

V&V Reference Report

L2 ASCDS Version : 10.1.1

Observation 15983 - L2 Version 2
Chandra X-Ray Center

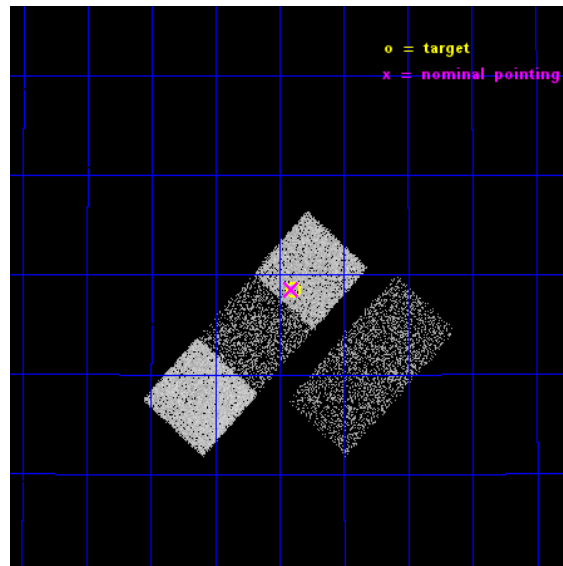
L2 Processing Date : Dec 9 2014

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1 Front

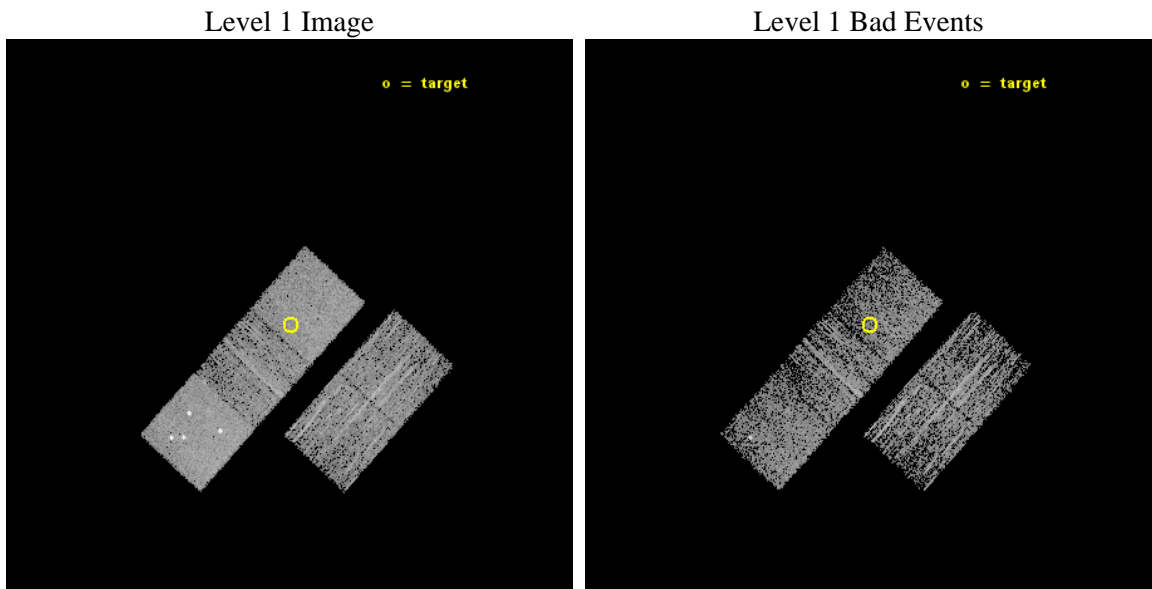
seq_num	502216	Sequence number
obs_id	15983	Observation id
title	Where Have All The Central Compact Objects Gone?	Proposal title
observer	Dr. Eric Gotthelf	Principal investigator
object	PSR J2156+2618	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	329.09875	Observer's specified target RA [deg]
dec_targ	26.308444	Observer's specified target Dec [deg]
ra_nom	329.10206404636	Nominal RA [deg]
dec_nom	26.30907183118	Nominal Dec [deg]
roll_nom	312.26591632624	Nominal Roll [deg]
revision	2	Processing version of data
ontime	3566.660892427	Sum of GTIs [s]
livetime	3520.0598421299	Livetime [s]
ontime2	3566.4967324138	Sum of GTIs [s]
ontime3	3566.5377724171	Sum of GTIs [s]
ontime5	3566.6198524237	Sum of GTIs [s]
ontime6	3566.5788124204	Sum of GTIs [s]
ontime7	3566.660892427	Sum of GTIs [s]
l2events	27957	Number of level 2 events



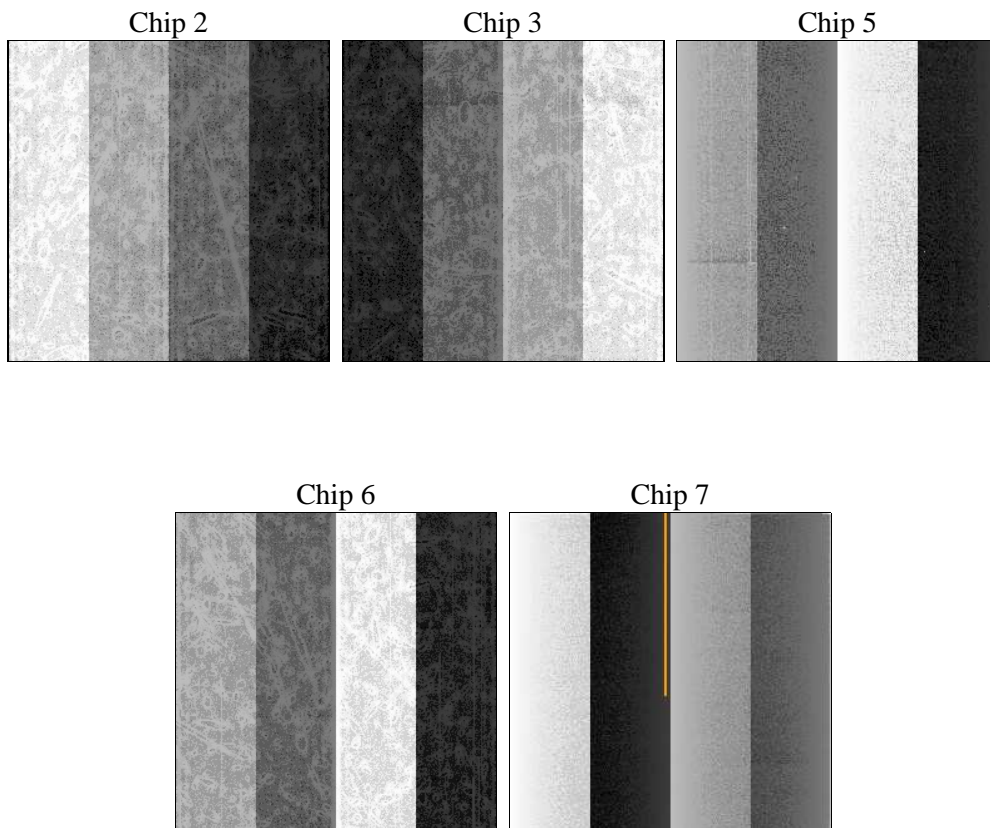
2 OBI

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	3566.660892427	Sum of GTIs [s]
caldbver	4.6.4	 	ontime2	3566.4967324138	Sum of GTIs [s]
date	2014-12-09T09:11:03	Date and time of file creation	ontime3	3566.5377724171	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	3566.6198524237	Sum of GTIs [s]
			ontime6	3566.5788124204	Sum of GTIs [s]
			ontime7	3566.660892427	Sum of GTIs [s]
			l1events	110448	Number of level 1 events

