

V&V Reference Report

L2 ASCDS Version : 10.6

Observation 19748 - L2 Version 2
Chandra X-Ray Center

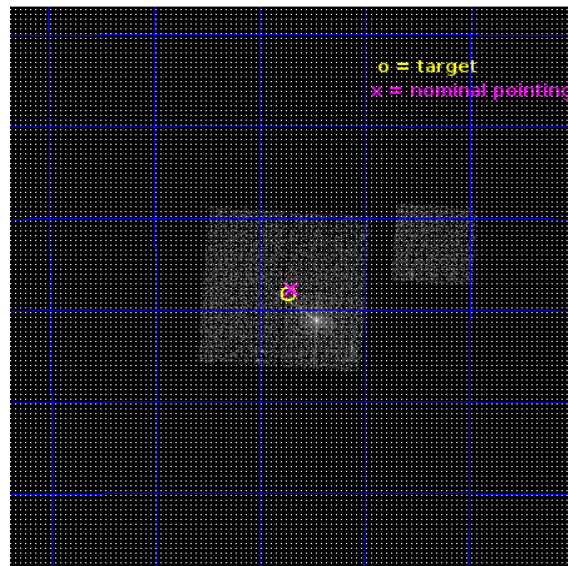
L2 Processing Date : Dec 13 2017

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 7	12
2.5	FID Slots	13
2.5.1	Slot 0	13
2.5.2	Slot 1	14
2.5.3	Slot 2	15
A	Summary	16
A.1	Status	16
A.2	Comments	16

1 Front

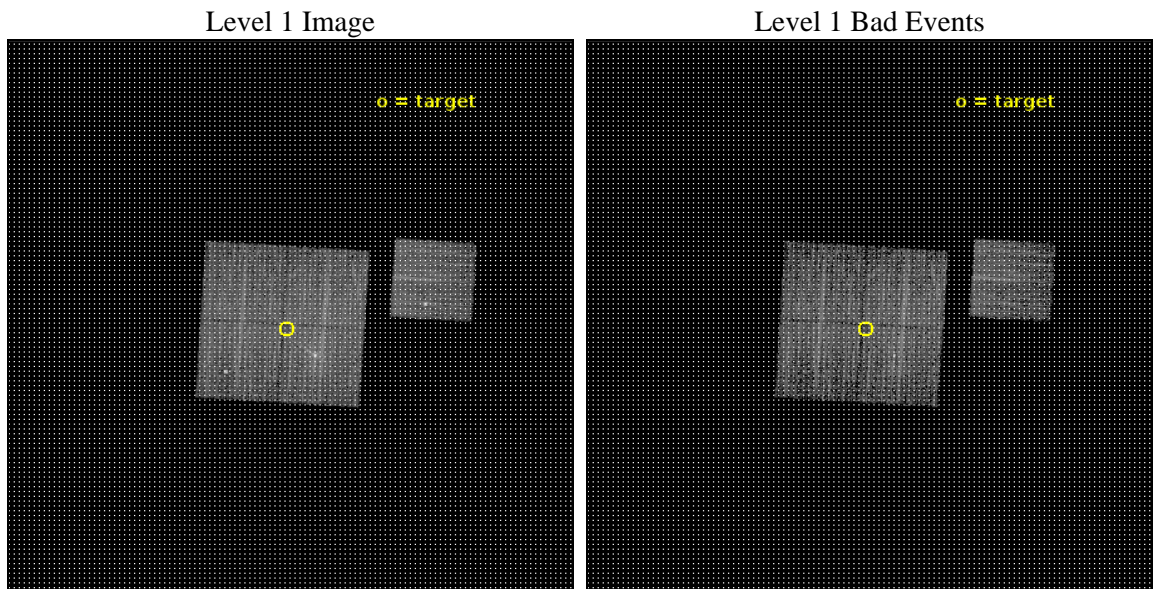
seq_num	703463	Sequence number
obs_id	19748	Observation id
title	Monitoring of the Cen A jet and LMXB population	Proposal title
observer	Ralph Kraft	Principal investigator
object	Centaurus A	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	201.431667	Observer's specified target RA [deg]
dec_targ	-42.97125	Observer's specified target Dec [deg]
ra_nom	201.42444310887	Nominal RA [deg]
dec_nom	-42.962239559282	Nominal Dec [deg]
roll_nom	93.696968284339	Nominal Roll [deg]
revision	2	Processing version of data
ontime	5067.9924198389	Sum of GTIs [s]
livetime	5001.775367872	Livetime [s]
ontime0	5067.8692998886	Sum of GTIs [s]
ontime1	5067.9103398323	Sum of GTIs [s]
ontime2	5067.9513798952	Sum of GTIs [s]
ontime3	5067.9924198389	Sum of GTIs [s]
ontime6	5067.8282598257	Sum of GTIs [s]
l2events	24749	Number of level 2 events



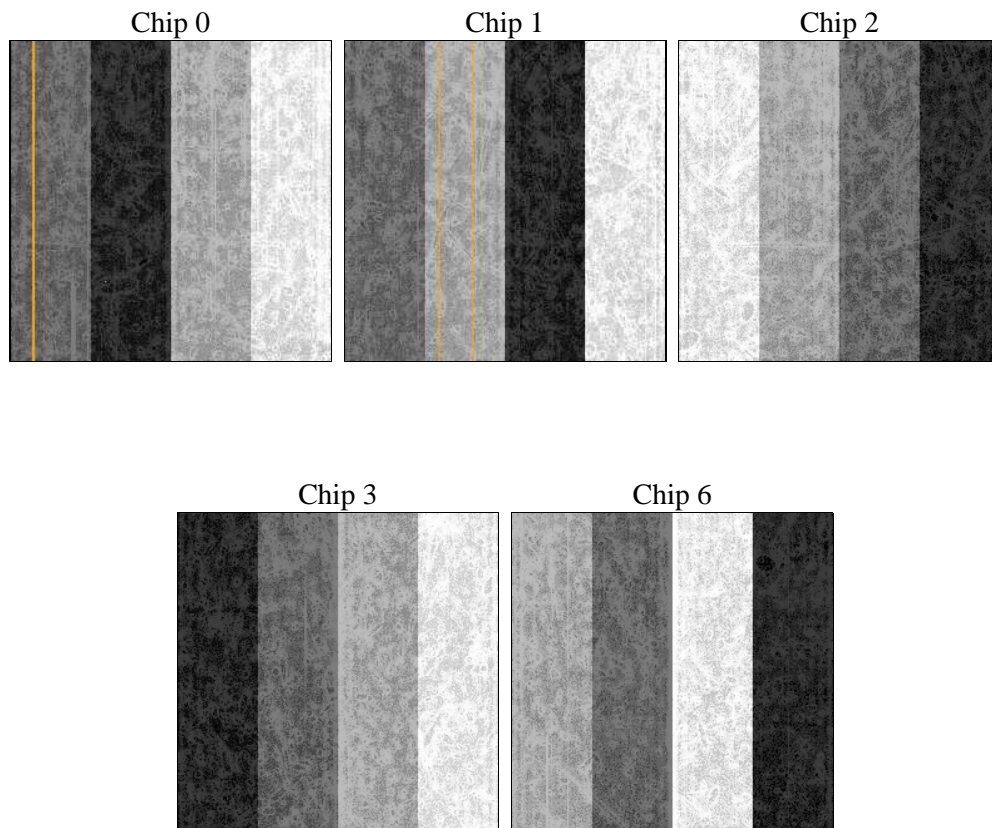
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5000.231000	[s] Scheduled observation exposure time
ascdsver	10.6	Processing system revision	ontime	5067.9924198389	Sum of GTIs [s]
caldsver	4.7.6	 	ontime0	5067.8692998886	Sum of GTIs [s]
date	2017-12-13T17:21:09	Date and time of file creation	ontime1	5067.9103398323	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	5067.9513798952	Sum of GTIs [s]
			ontime3	5067.9924198389	Sum of GTIs [s]
			ontime6	5067.8282598257	Sum of GTIs [s]
			l1events	199296	Number of level 1 events

