

V&V Reference Report

L2 ASCDS Version : 10.5.2

Observation 19445 - L2 Version 1
Chandra X-Ray Center

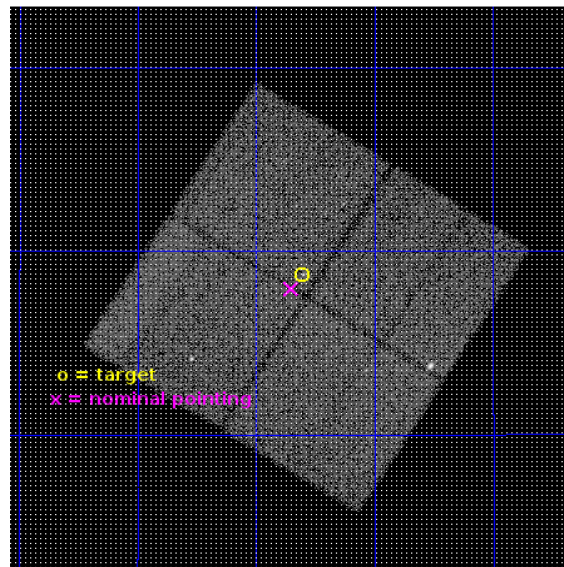
L2 Processing Date : Nov 17 2016

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1 Front

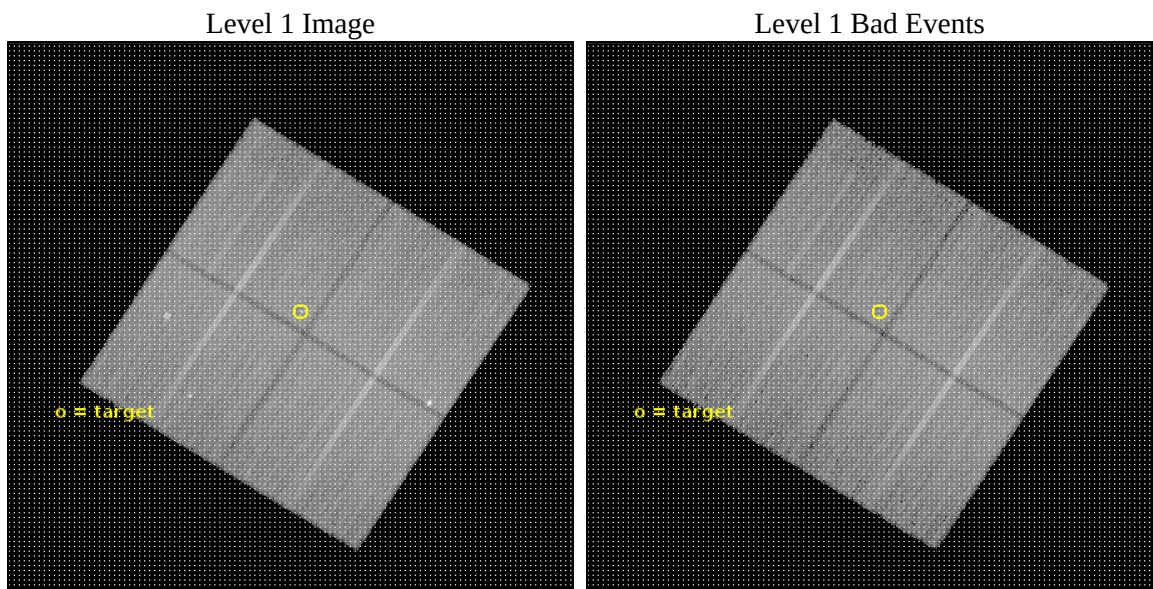
seq_num	901343	Sequence number
obs_id	19445	Observation id
title	Are runaway O-star bow shocks able to accelerate cosmic rays?	Prop
observer	Dr. Blagoy Rangelov	Principal investigator
object	Ae Aur	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	79.075833	Observer's specified target RA [deg]
dec_targ	34.312306	Observer's specified target Dec [deg]
ra_nom	79.087721917623	Nominal RA [deg]
dec_nom	34.299257464709	Nominal Dec [deg]
roll_nom	122.20199226305	Nominal Roll [deg]
revision	1	Processing version of data
ontime	45076.989789128	Sum of GTIs [s]
livetime	44488.025732336	Livetime [s]
ontime0	45076.989789128	Sum of GTIs [s]
ontime1	45083.300346851	Sum of GTIs [s]
ontime2	45083.300346851	Sum of GTIs [s]
ontime3	45080.1593467	Sum of GTIs [s]
l2events	122502	Number of level 2 events



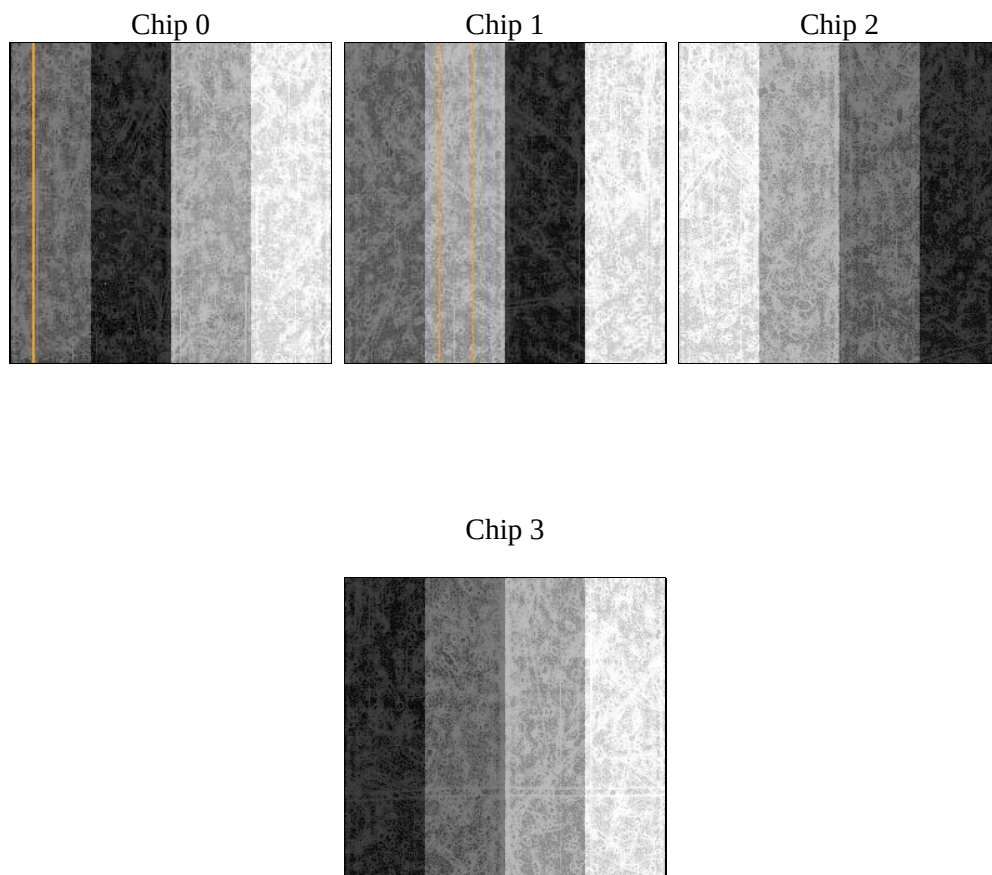
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	45000.000000	[s] Scheduled observation exposure time
ascdsver	10.5.2	Processing system revision	ontime	45076.989789128	Sum of GTIs [s]
caldsver	4.7.2	 	ontime0	45076.989789128	Sum of GTIs [s]
date	2016-11-18T02:14:27	Date and time of file creation	ontime1	45083.300346851	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	45083.300346851	Sum of GTIs [s]
			ontime3	45080.1593467	Sum of GTIs [s]
			l1events	1214080	Number of level 1 events

