

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 15617 - L2 Version 2
Chandra X-Ray Center

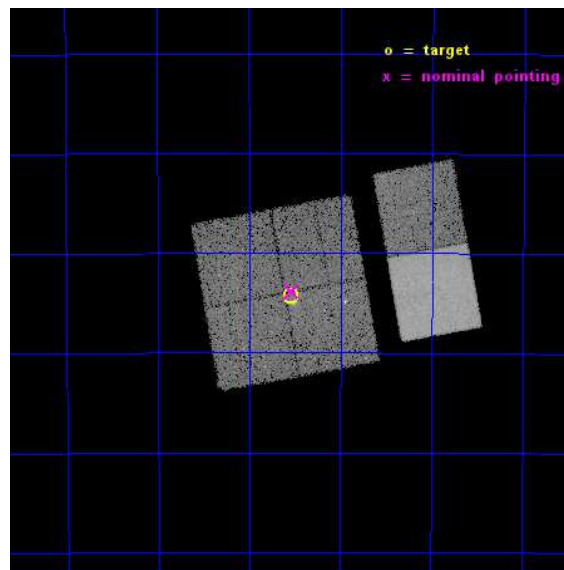
L2 Processing Date : Dec 1 2014

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1 Front

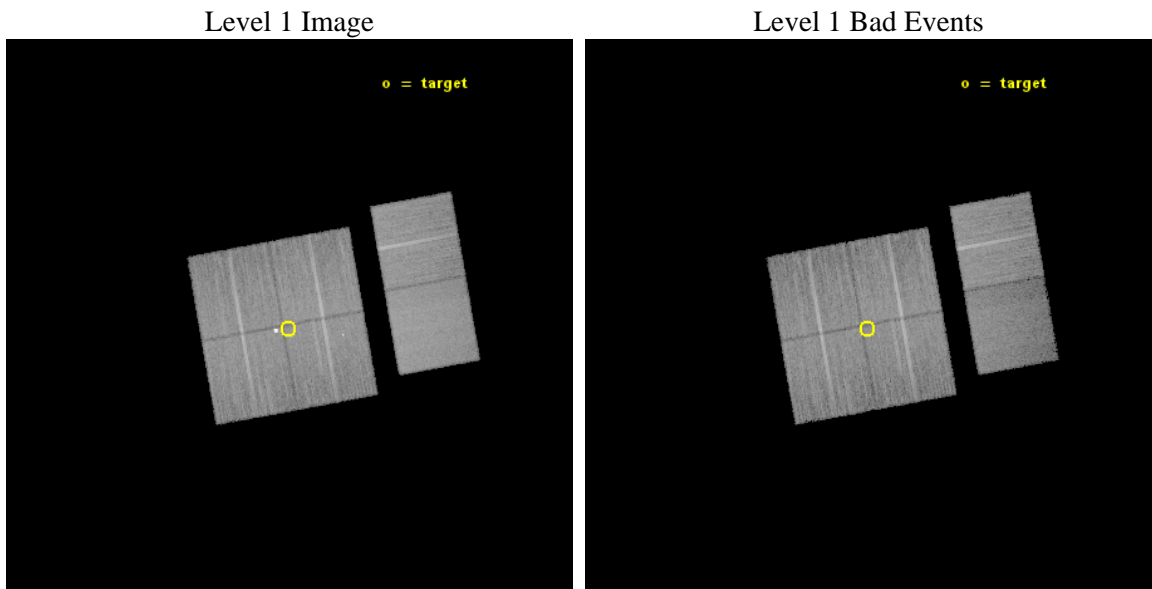
seq_num	200835	Sequence number
obs_id	15617	Observation id
title	An End in Fire: the Demise of a Massive Infrared Dark Cloud	Propos
observer	Dr. Leisa Townsley	Principal investigator
object	G333.3-0.4	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	245.385833	Observer's specified target RA [deg]
dec_targ	-50.405639	Observer's specified target Dec [deg]
ra_nom	245.38424867183	Nominal RA [deg]
dec_nom	-50.397608357225	Nominal Dec [deg]
roll_nom	79.80746412864	Nominal Roll [deg]
revision	2	Processing version of data
ontime	26462.970077395	Sum of GTIs [s]
livetime	26127.880016188	Livetime [s]
ontime0	26466.087937713	Sum of GTIs [s]
ontime1	26462.887977421	Sum of GTIs [s]
ontime2	26462.929027379	Sum of GTIs [s]
ontime3	26462.970077395	Sum of GTIs [s]
ontime6	26463.052187324	Sum of GTIs [s]
ontime7	26466.252097726	Sum of GTIs [s]
l2events	145222	Number of level 2 events



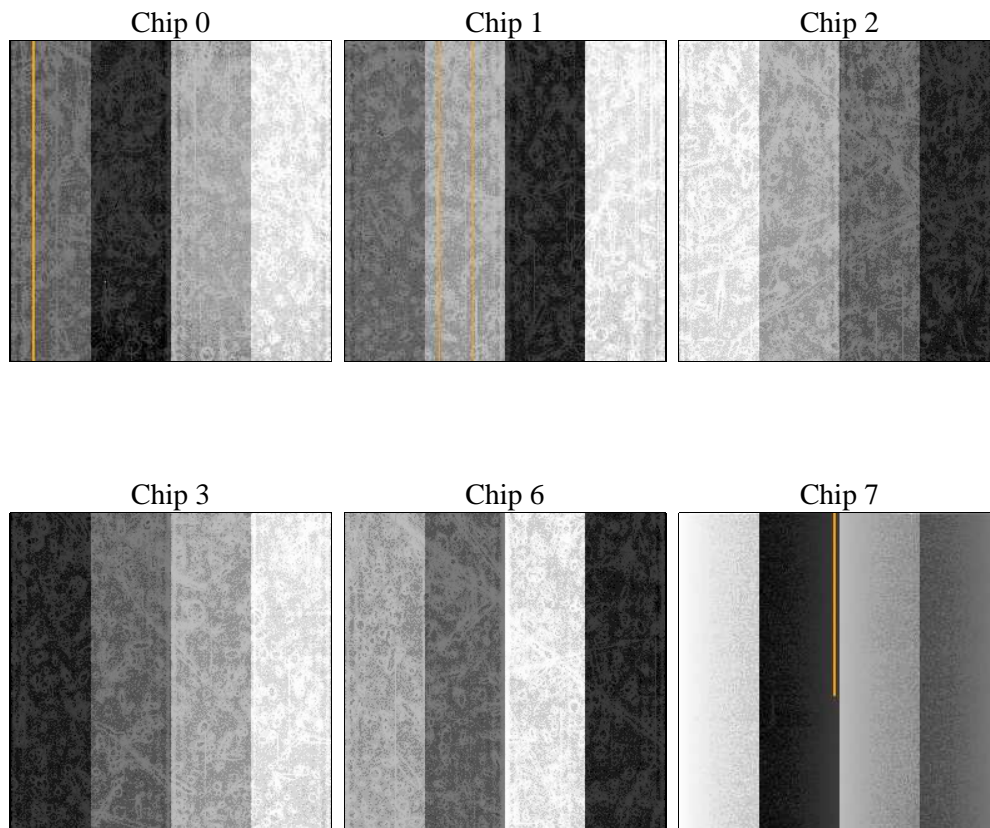
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	26500.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	26462.970077395	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	26466.087937713	Sum of GTIs [s]
date	2014-12-01T17:07:35	Date and time of file creation	ontime1	26462.887977421	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	26462.929027379	Sum of GTIs [s]
			ontime3	26462.970077395	Sum of GTIs [s]
			ontime6	26463.052187324	Sum of GTIs [s]
			ontime7	26466.252097726	Sum of GTIs [s]
			l1events	814468	Number of level 1 events

