

V&V Reference Report

L2 ASCDS Version : 8.4.3.1

Observation 6927 - L2 Version 2
Chandra X-Ray Center

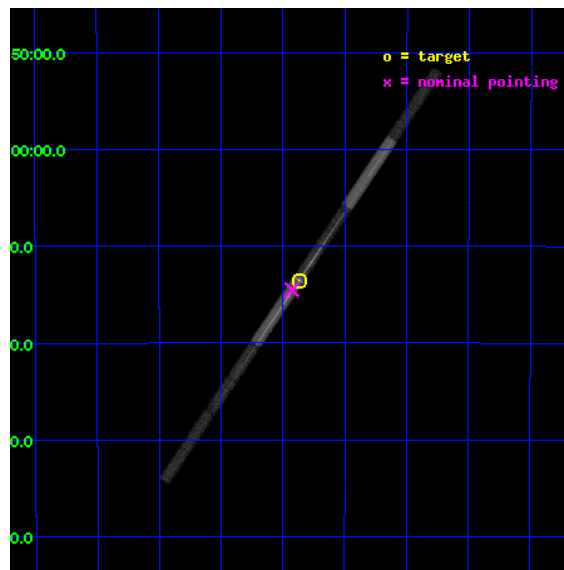
L2 Processing Date : Mar 29 2012

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1 Front

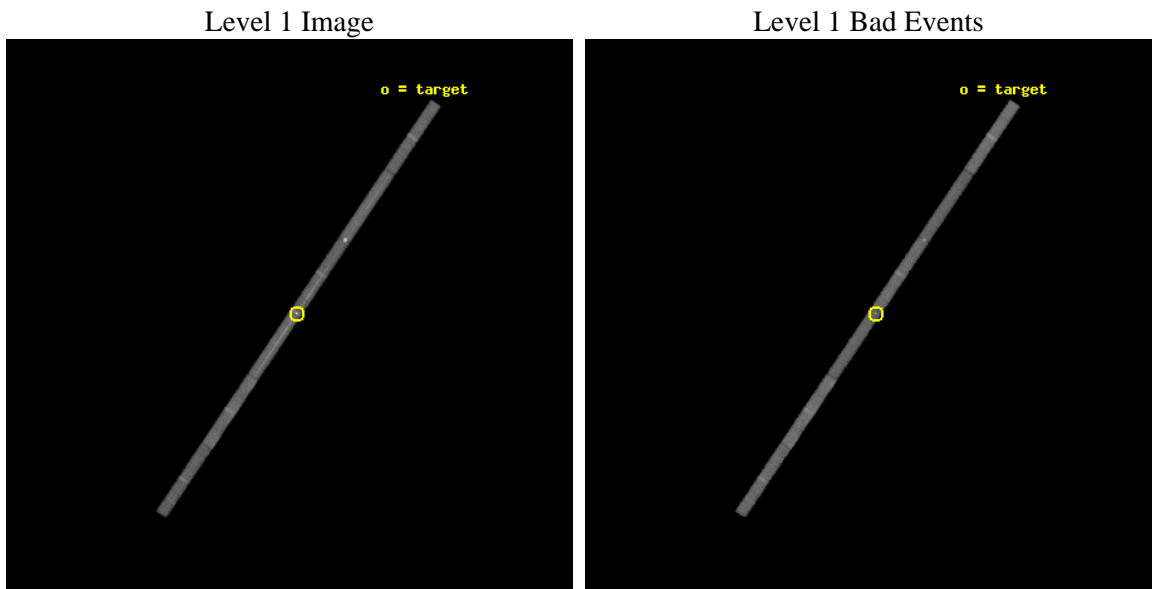
seq_num	790107	Sequence number
obs_id	6927	Observation id
title	AO7 Calibration Observations of PKS2155-304	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	PKS2155-304	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	329.716667	Observer's specified target RA [deg]
dec_targ	-30.225556	Observer's specified target Dec [deg]
ra_nom	329.73179262421	Nominal RA [deg]
dec_nom	-30.242036459918	Nominal Dec [deg]
roll_nom	124.00889231124	Nominal Roll [deg]
revision	2	Processing version of data
ontime	28564.899513543	Sum of GTIs [s]
livetime	26982.928937007	Livetime [s]
ontime4	28564.899513543	Sum of GTIs [s]
ontime5	28564.899513543	Sum of GTIs [s]
ontime6	28564.899513543	Sum of GTIs [s]
ontime7	28564.899513543	Sum of GTIs [s]
ontime8	28564.899513543	Sum of GTIs [s]
ontime9	28564.899513543	Sum of GTIs [s]
l2events	107218	Number of level 2 events



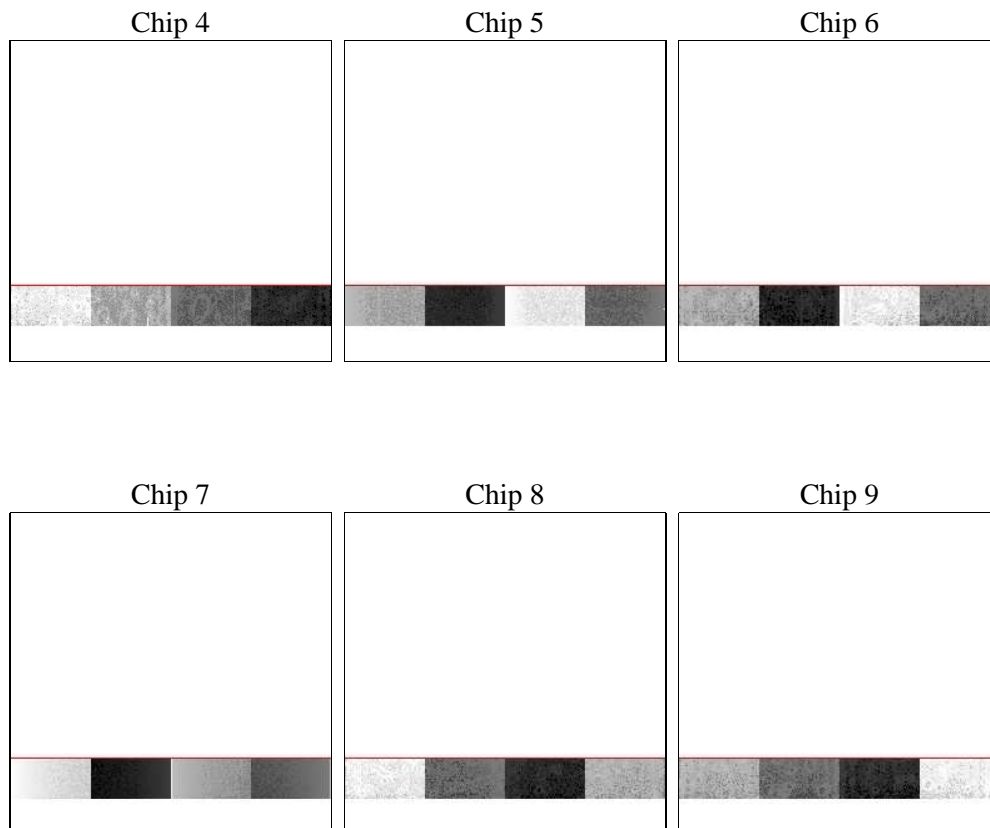
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	28500.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3.1	Processing system revision	ontime	28564.899513543	Sum of GTIs [s]
caldbver	4.4.8	 	ontime4	28564.899513543	Sum of GTIs [s]
date	2012-03-29T12:44:08	Date and time of file creation	ontime5	28564.899513543	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	28564.899513543	Sum of GTIs [s]
			ontime7	28564.899513543	Sum of GTIs [s]
			ontime8	28564.899513543	Sum of GTIs [s]
			ontime9	28564.899513543	Sum of GTIs [s]
			l1events	347490	Number of level 1 events

