

V&V Reference Report

L2 ASCDS Version : 10.4.1

Observation 16751 - L2 Version 1
Chandra X-Ray Center

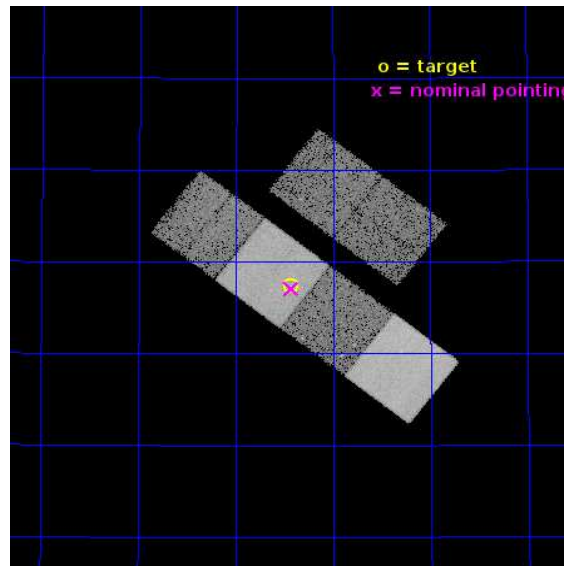
L2 Processing Date : Sep 17 2015

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1 Front

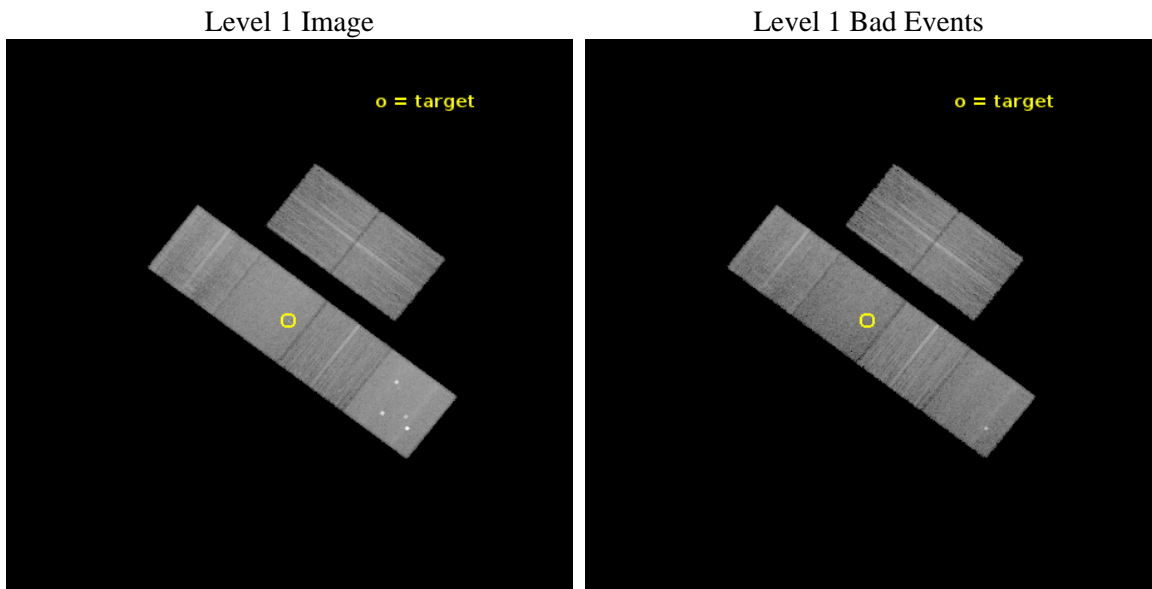
seq_num	401673	Sequence number
obs_id	16751	Observation id
title	What is the Orbital Period of the Hierarchical Triple Candidate 4U 2129+47?	Proposal title
observer	MIke Nowak	Principal investigator
object	4U 2129+47	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	322.859167	Observer's specified target RA [deg]
dec_targ	47.29	Observer's specified target Dec [deg]
ra_nom	322.85731692508	Nominal RA [deg]
dec_nom	47.284686685975	Nominal Dec [deg]
roll_nom	217.56968068236	Nominal Roll [deg]
revision	1	Processing version of data
ontime	19957.211635947	Sum of GTIs [s]
livetime	19704.501405423	Livetime [s]
ontime2	19957.252675891	Sum of GTIs [s]
ontime3	19953.847435474	Sum of GTIs [s]
ontime5	19957.170595884	Sum of GTIs [s]
ontime6	19957.129555941	Sum of GTIs [s]
ontime7	19957.211635947	Sum of GTIs [s]
ontime8	19957.047475934	Sum of GTIs [s]
l2events	176737	Number of level 2 events



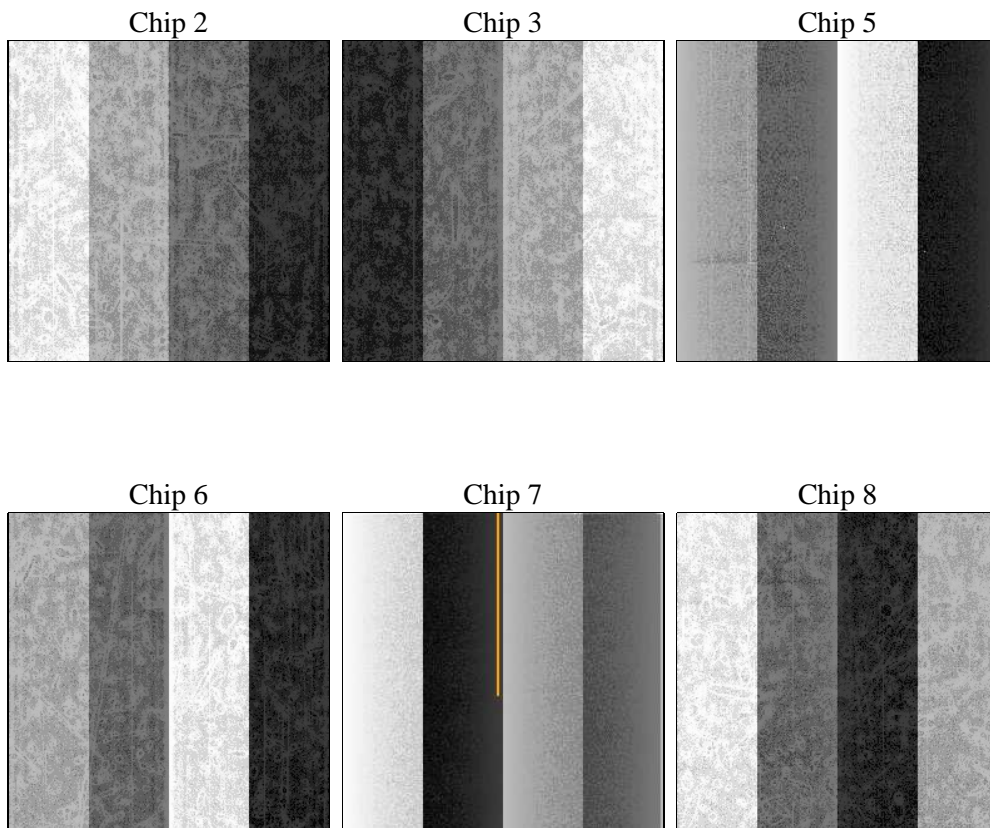
2 OBI

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	10.4.1	Processing system revision	ontime	19957.211635947	Sum of GTIs [s]
caldbver	4.6.8	 	ontime2	19957.252675891	Sum of GTIs [s]
date	2015-09-17T03:48:39	Date and time of file creation	ontime3	19953.847435474	Sum of GTIs [s]
revision	1	Processing version of data	ontime5	19957.170595884	Sum of GTIs [s]
			ontime6	19957.129555941	Sum of GTIs [s]
			ontime7	19957.211635947	Sum of GTIs [s]
			ontime8	19957.047475934	Sum of GTIs [s]
			l1events	784477	Number of level 1 events

