

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 13291 - L2 Version 2
Chandra X-Ray Center

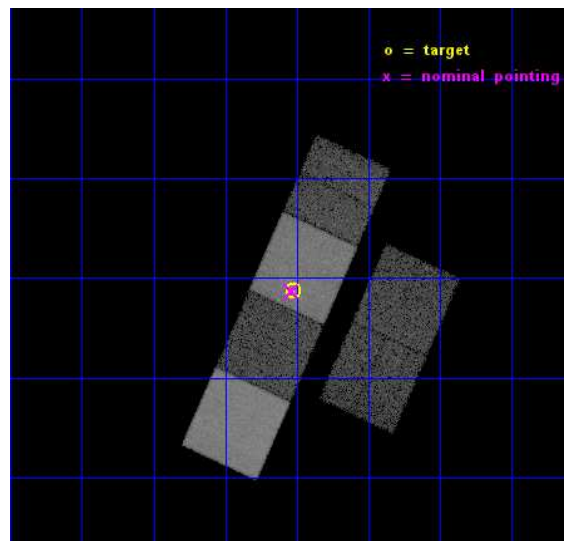
L2 Processing Date : Nov 29 2014

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1 Front

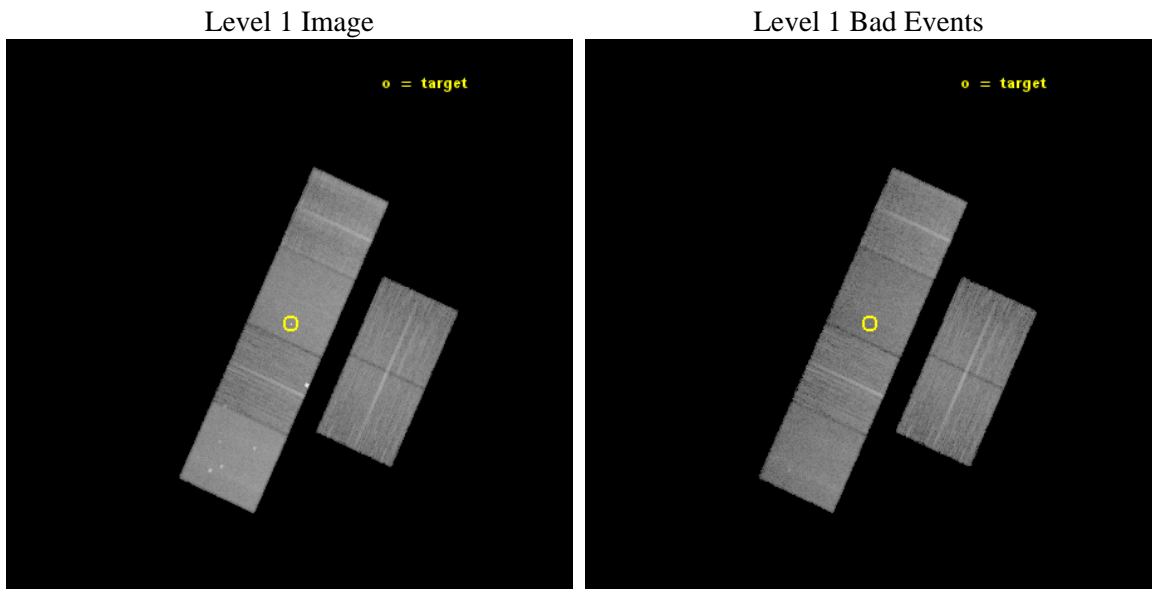
seq_num	501559	Sequence number
obs_id	13291	Observation id
title	A timing and spectral imaging observation of the soft gamma-ray pulsar IGR J18490-0000	Proposal title
observer	Dr Jelle Kaastra	Principal investigator
object	IGR J18490-0000	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	282.256667	Observer's specified target RA [deg]
dec_targ	-0.021583	Observer's specified target Dec [deg]
ra_nom	282.25965048699	Nominal RA [deg]
dec_nom	-0.022036428601615	Nominal Dec [deg]
roll_nom	294.26450868771	Nominal Roll [deg]
revision	2	Processing version of data
ontime	22963.199914515	Sum of GTIs [s]
livetime	22672.426050418	Livetime [s]
ontime2	22963.199914515	Sum of GTIs [s]
ontime3	22963.199914515	Sum of GTIs [s]
ontime5	22963.199914515	Sum of GTIs [s]
ontime6	22963.199914515	Sum of GTIs [s]
ontime7	22963.199914515	Sum of GTIs [s]
ontime8	22963.199914515	Sum of GTIs [s]
l2events	215708	Number of level 2 events



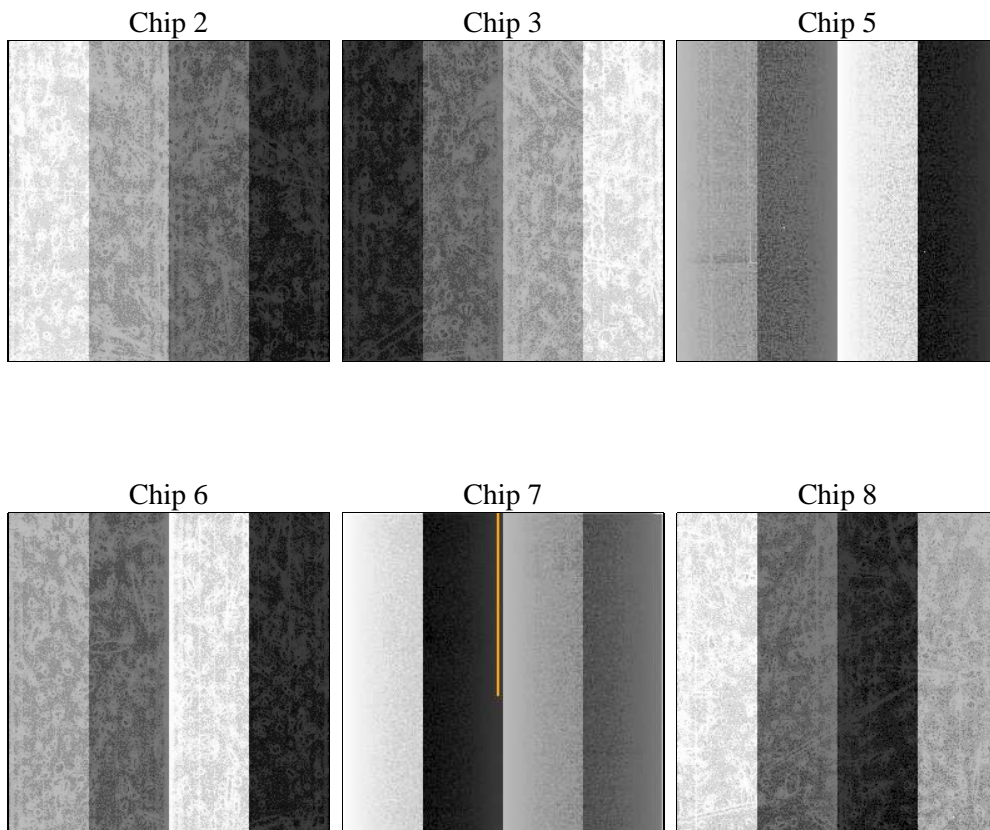
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	23000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	22963.199914515	Sum of GTIs [s]
caldbver	4.6.4	 	ontime2	22963.199914515	Sum of GTIs [s]
date	2014-11-29T14:23:25	Date and time of file creation	ontime3	22963.199914515	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	22963.199914515	Sum of GTIs [s]
			ontime6	22963.199914515	Sum of GTIs [s]
			ontime7	22963.199914515	Sum of GTIs [s]
			ontime8	22963.199914515	Sum of GTIs [s]
			l1events	891369	Number of level 1 events

