

V&V Reference Report

L2 ASCDS Version : 10.1.1

Observation 15380 - L2 Version 2
Chandra X-Ray Center

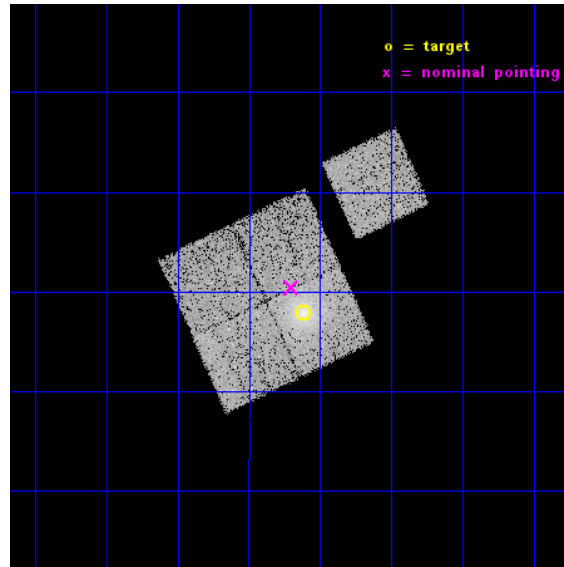
L2 Processing Date : Dec 7 2014

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

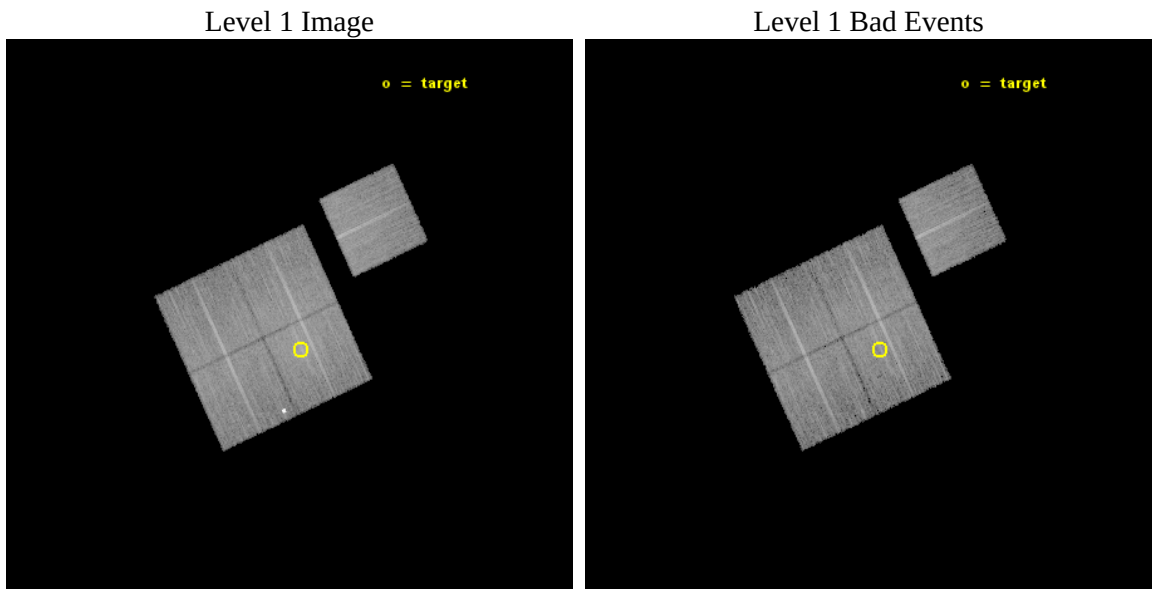
seq_num	801370	Sequence number
obs_id	15380	Observation id
title	Extending a Large Sample of Fossil Groups with Chandra	Proposal ti
observer	Professor Gordon Garmire	Principal investigator
object	SDSS J114406.81+054753.4	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	176.028333	Observer's specified target RA [deg]
dec_targ	5.798194	Observer's specified target Dec [deg]
ra_nom	176.05030866716	Nominal RA [deg]
dec_nom	5.8406603735605	Nominal Dec [deg]
roll_nom	65.05044017234	Nominal Roll [deg]
revision	2	Processing version of data
ontime	20084.900154471	Sum of GTIs [s]
livetime	19822.476147665	Livetime [s]
ontime0	20084.900154471	Sum of GTIs [s]
ontime1	20084.900154471	Sum of GTIs [s]
ontime2	20084.900154471	Sum of GTIs [s]
ontime3	20084.900154471	Sum of GTIs [s]
ontime6	20084.900154471	Sum of GTIs [s]
l2events	58718	Number of level 2 events



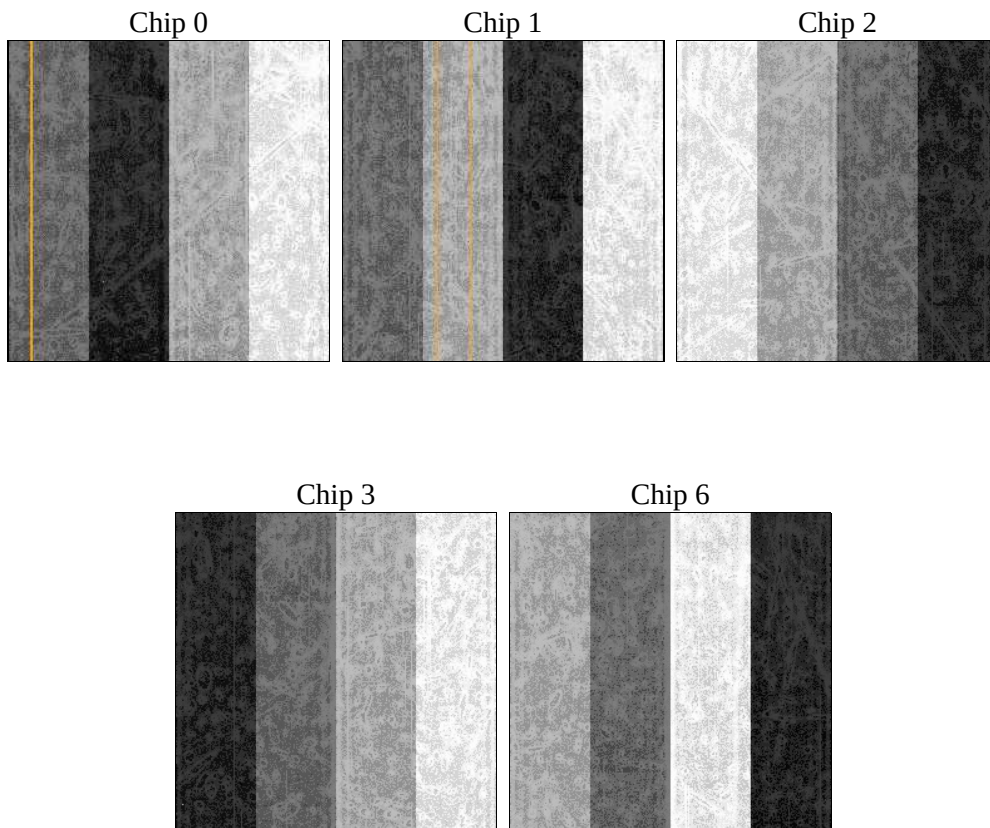
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	20000.253000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	20084.900154471	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	20084.900154471	Sum of GTIs [s]
date	2014-12-08T02:14:26	Date and time of file creation	ontime1	20084.900154471	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	20084.900154471	Sum of GTIs [s]
			ontime3	20084.900154471	Sum of GTIs [s]
			ontime6	20084.900154471	Sum of GTIs [s]
			l1events	481807	Number of level 1 events

