

V&V Reference Report

L2 ASCDS Version : 10.4.2.1

Observation 17271 - L2 Version 1
Chandra X-Ray Center

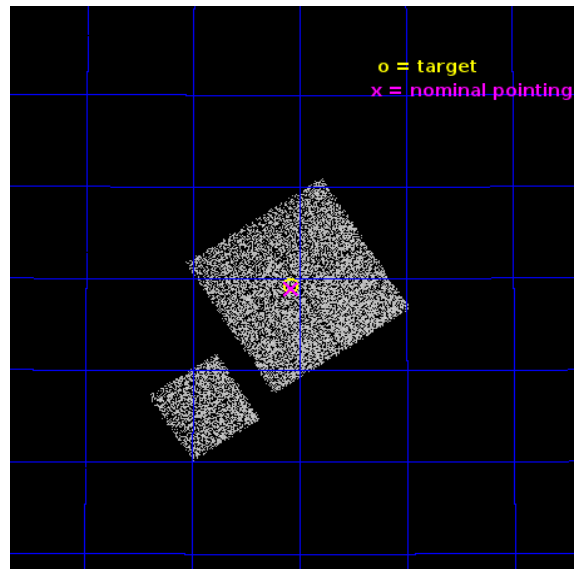
L2 Processing Date : Dec 10 2015

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1 Front

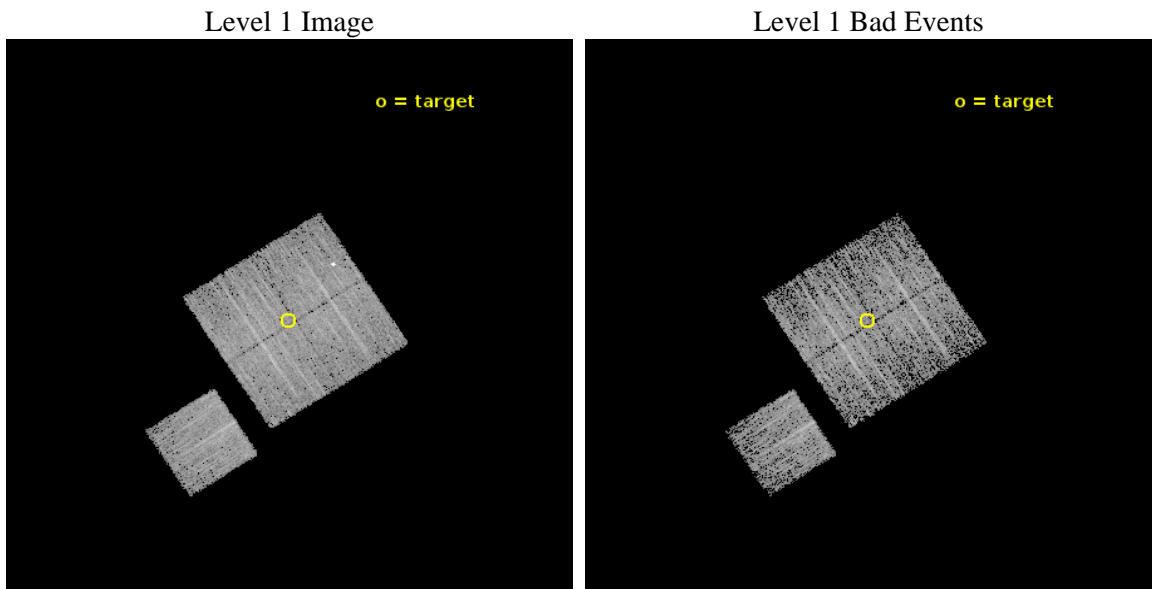
seq_num	801516	Sequence number
obs_id	17271	Observation id
title	Perseus: A New, Low-Redshift Anchor for Cluster Cosmology	Proposal
observer	Prof. Steven Allen	Principal investigator
object	Perseus cluster	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	50.5208	Observer's specified target RA [deg]
dec_targ	41.821194	Observer's specified target Dec [deg]
ra_nom	50.519186302482	Nominal RA [deg]
dec_nom	41.814860924081	Nominal Dec [deg]
roll_nom	237.14575240942	Nominal Roll [deg]
revision	1	Processing version of data
ontime	5064.8490599394	Sum of GTIs [s]
livetime	4998.6730782836	Livetime [s]
ontime0	5064.7259399891	Sum of GTIs [s]
ontime1	5064.7669799328	Sum of GTIs [s]
ontime2	5064.8080199957	Sum of GTIs [s]
ontime3	5064.8490599394	Sum of GTIs [s]
ontime6	5064.6848999262	Sum of GTIs [s]
l2events	18522	Number of level 2 events



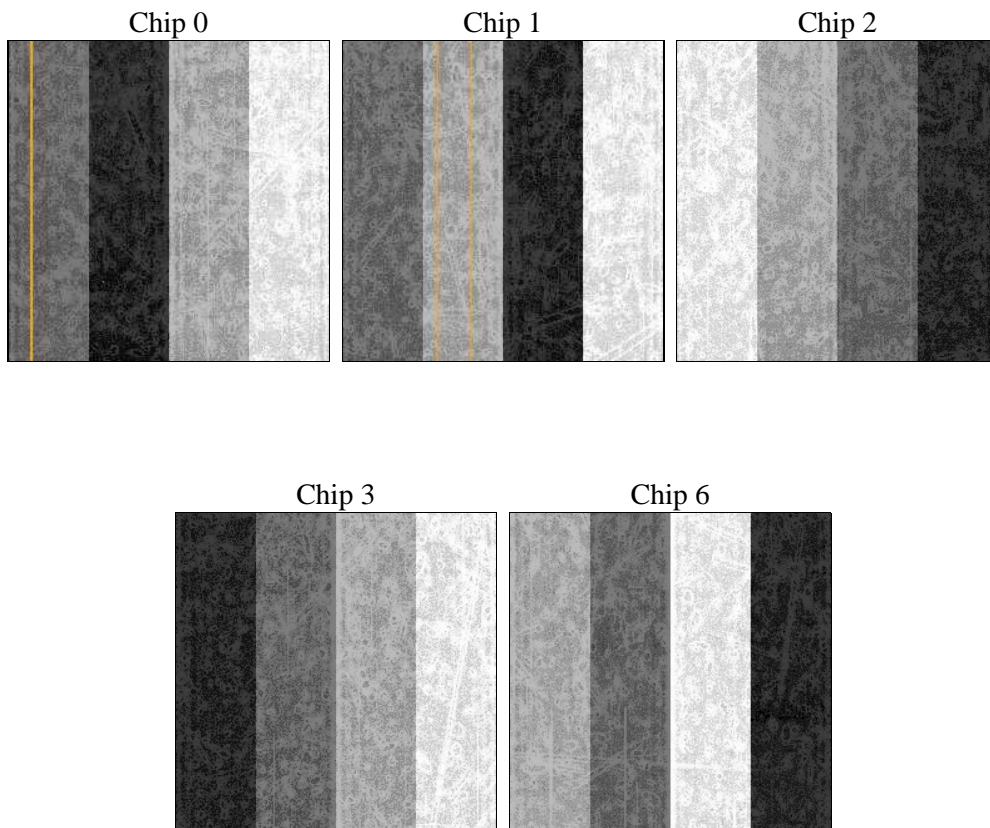
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	10.4.2.1	Processing system revision	ontime	5064.8490599394	Sum of GTIs [s]
caldsver	4.6.10a	 	ontime0	5064.7259399891	Sum of GTIs [s]
date	2015-12-10T14:51:22	Date and time of file creation	ontime1	5064.7669799328	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	5064.8080199957	Sum of GTIs [s]
			ontime3	5064.8490599394	Sum of GTIs [s]
			ontime6	5064.6848999262	Sum of GTIs [s]
			l1events	140000	Number of level 1 events

