

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 7933 - L2 Version 3
Chandra X-Ray Center

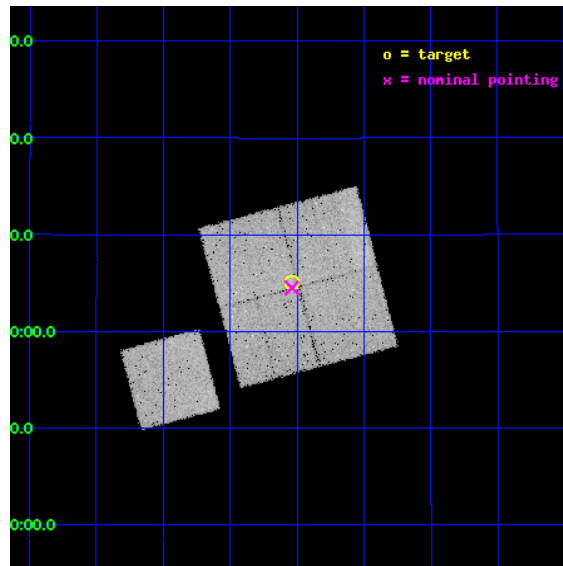
L2 Processing Date : May 10 2012

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1 Front

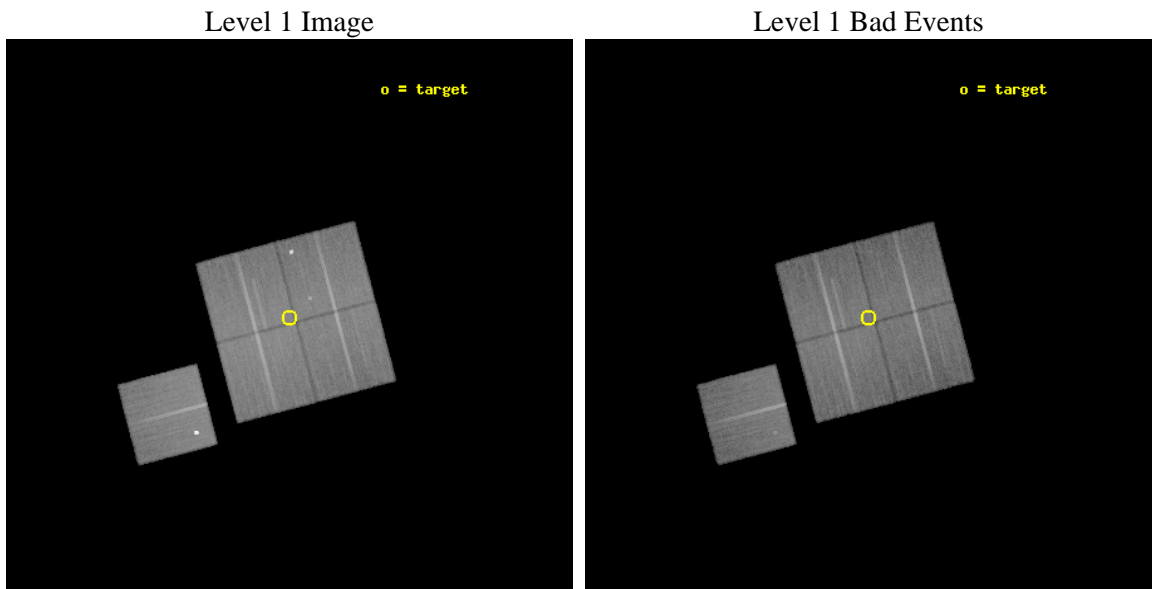
seq_num	800651	Sequence number
obs_id	7933	Observation id
title	A Complete Baryon Census in a Nearby Galaxy Group	Proposal title
observer	Dr. John Mulchaey	Principal investigator
object	NGC2563-P10	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	125.384167	Observer's specified target RA [deg]
dec_targ	21.083333	Observer's specified target Dec [deg]
ra_nom	125.3845545201	Nominal RA [deg]
dec_nom	21.075270339992	Nominal Dec [deg]
roll_nom	255.22730206241	Nominal Roll [deg]
revision	3	Processing version of data
ontime	30169.118221462	Sum of GTIs [s]
livetime	29774.936481717	Livetime [s]
ontime0	30169.118231416	Sum of GTIs [s]
ontime1	30169.118221462	Sum of GTIs [s]
ontime2	30175.400232077	Sum of GTIs [s]
ontime3	30169.118221462	Sum of GTIs [s]
ontime6	30175.400232077	Sum of GTIs [s]
l2events	103881	Number of level 2 events



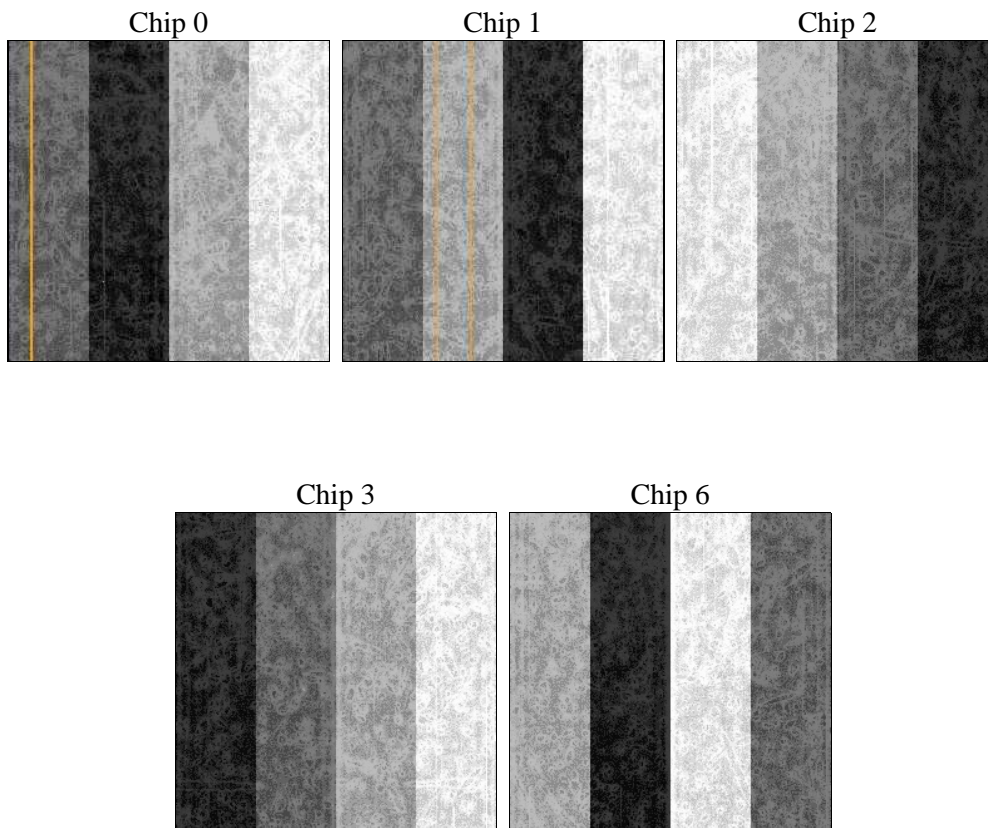
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	30000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	30169.118221462	Sum of GTIs [s]
caldbver	4.4.9	 	ontime0	30169.118231416	Sum of GTIs [s]
date	2012-05-10T23:05:38	Date and time of file creation	ontime1	30169.118221462	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	30175.400232077	Sum of GTIs [s]
			ontime3	30169.118221462	Sum of GTIs [s]
			ontime6	30175.400232077	Sum of GTIs [s]
			l1events	1258754	Number of level 1 events

