

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 13295 - L2 Version 3
Chandra X-Ray Center

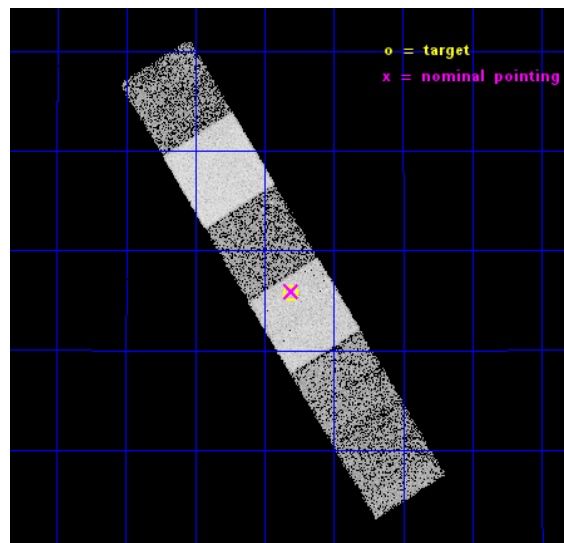
L2 Processing Date : Nov 30 2014

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1 Front

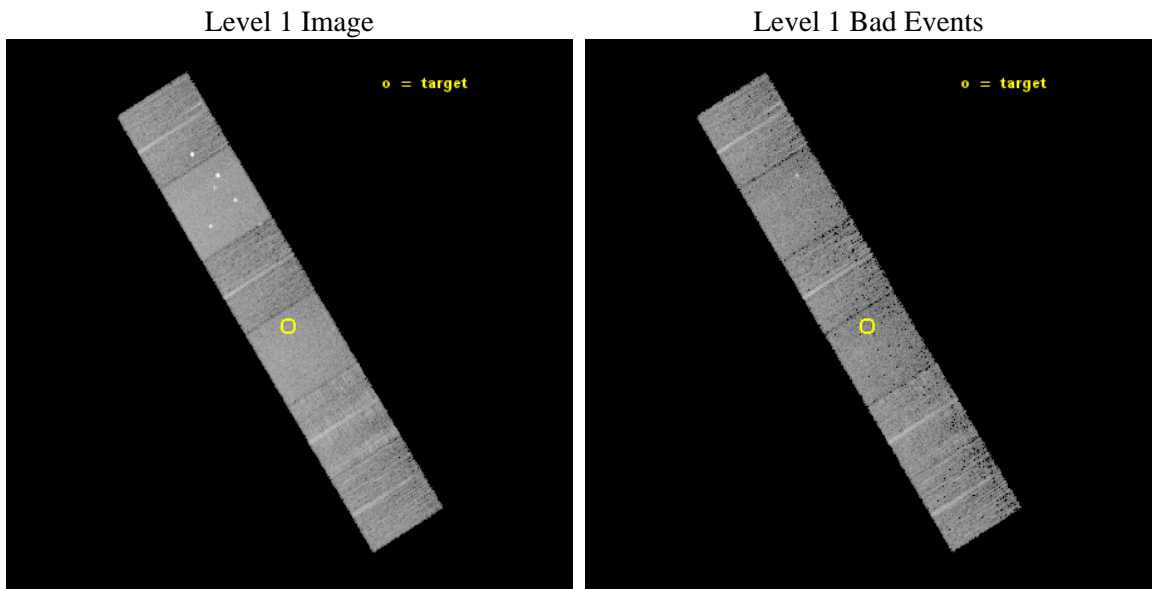
seq_num	600983	Sequence number
obs_id	13295	Observation id
title	Chandra follow-up of brignt off-nuclear X-ray sources in galaxies	P
observer	Dr Jelle Kaastra	Principal investigator
object	CXO J122518.6+144545	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	186.327917	Observer's specified target RA [deg]
dec_targ	14.762694	Observer's specified target Dec [deg]
ra_nom	186.32648633555	Nominal RA [deg]
dec_nom	14.76543091587	Nominal Dec [deg]
roll_nom	58.469660562583	Nominal Roll [deg]
revision	3	Processing version of data
ontime	9900.7999631763	Sum of GTIs [s]
livetime	9775.4300724965	Livetime [s]
ontime4	9900.7999631763	Sum of GTIs [s]
ontime5	9900.7999631763	Sum of GTIs [s]
ontime6	9900.7999631763	Sum of GTIs [s]
ontime7	9900.7999631763	Sum of GTIs [s]
ontime8	9900.7999631763	Sum of GTIs [s]
ontime9	9900.7999631763	Sum of GTIs [s]
l2events	88275	Number of level 2 events



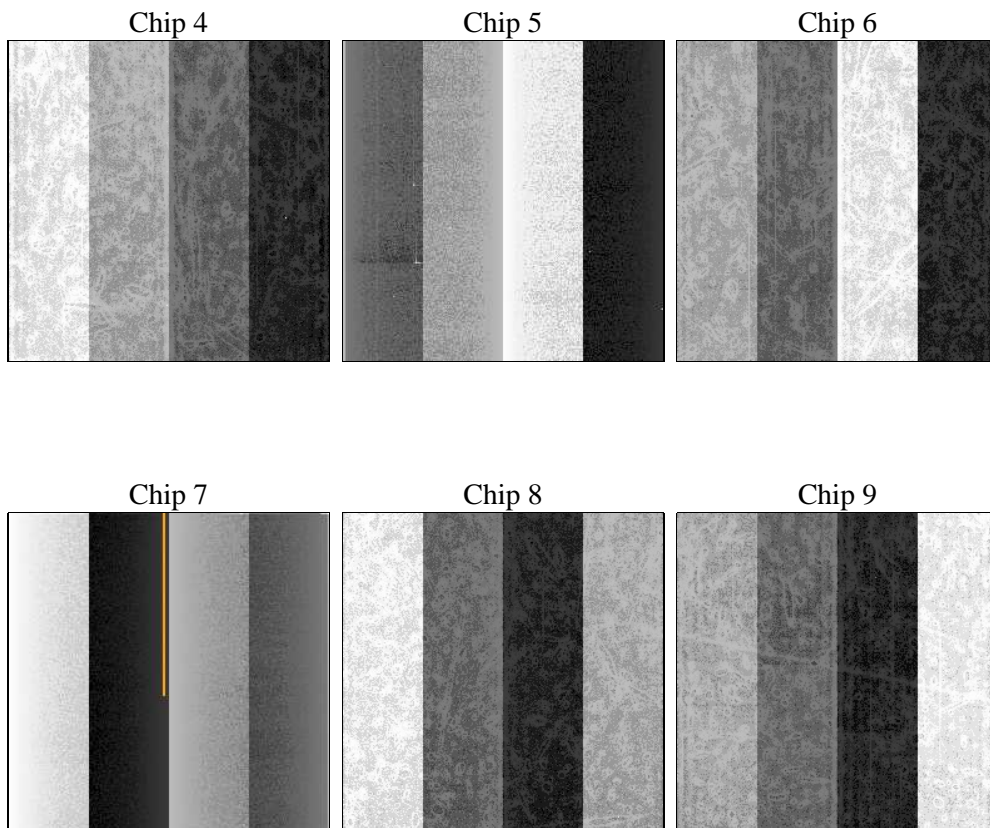
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	9900.7999631763	Sum of GTIs [s]
caldsver	4.6.4	 	ontime4	9900.7999631763	Sum of GTIs [s]
date	2014-12-01T04:50:04	Date and time of file creation	ontime5	9900.7999631763	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	9900.7999631763	Sum of GTIs [s]
			ontime7	9900.7999631763	Sum of GTIs [s]
			ontime8	9900.7999631763	Sum of GTIs [s]
			ontime9	9900.7999631763	Sum of GTIs [s]
			l1events	374373	Number of level 1 events

