

V&V Reference Report

L2 ASCDS Version : 10

Observation 15141 - L2 Version 2
Chandra X-Ray Center

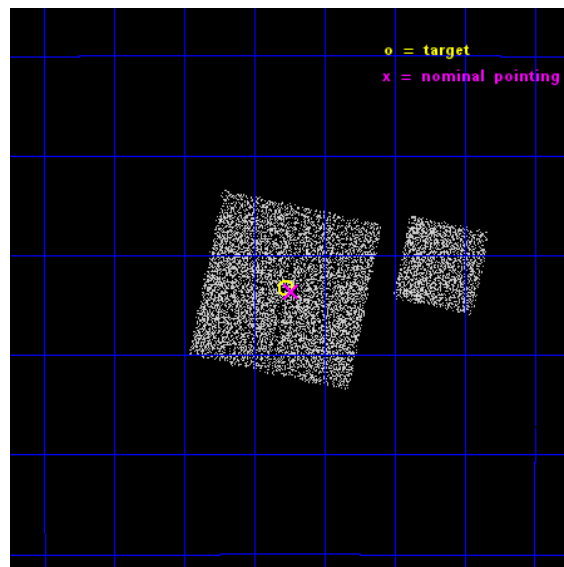
L2 Processing Date : Dec 5 2014

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

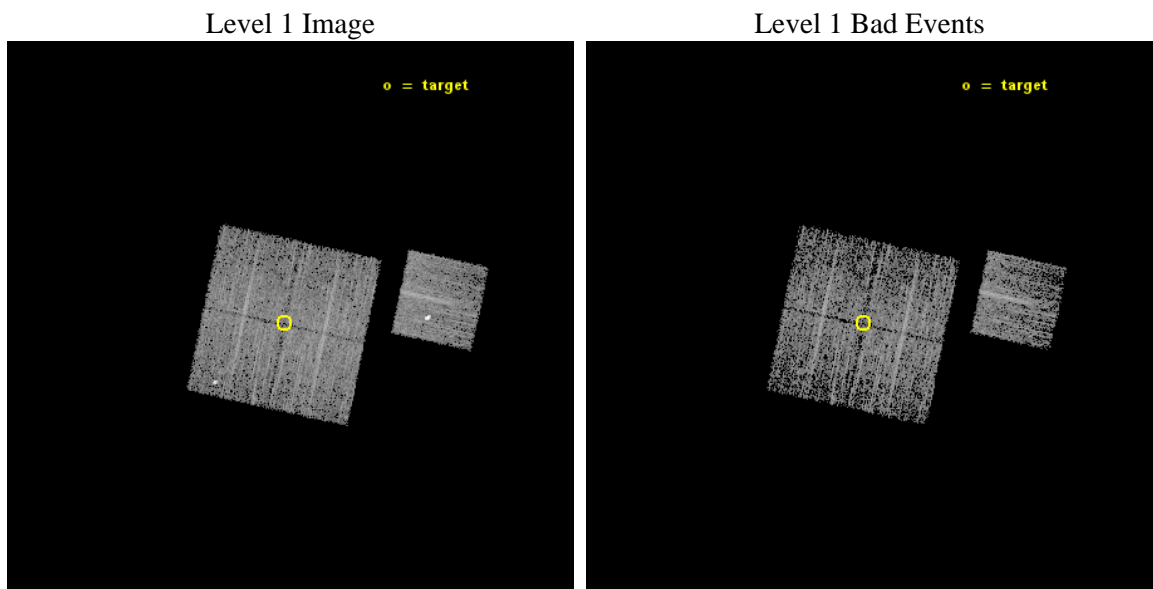
seq_num	801270	Sequence number
obs_id	15141	Observation id
title	TO THE OUTER LIMITS OF CLUSTERS WITH CHANDRA AND SUZAKU	Proposal t
observer	Dr. Eric Miller	Principal investigator
object	A2597	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	351.444	Observer's specified target RA [deg]
dec_targ	-11.888917	Observer's specified target Dec [deg]
ra_nom	351.4340459155	Nominal RA [deg]
dec_nom	-11.893841632506	Nominal Dec [deg]
roll_nom	102.13466269582	Nominal Roll [deg]
revision	2	Processing version of data
ontime	5083.2900063992	Sum of GTIs [s]
livetime	5016.8730802019	Livetime [s]
ontime0	5083.2489663959	Sum of GTIs [s]
ontime1	5083.2900063992	Sum of GTIs [s]
ontime2	5083.3310464025	Sum of GTIs [s]
ontime3	5080.2310259938	Sum of GTIs [s]
ontime6	5083.2079263926	Sum of GTIs [s]
l2events	12425	Number of level 2 events



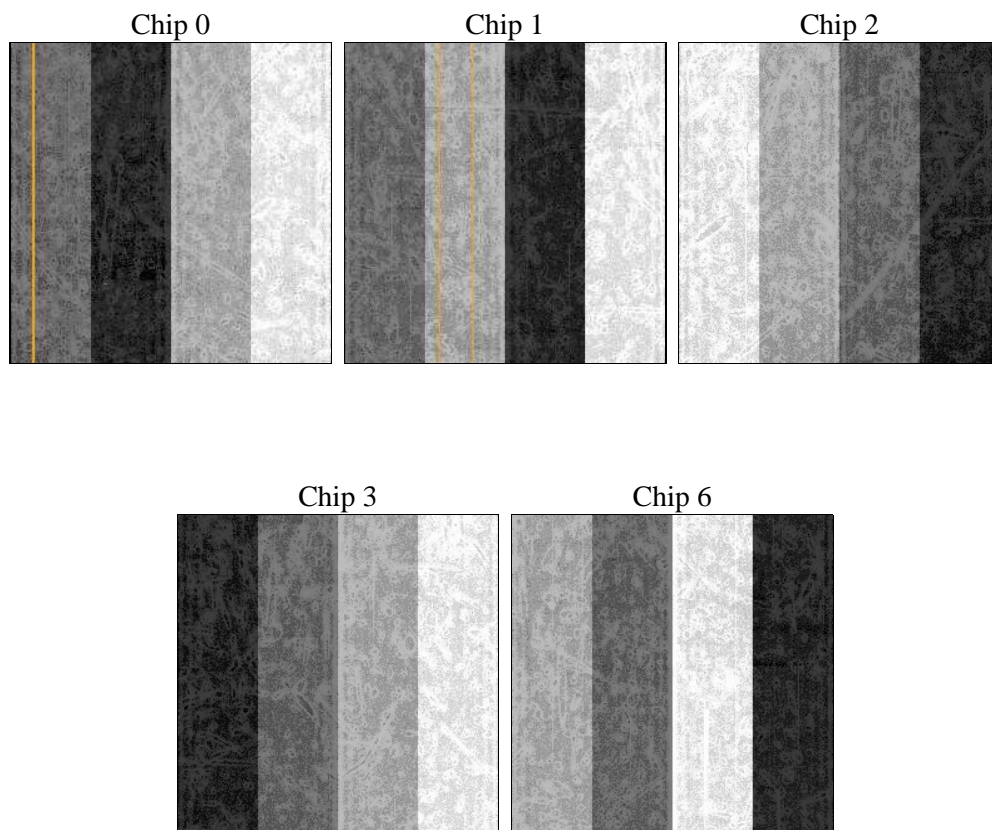
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	5083.2900063992	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	5083.2489663959	Sum of GTIs [s]
date	2014-12-06T03:34:17	Date and time of file creation	ontime1	5083.2900063992	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	5083.3310464025	Sum of GTIs [s]
			ontime3	5080.2310259938	Sum of GTIs [s]
			ontime6	5083.2079263926	Sum of GTIs [s]
			l1events	120322	Number of level 1 events

