

V&V Reference Report

L2 ASCDS Version : 10.2.1

Observation 14828 - L2 Version 2
Chandra X-Ray Center

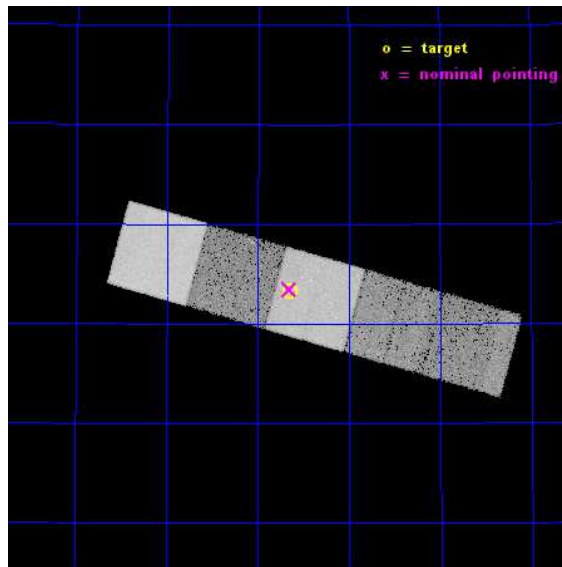
L2 Processing Date : Dec 9 2014

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1 Front

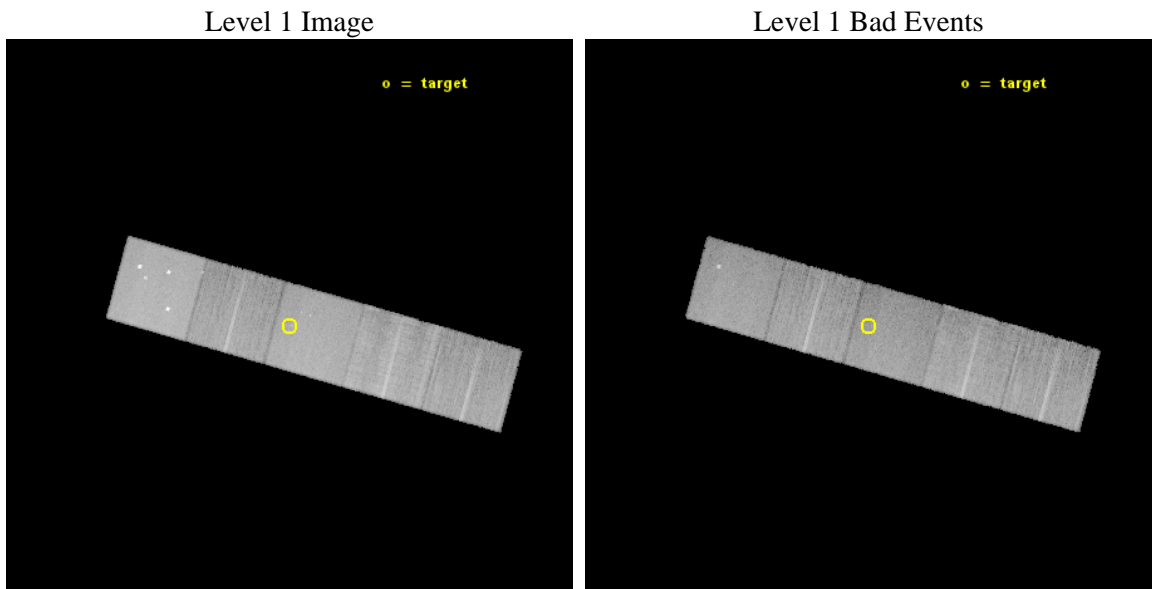
seq_num	501954	Sequence number
obs_id	14828	Observation id
title	Searching for X-ray counterparts of radio-quiet Fermi pulsars	Prop
observer	Dr. Martino Marelli	Principal investigator
object	PSR J1957+5033	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	299.412083	Observer's specified target RA [deg]
dec_targ	50.555	Observer's specified target Dec [deg]
ra_nom	299.41349998329	Nominal RA [deg]
dec_nom	50.55787992993	Nominal Dec [deg]
roll_nom	15.546304308335	Nominal Roll [deg]
revision	2	Processing version of data
ontime	25063.392765343	Sum of GTIs [s]
livetime	24735.921087463	Livetime [s]
ontime5	25063.35172534	Sum of GTIs [s]
ontime6	25057.028744578	Sum of GTIs [s]
ontime7	25063.392765343	Sum of GTIs [s]
ontime8	25060.128674984	Sum of GTIs [s]
ontime9	25060.087634981	Sum of GTIs [s]
l2events	206312	Number of level 2 events



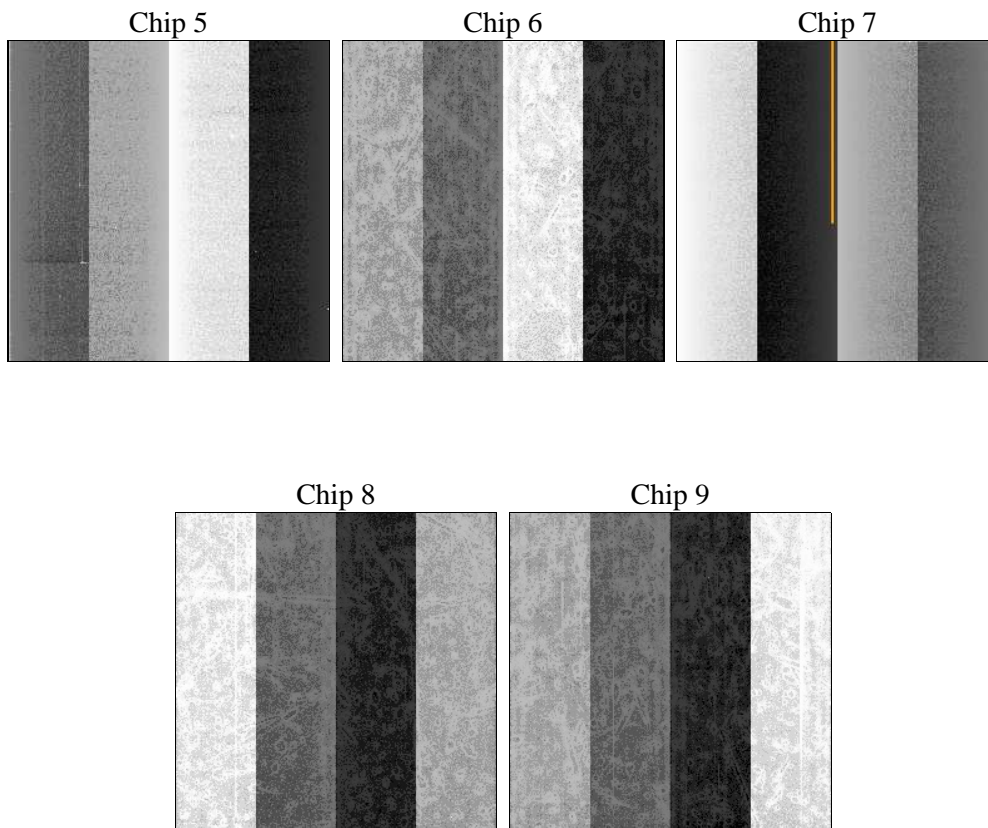
2 OBI

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	10.3.1	Processing system revision	ontime	25063.392765343	Sum of GTIs [s]
caldbver	4.6.4	 	ontime5	25063.35172534	Sum of GTIs [s]
date	2014-12-10T02:33:15	Date and time of file creation	ontime6	25057.028744578	Sum of GTIs [s]
revision	2	Processing version of data	ontime7	25063.392765343	Sum of GTIs [s]
			ontime8	25060.128674984	Sum of GTIs [s]
			ontime9	25060.087634981	Sum of GTIs [s]
			l1events	791881	Number of level 1 events

