

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 15648 - L2 Version 2
Chandra X-Ray Center

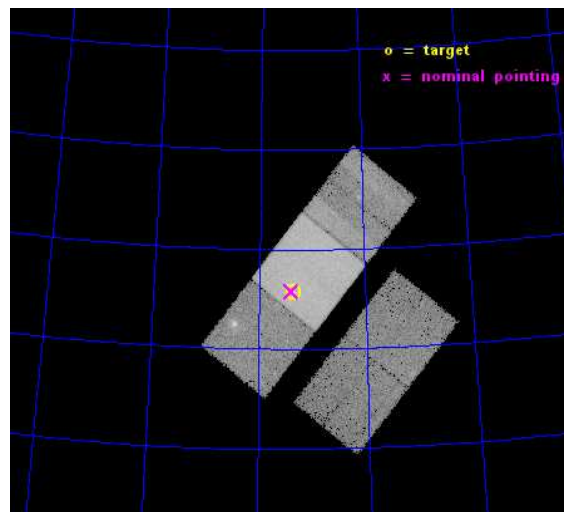
L2 Processing Date : Dec 3 2014

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1 Front

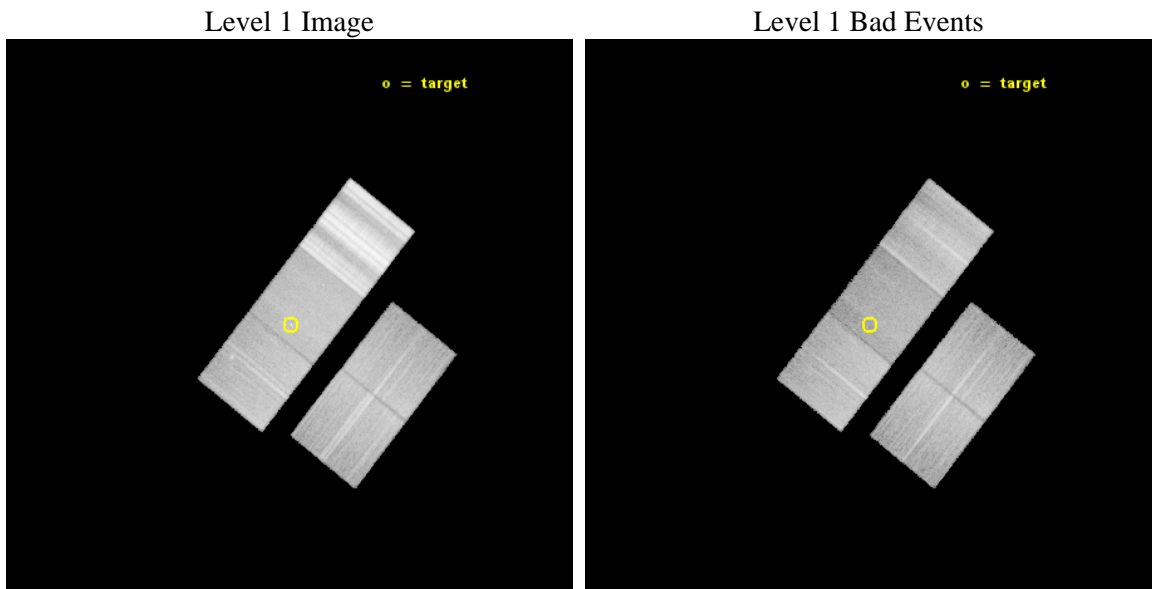
seq_num	601099	Sequence number
obs_id	15648	Observation id
title	A direct constraint on the mass of an IMBH candidate in NGC 2276	P
observer	Dr Timothy Roberts	Principal investigator
object	CXOU J072648.3+854549	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	111.70125	Observer's specified target RA [deg]
dec_targ	85.763611	Observer's specified target Dec [deg]
ra_nom	111.74187683737	Nominal RA [deg]
dec_nom	85.763913708165	Nominal Dec [deg]
roll_nom	308.35282575561	Nominal Roll [deg]
revision	2	Processing version of data
ontime	25062.680024385	Sum of GTIs [s]
livetime	24735.21765899	Livetime [s]
ontime2	25062.515864372	Sum of GTIs [s]
ontime3	25059.45697403	Sum of GTIs [s]
ontime6	25062.638984382	Sum of GTIs [s]
ontime7	25062.680024385	Sum of GTIs [s]
ontime8	25062.556904376	Sum of GTIs [s]
l2events	189056	Number of level 2 events



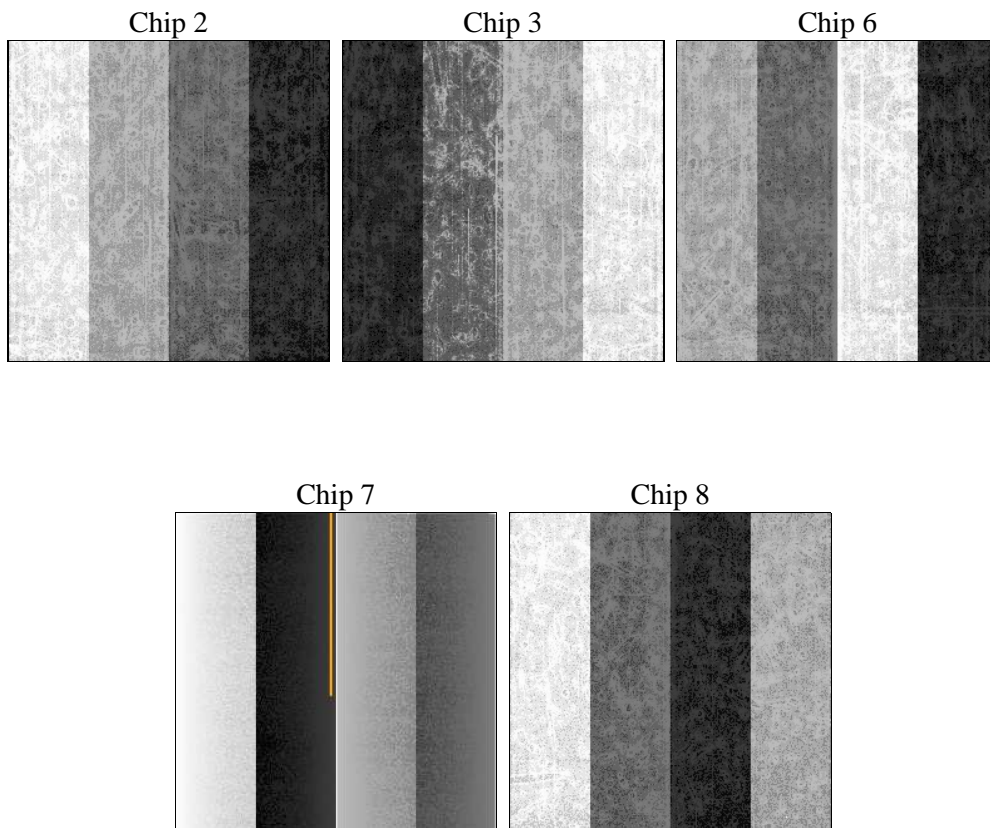
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	25000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	25062.680024385	Sum of GTIs [s]
caldbver	4.6.4	 	ontime2	25062.515864372	Sum of GTIs [s]
date	2014-12-03T09:09:27	Date and time of file creation	ontime3	25059.45697403	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	25062.638984382	Sum of GTIs [s]
			ontime7	25062.680024385	Sum of GTIs [s]
			ontime8	25062.556904376	Sum of GTIs [s]
			l1events	1287694	Number of level 1 events

