

V&V Reference Report

L2 ASCDS Version : 10.4.2.1

Observation 17282 - L2 Version 1
Chandra X-Ray Center

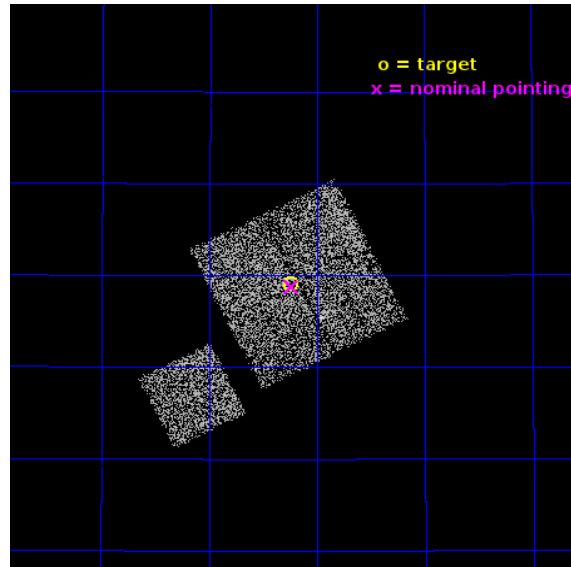
L2 Processing Date : Dec 12 2015

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1 Front

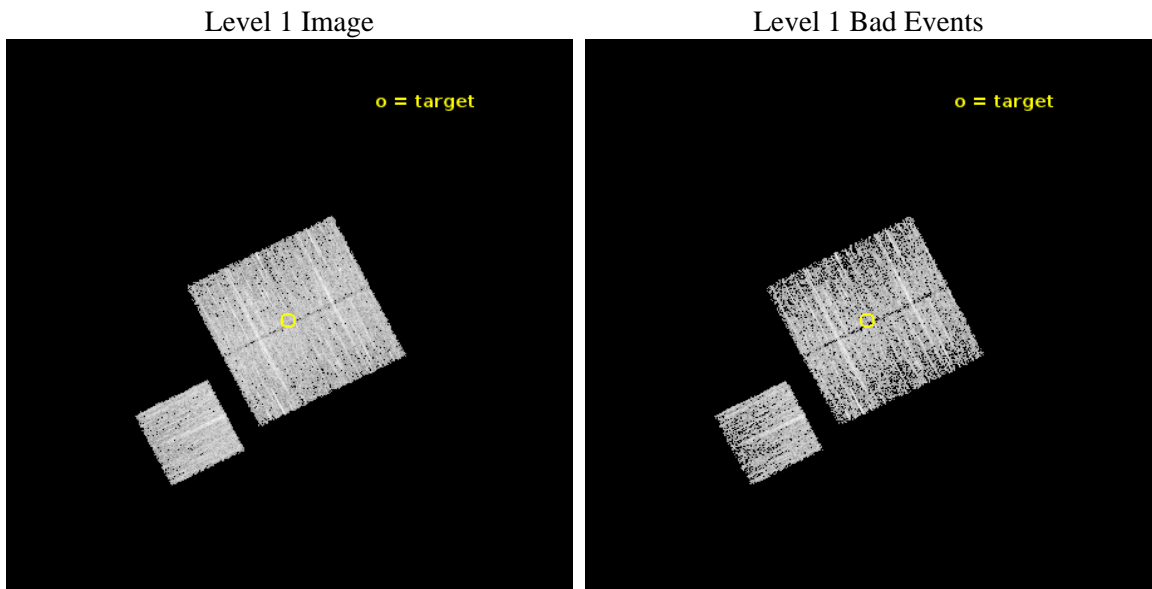
seq_num	801527	Sequence number
obs_id	17282	Observation id
title	Perseus: A New, Low-Redshift Anchor for Cluster Cosmology	Proposal
observer	Prof. Steven Allen	Principal investigator
object	Perseus cluster	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	48.56038	Observer's specified target RA [deg]
dec_targ	41.319133	Observer's specified target Dec [deg]
ra_nom	48.559810926084	Nominal RA [deg]
dec_nom	41.312812103082	Nominal Dec [deg]
roll_nom	243.18937329056	Nominal Roll [deg]
revision	1	Processing version of data
ontime	4777.1000368595	Sum of GTIs [s]
livetime	4714.6837080281	Livetime [s]
ontime0	4777.1000368595	Sum of GTIs [s]
ontime1	4777.1000368595	Sum of GTIs [s]
ontime2	4777.1000368595	Sum of GTIs [s]
ontime3	4777.1000368595	Sum of GTIs [s]
ontime6	4777.1000368595	Sum of GTIs [s]
l2events	13873	Number of level 2 events



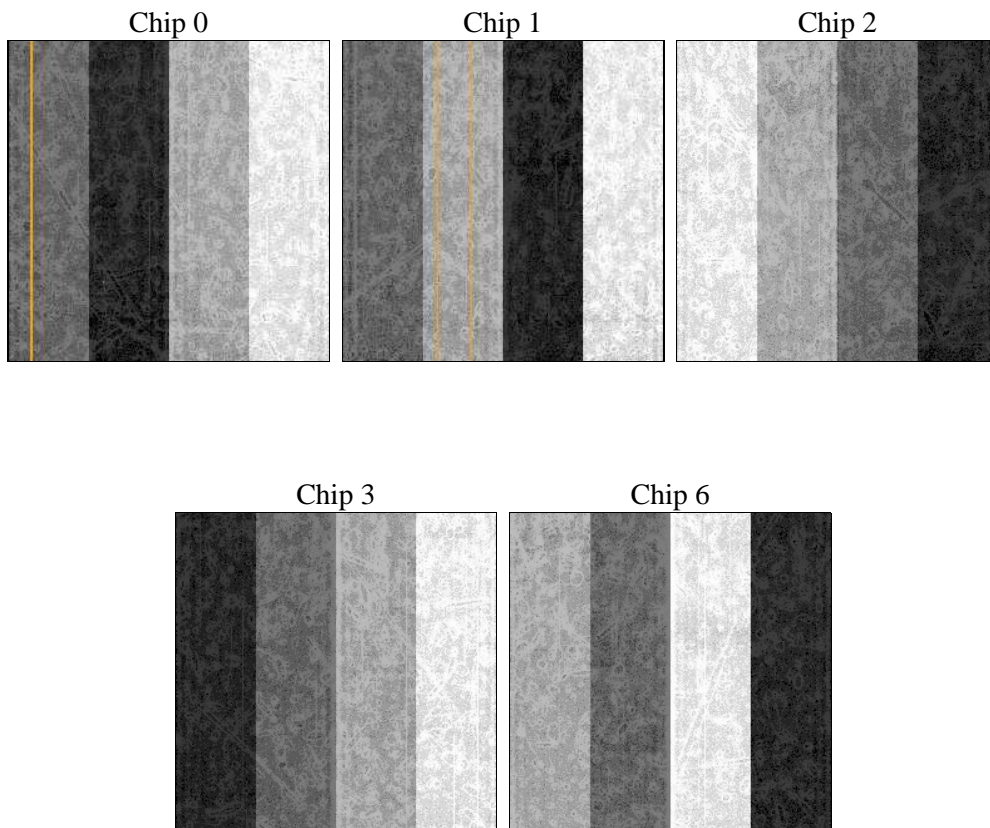
2 OBI

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	10.4.2.1	Processing system revision	ontime	4777.1000368595	Sum of GTIs [s]
caldsver	4.6.10a	 	ontime0	4777.1000368595	Sum of GTIs [s]
date	2015-12-12T14:43:17	Date and time of file creation	ontime1	4777.1000368595	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	4777.1000368595	Sum of GTIs [s]
			ontime3	4777.1000368595	Sum of GTIs [s]
			ontime6	4777.1000368595	Sum of GTIs [s]
			l1events	125410	Number of level 1 events

2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	24174	23665	25696	25828	26047
rejected events	20905	20106	22648	22659	22854
rejected %	86%	84%	88%	87%	87%

