

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 15287 - L2 Version 2
Chandra X-Ray Center

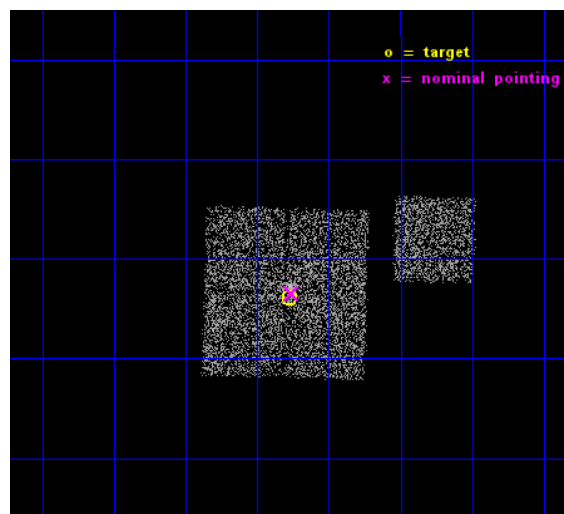
L2 Processing Date : Dec 2 2014

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

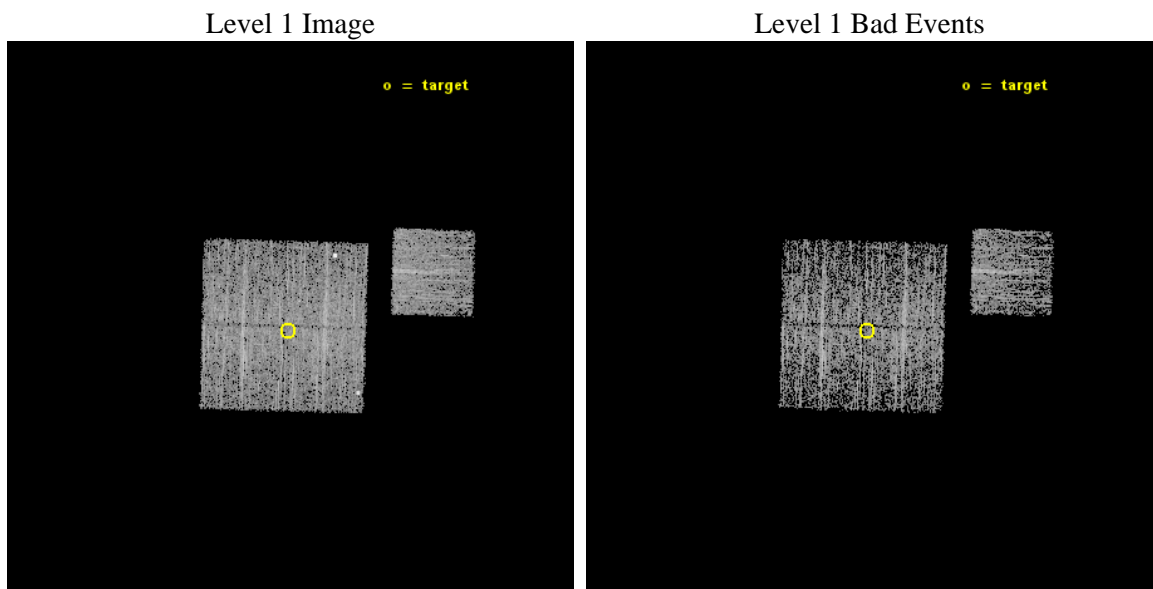
seq_num	801325	Sequence number
obs_id	15287	Observation id
title	Paving the way for eROSITA: with Chandra observations of the CODEX-BOSS clusters	Proposal title
observer	Dr. Peter Predehl	Principal investigator
object	CODEX 58083	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	215.067917	Observer's specified target RA [deg]
dec_targ	0.93475	Observer's specified target Dec [deg]
ra_nom	215.06528971733	Nominal RA [deg]
dec_nom	0.94246931593461	Nominal Dec [deg]
roll_nom	91.684269084331	Nominal Roll [deg]
revision	2	Processing version of data
ontime	4085.597114265	Sum of GTIs [s]
livetime	4032.2157801943	Livetime [s]
ontime0	4085.4739942551	Sum of GTIs [s]
ontime1	4085.5150342584	Sum of GTIs [s]
ontime2	4085.5560742617	Sum of GTIs [s]
ontime3	4085.597114265	Sum of GTIs [s]
ontime6	4085.4329542518	Sum of GTIs [s]
l2events	10528	Number of level 2 events



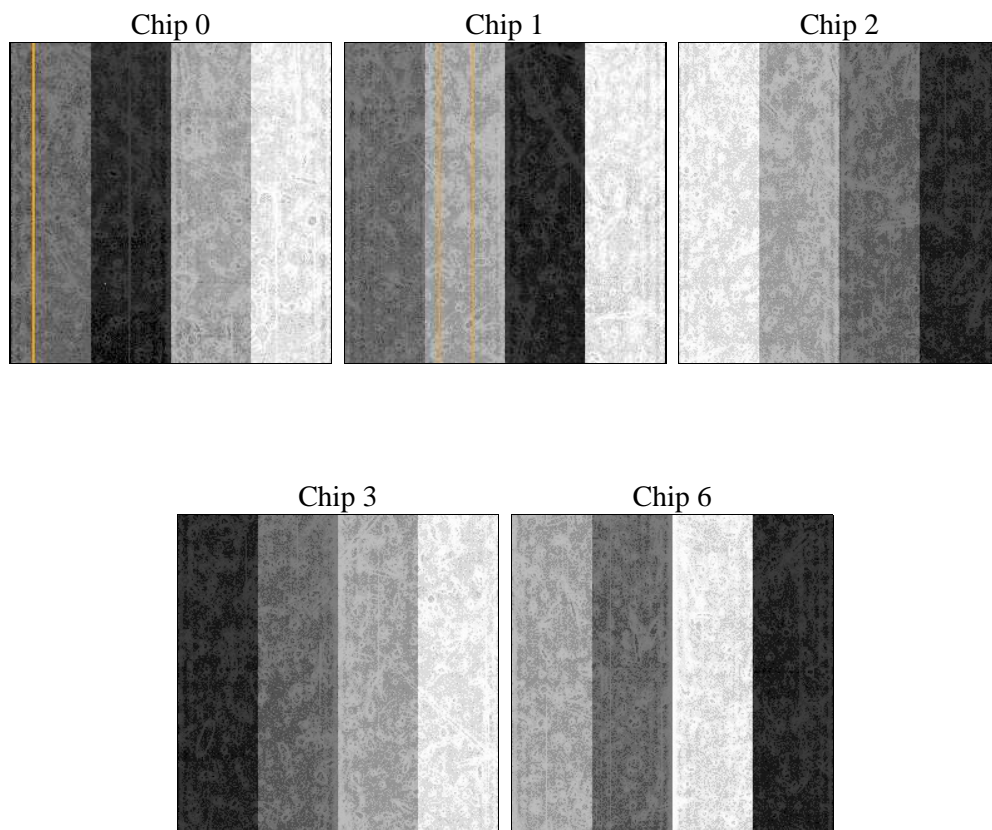
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	4000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	4085.597114265	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	4085.4739942551	Sum of GTIs [s]
date	2014-12-02T07:23:43	Date and time of file creation	ontime1	4085.5150342584	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	4085.5560742617	Sum of GTIs [s]
			ontime3	4085.597114265	Sum of GTIs [s]
			ontime6	4085.4329542518	Sum of GTIs [s]
			l1events	99427	Number of level 1 events

