

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 9452 - L2 Version 3
Chandra X-Ray Center

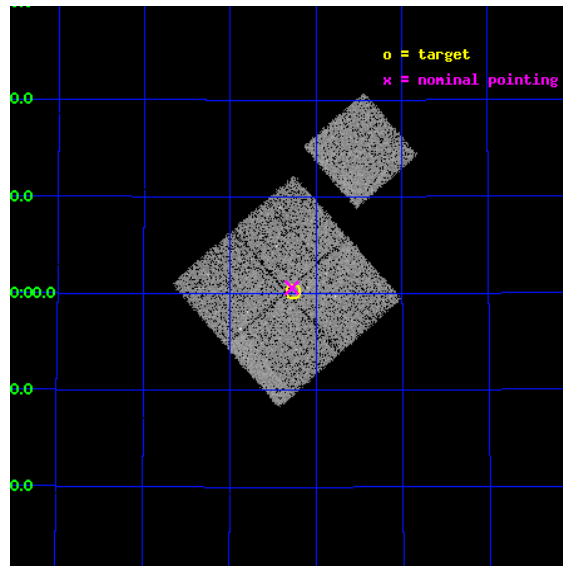
L2 Processing Date : May 9 2012

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1 Front

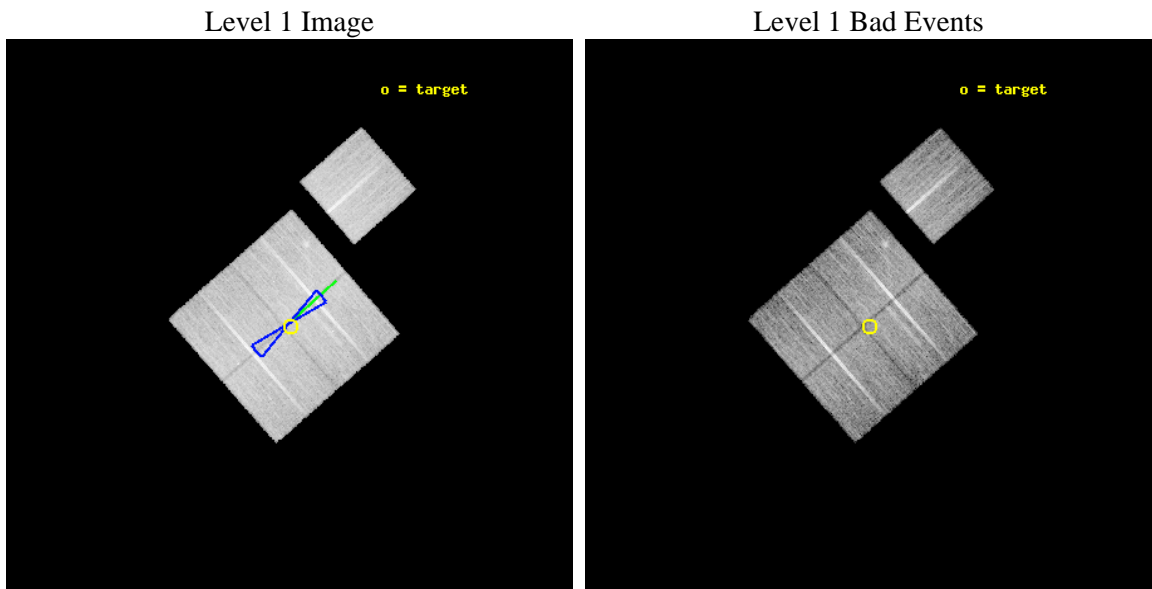
seq_num	900796	Sequence number
obs_id	9452	Observation id
title	The Evolution of Faint AGN at High Redshift	Proposal title
observer	Prof Kirpal Nandra	Principal investigator
object	AEGIS-1	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	215.064583	Observer's specified target RA [deg]
dec_targ	53.002694	Observer's specified target Dec [deg]
ra_nom	215.07000965727	Nominal RA [deg]
dec_nom	53.010054999098	Nominal Dec [deg]
roll_nom	48.704377324358	Nominal Roll [deg]
revision	3	Processing version of data
ontime	13463.218132973	Sum of GTIs [s]
livetime	13287.311276588	Livetime [s]
ontime0	13456.936212242	Sum of GTIs [s]
ontime1	13466.359083354	Sum of GTIs [s]
ontime2	13463.218212485	Sum of GTIs [s]
ontime3	13463.218132973	Sum of GTIs [s]
ontime6	13466.359103382	Sum of GTIs [s]
l2events	45712	Number of level 2 events



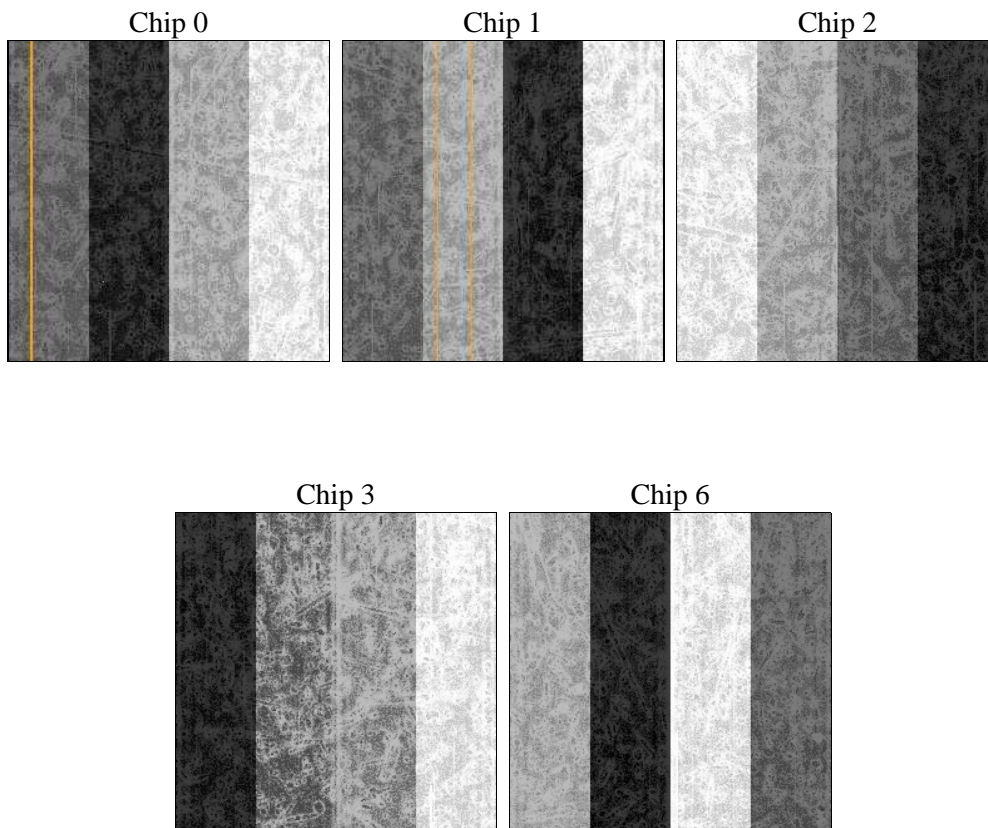
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	13322.572000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	13463.218132973	Sum of GTIs [s]
caldsver	4.4.9	 	ontime0	13456.936212242	Sum of GTIs [s]
date	2012-05-09T16:22:25	Date and time of file creation	ontime1	13466.359083354	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	13463.218212485	Sum of GTIs [s]
			ontime3	13463.218132973	Sum of GTIs [s]
			ontime6	13466.359103382	Sum of GTIs [s]
			l1events	546232	Number of level 1 events