2.1.4 Events

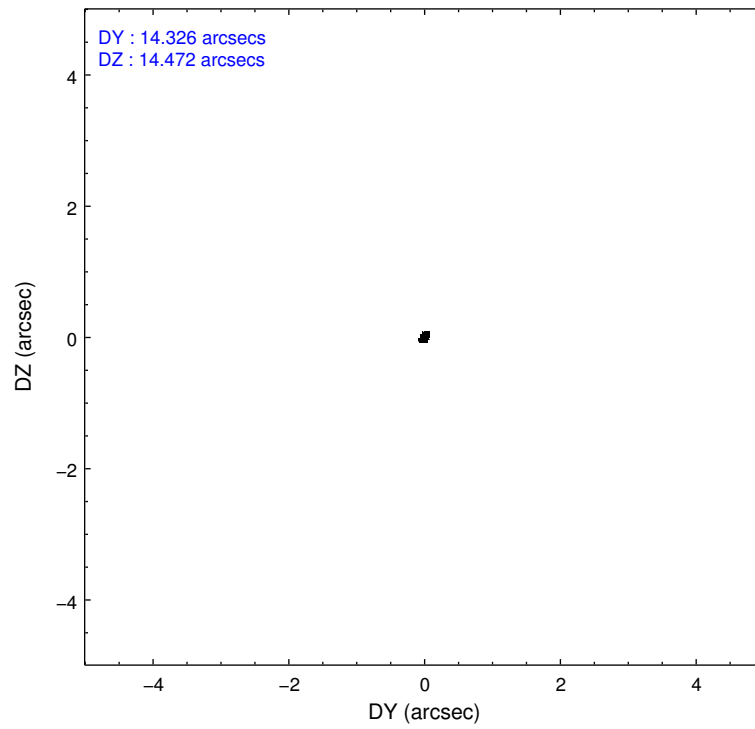
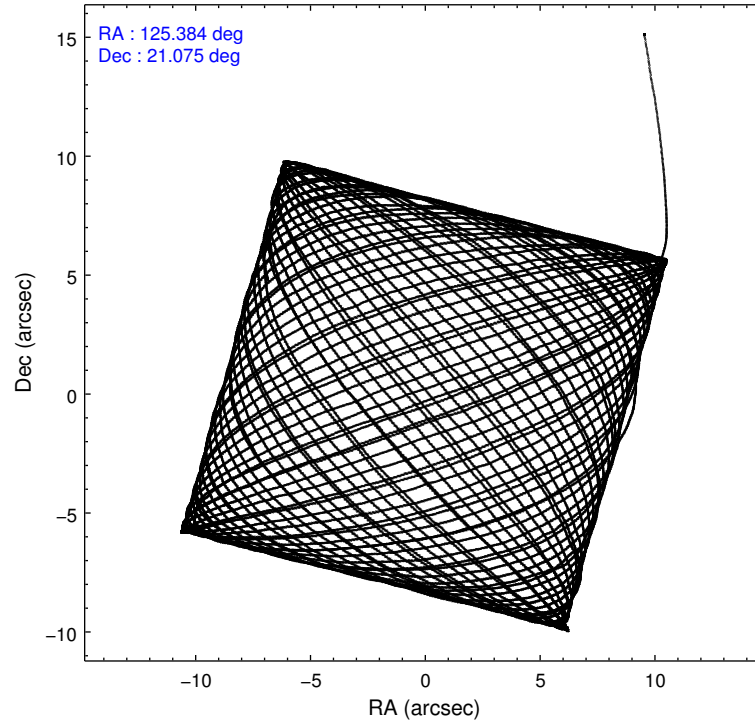
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	229866	241601	261760	247606	277921
rejected events	205041	203613	237971	224547	227077
rejected %	89%	84%	90%	90%	81%

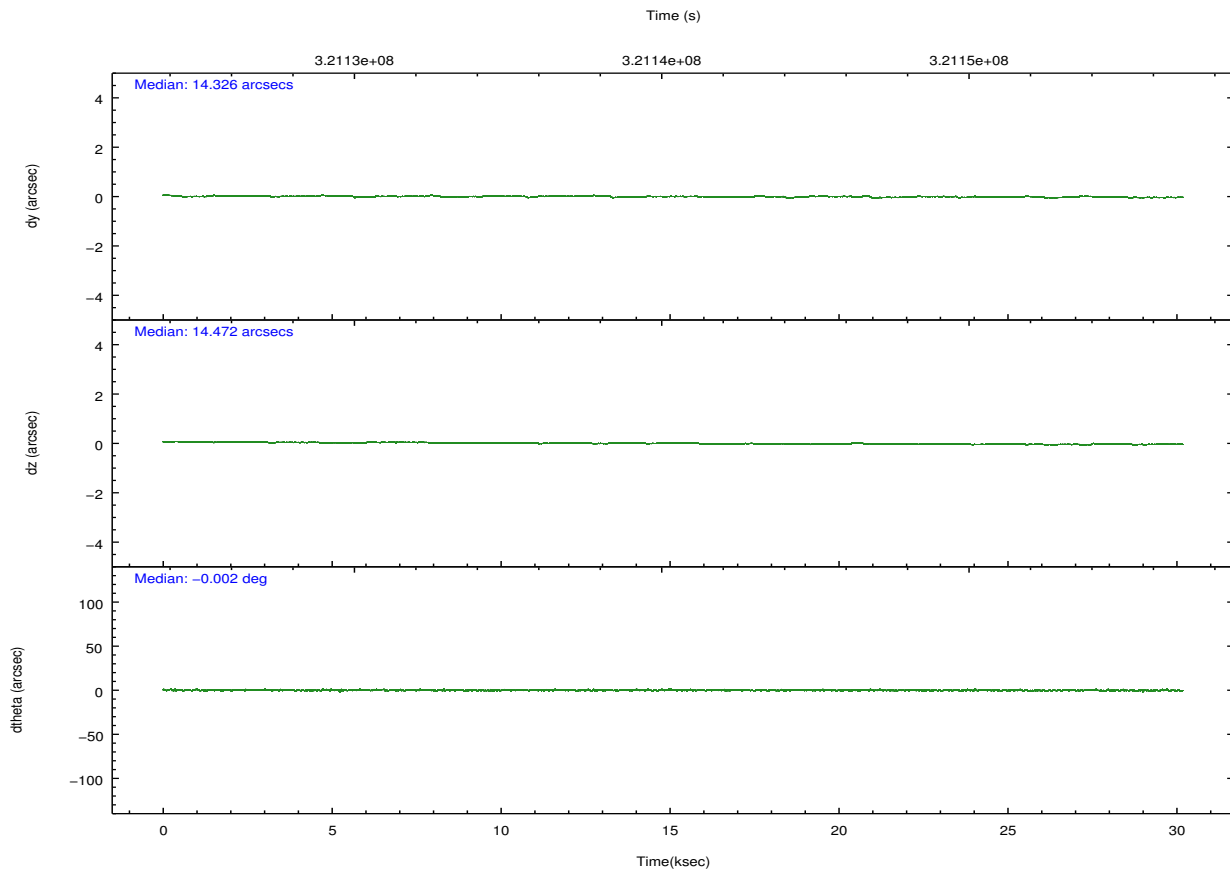
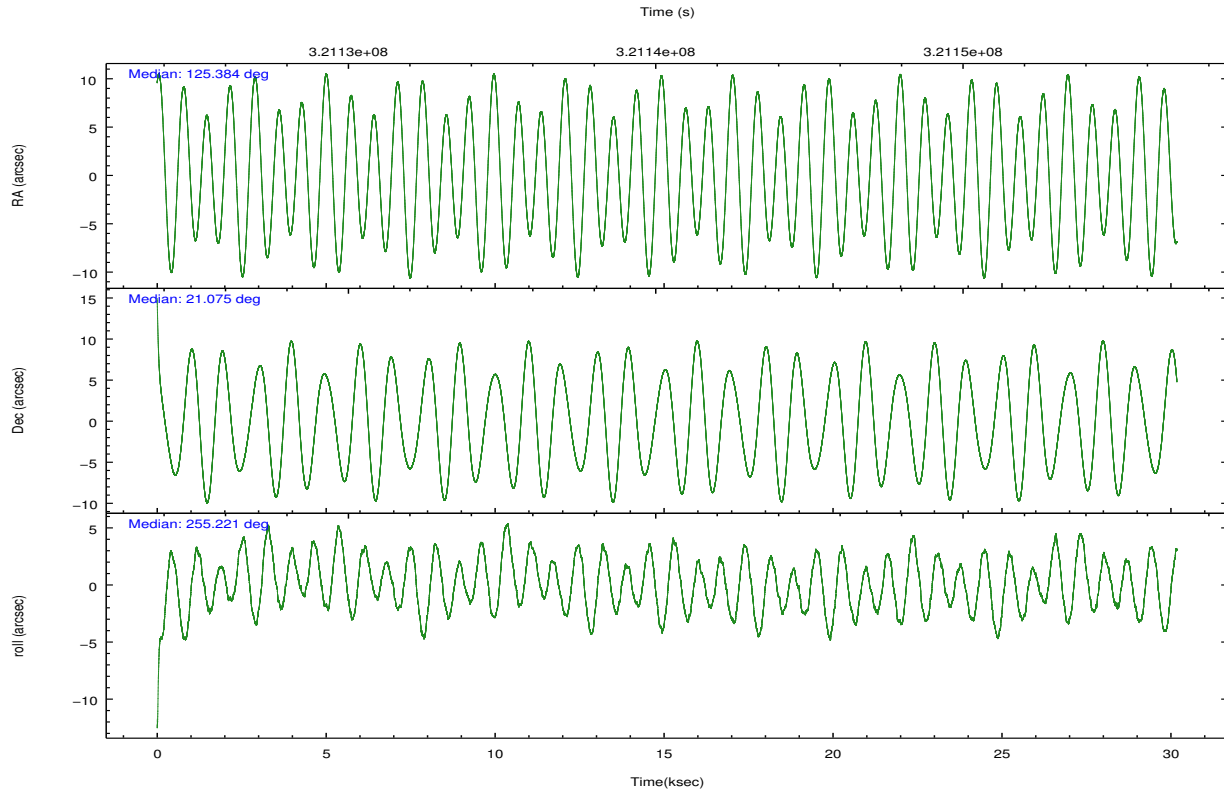
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	9099	11551	8827	8349	8801
	3%	4%	3%	3%	3%
grade 1 events	124	175	142	131	111
	0%	0%	0%	0%	0%
grade 2 events	5876	15425	5726	5181	31578
	2%	6%	2%	2%	11%
grade 3 events	2775	2946	2511	2623	2763
	1%	1%	0%	1%	0%
grade 4 events	2634	2965	2591	2554	2770
	1%	1%	0%	1%	0%
grade 5 events	8668	9381	8140	9981	9820
	3%	3%	3%	4%	3%
grade 6 events	4810	5628	4446	4646	5667
	2%	2%	1%	1%	2%
grade 7 events	195880	193530	229377	214141	216411
	85%	80%	87%	86%	77%

