

V&V Reference Report

L2 ASCDS Version : 10

Observation 15103 - L2 Version 2
Chandra X-Ray Center

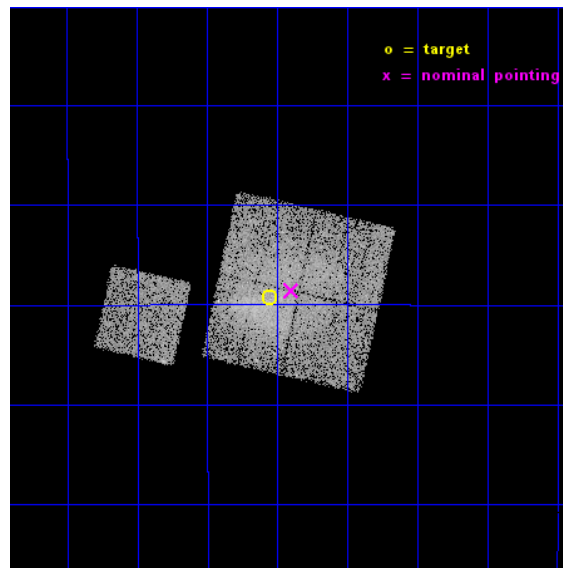
L2 Processing Date : Dec 6 2014

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1 Front

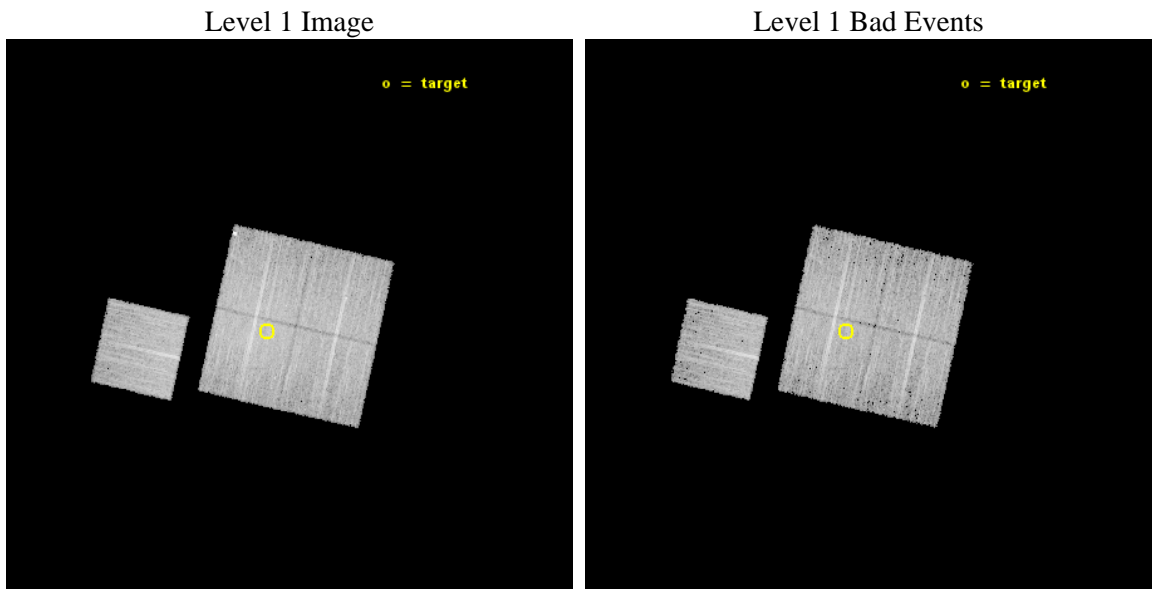
seq_num	801232	Sequence number
obs_id	15103	Observation id
title	A Chandra-Planck Legacy Program for Massive Clusters of Galaxies	P
observer	Dr. Christine Jones	Principal investigator
object	G039.85-39.98	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	321.764583	Observer's specified target RA [deg]
dec_targ	-12.155278	Observer's specified target Dec [deg]
ra_nom	321.72496808918	Nominal RA [deg]
dec_nom	-12.142732775866	Nominal Dec [deg]
roll_nom	282.72275322251	Nominal Roll [deg]
revision	2	Processing version of data
ontime	15084.063020706	Sum of GTIs [s]
livetime	14886.978632615	Livetime [s]
ontime0	15083.9809407	Sum of GTIs [s]
ontime1	15084.021980703	Sum of GTIs [s]
ontime2	15084.063020706	Sum of GTIs [s]
ontime3	15077.821939647	Sum of GTIs [s]
ontime6	15083.939900696	Sum of GTIs [s]
l2events	46673	Number of level 2 events



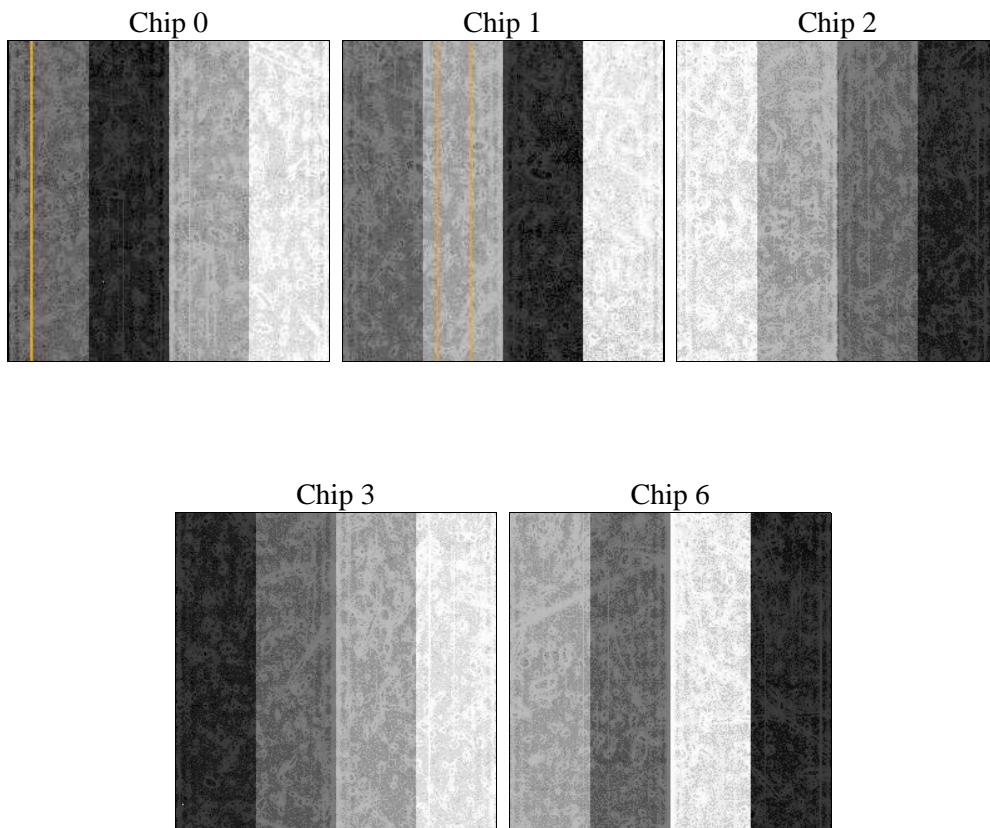
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	15000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	15084.063020706	Sum of GTIs [s]
caldbver	4.6.4	 	ontime0	15083.9809407	Sum of GTIs [s]
date	2014-12-06T15:35:21	Date and time of file creation	ontime1	15084.021980703	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	15084.063020706	Sum of GTIs [s]
			ontime3	15077.821939647	Sum of GTIs [s]
			ontime6	15083.939900696	Sum of GTIs [s]
			l1events	352627	Number of level 1 events

