

V&V Reference Report

L2 ASCDS Version : 10.2.2

Observation 16049 - L2 Version 2
Chandra X-Ray Center

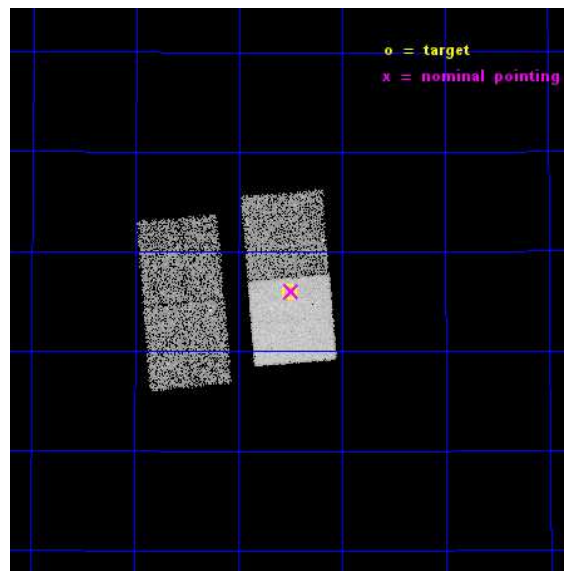
L2 Processing Date : Dec 11 2014

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

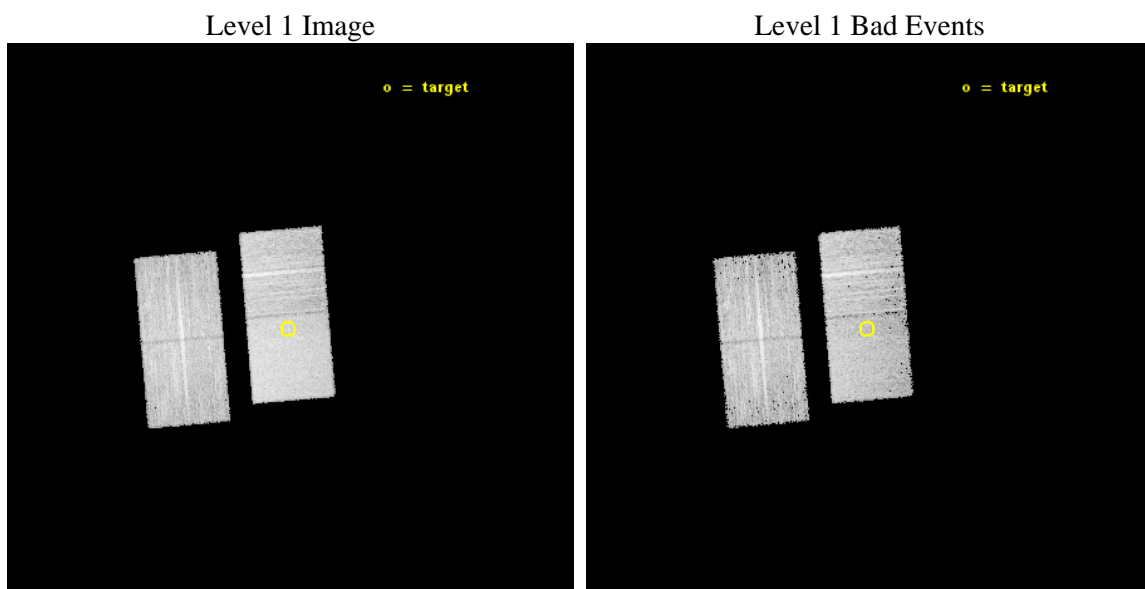
seq_num	702943	Sequence number
obs_id	16049	Observation id
title	Continuing the Chandra 3CR Snapshot Survey: 23 Radio Sources with 0.5	Proposal title
observer	Dr. Francesco Massaro	Principal investigator
object	3C54	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	28.875833	Observer's specified target RA [deg]
dec_targ	43.765389	Observer's specified target Dec [deg]
ra_nom	28.872532704679	Nominal RA [deg]
dec_nom	43.767231903832	Nominal Dec [deg]
roll_nom	85.158895129281	Nominal Roll [deg]
revision	2	Processing version of data
ontime	12080.700092912	Sum of GTIs [s]
livetime	11922.856852516	Livetime [s]
ontime2	12080.700092912	Sum of GTIs [s]
ontime3	12080.700092912	Sum of GTIs [s]
ontime6	12080.700092912	Sum of GTIs [s]
ontime7	12080.700092912	Sum of GTIs [s]
l2events	52361	Number of level 2 events



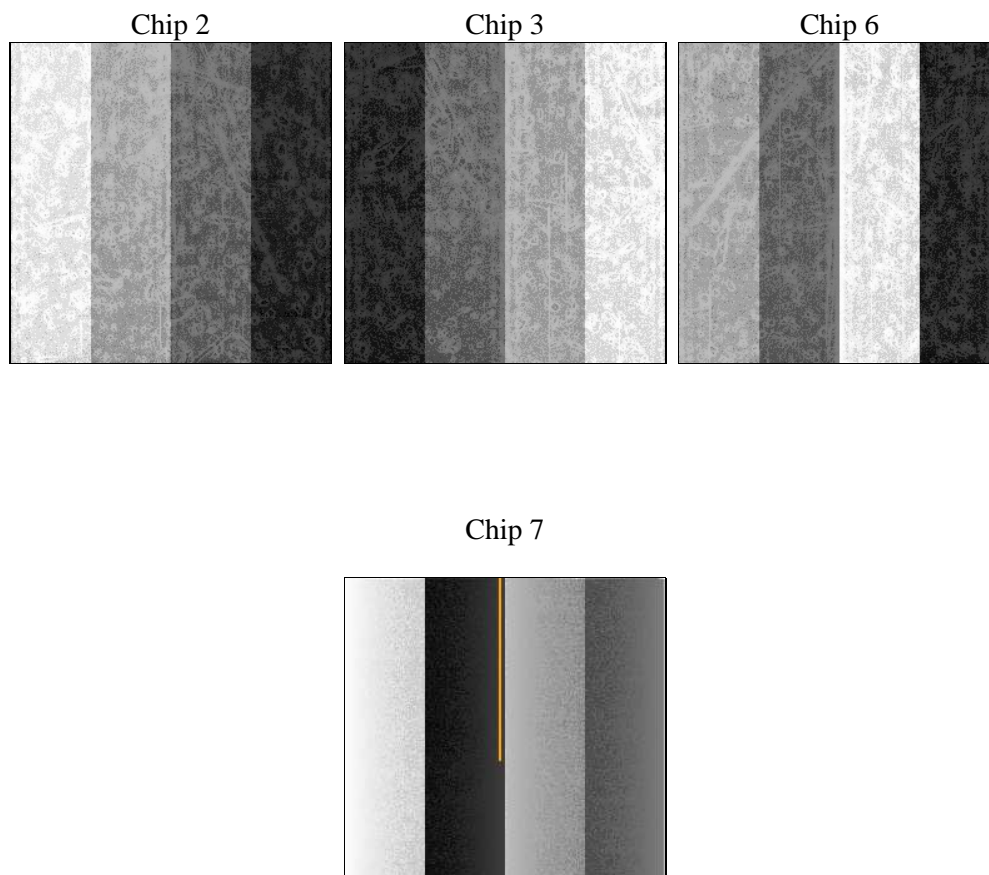
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	12000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	12080.700092912	Sum of GTIs [s]
caldsver	4.6.4	 	ontime2	12080.700092912	Sum of GTIs [s]
date	2014-12-12T02:52:50	Date and time of file creation	ontime3	12080.700092912	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	12080.700092912	Sum of GTIs [s]
			ontime7	12080.700092912	Sum of GTIs [s]
			l1events	255286	Number of level 1 events