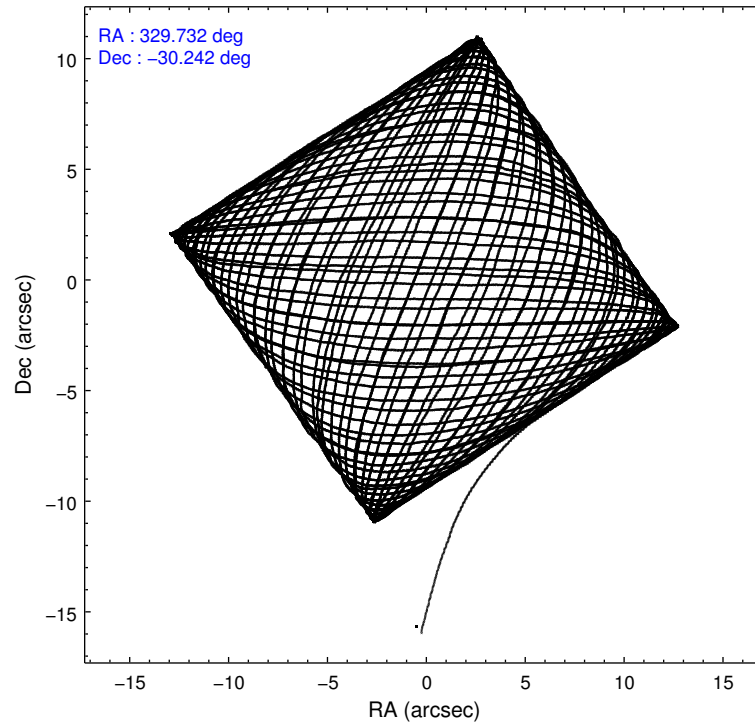
2.1.4 Events

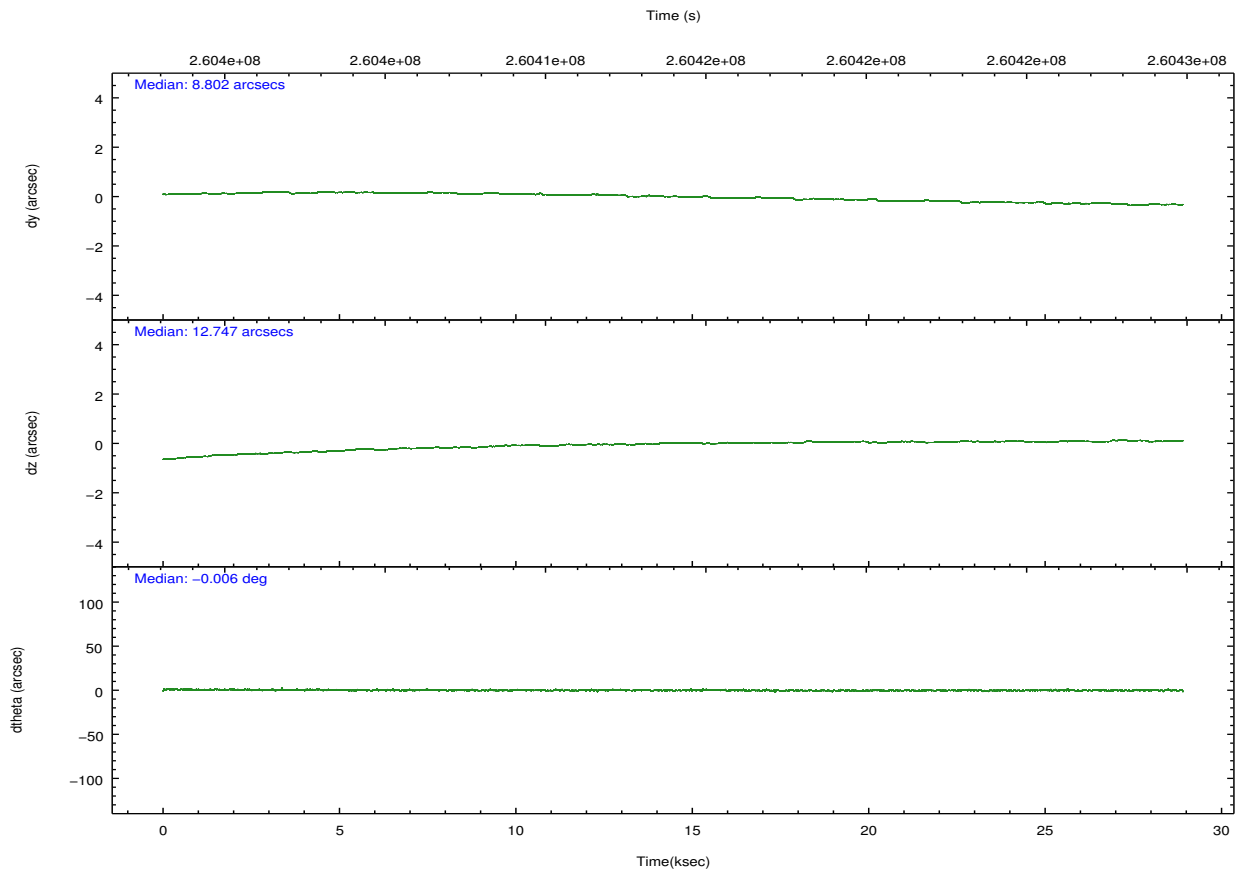
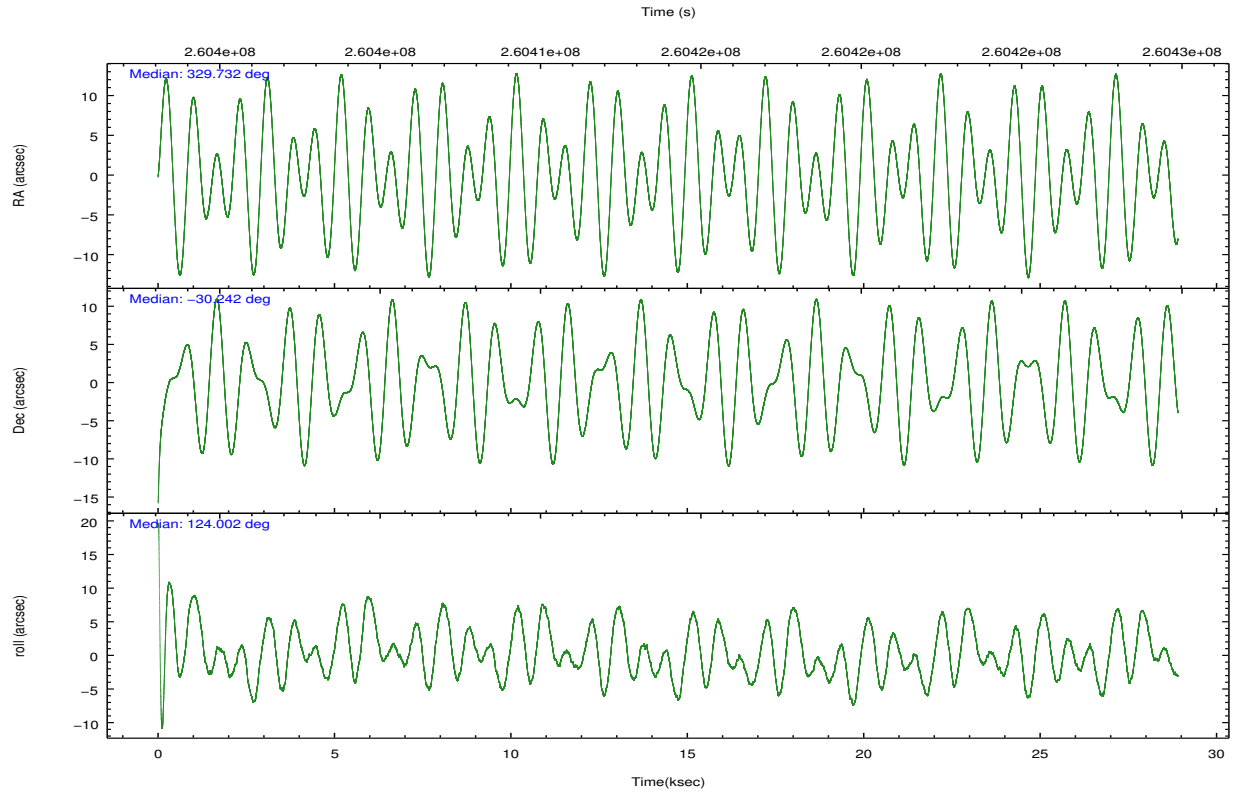
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	48475	69165	50312	83336	57628	38574	grade 0 events	2088	13581	9146	13765	3651	1865
rejected events	43038	26408	36465	28424	45239	33598		4%	19%	18%	16%	6%	4%
rejected %	88%	38%	72%	34%	78%	87%	grade 1 events	14	748	20	443	24	12
								0%	1%	0%	0%	0%	0%
							grade 2 events	1065	7218	1633	12768	2387	778
								2%	10%	3%	15%	4%	2%
							grade 3 events	798	4644	1050	6010	1359	778
								1%	6%	2%	7%	2%	2%
							grade 4 events	737	5223	1031	5885	1312	763
								1%	7%	2%	7%	2%	1%
							grade 5 events	1441	4753	1388	5330	1845	1432
								2%	6%	2%	6%	3%	3%
							grade 6 events	749	12094	987	16485	3680	792
								1%	17%	1%	19%	6%	2%
							grade 7 events	41583	20904	35057	22650	43370	32154
								85%	30%	69%	27%	75%	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	329.760311	329.7317926242051	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	-30.253648	-30.2420364599179	Subarray start row	113	113
[deg] Pointing Roll	123.866614	124.0088923112429	Subarray row count	128	128
[s] Window start time (MET)	260236865.184000	260236865.184000	Alternating exposures requested	N	N
[s] Window stop time (MET)	262742465.184000	262742465.184000	[s] Primary exposure time	0.000000	0.7
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-182.132523	-182.1370004450064			
[mm] SIM translation stage offset	-8	-7.995522138001405			
[s] Observation start time (MET)	260399925.184000	260398932.0721			
Observation start date	2006-04-02T21:17:40	2006-04-02T21:02:12			
[s] Observation end time (MET)	260428425.184000	260429119.3485			
Observation end date	2006-04-03T05:12:40	2006-04-03T05:25:19			
Read mode	TIMED	TIMED			

