

V&V Reference Report

L2 ASCDS Version : 10.1.1

Observation 15119 - L2 Version 2
Chandra X-Ray Center

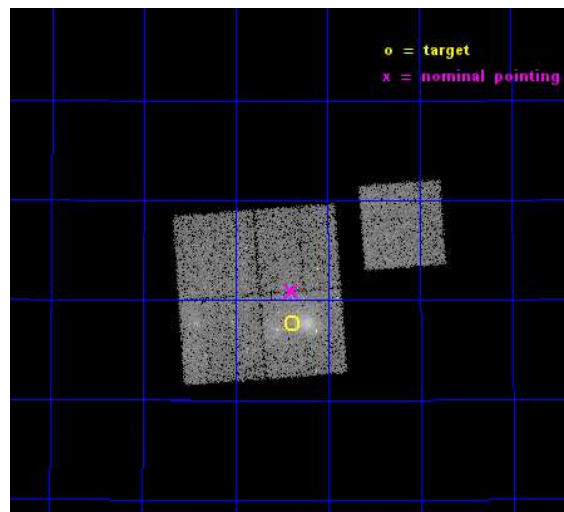
L2 Processing Date : Dec 9 2014

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1 Front

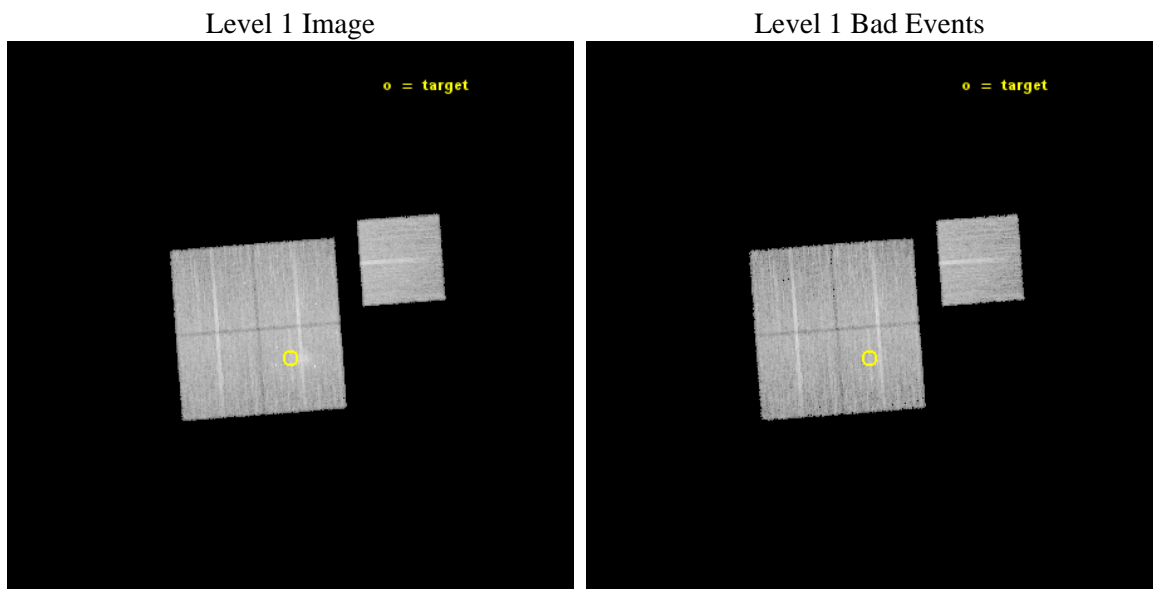
seq_num	801248	Sequence number
obs_id	15119	Observation id
title	A Chandra-Planck Legacy Program for Massive Clusters of Galaxies	P
observer	Dr. Christine Jones	Principal investigator
object	G143.24+65.21	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	179.845833	Observer's specified target RA [deg]
dec_targ	49.794167	Observer's specified target Dec [deg]
ra_nom	179.84864182382	Nominal RA [deg]
dec_nom	49.848589606675	Nominal Dec [deg]
roll_nom	85.728276294125	Nominal Roll [deg]
revision	2	Processing version of data
ontime	22084.400169849	Sum of GTIs [s]
livetime	21795.851223331	Livetime [s]
ontime0	22081.259159565	Sum of GTIs [s]
ontime1	22084.400169849	Sum of GTIs [s]
ontime2	22078.118179262	Sum of GTIs [s]
ontime3	22084.400169849	Sum of GTIs [s]
ontime6	22081.259169519	Sum of GTIs [s]
l2events	60988	Number of level 2 events



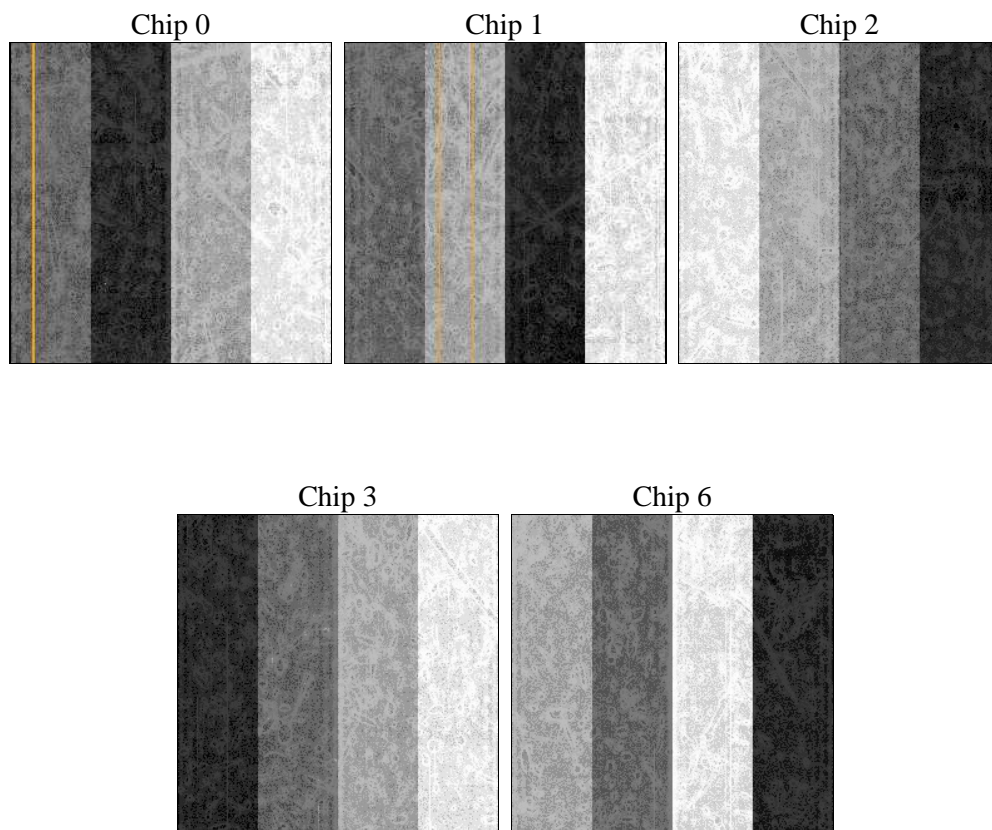
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	22000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	22084.400169849	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	22081.259159565	Sum of GTIs [s]
date	2014-12-09T08:42:36	Date and time of file creation	ontime1	22084.400169849	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	22078.118179262	Sum of GTIs [s]
			ontime3	22084.400169849	Sum of GTIs [s]
			ontime6	22081.259169519	Sum of GTIs [s]
			l1events	499510	Number of level 1 events

