

V&V Reference Report

L2 ASCDS Version : 10

Observation 15111 - L2 Version 2
Chandra X-Ray Center

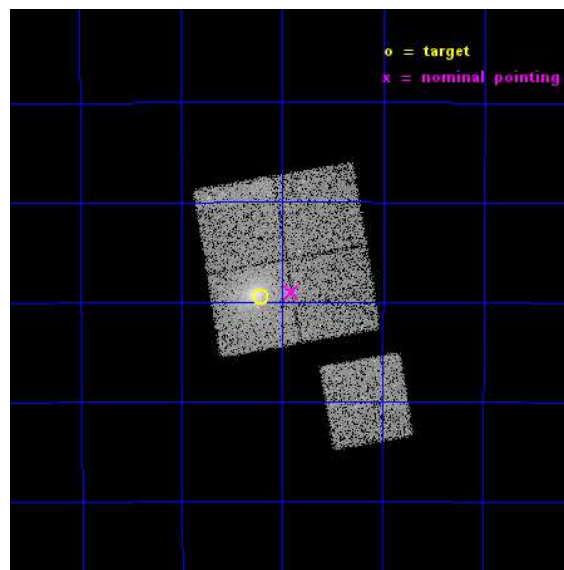
L2 Processing Date : Dec 4 2014

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1 Front

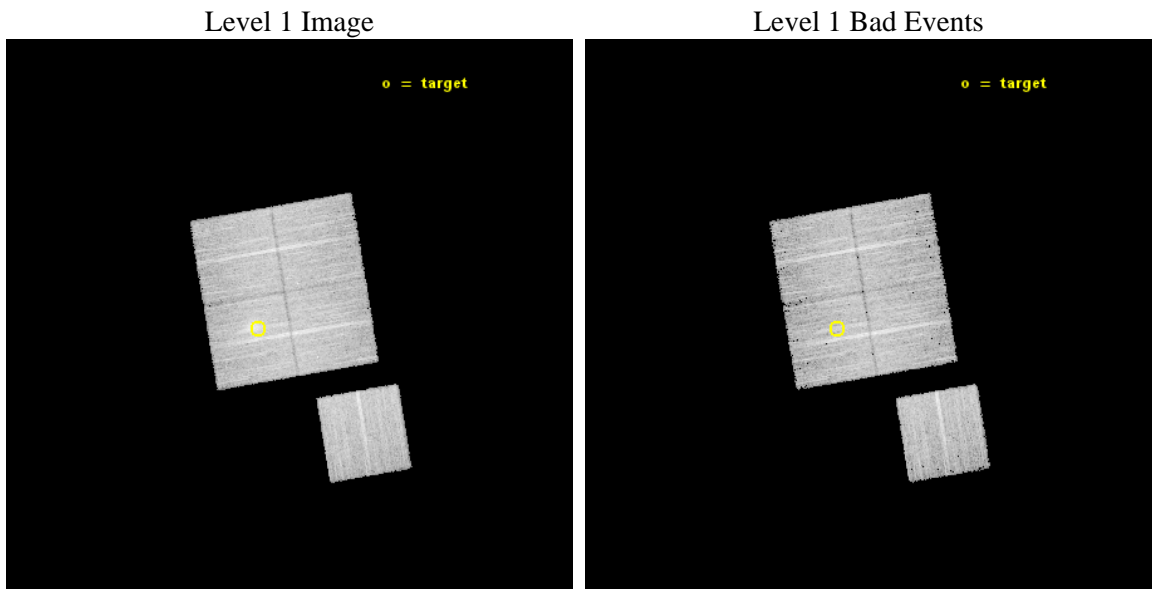
seq_num	801240	Sequence number
obs_id	15111	Observation id
title	A Chandra-Planck Legacy Program for Massive Clusters of Galaxies	P
observer	Dr. Christine Jones	Principal investigator
object	G250.90-36.25	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	77.554167	Observer's specified target RA [deg]
dec_targ	-45.324722	Observer's specified target Dec [deg]
ra_nom	77.47737913055	Nominal RA [deg]
dec_nom	-45.317797794447	Nominal Dec [deg]
roll_nom	170.31873498063	Nominal Roll [deg]
revision	2	Processing version of data
ontime	15772.759131014	Sum of GTIs [s]
livetime	15566.676421231	Livetime [s]
ontime0	15772.759150922	Sum of GTIs [s]
ontime1	15775.900121331	Sum of GTIs [s]
ontime2	15769.618110955	Sum of GTIs [s]
ontime3	15772.759131014	Sum of GTIs [s]
ontime6	15775.900121331	Sum of GTIs [s]
l2events	48578	Number of level 2 events



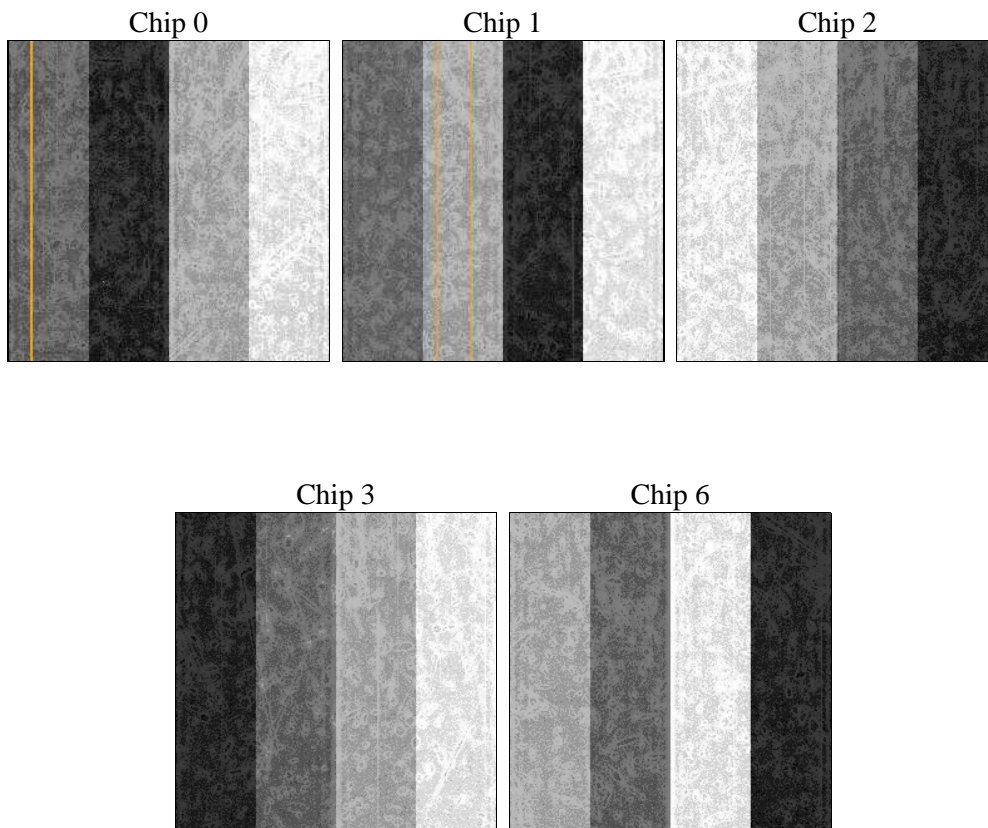
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	16000.513000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	15772.759131014	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	15772.759150922	Sum of GTIs [s]
date	2014-12-04T06:58:35	Date and time of file creation	ontime1	15775.900121331	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	15769.618110955	Sum of GTIs [s]
			ontime3	15772.759131014	Sum of GTIs [s]
			ontime6	15775.900121331	Sum of GTIs [s]
			l1events	389179	Number of level 1 events

