

V&V Reference Report

L2 ASCDS Version : 10.4.2.1

Observation 17264 - L2 Version 1
Chandra X-Ray Center

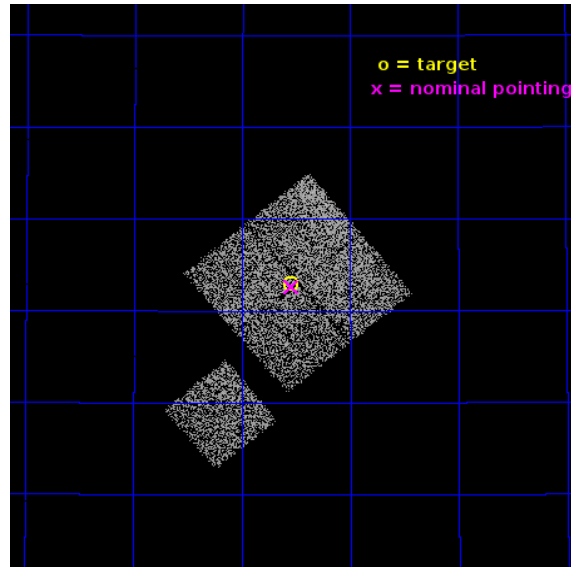
L2 Processing Date : Dec 2 2015

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1 Front

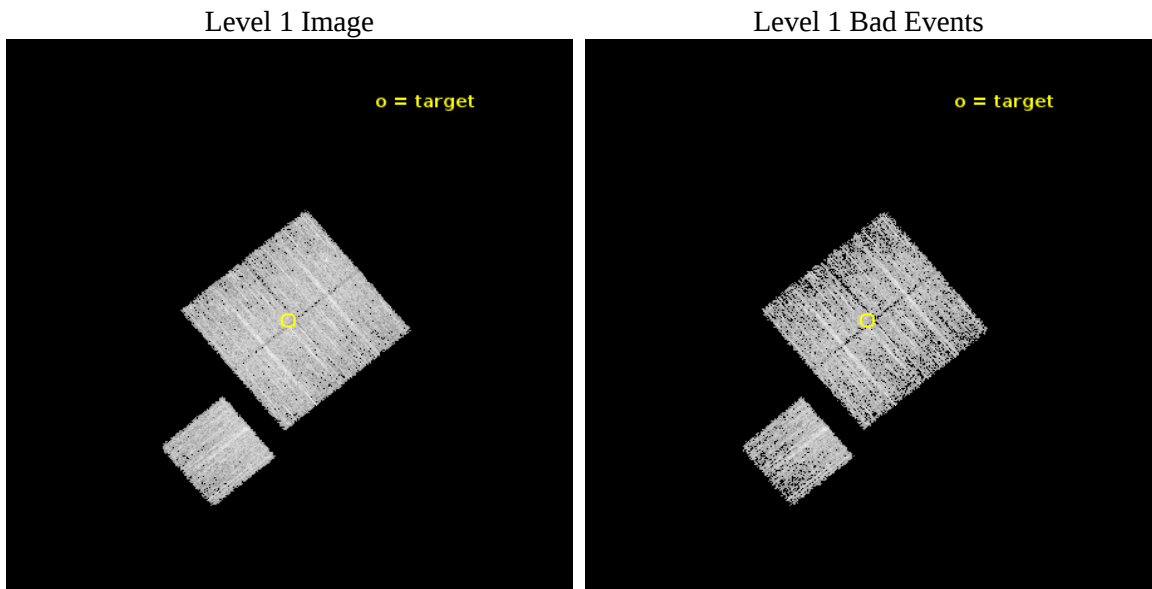
seq_num	801509	Sequence number
obs_id	17264	Observation id
title	Perseus: A New, Low-Redshift Anchor for Cluster Cosmology	Proposal
observer	Prof. Steven Allen	Principal investigator
object	Perseus cluster	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	50.38856	Observer's specified target RA [deg]
dec_targ	41.050167	Observer's specified target Dec [deg]
ra_nom	50.386107650906	Nominal RA [deg]
dec_nom	41.044021987726	Nominal Dec [deg]
roll_nom	230.21030872921	Nominal Roll [deg]
revision	1	Processing version of data
ontime	4773.5594369173	Sum of GTIs [s]
livetime	4711.1893686306	Livetime [s]
ontime0	4773.436316967	Sum of GTIs [s]
ontime1	4773.4773569107	Sum of GTIs [s]
ontime2	4773.5183969736	Sum of GTIs [s]
ontime3	4773.5594369173	Sum of GTIs [s]
ontime6	4773.3952769041	Sum of GTIs [s]
l2events	16945	Number of level 2 events



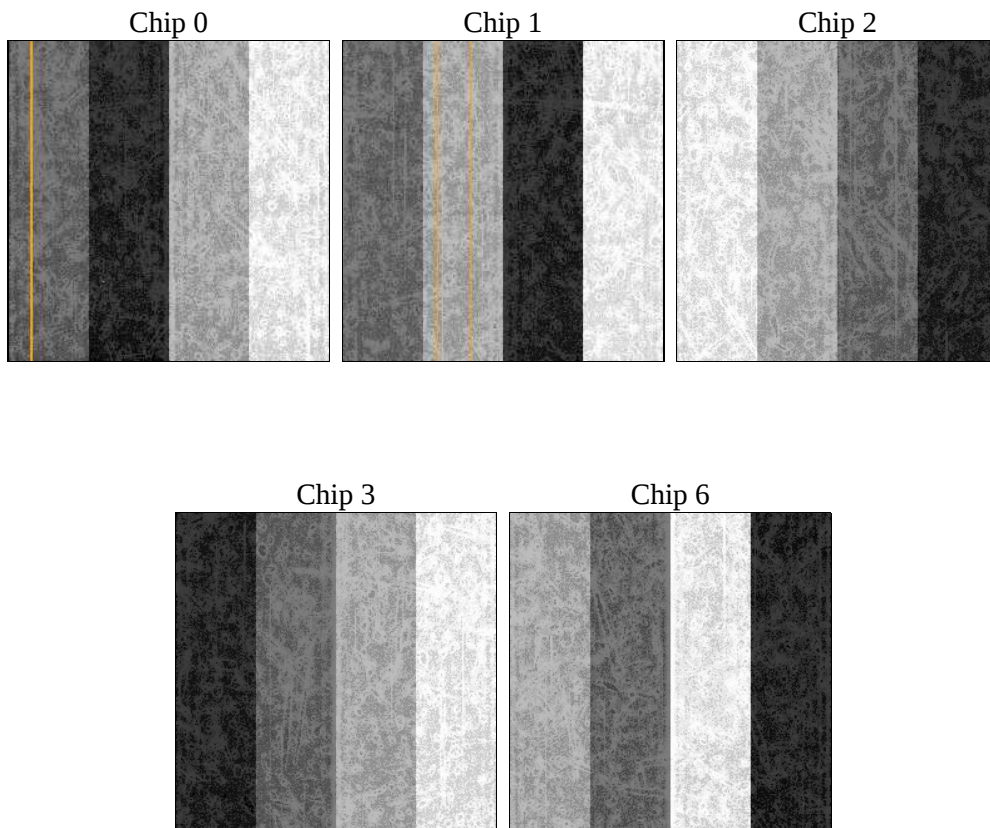
2 OBI

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	4773.5594369173	Sum of GTIs [s]
caldsver	4.6.10a	 	ontime0	4773.436316967	Sum of GTIs [s]
date	2015-12-02T15:38:27	Date and time of file creation	ontime1	4773.4773569107	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	4773.5183969736	Sum of GTIs [s]
			ontime3	4773.5594369173	Sum of GTIs [s]
			ontime6	4773.3952769041	Sum of GTIs [s]
			l1events	140722	Number of level 1 events