2.1.4 Events

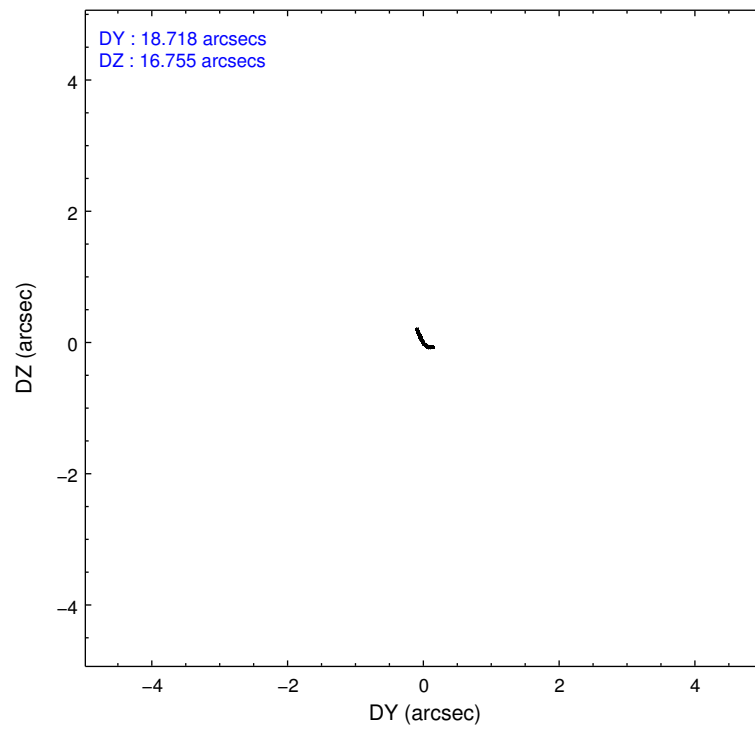
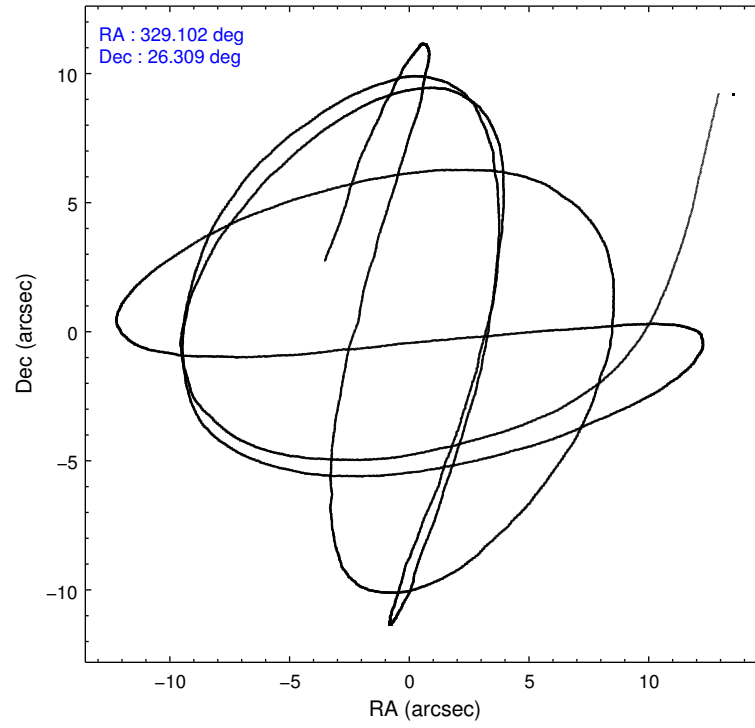
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	18784	17869	32196	17658	23941
rejected events	16857	15906	15349	15509	13775
rejected %	89%	89%	47%	87%	57%

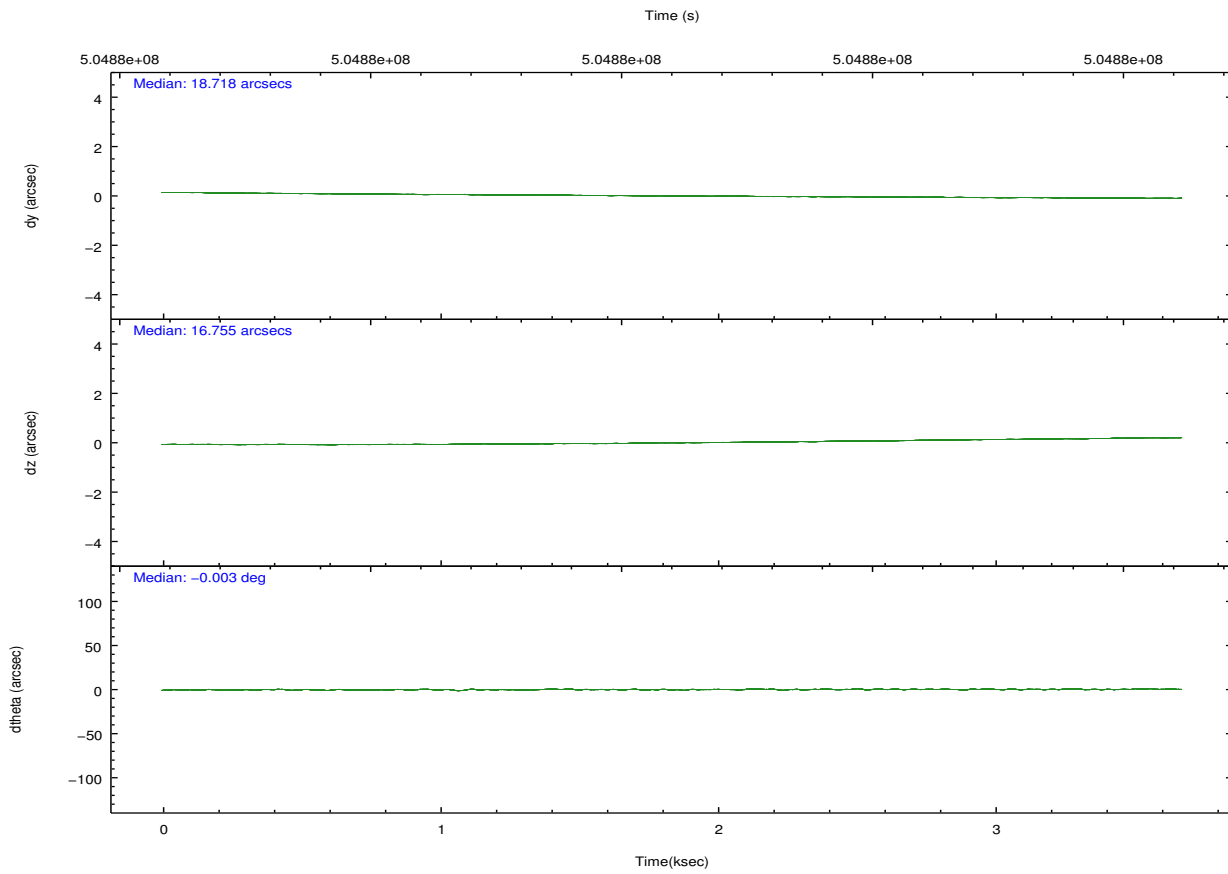
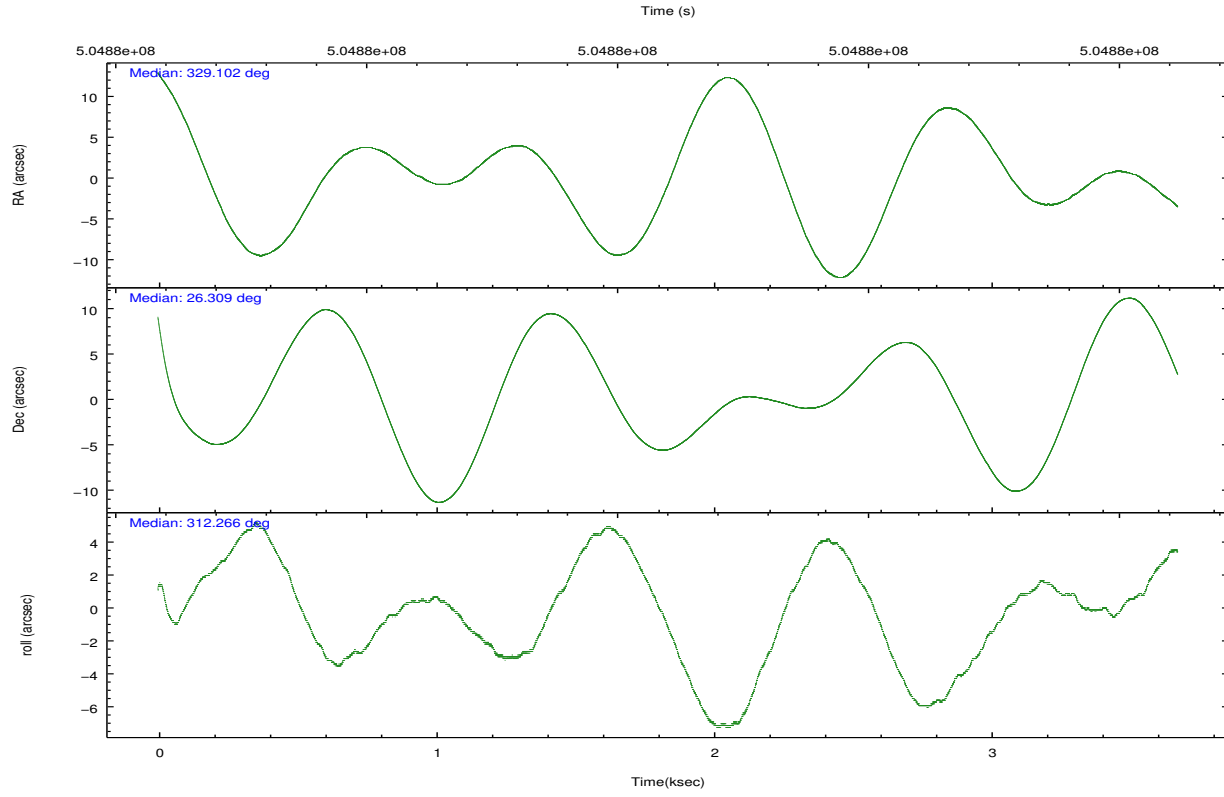
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	674	687	3647	767	882
	3%	3%	11%	4%	3%
grade 1 events	11	13	442	15	28
	0%	0%	1%	0%	0%
grade 2 events	469	417	4829	469	2129
	2%	2%	14%	2%	8%
grade 3 events	229	206	404	223	832
	1%	1%	1%	1%	3%
grade 4 events	186	218	396	195	792
	0%	1%	1%	1%	3%
grade 5 events	768	925	1971	877	2302
	4%	5%	6%	4%	9%
grade 6 events	373	439	7600	498	5538
	1%	2%	23%	2%	23%
grade 7 events	16074	14964	12907	14614	11438
	85%	83%	40%	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	329.072903	329.1020640463583	CCD I2 on	O2	Y
[deg] Pointing Dec	26.316927	26.30907183117986	CCD I3 on	O3	Y
[deg] Pointing Roll	312.122219	312.2659163262433	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)	504879529.184000	504878394.07912	CCD S5 on	N	N
Observation start date	2013-12-31T12:17:42	2013-12-31T11:59:54	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	504883029.184000	504883940.35443	On-chip summing requested	N	N
Observation end date	2013-12-31T13:16:02	2013-12-31T13:32:20	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