2.1.4 Events

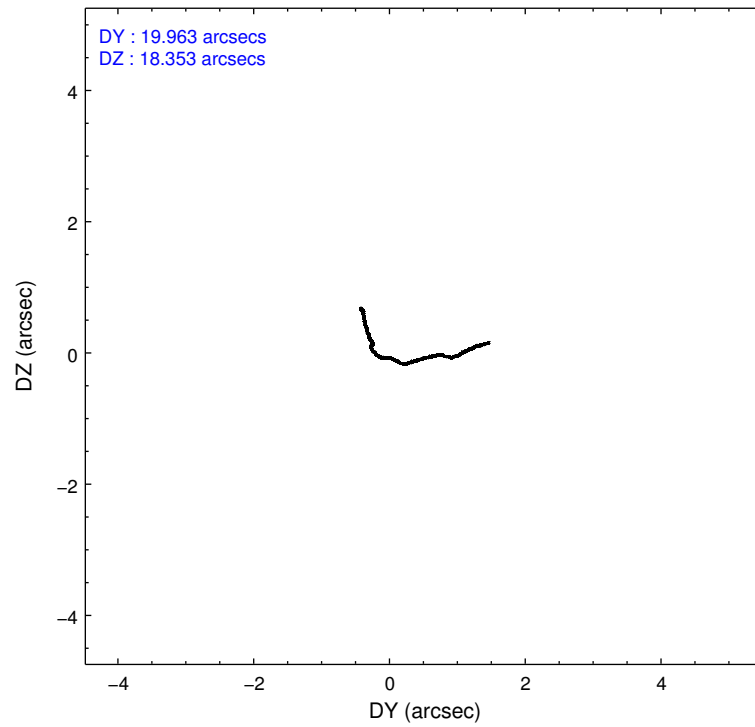
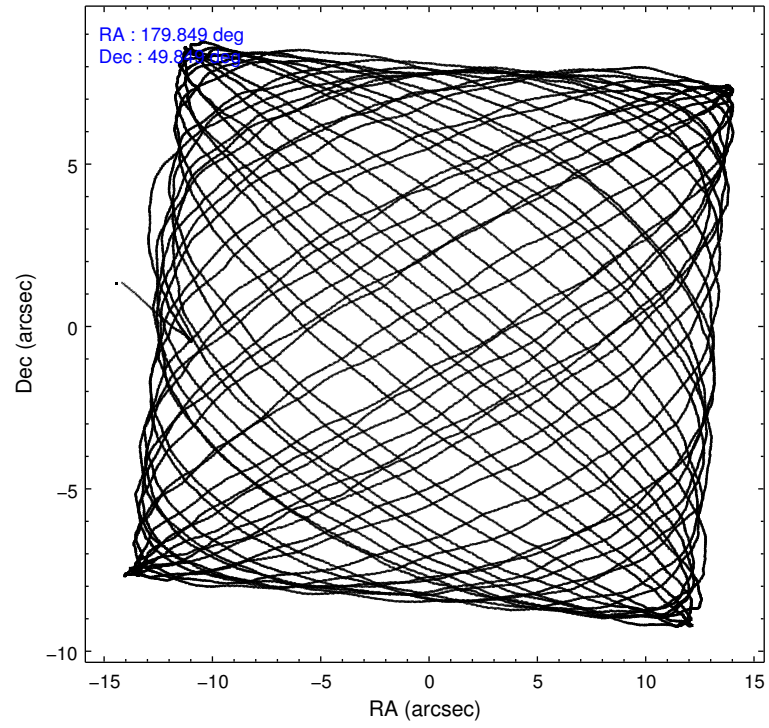
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	93059	95787	100400	106555	103709
rejected events	80594	81619	87928	87261	91188
rejected %	86%	85%	87%	81%	87%

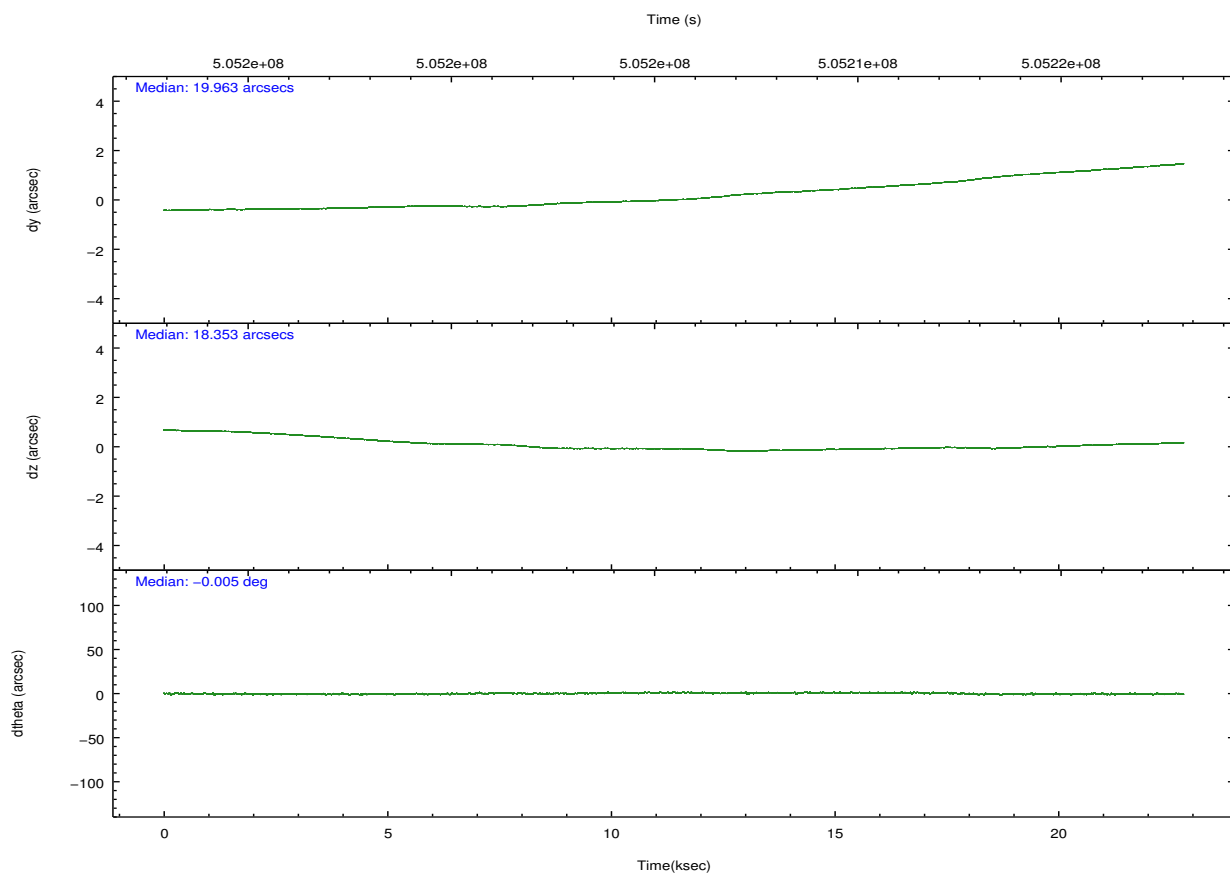
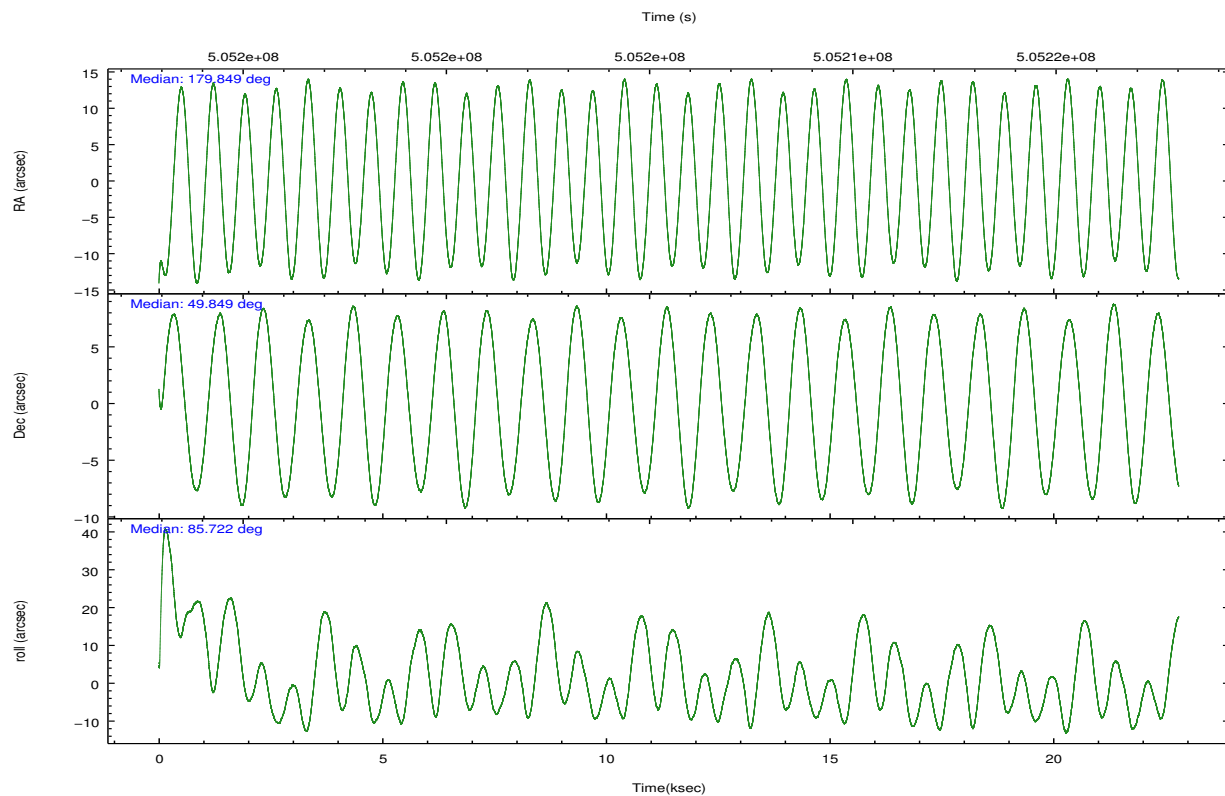
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	4072	5038	4527	10216	4251
	4%	5%	4%	9%	4%
grade 1 events	57	51	57	79	41
	0%	0%	0%	0%	0%
grade 2 events	3215	3334	3032	3454	2831
	3%	3%	3%	3%	2%
grade 3 events	1280	1376	1210	1494	1301
	1%	1%	1%	1%	1%
grade 4 events	1241	1415	1249	1510	1278
	1%	1%	1%	1%	1%
grade 5 events	5042	5187	4868	5561	5420
	5%	5%	4%	5%	5%
grade 6 events	2662	3008	2459	2626	2863
	2%	3%	2%	2%	2%
grade 7 events	75490	76378	82998	81615	85724
	81%	79%	82%	76%	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	179.867308	179.848641823821	CCD I2 on	Y	Y
[deg] Pointing Dec	49.823839	49.84858960667505	CCD I3 on	Y	Y
[deg] Pointing Roll	85.505351	85.72827629412497	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)	505194874.184000	505193202.34642	CCD S5 on	N	N
Observation start date	2014-01-04T03:53:27	2014-01-04T03:26:42	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	505216874.184000	505217650.13526	On-chip summing requested	N	N
Observation end date	2014-01-04T10:00:07	2014-01-04T10:14:10	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



