

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 13289 - L2 Version 2
Chandra X-Ray Center

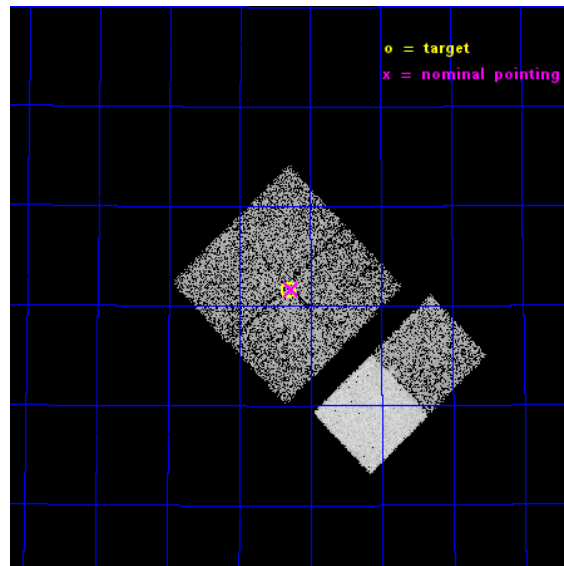
L2 Processing Date : Nov 27 2014

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

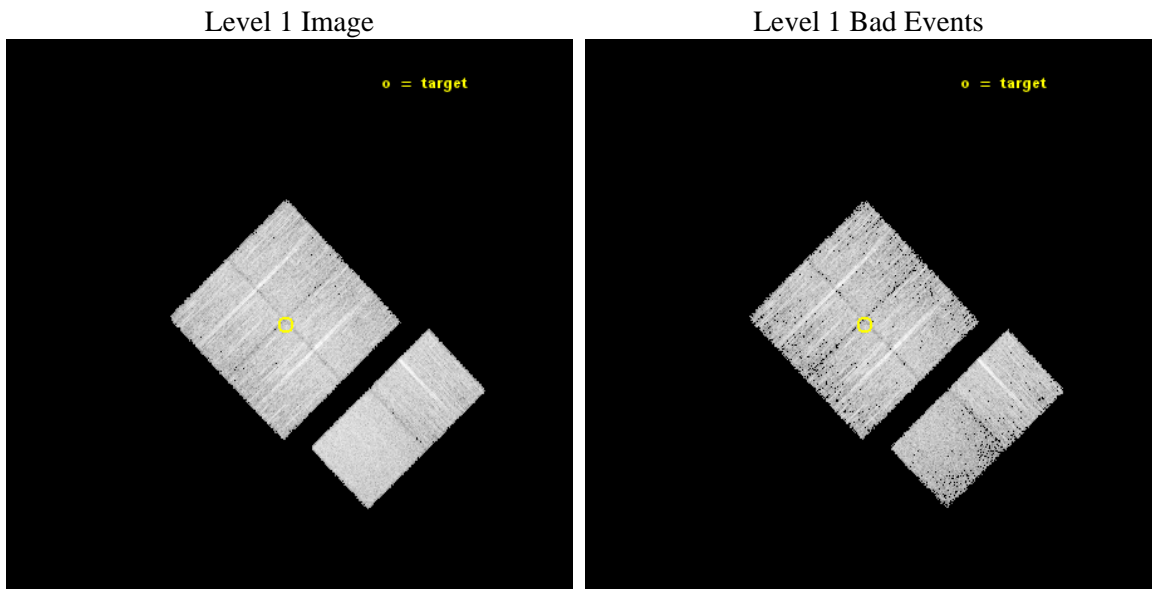
seq_num	501557	Sequence number
obs_id	13289	Observation id
title	Snap-shot survey of new galactic gamma-ray sources	Proposal title
observer	Professor Gordon Garmire	Principal investigator
object	PSR J0248+6021	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	42.0775	Observer's specified target RA [deg]
dec_targ	60.359444	Observer's specified target Dec [deg]
ra_nom	42.066549070867	Nominal RA [deg]
dec_nom	60.361292910402	Nominal Dec [deg]
roll_nom	135.85362955727	Nominal Roll [deg]
revision	2	Processing version of data
ontime	9337.5999652743	Sum of GTIs [s]
livetime	9219.3616520863	Livetime [s]
ontime0	9337.5999652743	Sum of GTIs [s]
ontime1	9337.5999652743	Sum of GTIs [s]
ontime2	9337.5999652743	Sum of GTIs [s]
ontime3	9337.5999652743	Sum of GTIs [s]
ontime6	9337.5999652743	Sum of GTIs [s]
ontime7	9337.5999652743	Sum of GTIs [s]
l2events	49158	Number of level 2 events



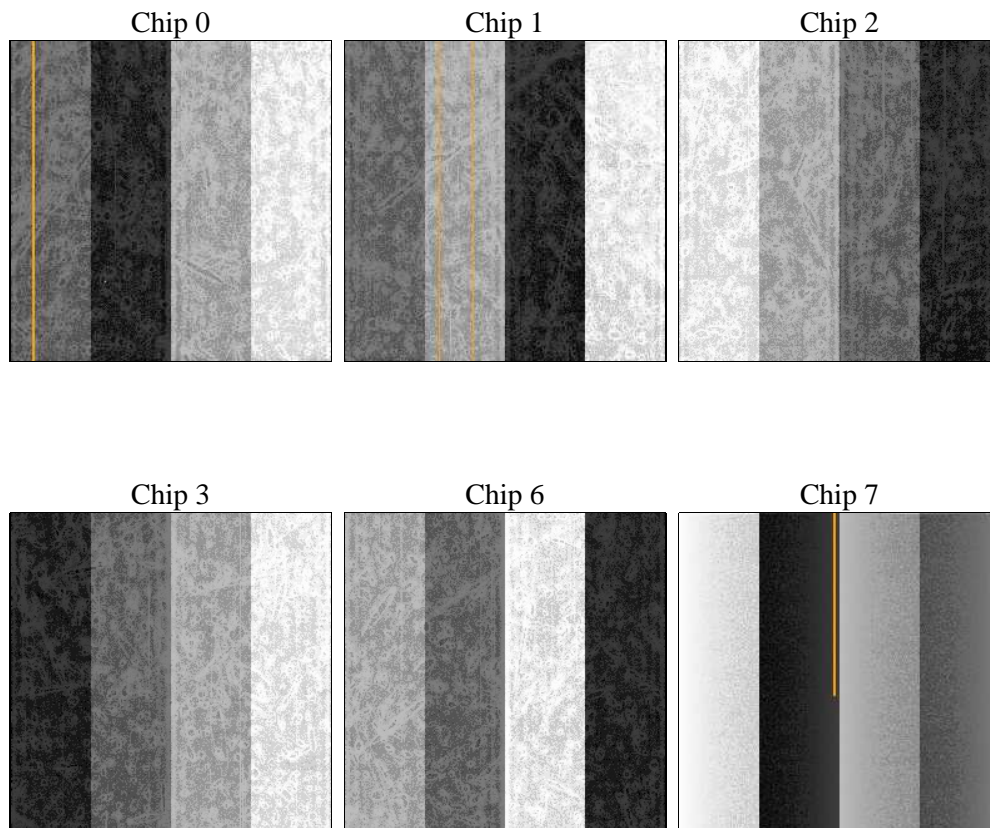
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	9367.344000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	9337.5999652743	Sum of GTIs [s]
caldbver	4.6.4	 	ontime0	9337.5999652743	Sum of GTIs [s]
date	2014-11-27T07:56:09	Date and time of file creation	ontime1	9337.5999652743	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	9337.5999652743	Sum of GTIs [s]
			ontime3	9337.5999652743	Sum of GTIs [s]
			ontime6	9337.5999652743	Sum of GTIs [s]
			ontime7	9337.5999652743	Sum of GTIs [s]
			l1events	284525	Number of level 1 events

