

V&V Reference Report

L2 ASCDS Version : 10.1.1

Observation 15124 - L2 Version 2
Chandra X-Ray Center

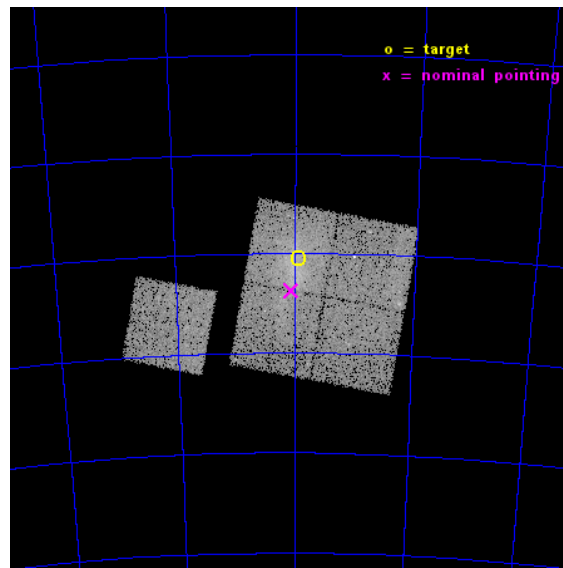
L2 Processing Date : Dec 8 2014

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1 Front

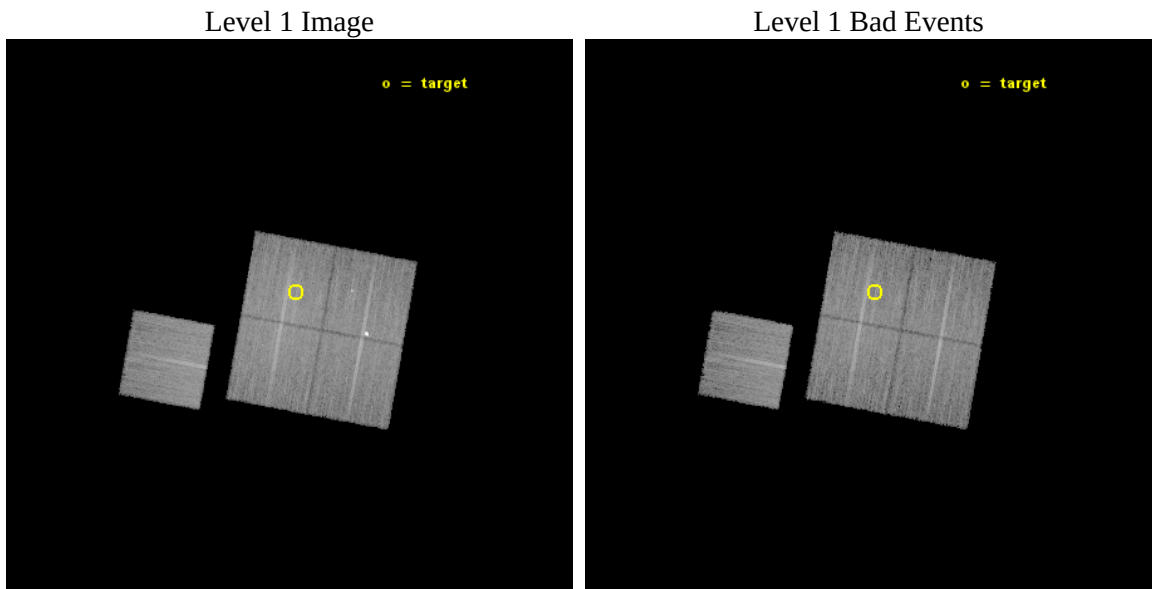
seq_num	801253	Sequence number
obs_id	15124	Observation id
title	A Chandra-Planck Legacy Program for Massive Clusters of Galaxies	P
observer	Dr. Christine Jones	Principal investigator
object	G304.67-31.66	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	354.933333	Observer's specified target RA [deg]
dec_targ	-85.175833	Observer's specified target Dec [deg]
ra_nom	355.07613093179	Nominal RA [deg]
dec_nom	-85.228935358916	Nominal Dec [deg]
roll_nom	280.41229907055	Nominal Roll [deg]
revision	2	Processing version of data
ontime	23084.924717546	Sum of GTIs [s]
livetime	22783.303181236	Livetime [s]
ontime0	23081.660627186	Sum of GTIs [s]
ontime1	23084.842637539	Sum of GTIs [s]
ontime2	23084.883677542	Sum of GTIs [s]
ontime3	23084.924717546	Sum of GTIs [s]
ontime6	23084.760557532	Sum of GTIs [s]
l2events	62993	Number of level 2 events



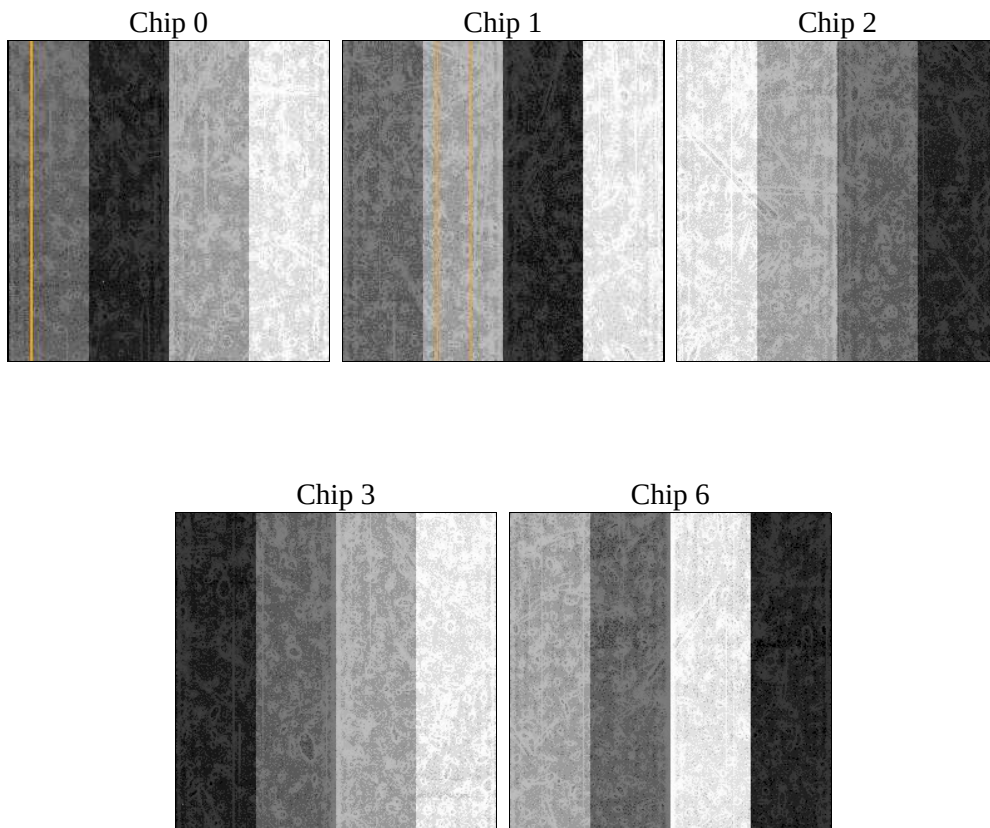
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	23000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	23084.924717546	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	23081.660627186	Sum of GTIs [s]
date	2014-12-08T08:48:15	Date and time of file creation	ontime1	23084.842637539	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	23084.883677542	Sum of GTIs [s]
			ontime3	23084.924717546	Sum of GTIs [s]
			ontime6	23084.760557532	Sum of GTIs [s]
			l1events	528369	Number of level 1 events