2.1.4 Events

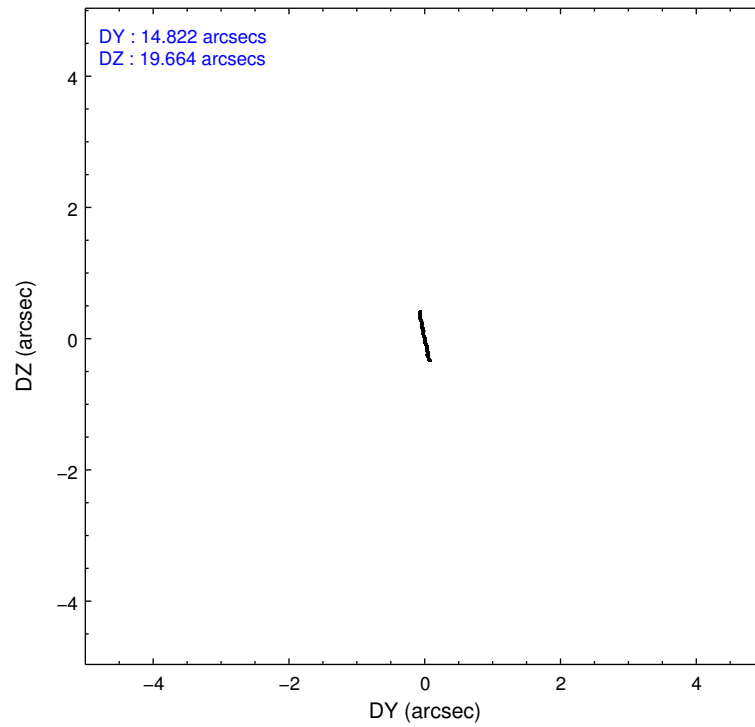
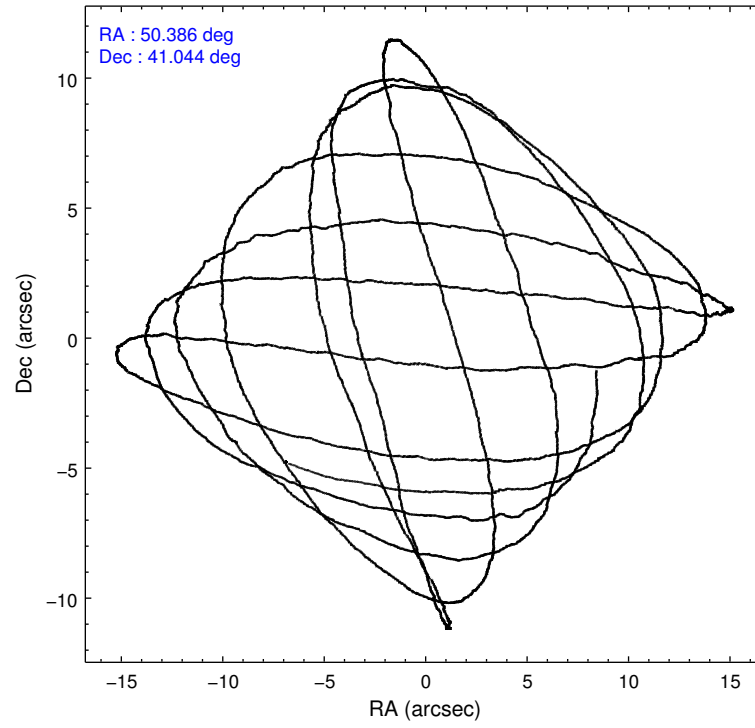
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	27343	27686	30044	27803	27846
rejected events	22981	22753	26537	24105	24573
rejected %	84%	82%	88%	86%	88%

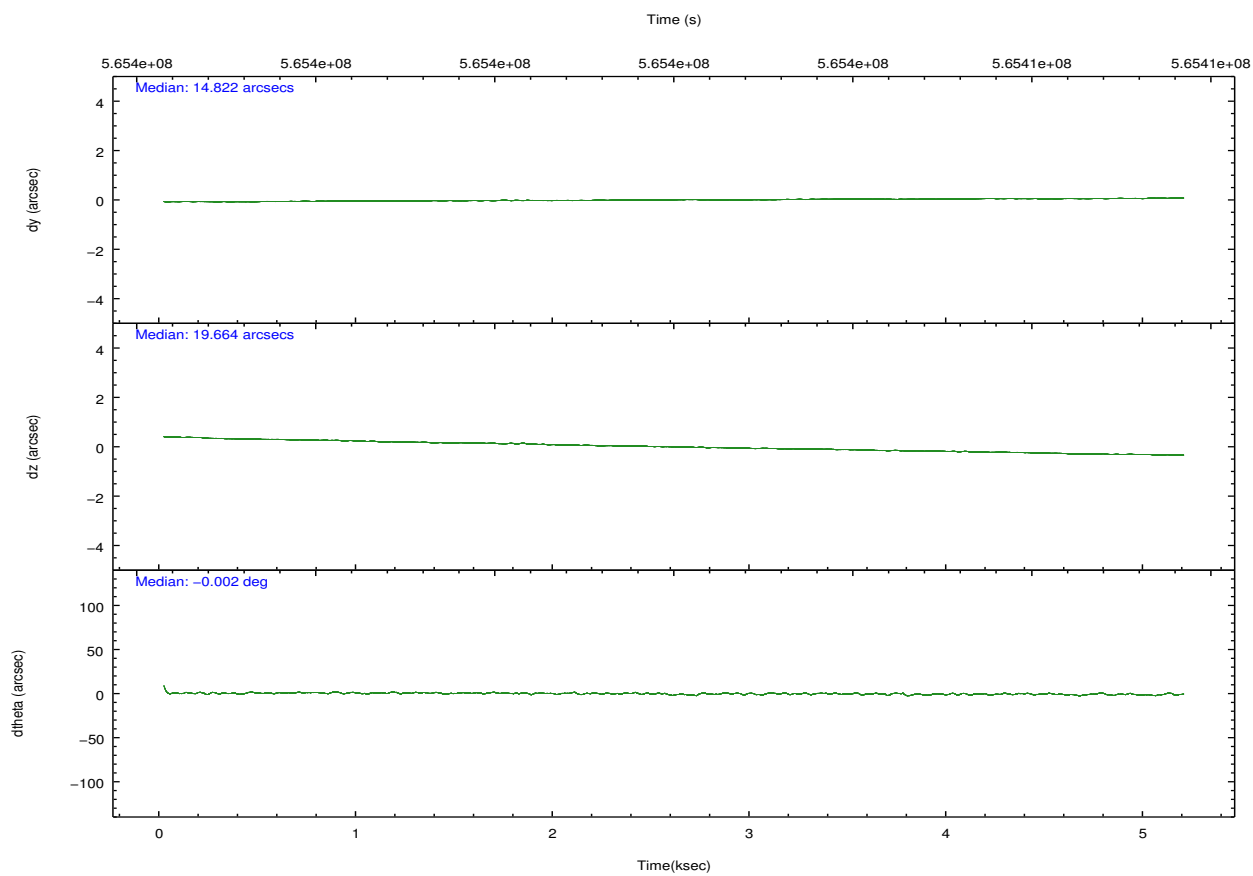
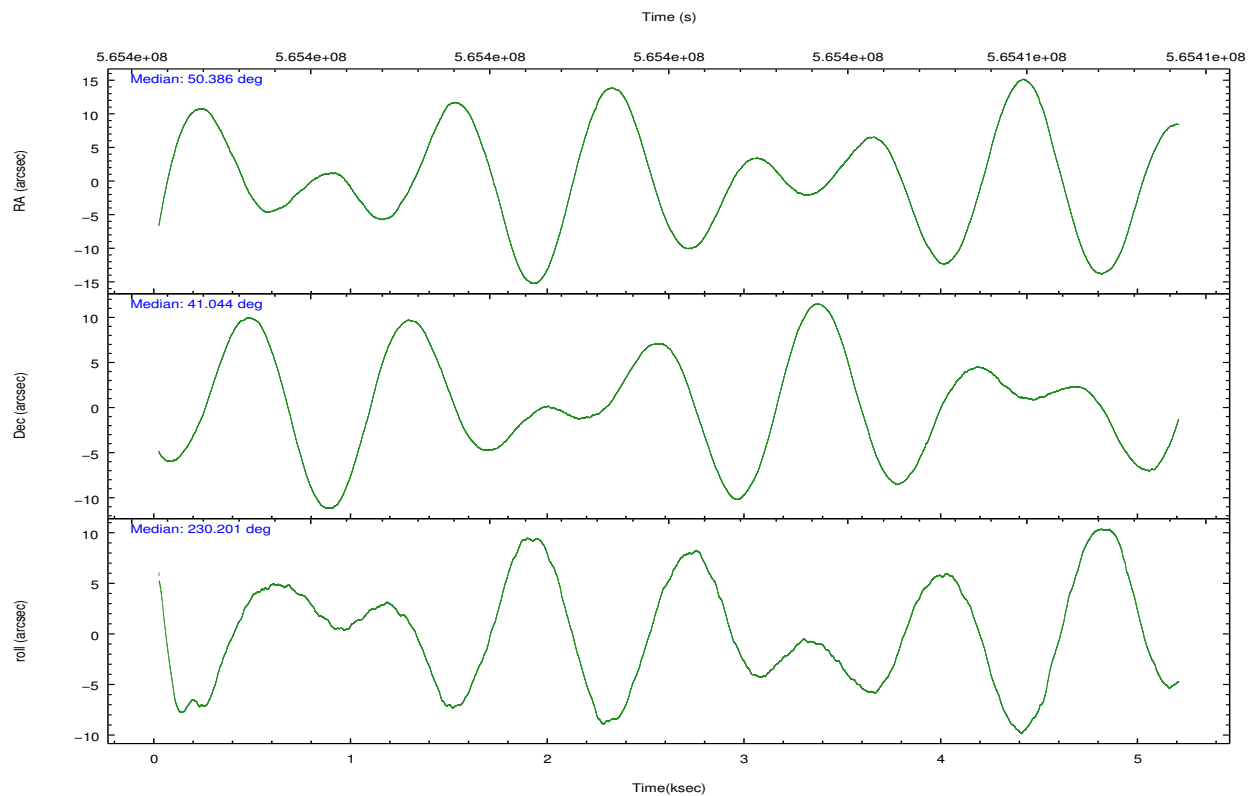
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	2033	2351	1484	1599	1225
	7%	8%	4%	5%	4%
grade 1 events	22	28	17	16	18
	0%	0%	0%	0%	0%
grade 2 events	878	1048	838	732	707
	3%	3%	2%	2%	2%
grade 3 events	394	408	309	350	287
	1%	1%	1%	1%	1%
grade 4 events	353	363	296	331	350
	1%	1%	0%	1%	1%
grade 5 events	1185	1300	1128	1442	1395
	4%	4%	3%	5%	5%
grade 6 events	708	768	582	689	708
	2%	2%	1%	2%	2%
grade 7 events	21770	21420	25390	22644	23156
	79%	77%	84%	81%	83%

