

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 13660 - L2 Version 3
Chandra X-Ray Center

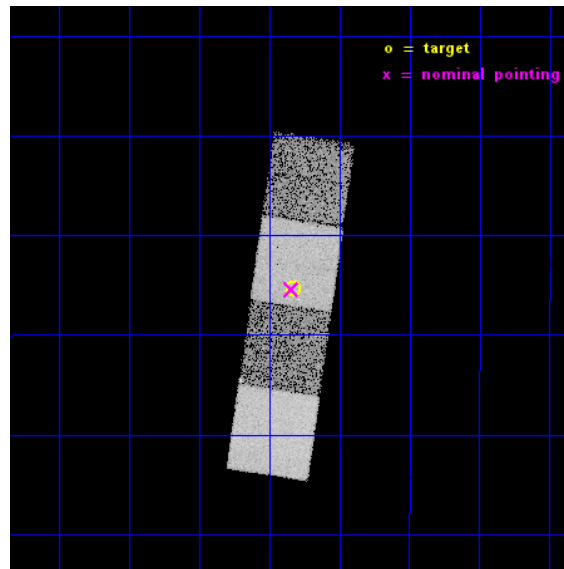
L2 Processing Date : Nov 28 2014

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1 Front

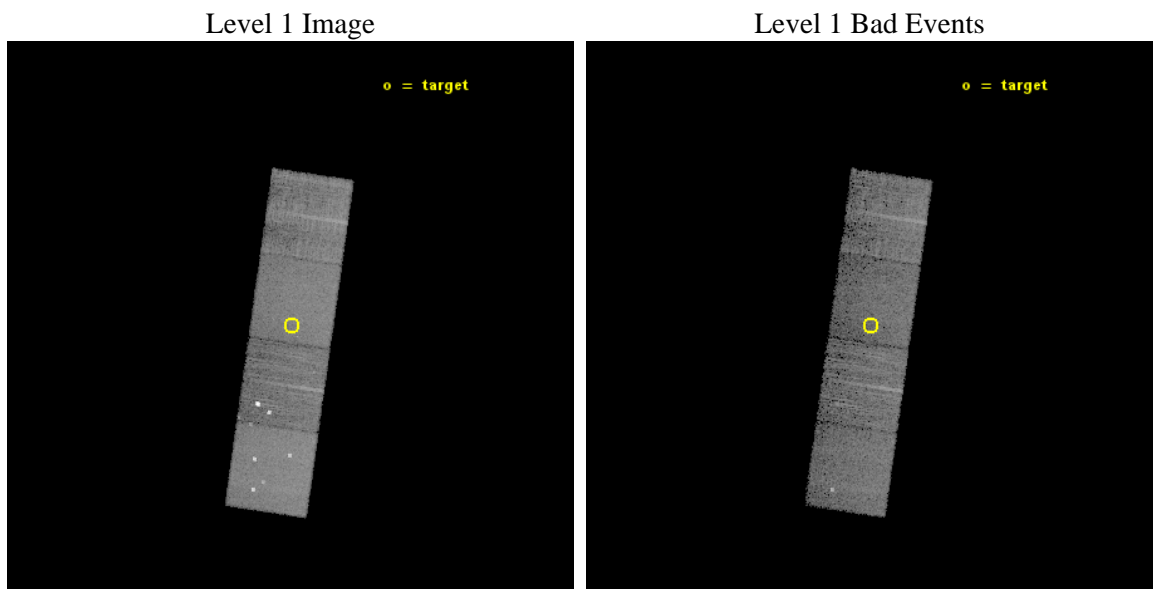
seq_num	200810	Sequence number
obs_id	13660	Observation id
title	Testing Star-Planet Interaction in Solar Analogs	Proposal title
observer	Brendan Miller	Principal investigator
object	HD 168746	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	275.4575	Observer's specified target RA [deg]
dec_targ	-11.922694	Observer's specified target Dec [deg]
ra_nom	275.46036483268	Nominal RA [deg]
dec_nom	-11.923893371357	Nominal Dec [deg]
roll_nom	278.30936455183	Nominal Roll [deg]
revision	3	Processing version of data
ontime	10068.746284425	Sum of GTIs [s]
livetime	9937.1907017161	Livetime [s]
ontime5	10068.705244422	Sum of GTIs [s]
ontime6	10068.664204419	Sum of GTIs [s]
ontime7	10068.746284425	Sum of GTIs [s]
ontime8	10068.623164415	Sum of GTIs [s]
l2events	84590	Number of level 2 events



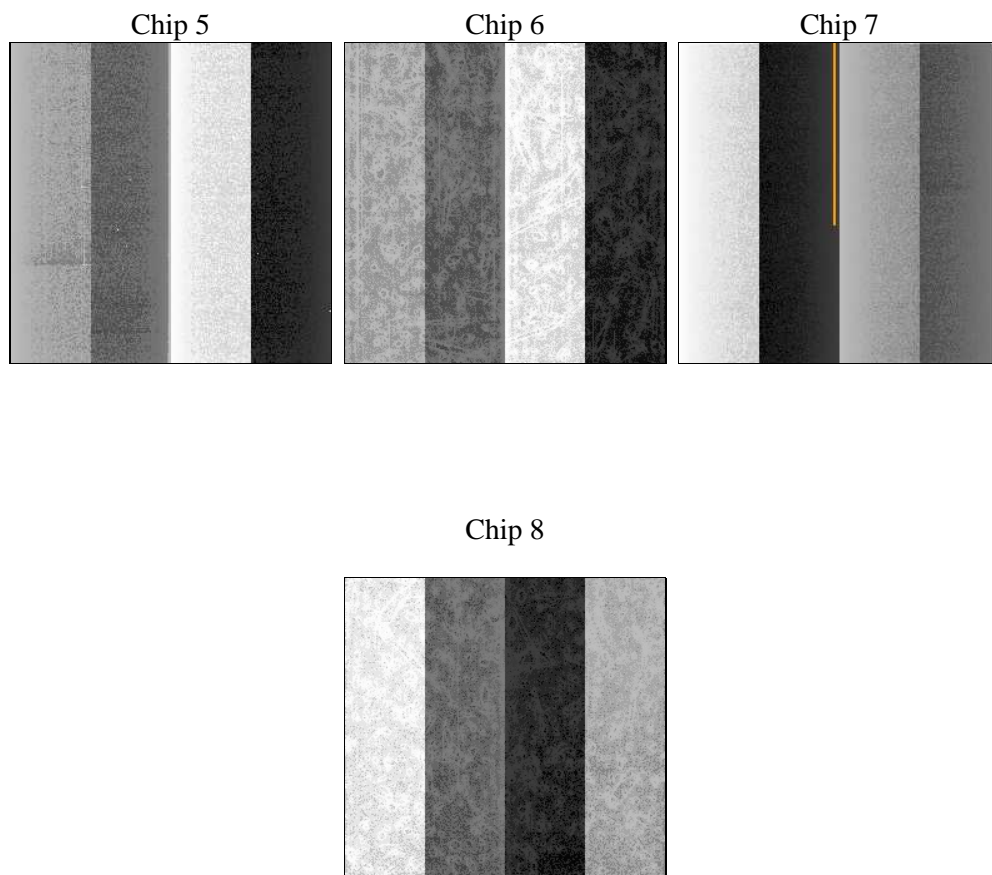
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	10068.746284425	Sum of GTIs [s]
caldsver	4.6.4	 	ontime5	10068.705244422	Sum of GTIs [s]
date	2014-11-29T00:10:47	Date and time of file creation	ontime6	10068.664204419	Sum of GTIs [s]
revision	3	Processing version of data	ontime7	10068.746284425	Sum of GTIs [s]
			ontime8	10068.623164415	Sum of GTIs [s]
			l1events	299564	Number of level 1 events

