

V&V Reference Report

L2 ASCDS Version : 10.1.1

Observation 15118 - L2 Version 2
Chandra X-Ray Center

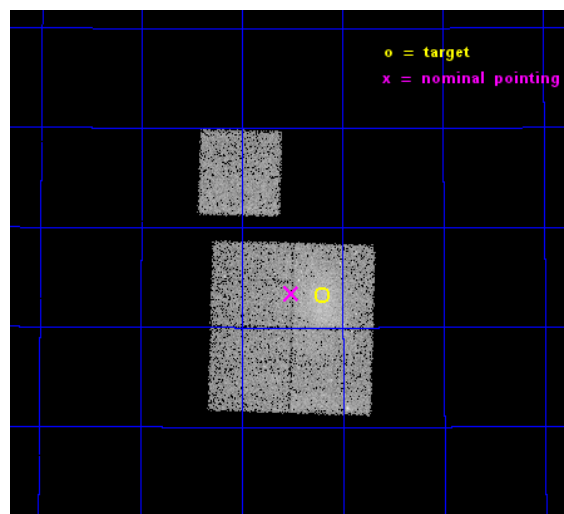
L2 Processing Date : Dec 8 2014

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1 Front

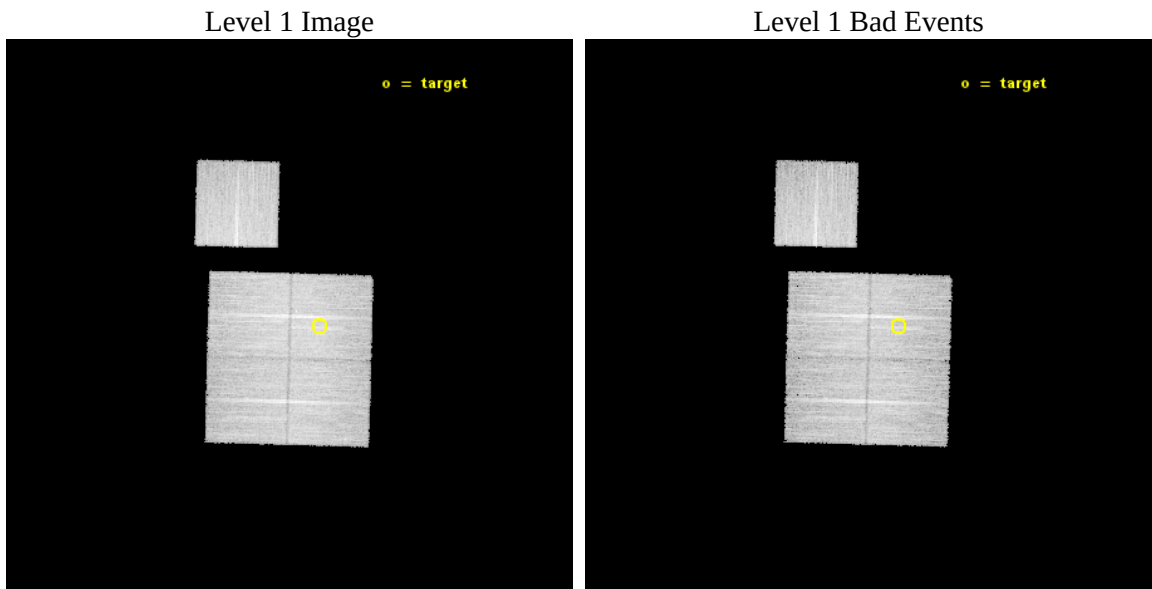
seq_num	801247	Sequence number
obs_id	15118	Observation id
title	A Chandra-Planck Legacy Program for Massive Clusters of Galaxies	P
observer	Dr. Christine Jones	Principal investigator
object	G071.61+29.79	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	266.8	Observer's specified target RA [deg]
dec_targ	45.22	Observer's specified target Dec [deg]
ra_nom	266.87709140888	Nominal RA [deg]
dec_nom	45.223743730847	Nominal Dec [deg]
roll_nom	1.569083109274	Nominal Roll [deg]
revision	2	Processing version of data
ontime	22585.745375872	Sum of GTIs [s]
livetime	22290.645985152	Livetime [s]
ontime0	22582.481255531	Sum of GTIs [s]
ontime1	22585.663295865	Sum of GTIs [s]
ontime2	22585.704335868	Sum of GTIs [s]
ontime3	22585.745375872	Sum of GTIs [s]
ontime6	22585.581215858	Sum of GTIs [s]
l2events	63459	Number of level 2 events



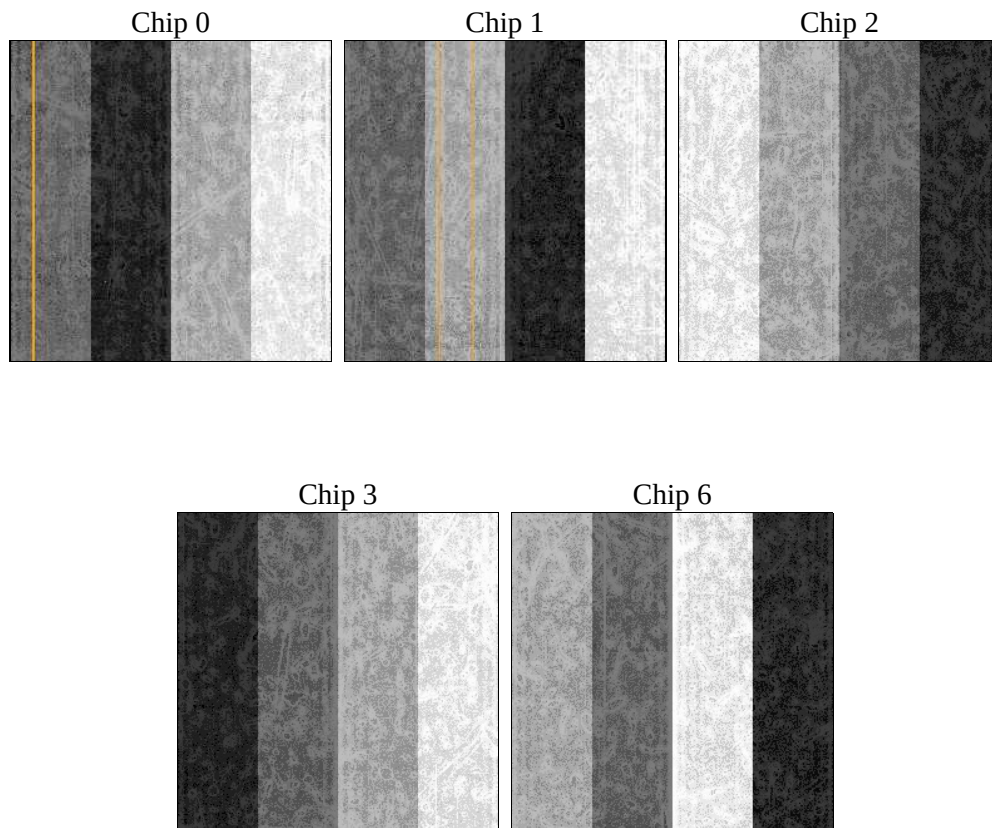
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	22500.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	22585.745375872	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	22582.481255531	Sum of GTIs [s]
date	2014-12-08T09:54:07	Date and time of file creation	ontime1	22585.663295865	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	22585.704335868	Sum of GTIs [s]
			ontime3	22585.745375872	Sum of GTIs [s]
			ontime6	22585.581215858	Sum of GTIs [s]
			l1events	525301	Number of level 1 events