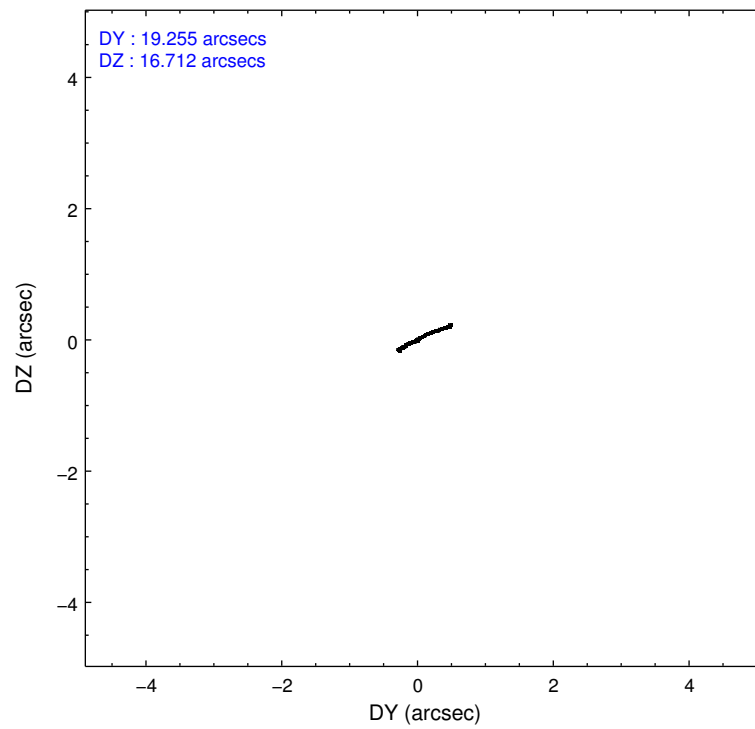
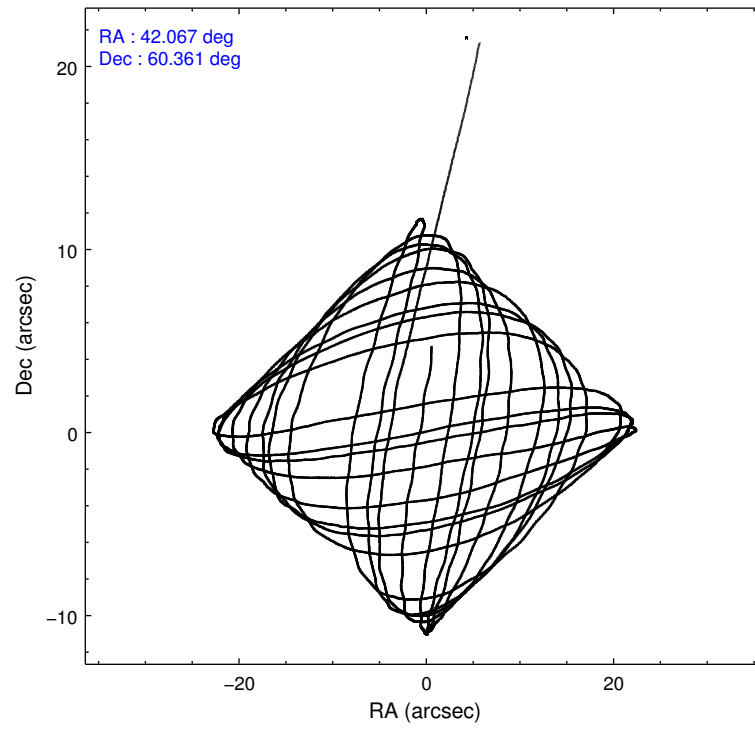
2.1.4 Events

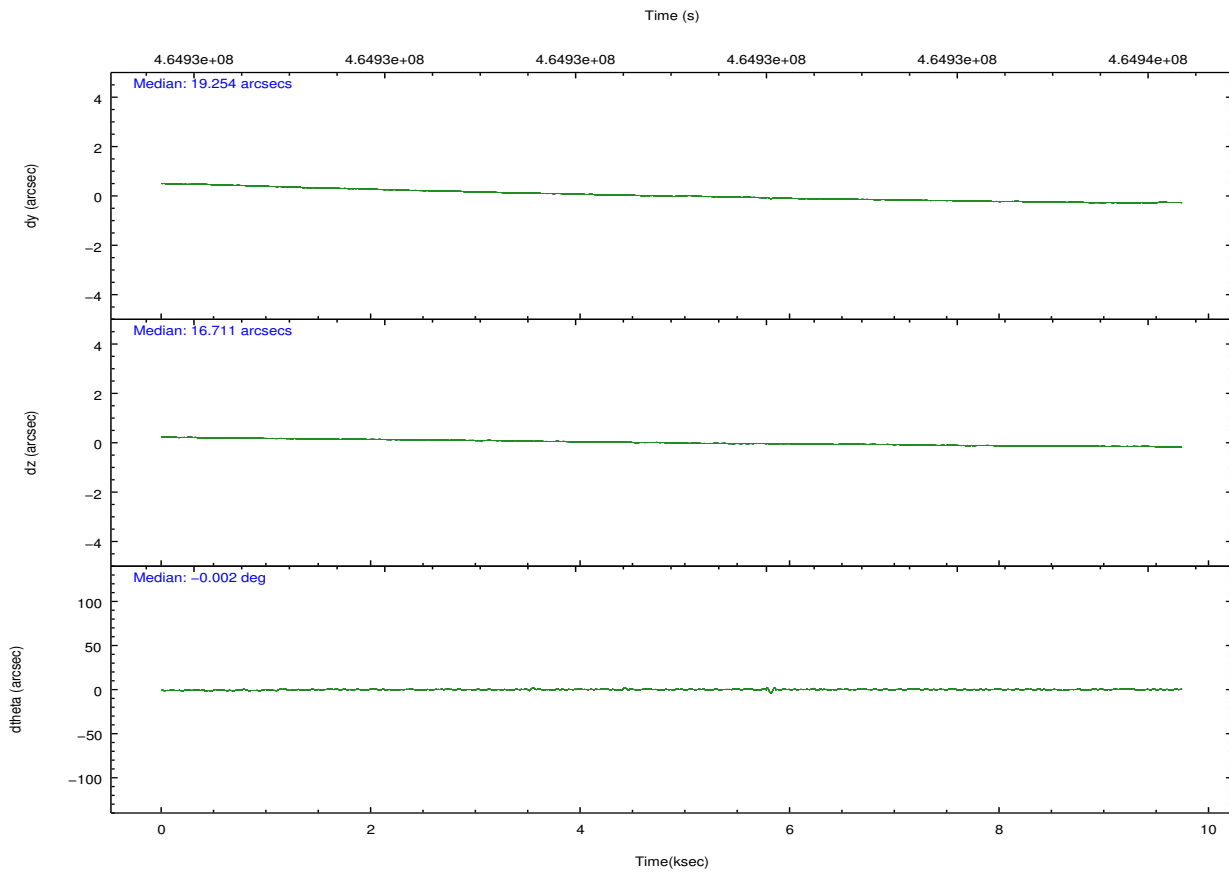
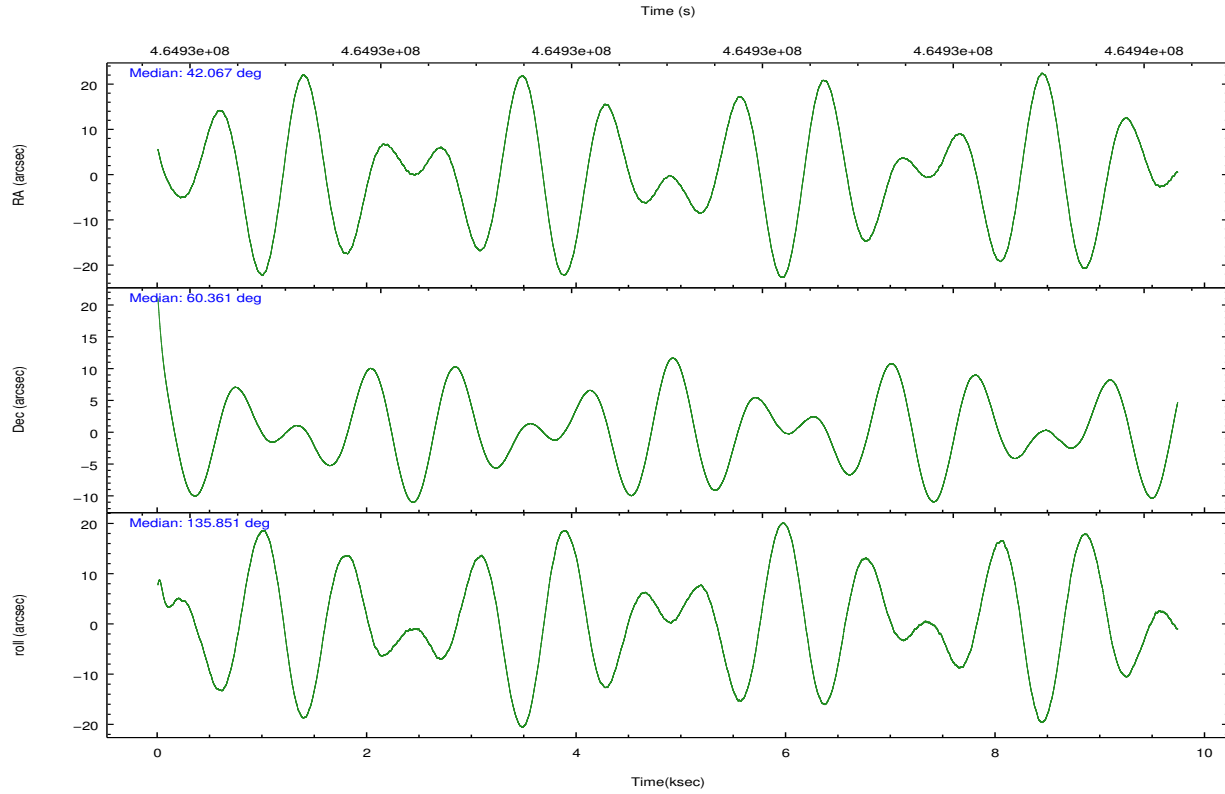
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	43655	44636	45902	46706	49420	54206	grade 0 events	2120	2033	2099	2080	2185	2270
rejected events	38044	38786	40424	41310	43421	28330		4%	4%	4%	4%	4%	4%
rejected %	87%	86%	88%	88%	87%	52%	grade 1 events	22	28	44	35	21	67
								0%	0%	0%	0%	0%	0%
							grade 2 events	1350	1361	1227	1140	1330	5528
								3%	3%	2%	2%	2%	10%
							grade 3 events	551	624	570	524	543	2280
								1%	1%	1%	1%	1%	4%
							grade 4 events	524	607	524	558	599	2181
								1%	1%	1%	1%	1%	4%
							grade 5 events	1892	1939	1682	2151	2106	5529
								4%	4%	3%	4%	4%	10%
							grade 6 events	1071	1230	1061	1097	1342	13635
								2%	2%	2%	2%	2%	25%
							grade 7 events	36125	36814	38695	39121	41294	22716
								82%	82%	84%	83%	83%	41%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	42.120491	42.06654907086718	CCD I2 on	Y	Y
[deg] Pointing Dec	60.354734	60.36129291040223	CCD I3 on	Y	Y
[deg] Pointing Roll	135.598041	135.8536295572662	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O2	Y
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	O1	Y
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	464926521.184000	464925465.79903	CCD S5 on	N	N
Observation start date	2012-09-25T02:14:14	2012-09-25T01:57:45	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	464935888.184000	464936124.7746	On-chip summing requested	N	N
Observation end date	2012-09-25T04:50:21	2012-09-25T04:55:24	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



