

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 14012 - L2 Version 2
Chandra X-Ray Center

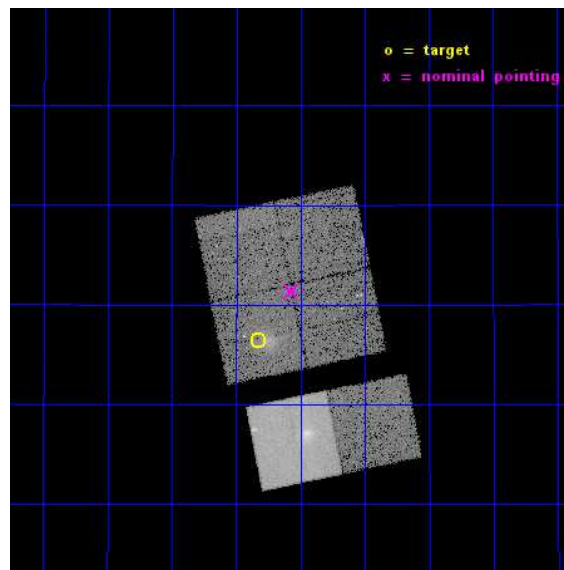
L2 Processing Date : Nov 27 2014

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

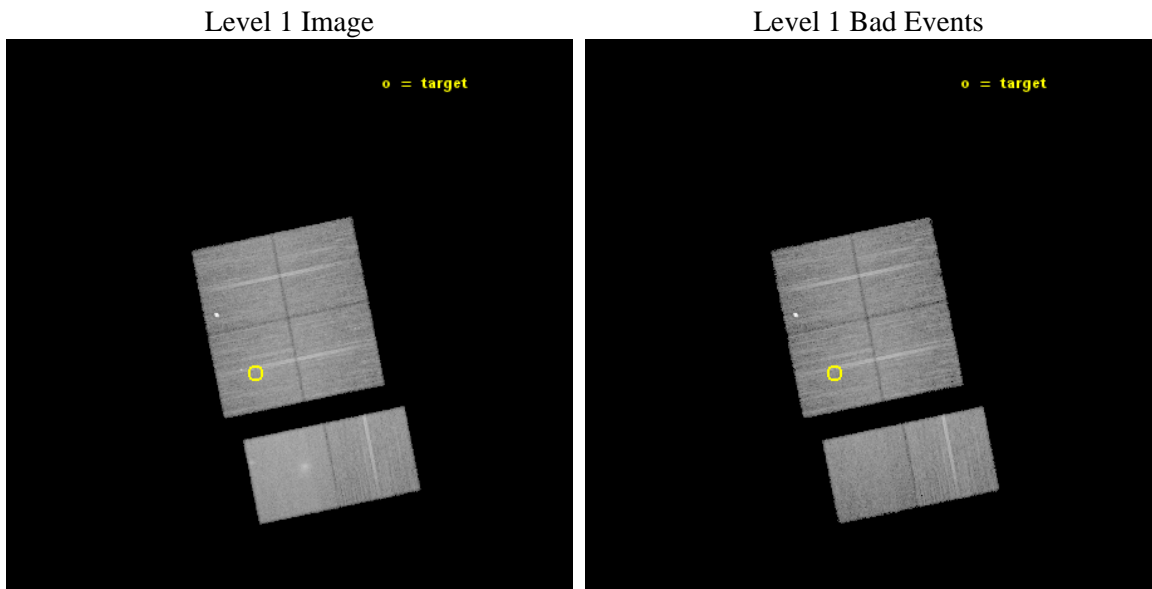
seq_num	801192	Sequence number
obs_id	14012	Observation id
title	Understanding the connection between radio halos and cluster mergers	
observer	Dr Rossella Cassano	Principal investigator
object	RXJ0027.6+2616	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	6.9575	Observer's specified target RA [deg]
dec_targ	26.273889	Observer's specified target Dec [deg]
ra_nom	6.8926930101	Nominal RA [deg]
dec_nom	26.355807986638	Nominal Dec [deg]
roll_nom	168.50710228166	Nominal Roll [deg]
revision	2	Processing version of data
ontime	21970.352898657	Sum of GTIs [s]
livetime	21692.151061296	Livetime [s]
ontime0	21963.747687995	Sum of GTIs [s]
ontime1	21970.270818651	Sum of GTIs [s]
ontime2	21960.588657439	Sum of GTIs [s]
ontime3	21970.352898657	Sum of GTIs [s]
ontime6	21970.434978664	Sum of GTIs [s]
ontime7	21970.393938661	Sum of GTIs [s]
l2events	136422	Number of level 2 events



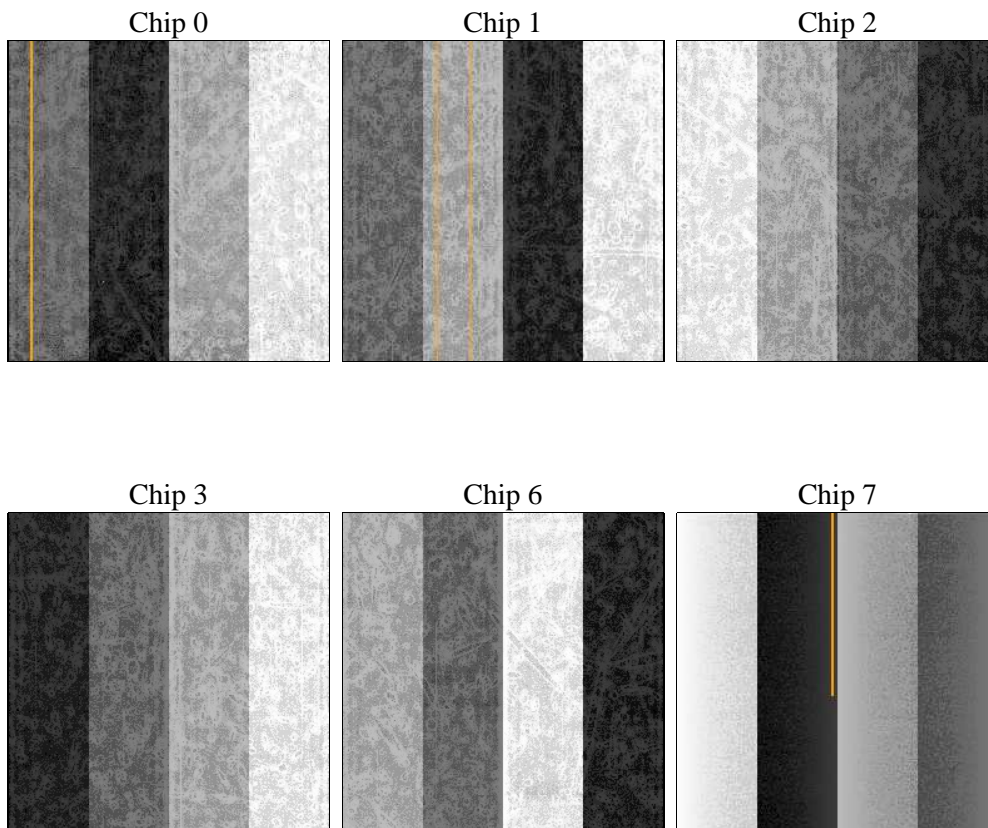
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	22000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	21970.352898657	Sum of GTIs [s]
caldbver	4.6.4	 	ontime0	21963.747687995	Sum of GTIs [s]
date	2014-11-27T07:27:04	Date and time of file creation	ontime1	21970.270818651	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	21960.588657439	Sum of GTIs [s]
			ontime3	21970.352898657	Sum of GTIs [s]
			ontime6	21970.434978664	Sum of GTIs [s]
			ontime7	21970.393938661	Sum of GTIs [s]
			l1events	743043	Number of level 1 events