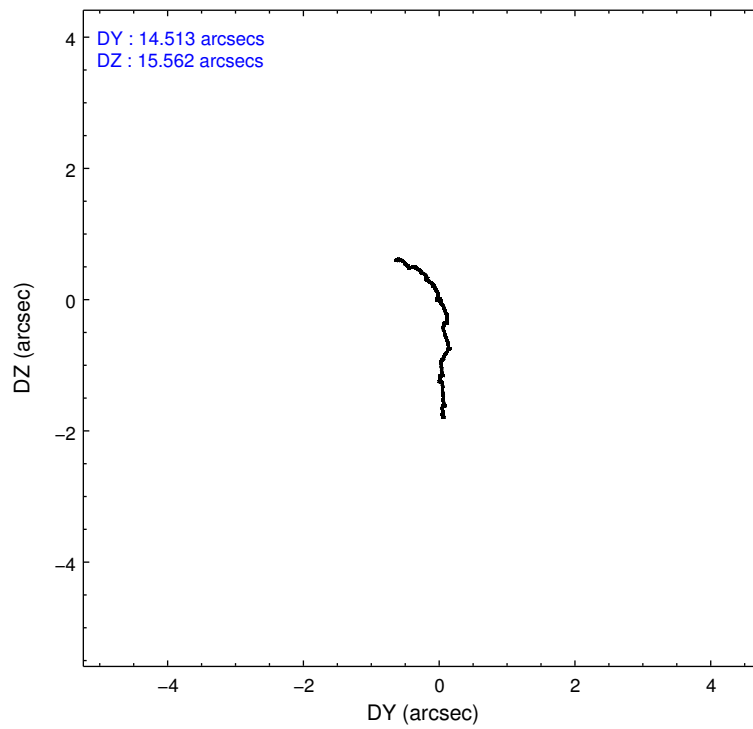
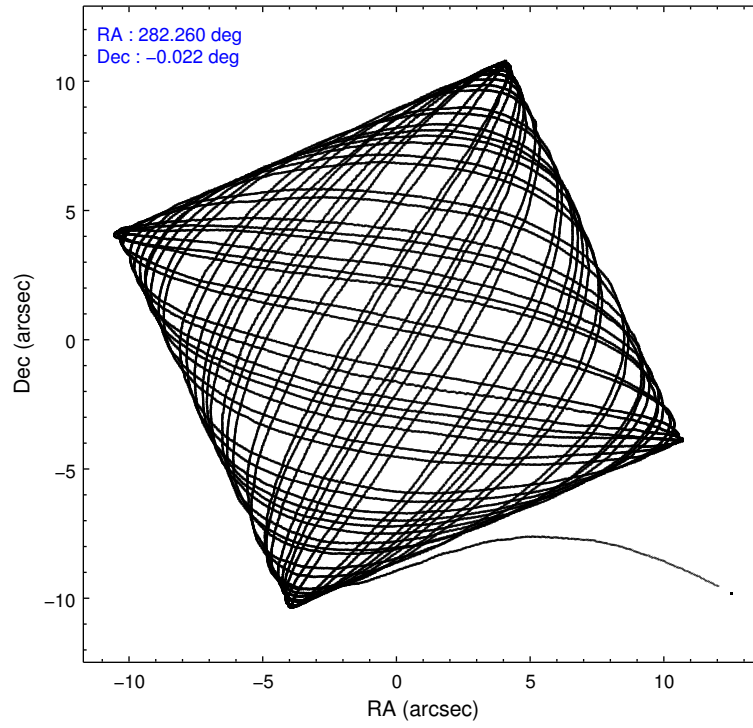
2.1.4 Events

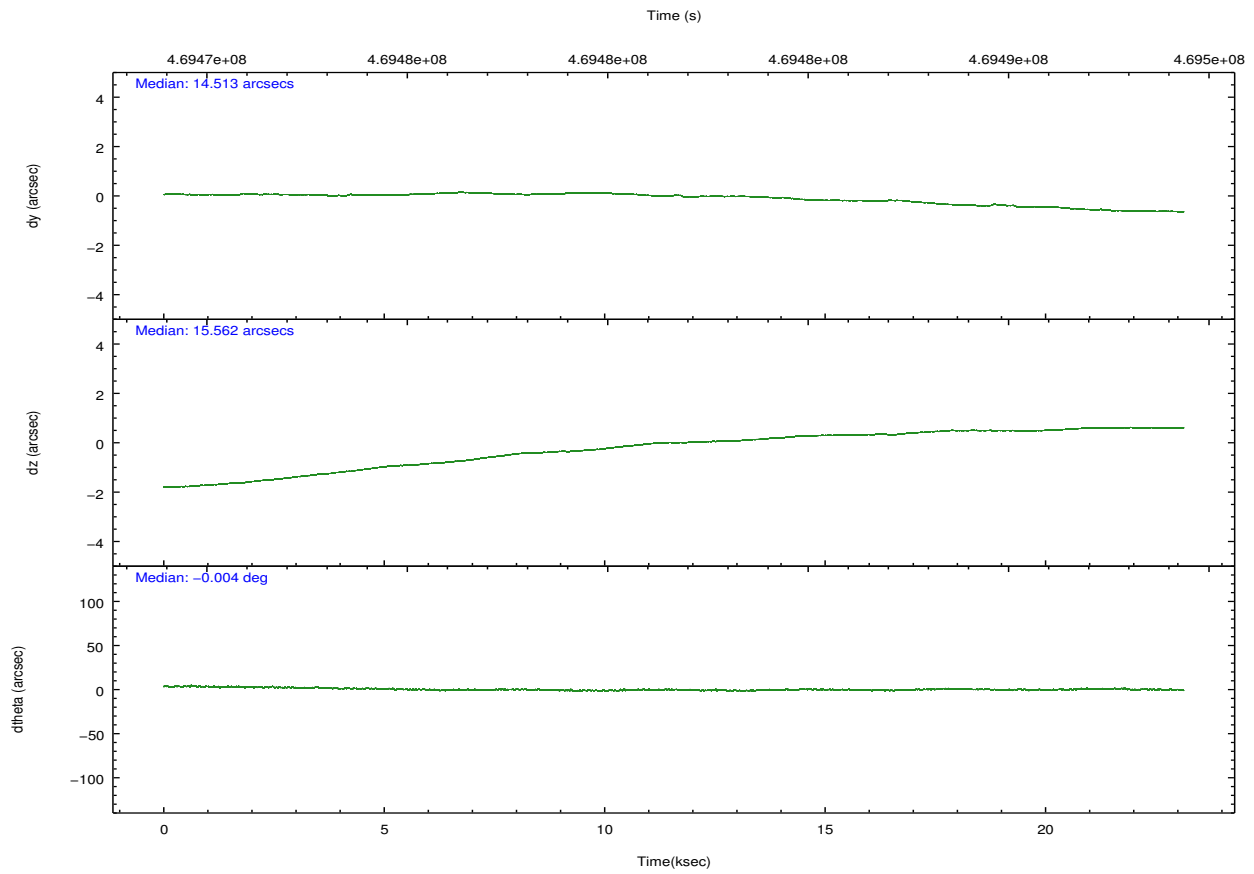
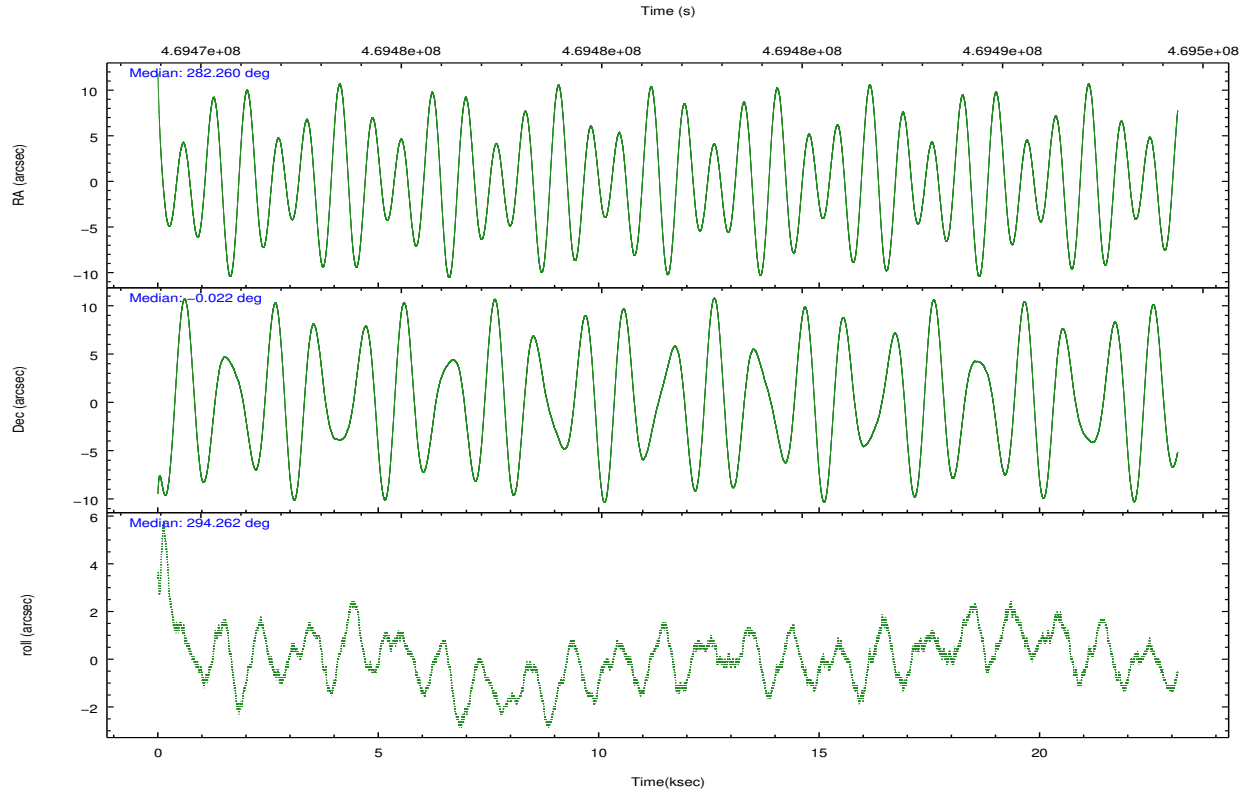
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	122639	115977	196842	129212	166712	159987	grade 0 events	5361	4938	8214	5678	6946	12703
rejected events	108252	102470	101949	106761	91655	117671		4%	4%	4%	4%	4%	7%
rejected %	88%	88%	51%	82%	54%	73%	grade 1 events	78	62	455	61	192	120
								0%	0%	0%	0%	0%	0%
							grade 2 events	3474	2956	28719	10276	15562	9881
								2%	2%	14%	7%	9%	6%
							grade 3 events	1411	1467	3183	1514	6346	4415
								1%	1%	1%	1%	3%	2%
							grade 4 events	1455	1384	3181	1482	6484	4252
								1%	1%	1%	1%	3%	2%
							grade 5 events	5321	6092	14278	6092	16645	8777
								4%	5%	7%	4%	9%	5%
							grade 6 events	2686	2764	51616	3503	39726	11067
								2%	2%	26%	2%	23%	6%
							grade 7 events	102853	96314	87196	100606	74811	108772
								83%	83%	44%	77%	44%	67%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	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	282.237256	282.2596504869868	CCD I2 on	Y	Y
[deg] Pointing Dec	-0.006346	-0.02203642860161514	CCD I3 on	Y	Y
[deg] Pointing Roll	294.107881	294.264508687712	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	O1	Y
[s] Observation start time (MET)	469470212.184000	469469015.83045	CCD S5 on	N	N
Observation start date	2012-11-16T16:22:25	2012-11-16T16:03:35	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	469493212.184000	469494571.13182	On-chip summing requested	N	N
Observation end date	2012-11-16T22:45:45	2012-11-16T23:09:31	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect





