

V&V Reference Report

L2 ASCDS Version : 10.1.1

Observation 15974 - L2 Version 2
Chandra X-Ray Center

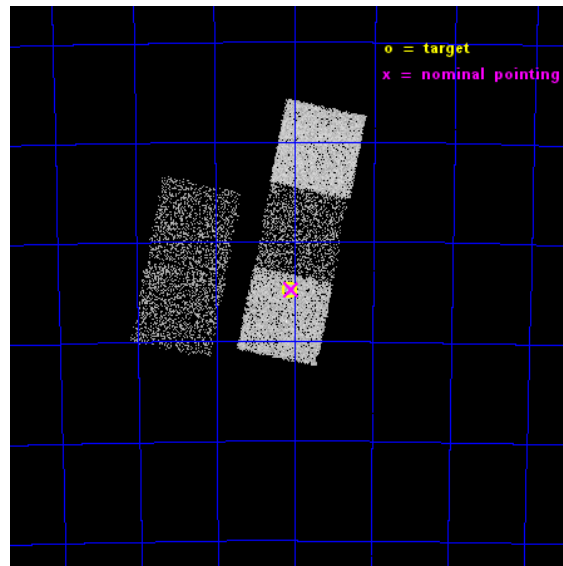
L2 Processing Date : Dec 9 2014

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

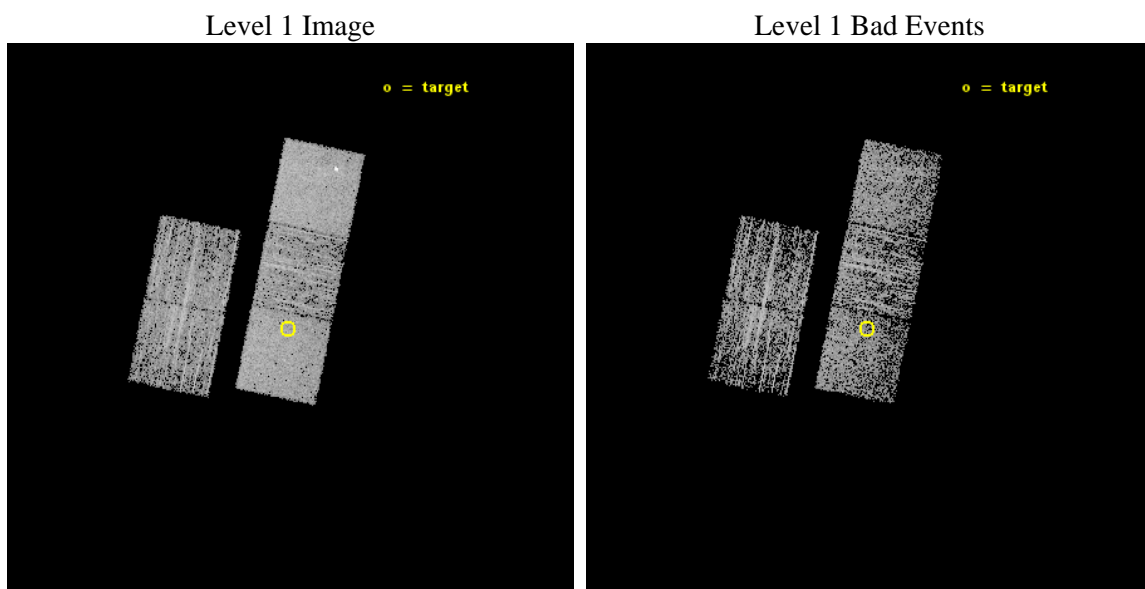
seq_num	502207	Sequence number
obs_id	15974	Observation id
title	Where Have All The Central Compact Objects Gone?	Proposal title
observer	Dr. Eric Gotthelf	Principal investigator
object	PSR J1410-7404	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	212.530417	Observer's specified target RA [deg]
dec_targ	-74.081472	Observer's specified target Dec [deg]
ra_nom	212.51983446466	Nominal RA [deg]
dec_nom	-74.080267099483	Nominal Dec [deg]
roll_nom	101.61192877595	Nominal Roll [deg]
revision	2	Processing version of data
ontime	3565.0000274181	Sum of GTIs [s]
livetime	3518.4206775451	Livetime [s]
ontime2	3565.0000274181	Sum of GTIs [s]
ontime3	3565.0000274181	Sum of GTIs [s]
ontime5	3565.0000274181	Sum of GTIs [s]
ontime6	3565.0000274181	Sum of GTIs [s]
ontime7	3565.0000274181	Sum of GTIs [s]
l2events	27295	Number of level 2 events



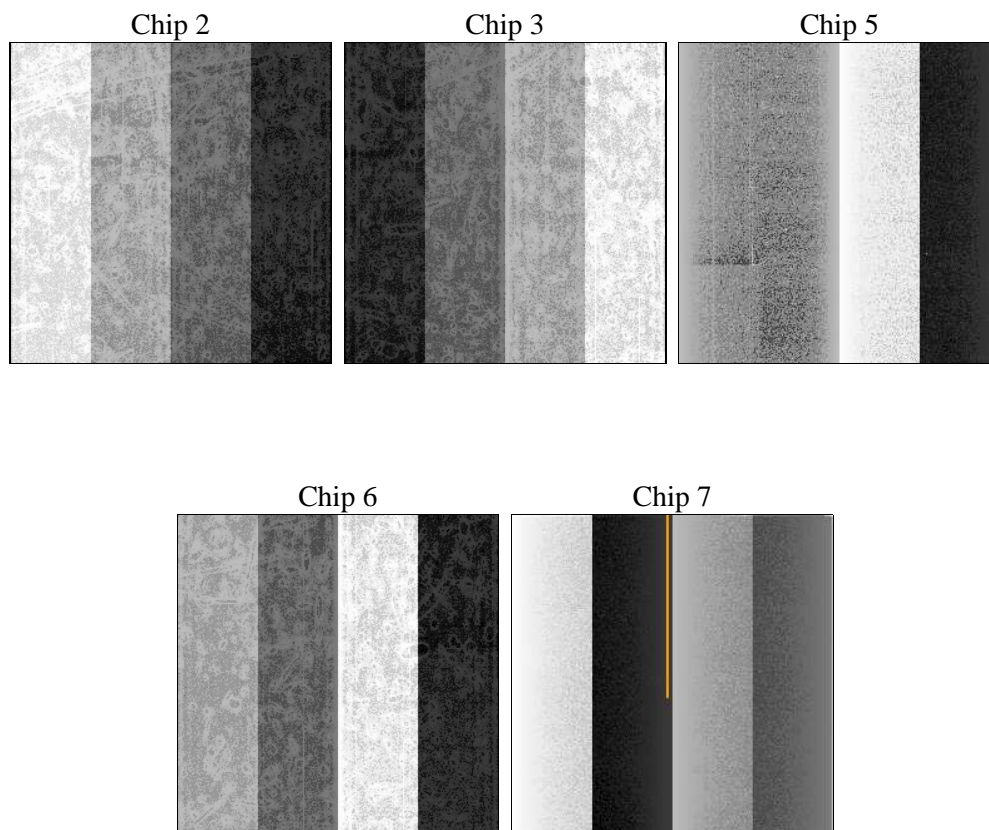
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	3500.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	3565.0000274181	Sum of GTIs [s]
caldsver	4.6.4	 	ontime2	3565.0000274181	Sum of GTIs [s]
date	2014-12-09T09:07:44	Date and time of file creation	ontime3	3565.0000274181	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	3565.0000274181	Sum of GTIs [s]
			ontime6	3565.0000274181	Sum of GTIs [s]
			ontime7	3565.0000274181	Sum of GTIs [s]
			l1events	100201	Number of level 1 events