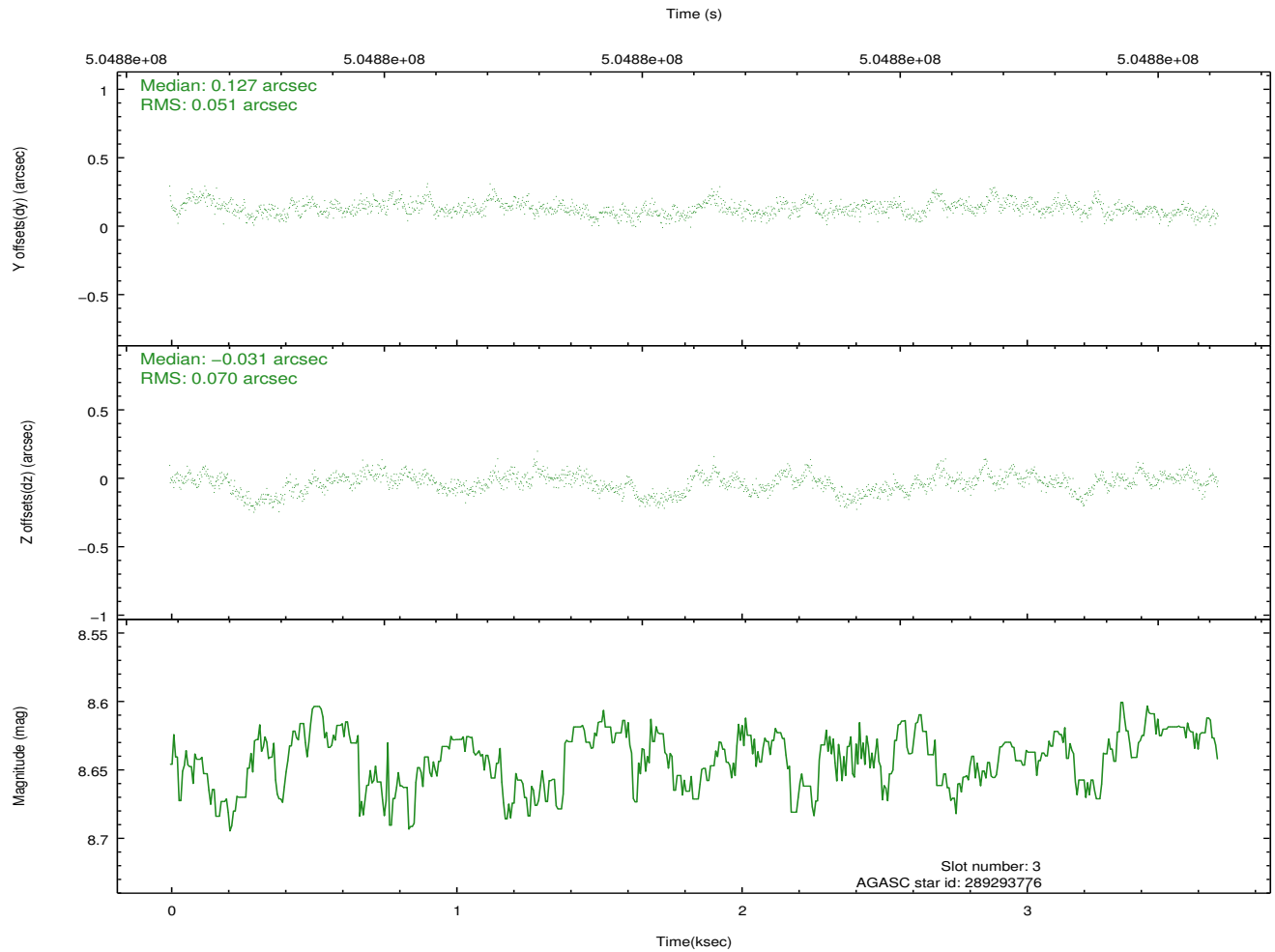
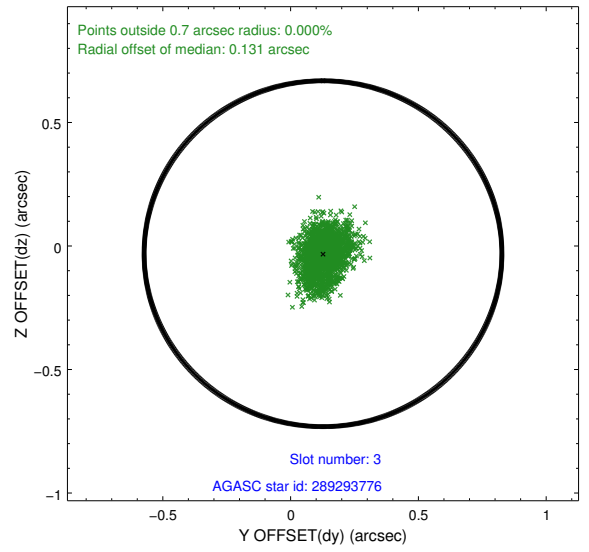
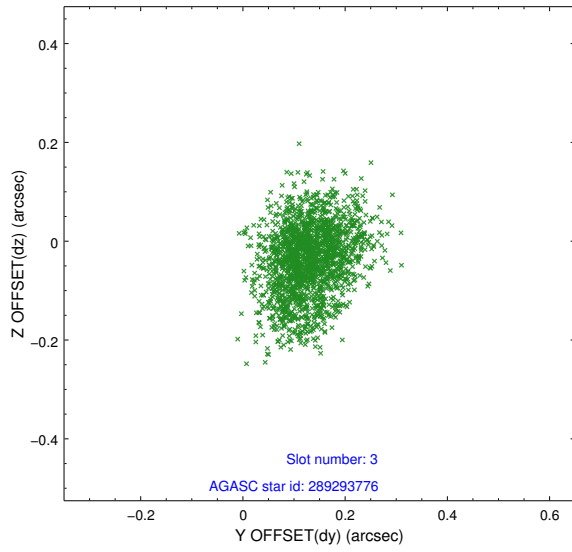
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.09	897	-0.118	-0.046	0.008	0.013	0.000000	0.000000	-771.94	-1738.24
1	FID		ACIS-S-4	7.18	897	0.300	0.069	0.007	0.013	0.000000	0.000000	2140.99	168.54
2	FID		ACIS-S-5	7.21	897	-0.213	-0.015	0.008	0.013	0.000000	0.000000	-1822.66	164.13
3	GUIDE	used	289293776	8.64	1794	0.127	-0.031	0.092	0.152	328.864438	25.932791	573.58	-1427.49
4	GUIDE	used	289682368	8.85	1793	0.007	0.266	0.081	0.130	328.474111	26.630444	-2131.92	-670.20
5	GUIDE	used	289817232	7.97	1794	0.001	-0.305	0.080	0.127	329.514472	26.539015	358.46	1591.85
6	GUIDE	used	289278536	8.83	1794	-0.027	0.125	0.084	0.131	329.986550	26.156310	2402.36	1809.92
7	GUIDE	used	289818160	9.00	1793	-0.110	-0.047	0.089	0.140	328.699445	26.869525	-2278.51	447.26