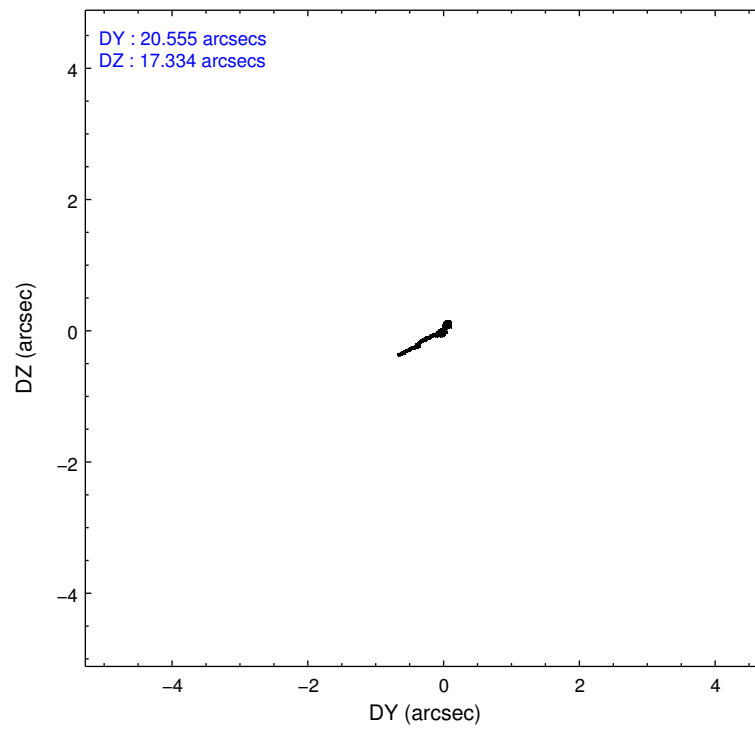
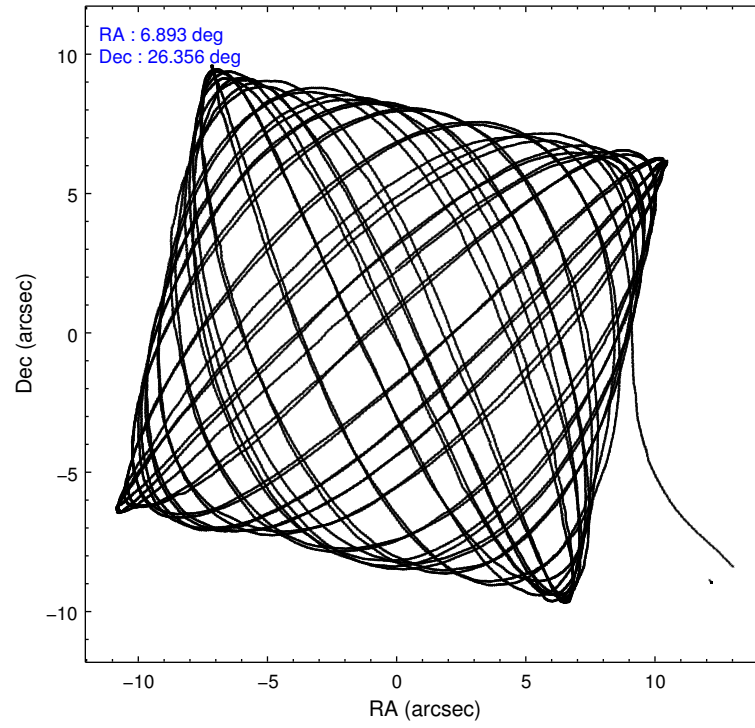
2.1.4 Events

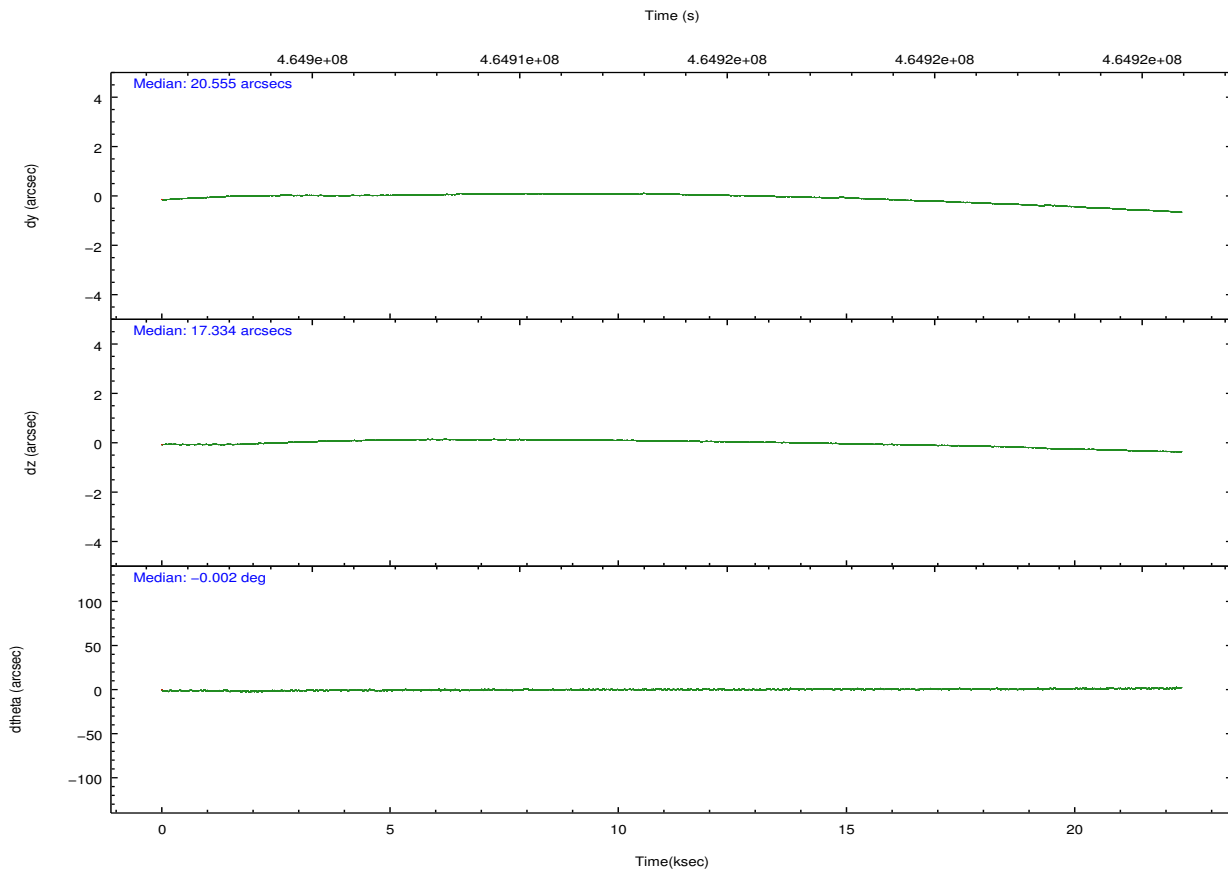
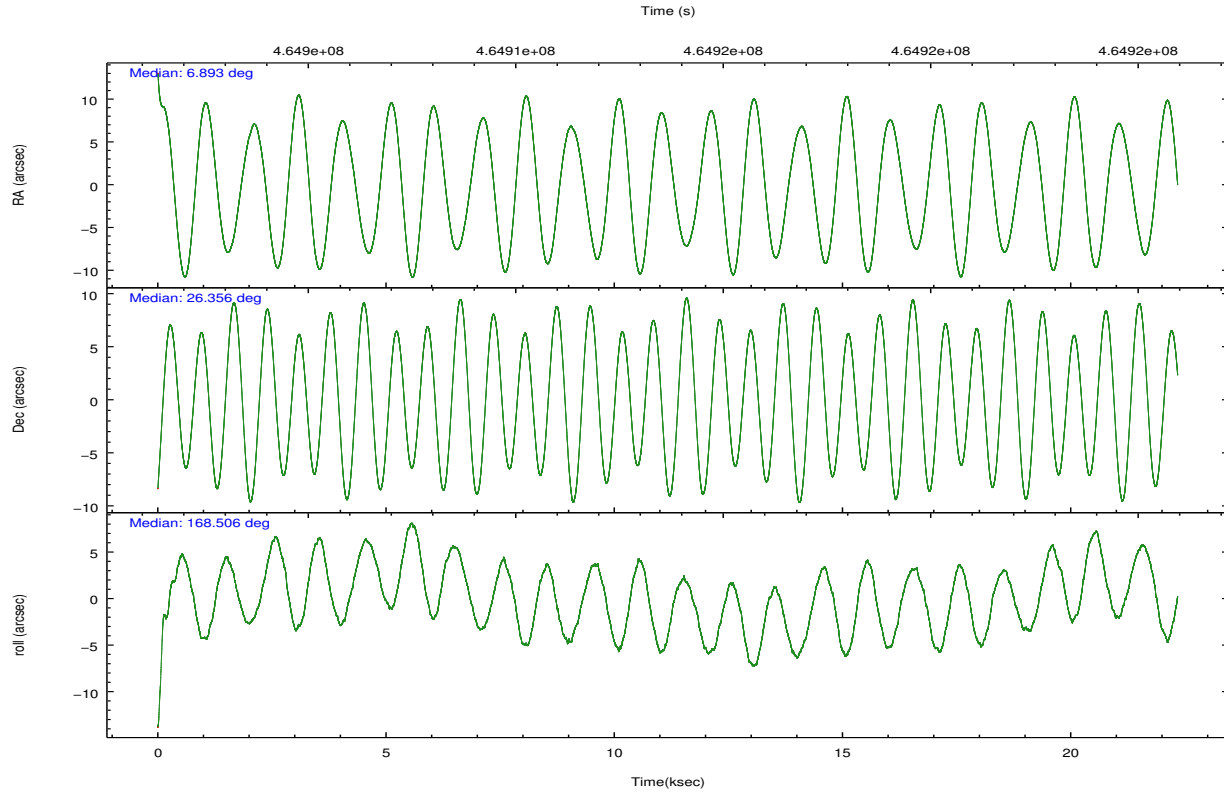
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	106540	115431	116300	117609	122017	165146	grade 0 events	4836	5699	5088	6851	4822	7919
rejected events	92457	99783	102415	101761	107577	90104		4%	4%	4%	5%	3%	4%
rejected %	86%	86%	88%	86%	88%	54%	grade 1 events	71	6682	78	73	58	209
								0%	5%	0%	0%	0%	0%
							grade 2 events	3460	3590	3319	3165	3240	15749
								3%	3%	2%	2%	2%	9%
							grade 3 events	1511	1520	1430	1458	1500	6526
								1%	1%	1%	1%	1%	3%
							grade 4 events	1380	1540	1357	1459	1487	6487
								1%	1%	1%	1%	1%	3%
							grade 5 events	5338	5799	5128	6139	6189	16337
								5%	5%	4%	5%	5%	9%
							grade 6 events	2896	3299	2695	2919	3393	38370
								2%	2%	2%	2%	2%	23%
							grade 7 events	87048	87302	97205	95545	101328	73549
								81%	75%	83%	81%	83%	44%