2.1.4 Events

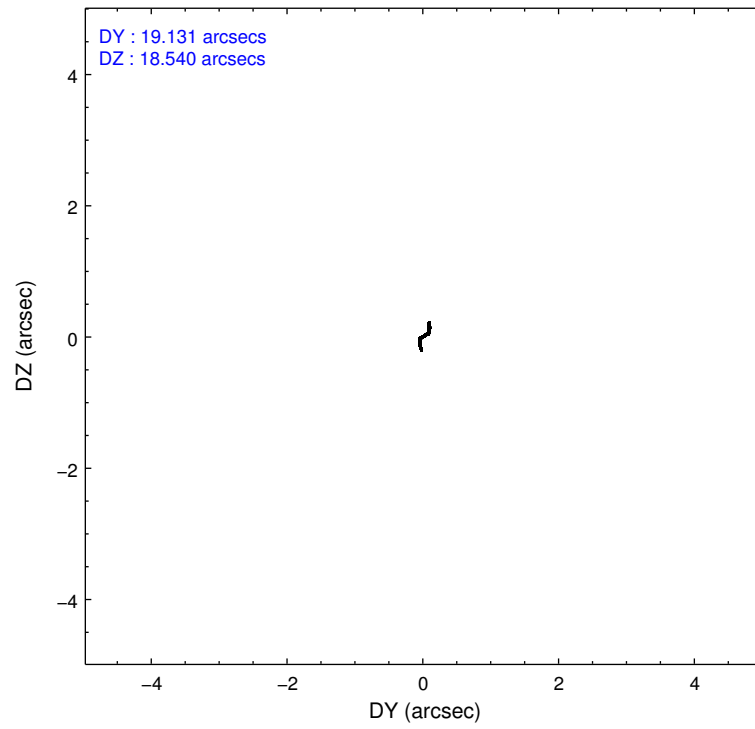
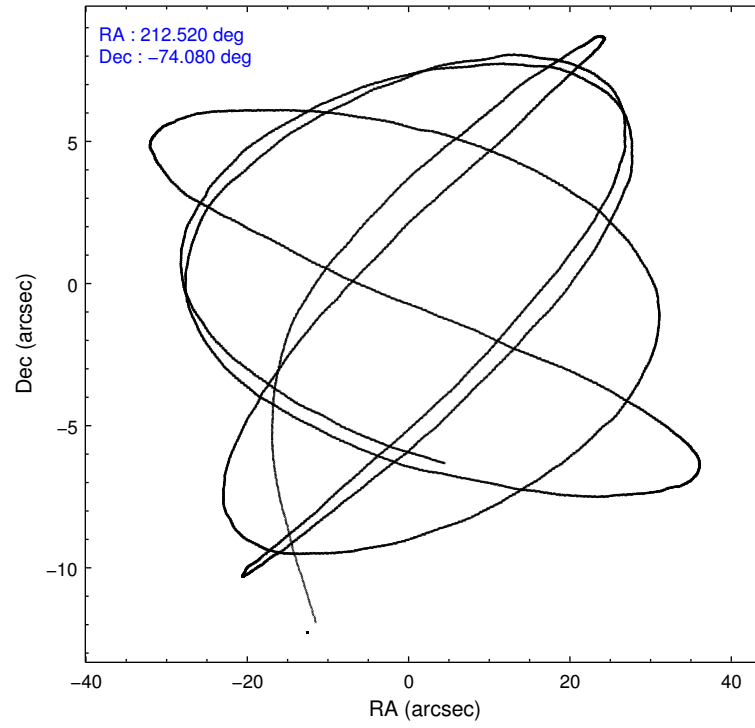
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	16405	16325	27798	16835	22838
rejected events	14488	14462	14311	14864	12891
rejected %	88%	88%	51%	88%	56%

