

V&V Reference Report

L2 ASCDS Version : 10.8

Observation 21699 - L2 Version 1
Chandra X-Ray Center

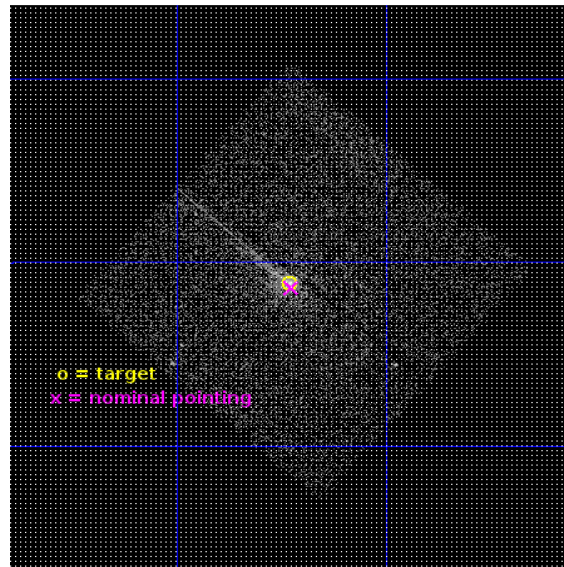
L2 Processing Date : Sep 10 2019

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1 Front

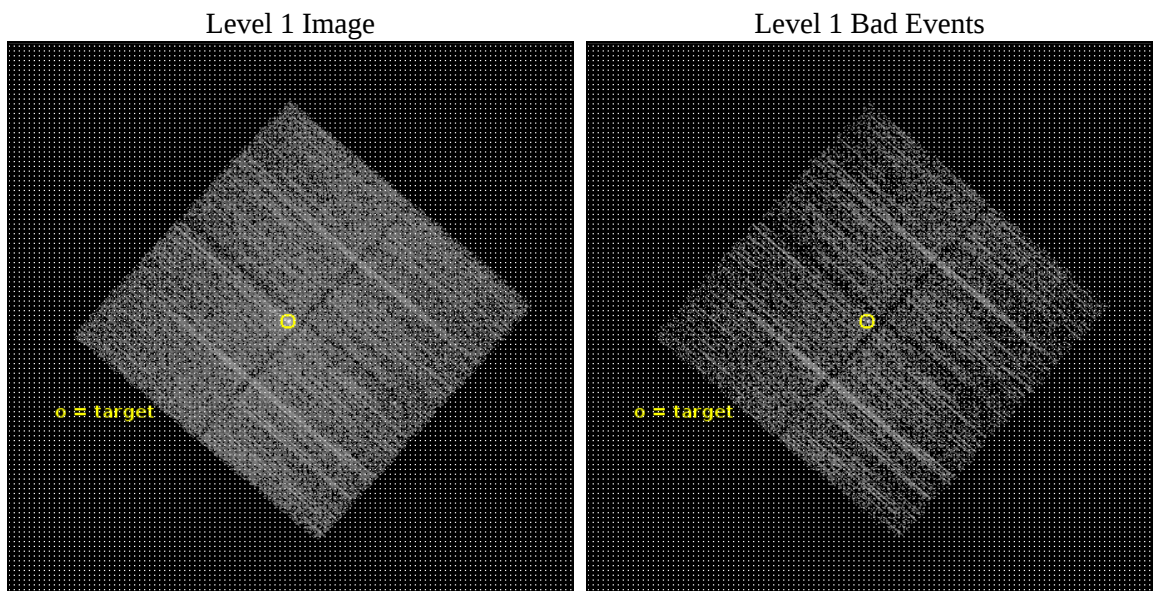
seq_num	703827	Sequence number
obs_id	21699	Observation id
title	Monitoring of the Centaurus A Jet	Proposal title
observer	Ralph Kraft	Principal investigator
object	Centaurus A	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	201.365083	Observer's specified target RA [deg]
dec_targ	-43.019111	Observer's specified target Dec [deg]
ra_nom	201.36307252121	Nominal RA [deg]
dec_nom	-43.023402259593	Nominal Dec [deg]
roll_nom	221.26754344911	Nominal Roll [deg]
revision	1	Processing version of data
ontime	5076.4826265574	Sum of GTIs [s]
livetime	5010.1546437892	Livetime [s]
ontime0	5076.3595066071	Sum of GTIs [s]
ontime1	5076.4005465508	Sum of GTIs [s]
ontime2	5076.4415866137	Sum of GTIs [s]
ontime3	5076.4826265574	Sum of GTIs [s]
l2events	21498	Number of level 2 events



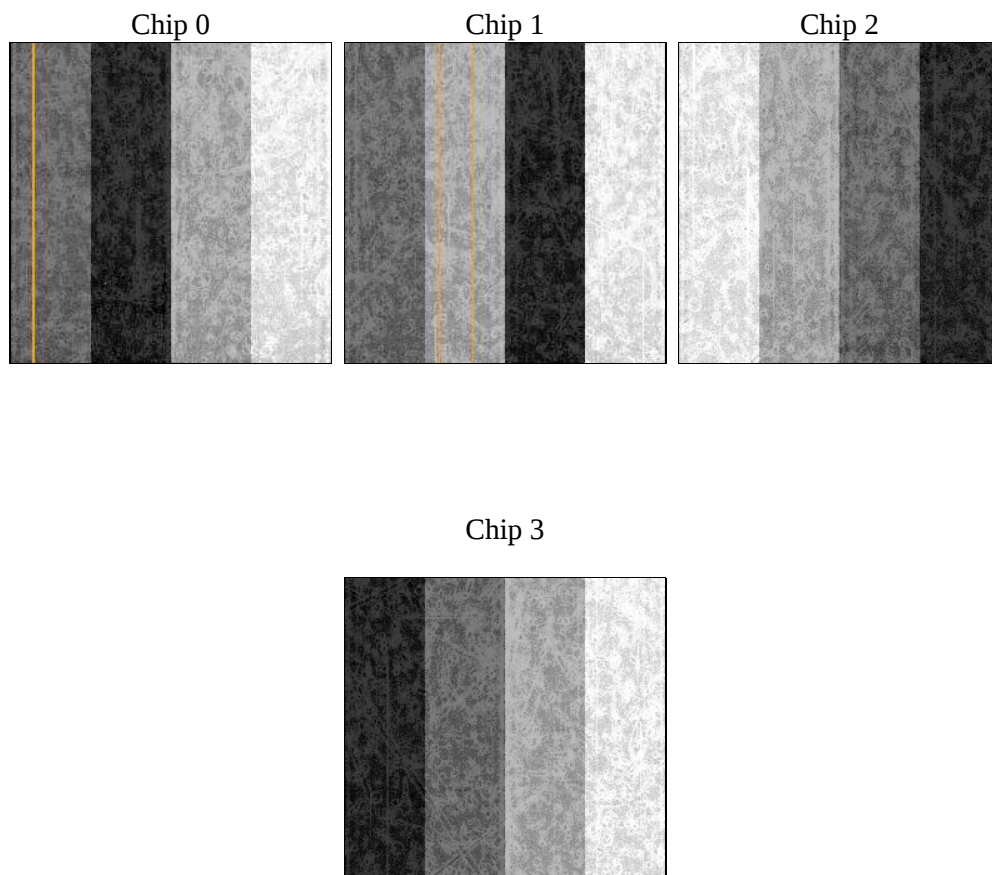
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	10.8	Processing system revision	ontime	5076.4826265574	Sum of GTIs [s]
caldsver	4.8.4.1	 	ontime0	5076.3595066071	Sum of GTIs [s]
date	2019-09-10T13:00:57	Date and time of file creation	ontime1	5076.4005465508	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	5076.4415866137	Sum of GTIs [s]
			ontime3	5076.4826265574	Sum of GTIs [s]
			l1events	162458	Number of level 1 events