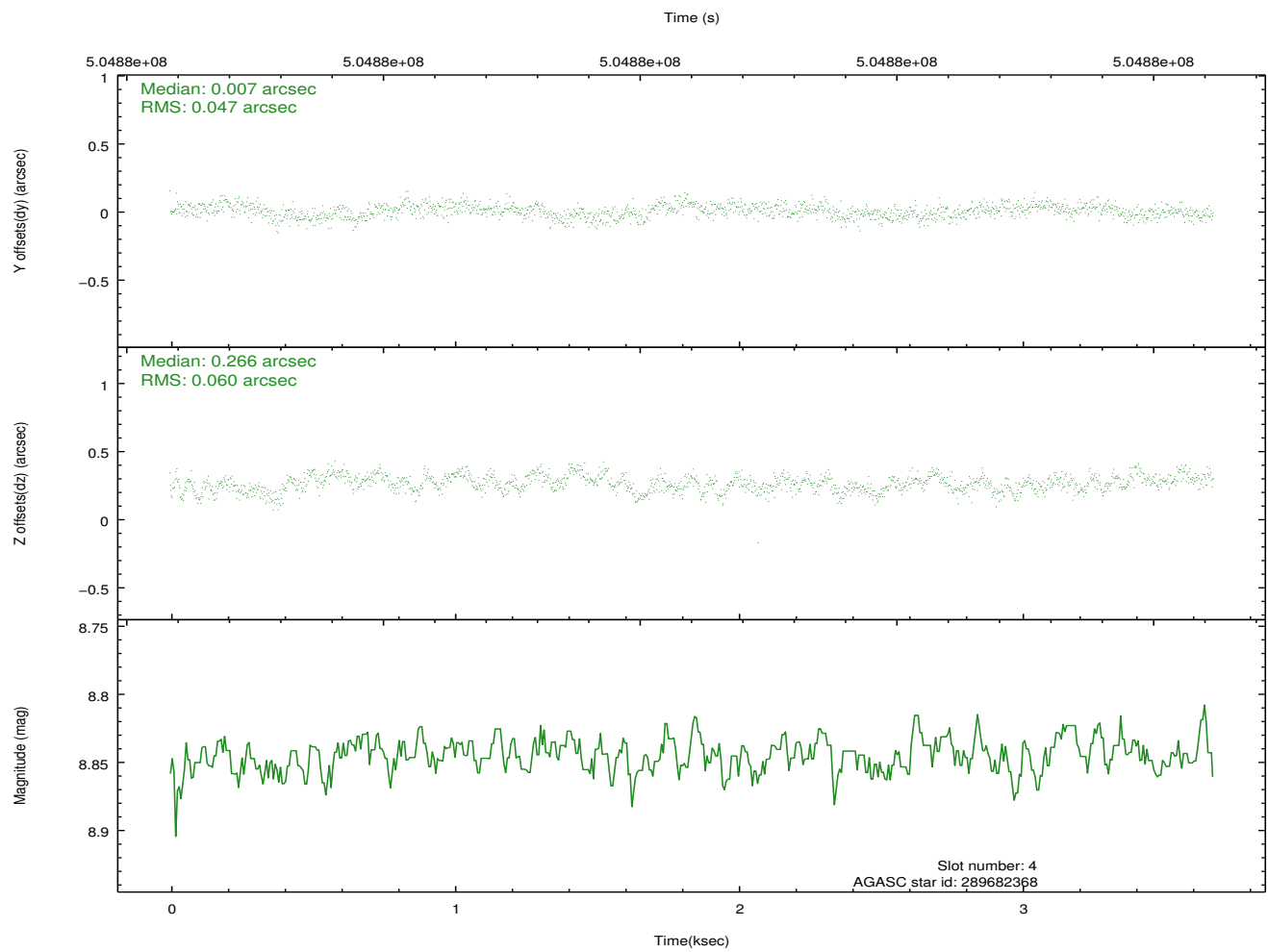
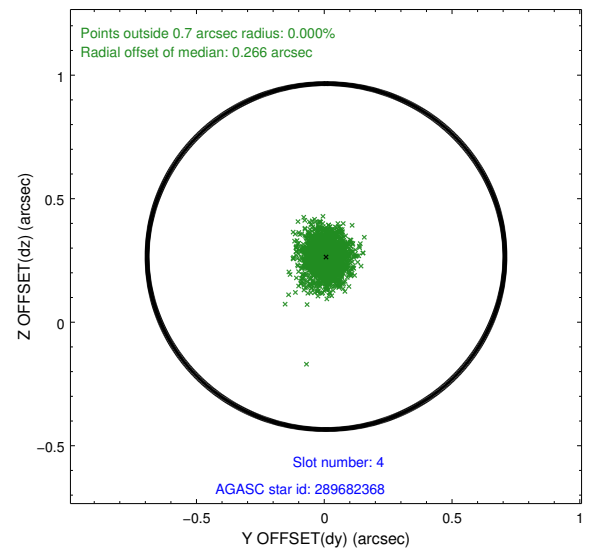
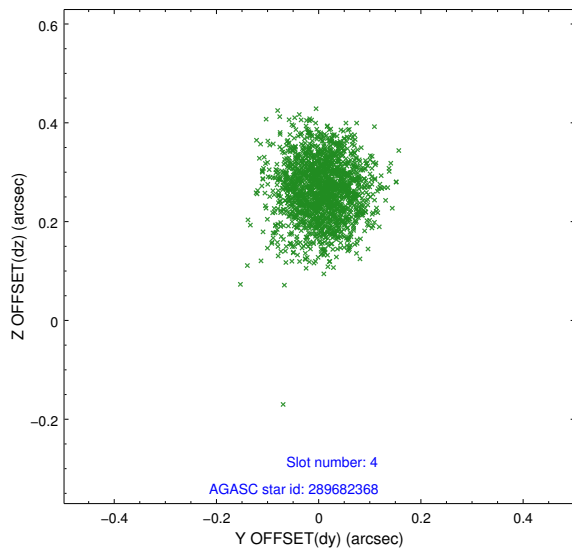
∞

