

V&V Reference Report

L2 ASCDS Version : 10.4.2.1

Observation 17279 - L2 Version 1
Chandra X-Ray Center

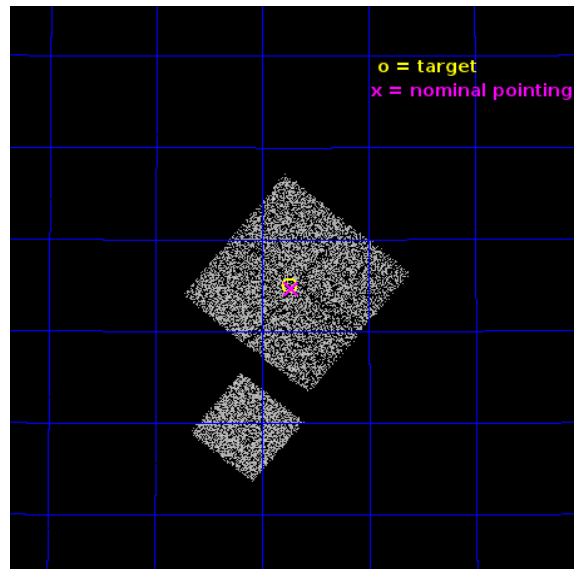
L2 Processing Date : Nov 30 2015

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1 Front

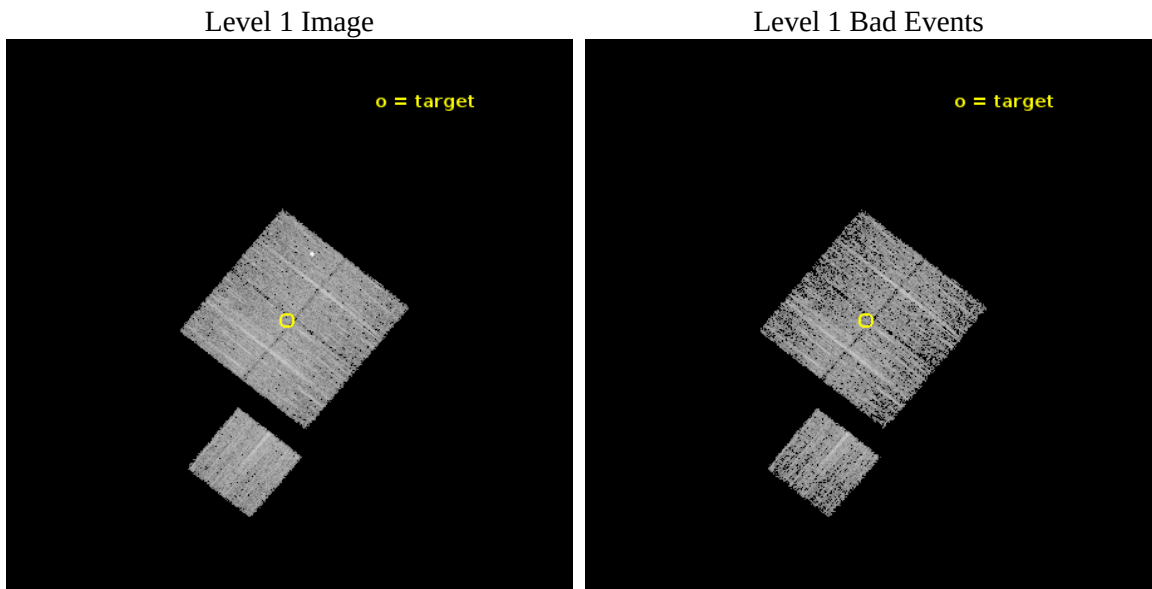
seq_num	801524	Sequence number
obs_id	17279	Observation id
title	Perseus: A New, Low-Redshift Anchor for Cluster Cosmology	Proposal
observer	Prof. Steven Allen	Principal investigator
object	Perseus cluster	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	49.18587	Observer's specified target RA [deg]
dec_targ	41.916536	Observer's specified target Dec [deg]
ra_nom	49.181745816433	Nominal RA [deg]
dec_nom	41.91089834811	Nominal Dec [deg]
roll_nom	219.15557393599	Nominal Roll [deg]
revision	1	Processing version of data
ontime	4770.8589767218	Sum of GTIs [s]
livetime	4708.5241919356	Livetime [s]
ontime0	4774.0000368357	Sum of GTIs [s]
ontime1	4774.0000368357	Sum of GTIs [s]
ontime2	4774.0000368357	Sum of GTIs [s]
ontime3	4770.8589767218	Sum of GTIs [s]
ontime6	4774.0000368357	Sum of GTIs [s]
l2events	16744	Number of level 2 events



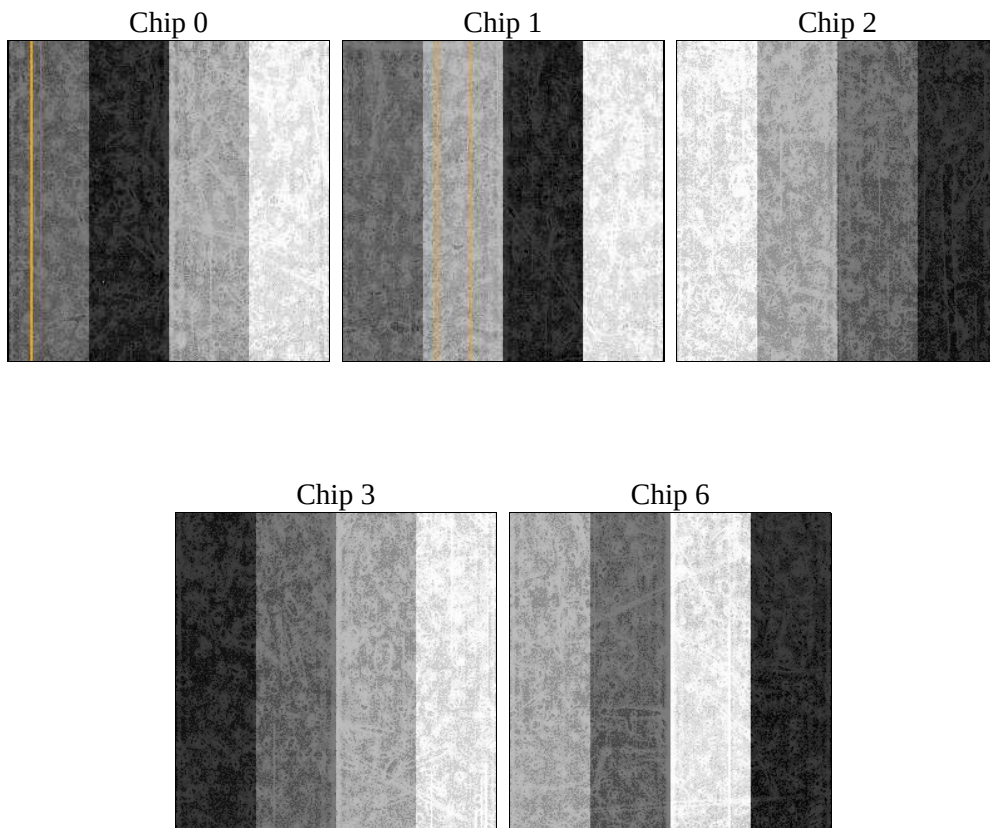
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5000.387000	[s] Scheduled observation exposure time
ascdsver	10.4.2.1	Processing system revision	ontime	4770.8589767218	Sum of GTIs [s]
caldsver	4.6.10a	 	ontime0	4774.0000368357	Sum of GTIs [s]
date	2015-11-30T20:50:58	Date and time of file creation	ontime1	4774.0000368357	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	4774.0000368357	Sum of GTIs [s]
			ontime3	4770.8589767218	Sum of GTIs [s]
			ontime6	4774.0000368357	Sum of GTIs [s]
			l1events	143819	Number of level 1 events