2.1.4 Events

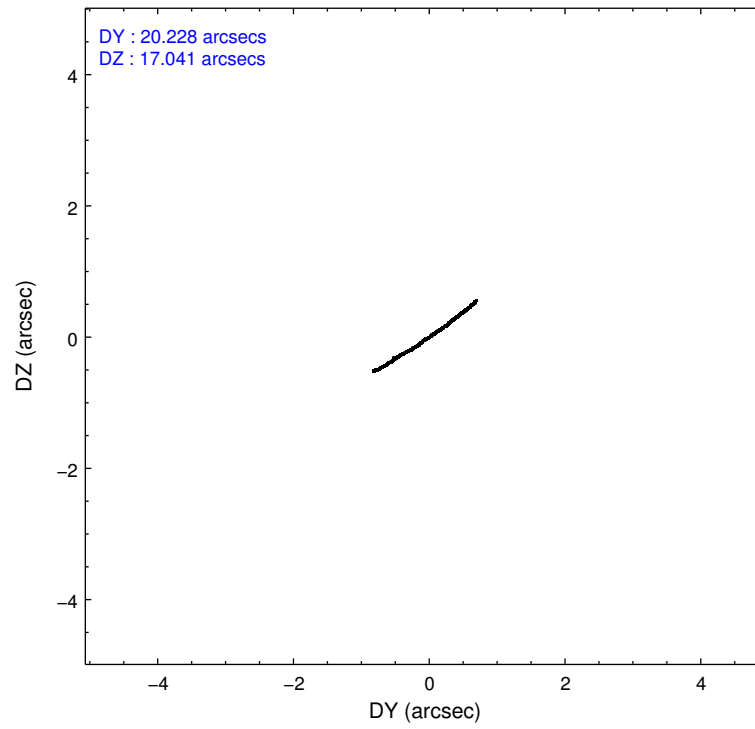
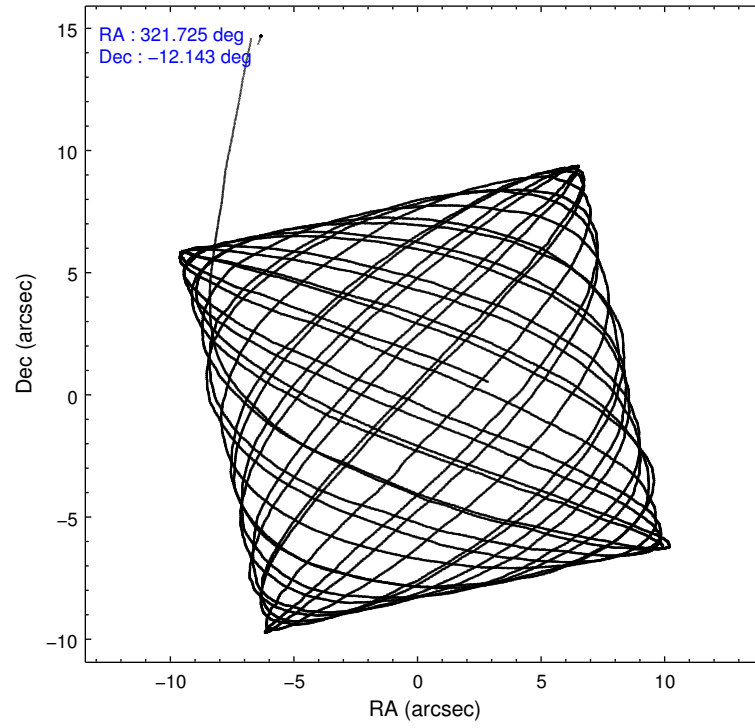
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	64379	67554	76981	72917	70796
rejected events	54692	56844	62220	61699	62288
rejected %	84%	84%	80%	84%	87%

