

V&V Reference Report

L2 ASCDS Version : 10.1.1

Observation 16107 - L2 Version 2
Chandra X-Ray Center

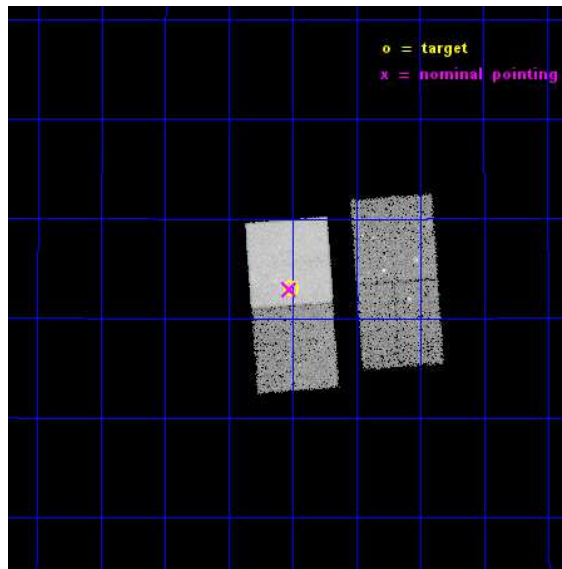
L2 Processing Date : Dec 8 2014

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1 Front

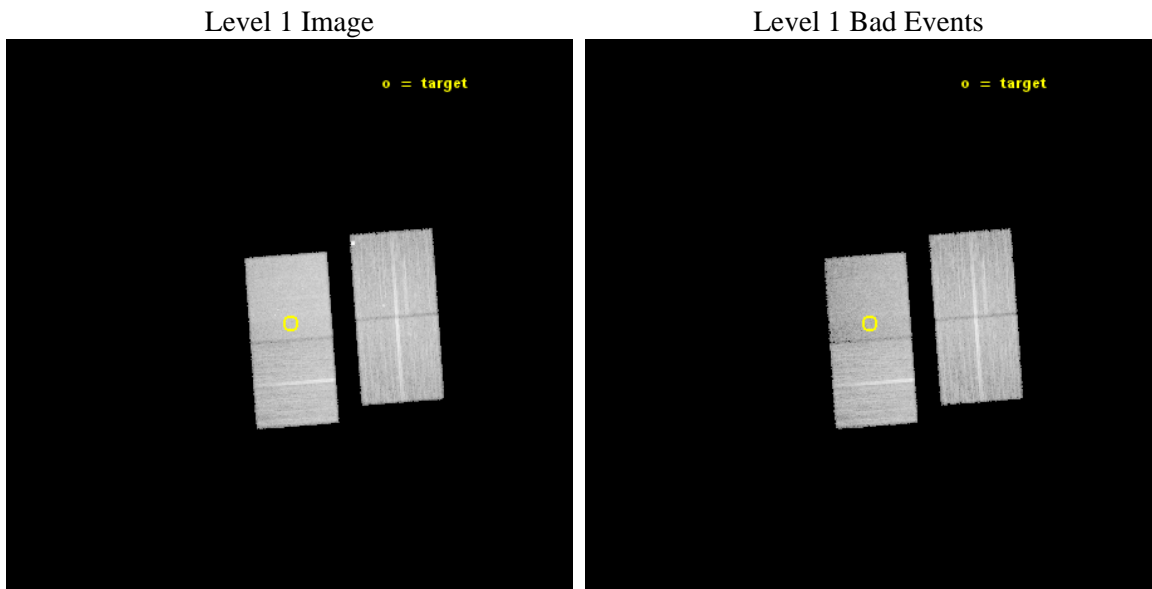
seq_num	702995	Sequence number
obs_id	16107	Observation id
title	Studying AGN evolution with ionization echoes	Proposal title
observer	Dr. Mischa Schirmer	Principal investigator
object	J015930.8+270302	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	29.878333	Observer's specified target RA [deg]
dec_targ	27.050556	Observer's specified target Dec [deg]
ra_nom	29.881061660664	Nominal RA [deg]
dec_nom	27.048744231297	Nominal Dec [deg]
roll_nom	265.77115199503	Nominal Roll [deg]
revision	2	Processing version of data
ontime	29874.700229764	Sum of GTIs [s]
livetime	29484.365277828	Livetime [s]
ontime2	29865.277068794	Sum of GTIs [s]
ontime3	29874.700229764	Sum of GTIs [s]
ontime6	29871.559169412	Sum of GTIs [s]
ontime7	29874.700229764	Sum of GTIs [s]
l2events	110796	Number of level 2 events



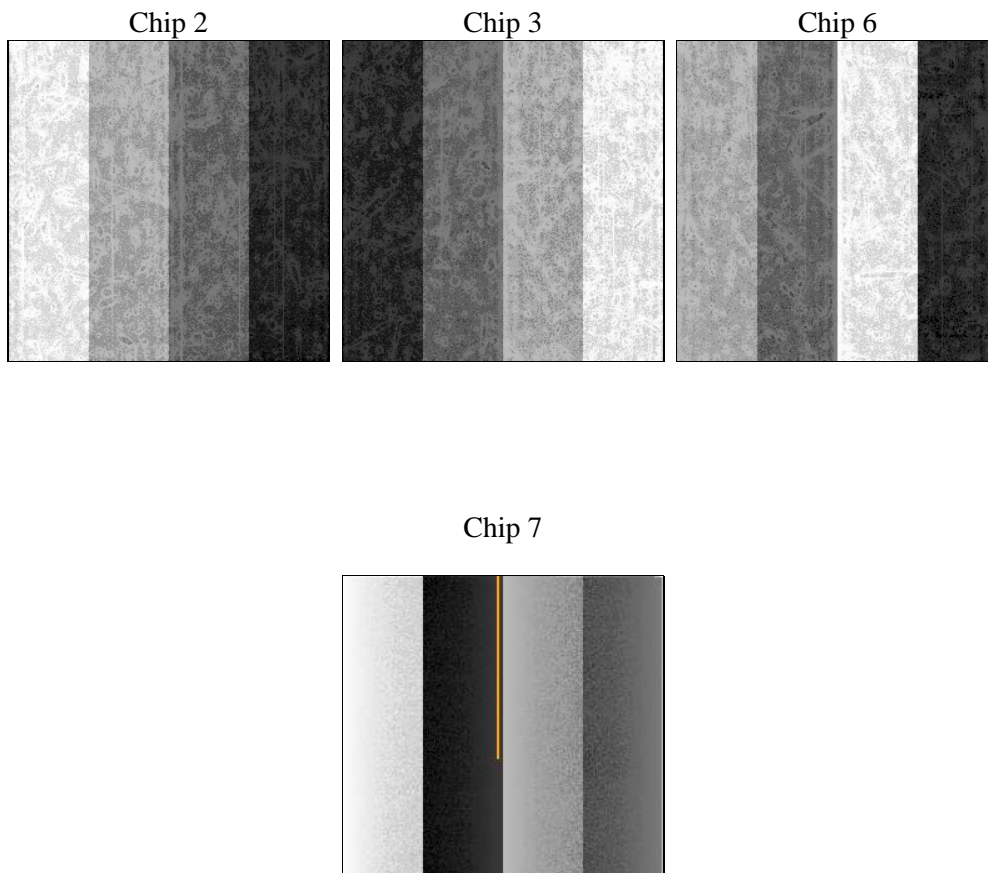
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	29800.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	29874.700229764	Sum of GTIs [s]
caldbver	4.6.4	 	ontime2	29865.277068794	Sum of GTIs [s]
date	2014-12-08T06:25:57	Date and time of file creation	ontime3	29874.700229764	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	29871.559169412	Sum of GTIs [s]
			ontime7	29874.700229764	Sum of GTIs [s]
			l1events	567776	Number of level 1 events

