

V&V Reference Report

L2 ASCDS Version : 10.2.1

Observation 15758 - L2 Version 2
Chandra X-Ray Center

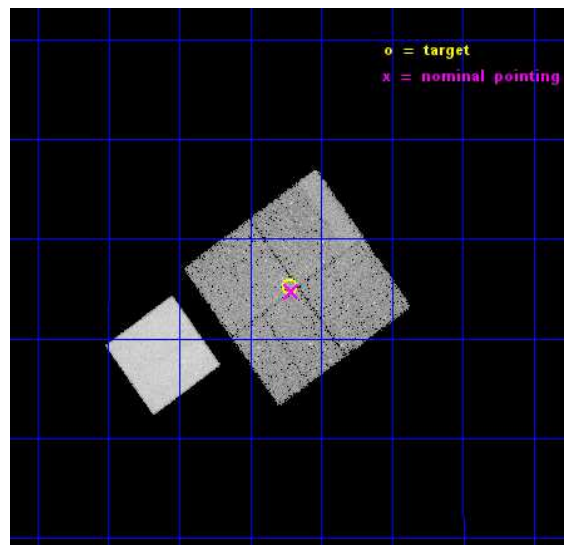
L2 Processing Date : Dec 10 2014

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1 Front

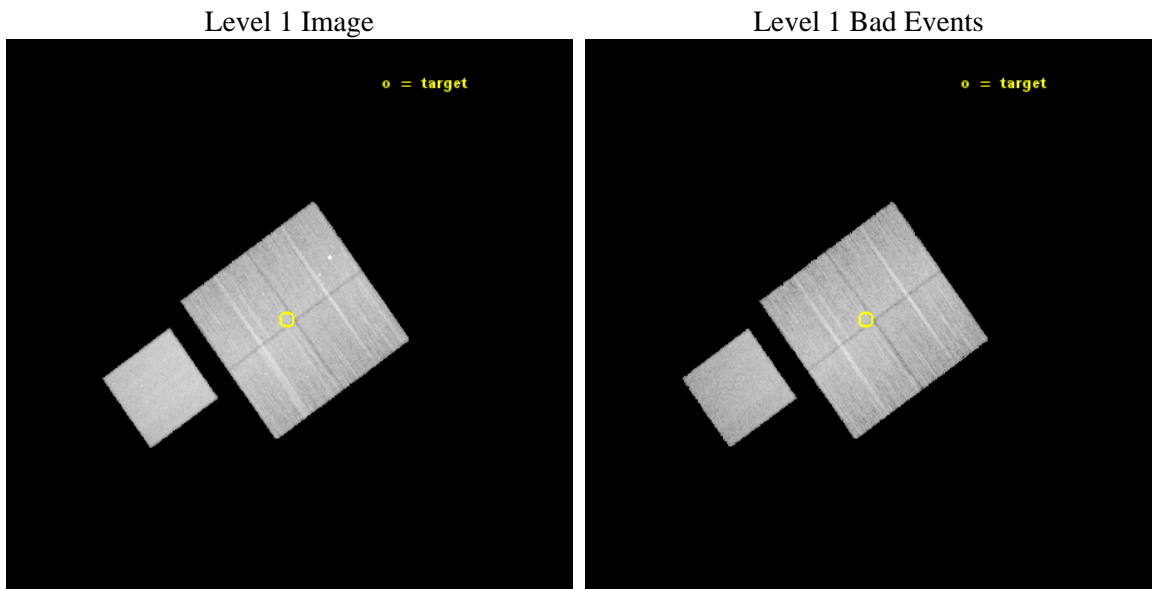
seq_num	401555	Sequence number
obs_id	15758	Observation id
title	Searching for a Metallicity Effect in Field X-ray Binaries	Proposa
observer	Prof. Thomas Maccarone	Principal investigator
object	NGC 4472 Halo-3	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	187.43	Observer's specified target RA [deg]
dec_targ	8.253417	Observer's specified target Dec [deg]
ra_nom	187.42742564071	Nominal RA [deg]
dec_nom	8.2457518290311	Nominal Dec [deg]
roll_nom	234.20905448405	Nominal Roll [deg]
revision	2	Processing version of data
ontime	30063.800231218	Sum of GTIs [s]
livetime	29670.99454855	Livetime [s]
ontime0	30060.659160376	Sum of GTIs [s]
ontime1	30063.800231218	Sum of GTIs [s]
ontime2	30063.800231218	Sum of GTIs [s]
ontime3	30063.800231218	Sum of GTIs [s]
ontime7	30063.800231218	Sum of GTIs [s]
l2events	157273	Number of level 2 events



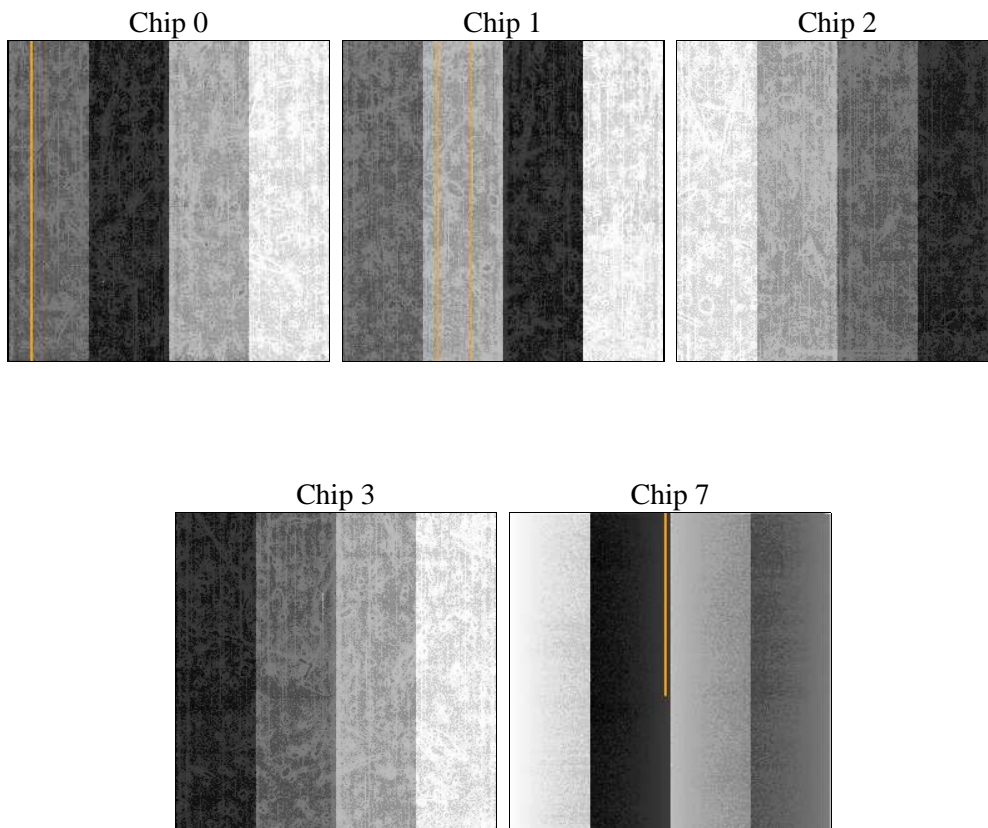
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	30000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	30063.800231218	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	30060.659160376	Sum of GTIs [s]
date	2014-12-11T02:40:59	Date and time of file creation	ontime1	30063.800231218	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	30063.800231218	Sum of GTIs [s]
			ontime3	30063.800231218	Sum of GTIs [s]
			ontime7	30063.800231218	Sum of GTIs [s]
			l1events	811660	Number of level 1 events