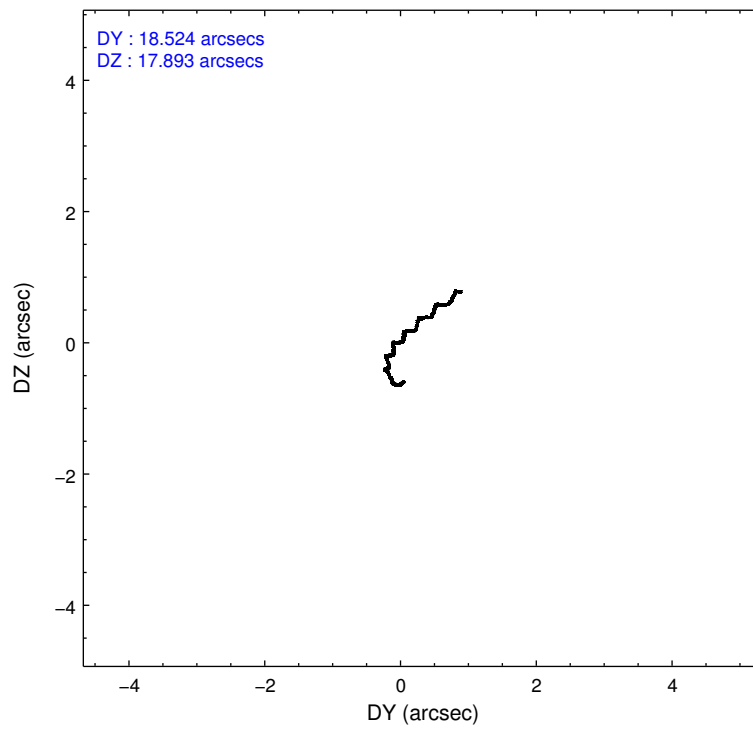
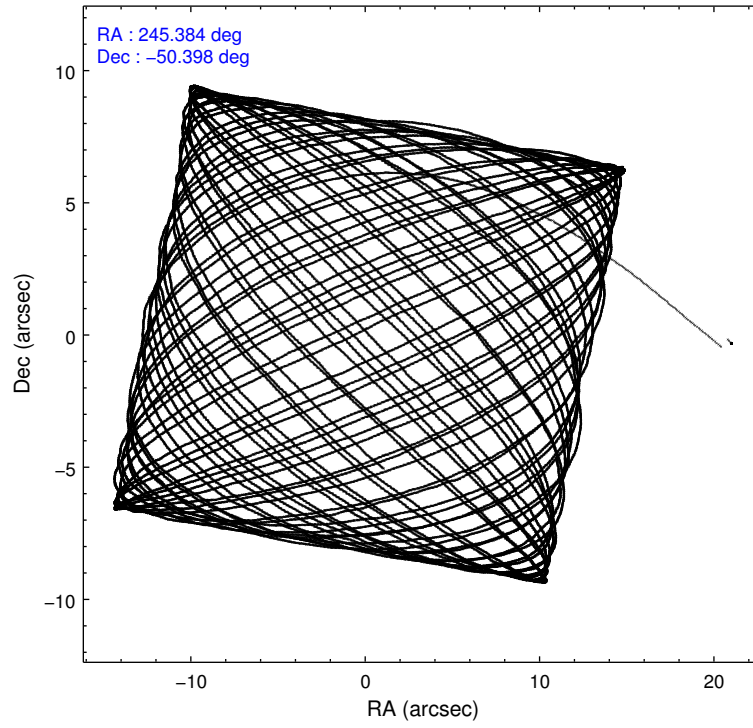
2.1.4 Events

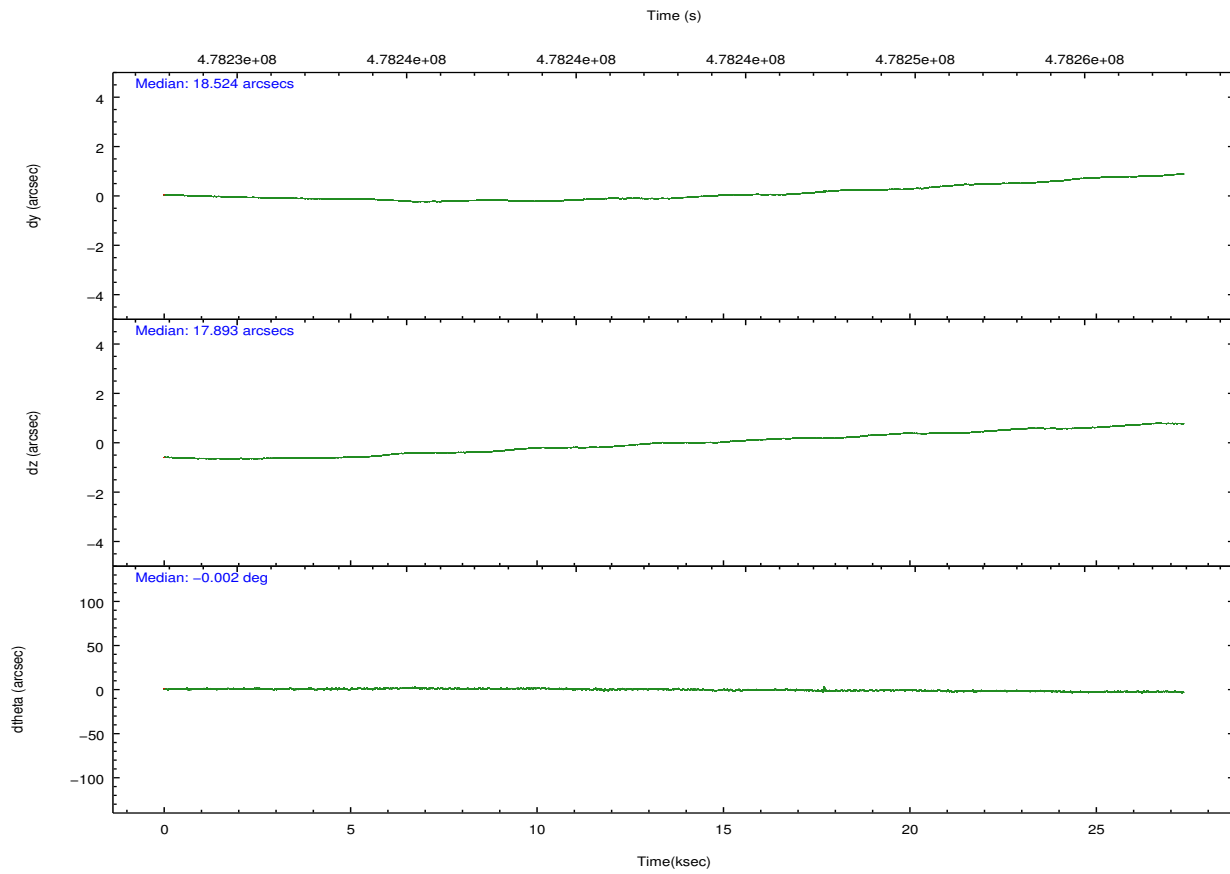
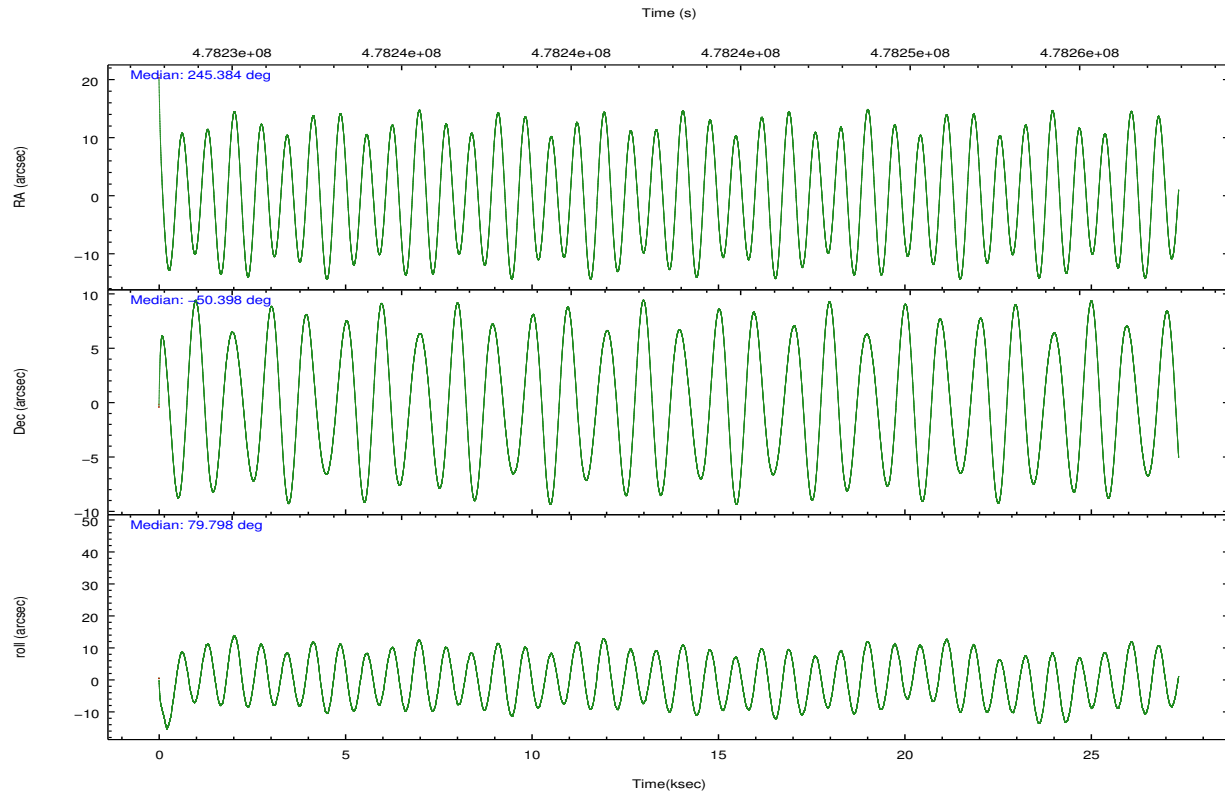
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	122912	135312	134365	126977	138602	156300	grade 0 events	6261	14713	6185	7305	6646	7555
rejected events	106414	109468	118253	109925	121245	80877		5%	10%	4%	5%	4%	4%
rejected %	86%	80%	88%	86%	87%	51%	grade 1 events	76	118	75	91	71	240
								0%	0%	0%	0%	0%	0%
							grade 2 events	4103	4071	3880	3568	3781	16103
								3%	3%	2%	2%	2%	10%
							grade 3 events	1639	1781	1572	1615	1704	6769
								1%	1%	1%	1%	1%	4%
							grade 4 events	1561	1757	1600	1645	1648	6716
								1%	1%	1%	1%	1%	4%
							grade 5 events	5235	5795	4791	6070	5974	16372
								4%	4%	3%	4%	4%	10%
							grade 6 events	2939	3529	2878	2922	3584	38299
								2%	2%	2%	2%	2%	24%
							grade 7 events	101098	103548	113384	103761	115194	64246
								82%	76%	84%	81%	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	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	245.399059	245.3842486718295	CCD I2 on	Y	Y
[deg] Pointing Dec	-50.423457	-50.39760835722489	CCD I3 on	Y	Y
[deg] Pointing Roll	79.610191	79.80746412863955	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	O1	Y
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	O2	Y
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	478230059.184000	478228344.96511	CCD S5 on	N	N
Observation start date	2013-02-26T01:39:52	2013-02-26T01:12:24	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	478256559.184000	478257542.60419	On-chip summing requested	N	N
Observation end date	2013-02-26T09:01:32	2013-02-26T09:19:02	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect





