

V&V Reference Report

L2 ASCDS Version : 10.7

Observation 21878 - L2 Version 1
Chandra X-Ray Center

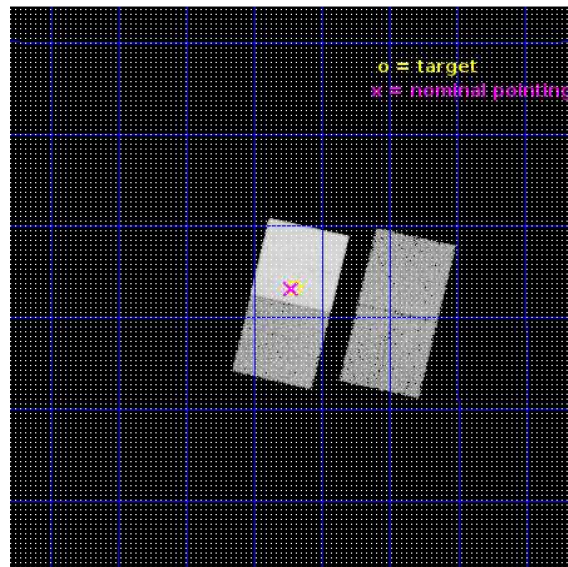
L2 Processing Date : Dec 9 2018

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 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

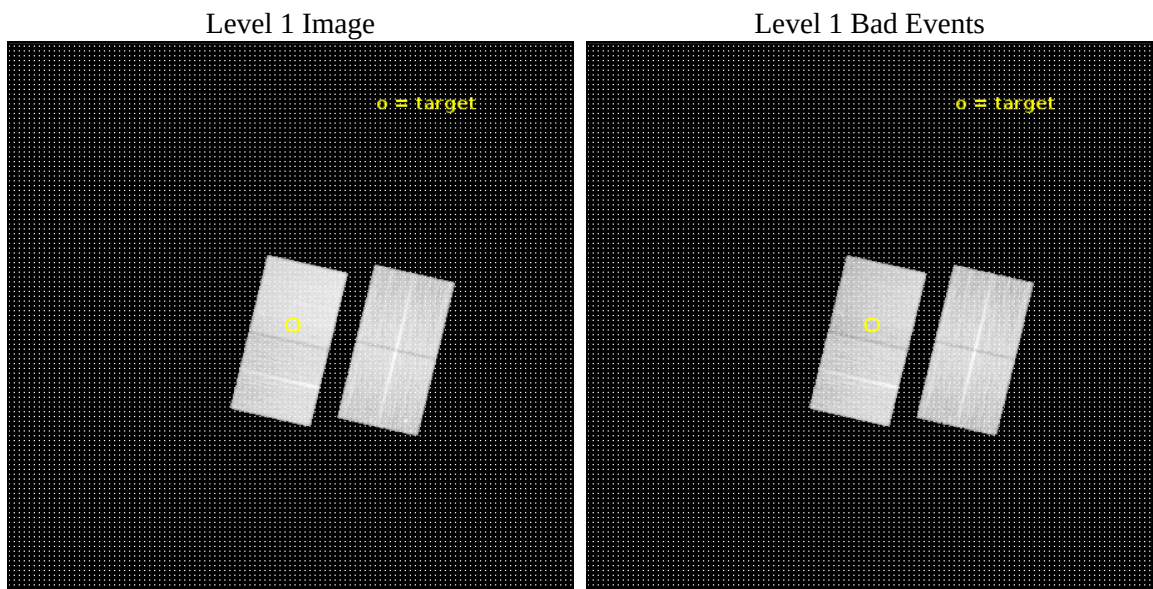
seq_num	703759	Sequence number
obs_id	21878	Observation id
title	X-raying a rare hyperluminous ultramassive black-hole at cosmic dawn	
observer	Luca Zappacosta	Principal investigator
object	J03064+1853	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	46.677083	Observer's specified target RA [deg]
dec_targ	18.887722	Observer's specified target Dec [deg]
ra_nom	46.681985360832	Nominal RA [deg]
dec_nom	18.885701069555	Nominal Dec [deg]
roll_nom	283.15502859156	Nominal Roll [deg]
revision	1	Processing version of data
ontime	30070.000231385	Sum of GTIs [s]
livetime	29677.11354115	Livetime [s]
ontime2	30063.718060851	Sum of GTIs [s]
ontime3	30070.000231385	Sum of GTIs [s]
ontime6	30066.85918057	Sum of GTIs [s]
ontime7	30070.000231385	Sum of GTIs [s]
l2events	184318	Number of level 2 events



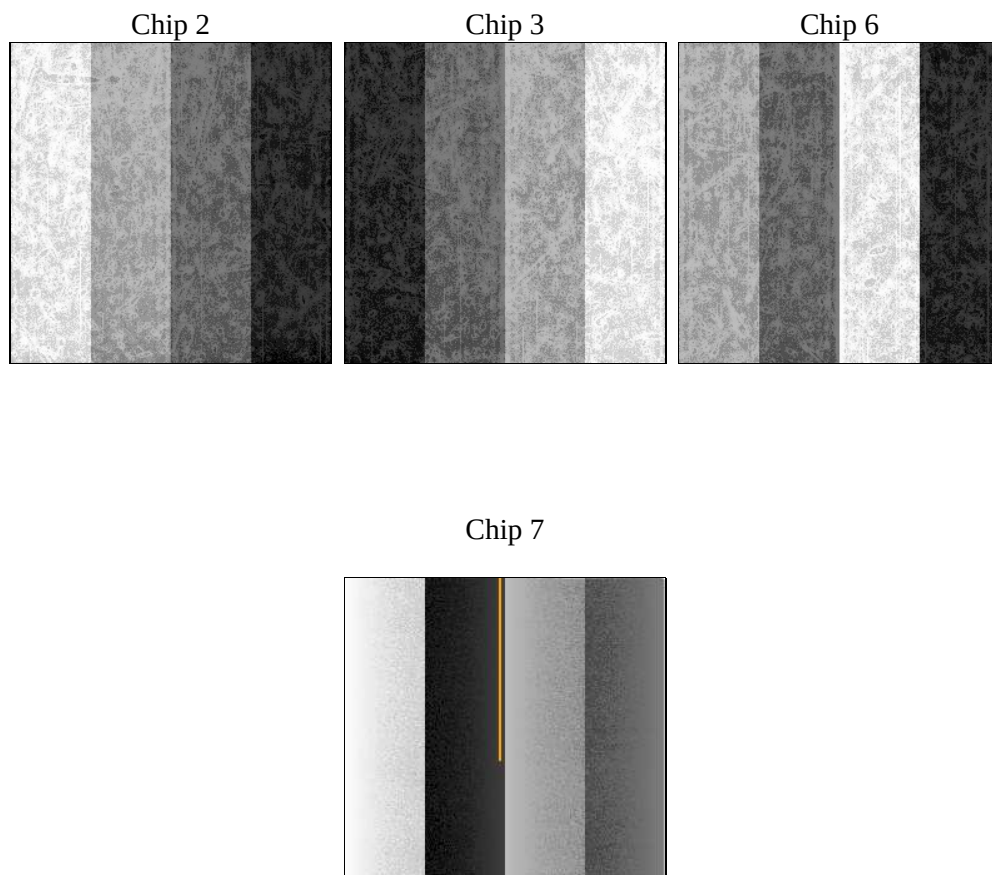
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	30000.000000	[s] Scheduled observation exposure time
ascdsver	10.7	Processing system revision	ontime	30070.000231385	Sum of GTIs [s]
caldsver	4.8.0.1	 	ontime2	30063.718060851	Sum of GTIs [s]
date	2018-12-09T05:44:11	Date and time of file creation	ontime3	30070.000231385	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	30066.85918057	Sum of GTIs [s]
			ontime7	30070.000231385	Sum of GTIs [s]
			l1events	946309	Number of level 1 events

