

V&V Reference Report

L2 ASCDS Version : 10.6

Observation 19329 - L2 Version 2
Chandra X-Ray Center

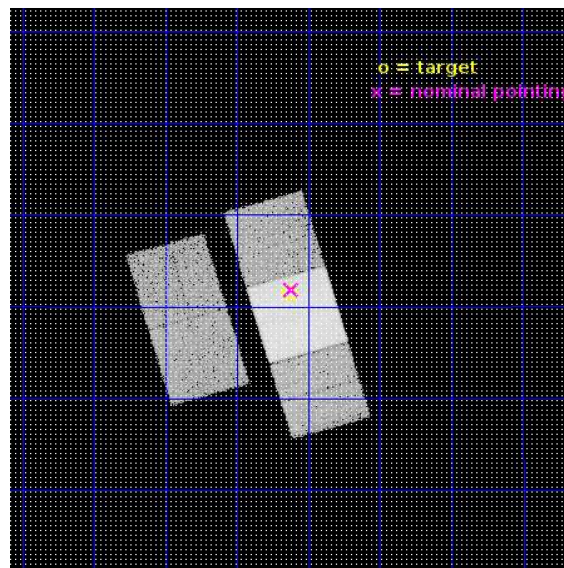
L2 Processing Date : Oct 27 2017

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1 Front

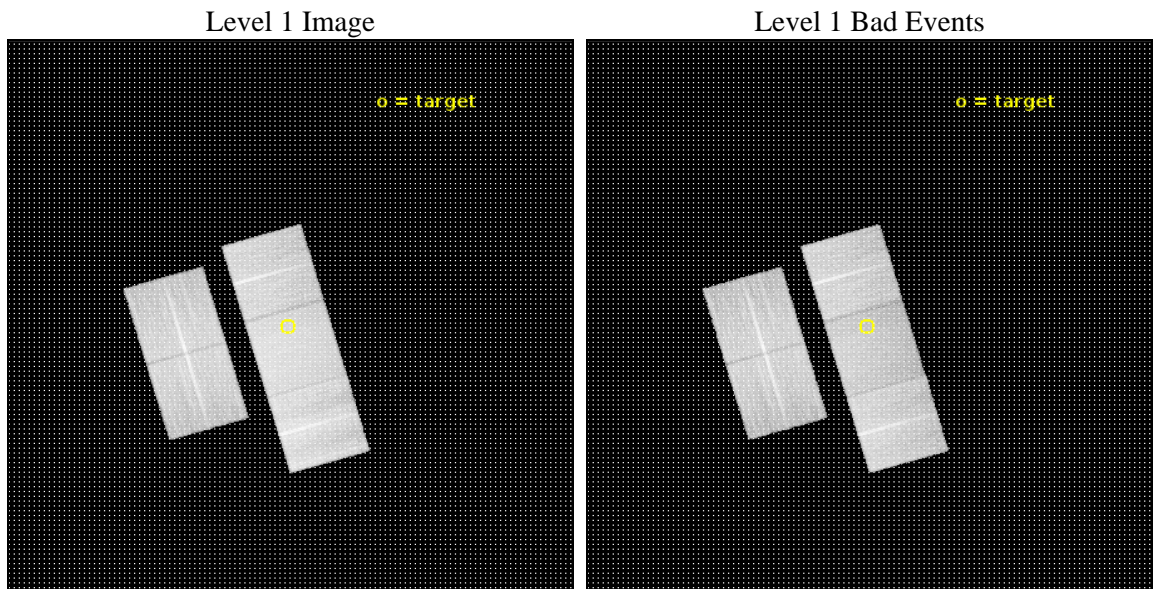
seq_num	601286	Sequence number
obs_id	19329	Observation id
title	Searching for Accreting Black Holes in Lyman Continuum Emitters	Pr
observer	Philip Kaaret	Principal investigator
object	GALEX J101007.7+033130	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	152.533333	Observer's specified target RA [deg]
dec_targ	3.525278	Observer's specified target Dec [deg]
ra_nom	152.53017335231	Nominal RA [deg]
dec_nom	3.530708089349	Nominal Dec [deg]
roll_nom	73.724506313502	Nominal Roll [deg]
revision	2	Processing version of data
ontime	26407.966794252	Sum of GTIs [s]
livetime	26062.927266823	Livetime [s]
ontime2	26407.802634239	Sum of GTIs [s]
ontime3	26407.884714246	Sum of GTIs [s]
ontime6	26407.925754309	Sum of GTIs [s]
ontime7	26407.966794252	Sum of GTIs [s]
ontime8	26407.843674302	Sum of GTIs [s]
l2events	166363	Number of level 2 events



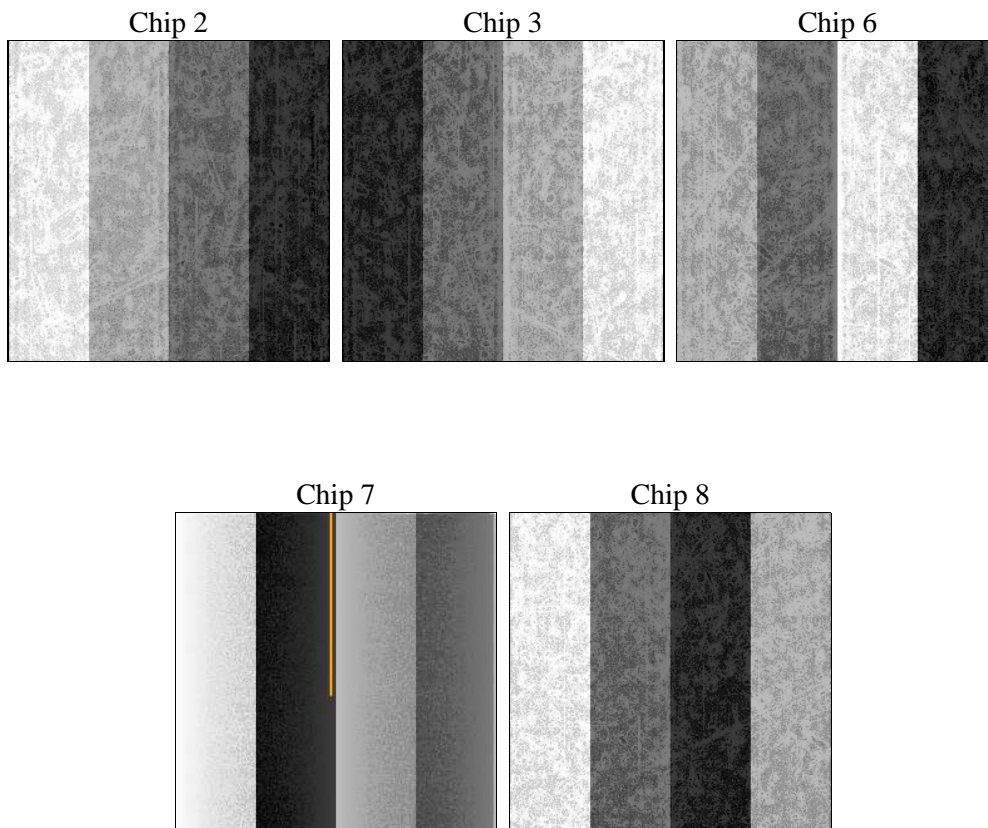
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	26356.000000	[s] Scheduled observation exposure time
ascdsver	10.6	Processing system revision	ontime	26407.966794252	Sum of GTIs [s]
caldbver	4.7.6	 	ontime2	26407.802634239	Sum of GTIs [s]
date	2017-10-28T02:29:18	Date and time of file creation	ontime3	26407.884714246	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	26407.925754309	Sum of GTIs [s]
			ontime7	26407.966794252	Sum of GTIs [s]
			ontime8	26407.843674302	Sum of GTIs [s]
			l1events	990978	Number of level 1 events

