

V&V Reference Report

L2 ASCDS Version : 10.5.2

Observation 19951 - L2 Version 1
Chandra X-Ray Center

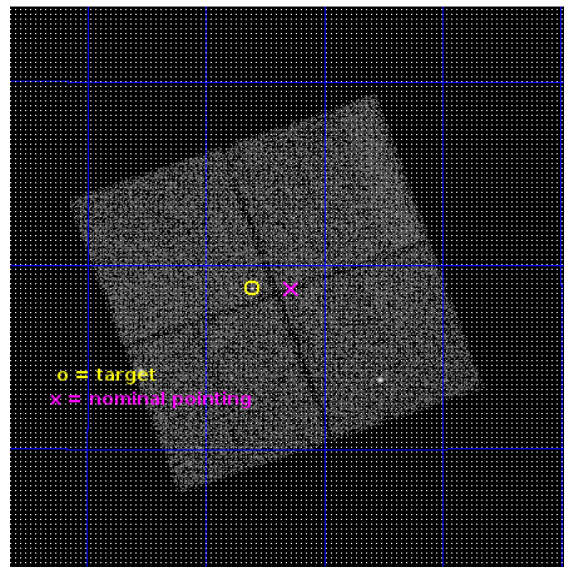
L2 Processing Date : Jan 7 2017

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1 Front

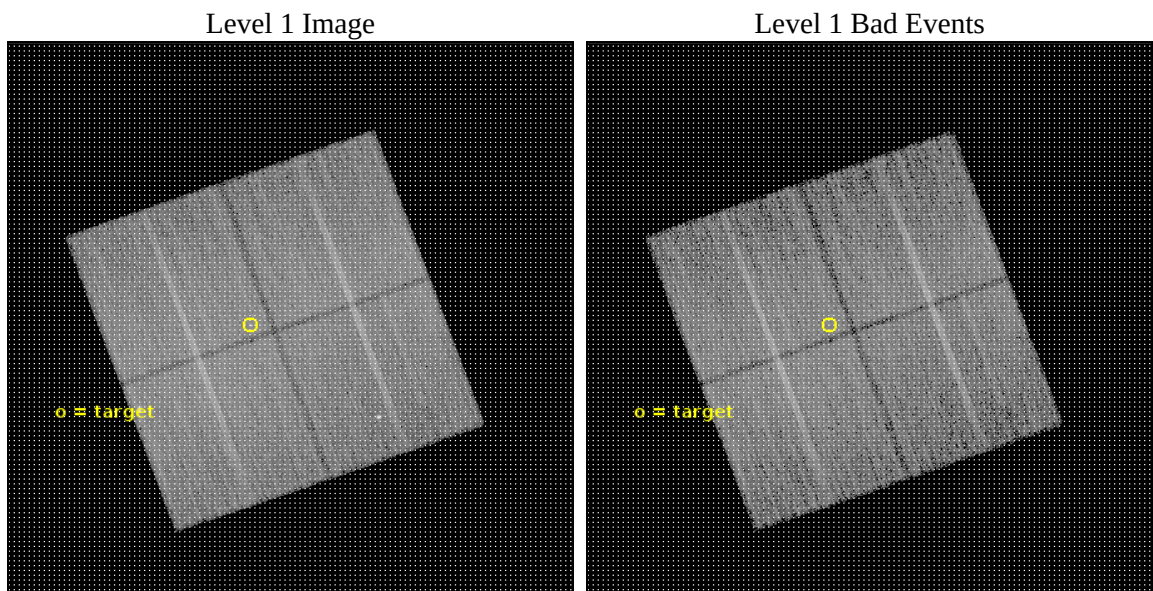
seq_num	901343	Sequence number
obs_id	19951	Observation id
title	Are runaway O-star bow shocks able to accelerate cosmic rays?	Prop
observer	Dr. Blagoy Rangelov	Principal investigator
object	Ae Aur	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	79.075833	Observer's specified target RA [deg]
dec_targ	34.312306	Observer's specified target Dec [deg]
ra_nom	79.034540994335	Nominal RA [deg]
dec_nom	34.312212401931	Nominal Dec [deg]
roll_nom	250.2319795391	Nominal Roll [deg]
revision	1	Processing version of data
ontime	28082.900216103	Sum of GTIs [s]
livetime	27715.976450449	Livetime [s]
ontime0	28079.759145856	Sum of GTIs [s]
ontime1	28079.759155869	Sum of GTIs [s]
ontime2	28076.618045211	Sum of GTIs [s]
ontime3	28082.900216103	Sum of GTIs [s]
l2events	75830	Number of level 2 events



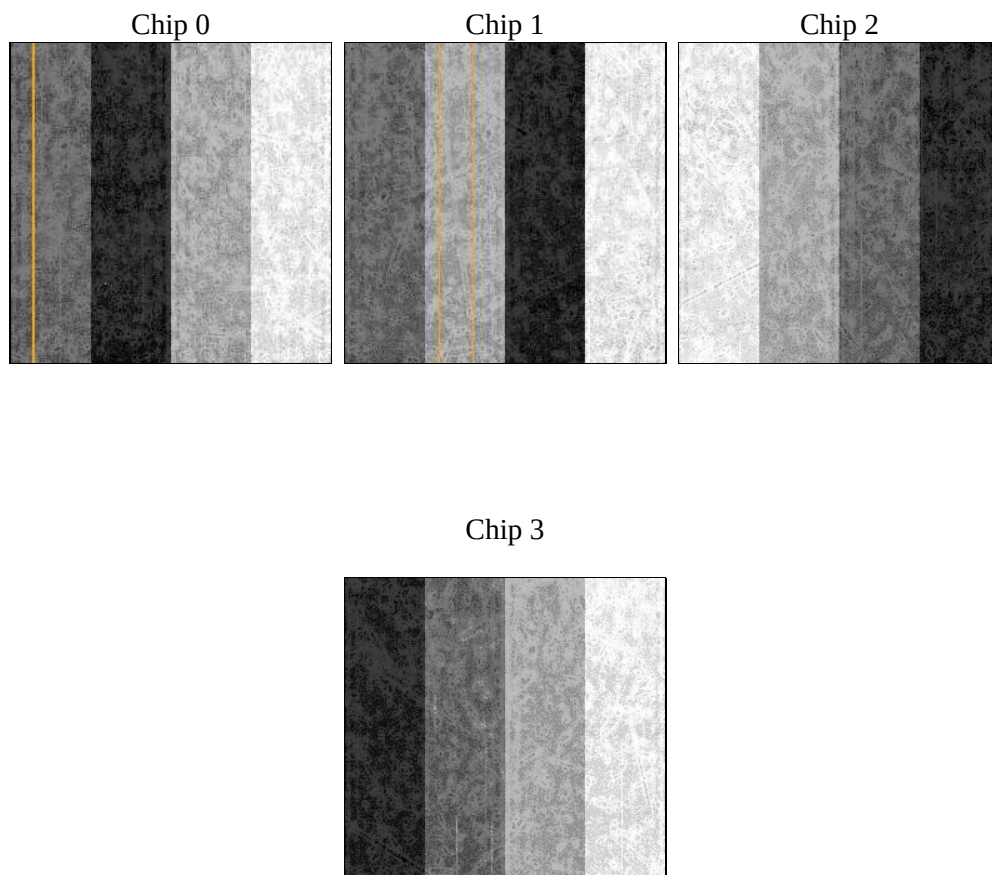
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	28000.000000	[s] Scheduled observation exposure time
ascdsver	10.5.2	Processing system revision	ontime	28082.900216103	Sum of GTIs [s]
caldbver	4.7.3	 	ontime0	28079.759145856	Sum of GTIs [s]
date	2017-01-07T15:10:57	Date and time of file creation	ontime1	28079.759155869	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	28076.618045211	Sum of GTIs [s]
			ontime3	28082.900216103	Sum of GTIs [s]
			l1events	742003	Number of level 1 events