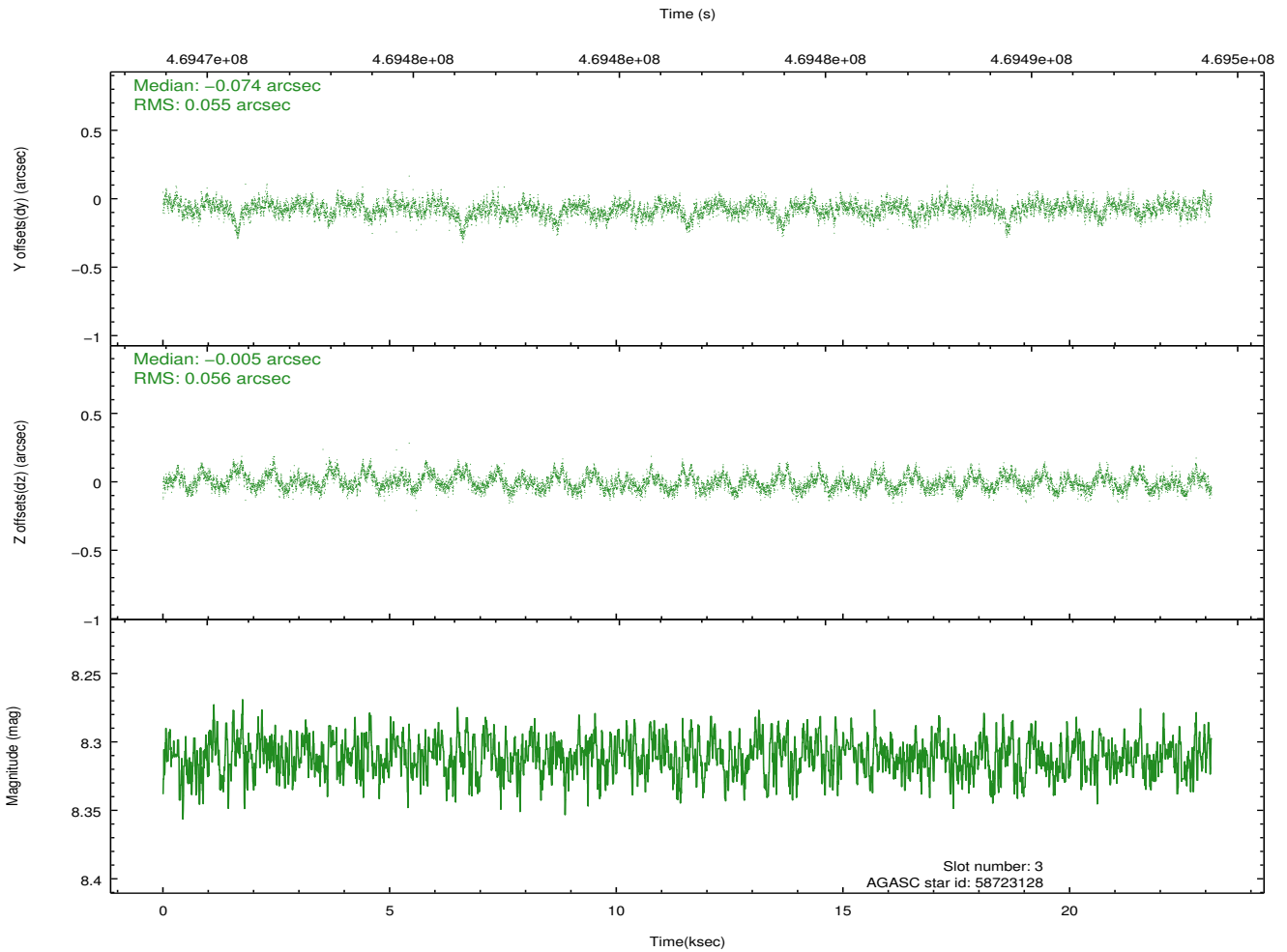
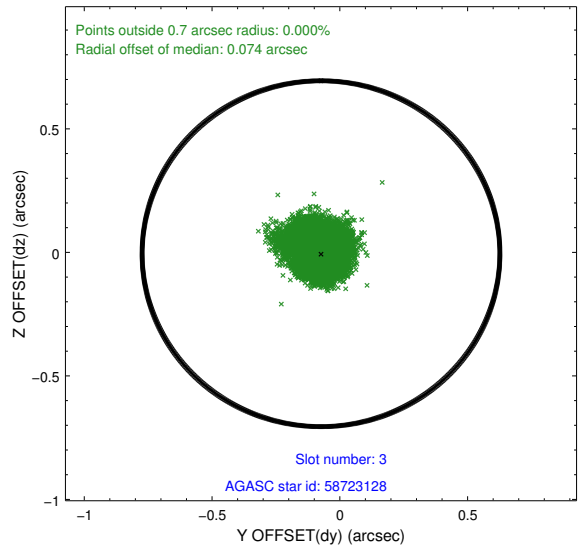
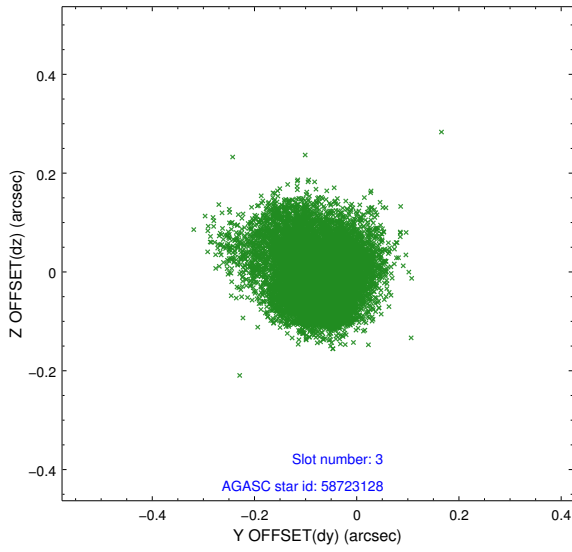
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.04	5640	-0.102	-0.023	0.020	0.030	0.000000	0.000000	-767.44	-1736.67
1	FID		ACIS-S-4	7.13	5642	0.257	0.058	0.015	0.026	0.000000	0.000000	2146.12	171.76
2	FID		ACIS-S-5	7.16	5642	-0.187	-0.022	0.012	0.022	0.000000	0.000000	-1820.20	165.50
3	GUIDE	used	58723128	8.31	11282	-0.074	-0.005	0.081	0.137	282.171155	0.522968	-1836.06	561.50
4	GUIDE	used	670303120	8.55	11280	0.156	0.098	0.079	0.131	283.028951	-0.220247	1867.33	2287.62
5	GUIDE	used	670303584	7.52	11281	-0.042	-0.118	0.053	0.086	282.662062	-0.360708	1789.26	875.70
6	GUIDE	used	670309376	8.26	11282	0.079	-0.008	0.066	0.105	281.935099	-0.236180	310.66	-1330.61
7	GUIDE	used	58721432	8.60	11281	-0.110	0.033	0.074	0.126	282.605647	0.791519	-2080.32	2383.89