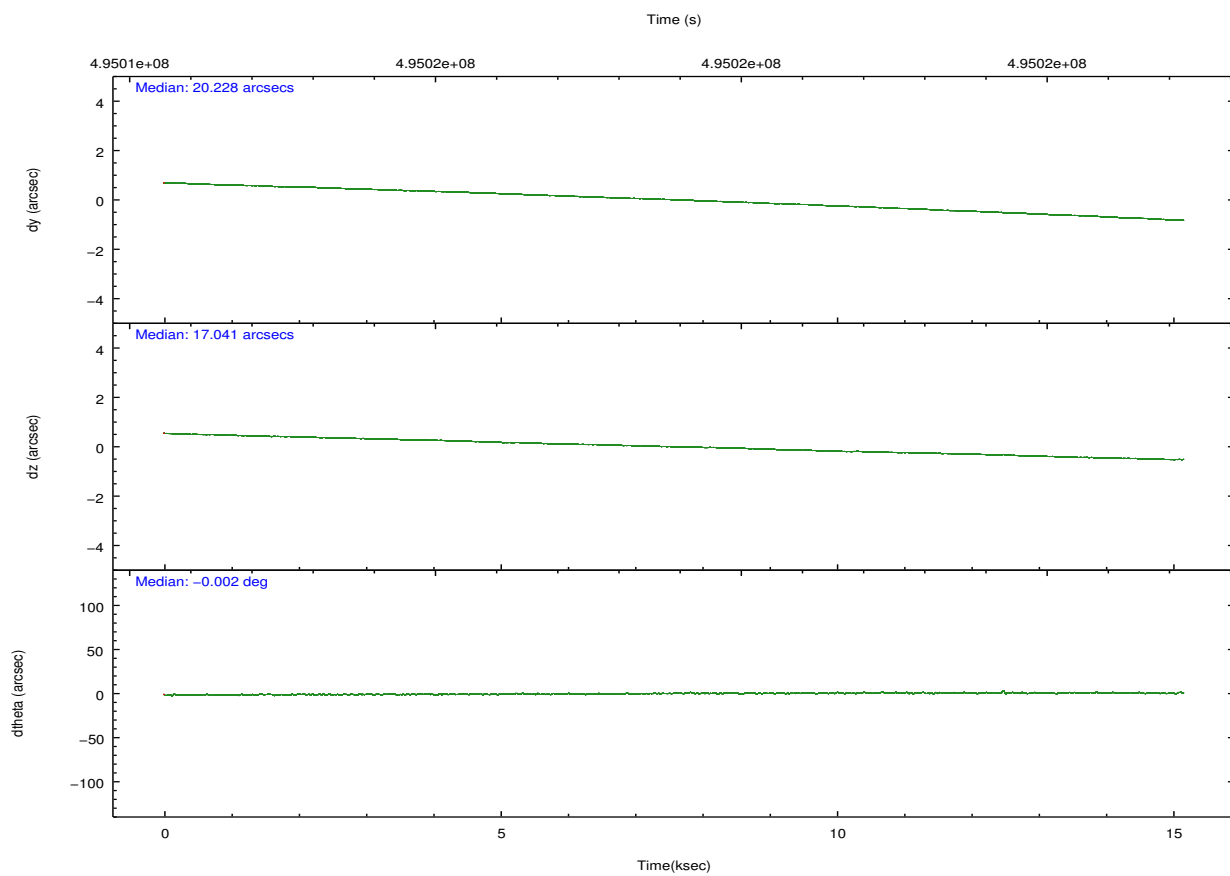
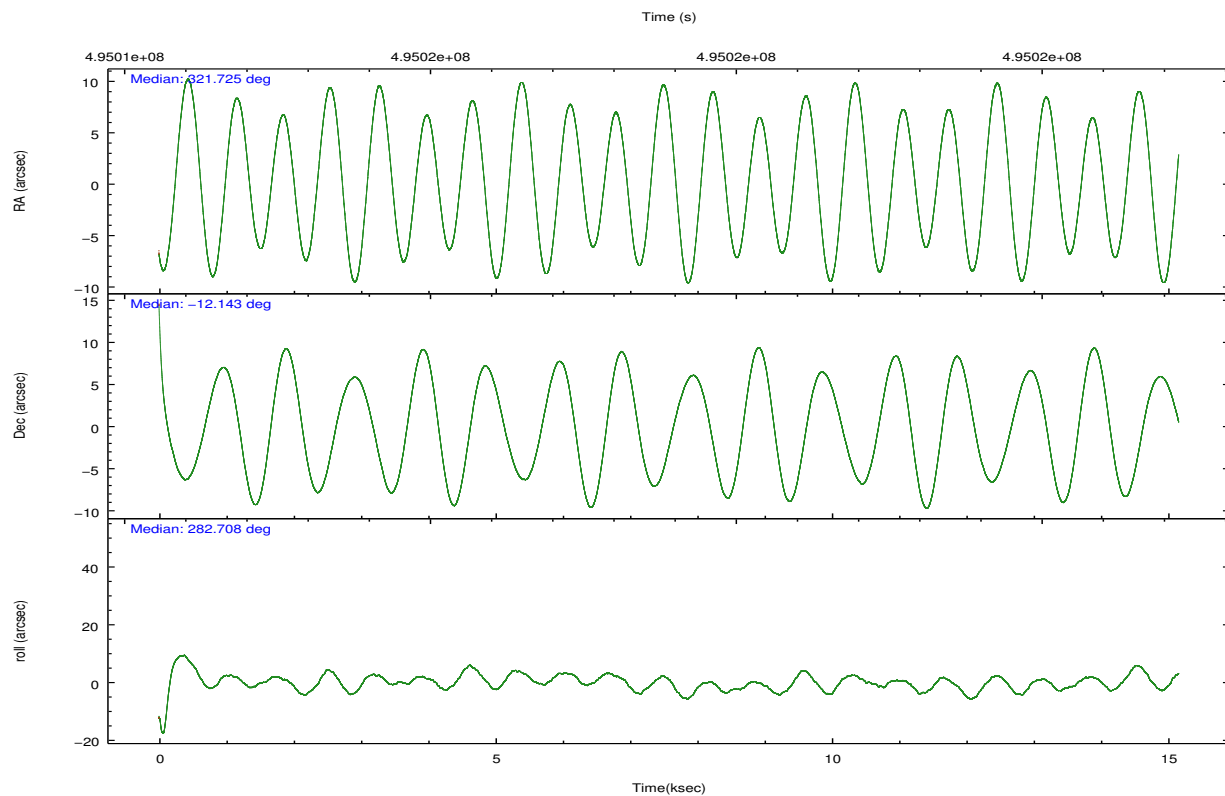
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	3936	4341	8323	5656	2929
	6%	6%	10%	7%	4%
grade 1 events	45	42	57	62	24
	0%	0%	0%	0%	0%
grade 2 events	2176	2263	2660	2039	1894
	3%	3%	3%	2%	2%
grade 3 events	884	962	1008	900	852
	1%	1%	1%	1%	1%
grade 4 events	885	980	1040	866	893
	1%	1%	1%	1%	1%
grade 5 events	3538	3710	3292	3883	3684
	5%	5%	4%	5%	5%
grade 6 events	1807	2167	1742	1762	1941
	2%	3%	2%	2%	2%
grade 7 events	51108	53089	58859	57749	58579
	79%	78%	76%	79%	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	321.705826	321.7249680891784	CCD I2 on	Y	Y
[deg] Pointing Dec	-12.122615	-12.14273277586633	CCD I3 on	Y	Y
[deg] Pointing Roll	282.510041	282.7227532225129	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	N	N
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	495011473.184000	495010025.12622	CCD S5 on	N	N
Observation start date	2013-09-08T07:10:06	2013-09-08T06:47:05	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	495026473.184000	495027133.91466	On-chip summing requested	N	N
Observation end date	2013-09-08T11:20:06	2013-09-08T11:32:13	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



