

V&V Reference Report

L2 ASCDS Version : 10.7.1

Observation 22195 - L2 Version 2
Chandra X-Ray Center

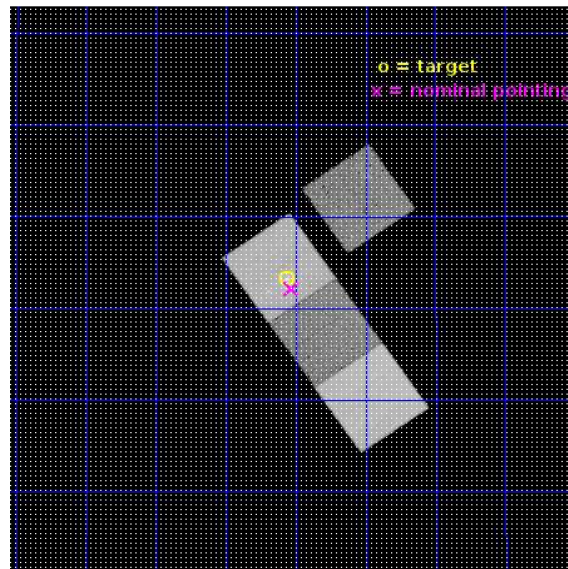
L2 Processing Date : May 6 2019

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1 Front

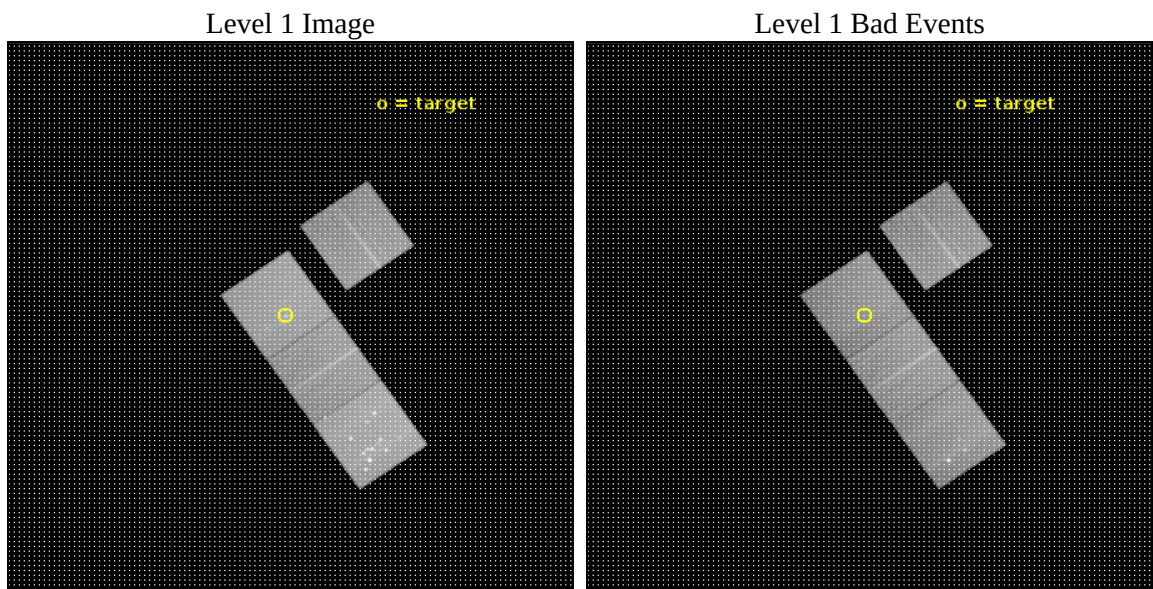
seq_num	801753	Sequence number
obs_id	22195	Observation id
title	Fuelling and self-regulation of AGN feedback at the Bondi radius of M84	Proposal title
observer	Helen Russell	Principal investigator
object	M84	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	186.265833	Observer's specified target RA [deg]
dec_targ	12.886944	Observer's specified target Dec [deg]
ra_nom	186.25787718551	Nominal RA [deg]
dec_nom	12.869084748242	Nominal Dec [deg]
roll_nom	235.4483608544	Nominal Roll [deg]
revision	2	Processing version of data
ontime	38573.184414506	Sum of GTIs [s]
livetime	38069.197362965	Livetime [s]
ontime3	38569.920324326	Sum of GTIs [s]
ontime5	38576.284434676	Sum of GTIs [s]
ontime6	38569.961284161	Sum of GTIs [s]
ontime7	38573.184414506	Sum of GTIs [s]
l2events	450738	Number of level 2 events



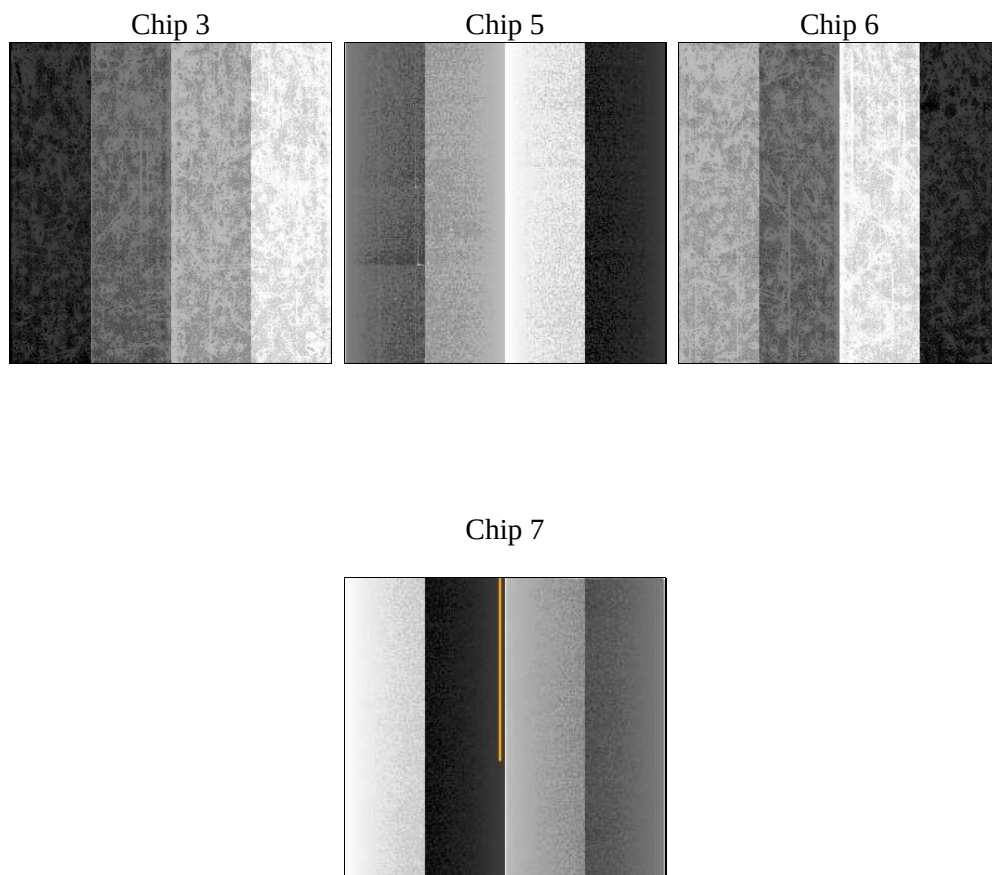
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	38513.000000	[s] Scheduled observation exposure time
ascdsver	10.7.1	Processing system revision	ontime	38573.184414506	Sum of GTIs [s]
caldsver	4.8.2	 	ontime3	38569.920324326	Sum of GTIs [s]
date	2019-05-06T18:43:05	Date and time of file creation	ontime5	38576.284434676	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	38569.961284161	Sum of GTIs [s]
			ontime7	38573.184414506	Sum of GTIs [s]
			l1events	1528959	Number of level 1 events