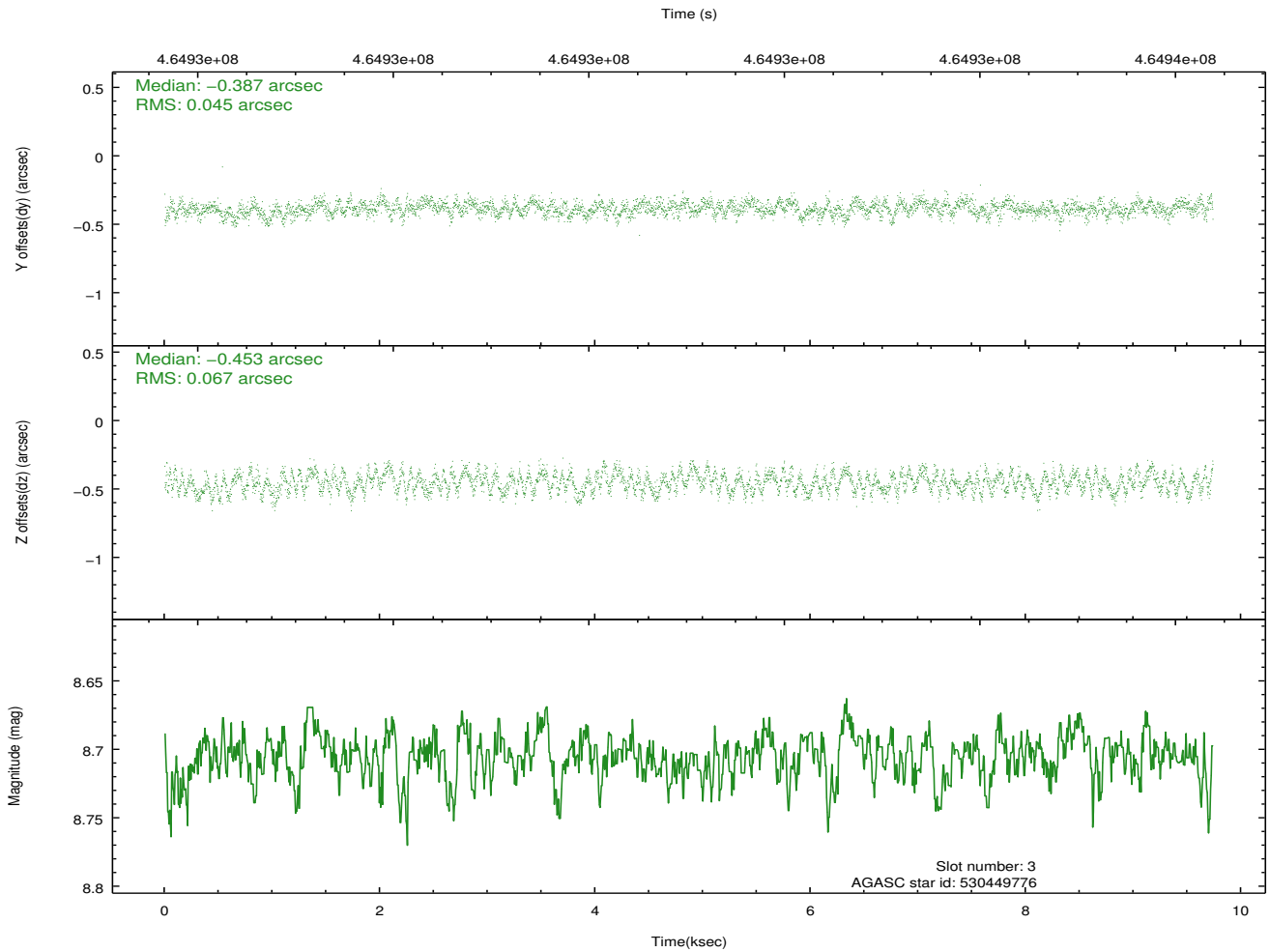
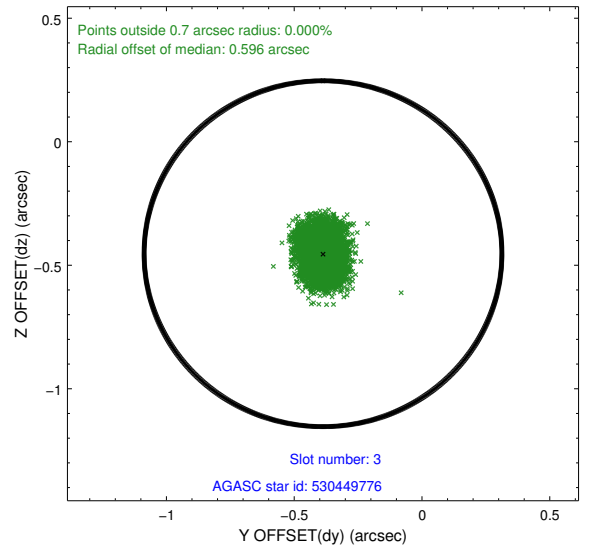
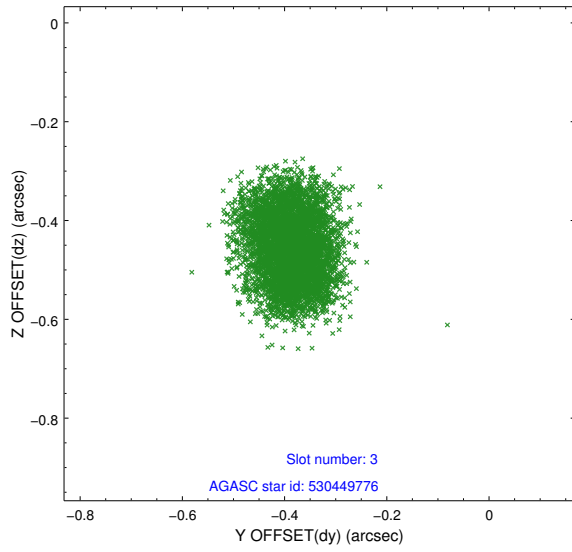


