

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 13637 - L2 Version 2
Chandra X-Ray Center

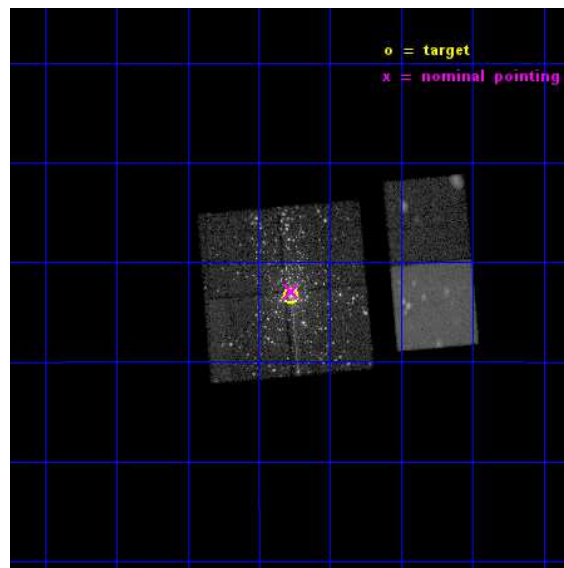
L2 Processing Date : Nov 27 2014

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1 Front

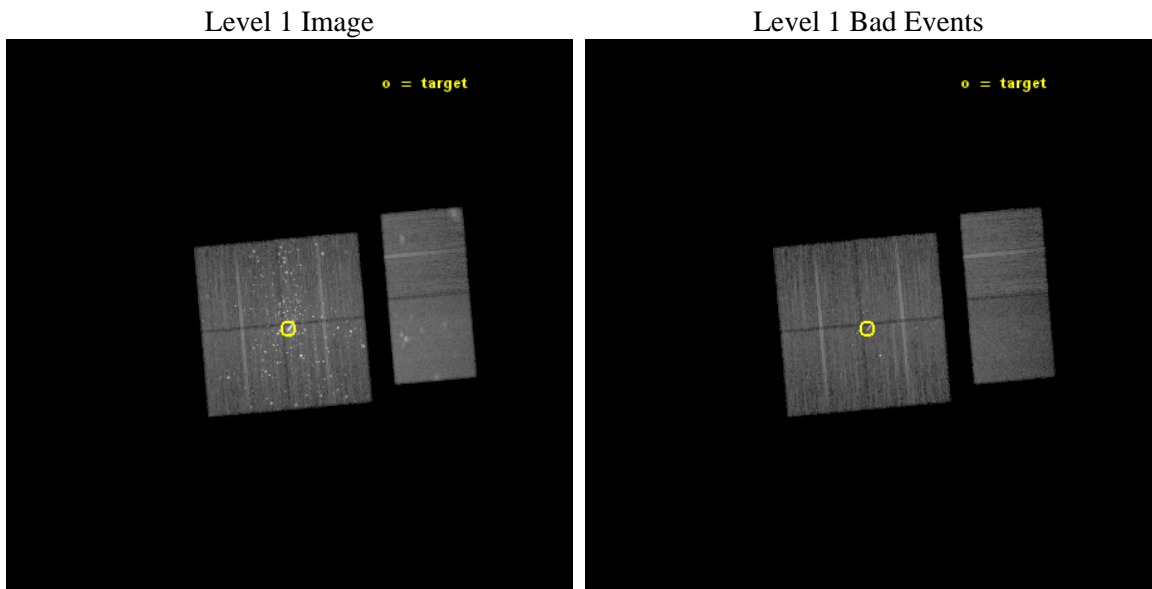
seq_num	200791	Sequence number
obs_id	13637	Observation id
title	Simultaneous X-ray and radio flaring of Young Stellar Objects in the Orion Nebula Cluster	Proposal title
observer	Dr Jan Forbrich	Principal investigator
object	Orion Nebula Cluster	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	83.819583	Observer's specified target RA [deg]
dec_targ	-5.39	Observer's specified target Dec [deg]
ra_nom	83.817864499559	Nominal RA [deg]
dec_nom	-5.3820909393167	Nominal Dec [deg]
roll_nom	84.943842485565	Nominal Roll [deg]
revision	2	Processing version of data
ontime	27592.288956642	Sum of GTIs [s]
livetime	27242.898779791	Livetime [s]
ontime0	27595.406847	Sum of GTIs [s]
ontime1	27592.20688653	Sum of GTIs [s]
ontime2	27589.006896615	Sum of GTIs [s]
ontime3	27592.288956642	Sum of GTIs [s]
ontime6	27595.612047017	Sum of GTIs [s]
ontime7	27595.571007013	Sum of GTIs [s]
l2events	344915	Number of level 2 events



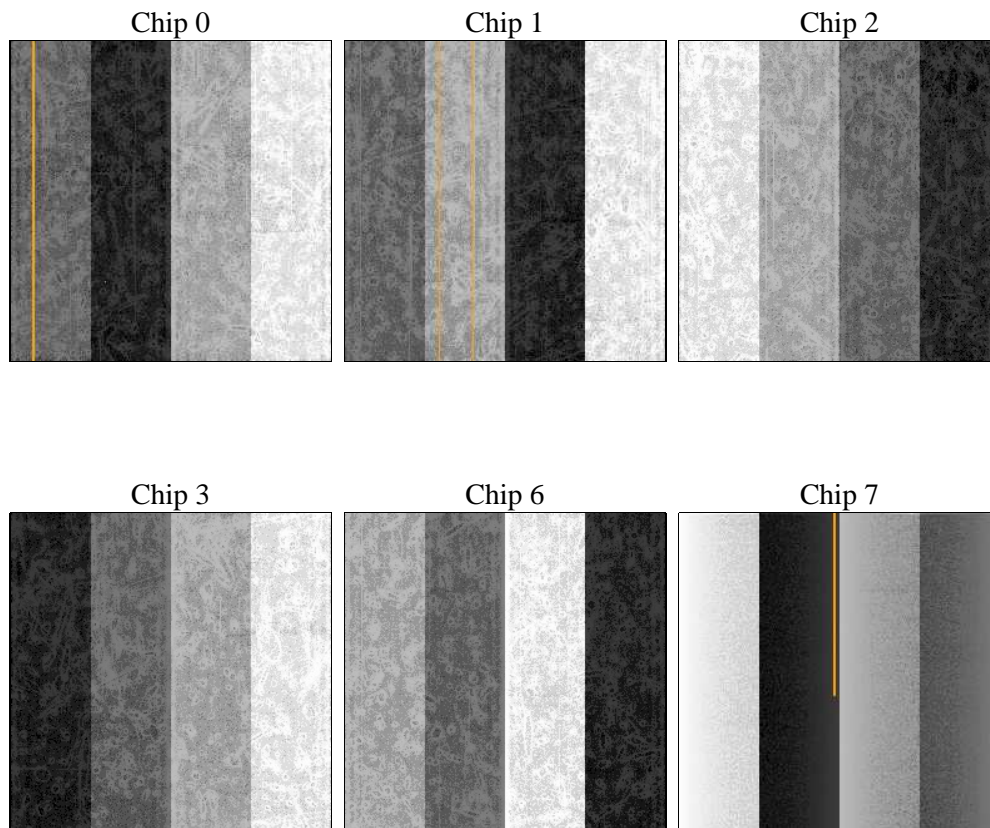
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	27623.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	27592.288956642	Sum of GTIs [s]
caldbver	4.6.4	 	ontime0	27595.406847	Sum of GTIs [s]
date	2014-11-27T16:39:50	Date and time of file creation	ontime1	27592.20688653	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	27589.006896615	Sum of GTIs [s]
			ontime3	27592.288956642	Sum of GTIs [s]
			ontime6	27595.612047017	Sum of GTIs [s]
			ontime7	27595.571007013	Sum of GTIs [s]
			l1events	1092599	Number of level 1 events