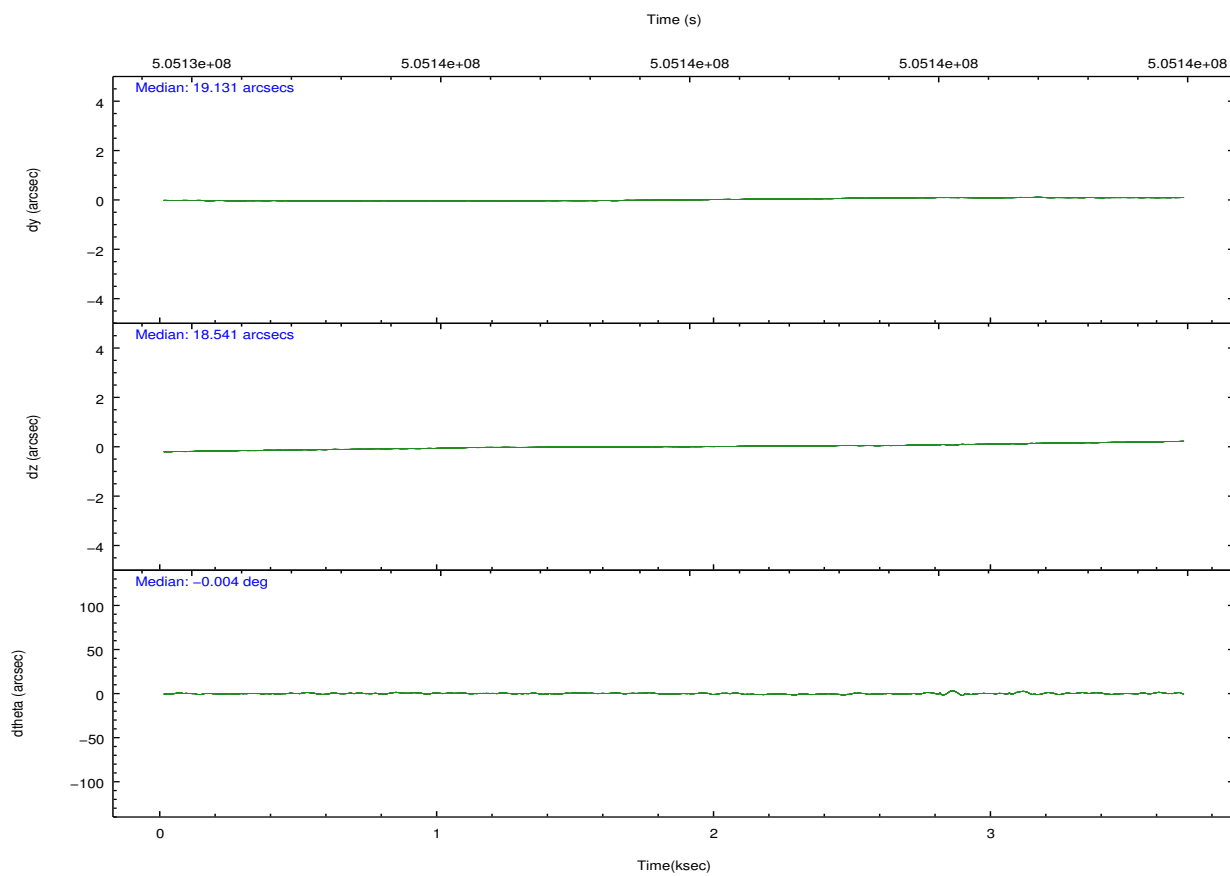
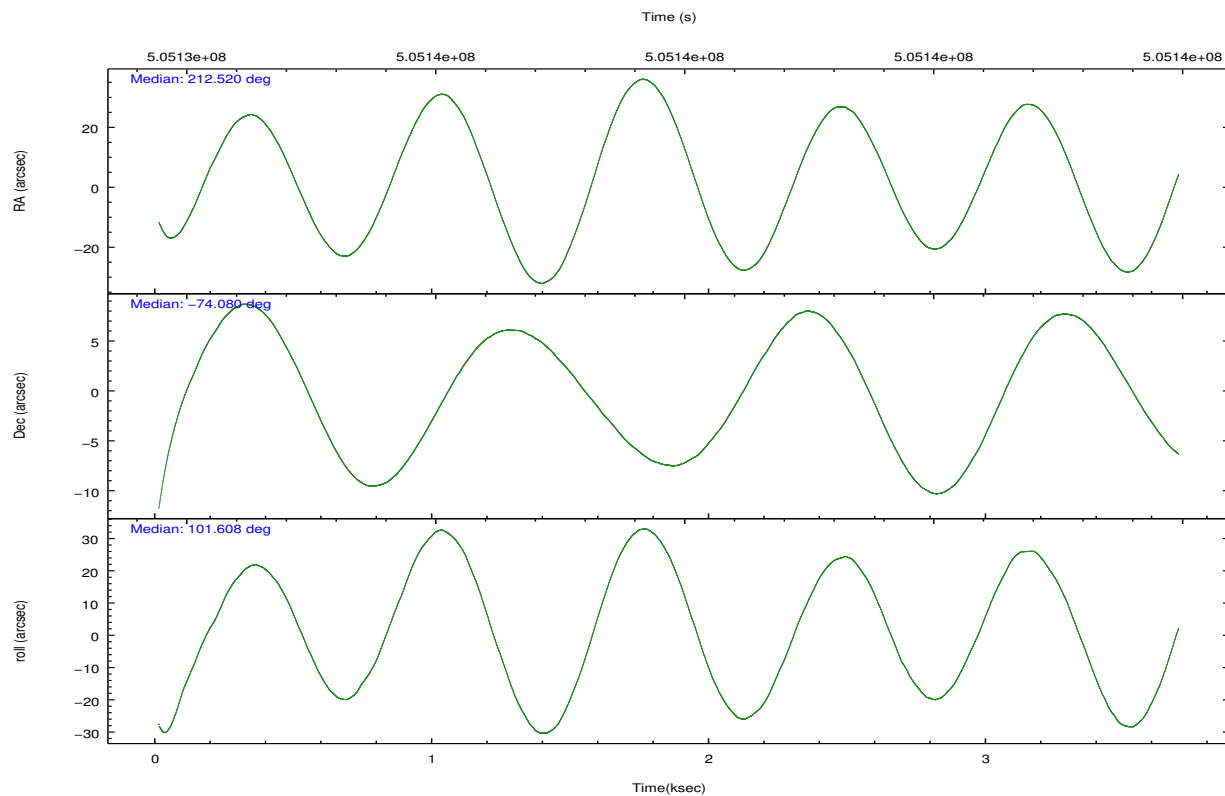
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	720	627	1125	662	854
	4%	3%	4%	3%	3%
grade 1 events	8	11	80	13	40
	0%	0%	0%	0%	0%
grade 2 events	445	436	4260	424	2090
	2%	2%	15%	2%	9%
grade 3 events	213	212	445	209	834
	1%	1%	1%	1%	3%
grade 4 events	206	195	429	165	841
	1%	1%	1%	0%	3%
grade 5 events	765	864	2027	839	2248
	4%	5%	7%	4%	9%
grade 6 events	339	399	7264	517	5360
	2%	2%	26%	3%	23%
grade 7 events	13709	13581	12168	14006	10571
	83%	83%	43%	83%	46%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23567	ACIS-23567	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	212.587397	212.5198344646621	CCD I2 on	O2	Y
[deg] Pointing Dec	-74.100580	-74.08026709948311	CCD I3 on	O3	Y
[deg] Pointing Roll	101.520315	101.6119287759459	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O1	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	O4	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	N	N
[s] Observation start time (MET)	505134279.184000	505132853.41811	CCD S5 on	N	N
Observation start date	2014-01-03T11:03:32	2014-01-03T10:40:53	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	505137779.184000	505138561.64342	On-chip summing requested	N	N
Observation end date	2014-01-03T12:01:52	2014-01-03T12:16:01	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