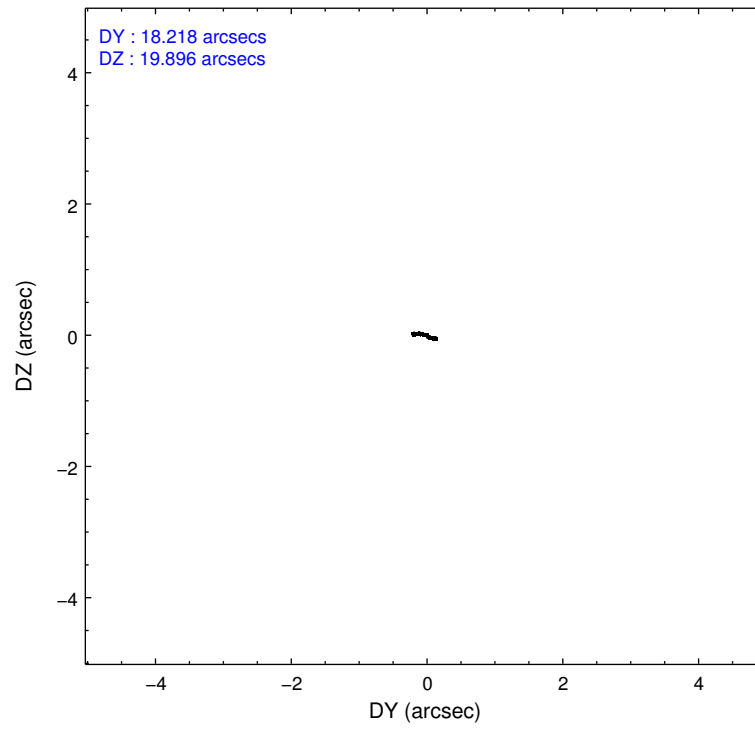
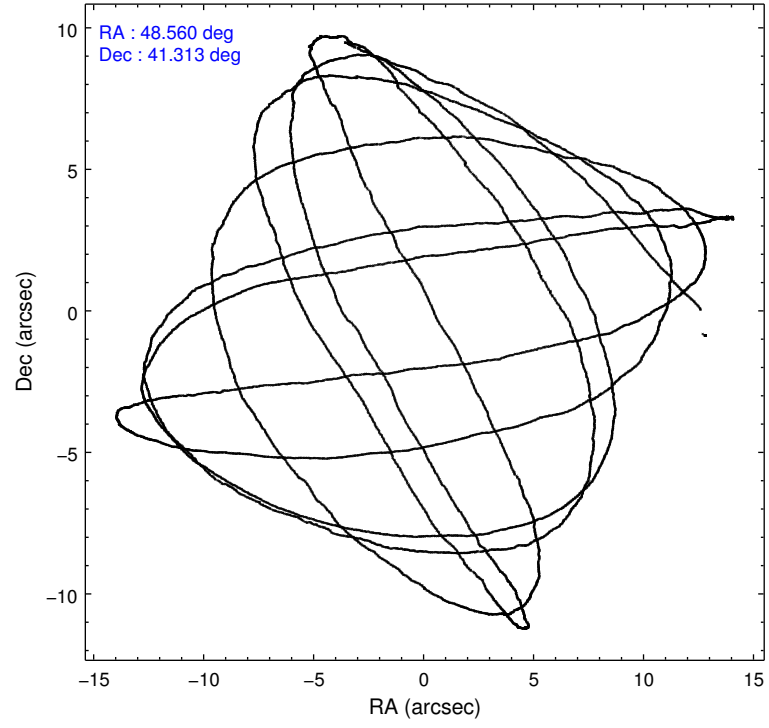
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	1300	1422	1214	1212	1198
	5%	6%	4%	4%	4%
grade 1 events	9	19	15	8	12
	0%	0%	0%	0%	0%
grade 2 events	783	809	704	687	648
	3%	3%	2%	2%	2%
grade 3 events	308	299	272	316	299
	1%	1%	1%	1%	1%
grade 4 events	304	307	280	320	294
	1%	1%	1%	1%	1%
grade 5 events	1172	1227	1127	1333	1256
	4%	5%	4%	5%	4%
grade 6 events	574	723	579	637	754
	2%	3%	2%	2%	2%
grade 7 events	19724	18859	21505	21315	21586
	81%	79%	83%	82%	82%

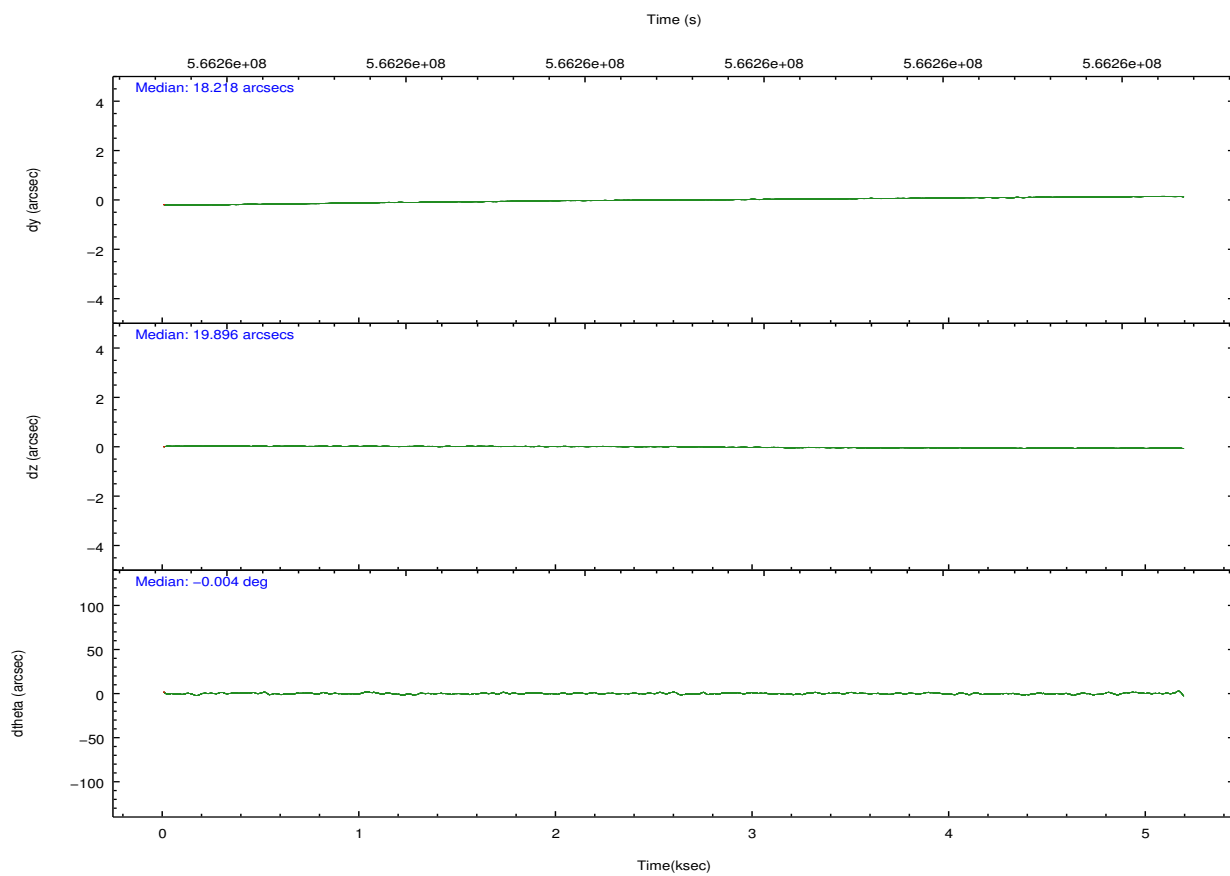
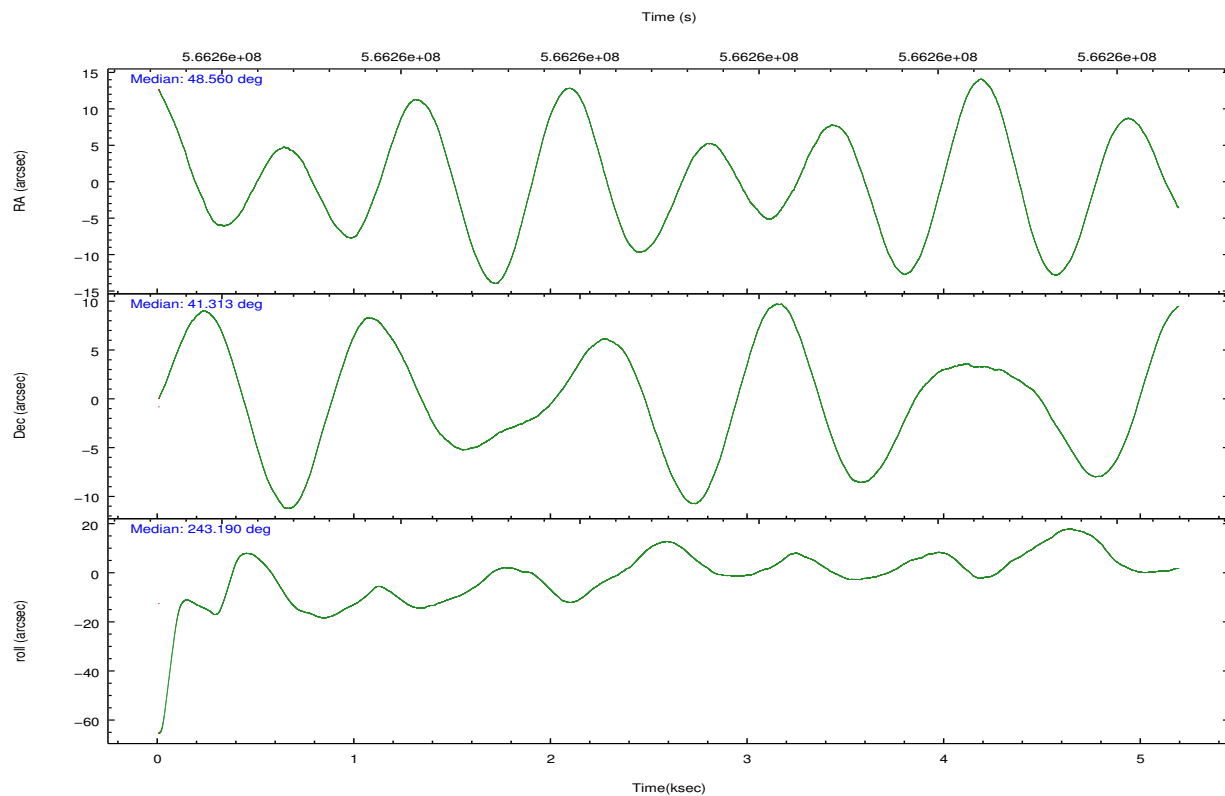
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-01236	ACIS-01236
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	48.557537	48.55981092608435
[deg] Pointing Dec	41.340320	41.31281210308153
[deg] Pointing Roll	242.982297	243.1893732905551
[mm] SIM focus pos	-0.782348	-0.7809083437167272
[mm] SIM defocus	0	0.001439871863259334
[mm] SIM translation stage pos	-233.592463	-233.5874344608287
[mm] SIM translation stage offset	0	-0.005018542100998502
[s] Observation start time (MET)	566260100.184000	566259724.8164901
Observation start date	2015-12-11T22:27:12	2015-12-11T22:22:04
[s] Observation end time (MET)	566265100.184000	566265250.0793101
Observation end date	2015-12-11T23:50:32	2015-12-11T23:54:10
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
CCD I0 on	Y	Y
CCD I1 on	Y	Y
CCD I2 on	Y	Y
CCD I3 on	Y	Y
CCD S0 on	N	N
CCD S1 on	N	N
CCD S2 on	O1	Y
CCD S3 on	N	N
CCD S4 on	N	N
CCD S5 on	N	N
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.1

