

V&V Reference Report

L2 ASCDS Version : 10.5.2

Observation 19941 - L2 Version 1
Chandra X-Ray Center

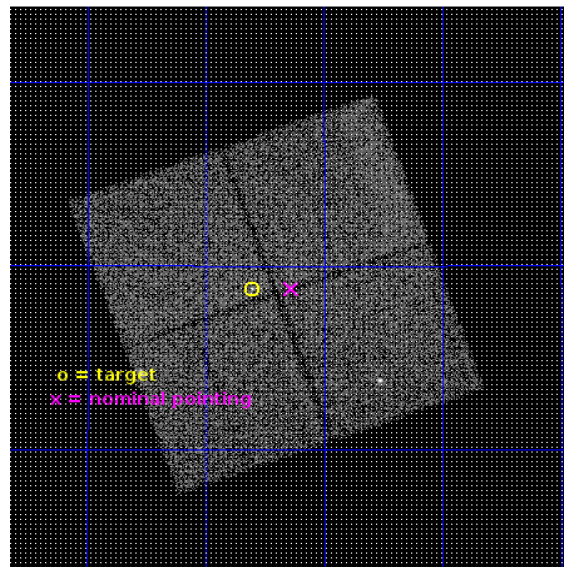
L2 Processing Date : Jan 4 2017

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1 Front

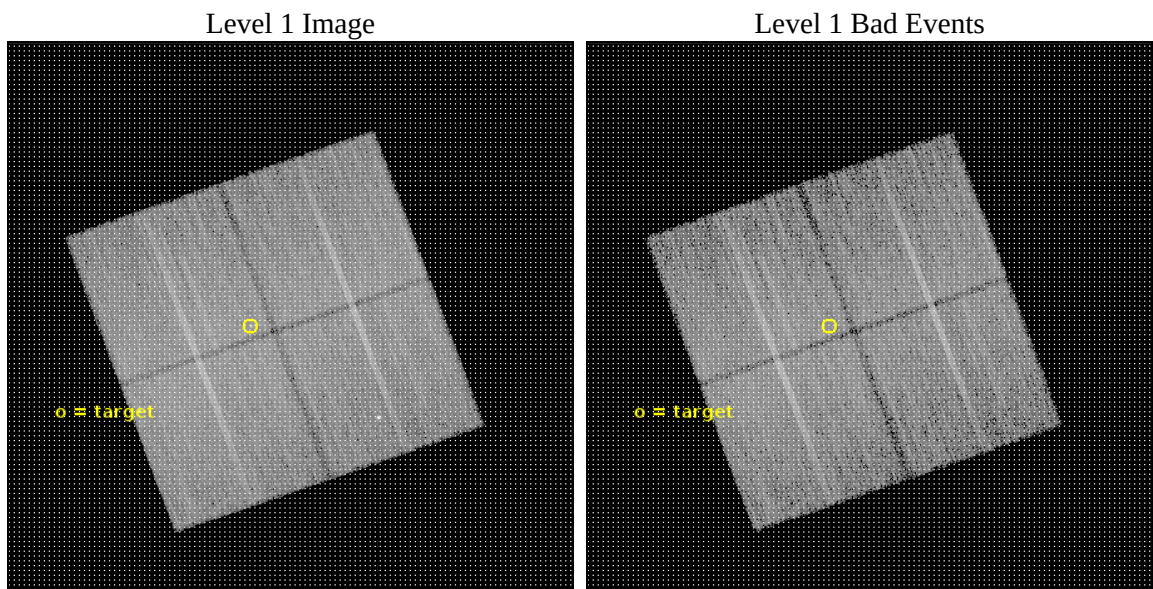
seq_num	901343	Sequence number
obs_id	19941	Observation id
title	Are runaway O-star bow shocks able to accelerate cosmic rays?	Prop
observer	Dr. Blagoy Rangelov	Principal investigator
object	Ae Aur	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	79.075833	Observer's specified target RA [deg]
dec_targ	34.312306	Observer's specified target Dec [deg]
ra_nom	79.034479129901	Nominal RA [deg]
dec_nom	34.312623160515	Nominal Dec [deg]
roll_nom	250.23201697573	Nominal Roll [deg]
revision	1	Processing version of data
ontime	27078.459198117	Sum of GTIs [s]
livetime	26724.659193822	Livetime [s]
ontime0	27078.459158421	Sum of GTIs [s]
ontime1	27081.600208402	Sum of GTIs [s]
ontime2	27081.600208402	Sum of GTIs [s]
ontime3	27078.459198117	Sum of GTIs [s]
l2events	73119	Number of level 2 events



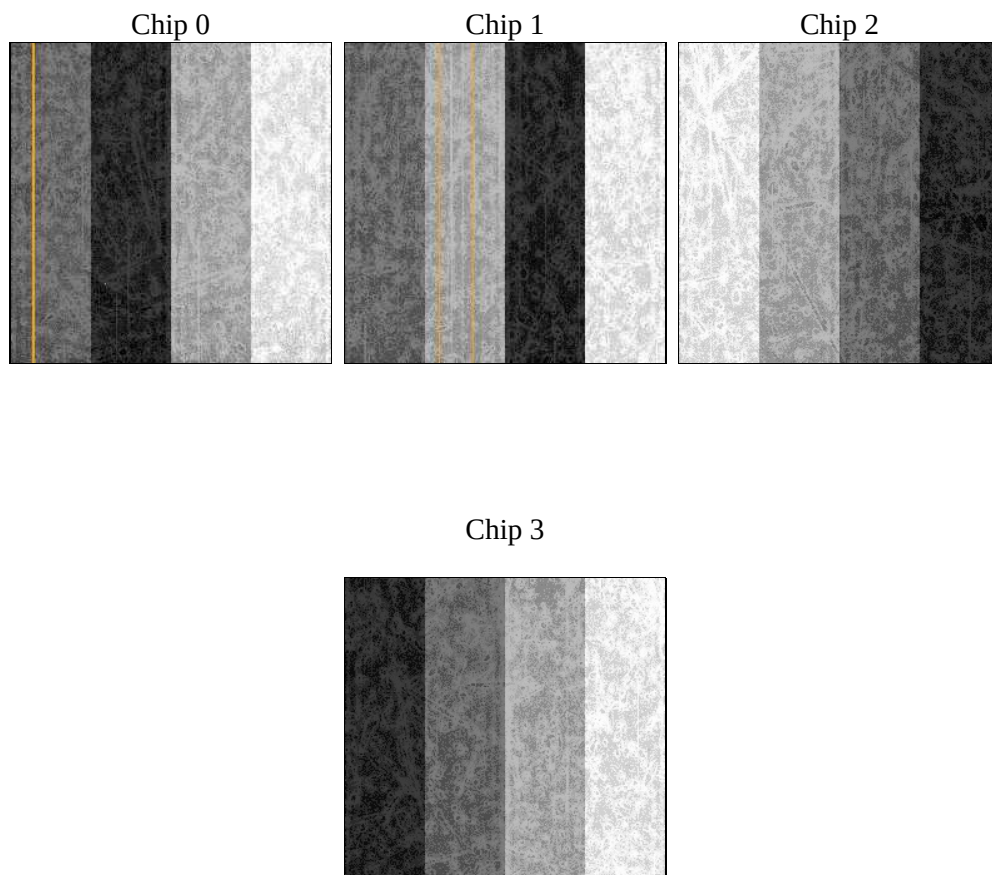
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	27000.000000	[s] Scheduled observation exposure time
ascdsver	10.5.2	Processing system revision	ontime	27078.459198117	Sum of GTIs [s]
caldbver	4.7.3	 	ontime0	27078.459158421	Sum of GTIs [s]
date	2017-01-05T01:07:42	Date and time of file creation	ontime1	27081.600208402	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	27081.600208402	Sum of GTIs [s]
			ontime3	27078.459198117	Sum of GTIs [s]
			l1events	721999	Number of level 1 events

