

V&V Reference Report

L2 ASCDS Version : 10.2.1

Observation 16577 - L2 Version 2
Chandra X-Ray Center

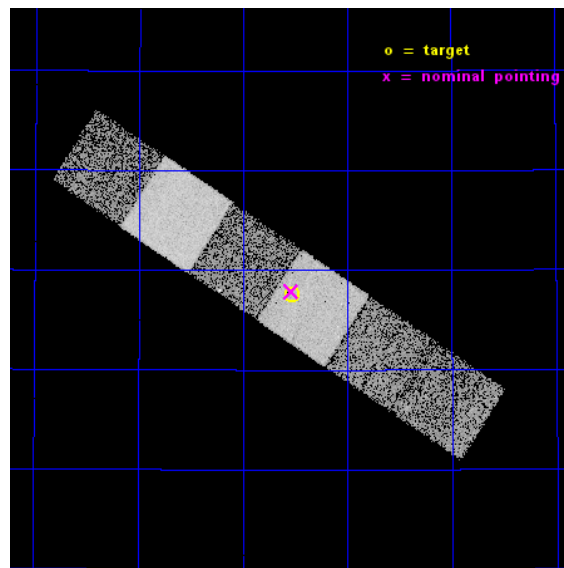
L2 Processing Date : Dec 10 2014

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1 Front

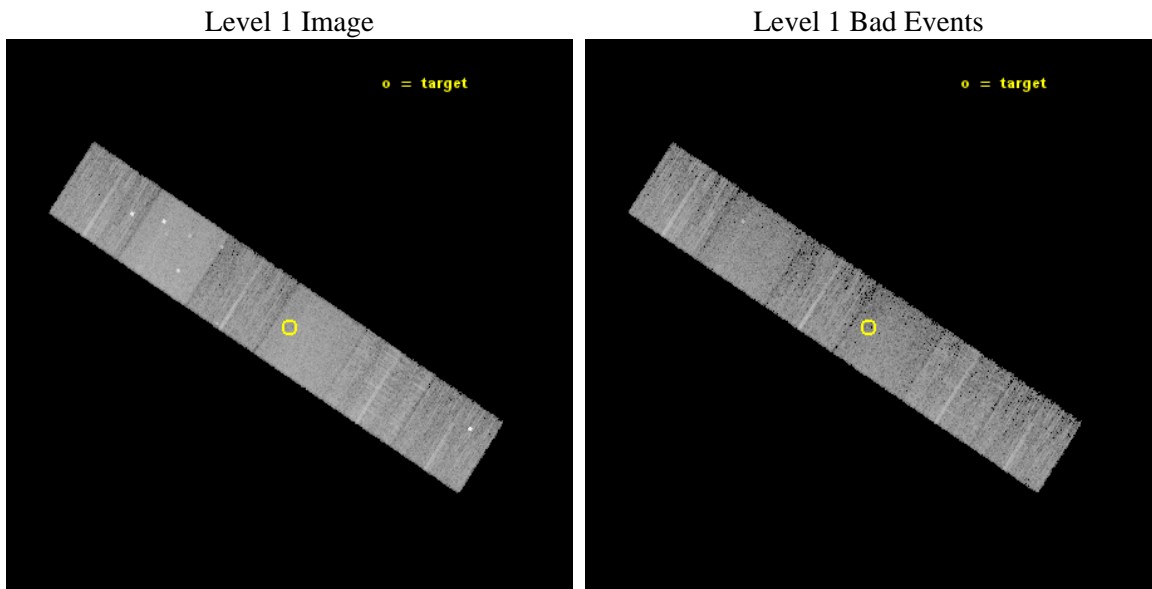
seq_num	200967	Sequence number
obs_id	16577	Observation id
title	X-ray driven evaporation of exoplanet atmospheres: discovery of a uniquely suited test system	Proposal title
observer	Dr Katja Poppenhaeger	Principal investigator
object	KOI-314	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	290.381667	Observer's specified target RA [deg]
dec_targ	43.292972	Observer's specified target Dec [deg]
ra_nom	290.38384598792	Nominal RA [deg]
dec_nom	43.298043489299	Nominal Dec [deg]
roll_nom	33.264900874983	Nominal Roll [deg]
revision	2	Processing version of data
ontime	9964.7999629378	Sum of GTIs [s]
livetime	9838.6196657249	Livetime [s]
ontime4	9964.7999629378	Sum of GTIs [s]
ontime5	9964.7999629378	Sum of GTIs [s]
ontime6	9964.7999629378	Sum of GTIs [s]
ontime7	9964.7999629378	Sum of GTIs [s]
ontime8	9964.7999629378	Sum of GTIs [s]
ontime9	9964.7999629378	Sum of GTIs [s]
l2events	83660	Number of level 2 events



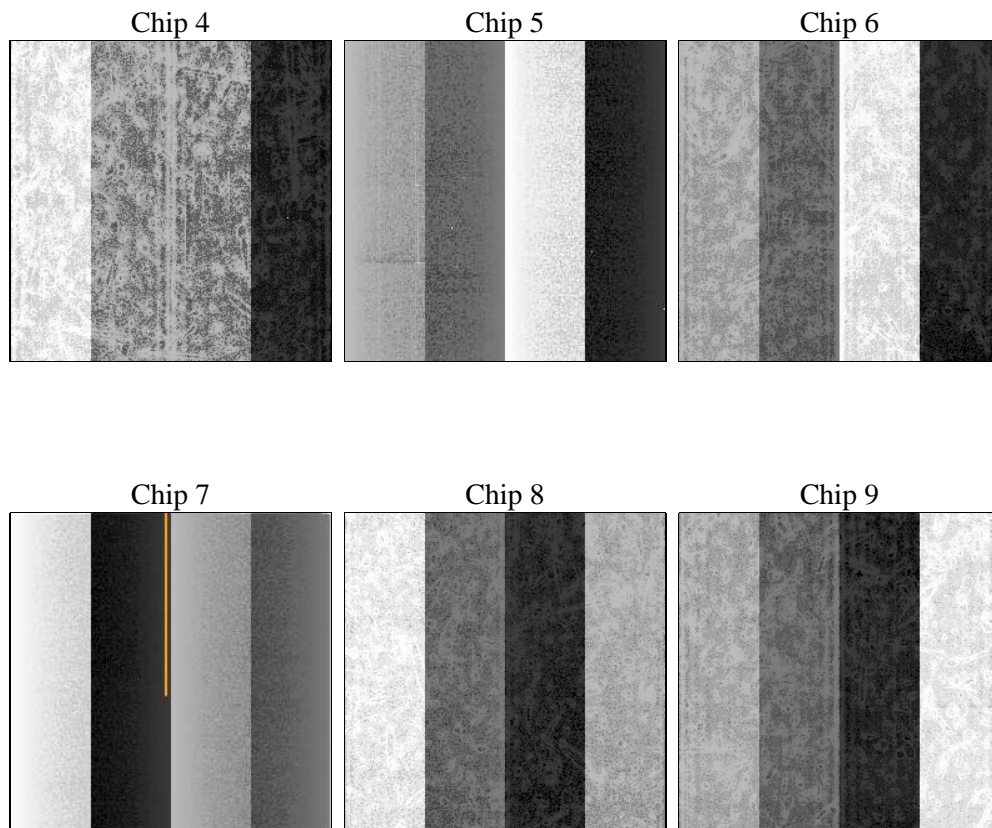
2 OBI

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	10.3.1	Processing system revision	ontime	9964.7999629378	Sum of GTIs [s]
caldsver	4.6.4	 	ontime4	9964.7999629378	Sum of GTIs [s]
date	2014-12-10T06:45:00	Date and time of file creation	ontime5	9964.7999629378	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	9964.7999629378	Sum of GTIs [s]
			ontime7	9964.7999629378	Sum of GTIs [s]
			ontime8	9964.7999629378	Sum of GTIs [s]
			ontime9	9964.7999629378	Sum of GTIs [s]
			l1events	364396	Number of level 1 events