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	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	6.921718	6.892693010100049	CCD I2 on	Y	Y
[deg] Pointing Dec	26.364629	26.35580798663756	CCD I3 on	Y	Y
[deg] Pointing Roll	168.285532	168.5071022816581	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)	464902841.184000	464901803.16026	CCD S5 on	N	N
Observation start date	2012-09-24T19:39:34	2012-09-24T19:23:23	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	464924841.184000	464925465.79903	On-chip summing requested	N	N
Observation end date	2012-09-25T01:46:14	2012-09-25T01:57:45	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



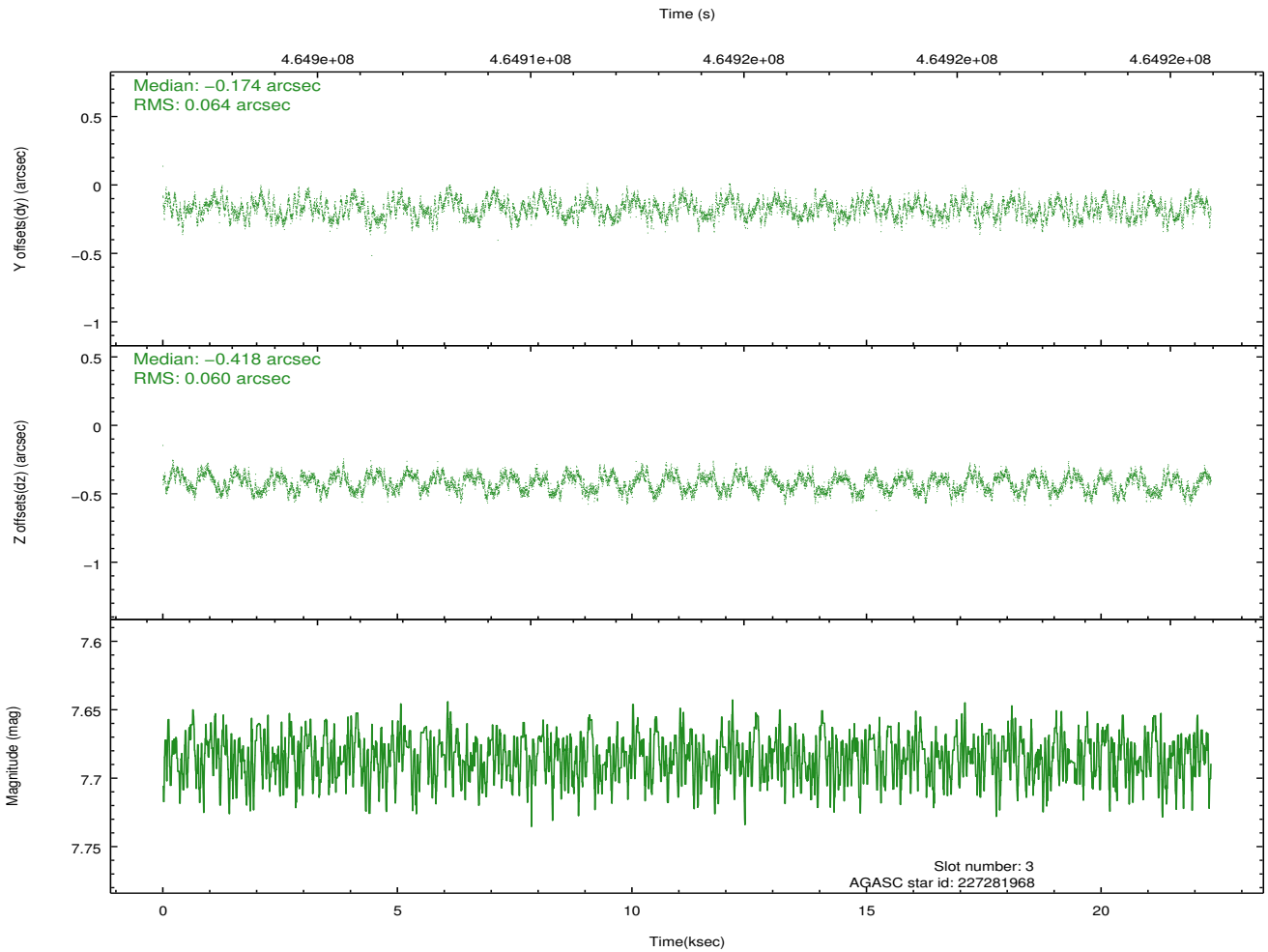
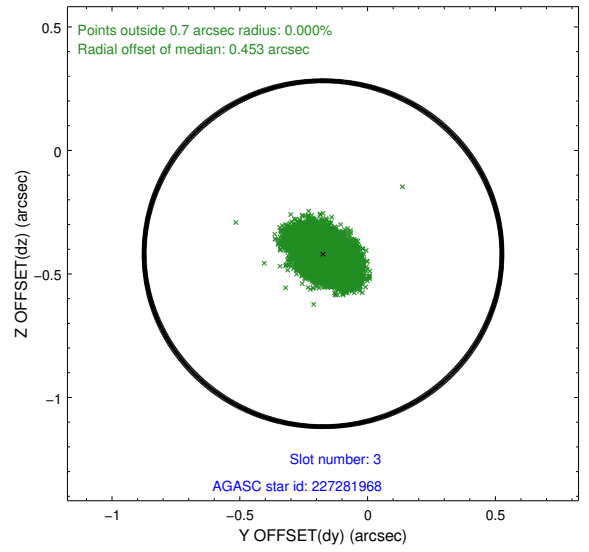
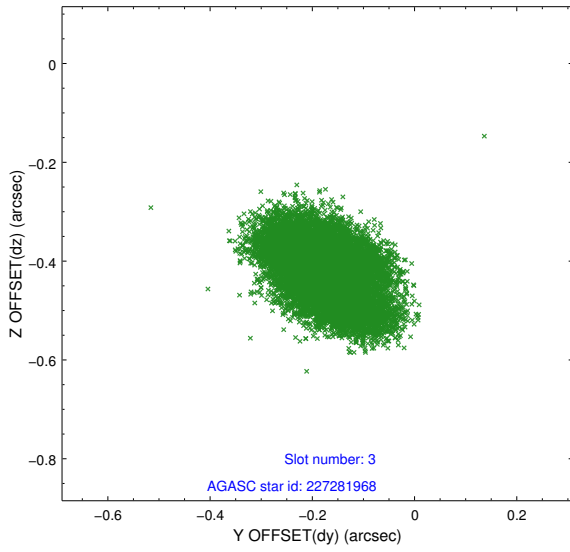