2.1.4 Events

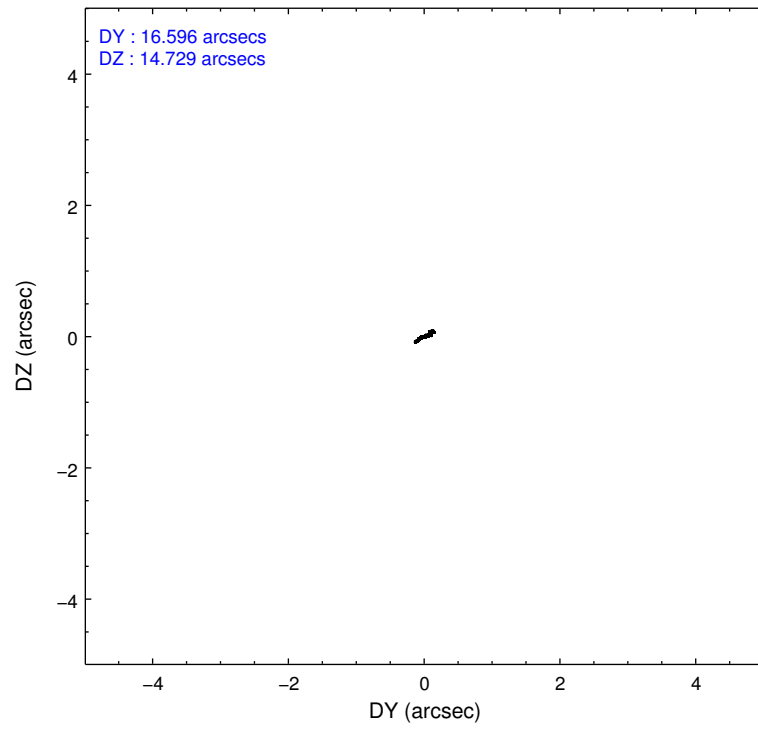
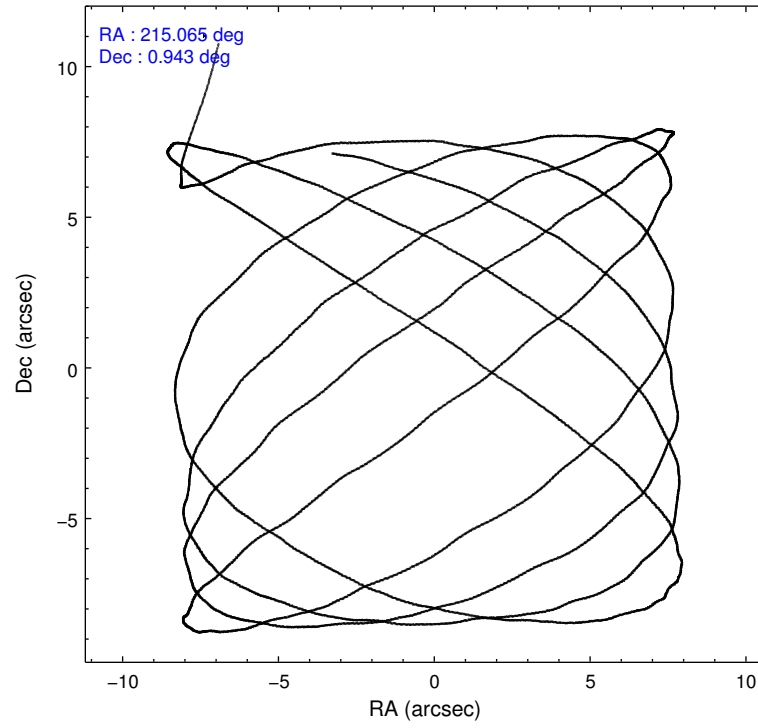
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	18052	20267	20950	20374	19784
rejected events	15488	17718	17066	17529	17430
rejected %	85%	87%	81%	86%	88%

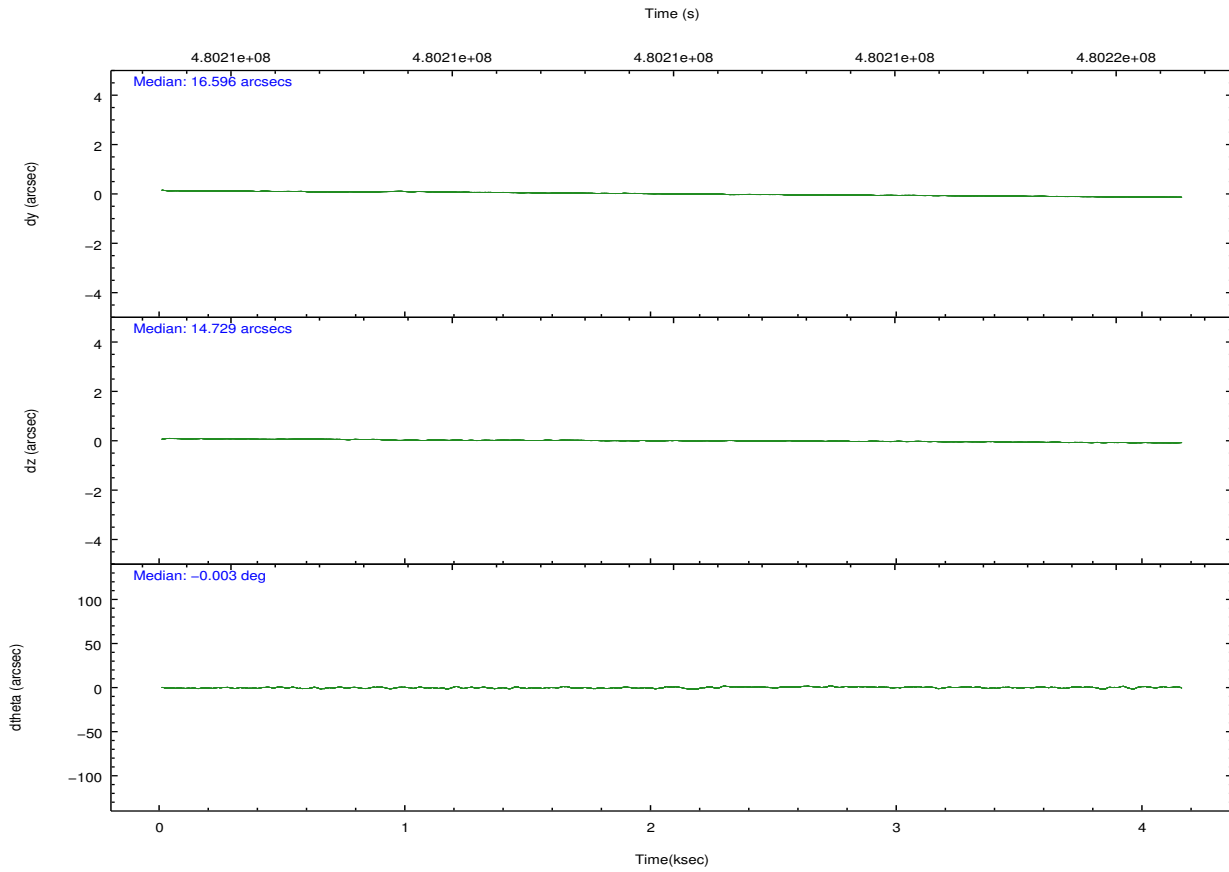
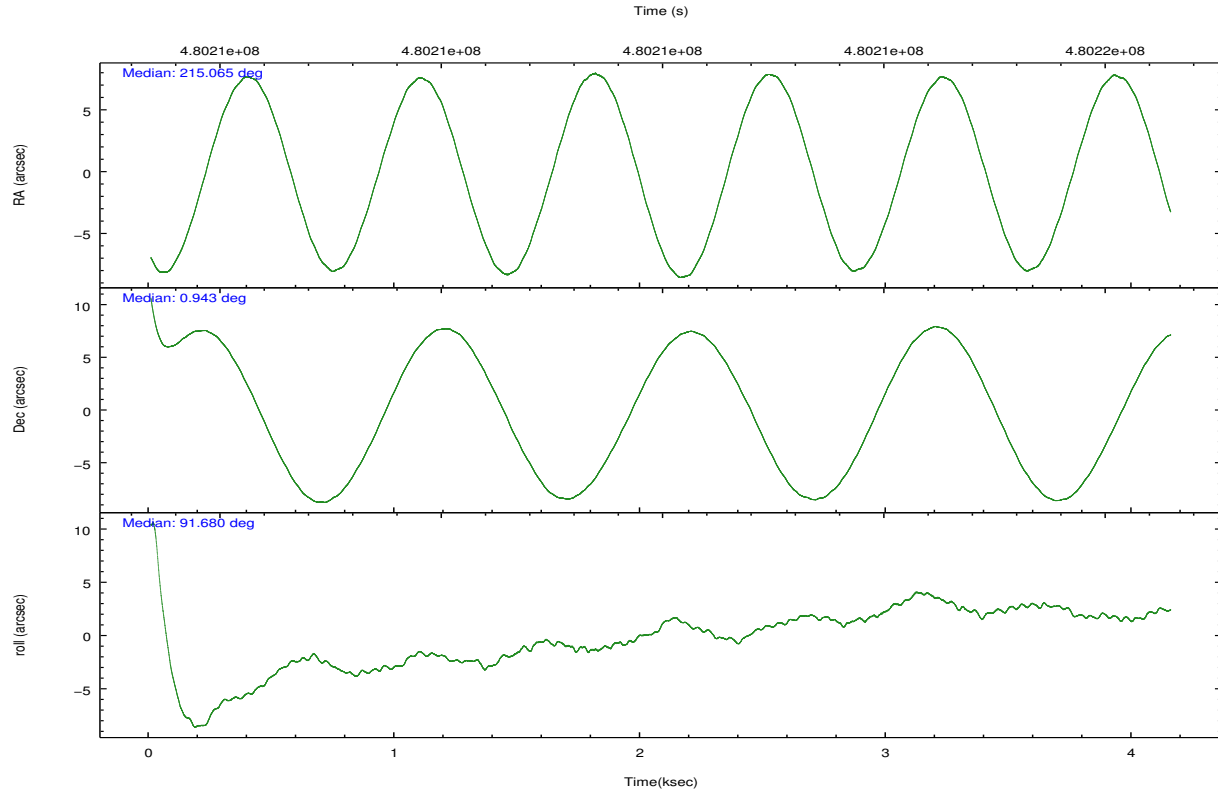
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	874	925	2354	1383	810
	4%	4%	11%	6%	4%
grade 1 events	7	13	19	20	8
	0%	0%	0%	0%	0%
grade 2 events	629	575	574	472	520
	3%	2%	2%	2%	2%
grade 3 events	284	254	232	255	238
	1%	1%	1%	1%	1%
grade 4 events	246	260	263	254	224
	1%	1%	1%	1%	1%
grade 5 events	989	1011	928	1132	1013
	5%	4%	4%	5%	5%
grade 6 events	534	539	464	483	566
	2%	2%	2%	2%	2%
grade 7 events	14489	16690	16116	16375	16405
	80%	82%	76%	80%	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	215.079828	215.0652897173346	CCD I2 on	Y	Y
[deg] Pointing Dec	0.919057	0.942469315934613	CCD I3 on	Y	Y
[deg] Pointing Roll	91.475293	91.68426908433072	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	O2	Y
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	O1	N
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	480211073.184000	480209892.49733	CCD S5 on	N	N
Observation start date	2013-03-20T23:56:46	2013-03-20T23:38:12	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	480215073.184000	480216563.71019	On-chip summing requested	N	N
Observation end date	2013-03-21T01:03:26	2013-03-21T01:29:23	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