2.1.4 Events

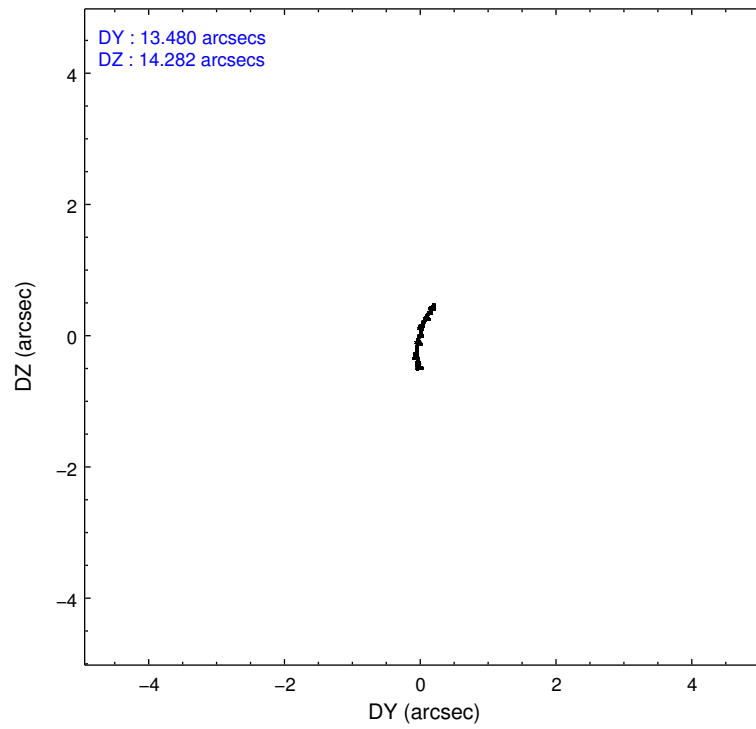
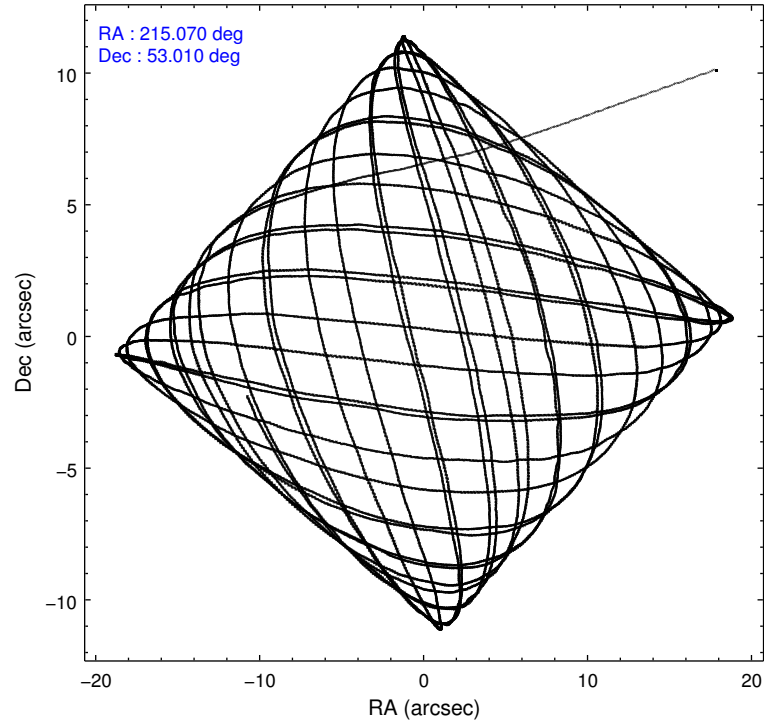
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	104220	103395	117169	108397	113051
rejected events	93315	91307	106426	98103	101830
rejected %	89%	88%	90%	90%	90%

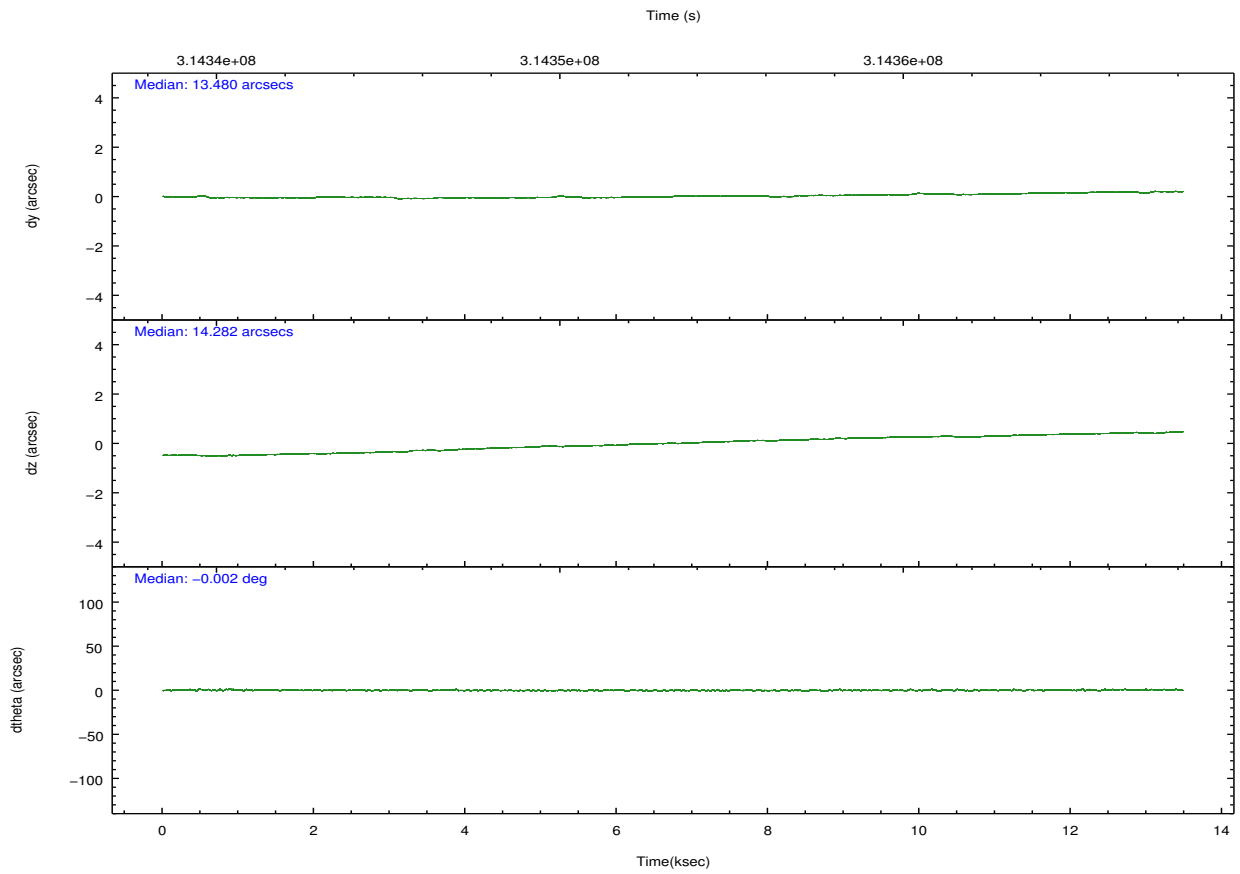
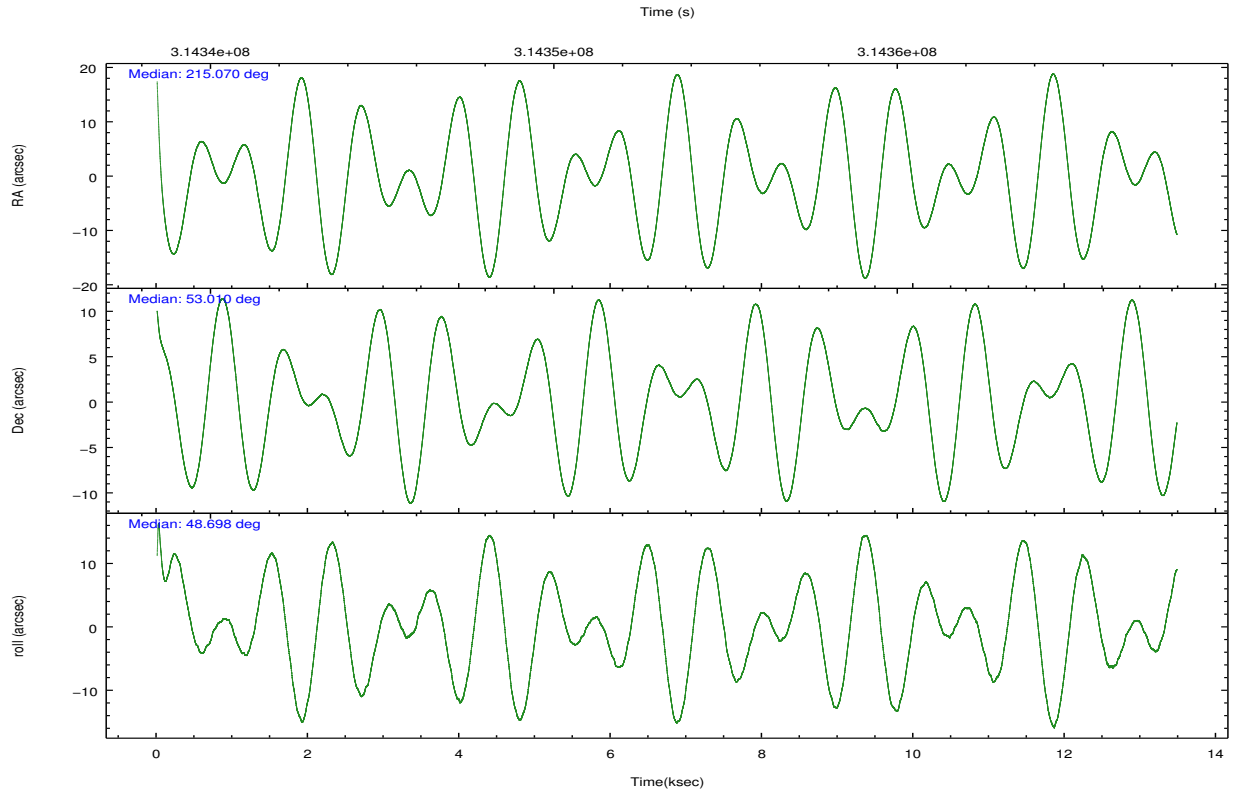
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	3981	4461	3947	3721	4029
	3%	4%	3%	3%	3%
grade 1 events	47	53	55	62	45
	0%	0%	0%	0%	0%
grade 2 events	2619	2802	2749	2291	2484
	2%	2%	2%	2%	2%
grade 3 events	1296	1317	1115	1214	1230
	1%	1%	0%	1%	1%
grade 4 events	1147	1267	1148	1131	1239
	1%	1%	0%	1%	1%
grade 5 events	3818	4280	3585	4441	4335
	3%	4%	3%	4%	3%
grade 6 events	2087	2470	1984	2103	2452
	2%	2%	1%	1%	2%
grade 7 events	89225	86745	102586	93434	97237
	85%	83%	87%	86%	86%