2.1.4 Events

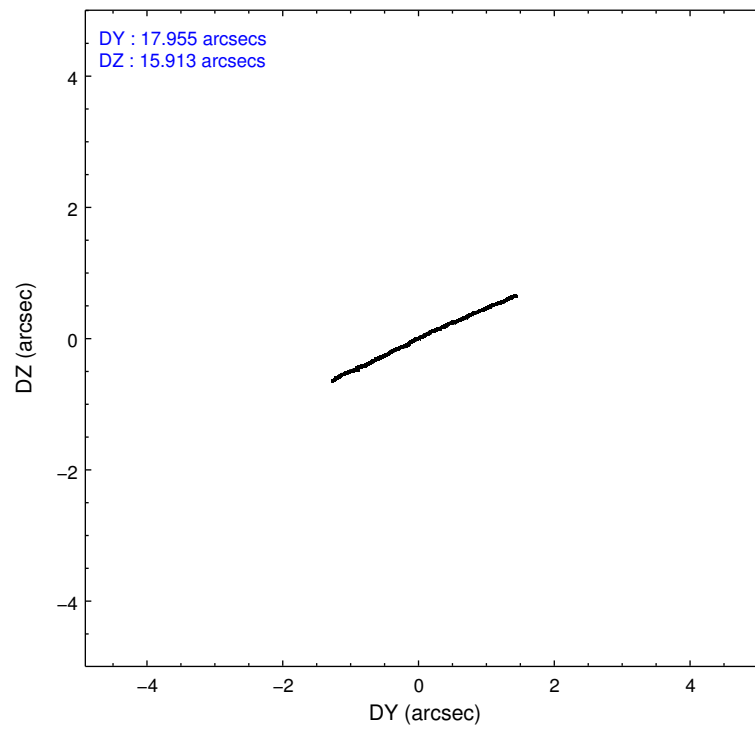
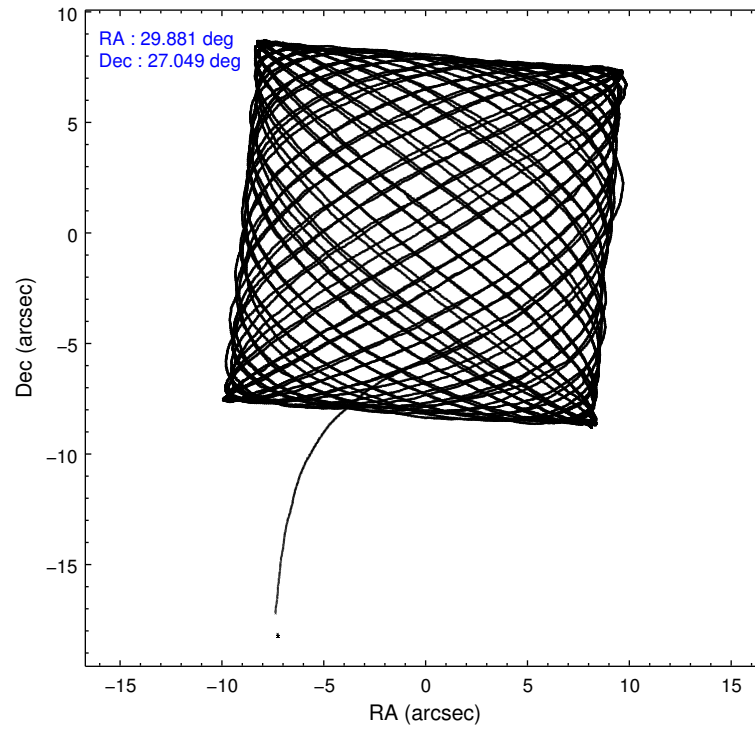
	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	135134	135730	137605	159307
rejected events	120848	118876	121959	85680
rejected %	89%	87%	88%	53%

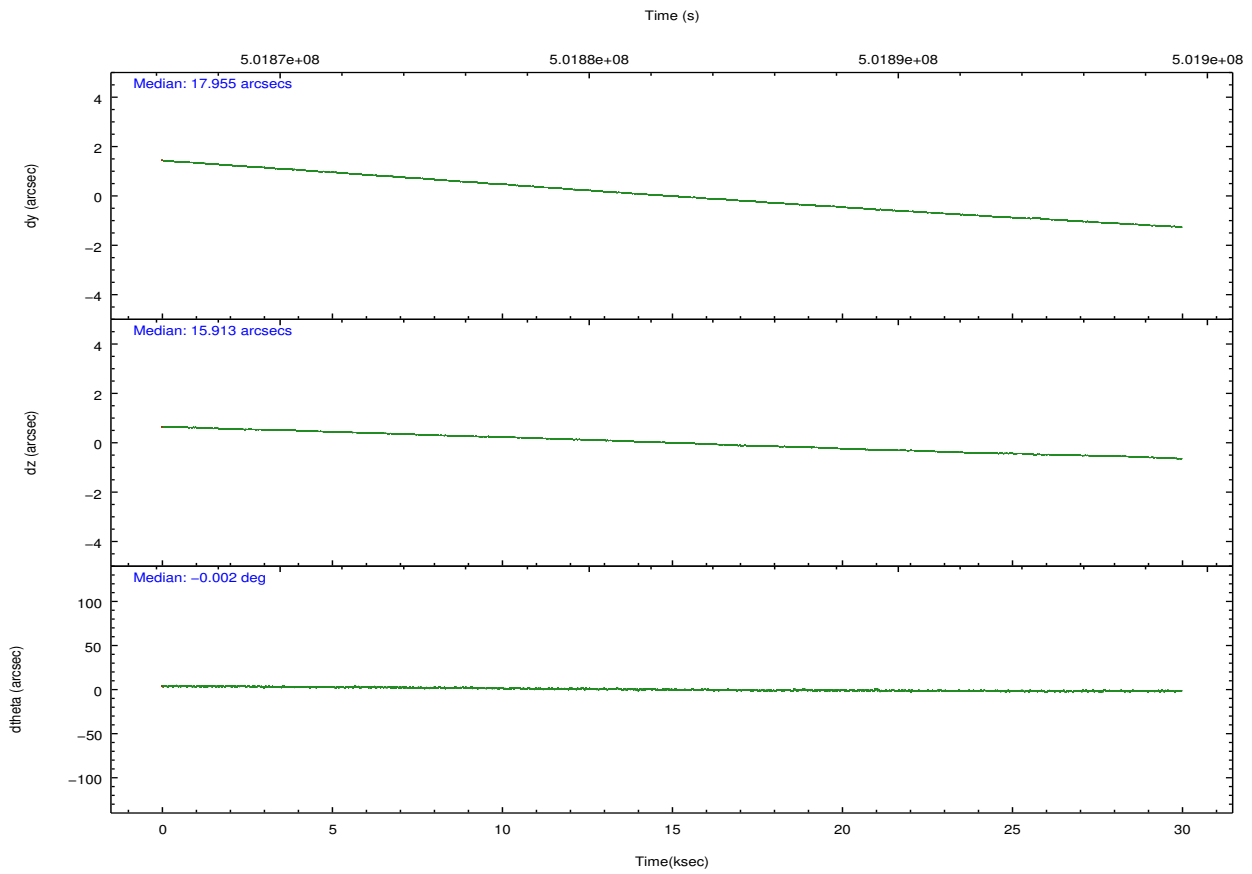
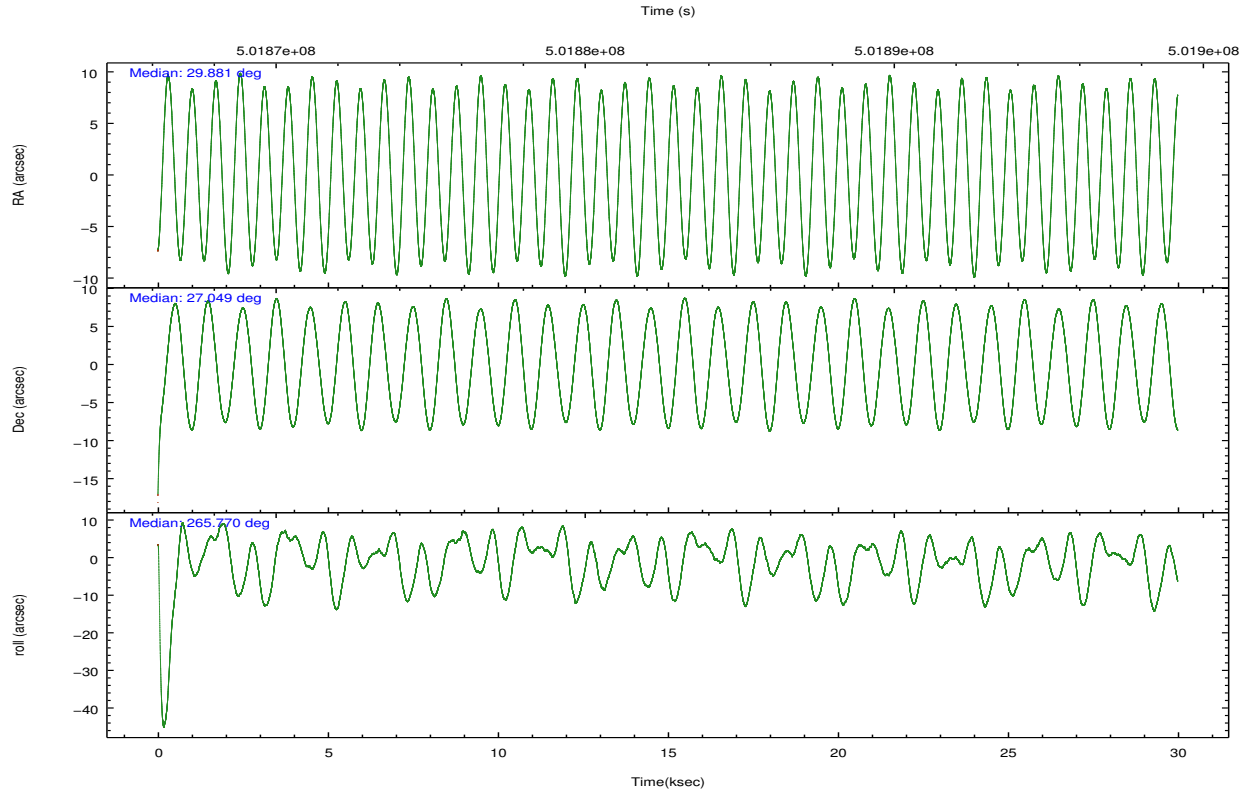
	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	5187	7429	5292	6604
	3%	5%	3%	4%
grade 1 events	84	76	63	223
	0%	0%	0%	0%
grade 2 events	3388	3314	3578	15450
	2%	2%	2%	9%
grade 3 events	1442	1624	1600	6105
	1%	1%	1%	3%
grade 4 events	1544	1552	1547	6050
	1%	1%	1%	3%
grade 5 events	4725	6155	6027	16163
	3%	4%	4%	10%
grade 6 events	2729	2940	3633	39434
	2%	2%	2%	24%
grade 7 events	116035	112640	115865	69278
	85%	82%	84%	43%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-2367	ACIS-2367	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	29.867326	29.88106166066444	CCD I2 on	O3	Y
[deg] Pointing Dec	27.073201	27.04874423129692	CCD I3 on	O2	Y
[deg] Pointing Roll	265.620756	265.771151995034	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	O4	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	O1	N
[s] Observation start time (MET)	501867855.184000	501866522.12636	CCD S5 on	N	N
Observation start date	2013-11-26T15:43:08	2013-11-26T15:22:02	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	501897655.184000	501898237.1656	On-chip summing requested	N	N
Observation end date	2013-11-26T23:59:48	2013-11-27T00:10:37	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