2.1.4 Events

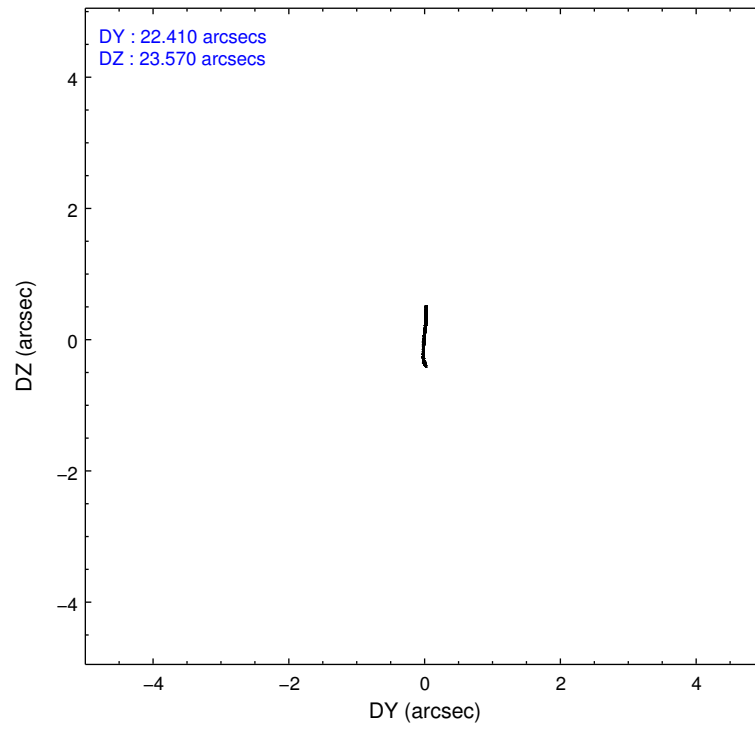
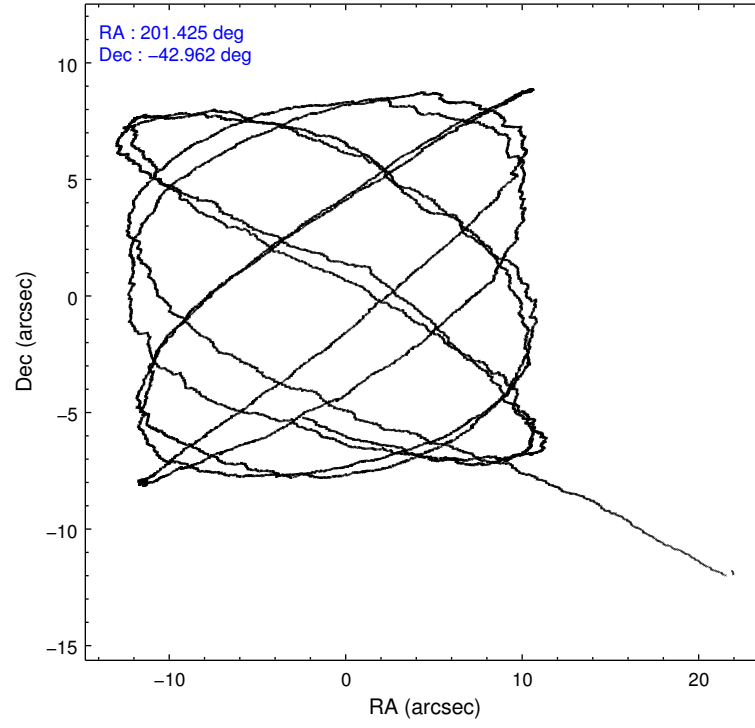
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	35499	37302	41946	45922	38627
rejected events	31175	31304	37860	35130	32929
rejected %	87%	83%	90%	76%	85%