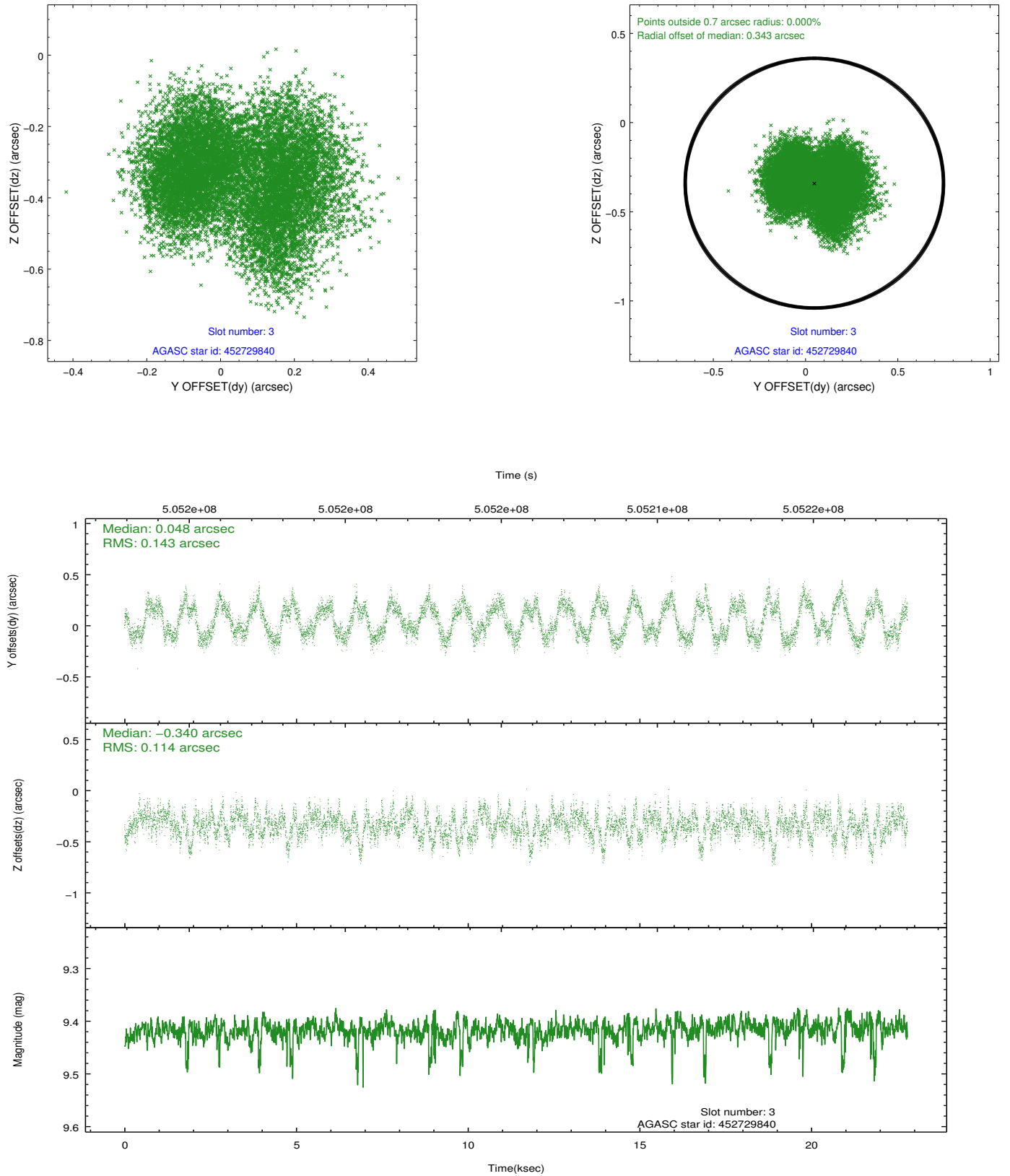


Slot Statistics

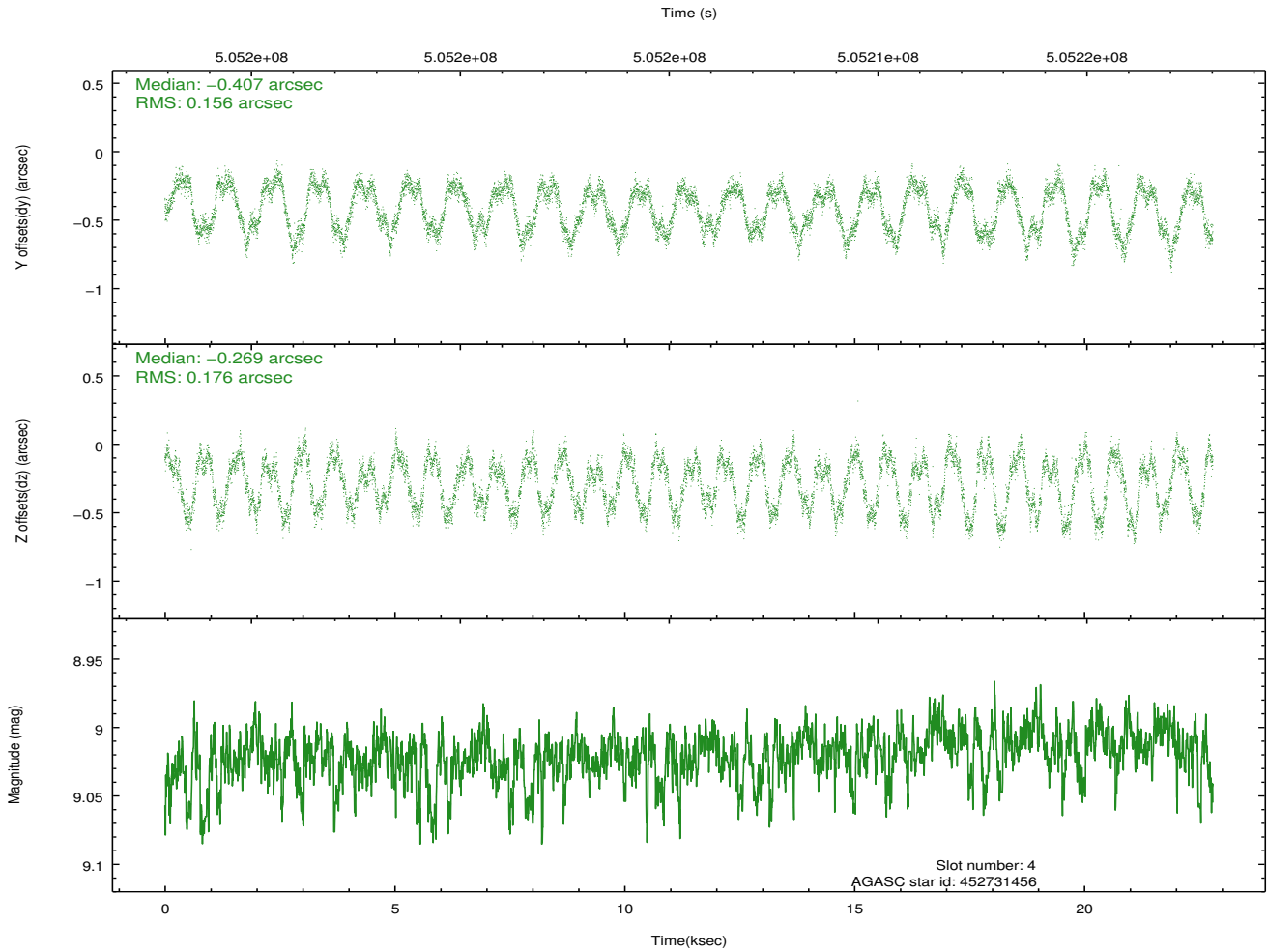
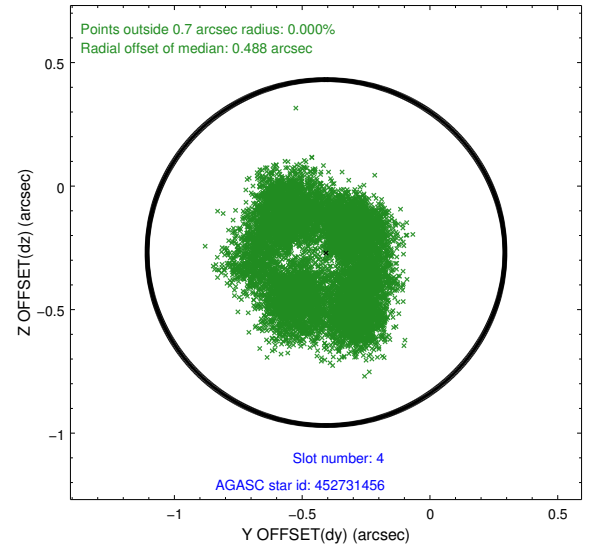
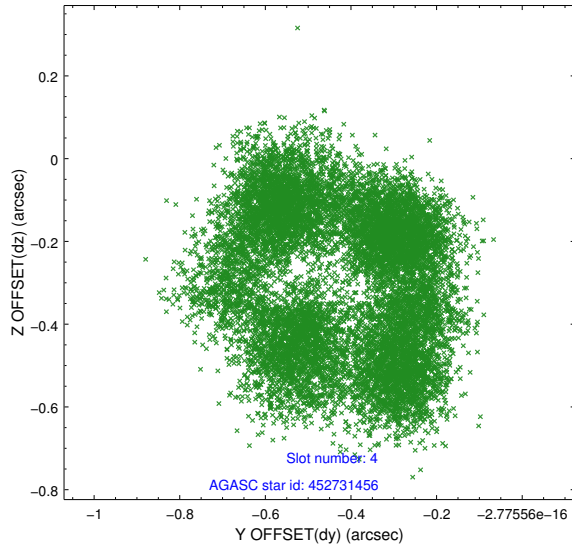
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.02	5561	0.136	-0.086	0.010	0.016	0.000000	0.000000	919.16	-1001.26
1	FID		ACIS-I-5	7.00	5561	-0.328	0.103	0.012	0.019	0.000000	0.000000	-1829.41	896.19
2	FID		ACIS-I-6	7.03	5561	0.098	0.053	0.012	0.024	0.000000	0.000000	384.40	1540.92
3	GUIDE	used	452729840	9.42	11114	0.048	-0.340	0.201	0.290	179.209091	49.489671	-1314.05	1441.33
4	GUIDE	used	452731456	9.02	11114	-0.407	-0.269	0.258	0.353	179.499520	49.911597	249.71	875.41
5	GUIDE	used	453127032	9.77	11066	0.098	0.305	0.230	0.390	180.794140	49.394133	-1358.38	-2284.79
6	GUIDE	used	453128880	8.83	11119	0.094	0.040	0.106	0.171	180.110350	49.584959	-811.47	-631.79
7	GUIDE	used	453125800	9.56	11105	0.182	0.274	0.147	0.230	180.109153	49.171947	-2293.96	-751.59

