

V&V Reference Report

L2 ASCDS Version : 10

Observation 15552 - L2 Version 2
Chandra X-Ray Center

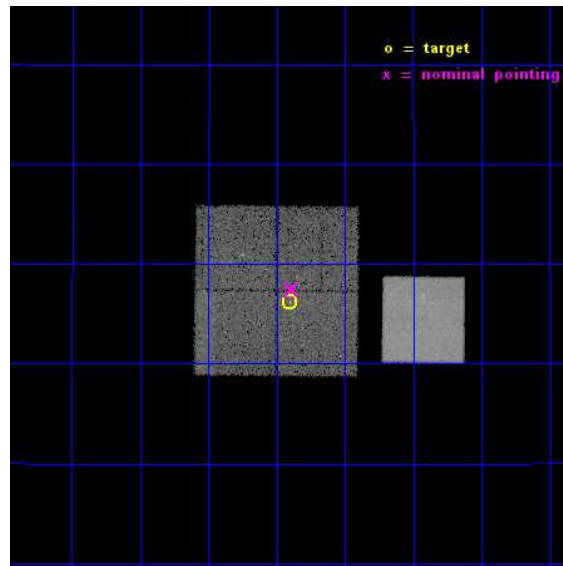
L2 Processing Date : Dec 6 2014

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1 Front

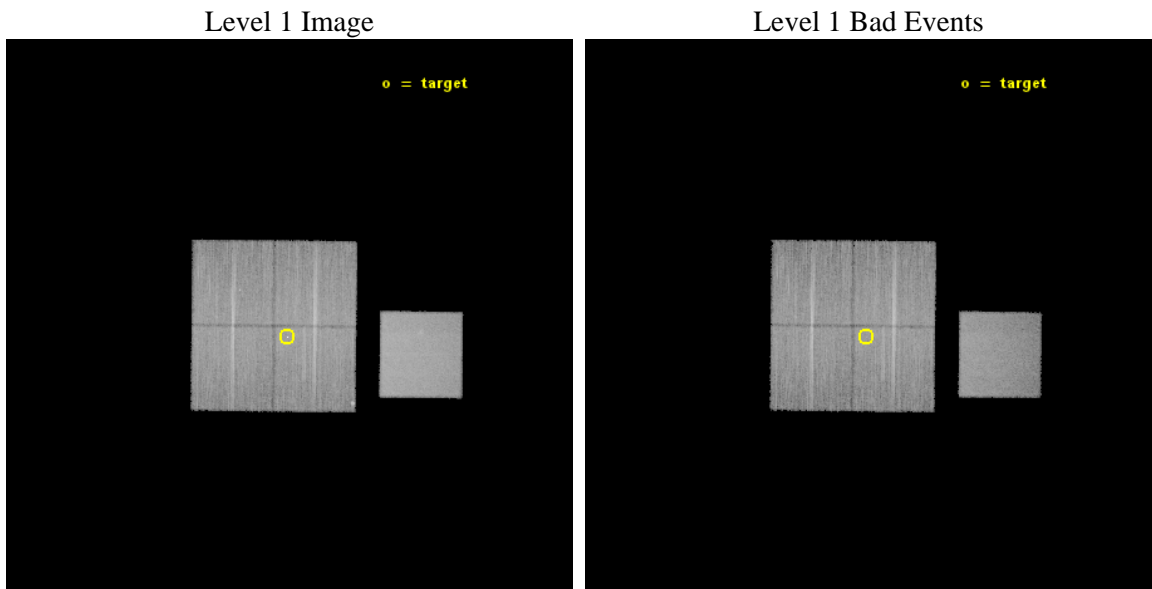
seq_num	501823	Sequence number
obs_id	15552	Observation id
title	A Legacy Study of the Relativistic Shocks of PWNe	Proposal title
observer	Prof. Roger Romani	Principal investigator
object	PSR J0633+1746	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	98.475833	Observer's specified target RA [deg]
dec_targ	17.77025	Observer's specified target Dec [deg]
ra_nom	98.473135940887	Nominal RA [deg]
dec_nom	17.791292186269	Nominal Dec [deg]
roll_nom	90.609509268732	Nominal Roll [deg]
revision	2	Processing version of data
ontime	37570.930030882	Sum of GTIs [s]
livetime	37080.038170713	Livetime [s]
ontime0	37570.806910872	Sum of GTIs [s]
ontime1	37570.847950876	Sum of GTIs [s]
ontime2	37567.74802053	Sum of GTIs [s]
ontime3	37570.930030882	Sum of GTIs [s]
ontime7	37570.971070886	Sum of GTIs [s]
l2events	178619	Number of level 2 events



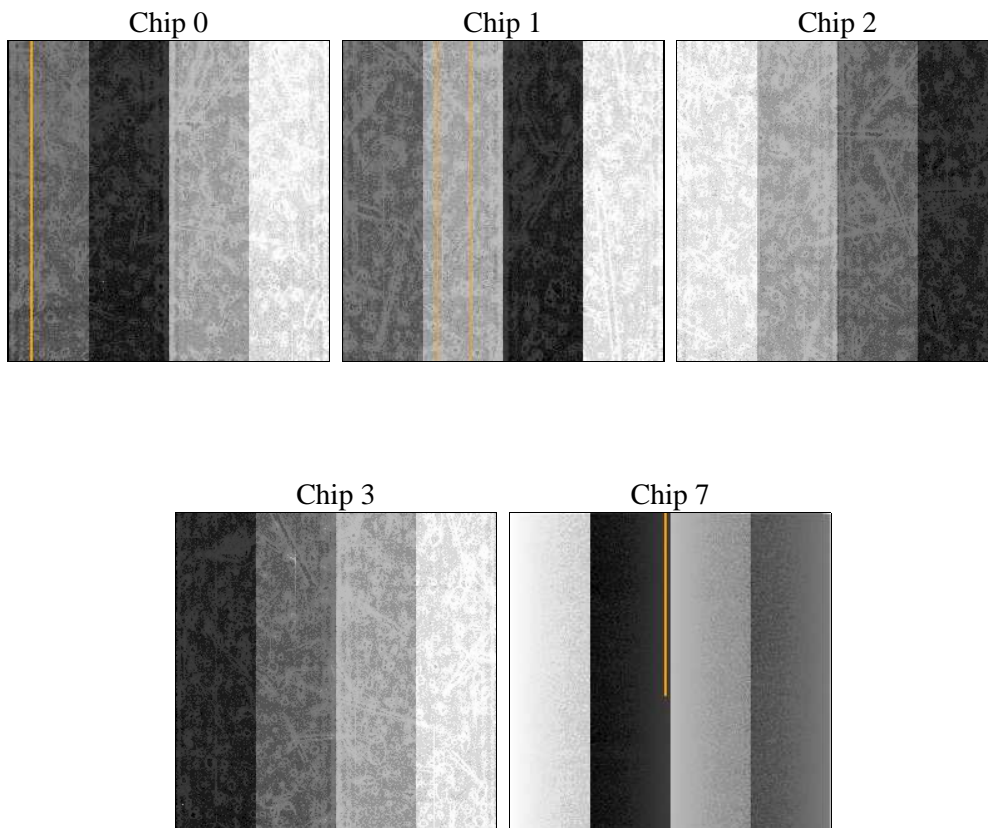
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	37500.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	37570.930030882	Sum of GTIs [s]
caldbver	4.6.4	 	ontime0	37570.806910872	Sum of GTIs [s]
date	2014-12-06T15:32:49	Date and time of file creation	ontime1	37570.847950876	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	37567.74802053	Sum of GTIs [s]
			ontime3	37570.930030882	Sum of GTIs [s]
			ontime7	37570.971070886	Sum of GTIs [s]
			l1events	925506	Number of level 1 events