2.1.4 Events

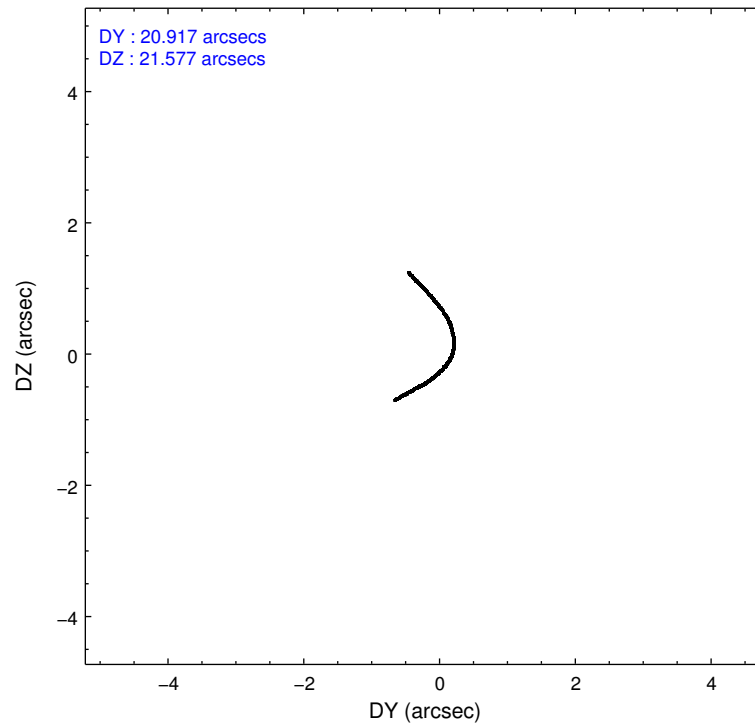
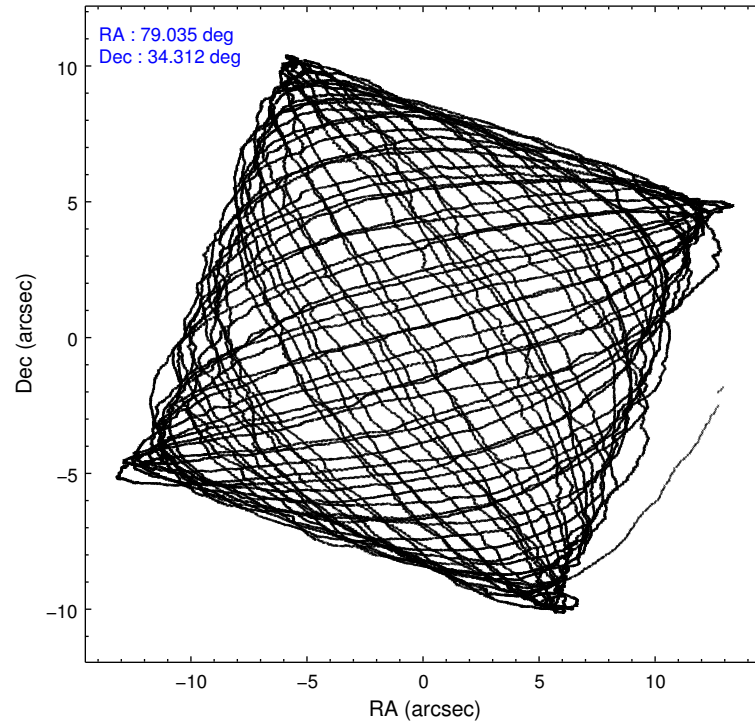
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	173434	181405	195962	191202
rejected events	150190	157626	173225	170444
rejected %	86%	86%	88%	89%