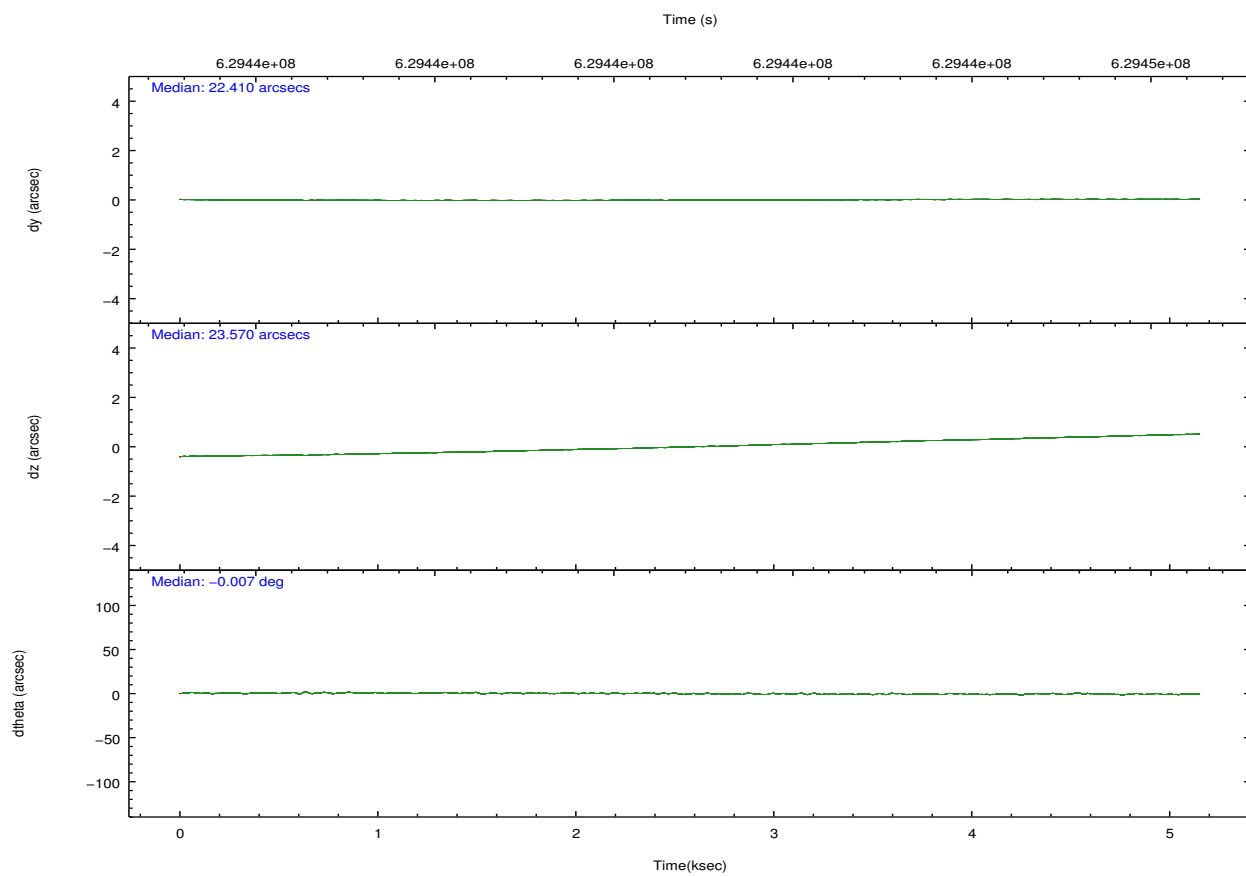
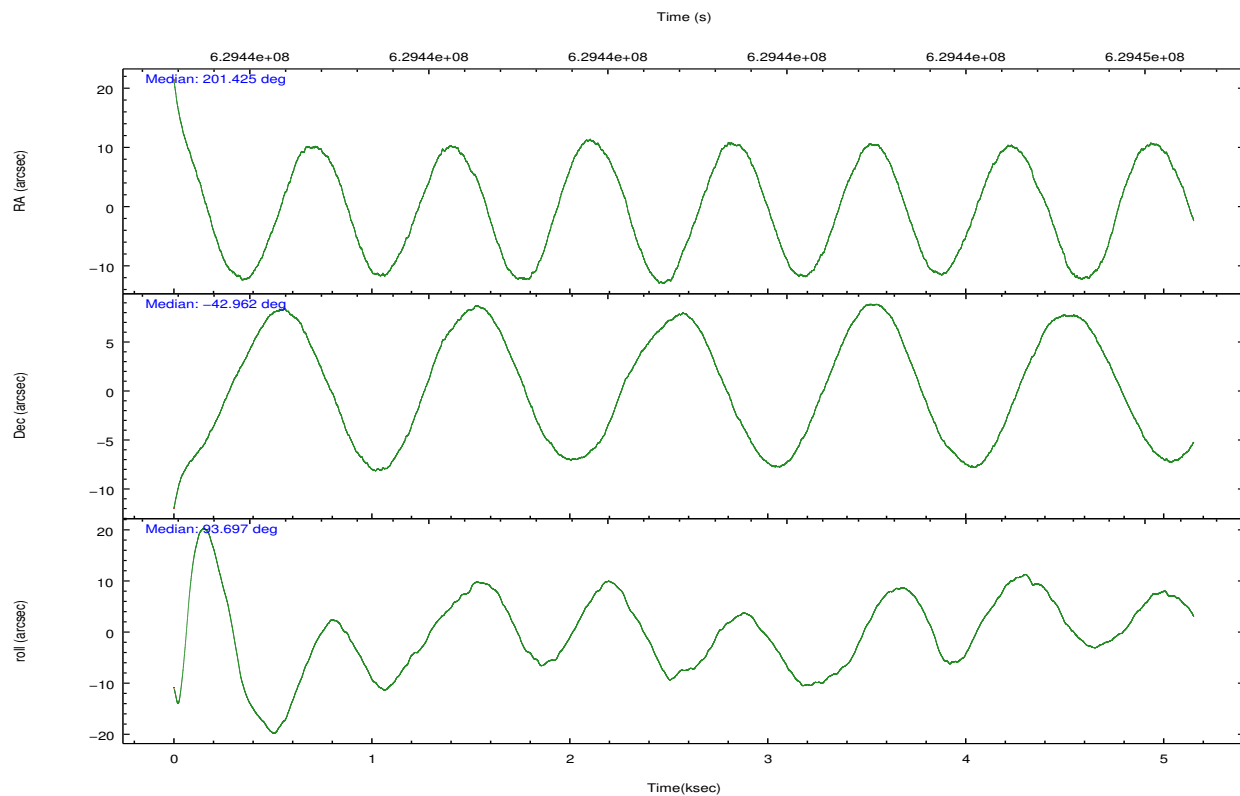
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	1521	1626	1542	5670	2893
	4%	4%	3%	12%	7%
grade 1 events	26	19	28	495	20
	0%	0%	0%	1%	0%
grade 2 events	1095	2621	906	1827	1018
	3%	7%	2%	3%	2%
grade 3 events	448	362	374	803	374
	1%	0%	0%	1%	0%
grade 4 events	390	381	378	818	350
	1%	1%	0%	1%	0%
grade 5 events	1533	1523	1350	2268	1619
	4%	4%	3%	4%	4%
grade 6 events	877	1020	893	1681	1069
	2%	2%	2%	3%	2%
grade 7 events	29609	29750	36475	32360	31284
	83%	79%	86%	70%	80%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	201.445398	201.4244431088652	CCD I2 on	Y	Y
[deg] Pointing Dec	-42.985076	-42.96223955928194	CCD I3 on	Y	Y
[deg] Pointing Roll	93.502700	93.69696828433908	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	O1	Y
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	N	N
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	629441004.184000	629439775.6639	CCD S5 on	N	N
Observation start date	2017-12-12T04:42:15	2017-12-12T04:22:55	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	629446004.184000	629447026.00183	On-chip summing requested	N	N
Observation end date	2017-12-12T06:05:35	2017-12-12T06:23:46	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



