

V&V Reference Report

L2 ASCDS Version : 10

Observation 15112 - L2 Version 2
Chandra X-Ray Center

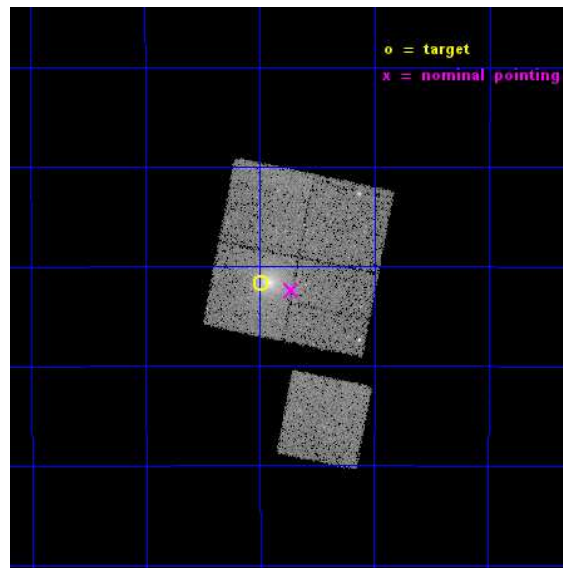
L2 Processing Date : Dec 3 2014

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1 Front

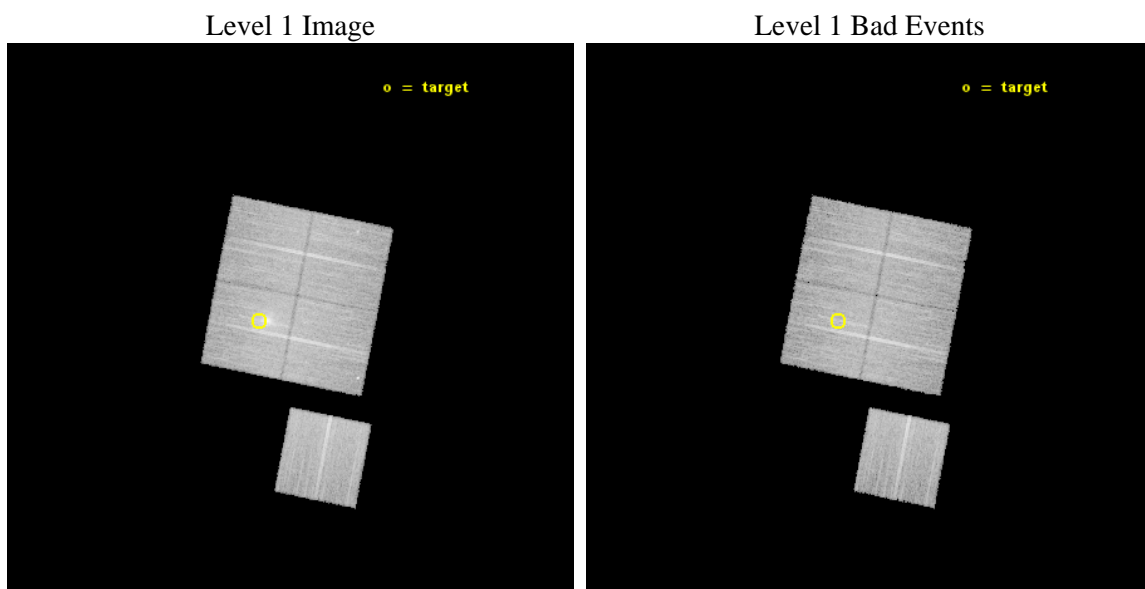
seq_num	801241	Sequence number
obs_id	15112	Observation id
title	A Chandra-Planck Legacy Program for Massive Clusters of Galaxies	P
observer	Dr. Christine Jones	Principal investigator
object	G241.74-30.88	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	83.2475	Observer's specified target RA [deg]
dec_targ	-37.027667	Observer's specified target Dec [deg]
ra_nom	83.181233780656	Nominal RA [deg]
dec_nom	-37.040511371848	Nominal Dec [deg]
roll_nom	191.29462133171	Nominal Roll [deg]
revision	2	Processing version of data
ontime	25082.059222579	Sum of GTIs [s]
livetime	24754.343653693	Livetime [s]
ontime0	25085.200192928	Sum of GTIs [s]
ontime1	25085.200192928	Sum of GTIs [s]
ontime2	25085.200192928	Sum of GTIs [s]
ontime3	25082.059222579	Sum of GTIs [s]
ontime6	25085.200192928	Sum of GTIs [s]
l2events	75351	Number of level 2 events



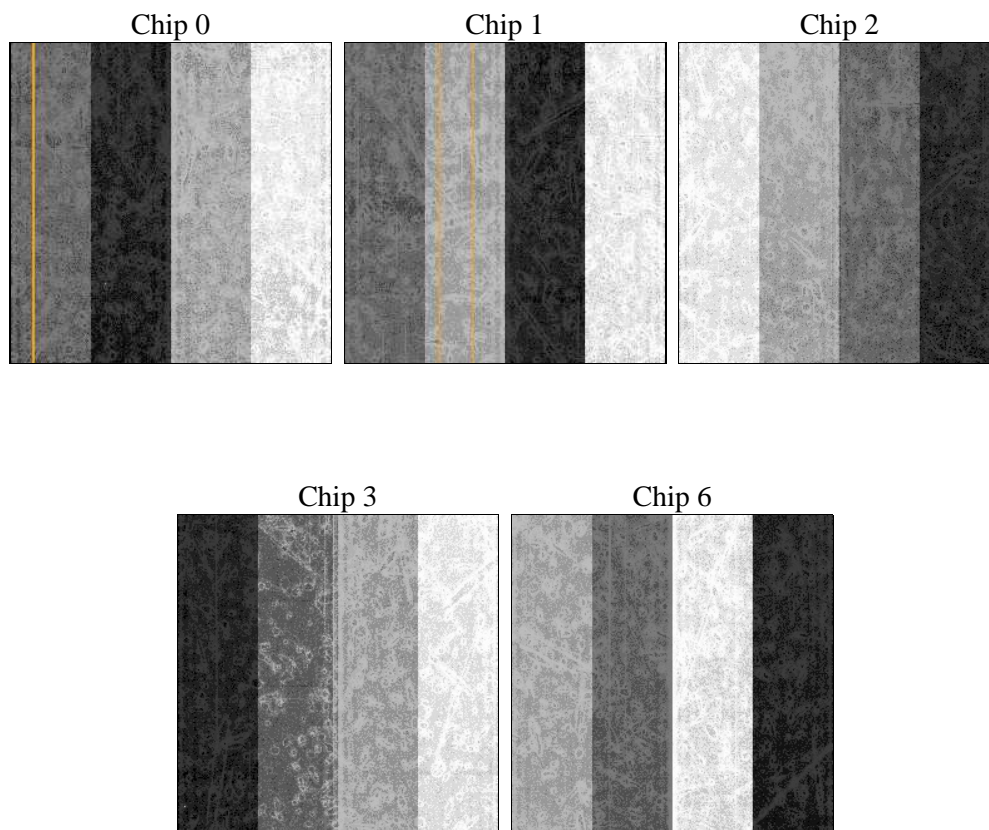
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	25000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	25082.059222579	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	25085.200192928	Sum of GTIs [s]
date	2014-12-03T12:18:12	Date and time of file creation	ontime1	25085.200192928	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	25085.200192928	Sum of GTIs [s]
			ontime3	25082.059222579	Sum of GTIs [s]
			ontime6	25085.200192928	Sum of GTIs [s]
			l1events	589255	Number of level 1 events