2.4 Star Slots

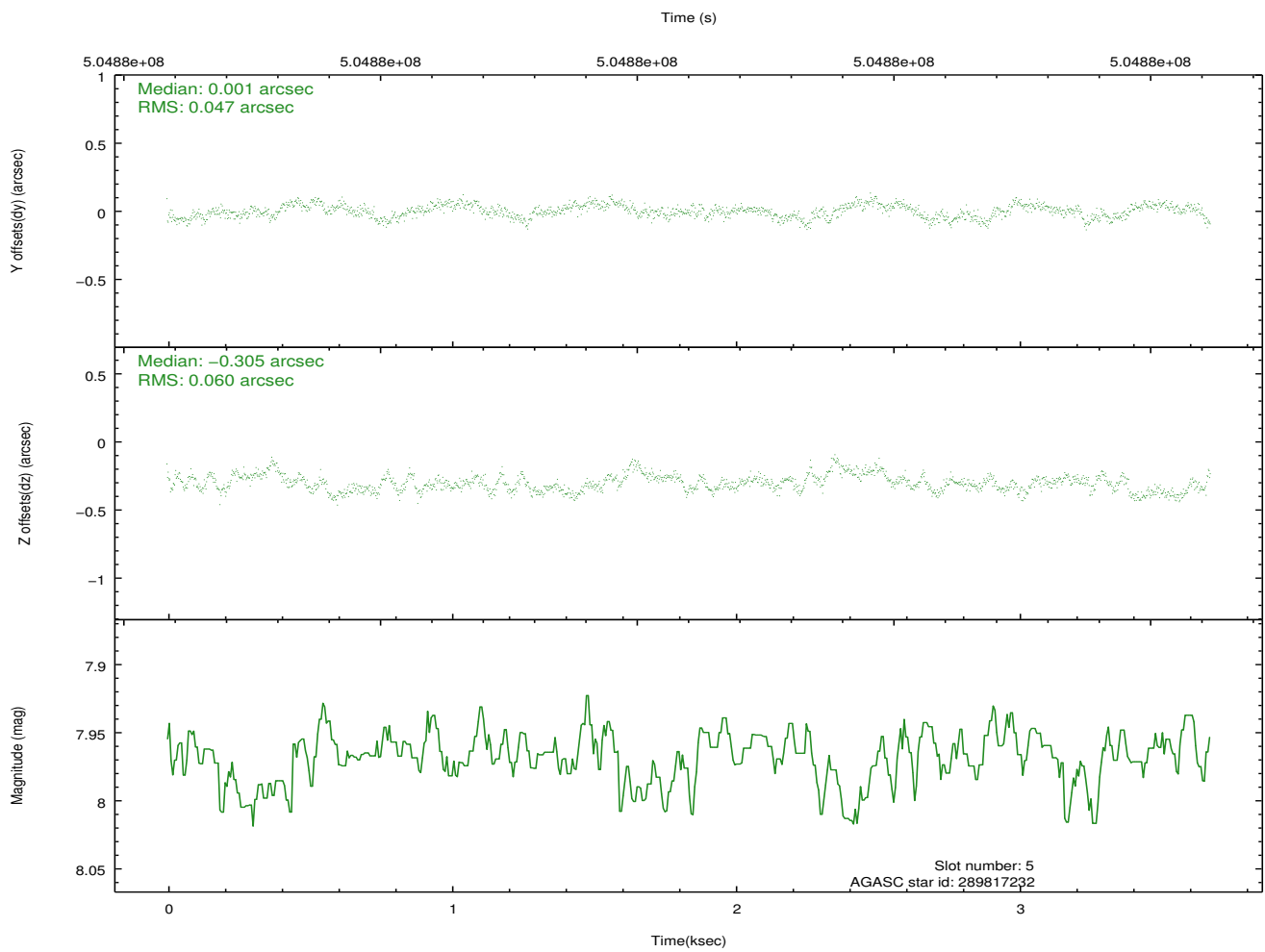
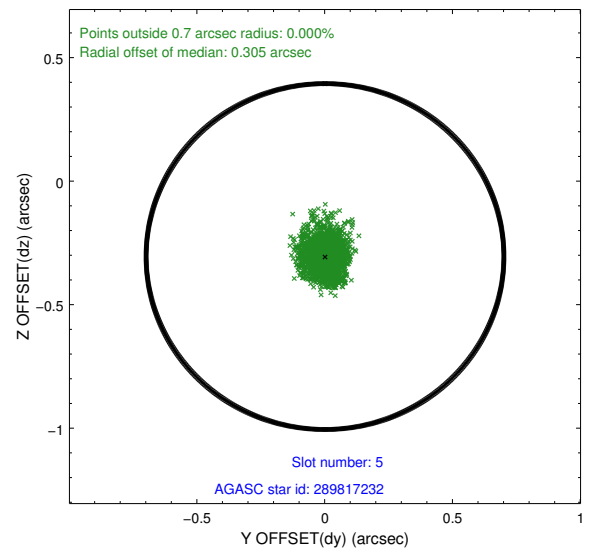
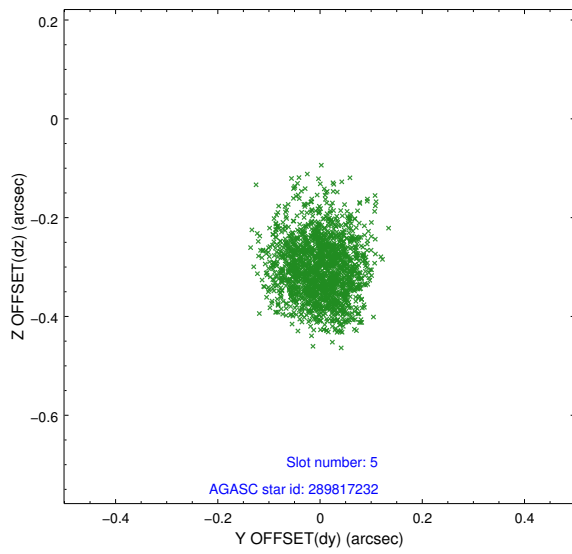
2.4.1 Slot 3



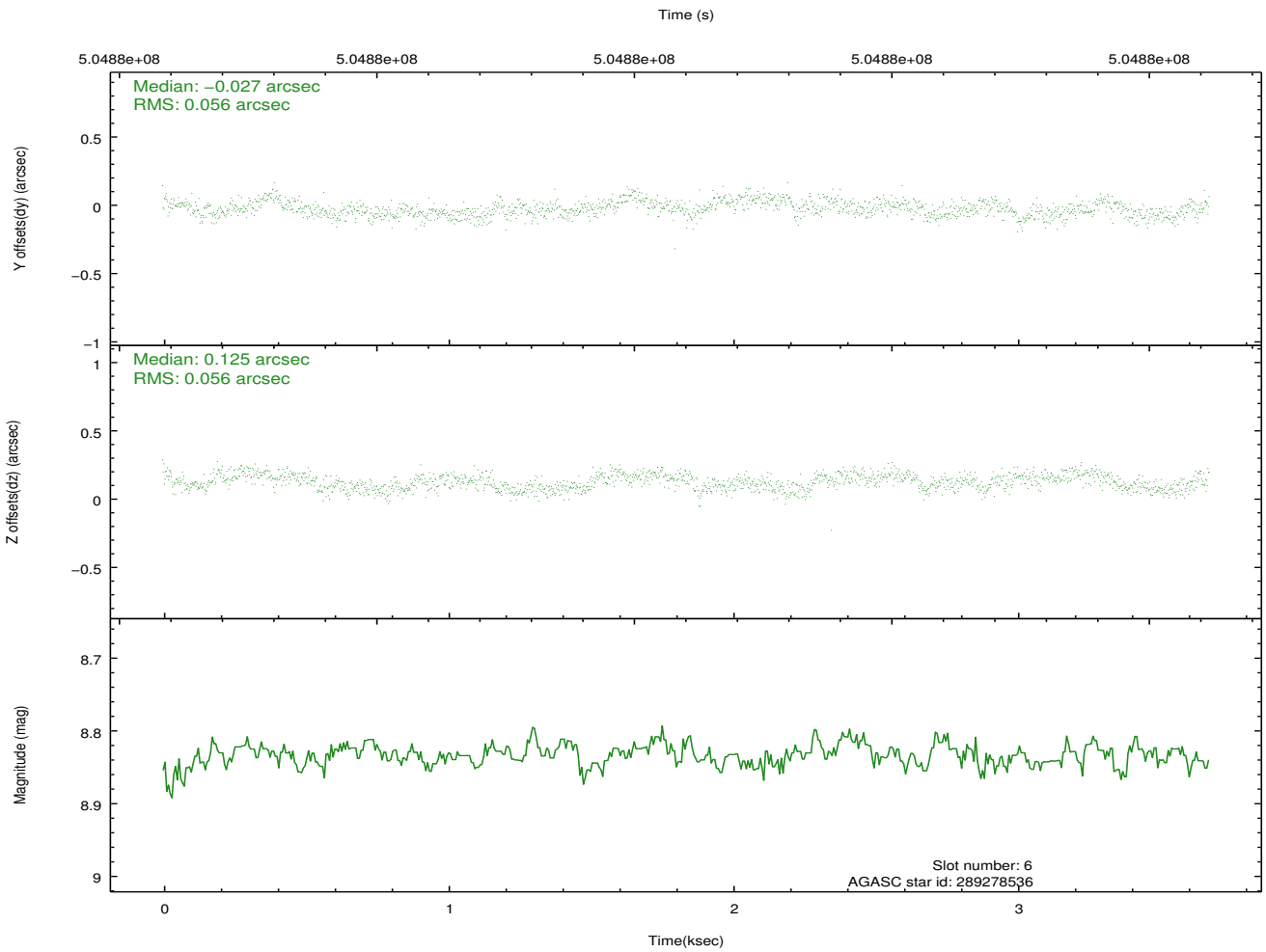
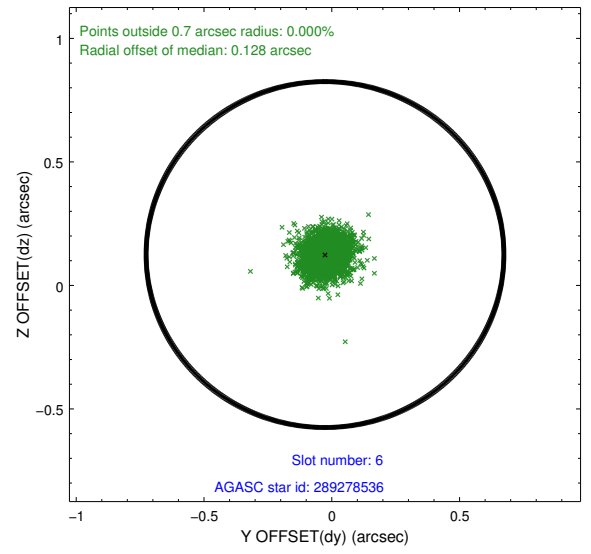
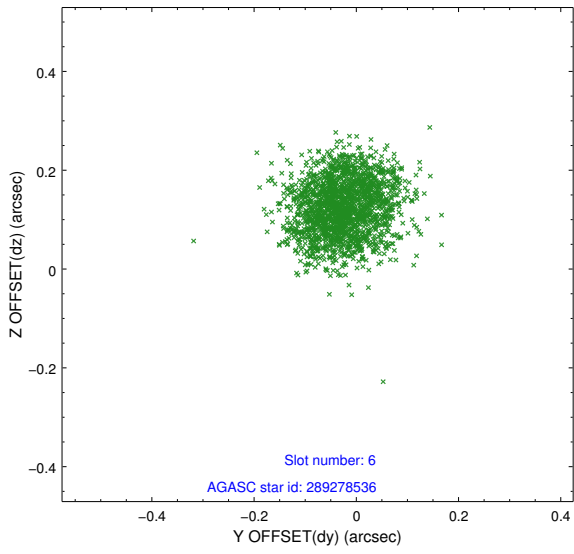
2.4.2 Slot 4