2.1.4 Events

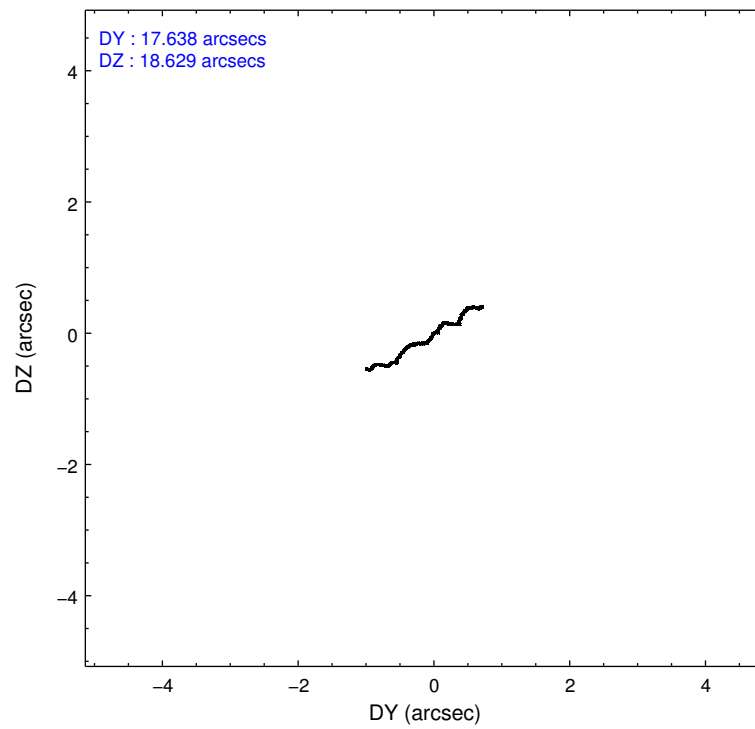
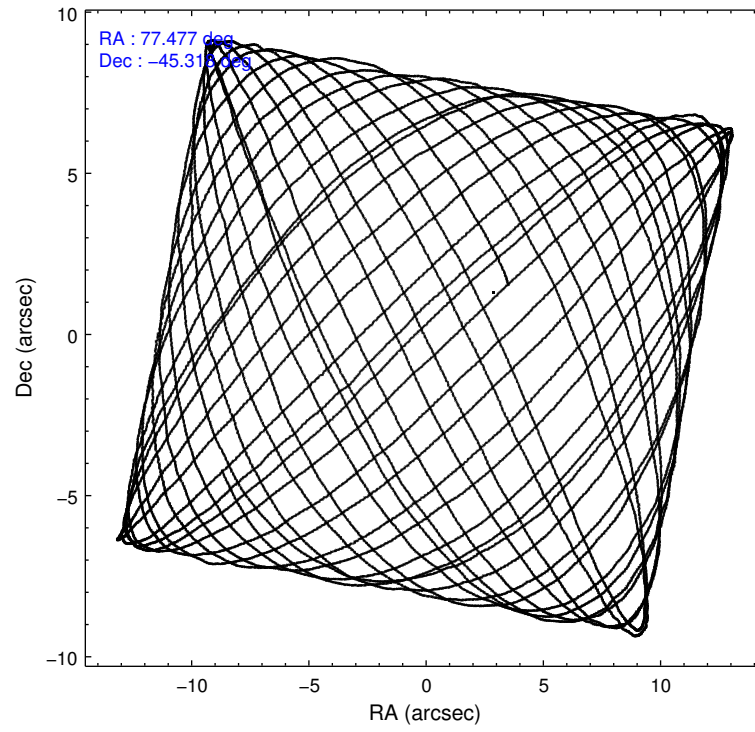
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	73279	75853	78393	85482	76172
rejected events	64071	65219	69098	67863	66959
rejected %	87%	85%	88%	79%	87%

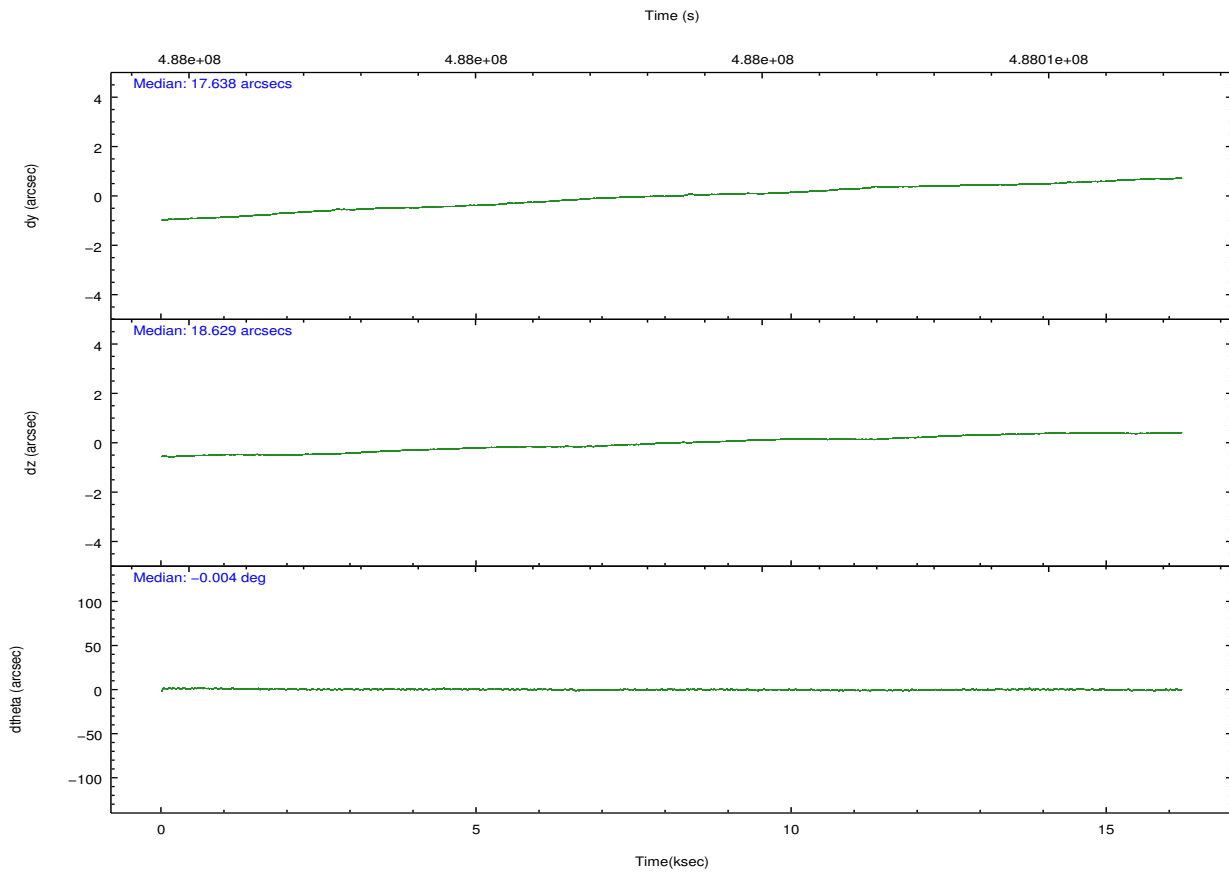
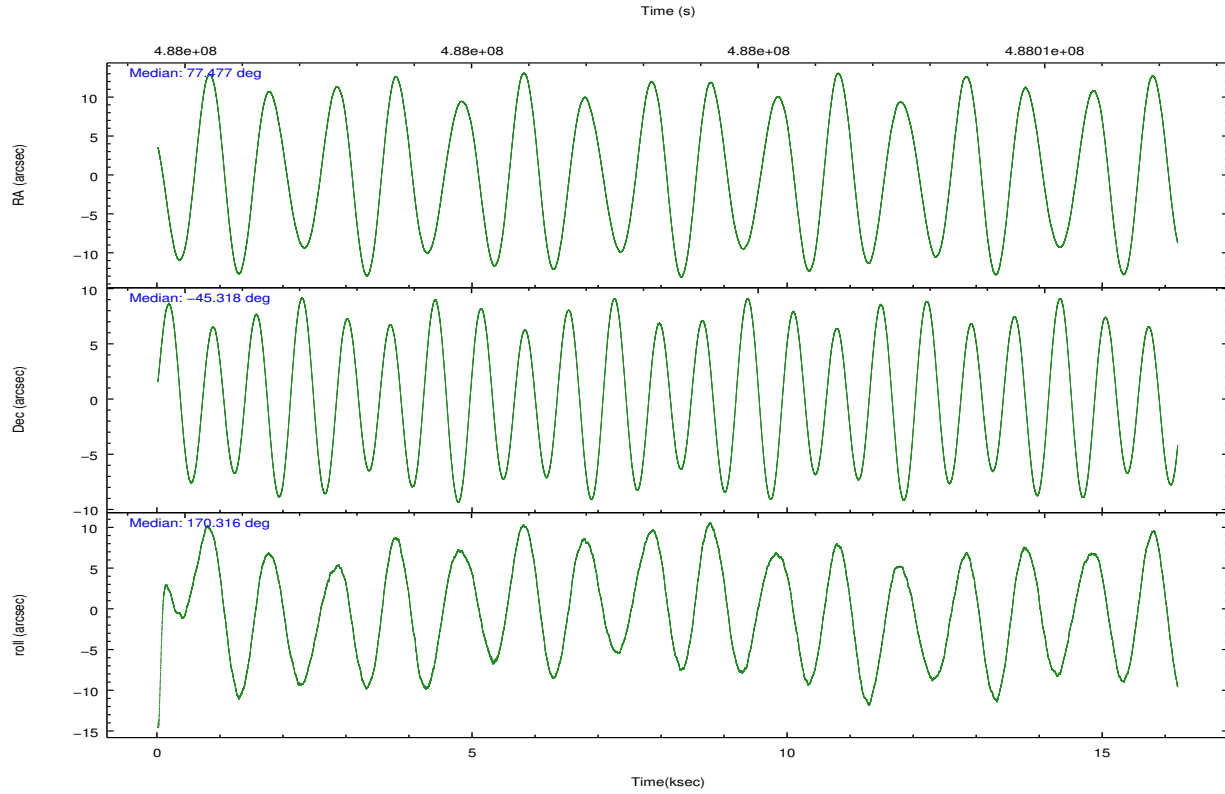
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	3082	3785	3469	10245	3144
	4%	4%	4%	11%	4%
grade 1 events	42	45	50	77	32
	0%	0%	0%	0%	0%
grade 2 events	2358	2574	2247	2915	2070
	3%	3%	2%	3%	2%
grade 3 events	949	1037	884	1238	946
	1%	1%	1%	1%	1%
grade 4 events	887	1020	924	1219	969
	1%	1%	1%	1%	1%
grade 5 events	3477	3892	3294	4096	4010
	4%	5%	4%	4%	5%
grade 6 events	1935	2220	1783	2005	2090
	2%	2%	2%	2%	2%
grade 7 events	60549	61280	65742	63687	62911
	82%	80%	83%	74%	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	77.513998	77.47737913054991	CCD I2 on	Y	Y
[deg] Pointing Dec	-45.308145	-45.31779779444652	CCD I3 on	Y	Y
[deg] Pointing Roll	170.136084	170.3187349806251	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)	487995526.184000	487994965.74421	CCD S5 on	N	N
Observation start date	2013-06-19T02:17:39	2013-06-19T02:09:25	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	488011526.184000	488011761.39512	On-chip summing requested	N	N
Observation end date	2013-06-19T06:44:19	2013-06-19T06:49:21	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