2.1.4 Events

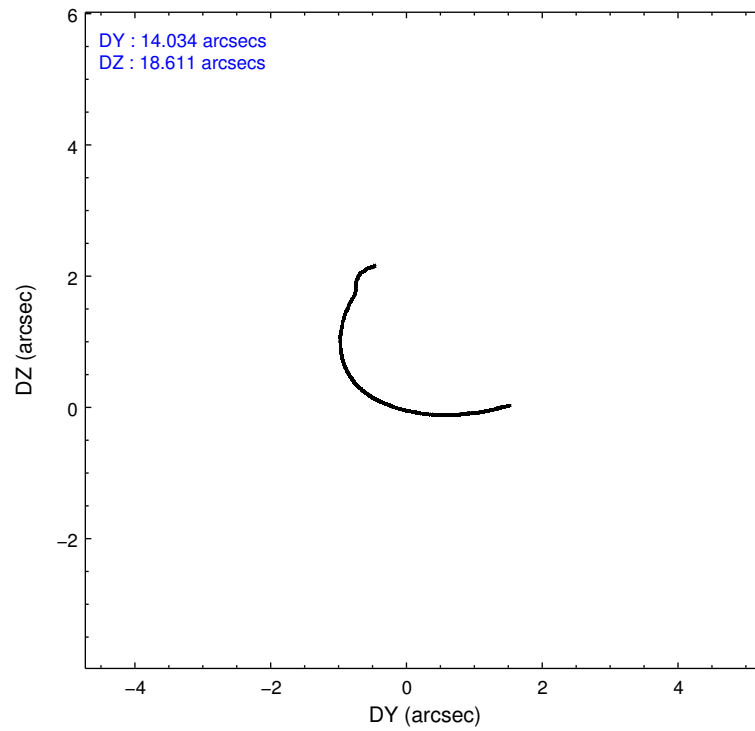
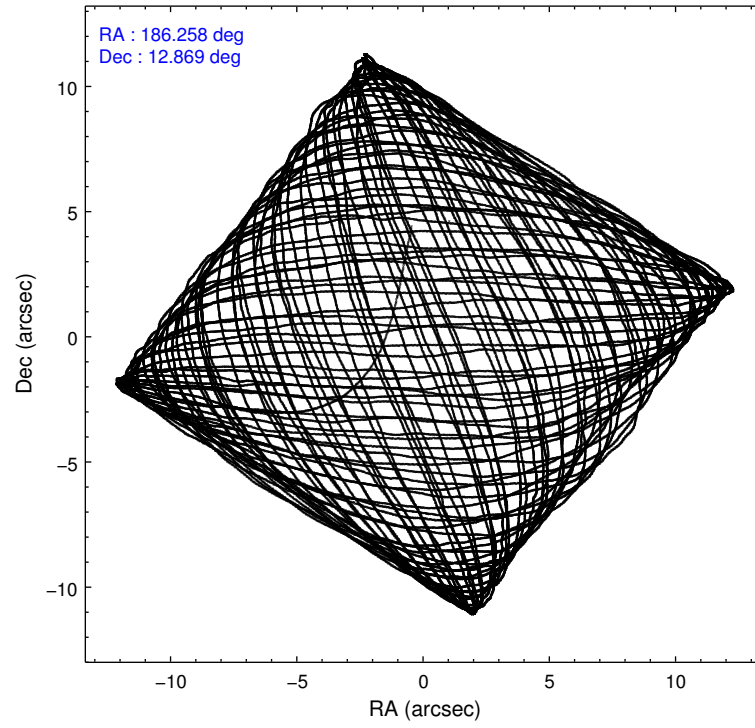
	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	288024	533990	312193	394752
rejected events	256246	260343	276587	217798
rejected %	88%	48%	88%	55%