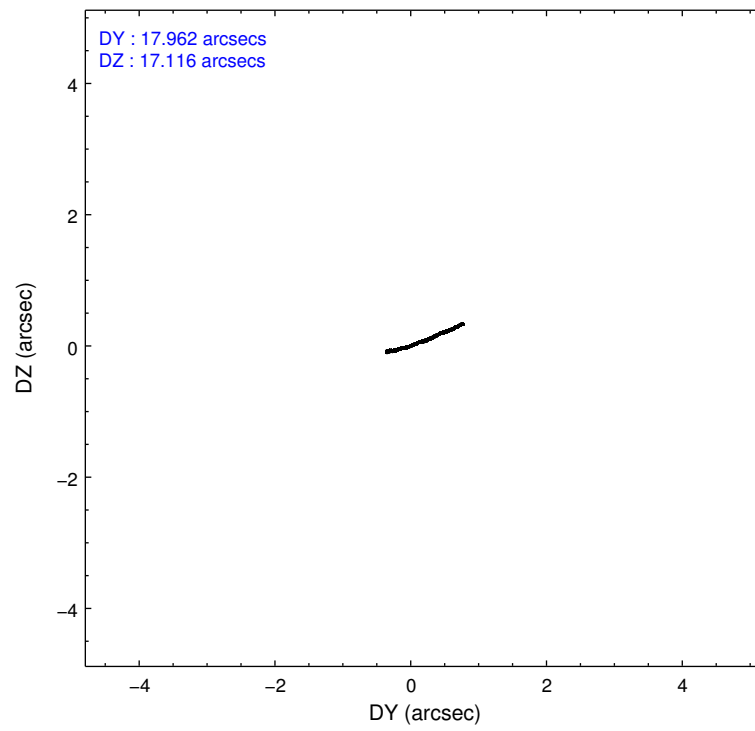
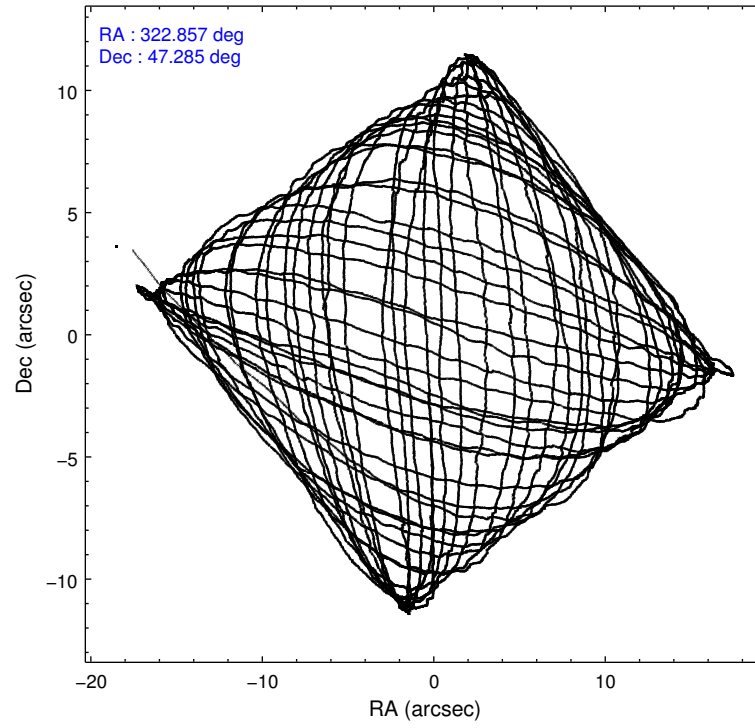
2.1.4 Events

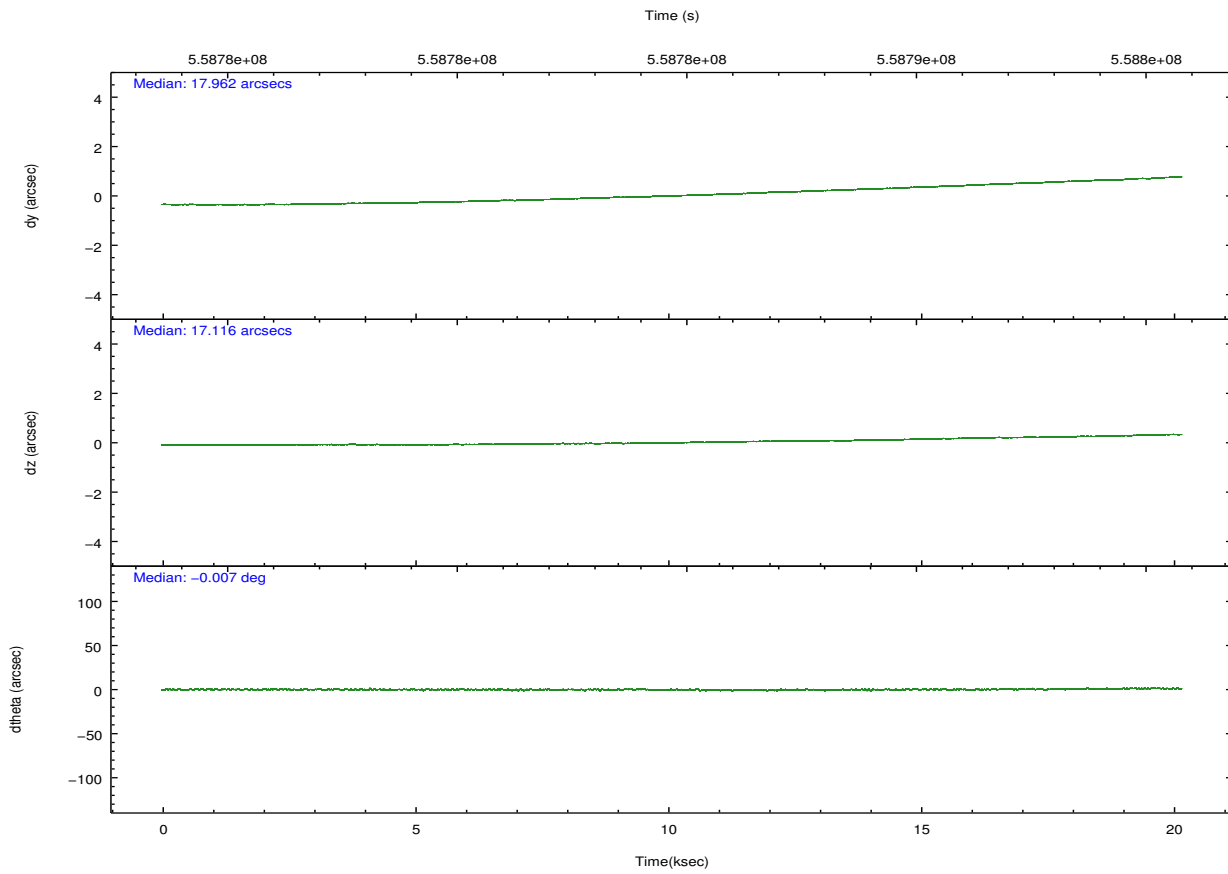
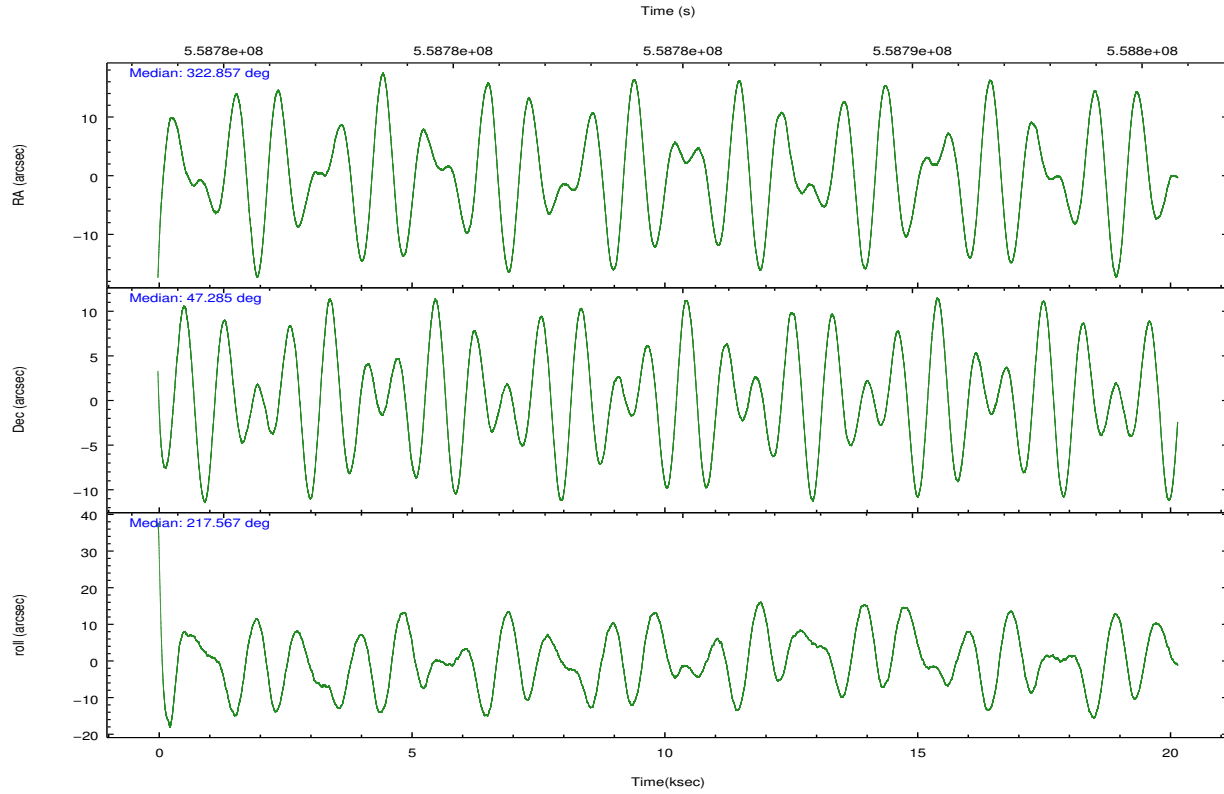
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	107029	98966	187219	114082	140103	137078	grade 0 events	3968	3884	17314	4138	4860	9410
rejected events	95827	88058	90885	101522	80496	103230		3%	3%	9%	3%	3%	6%
rejected %	89%	88%	48%	88%	57%	75%	grade 1 events	65	40	1386	50	174	100
								0%	0%	0%	0%	0%	0%
							grade 2 events	2631	2310	27762	2949	12619	8202
								2%	2%	14%	2%	9%	5%
							grade 3 events	1158	1189	3498	1189	4625	3533
								1%	1%	1%	1%	3%	2%
							grade 4 events	1147	1138	2461	1174	4486	3211
								1%	1%	1%	1%	3%	2%
							grade 5 events	4246	5181	10955	4986	13419	7662
								3%	5%	5%	4%	9%	5%
							grade 6 events	2301	2387	45317	3112	33028	9492
								2%	2%	24%	2%	23%	6%
							grade 7 events	91513	82837	78526	96484	66892	95468
								85%	83%	41%	84%	47%	69%