2.3 Aspect



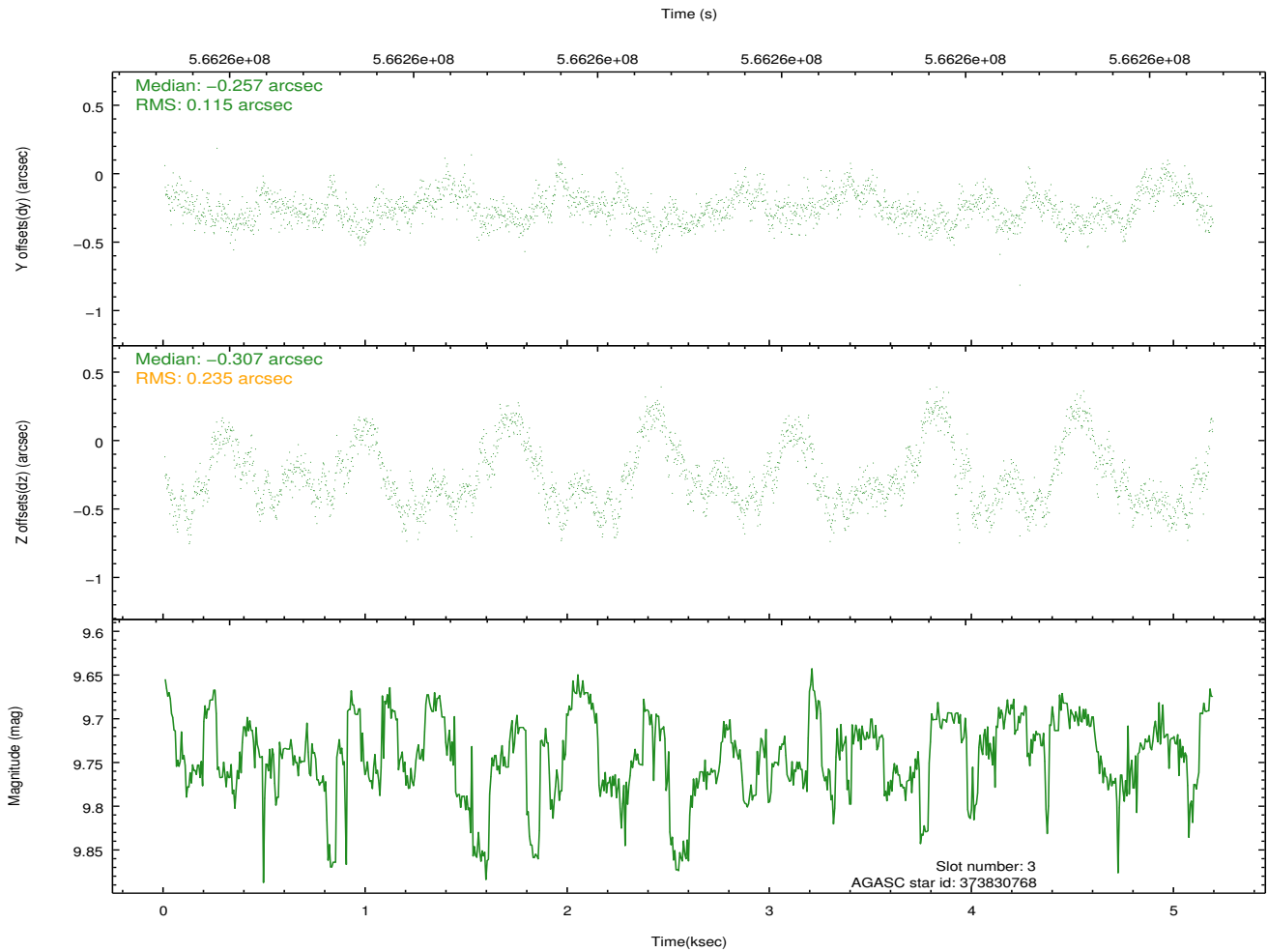
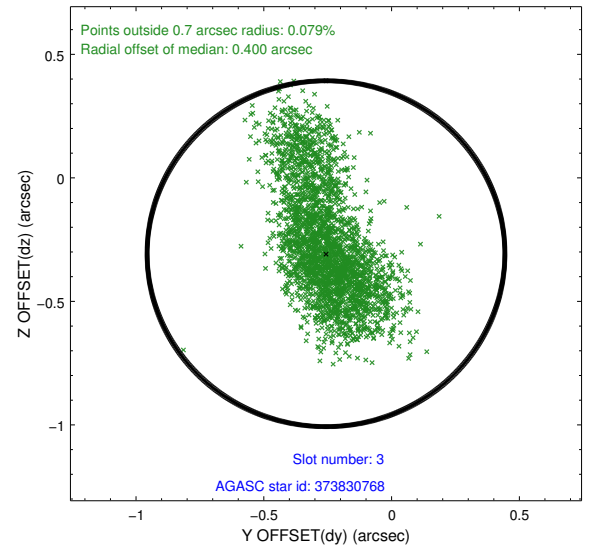
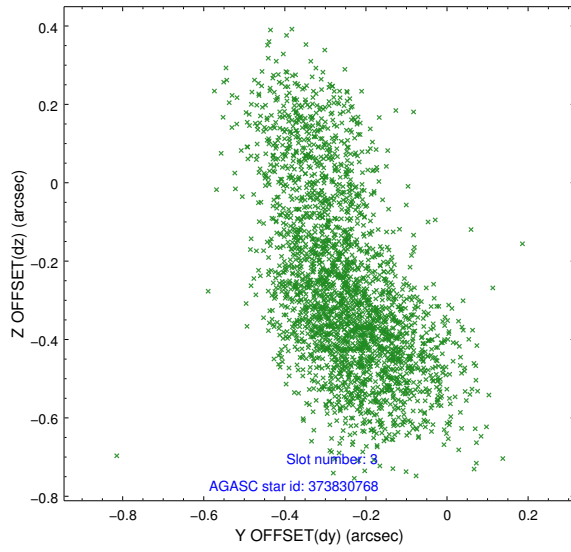