2.1.4 Events

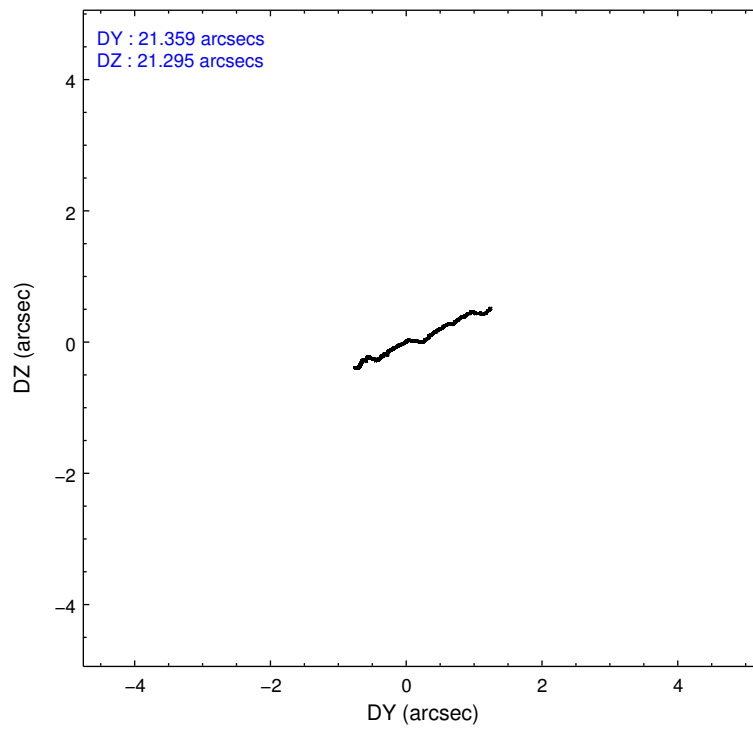
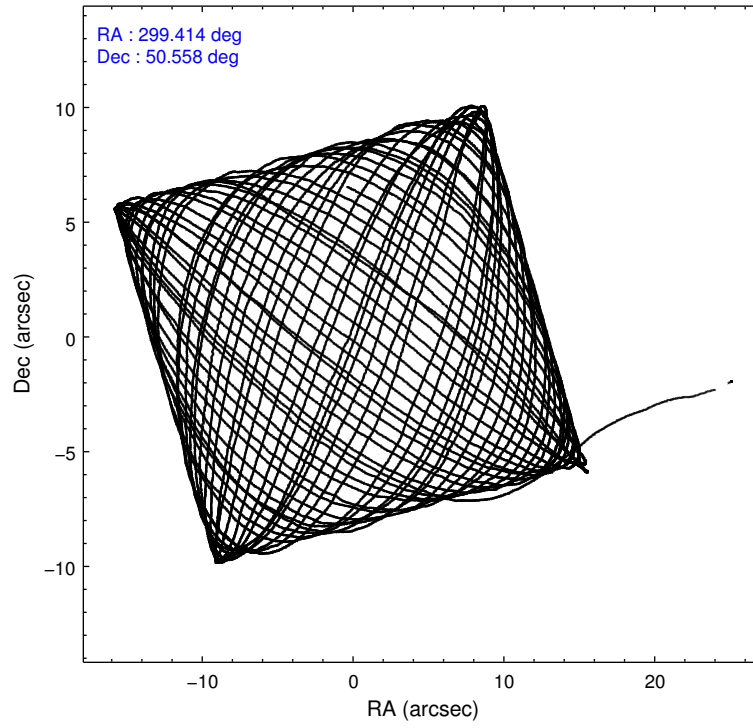
	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	209395	124057	166864	166129	125436
rejected events	105663	109345	93572	121270	109747
rejected %	50%	88%	56%	72%	87%

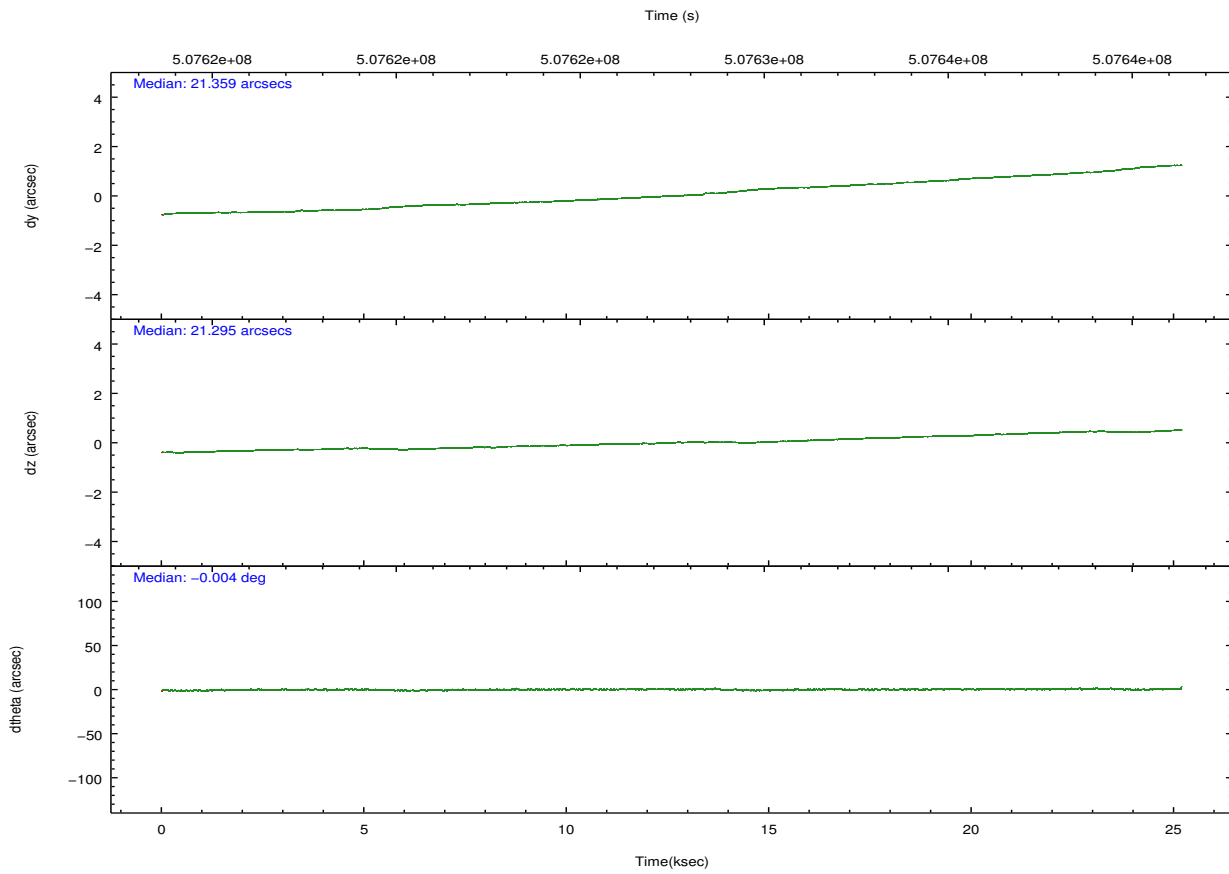
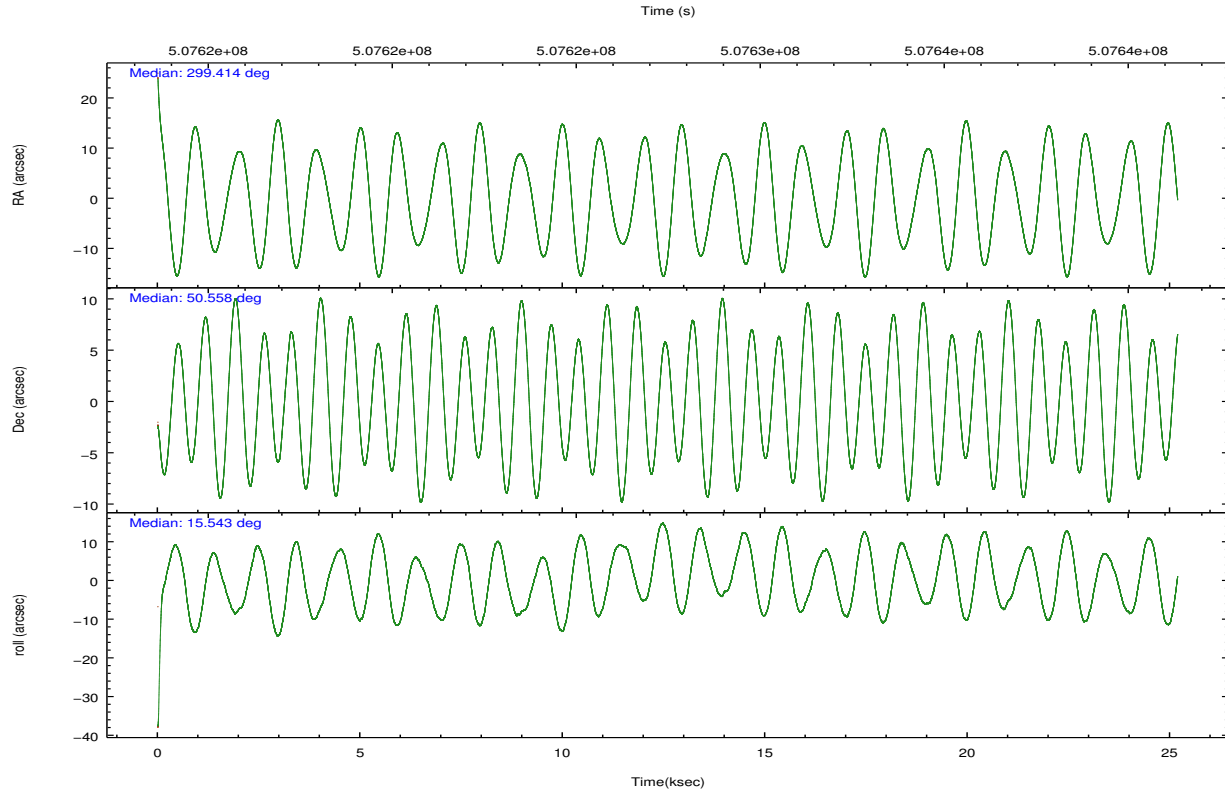
	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	15300	4774	6701	12927	5442
	7%	3%	4%	7%	4%
grade 1 events	1361	60	202	128	83
	0%	0%	0%	0%	0%
grade 2 events	29625	3456	15209	10979	3444
	14%	2%	9%	6%	2%
grade 3 events	3399	1521	6438	4361	1639
	1%	1%	3%	2%	1%
grade 4 events	3482	1564	6494	4175	1605
	1%	1%	3%	2%	1%
grade 5 events	15404	6418	17329	9258	7230
	7%	5%	10%	5%	5%
grade 6 events	51948	3402	38466	12423	3564
	24%	2%	23%	7%	2%
grade 7 events	88876	102862	76025	111878	102429
	42%	82%	45%	67%	81%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-56789	ACIS-56789	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	299.383766	299.4134999832852	CCD I2 on	N	N
[deg] Pointing Dec	50.538122	50.55787992992975	CCD I3 on	N	N
[deg] Pointing Roll	15.412656	15.54630430833514	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	Y	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	Y	Y
[s] Observation start time (MET)	507615082.184000	507613889.62952	CCD S5 on	O2	Y
Observation start date	2014-02-01T04:10:15	2014-02-01T03:51:29	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	507640082.184000	507641053.15602	On-chip summing requested	N	N
Observation end date	2014-02-01T11:06:55	2014-02-01T11:24:13	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