2.1.4 Events

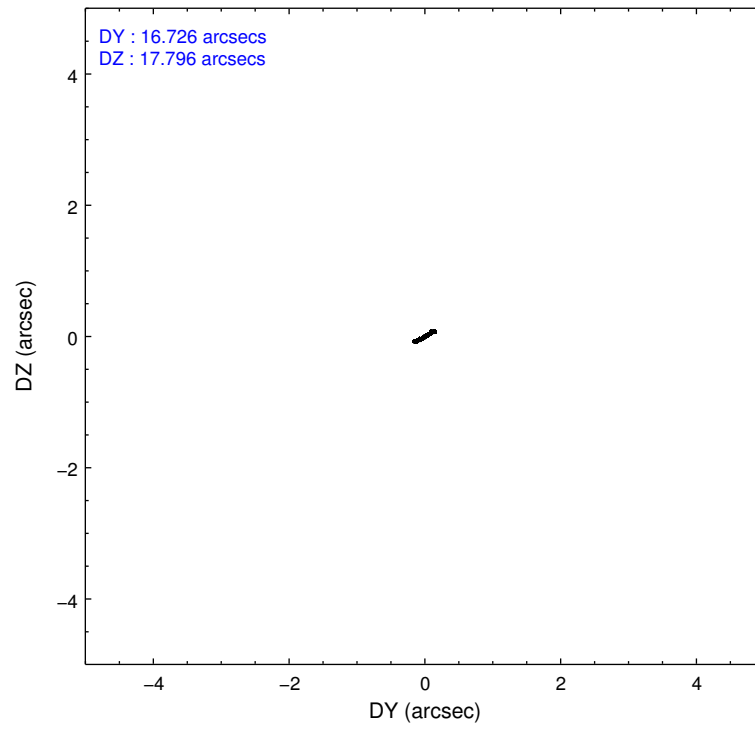
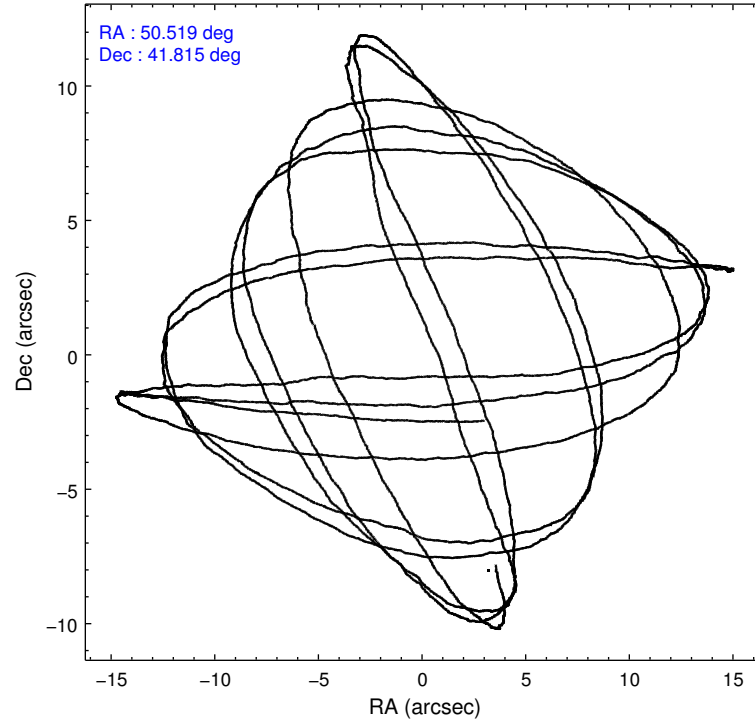
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	27586	27214	28678	28574	27948
rejected events	22414	21940	24023	25058	24165
rejected %	81%	80%	83%	87%	86%

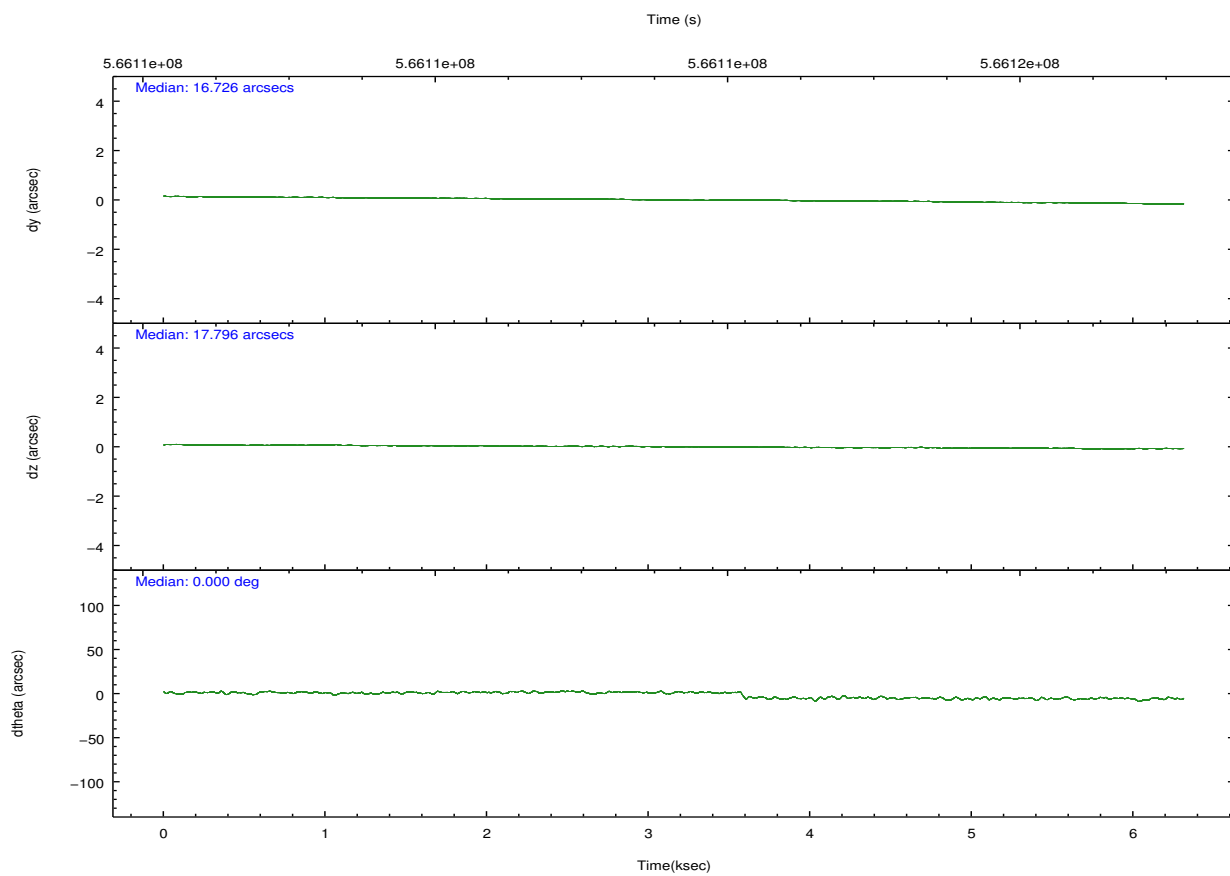
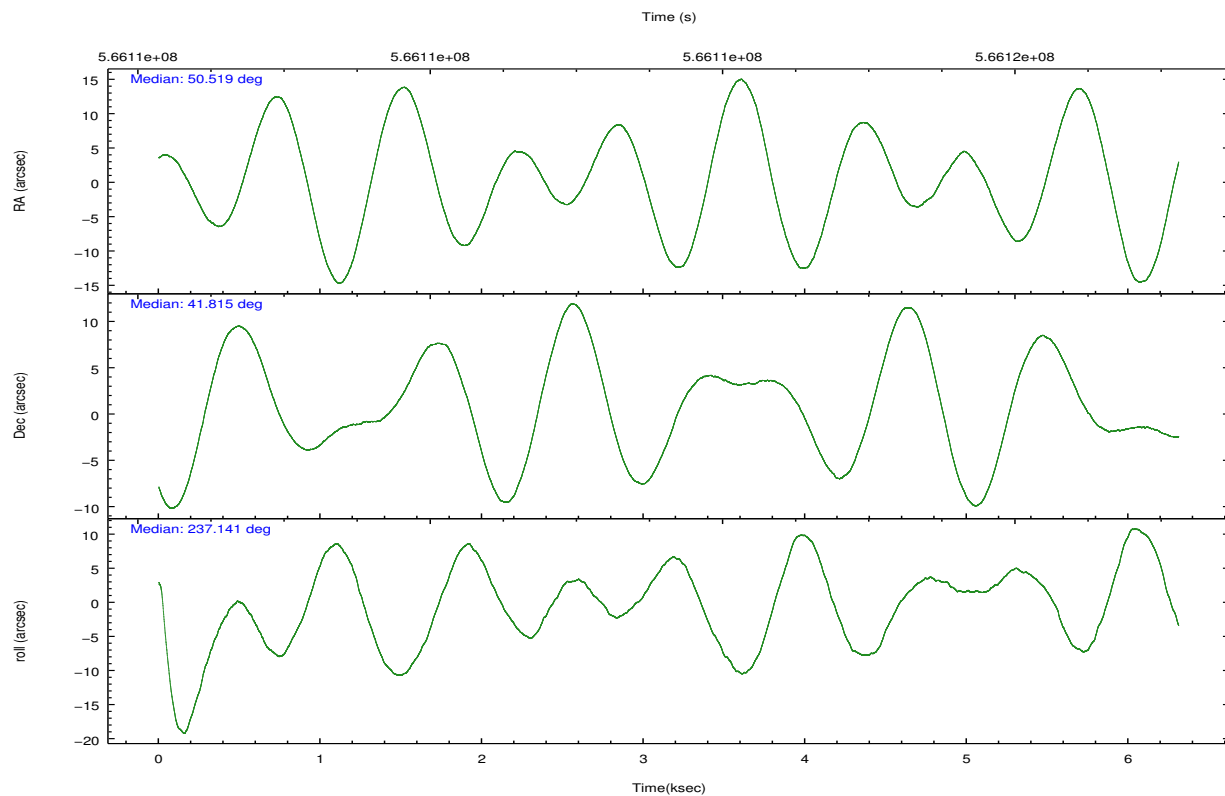
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	2730	2937	2352	1522	1512
	9%	10%	8%	5%	5%
grade 1 events	26	22	14	26	14
	0%	0%	0%	0%	0%
grade 2 events	983	846	875	697	839
	3%	3%	3%	2%	3%
grade 3 events	362	332	377	302	300
	1%	1%	1%	1%	1%
grade 4 events	395	357	387	338	312
	1%	1%	1%	1%	1%
grade 5 events	1218	1297	1072	1449	1330
	4%	4%	3%	5%	4%
grade 6 events	708	807	669	660	826
	2%	2%	2%	2%	2%
grade 7 events	21164	20616	22932	23580	22815
	76%	75%	79%	82%	81%