2.1.4 Events

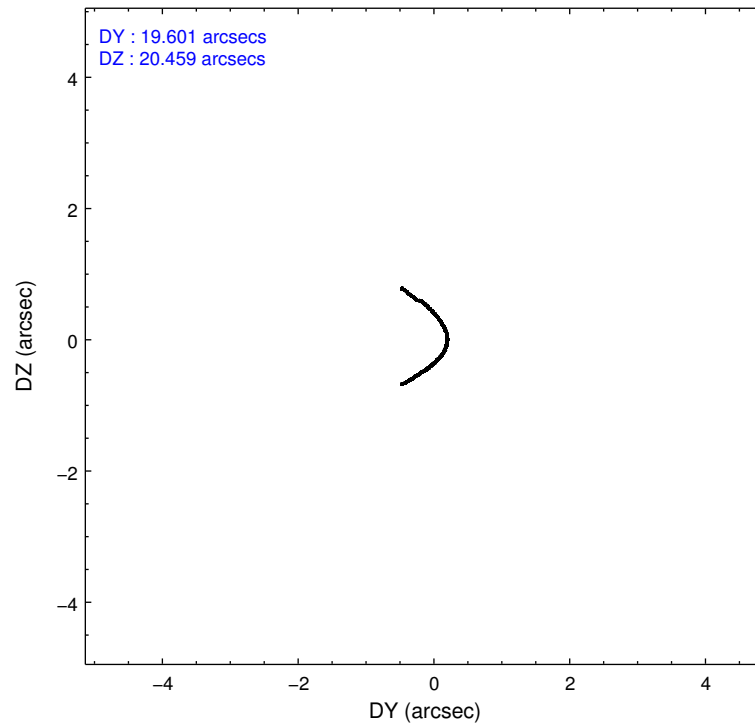
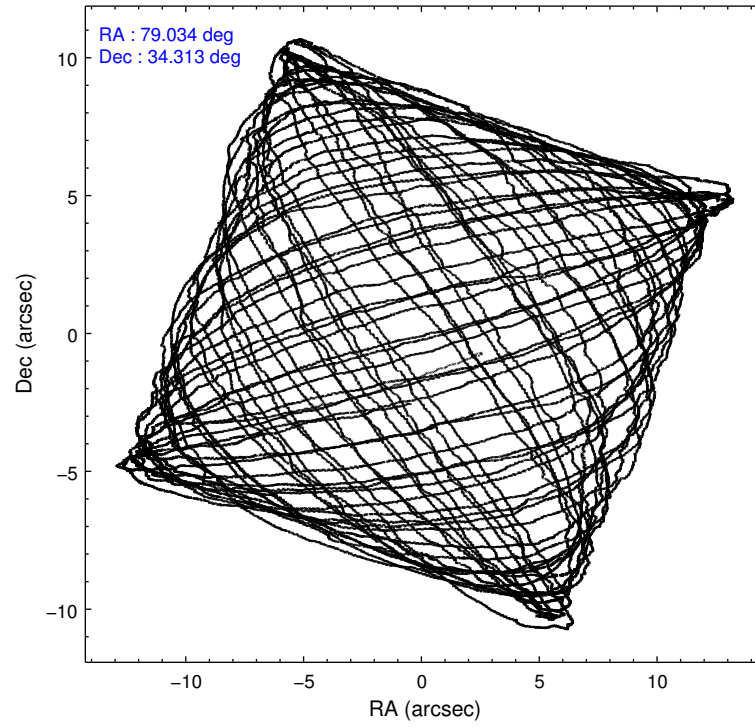
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	172577	174799	191030	183593
rejected events	149691	151604	169717	163294
rejected %	86%	86%	88%	88%

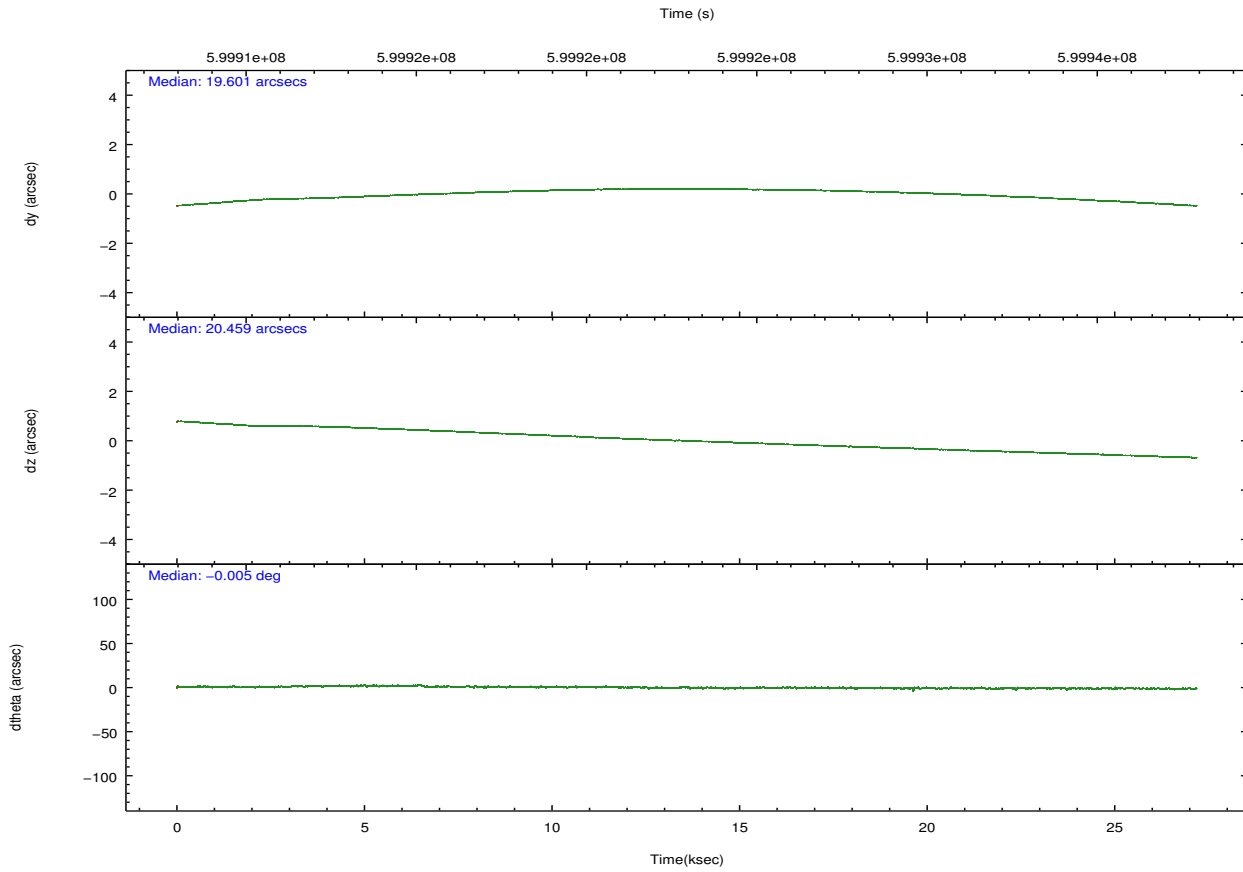
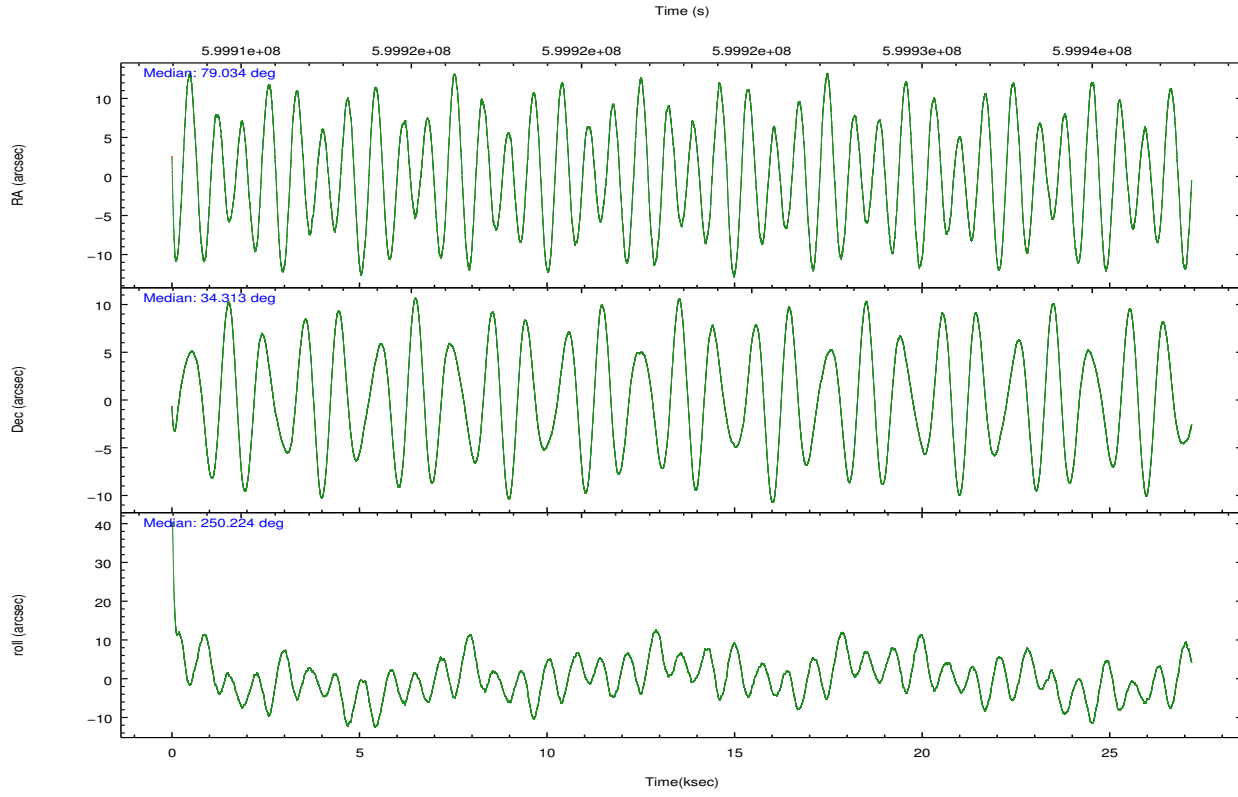
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	8541	7990	7778	7265
	4%	4%	4%	3%
grade 1 events	105	88	109	104
	0%	0%	0%	0%
grade 2 events	5569	5683	5183	4461
	3%	3%	2%	2%
grade 3 events	2224	2202	2075	2170
	1%	1%	1%	1%
grade 4 events	2113	2322	2139	2147
	1%	1%	1%	1%
grade 5 events	8171	8760	7648	9216
	4%	5%	4%	5%
grade 6 events	4444	5002	4142	4258
	2%	2%	2%	2%
grade 7 events	141410	142752	161956	153972
	81%	81%	84%	83%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-0123	ACIS-0123	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	79.028437	79.03447912990134	CCD I2 on	Y	Y
[deg] Pointing Dec	34.339769	34.31262316051477	CCD I3 on	Y	Y
[deg] Pointing Roll	250.026726	250.2320169757285	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	N	N
[mm] SIM translation stage pos	-238.418713	-238.4149198398239	CCD S3 on	O1	N
[mm] SIM translation stage offset	4.82625	4.822466836894193	CCD S4 on	N	N
[s] Observation start time (MET)	599909532.184000	599908286.7677799	CCD S5 on	N	N
Observation start date	2017-01-04T09:31:03	2017-01-04T09:11:26	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	599936532.184000	599937512.59447	On-chip summing requested	N	N
Observation end date	2017-01-04T17:01:03	2017-01-04T17:18:32	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