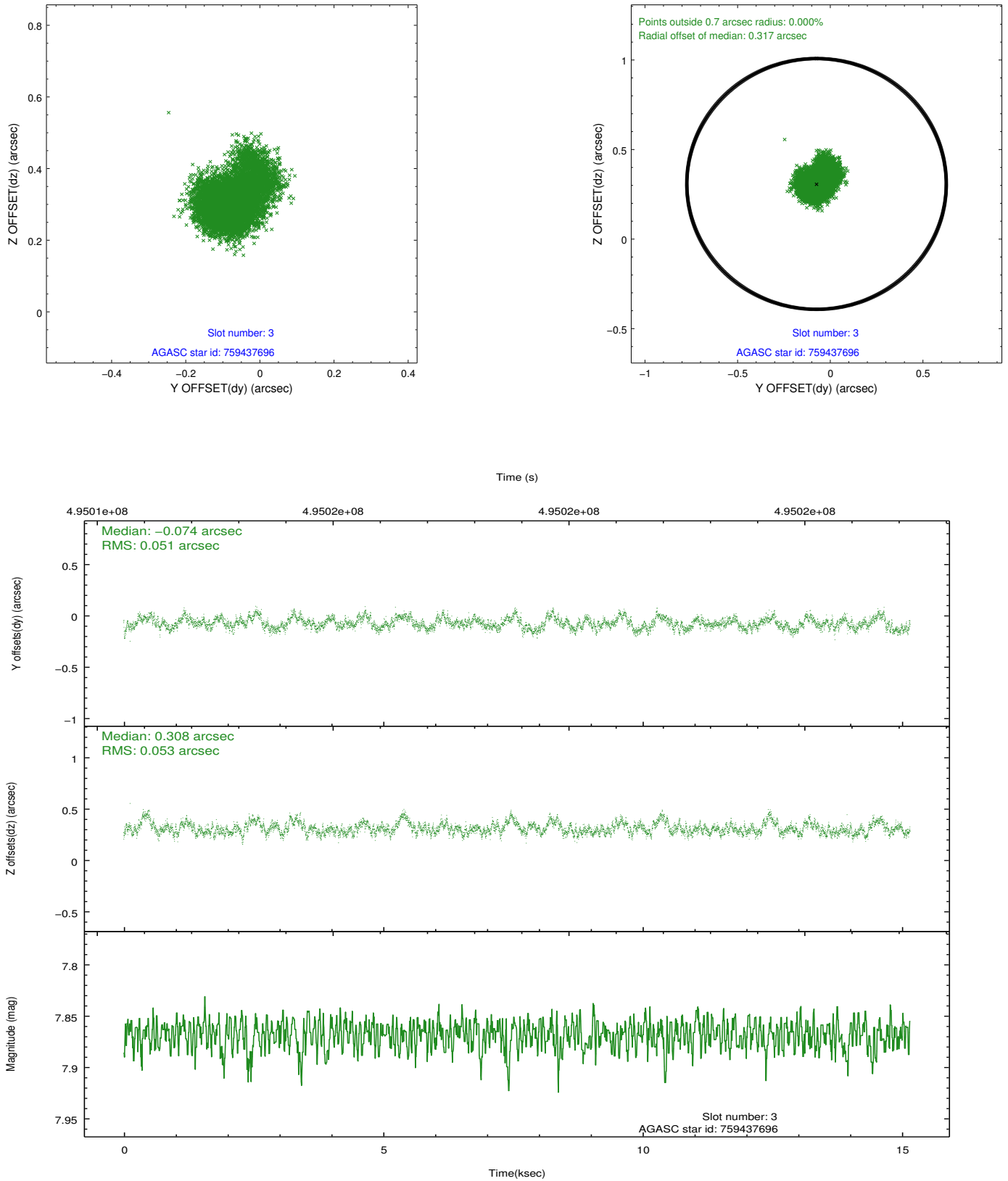


Slot Statistics

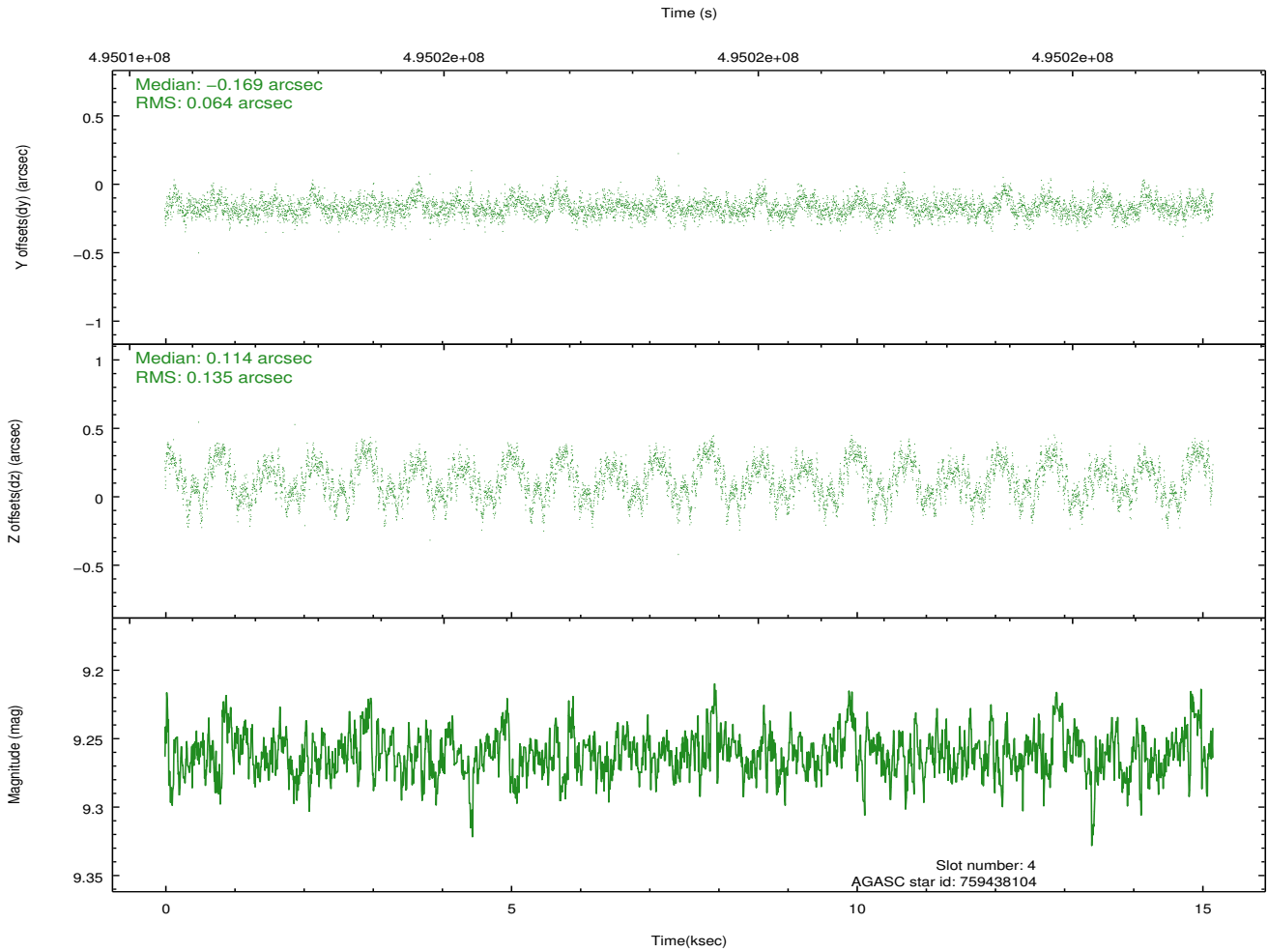
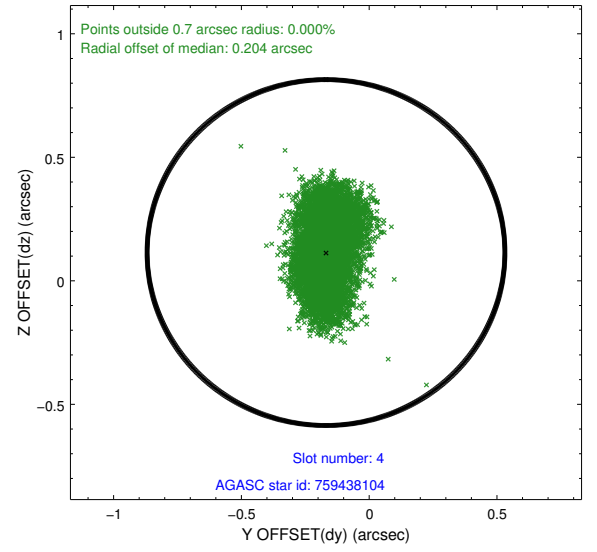
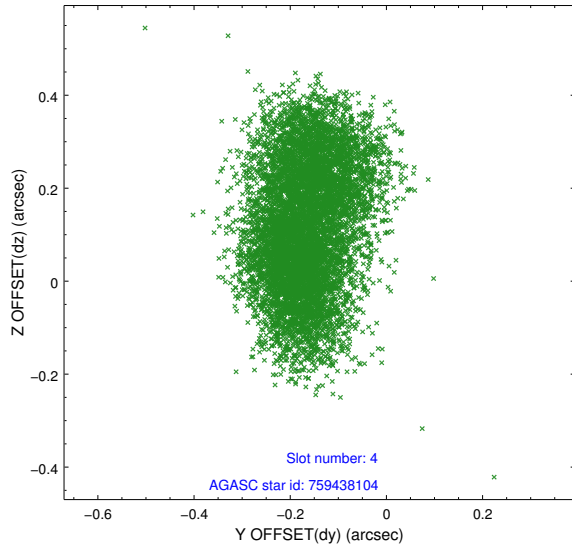
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.12	3698	0.074	-0.031	0.022	0.032	0.000000	0.000000	919.18	-840.72
1	FID		ACIS-I-5	7.10	3698	-0.281	0.059	0.010	0.016	0.000000	0.000000	-1829.12	1056.70
2	FID		ACIS-I-6	7.11	3698	0.116	0.039	0.018	0.025	0.000000	0.000000	384.44	1701.53
3	GUIDE	used	759437696	7.87	7395	-0.074	0.308	0.077	0.131	322.021125	-11.928488	-440.69	1235.83
4	GUIDE	used	759438104	9.26	7394	-0.169	0.114	0.163	0.256	321.852488	-12.251639	565.59	403.42
5	GUIDE	used	759438432	8.98	7382	-0.049	-0.086	0.103	0.162	322.179002	-12.589997	2005.00	1258.95
6	GUIDE	used	759438560	9.28	7350	-0.067	-0.263	0.141	0.224	321.843715	-12.531566	1543.54	154.20
7	GUIDE	used	757732224	9.51	7378	0.340	-0.057	0.202	0.327	321.353233	-12.547654	1227.77	-1541.07