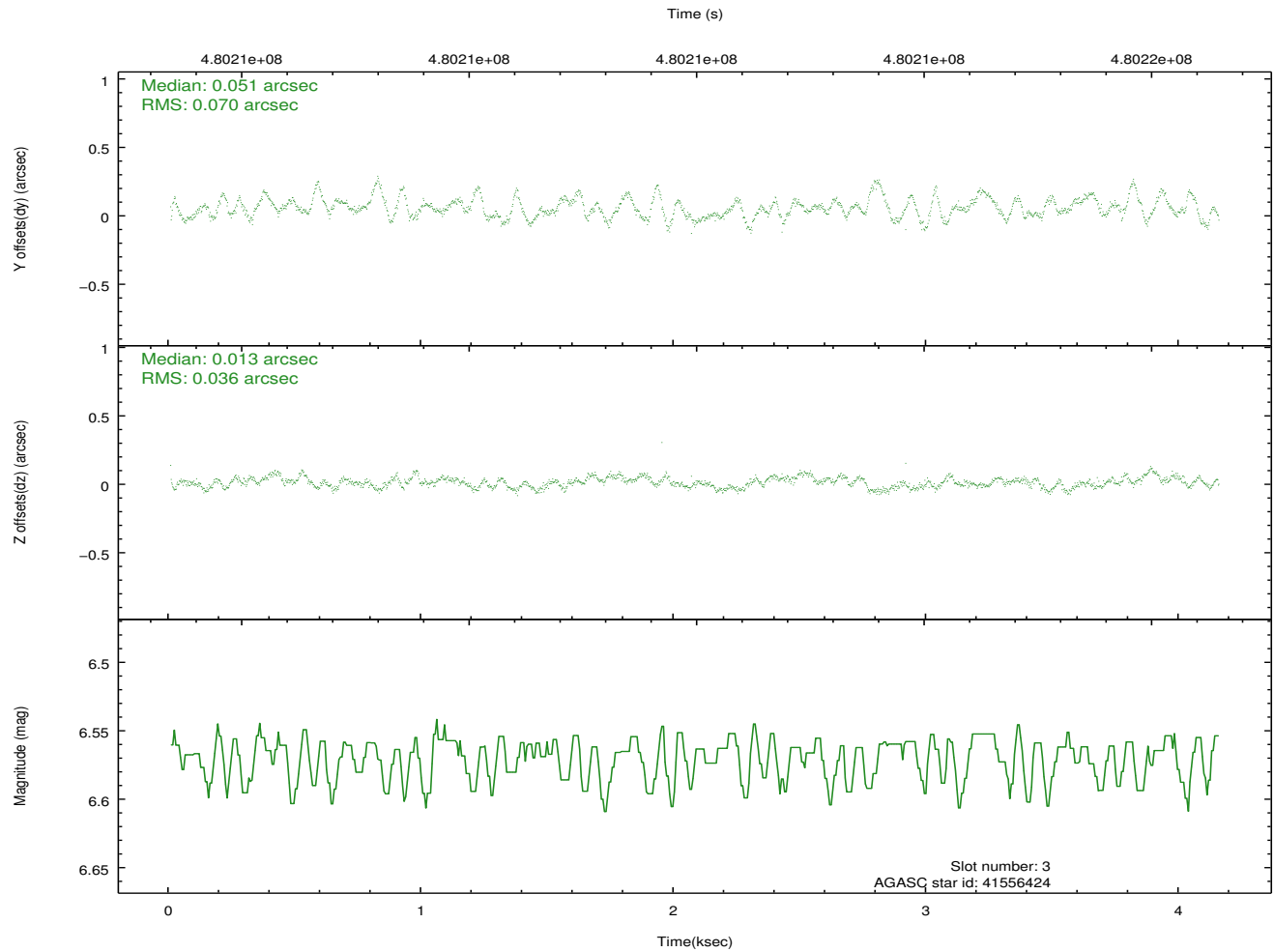
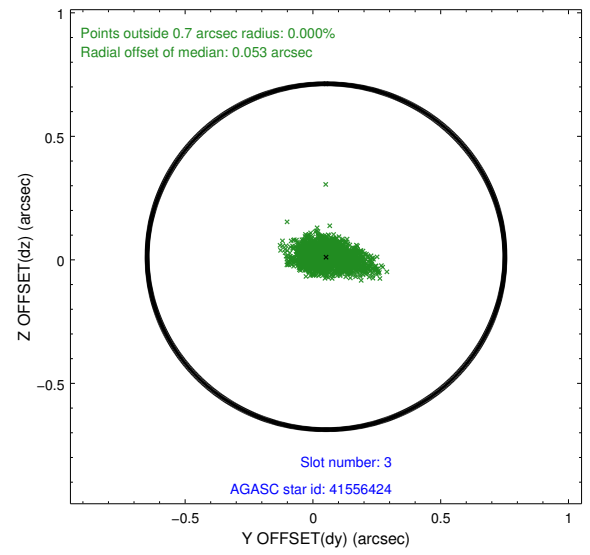
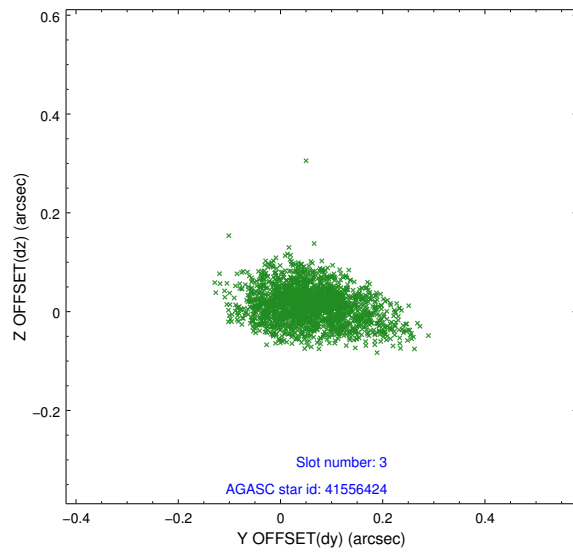