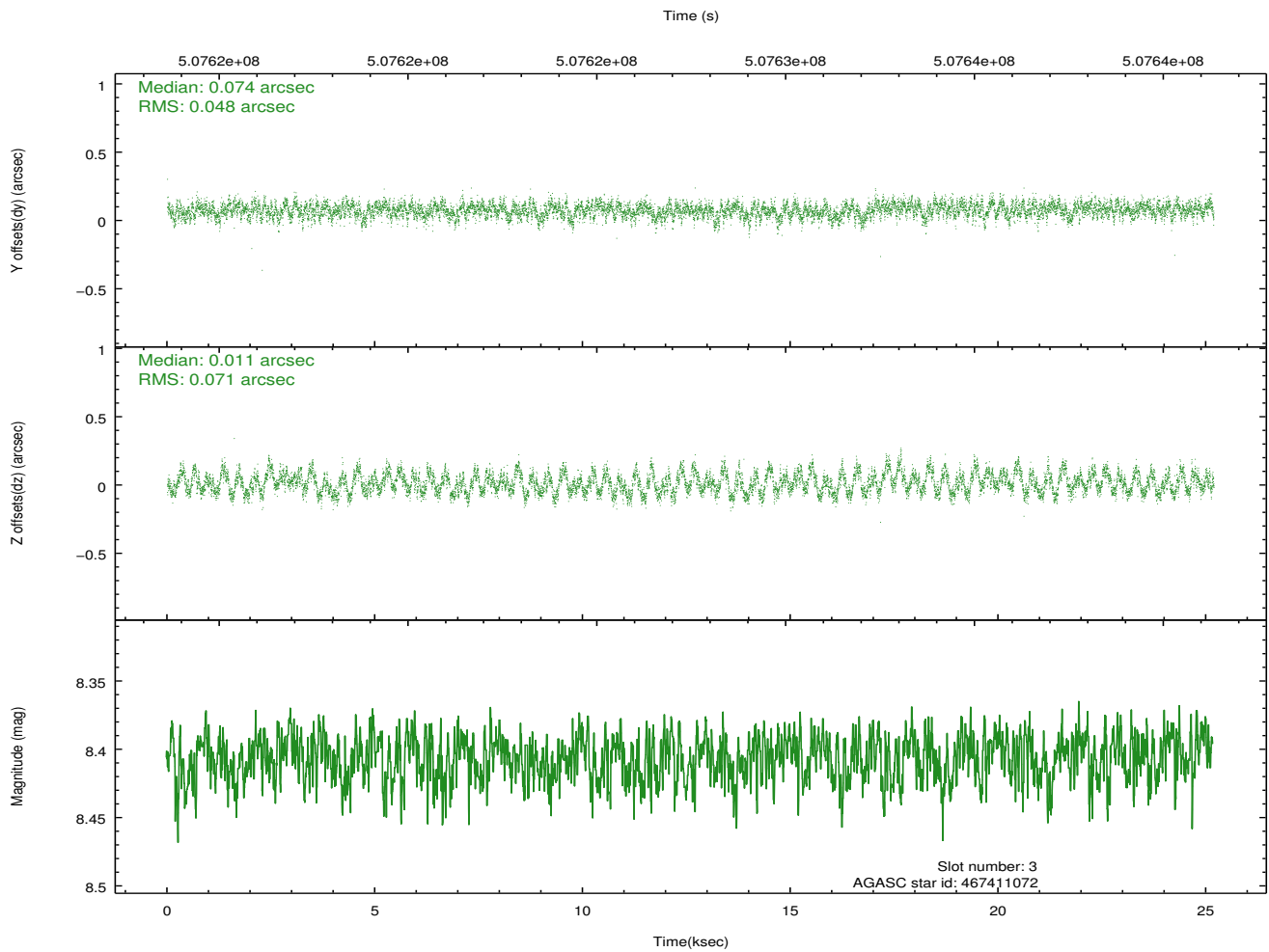
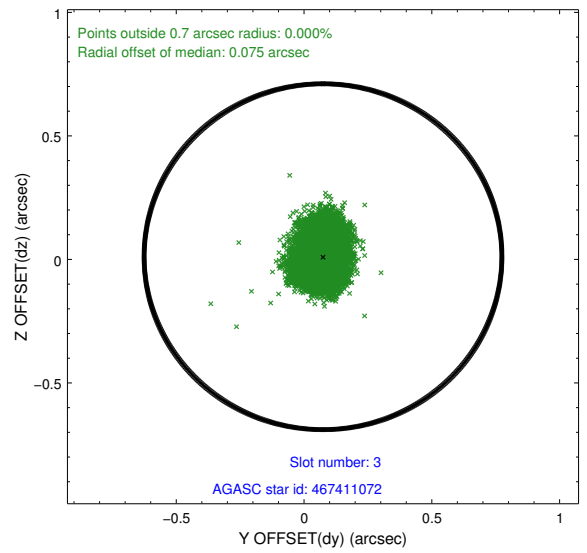
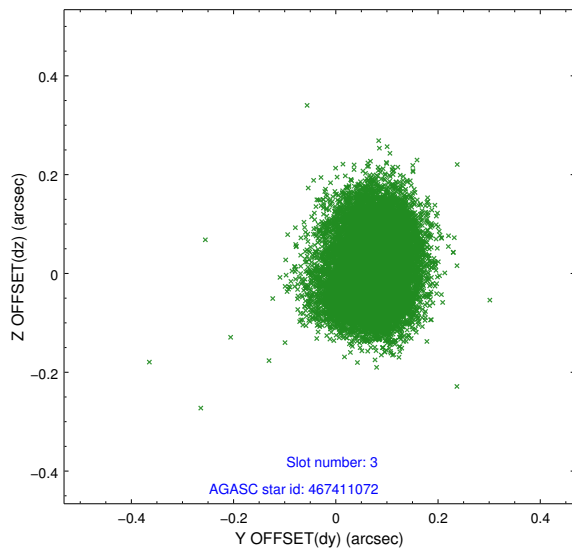
Slot Statistics