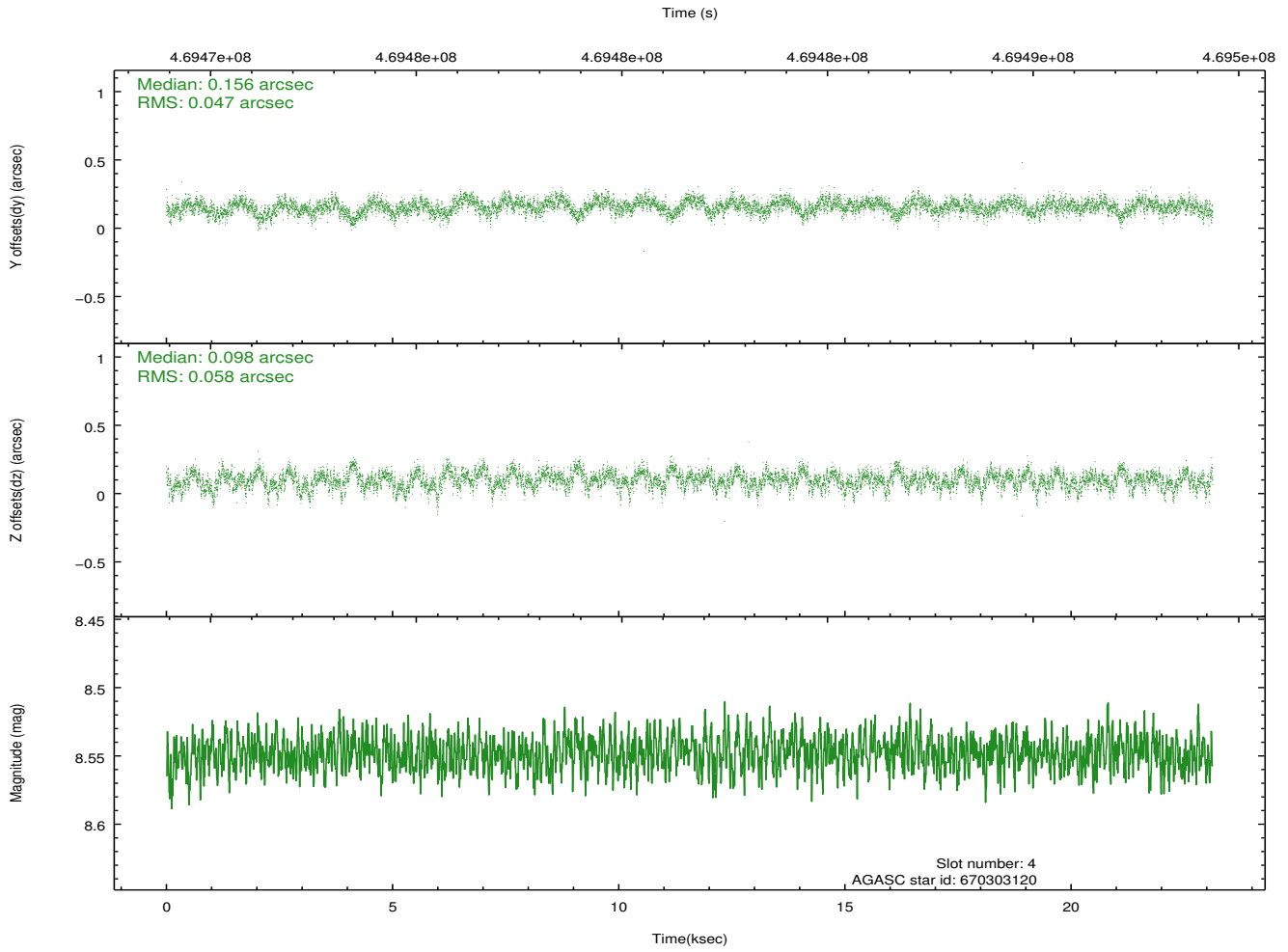
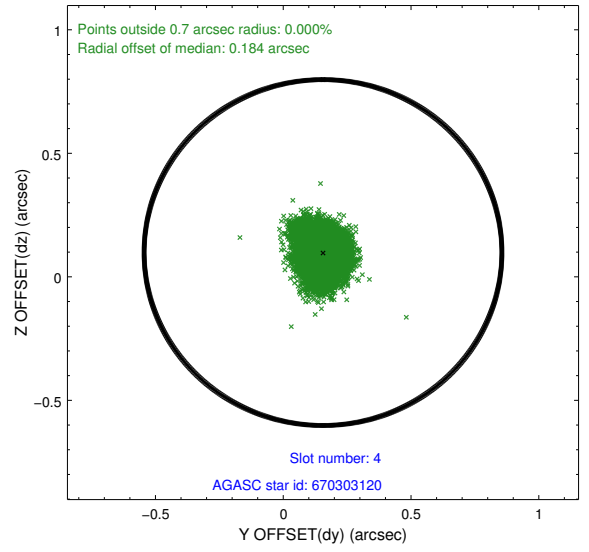
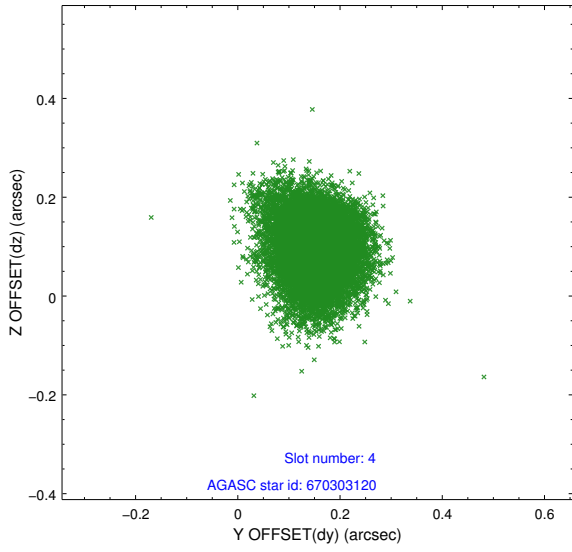
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2.4 Star Slots

