

V&V Reference Report

L2 ASCDS Version : 10.1.1

Observation 16561 - L2 Version 3
Chandra X-Ray Center

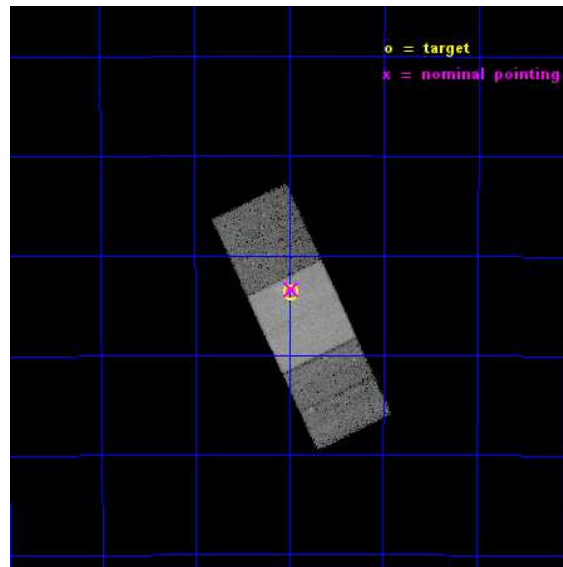
L2 Processing Date : Dec 9 2014

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1 Front

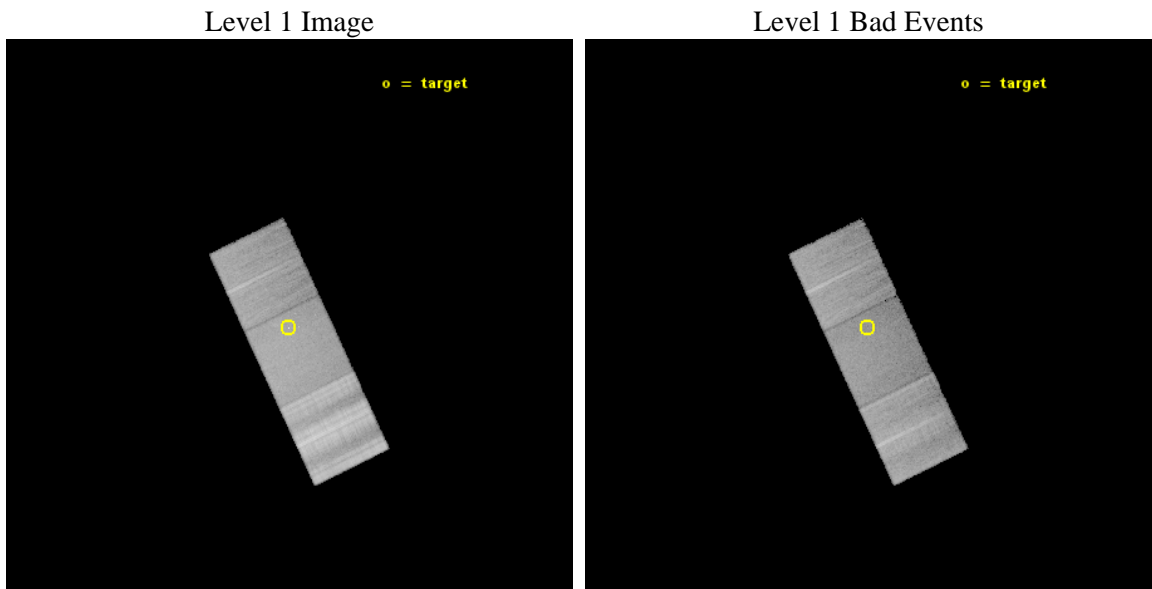
seq_num	401610	Sequence number
obs_id	16561	Observation id
title	Catching the rebirth of a radio millisecond pulsar	Proposal title
observer	Dr. Alessandro Patruno	Principal investigator
object	XSS J12270-4859	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	186.995833	Observer's specified target RA [deg]
dec_targ	-48.895278	Observer's specified target Dec [deg]
ra_nom	186.9939181574	Nominal RA [deg]
dec_nom	-48.890108435379	Nominal Dec [deg]
roll_nom	64.470902986884	Nominal Roll [deg]
revision	3	Processing version of data
ontime	30578.400235176	Sum of GTIs [s]
livetime	30178.870924613	Livetime [s]
ontime6	30578.389597833	Sum of GTIs [s]
ontime7	30578.400235176	Sum of GTIs [s]
ontime8	30578.34855783	Sum of GTIs [s]
l2events	125236	Number of level 2 events



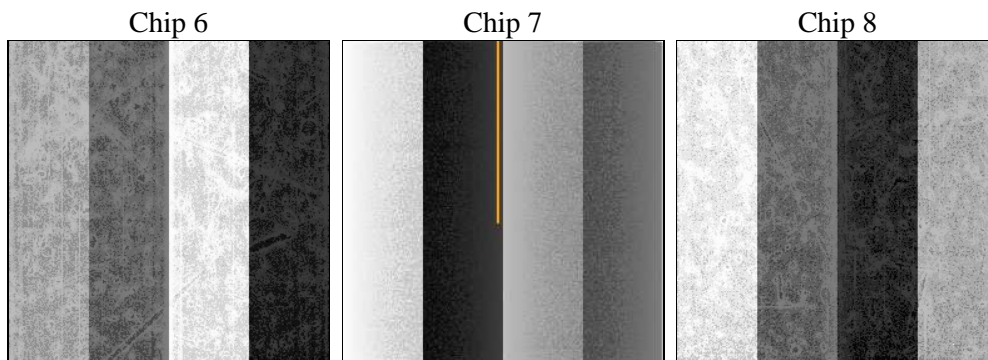
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	30497.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	30578.400235176	Sum of GTIs [s]
caldsver	4.6.4	 	ontime6	30578.389597833	Sum of GTIs [s]
date	2014-12-09T22:43:44	Date and time of file creation	ontime7	30578.400235176	Sum of GTIs [s]
revision	3	Processing version of data	ontime8	30578.34855783	Sum of GTIs [s]
			l1events	701511	Number of level 1 events

2.1.4 Events

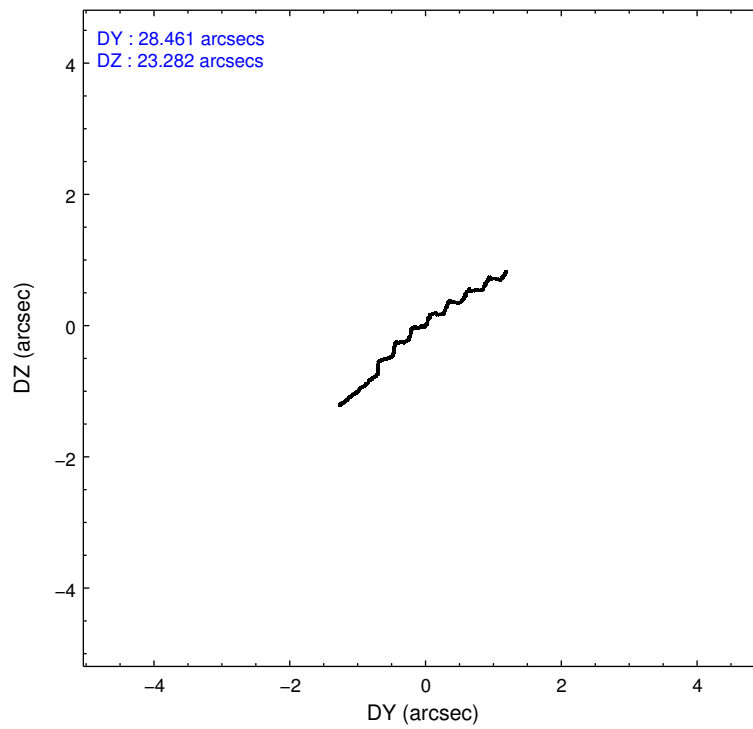
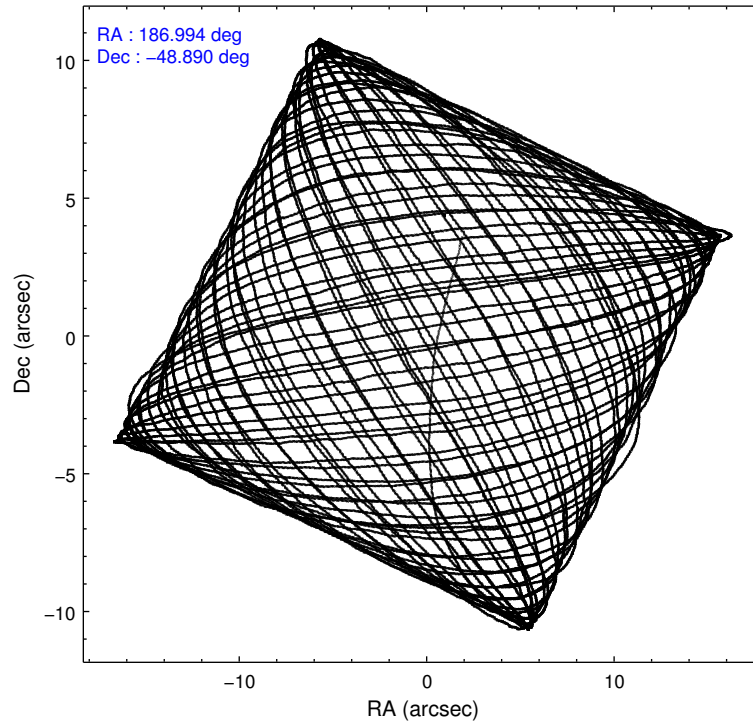
	ccd 6	ccd 7	ccd 8
level 1 events	164032	198189	339290
rejected events	143013	107535	167367
rejected %	87%	54%	49%