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	6144	-0.101	0.009	0.018	0.025	0.000000	0.000000	-774.71	-1742.74
1	FID		ACIS-S-4	7.02	6144	0.192	0.047	0.010	0.030	0.000000	0.000000	2138.82	165.64
2	FID		ACIS-S-5	7.05	6144	-0.119	-0.046	0.023	0.052	0.000000	0.000000	-1827.42	159.37
3	GUIDE	used	467411072	8.41	12285	0.074	0.011	0.093	0.144	298.436537	50.396543	-2227.16	99.73
4	GUIDE	used	467930312	6.89	12286	0.015	-0.152	0.065	0.103	299.779562	50.663079	990.73	196.15
5	GUIDE	used	467932360	8.62	12284	-0.165	-0.189	0.104	0.176	299.551618	51.021796	829.26	1578.02
6	GUIDE	used	467946464	6.95	12283	0.058	0.077	0.086	0.144	299.188214	50.902518	-78.89	1383.61
7	GUIDE	used	467410104	9.22	12270	0.003	0.266	0.167	0.319	299.765916	50.291127	611.81	-1088.10

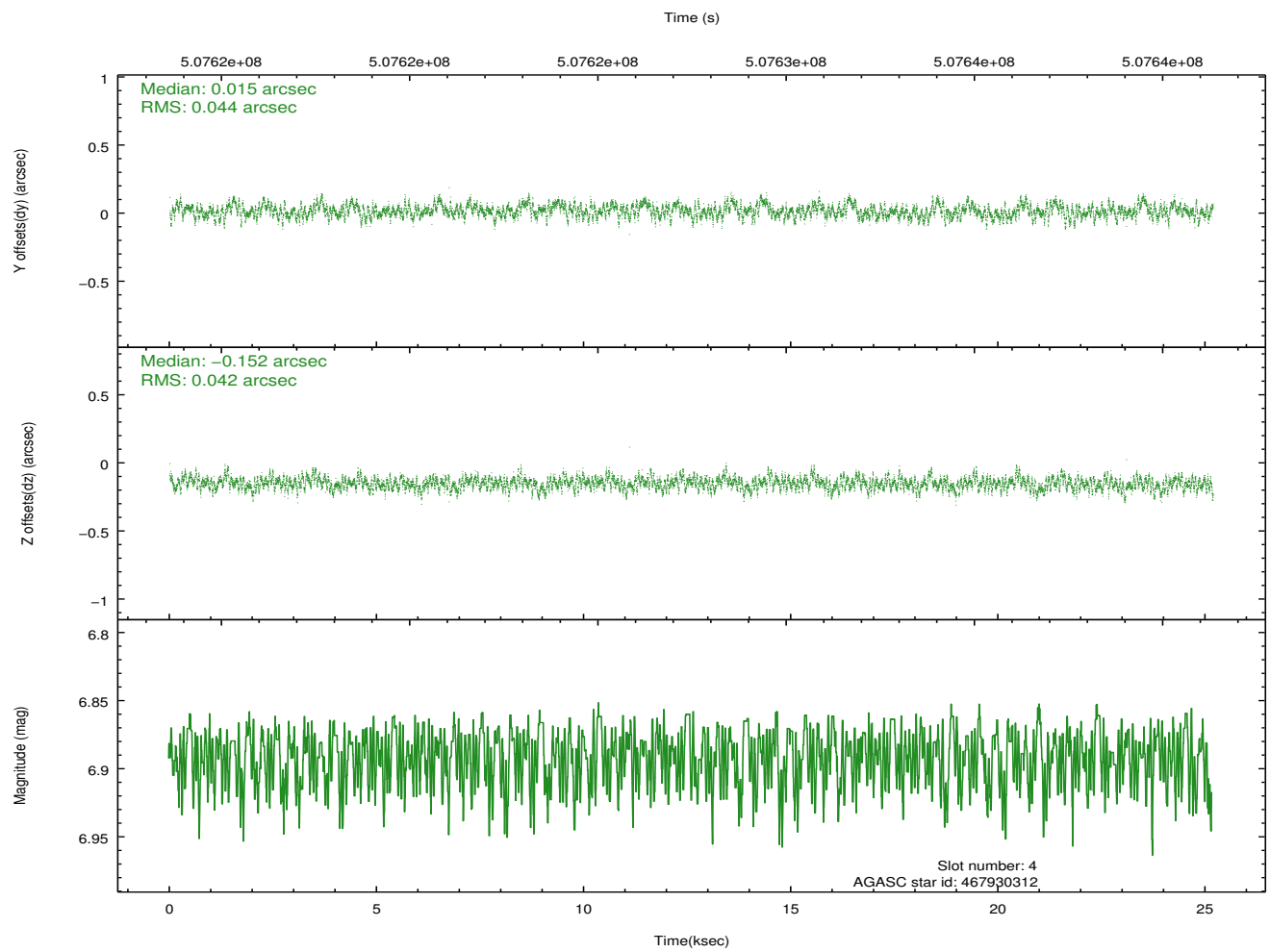
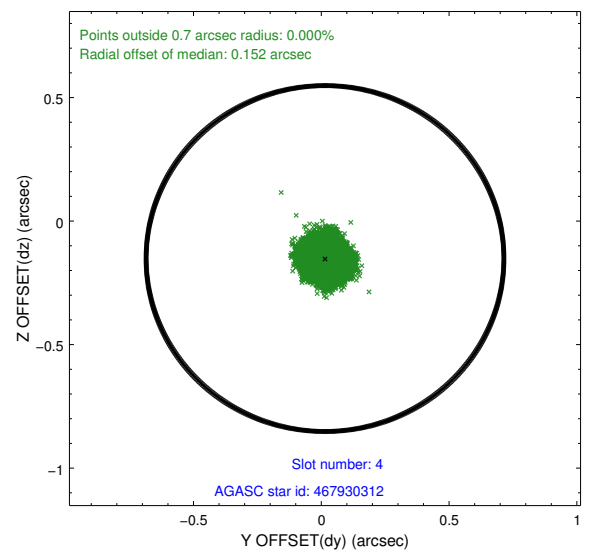
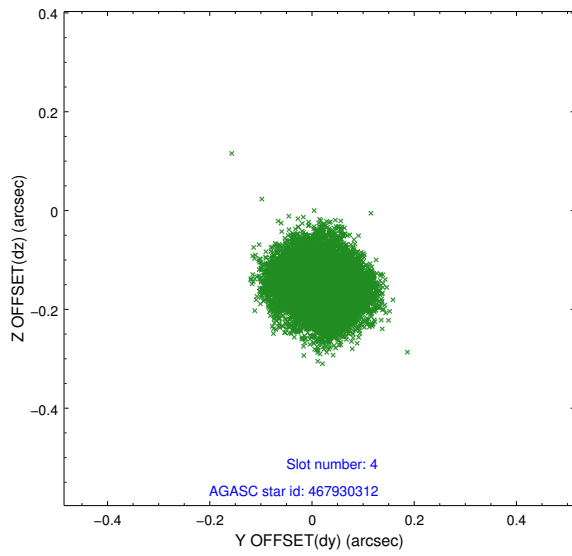
∞

