

V&V Reference Report

L2 ASCDS Version : 10.2.1

Observation 16139 - L2 Version 2
Chandra X-Ray Center

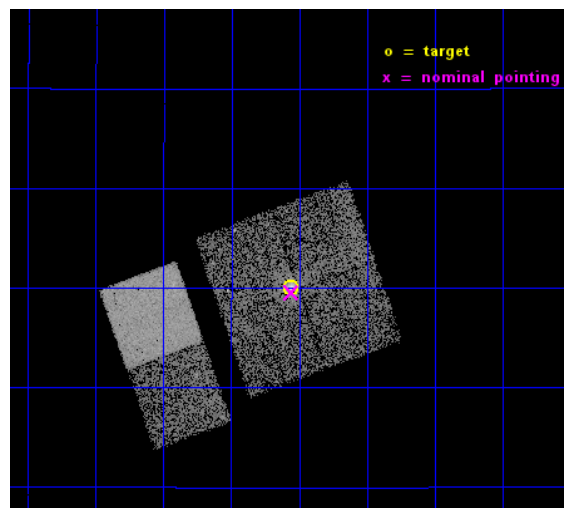
L2 Processing Date : Dec 10 2014

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1 Front

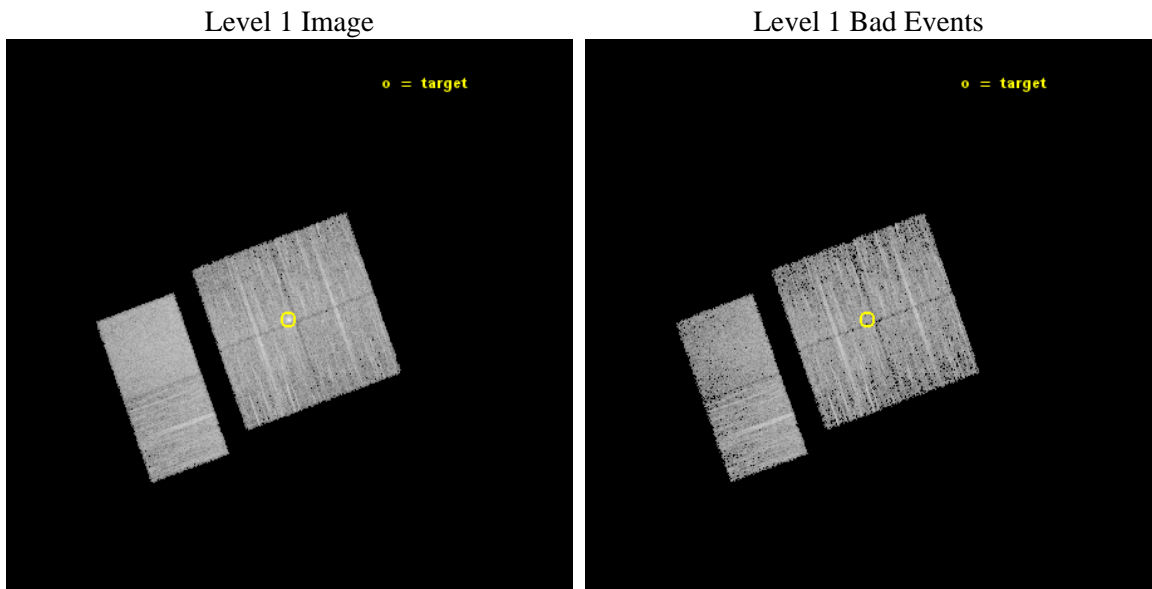
seq_num	801393	Sequence number
obs_id	16139	Observation id
title	Unmasking Galaxy Clusters Masquerading As Quasars	Proposal title
observer	Dr. Megan Donahue	Principal investigator
object	RXJ090533.4+184011	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	136.389583	Observer's specified target RA [deg]
dec_targ	18.667389	Observer's specified target Dec [deg]
ra_nom	136.38921683304	Nominal RA [deg]
dec_nom	18.659322955523	Nominal Dec [deg]
roll_nom	250.22085040882	Nominal Roll [deg]
revision	2	Processing version of data
ontime	9973.8547449112	Sum of GTIs [s]
livetime	9847.5597905968	Livetime [s]
ontime0	9973.7316249013	Sum of GTIs [s]
ontime1	9973.7726649046	Sum of GTIs [s]
ontime2	9973.8137049079	Sum of GTIs [s]
ontime3	9973.8547449112	Sum of GTIs [s]
ontime6	9973.9368249178	Sum of GTIs [s]
ontime7	9973.8957849145	Sum of GTIs [s]
l2events	51026	Number of level 2 events



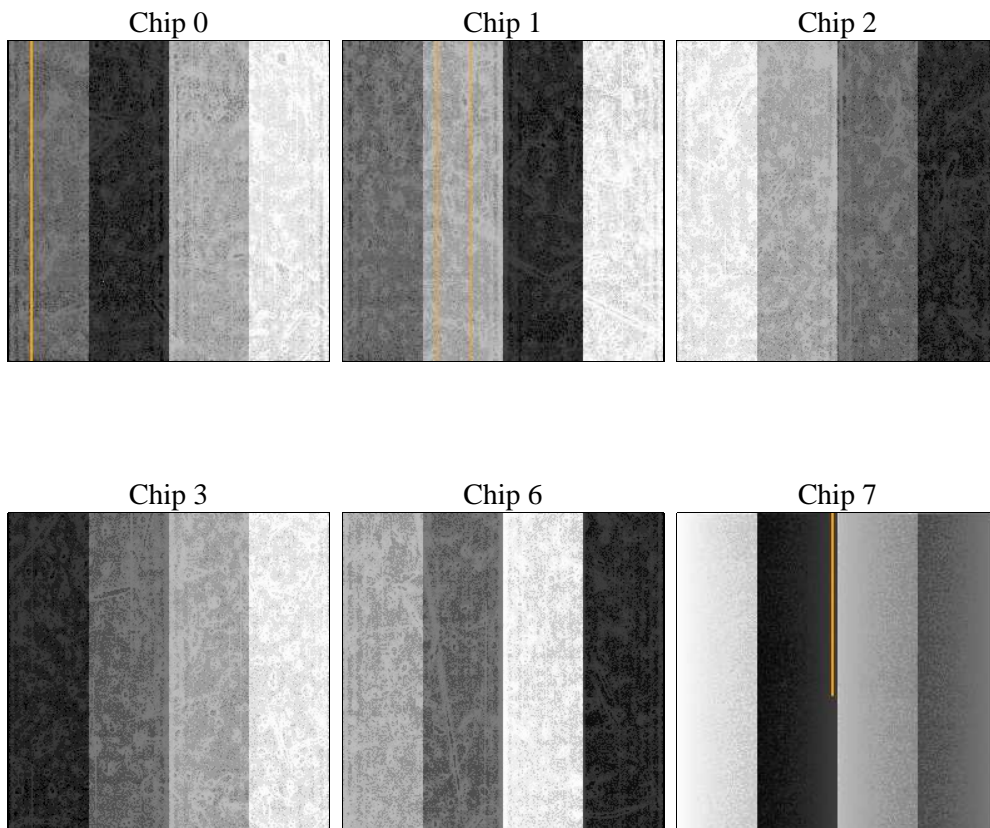
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	9973.8547449112	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	9973.7316249013	Sum of GTIs [s]
date	2014-12-10T16:07:08	Date and time of file creation	ontime1	9973.7726649046	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	9973.8137049079	Sum of GTIs [s]
			ontime3	9973.8547449112	Sum of GTIs [s]
			ontime6	9973.9368249178	Sum of GTIs [s]
			ontime7	9973.8957849145	Sum of GTIs [s]
			l1events	276761	Number of level 1 events