2.1.4 Events

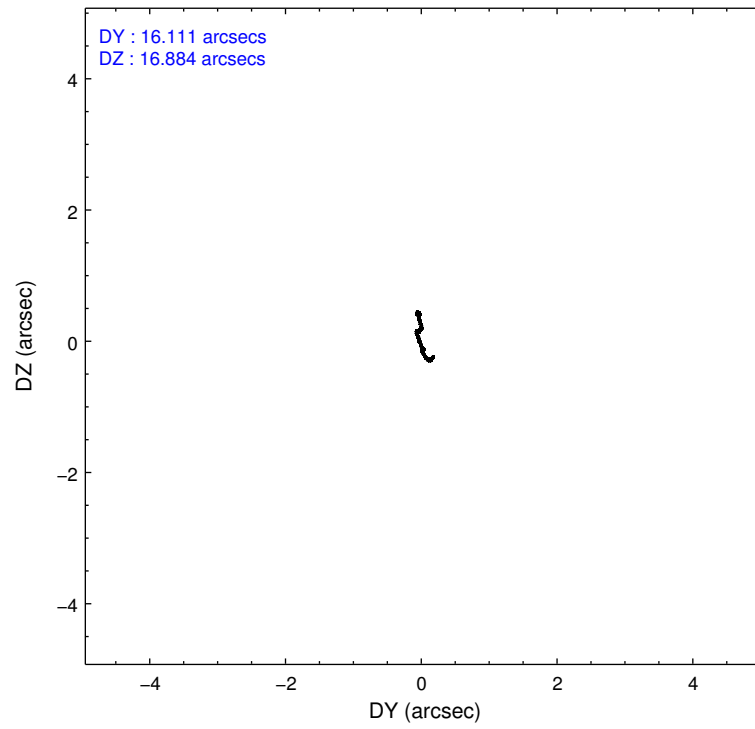
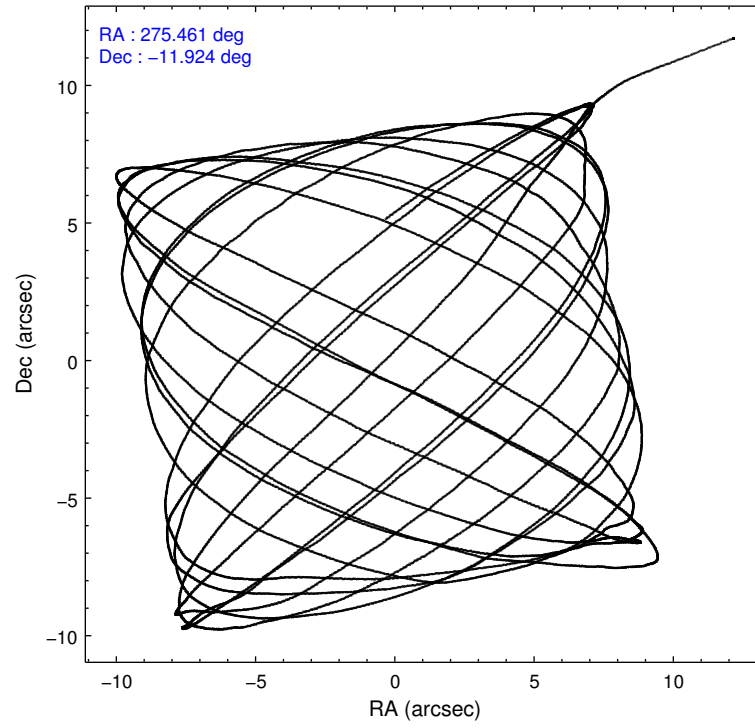
	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	93003	66558	71656	68347
rejected events	44910	46717	39772	50117
rejected %	48%	70%	55%	73%