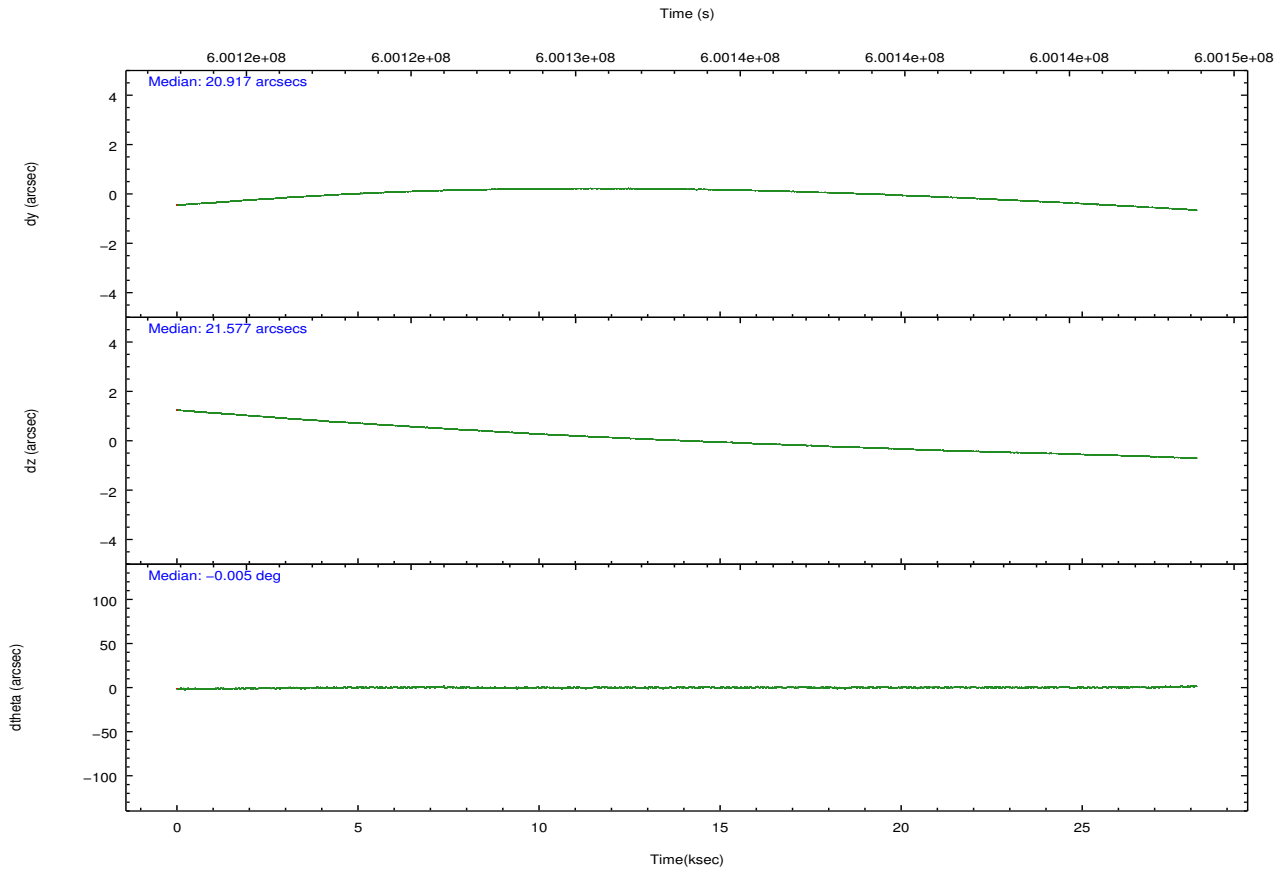
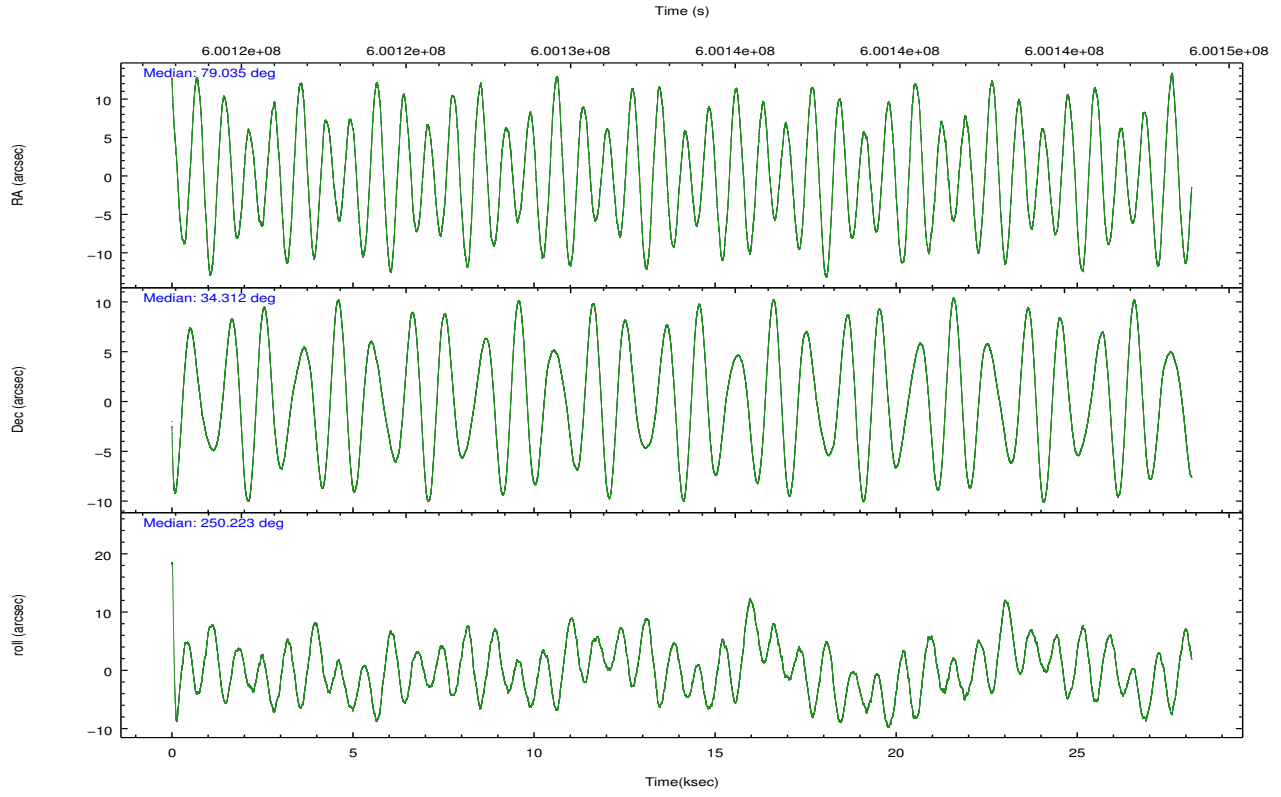
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	8722	8168	8478	7622
	5%	4%	4%	3%
grade 1 events	110	117	112	136
	0%	0%	0%	0%
grade 2 events	5473	5807	5528	4534
	3%	3%	2%	2%
grade 3 events	2207	2284	2188	2191
	1%	1%	1%	1%
grade 4 events	2281	2190	2254	2136
	1%	1%	1%	1%
grade 5 events	8341	8712	7867	9502
	4%	4%	4%	4%
grade 6 events	4564	5333	4290	4278
	2%	2%	2%	2%
grade 7 events	141736	148794	165245	160803
	81%	82%	84%	84%

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	79.028485	79.03454099433466	CCD I2 on	Y	Y
[deg] Pointing Dec	34.339362	34.31221240193068	CCD I3 on	Y	Y
[deg] Pointing Roll	250.026695	250.2319795391004	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)	600119445.184000	600117996.65492	CCD S5 on	N	N
Observation start date	2017-01-06T19:49:36	2017-01-06T19:26:36	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	600147445.184000	600148214.68167	On-chip summing requested	N	N
Observation end date	2017-01-07T03:36:16	2017-01-07T03:50:14	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



