

V&V Reference Report

L2 ASCDS Version : 10.4.3.1

Observation 18089 - L2 Version 1
Chandra X-Ray Center

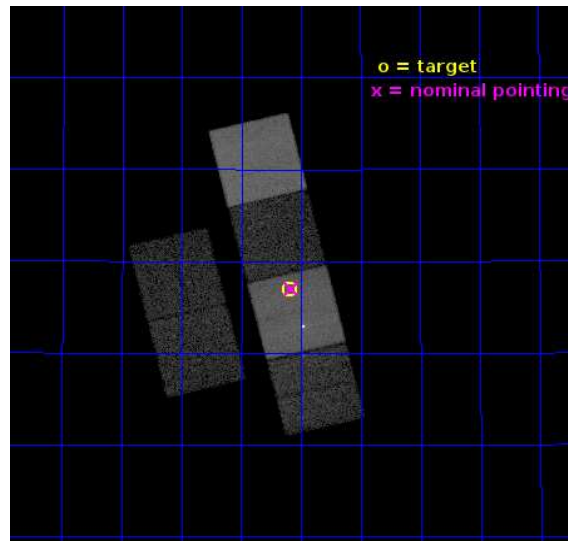
L2 Processing Date : Apr 7 2016

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1 Front

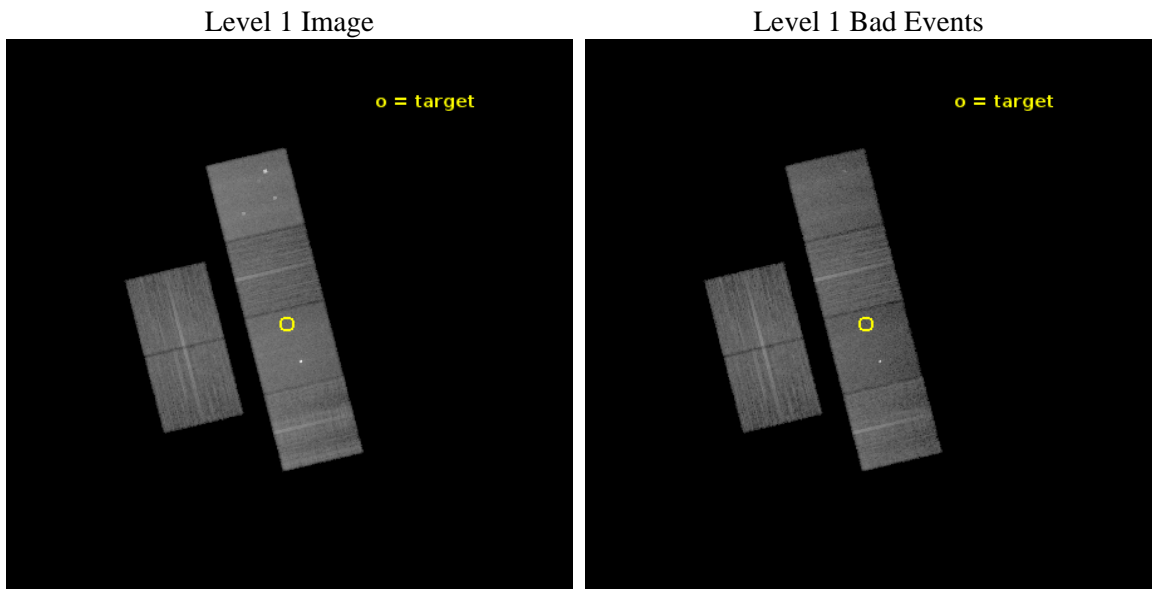
seq_num	901203	Sequence number
obs_id	18089	Observation id
title	Follow-up of Serendipitous NuSTAR Sources in the Galactic Plane	Pr
observer	John Tomsick	Principal investigator
object	NuSTAR J211935+3336.9	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	319.897917	Observer's specified target RA [deg]
dec_targ	33.6155	Observer's specified target Dec [deg]
ra_nom	319.89515795457	Nominal RA [deg]
dec_nom	33.61690852549	Nominal Dec [deg]
roll_nom	76.285853260455	Nominal Roll [deg]
revision	1	Processing version of data
ontime	19926.400296926	Sum of GTIs [s]
livetime	19674.080218129	Livetime [s]
ontime2	19926.400296926	Sum of GTIs [s]
ontime3	19919.918425918	Sum of GTIs [s]
ontime5	19926.400296926	Sum of GTIs [s]
ontime6	19926.400296926	Sum of GTIs [s]
ontime7	19926.400296926	Sum of GTIs [s]
ontime8	19923.159376144	Sum of GTIs [s]
l2events	220149	Number of level 2 events



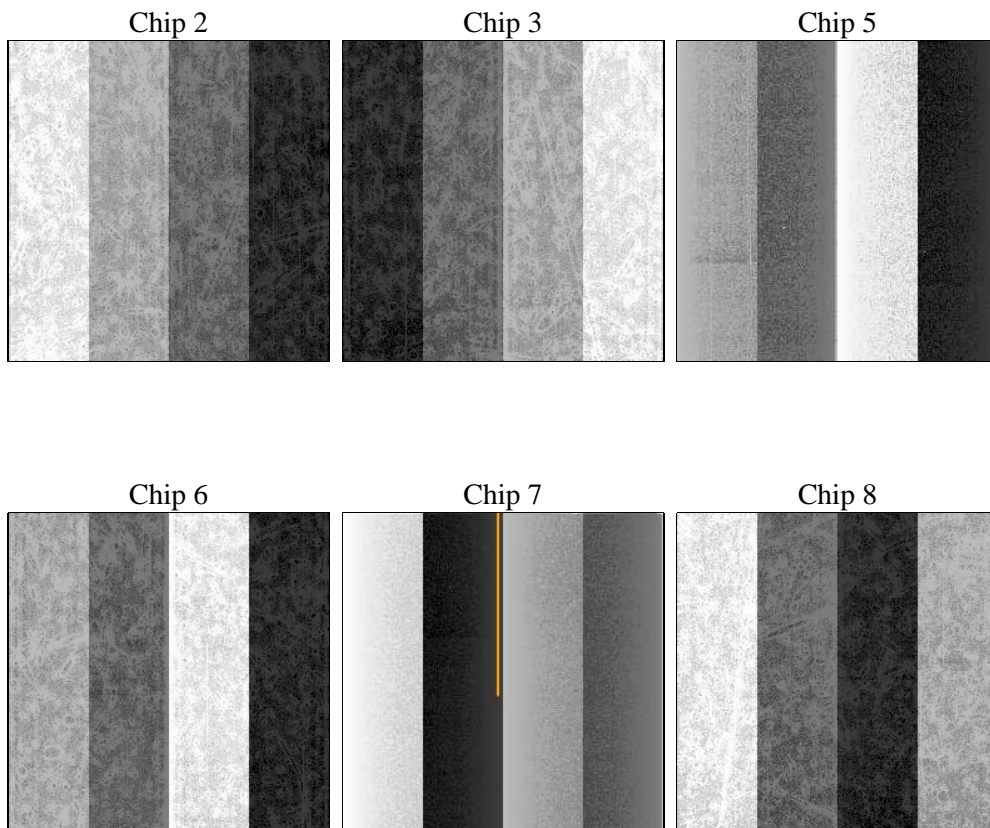
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	20000.000000	[s] Scheduled observation exposure time
ascdsver	10.4.3.1	Processing system revision	ontime	19926.400296926	Sum of GTIs [s]
caldsver	4.7.1	 	ontime2	19926.400296926	Sum of GTIs [s]
date	2016-04-08T01:04:20	Date and time of file creation	ontime3	19919.918425918	Sum of GTIs [s]
revision	1	Processing version of data	ontime5	19926.400296926	Sum of GTIs [s]
			ontime6	19926.400296926	Sum of GTIs [s]
			ontime7	19926.400296926	Sum of GTIs [s]
			ontime8	19923.159376144	Sum of GTIs [s]
			l1events	926245	Number of level 1 events