Slot Statistics

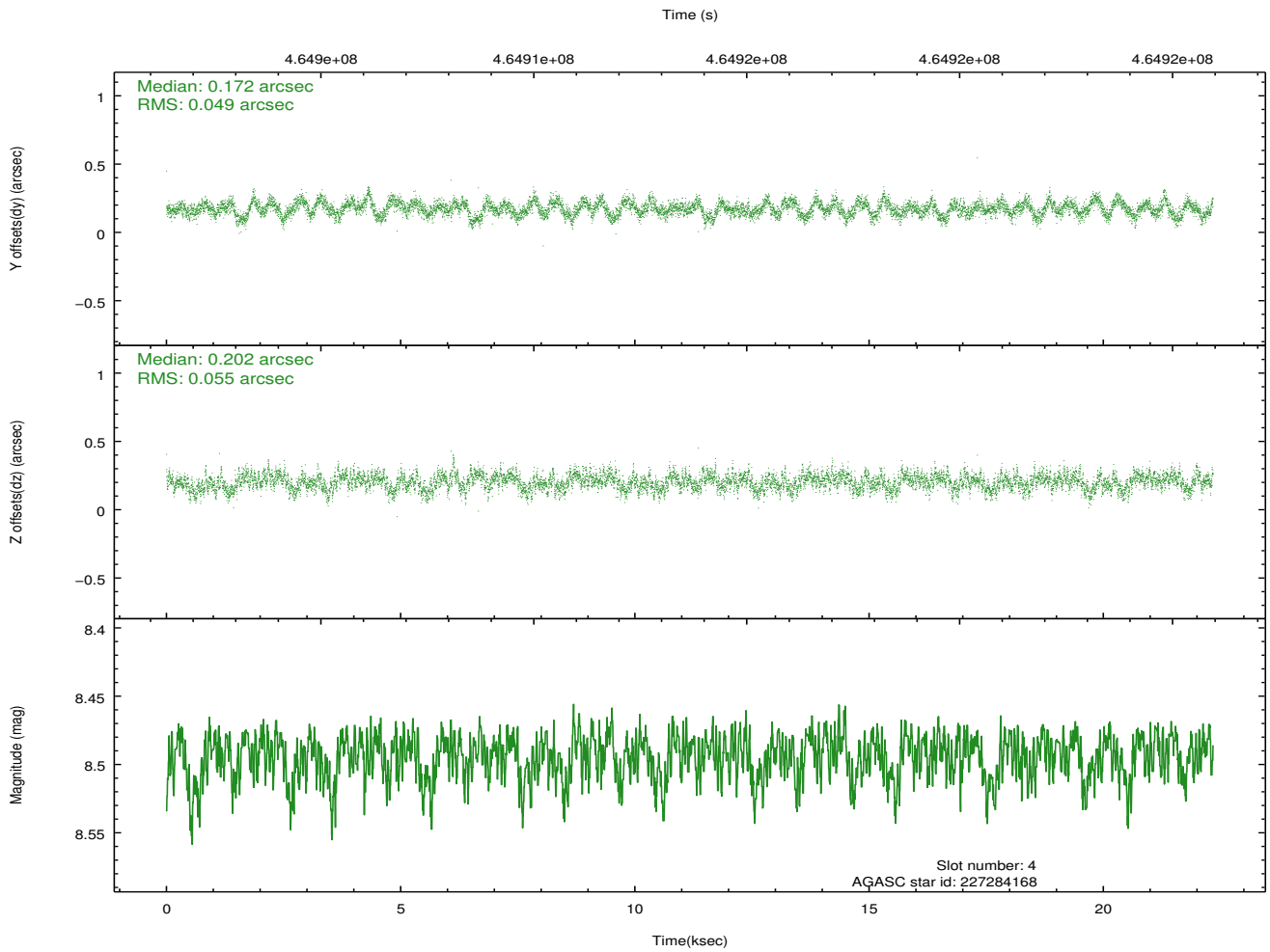
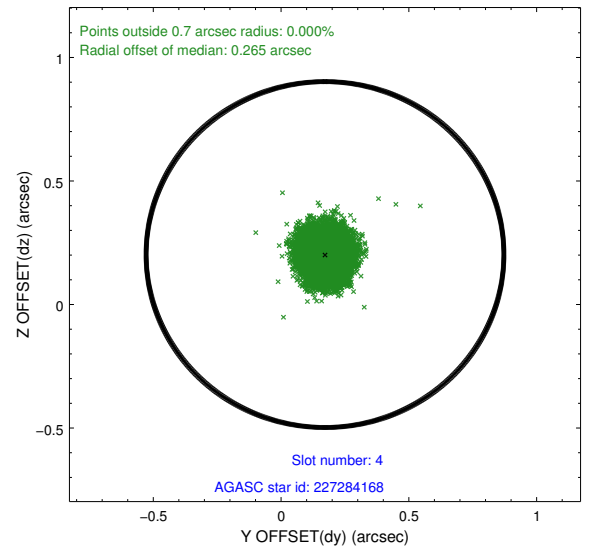
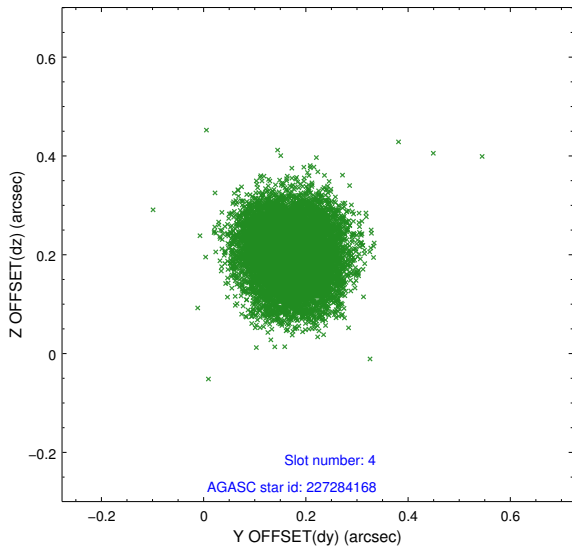
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.09	5450	0.066	-0.002	0.009	0.018	0.000000	0.000000	918.92	-840.96
1	FID		ACIS-I-5	7.08	5450	-0.271	0.059	0.007	0.012	0.000000	0.000000	-1829.45	1056.50
2	FID		ACIS-I-6	7.10	5450	0.113	0.014	0.009	0.015	0.000000	0.000000	384.34	1701.14
3	GUIDE	used	227281968	7.68	10899	-0.174	-0.418	0.095	0.145	6.861227	26.278794	127.76	342.84
4	GUIDE	used	227284168	8.49	10886	0.172	0.202	0.079	0.124	7.338725	26.871683	-939.45	-2060.79
5	GUIDE	used	227286408	8.57	10823	0.080	0.201	0.088	0.139	7.352499	26.495316	-1262.52	-744.34
6	GUIDE	used	227288248	8.91	10888	0.055	-0.008	0.121	0.195	7.112560	26.515036	-491.22	-654.94
7	GUIDE	used	227289528	9.24	10882	-0.136	0.029	0.117	0.180	6.878527	26.412714	172.12	-140.53