2.1.4 Events

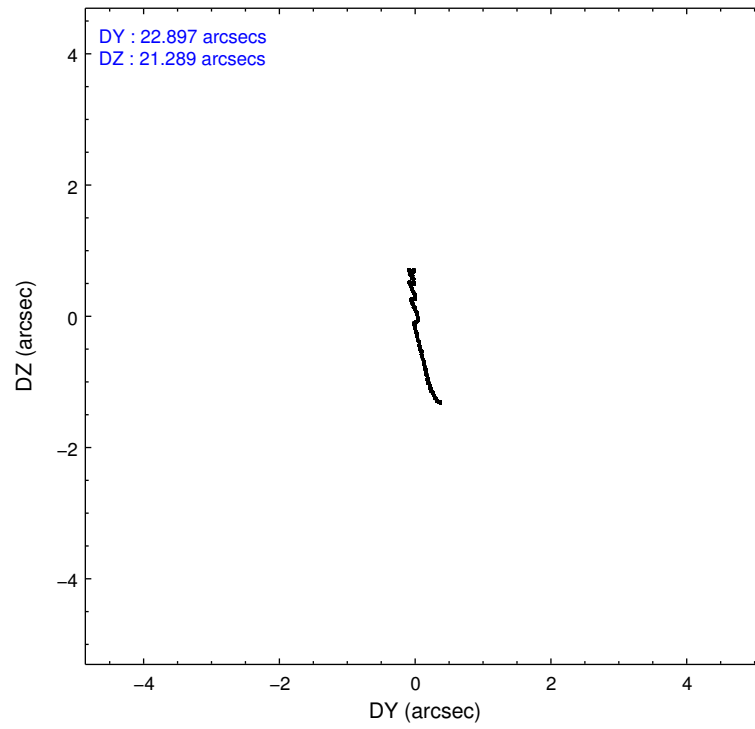
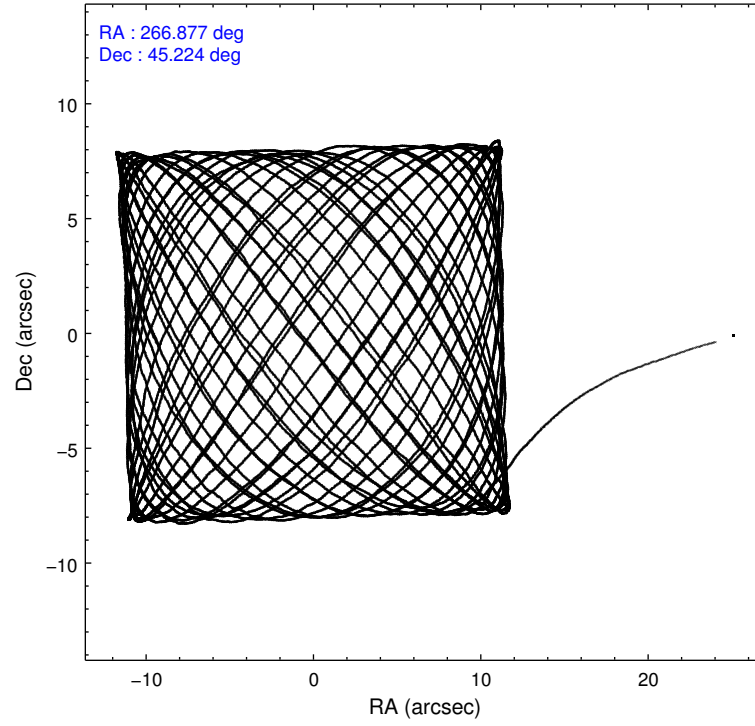
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	93971	101353	112326	110235	107416
rejected events	81098	86006	99265	90726	94741
rejected %	86%	84%	88%	82%	88%

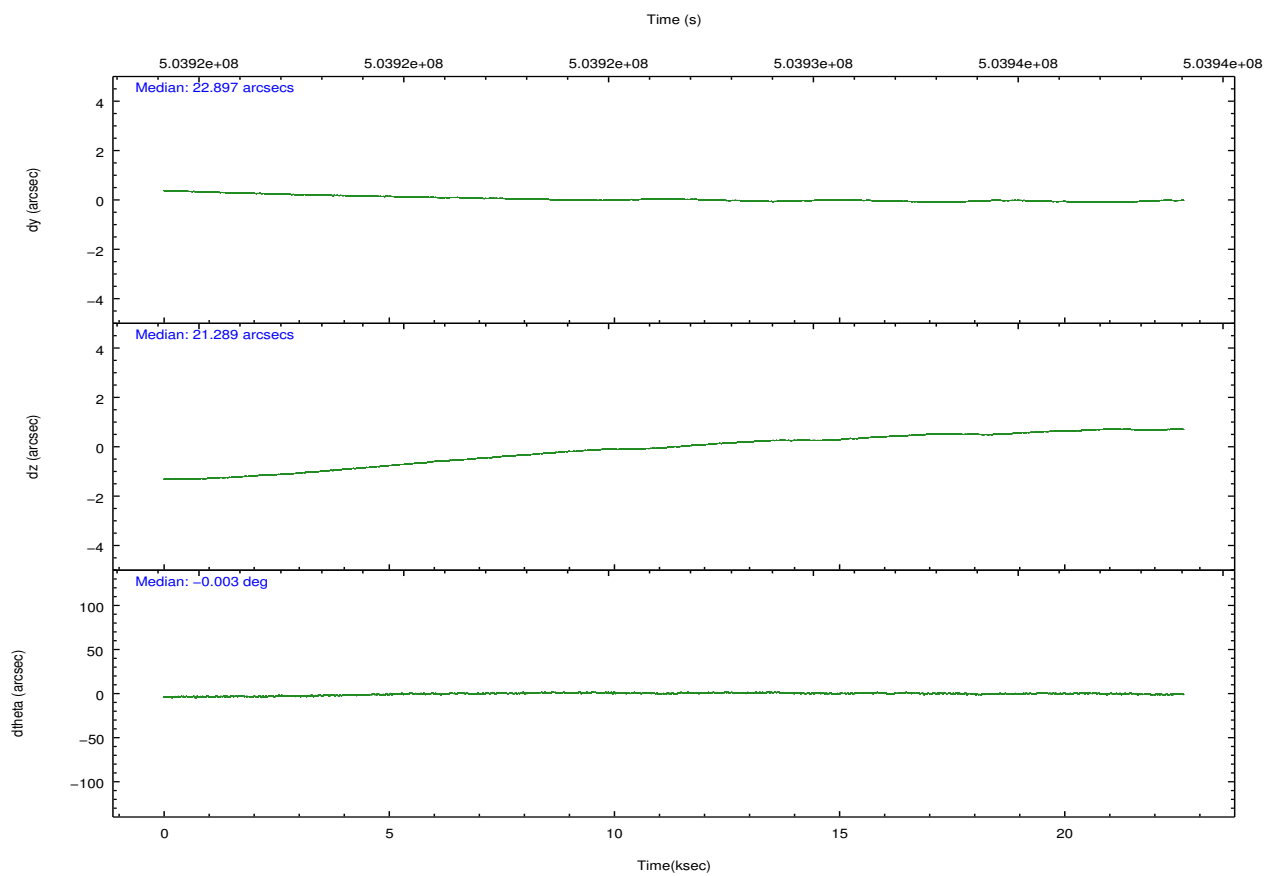
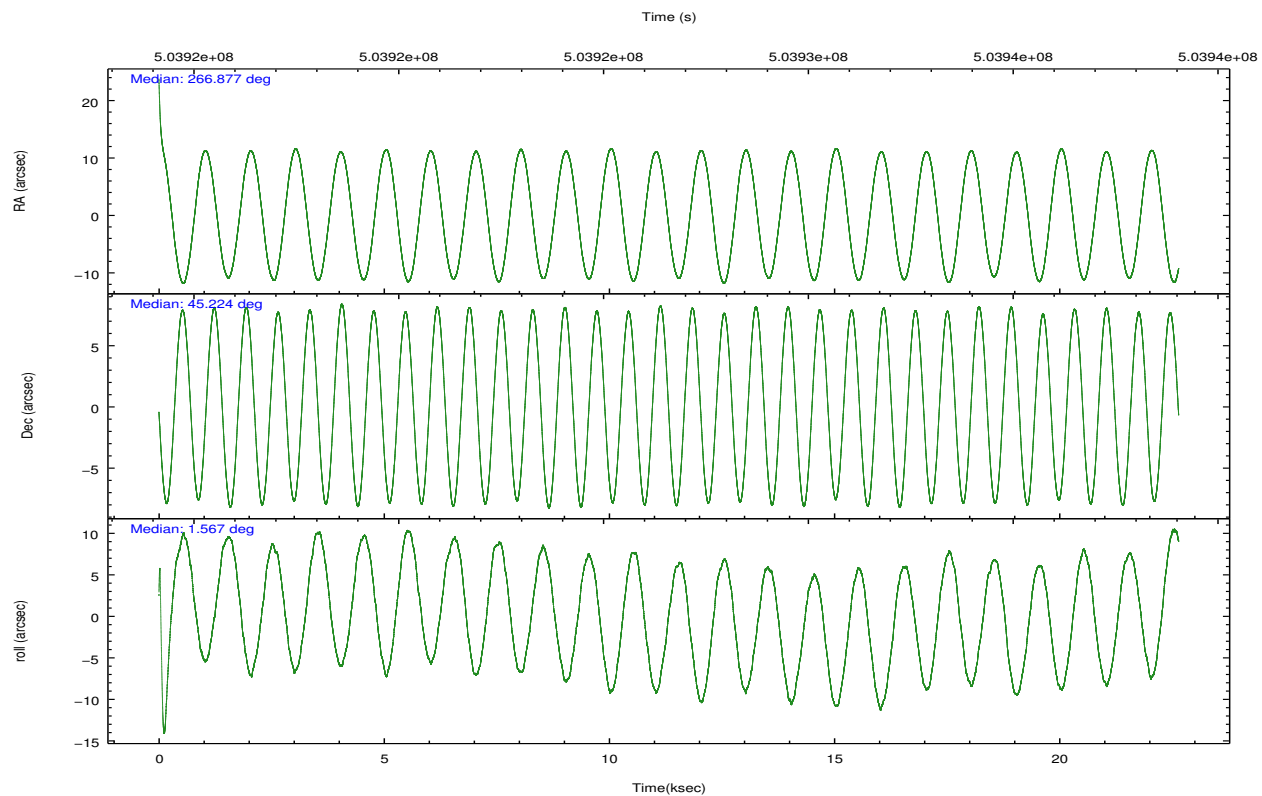
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	4455	6004	4934	10272	4241
	4%	5%	4%	9%	3%
grade 1 events	47	50	69	106	52
	0%	0%	0%	0%	0%
grade 2 events	3153	3518	3147	3416	2825
	3%	3%	2%	3%	2%
grade 3 events	1335	1401	1283	1490	1376
	1%	1%	1%	1%	1%
grade 4 events	1211	1363	1276	1529	1304
	1%	1%	1%	1%	1%
grade 5 events	5109	5209	4790	5828	5672
	5%	5%	4%	5%	5%
grade 6 events	2722	3066	2422	2806	2933
	2%	3%	2%	2%	2%
grade 7 events	75939	80742	94405	84788	89013
	80%	79%	84%	76%	82%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	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	266.843923	266.8770914088827	CCD I2 on	Y	Y
[deg] Pointing Dec	45.209250	45.223743730847	CCD I3 on	Y	Y
[deg] Pointing Roll	1.383920	1.569083109273969	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	-225.842463	-225.8433433320239	CCD S3 on	N	N
[mm] SIM translation stage offset	-7.75	-7.749109670905796	CCD S4 on	N	N
[s] Observation start time (MET)	503915405.184000	503914245.71367	CCD S5 on	N	N
Observation start date	2013-12-20T08:28:58	2013-12-20T08:10:45	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	503937905.184000	503938402.40249	On-chip summing requested	N	N
Observation end date	2013-12-20T14:43:58	2013-12-20T14:53:22	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