2.1.4 Events

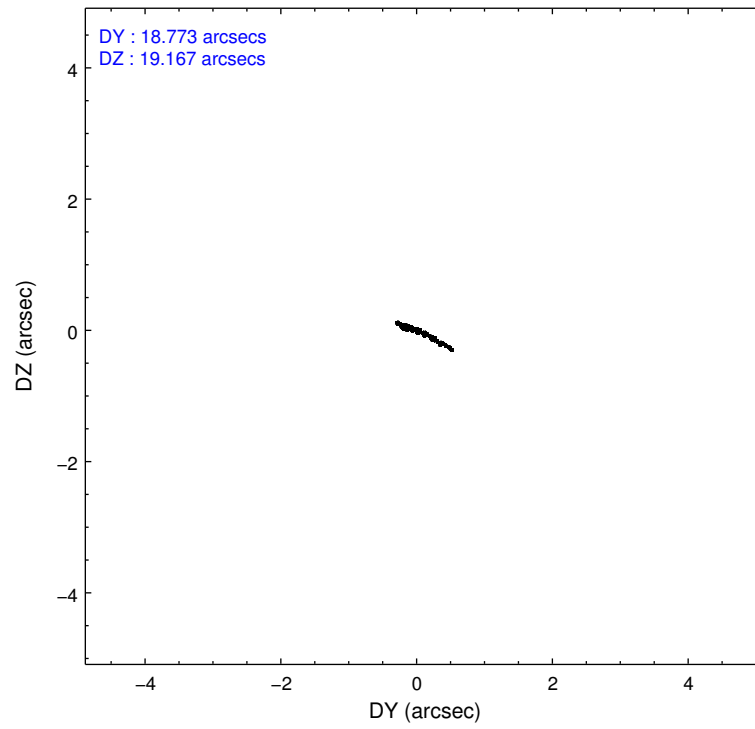
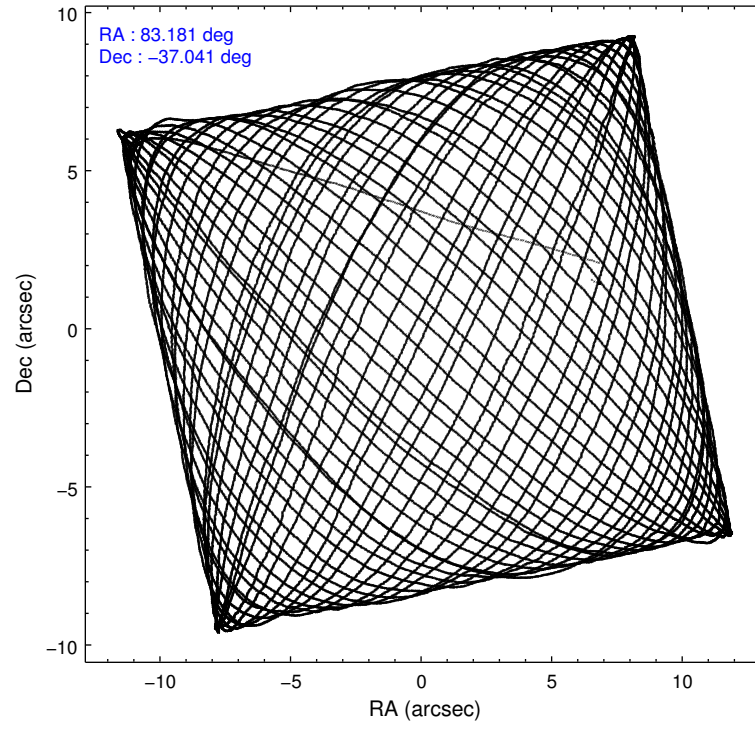
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	108777	110794	119957	131309	118418
rejected events	94139	94879	104836	104452	103976
rejected %	86%	85%	87%	79%	87%

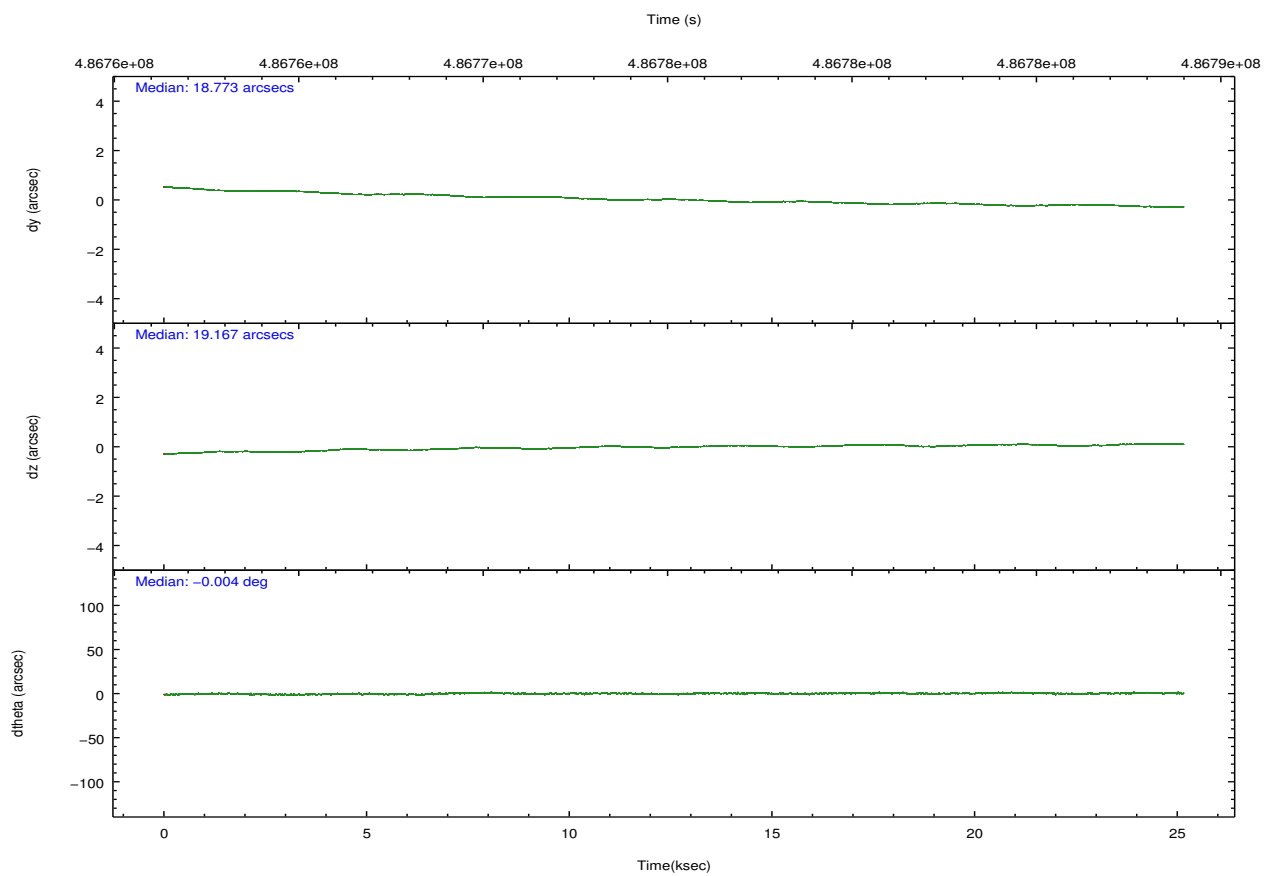
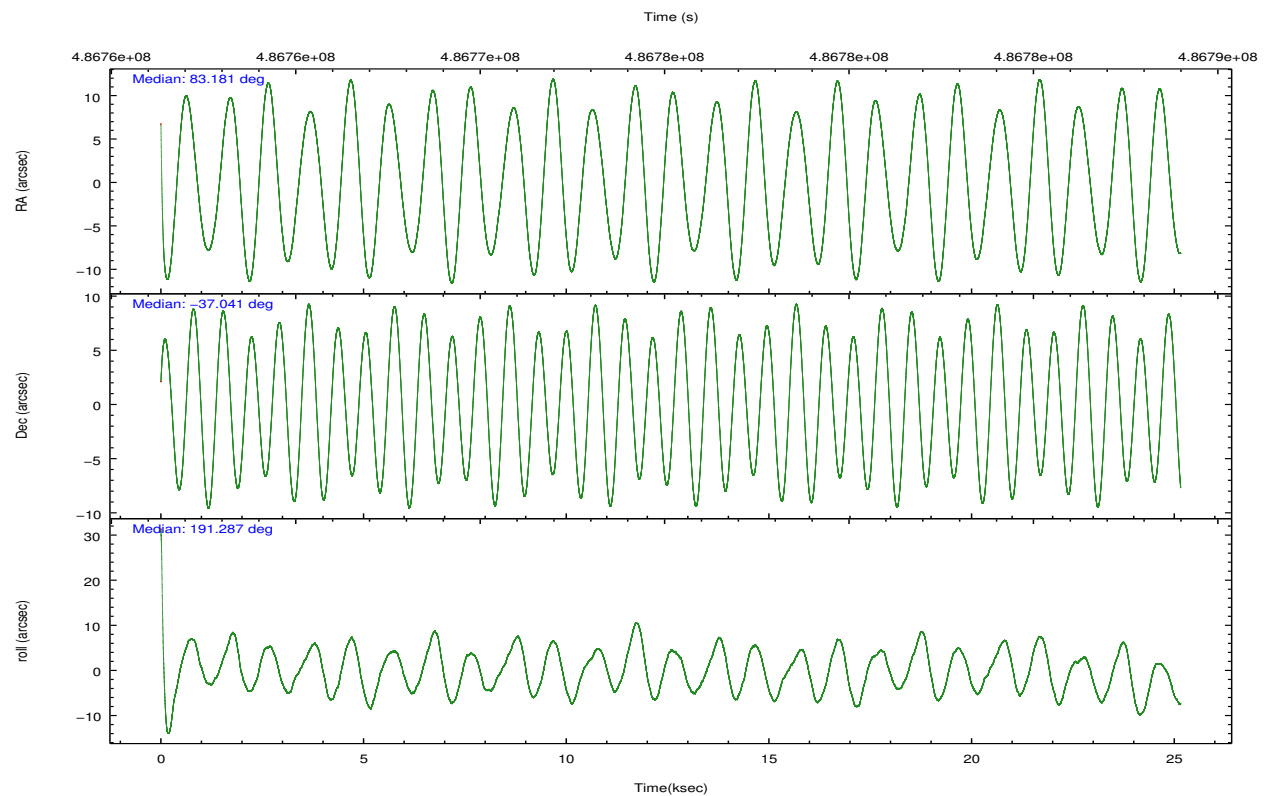
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	5157	5654	5860	15564	5044
	4%	5%	4%	11%	4%
grade 1 events	65	72	79	108	50
	0%	0%	0%	0%	0%
grade 2 events	3605	3810	3661	4322	3195
	3%	3%	3%	3%	2%
grade 3 events	1556	1525	1397	1854	1475
	1%	1%	1%	1%	1%
grade 4 events	1382	1611	1379	1878	1455
	1%	1%	1%	1%	1%
grade 5 events	5443	6087	5295	6302	6142
	5%	5%	4%	4%	5%
grade 6 events	2941	3317	2828	3246	3275
	2%	2%	2%	2%	2%
grade 7 events	88628	88718	99458	98035	97782
	81%	80%	82%	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	83.207036	83.18123378065593	CCD I2 on	Y	Y
[deg] Pointing Dec	-37.022296	-37.04051137184842	CCD I3 on	Y	Y
[deg] Pointing Roll	191.101467	191.2946213317079	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)	486762751.184000	486761563.70225	CCD S5 on	N	N
Observation start date	2013-06-04T19:51:24	2013-06-04T19:32:43	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	486787751.184000	486788786.67872	On-chip summing requested	N	N
Observation end date	2013-06-05T02:48:04	2013-06-05T03:06:26	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



