

V&V Reference Report

L2 ASCDS Version : 10.4.2.1

Observation 17260 - L2 Version 1
Chandra X-Ray Center

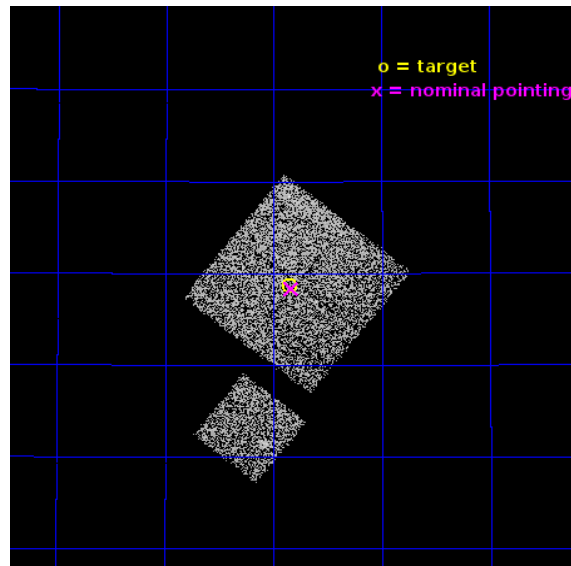
L2 Processing Date : Dec 1 2015

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1 Front

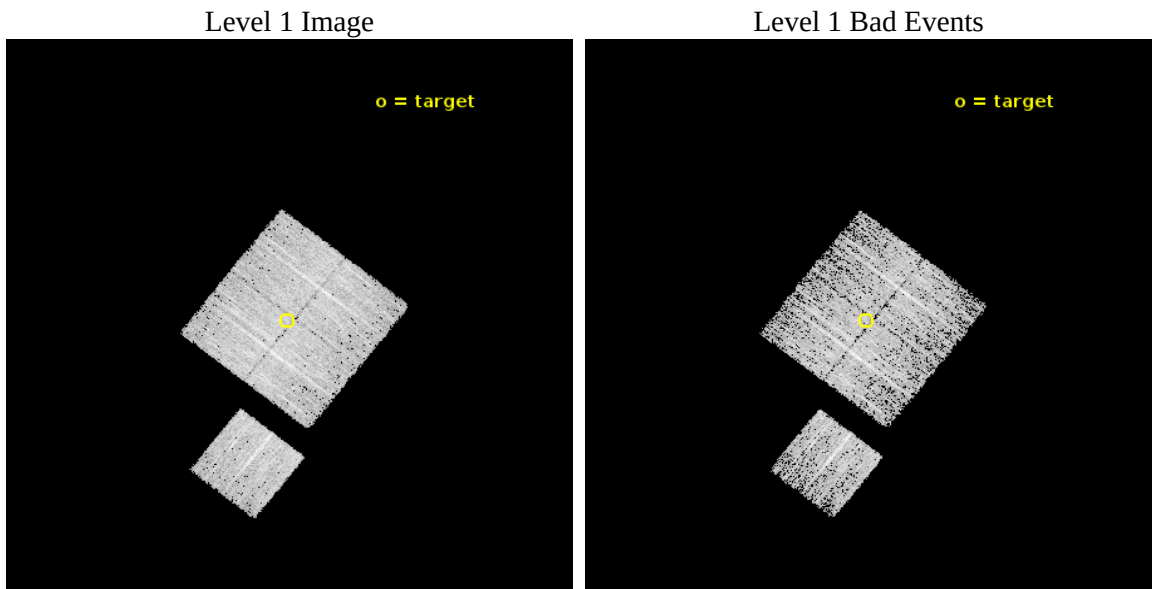
seq_num	801505	Sequence number
obs_id	17260	Observation id
title	Perseus: A New, Low-Redshift Anchor for Cluster Cosmology	Proposal
observer	Prof. Steven Allen	Principal investigator
object	Perseus cluster	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	49.71306	Observer's specified target RA [deg]
dec_targ	40.977736	Observer's specified target Dec [deg]
ra_nom	49.708902129258	Nominal RA [deg]
dec_nom	40.972174561962	Nominal Dec [deg]
roll_nom	218.21142047802	Nominal Roll [deg]
revision	1	Processing version of data
ontime	5070.2697384357	Sum of GTIs [s]
livetime	5004.0229316248	Livetime [s]
ontime0	5070.1466184855	Sum of GTIs [s]
ontime1	5070.1876584291	Sum of GTIs [s]
ontime2	5070.2286984921	Sum of GTIs [s]
ontime3	5070.2697384357	Sum of GTIs [s]
ontime6	5070.1055784225	Sum of GTIs [s]
l2events	18276	Number of level 2 events



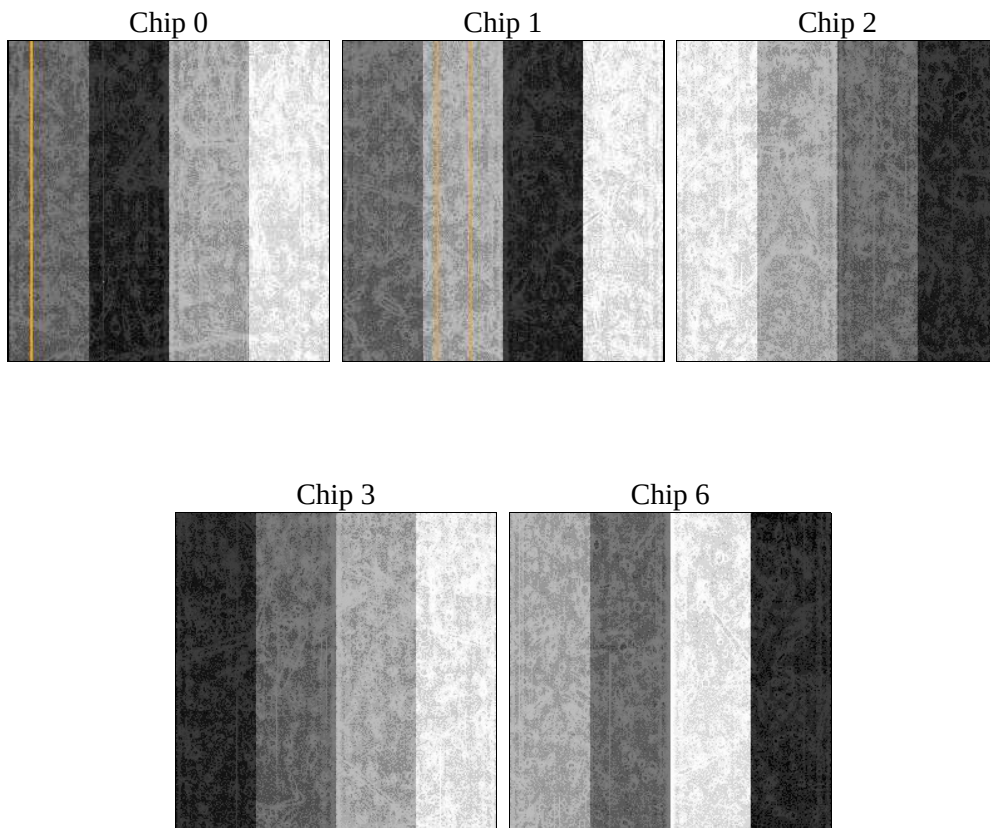
2 OBI

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	5070.2697384357	Sum of GTIs [s]
caldsver	4.6.10a	 	ontime0	5070.1466184855	Sum of GTIs [s]
date	2015-12-01T20:20:35	Date and time of file creation	ontime1	5070.1876584291	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	5070.2286984921	Sum of GTIs [s]
			ontime3	5070.2697384357	Sum of GTIs [s]
			ontime6	5070.1055784225	Sum of GTIs [s]
			l1events	146490	Number of level 1 events

