

V&V Reference Report

L2 ASCDS Version : 10.1.1

Observation 15971 - L2 Version 2
Chandra X-Ray Center

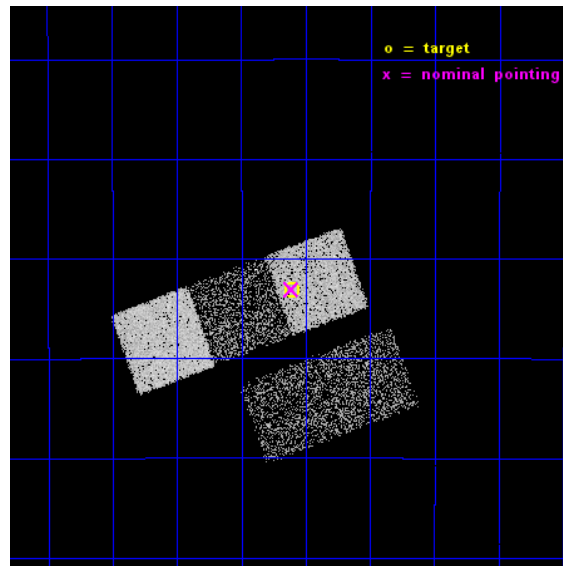
L2 Processing Date : Dec 9 2014

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1 Front

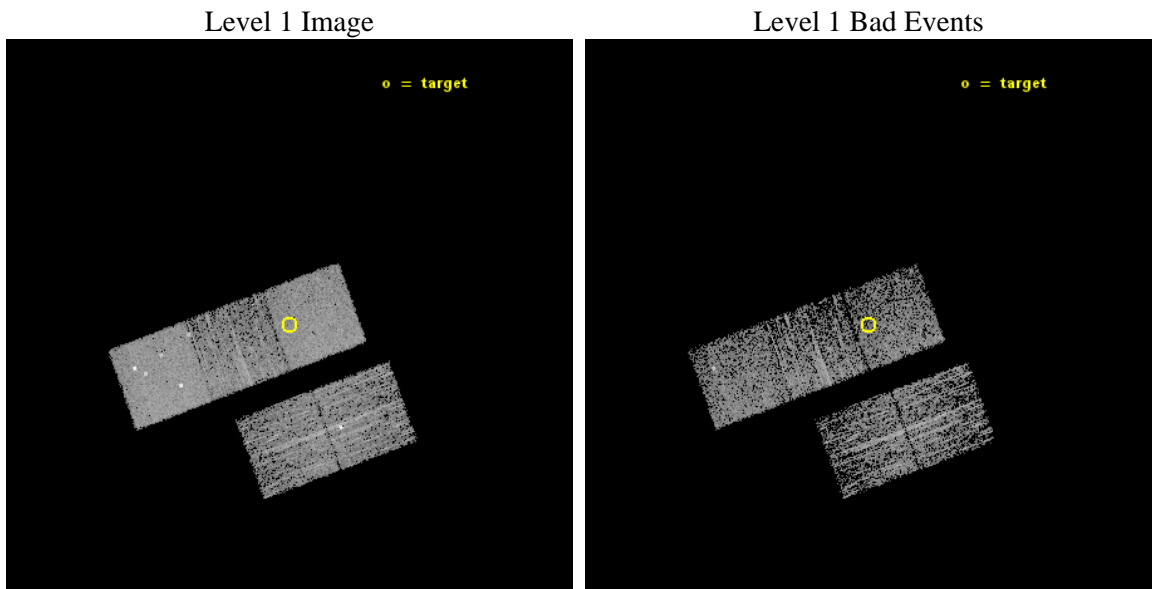
seq_num	502204	Sequence number
obs_id	15971	Observation id
title	Where Have All The Central Compact Objects Gone?	Proposal title
observer	Dr. Eric Gotthelf	Principal investigator
object	PSR J0520-2553	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	80.150417	Observer's specified target RA [deg]
dec_targ	-25.886722	Observer's specified target Dec [deg]
ra_nom	80.152905625069	Nominal RA [deg]
dec_nom	-25.884854804824	Nominal Dec [deg]
roll_nom	339.71906053549	Nominal Roll [deg]
revision	2	Processing version of data
ontime	3563.8978286982	Sum of GTIs [s]
livetime	3517.3328798628	Livetime [s]
ontime2	3563.733668685	Sum of GTIs [s]
ontime3	3563.7747086883	Sum of GTIs [s]
ontime5	3563.8567886949	Sum of GTIs [s]
ontime6	3563.8157486916	Sum of GTIs [s]
ontime7	3563.8978286982	Sum of GTIs [s]
l2events	28441	Number of level 2 events



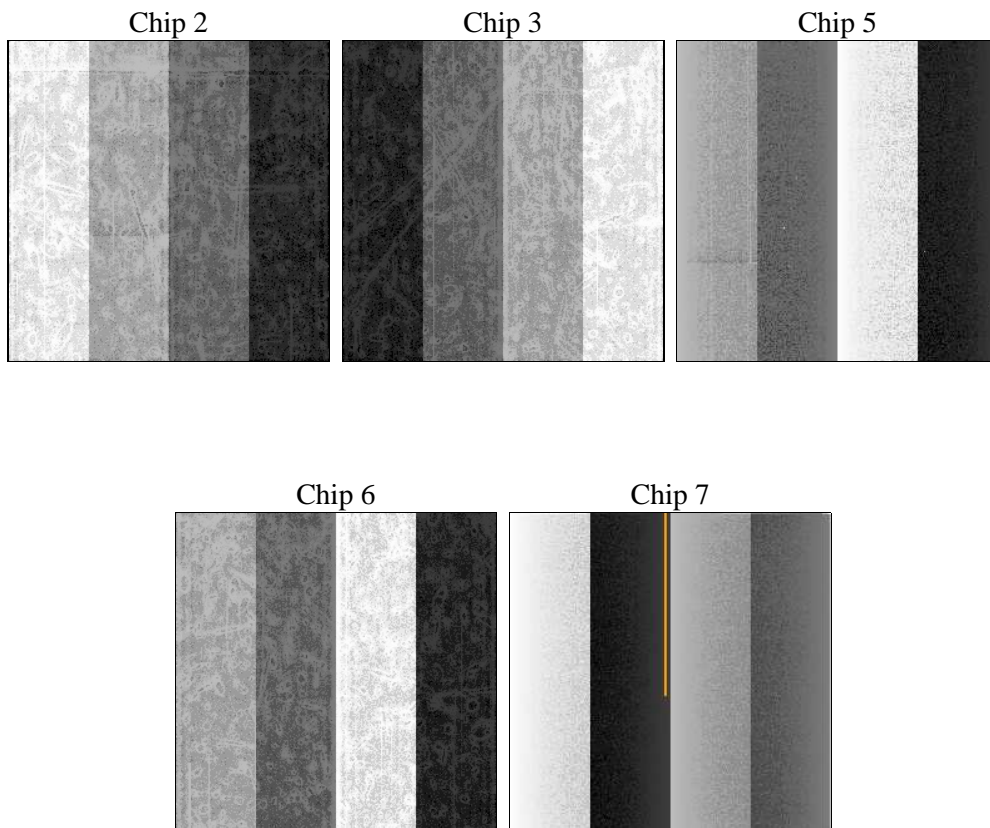
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	3500.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	3563.8978286982	Sum of GTIs [s]
caldbver	4.6.4	 	ontime2	3563.733668685	Sum of GTIs [s]
date	2014-12-09T08:37:27	Date and time of file creation	ontime3	3563.7747086883	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	3563.8567886949	Sum of GTIs [s]
			ontime6	3563.8157486916	Sum of GTIs [s]
			ontime7	3563.8978286982	Sum of GTIs [s]
			l1events	109906	Number of level 1 events

