

V&V Reference Report

L2 ASCDS Version : 10.1.1

Observation 16302 - L2 Version 2
Chandra X-Ray Center

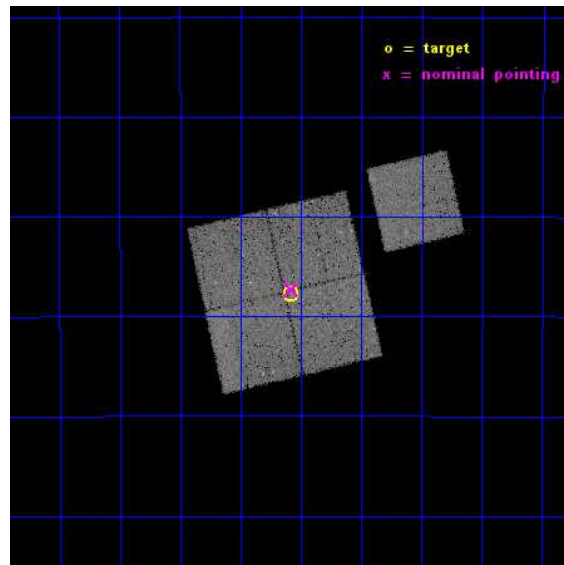
L2 Processing Date : Dec 9 2014

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1 Front

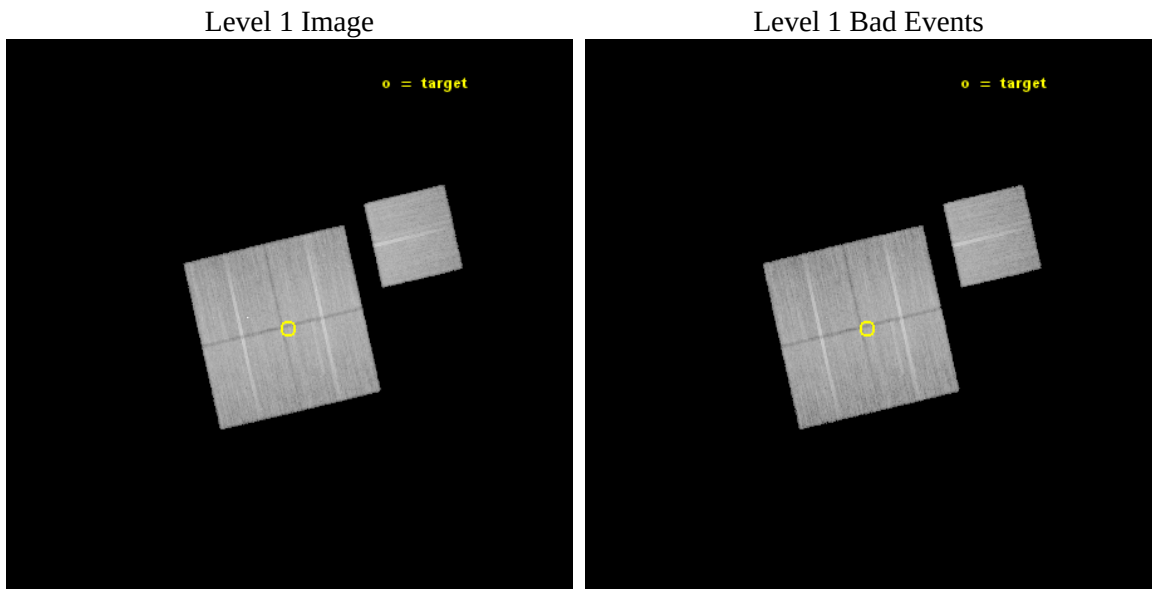
seq_num	601144	Sequence number
obs_id	16302	Observation id
title	Hot X-ray coronae around massive spiral galaxies: probing galaxy formation models	Proposal title
observer	Dr Stephen Murray	Principal investigator
object	ESO445-081	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	209.145417	Observer's specified target RA [deg]
dec_targ	-32.62975	Observer's specified target Dec [deg]
ra_nom	209.14469152378	Nominal RA [deg]
dec_nom	-32.621694791375	Nominal Dec [deg]
roll_nom	76.992022560593	Nominal Roll [deg]
revision	2	Processing version of data
ontime	39698.453808904	Sum of GTIs [s]
livetime	39179.764284314	Livetime [s]
ontime0	39707.753679752	Sum of GTIs [s]
ontime1	39704.653729498	Sum of GTIs [s]
ontime2	39707.835759759	Sum of GTIs [s]
ontime3	39698.453808904	Sum of GTIs [s]
ontime6	39704.571649492	Sum of GTIs [s]
l2events	99749	Number of level 2 events



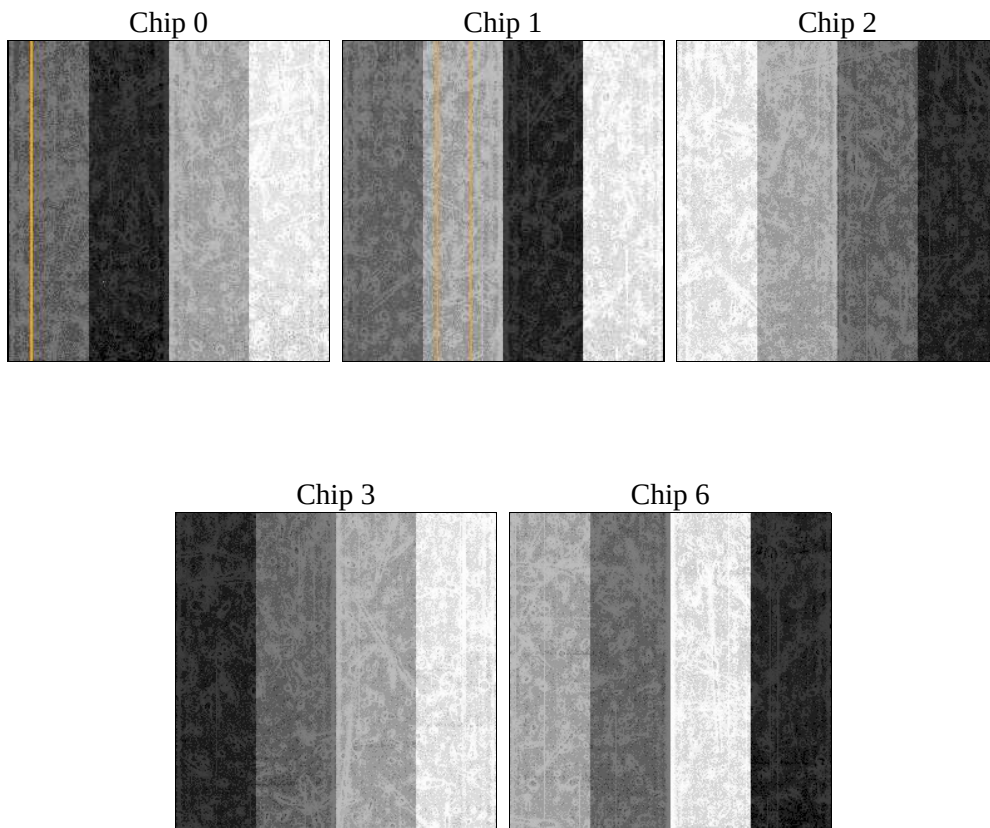
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	40000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	39698.453808904	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	39707.753679752	Sum of GTIs [s]
date	2014-12-09T21:54:39	Date and time of file creation	ontime1	39704.653729498	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	39707.835759759	Sum of GTIs [s]
			ontime3	39698.453808904	Sum of GTIs [s]
			ontime6	39704.571649492	Sum of GTIs [s]
			l1events	932827	Number of level 1 events