2.1.4 Events

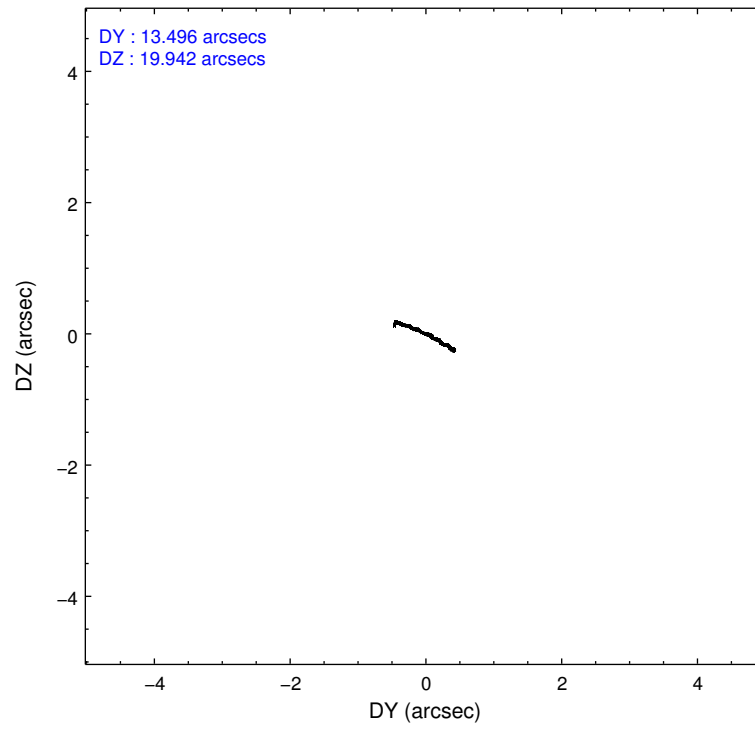
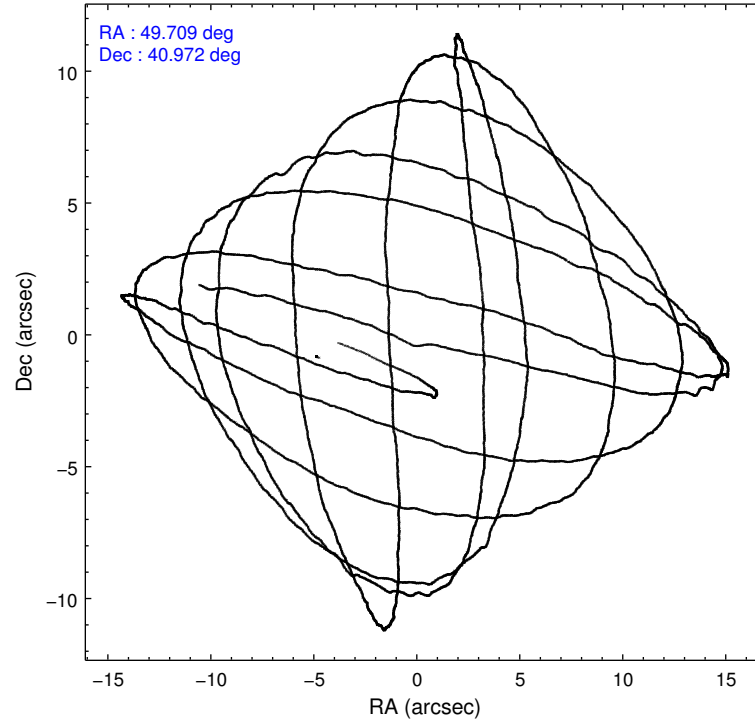
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	27770	28738	30385	30279	29318
rejected events	23696	23377	26523	26157	25624
rejected %	85%	81%	87%	86%	87%

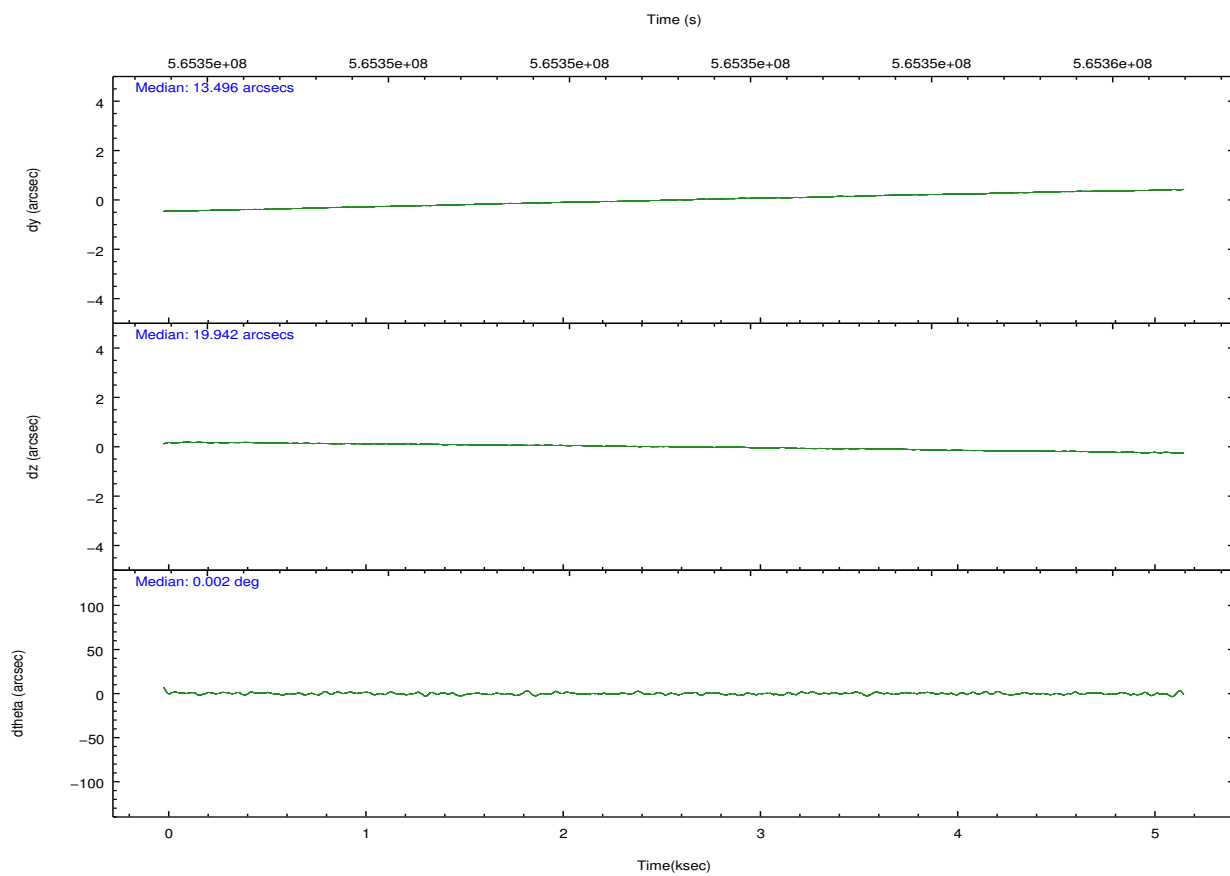
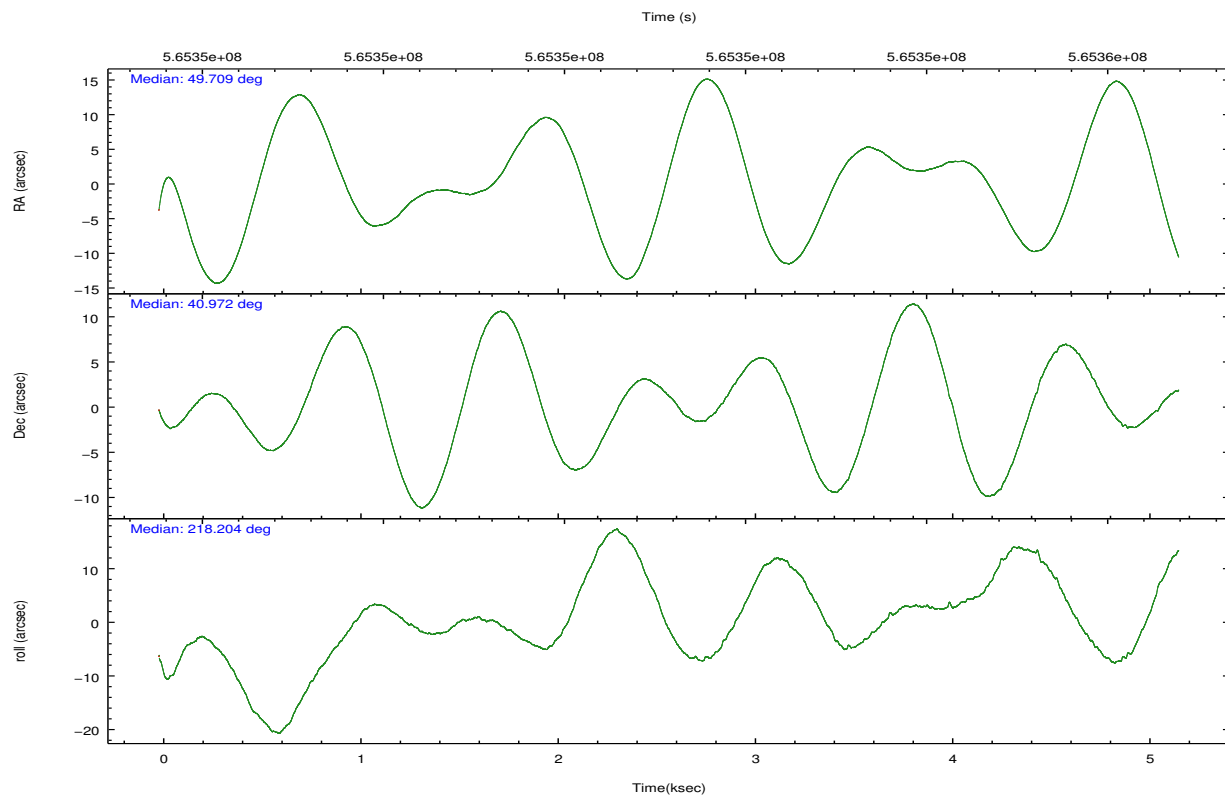
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	1795	2547	1609	1905	1313
	6%	8%	5%	6%	4%
grade 1 events	23	20	15	18	15
	0%	0%	0%	0%	0%
grade 2 events	888	1110	927	807	839
	3%	3%	3%	2%	2%
grade 3 events	352	392	365	364	380
	1%	1%	1%	1%	1%
grade 4 events	350	423	315	343	355
	1%	1%	1%	1%	1%
grade 5 events	1250	1446	1173	1500	1471
	4%	5%	3%	4%	5%
grade 6 events	695	894	650	709	811
	2%	3%	2%	2%	2%
grade 7 events	22417	21906	25331	24633	24134
	80%	76%	83%	81%	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	49.722369	49.70890212925751	CCD I2 on	Y	Y
[deg] Pointing Dec	40.997864	40.97217456196169	CCD I3 on	Y	Y
[deg] Pointing Roll	217.993900	218.211420478025	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)	565350162.184000	565348861.58992	CCD S5 on	N	N
Observation start date	2015-12-01T09:41:34	2015-12-01T09:21:01	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	565355162.184000	565355349.84029	On-chip summing requested	N	N
Observation end date	2015-12-01T11:04:54	2015-12-01T11:09:09	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