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	125.376691	125.3845545201043	CCD I2 on	Y	Y
[deg] Pointing Dec	21.101758	21.07527033999205	CCD I3 on	Y	Y
[deg] Pointing Roll	255.021448	255.2273020624062	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	N	N
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	321125458.184000	321124251.23661	CCD S5 on	N	N
Observation start date	2008-03-05T17:29:53	2008-03-05T17:10:51	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	321155458.184000	321156312.72567	On-chip summing requested	N	N
Observation end date	2008-03-06T01:49:53	2008-03-06T02:05:12	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



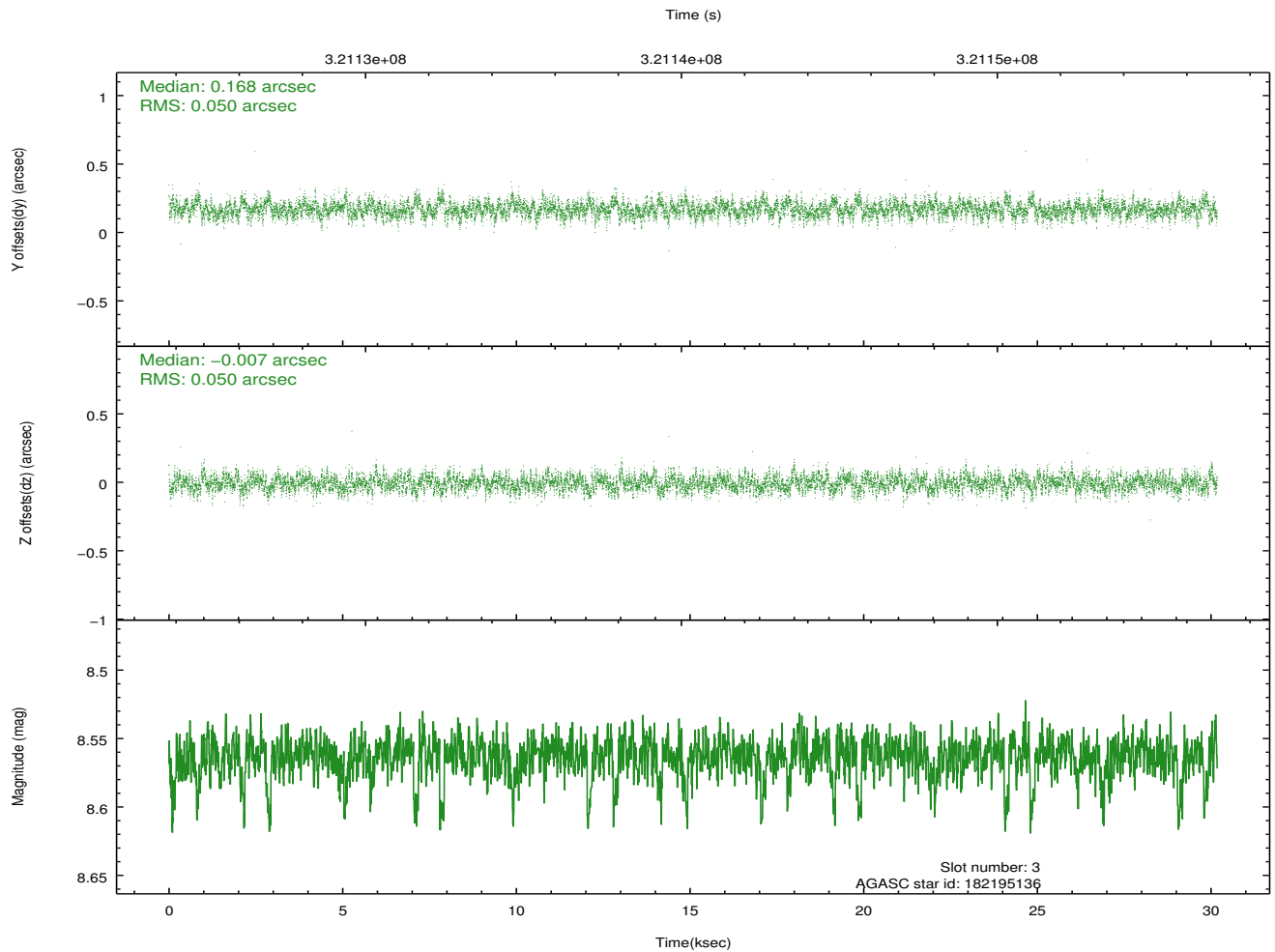
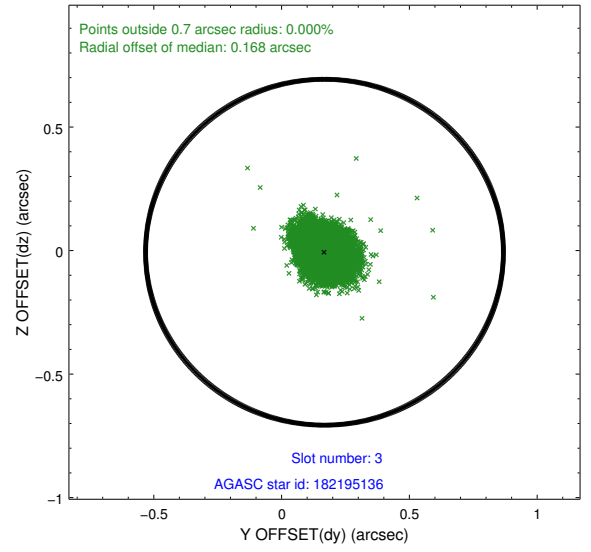
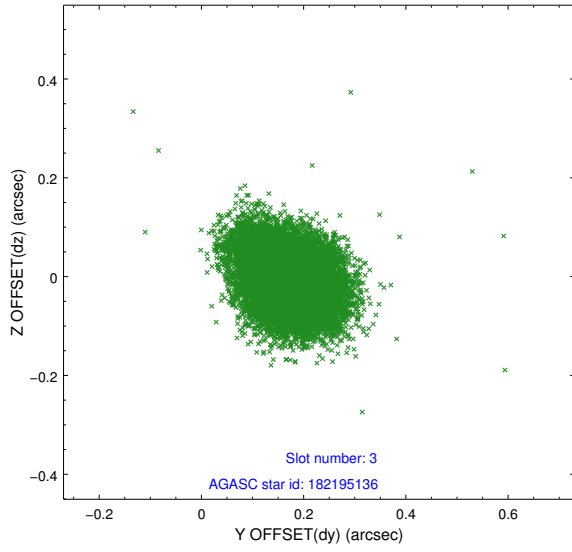


