

V&V Reference Report

L2 ASCDS Version : 10.2.1

Observation 15134 - L2 Version 2
Chandra X-Ray Center

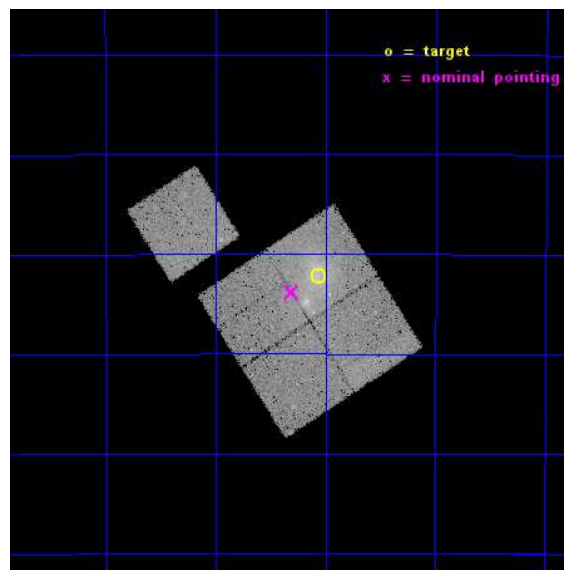
L2 Processing Date : Dec 11 2014

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1 Front

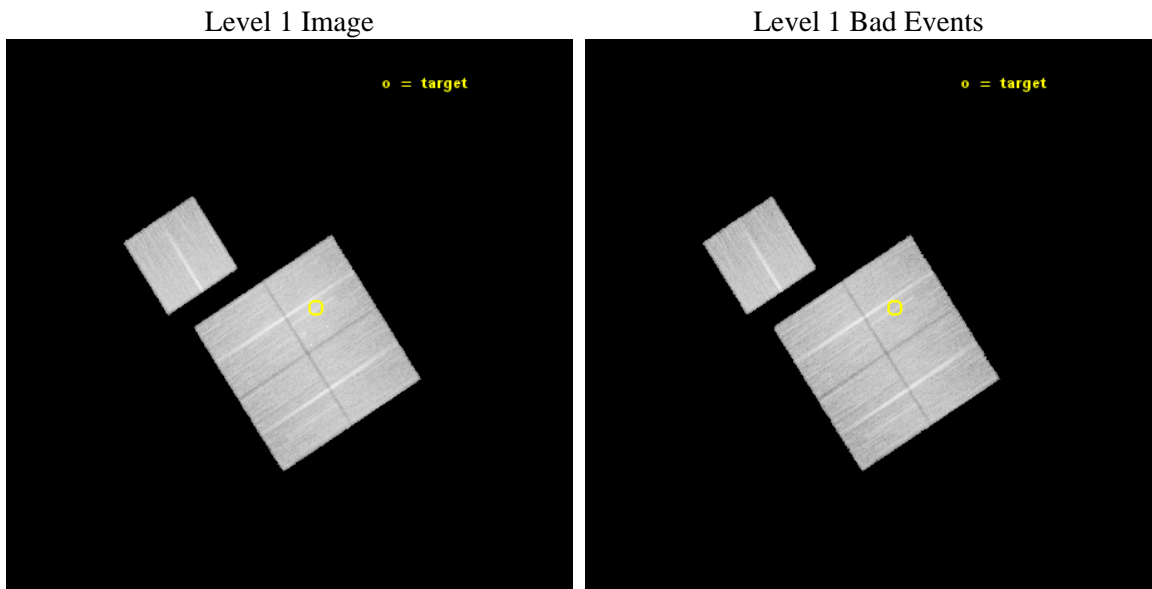
seq_num	801263	Sequence number
obs_id	15134	Observation id
title	A Chandra-Planck Legacy Program for Massive Clusters of Galaxies	P
observer	Dr. Christine Jones	Principal investigator
object	G292.51+21.98	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	180.266667	Observer's specified target RA [deg]
dec_targ	-39.869722	Observer's specified target Dec [deg]
ra_nom	180.32779413154	Nominal RA [deg]
dec_nom	-39.897311386483	Nominal Dec [deg]
roll_nom	327.20842606725	Nominal Roll [deg]
revision	2	Processing version of data
ontime	43241.334382832	Sum of GTIs [s]
livetime	42676.354515313	Livetime [s]
ontime0	43241.211262822	Sum of GTIs [s]
ontime1	43241.252302825	Sum of GTIs [s]
ontime2	43241.293342829	Sum of GTIs [s]
ontime3	43241.334382832	Sum of GTIs [s]
ontime6	43241.170222819	Sum of GTIs [s]
l2events	116633	Number of level 2 events



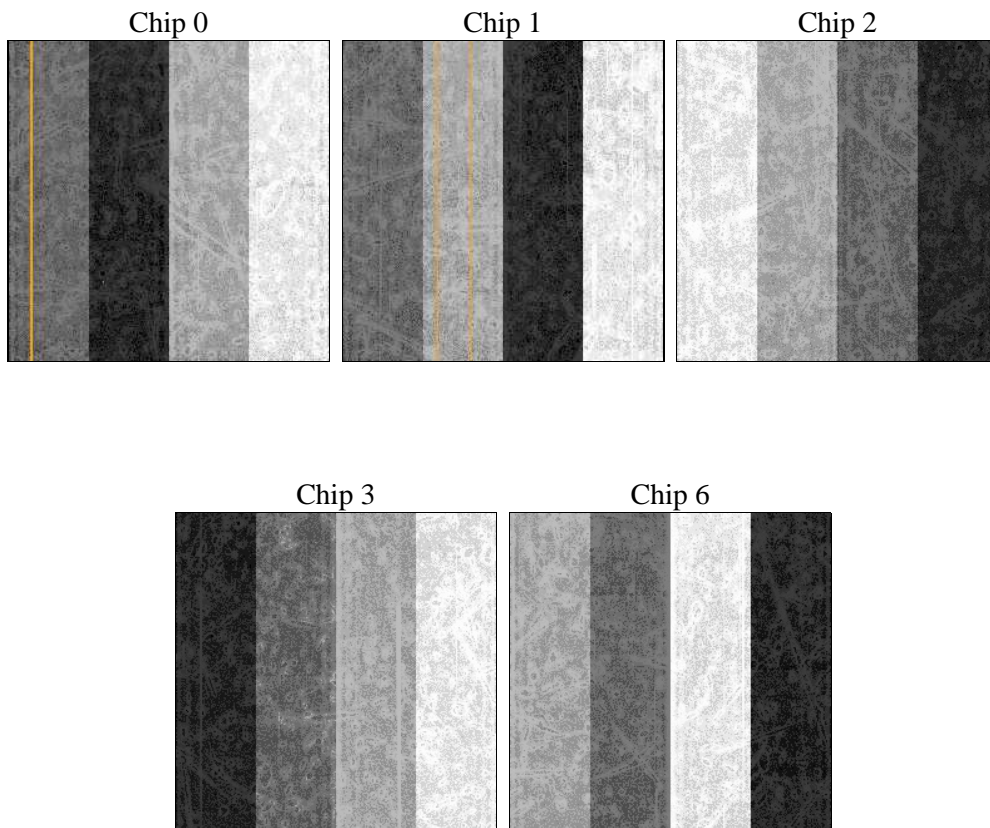
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	43153.101000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	43241.334382832	Sum of GTIs [s]
caldbver	4.6.4	 	ontime0	43241.211262822	Sum of GTIs [s]
date	2014-12-11T06:25:11	Date and time of file creation	ontime1	43241.252302825	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	43241.293342829	Sum of GTIs [s]
			ontime3	43241.334382832	Sum of GTIs [s]
			ontime6	43241.170222819	Sum of GTIs [s]
			l1events	978844	Number of level 1 events