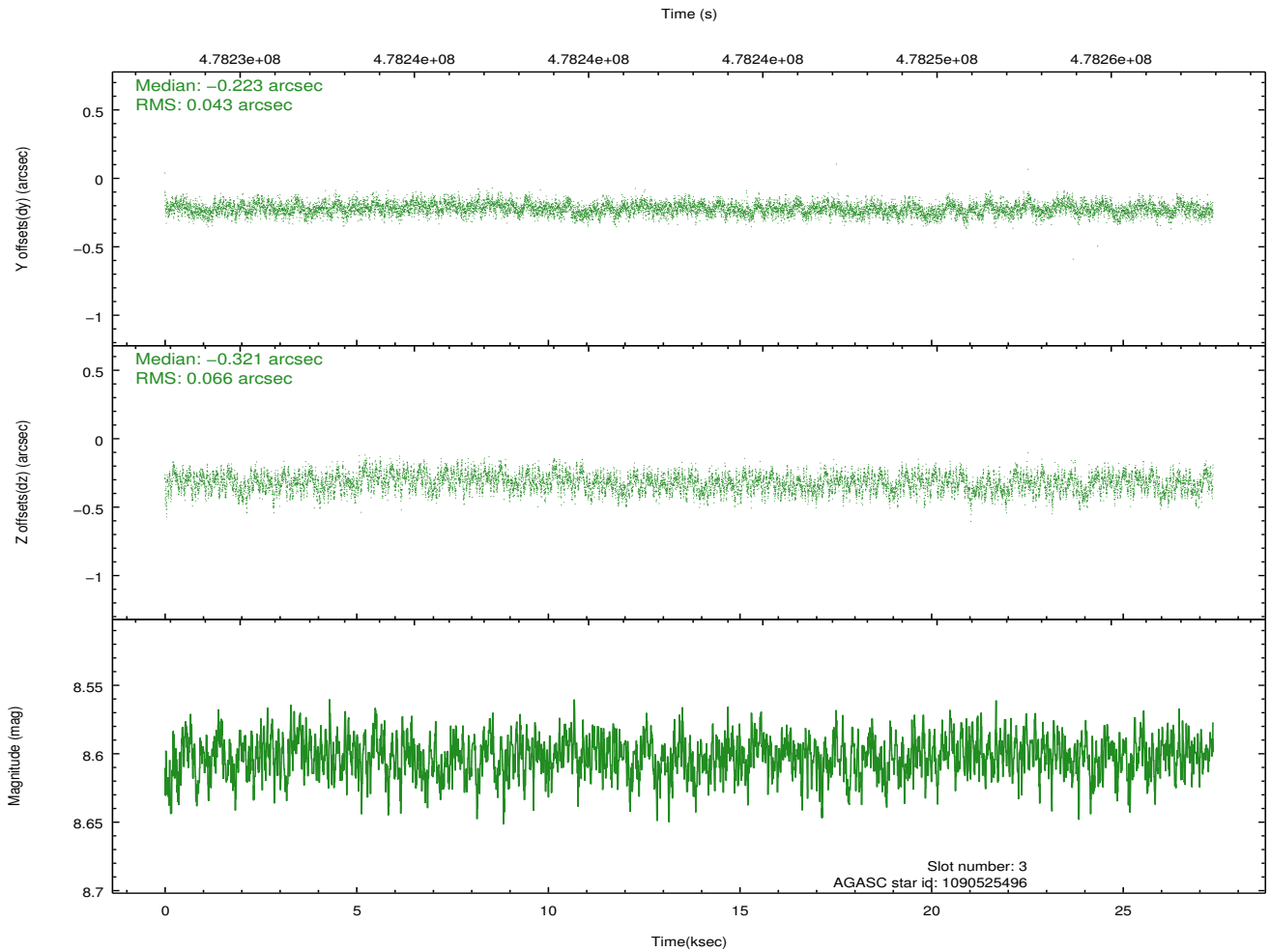
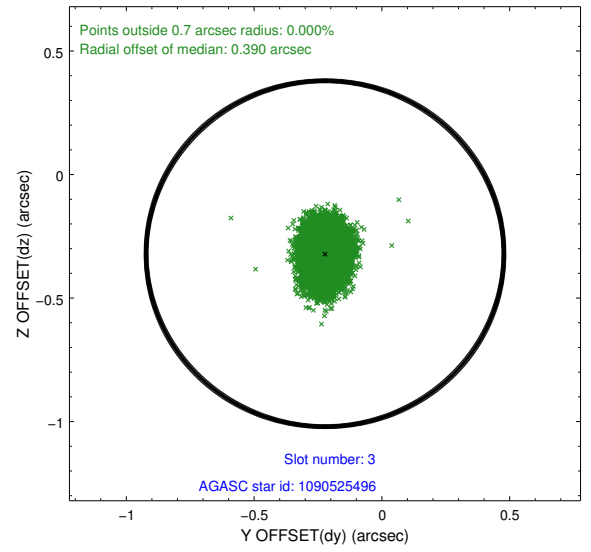
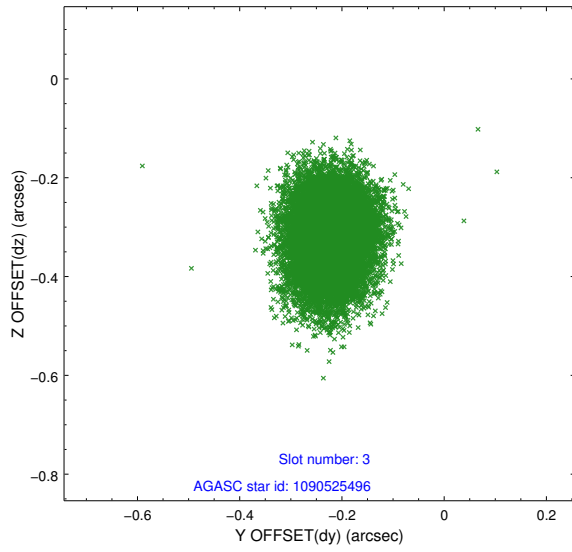
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.05	6670	0.057	0.020	0.026	0.043	0.000000	0.000000	920.78	-841.53
1	FID		ACIS-I-5	7.03	6671	-0.262	0.057	0.010	0.016	0.000000	0.000000	-1827.62	1055.93
2	FID		ACIS-I-6	7.05	6671	0.111	-0.004	0.019	0.029	0.000000	0.000000	386.25	1700.51
3	GUIDE	used	1090525496	8.60	13335	-0.223	-0.321	0.084	0.134	244.777039	-50.152945	692.96	1585.73
4	GUIDE	used	1090525744	8.19	13338	0.035	0.085	0.088	0.142	245.649389	-50.543894	-324.09	-641.26
5	GUIDE	used	1090921280	9.10	13318	0.152	-0.526	0.094	0.159	244.365071	-50.638328	-1202.81	2178.92
6	GUIDE	used	1091065936	8.81	13317	0.076	0.458	0.095	0.164	246.363156	-50.698332	-590.37	-2342.65
7	GUIDE	used	1091064768	8.68	13317	-0.048	0.300	0.105	0.166	246.317691	-50.745822	-776.41	-2269.74