Slot Statistics

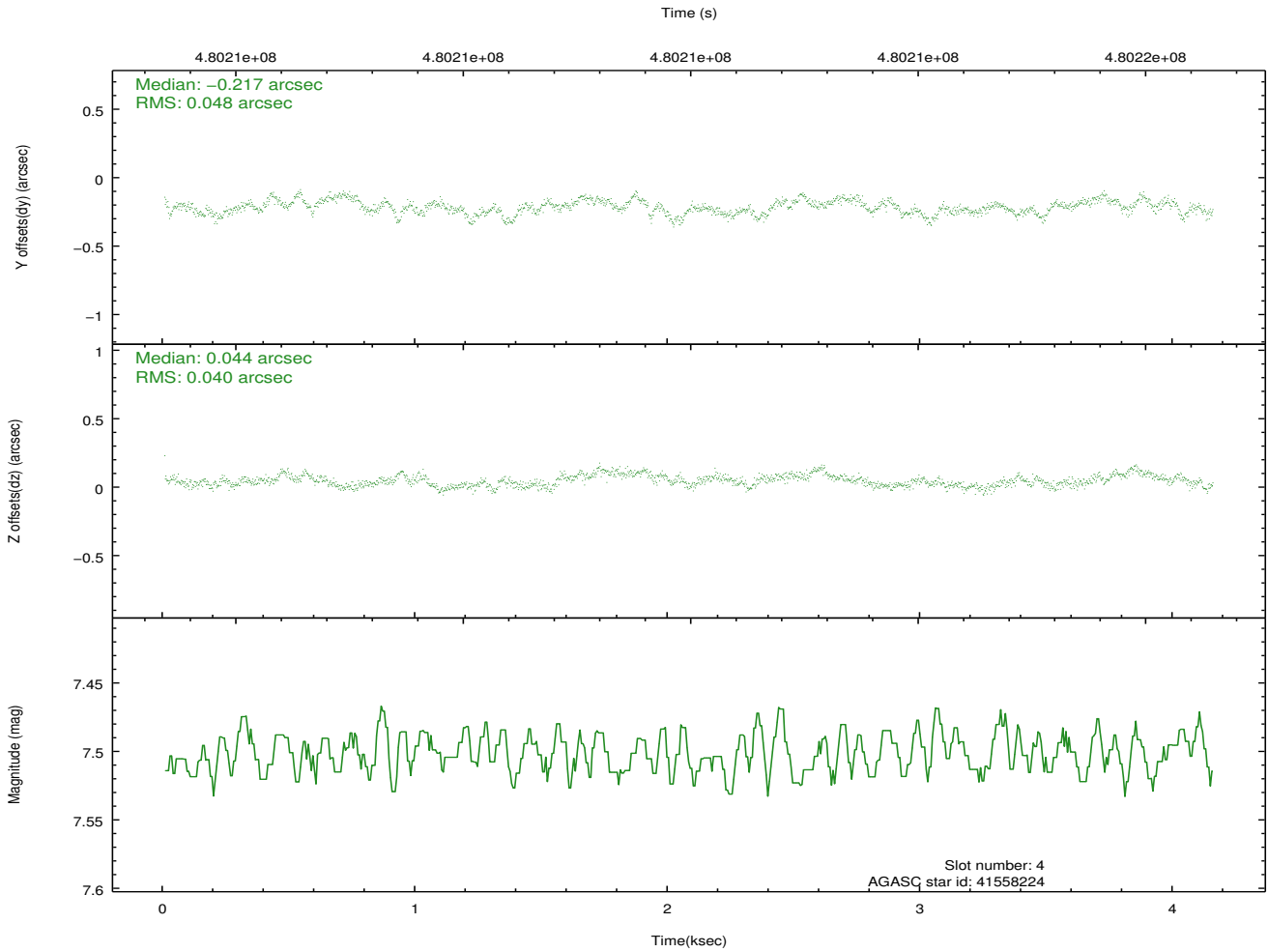
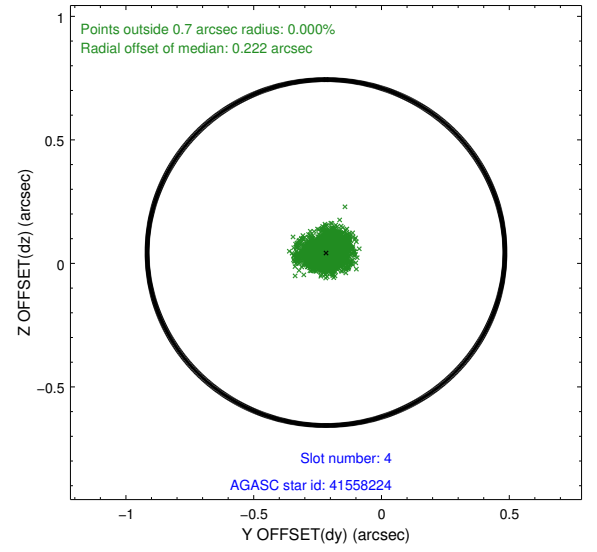
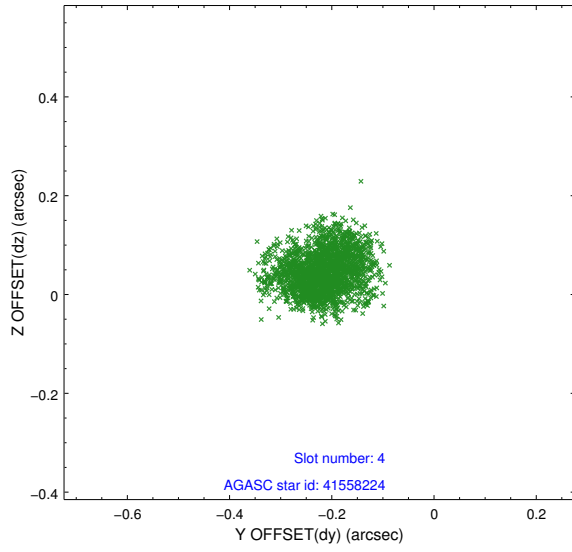
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-2	7.05	1013	-0.087	-0.074	0.008	0.014	0.000000	0.000000	-771.42	-844.77
1	FID		ACIS-I-4	7.07	1013	0.227	0.073	0.008	0.015	0.000000	0.000000	2142.22	1060.84
2	FID		ACIS-I-5	7.13	1013	-0.241	0.070	0.009	0.015	0.000000	0.000000	-1823.52	1060.33
3	GUIDE	used	41556424	6.57	2026	0.051	0.013	0.080	0.146	214.920626	0.384336	-1909.81	623.15
4	GUIDE	used	41558224	7.50	2026	-0.217	0.044	0.068	0.107	214.701271	1.255915	1246.11	1331.53
5	GUIDE	used	41558792	8.54	2022	-0.031	-0.344	0.092	0.141	214.527195	1.146036	869.39	1967.55
6	GUIDE	used	41682112	9.23	2024	0.106	0.262	0.108	0.168	215.438593	0.783101	-522.14	-1276.63
7	GUIDE	used	41683432	9.41	2019	0.089	0.009	0.170	0.270	215.015984	0.526268	-1407.93	265.71