2.1.4 Events

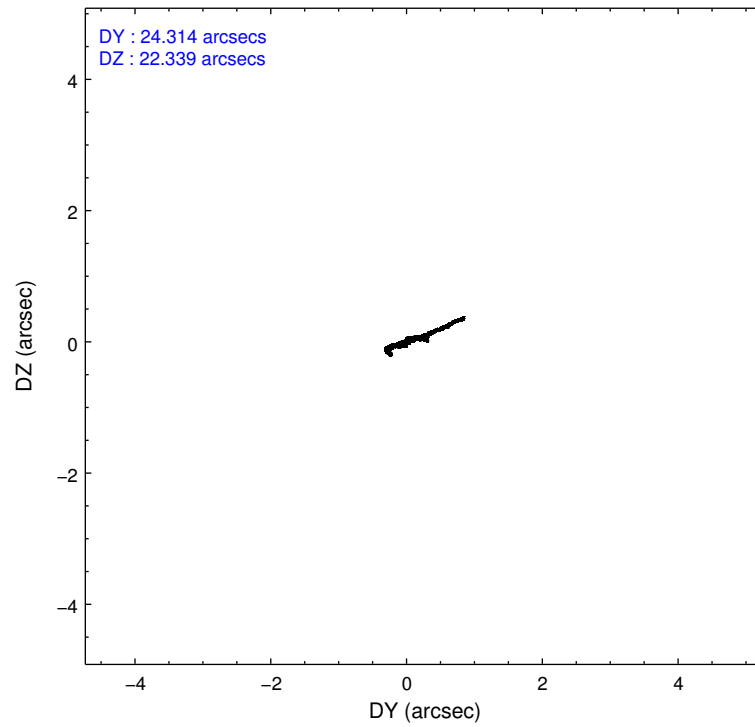
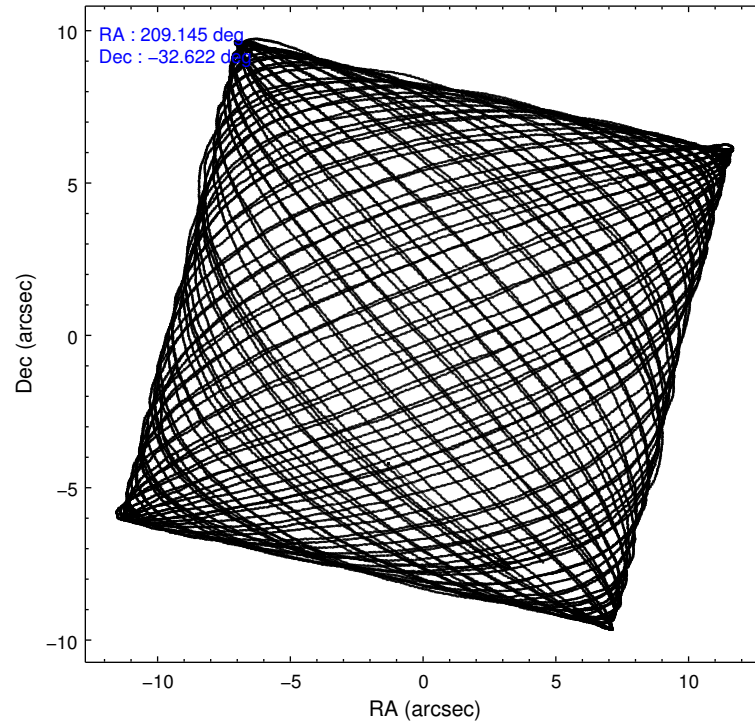
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	173710	181129	192521	190734	194733
rejected events	149193	155452	168846	168851	170949
rejected %	85%	85%	87%	88%	87%

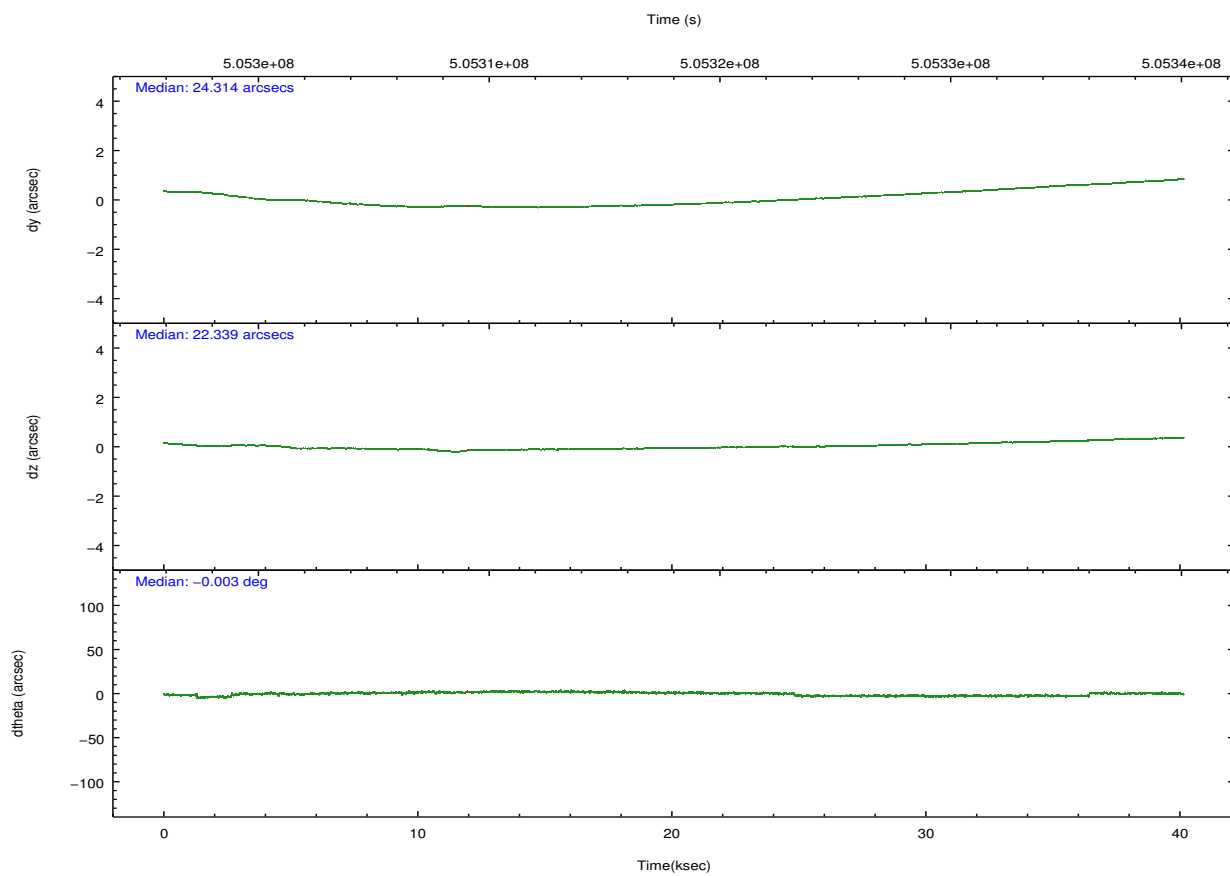
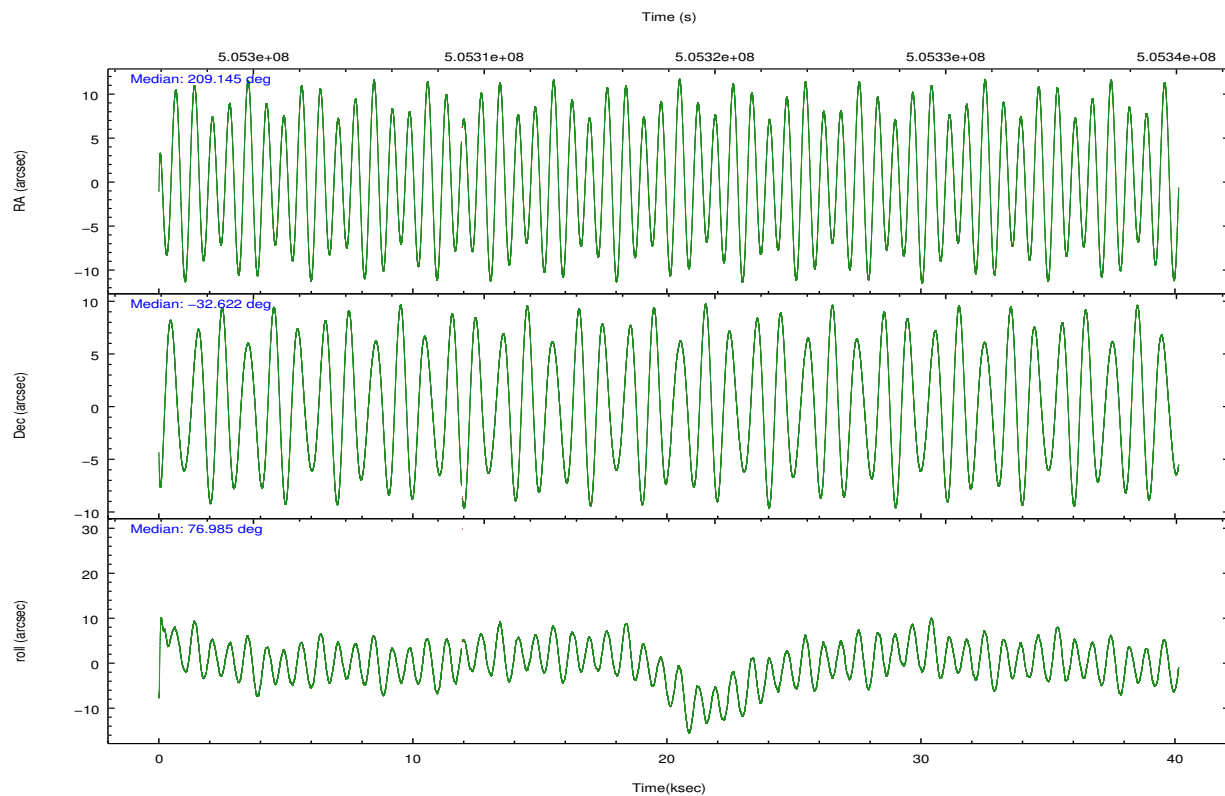
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	9118	8986	8761	7821	8308
	5%	4%	4%	4%	4%
grade 1 events	144	99	132	103	99
	0%	0%	0%	0%	0%
grade 2 events	6149	6216	5901	4956	5493
	3%	3%	3%	2%	2%
grade 3 events	2325	2510	2234	2338	2355
	1%	1%	1%	1%	1%
grade 4 events	2209	2580	2351	2312	2296
	1%	1%	1%	1%	1%
grade 5 events	8981	9758	8267	10323	9679
	5%	5%	4%	5%	4%
grade 6 events	4761	5436	4471	4499	5378
	2%	3%	2%	2%	2%
grade 7 events	140023	145544	160404	158382	161125
	80%	80%	83%	83%	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	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	209.154368	209.1446915237775	Subarray requested	NONE	NONE
[deg] Pointing Dec	-32.647963	-32.6216947913753	Alternating exposures requested	N	N
[deg] Pointing Roll	76.788566	76.99202256059328	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-233.592463	-233.5899487761303			
[mm] SIM translation stage offset	0	-0.002504226799430853			
[s] Observation start time (MET)	505298068.184000	505296902.11462			
Observation start date	2014-01-05T08:33:21	2014-01-05T08:15:02			
[s] Observation end time (MET)	505338068.184000	505338845.11692			
Observation end date	2014-01-05T19:40:01	2014-01-05T19:54:05			
Read mode	TIMED	TIMED			