2.1.4 Events

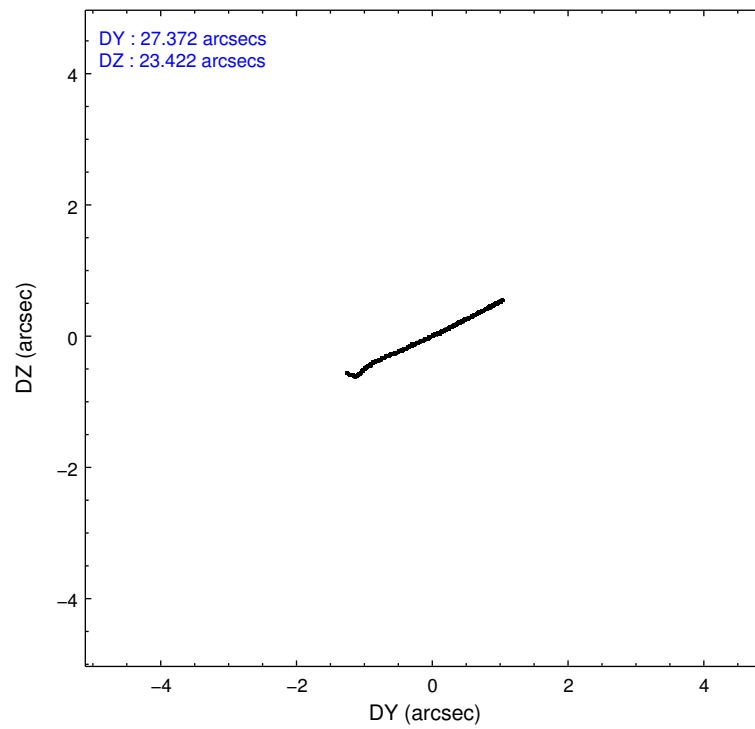
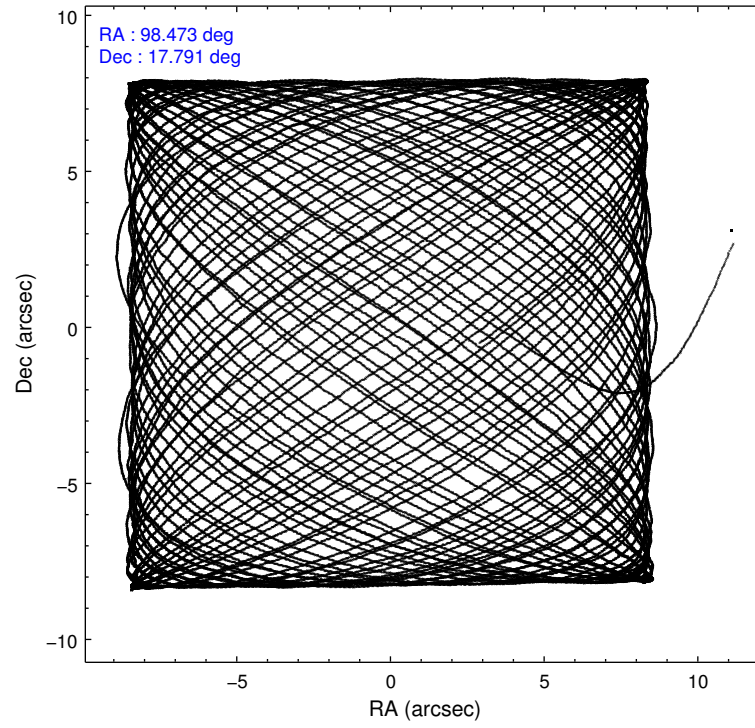
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
level 1 events	163647	165176	175846	174181	246656
rejected events	141838	141616	155137	151307	139613
rejected %	86%	85%	88%	86%	56%

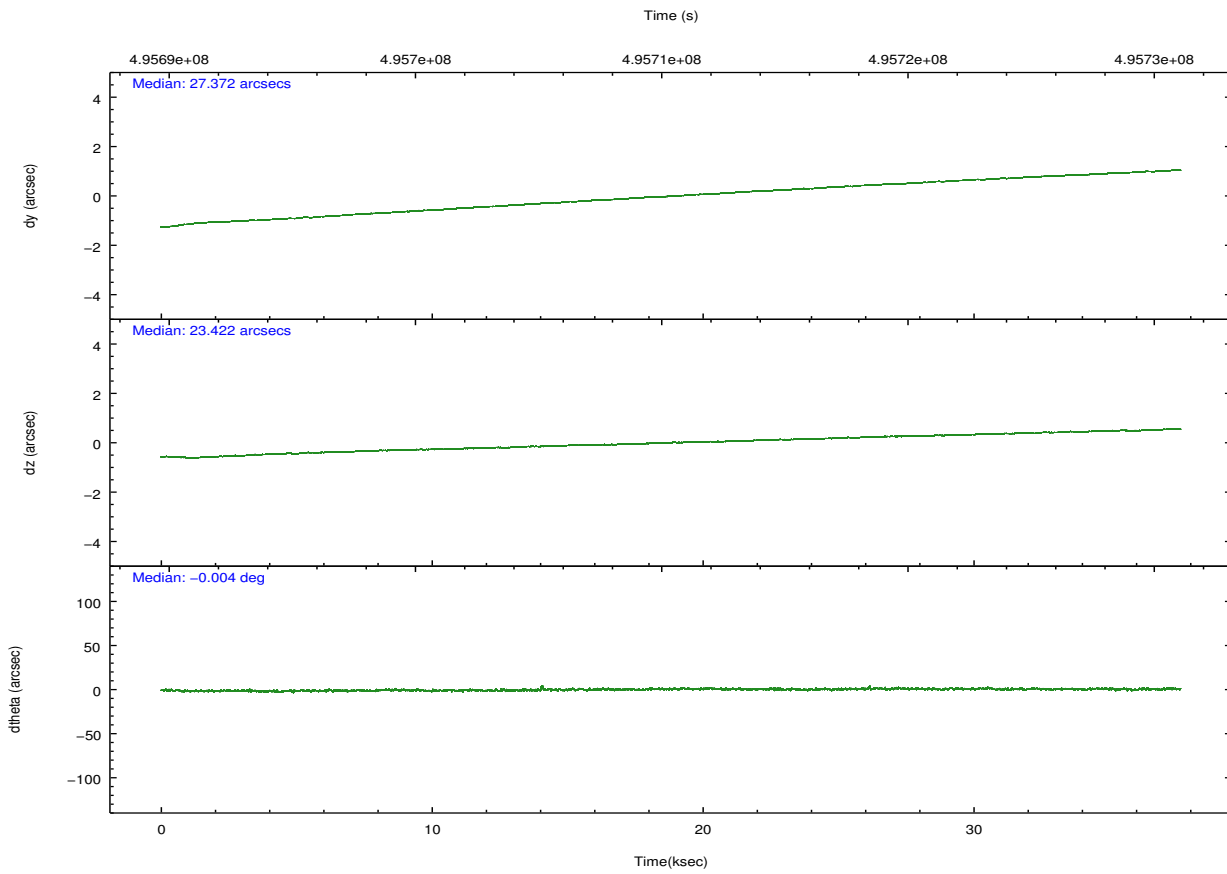
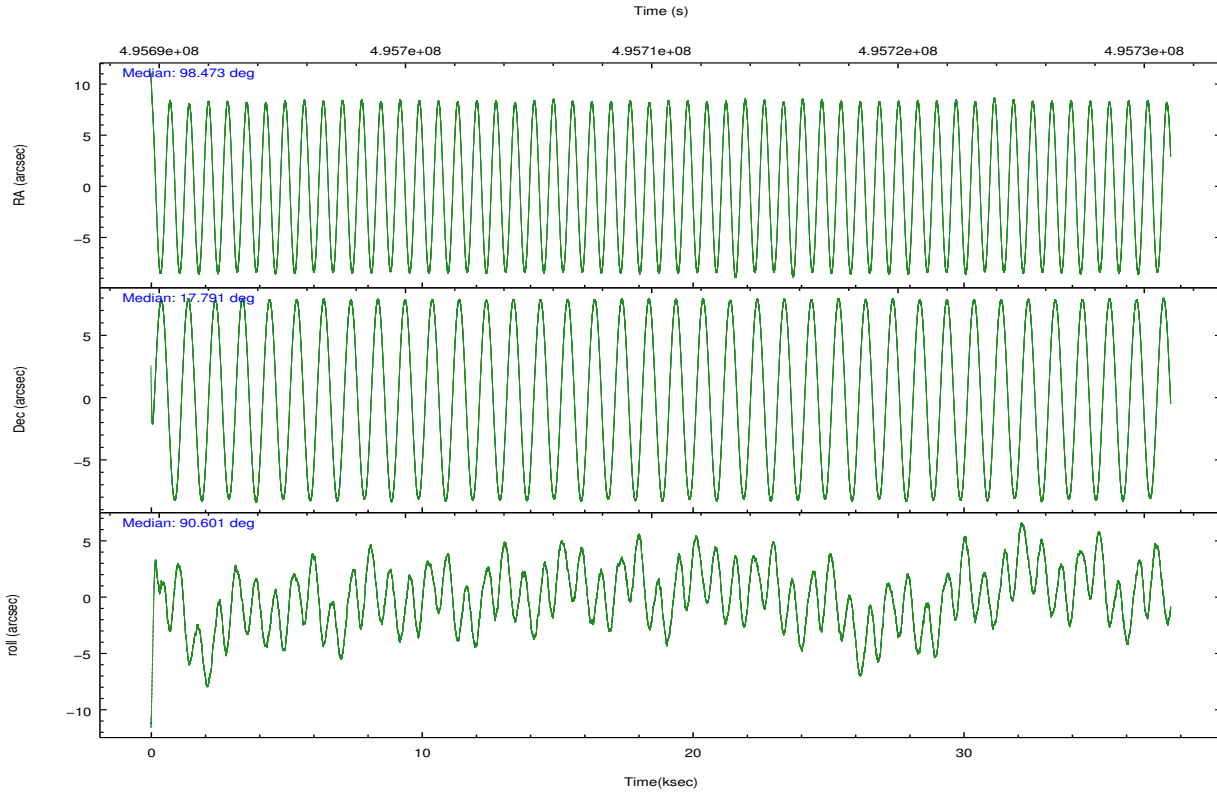
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
grade 0 events	7557	7963	7354	9187	9246
	4%	4%	4%	5%	3%
grade 1 events	92	83	100	121	320
	0%	0%	0%	0%	0%
grade 2 events	5555	5891	5031	4813	21886
	3%	3%	2%	2%	8%
grade 3 events	2270	2241	2122	2189	9226
	1%	1%	1%	1%	3%
grade 4 events	2079	2349	2115	2276	9256
	1%	1%	1%	1%	3%
grade 5 events	8439	9252	7800	9854	25687
	5%	5%	4%	5%	10%
grade 6 events	4351	5120	4091	4409	57450
	2%	3%	2%	2%	23%
grade 7 events	133304	132277	147233	141332	113585
	81%	80%	83%	81%	46%