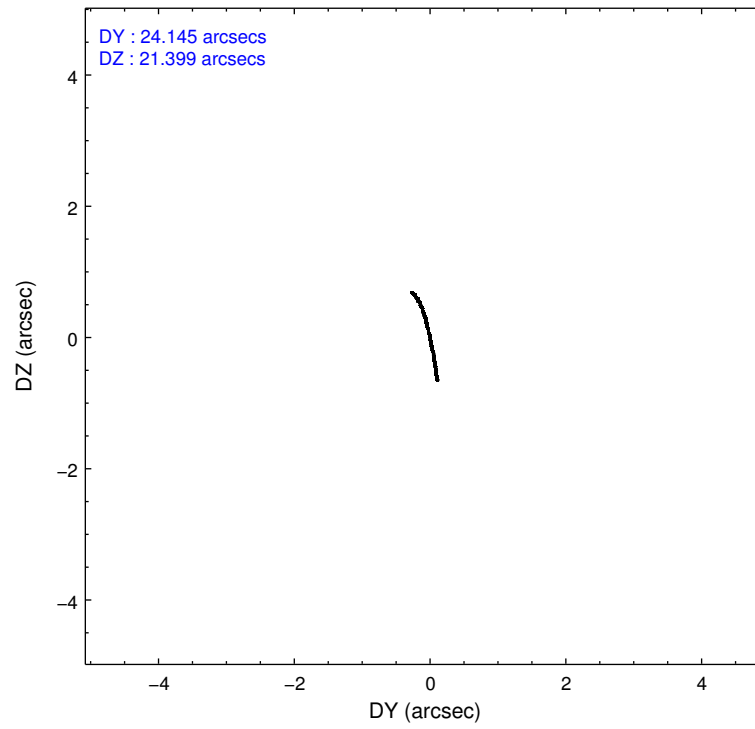
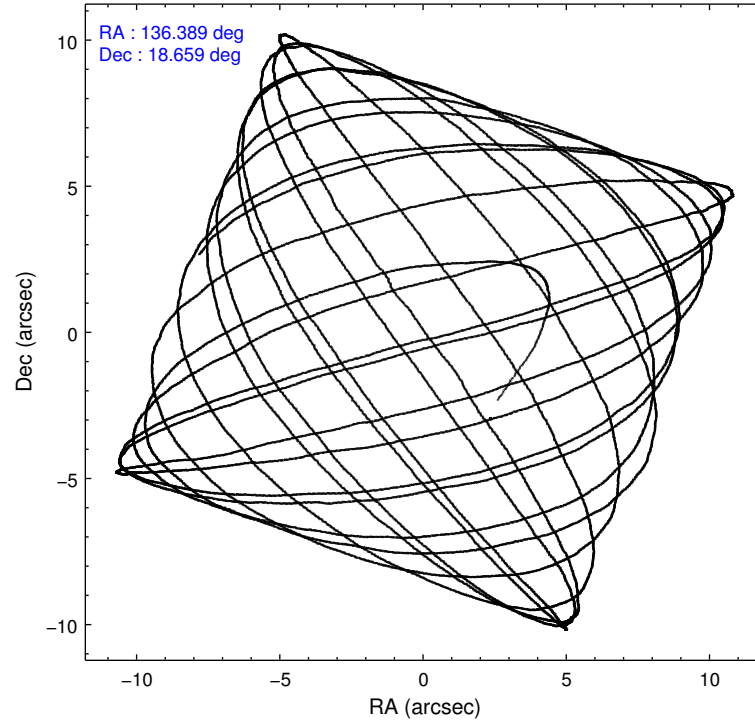
2.1.4 Events