2.1.4 Events

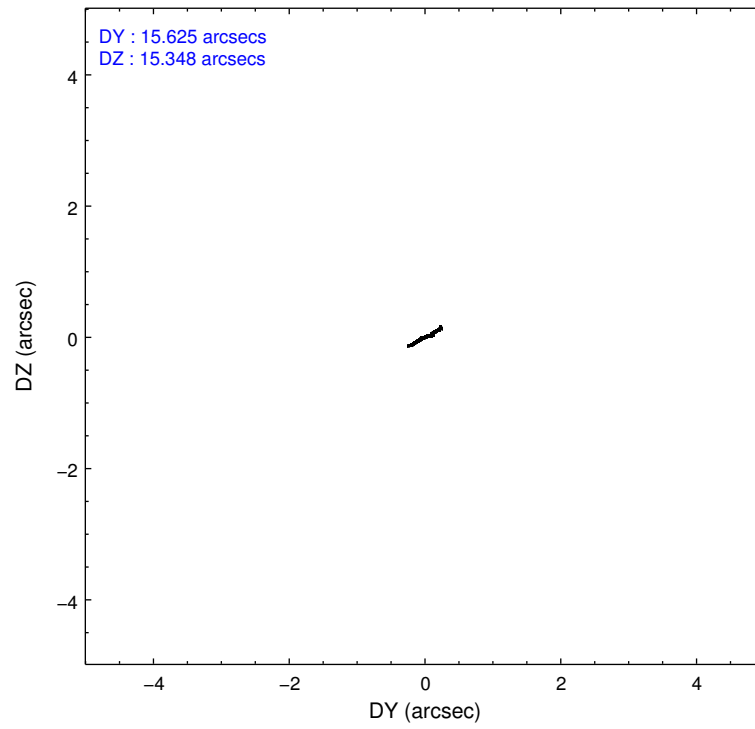
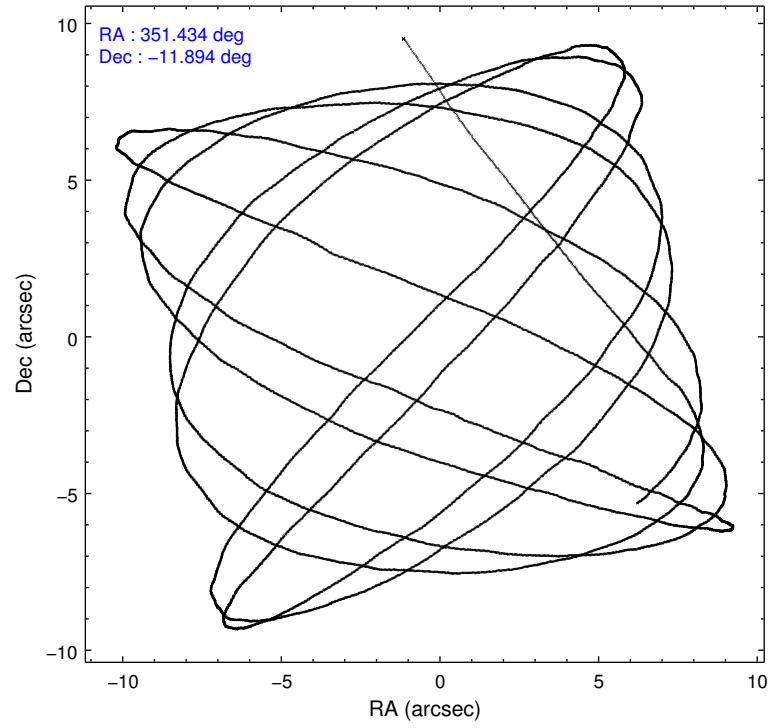
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	21392	23098	23630	24535	27667
rejected events	18392	18895	20937	21644	21881
rejected %	85%	81%	88%	88%	79%

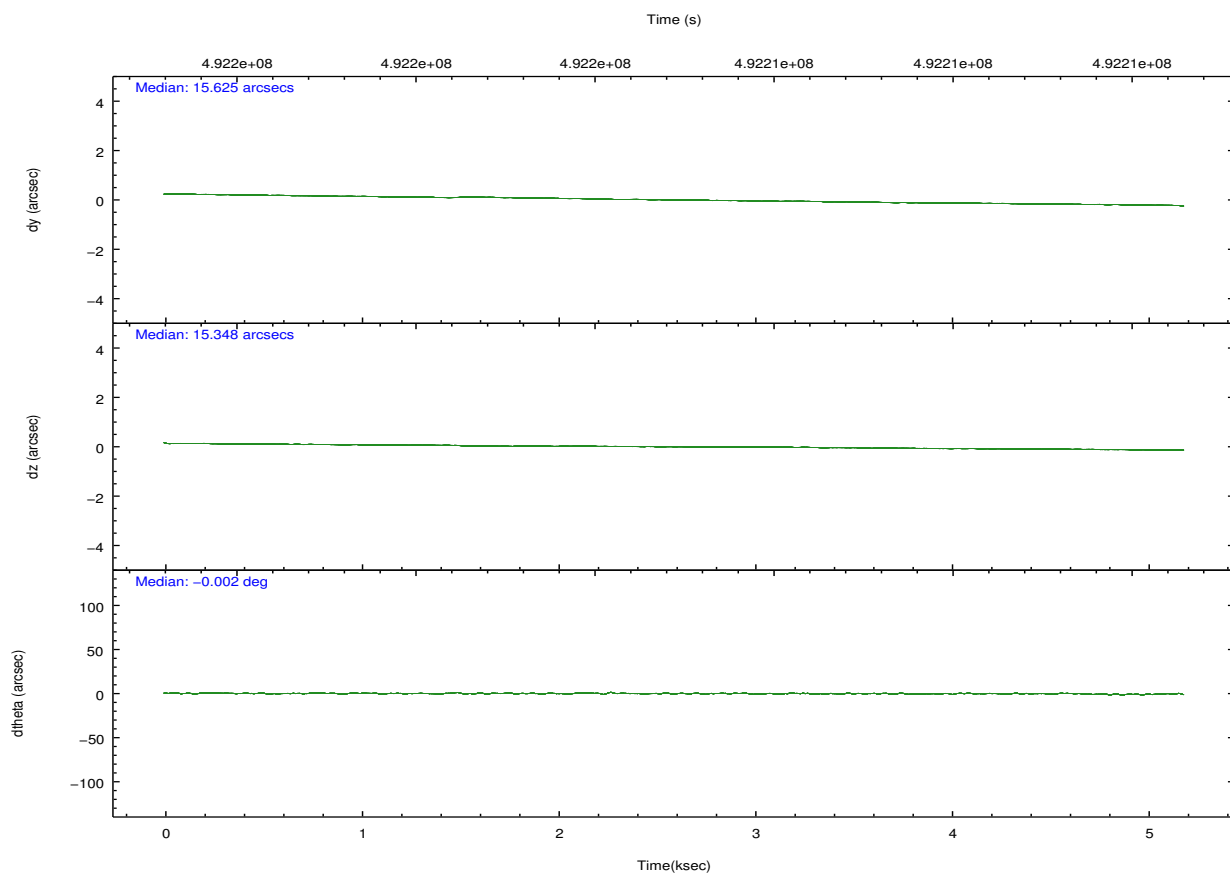
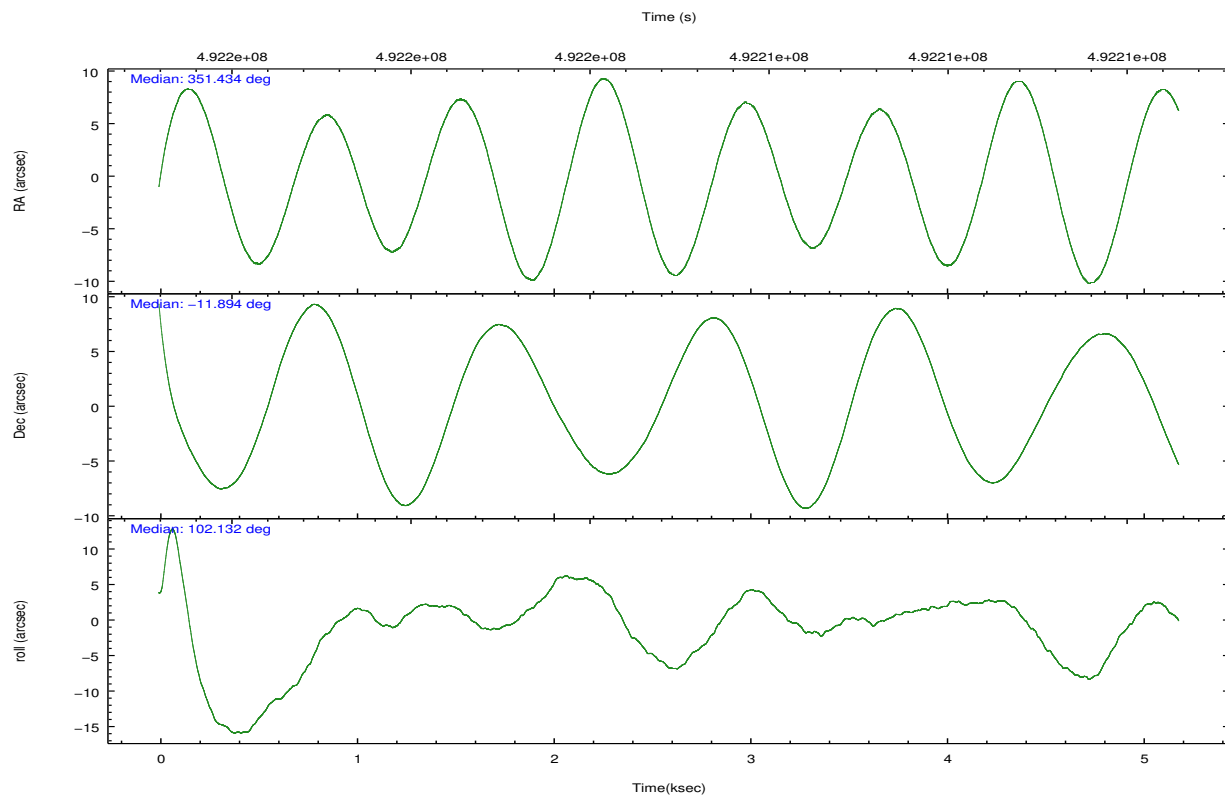
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	1076	2149	1008	1103	3877
	5%	9%	4%	4%	14%
grade 1 events	15	18	16	17	27
	0%	0%	0%	0%	0%
grade 2 events	680	708	598	585	635
	3%	3%	2%	2%	2%
grade 3 events	328	298	263	320	288
	1%	1%	1%	1%	1%
grade 4 events	311	327	296	285	312
	1%	1%	1%	1%	1%
grade 5 events	1154	1154	1038	1325	1164
	5%	4%	4%	5%	4%
grade 6 events	608	725	531	601	680
	2%	3%	2%	2%	2%
grade 7 events	17220	17719	19880	20299	20684
	80%	76%	84%	82%	74%

