

V&V Reference Report

L2 ASCDS Version : 10.7.1

Observation 21698 - L2 Version 1
Chandra X-Ray Center

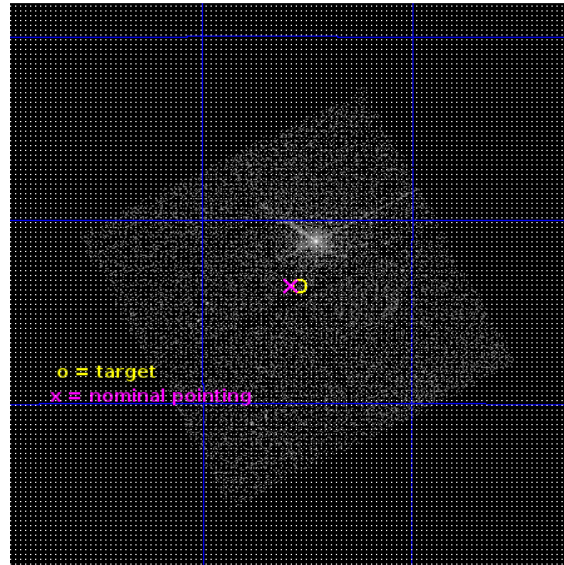
L2 Processing Date : Apr 29 2019

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1 Front

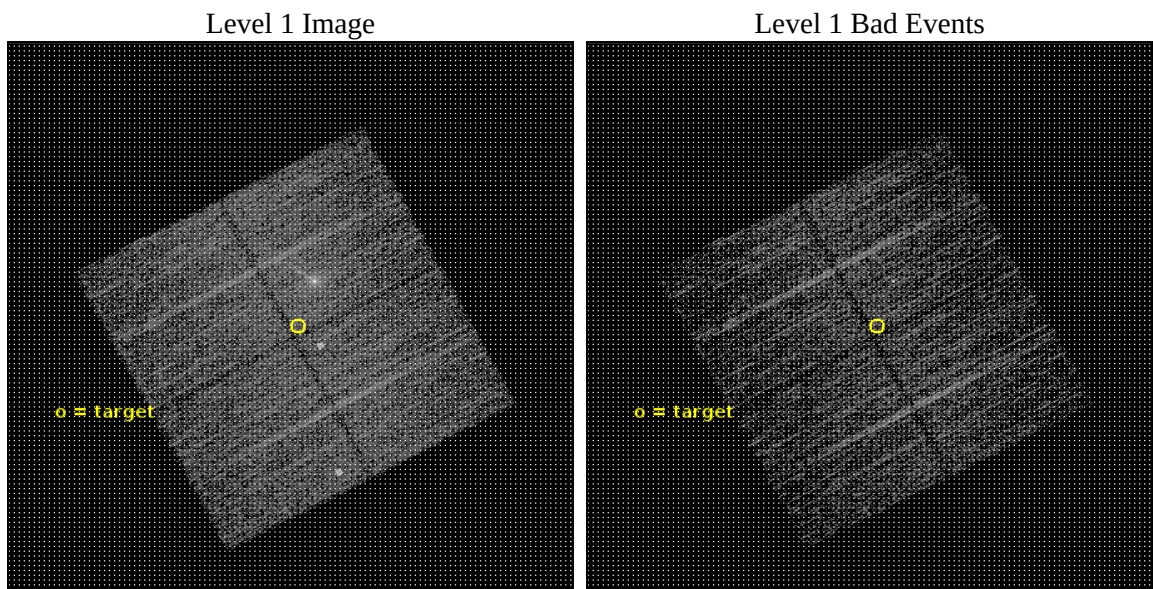
seq_num	703826	Sequence number
obs_id	21698	Observation id
title	Monitoring of the Centaurus A Jet	Proposal title
observer	Ralph Kraft	Principal investigator
object	Centaurus A	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	201.384042	Observer's specified target RA [deg]
dec_targ	-43.059833	Observer's specified target Dec [deg]
ra_nom	201.39368953676	Nominal RA [deg]
dec_nom	-43.059728685716	Nominal Dec [deg]
roll_nom	331.98505375812	Nominal Roll [deg]
revision	1	Processing version of data
ontime	5074.7000391483	Sum of GTIs [s]
liveltime	5008.395347197	Livetime [s]
ontime0	5074.7000391483	Sum of GTIs [s]
ontime1	5074.7000391483	Sum of GTIs [s]
ontime2	5074.7000391483	Sum of GTIs [s]
ontime3	5074.7000391483	Sum of GTIs [s]
l2events	22053	Number of level 2 events



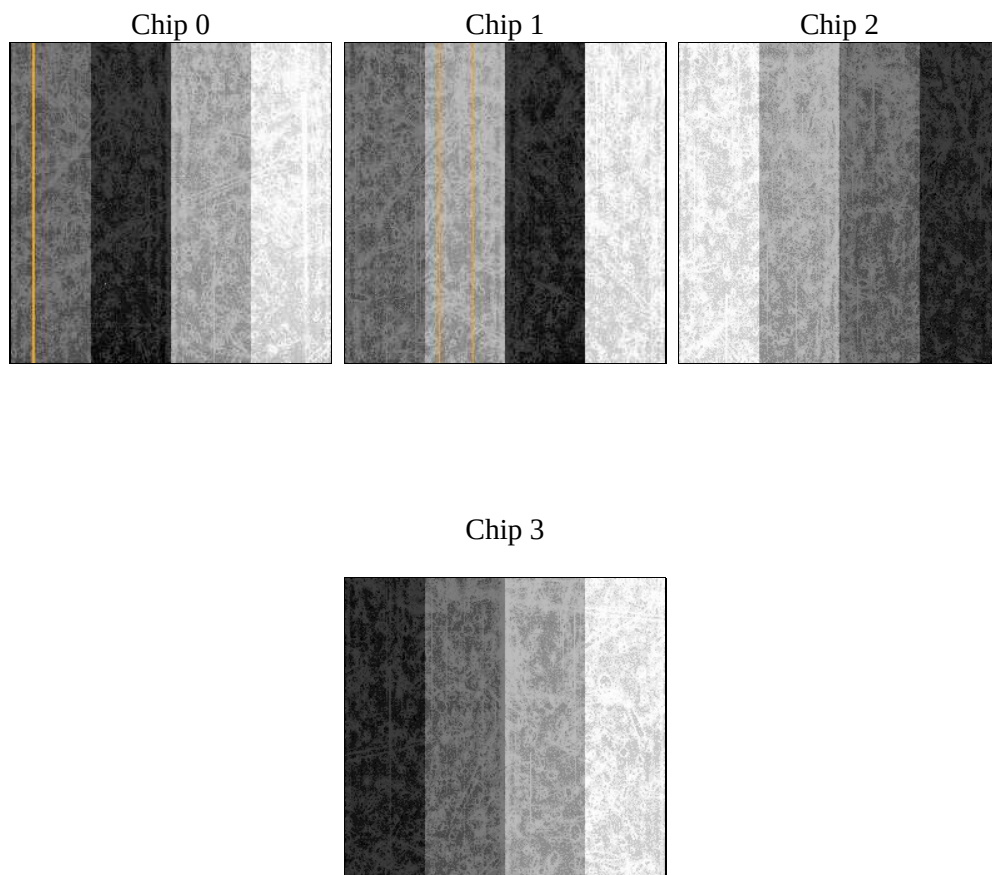
2 OBI

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	10.7.1	Processing system revision	ontime	5074.7000391483	Sum of GTIs [s]
caldbver	4.8.2	 	ontime0	5074.7000391483	Sum of GTIs [s]
date	2019-04-29T18:53:25	Date and time of file creation	ontime1	5074.7000391483	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	5074.7000391483	Sum of GTIs [s]
			ontime3	5074.7000391483	Sum of GTIs [s]
			l1events	157692	Number of level 1 events