2.1.4 Events

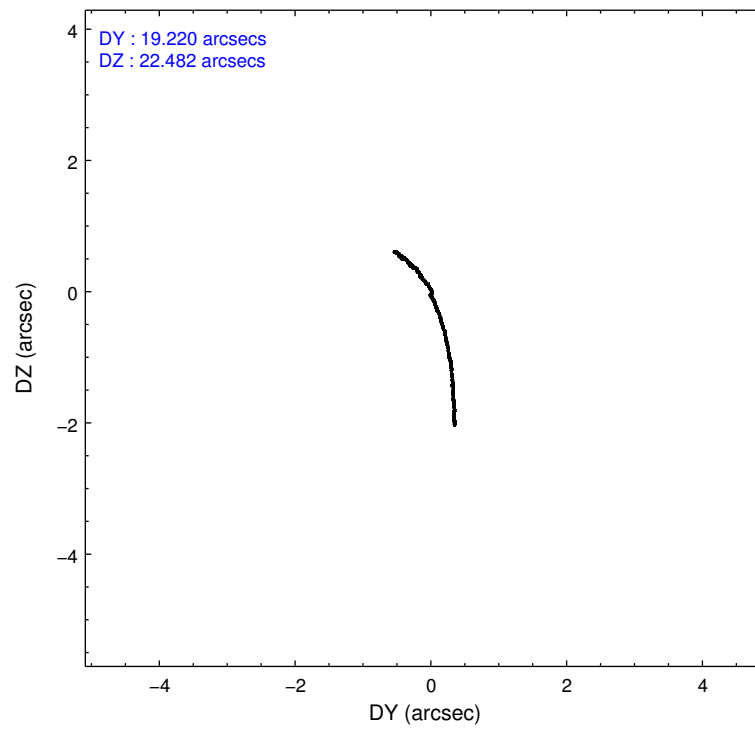
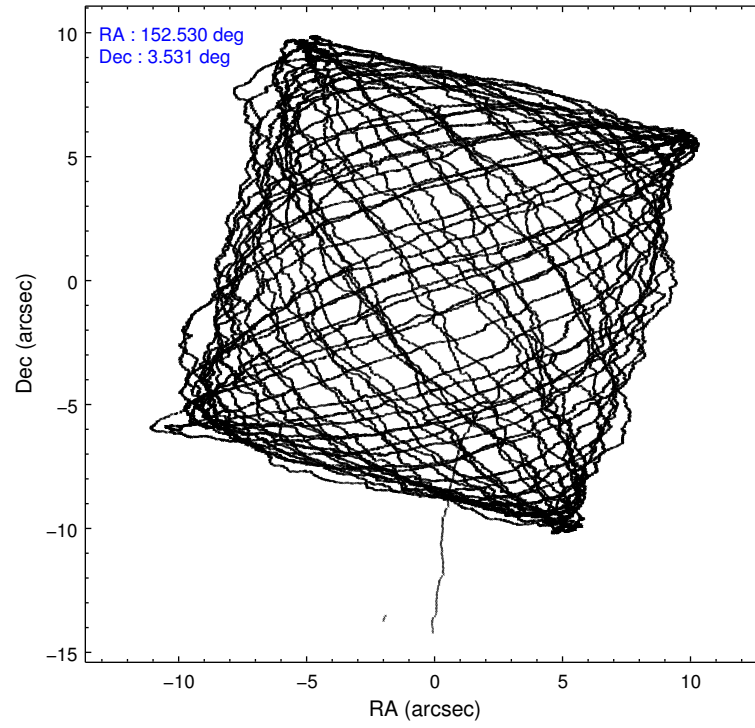
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	173771	171633	187368	226989	231217
rejected events	155279	153429	166912	128877	170907
rejected %	89%	89%	89%	56%	73%

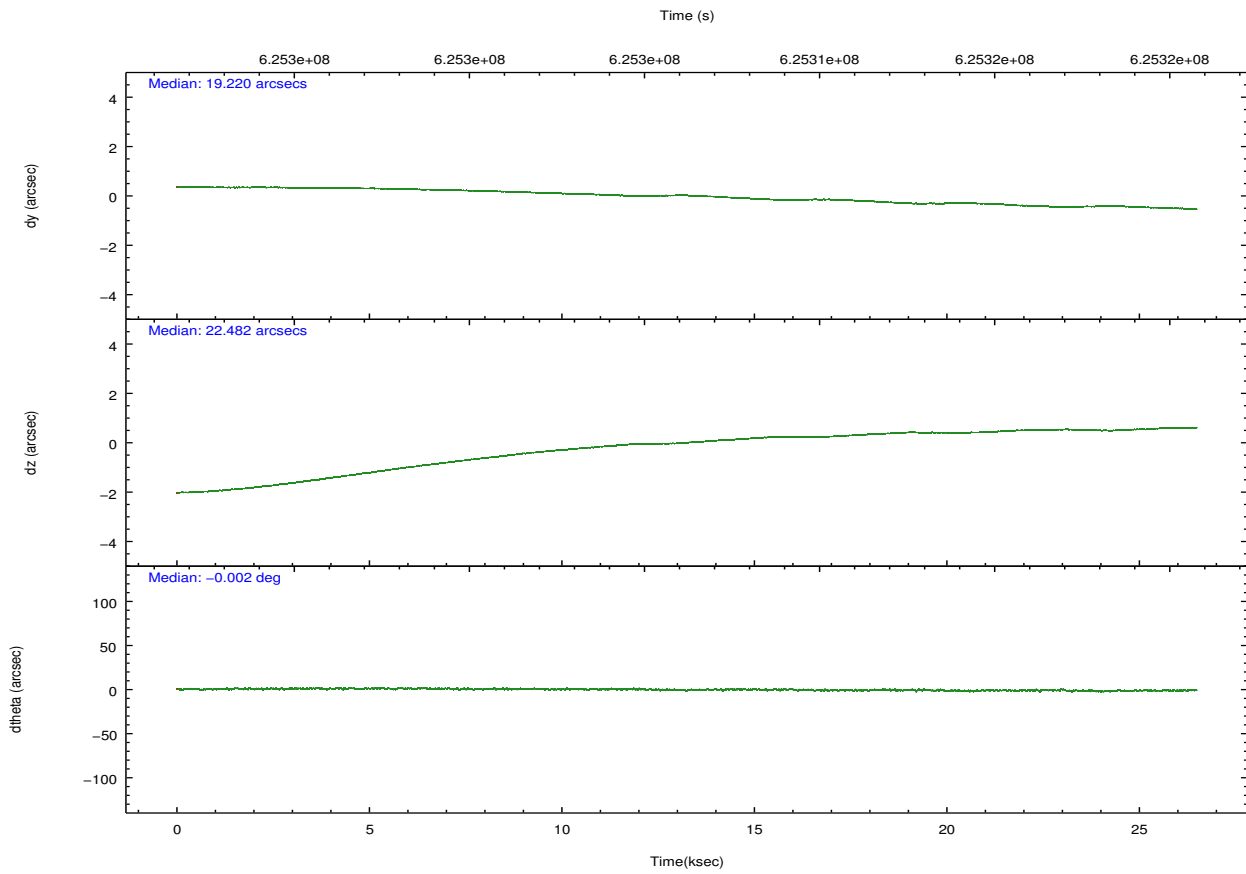
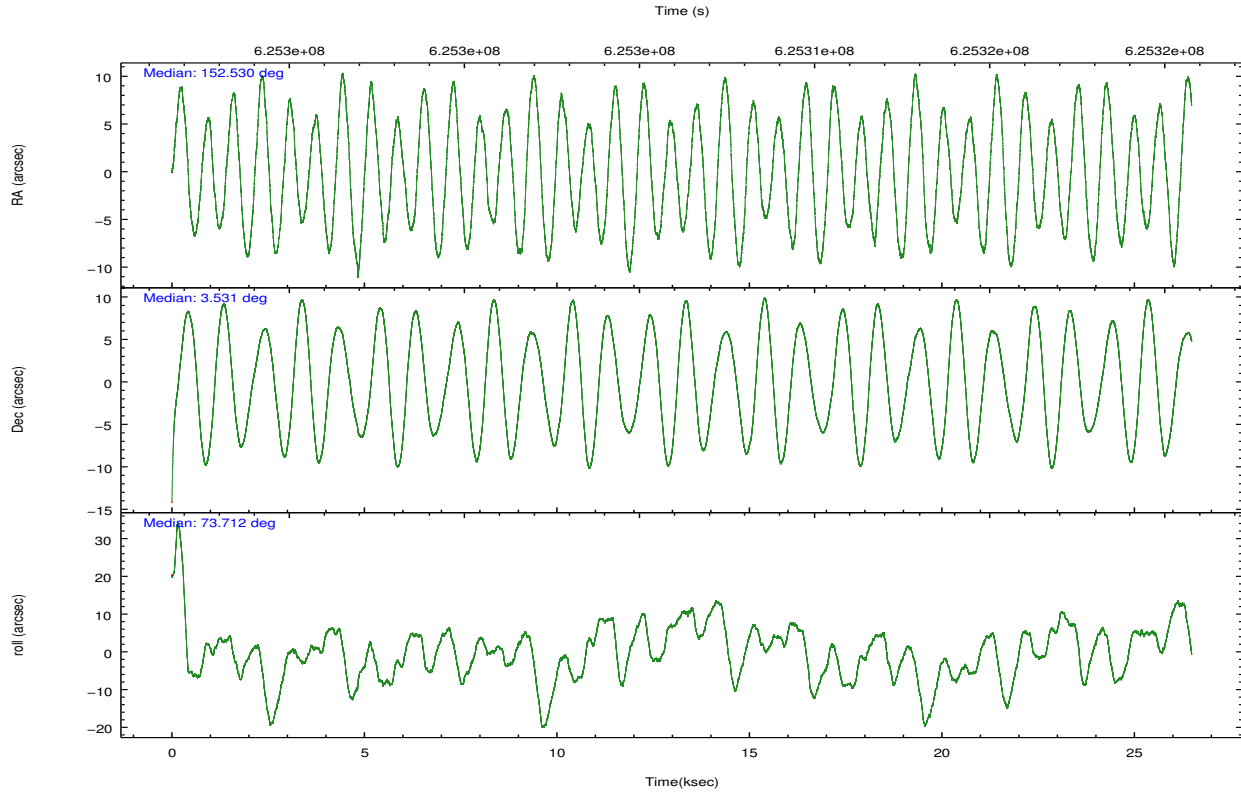
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	6514	6372	6528	8338	16994
	3%	3%	3%	3%	7%
grade 1 events	94	88	95	303	179
	0%	0%	0%	0%	0%
grade 2 events	4575	3922	5029	20672	14696
	2%	2%	2%	9%	6%
grade 3 events	1756	1924	1888	7986	6236
	1%	1%	1%	3%	2%
grade 4 events	1975	1958	1899	7641	5723
	1%	1%	1%	3%	2%
grade 5 events	6671	8284	8115	22588	12728
	3%	4%	4%	9%	5%
grade 6 events	3672	4034	5117	53498	16669
	2%	2%	2%	23%	7%
grade 7 events	148514	145051	158697	105963	157992
	85%	84%	84%	46%	68%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23678	ACIS-23678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	152.537026	152.5301733523073	CCD I2 on	O1	Y
[deg] Pointing Dec	3.504124	3.530708089348991	CCD I3 on	Y	Y
[deg] Pointing Roll	73.567460	73.72450631350229	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	Y	Y
[s] Observation start time (MET)	625293102.184000	625291863.33301	CCD S5 on	N	N
Observation start date	2017-10-25T04:30:33	2017-10-25T04:11:03	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	625319458.184000	625320814.97221	On-chip summing requested	N	N
Observation end date	2017-10-25T11:49:49	2017-10-25T12:13:34	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