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	351.452936	351.4340459155031	CCD I2 on	Y	Y
[deg] Pointing Dec	-11.914160	-11.89384163250609	CCD I3 on	Y	Y
[deg] Pointing Roll	101.929886	102.1346626958155	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)	492203023.184000	492201725.36059	CCD S5 on	N	N
Observation start date	2013-08-06T19:02:36	2013-08-06T18:42:05	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	492208023.184000	492208789.66097	On-chip summing requested	N	N
Observation end date	2013-08-06T20:25:56	2013-08-06T20:39:49	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



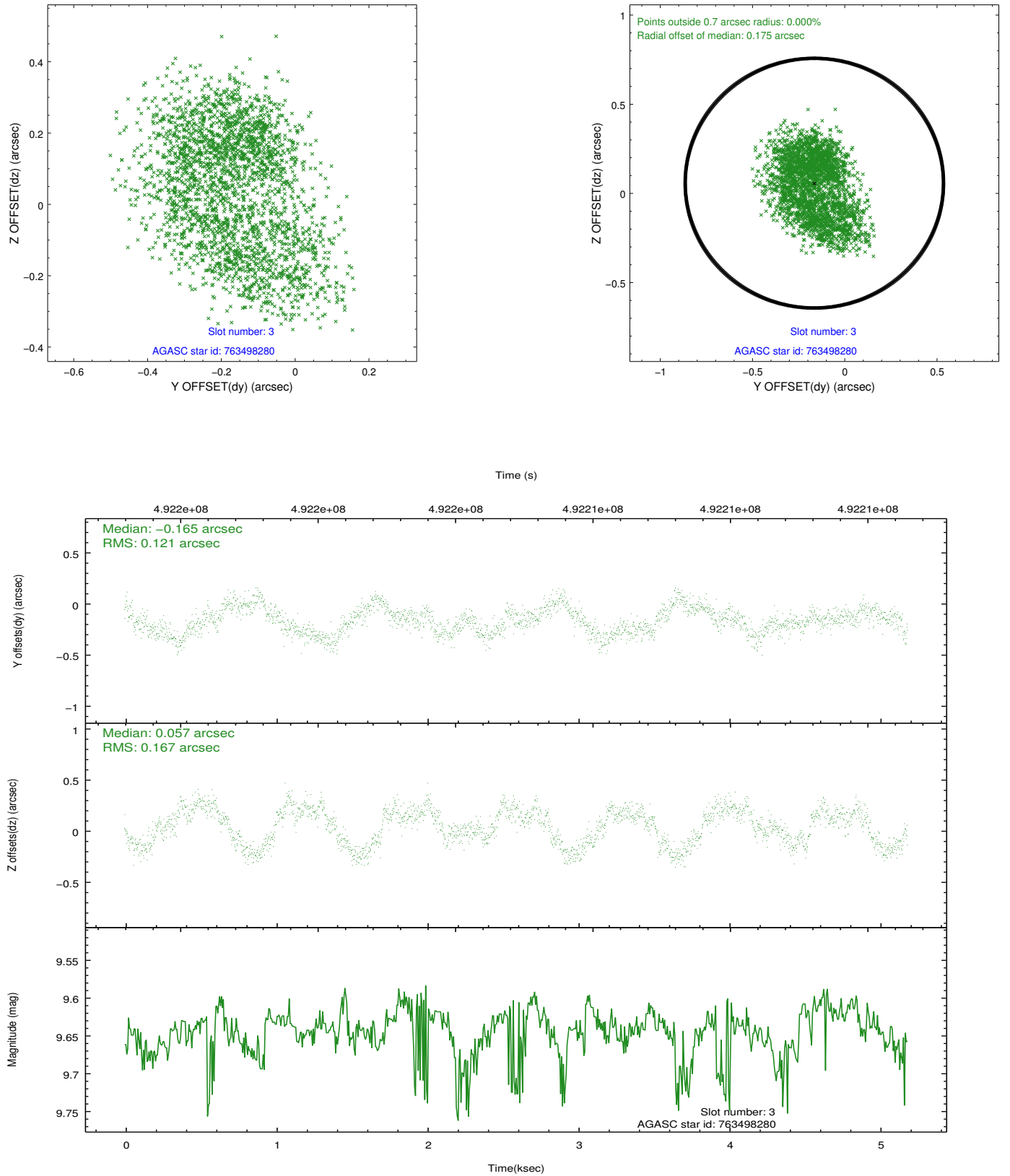


Slot Statistics

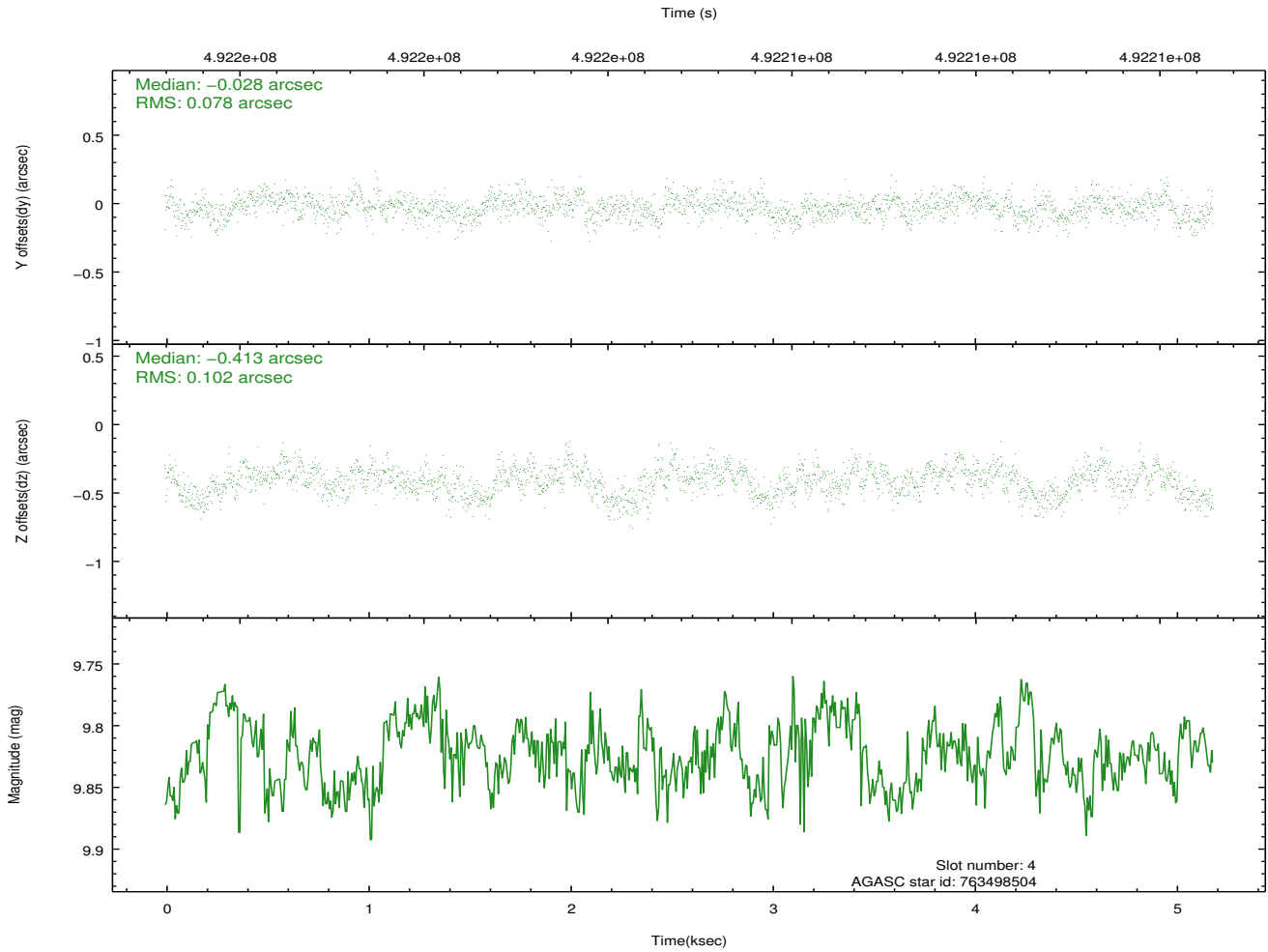
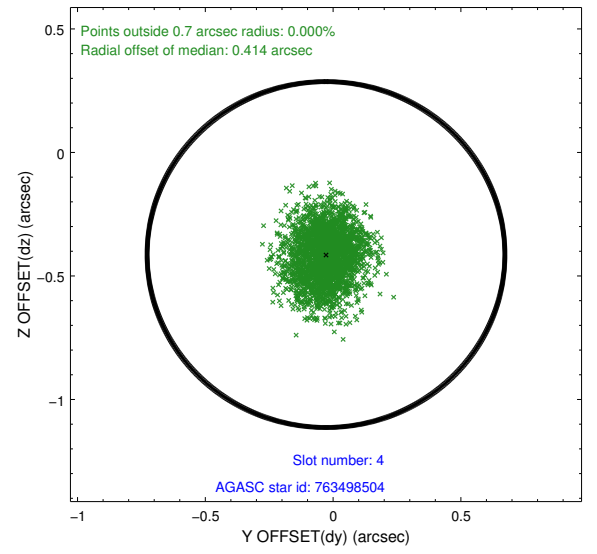
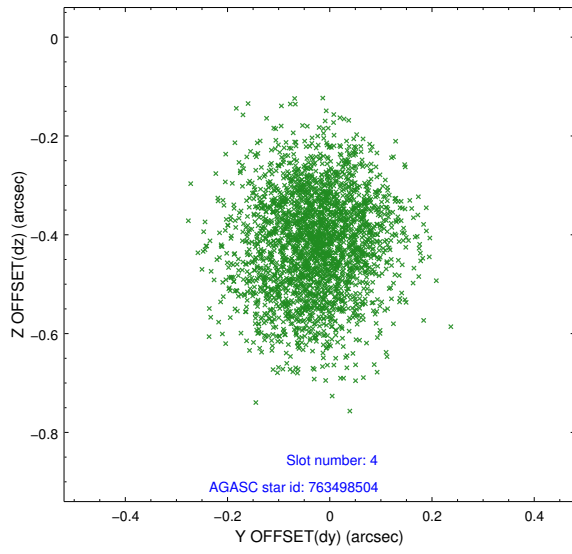
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.17	1265	0.055	-0.041	0.008	0.014	0.000000	0.000000	923.88	-838.99
1	FID		ACIS-I-5	7.16	1265	-0.245	0.044	0.007	0.012	0.000000	0.000000	-1823.90	1057.98
2	FID		ACIS-I-6	7.16	1265	0.099	0.067	0.008	0.012	0.000000	0.000000	388.17	1703.85
3	GUIDE	used	763498280	9.64	2520	-0.165	0.057	0.224	0.344	351.715548	-11.532836	1151.57	-1189.39
4	GUIDE	used	763498504	9.82	2522	-0.028	-0.413	0.137	0.218	351.252498	-11.852907	362.01	644.88
5	GUIDE	used	763499608	9.58	2529	0.141	0.071	0.151	0.240	351.830271	-12.196099	-1267.62	-1088.29
6	GUIDE	used	763500112	6.18	2531	0.002	0.104	0.102	0.142	352.030274	-12.212329	-1472.21	-1765.09
7	GUIDE	used	763504608	6.32	2530	0.046	0.194	0.117	0.181	352.021650	-11.449752	1218.48	-2309.70