2.1.4 Events

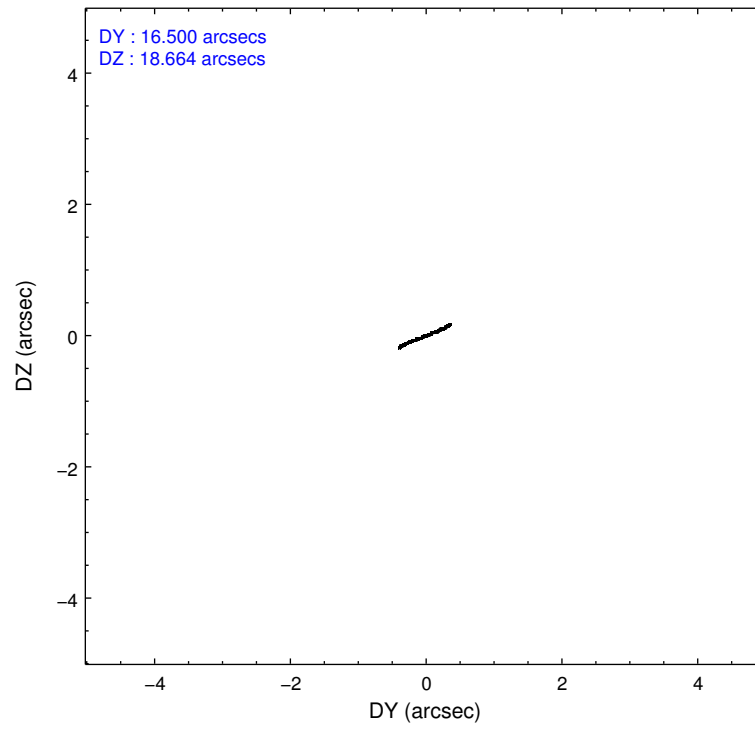
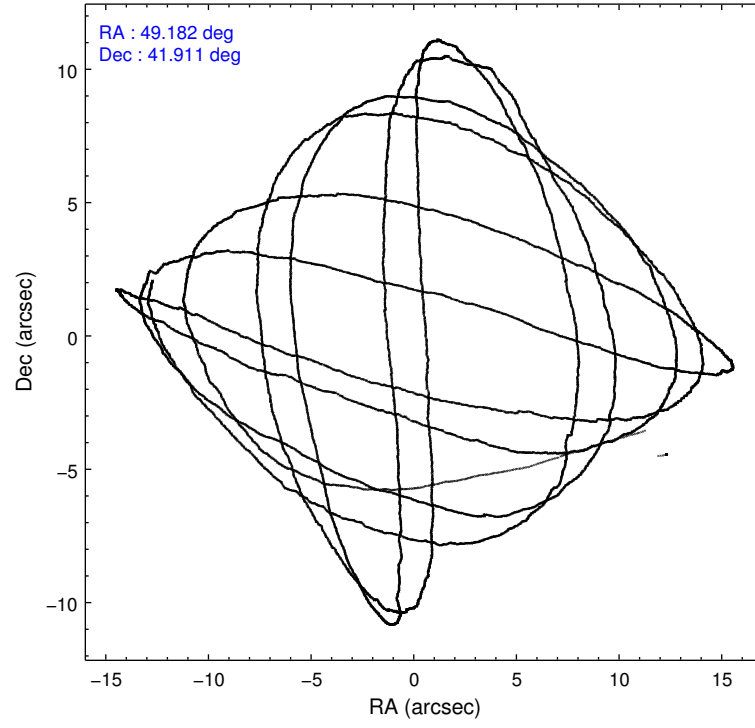
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	26781	27006	29864	29715	30453
rejected events	23219	21969	26222	26008	25926
rejected %	86%	81%	87%	87%	85%