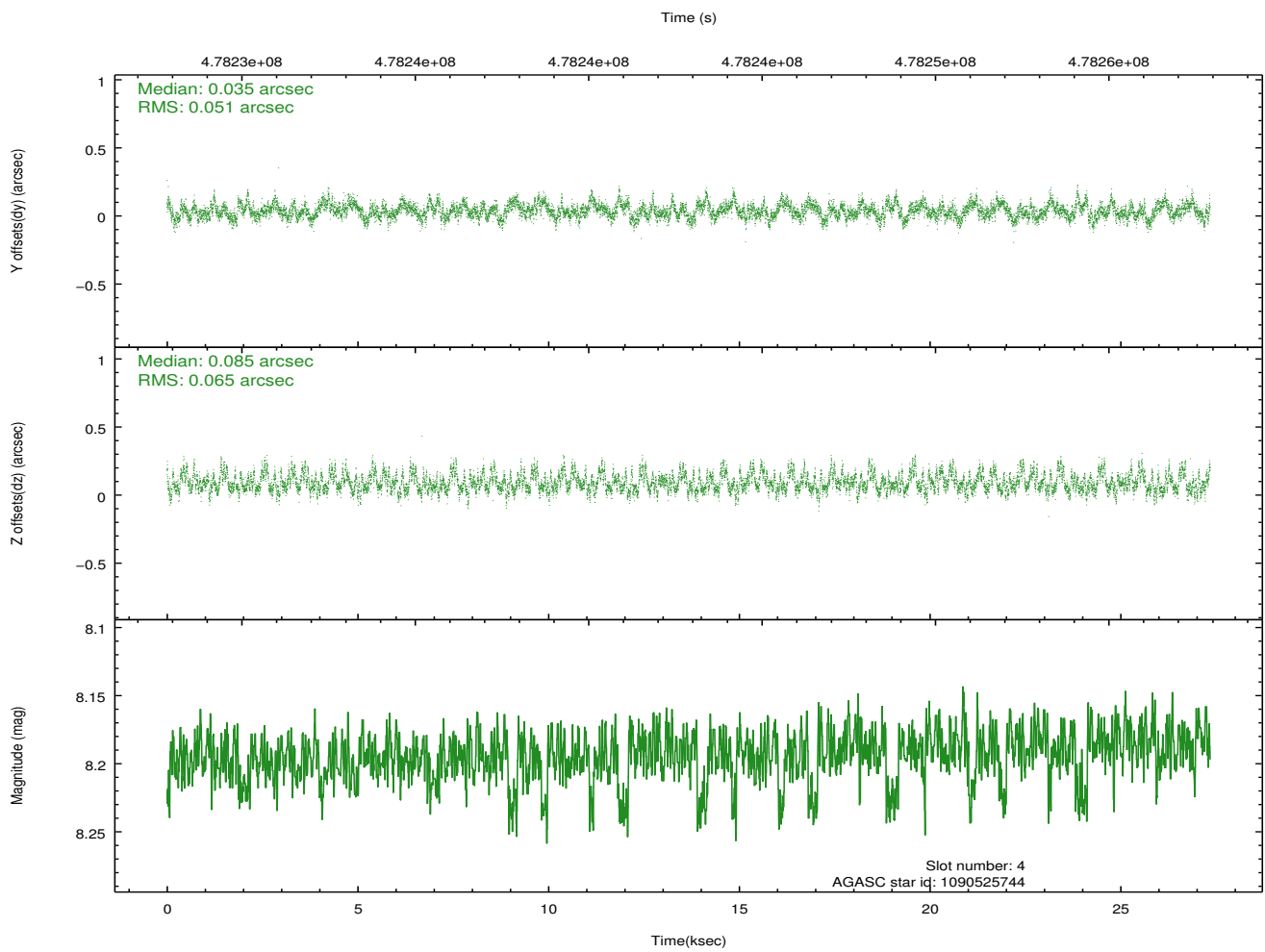
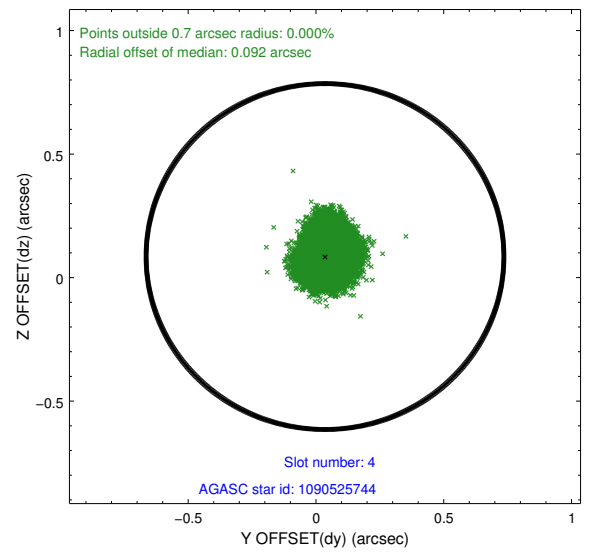
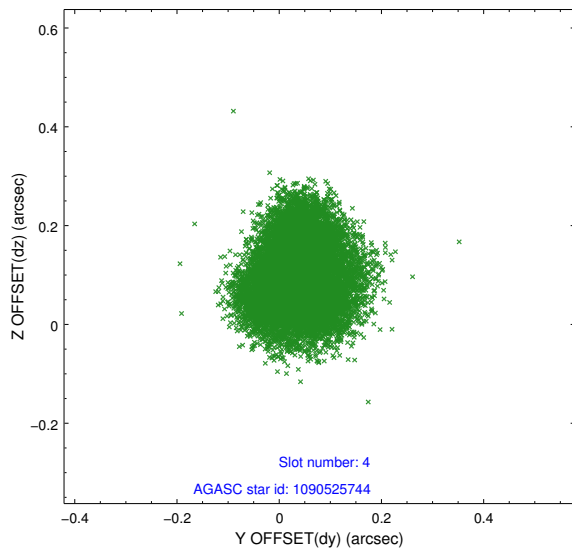
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2.4 Star Slots