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	50.392122	50.38610765090631	CCD I2 on	Y	Y
[deg] Pointing Dec	41.071321	41.04402198772558	CCD I3 on	Y	Y
[deg] Pointing Roll	229.997668	230.2103087292129	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)	565401617.184000	565401083.8053499	CCD S5 on	N	N
Observation start date	2015-12-01T23:59:09	2015-12-01T23:51:23	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	565406617.184000	565408086.60575	On-chip summing requested	N	N
Observation end date	2015-12-02T01:22:29	2015-12-02T01:48:06	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



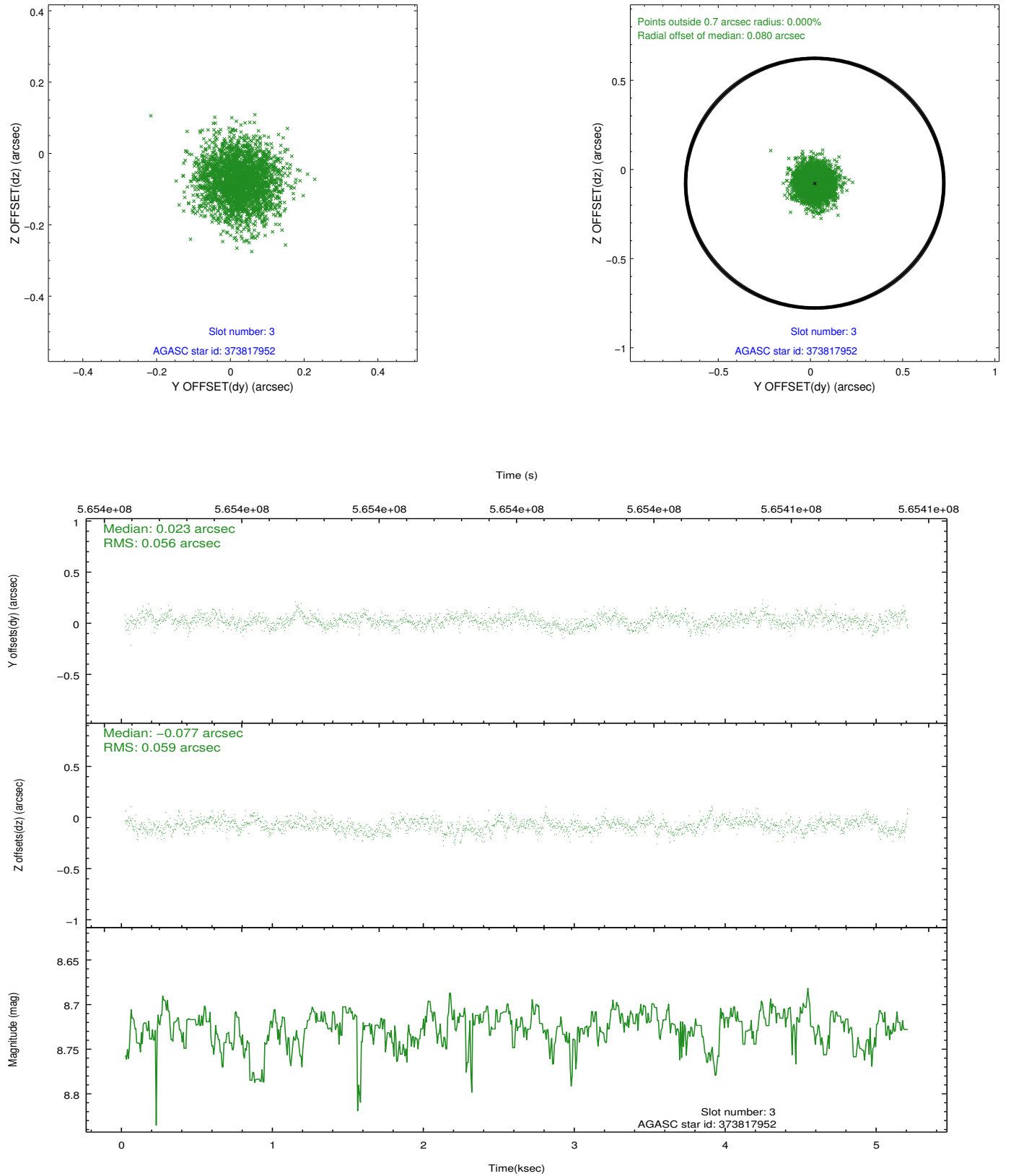


Slot Statistics

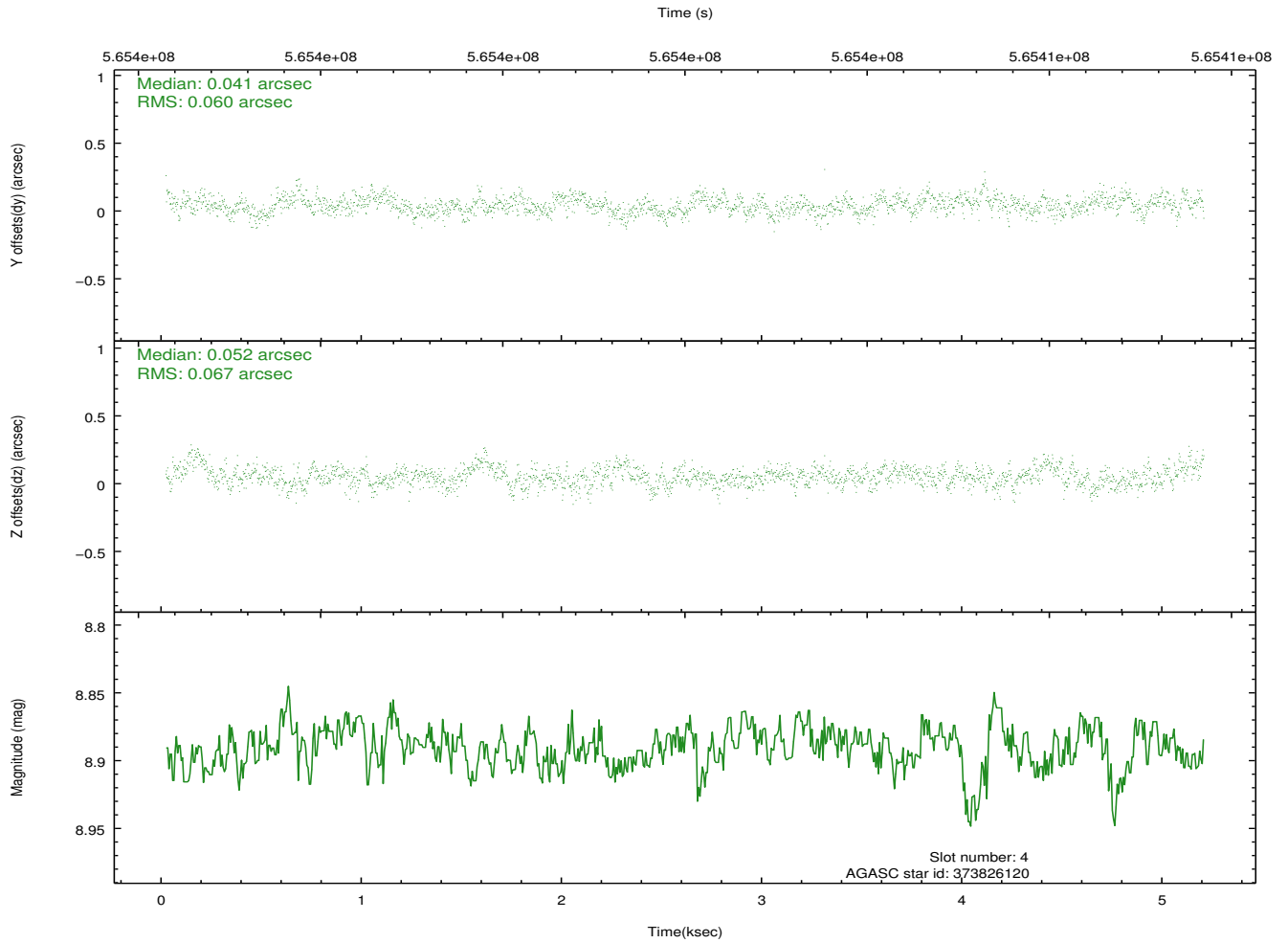
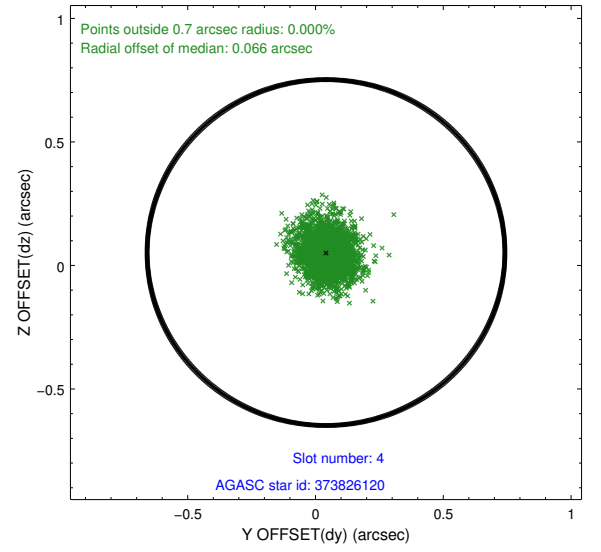
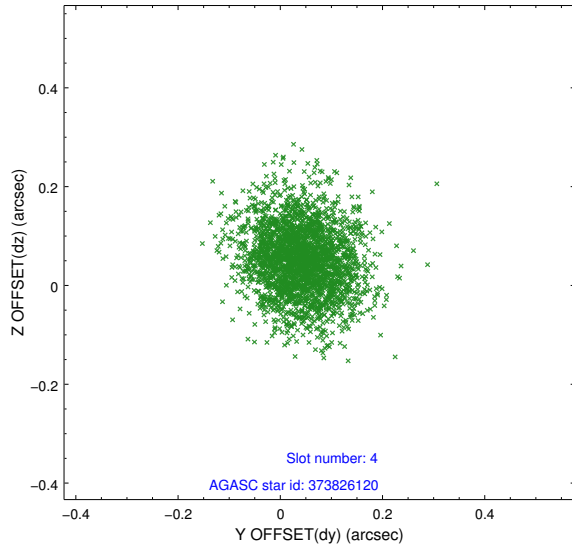
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-2	7.15	1265	-0.177	0.001	0.009	0.018	0.000000	0.000000	-769.70	-849.76
1	FID		ACIS-I-4	7.21	1262	0.385	0.096	0.007	0.014	0.000000	0.000000	2144.37	1055.93
2	FID		ACIS-I-5	7.25	1265	-0.309	-0.029	0.010	0.017	0.000000	0.000000	-1822.18	1054.96
3	GUIDE	used	373817952	8.72	2530	0.023	-0.077	0.086	0.139	49.913424	40.978510	1089.98	-783.86
4	GUIDE	used	373826120	8.89	2529	0.041	0.052	0.094	0.160	49.738165	41.186341	817.60	-1627.81
5	GUIDE	used	375526240	8.74	2526	0.006	-0.060	0.102	0.162	51.034416	40.968783	-844.04	1570.04
6	GUIDE	used	375534552	8.20	2529	-0.017	0.006	0.090	0.149	50.877490	41.206927	-1221.83	691.64
7	GUIDE	used	376070440	6.96	2529	-0.058	0.084	0.084	0.135	51.289107	41.257301	-2083.46	1420.90