Slot Statistics

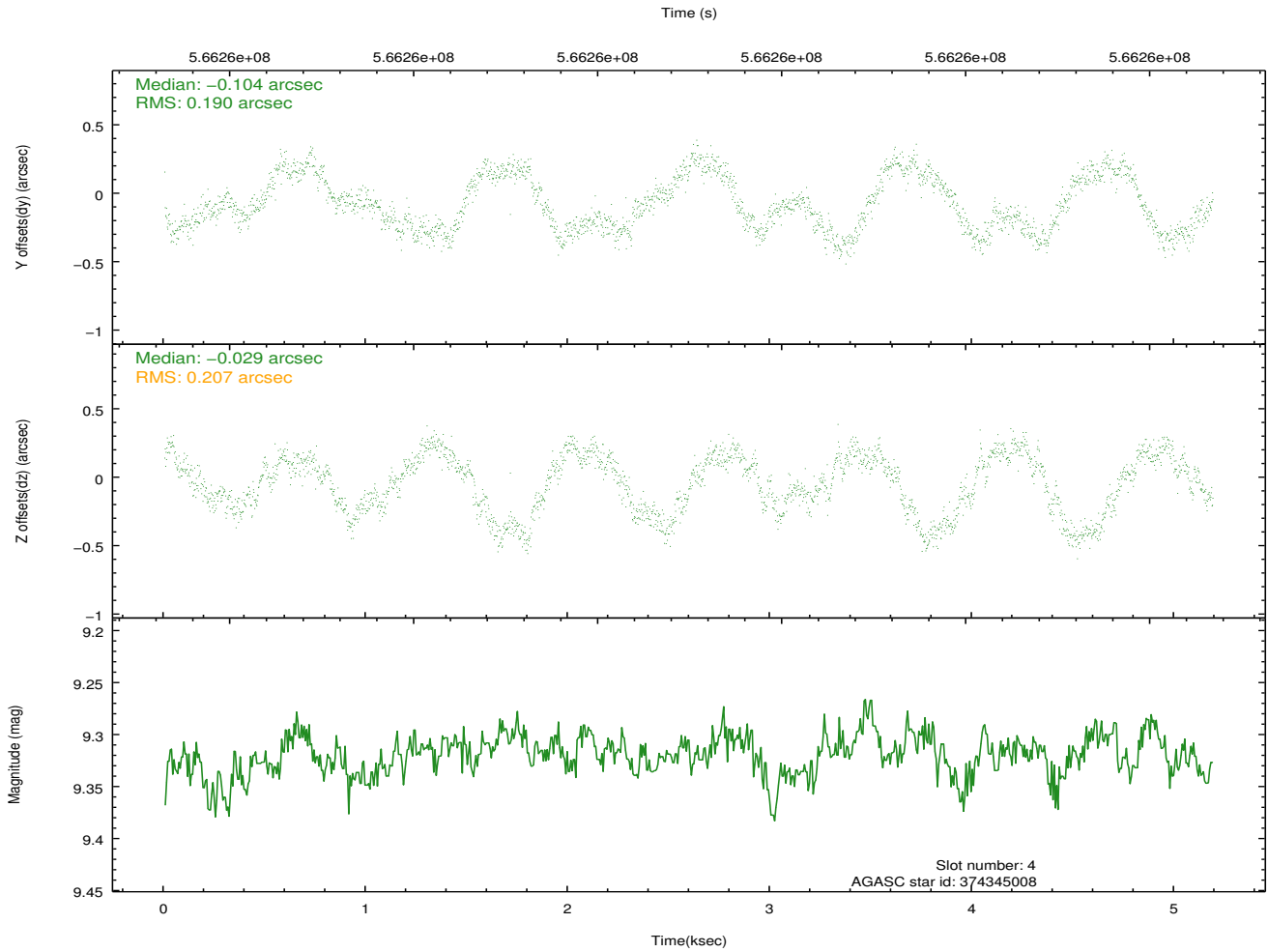
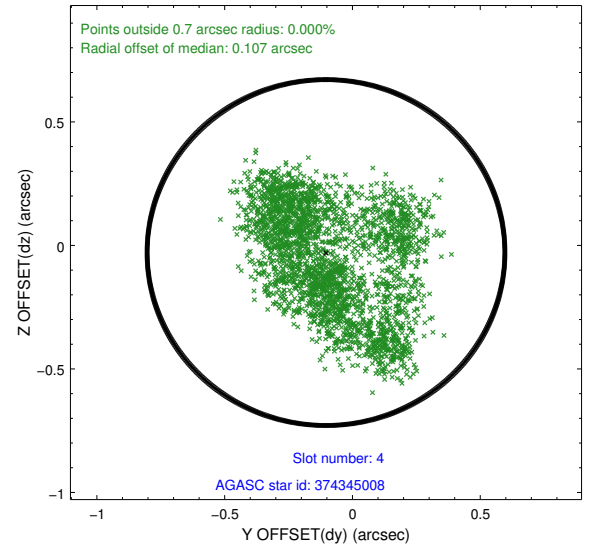
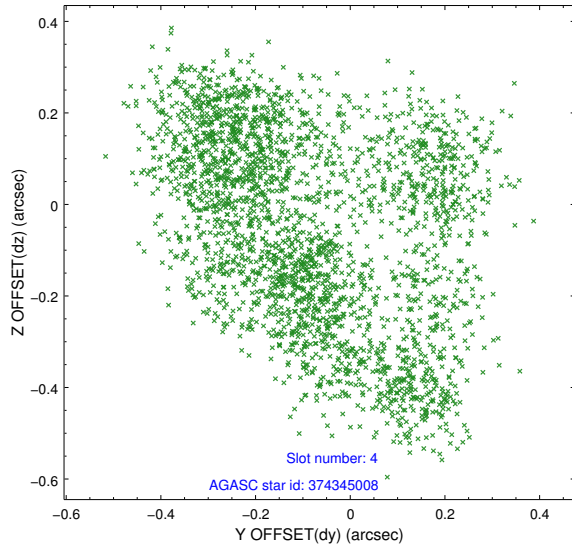
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-2	7.14	1265	-0.195	-0.044	0.010	0.017	0.000000	0.000000	-773.18	-850.04
1	FID		ACIS-I-4	7.19	1266	0.488	0.117	0.007	0.013	0.000000	0.000000	2140.97	1055.79
2	FID		ACIS-I-5	7.24	1266	-0.394	-0.004	0.010	0.016	0.000000	0.000000	-1825.77	1054.72
3	GUIDE	used	373830768	9.74	2523	-0.257	-0.307	0.263	0.500	48.797176	41.169770	251.87	856.76
4	GUIDE	used	374345008	9.32	2527	-0.104	-0.029	0.307	0.458	48.768668	41.619367	-1152.44	50.80
5	GUIDE	used	374352576	9.66	2528	0.292	0.076	0.173	0.280	48.746850	41.454001	-596.49	269.03
6	GUIDE	used	374353904	8.33	2530	-0.037	0.046	0.159	0.228	48.175092	41.439059	150.77	-1081.34
7	GUIDE	used	374355168	8.57	2530	0.090	0.200	0.141	0.237	48.517523	41.466988	-356.16	-302.65