2.4 Star Slots

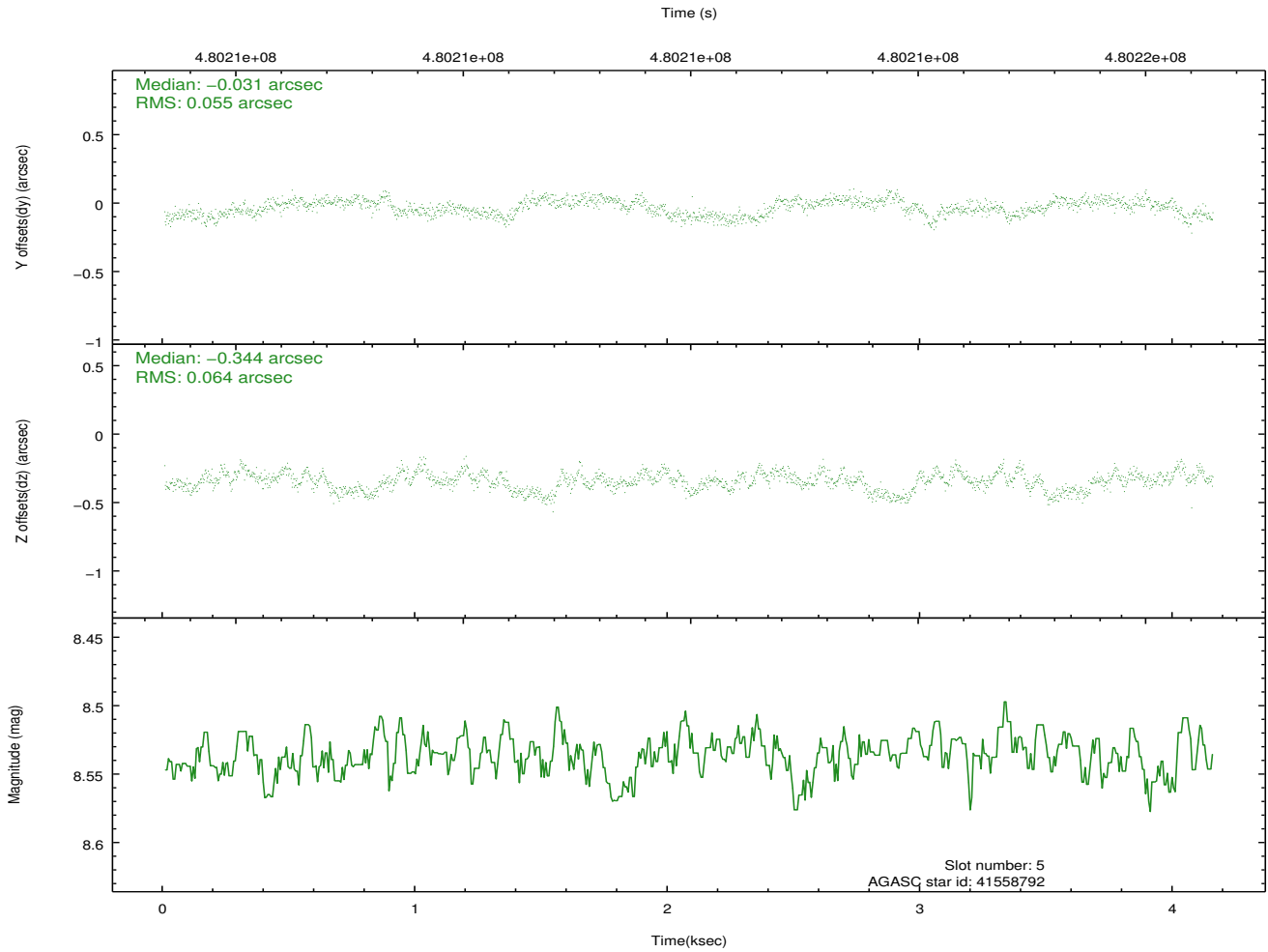
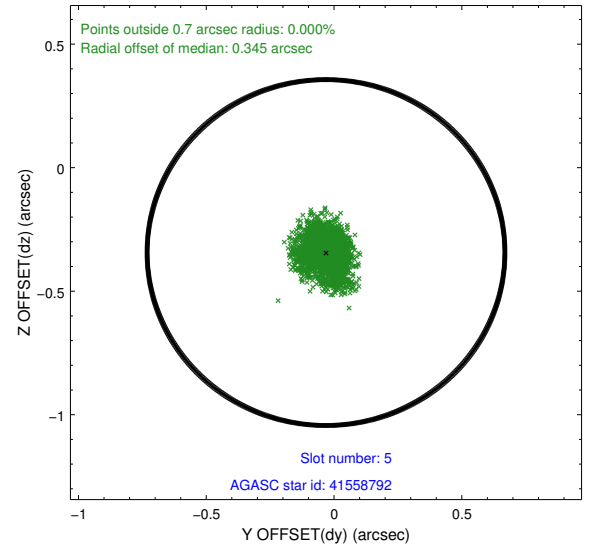
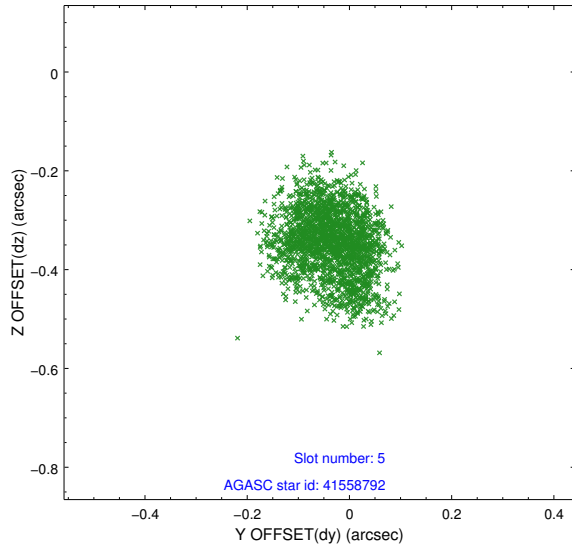
2.4.1 Slot 3