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	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	98.487930	98.47313594088651	CCD I2 on	Y	Y
[deg] Pointing Dec	17.767664	17.79129218626917	CCD I3 on	Y	Y
[deg] Pointing Roll	90.396305	90.60950926873198	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	N	N
[mm] SIM translation stage pos	-231.252463	-231.2566641762826	CCD S3 on	O1	Y
[mm] SIM translation stage offset	-2.34	-2.335788826647132	CCD S4 on	N	N
[s] Observation start time (MET)	495691681.184000	495690209.52587	CCD S5 on	N	N
Observation start date	2013-09-16T04:06:54	2013-09-16T03:43:29	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	495729181.184000	495730046.66555	On-chip summing requested	N	N
Observation end date	2013-09-16T14:31:54	2013-09-16T14:47:26	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



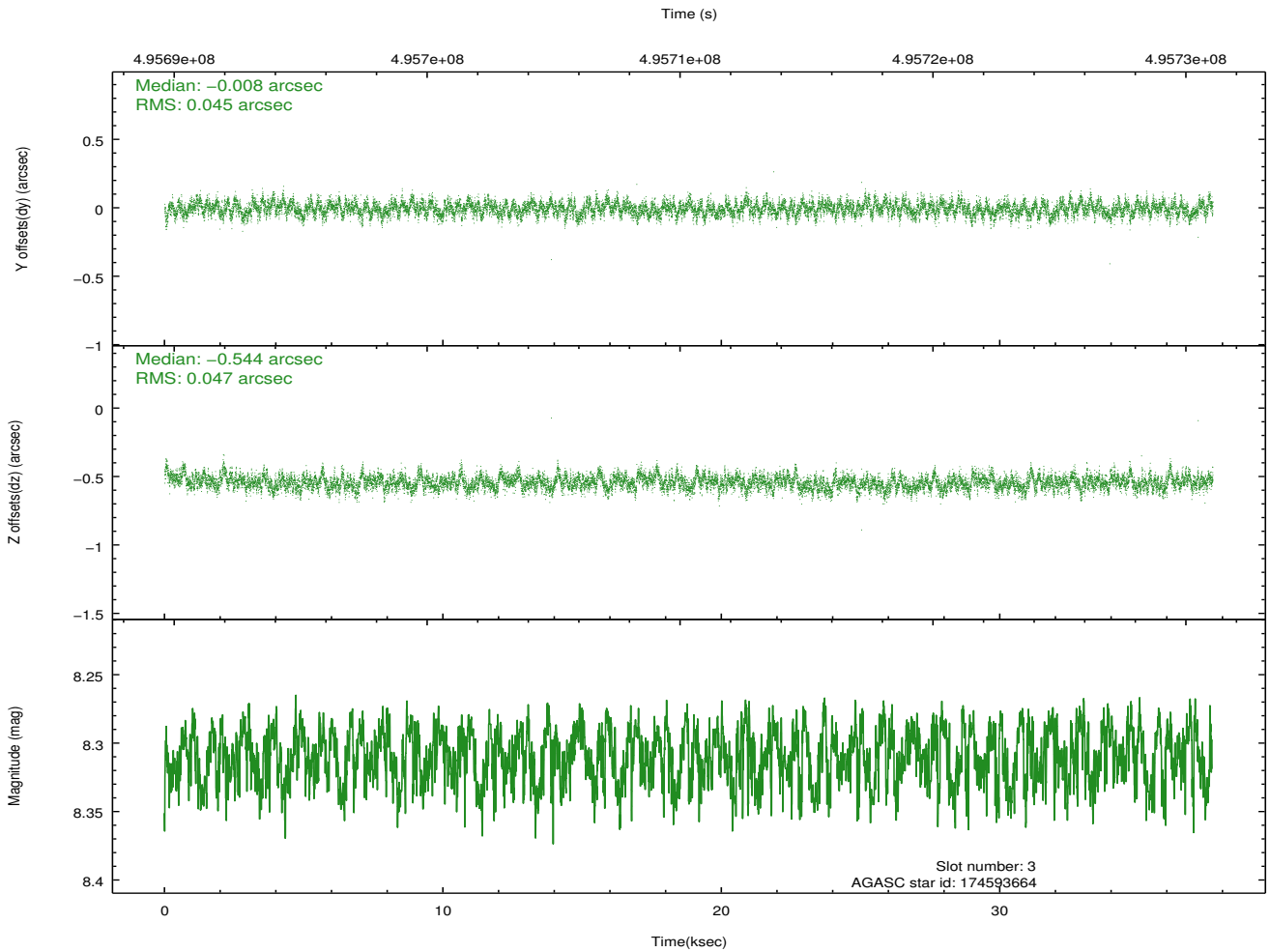
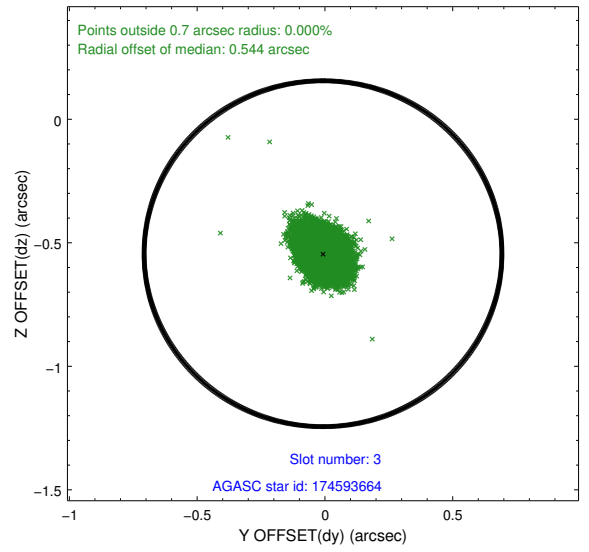
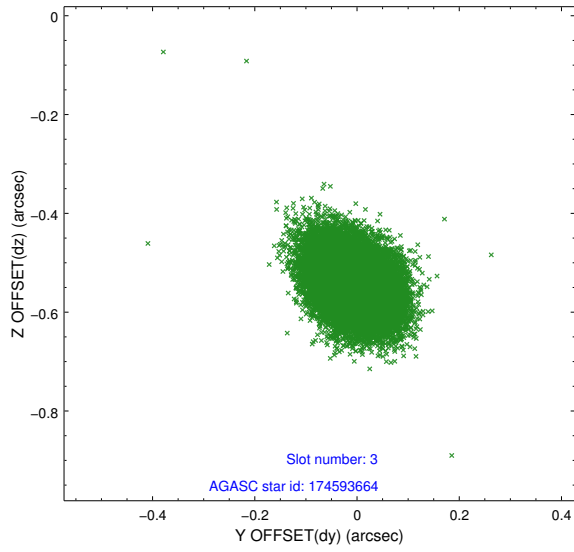