Slot Statistics

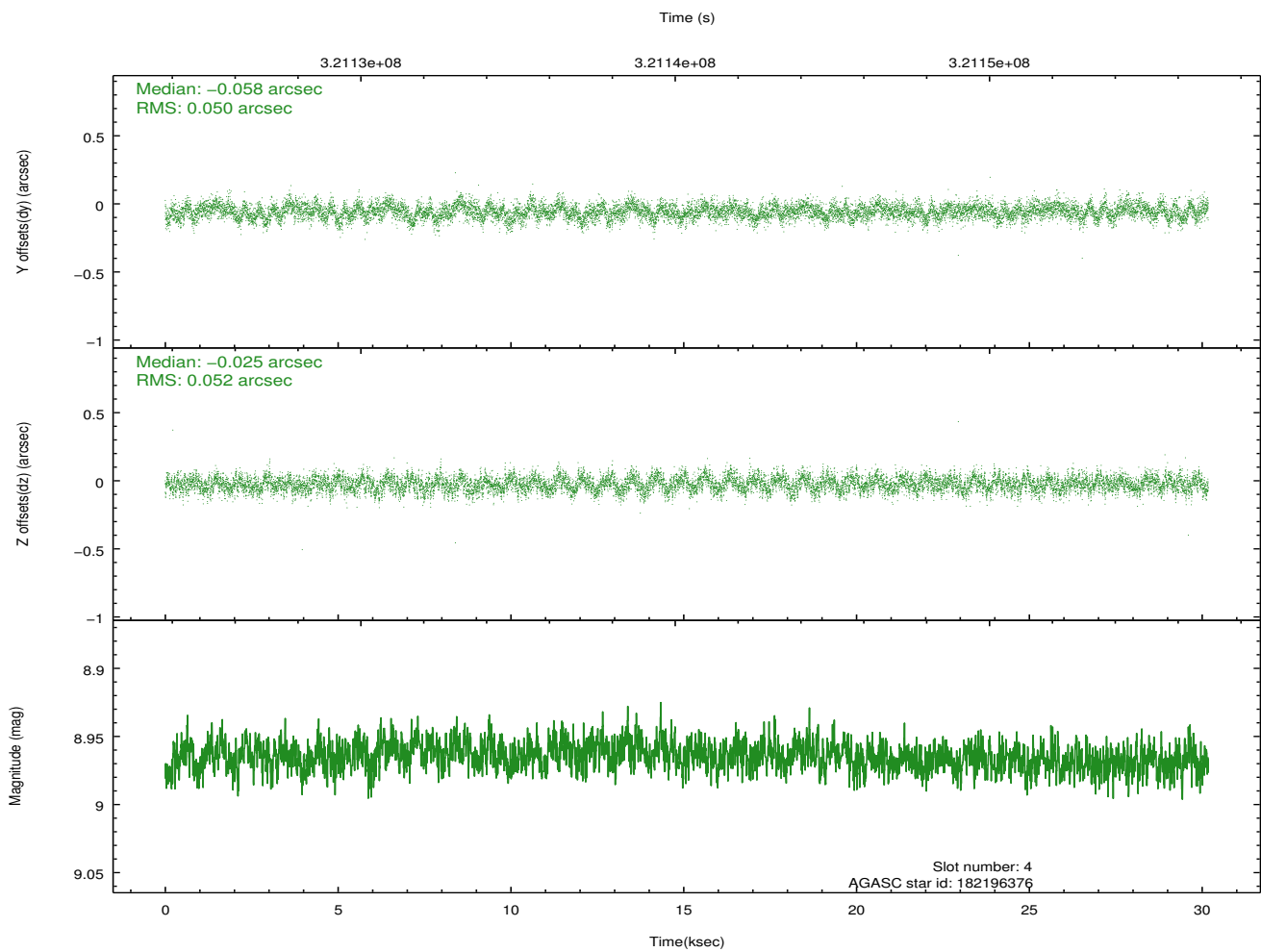
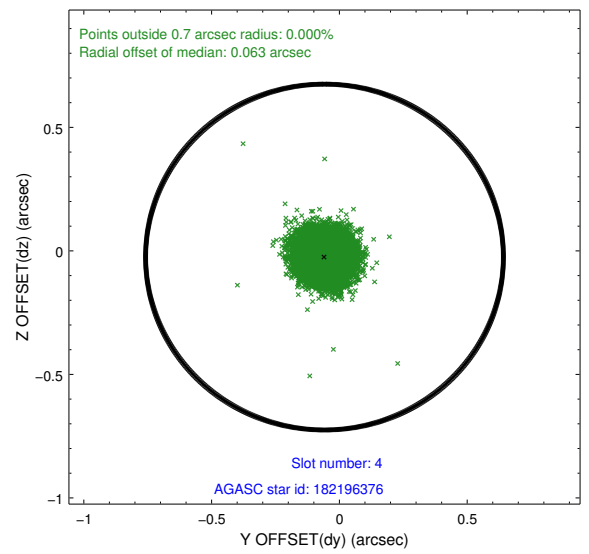
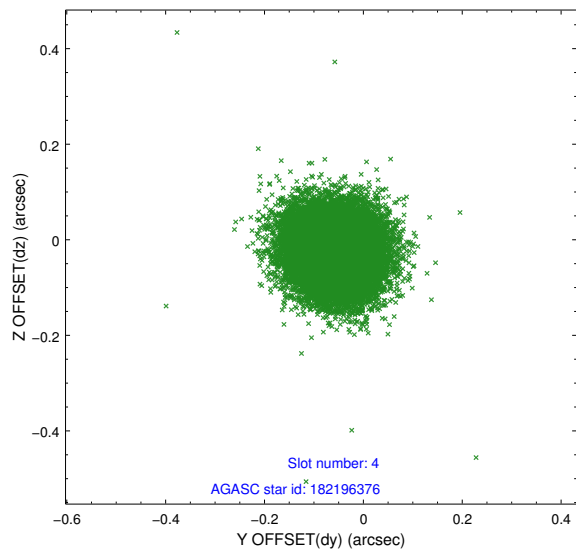
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.24	7360	0.025	0.012	0.006	0.011	0.000000	0.000000	925.19	-838.04
1	FID	ACIS-I-5	7.23	7361	-0.207	0.034	0.006	0.010	0.000000	0.000000	-1823.12	1059.42
2	FID	ACIS-I-6	7.24	7359	0.090	0.025	0.007	0.011	0.000000	0.000000	390.70	1704.01
3	GUIDE	182195136	8.56	14718	0.168	-0.007	0.073	0.122	124.931899	20.918080	1024.10	-1273.97
4	GUIDE	182196376	8.96	14705	-0.058	-0.025	0.076	0.122	125.557315	21.603160	-1899.75	117.52
5	GUIDE	182202928	9.08	14708	-0.020	-0.004	0.076	0.124	125.551699	21.434953	-1310.28	256.83
6	GUIDE	182202936	7.82	14718	0.039	0.004	0.058	0.094	124.849962	21.257255	-86.11	-1851.92
7	GUIDE	182201632	7.65	14718	-0.130	0.033	0.066	0.101	124.727284	21.494130	-805.98	-2467.38