2.4 Star Slots

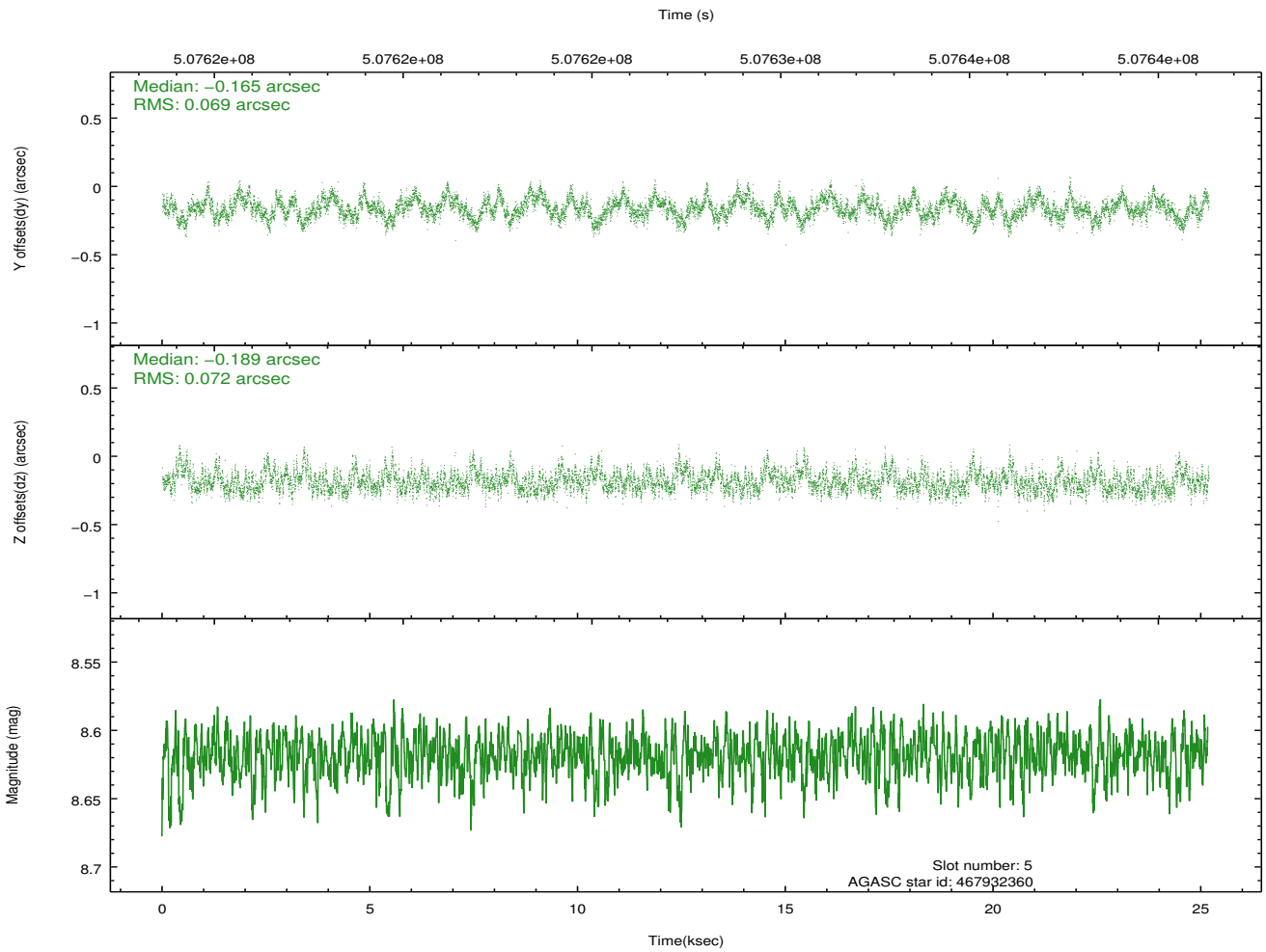
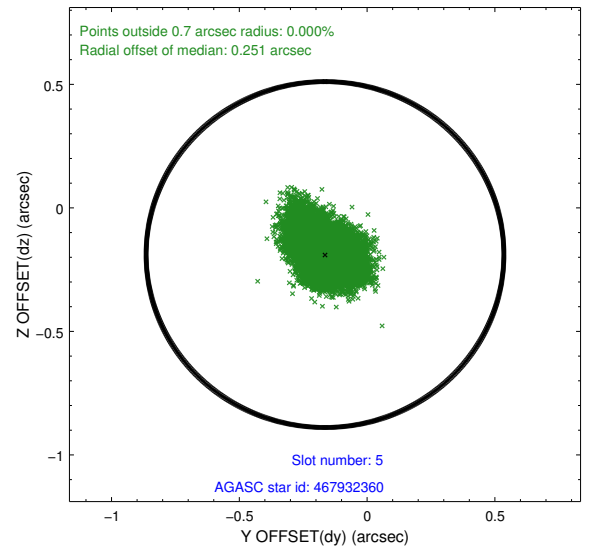
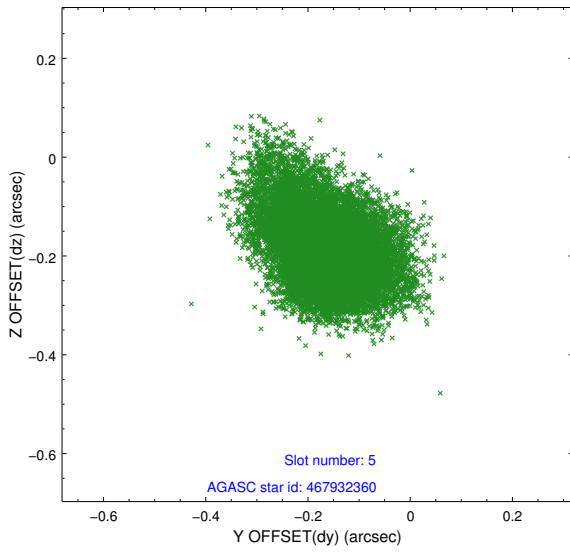
2.4.1 Slot 3



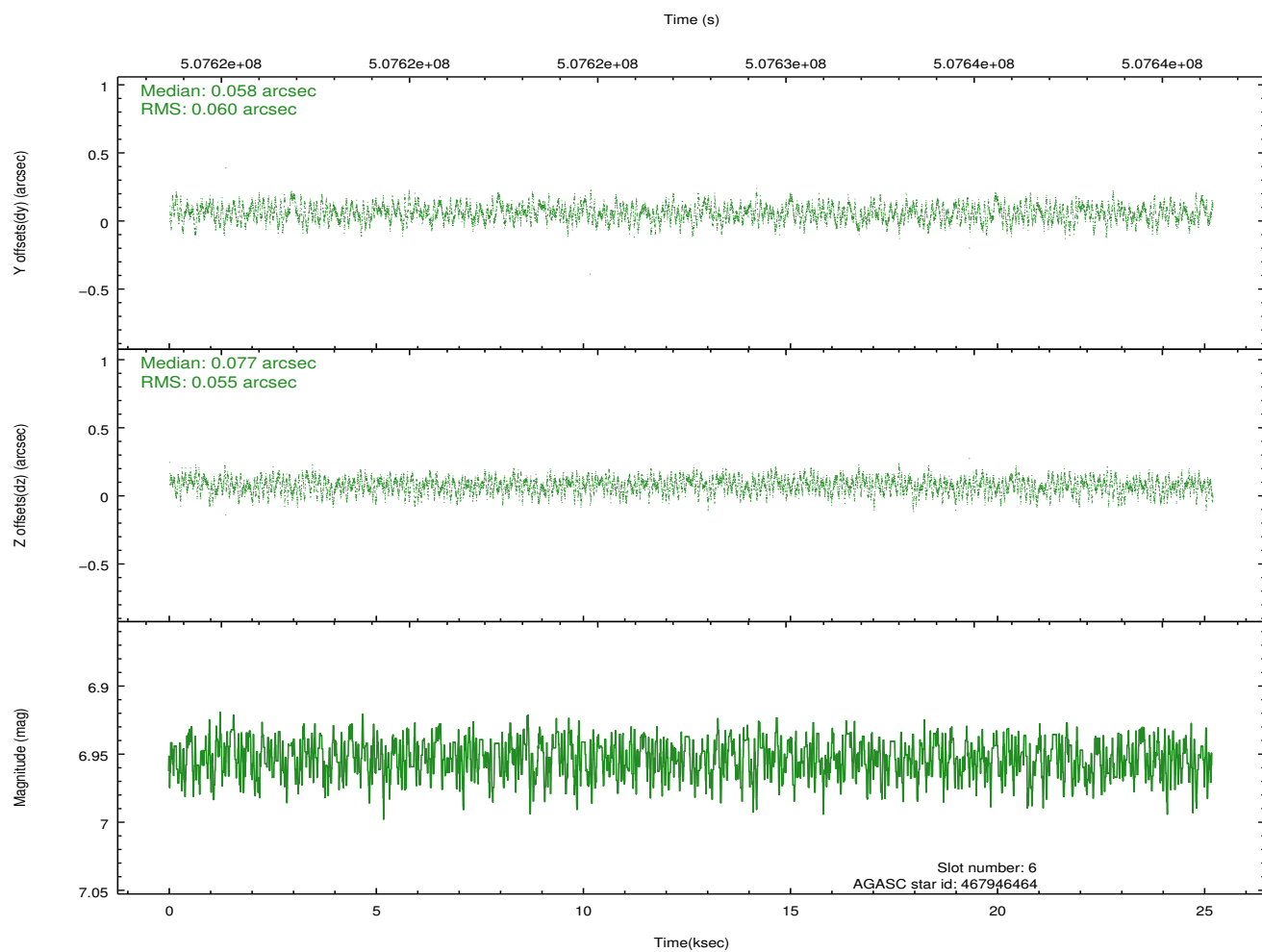
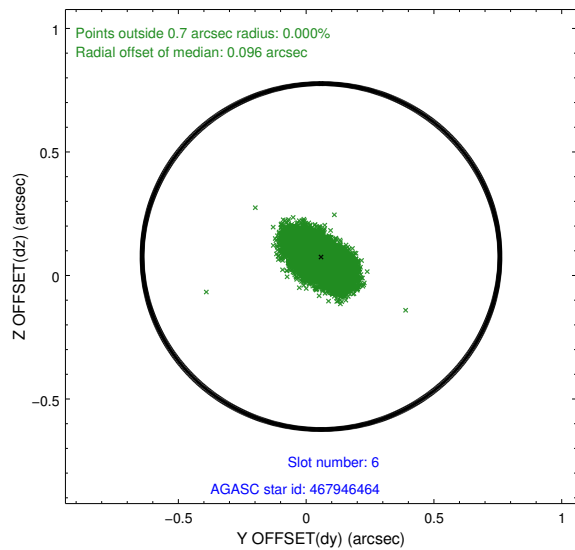
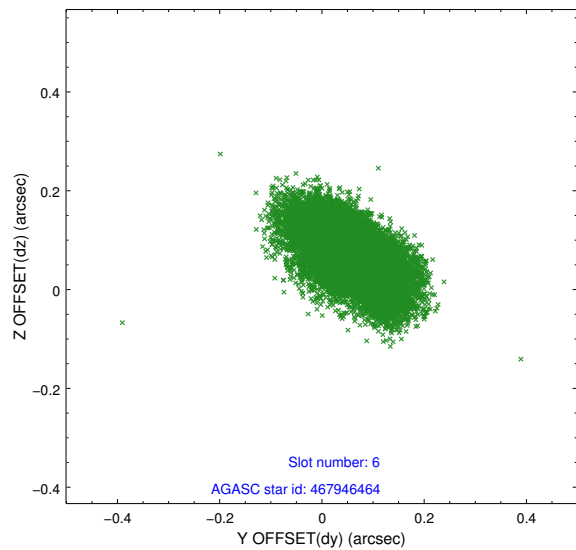
2.4.2 Slot 4