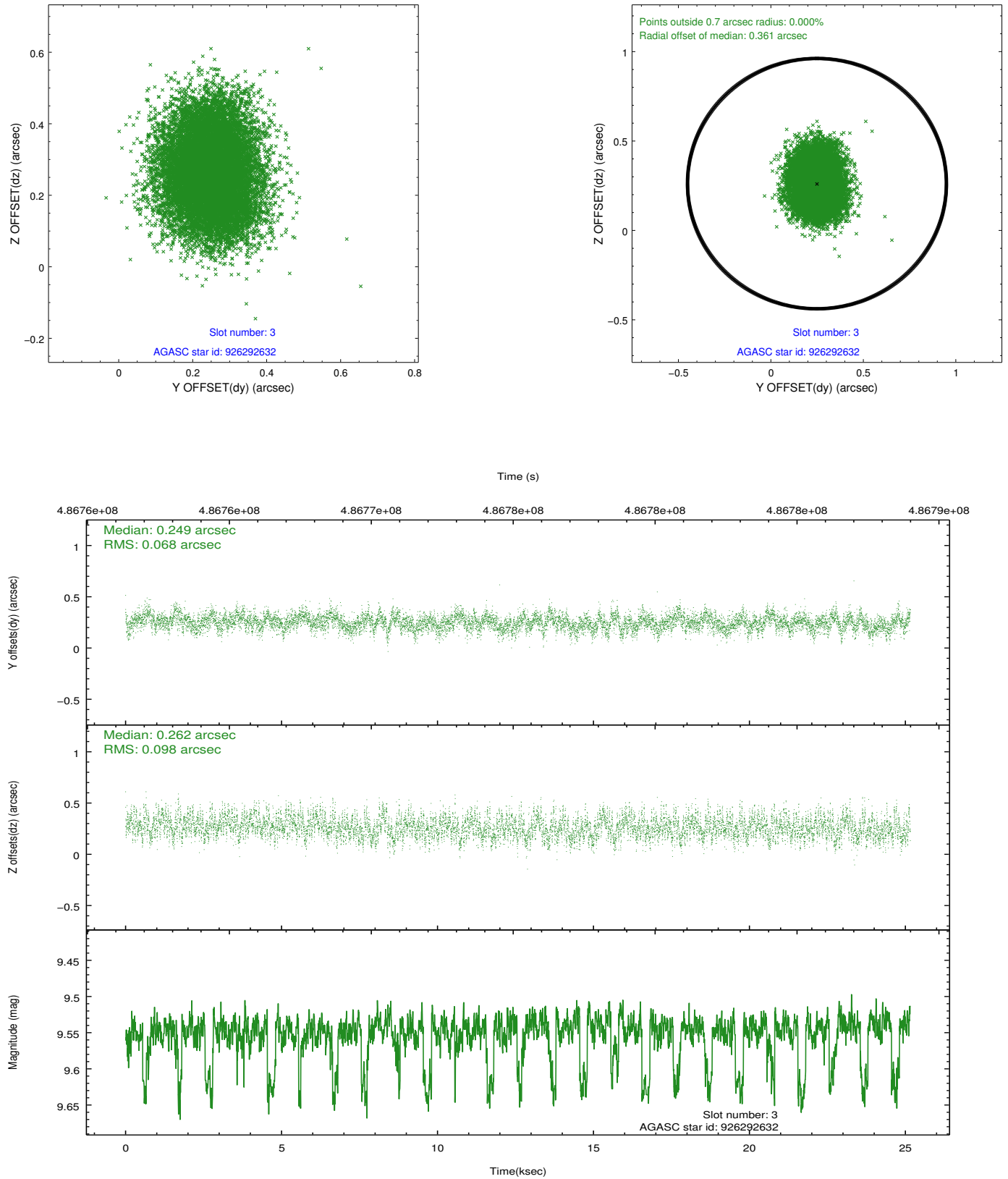


Slot Statistics

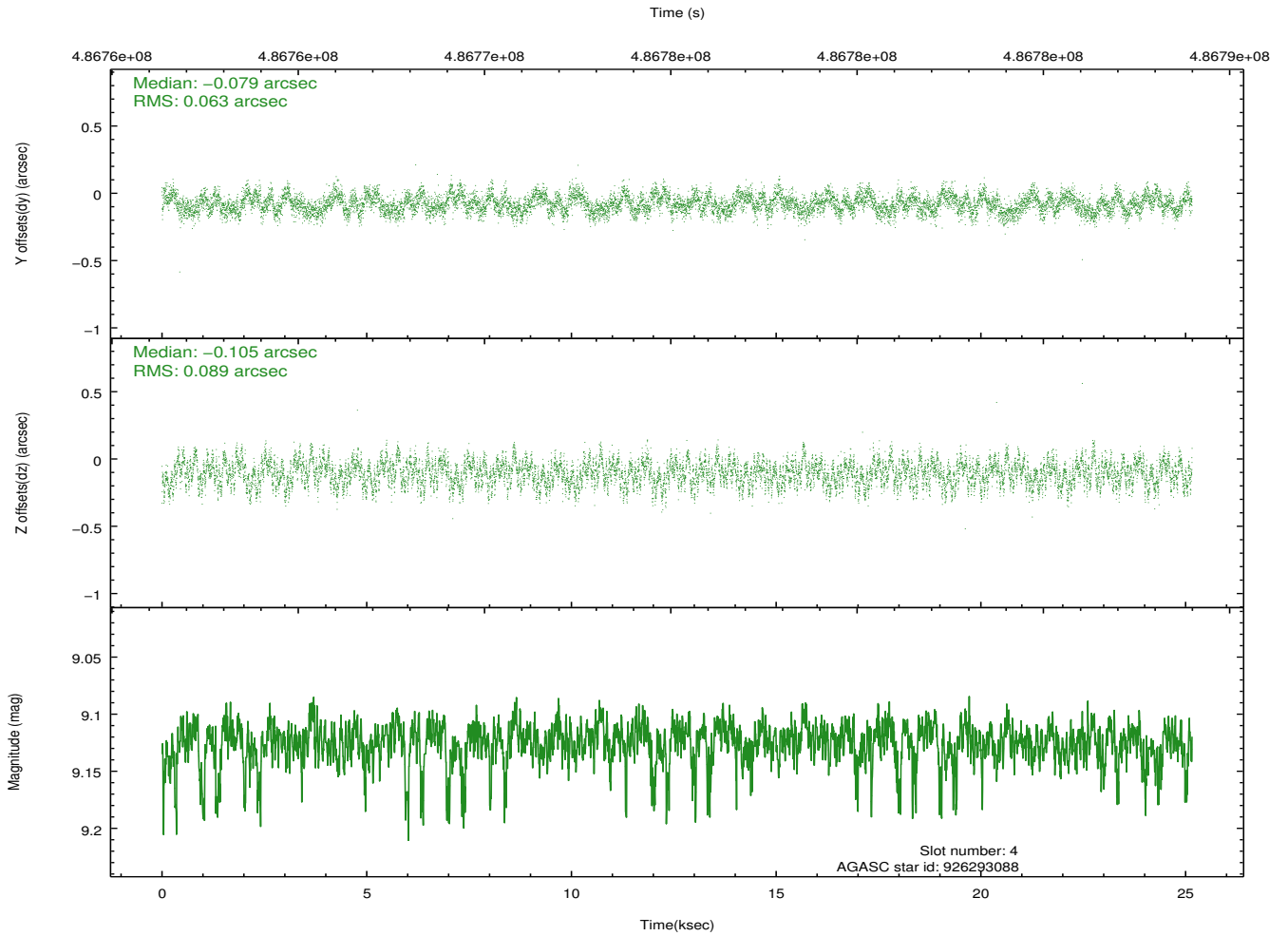
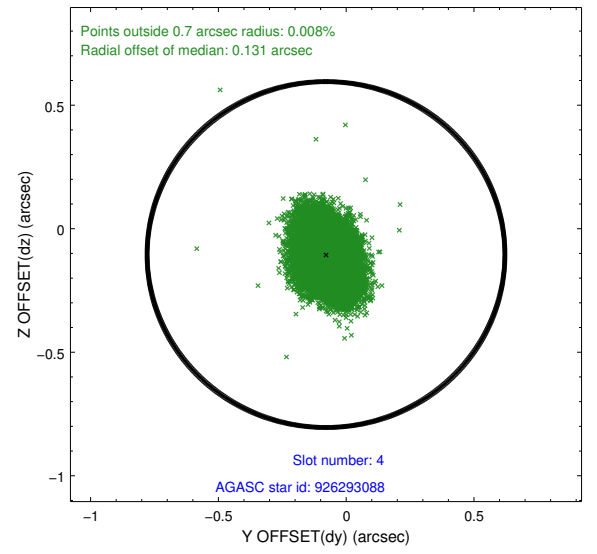
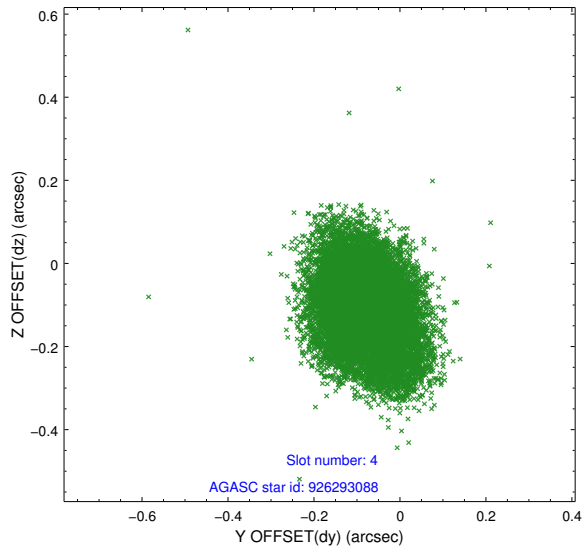
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.04	6137	0.118	-0.079	0.010	0.018	0.000000	0.000000	920.57	-1001.96
1	FID		ACIS-I-5	7.03	6137	-0.315	0.089	0.010	0.016	0.000000	0.000000	-1827.98	895.50
2	FID		ACIS-I-6	7.05	6137	0.104	0.060	0.011	0.017	0.000000	0.000000	385.87	1540.20
3	GUIDE	used	926292632	9.55	12255	0.249	0.262	0.128	0.206	83.218588	-36.458113	-423.57	-1986.61
4	GUIDE	used	926293088	9.12	12257	-0.079	-0.105	0.116	0.187	82.880847	-37.250845	1075.88	629.01
5	GUIDE	used	926294040	9.09	12264	-0.198	-0.181	0.090	0.148	82.527936	-37.413273	2177.69	1014.87
6	GUIDE	used	995624008	9.07	12257	0.339	0.111	0.093	0.150	83.373994	-37.549886	-101.67	1956.12
7	GUIDE	used	995624240	8.52	12264	-0.305	-0.086	0.068	0.109	82.754005	-37.742795	1765.15	2300.49