2.1.4 Events

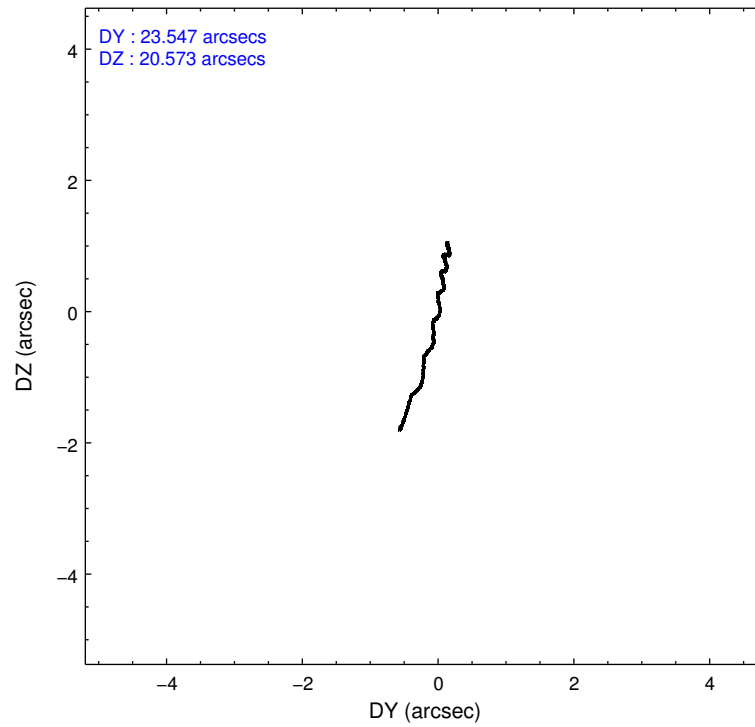
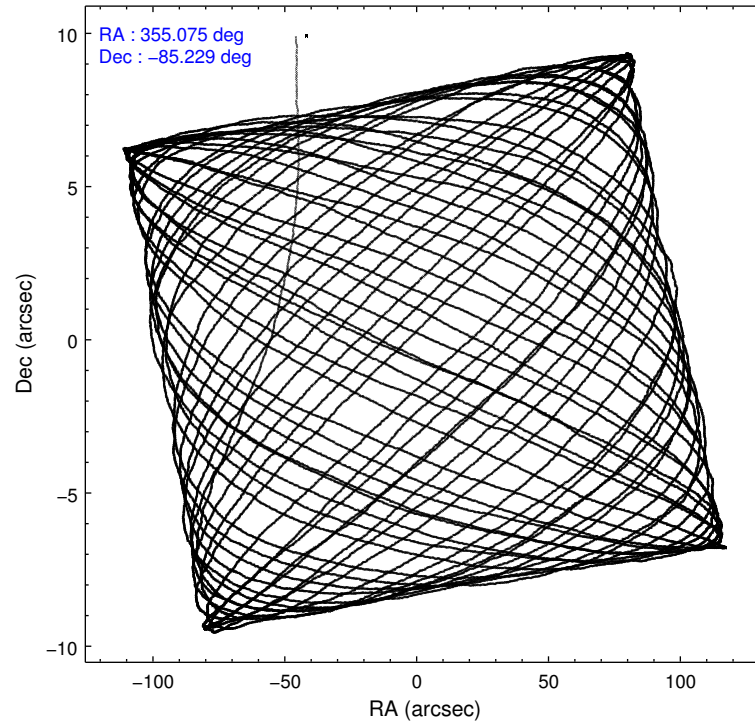
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	94686	106696	107322	110115	109550
rejected events	81910	84812	93358	91556	96390
rejected %	86%	79%	86%	83%	87%

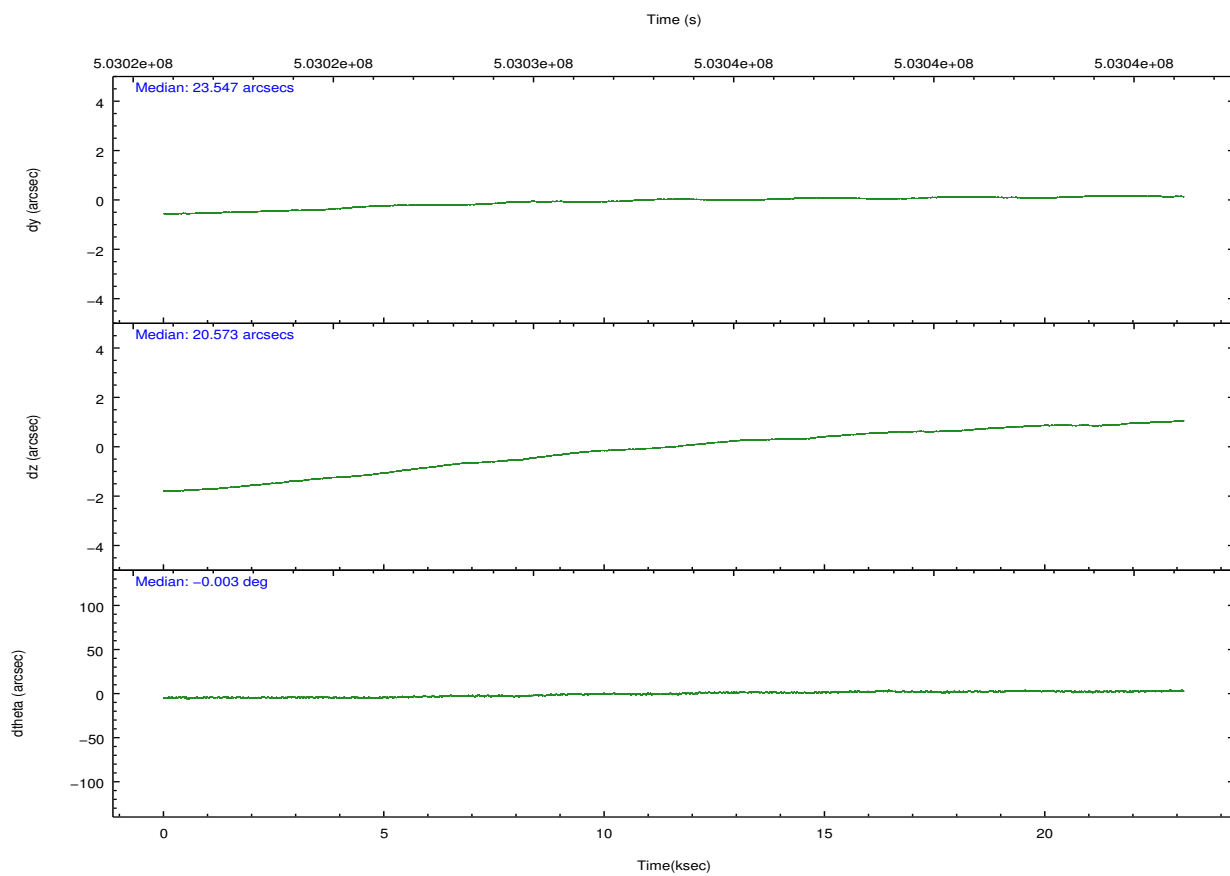
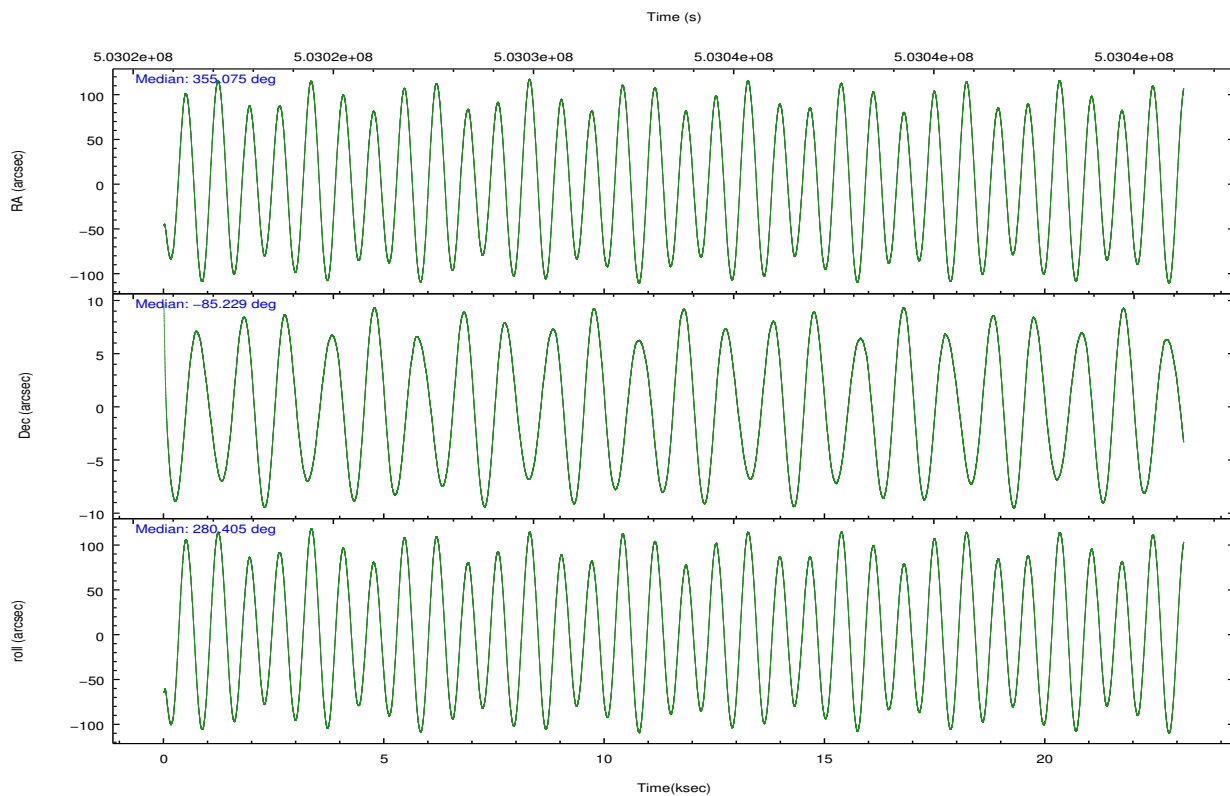
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	4407	12474	5715	9295	4410
	4%	11%	5%	8%	4%
grade 1 events	61	83	57	80	42
	0%	0%	0%	0%	0%
grade 2 events	3171	3534	3188	3470	3015
	3%	3%	2%	3%	2%
grade 3 events	1308	1400	1301	1516	1357
	1%	1%	1%	1%	1%
grade 4 events	1254	1410	1268	1492	1317
	1%	1%	1%	1%	1%
grade 5 events	5064	5474	4655	5960	5501
	5%	5%	4%	5%	5%
grade 6 events	2639	3071	2492	2792	3067
	2%	2%	2%	2%	2%
grade 7 events	76782	79250	88646	85510	90841
	81%	74%	82%	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	354.861966	355.0761309317925	CCD I2 on	Y	Y
[deg] Pointing Dec	-85.208028	-85.22893535891615	CCD I3 on	Y	Y
[deg] Pointing Roll	279.990194	280.4122990705508	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)	503022073.184000	503021061.68966	CCD S5 on	N	N
Observation start date	2013-12-10T00:20:06	2013-12-10T00:04:21	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	503045073.184000	503045863.10352	On-chip summing requested	N	N
Observation end date	2013-12-10T06:43:26	2013-12-10T06:57:43	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