2.1.4 Events

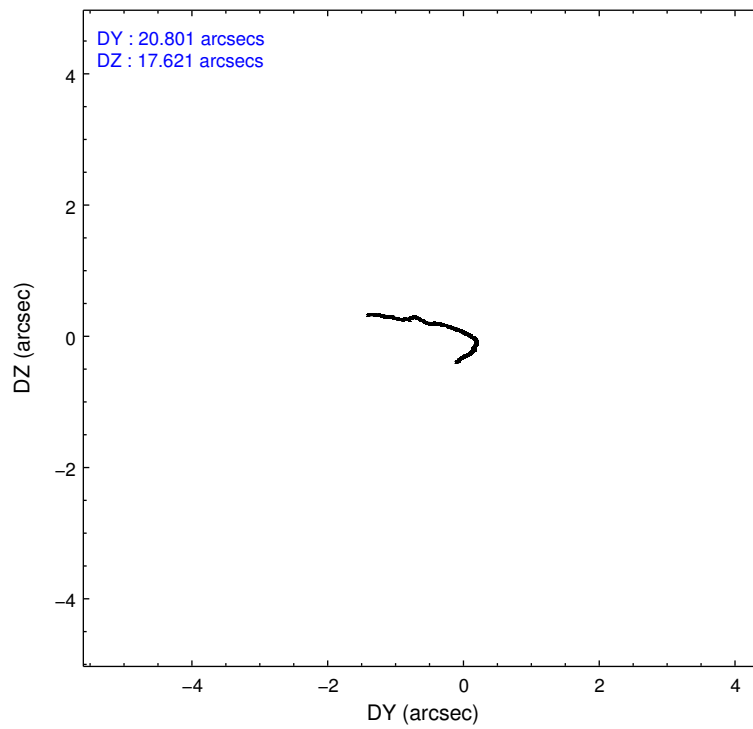
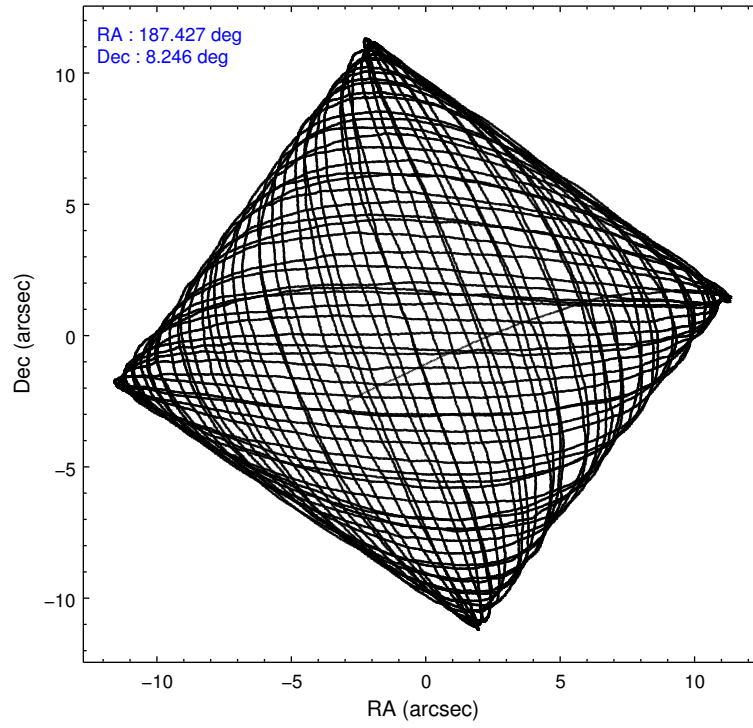
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
level 1 events	140985	148684	164007	153472	204512
rejected events	118759	124199	139236	135091	111802
rejected %	84%	83%	84%	88%	54%

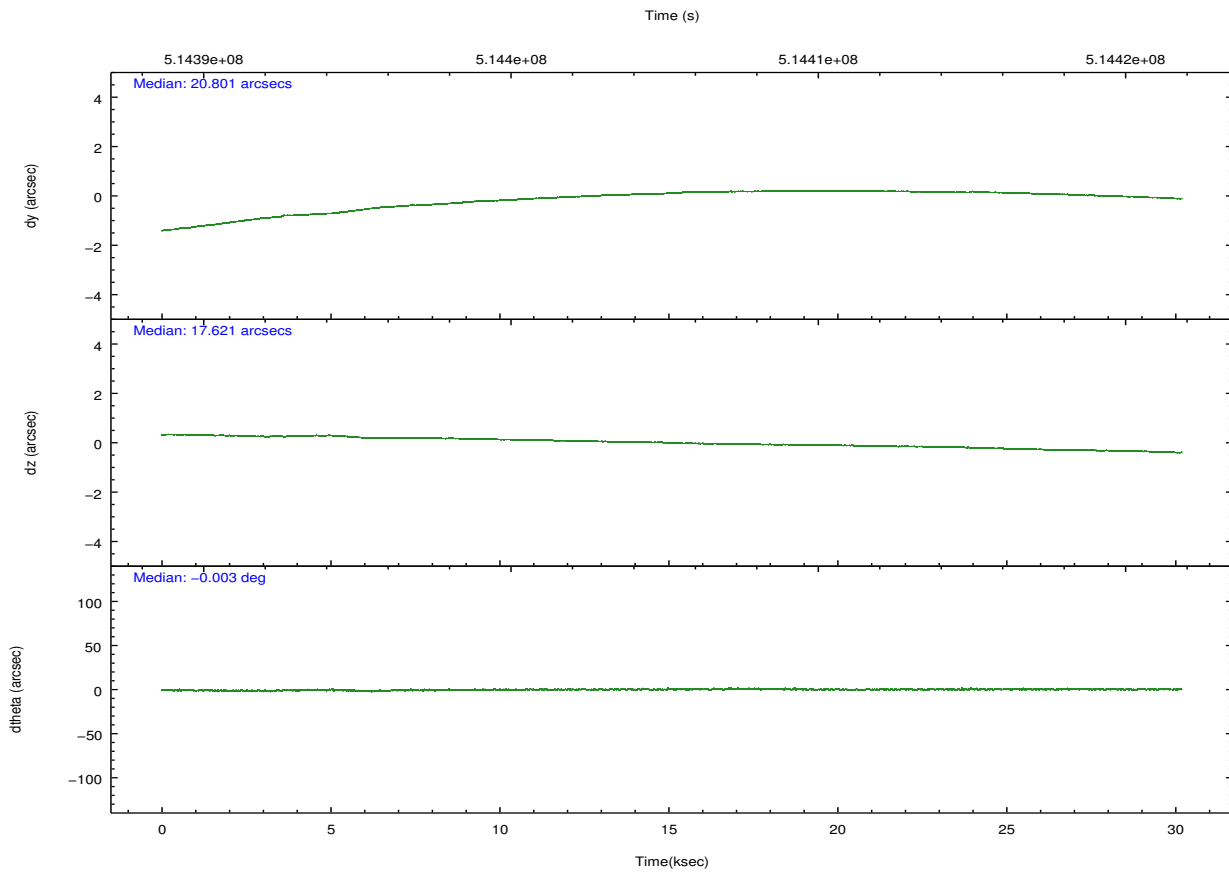
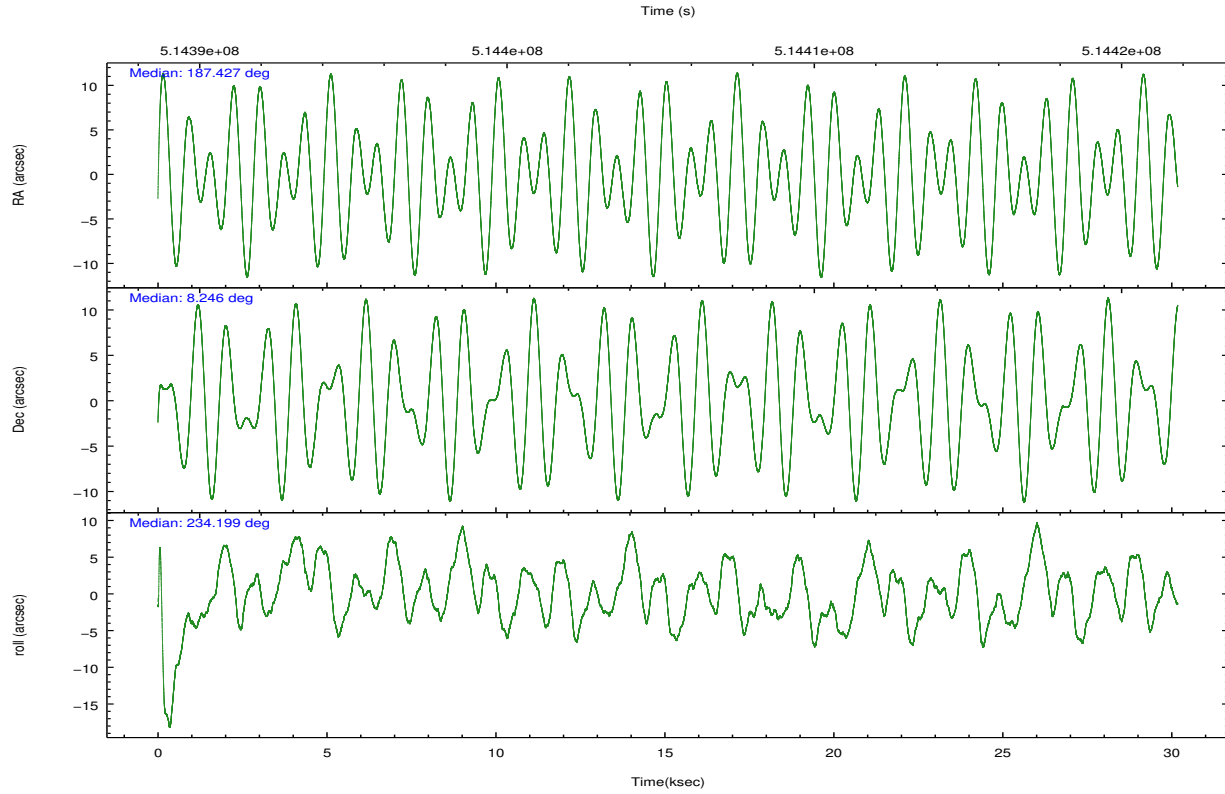
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
grade 0 events	9892	10805	11087	7475	8931
	7%	7%	6%	4%	4%
grade 1 events	107	97	94	86	365
	0%	0%	0%	0%	0%
grade 2 events	5501	5739	5973	4024	20909
	3%	3%	3%	2%	10%
grade 3 events	1758	1896	1646	1725	7950
	1%	1%	1%	1%	3%
grade 4 events	1698	1902	2589	1752	7903
	1%	1%	1%	1%	3%
grade 5 events	6372	6864	6011	7429	20284
	4%	4%	3%	4%	9%
grade 6 events	3380	4146	3481	3413	47043
	2%	2%	2%	2%	23%
grade 7 events	112277	117235	133126	127568	91127
	79%	78%	81%	83%	44%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01237	ACIS-01237	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	187.430105	187.4274256407093	CCD I2 on	Y	Y
[deg] Pointing Dec	8.273124	8.24575182903115	CCD I3 on	Y	Y
[deg] Pointing Roll	233.999990	234.209054484048	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O1	N
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	O2	Y
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	514390319.184000	514389197.40278	CCD S5 on	N	N
Observation start date	2014-04-20T14:10:52	2014-04-20T13:53:17	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	514420319.184000	514421013.40453	On-chip summing requested	N	N
Observation end date	2014-04-20T22:30:52	2014-04-20T22:43:33	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