2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	36501	39481	36507	45203
rejected events	30058	32346	31685	35217
rejected %	82%	81%	86%	77%

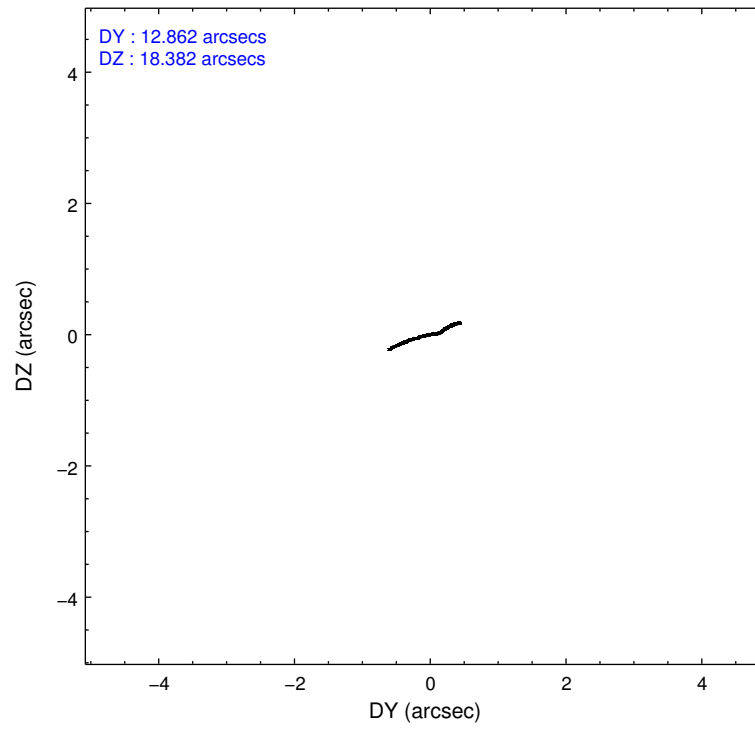
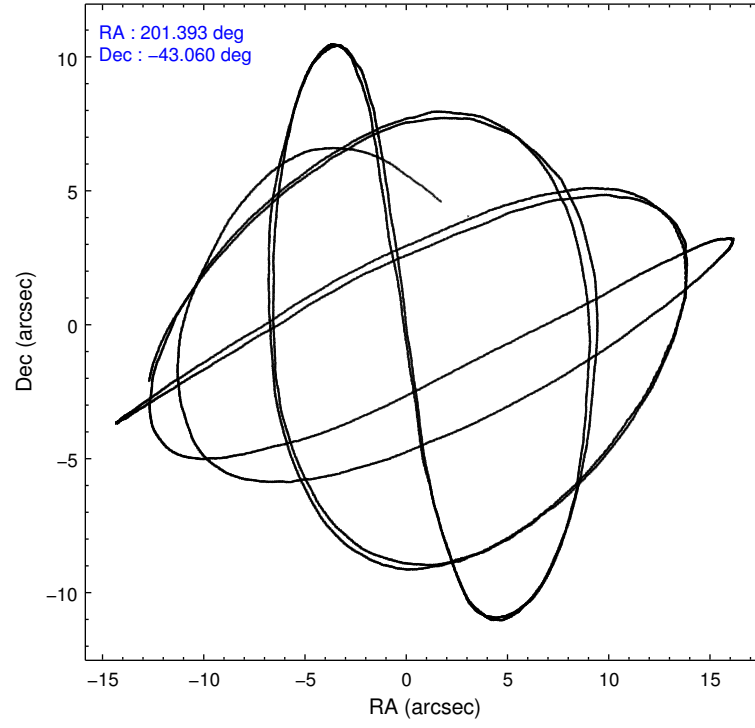
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	3381	3681	1897	5221
	9%	9%	5%	11%
grade 1 events	33	37	26	229
	0%	0%	0%	0%
grade 2 events	1200	1347	1133	1745
	3%	3%	3%	3%
grade 3 events	446	516	432	732
	1%	1%	1%	1%
grade 4 events	459	479	465	777
	1%	1%	1%	1%
grade 5 events	1799	1793	1734	2130
	4%	4%	4%	4%
grade 6 events	968	1121	899	1523
	2%	2%	2%	3%
grade 7 events	28215	30507	29921	32846
	77%	77%	81%	72%