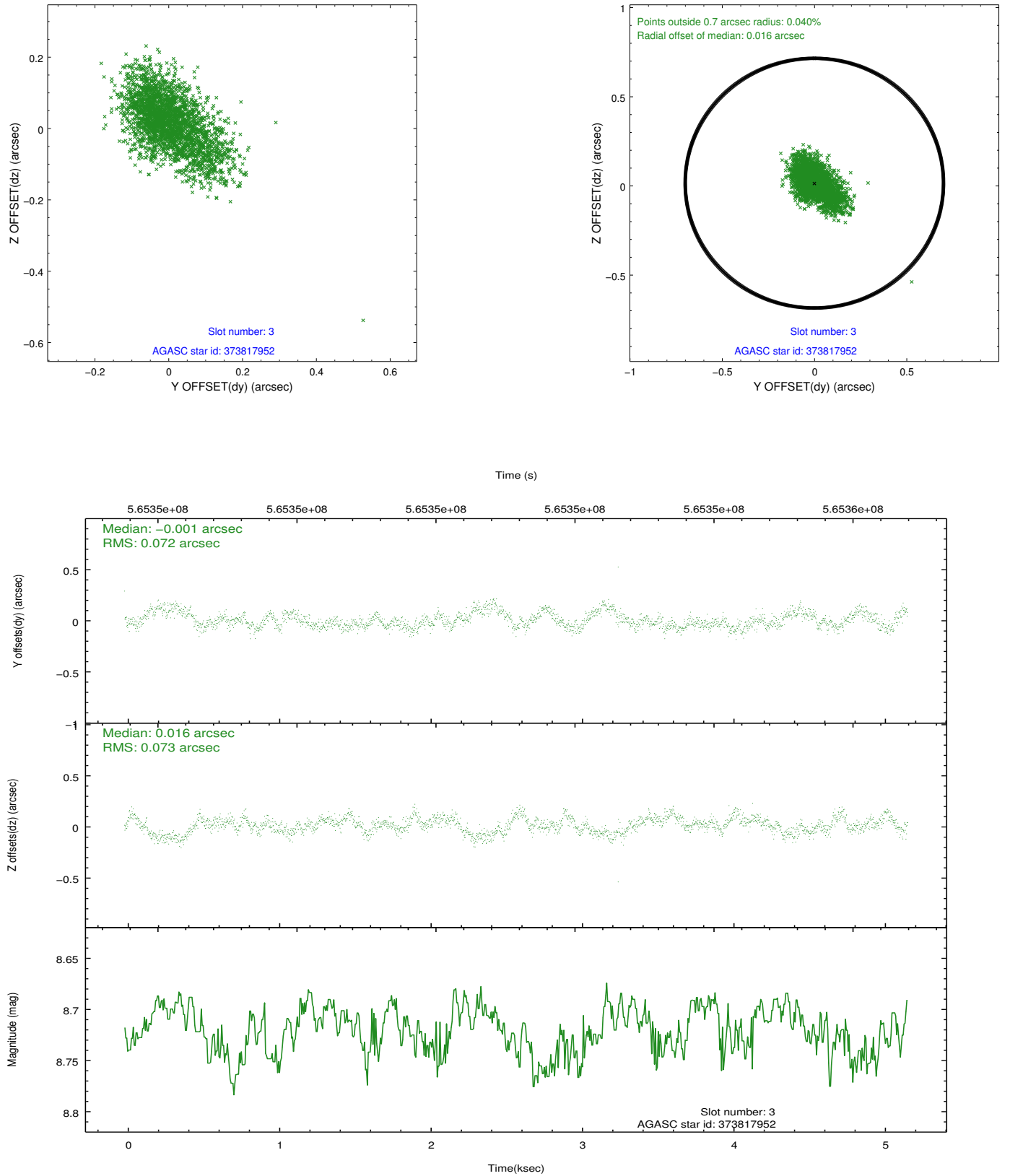


Slot Statistics

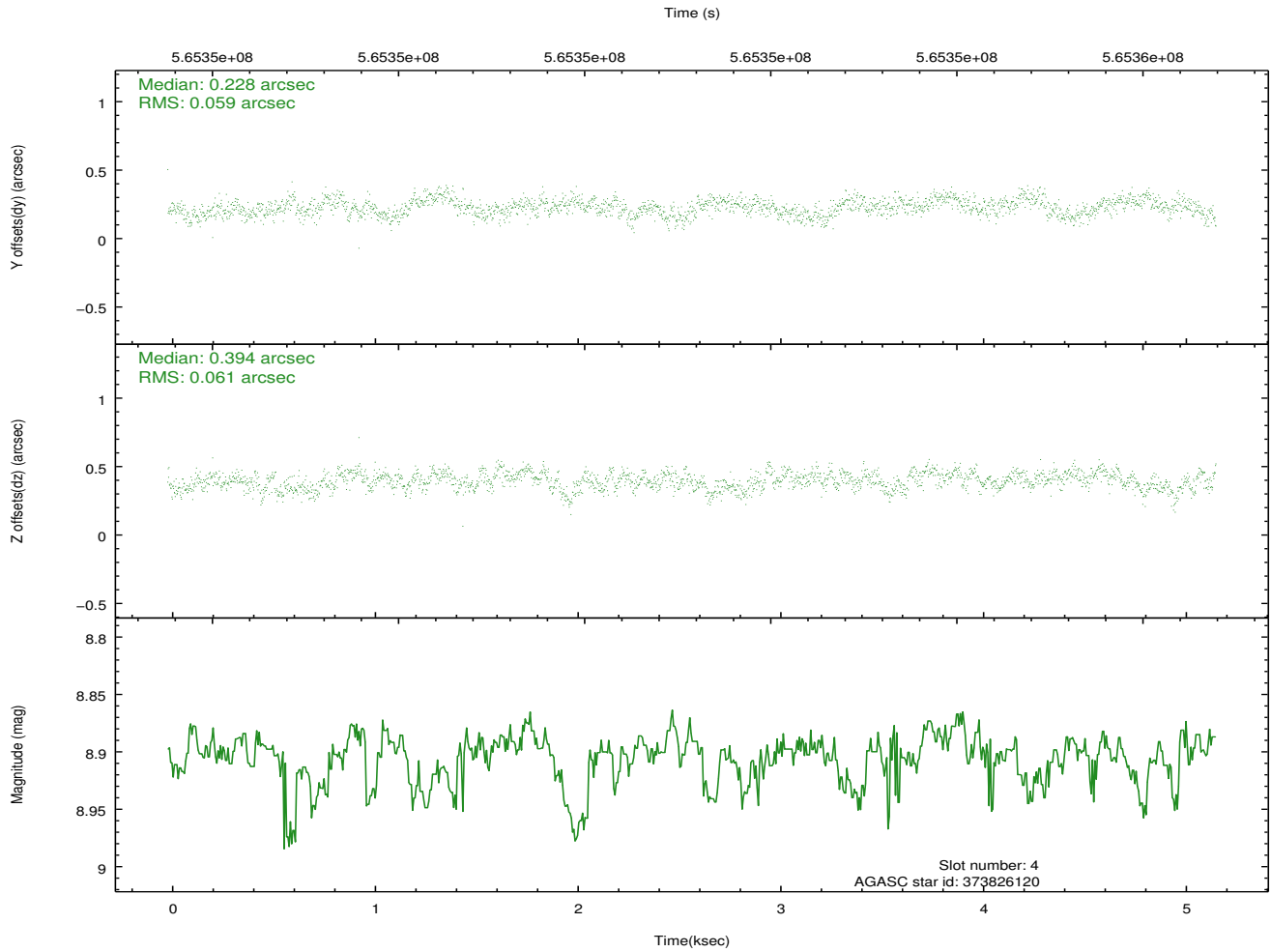
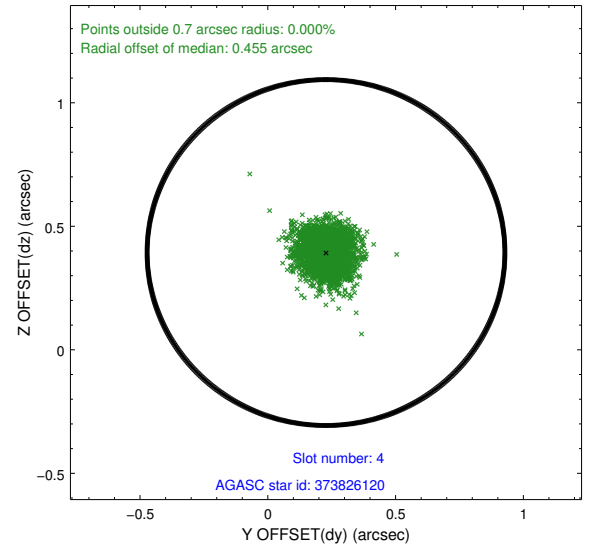
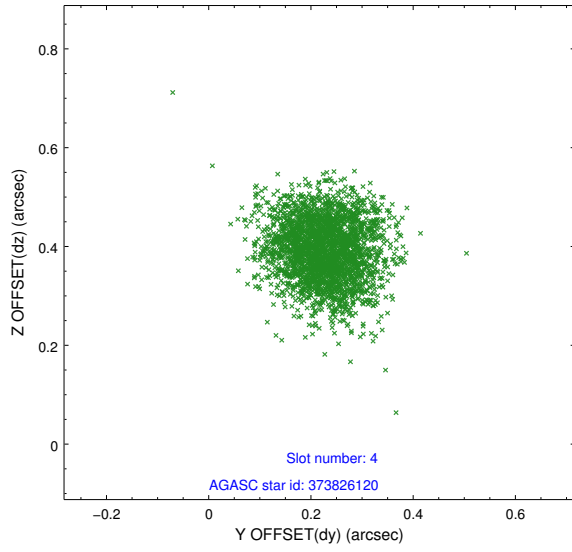
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.24	1262	-0.003	-0.030	0.010	0.017	0.000000	0.000000	925.95	-843.75
1	FID		ACIS-I-2	7.15	1262	-0.288	-0.105	0.008	0.013	0.000000	0.000000	-767.77	-850.75
2	FID		ACIS-I-4	7.19	1262	0.192	0.202	0.009	0.015	0.000000	0.000000	2145.62	1055.61
3	GUIDE	used	373817952	8.72	2521	-0.001	0.016	0.106	0.181	49.913424	40.978510	-366.41	374.33
4	GUIDE	used	373826120	8.90	2522	0.228	0.394	0.090	0.143	49.738165	41.186341	-450.98	-507.88
5	GUIDE	used	373828368	9.46	2521	0.008	-0.214	0.206	0.326	49.507374	40.699462	1123.86	486.51
6	GUIDE	used	373830768	9.71	2516	0.067	-0.013	0.166	0.263	48.797176	41.169770	1587.96	-2041.15
7	GUIDE	used	373831072	9.39	2520	-0.301	-0.162	0.148	0.239	49.776828	40.594328	777.37	1235.63