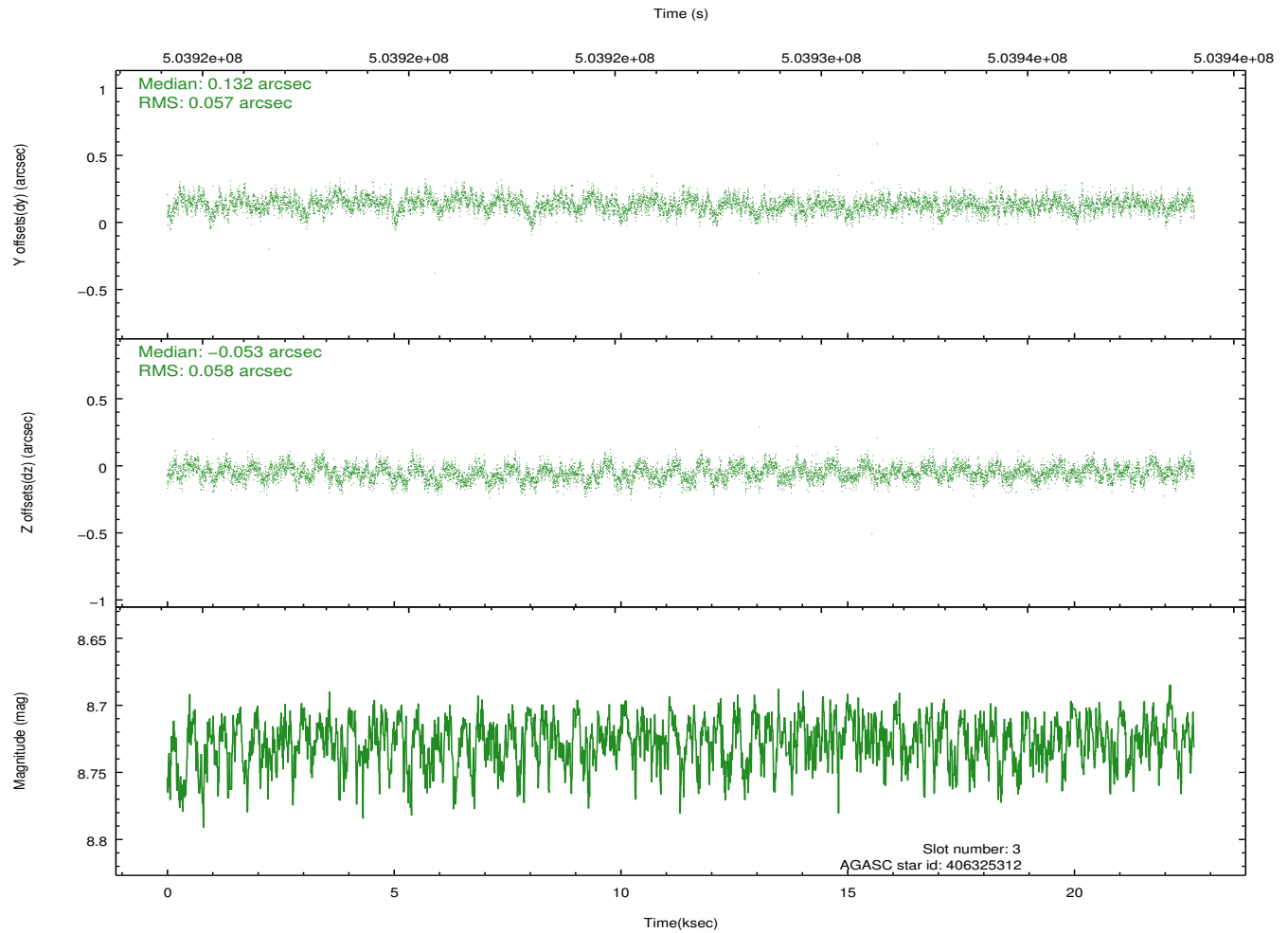
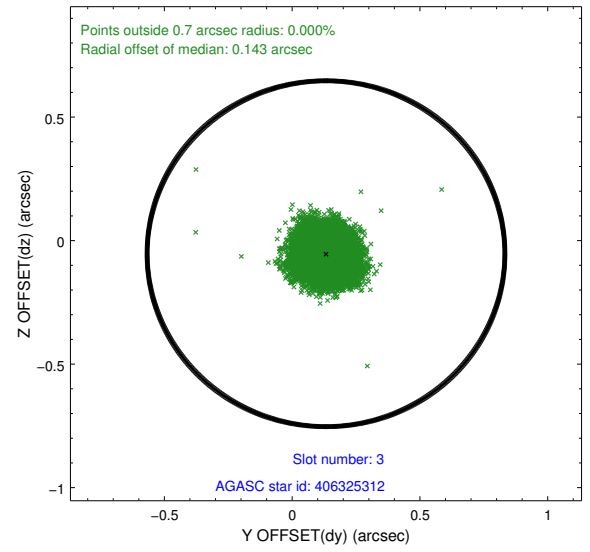
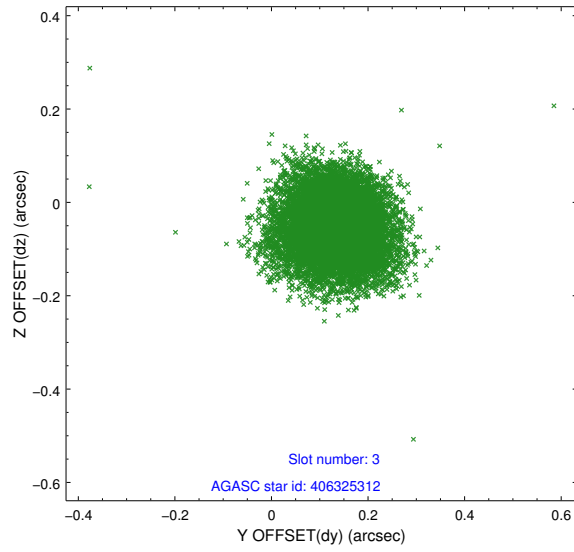