Slot Statistics

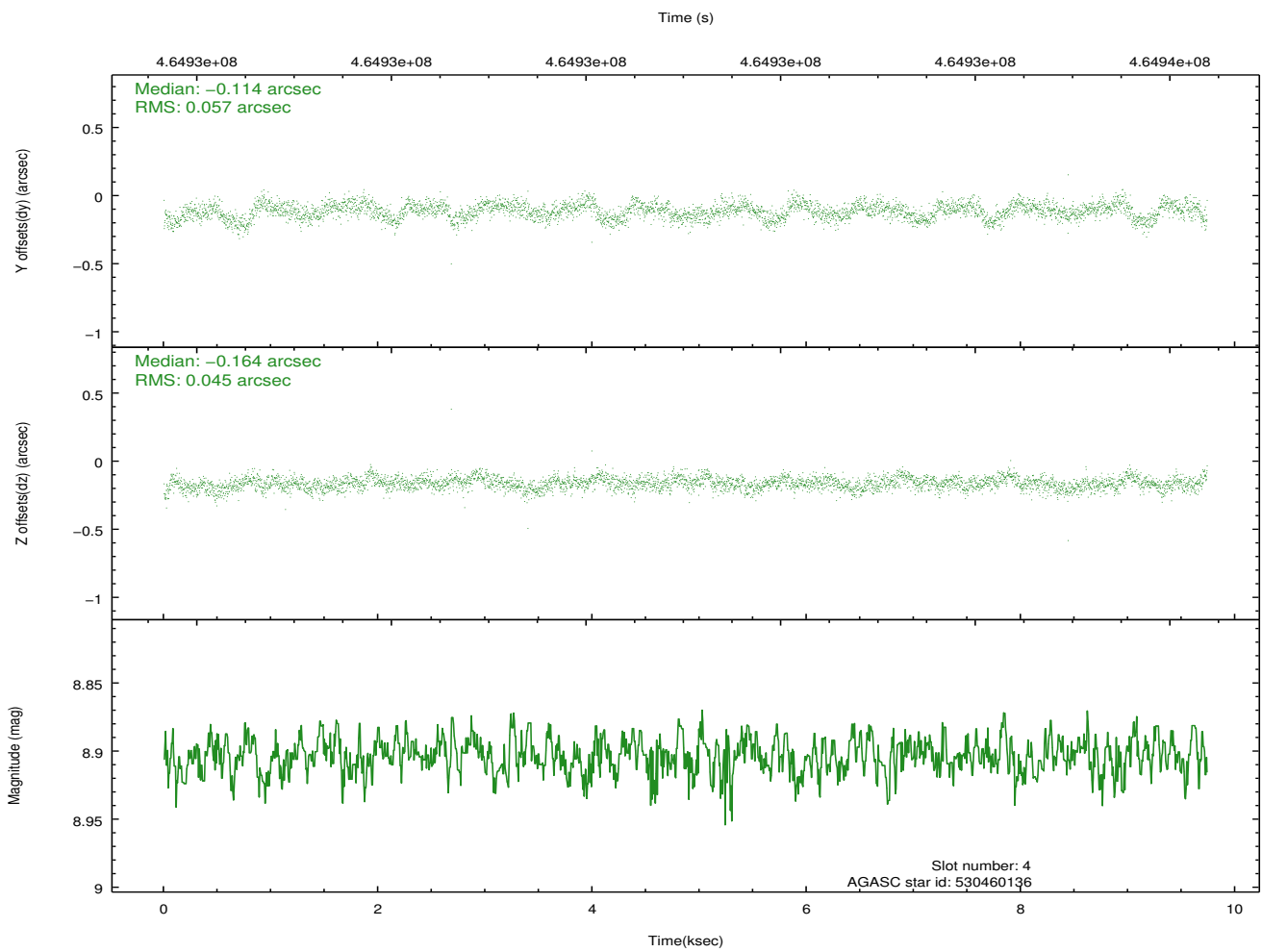
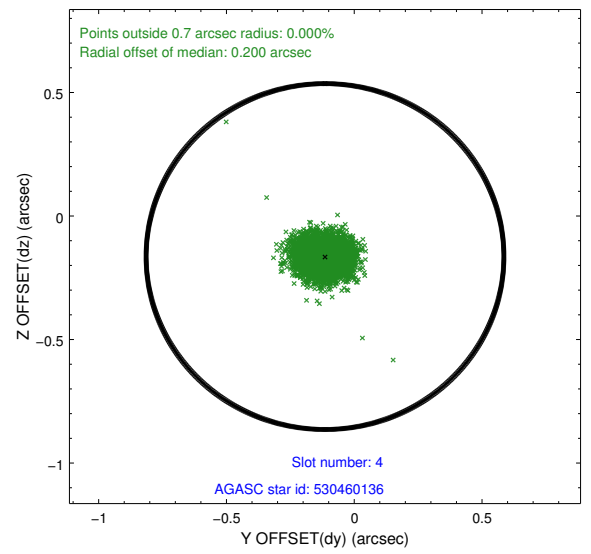
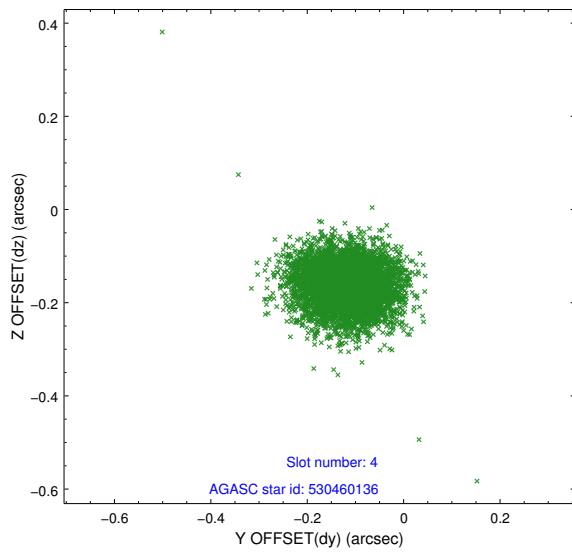
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.14	2375	0.079	-0.040	0.008	0.021	0.000000	0.000000	920.13	-840.41
1	FID		ACIS-I-5	7.14	2375	-0.282	0.062	0.007	0.011	0.000000	0.000000	-1828.03	1056.92
2	FID		ACIS-I-6	7.15	2375	0.113	0.048	0.009	0.018	0.000000	0.000000	385.12	1702.02
3	GUIDE	used	530449776	8.71	4744	-0.387	-0.453	0.087	0.136	40.737398	60.204468	1407.20	2098.46
4	GUIDE	used	530460136	8.90	4748	-0.114	-0.164	0.076	0.122	40.905067	60.608398	2187.53	836.10
5	GUIDE	used	530460184	6.59	4751	-0.043	0.074	0.075	0.123	41.790318	60.570763	963.29	-147.90
6	GUIDE	used	530588672	8.92	4750	0.388	0.251	0.090	0.143	43.690830	60.367845	-1938.72	-2012.57
7	GUIDE	used	530593936	7.36	4749	0.157	0.292	0.066	0.105	43.976286	60.393262	-2228.10	-2441.85

