

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 9451 - L2 Version 3
Chandra X-Ray Center

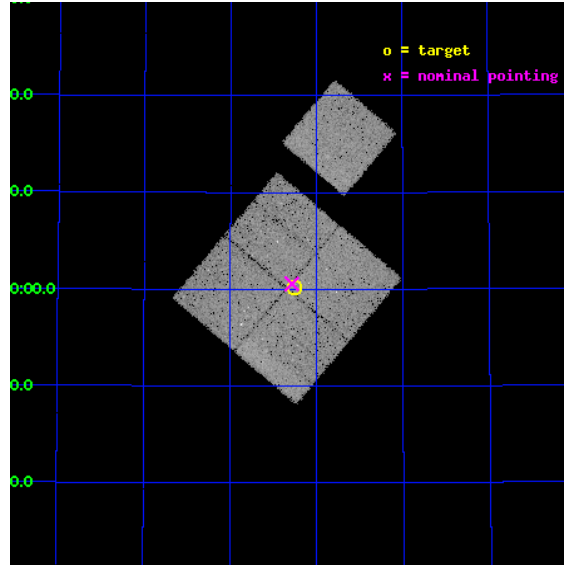
L2 Processing Date : May 7 2012

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

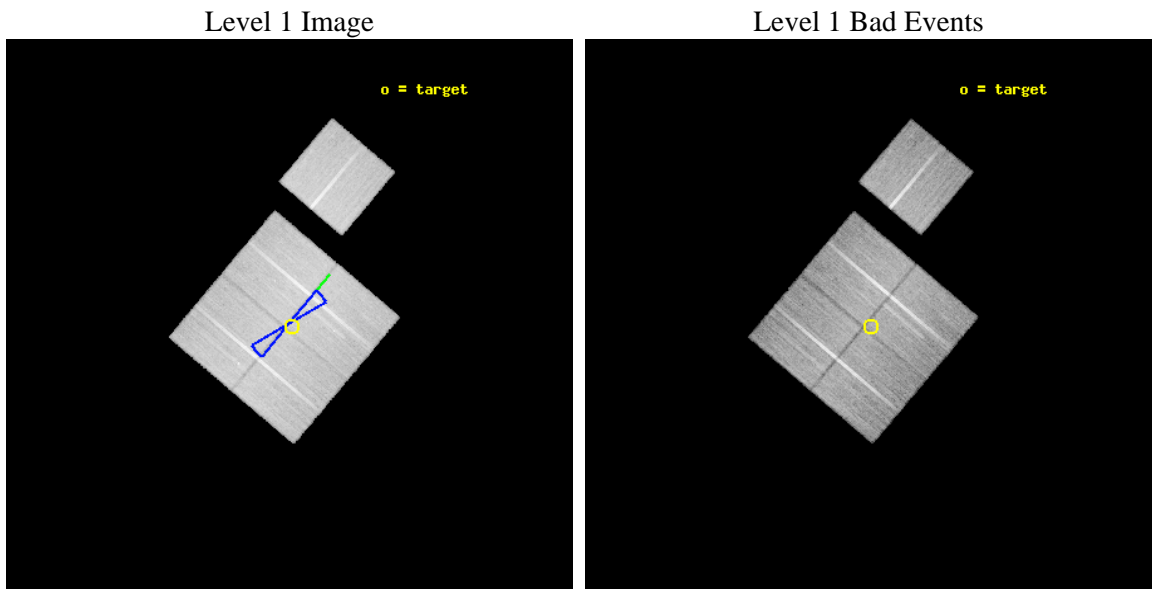
seq_num	900796	Sequence number
obs_id	9451	Observation id
title	The Evolution of Faint AGN at High Redshift	Proposal title
observer	Prof Kirpal Nandra	Principal investigator
object	AEGIS-1	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	215.064583	Observer's specified target RA [deg]
dec_targ	53.002694	Observer's specified target Dec [deg]
ra_nom	215.07179528589	Nominal RA [deg]
dec_nom	53.009507683691	Nominal Dec [deg]
roll_nom	40.202936338007	Nominal Roll [deg]
revision	3	Processing version of data
ontime	25547.018245935	Sum of GTIs [s]
livetime	25213.227645111	Livetime [s]
ontime0	25553.300196528	Sum of GTIs [s]
ontime1	25547.018226087	Sum of GTIs [s]
ontime2	25553.300196528	Sum of GTIs [s]
ontime3	25547.018245935	Sum of GTIs [s]
ontime6	25547.018246055	Sum of GTIs [s]
l2events	86926	Number of level 2 events



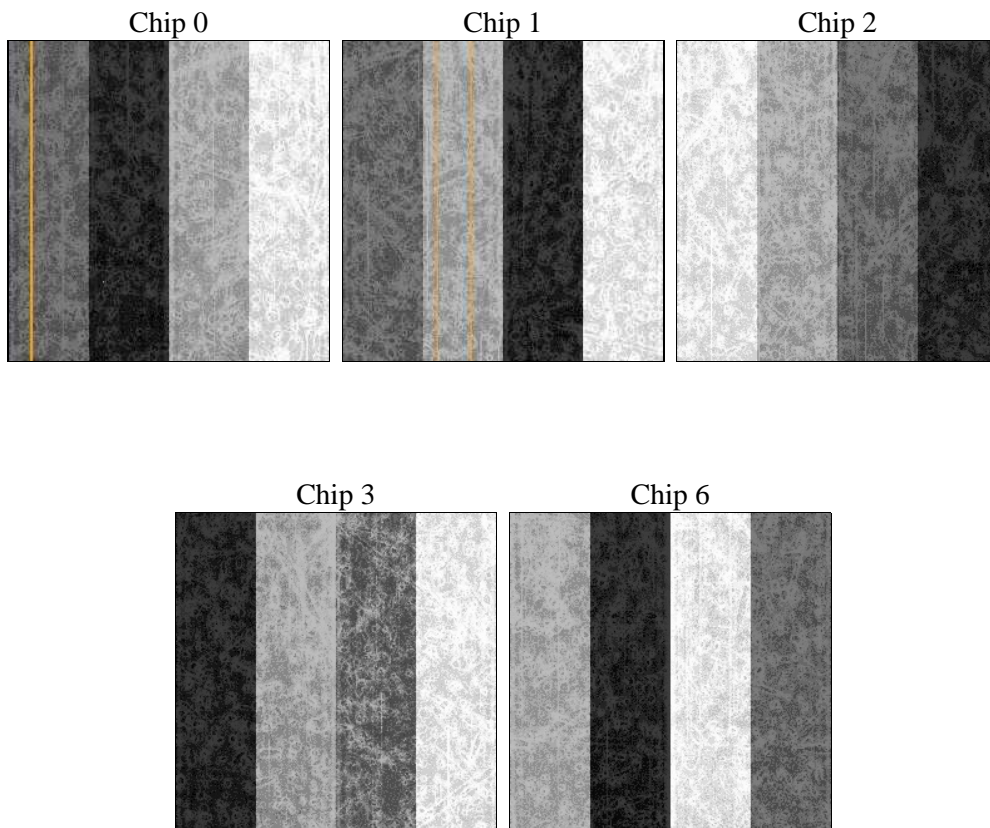
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	25400.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	25547.018245935	Sum of GTIs [s]
caldsver	4.4.9	 	ontime0	25553.300196528	Sum of GTIs [s]
date	2012-05-07T13:38:59	Date and time of file creation	ontime1	25547.018226087	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	25553.300196528	Sum of GTIs [s]
			ontime3	25547.018245935	Sum of GTIs [s]
			ontime6	25547.018246055	Sum of GTIs [s]
			l1events	1029374	Number of level 1 events