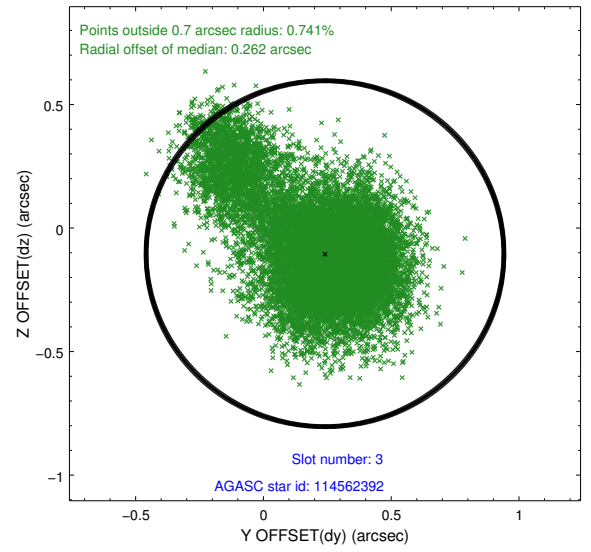
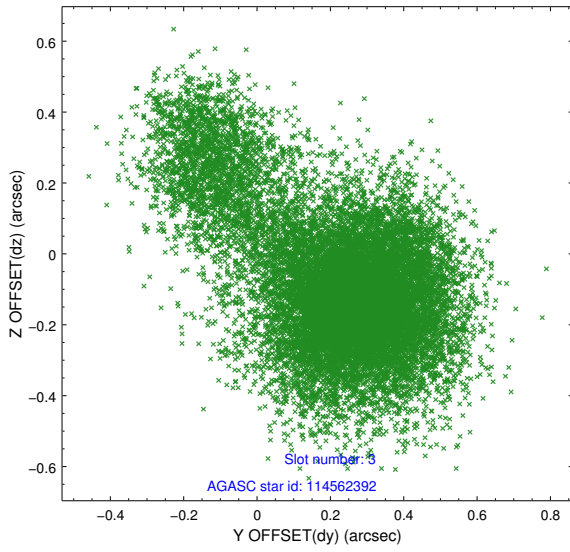


Slot Statistics

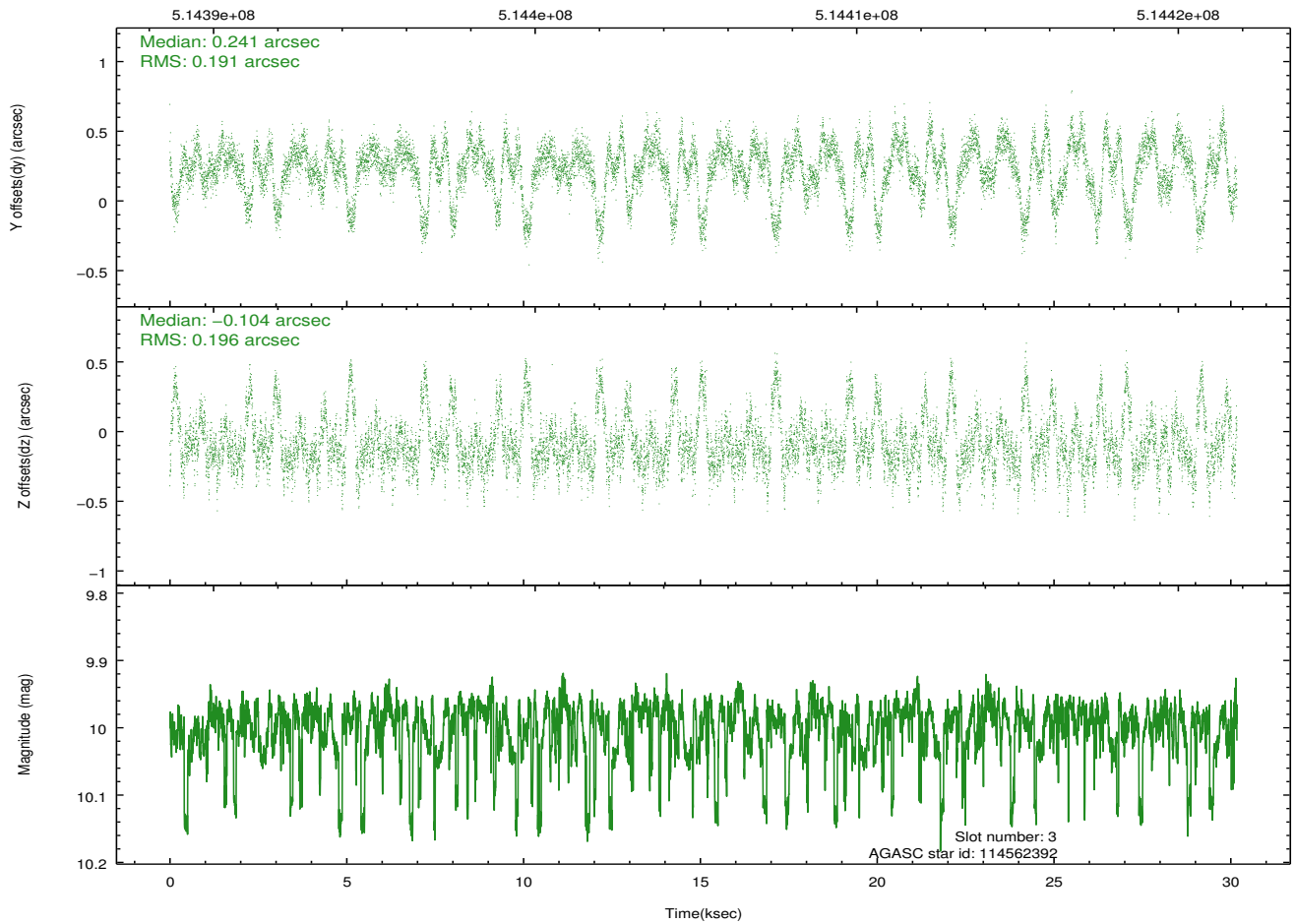
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.03	7360	0.053	0.014	0.011	0.020	0.000000	0.000000	918.75	-841.26
1	FID		ACIS-I-5	7.02	7361	-0.257	0.052	0.011	0.028	0.000000	0.000000	-1829.66	1056.19
2	FID		ACIS-I-6	7.03	7361	0.113	0.005	0.008	0.013	0.000000	0.000000	384.23	1700.76
3	GUIDE	used	114562392	10.00	14712	0.241	-0.104	0.254	0.564	187.662769	8.522526	-1212.88	142.04
4	GUIDE	used	114563576	7.88	14718	-0.026	-0.018	0.121	0.186	186.867039	8.012388	1939.38	-1073.23
5	GUIDE	used	114563648	9.75	14707	0.076	0.145	0.198	0.303	187.009208	7.938475	1856.73	-506.19
6	GUIDE	used	114565400	6.32	14722	-0.196	0.195	0.114	0.186	186.925333	8.610343	73.68	-2167.24
7	GUIDE	used	114565064	9.92	14702	-0.068	-0.262	0.191	0.296	187.898151	7.788605	429.38	2375.09