2.1.4 Events

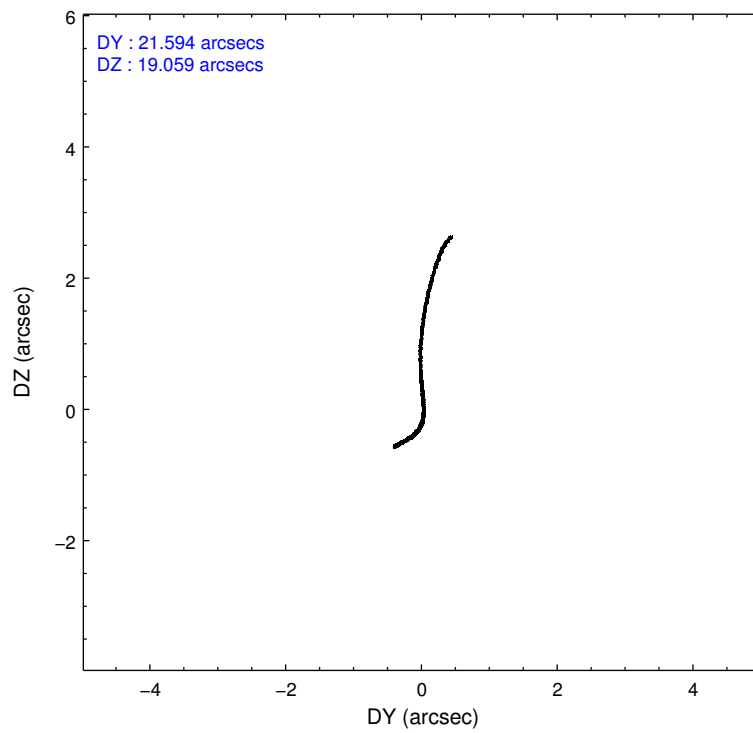
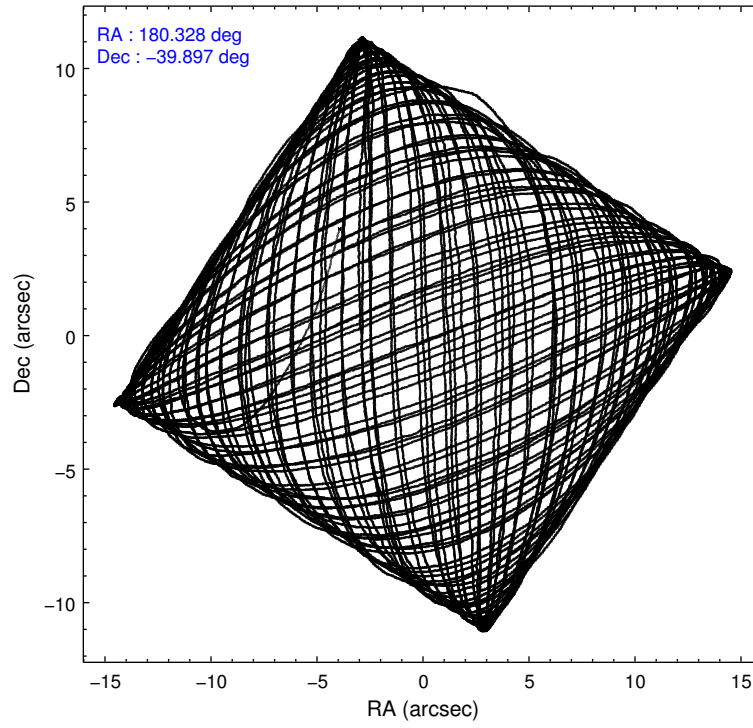
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	178966	186215	203091	209093	201479
rejected events	154759	159959	178732	172445	177262
rejected %	86%	85%	88%	82%	87%

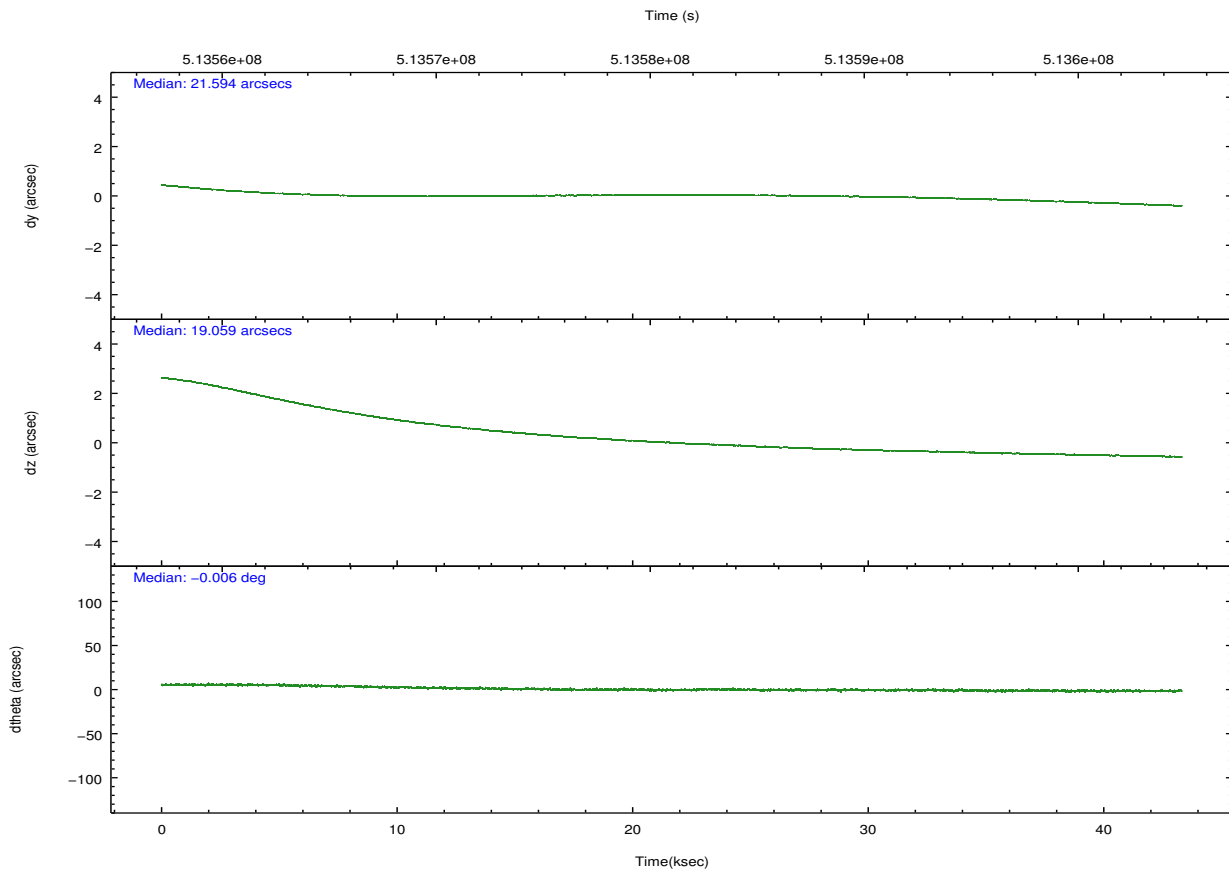
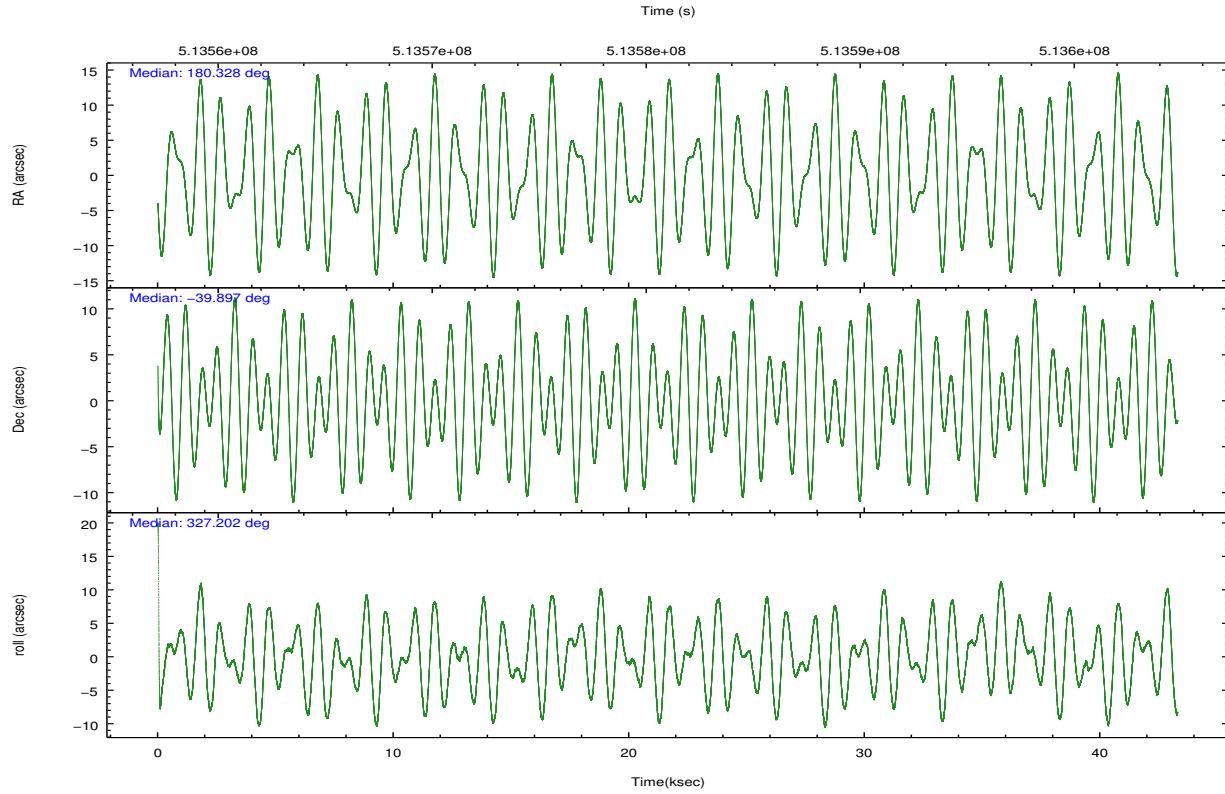
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	8485	9236	9121	18914	8153
	4%	4%	4%	9%	4%
grade 1 events	118	90	124	164	95
	0%	0%	0%	0%	0%
grade 2 events	5816	6177	6001	6605	5448
	3%	3%	2%	3%	2%
grade 3 events	2535	2579	2340	2953	2497
	1%	1%	1%	1%	1%
grade 4 events	2331	2539	2307	2872	2407
	1%	1%	1%	1%	1%
grade 5 events	9527	10166	8944	11246	10769
	5%	5%	4%	5%	5%
grade 6 events	5043	5727	4590	5307	5712
	2%	3%	2%	2%	2%
grade 7 events	145111	149701	169664	161032	166398
	81%	80%	83%	77%	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	180.292000	180.3277941315444	CCD I2 on	Y	Y
[deg] Pointing Dec	-39.896083	-39.89731138648257	CCD I3 on	Y	Y
[deg] Pointing Roll	326.976775	327.208426067254	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	-225.842463	-225.8433433320239	CCD S3 on	N	N
[mm] SIM translation stage offset	-7.75	-7.749109670905796	CCD S4 on	N	N
[s] Observation start time (MET)	513559514.184000	513558275.98195	CCD S5 on	N	N
Observation start date	2014-04-10T23:24:07	2014-04-10T23:04:35	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	513602667.184000	513602904.99691	On-chip summing requested	N	N
Observation end date	2014-04-11T11:23:20	2014-04-11T11:28:24	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