2.4 Star Slots

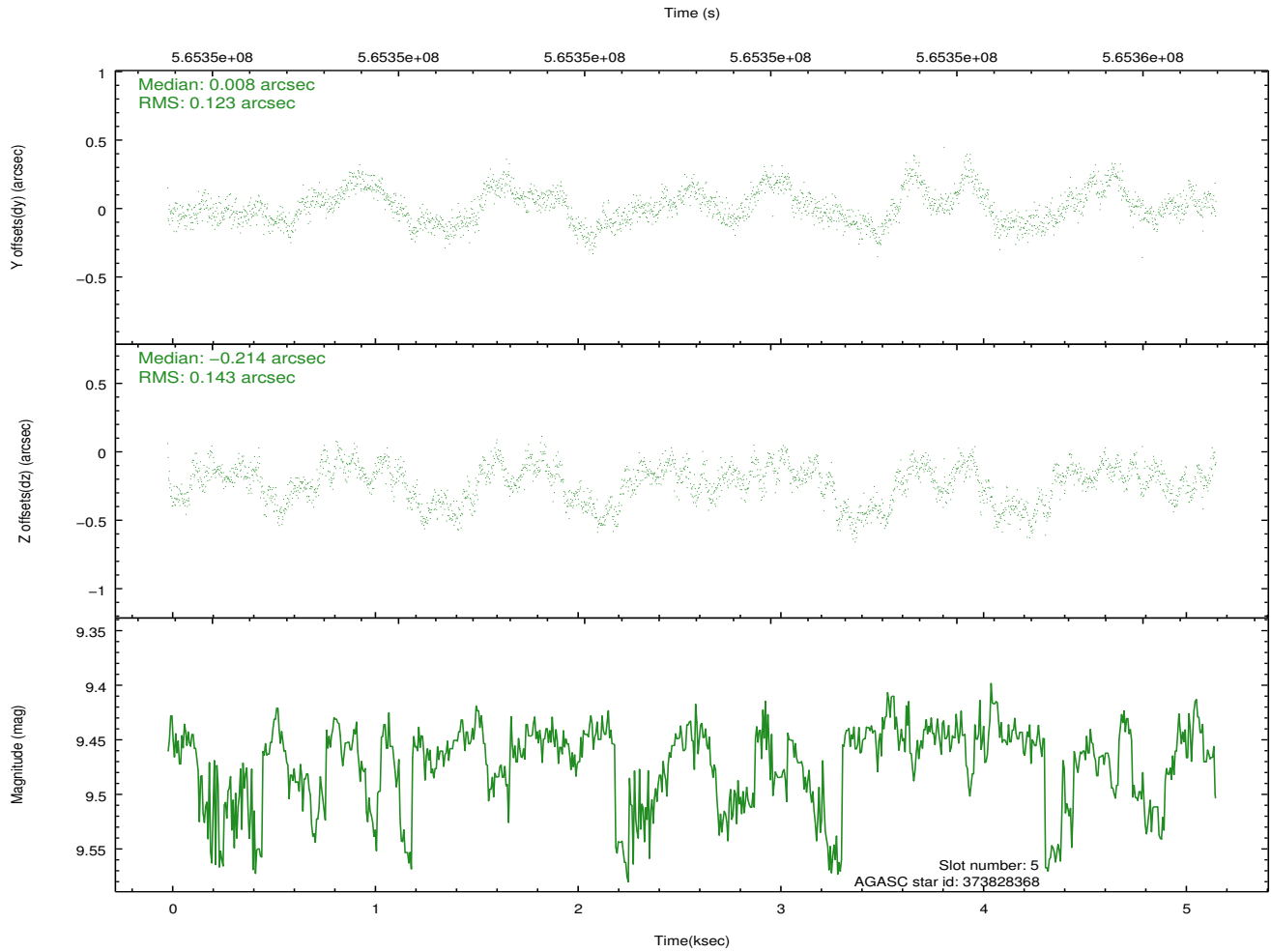
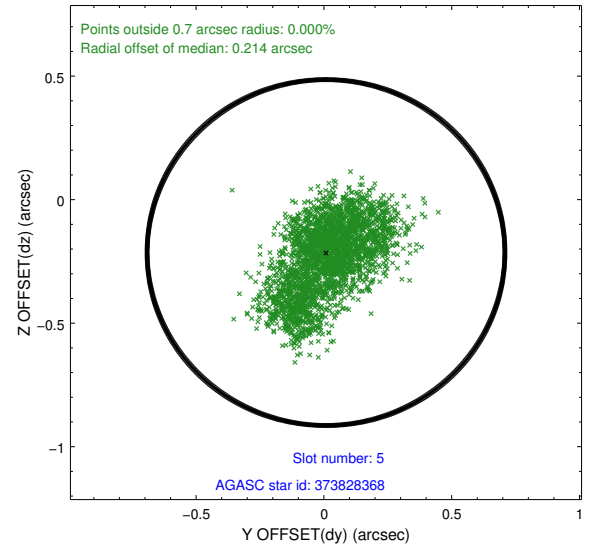
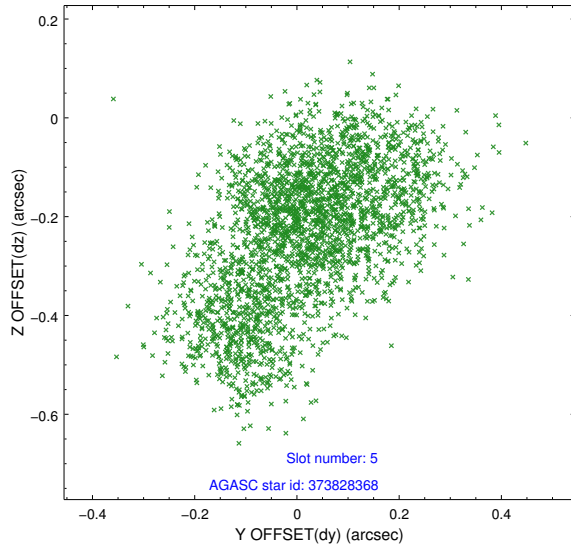
2.4.1 Slot 3



