

V&V Reference Report

L2 ASCDS Version : 10

Observation 15136 - L2 Version 2
Chandra X-Ray Center

L2 Processing Date : Dec 3 2014

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1 Front

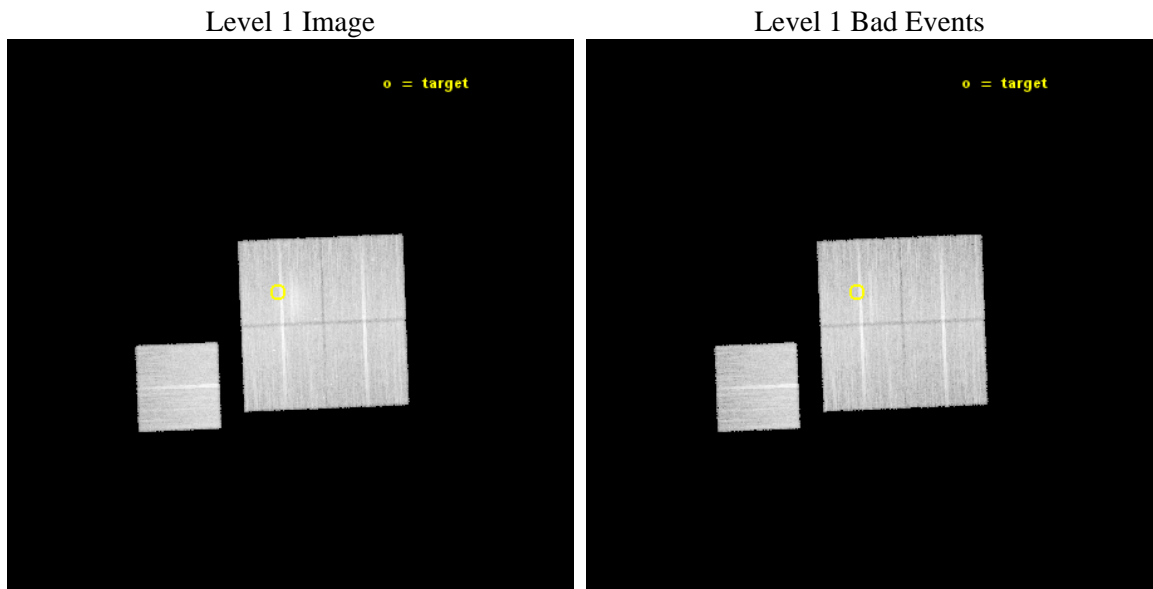
seq_num	801265	Sequence number
obs_id	15136	Observation id
title	A Chandra-Planck Legacy Program for Massive Clusters of Galaxies	P
observer	Dr. Christine Jones	Principal investigator
object	G139.19+56.35	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	175.655833	Observer's specified target RA [deg]
dec_targ	58.537306	Observer's specified target Dec [deg]
ra_nom	175.61602367641	Nominal RA [deg]
dec_nom	58.48378696623	Nominal Dec [deg]
roll_nom	267.69323799385	Nominal Roll [deg]
revision	2	Processing version of data
ontime	33086.300254464	Sum of GTIs [s]
livetime	32654.00338386	Livetime [s]
ontime0	33083.159294128	Sum of GTIs [s]
ontime1	33086.300254464	Sum of GTIs [s]
ontime2	33086.300254464	Sum of GTIs [s]
ontime3	33086.300254464	Sum of GTIs [s]
ontime6	33083.1189937	Sum of GTIs [s]
l2events	91161	Number of level 2 events



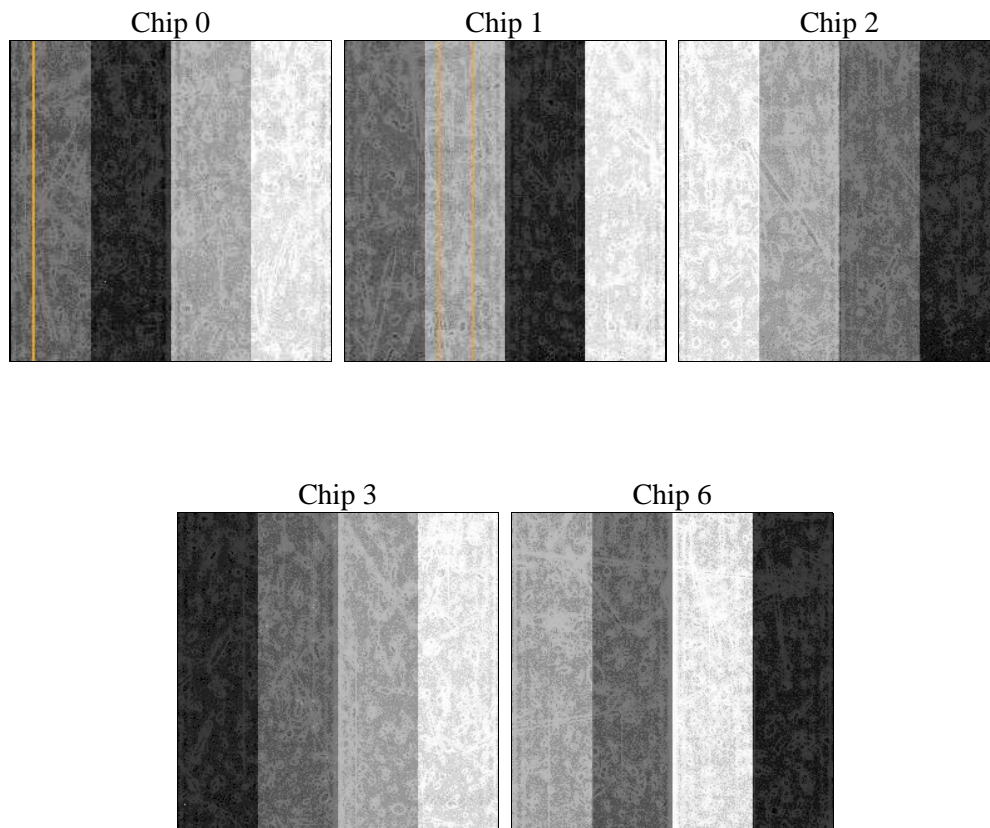
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	33000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	33086.300254464	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	33083.159294128	Sum of GTIs [s]
date	2014-12-04T01:05:37	Date and time of file creation	ontime1	33086.300254464	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	33086.300254464	Sum of GTIs [s]
			ontime3	33086.300254464	Sum of GTIs [s]
			ontime6	33083.1189937	Sum of GTIs [s]
			l1events	771111	Number of level 1 events

2.1.4 Events

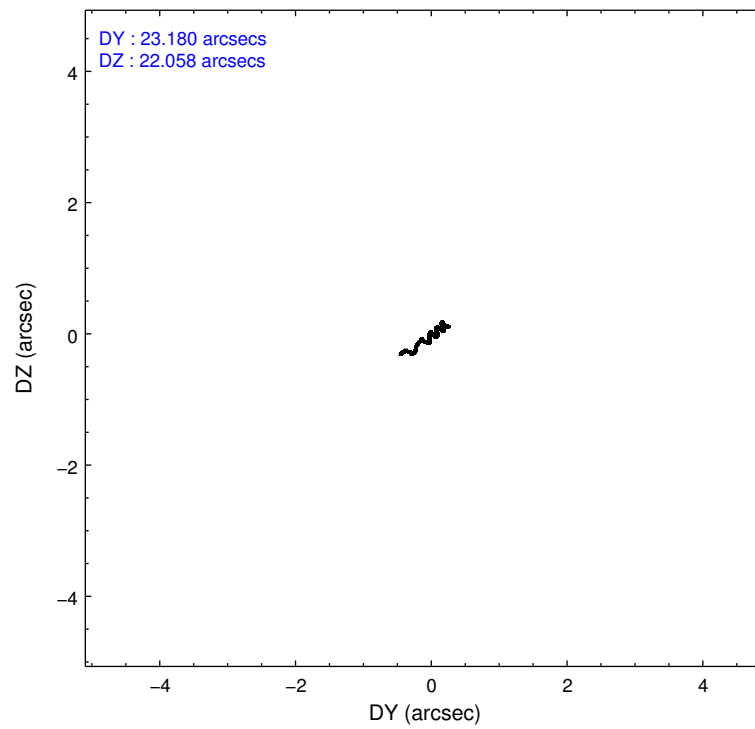
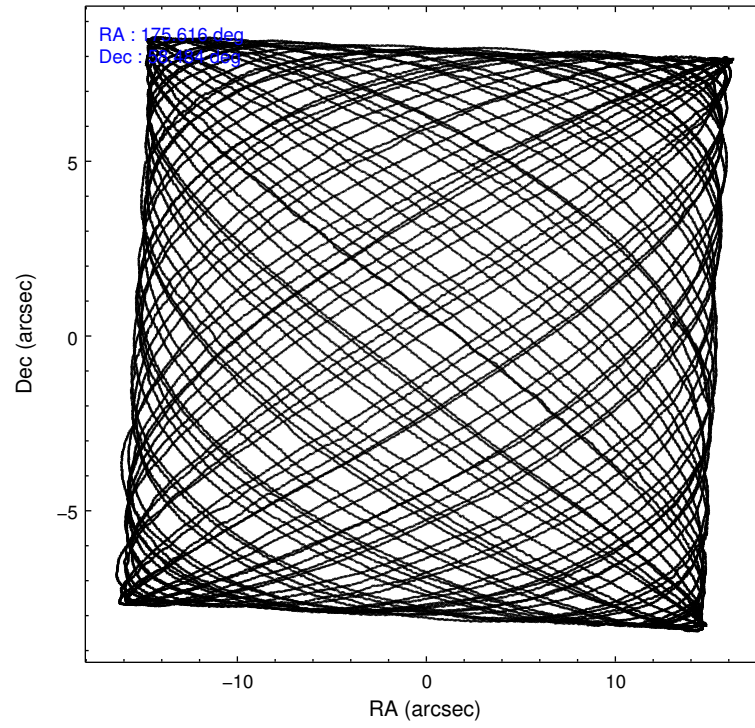
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	143095	145740	160308	167655	154313
rejected events	124521	125050	140847	138186	134923
rejected %	87%	85%	87%	82%	87%