2.4 Star Slots

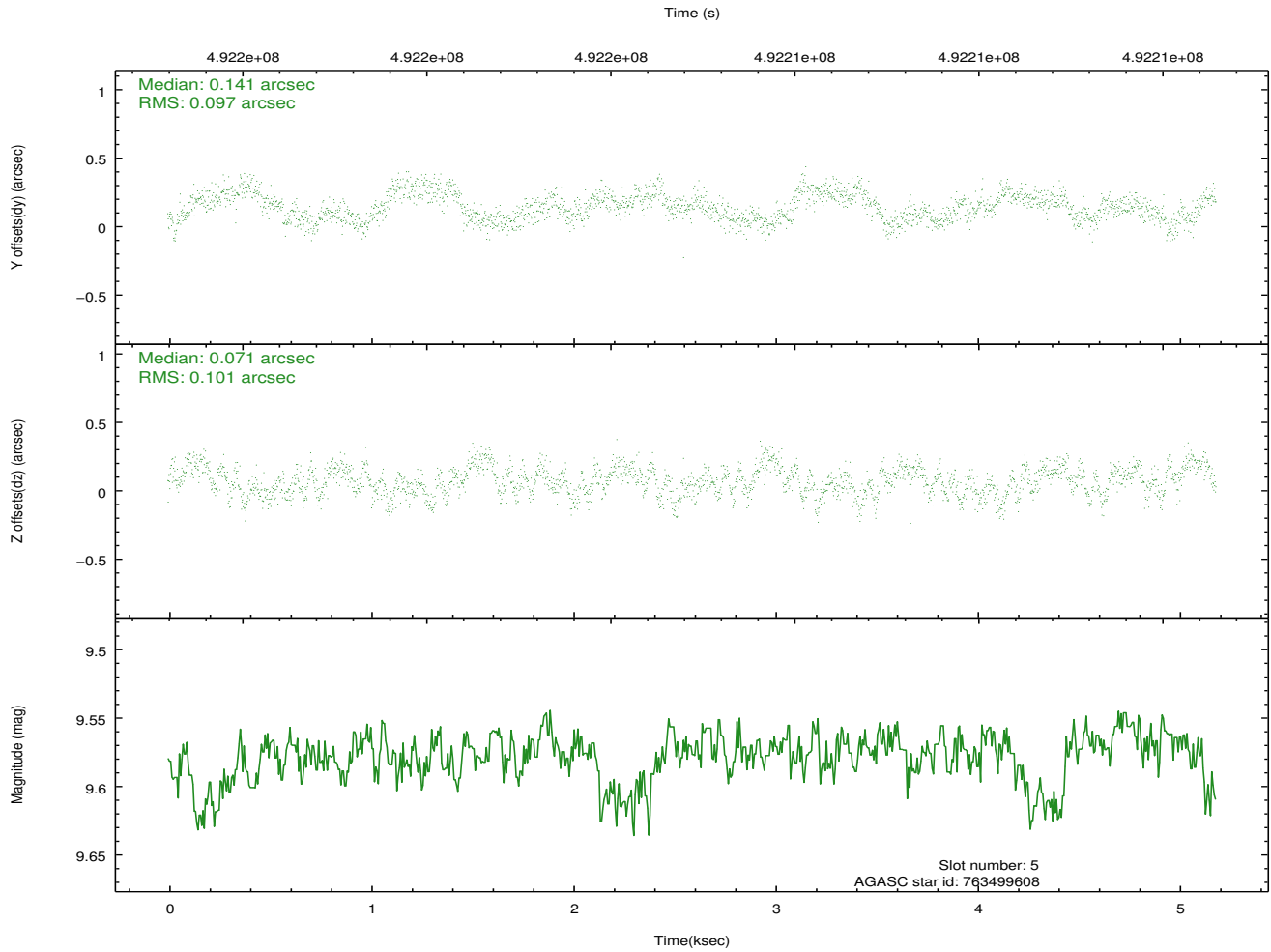
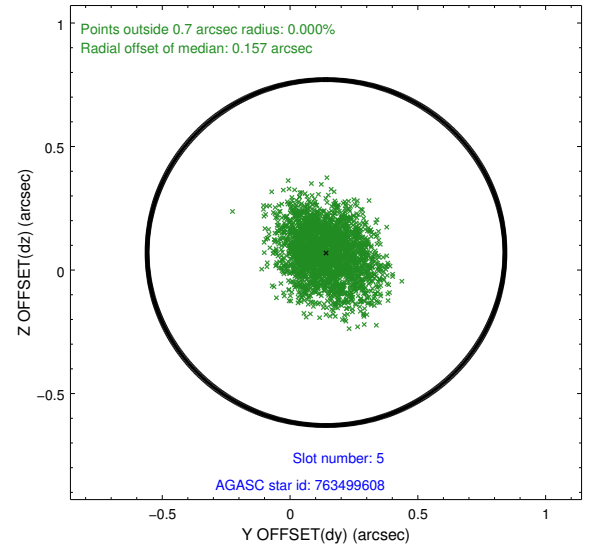
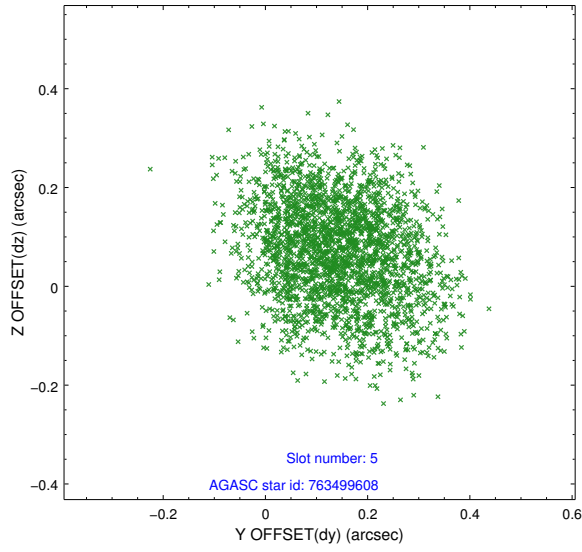
2.4.1 Slot 3