2.1.4 Events

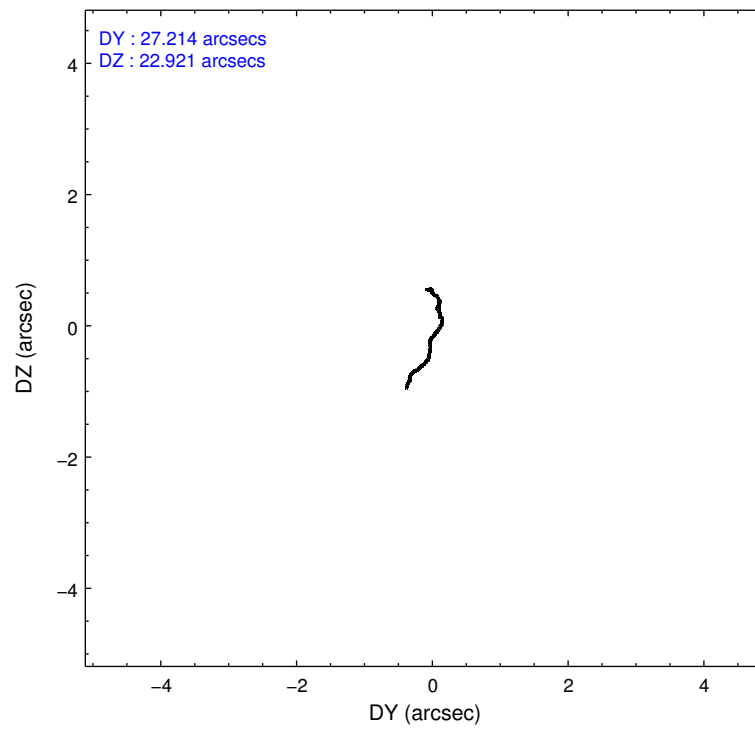
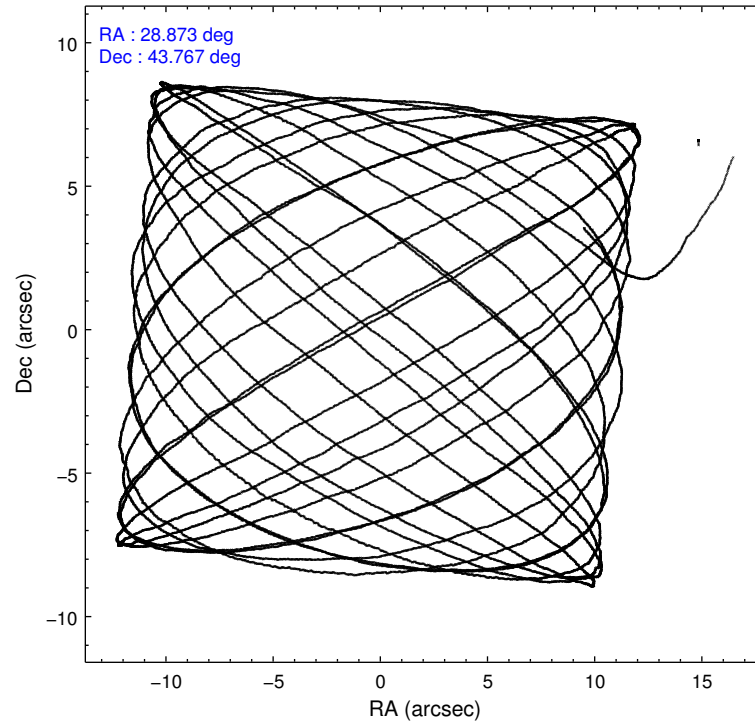
	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	57819	56100	61200	80167
rejected events	51195	49230	53767	45125
rejected %	88%	87%	87%	56%

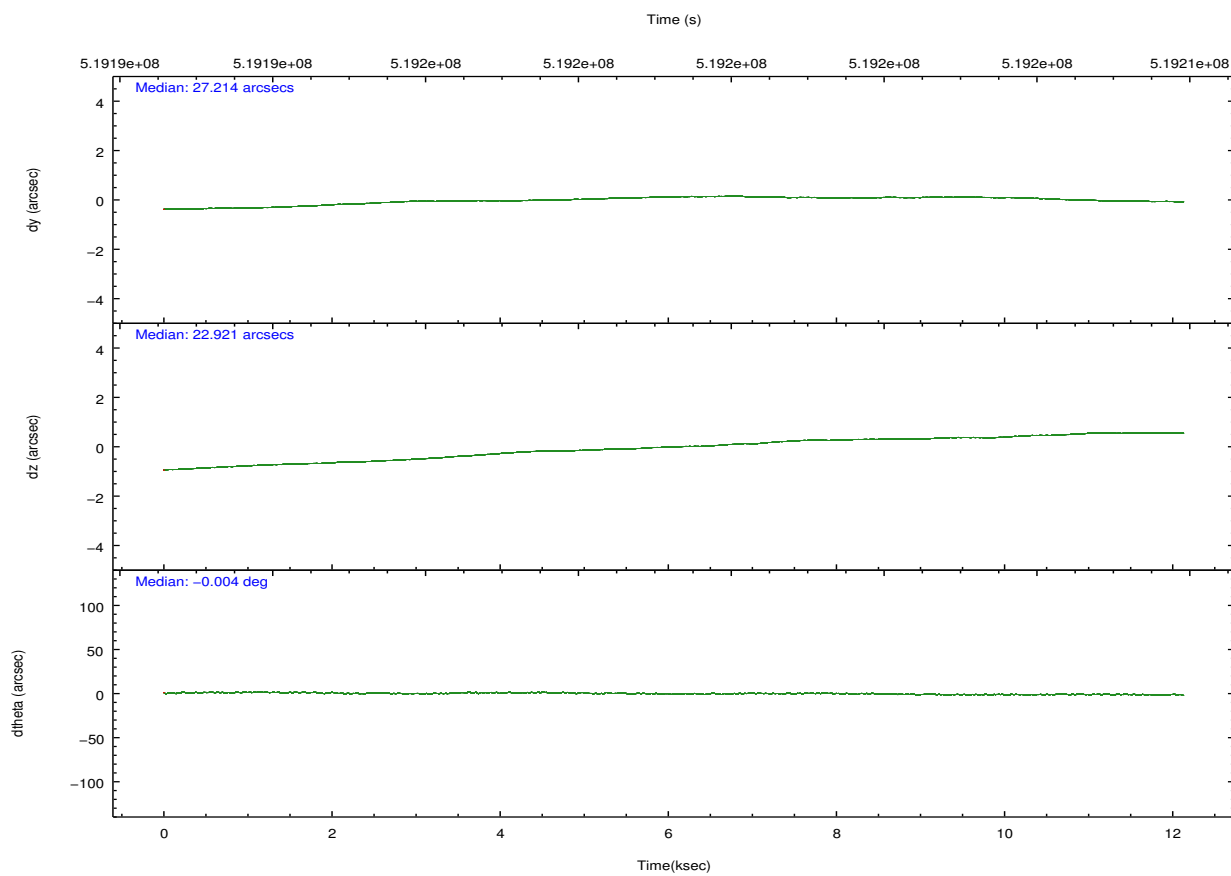
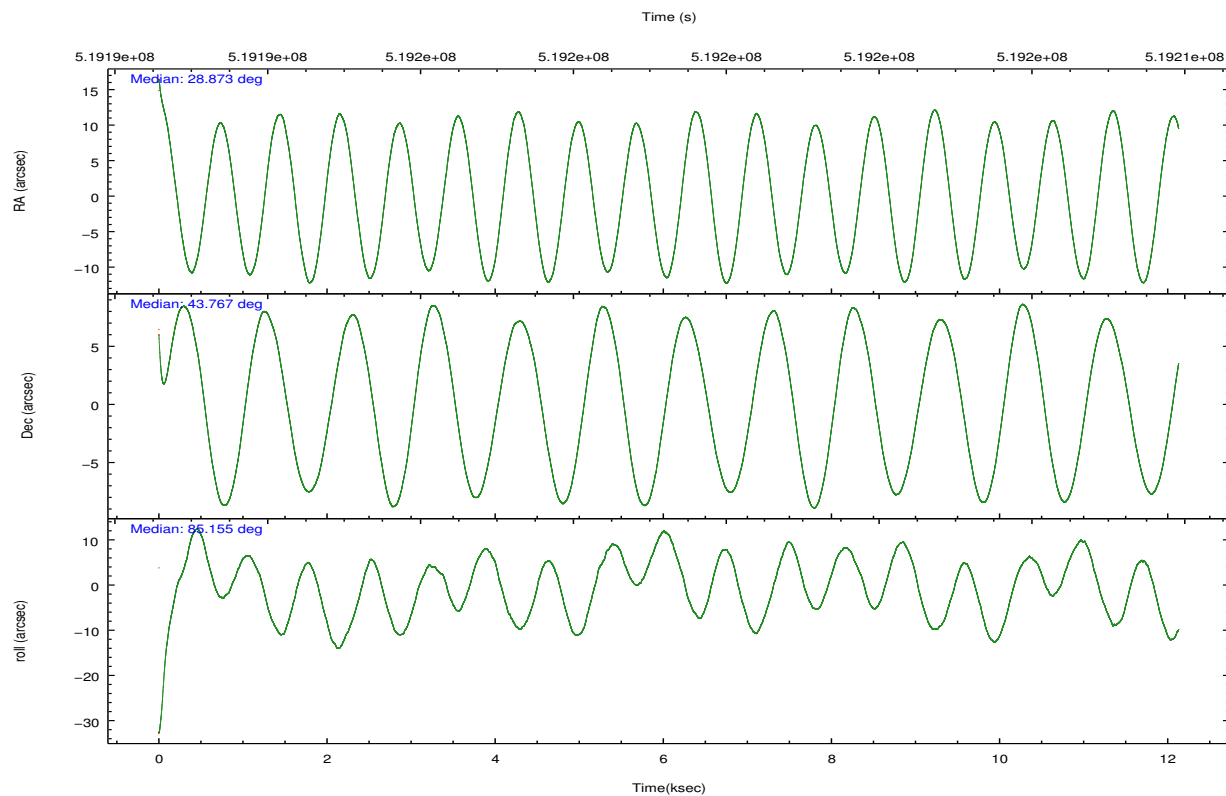
	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	2346	2535	2535	3145
	4%	4%	4%	3%
grade 1 events	32	32	32	66
	0%	0%	0%	0%
grade 2 events	1682	1536	1672	7159
	2%	2%	2%	8%
grade 3 events	653	736	738	3019
	1%	1%	1%	3%
grade 4 events	653	731	763	3008
	1%	1%	1%	3%
grade 5 events	2543	3074	3168	8292
	4%	5%	5%	10%
grade 6 events	1292	1342	1731	18733
	2%	2%	2%	23%
grade 7 events	48618	46114	50561	36745
	84%	82%	82%	45%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-2367	ACIS-2367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	28.889060	28.87253270467939	CCD I2 on	O1	Y
[deg] Pointing Dec	43.742636	43.76723190383169	CCD I3 on	O2	Y
[deg] Pointing Roll	84.990858	85.15889512928126	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	N	N
[s] Observation start time (MET)	519193314.184000	519191832.09303	CCD S5 on	N	N
Observation start date	2014-06-15T04:20:47	2014-06-15T03:57:12	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	519205314.184000	519206030.39381	On-chip summing requested	N	N
Observation end date	2014-06-15T07:40:47	2014-06-15T07:53:50	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