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	50.520946	50.51918630248169	CCD I2 on	Y	Y
[deg] Pointing Dec	41.842516	41.81486092408085	CCD I3 on	Y	Y
[deg] Pointing Roll	236.935883	237.1457524094192	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)	566111779.184000	566110275.70803	CCD S5 on	N	N
Observation start date	2015-12-10T05:15:11	2015-12-10T04:51:15	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	566116779.184000	566117965.77096	On-chip summing requested	N	N
Observation end date	2015-12-10T06:38:31	2015-12-10T06:59:25	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



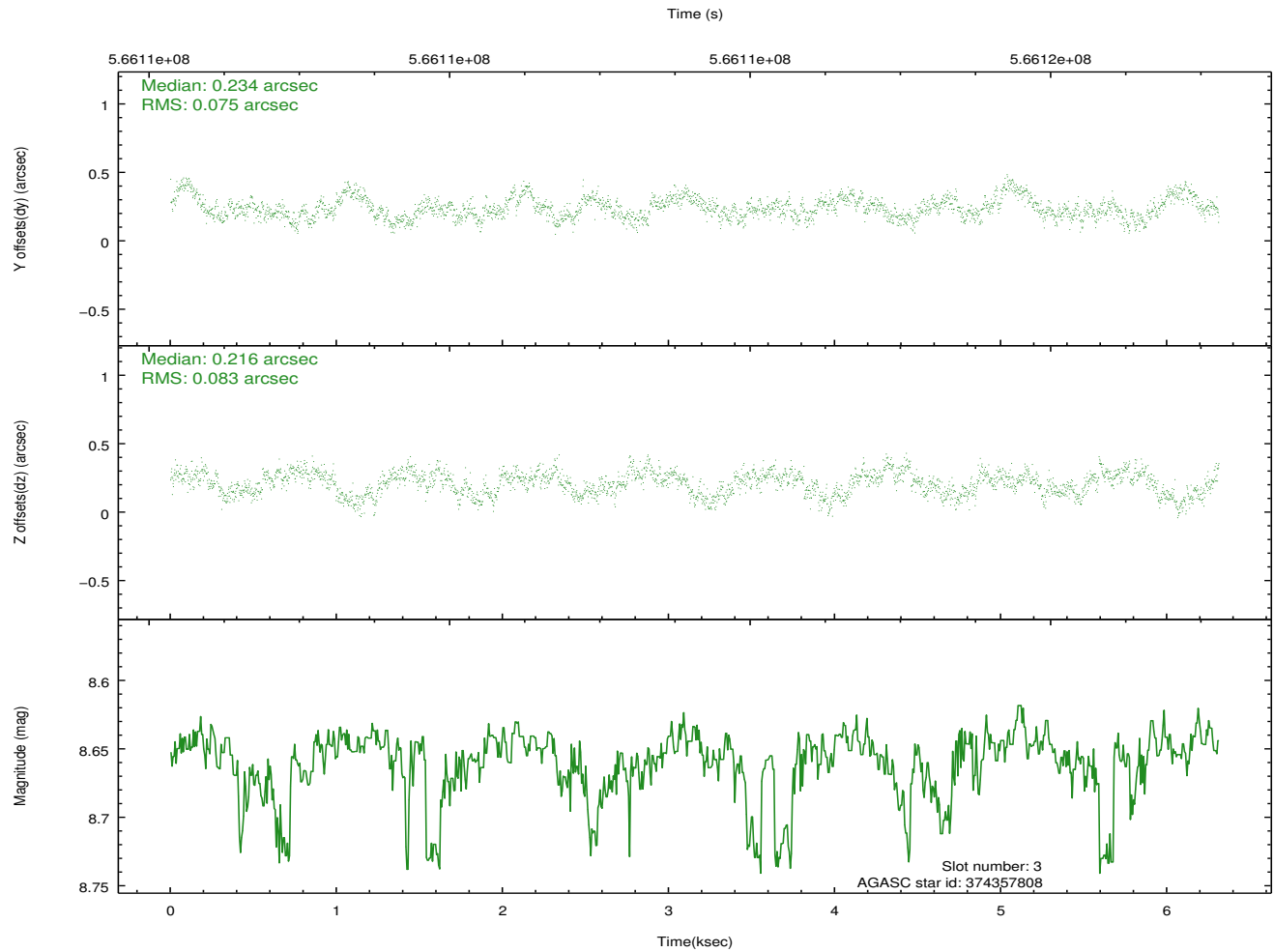
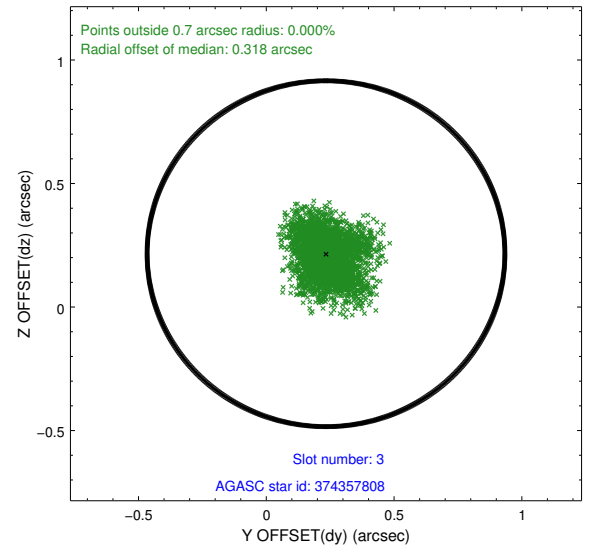
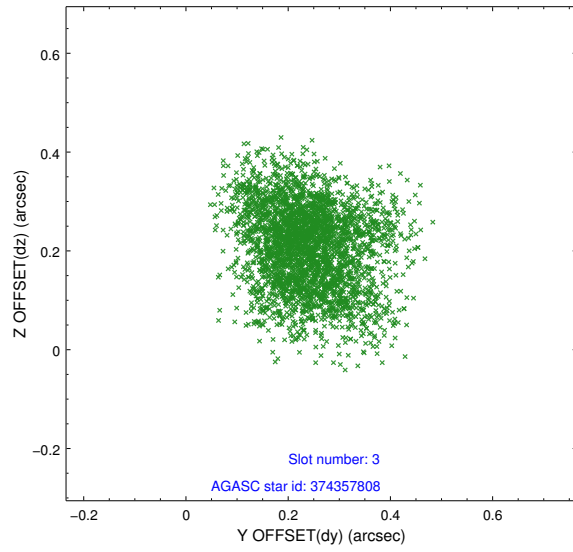