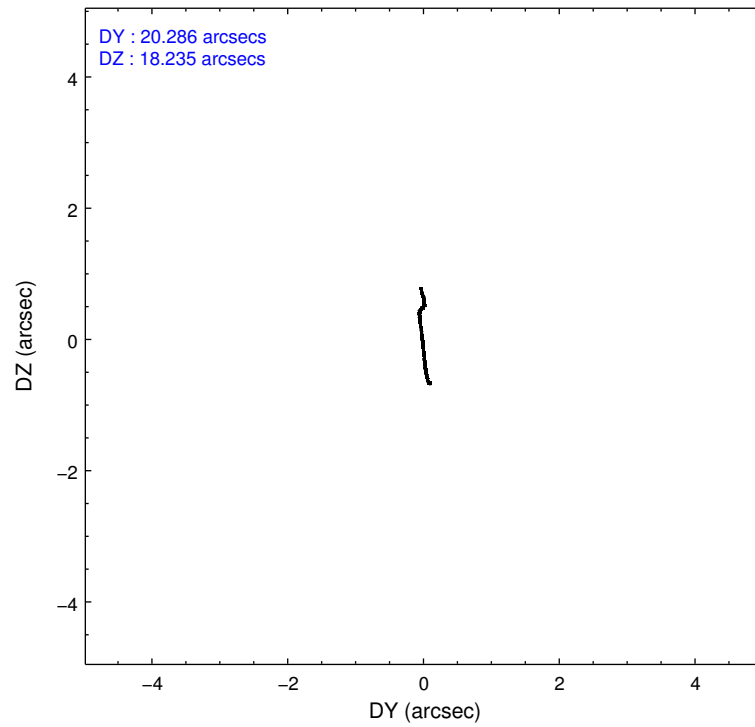
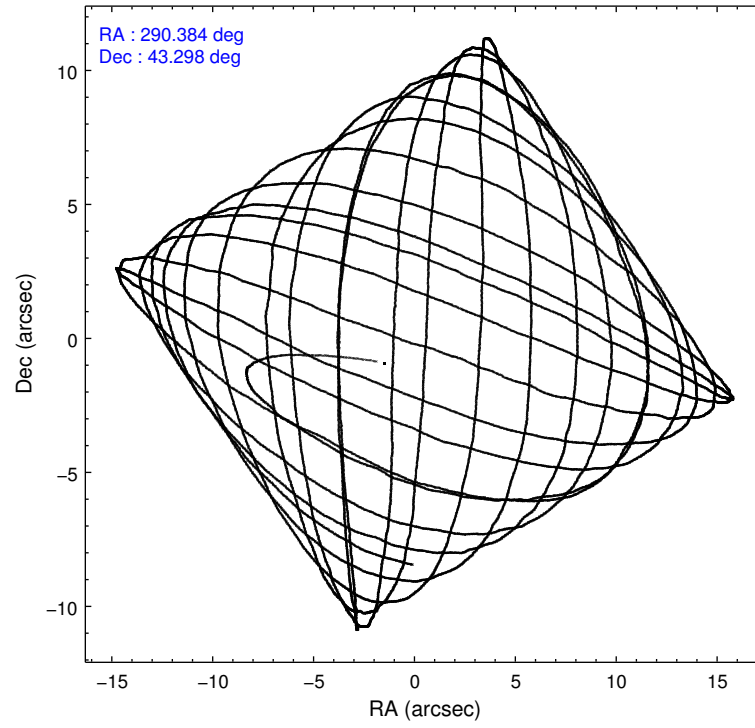
2.1.4 Events

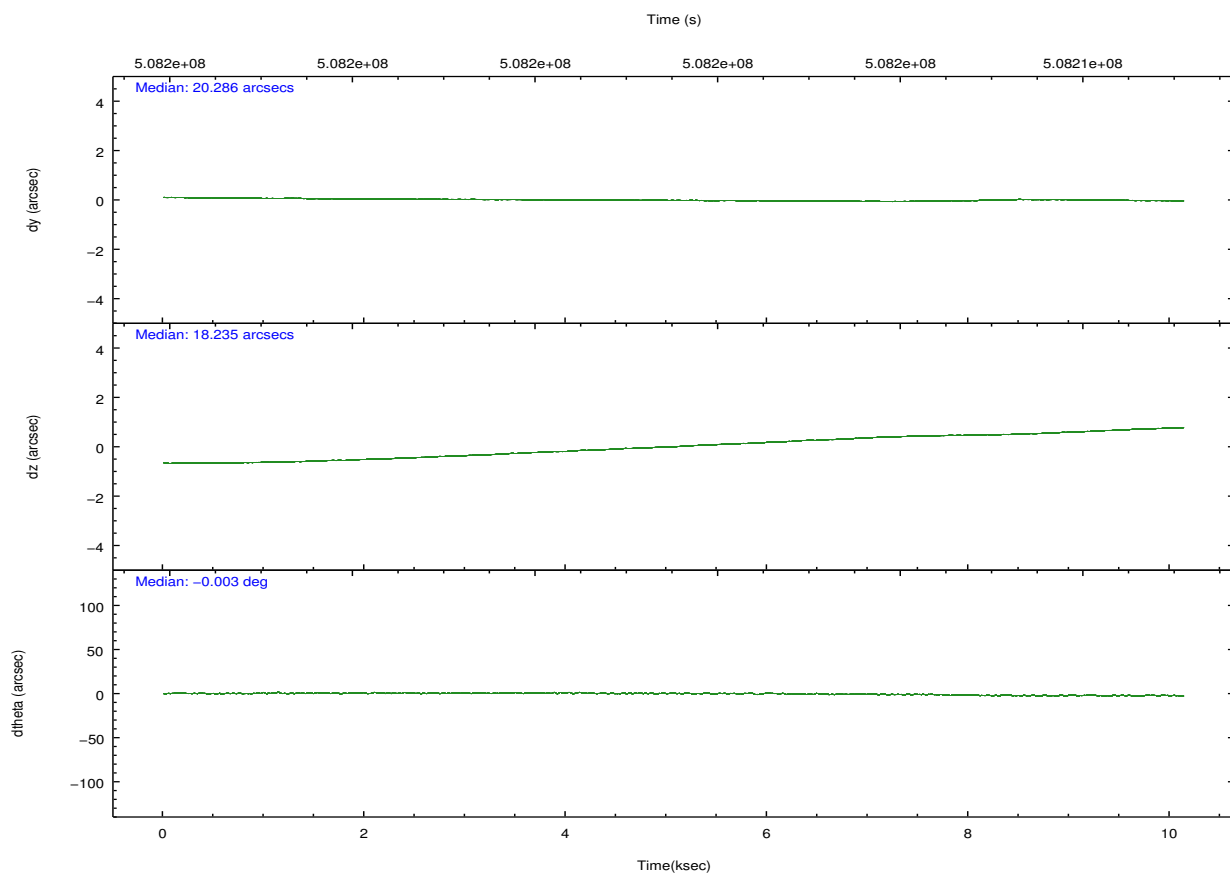
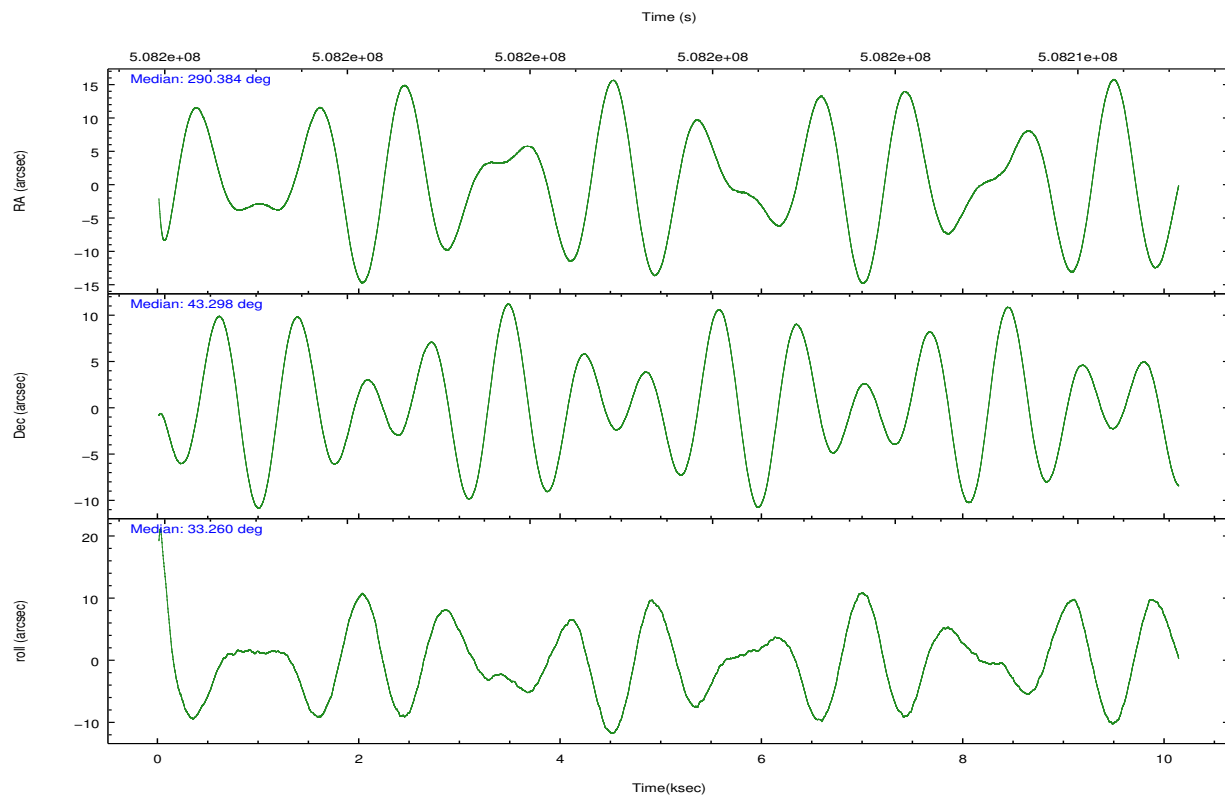
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	56104	79378	47230	65103	64242	52339	grade 0 events	3943	4043	2108	2479	4681	5282
rejected events	48589	40956	41318	36814	48217	43190		7%	5%	4%	3%	7%	10%
rejected %	86%	51%	87%	56%	75%	82%	grade 1 events	63	348	18	80	37	44
								0%	0%	0%	0%	0%	0%
							grade 2 events	1337	11814	1335	6008	3736	1335
								2%	14%	2%	9%	5%	2%
							grade 3 events	597	1155	590	2257	1678	601
								1%	1%	1%	3%	2%	1%
							grade 4 events	613	1099	515	2272	1630	585
								1%	1%	1%	3%	2%	1%
							grade 5 events	2417	5355	2438	6273	3610	2709
								4%	6%	5%	9%	5%	5%
							grade 6 events	1025	20320	1366	15282	4303	1350
								1%	25%	2%	23%	6%	2%
							grade 7 events	46109	35244	38860	30452	44567	40433
								82%	44%	82%	46%	69%	77%