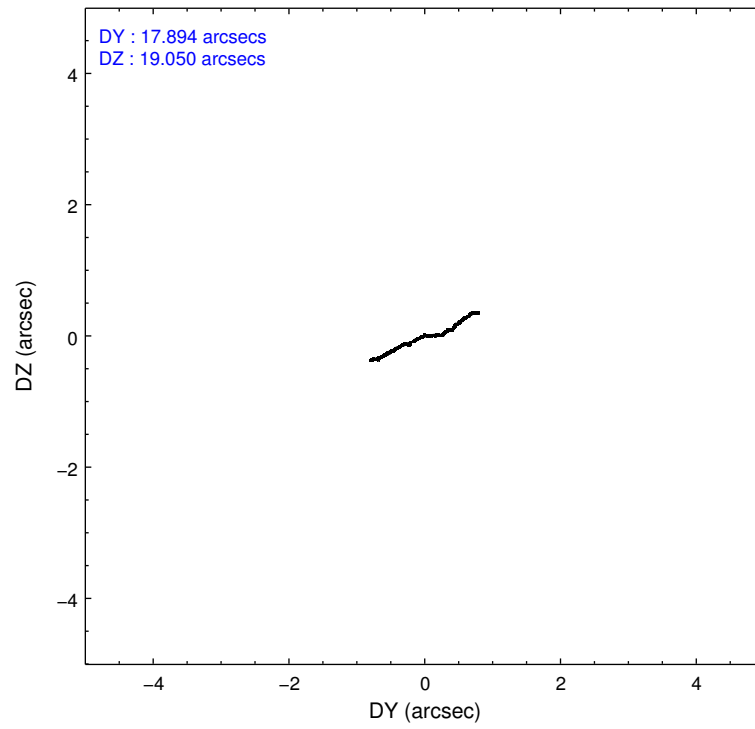
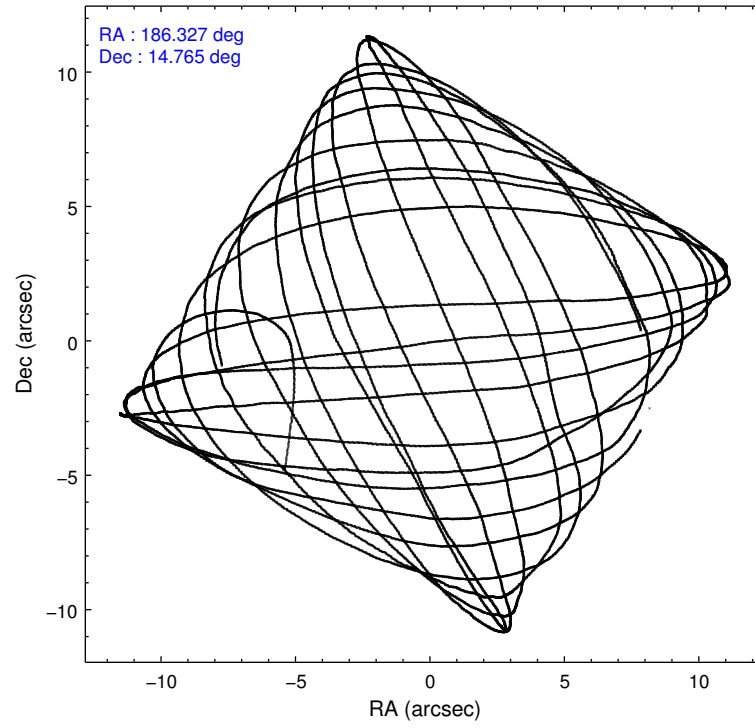
2.1.4 Events