2.1.4 Events

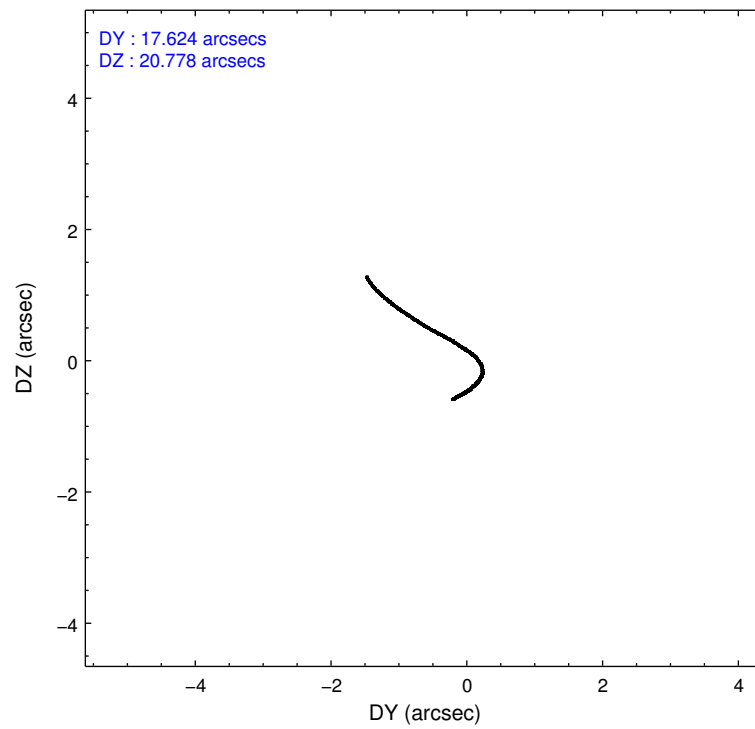
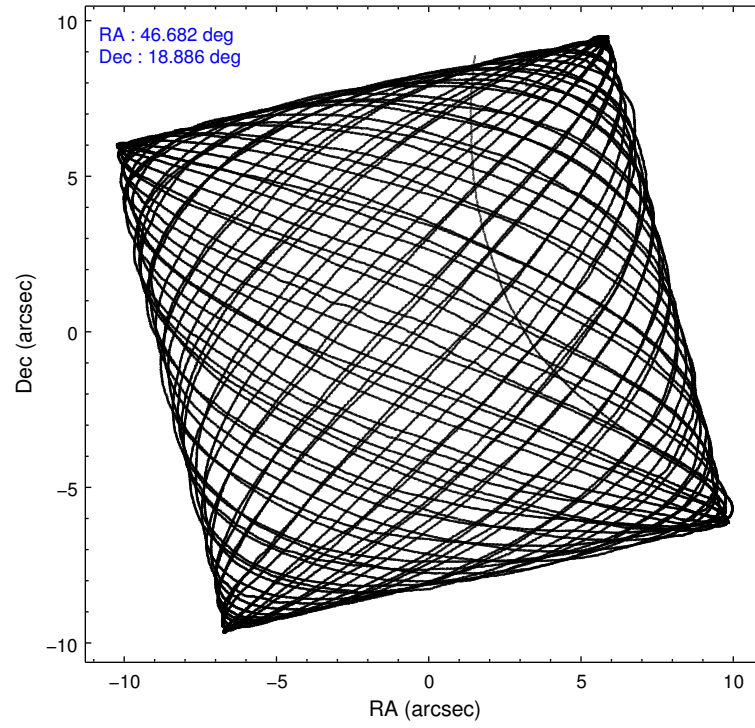
	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	218752	212272	227371	287914
rejected events	194332	189305	202168	162869
rejected %	88%	89%	88%	56%

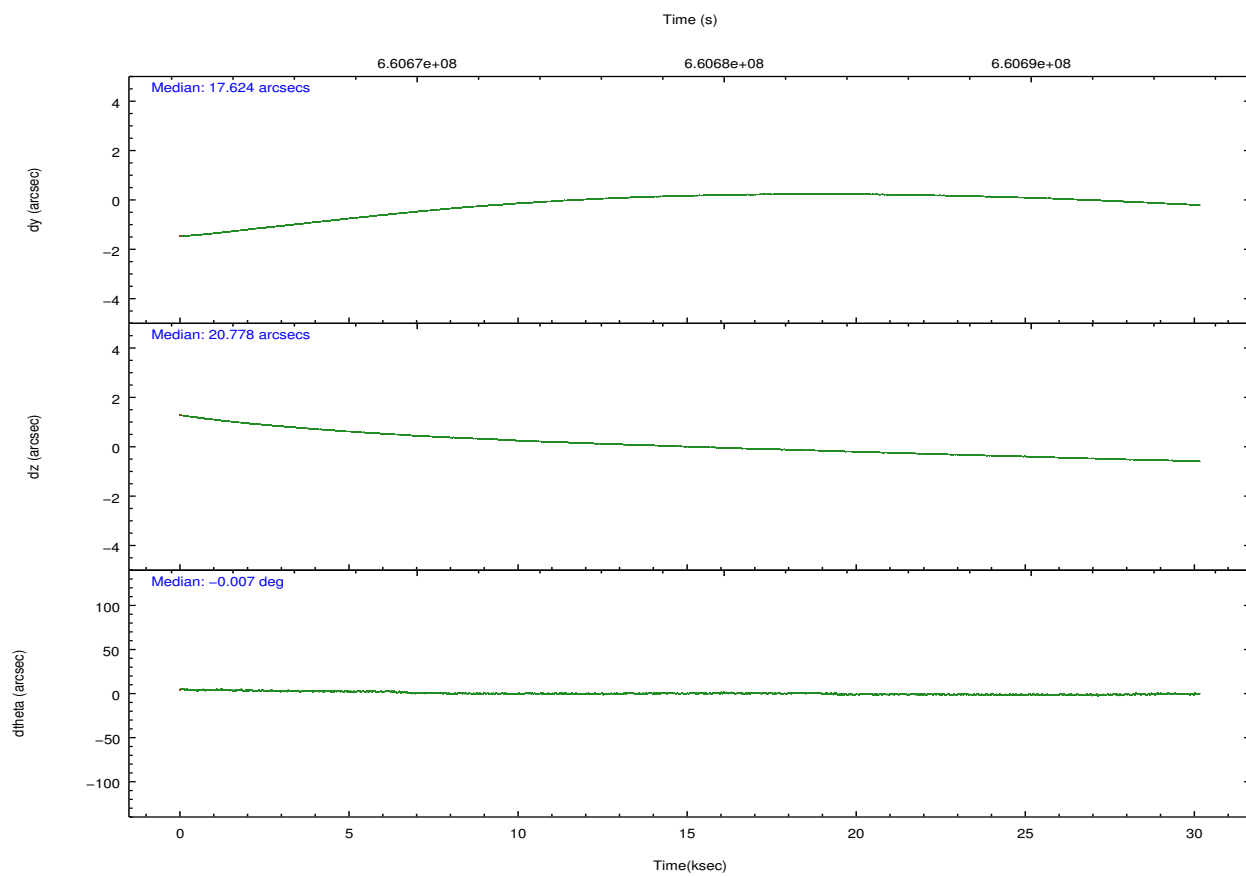
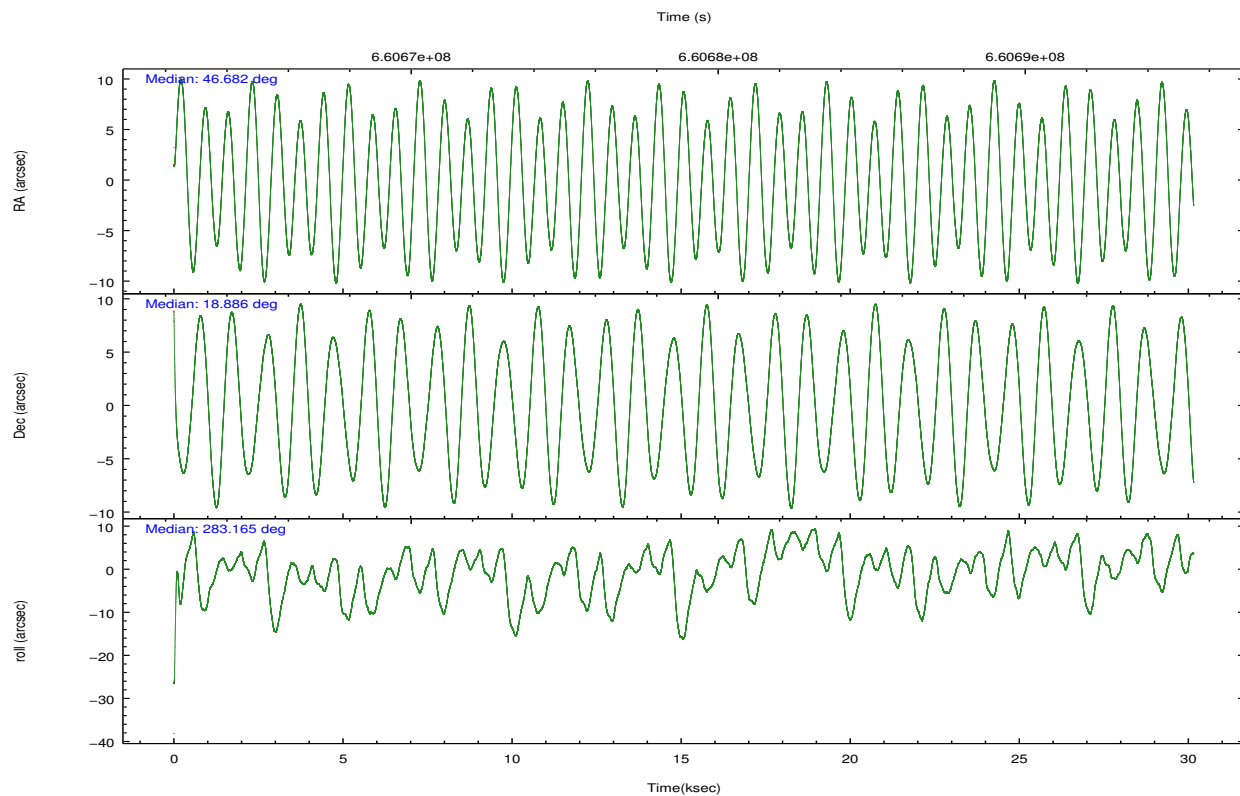
	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	9086	7986	8299	10260
	4%	3%	3%	3%
grade 1 events	146	133	114	452
	0%	0%	0%	0%
grade 2 events	5808	5073	5937	26813
	2%	2%	2%	9%
grade 3 events	2373	2514	2460	9817
	1%	1%	1%	3%
grade 4 events	2365	2413	2459	9633
	1%	1%	1%	3%
grade 5 events	8941	10505	10583	28420
	4%	4%	4%	9%
grade 6 events	4799	4988	6054	68546
	2%	2%	2%	23%
grade 7 events	185234	178660	191465	133973
	84%	84%	84%	46%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-2367	ACIS-2367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	46.661849	46.68198536083239	CCD I2 on	O1	Y
[deg] Pointing Dec	18.905466	18.88570106955524	CCD I3 on	Y	Y
[deg] Pointing Roll	283.004933	283.1550285915594	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	N	N
[s] Observation start time (MET)	660663965.184000	660662967.3039	CCD S5 on	N	N
Observation start date	2018-12-08T13:44:56	2018-12-08T13:29:27	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	660693965.184000	660694997.53081	On-chip summing requested	N	N
Observation end date	2018-12-08T22:04:56	2018-12-08T22:23:17	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