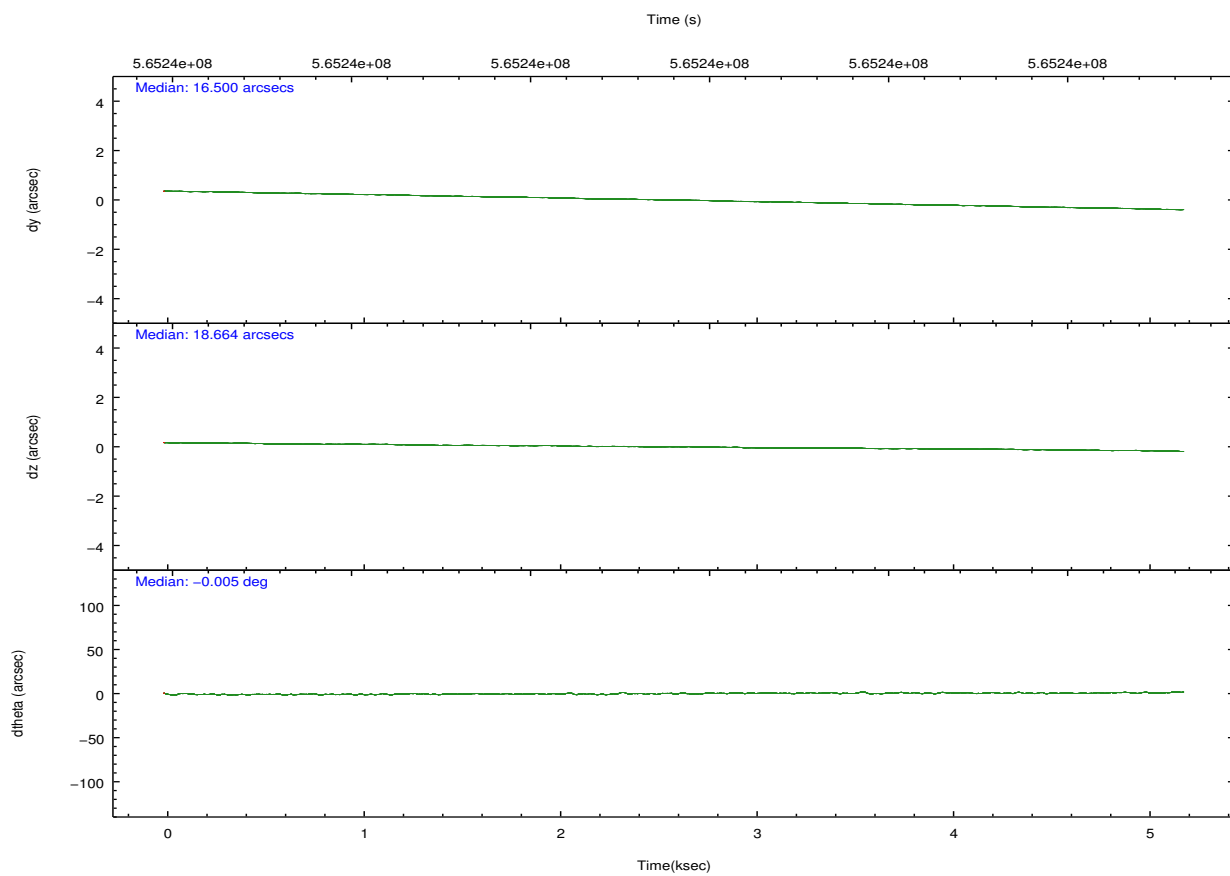
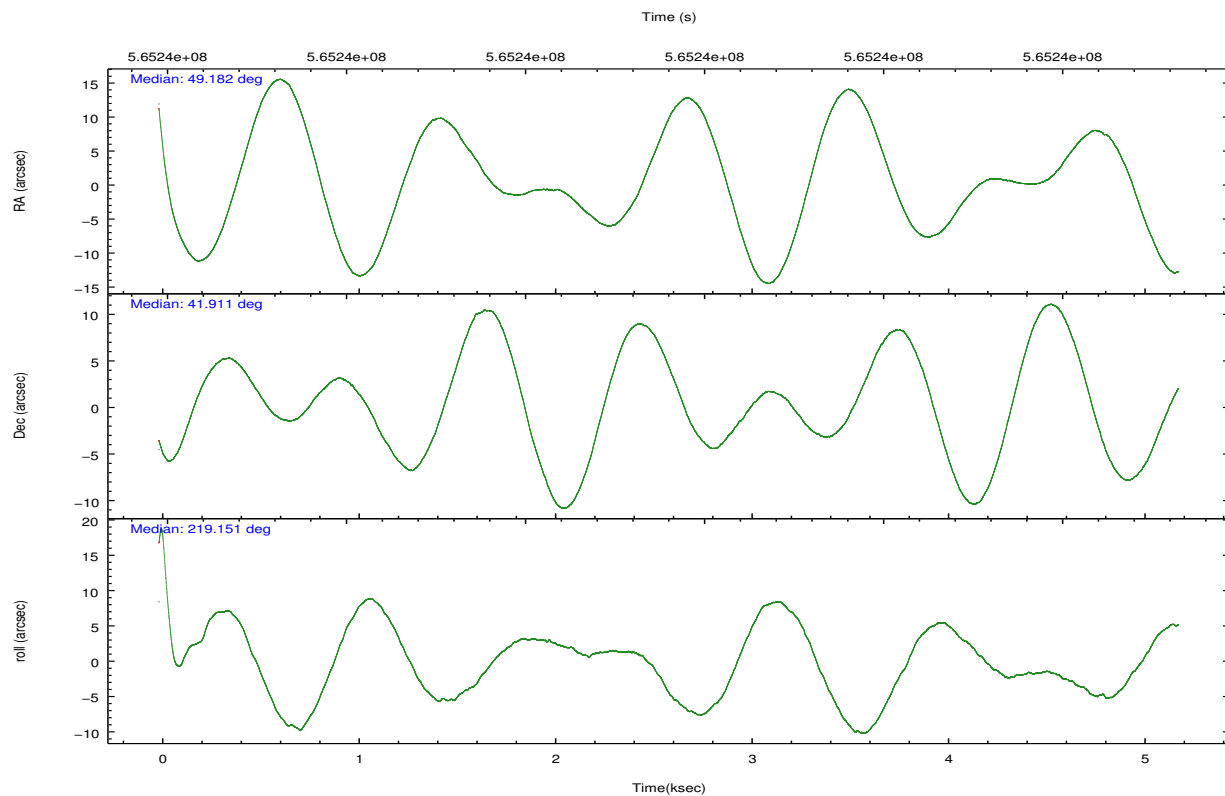
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	1399	2645	1559	1614	2106
	5%	9%	5%	5%	6%
grade 1 events	11	18	17	19	21
	0%	0%	0%	0%	0%
grade 2 events	777	858	772	688	906
	2%	3%	2%	2%	2%
grade 3 events	351	341	334	363	355
	1%	1%	1%	1%	1%
grade 4 events	314	368	308	347	294
	1%	1%	1%	1%	0%
grade 5 events	1184	1283	1179	1402	1386
	4%	4%	3%	4%	4%
grade 6 events	722	829	671	702	867
	2%	3%	2%	2%	2%
grade 7 events	22023	20664	25024	24580	24518
	82%	76%	83%	82%	80%

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	49.194864	49.18174581643255	CCD I2 on	Y	Y
[deg] Pointing Dec	41.936772	41.91089834811012	CCD I3 on	Y	Y
[deg] Pointing Roll	218.938024	219.1555739359893	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)	565238378.184000	565236978.2210799	CCD S5 on	N	N
Observation start date	2015-11-30T02:38:30	2015-11-30T02:16:18	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	565243379.184000	565243616.1214499	On-chip summing requested	N	N
Observation end date	2015-11-30T04:01:51	2015-11-30T04:06:56	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