2.4 Star Slots

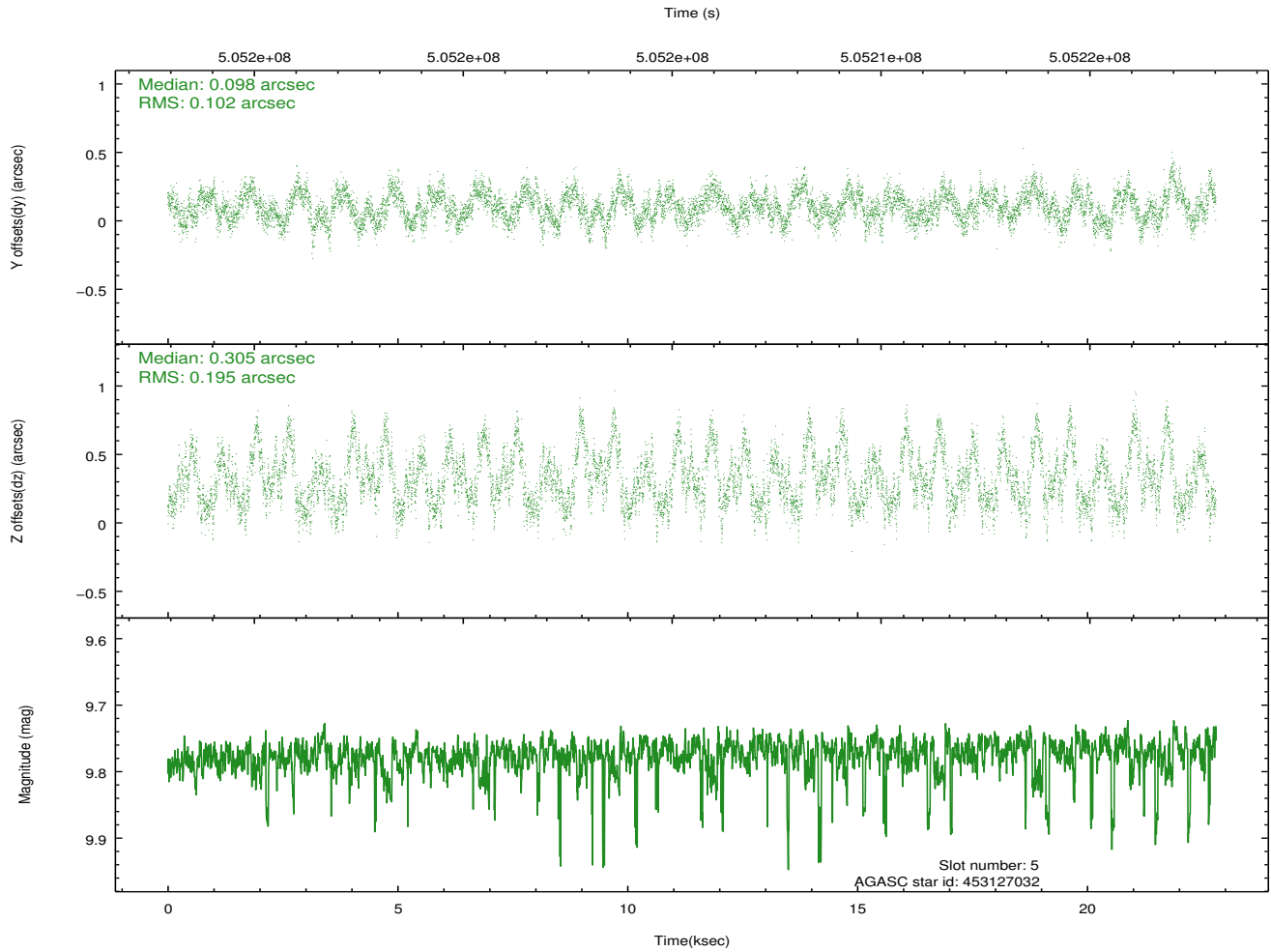
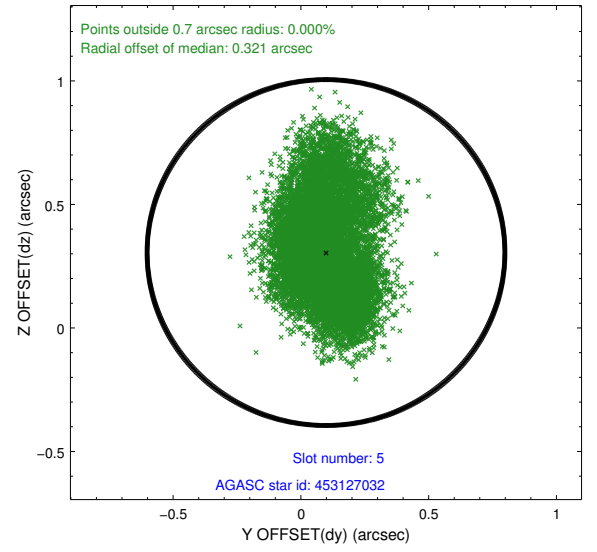
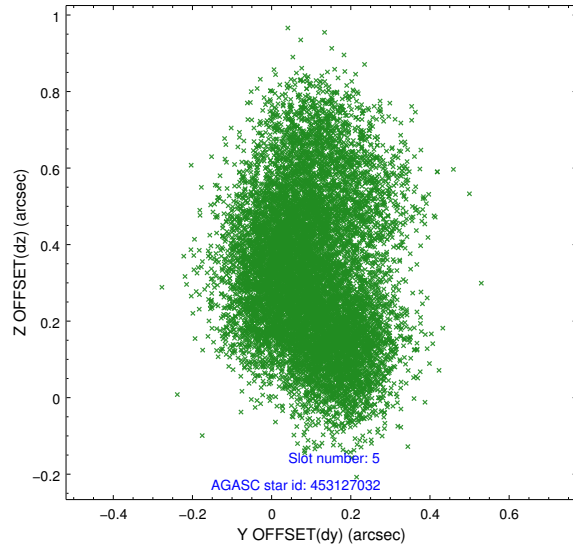