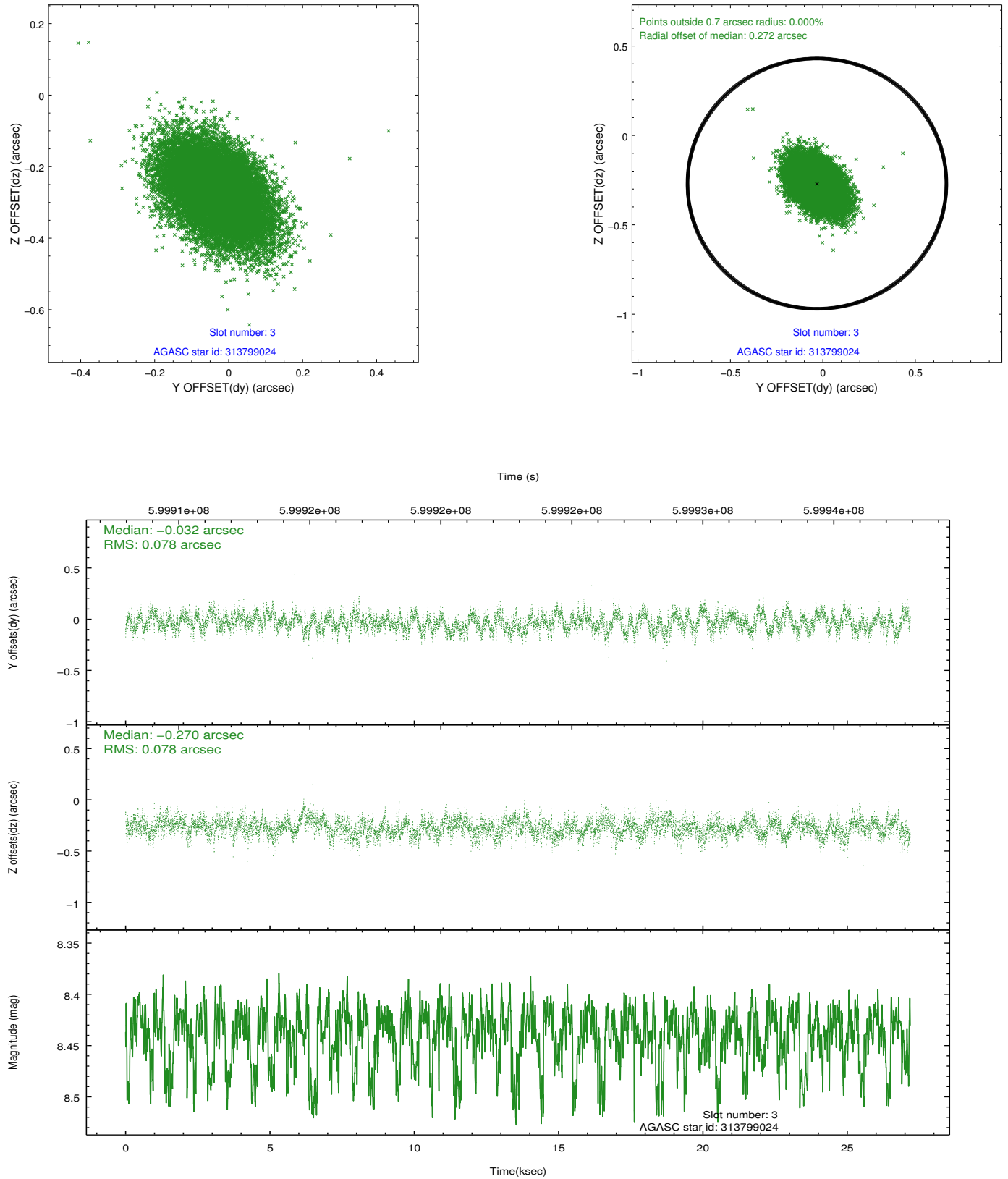


Slot Statistics

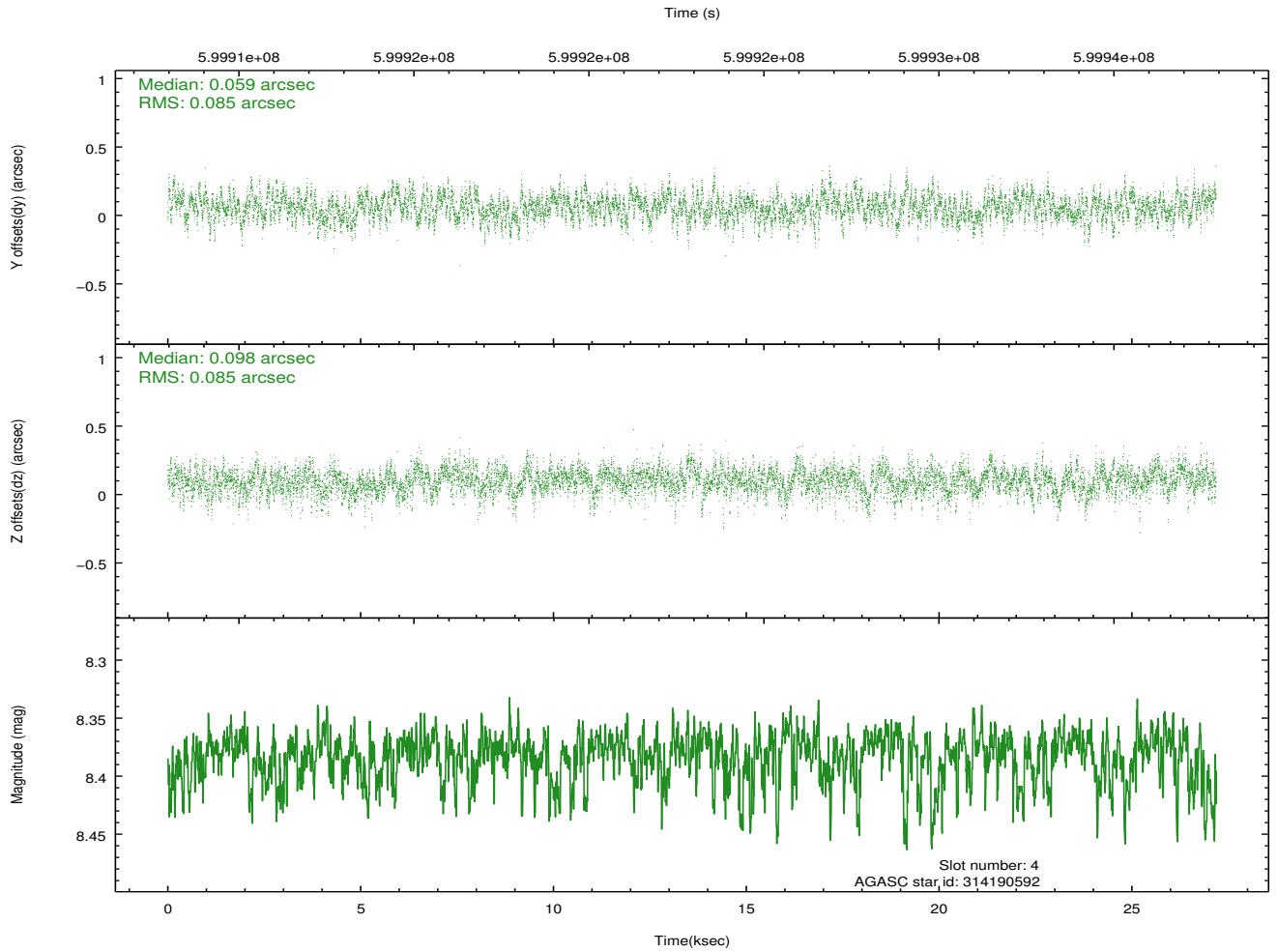
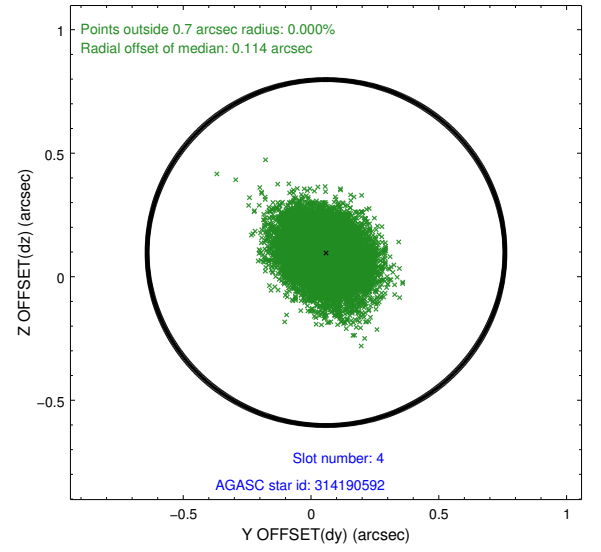
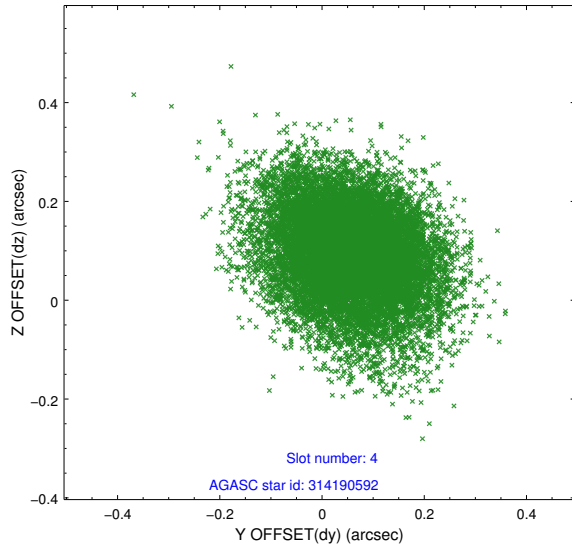
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.11	6630	0.026	0.018	0.029	0.040	0.000000	0.000000	919.93	-744.99
1	FID		ACIS-I-5	7.07	6631	-0.326	0.001	0.014	0.021	0.000000	0.000000	-1828.59	1152.29
2	FID		ACIS-I-6	7.08	6630	0.212	0.051	0.019	0.029	0.000000	0.000000	385.40	1797.08
3	GUIDE	used	313799024	8.44	13257	-0.032	-0.270	0.116	0.190	79.398688	33.593486	2143.96	1960.82
4	GUIDE	used	314190592	8.38	13253	0.059	0.098	0.126	0.211	78.184855	34.089521	1697.09	-2058.58
5	GUIDE	used	314317160	8.64	13250	-0.076	0.027	0.106	0.184	79.818927	34.564727	-1569.10	1923.18
6	GUIDE	used	314313576	8.36	13252	0.254	0.488	0.186	0.290	78.918206	34.584684	-716.68	-607.59
7	GUIDE	used	314317672	8.40	13250	-0.204	-0.339	0.165	0.241	79.726952	33.968519	536.77	2414.02