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	322.872270	322.8573169250763	CCD I2 on	O1	Y
[deg] Pointing Dec	47.310218	47.28468668597525	CCD I3 on	O2	Y
[deg] Pointing Roll	217.402037	217.5696806823573	CCD S0 on	N	N
[s] Window start time (MET)	557020868.184000	557020868.184000	CCD S1 on	O4	Y
[s] Window stop time (MET)	562550468.184000	562550468.184000	CCD S2 on	O5	Y
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S3 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S4 on	O3	Y
[mm] SIM translation stage pos	-190.132523	-190.1425803651734	CCD S5 on	N	N
[mm] SIM translation stage offset	0	0.01005778216563158	Number of optional ACIS chips dropped	0	0
Phase constraints	Y	Y	On-chip summing requested	N	N
[d] Phase period	0.218260	0.218260	Subarray requested	NONE	NONE
[d] Phase epoch (MJD)	57295.185510	57295.185510	Alternating exposures requested	N	N
Phase start	0.636300	0.636300	[s] Primary exposure time	0.000000	3.2
Phase end	0.363700	0.363700			
Phase start error	0.053000	0.053000			
Phase end error	0.053000	0.053000			
[s] Observation start time (MET)	558774733.184000	558773335.26633			
Observation start date	2015-09-16T07:11:05	2015-09-16T06:48:55			
[s] Observation end time (MET)	558794733.184000	558795256.43007			