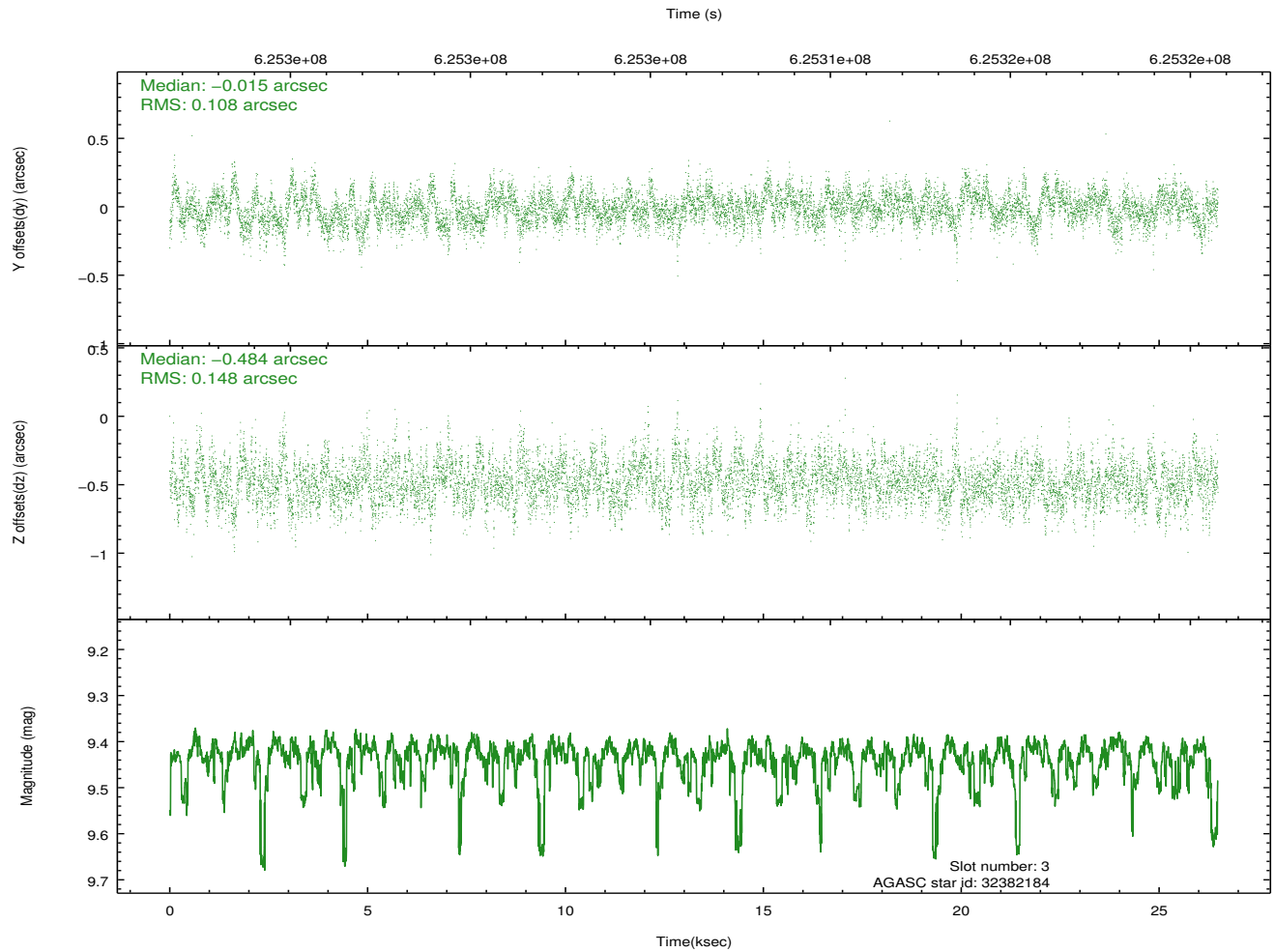
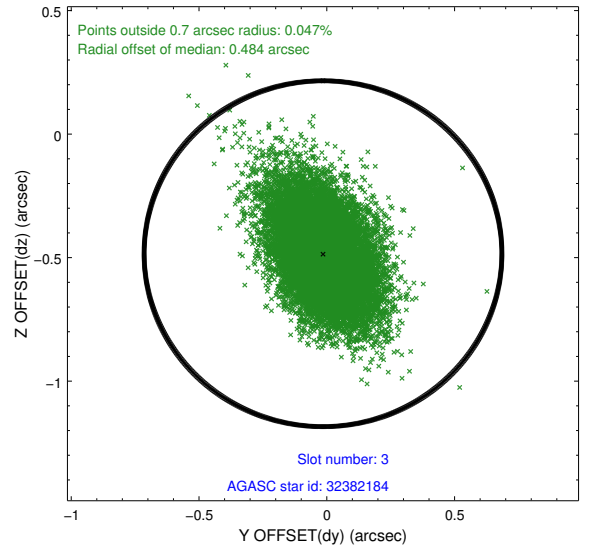
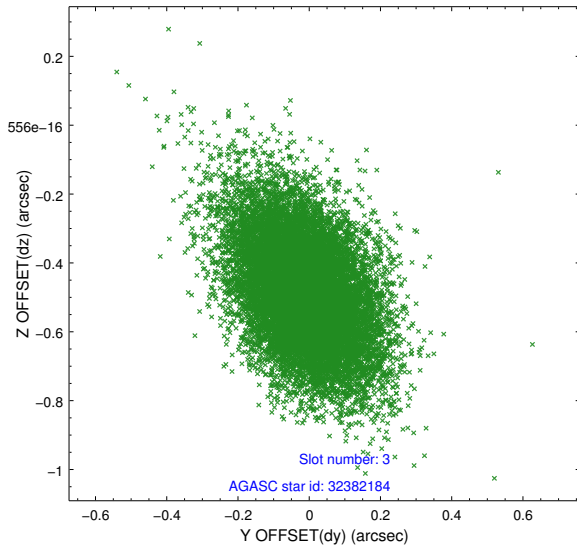