2.4 Star Slots

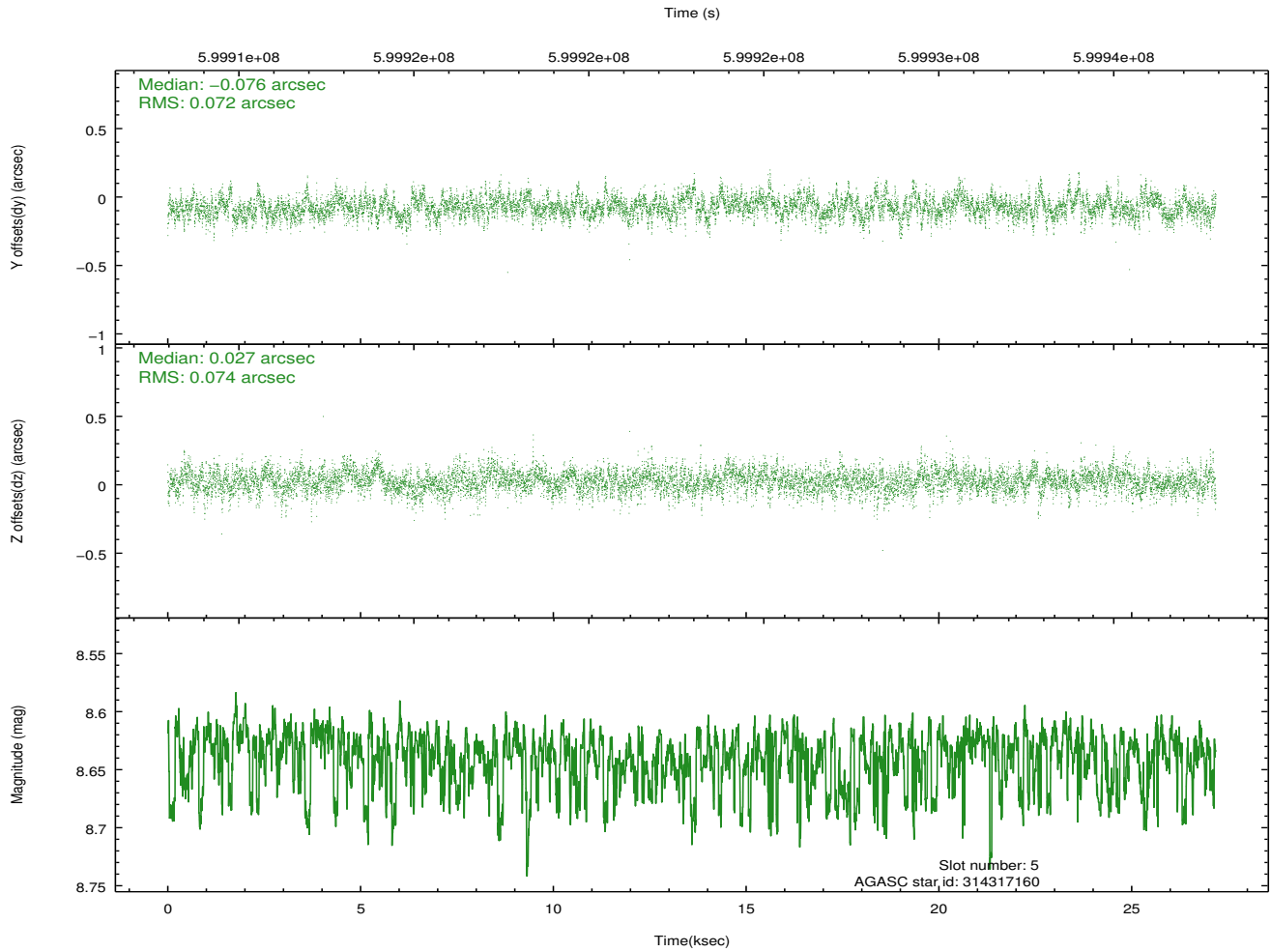
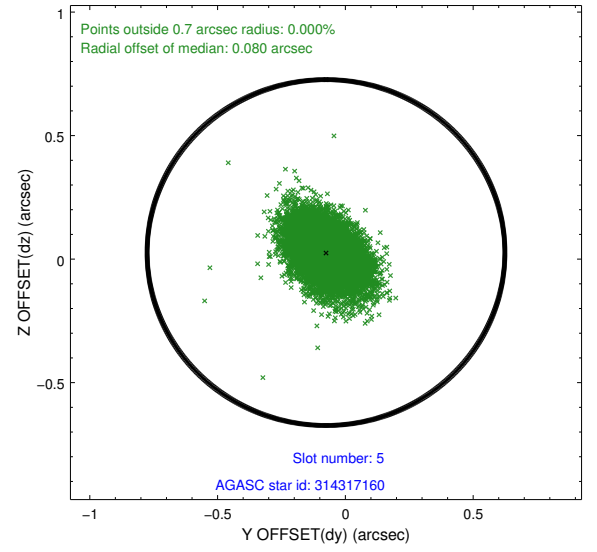
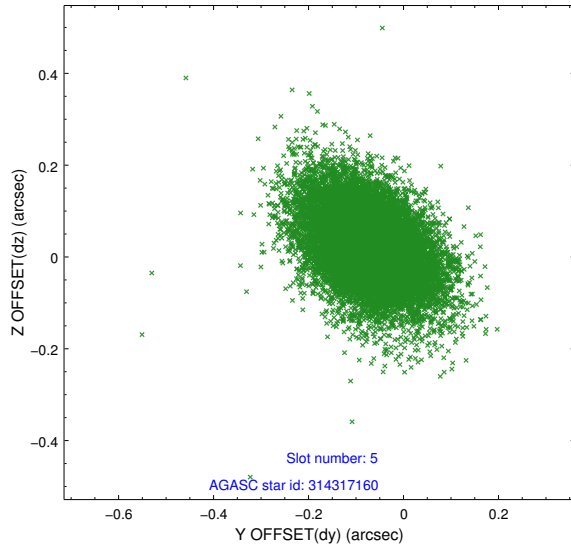
2.4.1 Slot 3