2.4 Star Slots

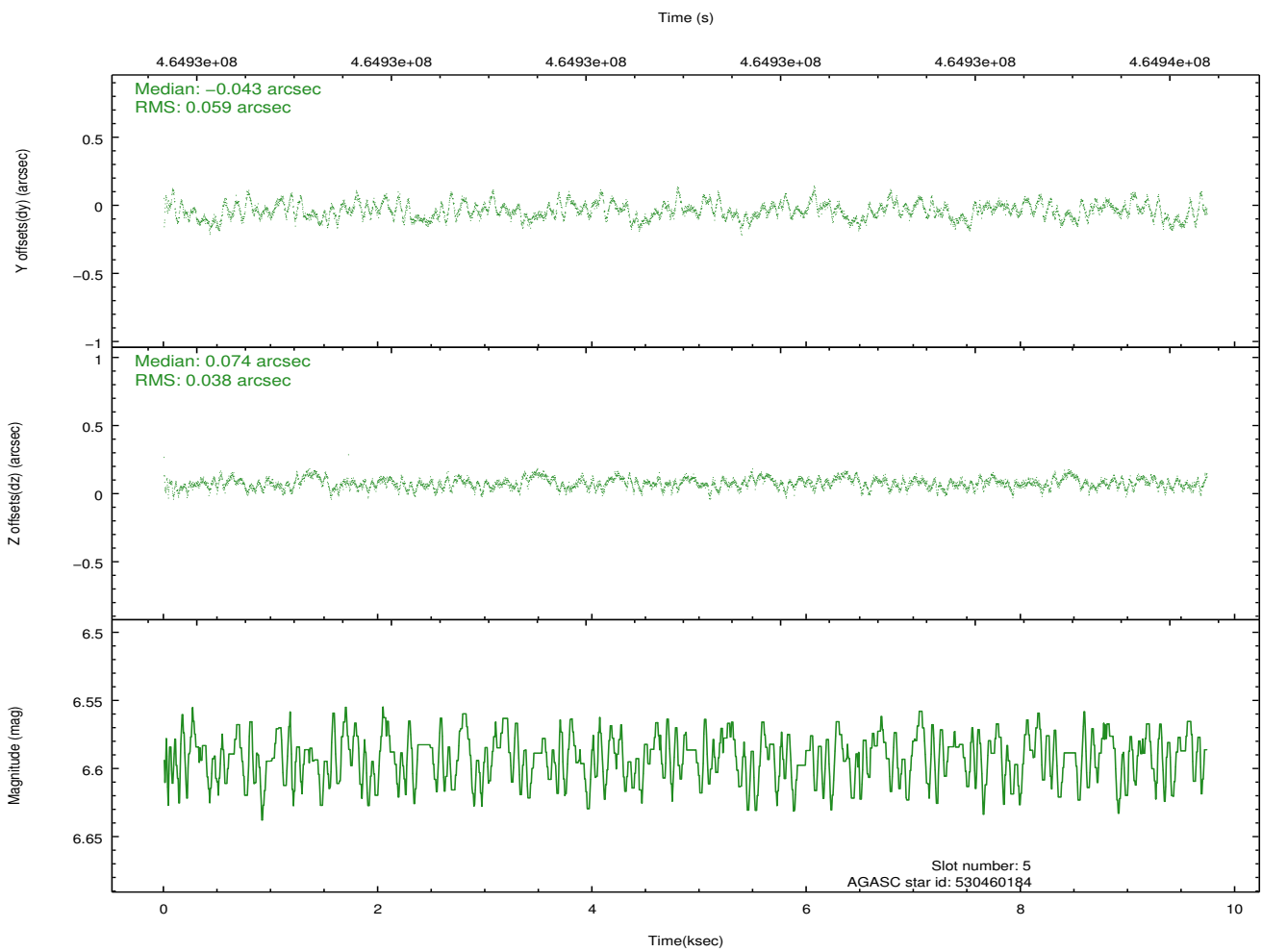
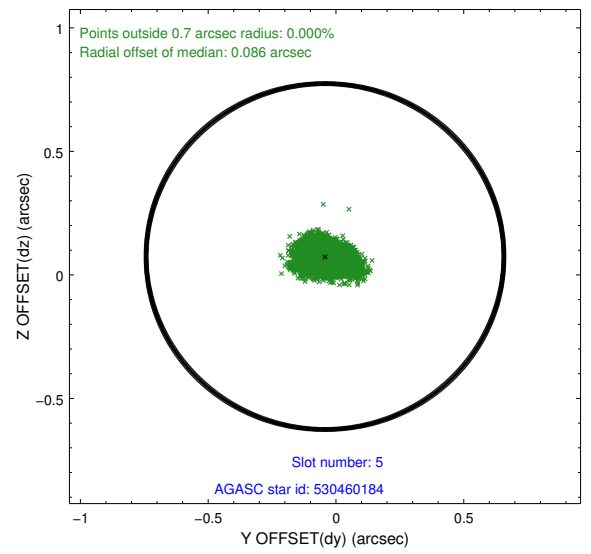
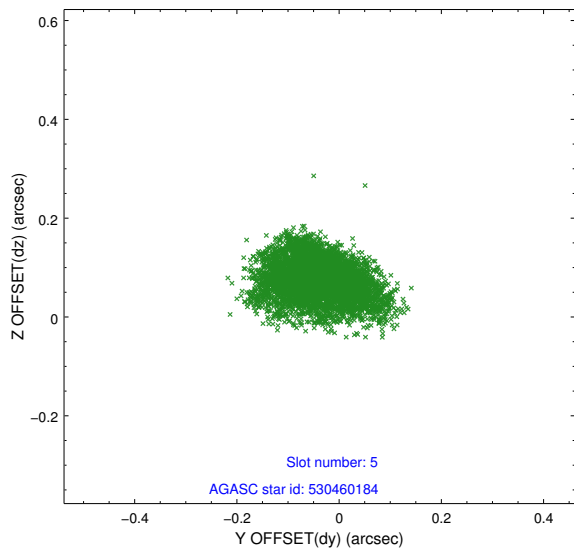
2.4.1 Slot 3



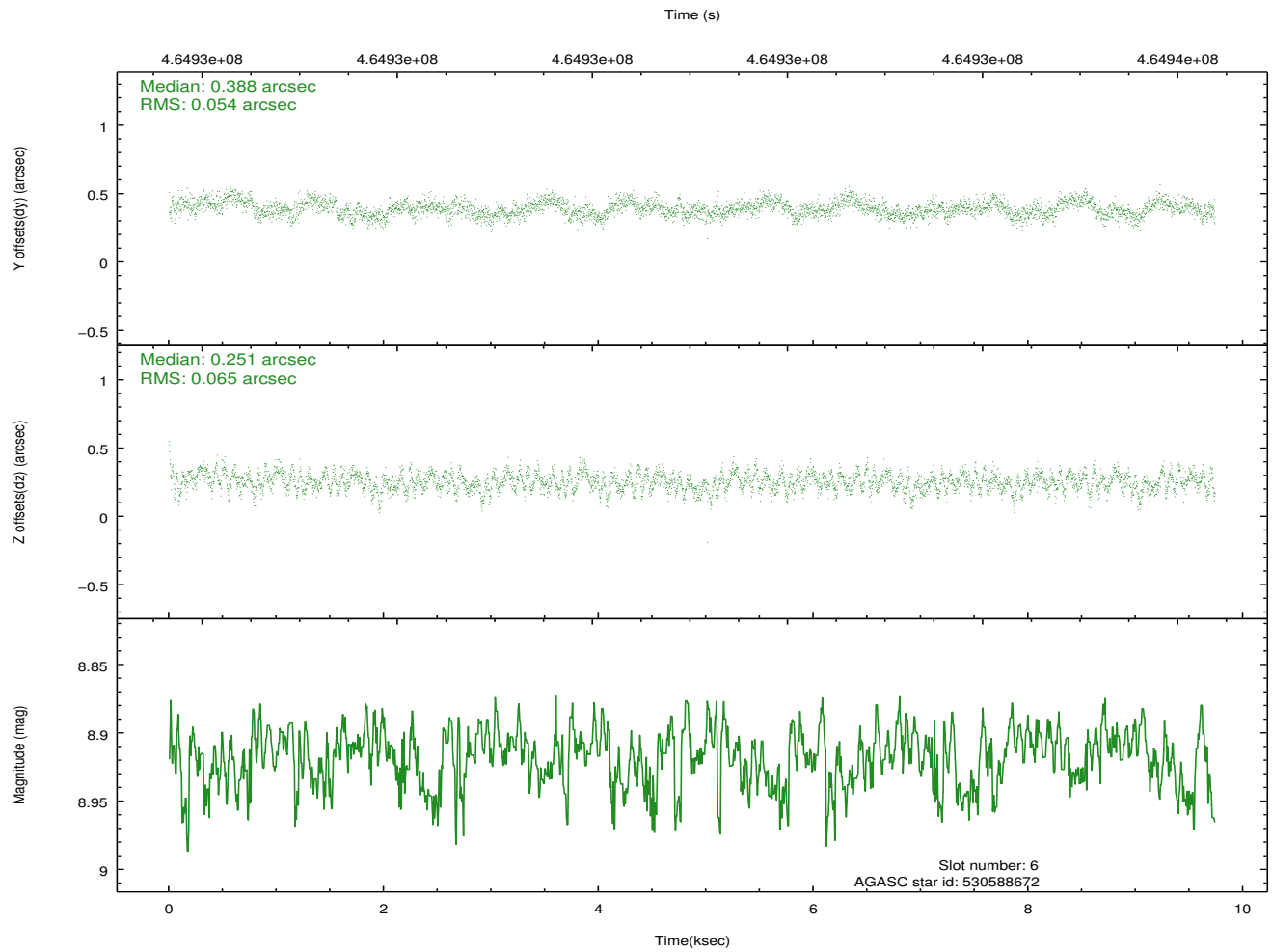
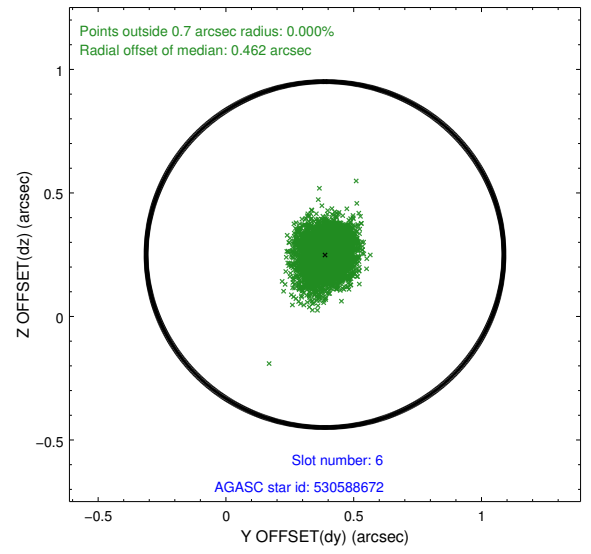
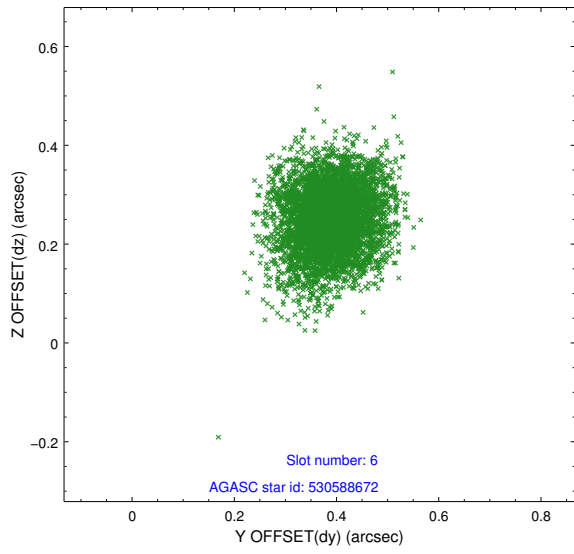
2.4.2 Slot 4