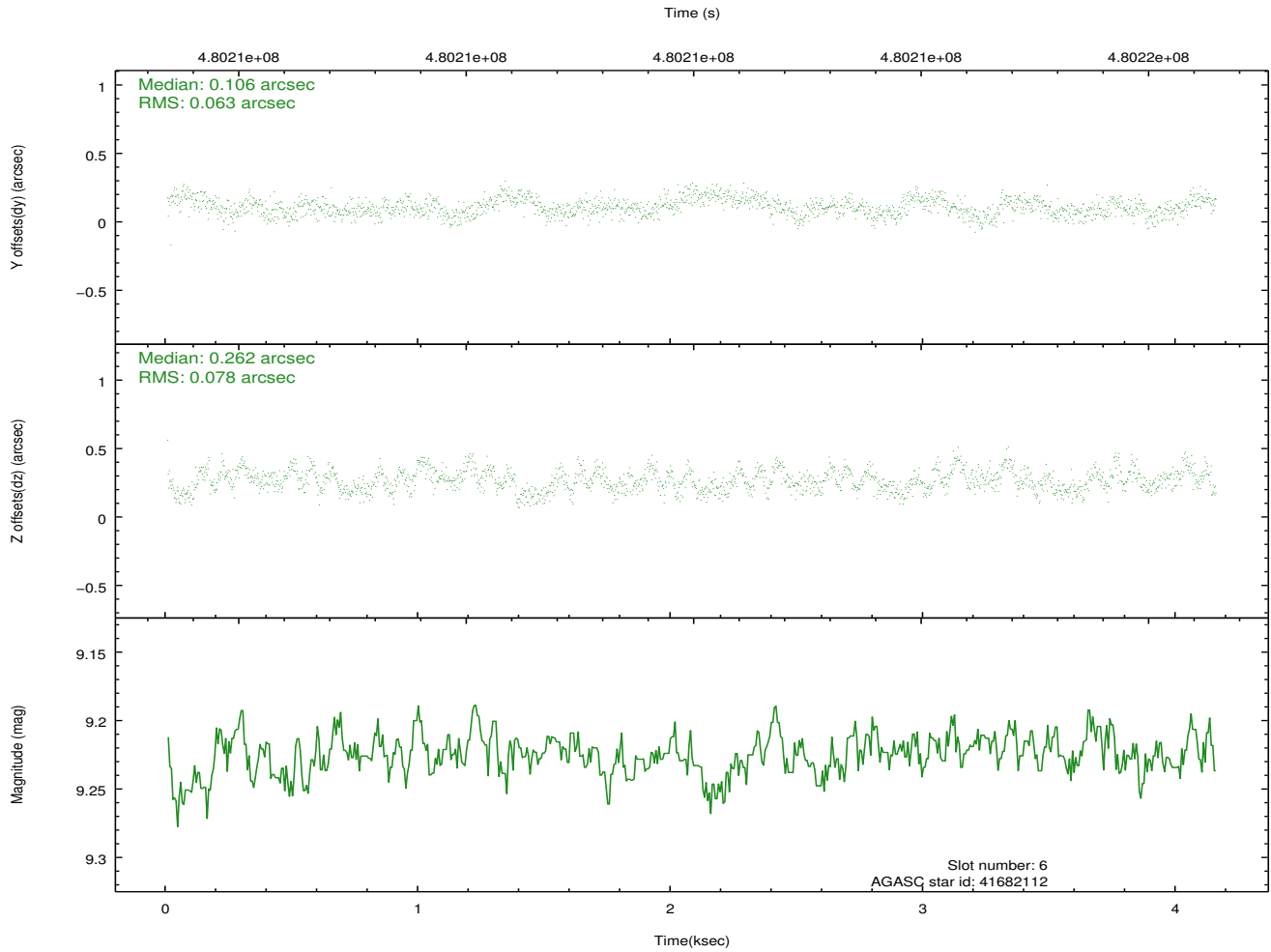
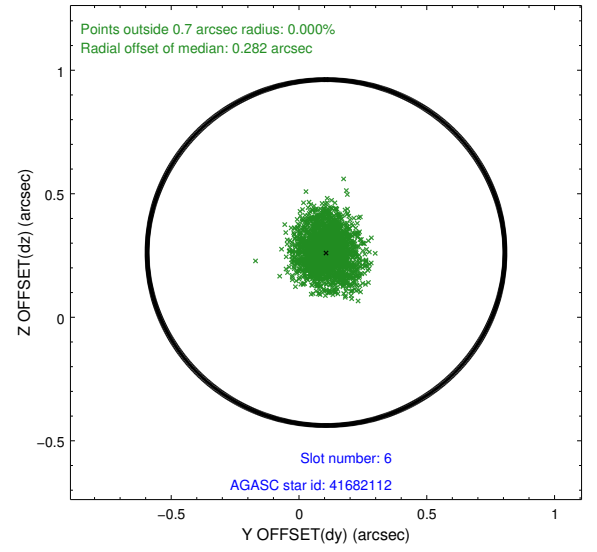
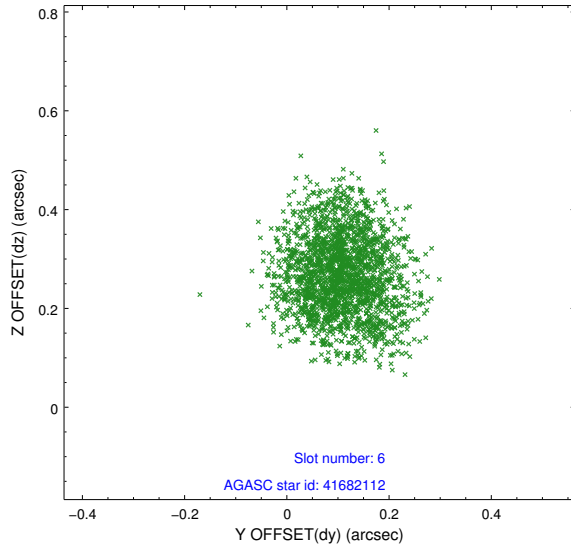
2.4.2 Slot 4



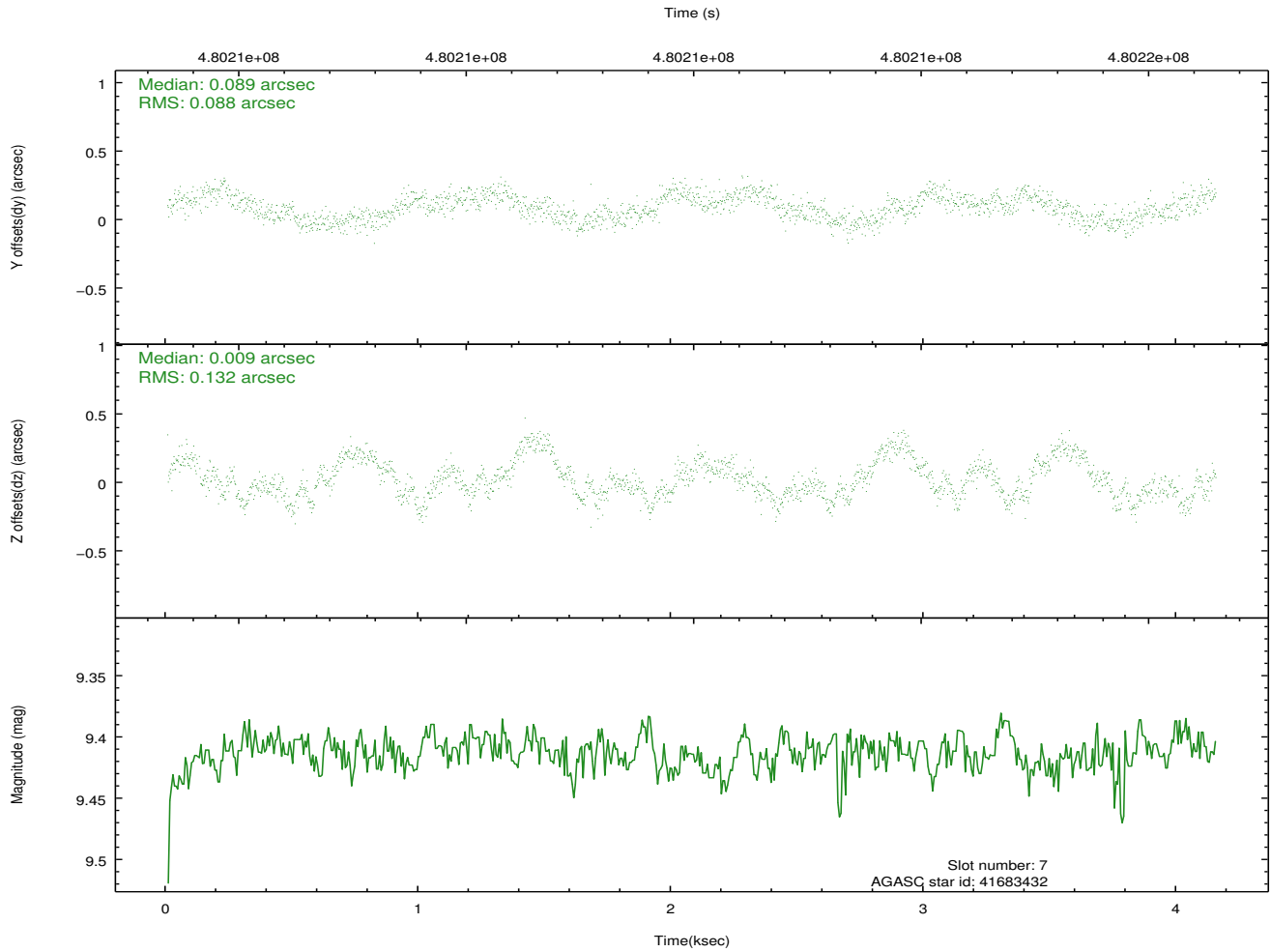
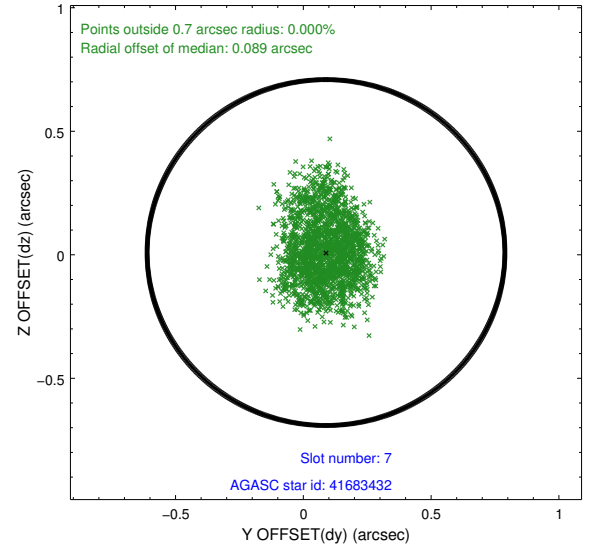
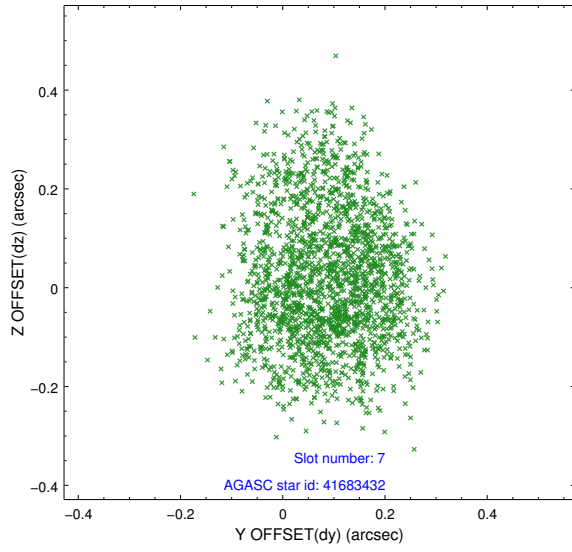
2.4.3 Slot 5