2.4 Star Slots

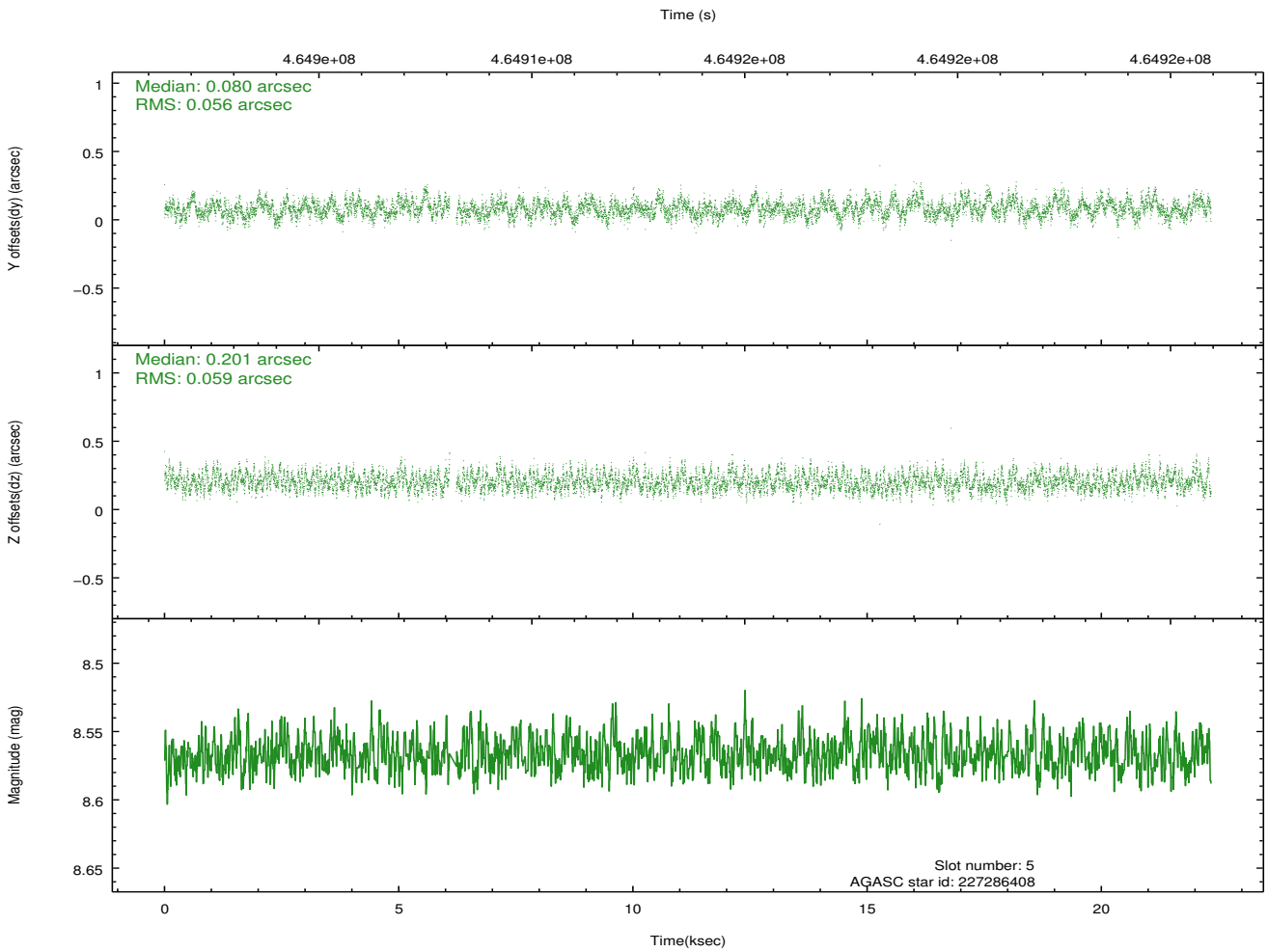
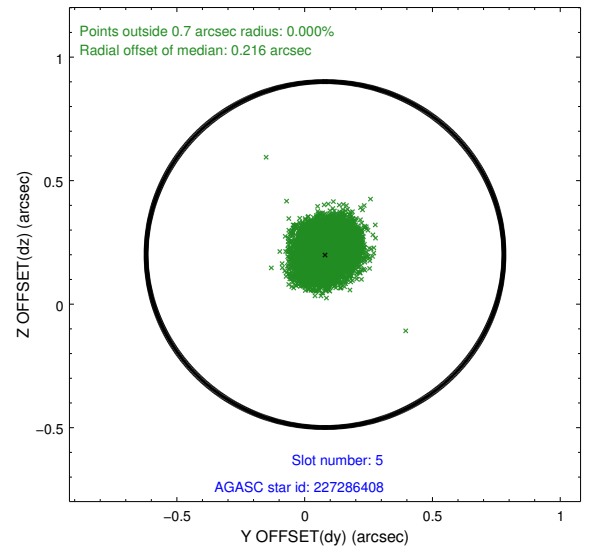
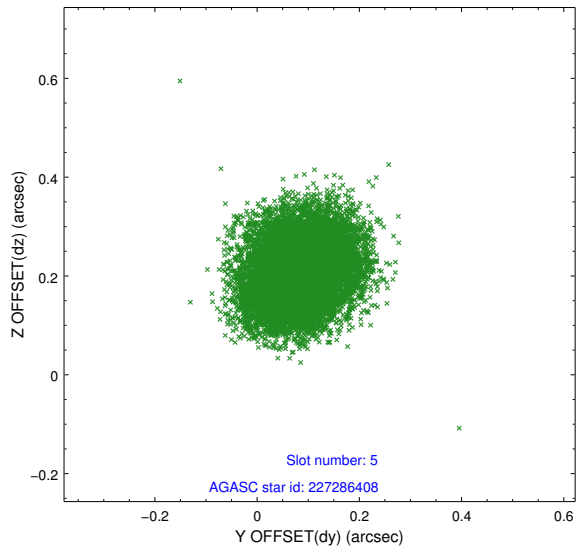
2.4.1 Slot 3



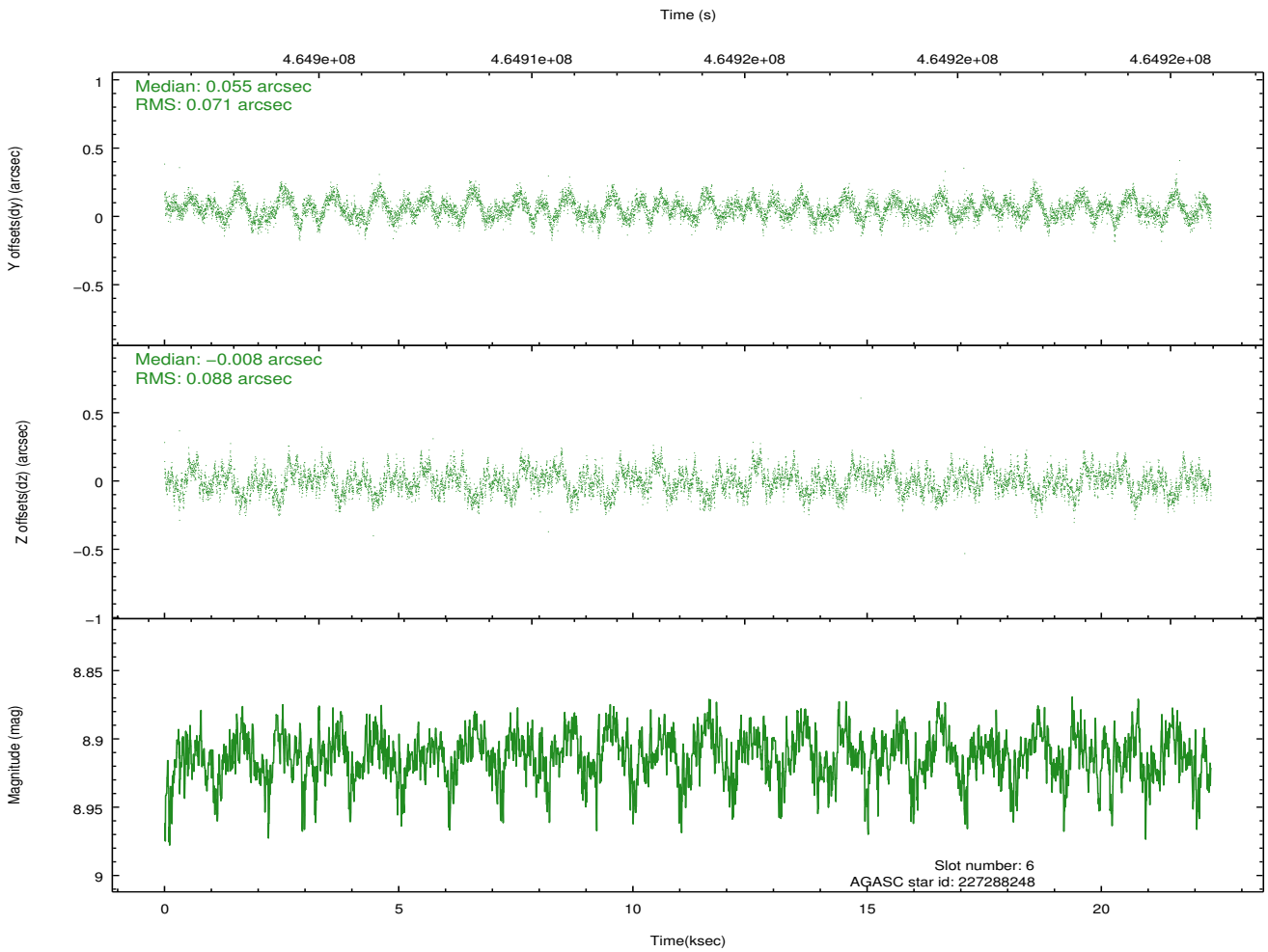
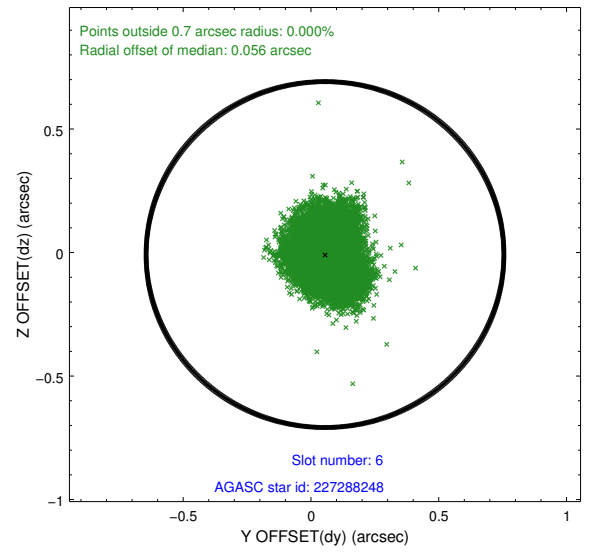
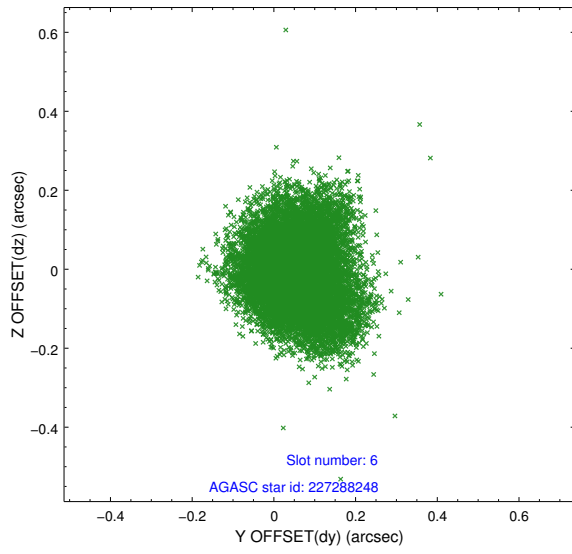
2.4.2 Slot 4