2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	284835	295341	328657	305247
rejected events	248699	254317	291123	272015
rejected %	87%	86%	88%	89%

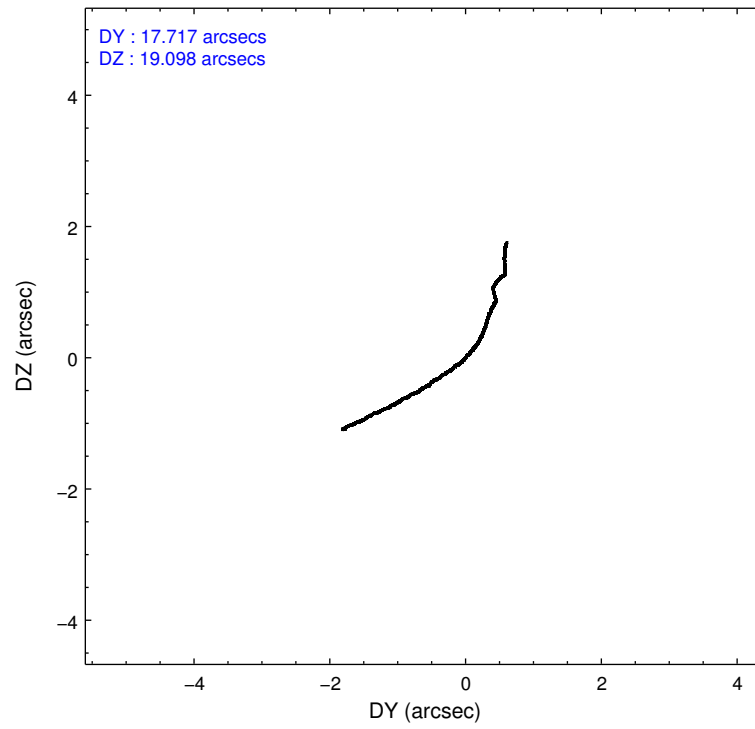
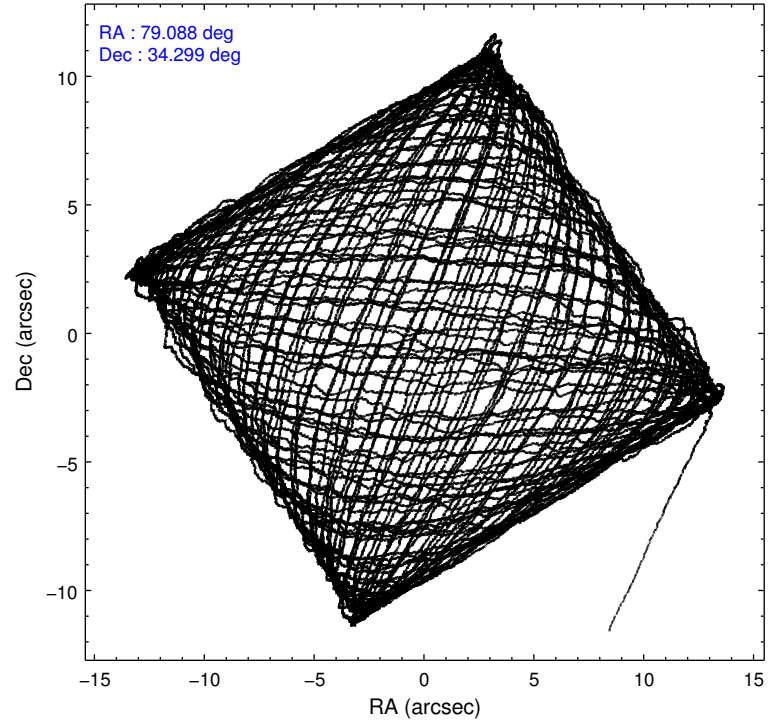
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	12869	15662	14850	11803
	4%	5%	4%	3%
grade 1 events	167	138	206	158
	0%	0%	0%	0%
grade 2 events	8885	9248	8723	7400
	3%	3%	2%	2%
grade 3 events	3722	3710	3544	3439
	1%	1%	1%	1%
grade 4 events	3499	3710	3534	3538
	1%	1%	1%	1%
grade 5 events	13490	13922	12204	15082
	4%	4%	3%	4%
grade 6 events	7164	8696	6887	7054
	2%	2%	2%	2%
grade 7 events	235039	240255	278709	256773
	82%	81%	84%	84%