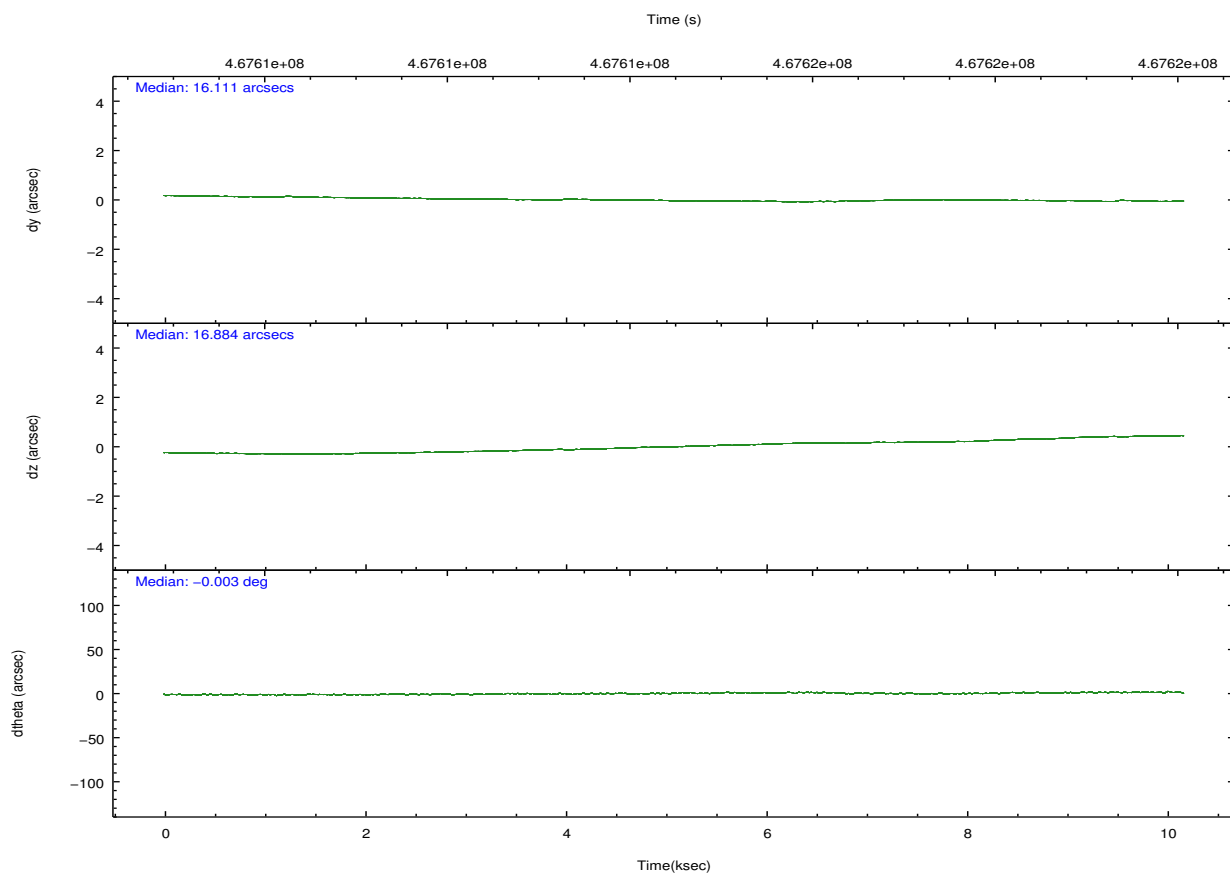
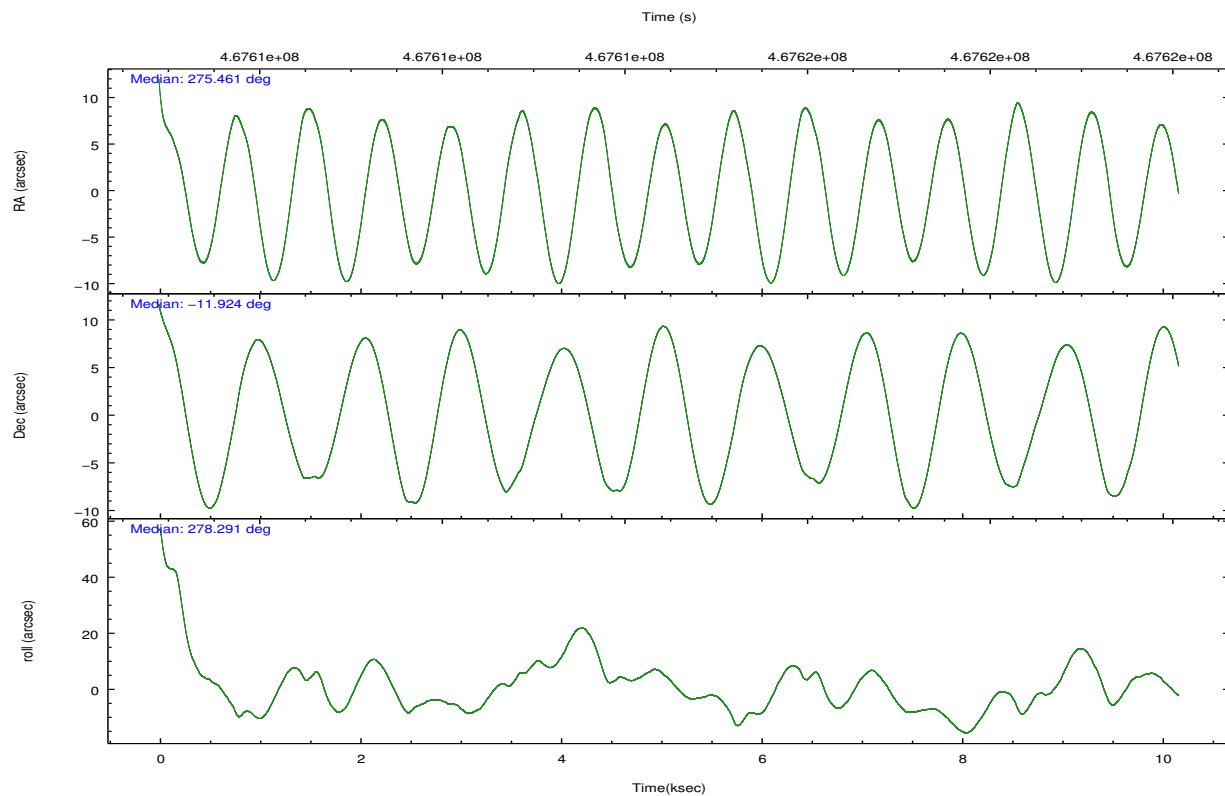
	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	8989	15335	2974	5632
	9%	23%	4%	8%
grade 1 events	808	70	70	64
	0%	0%	0%	0%
grade 2 events	13298	1617	6624	4299
	14%	2%	9%	6%
grade 3 events	1553	688	2832	1850
	1%	1%	3%	2%
grade 4 events	1595	742	2768	1667
	1%	1%	3%	2%
grade 5 events	6433	2846	7426	3769
	6%	4%	10%	5%
grade 6 events	22688	1473	16700	4788
	24%	2%	23%	7%
grade 7 events	37639	43787	32262	46278
	40%	65%	45%	67%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-5678	ACIS-5678	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	275.442702	275.4603648326835	CCD I2 on	N	N
[deg] Pointing Dec	-11.902712	-11.92389337135664	CCD I3 on	N	N
[deg] Pointing Roll	278.149073	278.3093645518262	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O1	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	O2	Y
[mm] SIM translation stage pos	-190.132523	-190.145094680475	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01257209746719923	CCD S4 on	O3	Y
[s] Observation start time (MET)	467609562.184000	467608332.20546	CCD S5 on	N	N
Observation start date	2012-10-26T03:31:35	2012-10-26T03:12:12	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	467619562.184000	467620040.26859	On-chip summing requested	N	N
Observation end date	2012-10-26T06:18:15	2012-10-26T06:27:20	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