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	215.061283	215.0700096572725	CCD I2 on	Y	Y
[deg] Pointing Dec	52.983099	53.01005499909842	CCD I3 on	Y	Y
[deg] Pointing Roll	48.502636	48.70437732435764	CCD S0 on	N	N
[deg] Roll angle	50.000000	50.000000	CCD S1 on	N	N
[deg] Roll tolerance	10.000000	10.000000	CCD S2 on	O1	Y
Roll constraint allows 180D rotation	Y	Y	CCD S3 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S4 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S5 on	N	N
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	Number of optional ACIS chips dropped	0	0
[mm] SIM translation stage offset	0	-0.005018542100998502	On-chip summing requested	N	N
[s] Observation start time (MET)	314345065.184000	314343949.19537	Subarray requested	NONE	NONE
Observation start date	2007-12-18T06:03:20	2007-12-18T05:45:49	Alternating exposures requested	N	N
[s] Observation end time (MET)	314358387.184000	314358623.60858	[s] Primary exposure time	0.000000	3.1
Observation end date	2007-12-18T09:45:22	2007-12-18T09:50:23			
Read mode	TIMED	TIMED			

2.3 Aspect



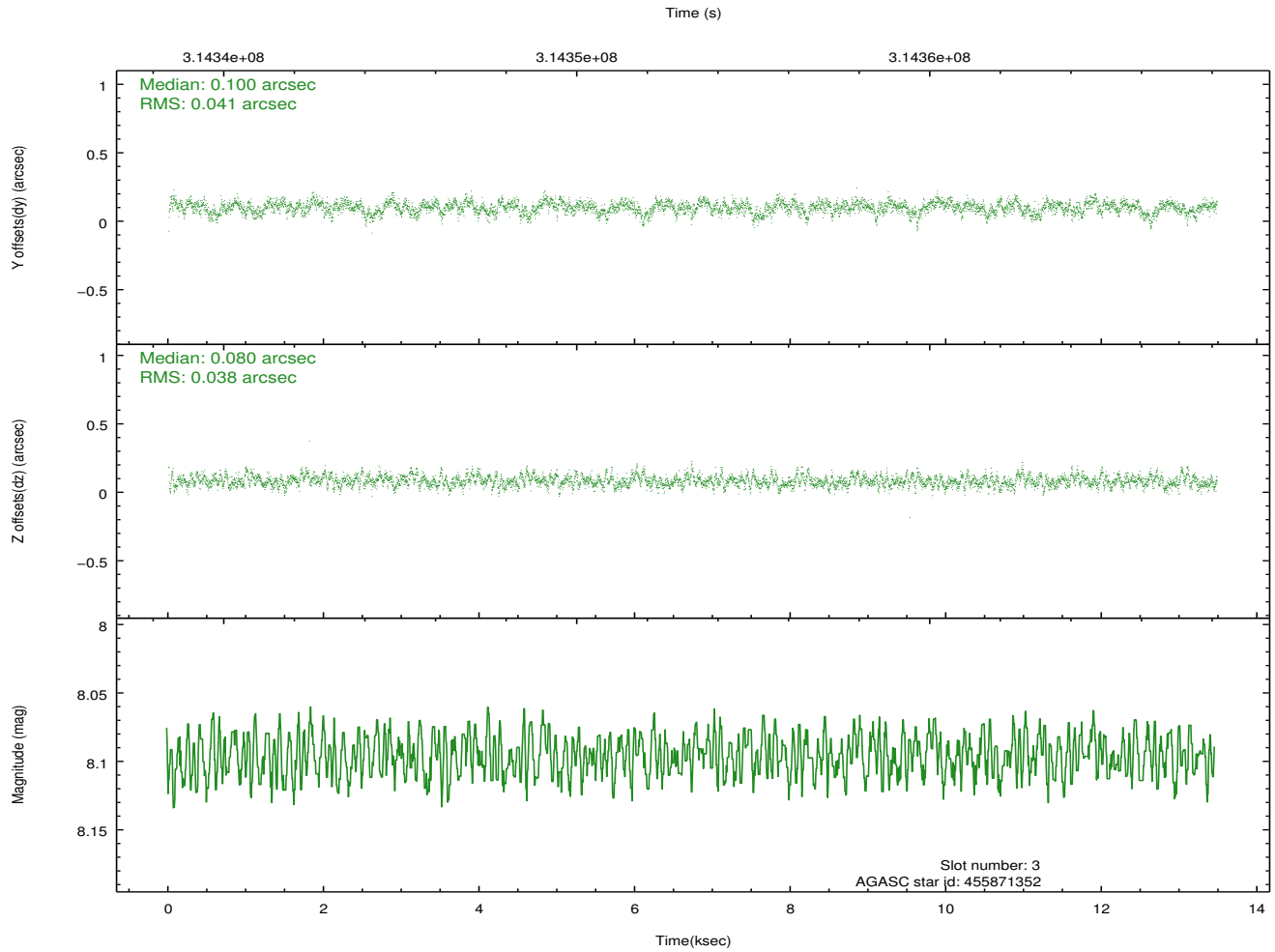
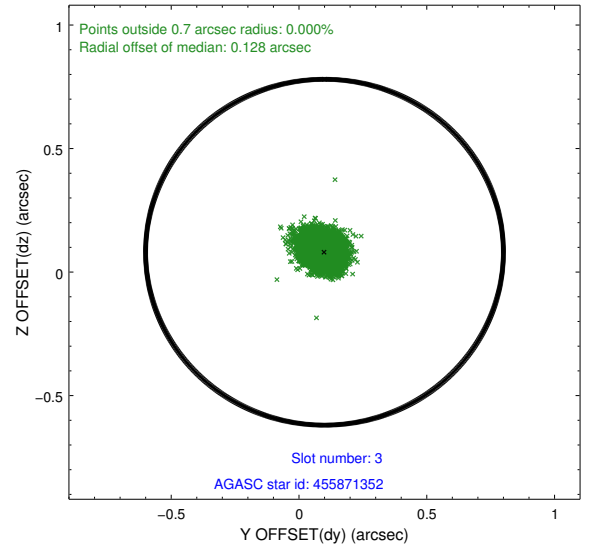
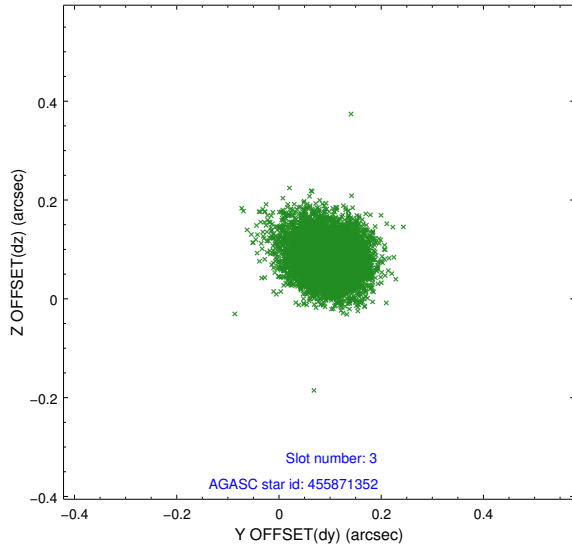