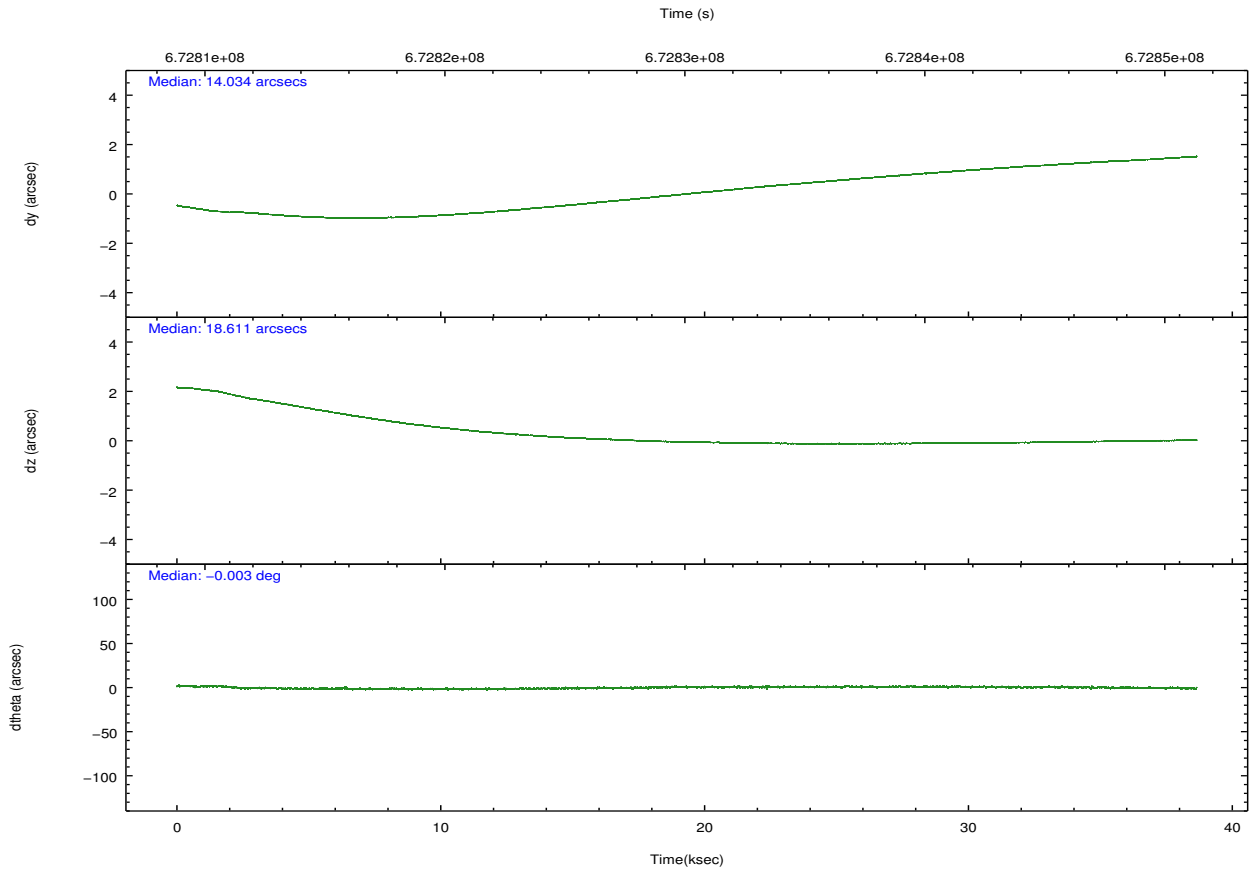
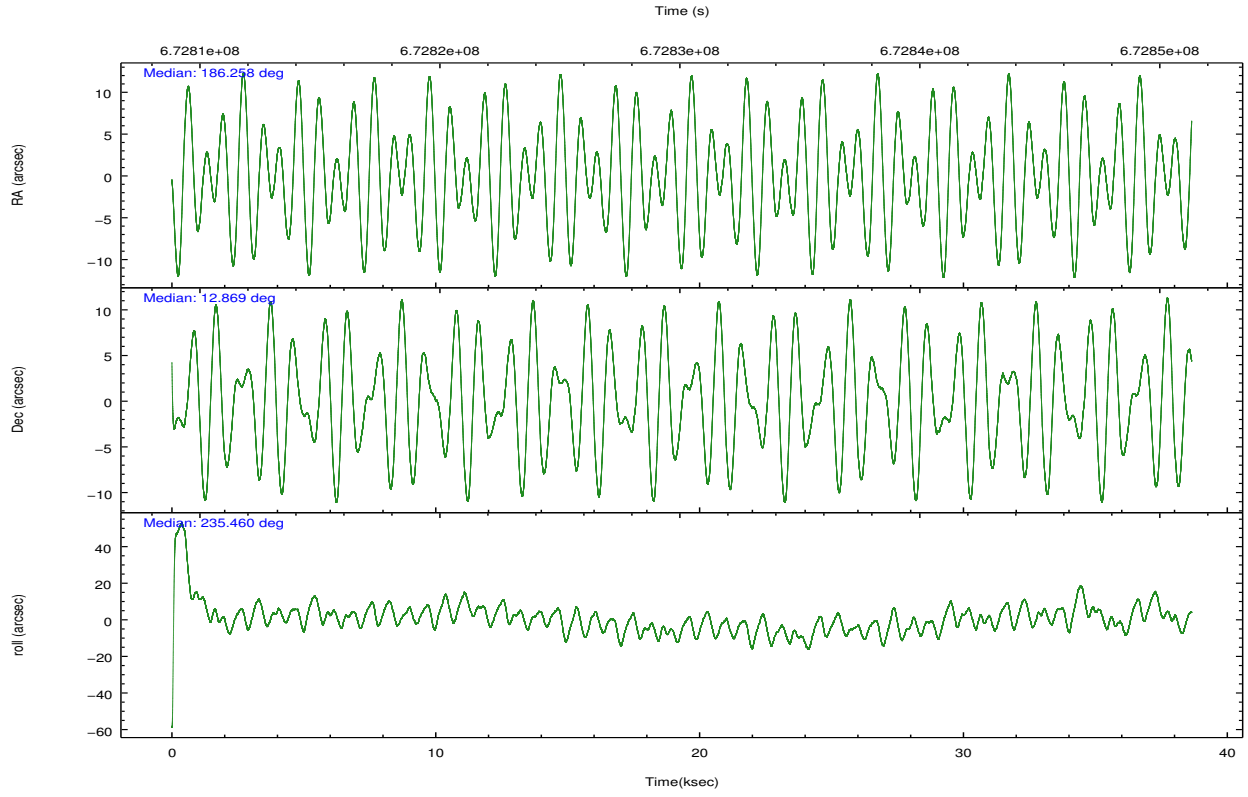
	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	12245	46855	11917	17297
	4%	8%	3%	4%
grade 1 events	170	1252	147	570
	0%	0%	0%	0%
grade 2 events	6671	83840	8889	38011
	2%	15%	2%	9%
grade 3 events	3147	8024	3081	14024
	1%	1%	0%	3%
grade 4 events	3119	7087	3112	13834
	1%	1%	0%	3%
grade 5 events	12993	31459	12935	36590
	4%	5%	4%	9%
grade 6 events	6605	127906	8617	93814
	2%	23%	2%	23%
grade 7 events	243074	227567	263495	180612
	84%	42%	84%	45%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-3567	ACIS-3567	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	186.259754	186.257877185511	CCD I2 on	O1	N
[deg] Pointing Dec	12.896469	12.86908474824219	CCD I3 on	Y	Y
[deg] Pointing Roll	235.291356	235.4483608544004	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	Y
[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	O2	N
[s] Observation start time (MET)	672810896.184000	672809695.67975	CCD S5 on	N	N
Observation start date	2019-04-28T03:53:47	2019-04-28T03:34:55	Number of optional ACIS chips dropped	2	2
[s] Observation end time (MET)	672849409.184000	672849899.76966	On-chip summing requested	N	N
Observation end date	2019-04-28T14:35:40	2019-04-28T14:44:59	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