Slot Statistics

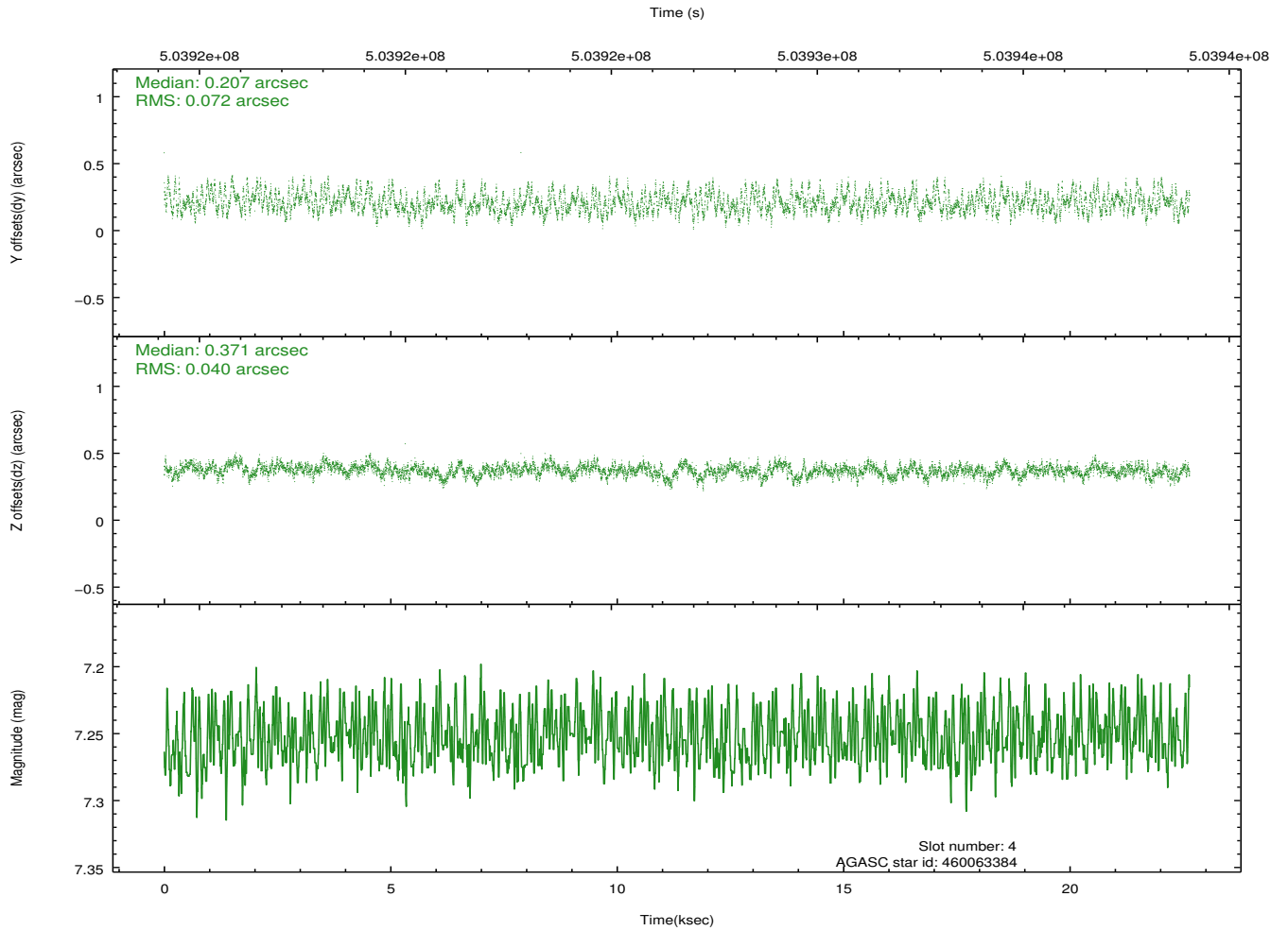
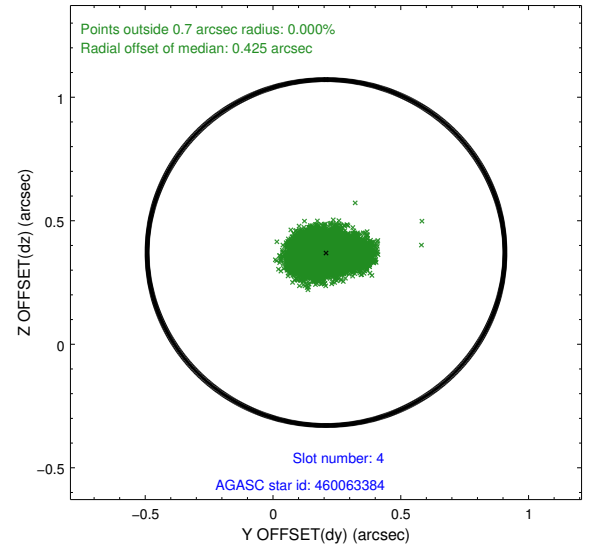
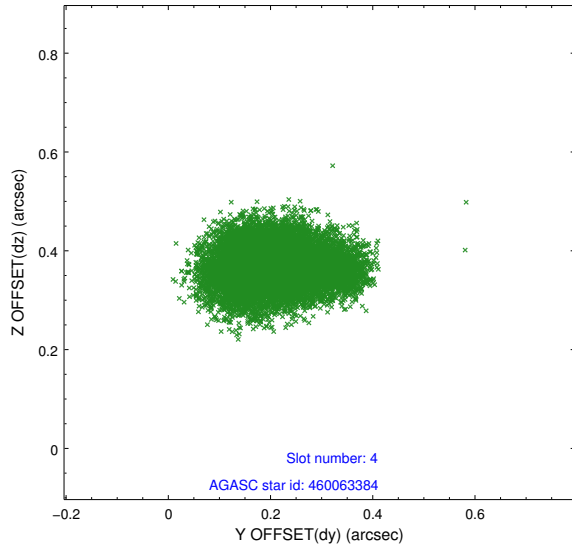
lot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_x
0	FID		ACIS-I-1	7.21	5524	0.169	-0.132	0.021	0.031	0.000000	0.000000	916.33	-1004.13
1	FID		ACIS-I-5	7.20	5523	-0.388	0.113	0.013	0.034	0.000000	0.000000	-1832.28	893.45
2	FID		ACIS-I-6	7.21	5524	0.126	0.100	0.026	0.037	0.000000	0.000000	381.64	1538.16
3	GUIDE	used	406325312	8.73	11045	0.132	-0.053	0.086	0.139	267.155174	44.831374	762.25	-1377.46
4	GUIDE	used	460063384	7.25	11048	0.207	0.371	0.088	0.145	266.017956	45.034702	-2114.88	-566.43
5	BAD	used	460204384	5.79	6901	-0.472	-0.131	0.059	0.091	267.196727	45.699830	929.05	1745.39
6	GUIDE	used	460208168	9.15	11043	-0.114	-0.296	0.101	0.158	267.188720	45.740992	912.50	1894.76
7	GUIDE	used	460205768	9.36	11034	0.061	0.062	0.112	0.184	267.693150	45.192917	2152.83	-99.18