2.1.4 Events

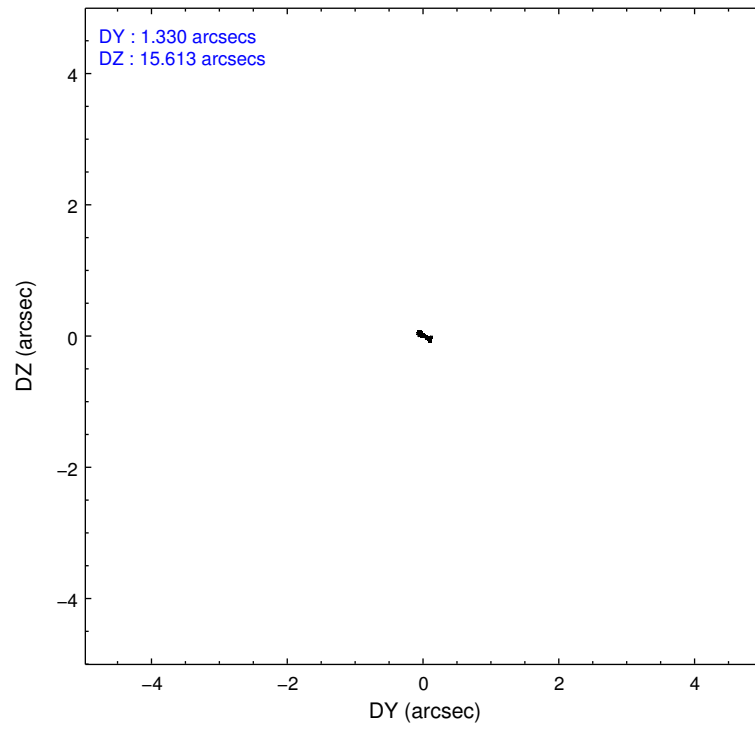
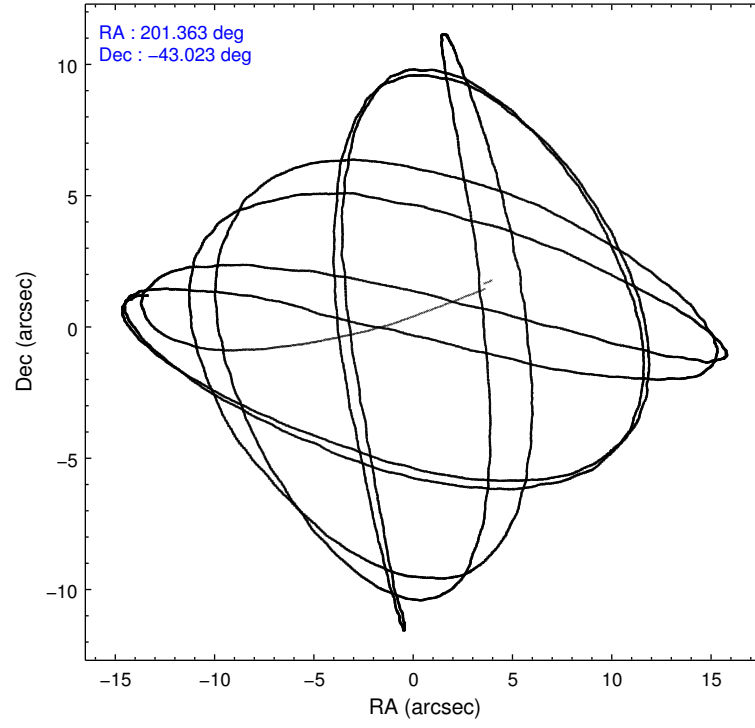
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	36777	37322	45184	43175
rejected events	31945	31688	39769	34393
rejected %	86%	84%	88%	79%