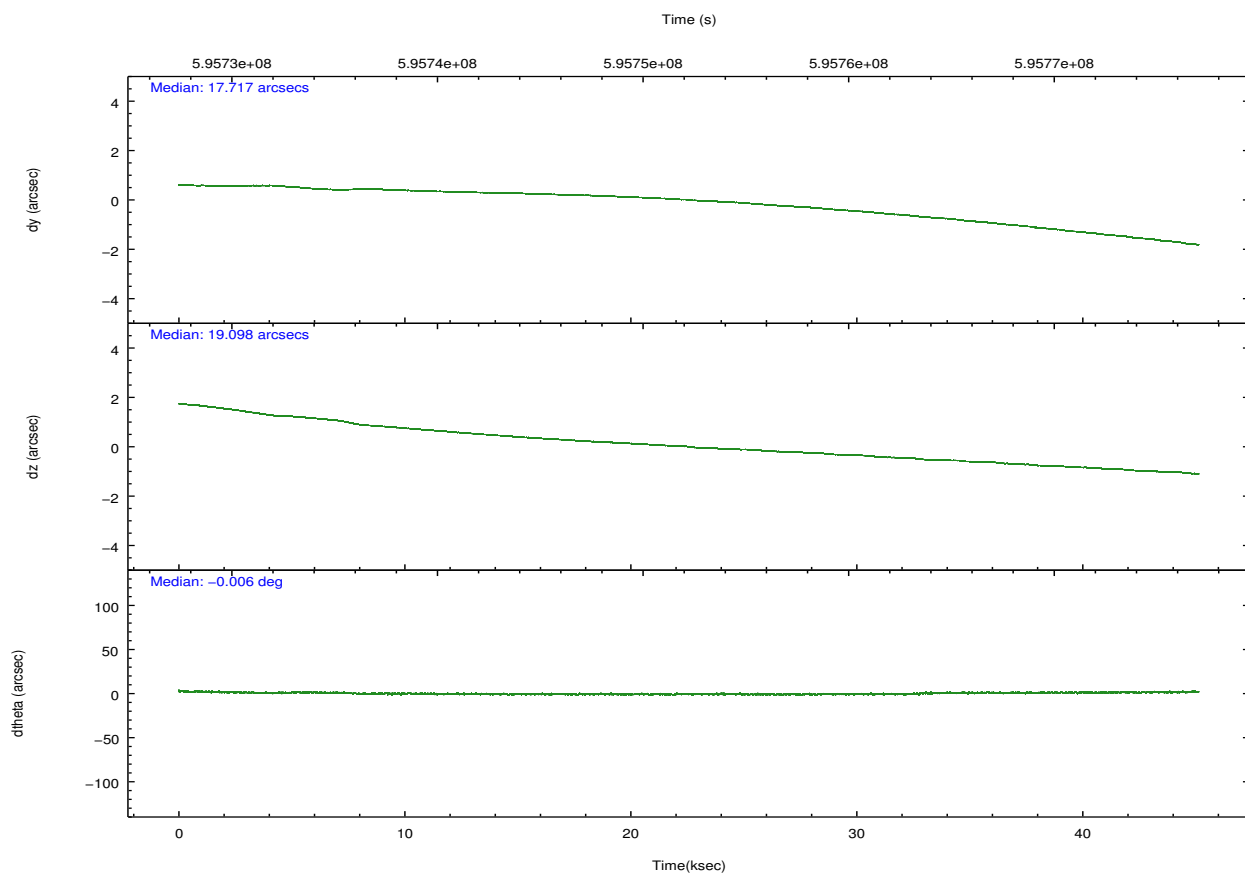
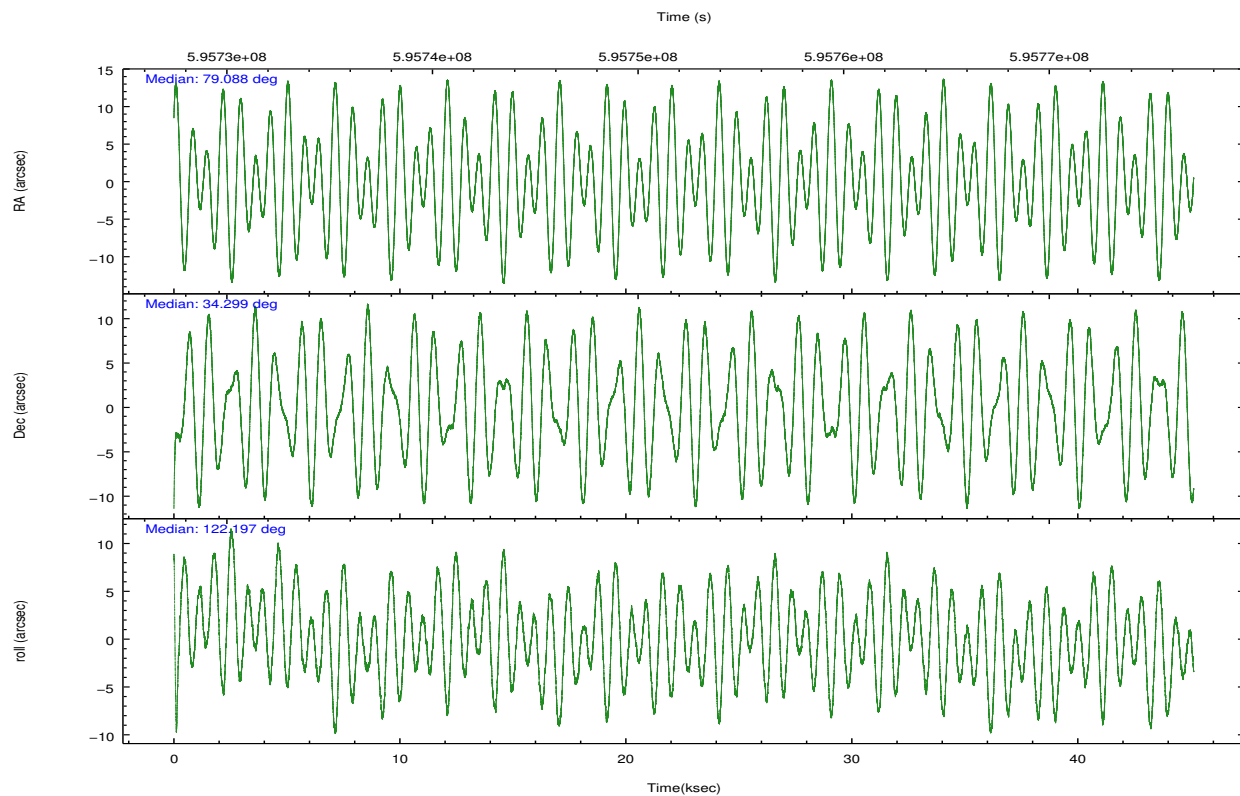
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-0123	ACIS-0123
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	79.117329	79.08772191762283
[deg] Pointing Dec	34.286485	34.29925746470869
[deg] Pointing Roll	121.976624	122.2019922630453
[mm] SIM focus pos	-0.782348	-0.7809083437167272
[mm] SIM defocus	0	0.001439871863259334
[mm] SIM translation stage pos	-238.418713	-238.4149198398239
[mm] SIM translation stage offset	4.82625	4.822466836894193
[s] Observation start time (MET)	595729779.184000	595728560.48874
Observation start date	2016-11-17T00:28:31	2016-11-17T00:09:20
[s] Observation end time (MET)	595774779.184000	595775791.9789701
Observation end date	2016-11-17T12:58:31	2016-11-17T13:16:31
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
CCD I0 on	Y	Y
CCD I1 on	Y	Y
CCD I2 on	Y	Y
CCD I3 on	Y	Y
CCD S0 on	N	N
CCD S1 on	N	N
CCD S2 on	N	N
CCD S3 on	O1	N
CCD S4 on	N	N
CCD S5 on	N	N
Number of optional ACIS chips dropped	1	1
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.1