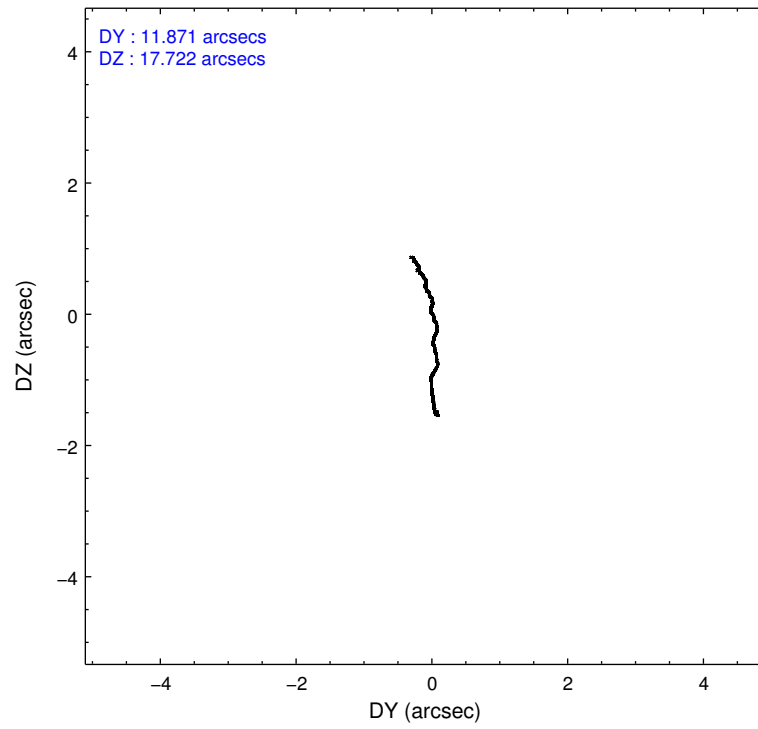
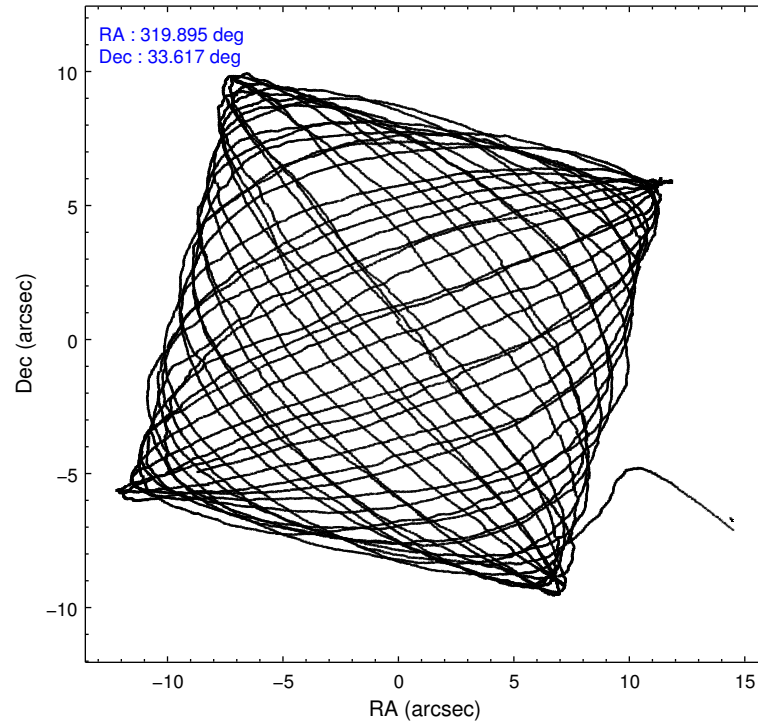
2.1.4 Events