2.4.1 Slot 3



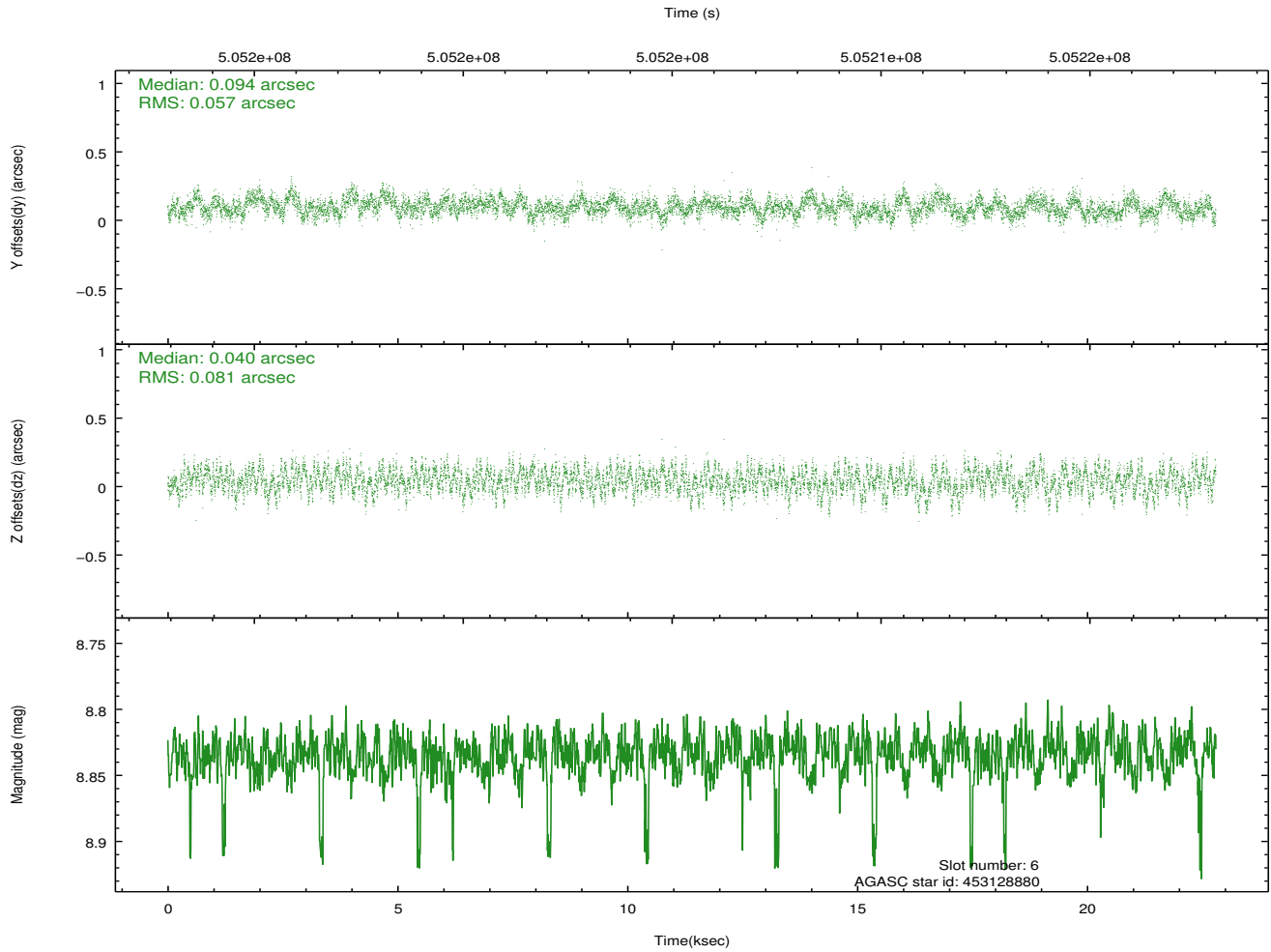
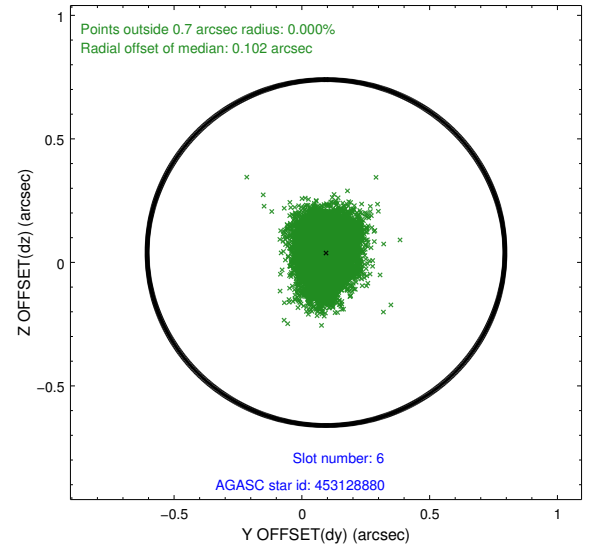
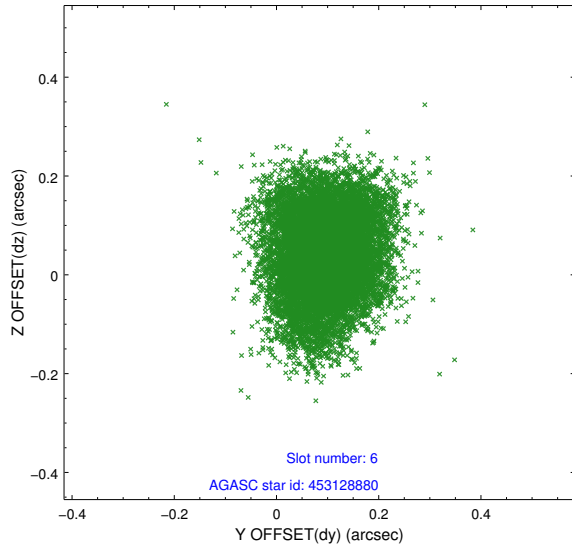
2.4.2 Slot 4