2.1.4 Events

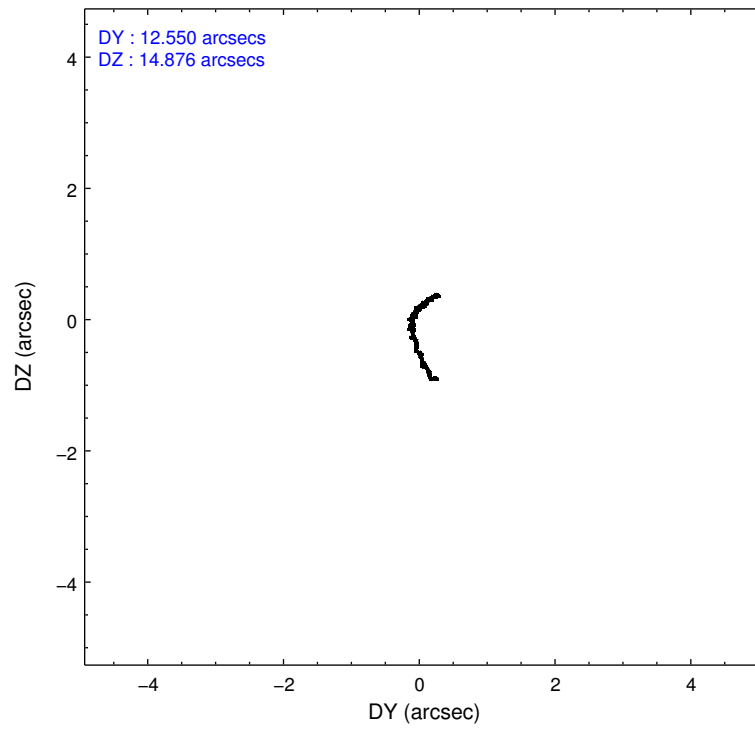
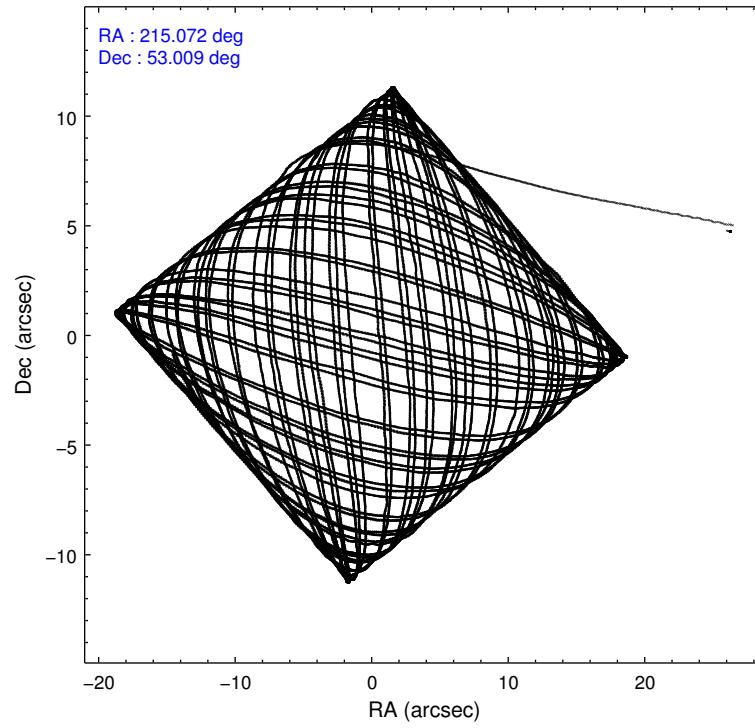
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	199876	197147	217897	205955	208499	grade 0 events	7536	8302	7345	7023	7440
rejected events	178892	174186	197588	186504	187176		3%	4%	3%	3%	3%
rejected %	89%	88%	90%	90%	89%	grade 1 events	105	114	119	120	104
							0%	0%	0%	0%	0%
						grade 2 events	5084	5178	4951	4287	4683
							2%	2%	2%	2%	2%
						grade 3 events	2345	2498	2138	2229	2408
							1%	1%	0%	1%	1%
						grade 4 events	2134	2414	2195	2191	2332
							1%	1%	1%	1%	1%
						grade 5 events	7438	8140	6762	8469	8332
							3%	4%	3%	4%	3%
						grade 6 events	4027	4727	3811	3862	4599
							2%	2%	1%	1%	2%
						grade 7 events	171207	165774	190576	177774	178601
							85%	84%	87%	86%	85%