2.4 Star Slots

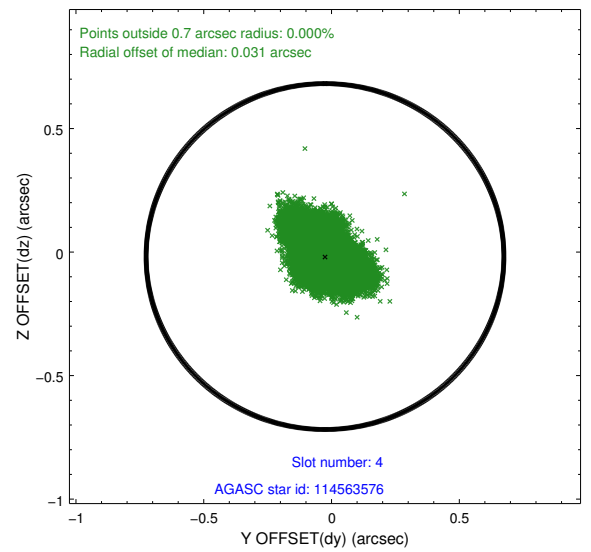
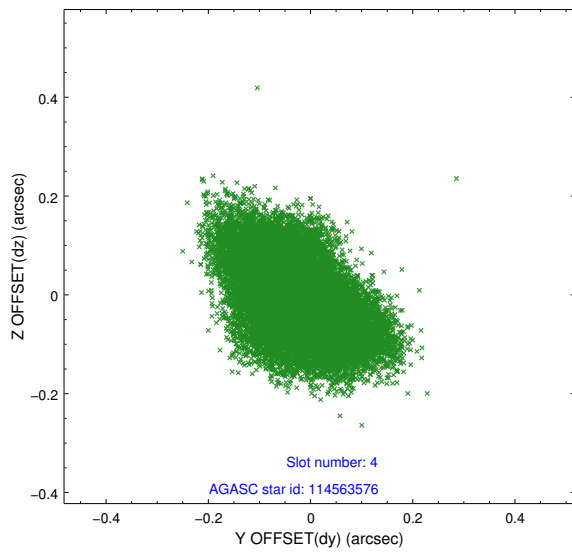
2.4.1 Slot 3



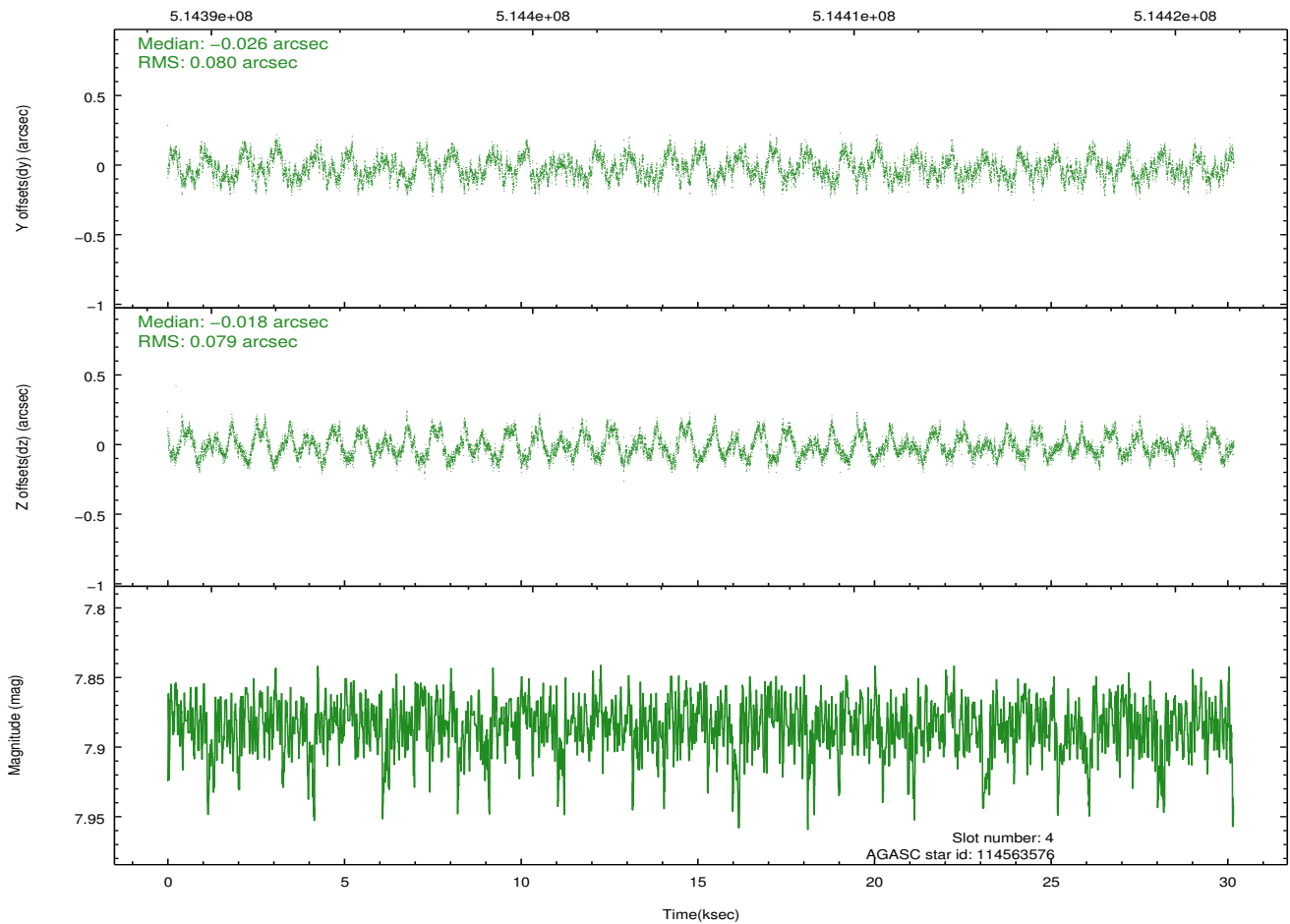
Time (s)



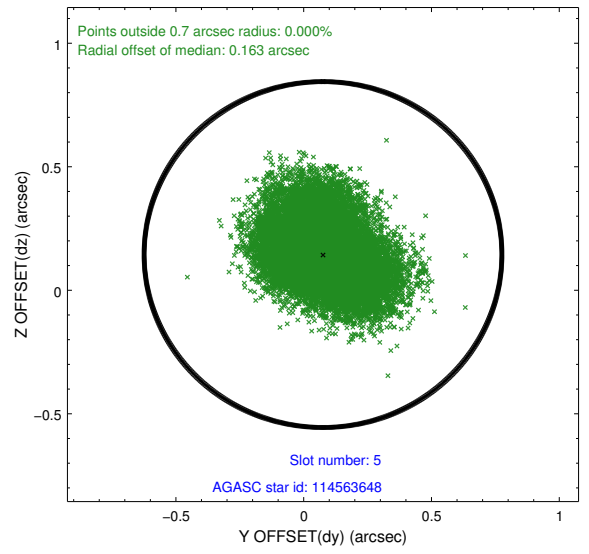
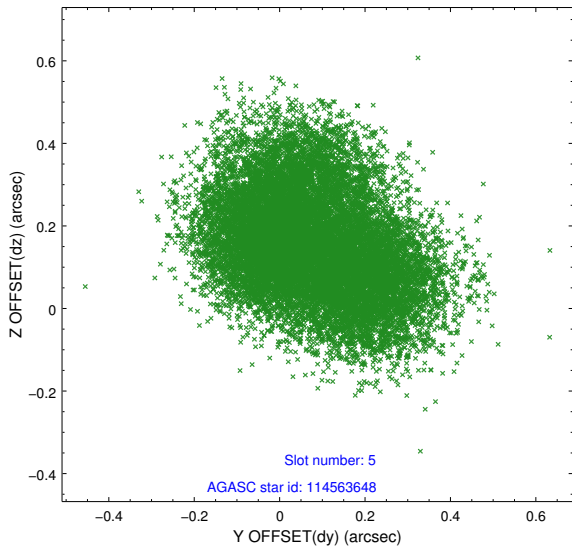
2.4.2 Slot 4