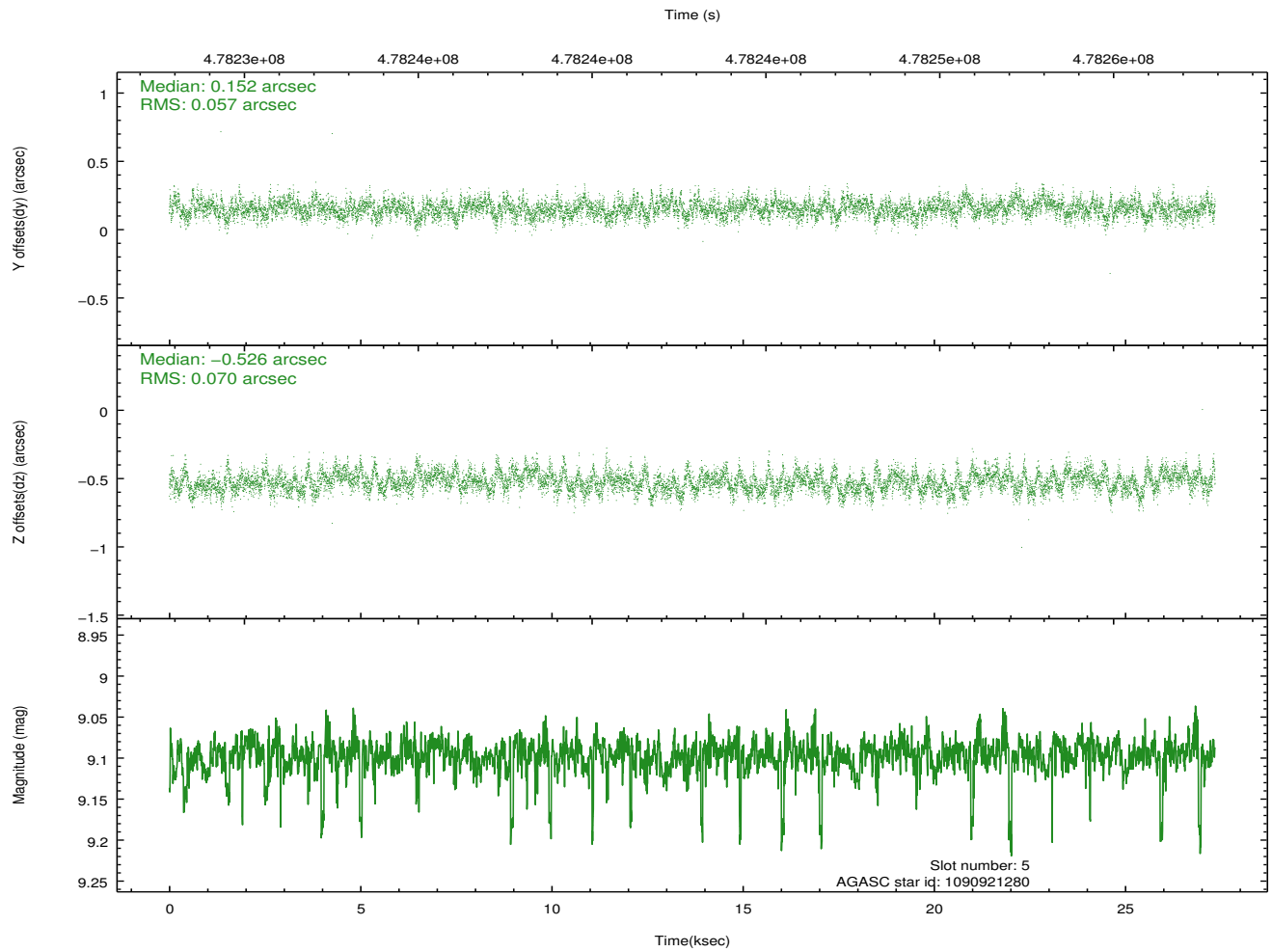
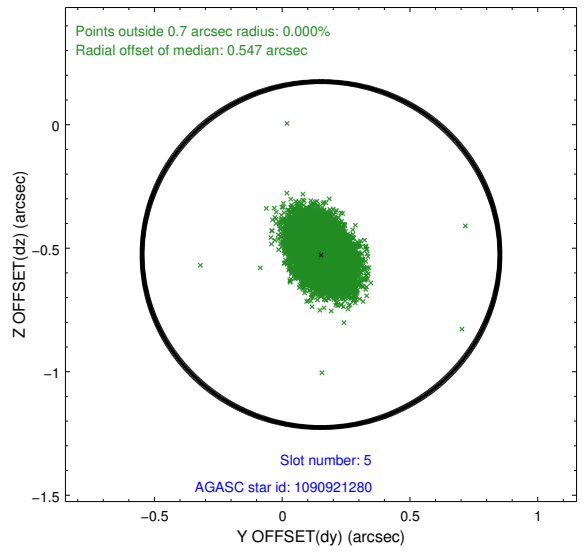
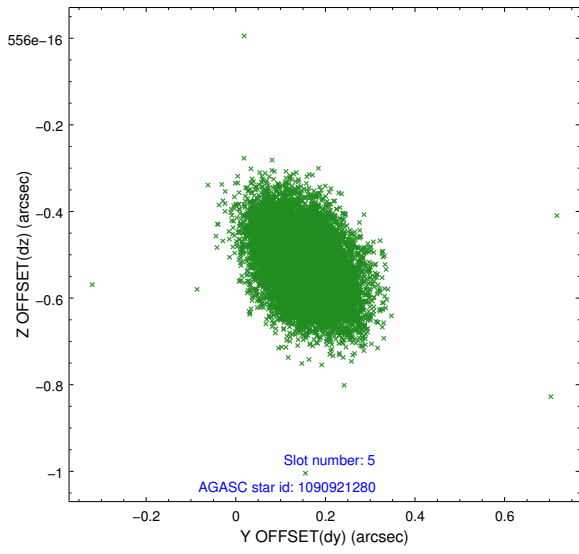
2.4.1 Slot 3



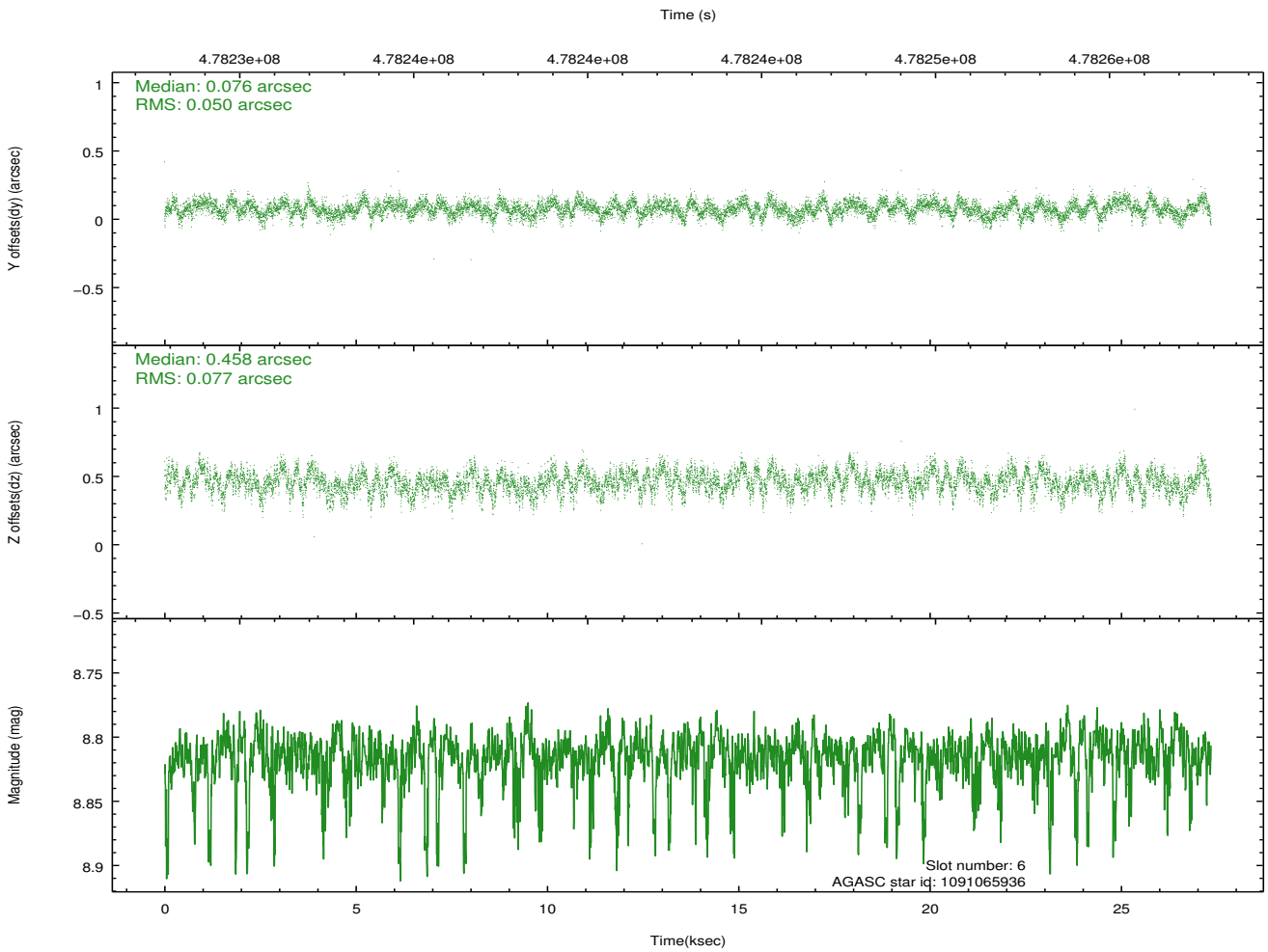
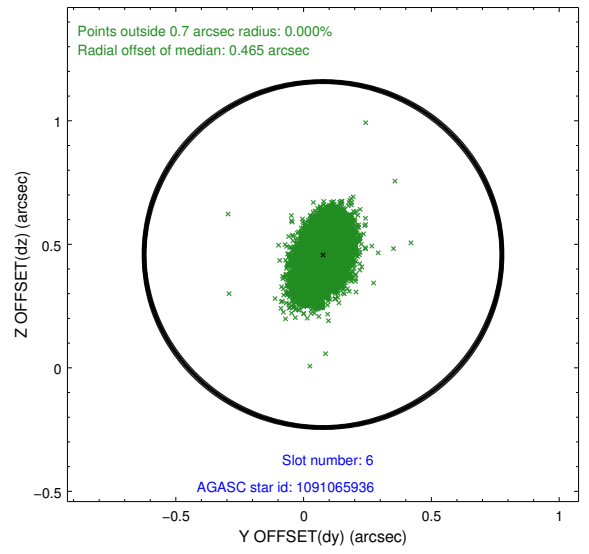
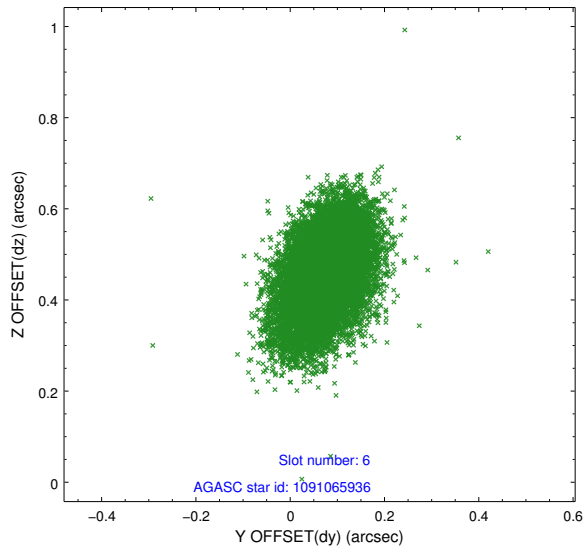
2.4.2 Slot 4