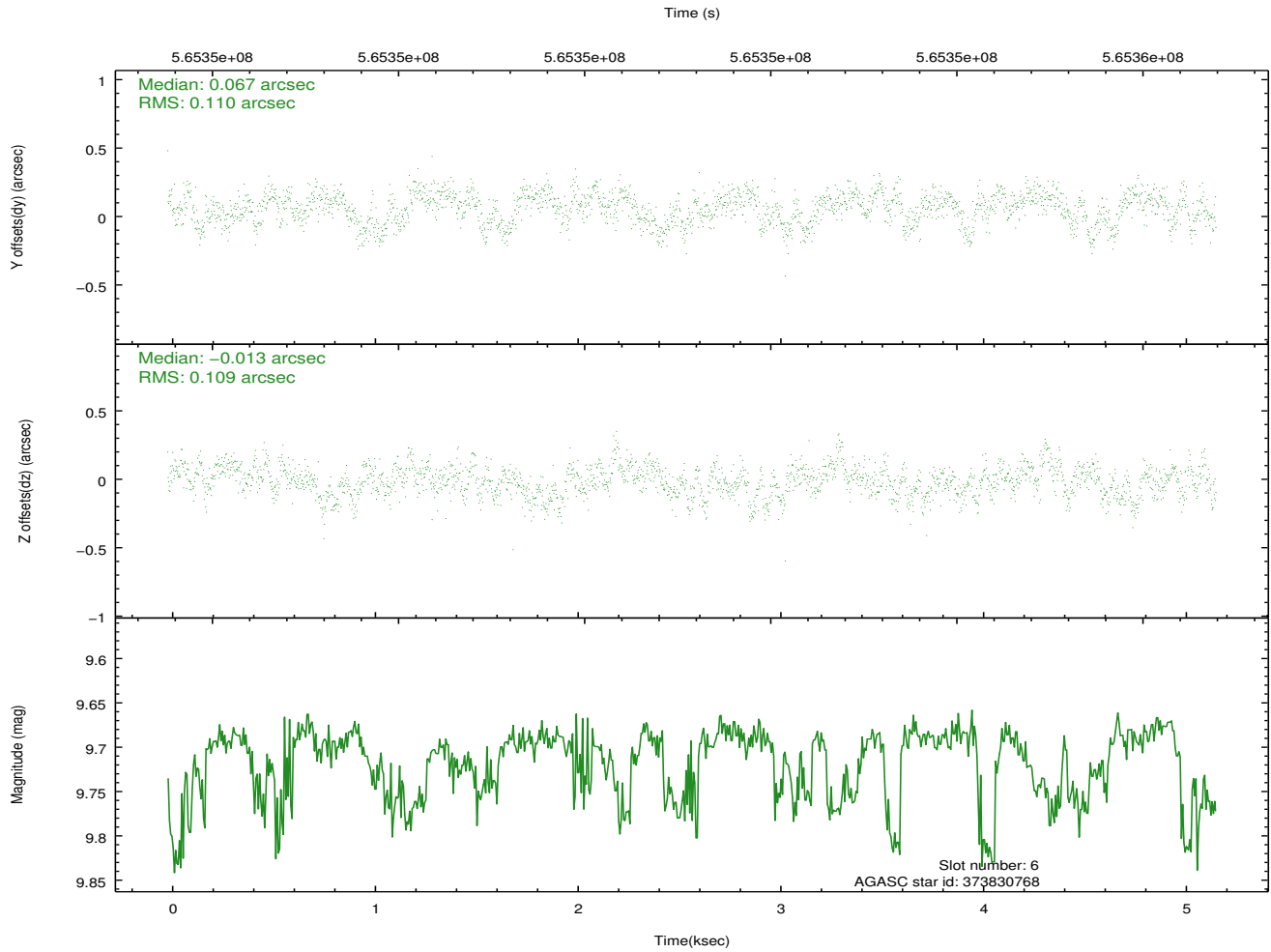
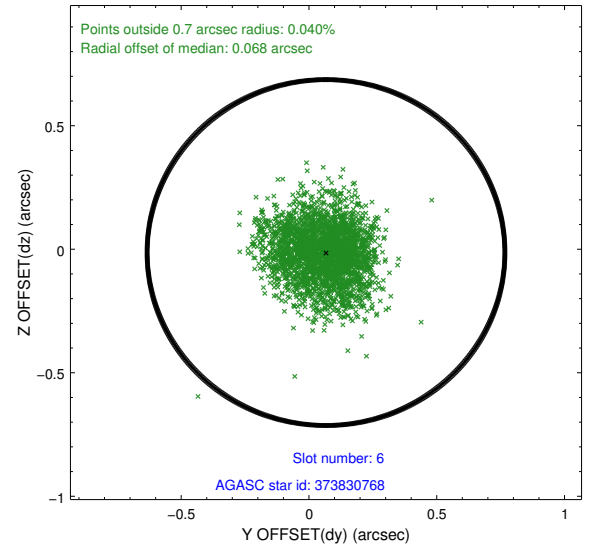
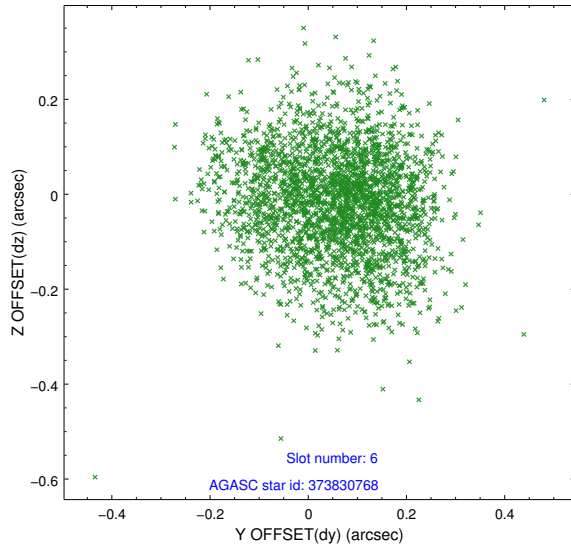
2.4.2 Slot 4