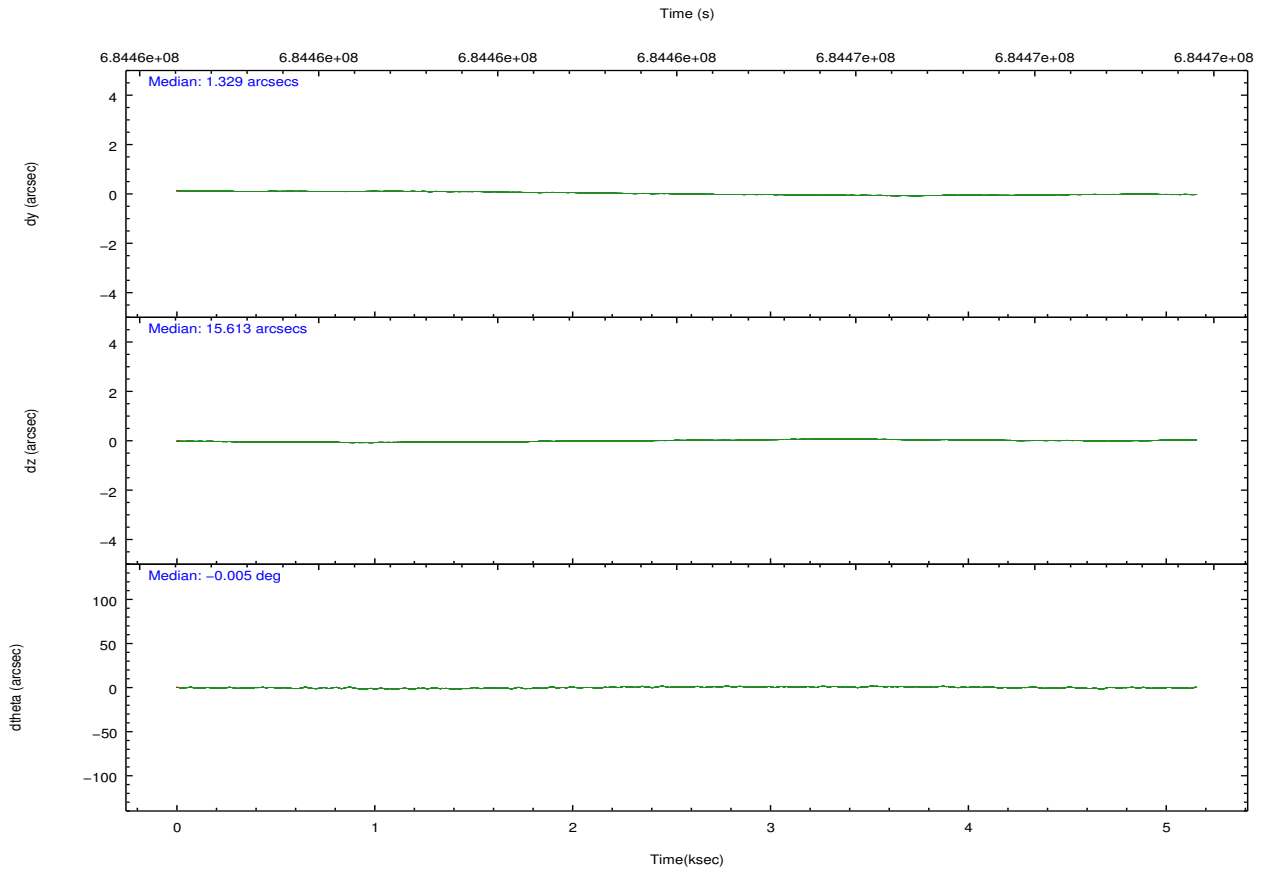
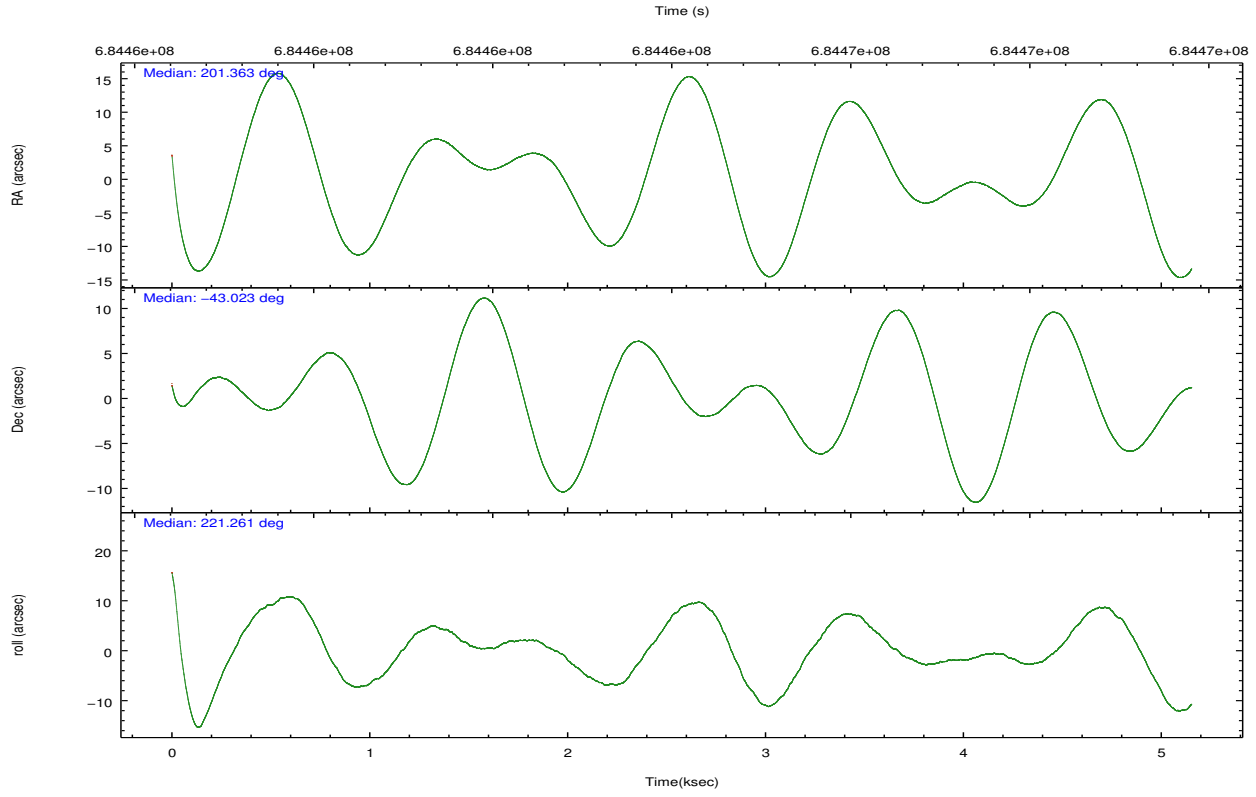
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	1902	2094	2361	4704
	5%	5%	5%	10%
grade 1 events	17	20	26	132
	0%	0%	0%	0%
grade 2 events	1137	1453	1187	1489
	3%	3%	2%	3%
grade 3 events	432	434	441	645
	1%	1%	0%	1%
grade 4 events	420	493	503	626
	1%	1%	1%	1%
grade 5 events	1609	1710	1562	2002
	4%	4%	3%	4%
grade 6 events	947	1168	931	1327
	2%	3%	2%	3%
grade 7 events	30313	29950	38173	32250
	82%	80%	84%	74%

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	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	201.375161	201.3630725212086	Subarray requested	NONE	NONE
[deg] Pointing Dec	-42.997248	-43.02340225959254	Alternating exposures requested	N	N
[deg] Pointing Roll	221.067076	221.2675434491097	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	684462625.184000	684461242.4293			
Observation start date	2019-09-10T00:29:16	2019-09-10T00:07:22			
[s] Observation end time (MET)	684467625.184000	684468376.94223			
Observation end date	2019-09-10T01:52:36	2019-09-10T02:06:16			
Read mode	TIMED	TIMED			