2.1.4 Events

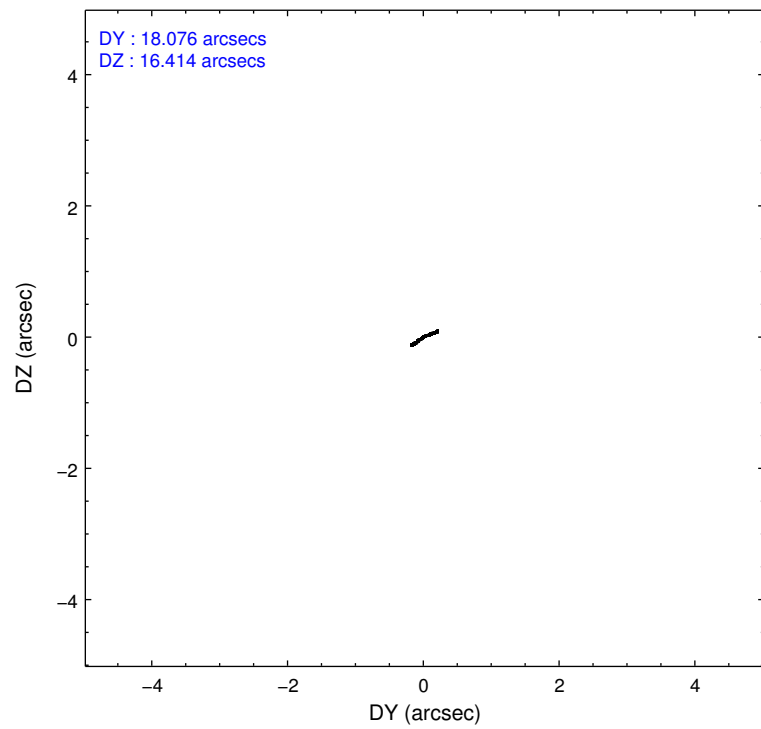
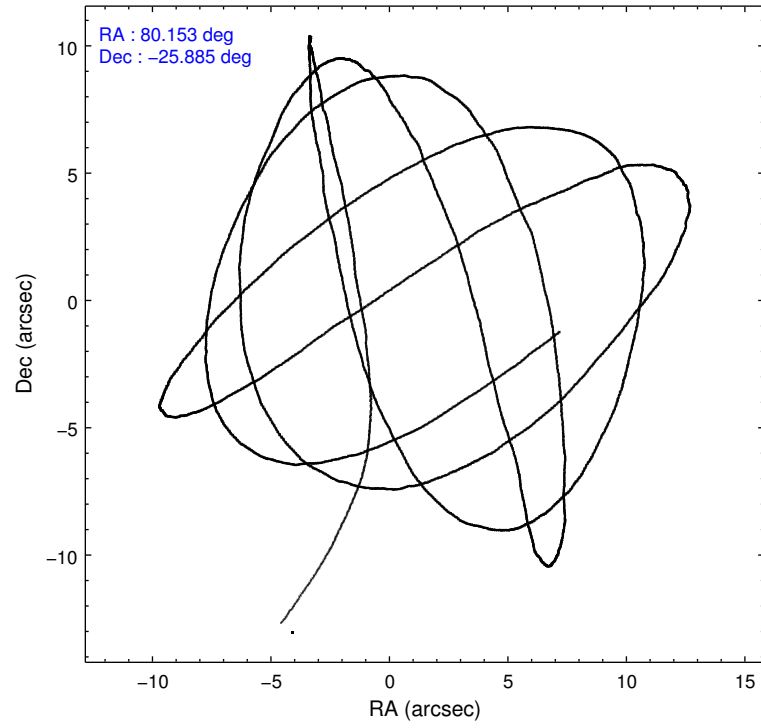
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	16922	19447	31429	17749	24359
rejected events	14999	16363	15270	15630	13999
rejected %	88%	84%	48%	88%	57%

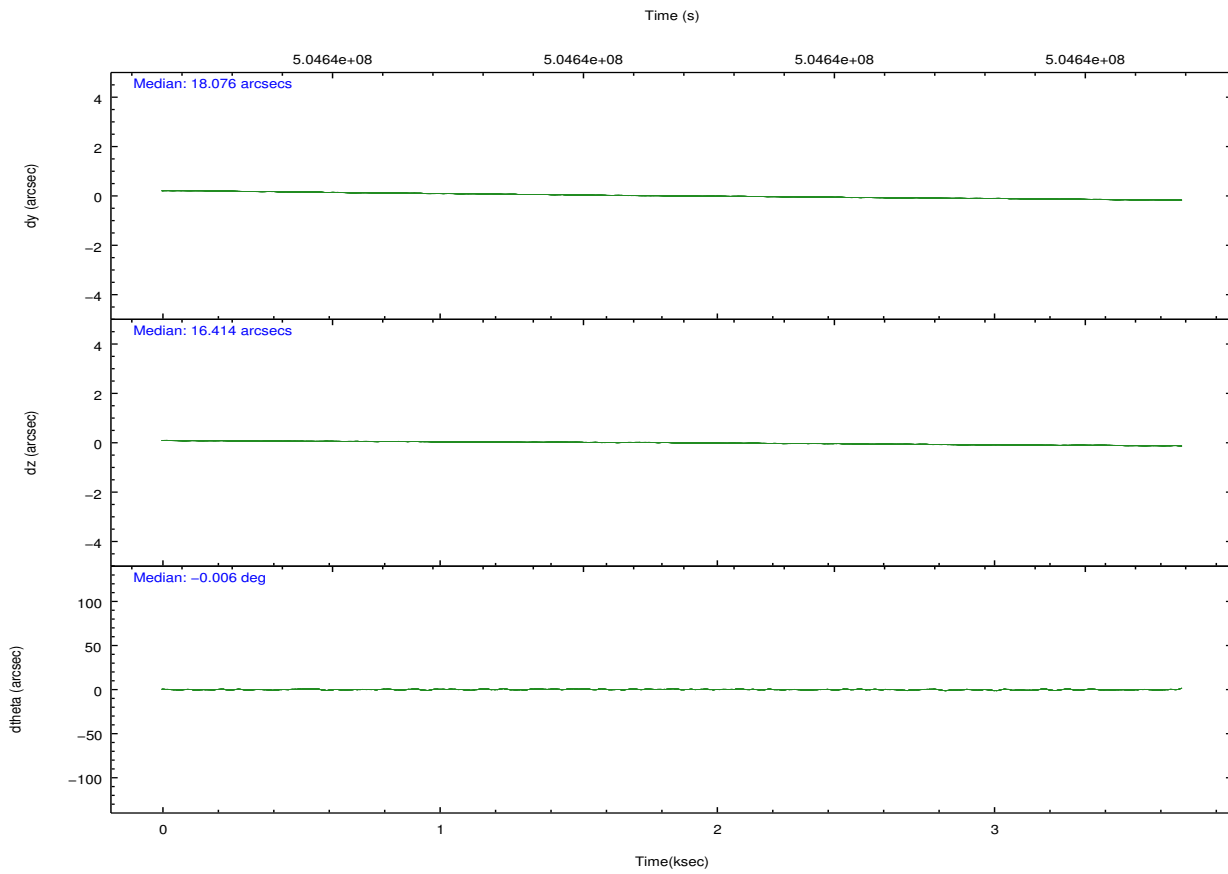
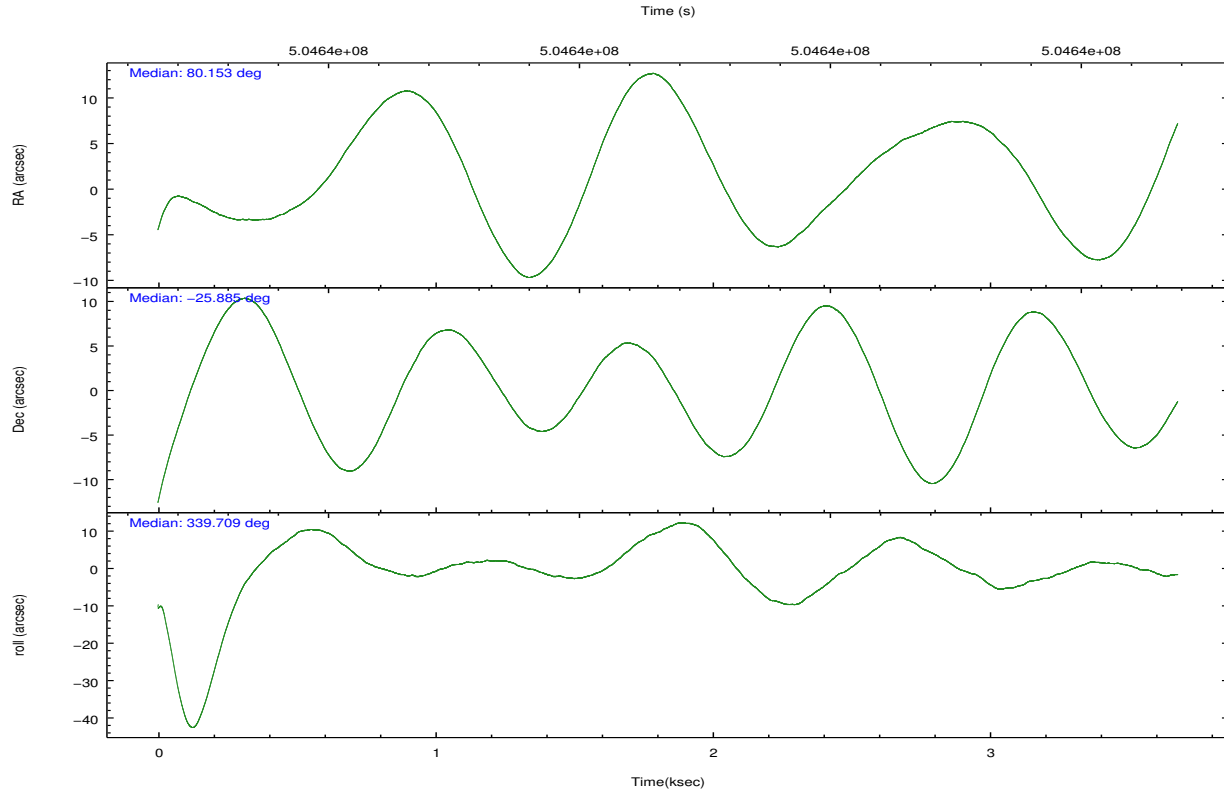
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	658	1837	2868	671	880
	3%	9%	9%	3%	3%
grade 1 events	11	12	286	7	19
	0%	0%	0%	0%	0%
grade 2 events	510	421	4650	510	2174
	3%	2%	14%	2%	8%
grade 3 events	183	202	434	223	830
	1%	1%	1%	1%	3%
grade 4 events	202	202	439	218	814
	1%	1%	1%	1%	3%
grade 5 events	750	897	1917	936	2344
	4%	4%	6%	5%	9%
grade 6 events	375	424	7786	499	5667
	2%	2%	24%	2%	23%
grade 7 events	14233	15452	13049	14685	11631
	84%	79%	41%	82%	47%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23567	ACIS-23567	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	80.123208	80.15290562506904	CCD I2 on	O2	Y
[deg] Pointing Dec	-25.889872	-25.88485480482444	CCD I3 on	O3	Y
[deg] Pointing Roll	339.549315	339.7190605354883	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	O4	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	N	N
[s] Observation start time (MET)	504640688.184000	504639496.29101	CCD S5 on	N	N
Observation start date	2013-12-28T17:57:01	2013-12-28T17:38:16	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	504644188.184000	504644831.9288	On-chip summing requested	N	N
Observation end date	2013-12-28T18:55:21	2013-12-28T19:07:11	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