2.3 Aspect



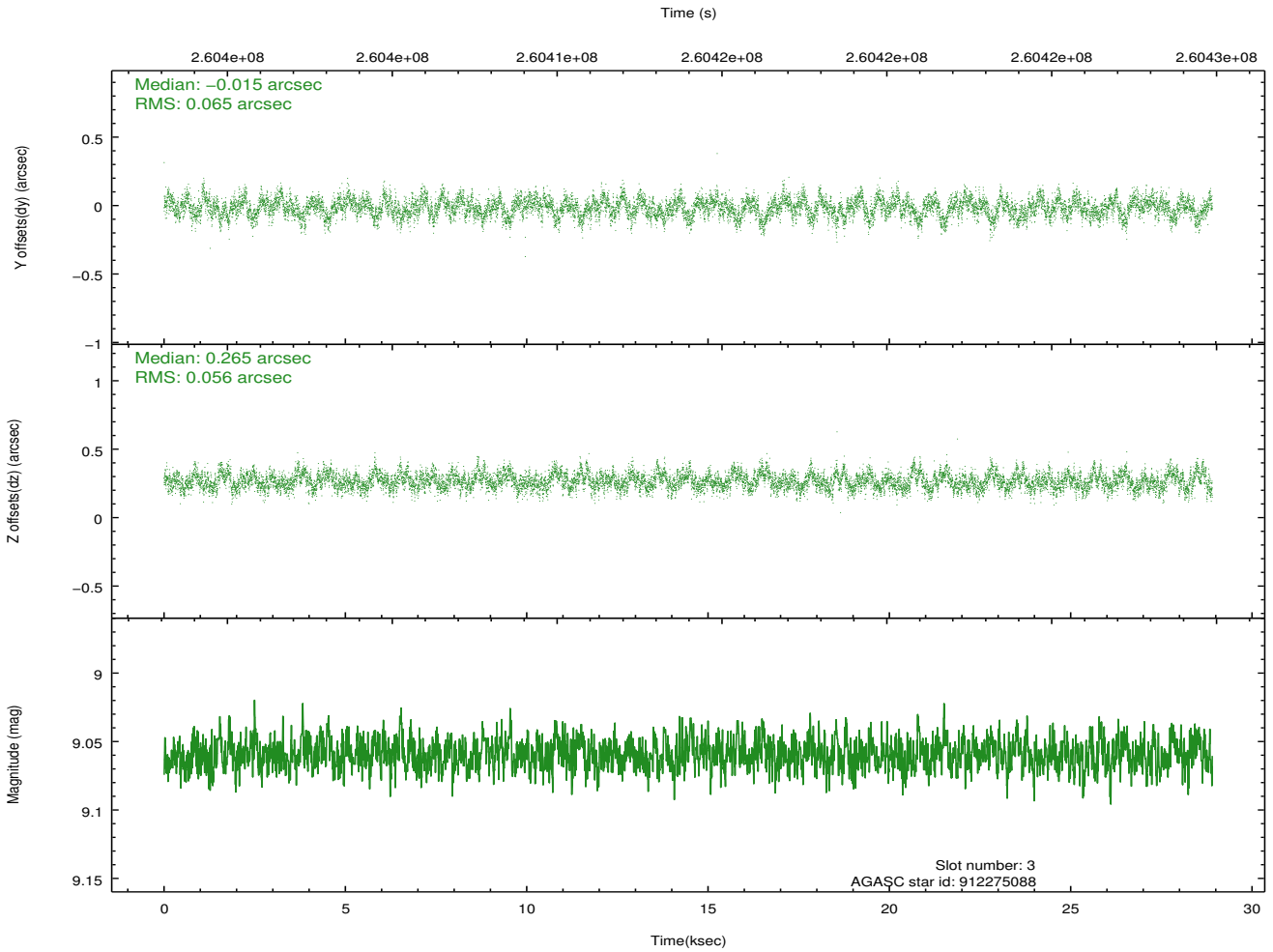
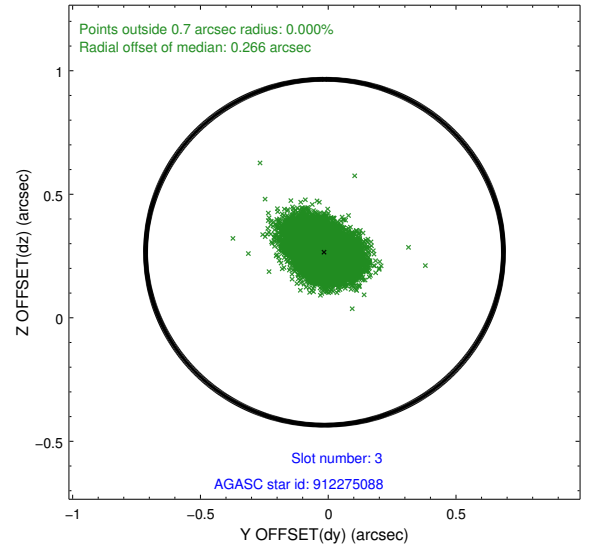
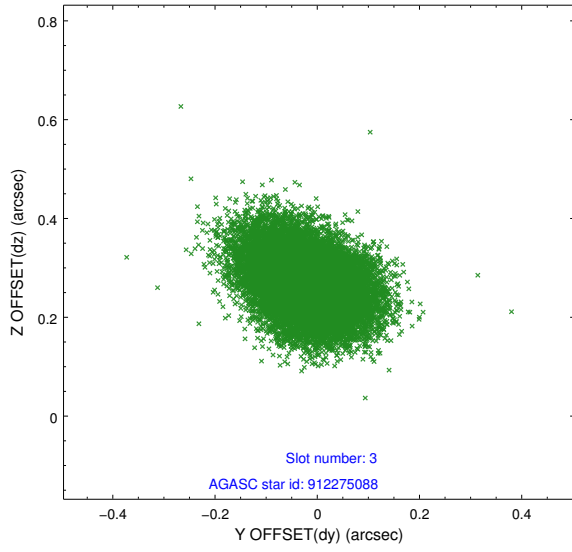


Slot Statistics

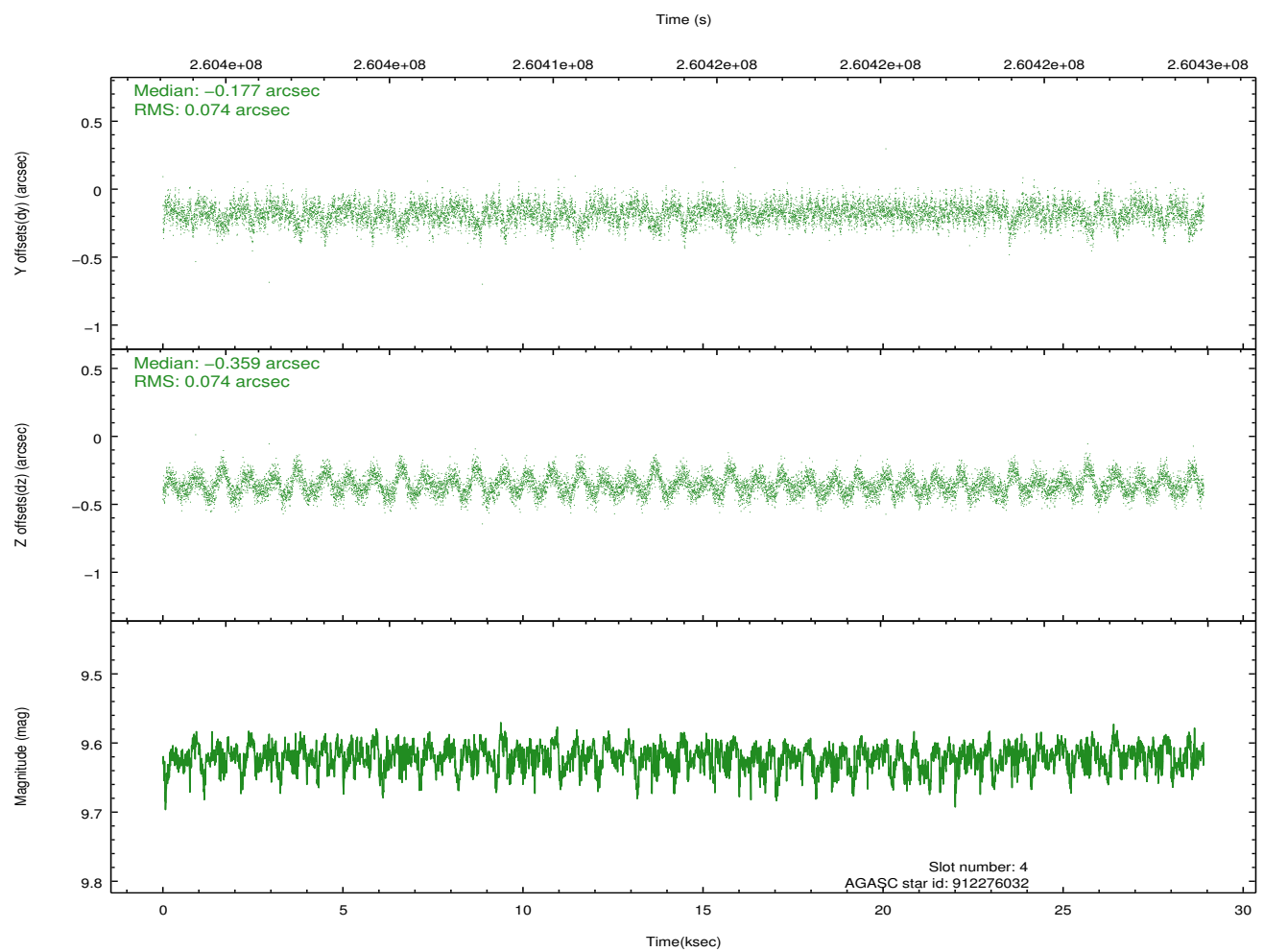
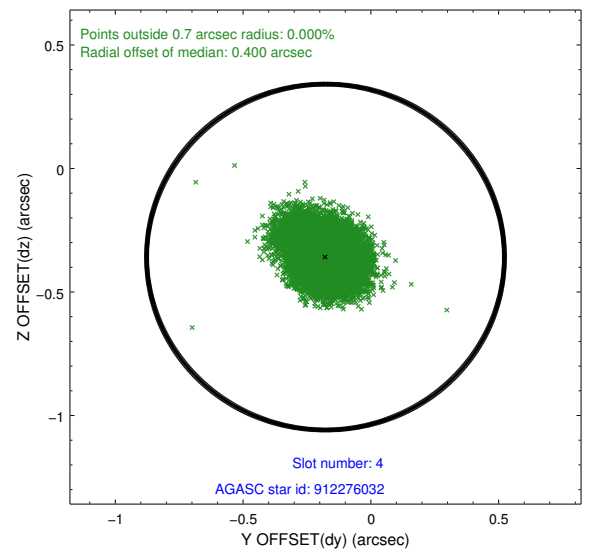
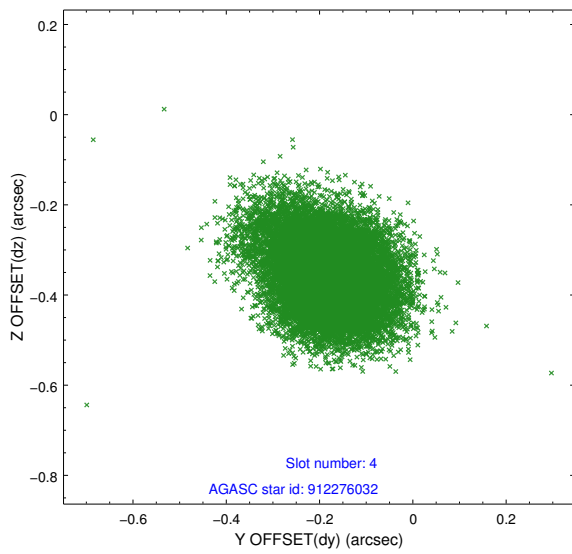
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.18	7049	0.041	0.105	0.010	0.018	0.000000	0.000000	935.11	-1894.20
1	FID	ACIS-S-5	7.23	7049	-0.119	0.051	0.010	0.017	0.000000	0.000000	-1814.02	3.14
2	FID	ACIS-S-6	7.40	7050	0.056	-0.146	0.010	0.016	0.000000	0.000000	400.56	647.03
3	GUIDE	912275088	9.06	14093	-0.015	0.265	0.091	0.150	329.619228	-29.738698	1785.22	-666.25
4	GUIDE	912276032	9.62	14080	-0.177	-0.359	0.111	0.183	329.395967	-29.803466	1978.70	42.78
5	GUIDE	981468016	9.02	14093	-0.081	0.079	0.072	0.119	328.842457	-30.034984	2238.27	1943.38
6	GUIDE	981468128	9.34	14085	0.201	0.126	0.152	0.240	329.756350	-30.158334	292.33	-180.73
7	GUIDE	981478152	9.39	14022	0.075	-0.122	0.094	0.151	329.415589	-30.057192	1184.85	498.65