Slot Statistics

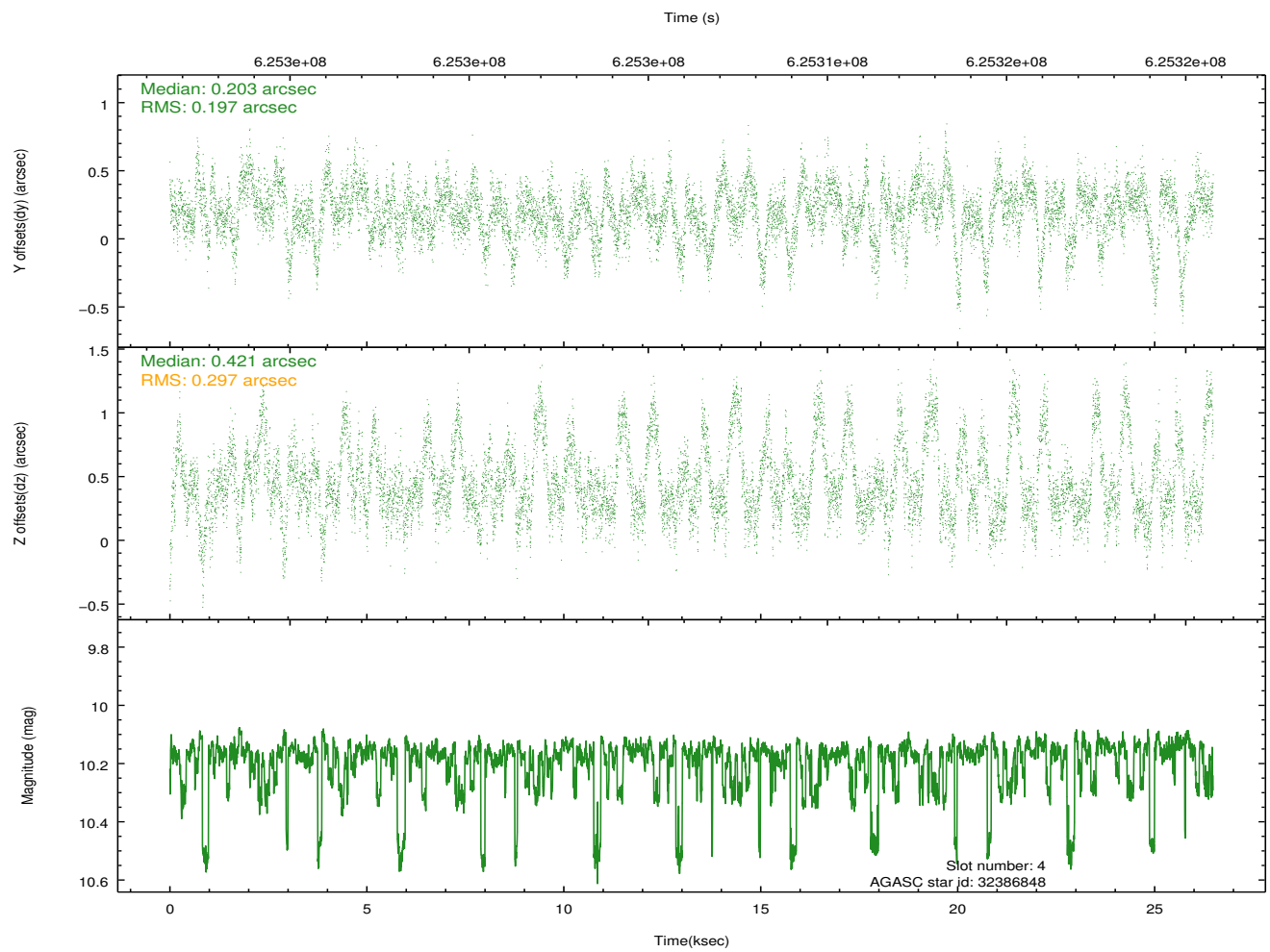
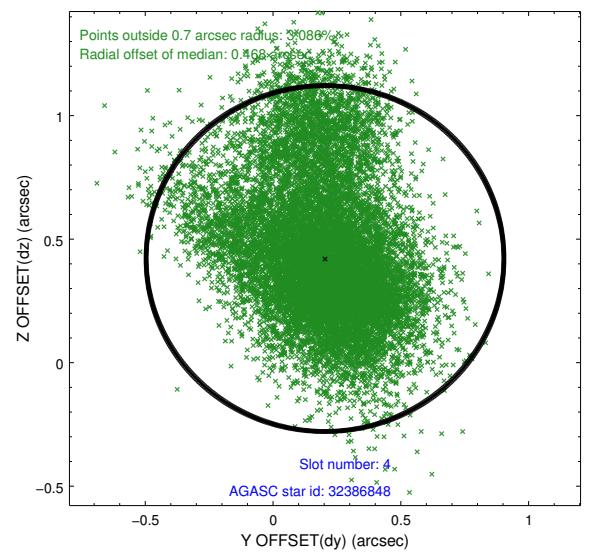
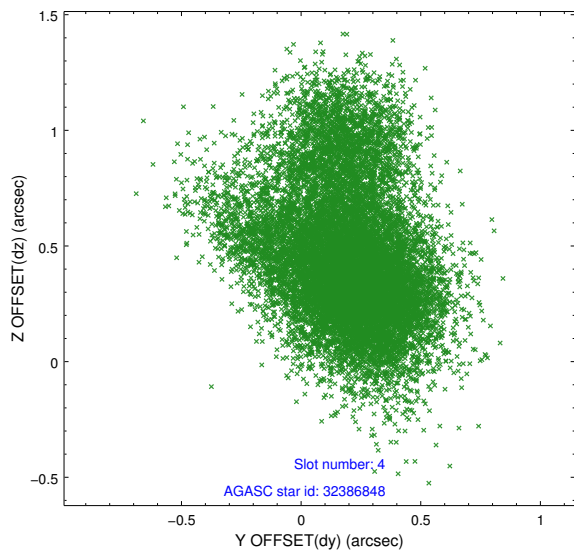
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-1	7.21	6460	0.085	0.049	0.024	0.084	0.000000	0.000000	923.75	-1739.42
1	FID		ACIS-S-2	7.12	6460	-0.422	-0.228	0.014	0.025	0.000000	0.000000	-772.60	-1744.24
2	FID		ACIS-S-4	7.22	6460	0.310	0.188	0.034	0.066	0.000000	0.000000	2141.28	164.73
3	GUIDE	used	32382184	9.43	12898	-0.015	-0.484	0.188	0.325	152.040791	3.302356	-1201.76	1505.87
4	GUIDE	used	32386848	10.17	12833	0.203	0.421	0.369	0.651	152.259356	2.991018	-2053.74	435.70
5	GUIDE	used	32386888	9.93	12808	0.161	-0.018	0.244	0.405	152.342883	3.147833	-1427.73	306.58
6	GUIDE	used	32387240	9.84	12833	0.135	-0.414	0.238	0.443	152.171853	3.291323	-1105.86	1042.18
7	GUIDE	used	32518416	9.83	12894	-0.465	0.455	0.299	0.517	153.076863	3.891454	1886.54	-1463.63