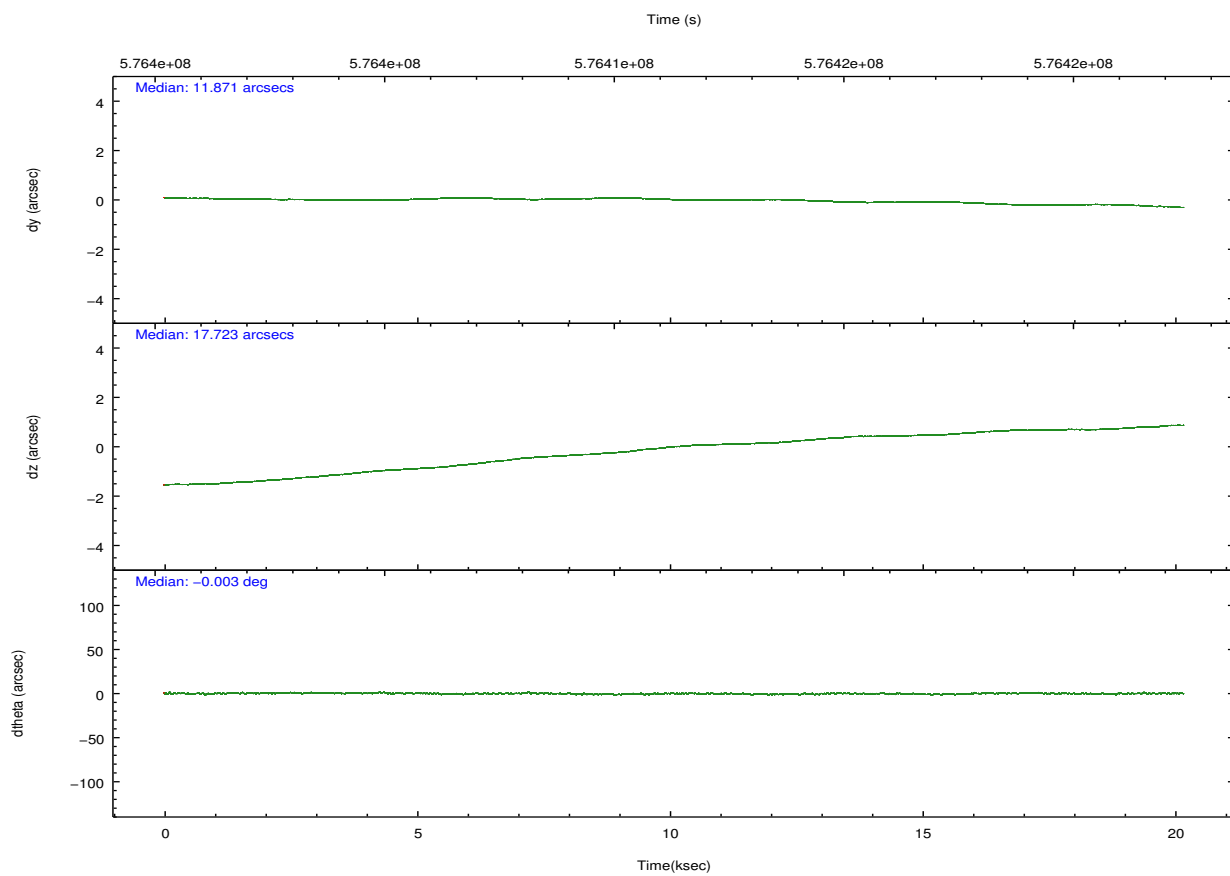
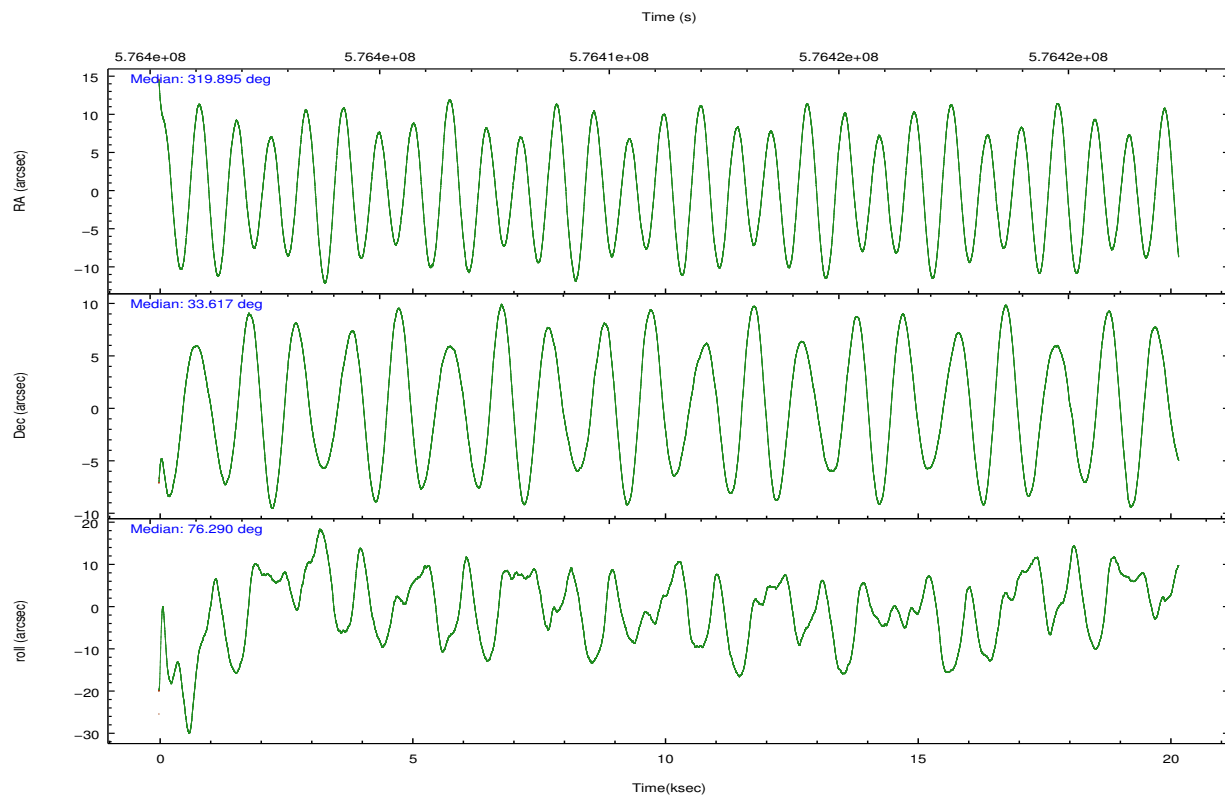
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	129513	122866	205038	128972	176956	162900	grade 0 events	4531	4691	12321	4607	8501	12737
rejected events	116209	109969	103162	115068	94920	119433		3%	3%	6%	3%	4%	7%
rejected %	89%	89%	50%	89%	53%	73%	grade 1 events	64	70	512	65	624	120
								0%	0%	0%	0%	0%	0%
							grade 2 events	3456	2775	30789	3297	18197	10490
								2%	2%	15%	2%	10%	6%
							grade 3 events	1336	1332	3230	1374	6825	4559
								1%	1%	1%	1%	3%	2%
							grade 4 events	1365	1348	2829	1311	6718	4182
								1%	1%	1%	1%	3%	2%
							grade 5 events	5048	5874	13408	5766	16952	8741
								3%	4%	6%	4%	9%	5%
							grade 6 events	2619	2752	52724	3317	41806	11506
								2%	2%	25%	2%	23%	7%
							grade 7 events	111094	104024	89225	109235	77333	110565
								85%	84%	43%	84%	43%	67%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	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	319.904795	319.8951579545686	CCD I2 on	O2	Y
[deg] Pointing Dec	33.590683	33.61690852548969	CCD I3 on	Y	Y
[deg] Pointing Roll	76.123907	76.28585326045518	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O1	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	Y	Y
[s] Observation start time (MET)	576401369.184000	576400207.66649	CCD S5 on	N	N
Observation start date	2016-04-07T07:28:21	2016-04-07T07:10:07	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	576421369.184000	576422332.29275	On-chip summing requested	N	N
Observation end date	2016-04-07T13:01:41	2016-04-07T13:18:52	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