2.4 Star Slots

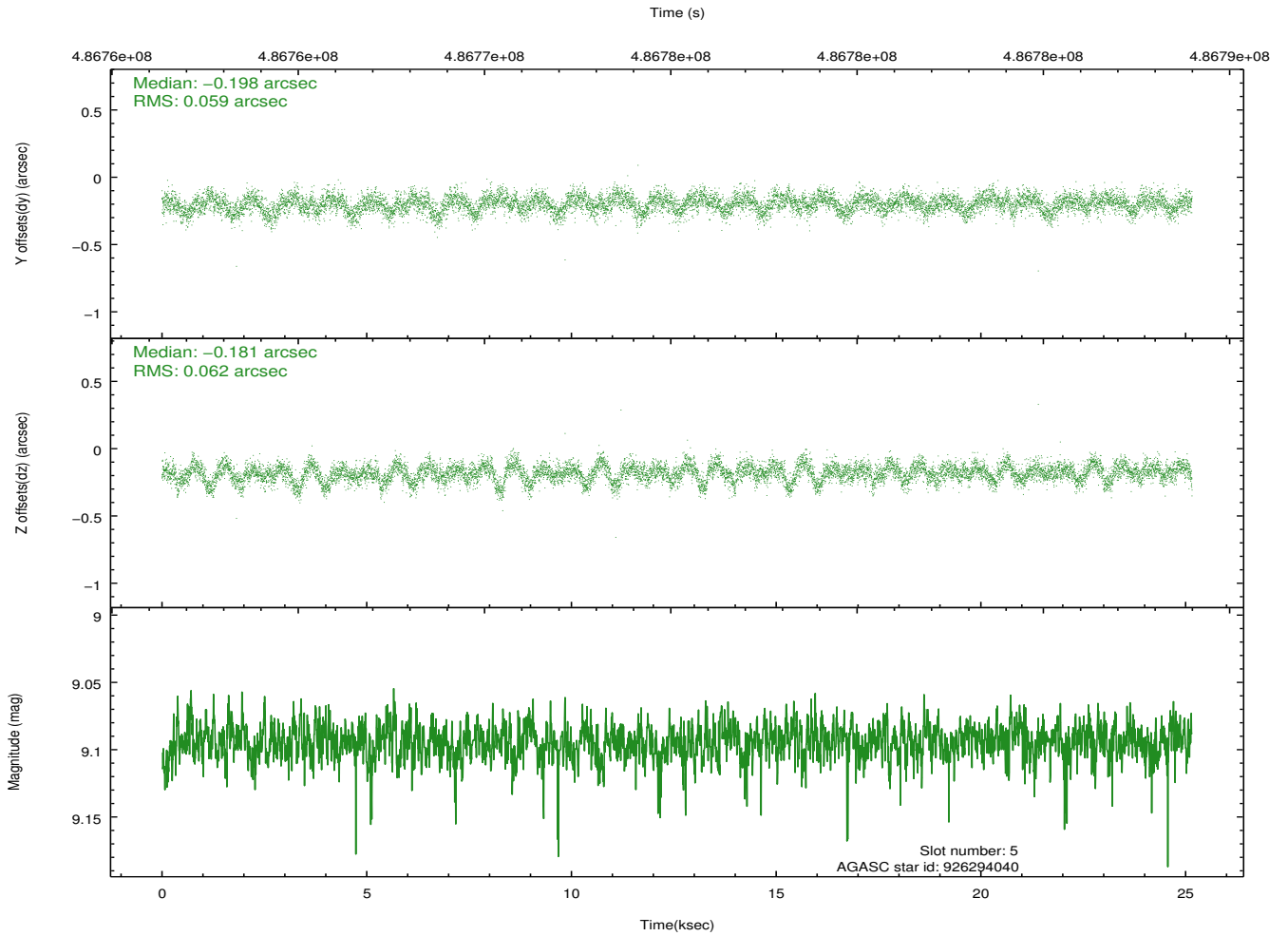
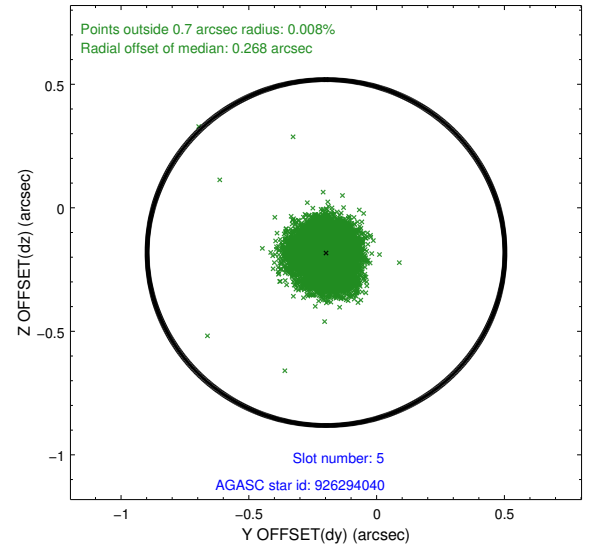
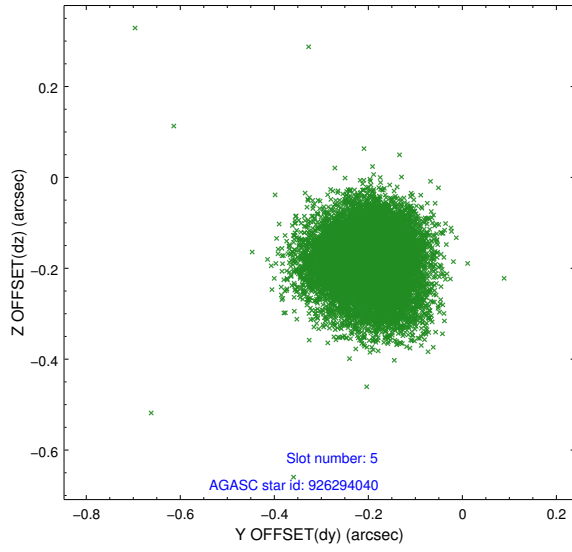