2.4 Star Slots

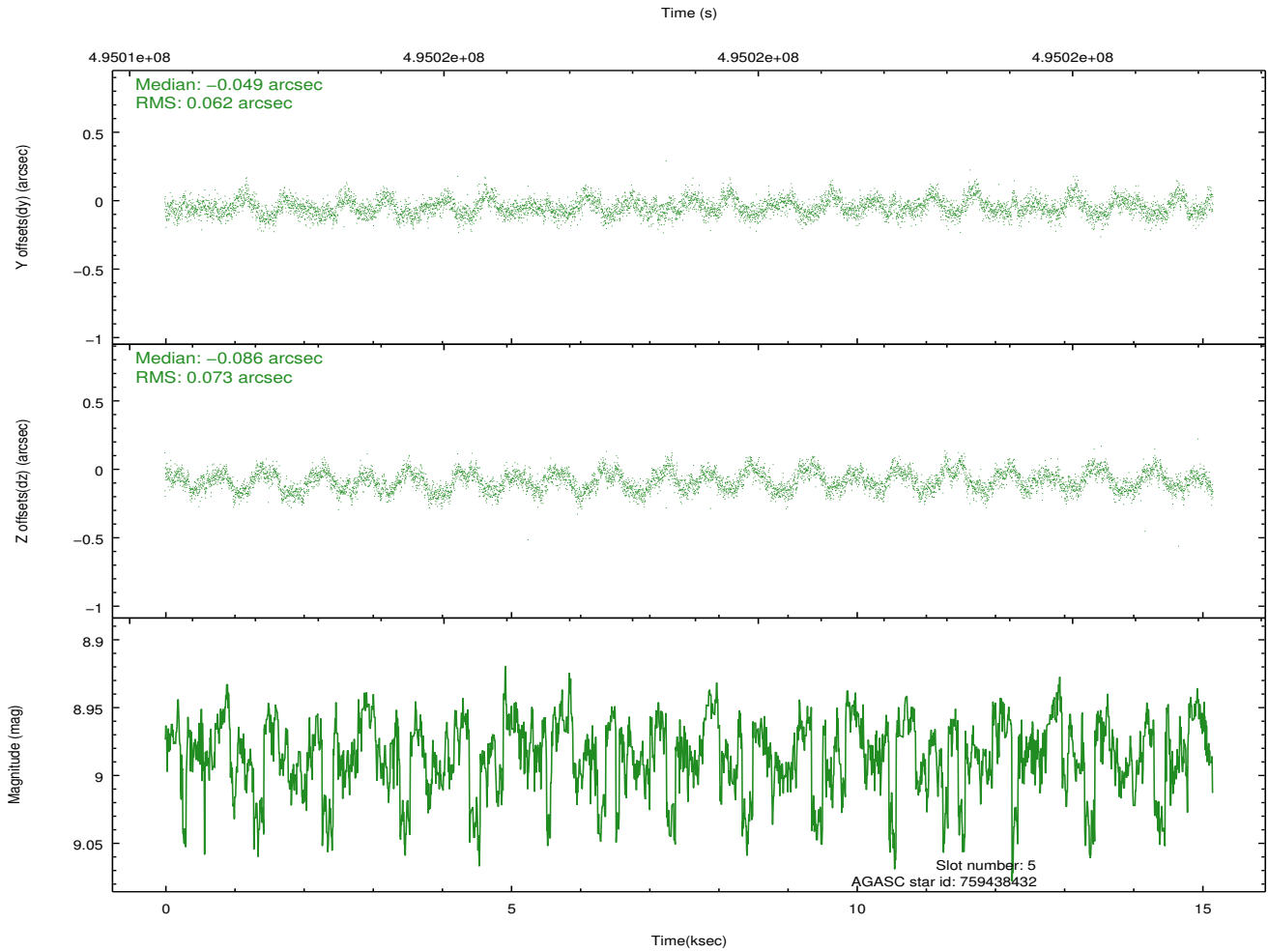
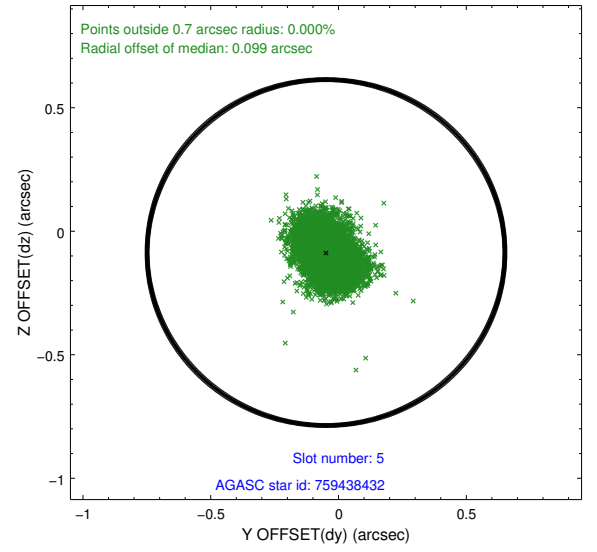
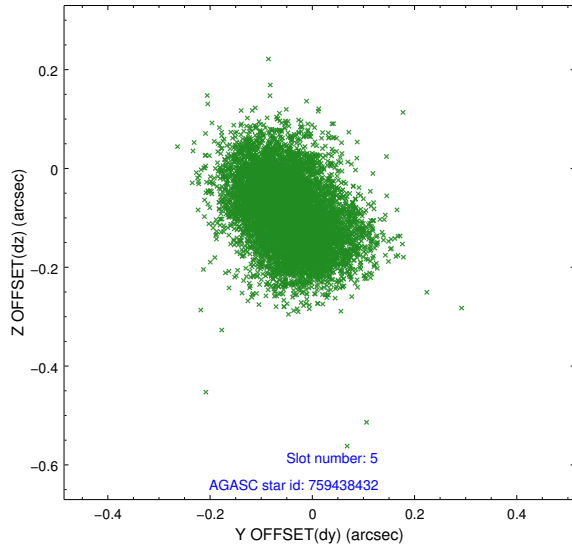
2.4.1 Slot 3