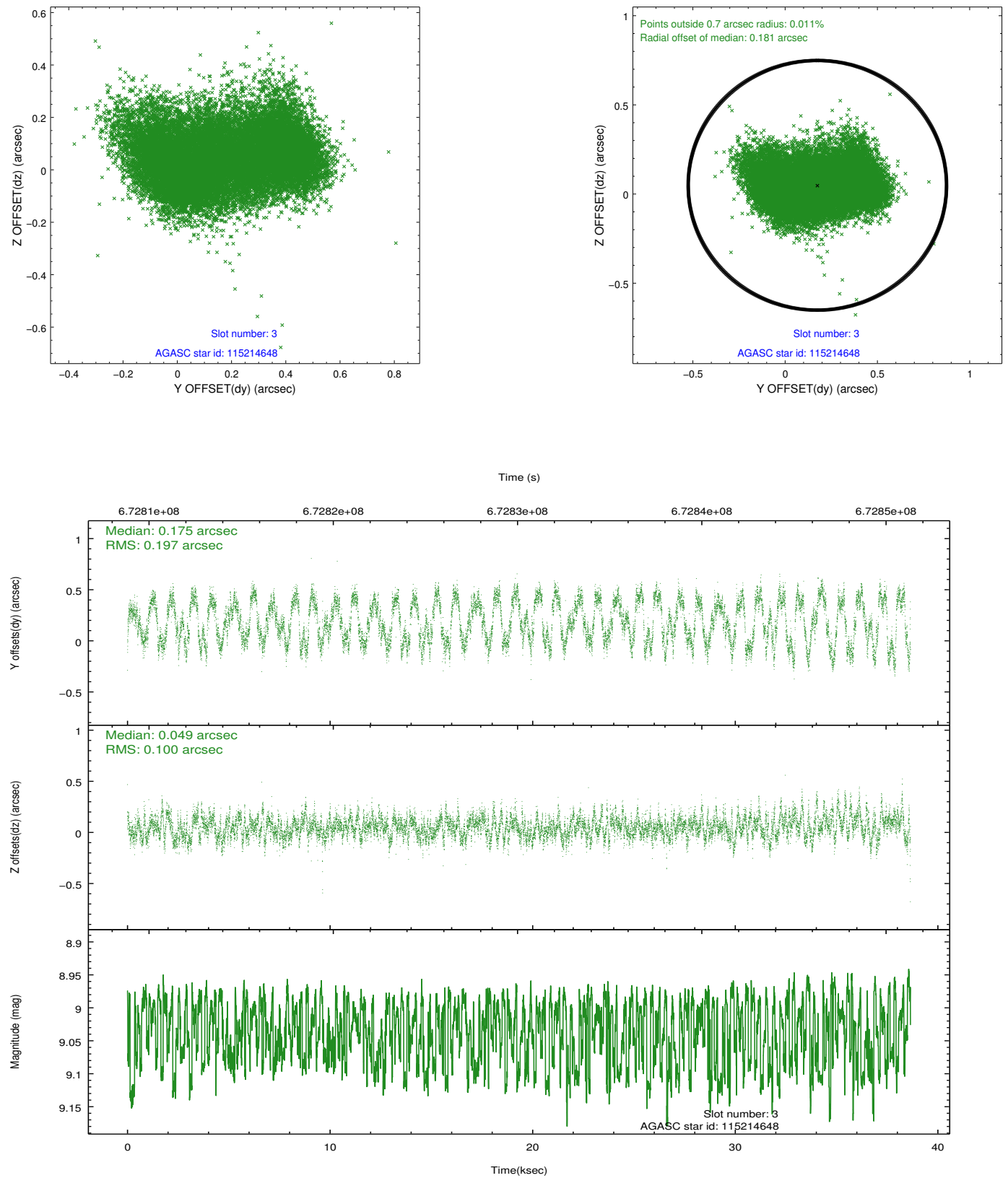


Slot Statistics

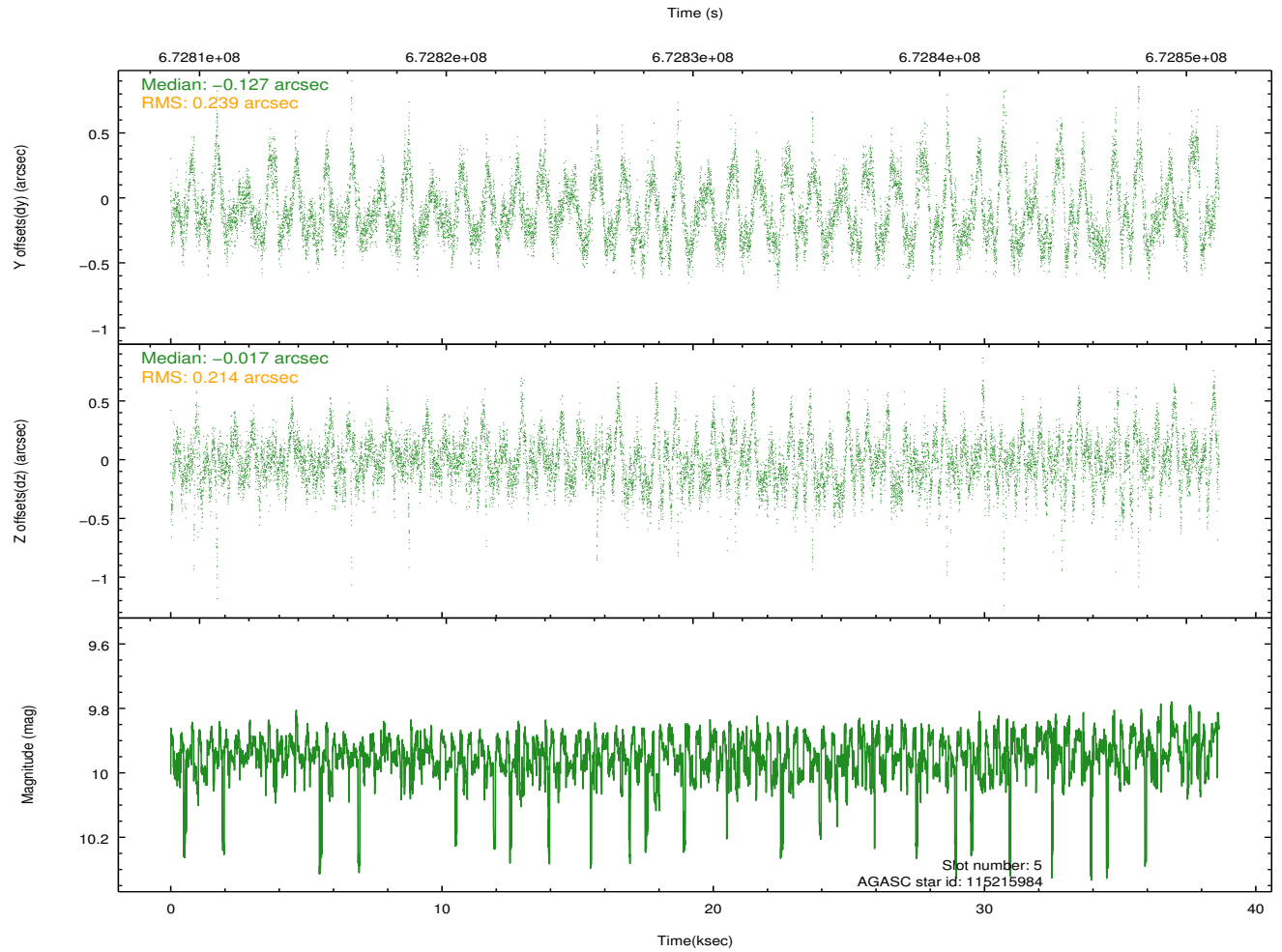
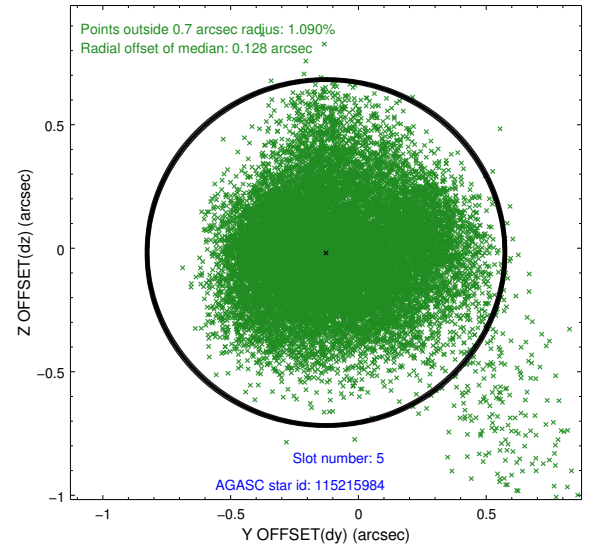
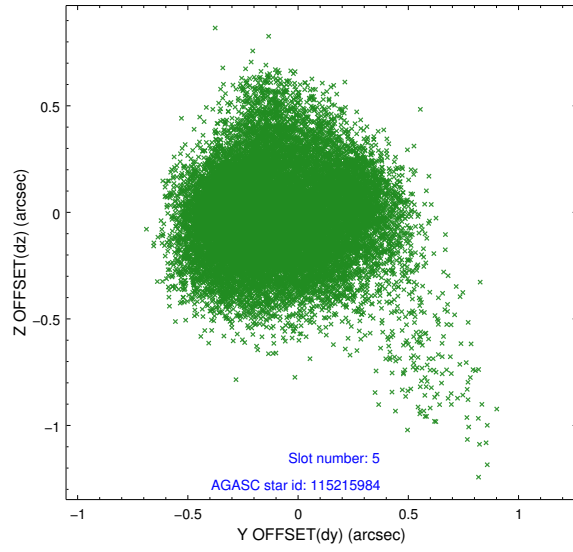
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.10	9426	1.000	-0.469	-0.320	0.038	0.051	0.000000	0.000000	-767.58	-1740
1	FID		ACIS-S-4	7.21	9426	1.000	0.499	0.276	0.033	0.042	0.000000	0.000000	2146.70	168
2	FID		ACIS-S-6	7.35	9426	1.000	-0.059	0.050	0.011	0.021	0.000000	0.000000	394.90	805
3	GUIDE	used	115214648	9.04	18831	1.000	0.175	0.049	0.244	0.349	185.771147	12.685188	1601.71	-979
4	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0
5	GUIDE	used	115215984	9.94	18713	1.000	-0.127	-0.017	0.337	0.535	186.134733	12.875031	313.68	-316
6	GUIDE	used	115216184	9.63	18794	1.000	-0.155	-0.077	0.172	0.285	185.973150	12.580247	1510.91	-177
7	GUIDE	used	115347480	9.56	18802	1.000	0.065	0.048	0.192	0.347	186.668576	13.310410	-2041.04	329

