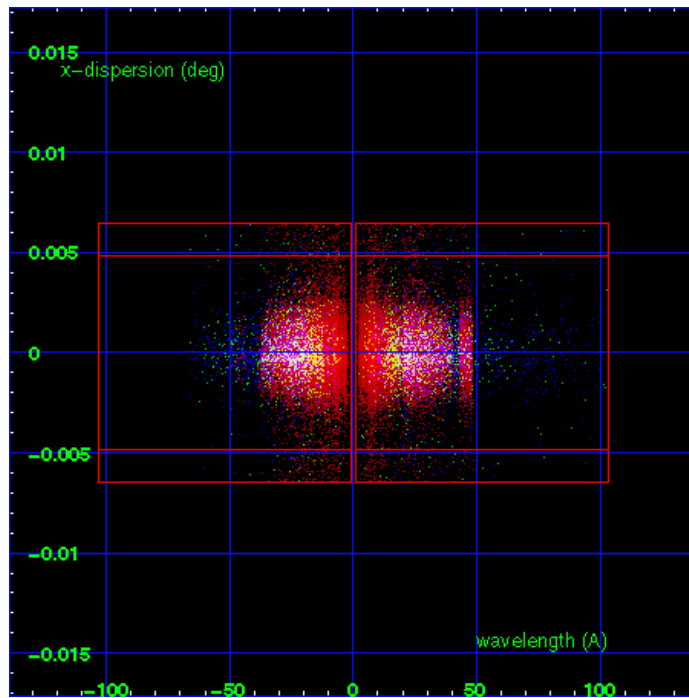
LETG Order Sort 123



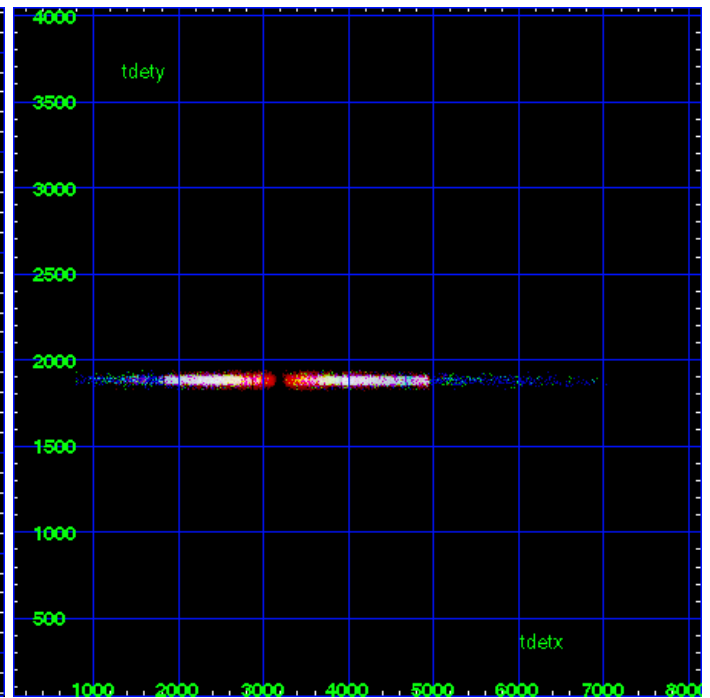
LETG Zero Order



LETG Order Sort ALL

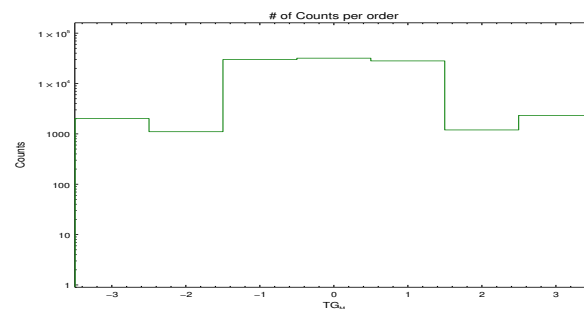


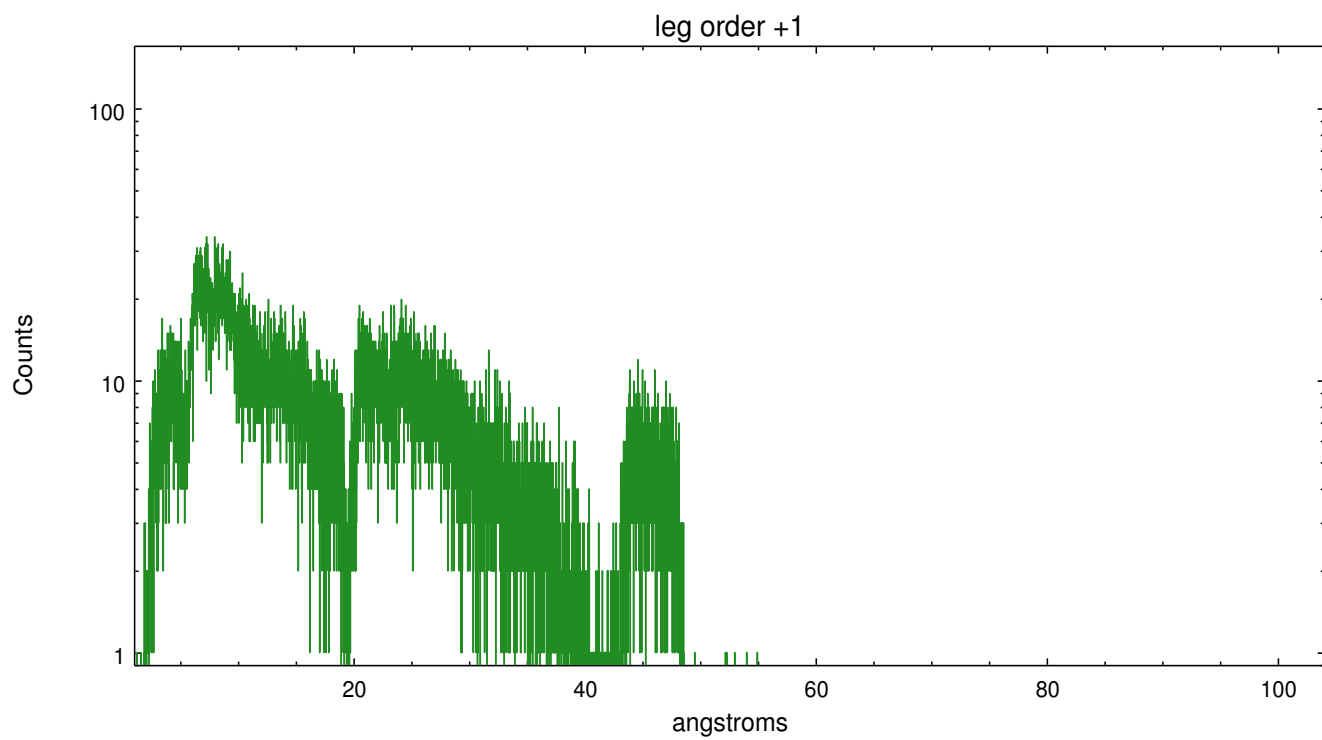
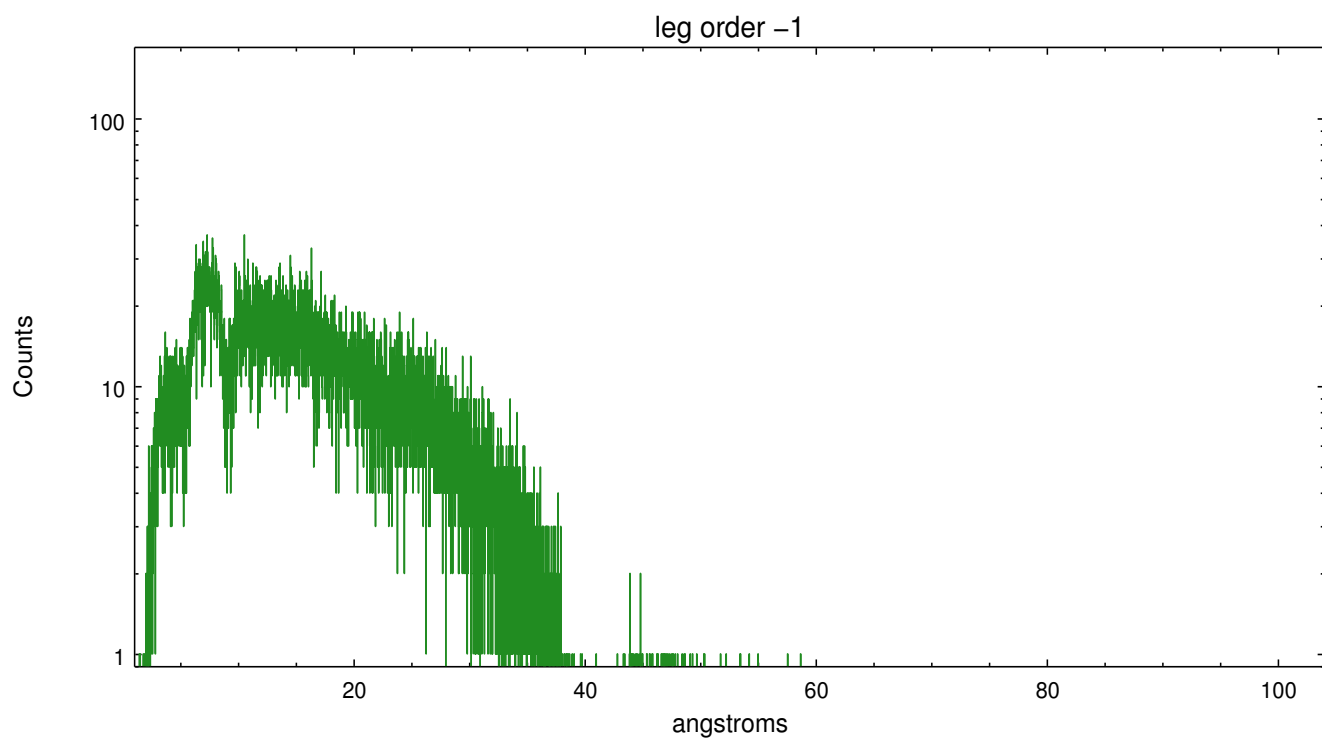
Spot Image LETG



Full Detector LETG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	2020	1109	30113	32119	28368	1201	2336





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	19.756

A.2 Comments

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.