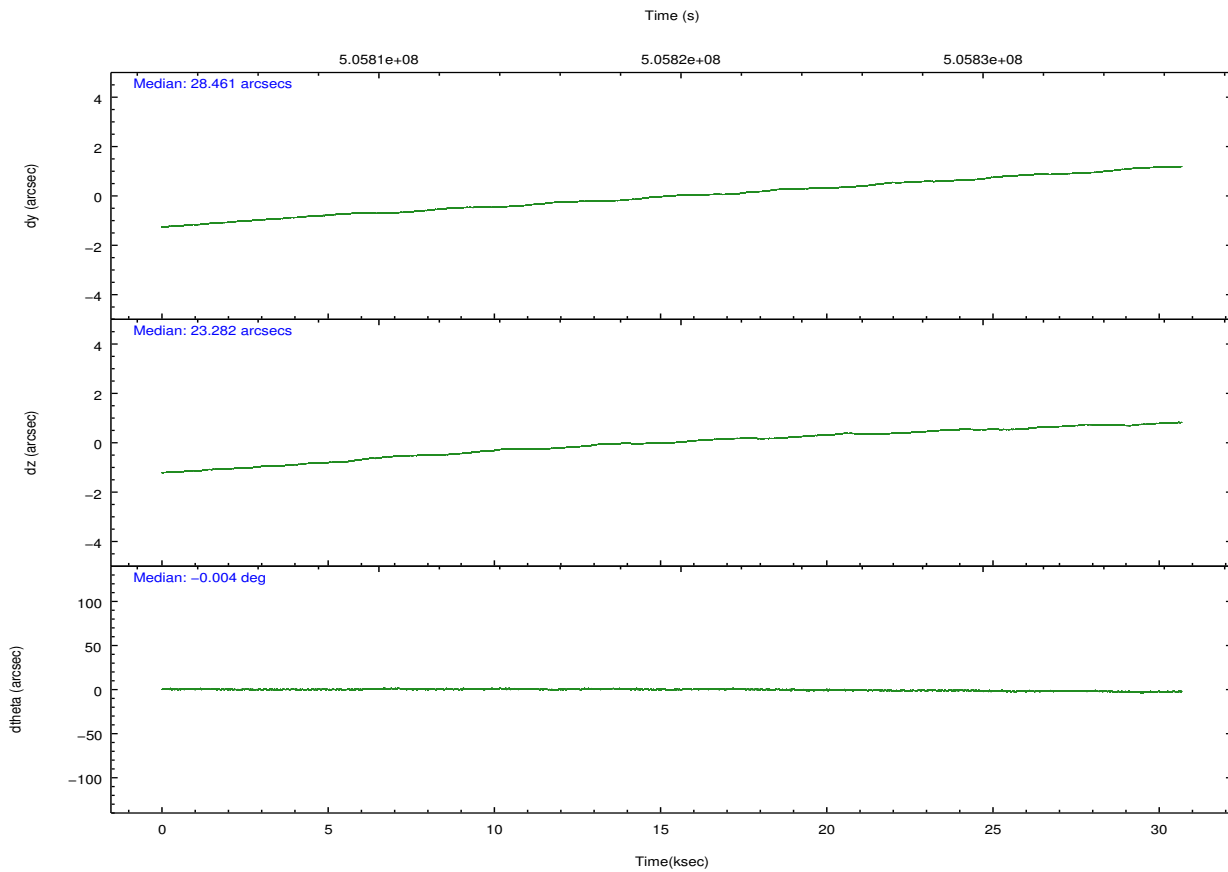
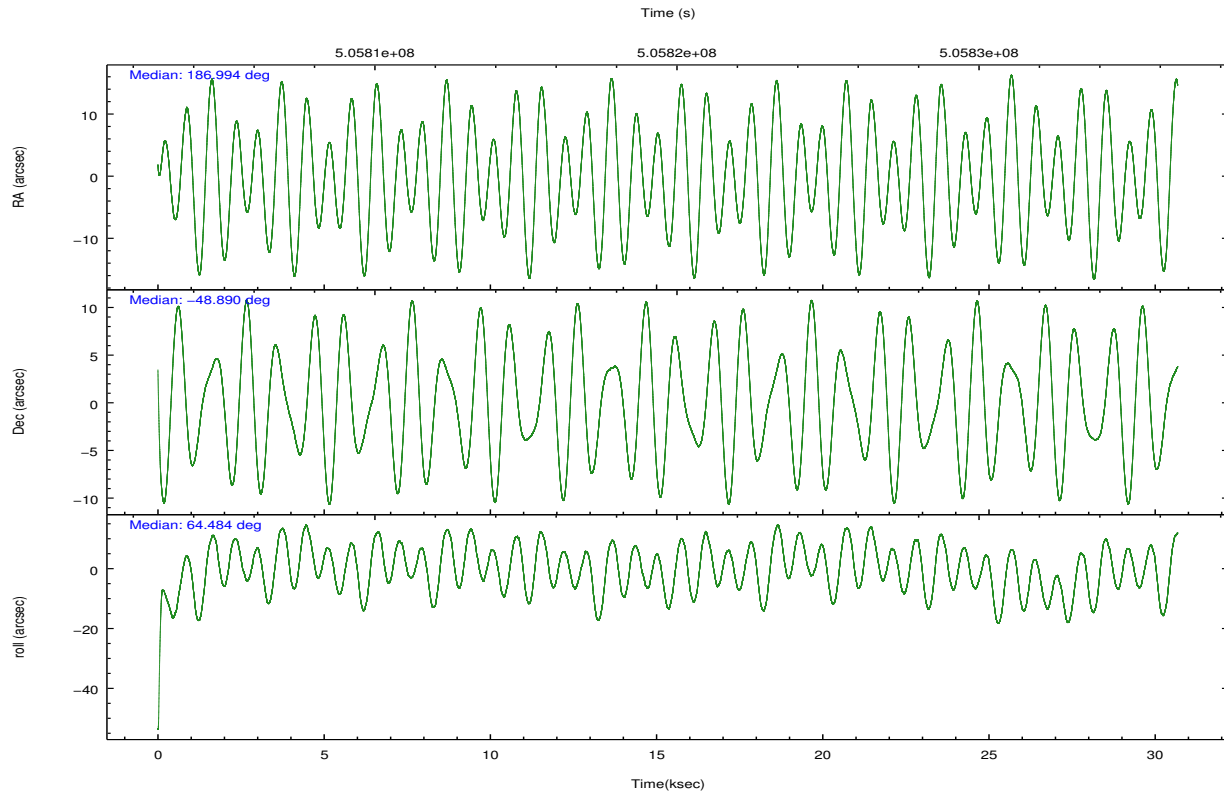
	ccd 6	ccd 7	ccd 8
grade 0 events	7913	8908	49614
	4%	4%	14%
grade 1 events	84	273	370
	0%	0%	0%
grade 2 events	5442	19961	28730
	3%	10%	8%
grade 3 events	1891	7864	26839
	1%	3%	7%
grade 4 events	1705	7770	25225
	1%	3%	7%
grade 5 events	7390	19898	12328
	4%	10%	3%
grade 6 events	4073	46171	41519
	2%	23%	12%
grade 7 events	135534	87344	154665
	82%	44%	45%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-678	ACIS-678	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	186.997711	186.9939181574046	CCD I2 on	N	N
[deg] Pointing Dec	-48.917323	-48.89010843537933	CCD I3 on	N	N
[deg] Pointing Roll	64.317153	64.47090298688418	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	O1	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	O2	Y
[s] Observation start time (MET)	505804531.184000	505803678.02997	CCD S5 on	N	N
Observation start date	2014-01-11T05:14:24	2014-01-11T05:01:18	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	505835028.184000	505835719.01923	On-chip summing requested	N	N
Observation end date	2014-01-11T13:42:41	2014-01-11T13:55:19	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