Slot Statistics

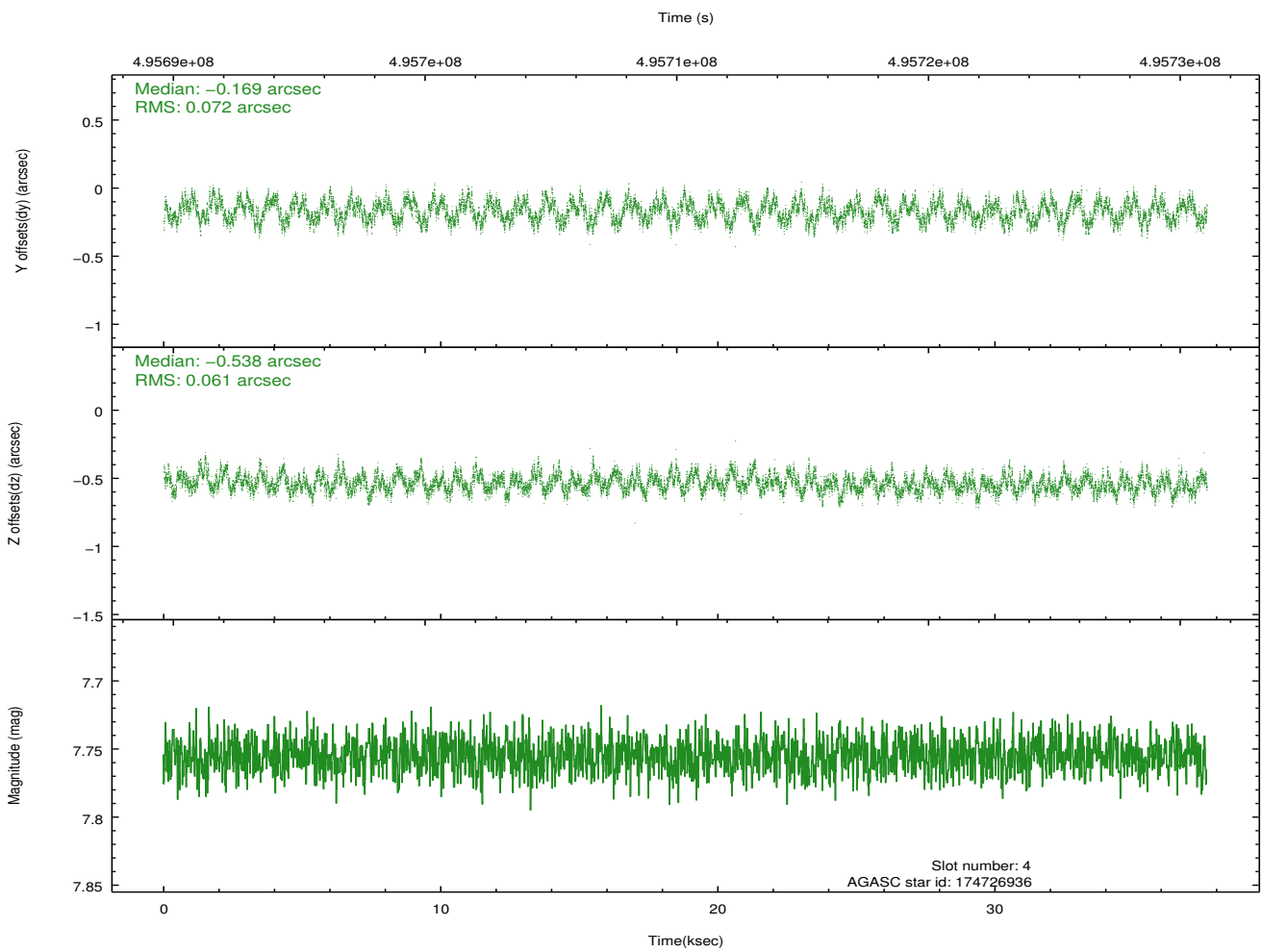
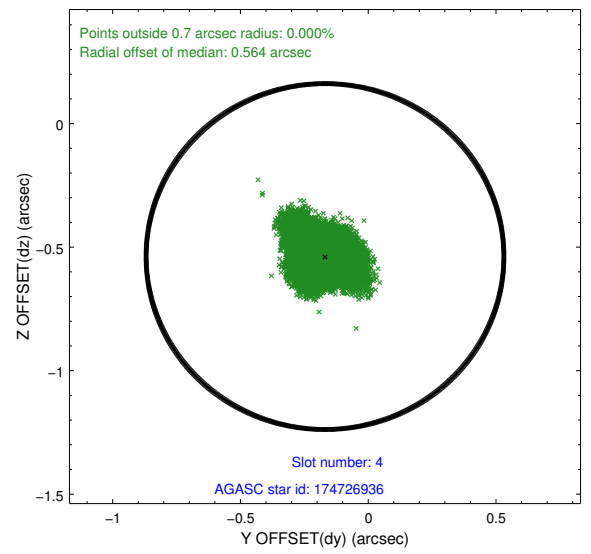
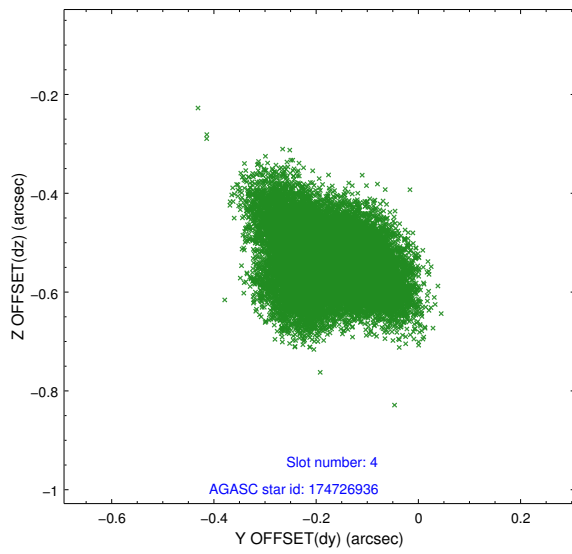
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-2	7.01	9182	-0.175	-0.068	0.021	0.037	0.000000	0.000000	-782.71	-901.25
1	FID		ACIS-I-4	6.99	9181	0.357	0.114	0.027	0.041	0.000000	0.000000	2131.80	1005.15
2	FID		ACIS-I-5	7.05	9181	-0.274	0.019	0.016	0.028	0.000000	0.000000	-1836.53	1002.53
3	GUIDE	used	174593664	8.31	18355	-0.008	-0.544	0.069	0.114	97.965949	17.333165	-1549.46	1804.26
4	GUIDE	used	174726936	7.76	18358	-0.169	-0.538	0.101	0.162	98.009571	17.665063	-356.55	1643.12
5	GUIDE	used	174730168	8.14	18354	-0.188	-0.050	0.070	0.114	98.803227	18.065078	1062.28	-1086.59
6	GUIDE	used	174731032	8.86	18310	0.244	0.713	0.100	0.159	99.169475	17.388789	-1375.15	-2331.14
7	GUIDE	used	174731792	7.91	18355	0.121	0.419	0.093	0.144	98.964622	17.200033	-2052.51	-1624.79