2.3 Aspect





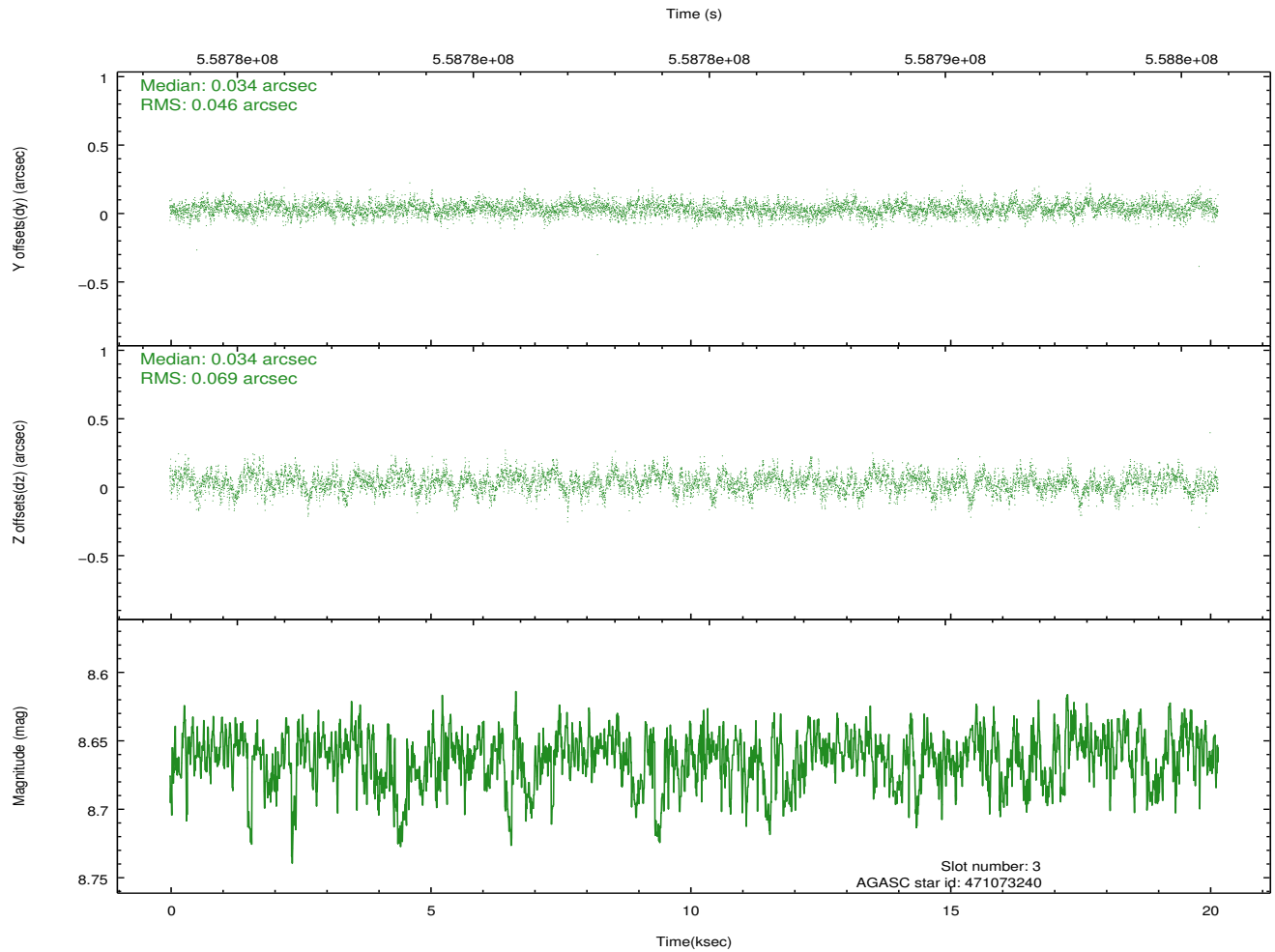
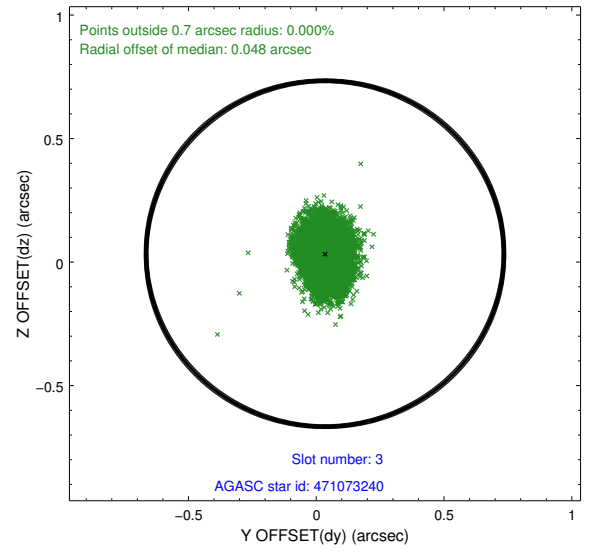
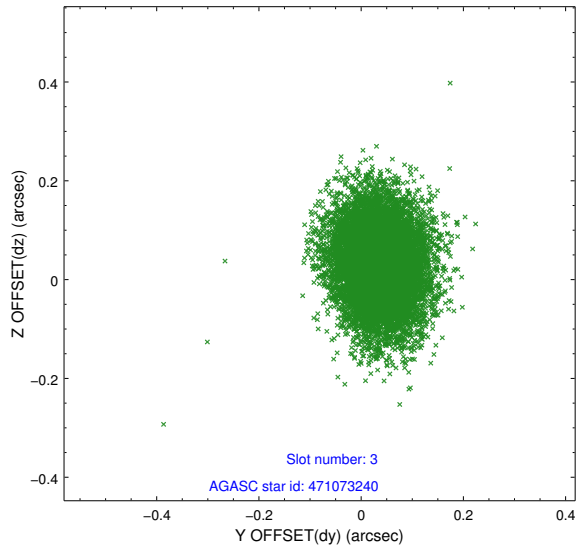
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-1	7.23	4919	0.185	-0.136	0.017	0.032	0.000000	0.000000	925.18	-1734.28
1	FID		ACIS-S-5	7.26	4919	-0.287	0.110	0.009	0.015	0.000000	0.000000	-1824.23	163.25
2	FID		ACIS-S-6	7.36	4919	0.079	0.035	0.016	0.031	0.000000	0.000000	390.37	807.40
3	GUIDE	used	471073240	8.66	9833	0.034	0.034	0.087	0.147	322.948313	47.442940	-437.00	-266.90
4	GUIDE	used	471076944	8.95	9835	0.169	-0.003	0.102	0.169	323.173612	47.958519	-1996.17	-1413.54
5	GUIDE	used	471086376	8.63	9834	-0.276	-0.332	0.103	0.166	322.863278	47.262479	121.83	122.96
6	GUIDE	used	471091056	8.83	9838	-0.024	0.113	0.126	0.192	323.297085	47.790378	-1867.40	-751.03
7	GUIDE	used	471093808	9.14	9834	0.103	0.193	0.119	0.198	322.810499	47.588788	-489.61	-887.46

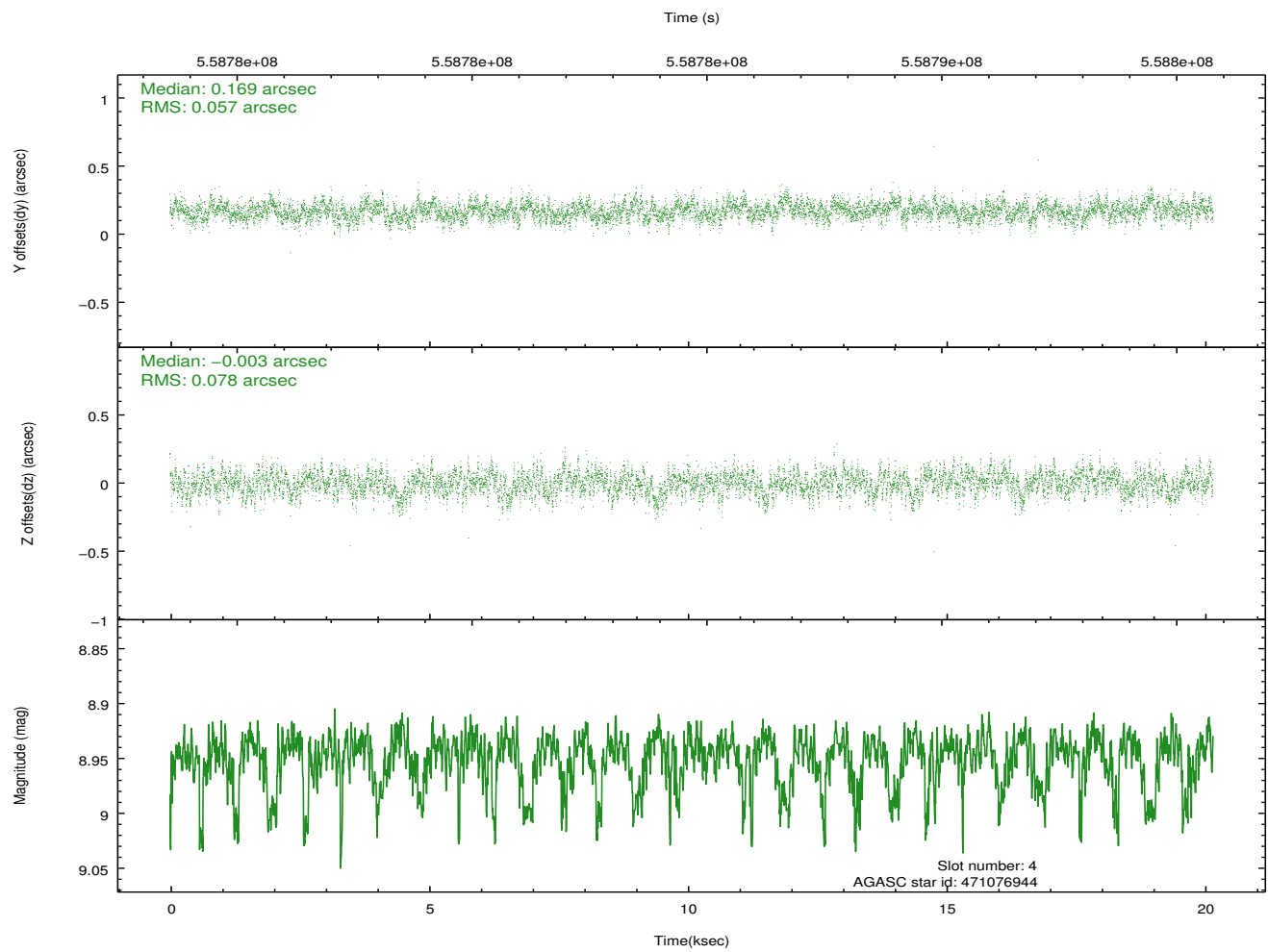
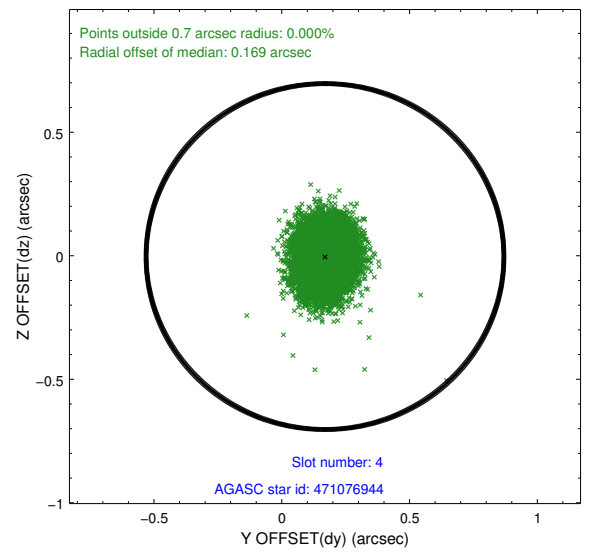
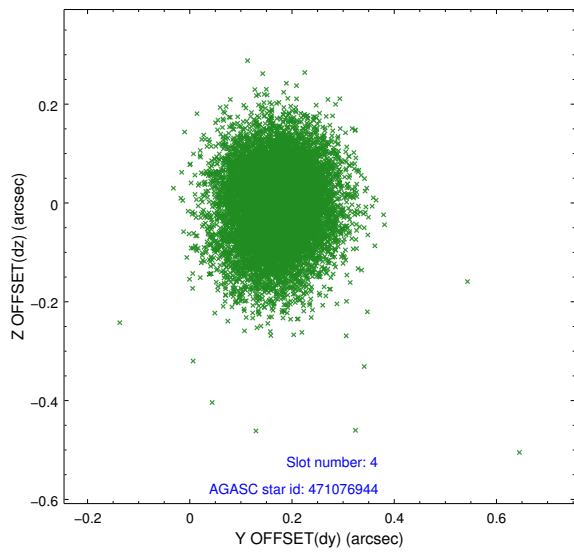
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2.4 Star Slots