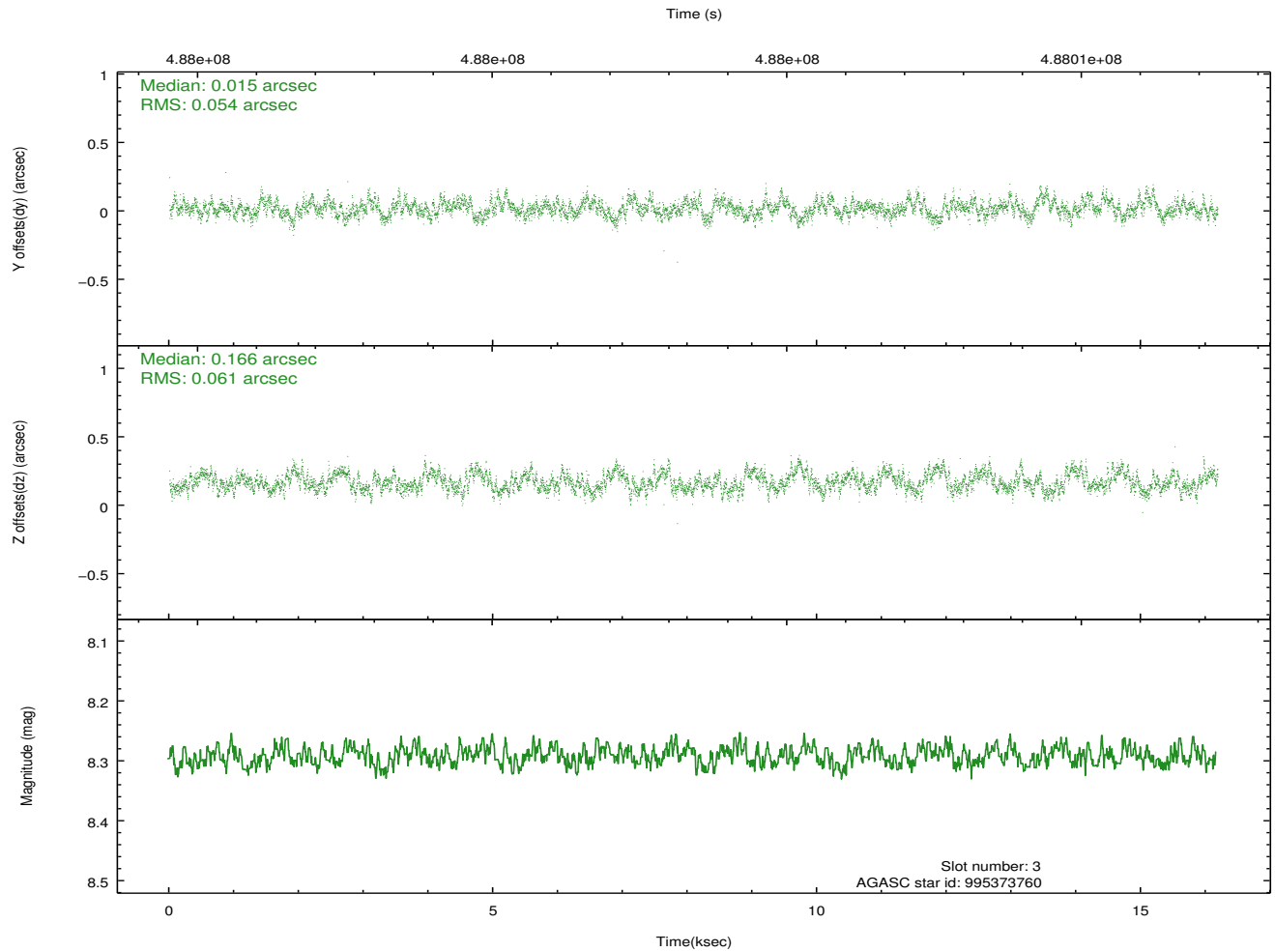
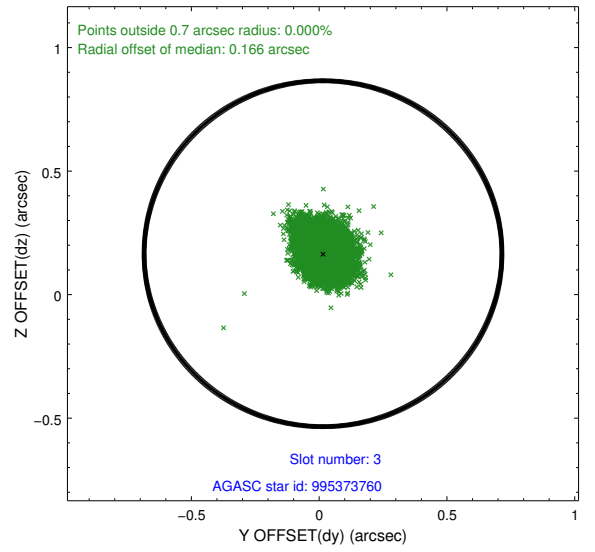
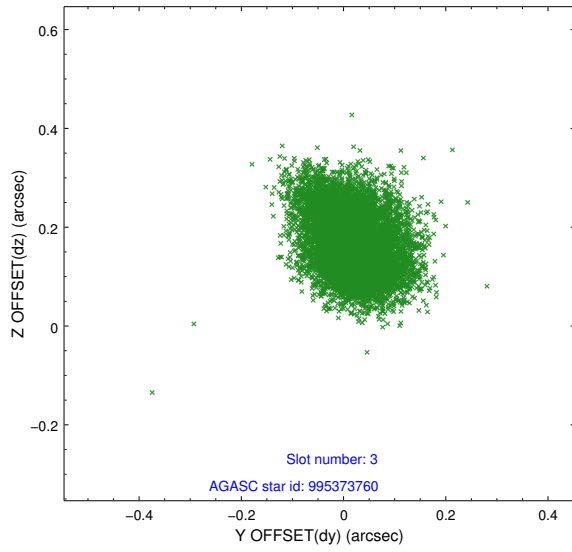