2.3 Aspect



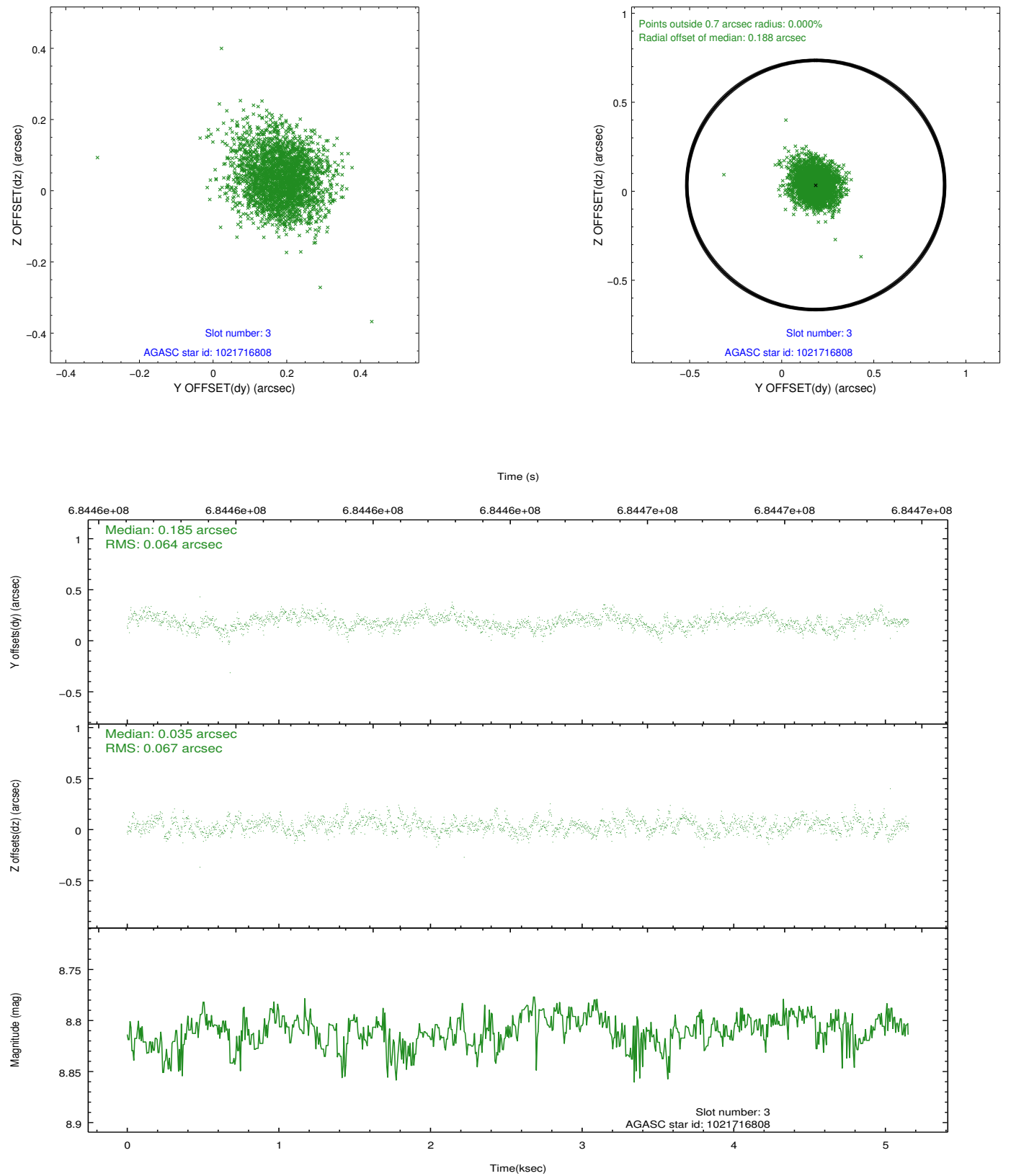


Slot Statistics

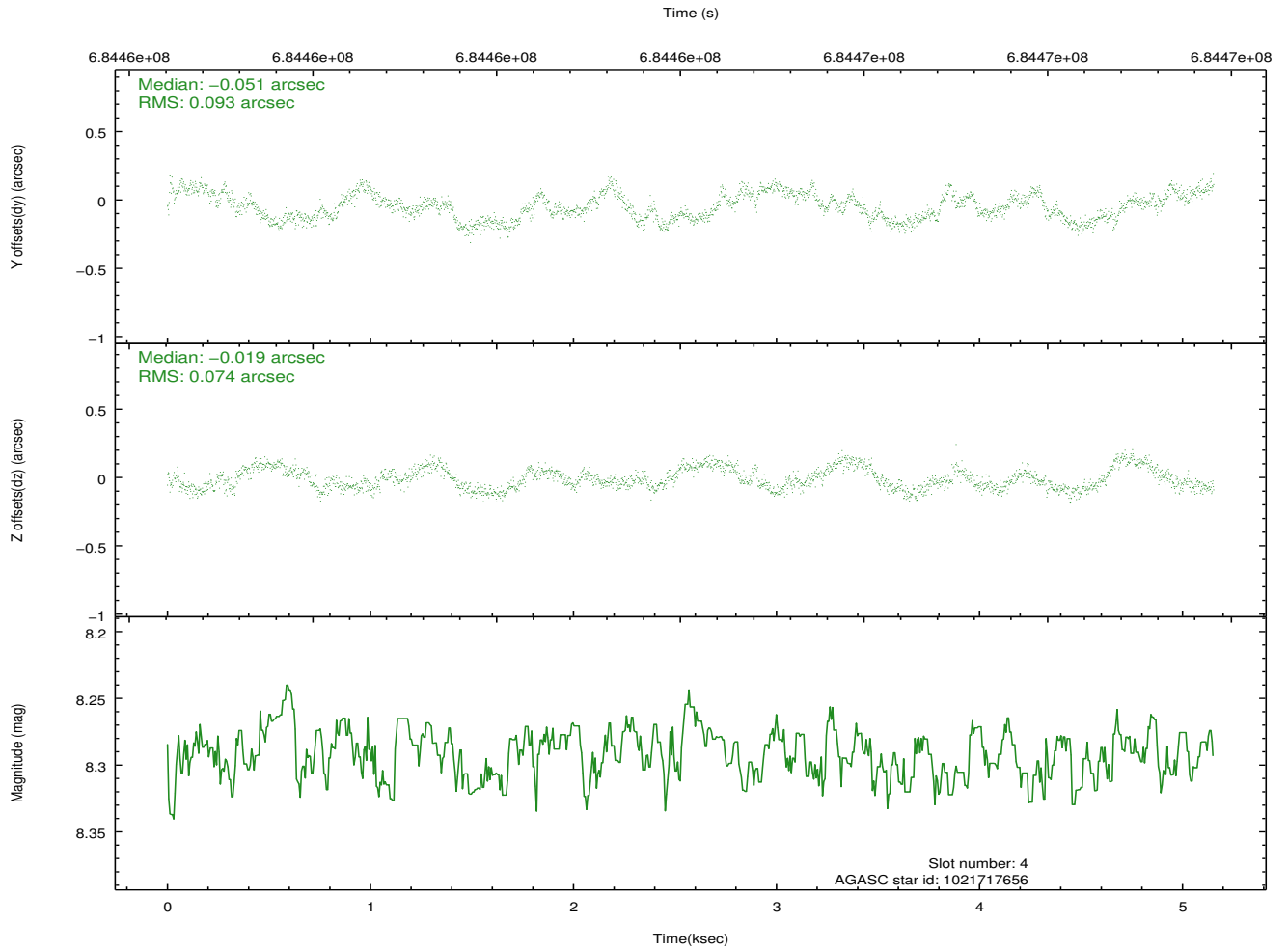
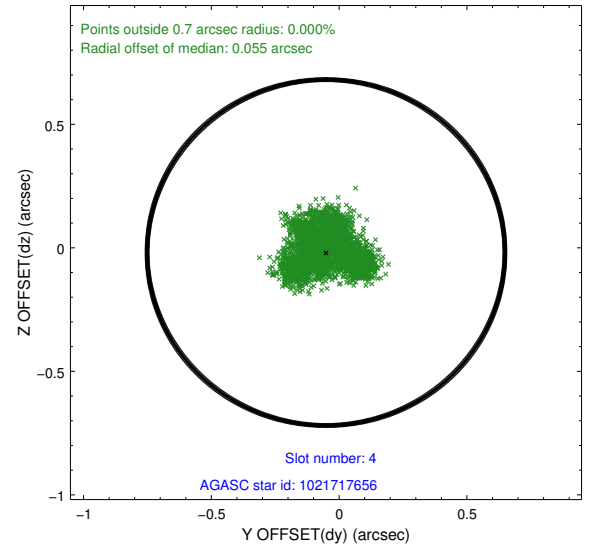
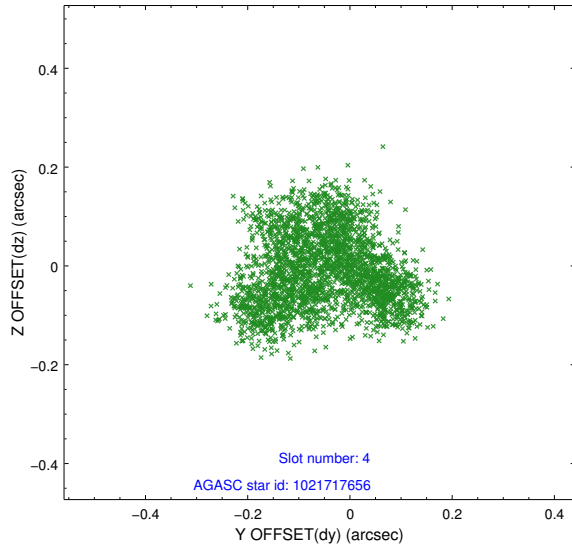
id	status	used	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_x
0	FID		7.20	1258	1.000	0.140	-0.109	0.008	0.013	0.000000	0.000000	938.66	-839
1	FID		7.15	1258	1.000	-0.378	0.087	0.007	0.011	0.000000	0.000000	-1809.40	1057
2	FID		7.17	1257	1.000	0.147	0.091	0.009	0.016	0.000000	0.000000	402.82	1703
3	GUIDE	used	8.81	2512	1.000	0.185	0.035	0.097	0.157	200.901189	-42.531395	-150.25	-2087
4	GUIDE	used	8.29	2513	1.000	-0.051	-0.019	0.133	0.186	201.139642	-43.082878	670.31	-174
5	GUIDE	used	8.29	2512	1.000	-0.161	0.180	0.094	0.156	202.114846	-42.795539	-1943.29	742
6	GUIDE	used	7.57	2515	1.000	0.075	-0.161	0.092	0.154	200.511976	-43.050426	1845.16	-1337
7	GUIDE	used	9.51	2510	1.000	-0.032	-0.040	0.148	0.231	201.740358	-43.079729	-526.44	856