2.1.4 Events

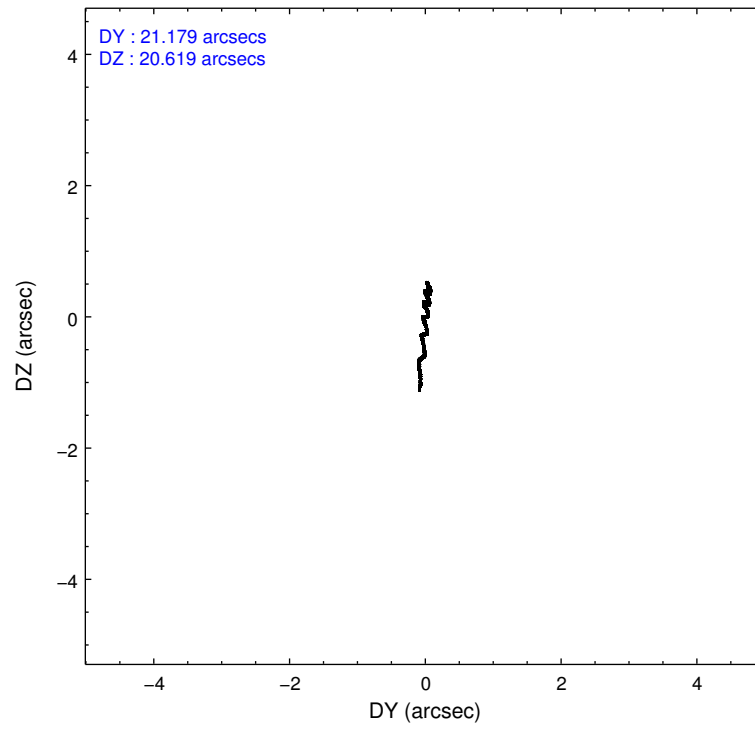
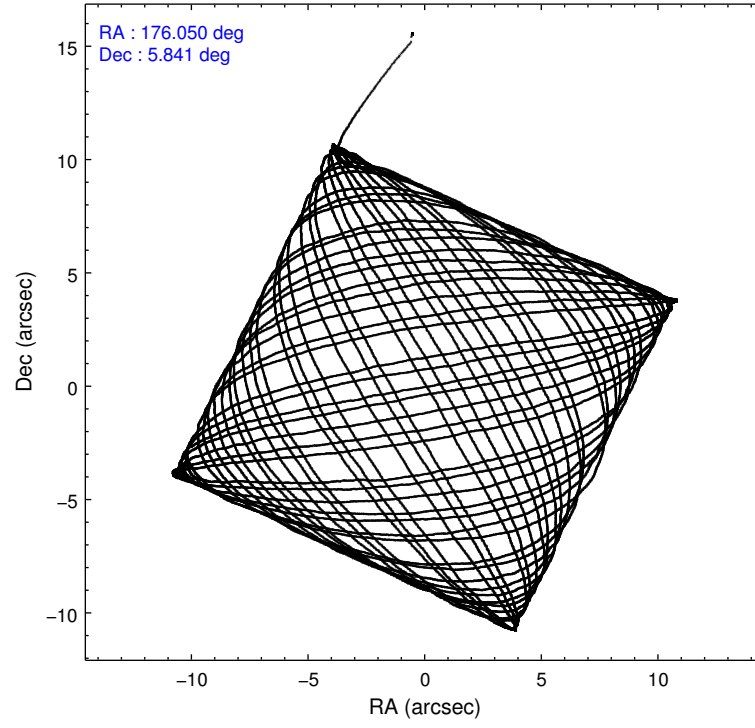
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	88439	95385	97951	102326	97706
rejected events	76809	75603	86232	83317	85687
rejected %	86%	79%	88%	81%	87%

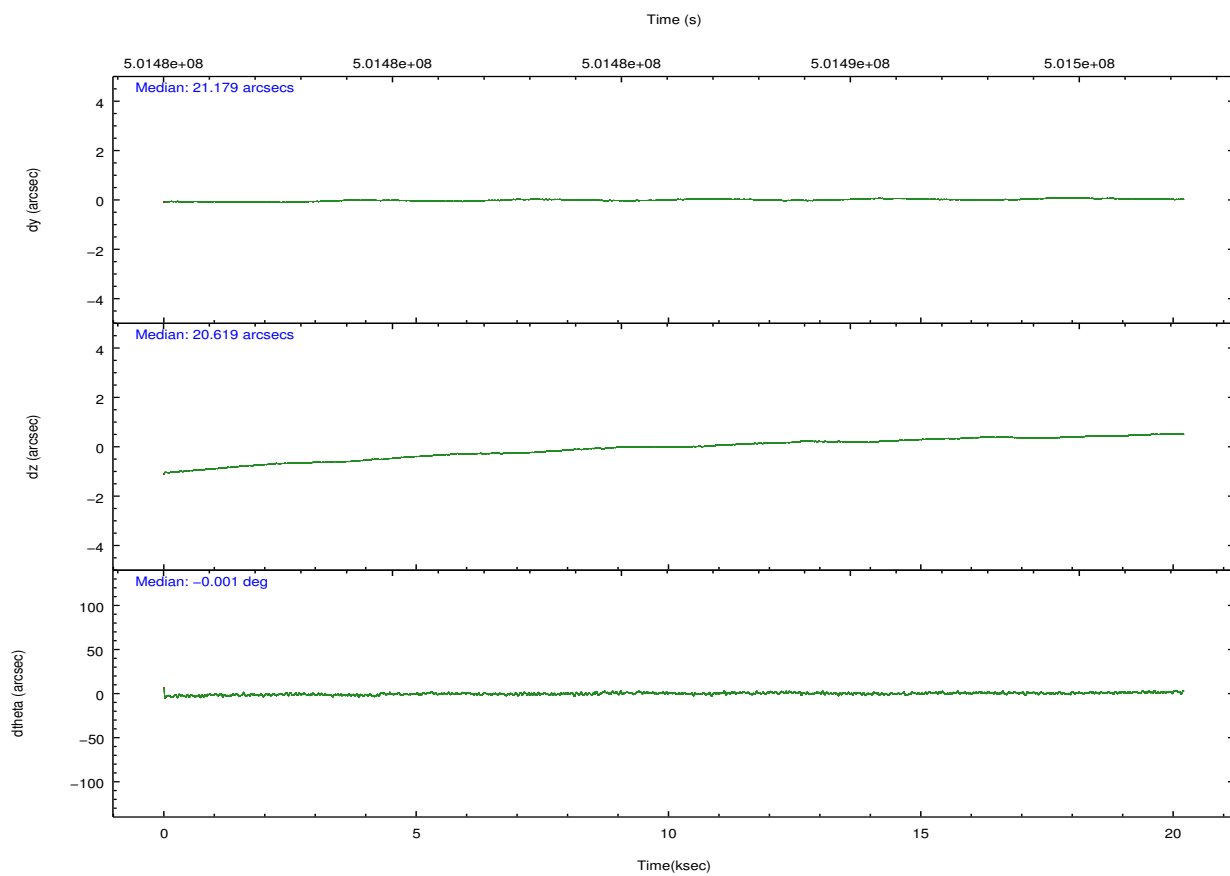
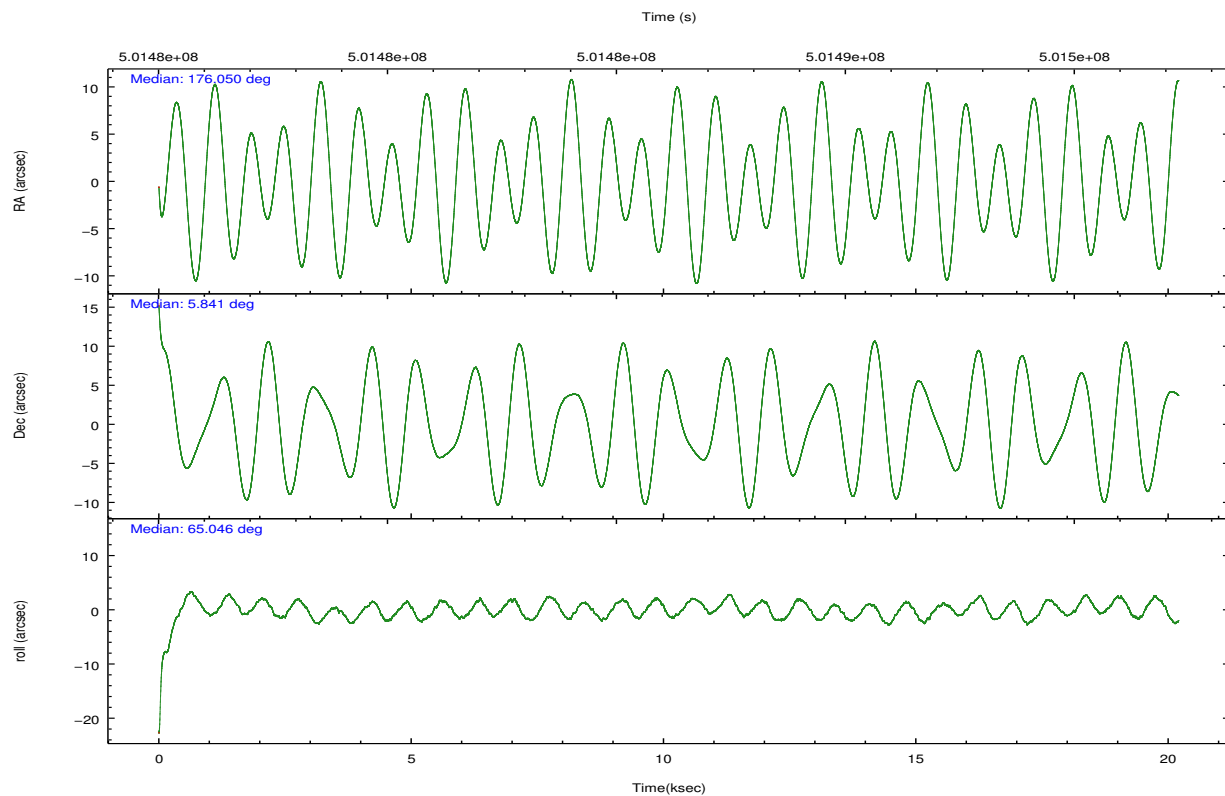
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	3973	11237	4527	10237	4108
	4%	11%	4%	10%	4%
grade 1 events	44	66	63	90	46
	0%	0%	0%	0%	0%
grade 2 events	2892	3186	2764	3318	2581
	3%	3%	2%	3%	2%
grade 3 events	1195	1268	1141	1452	1273
	1%	1%	1%	1%	1%
grade 4 events	1104	1258	1174	1441	1243
	1%	1%	1%	1%	1%
grade 5 events	4614	4911	4269	5427	5027
	5%	5%	4%	5%	5%
grade 6 events	2466	2836	2117	2562	2818
	2%	2%	2%	2%	2%
grade 7 events	72151	70623	81896	77799	80610
	81%	74%	83%	76%	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	176.052838	176.0503086671575	CCD I2 on	Y	Y
[deg] Pointing Dec	5.813258	5.840660373560483	CCD I3 on	Y	Y
[deg] Pointing Roll	64.841506	65.05044017233986	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	-226.992463	-226.9923854248368	CCD S3 on	N	N
[mm] SIM translation stage offset	-6.6	-6.600067578092876	CCD S4 on	N	N
[s] Observation start time (MET)	501476242.184000	501475281.14243	CCD S5 on	N	N
Observation start date	2013-11-22T02:56:15	2013-11-22T02:41:21	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	501496242.184000	501496477.11859	On-chip summing requested	N	N
Observation end date	2013-11-22T08:29:35	2013-11-22T08:34:37	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