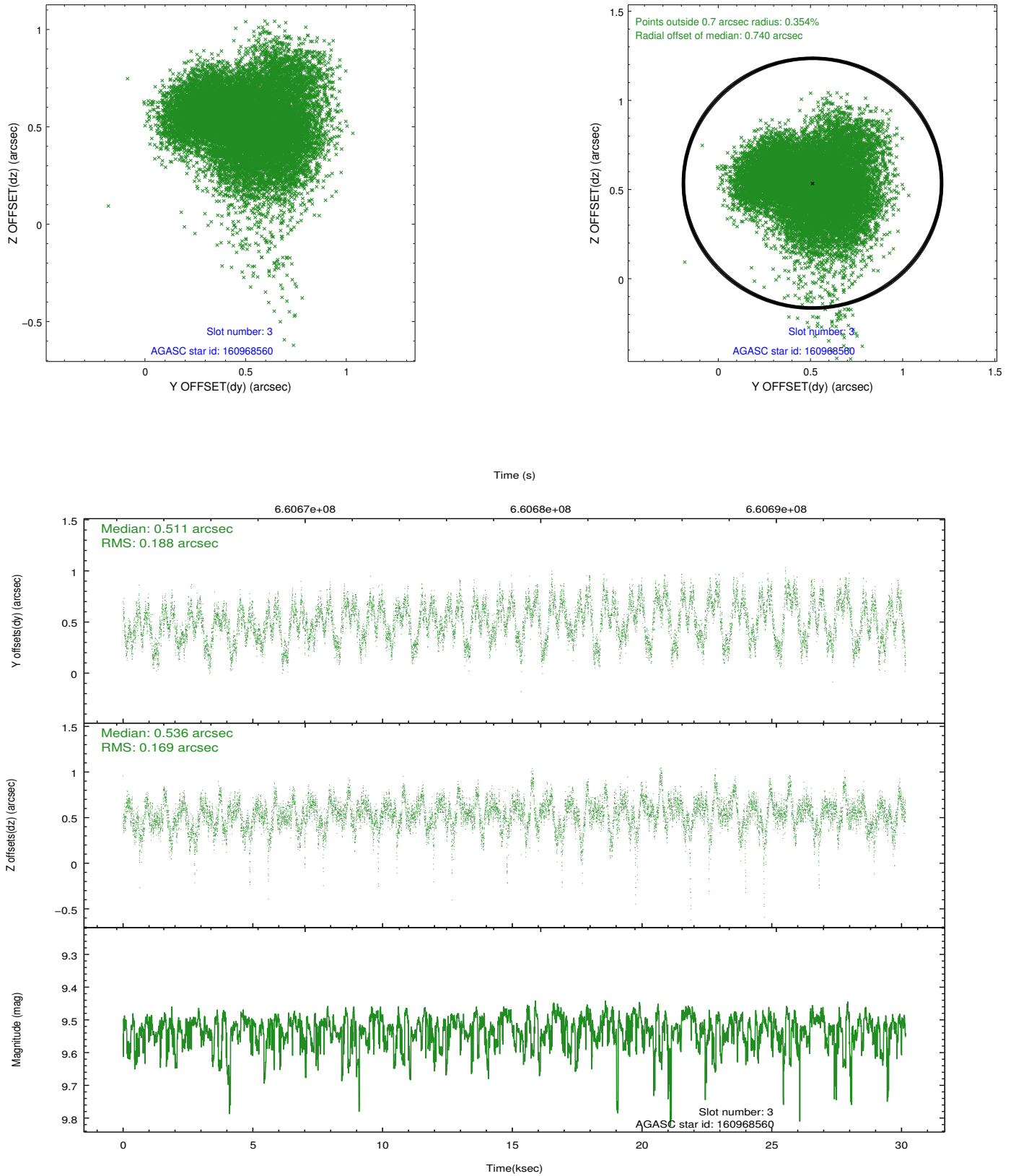


Slot Statistics

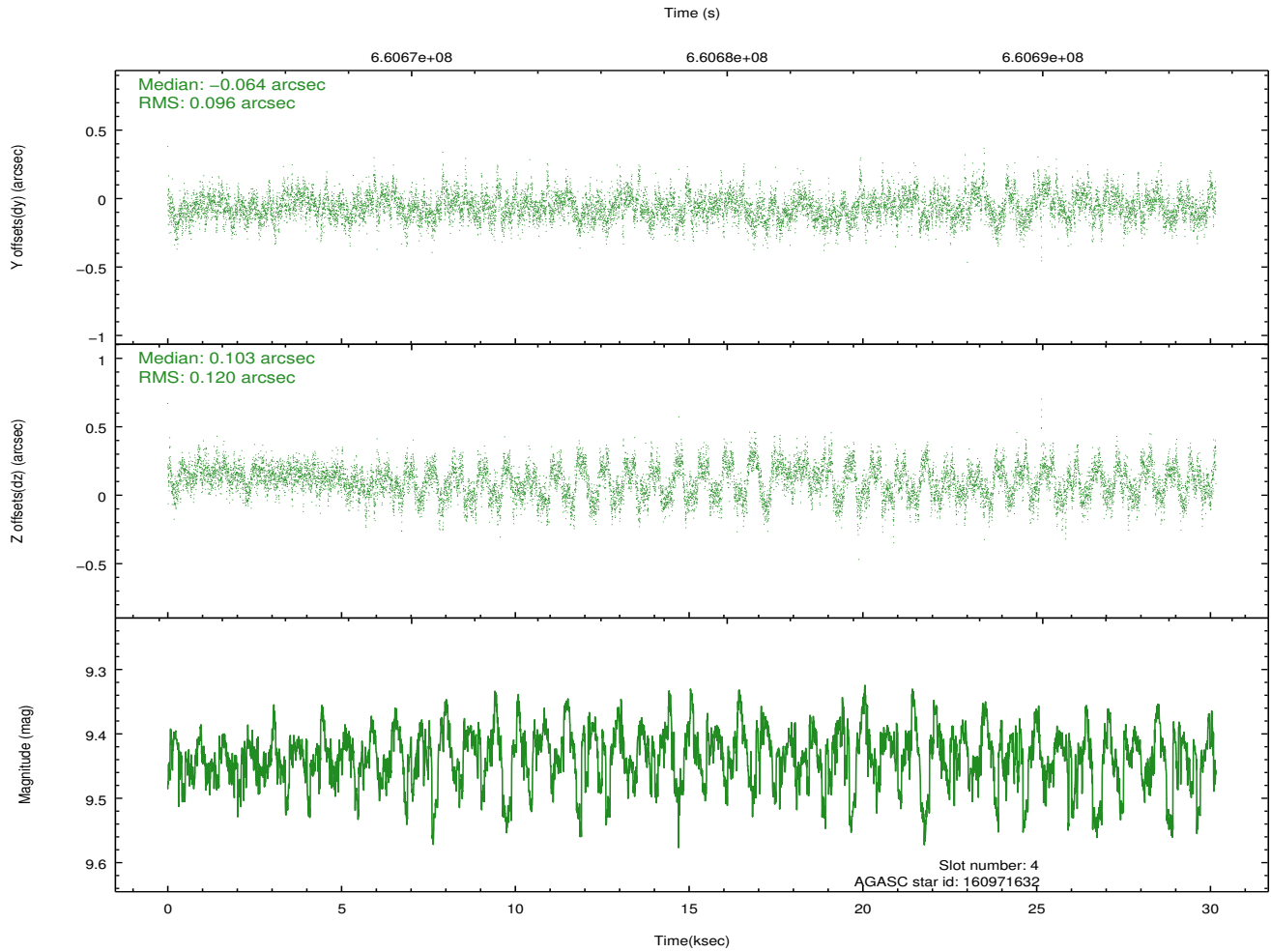
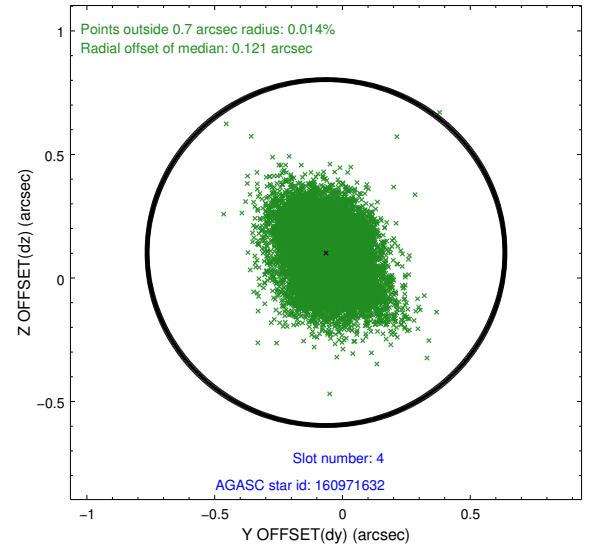
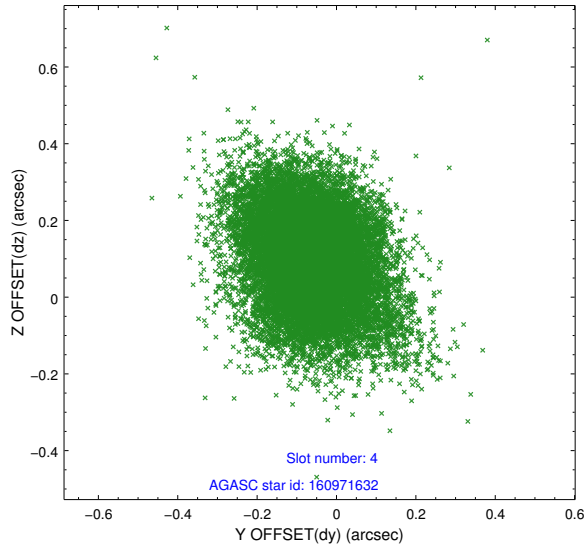
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.03	7356	1.000	-0.349	-0.232	0.020	0.027	0.000000	0.000000	-770.73	-1742
1	FID		ACIS-S-4	7.15	7354	1.000	0.802	0.230	0.034	0.049	0.000000	0.000000	2143.57	166
2	FID		ACIS-S-5	7.12	7356	1.000	-0.484	0.009	0.019	0.033	0.000000	0.000000	-1823.70	159
3	GUIDE	used	160968560	9.53	14692	1.000	0.511	0.536	0.272	0.413	46.032533	19.406042	-2240.69	-1674
4	GUIDE	used	160971632	9.43	14682	1.000	-0.064	0.103	0.161	0.267	46.728780	18.585125	1174.69	-36
5	GUIDE	used	160970752	8.73	14704	1.000	0.339	-0.047	0.174	0.303	46.447391	18.179789	2380.04	-1302
6	GUIDE	used	160961808	8.91	14697	1.000	-0.327	-0.241	0.259	0.386	47.007368	18.296563	2398.91	654
7	GUIDE	used	160960896	9.26	14698	1.000	-0.474	-0.309	0.201	0.365	47.061243	18.753698	837.14	1204