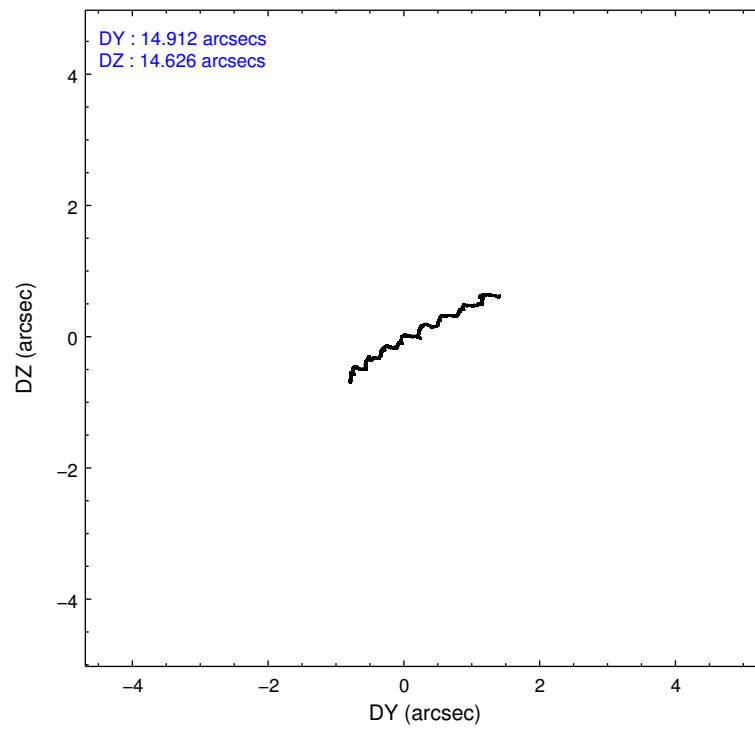
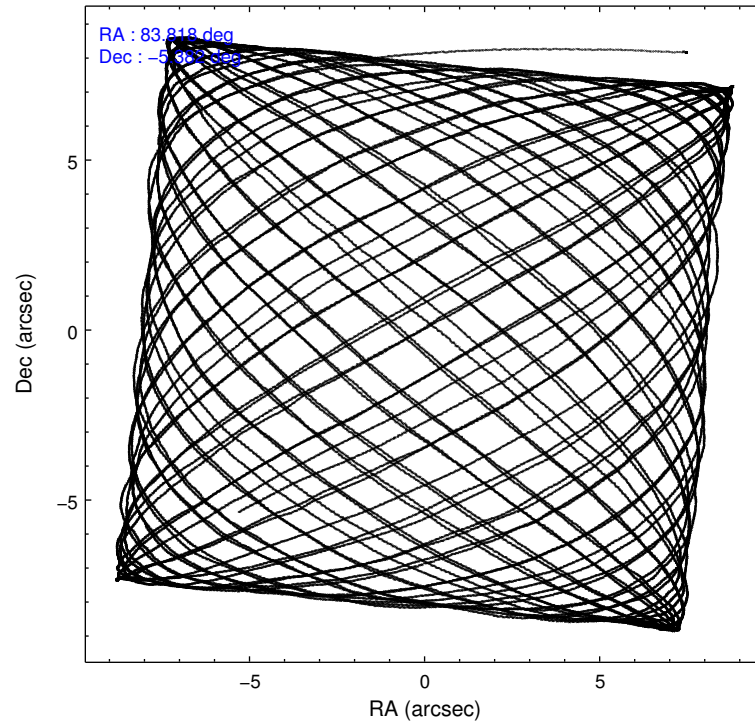
2.1.4 Events

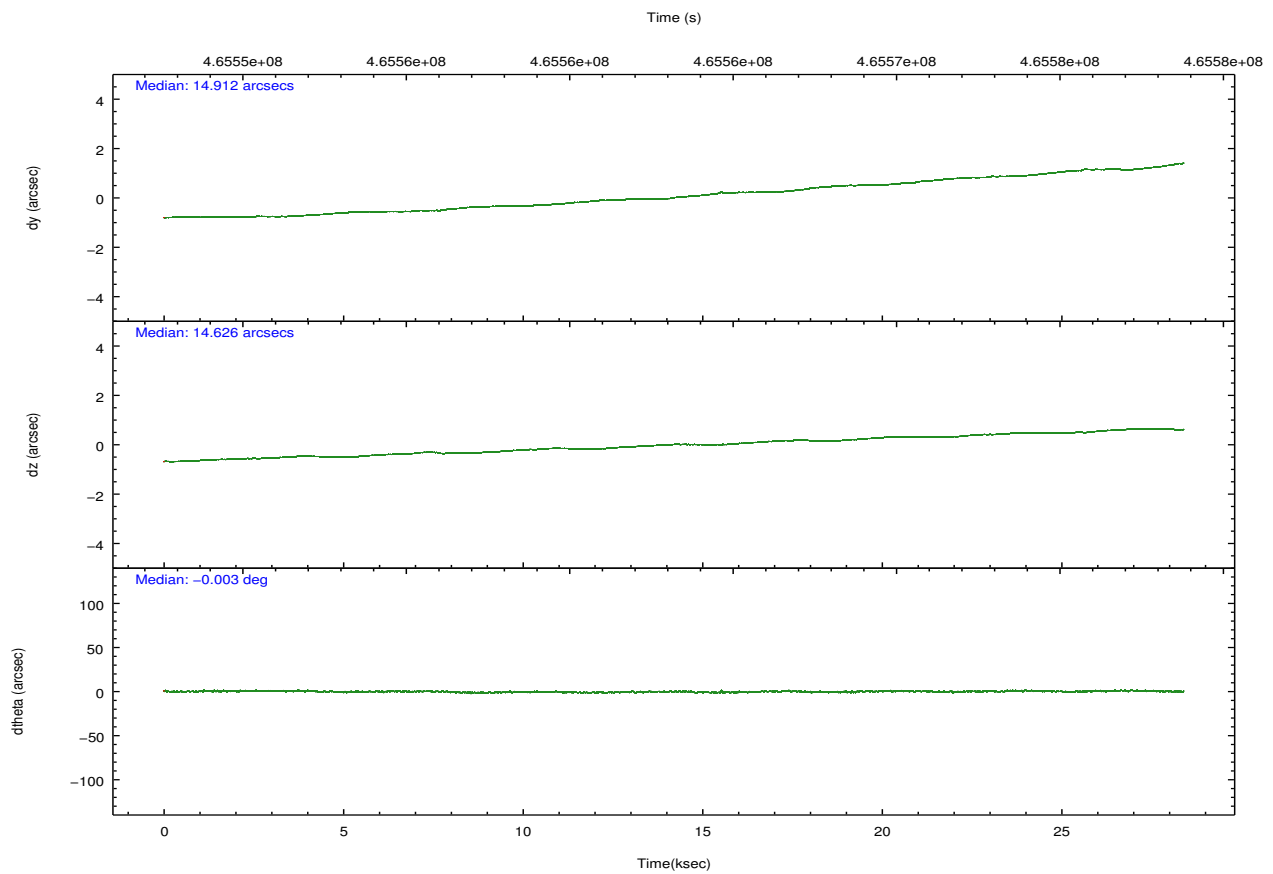
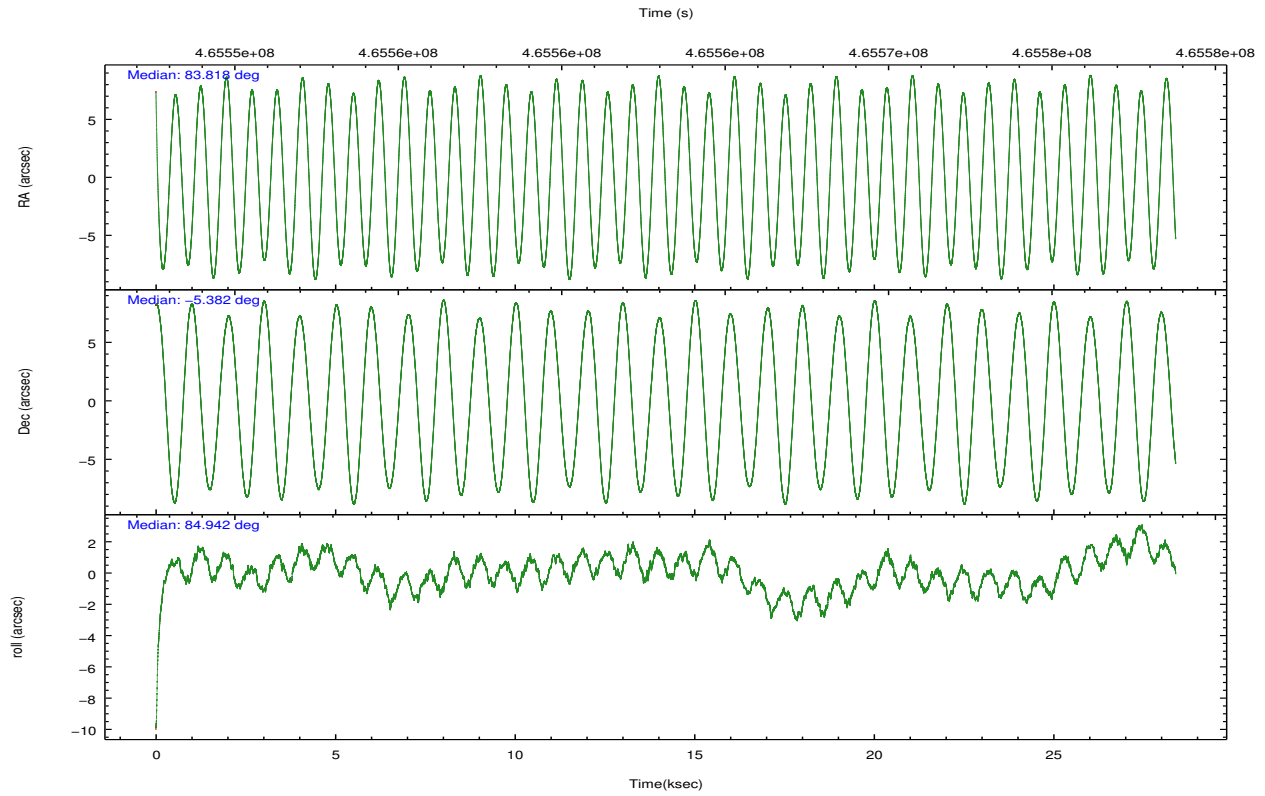
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	145633	166829	195812	234568	152455	197302	grade 0 events	19212	32351	46950	73029	9711	10097
rejected events	112144	115376	127107	130680	130398	105744		13%	19%	23%	31%	6%	5%
rejected %	77%	69%	64%	55%	85%	53%	grade 1 events	224	735	933	3929	74	228
								0%	0%	0%	1%	0%	0%
							grade 2 events	5942	8179	9765	13966	4411	19305
								4%	4%	4%	5%	2%	9%
							grade 3 events	2235	2985	3492	5016	1923	8068
								1%	1%	1%	2%	1%	4%
							grade 4 events	2107	2970	3638	5095	1900	7936
								1%	1%	1%	2%	1%	4%
							grade 5 events	6641	7797	6731	10439	7467	19689
								4%	4%	3%	4%	4%	9%
							grade 6 events	3998	4982	4872	6811	4119	46177
								2%	2%	2%	2%	2%	23%
							grade 7 events	105274	106830	119431	116283	122850	85802
								72%	64%	60%	49%	80%	43%