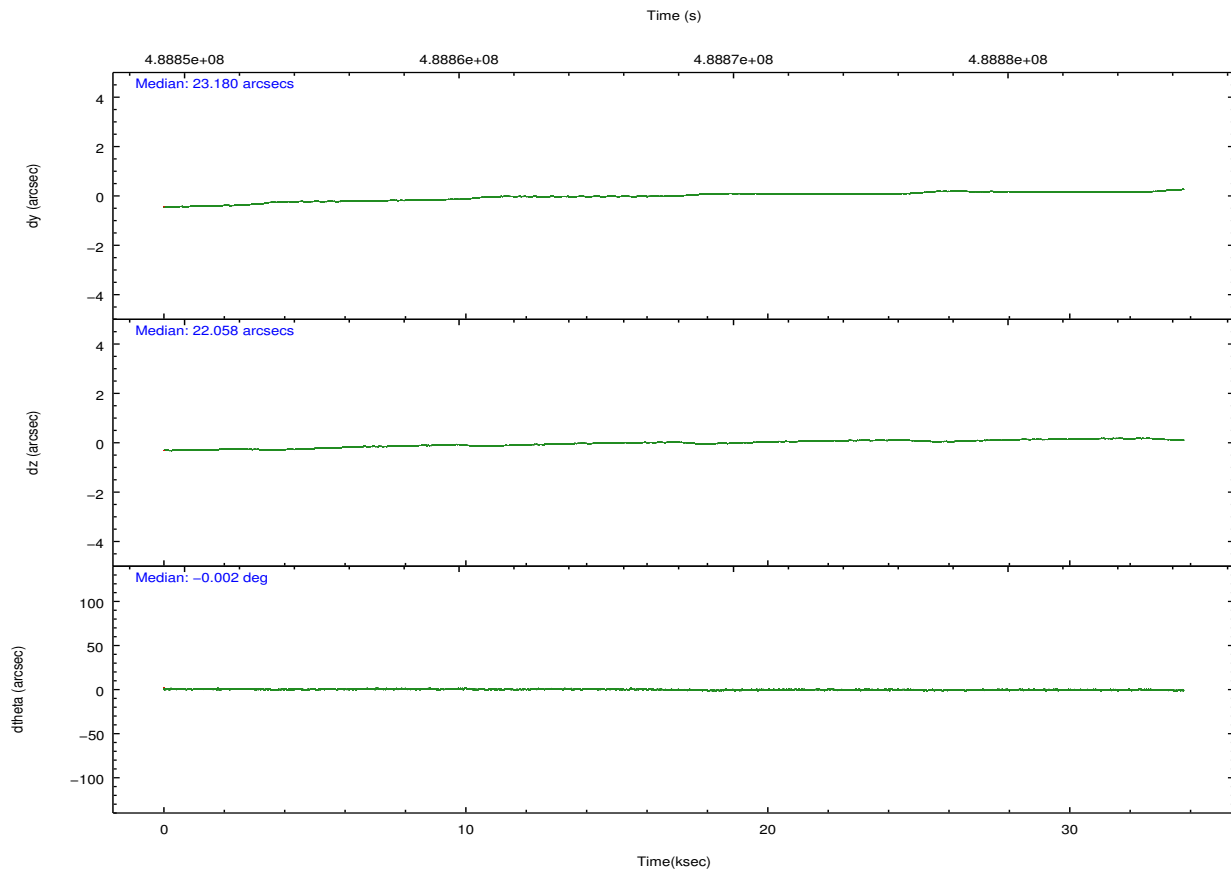
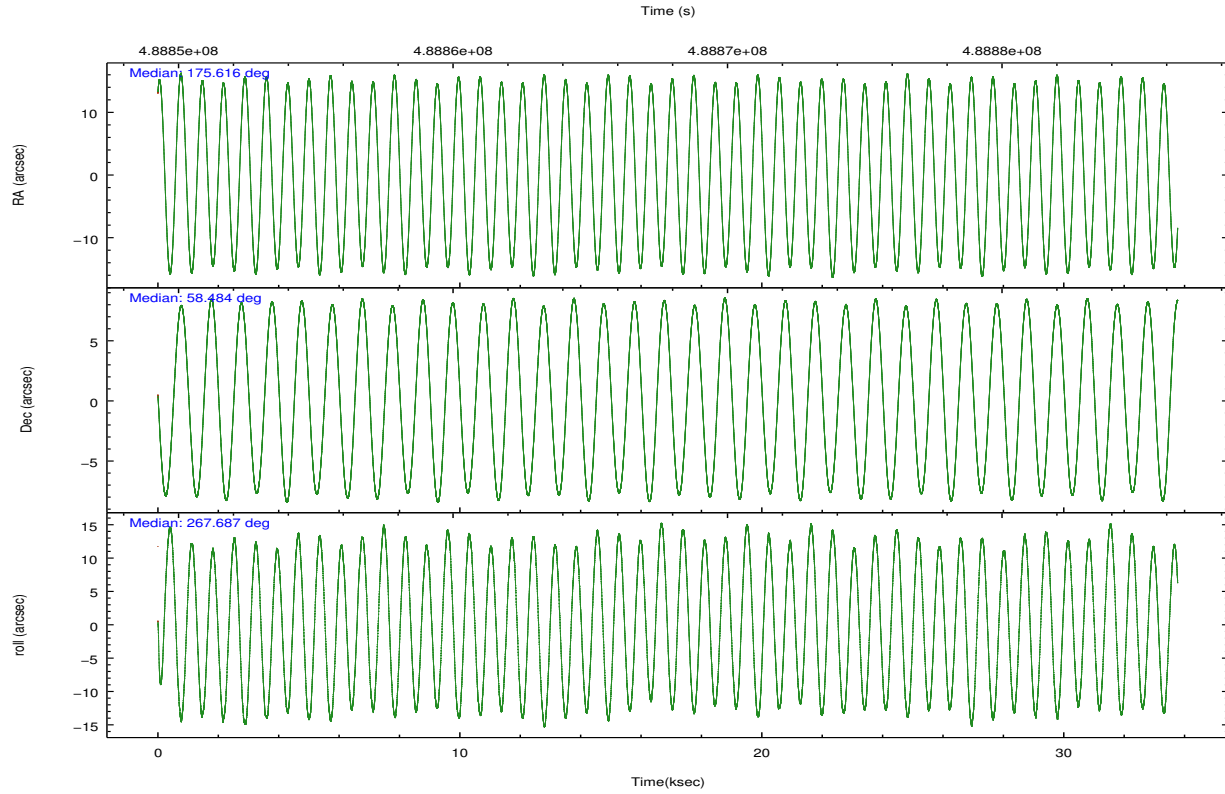
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	6386	7297	7481	15589	6716
	4%	5%	4%	9%	4%
grade 1 events	81	82	99	149	88
	0%	0%	0%	0%	0%
grade 2 events	4818	5031	4775	5265	4459
	3%	3%	2%	3%	2%
grade 3 events	1920	1991	1858	2302	1930
	1%	1%	1%	1%	1%
grade 4 events	1810	2040	1924	2238	1921
	1%	1%	1%	1%	1%
grade 5 events	7216	7888	6704	8592	8162
	5%	5%	4%	5%	5%
grade 6 events	3641	4333	3424	4078	4365
	2%	2%	2%	2%	2%
grade 7 events	117223	117078	134043	129442	126672
	81%	80%	83%	77%	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	175.591382	175.6160236764129	CCD I2 on	Y	Y
[deg] Pointing Dec	58.508102	58.4837869662295	CCD I3 on	Y	Y
[deg] Pointing Roll	267.505563	267.6932379938492	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	-225.8458576473255	CCD S3 on	N	N
[mm] SIM translation stage offset	-7.75	-7.746595355604228	CCD S4 on	N	N
[s] Observation start time (MET)	488851716.184000	488850482.55319	CCD S5 on	N	N
Observation start date	2013-06-29T00:07:29	2013-06-28T23:48:02	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	488884716.184000	488885573.43009	On-chip summing requested	N	N
Observation end date	2013-06-29T09:17:29	2013-06-29T09:32:53	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