Slot Statistics

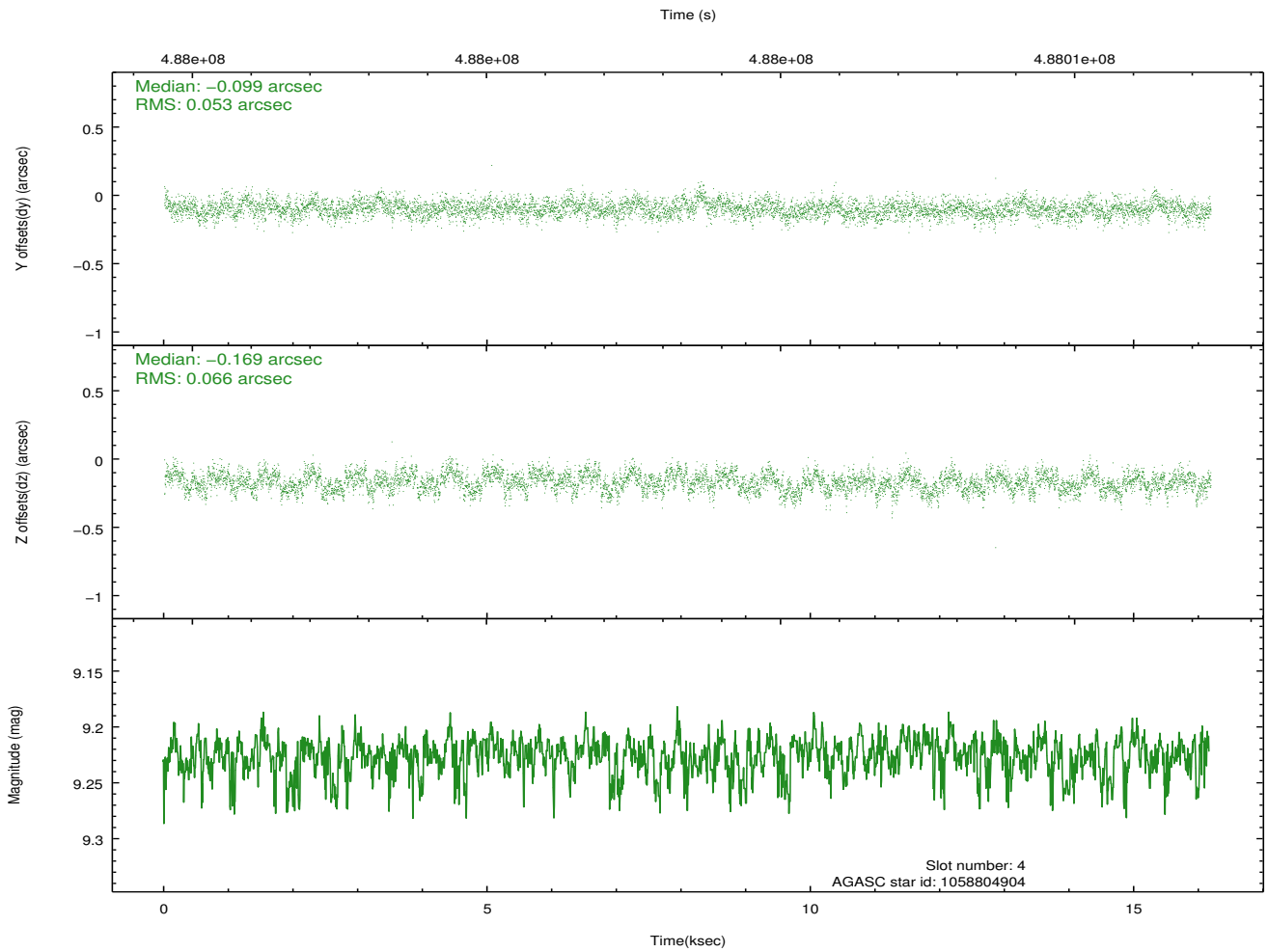
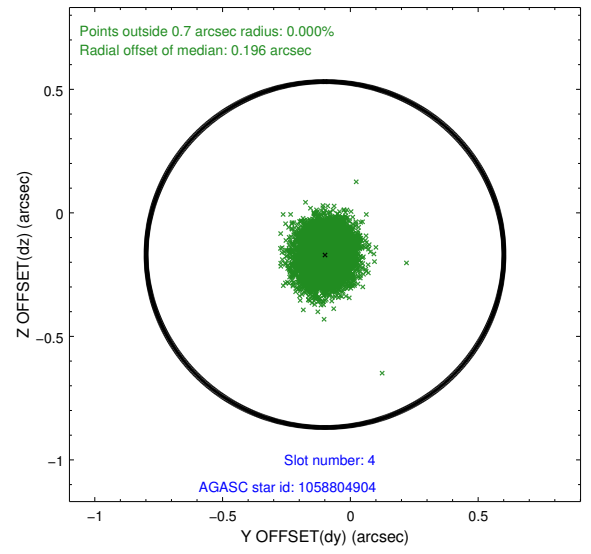
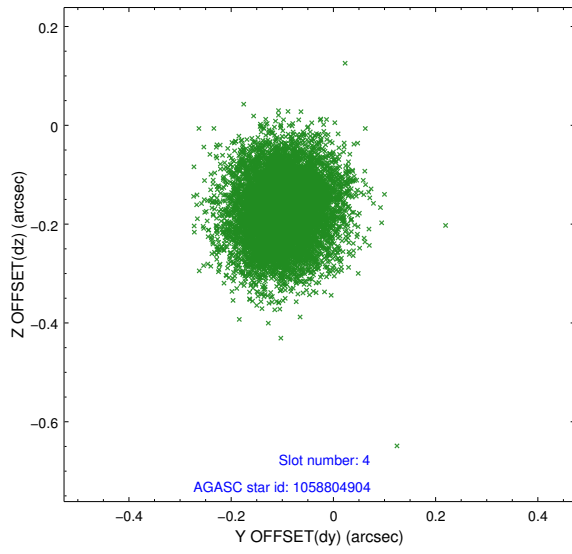
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.06	3947	0.108	-0.060	0.011	0.018	0.000000	0.000000	921.80	-1001.34
1	FID		ACIS-I-5	7.05	3947	-0.261	0.096	0.014	0.022	0.000000	0.000000	-1826.60	896.02
2	FID		ACIS-I-6	7.06	3947	0.063	0.034	0.018	0.026	0.000000	0.000000	386.91	1540.86
3	GUIDE	used	995373760	8.29	7894	0.015	0.166	0.087	0.140	77.456283	-44.874180	413.07	-1513.51
4	GUIDE	used	1058804904	9.23	7884	-0.099	-0.169	0.091	0.145	76.783999	-45.478967	1708.82	929.73
5	GUIDE	used	1058806384	9.13	7886	0.197	-0.105	0.111	0.173	78.307326	-45.516544	-2101.14	406.15
6	GUIDE	used	1058810352	8.52	7894	-0.233	-0.221	0.075	0.123	76.909943	-45.573532	1334.69	1207.59
7	GUIDE	used	995371920	9.20	7883	0.122	0.336	0.116	0.188	77.837290	-44.956576	-593.99	-1385.36