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	290.367430	290.3838459879227	CCD I2 on	N	N
[deg] Pointing Dec	43.273478	43.29804348929862	CCD I3 on	N	N
[deg] Pointing Roll	33.119514	33.26490087498263	CCD S0 on	O1	Y
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O3	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	O5	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	O4	Y
[s] Observation start time (MET)	508196594.184000	508195456.72394	CCD S5 on	O2	Y
Observation start date	2014-02-07T21:42:07	2014-02-07T21:24:16	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	508206594.184000	508207548.13711	On-chip summing requested	N	N
Observation end date	2014-02-08T00:28:47	2014-02-08T00:45:48	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



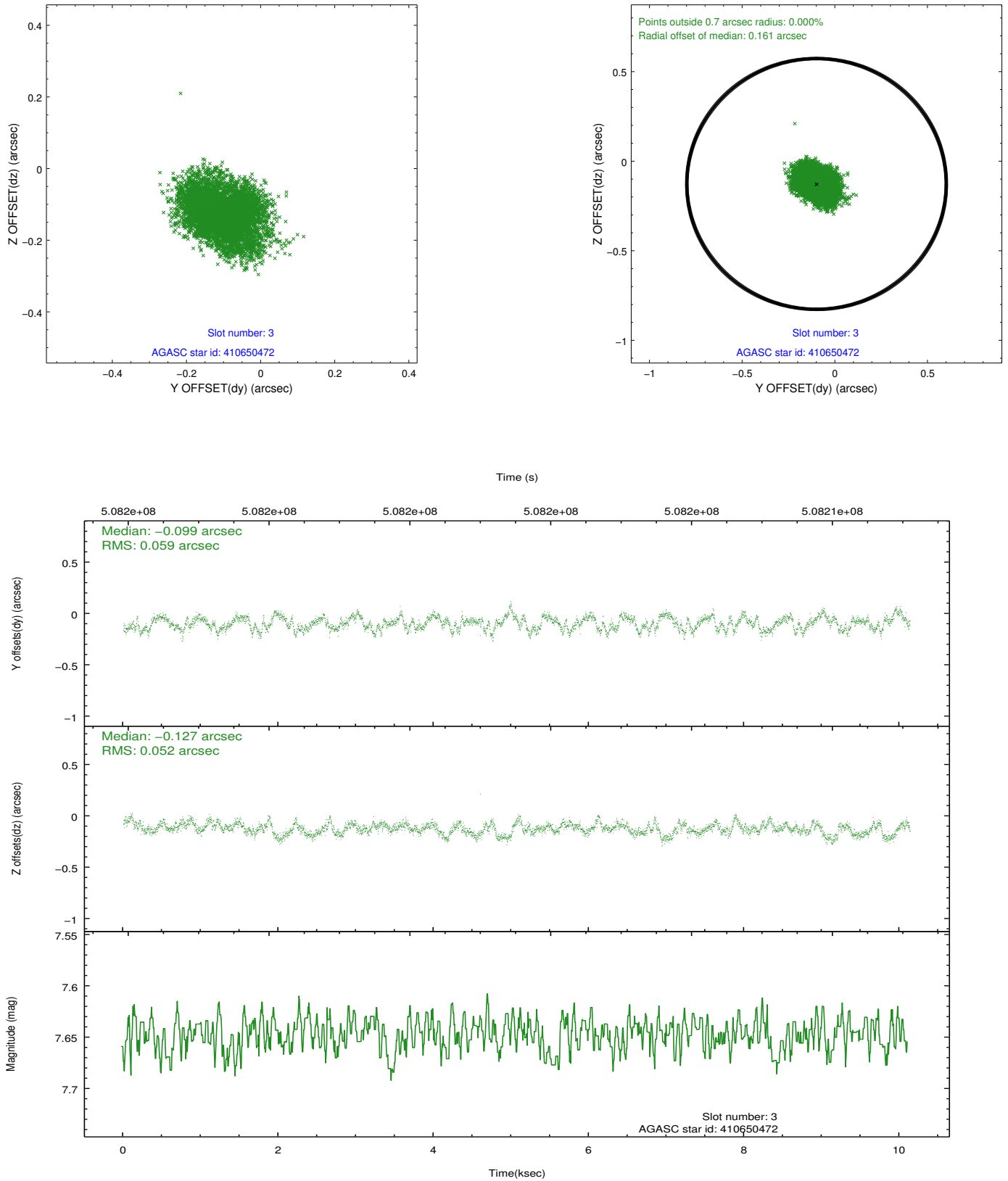


Slot Statistics

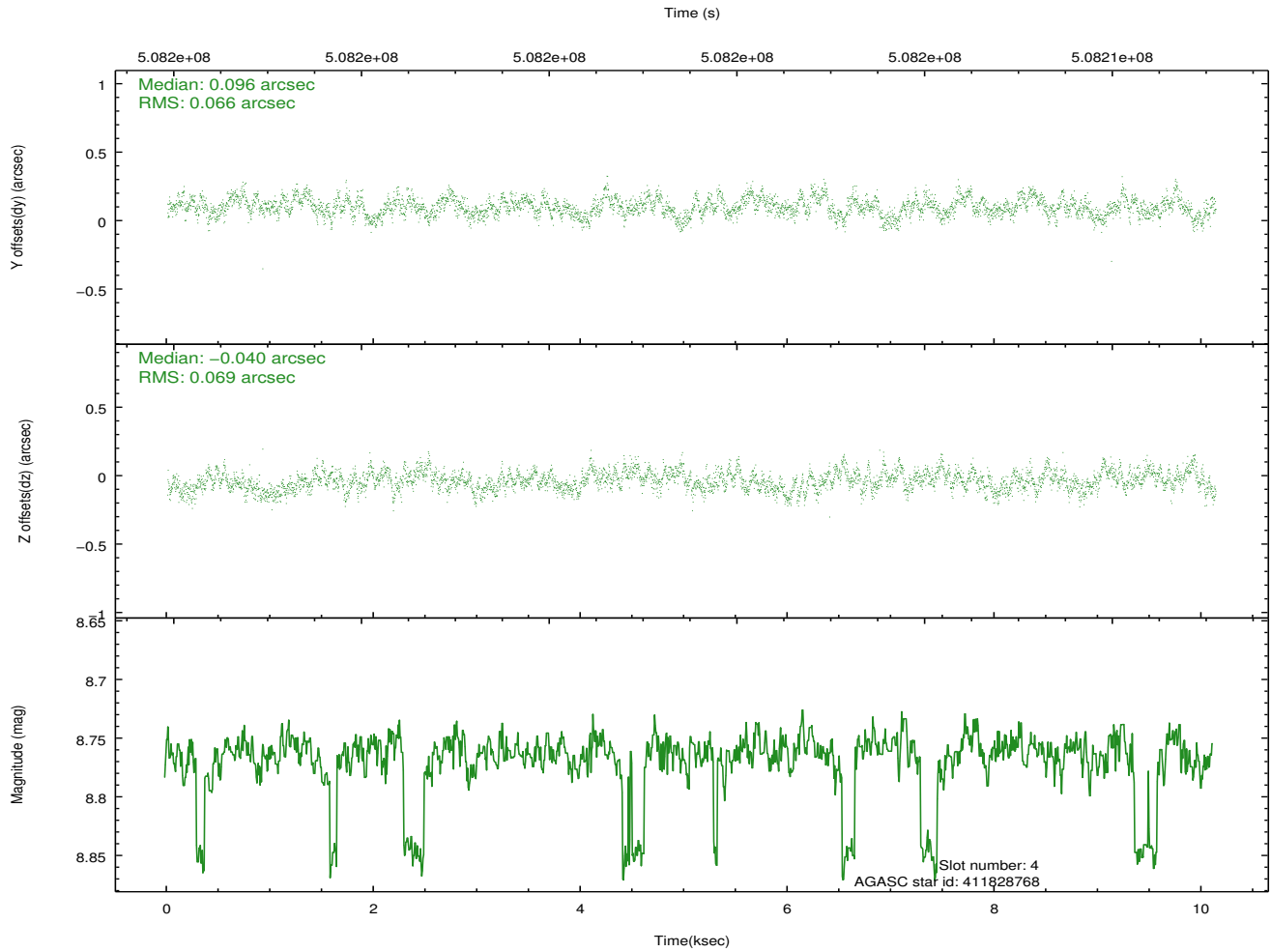
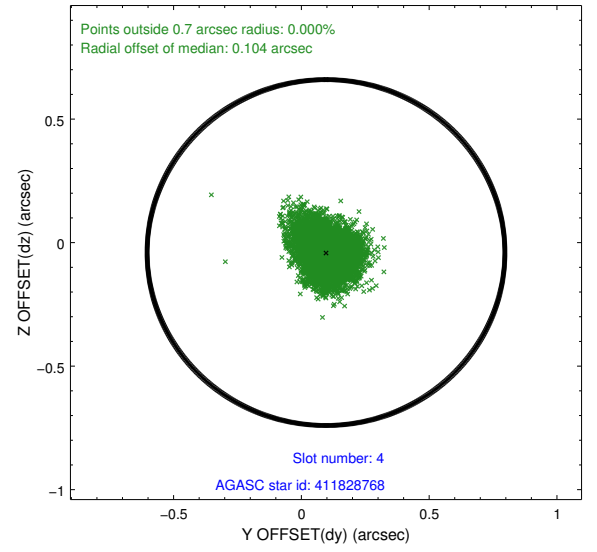
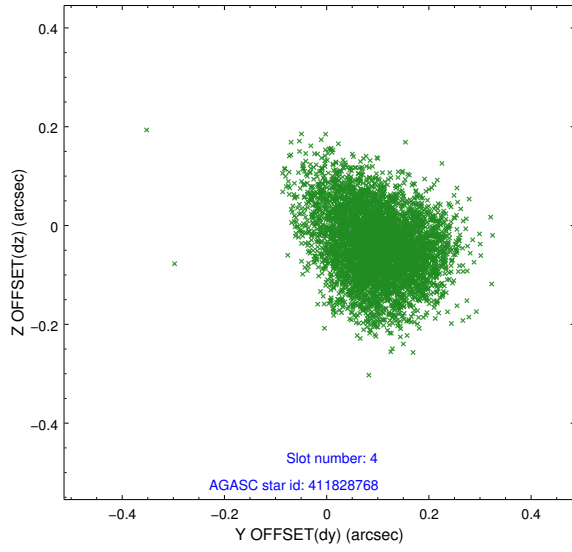
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.06	2471	-0.125	-0.062	0.009	0.015	0.000000	0.000000	-773.56	-1739.70
1	FID		ACIS-S-4	7.16	2471	0.271	0.077	0.006	0.011	0.000000	0.000000	2139.91	168.32
2	FID		ACIS-S-5	7.18	2471	-0.177	-0.006	0.008	0.014	0.000000	0.000000	-1825.75	162.58
3	GUIDE	used	410650472	7.65	4943	-0.099	-0.127	0.084	0.132	289.959245	43.556270	-334.11	1436.66
4	GUIDE	used	411828768	8.76	4940	0.096	-0.040	0.101	0.162	291.074824	42.922852	877.03	-2069.06
5	GUIDE	used	411830704	8.98	4940	0.270	0.336	0.105	0.166	290.150035	42.554167	-1896.12	-1853.08
6	GUIDE	used	412361592	8.62	4941	-0.197	-0.211	0.079	0.129	290.903818	43.891292	2383.09	1105.96
7	GUIDE	used	412353568	8.01	4939	-0.073	0.046	0.074	0.117	291.202869	43.521801	2321.47	-433.30