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	83.829611	83.81786449955889	CCD I2 on	Y	Y
[deg] Pointing Dec	-5.406988	-5.382090939316723	CCD I3 on	Y	Y
[deg] Pointing Roll	84.736260	84.94384248556534	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)	465549761.184000	465548505.93235	CCD S5 on	N	N
Observation start date	2012-10-02T07:21:34	2012-10-02T07:01:45	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	465577384.184000	465578198.13398	On-chip summing requested	N	N
Observation end date	2012-10-02T15:01:57	2012-10-02T15:16:38	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect





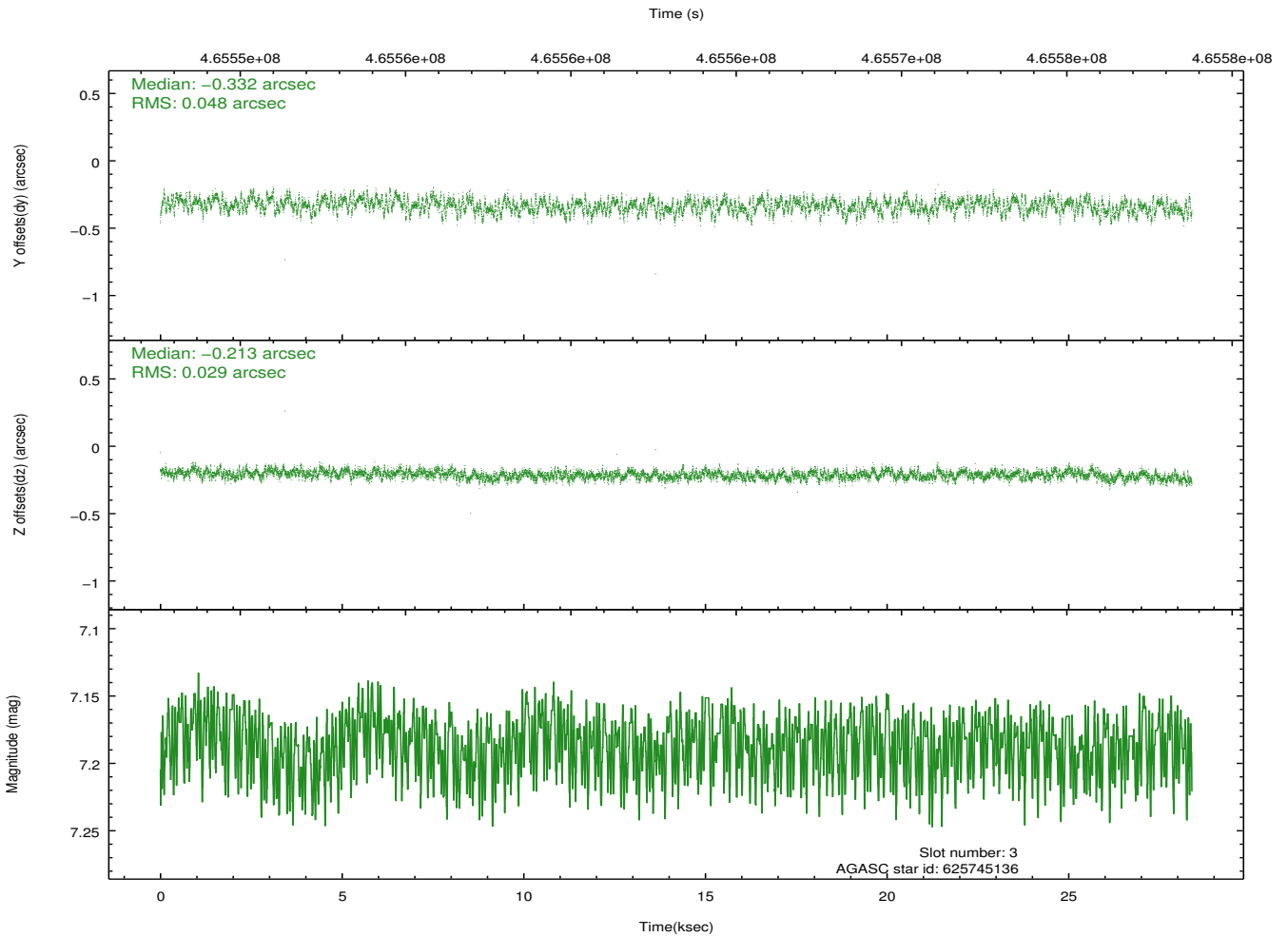
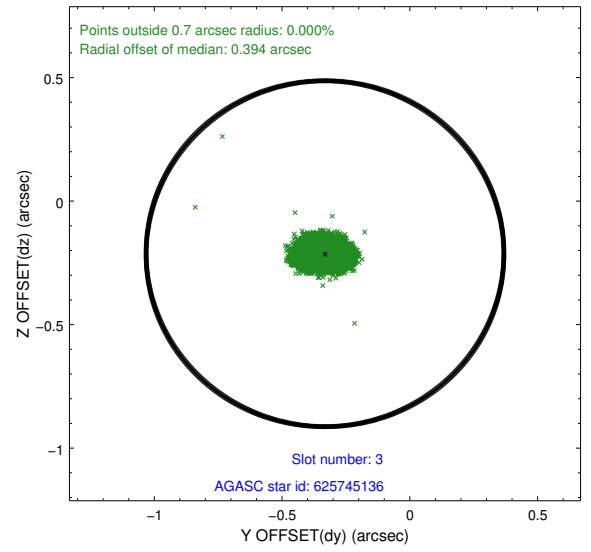
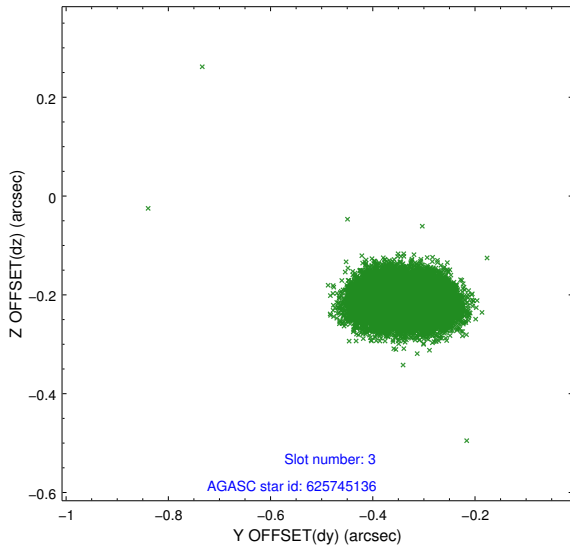
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.13	6927	0.038	0.001	0.013	0.021	0.000000	0.000000	924.50	-838.18
1	FID		ACIS-I-5	7.12	6926	-0.235	0.038	0.009	0.015	0.000000	0.000000	-1823.87	1059.25
2	FID		ACIS-I-6	7.12	6927	0.105	0.028	0.014	0.023	0.000000	0.000000	389.96	1703.89
3	GUIDE	used	625745136	7.19	13853	-0.332	-0.213	0.059	0.098	83.600341	-4.804339	2084.74	1017.93
4	GUIDE	used	626272760	6.60	13853	0.203	0.140	0.076	0.117	84.363987	-5.938389	-1729.73	-2080.74
5	GUIDE	used	625745128	7.82	13851	-0.246	-0.260	0.055	0.090	83.769930	-4.731835	2400.46	436.04
6	GUIDE	used	625874664	6.71	13852	0.145	0.180	0.085	0.141	84.472438	-4.814037	2336.69	-2100.25
7	GUIDE	used	626272880	7.66	13852	0.225	0.155	0.070	0.116	83.815609	-6.032748	-2247.24	-156.70