2.4 Star Slots

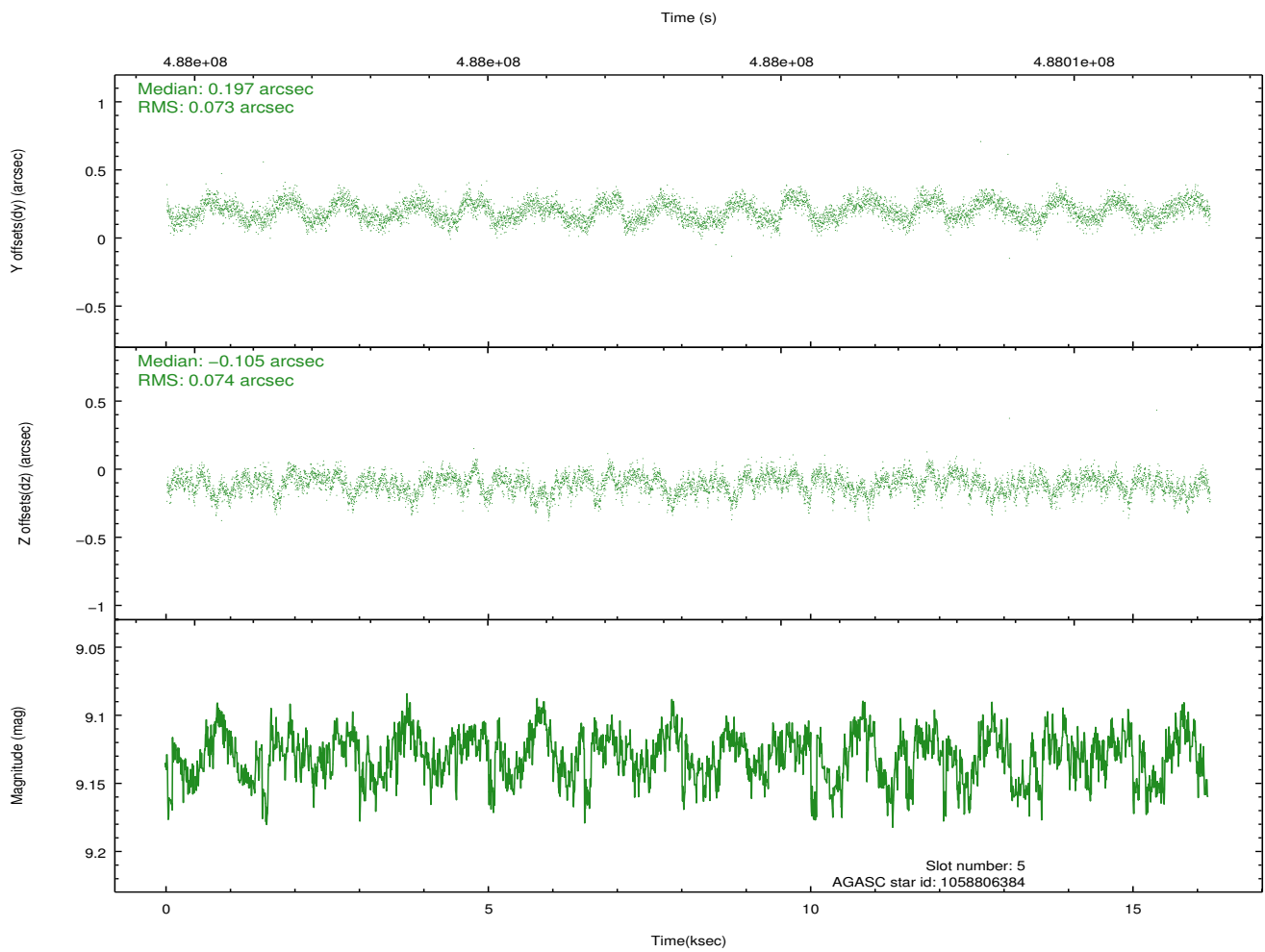
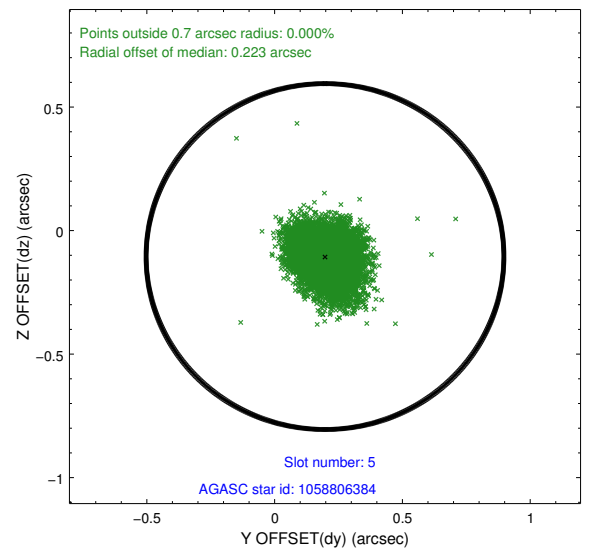
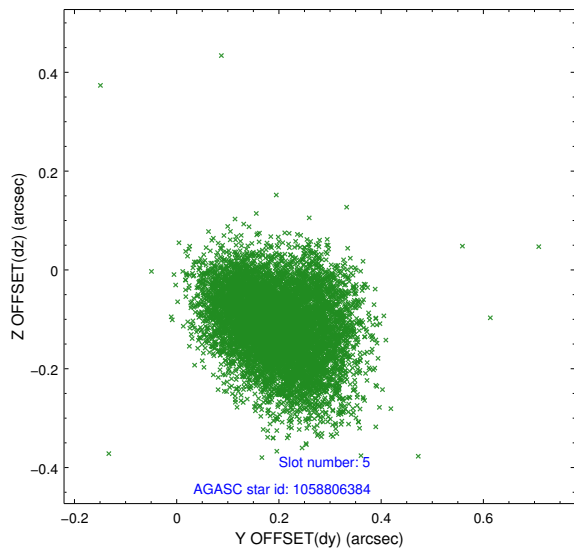
2.4.1 Slot 3



