

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 13373 - L2 Version 2
Chandra X-Ray Center

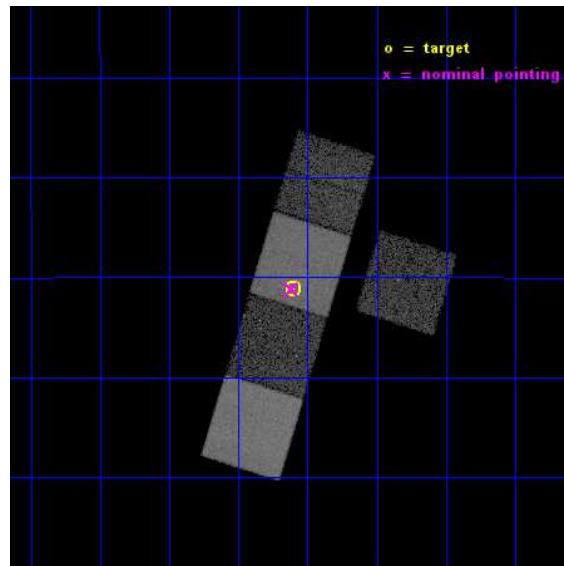
L2 Processing Date : Nov 26 2014

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1 Front

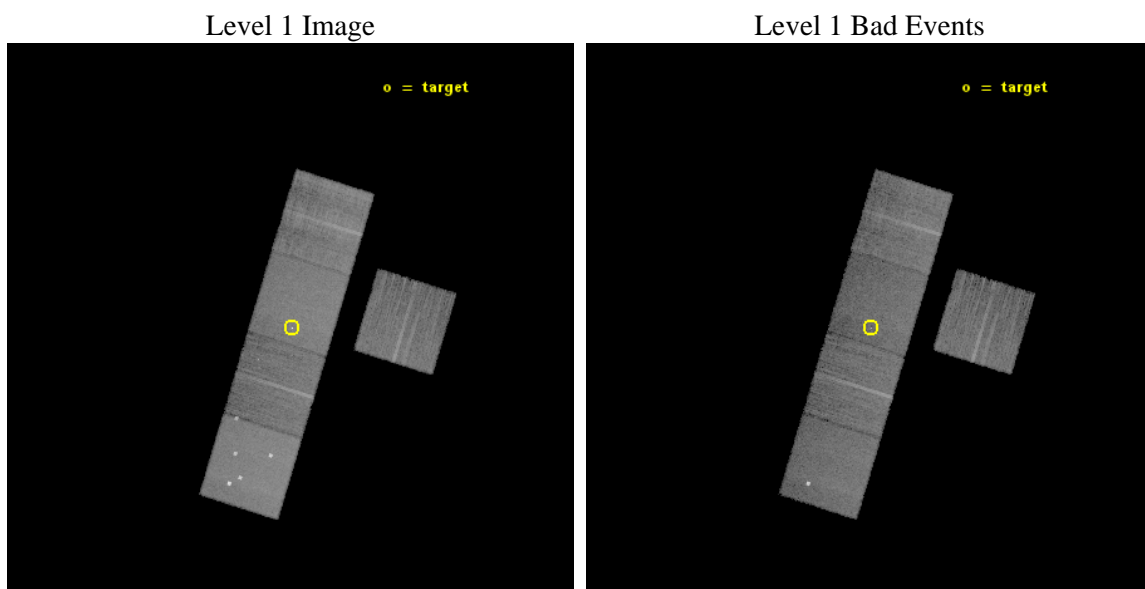
seq_num	702580	Sequence number
obs_id	13373	Observation id
title	PKS2155-152: Measuring the mechanical energy of radiatively bright AGN	Proposal title
observer	Dr. Stephen Murray	Principal investigator
object	PKS2155-152	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	329.52625	Observer's specified target RA [deg]
dec_targ	-15.019306	Observer's specified target Dec [deg]
ra_nom	329.52929409277	Nominal RA [deg]
dec_nom	-15.020091571309	Nominal Dec [deg]
roll_nom	287.15740841753	Nominal Roll [deg]
revision	2	Processing version of data
ontime	20063.200154305	Sum of GTIs [s]
livetime	19801.059673975	Livetime [s]
ontime3	20060.059104085	Sum of GTIs [s]
ontime5	20063.200154305	Sum of GTIs [s]
ontime6	20063.200154305	Sum of GTIs [s]
ontime7	20063.200154305	Sum of GTIs [s]
ontime8	20063.200154305	Sum of GTIs [s]
l2events	180621	Number of level 2 events



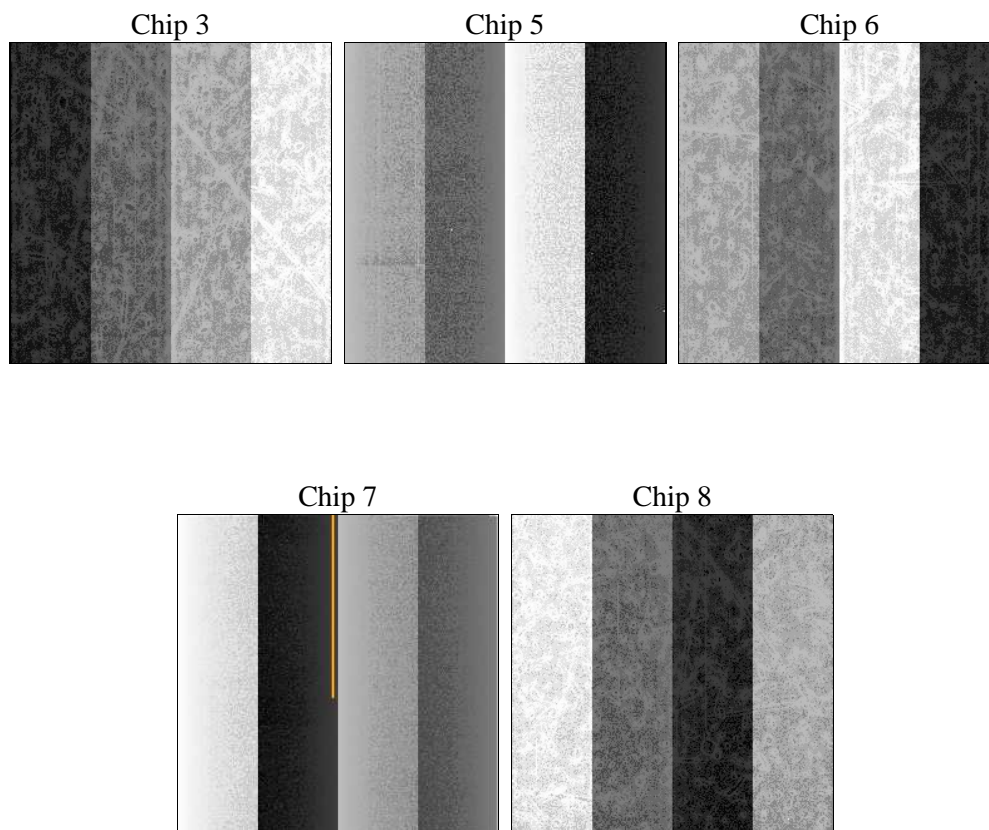
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	20000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	20063.200154305	Sum of GTIs [s]
caldbver	4.6.4	 	ontime3	20060.059104085	Sum of GTIs [s]
date	2014-11-27T04:04:57	Date and time of file creation	ontime5	20063.200154305	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	20063.200154305	Sum of GTIs [s]
			ontime7	20063.200154305	Sum of GTIs [s]
			ontime8	20063.200154305	Sum of GTIs [s]
			l1events	697232	Number of level 1 events