2.3 Aspect



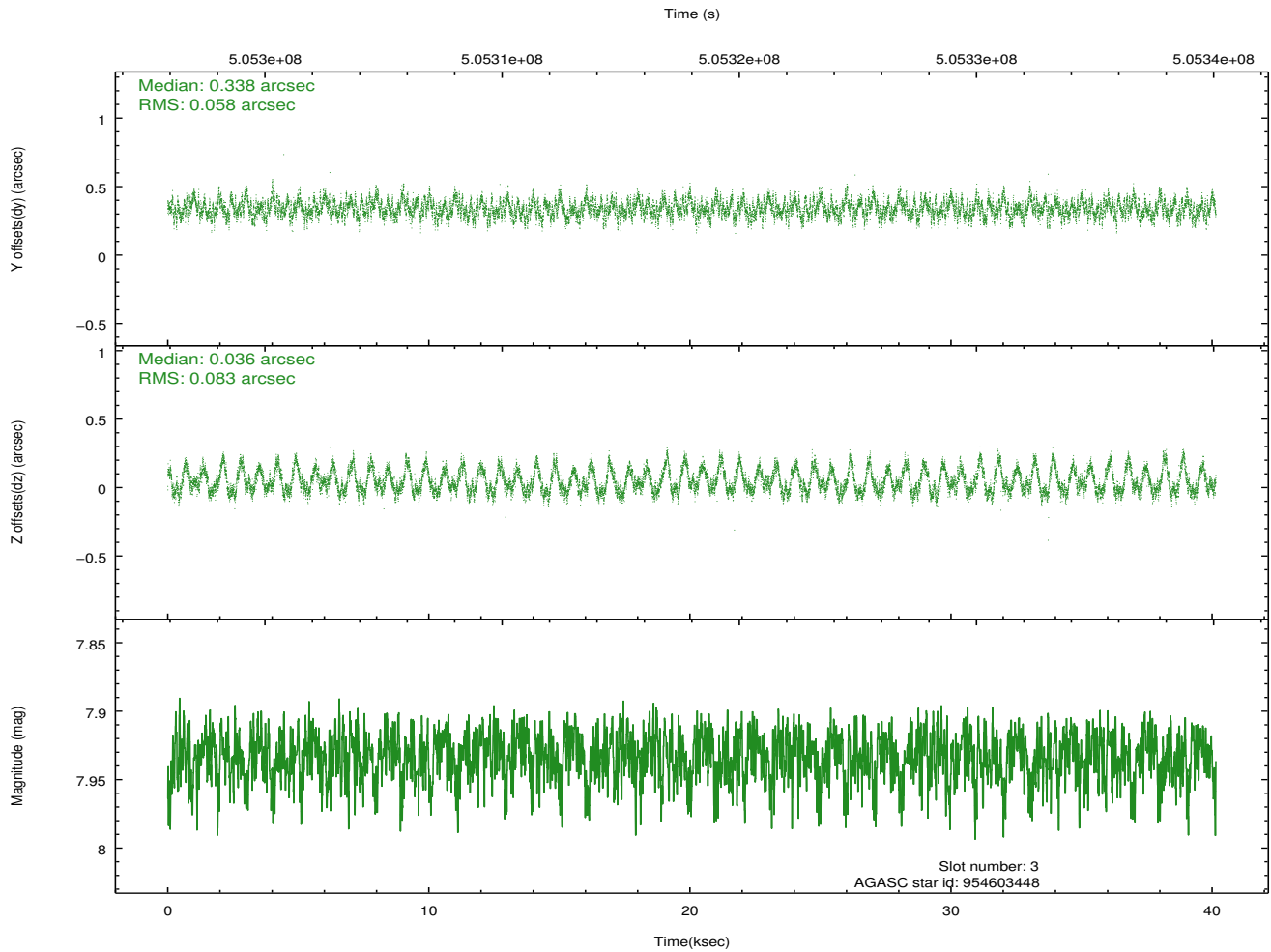
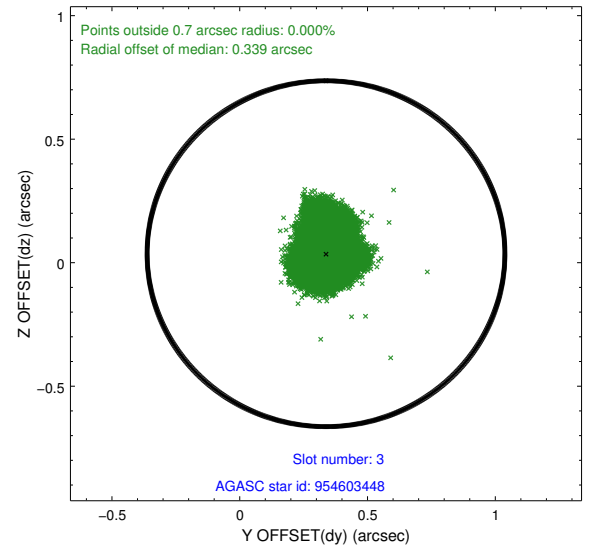
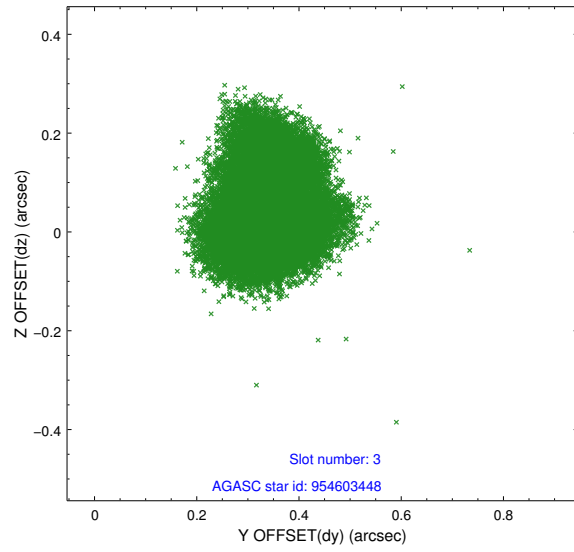