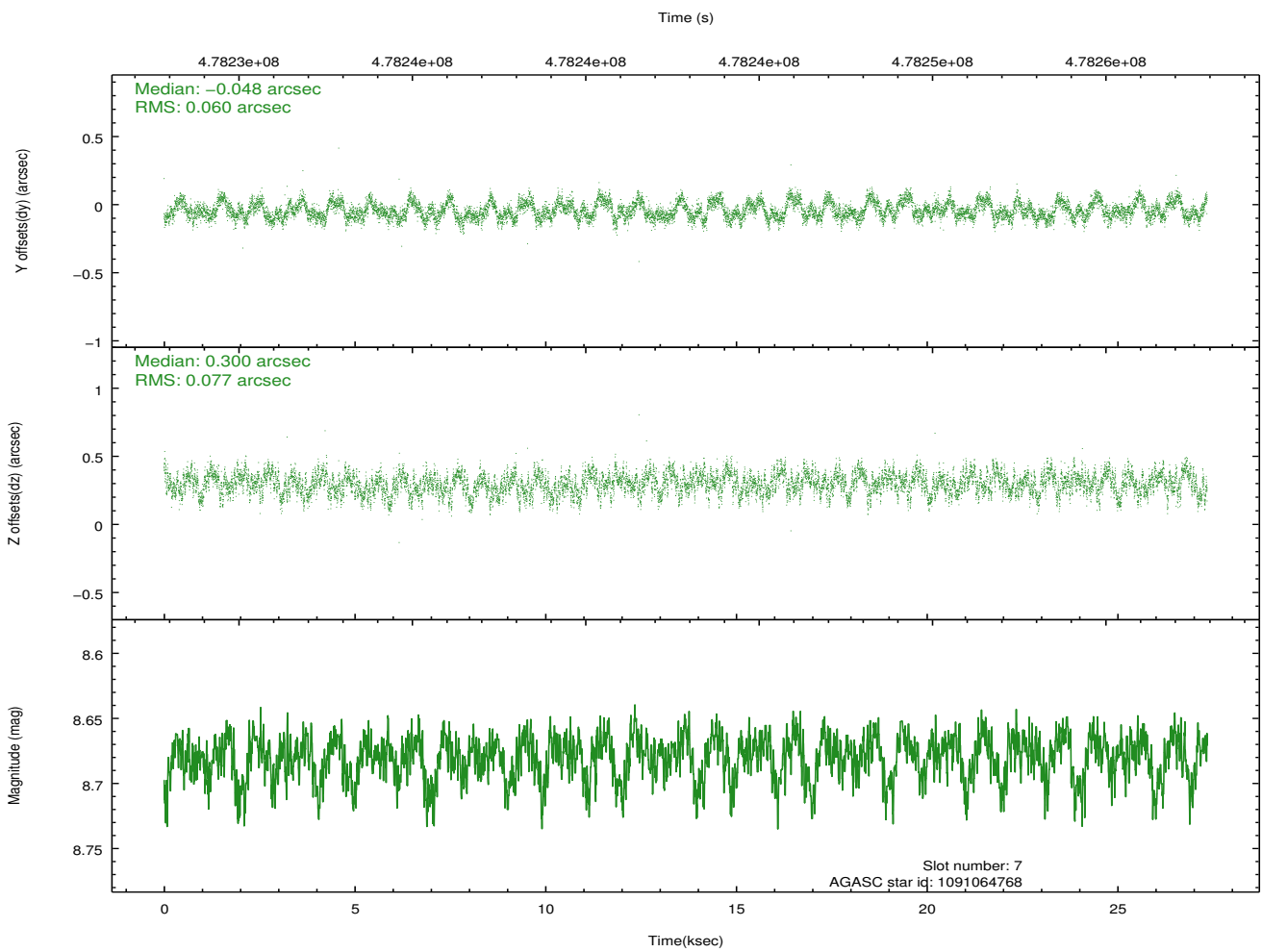
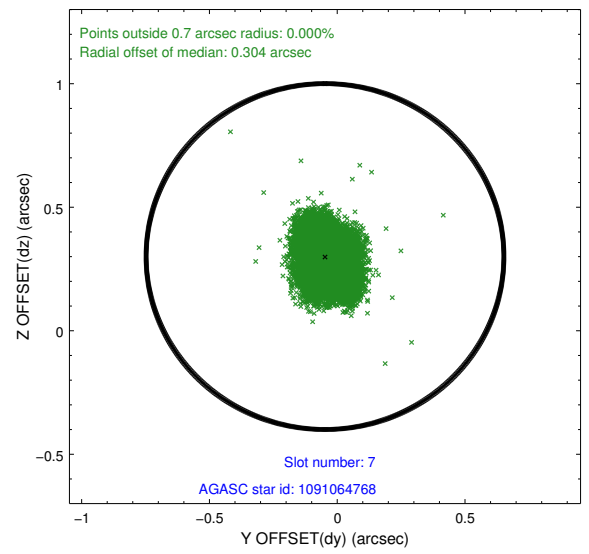
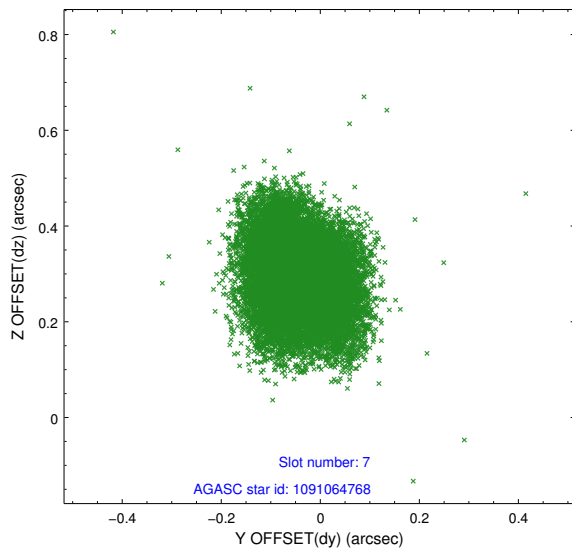
2.4.3 Slot 5