2.4.1 Slot 3



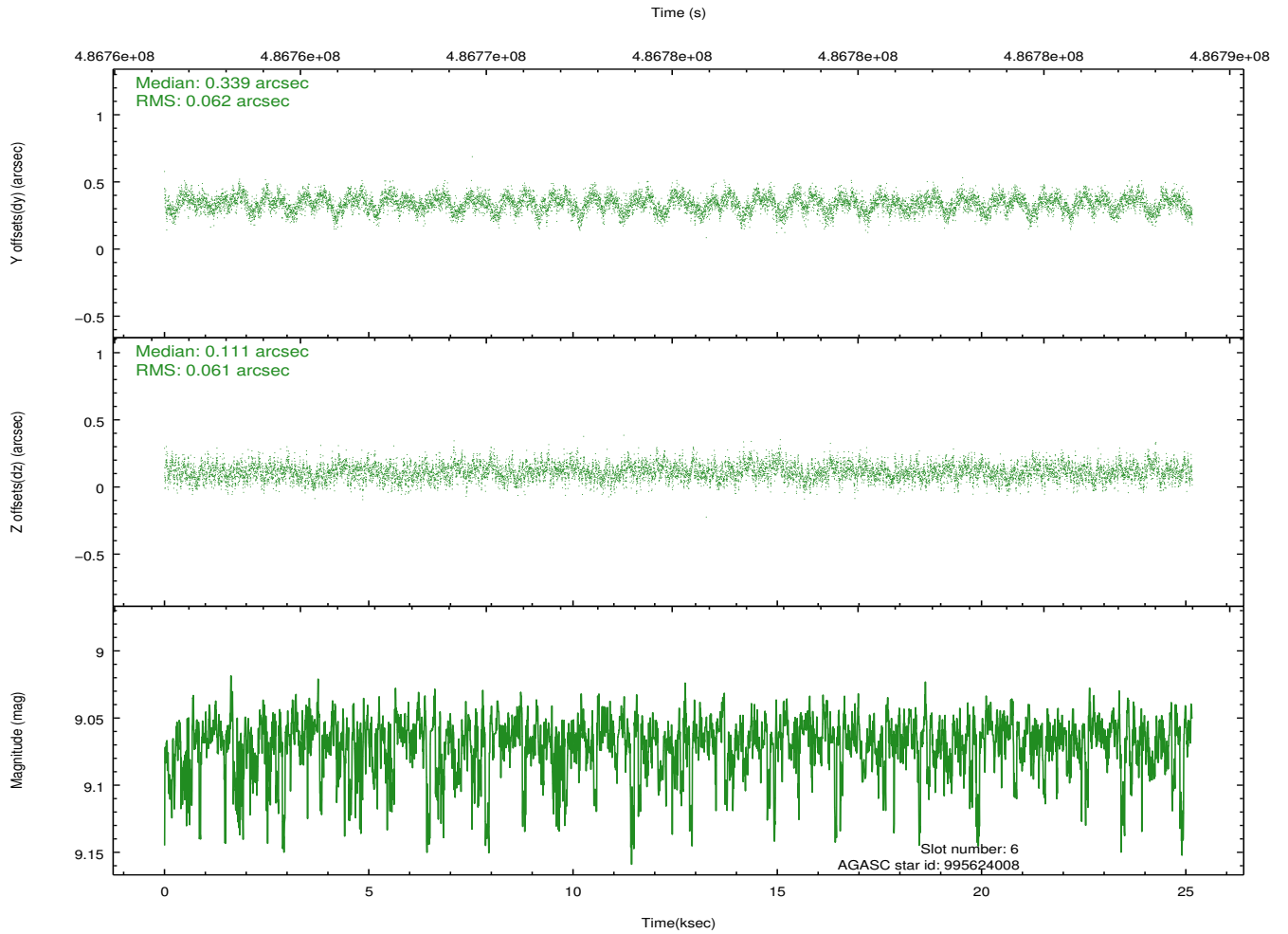
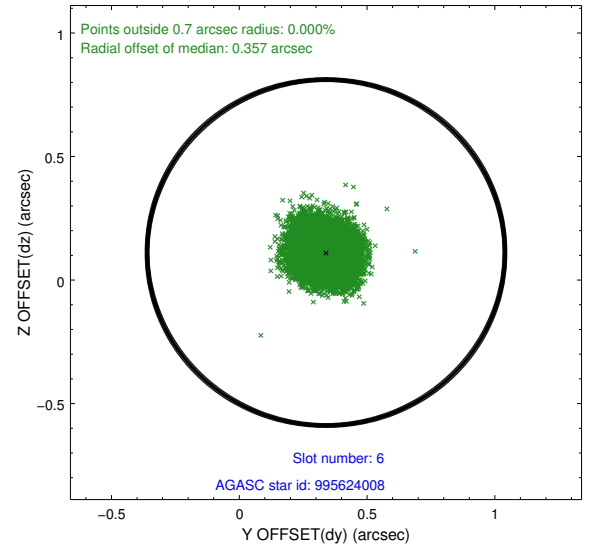
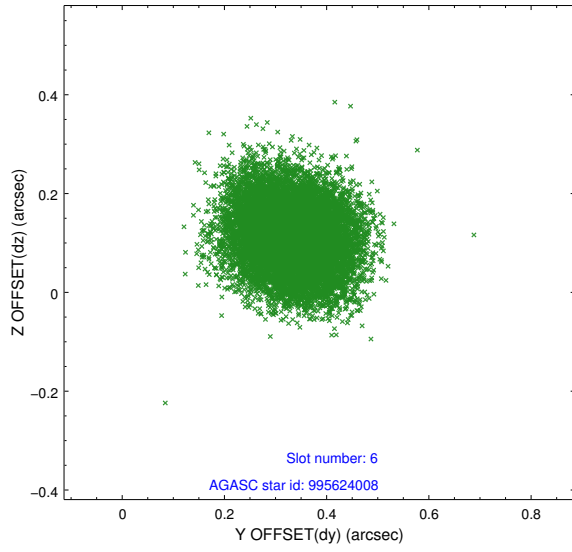
2.4.2 Slot 4