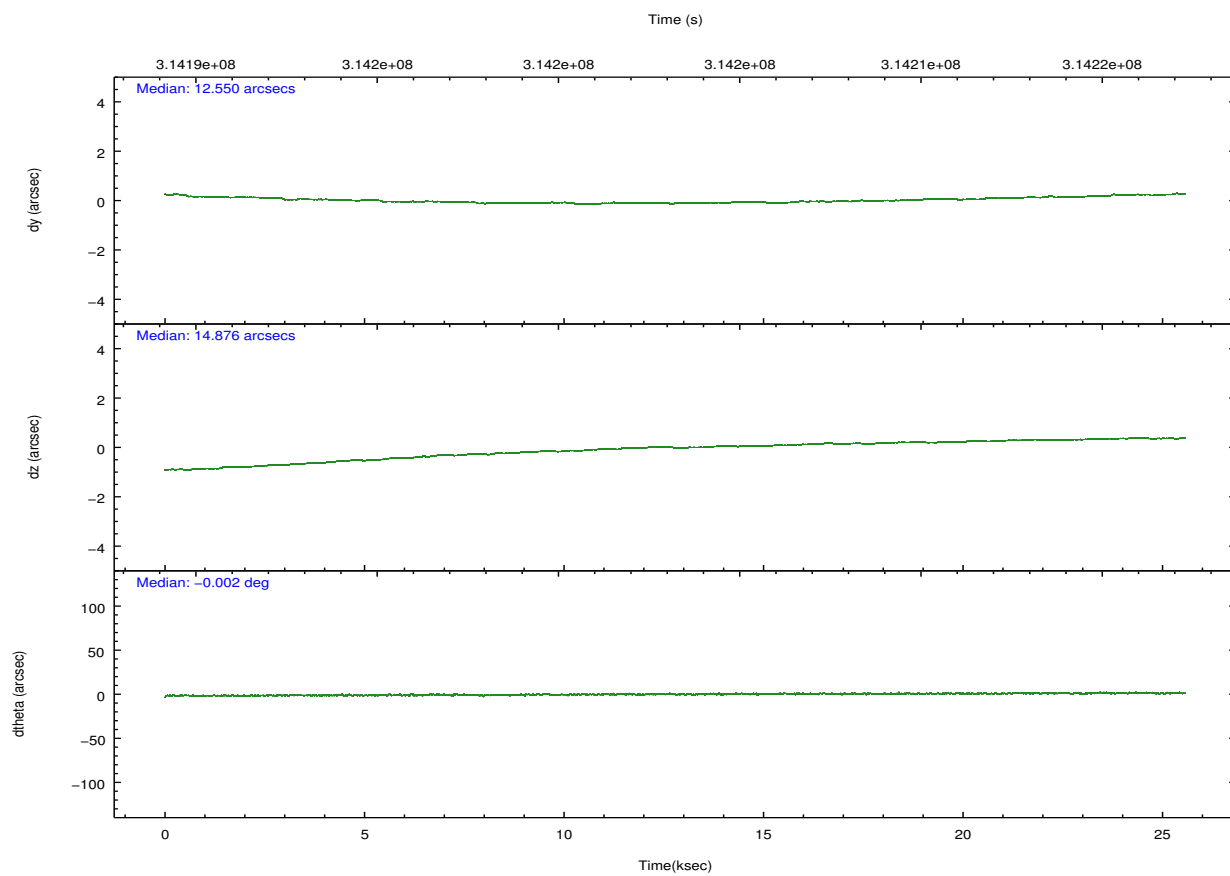
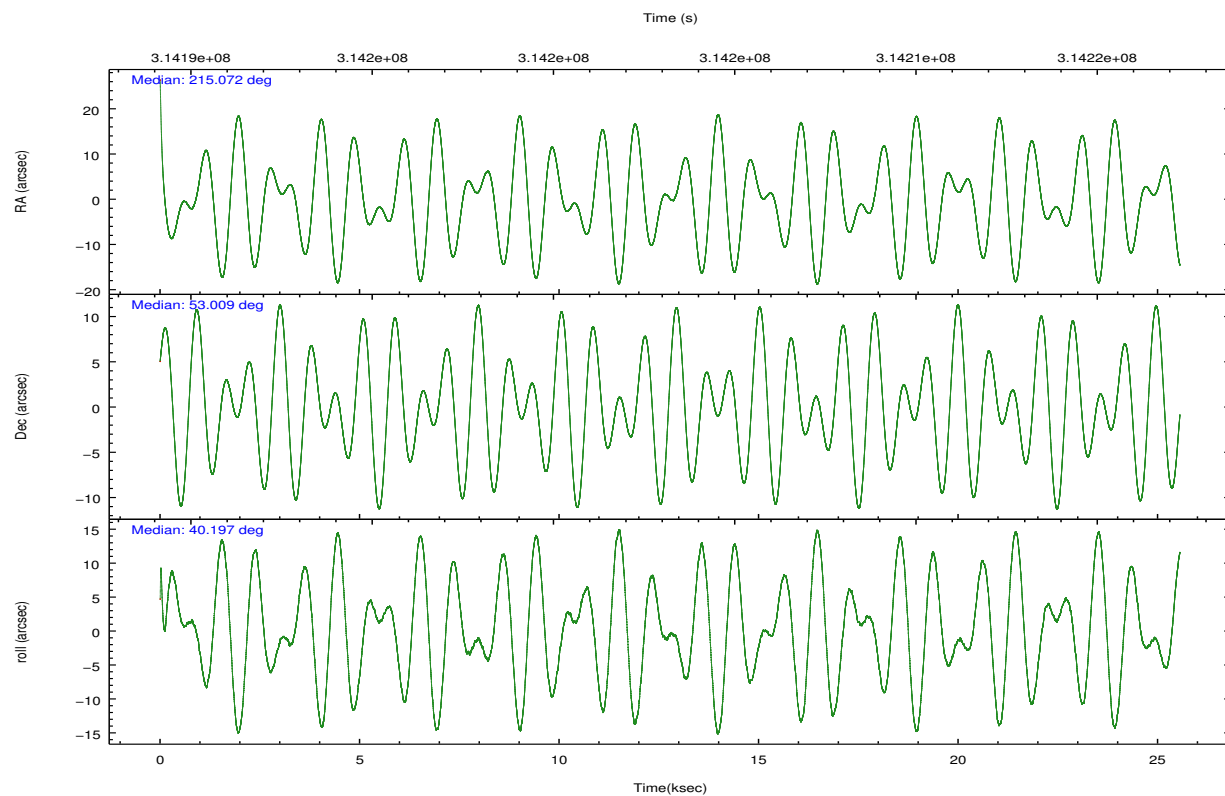
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-01236	ACIS-01236
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	215.056503	215.0717952858944
[deg] Pointing Dec	52.983611	53.00950768369069
[deg] Pointing Roll	40.006455	40.20293633800734
[deg] Roll angle	50.000000	50.000000
[deg] Roll tolerance	10.000000	10.000000
Roll constraint allows 180D rotation	Y	Y
[mm] SIM focus pos	-0.782348	-0.7809083437167272
[mm] SIM defocus	0	0.001439871863259334
[mm] SIM translation stage pos	-233.592463	-233.5874344608287
[mm] SIM translation stage offset	0	-0.005018542100998502
[s] Observation start time (MET)	314190592.184000	314189526.2754
Observation start date	2007-12-16T11:08:47	2007-12-16T10:52:06
[s] Observation end time (MET)	314215992.184000	314216698.00171
Observation end date	2007-12-16T18:12:07	2007-12-16T18:24:58
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
CCD I0 on	Y	Y
CCD I1 on	Y	Y
CCD I2 on	Y	Y
CCD I3 on	Y	Y
CCD S0 on	N	N
CCD S1 on	N	N
CCD S2 on	O1	Y
CCD S3 on	N	N
CCD S4 on	N	N
CCD S5 on	N	N
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.1