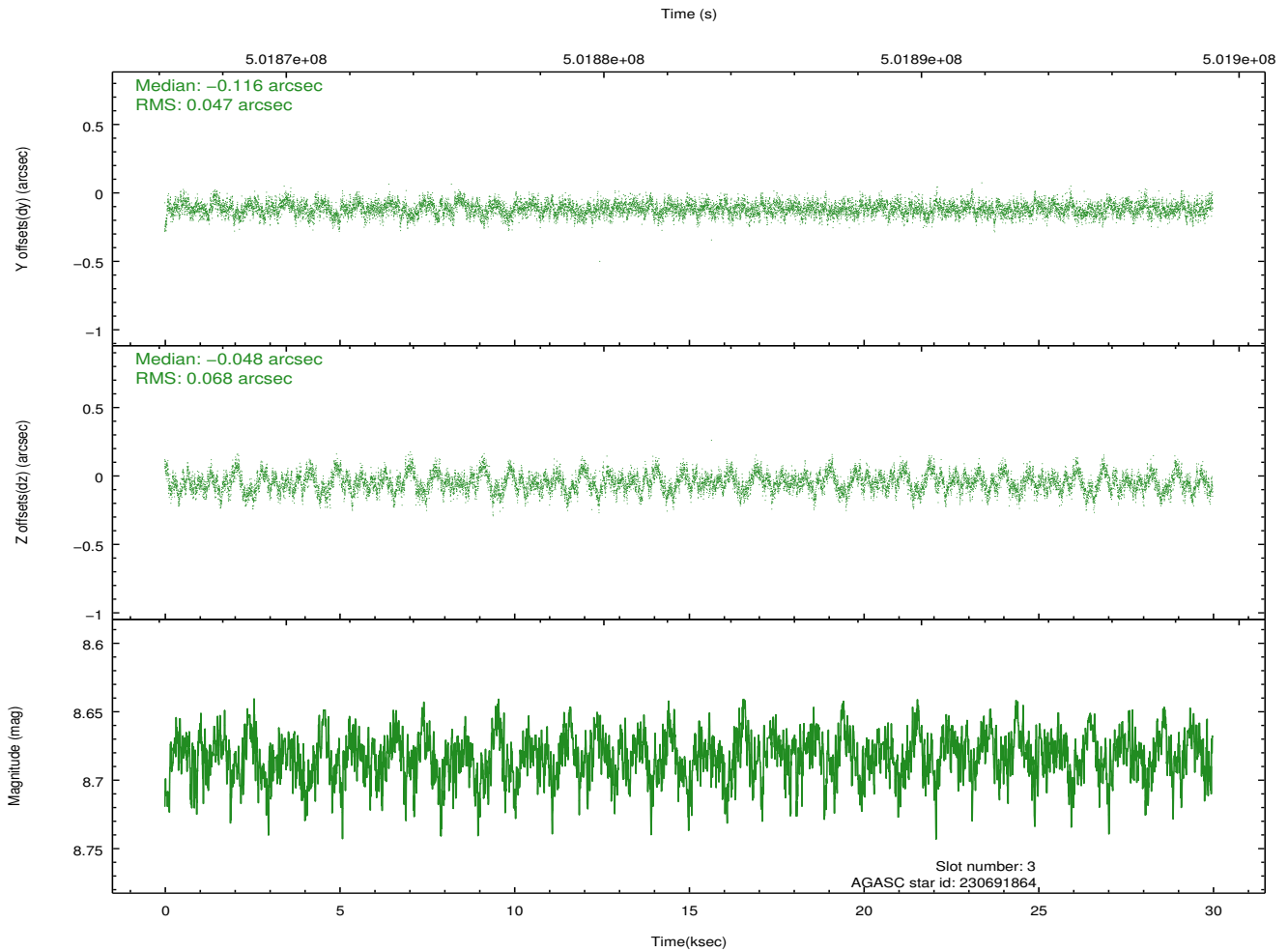
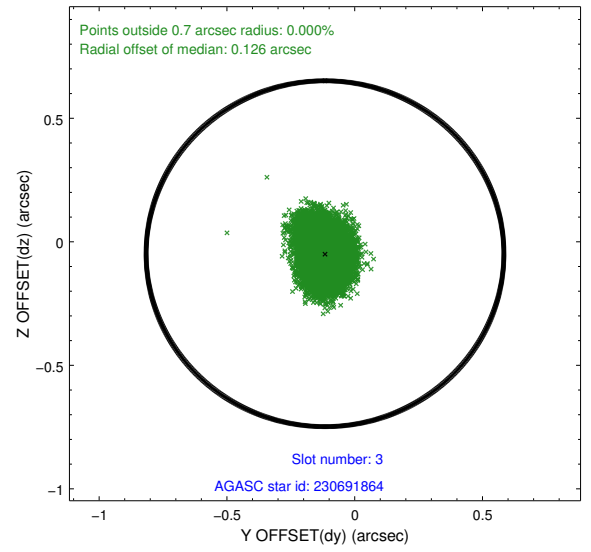
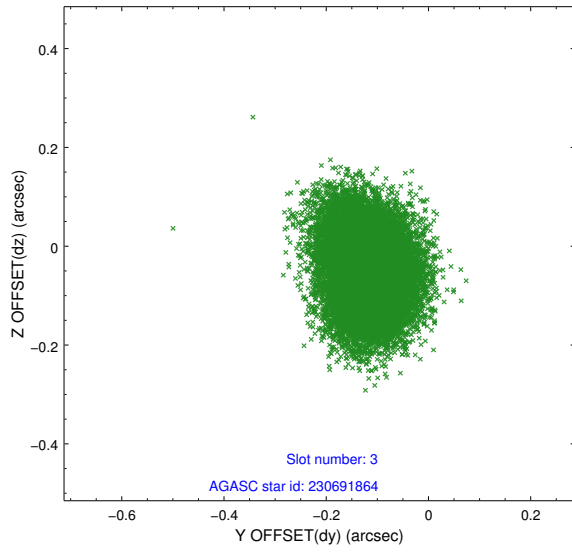
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-1	7.16	7313	0.090	-0.057	0.012	0.019	0.000000	0.000000	925.00	-1733.00
1	FID		ACIS-S-2	7.08	7315	-0.222	-0.051	0.017	0.024	0.000000	0.000000	-771.18	-1737.53
2	FID		ACIS-S-4	7.16	7315	0.100	0.117	0.018	0.030	0.000000	0.000000	2142.32	171.20
3	GUIDE	used	230691864	8.68	14620	-0.116	-0.048	0.088	0.145	29.436465	27.033616	245.94	-1366.54
4	GUIDE	used	230692704	9.11	14622	0.105	0.170	0.114	0.187	29.254395	27.176477	-224.86	-1985.73
5	GUIDE	used	230703032	9.62	14617	0.073	0.049	0.289	0.422	30.163680	26.944658	388.22	983.63
6	GUIDE	used	230703224	9.85	14618	-0.086	-0.307	0.205	0.317	29.898707	26.934180	491.78	138.60
7	GUIDE	used	230703304	9.41	14615	0.053	0.139	0.164	0.268	29.675341	26.820055	955.96	-545.09