2.4 Star Slots

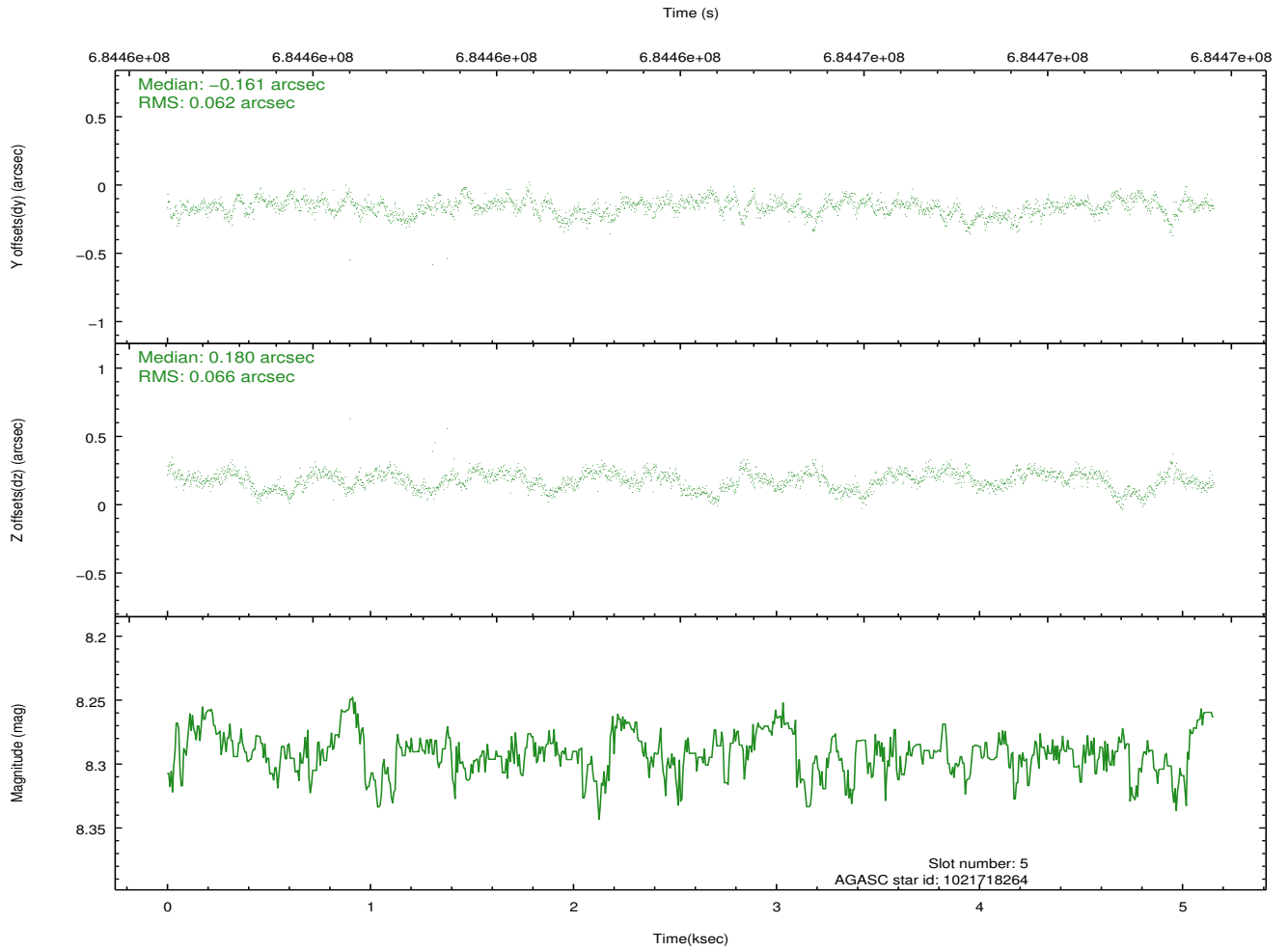
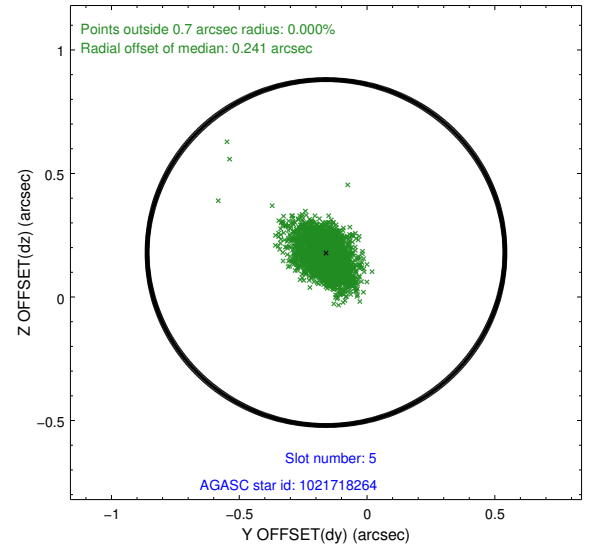
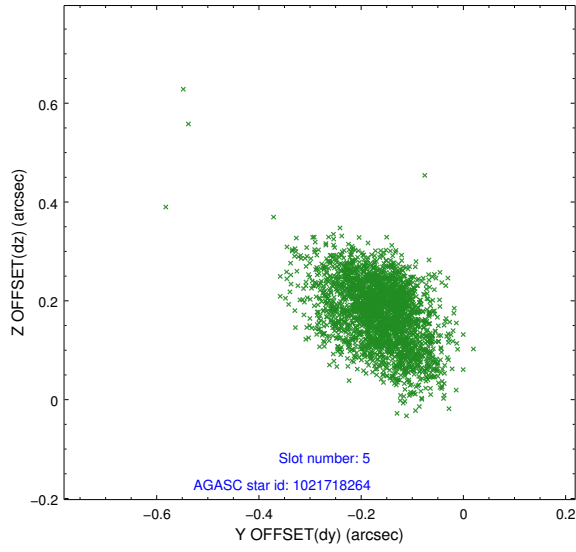
2.4.1 Slot 3