2.3 Aspect



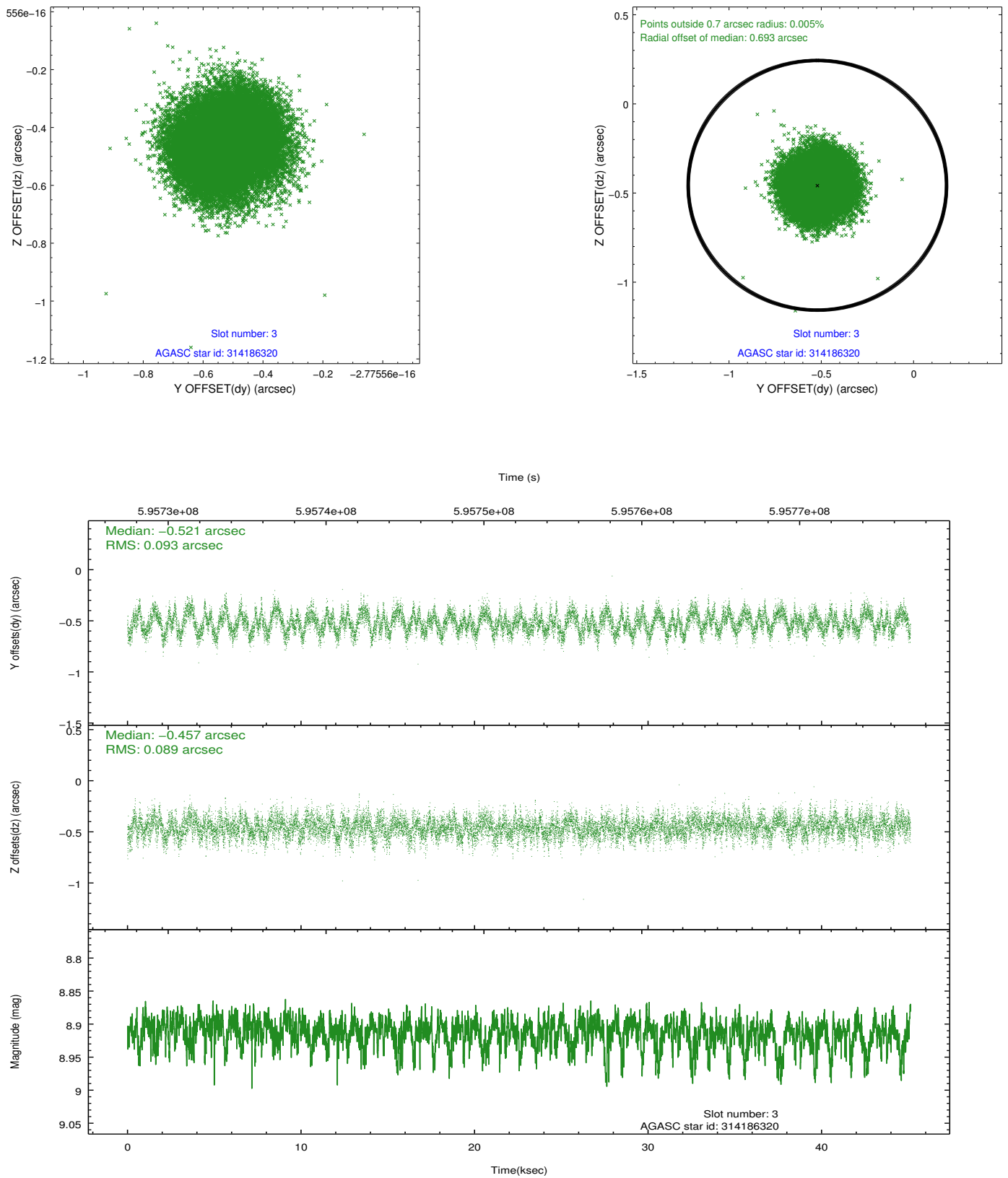


Slot Statistics

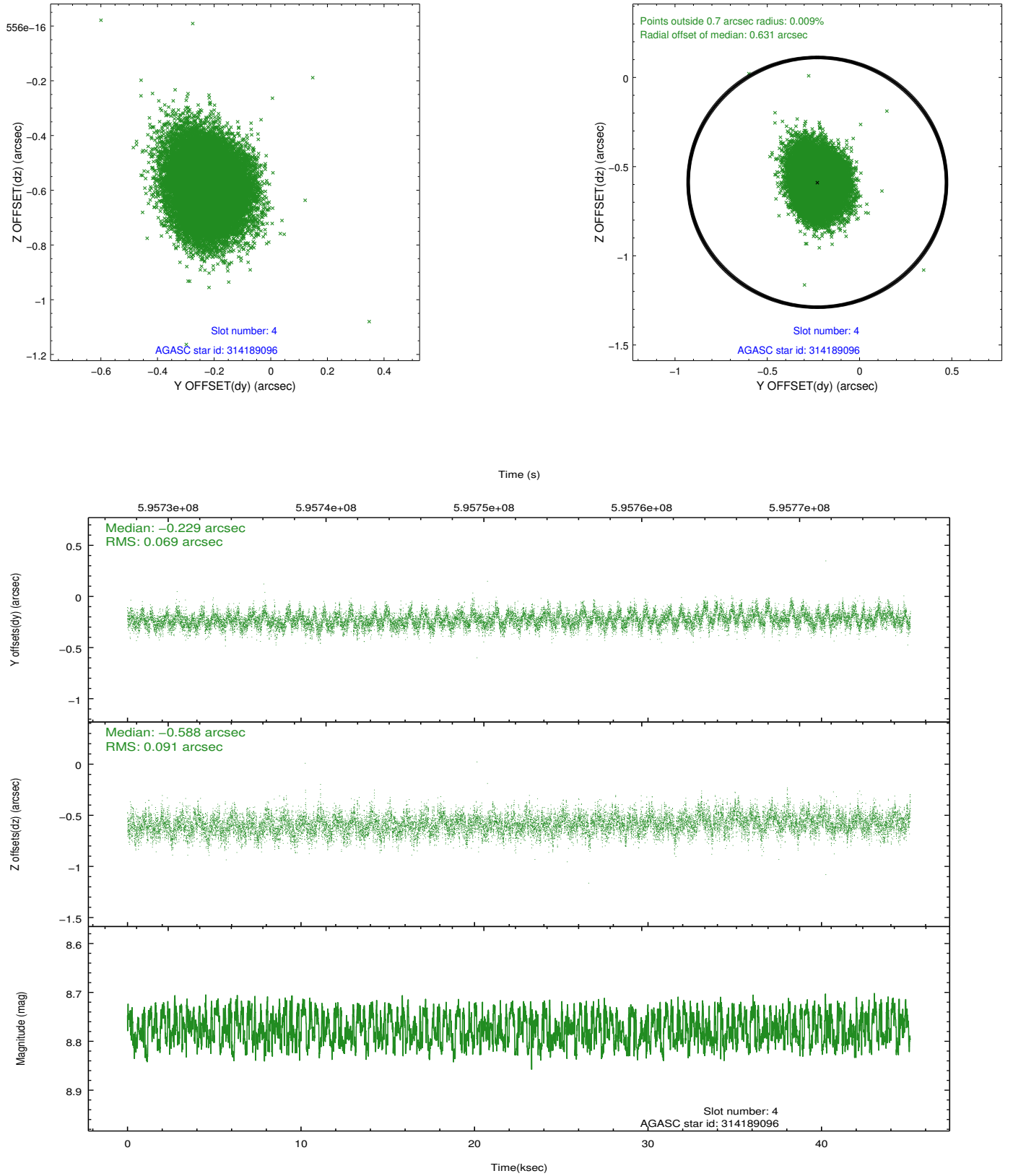
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.16	11007	0.015	0.054	0.024	0.073	0.000000	0.000000	922.06	-743.64
1	FID		ACIS-I-5	7.12	11007	-0.304	0.005	0.011	0.021	0.000000	0.000000	-1826.49	1153.65
2	FID		ACIS-I-6	7.14	11007	0.195	0.012	0.020	0.054	0.000000	0.000000	387.62	1798.30
3	GUIDE	used	314186320	8.91	21988	-0.521	-0.457	0.140	0.215	78.294342	34.293553	1325.77	2057.39
4	GUIDE	used	314189096	8.77	21990	-0.229	-0.588	0.120	0.197	78.474947	34.295079	1043.02	1601.10
5	GUIDE	used	314317160	8.65	22002	0.393	0.339	0.109	0.189	79.818927	34.564727	-245.96	-2297.61
6	GUIDE	used	314318832	6.81	22011	0.066	0.298	0.115	0.188	79.848935	33.985406	-2069.38	-1282.87
7	GUIDE	used	314321208	8.72	21996	0.293	0.408	0.122	0.201	79.829709	33.968281	-2091.30	-1201.20