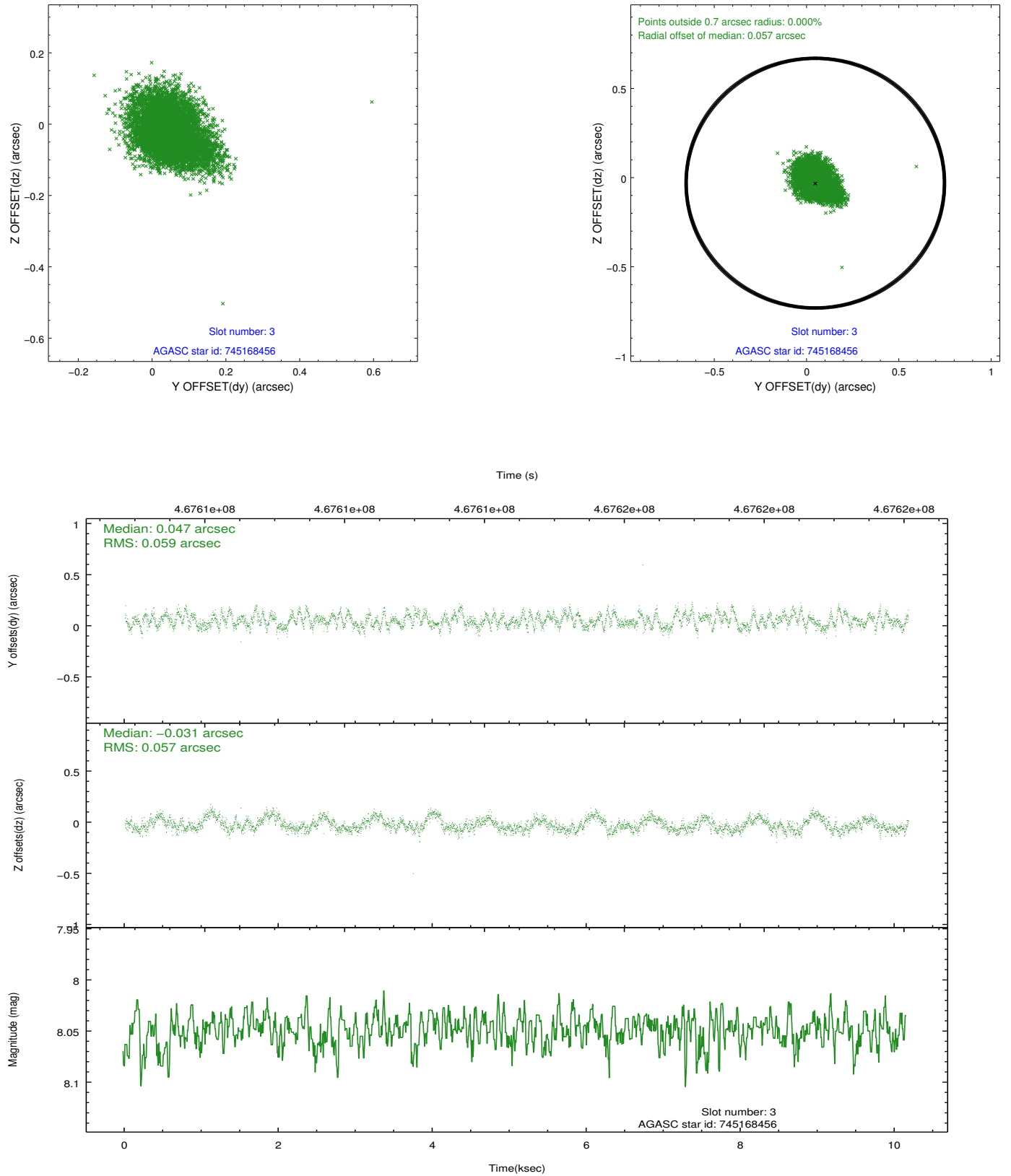


Slot Statistics

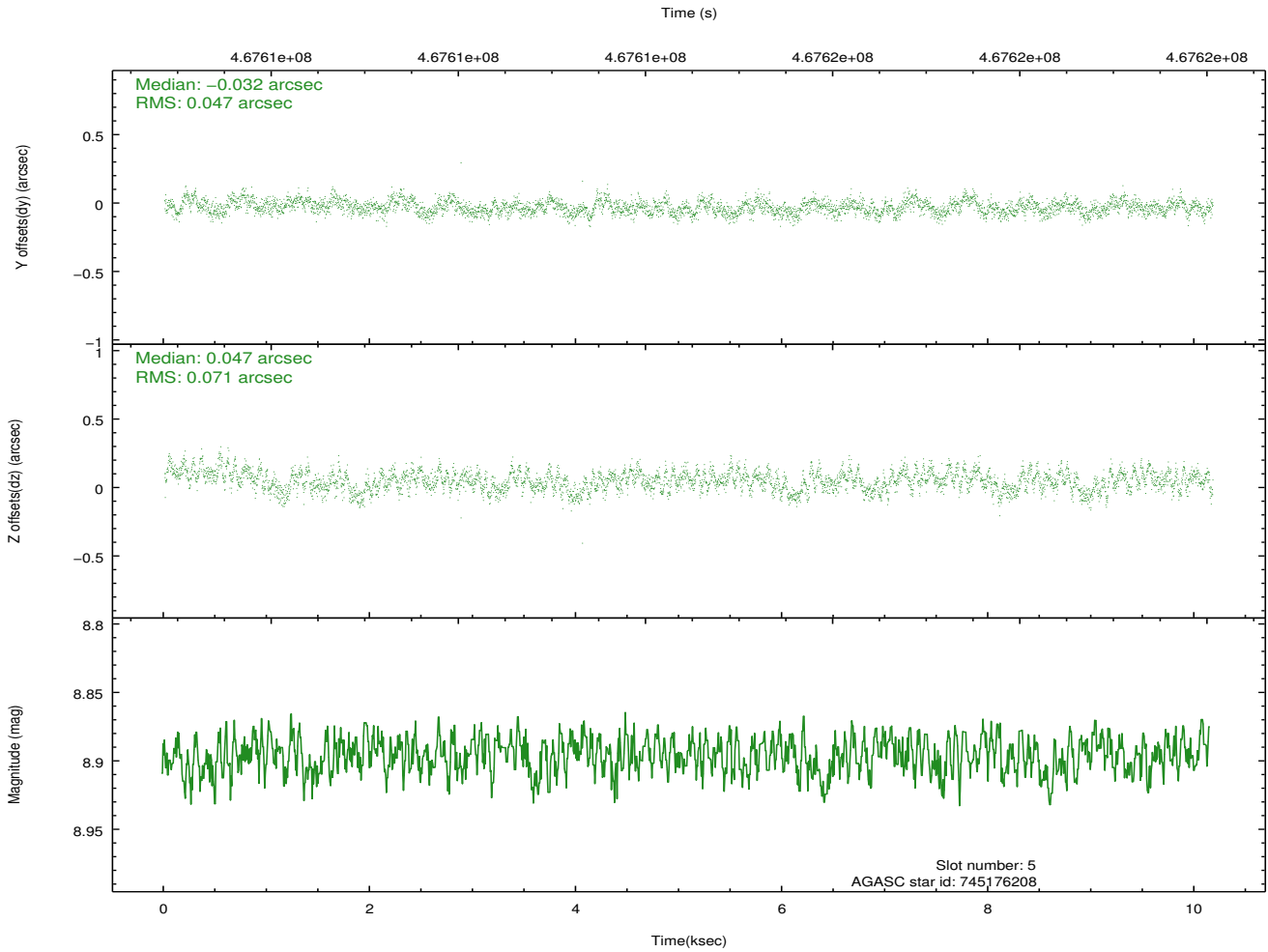
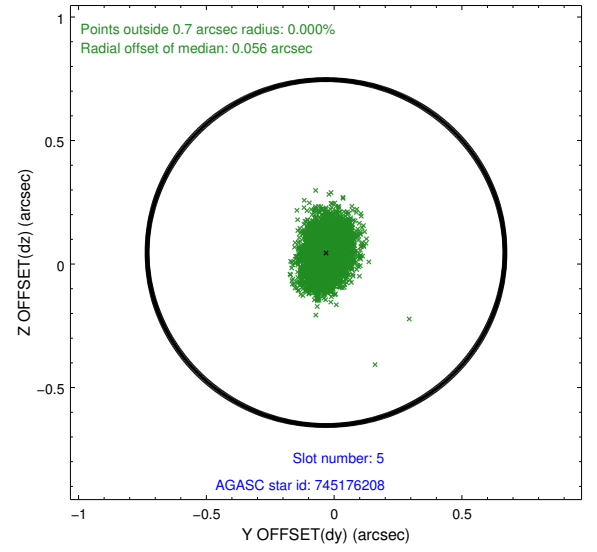
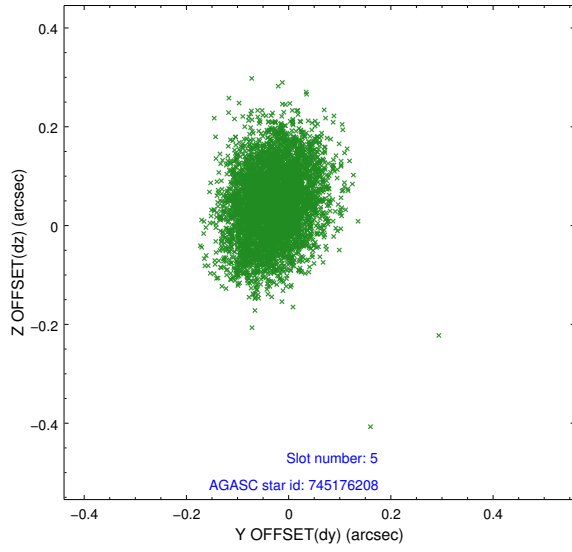
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.95	2480	-0.101	-0.025	0.015	0.025	0.000000	0.000000	-769.25	-1738.24
1	FID		ACIS-S-4	7.04	2481	0.211	0.055	0.007	0.012	0.000000	0.000000	2144.12	169.74
2	FID		ACIS-S-5	7.07	2481	-0.142	-0.022	0.013	0.022	0.000000	0.000000	-1821.44	163.98
3	GUIDE	used	745168456	8.05	4960	0.047	-0.031	0.087	0.138	274.931254	-12.513344	1923.46	-2091.21
4	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
5	GUIDE	used	745176208	8.90	4959	-0.032	0.047	0.090	0.149	274.780674	-11.633090	-1288.04	-2175.17
6	GUIDE	used	746883888	7.65	4962	0.041	-0.036	0.075	0.120	275.829811	-12.300383	1610.51	1144.09
7	GUIDE	used	746872264	7.39	4961	-0.058	0.017	0.057	0.091	276.174051	-12.475071	2407.09	2252.56