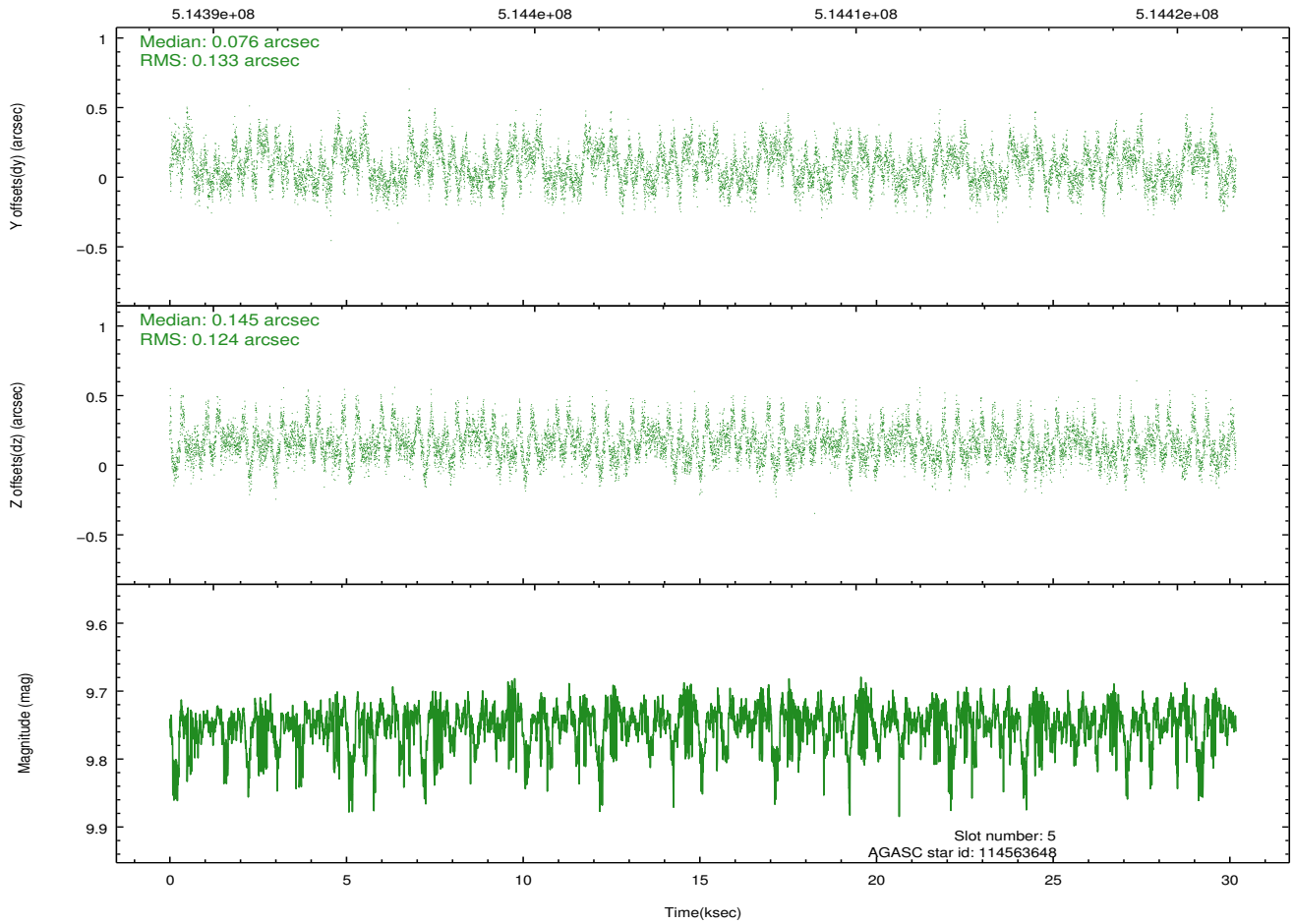
Time (s)



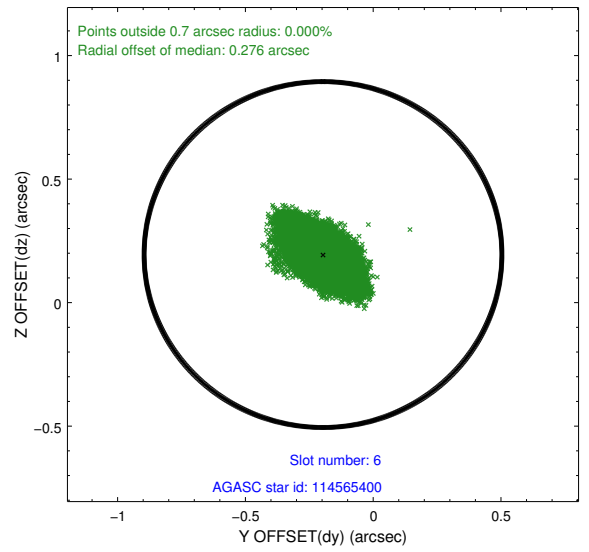
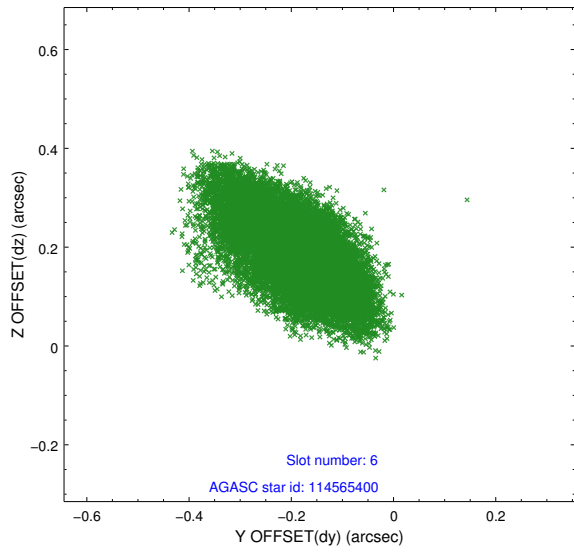
2.4.3 Slot 5



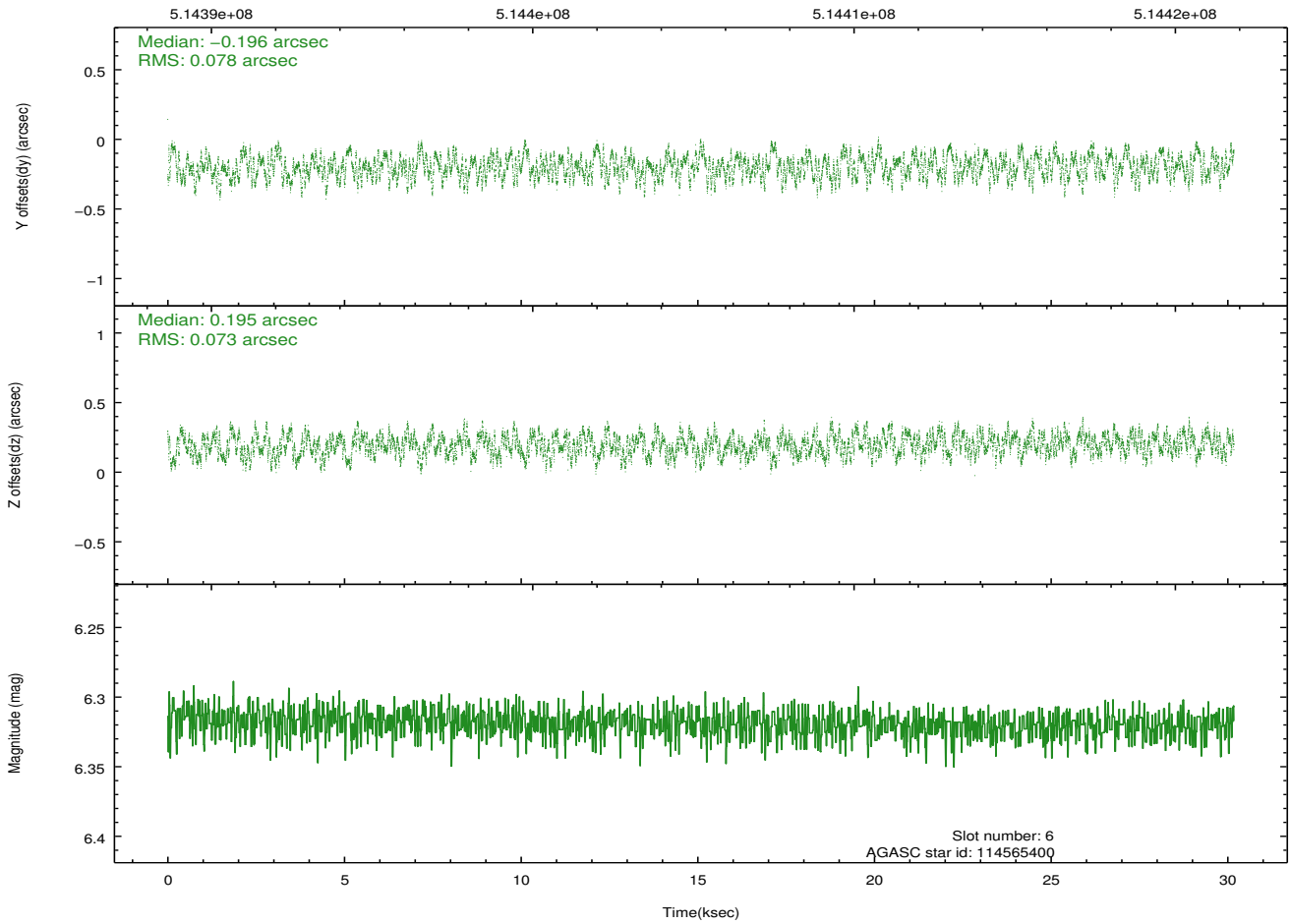
Time (s)