2.3 Aspect



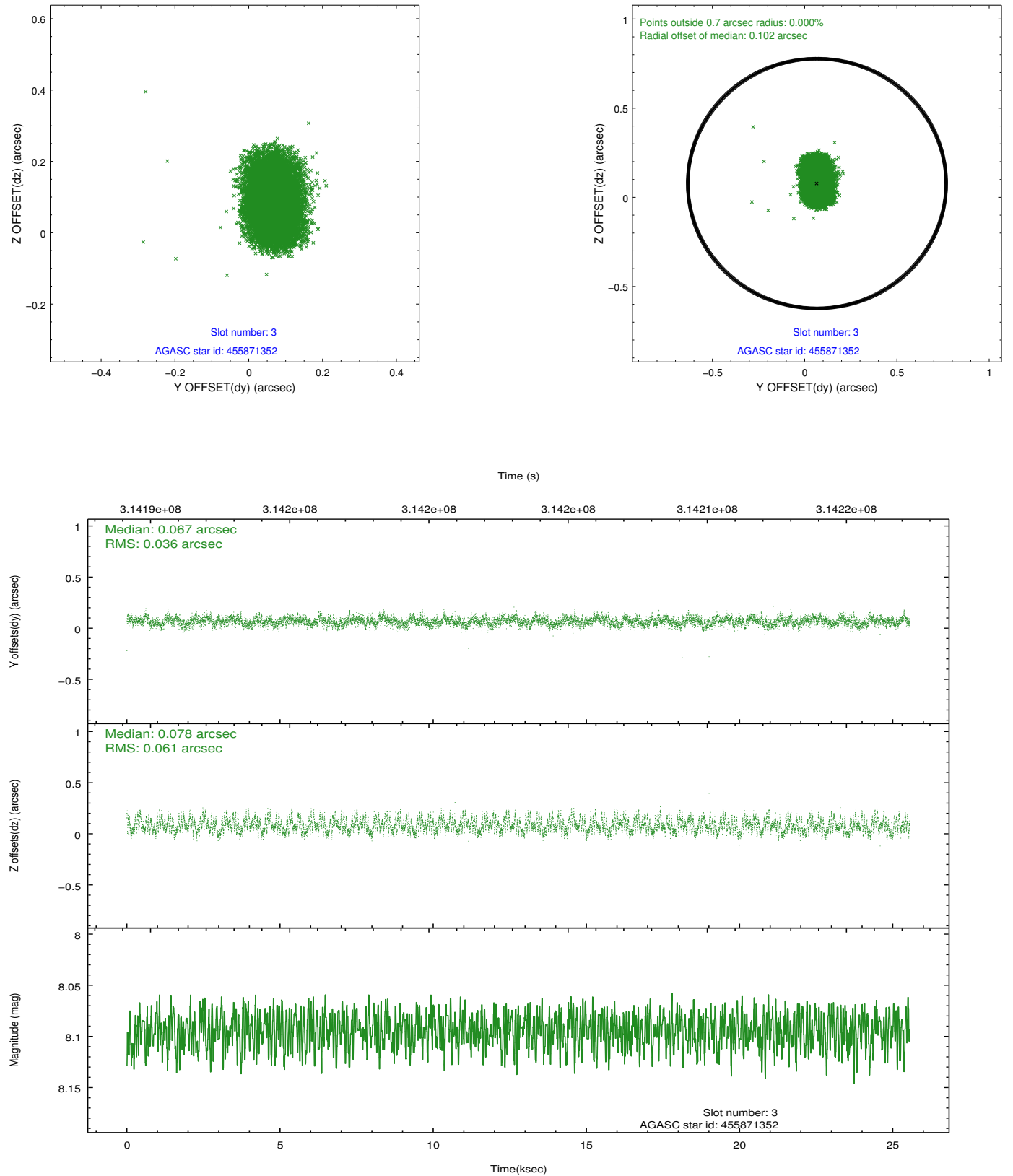


Slot Statistics

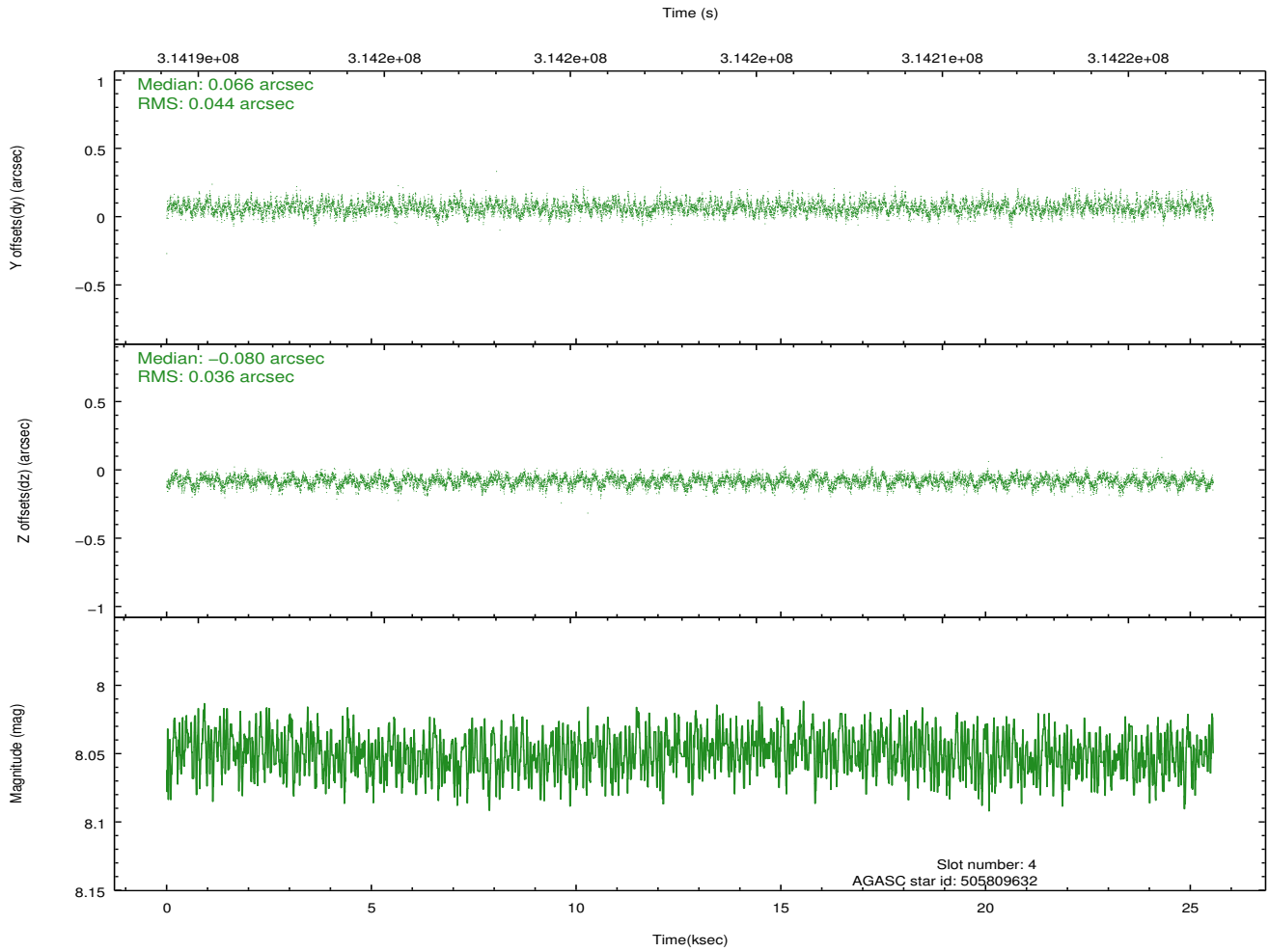
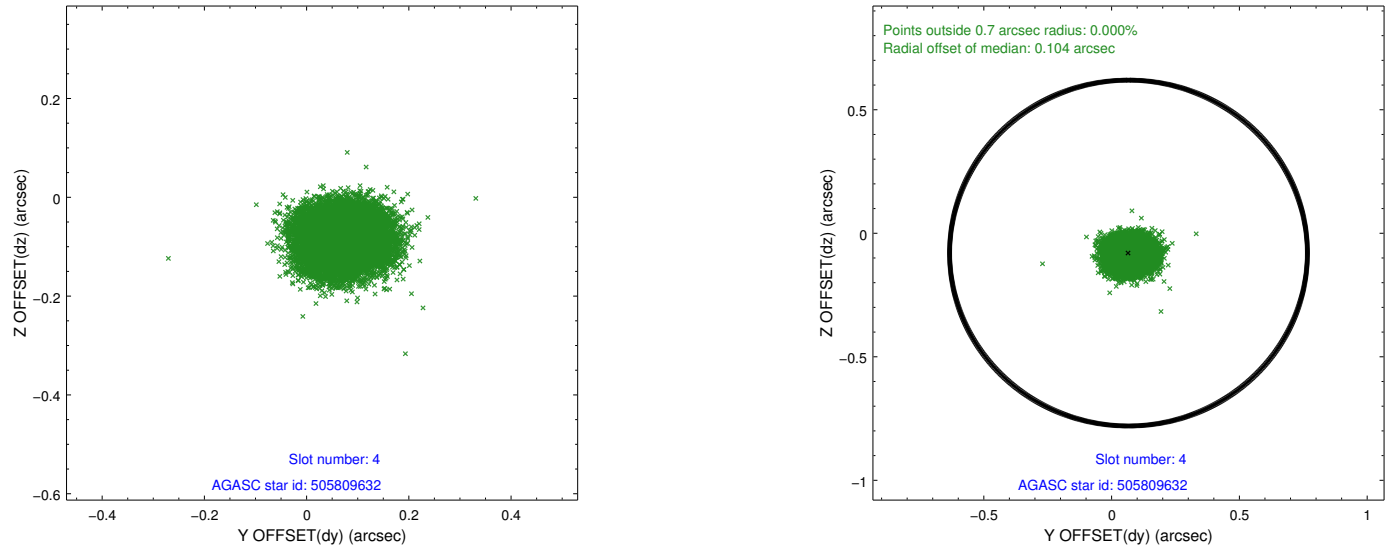
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.23	6233	0.027	-0.012	0.019	0.029	0.000000	0.000000	926.98	-838.37
1	FID	ACIS-I-5	7.22	6234	-0.202	0.034	0.008	0.014	0.000000	0.000000	-1821.30	1059.10
2	FID	ACIS-I-6	7.23	6233	0.082	0.051	0.015	0.029	0.000000	0.000000	392.45	1703.75
3	GUIDE	455871352	8.09	12467	0.067	0.078	0.076	0.122	215.099961	52.172669	-1802.87	-2297.80
4	GUIDE	505809632	8.05	12465	0.066	-0.080	0.060	0.097	215.499426	53.521185	1972.19	875.32
5	GUIDE	505812088	8.15	12465	0.058	-0.175	0.066	0.105	214.186617	53.263562	-779.33	1984.84
6	GUIDE	505812376	7.55	12466	-0.097	0.044	0.046	0.074	214.039537	52.937930	-1785.82	1304.68
7	GUIDE	505815928	8.35	12465	-0.096	0.128	0.067	0.113	216.234742	53.074559	2175.89	-1370.74