2.1.4 Events

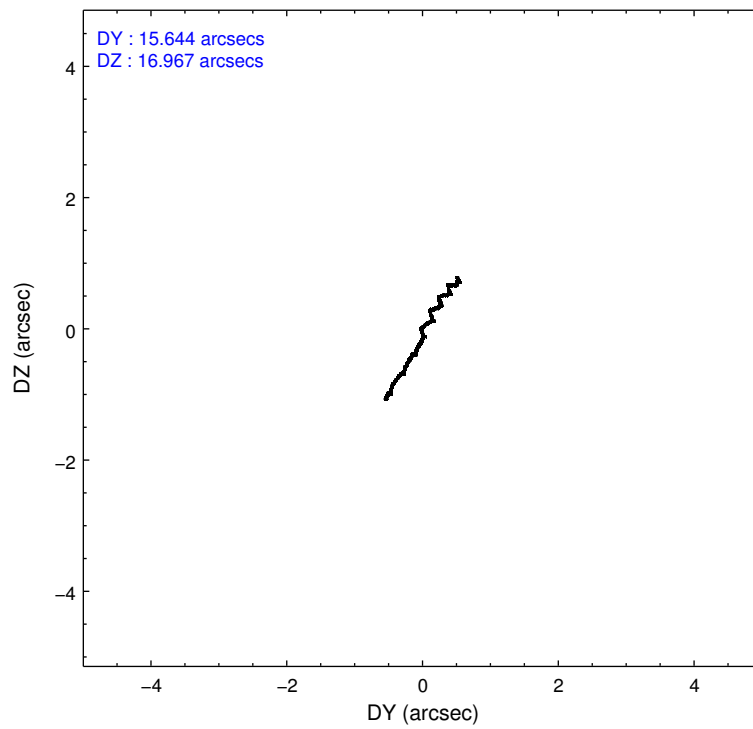
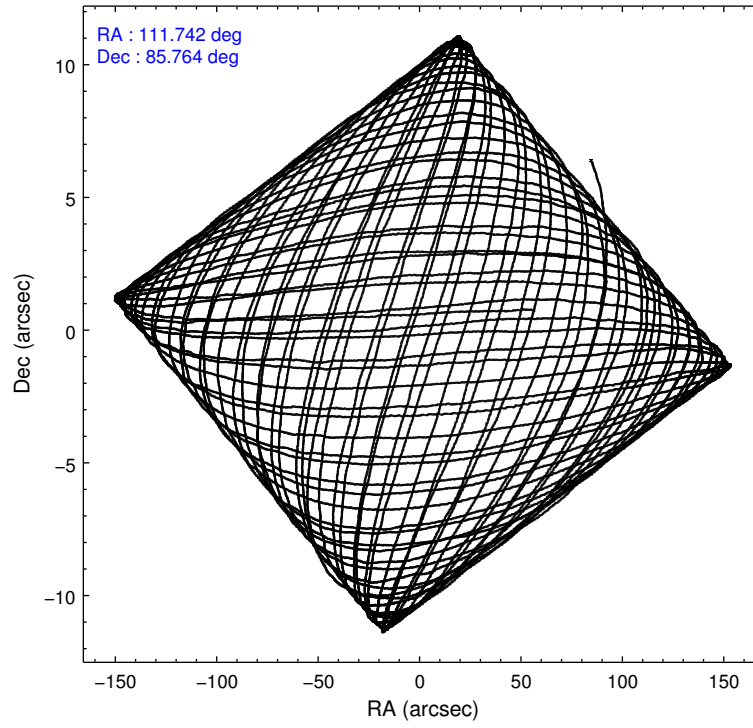
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	184612	168832	199535	203644	531071
rejected events	154632	148029	166994	102566	183595
rejected %	83%	87%	83%	50%	34%

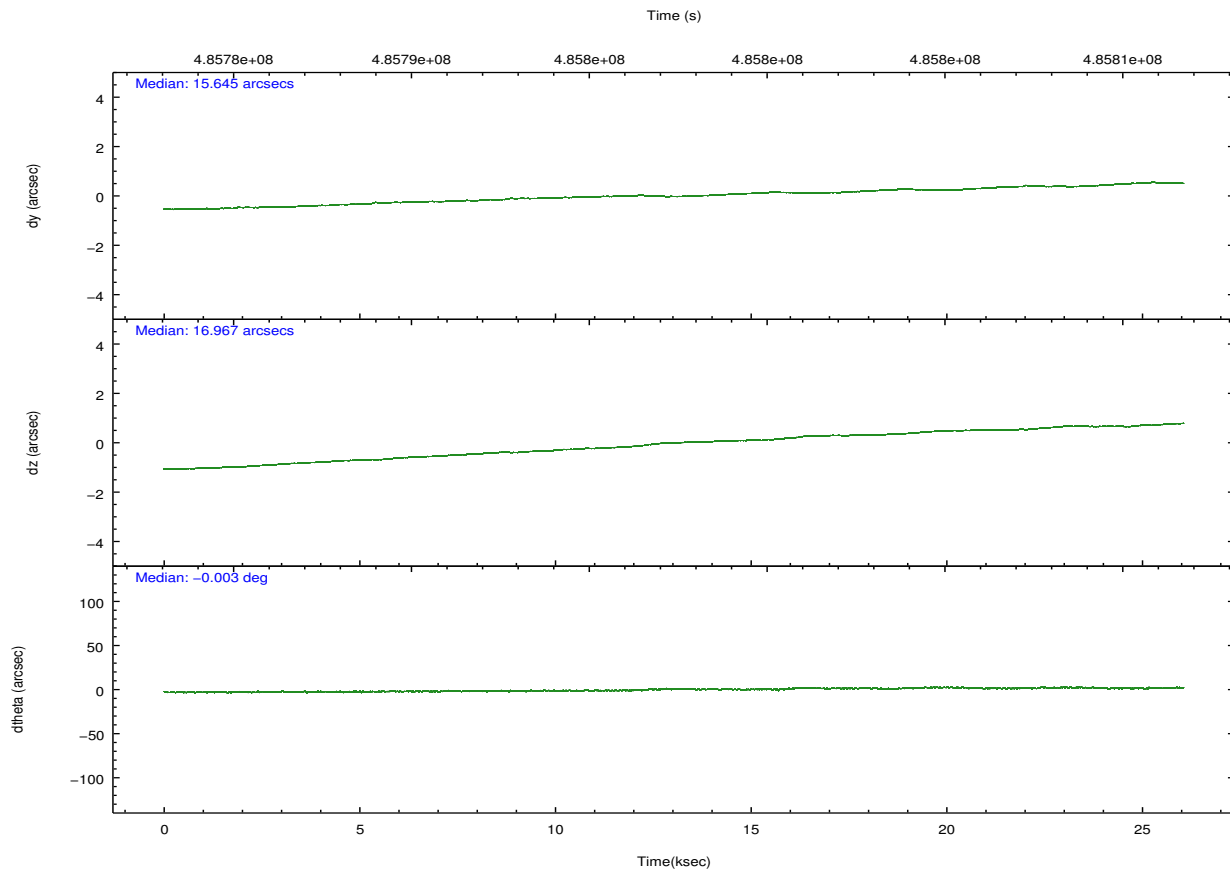
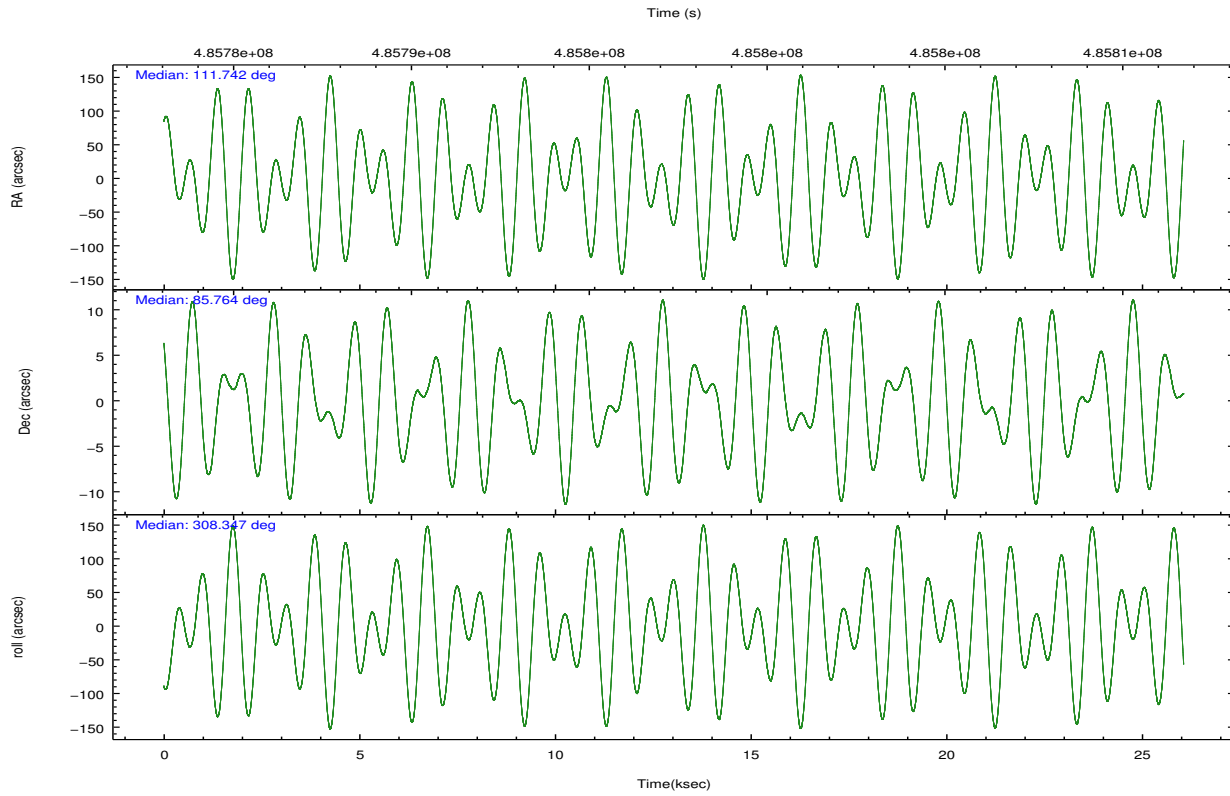
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	14556	9685	17489	10425	125689
	7%	5%	8%	5%	23%
grade 1 events	155	95	108	453	1027
	0%	0%	0%	0%	0%
grade 2 events	7242	4308	7101	23953	40470
	3%	2%	3%	11%	7%
grade 3 events	1647	1705	1886	8602	64065
	0%	1%	0%	4%	12%
grade 4 events	2854	1790	1990	8599	59654
	1%	1%	0%	4%	11%
grade 5 events	5214	6100	6115	18313	12434
	2%	3%	3%	8%	2%
grade 6 events	3684	3320	4081	49514	57669
	1%	1%	2%	24%	10%
grade 7 events	149260	141829	160765	83785	170063
	80%	84%	80%	41%	32%