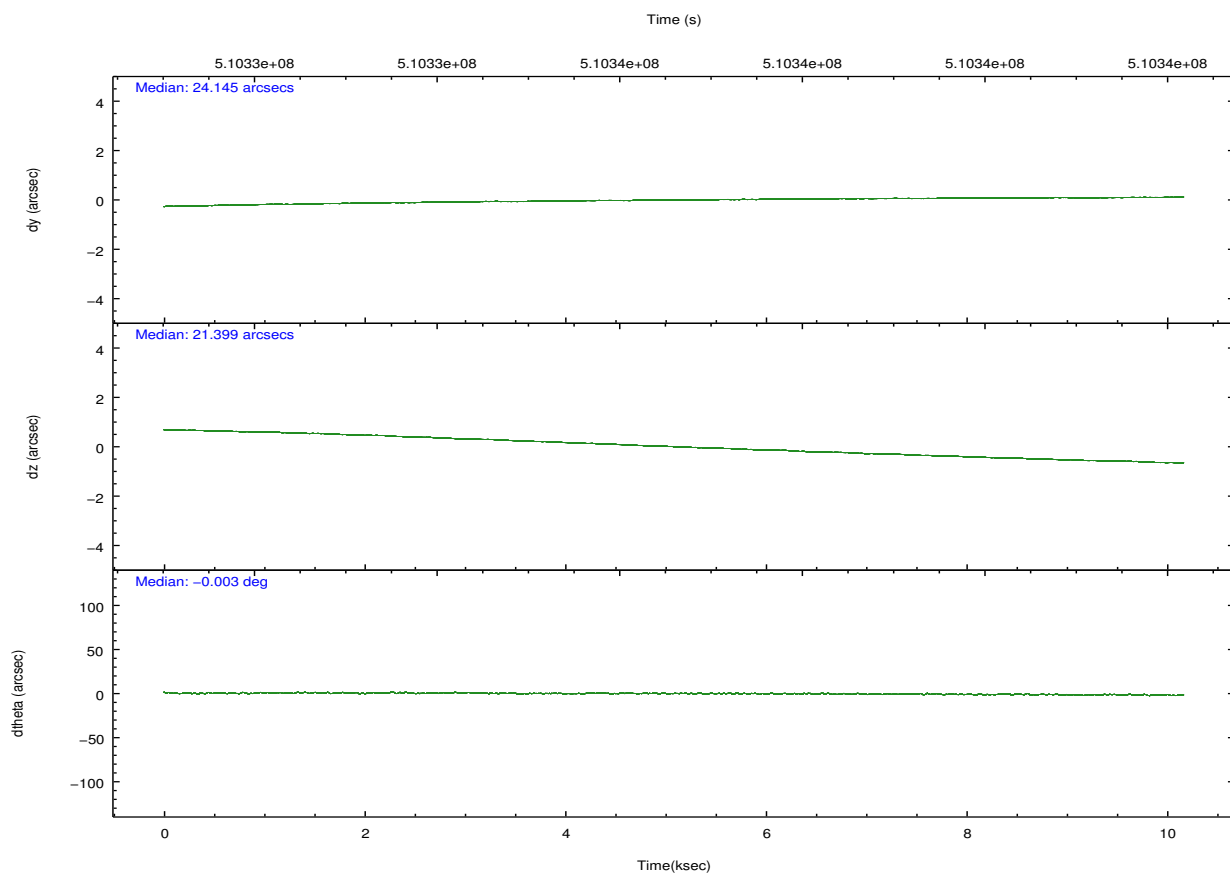
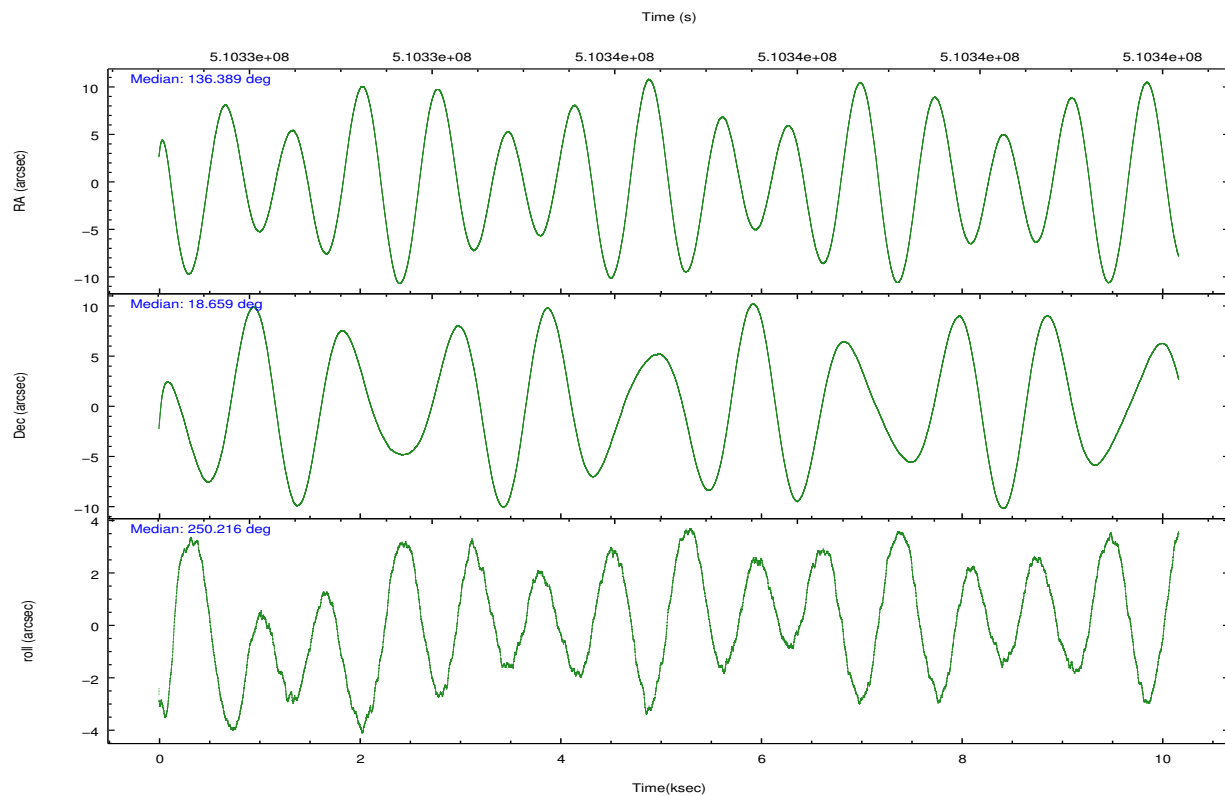
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	39023	41770	44731	43107	47423	60707	grade 0 events	1912	2095	2269	3611	1902	2419
rejected events	33691	35804	38943	35956	41847	34236		4%	5%	5%	8%	4%	3%
rejected %	86%	85%	87%	83%	88%	56%	grade 1 events	20	24	30	28	15	87
								0%	0%	0%	0%	0%	0%
							grade 2 events	1336	1442	1437	1324	1301	5614
								3%	3%	3%	3%	2%	9%
							grade 3 events	563	564	518	571	552	2264
								1%	1%	1%	1%	1%	3%
							grade 4 events	492	575	560	569	557	2265
								1%	1%	1%	1%	1%	3%
							grade 5 events	2057	2133	1973	2295	2387	6242
								5%	5%	4%	5%	5%	10%
							grade 6 events	1034	1292	1008	1081	1267	13931
								2%	3%	2%	2%	2%	22%
							grade 7 events	31609	33645	36936	33628	39442	27885
								81%	80%	82%	78%	83%	45%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	136.383948	136.3892168330378	CCD I2 on	Y	Y
[deg] Pointing Dec	18.686355	18.65932295552302	CCD I3 on	Y	Y
[deg] Pointing Roll	250.013842	250.2208504088204	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	O2	Y
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	510331679.184000	510330505.19154	CCD S5 on	N	N
Observation start date	2014-03-04T14:46:52	2014-03-04T14:28:25	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	510341679.184000	510342457.7172	On-chip summing requested	N	N
Observation end date	2014-03-04T17:33:32	2014-03-04T17:47:37	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