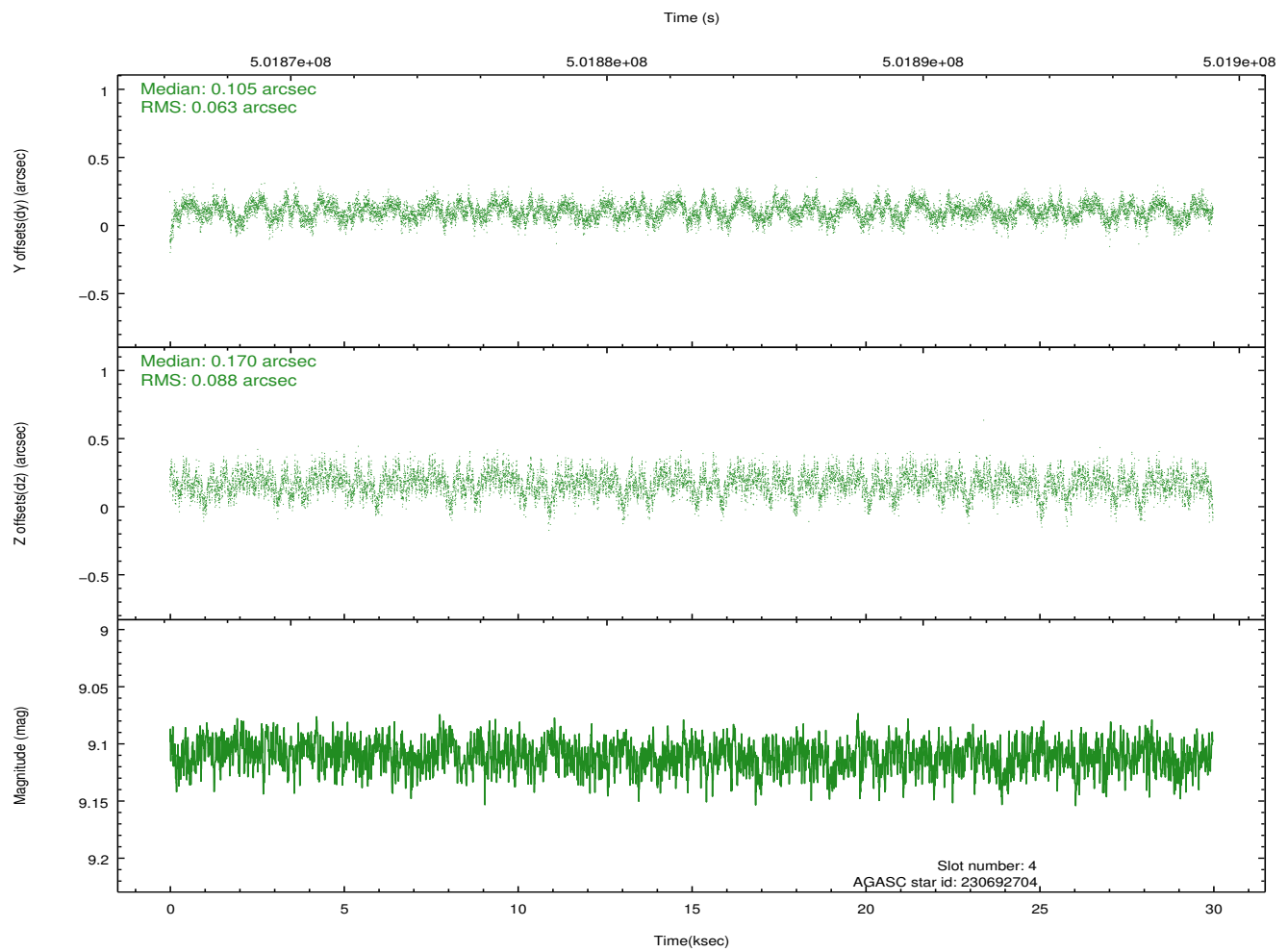
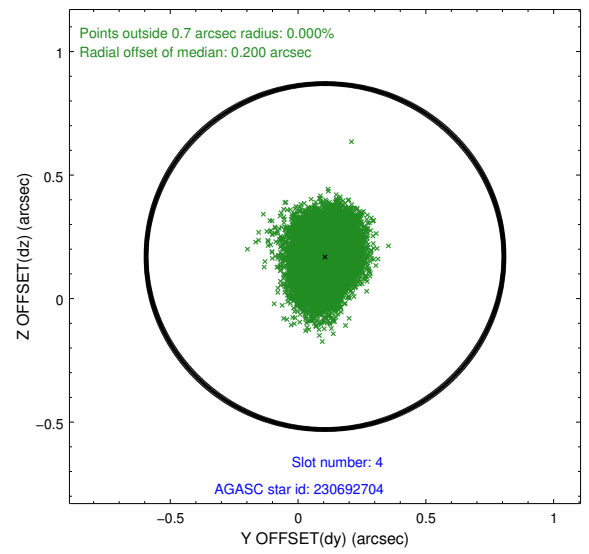
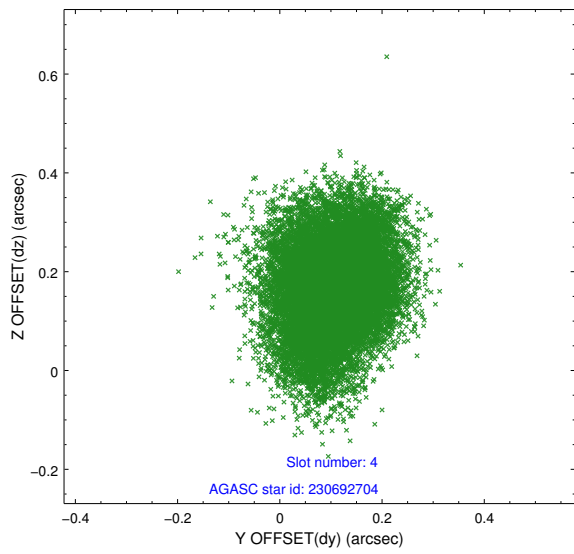
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2.4 Star Slots

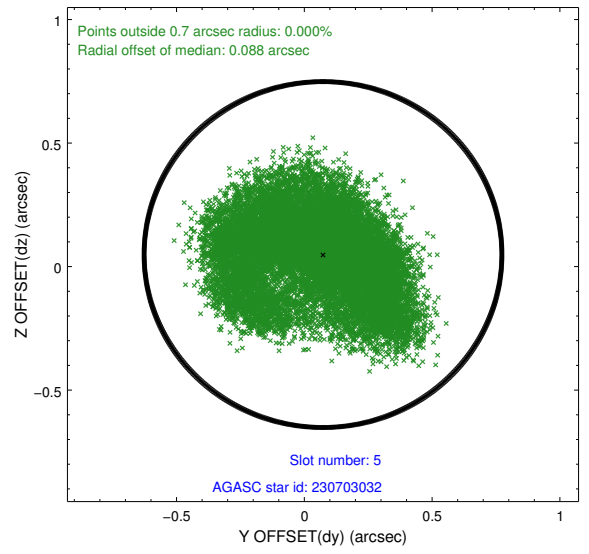
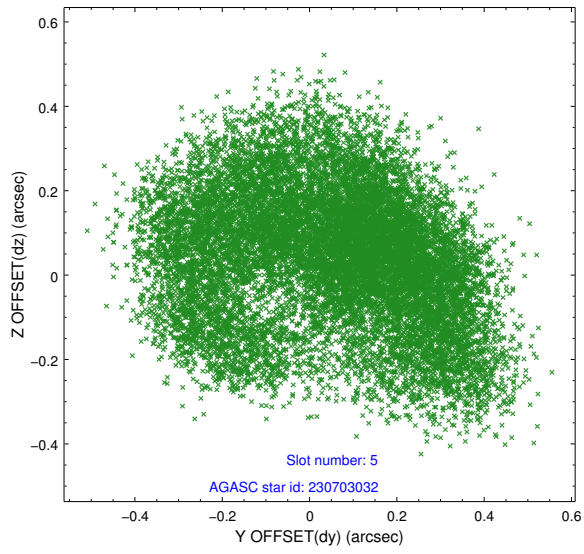
2.4.1 Slot 3