Slot Statistics

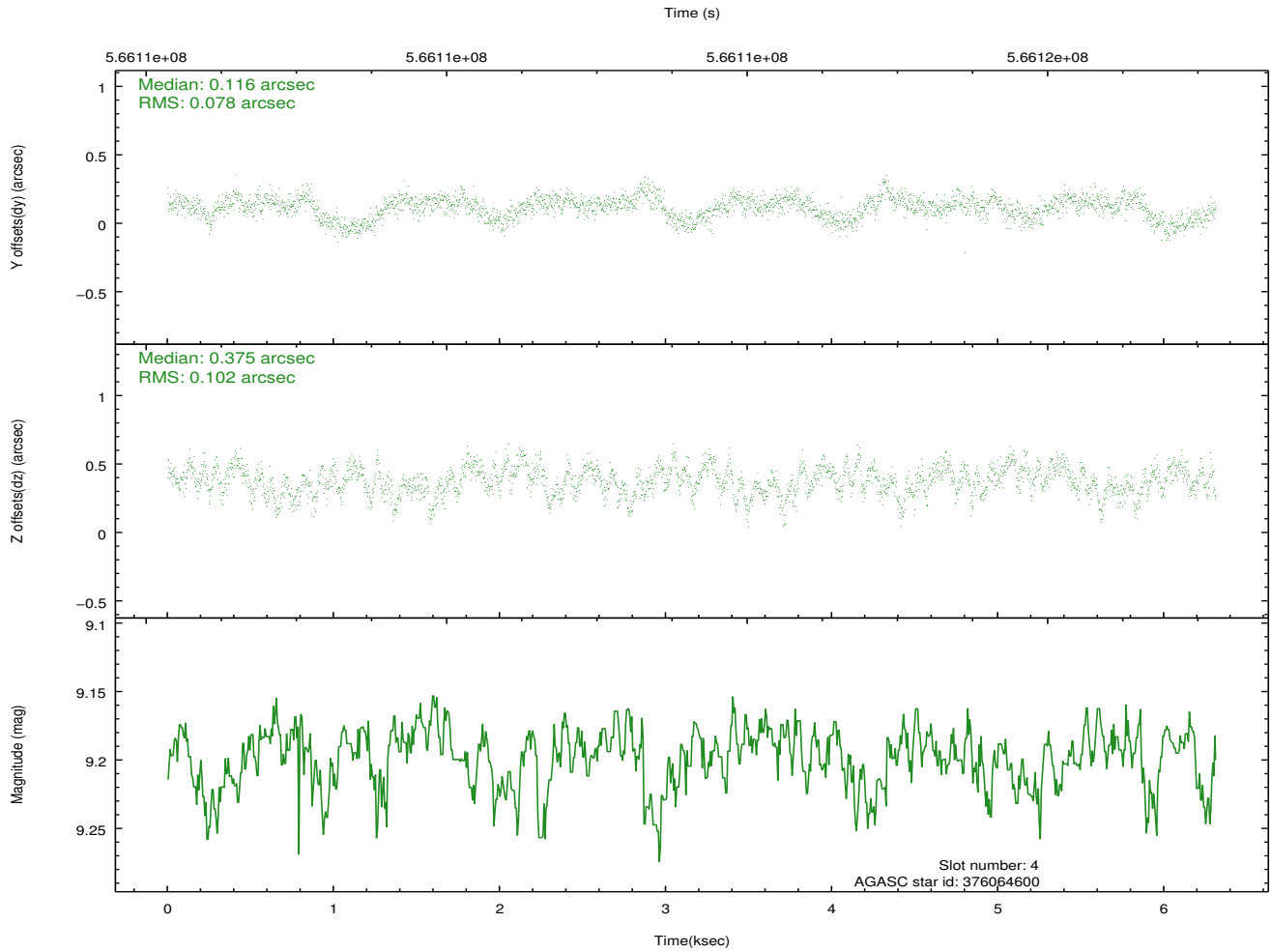
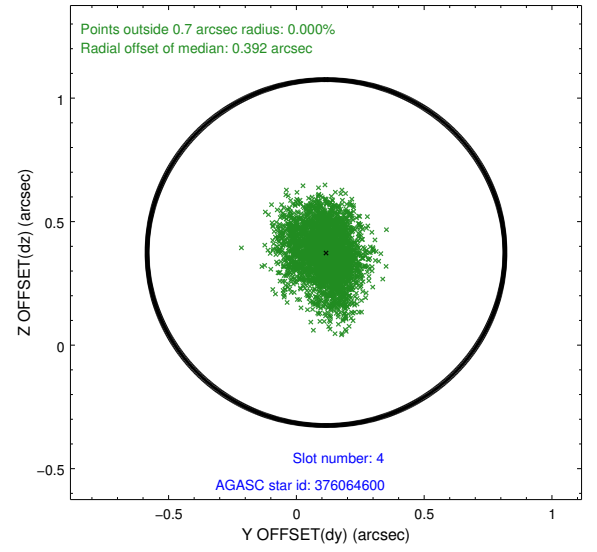
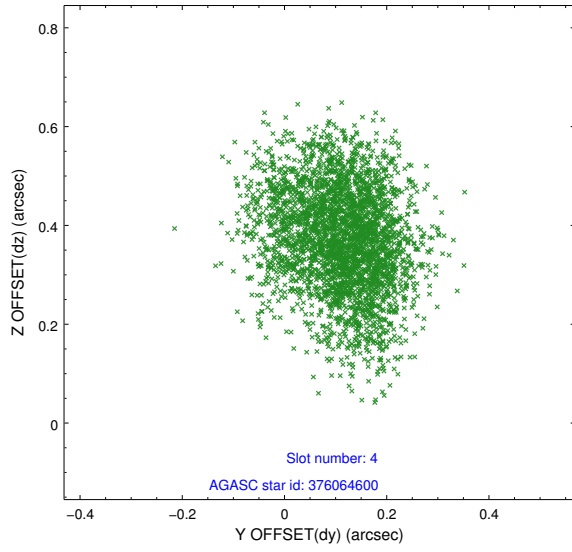
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.26	1540	-0.063	0.015	0.034	0.049	0.000000	0.000000	922.60	-841.49
1	FID		ACIS-I-2	7.16	1540	-0.272	-0.150	0.011	0.017	0.000000	0.000000	-771.19	-848.50
2	FID		ACIS-I-4	7.20	1540	0.238	0.205	0.025	0.035	0.000000	0.000000	2142.41	1058.02
3	GUIDE	used	374357808	8.66	3077	0.234	0.216	0.121	0.195	49.921429	42.176083	-137.99	-1998.04
4	GUIDE	used	376064600	9.20	3080	0.116	0.375	0.137	0.220	50.213209	42.582691	-1788.93	-2138.36
5	GUIDE	used	376070040	8.40	3080	0.031	0.039	0.085	0.142	50.072031	41.897206	488.42	-1117.49
6	GUIDE	used	375534552	8.18	3079	-0.255	-0.334	0.084	0.137	50.877490	41.206927	1389.20	2056.52
7	GUIDE	used	375534824	9.07	3078	-0.131	-0.288	0.107	0.173	50.943864	41.119832	1552.52	2379.76