2.4 Star Slots

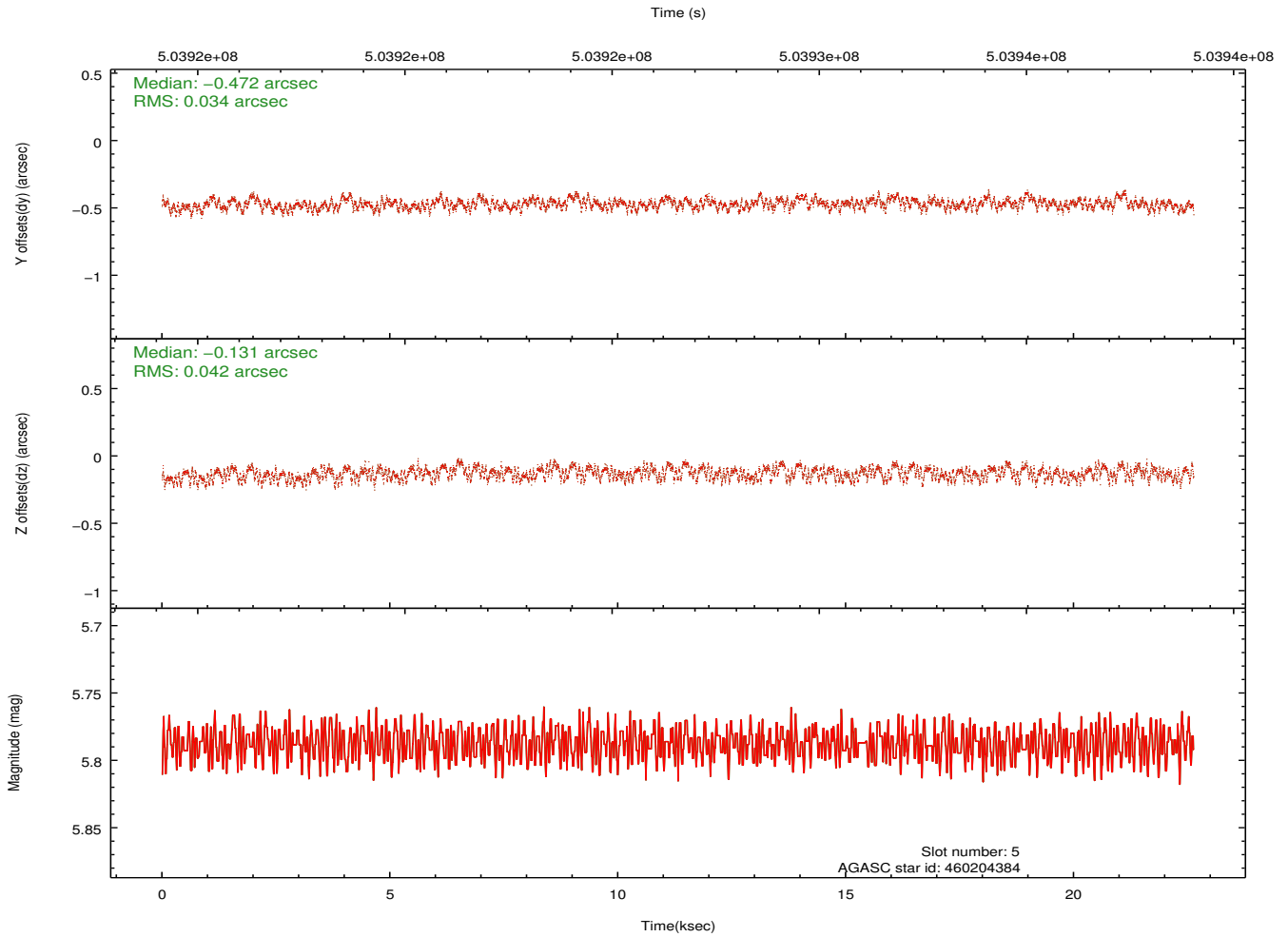
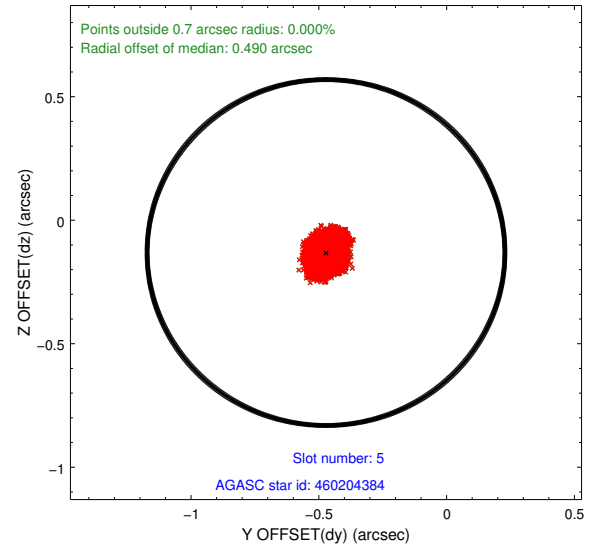
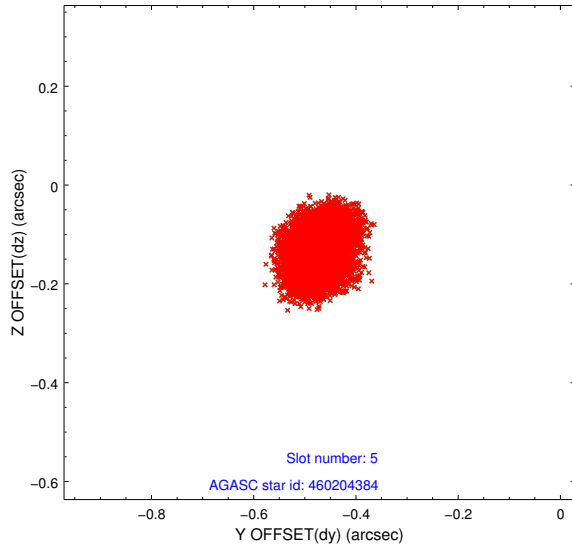
2.4.1 Slot 3