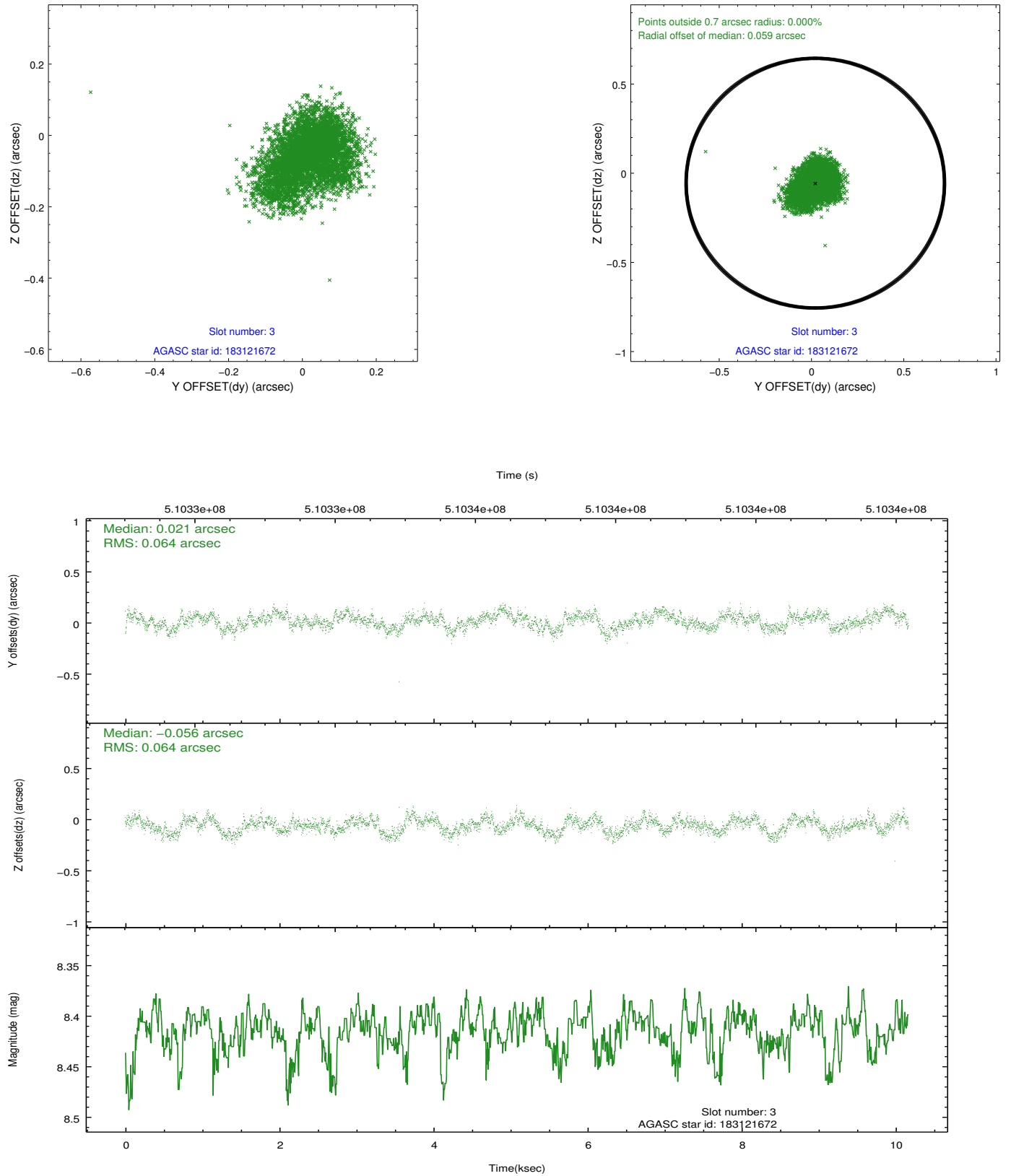


Slot Statistics

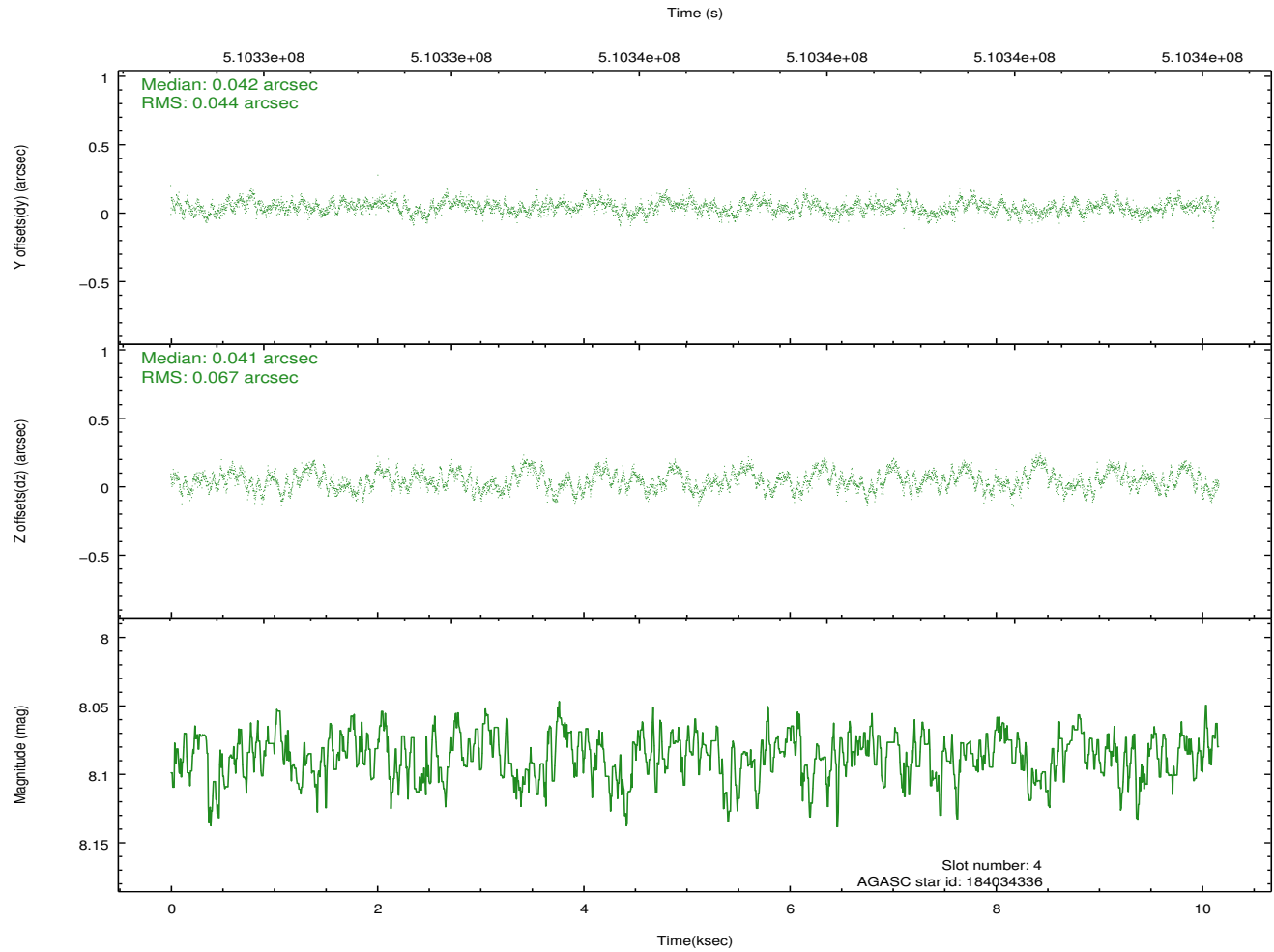
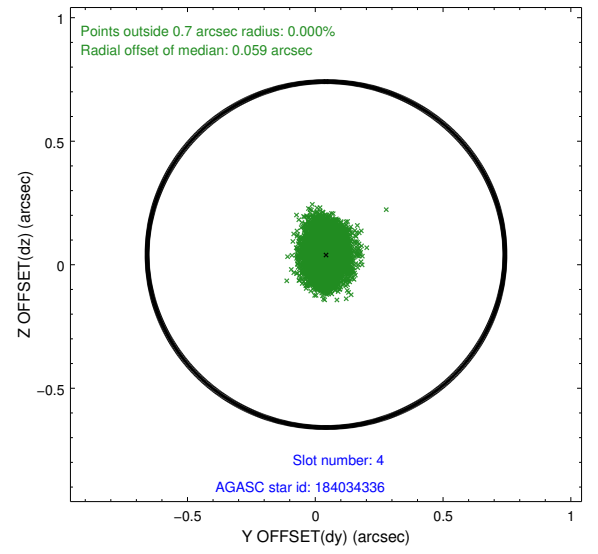
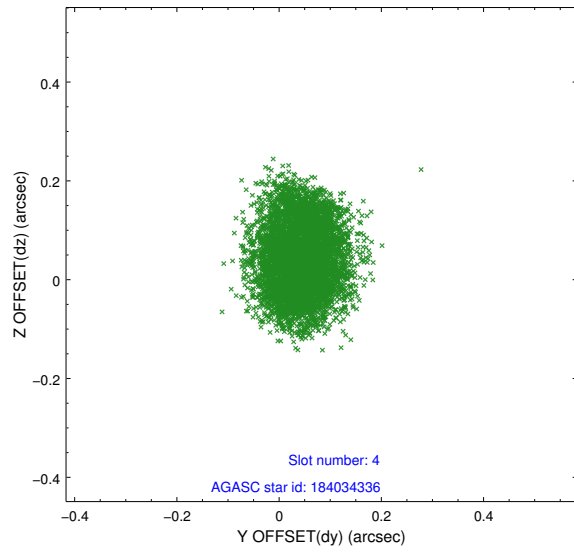
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.07	2480	0.066	-0.013	0.016	0.022	0.000000	0.000000	915.17	-845.18
1	FID		ACIS-I-5	7.06	2480	-0.272	0.056	0.016	0.022	0.000000	0.000000	-1833.02	1052.08
2	FID		ACIS-I-6	7.07	2479	0.114	0.027	0.015	0.024	0.000000	0.000000	380.15	1697.17
3	GUIDE	used	183121672	8.41	4957	0.021	-0.056	0.098	0.156	135.968829	18.685863	485.35	-1329.92
4	GUIDE	used	184034336	8.09	4958	0.042	0.041	0.088	0.136	136.360486	18.747604	-179.15	-150.56
5	GUIDE	used	184035560	8.23	4960	0.111	0.118	0.069	0.111	136.343942	18.949677	-843.79	-451.84
6	GUIDE	used	184037664	7.99	4959	-0.316	-0.361	0.087	0.138	136.797994	18.143210	1352.35	1998.62
7	GUIDE	used	183118272	8.45	4958	0.139	0.262	0.100	0.154	135.890425	19.357397	-1698.30	-2400.69