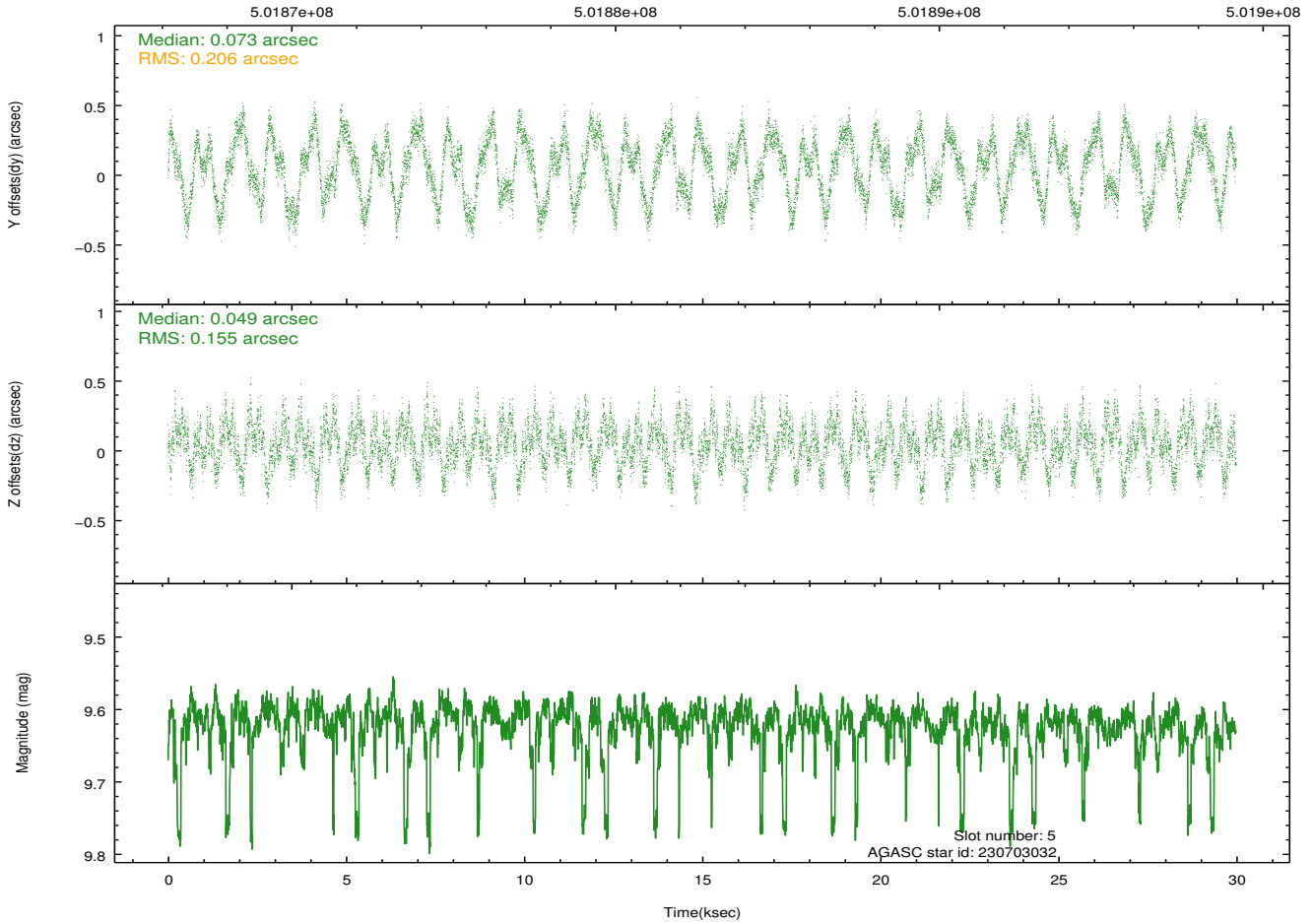
2.4.2 Slot 4



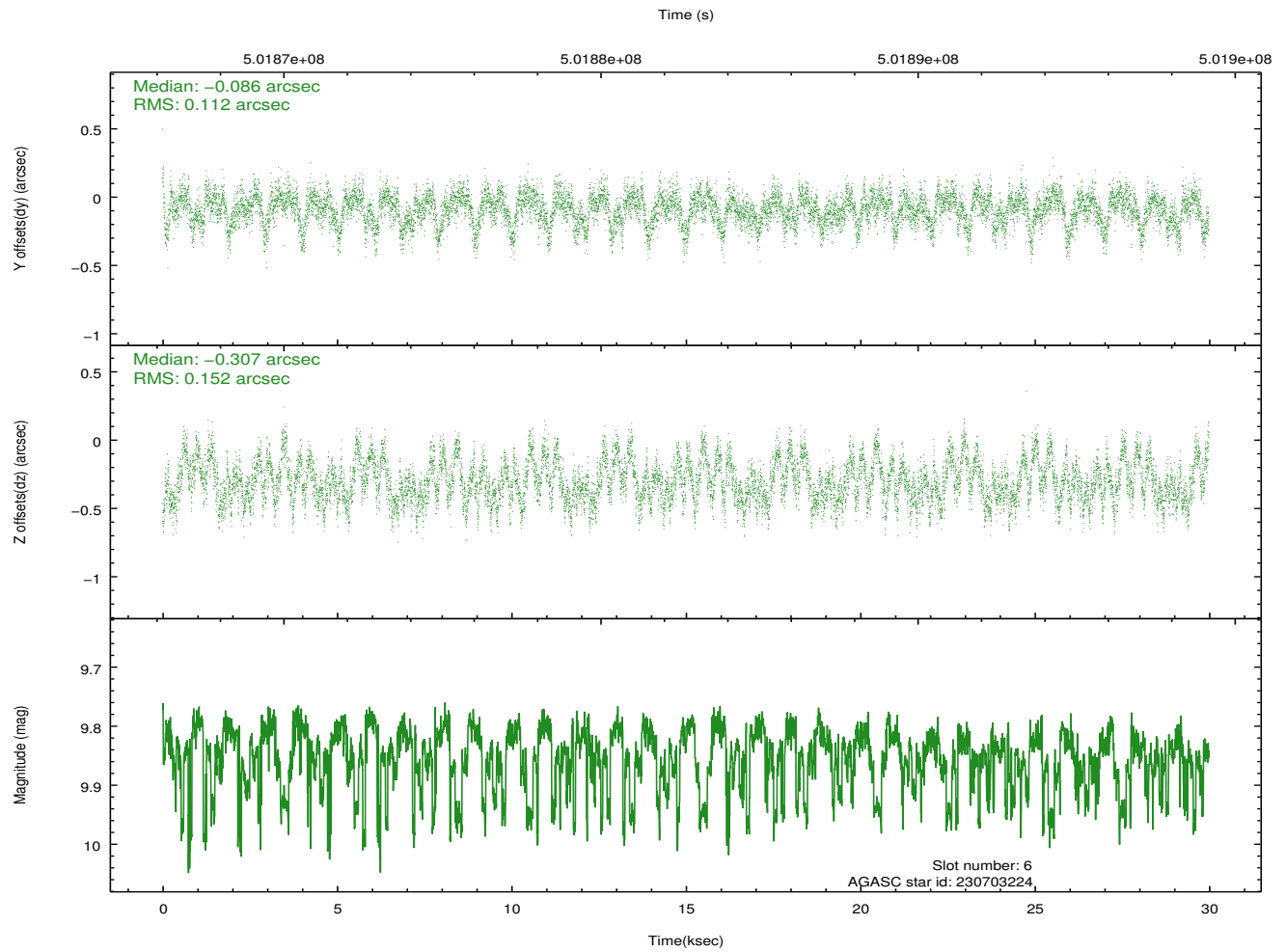
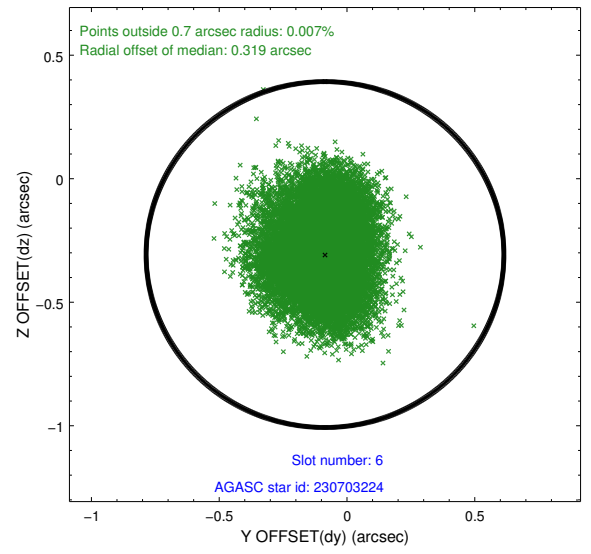
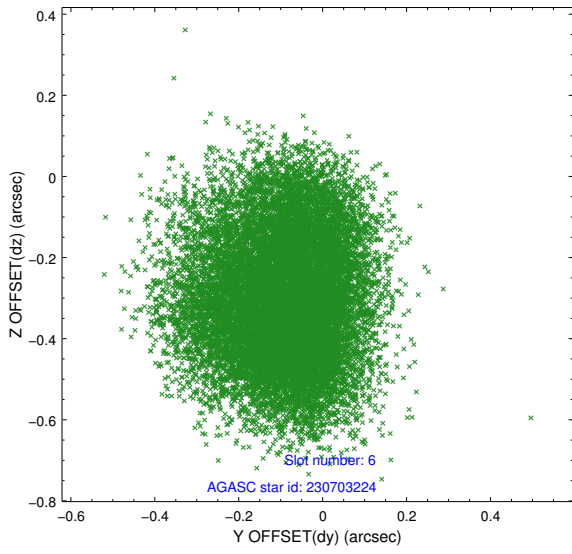
2.4.3 Slot 5