2.4 Star Slots

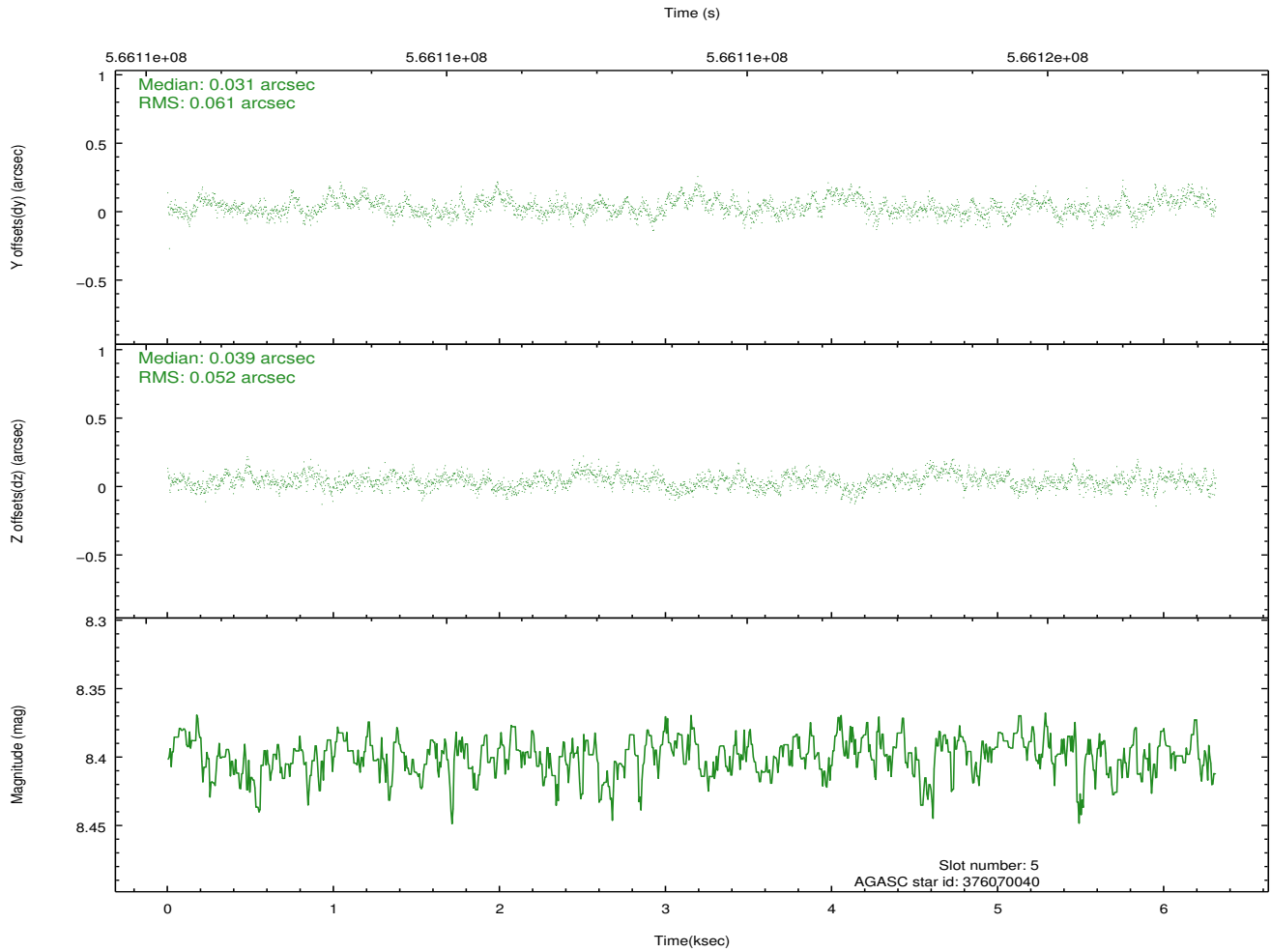
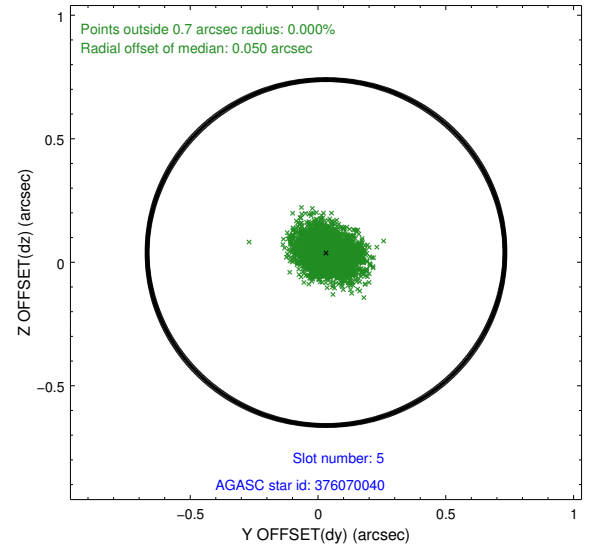
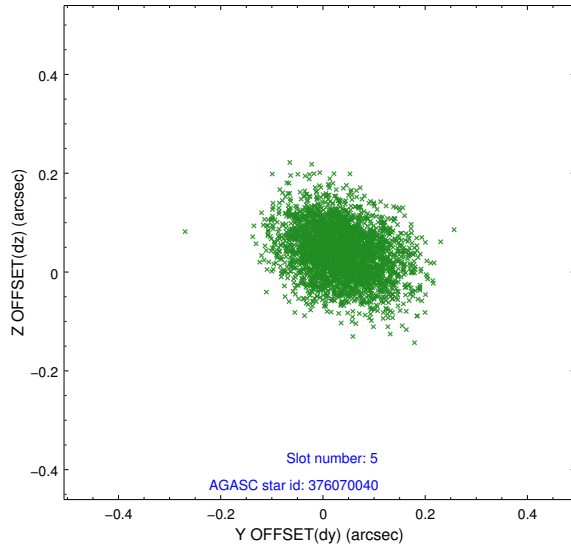
2.4.1 Slot 3