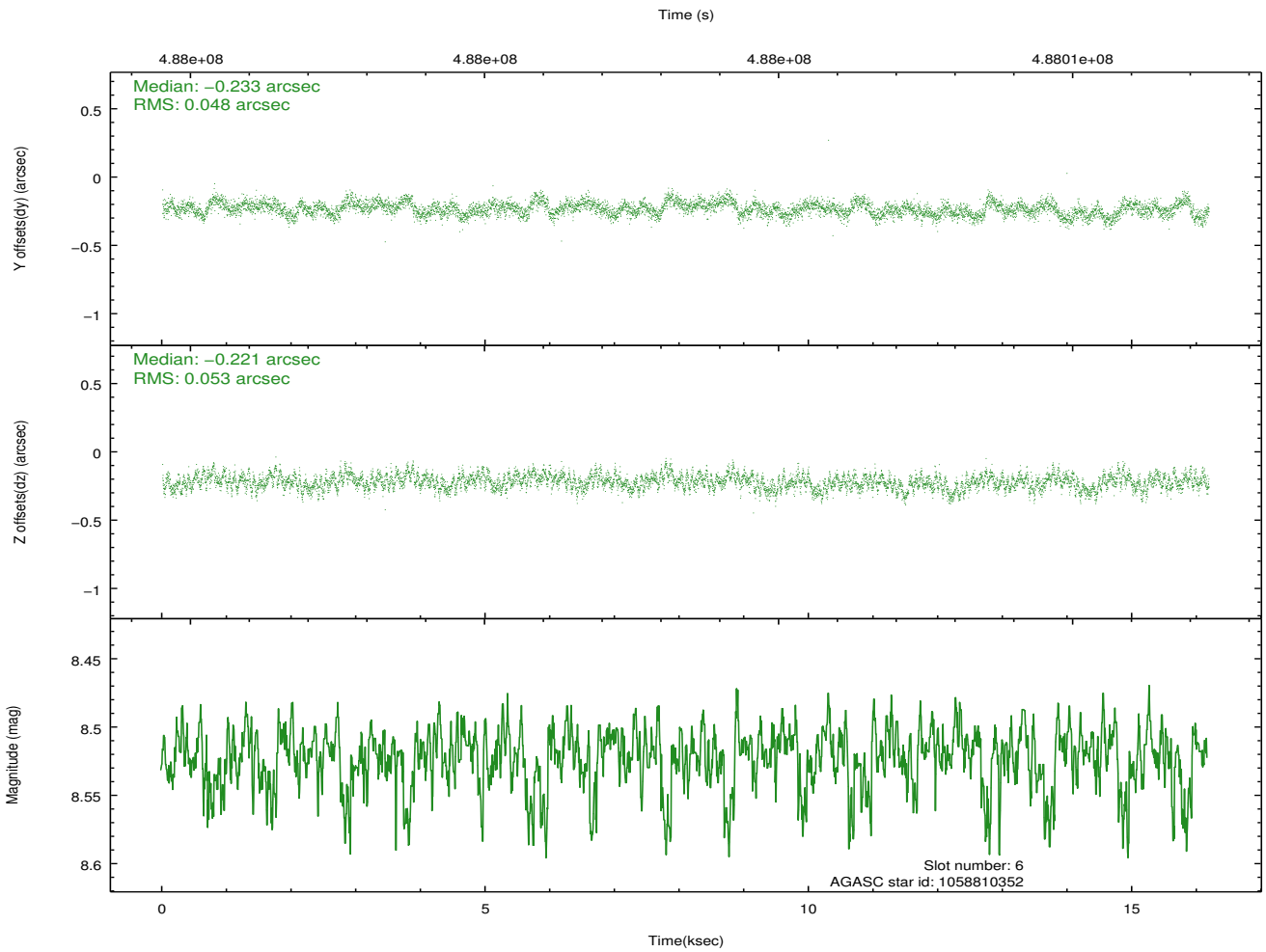
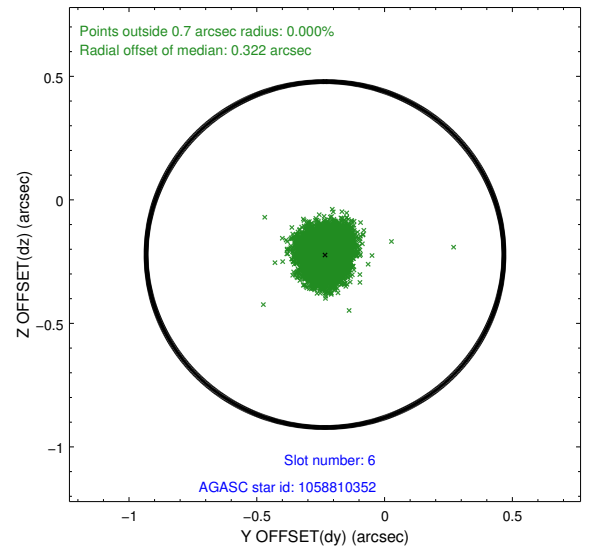
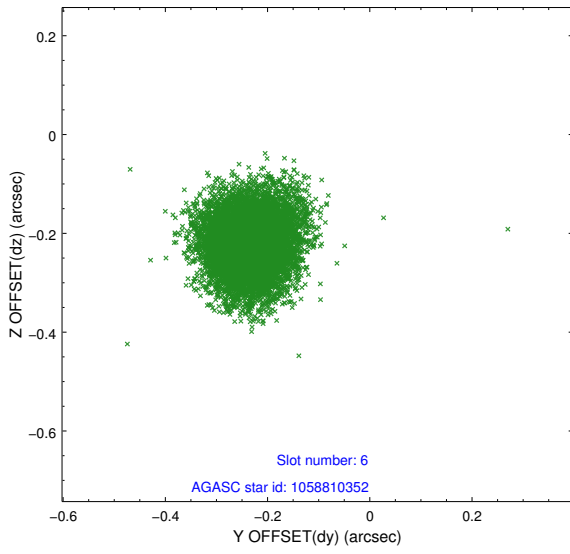
2.4.2 Slot 4



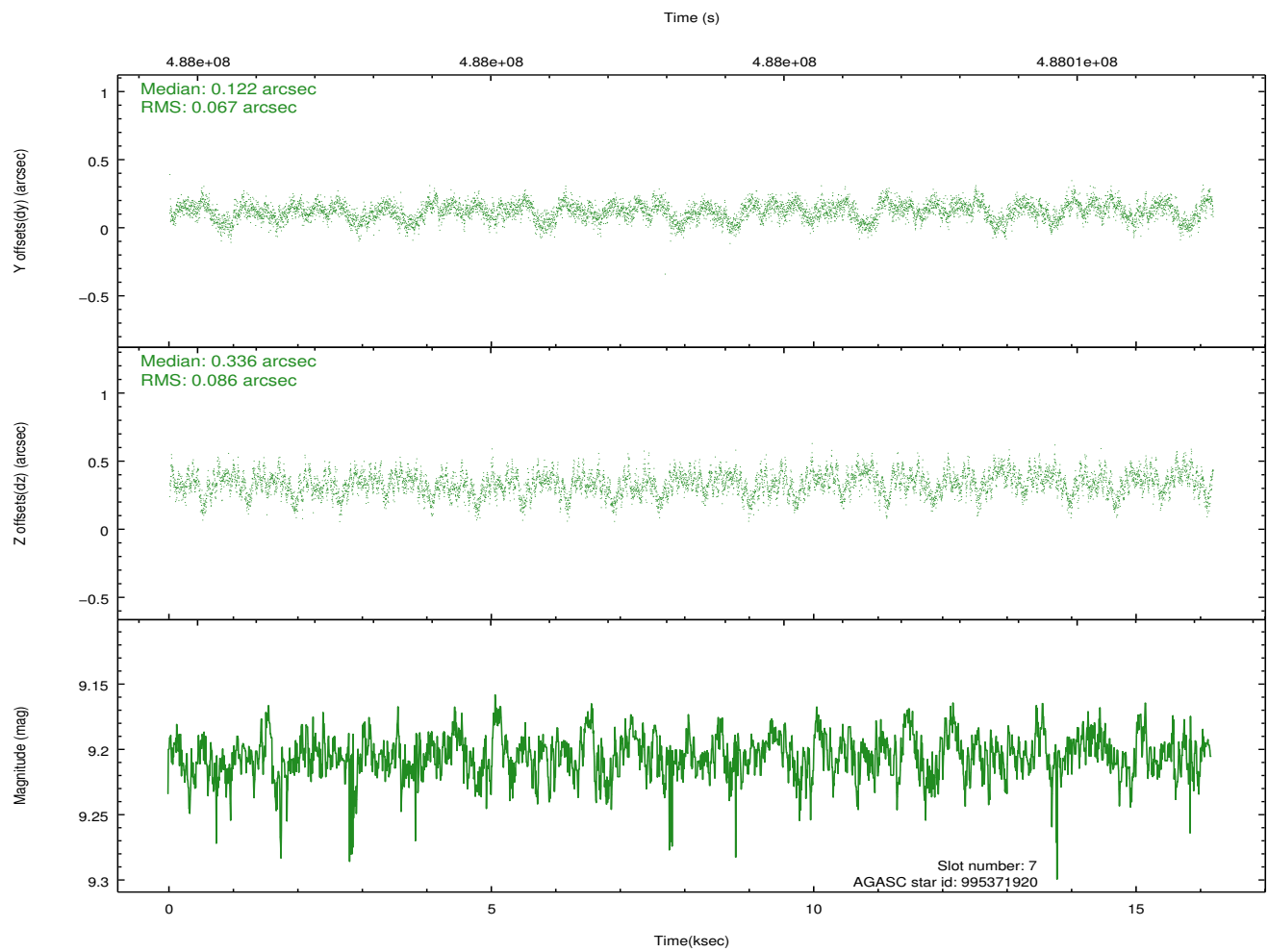
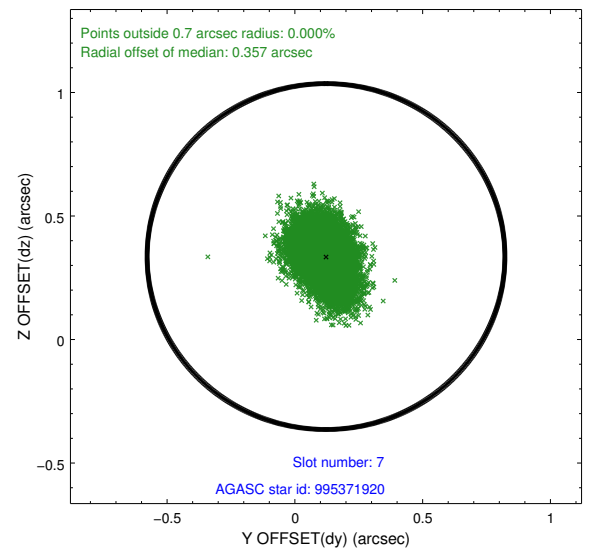
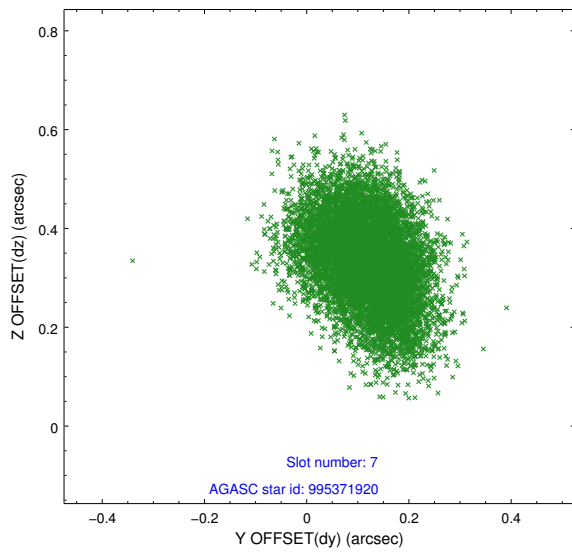
2.4.3 Slot 5