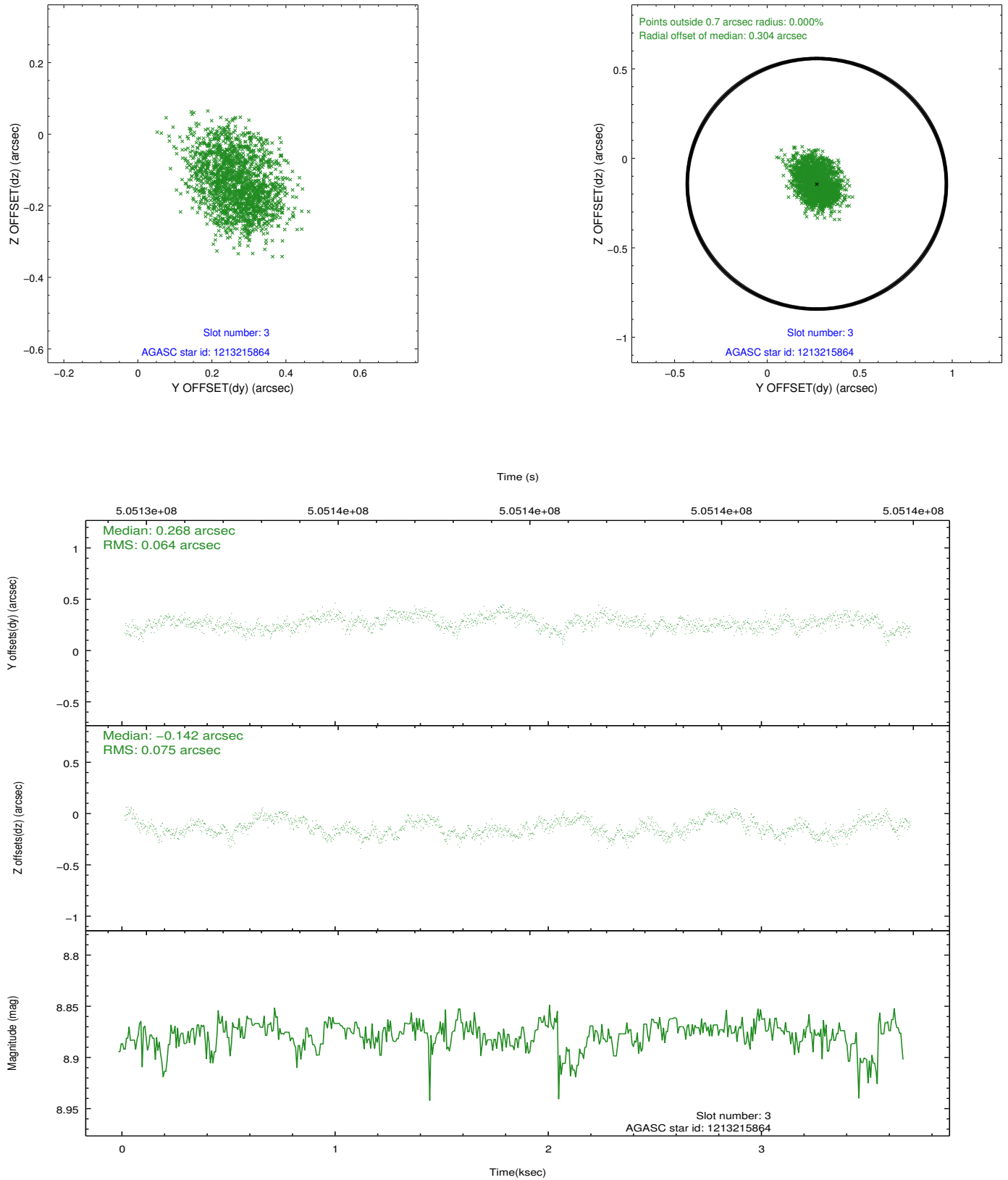


Slot Statistics

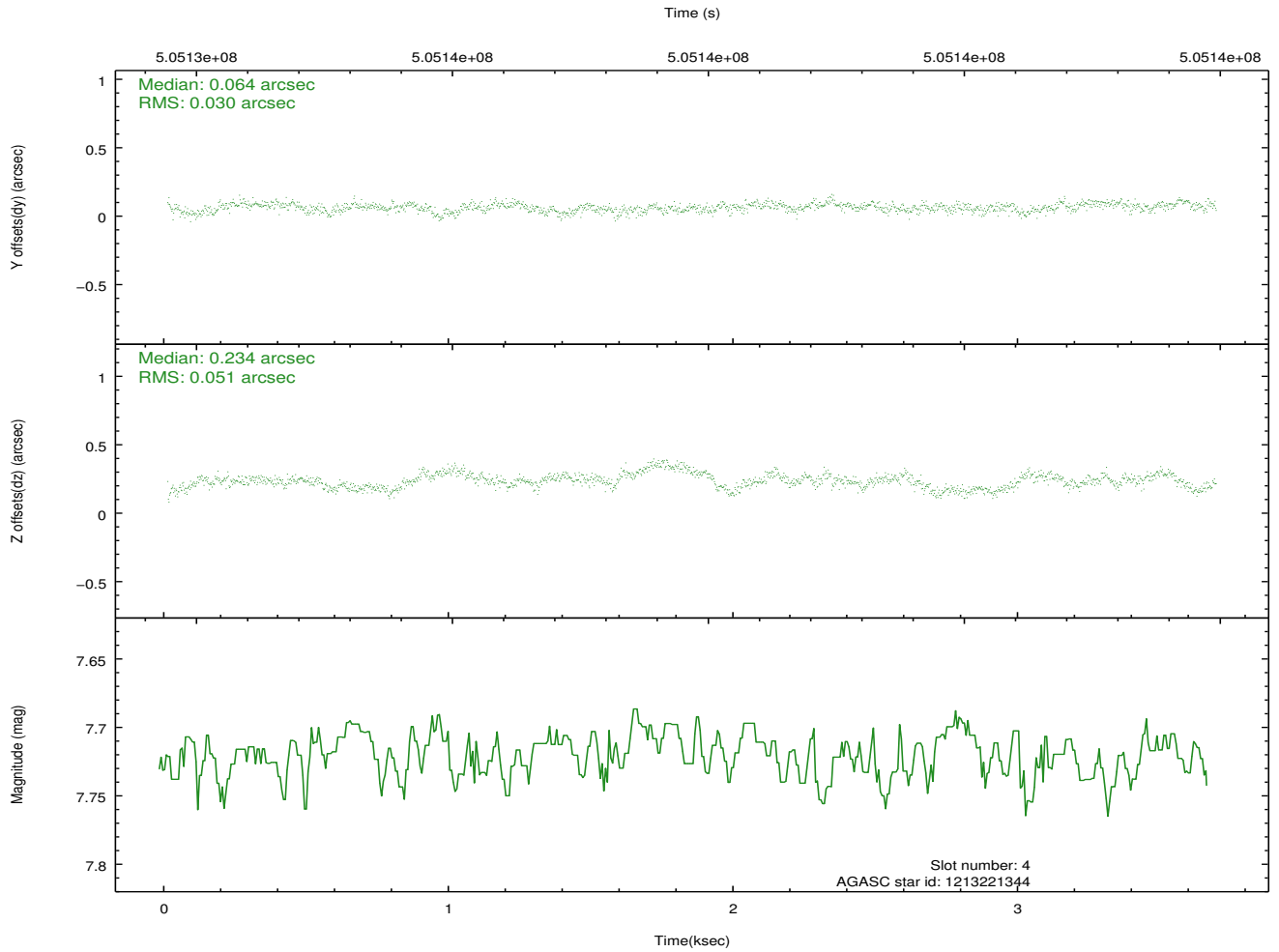
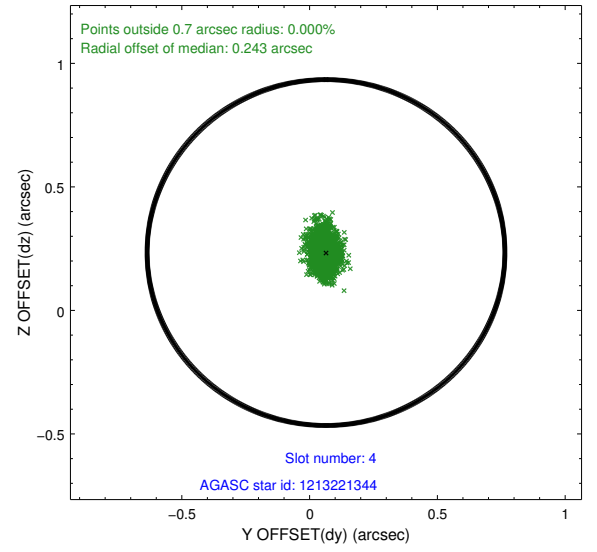
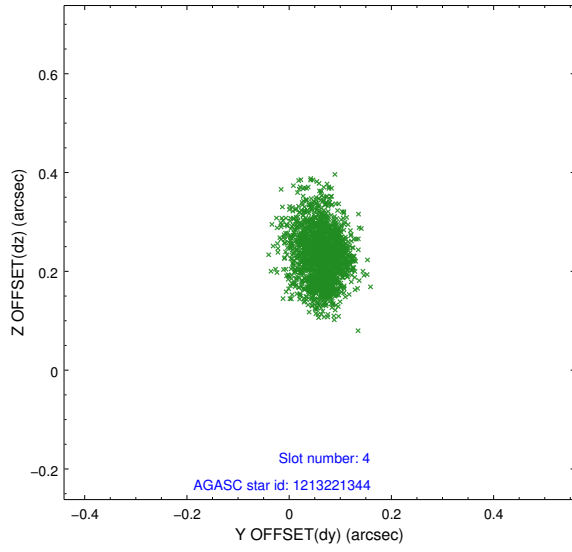
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-1	7.13	899	0.132	0.041	0.007	0.013	0.000000	0.000000	923.89	-1735.63
1	FID		ACIS-S-2	7.06	899	-0.182	-0.063	0.006	0.010	0.000000	0.000000	-771.38	-1742.01
2	FID		ACIS-S-6	7.27	899	0.029	0.026	0.006	0.011	0.000000	0.000000	388.72	803.93
3	GUIDE	used	1213215864	8.88	1796	0.268	-0.142	0.108	0.163	212.308969	-74.711727	-2103.72	698.49
4	GUIDE	used	1213221344	7.72	1798	0.064	0.234	0.062	0.105	214.498595	-74.020902	-128.15	-1905.78
5	GUIDE	used	1213222896	8.65	1798	-0.406	-0.248	0.073	0.123	211.770261	-73.826020	1125.91	605.50
6	GUIDE	used	1213220016	7.10	1798	0.101	0.336	0.083	0.140	214.989040	-73.968441	-57.06	-2423.59
7	GUIDE	used	1213071720	9.71	1797	-0.018	-0.179	0.156	0.275	209.996789	-73.582249	2298.23	2219.66