2.4 Star Slots

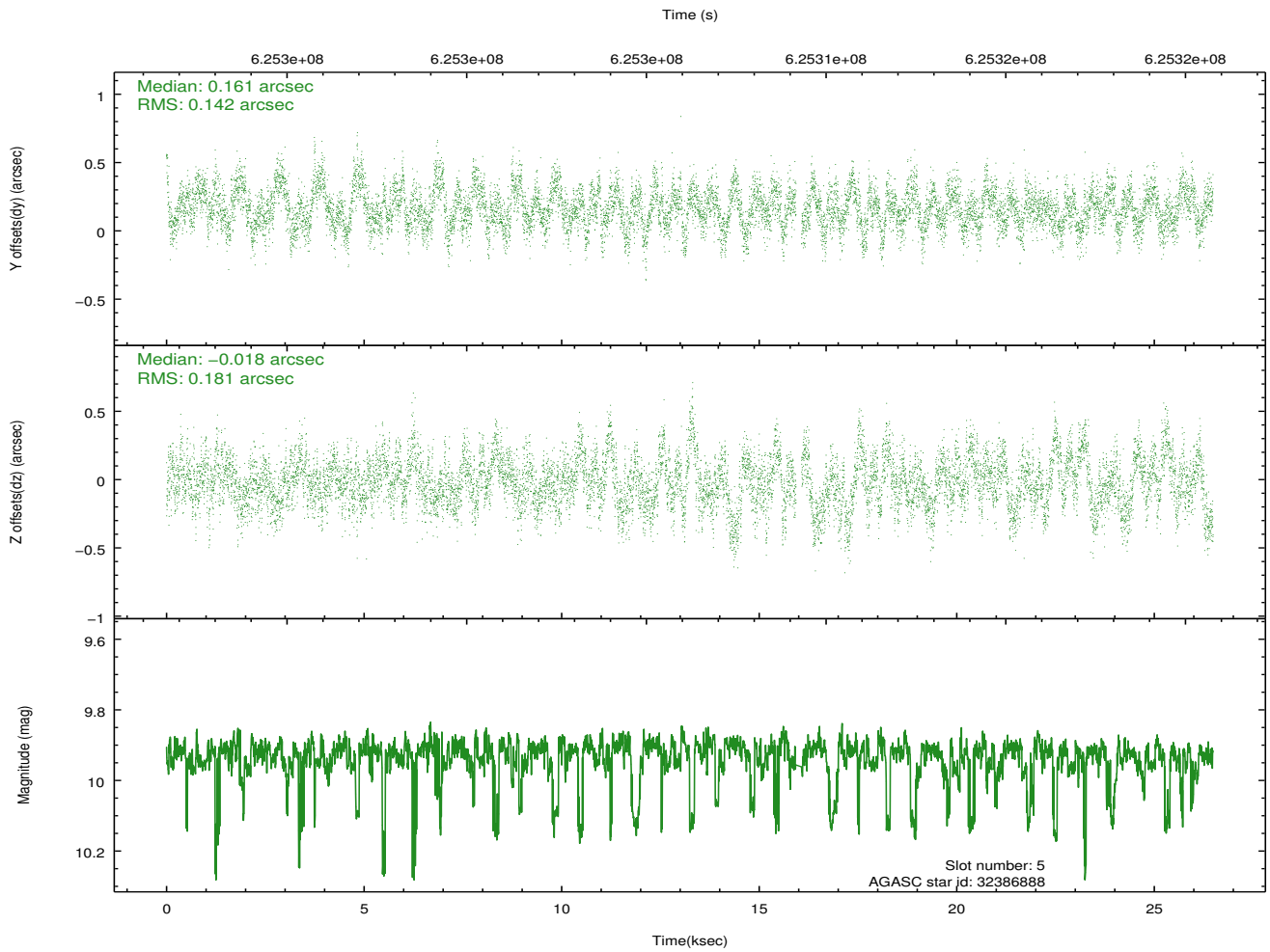
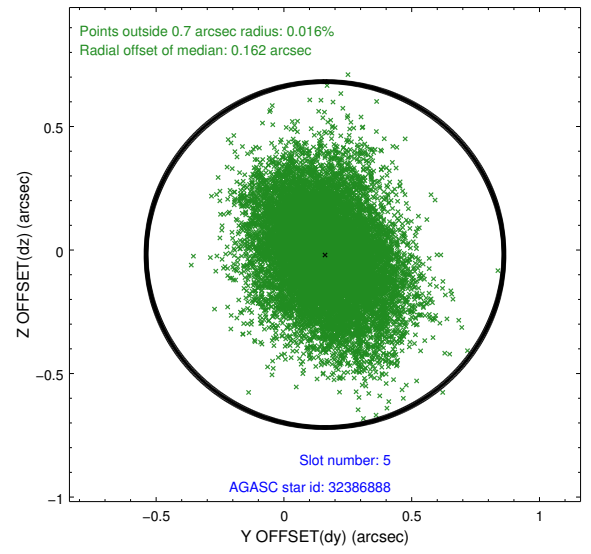
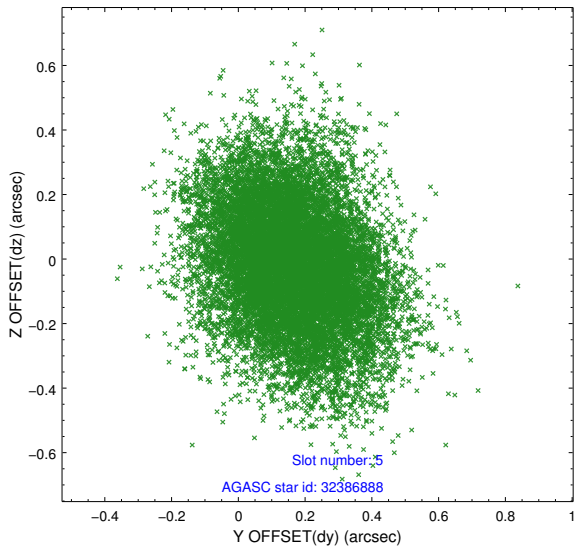
2.4.1 Slot 3



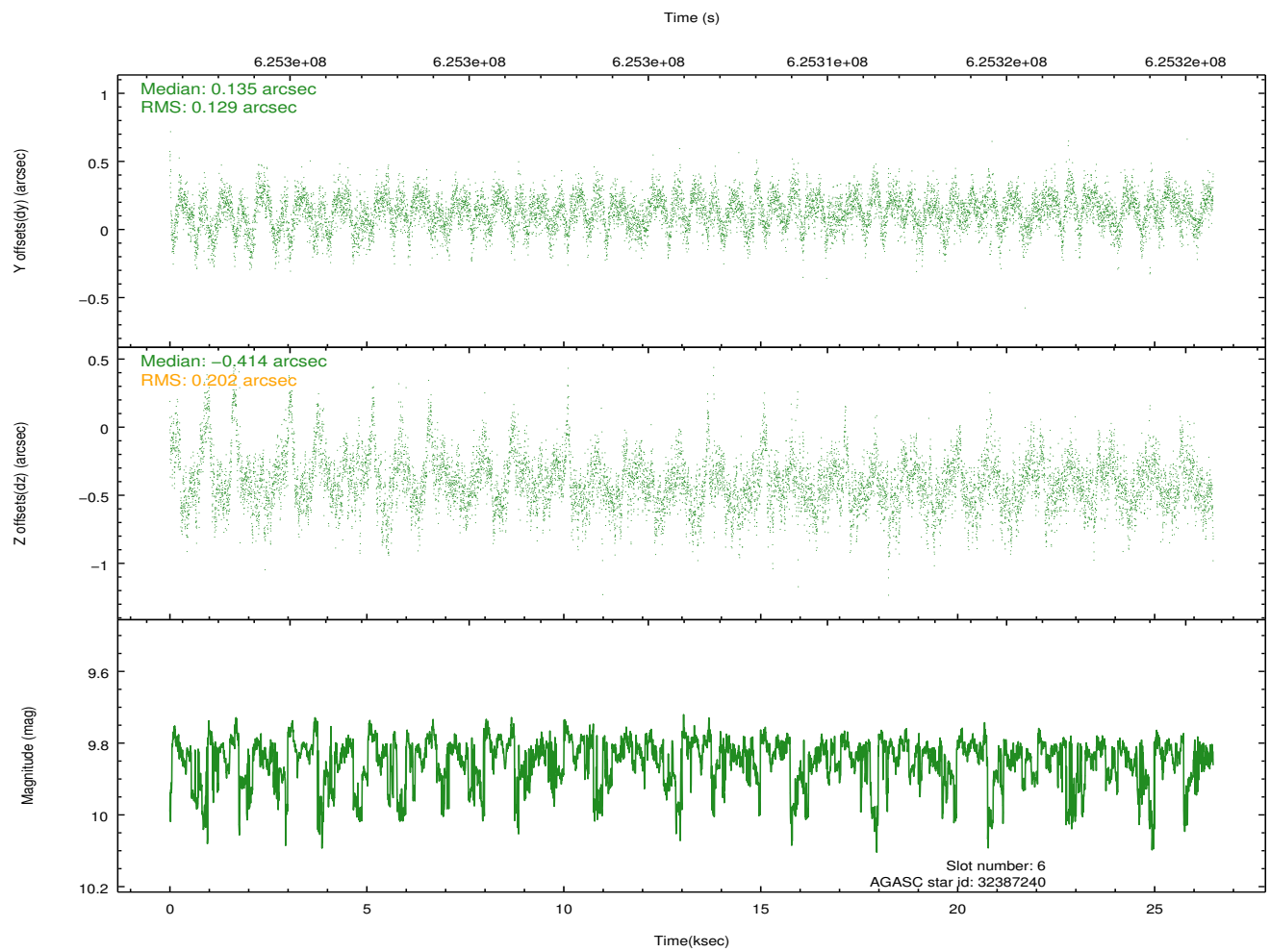
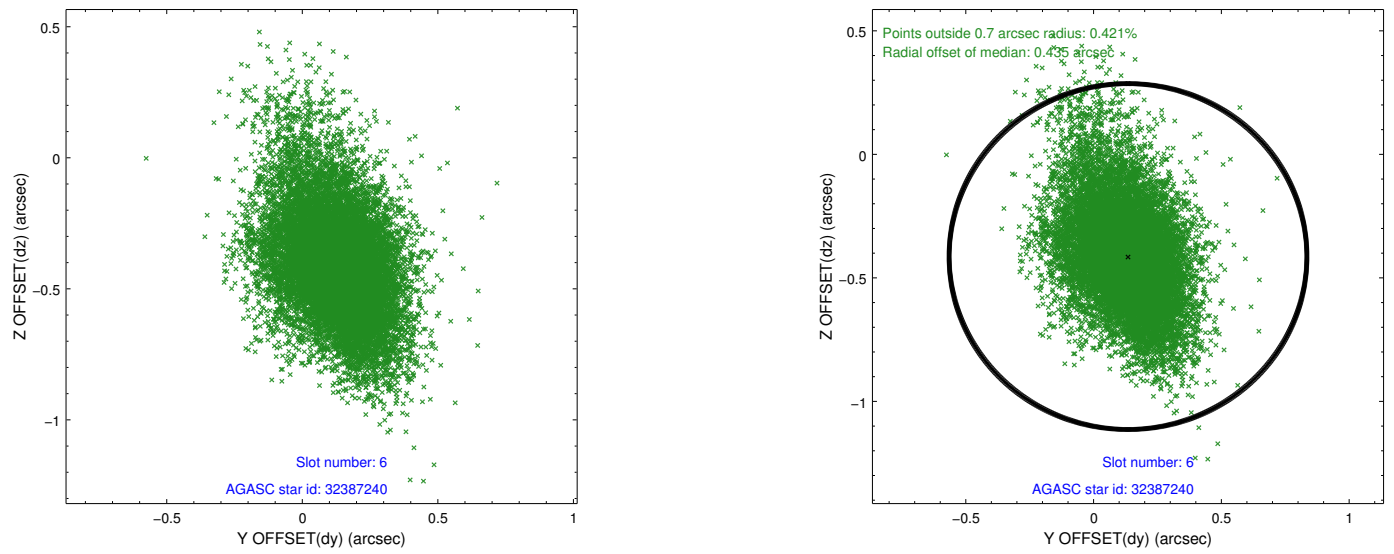
2.4.2 Slot 4