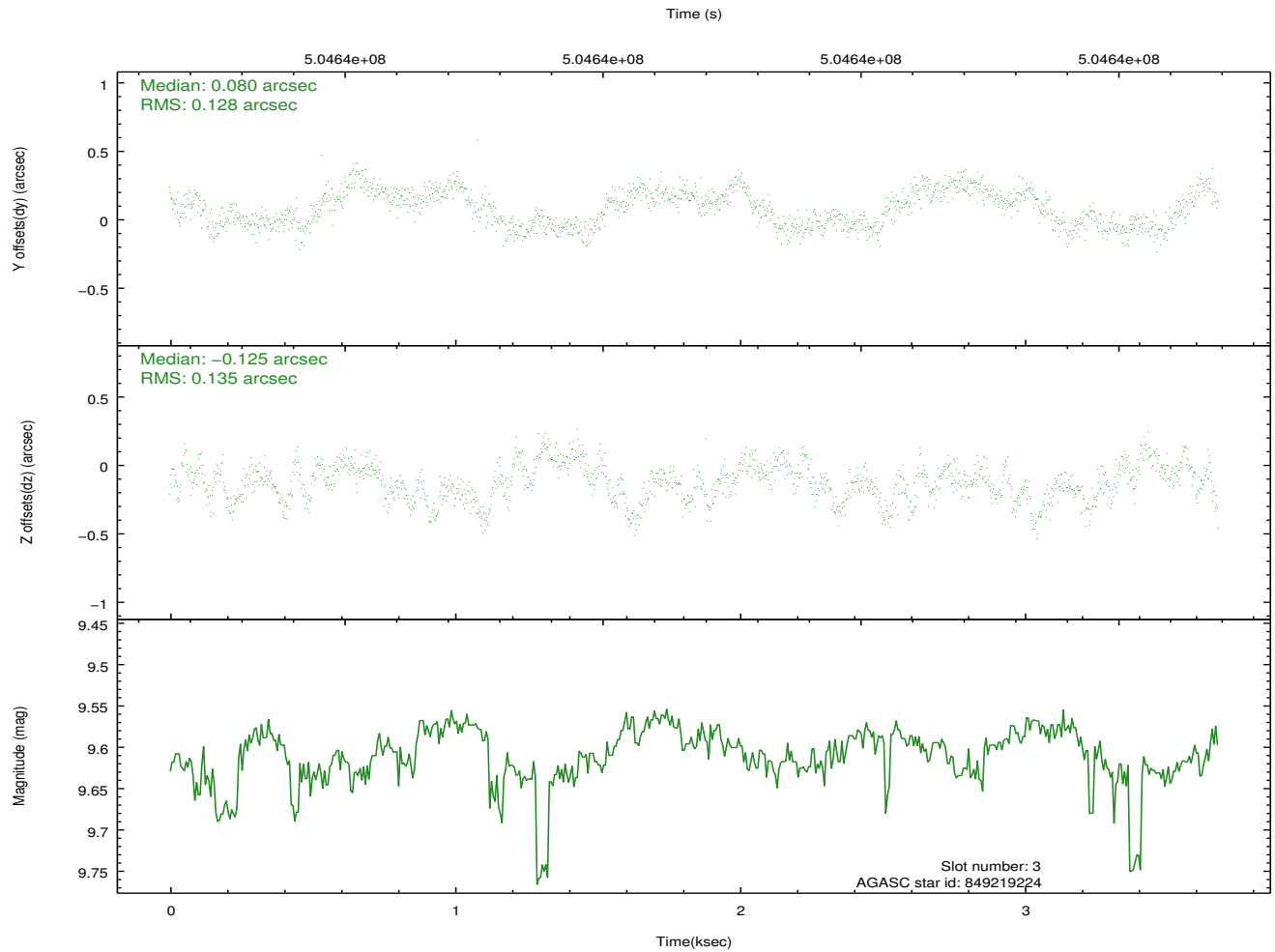
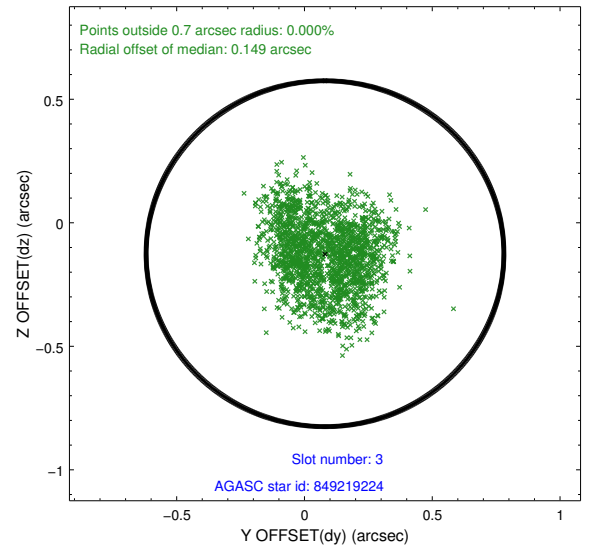
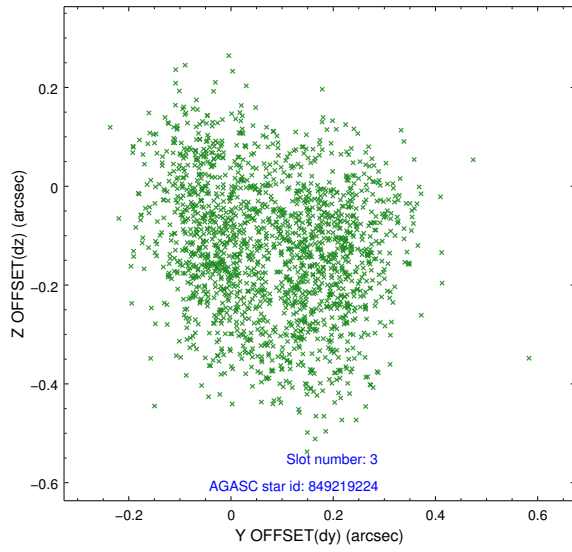
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-1	7.17	898	0.072	-0.086	0.011	0.019	0.000000	0.000000	924.98	-1733.53
1	FID		ACIS-S-4	7.17	898	0.195	0.029	0.007	0.012	0.000000	0.000000	2143.43	168.99
2	FID		ACIS-S-5	7.20	898	-0.294	0.069	0.009	0.014	0.000000	0.000000	-1822.09	164.52
3	GUIDE	used	849219224	9.61	1794	0.080	-0.125	0.203	0.302	79.917999	-26.007007	-473.18	-627.48
4	GUIDE	used	849226272	8.39	1796	-0.078	-0.242	0.096	0.149	80.214822	-25.538553	-162.38	1288.79
5	GUIDE	used	849748848	9.90	1794	0.045	0.156	0.193	0.328	79.604790	-26.314901	-1030.01	-2019.63
6	GUIDE	used	849751056	10.08	1796	-0.101	0.135	0.228	0.375	79.705397	-26.441800	-566.00	-2335.06
7	GUIDE	used	849751096	10.00	1794	0.034	0.076	0.286	0.596	80.340276	-26.496571	1419.94	-1803.34