2.4 Star Slots

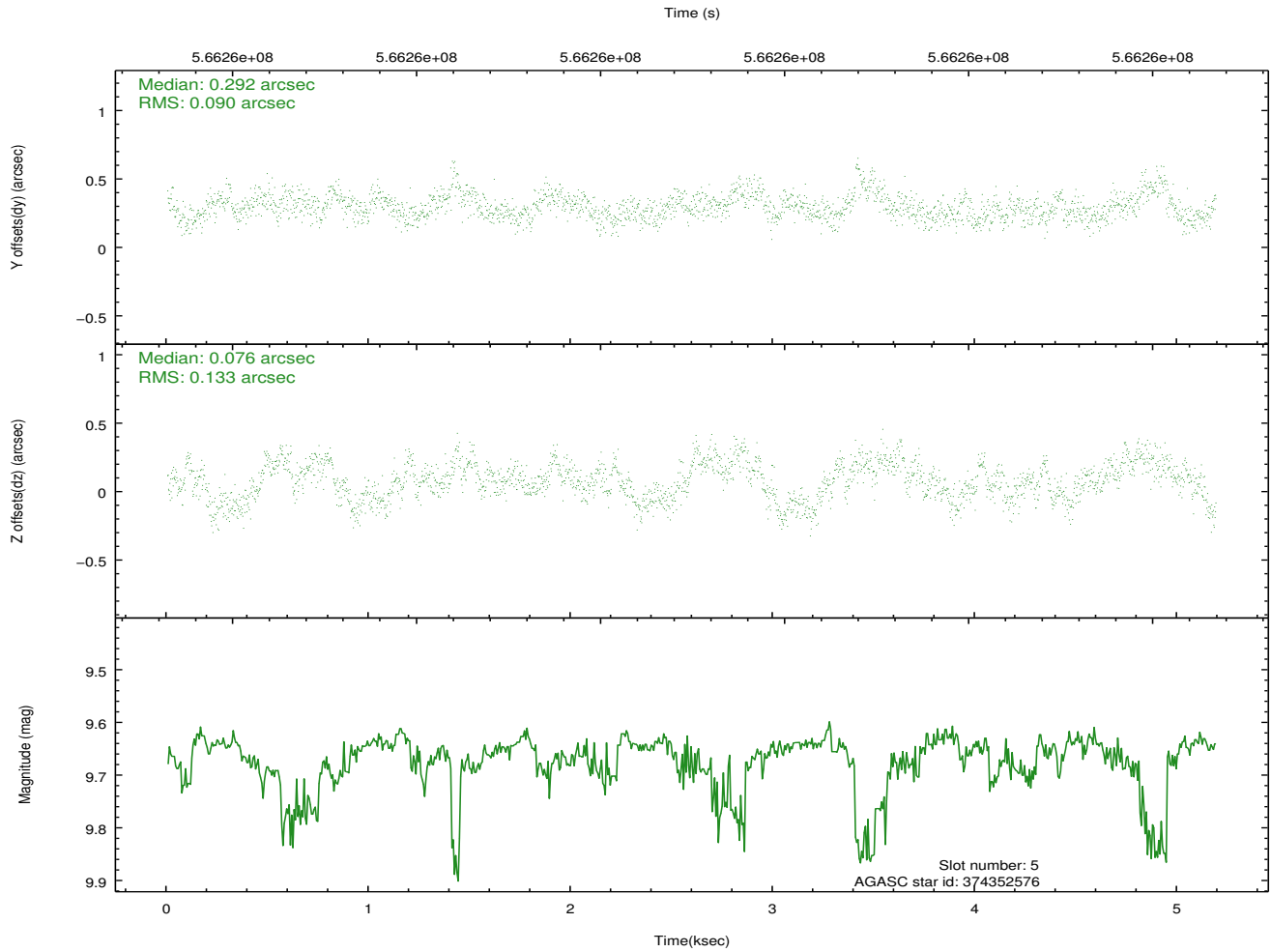
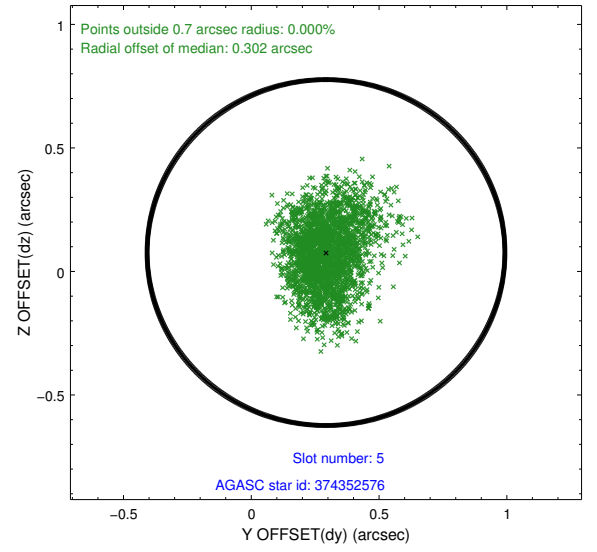
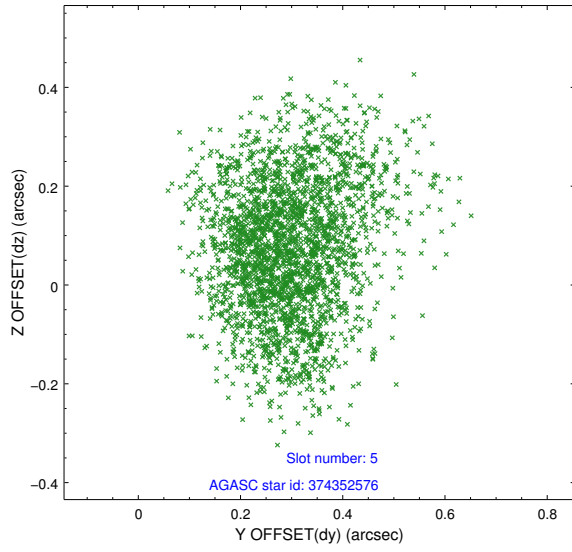
2.4.1 Slot 3