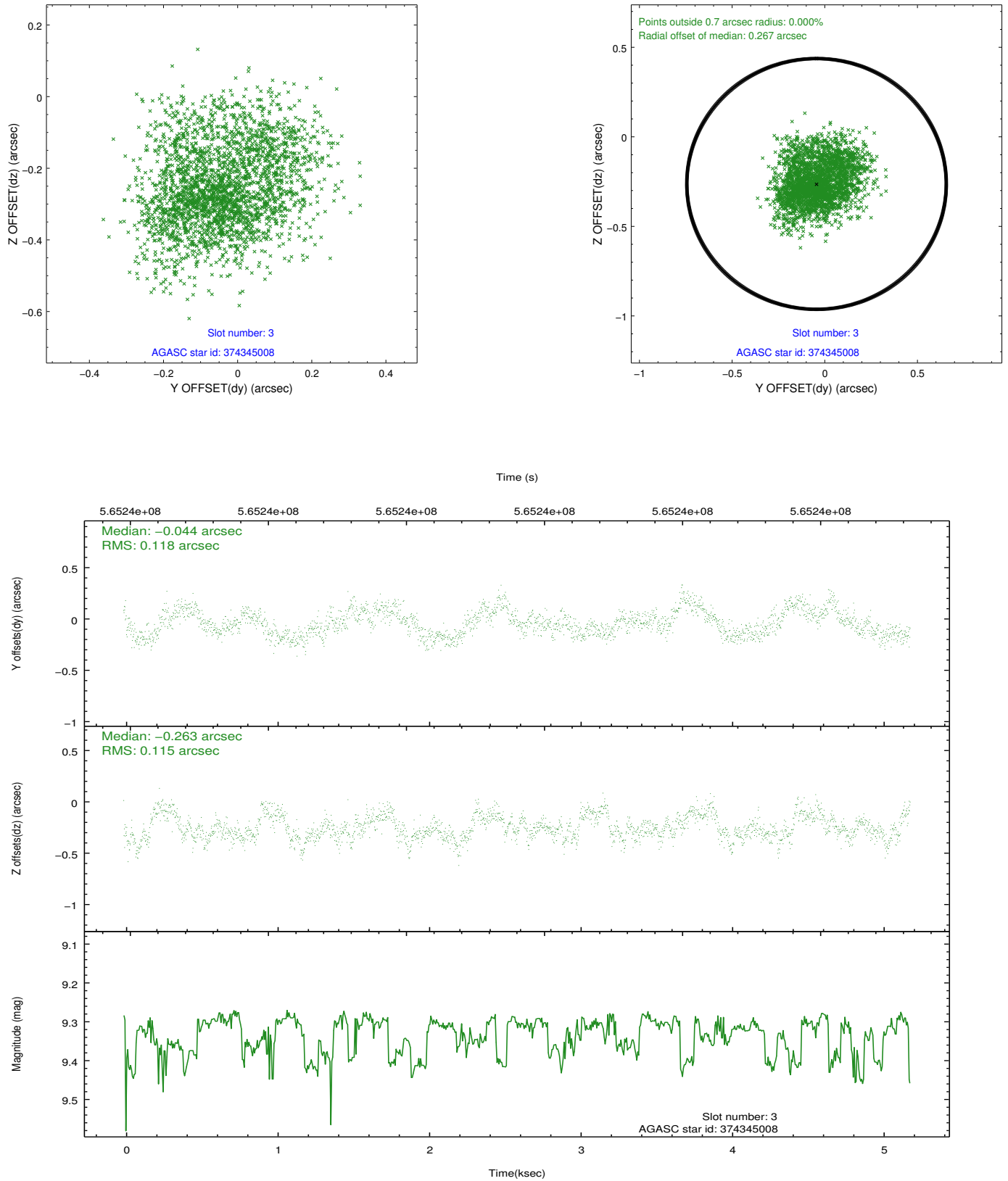


Slot Statistics

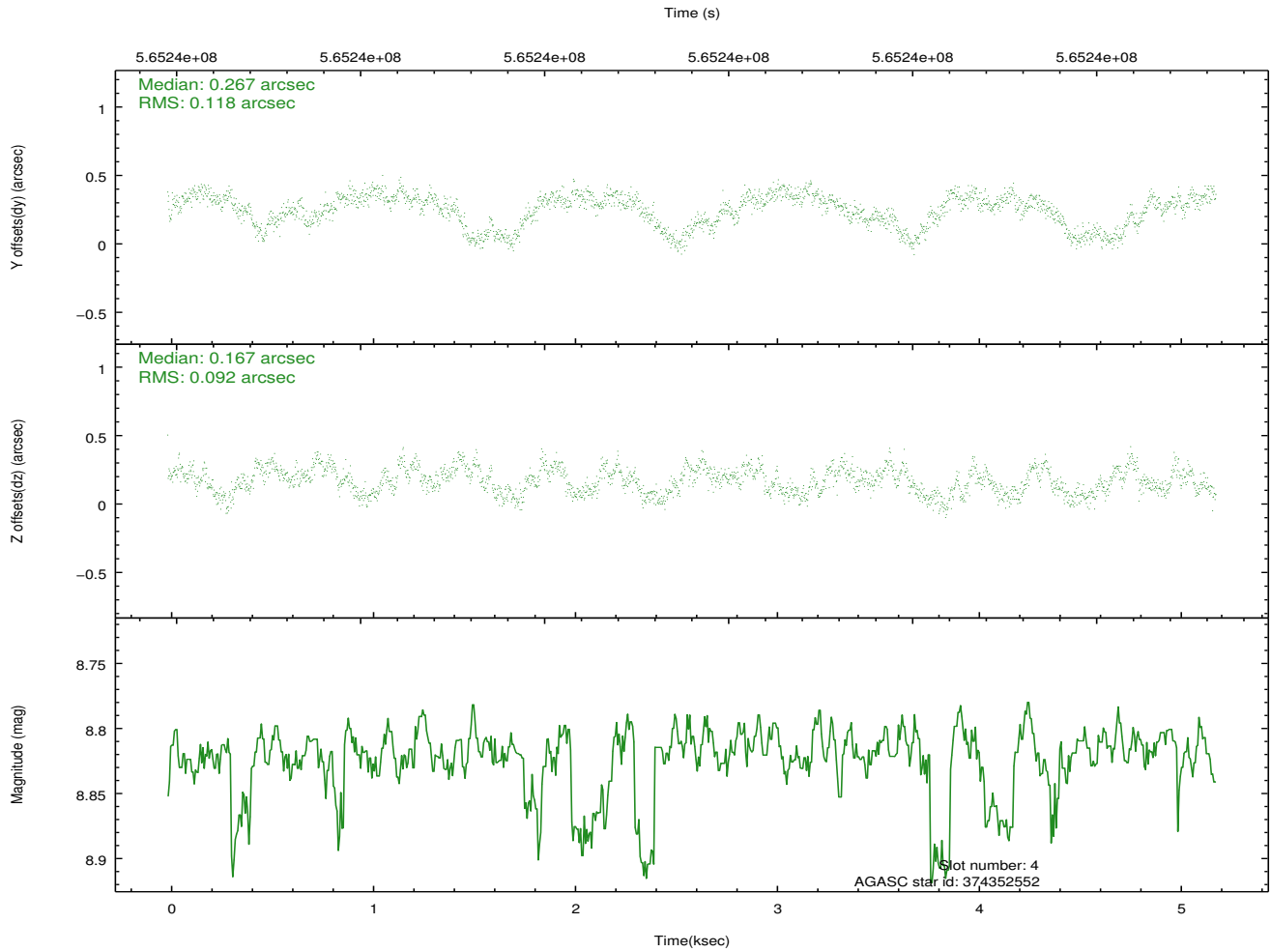
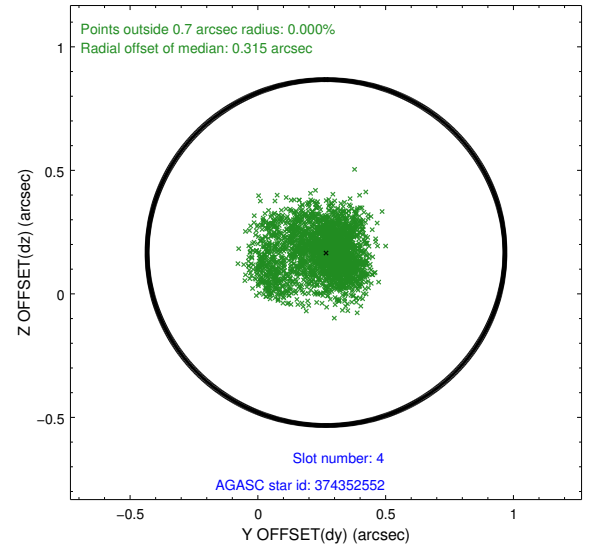
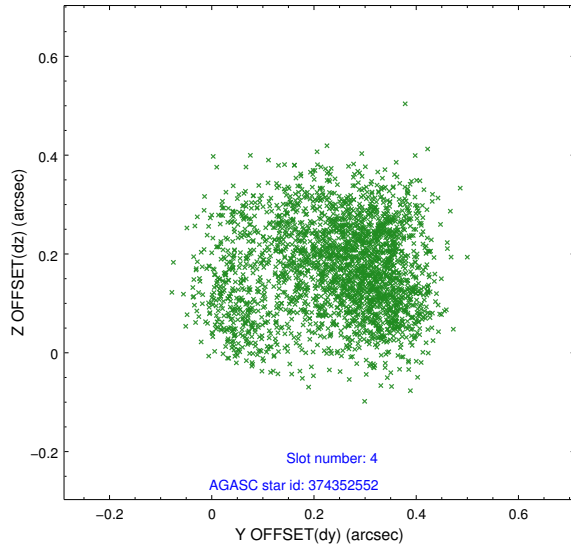
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.26	1267	0.057	0.008	0.011	0.017	0.000000	0.000000	923.02	-842.31
1	FID		ACIS-I-5	7.25	1267	-0.346	0.030	0.008	0.014	0.000000	0.000000	-1824.93	1054.49
2	FID		ACIS-I-6	7.27	1267	0.197	0.032	0.010	0.015	0.000000	0.000000	387.32	1700.42
3	GUIDE	used	374345008	9.33	2531	-0.044	-0.263	0.179	0.281	48.768668	41.619367	1608.69	166.91
4	GUIDE	used	374352552	8.82	2533	0.267	0.167	0.159	0.261	49.205176	42.496124	-1285.53	-1547.70
5	GUIDE	used	374357808	8.66	2533	-0.044	-0.046	0.098	0.154	49.921429	42.176083	-2054.88	541.53
6	GUIDE	used	376070040	8.40	2532	-0.214	-0.102	0.080	0.127	50.072031	41.897206	-1747.23	1579.29
7	GUIDE	used	374357368	7.77	2532	0.051	0.230	0.097	0.152	49.396079	42.675115	-2085.69	-1731.68