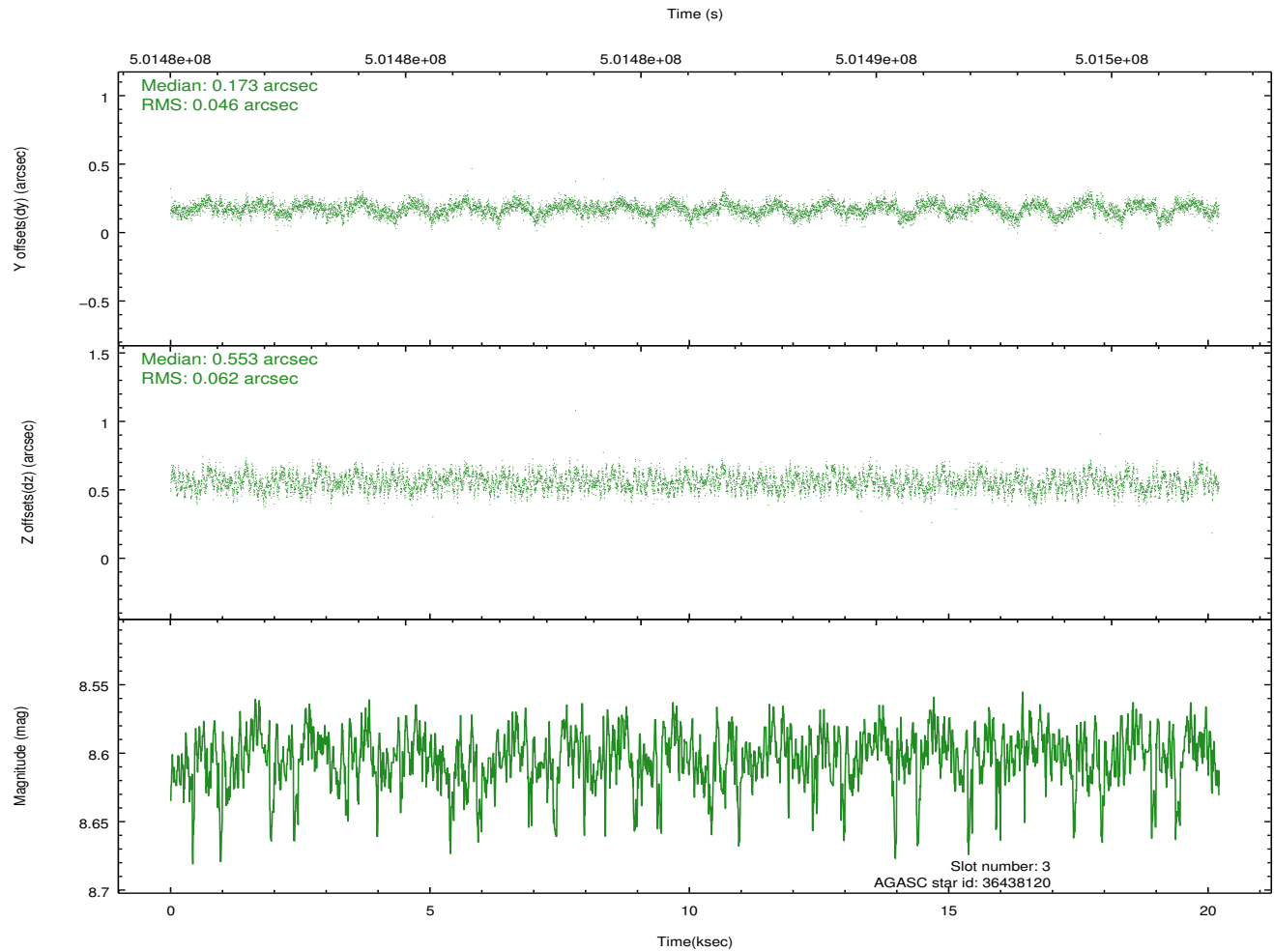
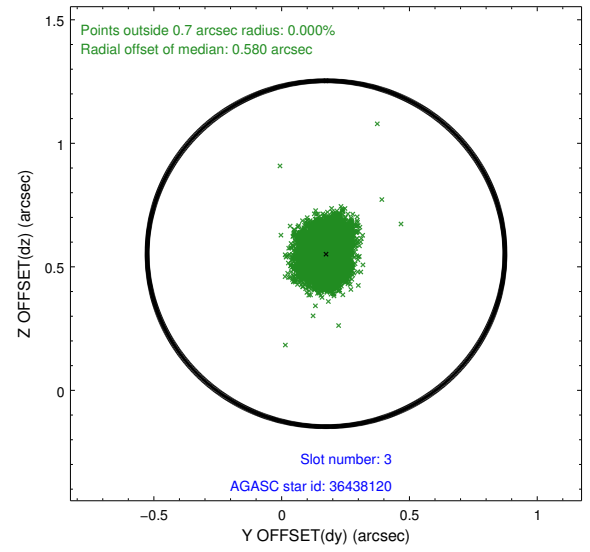
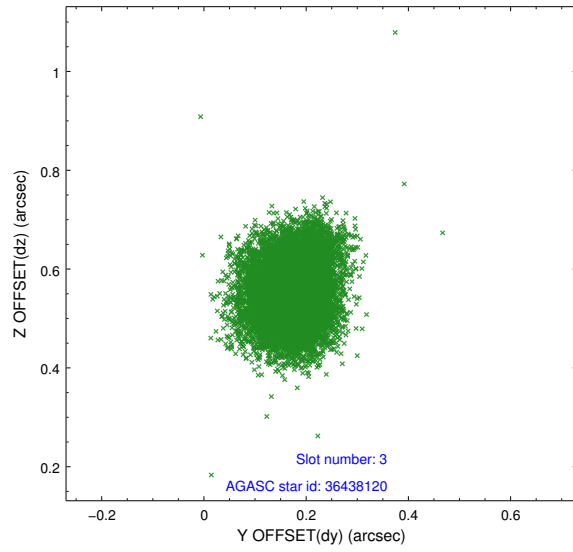


