

V&V Reference Report

L2 ASCDS Version : 10.1.1

Observation 15708 - L2 Version 2
Chandra X-Ray Center

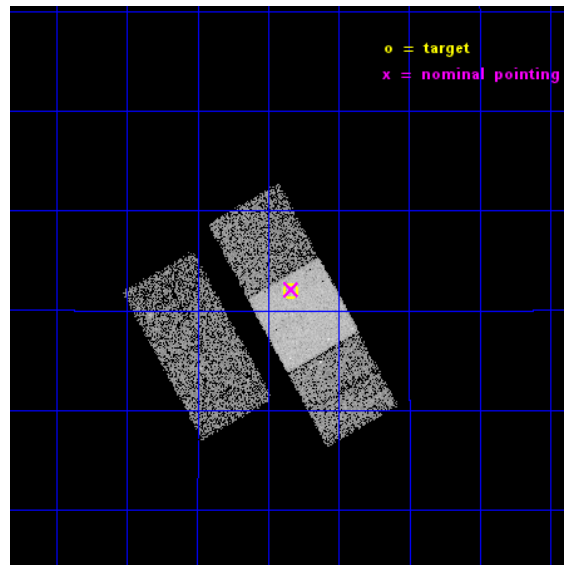
L2 Processing Date : Dec 9 2014

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1 Front

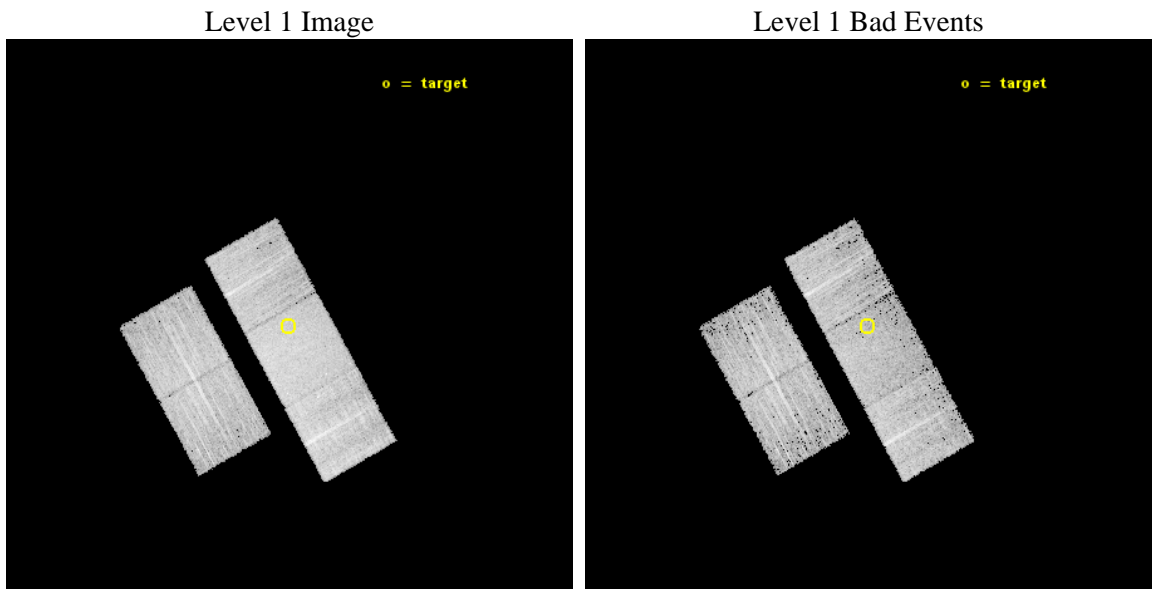
seq_num	200921	Sequence number
obs_id	15708	Observation id
title	X-ray irradiation of planets with atmospheres amenable to comprehensive follow-up	Proposal title
observer	Mr. Michael Salz	Principal investigator
object	Wasp-38	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	243.96	Observer's specified target RA [deg]
dec_targ	10.032583	Observer's specified target Dec [deg]
ra_nom	243.95858073261	Nominal RA [deg]
dec_nom	10.035217563696	Nominal Dec [deg]
roll_nom	60.744896087458	Nominal Roll [deg]
revision	2	Processing version of data
ontime	10068.800077438	Sum of GTIs [s]
livetime	9937.2437918838	Livetime [s]
ontime2	10068.767051458	Sum of GTIs [s]
ontime3	10068.800077438	Sum of GTIs [s]
ontime6	10068.800077438	Sum of GTIs [s]
ontime7	10068.800077438	Sum of GTIs [s]
ontime8	10068.800077438	Sum of GTIs [s]
l2events	50565	Number of level 2 events



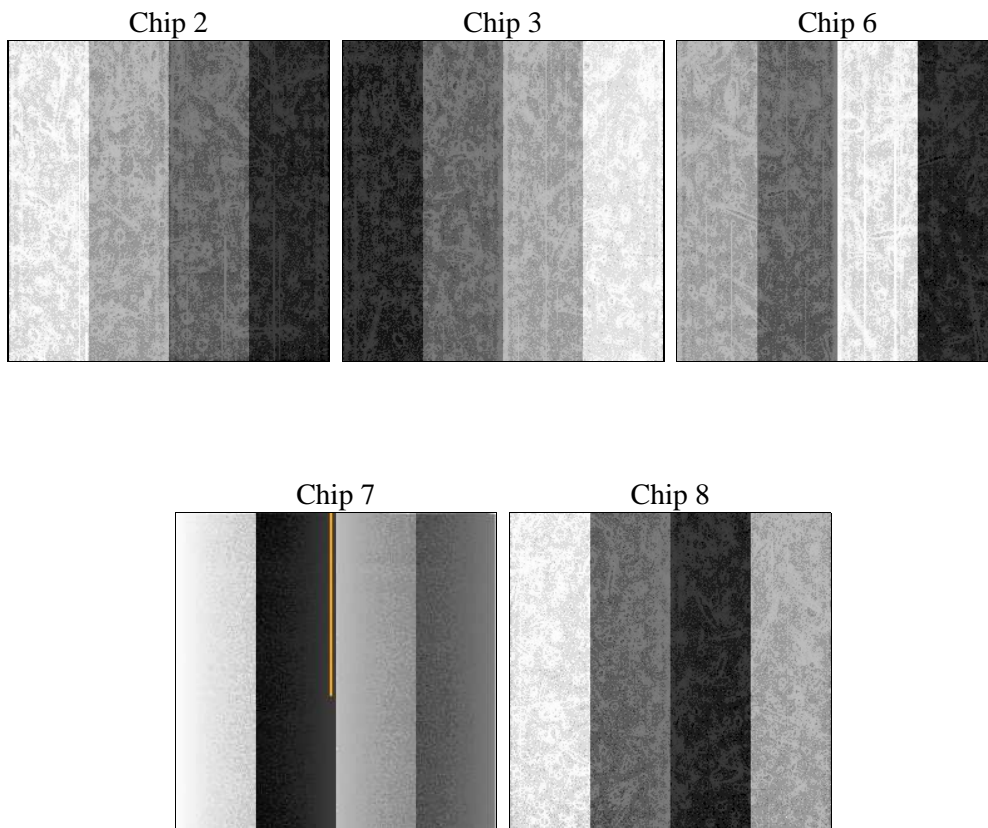
2 OBI

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	10068.800077438	Sum of GTIs [s]
caldbver	4.6.4	 	ontime2	10068.767051458	Sum of GTIs [s]
date	2014-12-10T01:21:24	Date and time of file creation	ontime3	10068.800077438	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	10068.800077438	Sum of GTIs [s]
			ontime7	10068.800077438	Sum of GTIs [s]
			ontime8	10068.800077438	Sum of GTIs [s]
			l1events	277404	Number of level 1 events