2.4 Star Slots

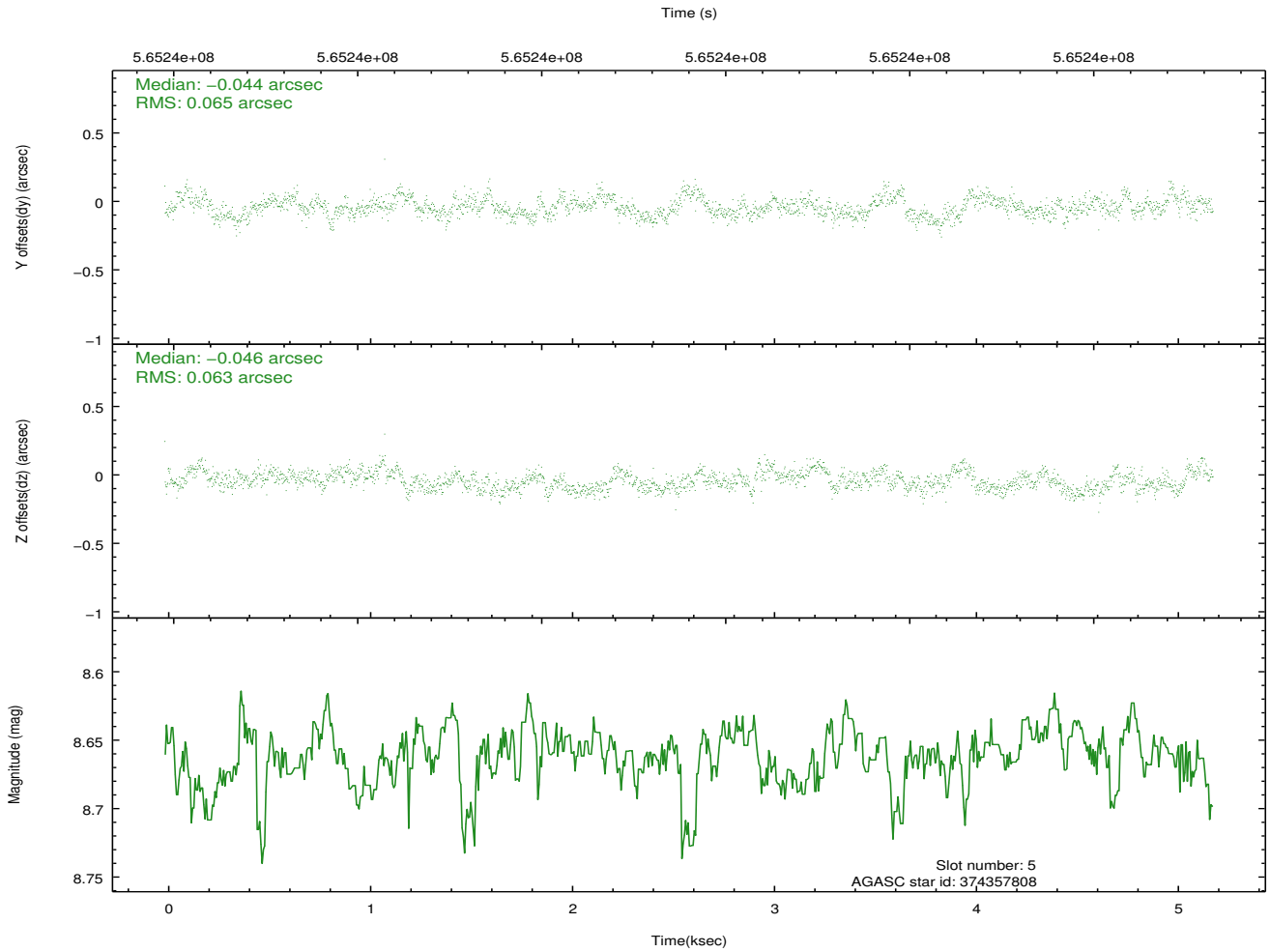
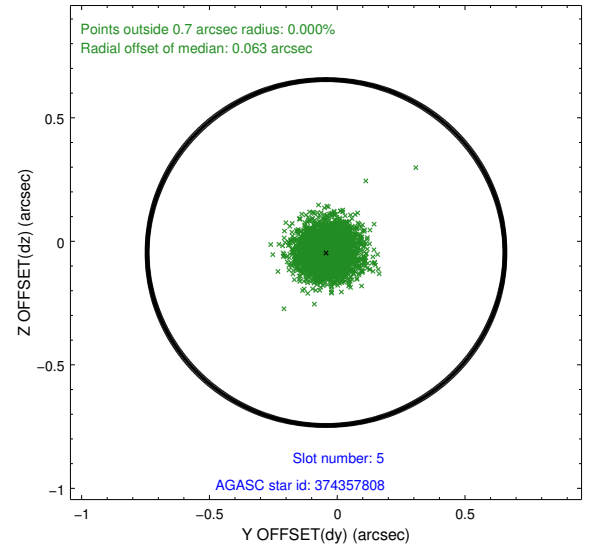
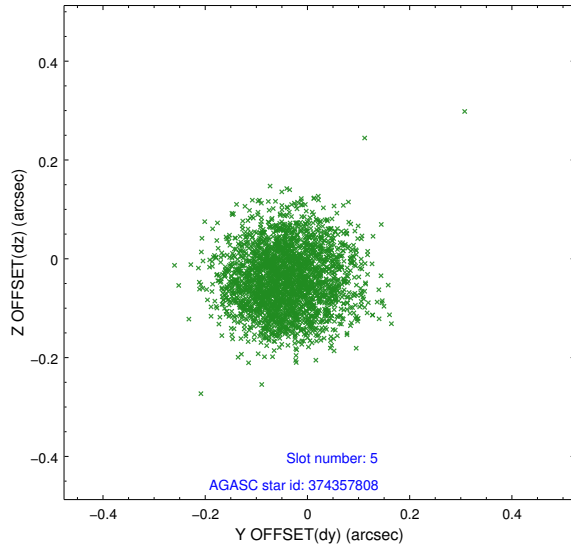
2.4.1 Slot 3