2.1.4 Events

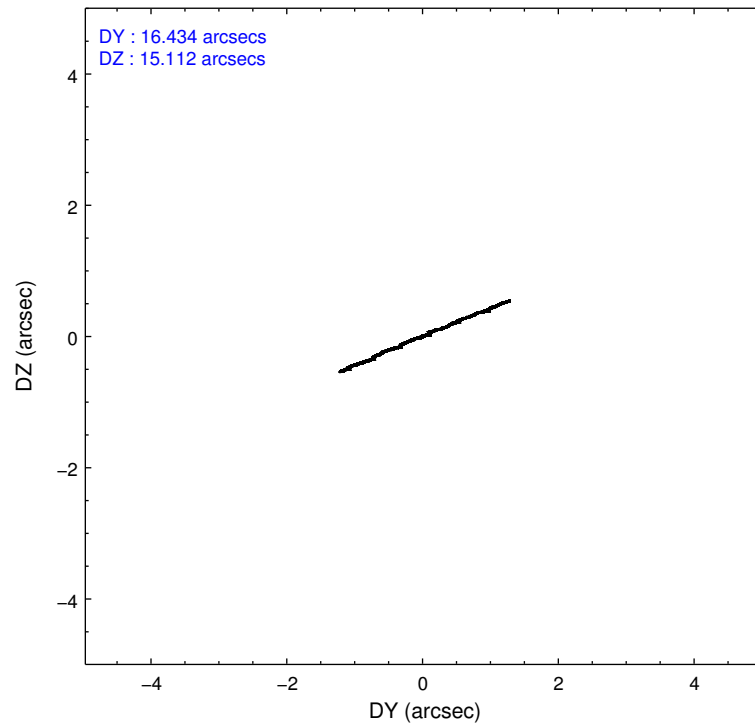
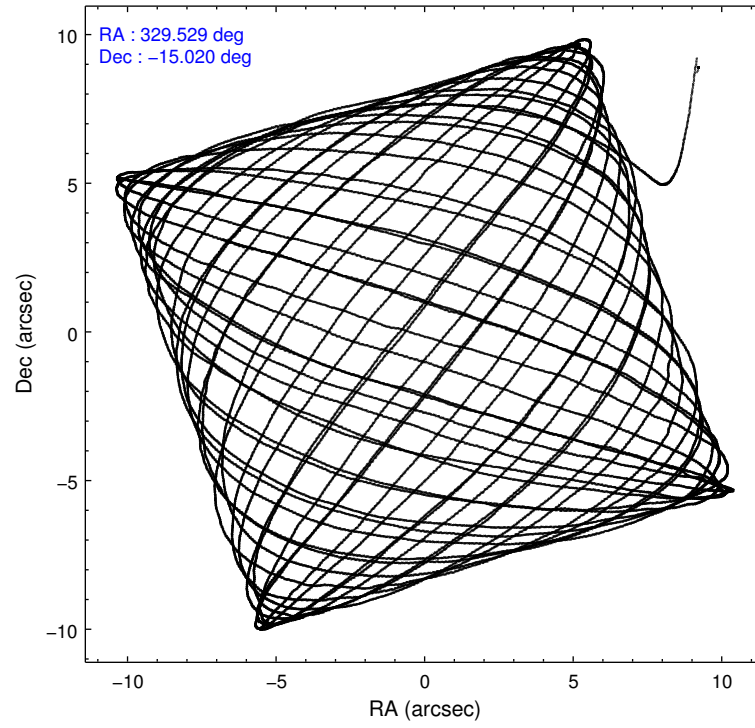
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	105320	190896	109990	149741	141285
rejected events	93336	95012	96749	82803	105106
rejected %	88%	49%	87%	55%	74%

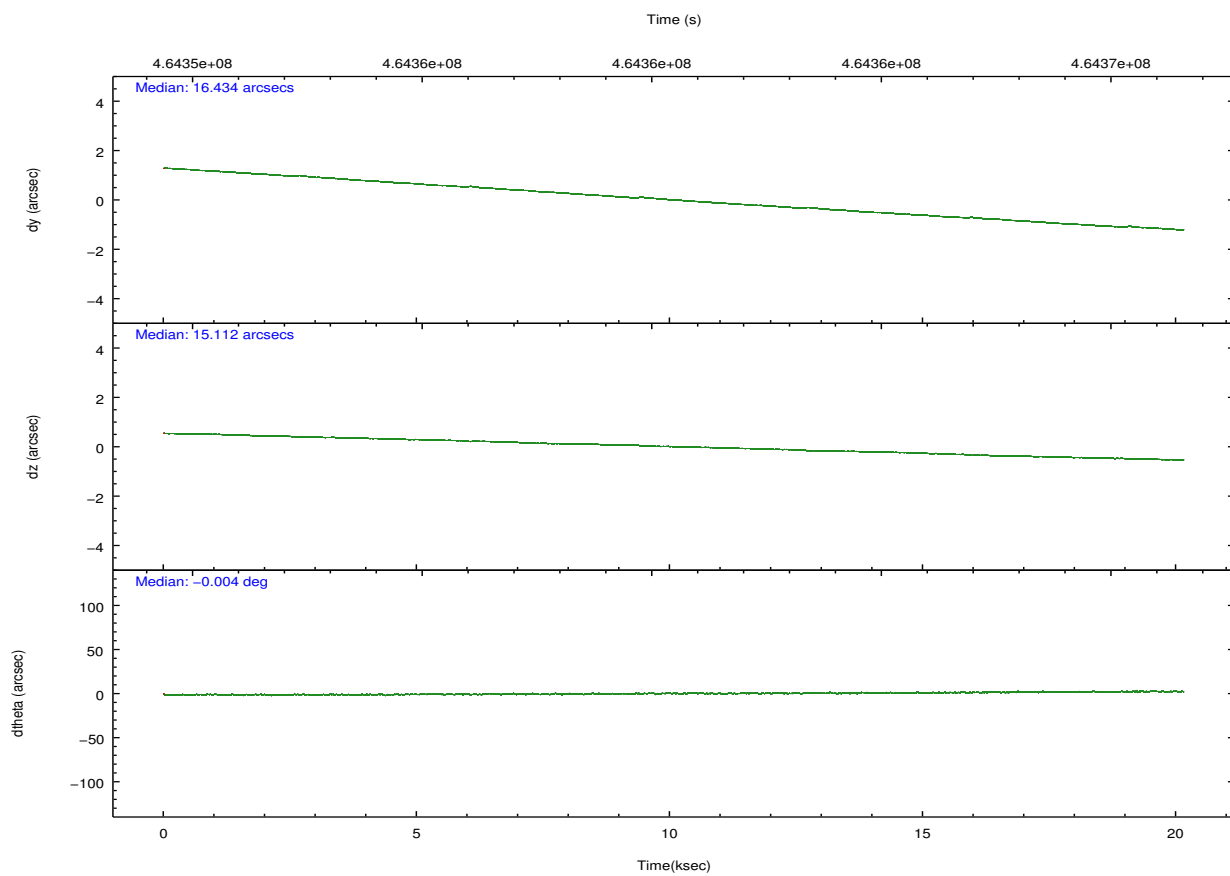
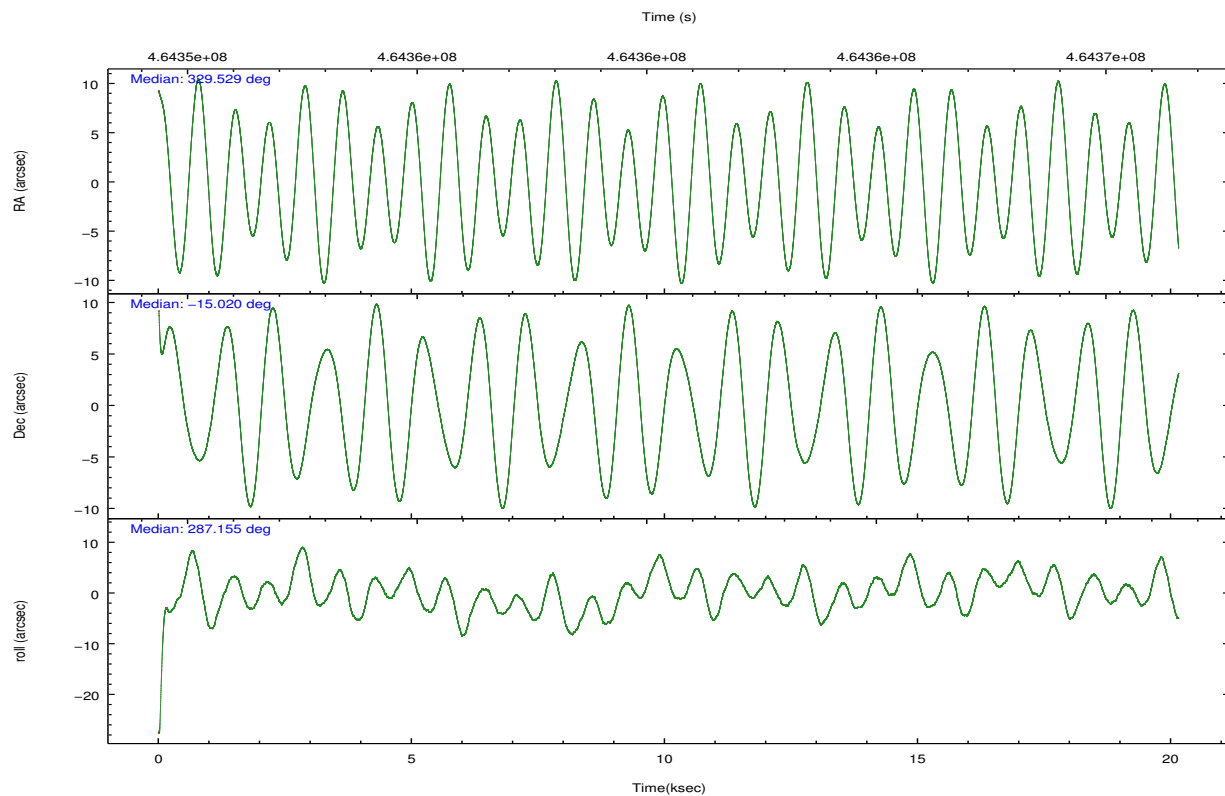
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	4191	16868	4593	6460	10002
	3%	8%	4%	4%	7%
grade 1 events	63	324	62	231	102
	0%	0%	0%	0%	0%
grade 2 events	2678	27243	2996	13857	8580
	2%	14%	2%	9%	6%
grade 3 events	1283	2880	1414	5851	4017
	1%	1%	1%	3%	2%
grade 4 events	1278	2770	1358	5777	3628
	1%	1%	1%	3%	2%
grade 5 events	5437	12810	5580	15233	7972
	5%	6%	5%	10%	5%
grade 6 events	2558	46144	2880	35010	9954
	2%	24%	2%	23%	7%
grade 7 events	87832	81857	91107	67322	97030
	83%	42%	82%	44%	68%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-35678	ACIS-35678	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	329.508256	329.5292940927667	CCD I2 on	N	N
[deg] Pointing Dec	-15.001788	-15.02009157130857	CCD I3 on	O1	Y
[deg] Pointing Roll	286.995341	287.1574084175257	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	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	Y	Y
[s] Observation start time (MET)	464350560.184000	464349306.60547	CCD S5 on	N	N
Observation start date	2012-09-18T10:14:53	2012-09-18T09:55:06	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	464370560.184000	464371490.68177	On-chip summing requested	N	N
Observation end date	2012-09-18T15:48:13	2012-09-18T16:04:50	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