2.4 Star Slots

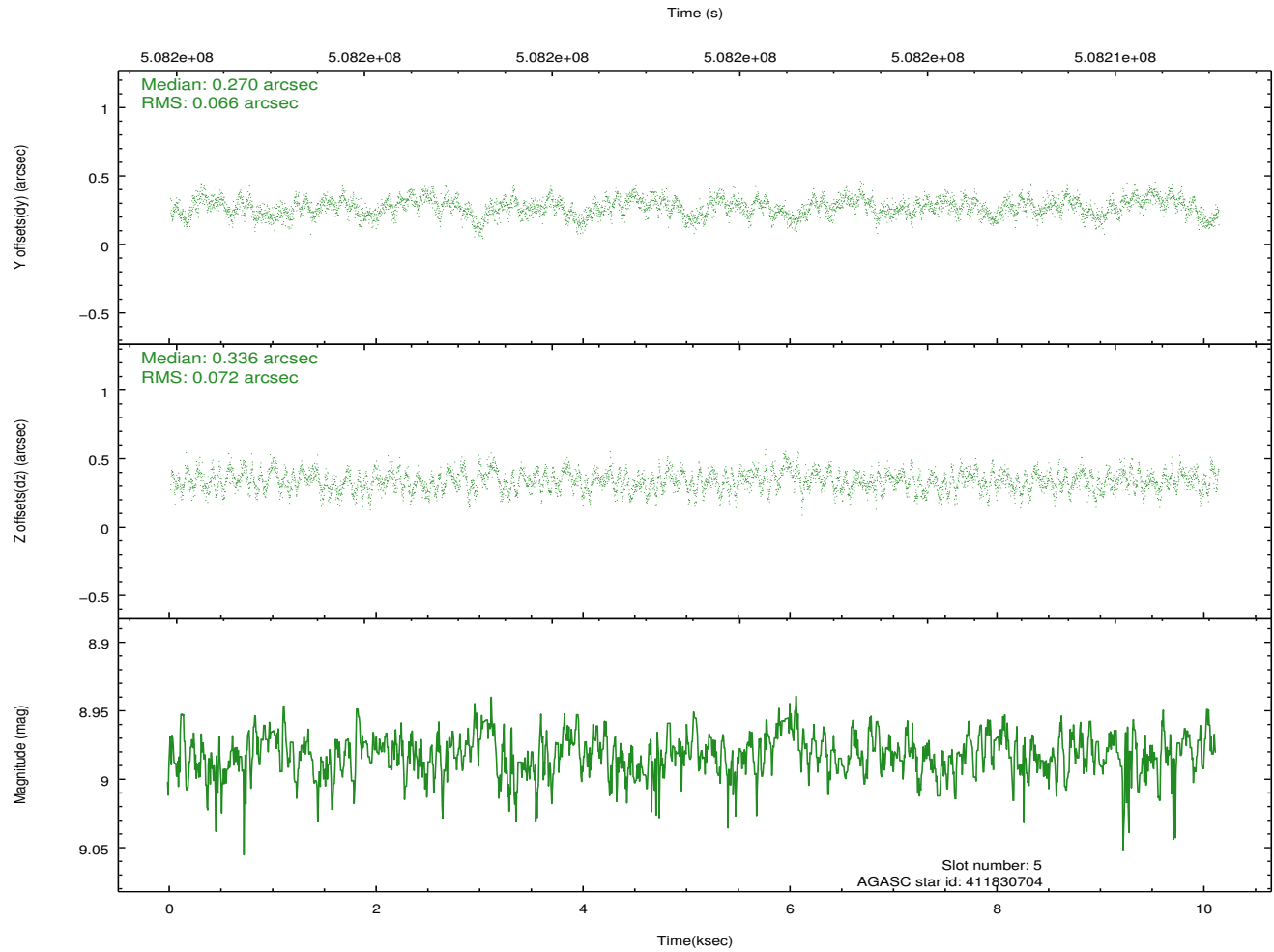
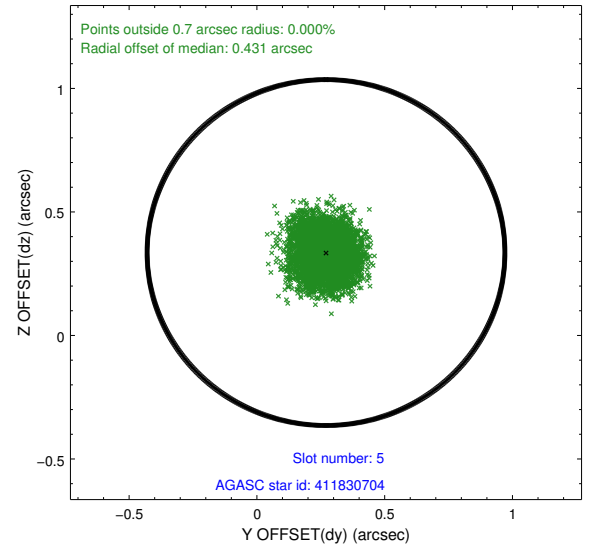
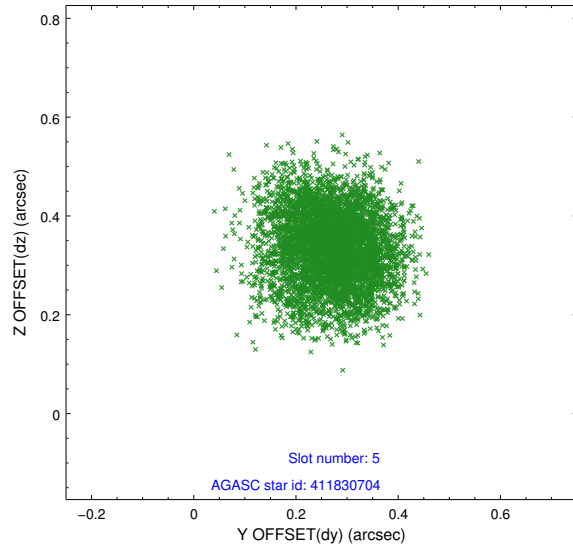
2.4.1 Slot 3