2.1.4 Events

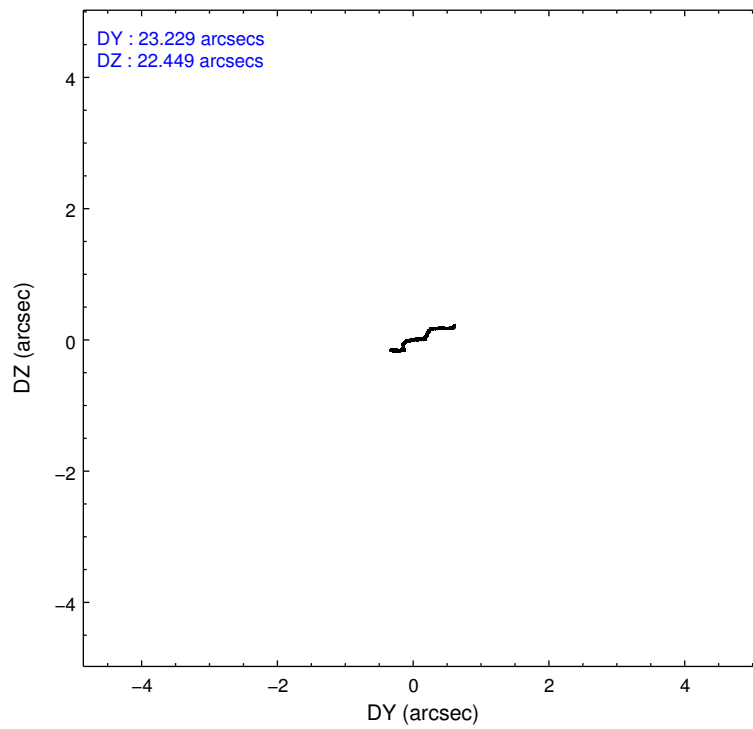
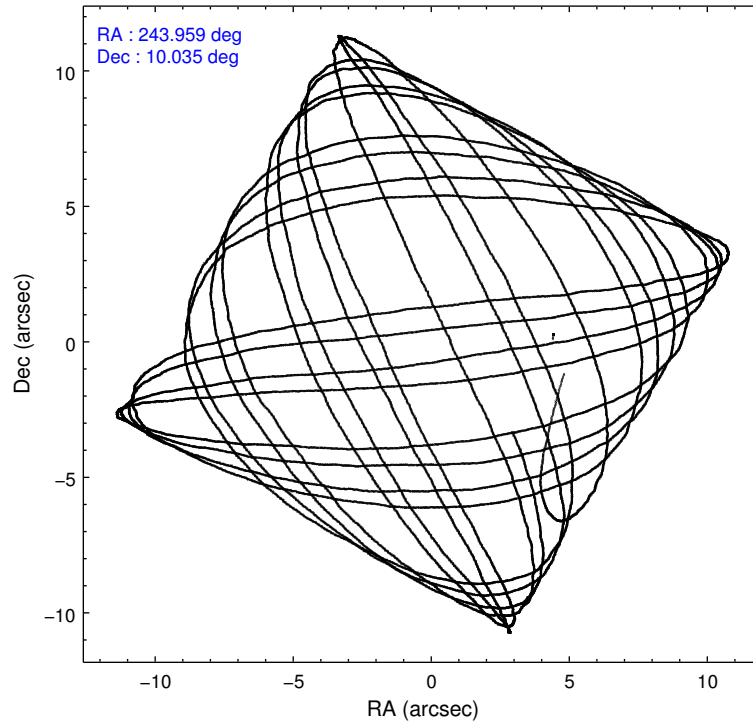
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	48117	46862	49471	67385	65569
rejected events	42388	41357	43283	37637	47699
rejected %	88%	88%	87%	55%	72%

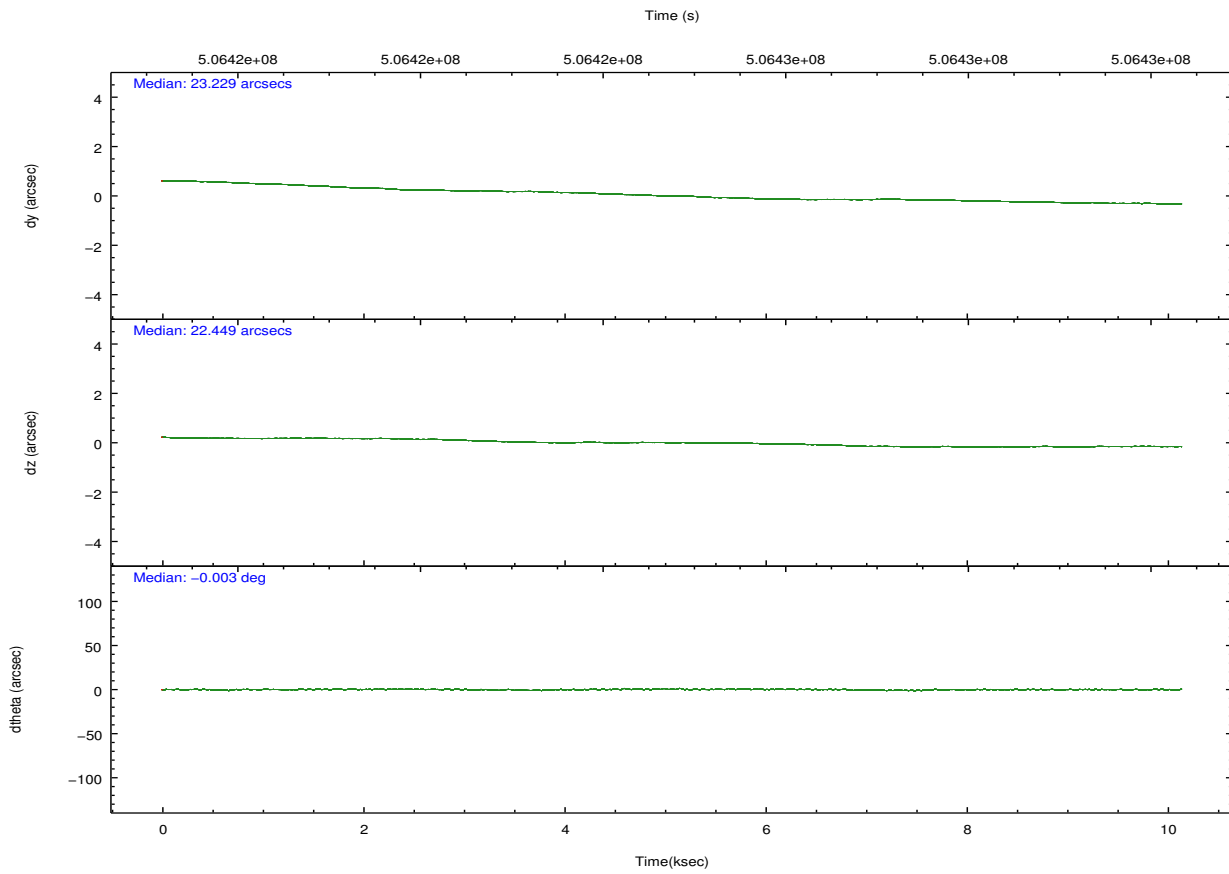
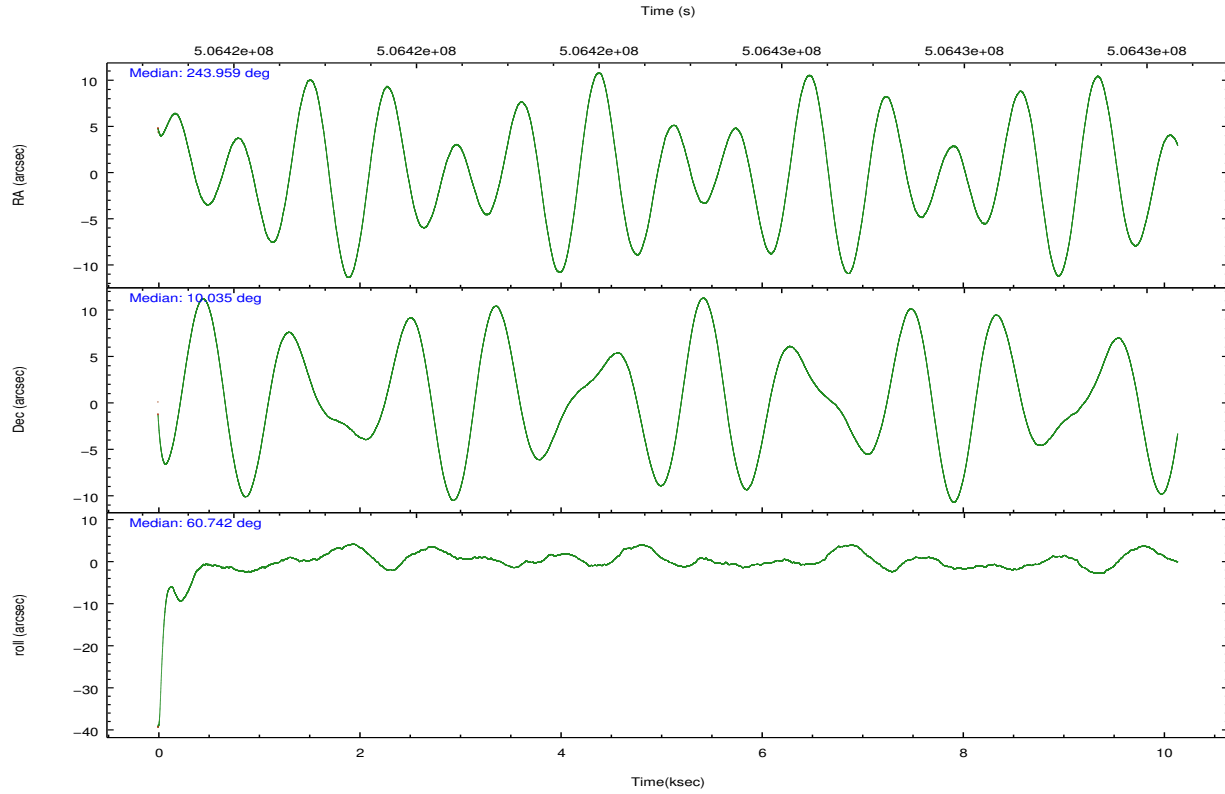
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	2034	1942	2189	2836	5437
	4%	4%	4%	4%	8%
grade 1 events	23	41	26	83	50
	0%	0%	0%	0%	0%
grade 2 events	1468	1202	1338	6137	4184
	3%	2%	2%	9%	6%
grade 3 events	558	596	632	2595	1783
	1%	1%	1%	3%	2%
grade 4 events	556	597	567	2534	1725
	1%	1%	1%	3%	2%
grade 5 events	2021	2617	2599	6912	3847
	4%	5%	5%	10%	5%
grade 6 events	1117	1170	1463	15650	4743
	2%	2%	2%	23%	7%
grade 7 events	40340	38697	40657	30638	43800
	83%	82%	82%	45%	66%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23678	ACIS-23678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	243.959285	243.9585807326086	CCD I2 on	O1	Y
[deg] Pointing Dec	10.007919	10.0352175636964	CCD I3 on	O2	Y
[deg] Pointing Roll	60.588199	60.74489608745811	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	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	Y	Y
[s] Observation start time (MET)	506419813.184000	506418816.95126	CCD S5 on	N	N
Observation start date	2014-01-18T08:09:06	2014-01-18T07:53:36	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	506429813.184000	506430792.02692	On-chip summing requested	N	N
Observation end date	2014-01-18T10:55:46	2014-01-18T11:13:12	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