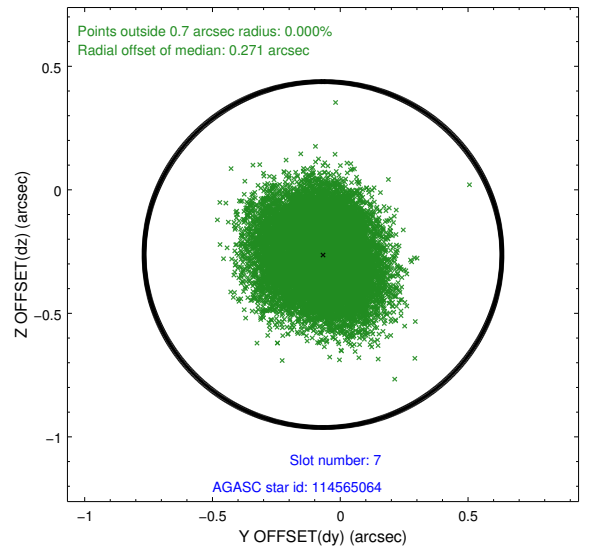
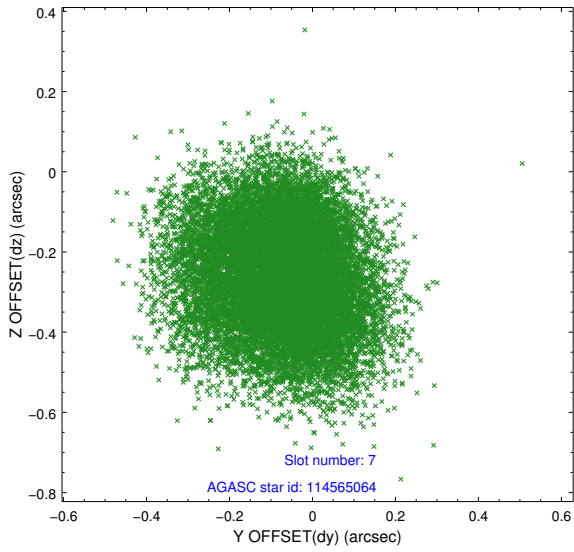
2.4.4 Slot 6



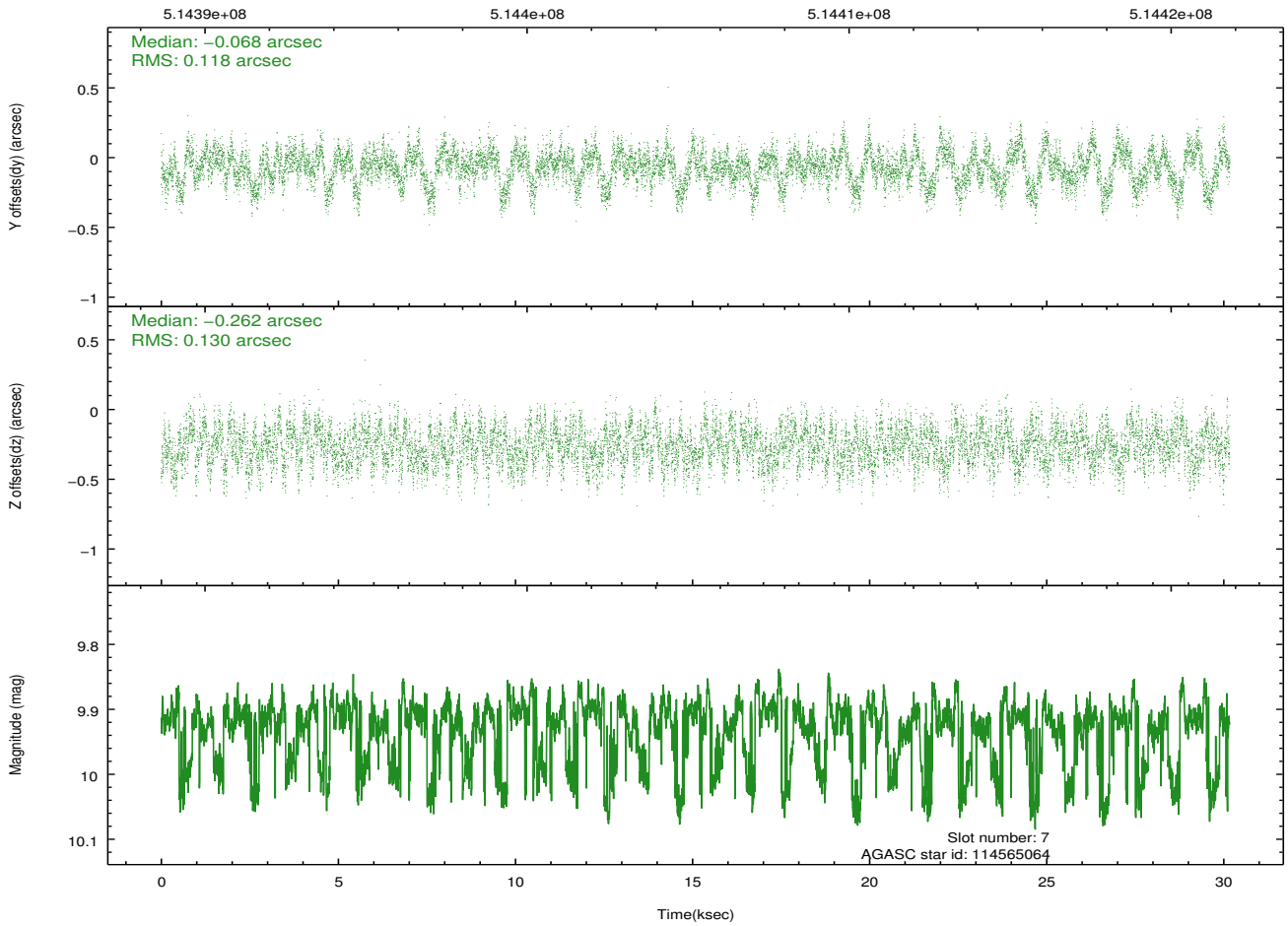
Time (s)