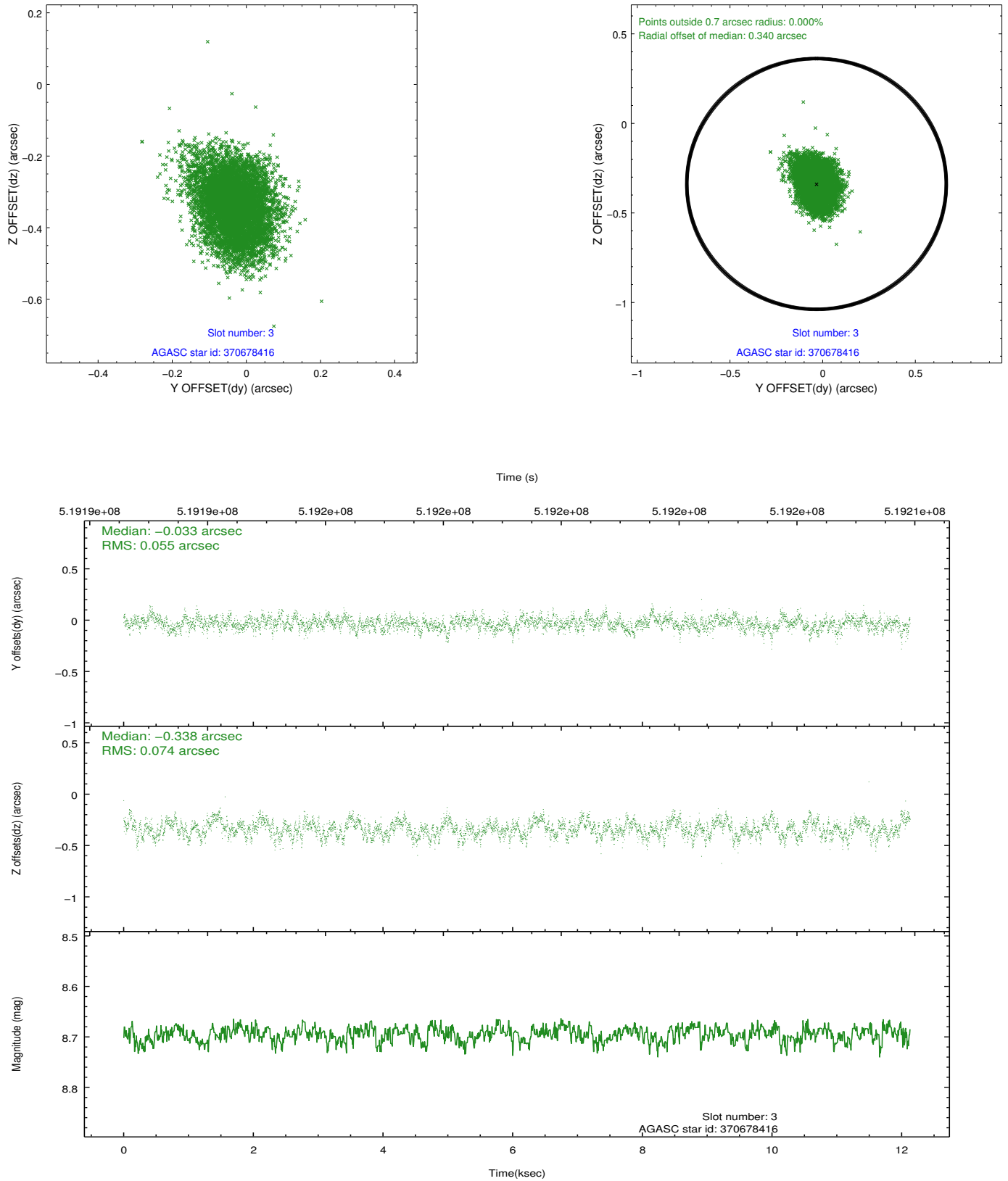


Slot Statistics

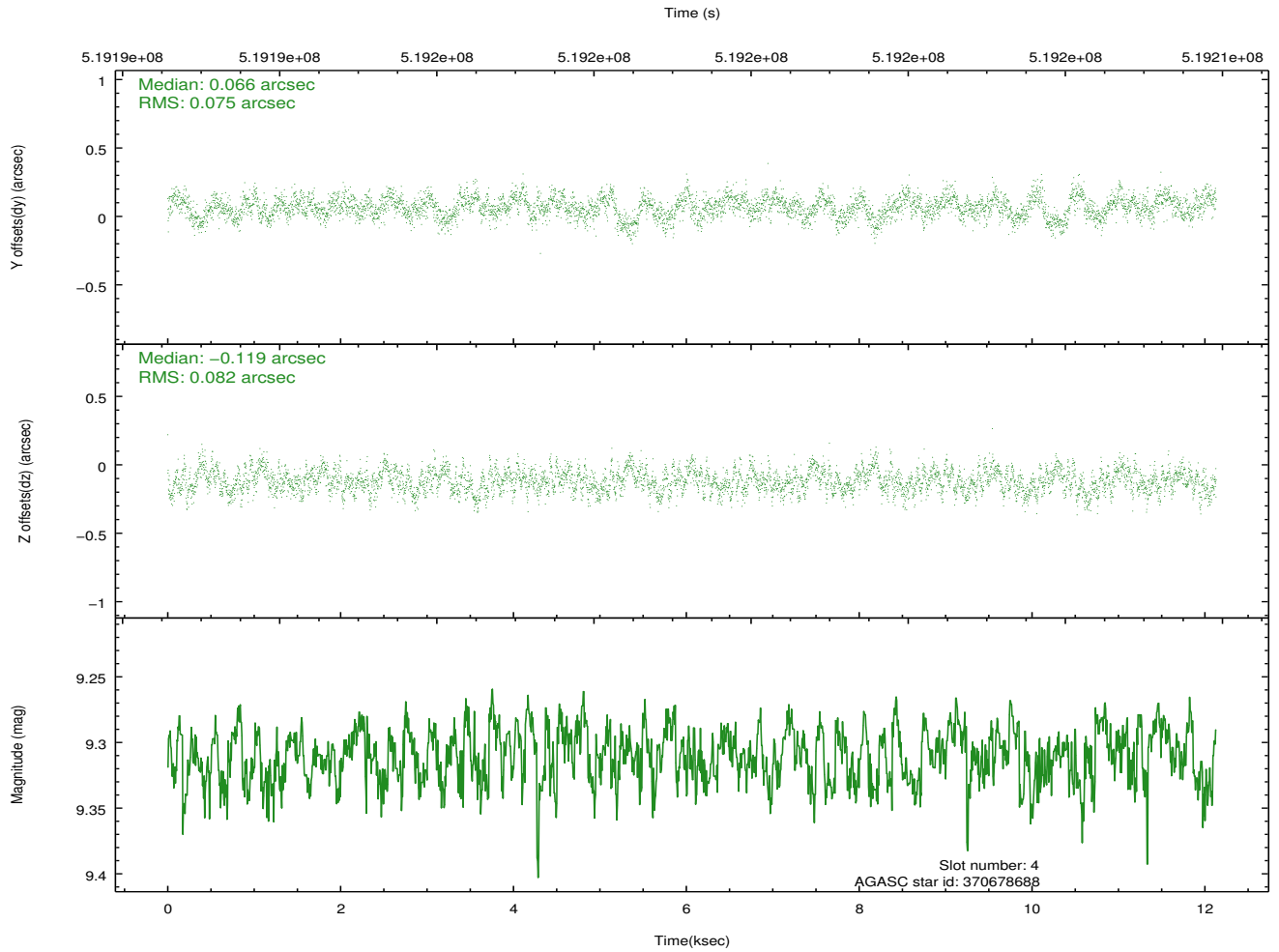
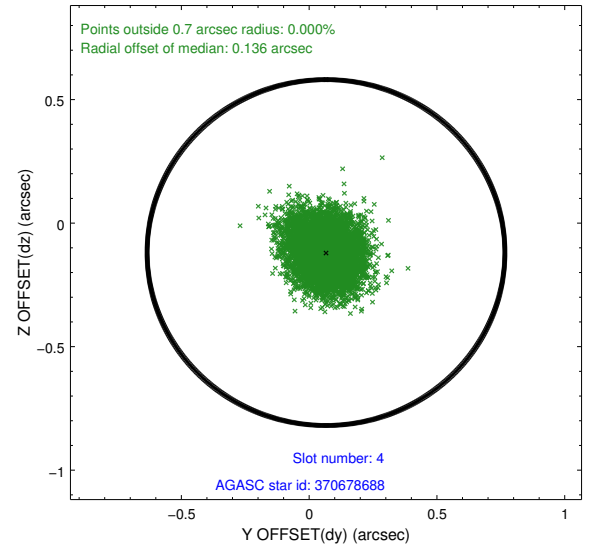
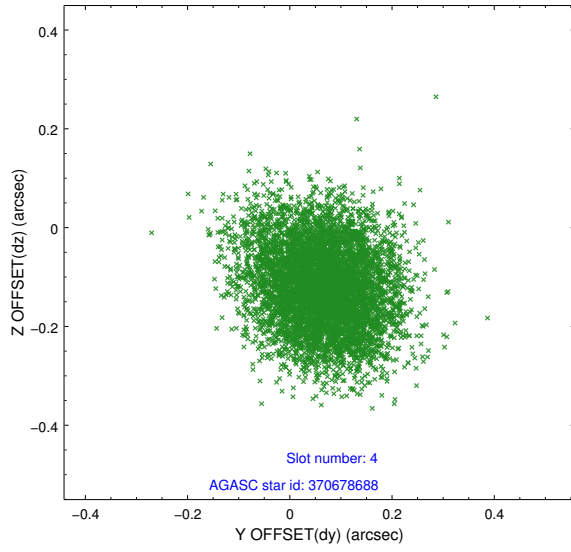
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.94	2959	-0.156	-0.040	0.012	0.018	0.000000	0.000000	-780.65	-1744.43
1	FID		ACIS-S-4	7.03	2959	0.337	0.087	0.010	0.018	0.000000	0.000000	2132.93	163.74
2	FID		ACIS-S-5	7.07	2959	-0.211	-0.038	0.009	0.015	0.000000	0.000000	-1833.02	157.76
3	GUIDE	used	370678416	8.69	5916	-0.033	-0.338	0.099	0.161	28.330219	43.389442	-1389.11	1345.86
4	GUIDE	used	370678688	9.31	5915	0.066	-0.119	0.120	0.188	28.455956	43.374368	-1416.53	1013.99
5	GUIDE	used	370681840	9.64	5909	0.285	0.404	0.185	0.288	29.695381	43.137682	-1974.14	-2298.82
6	GUIDE	used	370684384	8.02	5915	-0.210	-0.102	0.083	0.134	29.216110	44.207181	1740.62	-694.12
7	GUIDE	used	370688728	8.70	5913	-0.112	0.157	0.154	0.219	29.565983	43.763475	236.33	-1745.52