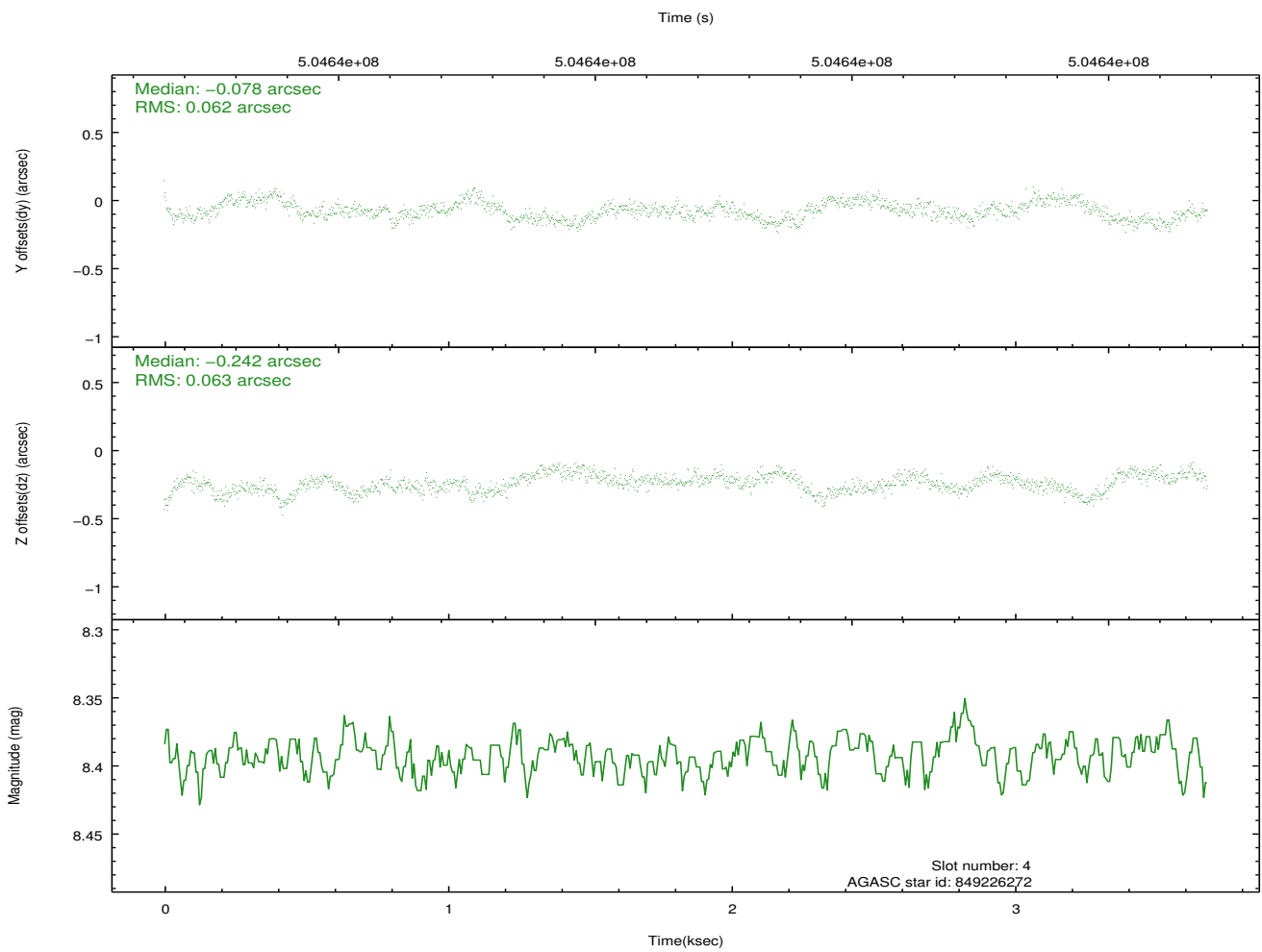
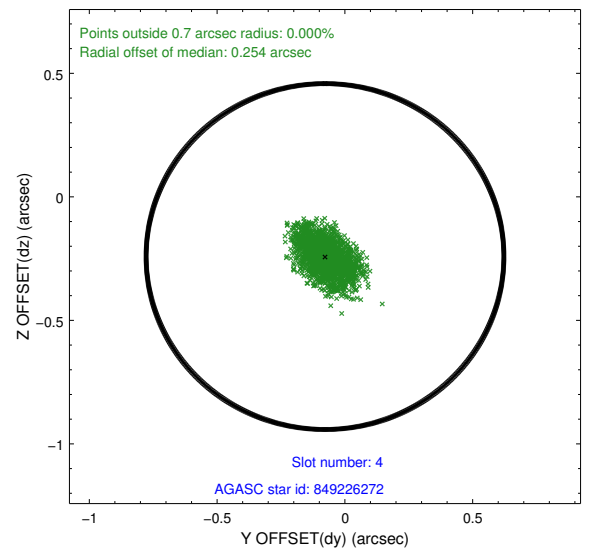
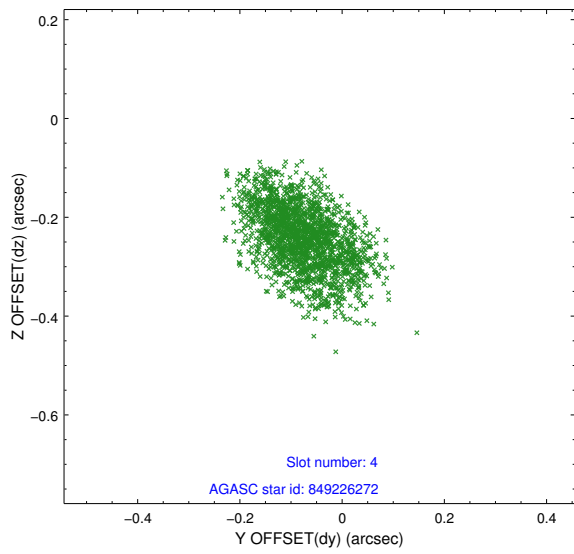
∞

2.4 Star Slots

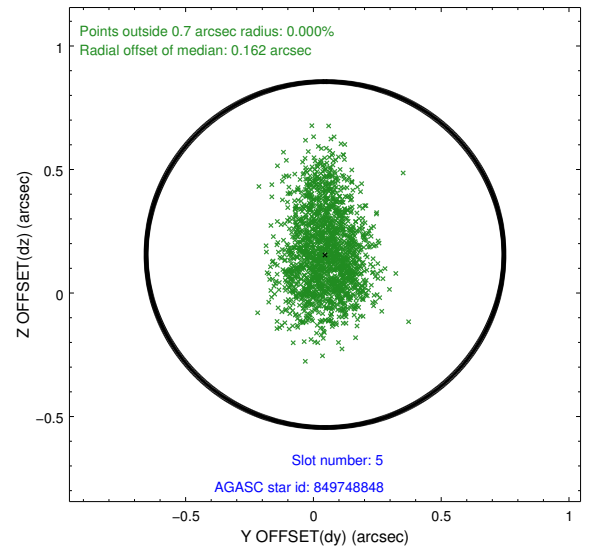
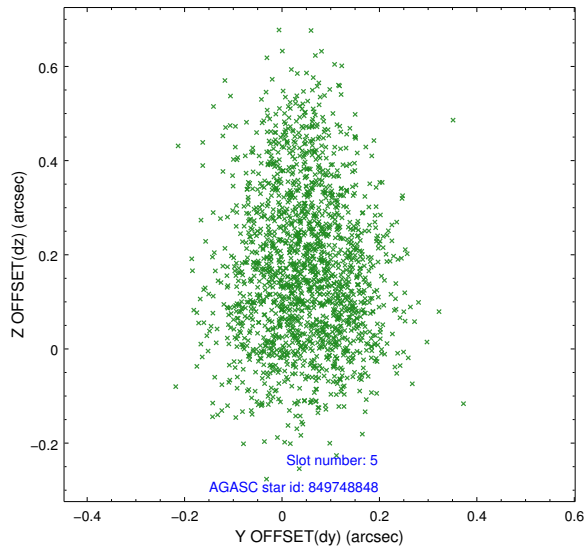
2.4.1 Slot 3