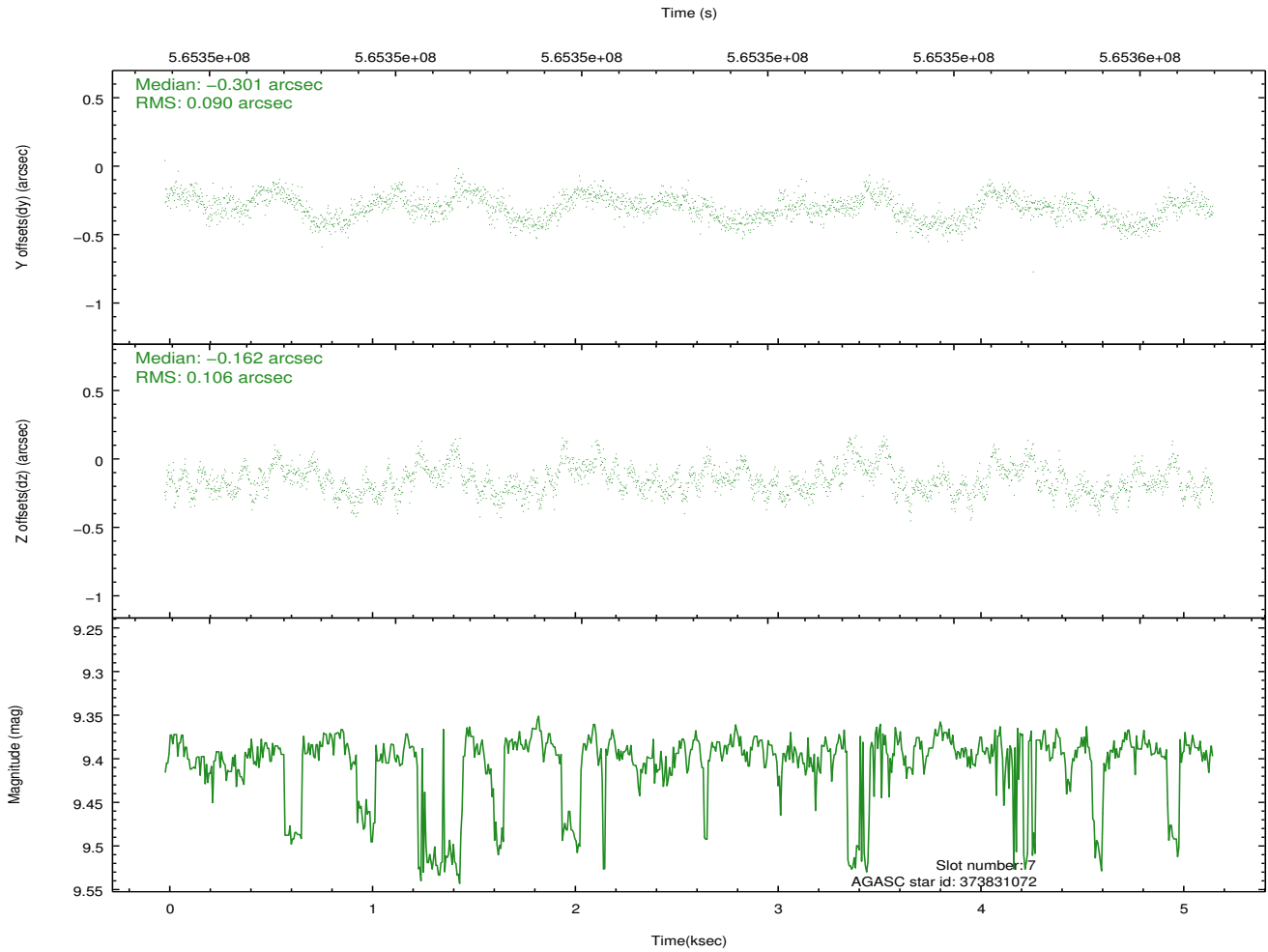
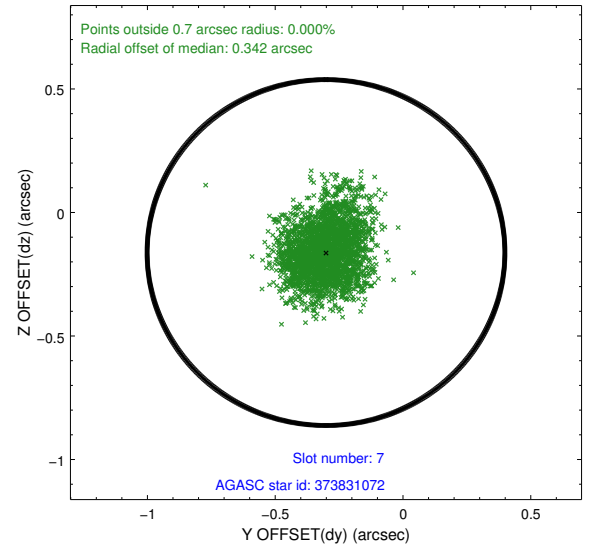
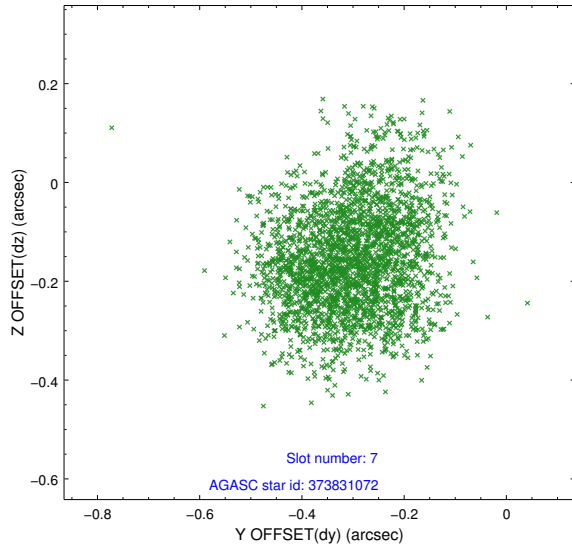
2.4.3 Slot 5