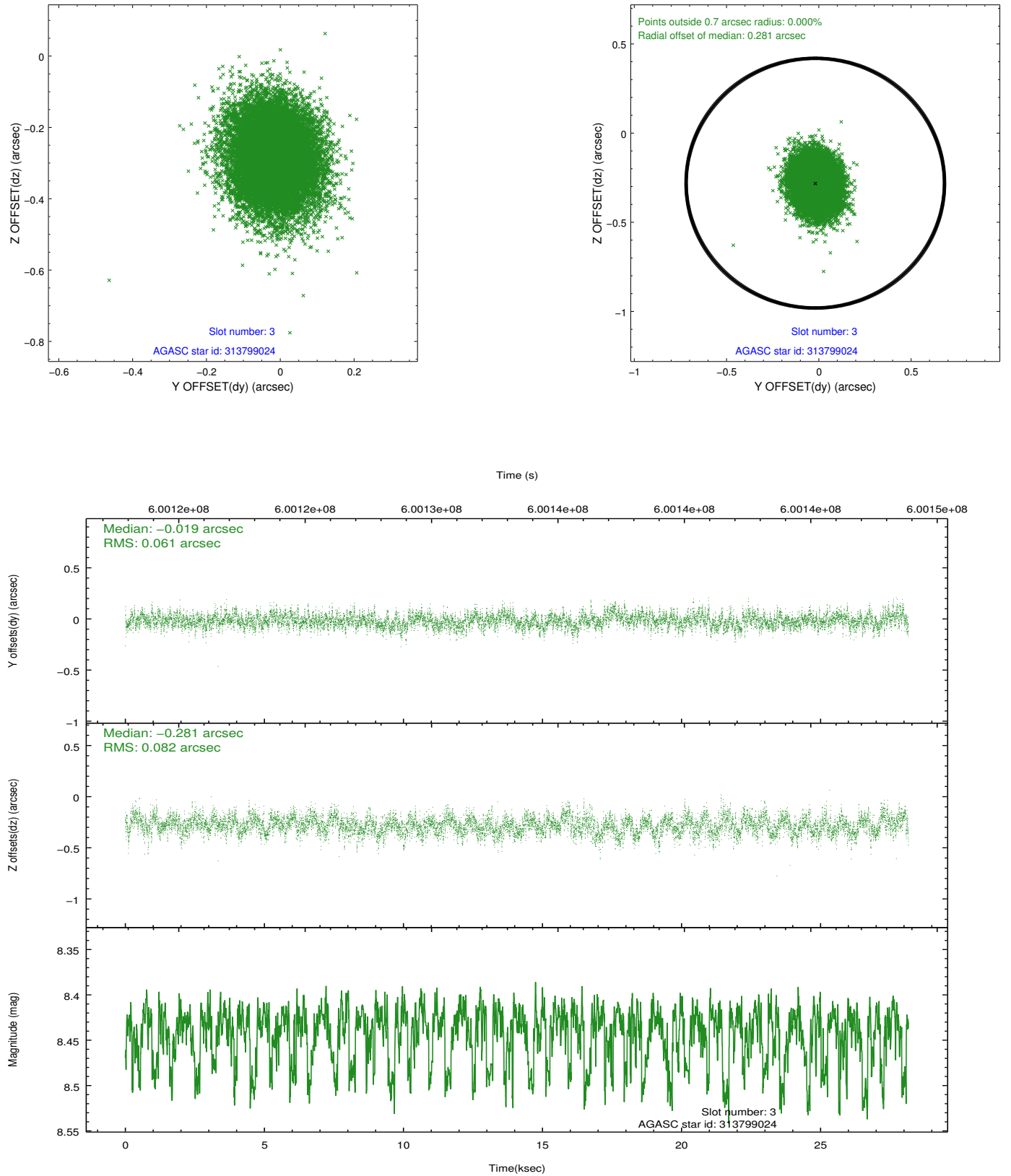


Slot Statistics

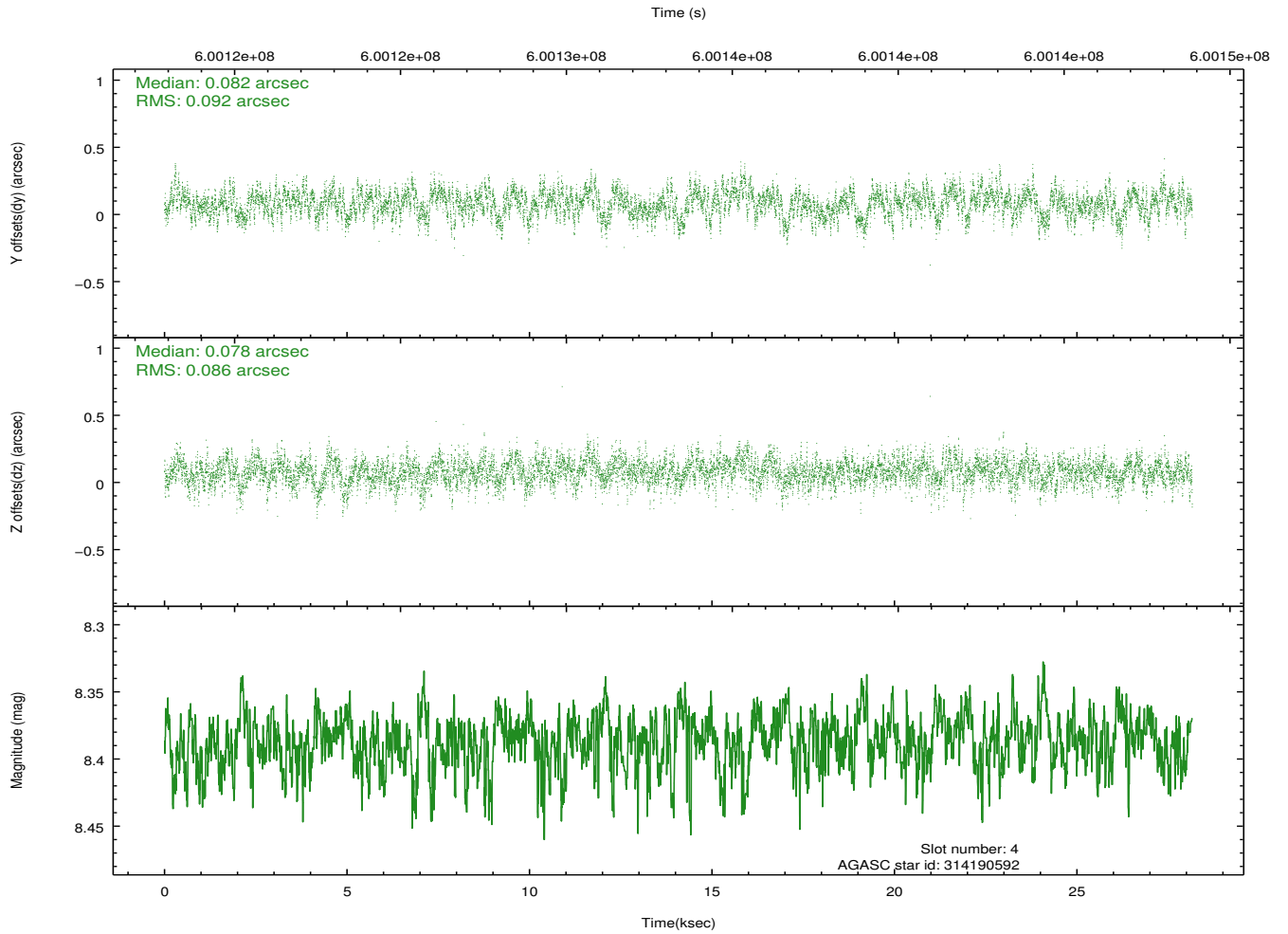
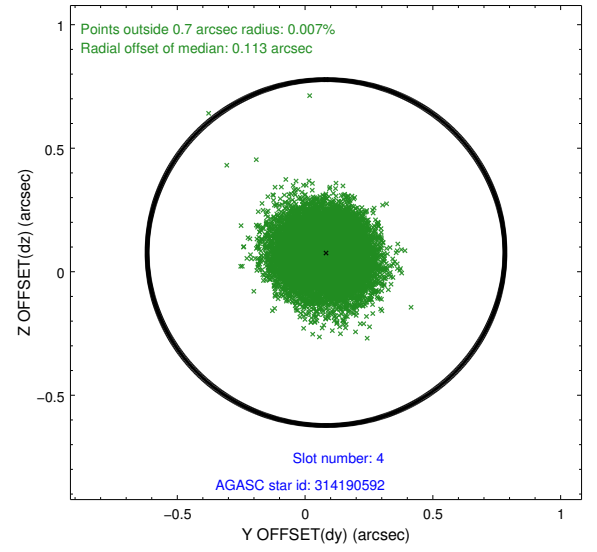
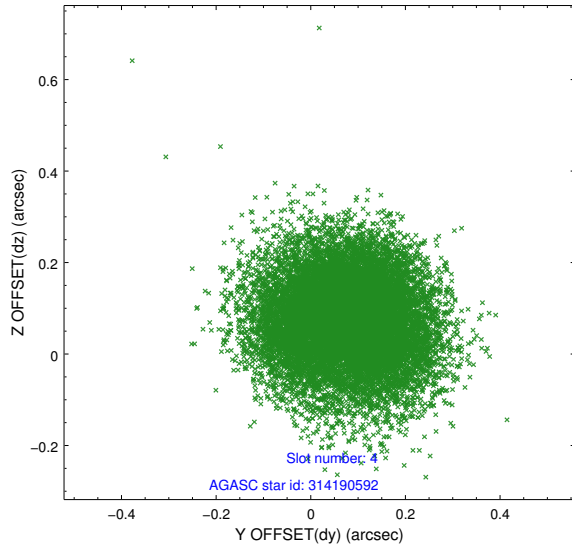
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.17	6869	0.056	0.014	0.021	0.064	0.000000	0.000000	918.63	-746.20
1	FID		ACIS-I-5	7.13	6865	-0.376	0.022	0.013	0.037	0.000000	0.000000	-1829.97	1151.10
2	FID		ACIS-I-6	7.15	6868	0.229	0.035	0.027	0.064	0.000000	0.000000	384.10	1795.83
3	GUIDE	used	313799024	8.44	13723	-0.019	-0.281	0.107	0.177	79.398688	33.593486	2142.65	1960.17
4	GUIDE	used	314190592	8.39	13732	0.082	0.078	0.135	0.218	78.184855	34.089521	1695.85	-2059.25
5	GUIDE	used	314317160	8.60	13731	-0.109	0.035	0.254	0.377	79.818927	34.564727	-1570.47	1922.50
6	GUIDE	used	314313576	8.34	13729	0.261	0.495	0.137	0.229	78.918206	34.584684	-717.96	-608.26
7	GUIDE	used	314317672	8.42	13732	-0.208	-0.331	0.125	0.209	79.726952	33.968519	535.44	2413.37