2.4 Star Slots

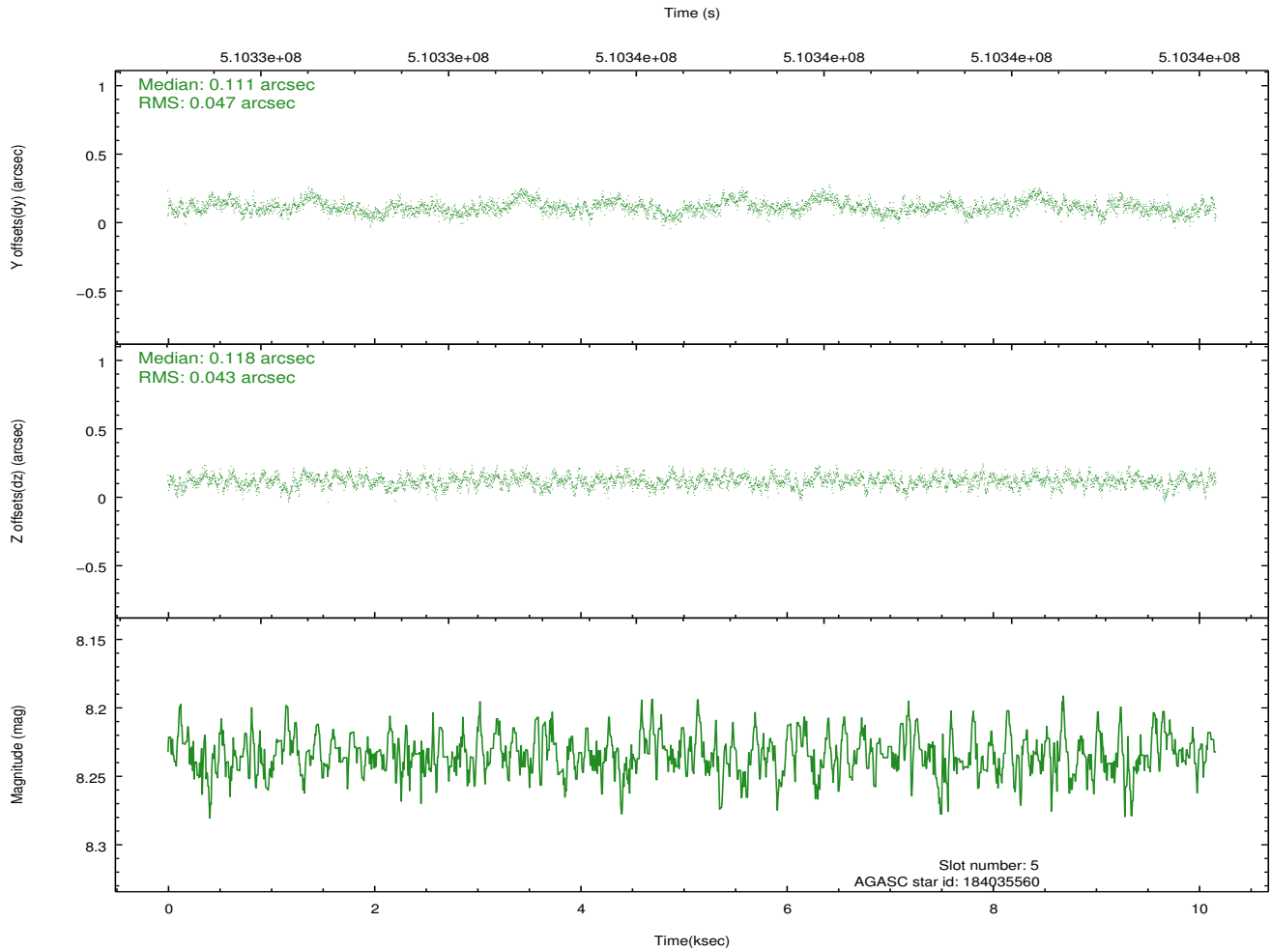
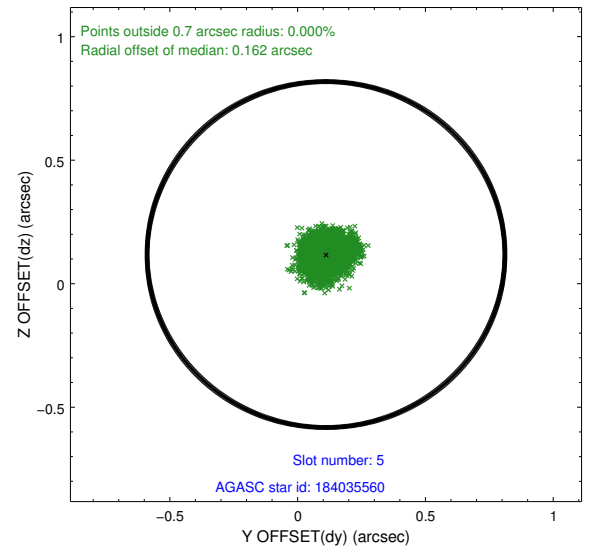
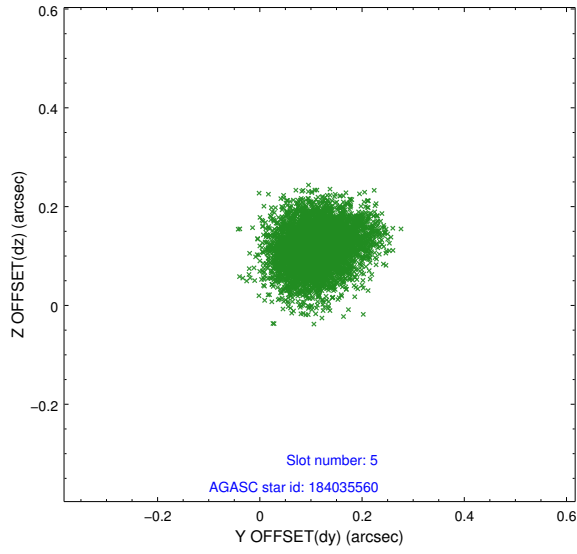
2.4.1 Slot 3