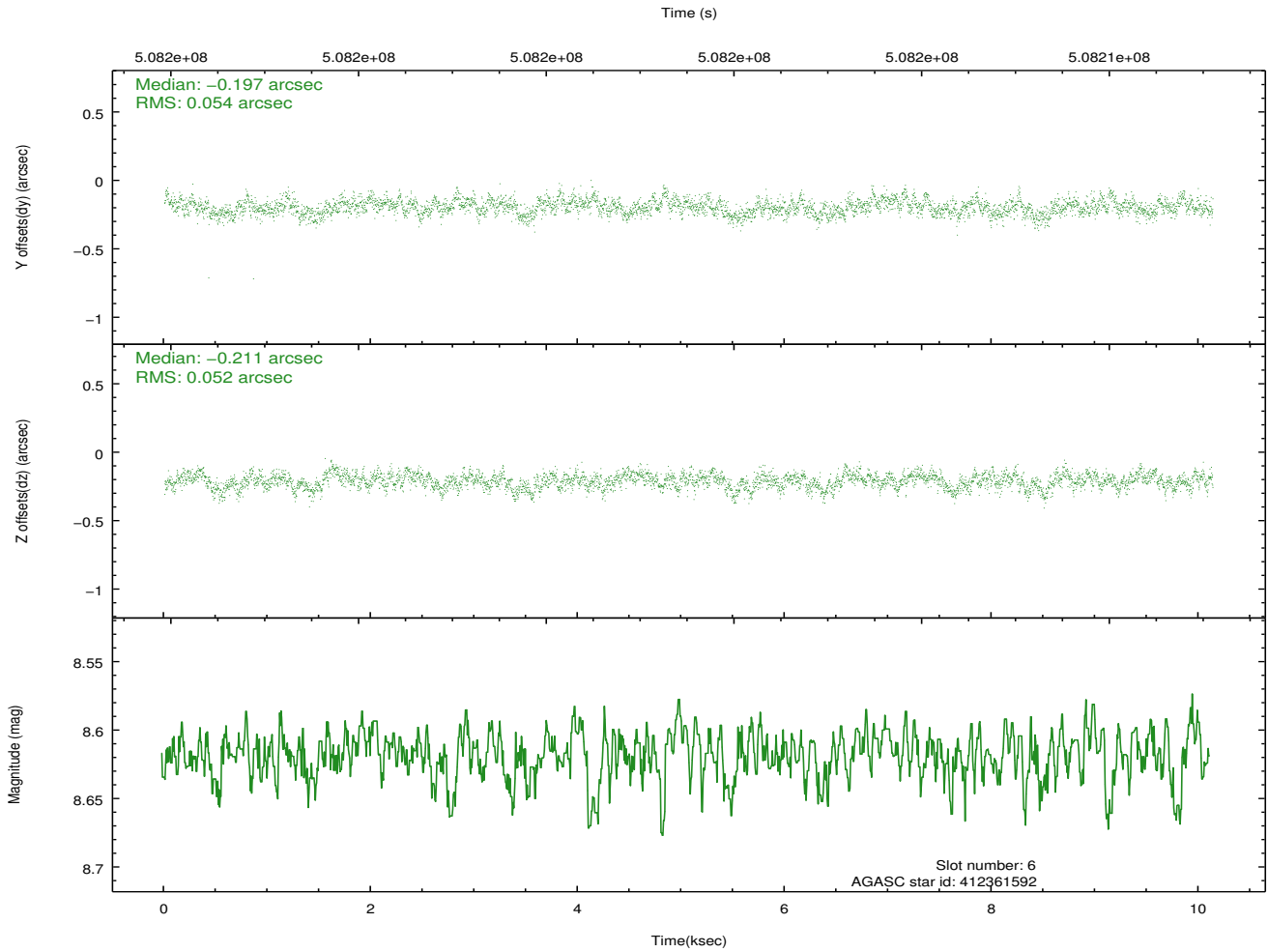
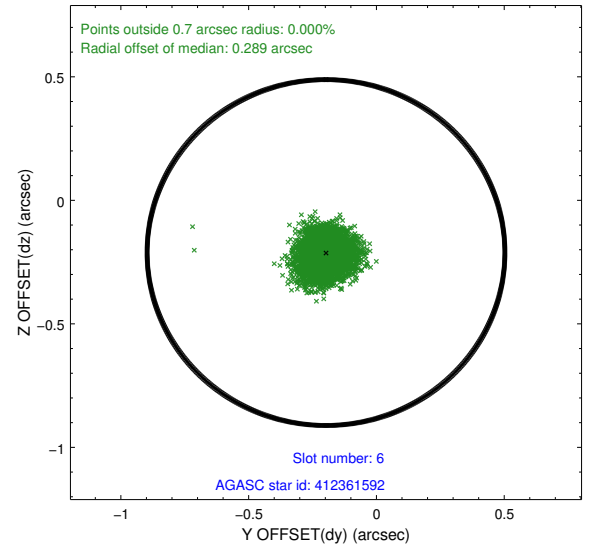
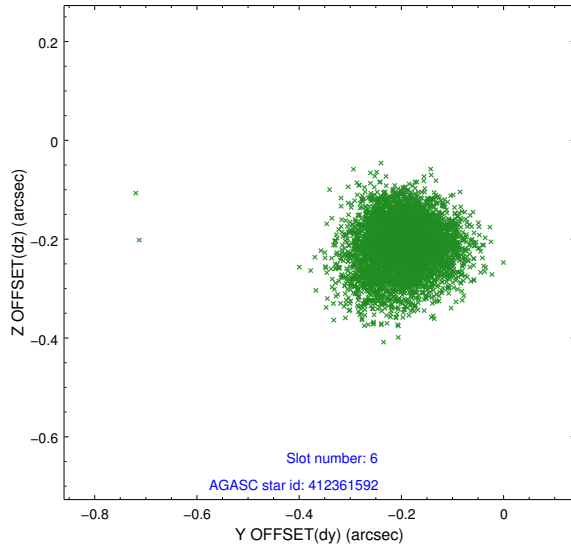
2.4.2 Slot 4