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	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	111.395387	111.7418768373667	Subarray requested	NONE	NONE
[deg] Pointing Dec	85.773542	85.76391370816479	Alternating exposures requested	N	N
[deg] Pointing Roll	308.541746	308.3528257556143	[s] Primary exposure time	0.000000	3.1
[s] Window start time (MET)	485618467.184000	485618467.184000			
[s] Window stop time (MET)	485812867.184000	485812867.184000			
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	485785404.184000	485784027.29923			
Observation start date	2013-05-24T12:22:17	2013-05-24T12:00:27			
[s] Observation end time (MET)	485810404.184000	485811193.9007			
Observation end date	2013-05-24T19:18:57	2013-05-24T19:33:13			
Read mode	TIMED	TIMED			

2.3 Aspect





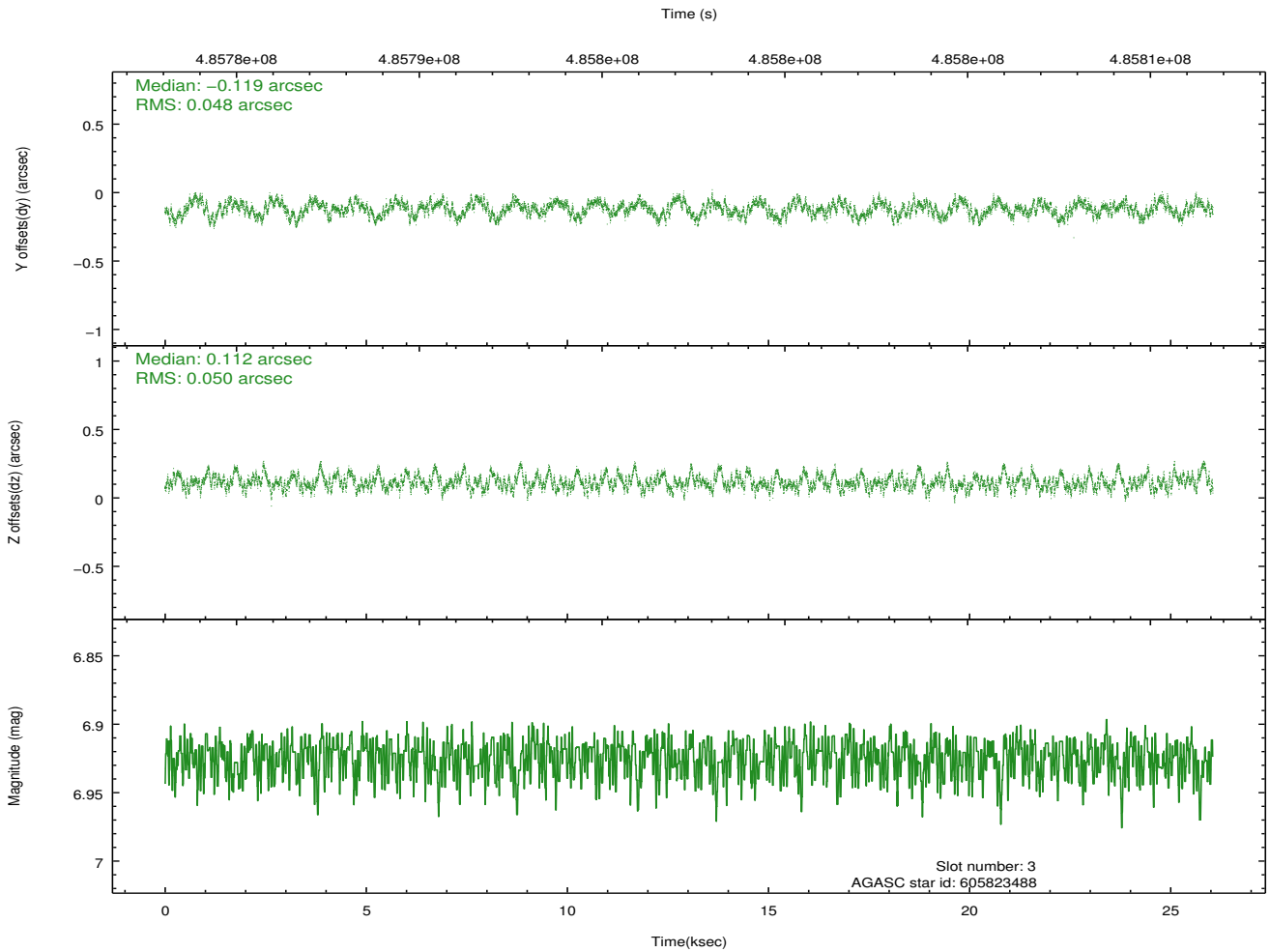
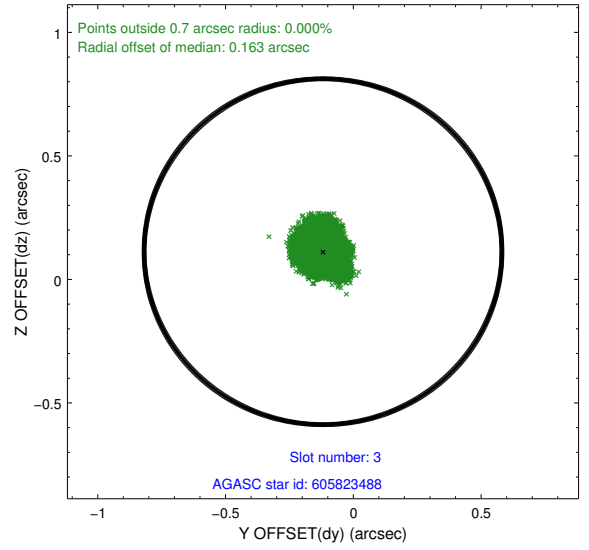
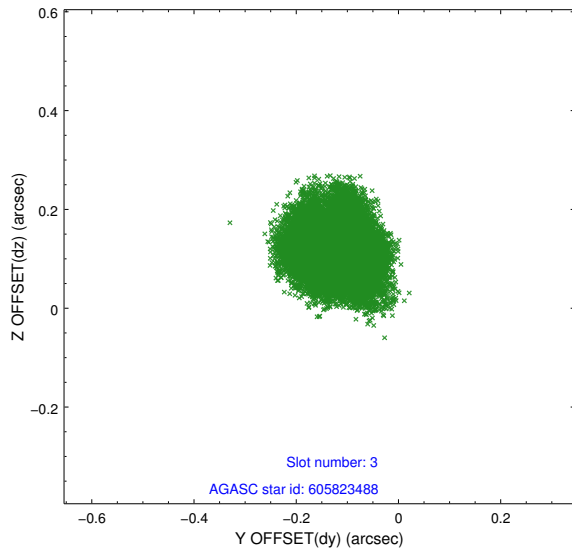
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.87	6356	-0.091	-0.013	0.018	0.026	0.000000	0.000000	-768.75	-1738.31
1	FID		ACIS-S-4	6.94	6354	0.196	0.048	0.018	0.031	0.000000	0.000000	2144.79	170.08
2	FID		ACIS-S-5	6.97	6356	-0.138	-0.025	0.018	0.026	0.000000	0.000000	-1821.47	163.85
3	GUIDE	used	605823488	6.92	12711	-0.119	0.112	0.076	0.115	107.414621	85.570014	-145.62	-1297.41
4	GUIDE	used	605824608	9.09	12657	0.099	0.069	0.105	0.166	109.255248	85.176243	1269.53	-1838.62
5	GUIDE	used	606339744	9.12	12693	0.110	0.040	0.096	0.160	112.256096	86.307705	-1380.33	1354.80
6	GUIDE	used	606340952	9.24	12710	0.057	-0.166	0.119	0.197	117.163804	86.333781	-803.39	2334.98
7	GUIDE	used	607525784	9.32	12709	-0.149	-0.061	0.093	0.150	120.471637	85.570426	1982.28	1634.58