Slot Statistics

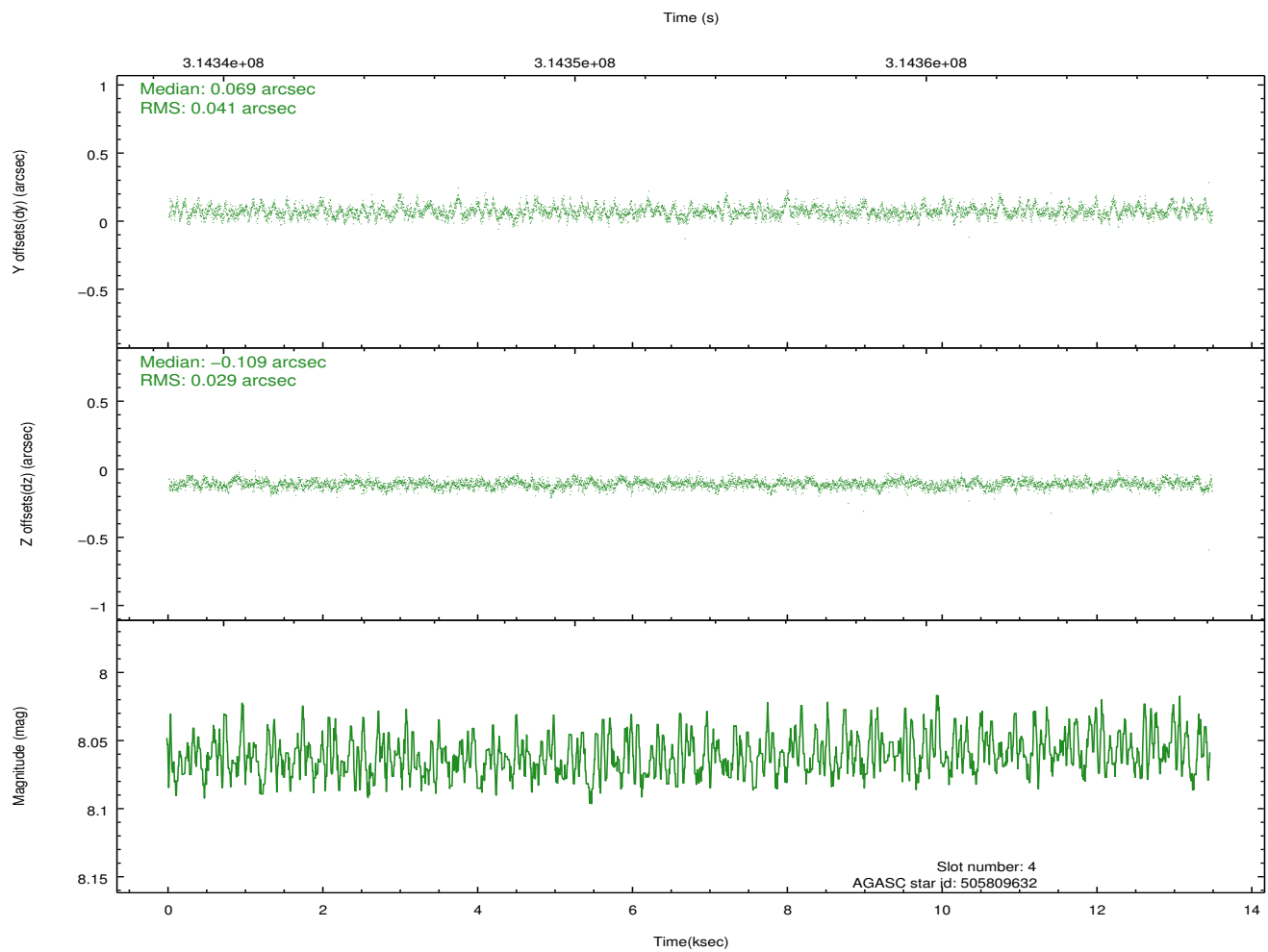
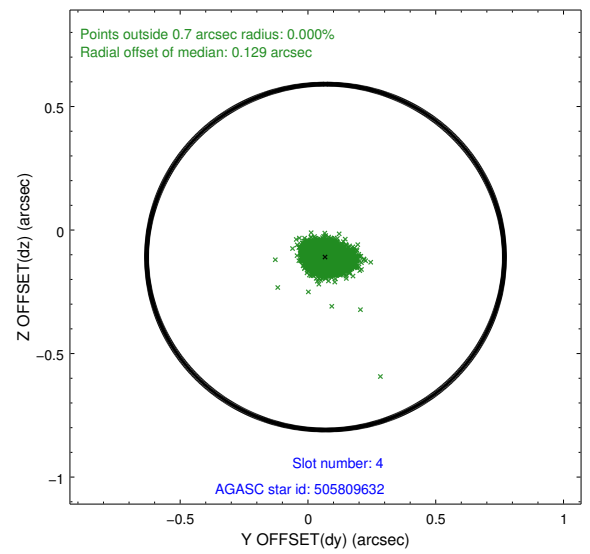
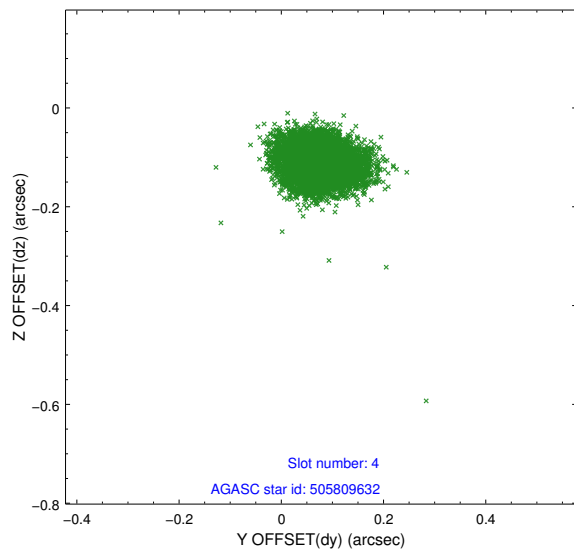
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.23	3287	0.027	0.012	0.011	0.018	0.000000	0.000000	926.03	-837.83
1	FID	ACIS-I-5	7.22	3286	-0.210	0.034	0.007	0.011	0.000000	0.000000	-1822.14	1059.49
2	FID	ACIS-I-6	7.24	3287	0.093	0.024	0.013	0.021	0.000000	0.000000	391.23	1704.40
3	GUIDE	455871352	8.10	6572	0.100	0.080	0.059	0.098	215.099961	52.172669	-2128.02	-1997.09
4	GUIDE	505809632	8.06	6570	0.069	-0.109	0.052	0.089	215.499426	53.521185	2074.41	583.03
5	GUIDE	505812088	8.15	6574	0.027	-0.144	0.065	0.105	214.186617	53.263562	-482.60	2087.30
6	GUIDE	505812376	7.57	6575	-0.117	0.045	0.048	0.080	214.039537	52.937930	-1578.79	1563.45
7	GUIDE	505815928	8.35	6573	-0.075	0.127	0.061	0.100	216.234742	53.074559	1943.94	-1668.19