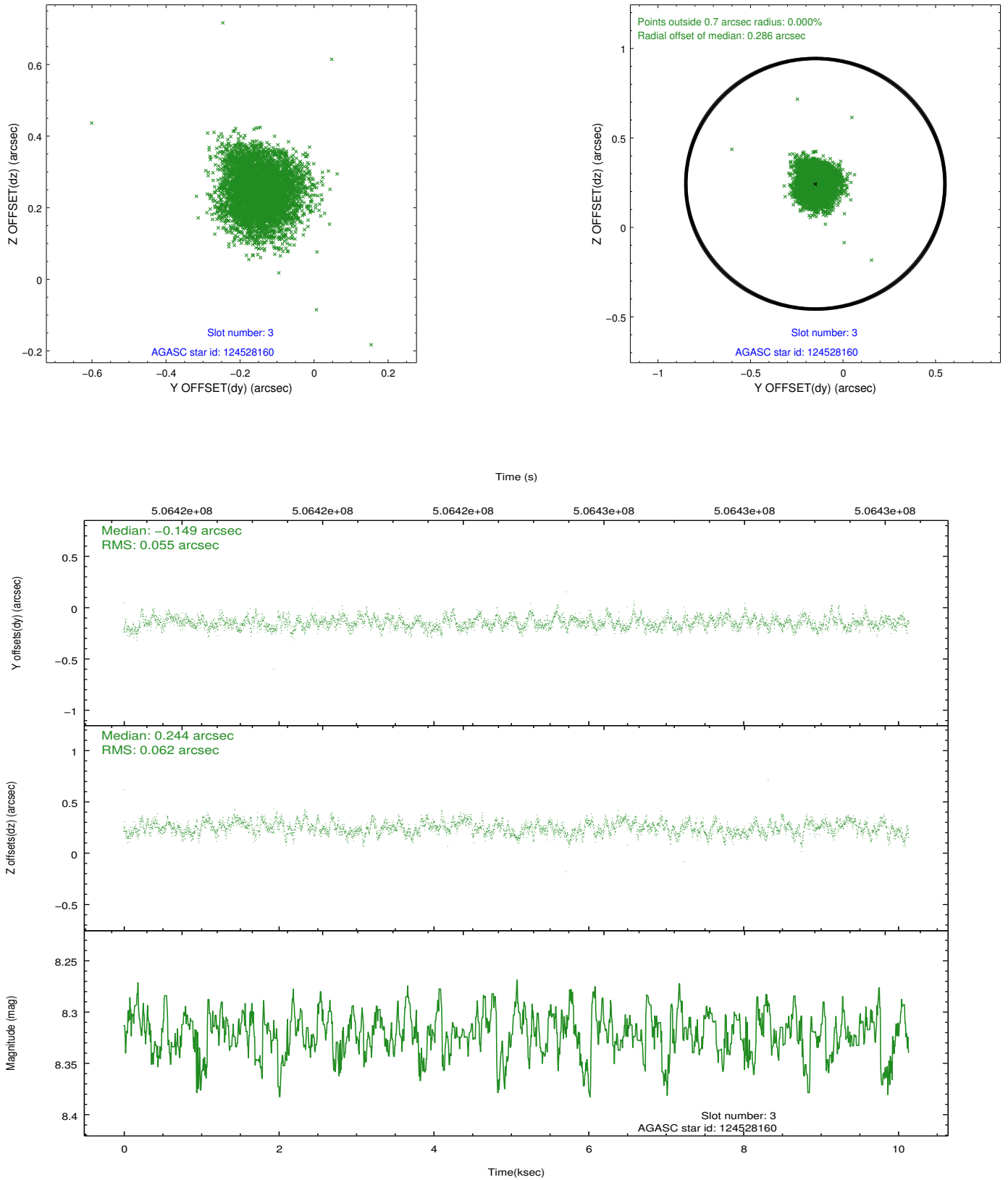
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.94	2474	-0.093	-0.027	0.013	0.021	0.000000	0.000000	-776.61	-1744.04
1	FID		ACIS-S-4	7.01	2474	0.251	0.053	0.014	0.024	0.000000	0.000000	2136.81	163.93
2	FID		ACIS-S-5	7.05	2474	-0.187	-0.018	0.009	0.013	0.000000	0.000000	-1828.84	158.20
3	GUIDE	used	124528160	8.32	4946	-0.149	0.244	0.088	0.138	244.453332	10.284757	1728.91	-1034.00
4	GUIDE	used	124528880	8.68	4946	-0.161	-0.348	0.097	0.153	243.496301	10.241817	-70.78	1842.77
5	GUIDE	used	124529560	8.65	4948	0.227	-0.133	0.088	0.139	243.527330	9.540858	-2216.38	511.07
6	GUIDE	used	124530104	7.98	4946	0.306	0.517	0.077	0.130	243.961923	9.512115	-1549.97	-883.91
7	GUIDE	used	124525712	9.56	4939	-0.230	-0.289	0.133	0.204	243.853844	10.722279	2056.68	1587.76