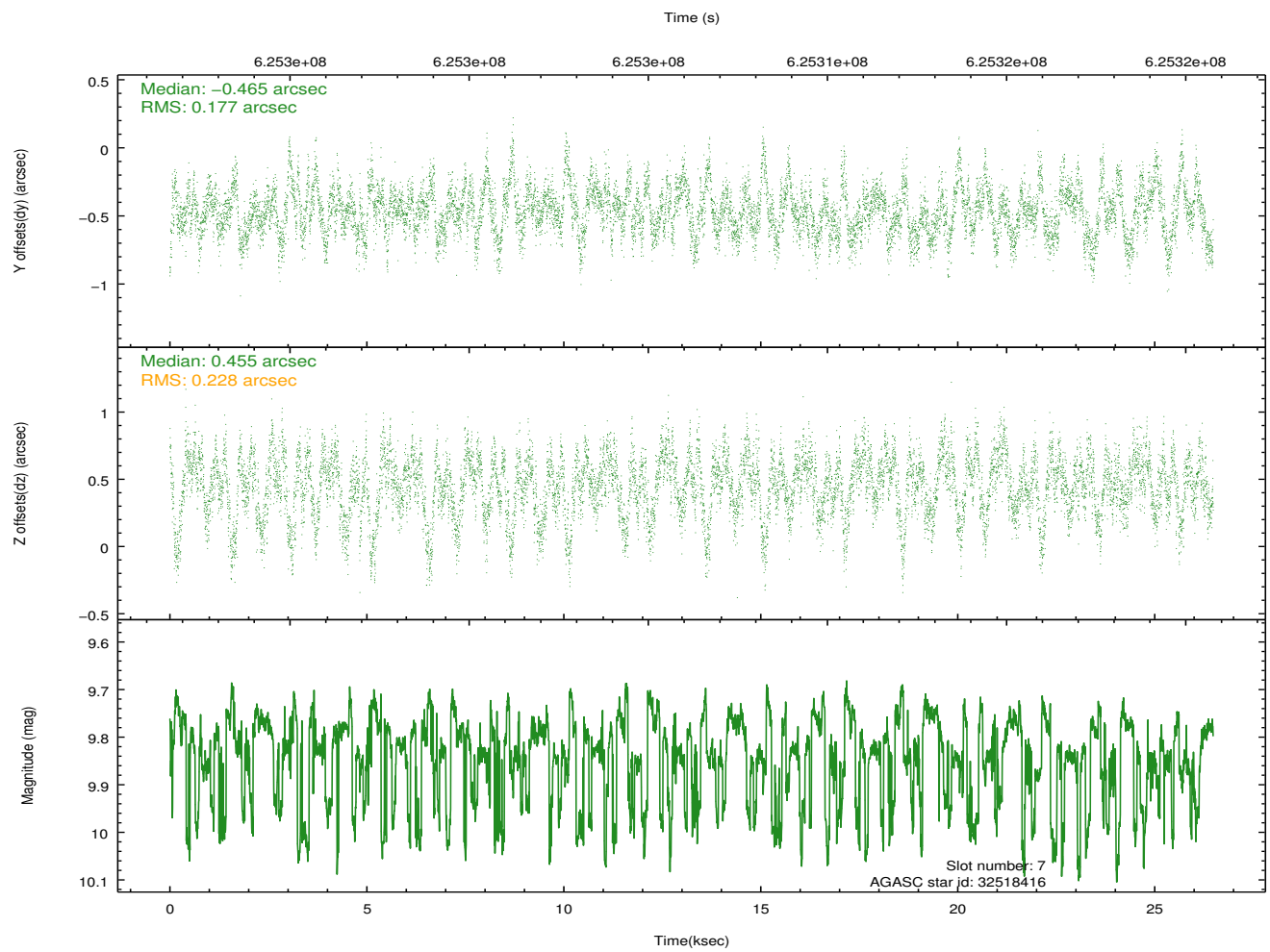
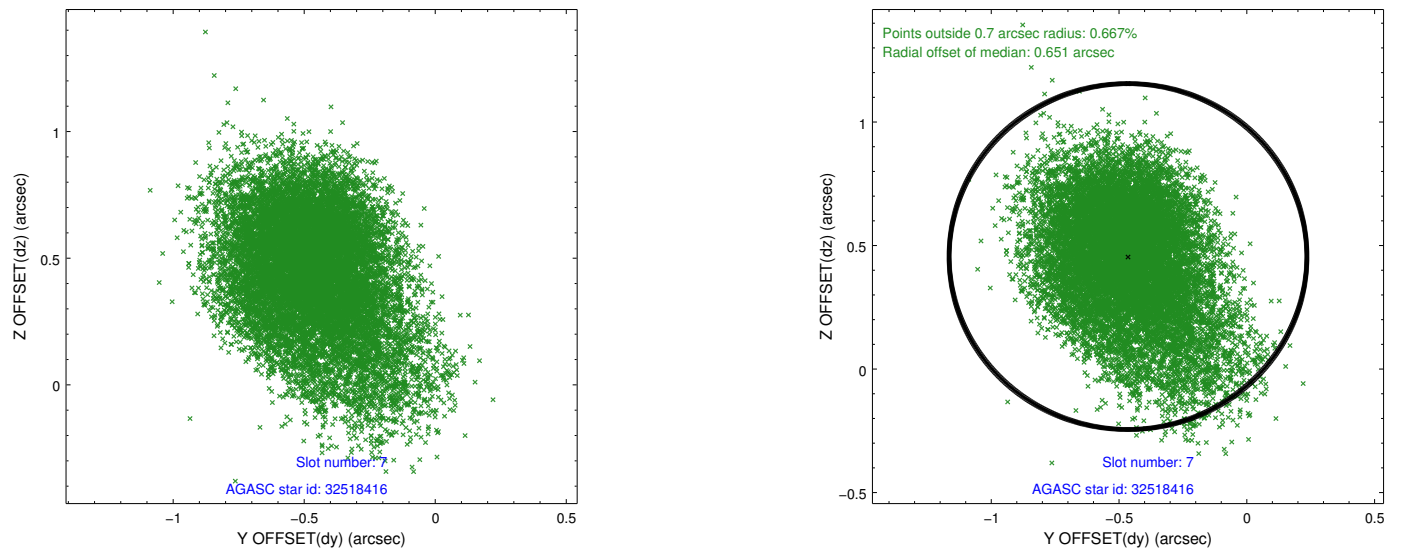
2.4.3 Slot 5