2.4 Star Slots

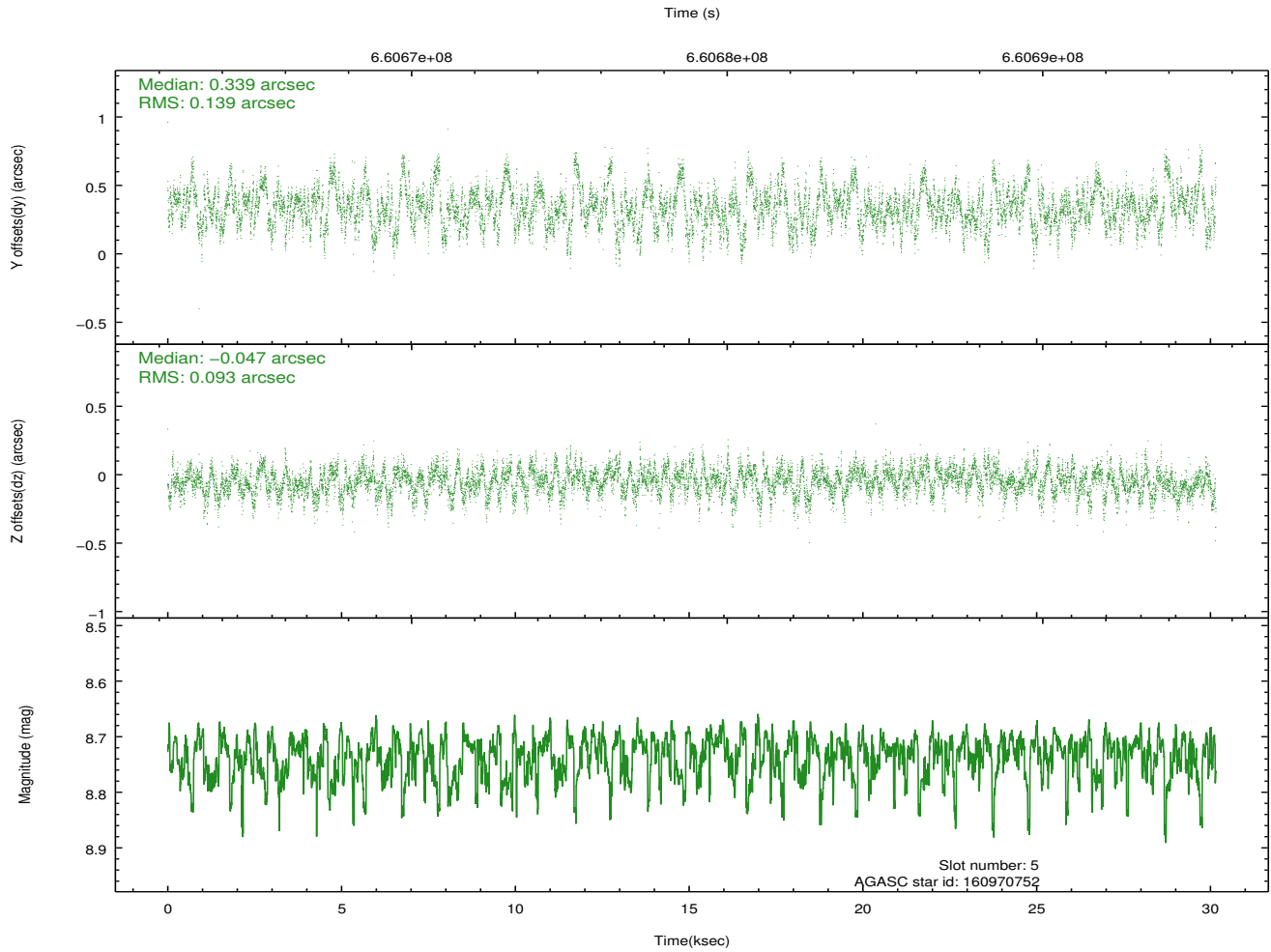
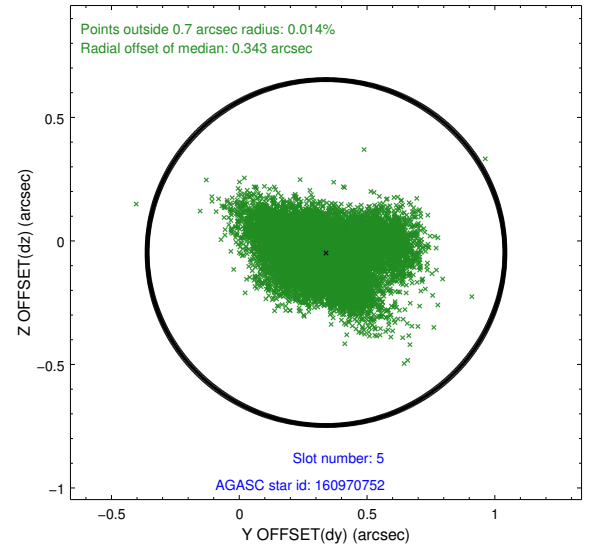
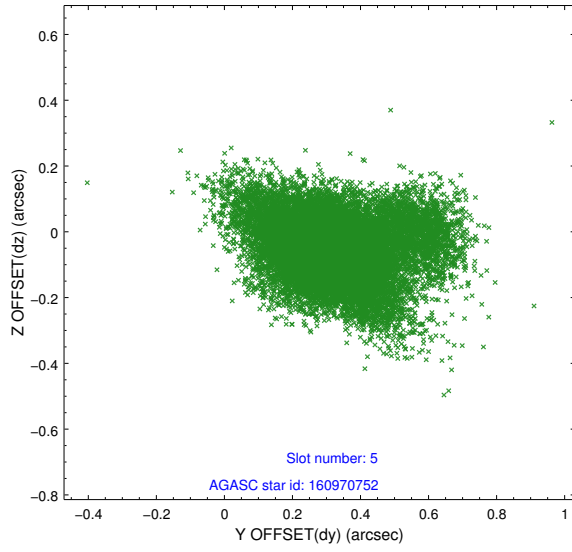
2.4.1 Slot 3