2.4 Star Slots

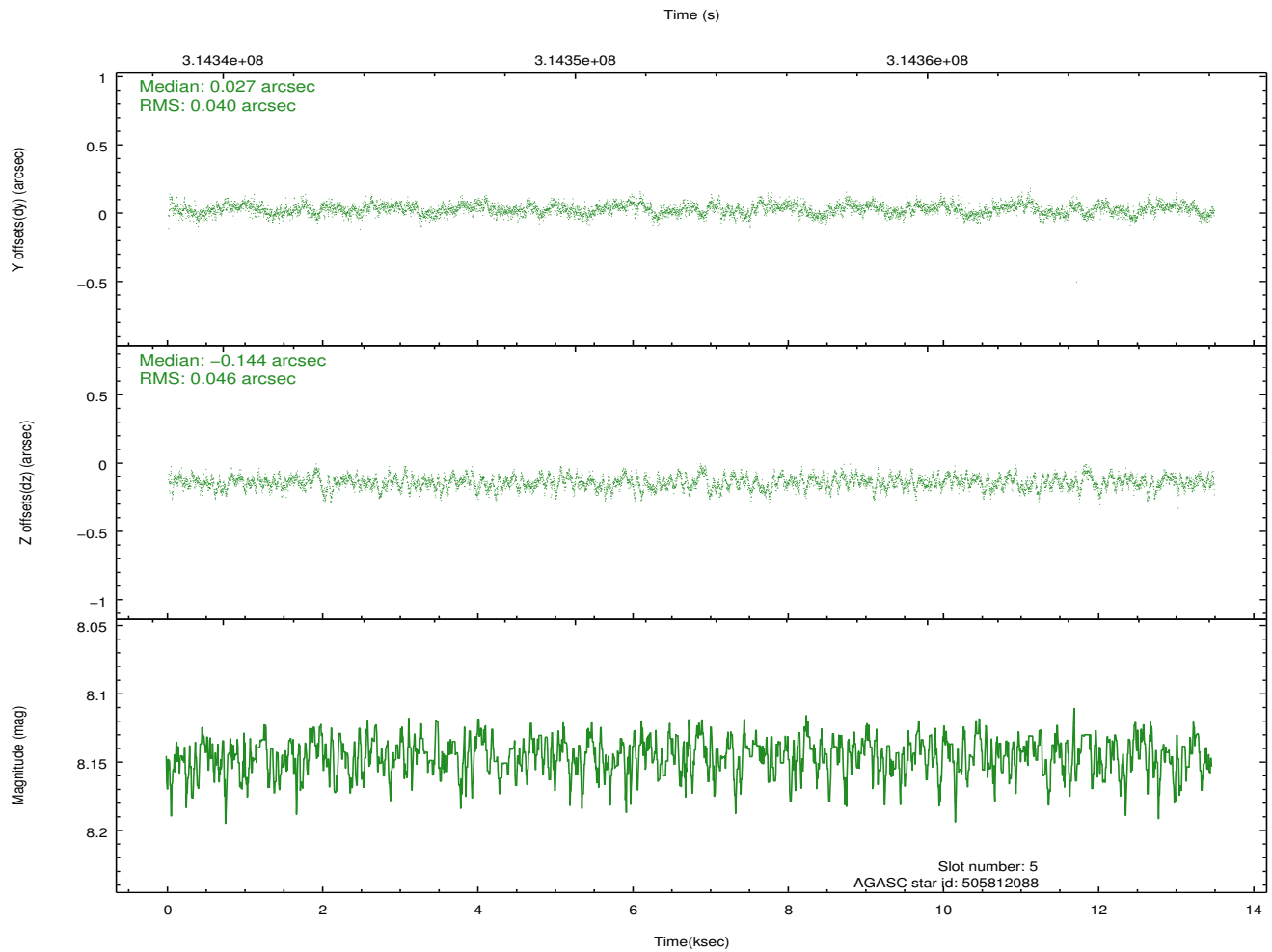
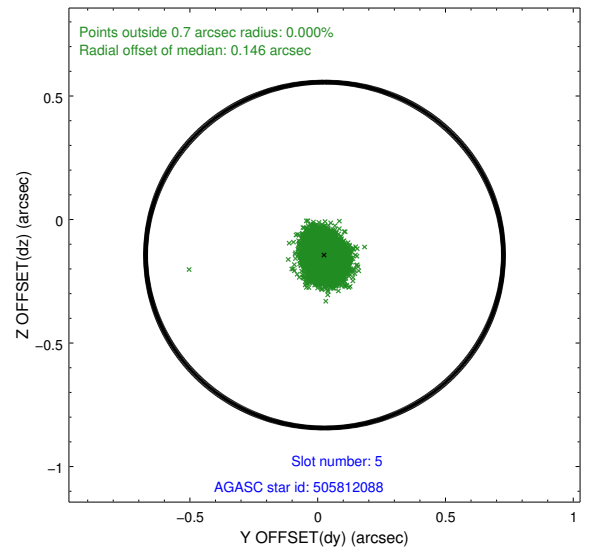
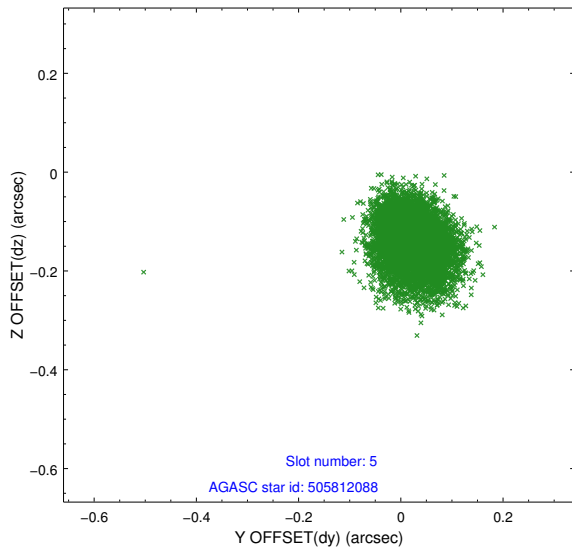
2.4.1 Slot 3



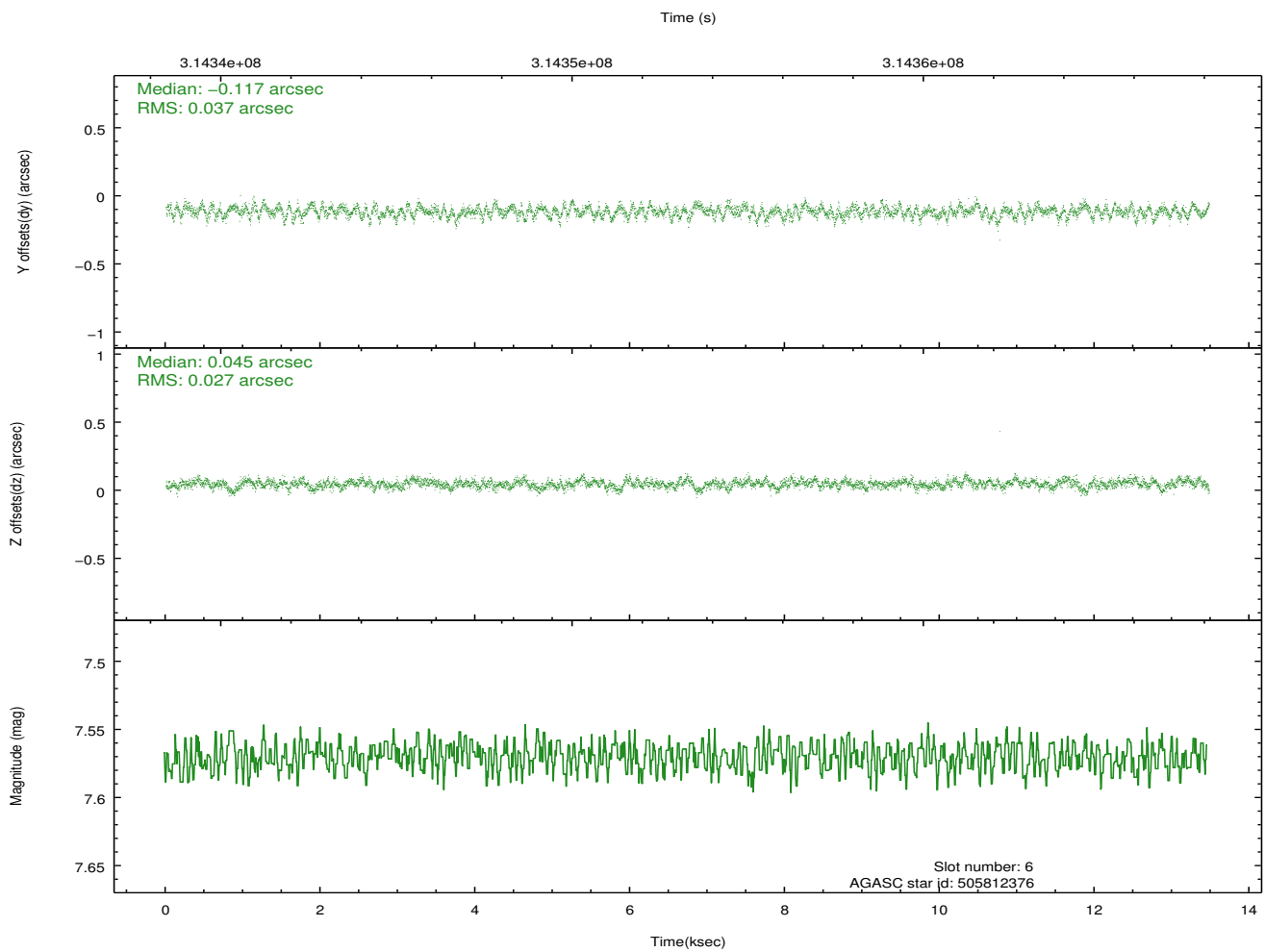
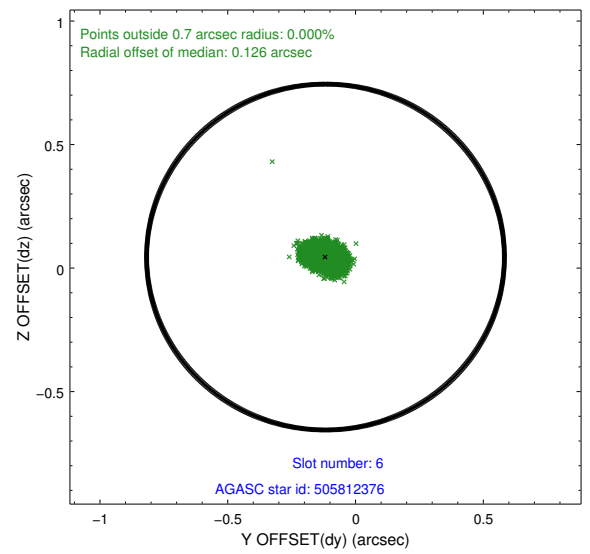
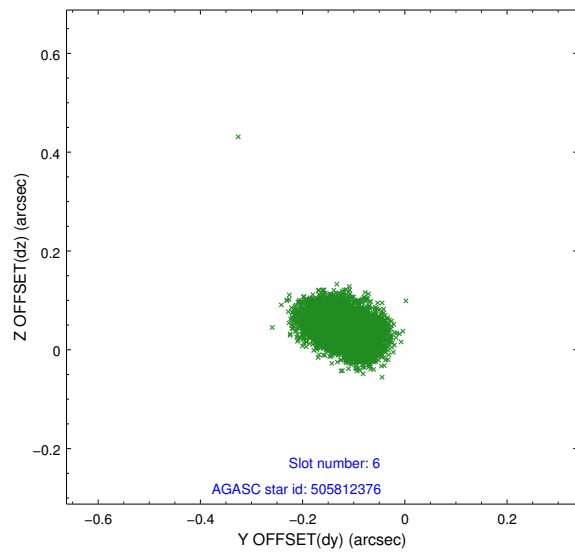
2.4.2 Slot 4