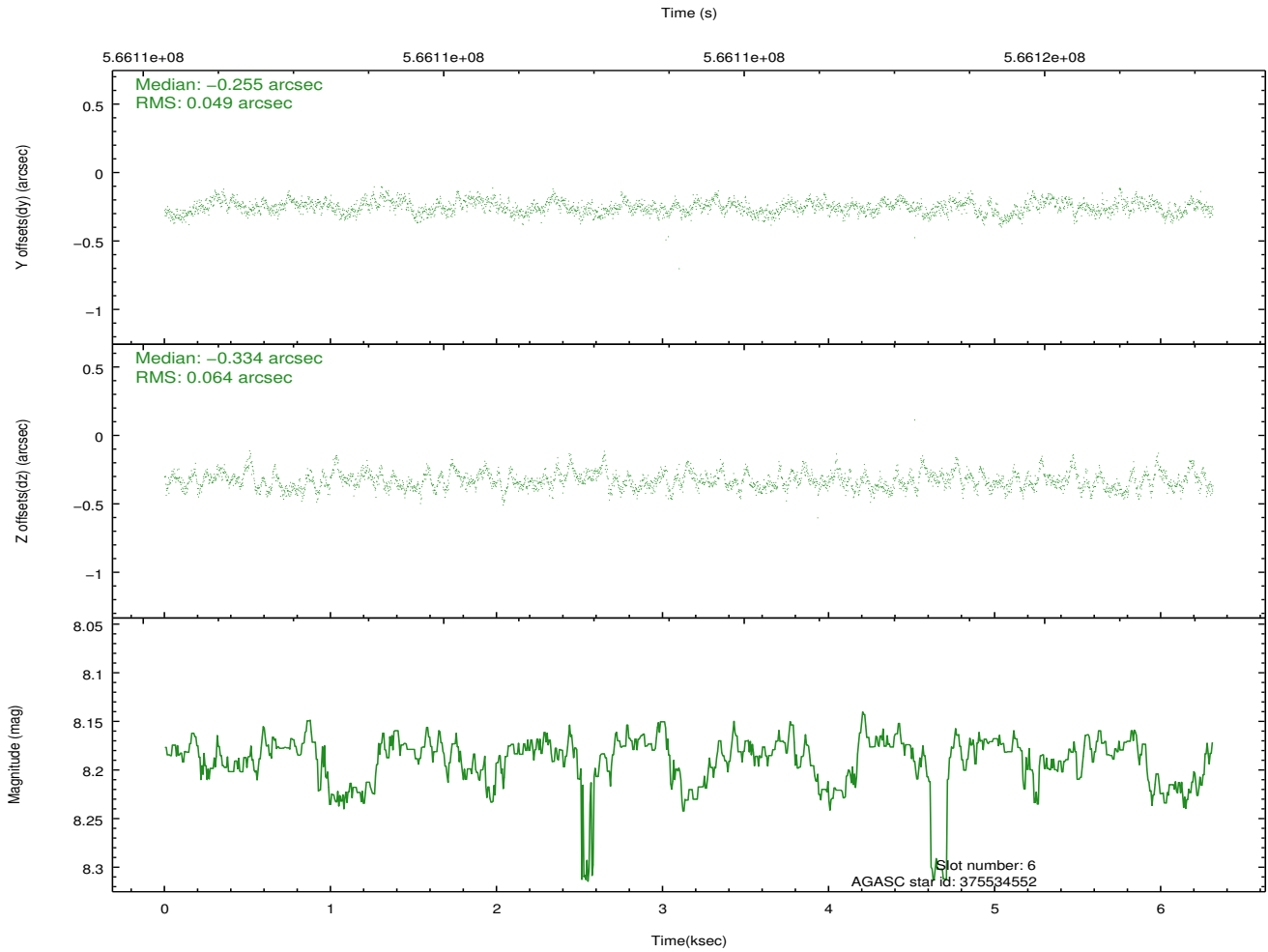
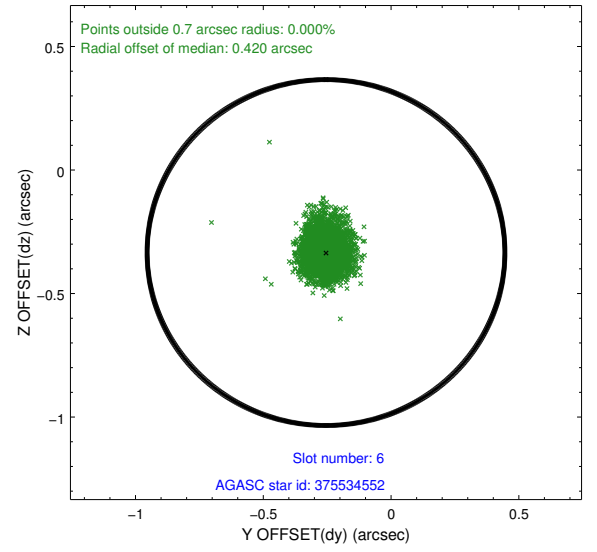
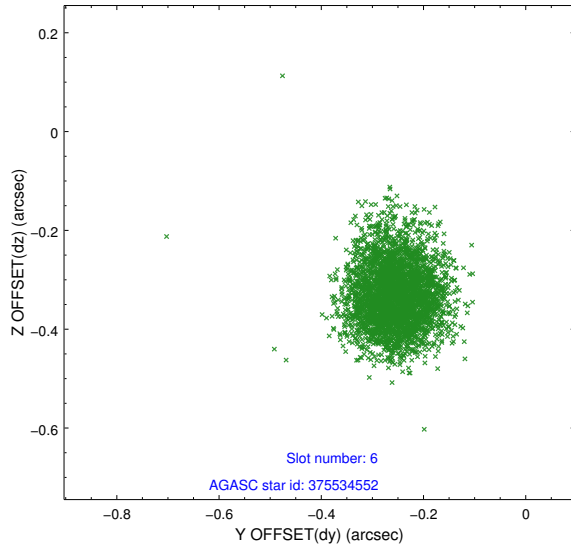
2.4.2 Slot 4



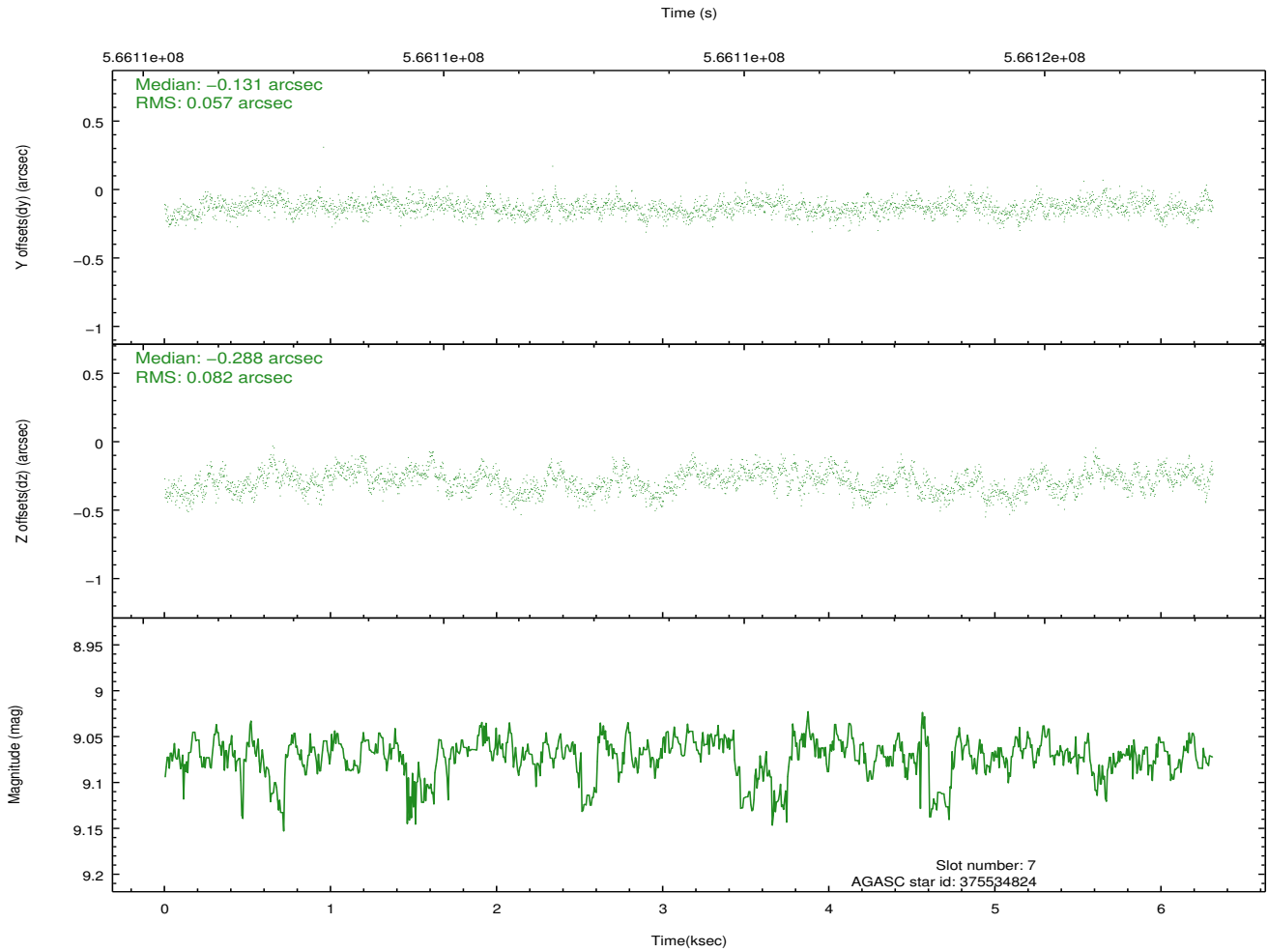
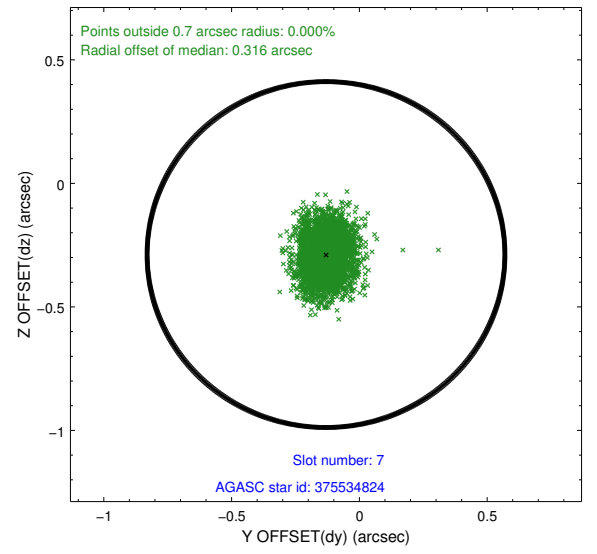
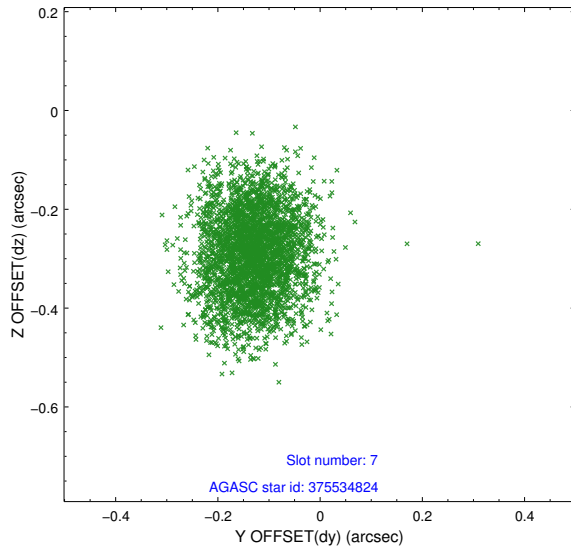
2.4.3 Slot 5