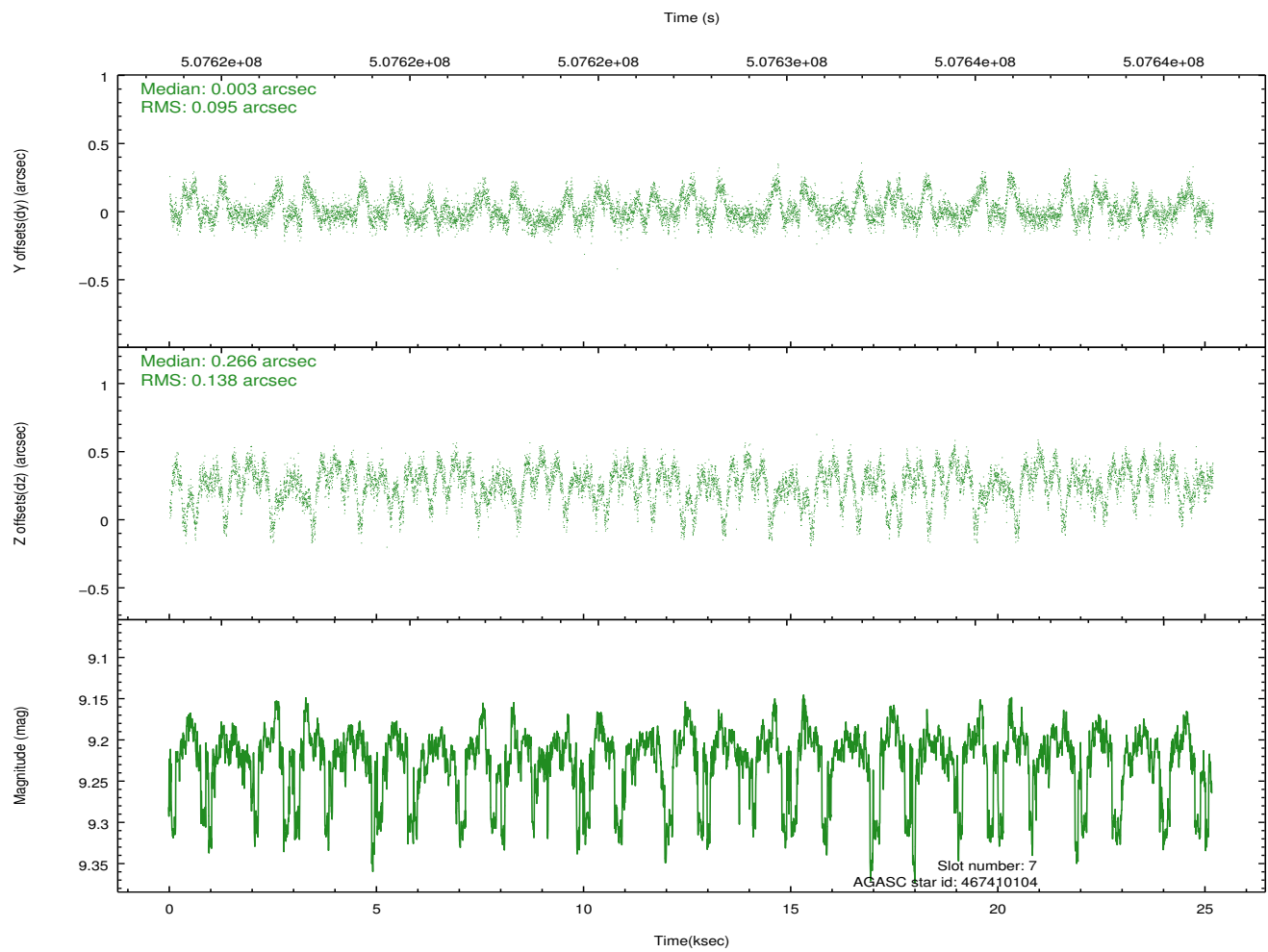
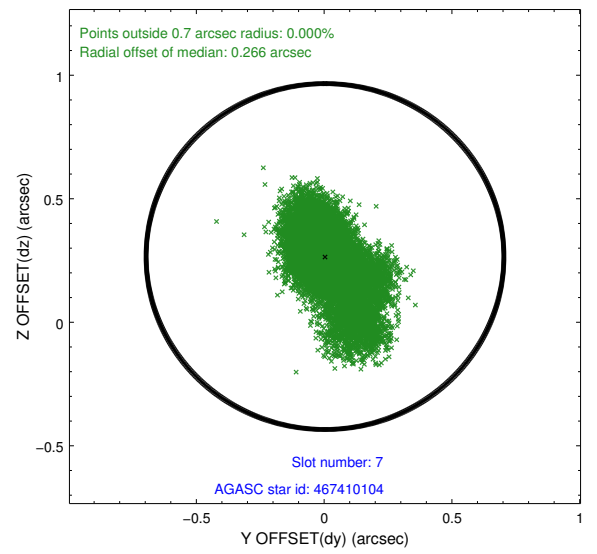
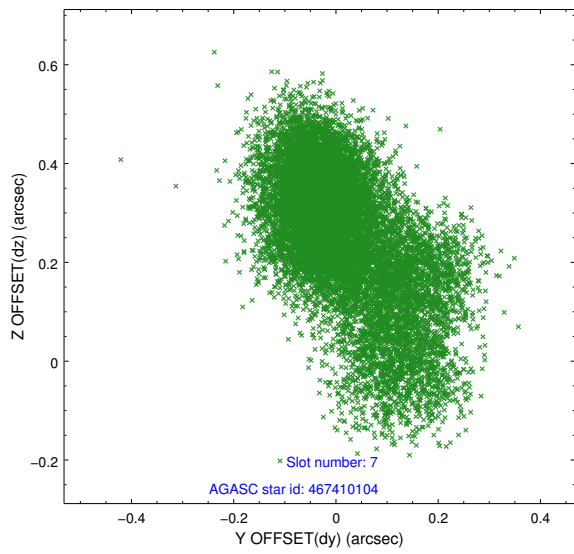
2.4.3 Slot 5