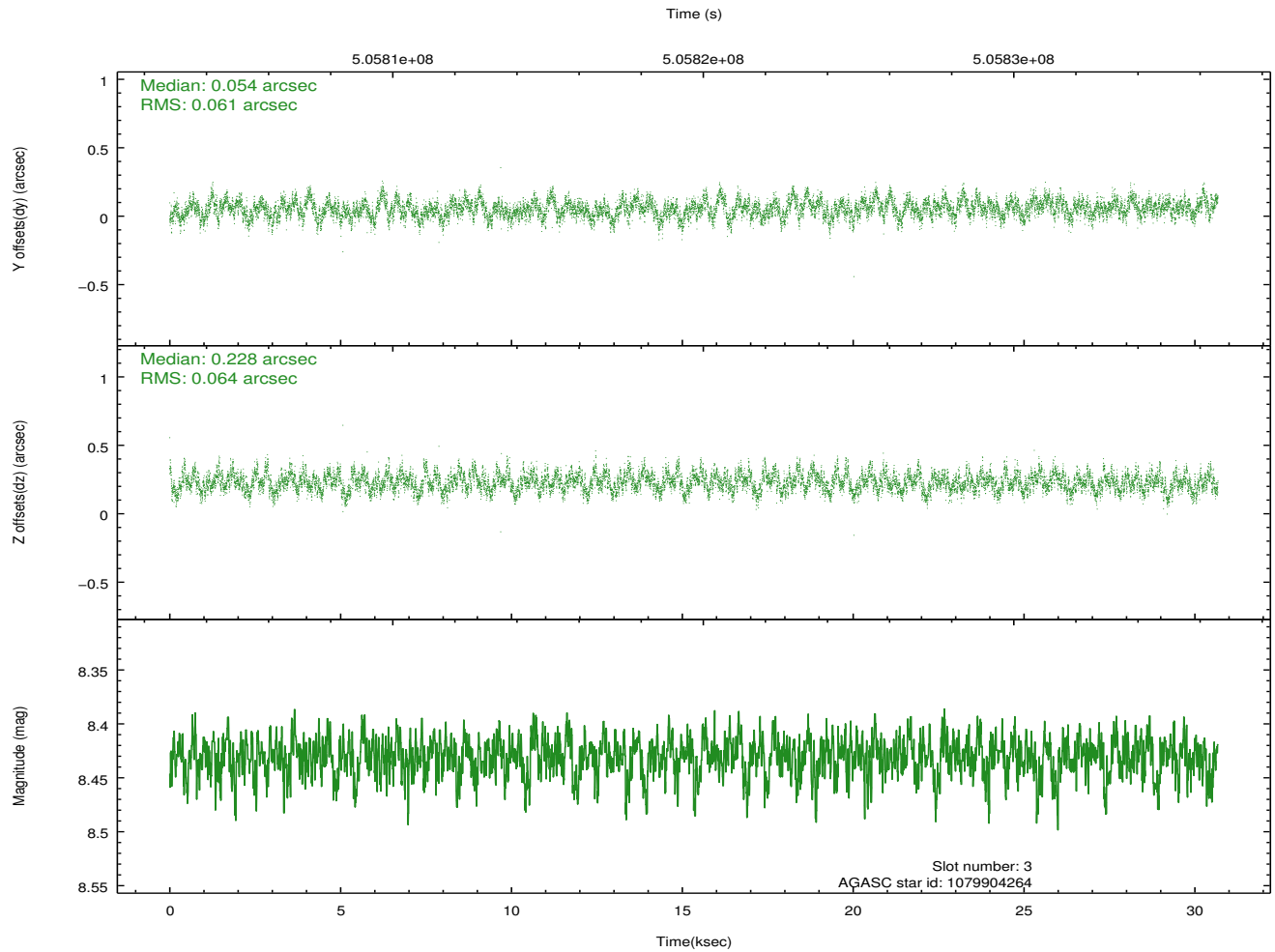
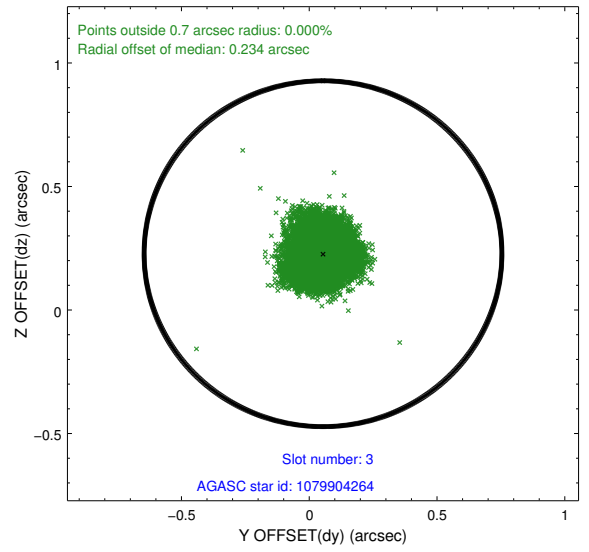
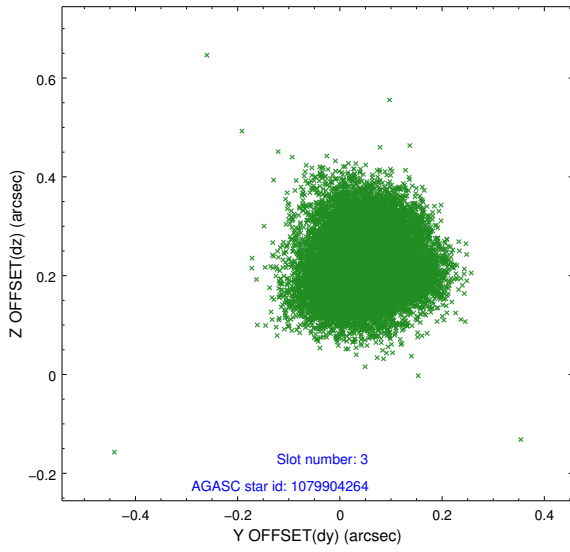
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.93	7483	-0.189	-0.047	0.032	0.047	0.000000	0.000000	-781.98	-1744.87
1	FID		ACIS-S-4	7.01	7483	0.409	0.108	0.025	0.058	0.000000	0.000000	2131.86	163.68
2	FID		ACIS-S-5	7.04	7483	-0.240	-0.041	0.020	0.045	0.000000	0.000000	-1834.78	157.29
3	GUIDE	used	1079904264	8.43	14960	0.054	0.228	0.096	0.150	186.985837	-48.994000	-260.35	-93.75
4	GUIDE	used	1079909120	9.40	14959	0.268	0.338	0.145	0.268	187.049107	-49.366944	-1405.94	-809.14
5	GUIDE	used	1079910496	8.31	14965	0.173	0.141	0.091	0.160	187.894634	-48.985477	686.04	-2020.82
6	GUIDE	used	1079384384	9.31	14957	-0.562	-0.463	0.116	0.189	186.868484	-48.131330	2410.97	1508.00
7	GUIDE	used	1079913456	8.82	14961	0.054	-0.254	0.087	0.143	186.852912	-49.050539	-579.78	100.20