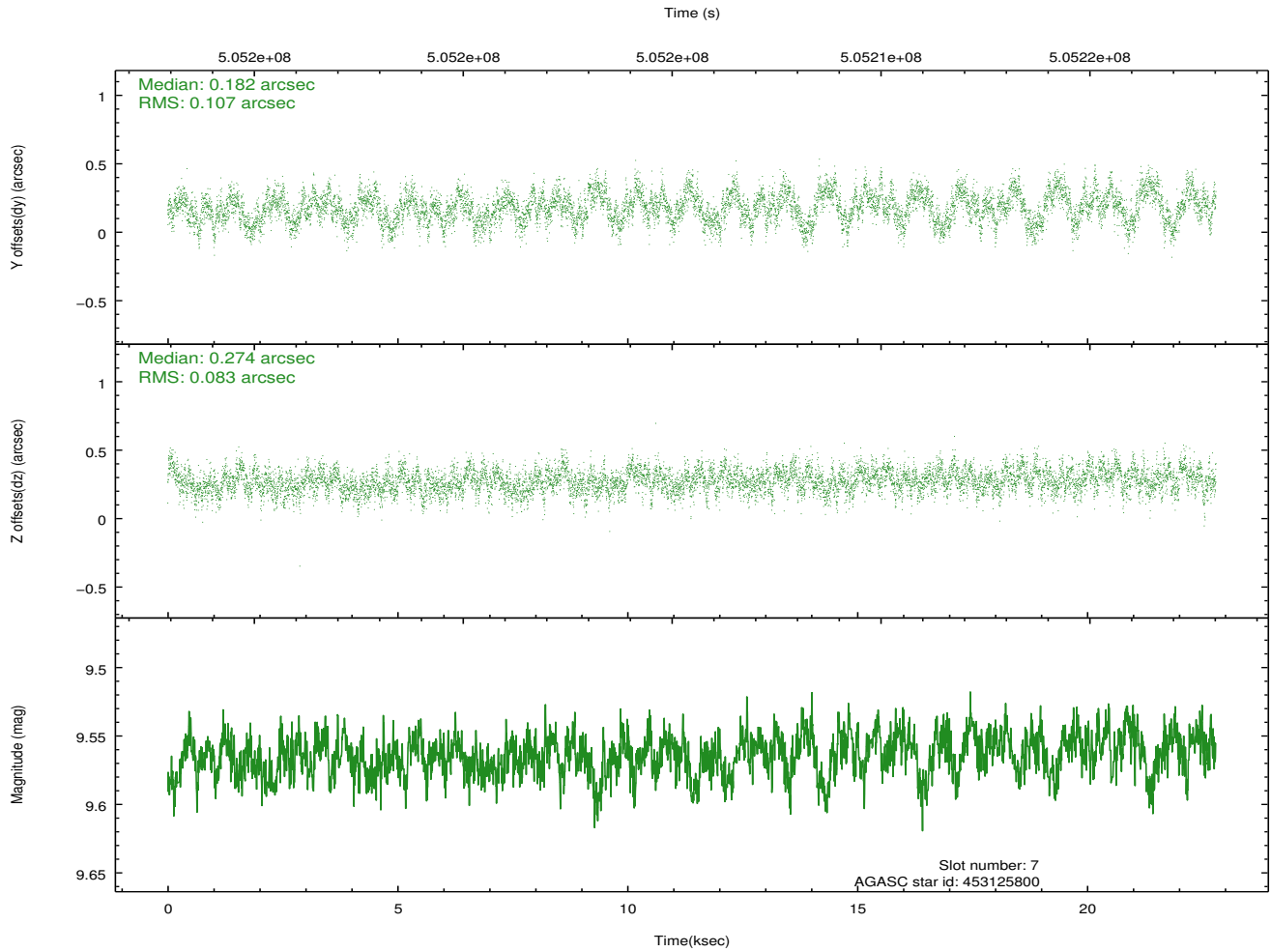
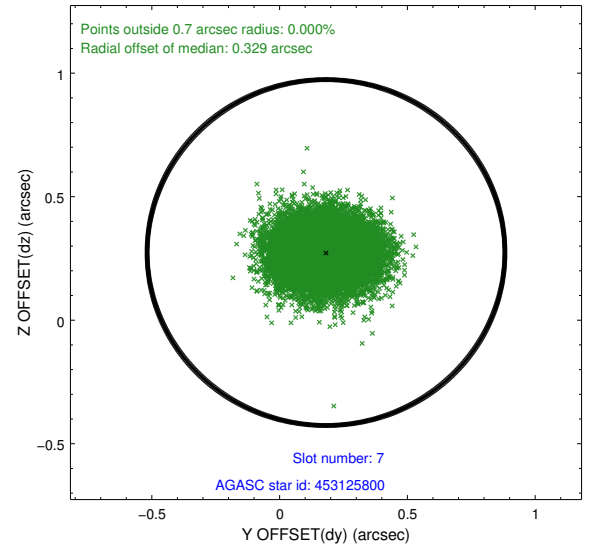
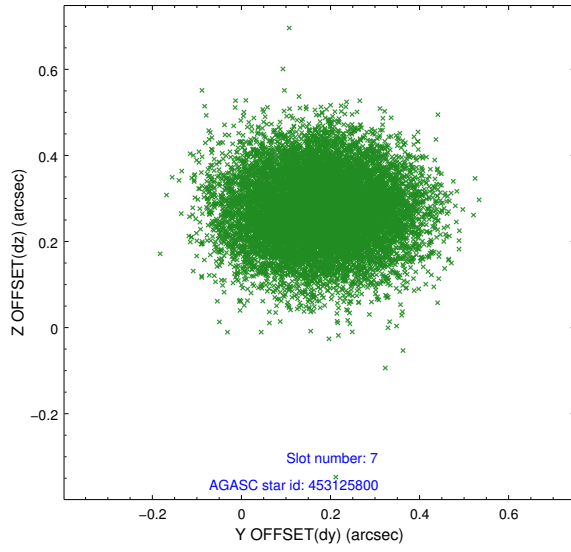
2.4.3 Slot 5