2.4 Star Slots

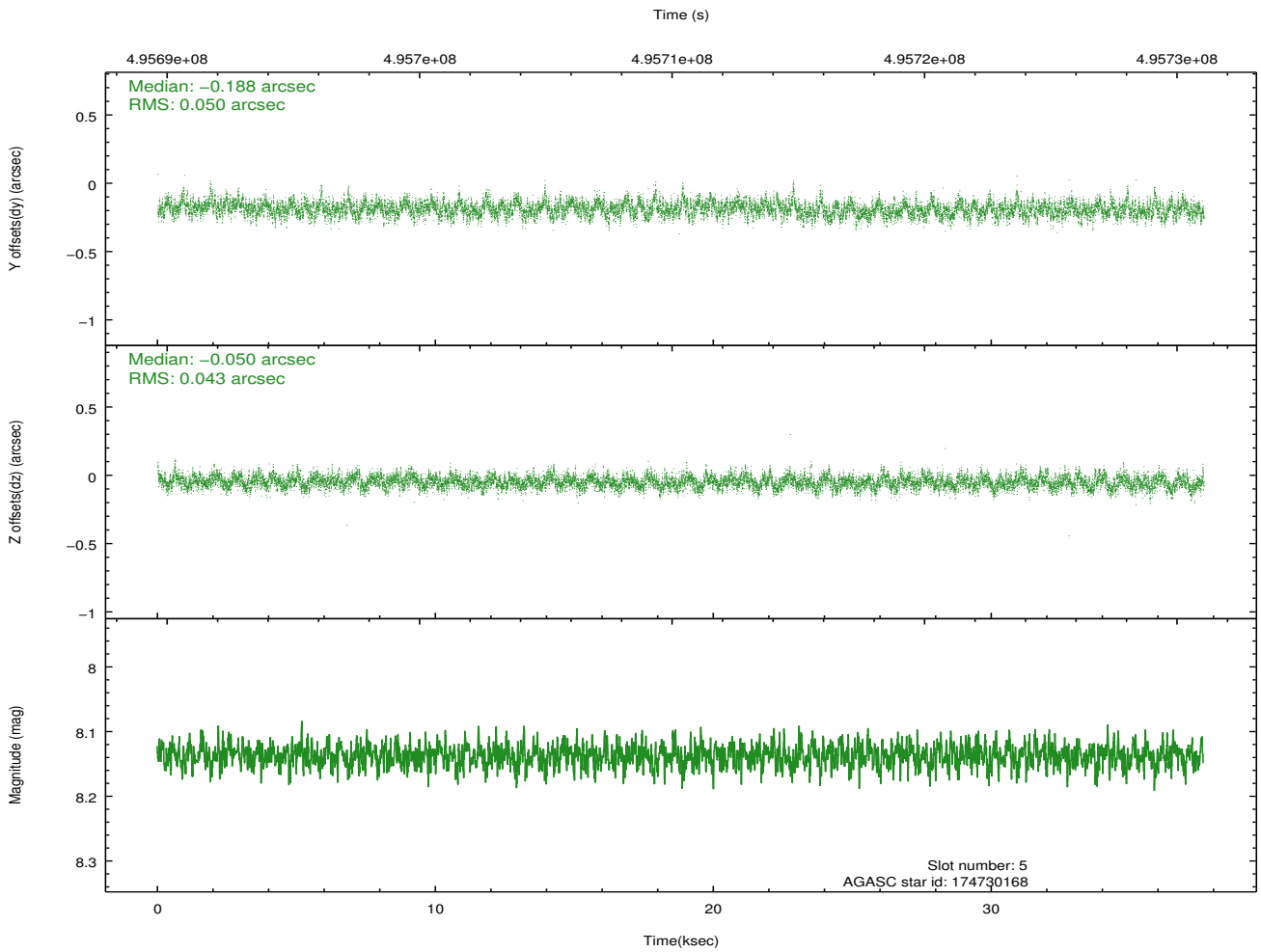
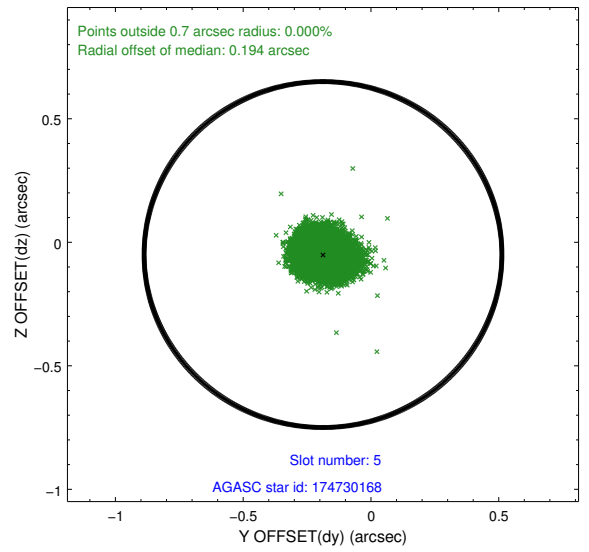
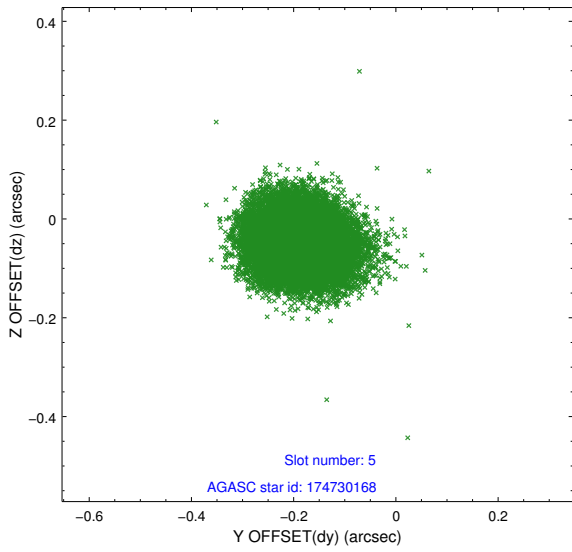
2.4.1 Slot 3