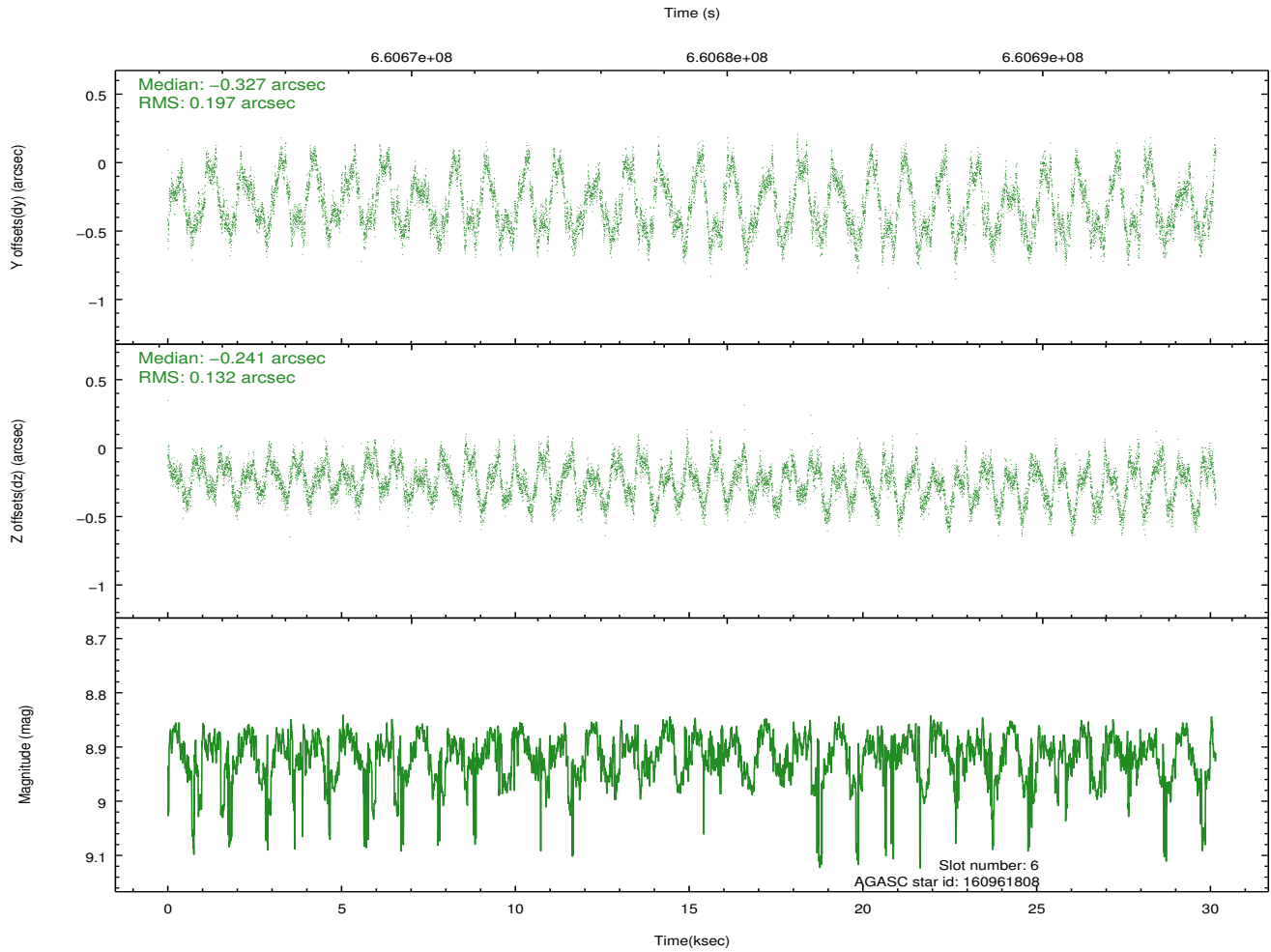
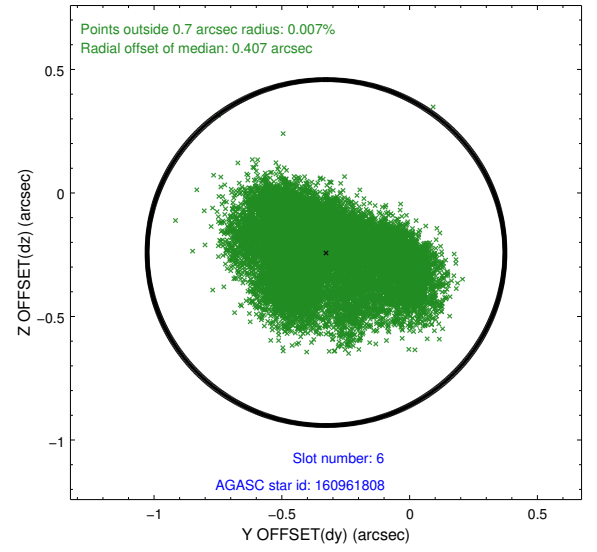
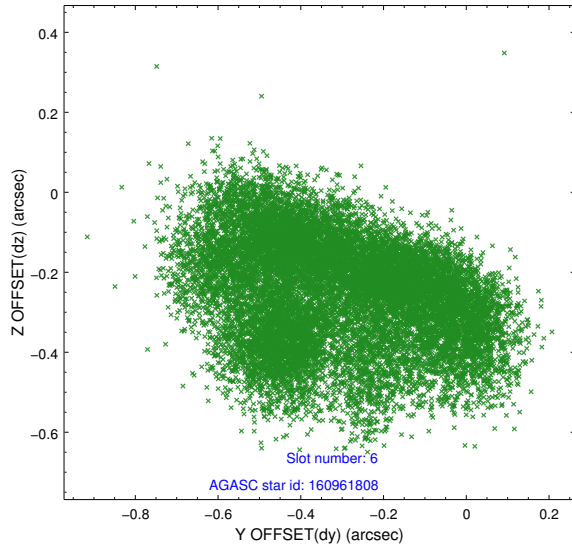
2.4.2 Slot 4