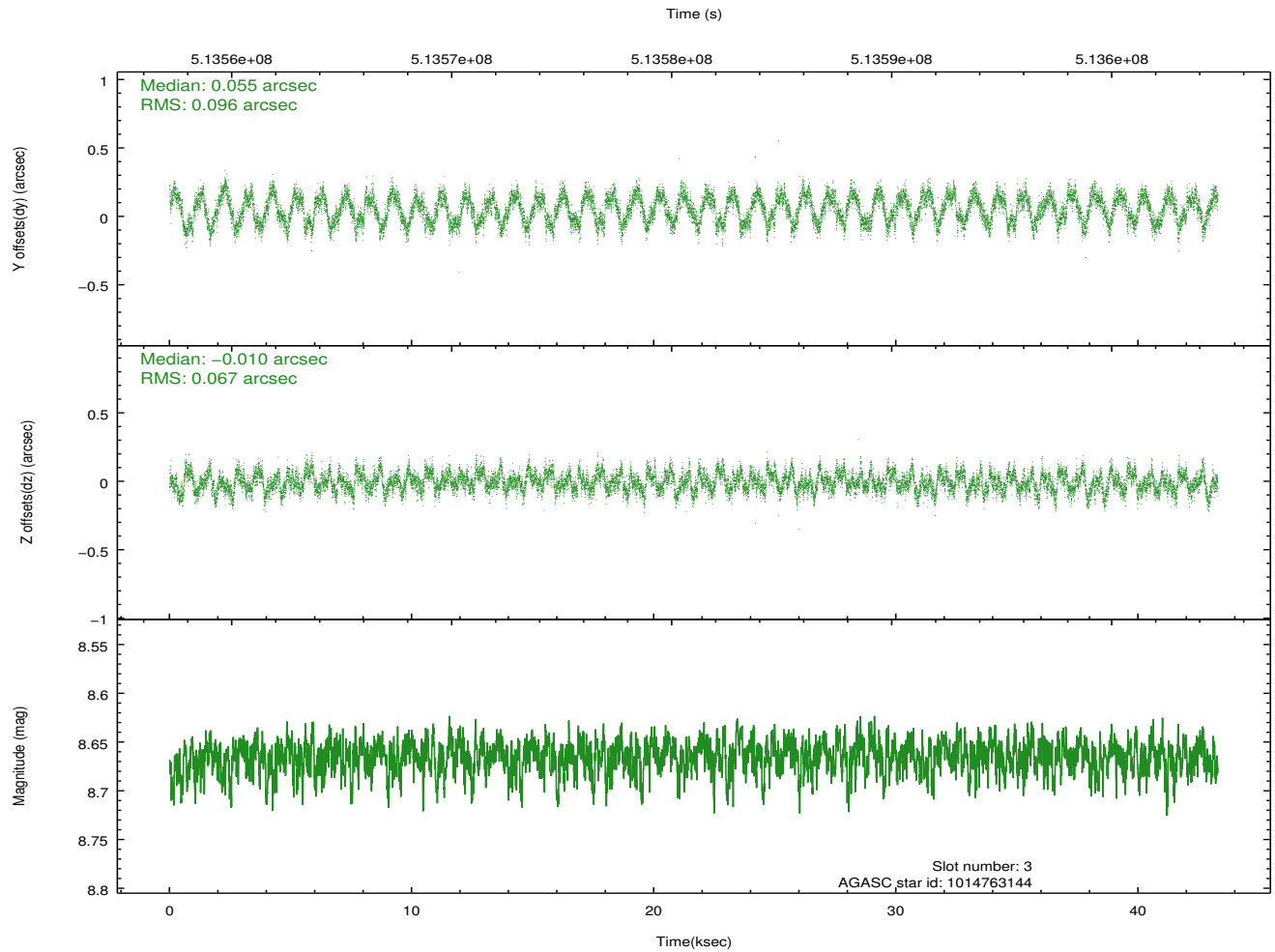
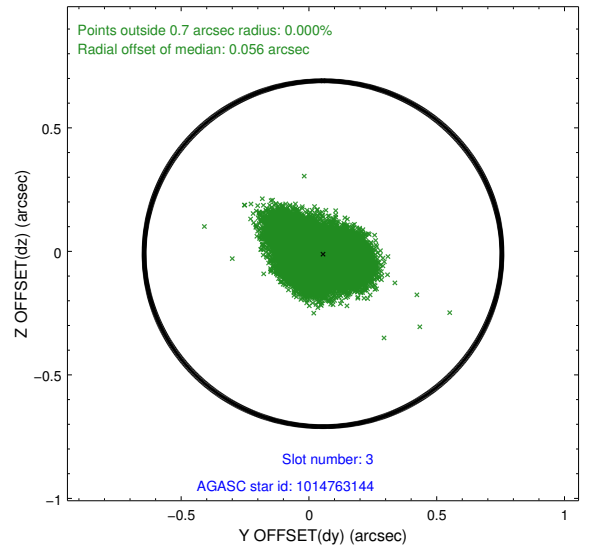
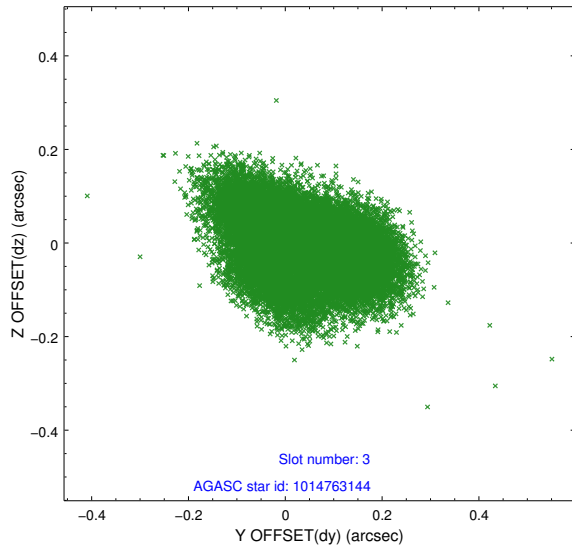
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.11	10559	0.066	-0.100	0.023	0.088	0.000000	0.000000	917.70	-1002.25
1	FID		ACIS-I-4	7.02	10560	0.181	0.063	0.016	0.046	0.000000	0.000000	2137.30	898.76
2	FID		ACIS-I-5	7.09	10559	-0.347	0.108	0.020	0.052	0.000000	0.000000	-1830.83	895.46
3	GUIDE	used	1014763144	8.66	21105	0.055	-0.010	0.126	0.194	179.937501	-39.197367	-2198.55	1568.44
4	GUIDE	used	1015285000	8.87	21108	0.120	0.170	0.304	0.376	179.642253	-40.020698	-1253.46	-1357.33
5	GUIDE	used	1015285096	8.45	21111	0.197	0.250	0.094	0.143	179.732993	-39.831991	-1418.37	-652.39
6	GUIDE	used	1016463464	9.36	21098	-0.079	-0.367	0.144	0.227	180.179354	-39.045943	-1931.67	2393.98
7	GUIDE	used	1016993608	7.91	21116	-0.281	-0.072	0.092	0.162	180.738476	-40.552779	2314.09	-1318.56