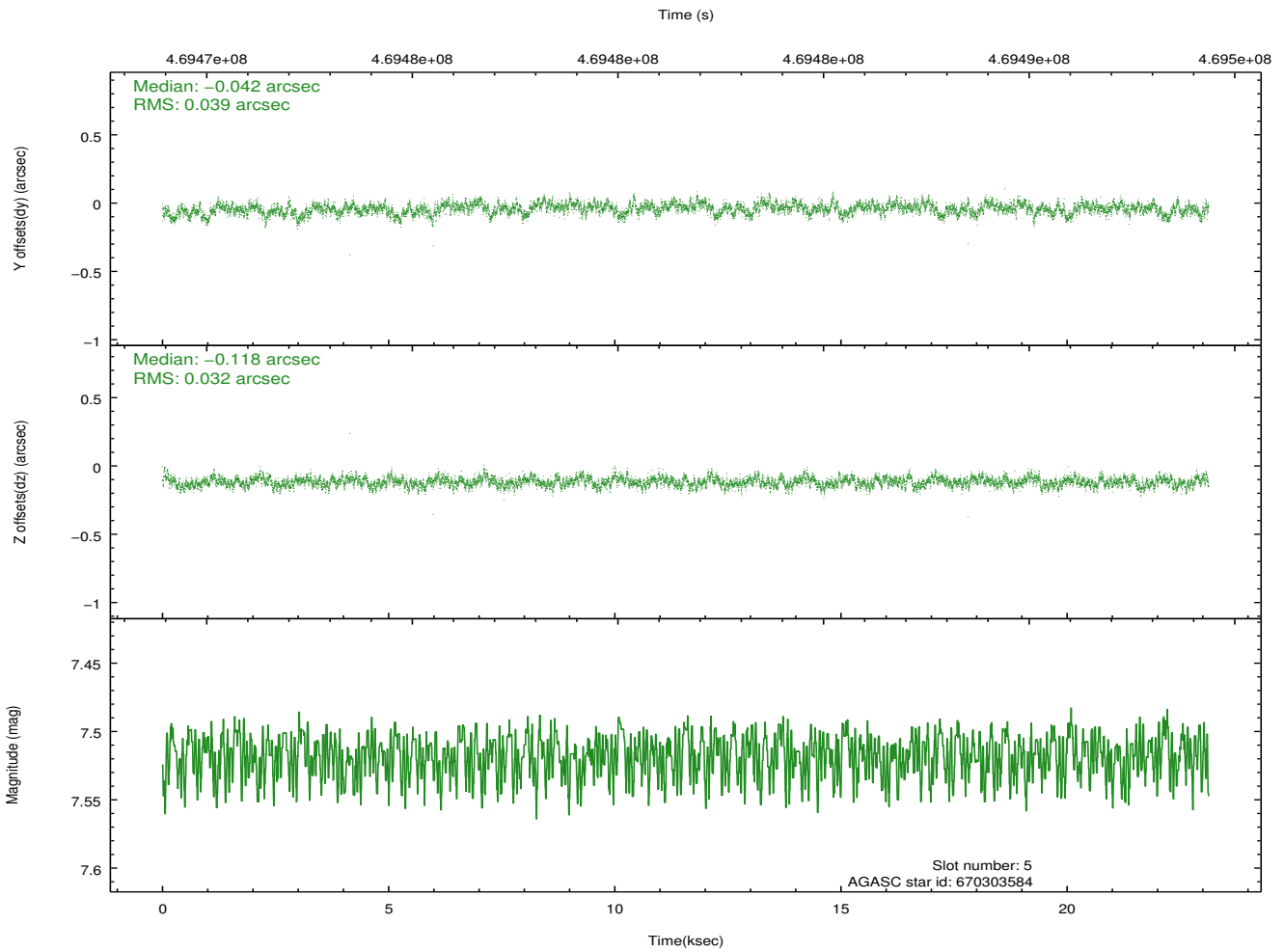
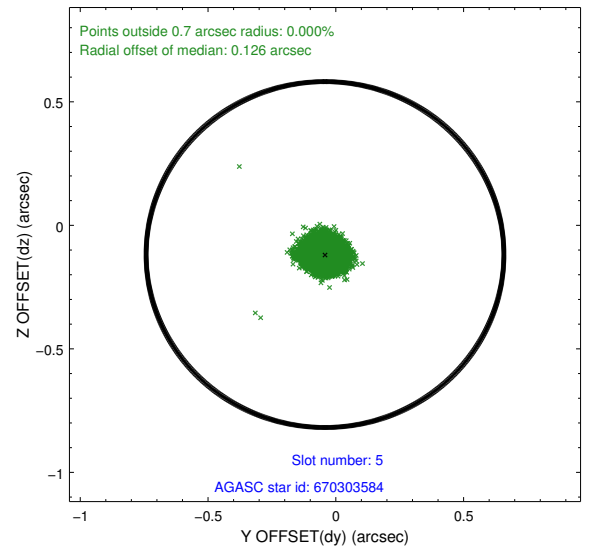
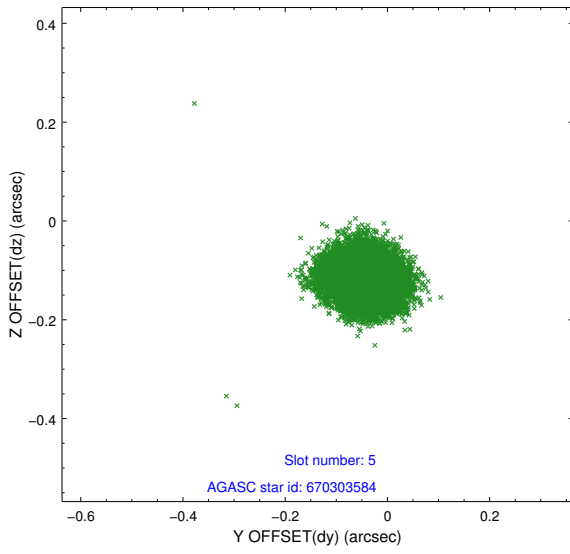
2.4.1 Slot 3



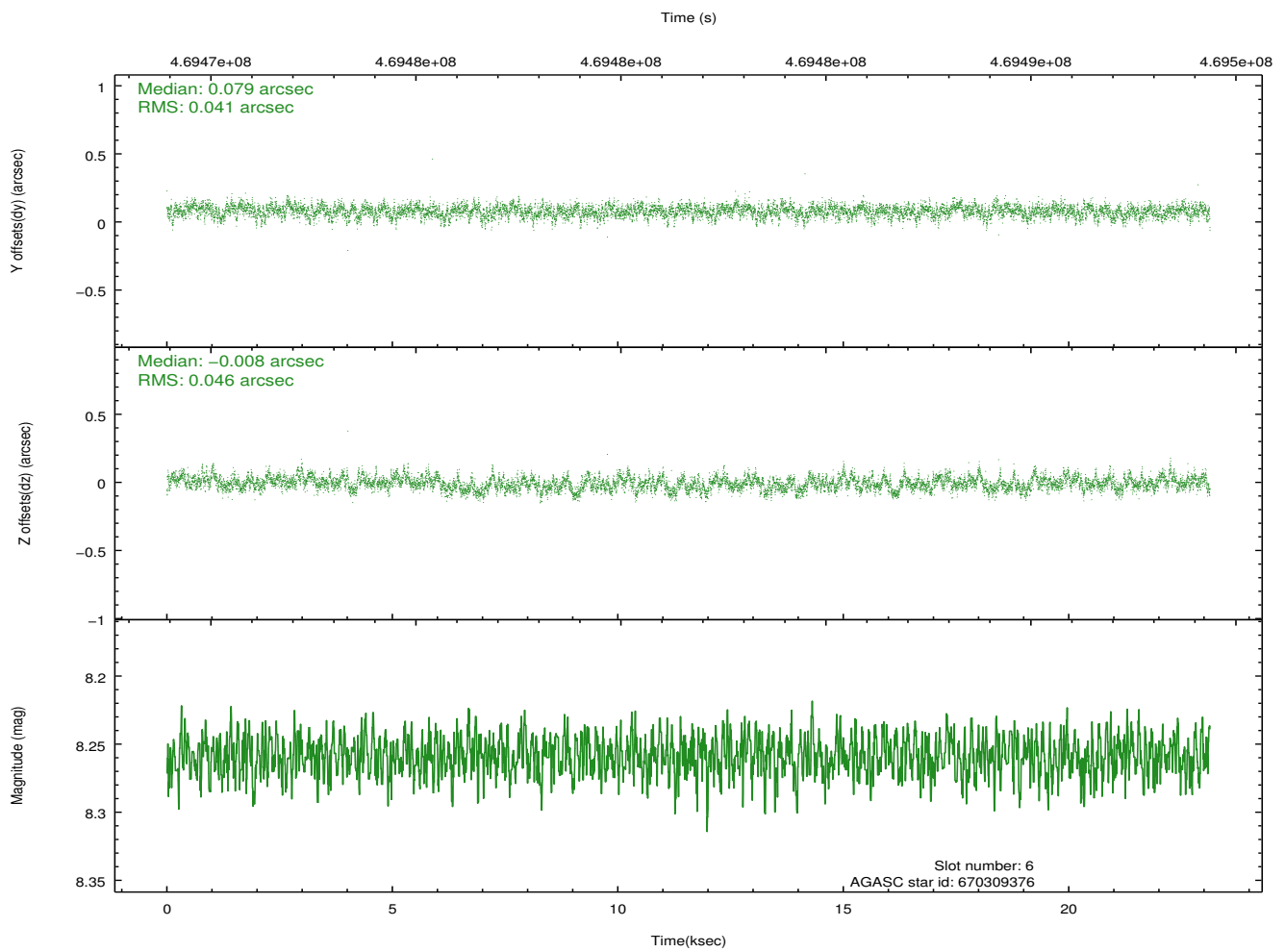
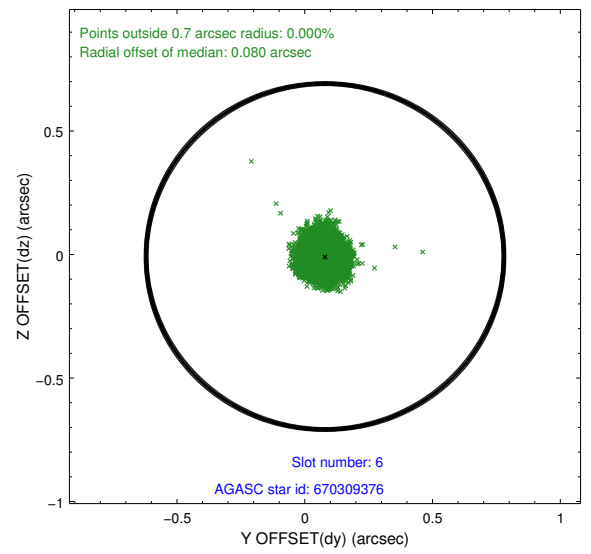
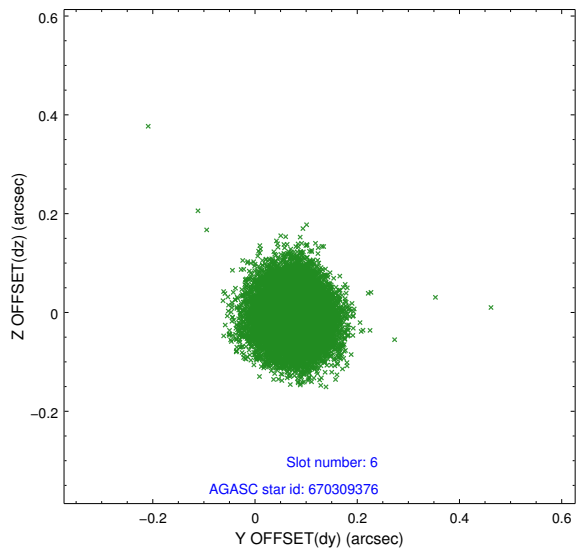
2.4.2 Slot 4