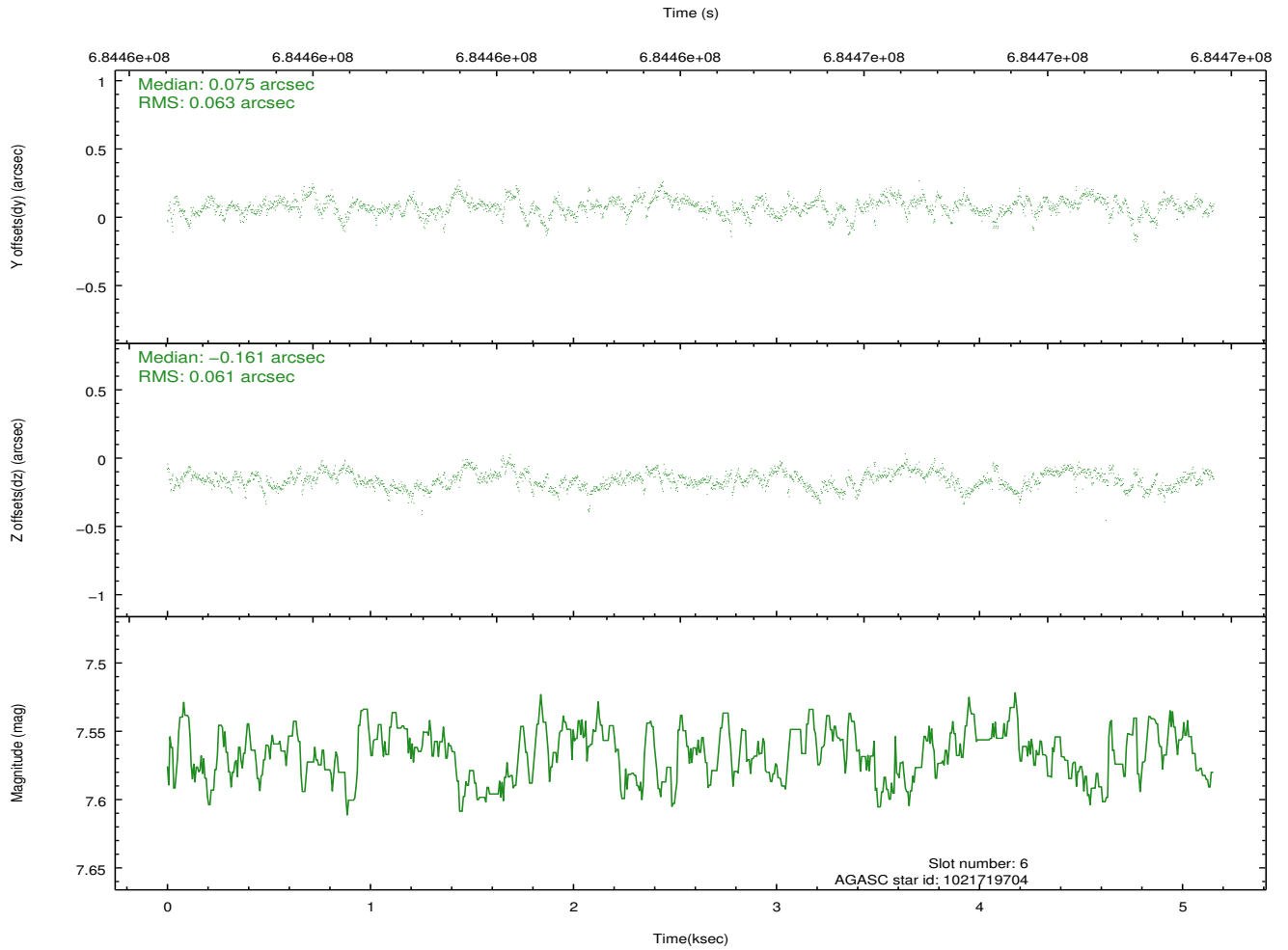
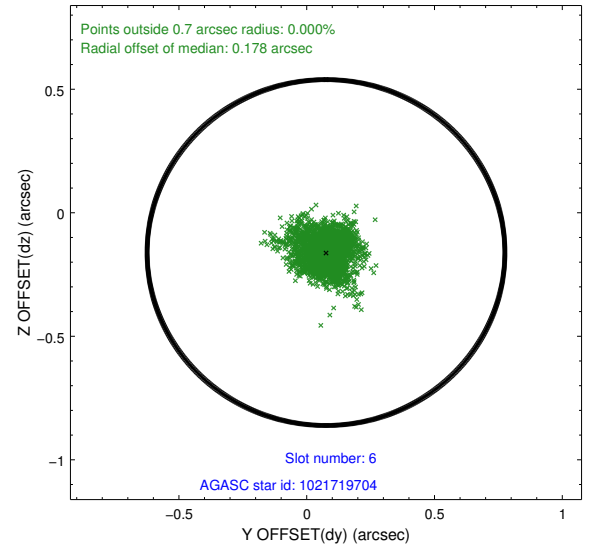
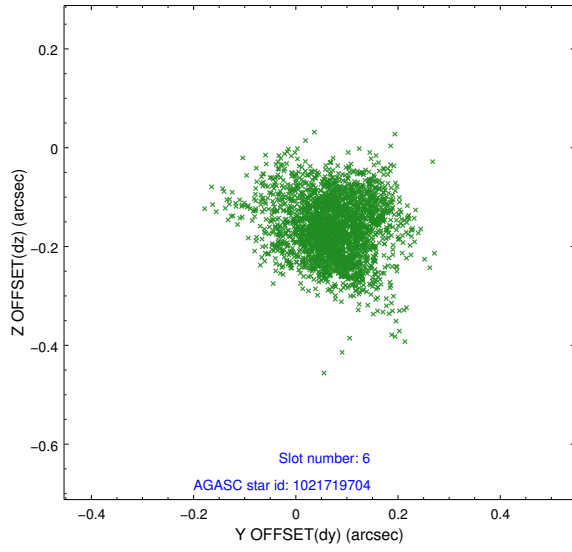
2.4.2 Slot 4



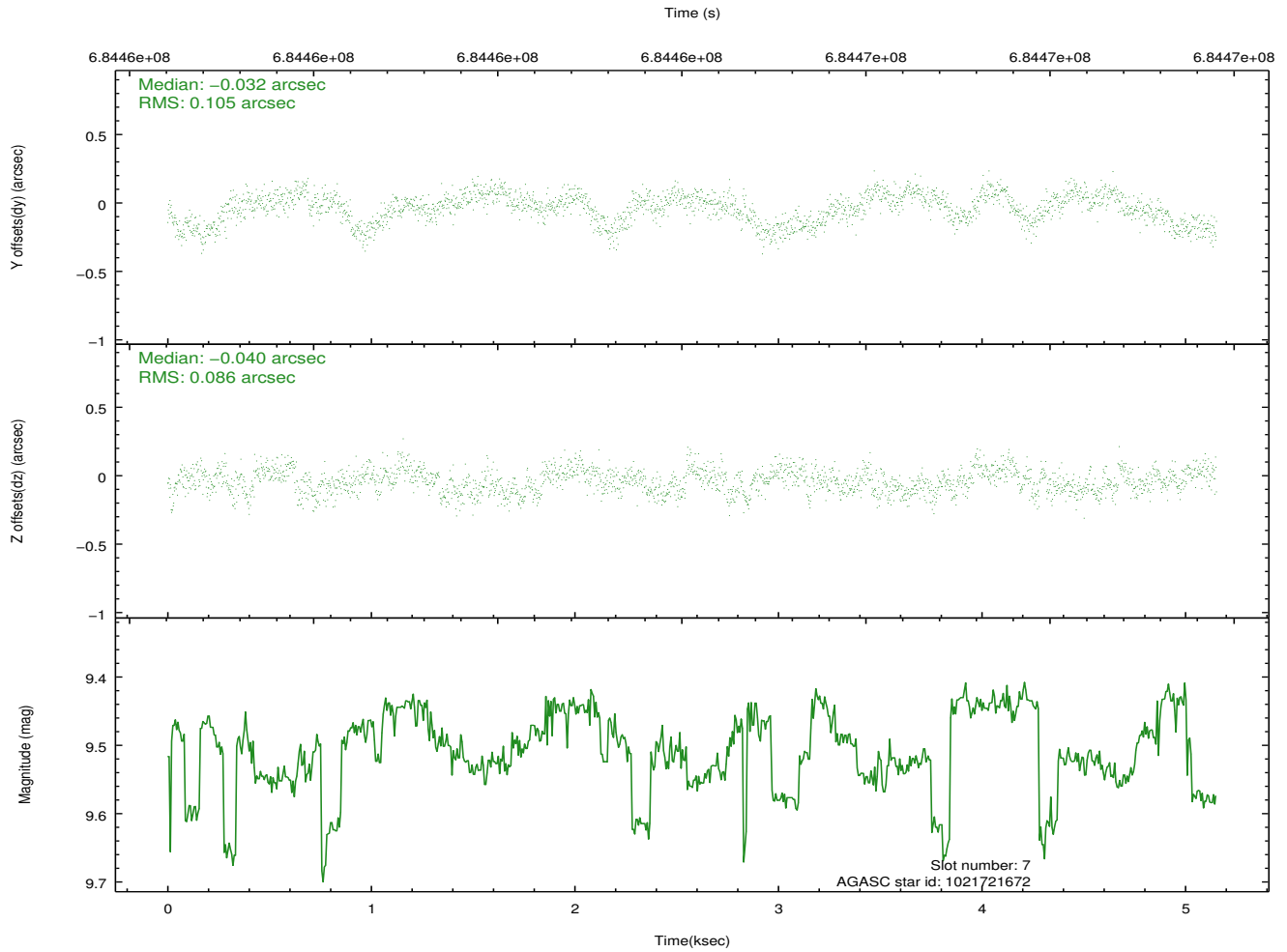
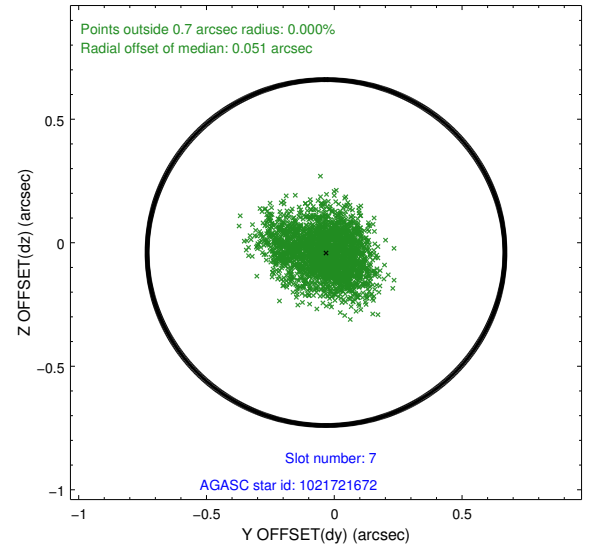
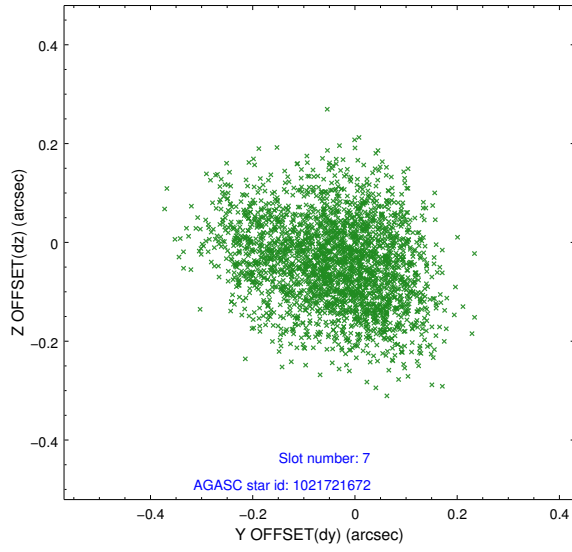
2.4.3 Slot 5