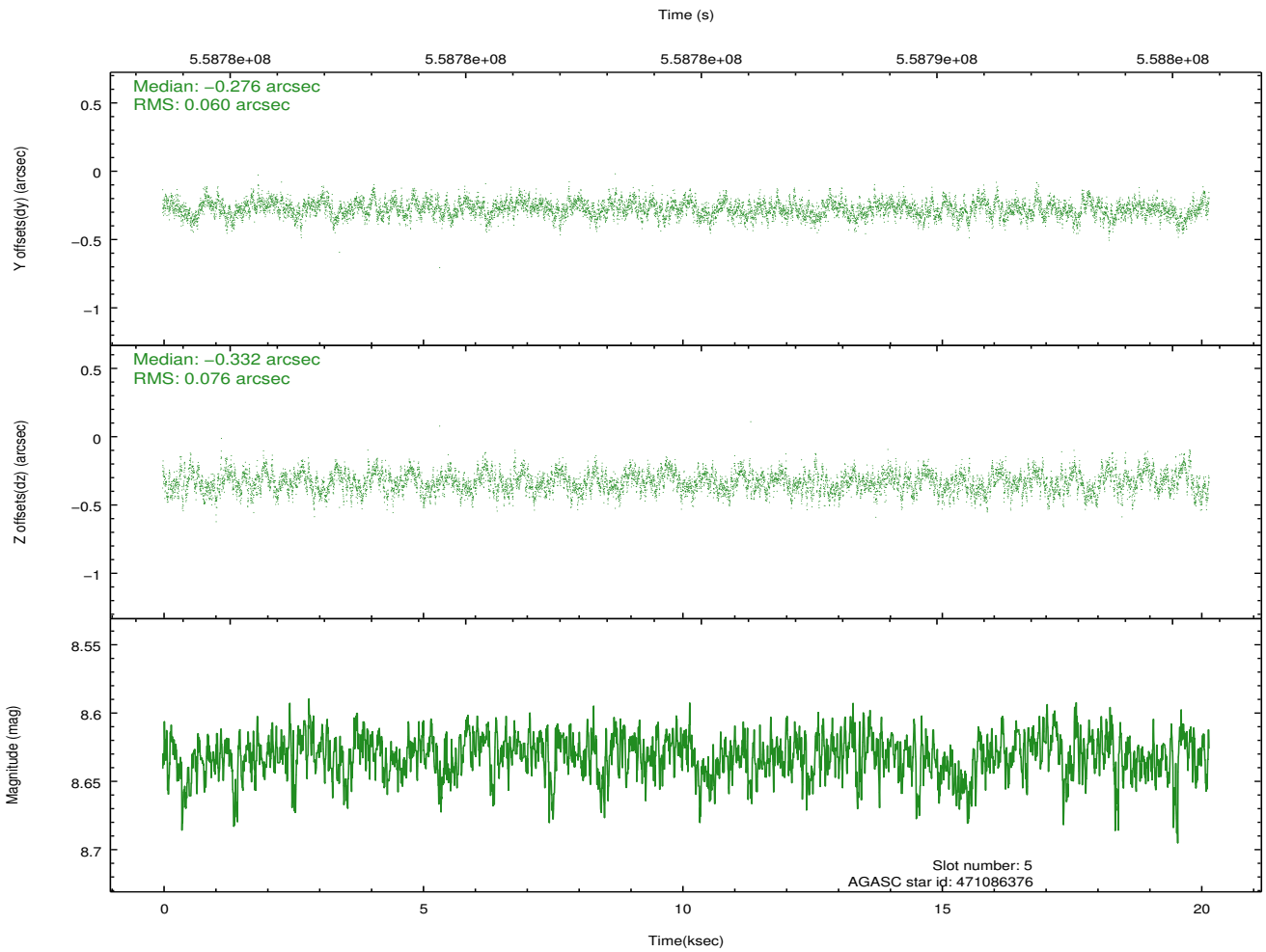
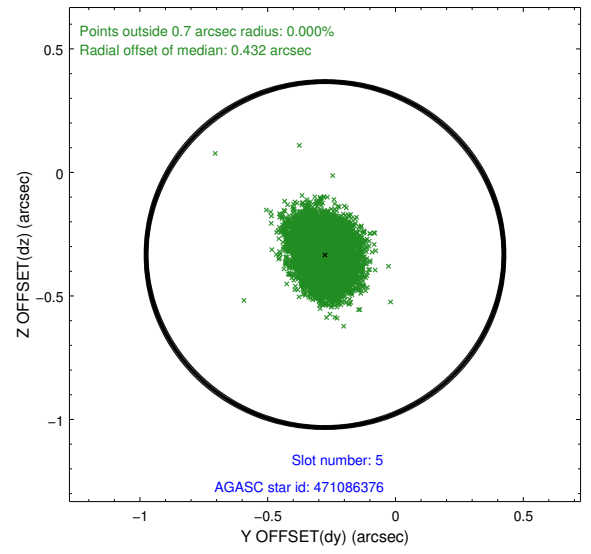
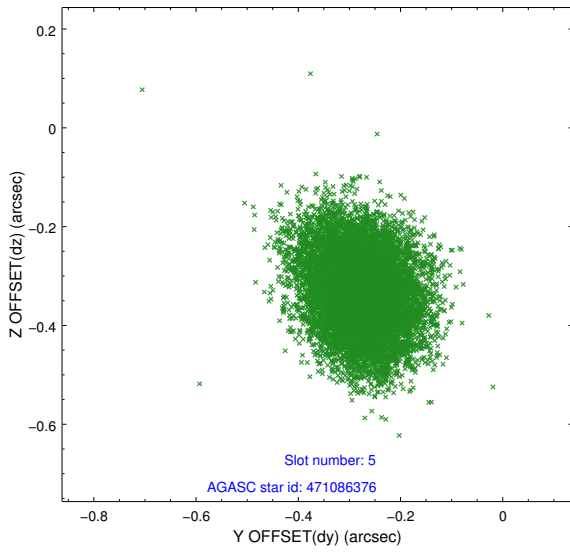
2.4.1 Slot 3