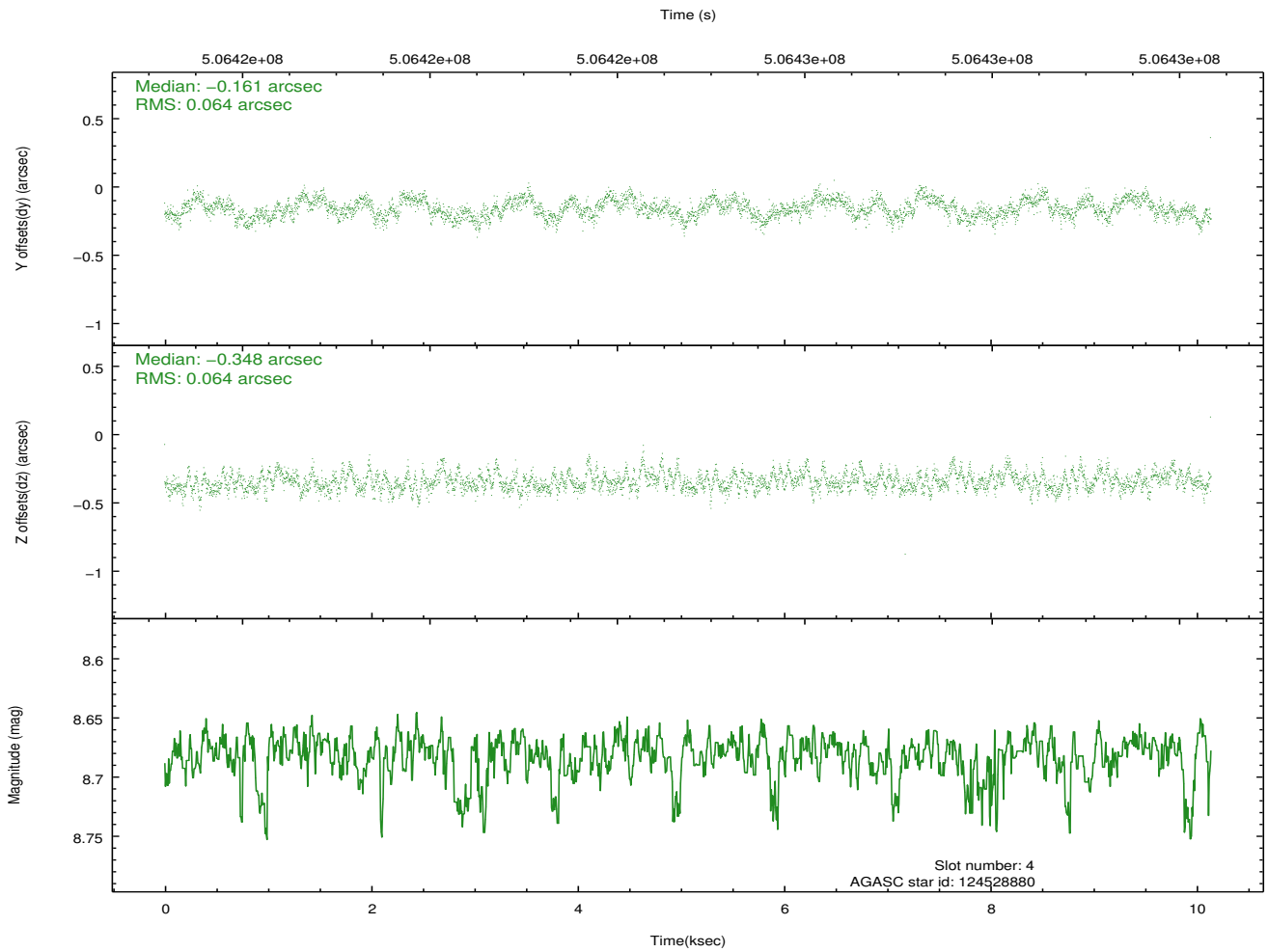
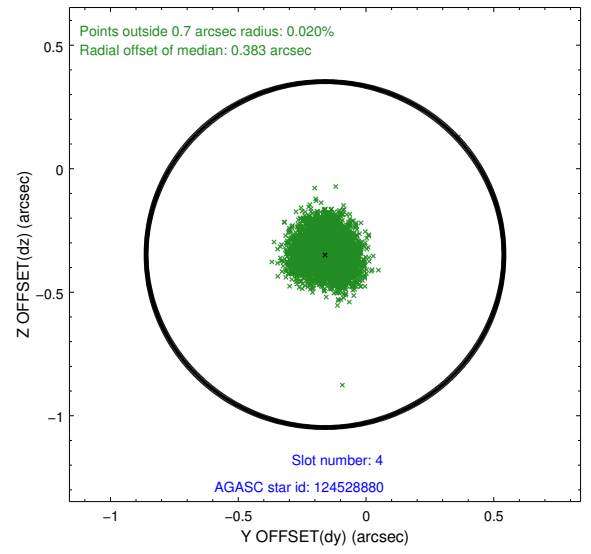
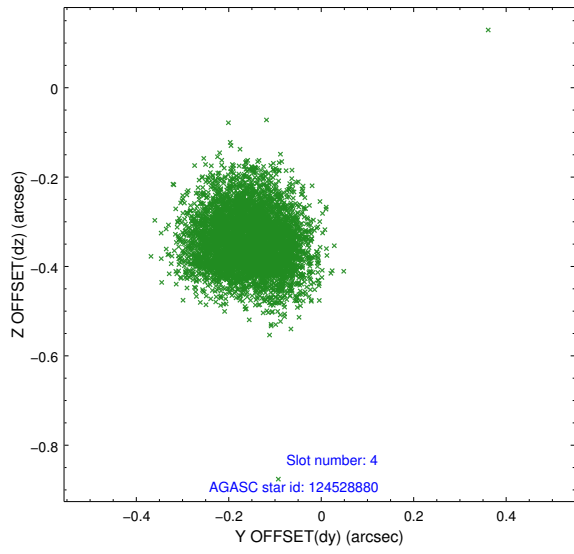
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2.4 Star Slots