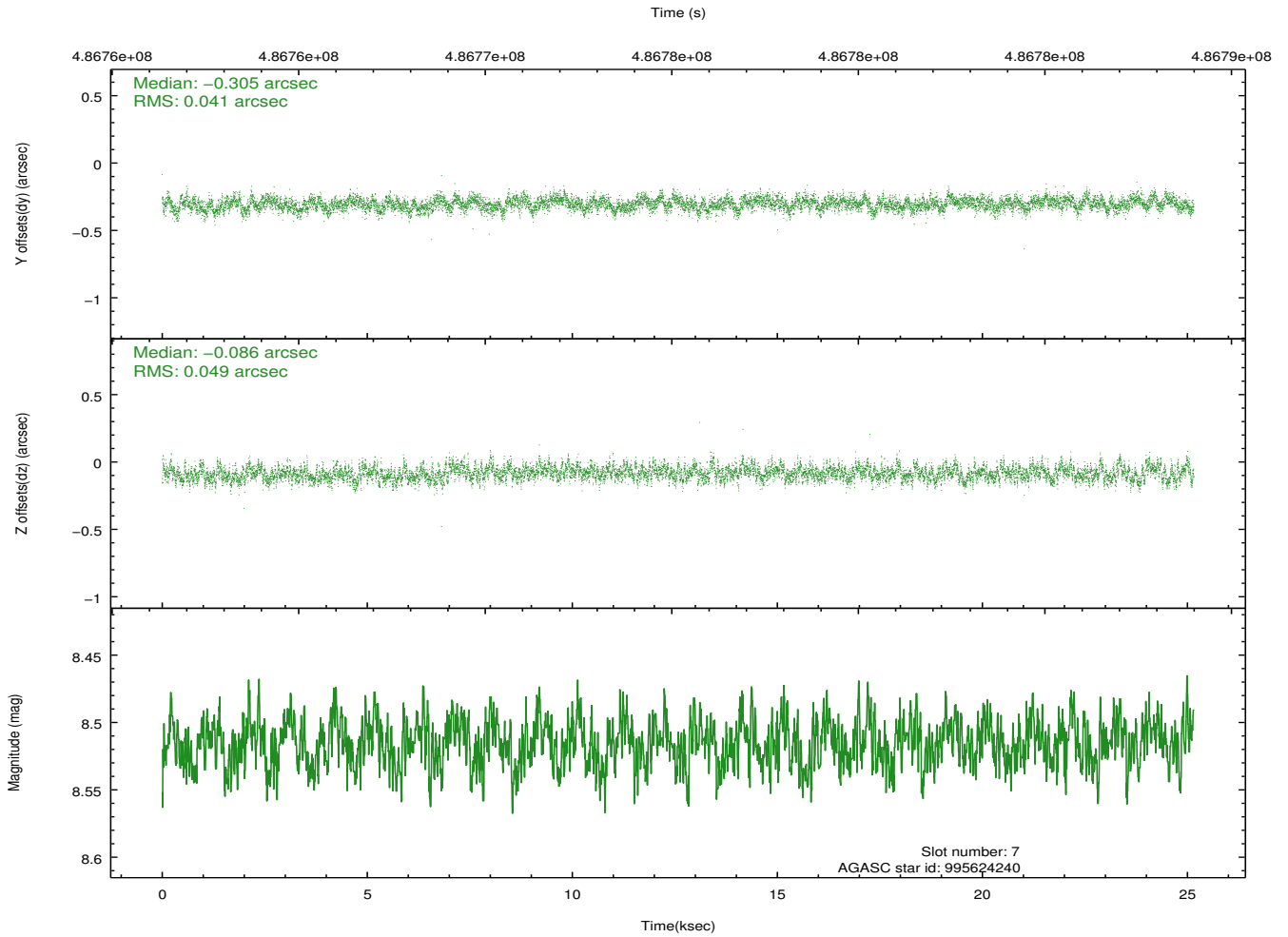
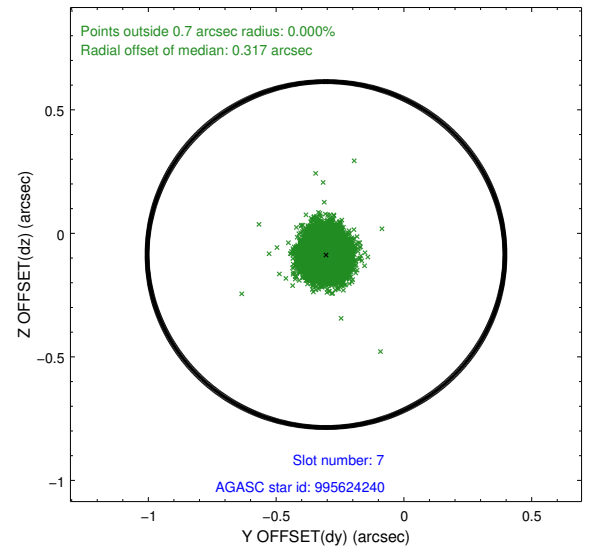
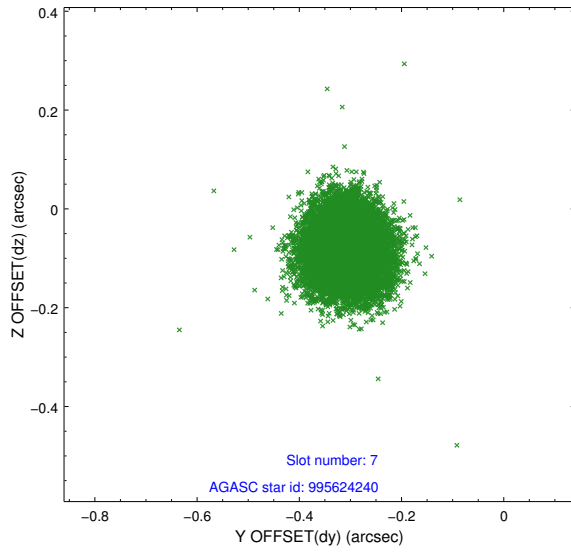
2.4.3 Slot 5