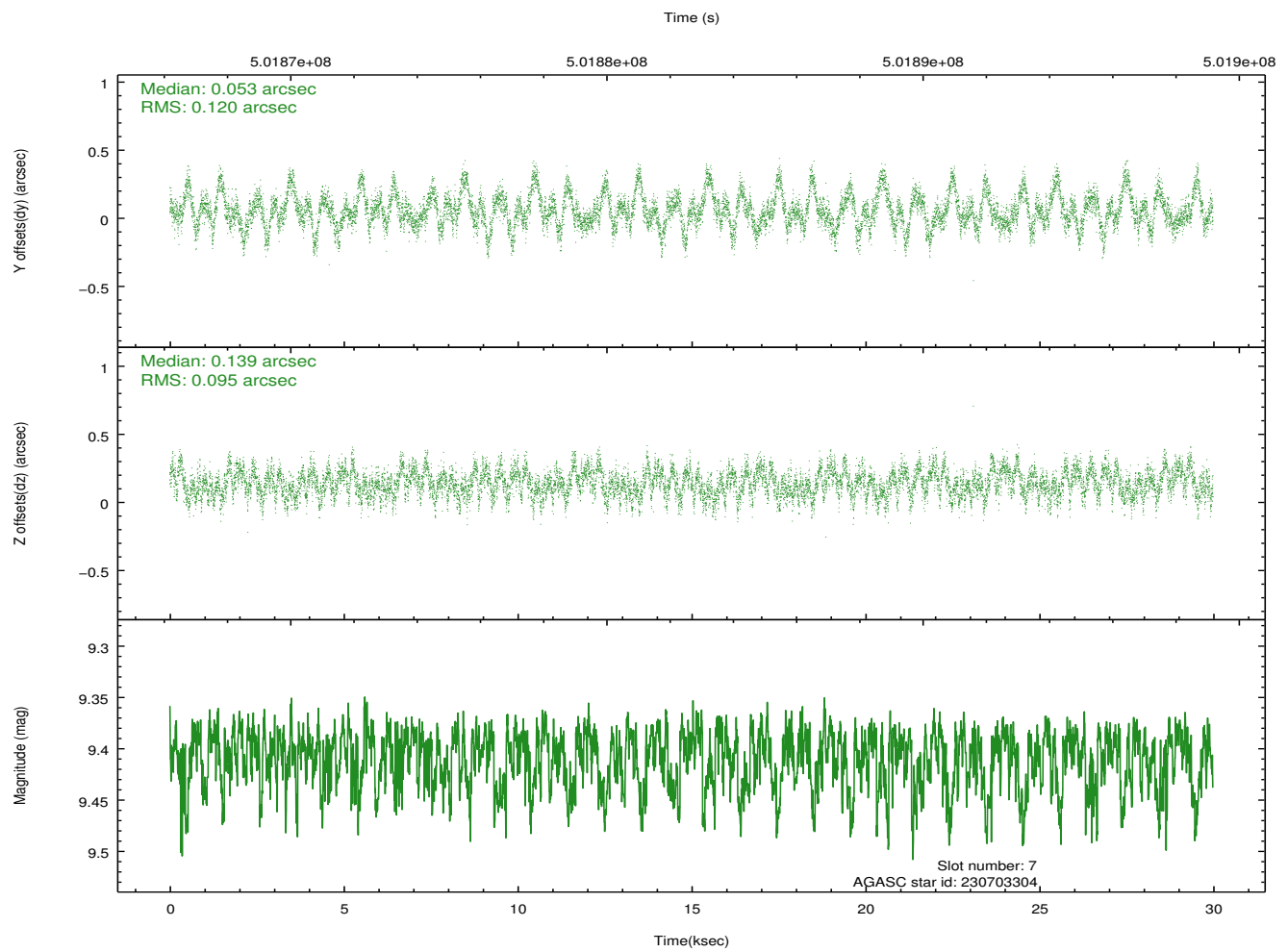
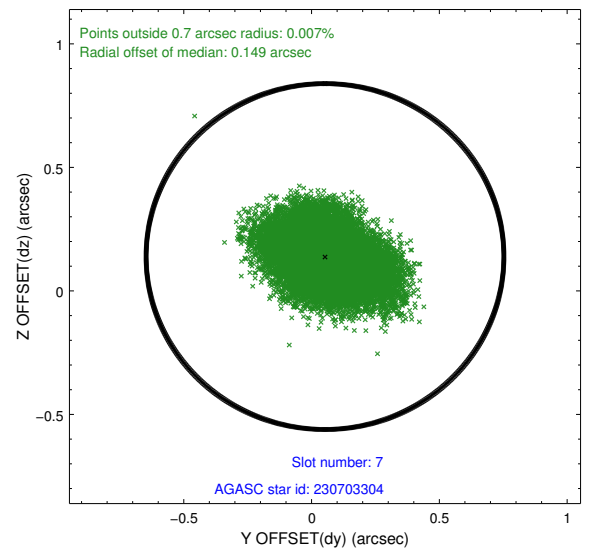
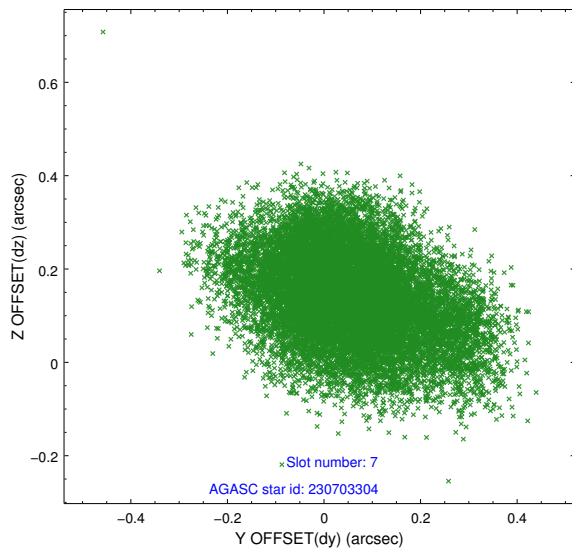
Time (s)