2.4 Star Slots

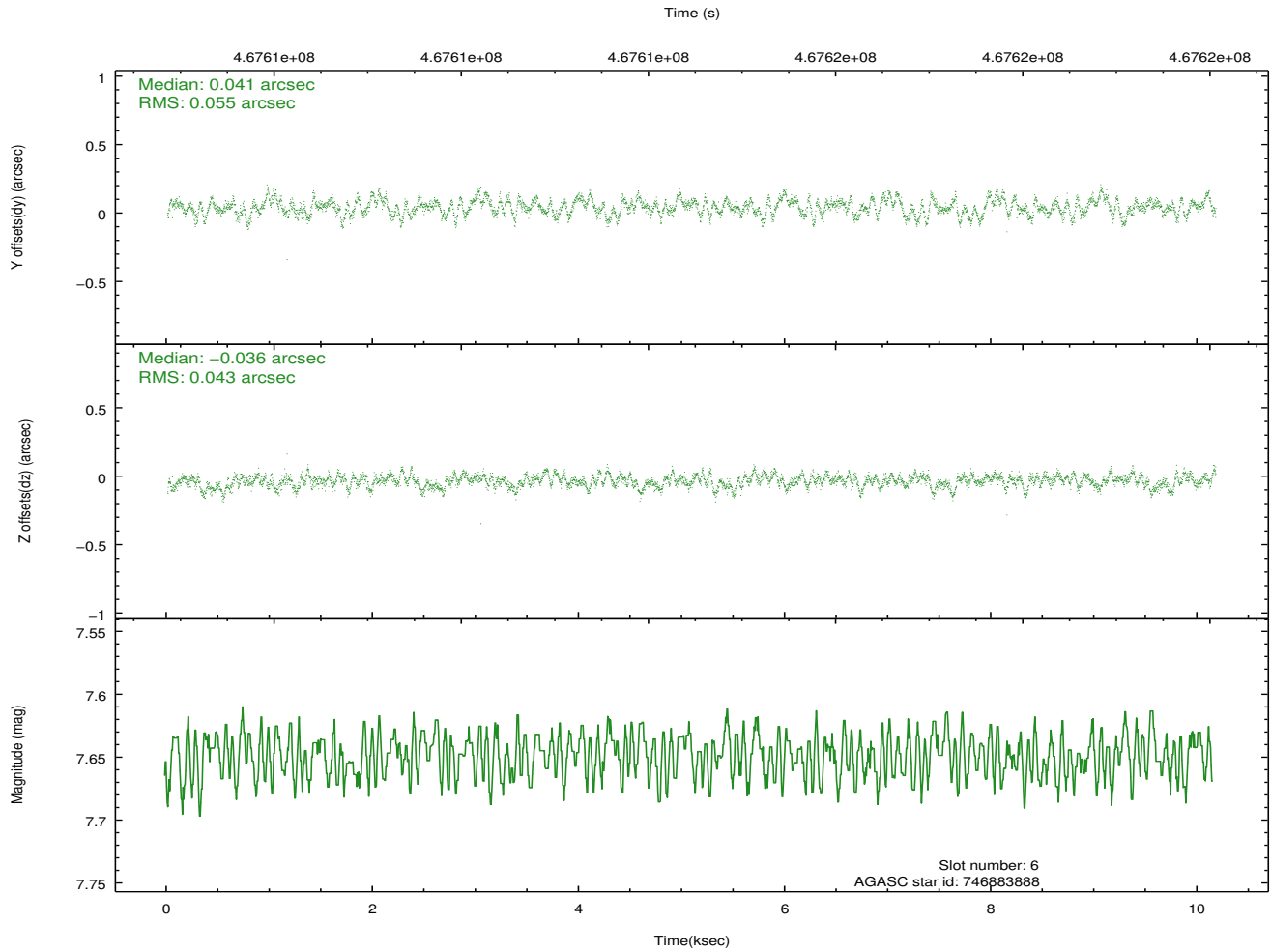
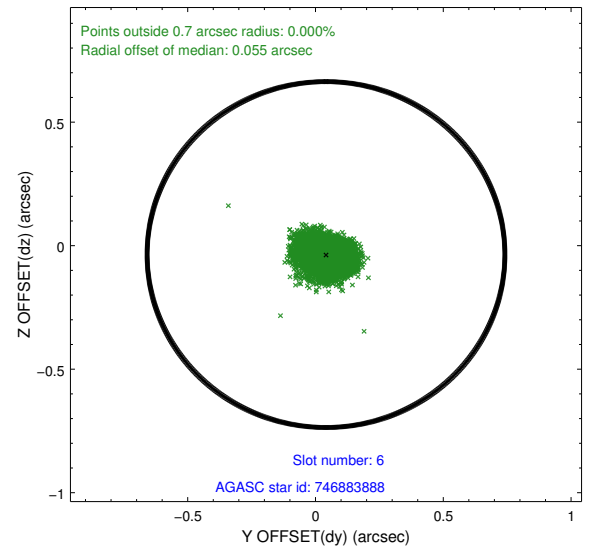
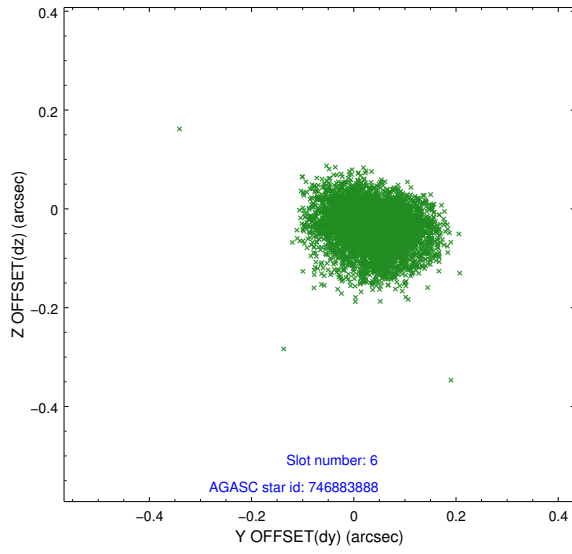
2.4.1 Slot 3