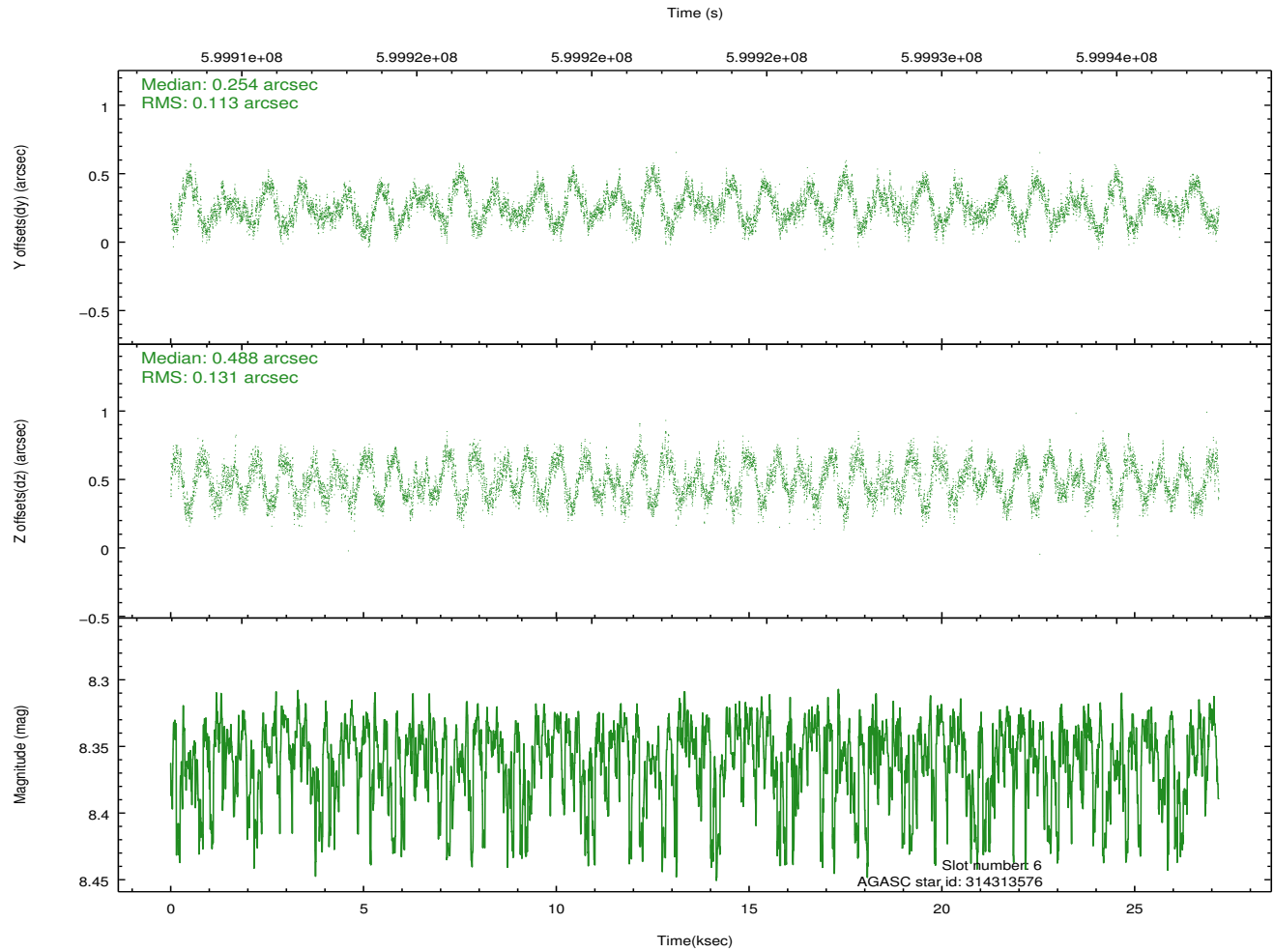
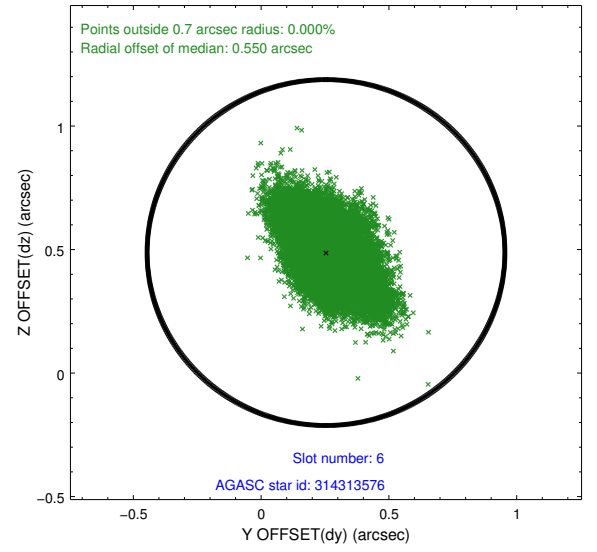
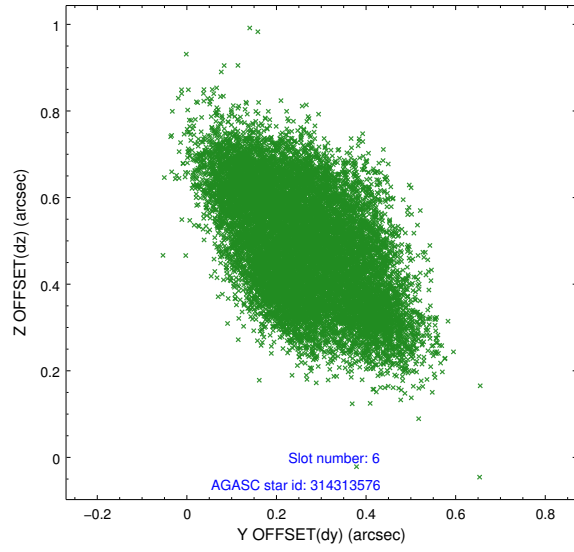
2.4.2 Slot 4