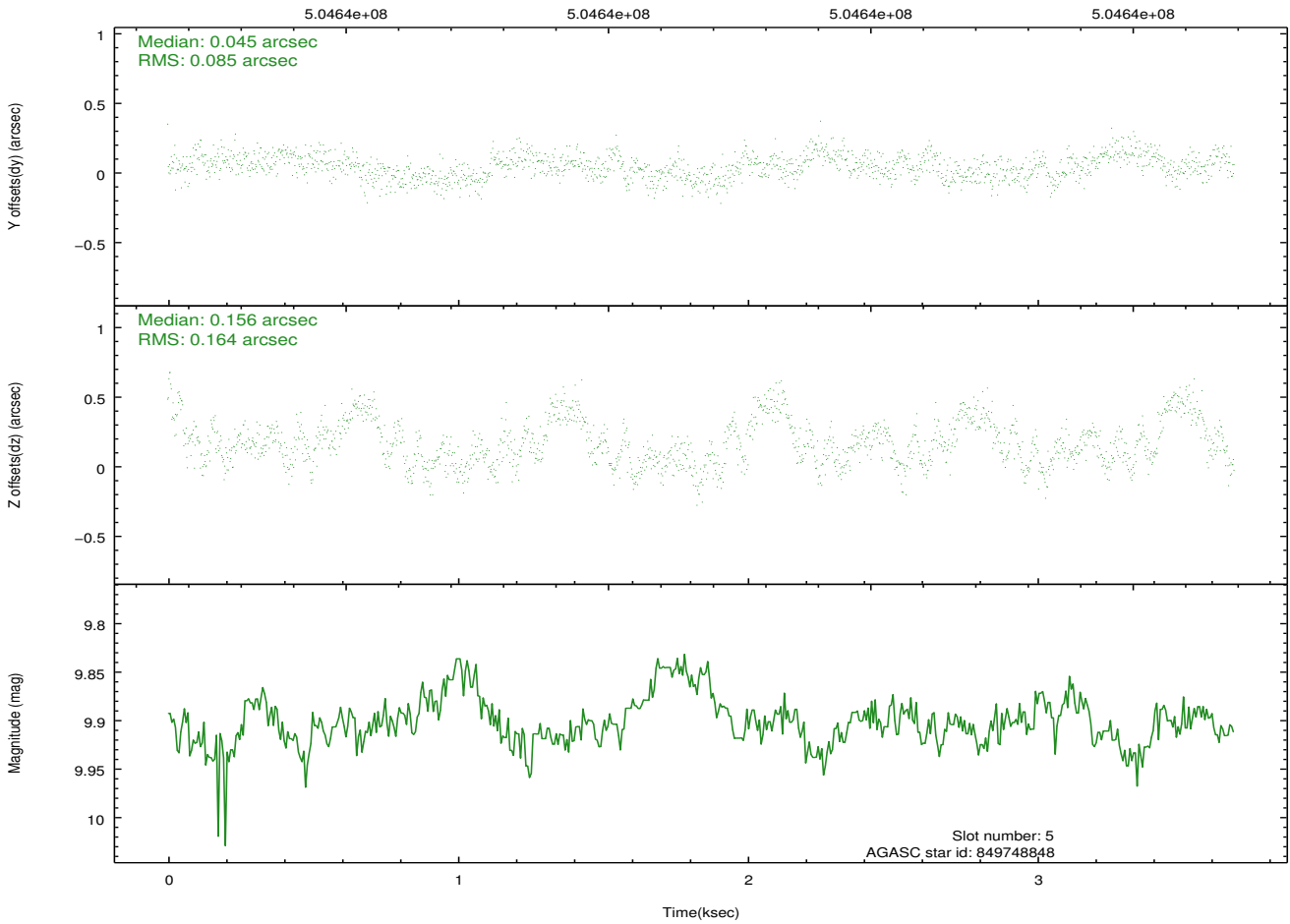
2.4.2 Slot 4



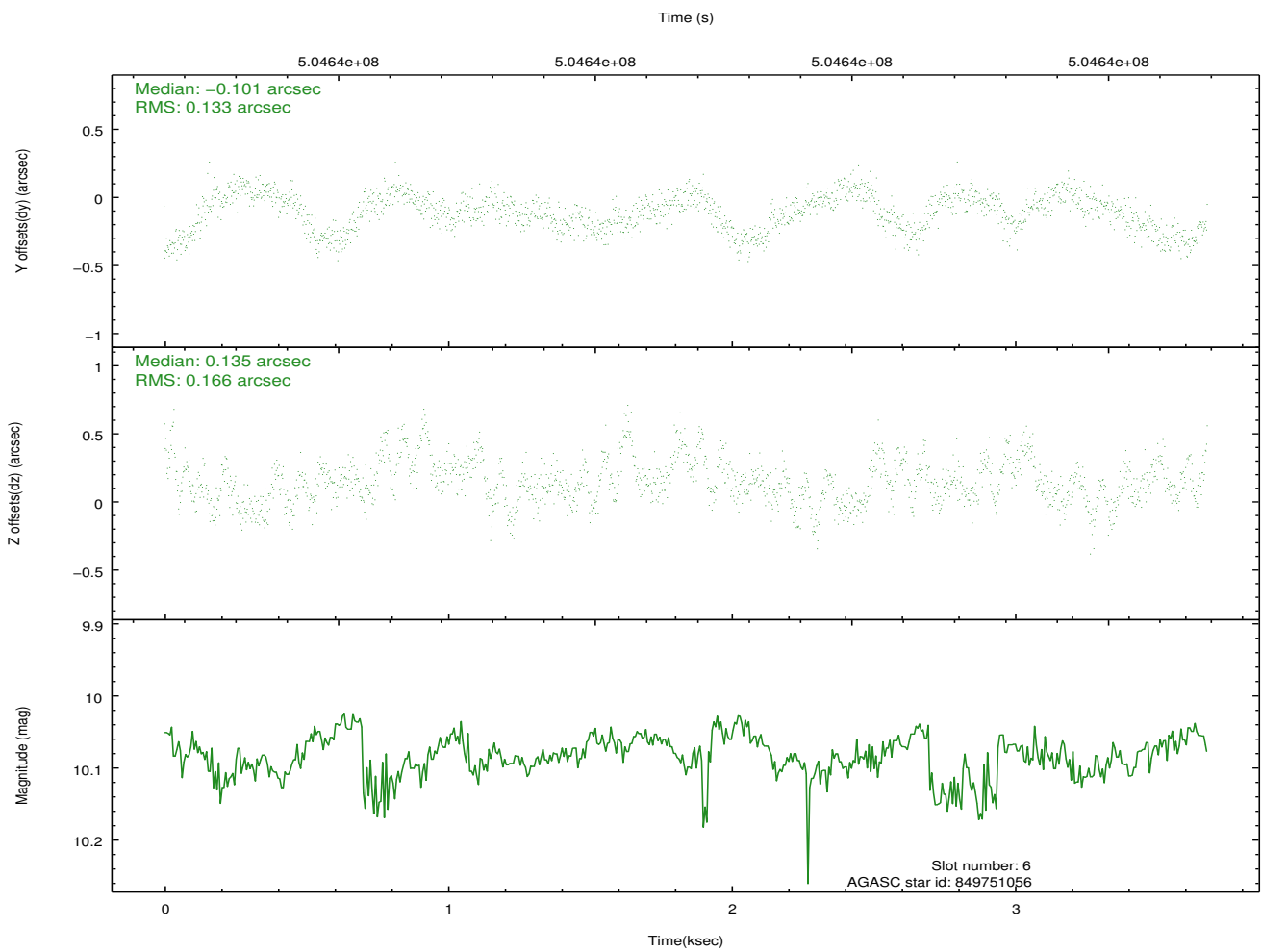
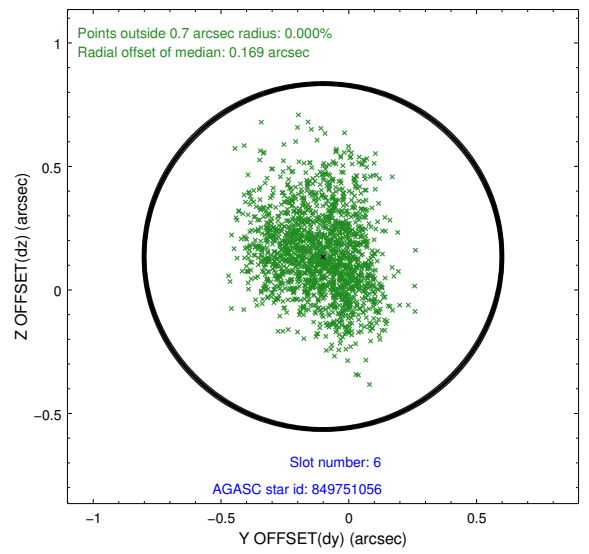
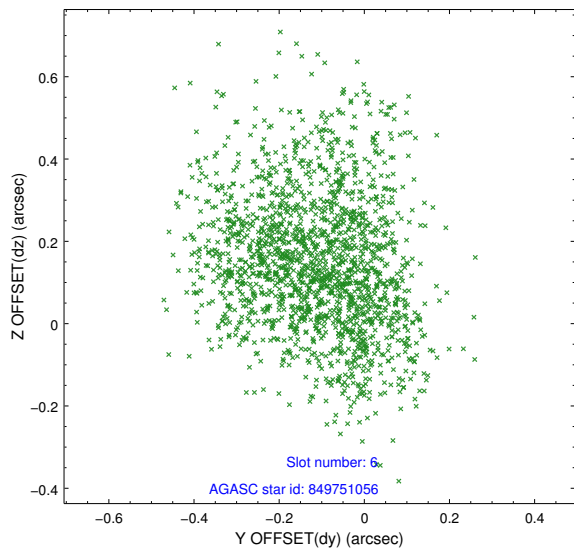
2.4.3 Slot 5