2.4 Star Slots

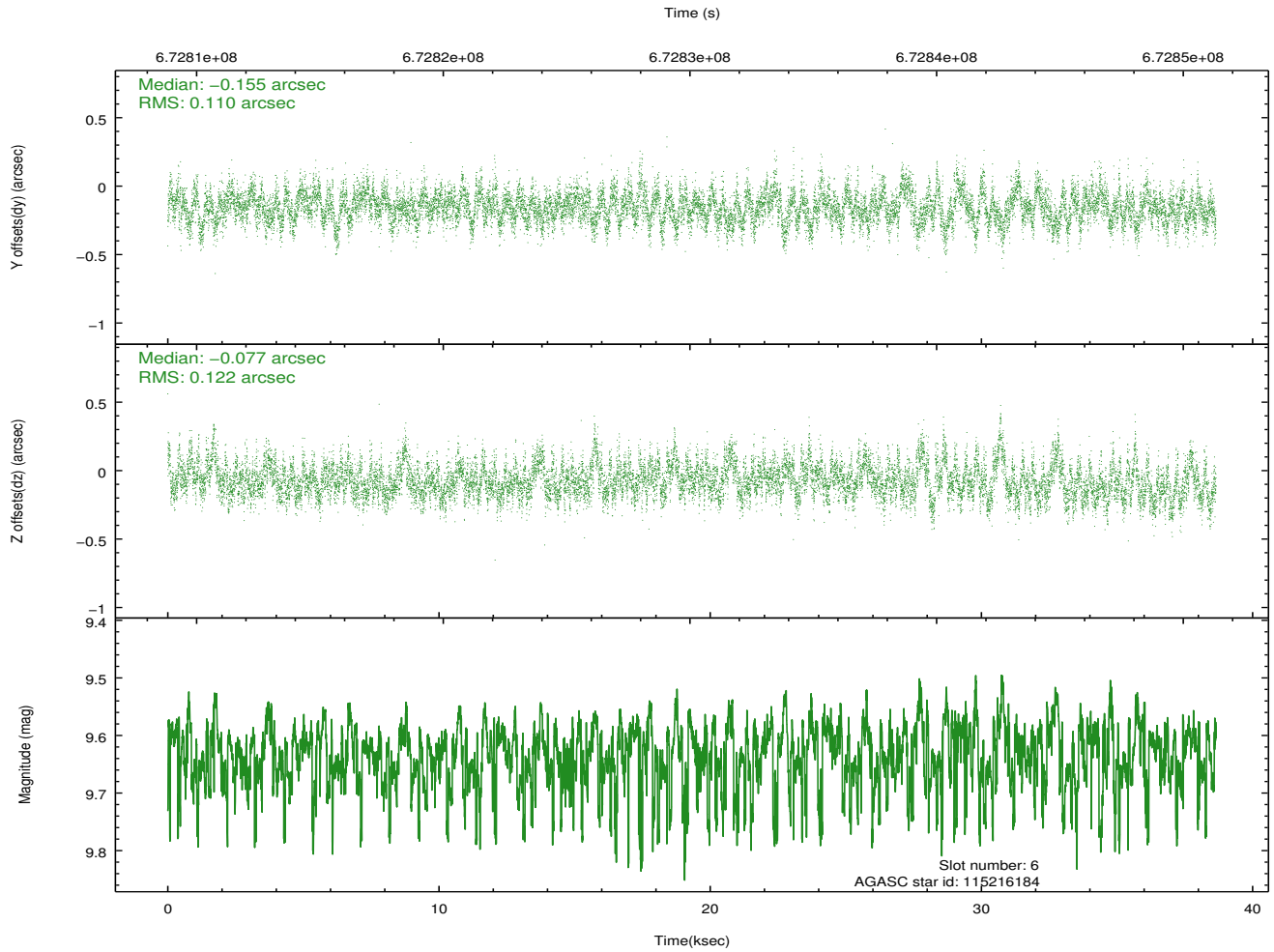
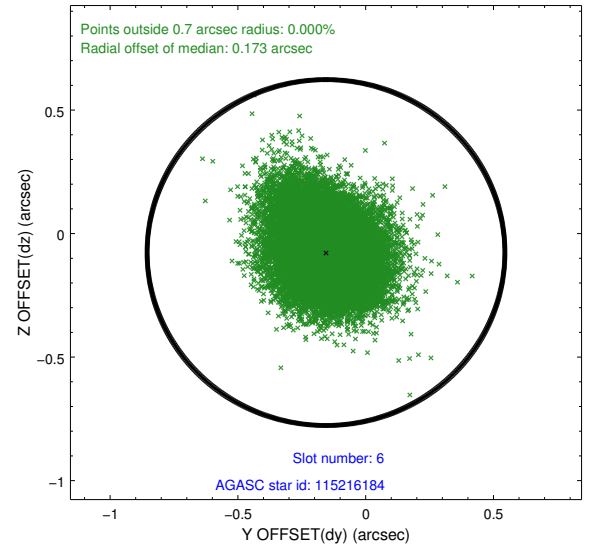
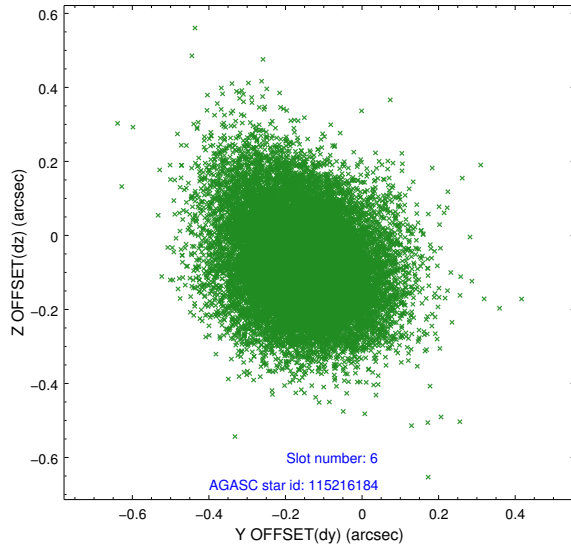
2.4.1 Slot 3