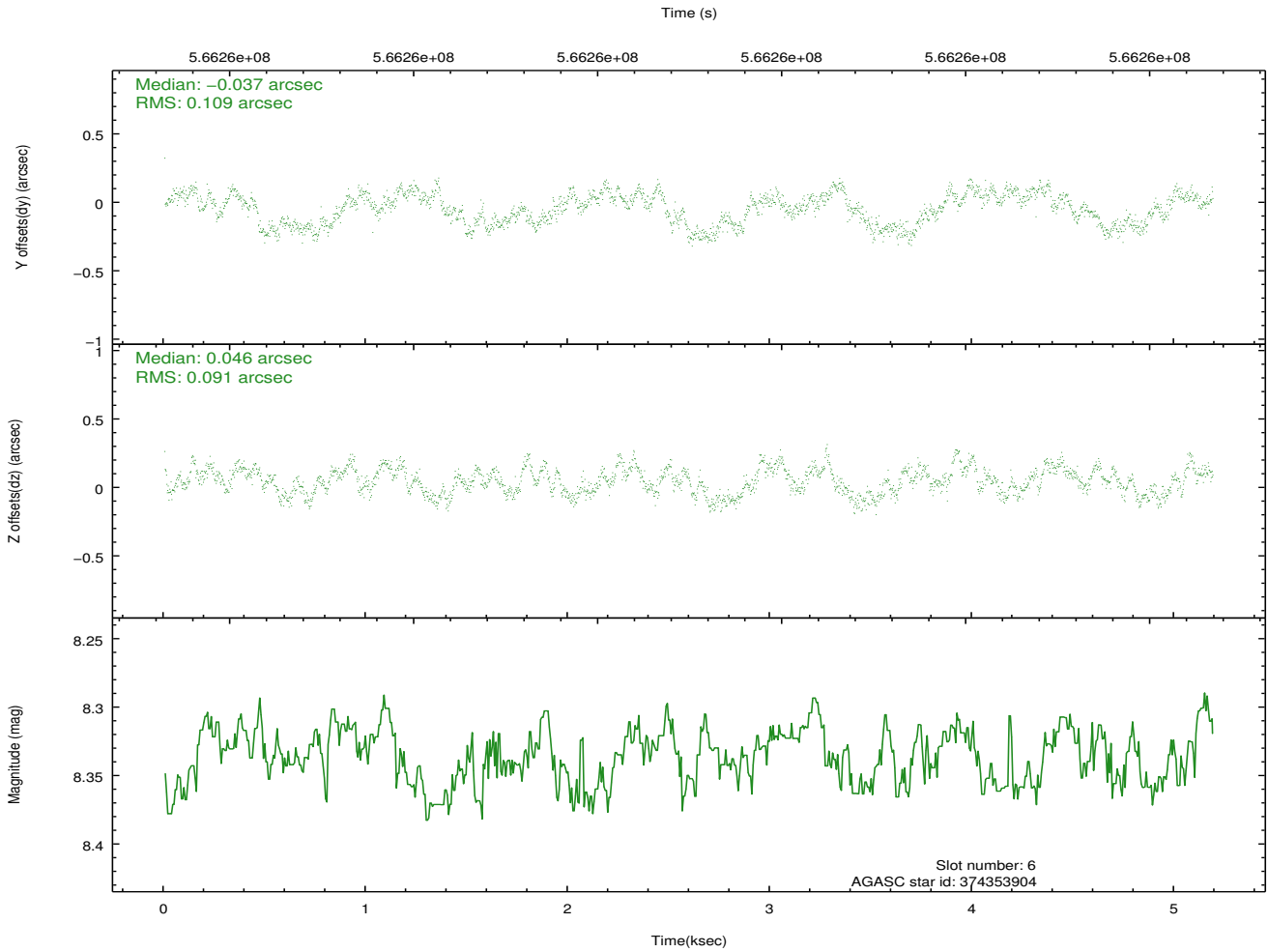
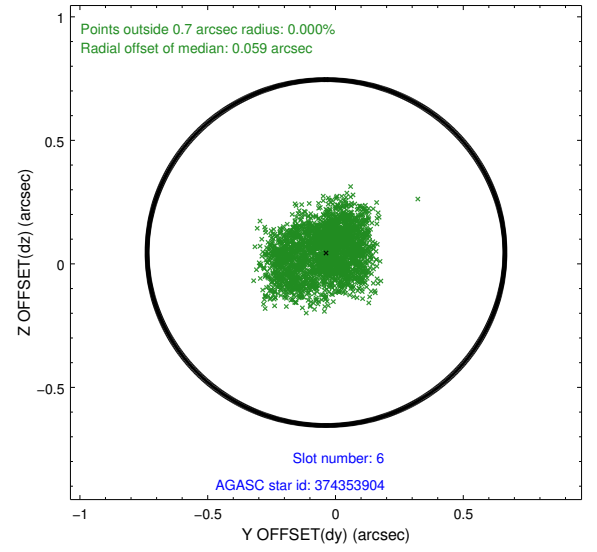
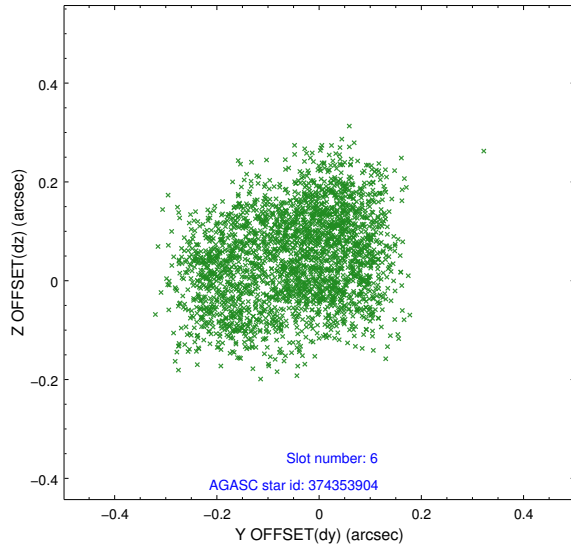
2.4.2 Slot 4



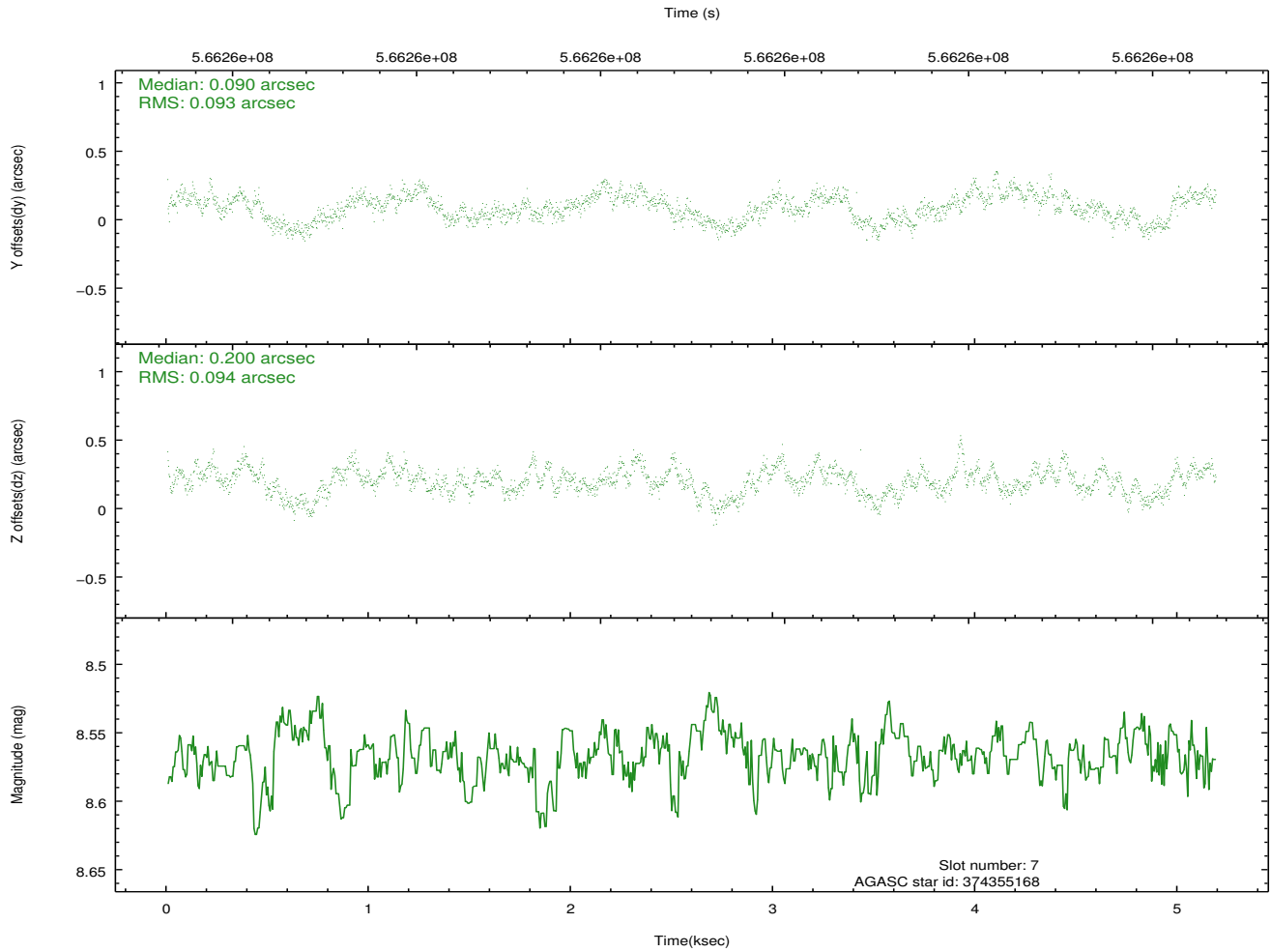
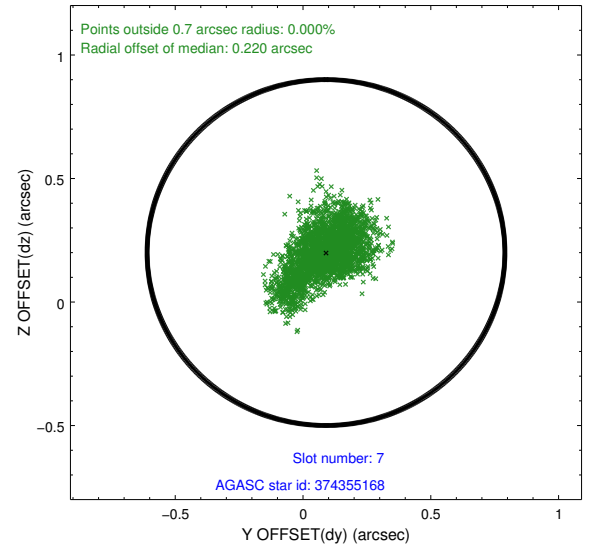
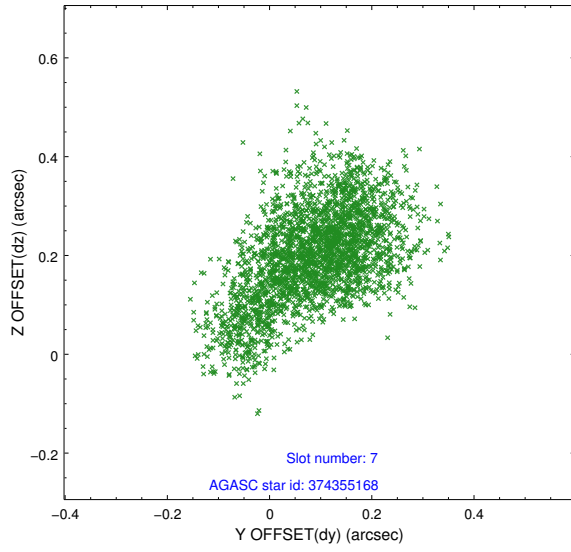
2.4.3 Slot 5