2.4 Star Slots

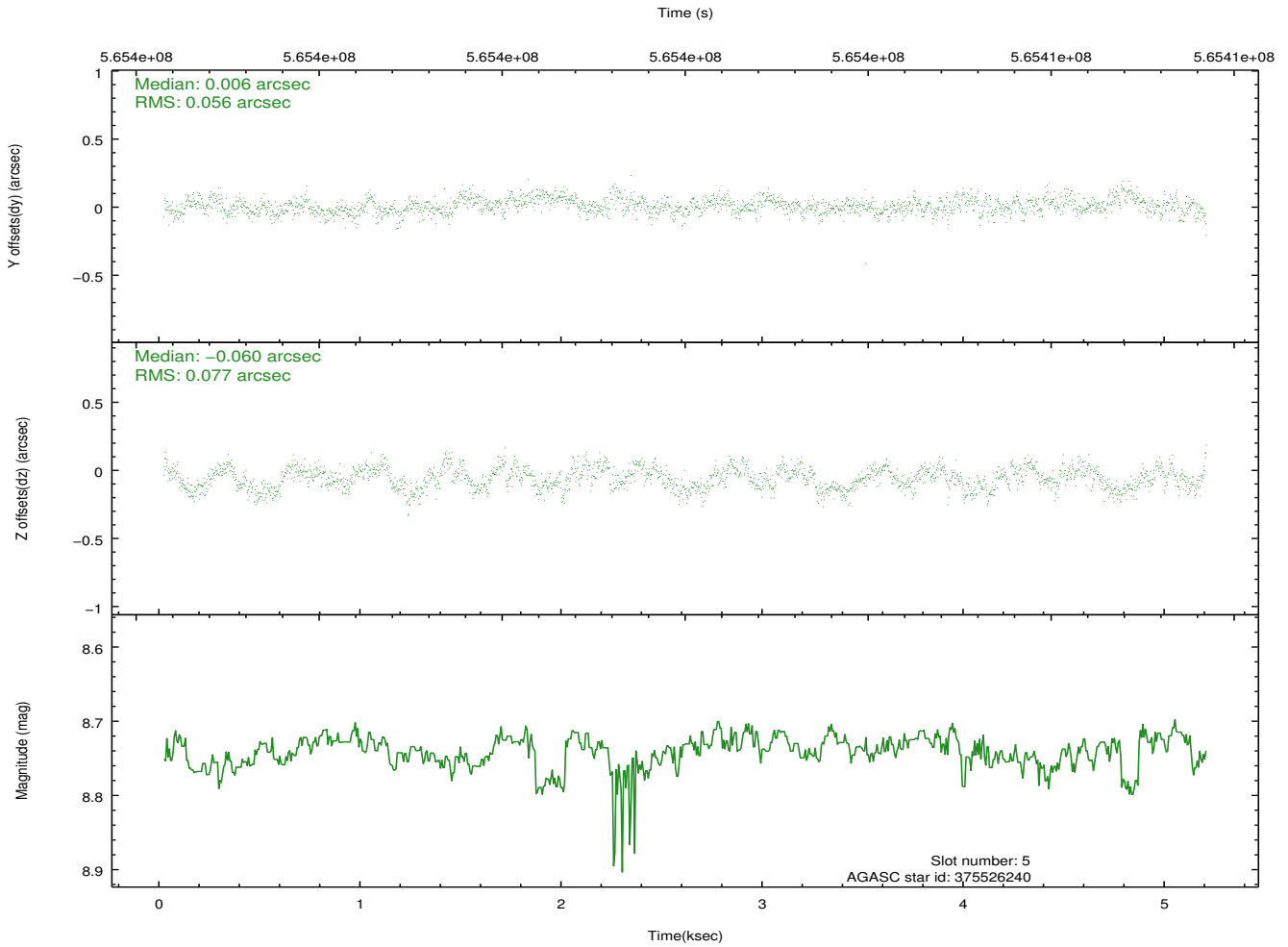
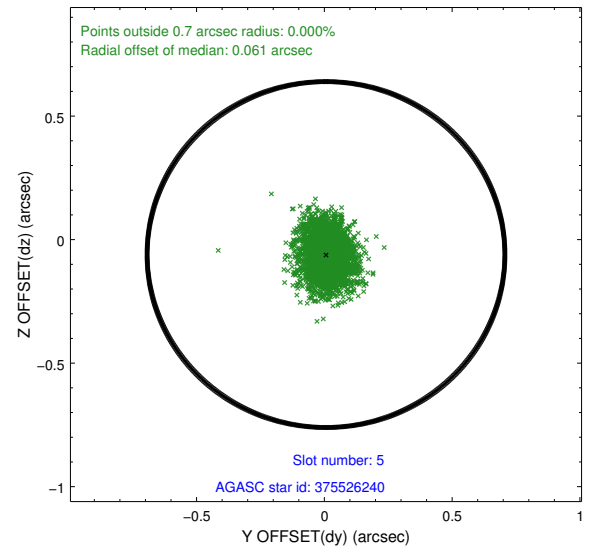
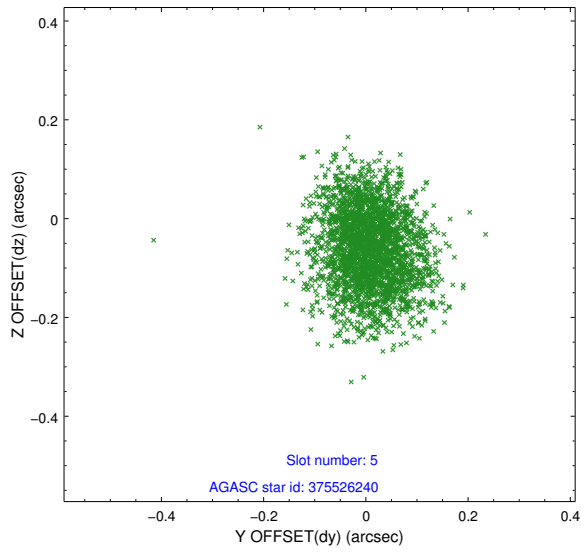