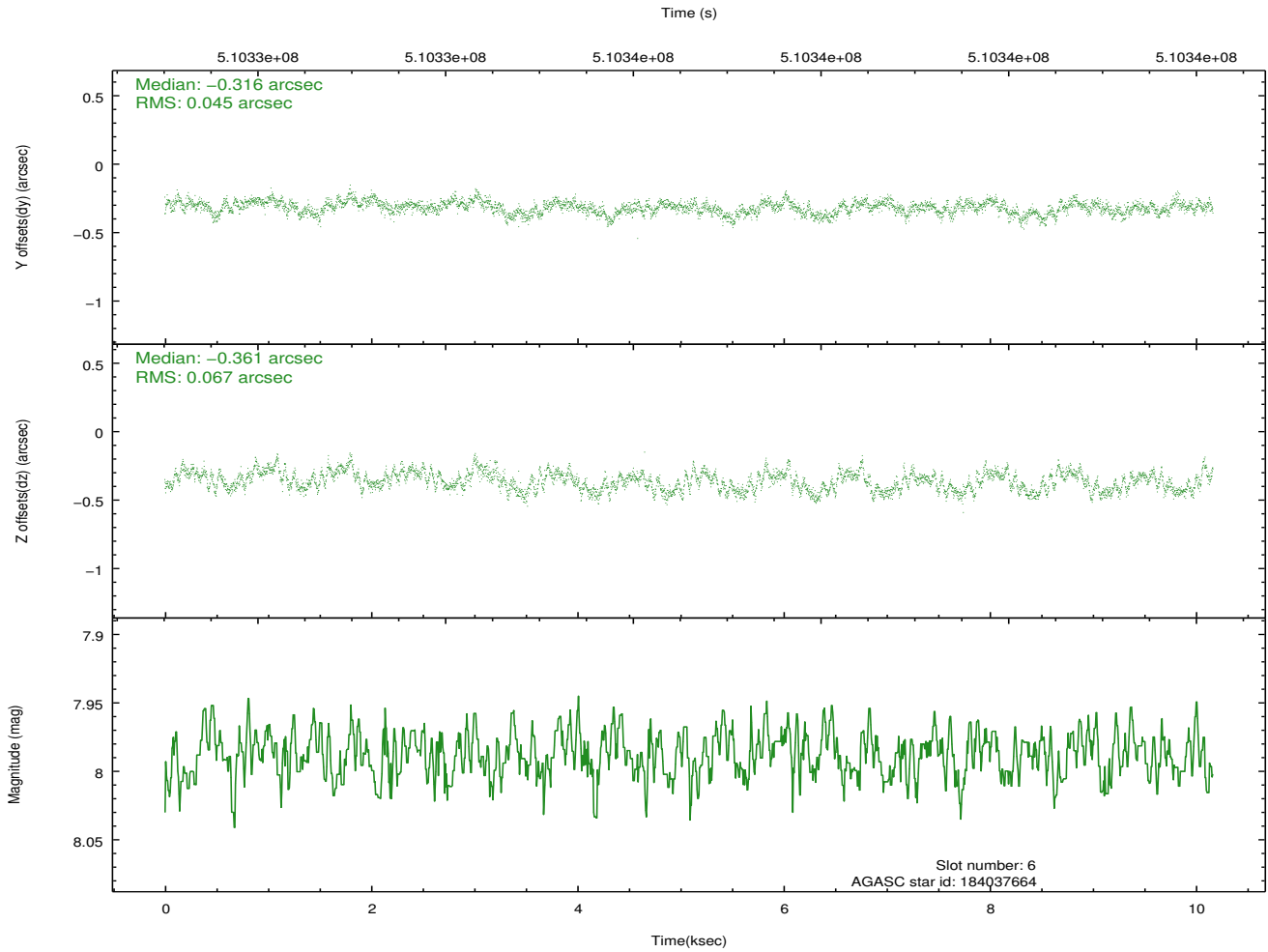
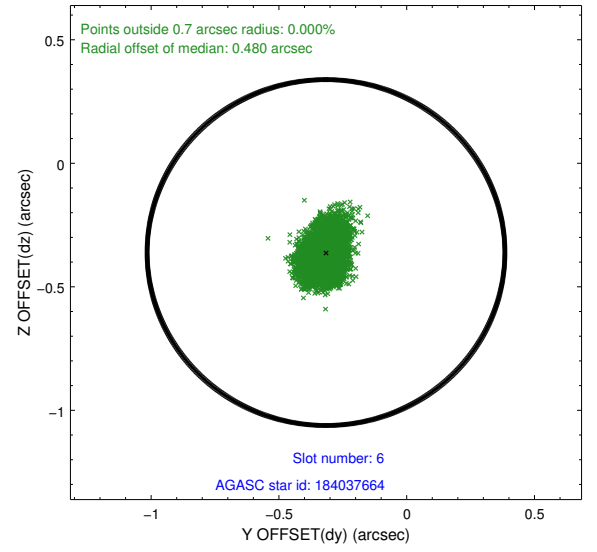
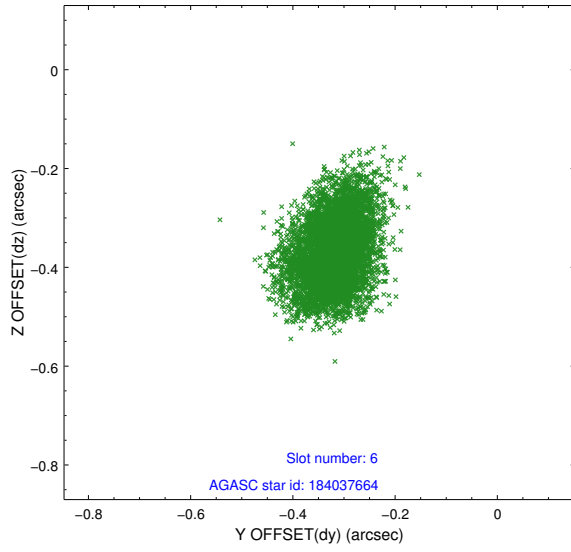
2.4.2 Slot 4