2.4.4 Slot 6

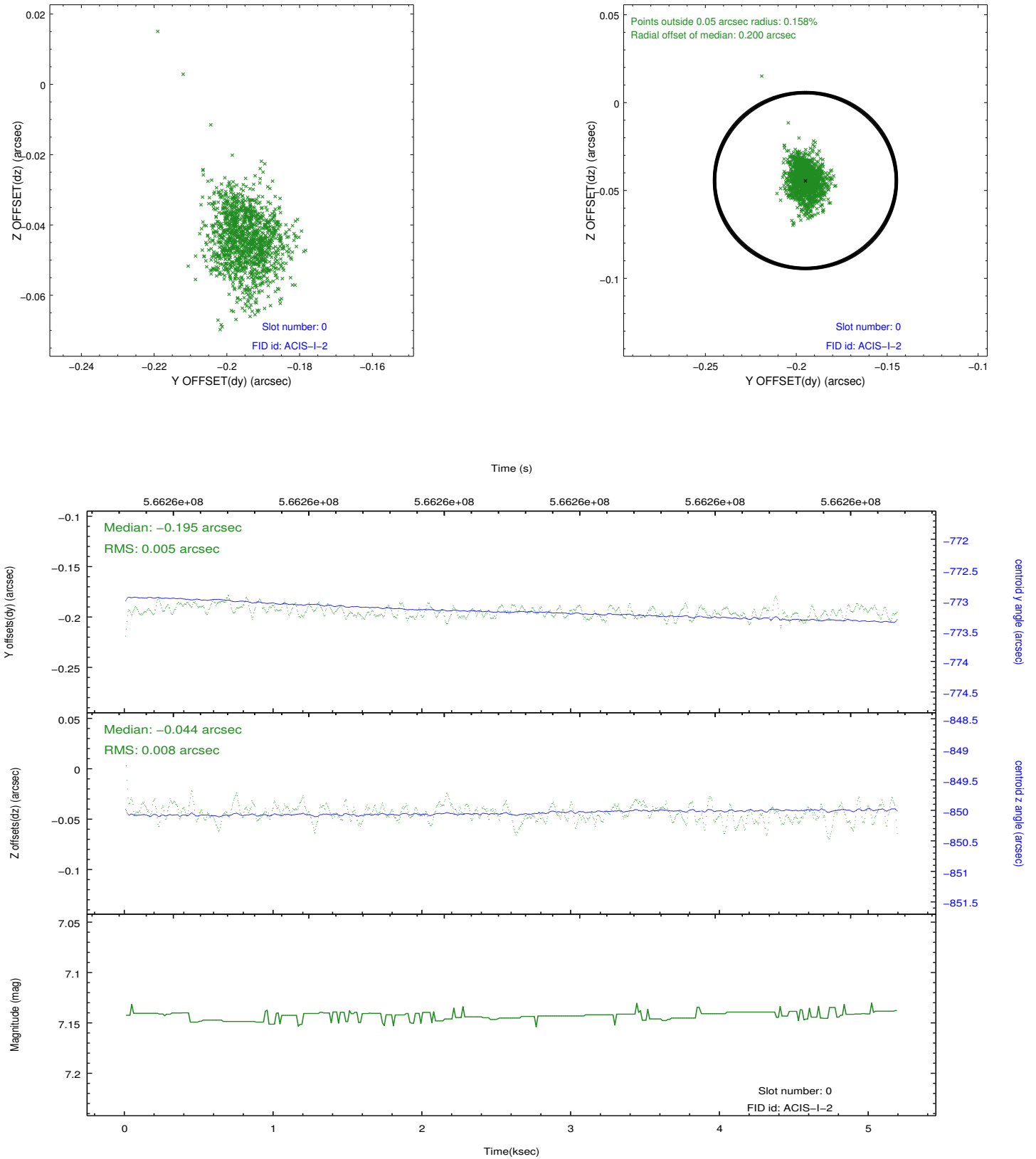


2.4.5 Slot 7

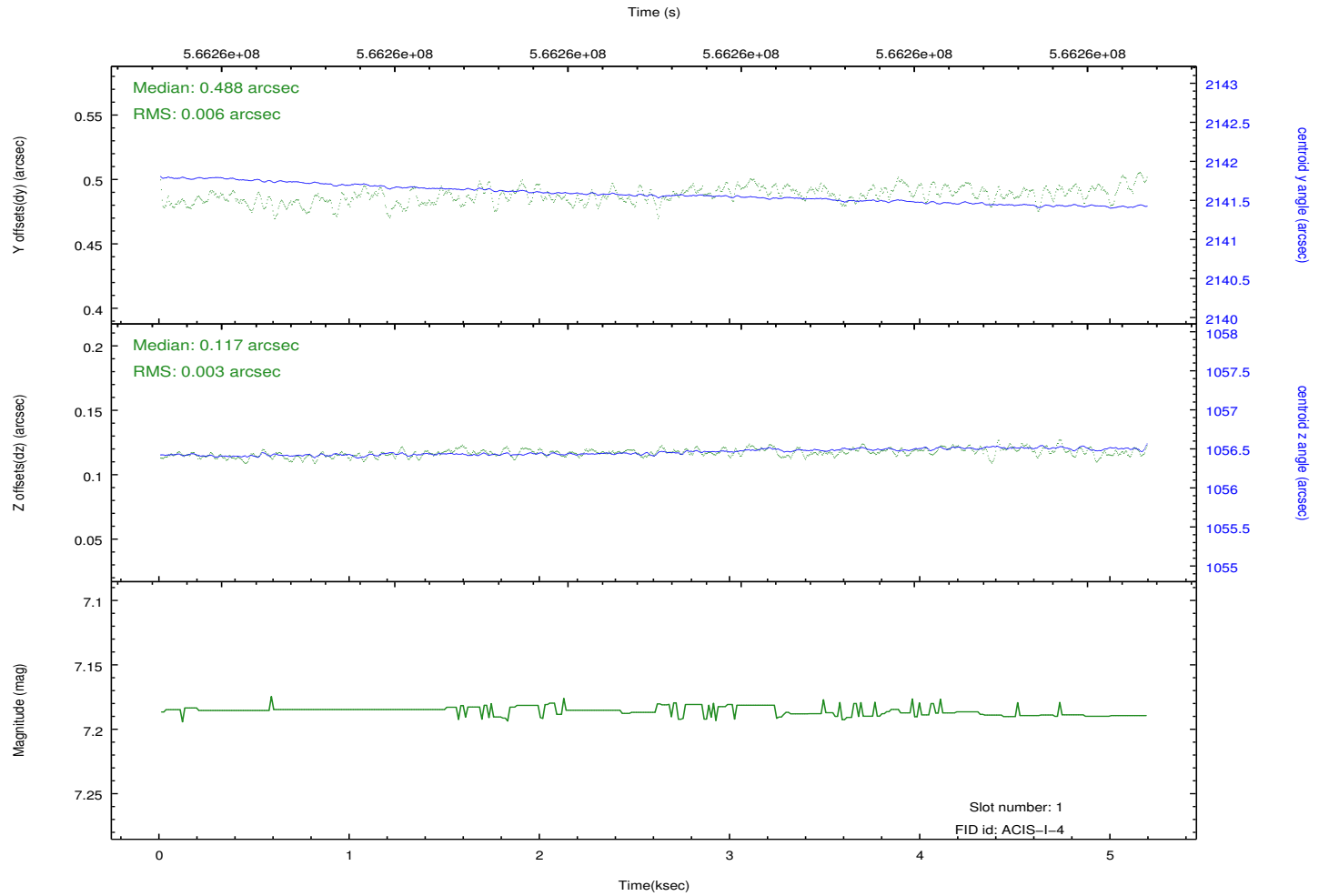
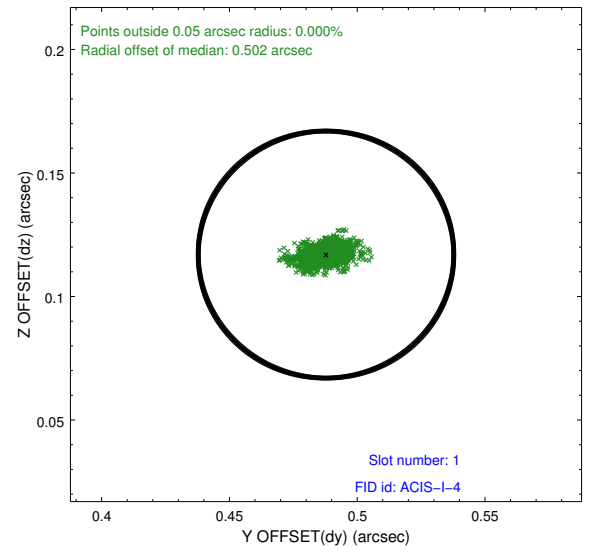
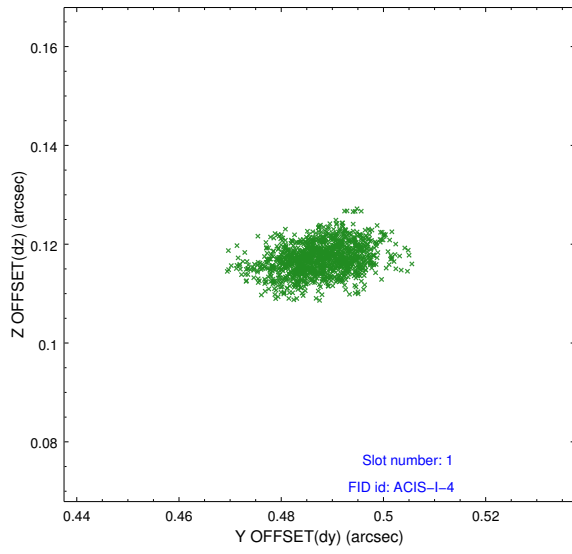


2.5 FID Slots