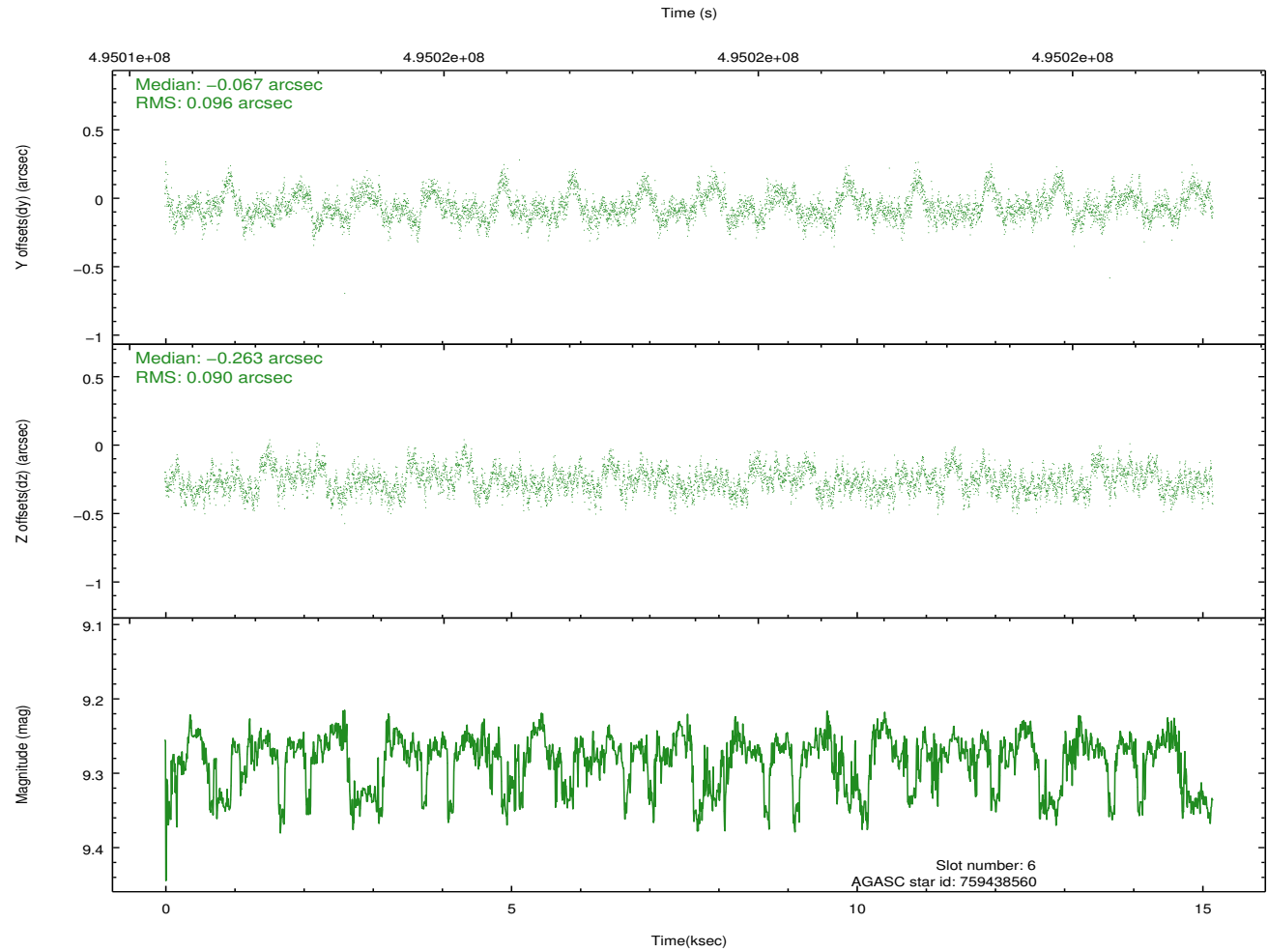
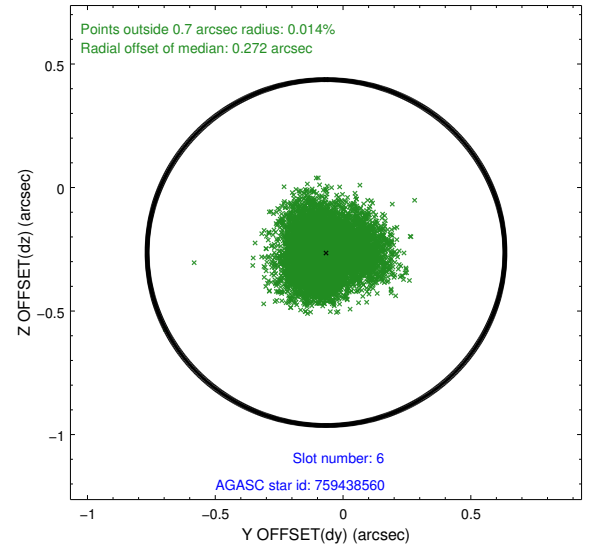
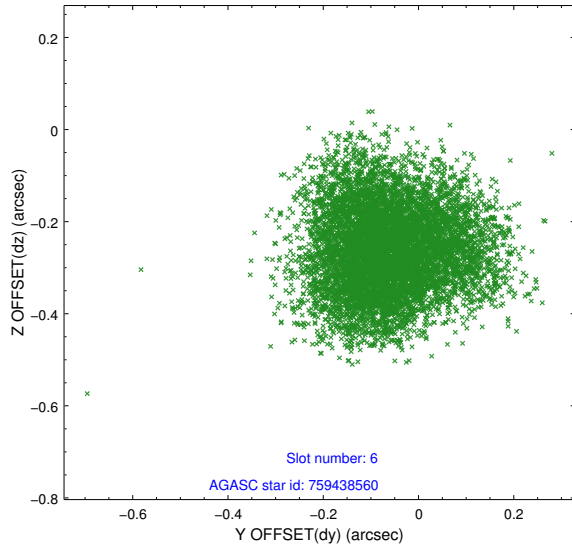
2.4.2 Slot 4