2.4.4 Slot 6

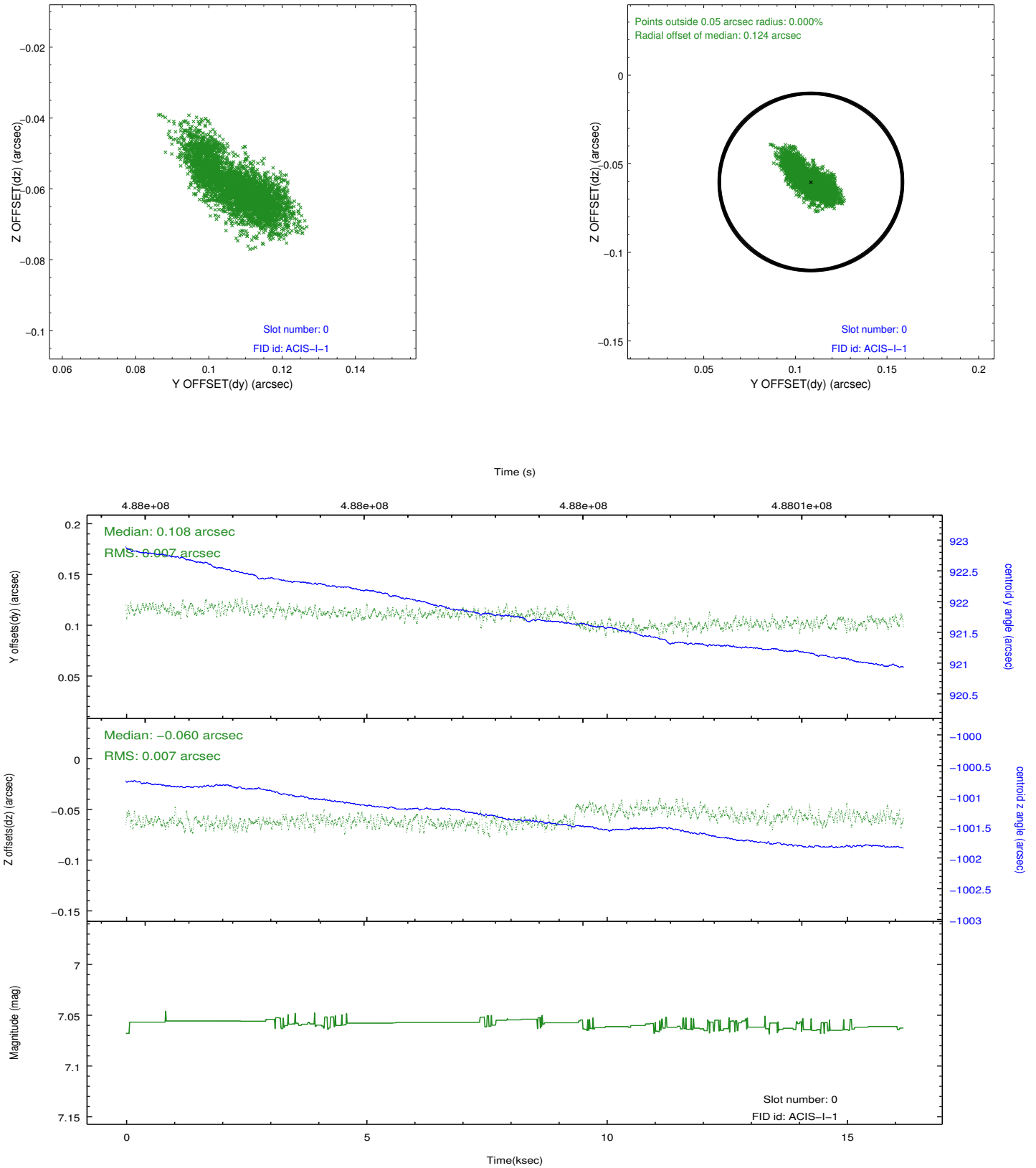


2.4.5 Slot 7

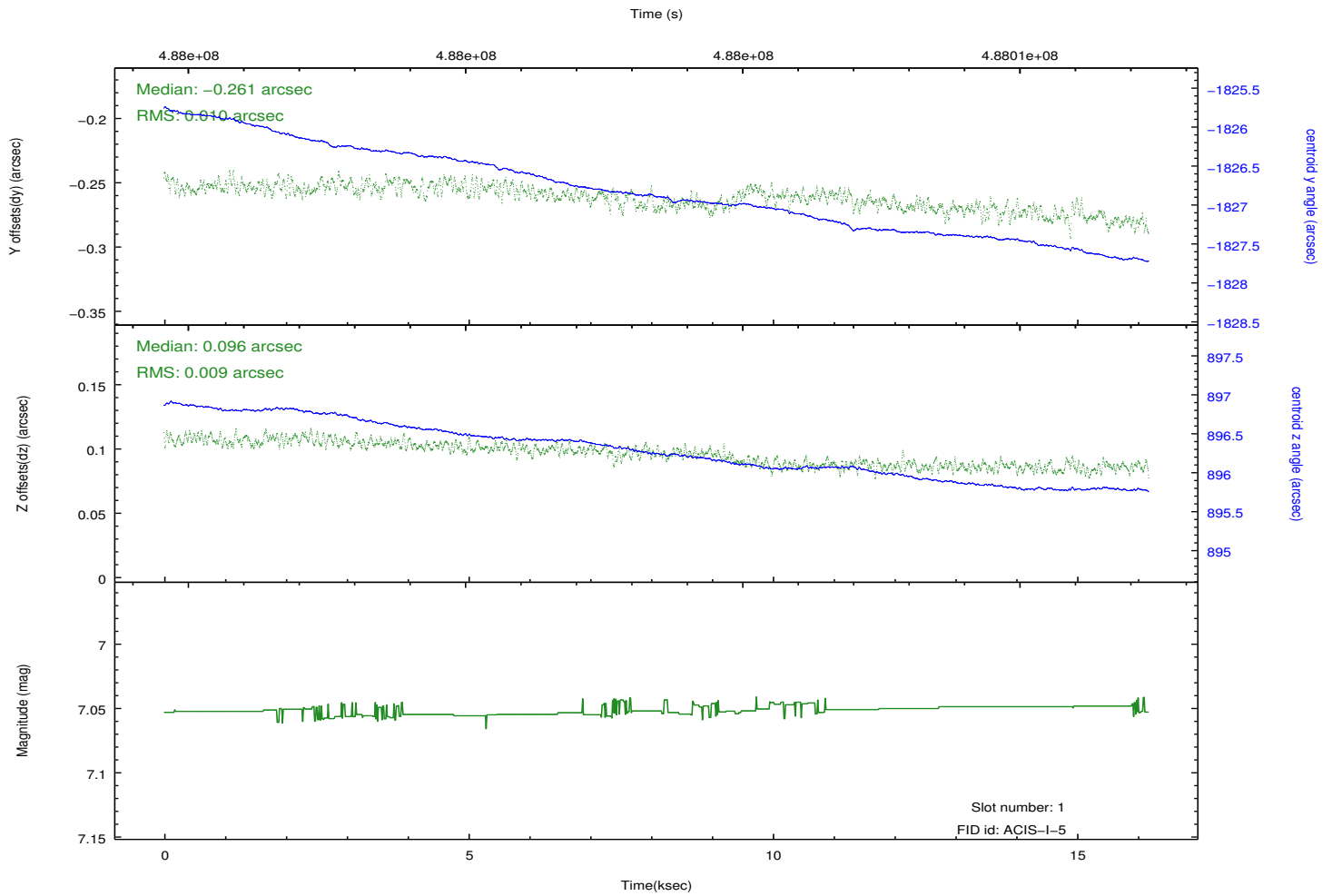
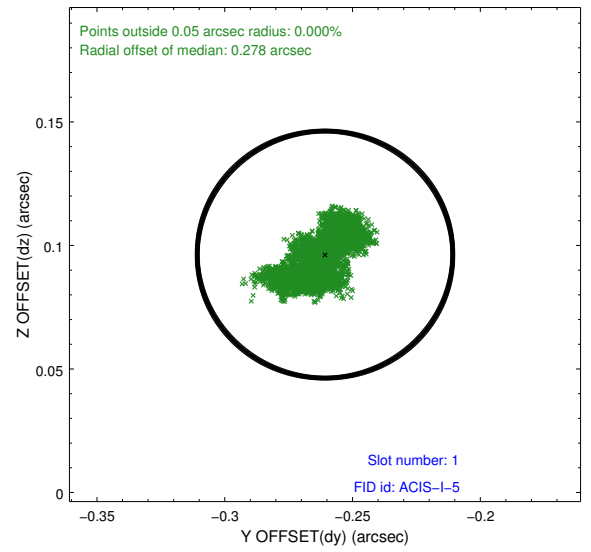
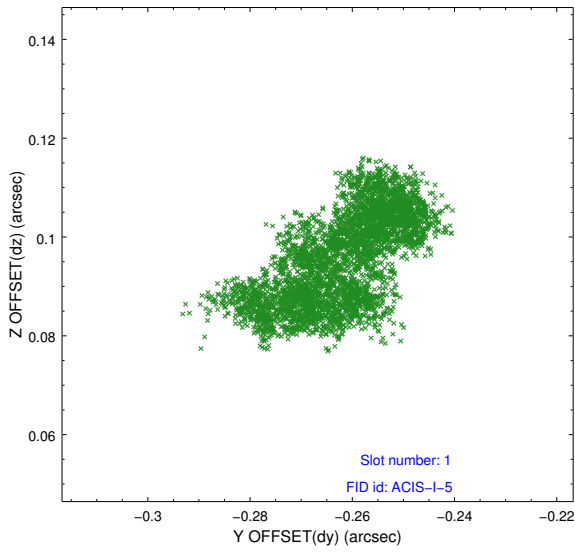