2.4 Star Slots

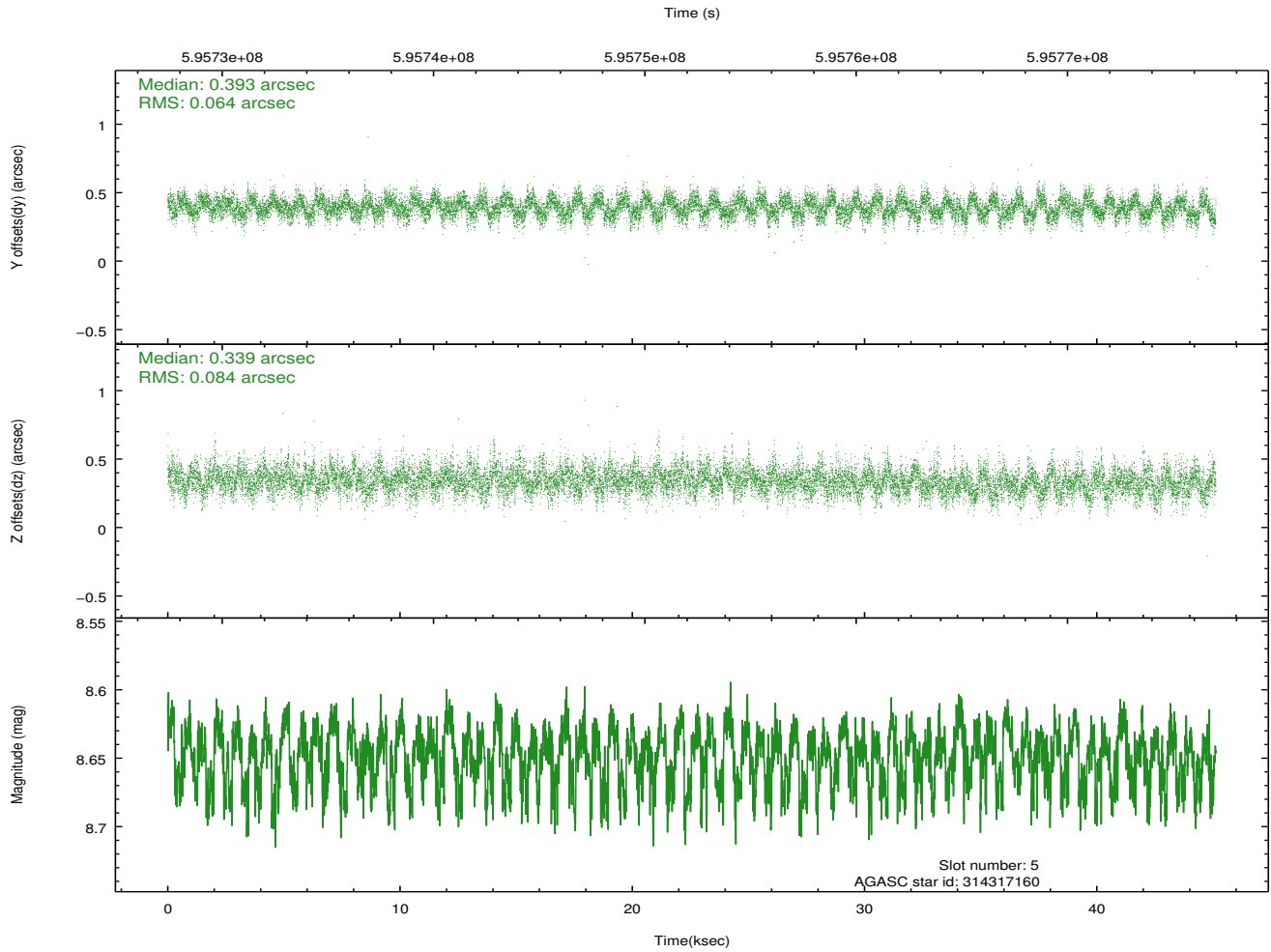
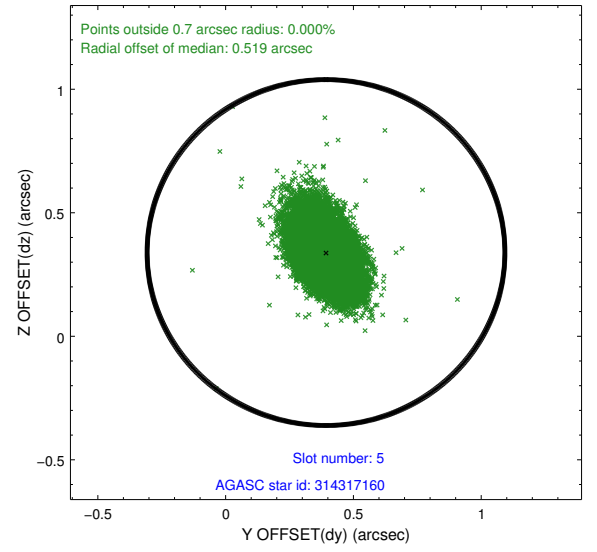
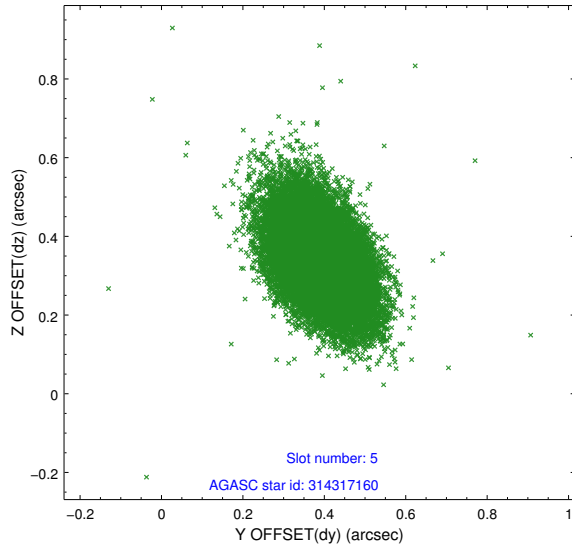
2.4.1 Slot 3