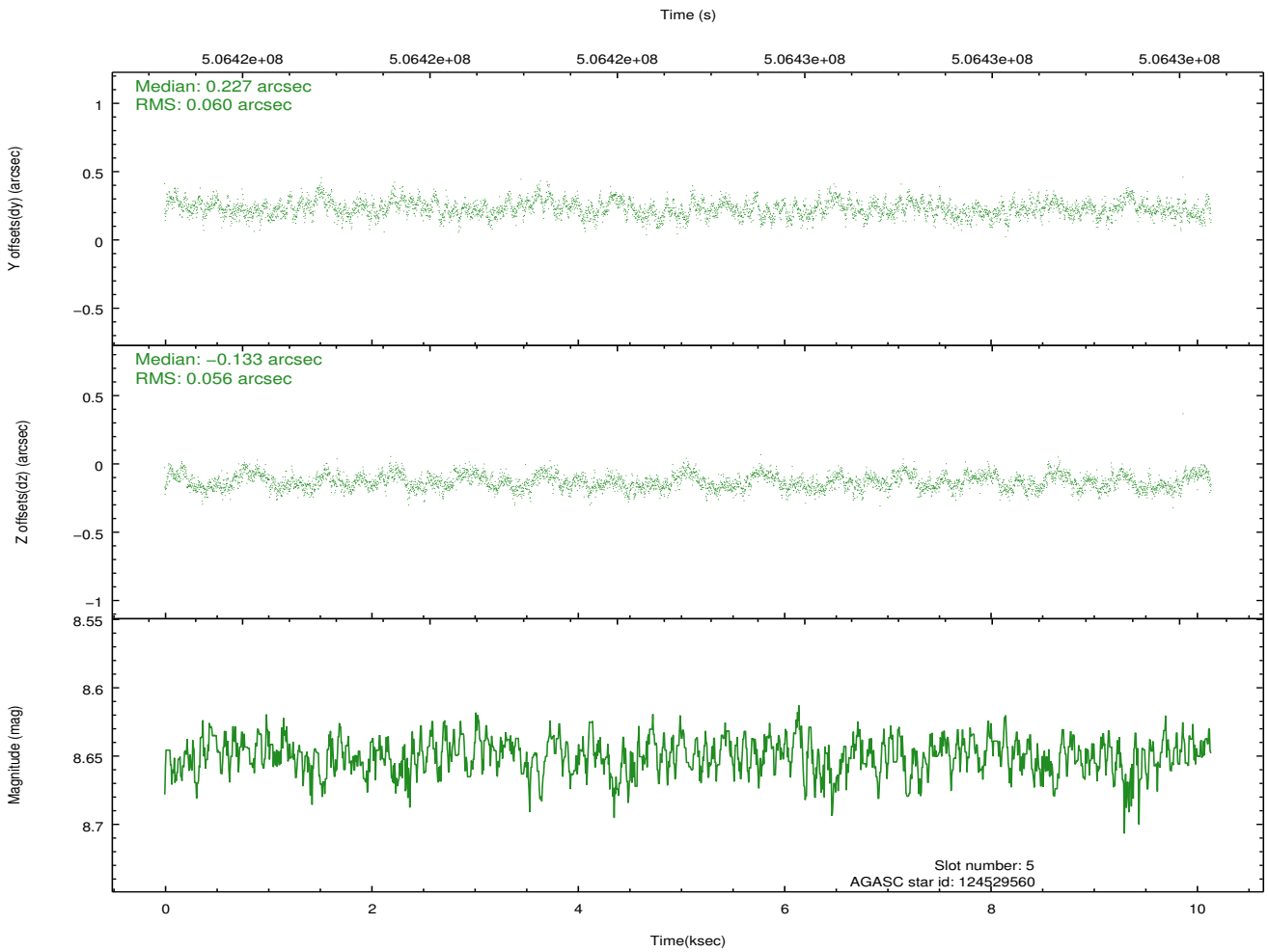
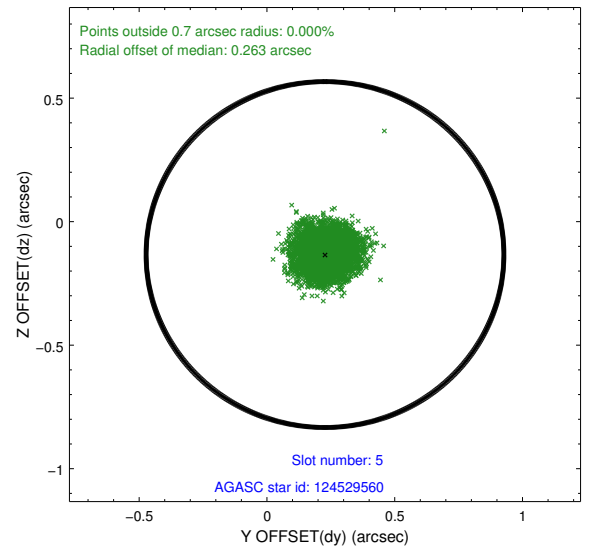
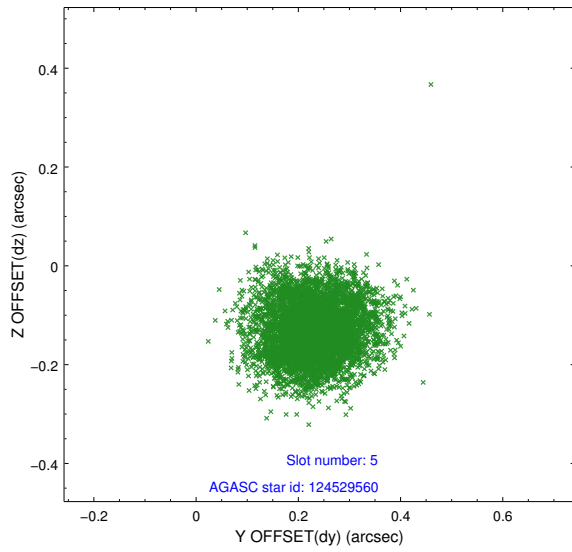
2.4.1 Slot 3



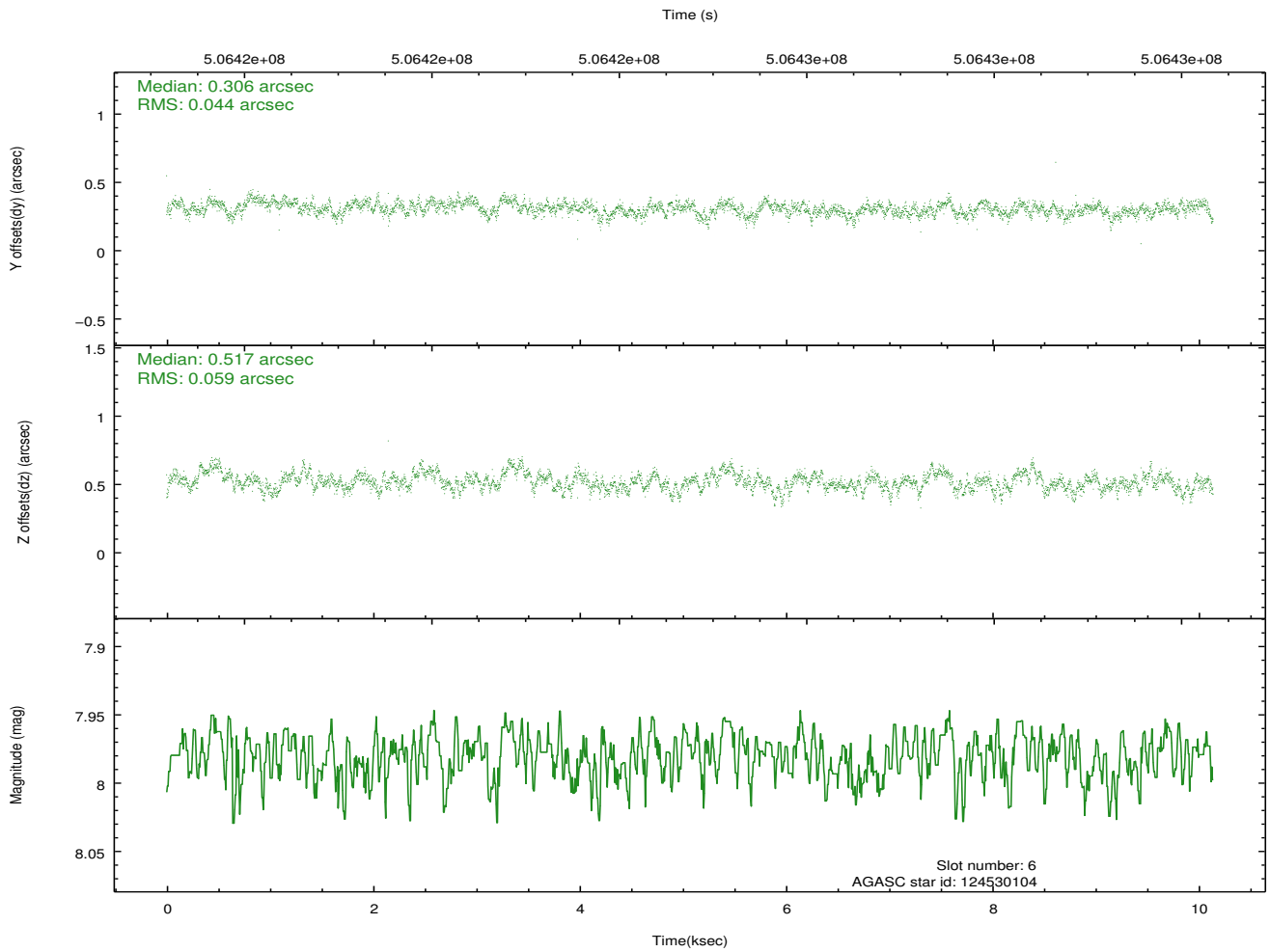
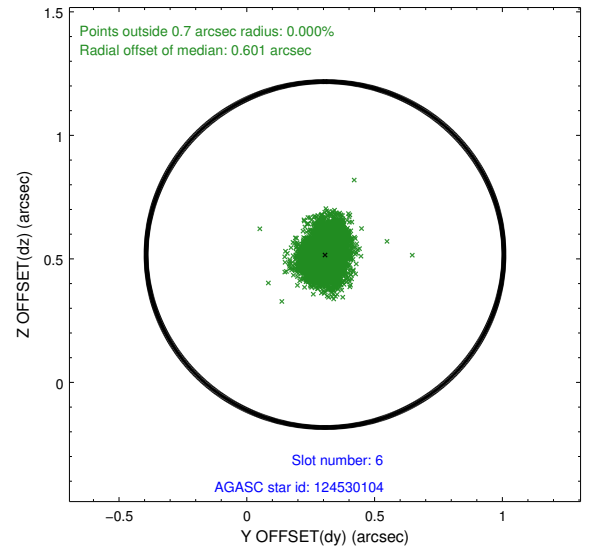
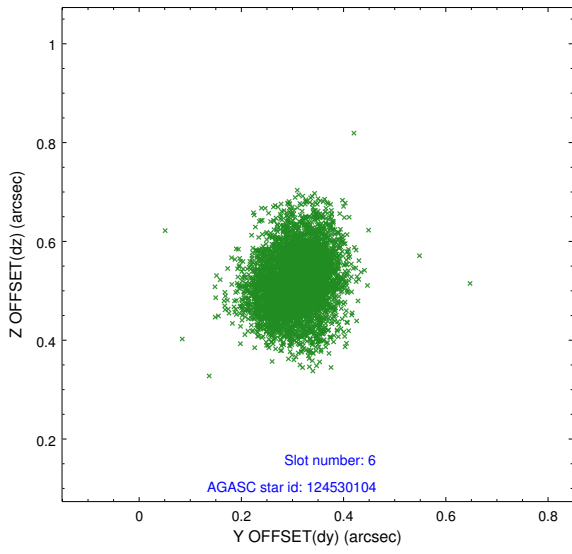
2.4.2 Slot 4