2.4 Star Slots

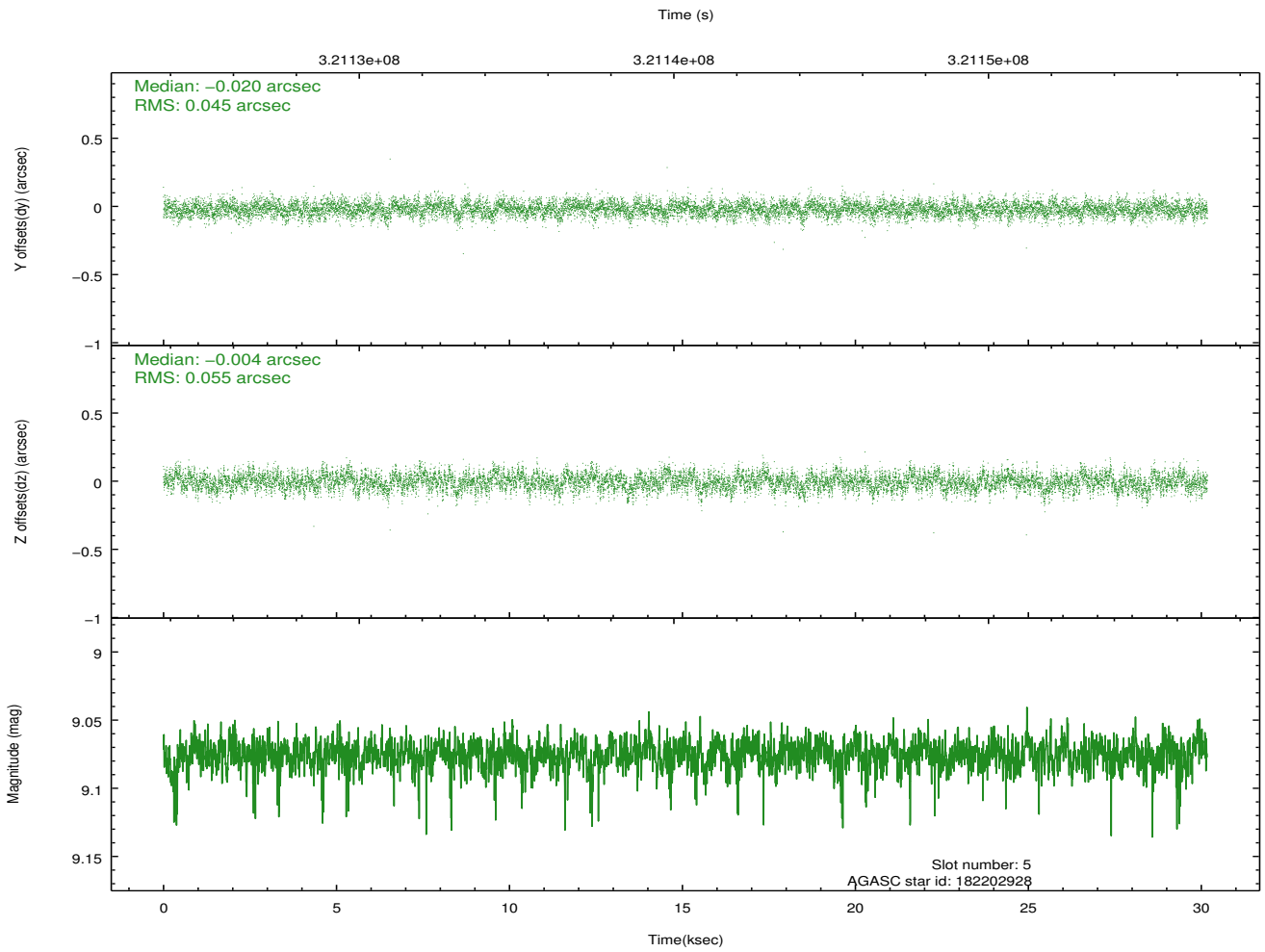
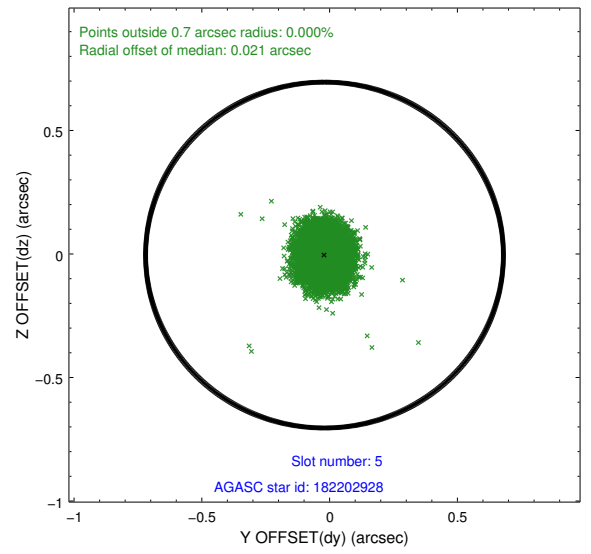
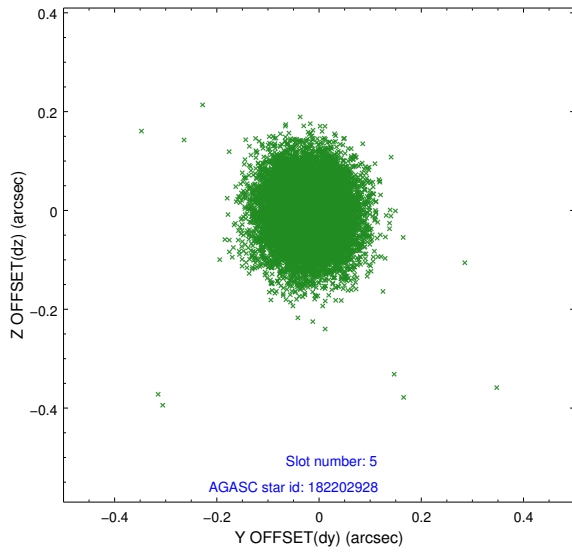
2.4.1 Slot 3