2.4.4 Slot 6

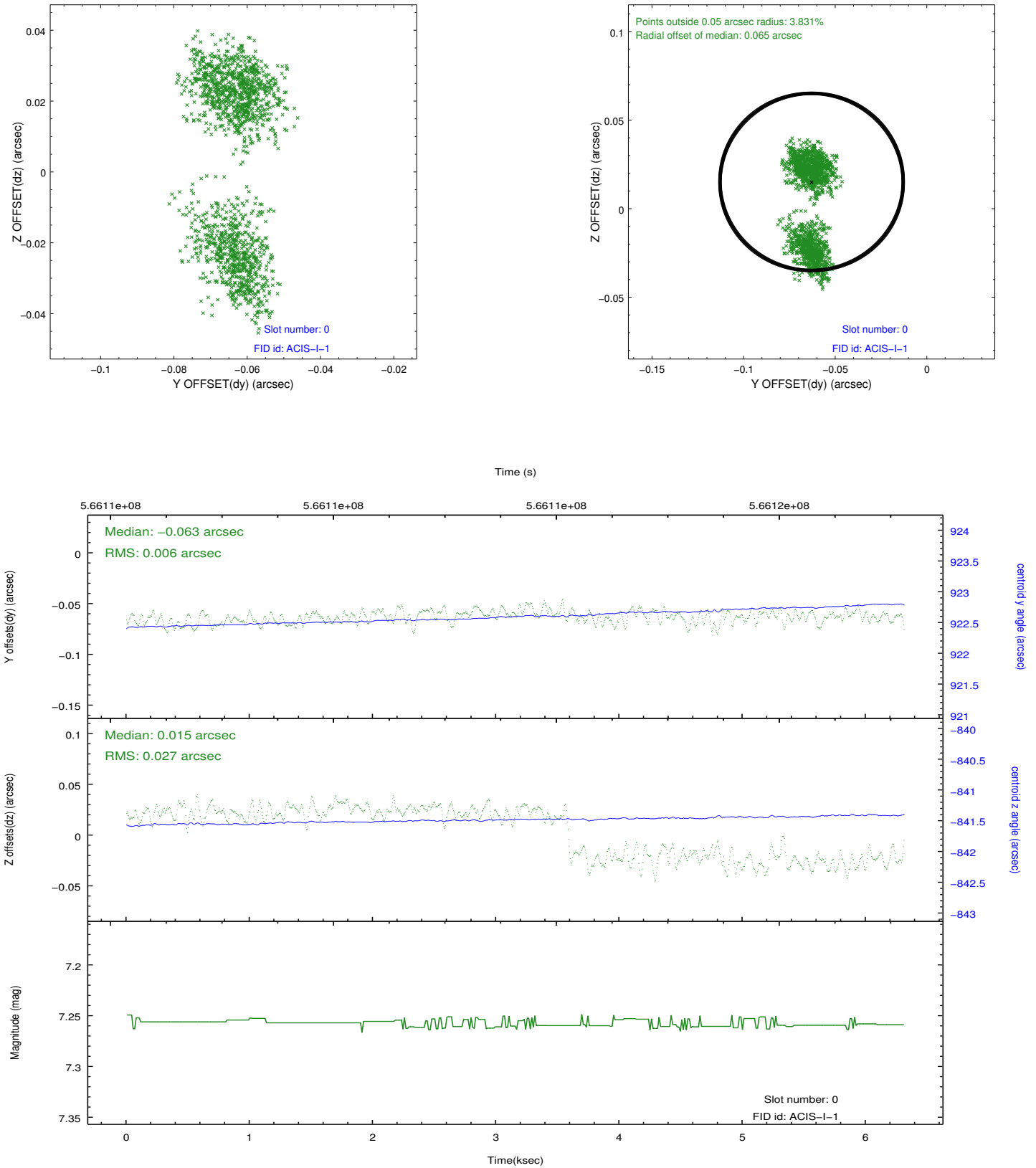


2.4.5 Slot 7

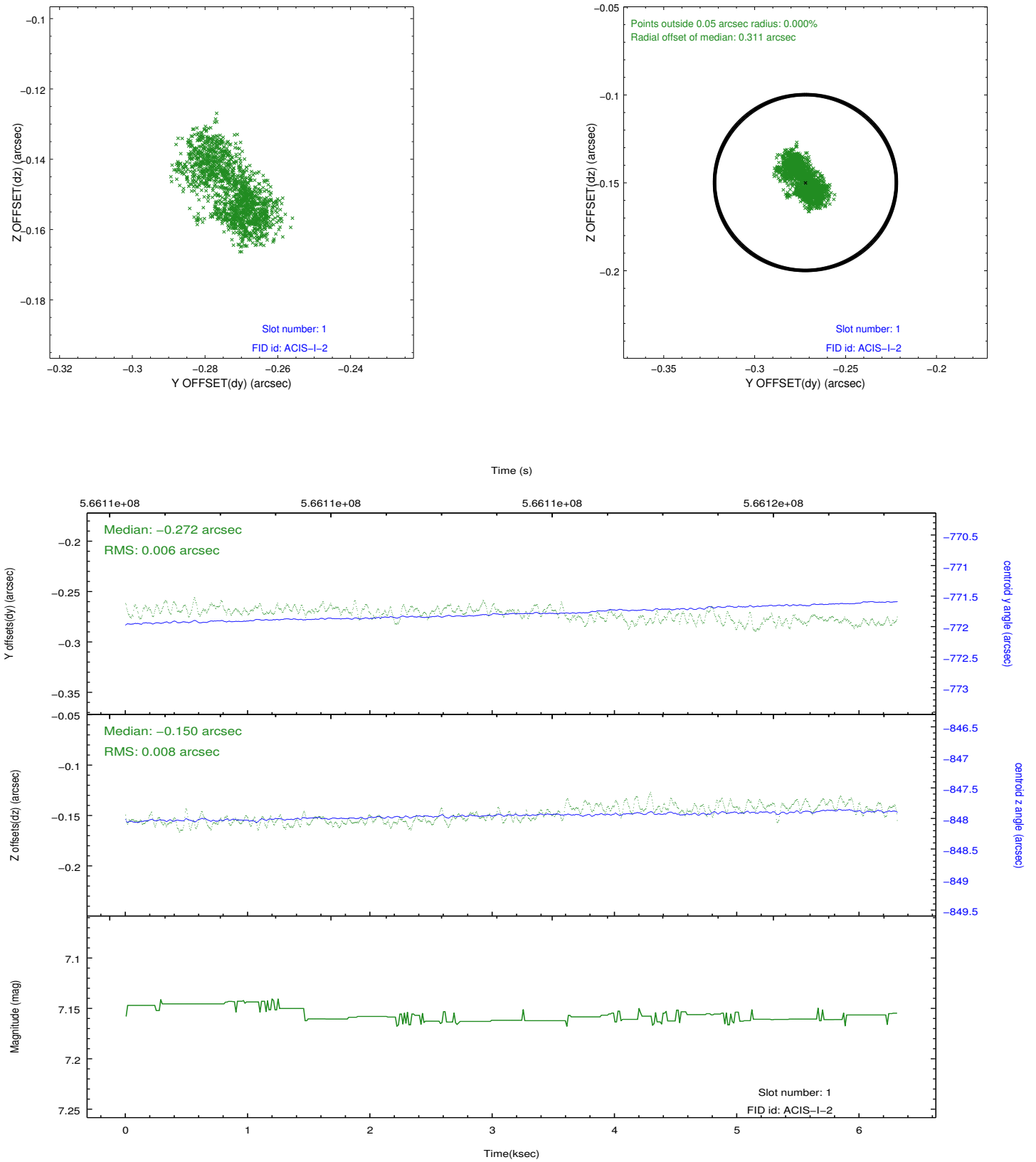


2.5 FID Slots

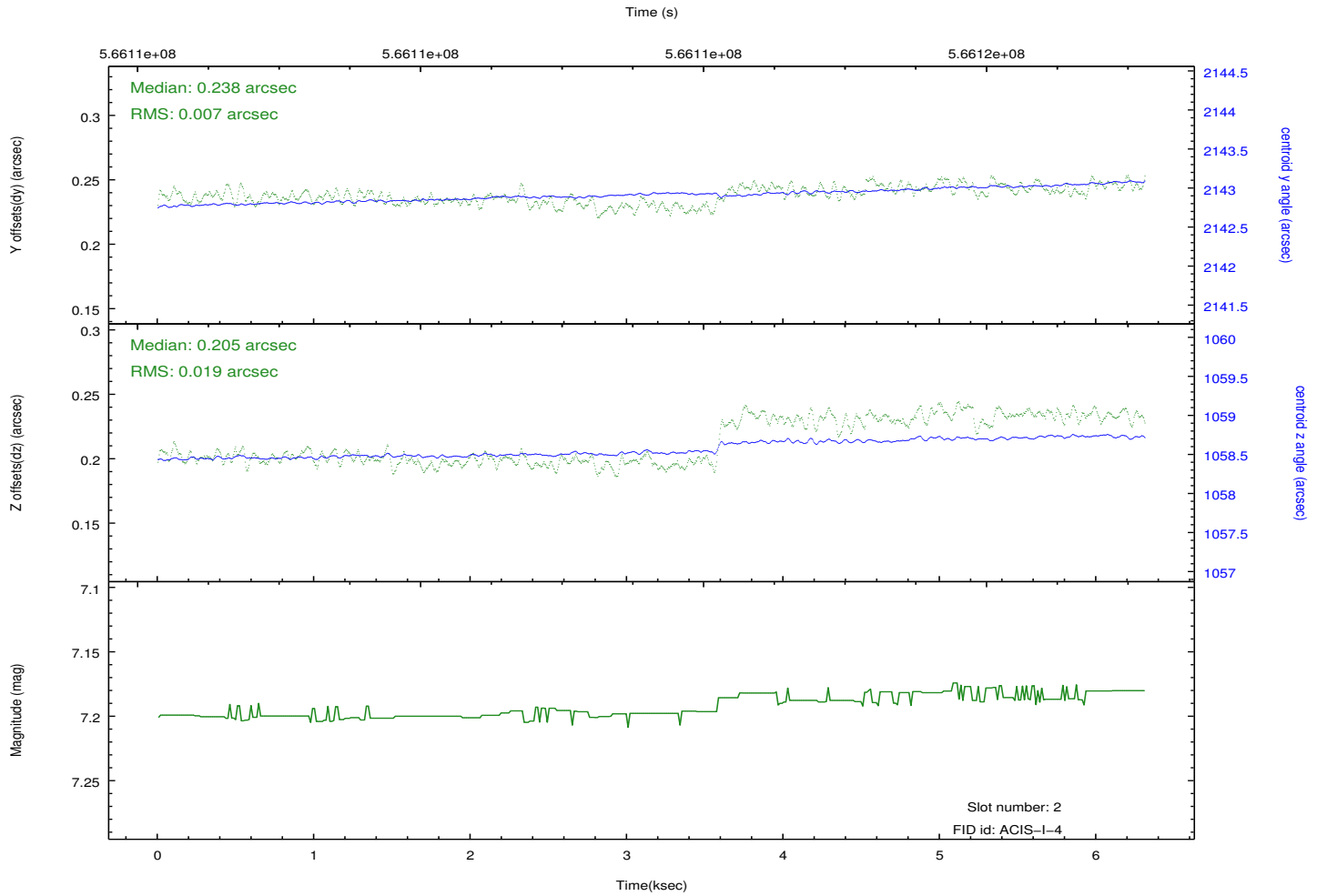
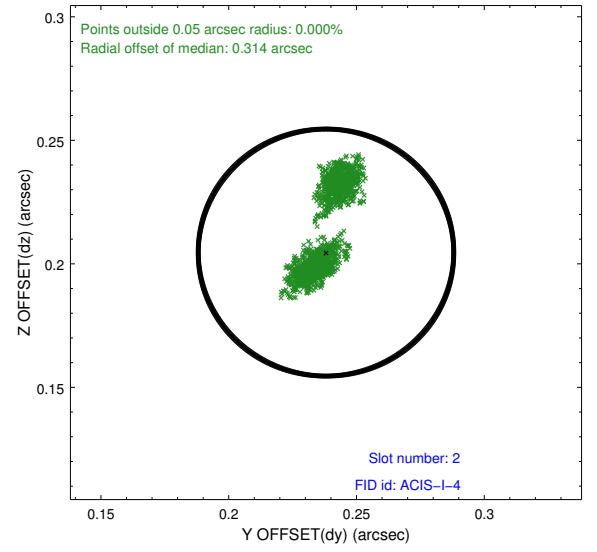
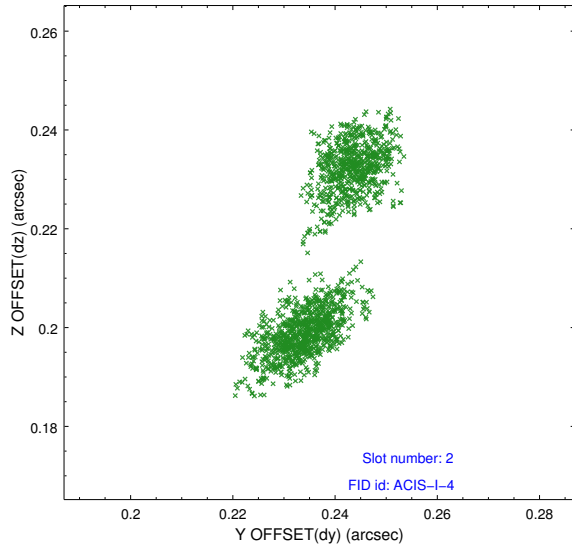
2.5.1 Slot 0



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)	2015.12.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.0648490599394

A.2 Comments