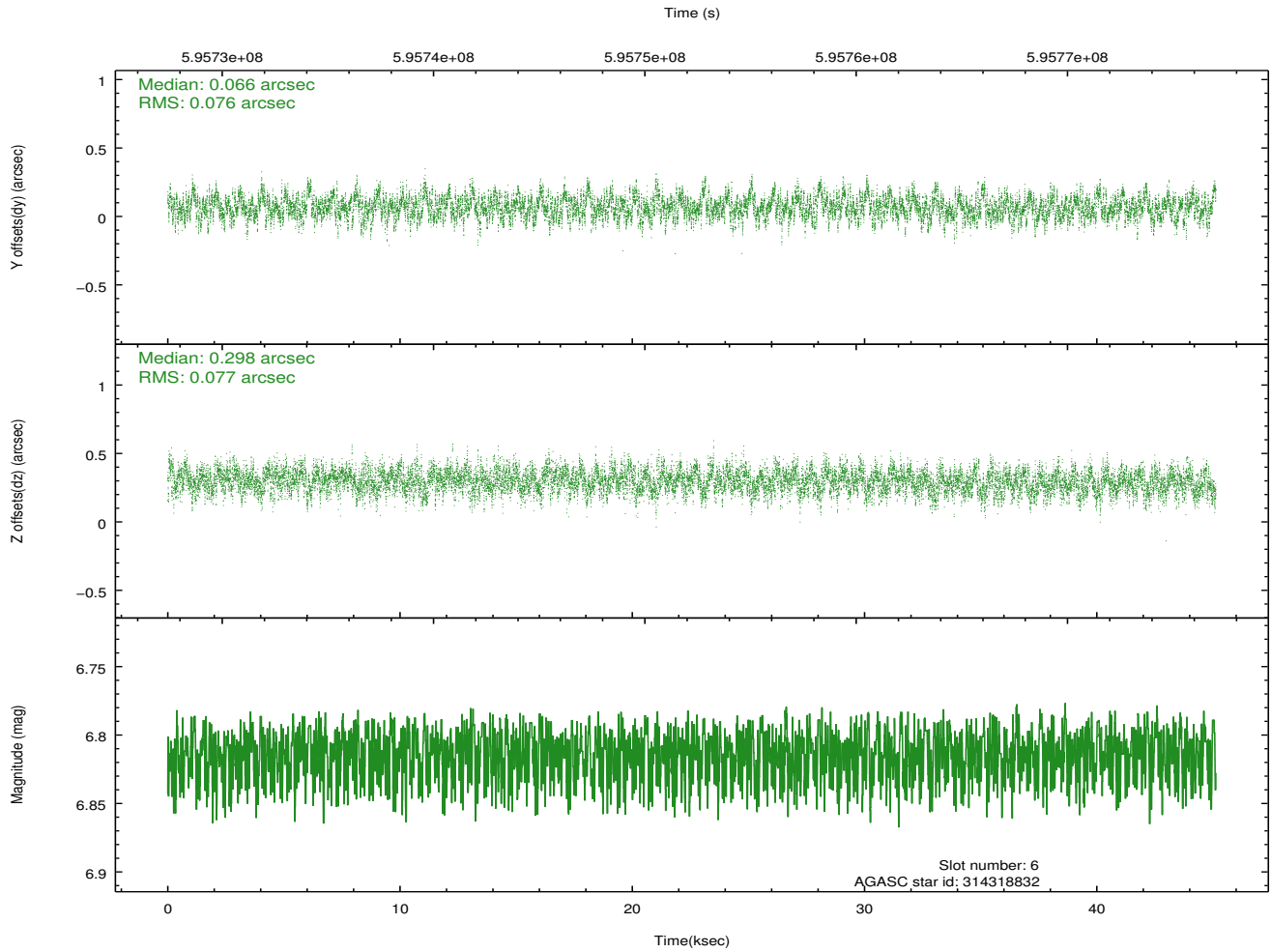
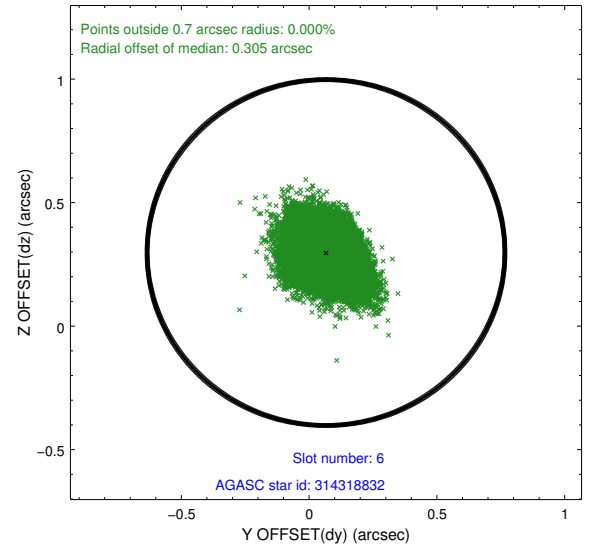
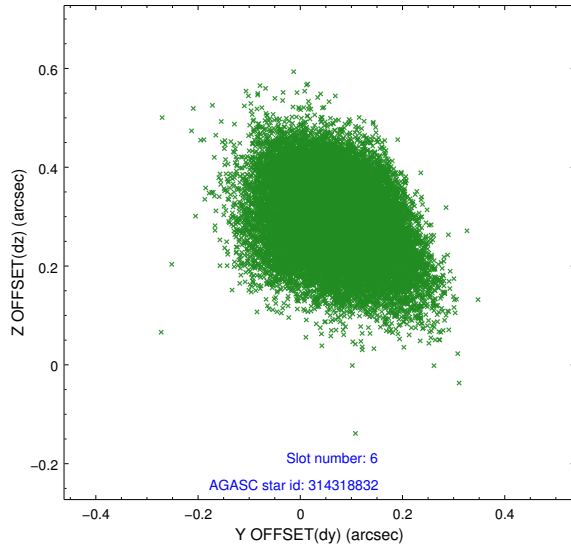
2.4.2 Slot 4