Slot Statistics

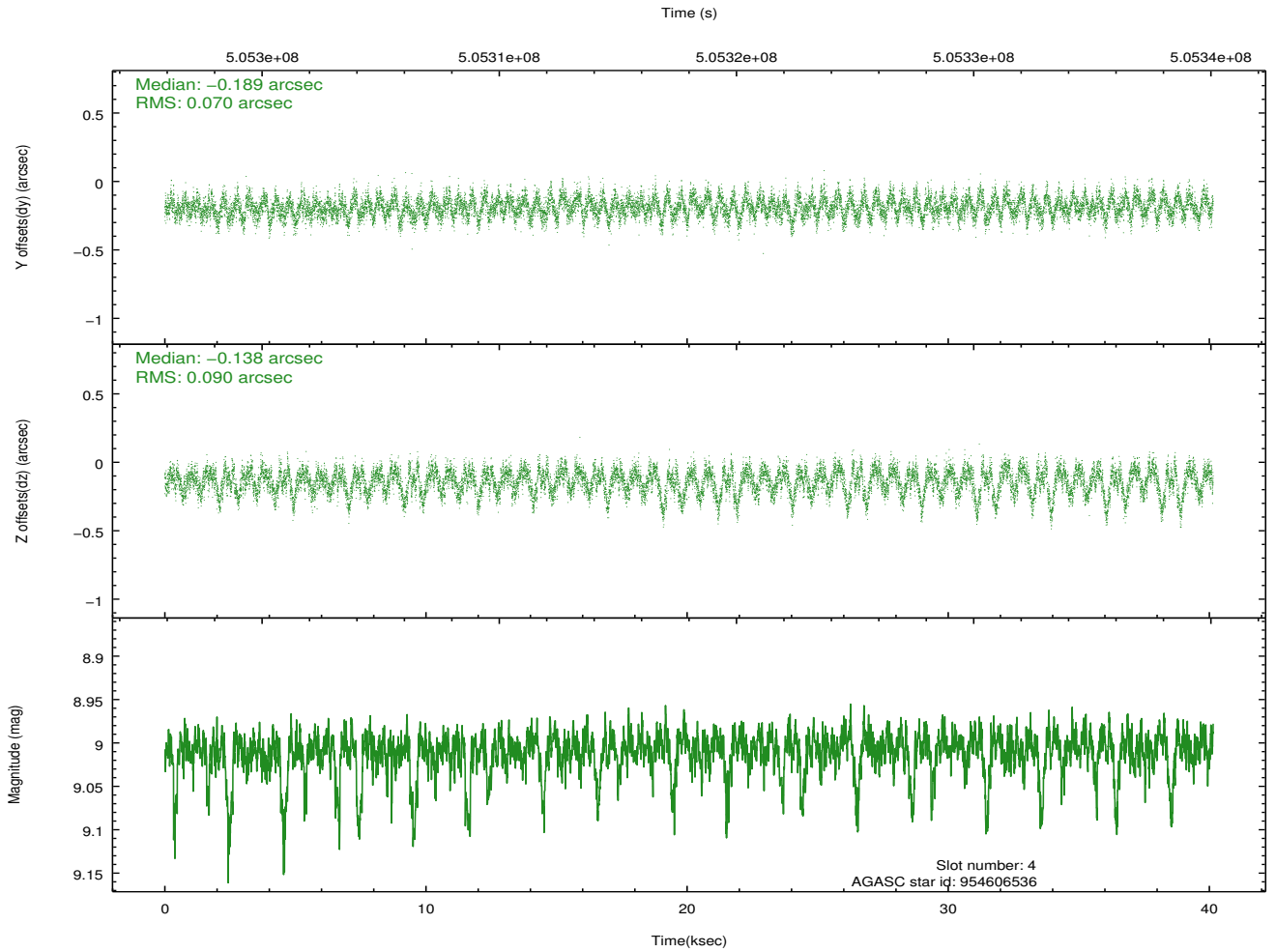
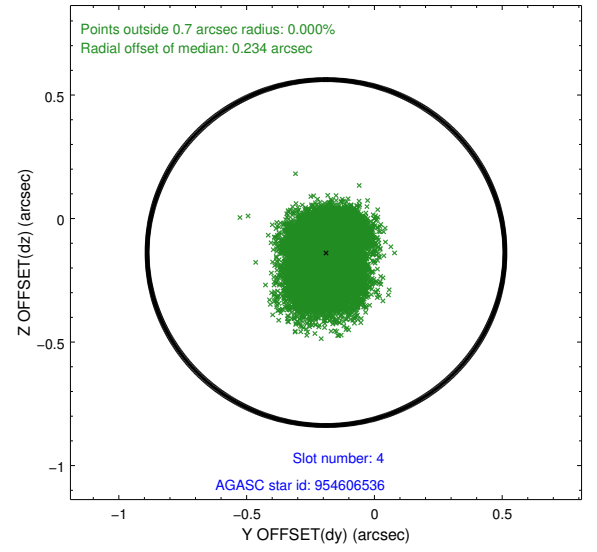
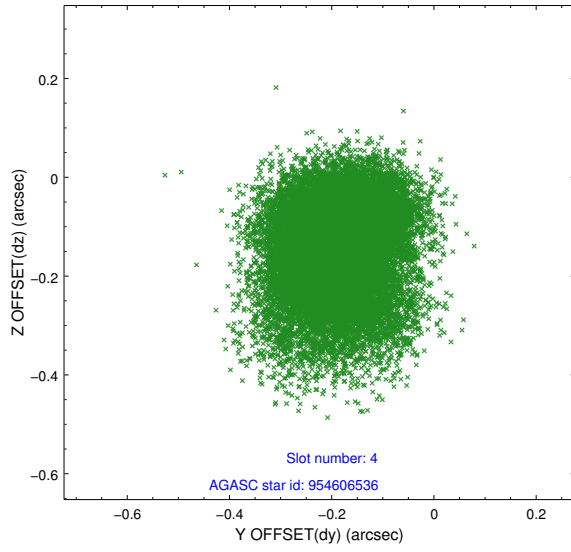
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.08	9784	-0.009	0.016	0.041	0.059	0.000000	0.000000	914.82	-846.12
1	FID		ACIS-I-4	7.04	9784	0.256	0.093	0.030	0.053	0.000000	0.000000	2135.08	1053.78
2	FID		ACIS-I-5	7.06	9784	-0.349	0.100	0.038	0.052	0.000000	0.000000	-1833.54	1051.55
3	GUIDE	used	954603448	7.93	19566	0.338	0.036	0.110	0.166	208.995855	-32.755253	-485.99	379.17
4	GUIDE	used	954606536	9.01	19562	-0.189	-0.138	0.120	0.200	209.229208	-32.217760	1559.66	132.04
5	GUIDE	used	954610688	7.24	19566	-0.155	-0.325	0.094	0.148	208.583511	-32.445511	307.68	1855.06
6	GUIDE	used	954733824	7.19	19567	0.215	0.697	0.057	0.092	209.720817	-32.792420	-118.37	-1788.05
7	GUIDE	used	954606376	8.19	19559	-0.216	-0.277	0.082	0.133	208.953566	-32.279624	1150.32	897.85