2.4.1 Slot 3



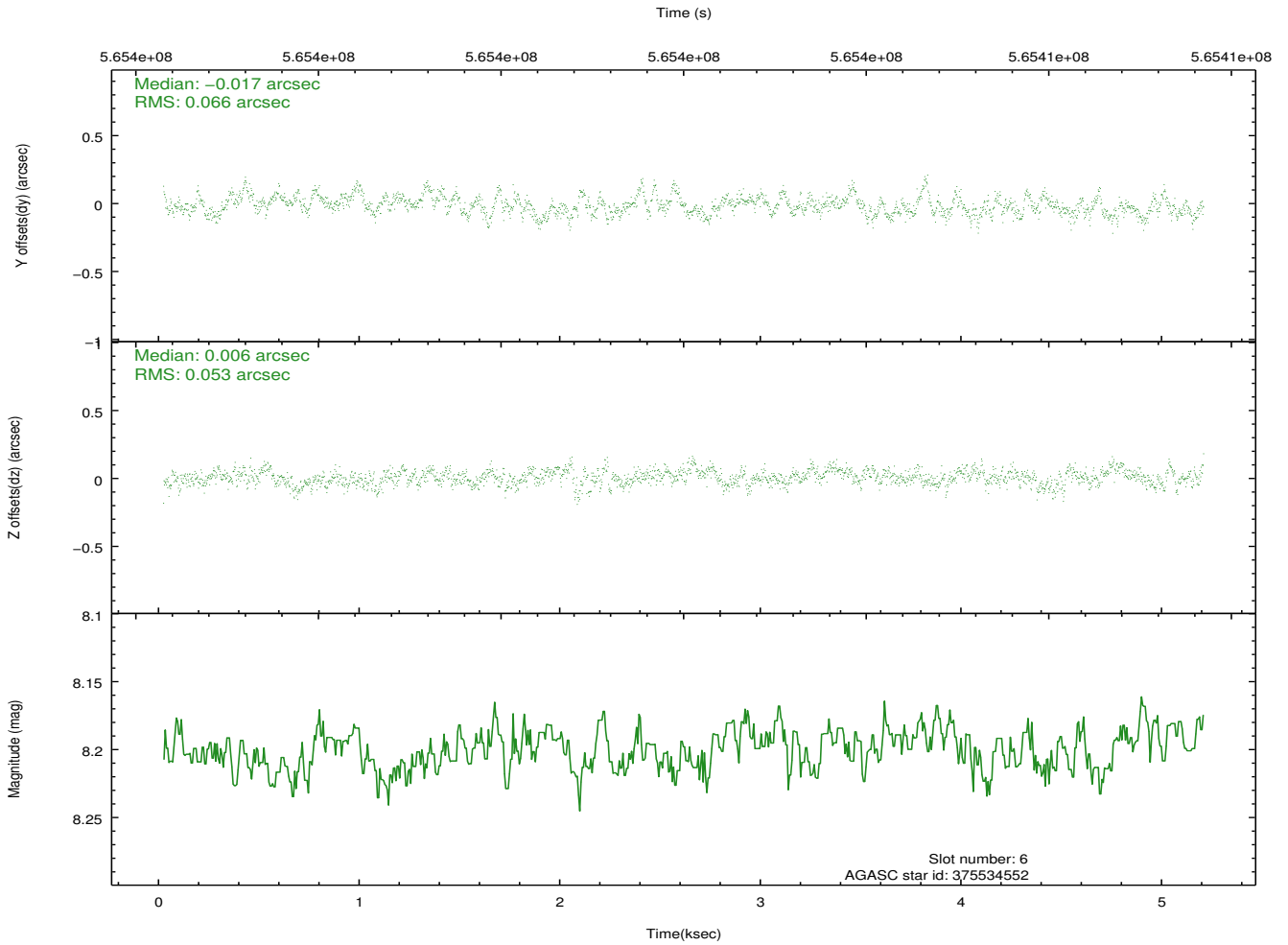
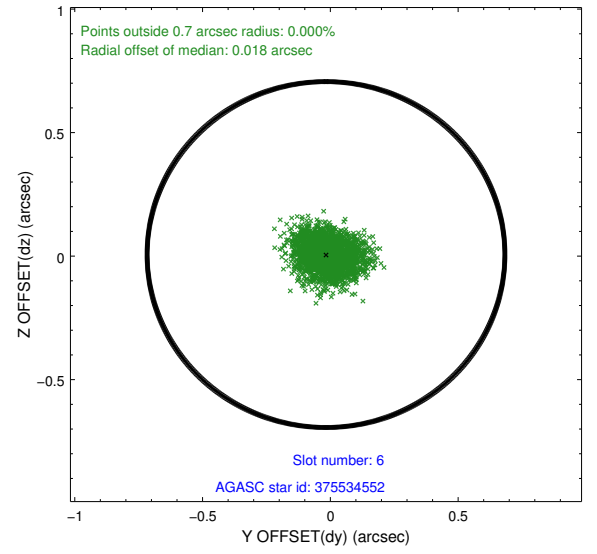
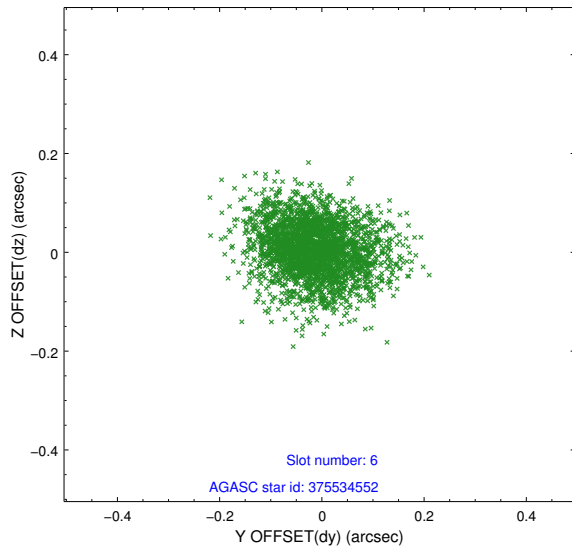
2.4.2 Slot 4