2.4 Star Slots

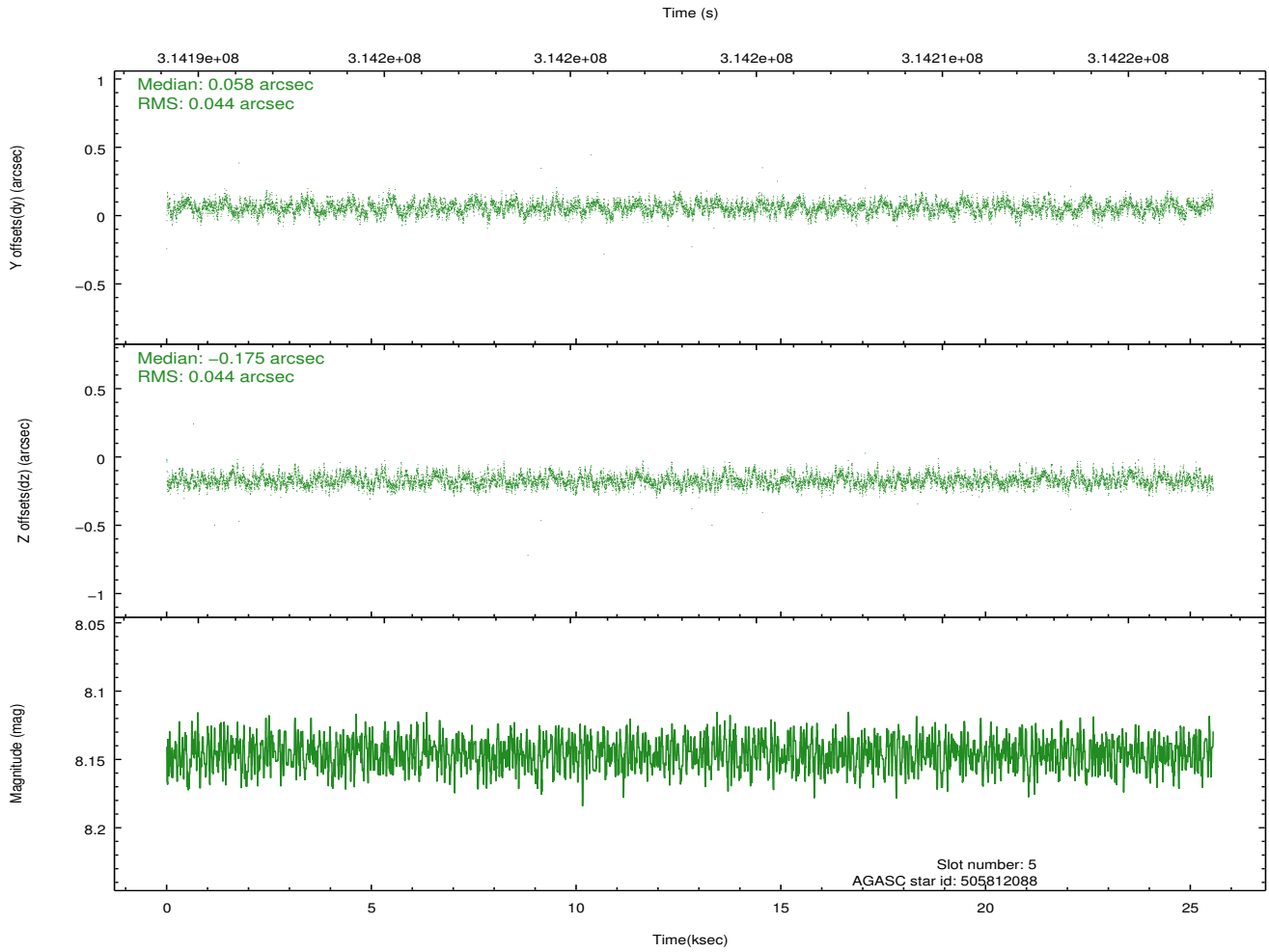
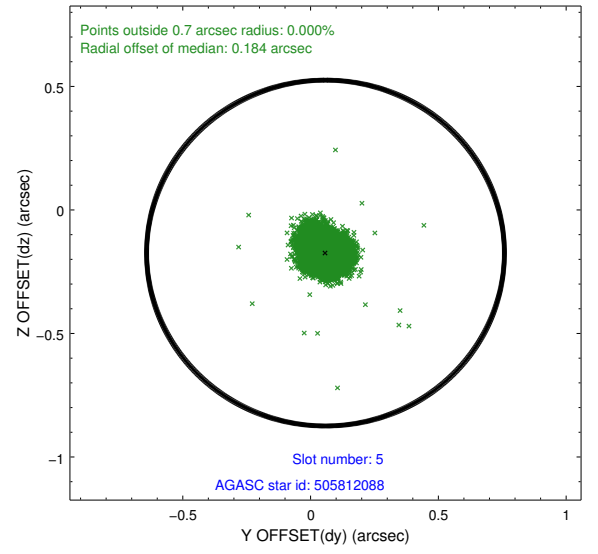
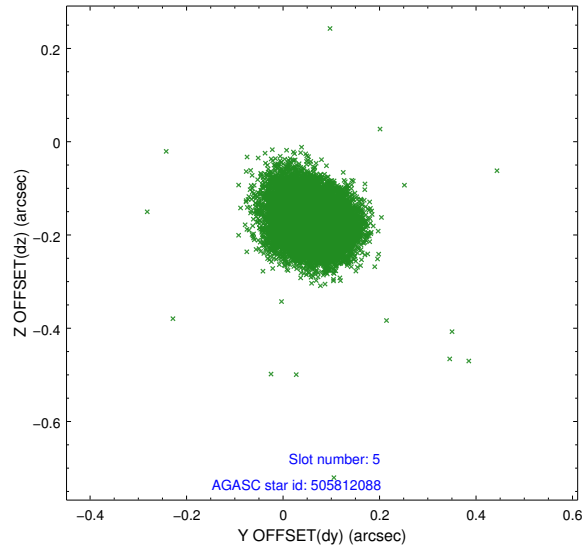
2.4.1 Slot 3