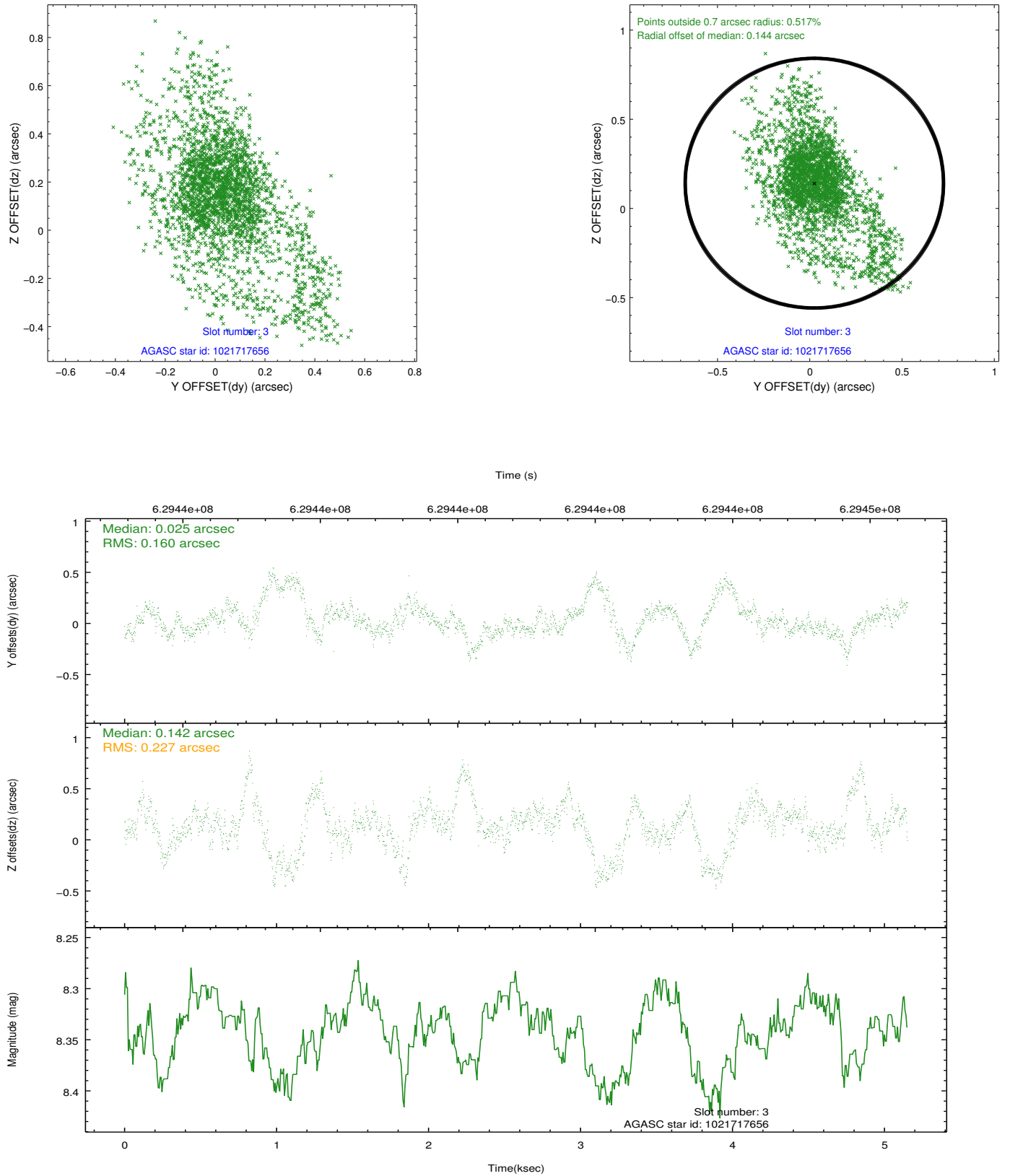


Slot Statistics

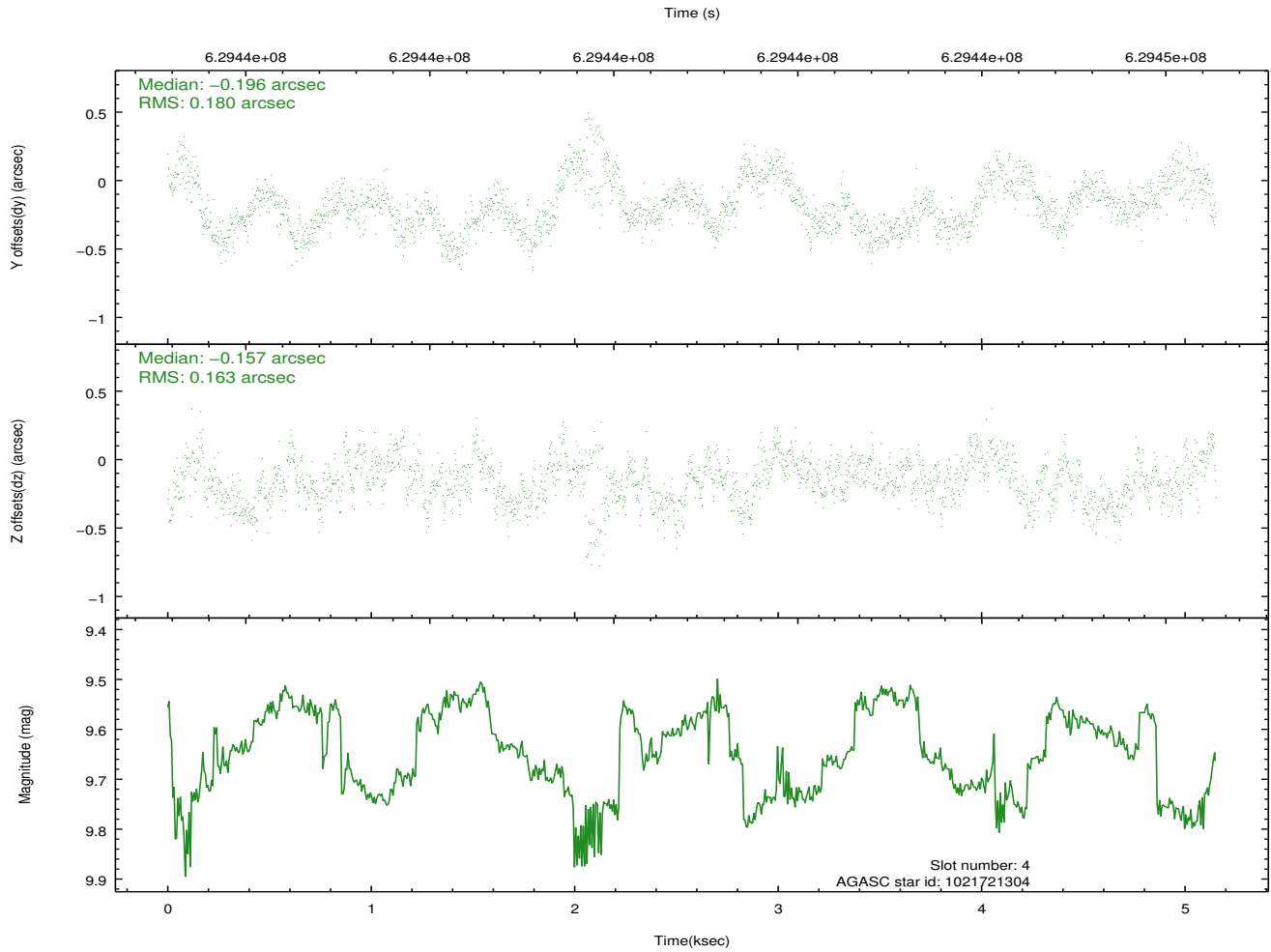
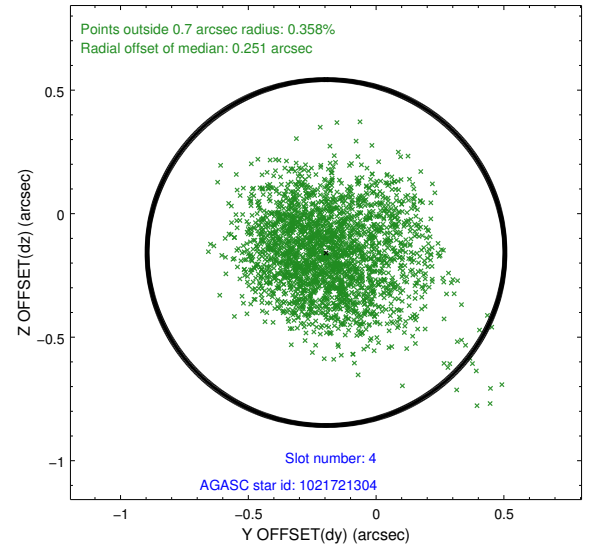
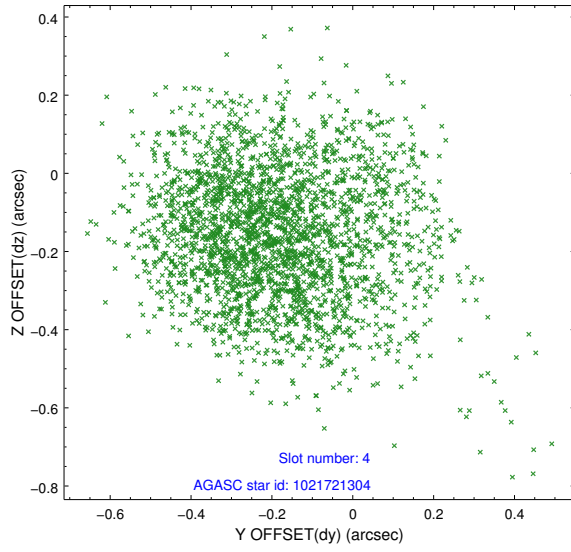
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.24	1257	0.056	0.004	0.008	0.014	0.000000	0.000000	916.98	-847.32
1	FID		ACIS-I-5	7.21	1257	-0.429	0.004	0.008	0.014	0.000000	0.000000	-1831.15	1049.31
2	FID		ACIS-I-6	7.24	1257	0.281	0.063	0.008	0.014	0.000000	0.000000	381.22	1695.41
3	GUIDE	used	1021717656	8.34	2514	0.025	0.142	0.262	0.558	201.139642	-43.082878	-302.98	824.47
4	GUIDE	used	1021721304	9.65	2512	-0.196	-0.157	0.259	0.406	201.117326	-42.480412	1865.38	759.04
5	GUIDE	used	1021721672	9.49	2510	0.514	0.320	0.284	0.427	201.740358	-43.079729	-386.97	-752.15
6	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
7	GUIDE	used	1021716808	8.78	2508	-0.357	-0.289	0.153	0.250	200.901189	-42.531395	1713.78	1341.61