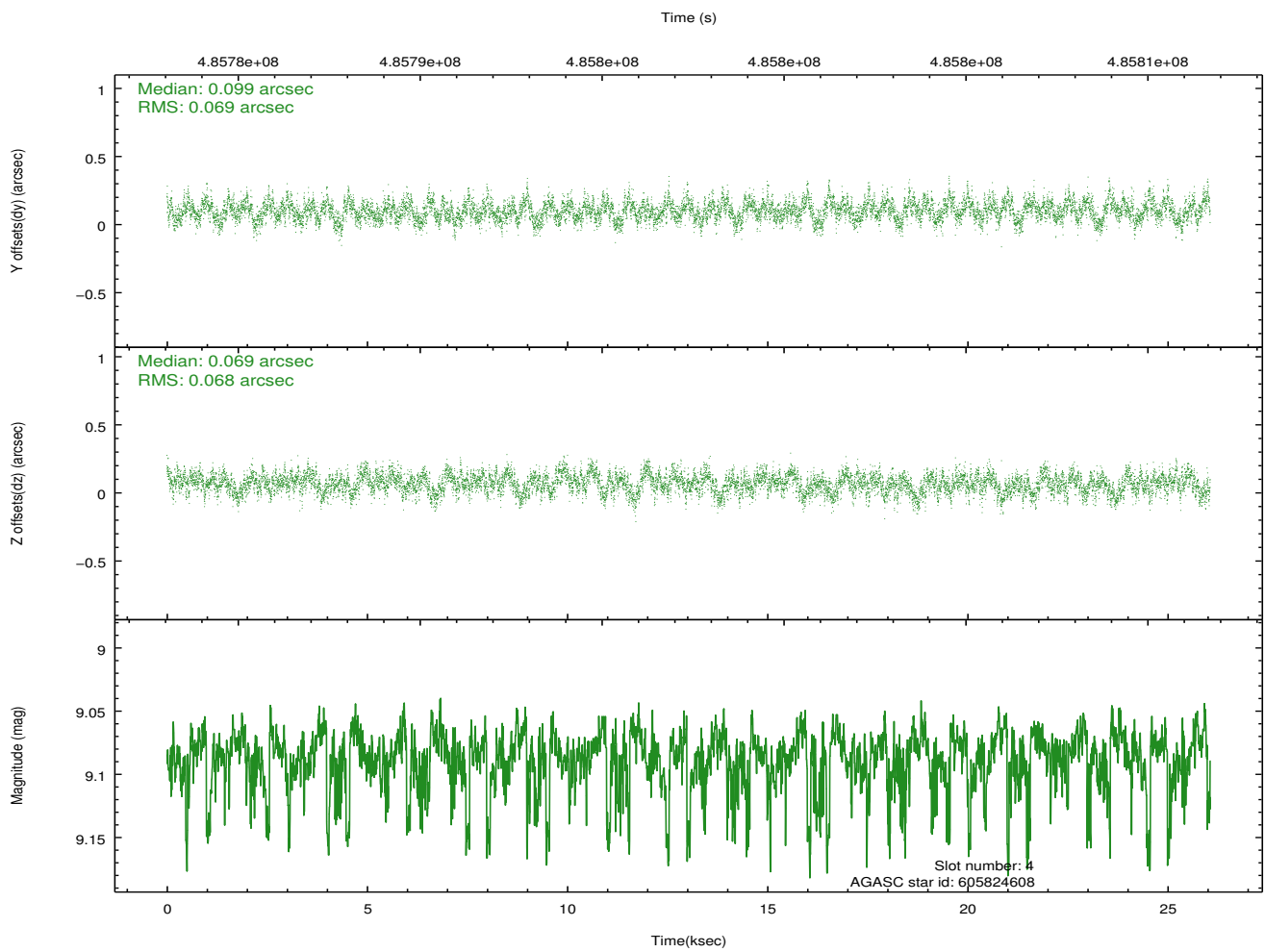
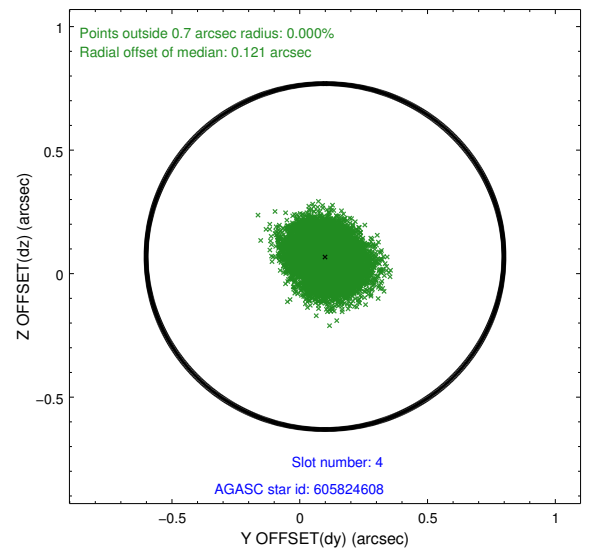
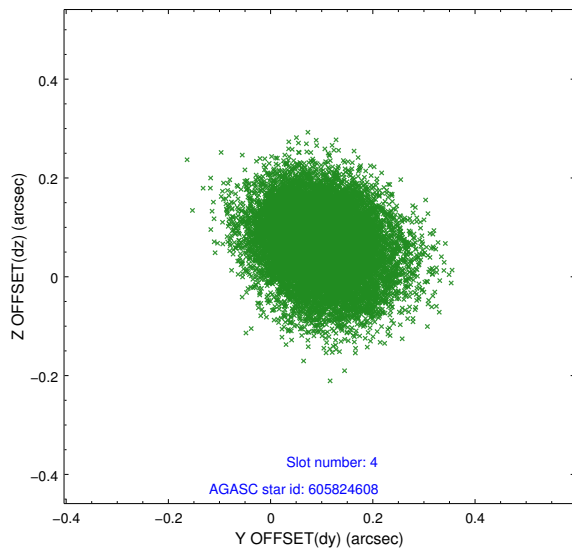
∞