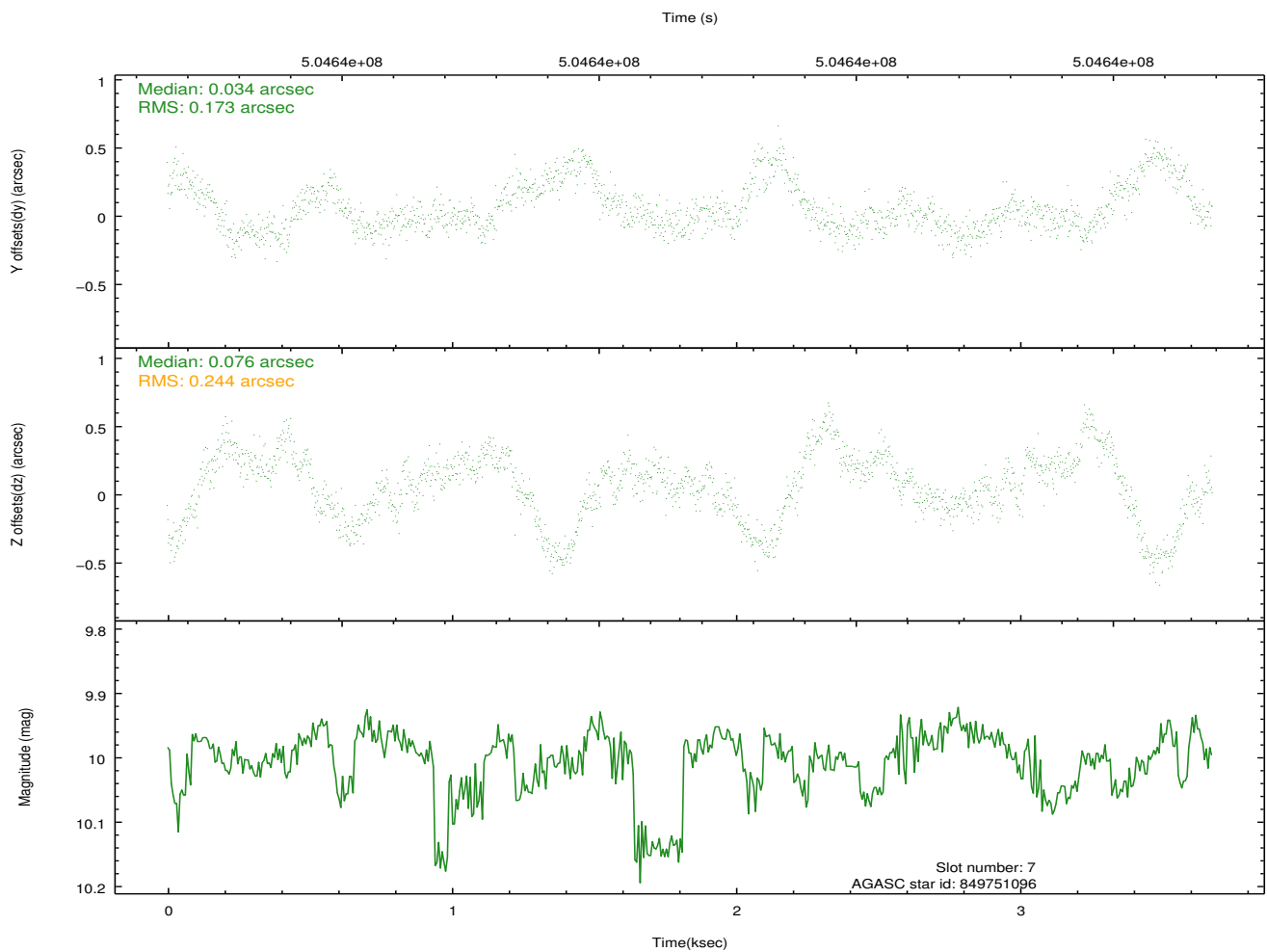
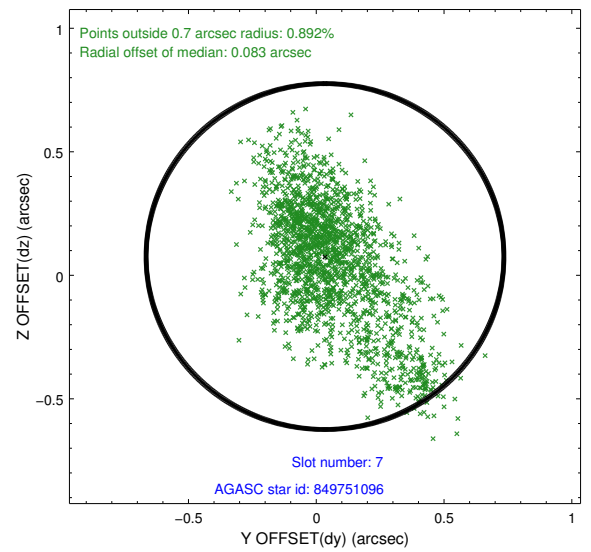
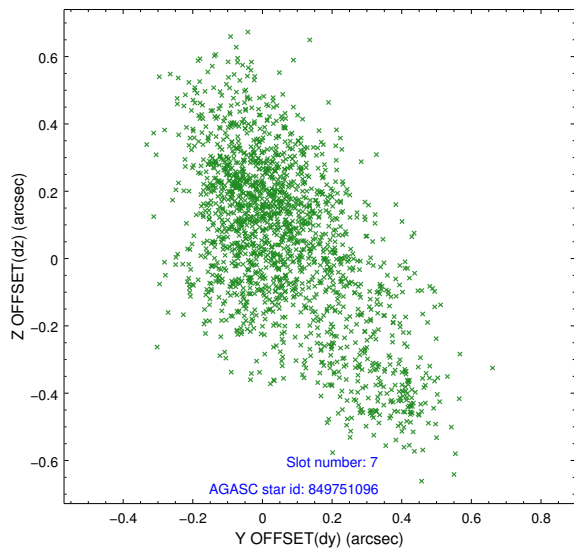
Time (s)