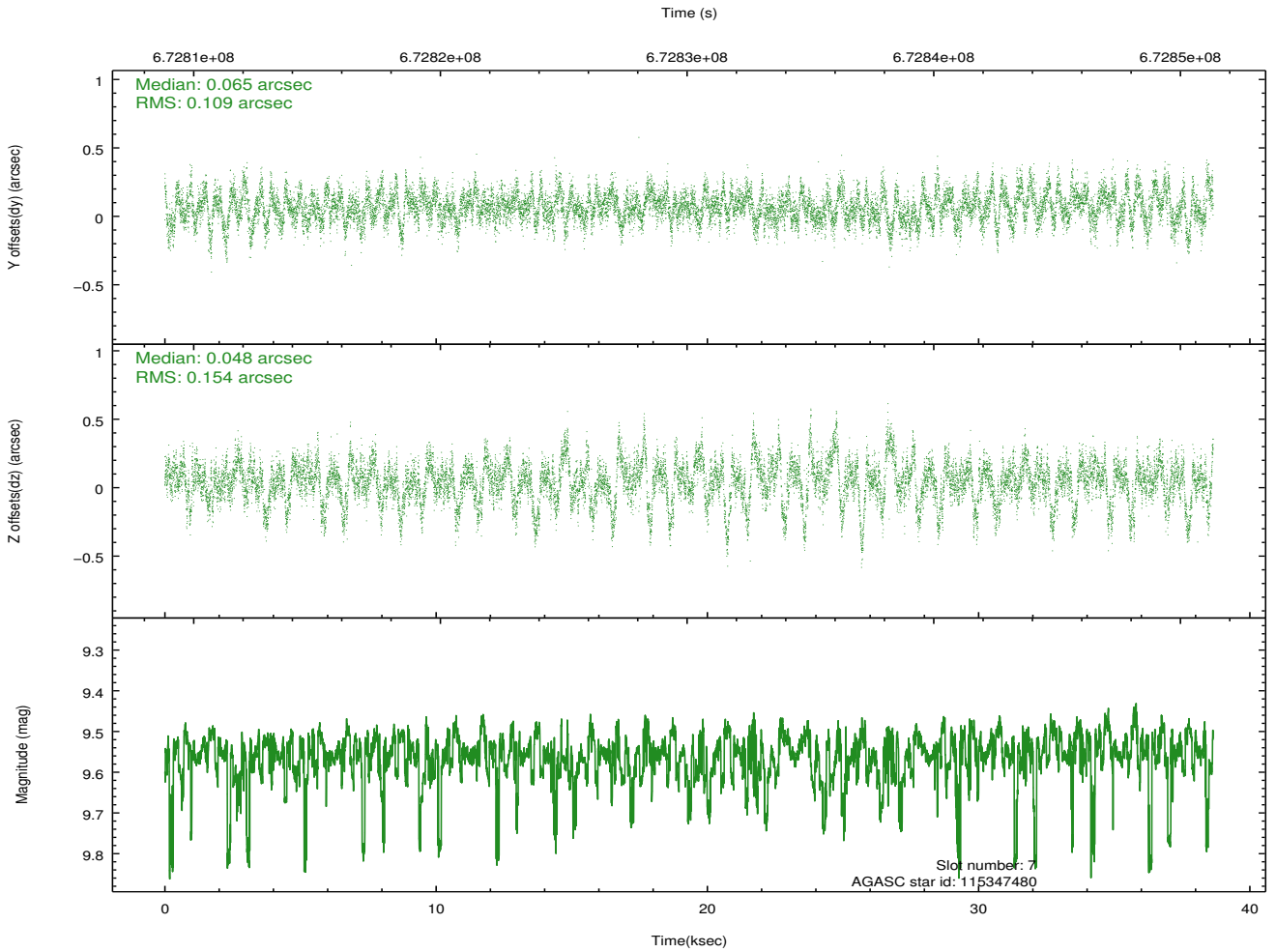
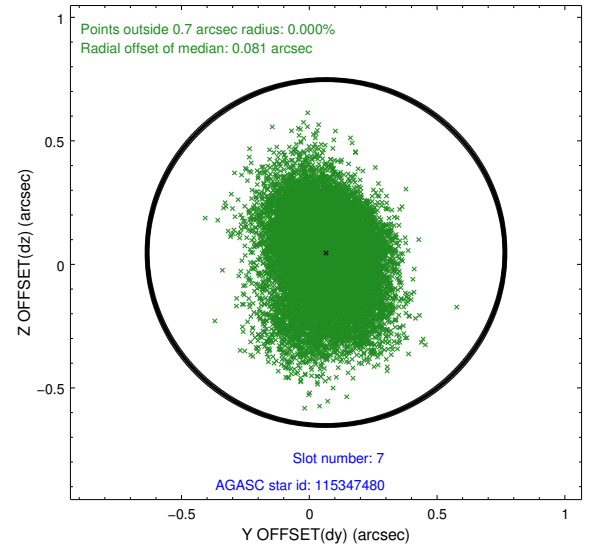
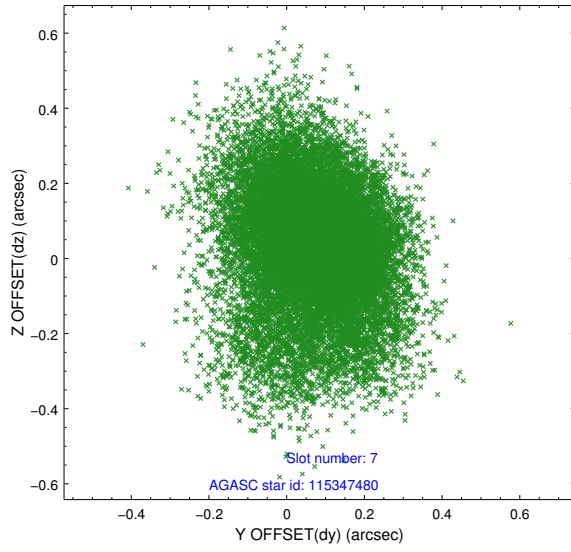
2.4.2 Slot 5