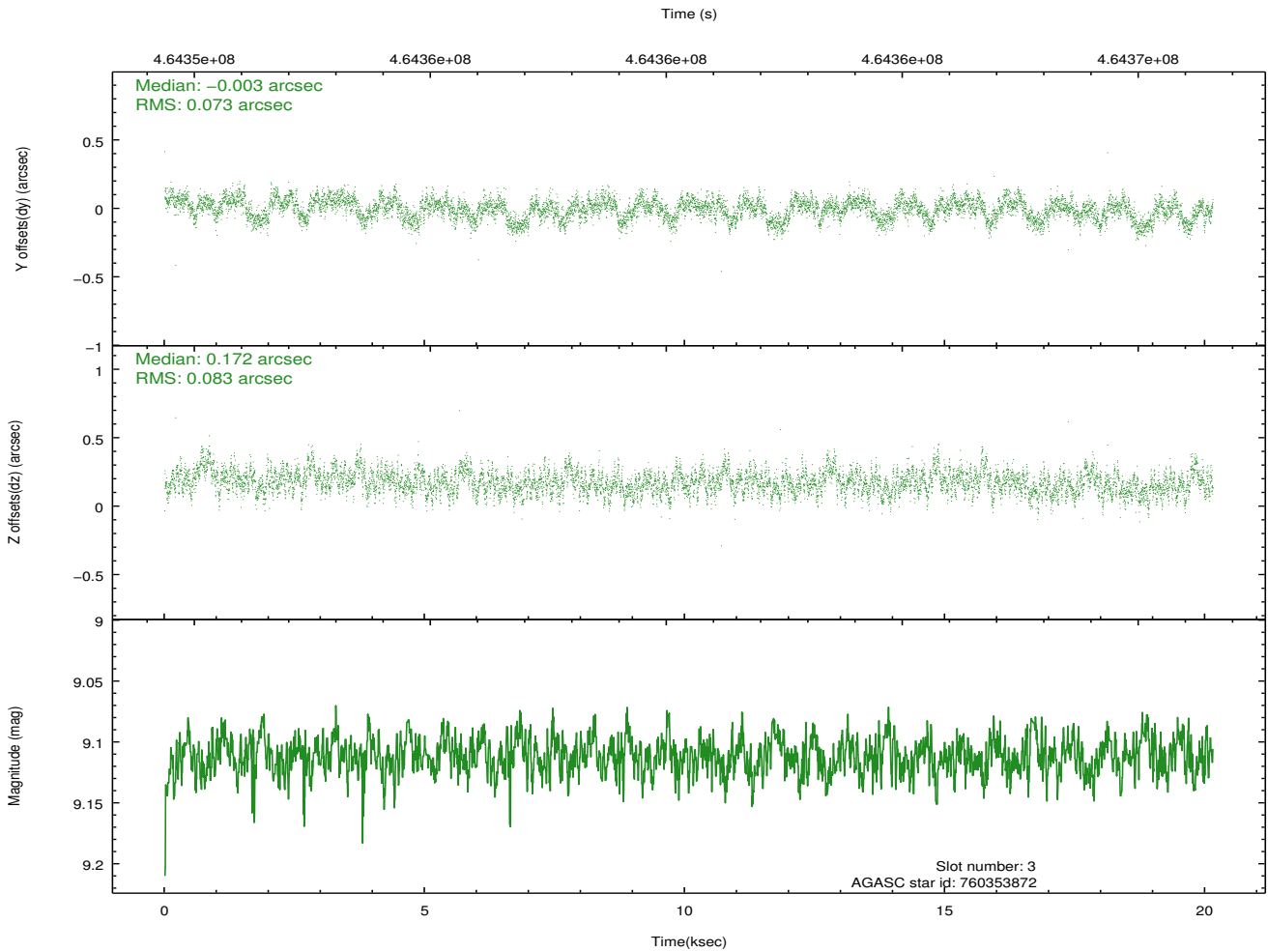
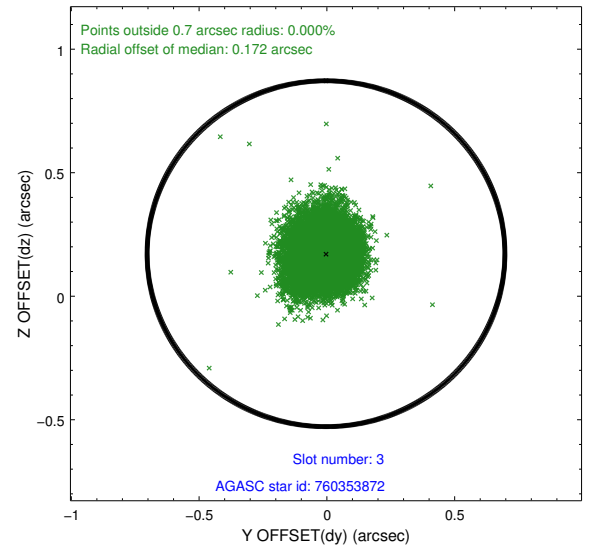
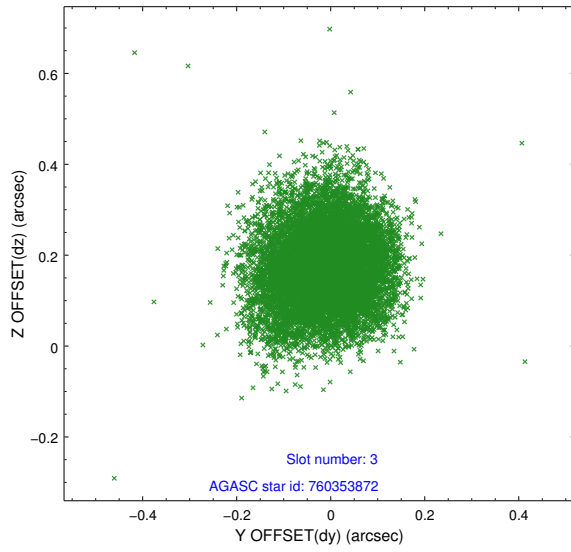