2.4 Star Slots

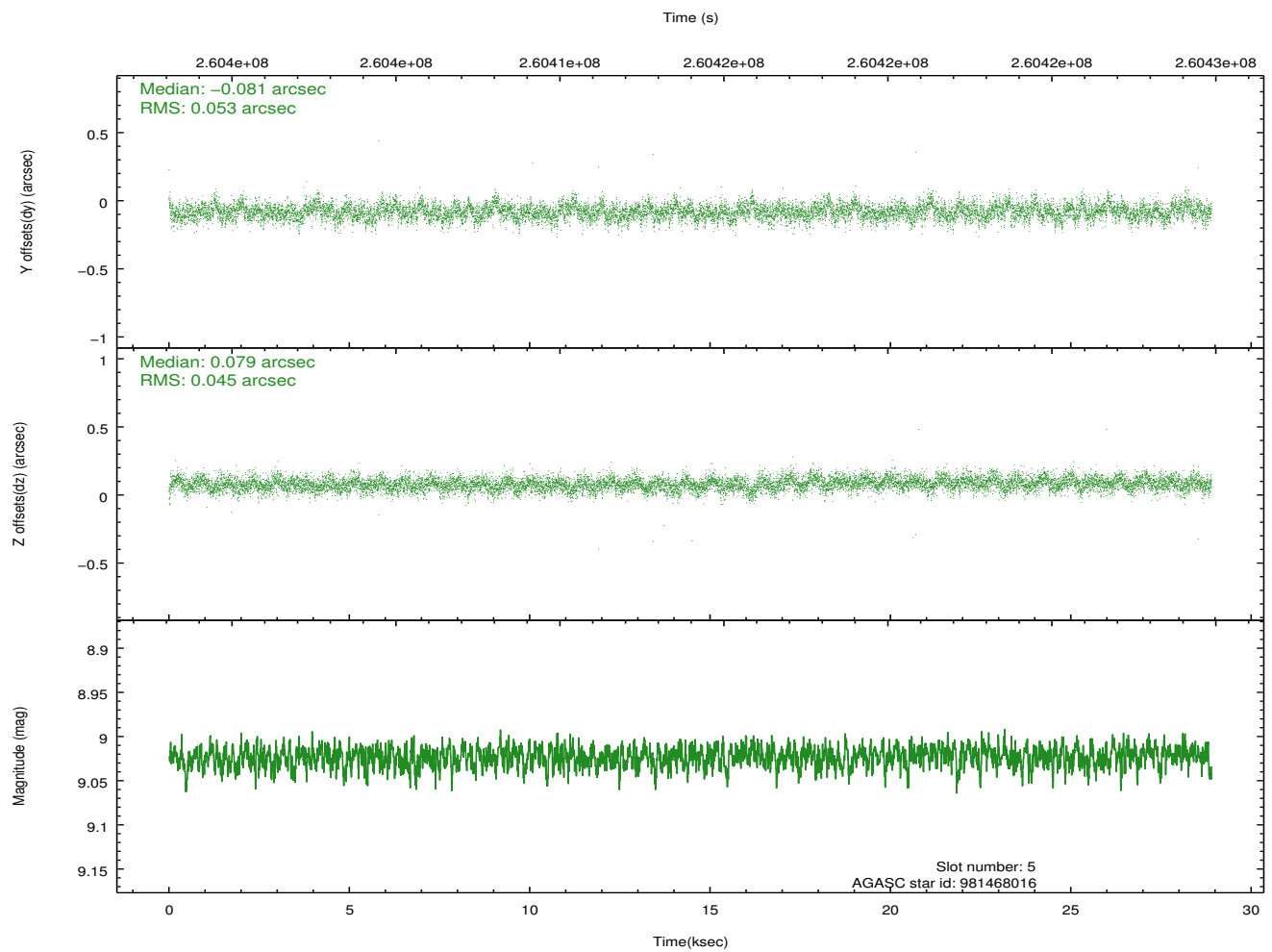
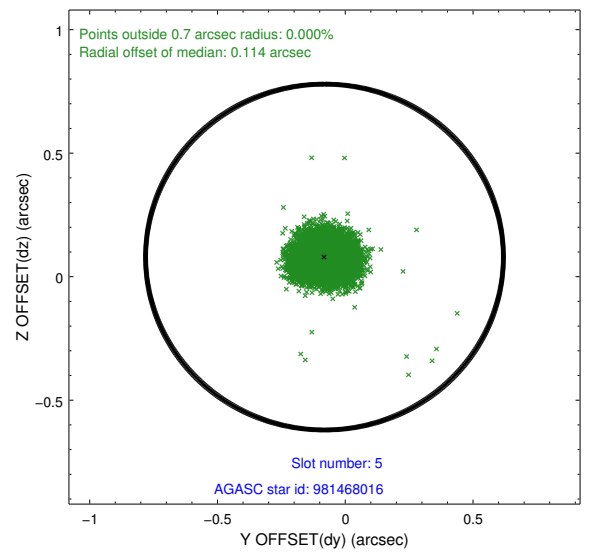
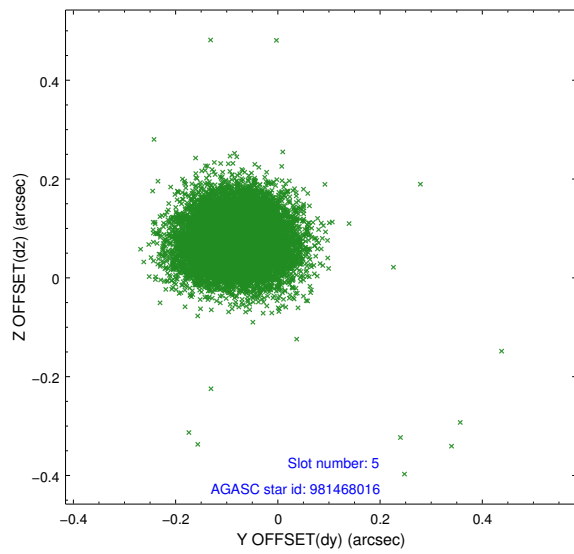
2.4.1 Slot 3