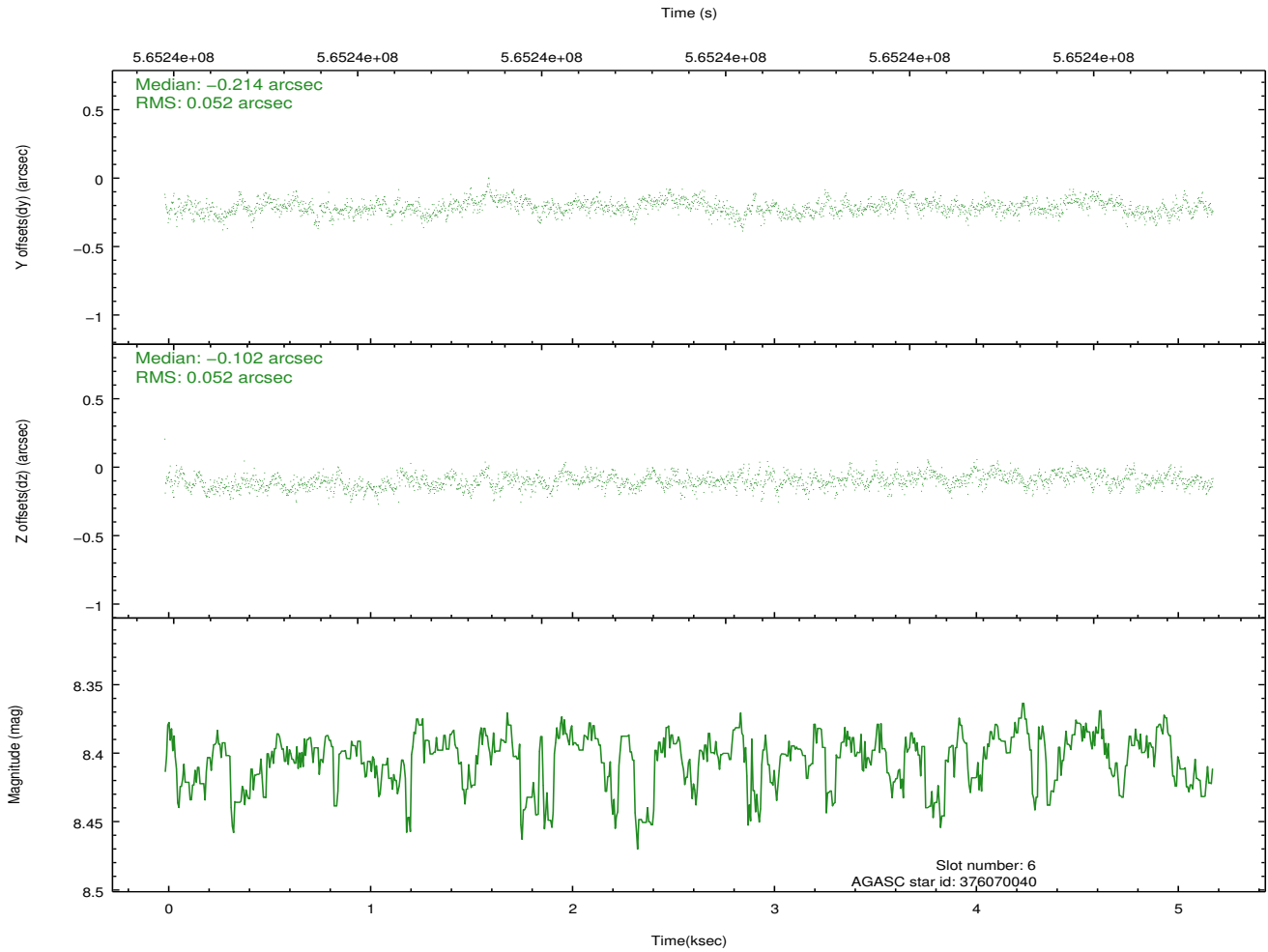
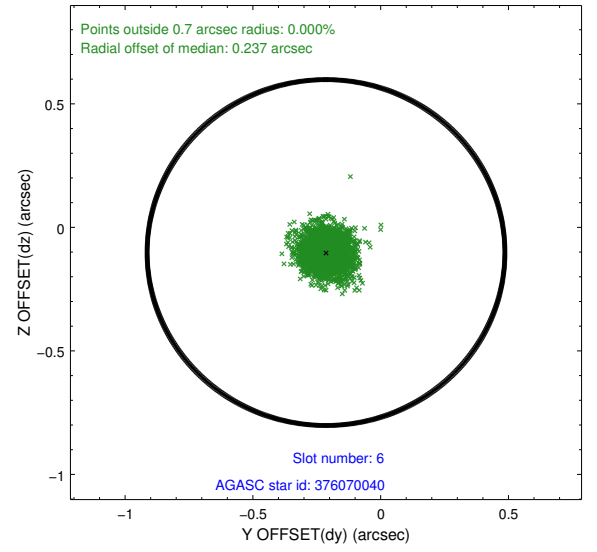
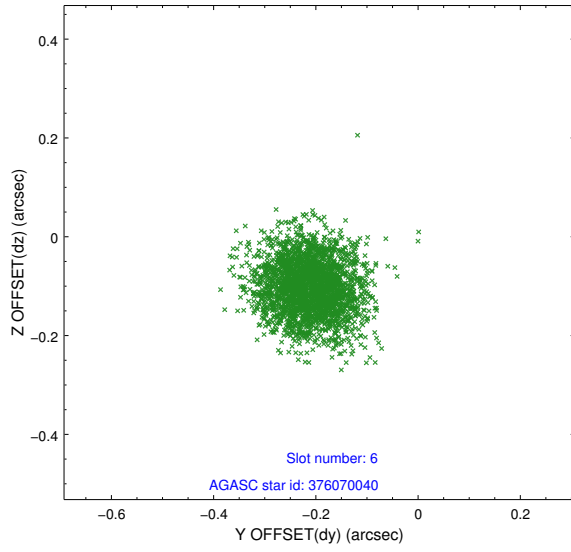
2.4.2 Slot 4