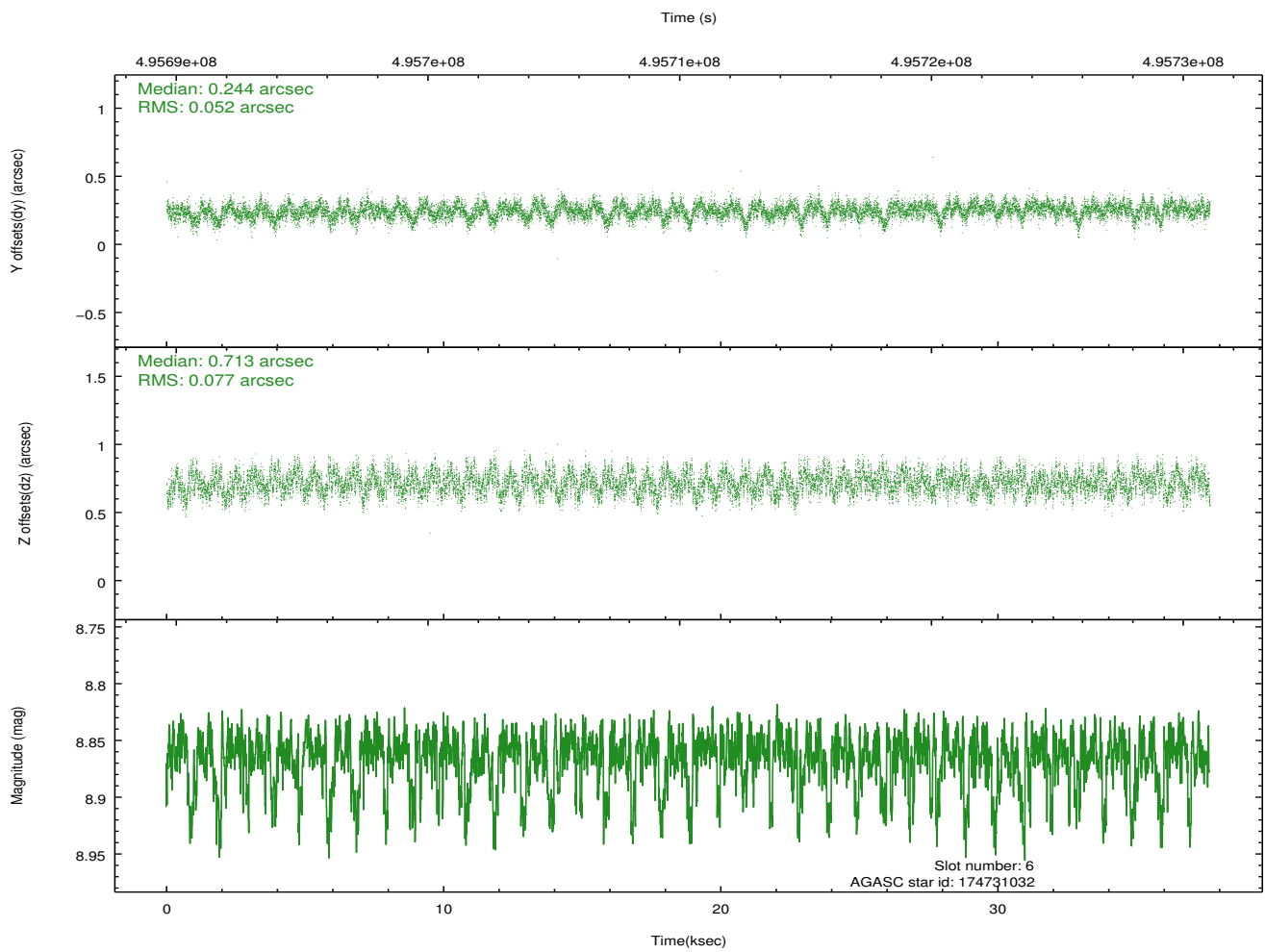
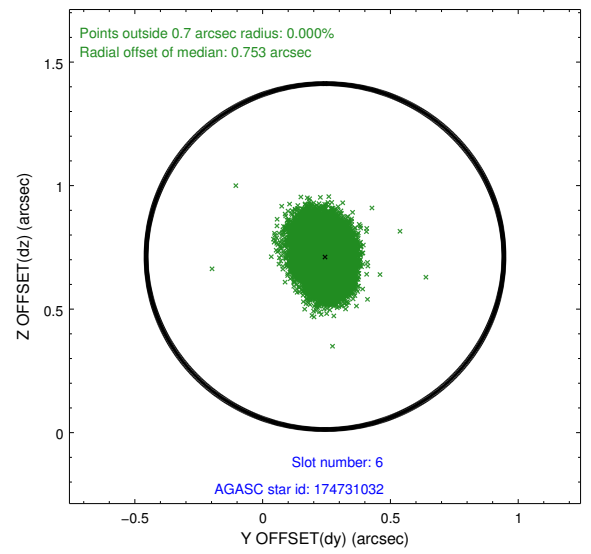
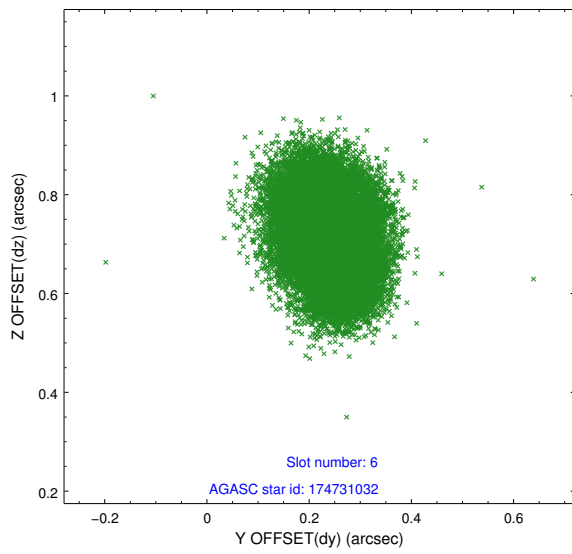
2.4.2 Slot 4



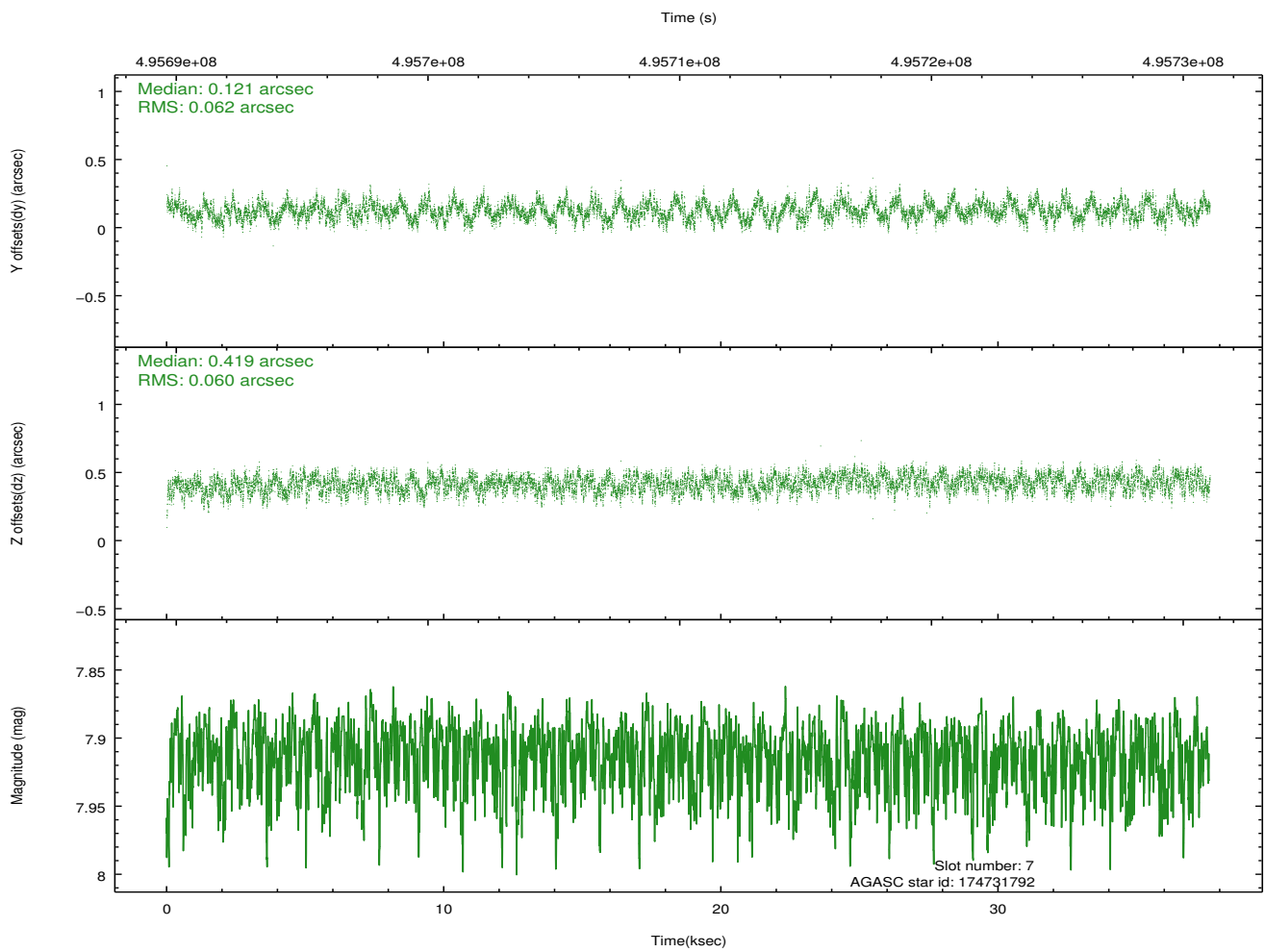
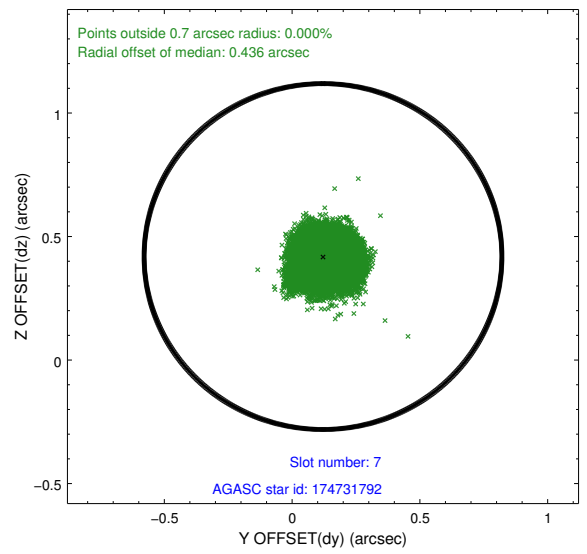
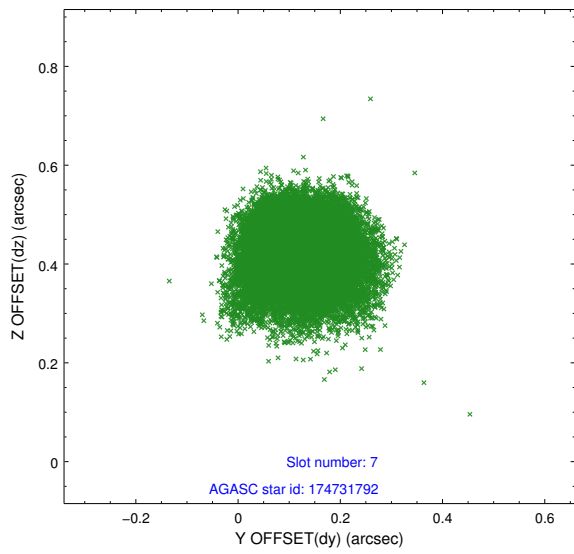
2.4.3 Slot 5