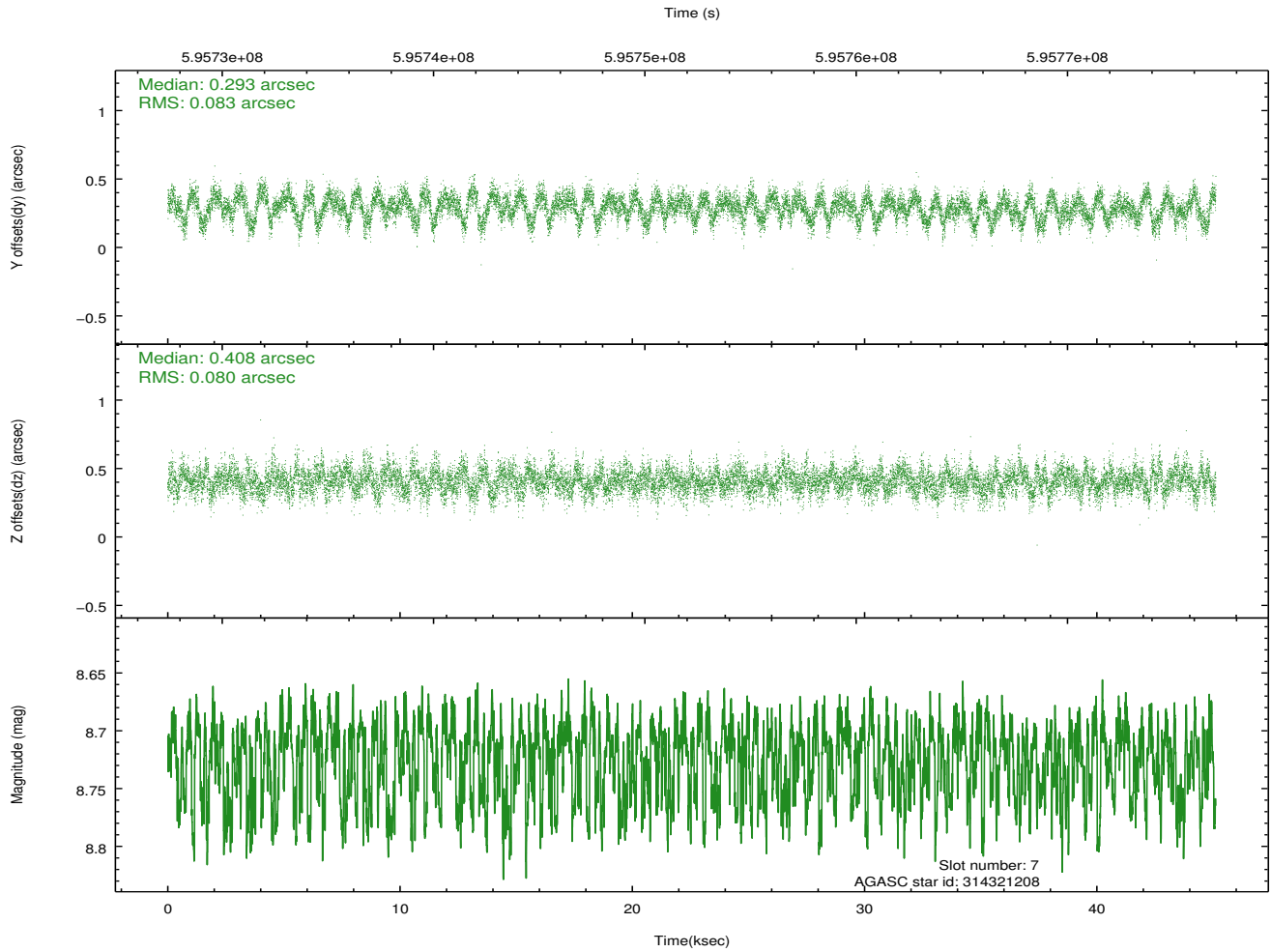
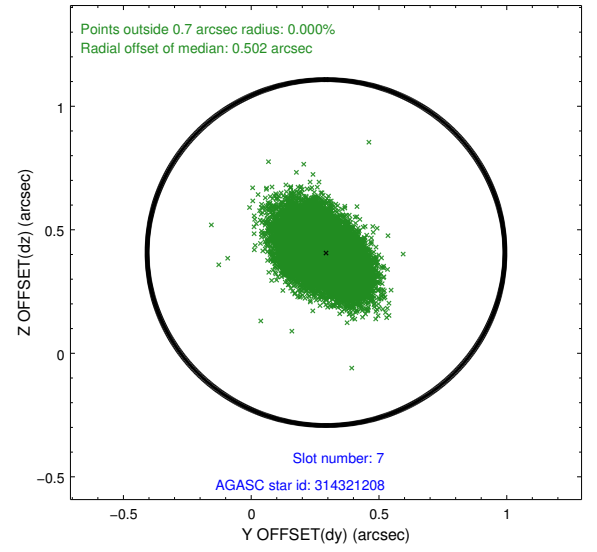
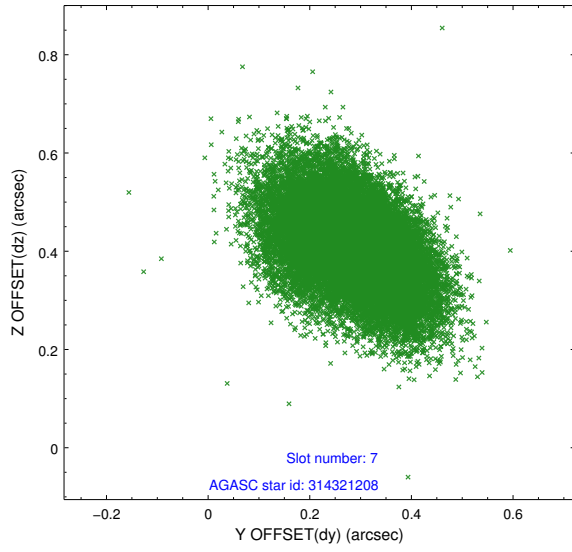
2.4.3 Slot 5