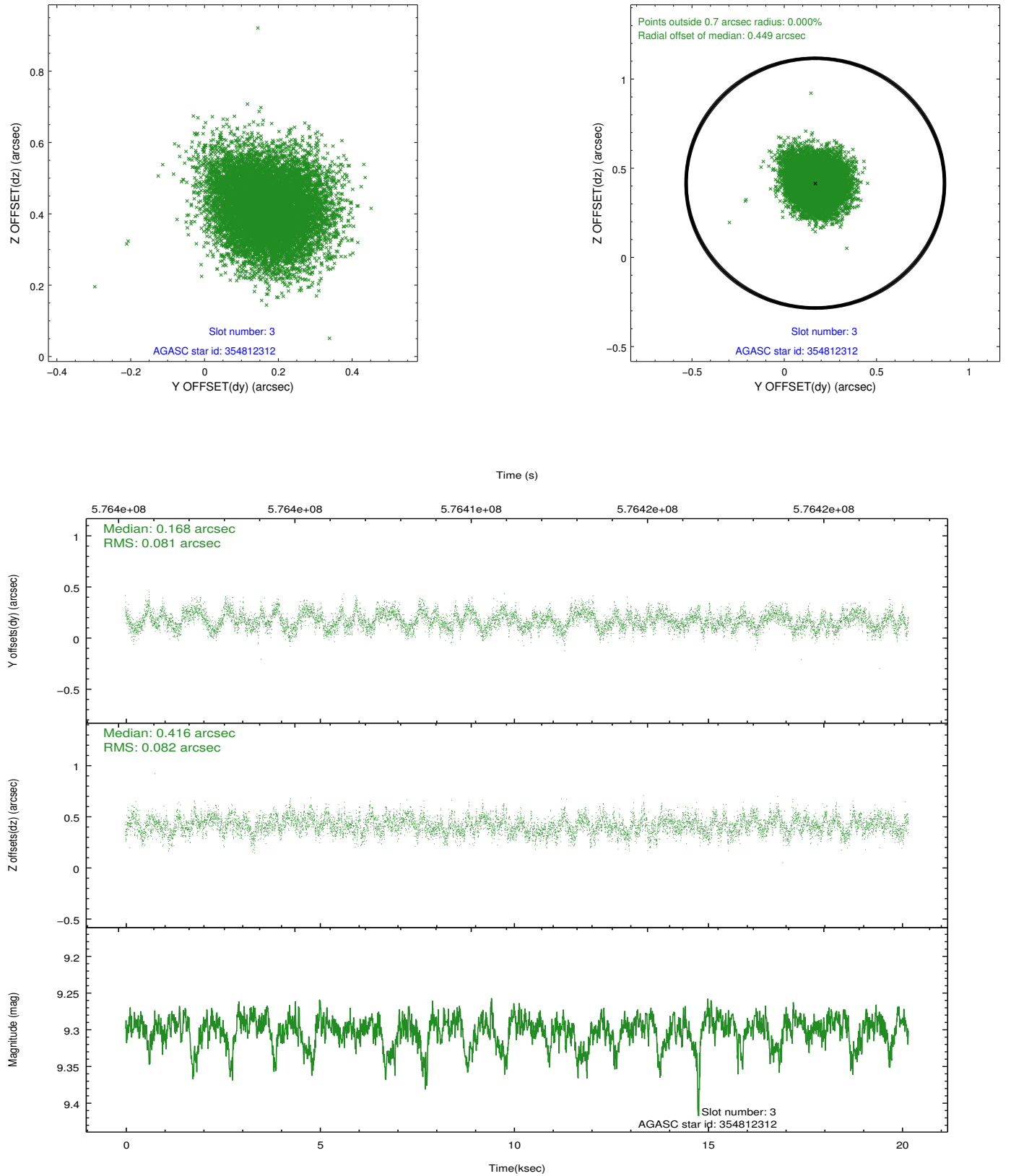


Slot Statistics

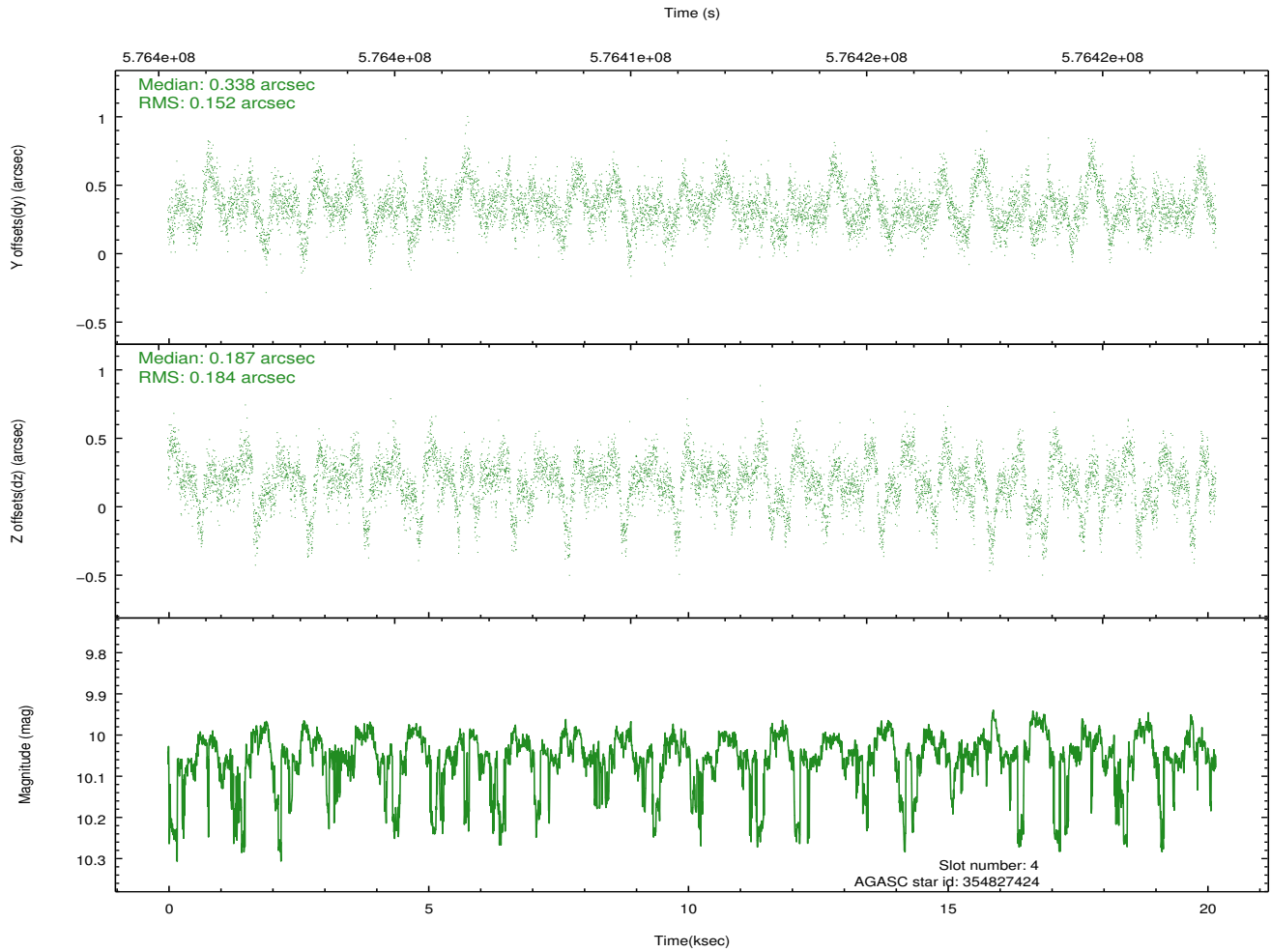
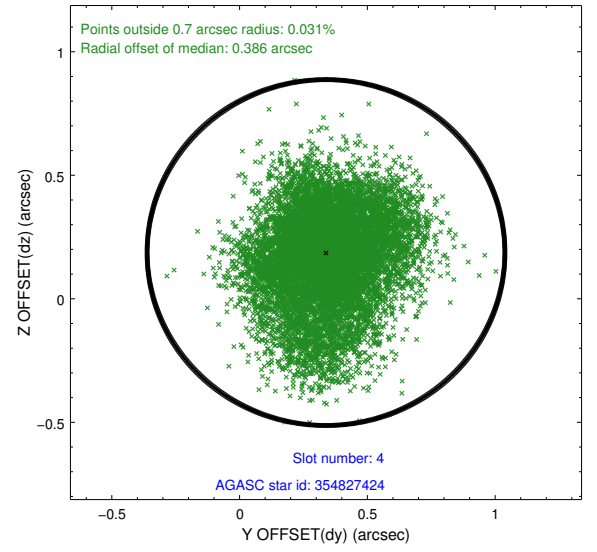
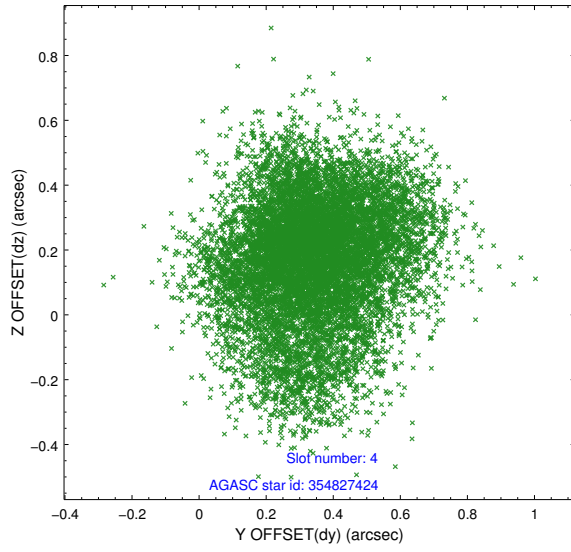
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.10	4921	-0.207	-0.135	0.008	0.012	0.000000	0.000000	-764.94	-1739.05
1	FID		ACIS-S-4	7.22	4922	0.264	0.103	0.009	0.014	0.000000	0.000000	2148.74	169.45
2	FID		ACIS-S-6	7.35	4922	-0.085	0.039	0.012	0.020	0.000000	0.000000	397.43	807.00
3	GUIDE	used	354812312	9.30	9825	0.168	0.416	0.123	0.197	320.184732	33.447000	-299.60	-939.11
4	GUIDE	used	354827424	10.05	9823	0.338	0.187	0.256	0.417	319.779986	33.013455	-2107.62	-132.35
5	GUIDE	used	355336784	9.48	9832	-0.005	-0.222	0.193	0.312	319.794454	33.838156	785.91	533.98
6	GUIDE	used	355337360	9.49	9829	-0.487	-0.096	0.137	0.221	319.711662	34.111986	1684.22	1009.20
7	GUIDE	used	354813152	8.95	9832	-0.010	-0.250	0.124	0.199	319.742103	33.487971	-475.42	385.80