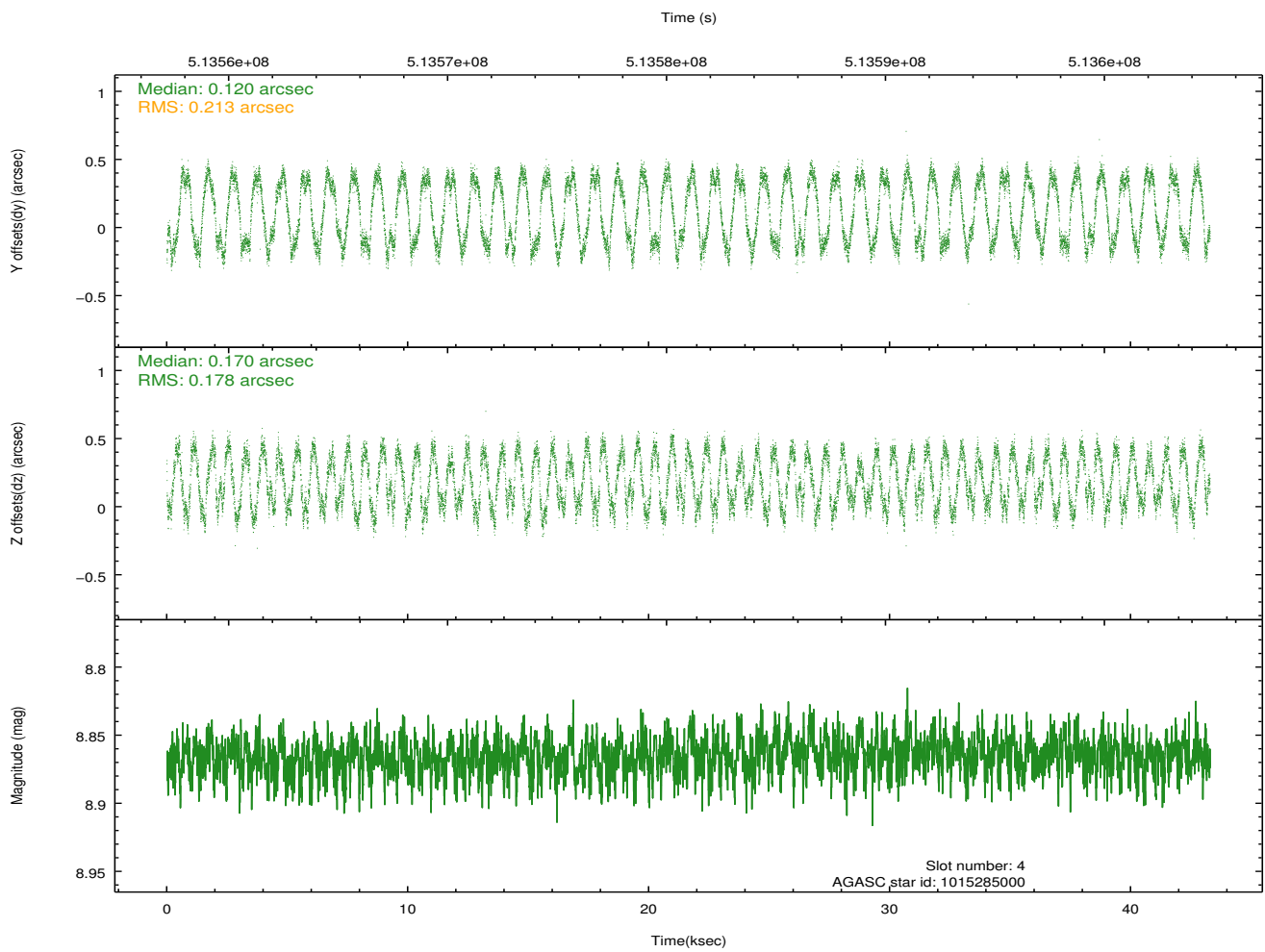
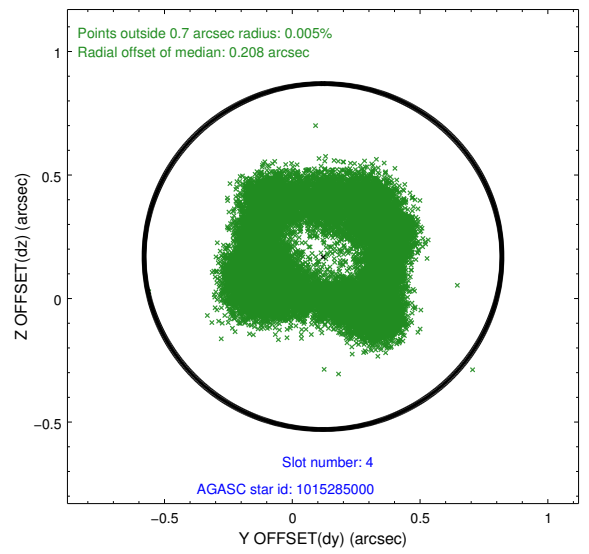
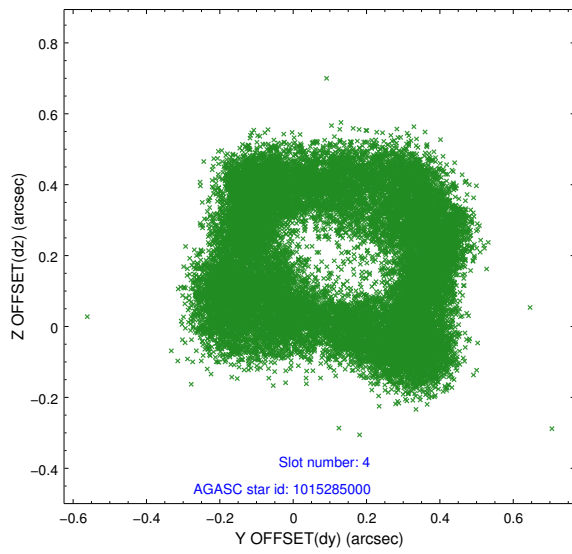
∞