2.4.4 Slot 6

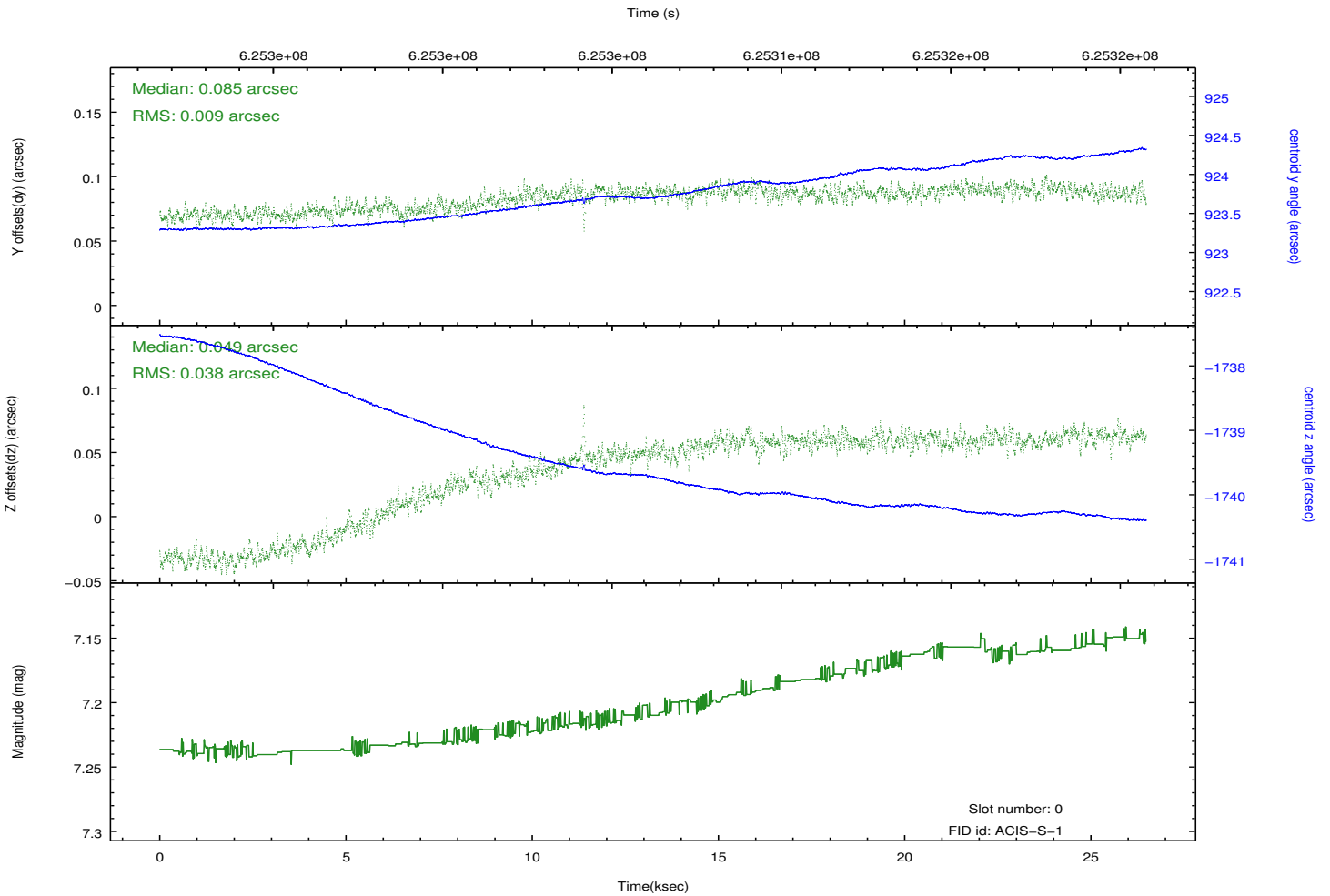
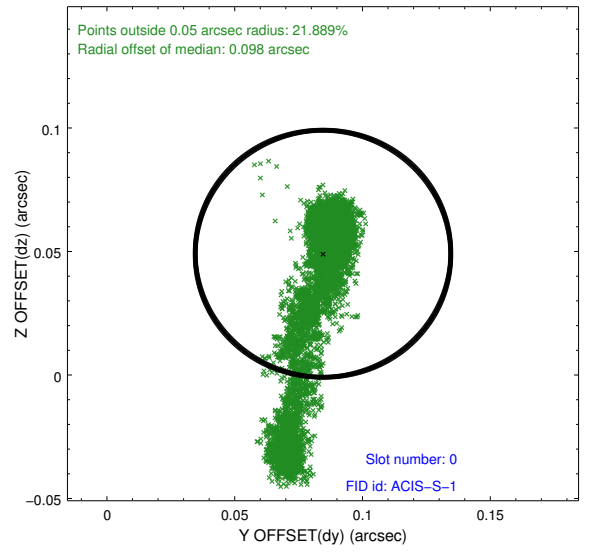
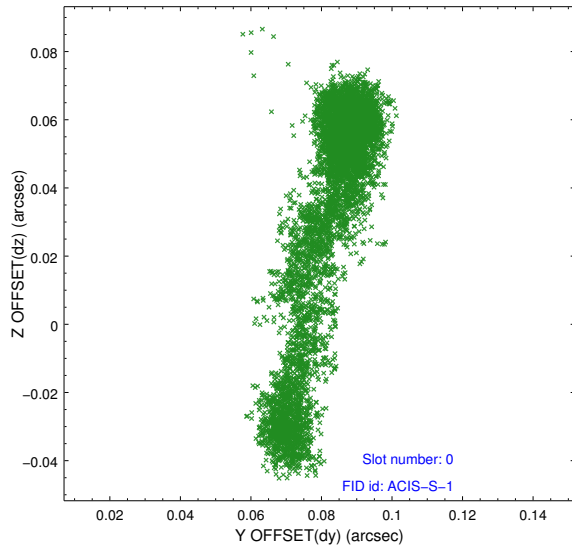


2.4.5 Slot 7

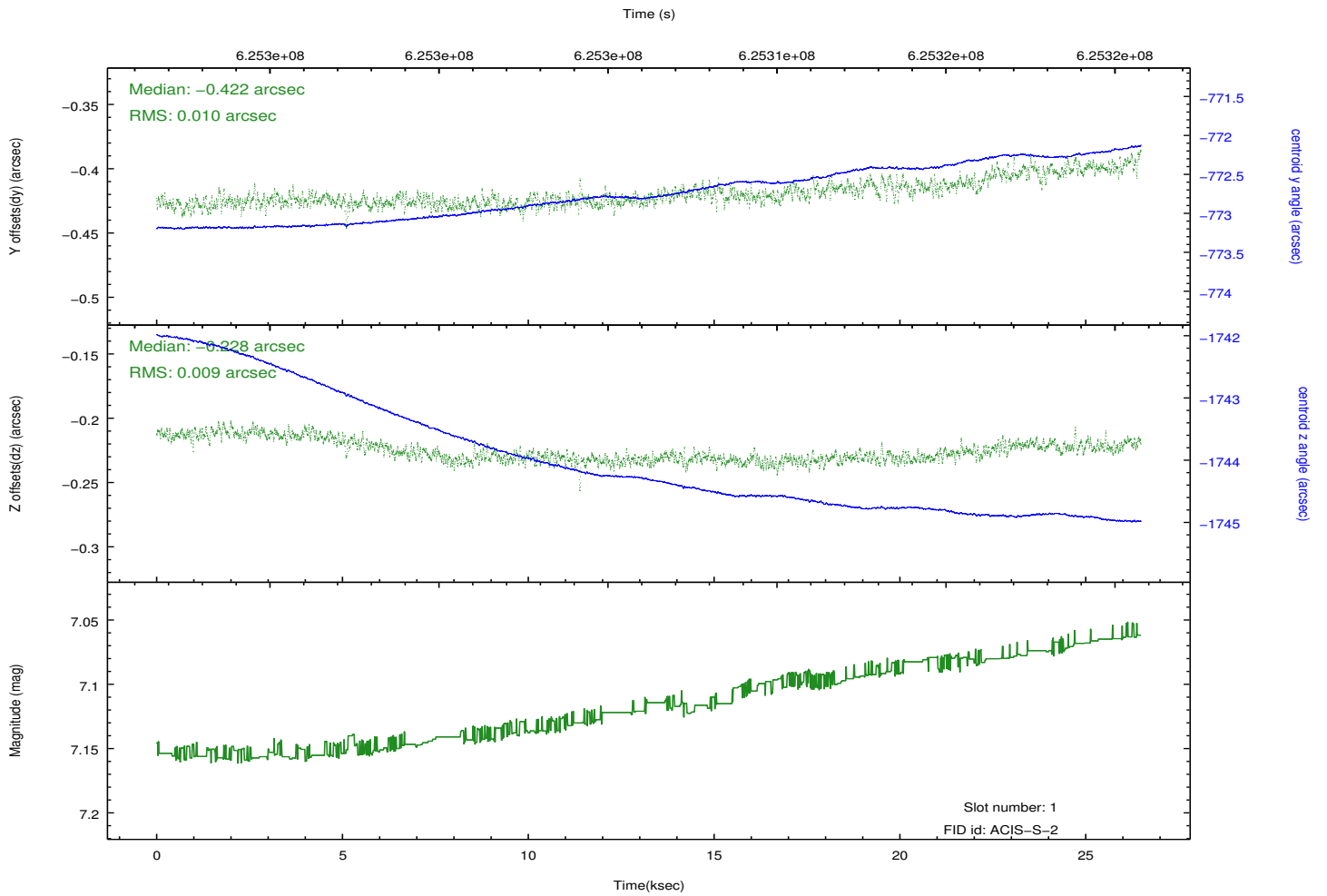
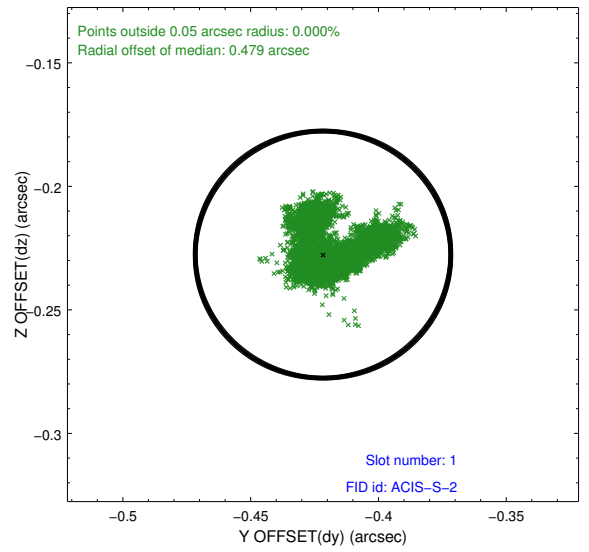
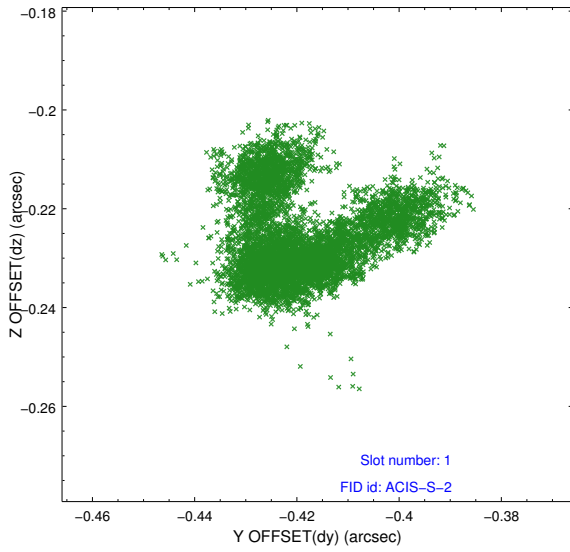