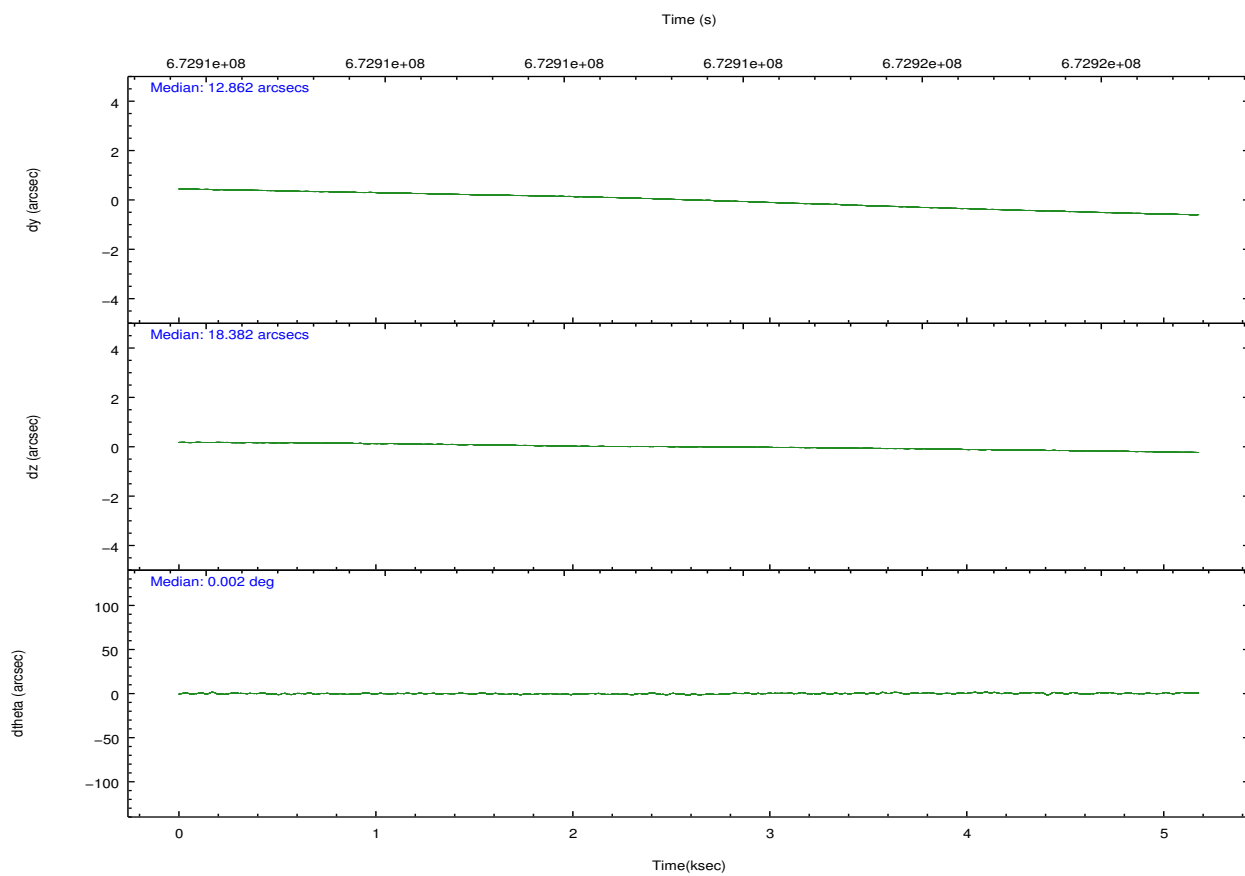
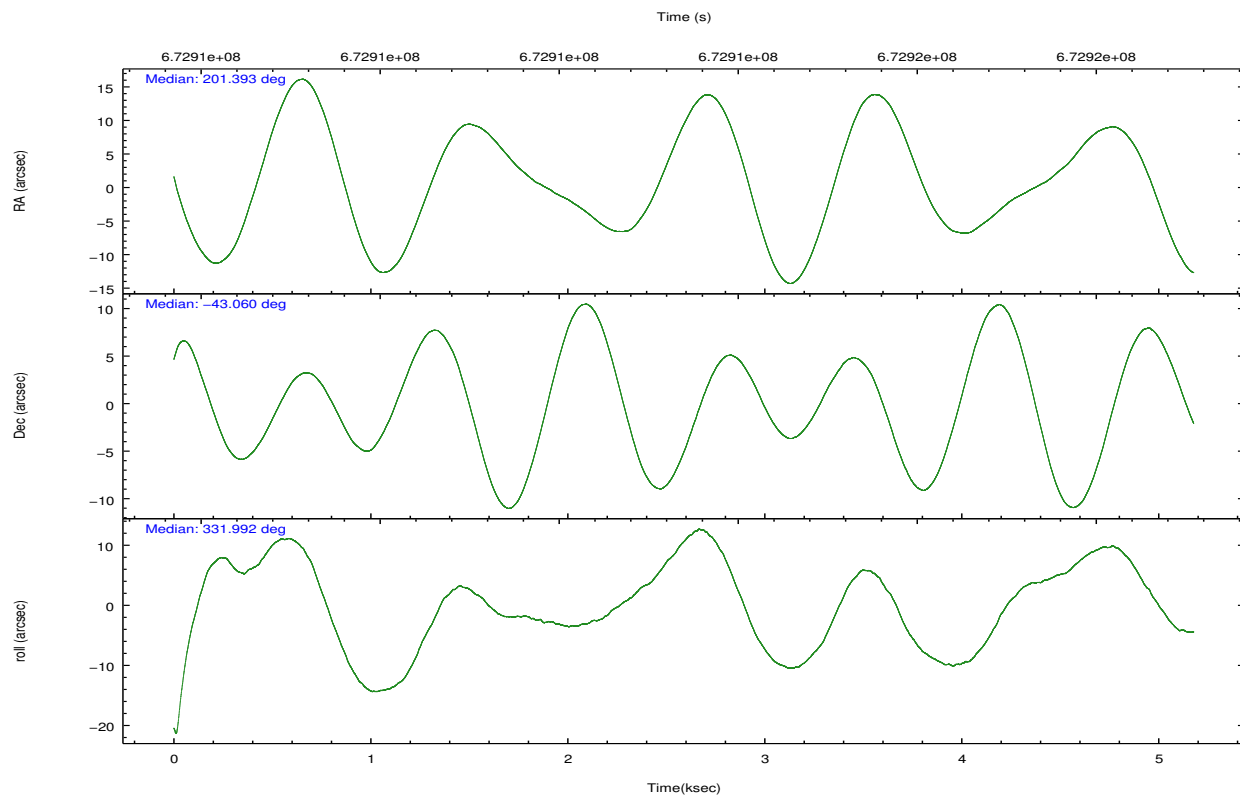
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-0123	ACIS-0123
Grating	NONE	NONE
Data mode	FAINT	FAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	201.355993	201.3936895367599
[deg] Pointing Dec	-43.060836	-43.05972868571632
[deg] Pointing Roll	331.750697	331.9850537581211
[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)	672911267.184000	672910451.64829
Observation start date	2019-04-29T07:46:38	2019-04-29T07:34:11
[s] Observation end time (MET)	672916267.184000	672916892.2361701
Observation end date	2019-04-29T09:09:58	2019-04-29T09:21:32
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
Number of optional ACIS chips dropped	0	0
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