Slot Statistics

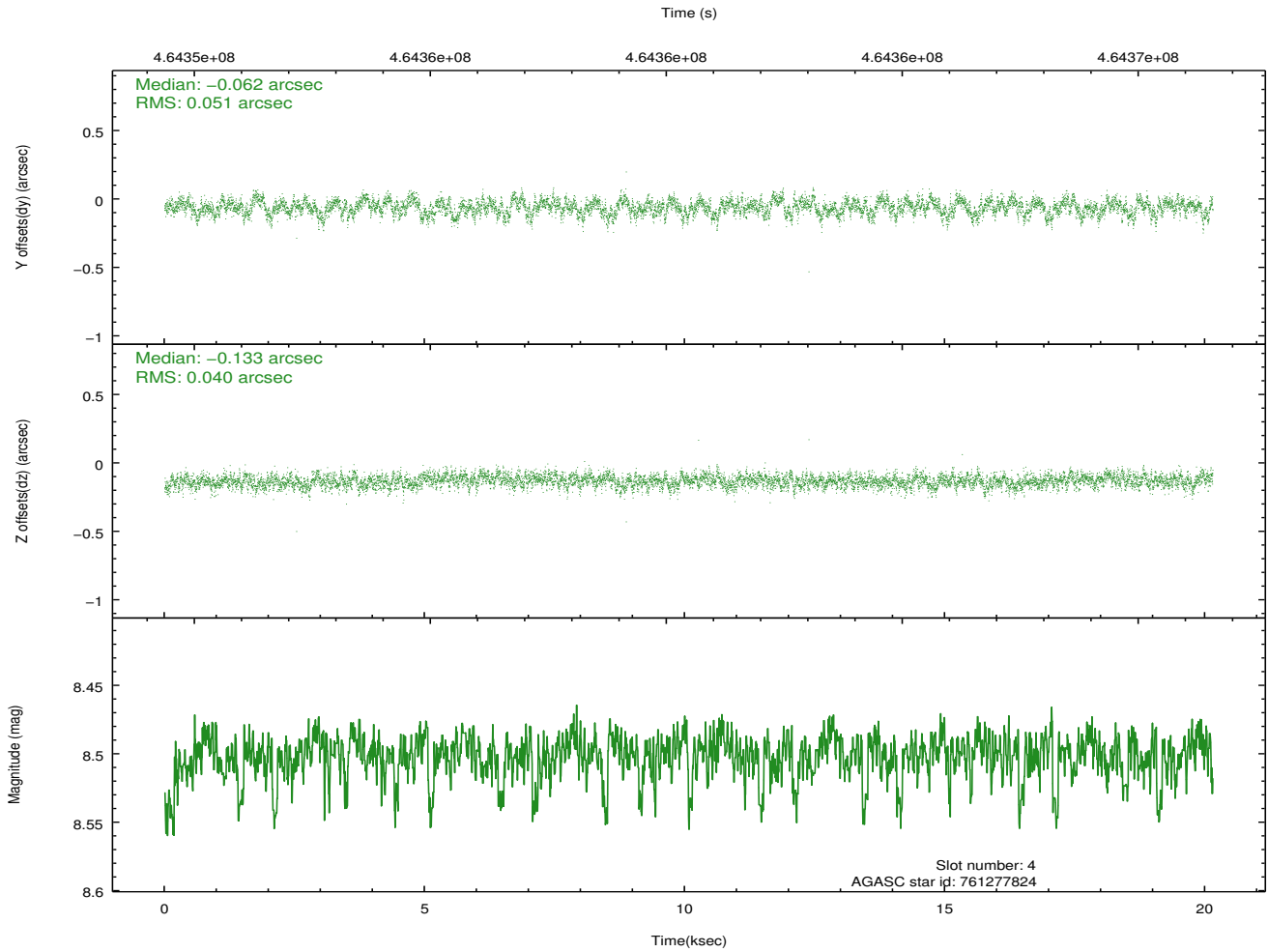
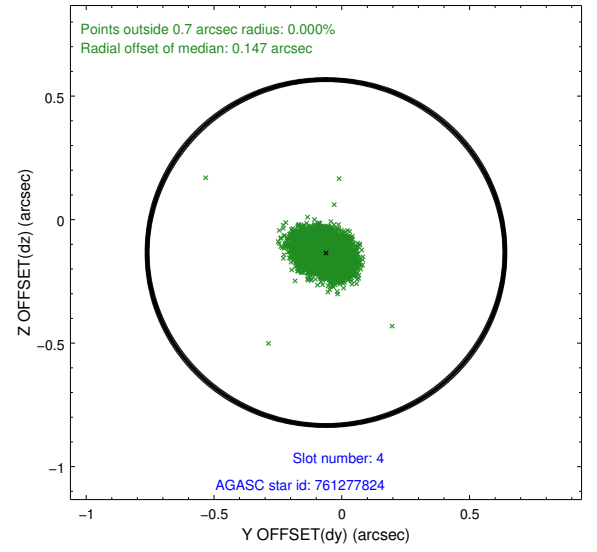
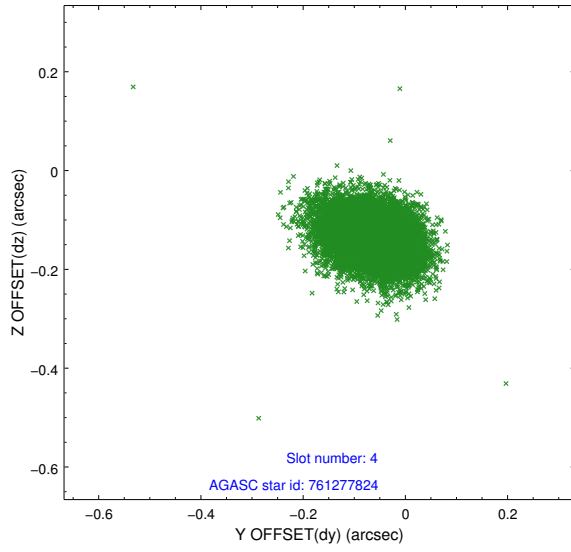
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.00	4915	-0.130	-0.017	0.015	0.024	0.000000	0.000000	-769.57	-1736.47
1	FID		ACIS-S-4	7.08	4915	0.265	0.067	0.012	0.021	0.000000	0.000000	2144.00	171.93
2	FID		ACIS-S-5	7.11	4915	-0.169	-0.040	0.015	0.026	0.000000	0.000000	-1822.23	165.67
3	GUIDE	used	760353872	9.11	9813	-0.003	0.172	0.119	0.188	328.676530	-14.585438	-2274.85	-2334.66
4	GUIDE	used	761277824	8.50	9827	-0.062	-0.133	0.069	0.114	329.793569	-14.509635	-1403.14	1468.25
5	GUIDE	used	835724792	7.02	9826	-0.111	-0.098	0.075	0.118	329.706150	-15.129389	640.71	523.44
6	GUIDE	used	835724888	8.55	9823	-0.044	-0.029	0.080	0.128	329.780836	-15.143617	766.07	756.52
7	GUIDE	used	835727984	9.36	9819	0.231	0.098	0.129	0.200	329.563223	-15.304186	1097.59	-135.43