2.4 Star Slots

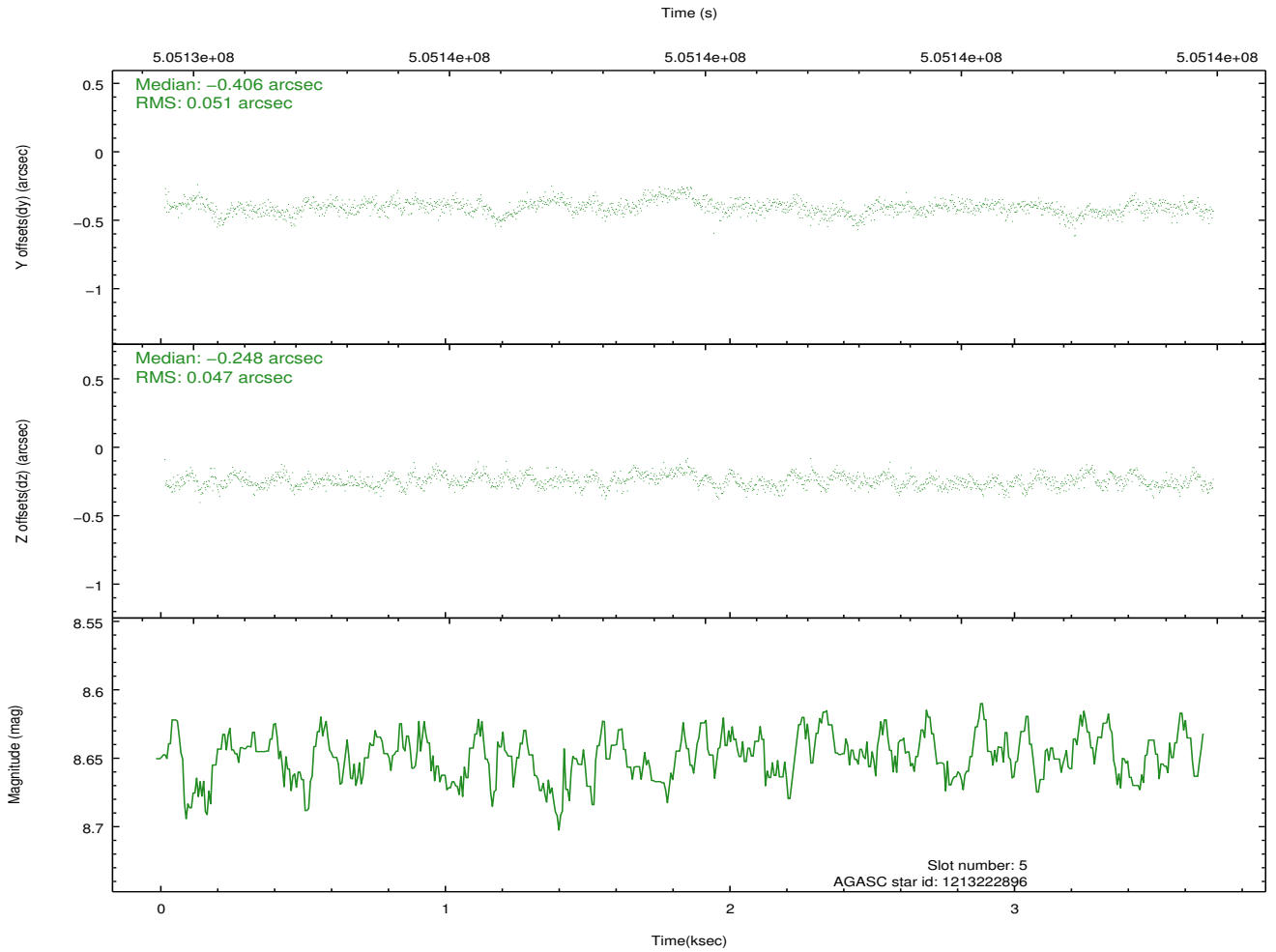
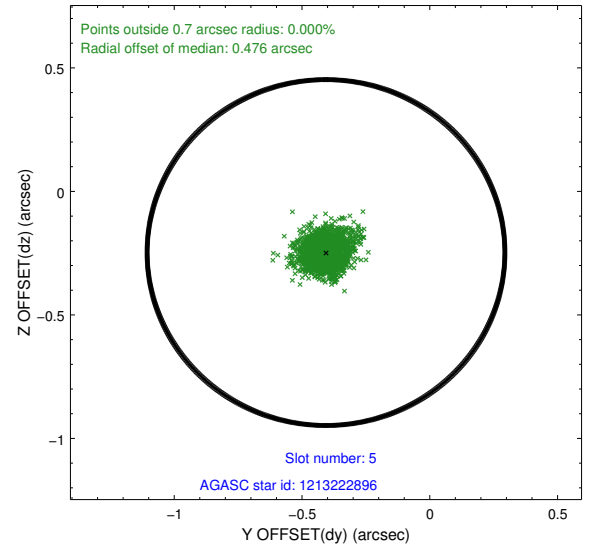
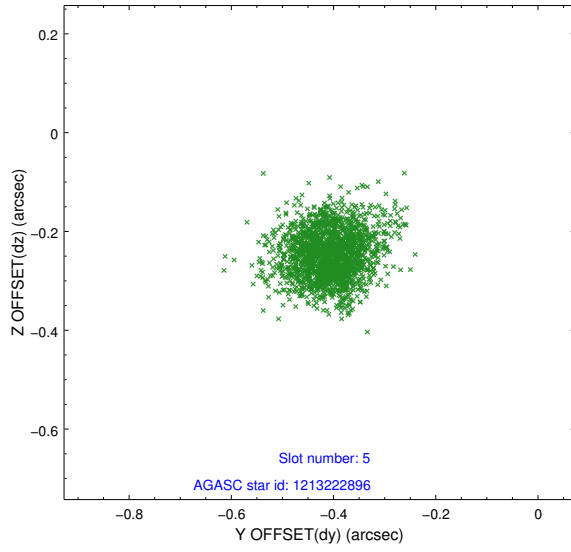
2.4.1 Slot 3