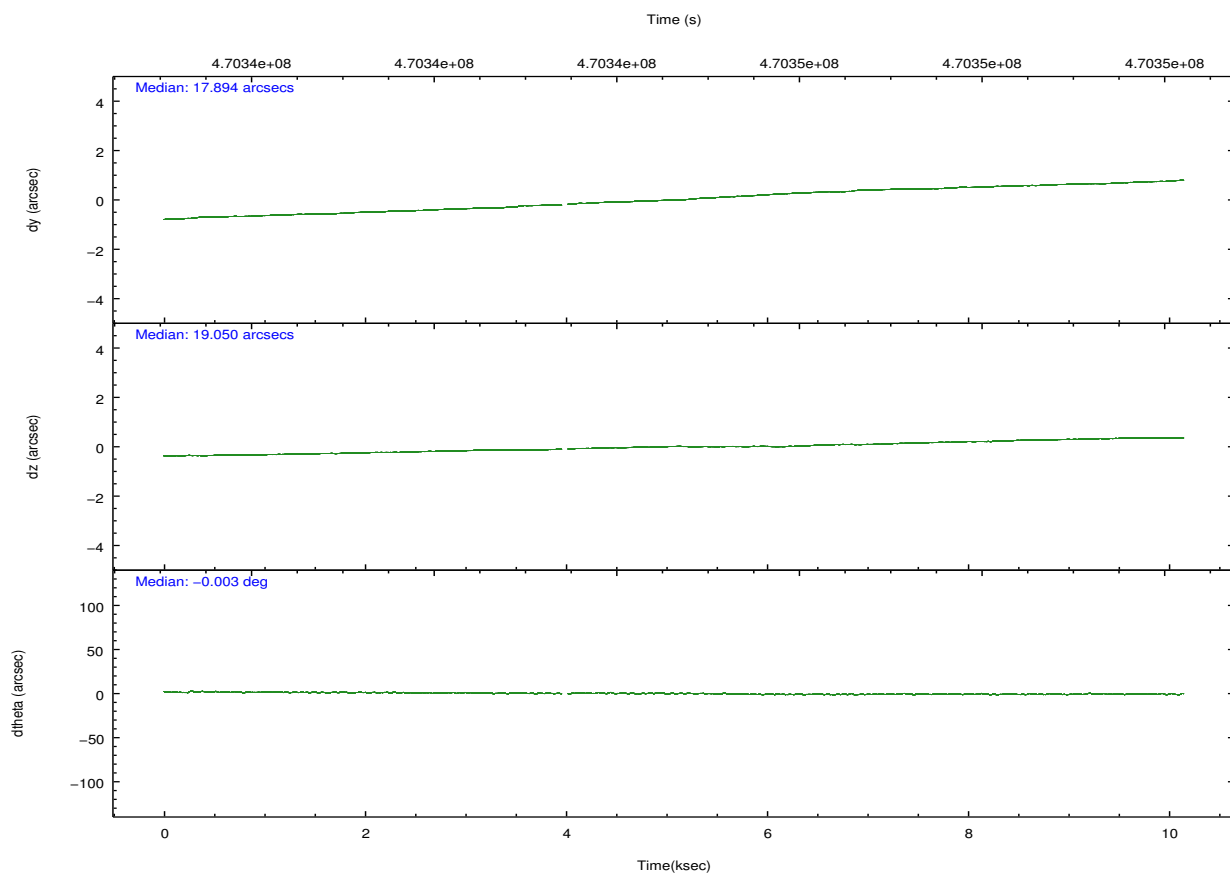
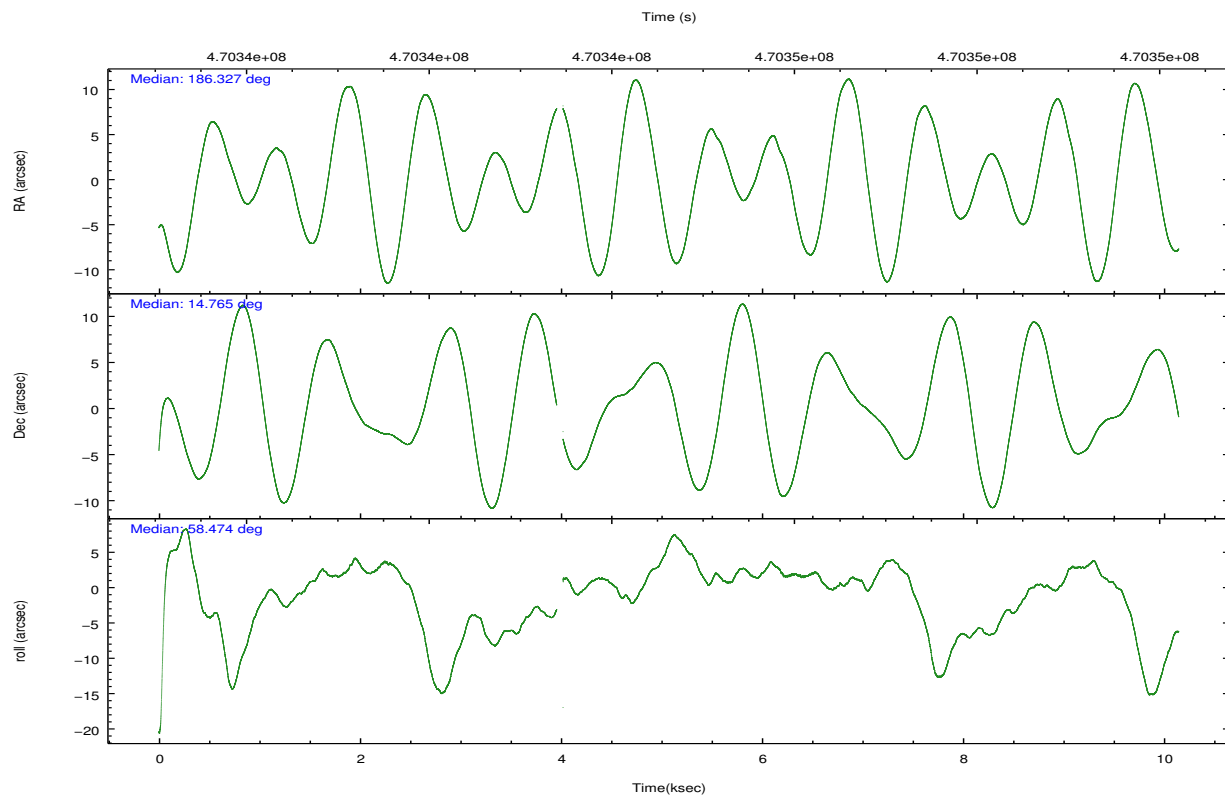
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	57334	85488	49299	66692	66730	48830	grade 0 events	5536	6001	2294	2691	5260	2475
rejected events	47937	42103	43030	37425	48707	42242		9%	7%	4%	4%	7%	5%
rejected %	83%	49%	87%	56%	72%	86%	grade 1 events	51	478	24	79	46	23
								0%	0%	0%	0%	0%	0%
							grade 2 events	1471	13839	1407	5808	4341	1487
								2%	16%	2%	8%	6%	3%
							grade 3 events	681	1380	631	2530	1761	626
								1%	1%	1%	3%	2%	1%
							grade 4 events	686	1345	635	2552	1714	624
								1%	1%	1%	3%	2%	1%
							grade 5 events	2499	5977	2571	6870	3739	2652
								4%	6%	5%	10%	5%	5%
							grade 6 events	1088	21114	1342	15903	5056	1415
								1%	24%	2%	23%	7%	2%
							grade 7 events	45322	35354	40395	30259	44813	39528
								79%	41%	81%	45%	67%	80%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-456789	ACIS-456789	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	186.326182	186.3264863355461	CCD I2 on	N	N
[deg] Pointing Dec	14.738071	14.76543091587036	CCD I3 on	N	N
[deg] Pointing Roll	58.313152	58.4696605625834	CCD S0 on	O5	Y
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O4	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	O1	Y
[mm] SIM translation stage pos	-190.132523	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	O2	Y
[s] Observation start time (MET)	470339693.184000	470338627.41473	CCD S5 on	O3	Y
Observation start date	2012-11-26T17:53:46	2012-11-26T17:37:07	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	470349693.184000	470350680.39038	On-chip summing requested	N	N
Observation end date	2012-11-26T20:40:26	2012-11-26T20:58:00	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