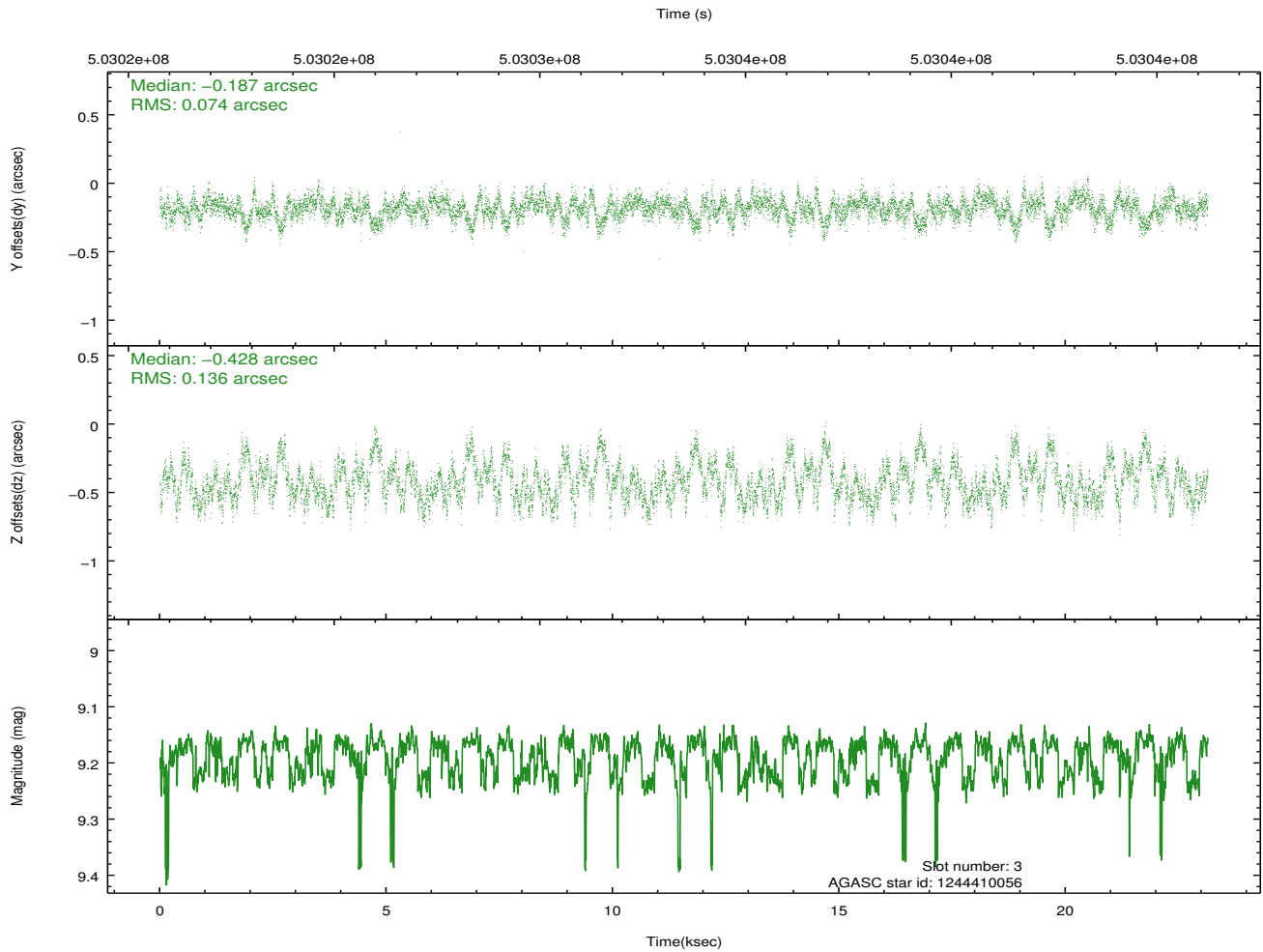
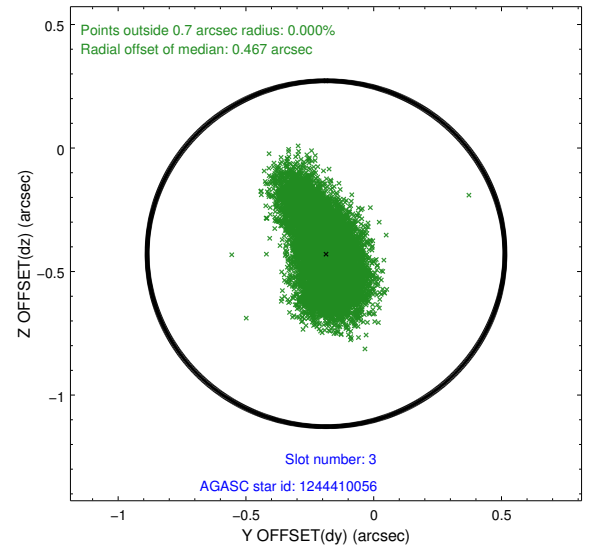
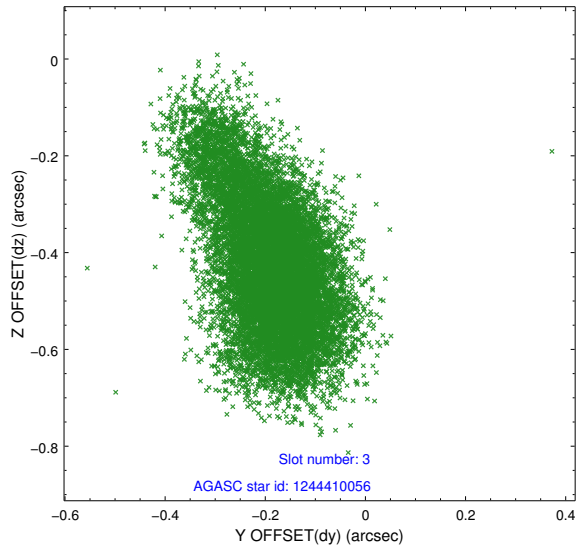