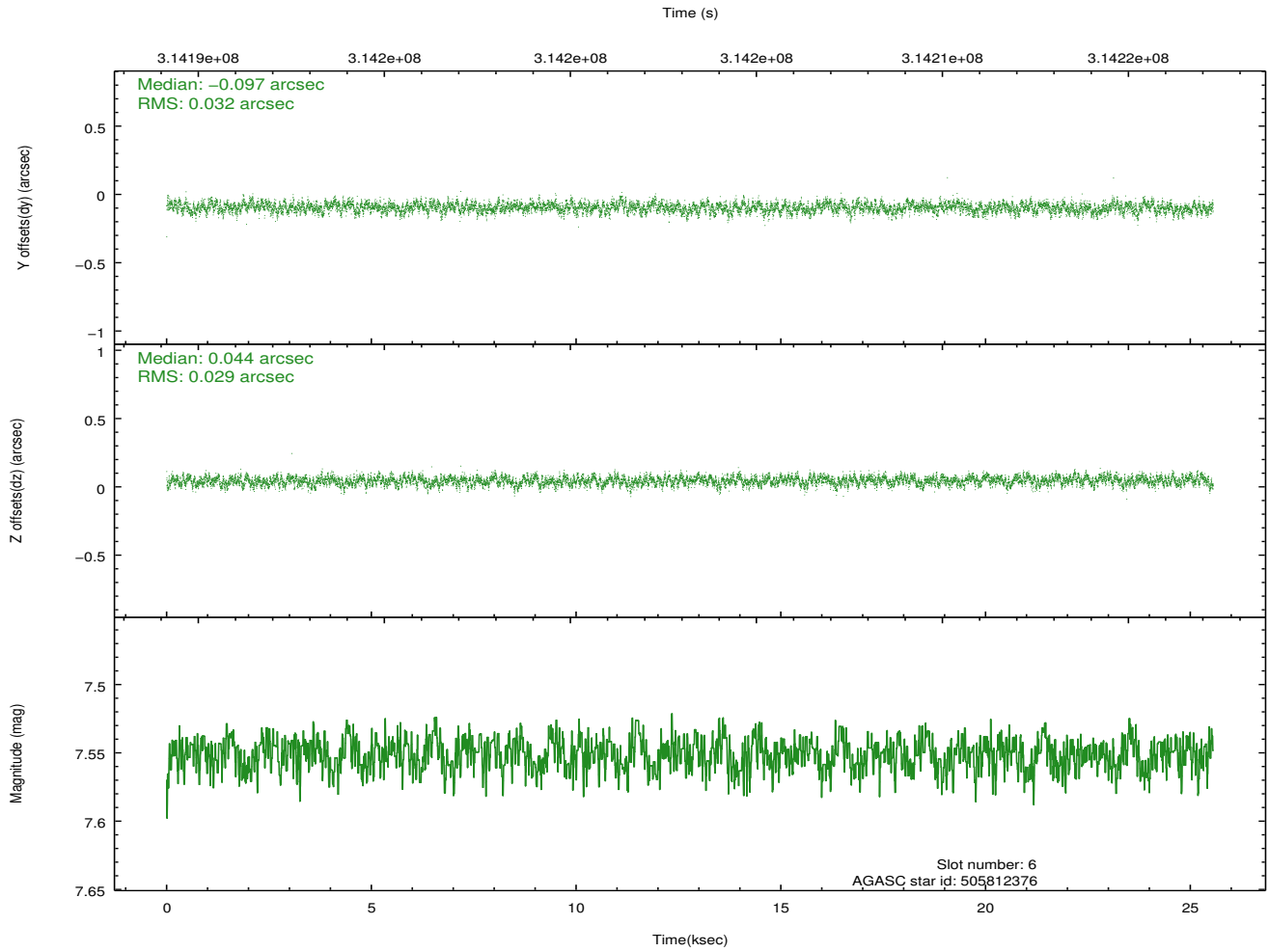
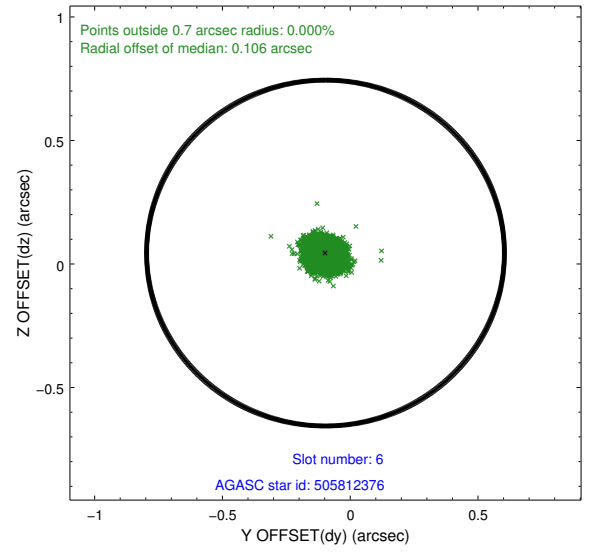
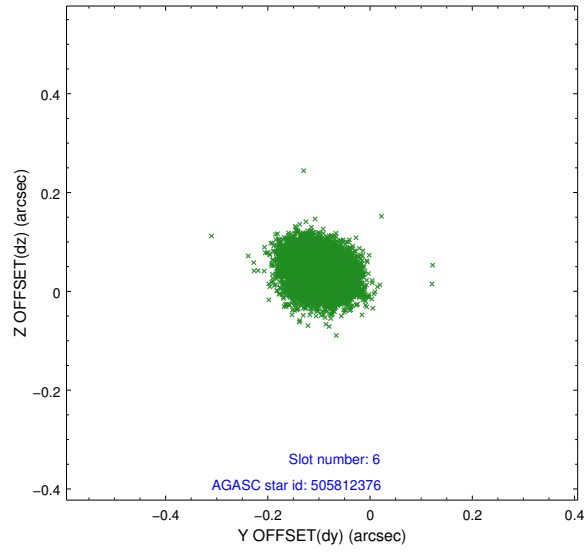
2.4.2 Slot 4