2.4 Star Slots

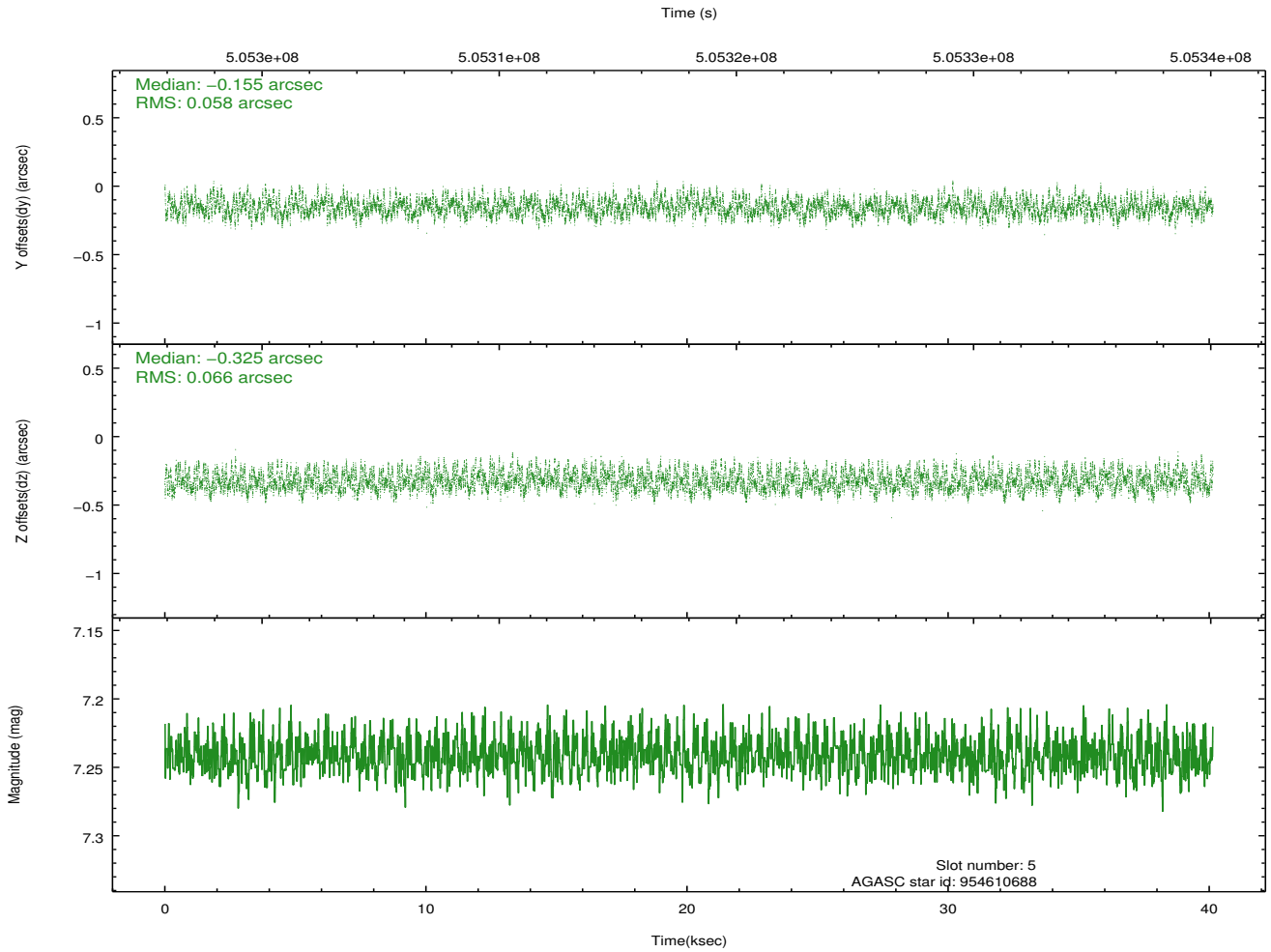
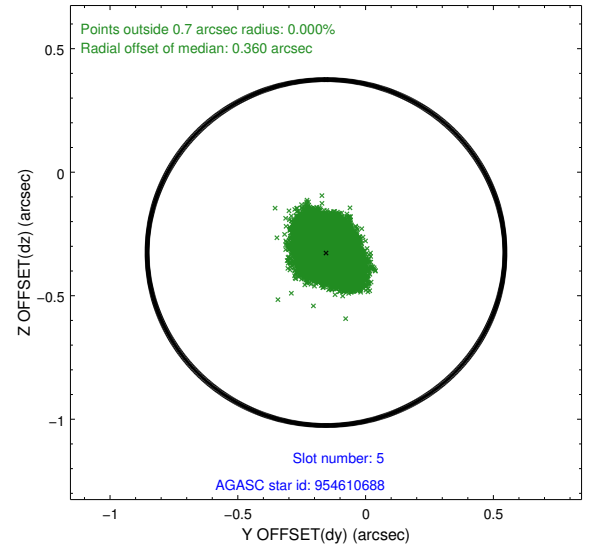
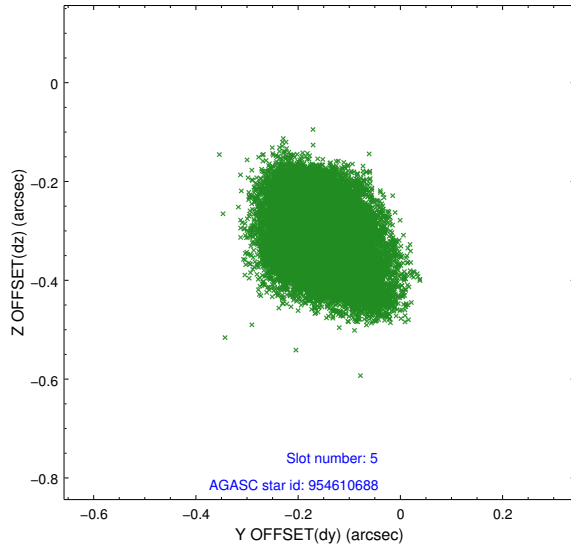
2.4.1 Slot 3