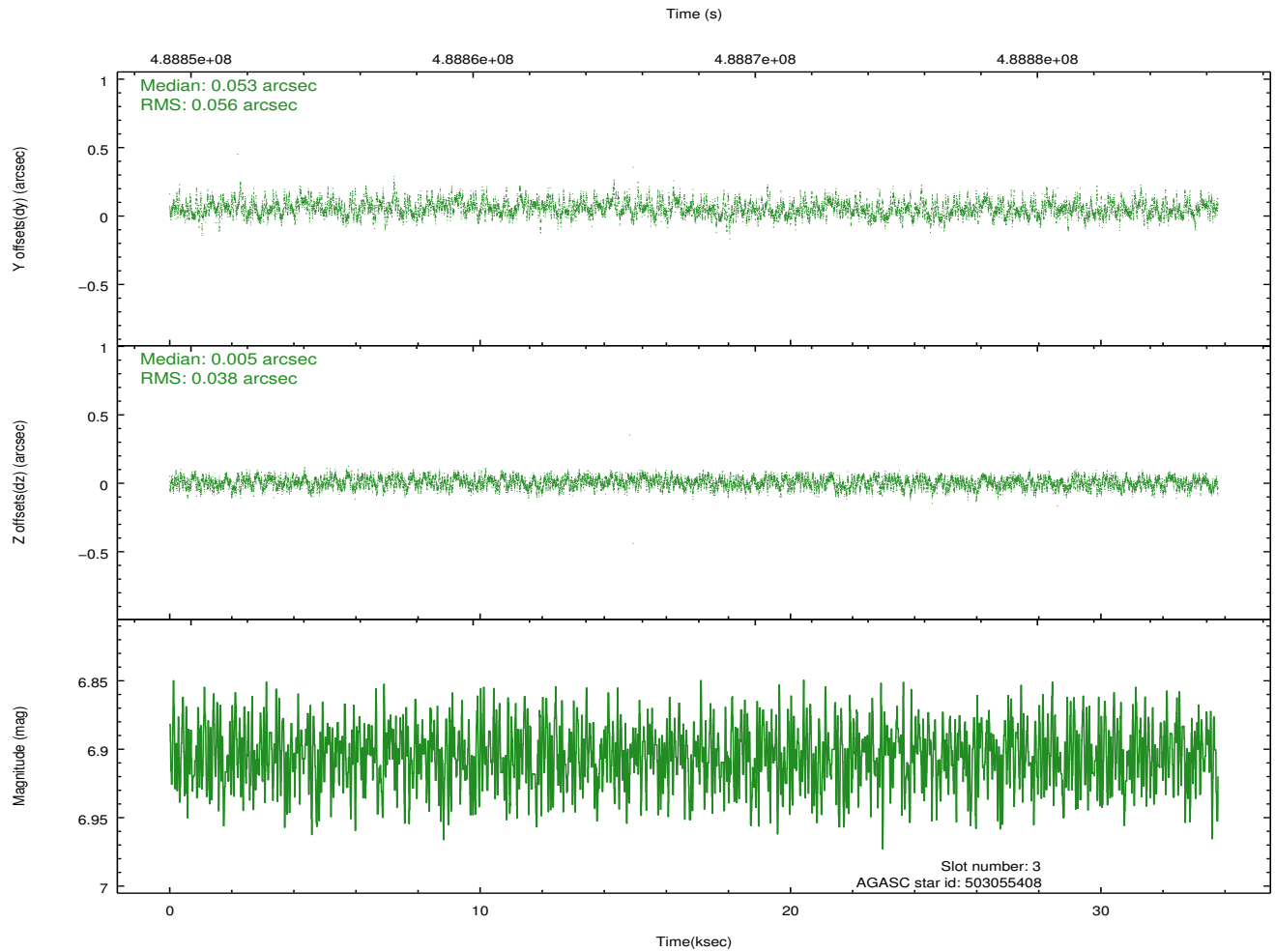
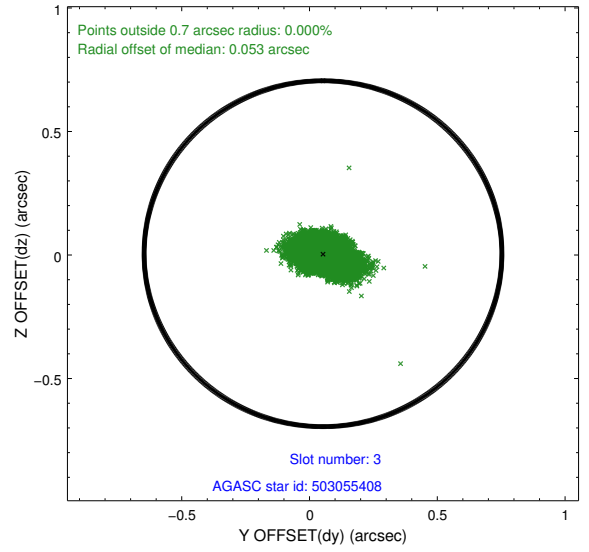
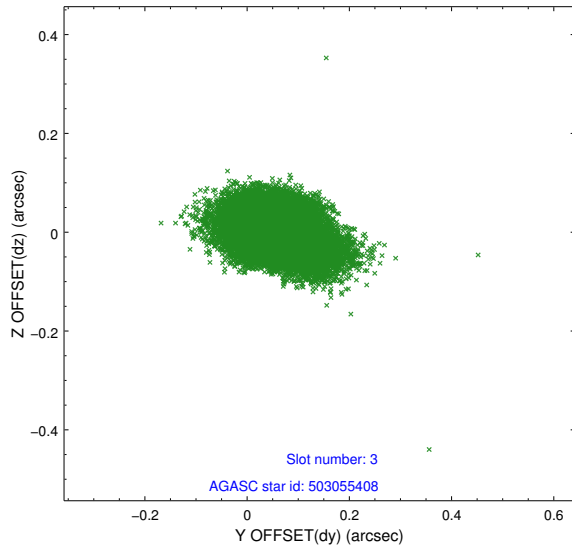
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.06	8238	0.135	-0.068	0.017	0.025	0.000000	0.000000	916.07	-1004.90
1	FID		ACIS-I-5	7.05	8238	-0.339	0.102	0.008	0.014	0.000000	0.000000	-1832.50	892.69
2	FID		ACIS-I-6	7.06	8236	0.114	0.039	0.014	0.021	0.000000	0.000000	381.52	1537.21
3	GUIDE	used	503055408	6.91	16472	0.053	0.005	0.070	0.119	175.114291	57.970404	1970.56	-825.42
4	GUIDE	used	503058032	8.29	16467	-0.114	-0.178	0.088	0.146	175.962146	58.411045	317.05	713.77
5	GUIDE	used	503058768	7.69	16473	-0.257	-0.252	0.076	0.119	176.470694	58.027467	1644.94	1747.64
6	GUIDE	used	503059424	9.46	16458	0.214	0.117	0.149	0.241	174.449124	58.799440	-972.45	-2174.00
7	GUIDE	used	503061752	8.30	16468	0.096	0.309	0.094	0.146	174.608337	59.099209	-2059.74	-1908.55