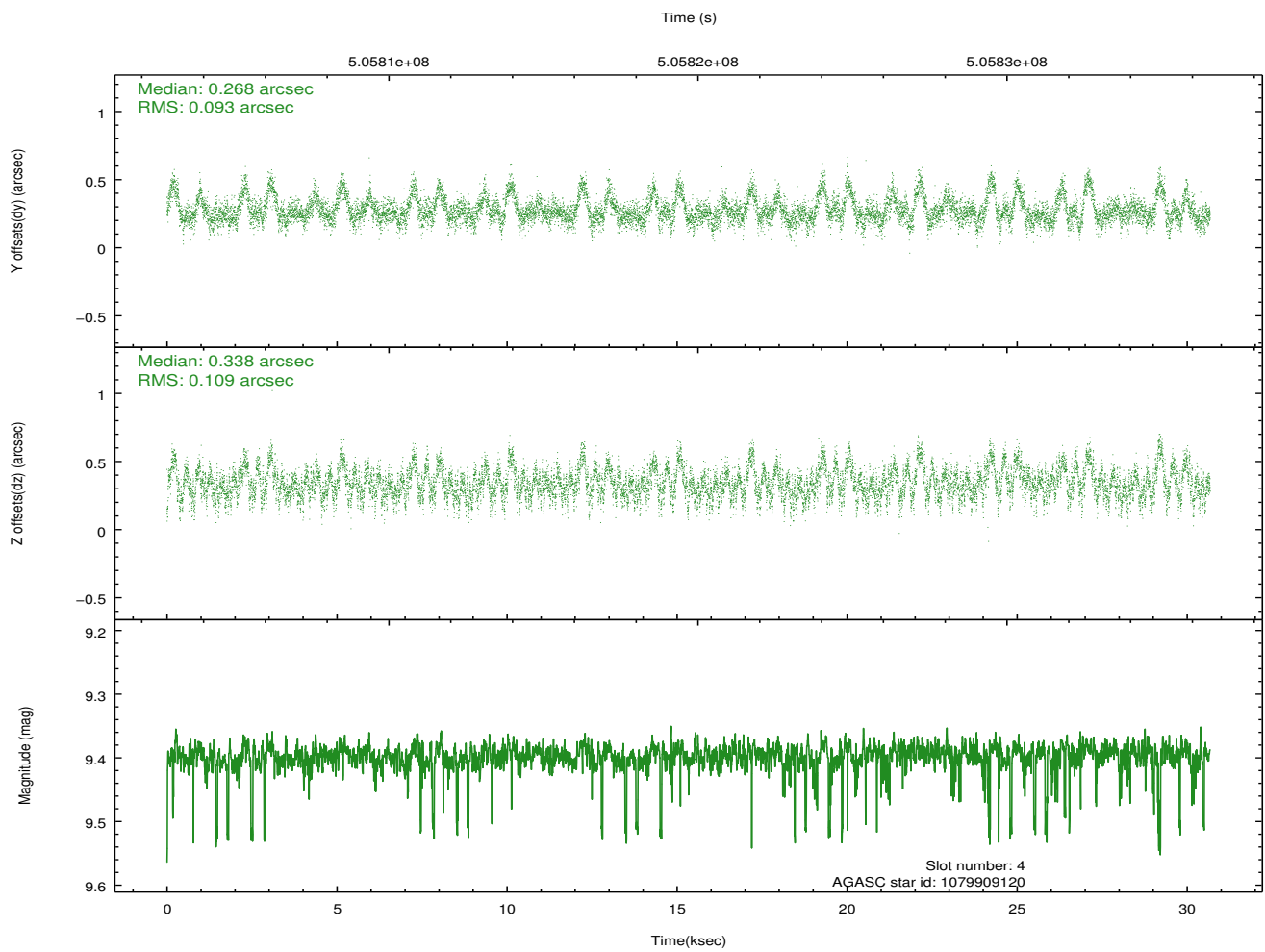
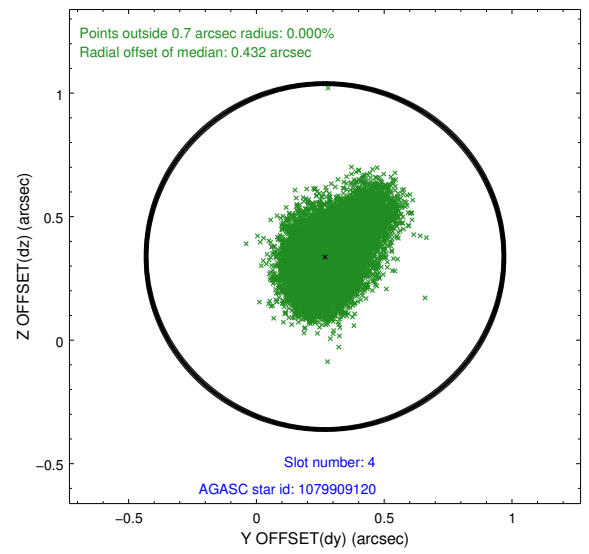
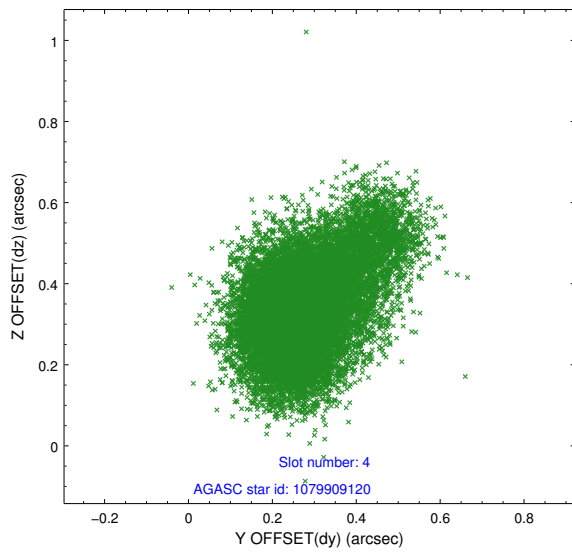
∞