2.4 Star Slots

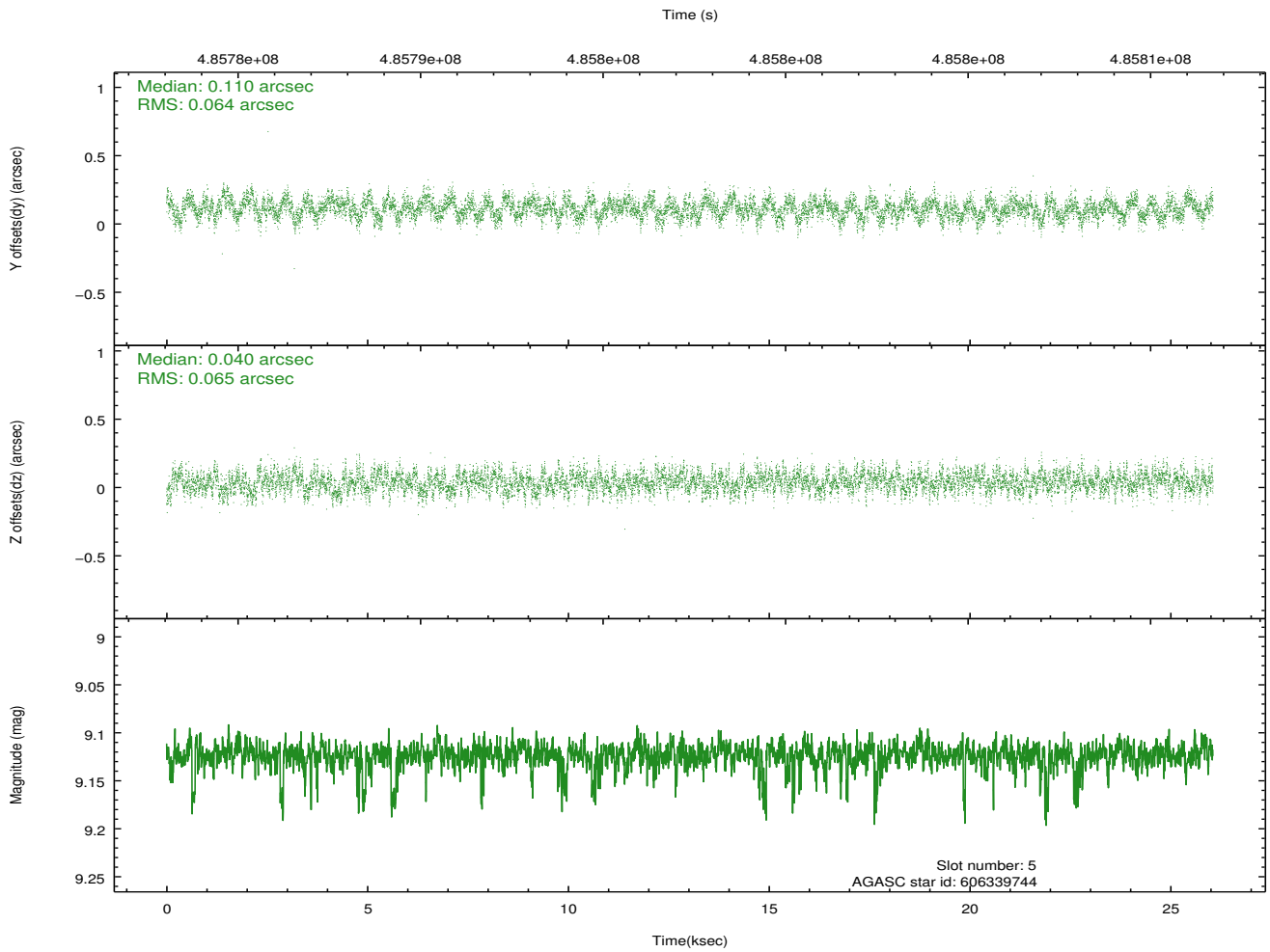
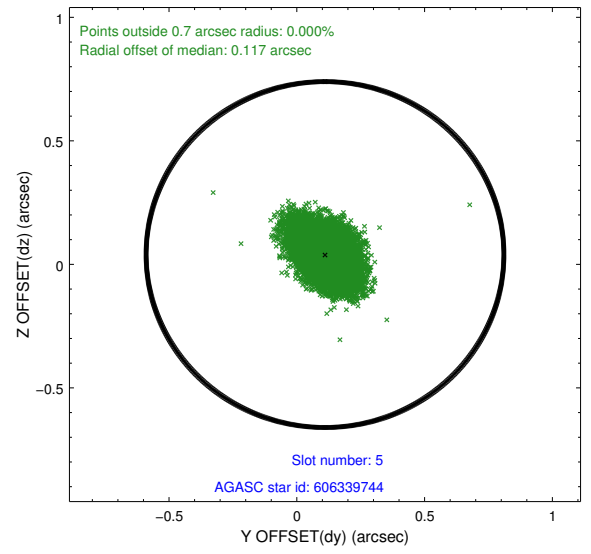
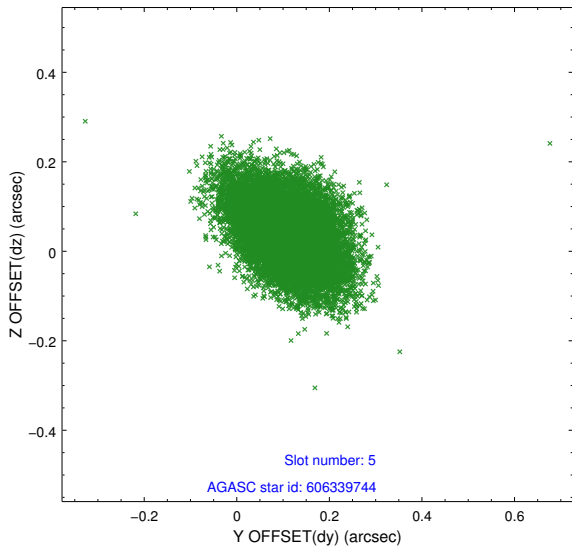
2.4.1 Slot 3



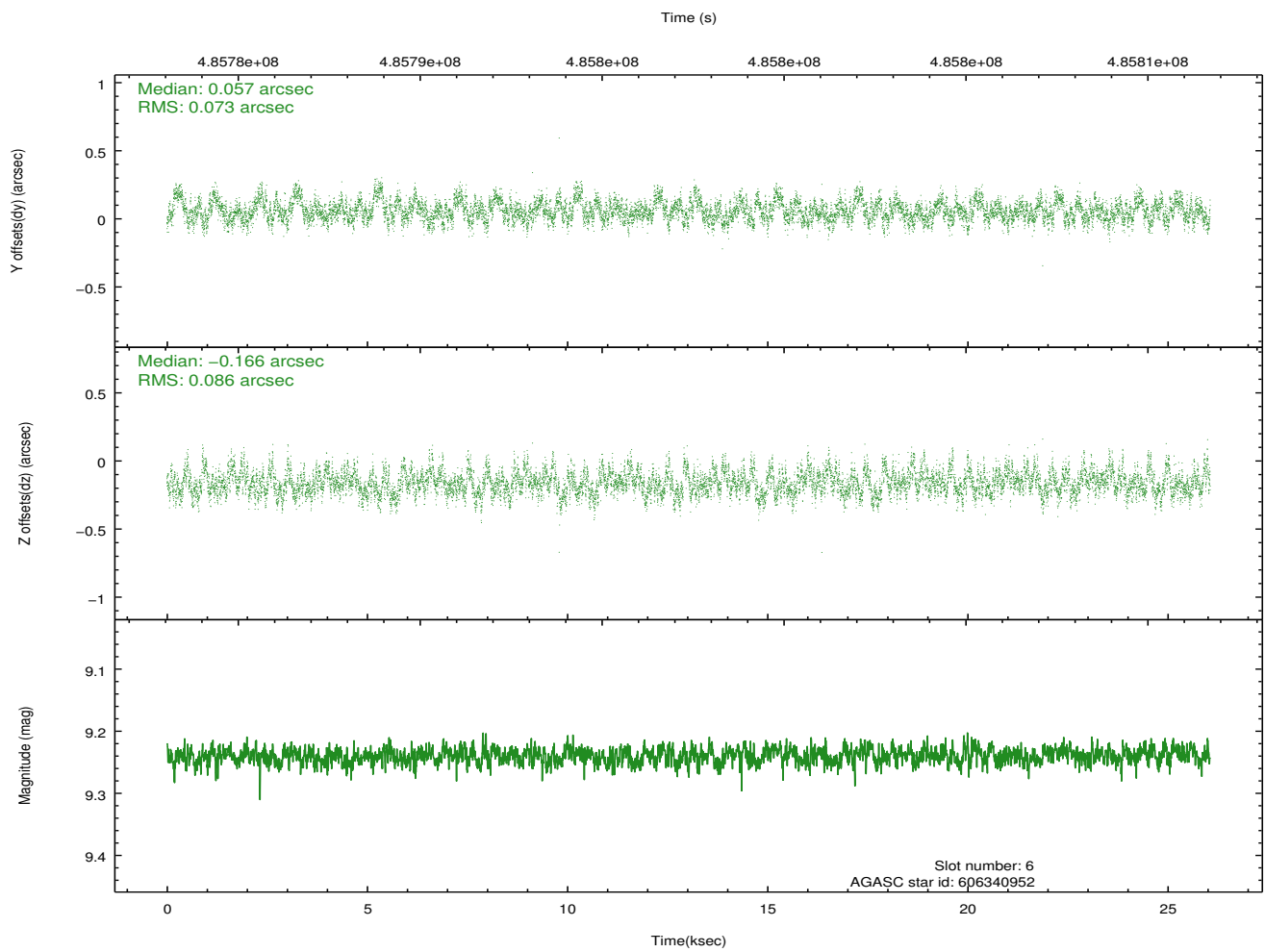
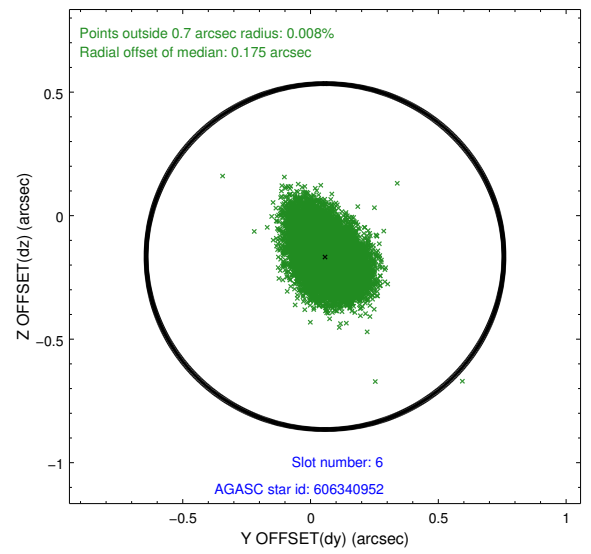
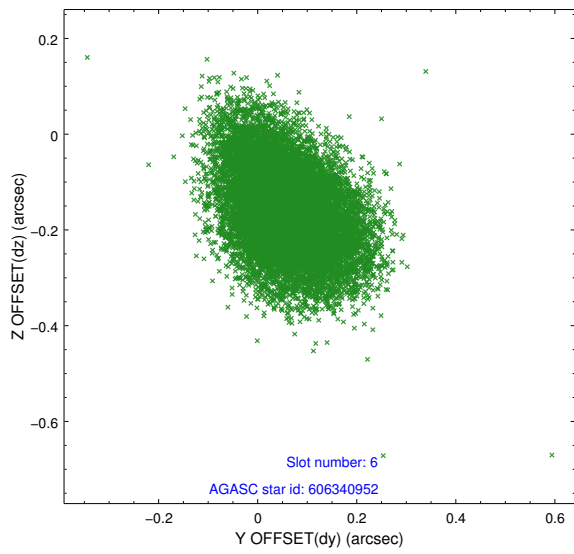
2.4.2 Slot 4