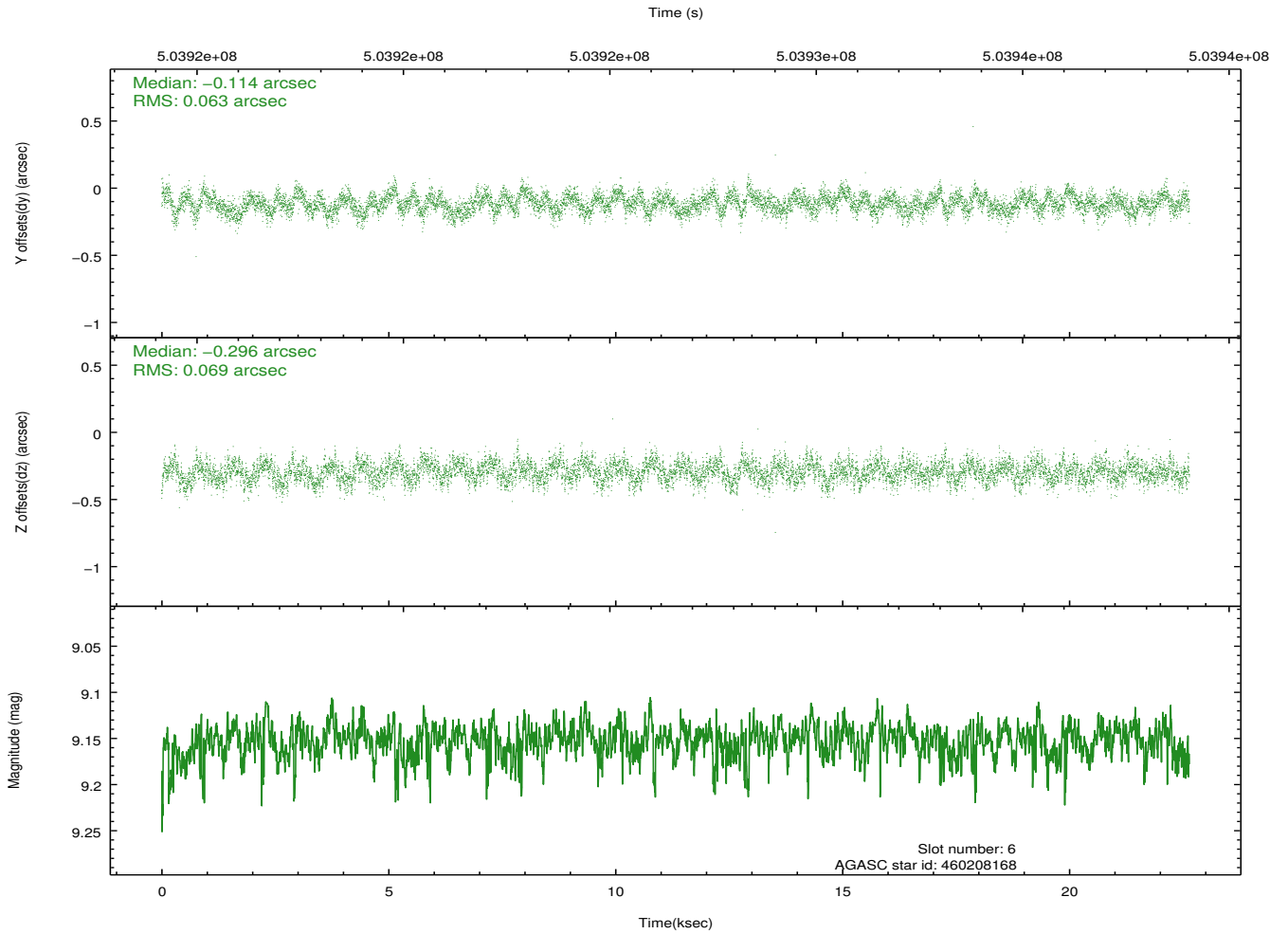
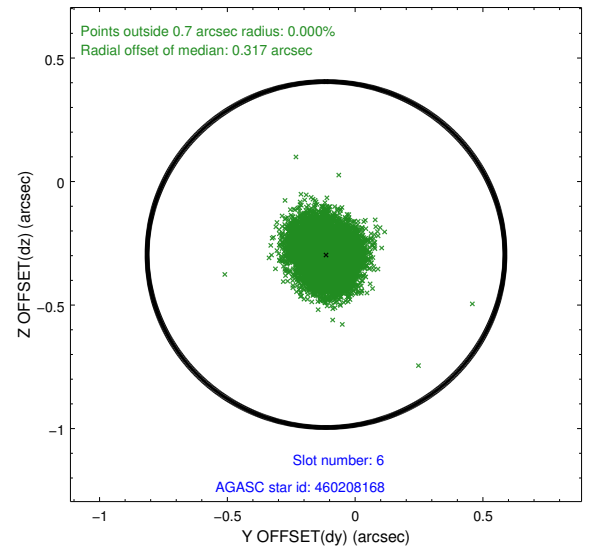
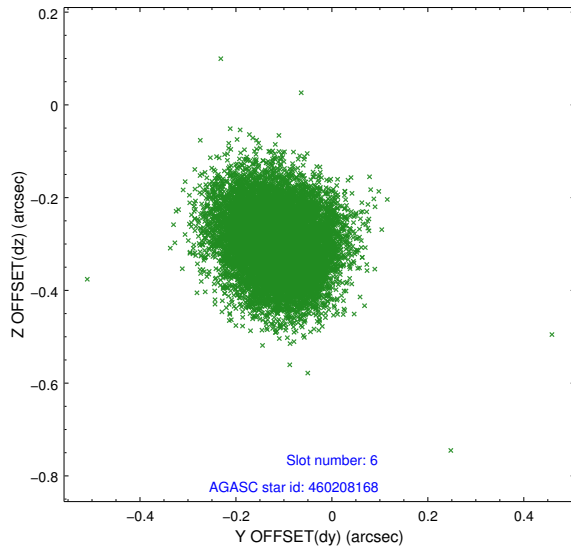
2.4.2 Slot 4



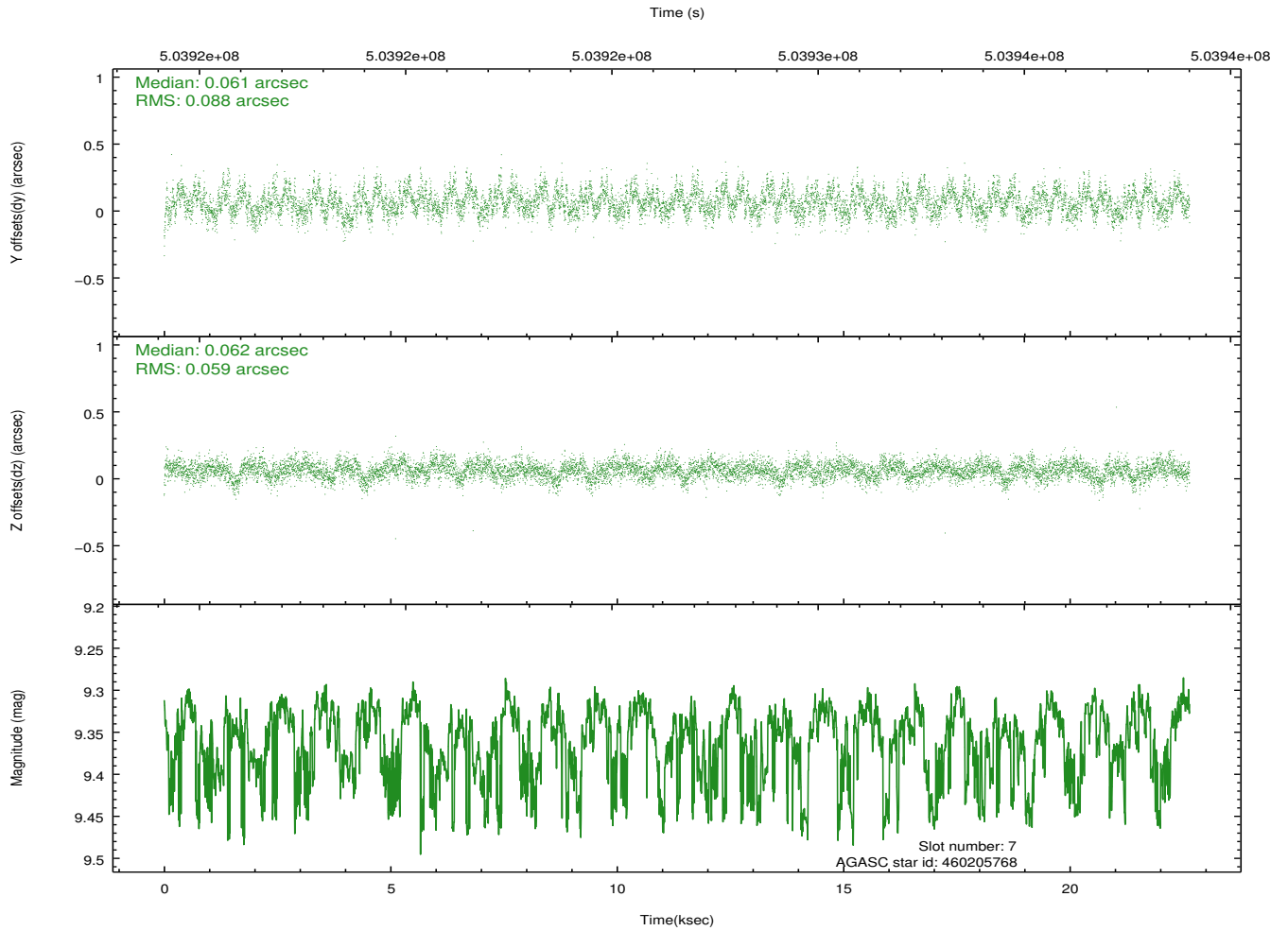
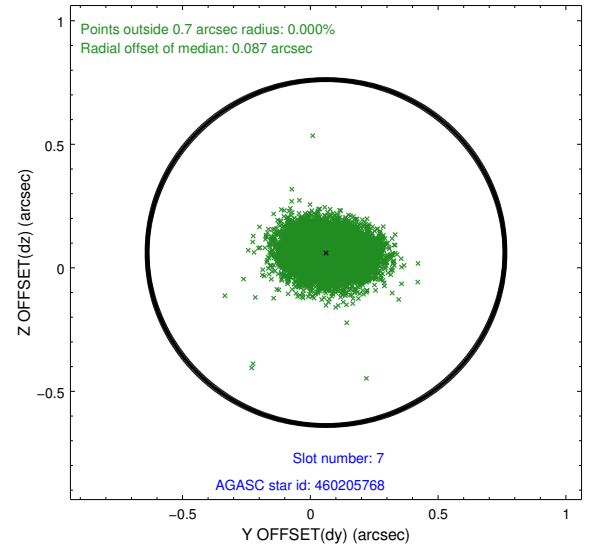
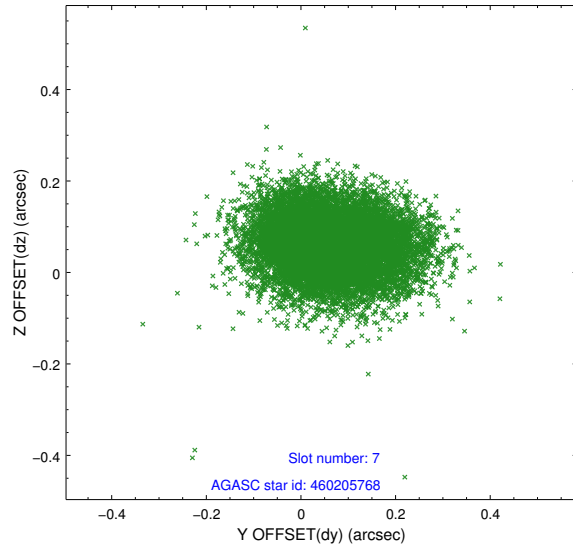
2.4.3 Slot 5