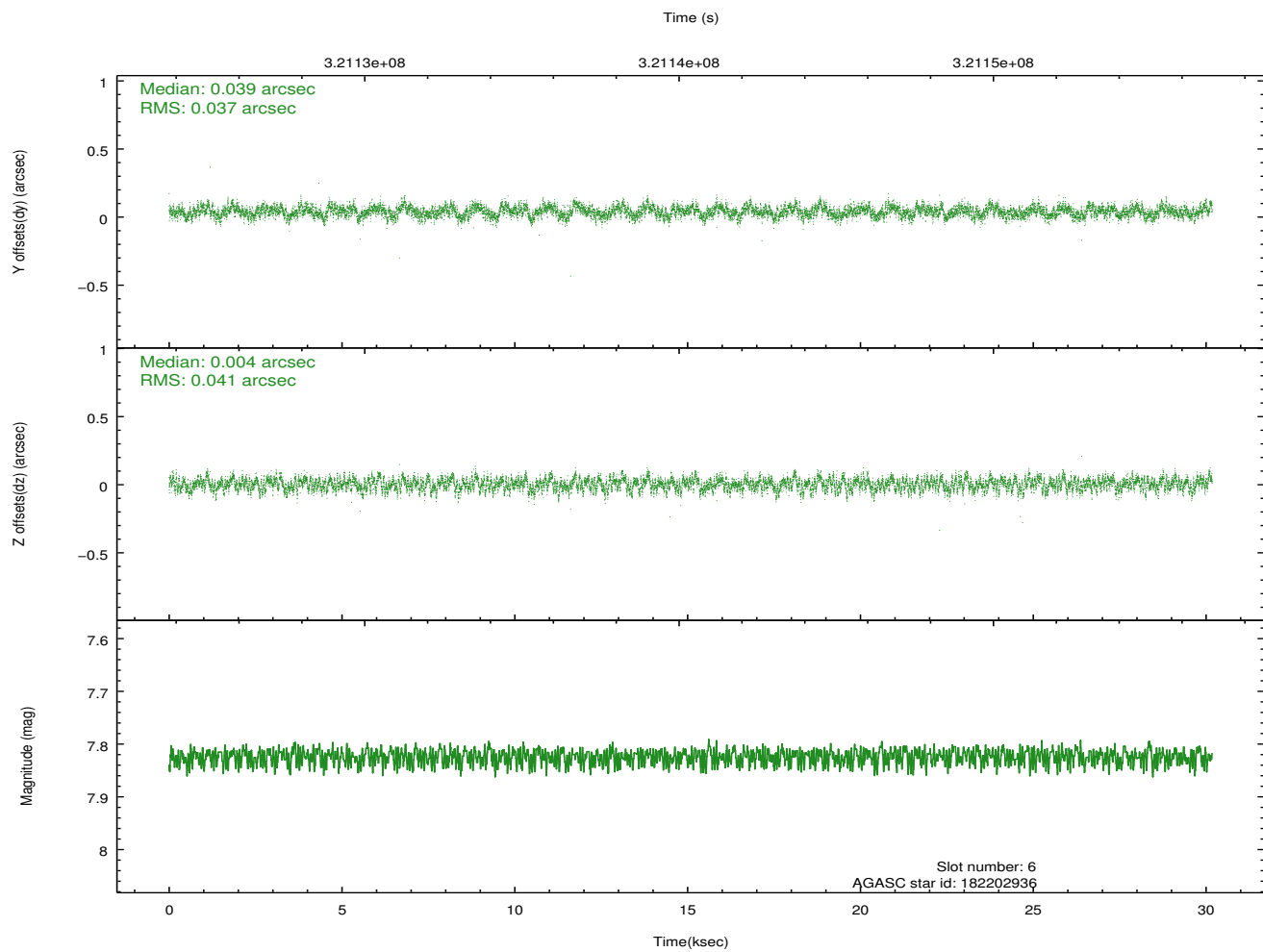
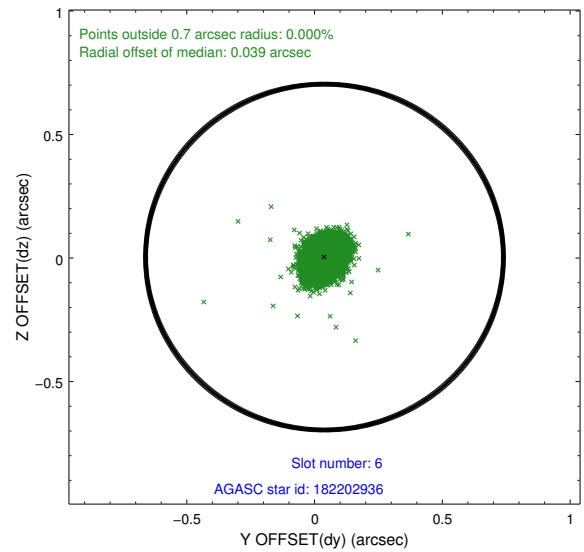
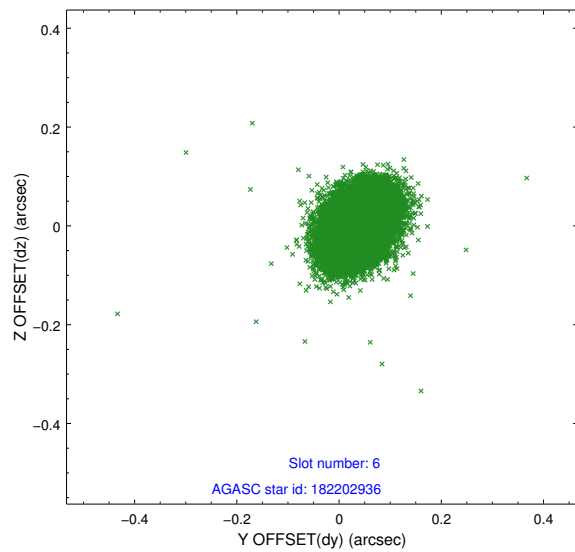
2.4.2 Slot 4



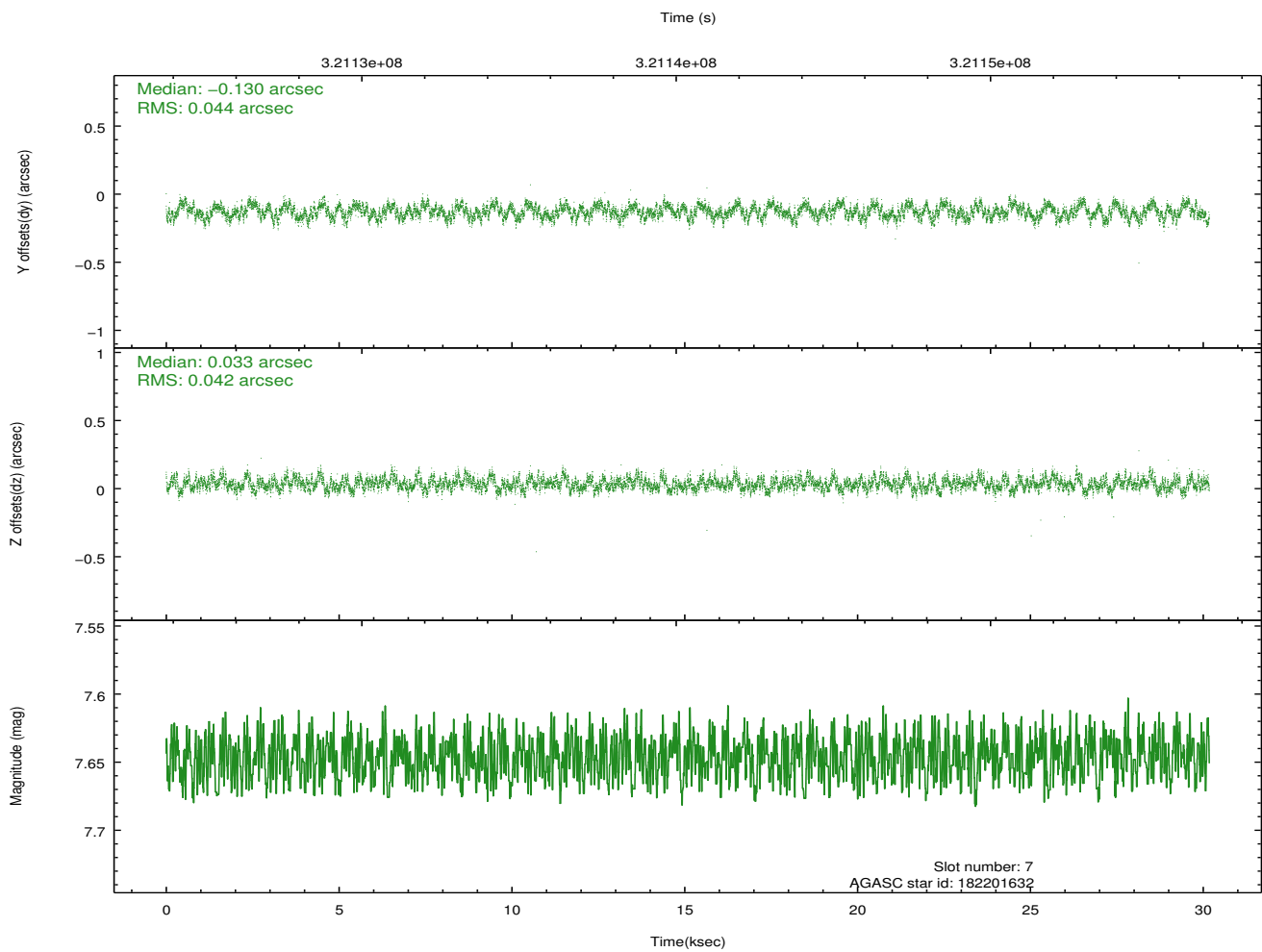
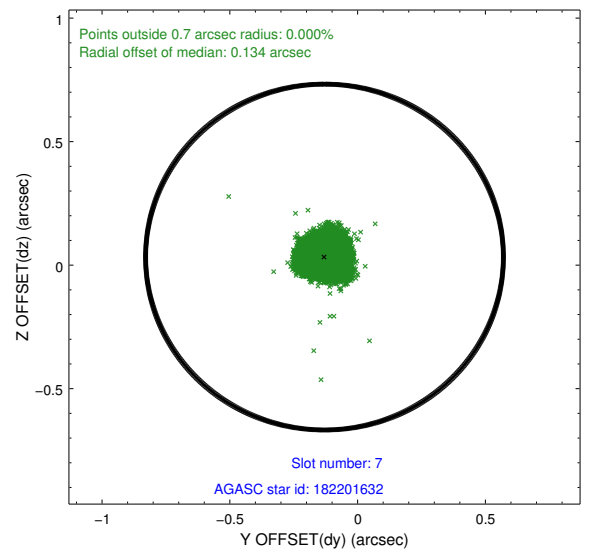
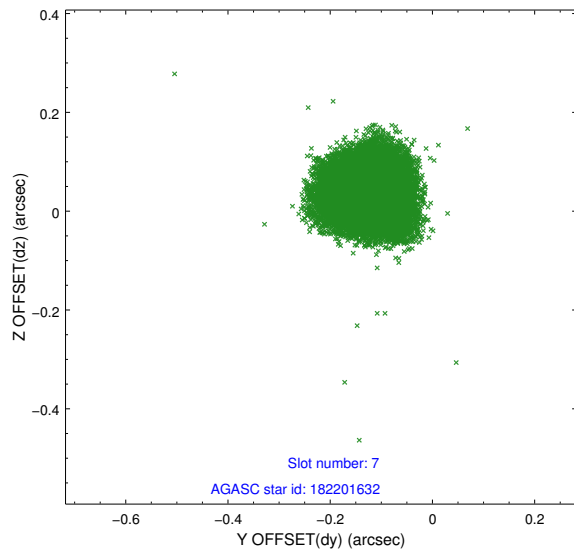
2.4.3 Slot 5