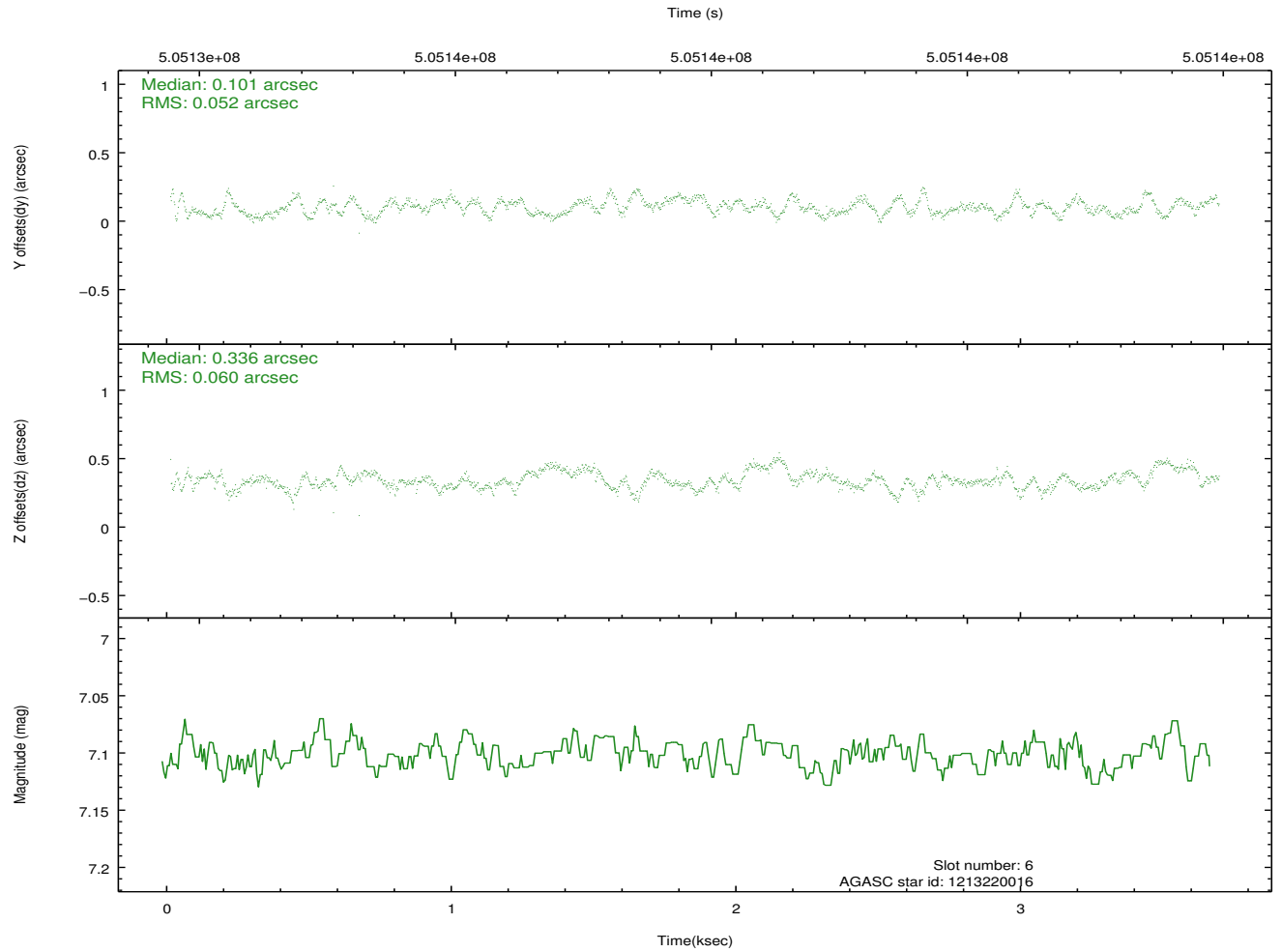
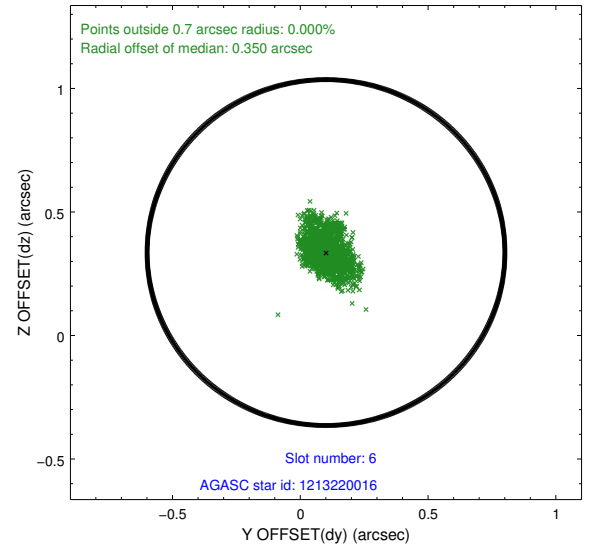
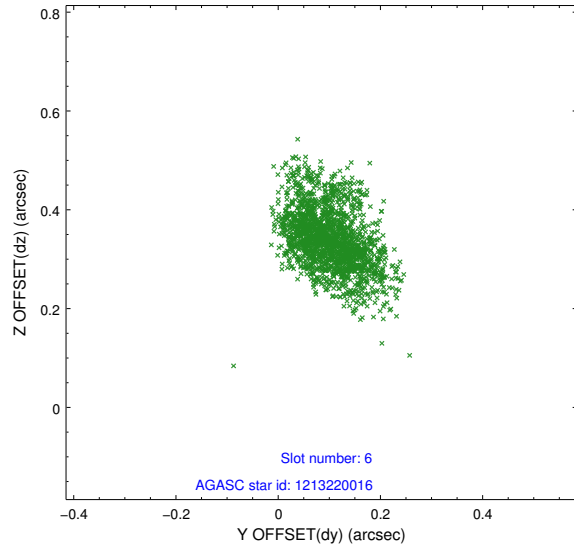
2.4.2 Slot 4