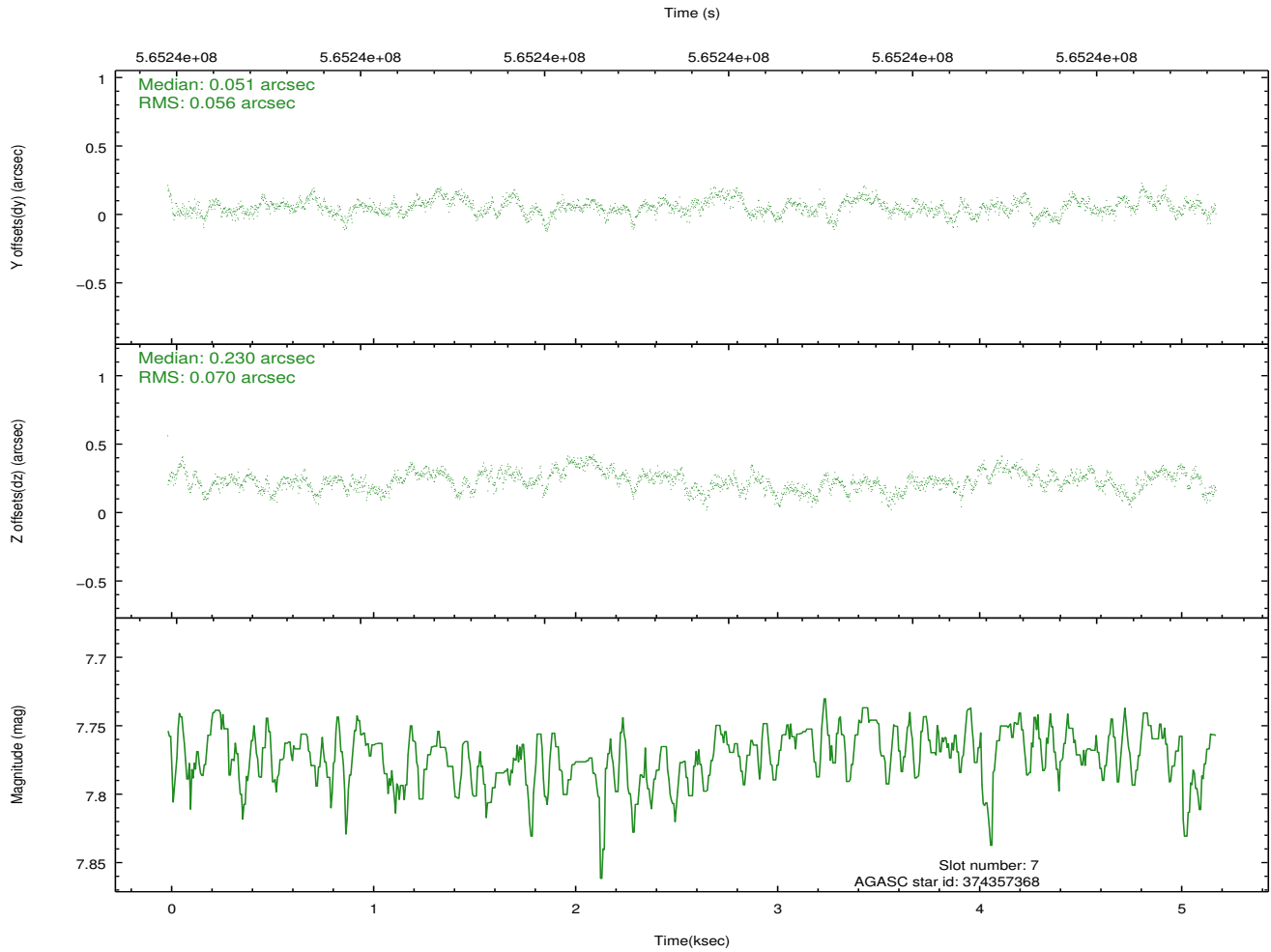
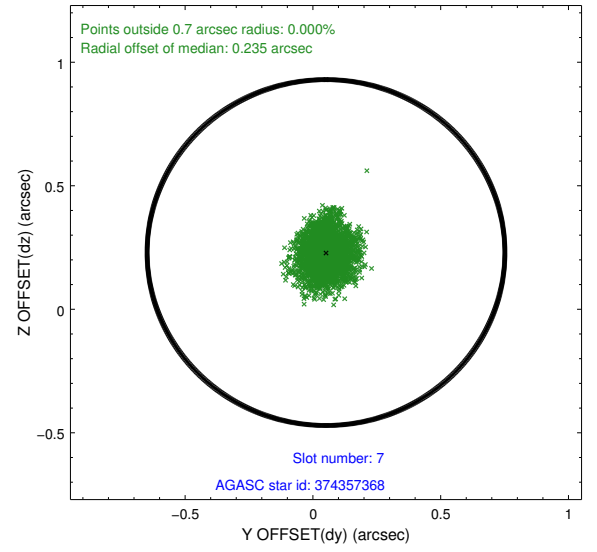
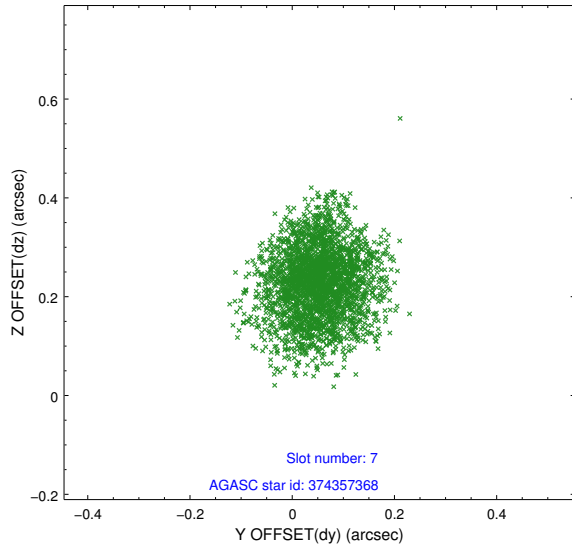
2.4.3 Slot 5