2.4.4 Slot 6

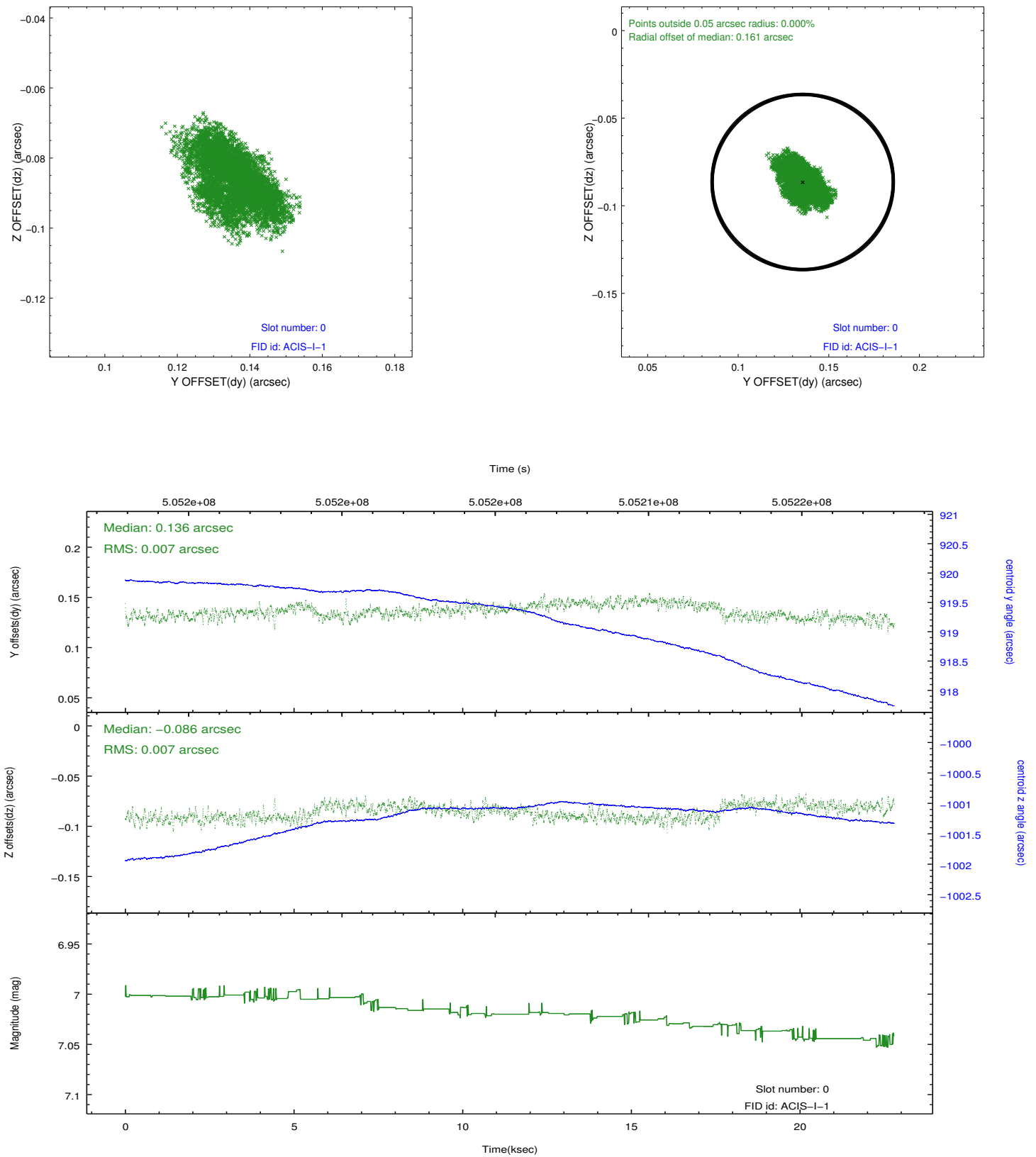


2.4.5 Slot 7

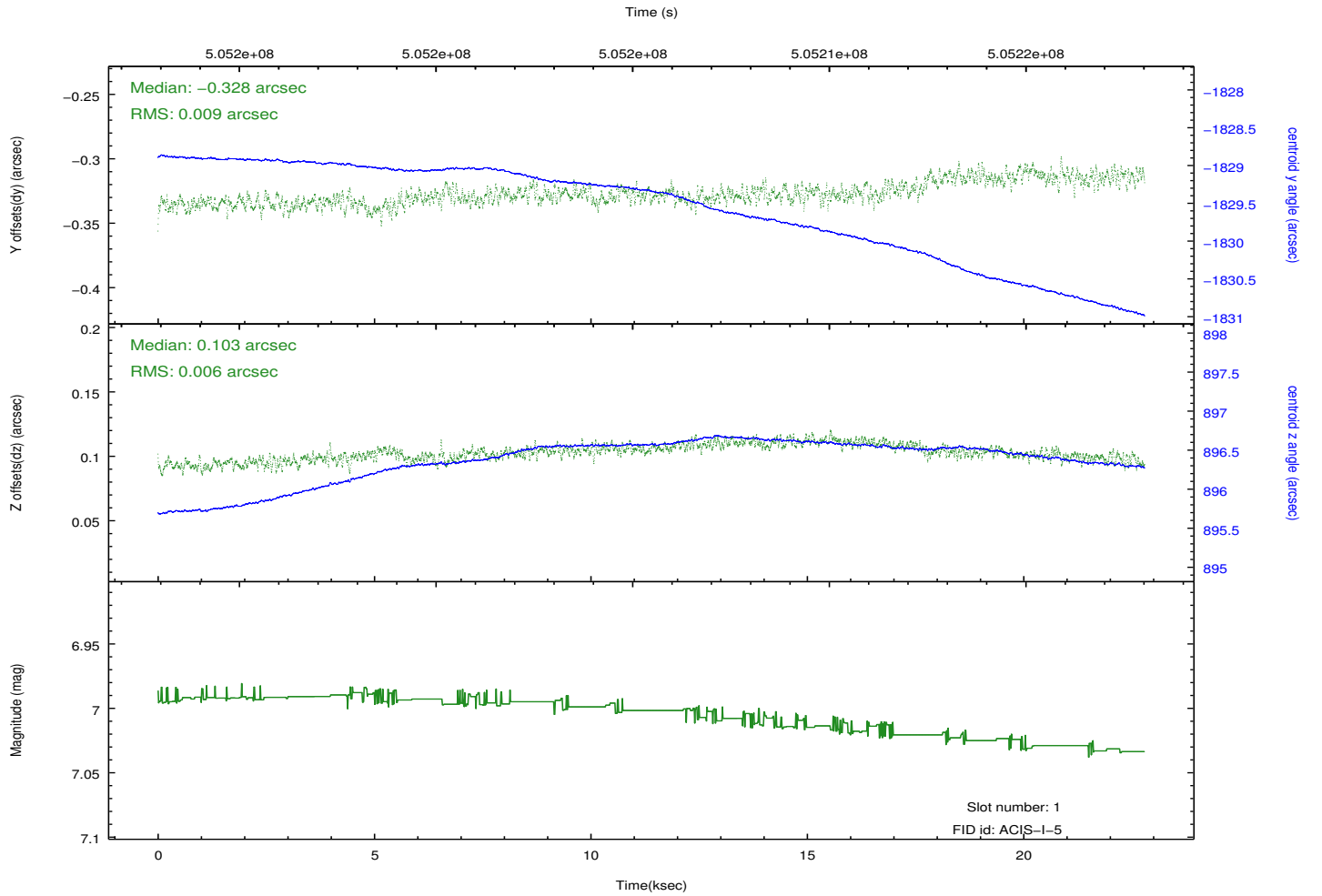
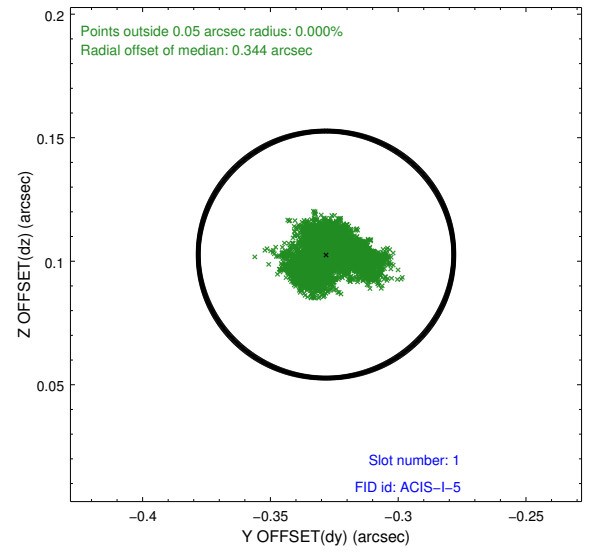
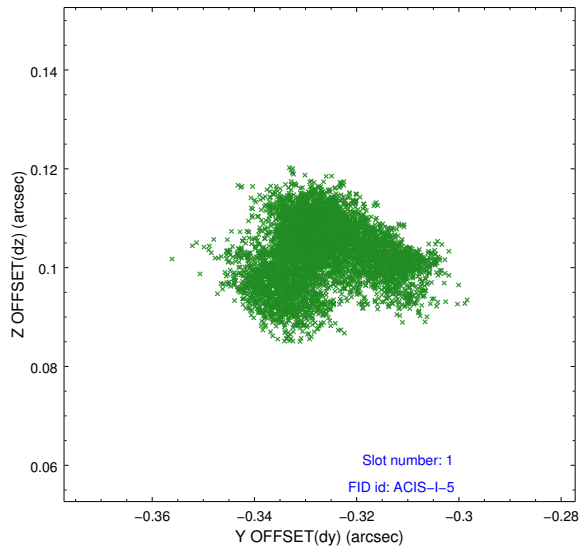