2.4 Star Slots

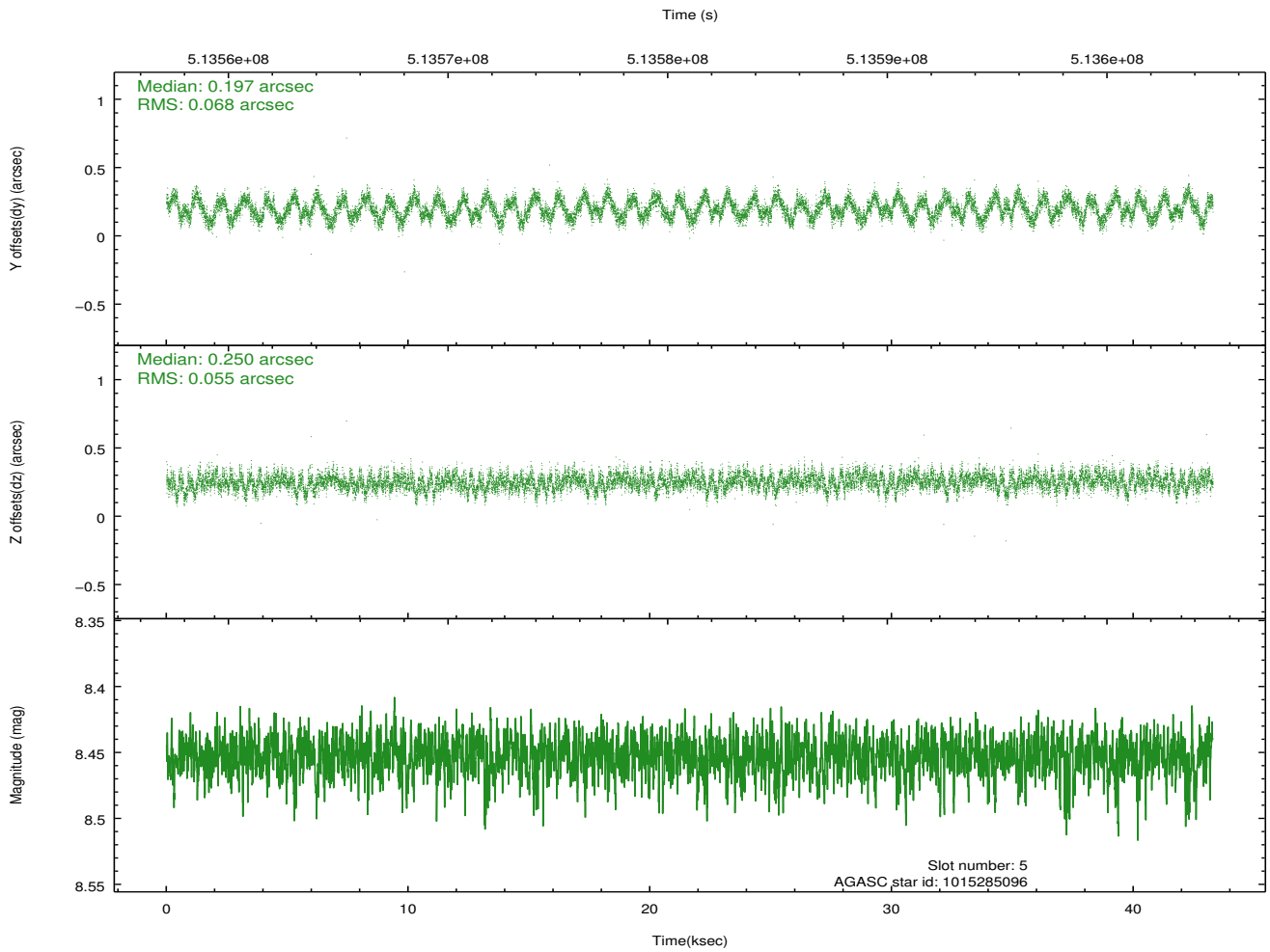
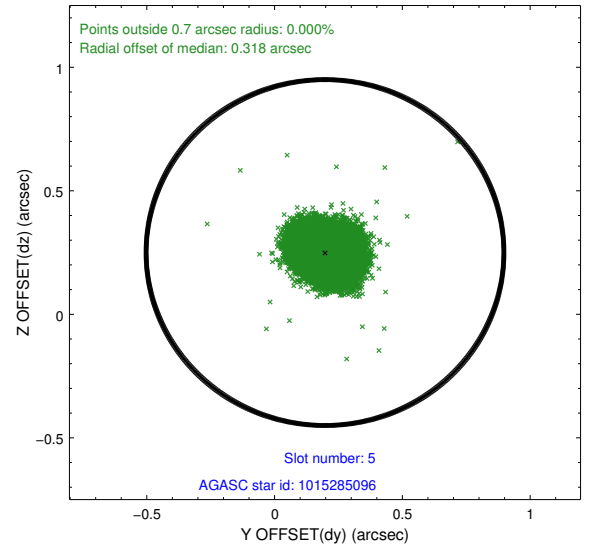
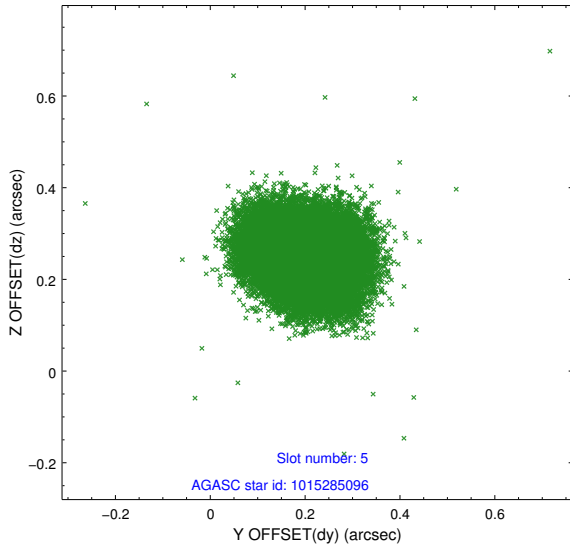
2.4.1 Slot 3



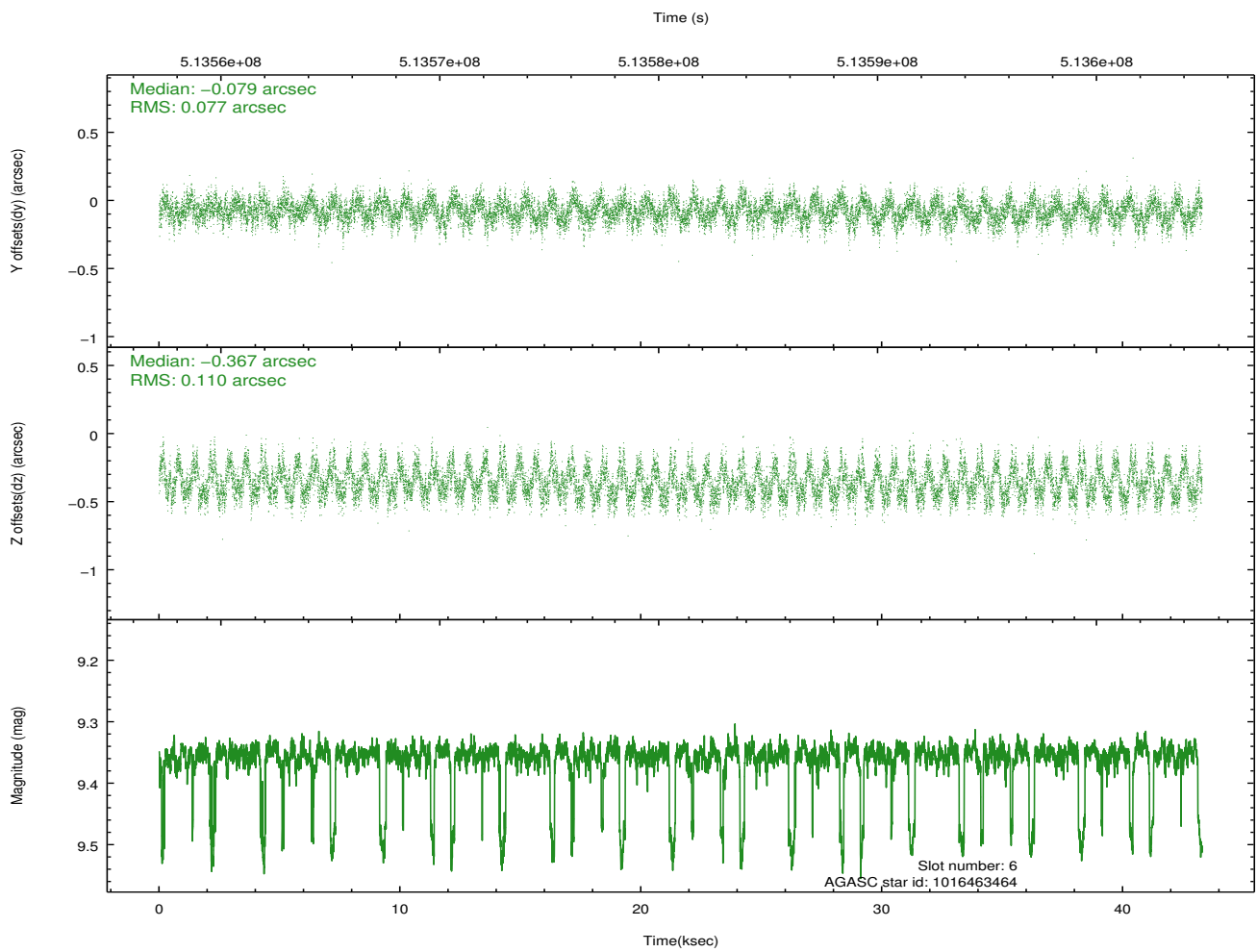
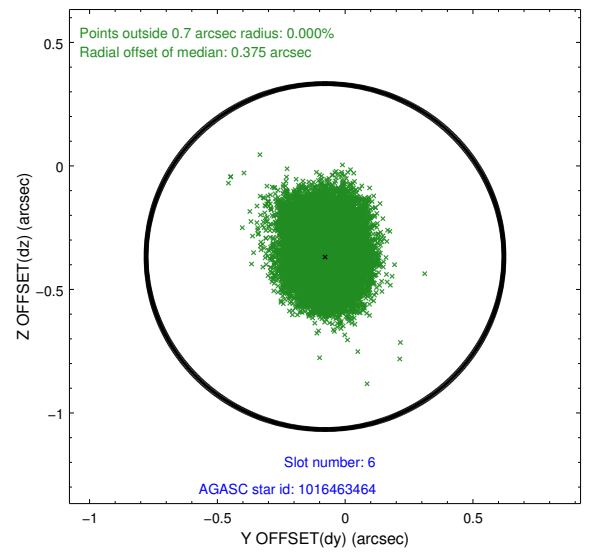
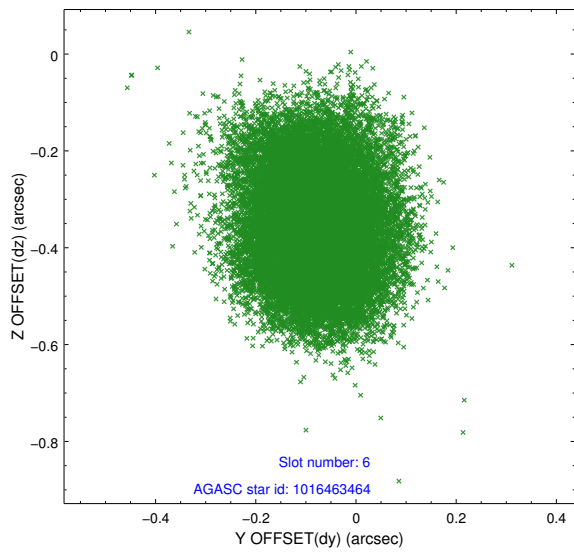
2.4.2 Slot 4