2.4.4 Slot 6

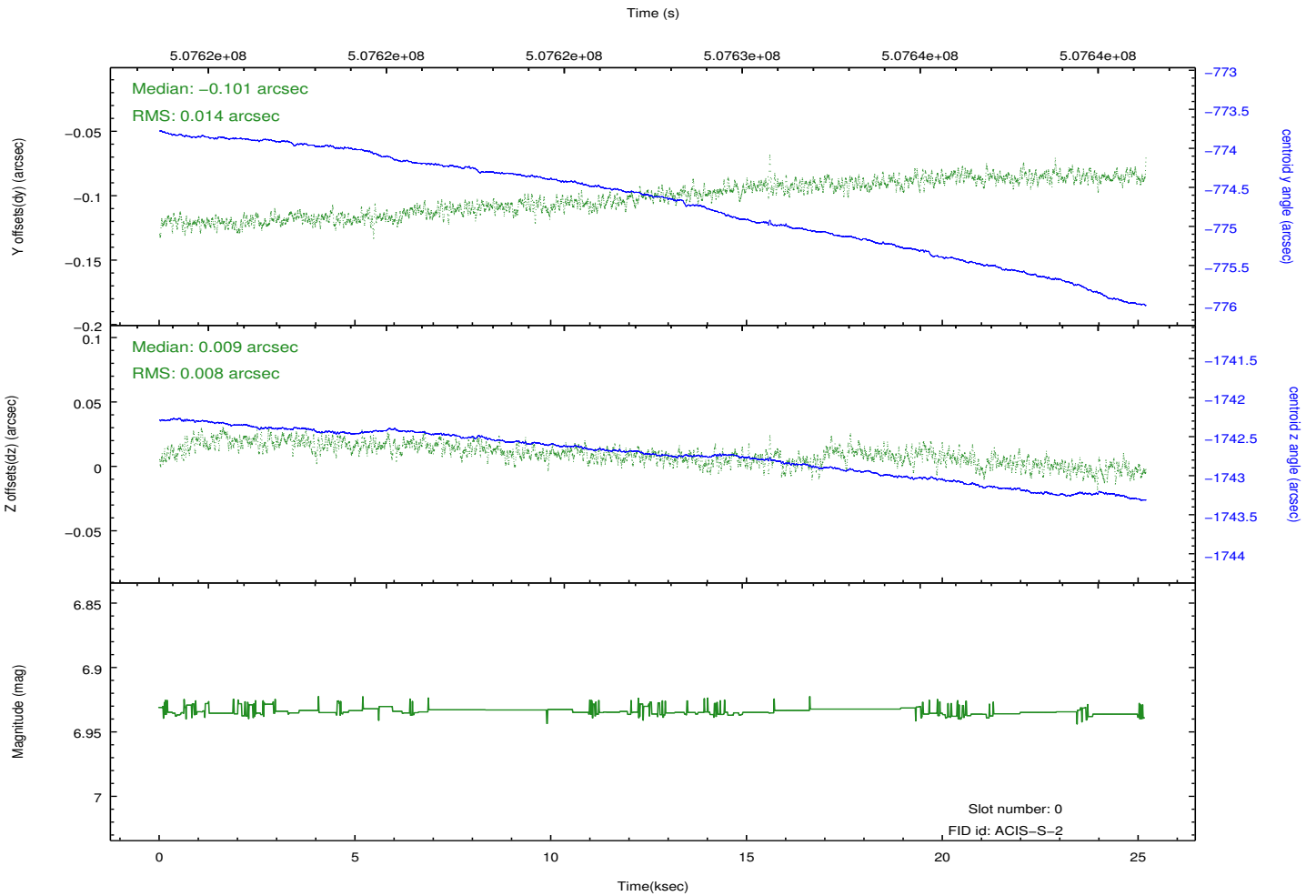
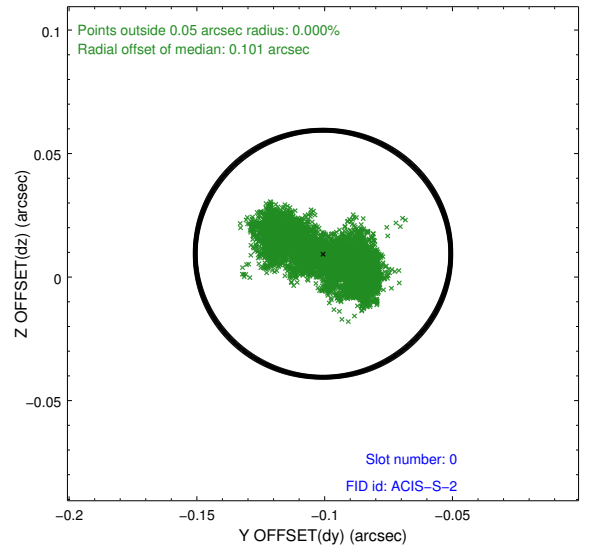
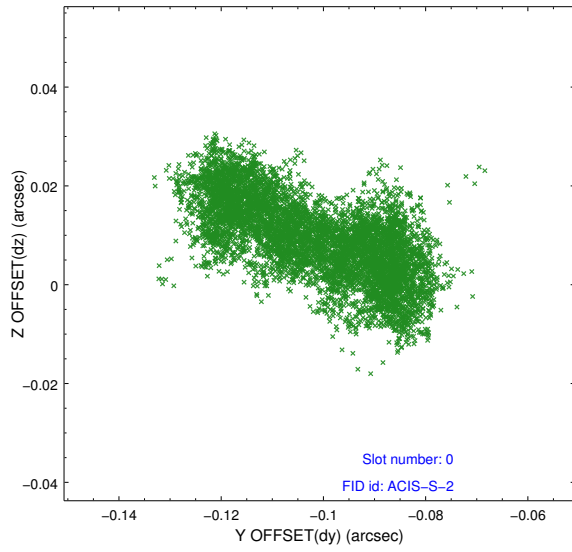


2.4.5 Slot 7

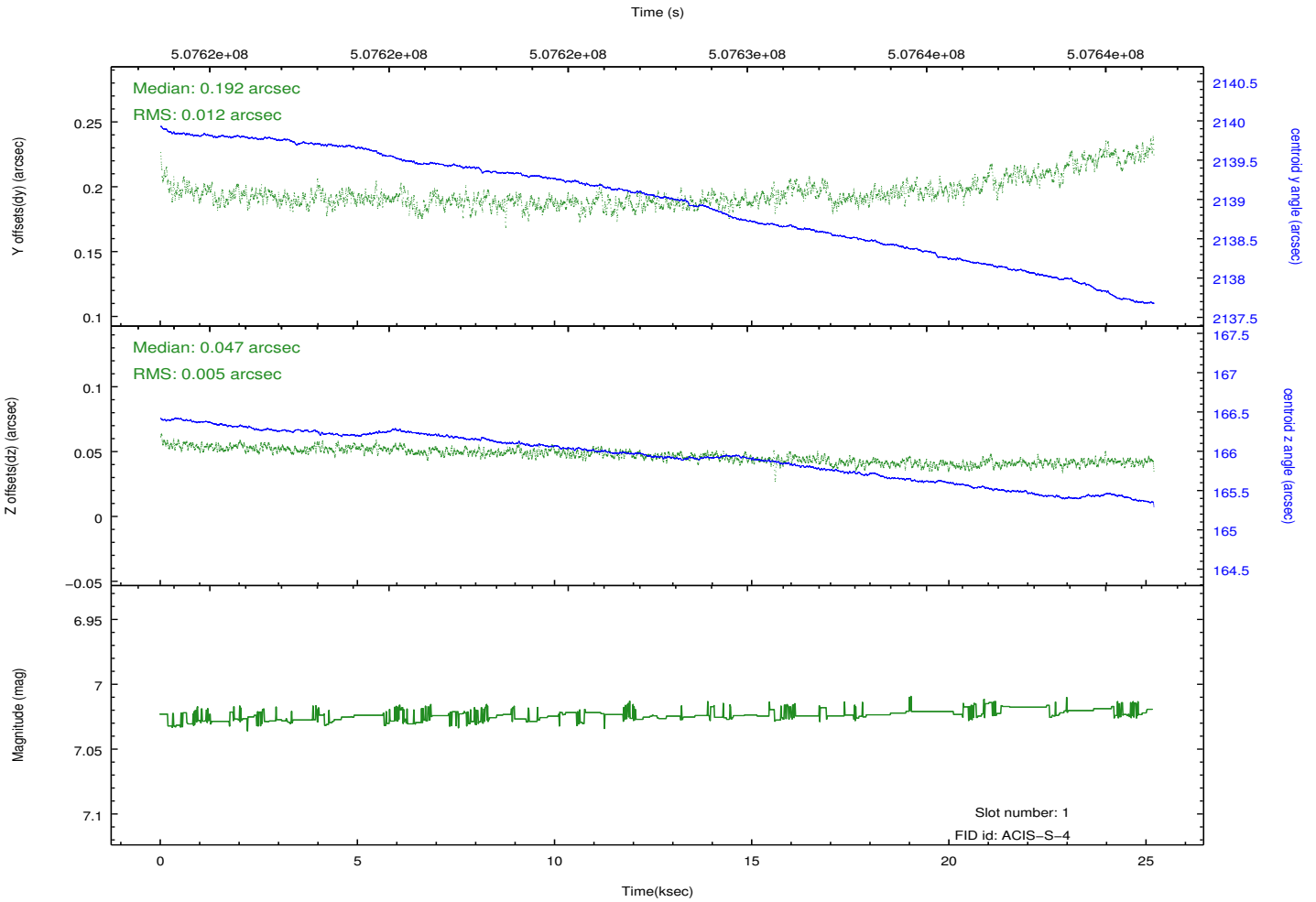
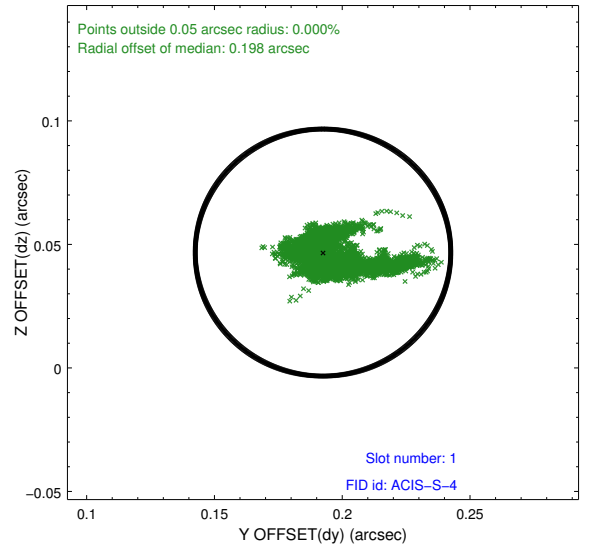
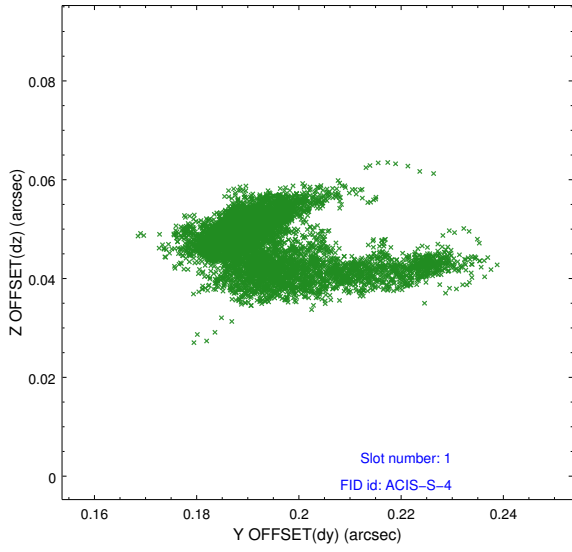