2.4 Star Slots

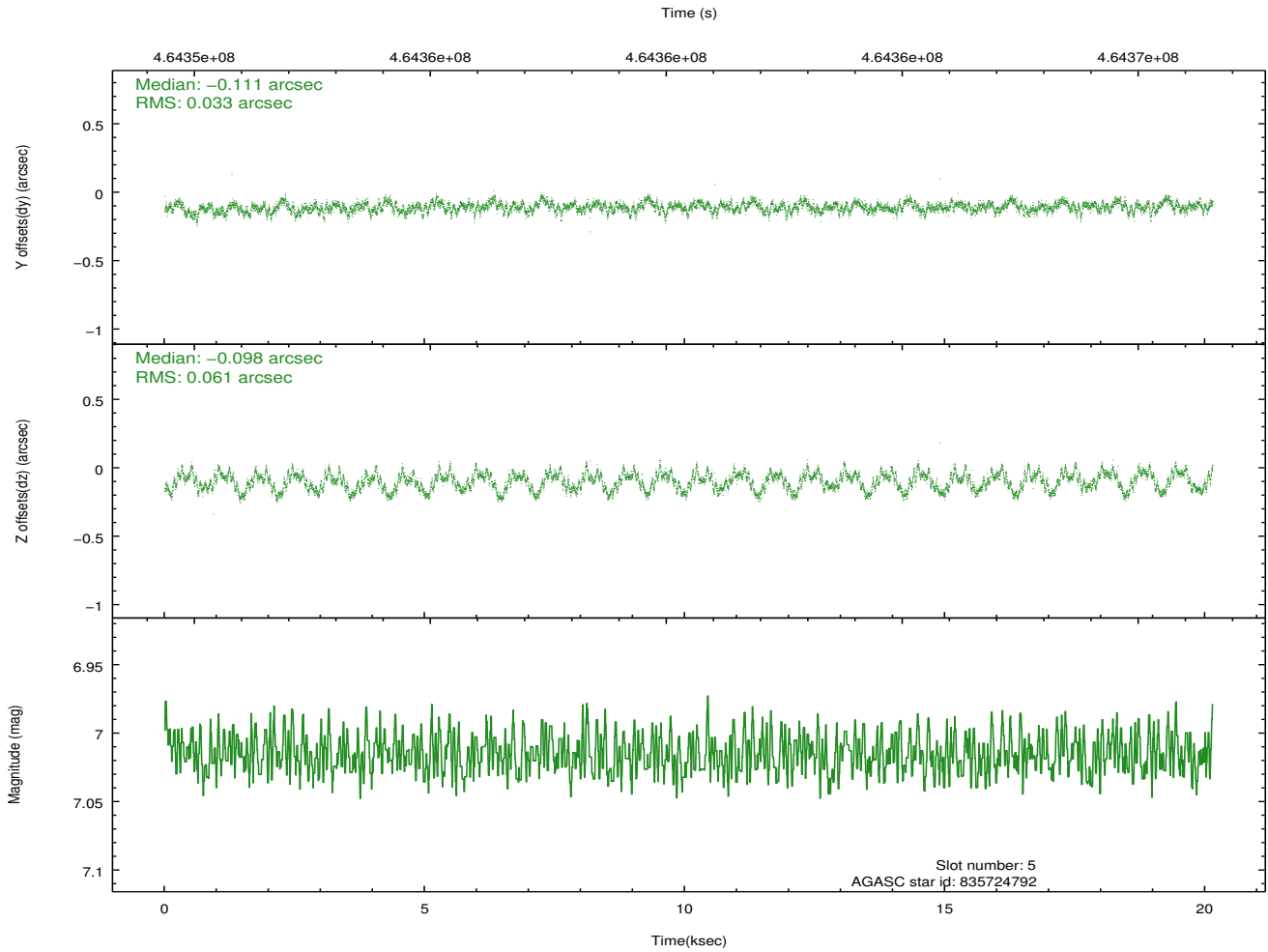
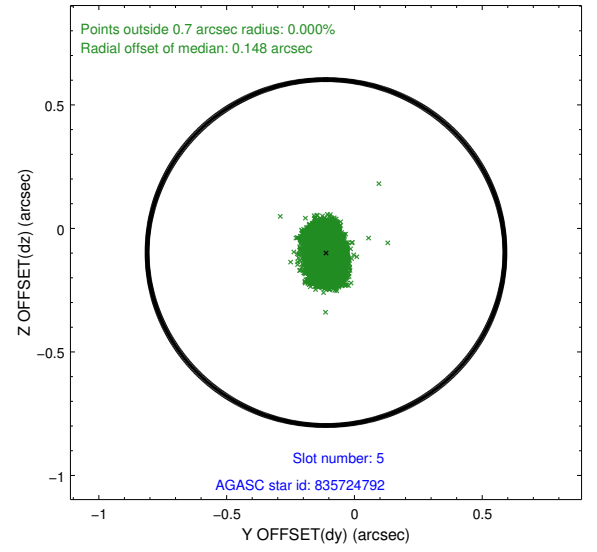
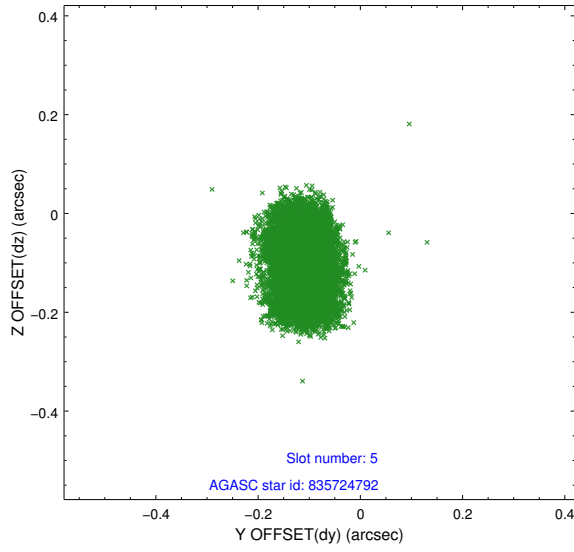
2.4.1 Slot 3