2.4.4 Slot 6

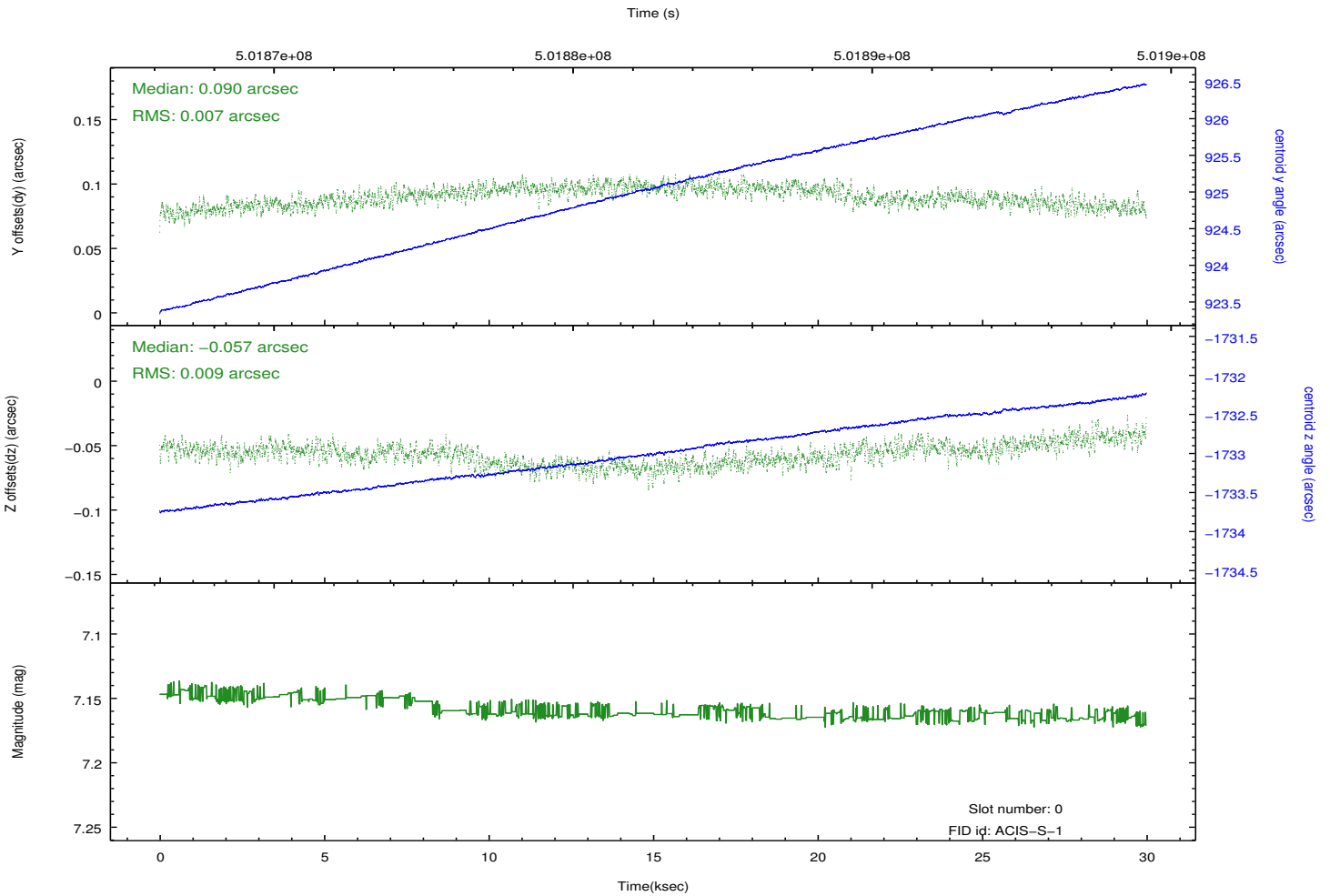
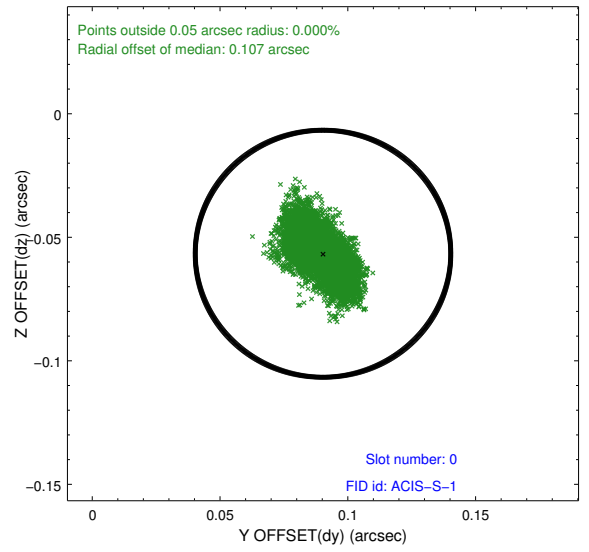
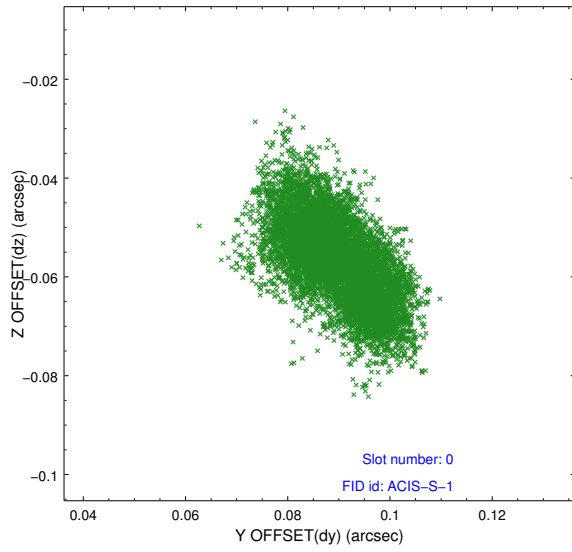


2.4.5 Slot 7

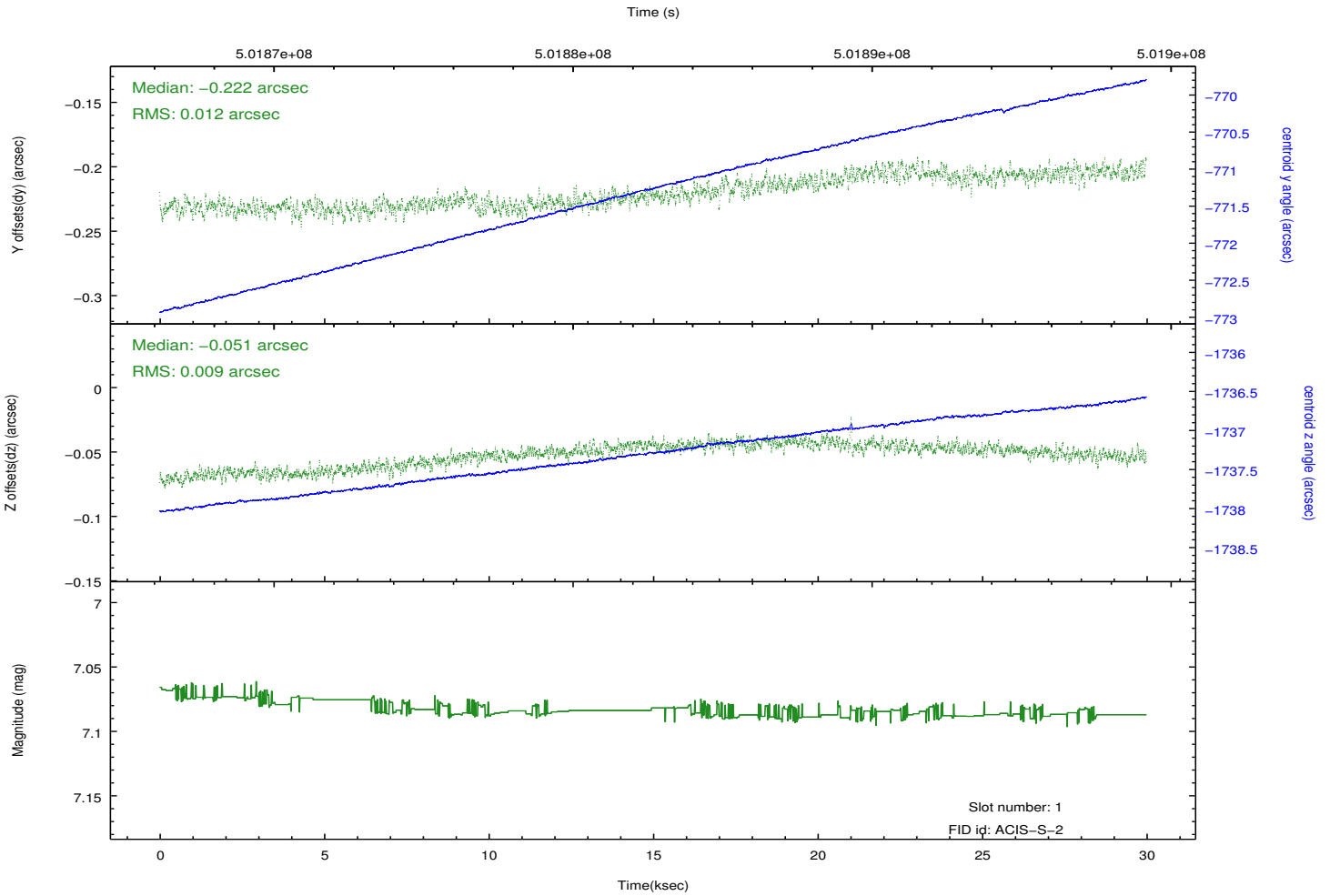
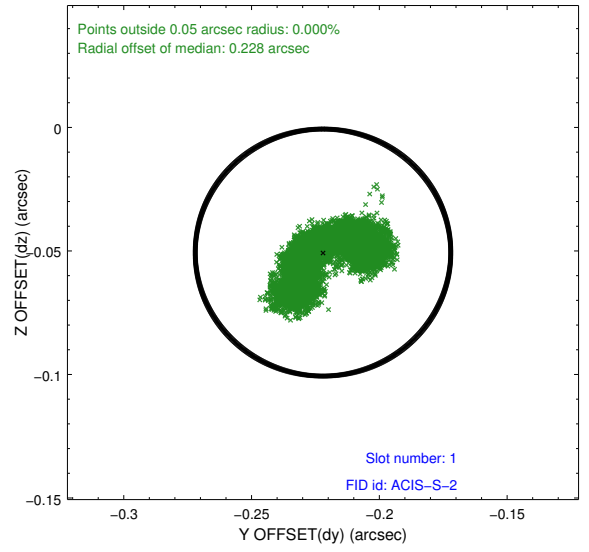
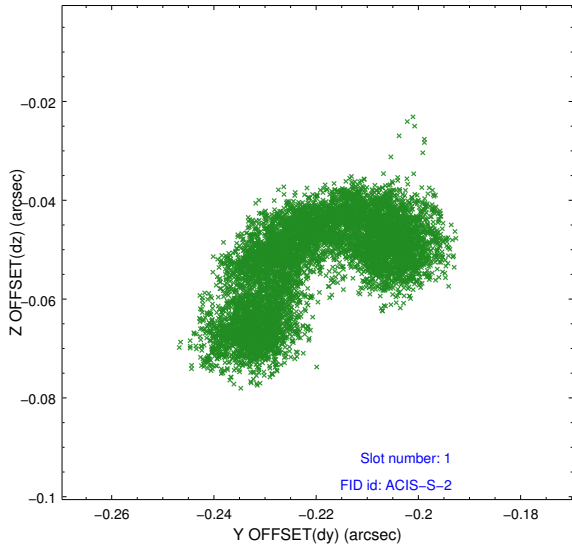