2.4.4 Slot 6

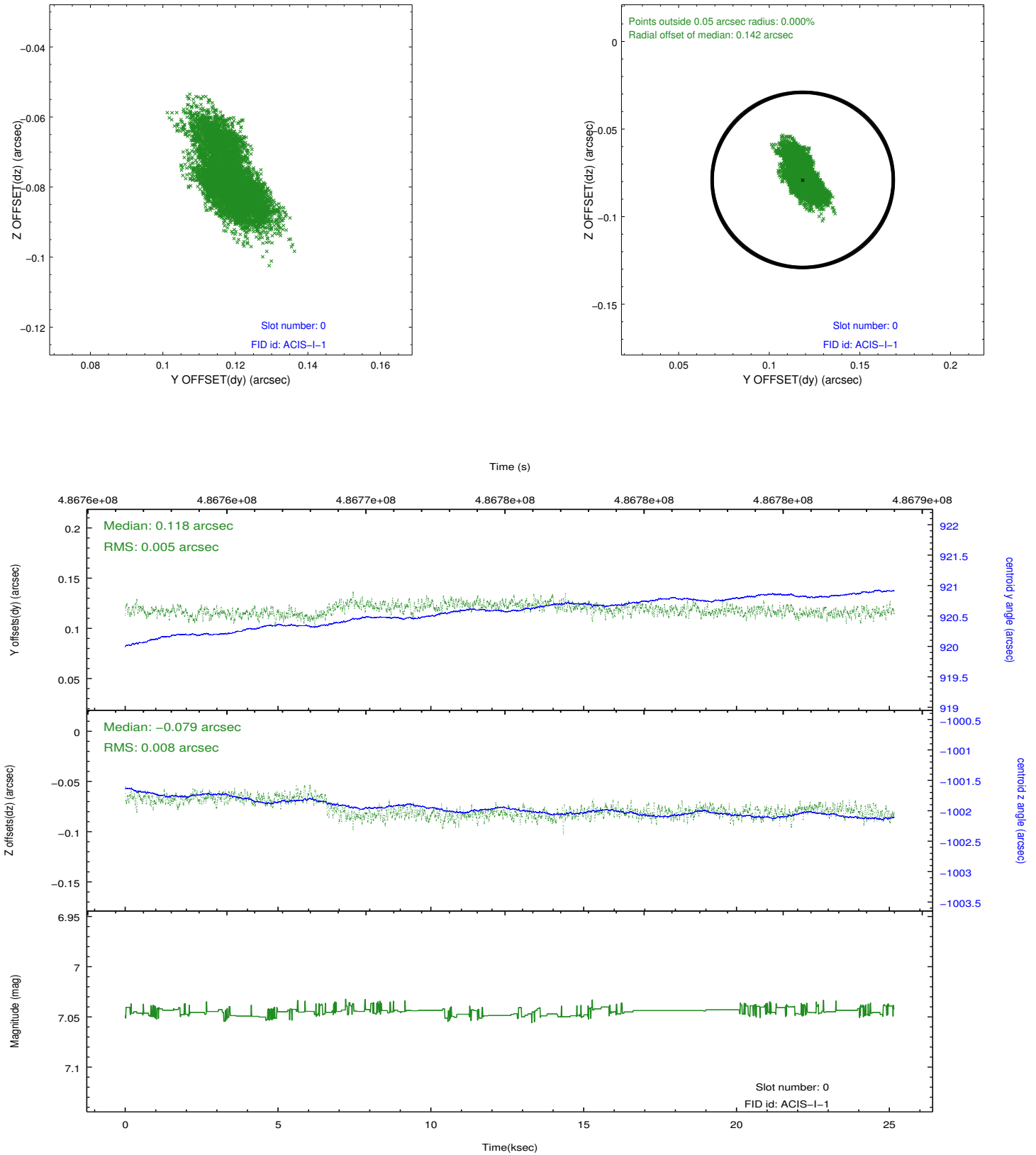


2.4.5 Slot 7

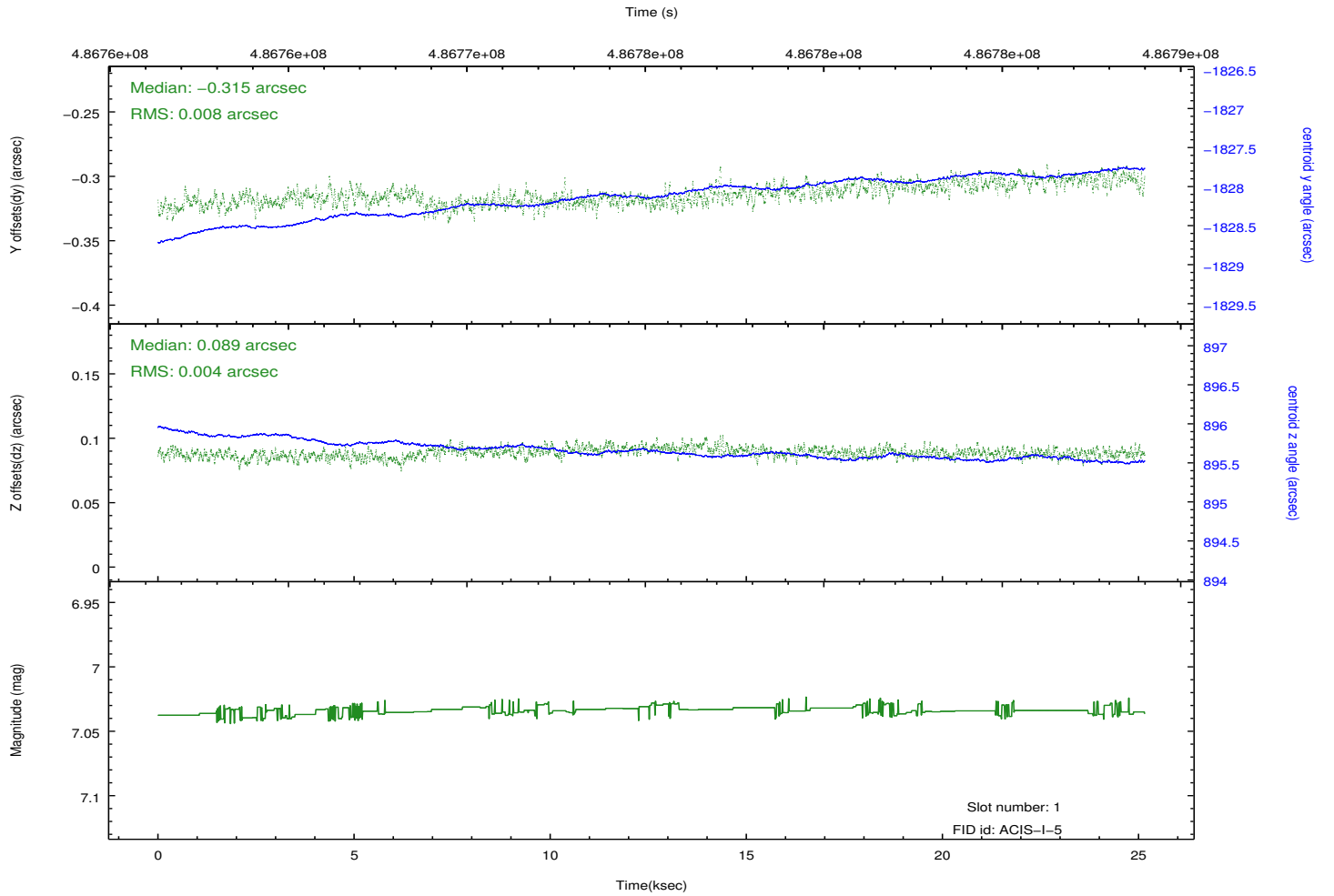
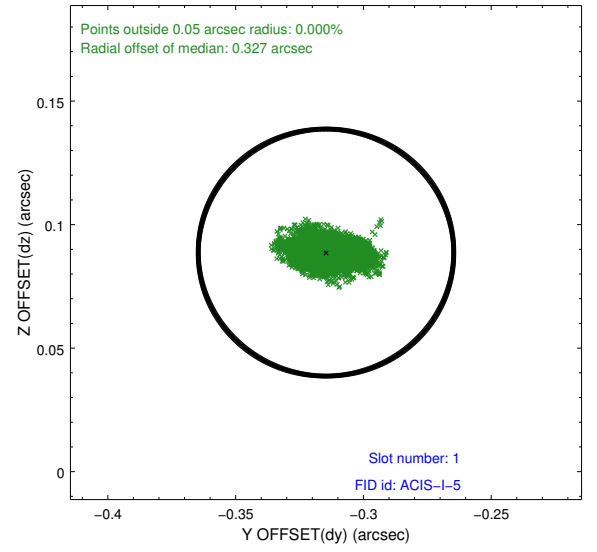
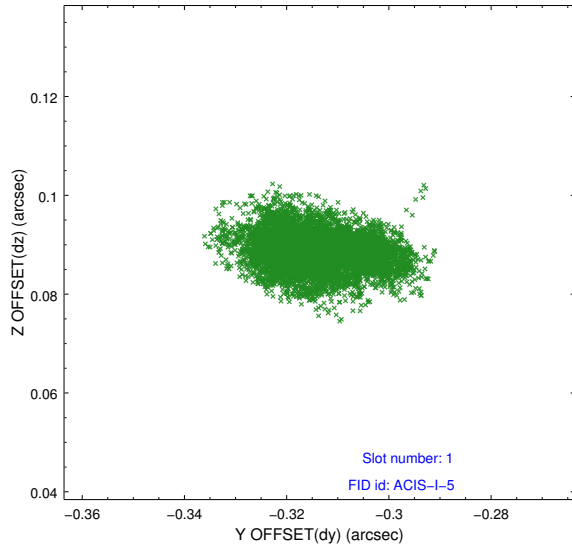