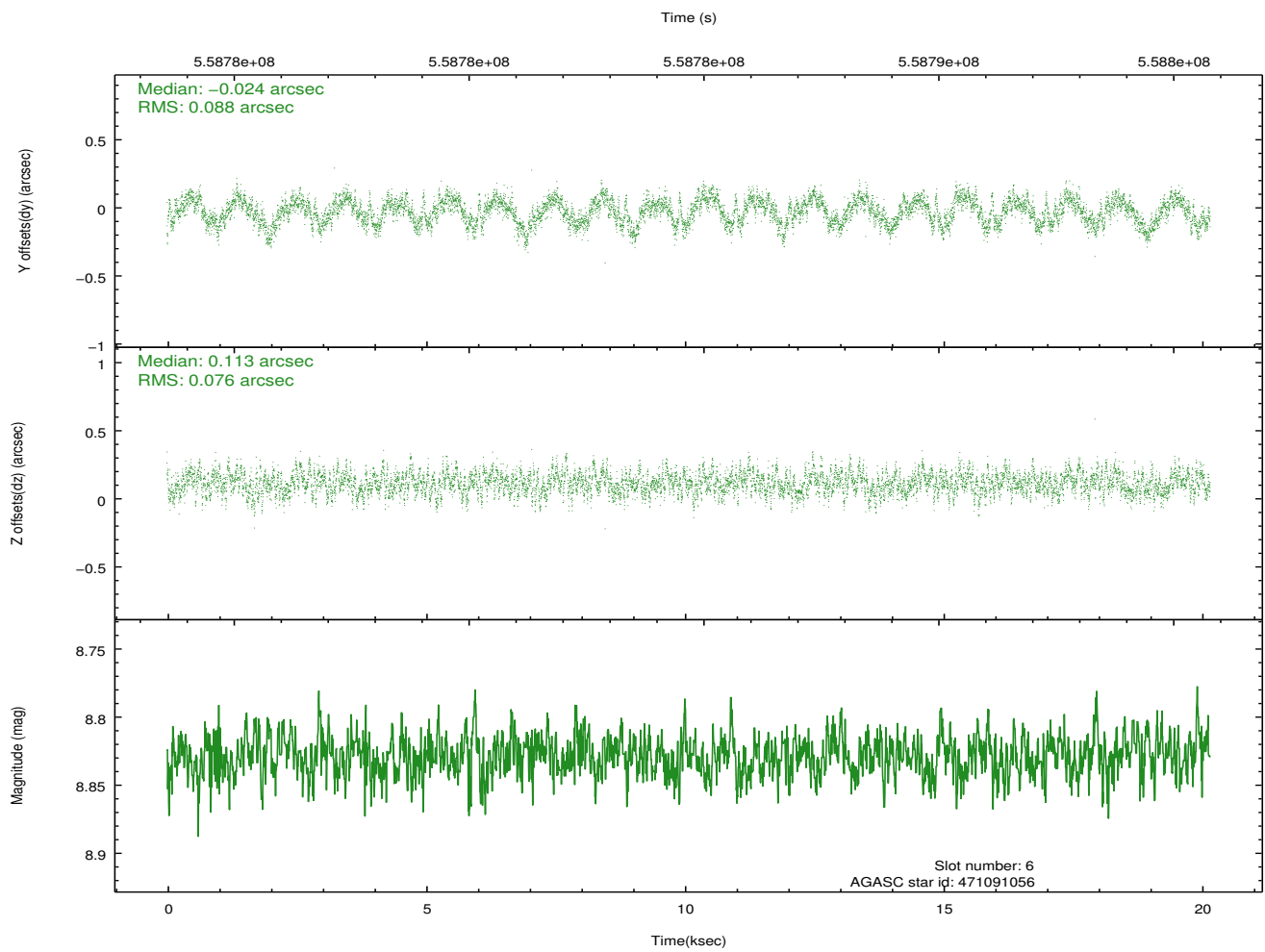
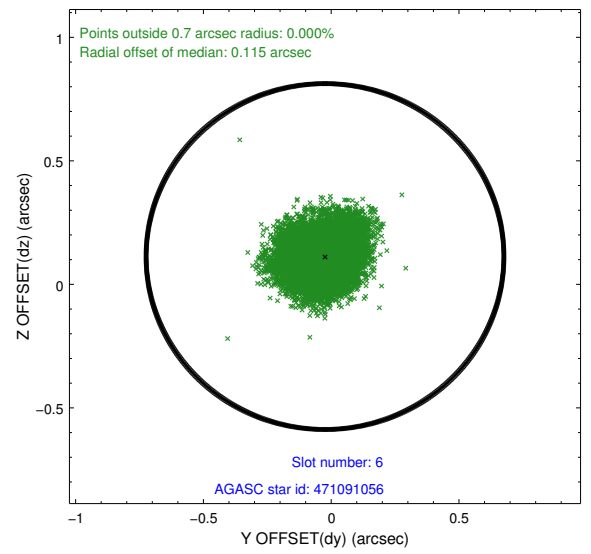
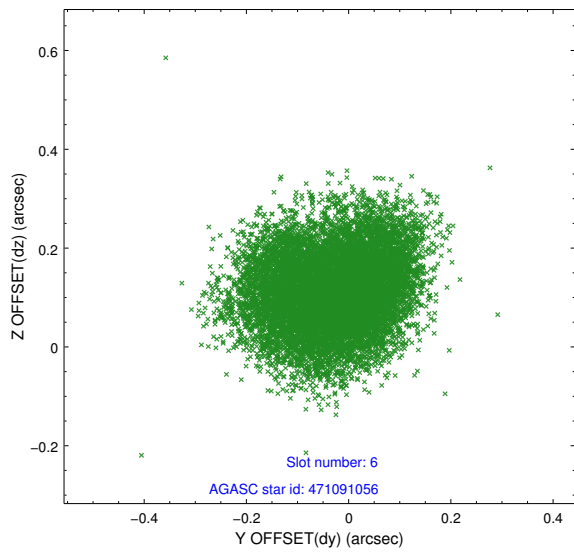
2.4.2 Slot 4