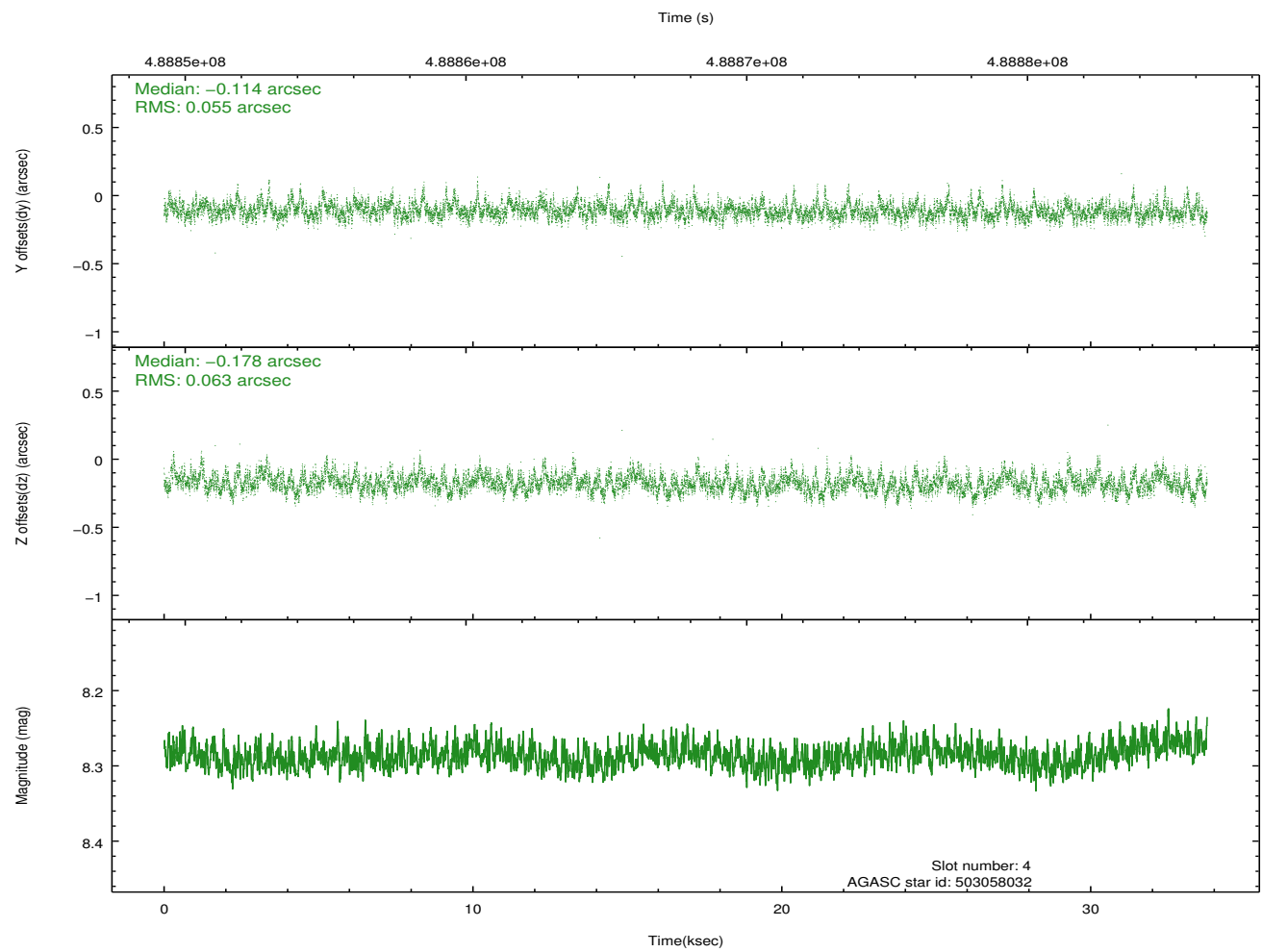
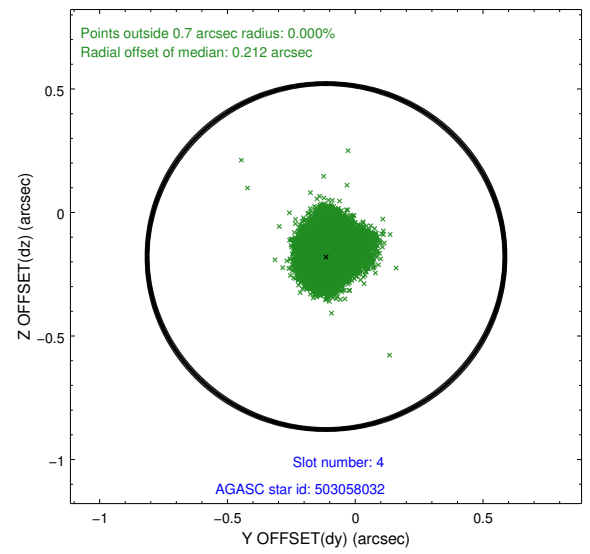
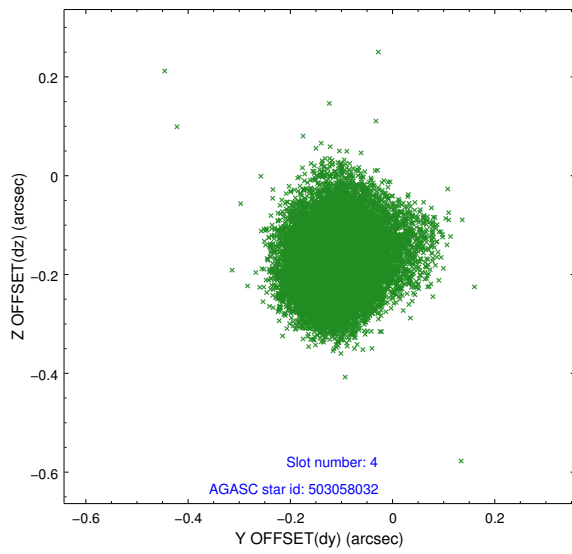
∞