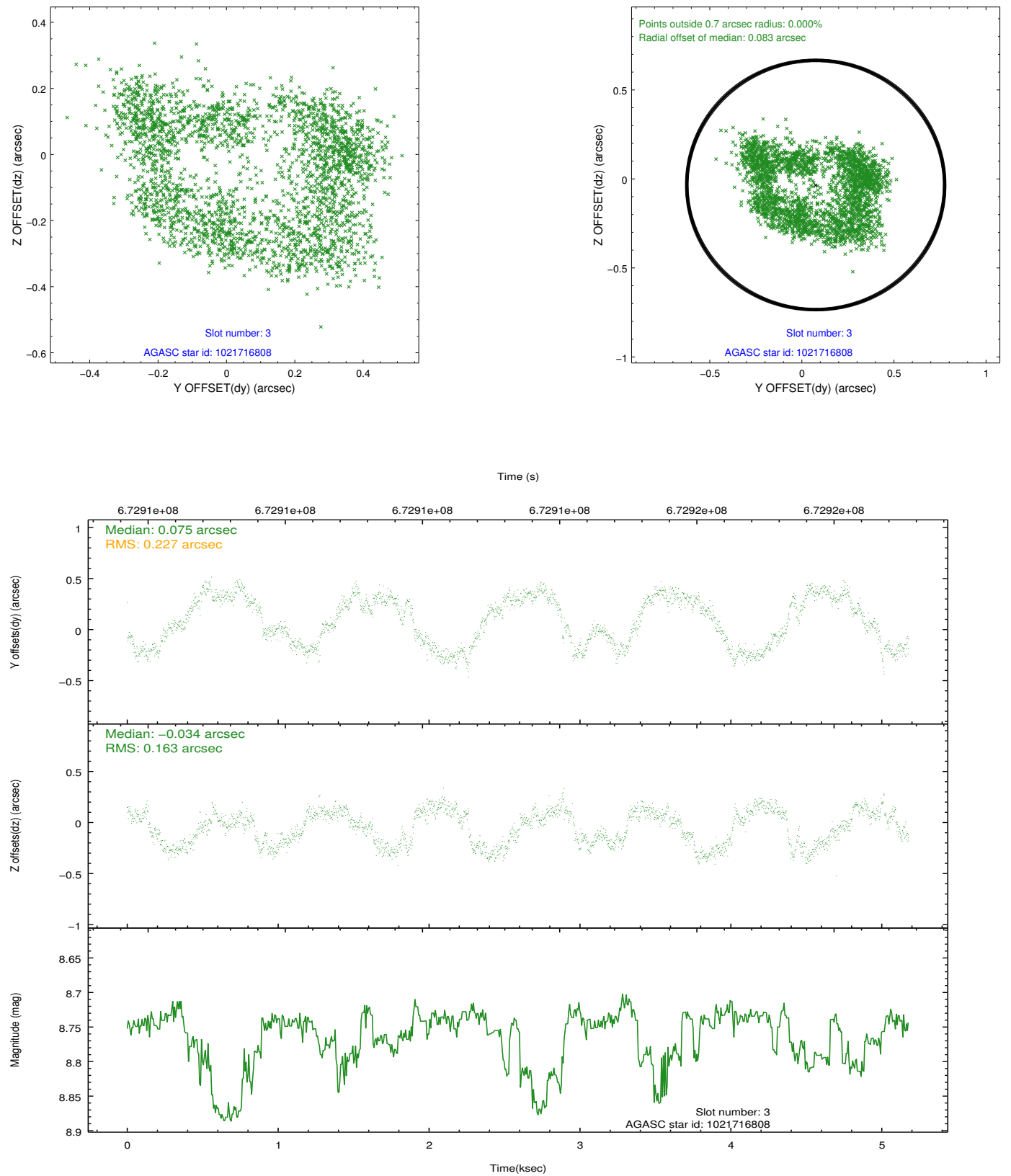


Slot Statistics

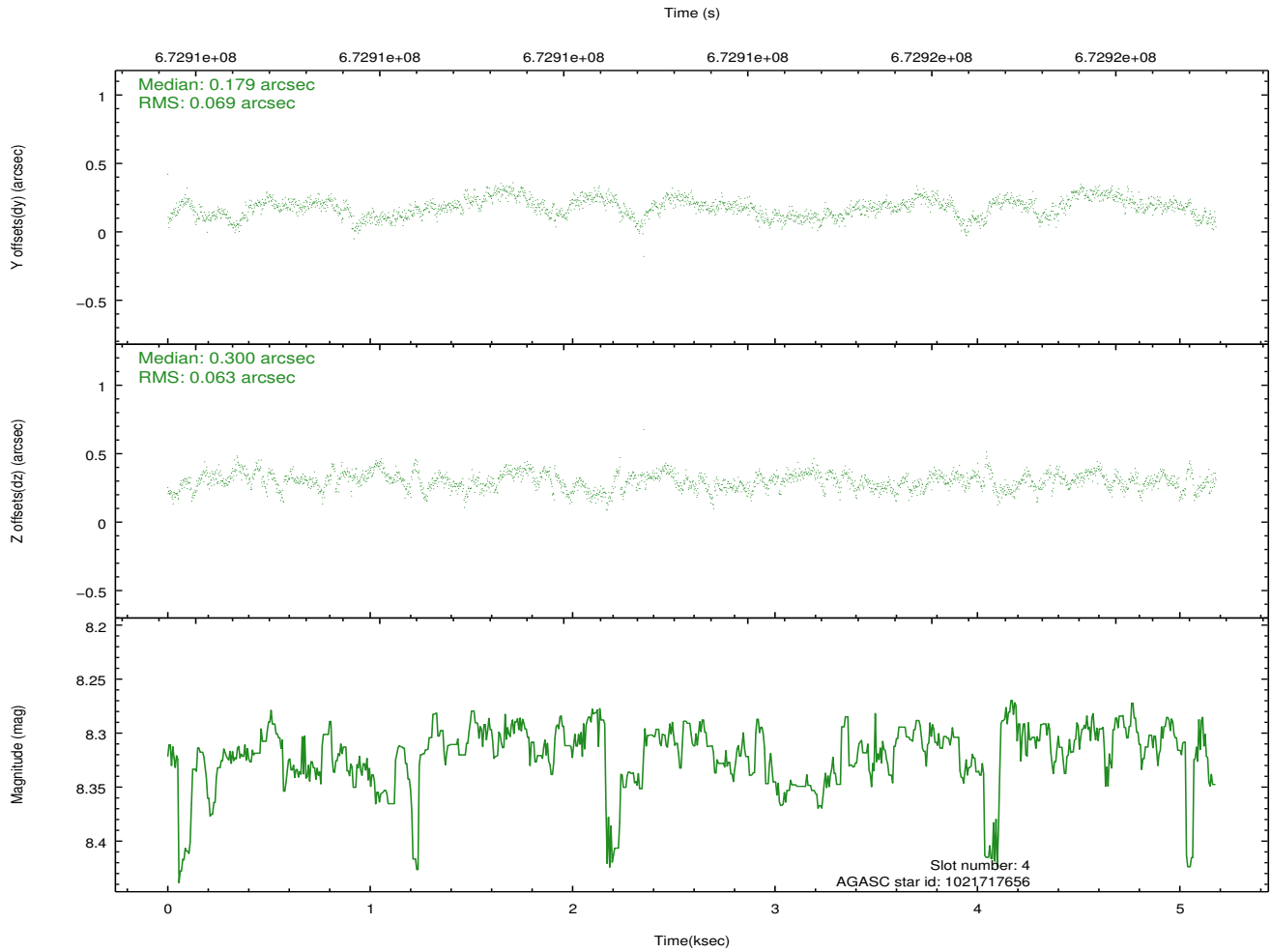
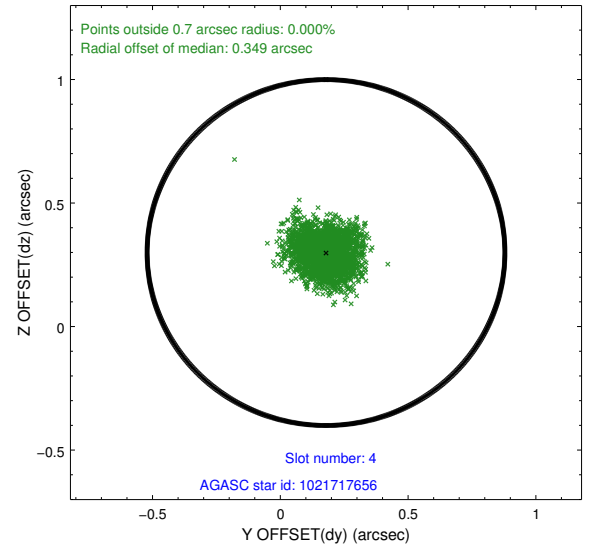
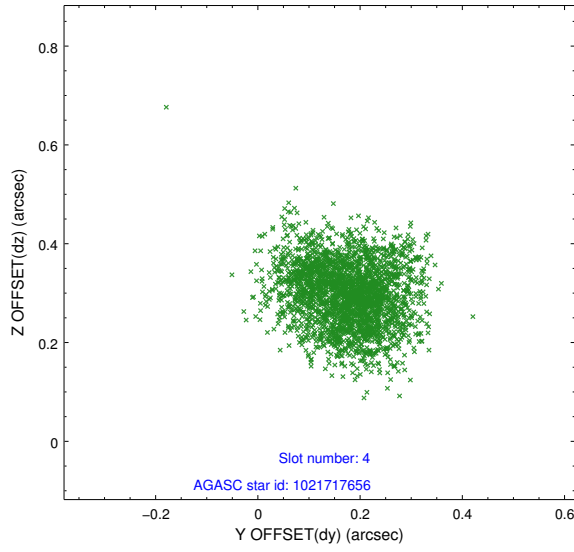
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.09	1263	1.000	0.123	-0.065	0.009	0.015	0.000000	0.000000	926.76	-842
1	FID		ACIS-I-3	7.32	1263	1.000	-0.143	0.121	0.007	0.011	0.000000	0.000000	44.63	-975
2	FID		ACIS-I-6	7.09	1263	1.000	-0.069	0.013	0.010	0.018	0.000000	0.000000	392.47	1699
3	GUIDE	used	1021716808	8.75	2522	1.000	0.075	-0.034	0.306	0.405	200.901189	-42.531395	-1962.53	1104
4	GUIDE	used	1021717656	8.32	2526	1.000	0.179	0.300	0.101	0.158	201.139642	-43.082878	-463.12	-339
5	GUIDE	used	1021718264	8.33	2525	1.000	-0.446	-0.546	0.228	0.318	202.114846	-42.795539	1317.43	1780
6	GUIDE	used	1021719704	7.55	2527	1.000	0.341	0.476	0.101	0.155	200.511976	-43.050426	-1966.39	-1026
7	GUIDE	used	1021721304	9.61	2524	1.000	-0.155	-0.200	0.195	0.317	201.117326	-42.480412	-1546.66	1539