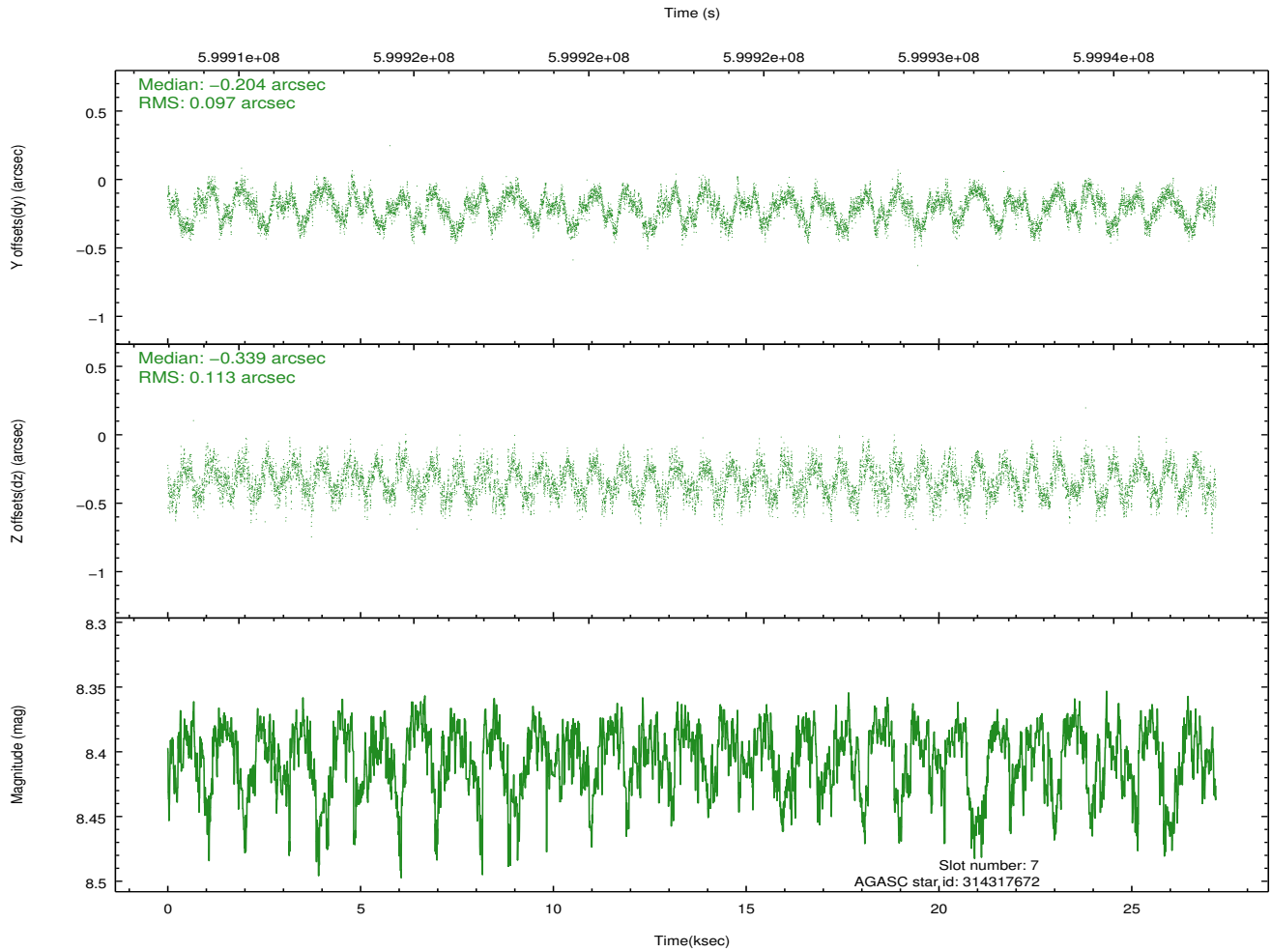
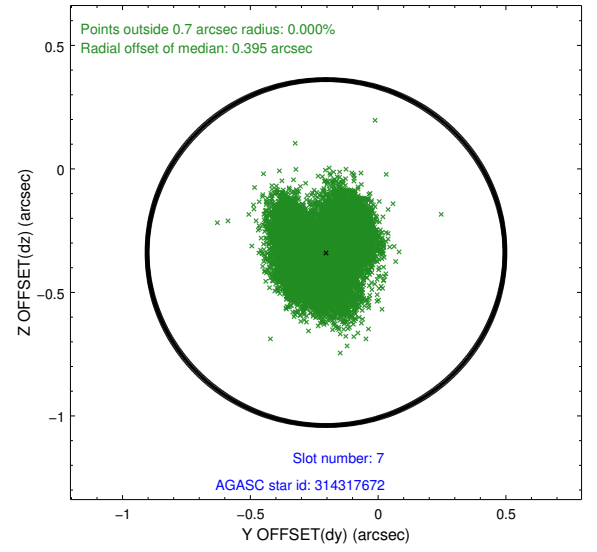
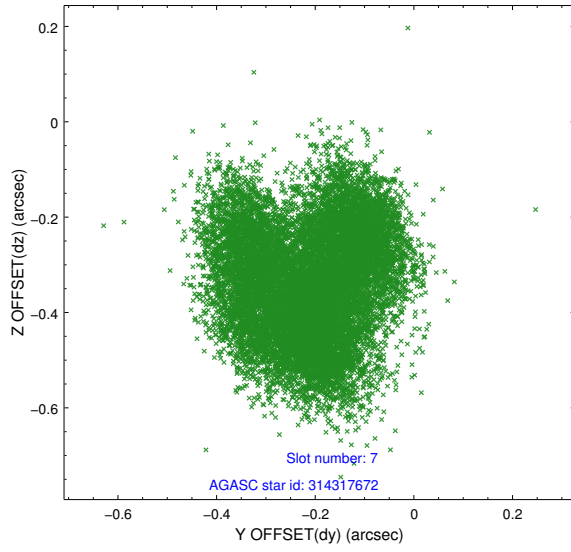
2.4.3 Slot 5