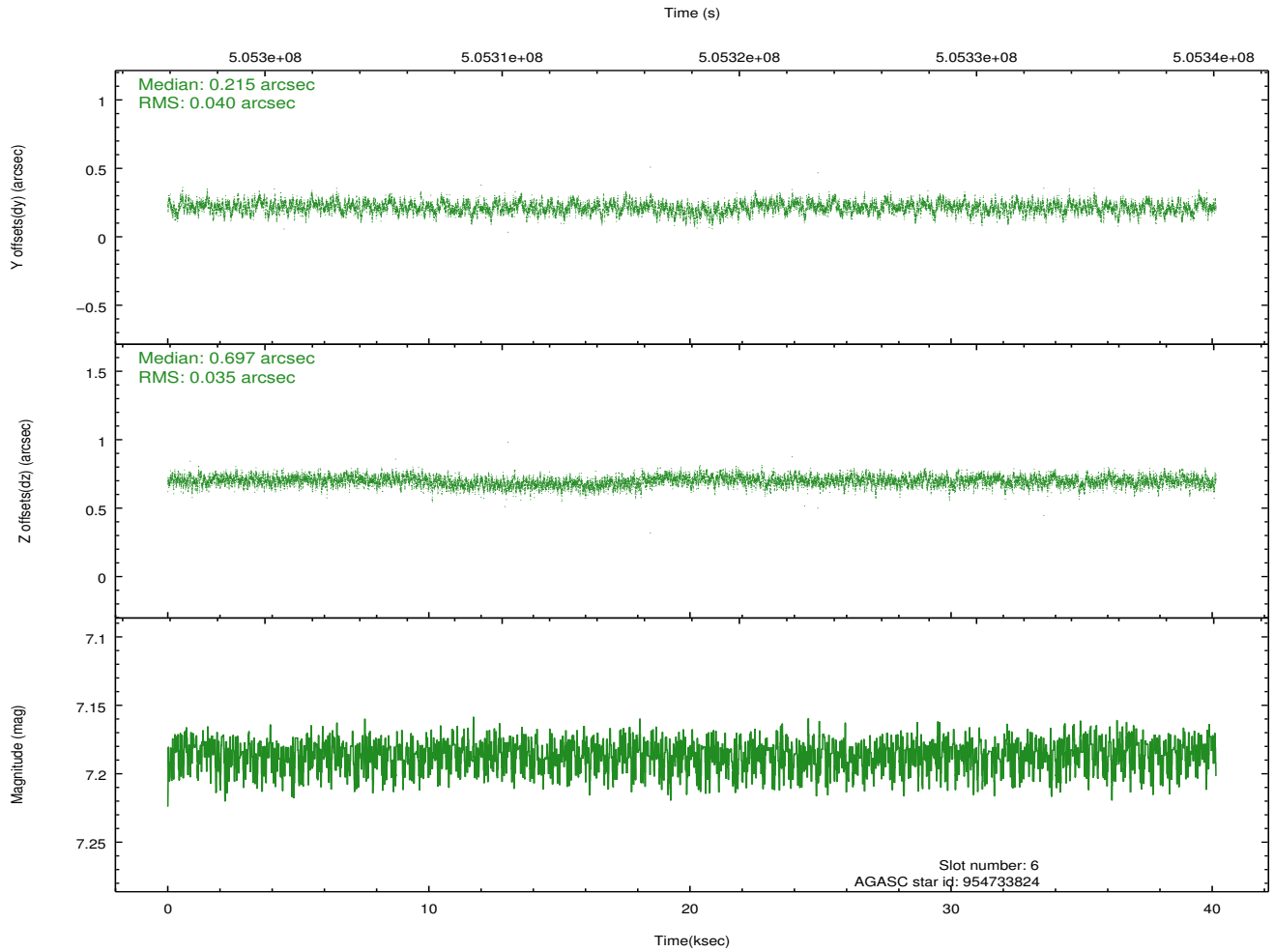
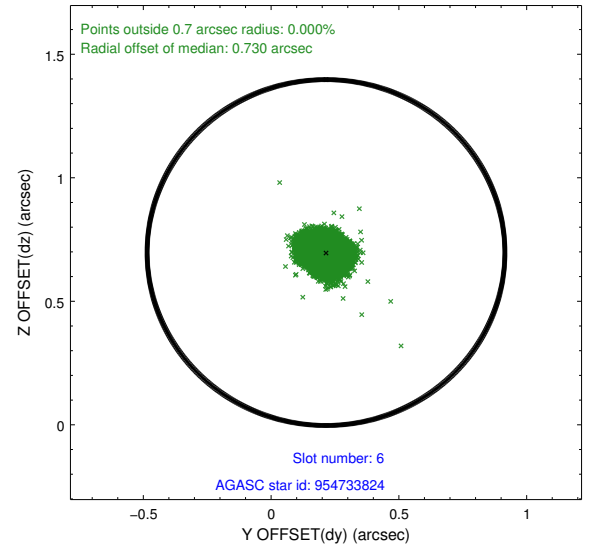
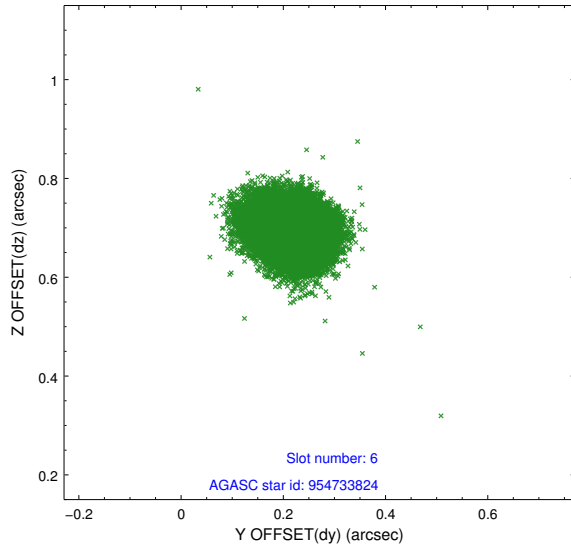
2.4.2 Slot 4



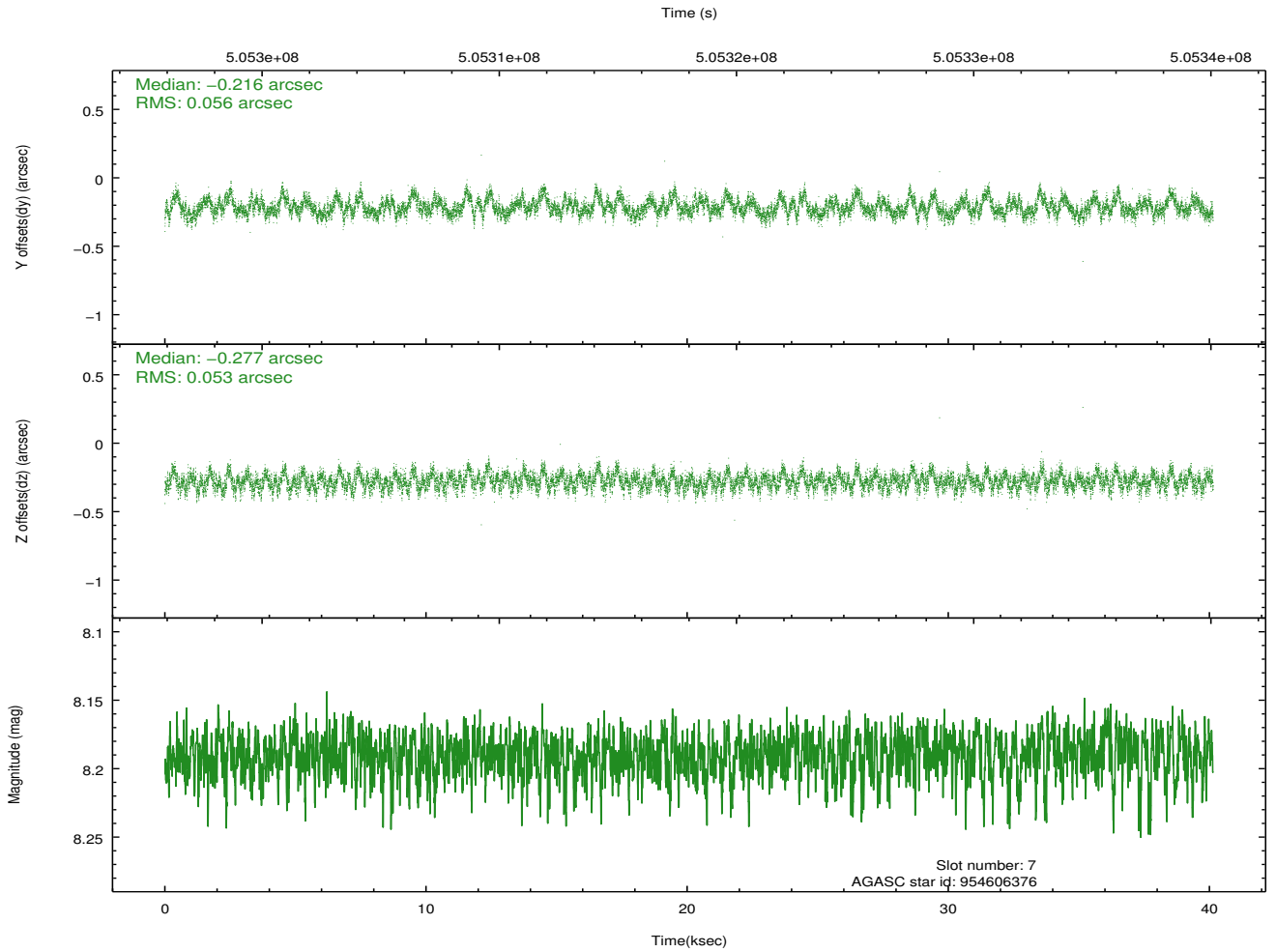
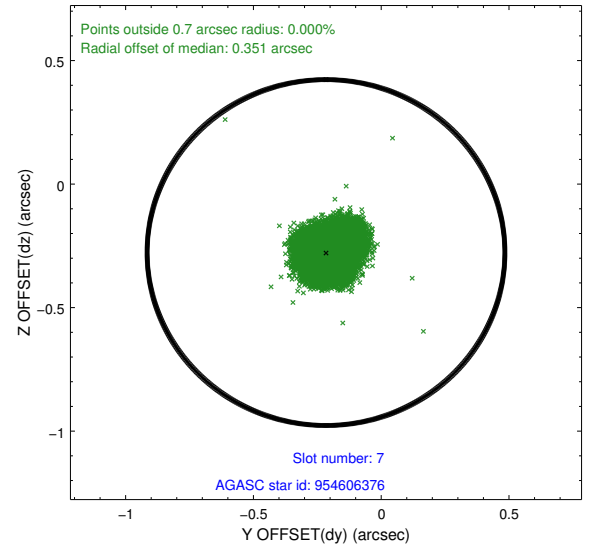
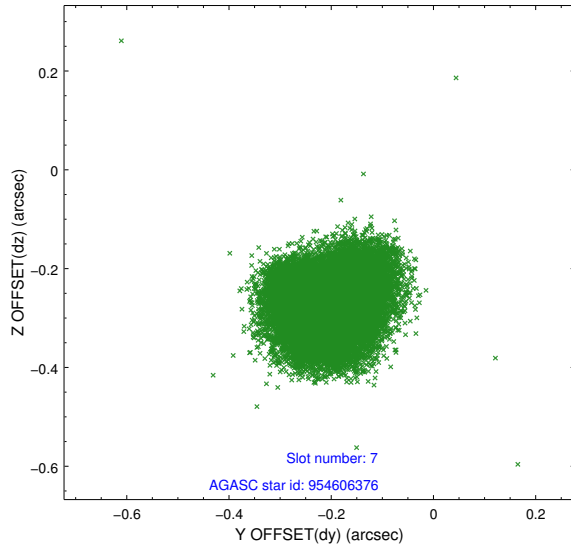
2.4.3 Slot 5