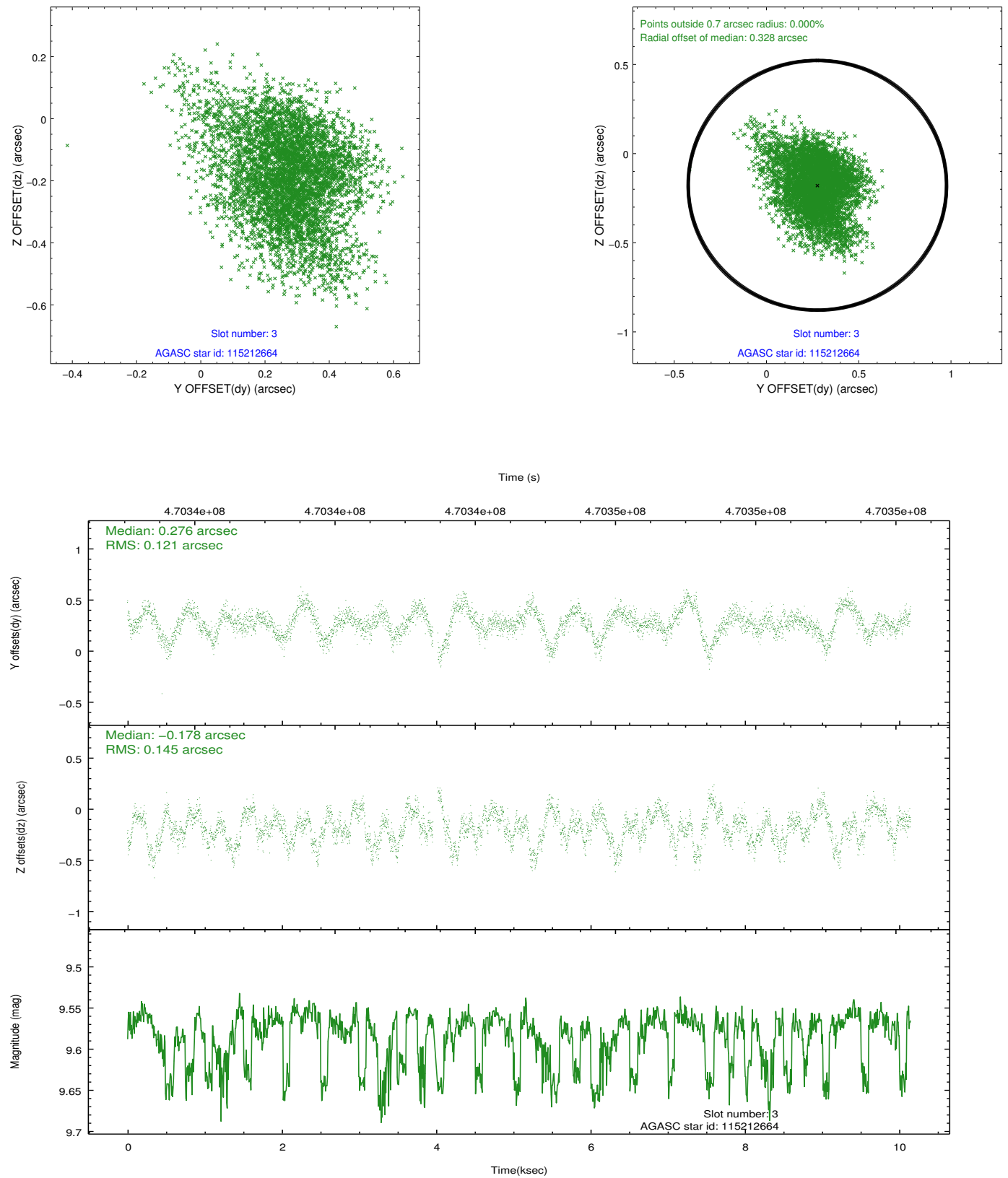


Slot Statistics

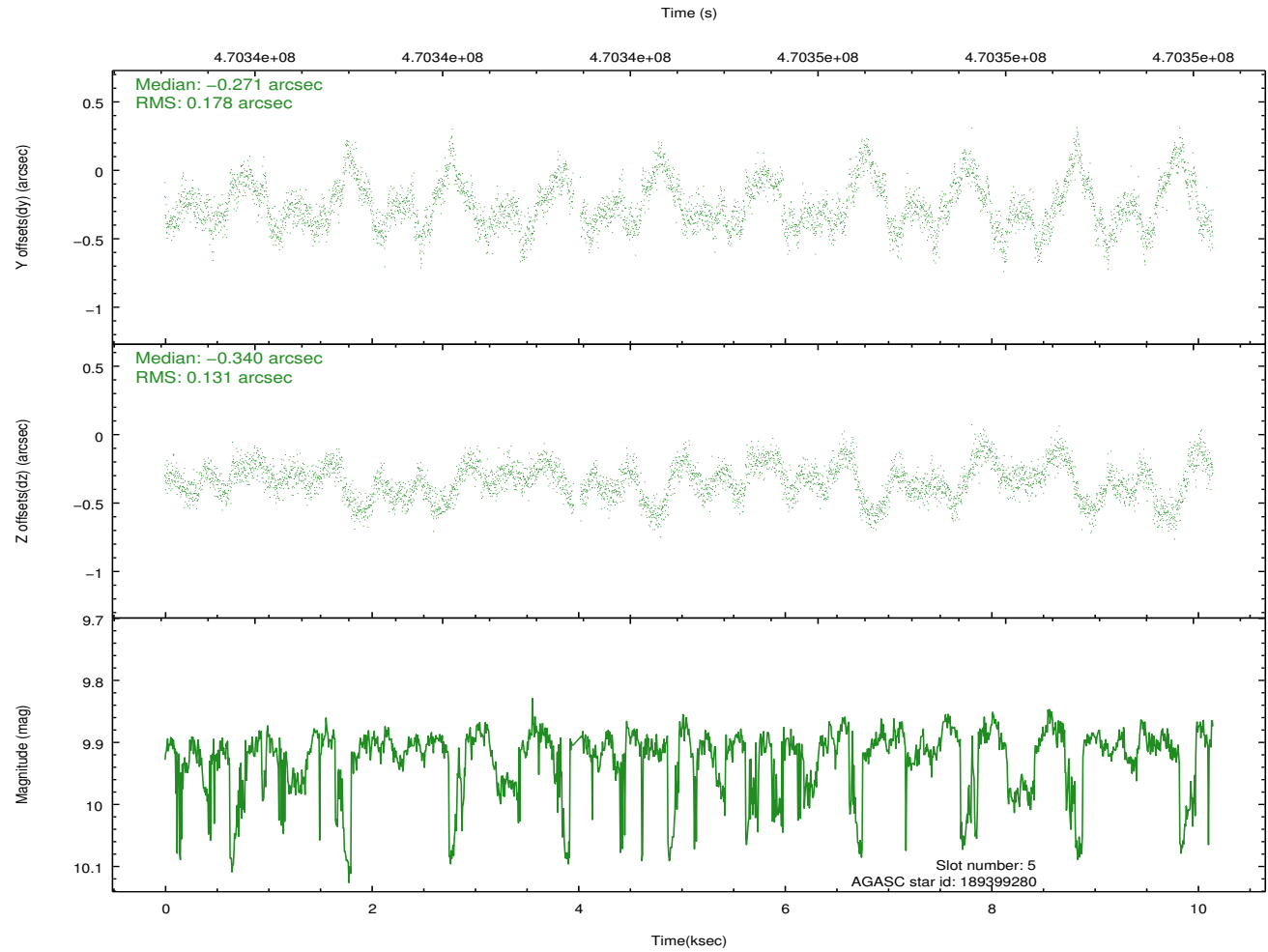
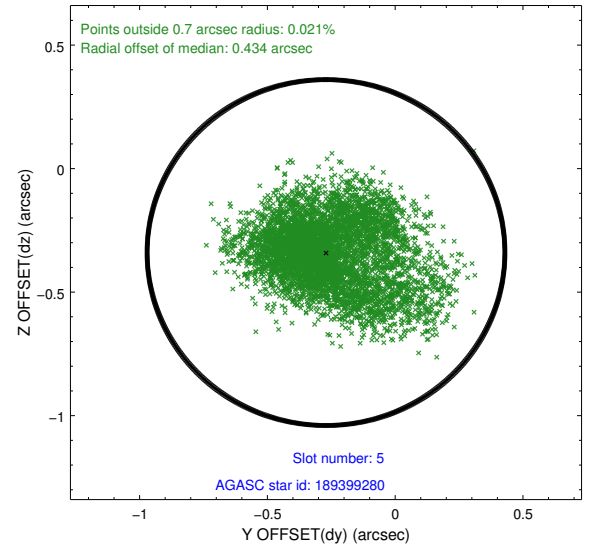
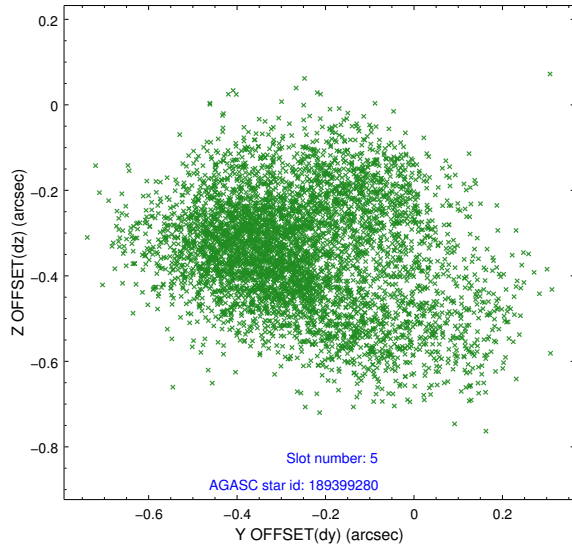
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.92	2460	-0.095	-0.037	0.011	0.017	0.000000	0.000000	-771.08	-1740.50
1	FID		ACIS-S-4	7.01	2460	0.238	0.056	0.024	0.032	0.000000	0.000000	2142.31	167.49
2	FID		ACIS-S-5	7.03	2460	-0.174	-0.010	0.015	0.024	0.000000	0.000000	-1823.30	161.75
3	GUIDE	used	115212664	9.58	4895	0.276	-0.178	0.198	0.334	186.112214	14.500161	-1121.07	184.59
4	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
5	GUIDE	used	189399280	9.91	4877	-0.271	-0.340	0.234	0.395	186.536897	15.337958	2221.81	511.80
6	GUIDE	used	189403320	10.02	4889	-0.396	0.579	0.245	0.399	186.650538	15.117423	1755.24	-240.84
7	GUIDE	used	115212320	10.58	4833	0.359	-0.053	0.264	0.426	185.628045	14.393902	-2328.72	1422.82