2.4 Star Slots

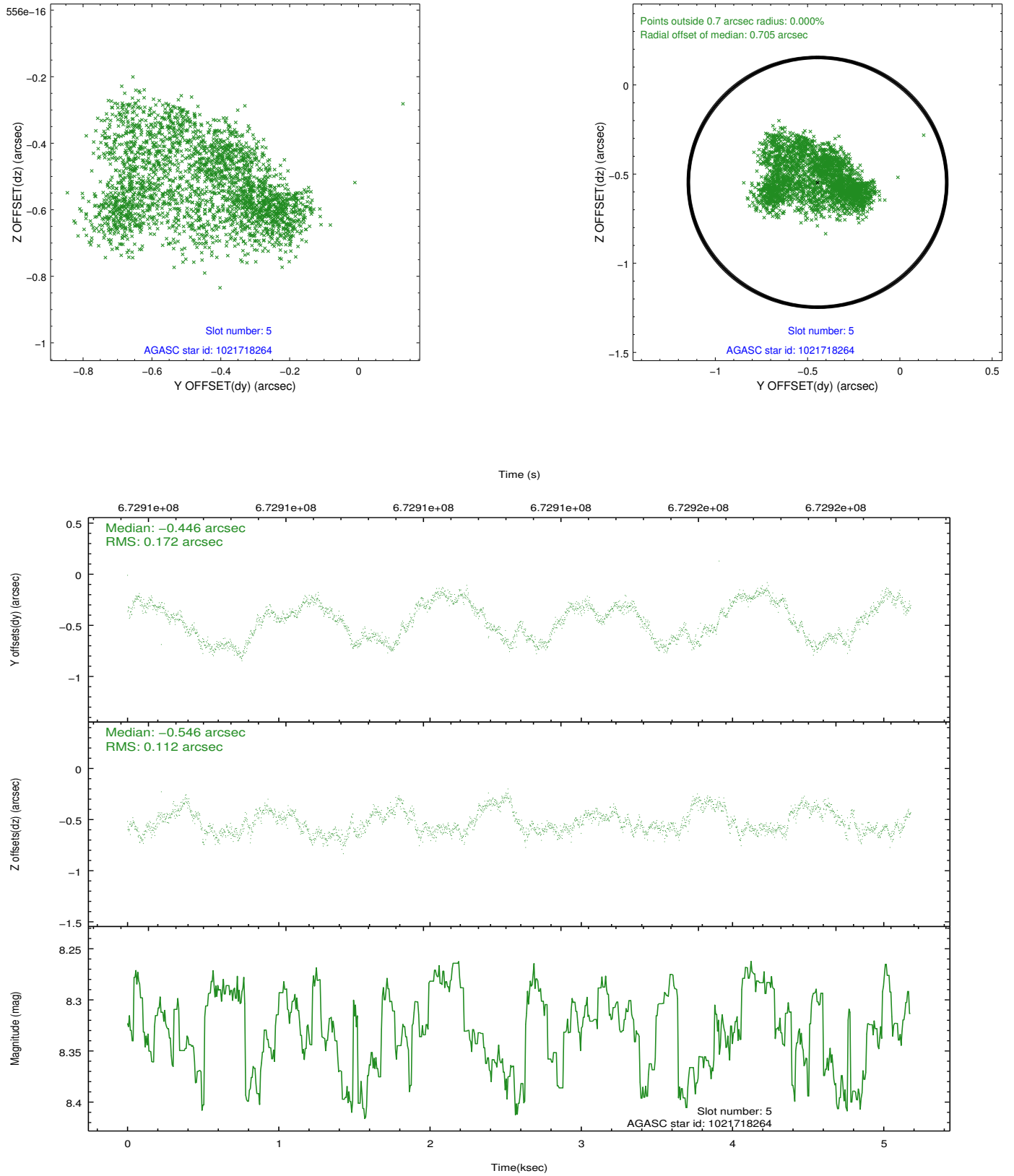
2.4.1 Slot 3



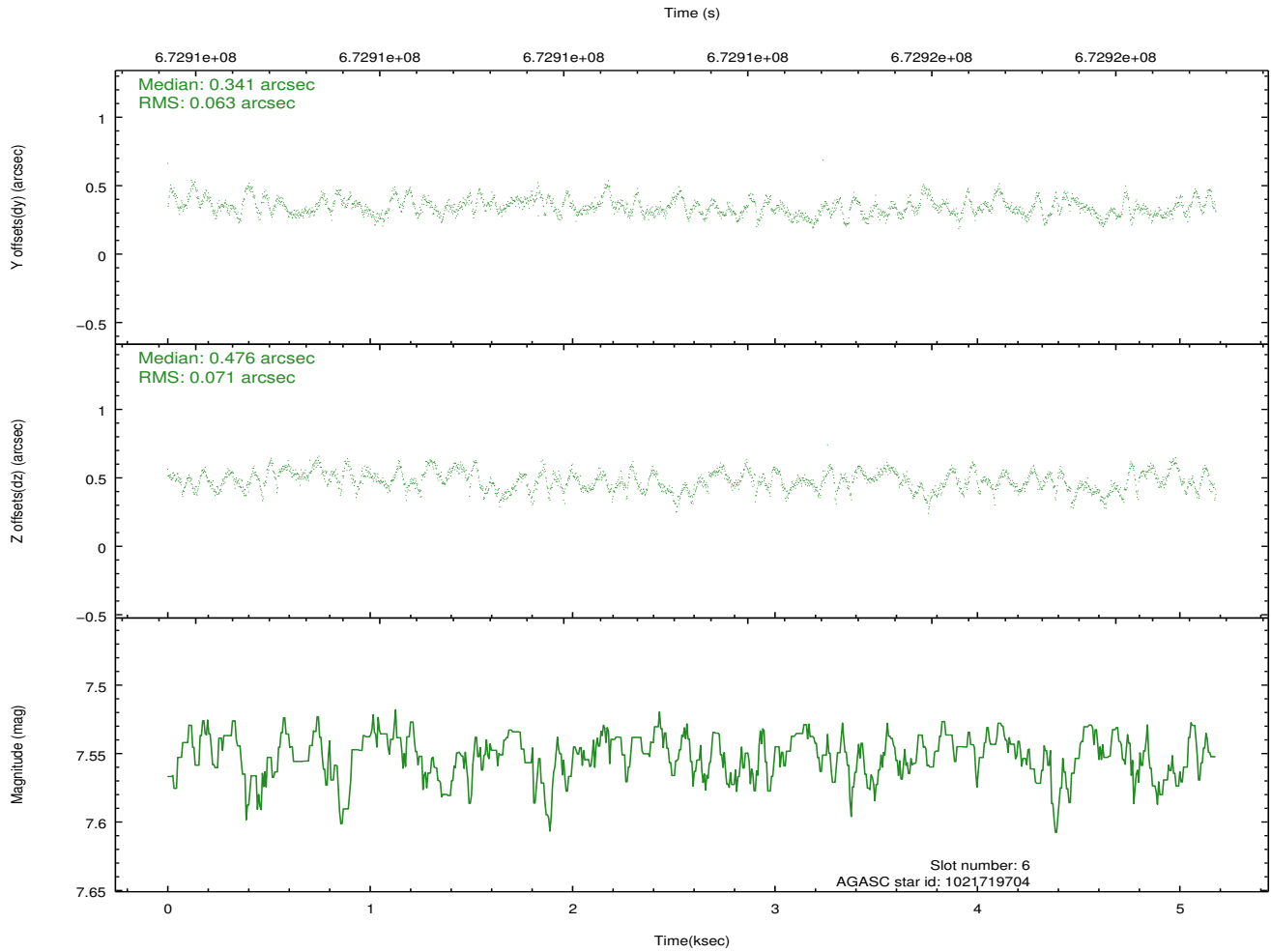
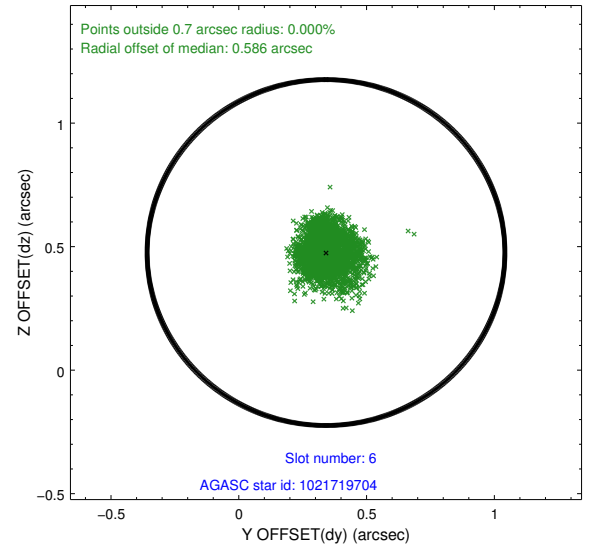