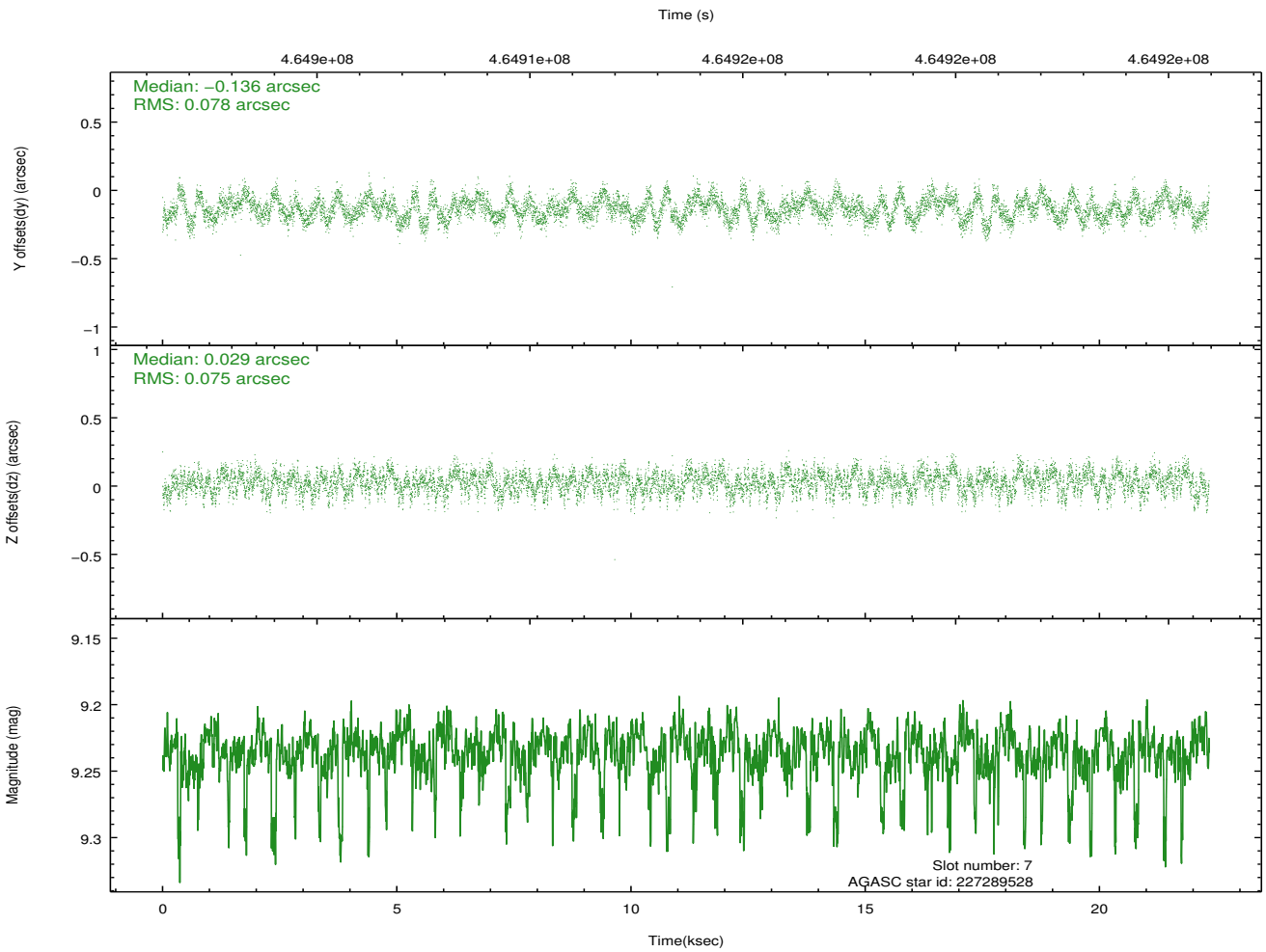
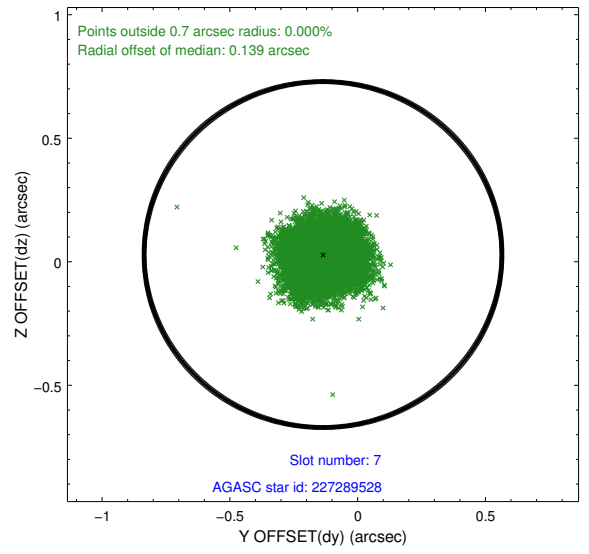
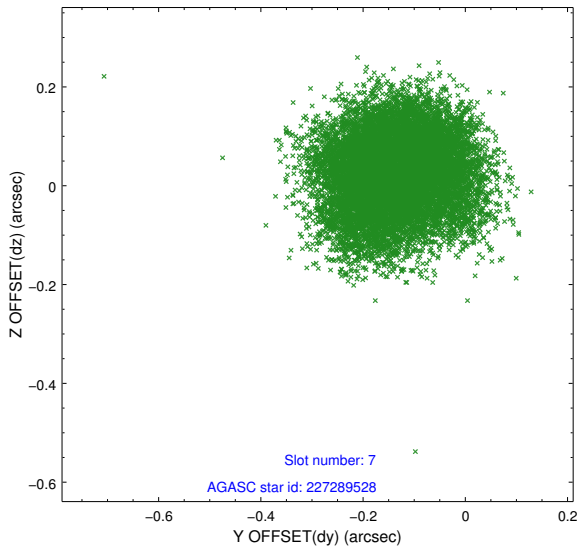
2.4.3 Slot 5