2.4.4 Slot 6

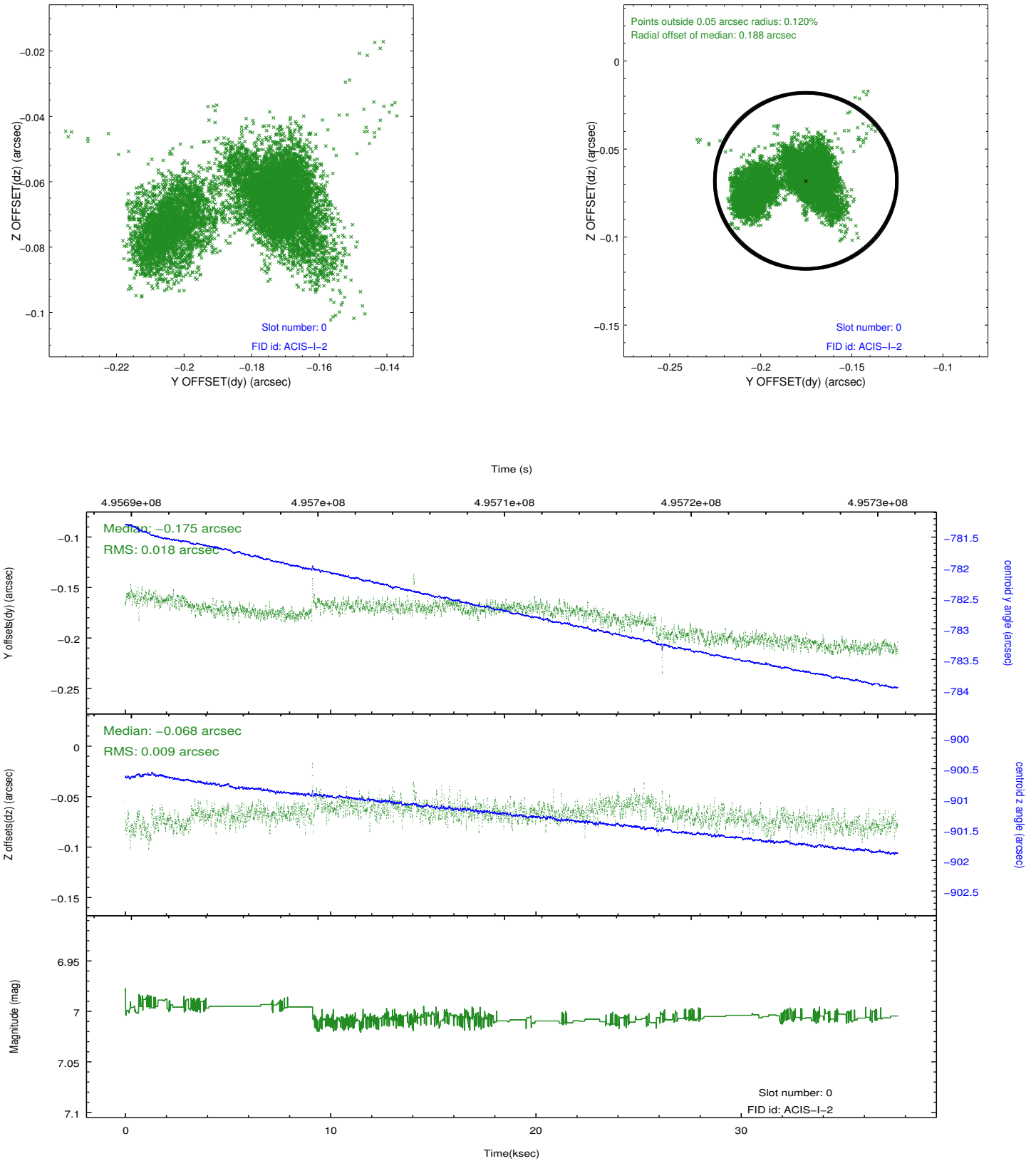


2.4.5 Slot 7

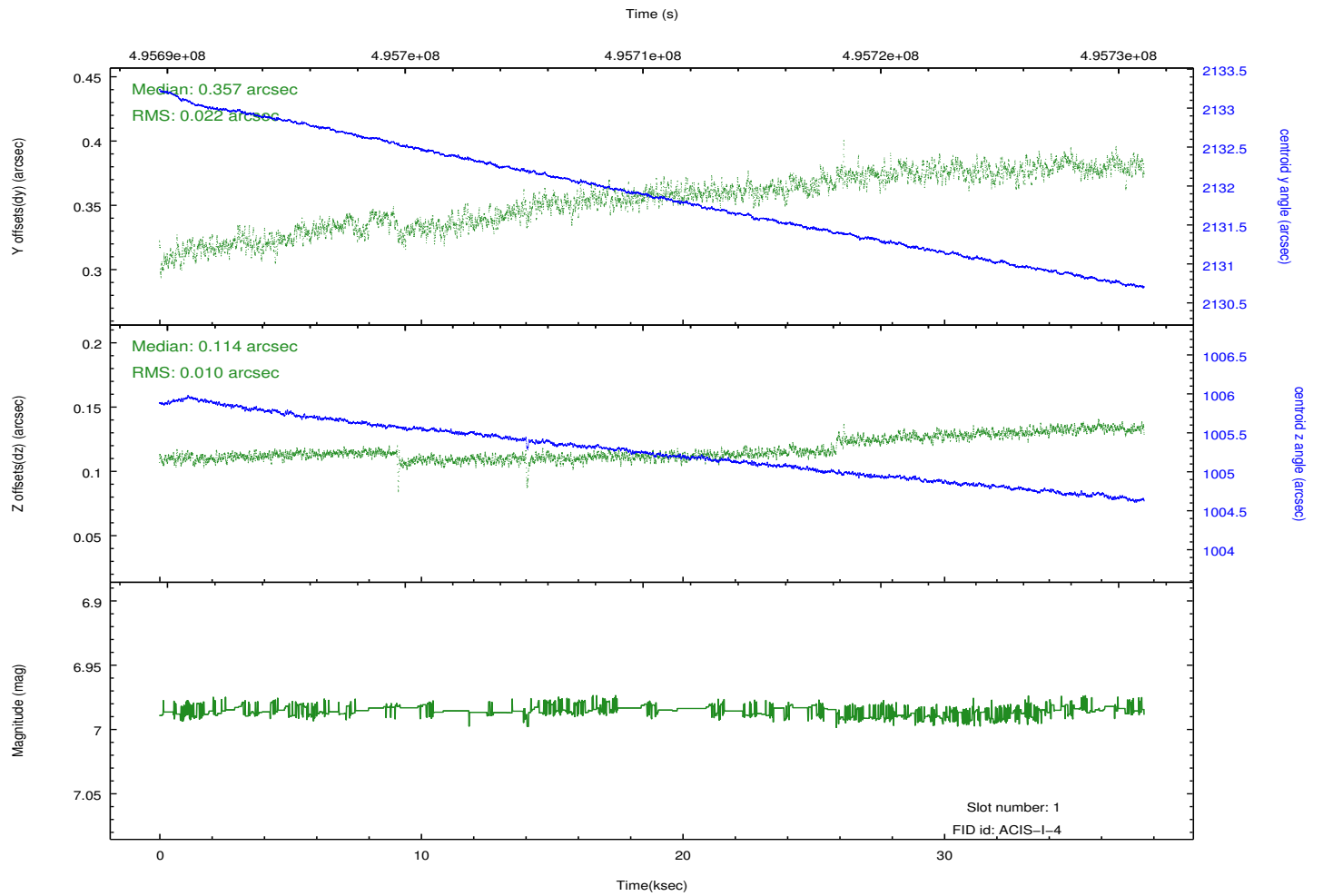
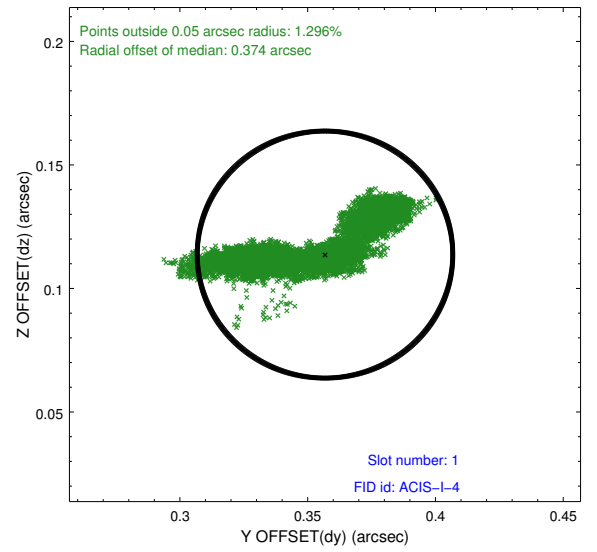
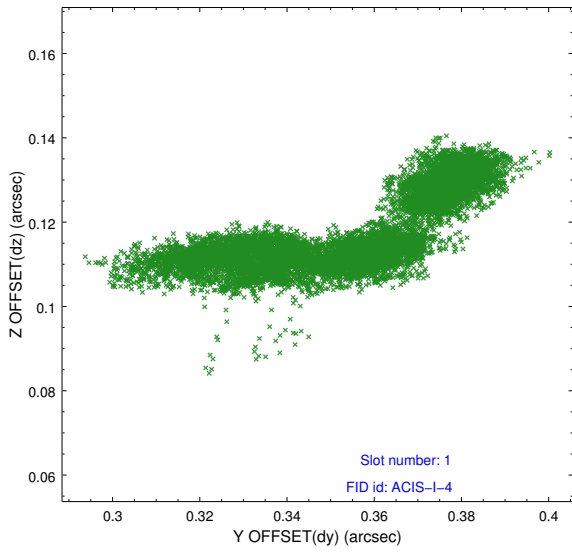