2.4 Star Slots

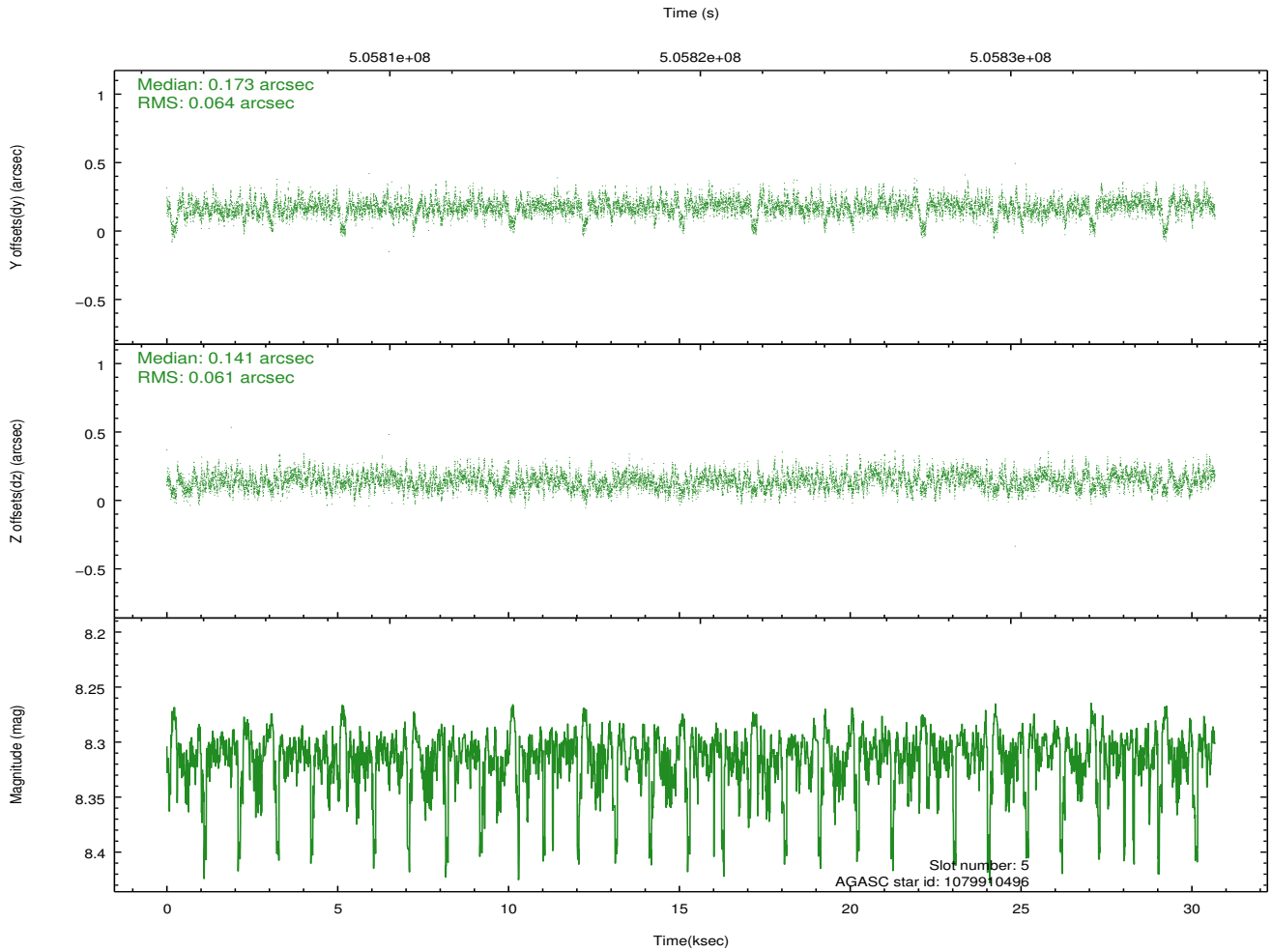
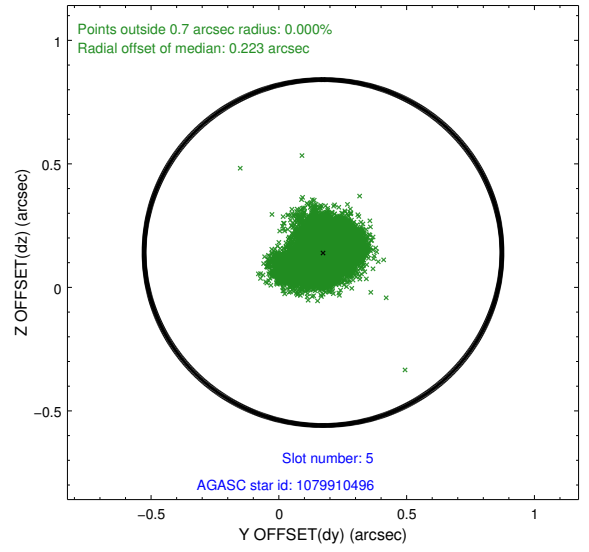
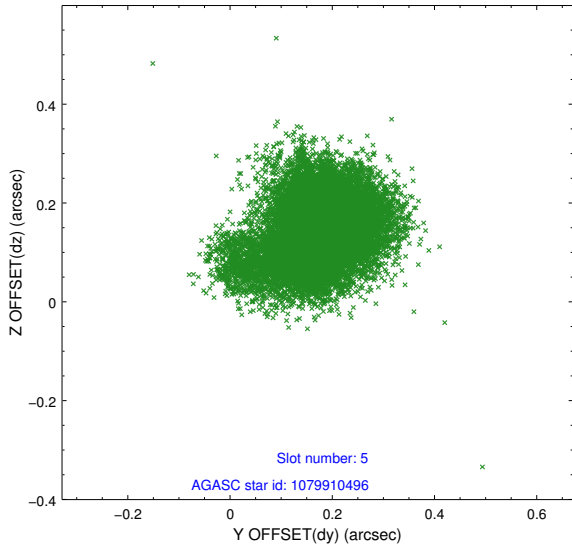
2.4.1 Slot 3



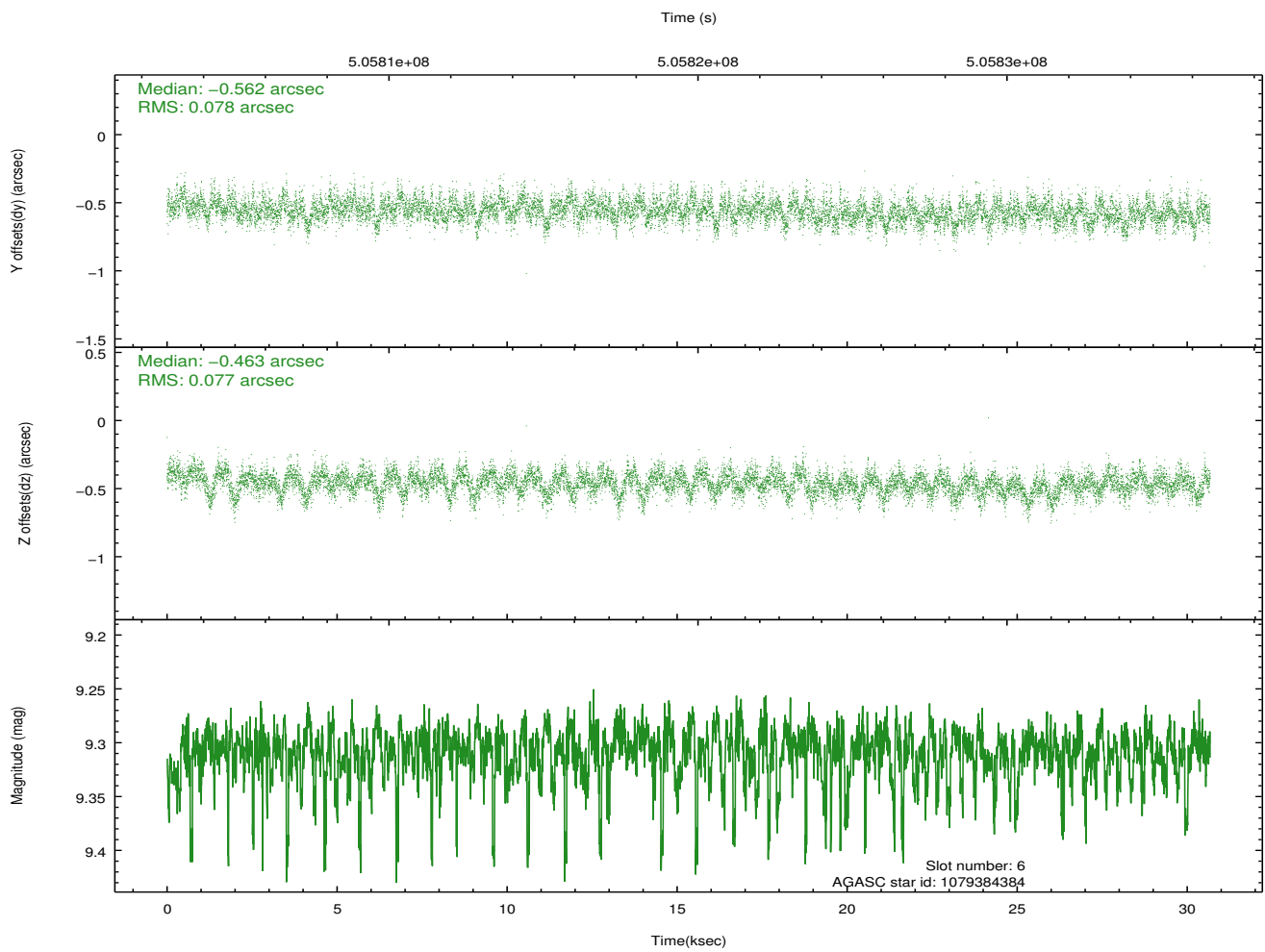
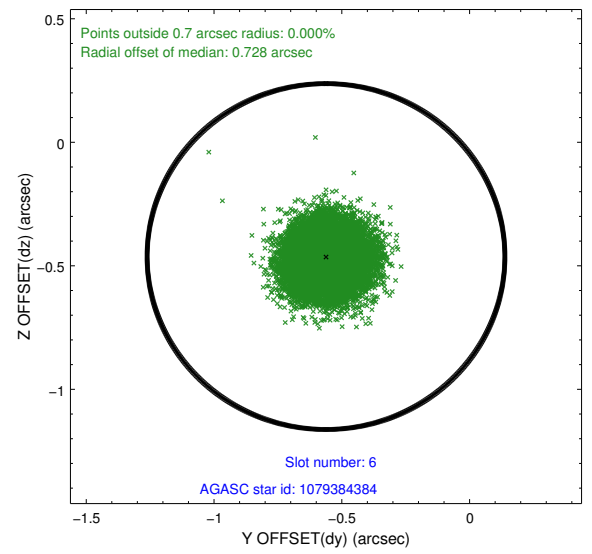
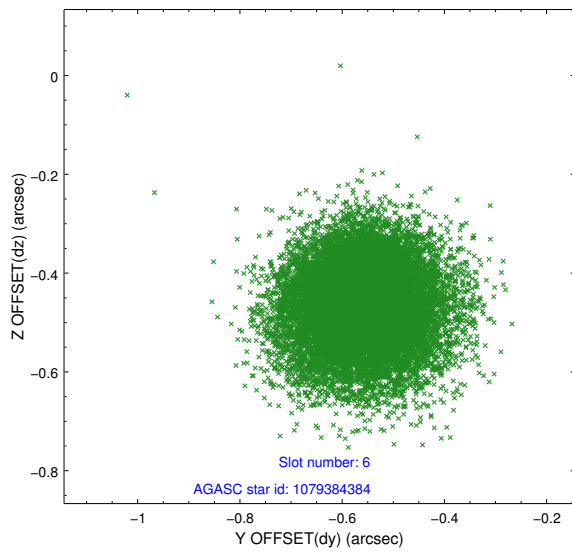
2.4.2 Slot 4