2.4 Star Slots

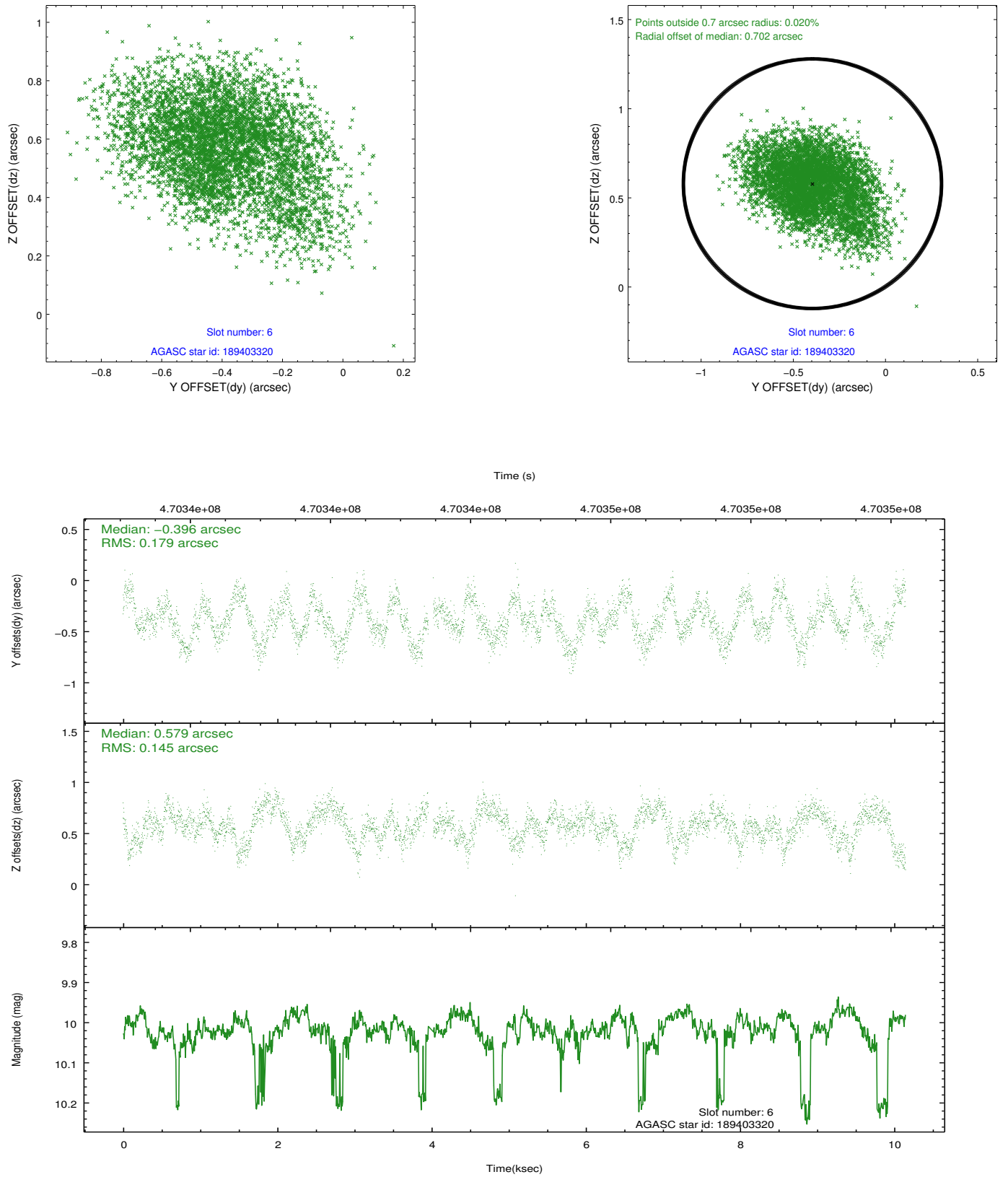
2.4.1 Slot 3



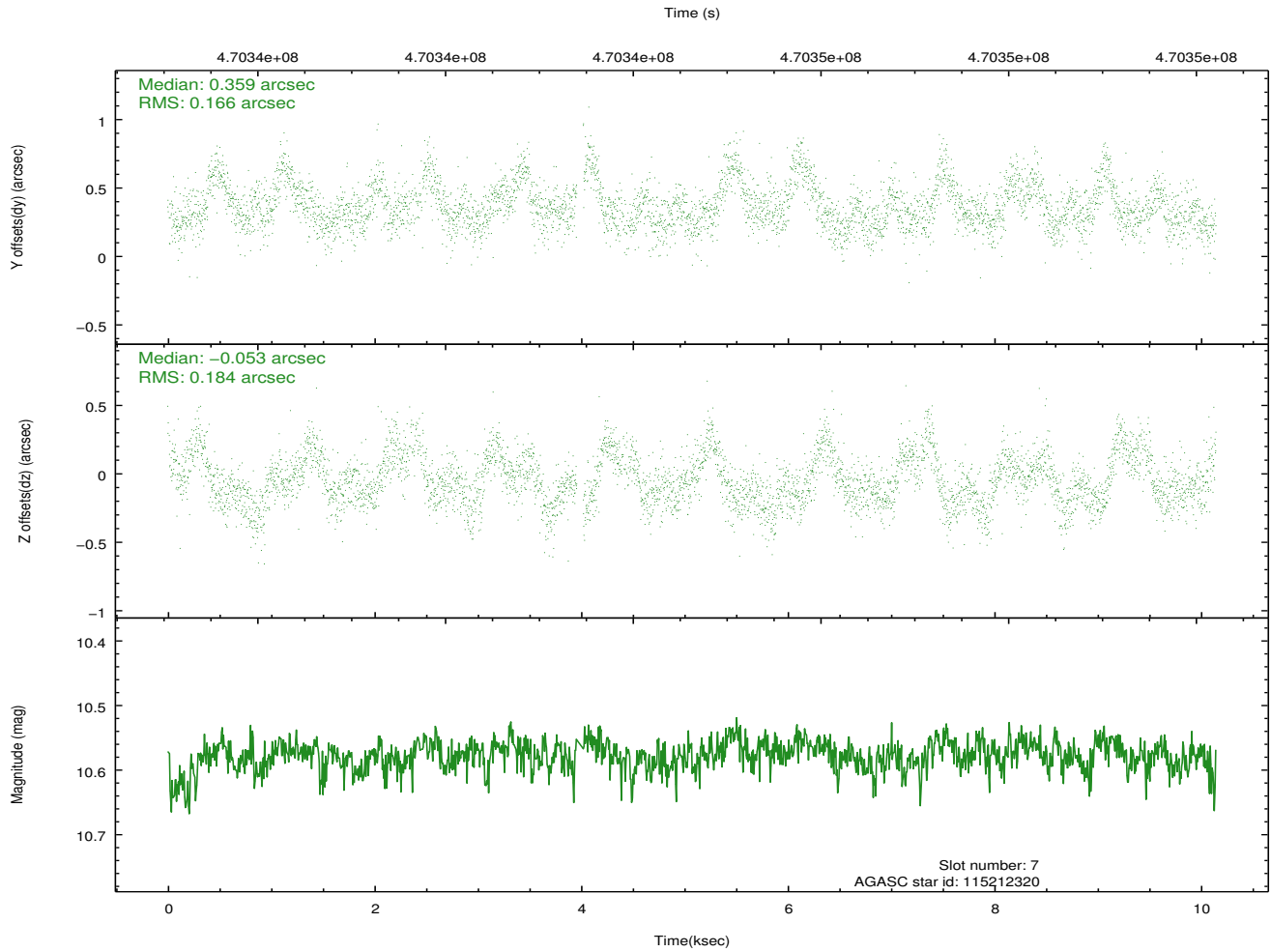
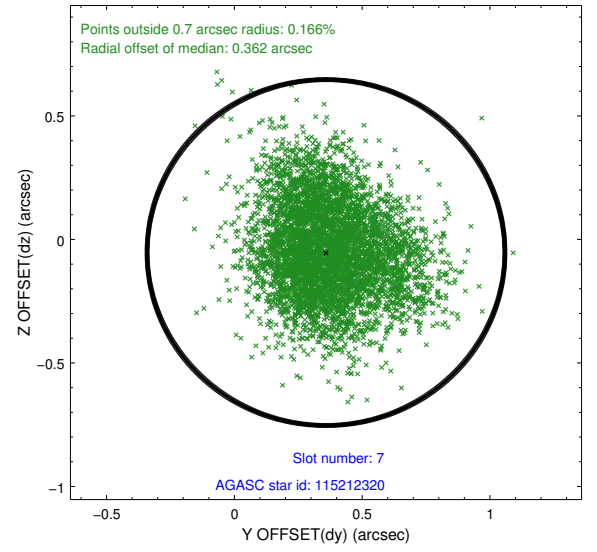
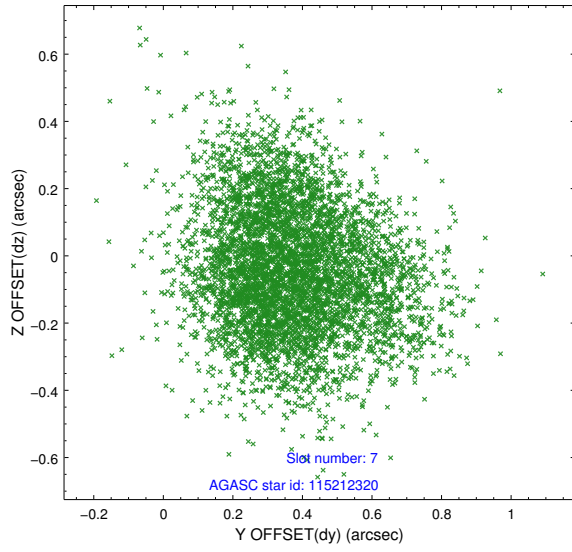
2.4.2 Slot 5