2.4 Star Slots

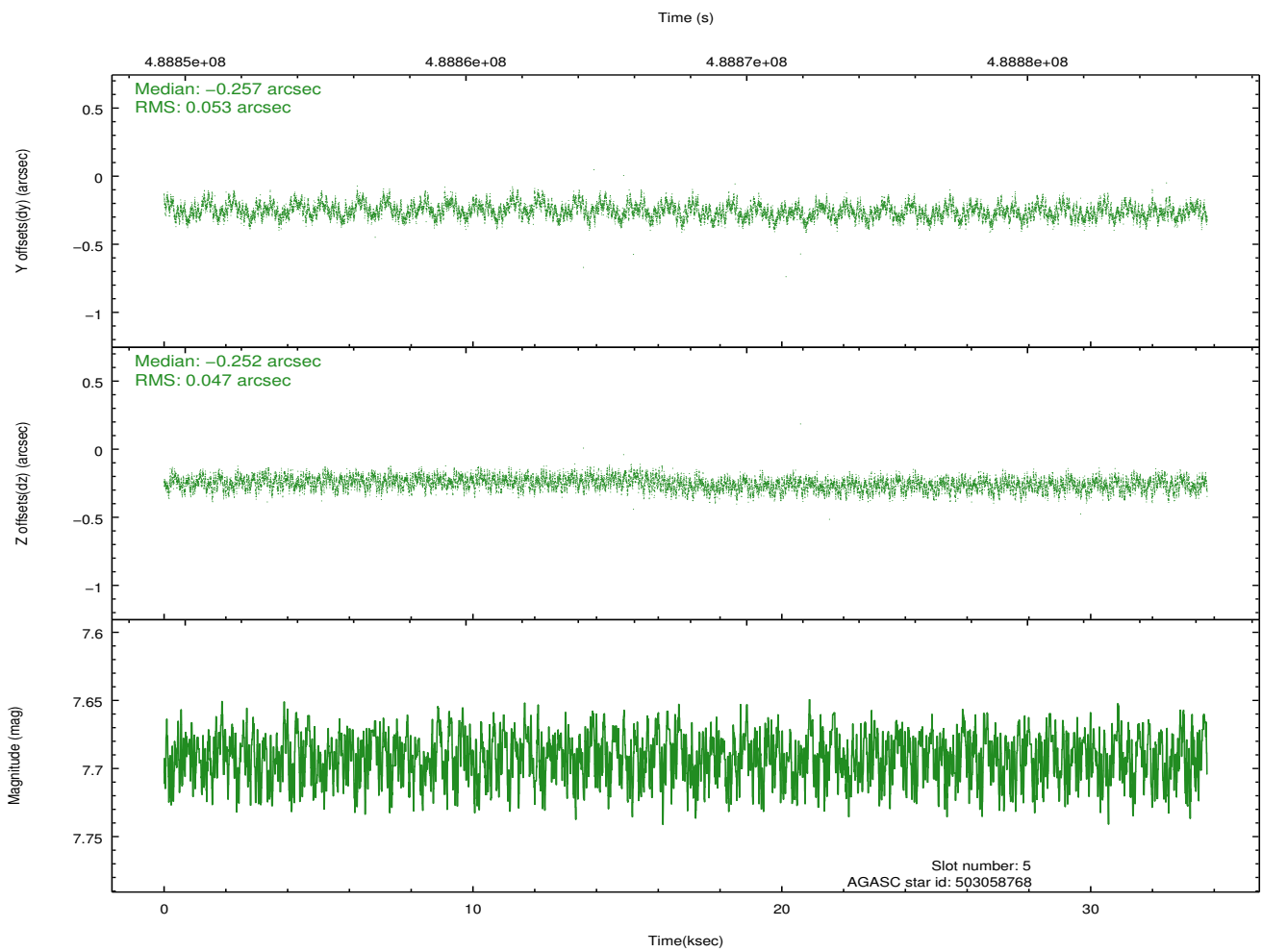
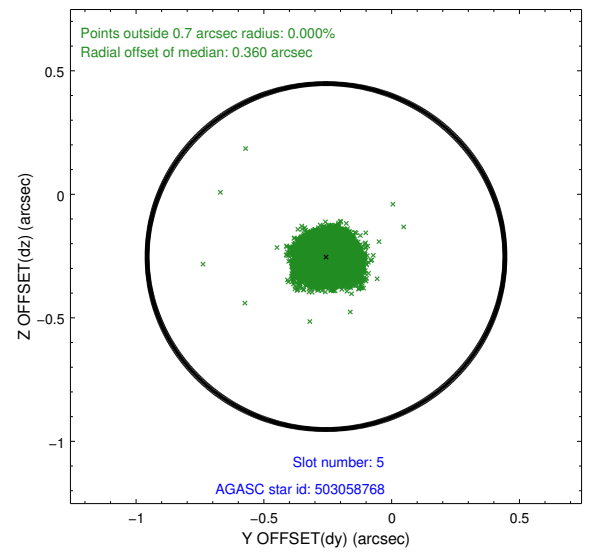
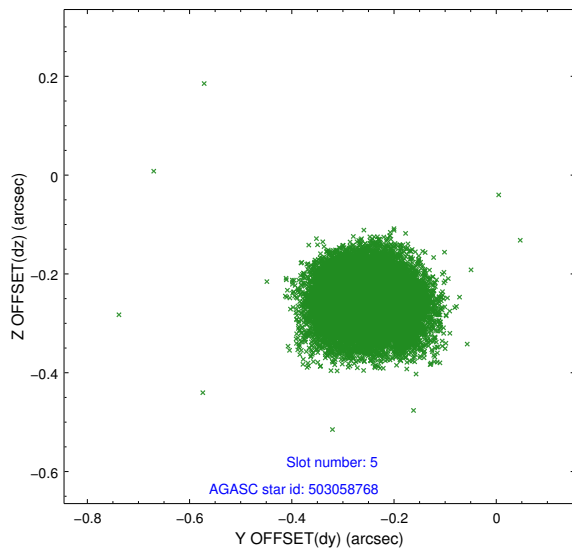
2.4.1 Slot 3



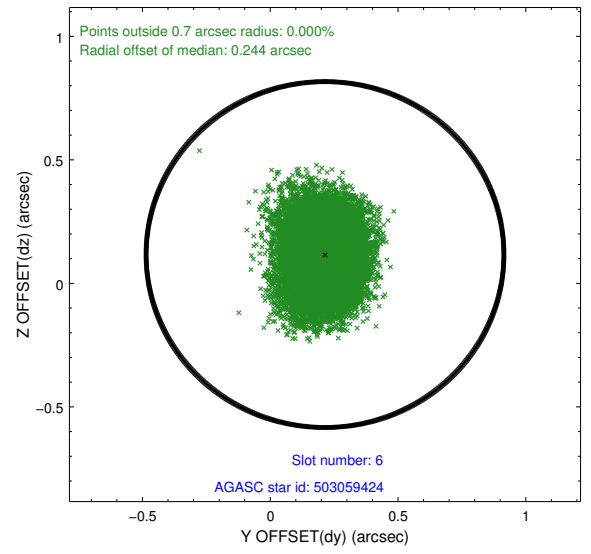
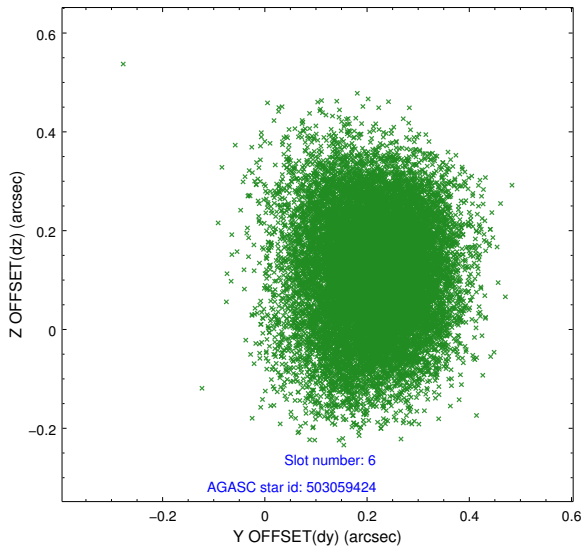
2.4.2 Slot 4