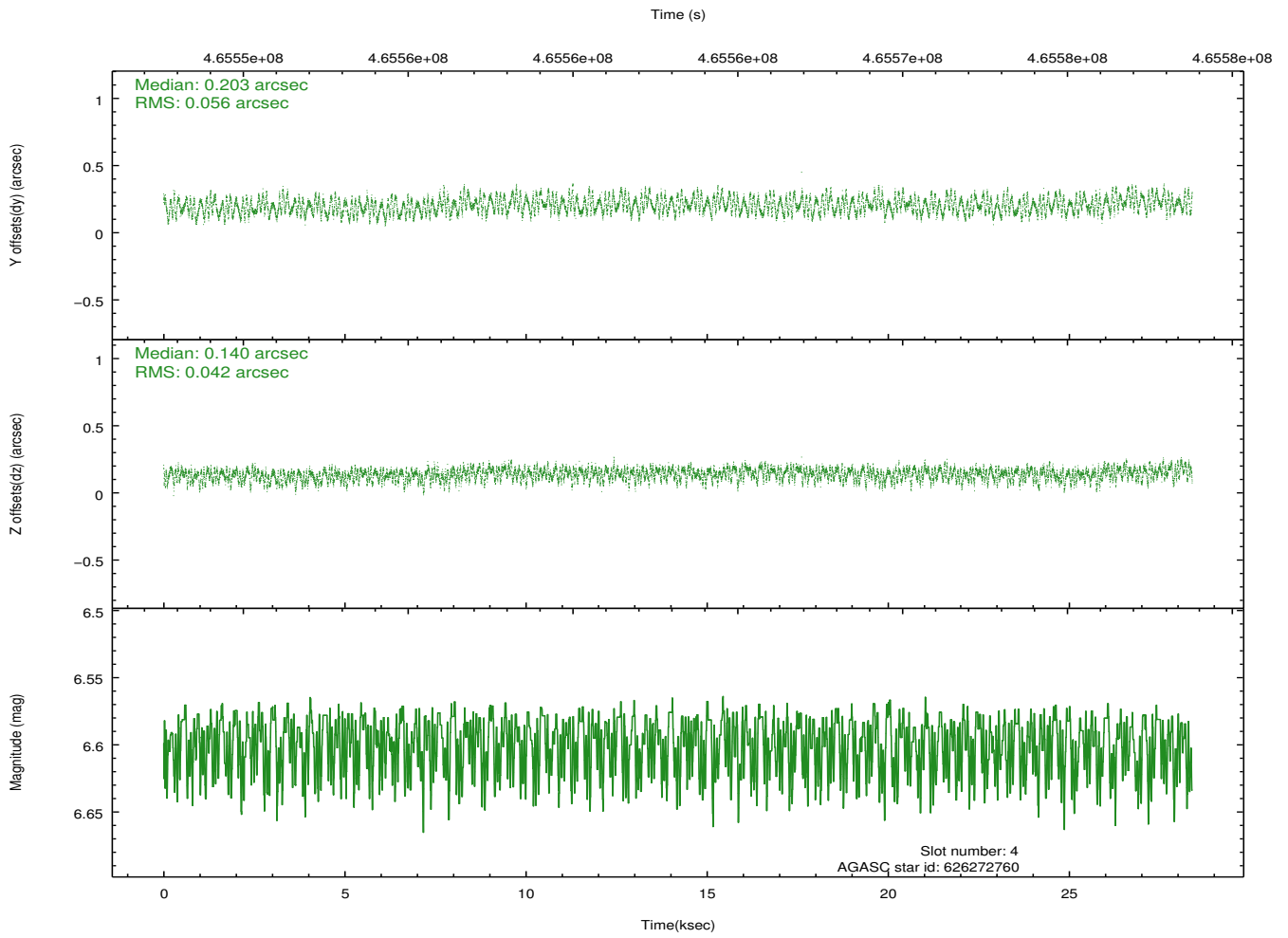
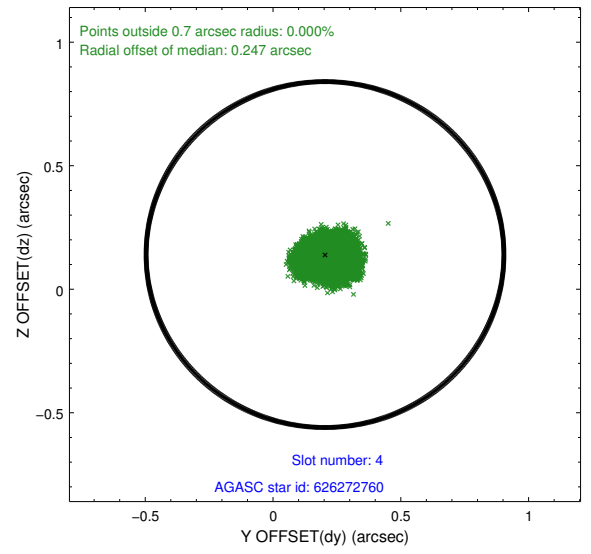
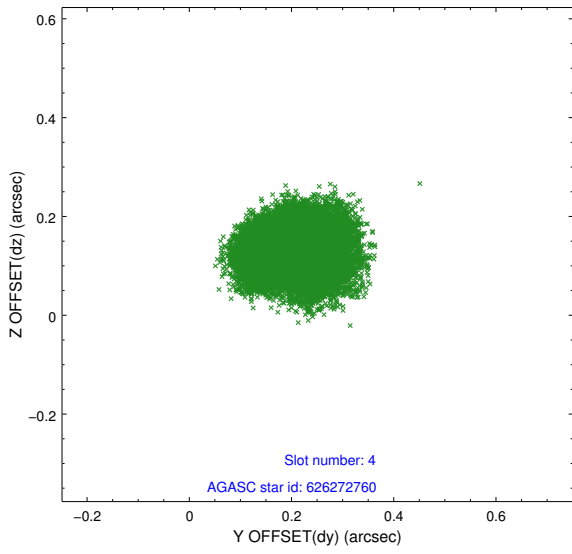
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2.4 Star Slots