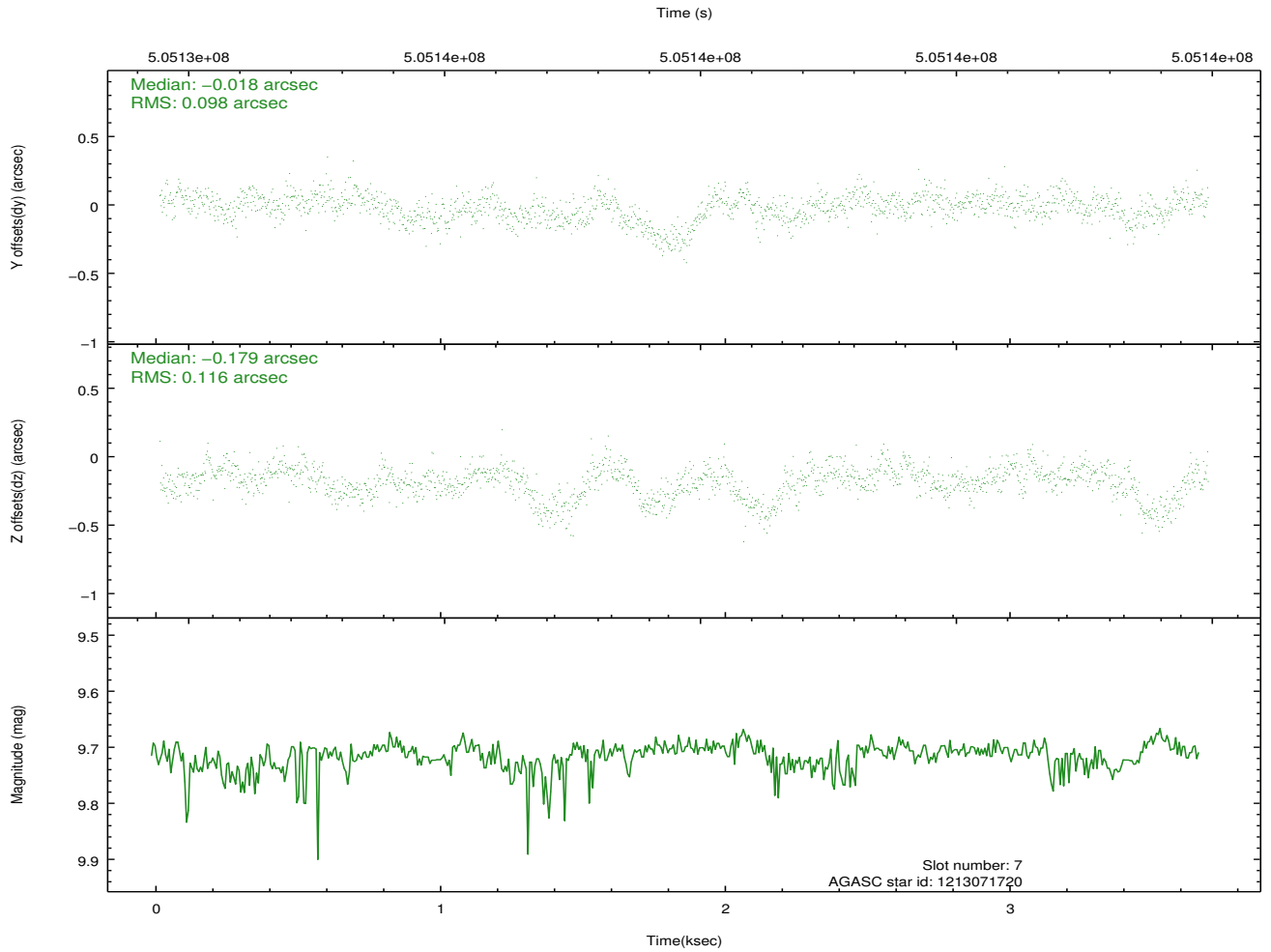
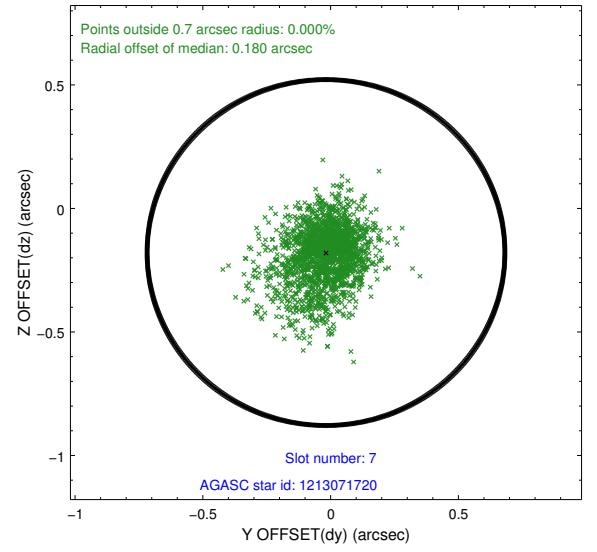
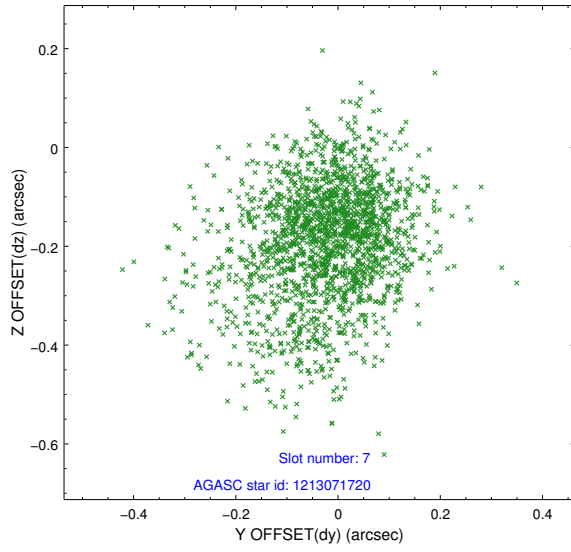
2.4.3 Slot 5