2.4 Star Slots

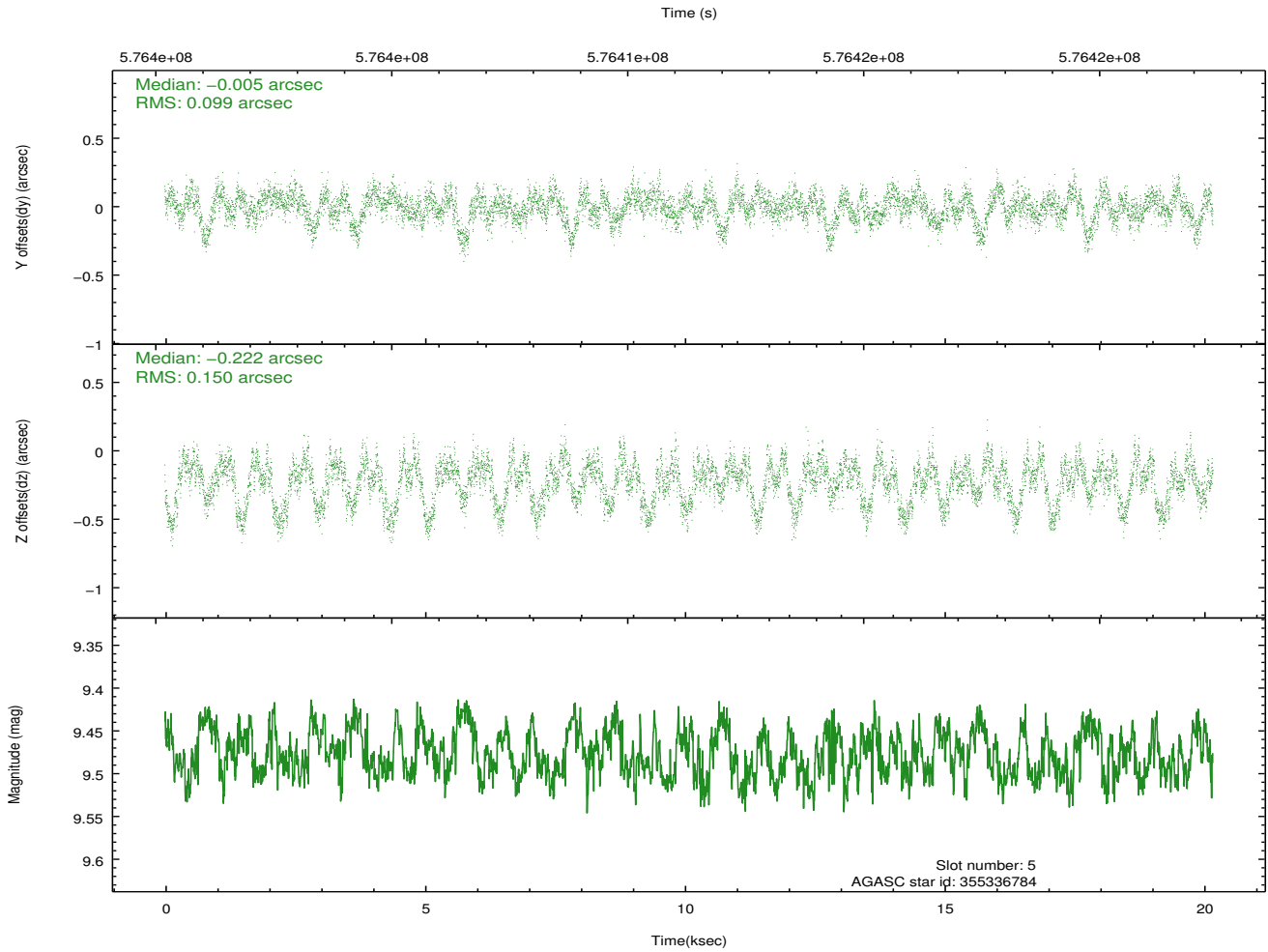
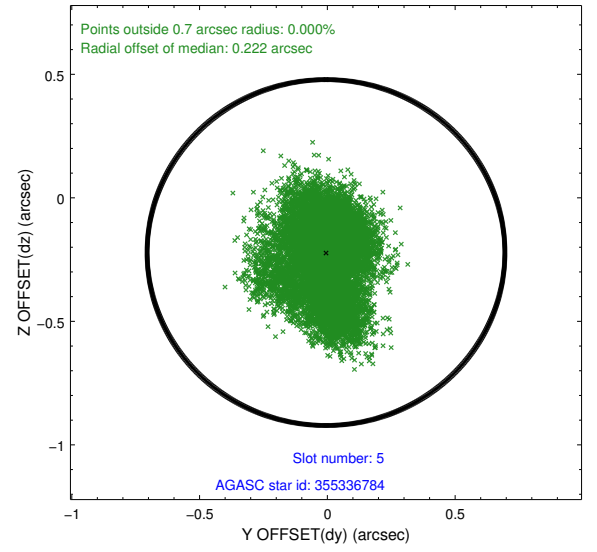
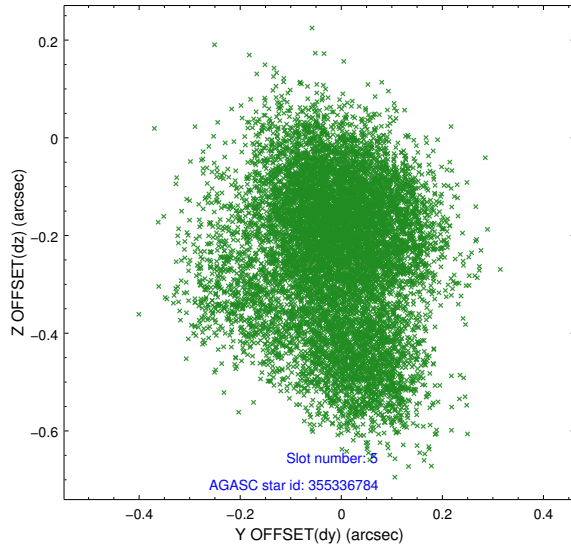
2.4.1 Slot 3