2.5 FID Slots

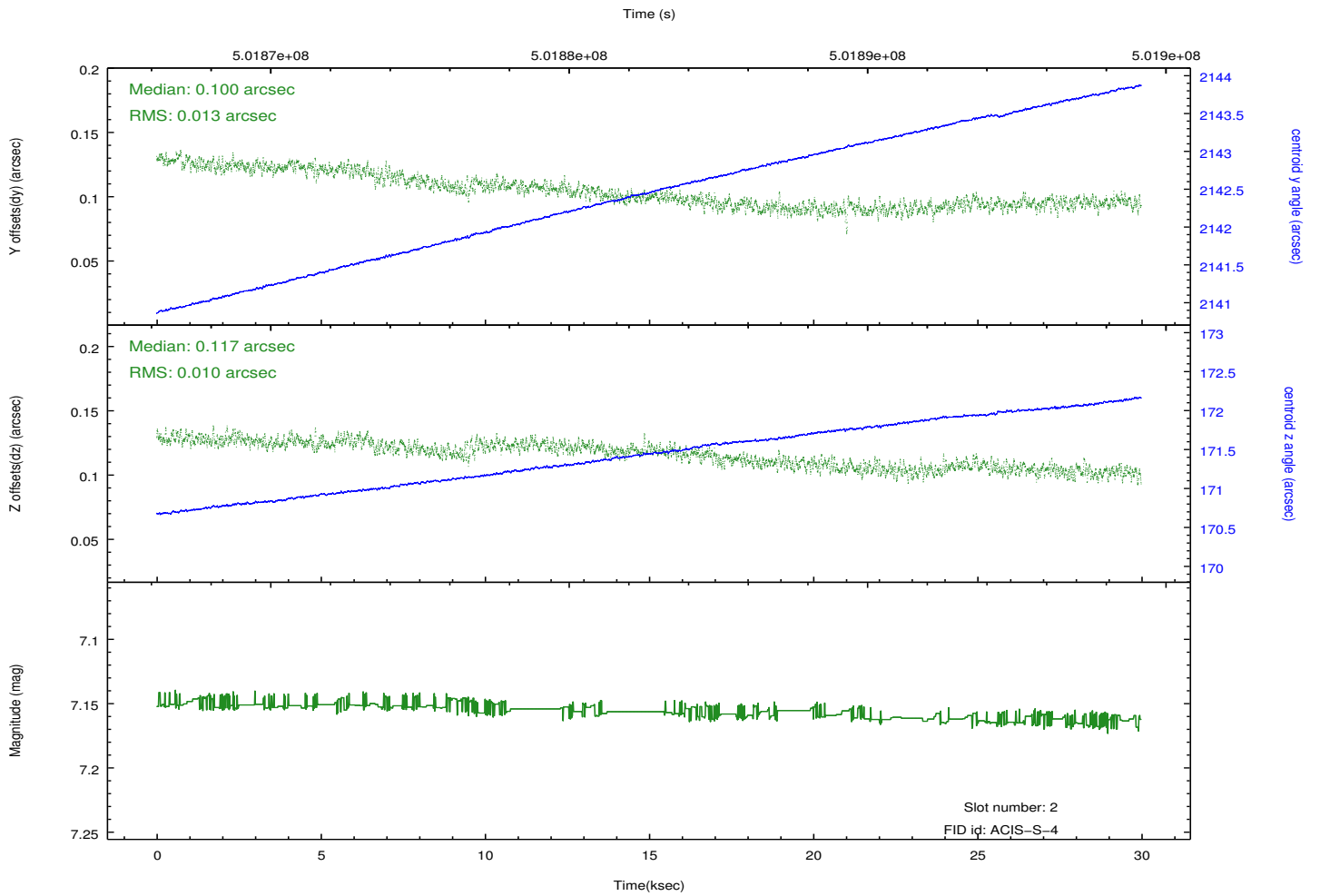
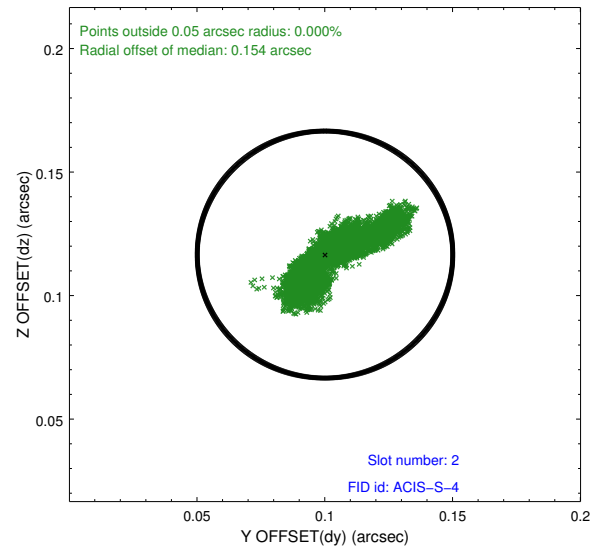
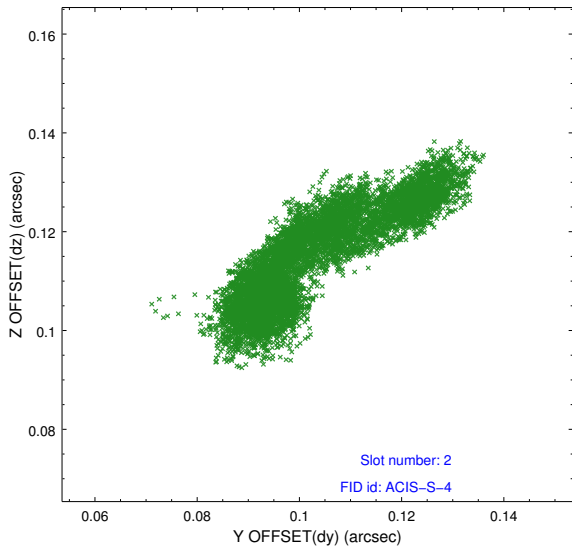
2.5.1 Slot 0



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)	2014.12.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	29.874700229764

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.