Slot Statistics

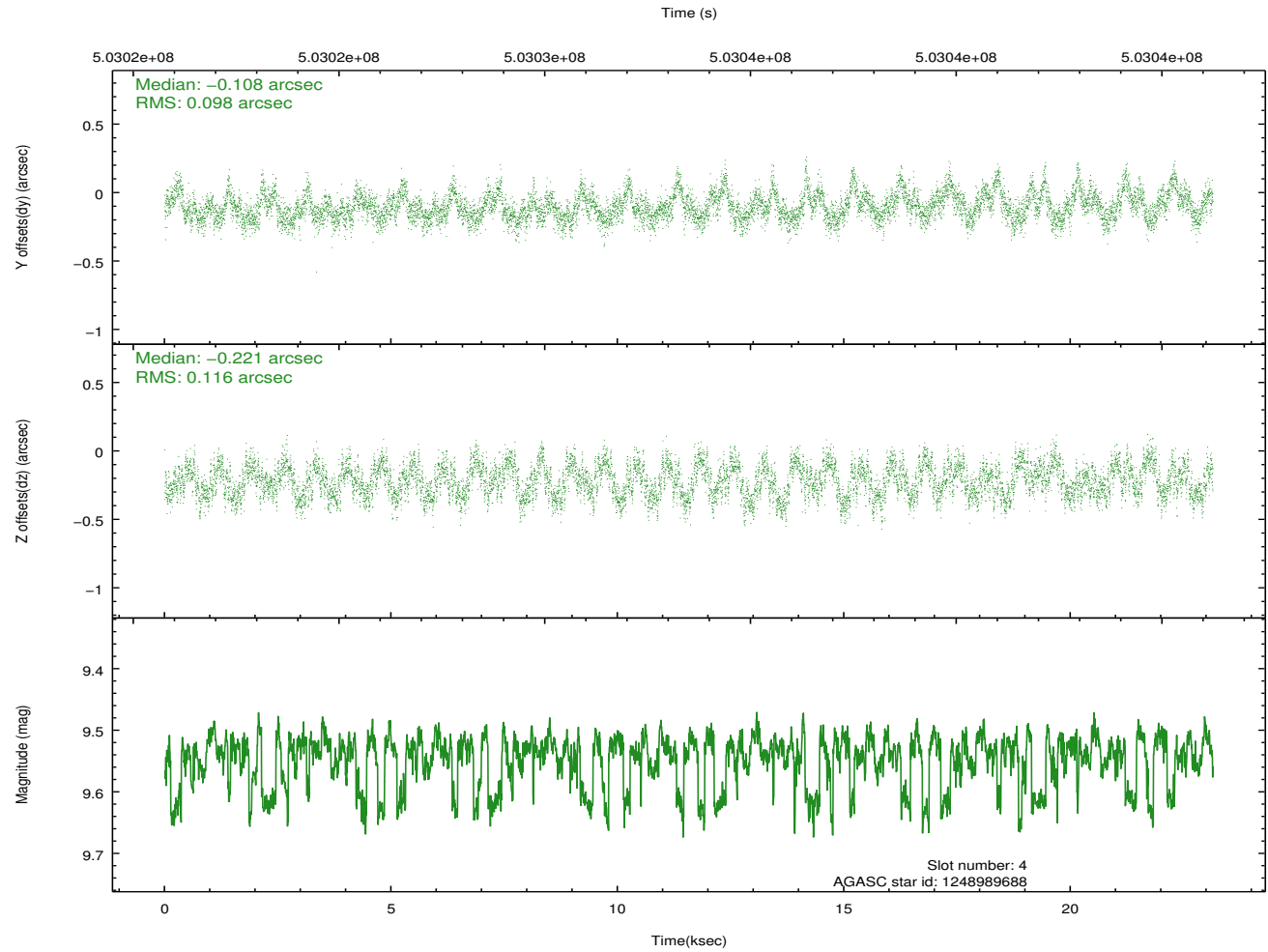
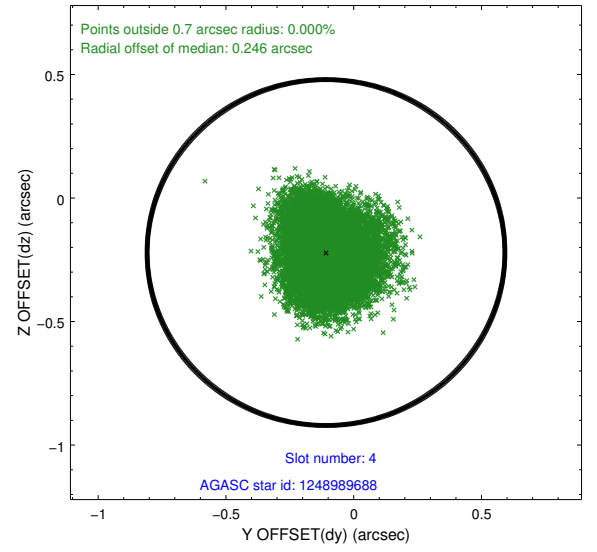
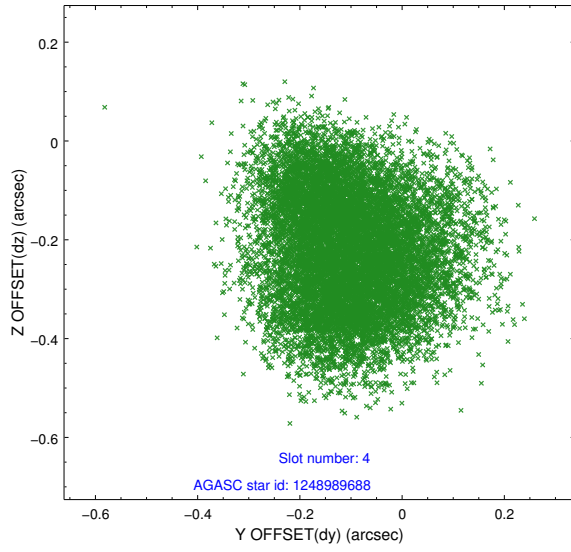
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.14	5645	0.150	-0.130	0.023	0.060	0.000000	0.000000	915.79	-1003.28
1	FID		ACIS-I-5	7.13	5645	-0.387	0.089	0.019	0.029	0.000000	0.000000	-1832.82	894.24
2	FID		ACIS-I-6	7.14	5645	0.147	0.106	0.019	0.030	0.000000	0.000000	381.12	1538.98
3	GUIDE	used	1244410056	9.18	11285	-0.187	-0.428	0.160	0.284	1.711668	-85.376145	1056.76	1827.73
4	GUIDE	used	1248989688	9.54	11282	-0.108	-0.221	0.165	0.251	355.680551	-85.414808	776.17	103.04
5	GUIDE	used	1248993248	10.08	11157	-0.049	0.468	0.293	0.442	347.328067	-85.468901	693.19	-2290.35
6	GUIDE	used	1248994864	9.06	11284	0.175	0.343	0.148	0.246	348.445837	-85.009430	-940.70	-1869.72
7	GUIDE	used	1248996968	9.83	11279	0.156	-0.148	0.163	0.291	357.919980	-84.719688	-1528.61	1297.16