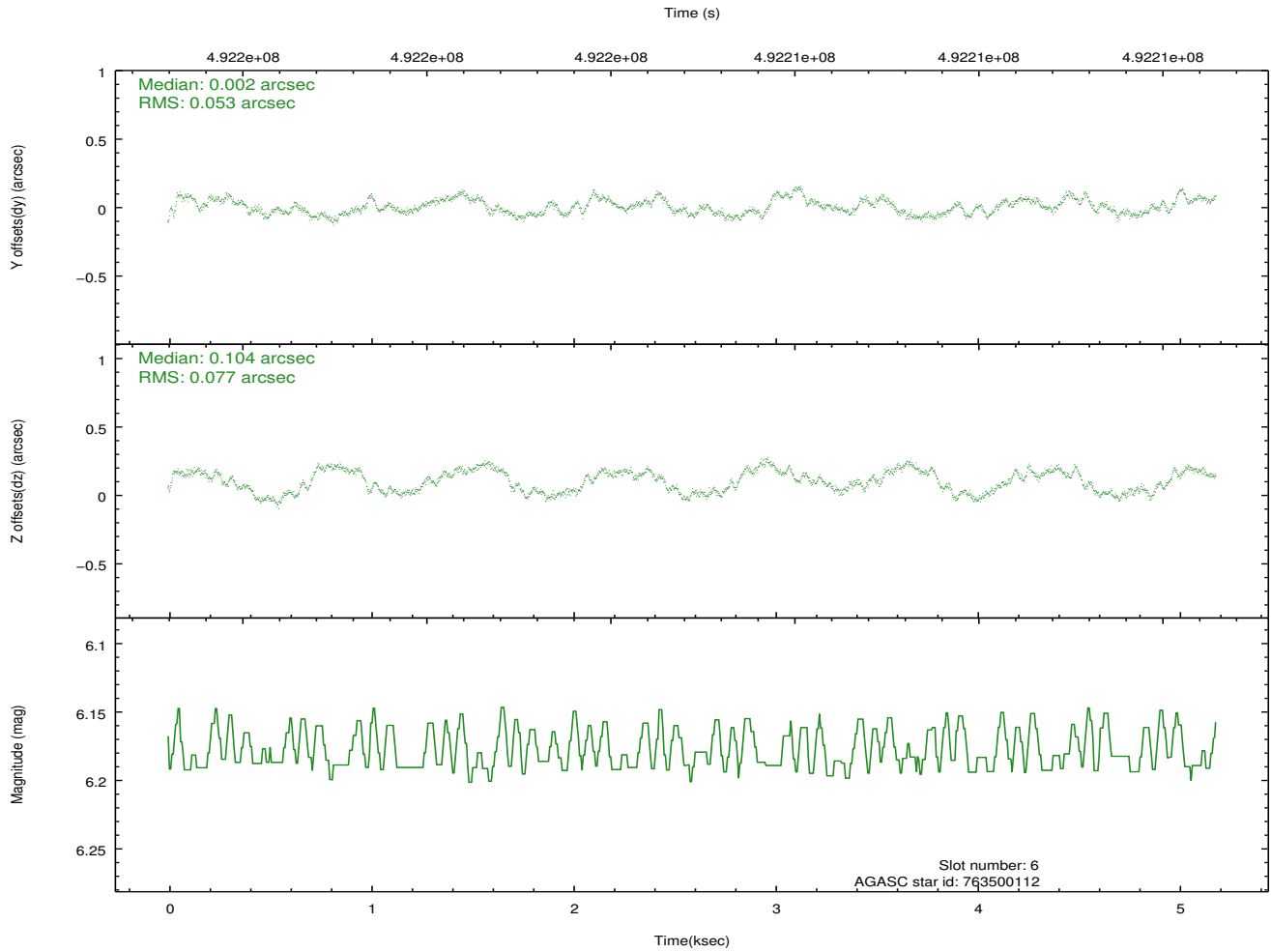
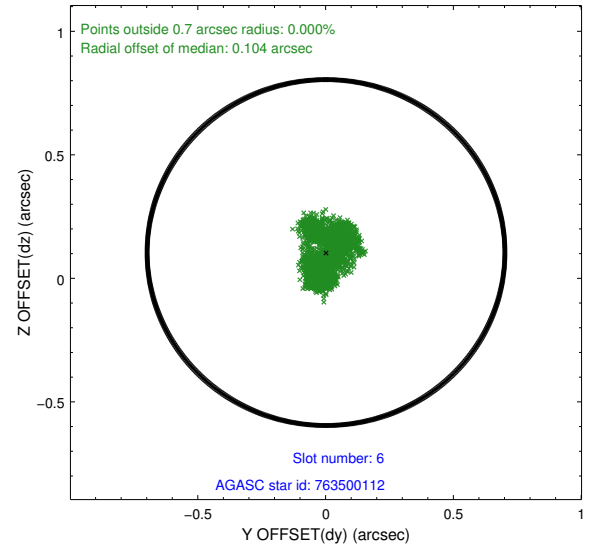
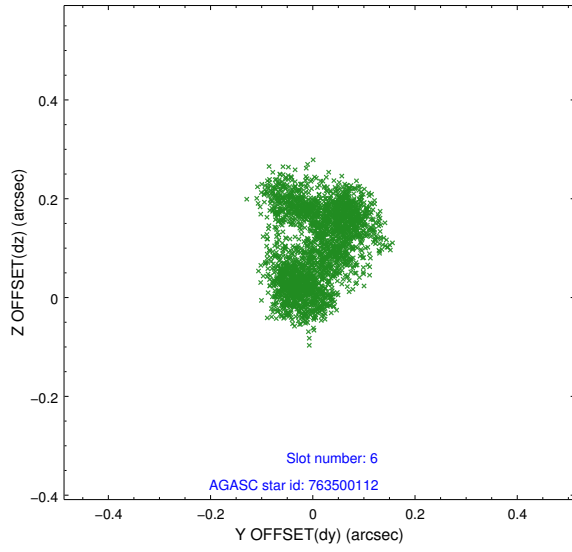
2.4.2 Slot 4