2.5 FID Slots

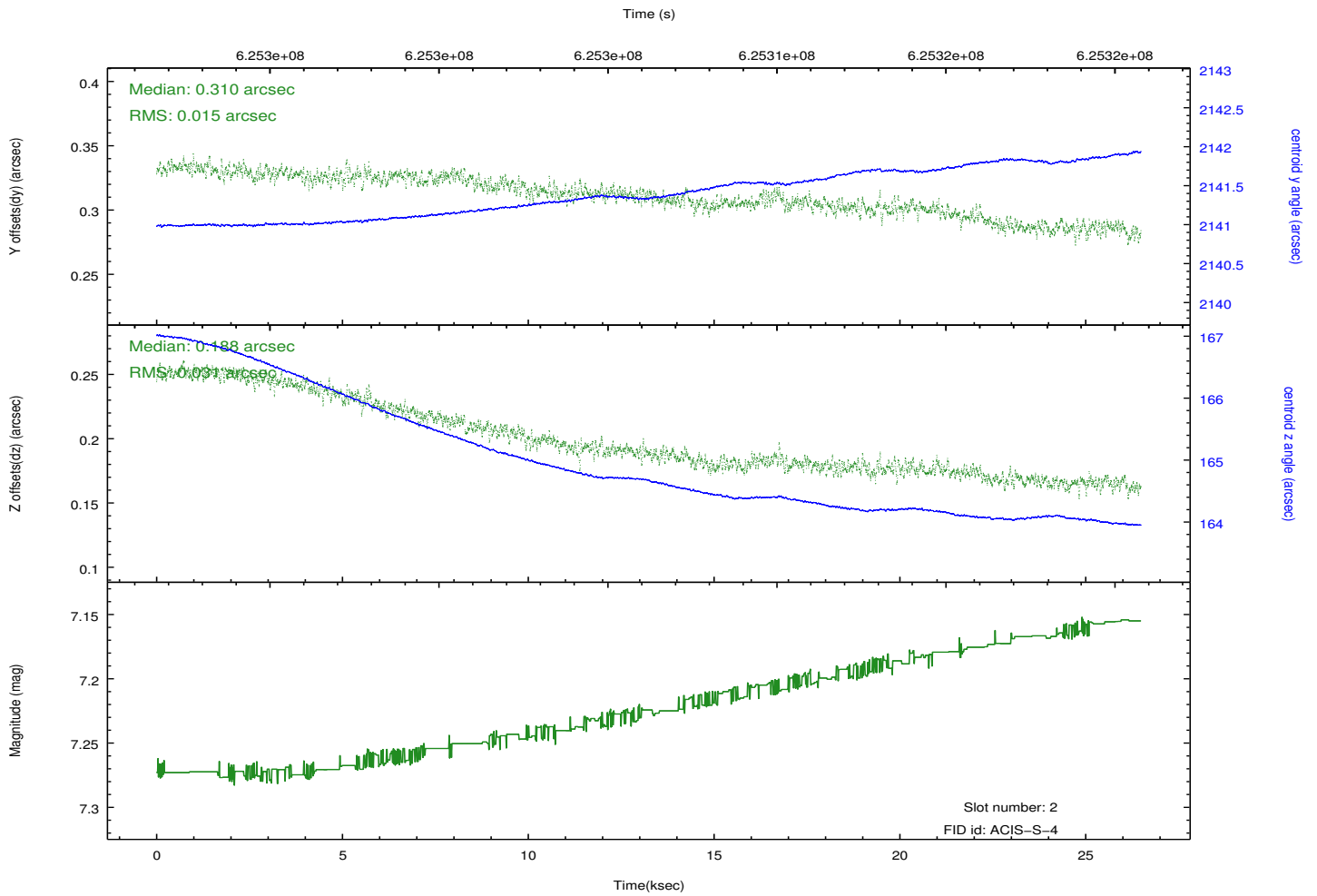
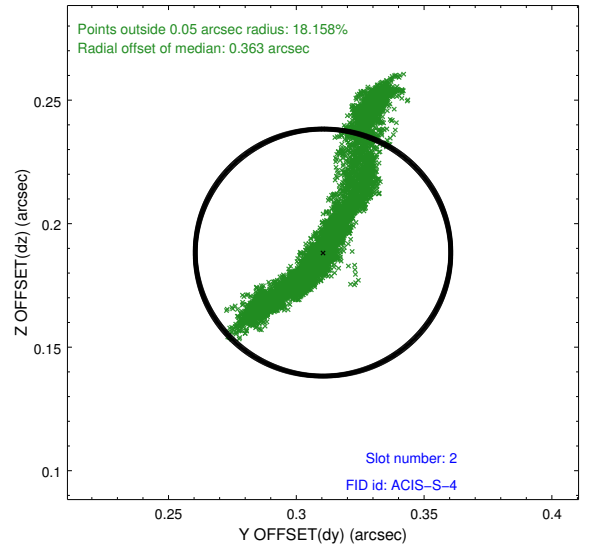
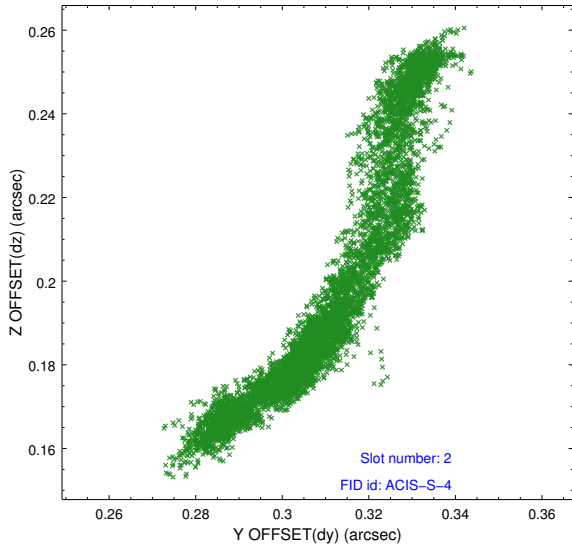
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2017.10.30
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	26.407966794252

A.2 Comments

A spatial region of the original bias map for CCD = 2 suffered from anomalously high data values. Pixels in the event data that were bias-corrected by one of the original affected bias pixels may have an apparent energy shift. While the change in energy is expected to be small (~ 20 eV), it depends on many parameters that have not yet been fully explored for this bias anomaly. The bias map for CCD = 2 has been reconstructed for this processing to remove this anomaly using scaled data from a comparable bias map from another observation. The pixels affected by the anomaly are bounded by sky coords: (152.69211,3.63037), (152.68909,3.63124), (152.64990,3.49736), (152.65292,3.49649).