2.4 Star Slots

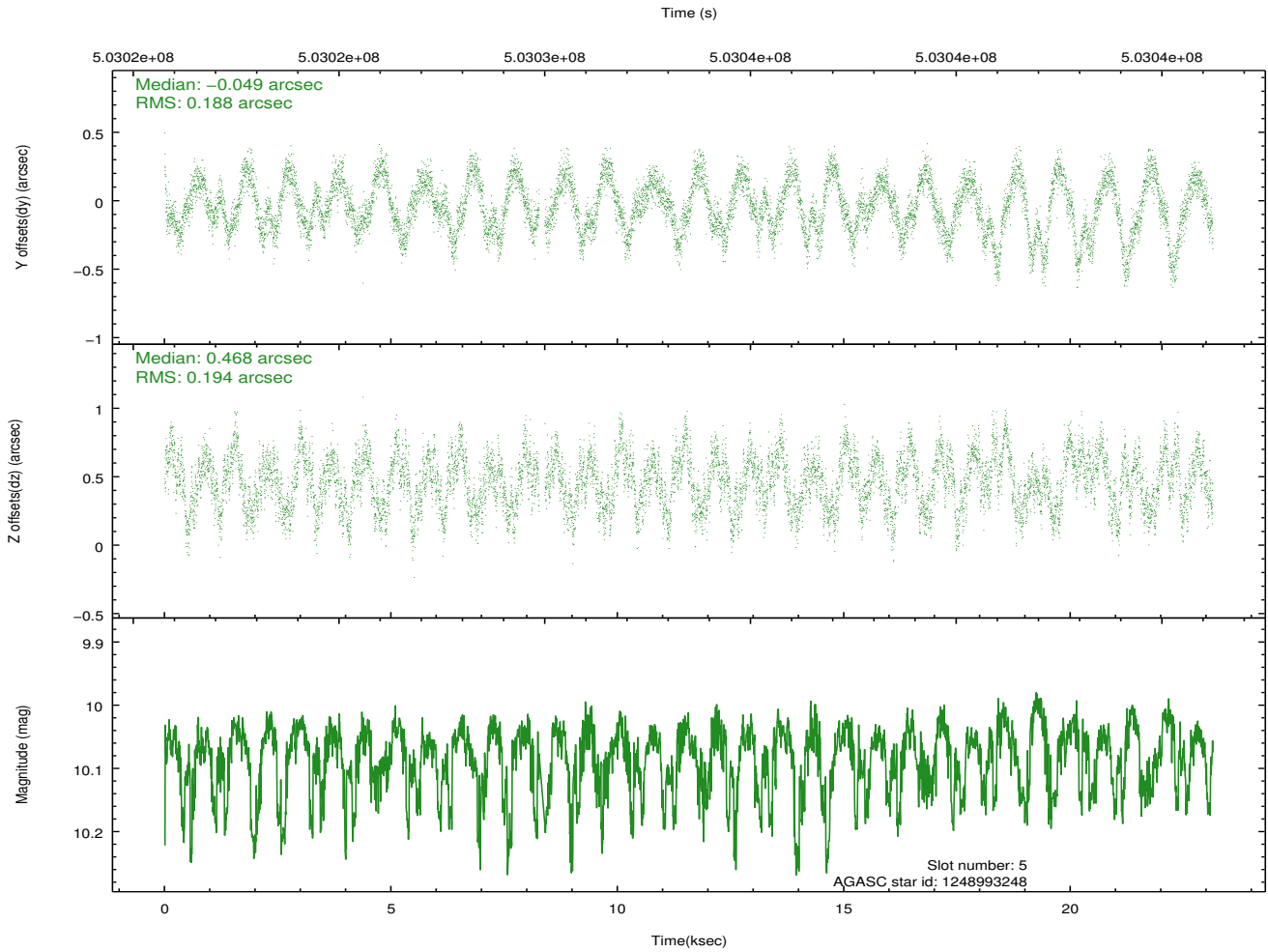
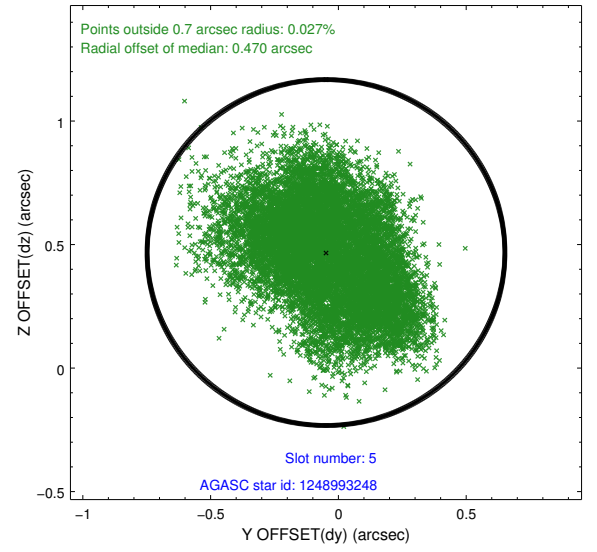
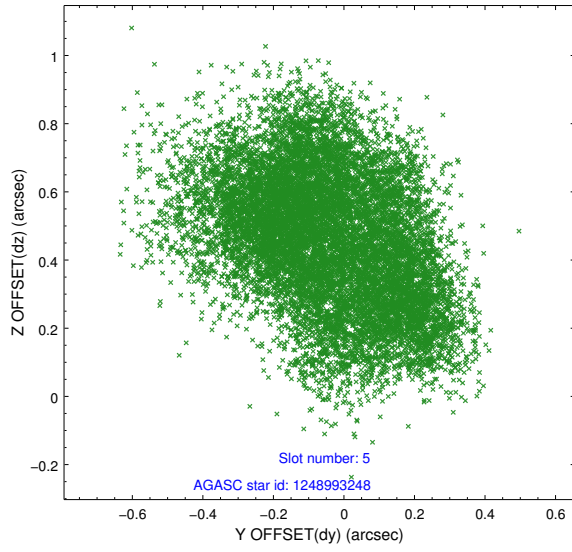
2.4.1 Slot 3