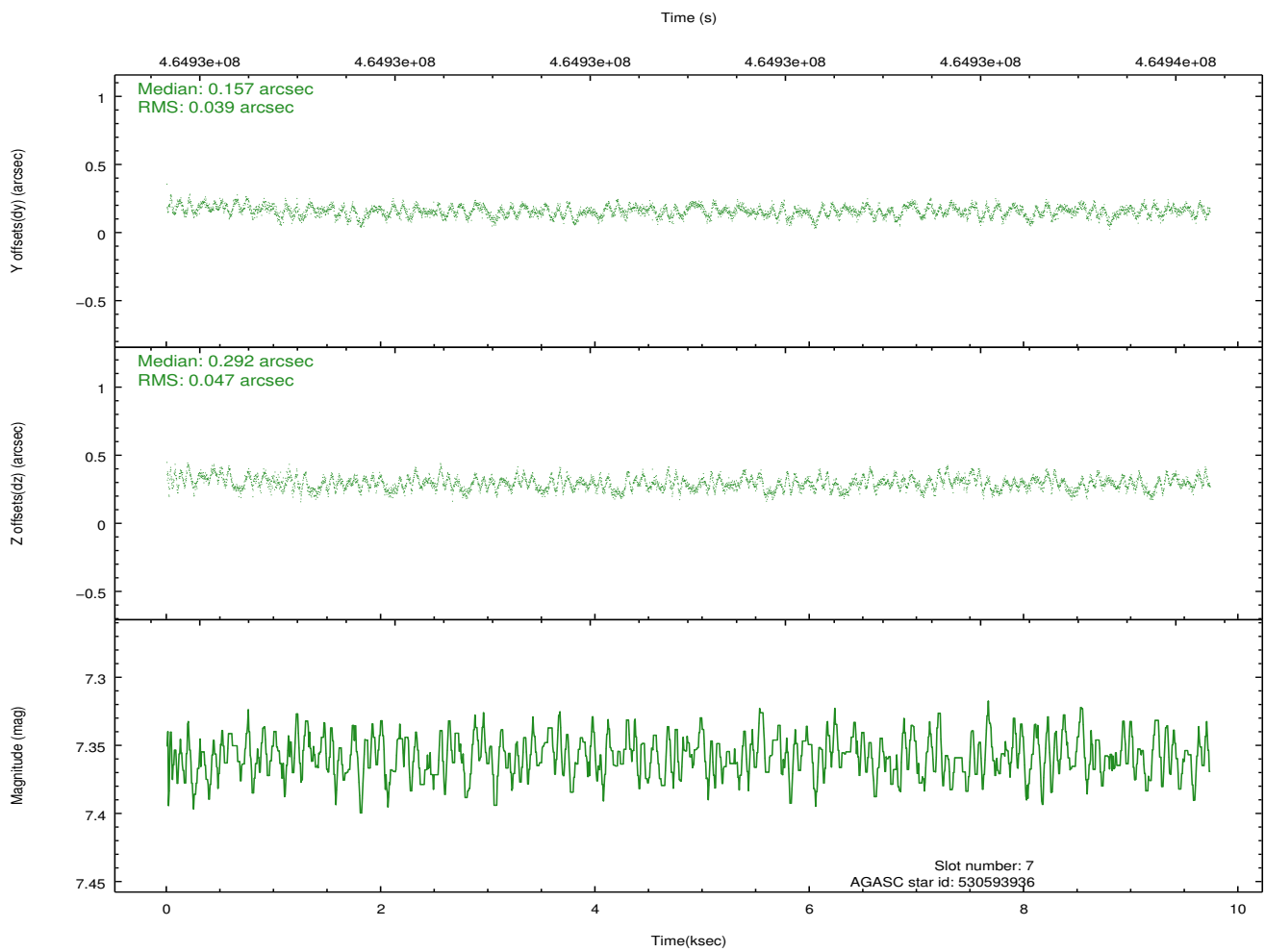
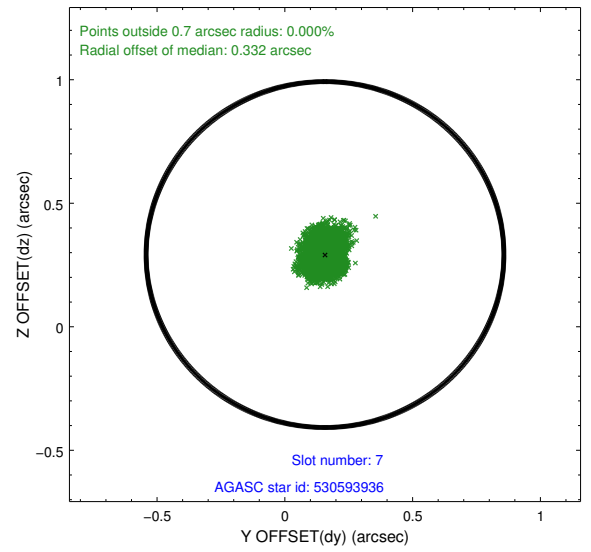
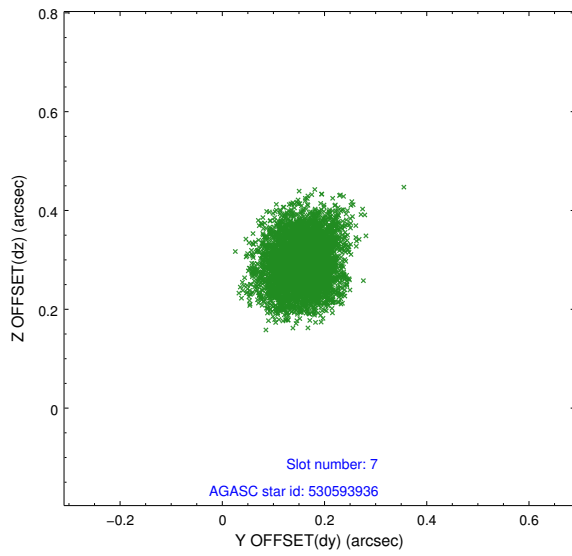
2.4.3 Slot 5