2.4.4 Slot 6

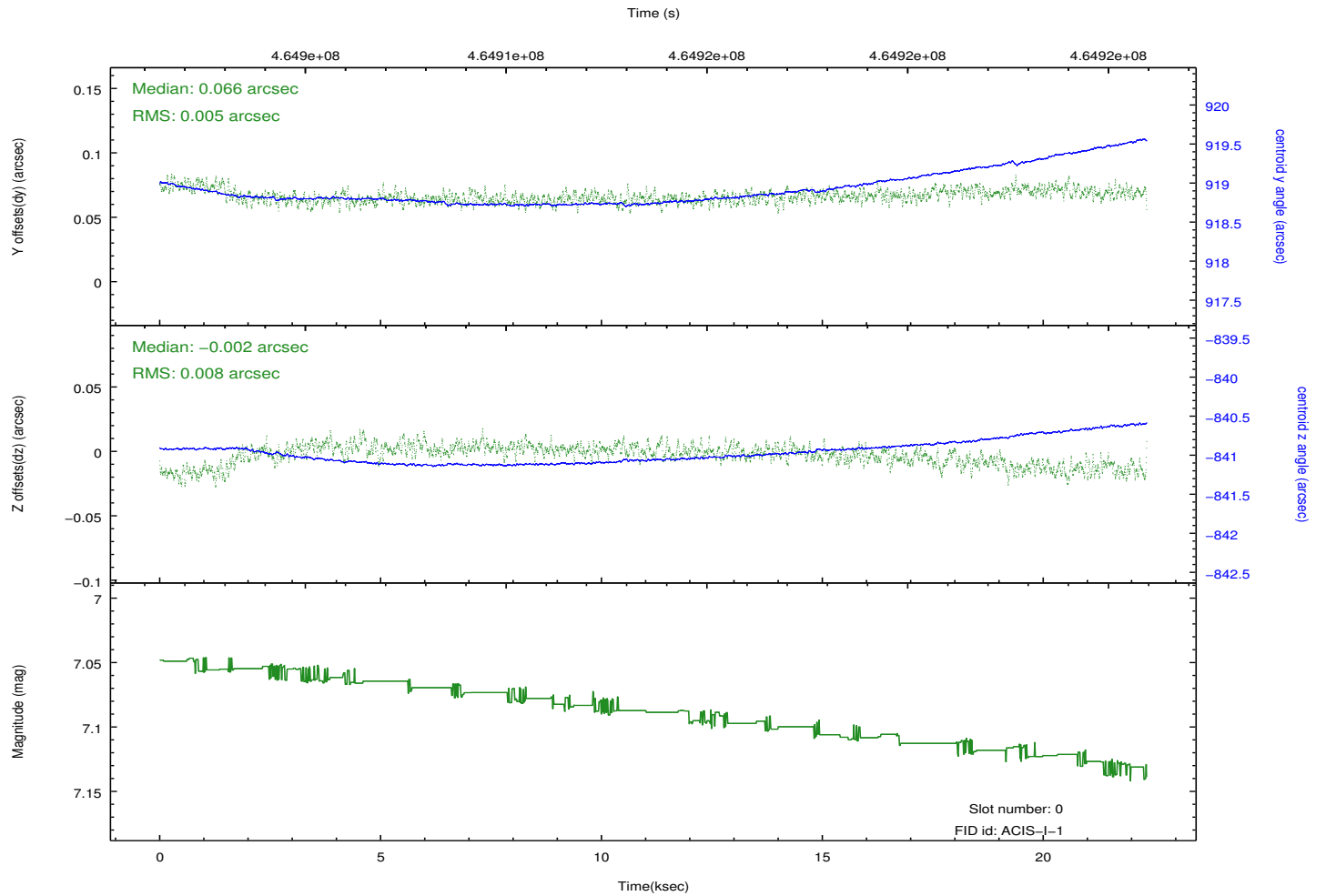
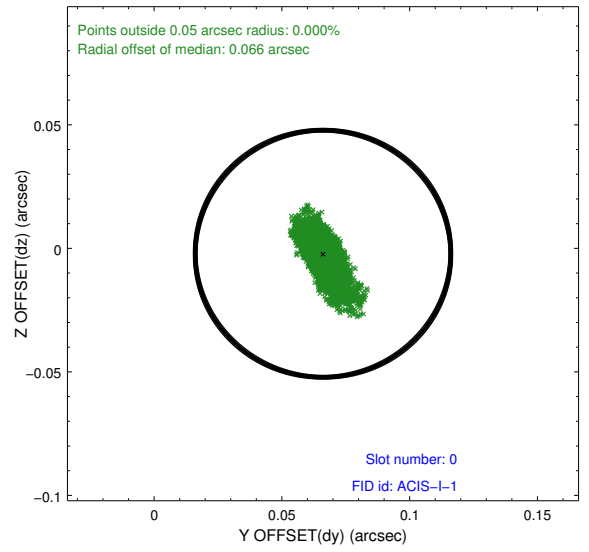
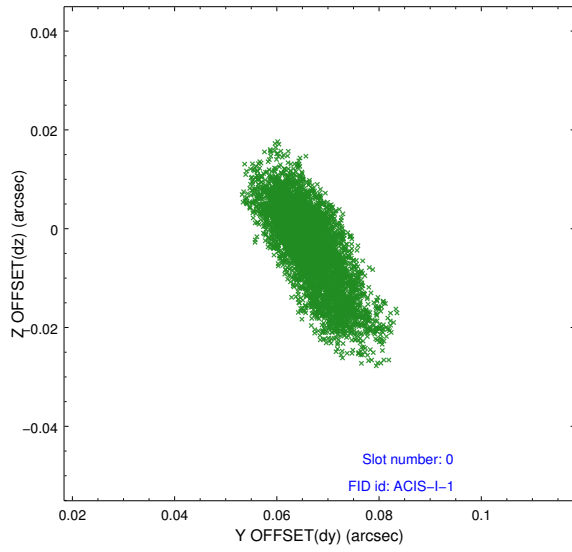


2.4.5 Slot 7

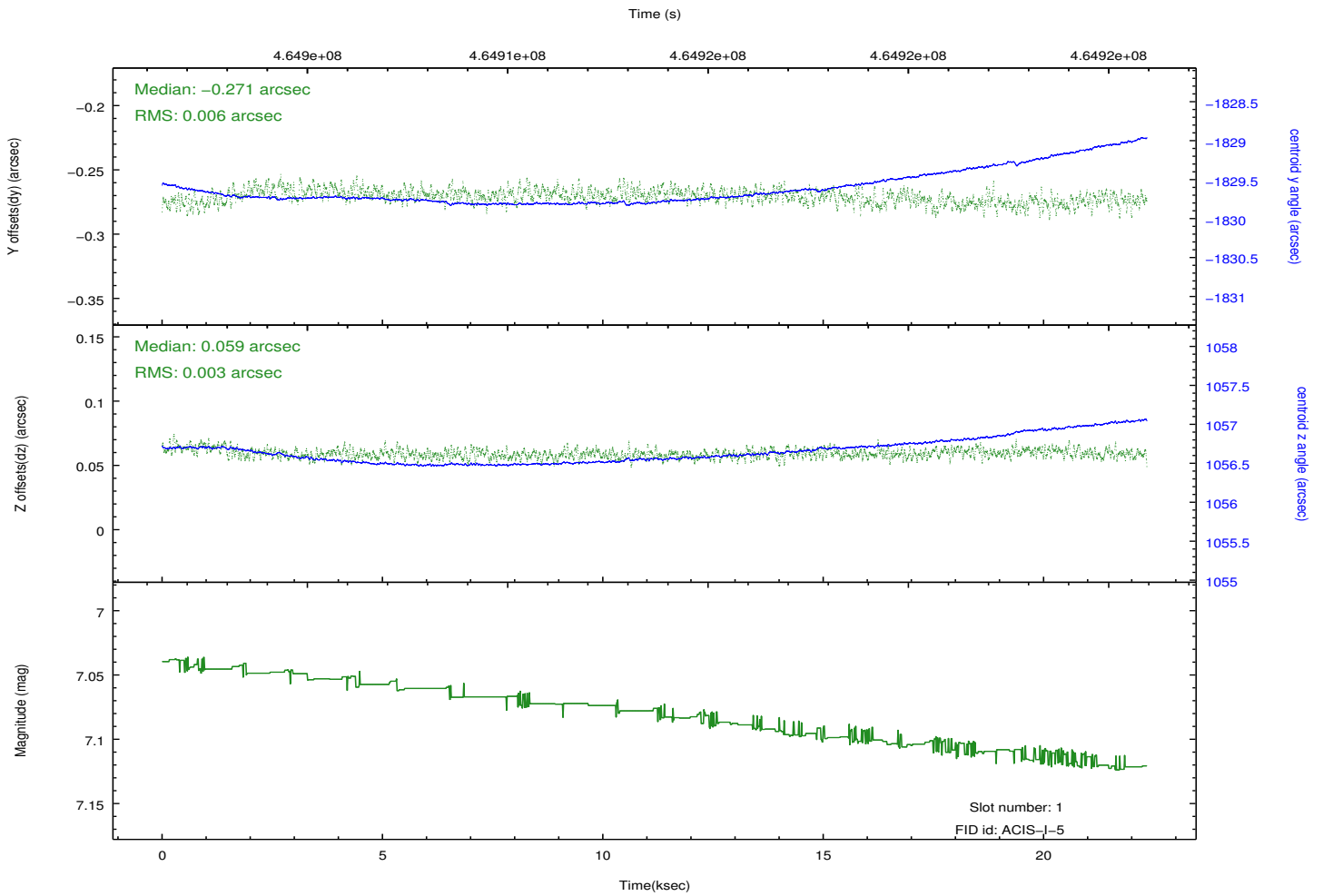
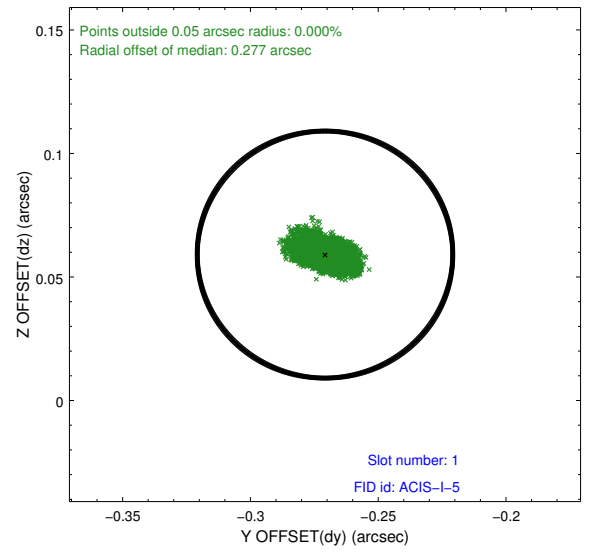
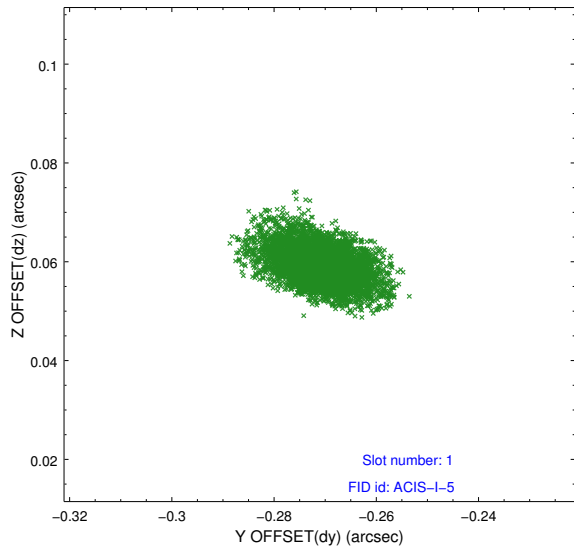