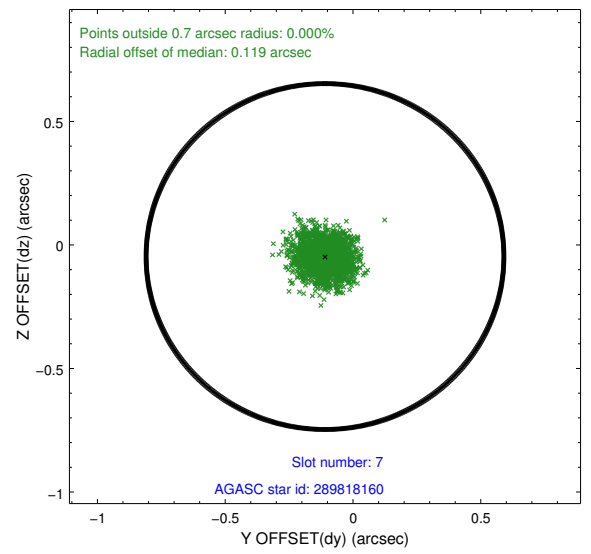
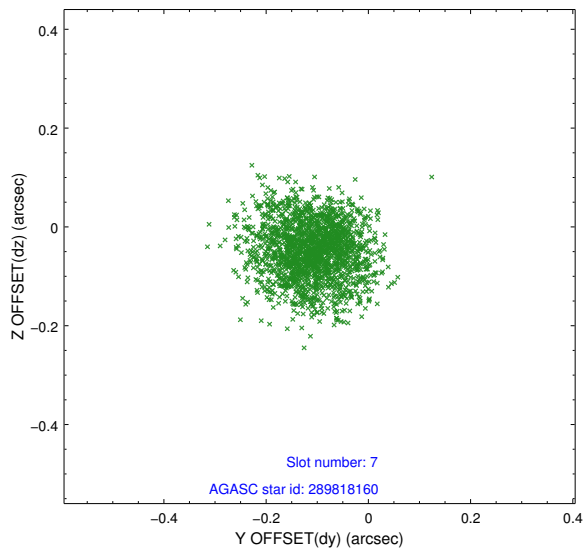
2.4.3 Slot 5