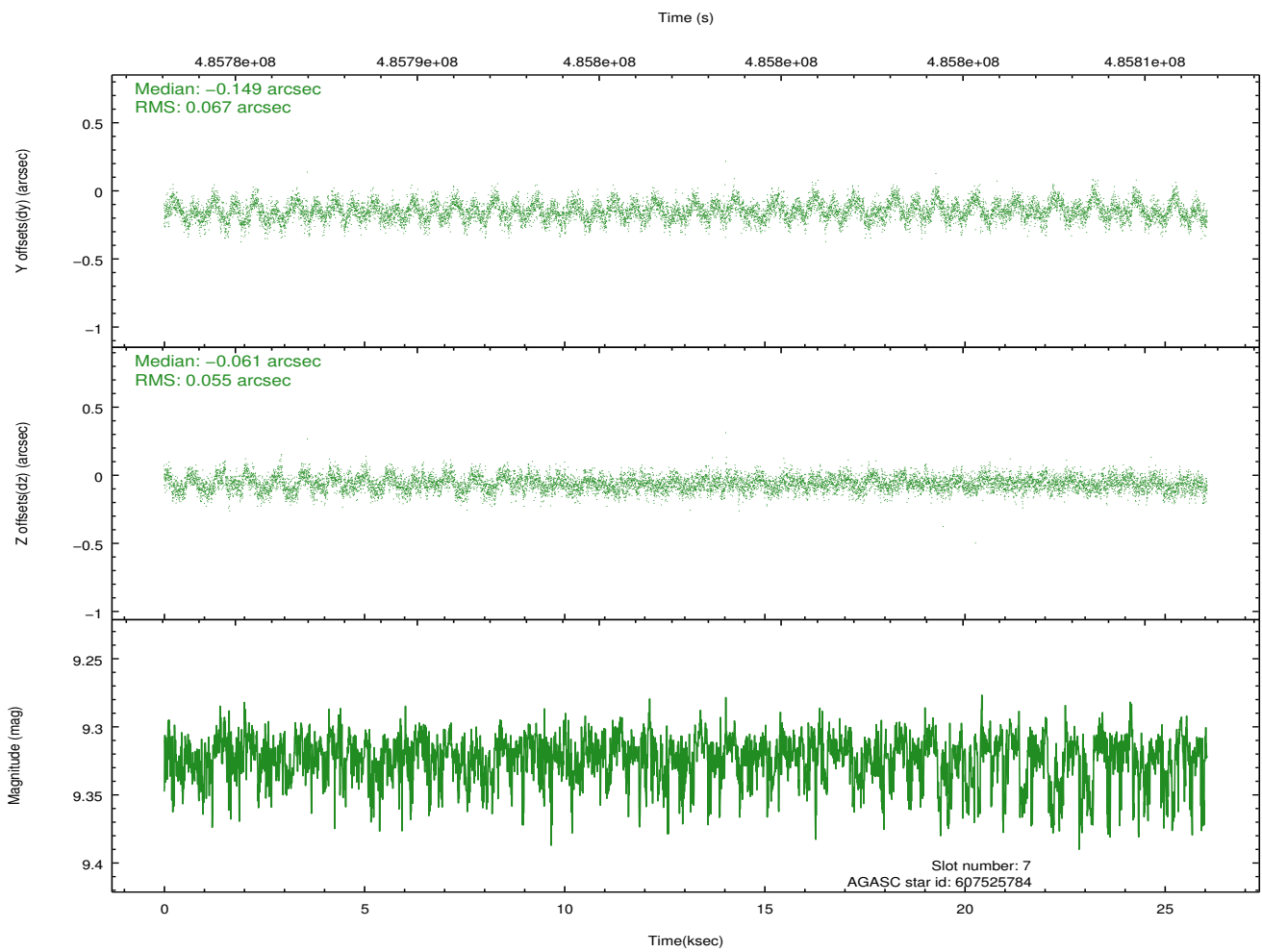
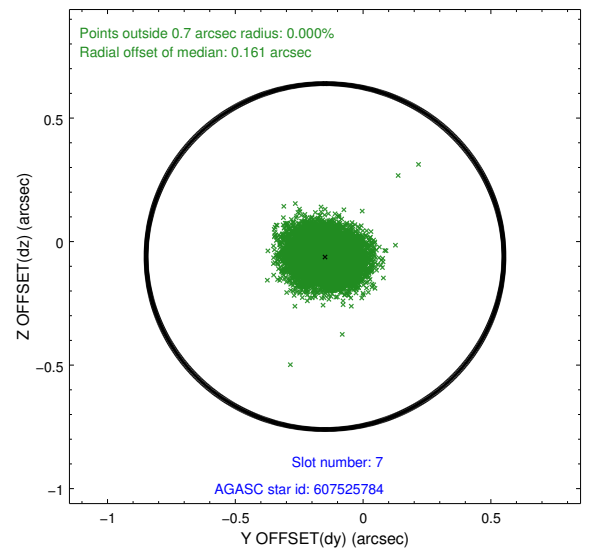
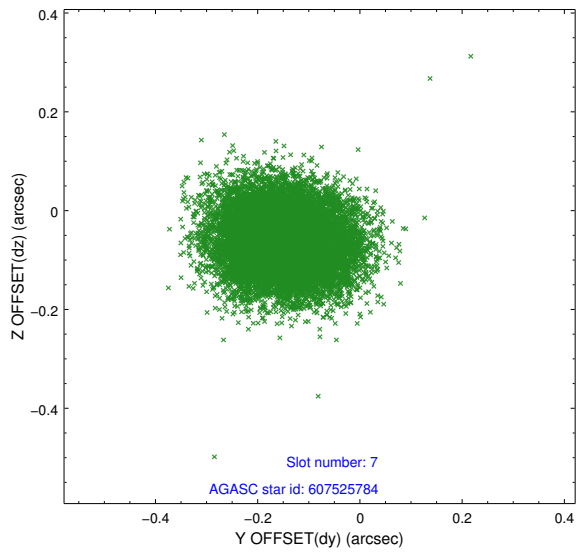
2.4.3 Slot 5