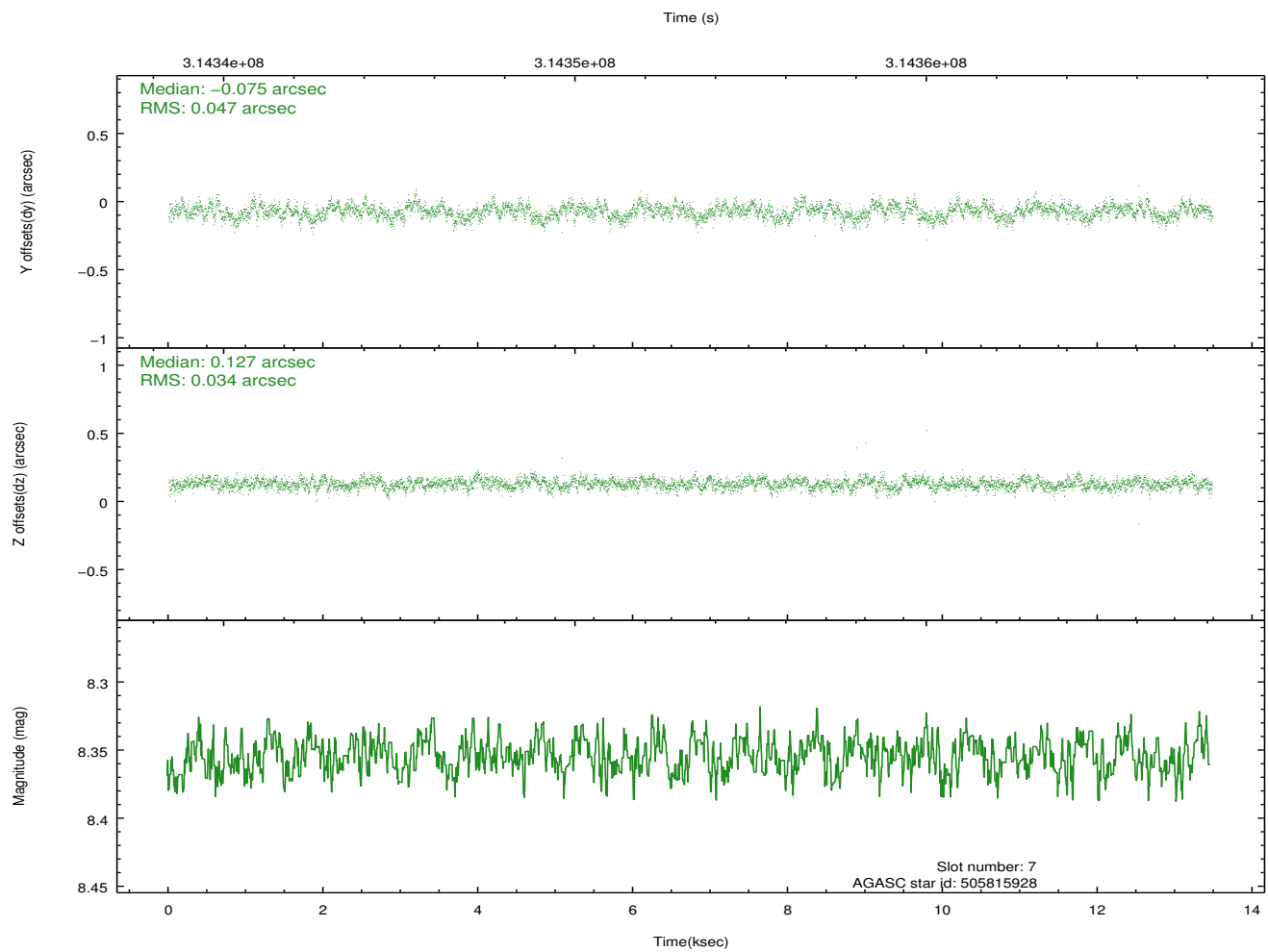
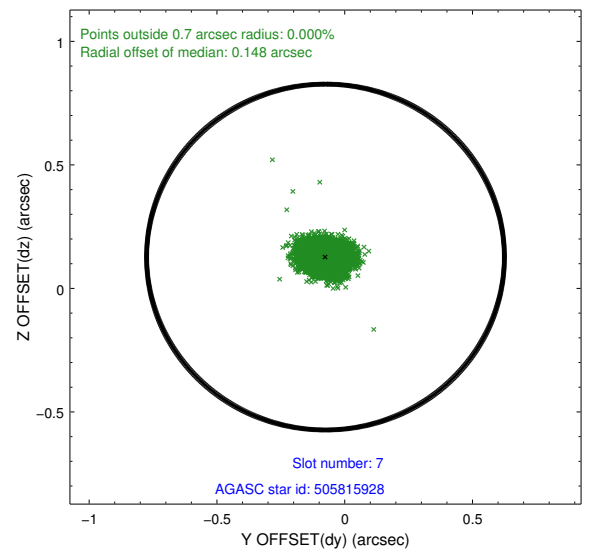
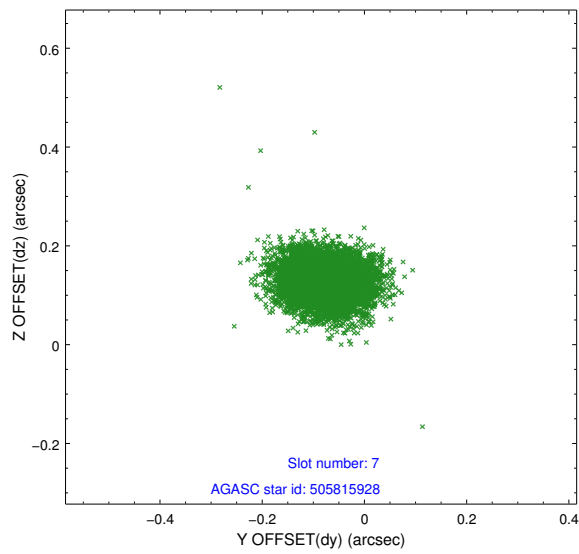
2.4.3 Slot 5