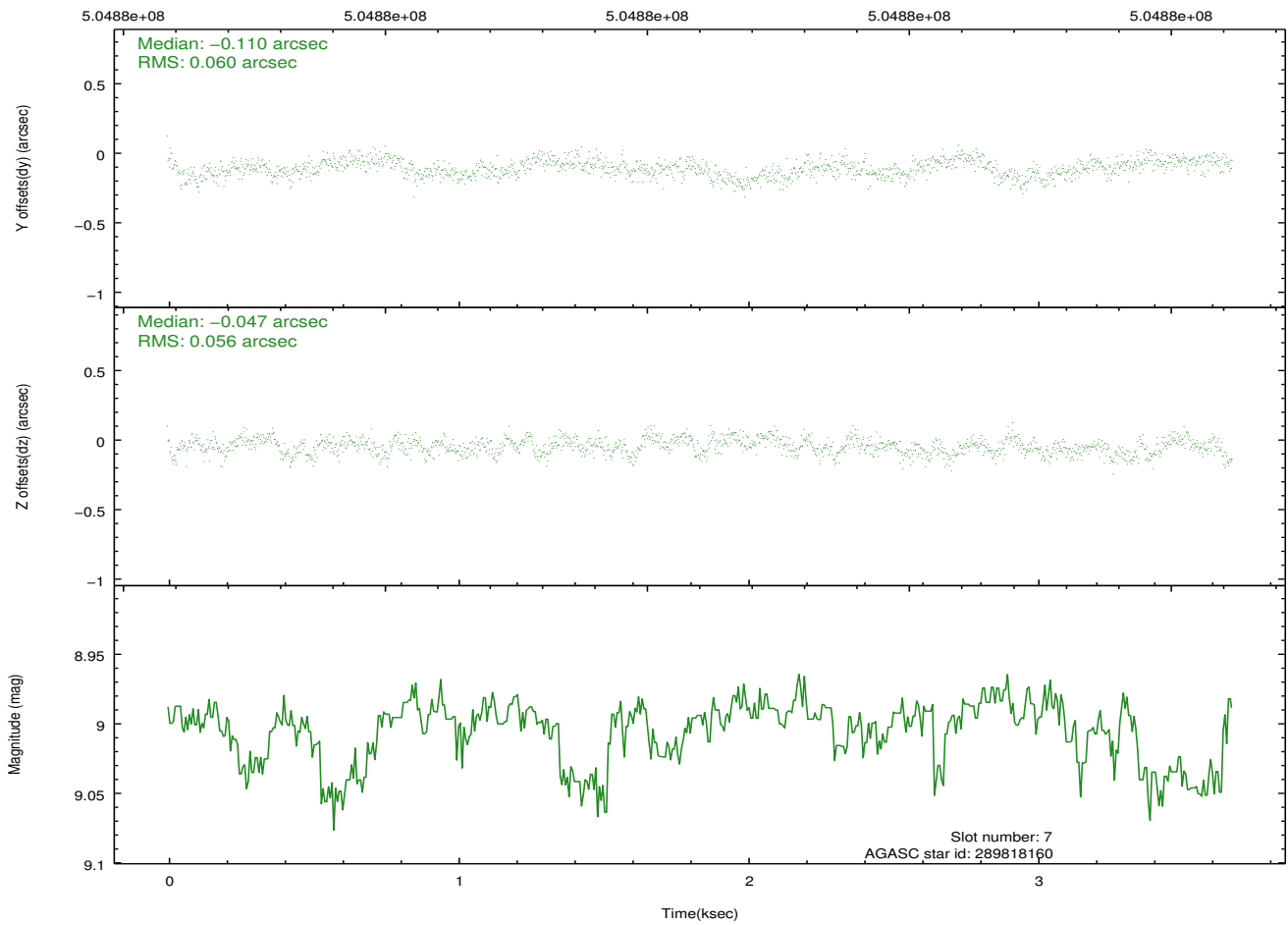
2.4.4 Slot 6



2.4.5 Slot 7

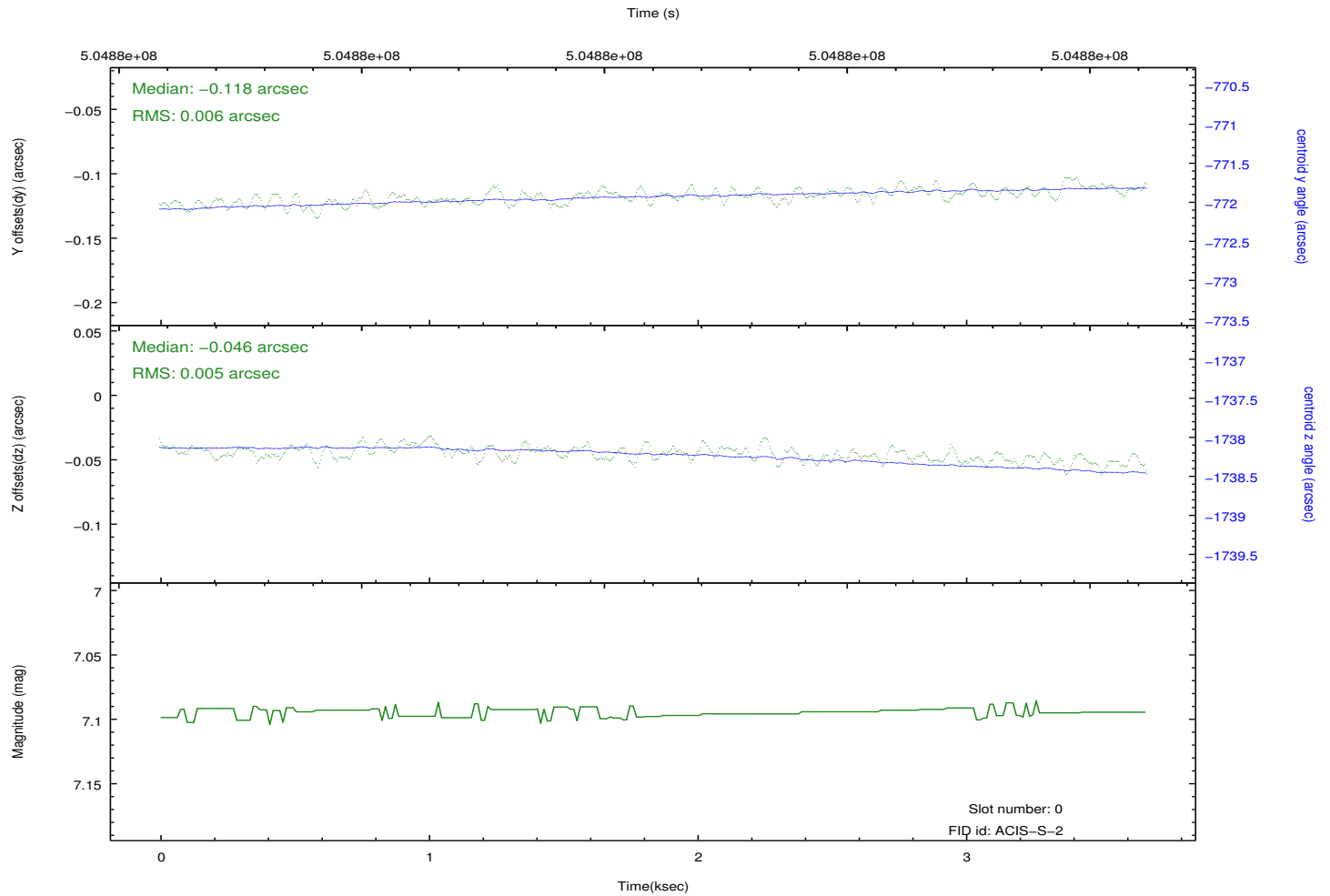
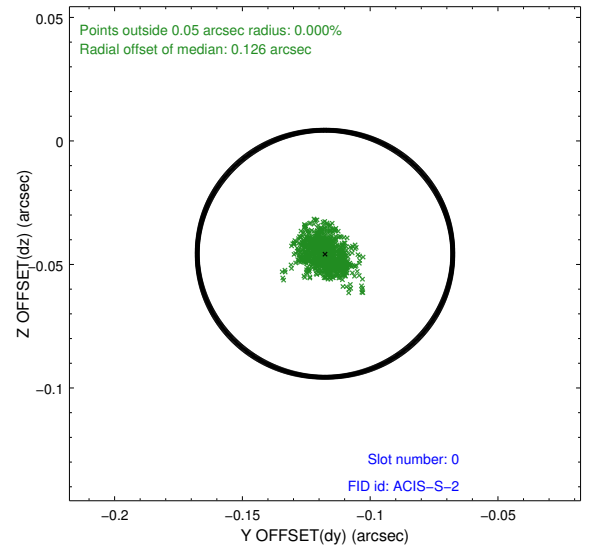
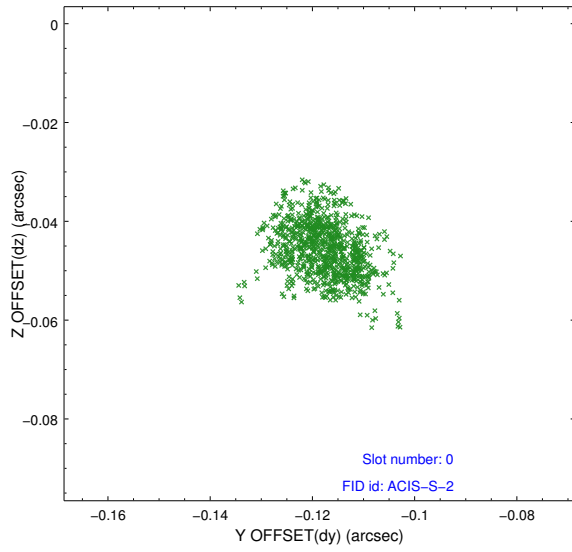


Time (s)

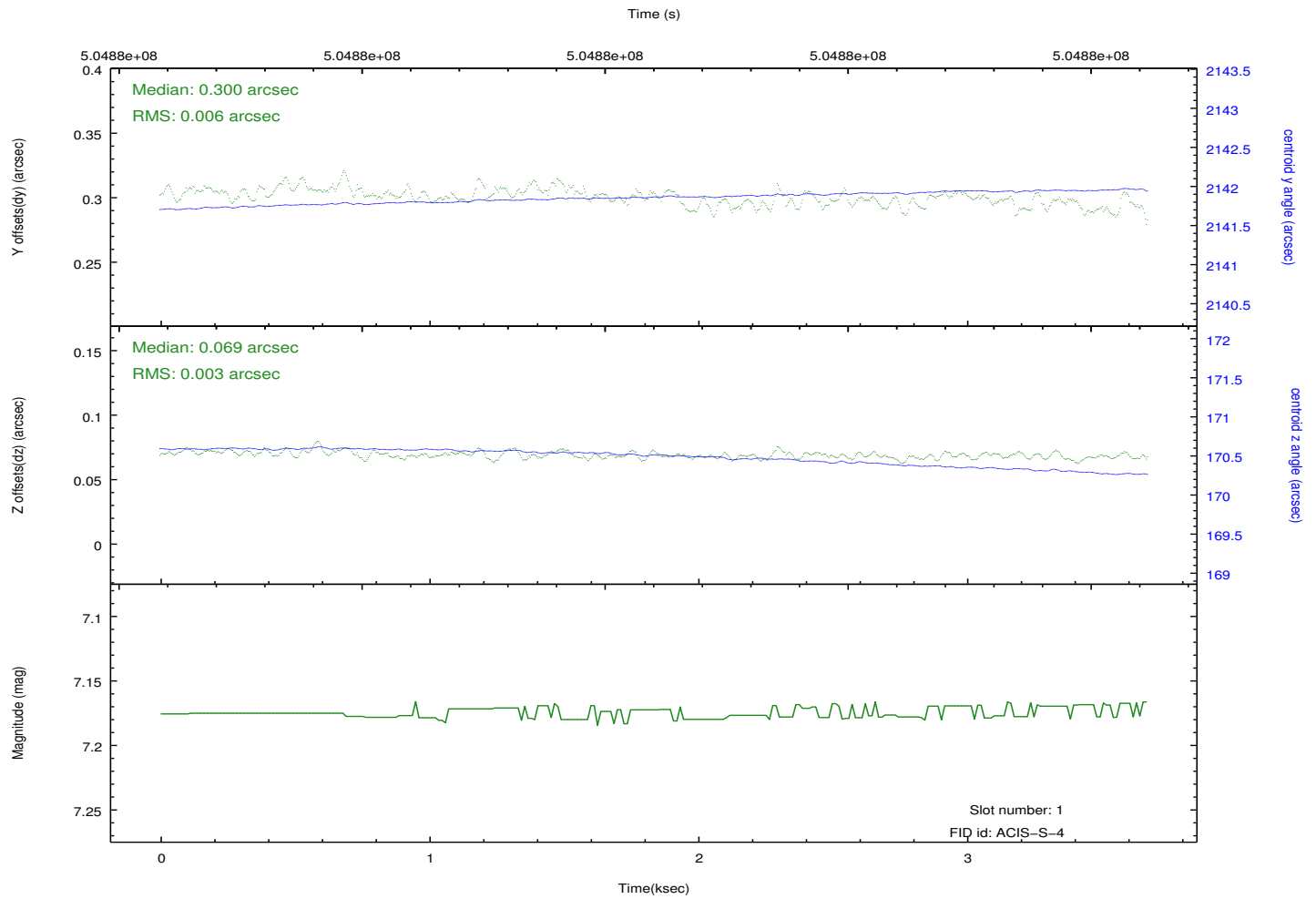
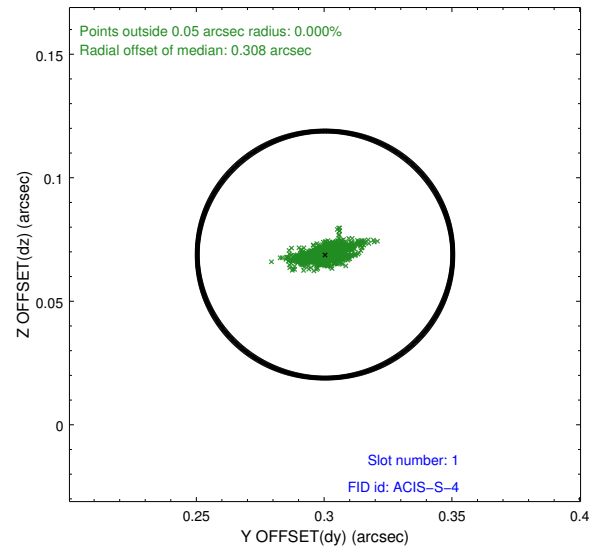
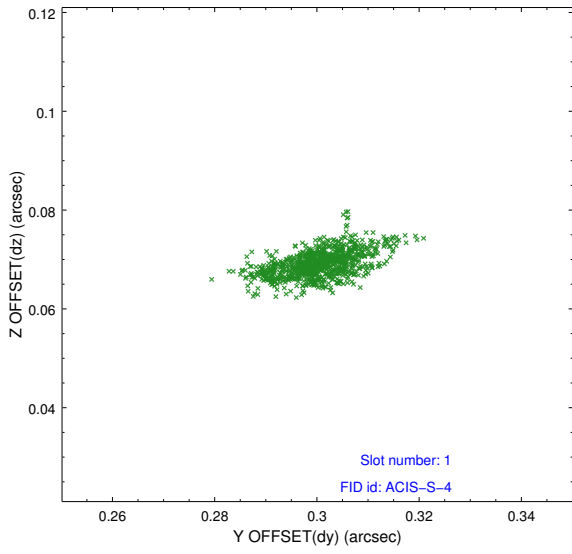