2.4.3 Slot 6

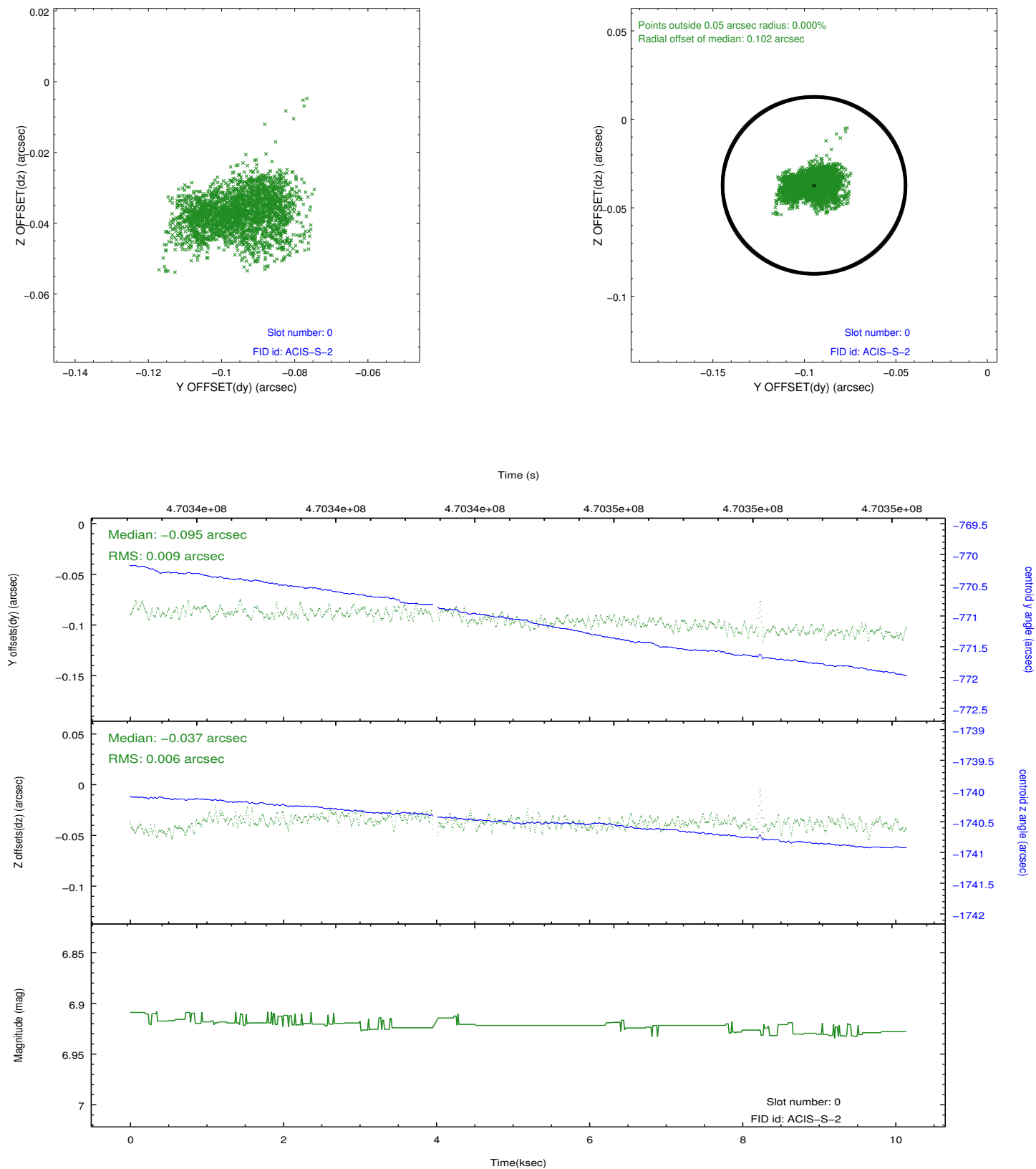


2.4.4 Slot 7

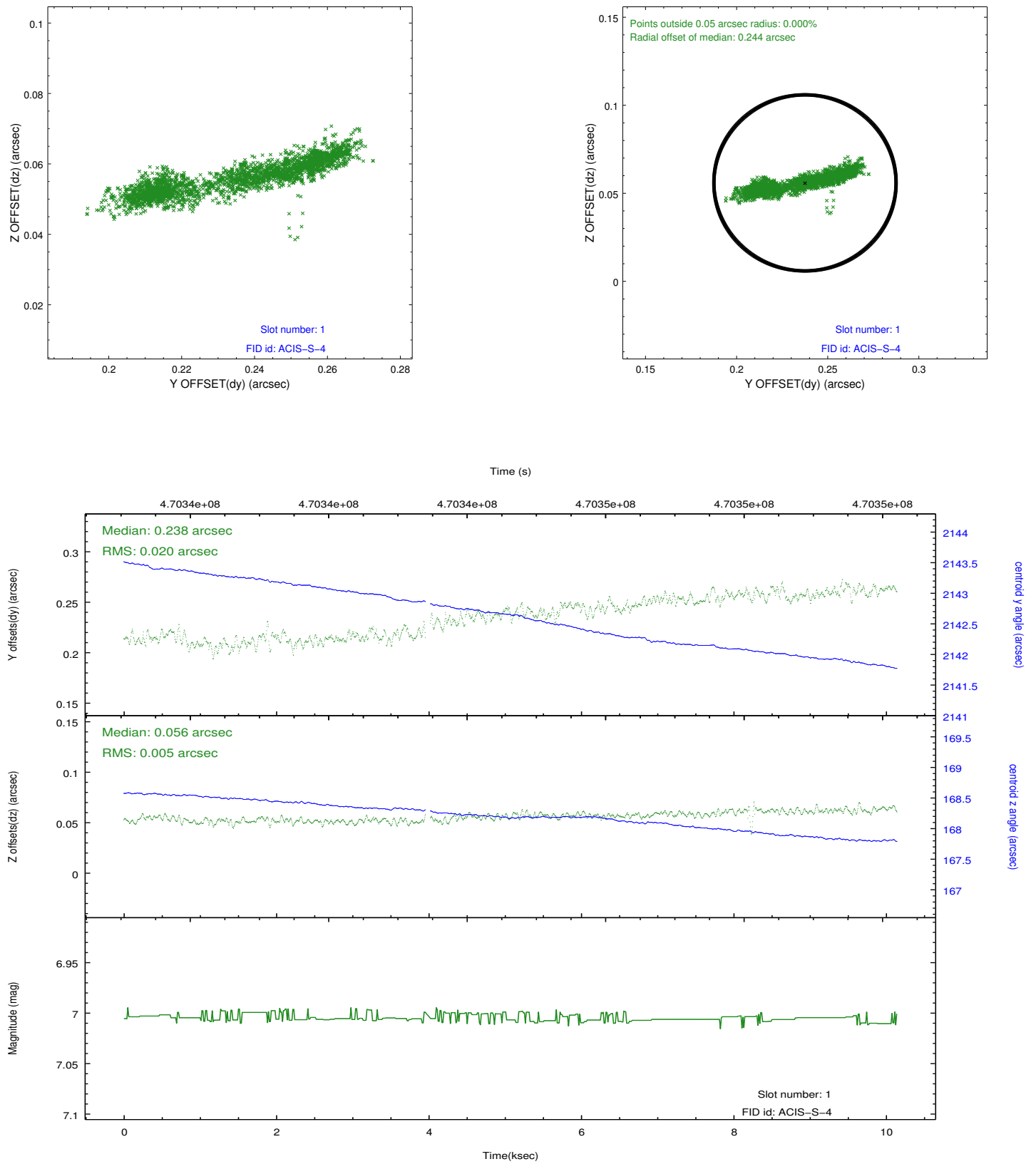


2.5 FID Slots

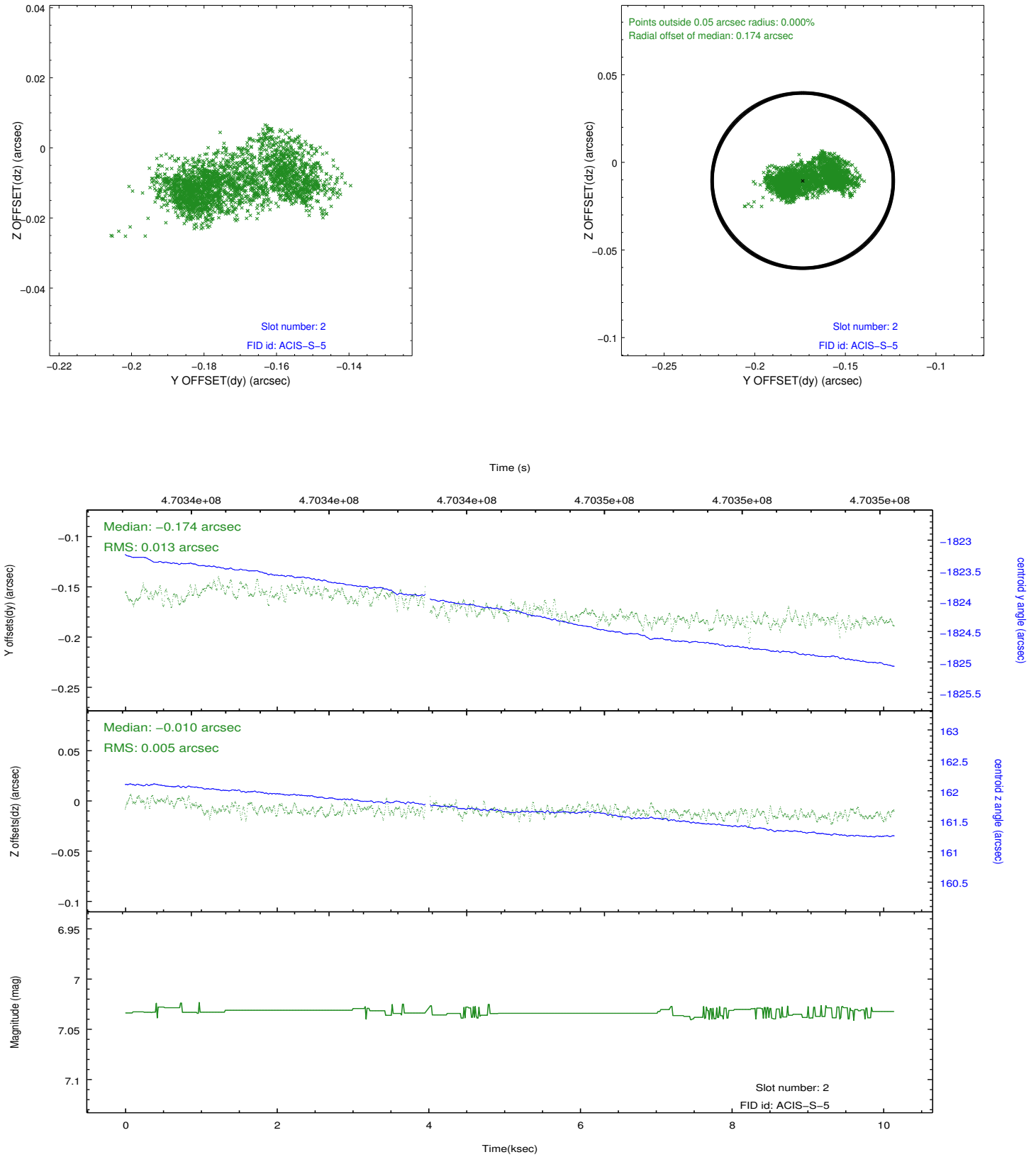
2.5.1 Slot 0



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)	2014.12.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.9007999631763

A.2 Comments

The guide star in slot 4 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this star from the solution.

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.