2.4 Star Slots

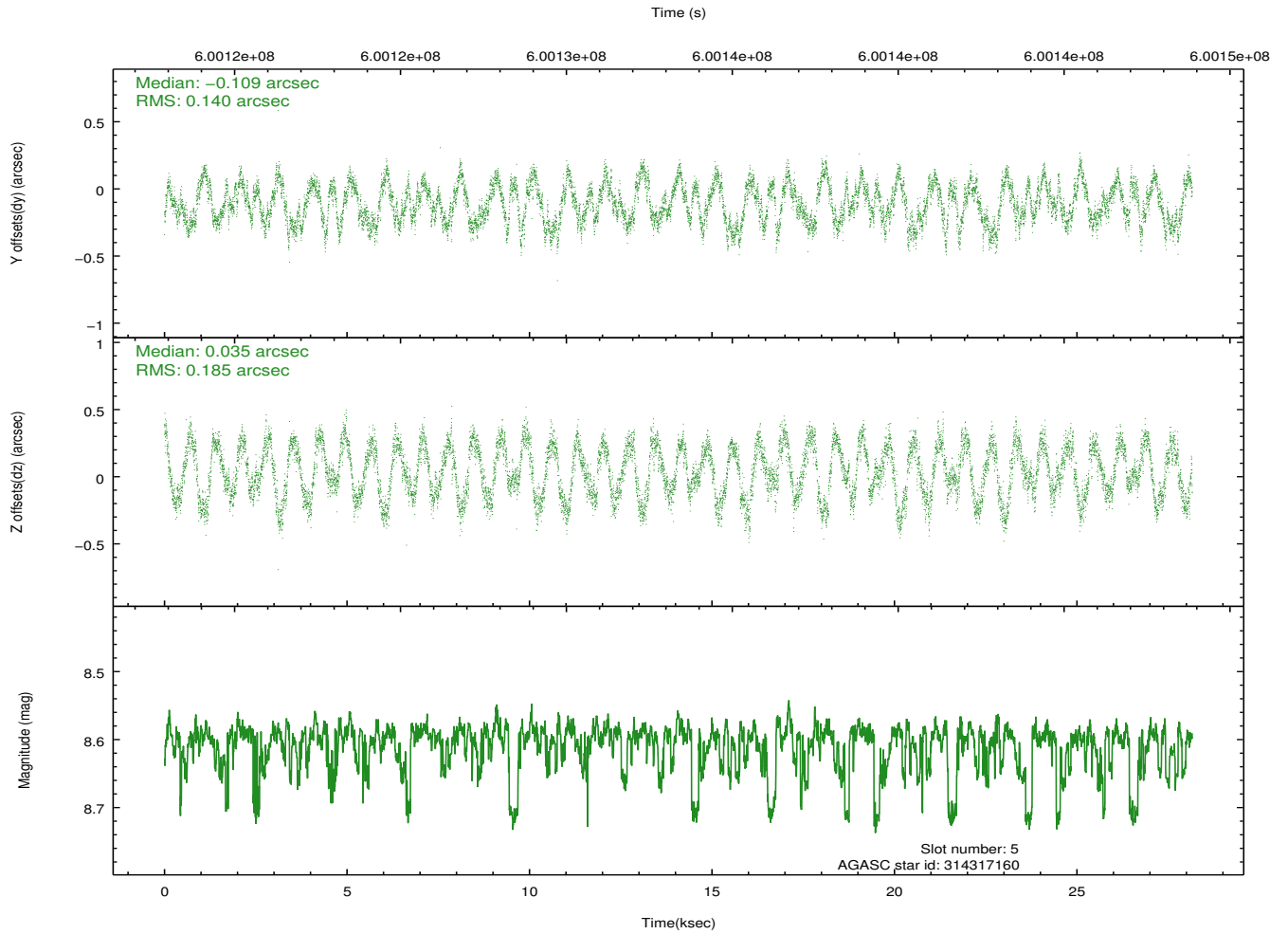
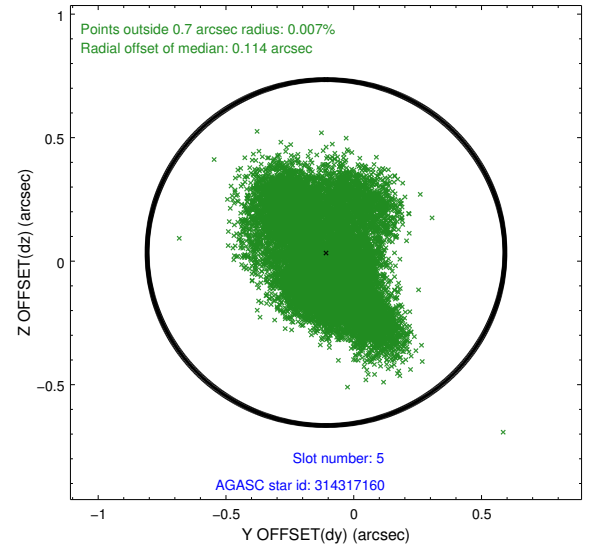
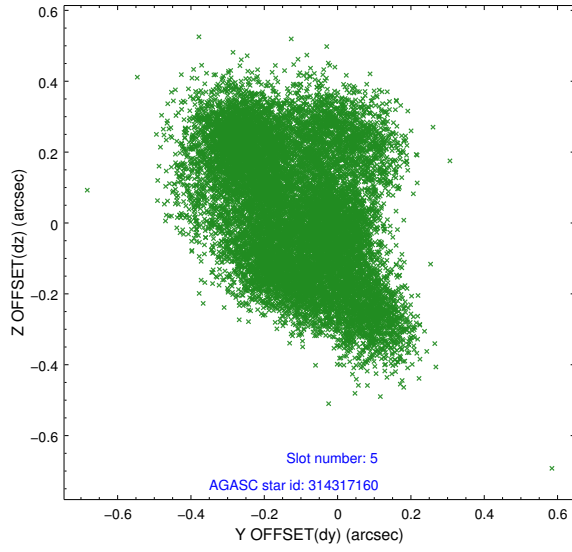
2.4.1 Slot 3