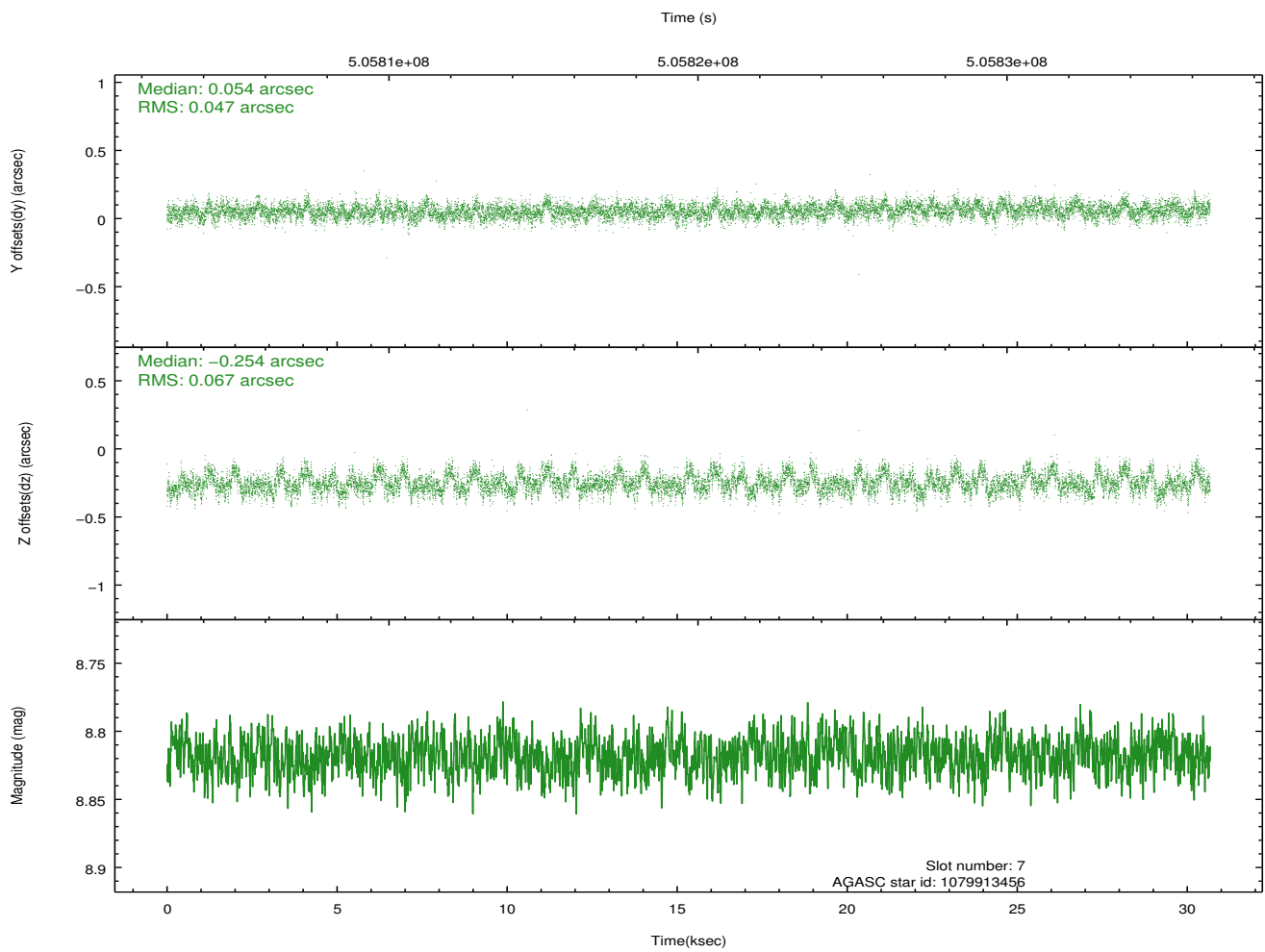
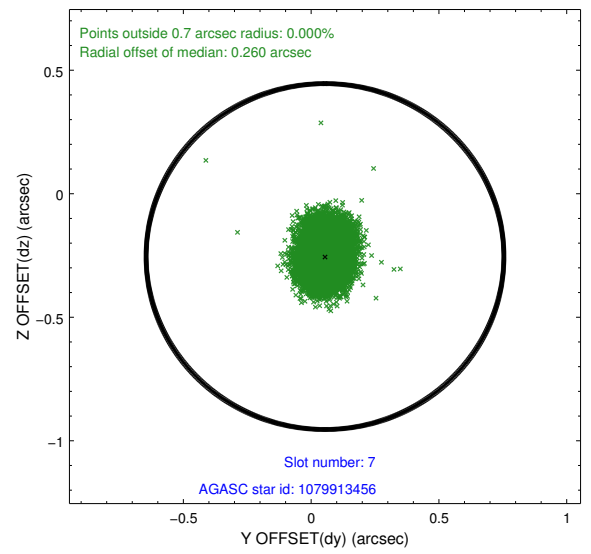
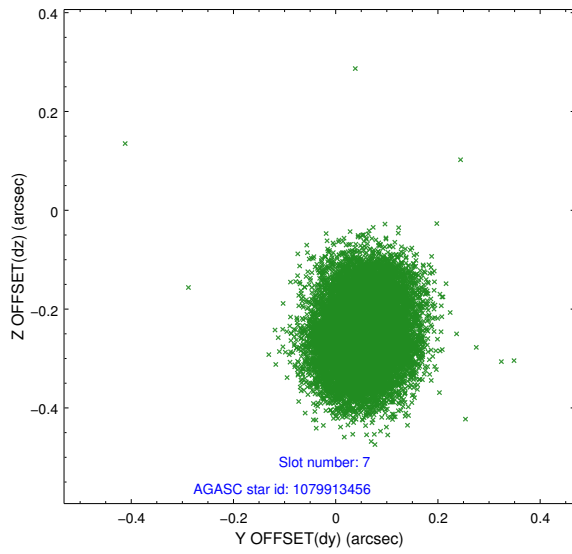
2.4.3 Slot 5