2.4.4 Slot 6

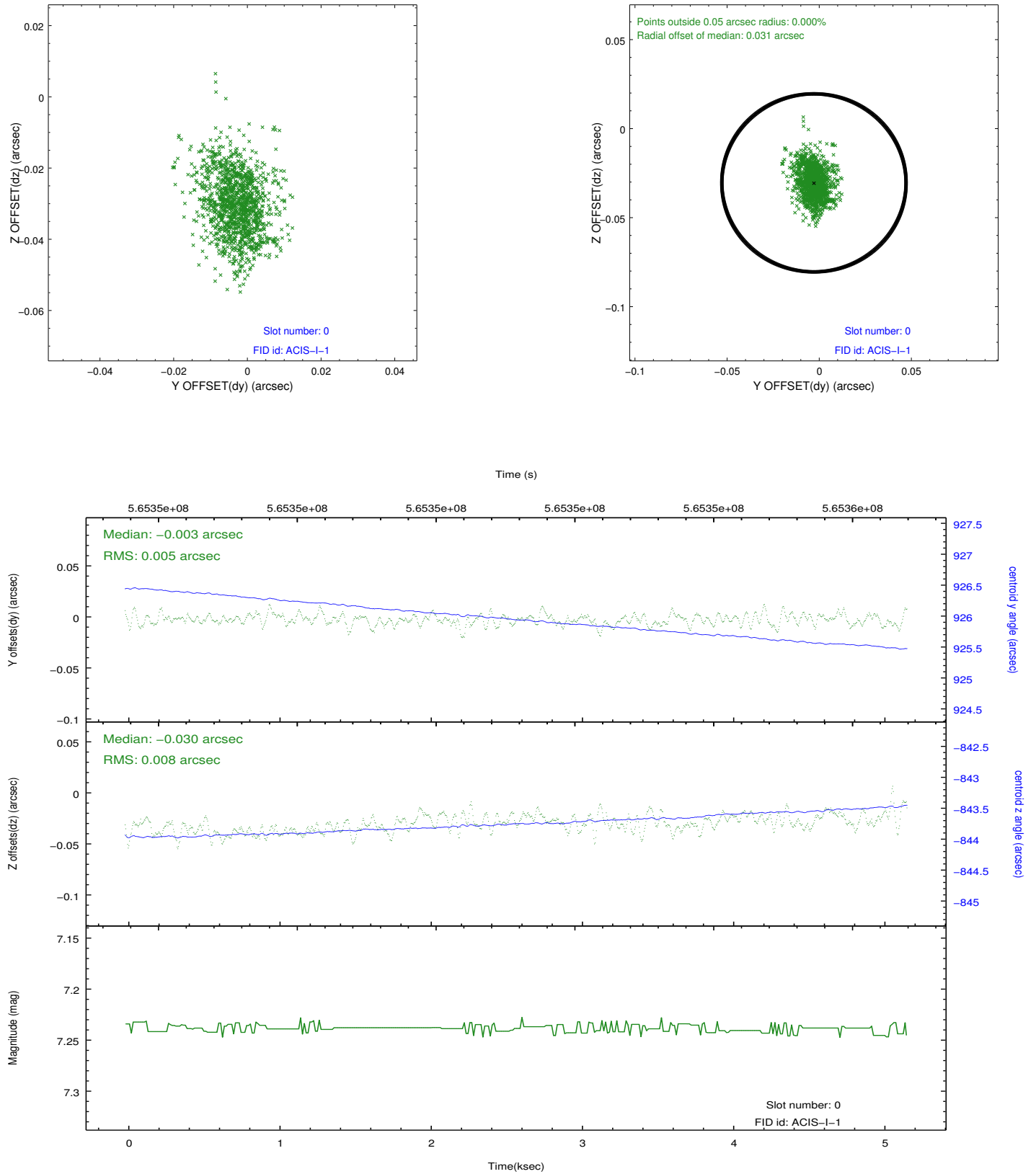


2.4.5 Slot 7

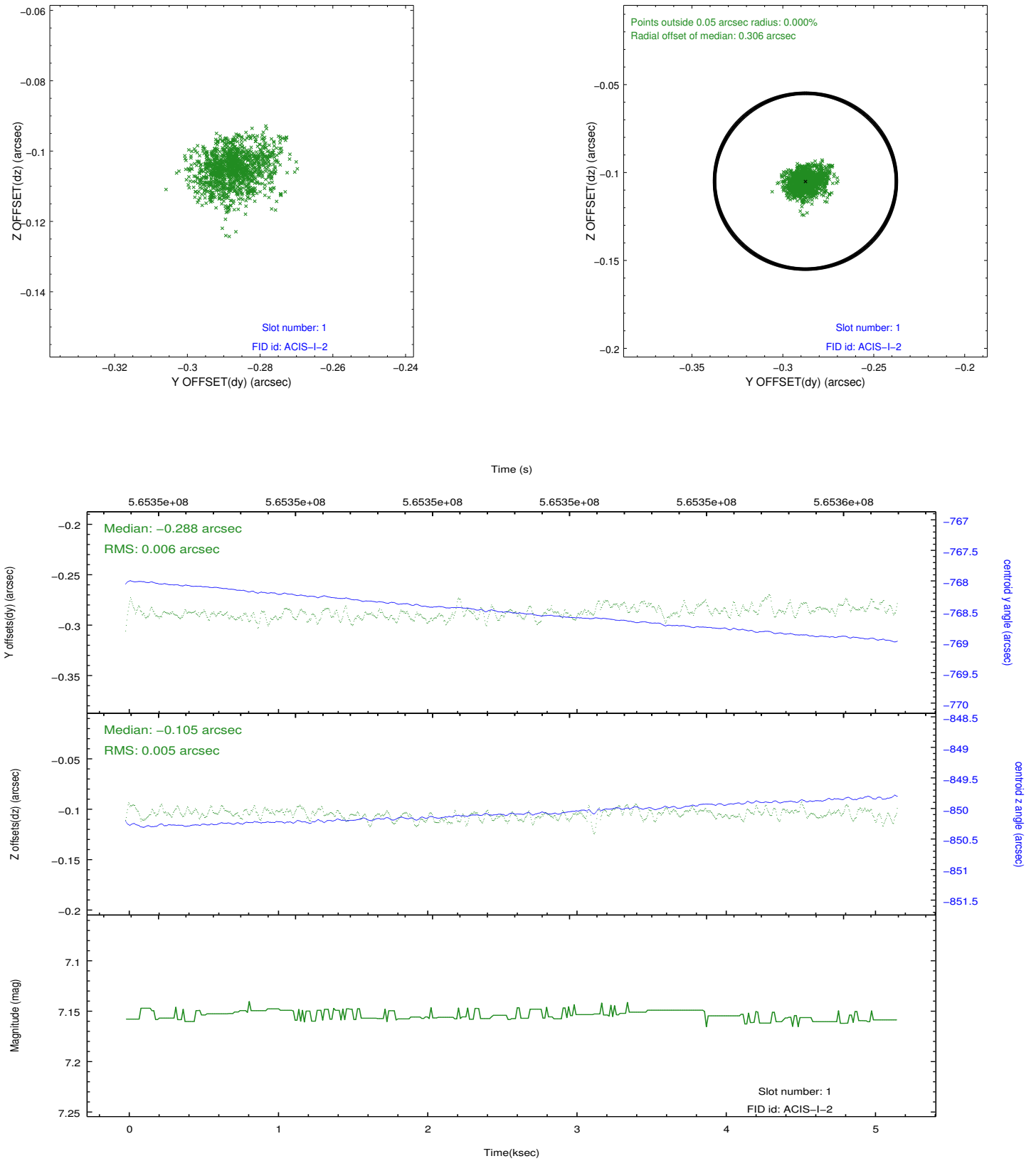


2.5 FID Slots

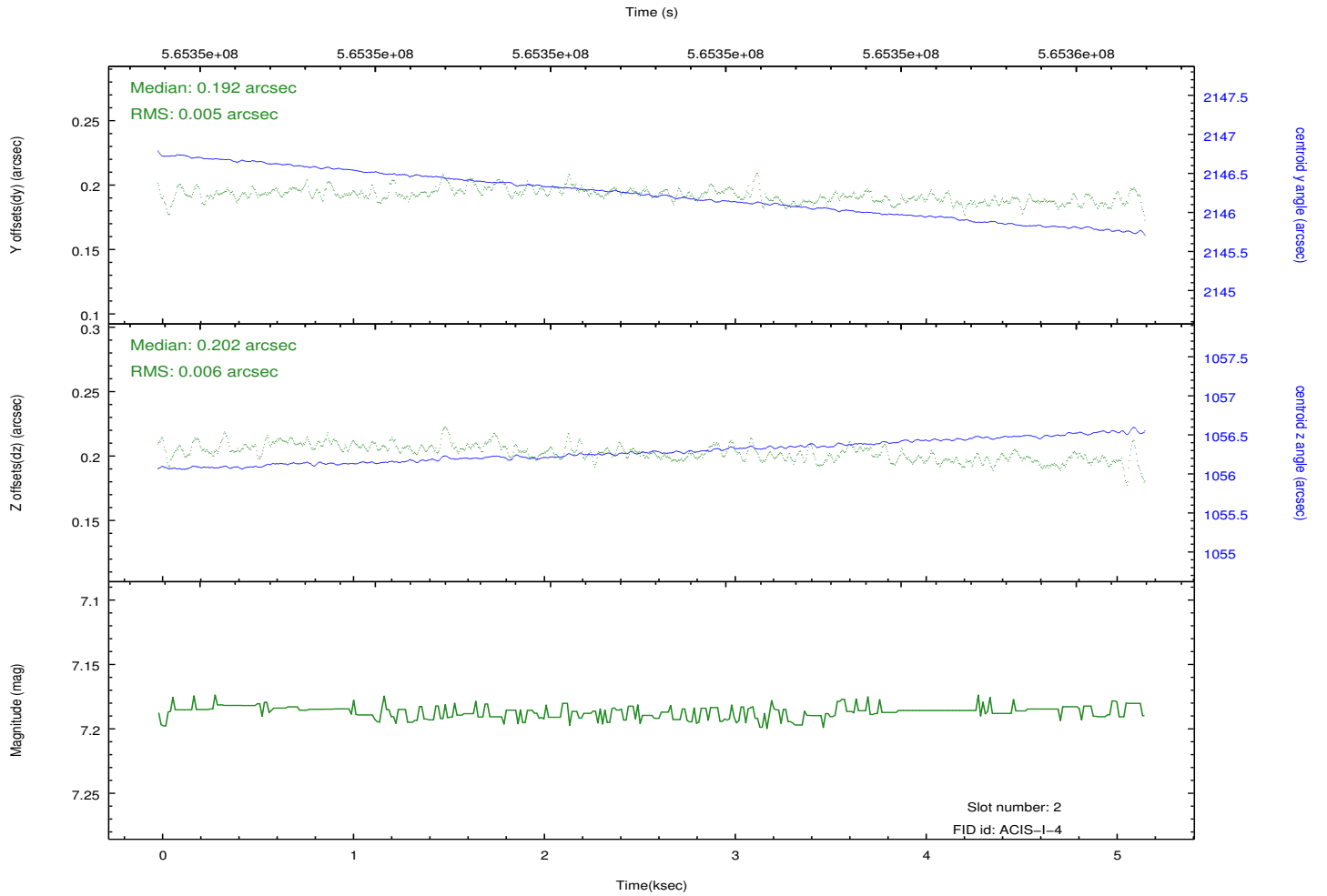
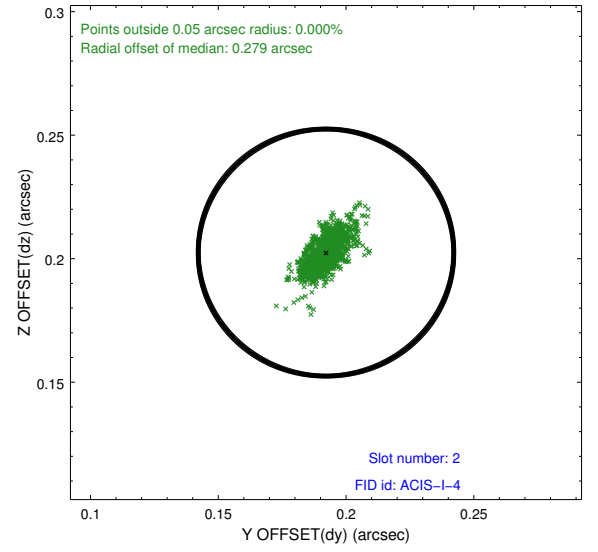
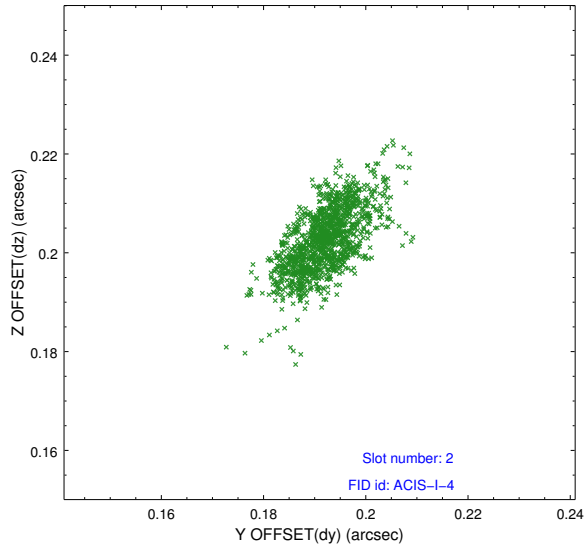
2.5.1 Slot 0



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)	2015.12.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.0702697384357

A.2 Comments