2.4.4 Slot 6

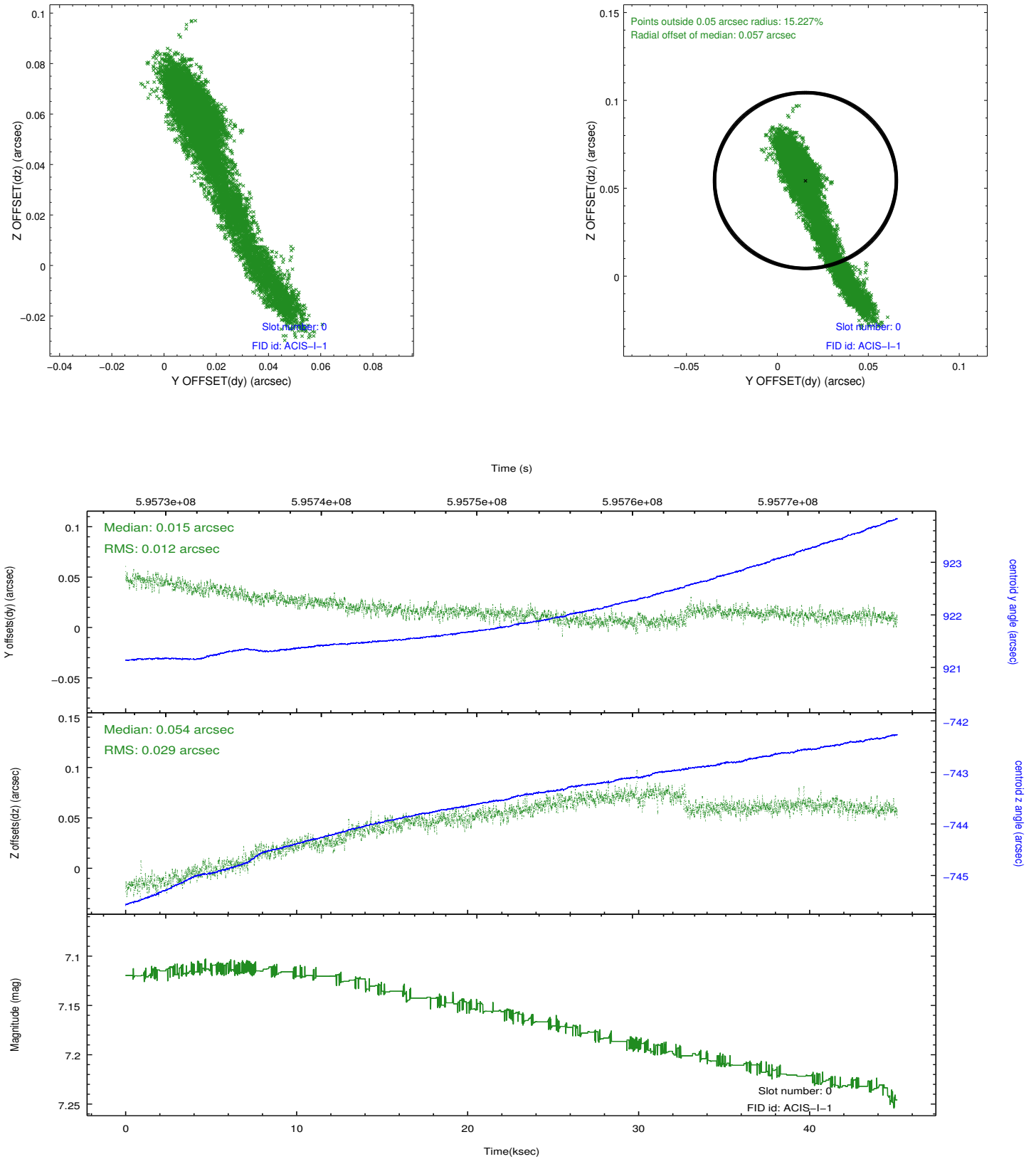


2.4.5 Slot 7

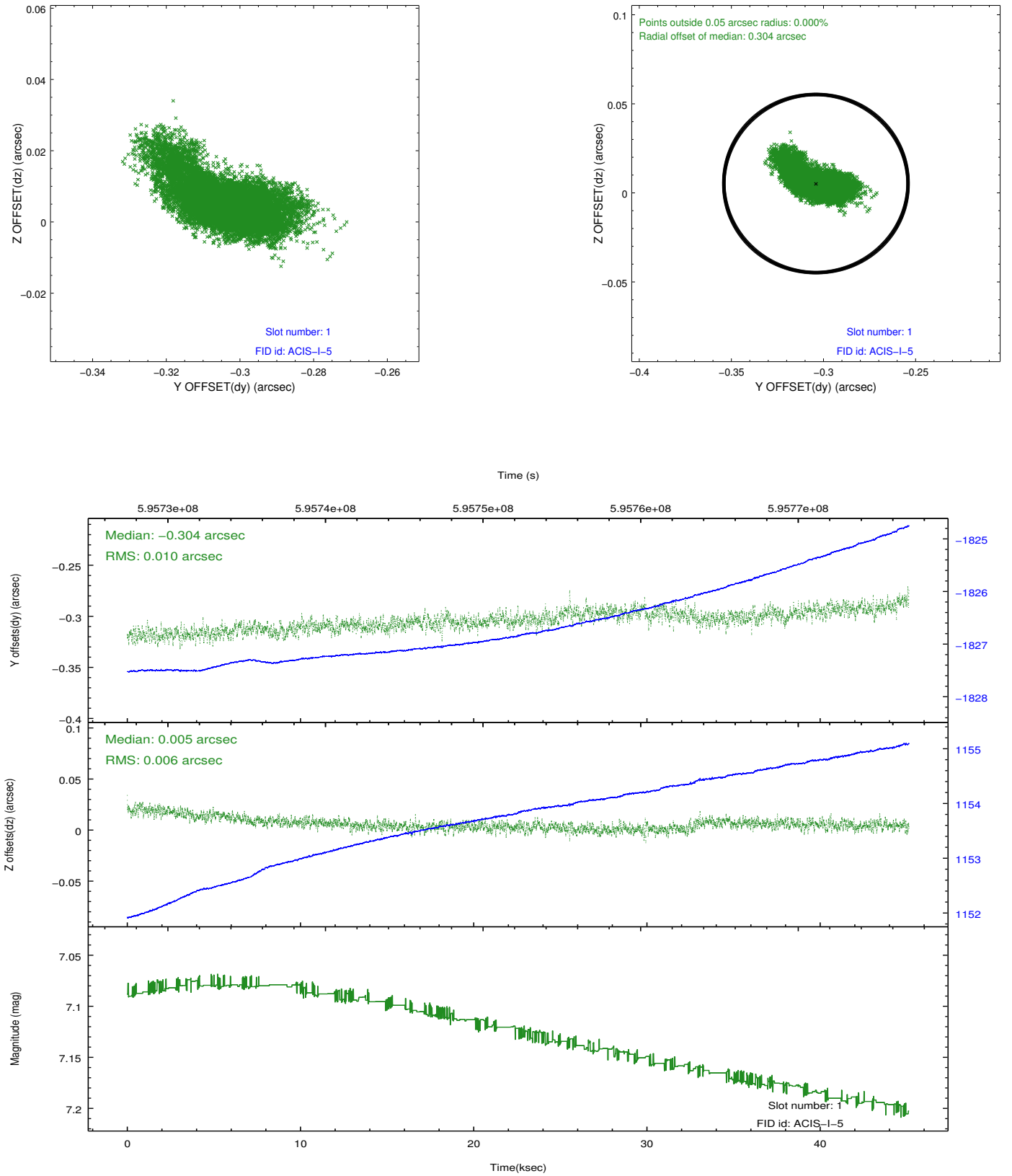


2.5 FID Slots

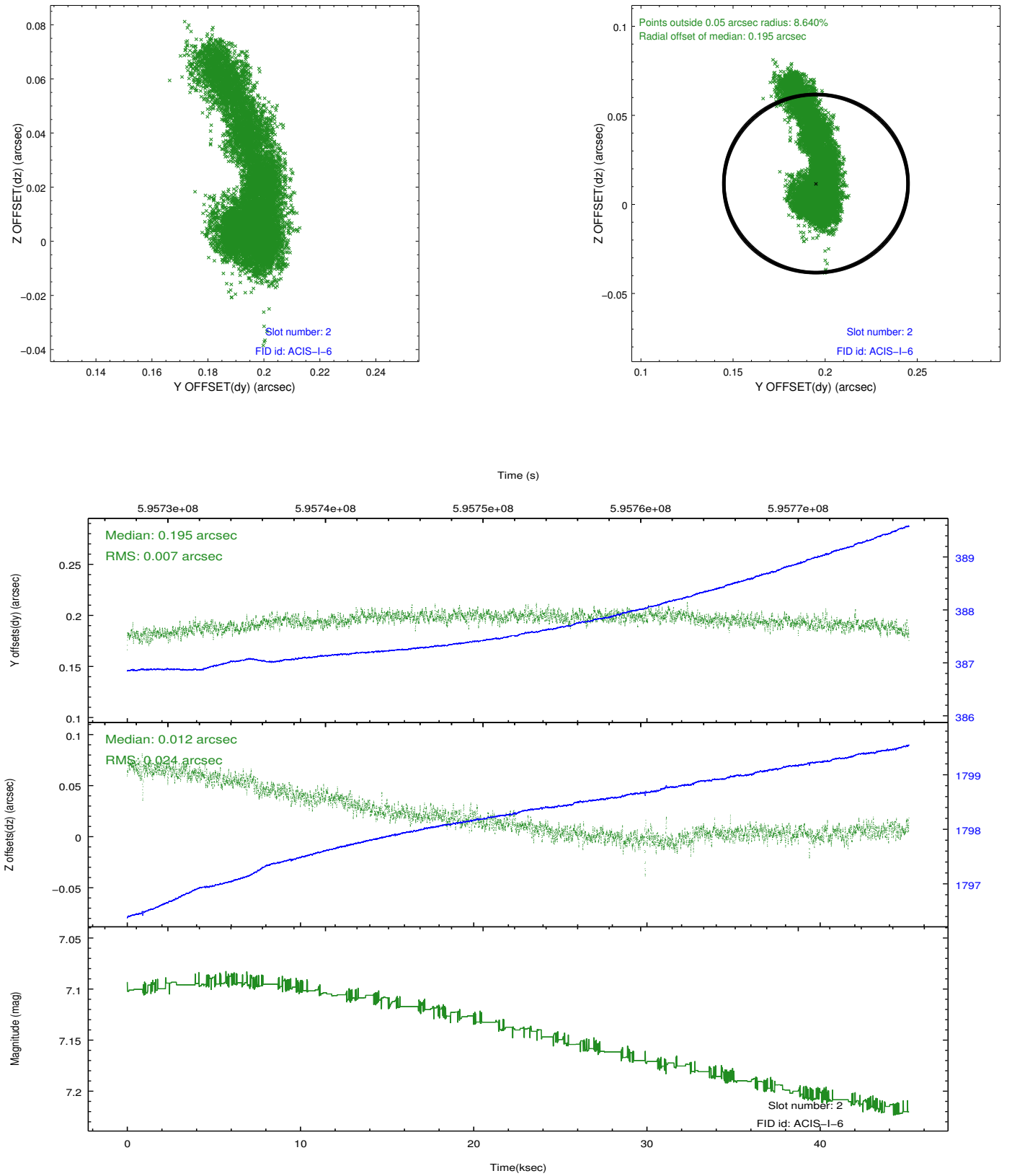
2.5.1 Slot 0



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)	2016.11.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	45.076989789128

A.2 Comments

Optional chip S3 not included.