2.4.4 Slot 6

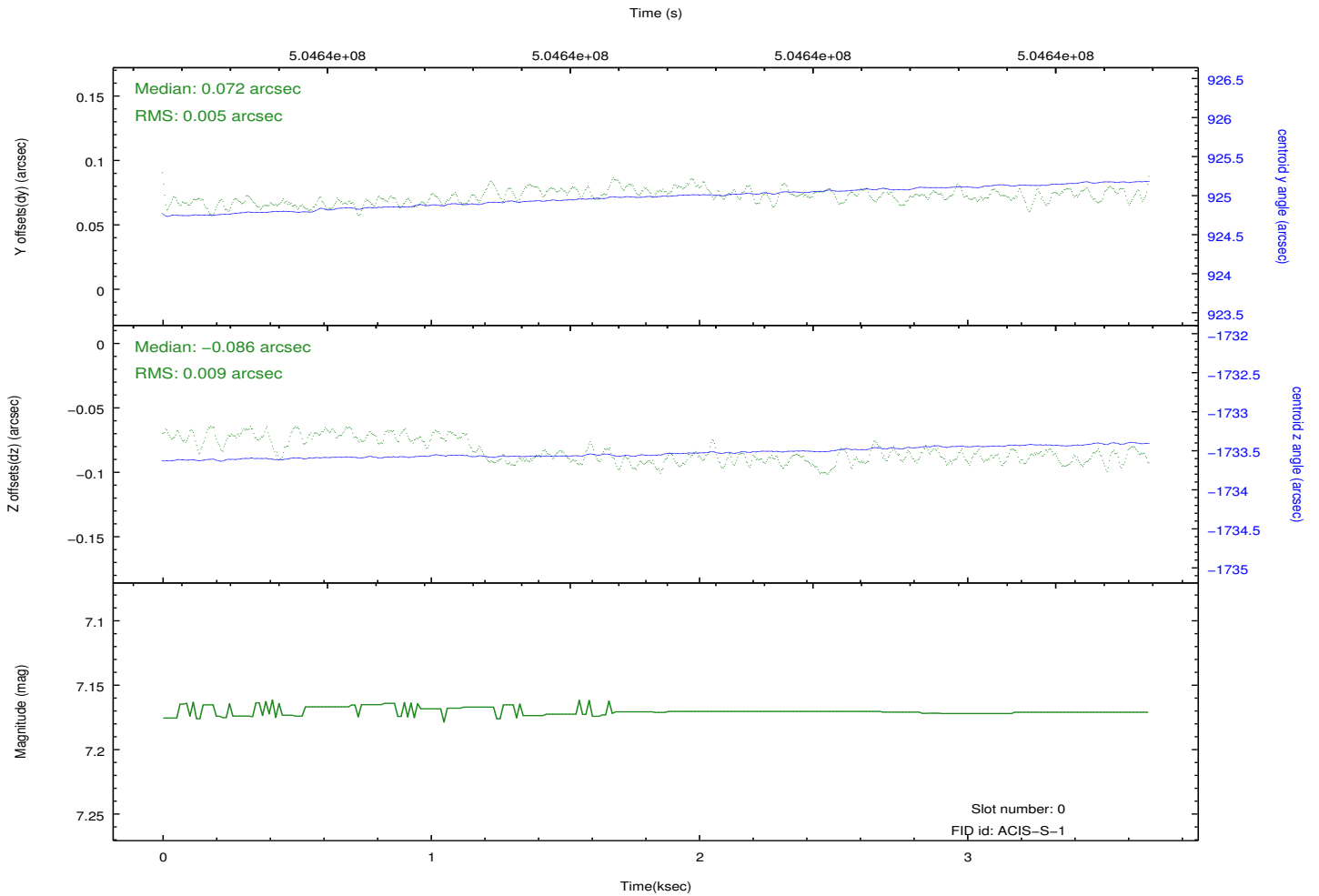
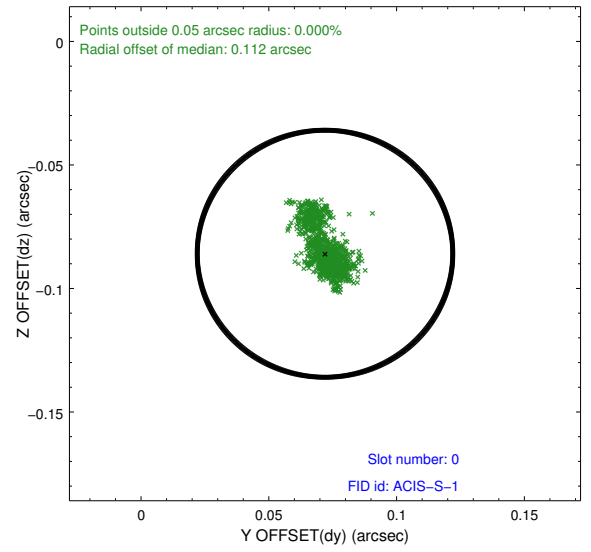
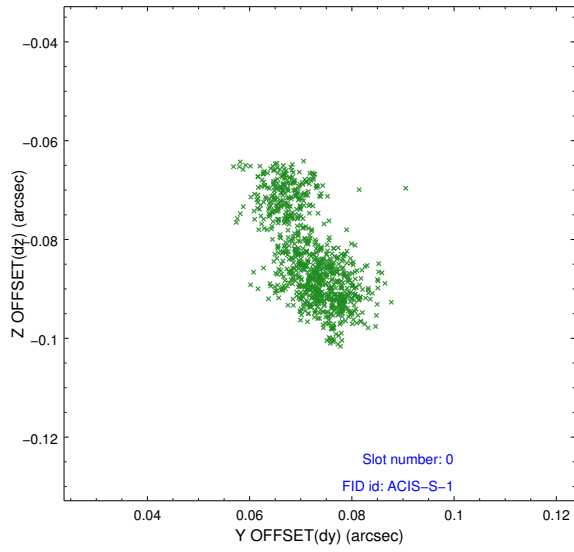


2.4.5 Slot 7

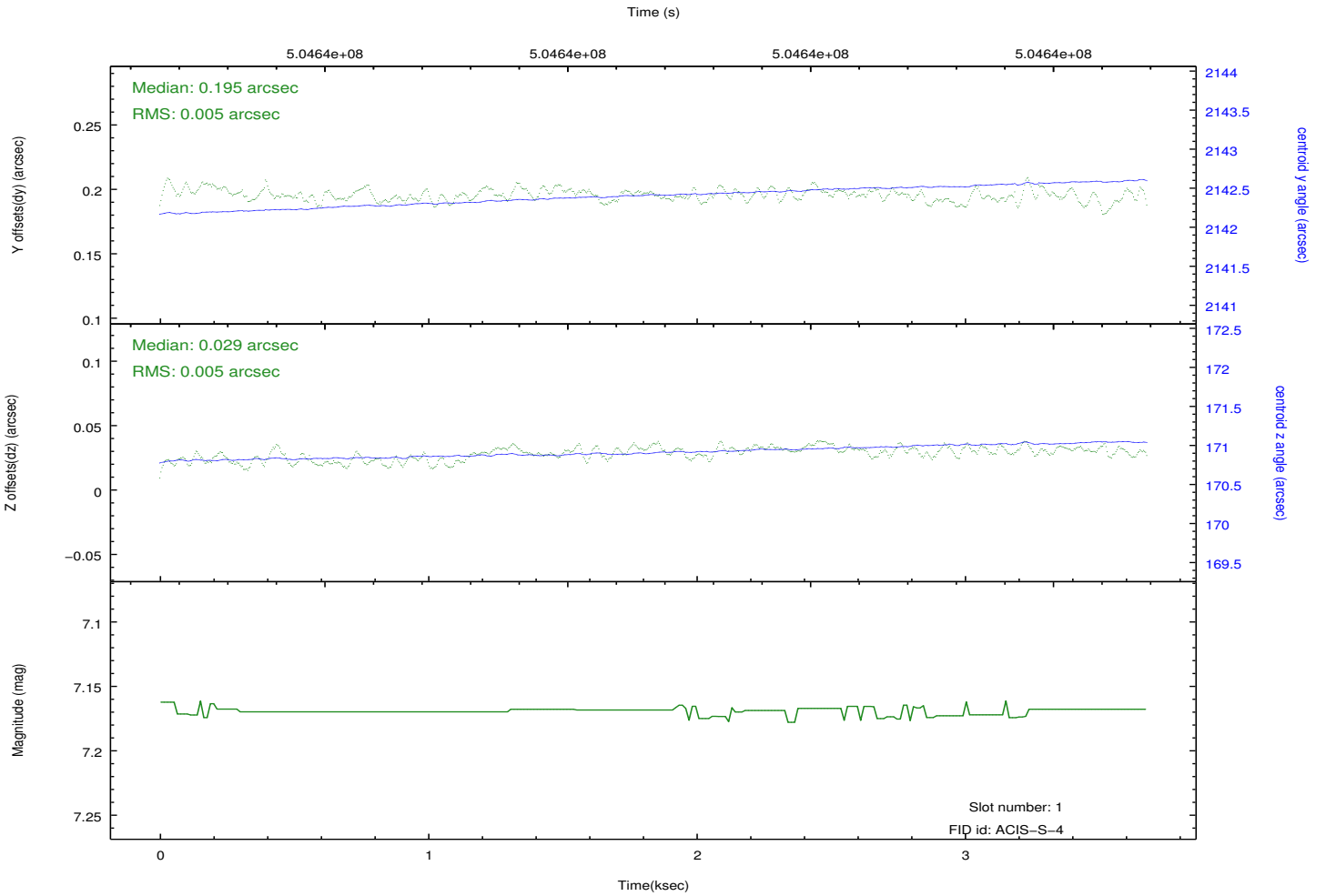
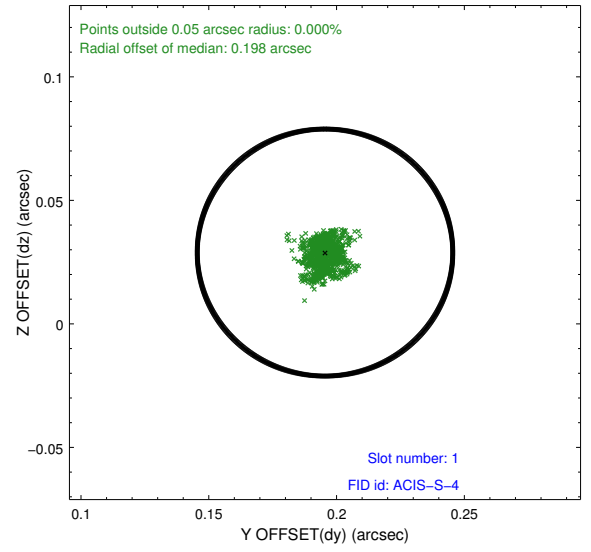
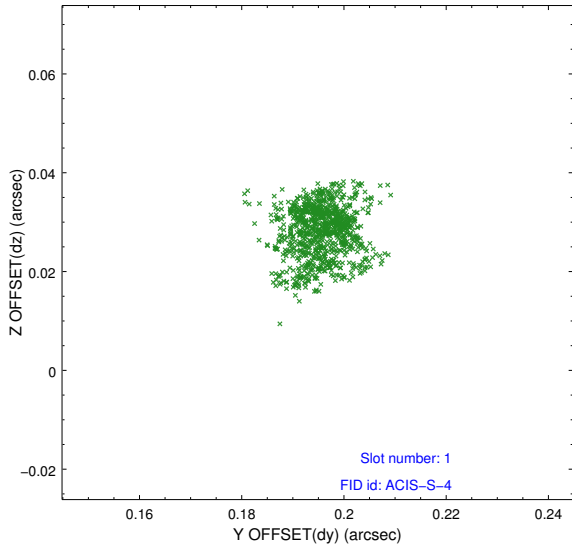