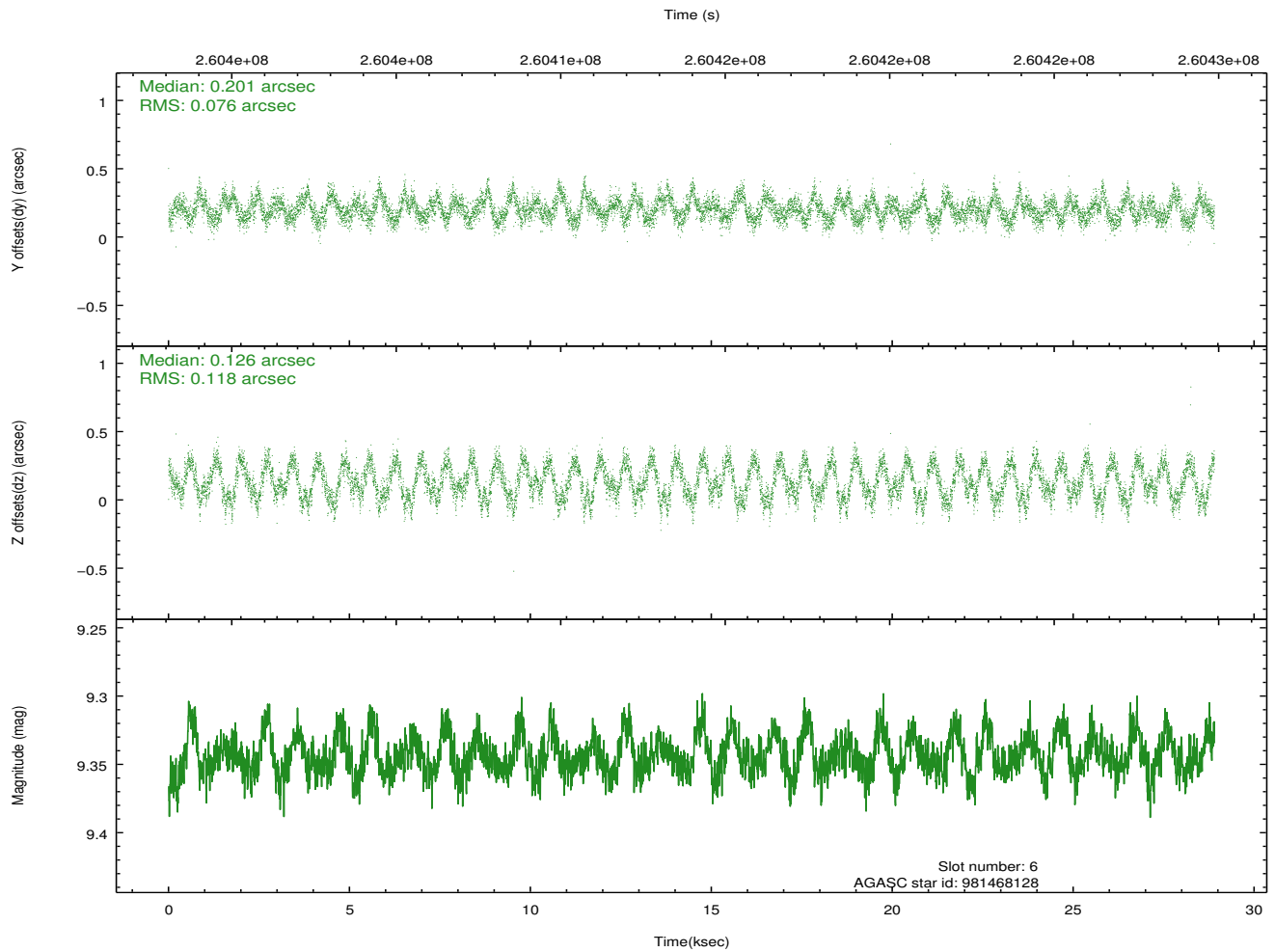
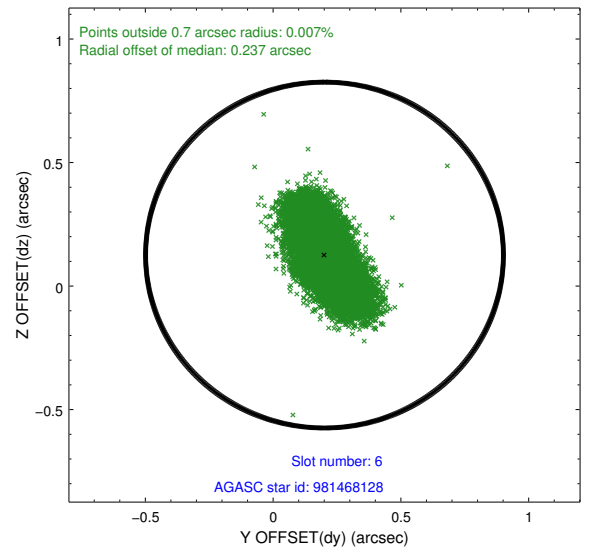
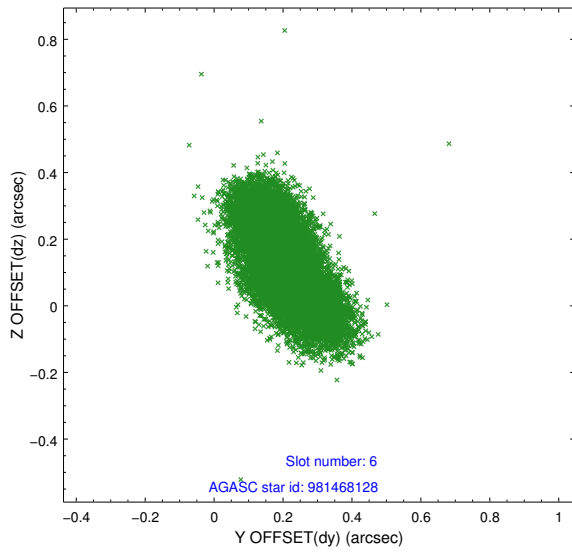
2.4.2 Slot 4



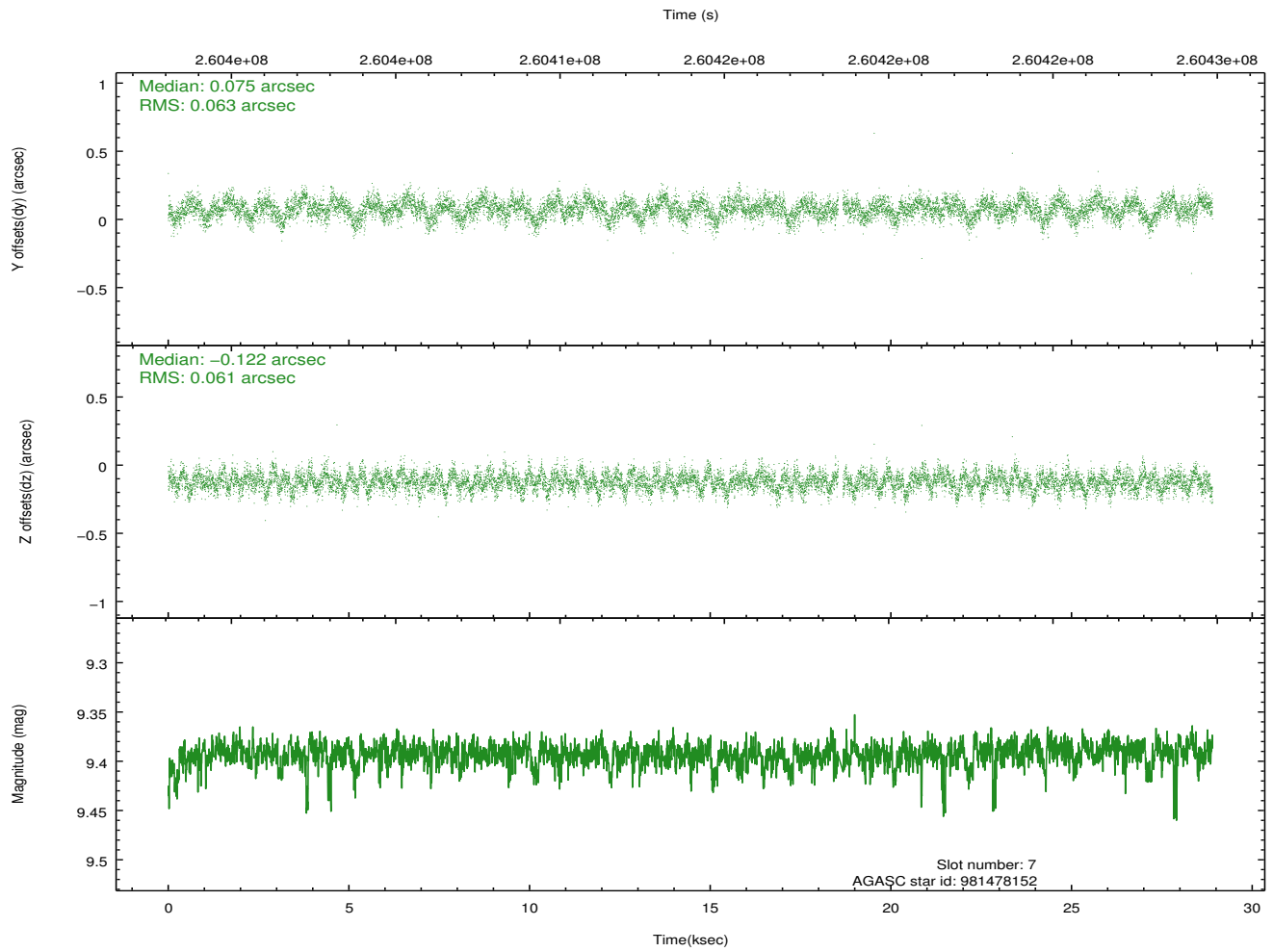
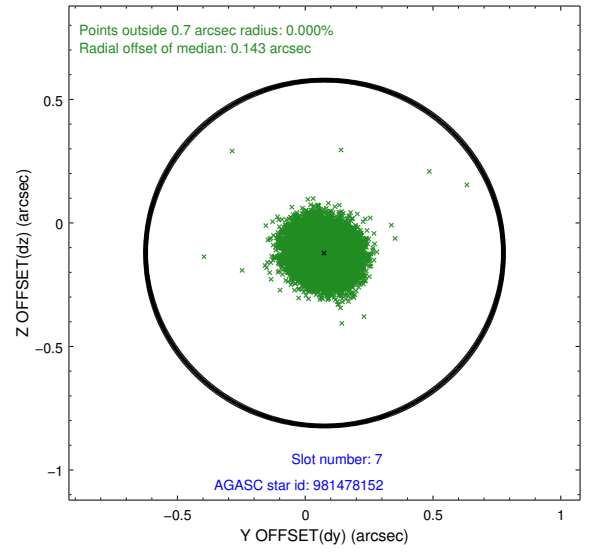
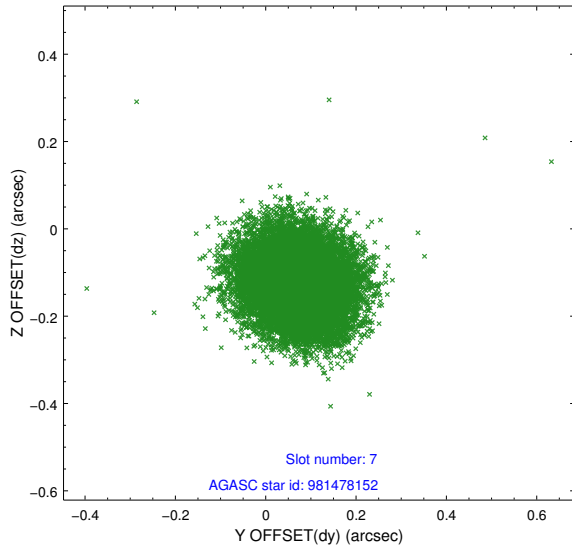
2.4.3 Slot 5