2.4.4 Slot 6

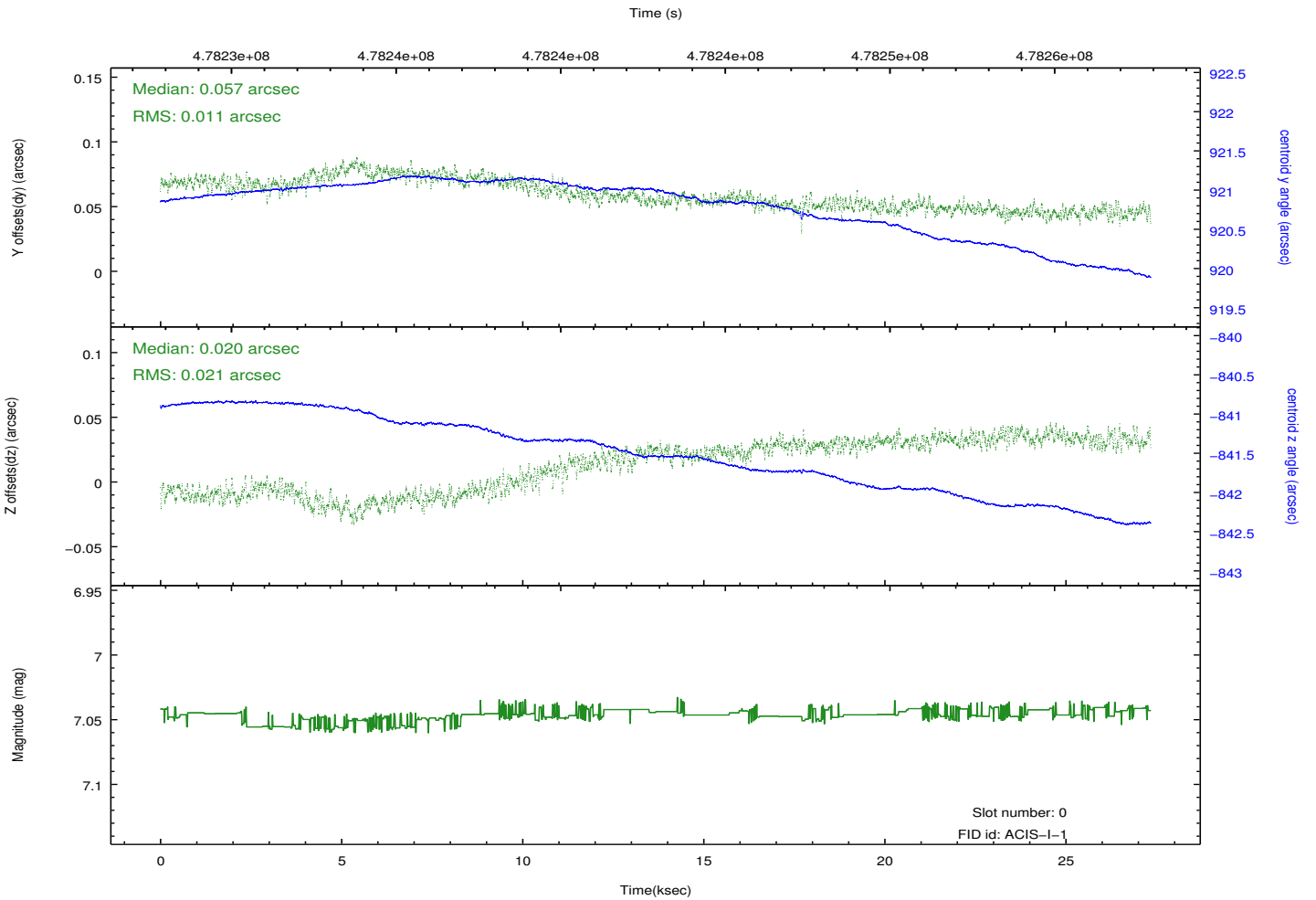
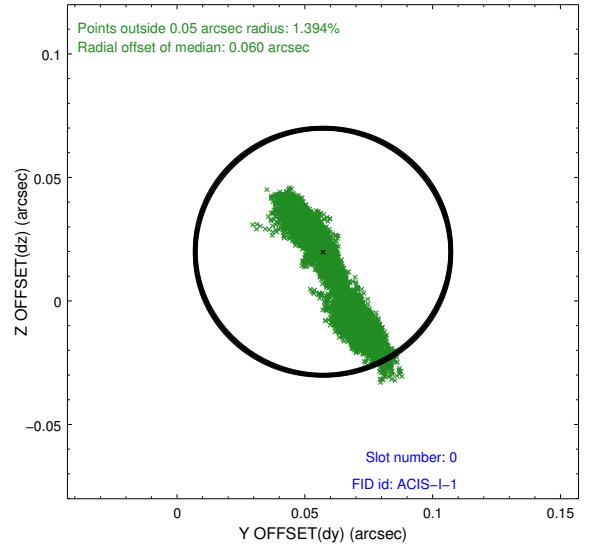
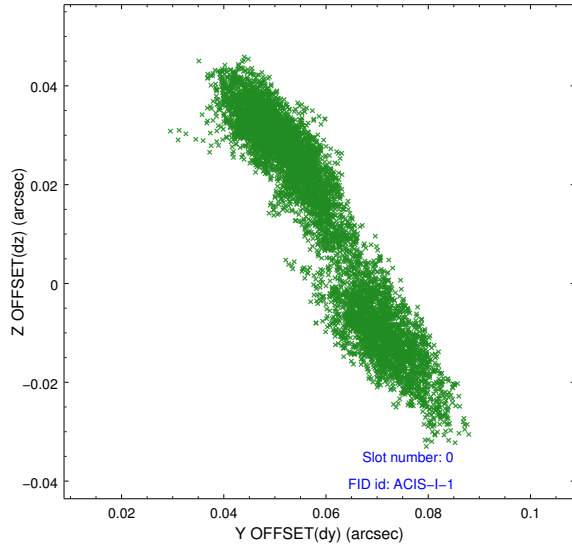


2.4.5 Slot 7

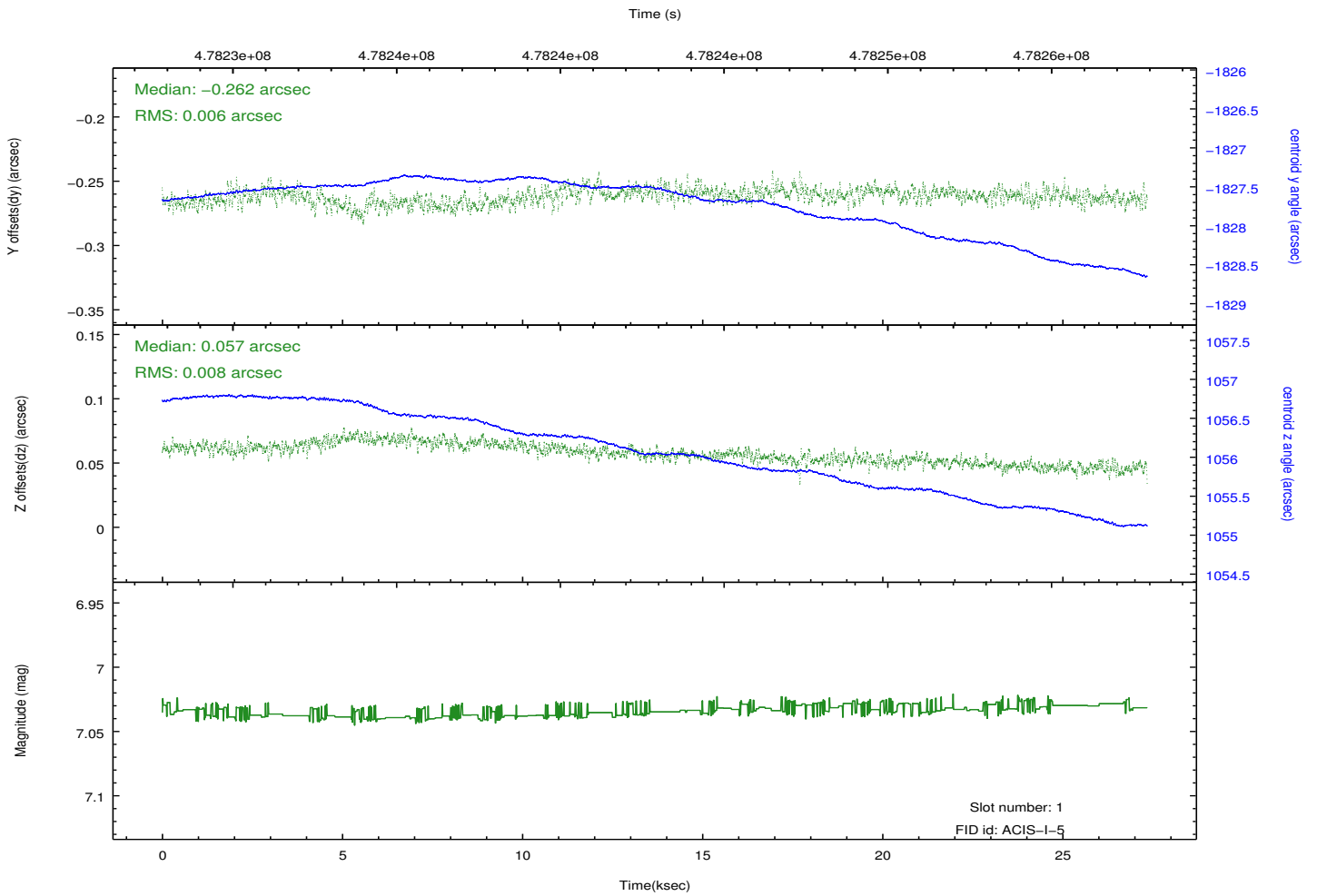
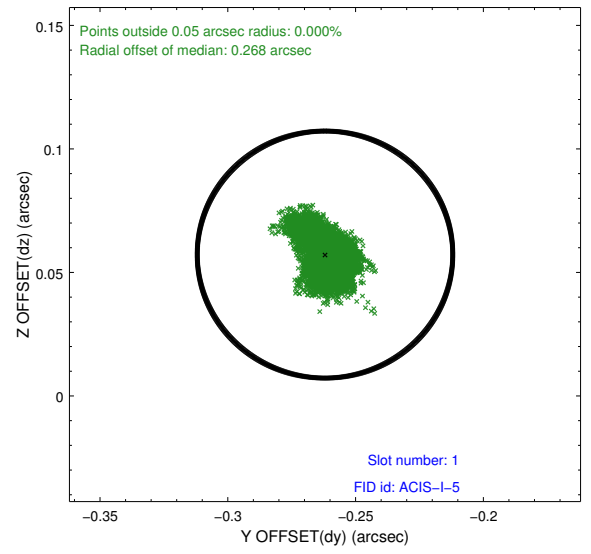
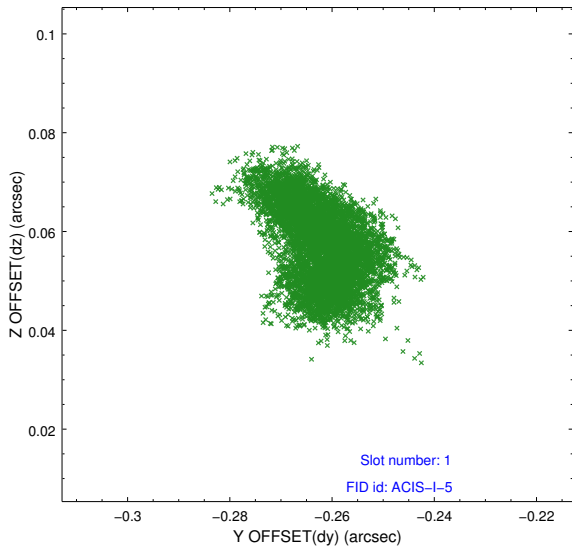