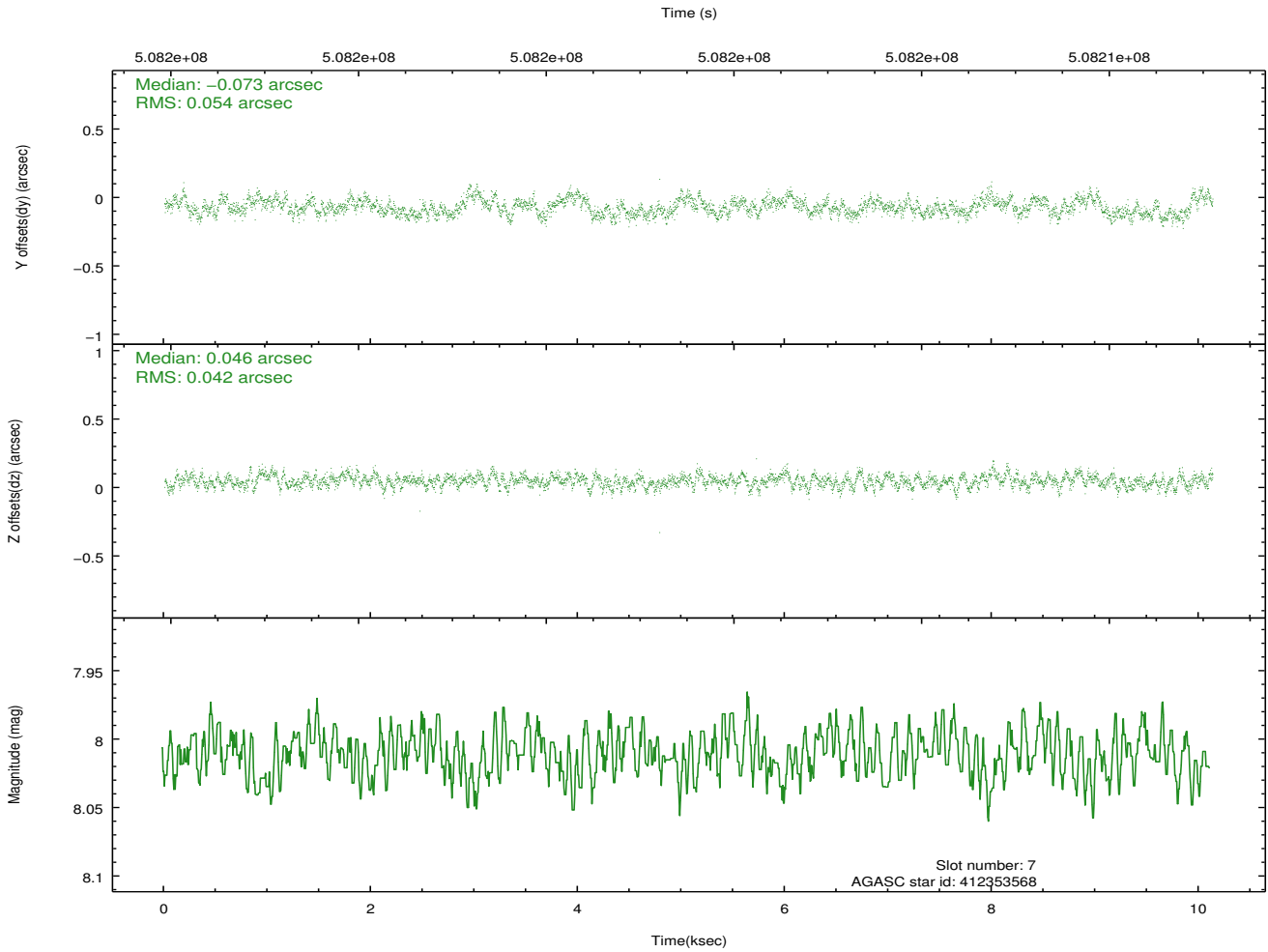
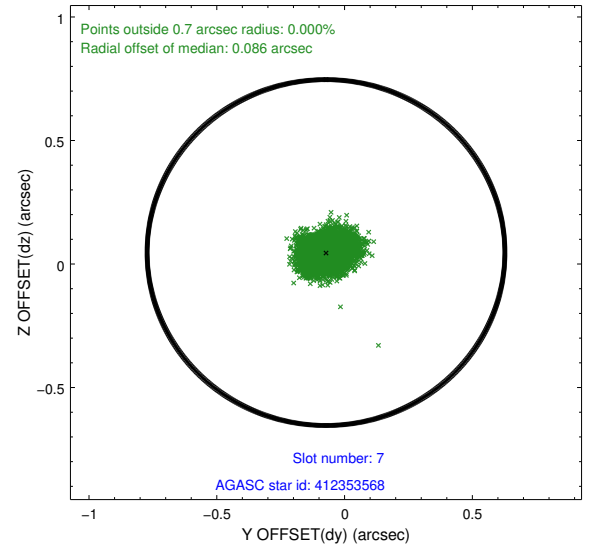
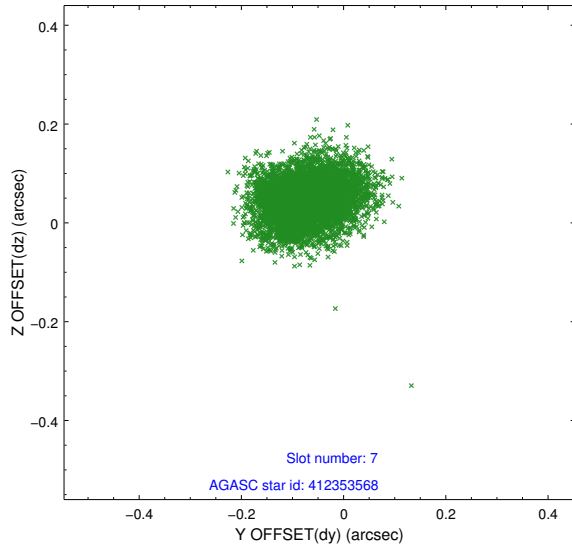
2.4.3 Slot 5