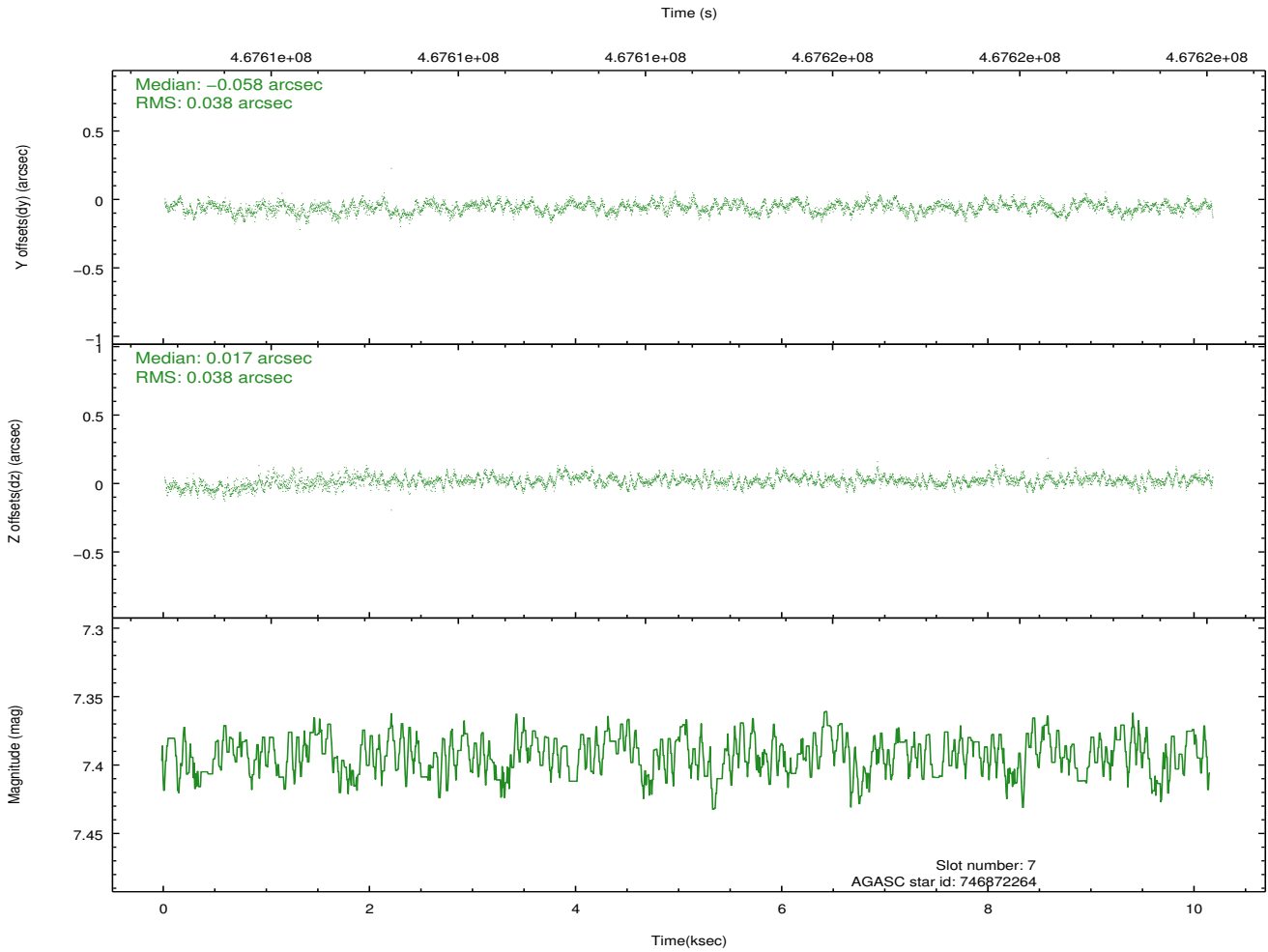
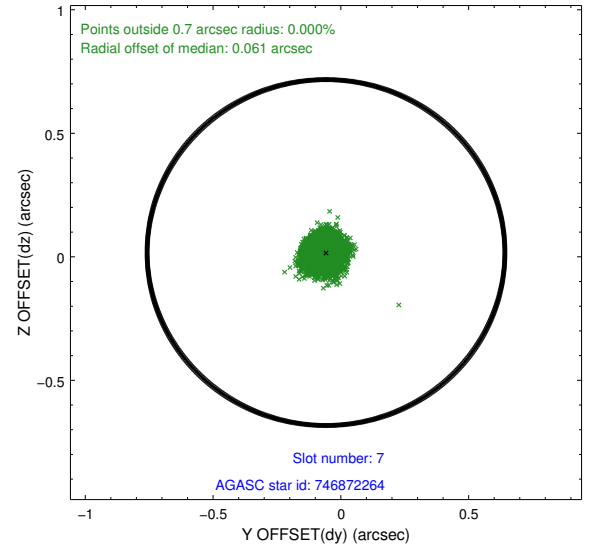
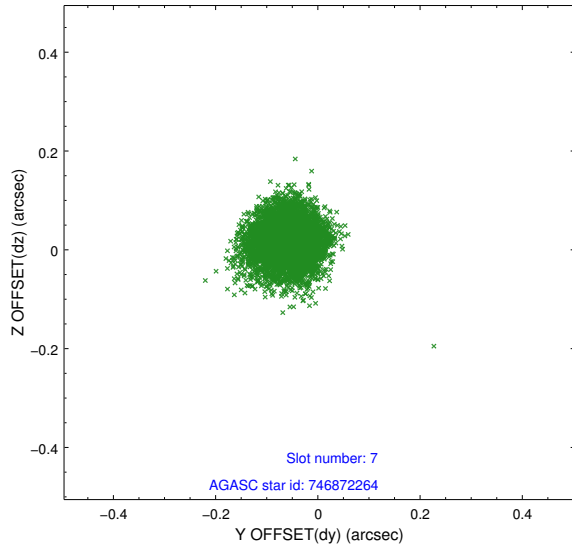
2.4.2 Slot 5