Slot Statistics

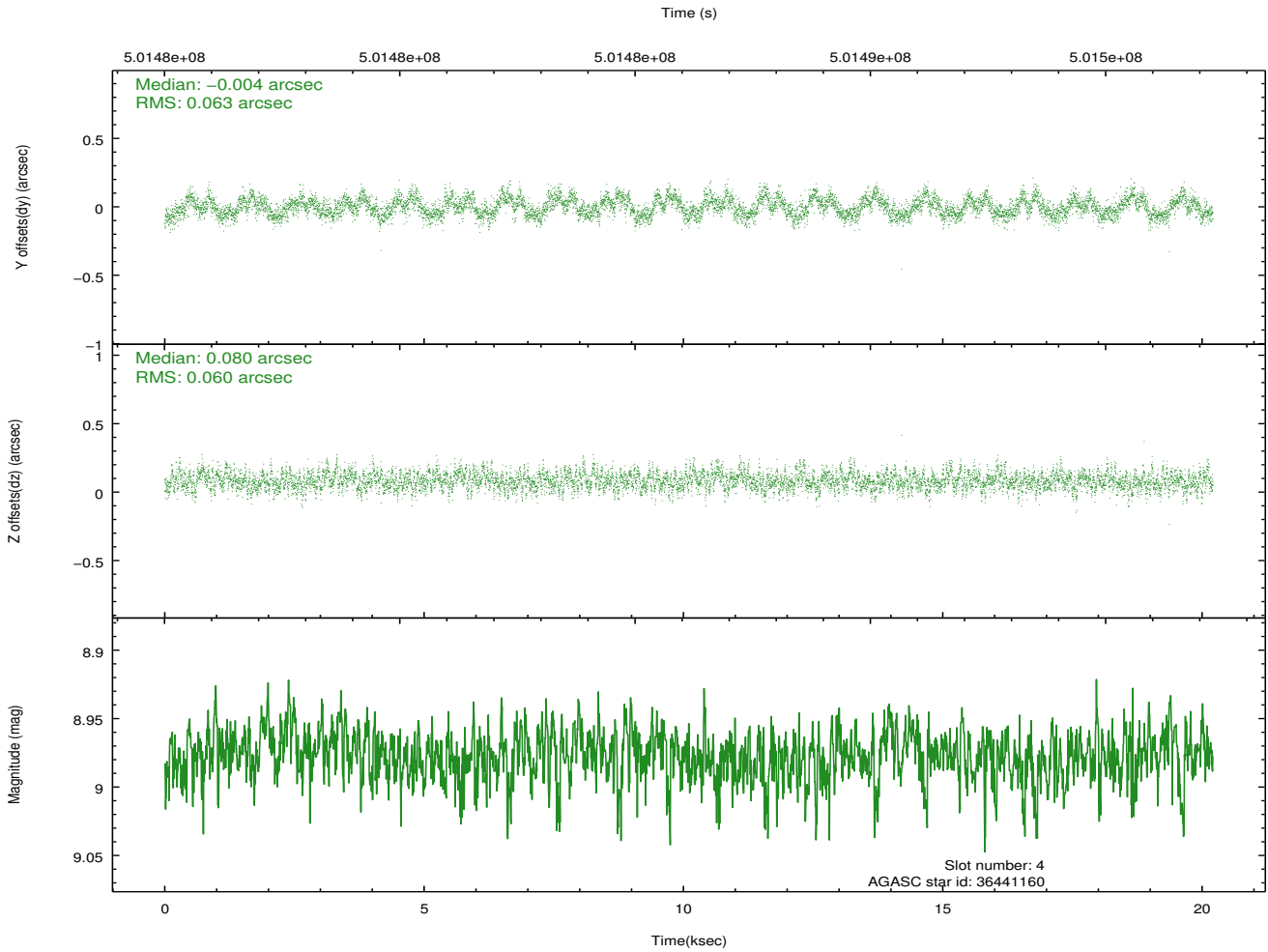
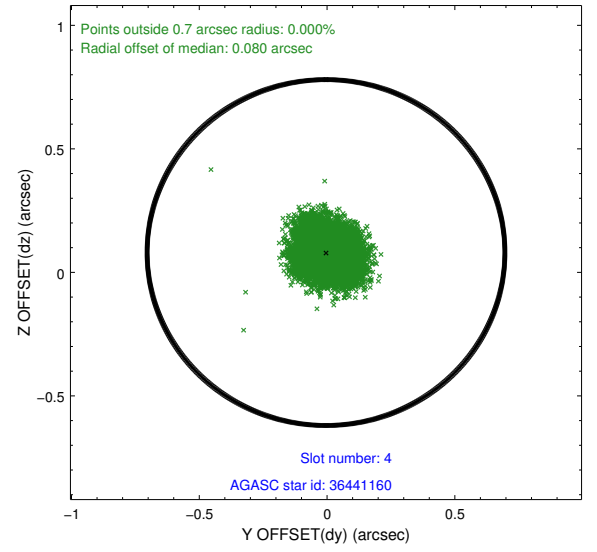
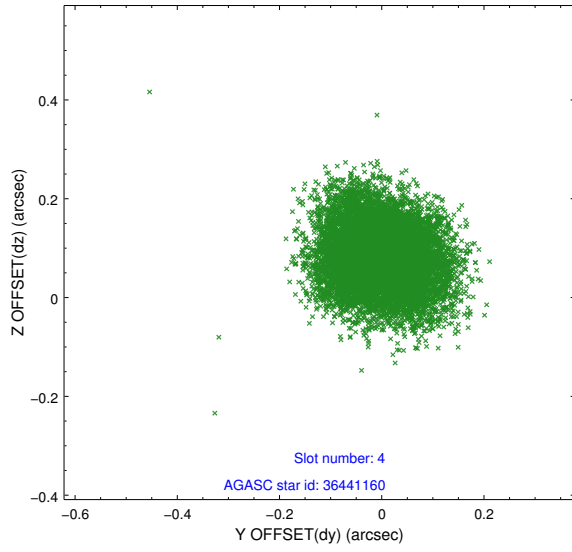
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.15	4929	0.168	-0.130	0.015	0.024	0.000000	0.000000	918.14	-979.90
1	FID		ACIS-I-2	7.12	4929	-0.347	0.008	0.009	0.015	0.000000	0.000000	-776.71	-985.42
2	FID		ACIS-I-4	7.05	4929	0.082	0.189	0.010	0.015	0.000000	0.000000	2137.51	920.91
3	GUIDE	used	36438120	8.60	9856	0.173	0.553	0.083	0.131	176.479057	5.227757	-1257.28	-2278.72
4	GUIDE	used	36441160	8.98	9849	-0.004	0.080	0.093	0.148	176.279607	5.675539	-103.03	-945.91
5	GUIDE	used	36441664	8.35	9857	0.110	-0.235	0.083	0.135	175.614508	5.505443	-1670.09	950.80
6	GUIDE	used	36442320	8.65	9853	-0.382	-0.583	0.087	0.142	175.723761	6.383131	1355.97	1937.25
7	GUIDE	used	36444312	8.56	9855	0.104	0.186	0.082	0.141	176.420190	5.500270	-458.59	-1668.65