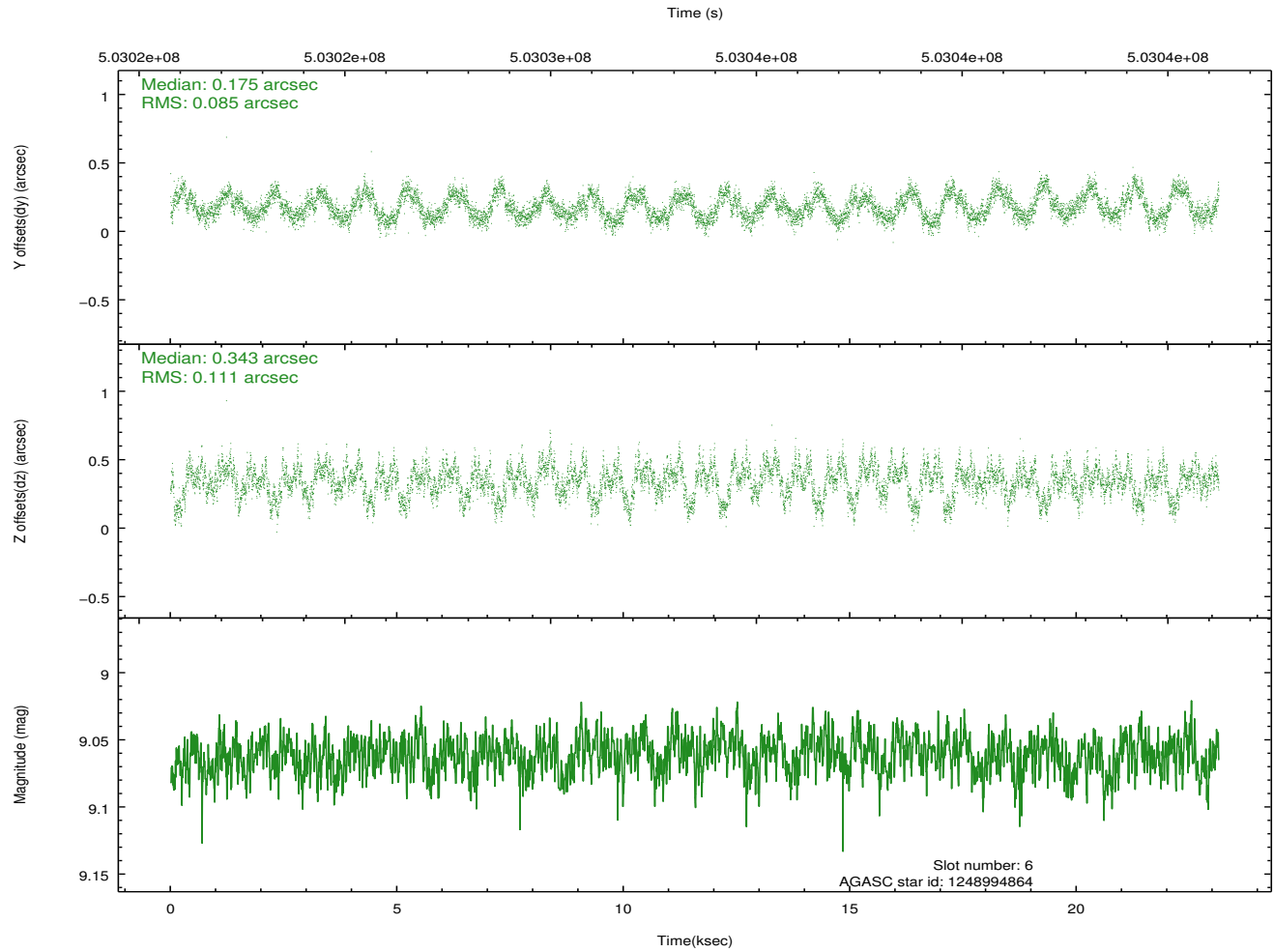
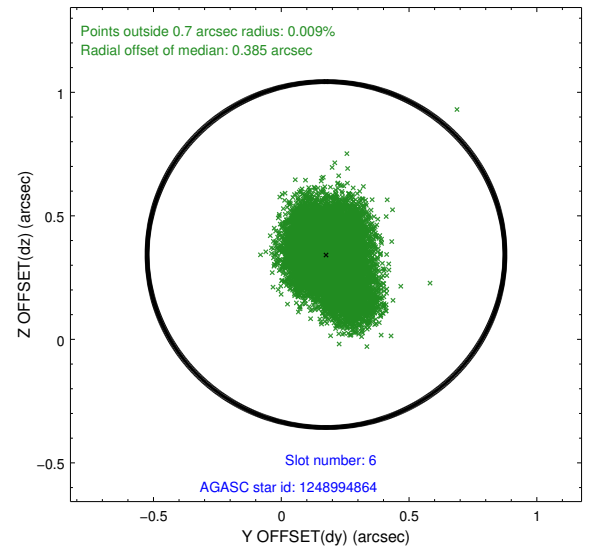
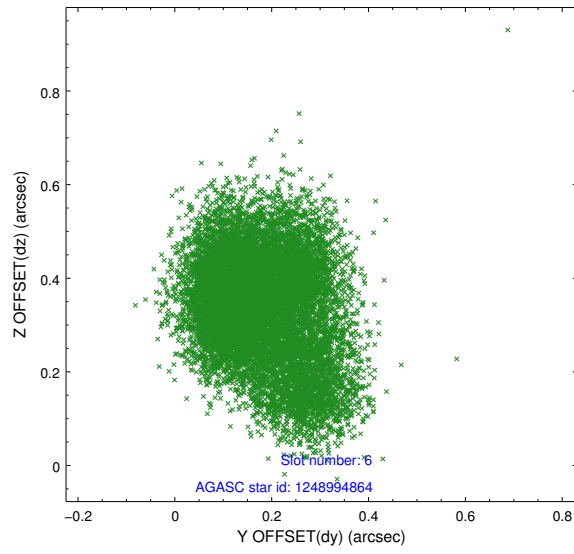
2.4.2 Slot 4



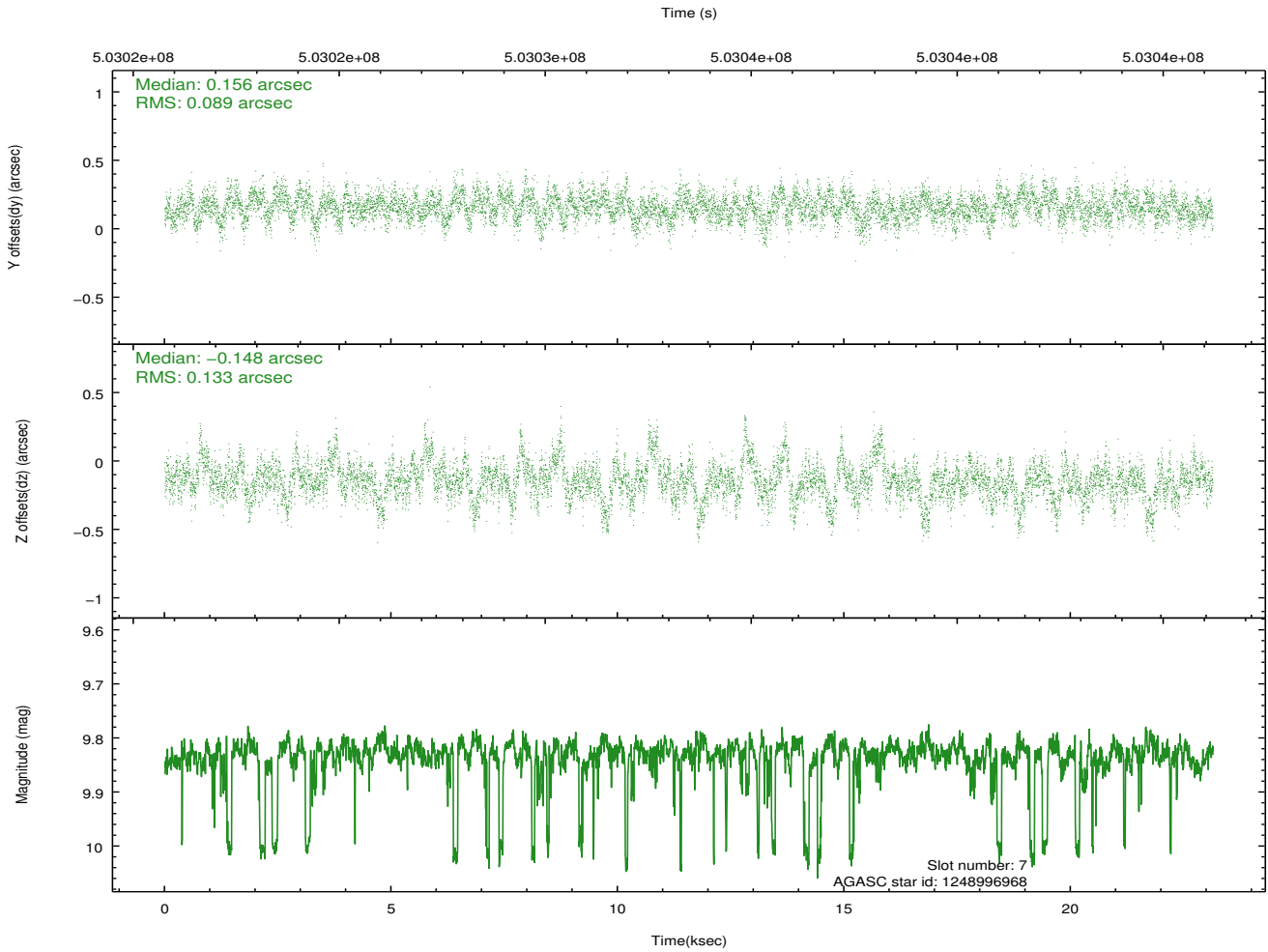
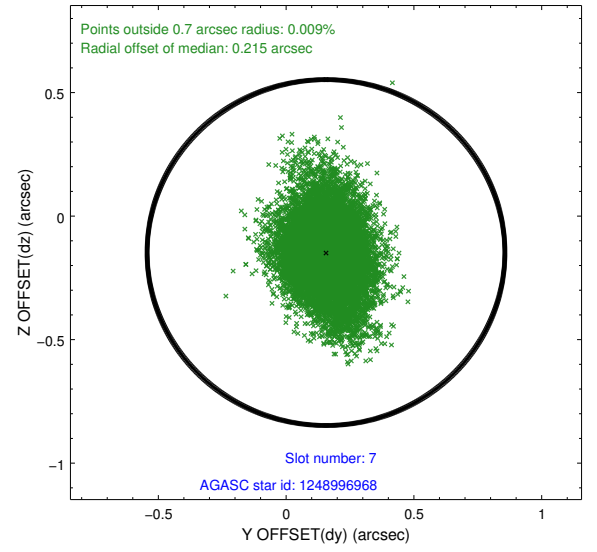
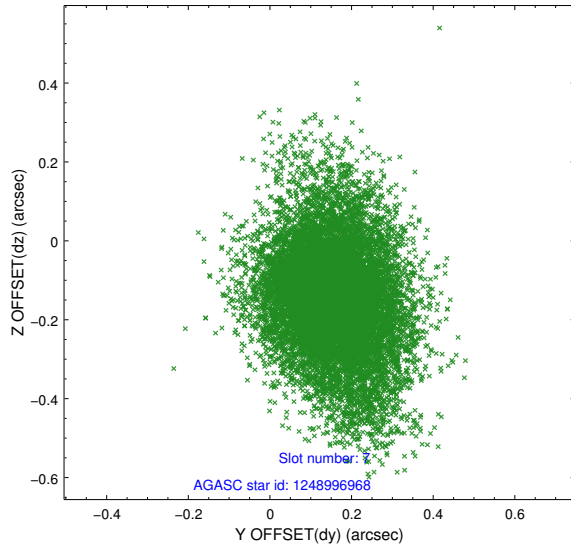
2.4.3 Slot 5