2.4.4 Slot 6

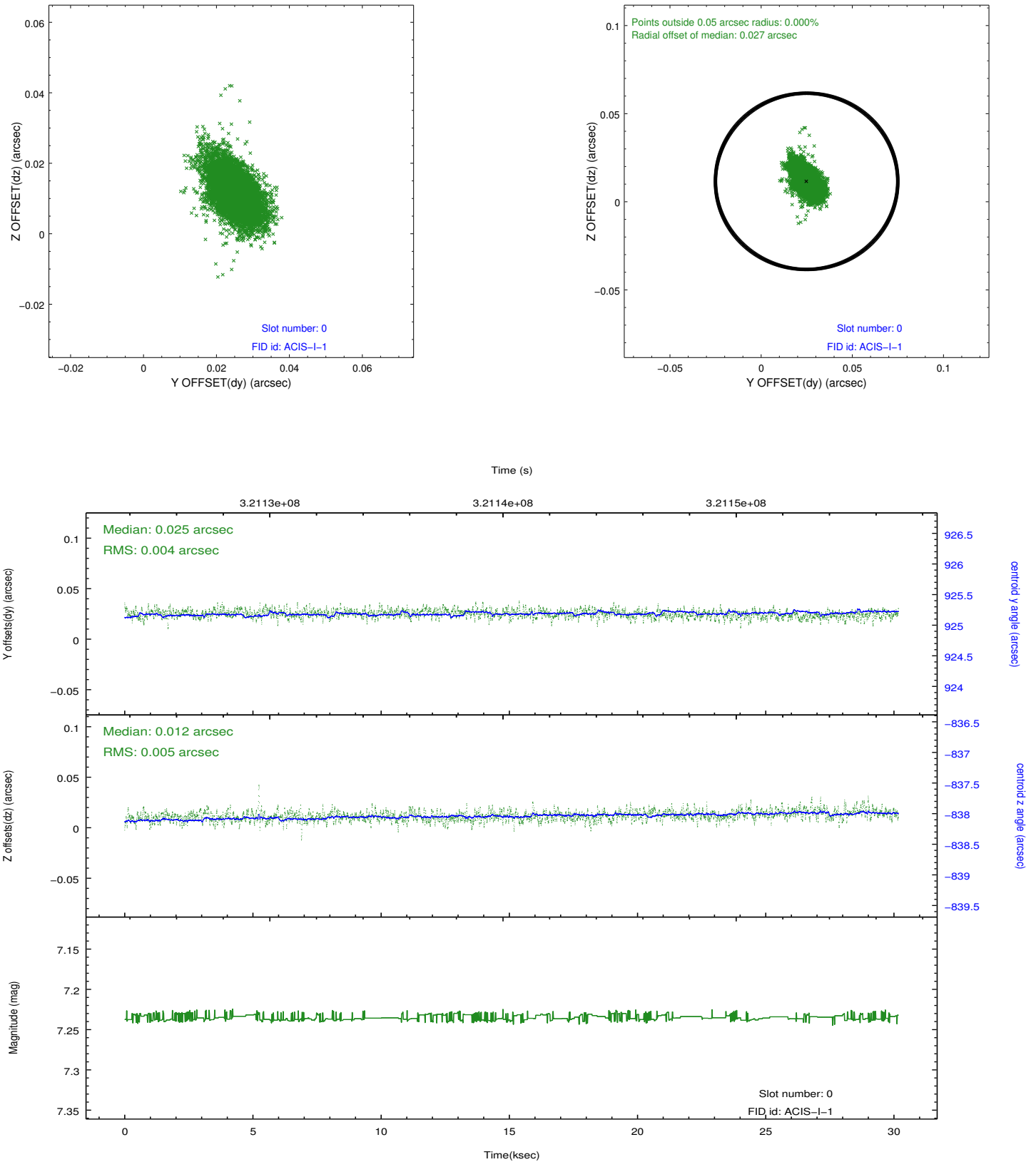


2.4.5 Slot 7

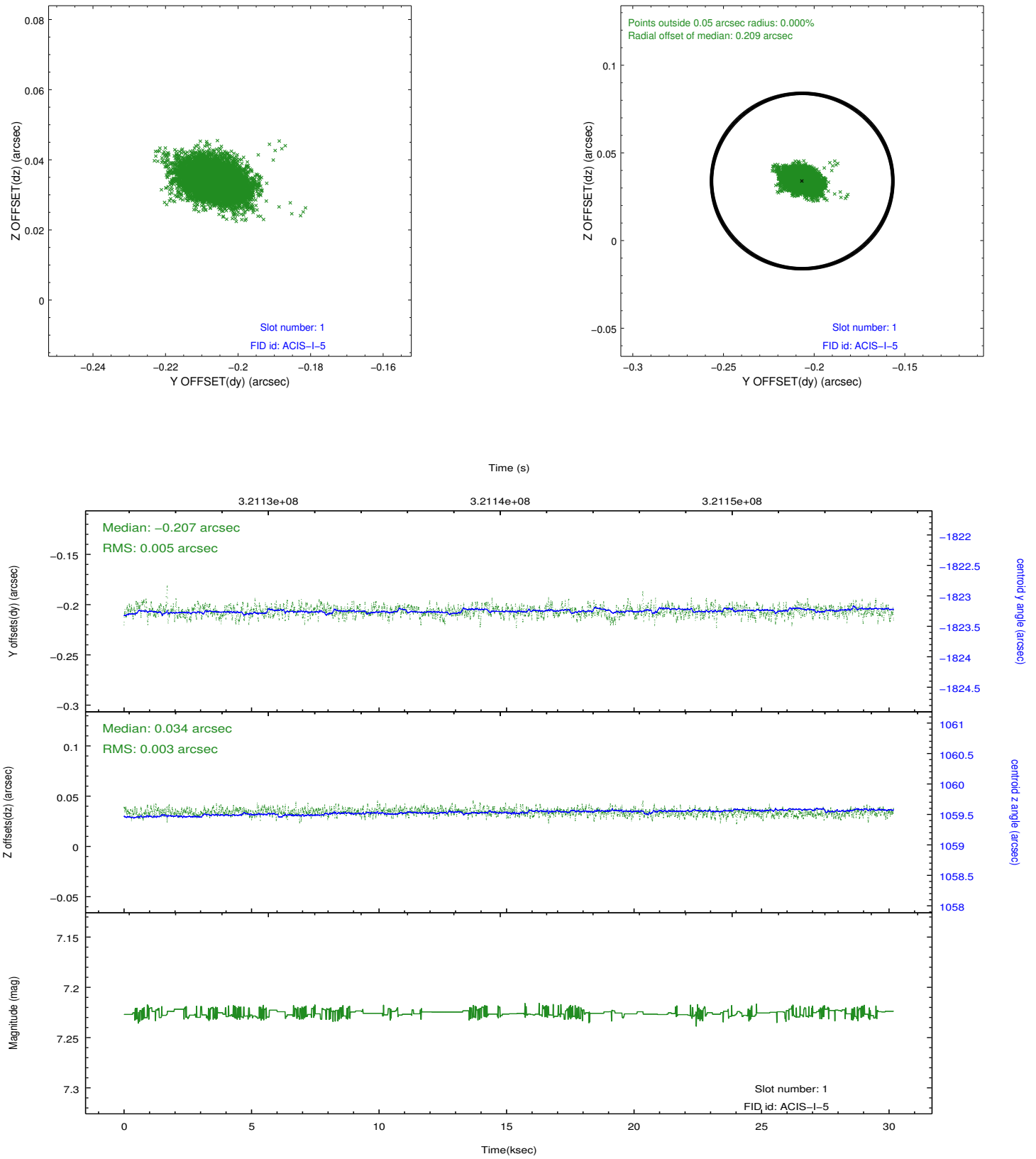


2.5 FID Slots

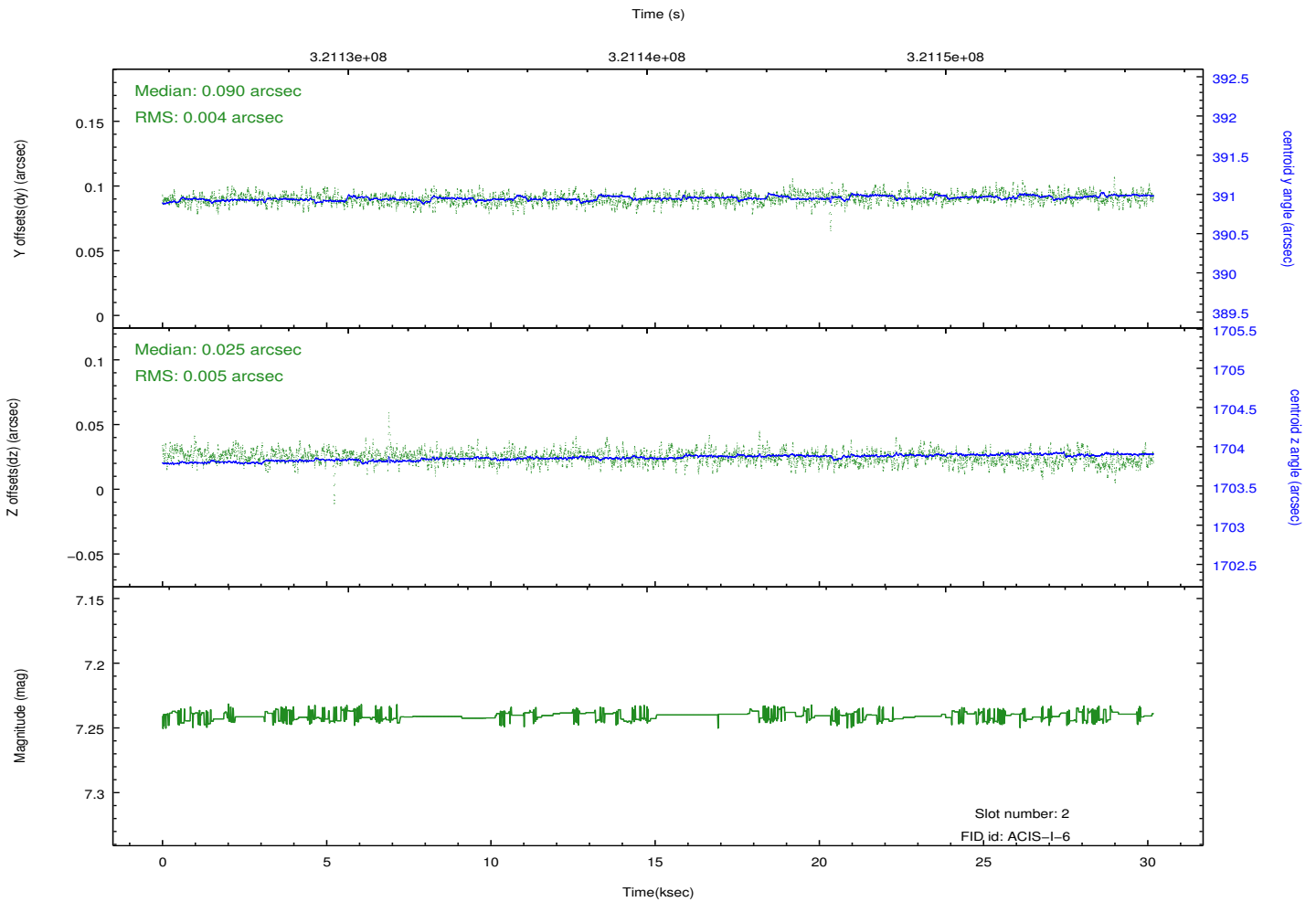
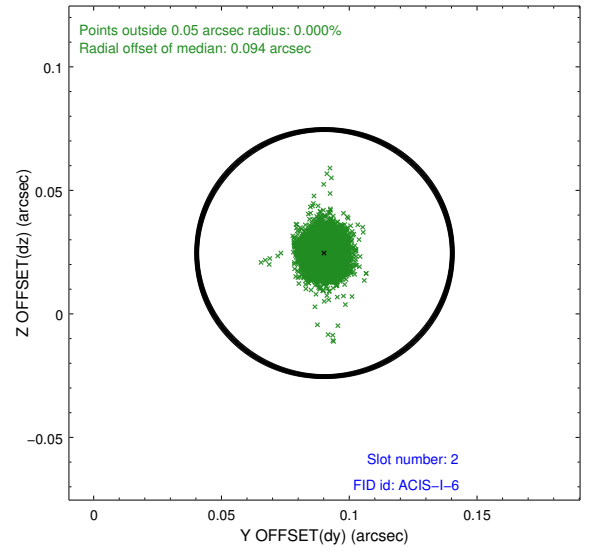
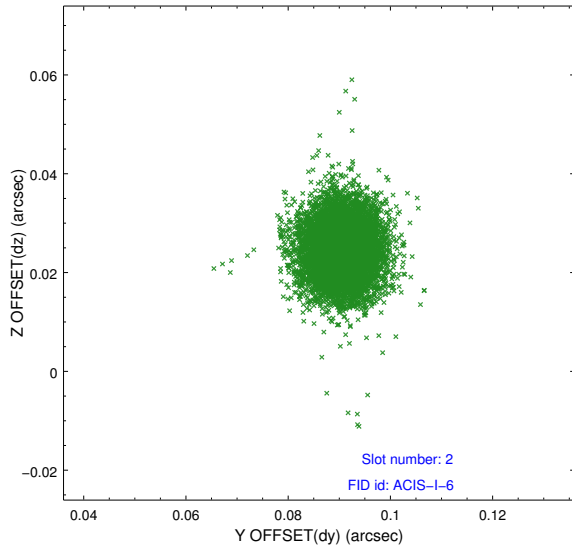
2.5.1 Slot 0



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)	2012.05.14
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.1691182

A.2 Comments

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:
(125.28200,21.00981), (125.28793,21.00834), (125.30651,21.07426), (125.30215,21.08126)