2.5 FID Slots

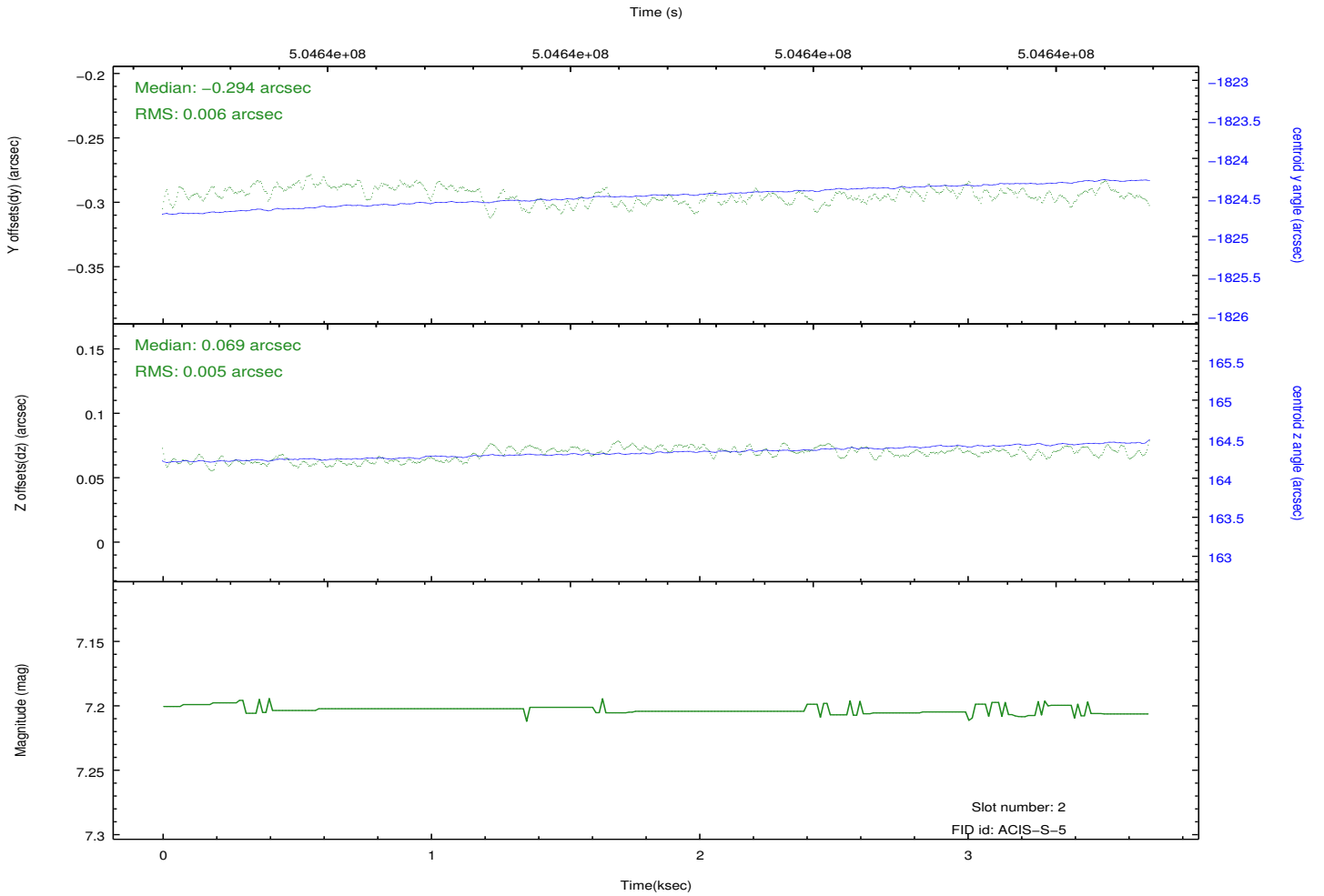
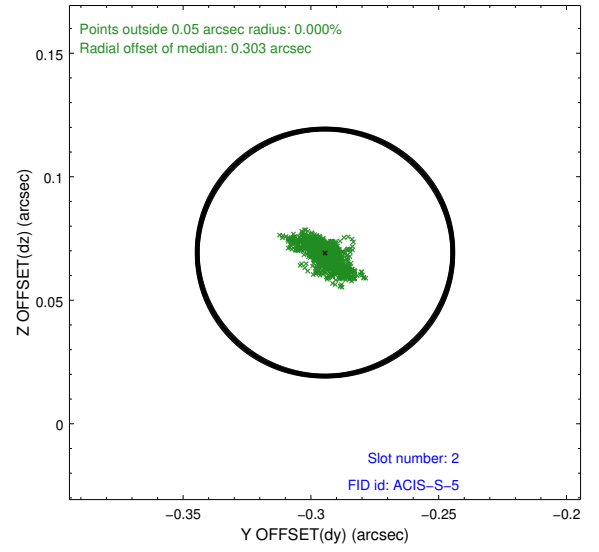
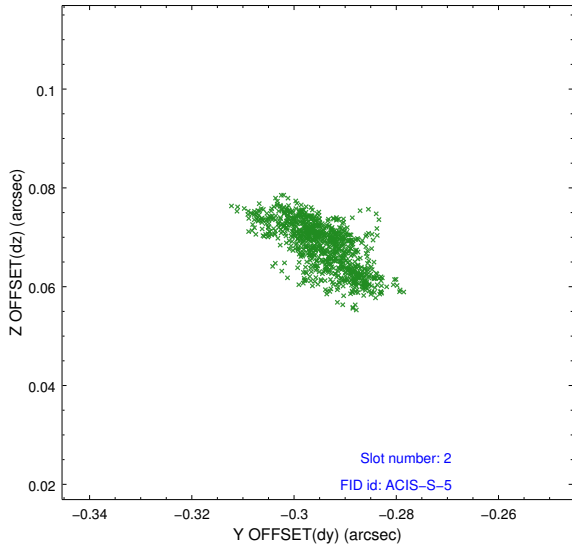
2.5.1 Slot 0



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)	2014.12.16
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	3.5638978286982

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.