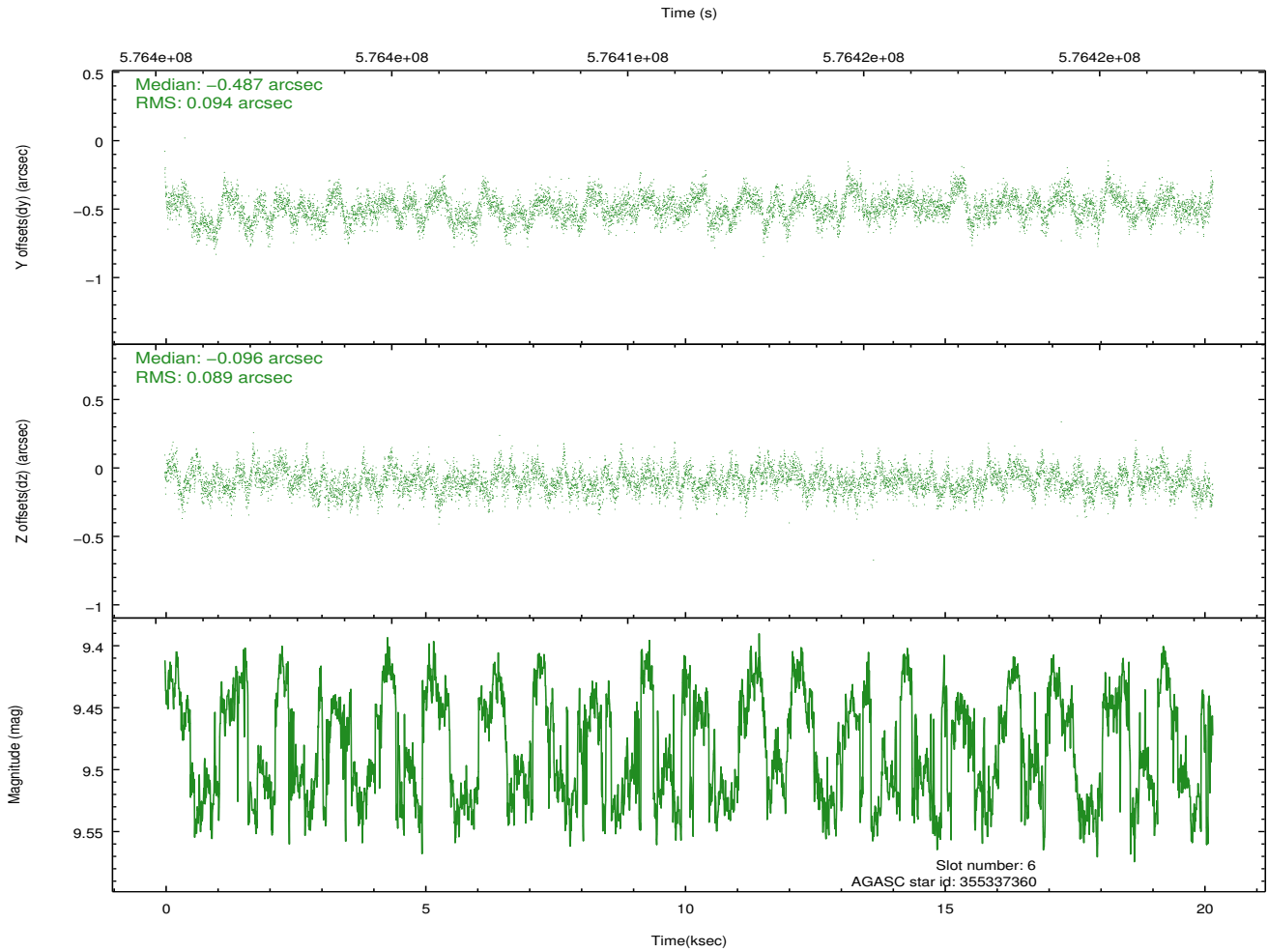
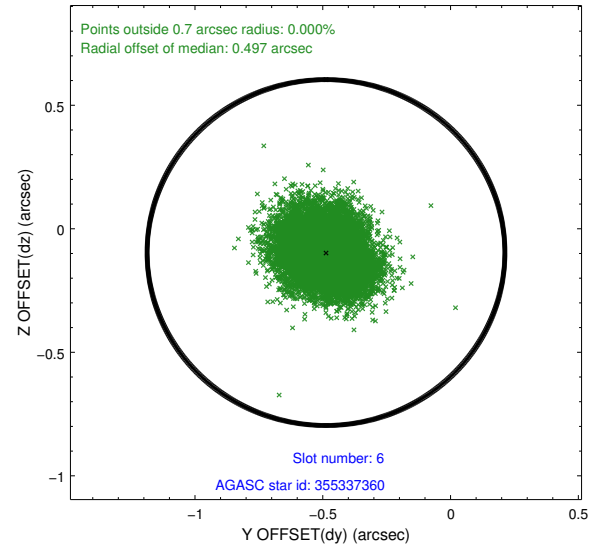
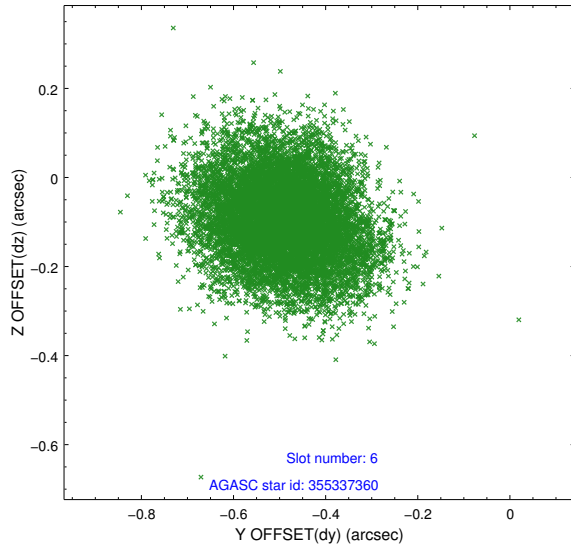
2.4.2 Slot 4



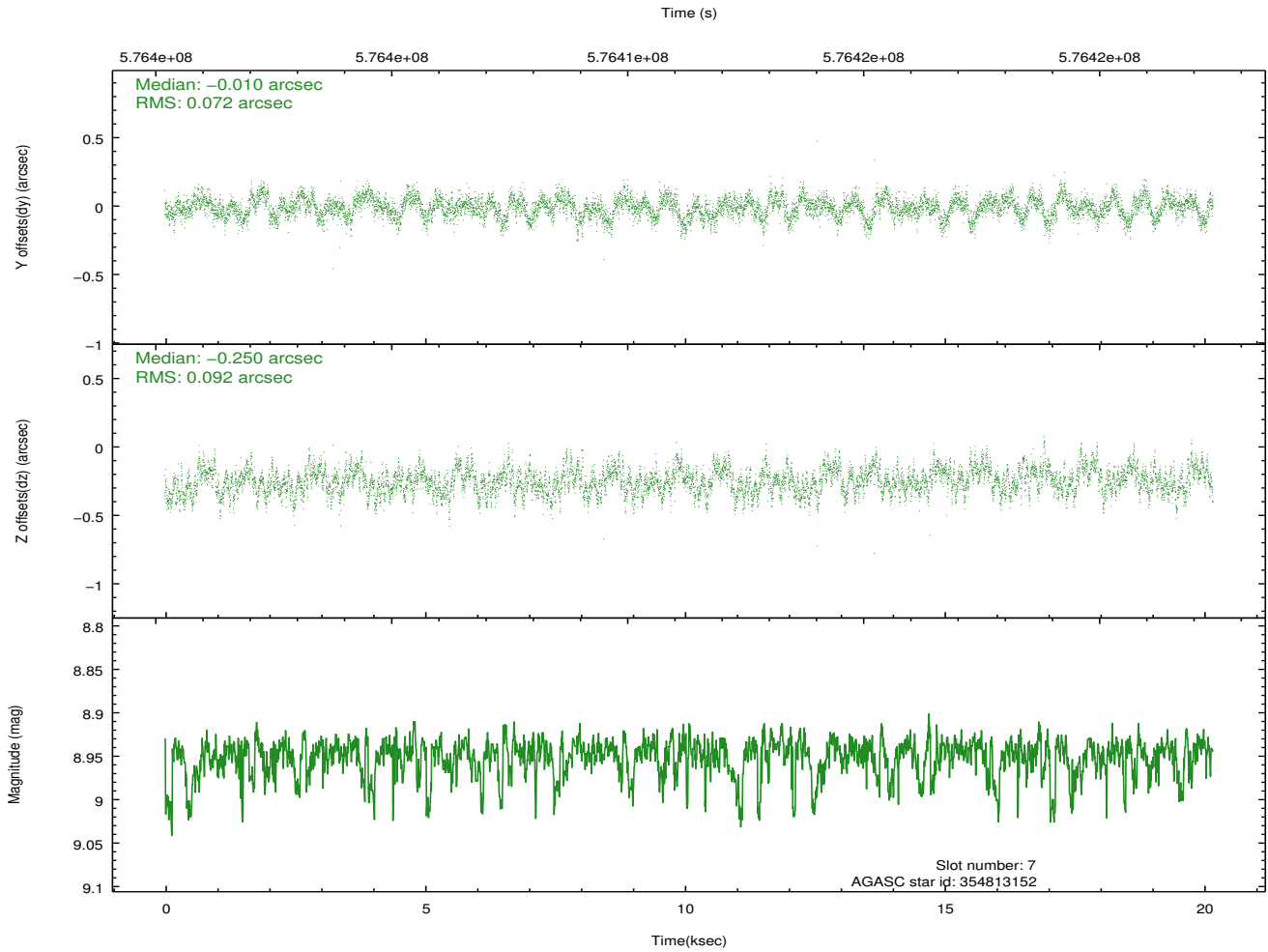
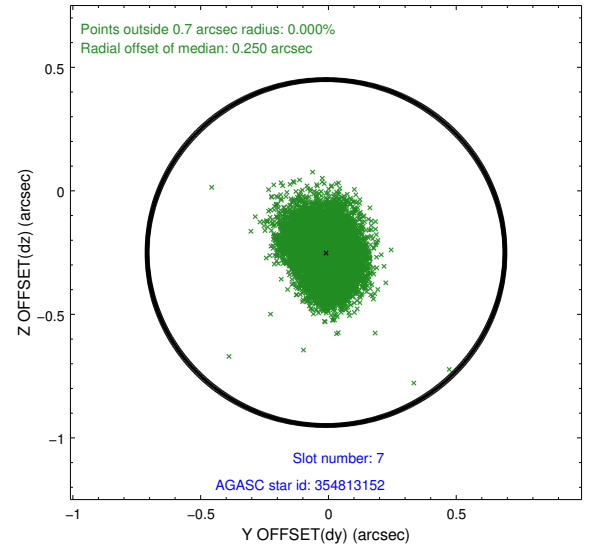
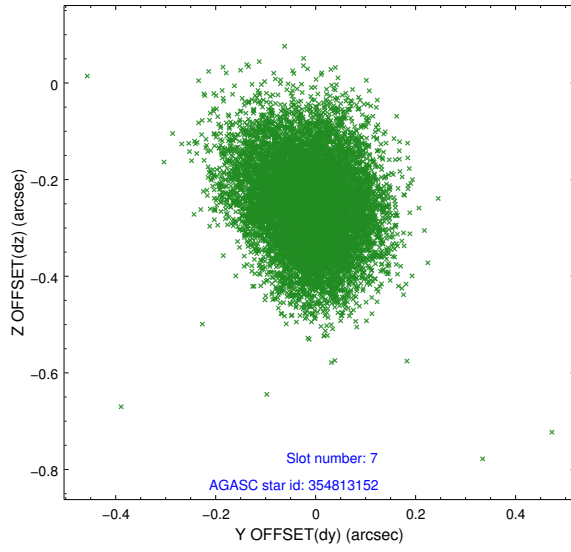
2.4.3 Slot 5