2.4.4 Slot 6

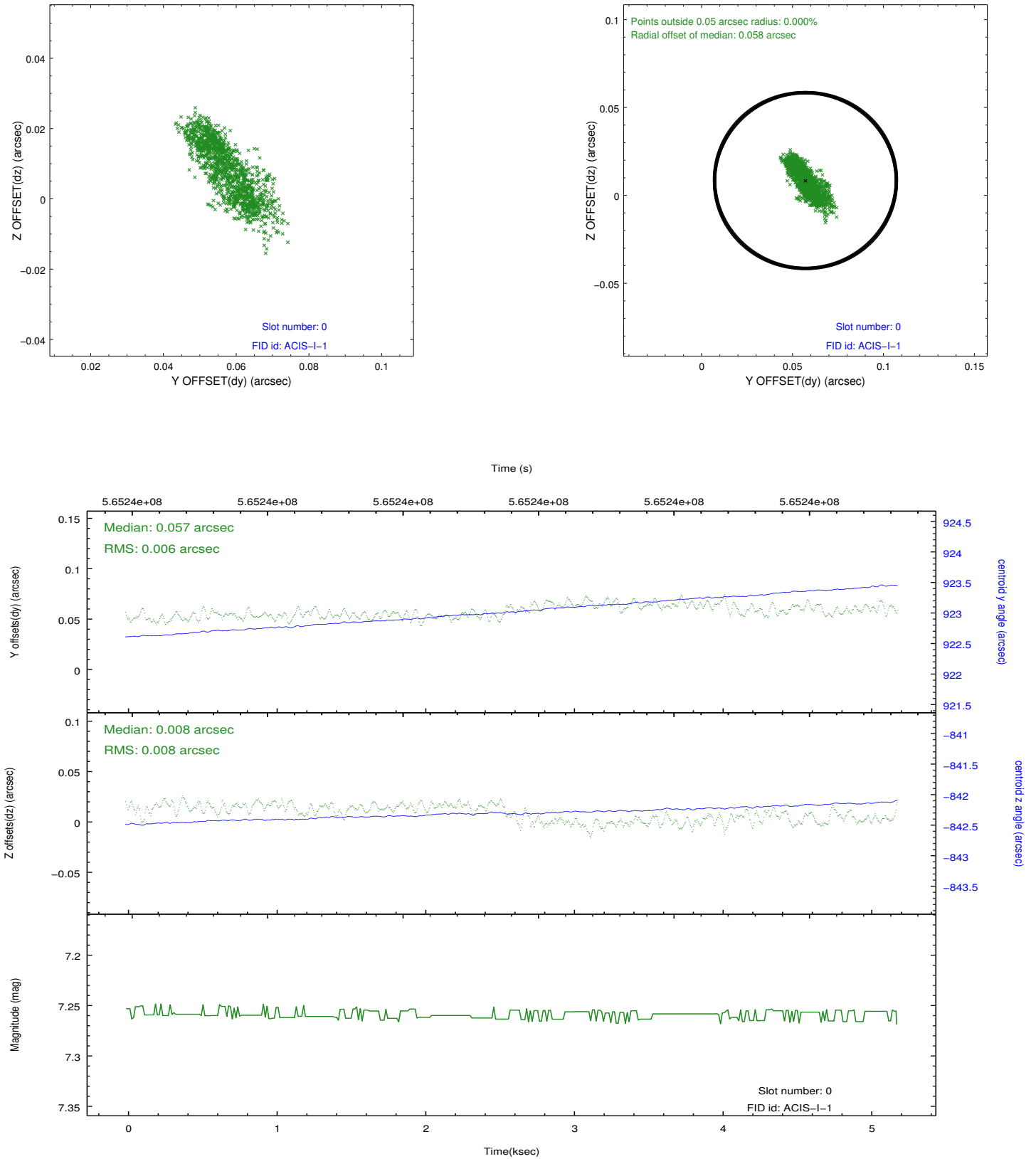


2.4.5 Slot 7

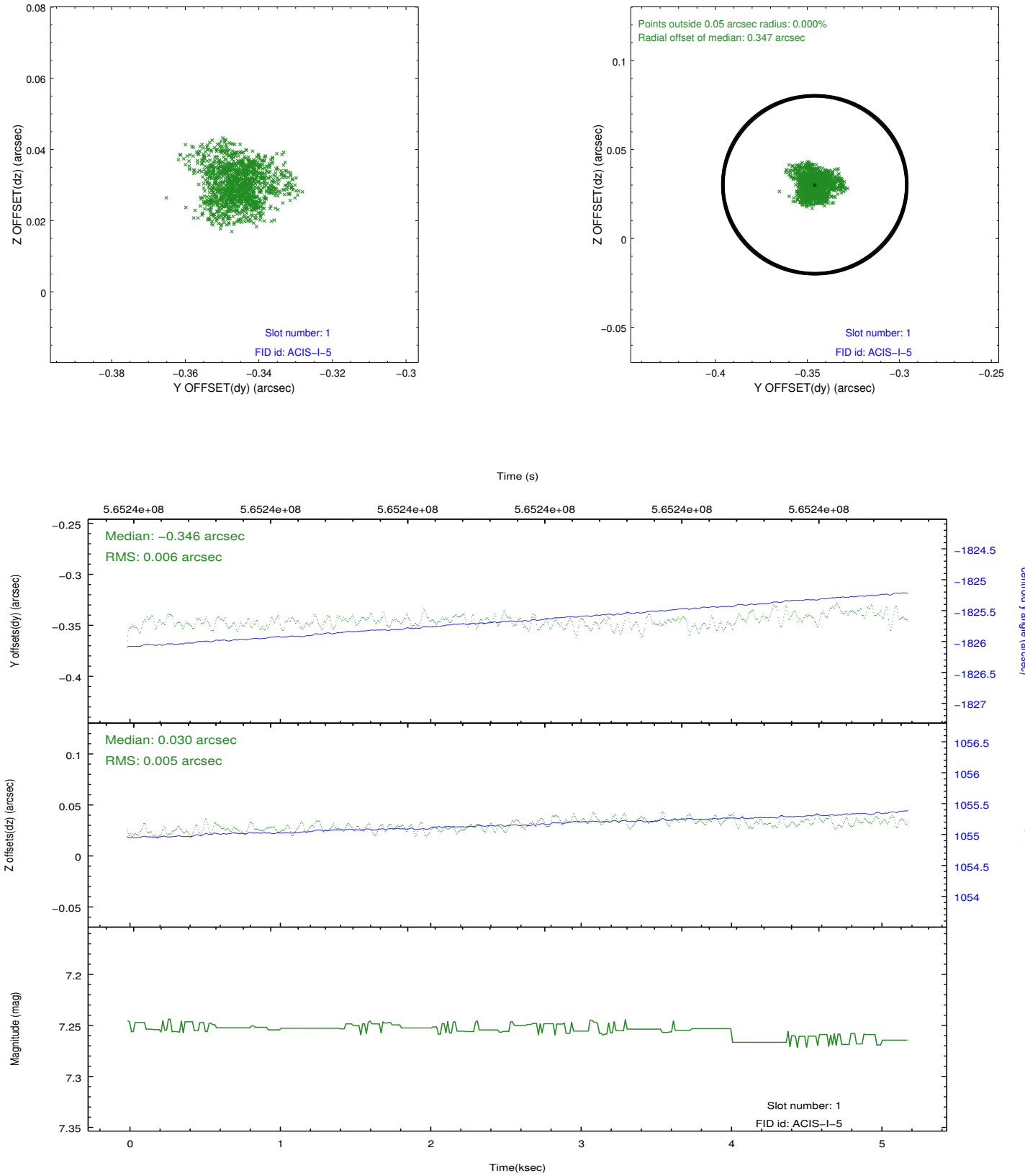


2.5 FID Slots

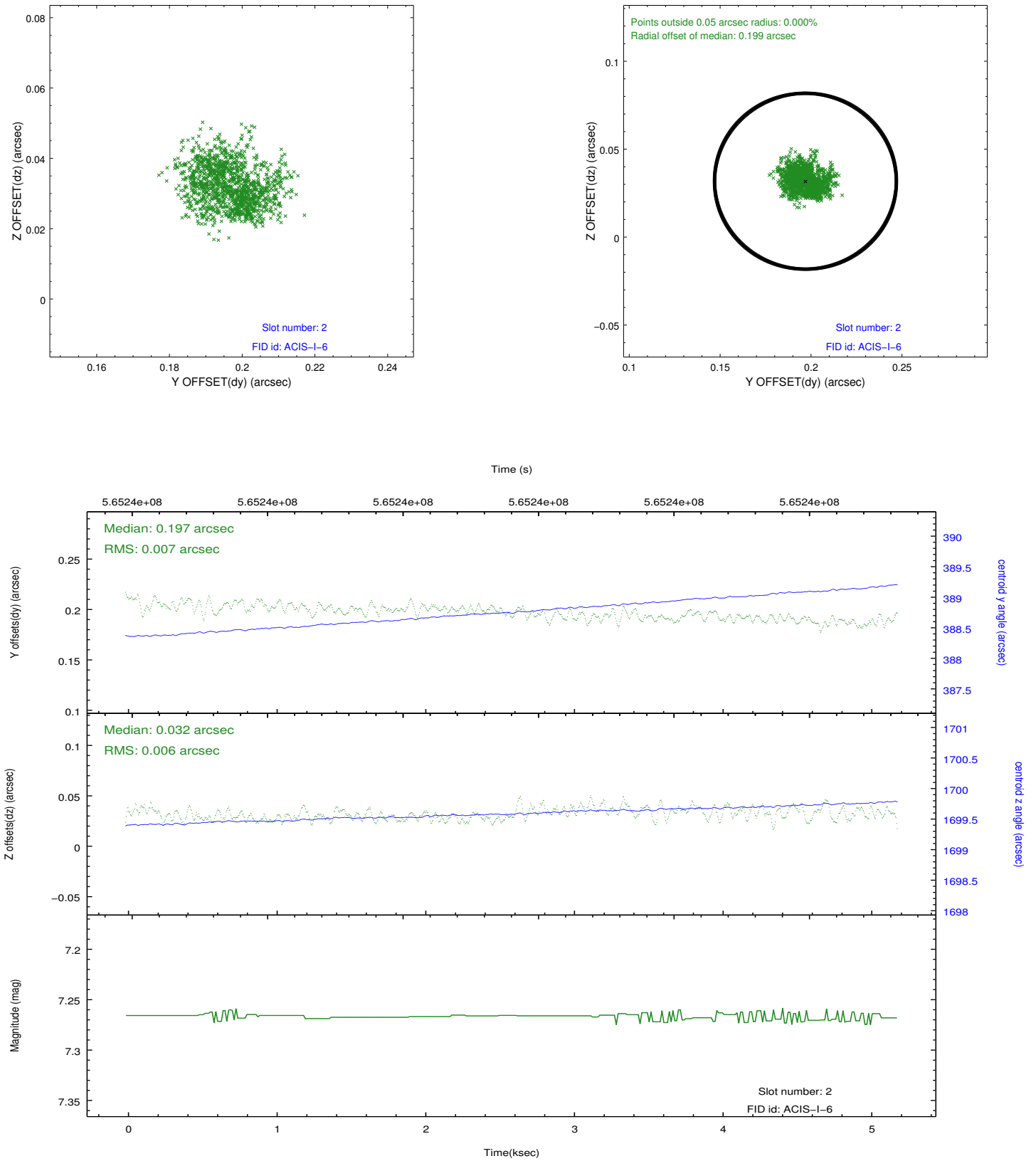
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2015.12.01
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.7708589767218

A.2 Comments