2.4.4 Slot 6

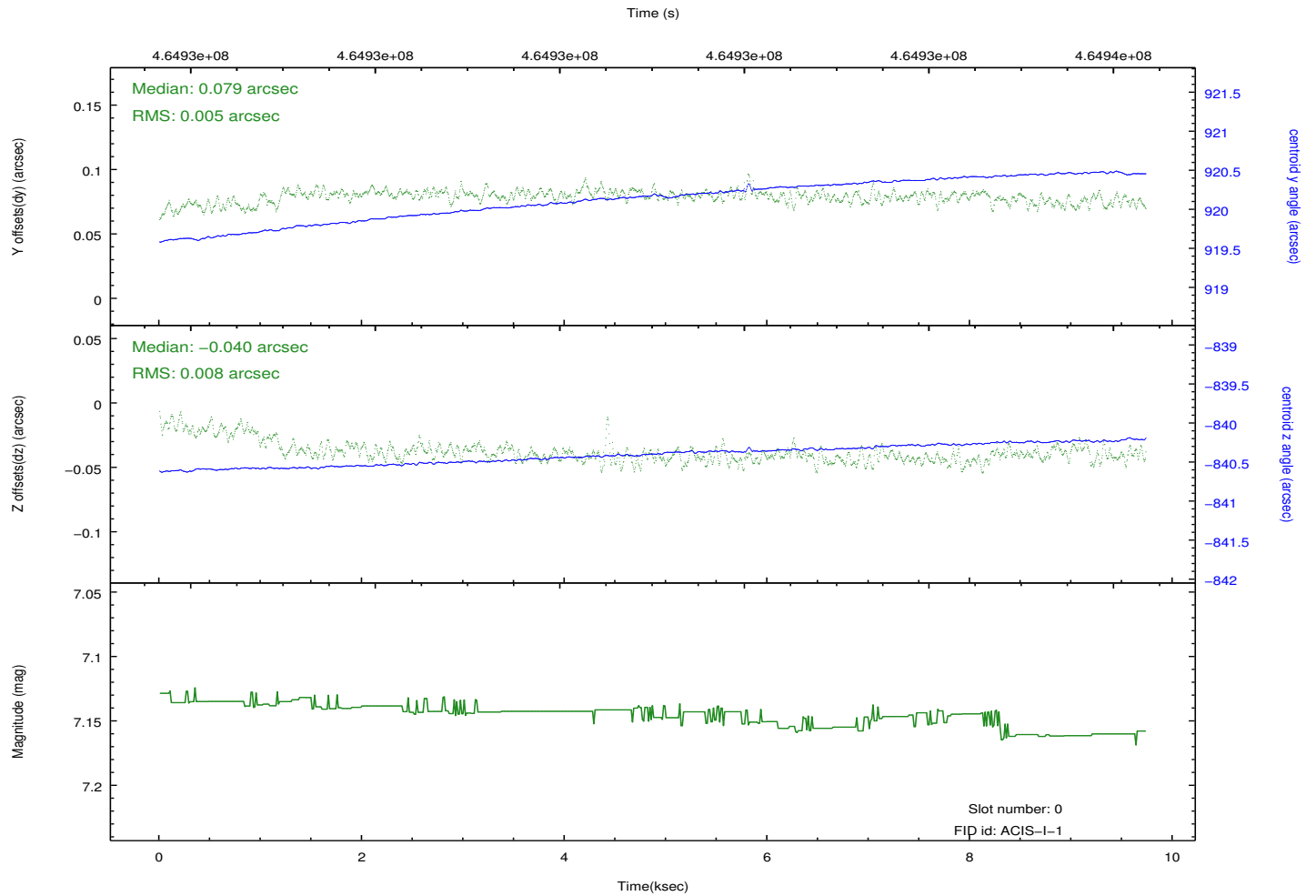
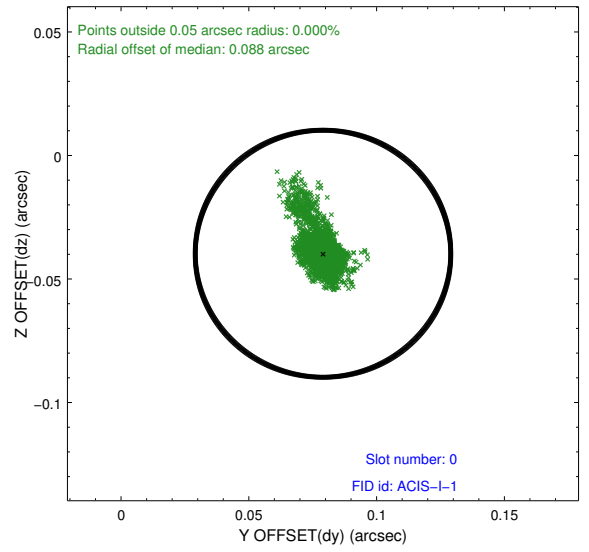
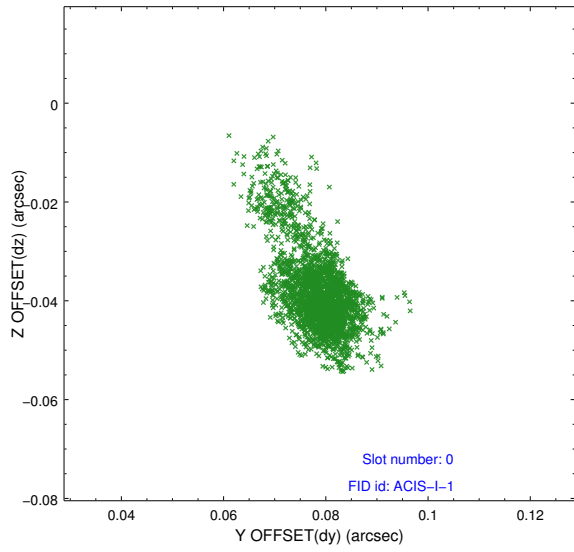


2.4.5 Slot 7

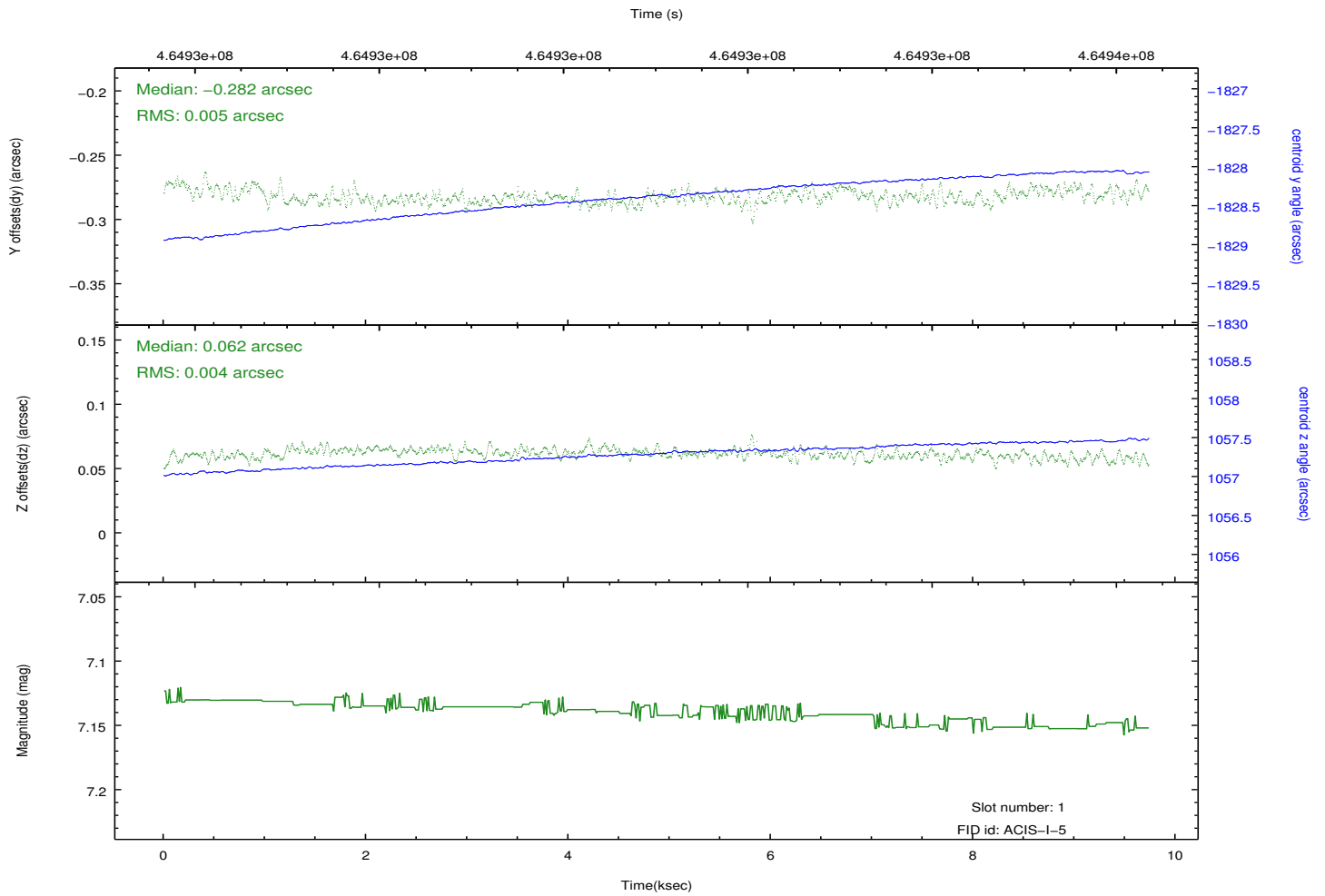
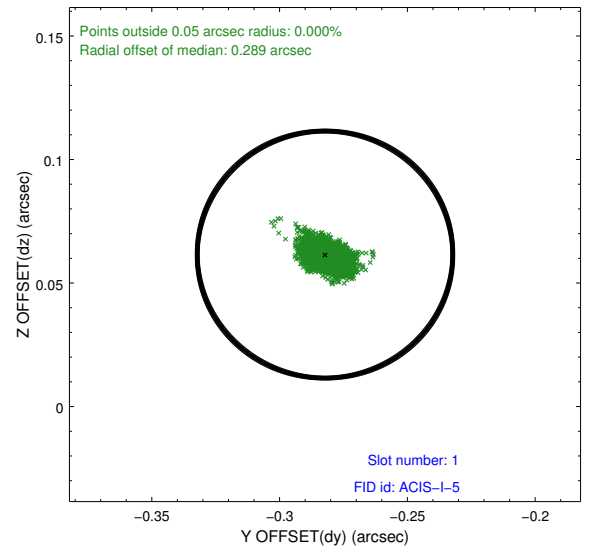
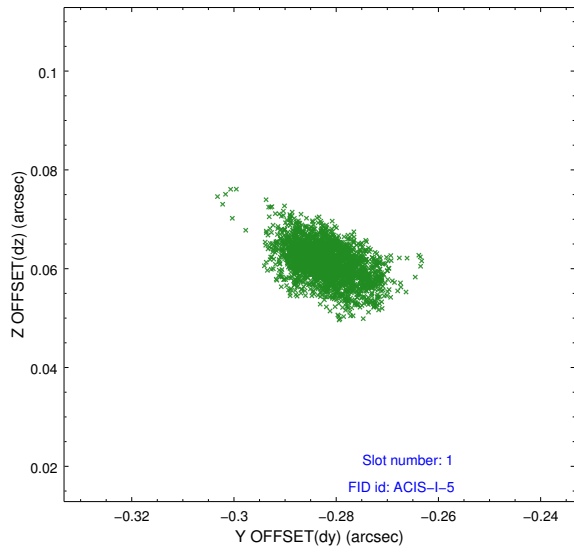