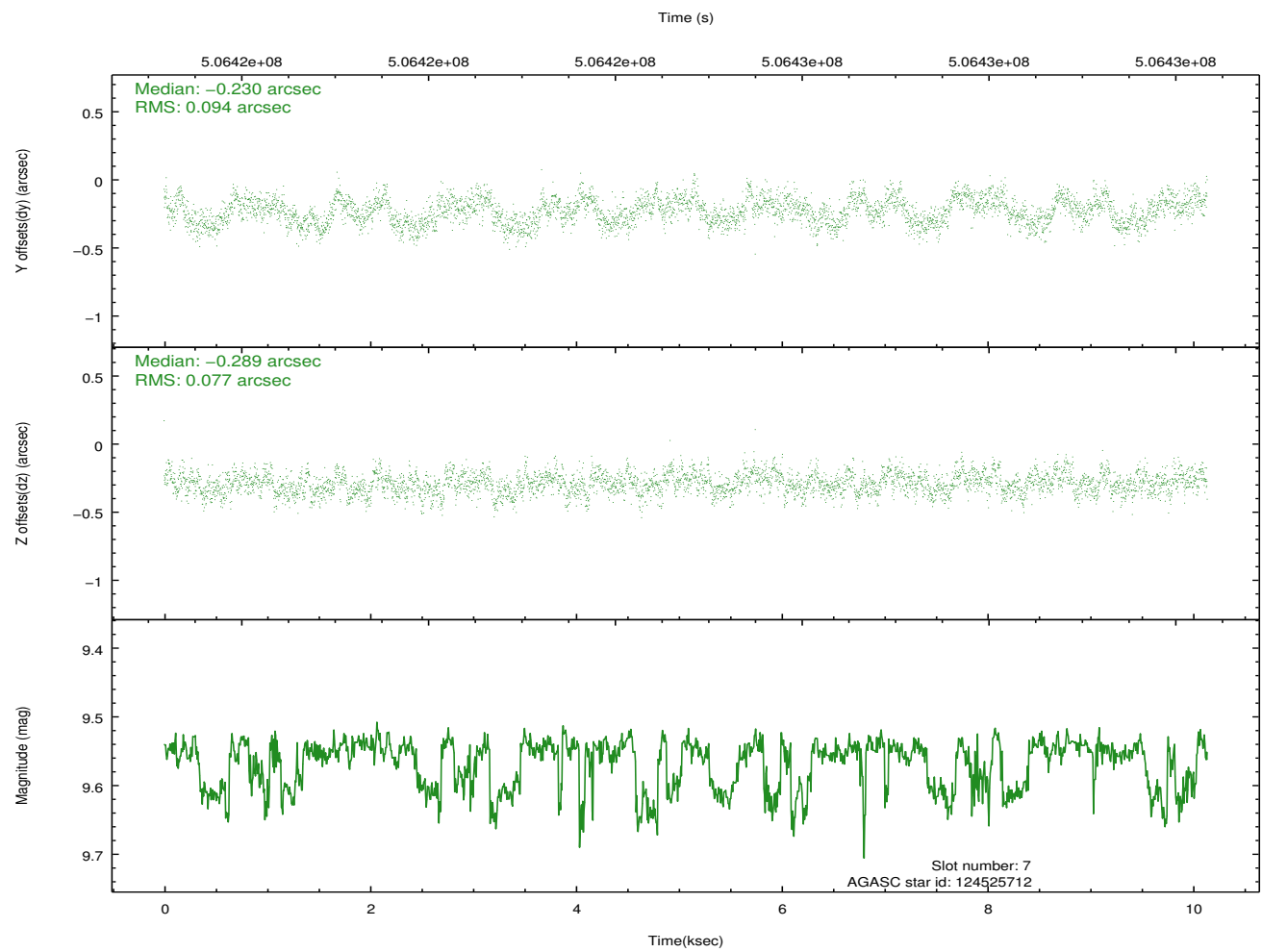
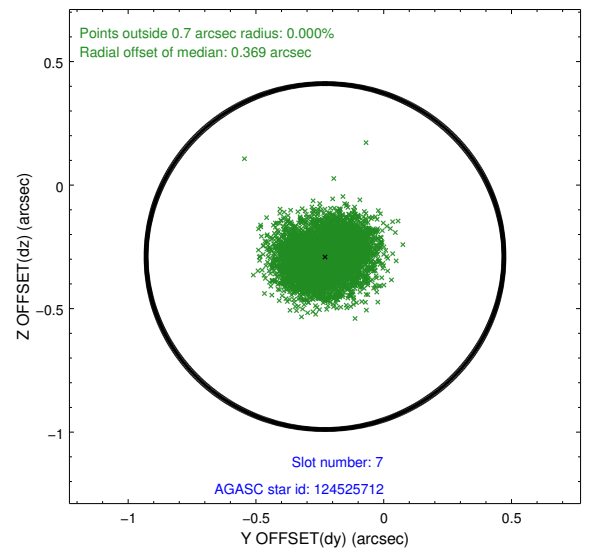
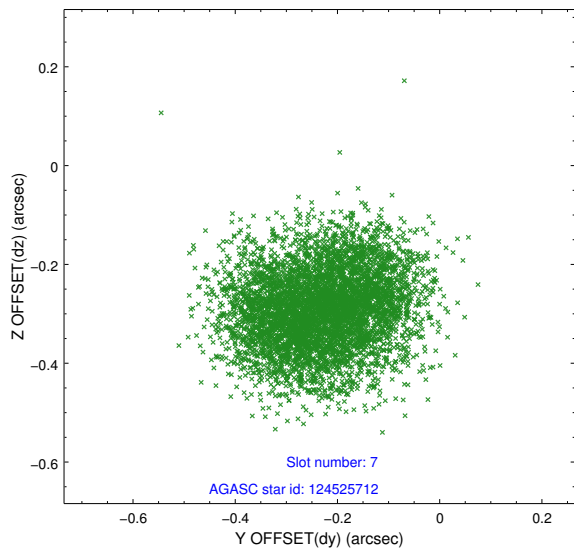
2.4.3 Slot 5