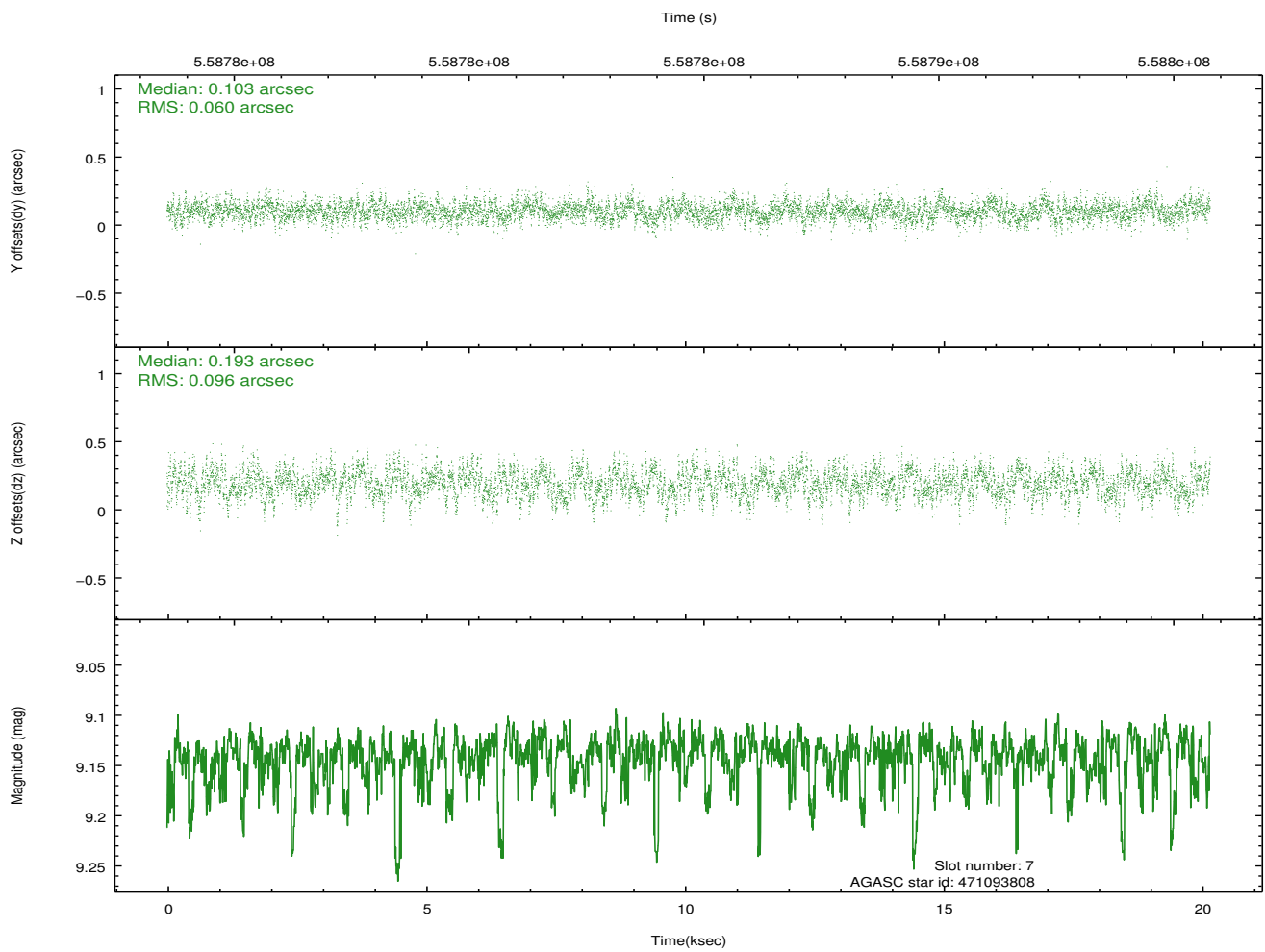
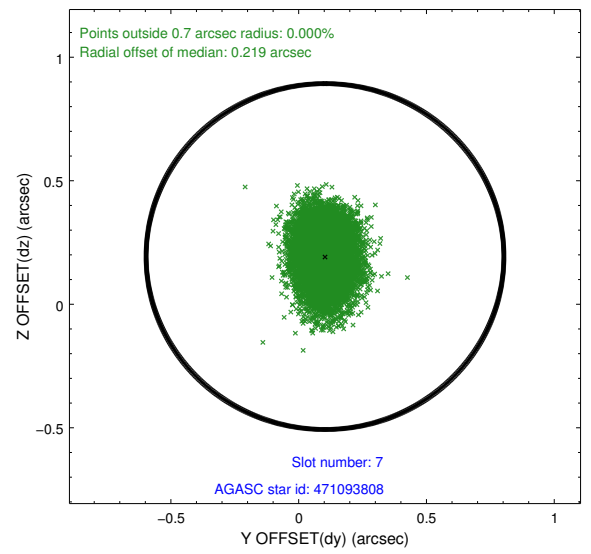
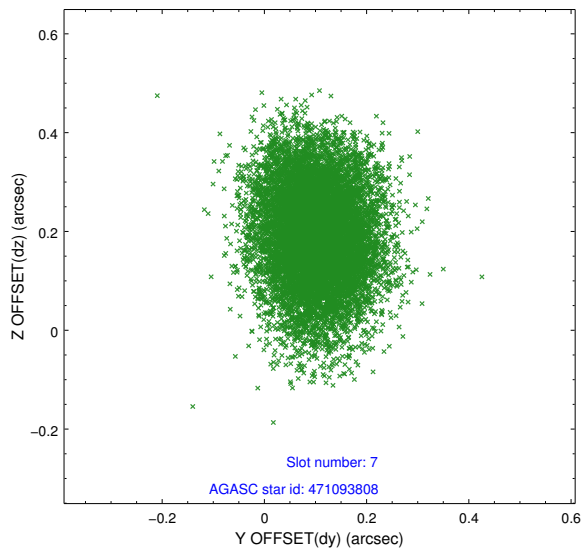
2.4.3 Slot 5



2.4.4 Slot 6

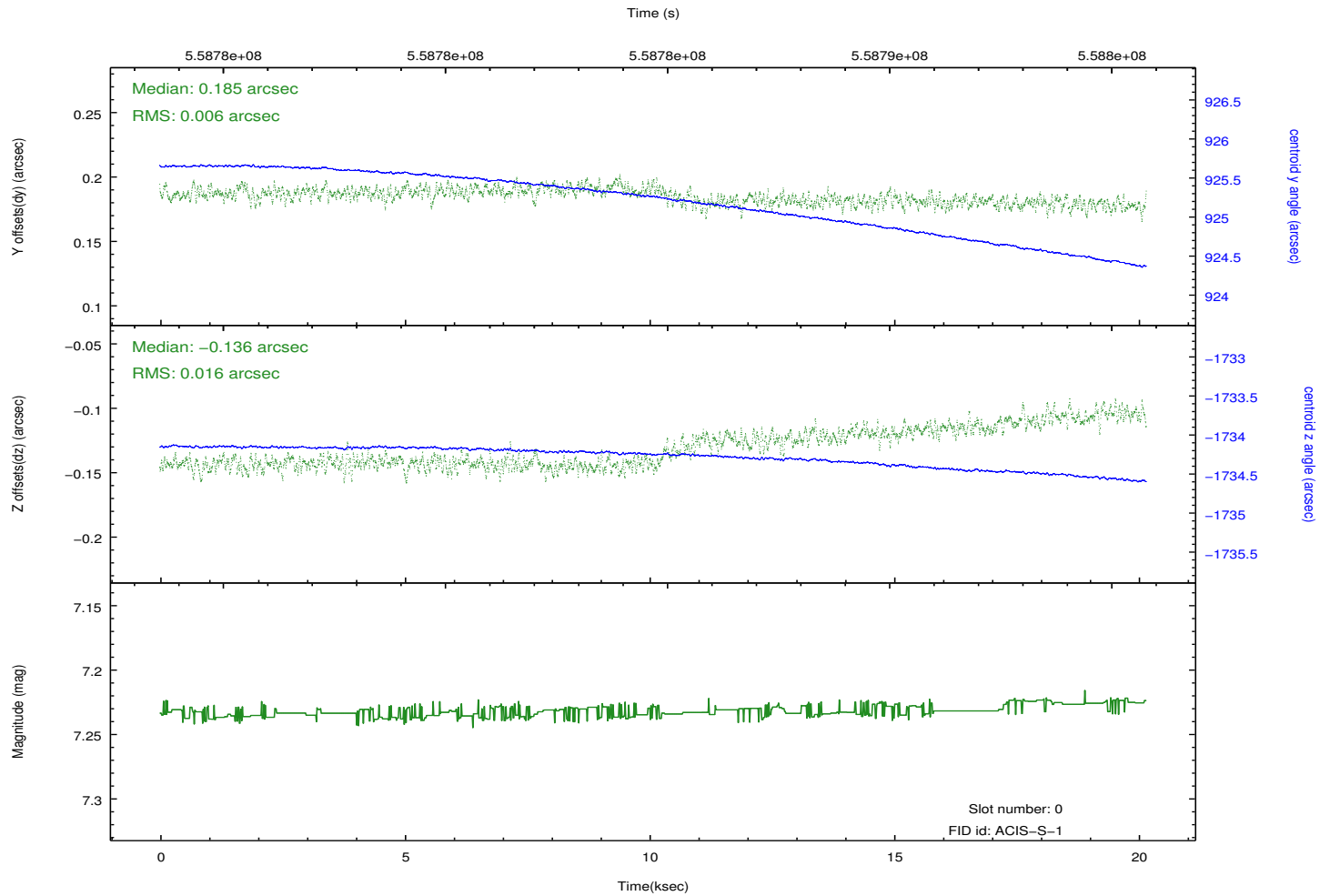
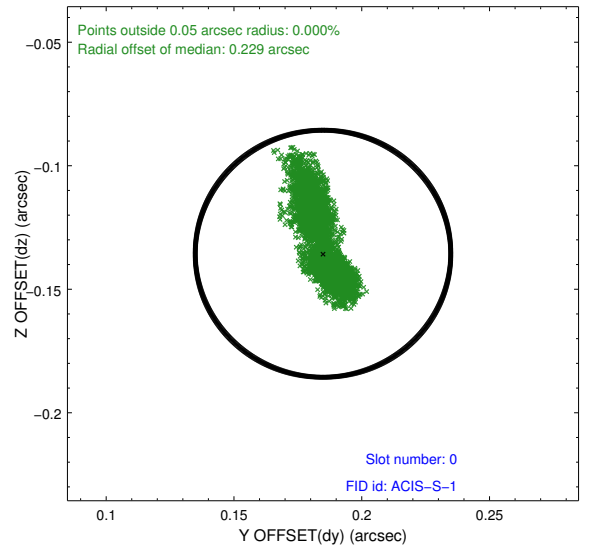
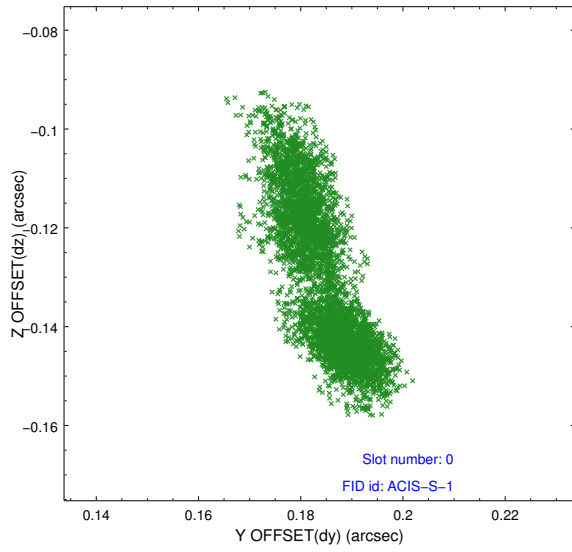