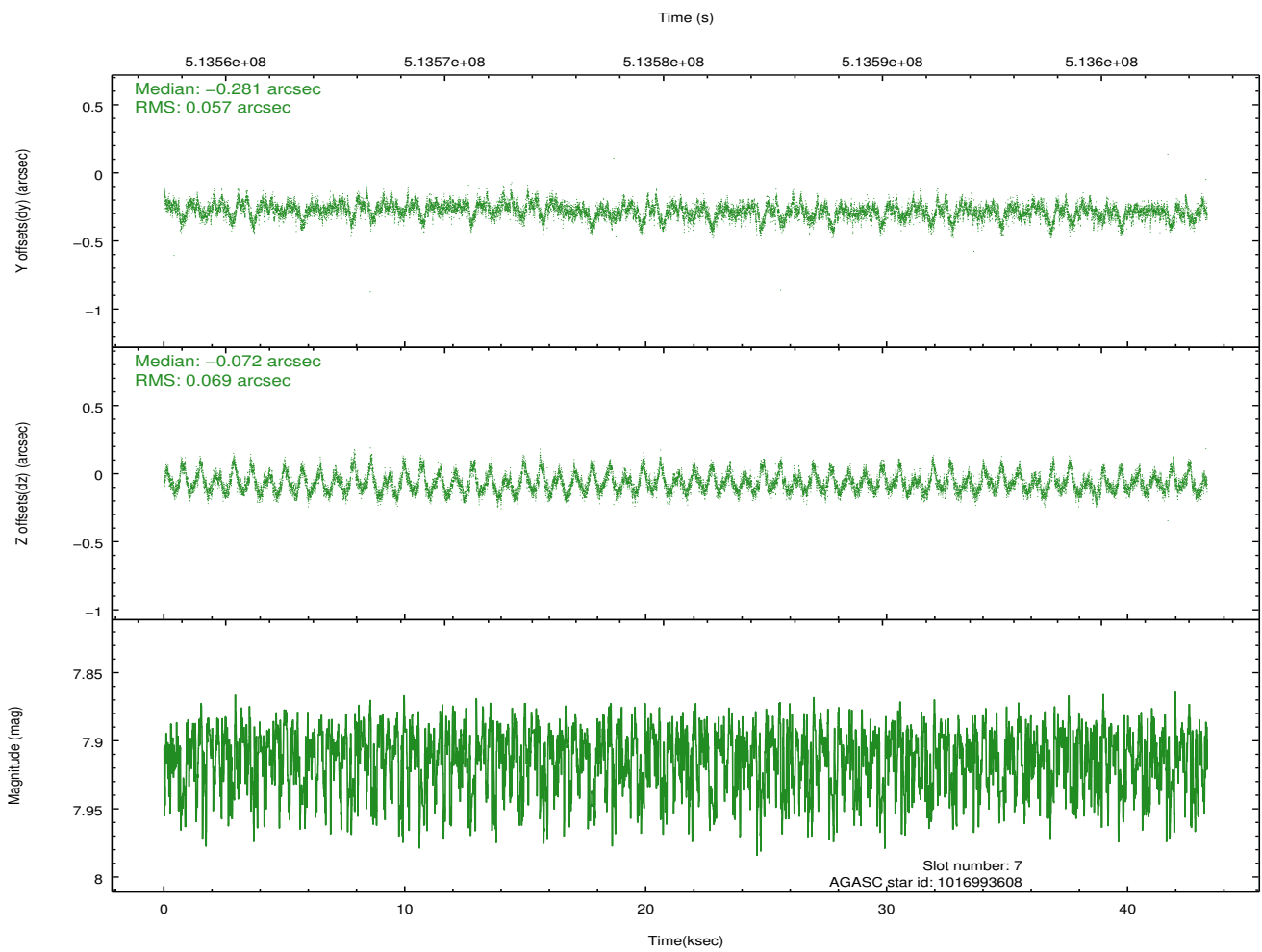
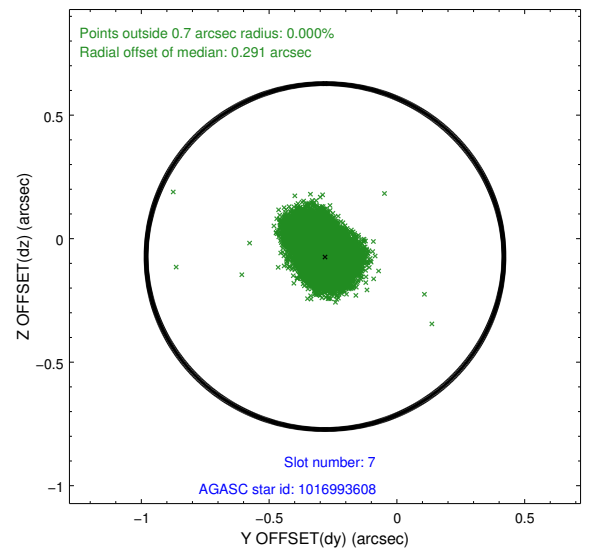
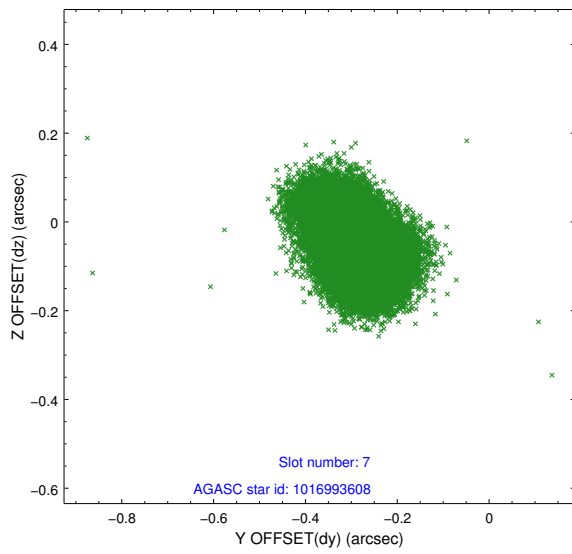
2.4.3 Slot 5