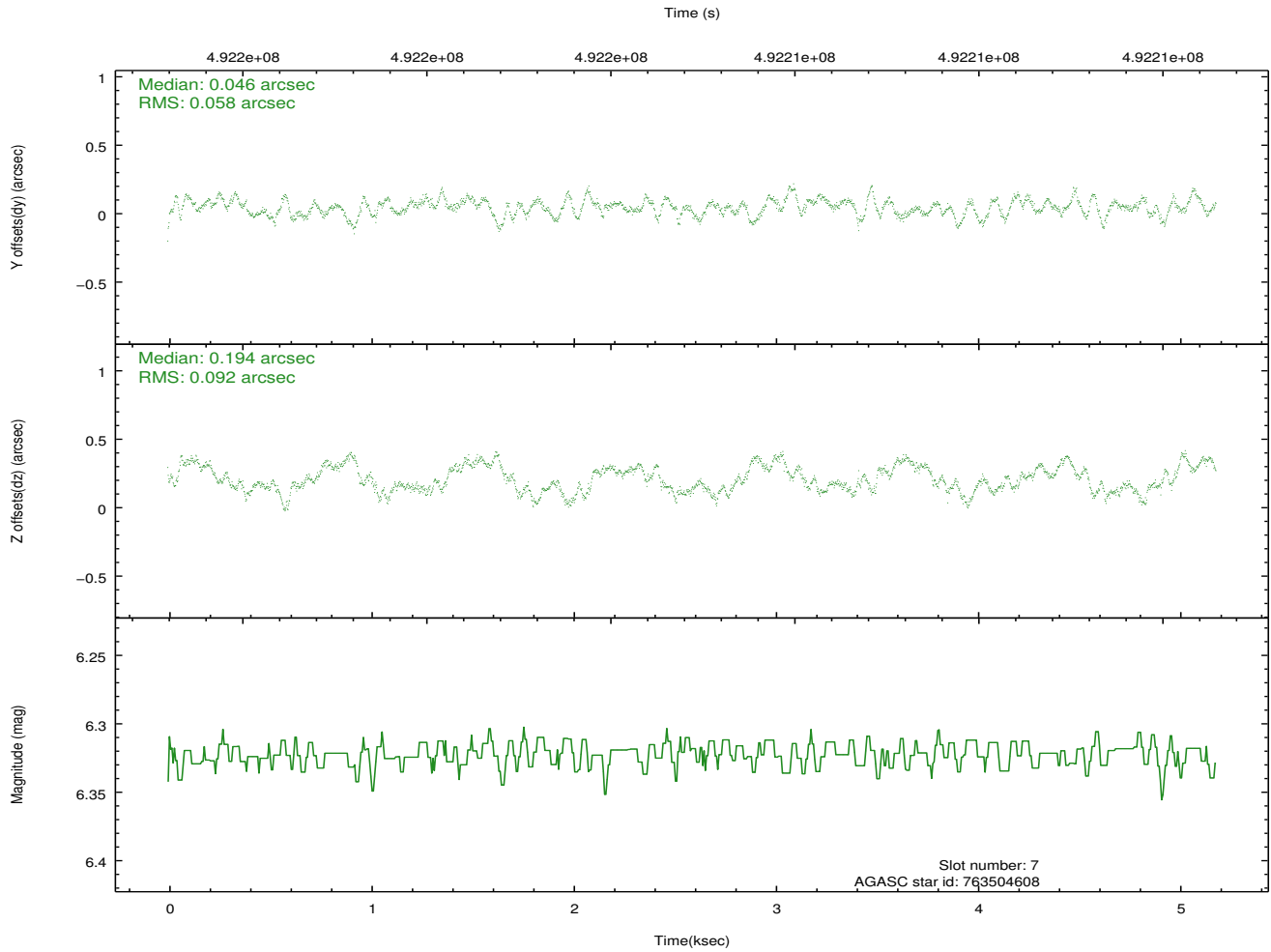
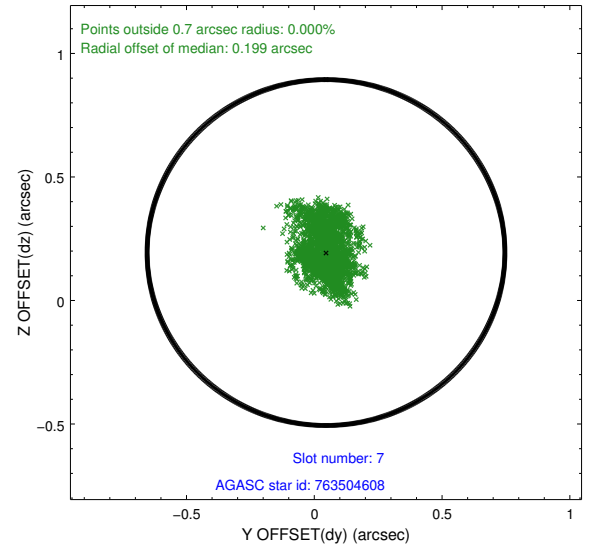
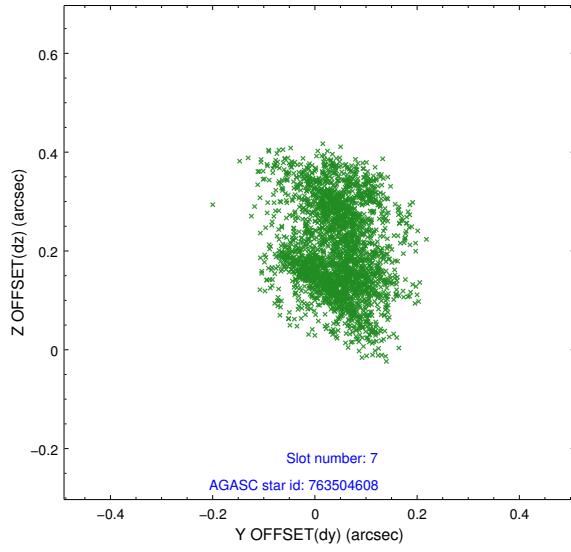
2.4.3 Slot 5