2.4.4 Slot 6

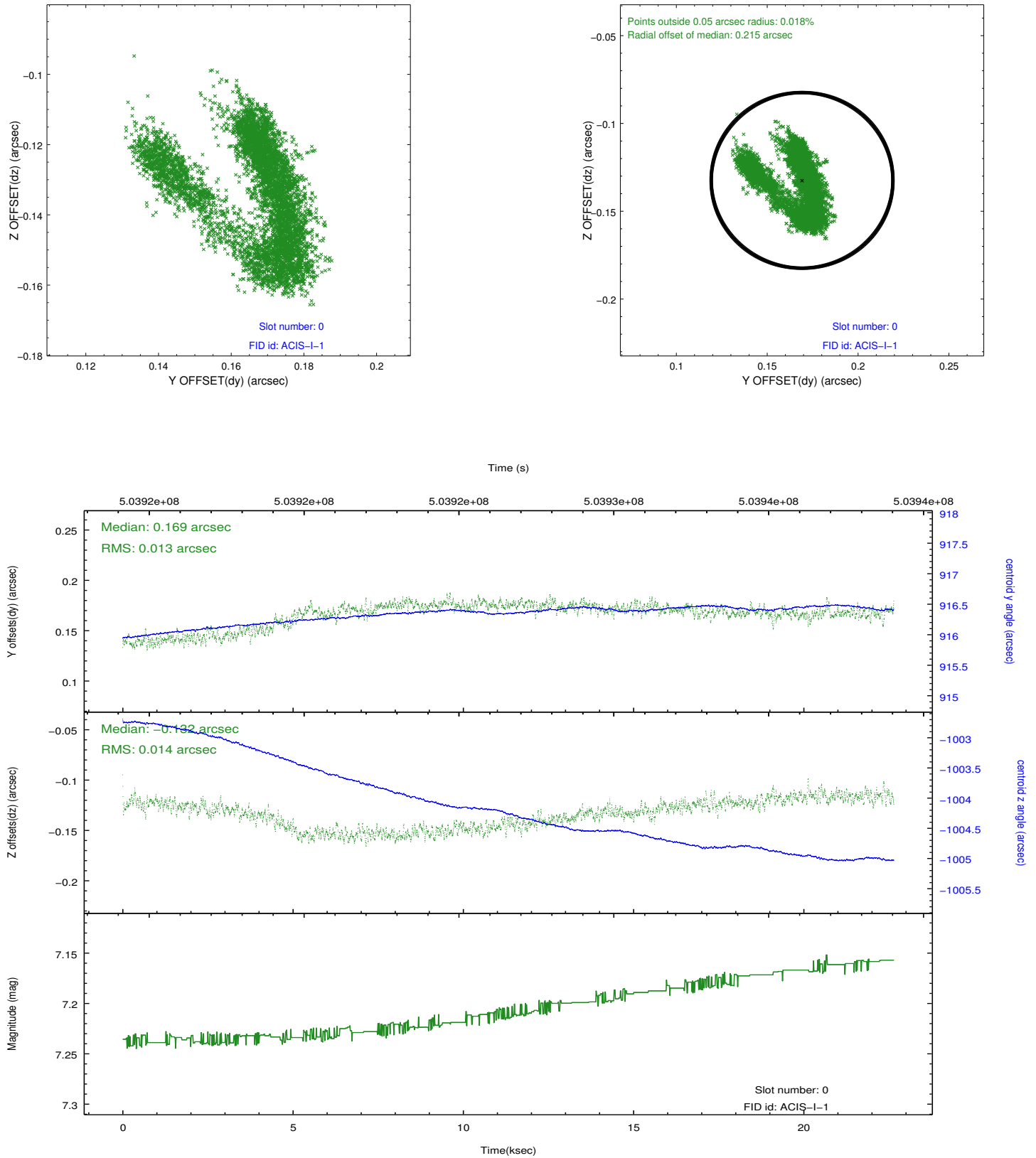


2.4.5 Slot 7

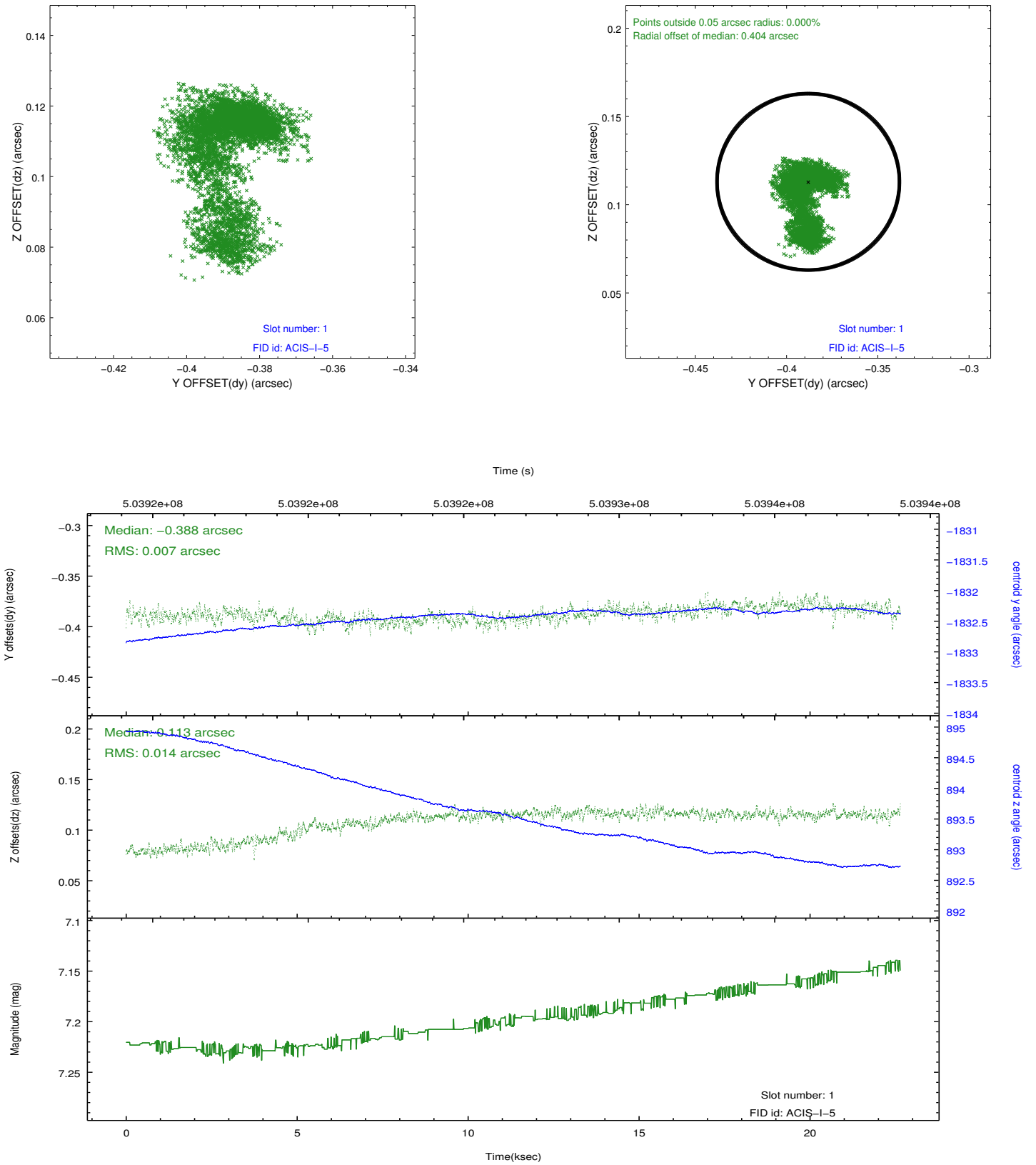


2.5 FID Slots

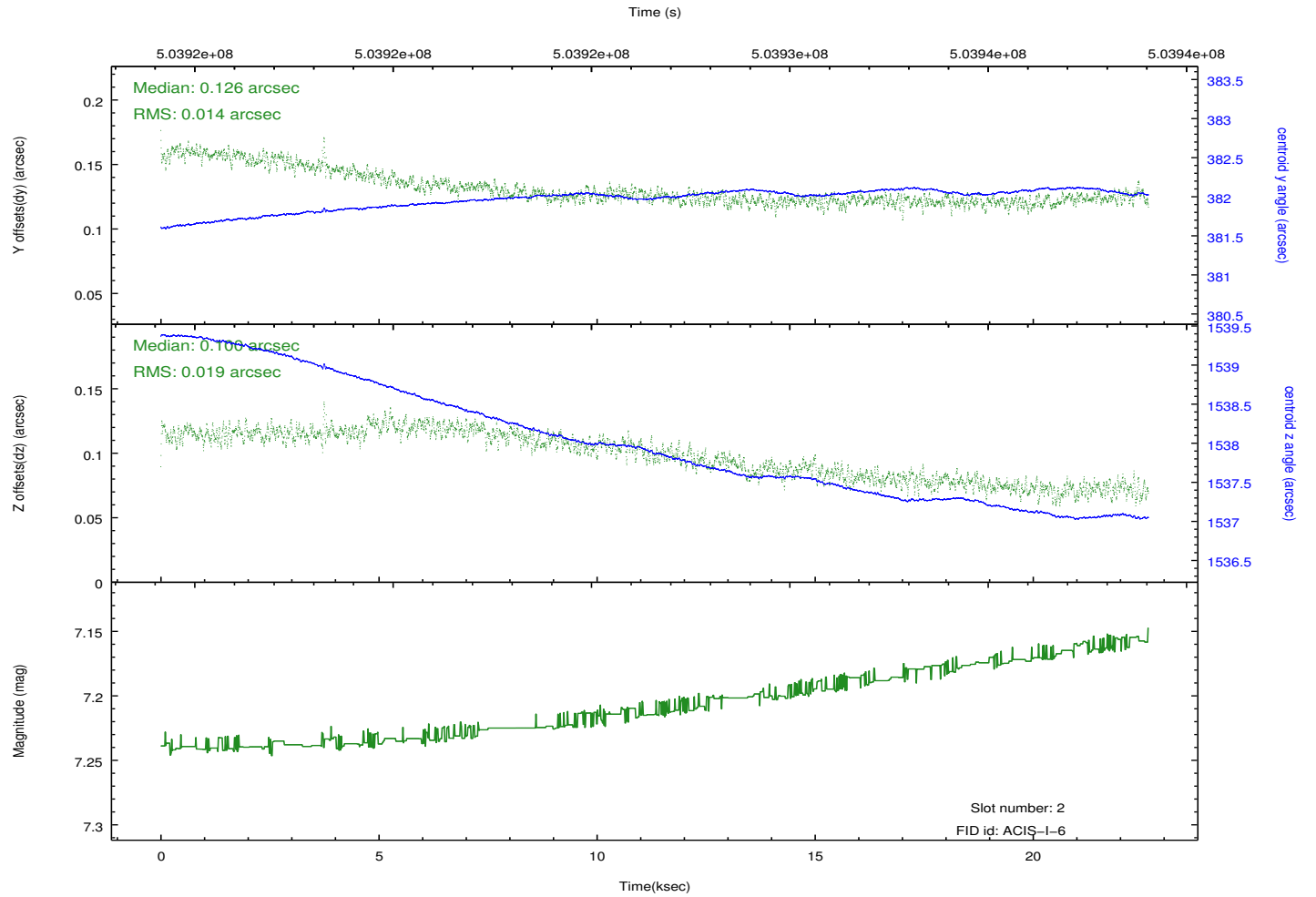
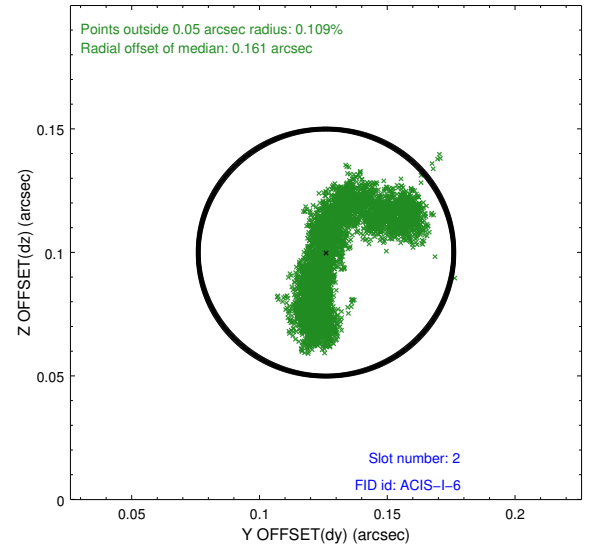
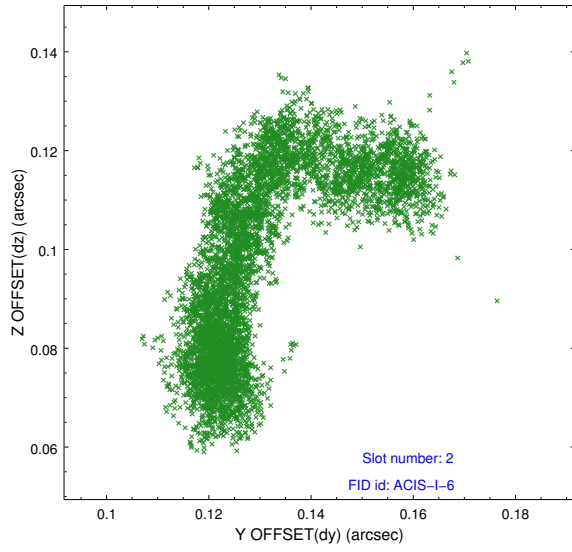
2.5.1 Slot 0



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)	2014.12.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	22.585745375872

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.