2.4.4 Slot 6

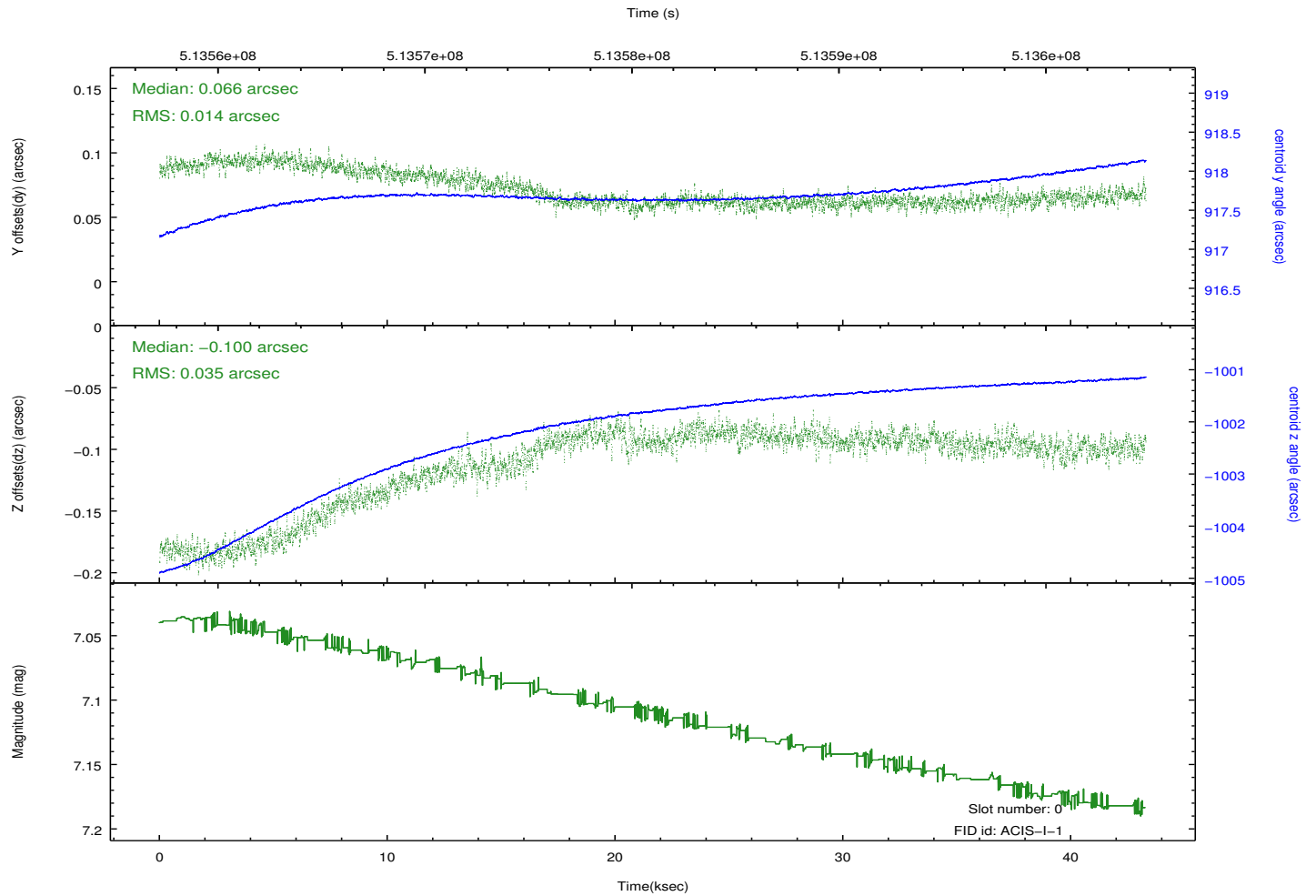
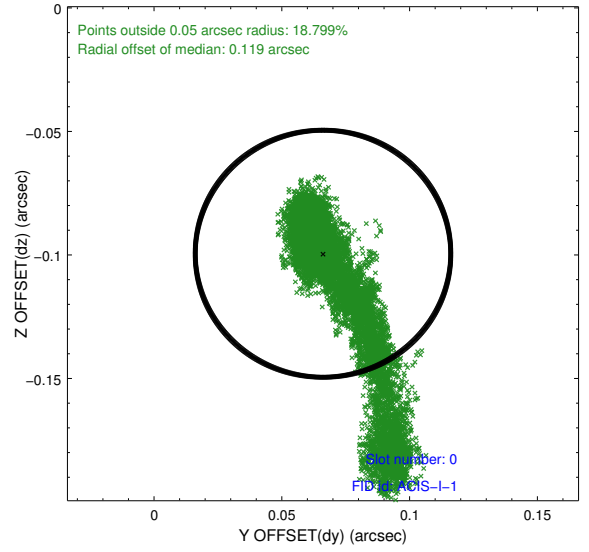
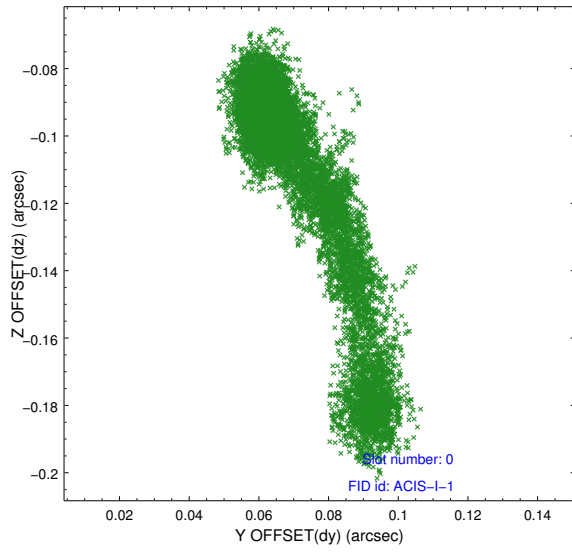


2.4.5 Slot 7

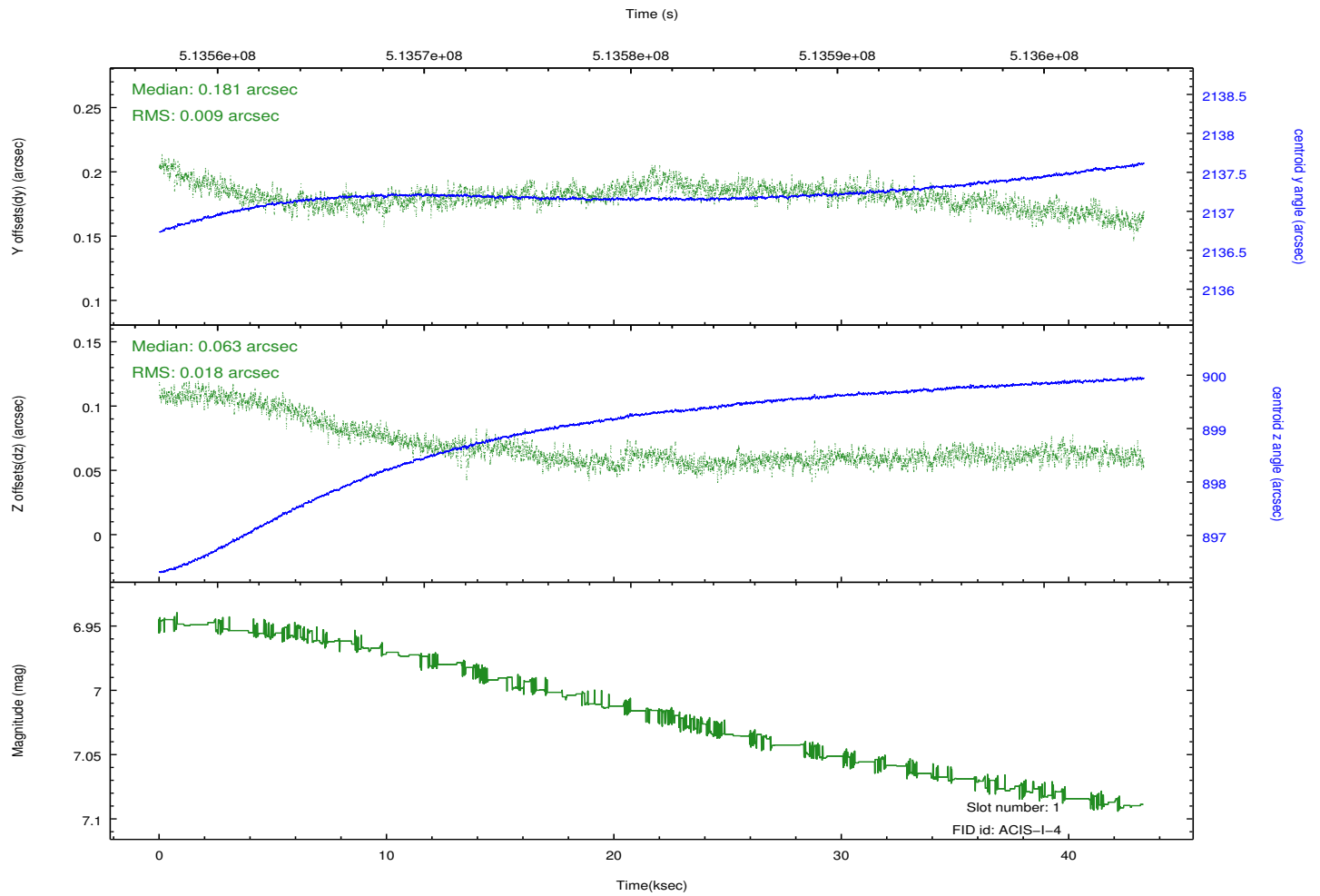
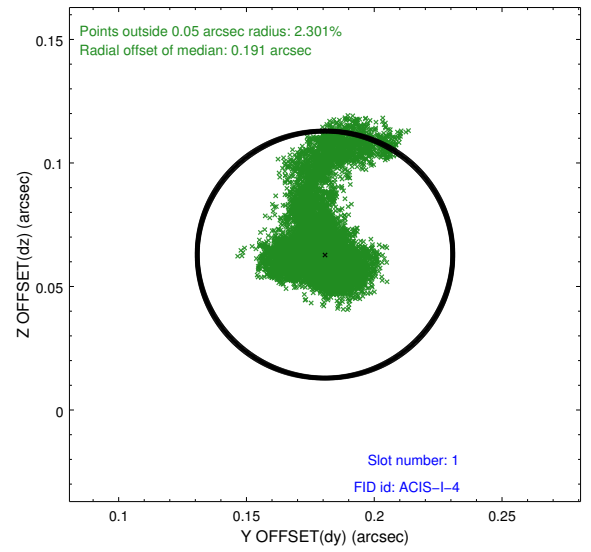
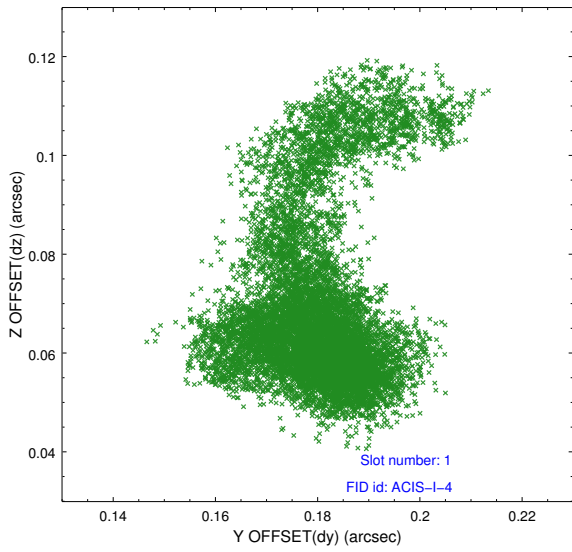