2.4.4 Slot 6

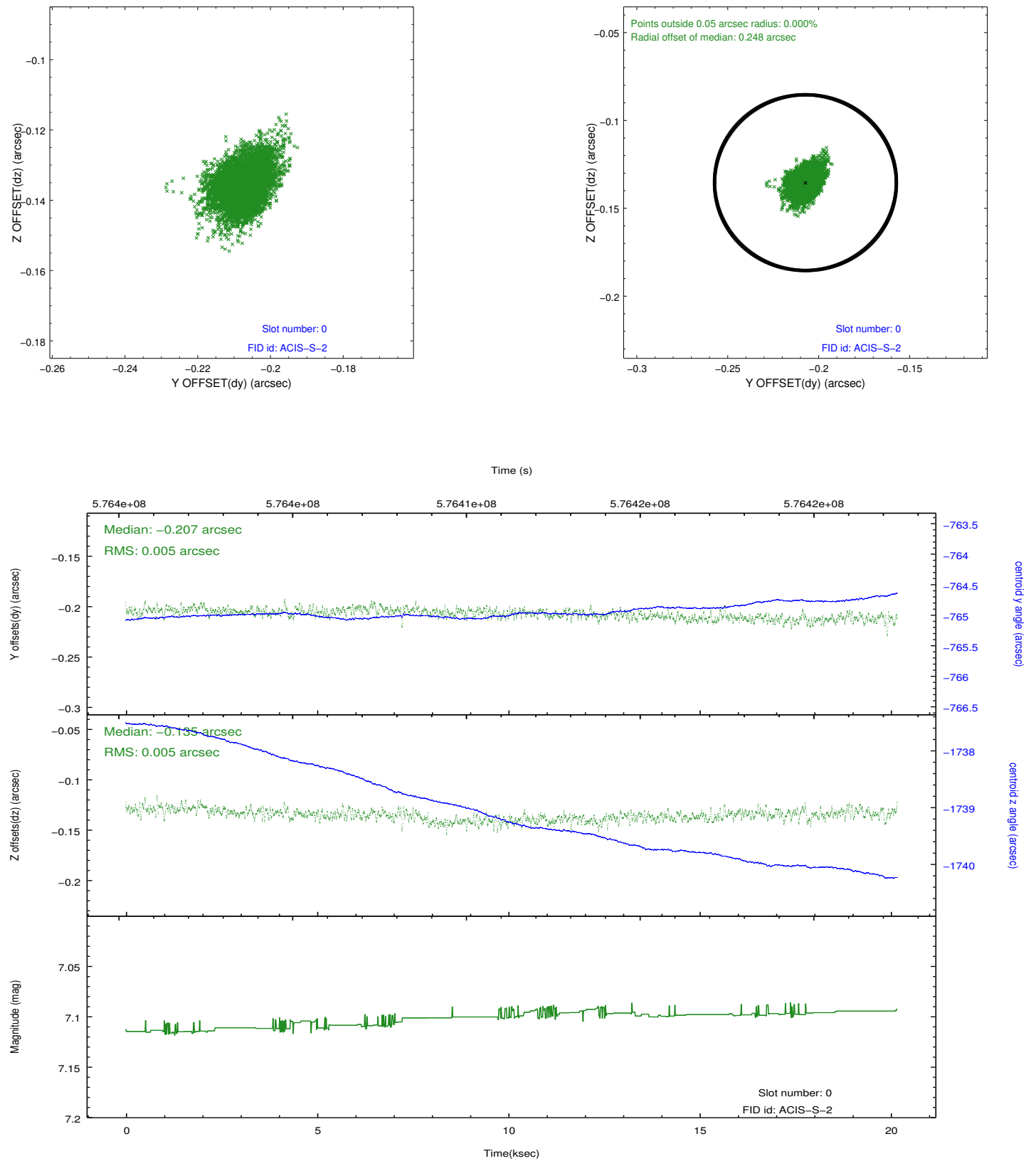


2.4.5 Slot 7

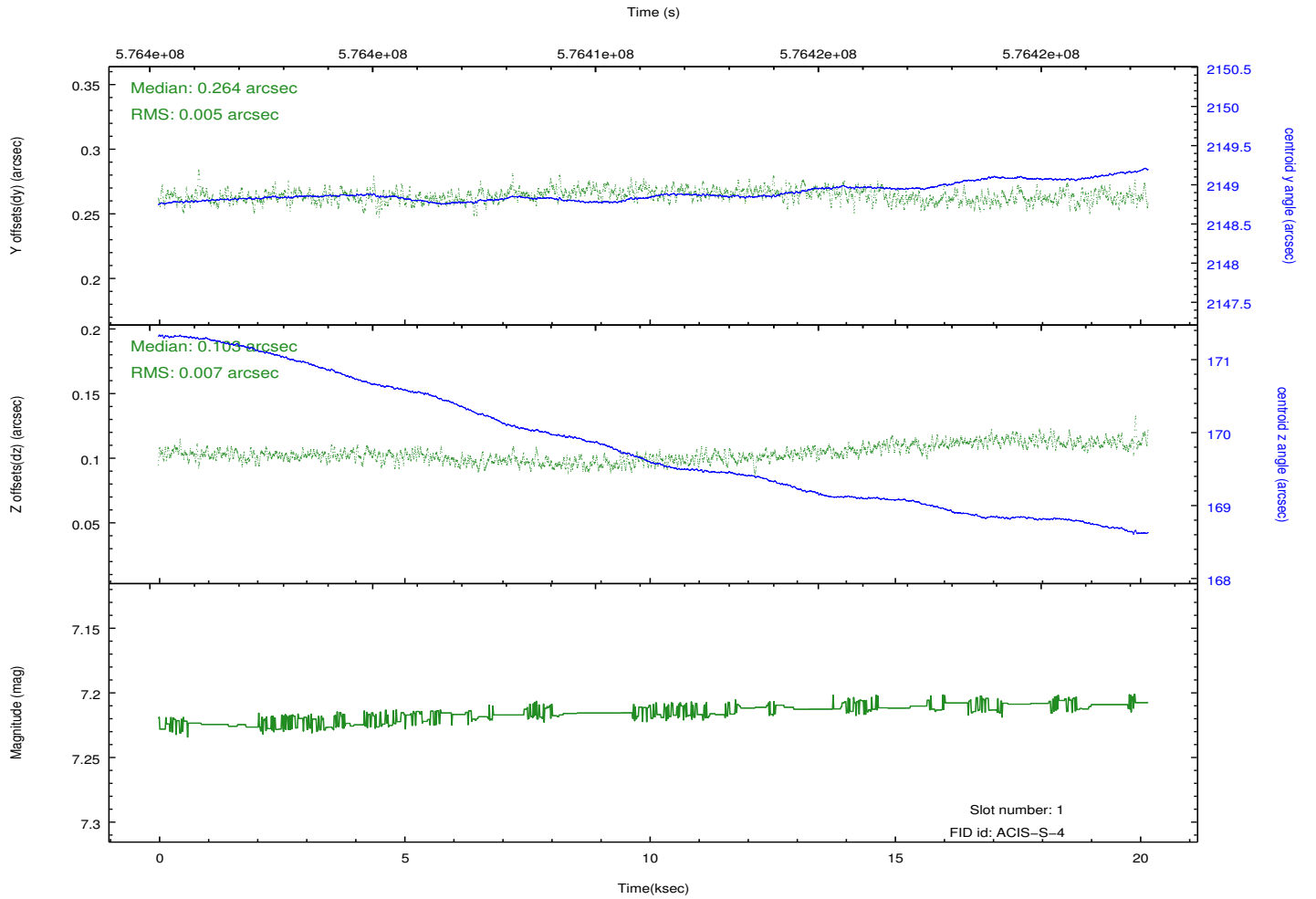
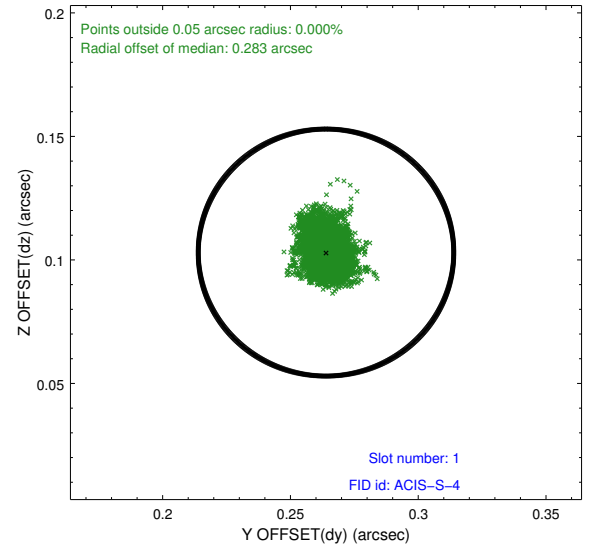
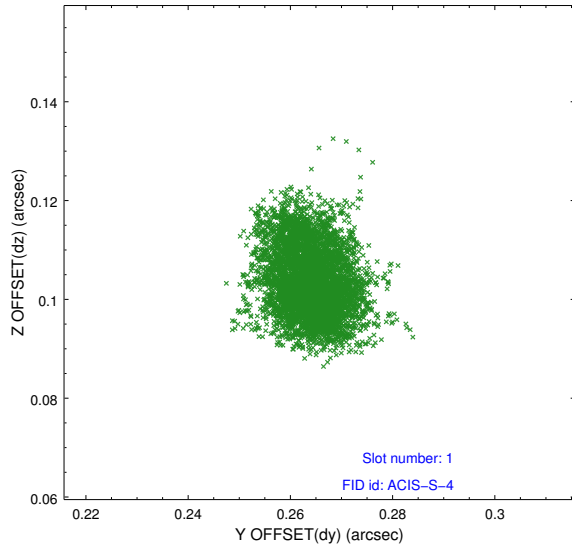