2.4 Star Slots

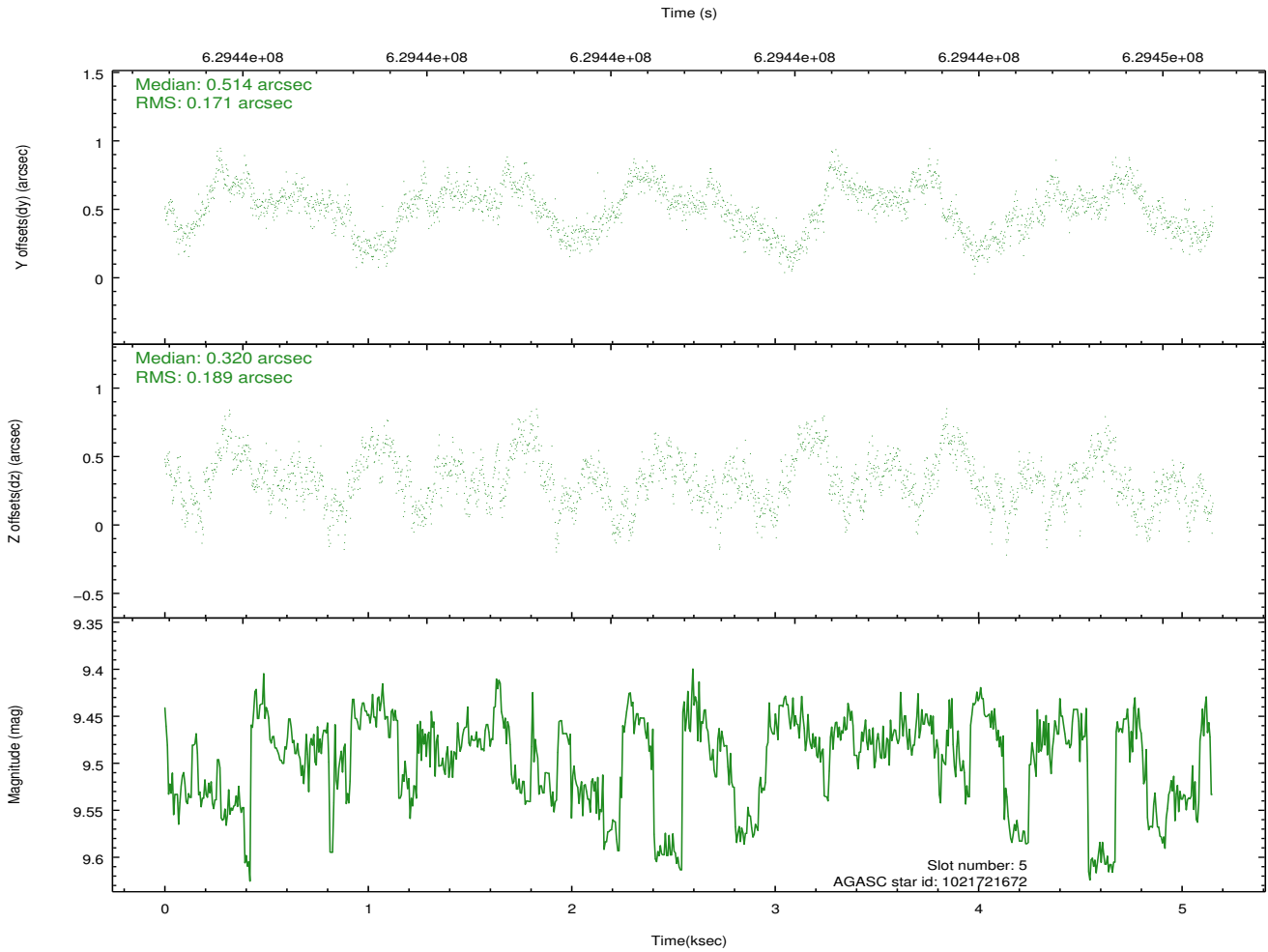
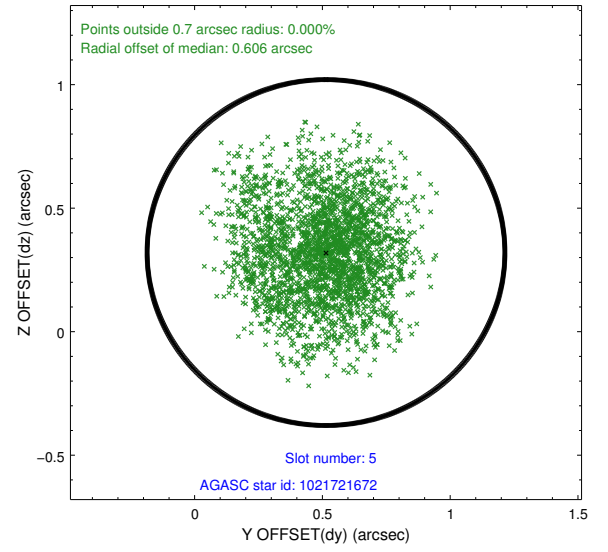
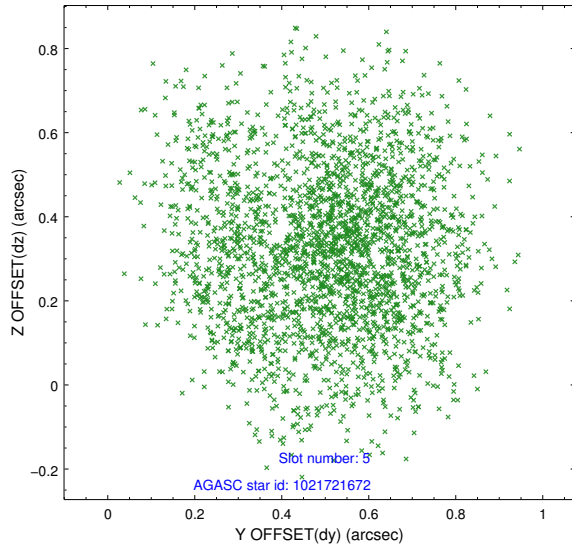
2.4.1 Slot 3