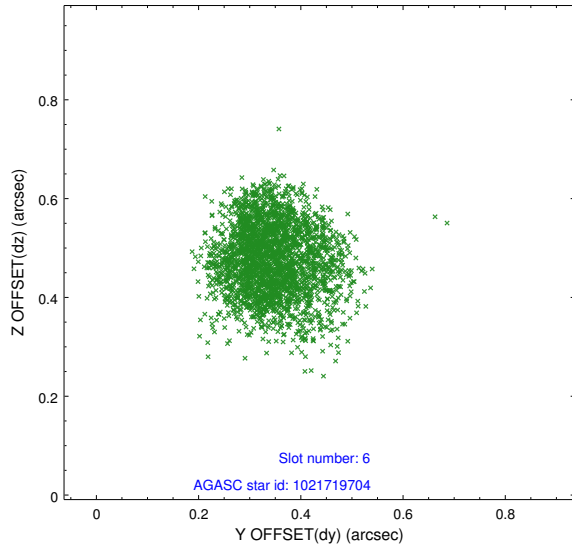
2.4.2 Slot 4



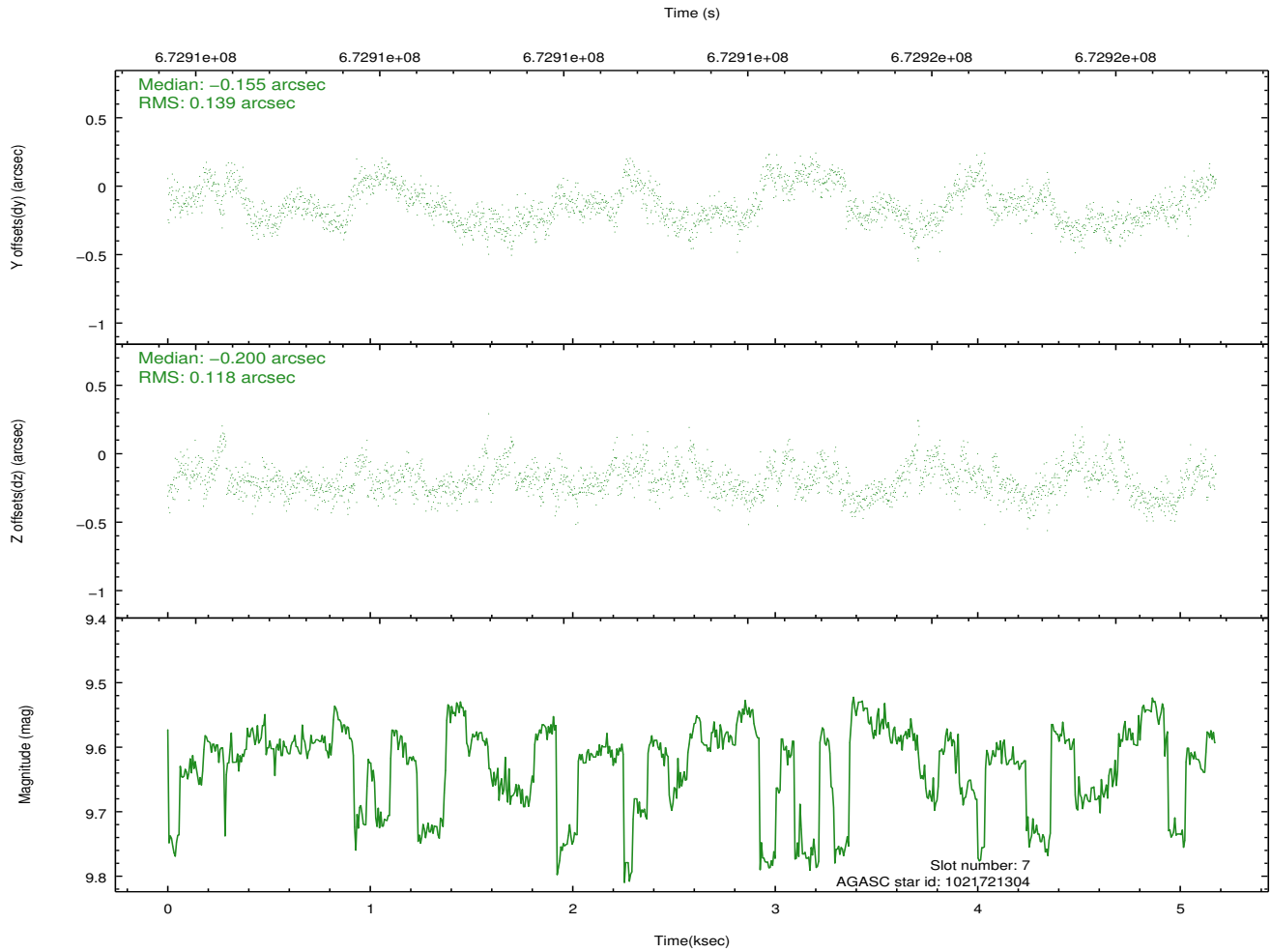
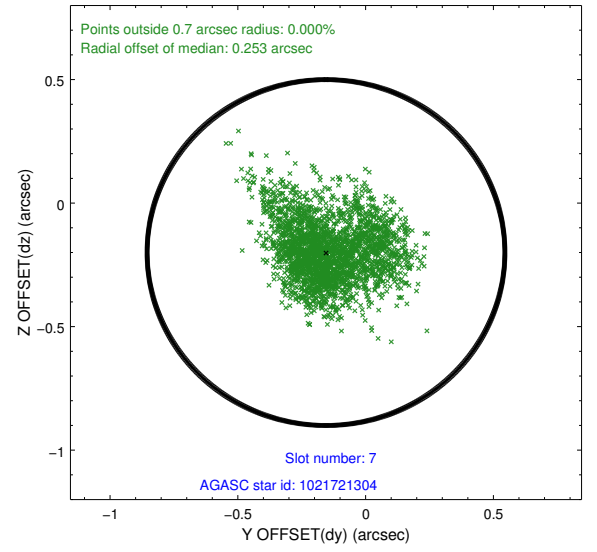
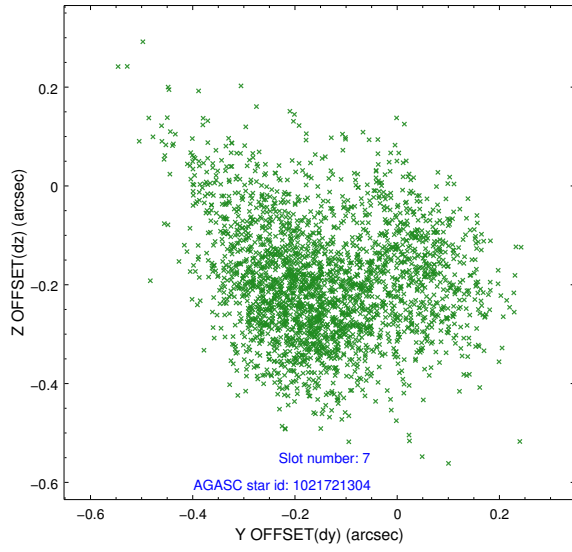
2.4.3 Slot 5