2.4.4 Slot 6

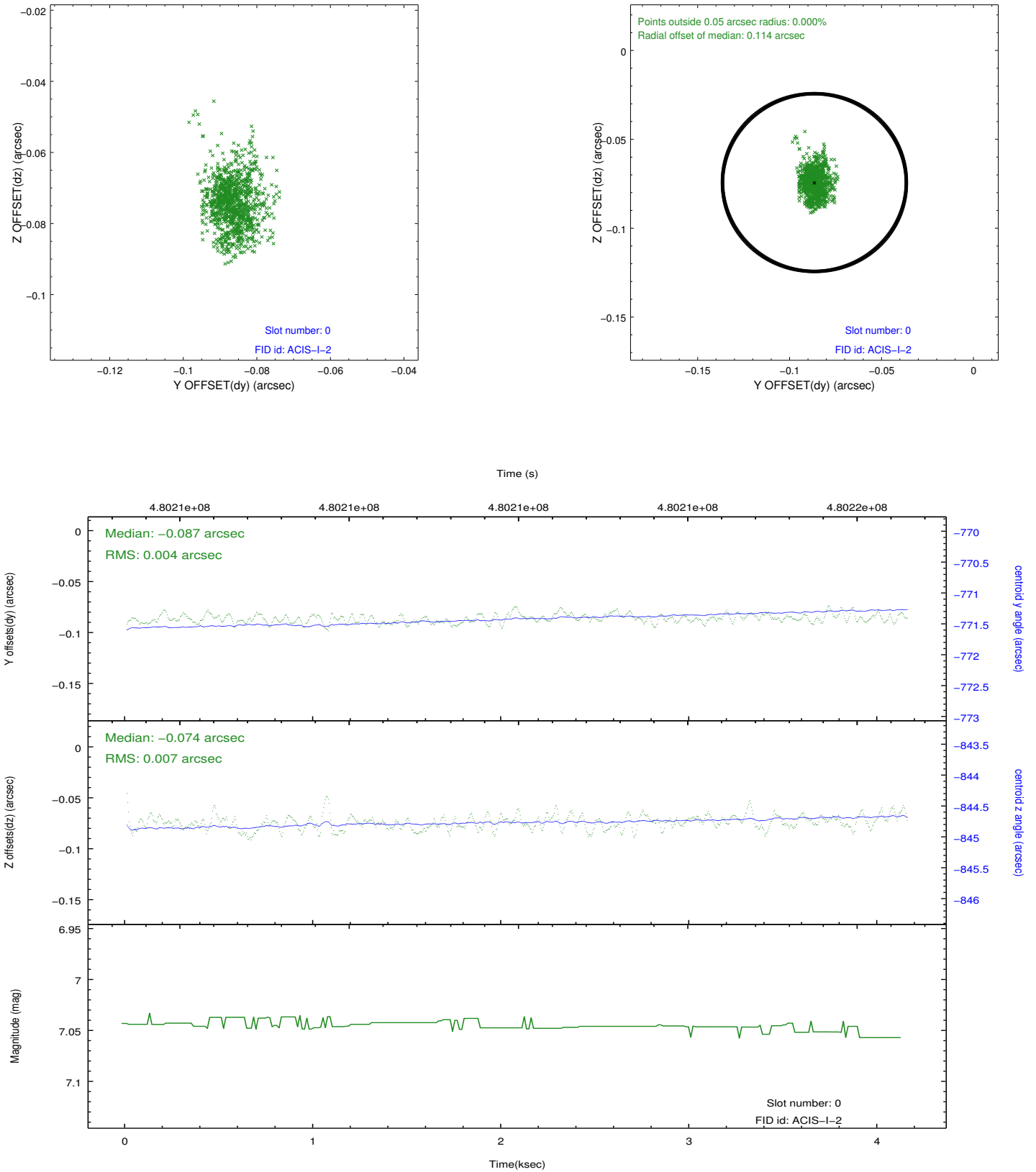


2.4.5 Slot 7

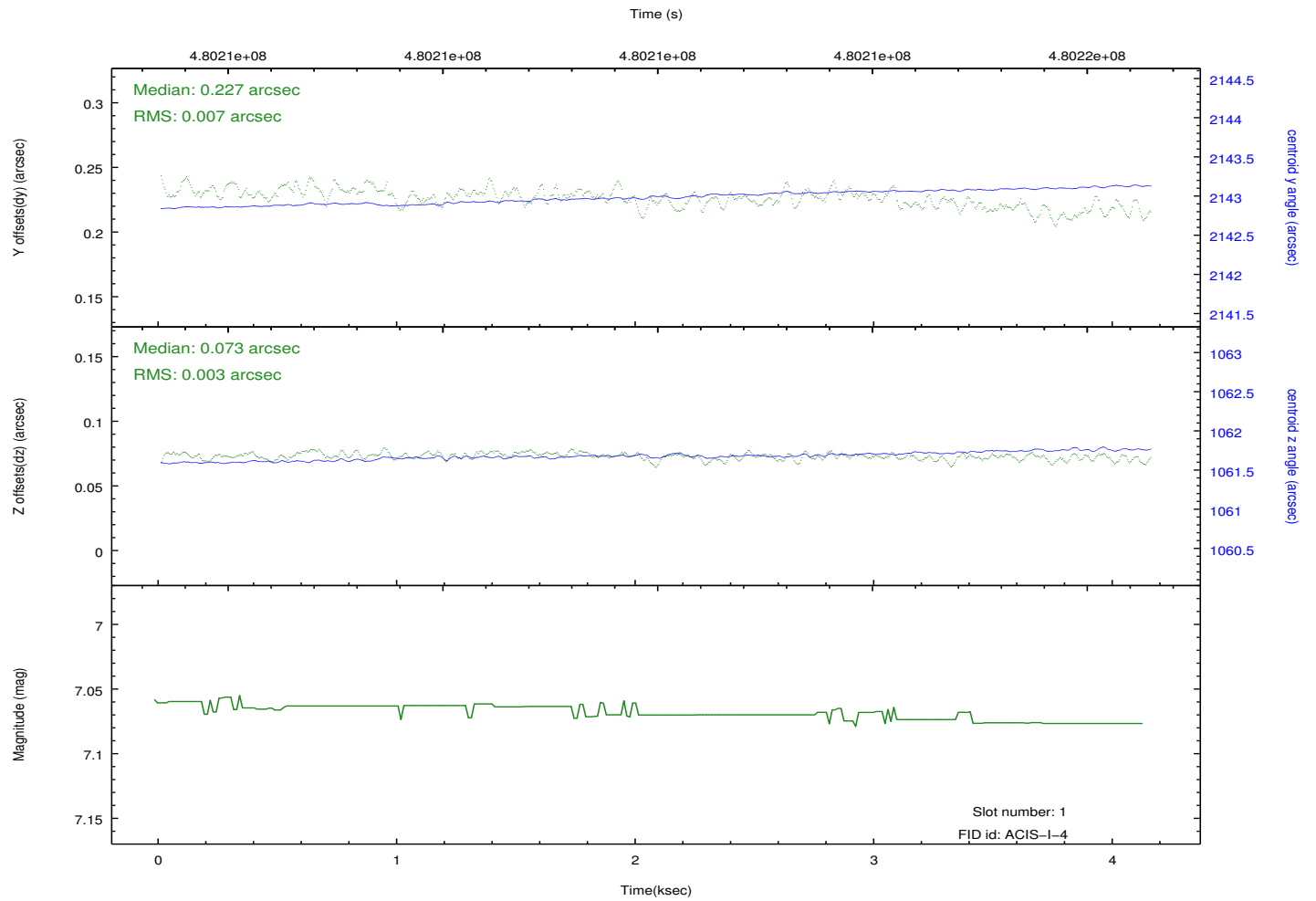
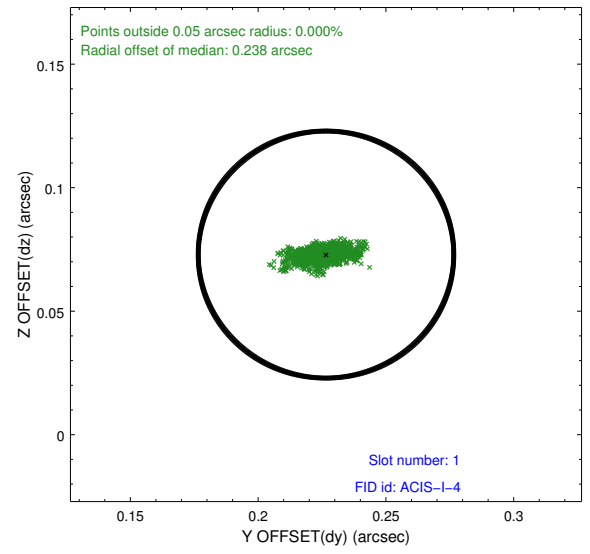
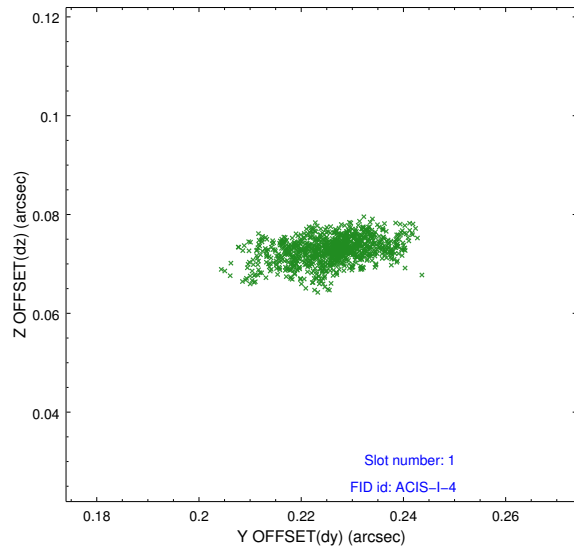


2.5 FID Slots