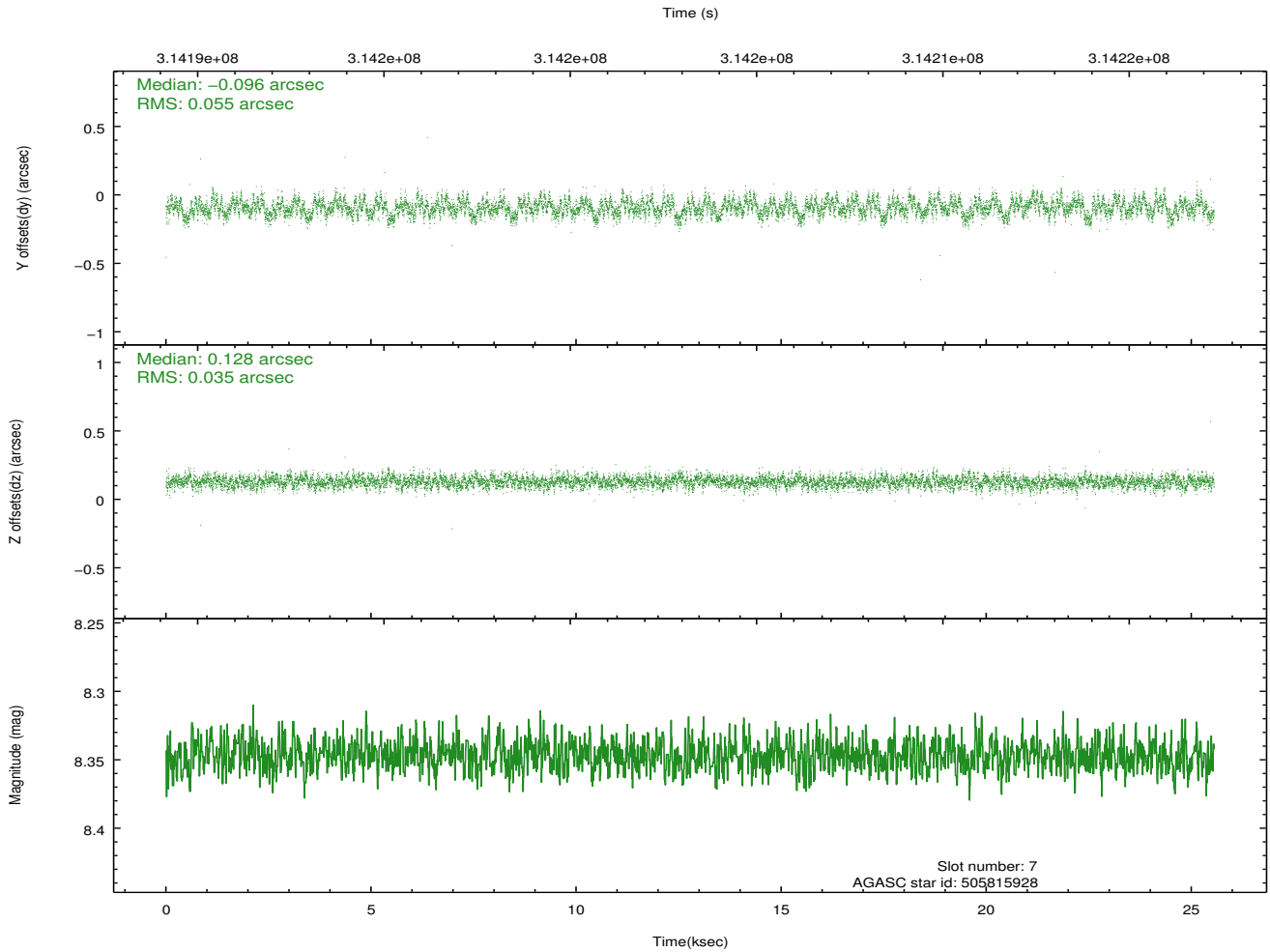
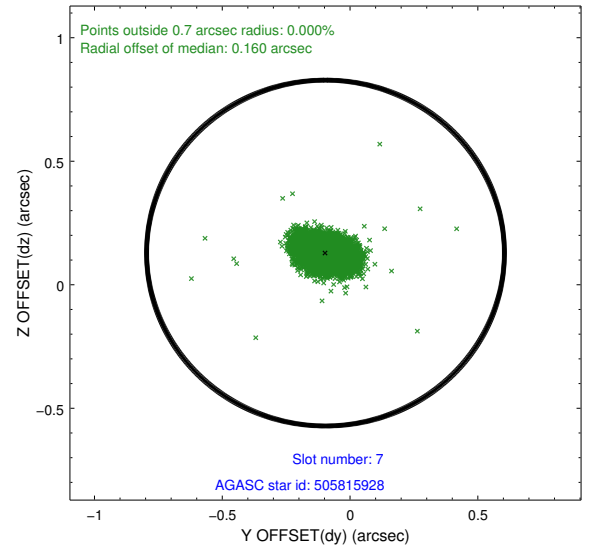
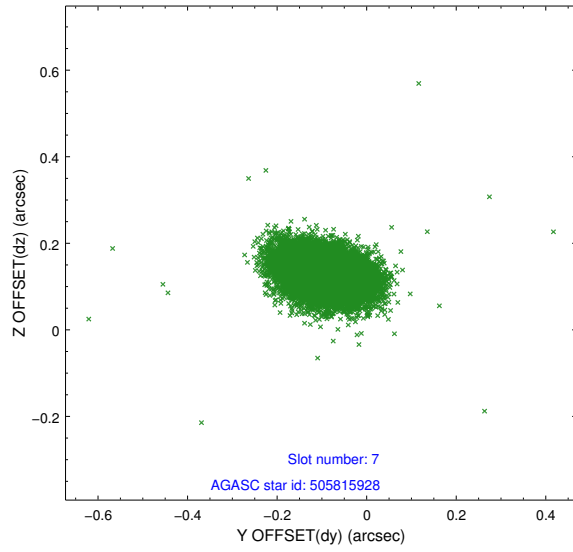
2.4.3 Slot 5