2.4.4 Slot 6

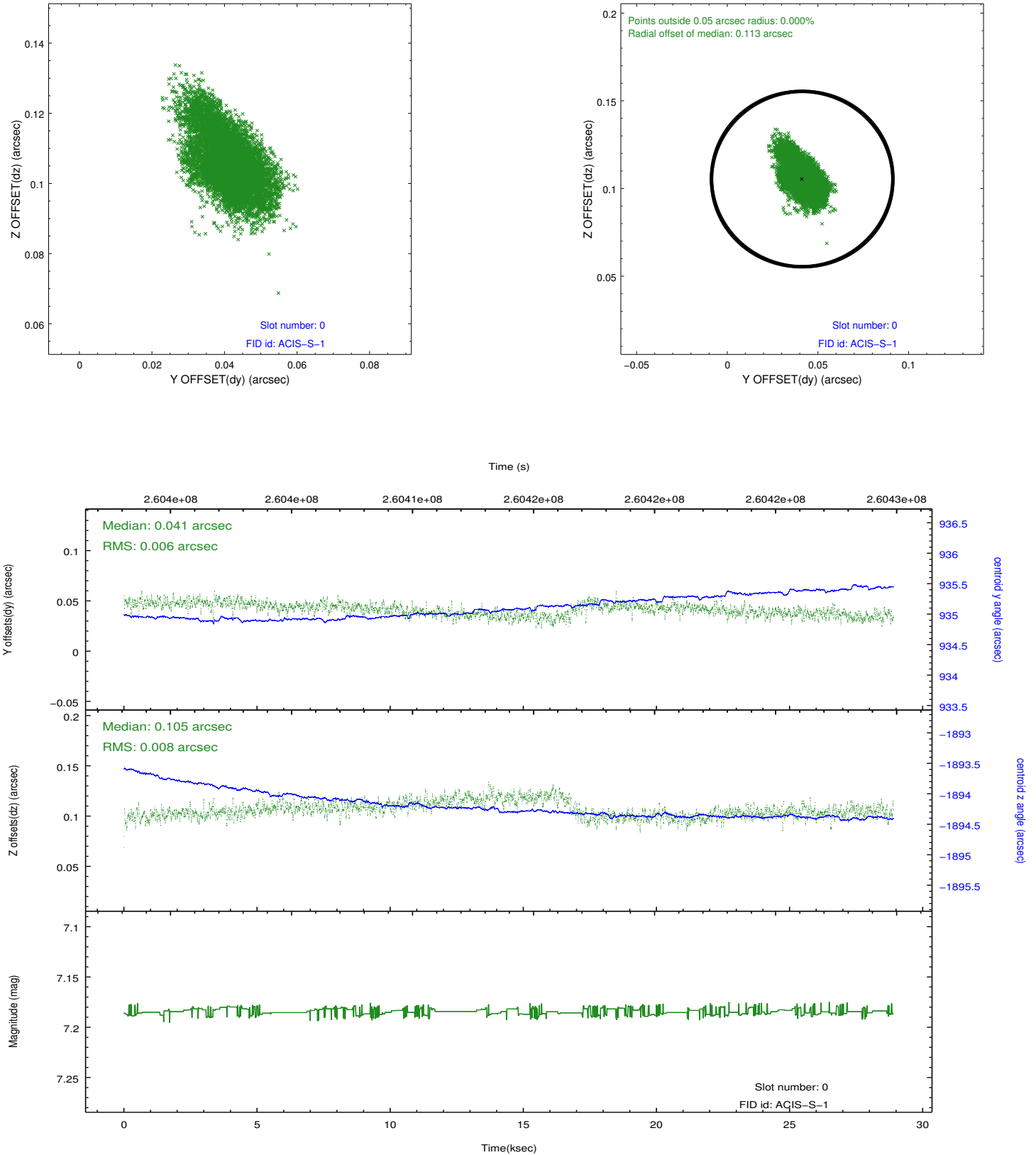


2.4.5 Slot 7

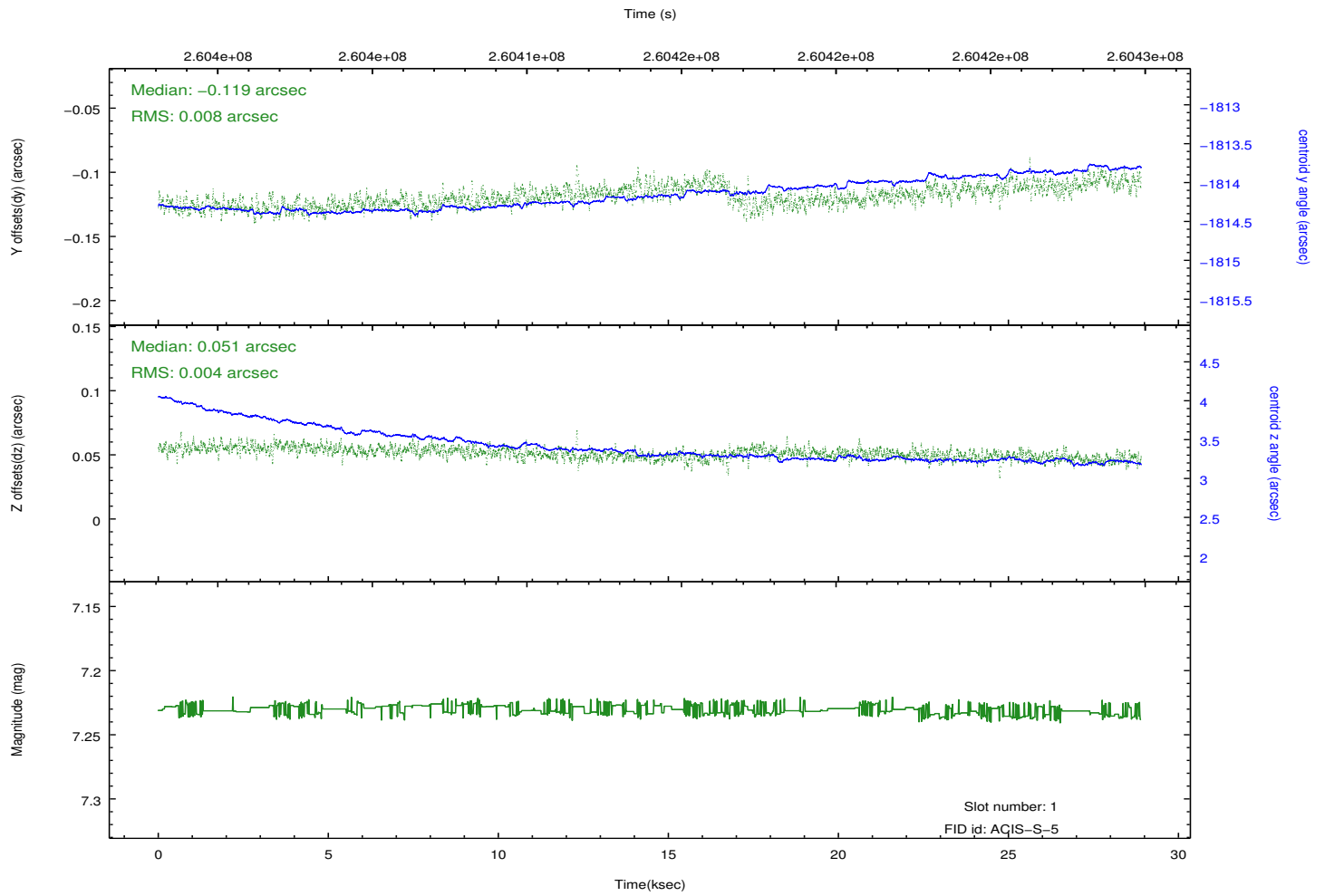
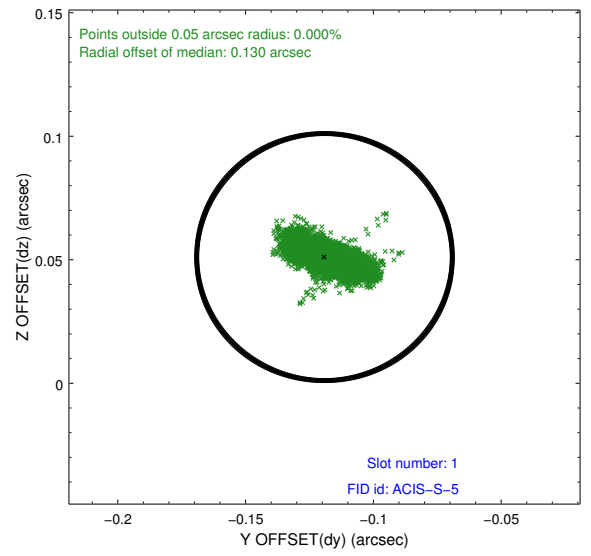
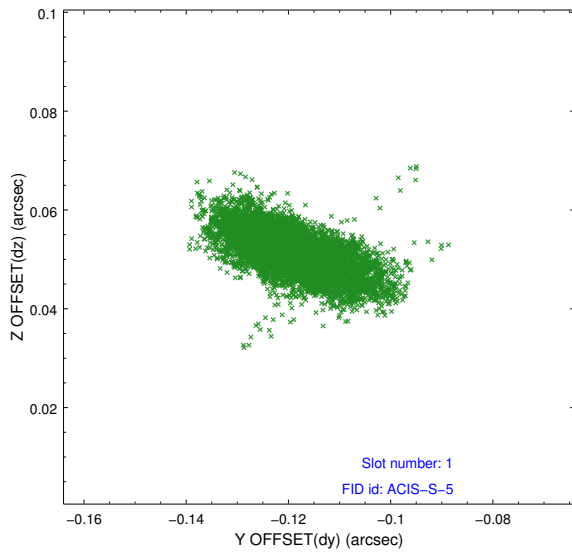