2.4.3 Slot 6

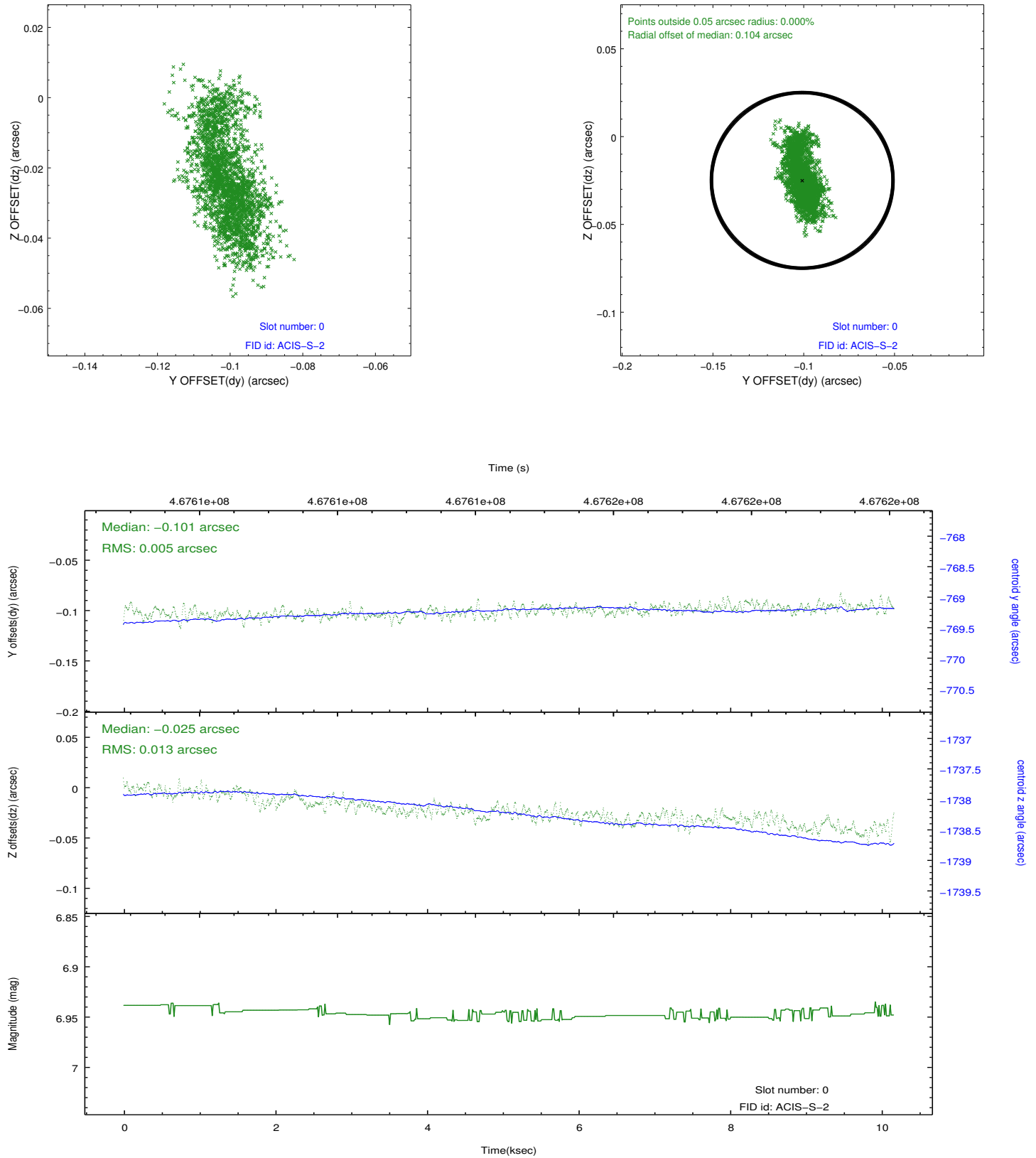


2.4.4 Slot 7

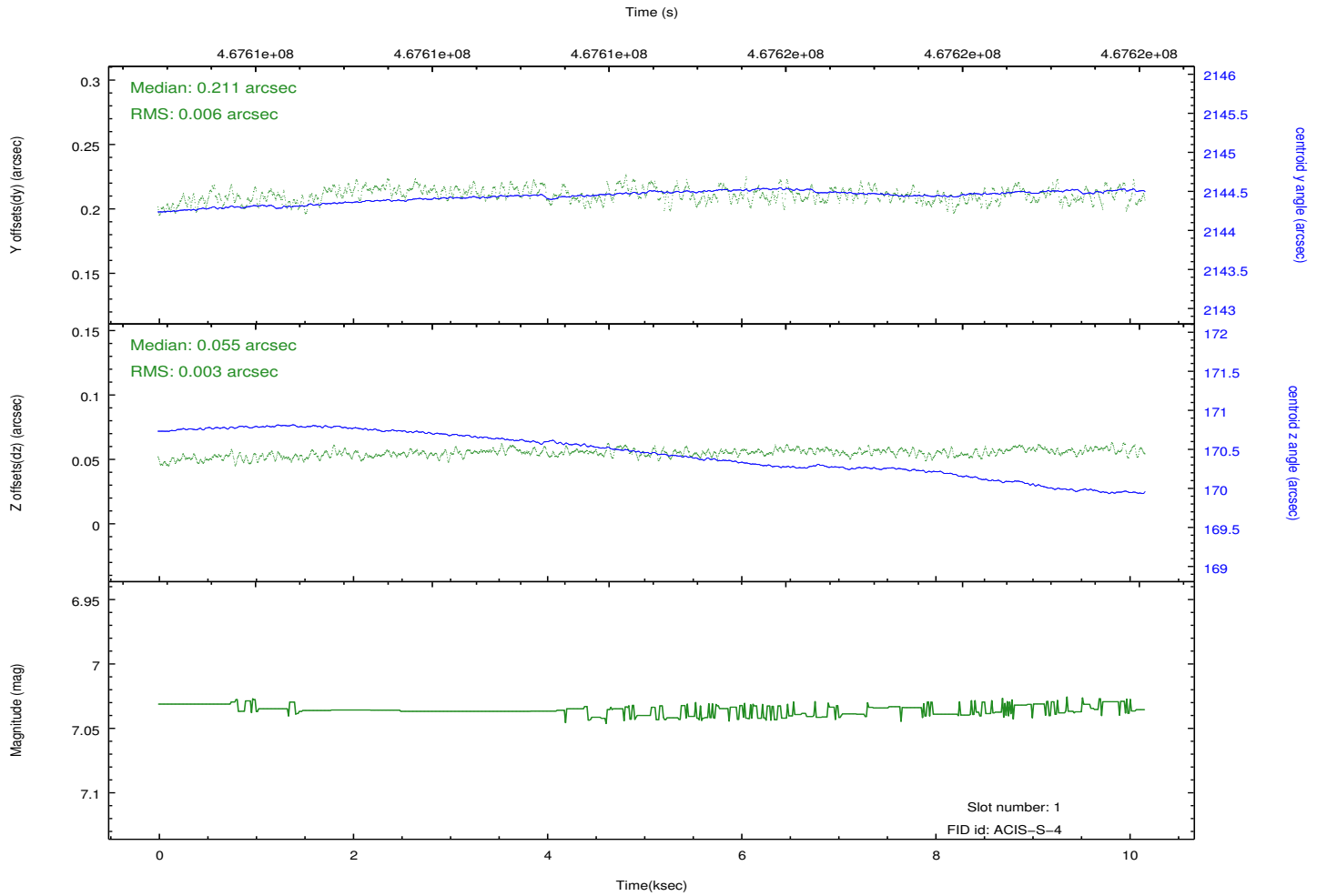
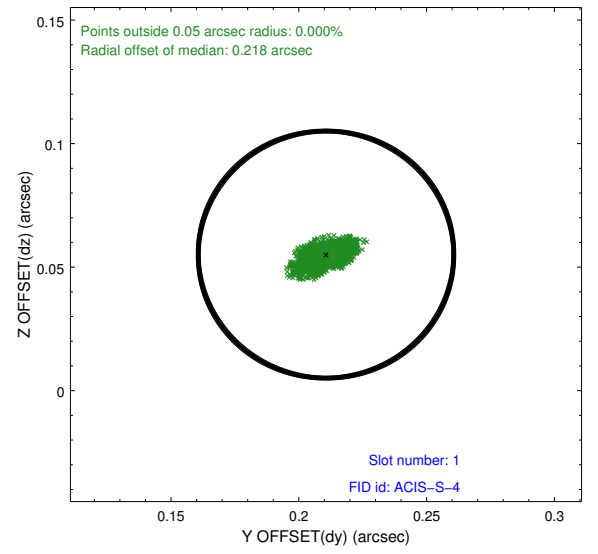
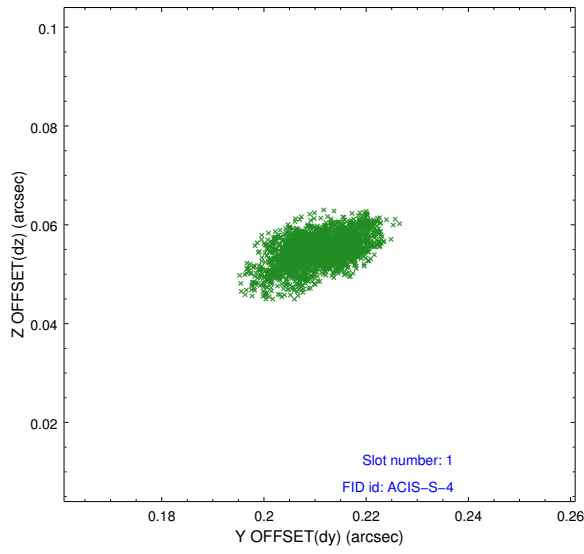