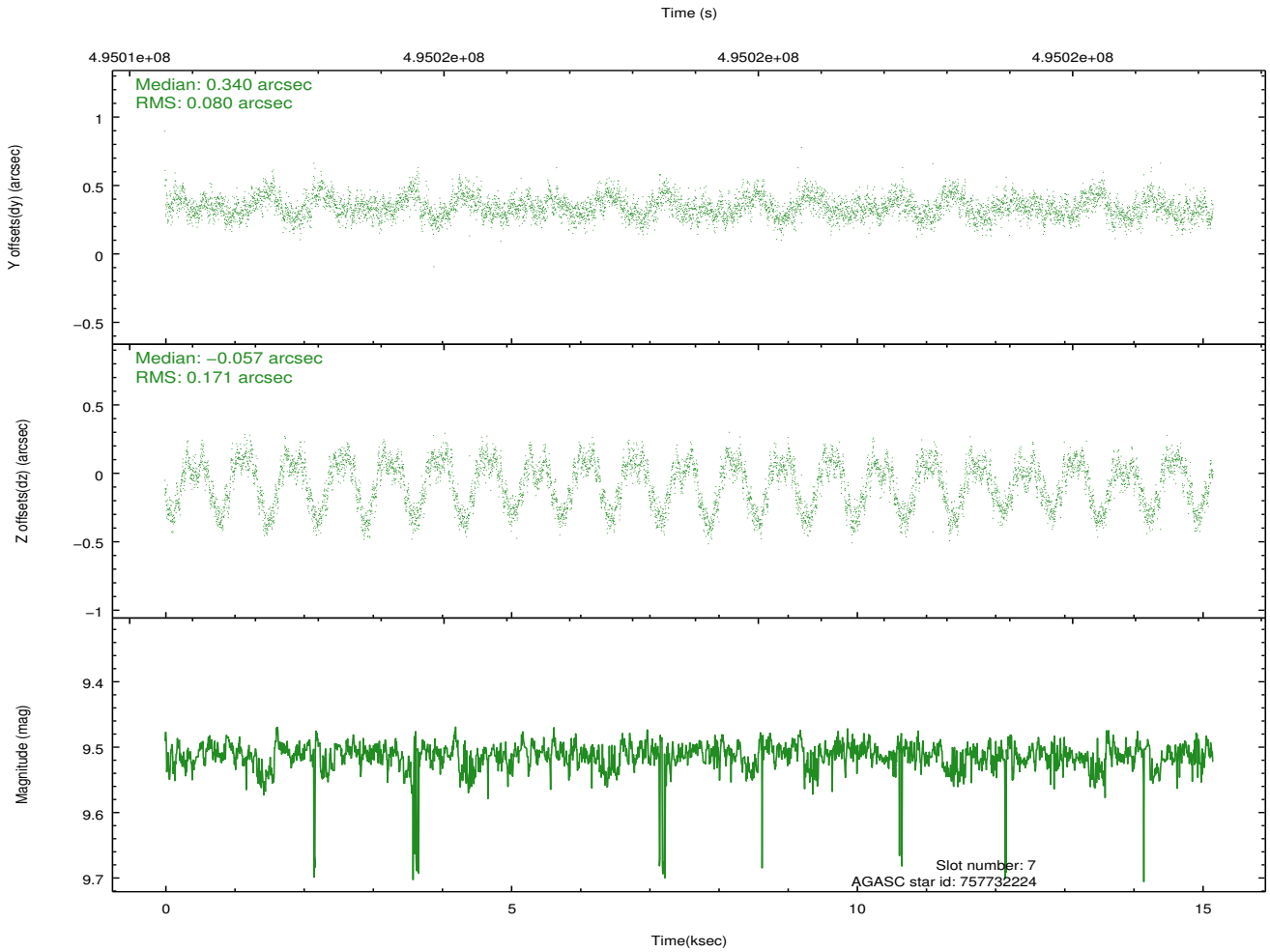
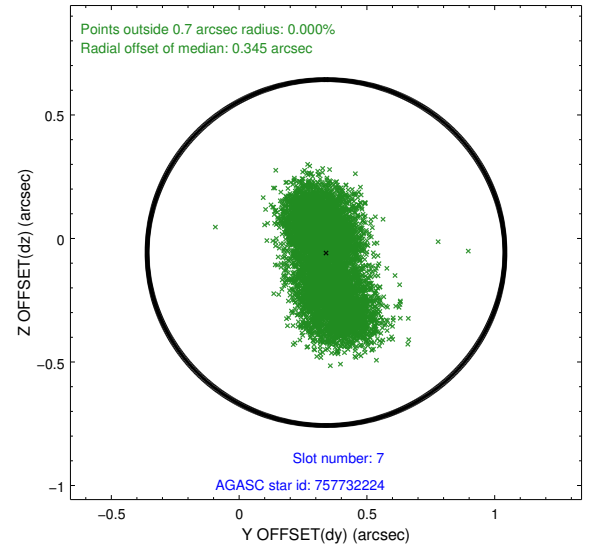
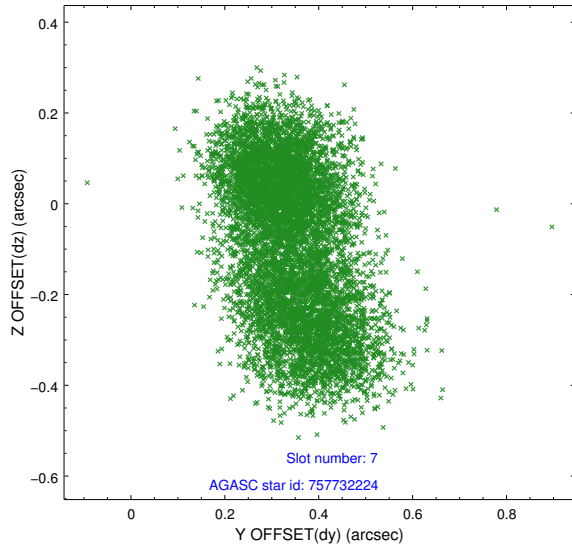
2.4.3 Slot 5