2.4.4 Slot 6

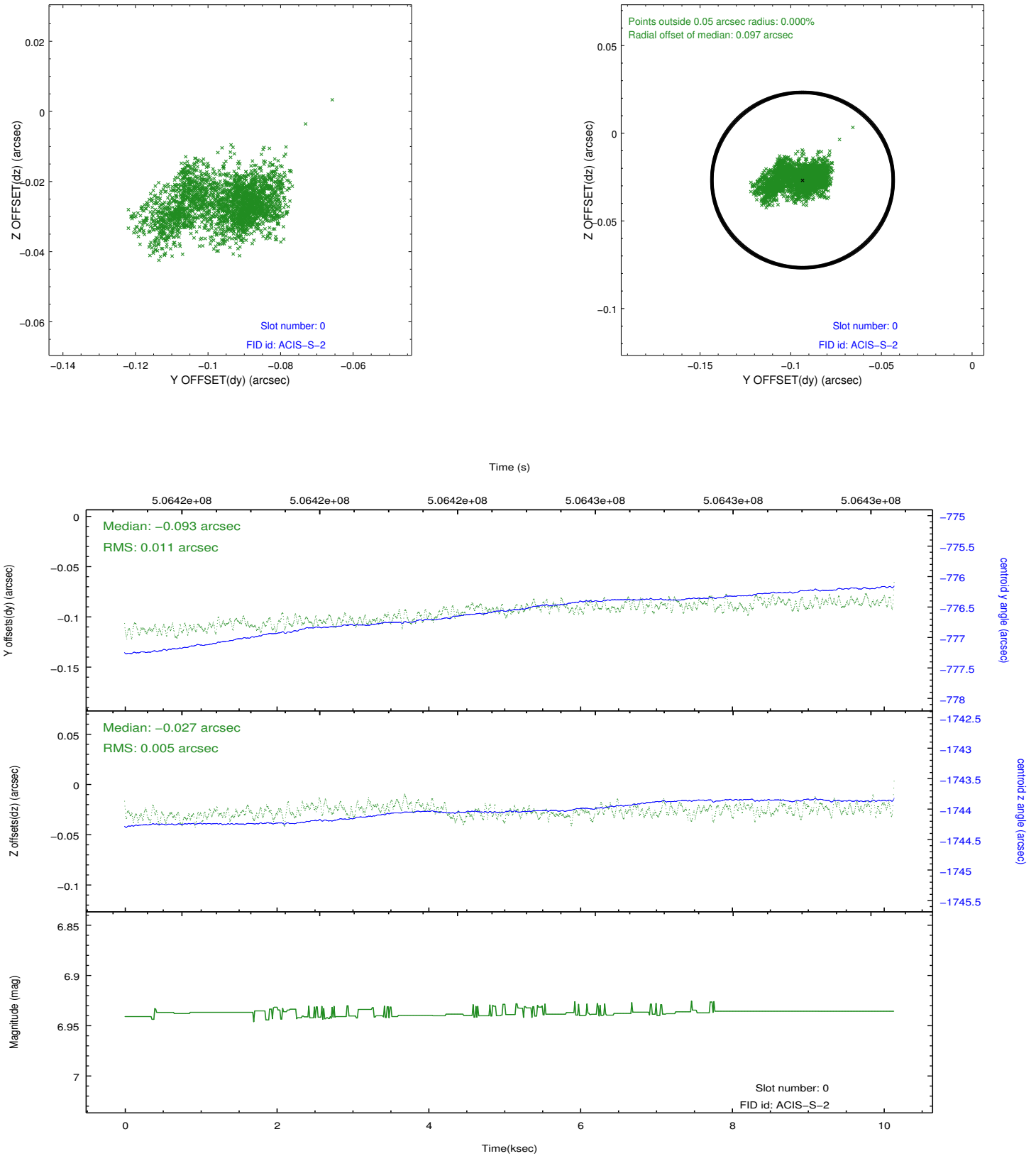


2.4.5 Slot 7

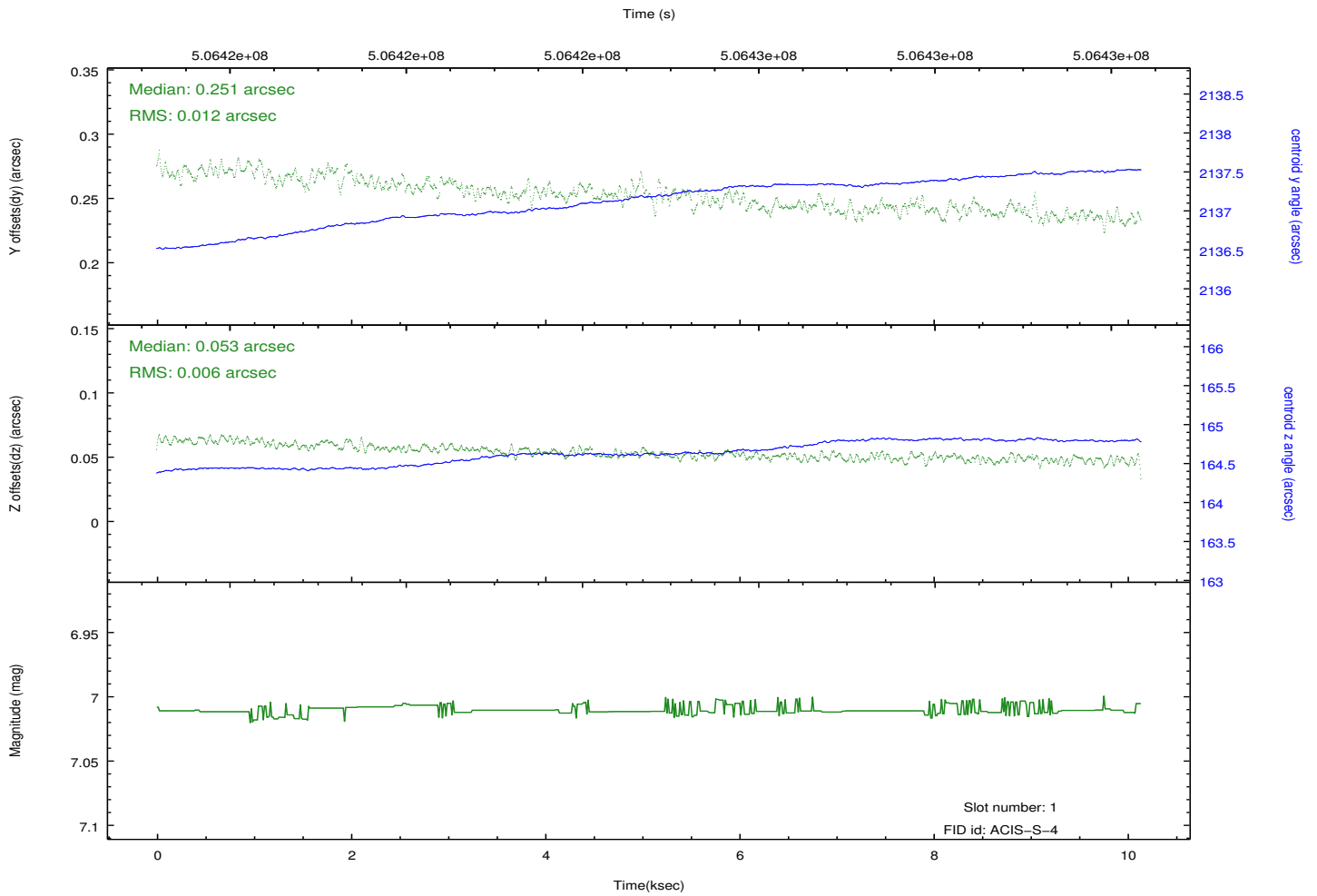
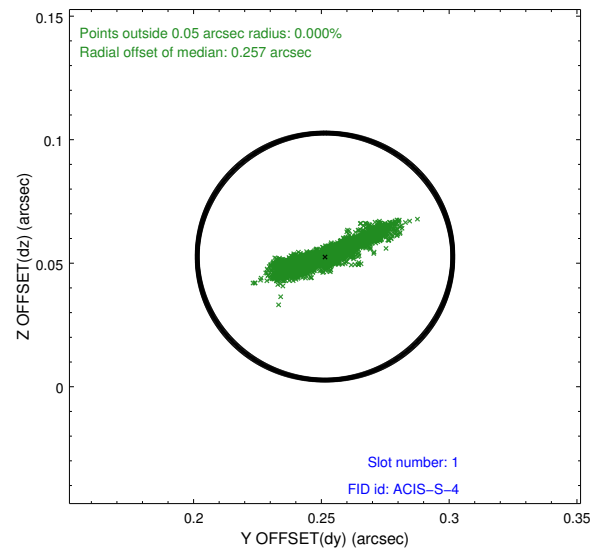
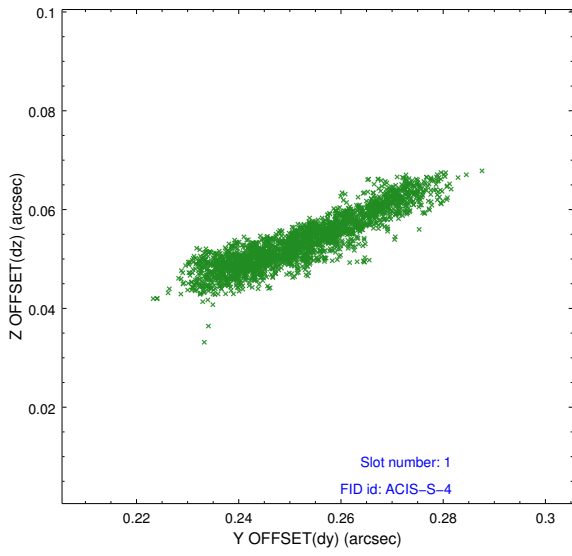