2.5 FID Slots

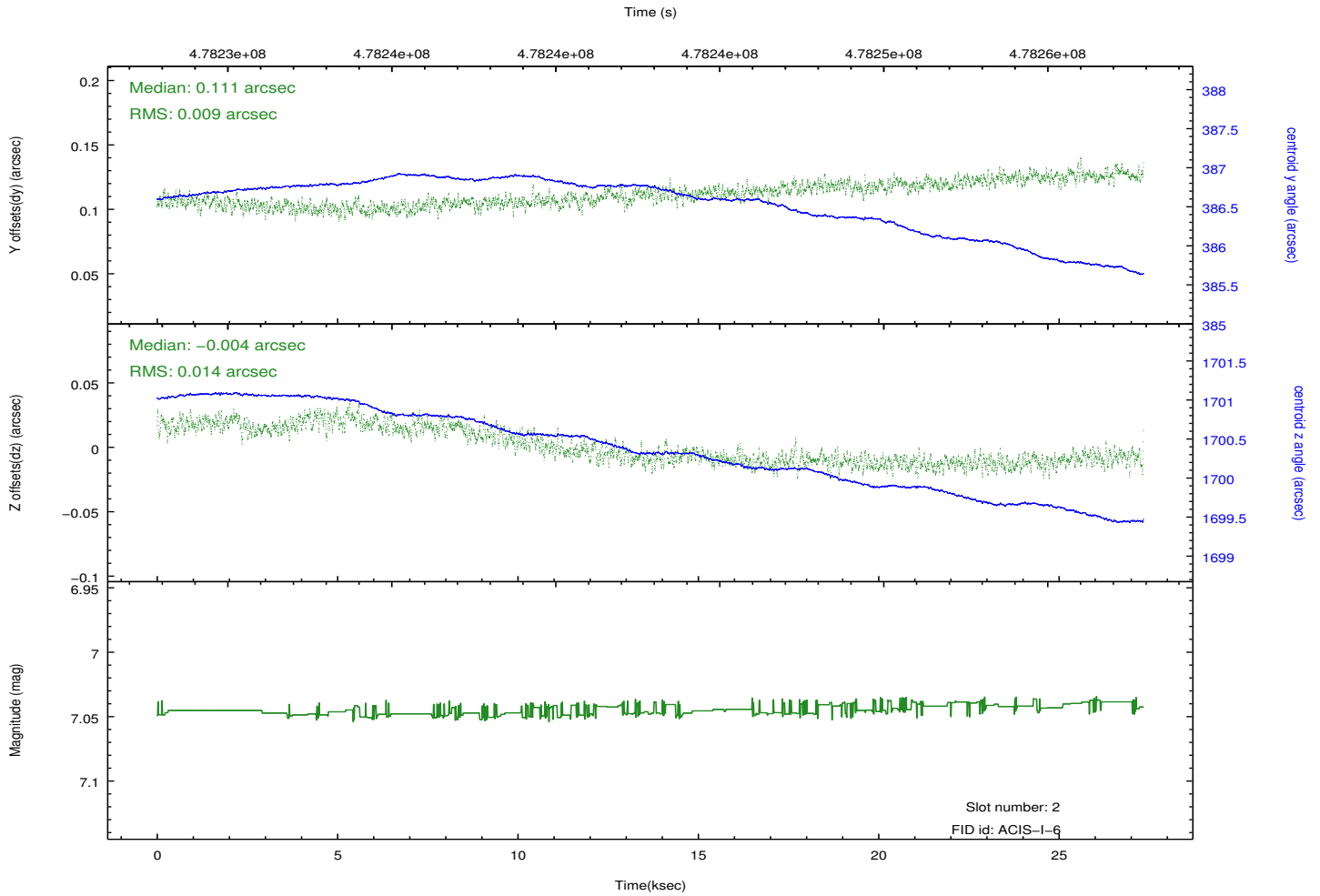
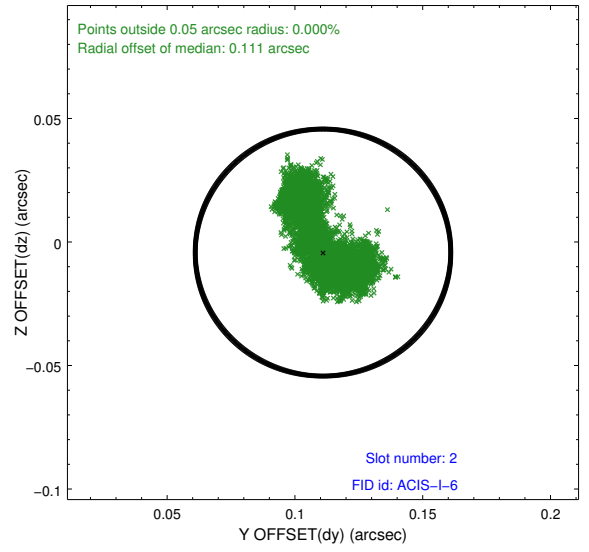
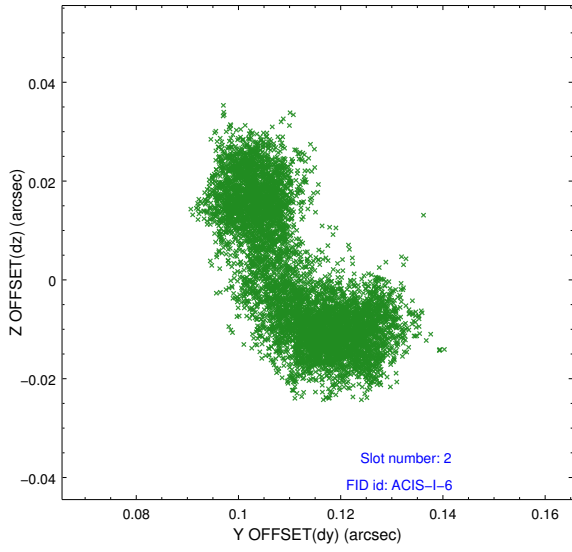
2.5.1 Slot 0



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)	2014.12.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	26.462970077395

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.