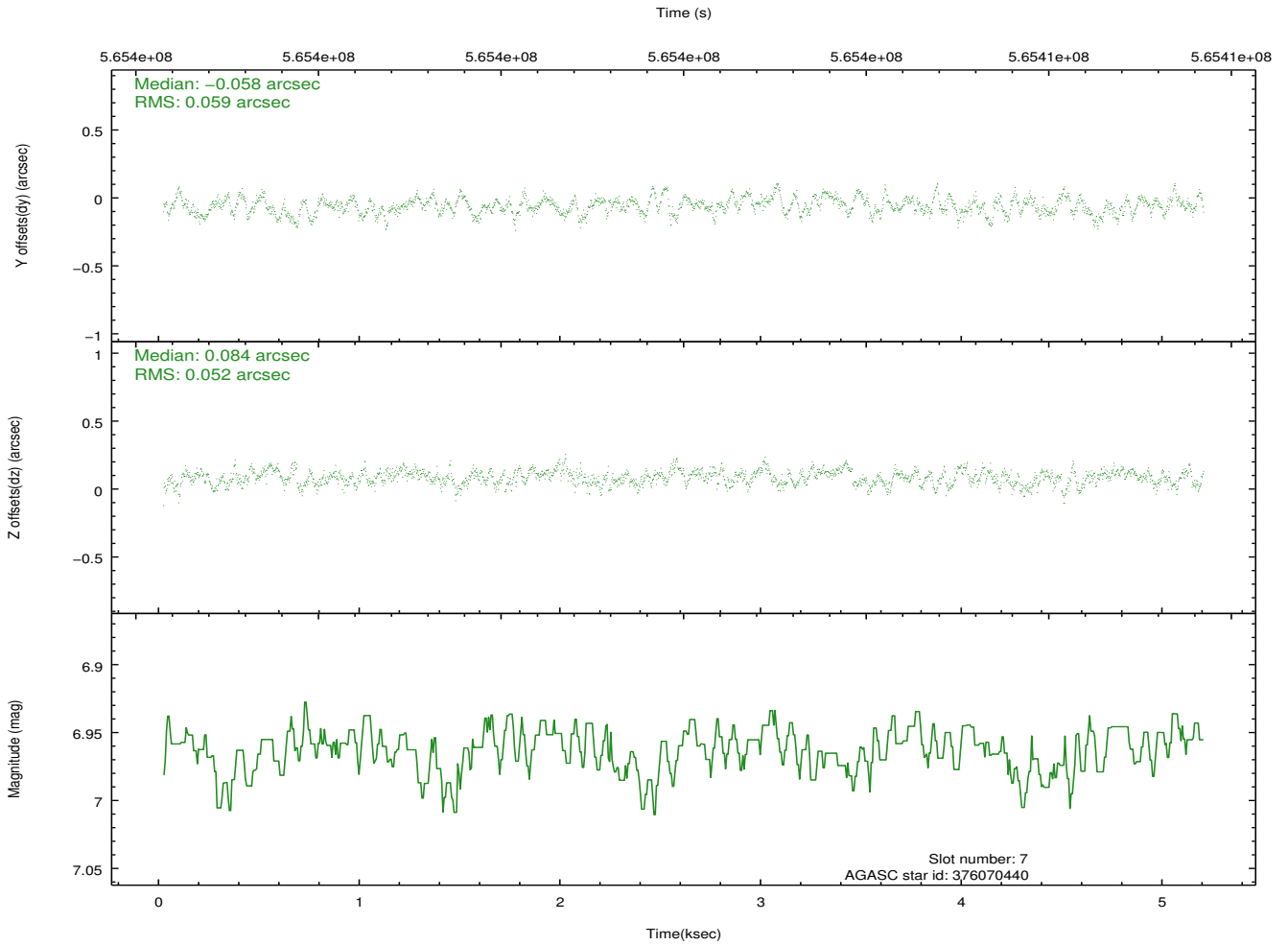
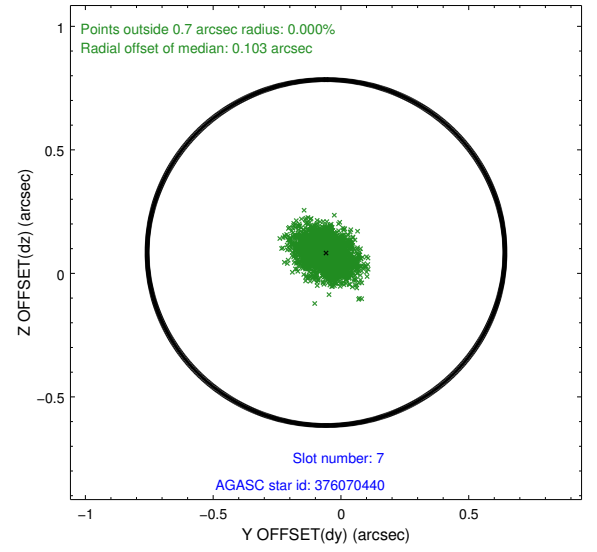
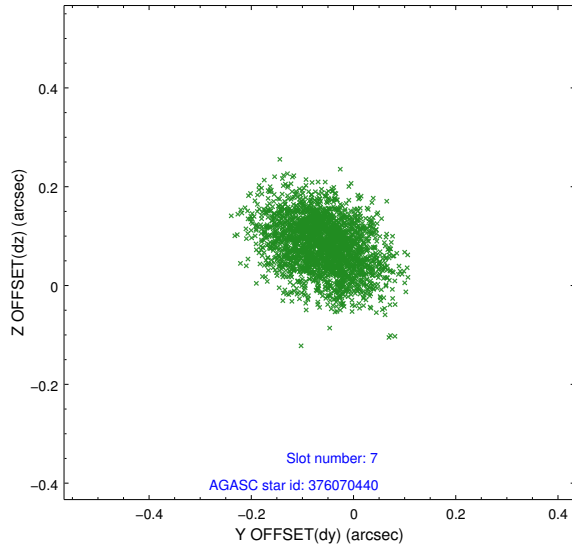
2.4.3 Slot 5