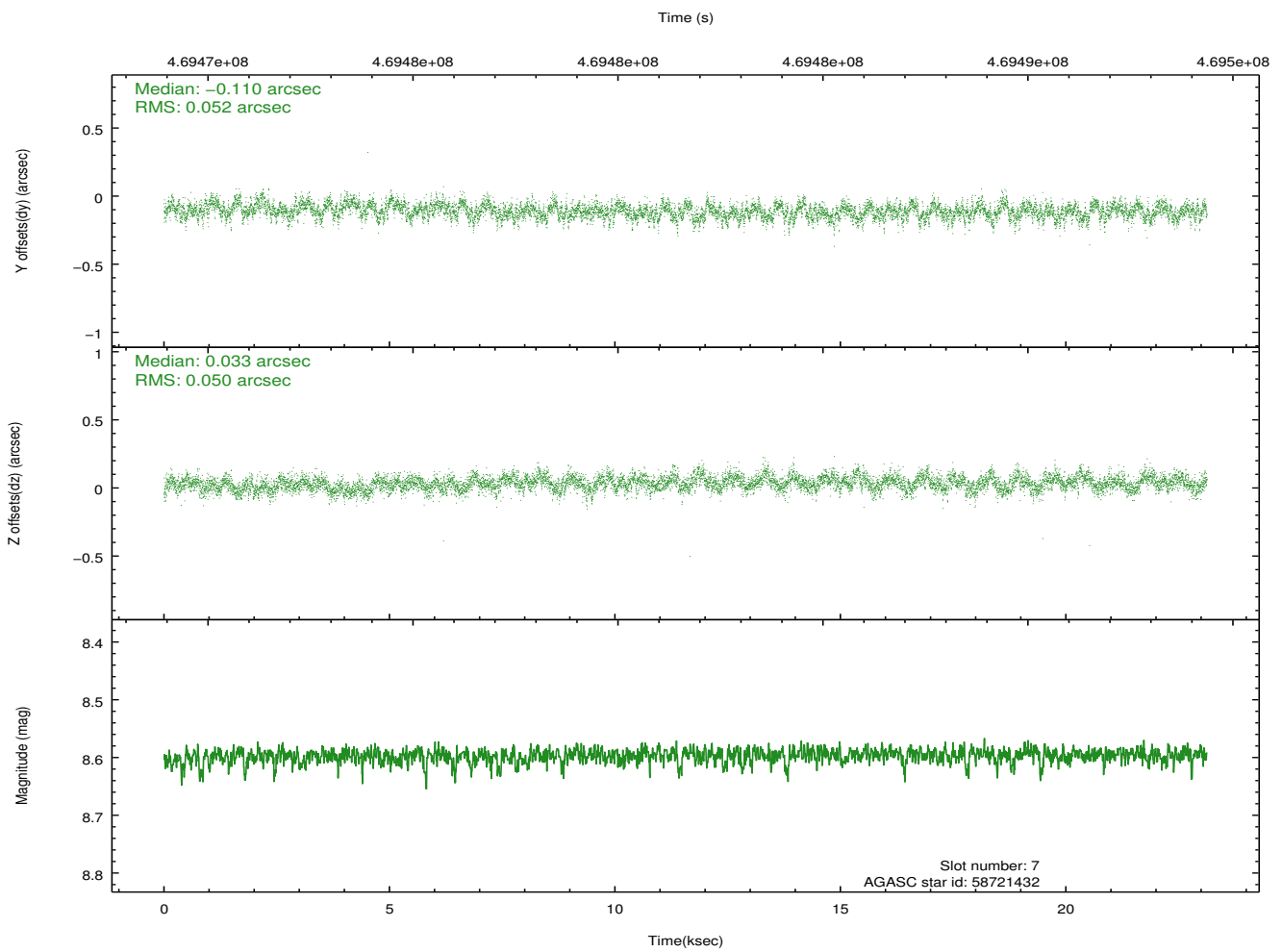
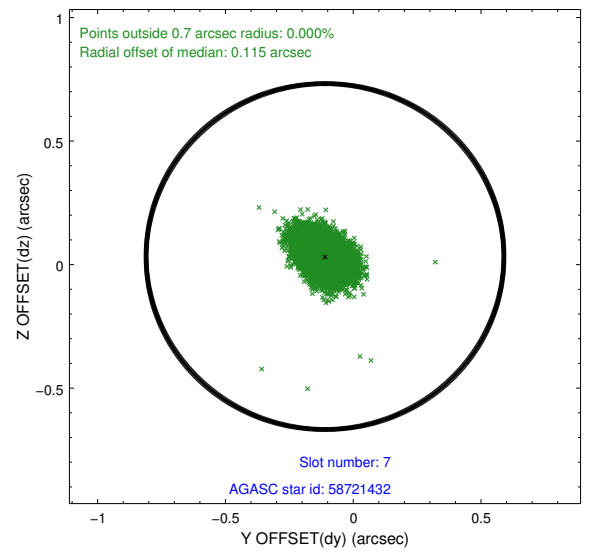
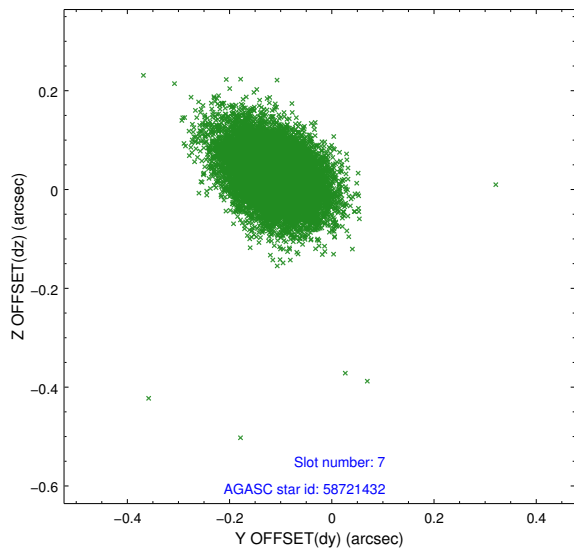
2.4.3 Slot 5