2.4.4 Slot 6

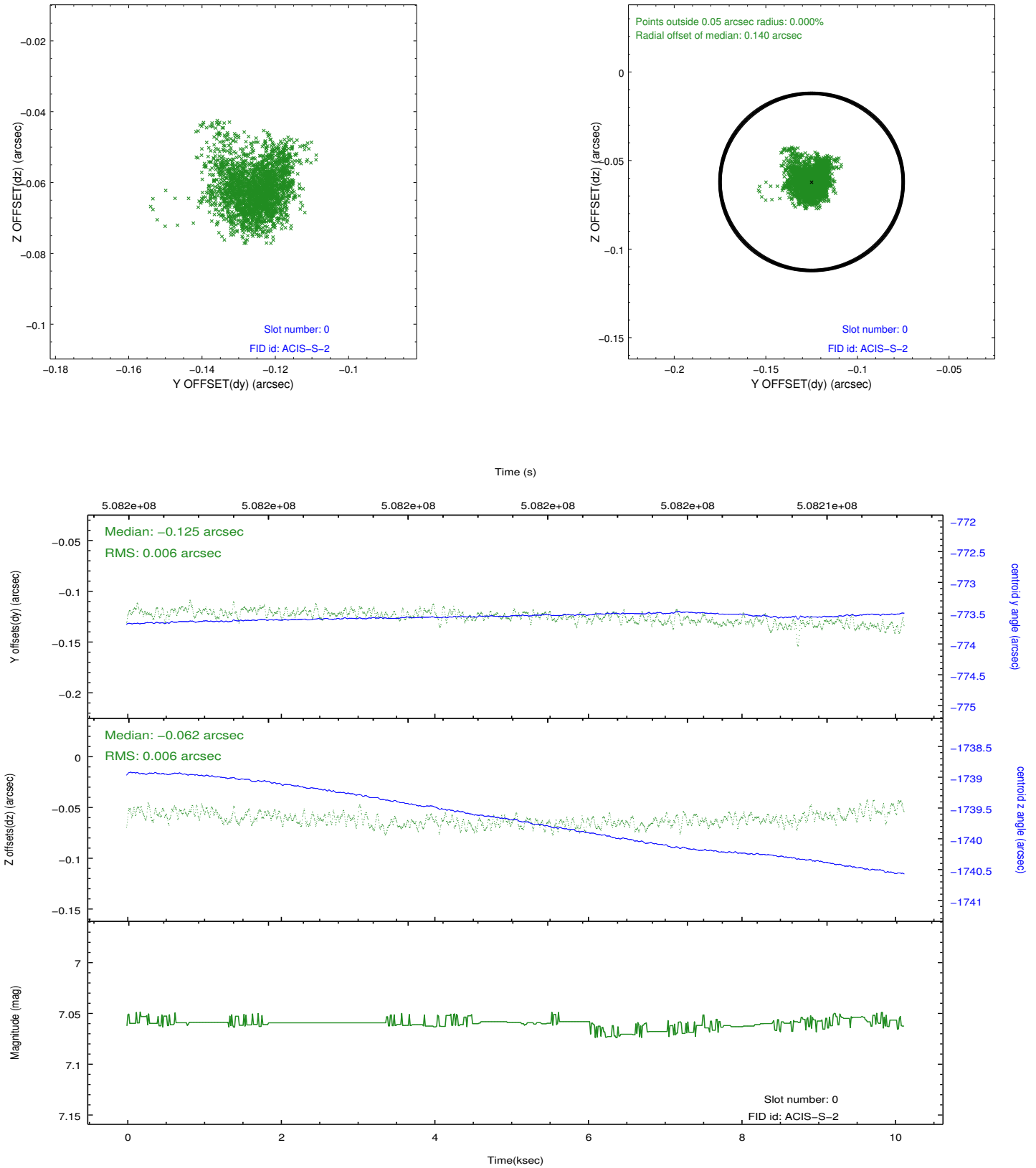


2.4.5 Slot 7

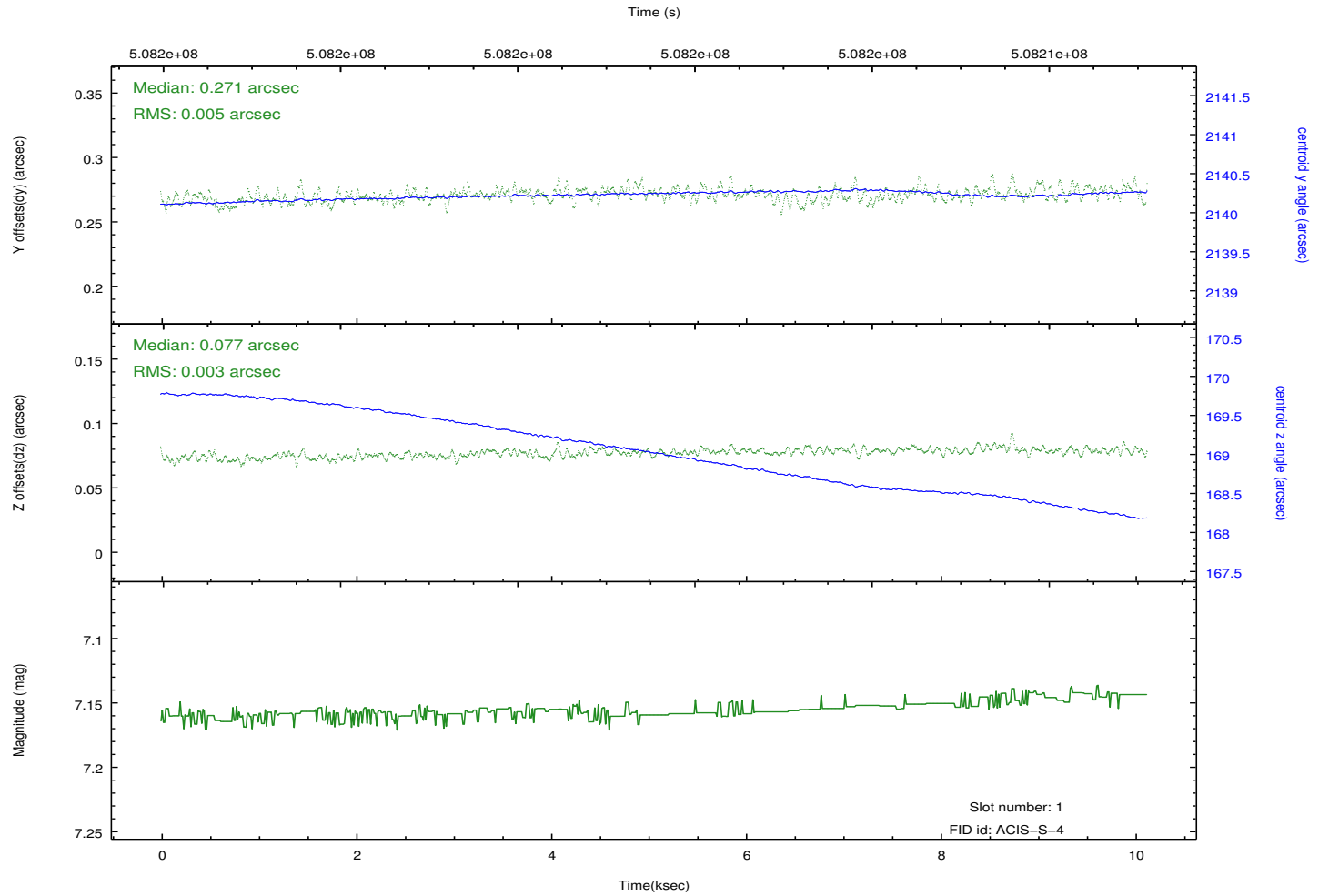
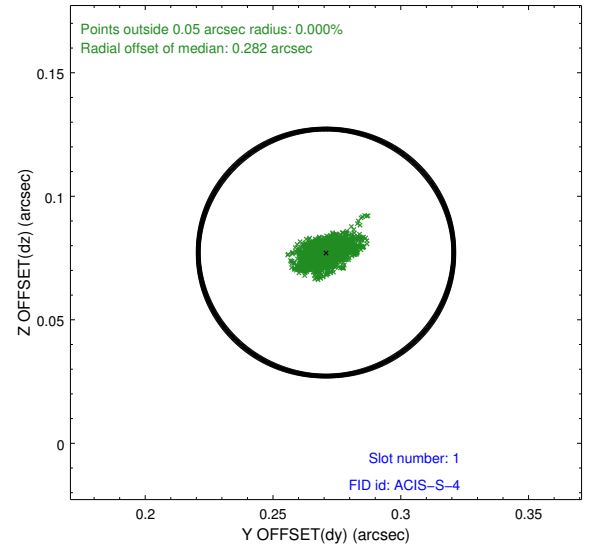
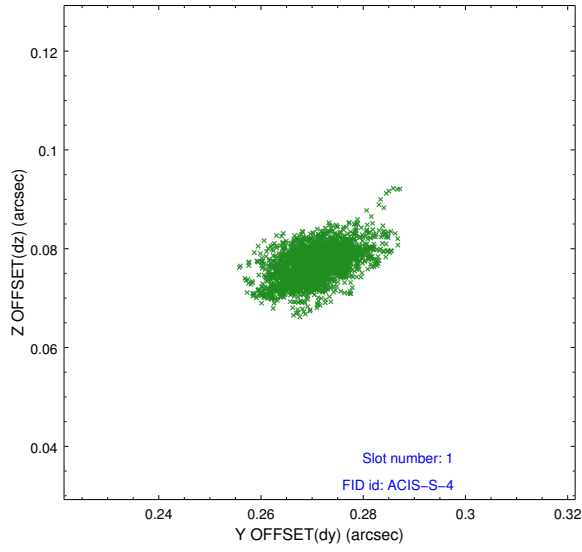


2.5 FID Slots