2.4 Star Slots

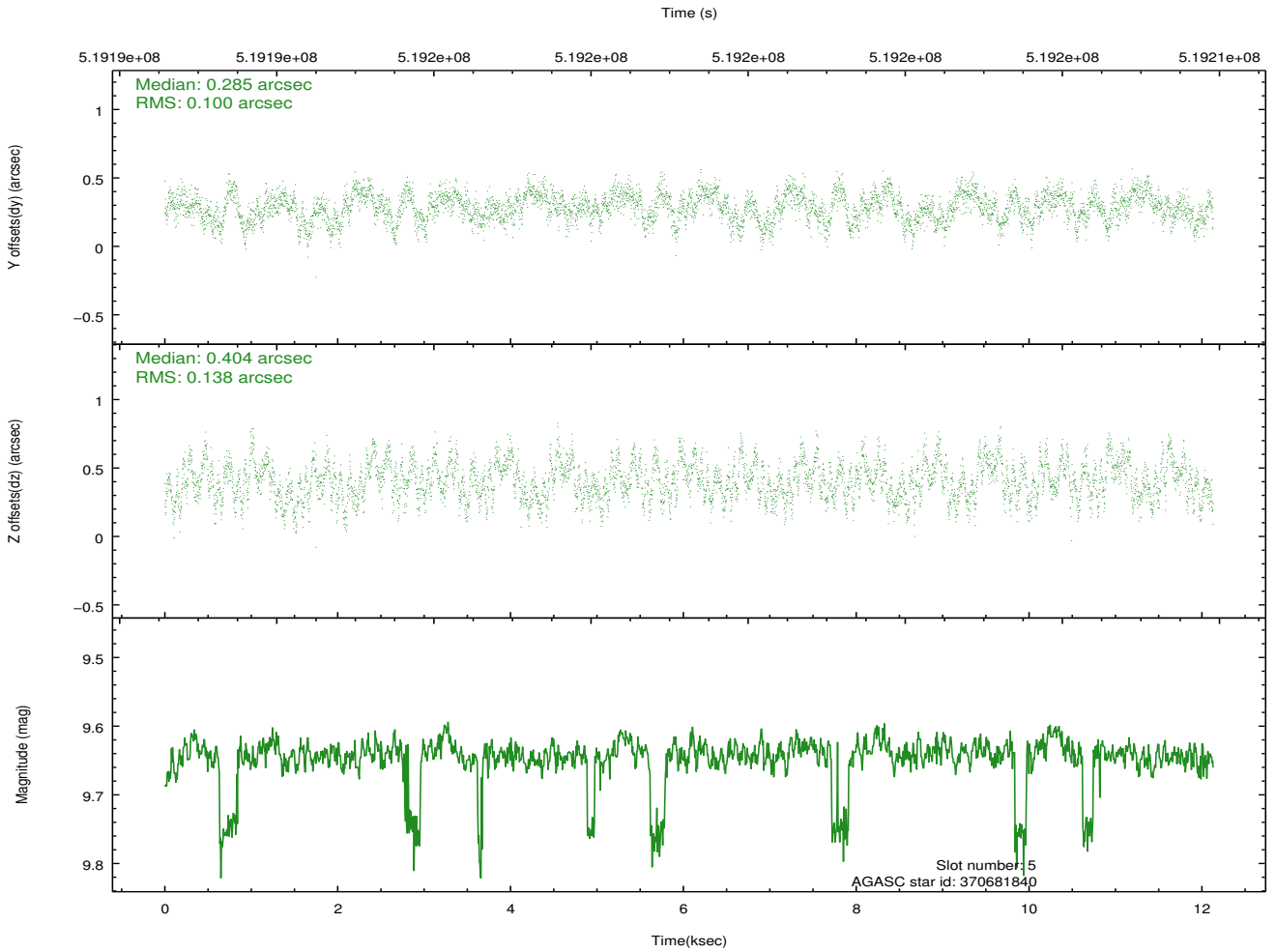
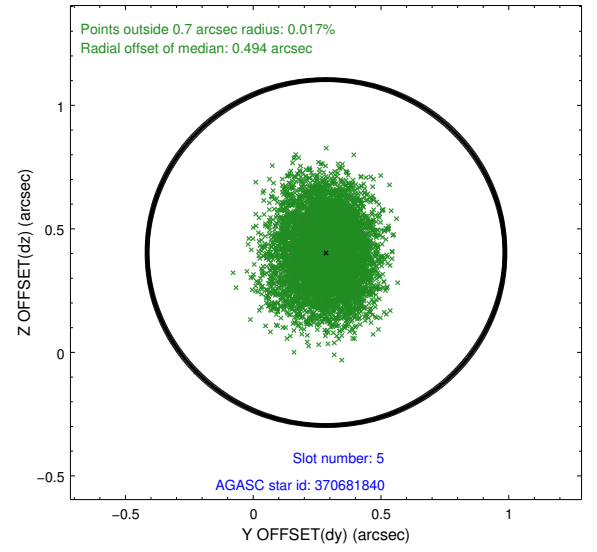
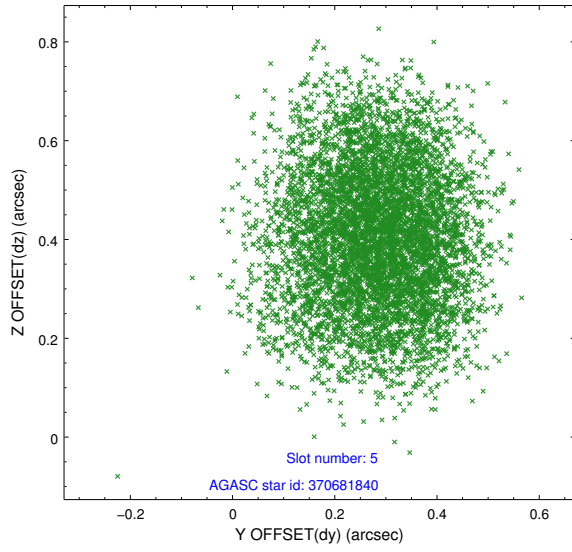
2.4.1 Slot 3