2.4.5 Slot 7

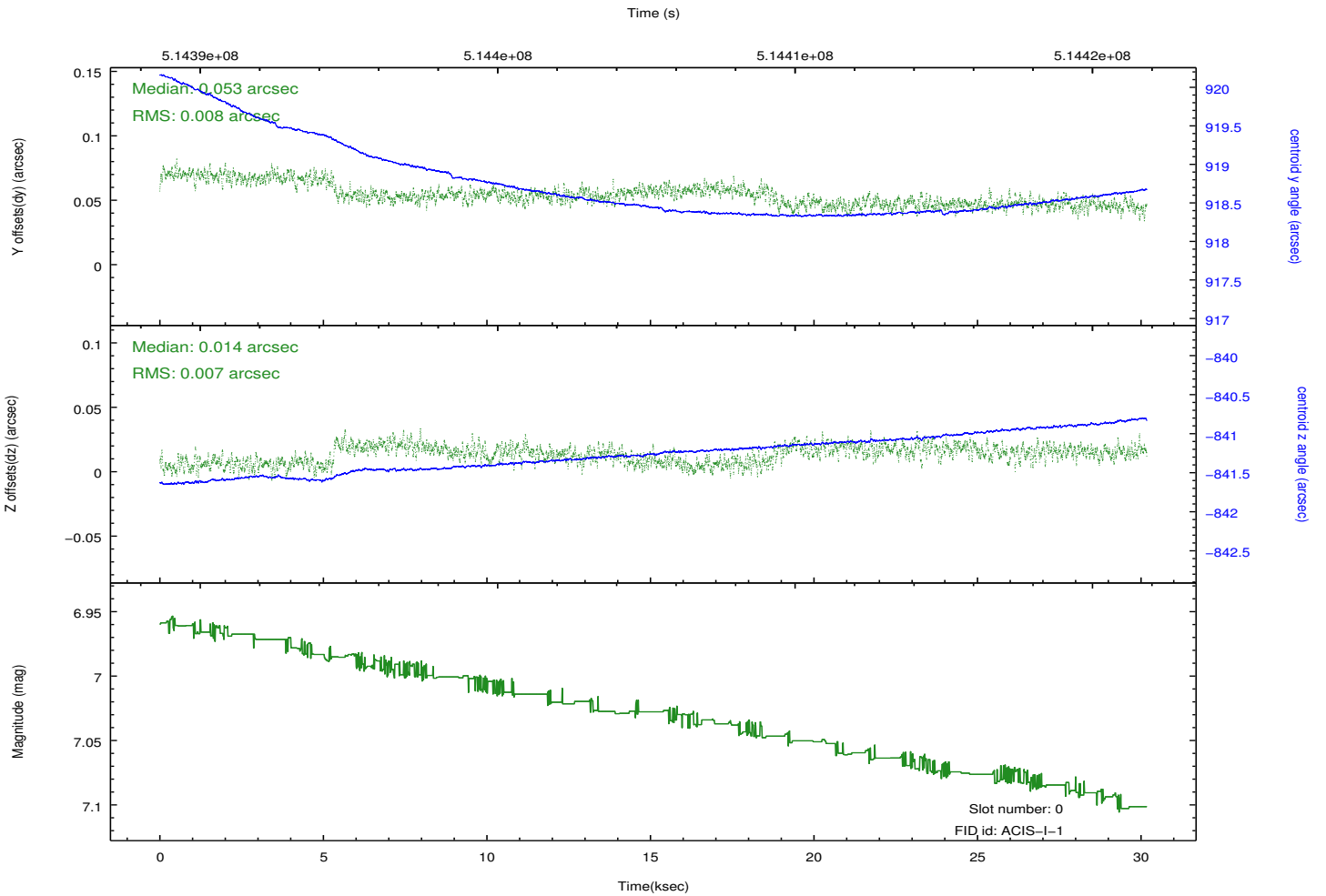
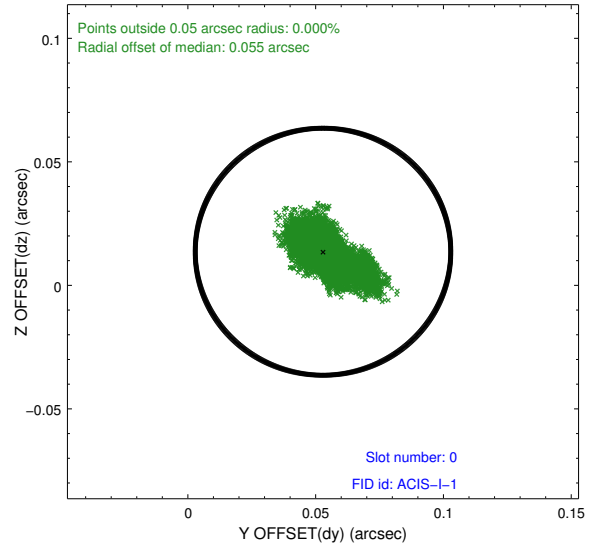
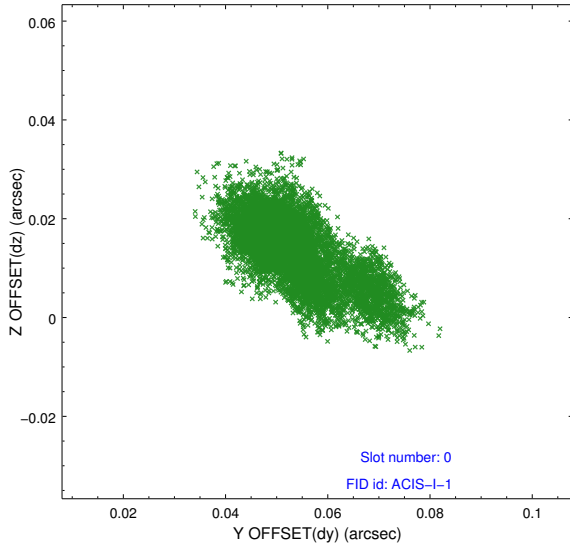


Time (s)

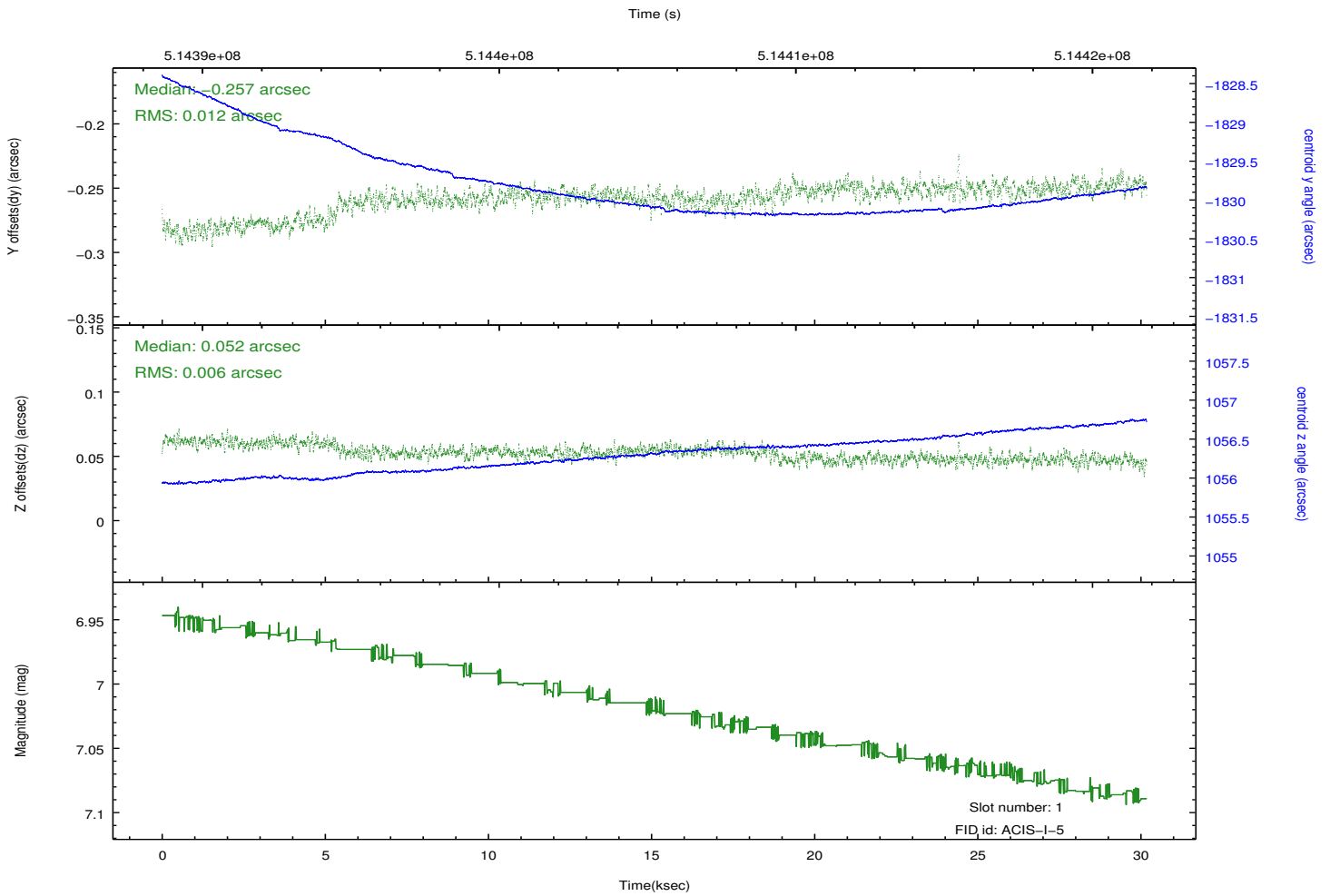
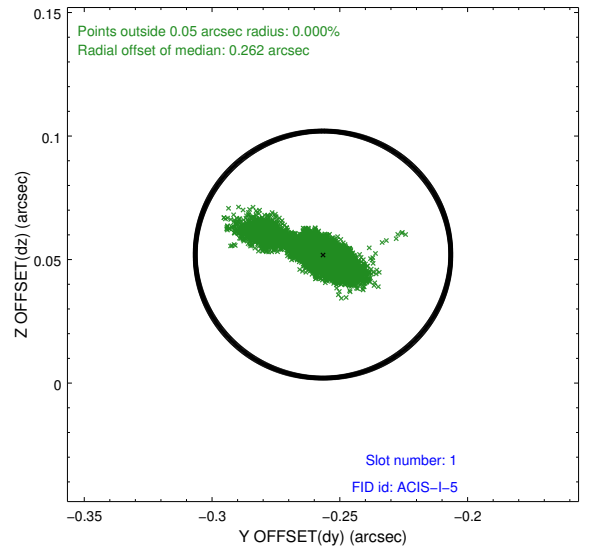
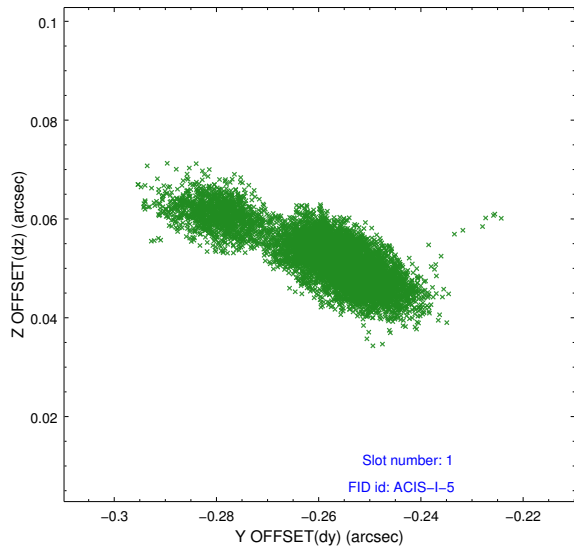