2.4.4 Slot 6

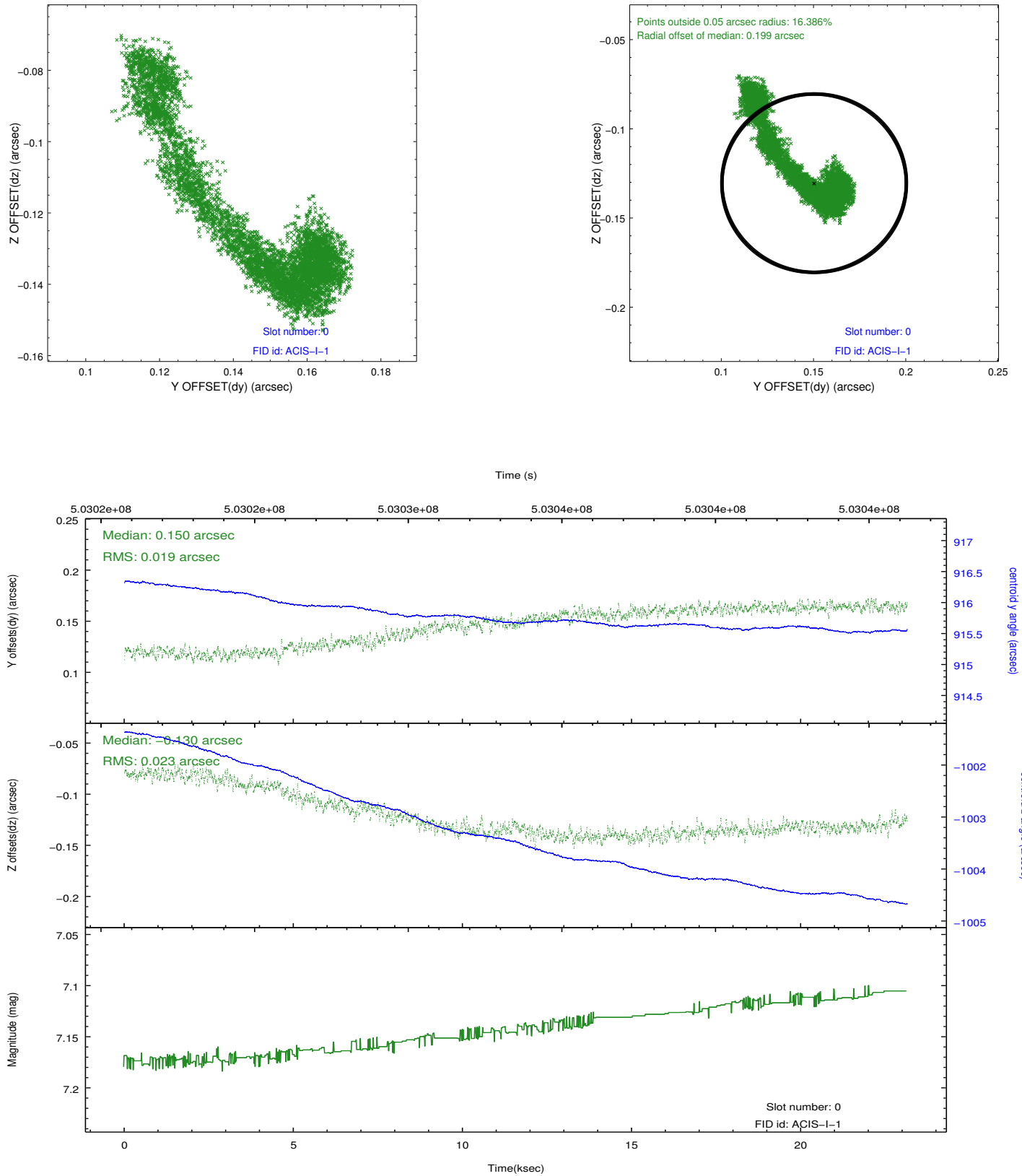


2.4.5 Slot 7

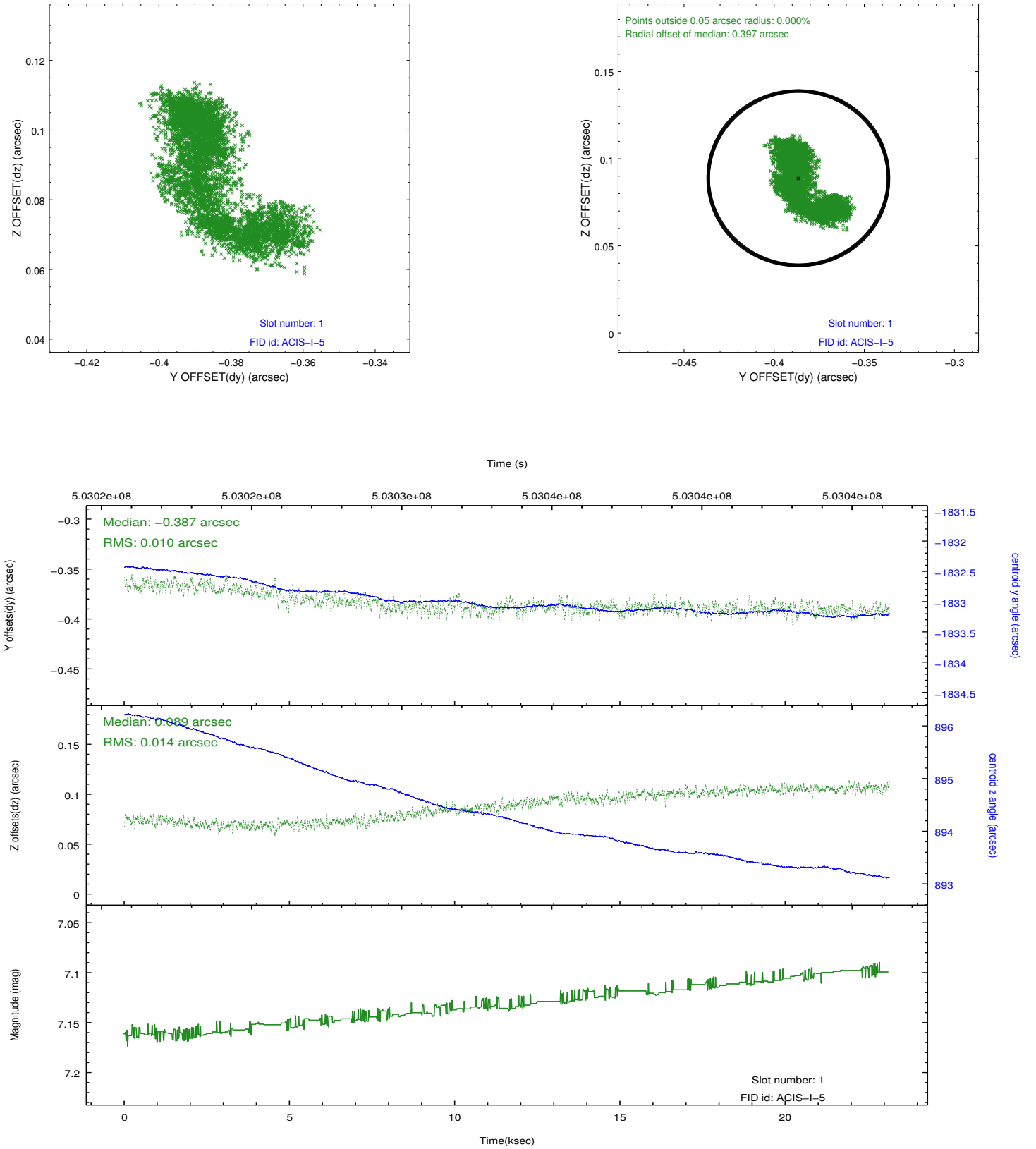


2.5 FID Slots

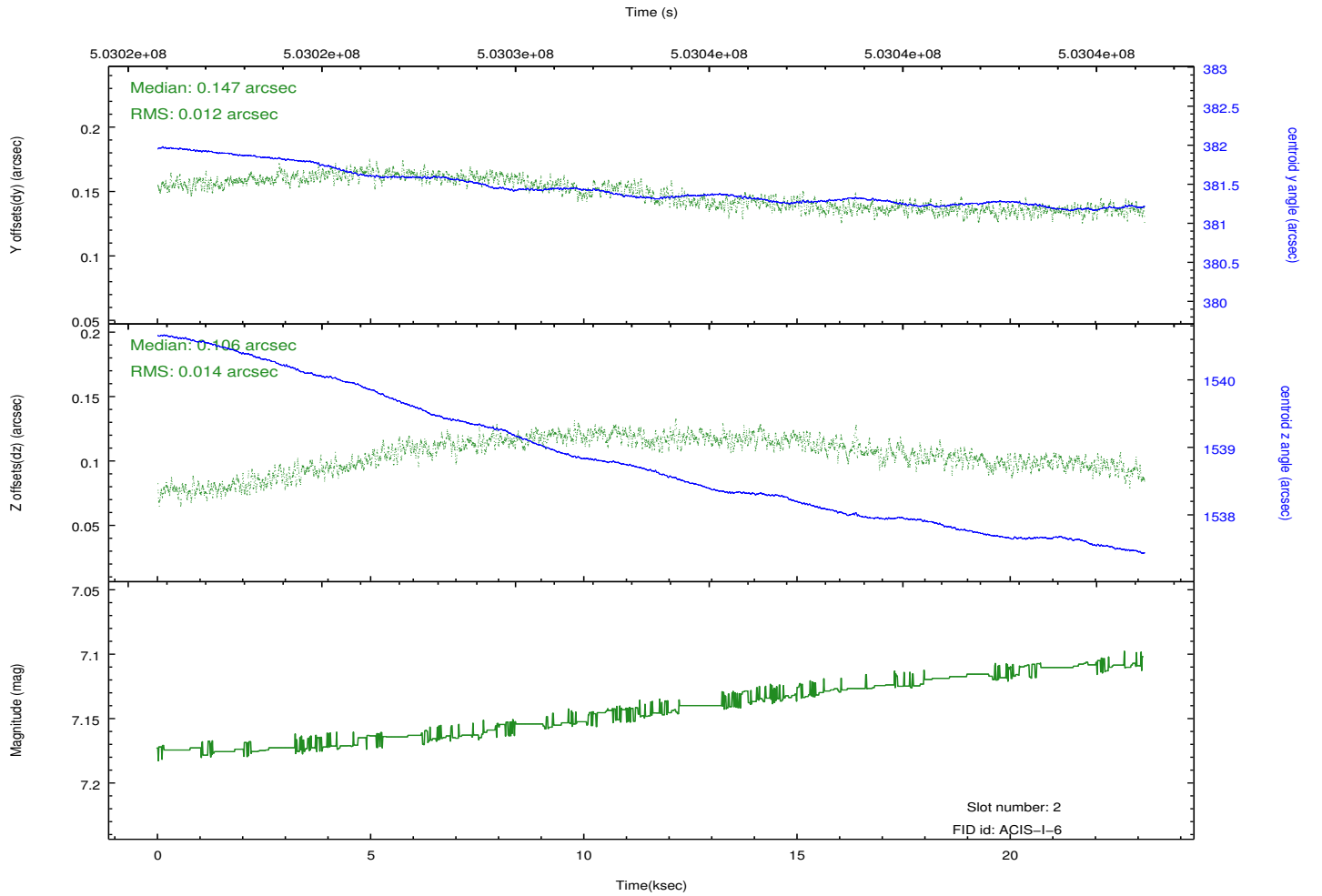
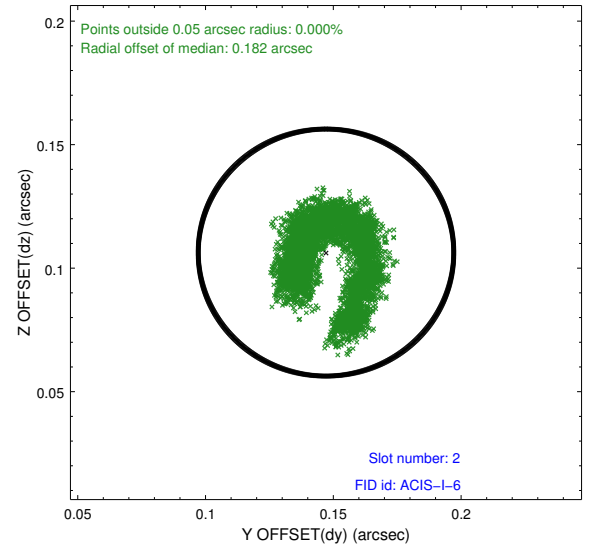
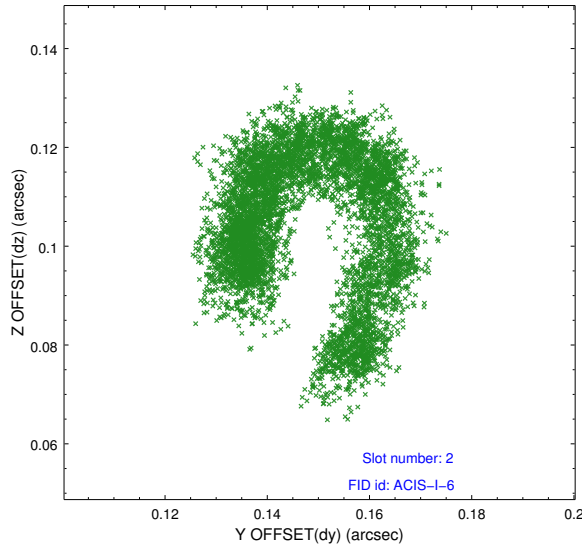
2.5.1 Slot 0



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)	2014.12.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	23.084924717546

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.