2.5 FID Slots

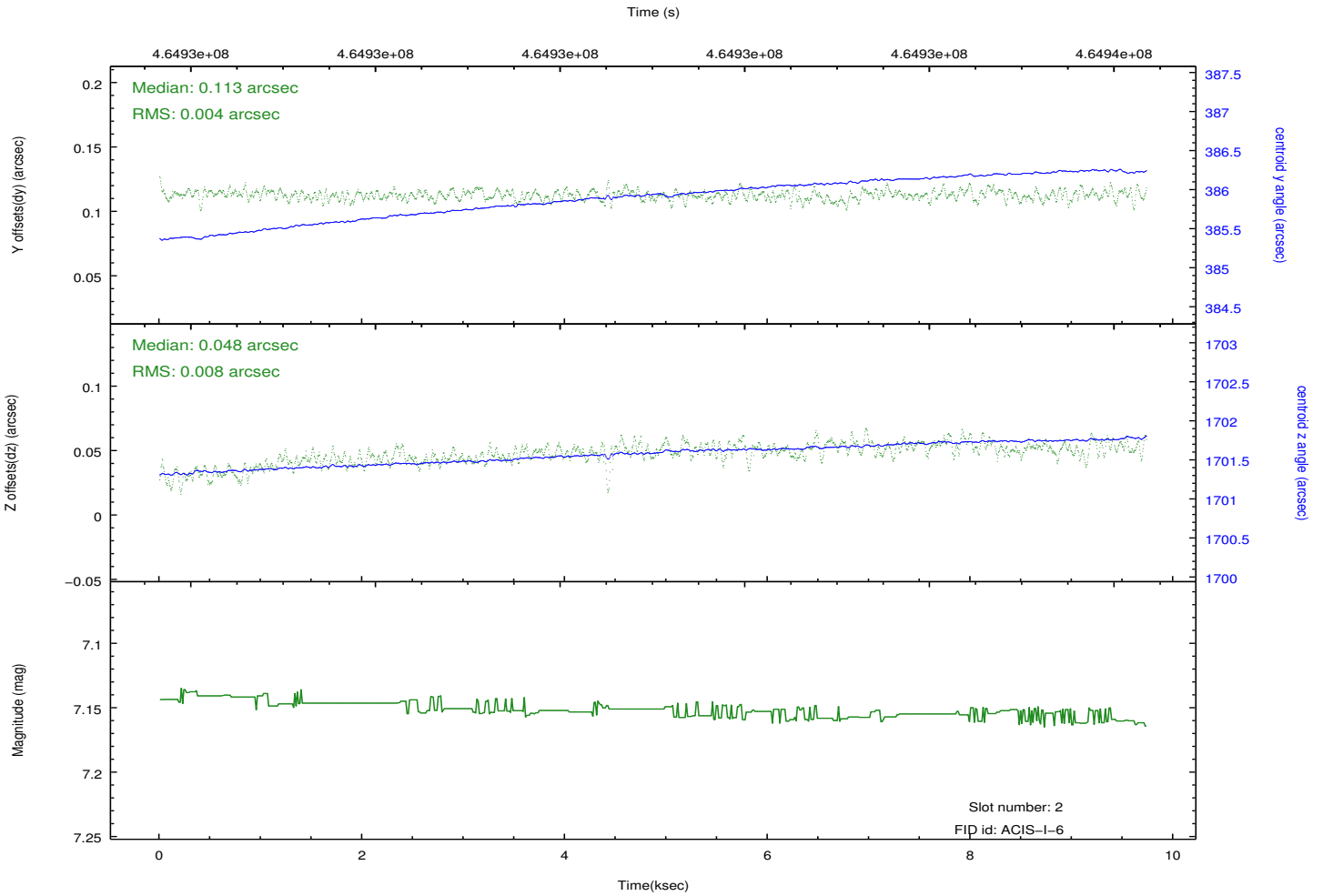
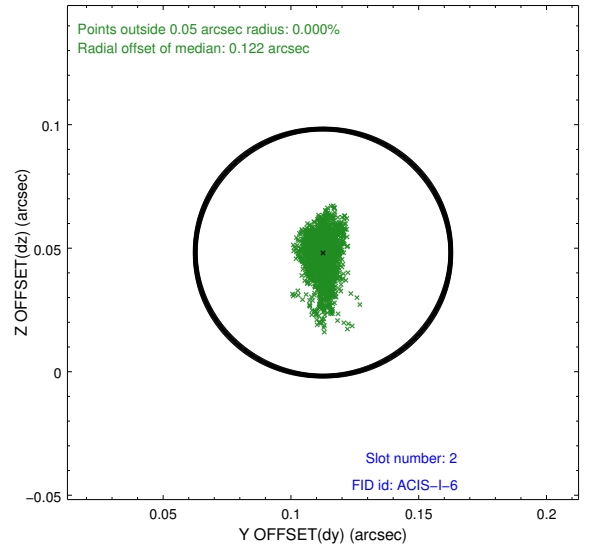
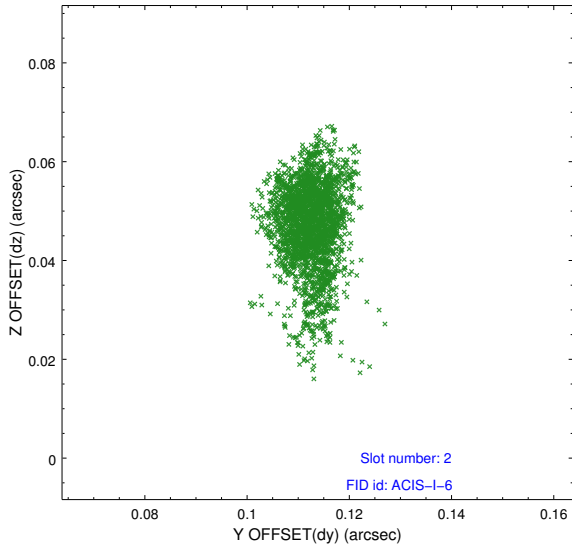
2.5.1 Slot 0



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)	2014.12.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.3375999652743

A.2 Comments

These data have been reprocessed with new aspect alignment calibration files that correct small mean offsets (up to 0.4 arcsecs) and improve overall astrometric accuracy. The new calibration was determined using data from the time period being reprocessed and was performed using cross-correlation of X-ray sources with radio and optical counterparts.