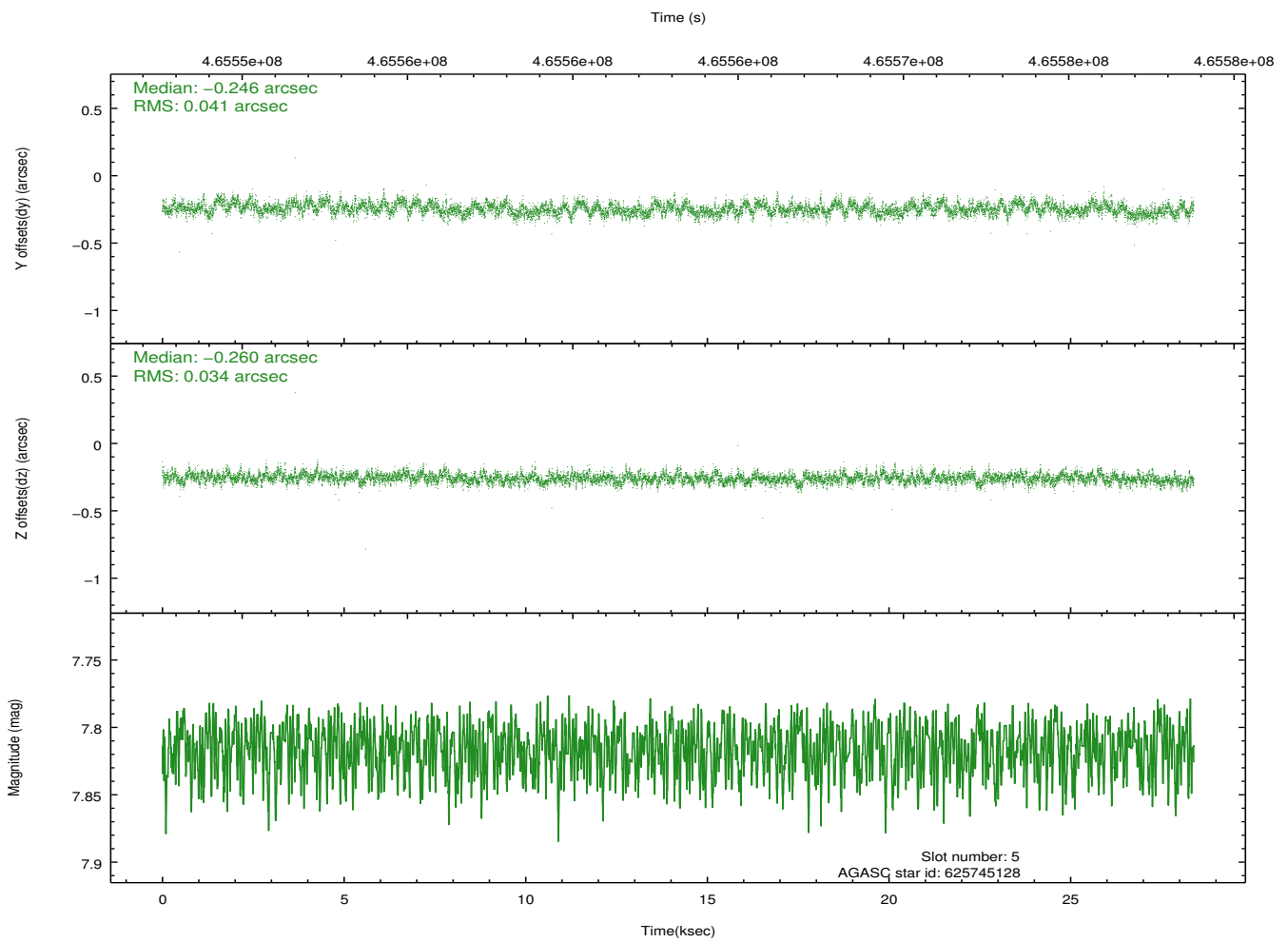
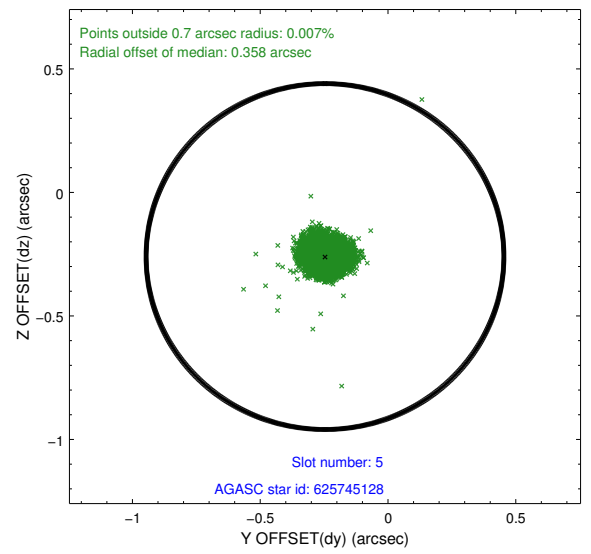
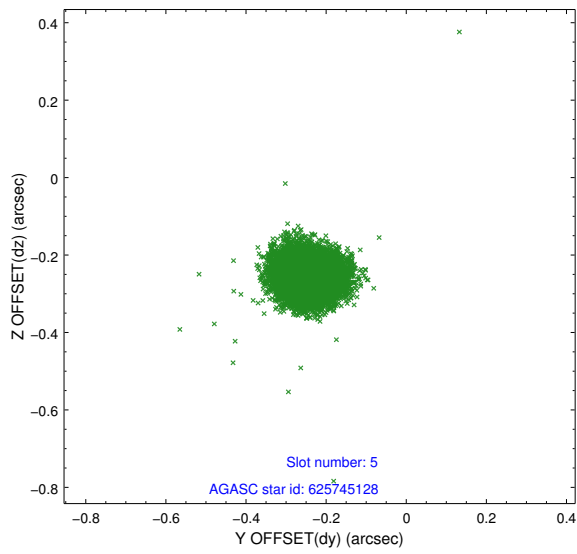
2.4.1 Slot 3



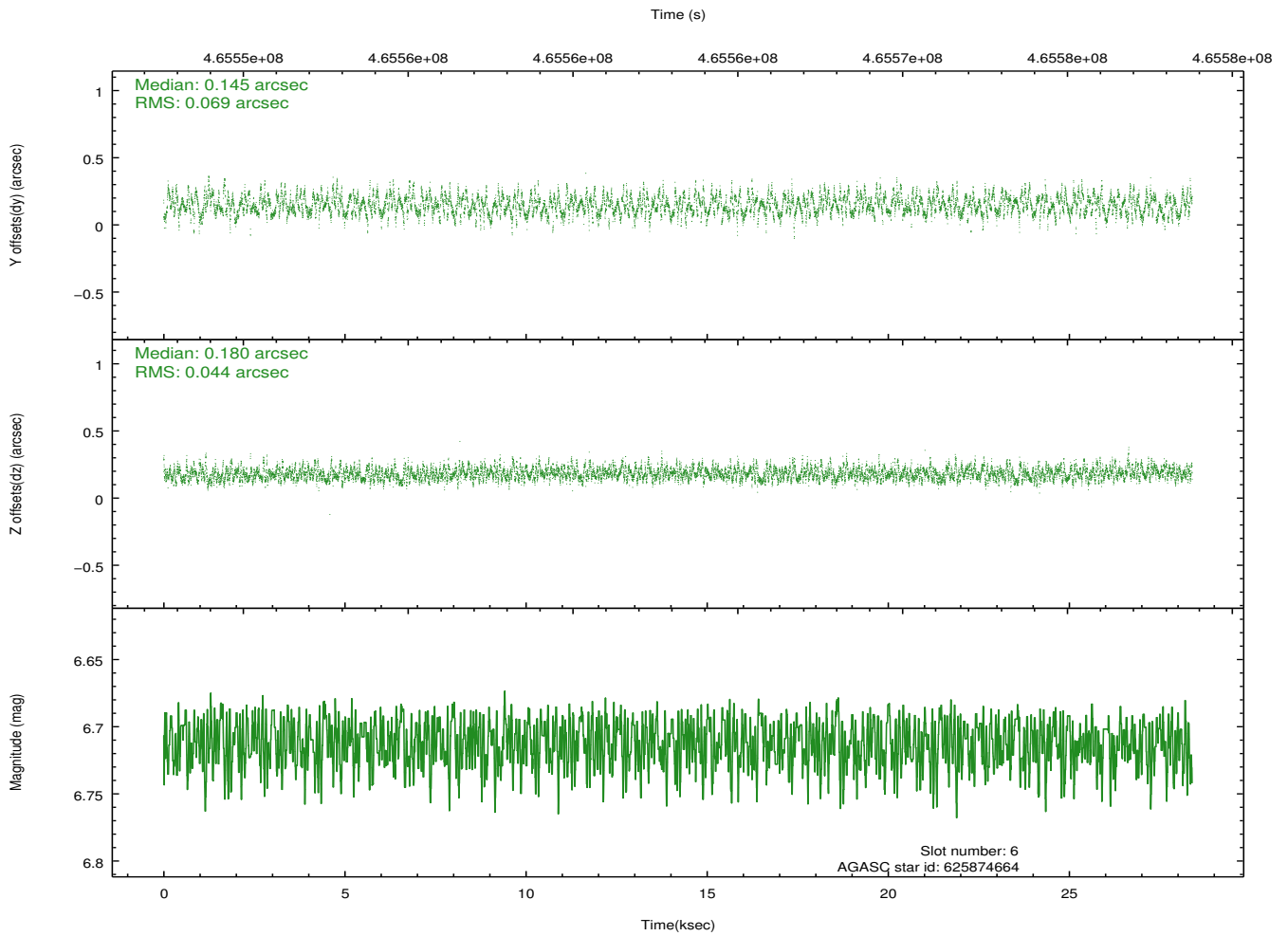
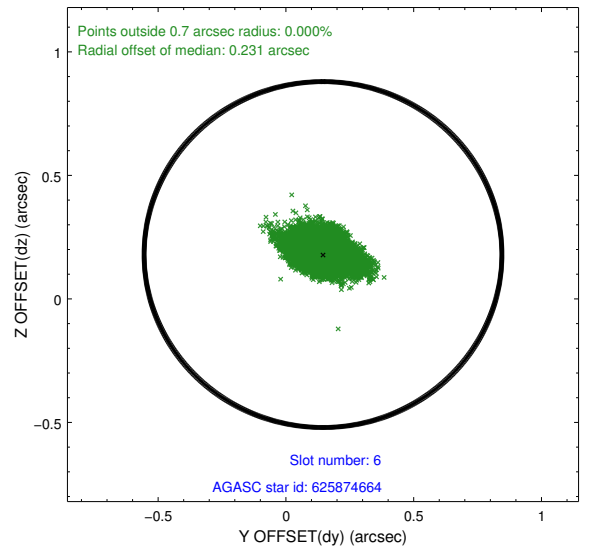
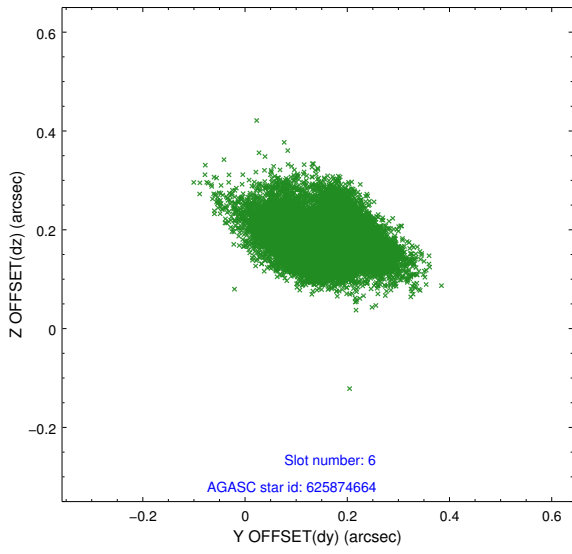
2.4.2 Slot 4