2.4.4 Slot 6

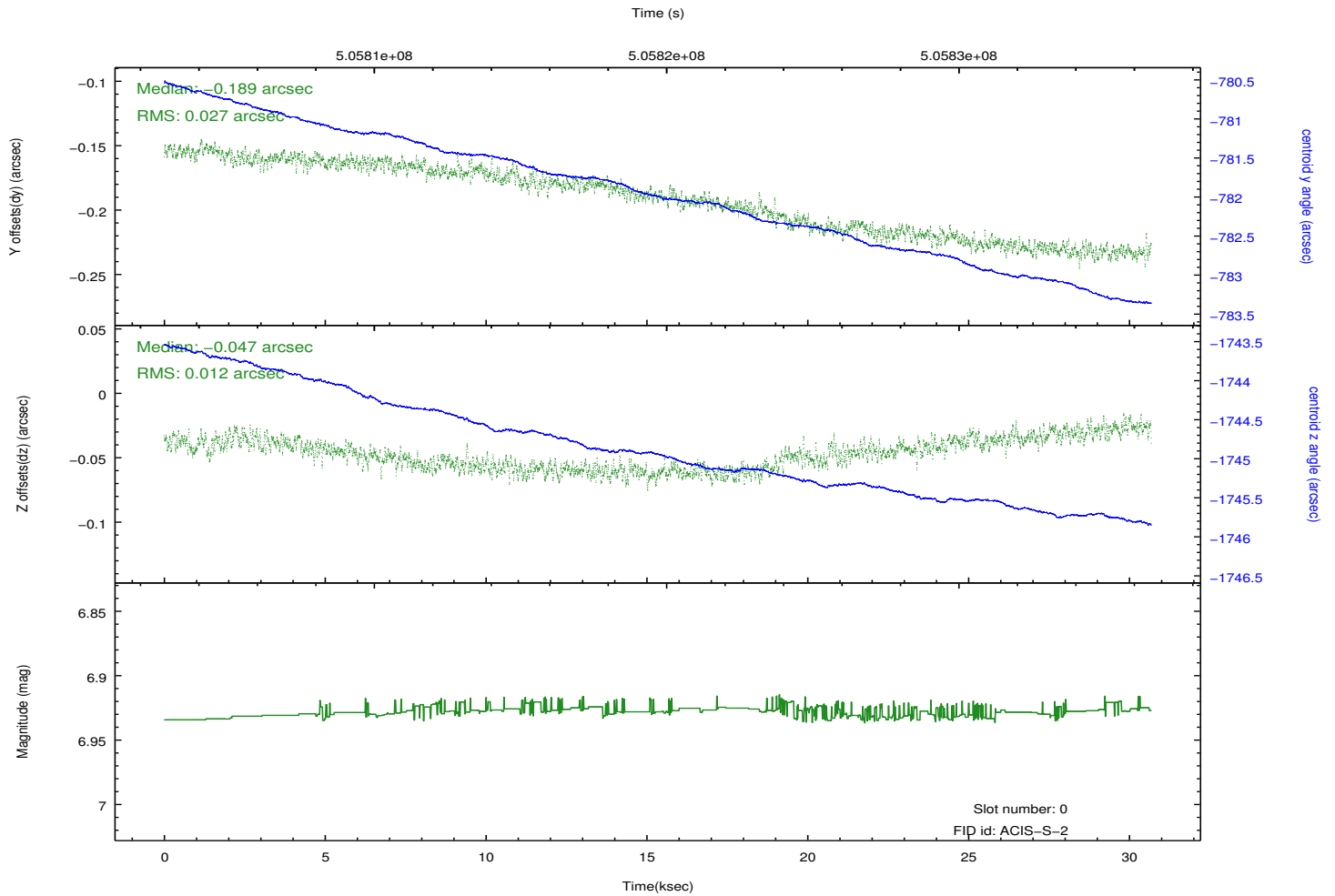
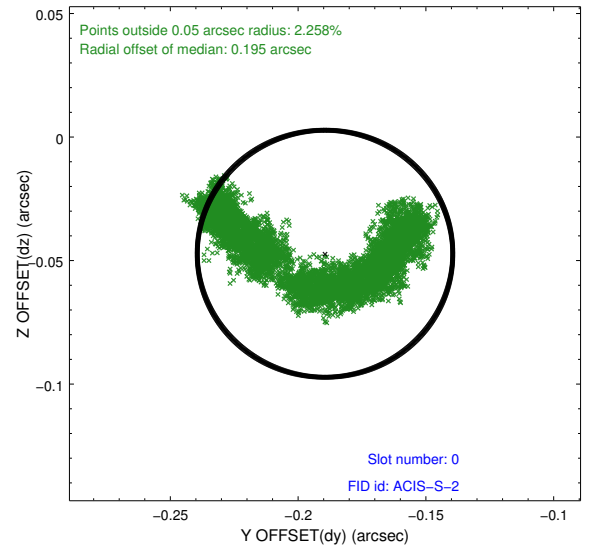
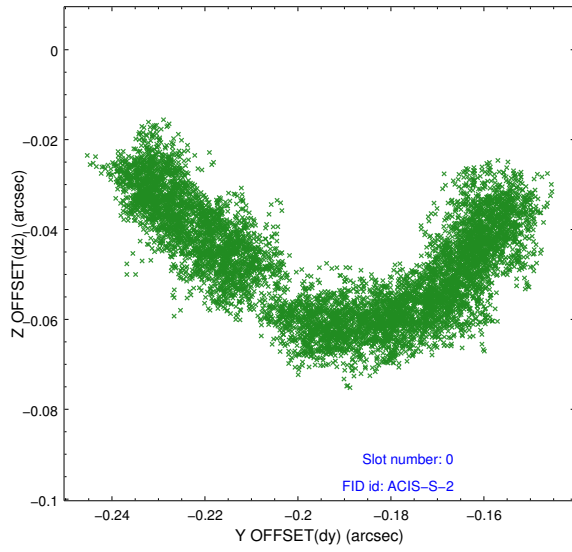


2.4.5 Slot 7

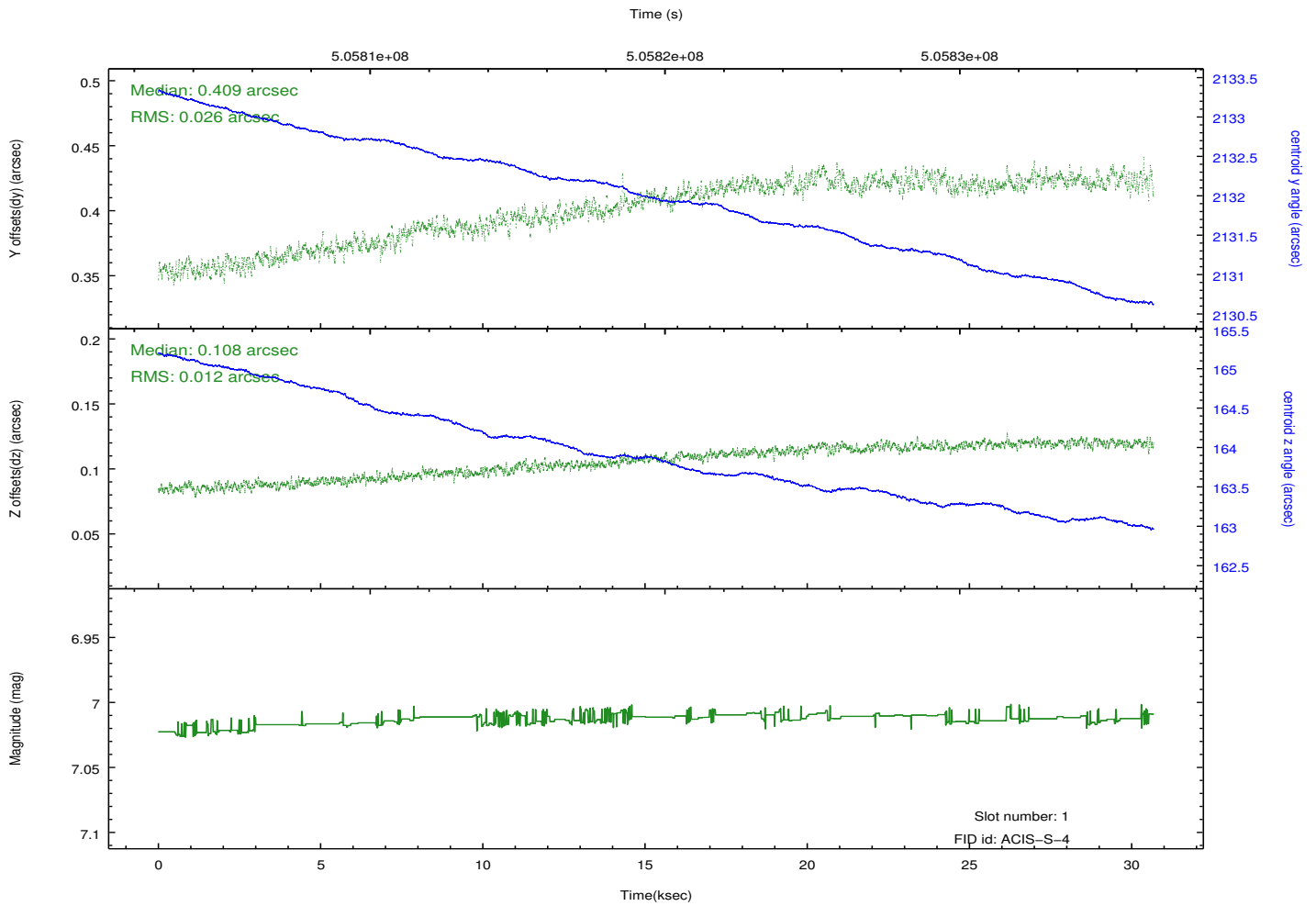
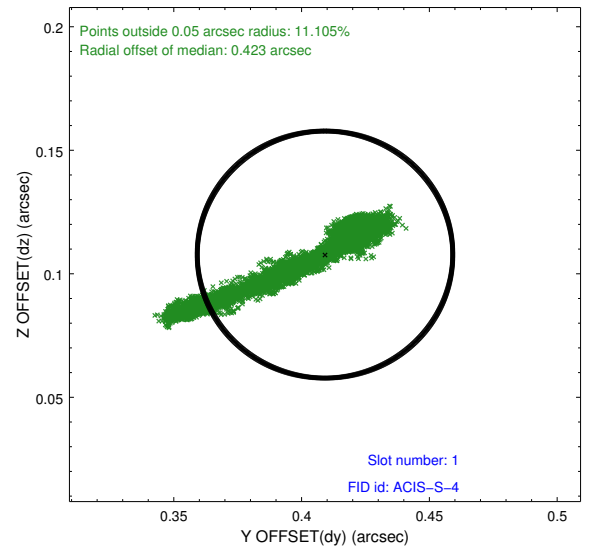
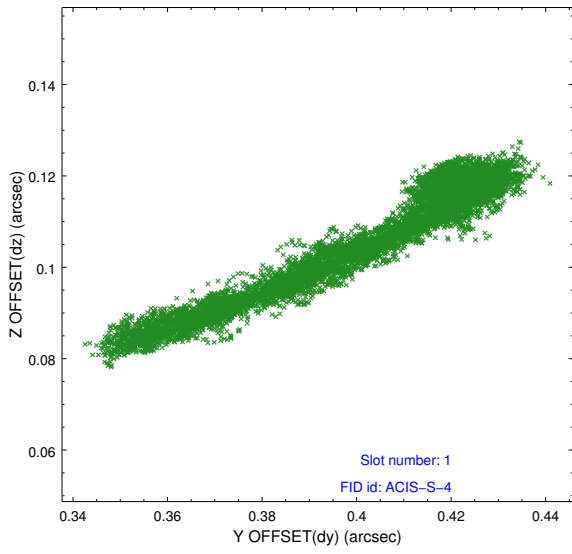