2.5 FID Slots

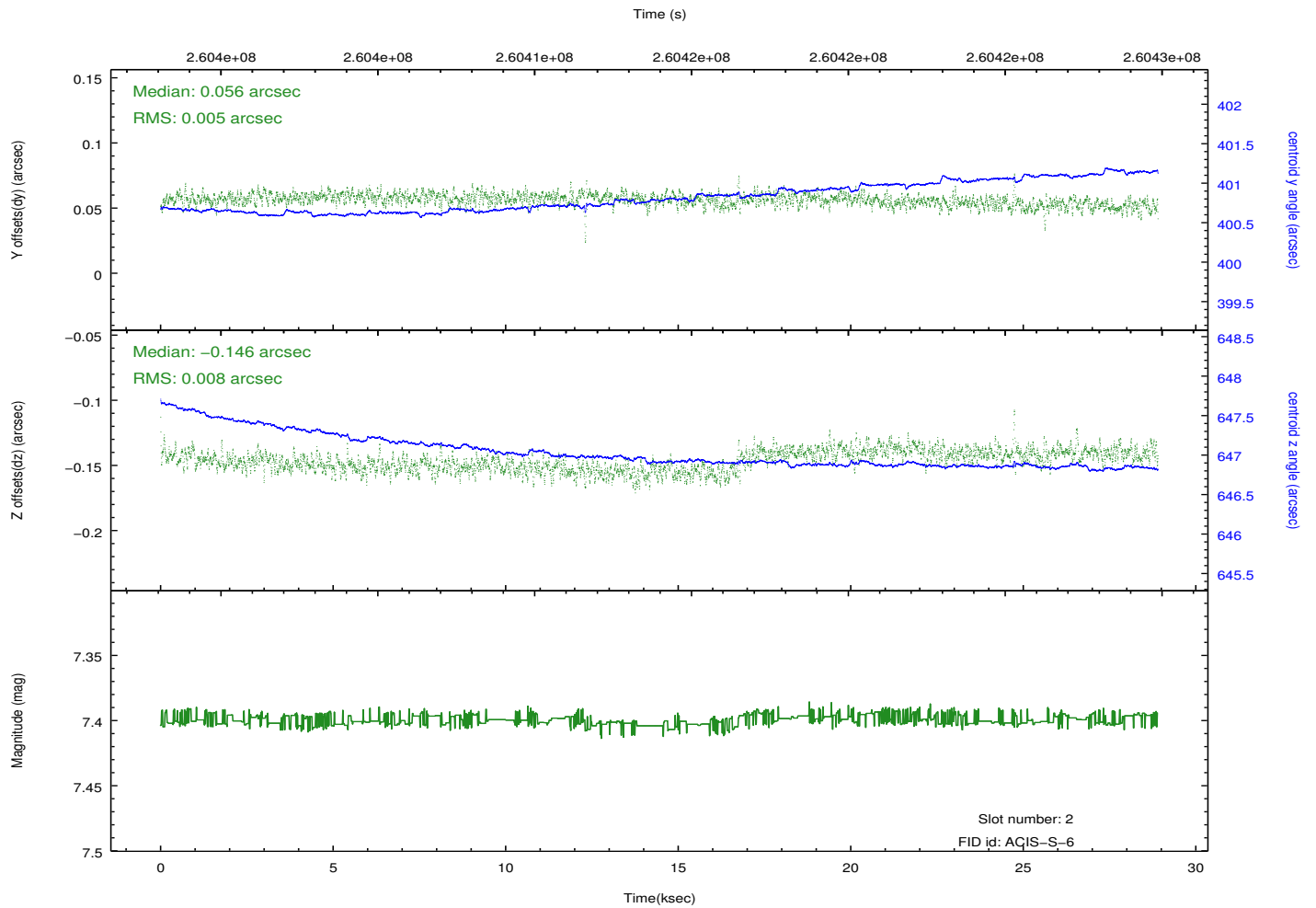
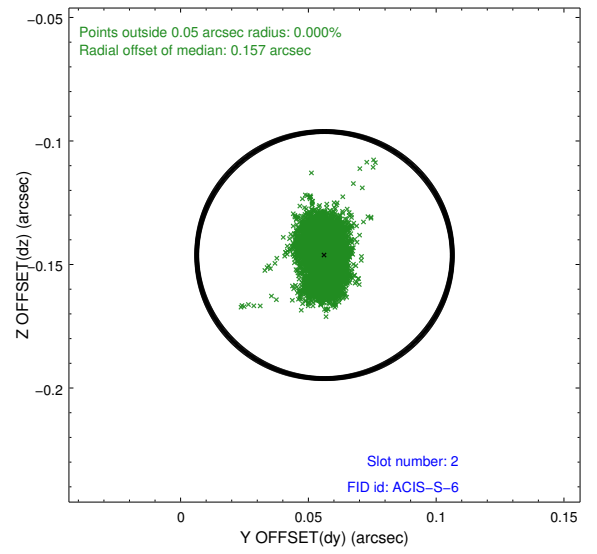
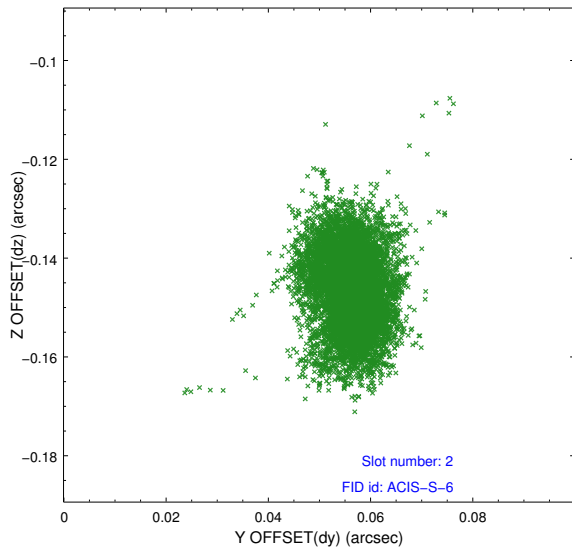
2.5.1 Slot 0