2.5 FID Slots

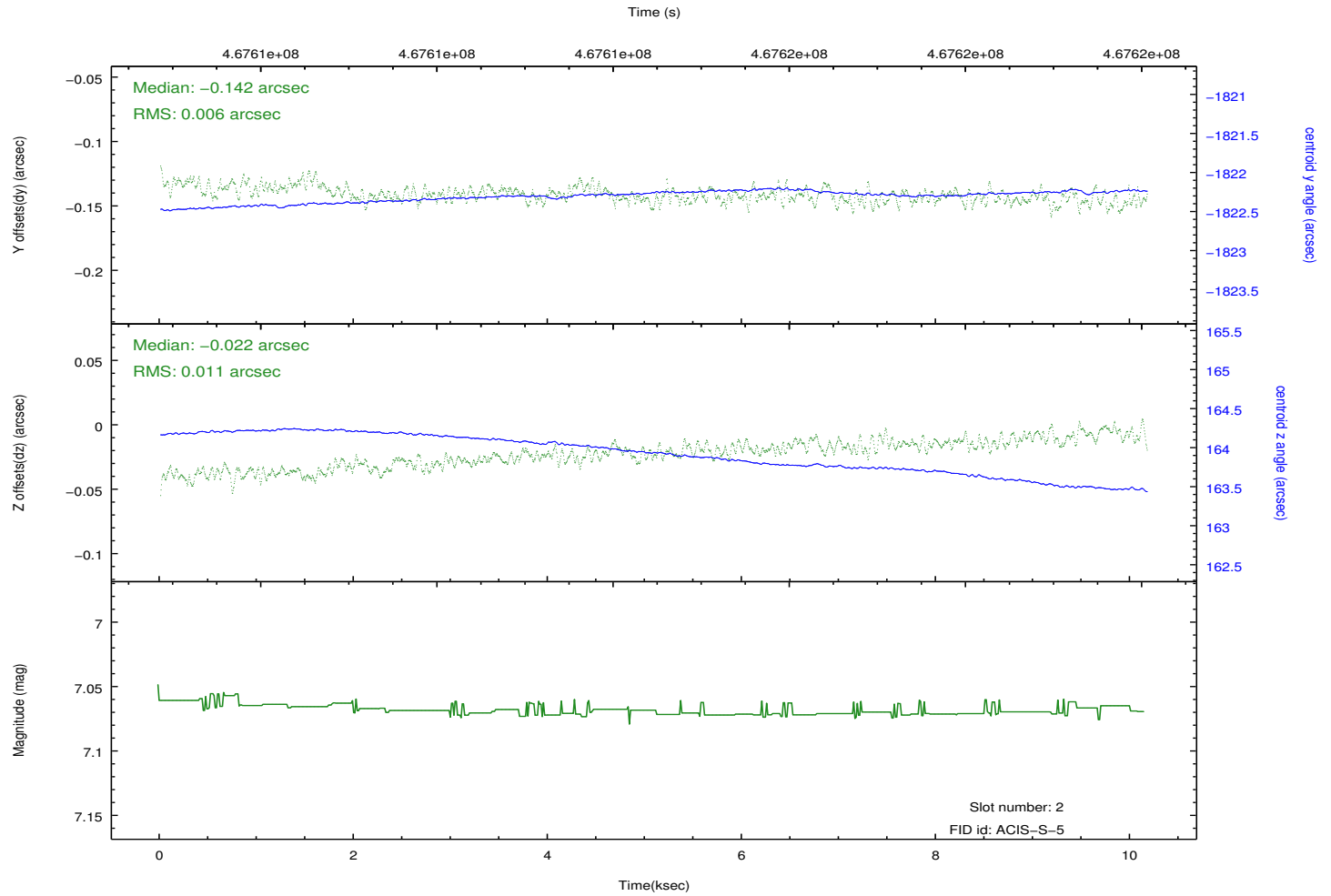
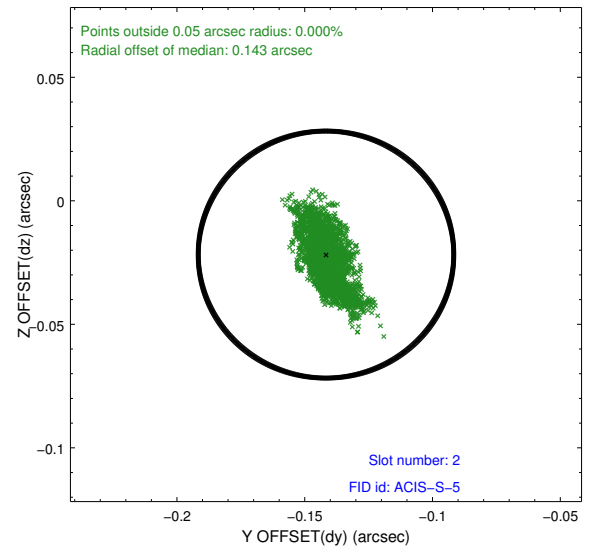
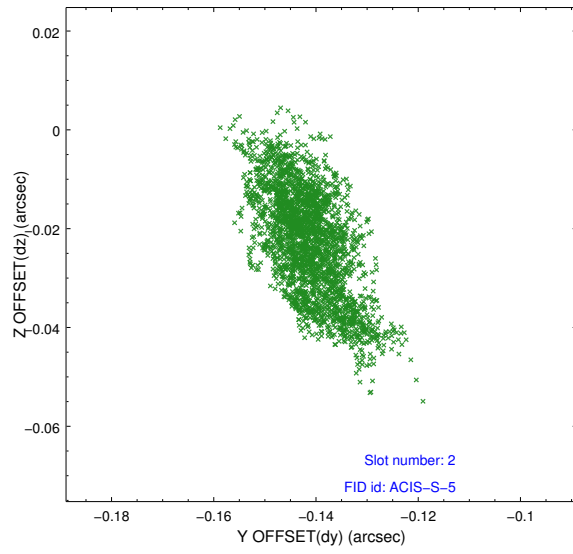
2.5.1 Slot 0



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)	2014.12.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.068746284425

A.2 Comments

The guide star in slot 4 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this star from the solution.

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.