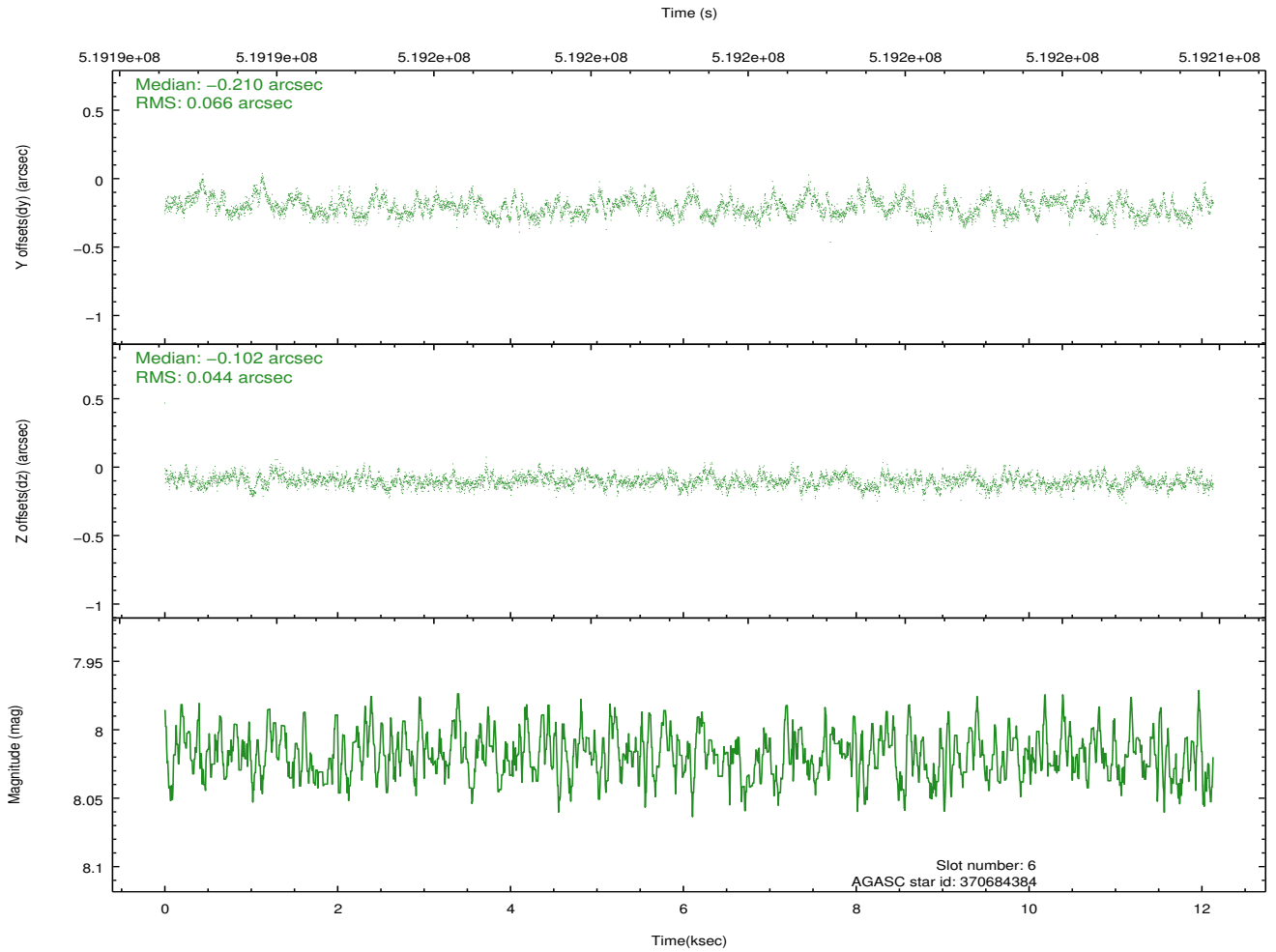
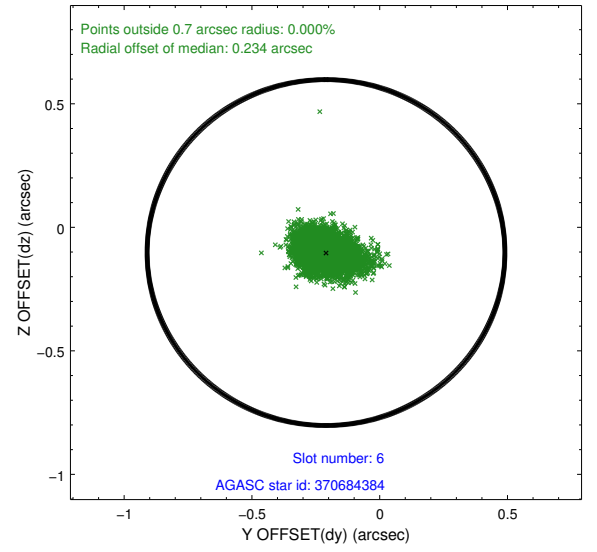
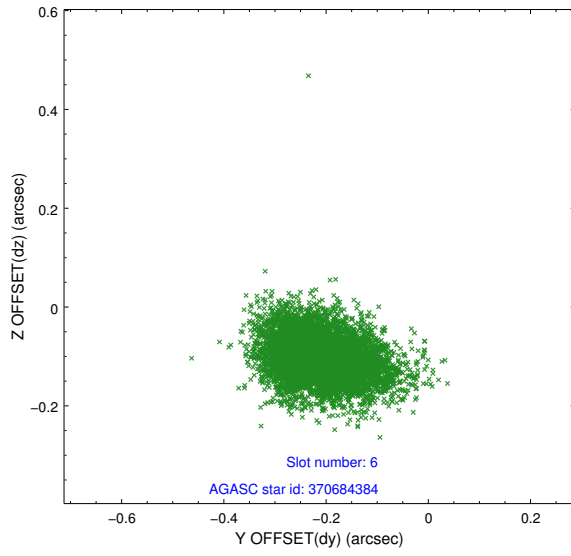
2.4.2 Slot 4