2.5 FID Slots

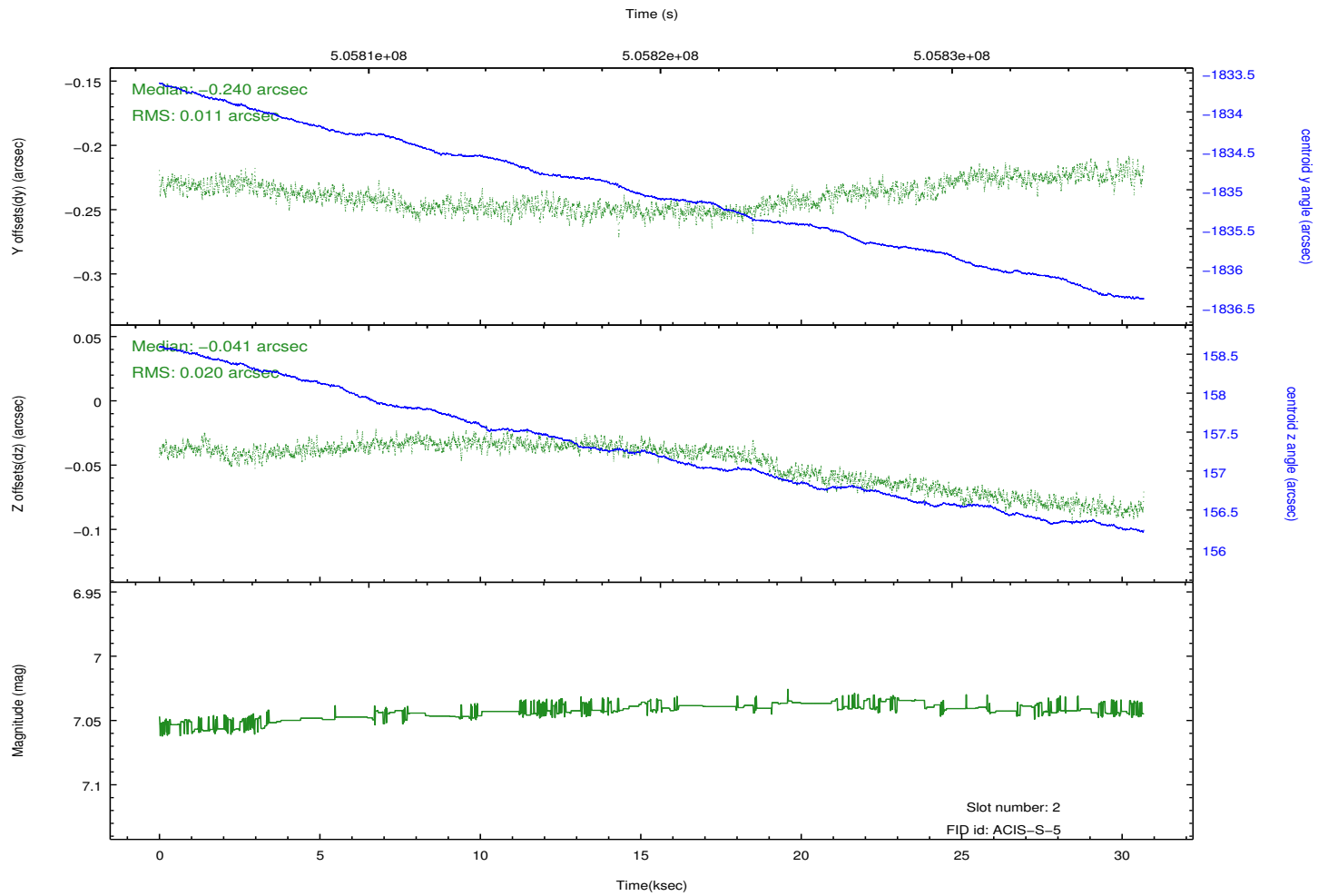
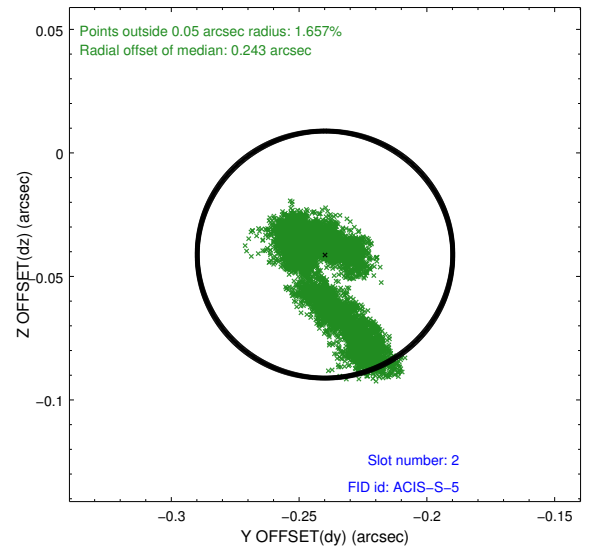
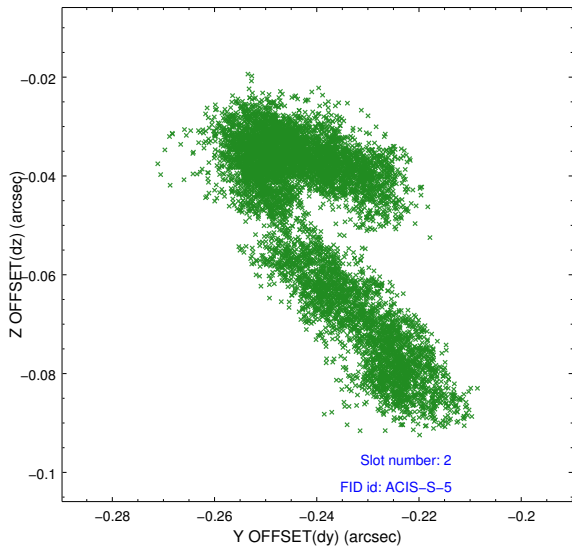
2.5.1 Slot 0



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	30.578400235176

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.