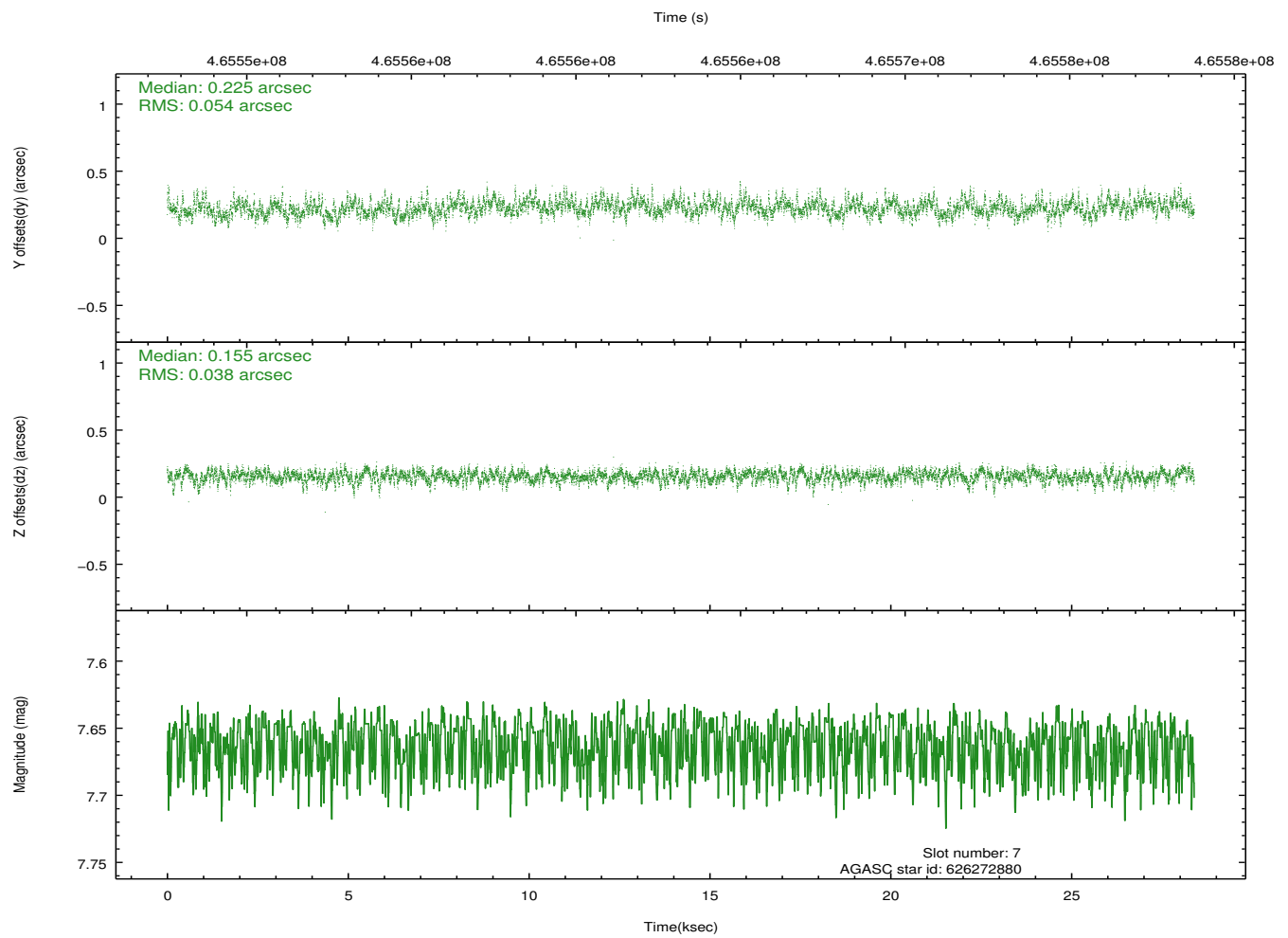
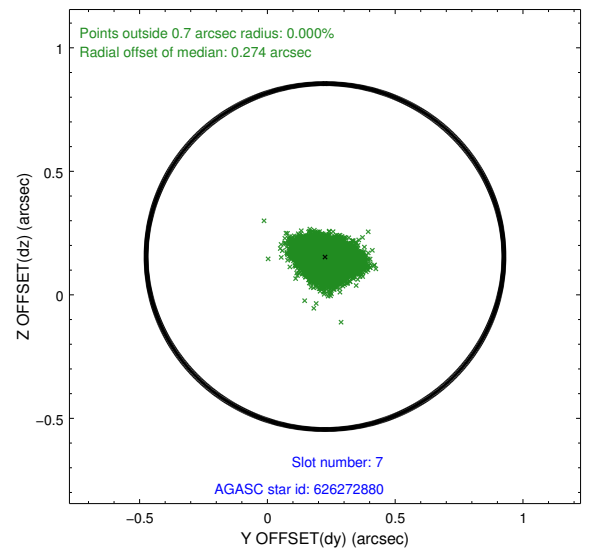
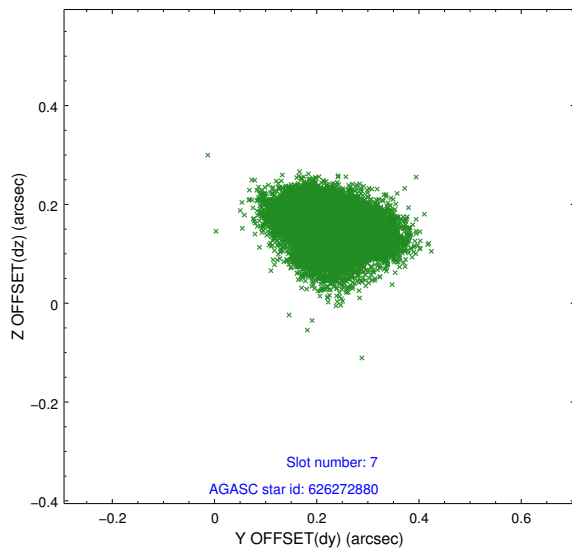
2.4.3 Slot 5