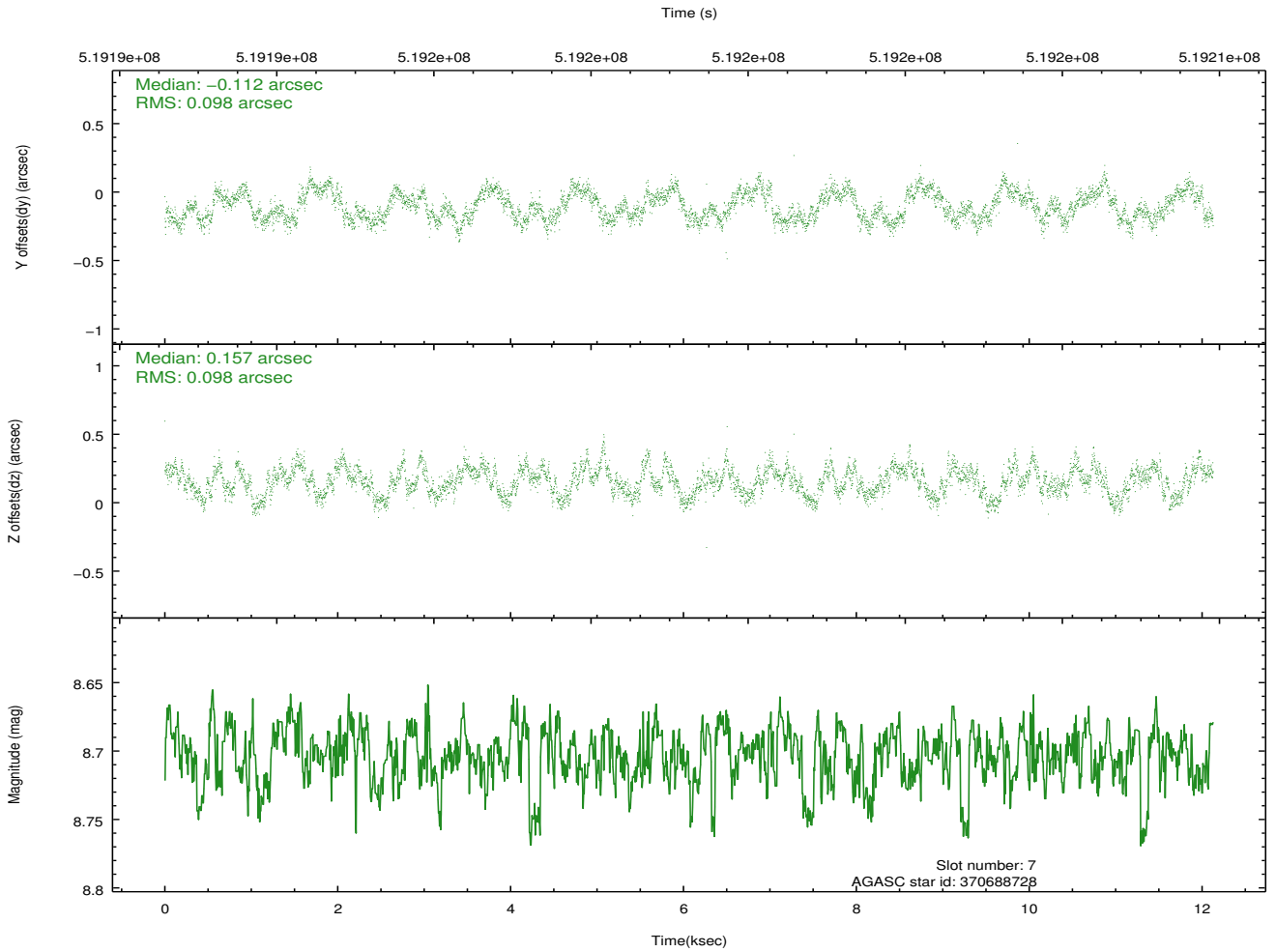
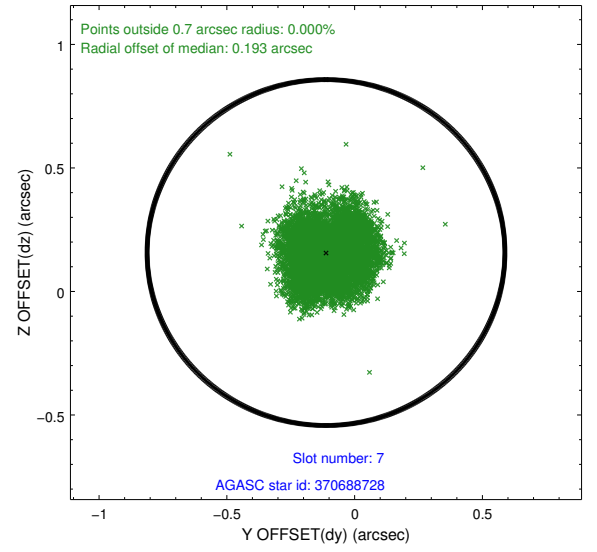
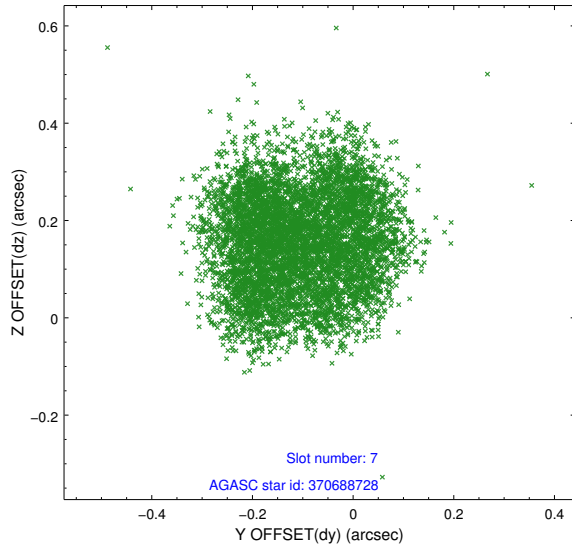
2.4.3 Slot 5