2.4.4 Slot 6

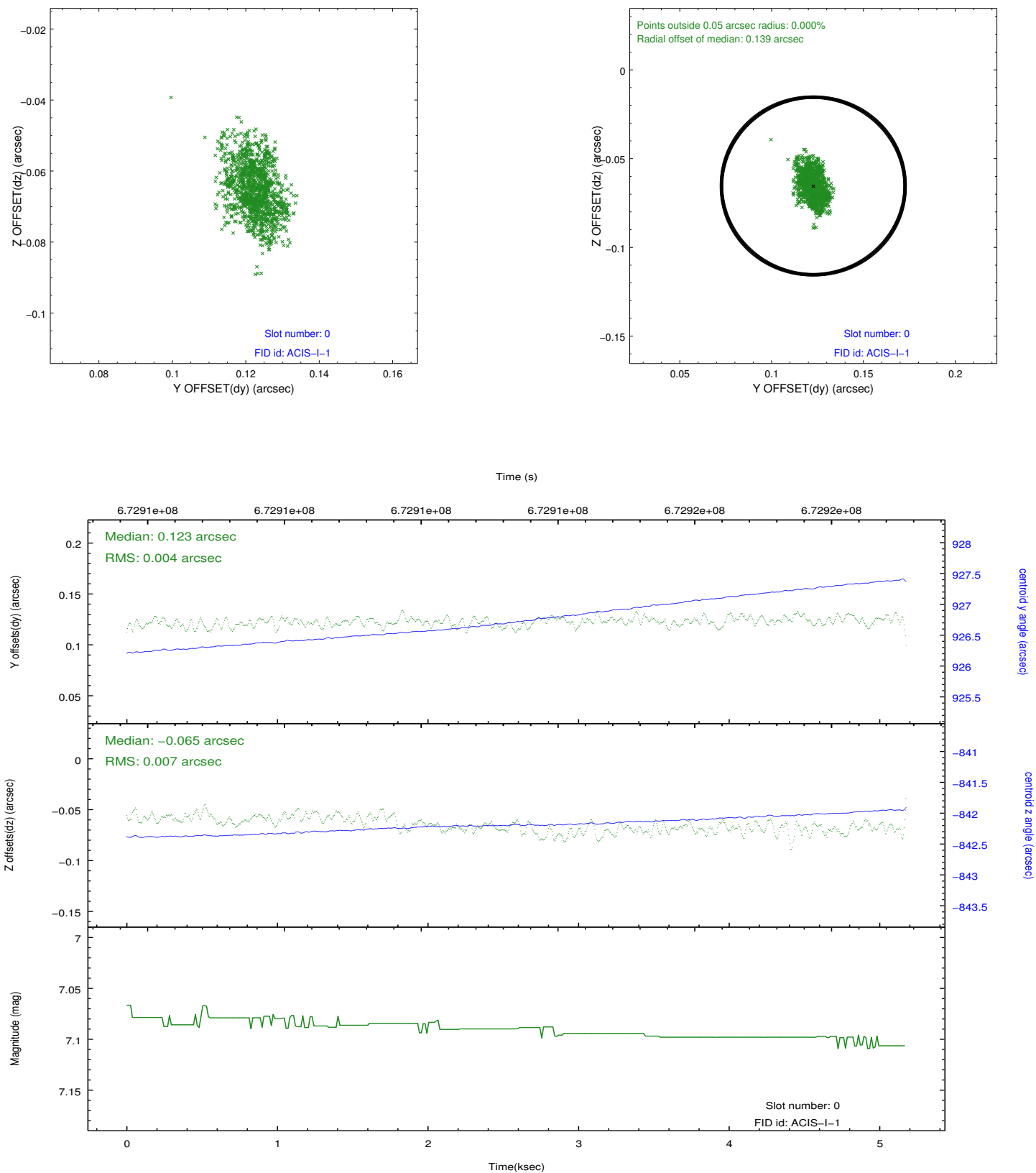


2.4.5 Slot 7

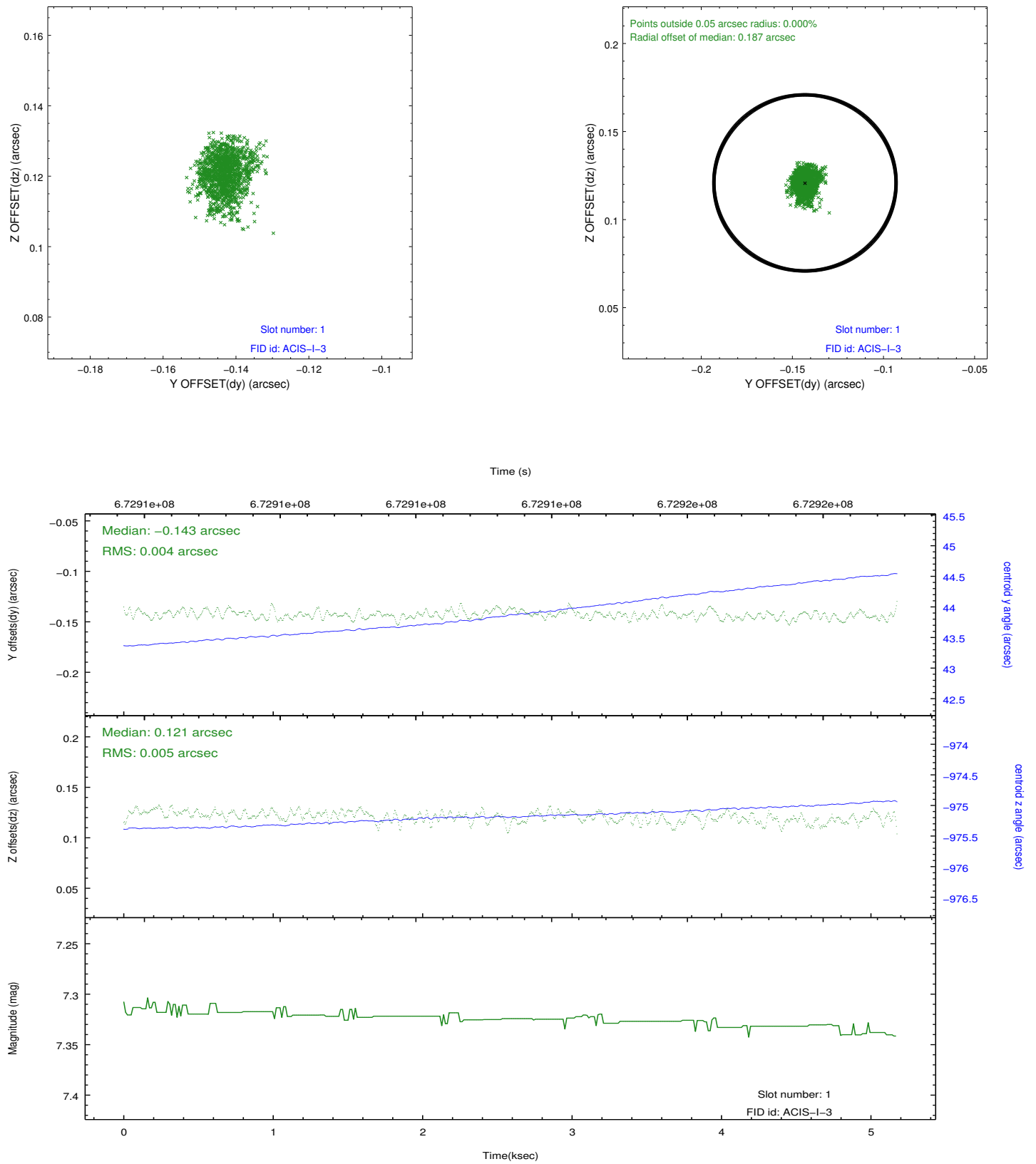


2.5 FID Slots

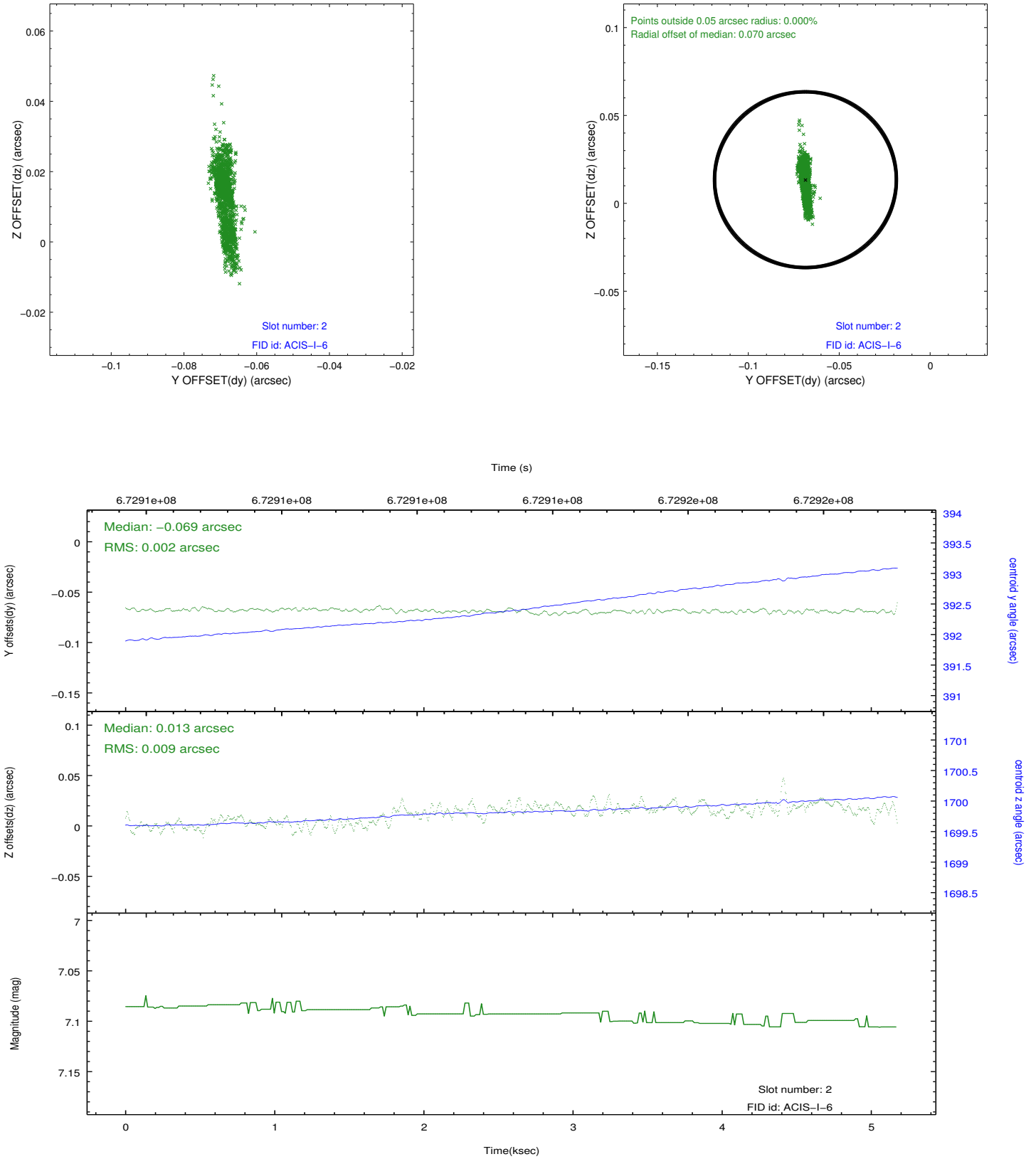
2.5.1 Slot 0



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)	2019.05.09
V&V Edition	2
V&V Disposition and Status	OK
V&V Charge Time	5.0747000391483

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.