2.4.4 Slot 6

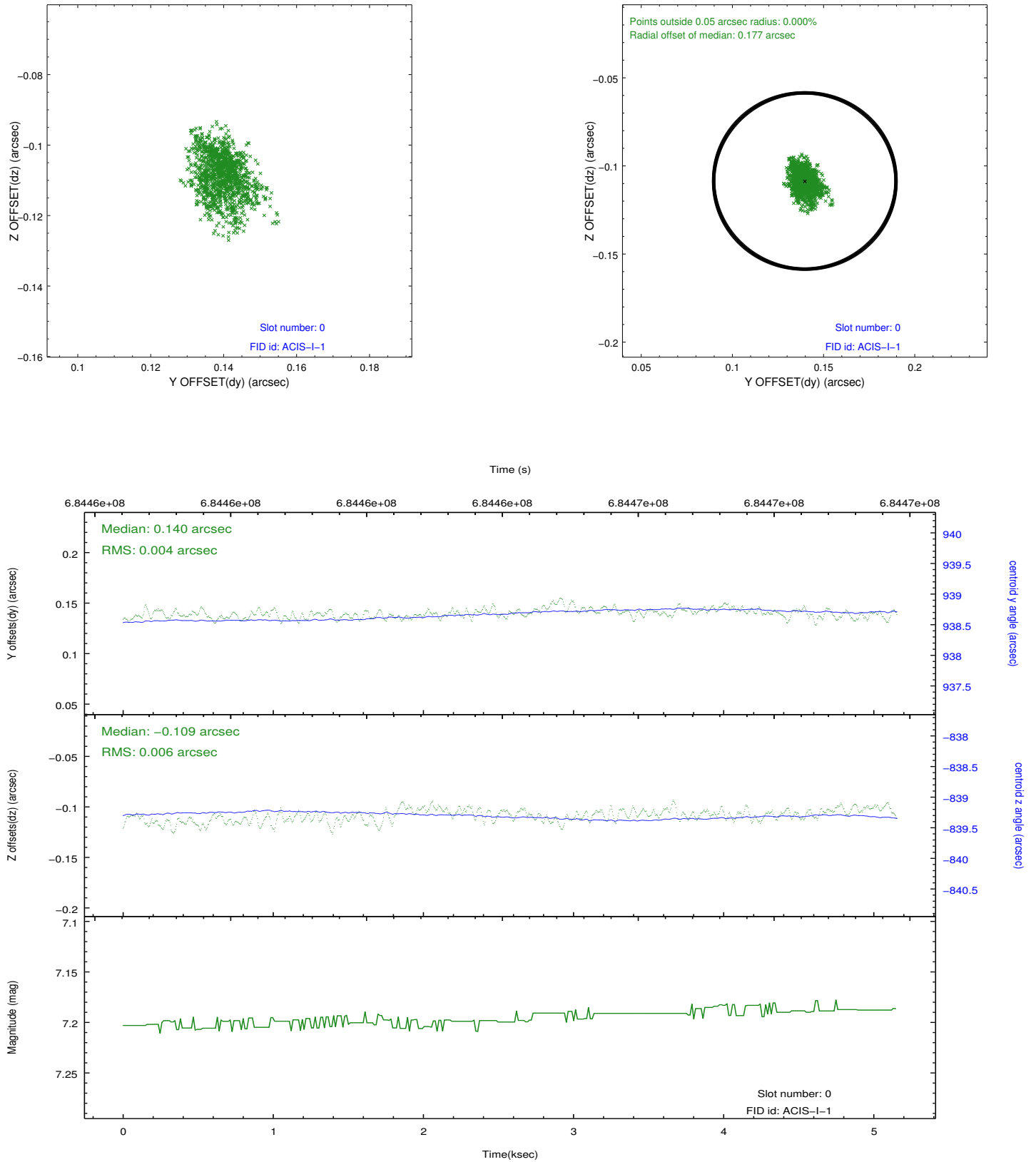


2.4.5 Slot 7

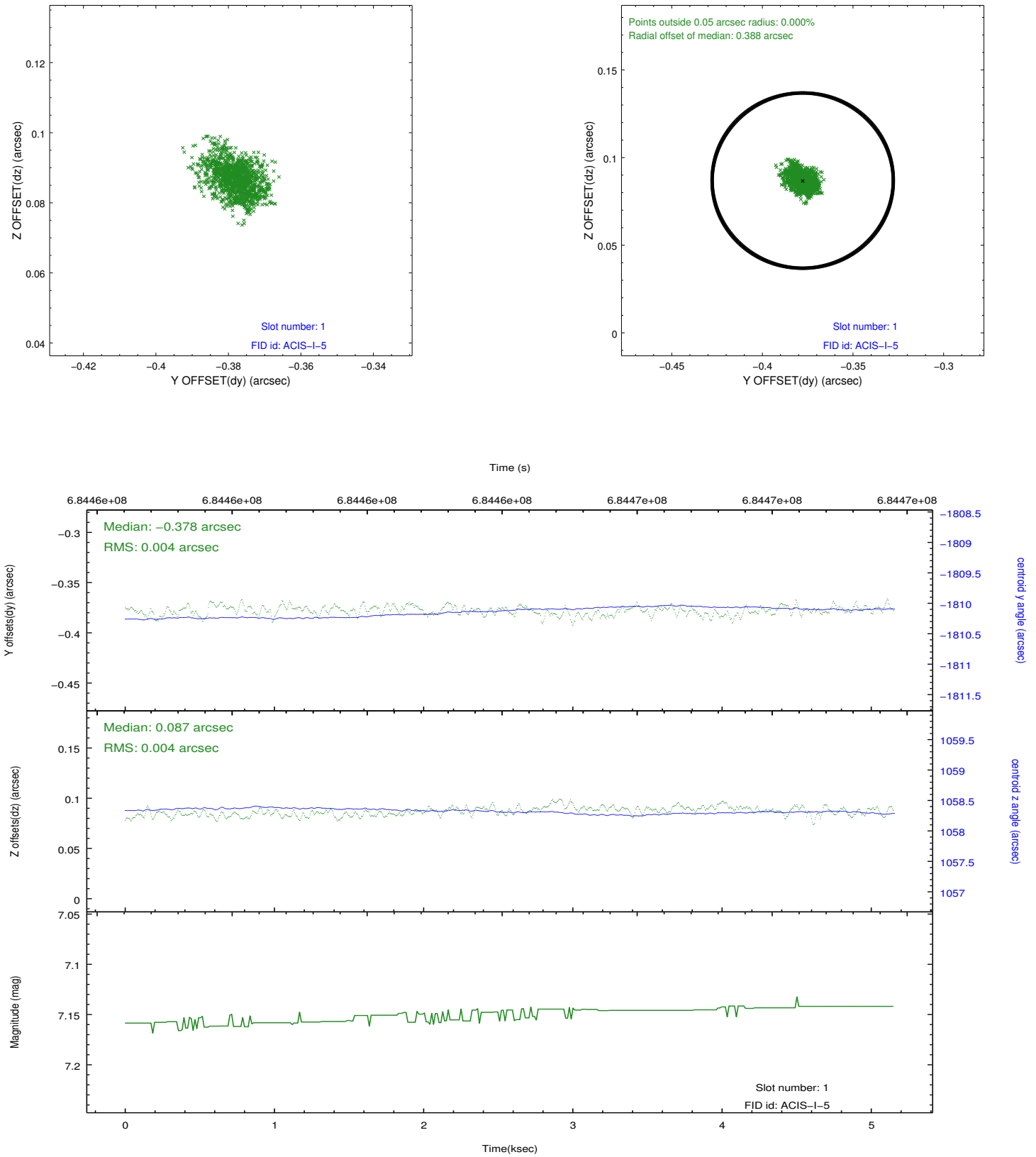


2.5 FID Slots

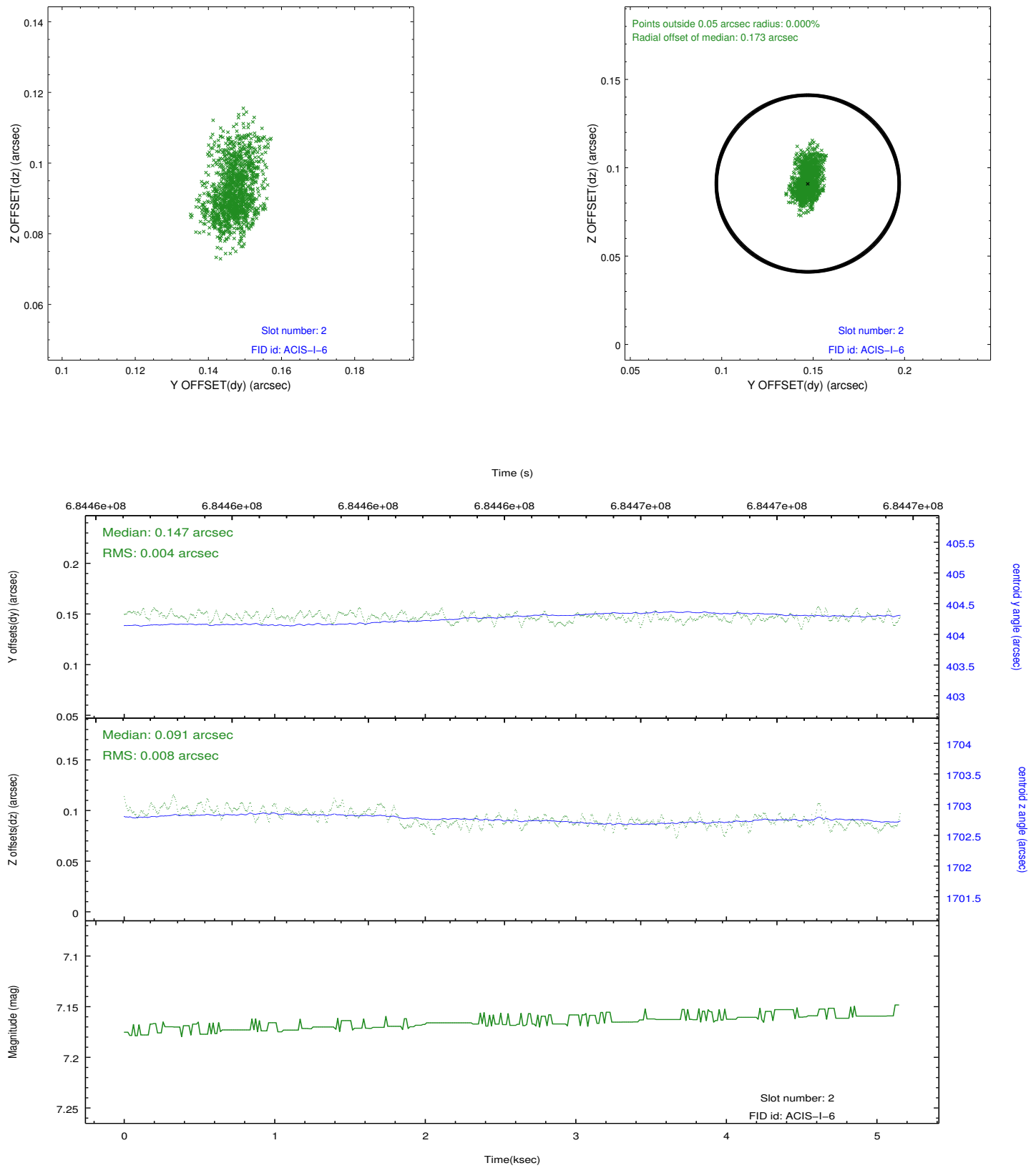
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2019.09.20
V&V Edition	2
V&V Disposition and Status	OK
V&V Charge Time	5.0764826265574

A.2 Comments

A spatial region of the original bias map for CCD = 0 suffered from anomalously high data values. Pixels in the event data that were bias-corrected by one of the original affected bias pixels may have an apparent energy shift. While the change in energy is expected to be small (~20 eV), it depends on many parameters that have not yet been fully explored for this bias anomaly. In this case, the bias map for CCD = 0 could not be improved because no suitable data at a compatible temperature and time range are available to use as replacement values. The bias map used in this processing is the original bias map telemetered with the observation.