2.4.4 Slot 6

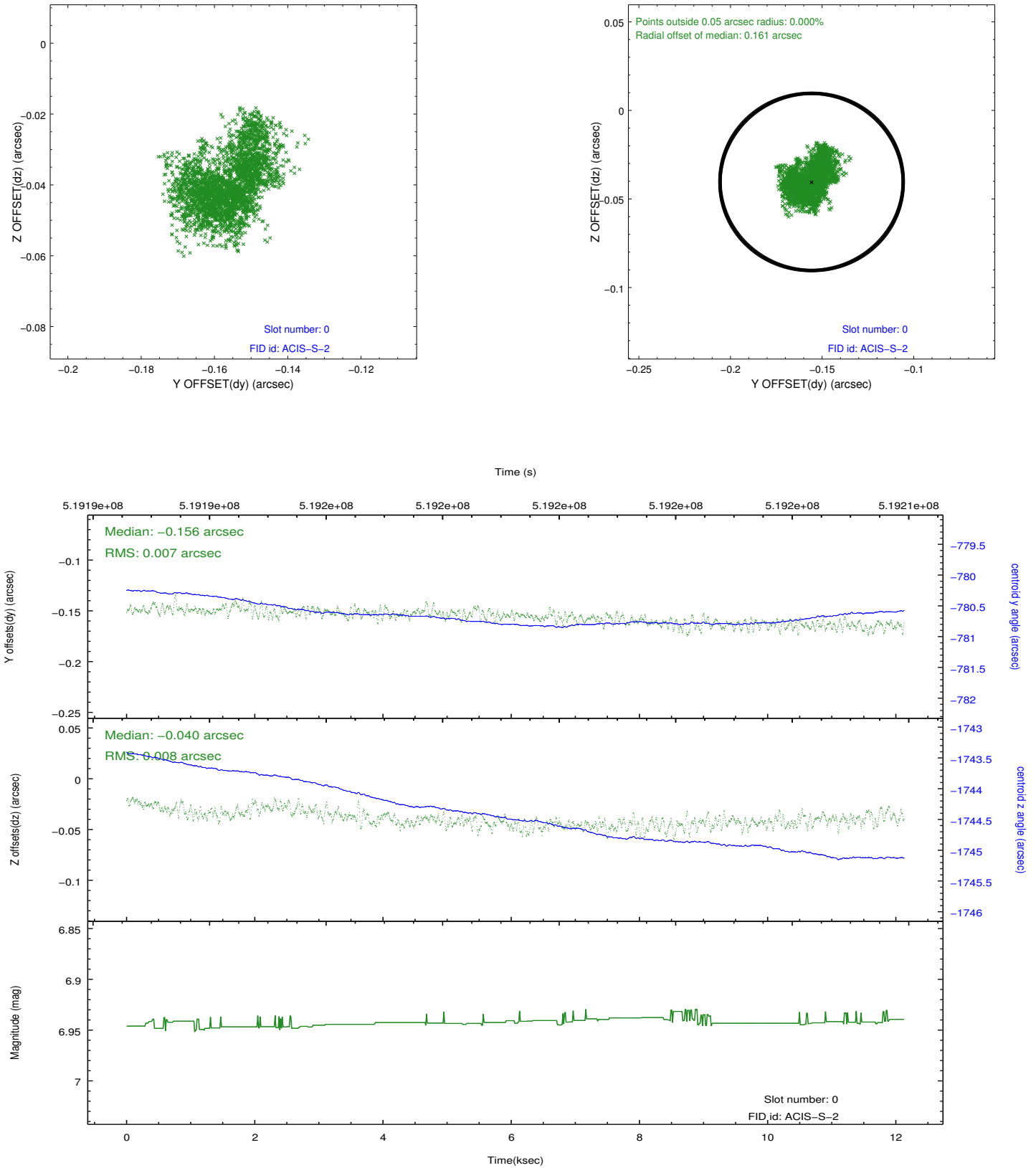


2.4.5 Slot 7

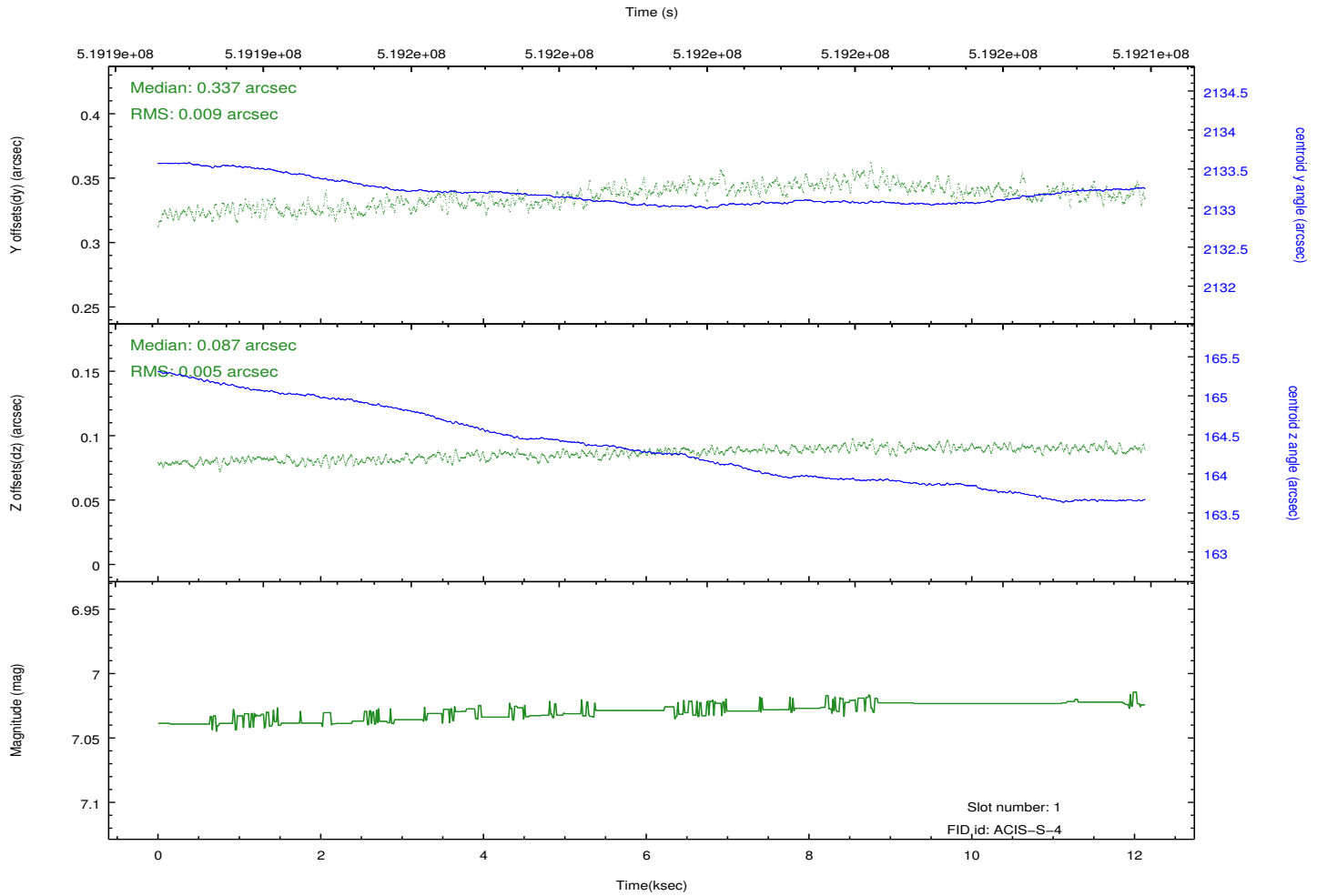
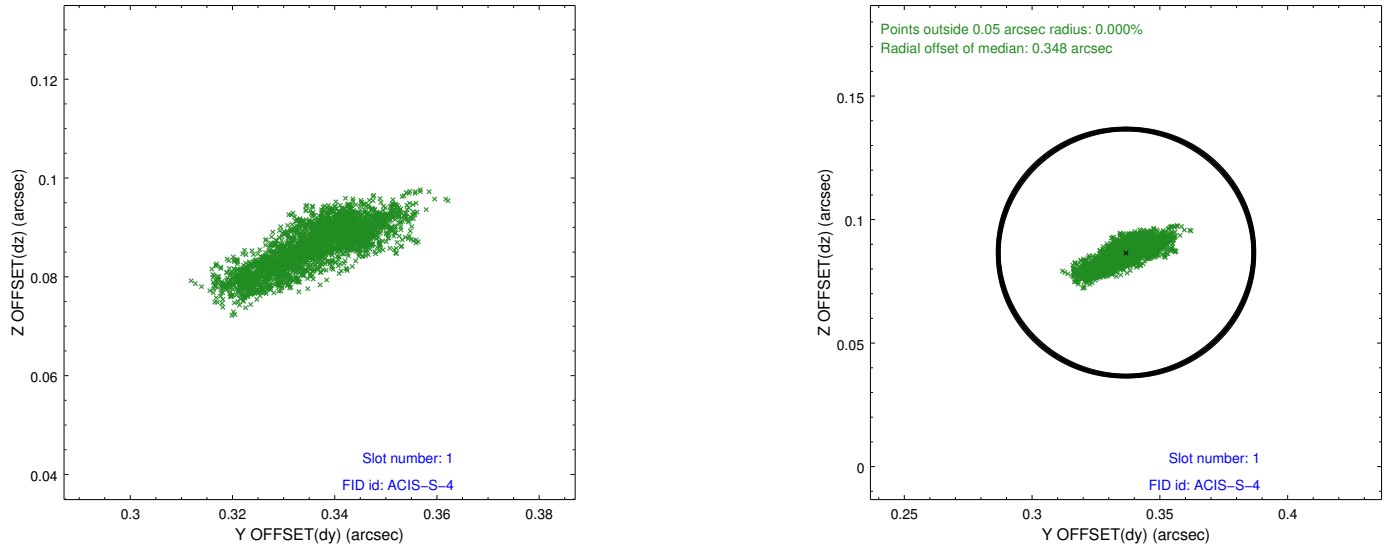


2.5 FID Slots

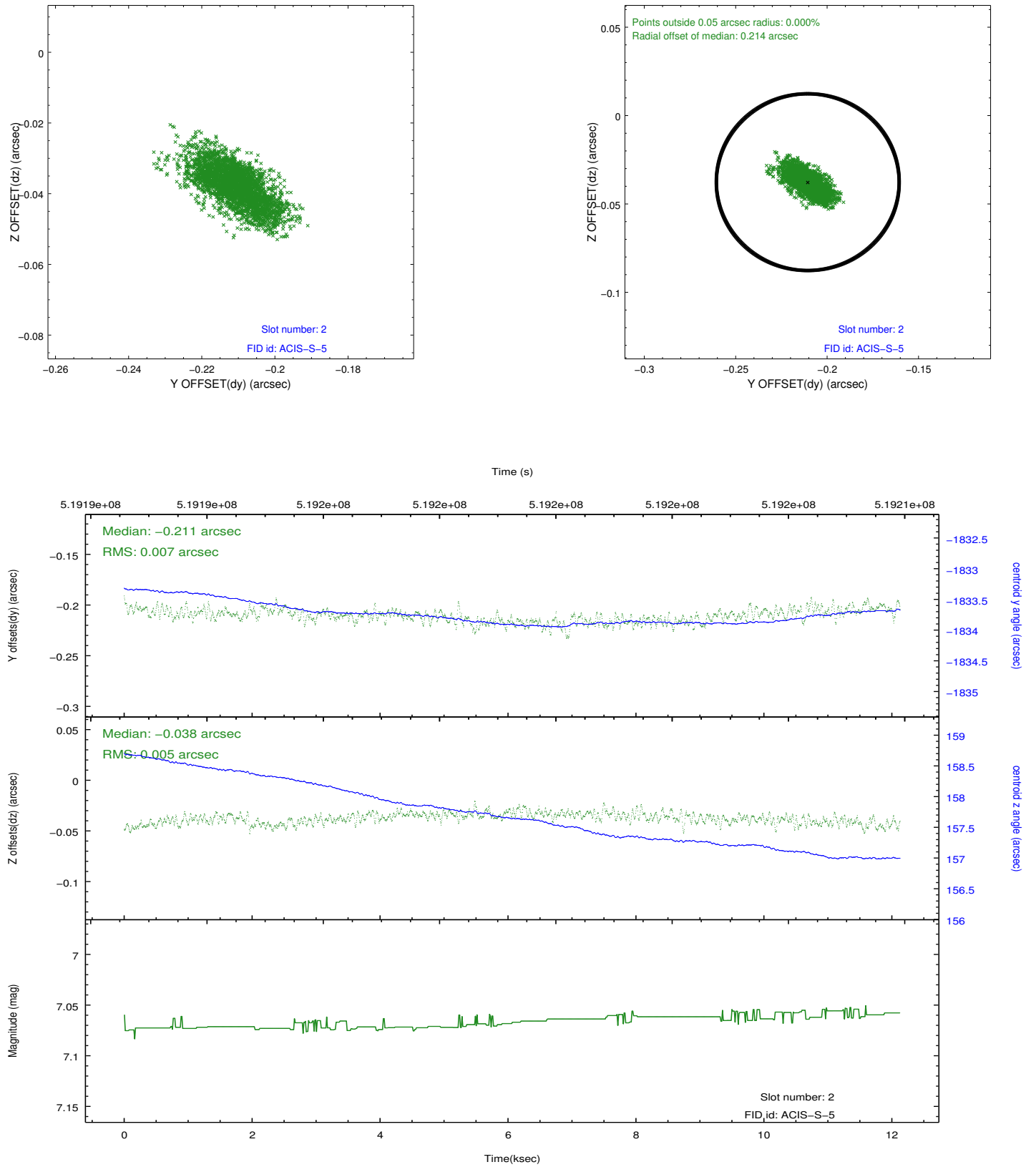
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2014.12.19
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	12.080700092912

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.