2.4.4 Slot 6

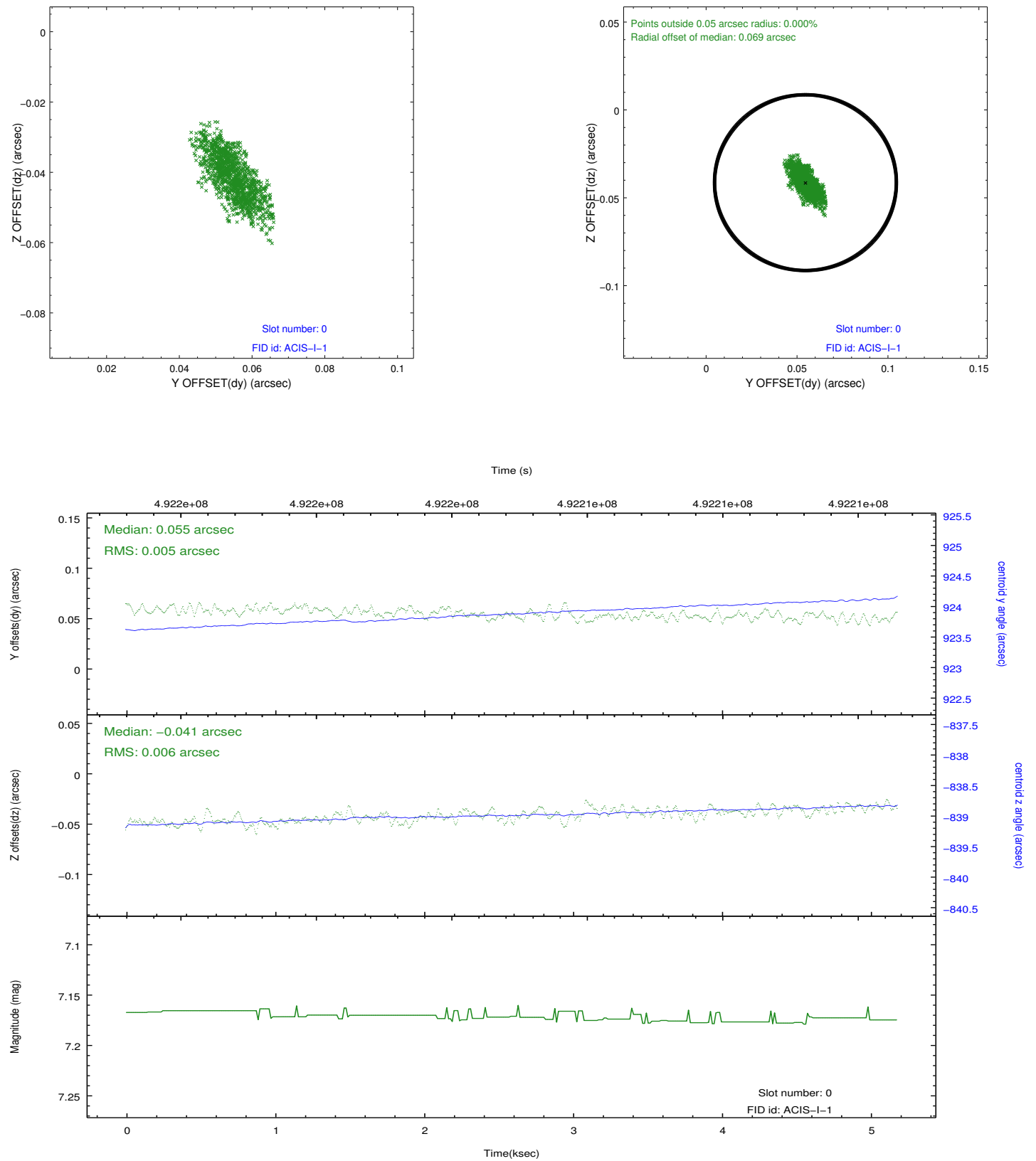


2.4.5 Slot 7

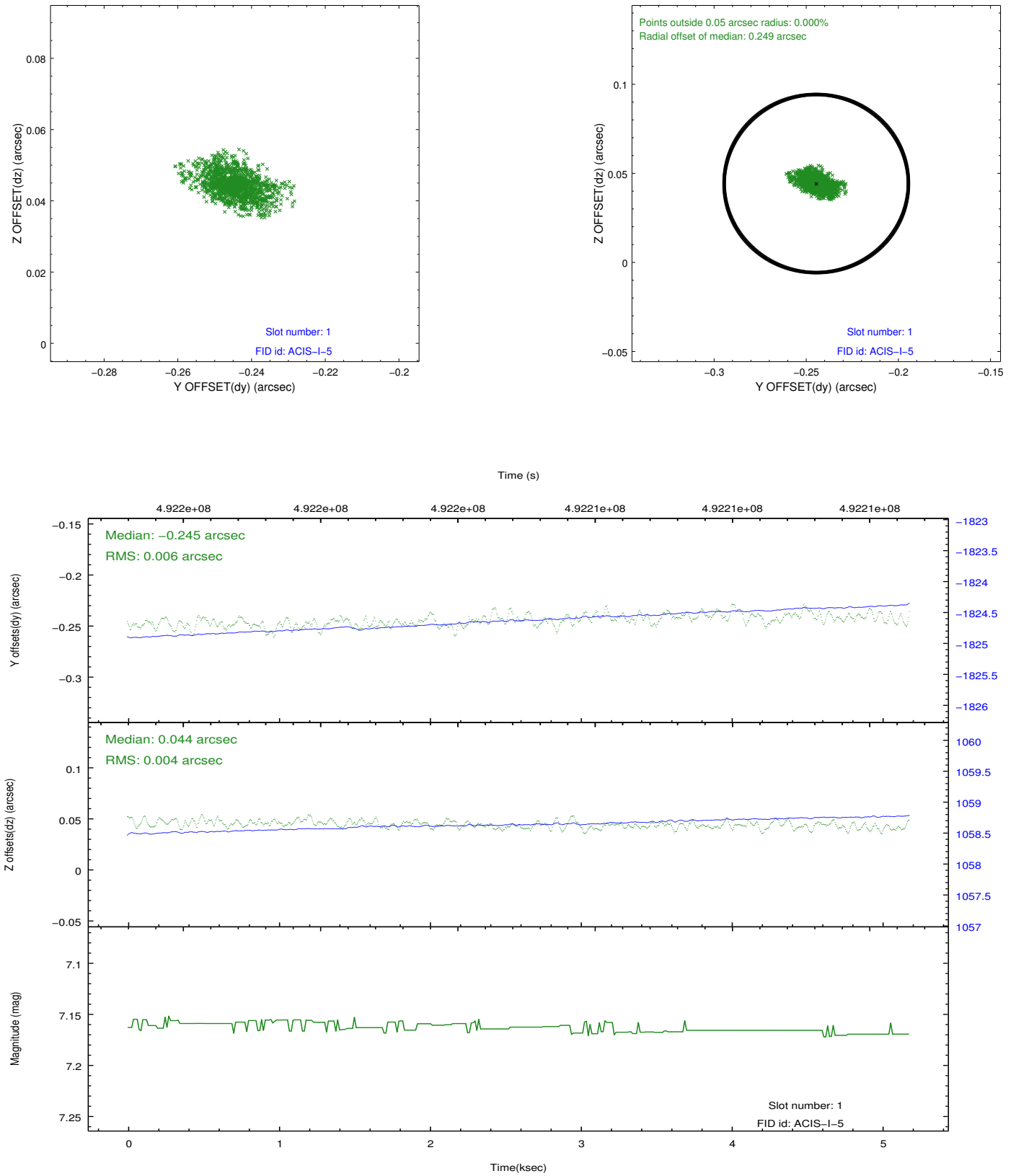


2.5 FID Slots

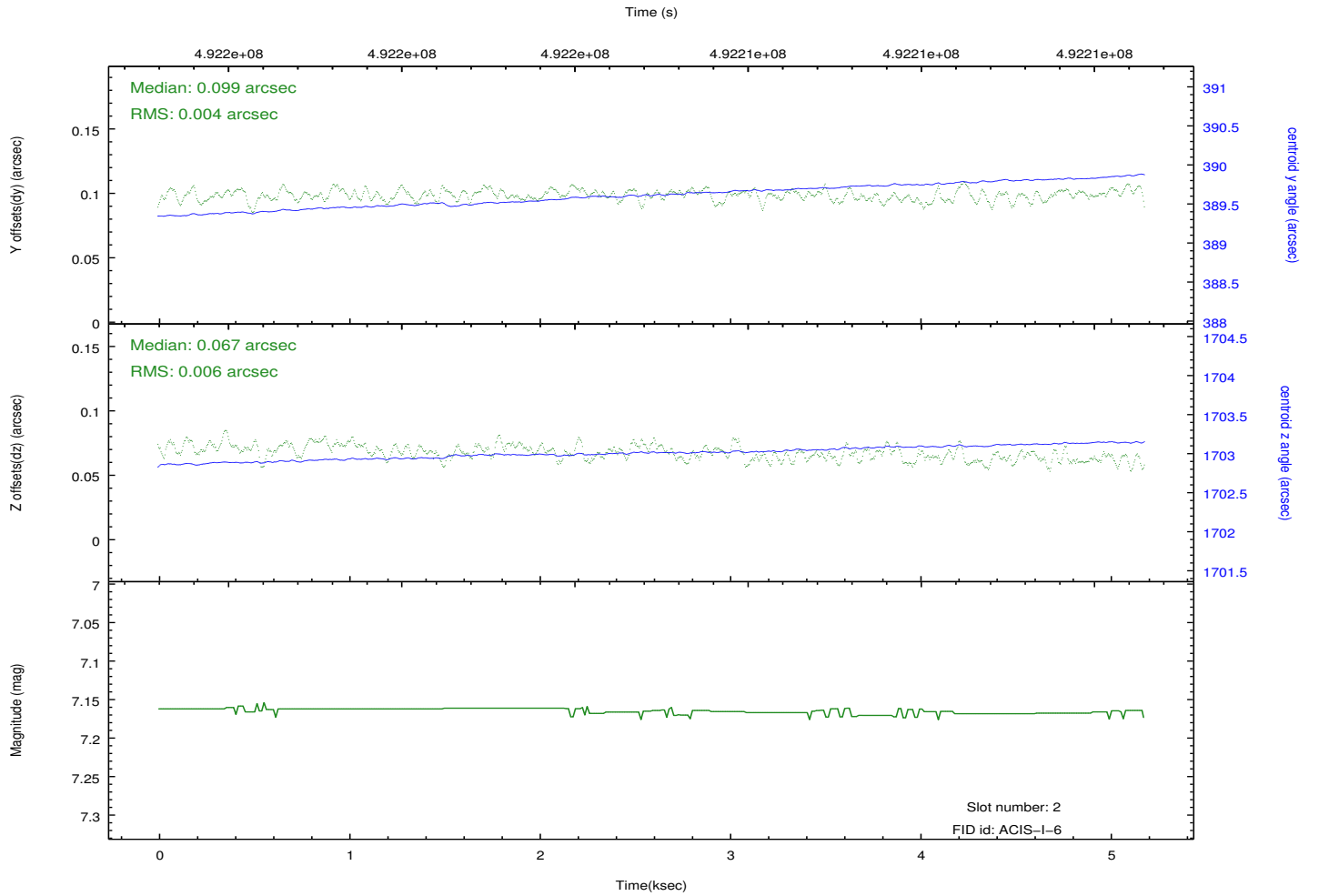
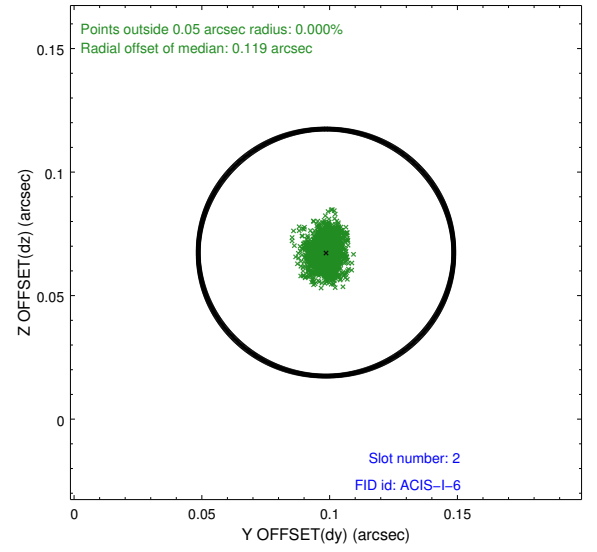
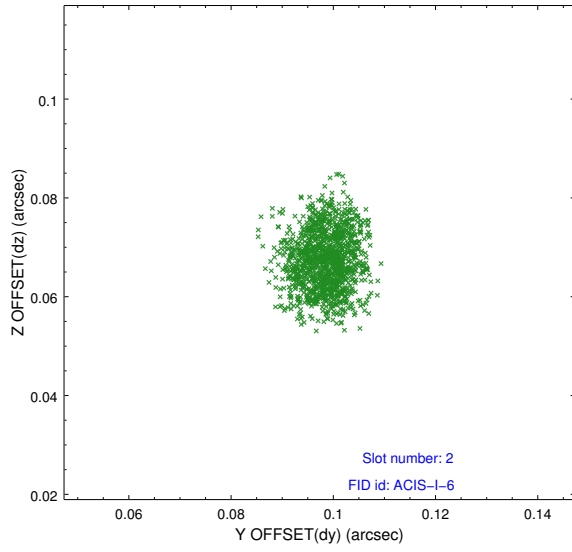
2.5.1 Slot 0



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)	2014.12.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.0832900063992

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.