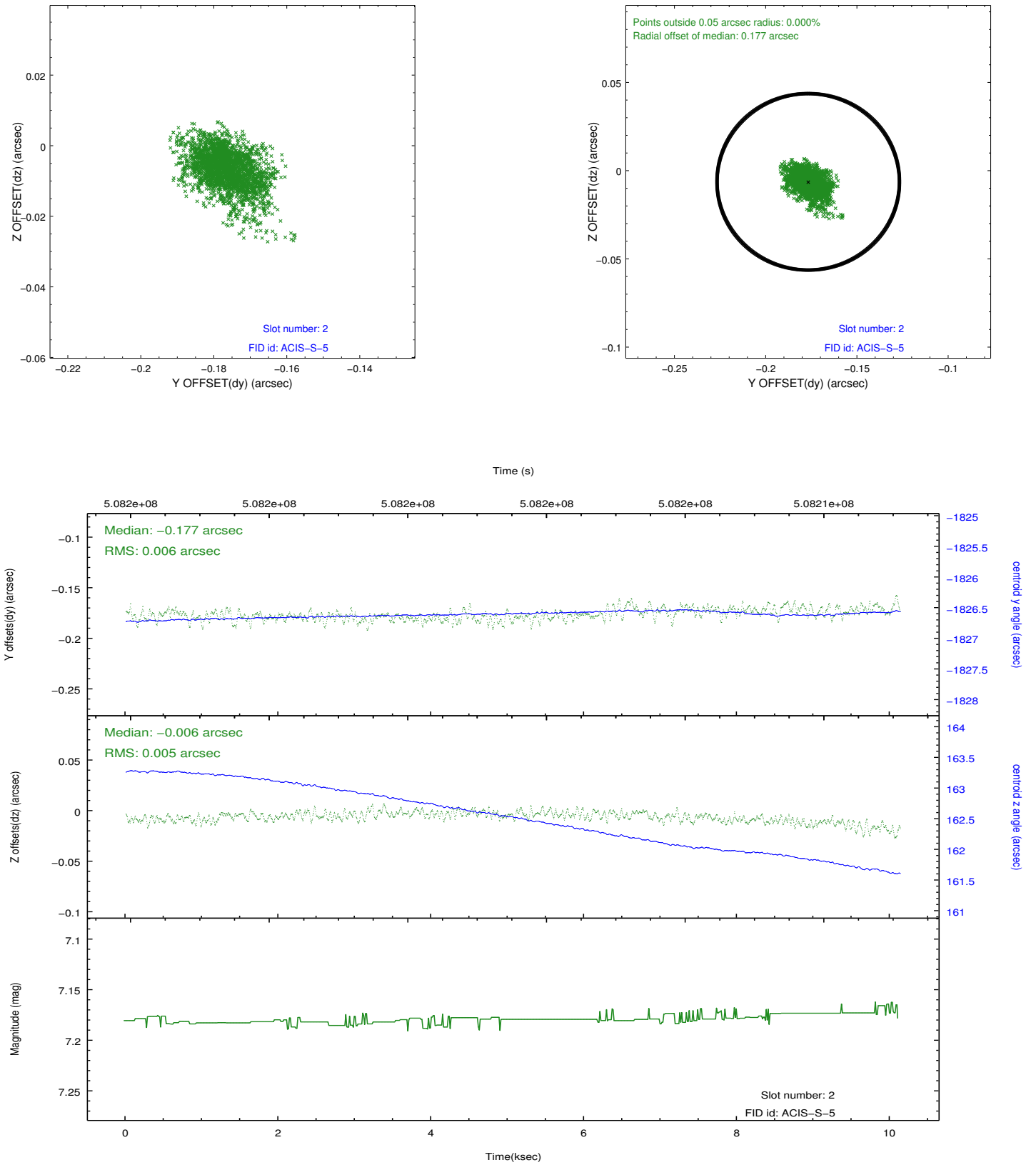
2.5.1 Slot 0



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)	2014.12.17
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.9647999629378

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.