2.4.4 Slot 6

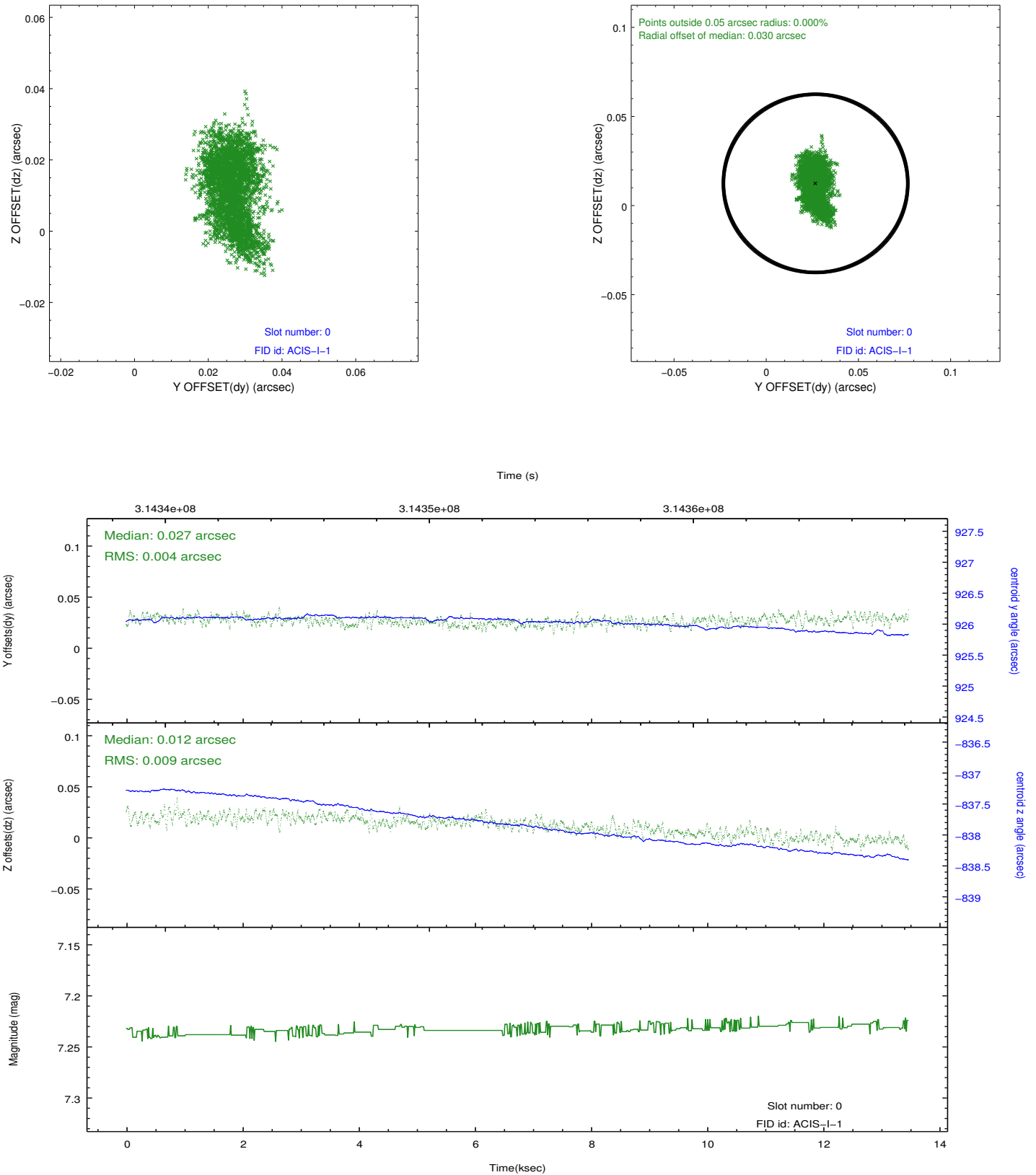


2.4.5 Slot 7

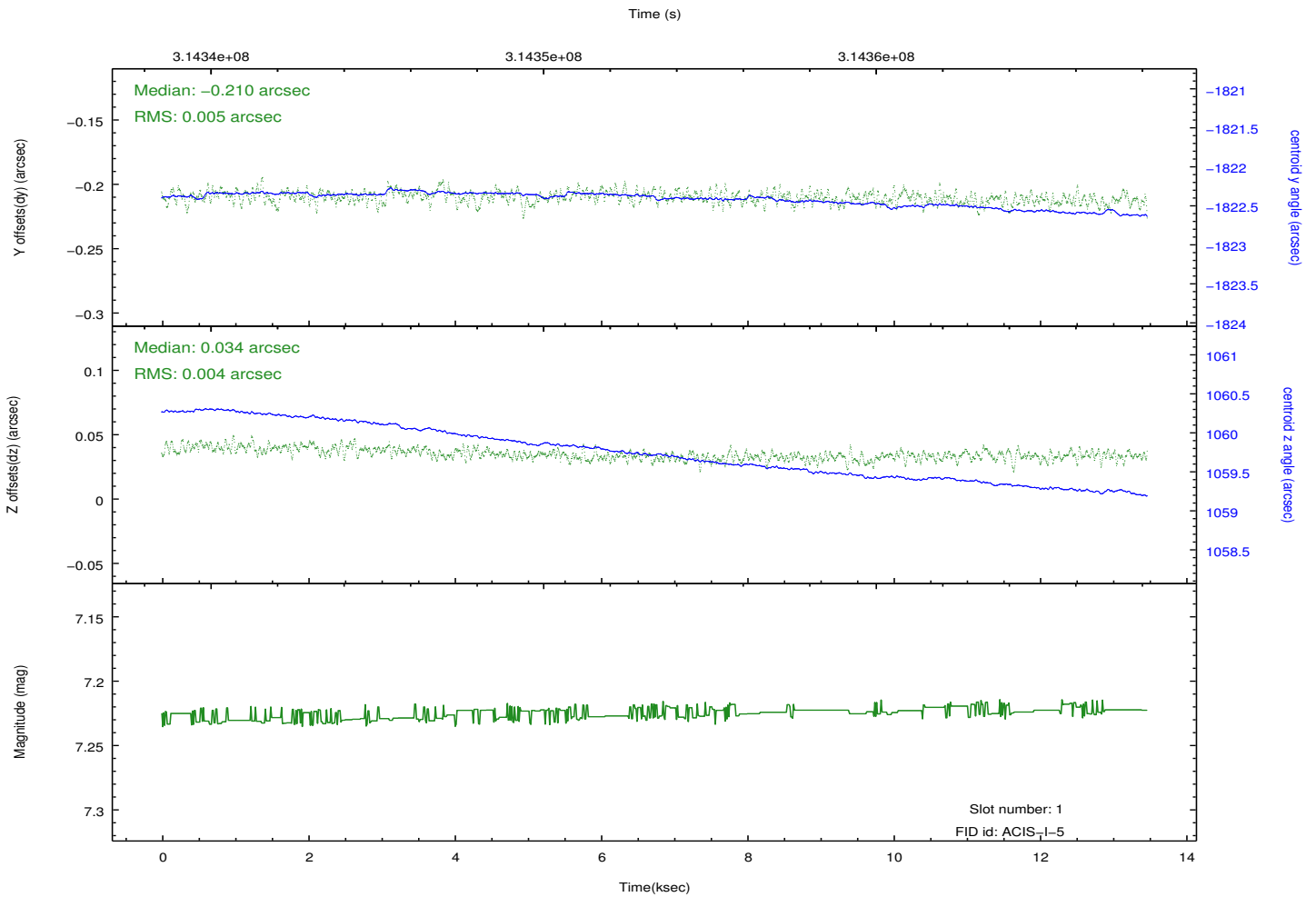
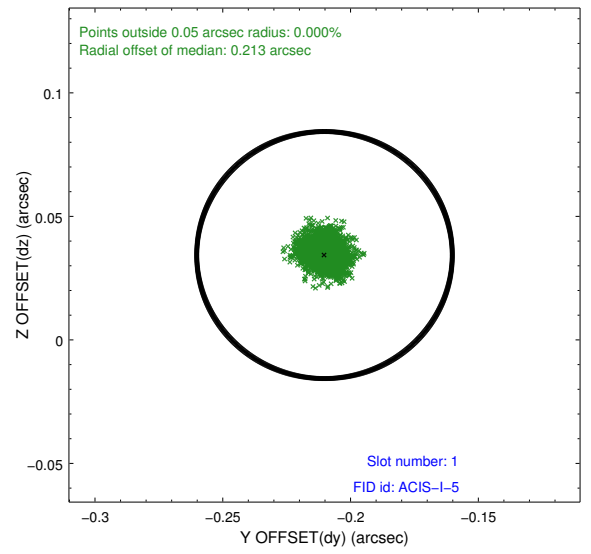
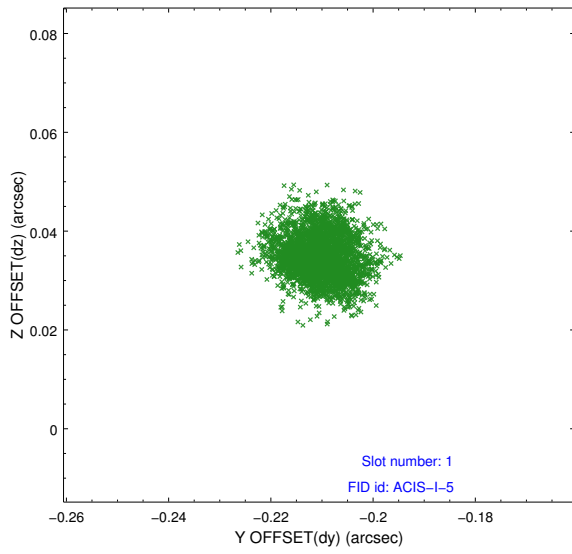