2.5 FID Slots

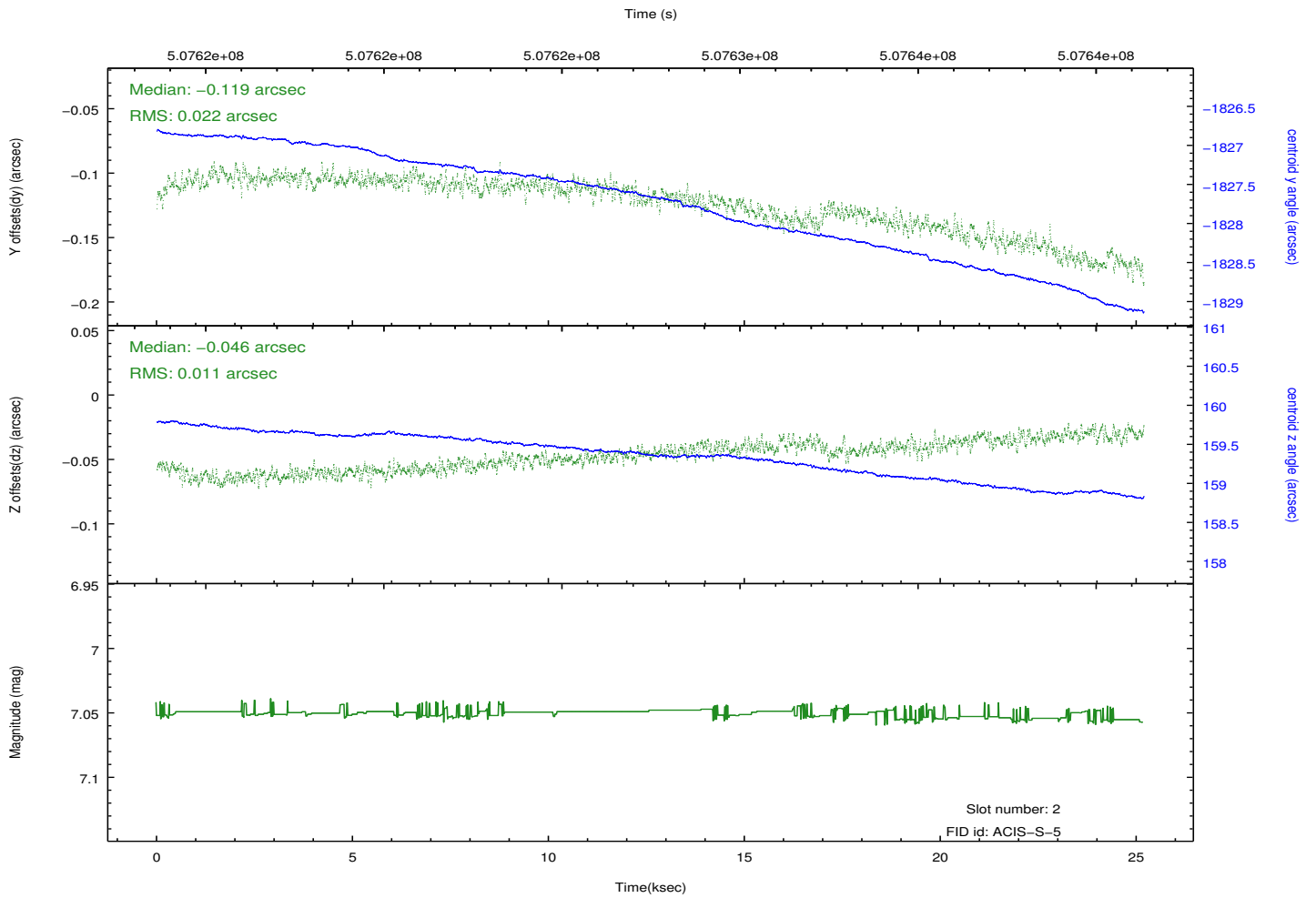
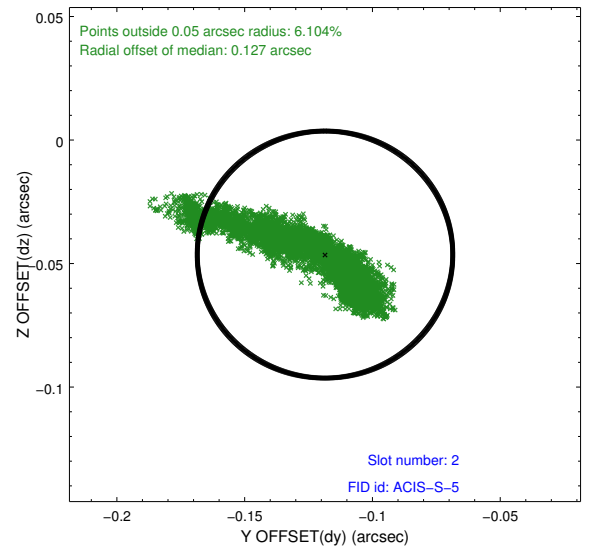
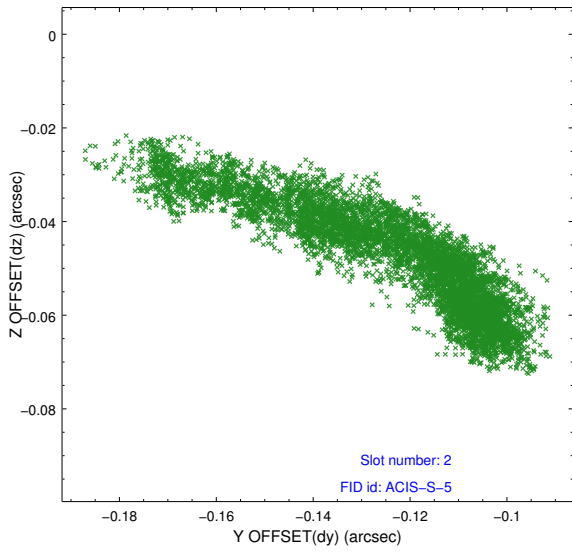
2.5.1 Slot 0



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)	2014.12.17
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	25.063392765343

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.