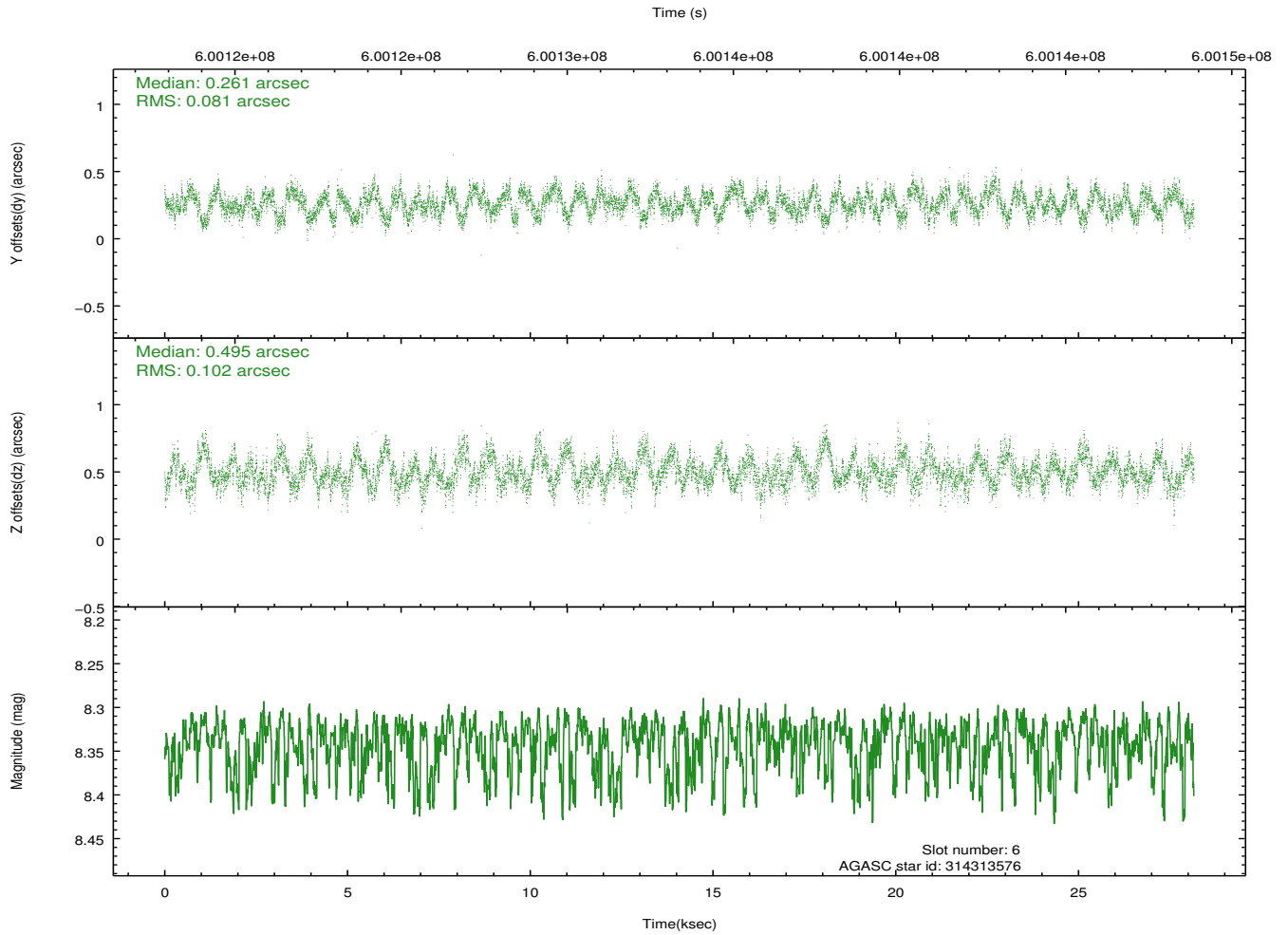
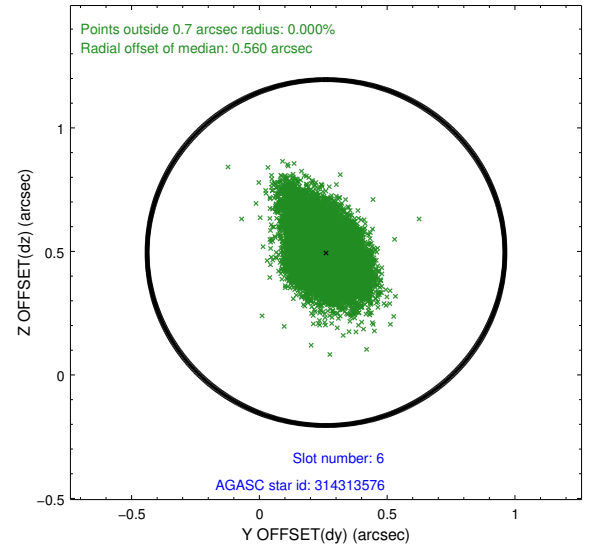
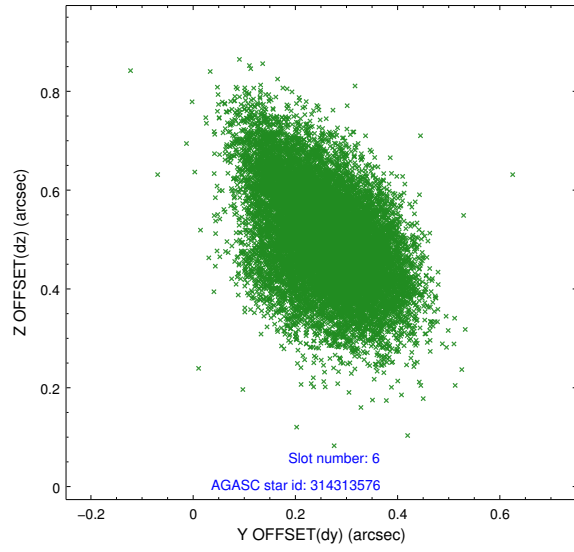
2.4.2 Slot 4