2.5 FID Slots

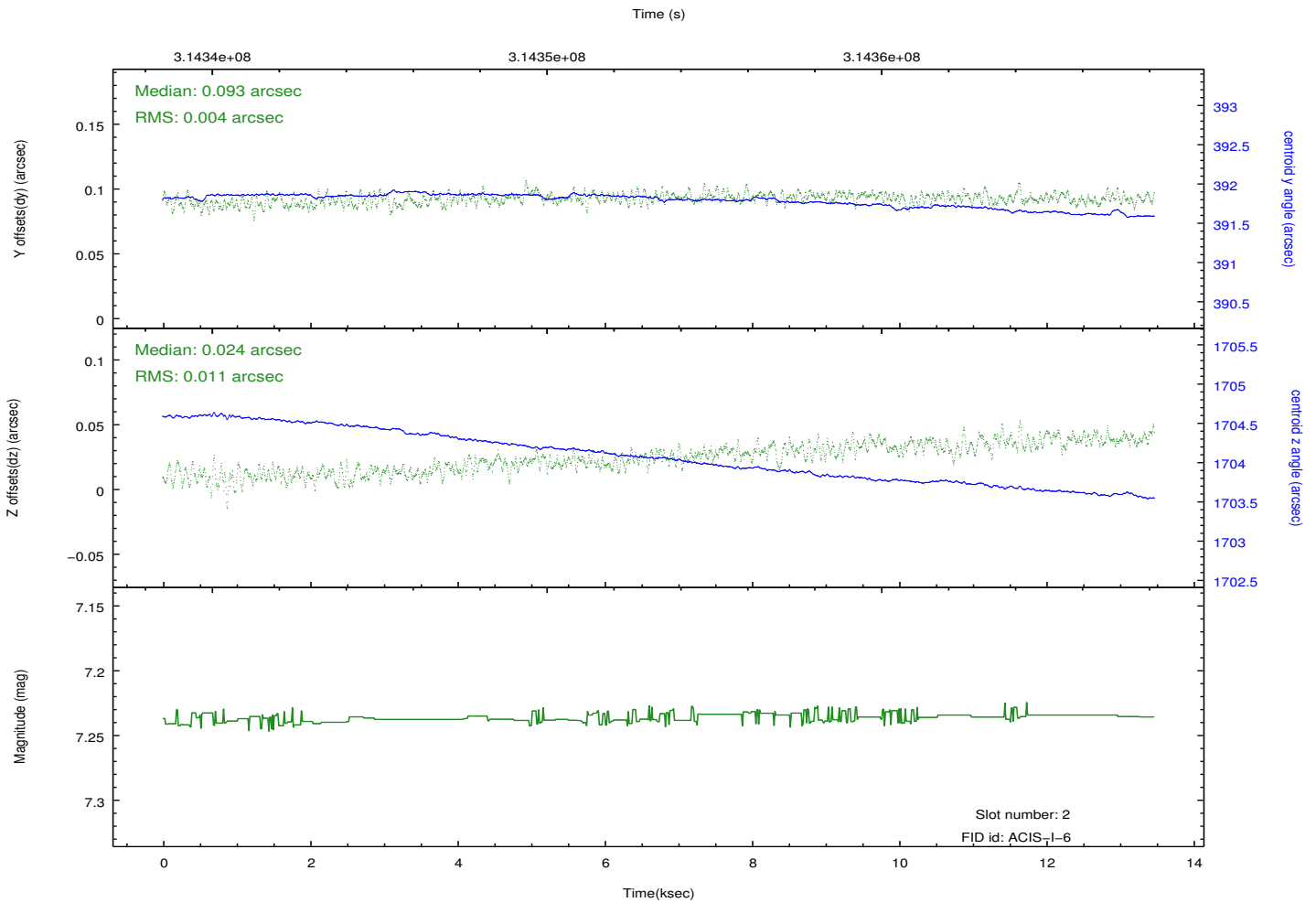
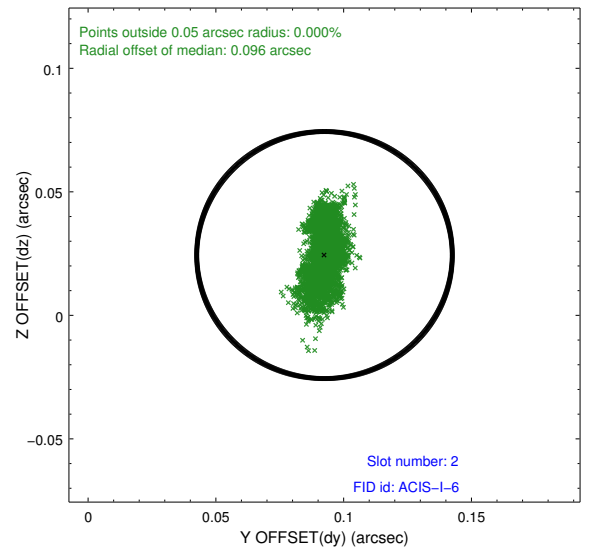
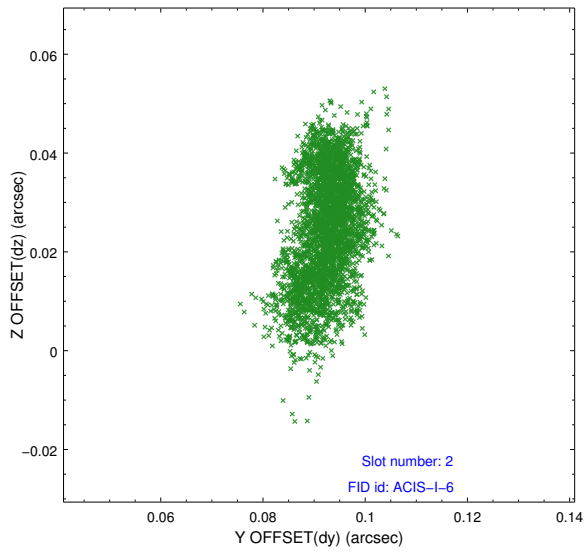
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.05.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	13.4632181

A.2 Comments

Roll constraint met.

=====

A spatial region of the original bias map for CCD = 3 suffered from anomalously high data values. Pixels in the event data that were bias-corrected by one of the original affected bias pixels may have an apparent energy shift. While the change in energy is expected to be small (~ 20 eV), it depends on many parameters that have not yet been fully explored for this bias anomaly. The bias map for CCD = 3 has been reconstructed for this processing to remove this anomaly using scaled data from a comparable bias map from another observation. The pixels affected by the anomaly are bounded by sky coords:
(214.78145,52.97724), (214.78708,52.97428), (214.93962,53.07933), (214.93400,53.08230)