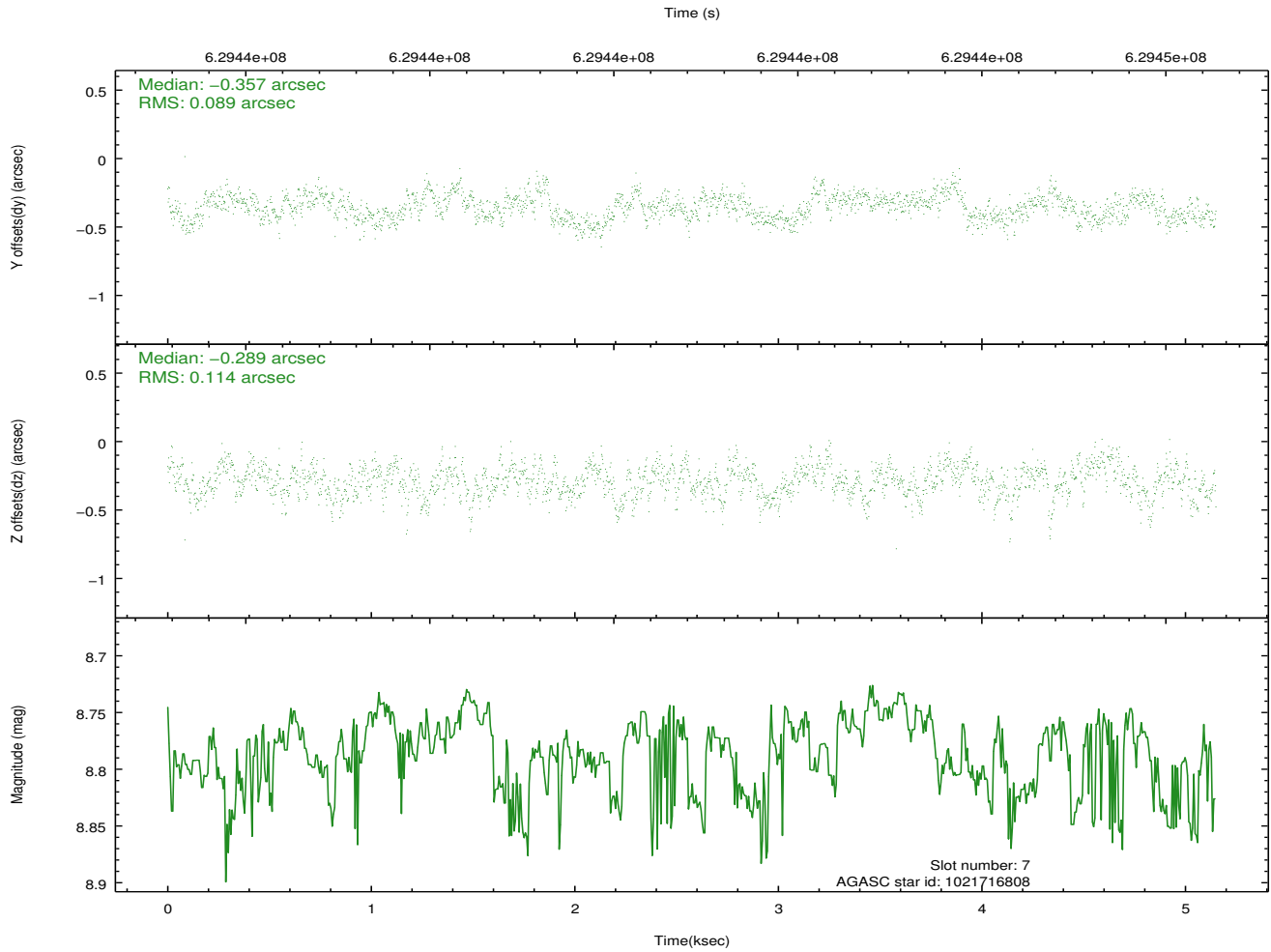
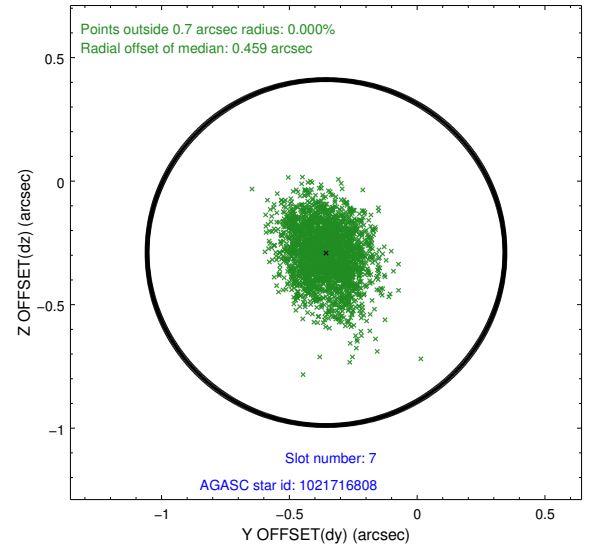
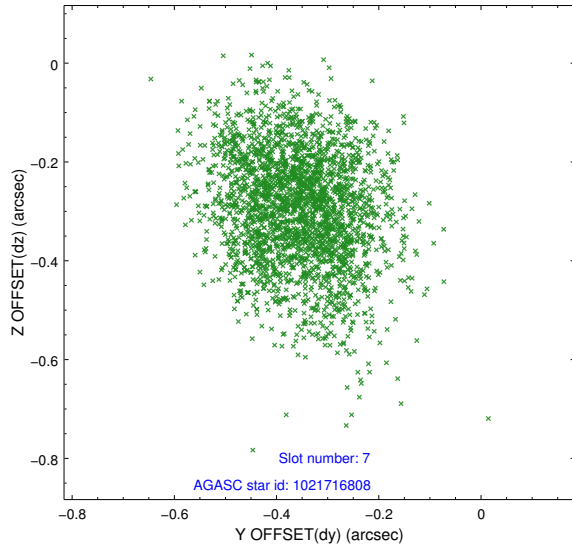
2.4.2 Slot 4