2.4 Star Slots

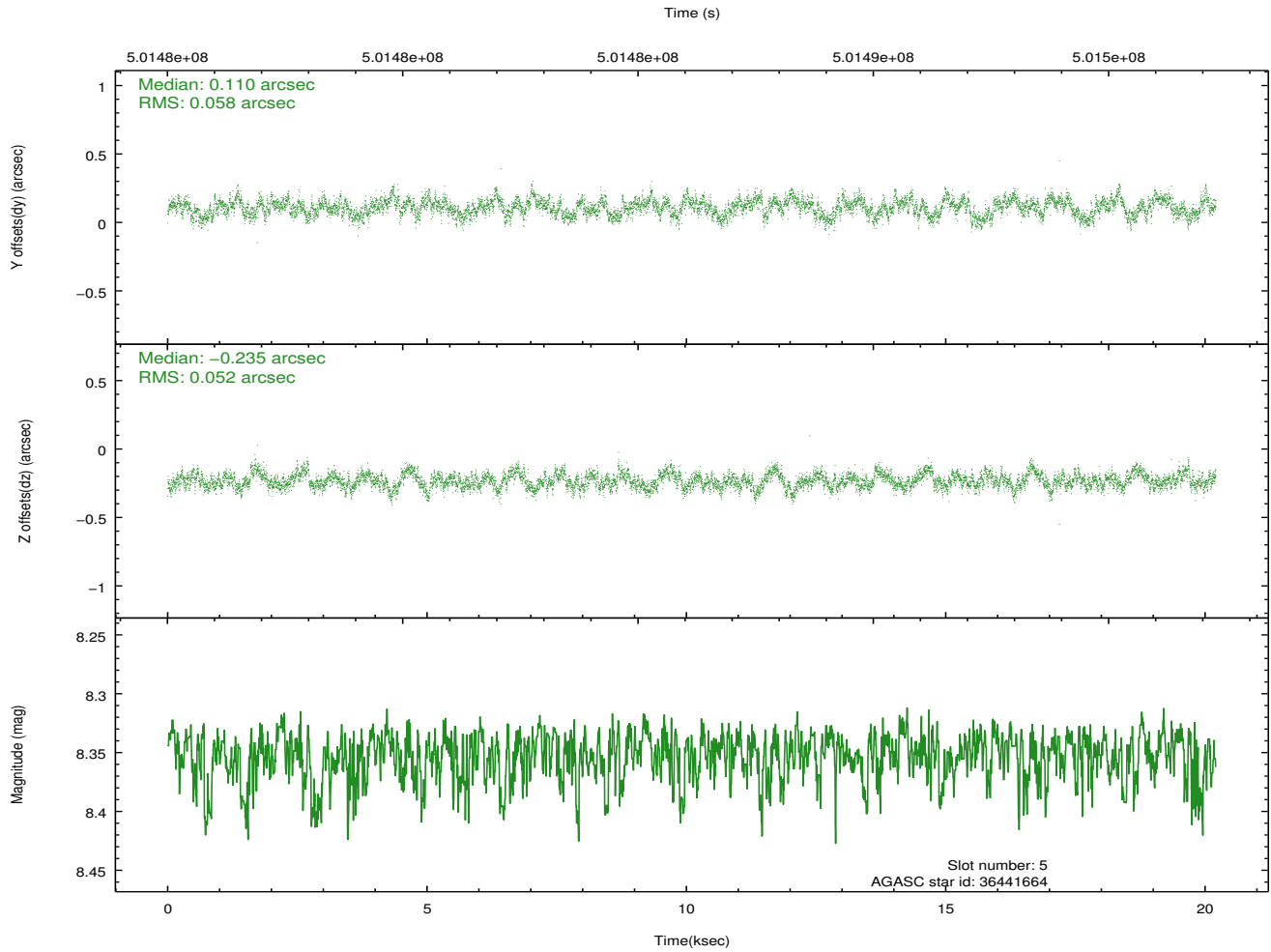
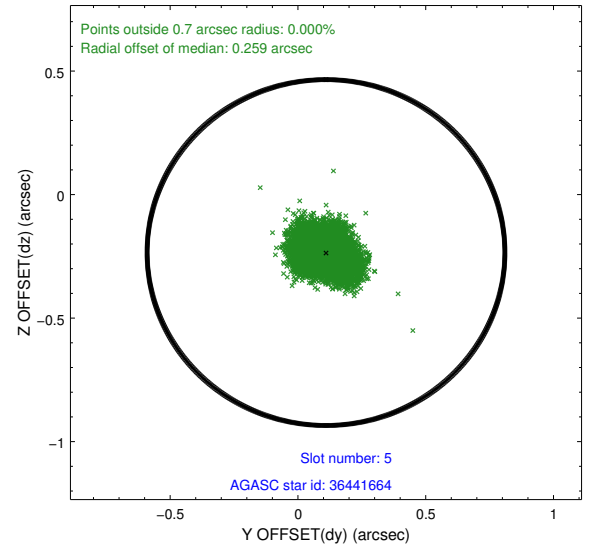
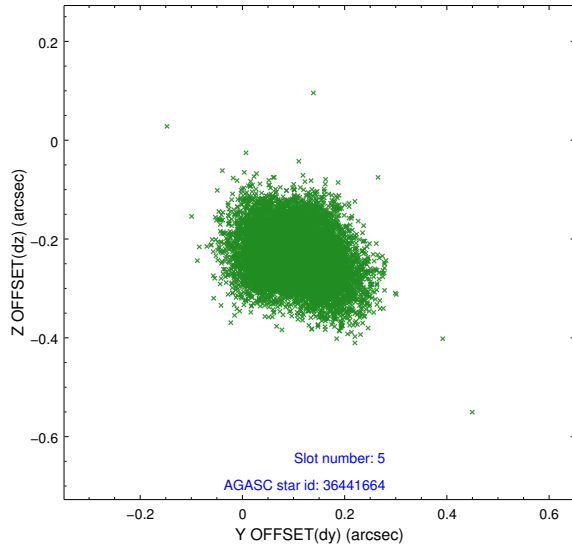
2.4.1 Slot 3