2.4.4 Slot 6

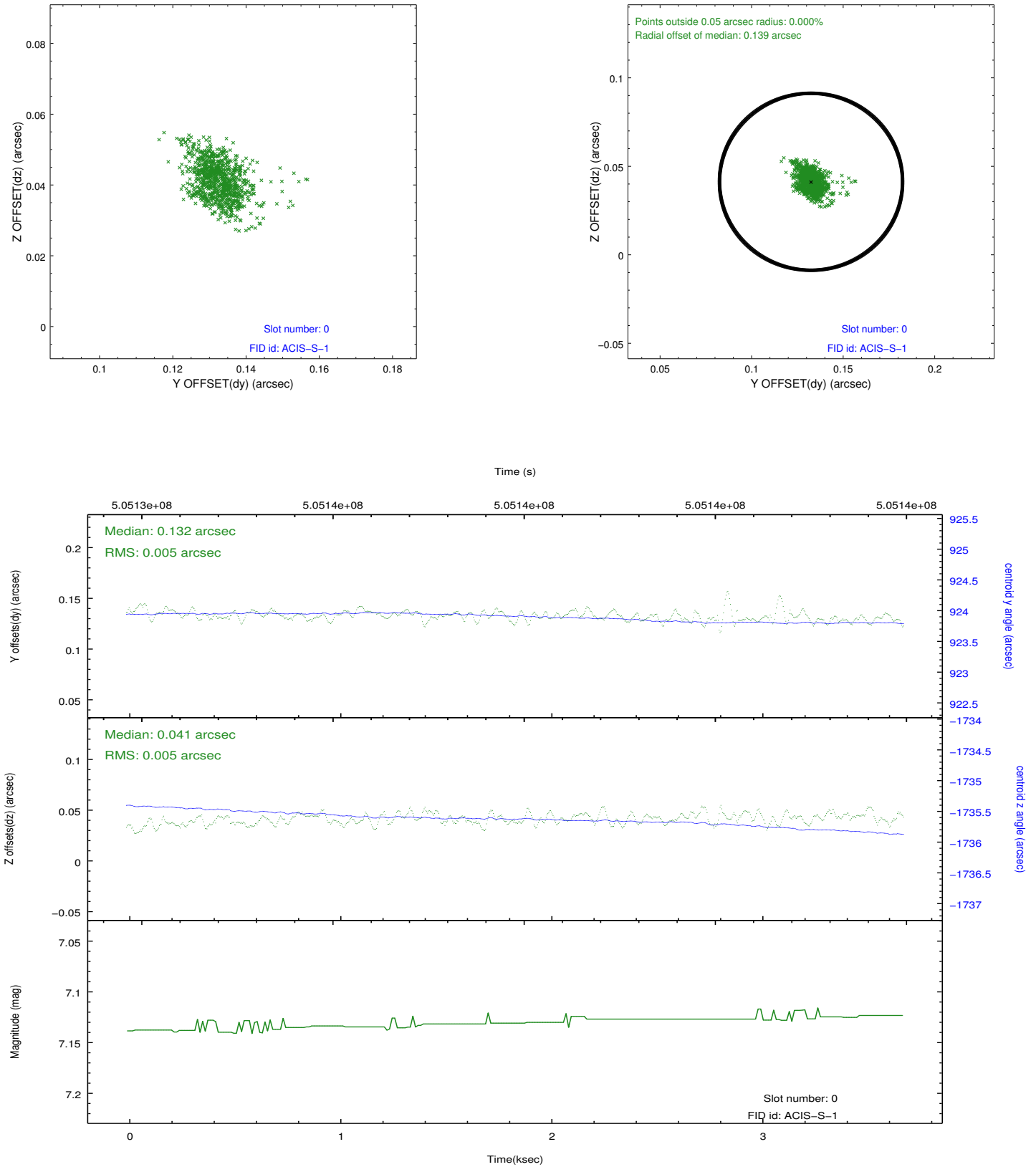


2.4.5 Slot 7

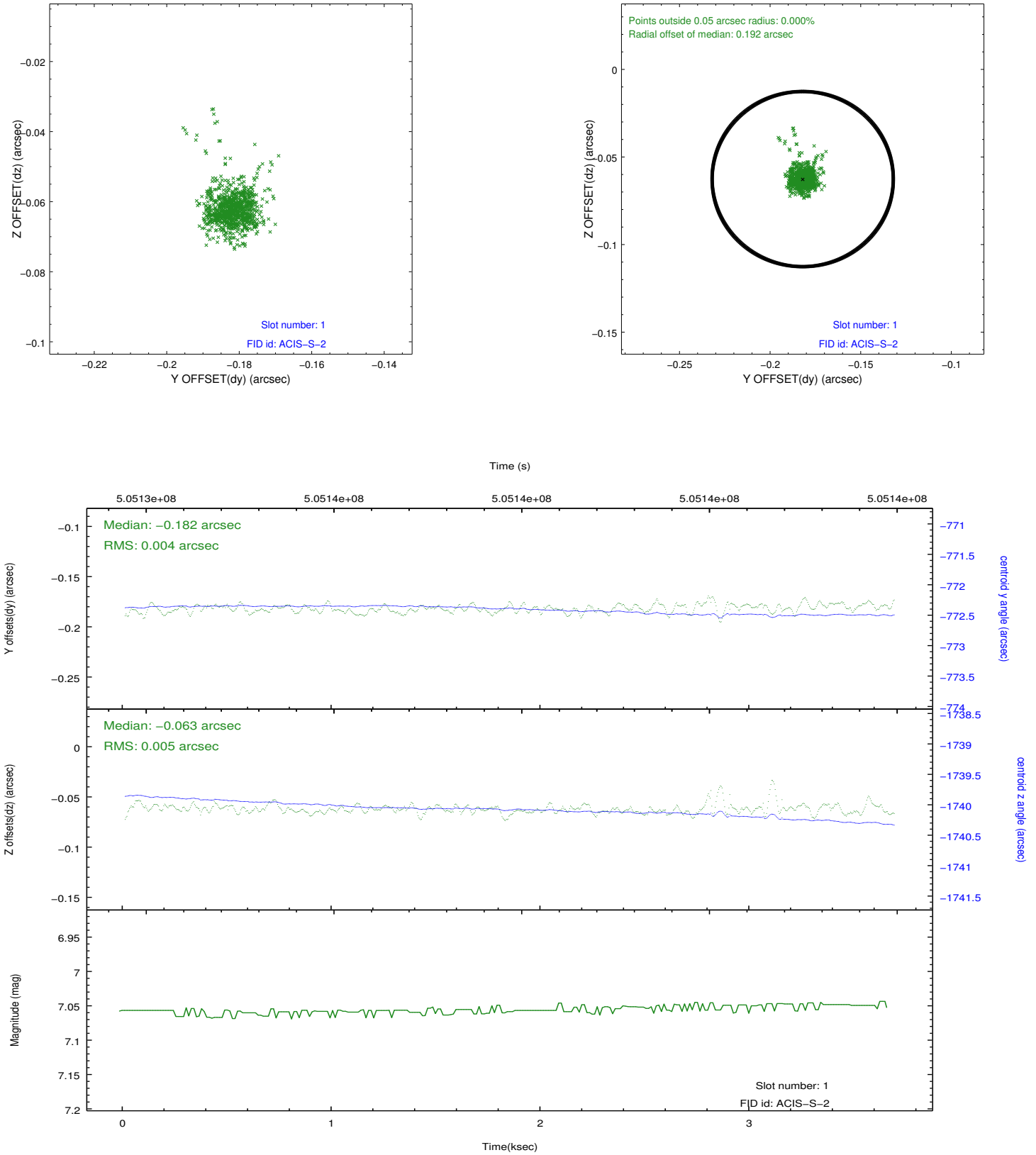


2.5 FID Slots

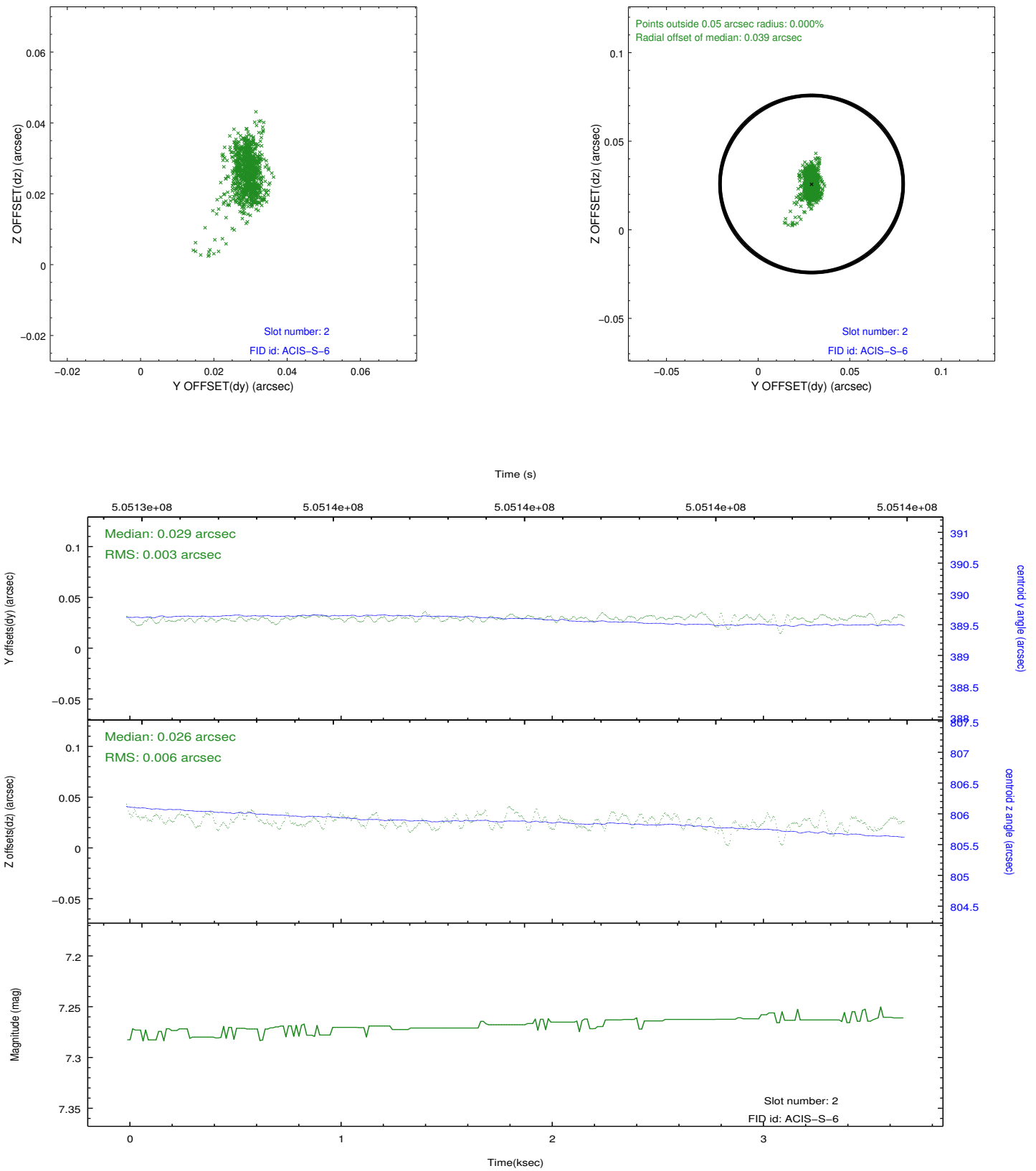
2.5.1 Slot 0



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)	2014.12.16
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	3.5650000274181

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.