2.4.4 Slot 6

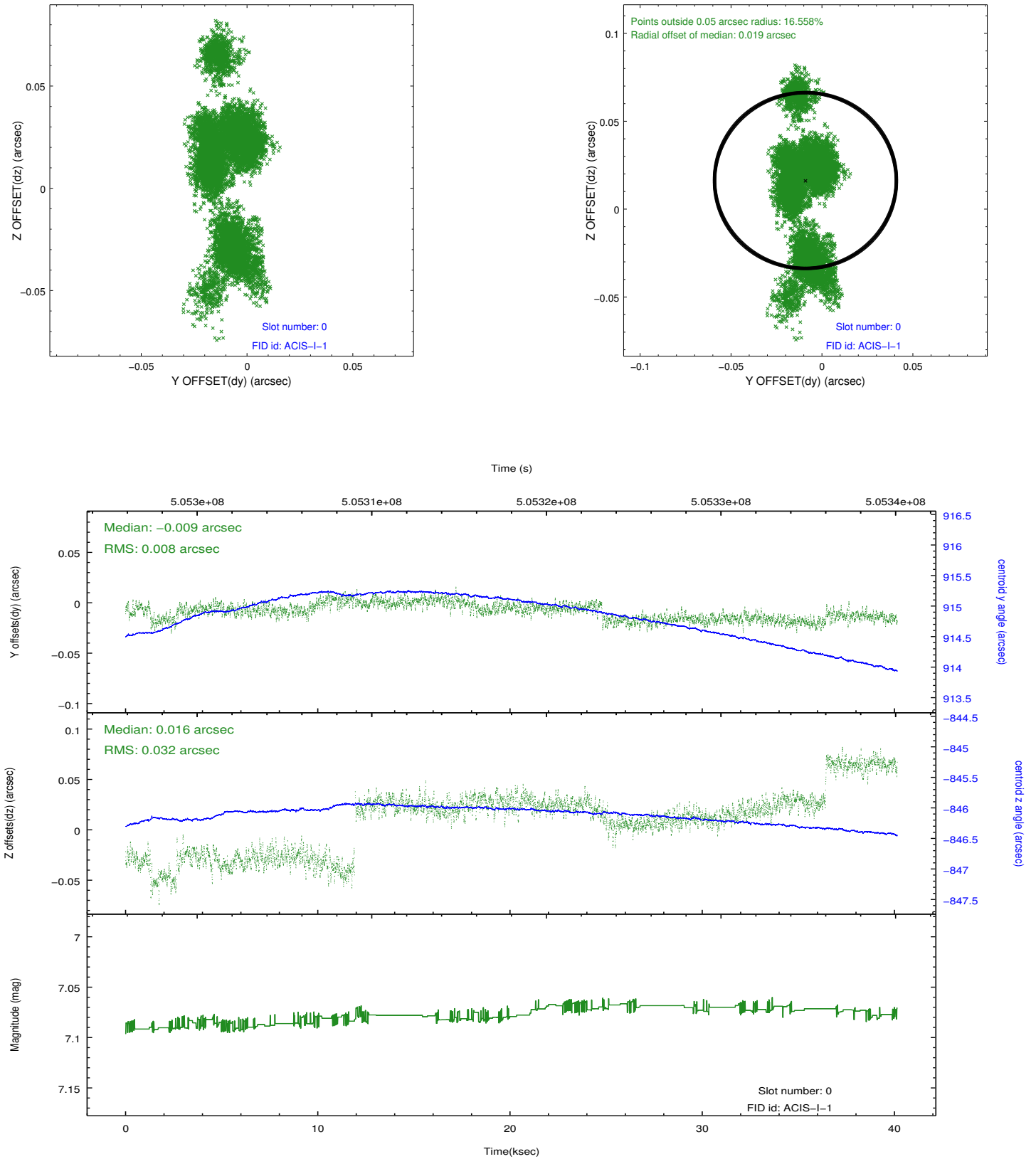


2.4.5 Slot 7

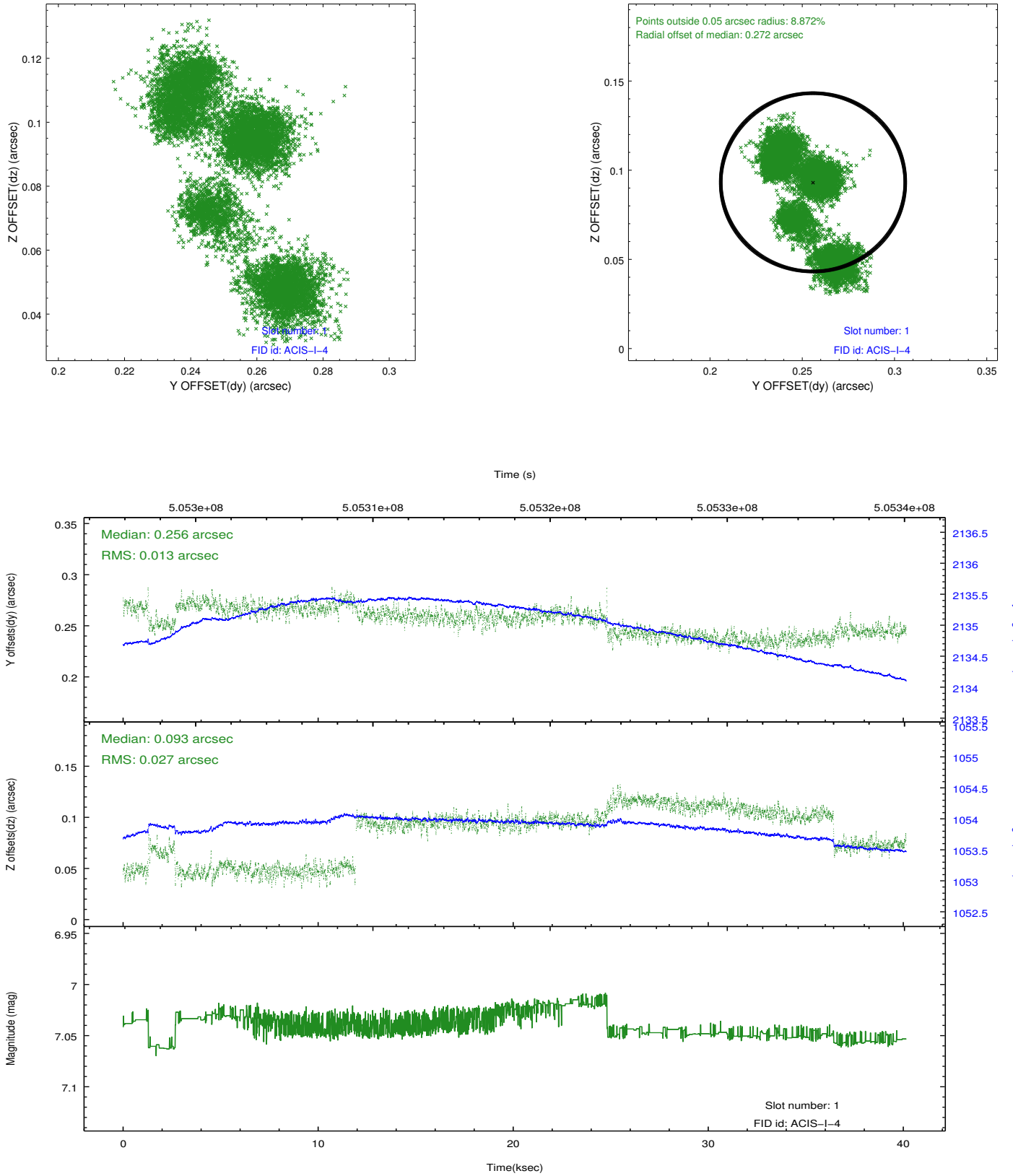


2.5 FID Slots

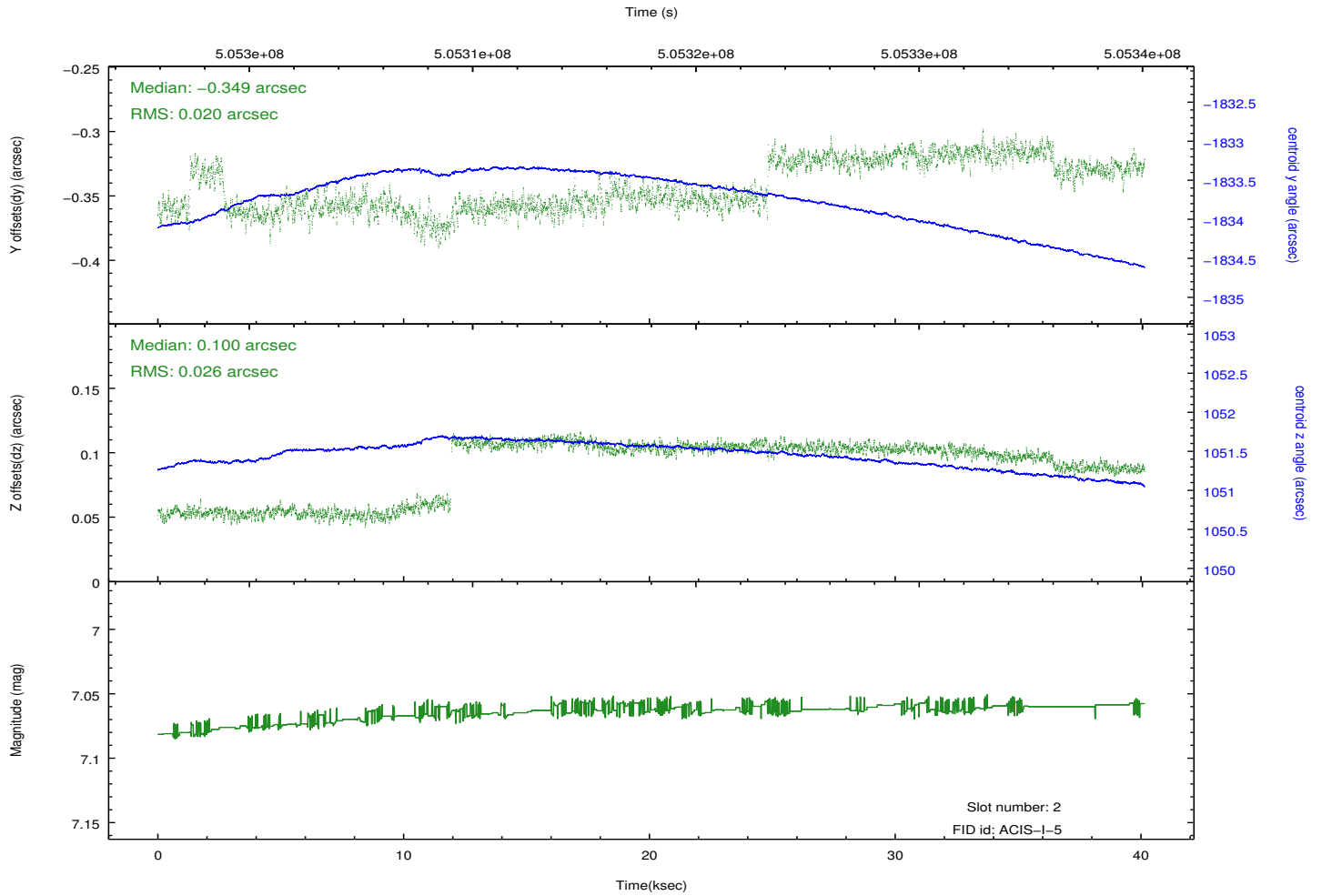
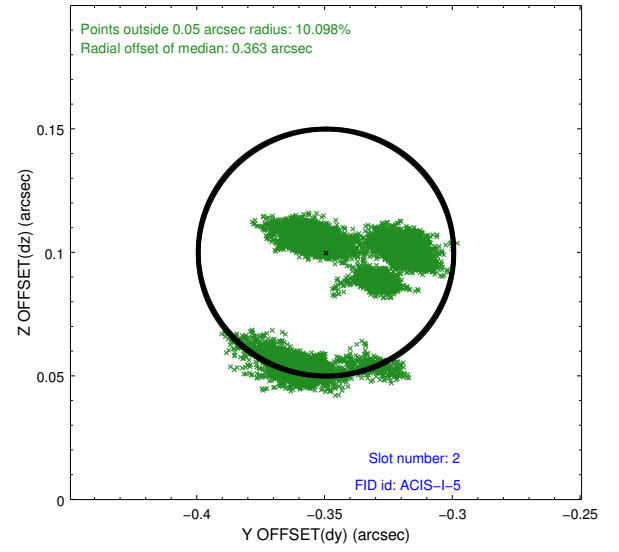
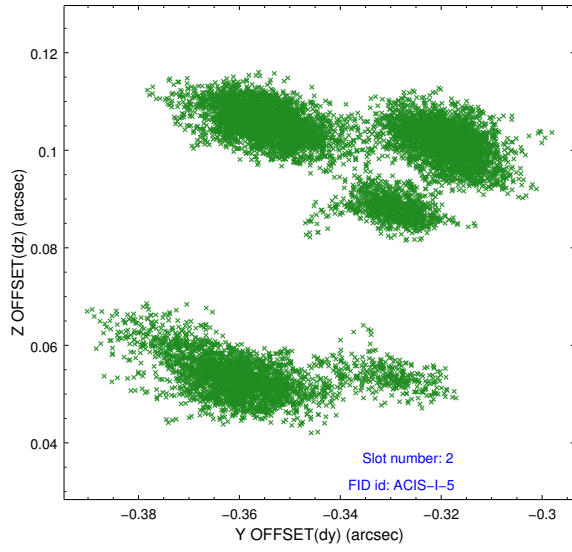
2.5.1 Slot 0



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)	2014.12.16
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	39.698453808904

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.