2.5 FID Slots

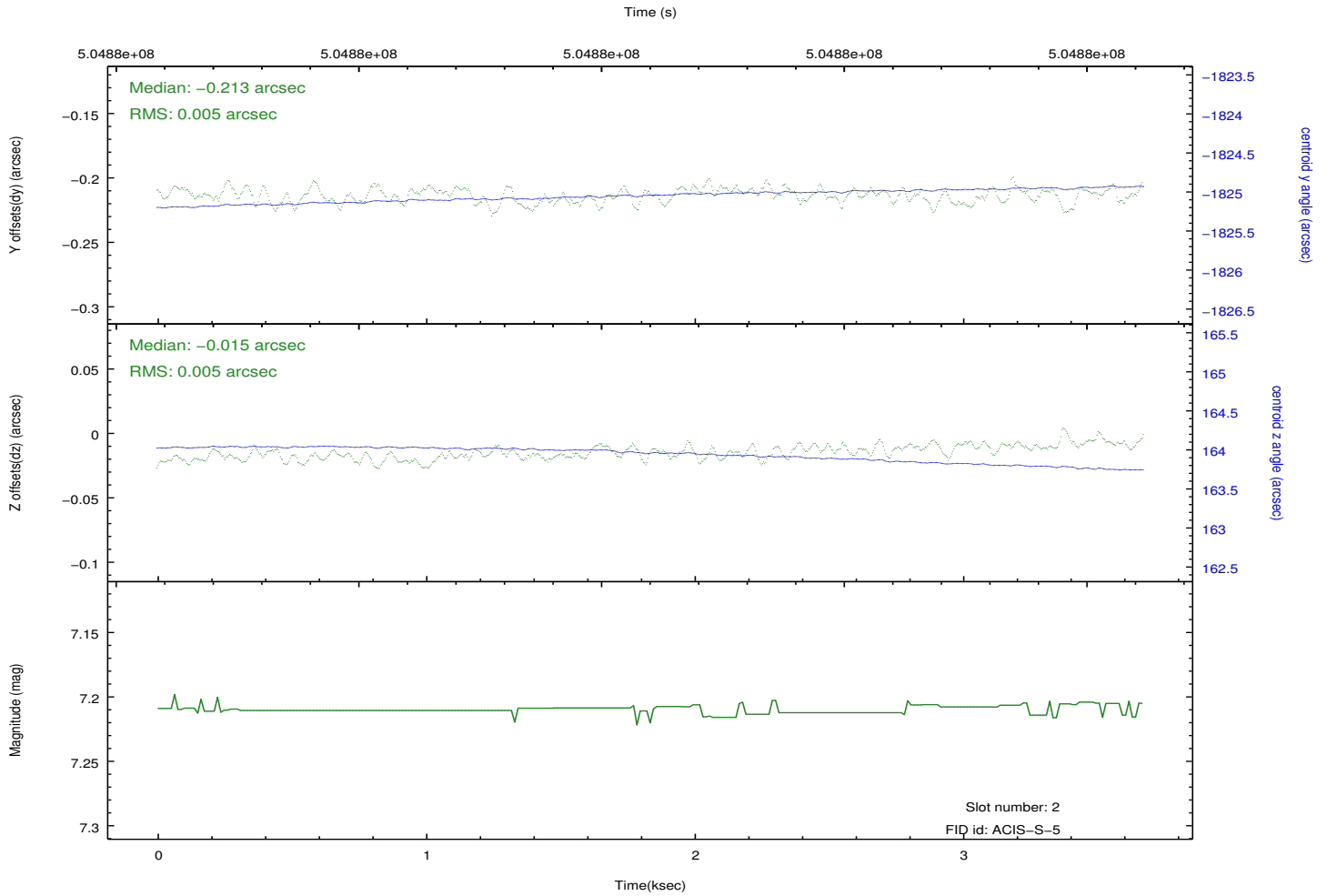
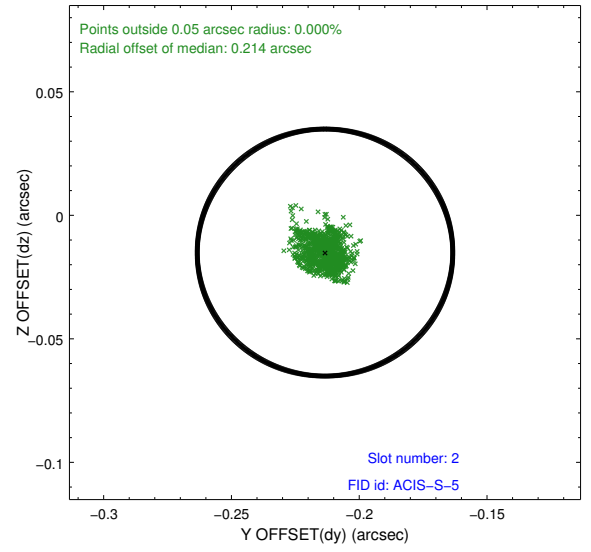
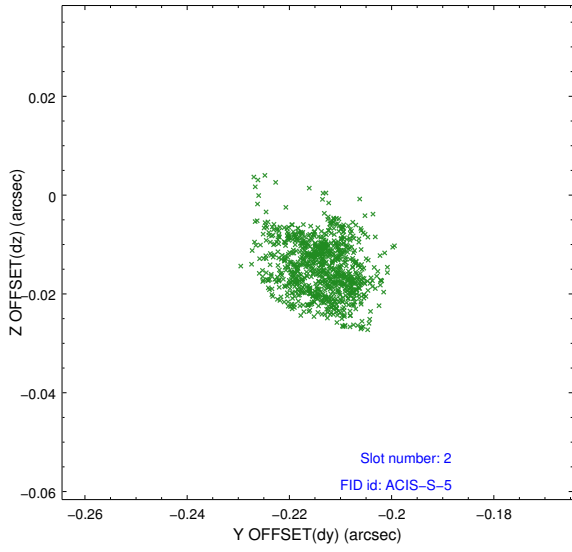
2.5.1 Slot 0



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	3.566660892427

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.