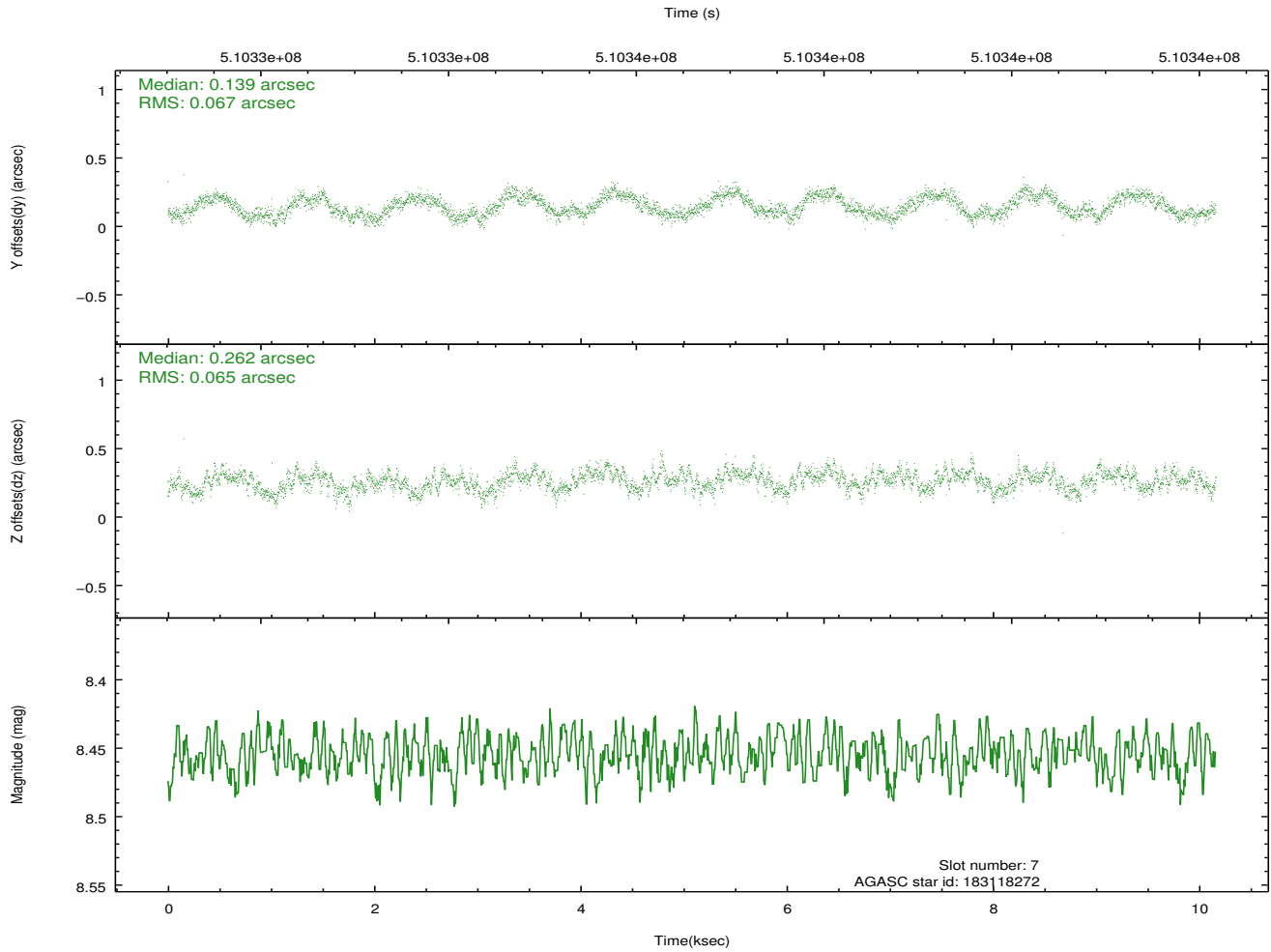
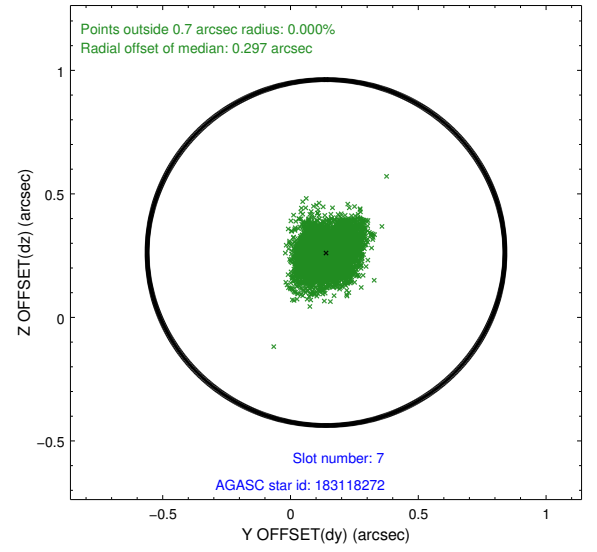
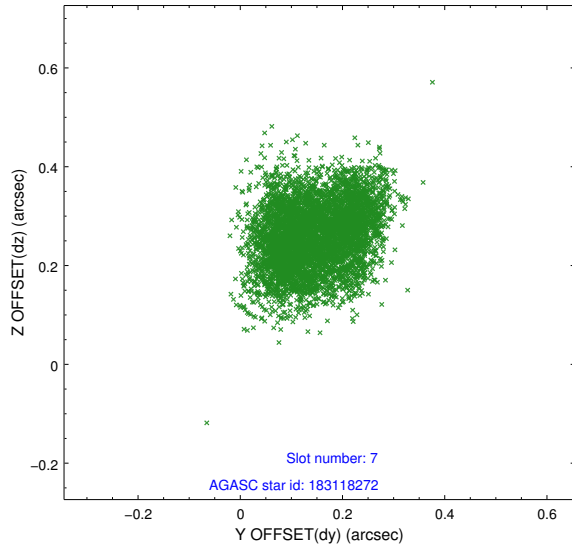
2.4.3 Slot 5