2.5 FID Slots

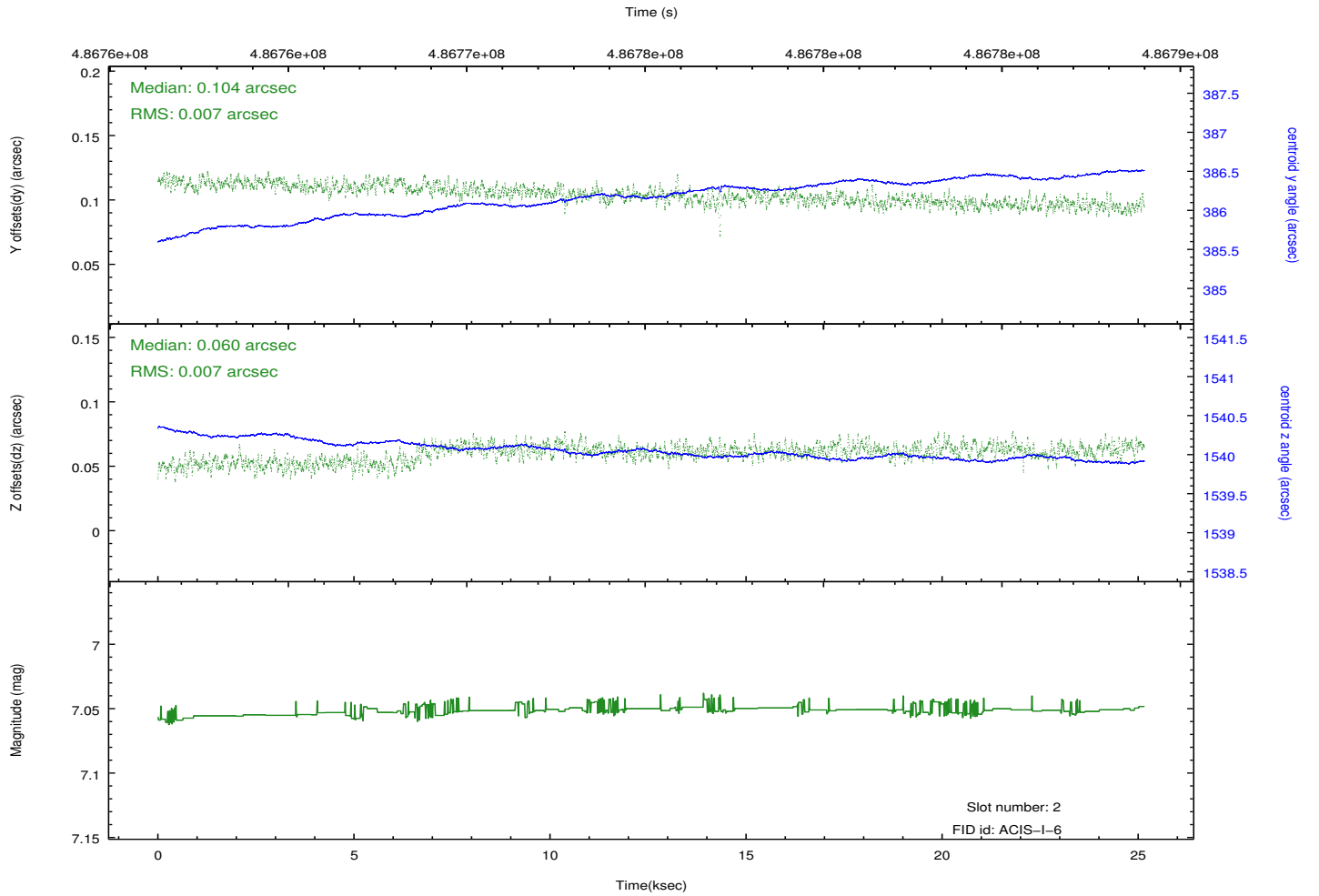
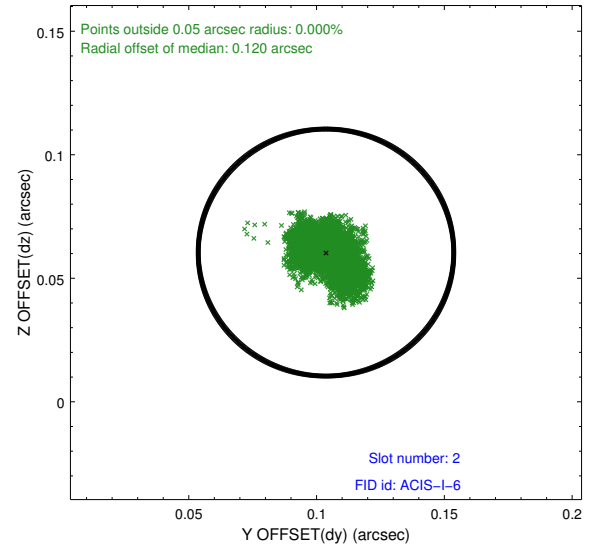
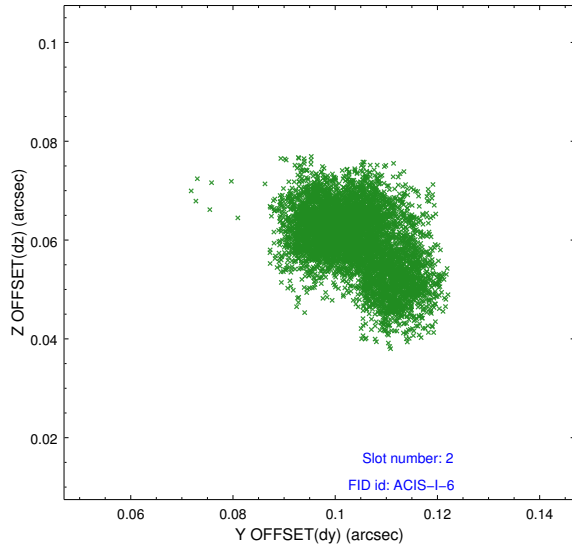
2.5.1 Slot 0



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)	2014.12.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	25.082059222579

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.