2.5 FID Slots

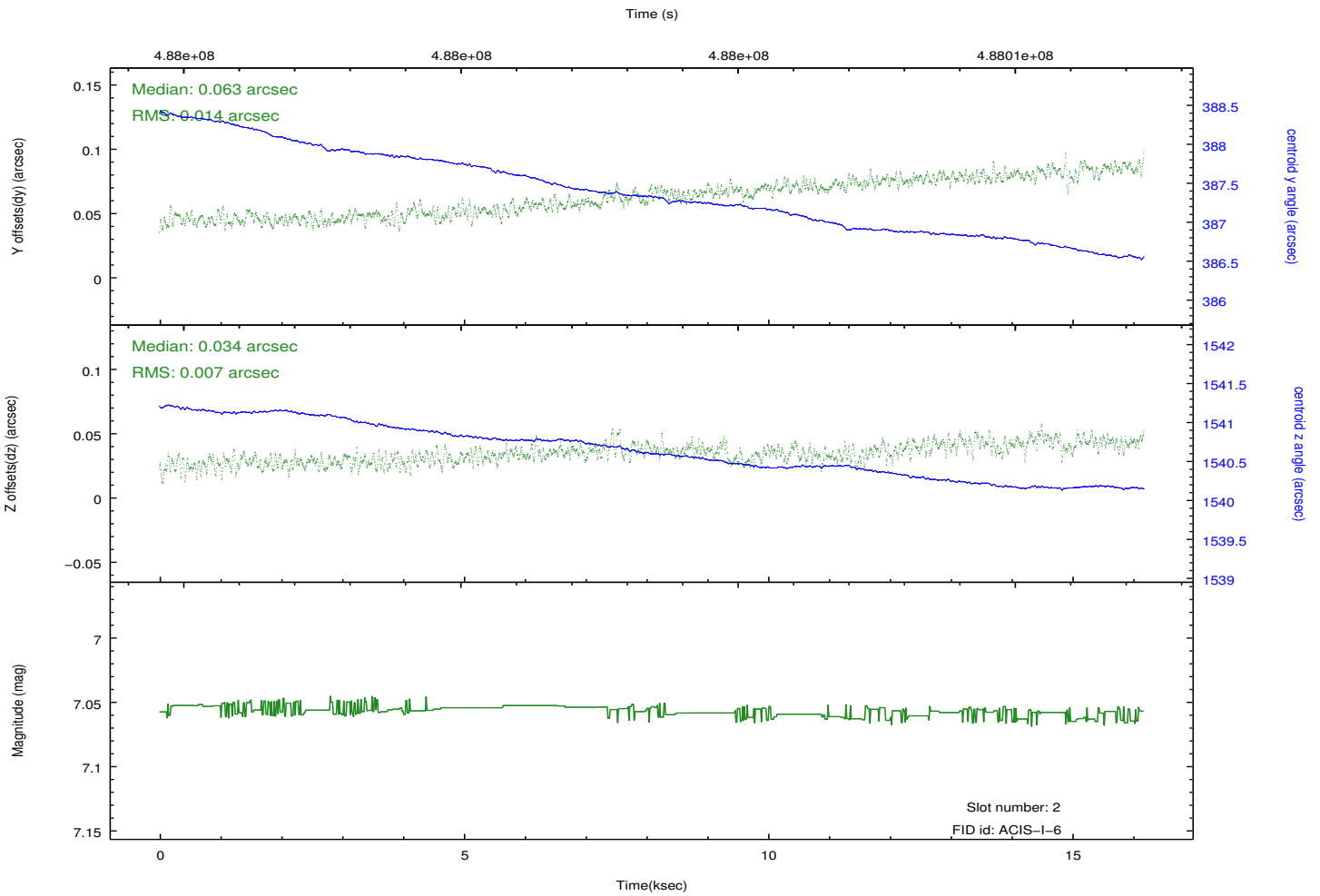
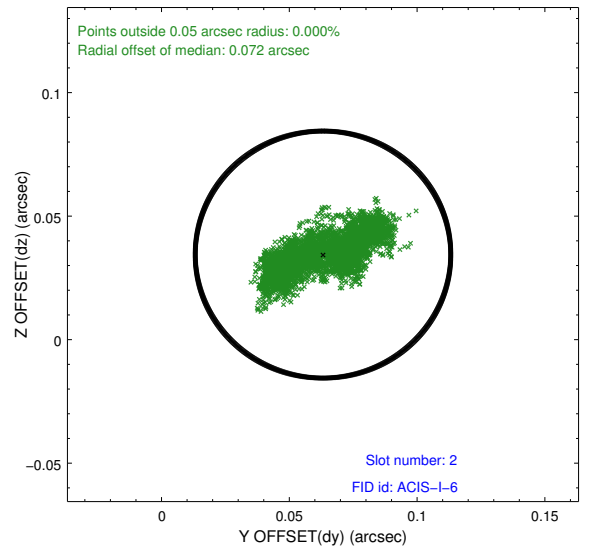
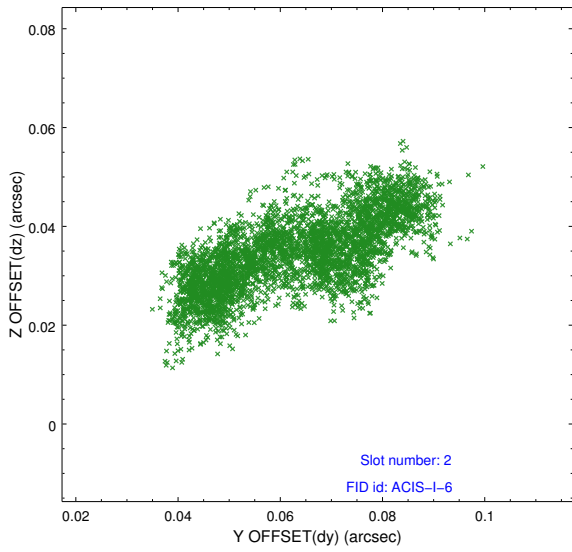
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2014.12.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	15.772759131014

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.