2.4.4 Slot 6

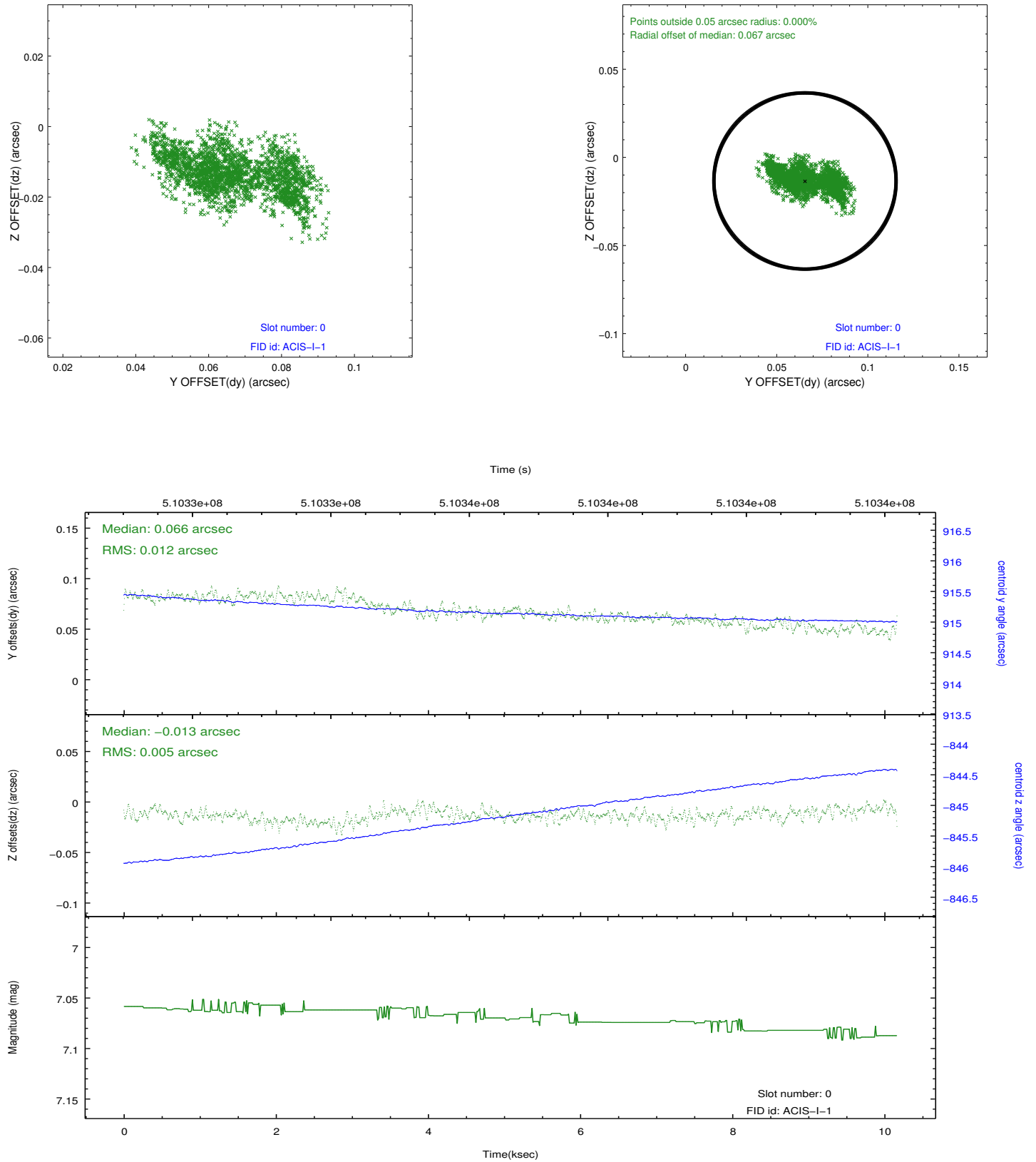


2.4.5 Slot 7

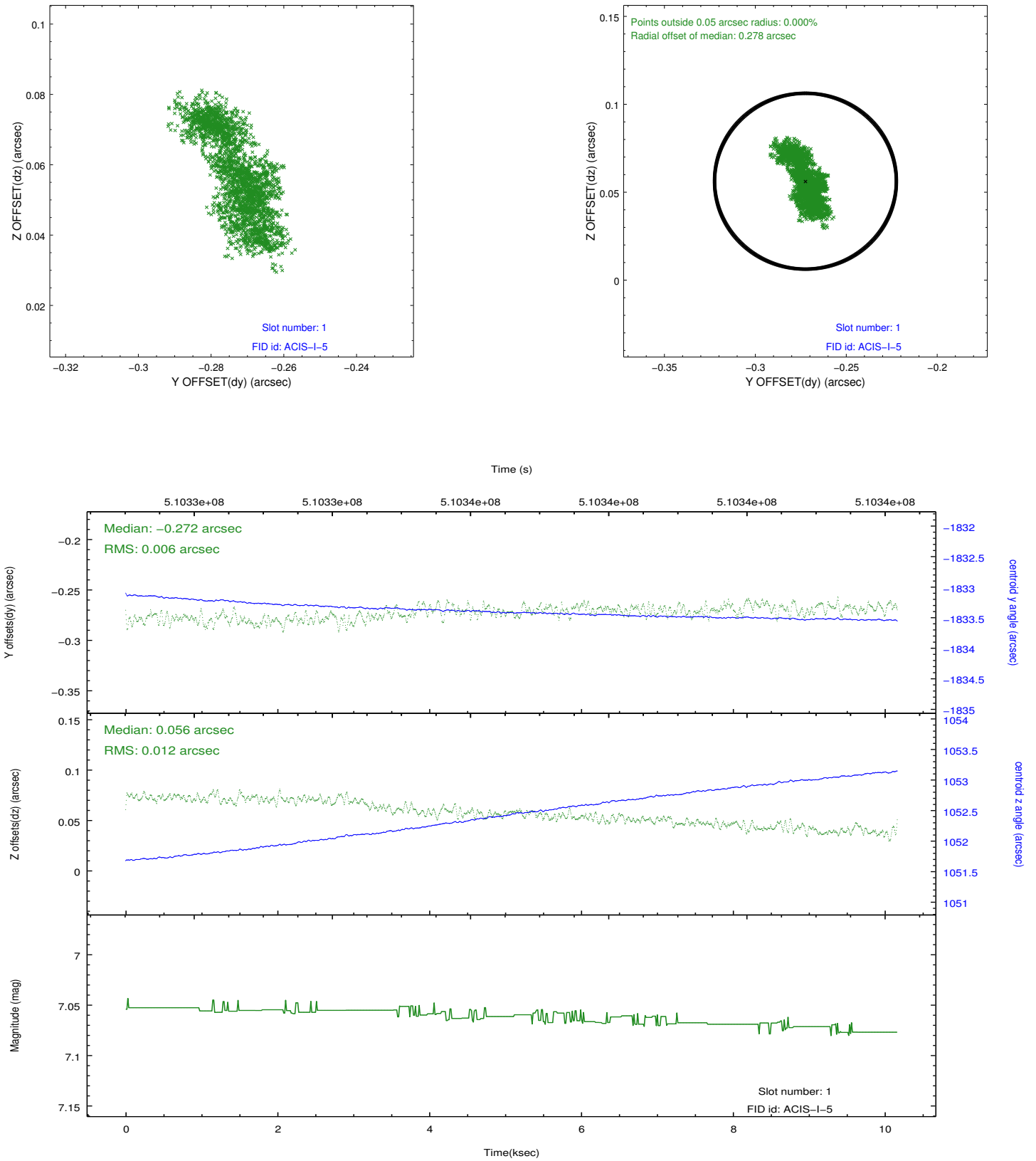


2.5 FID Slots

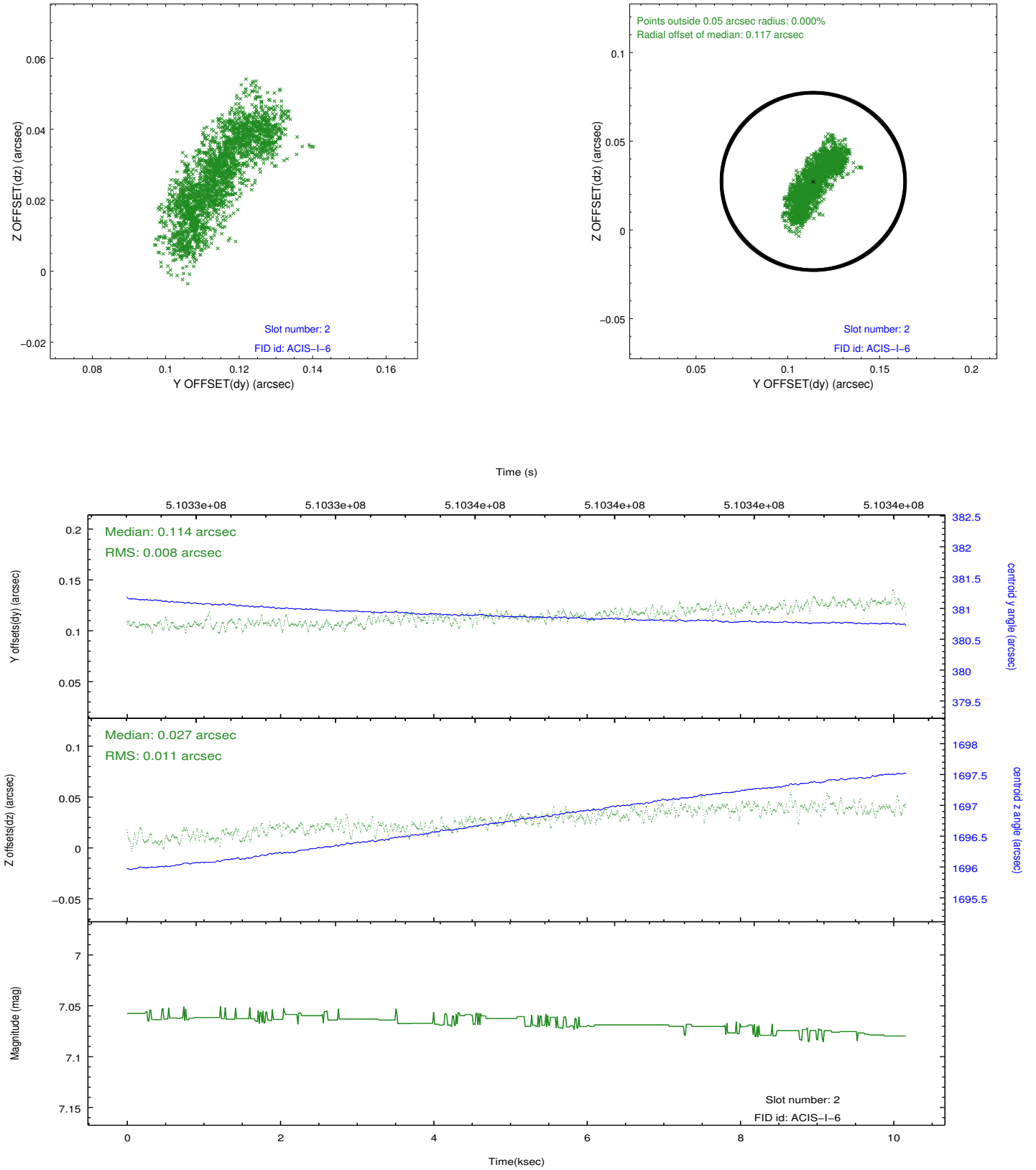
2.5.1 Slot 0



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)	2014.12.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.9738547449112

A.2 Comments

These data have been reprocessed with new aspect alignment calibration files that correct small mean offsets (up to 0.4 arcsecs) and improve overall astrometric accuracy. The new calibration was determined using data from the time period being reprocessed and was performed using cross-correlation of X-ray sources with radio and optical counterparts.