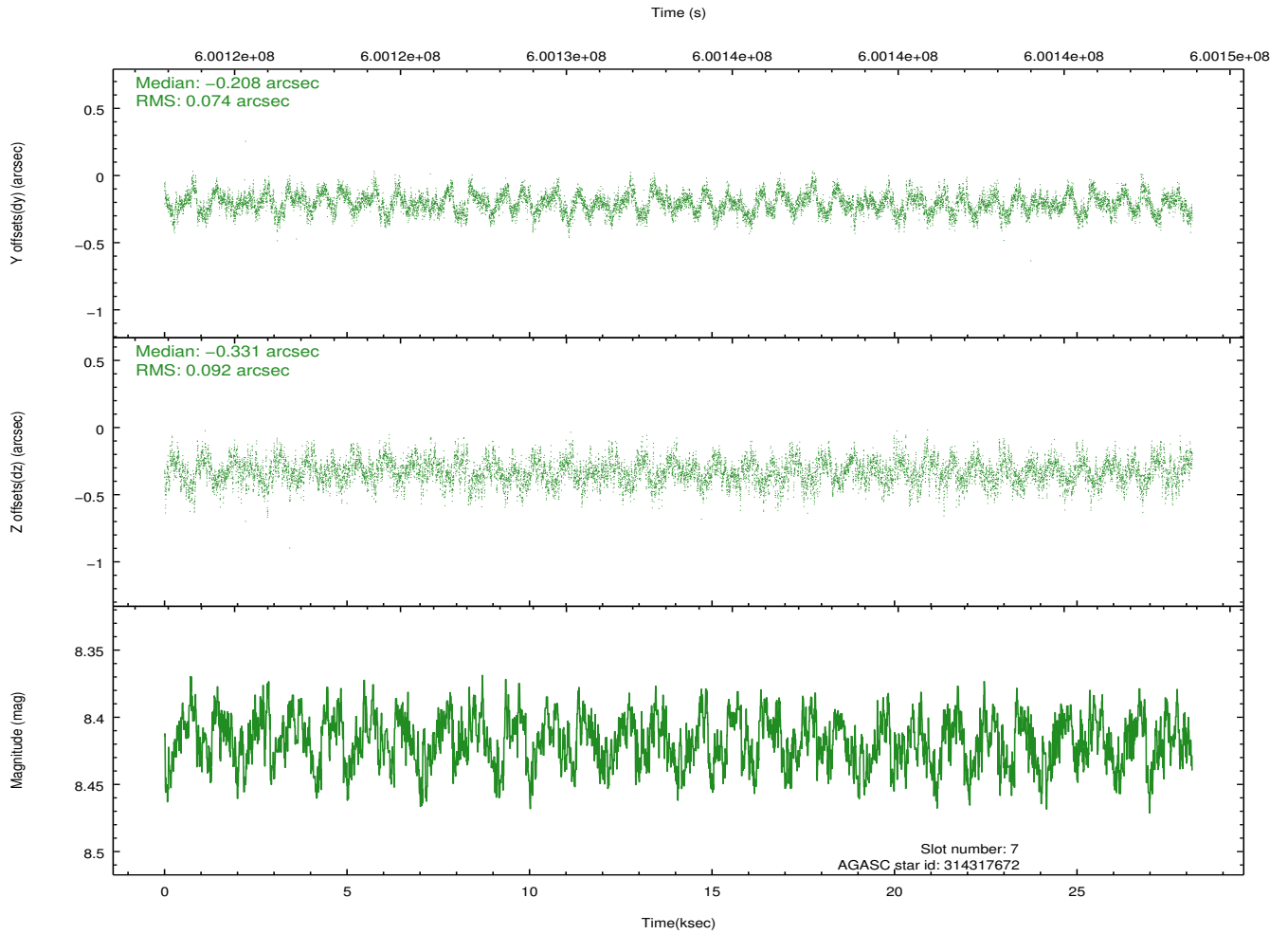
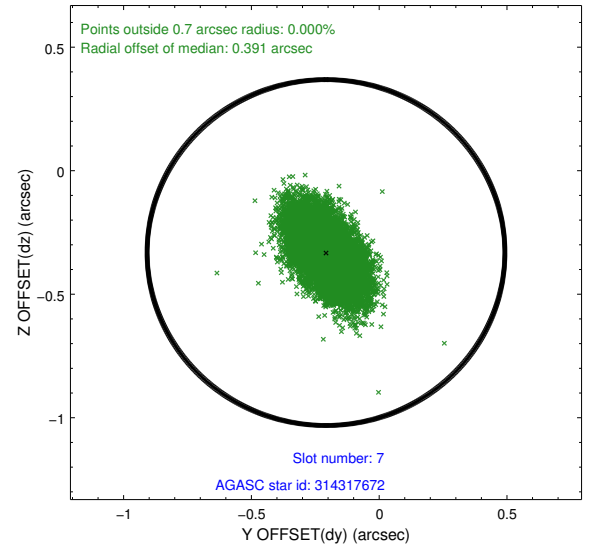
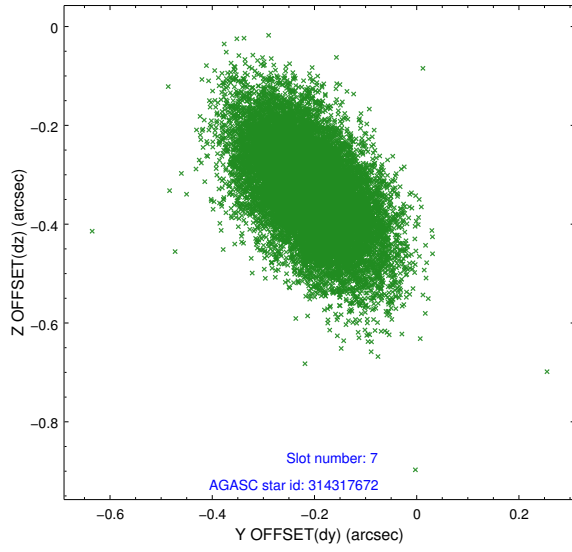
2.4.3 Slot 5