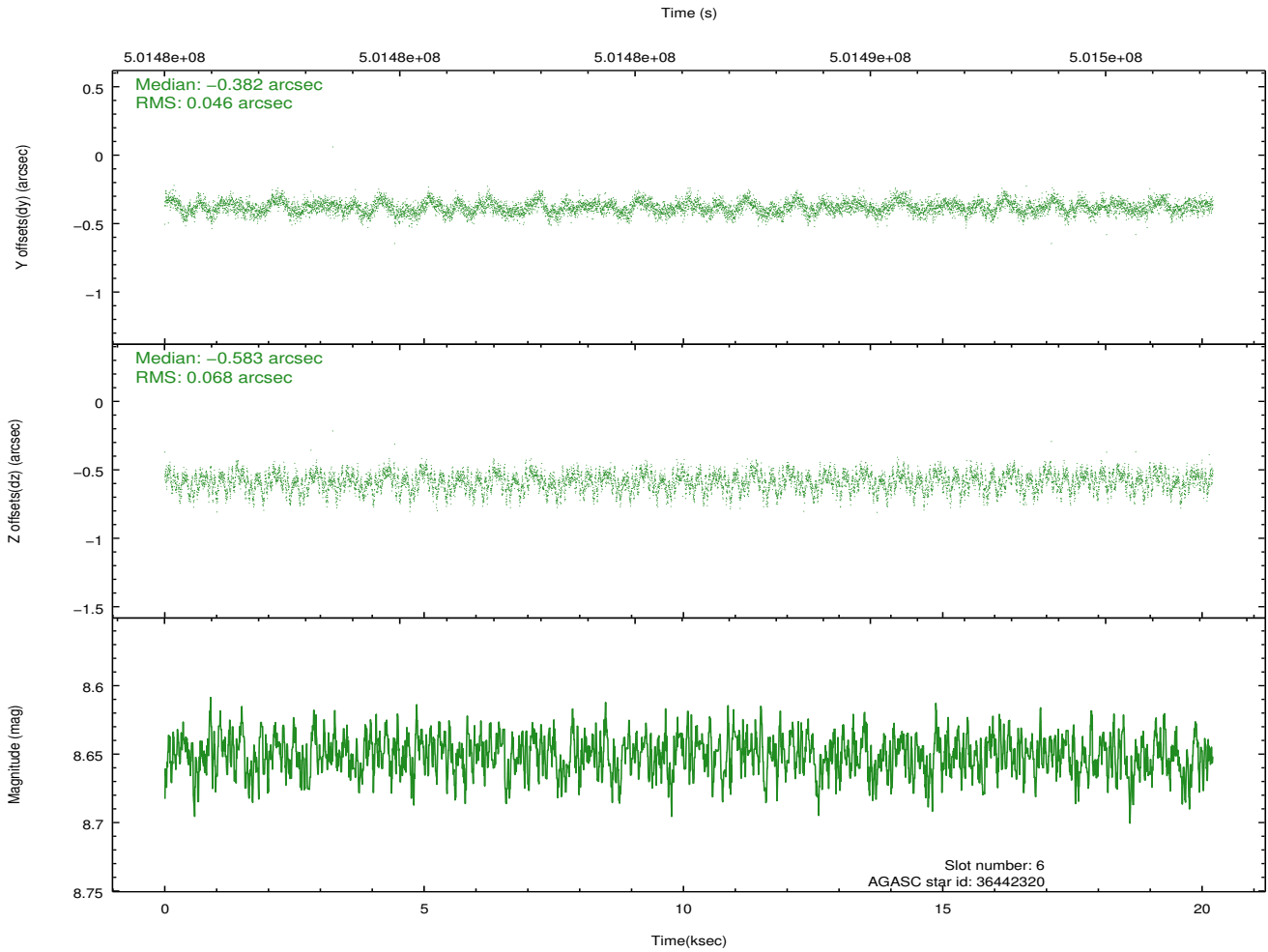
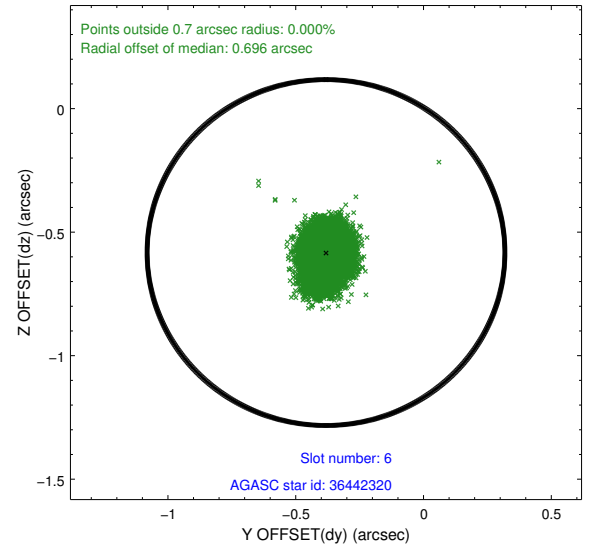
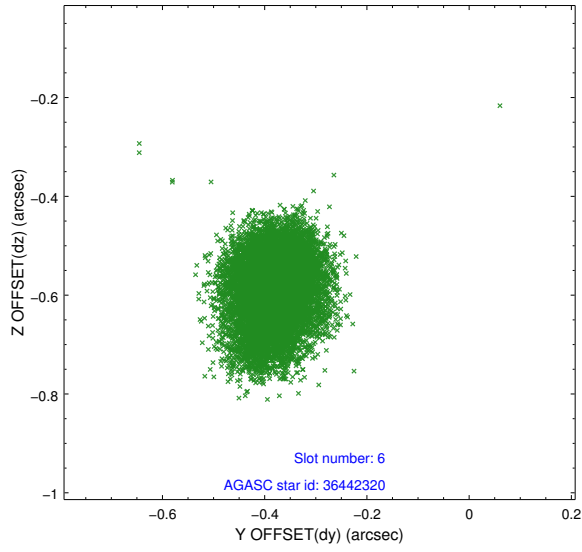
2.4.2 Slot 4



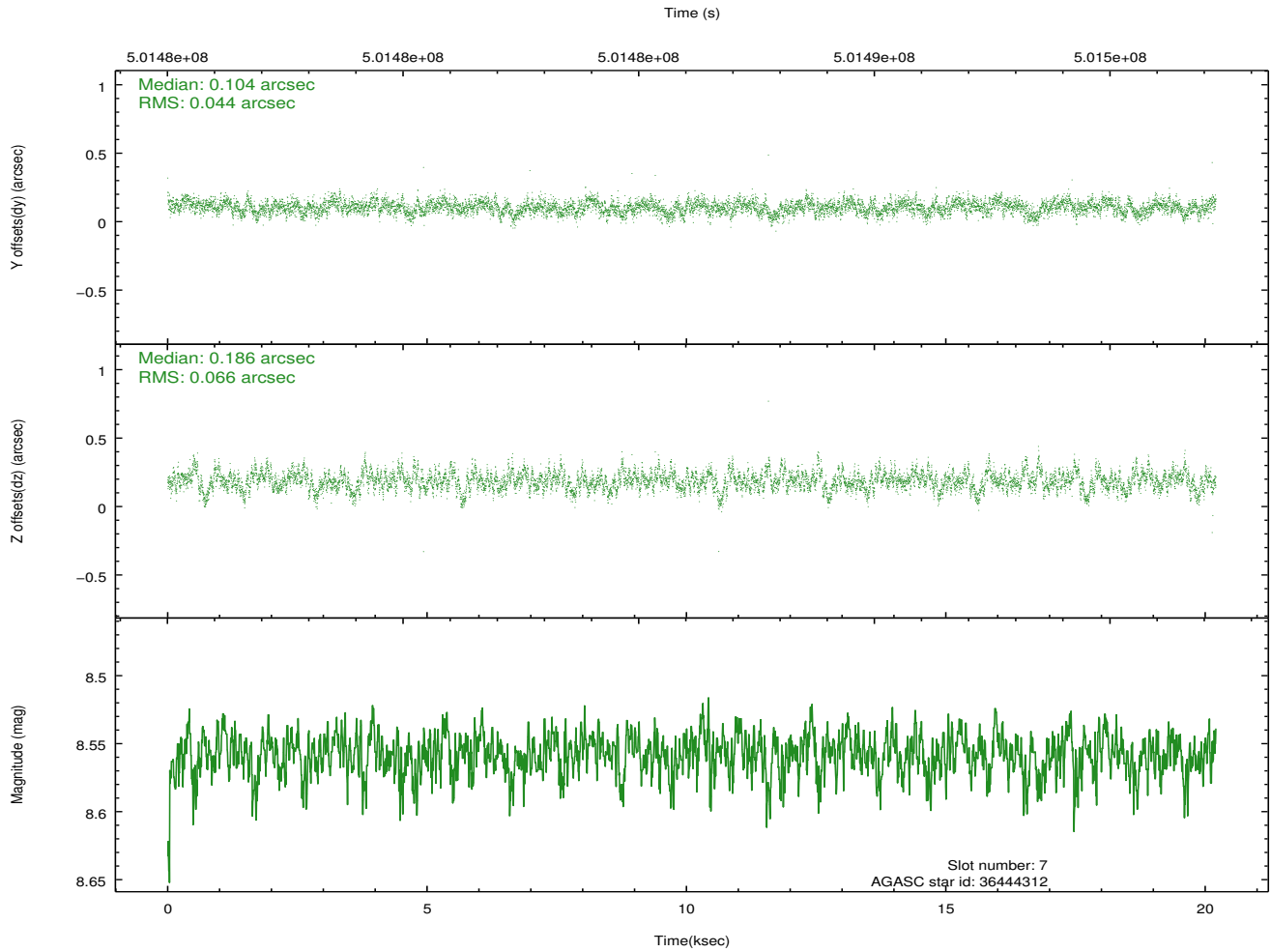
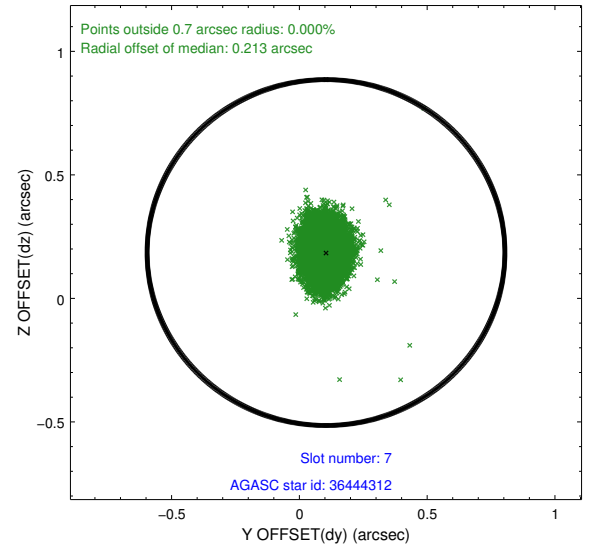
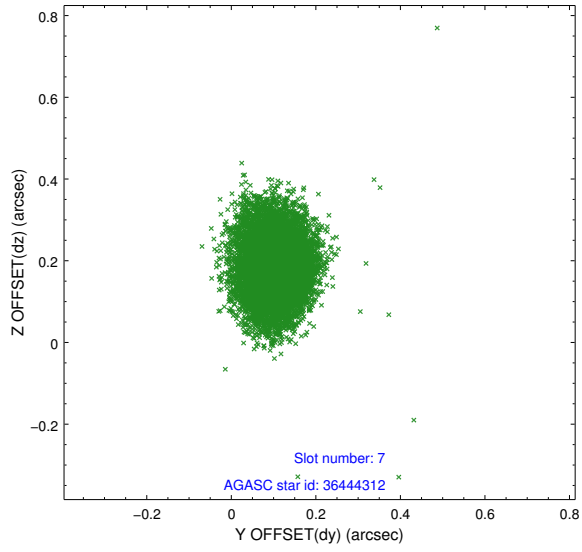
2.4.3 Slot 5