2.4.4 Slot 6

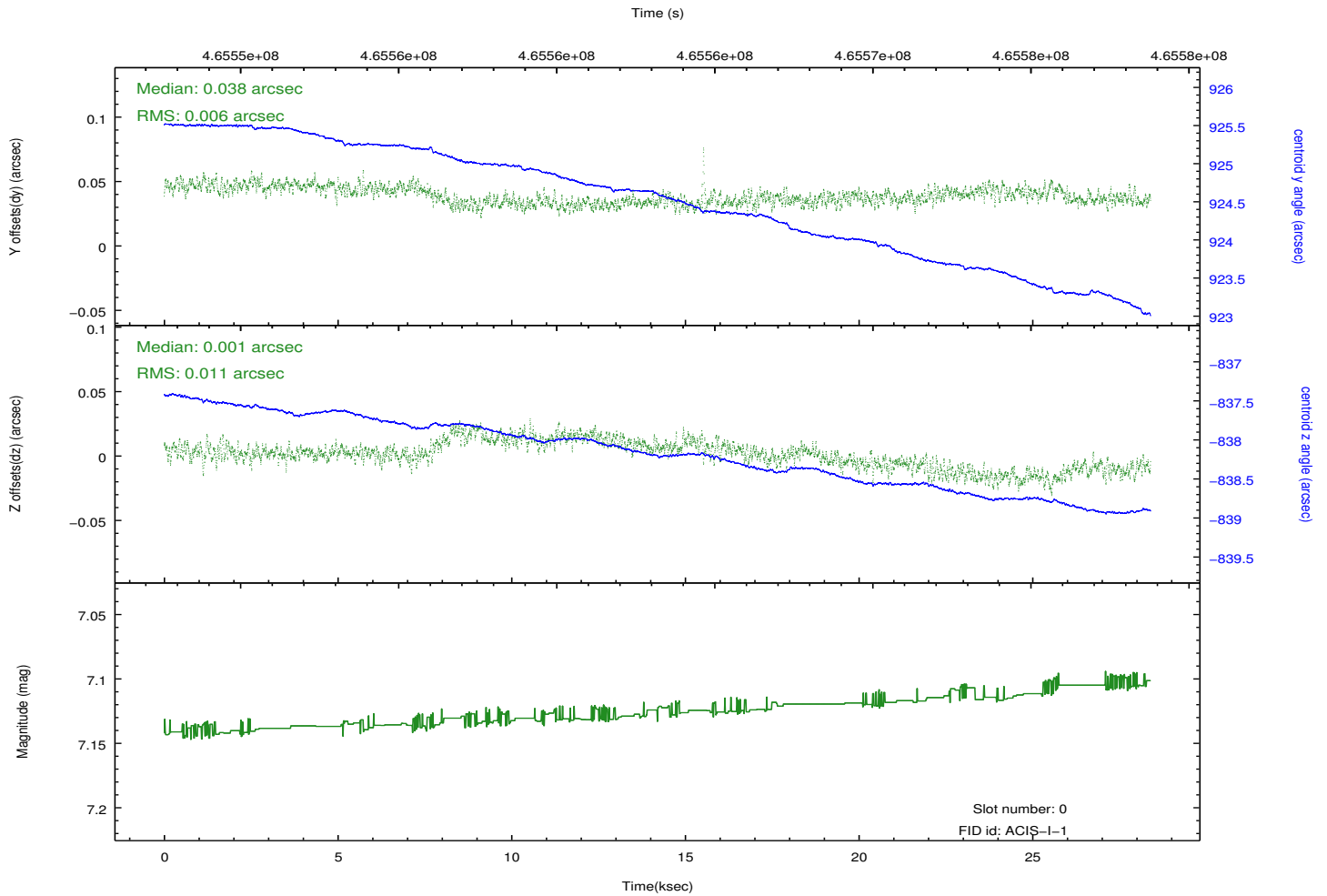
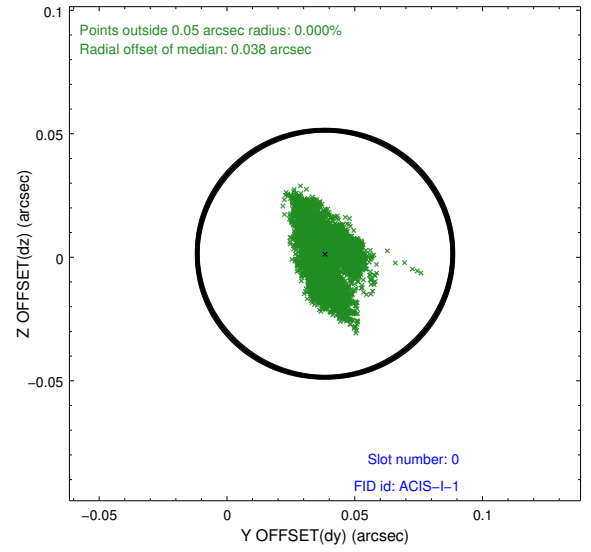
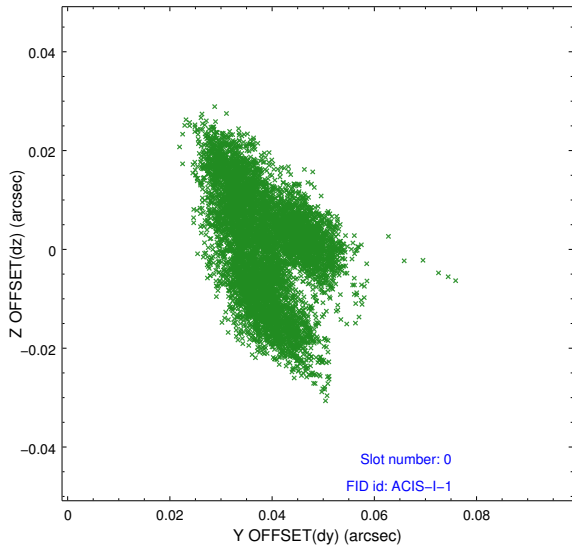


2.4.5 Slot 7

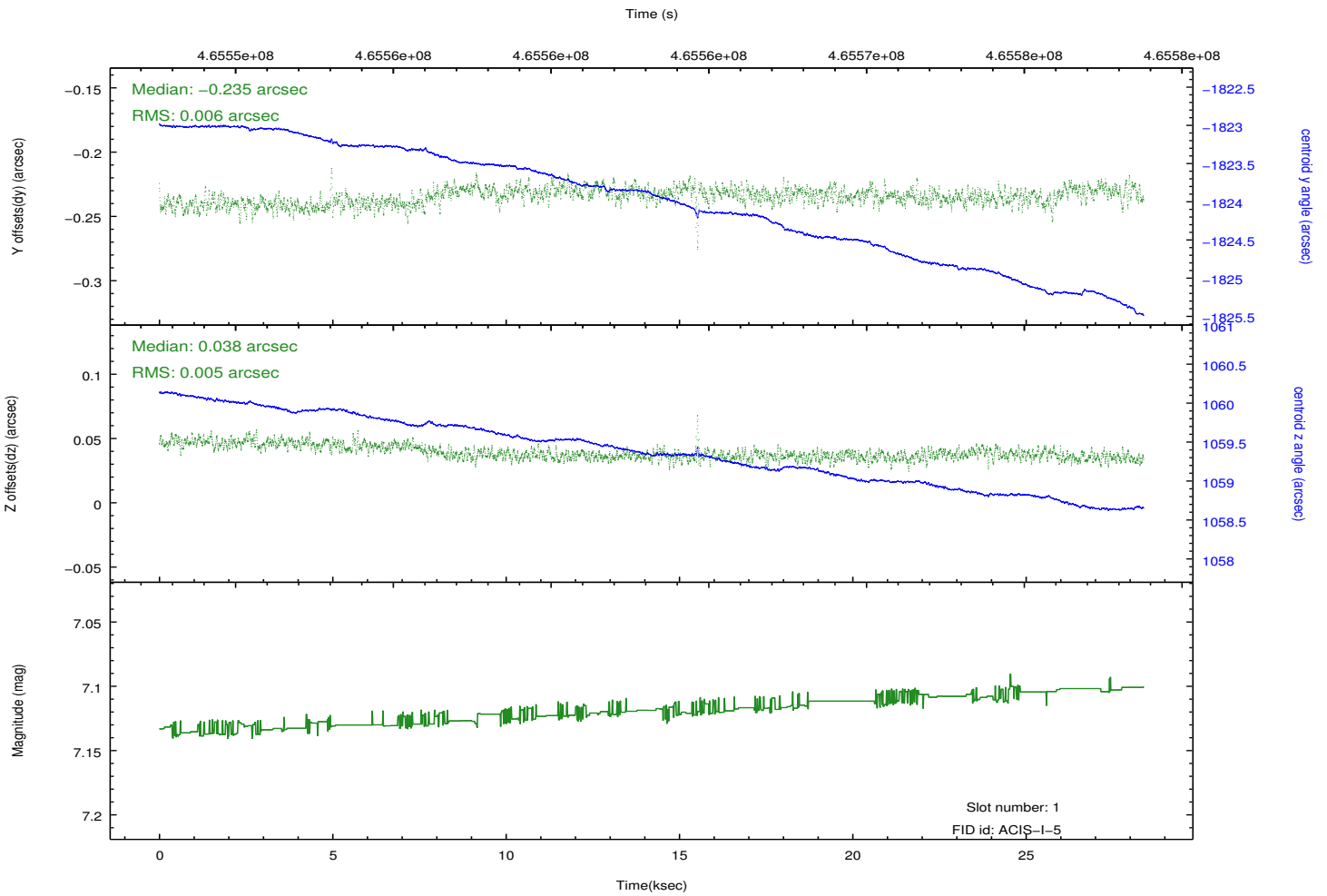
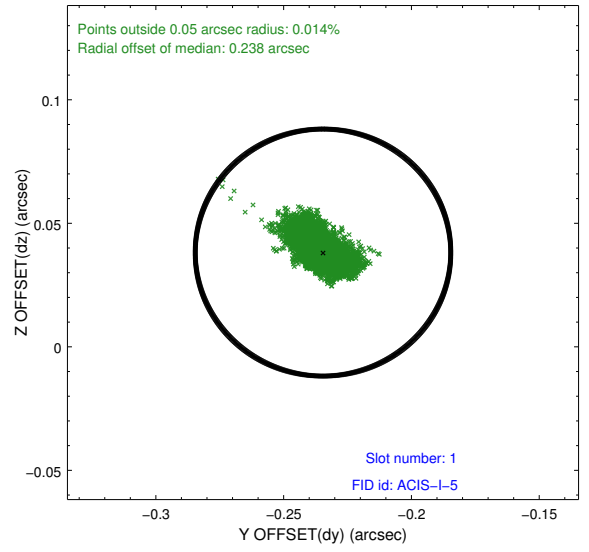
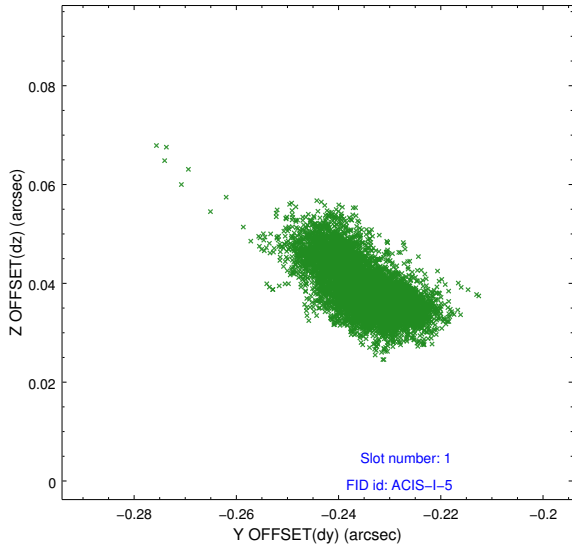