2.4.4 Slot 6

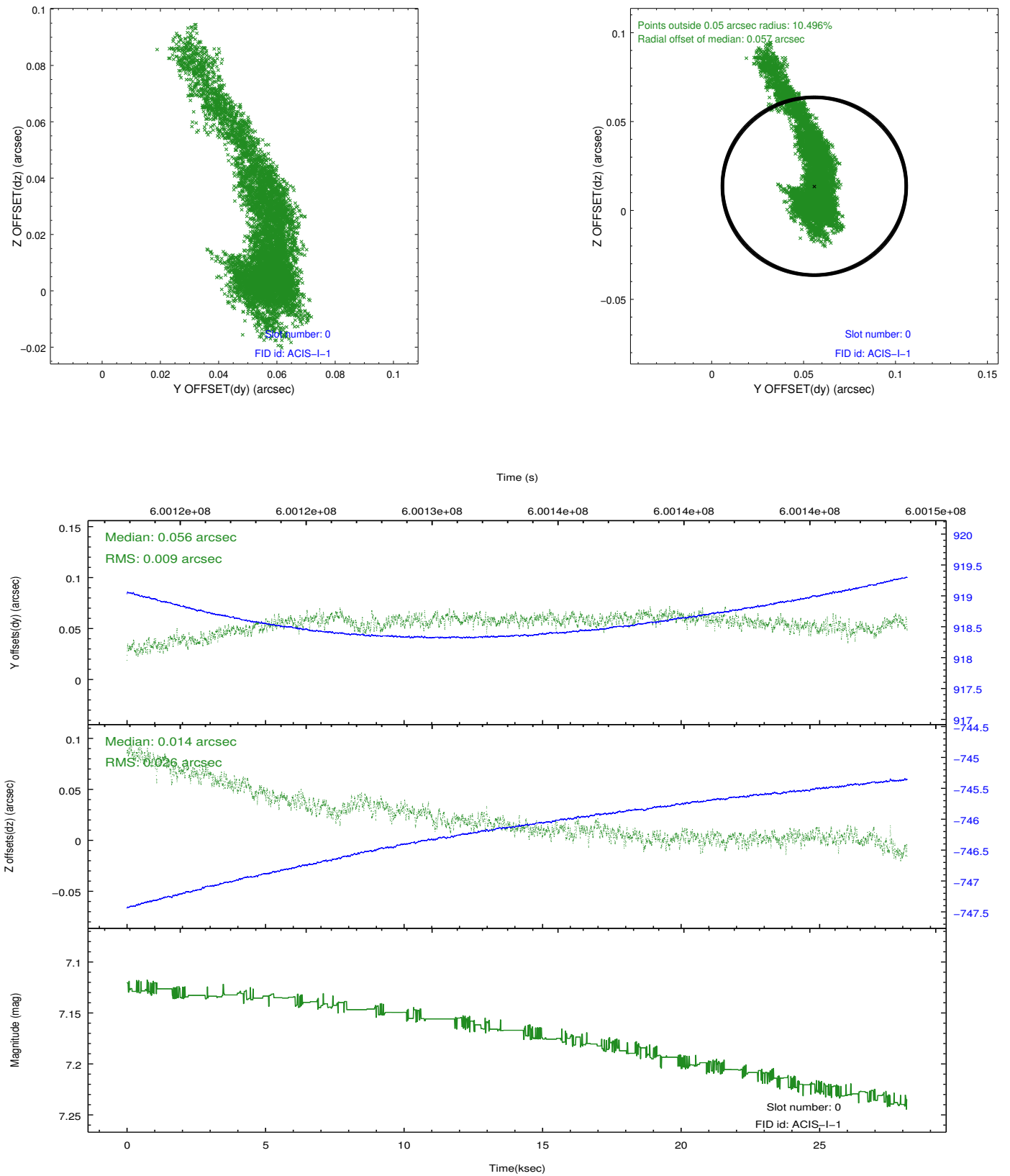


2.4.5 Slot 7

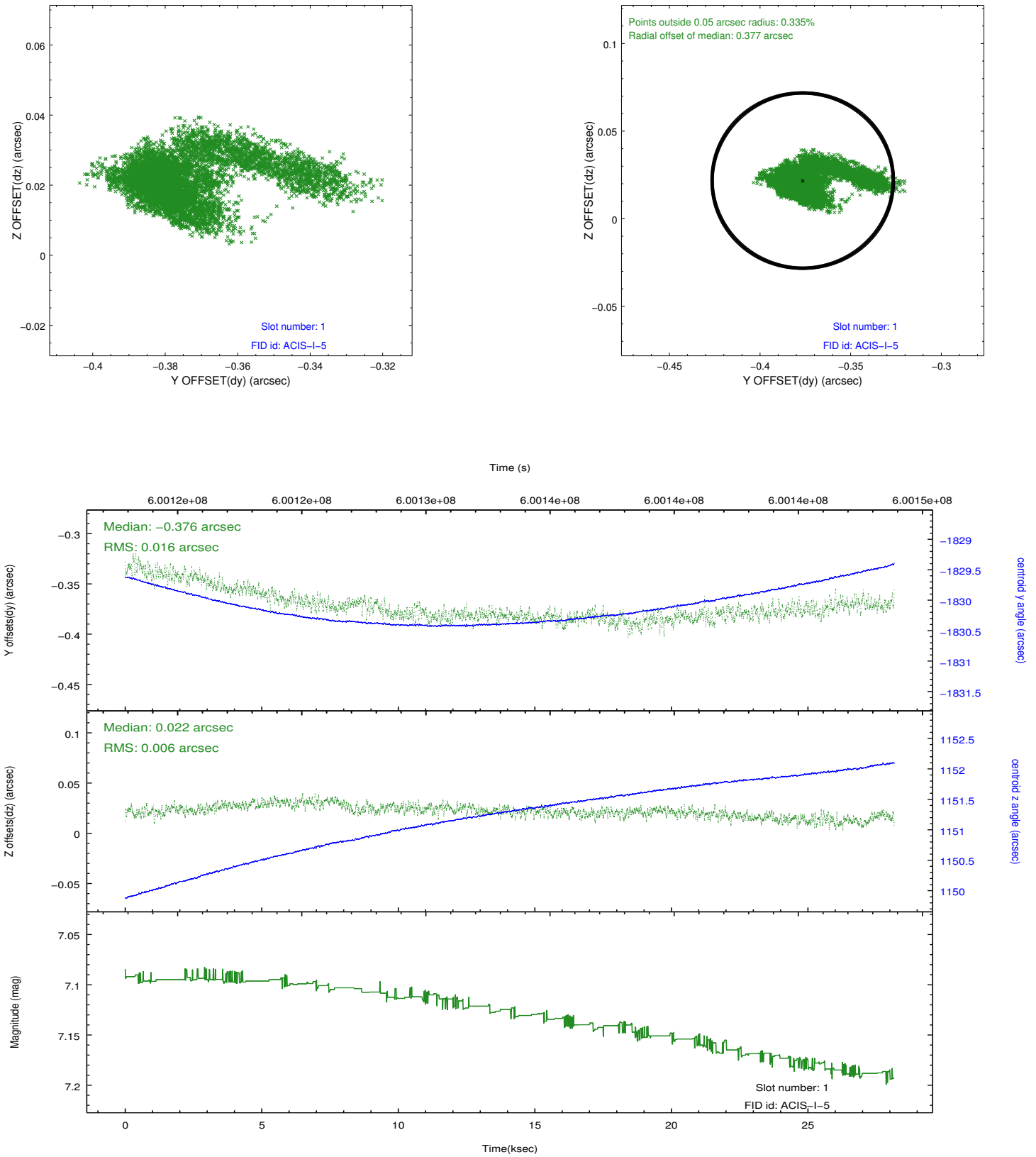


2.5 FID Slots

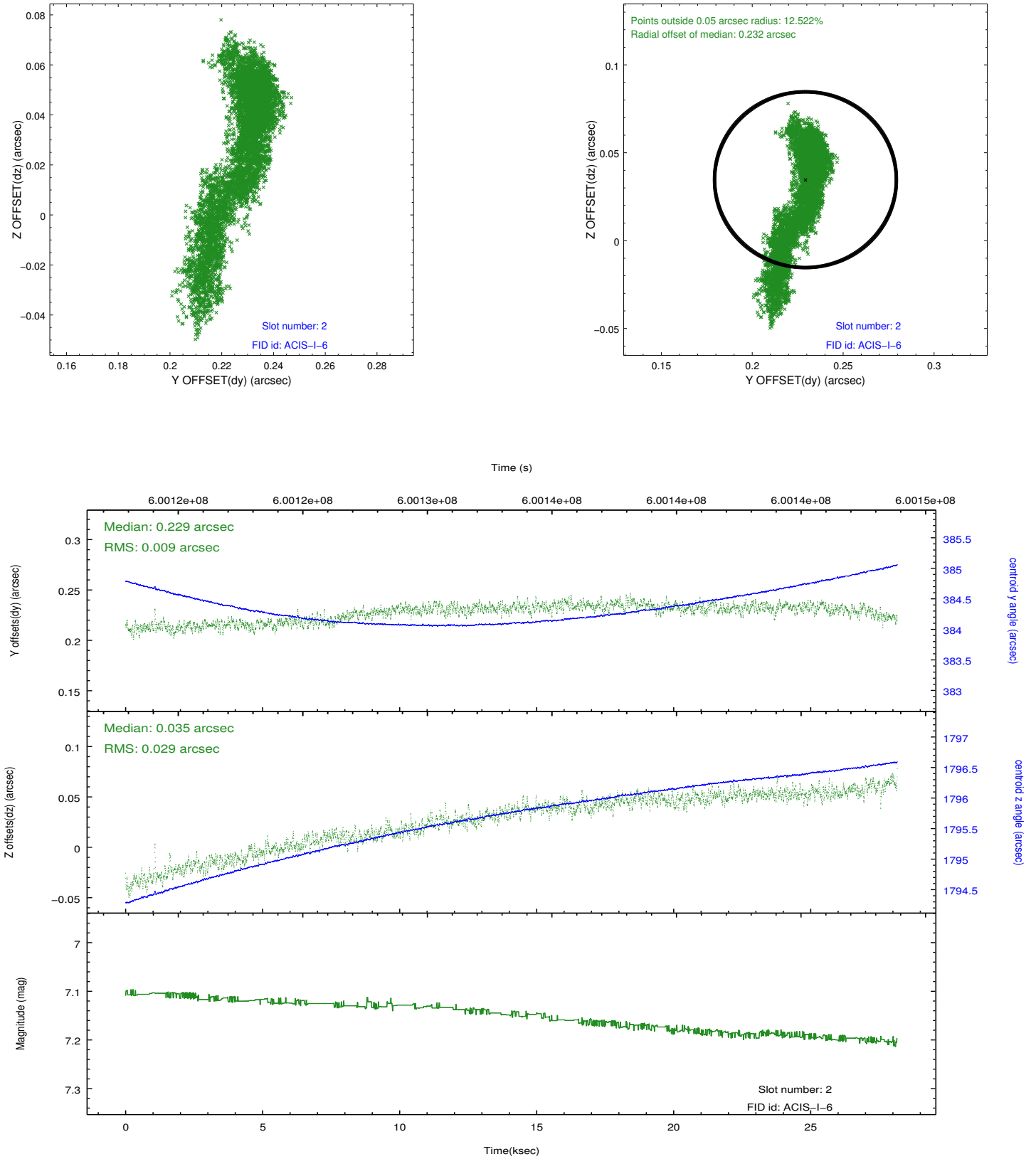
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2017.01.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	28.082900216103

A.2 Comments