2.4.4 Slot 6

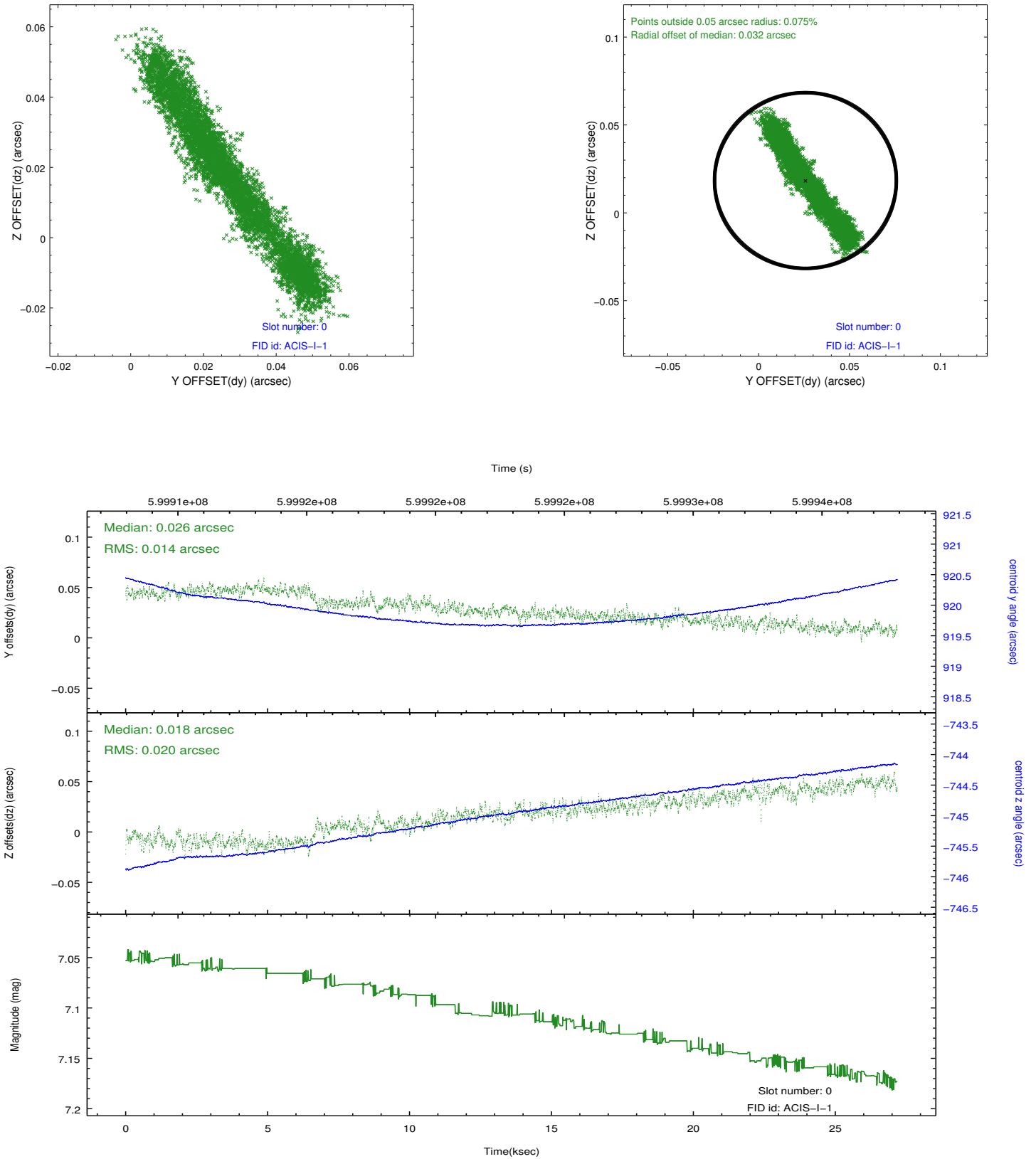


2.4.5 Slot 7

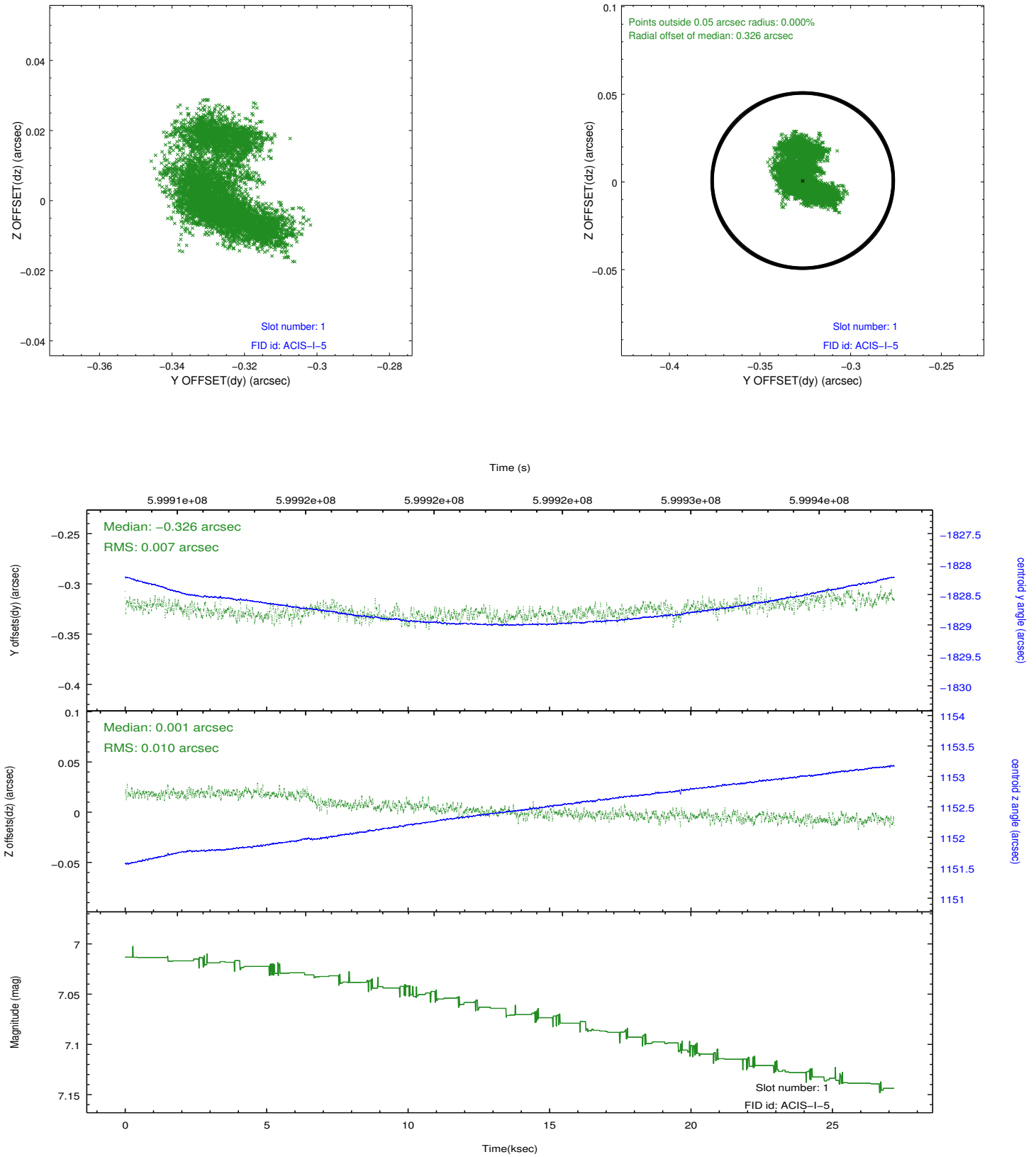


2.5 FID Slots

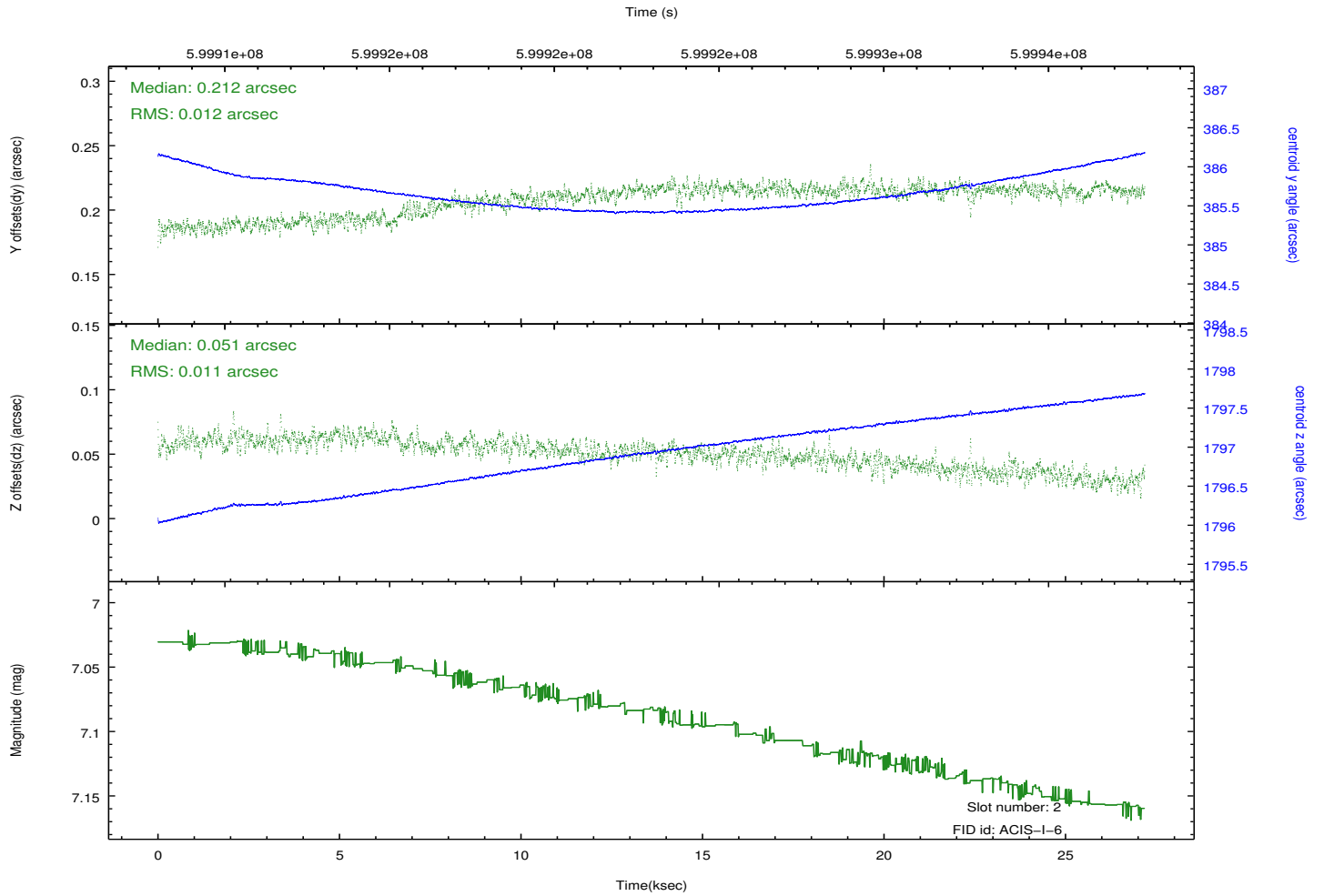
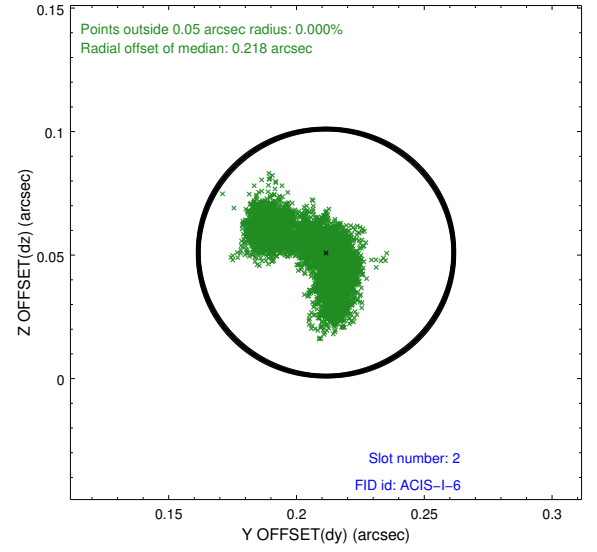
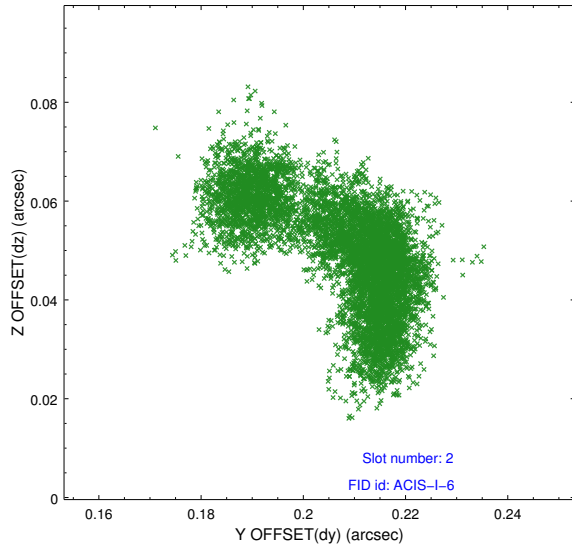
2.5.1 Slot 0



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)	2017.01.05
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	27.078459198117

A.2 Comments

Optional chip S3 not included.