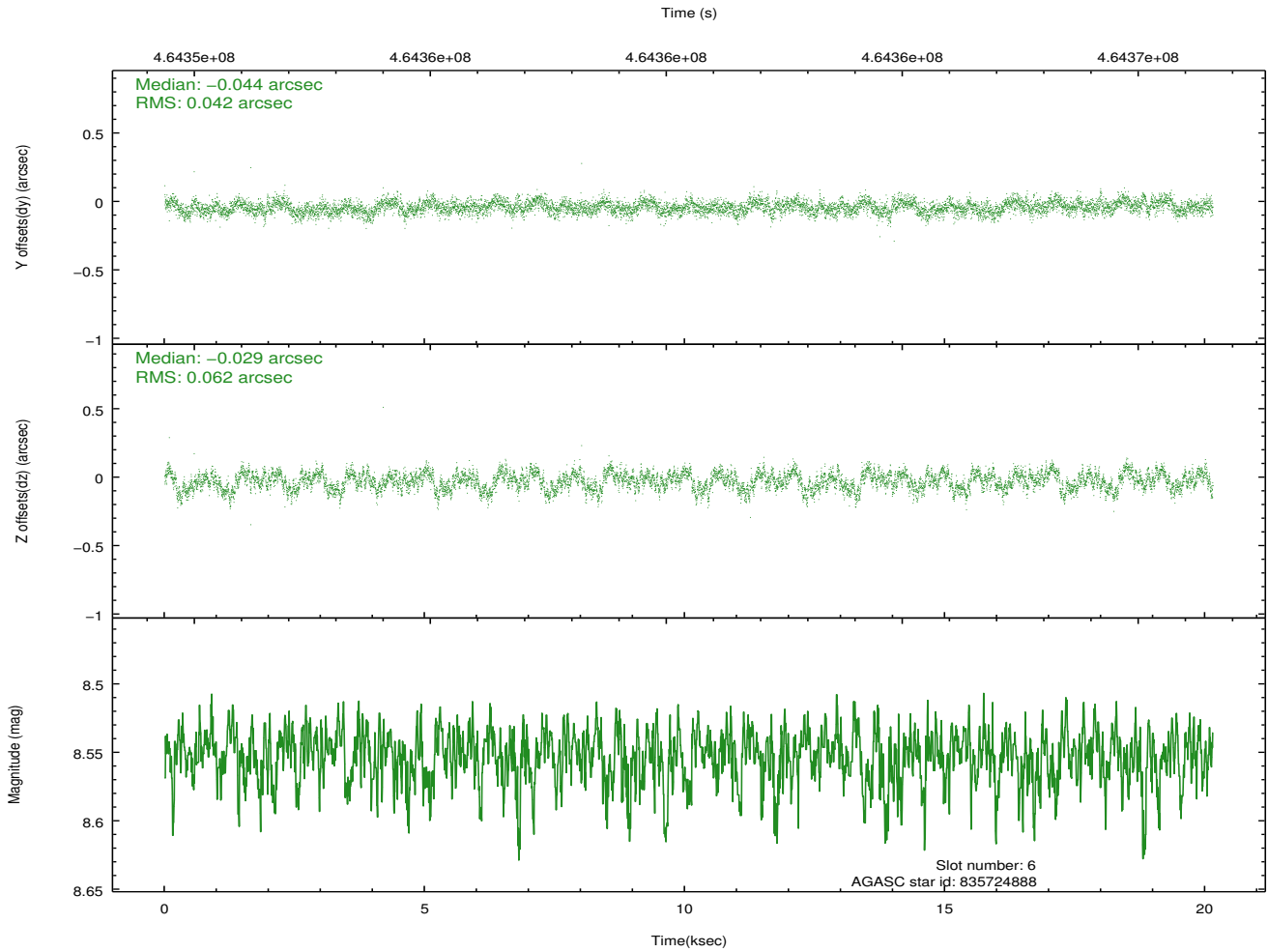
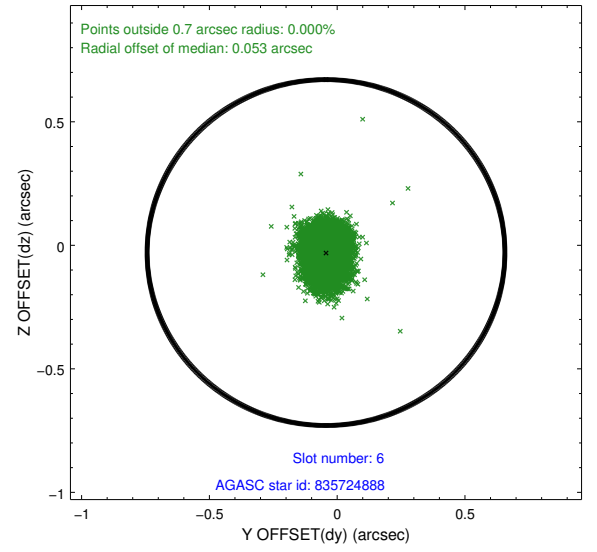
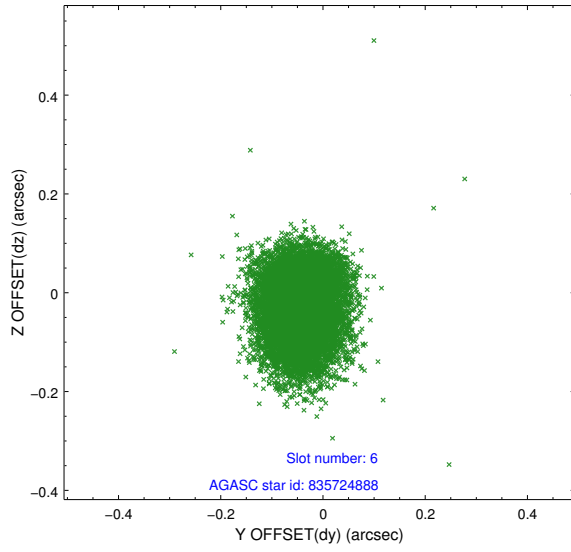
2.4.2 Slot 4



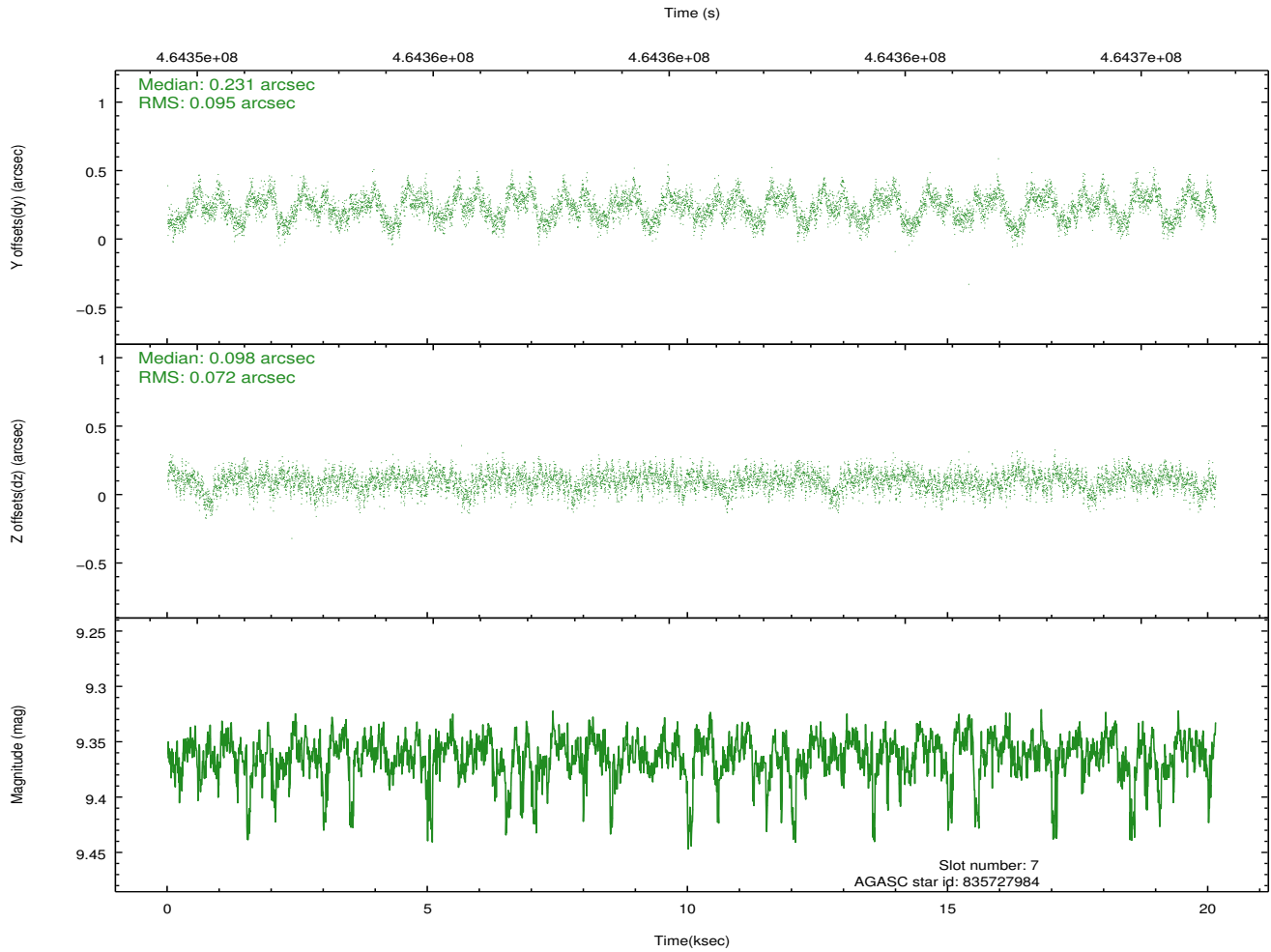
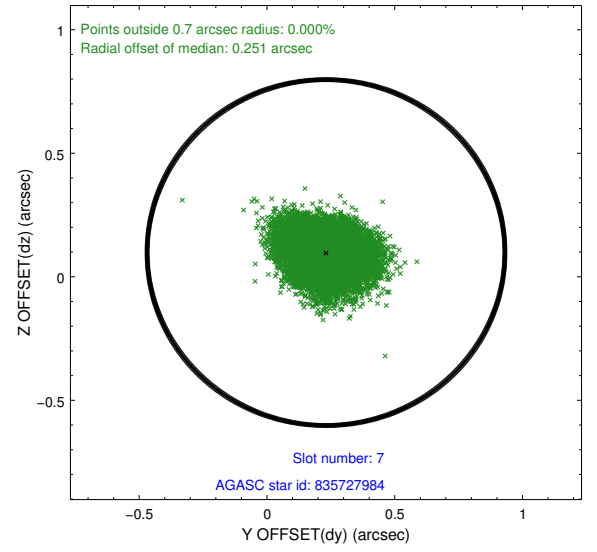
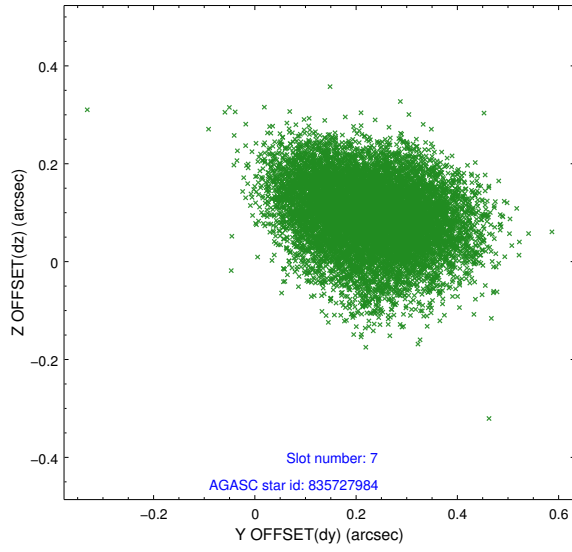
2.4.3 Slot 5