2.4.4 Slot 6

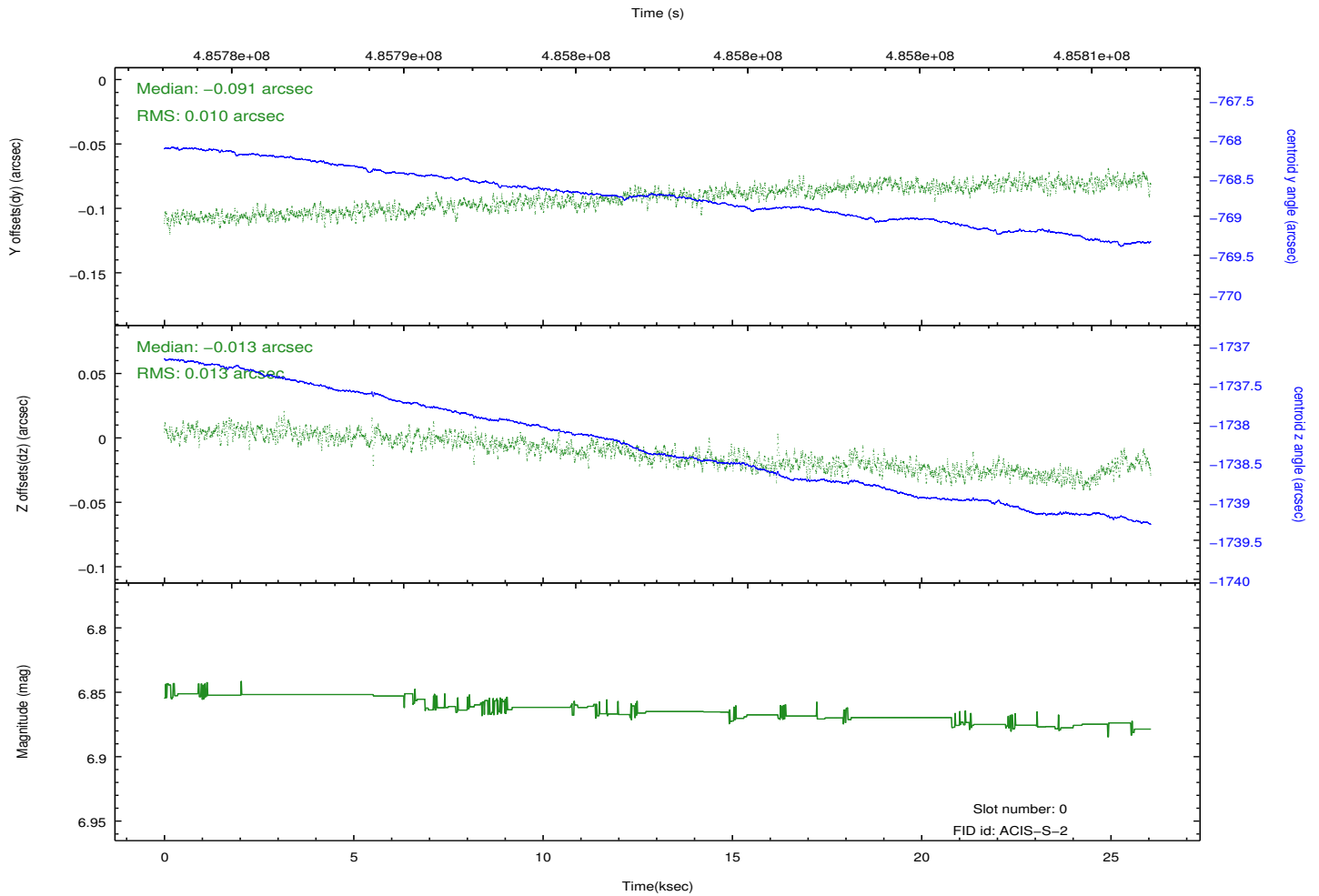
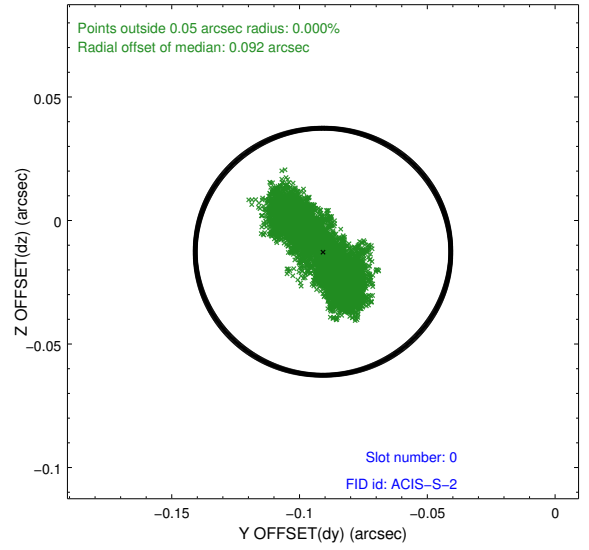
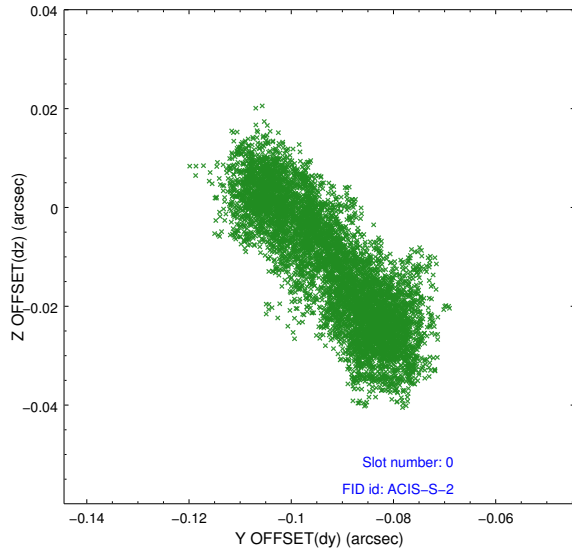


2.4.5 Slot 7

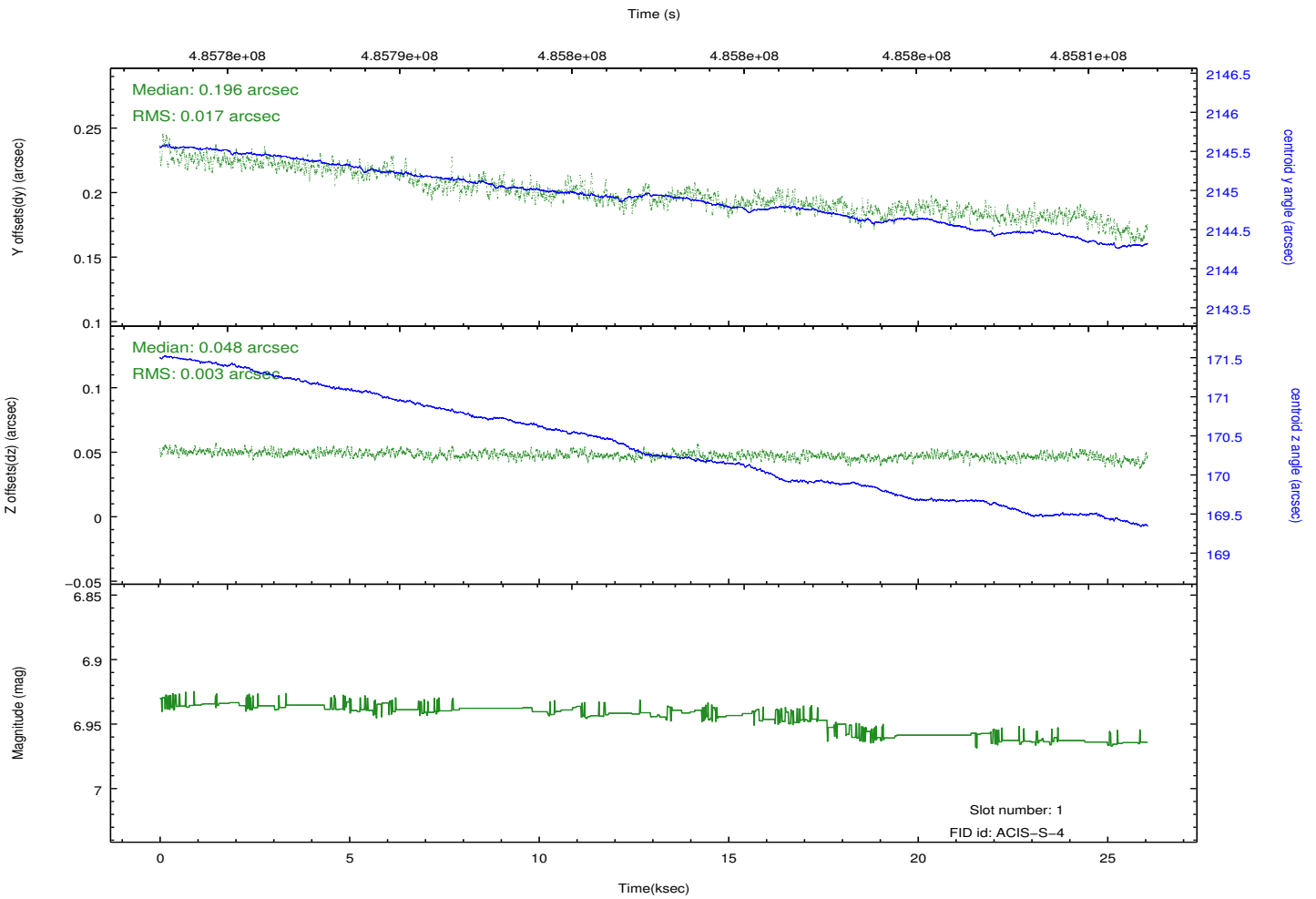
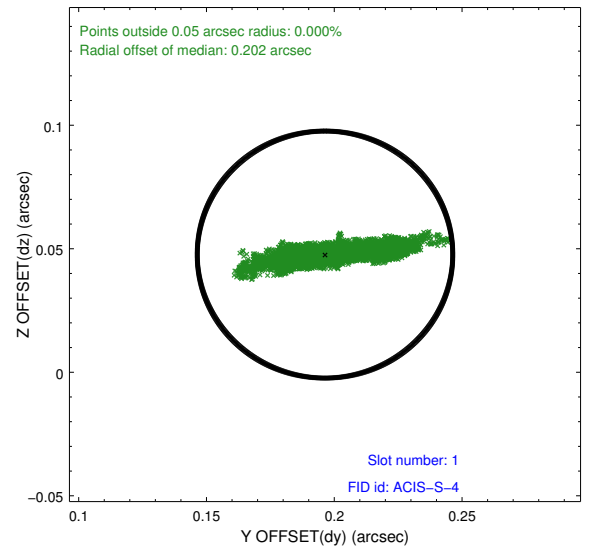
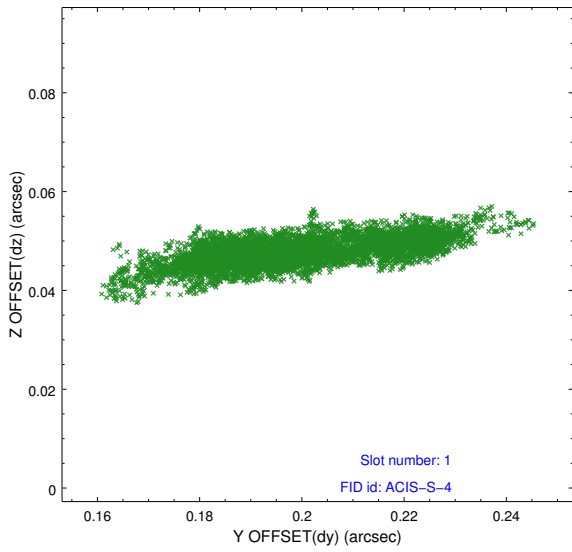