2.4.4 Slot 6

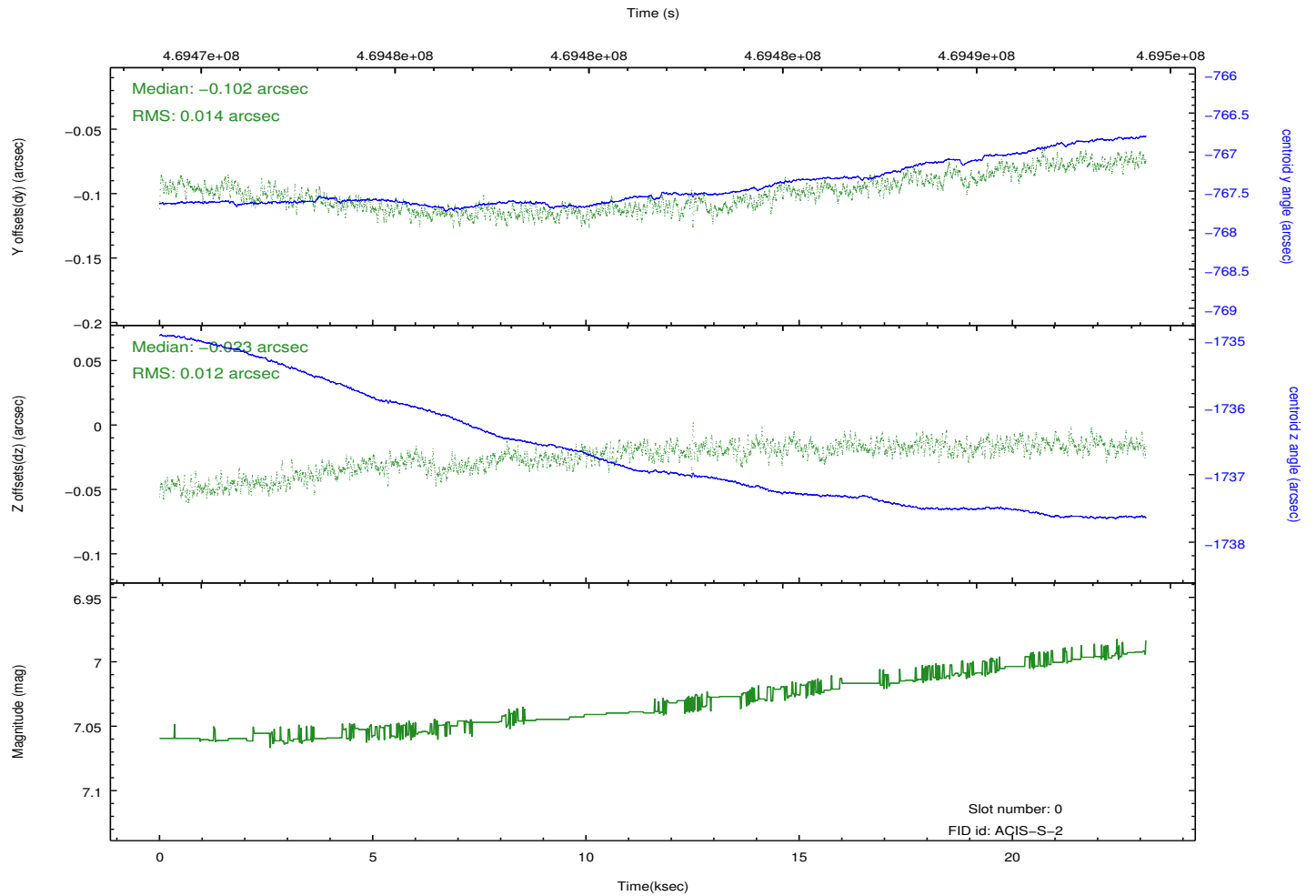
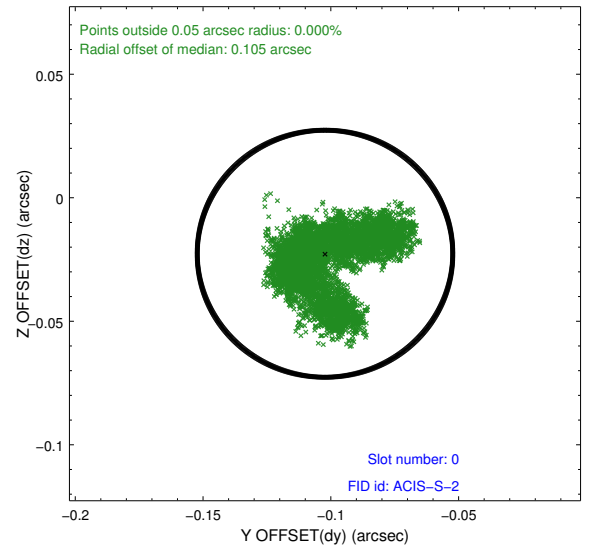
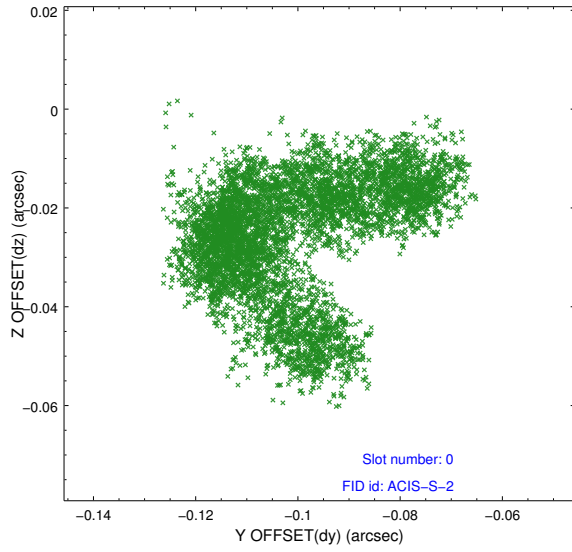


2.4.5 Slot 7

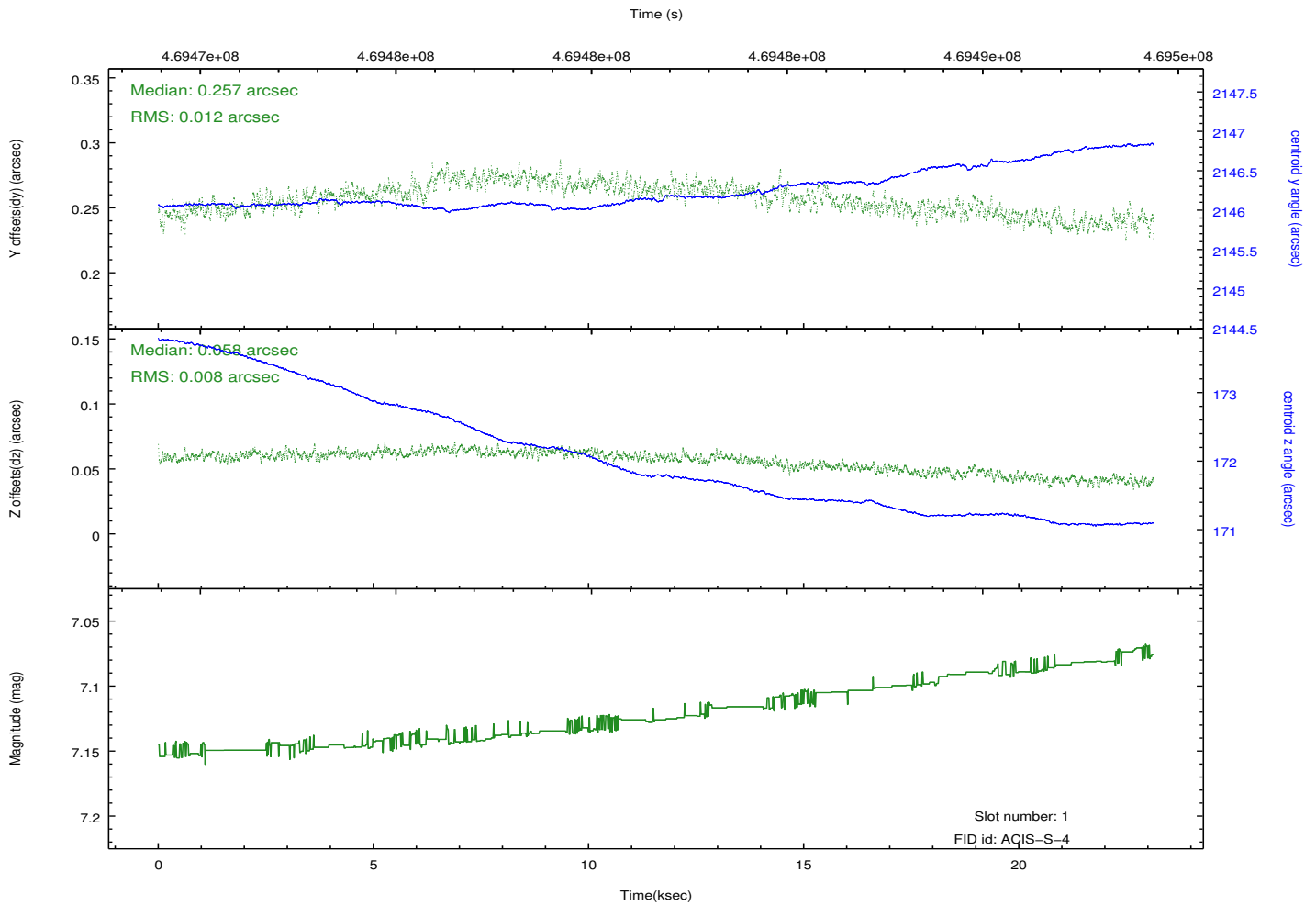
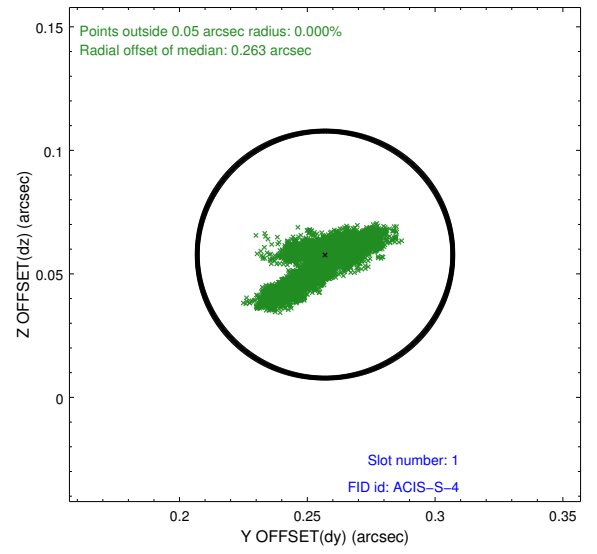
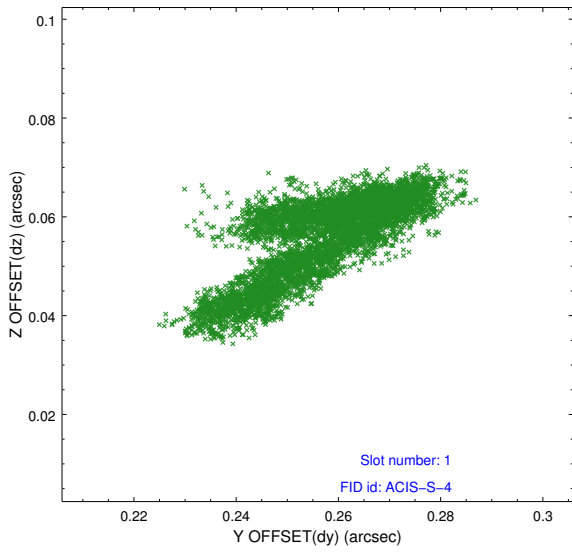