2.5 FID Slots

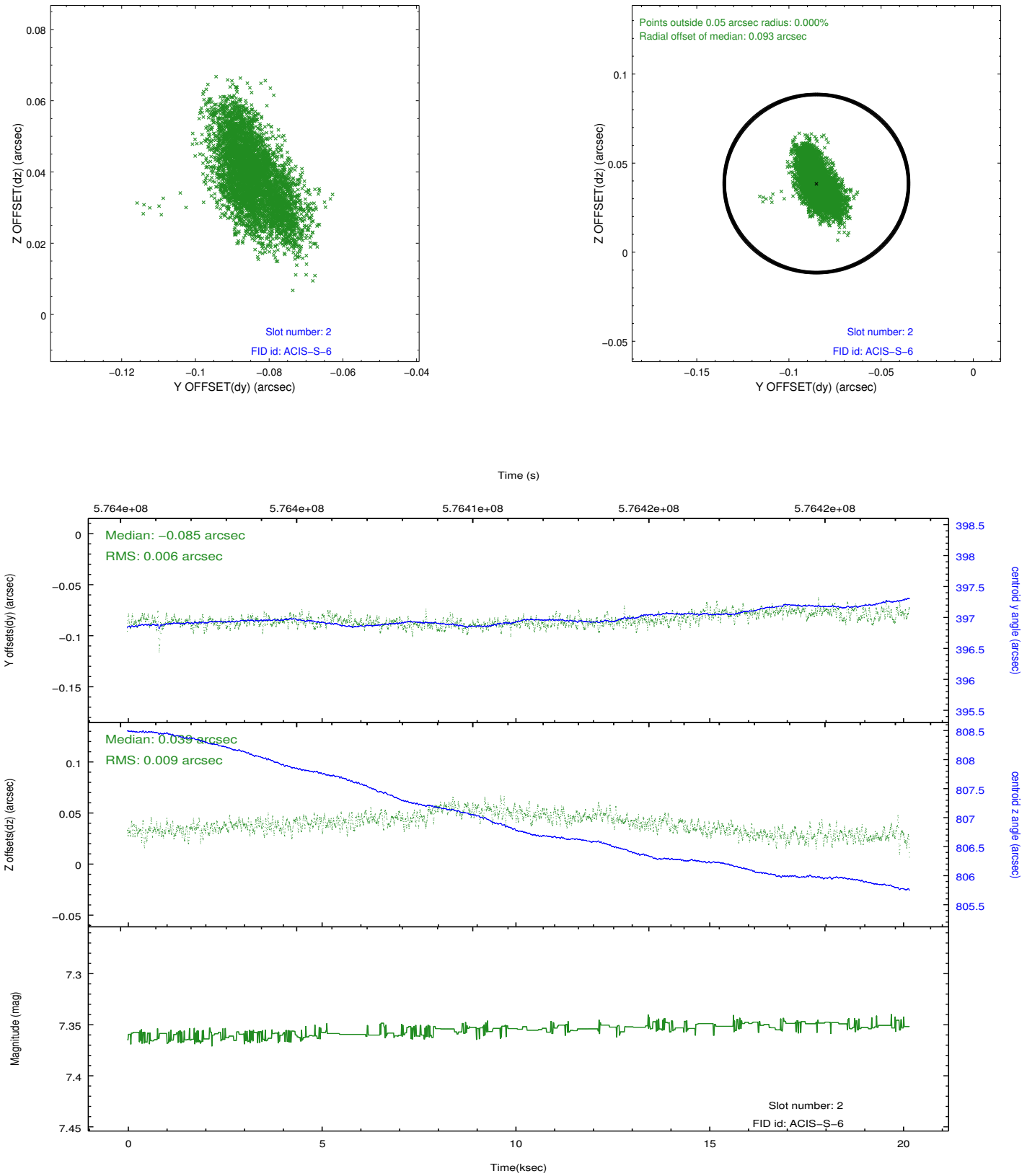
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2016.04.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	19.926400296926

A.2 Comments