2.5 FID Slots

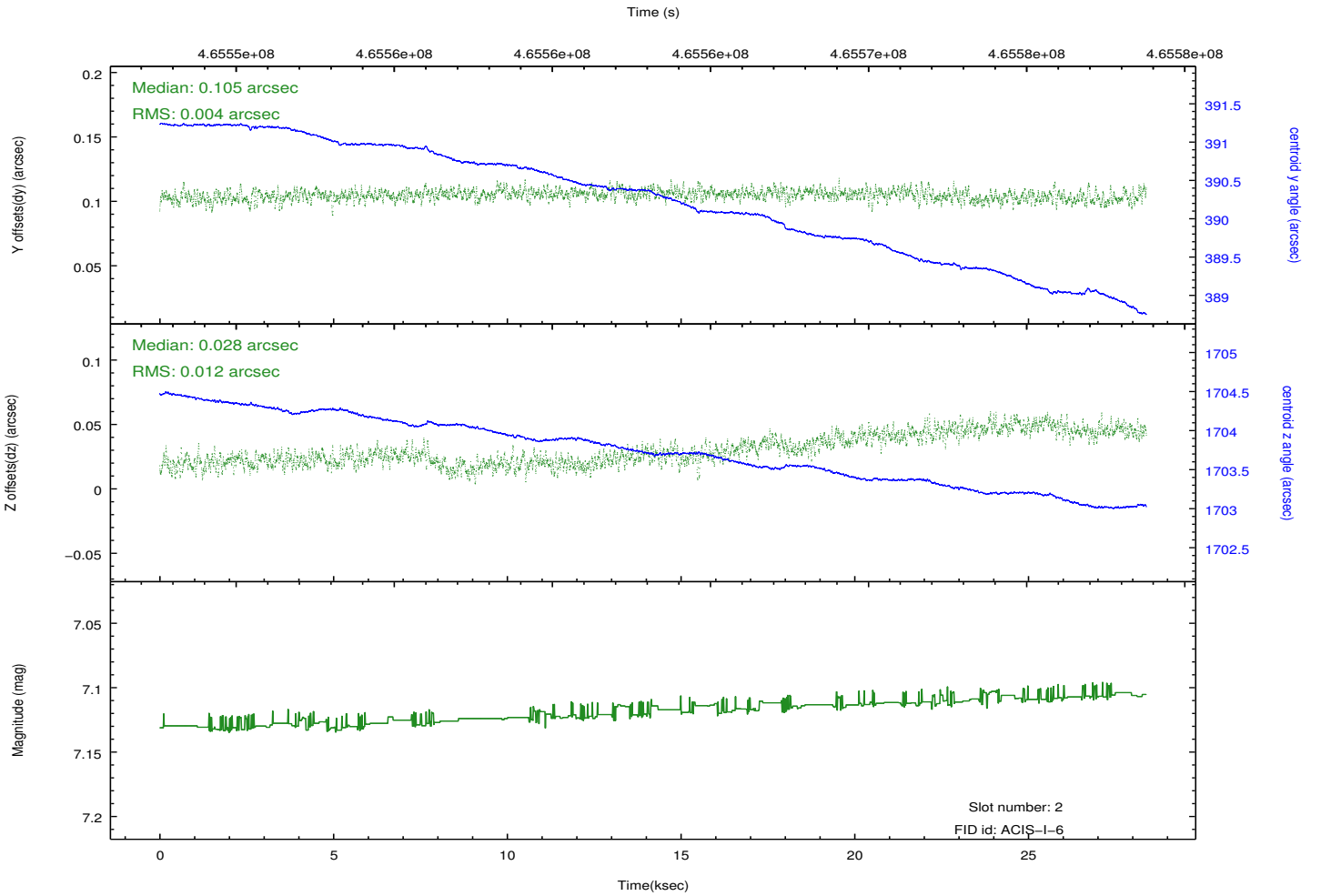
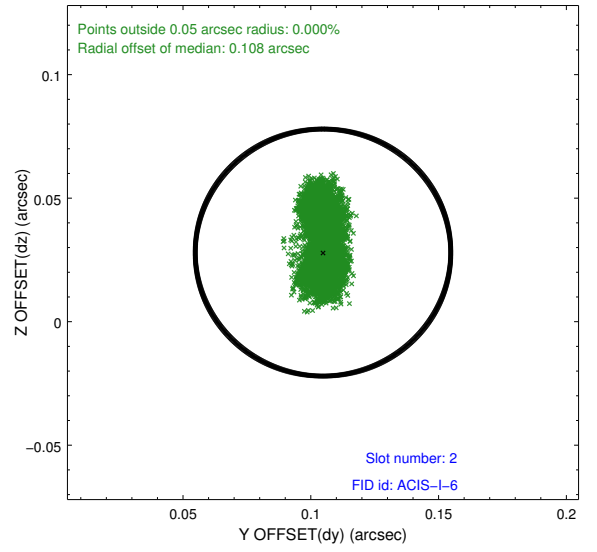
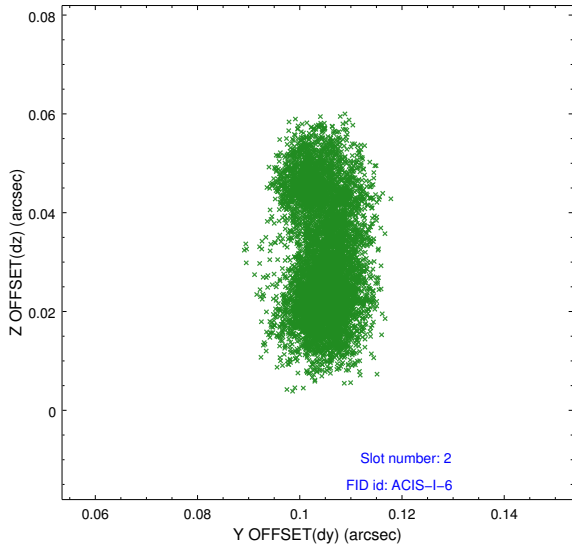
2.5.1 Slot 0



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	27.592288956642

A.2 Comments

Joint proposal with NRAO.

Observation coordinated with EVLA.

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.