2.4.4 Slot 6

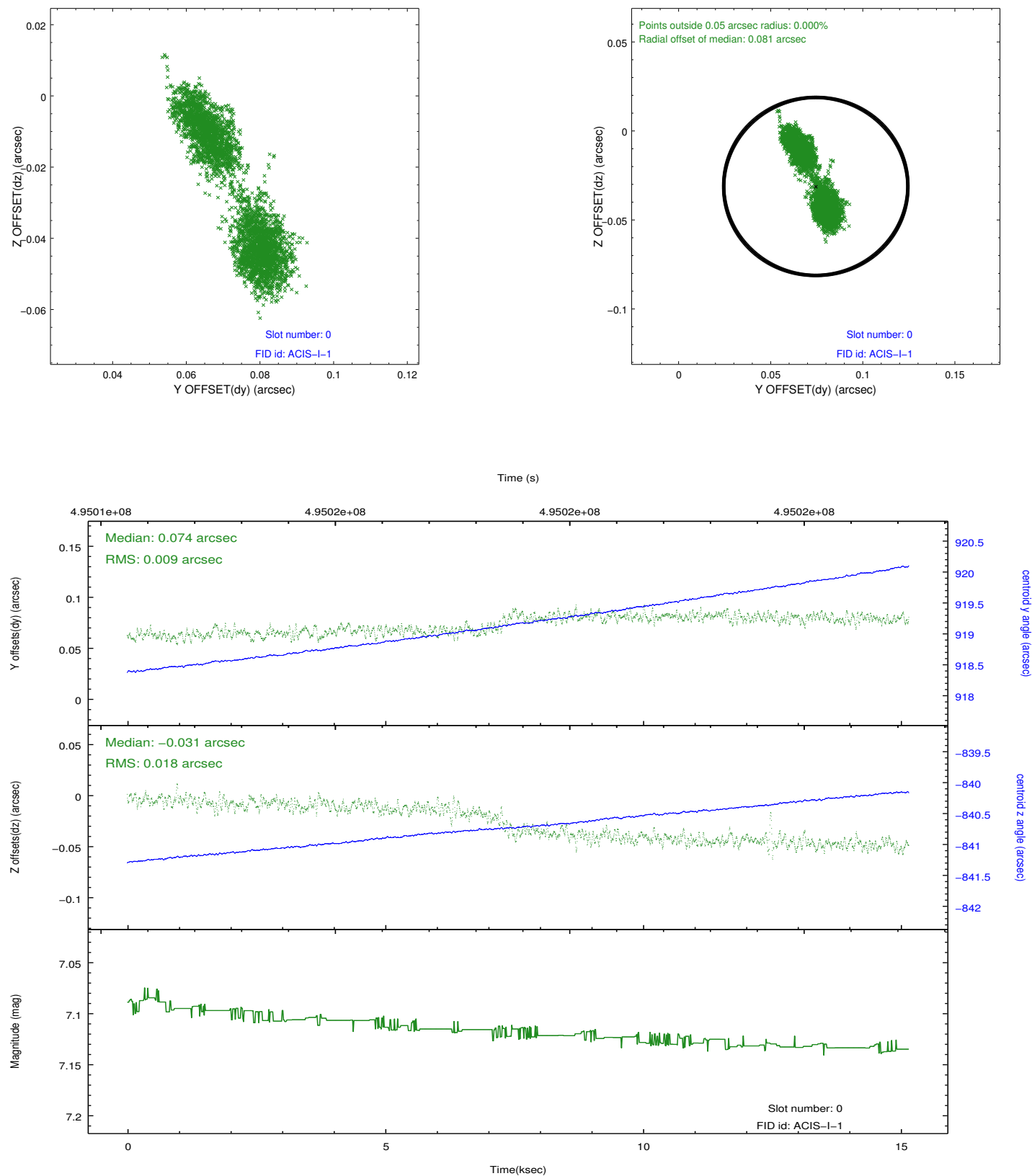


2.4.5 Slot 7

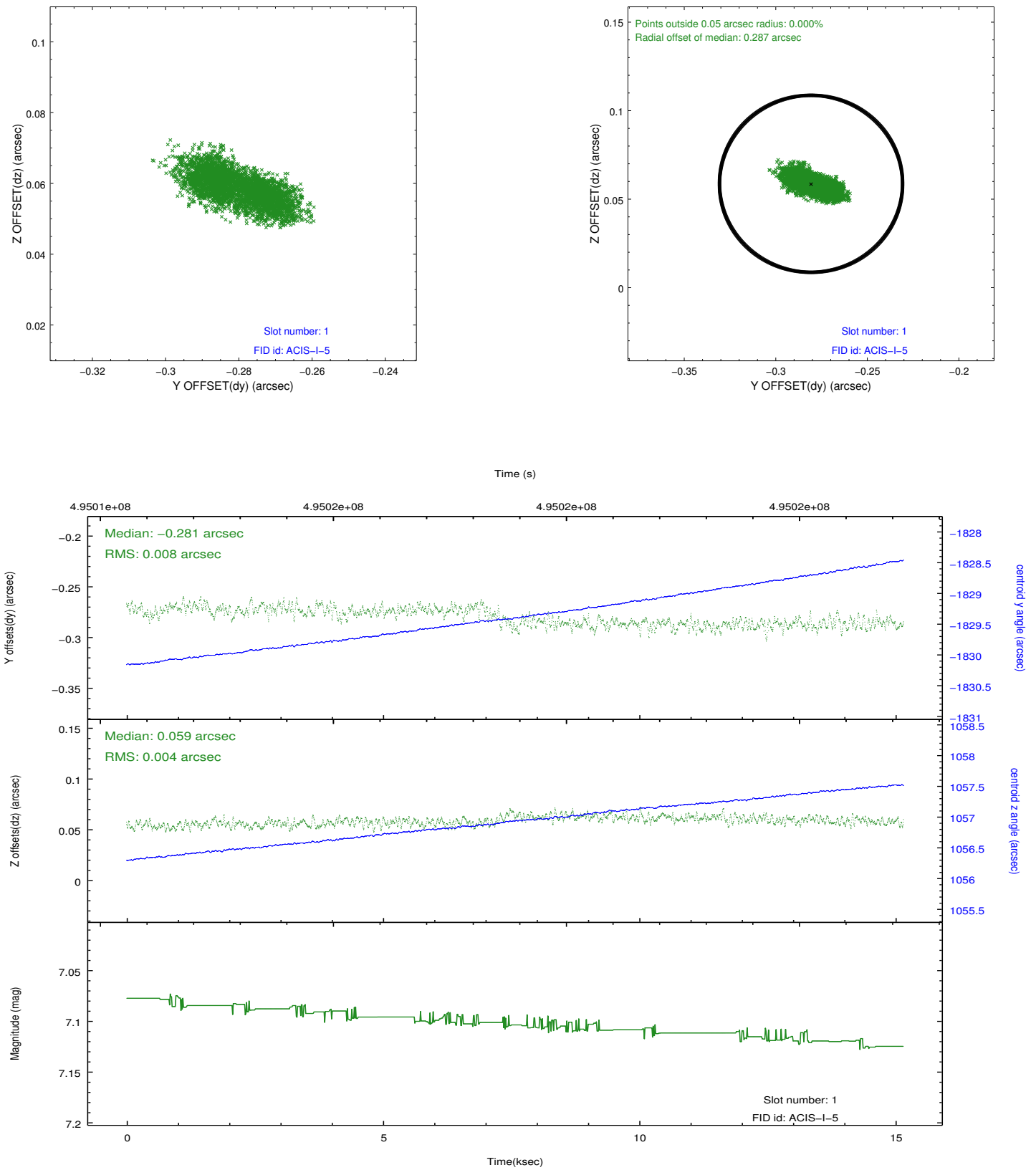


2.5 FID Slots

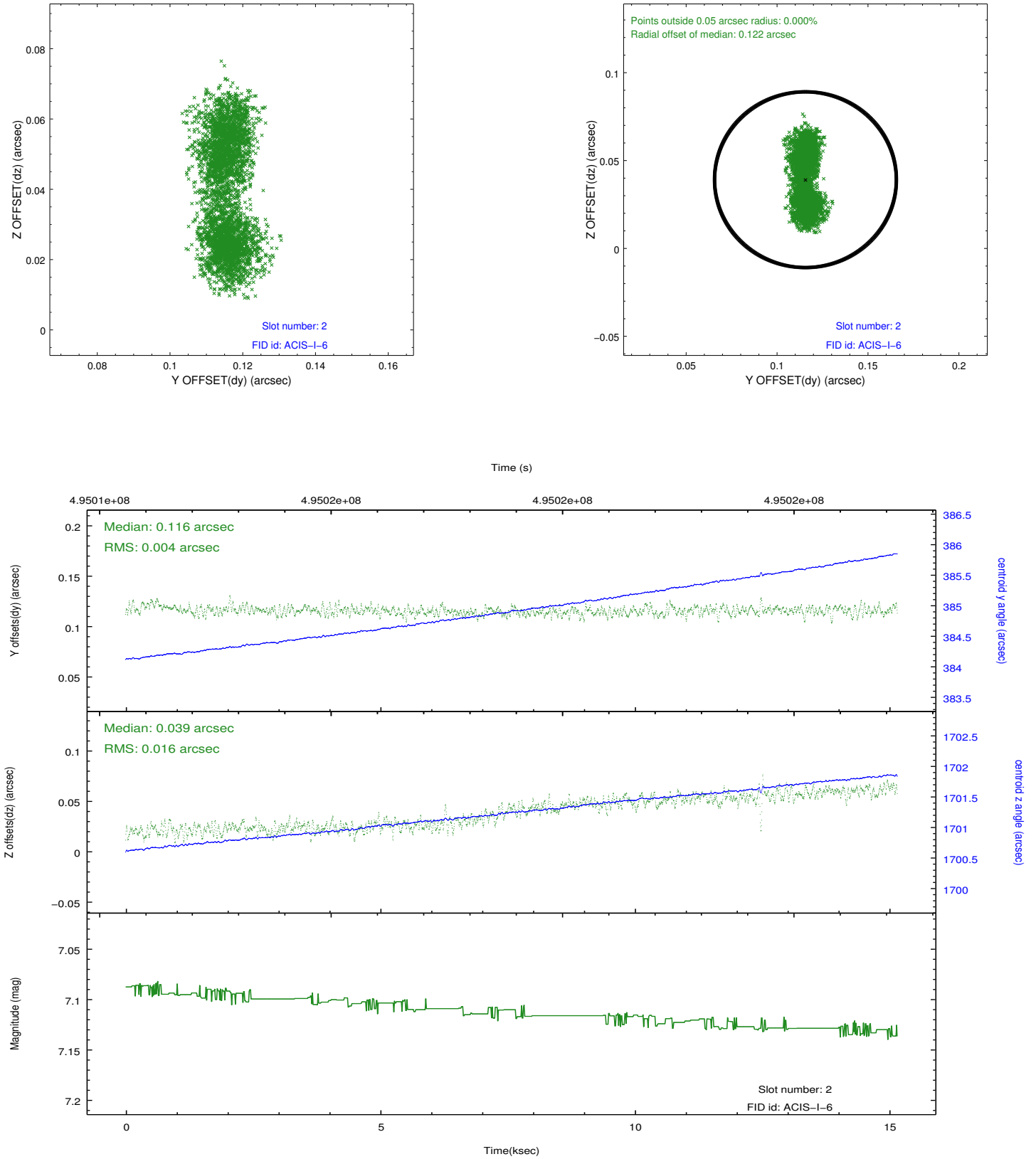
2.5.1 Slot 0



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)	2014.12.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	15.084063020706

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.