2.5.2 Slot 1

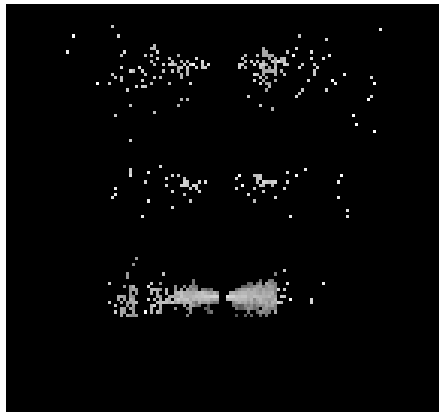


2.5.3 Slot 2

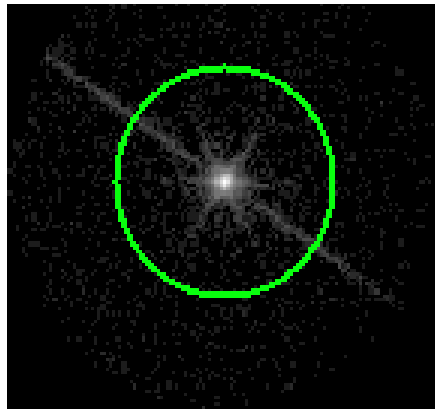


3 Gratings

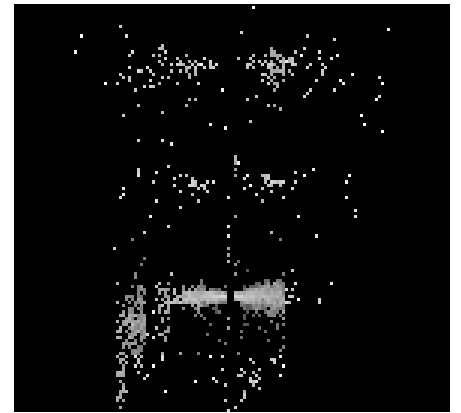
3.1 LETG Arm



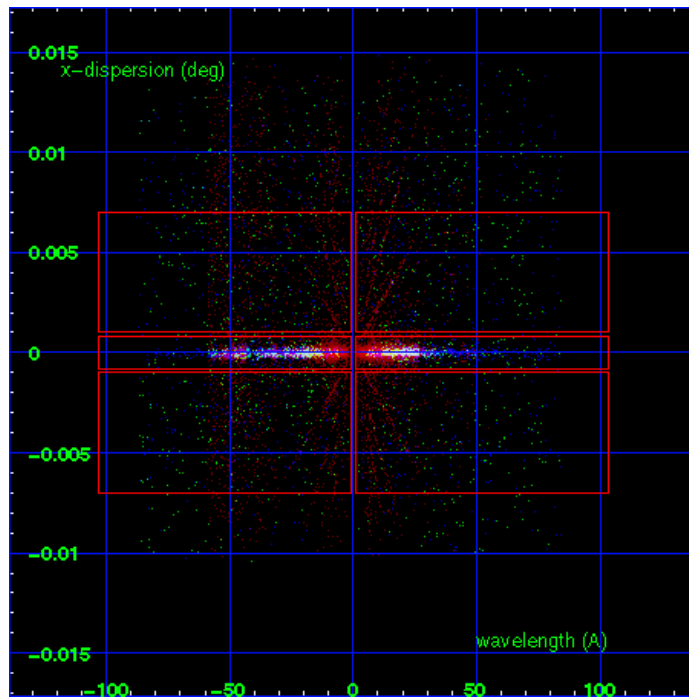
LETG Order Sort 123



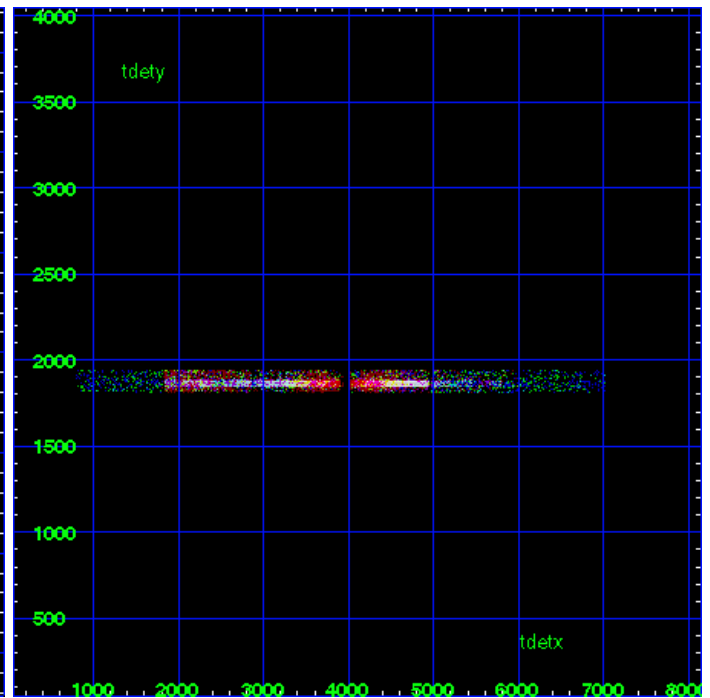
LETG Zero Order



LETG Order Sort ALL

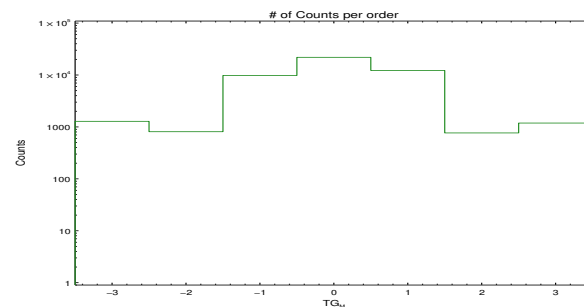


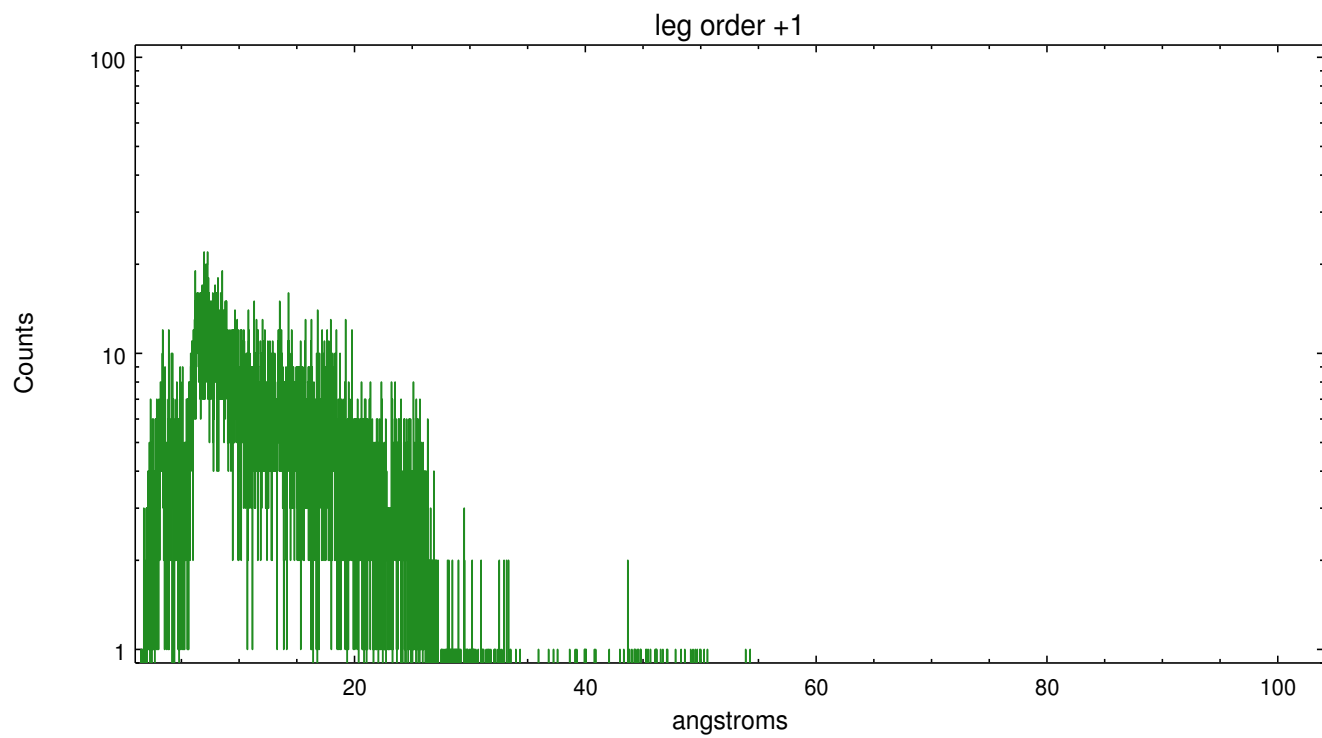
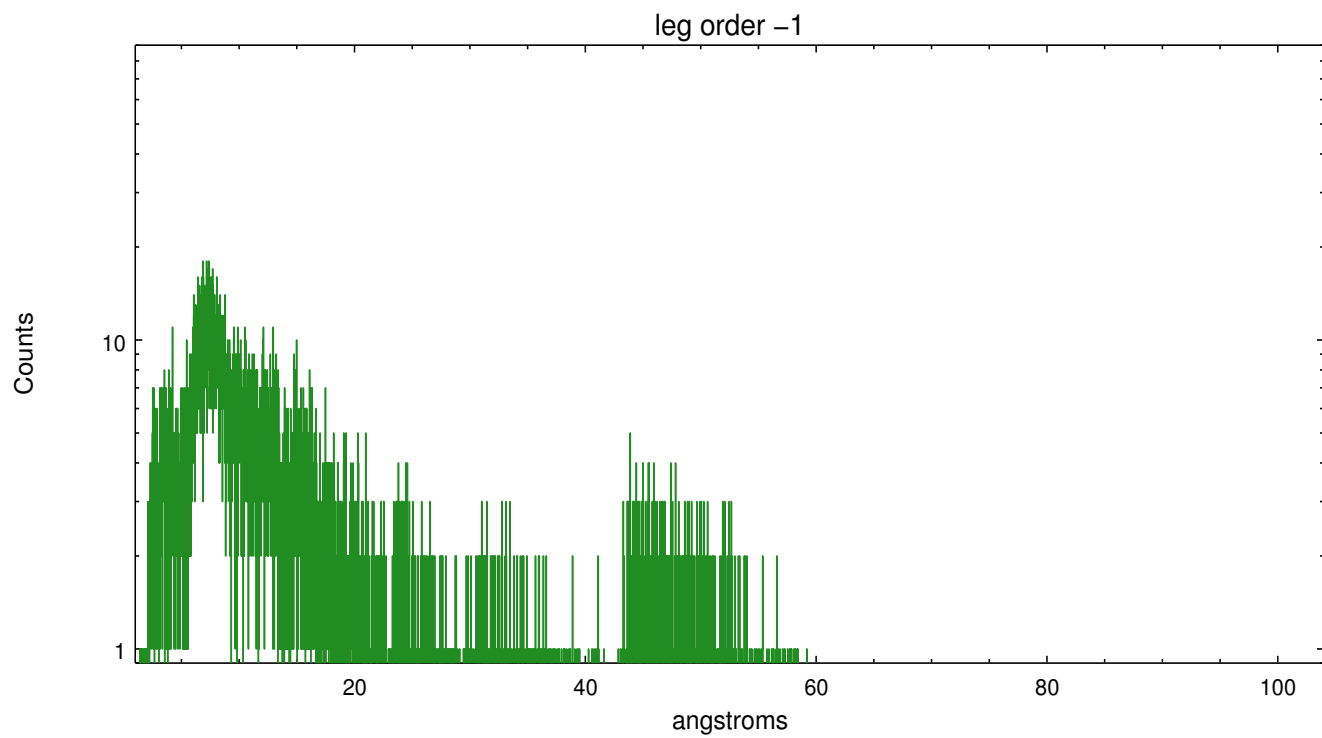
Spot Image LETG



Full Detector LETG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	1281	809	9800	21894	12242	766	1187





A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.04.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	28.5648995

A.2 Comments

Gain and CTI correction are not well calibrated on CCD_ID 5 (ACIS-S1). Default order sorting can clip some regions, particularly longward of 30A (first order). User-specified custom processing parameters may be required in `tg_resolve_events` (`osipfile=None`, `osort_lo`, `osort_hi ~0.5`) though this can allow more zeroth order background at short wavelengths.

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