2.5 FID Slots

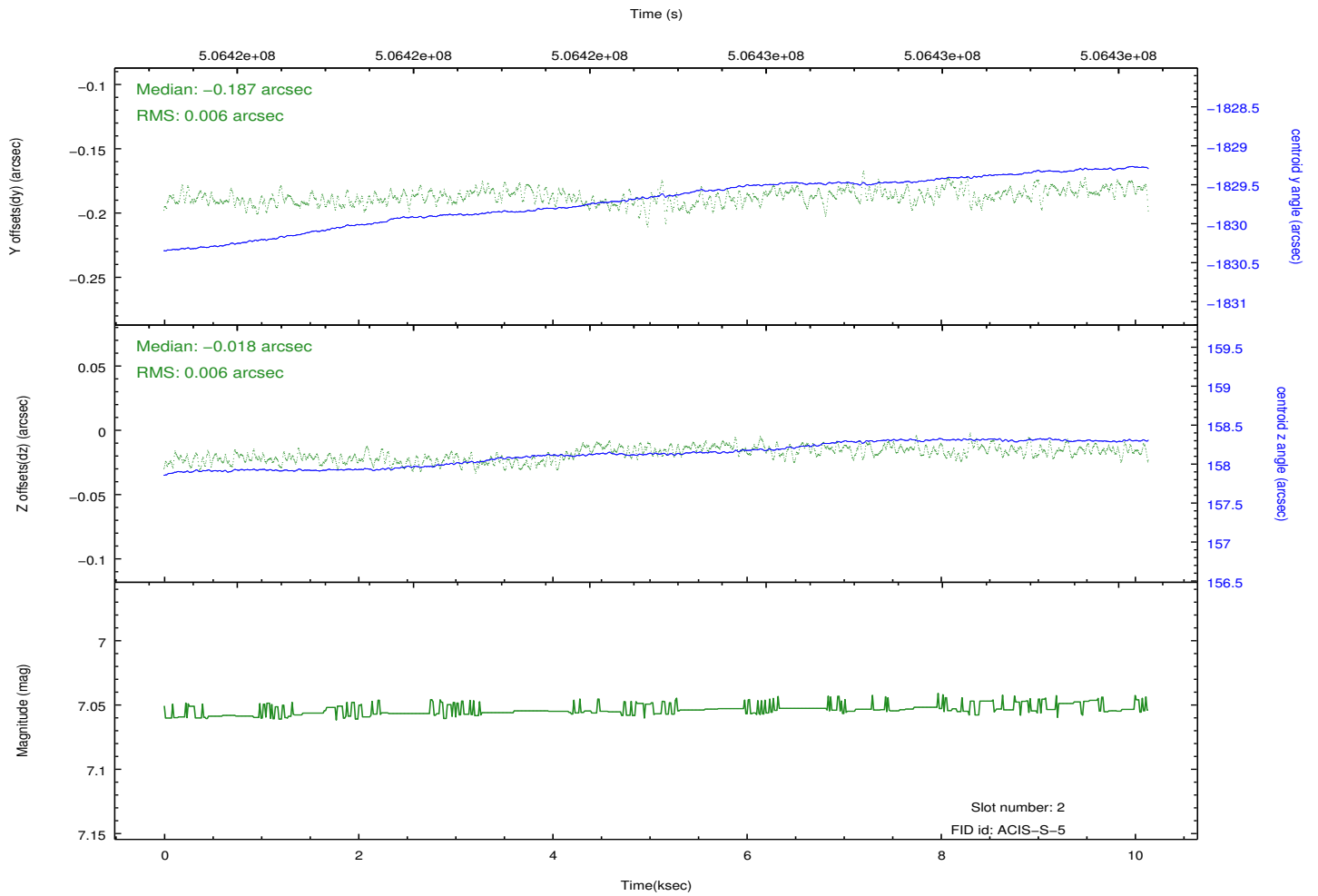
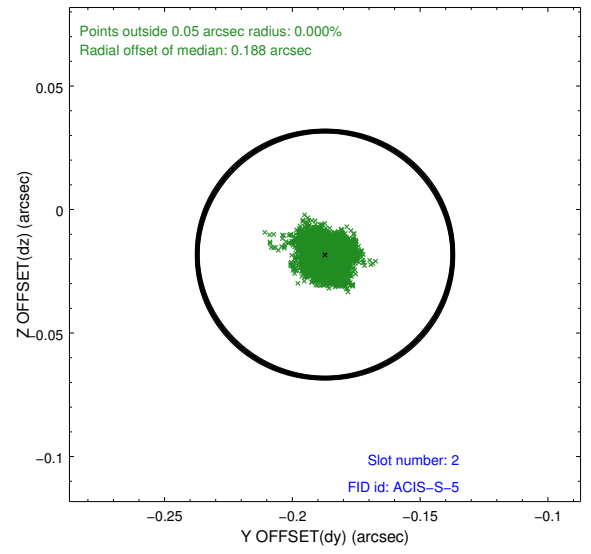
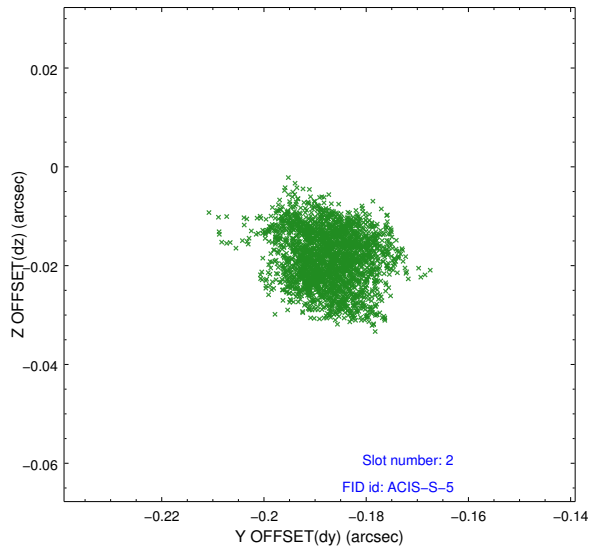
2.5.1 Slot 0



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	10.068800077438

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.