2.5 FID Slots

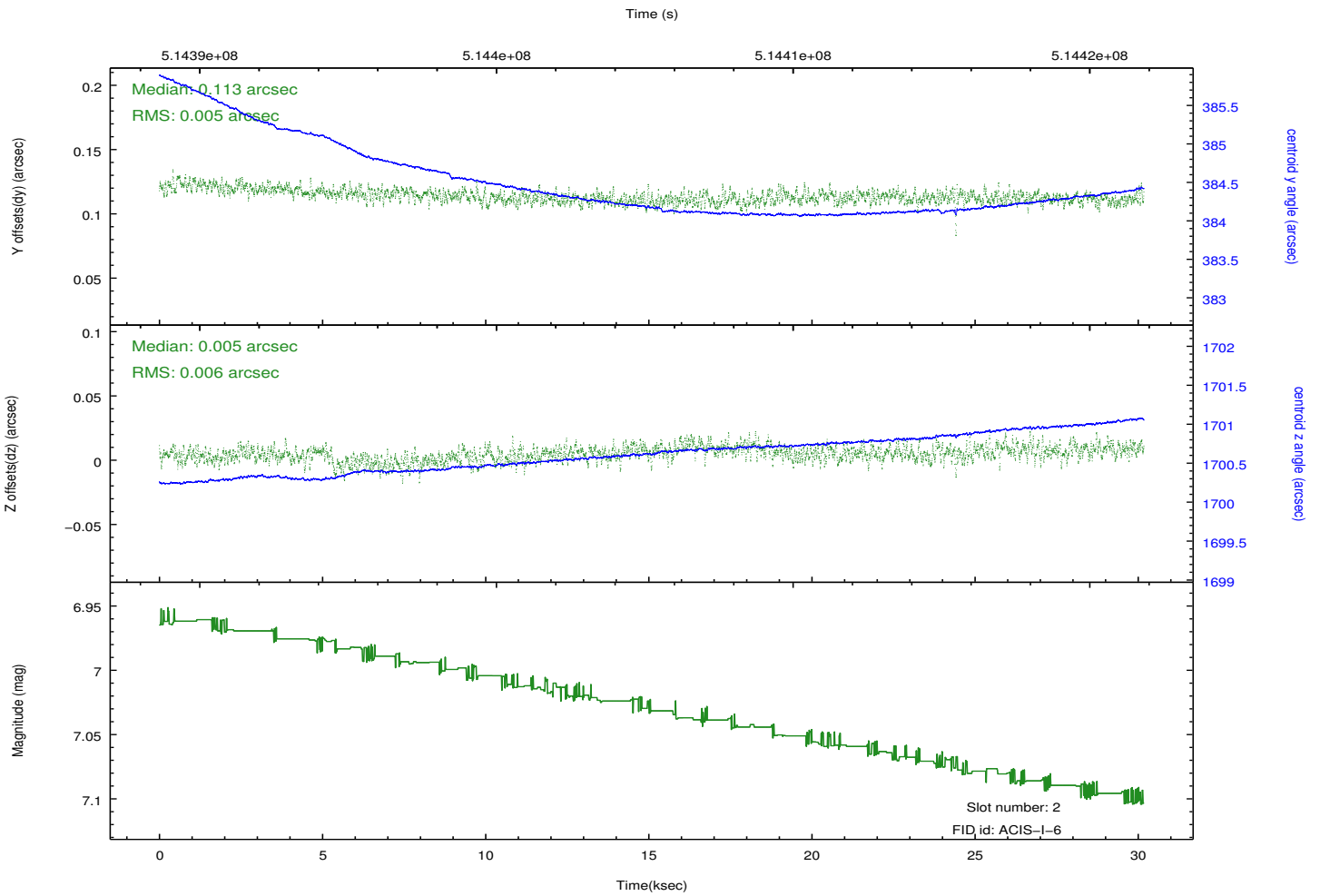
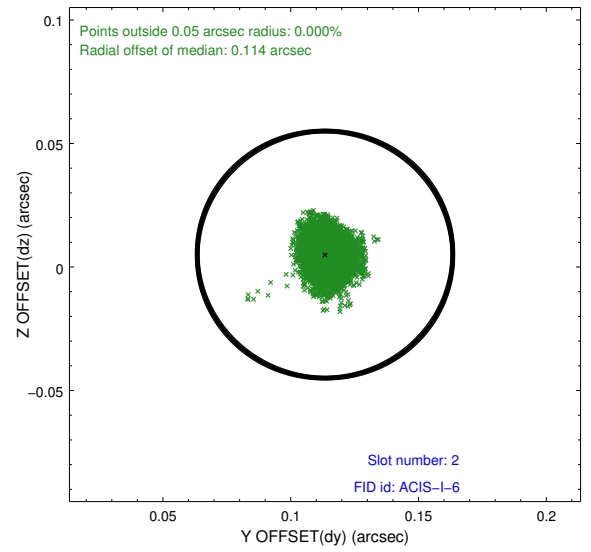
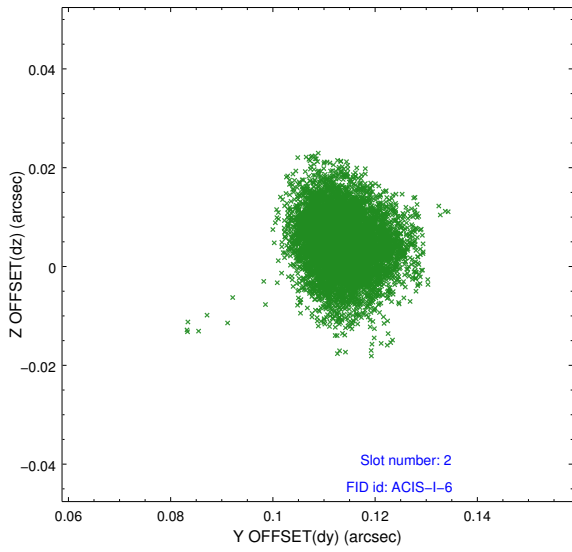
2.5.1 Slot 0



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)	2014.12.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.063800231218

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.