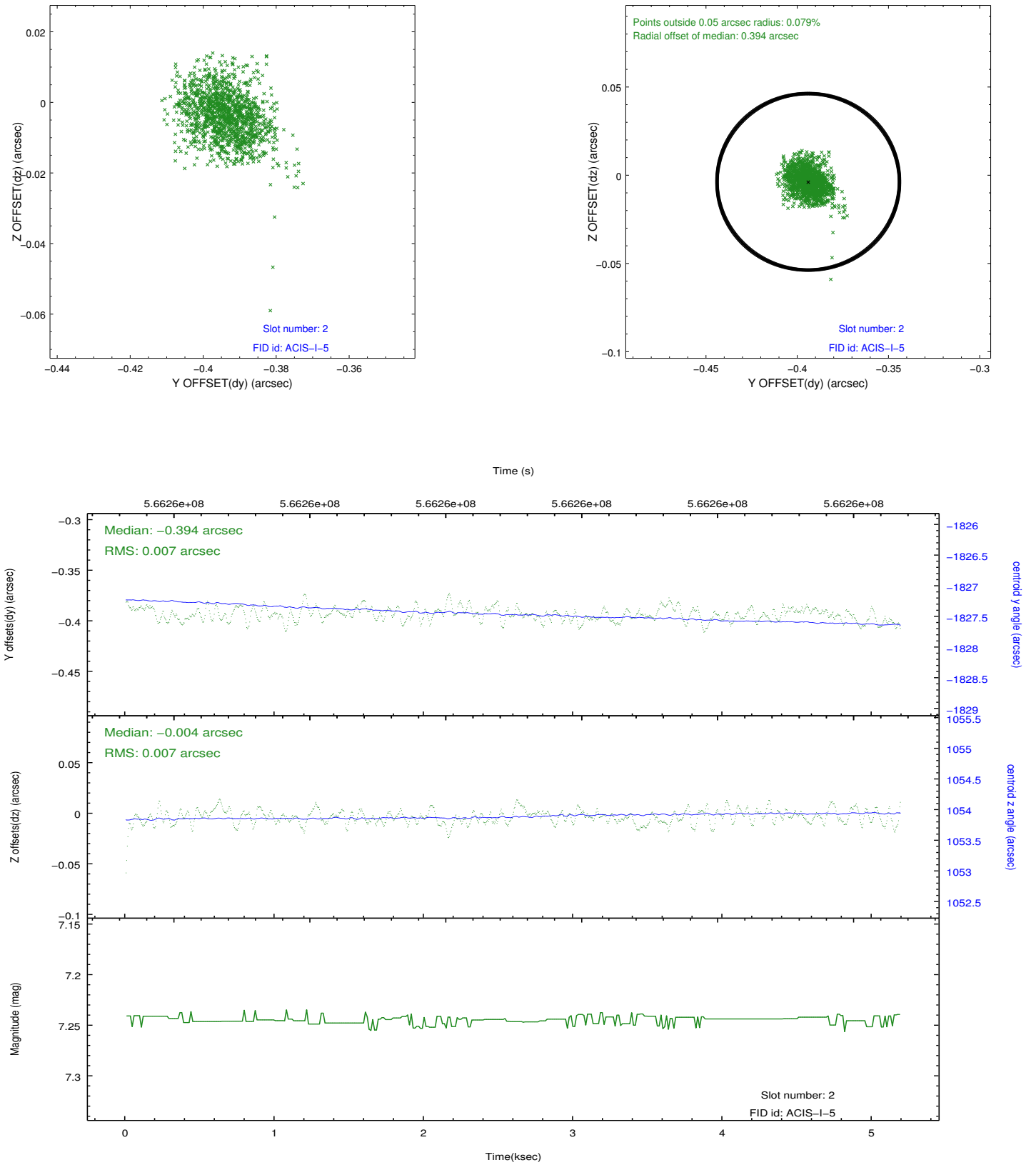
2.5.1 Slot 0



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)	2015.12.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.7771000368595

A.2 Comments