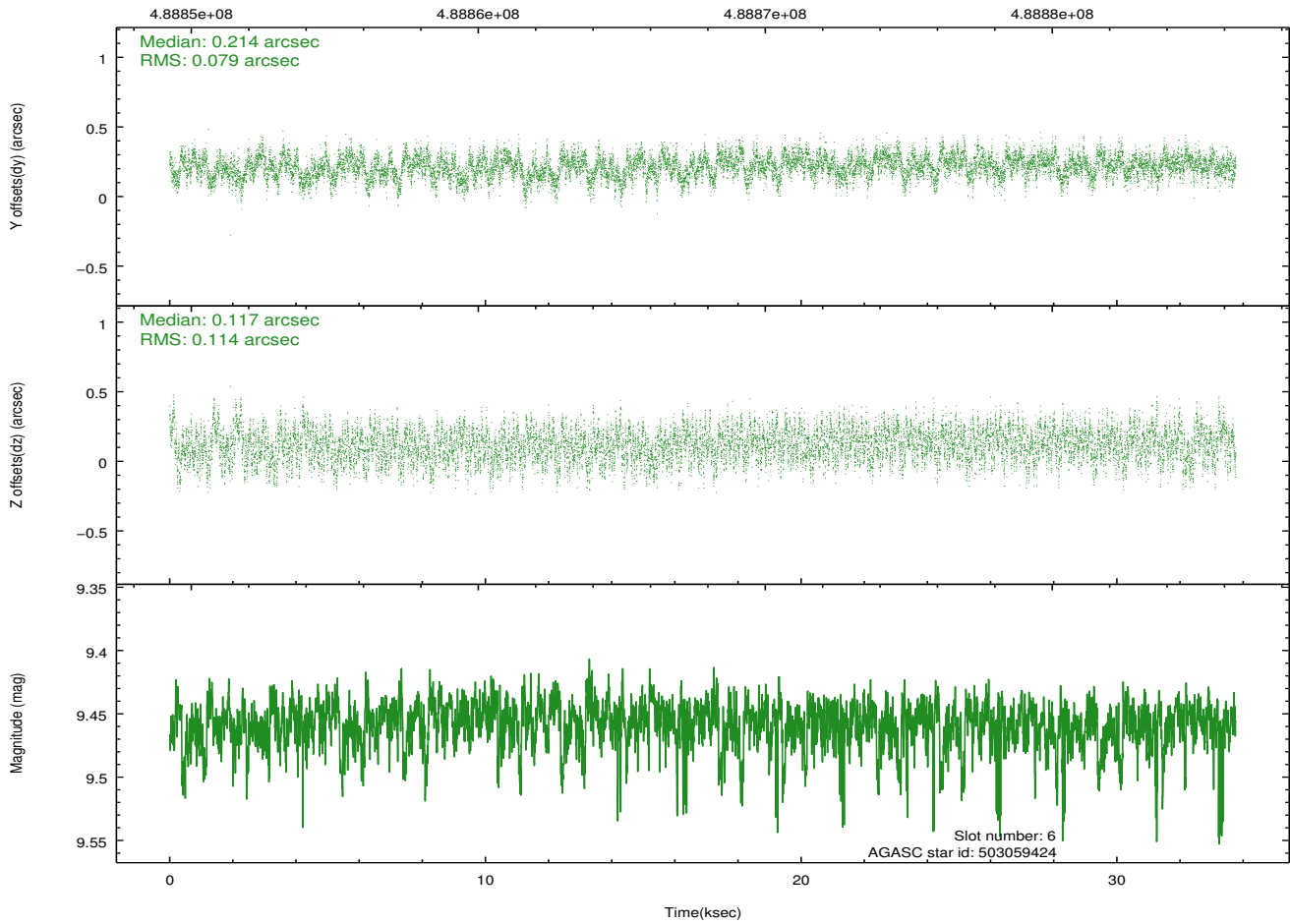
2.4.3 Slot 5



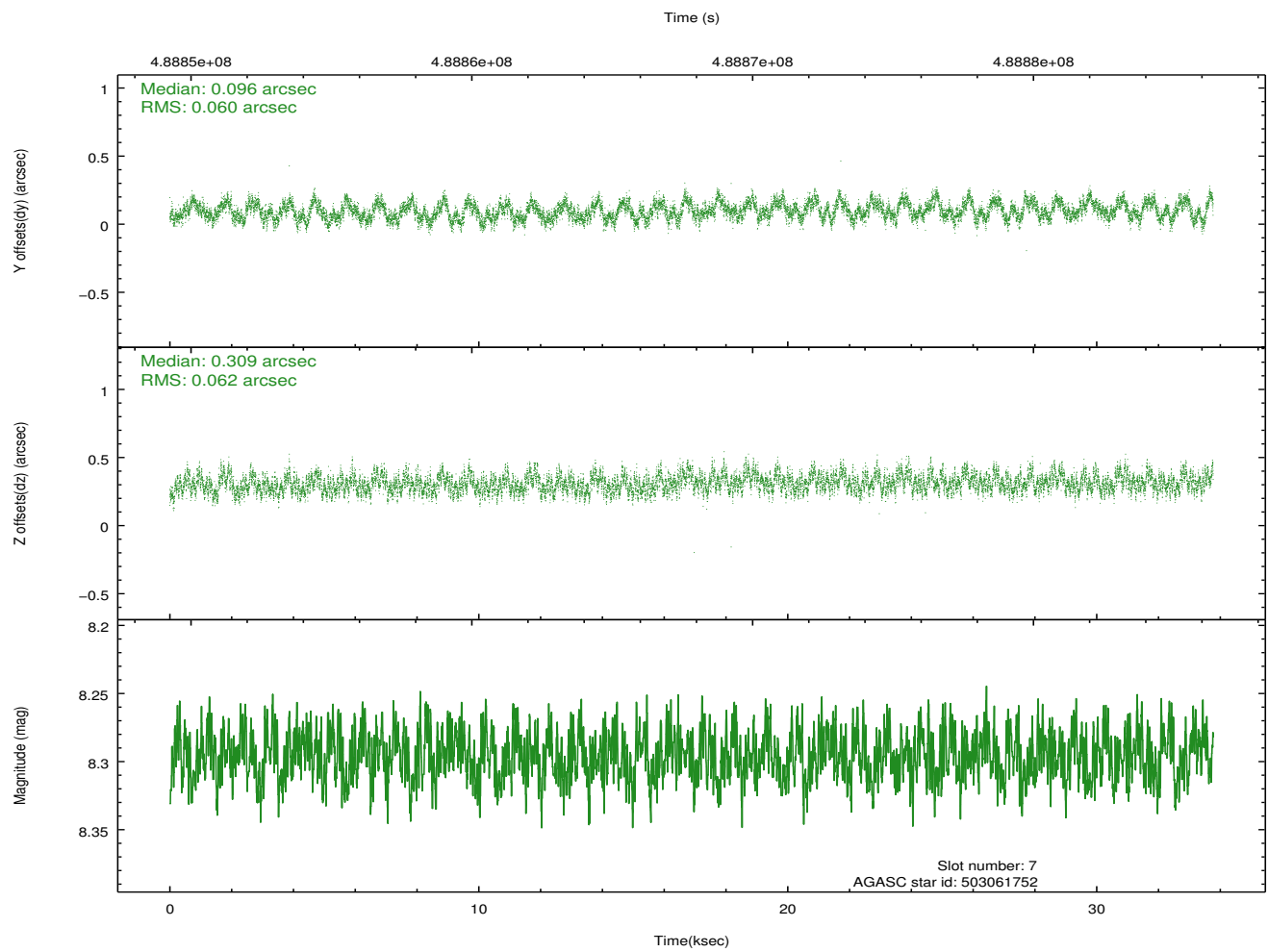
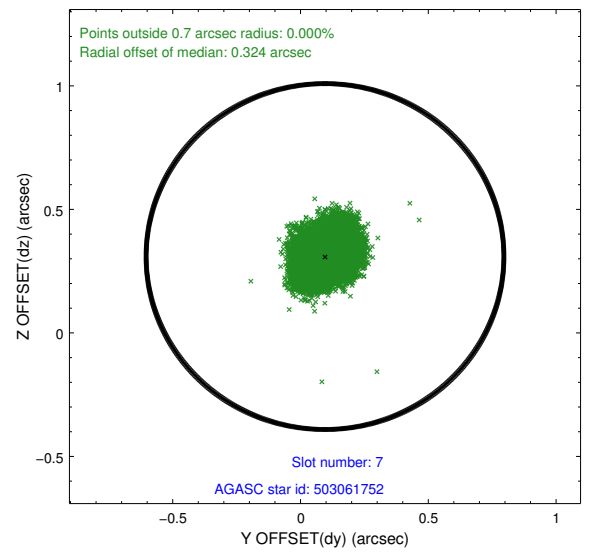
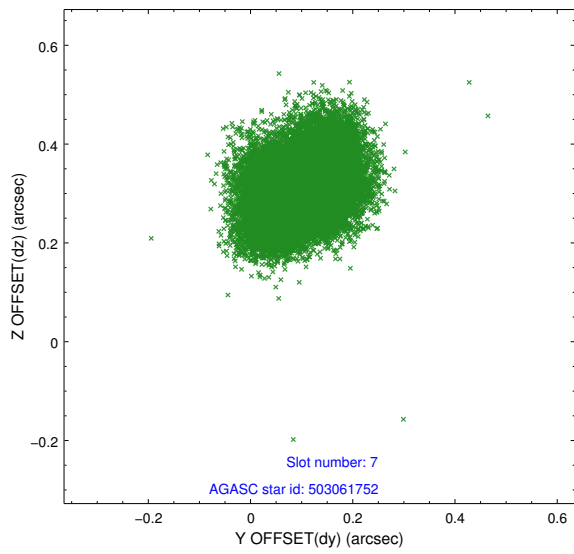
2.4.4 Slot 6



Time (s)