2.5 FID Slots

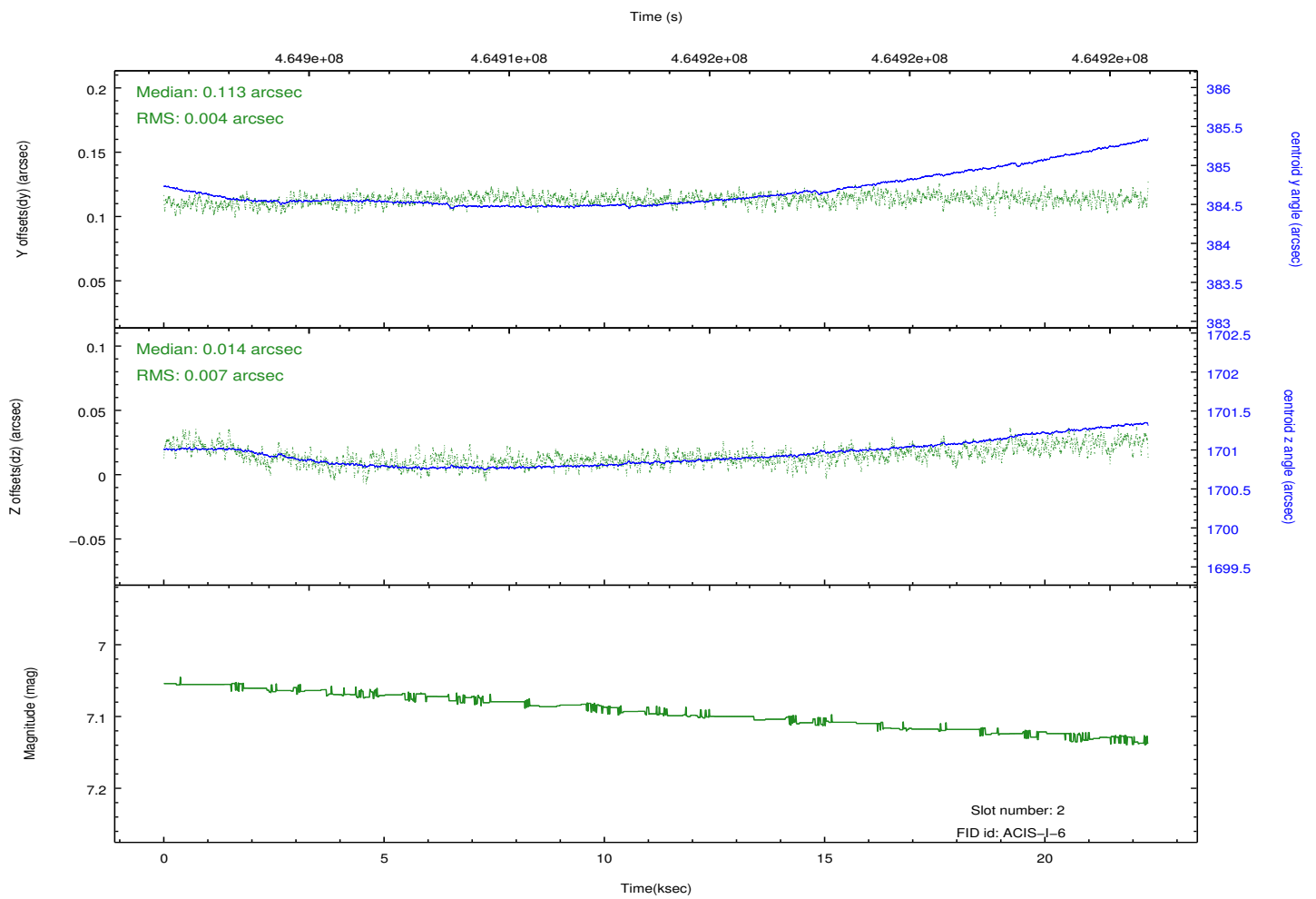
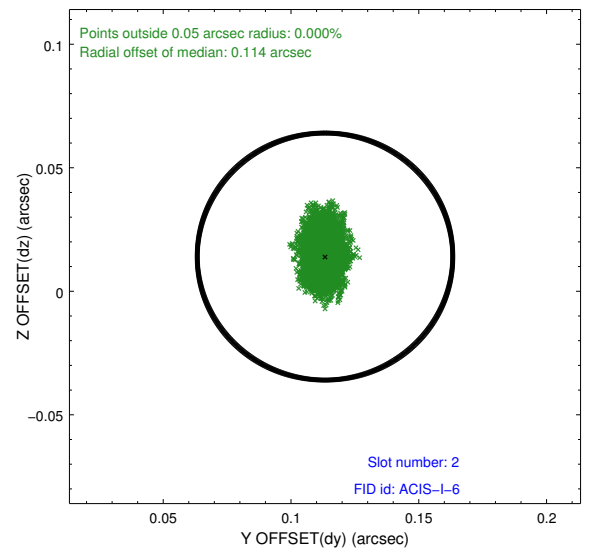
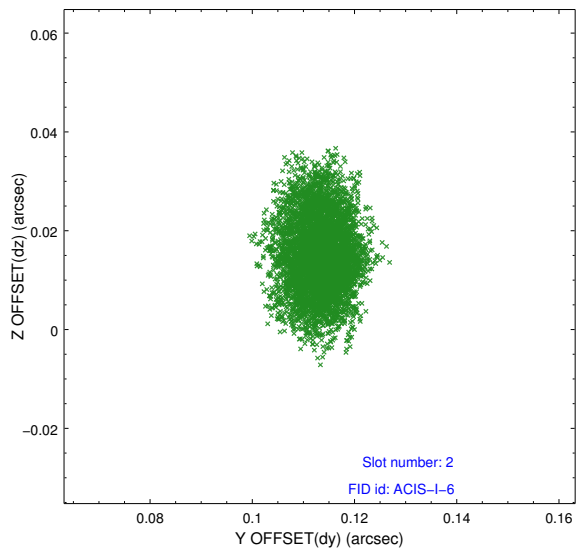
2.5.1 Slot 0



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	21.970352898657

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.