2.5 FID Slots

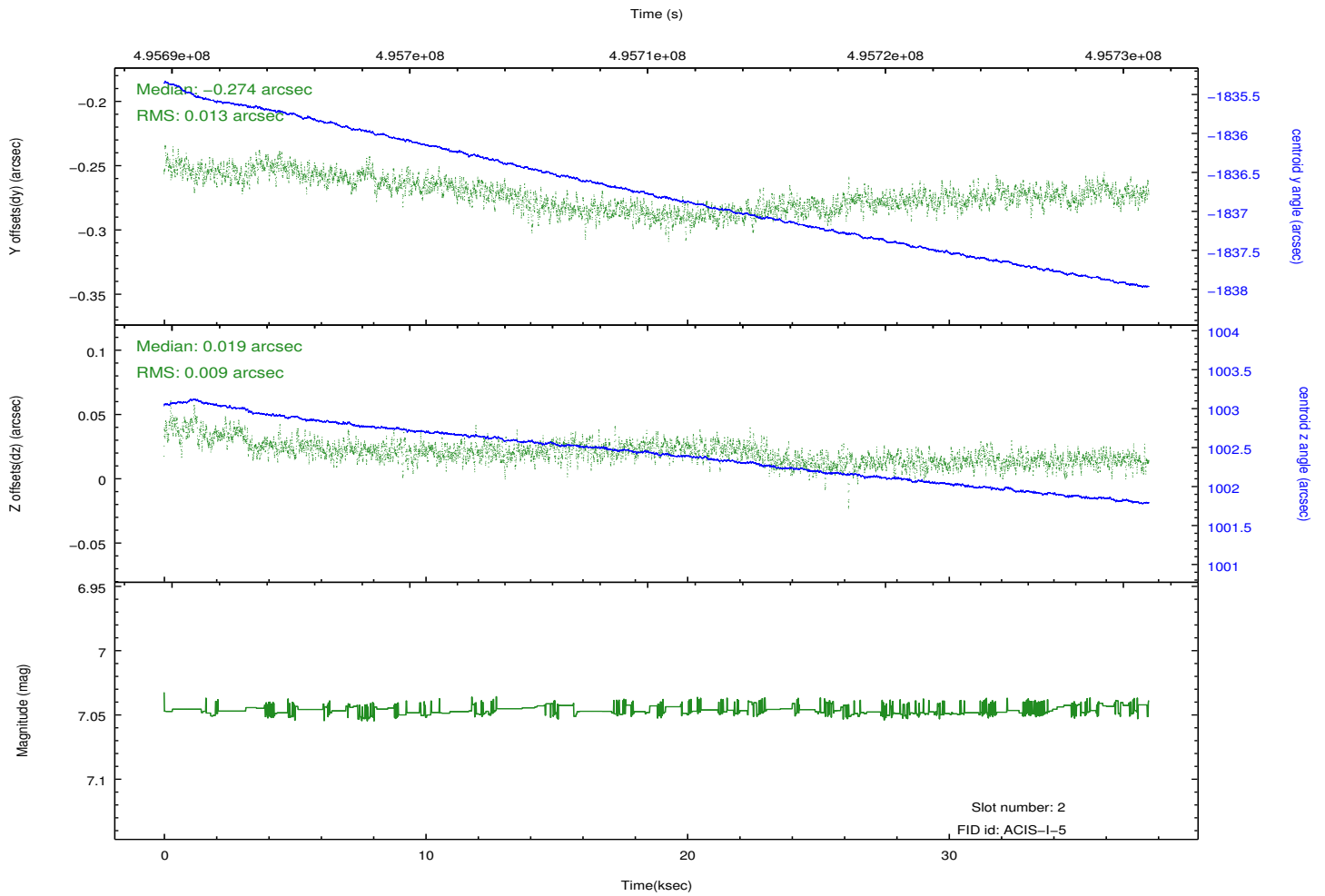
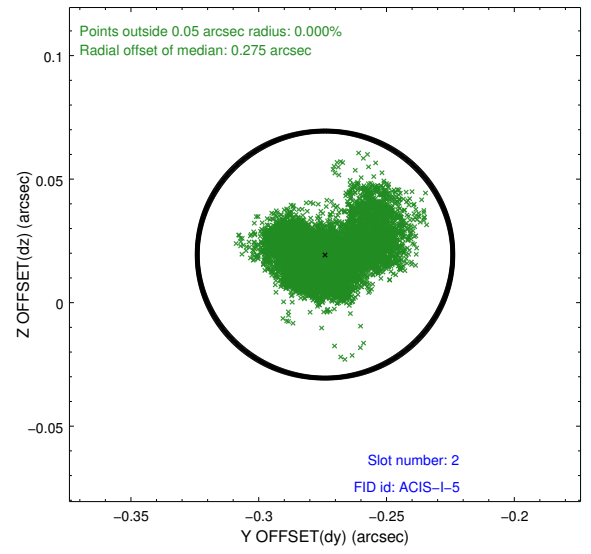
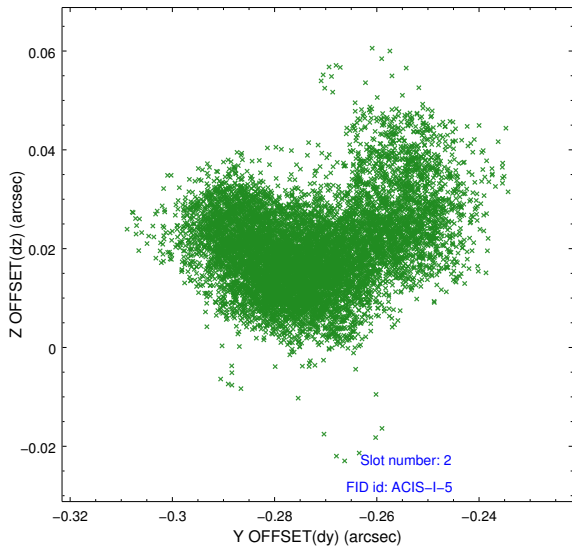
2.5.1 Slot 0



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)	2014.12.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	37.570930030882

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.