2.4.4 Slot 6

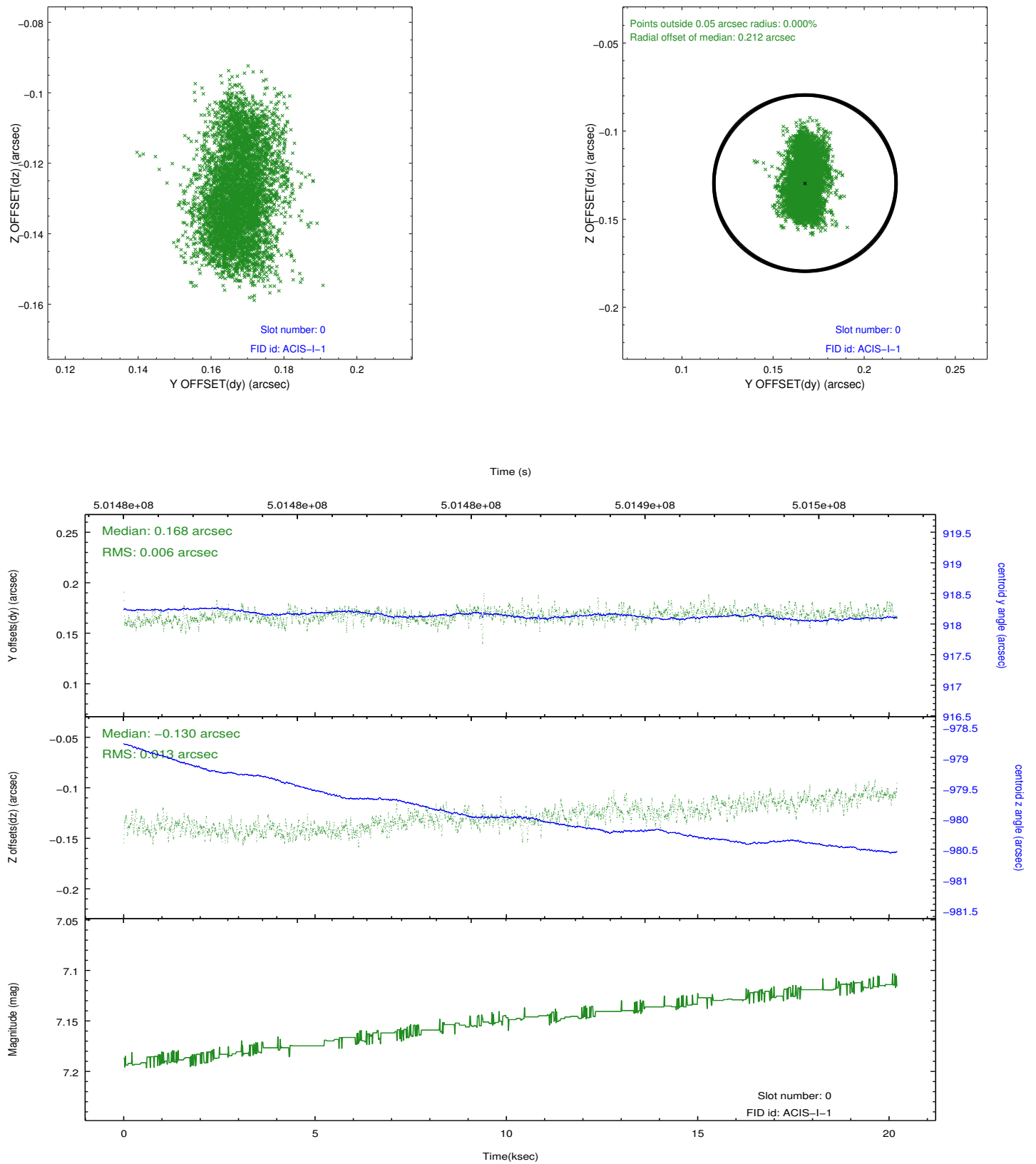


2.4.5 Slot 7

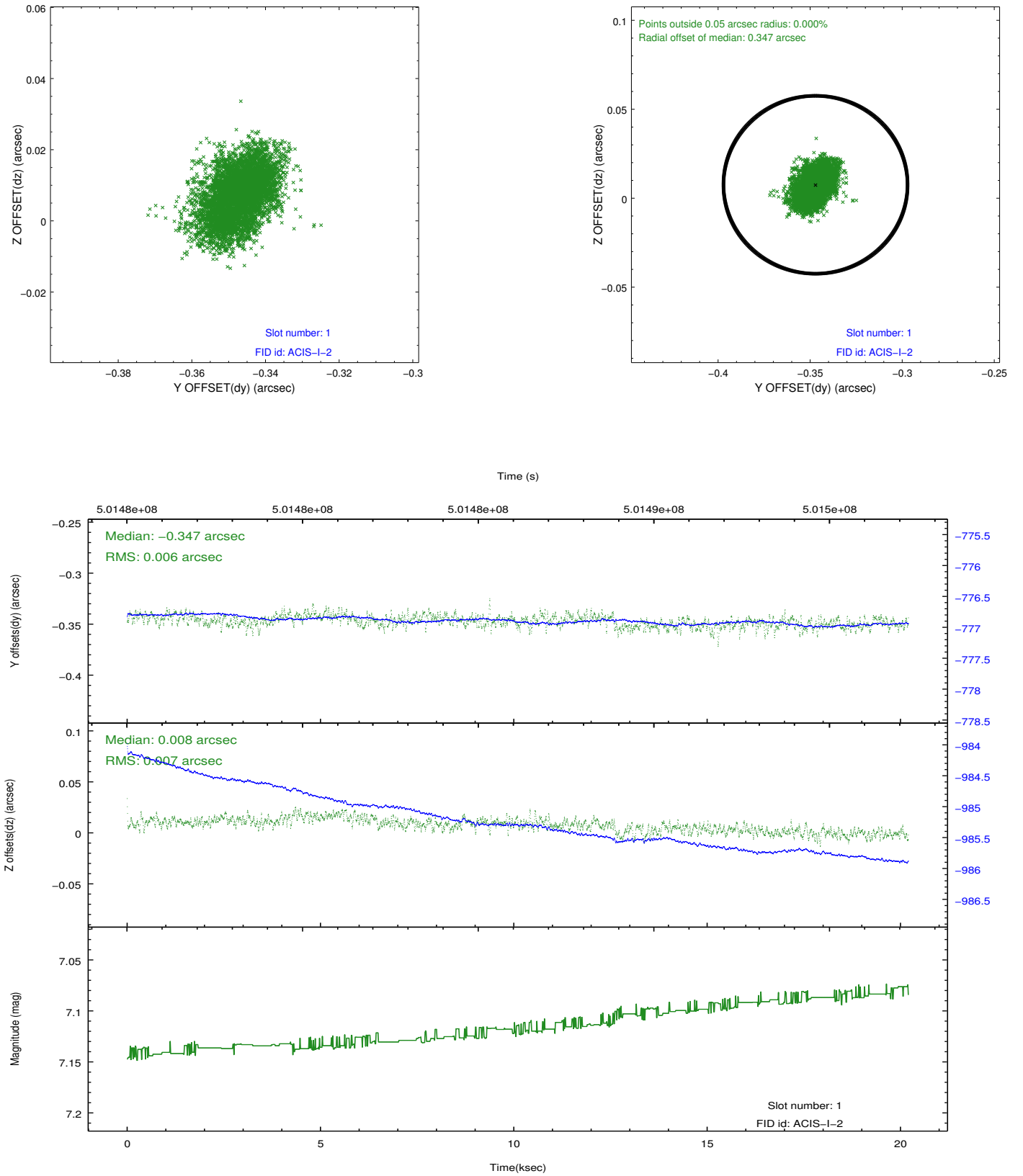


2.5 FID Slots

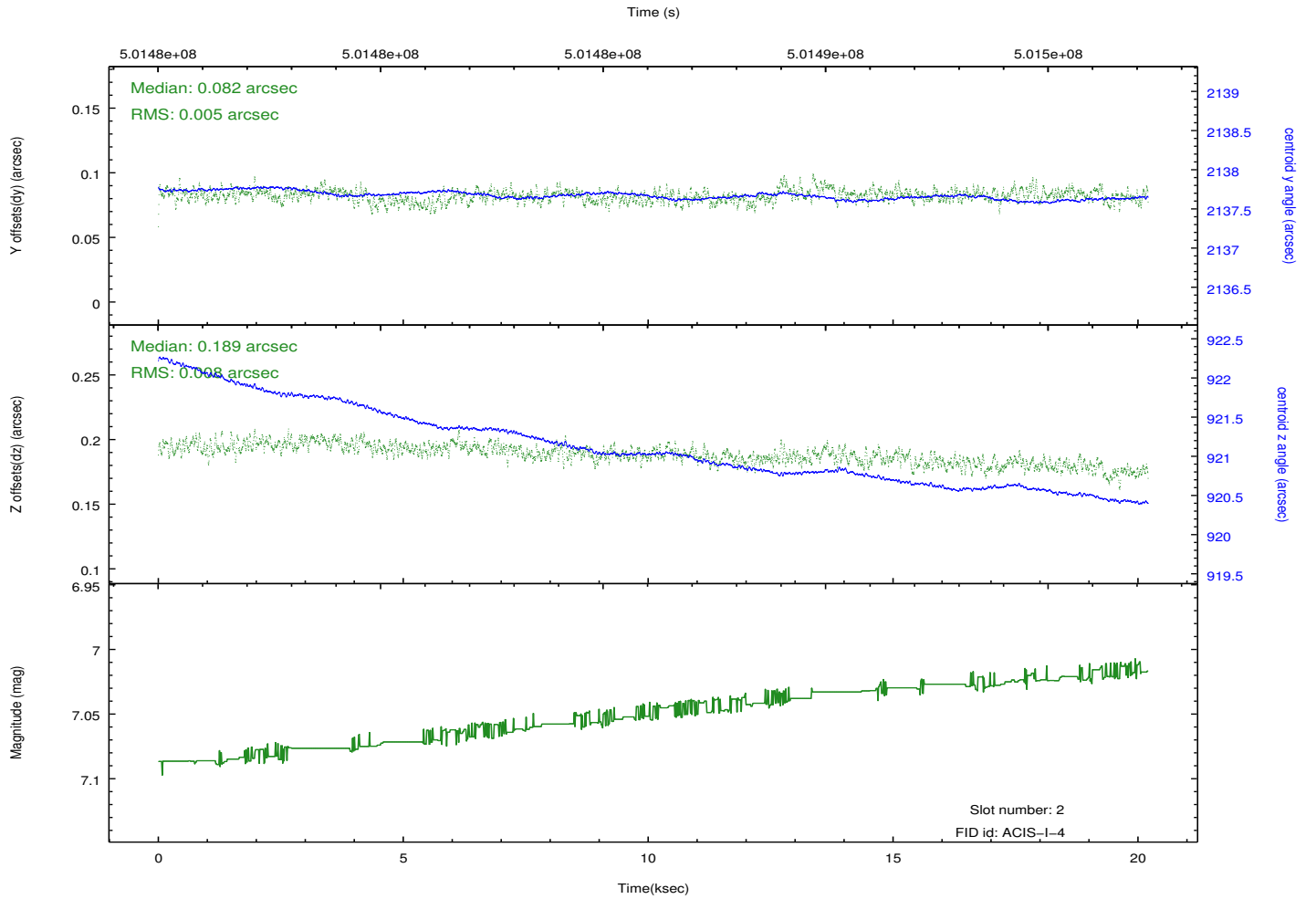
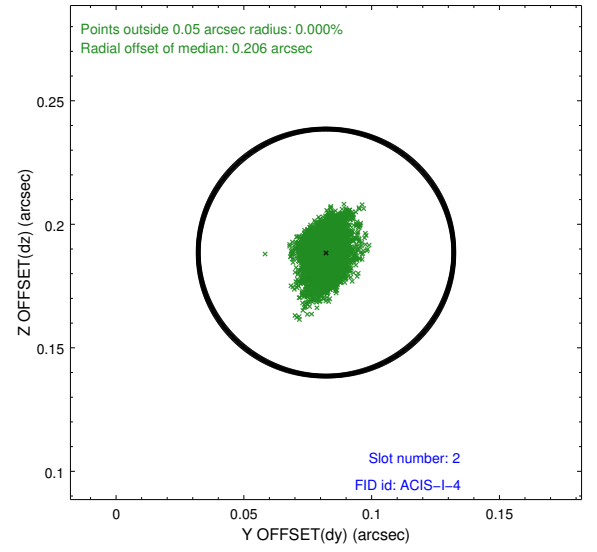
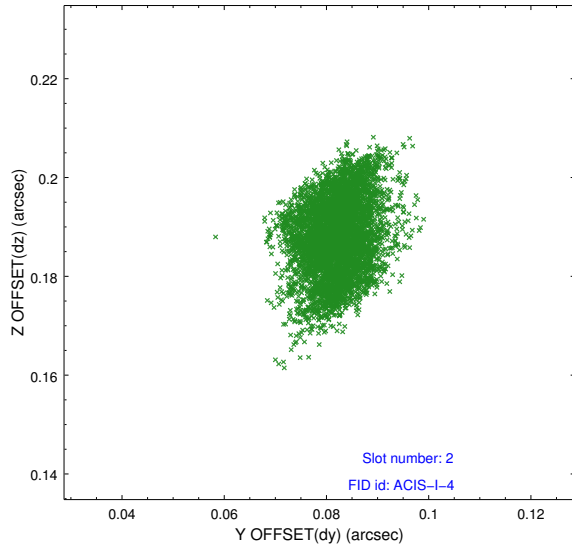
2.5.1 Slot 0



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)	2014.12.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.084900154471

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.