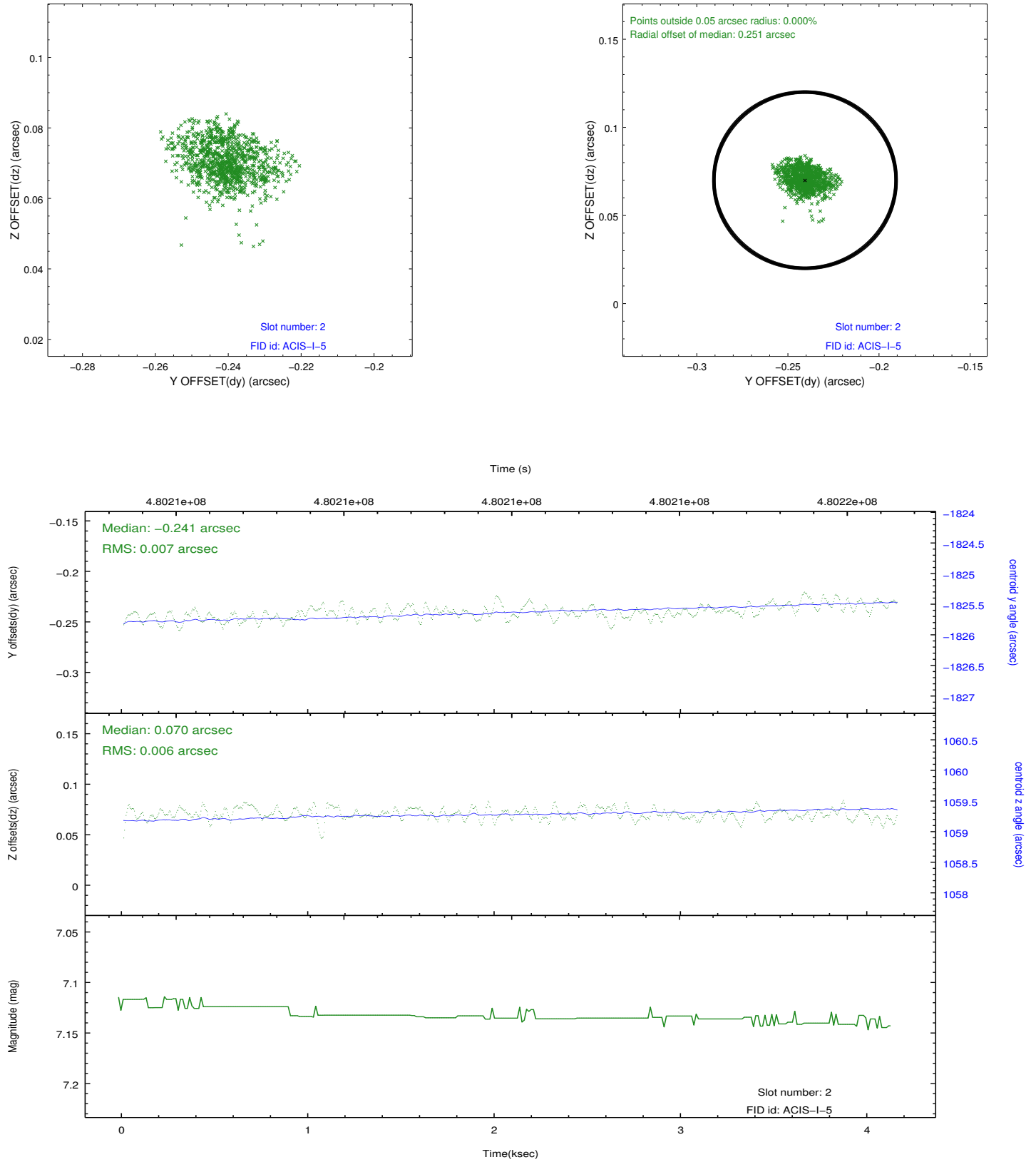
2.5.1 Slot 0



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)	2014.12.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.085597114265

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.