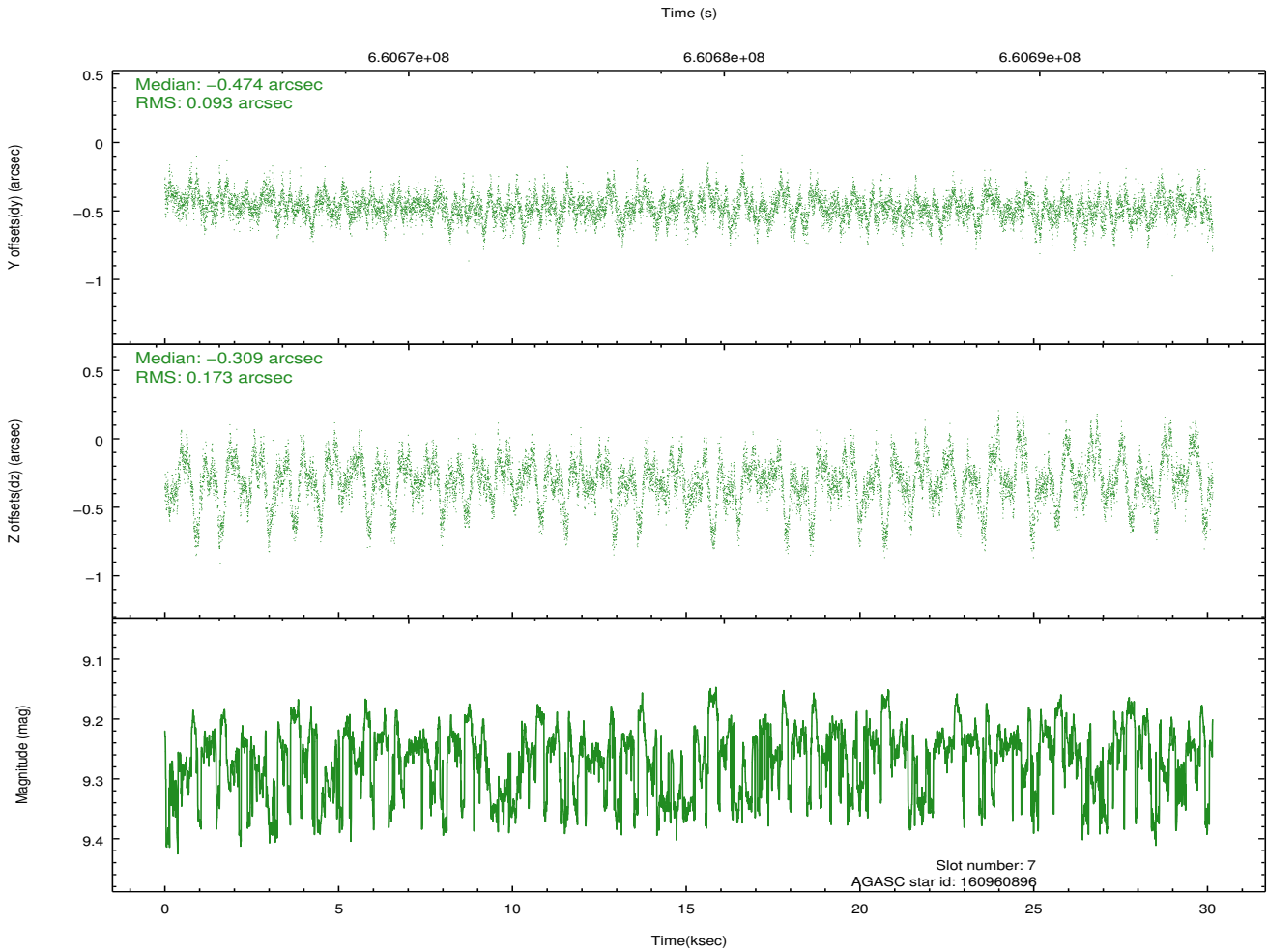
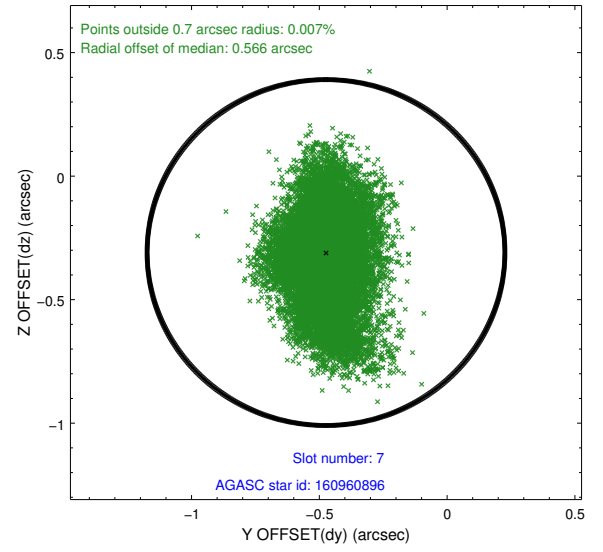
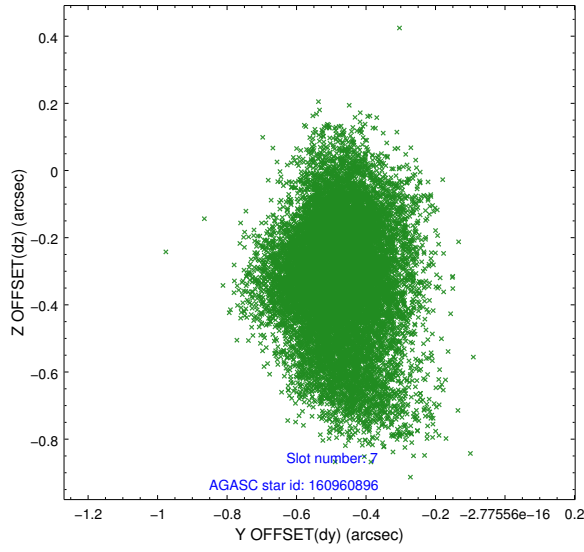
2.4.3 Slot 5