2.4.3 Slot 6

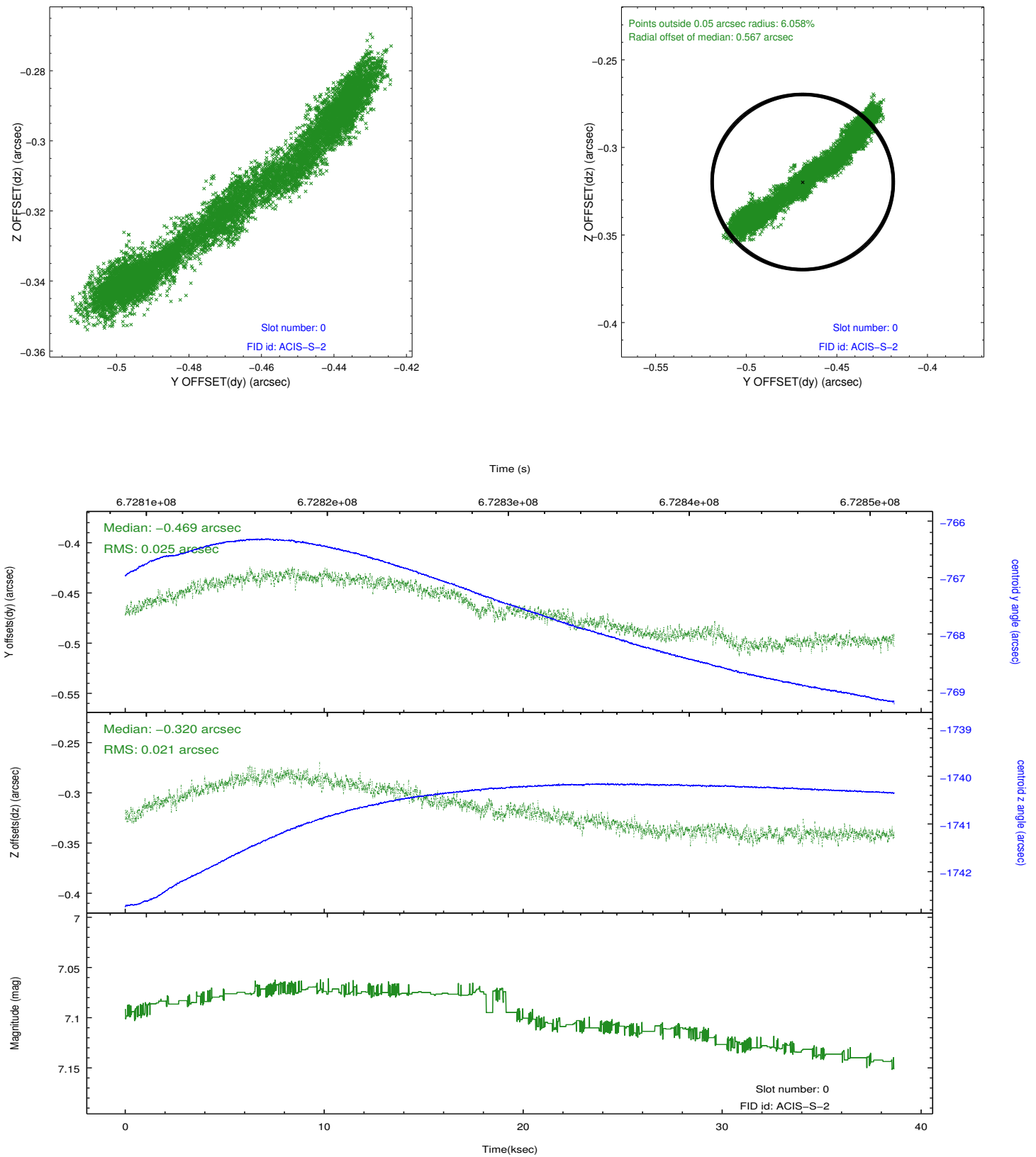


2.4.4 Slot 7

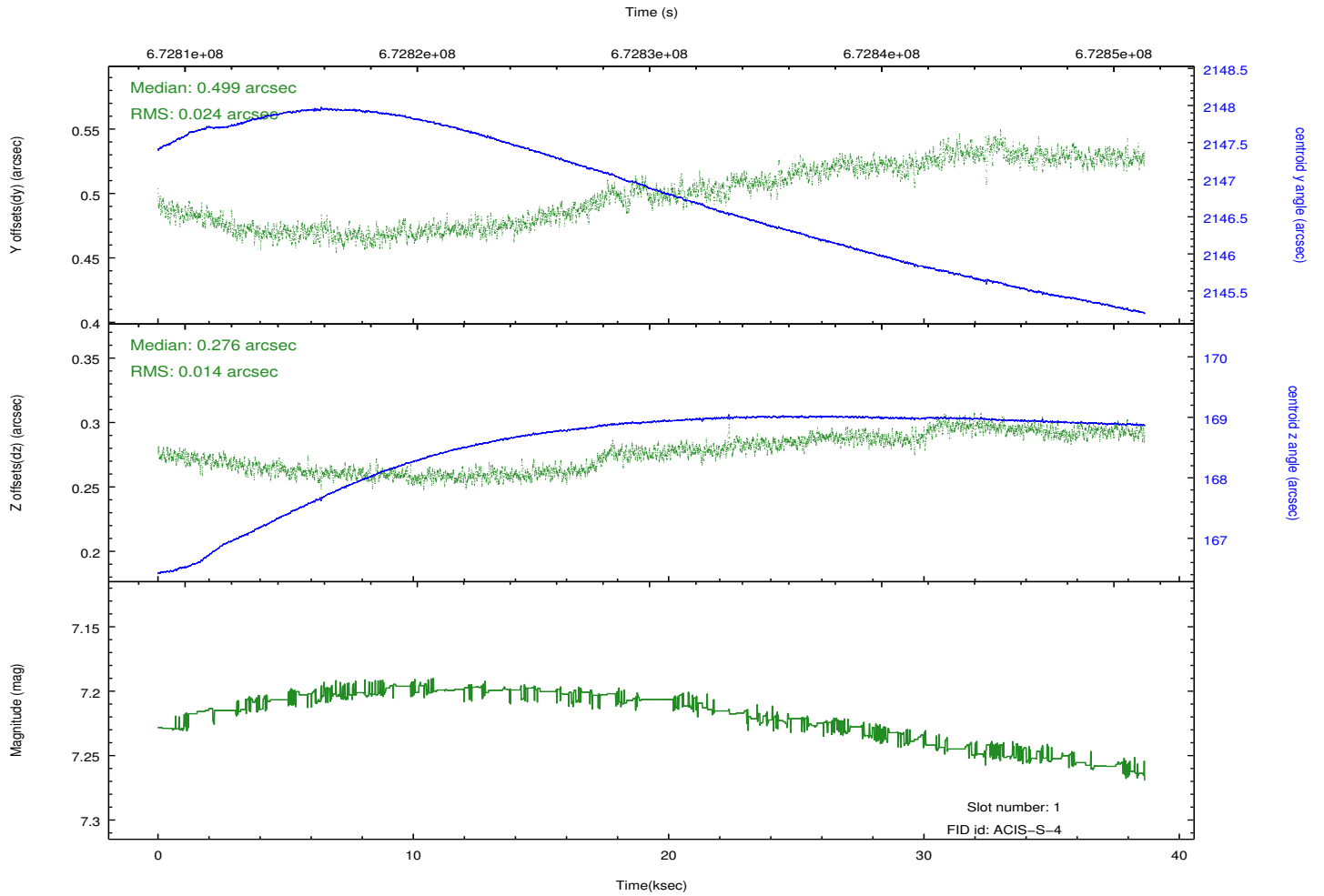
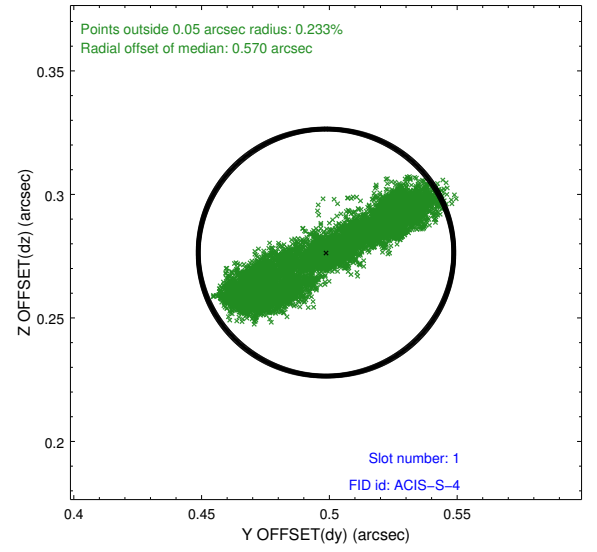
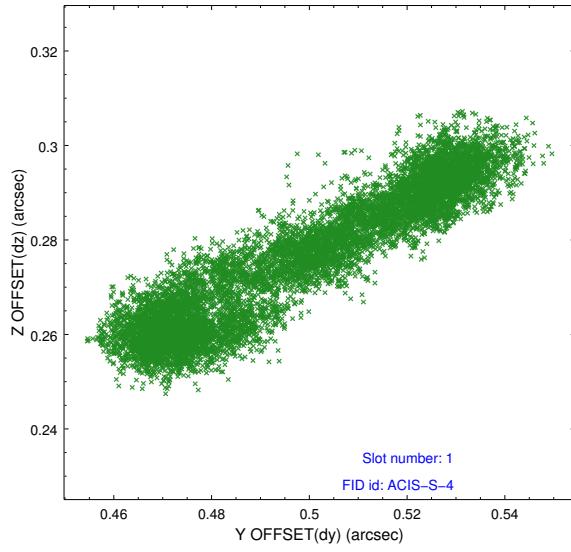


2.5 FID Slots

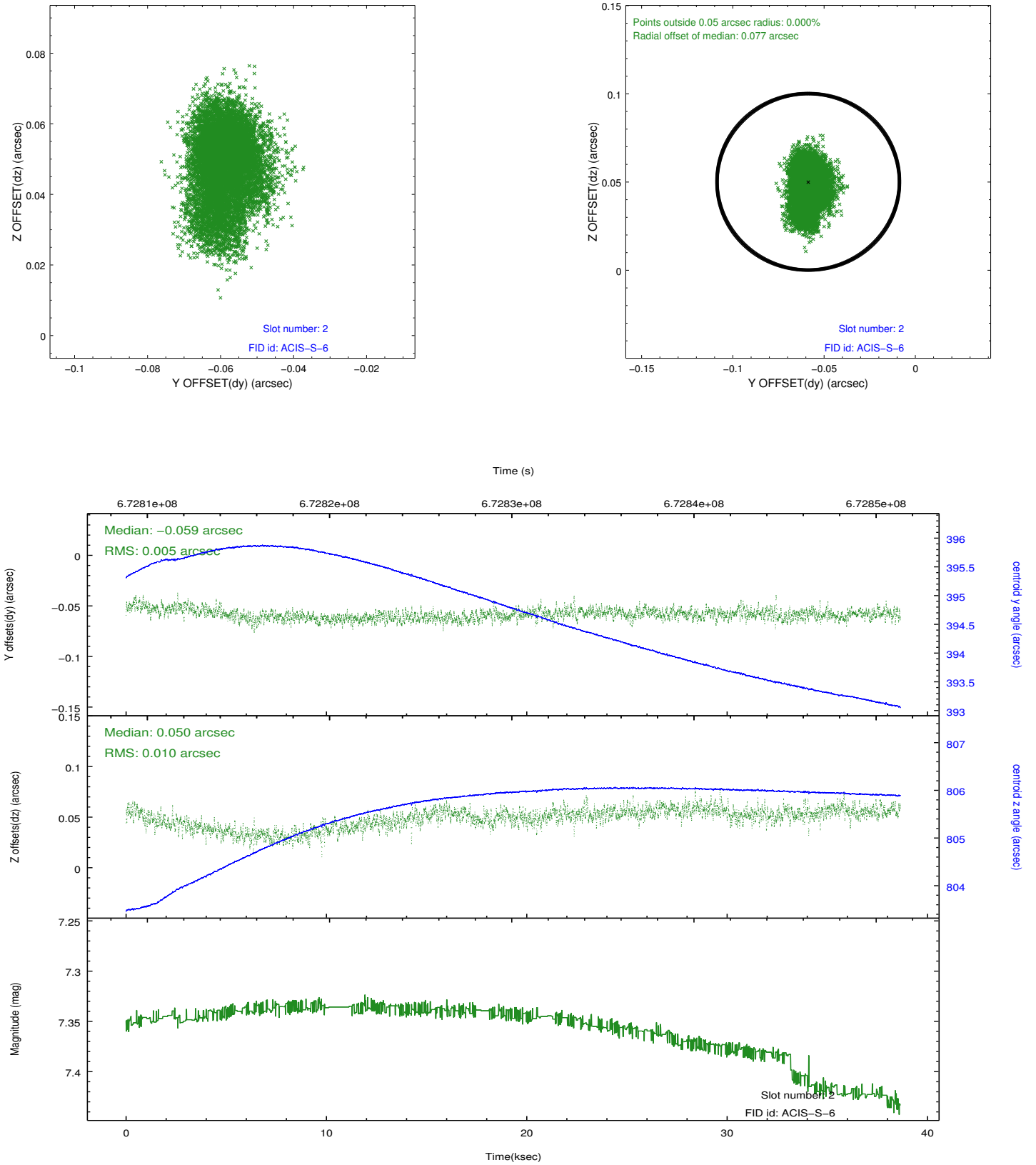
2.5.1 Slot 0



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)	2019.05.07
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	38.573184414506

A.2 Comments

The guide star in slot 4 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.

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Optional chips I2 and S4 not included.