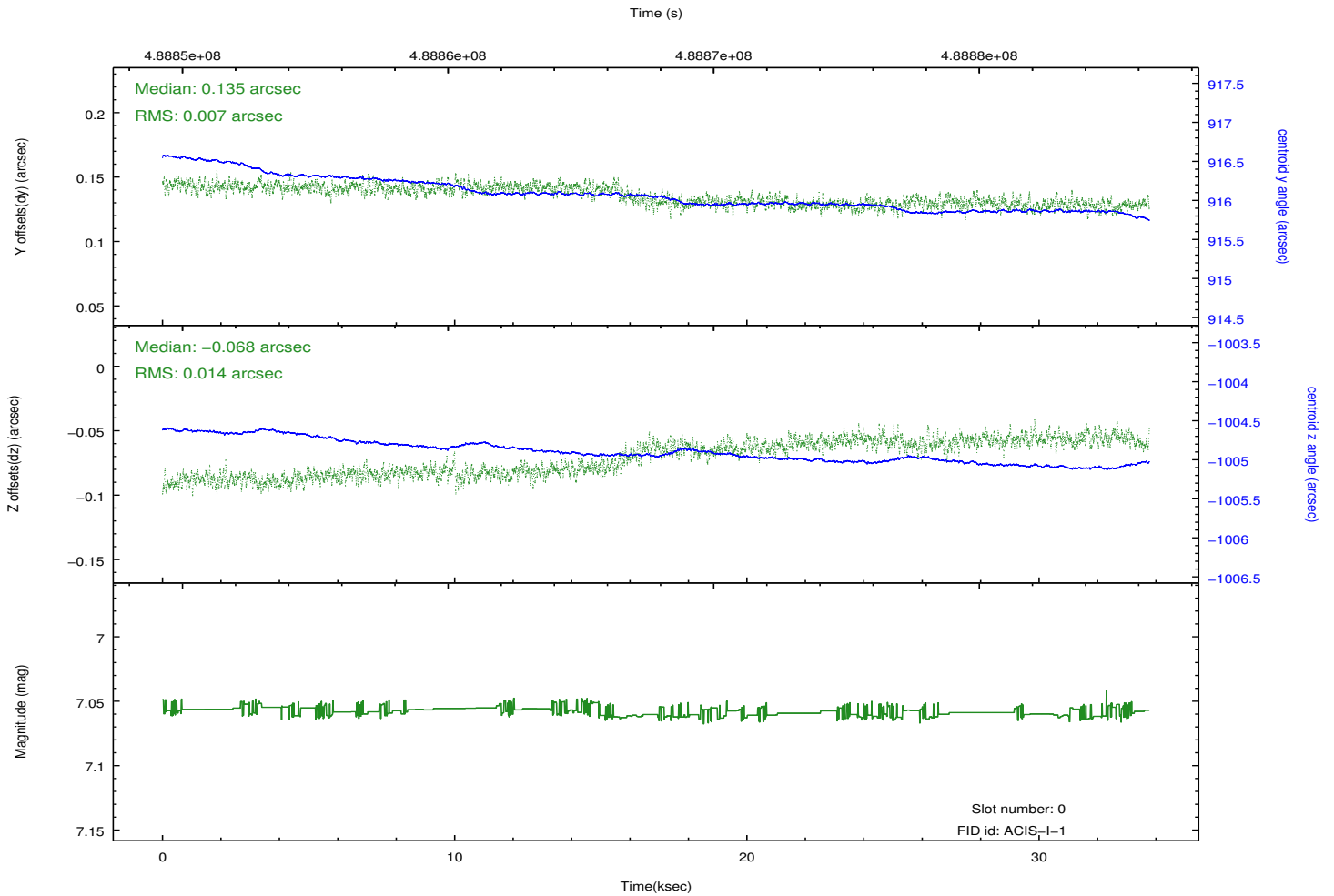
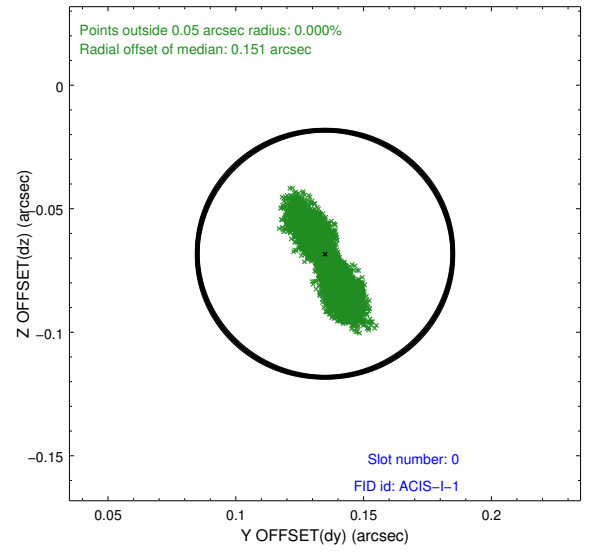
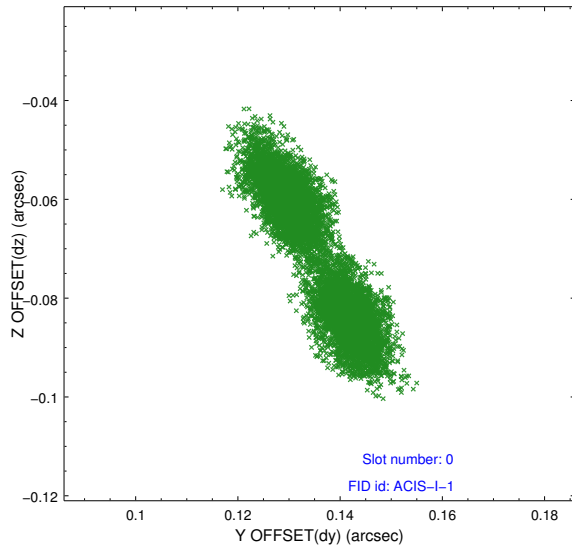


2.4.5 Slot 7

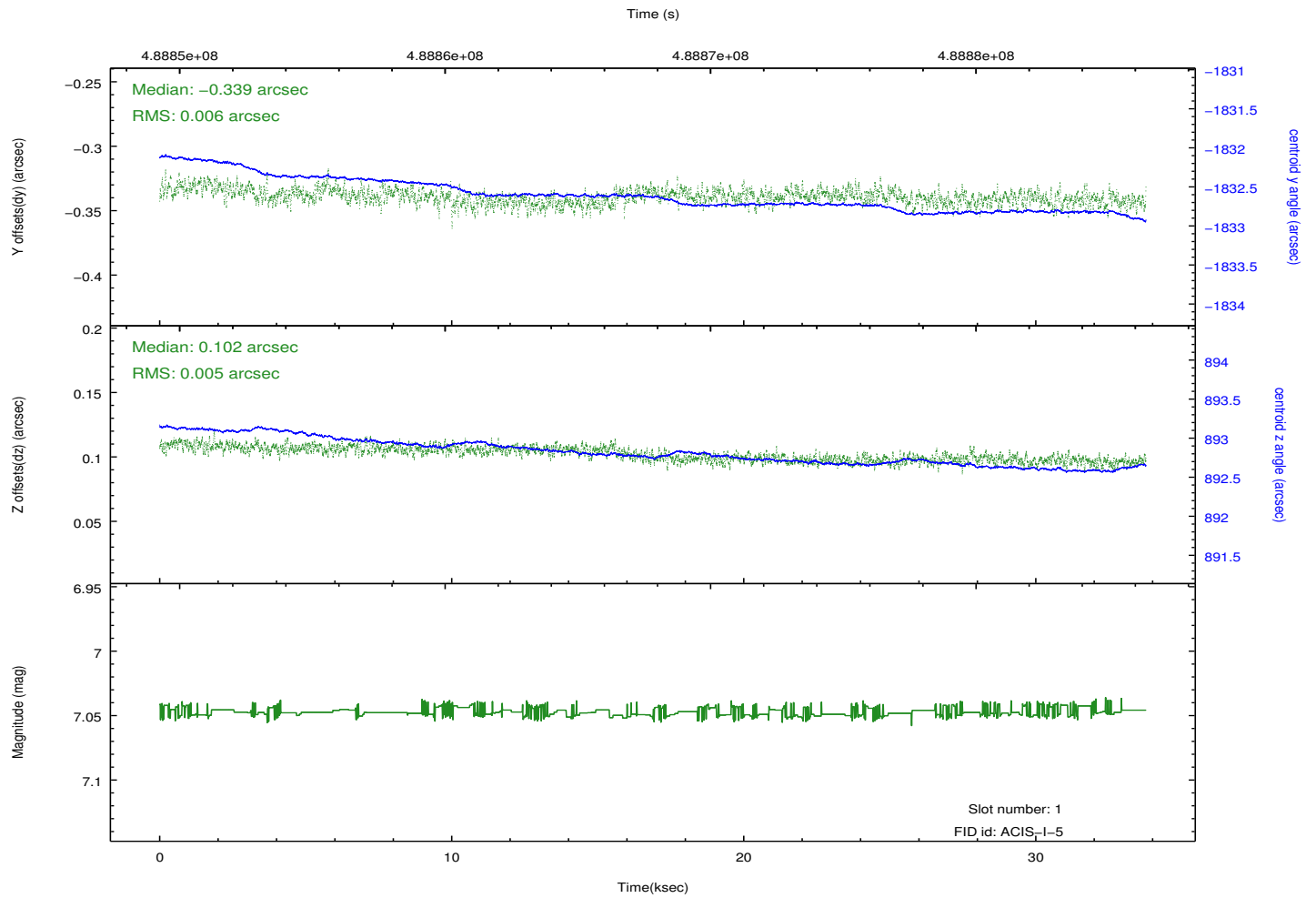
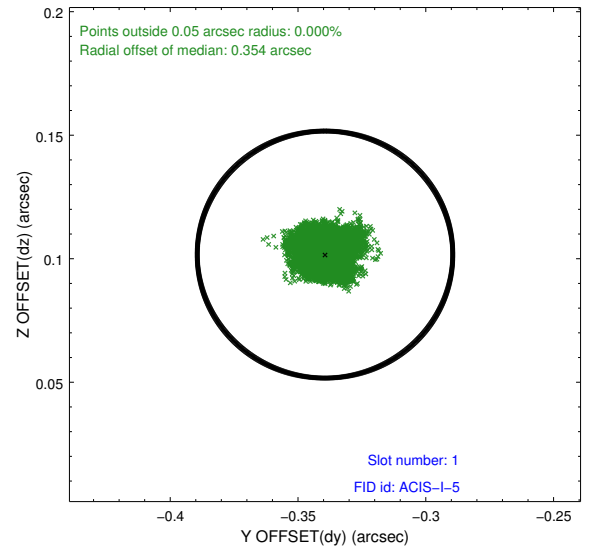
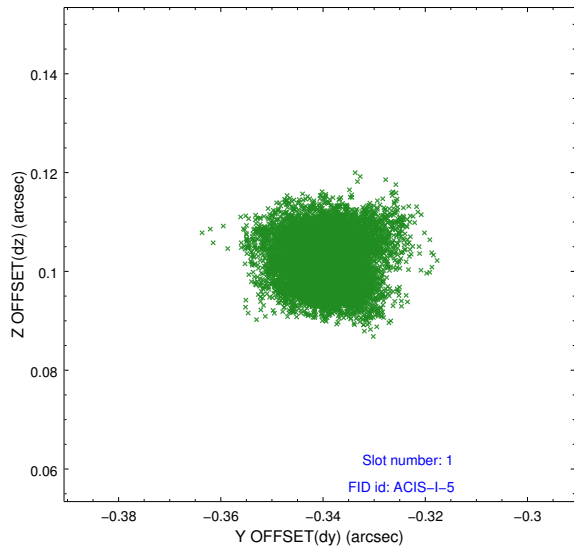