2.5 FID Slots

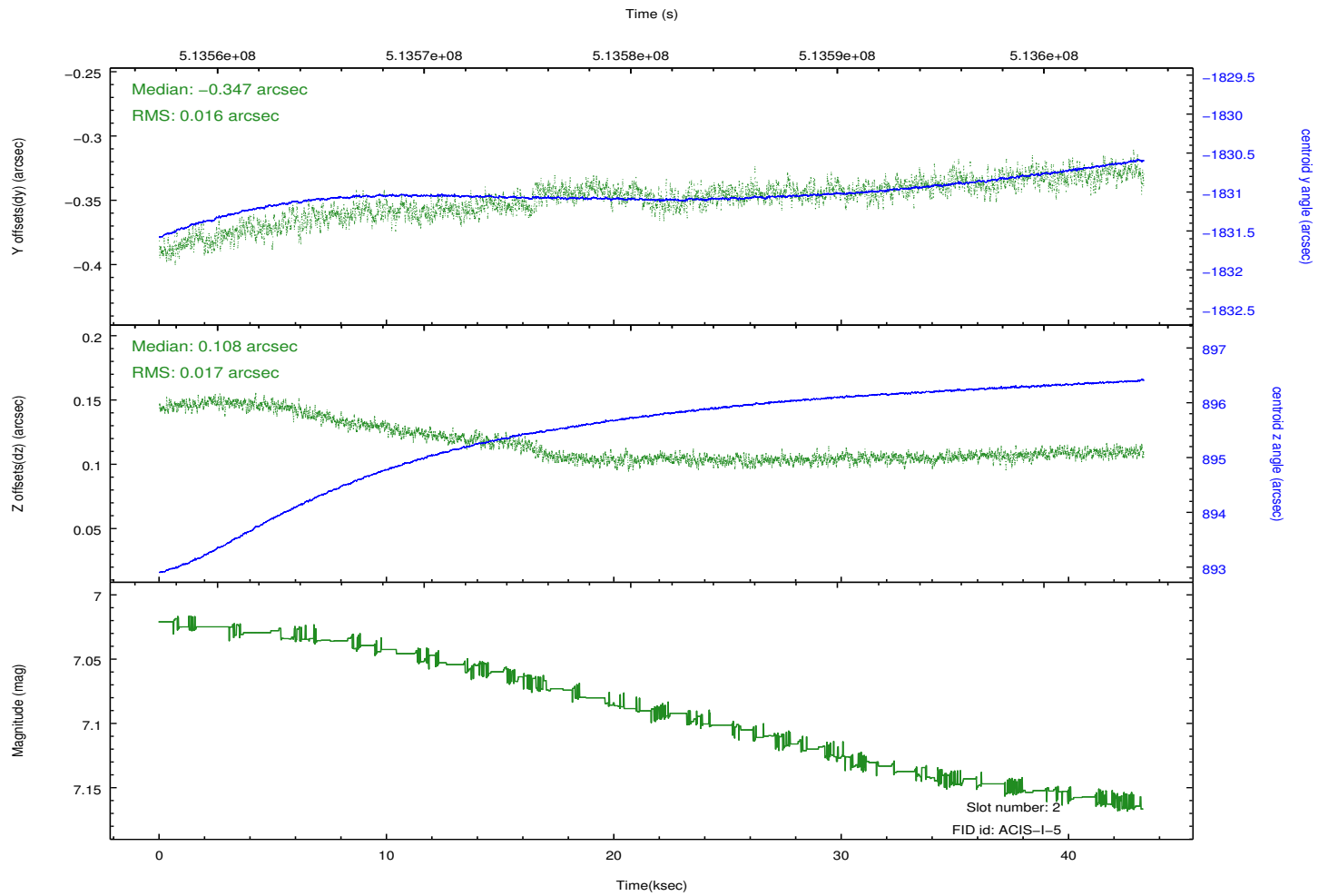
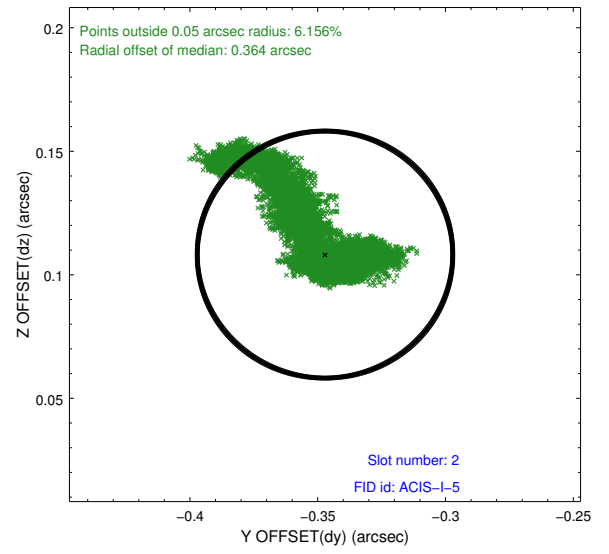
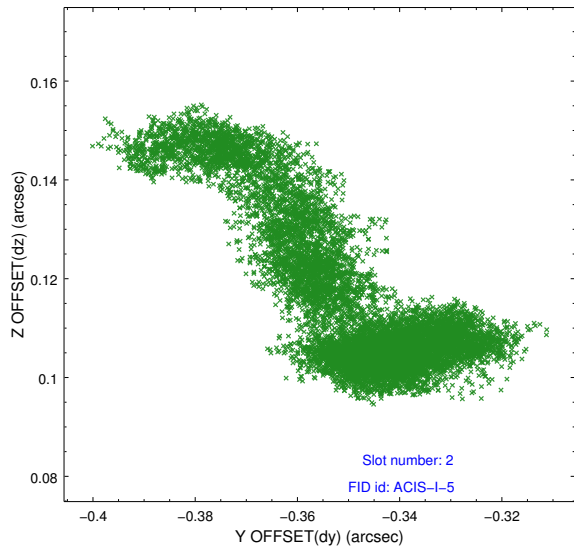
2.5.1 Slot 0



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)	2014.12.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	43.241334382832

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.