2.5 FID Slots

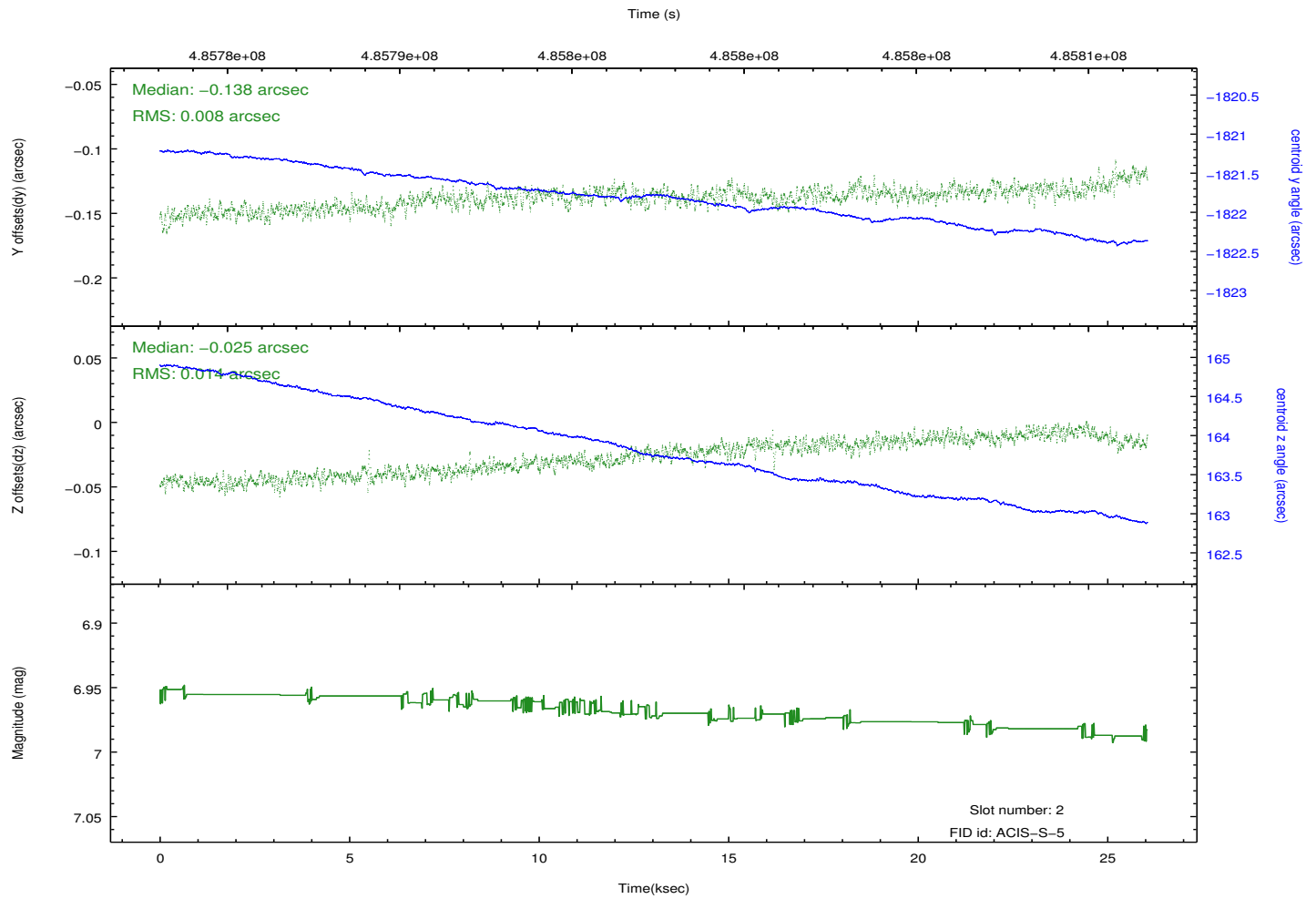
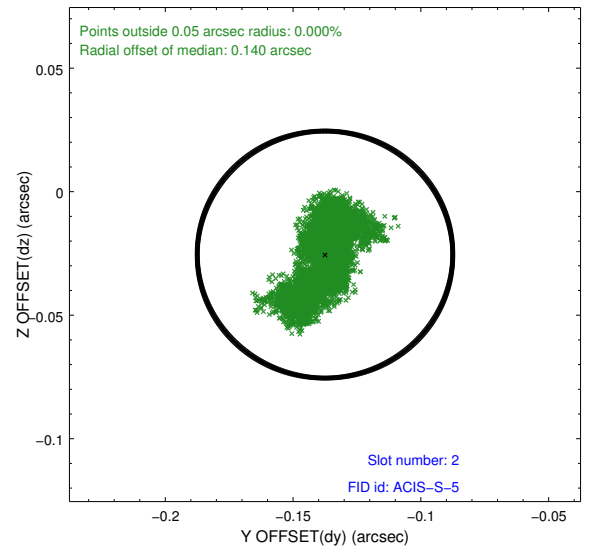
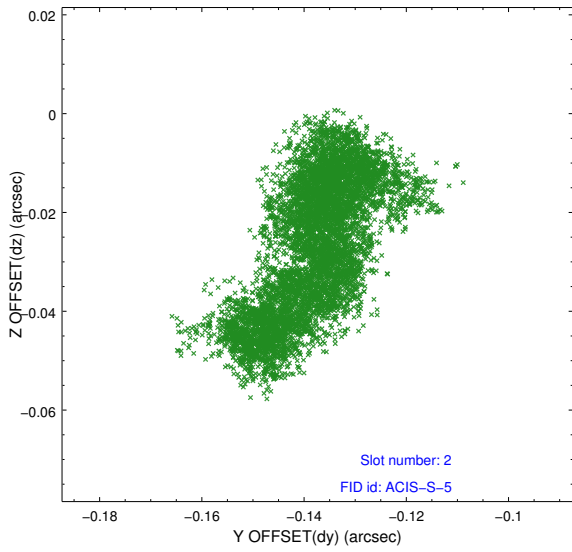
2.5.1 Slot 0



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)	2014.12.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	25.062680024385

A.2 Comments

Window preference met.

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.