2.4.4 Slot 6

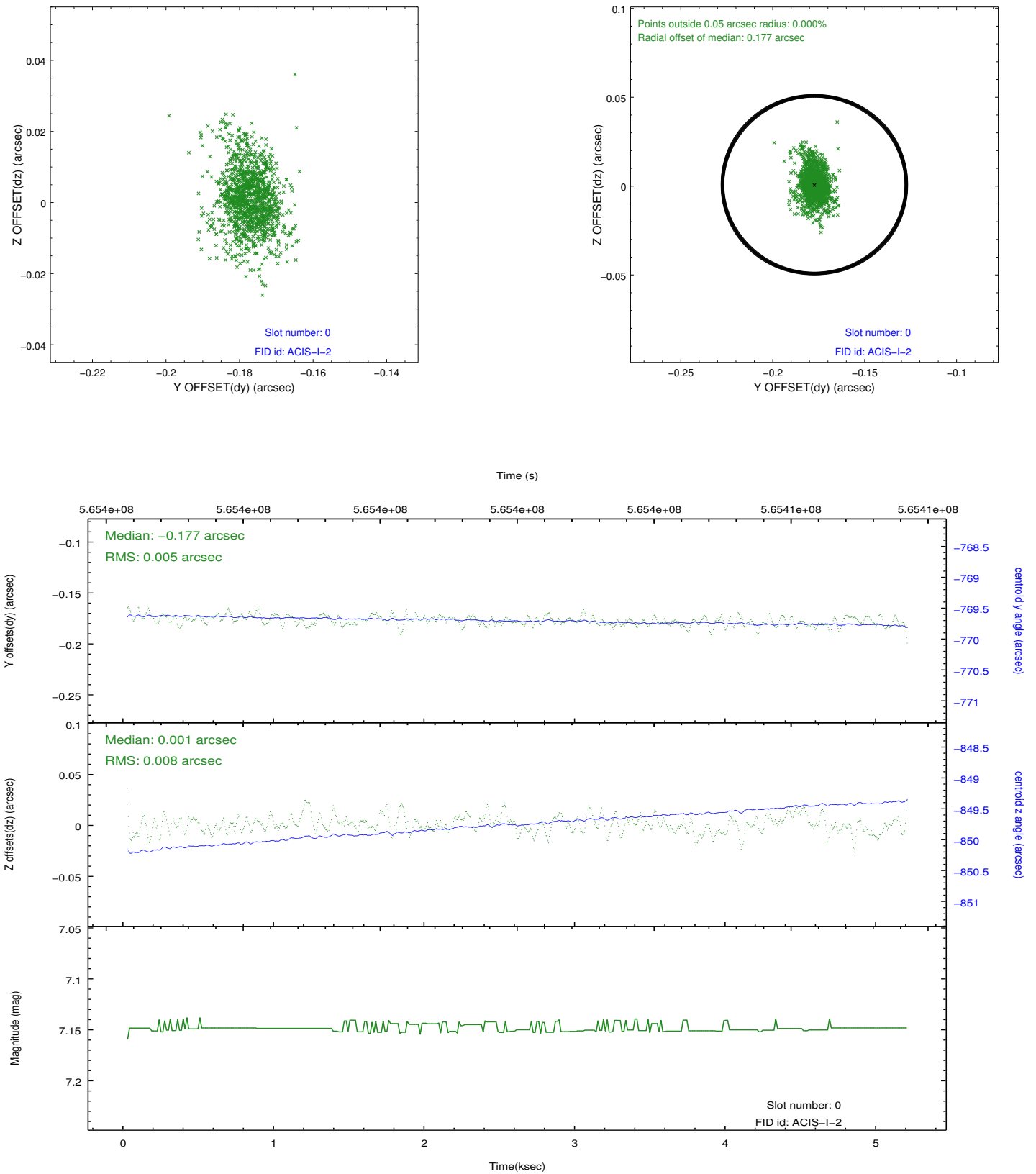


2.4.5 Slot 7

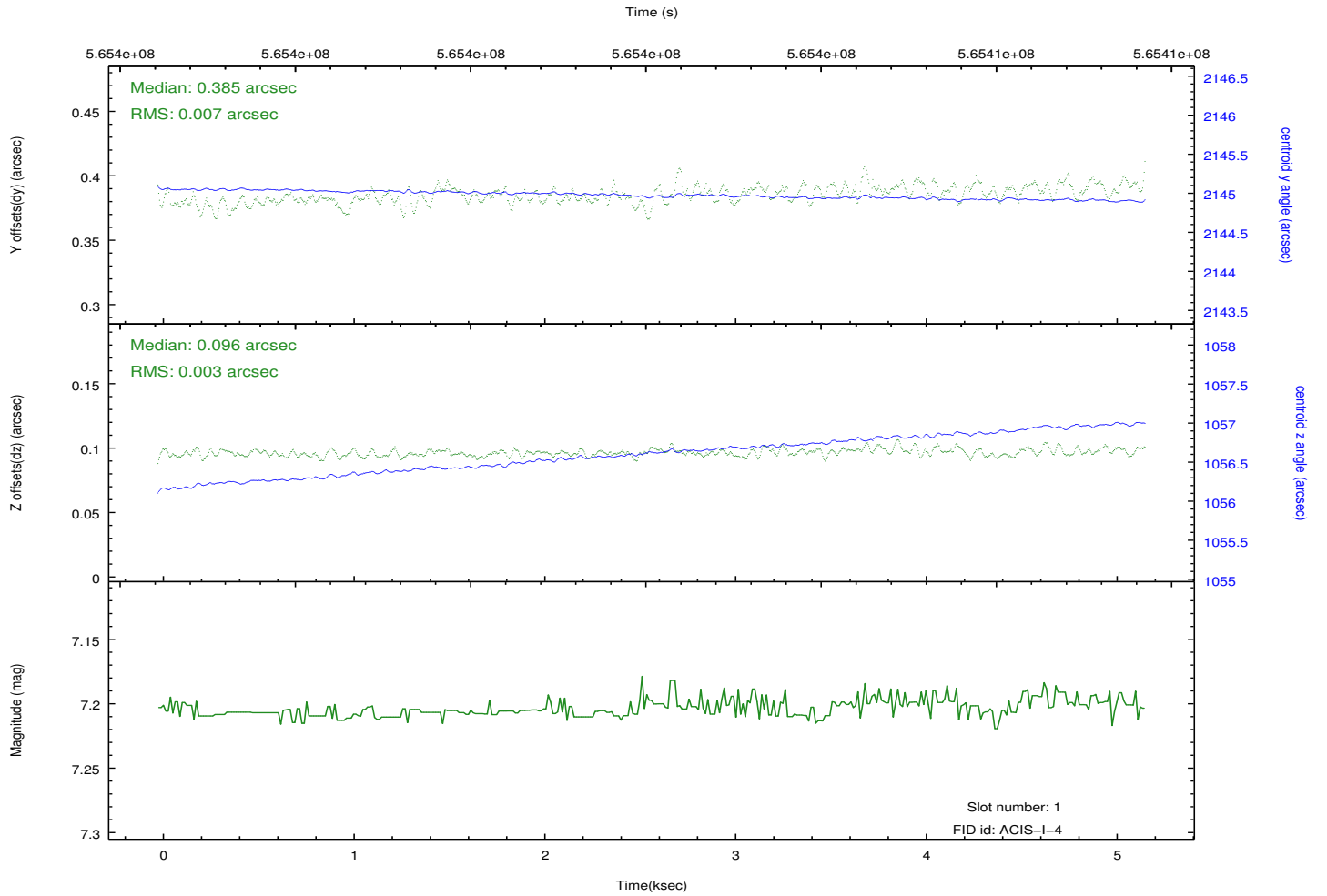
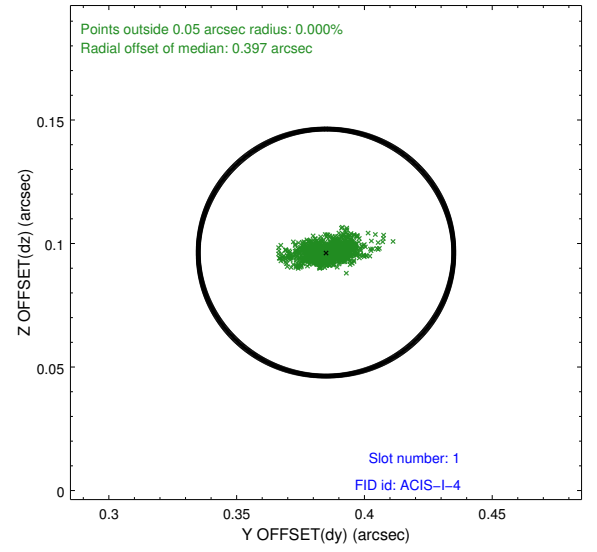
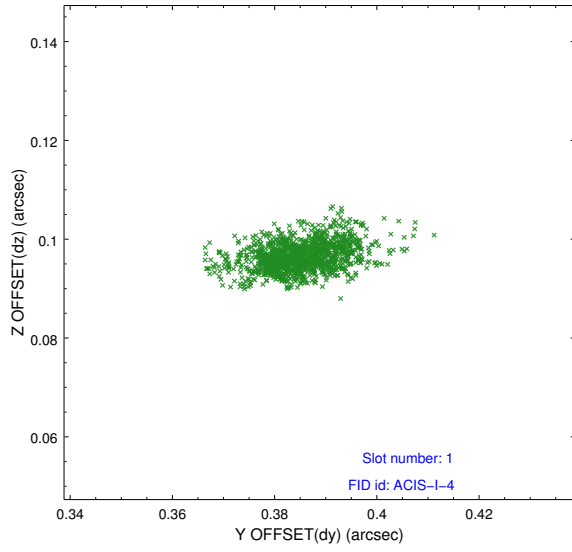