2.4.4 Slot 6

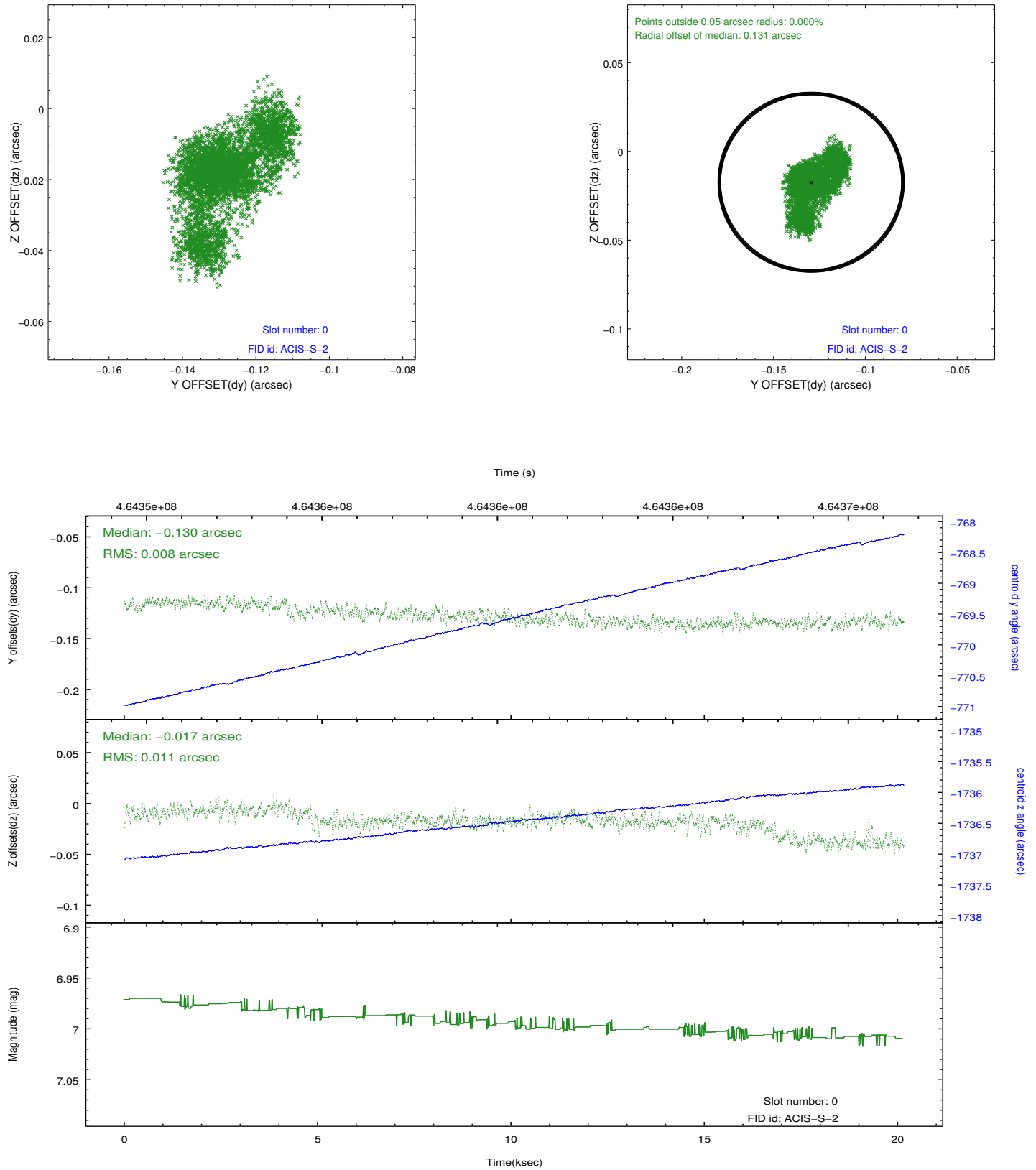


2.4.5 Slot 7

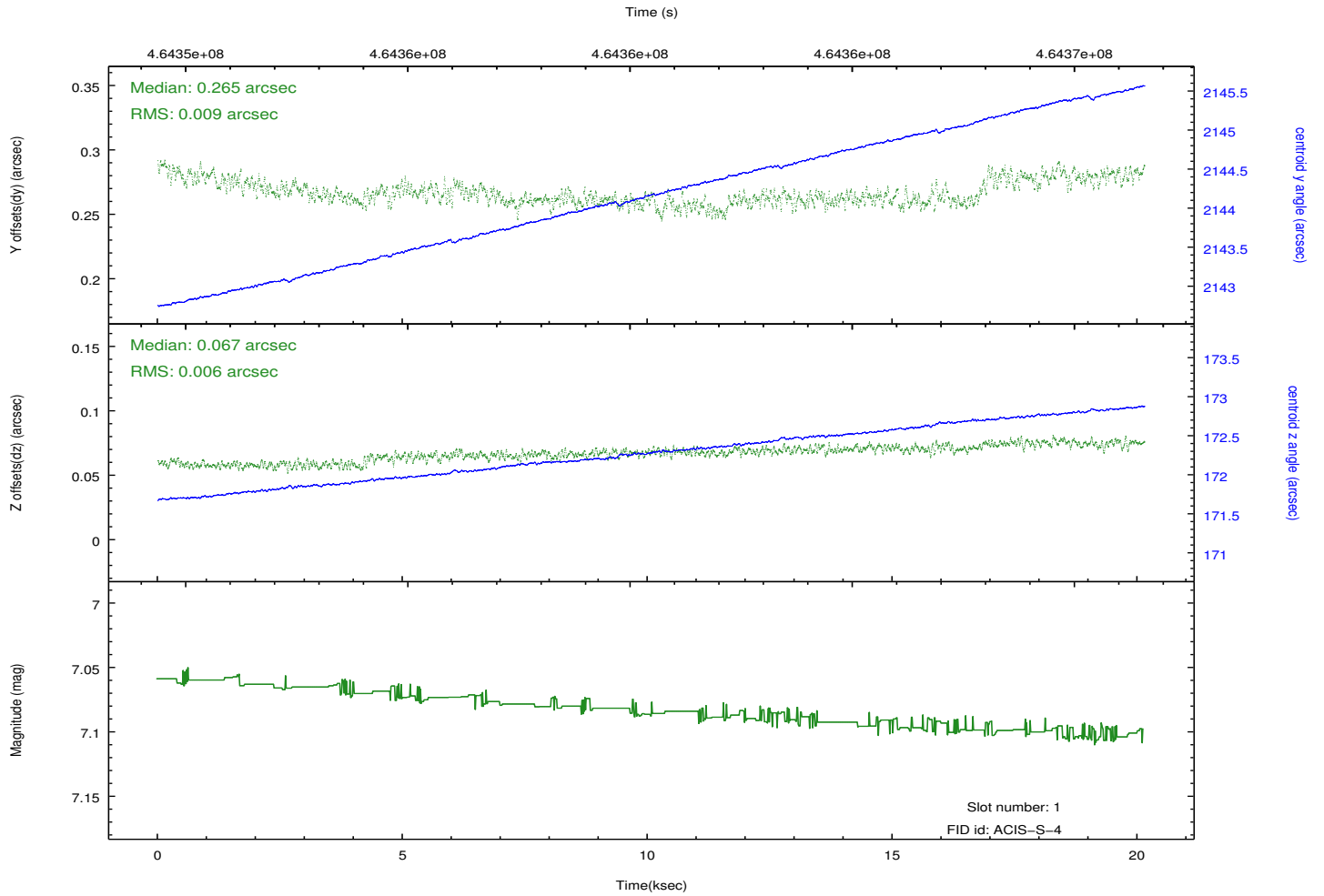
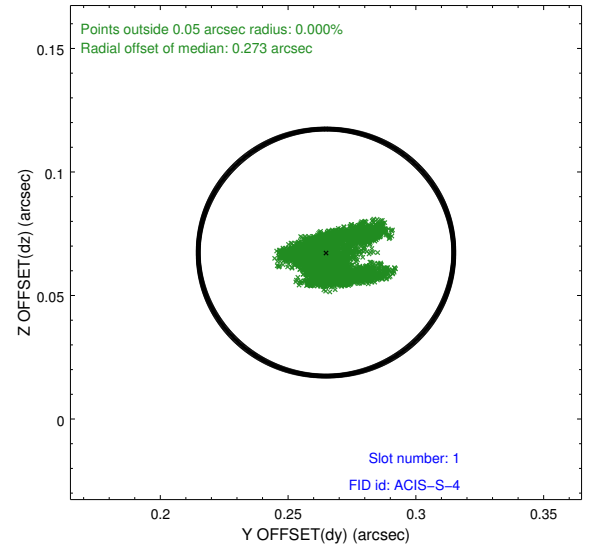
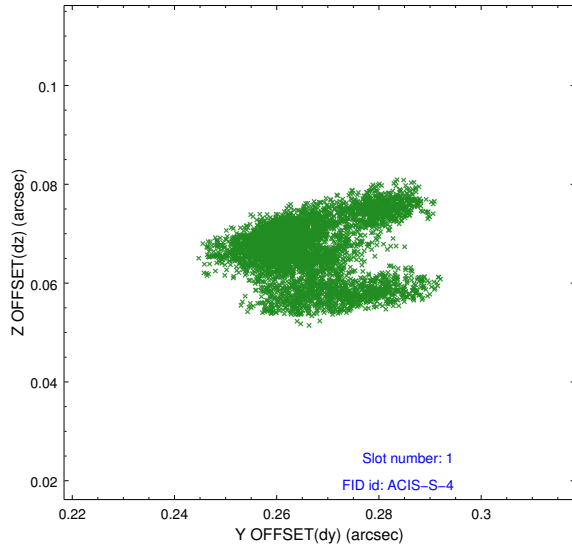


2.5 FID Slots