2.4.3 Slot 5

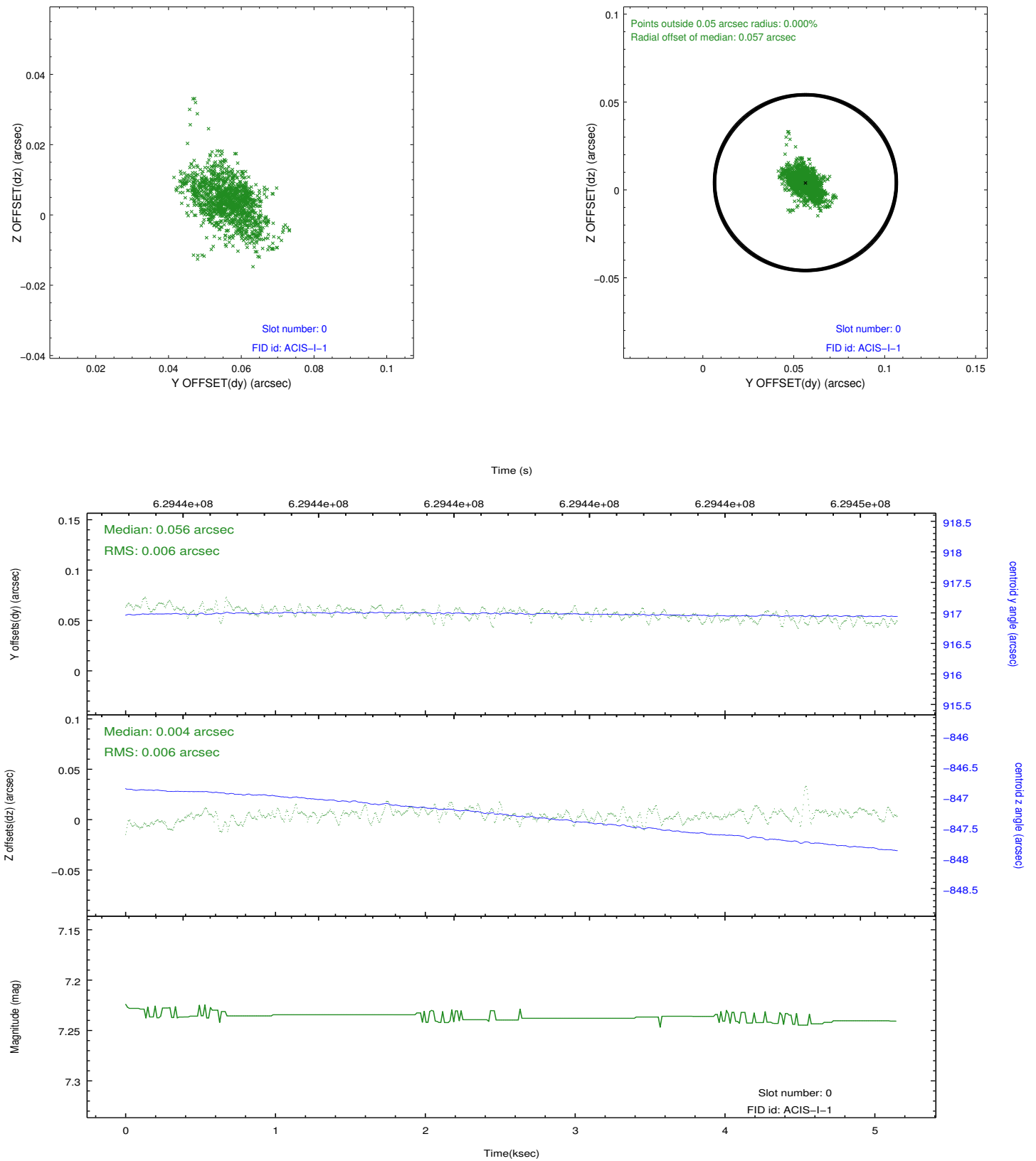


2.4.4 Slot 7

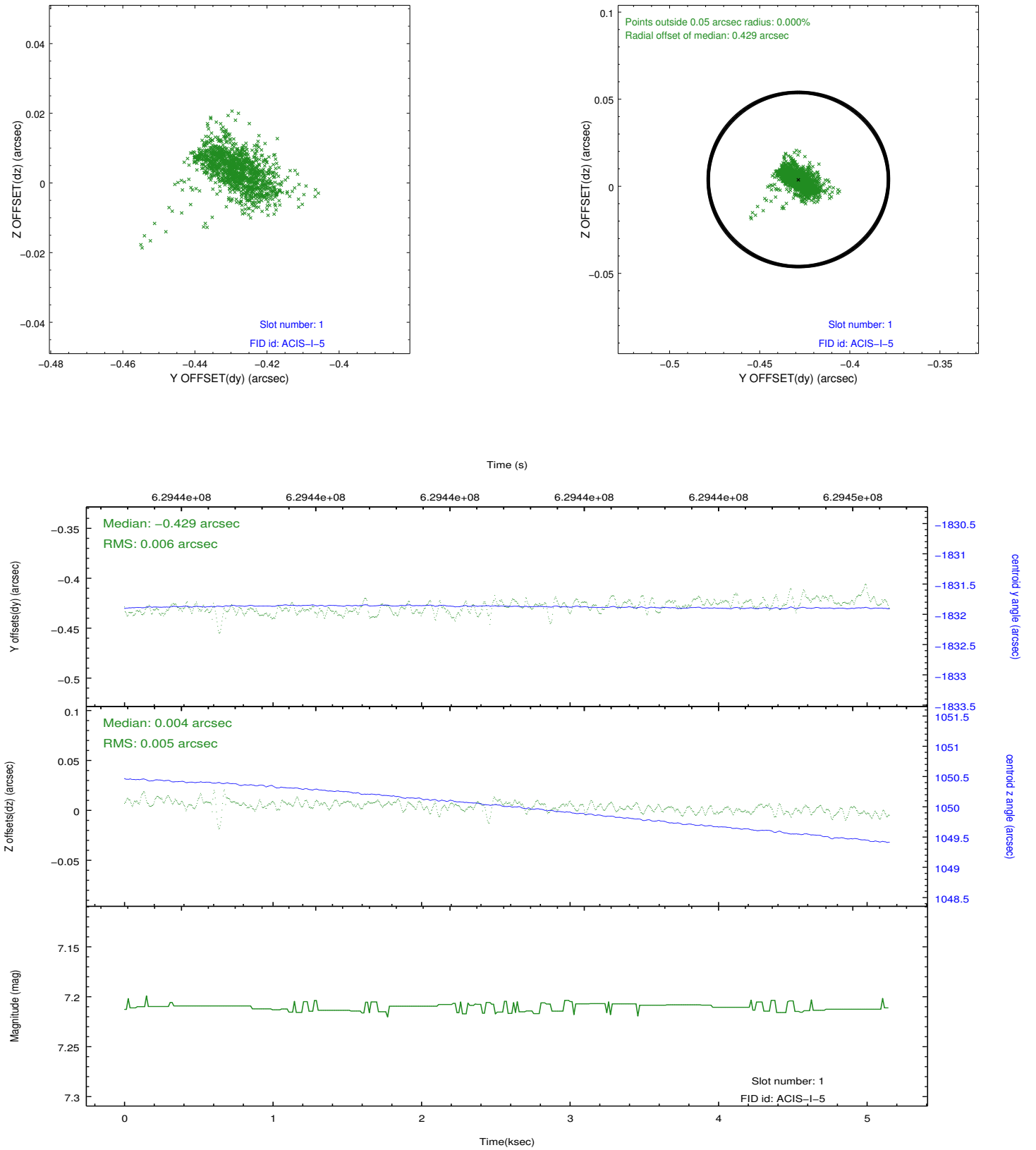


2.5 FID Slots

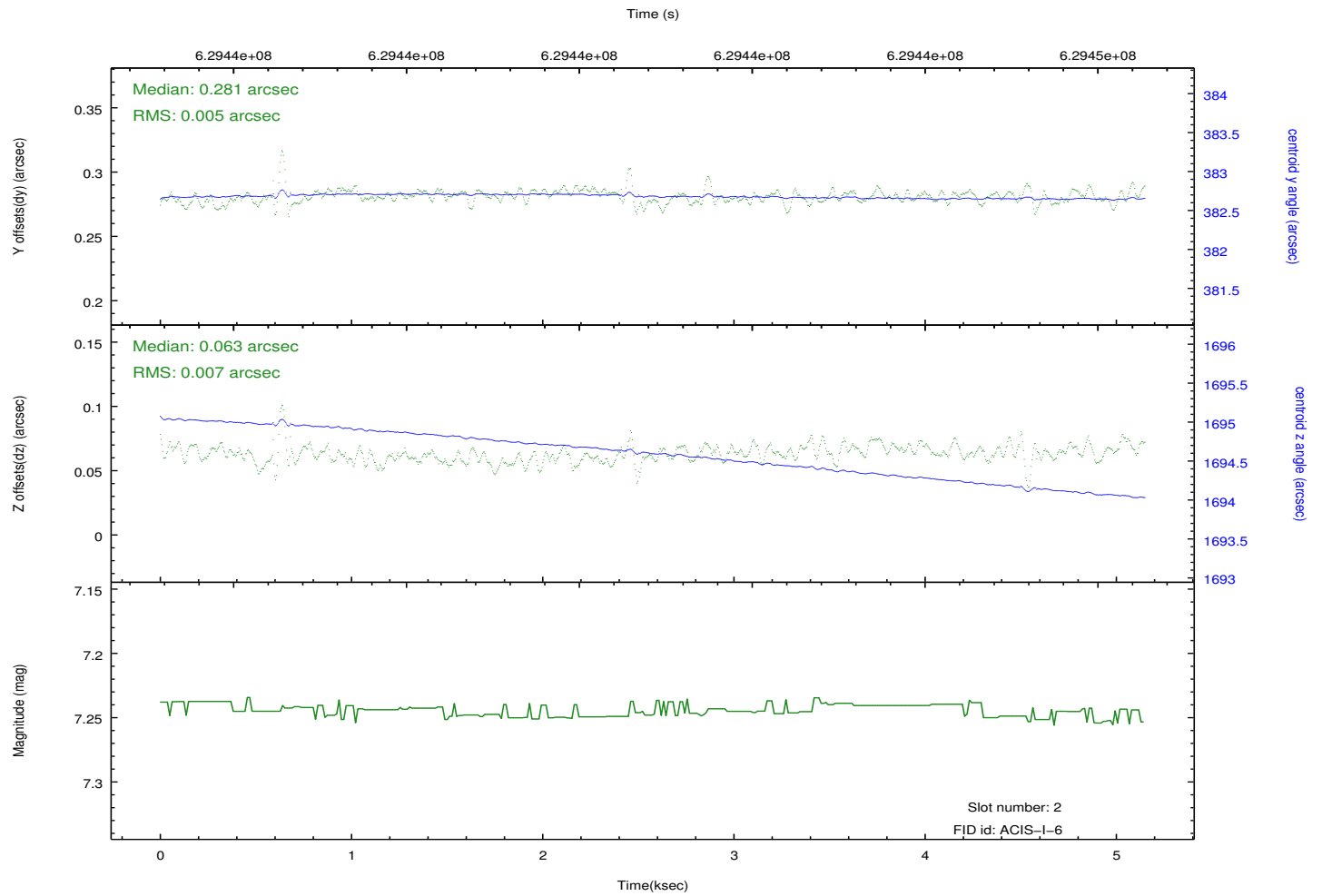
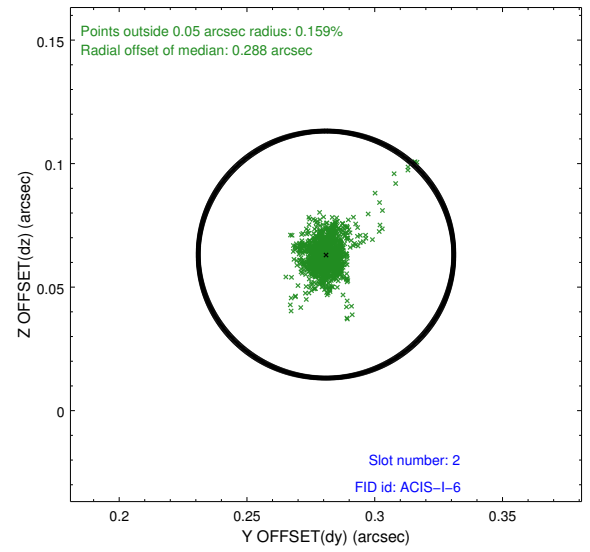
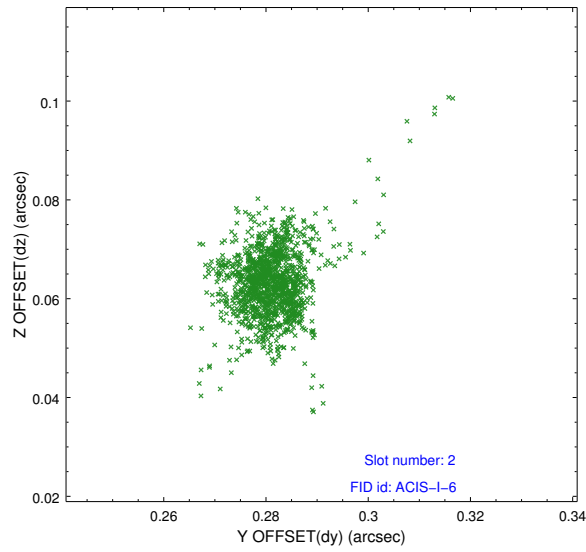
2.5.1 Slot 0



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)	2017.12.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.0679924198389

A.2 Comments

The guide star in slot 6 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this guide star from the solution.