2.5 FID Slots

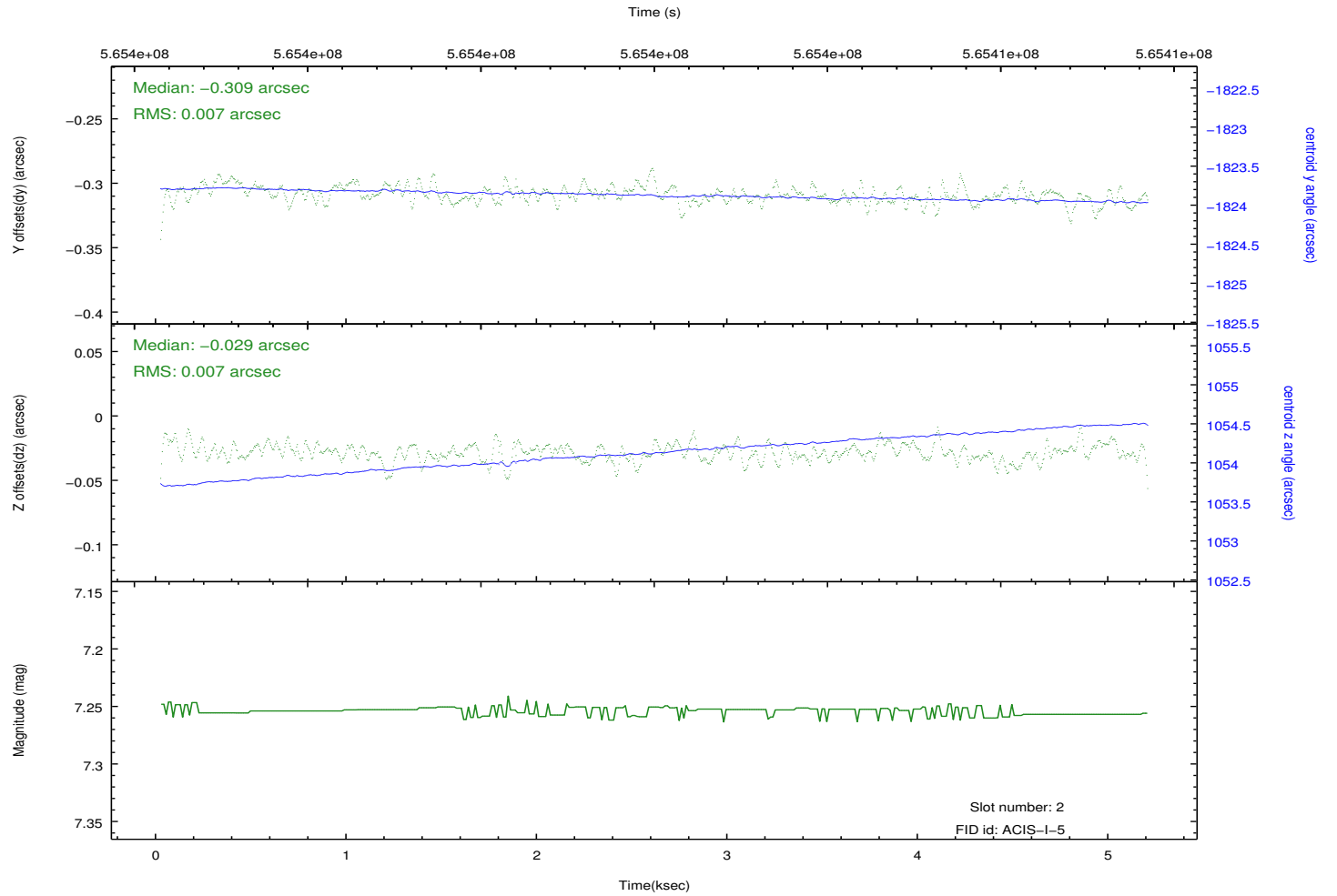
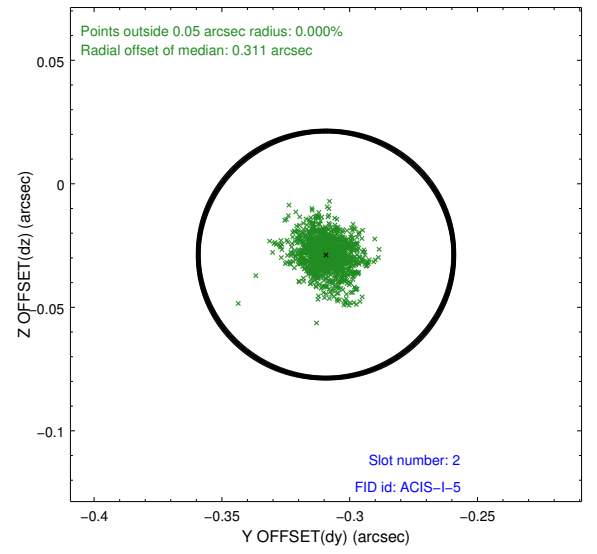
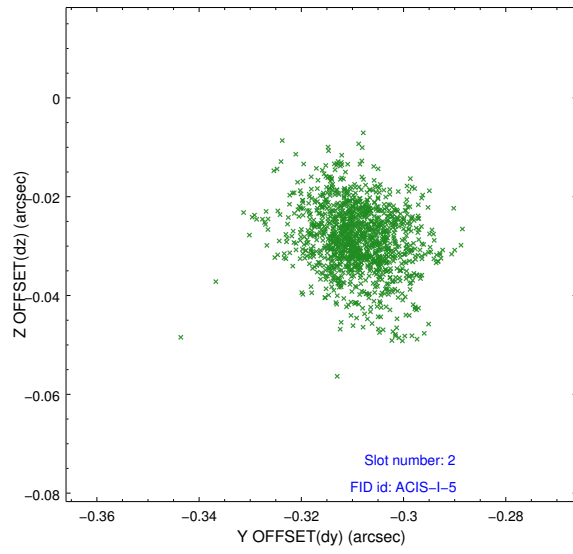
2.5.1 Slot 0



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)	2015.12.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.7735594369173

A.2 Comments