2.4.4 Slot 6

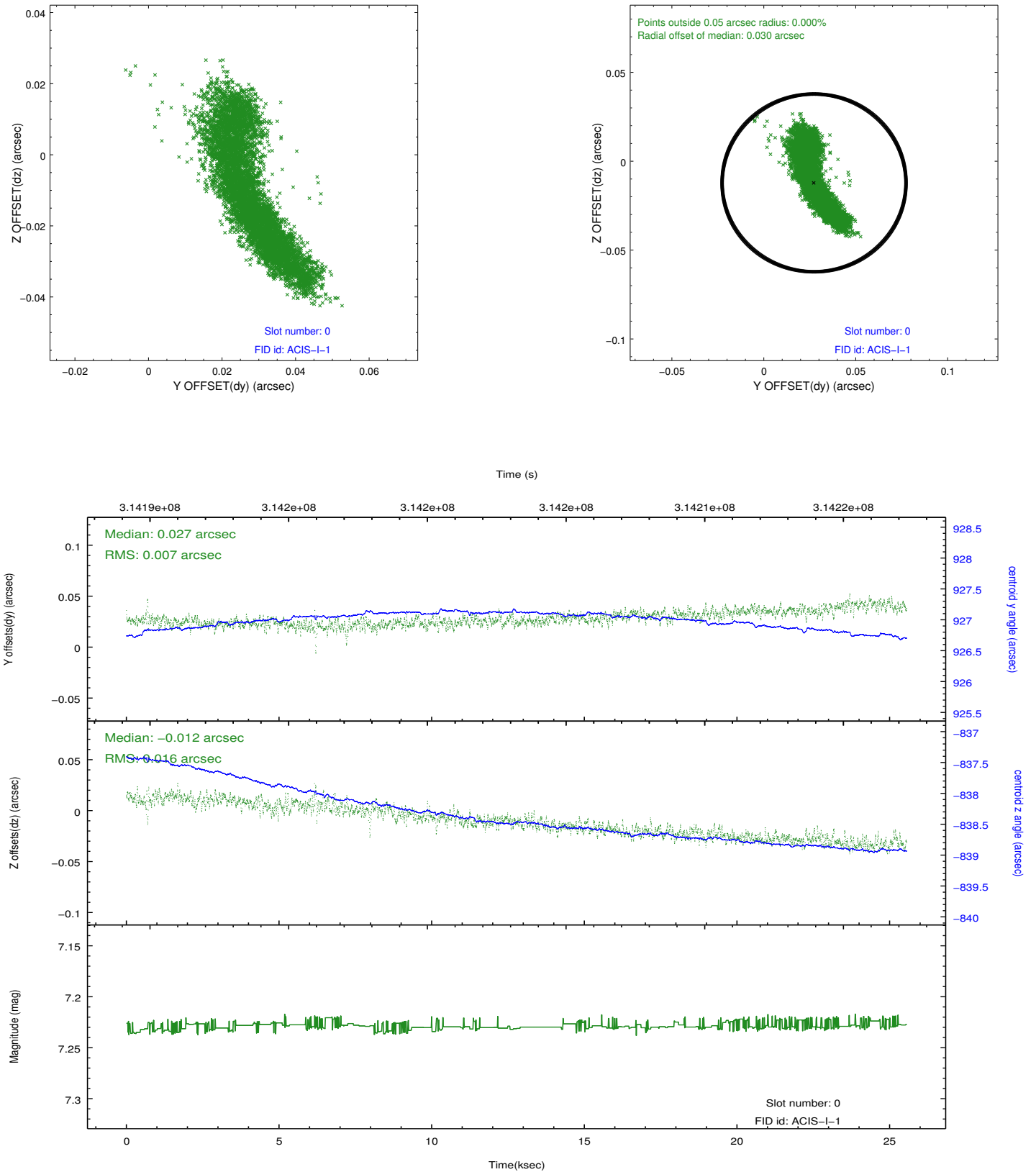


2.4.5 Slot 7

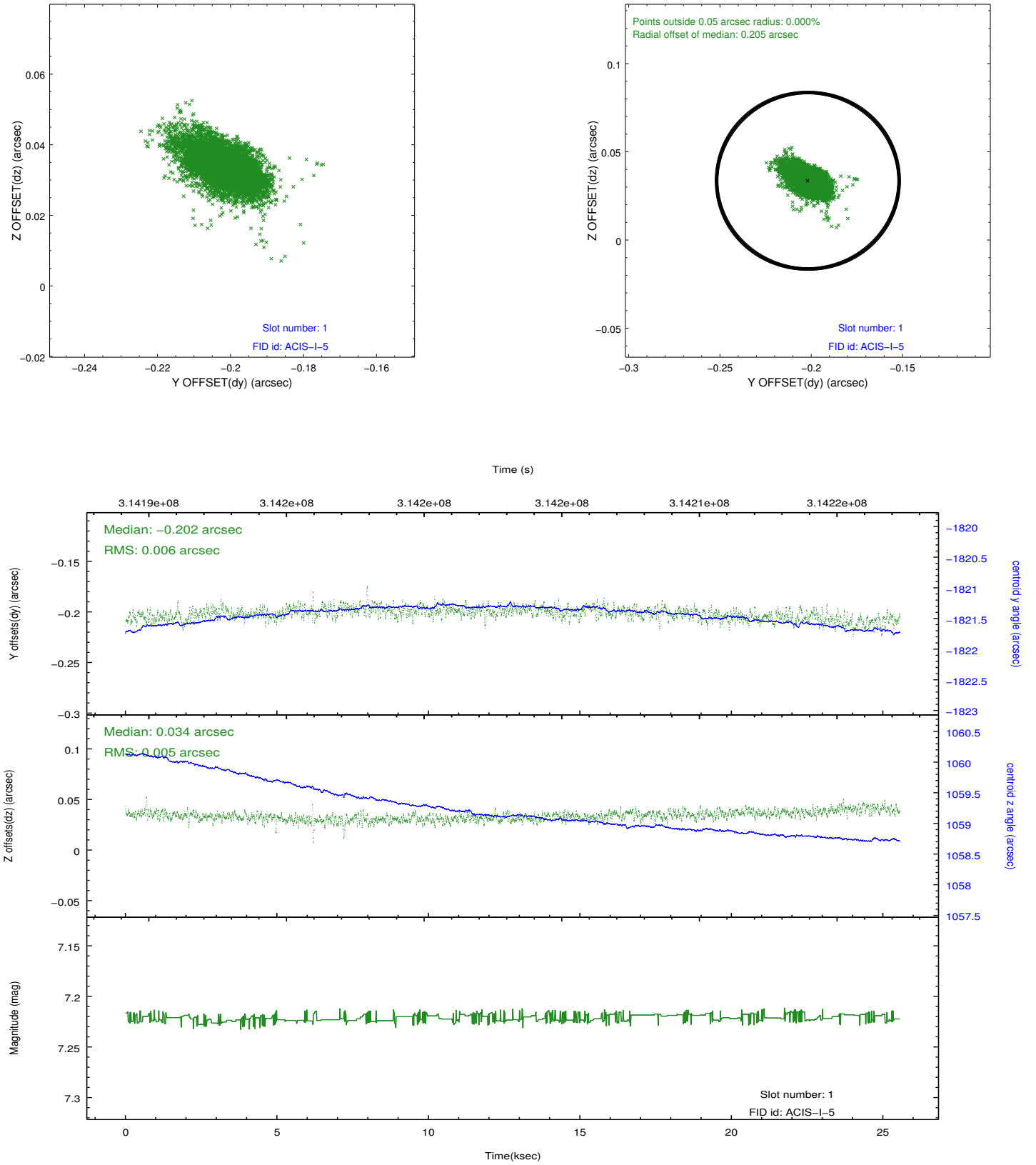


2.5 FID Slots

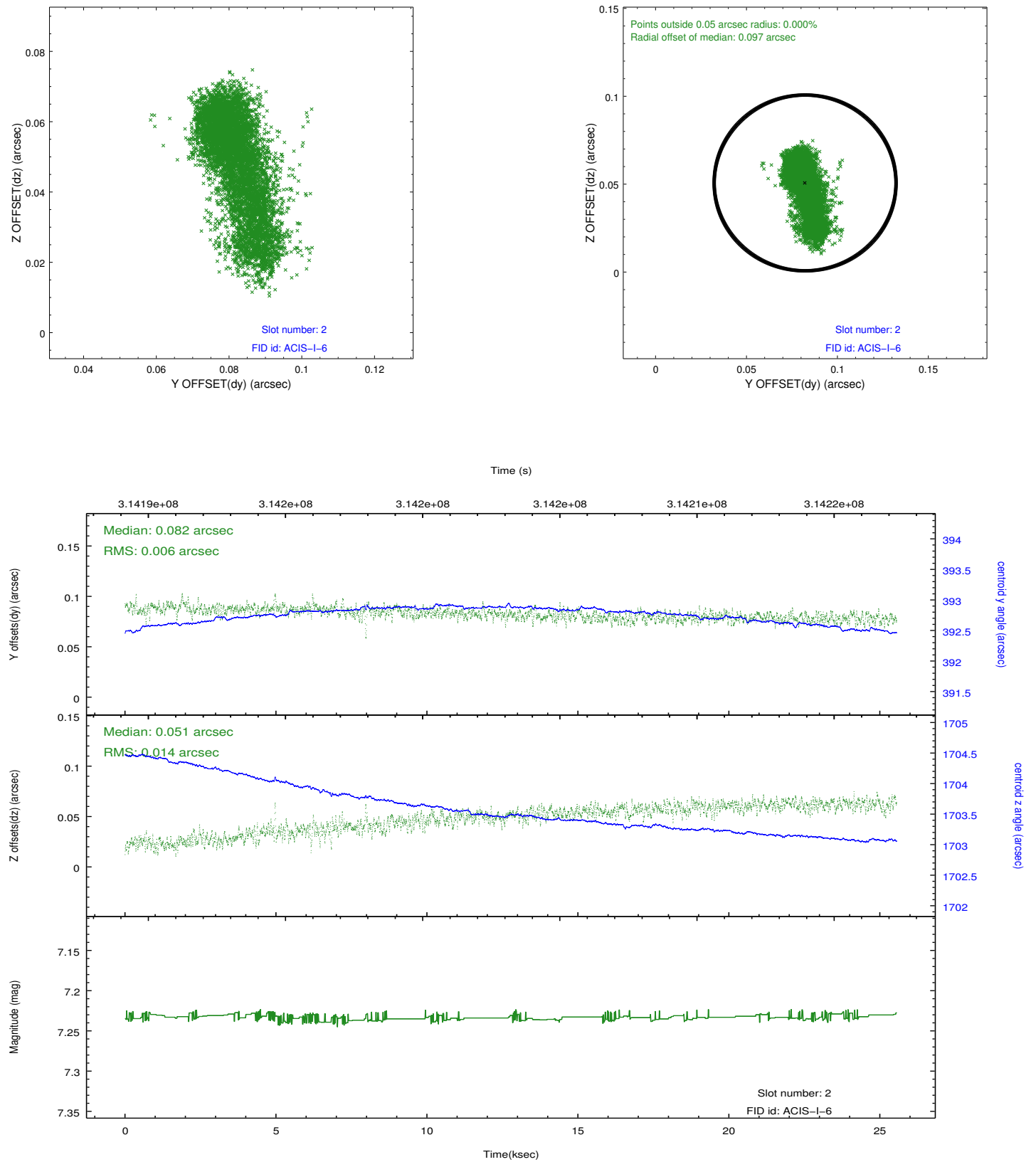
2.5.1 Slot 0



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)	2012.05.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	25.5470182

A.2 Comments

Roll constraint met. Joint Proposal: Spitzer.

=====

A spatial region of the original bias map for CCD = 0 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 = 0 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:
(215.32571,53.05019),(215.32106,53.05354),(215.28597,53.03583),(215.28507,53.02967)