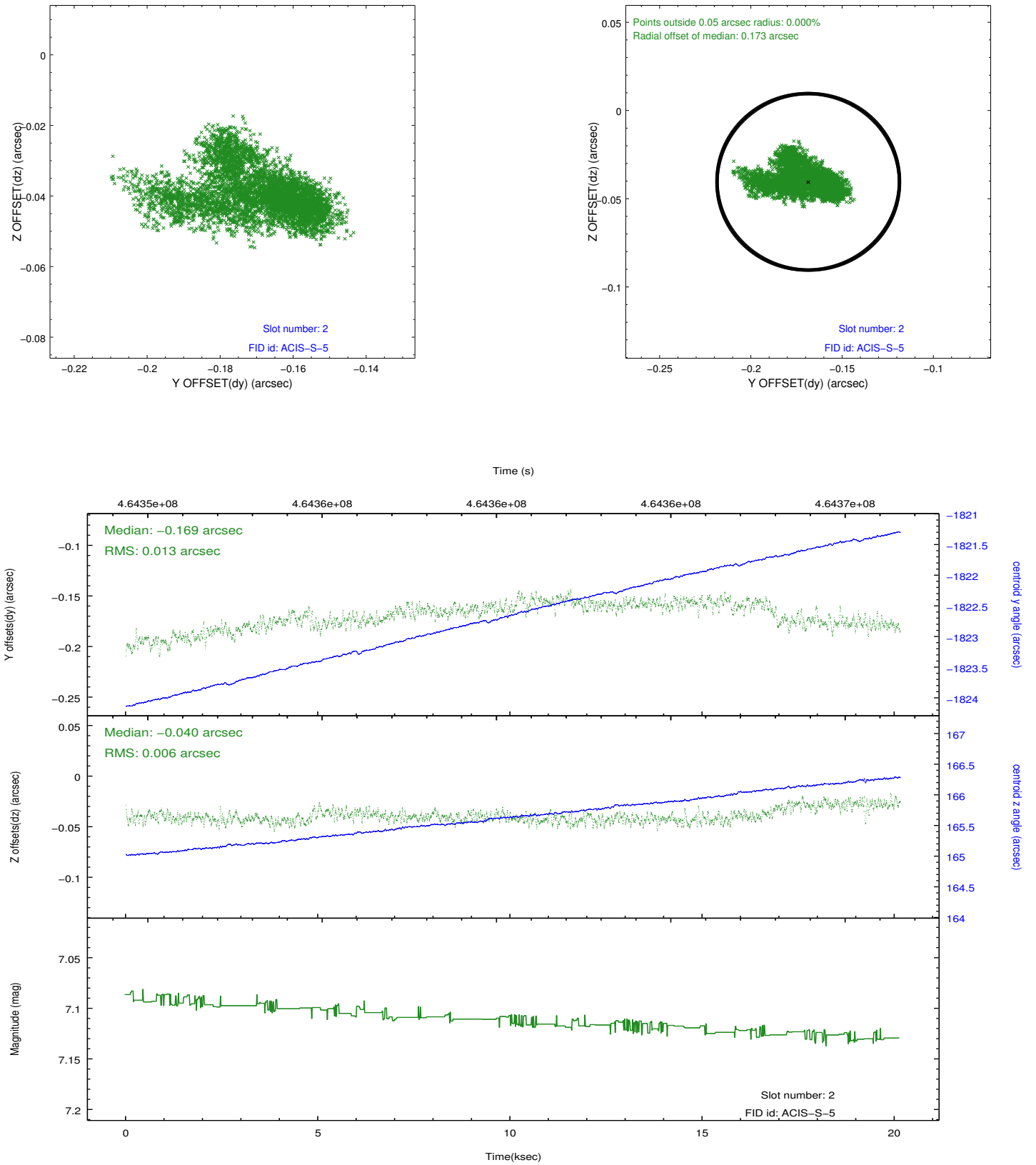
2.5.1 Slot 0



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)	2014.12.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.063200154305

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.