2.4.4 Slot 6

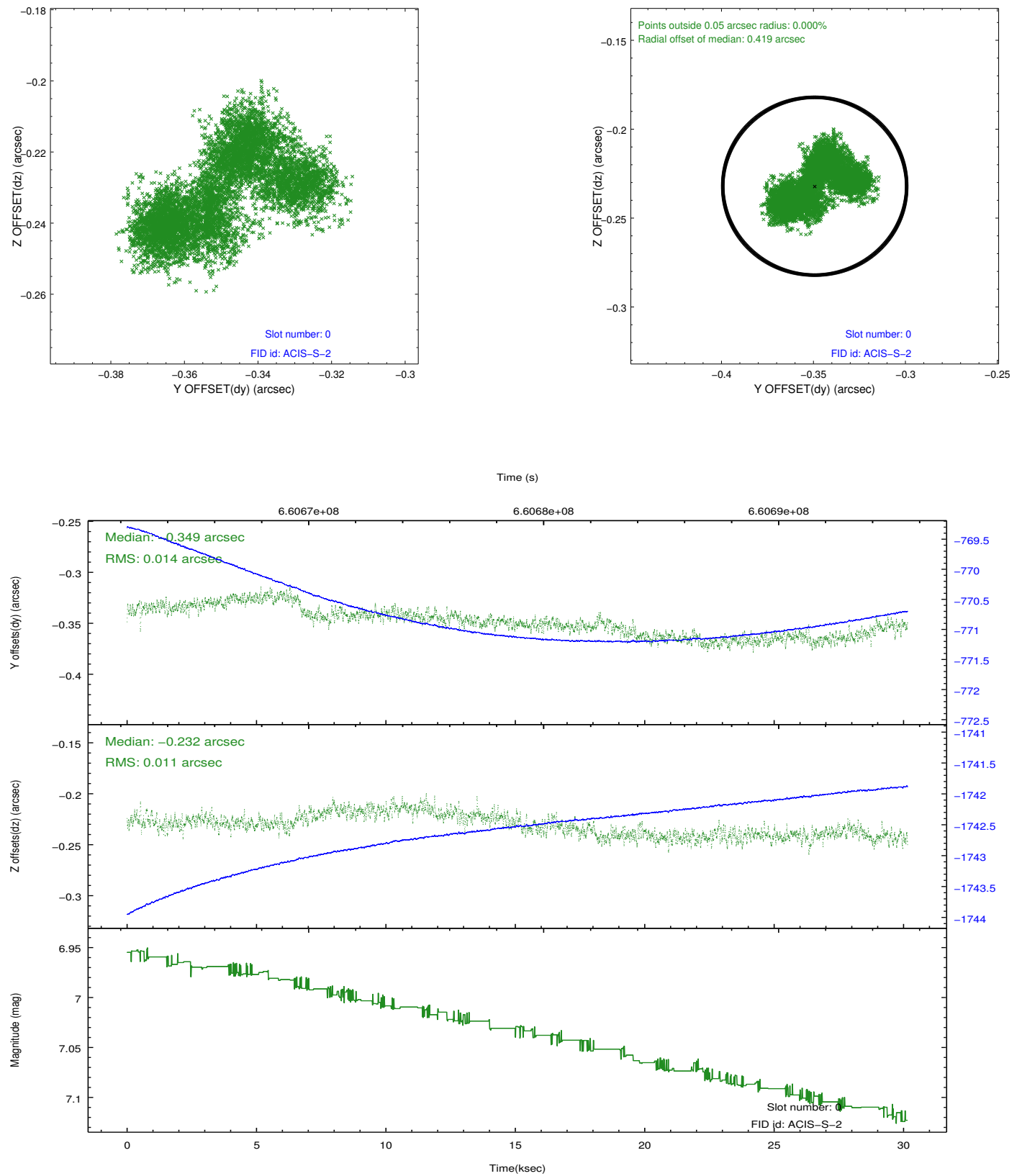


2.4.5 Slot 7

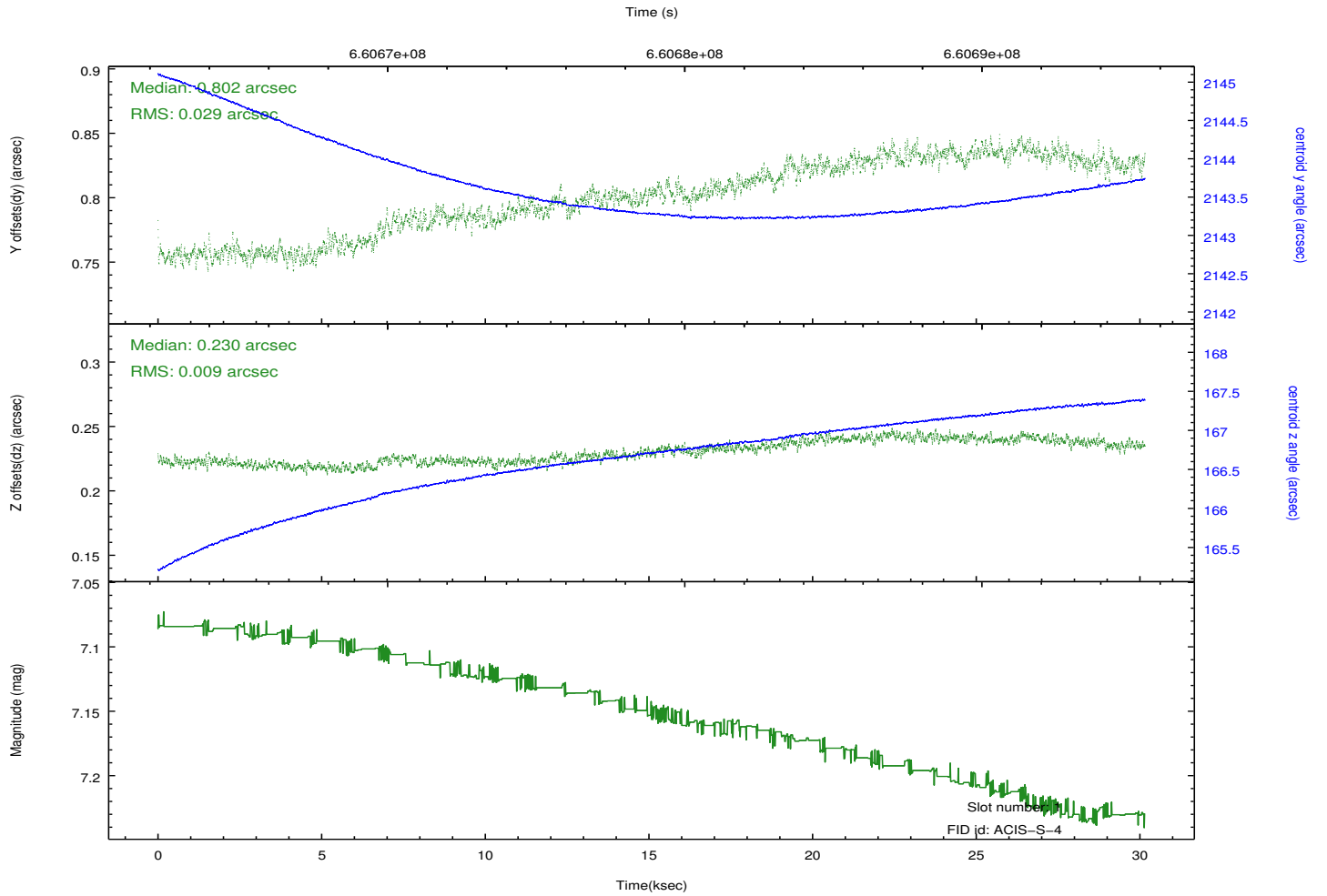
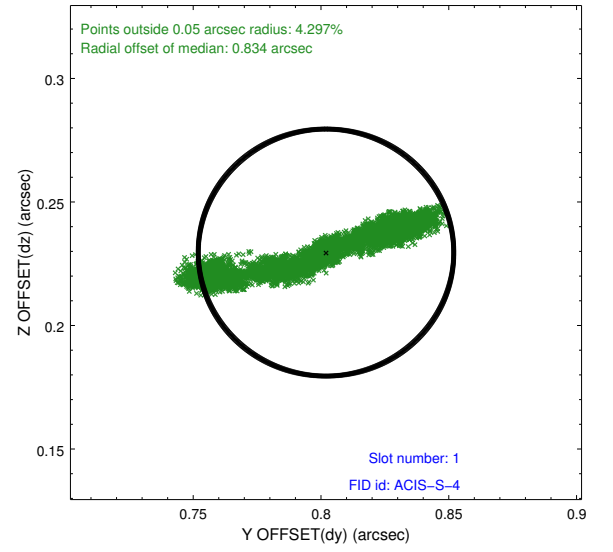
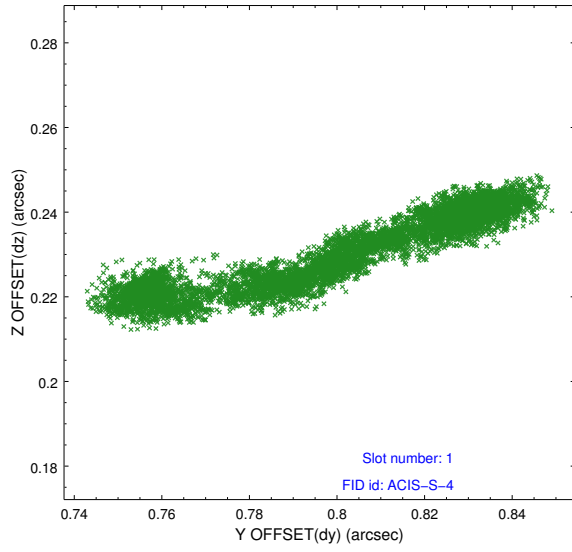


2.5 FID Slots