2.5 FID Slots

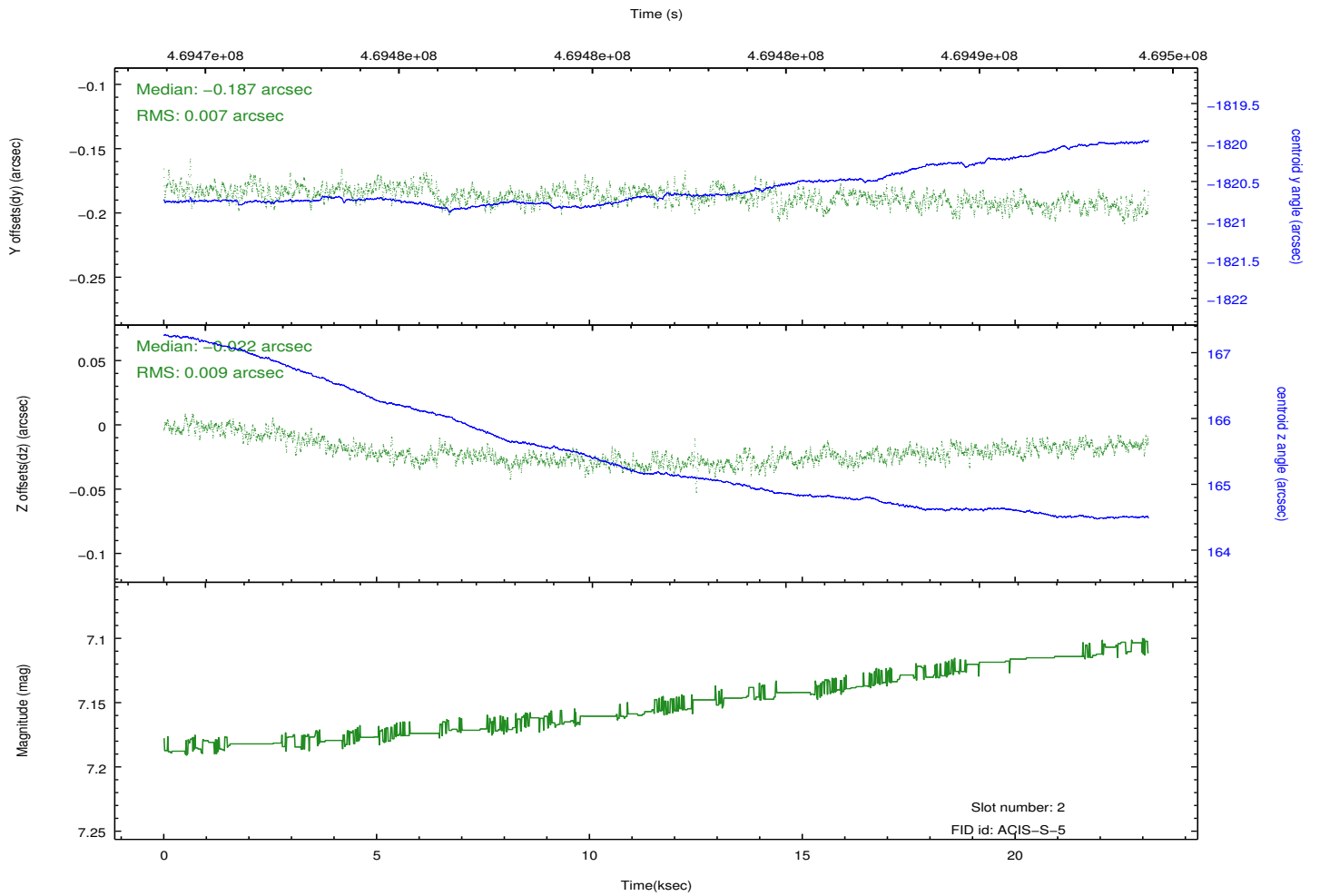
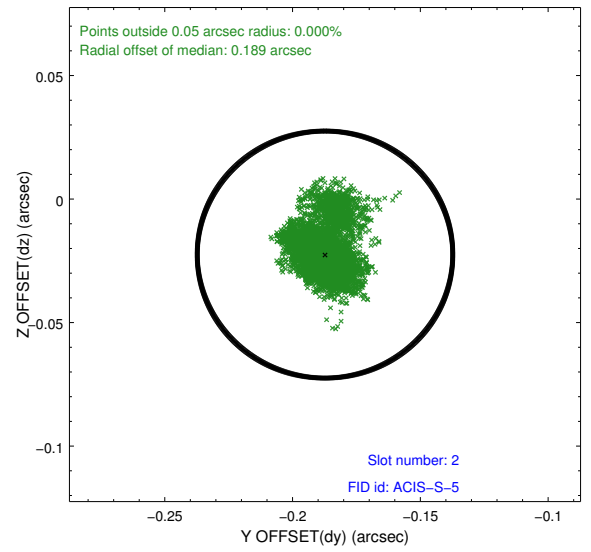
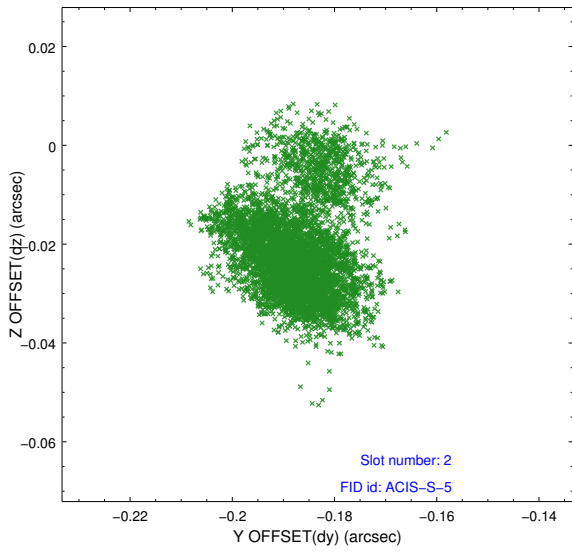
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2014.12.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	22.963199914515

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.