2.5 FID Slots

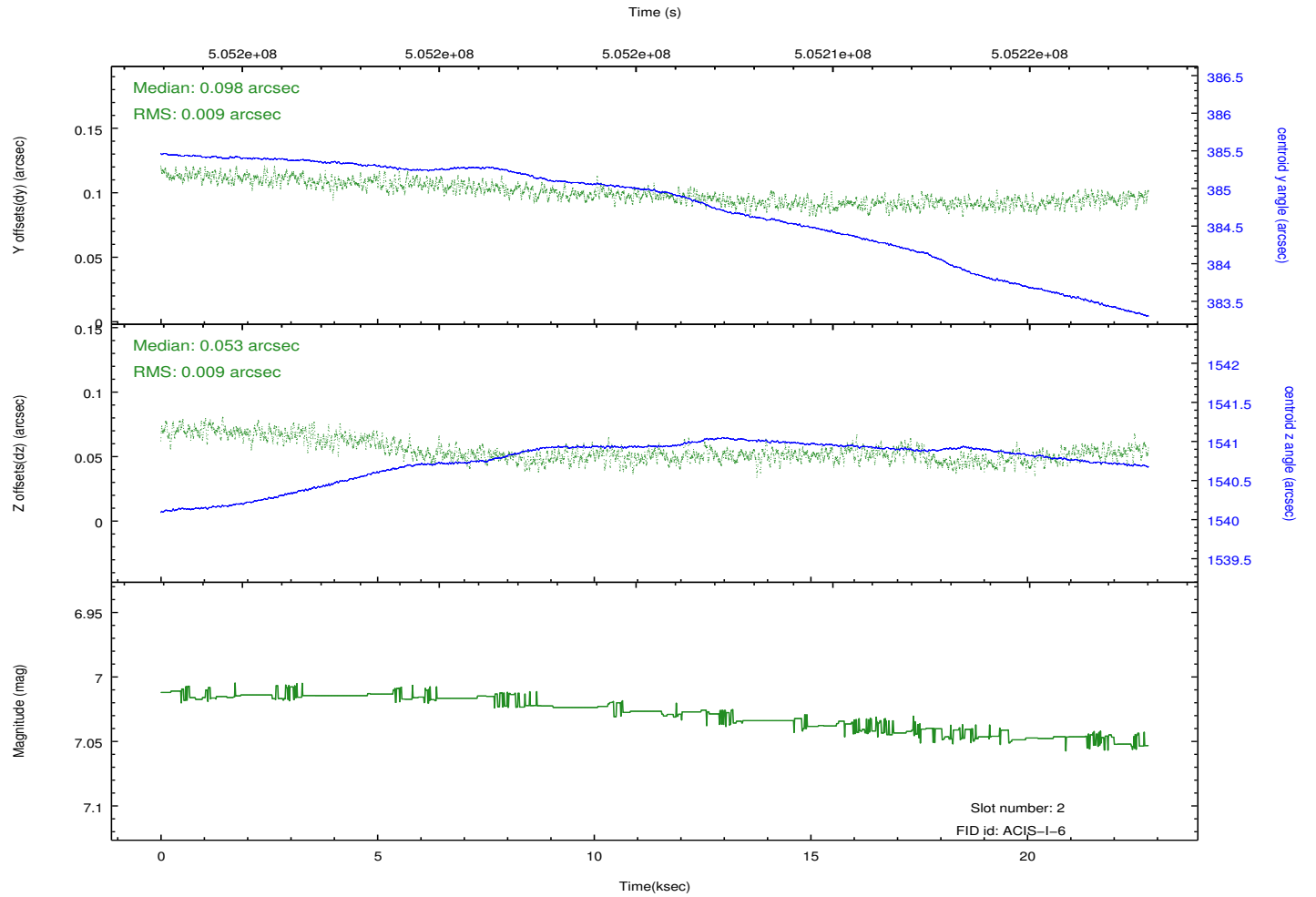
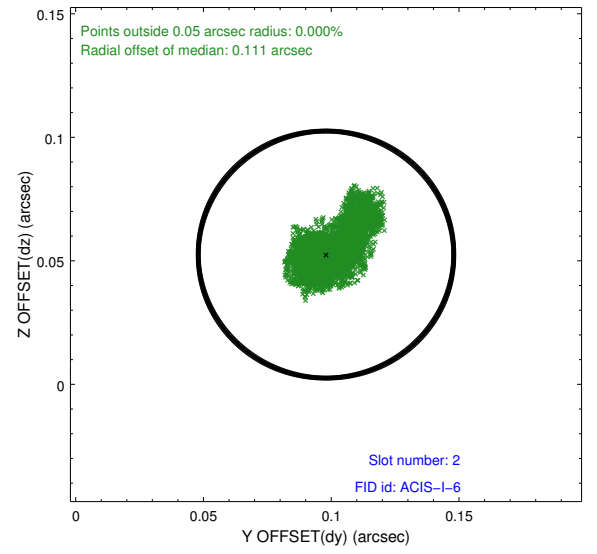
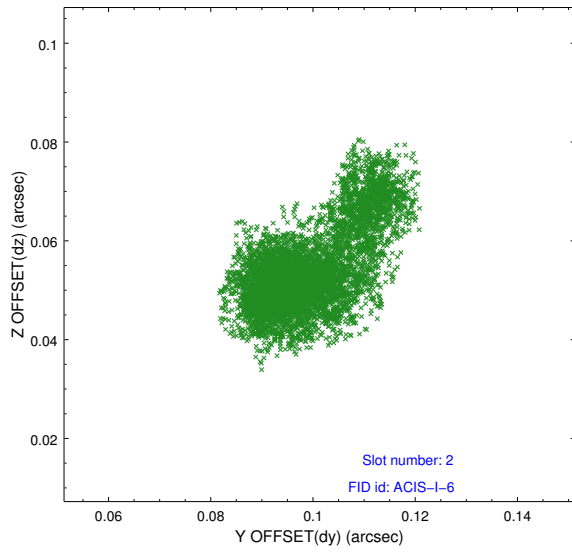
2.5.1 Slot 0



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)	2014.12.16
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	22.084400169849

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.