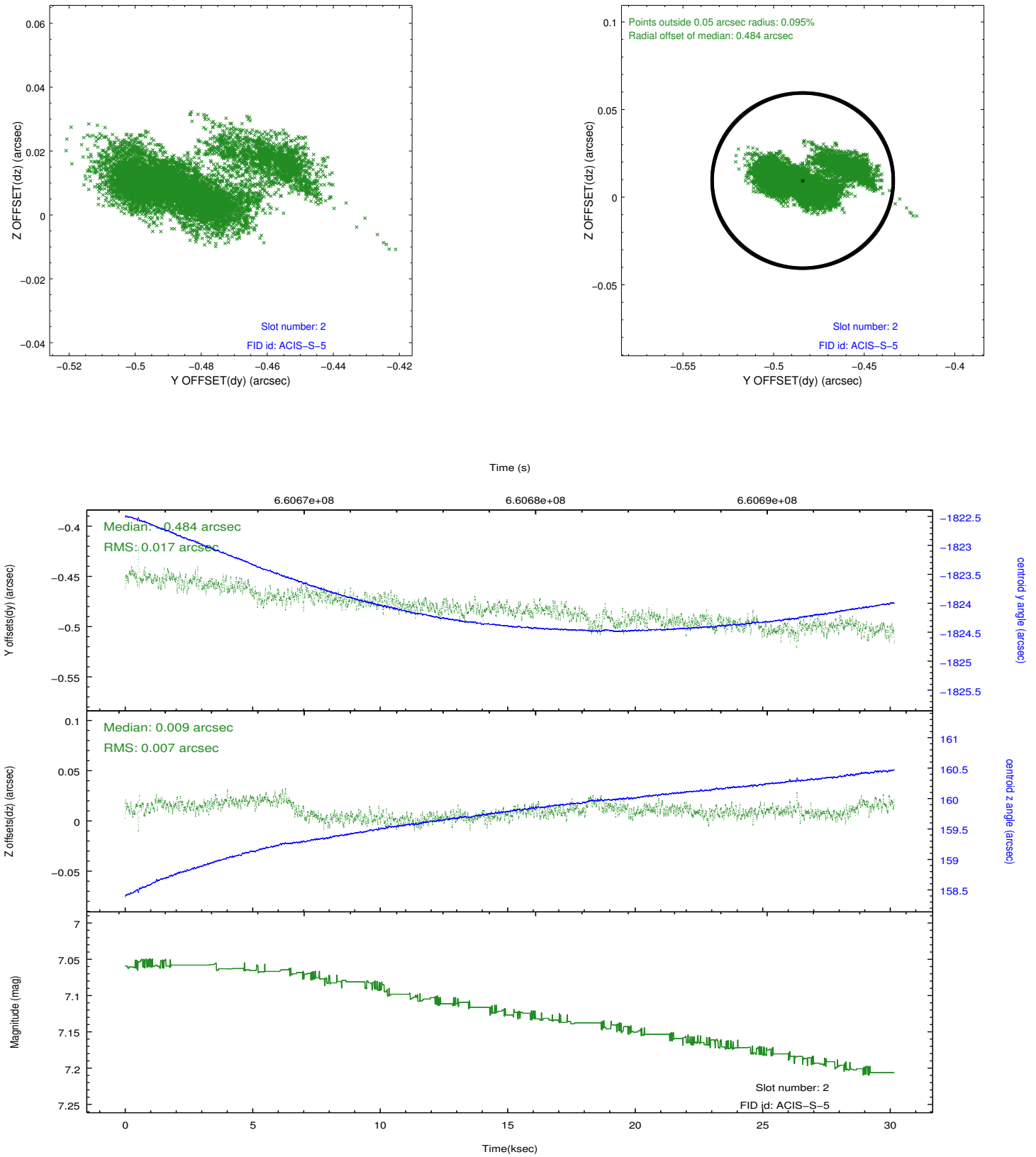
2.5.1 Slot 0



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)	2018.12.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.070000231385

A.2 Comments