2.5 FID Slots

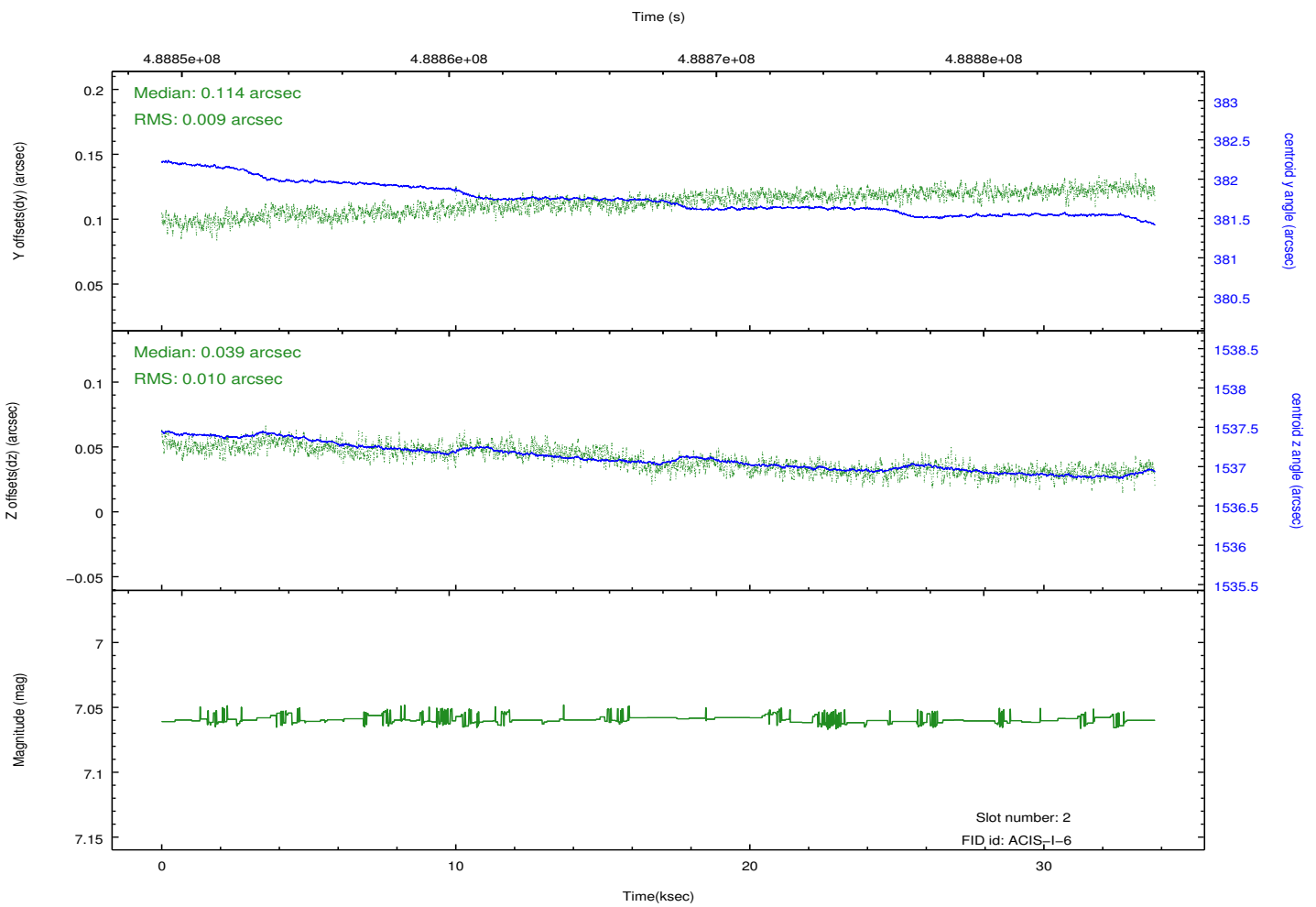
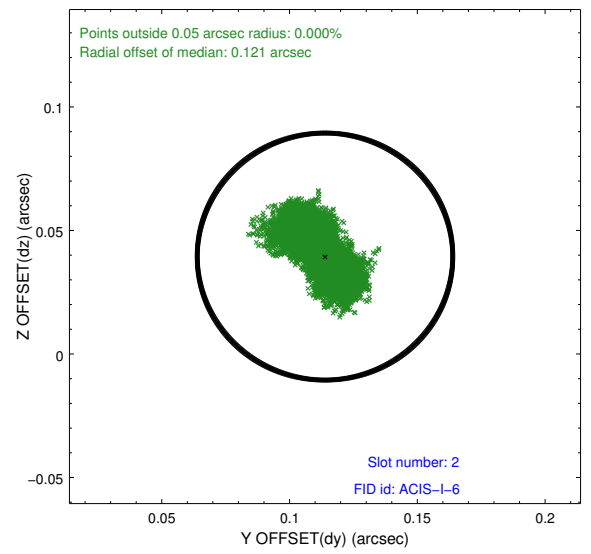
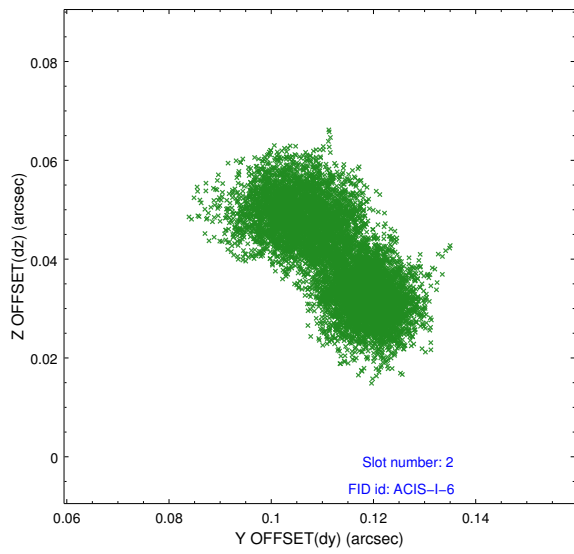
2.5.1 Slot 0



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)	2014.12.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	33.086300254464

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.