2.4.5 Slot 7

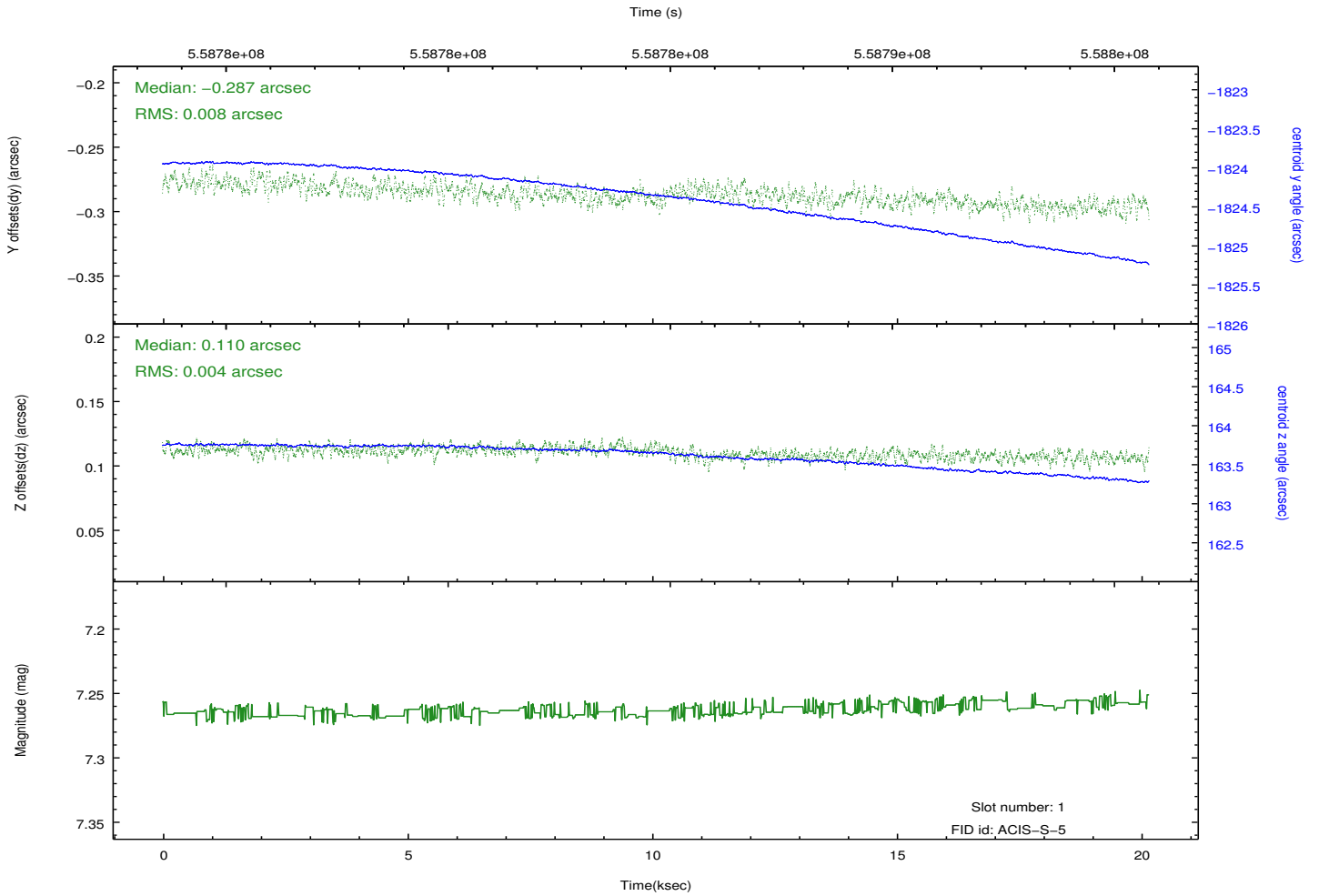
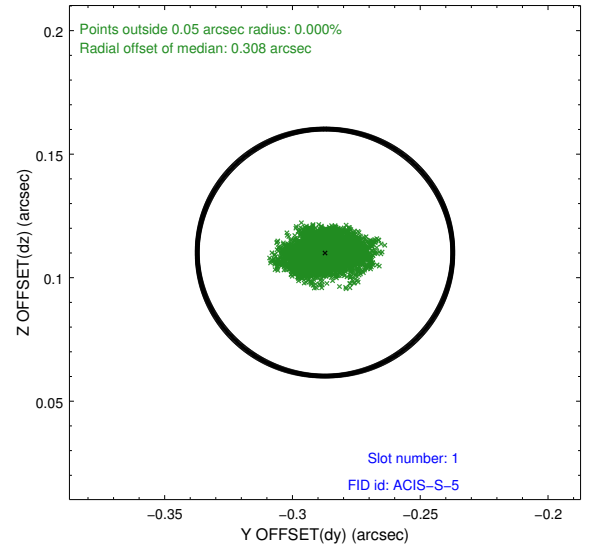
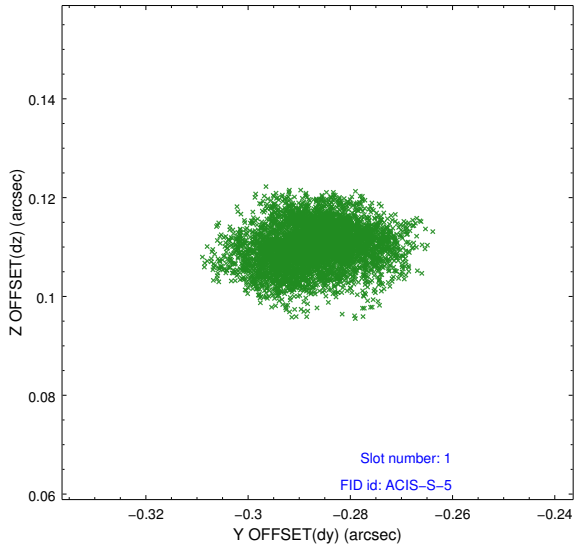


2.5 FID Slots

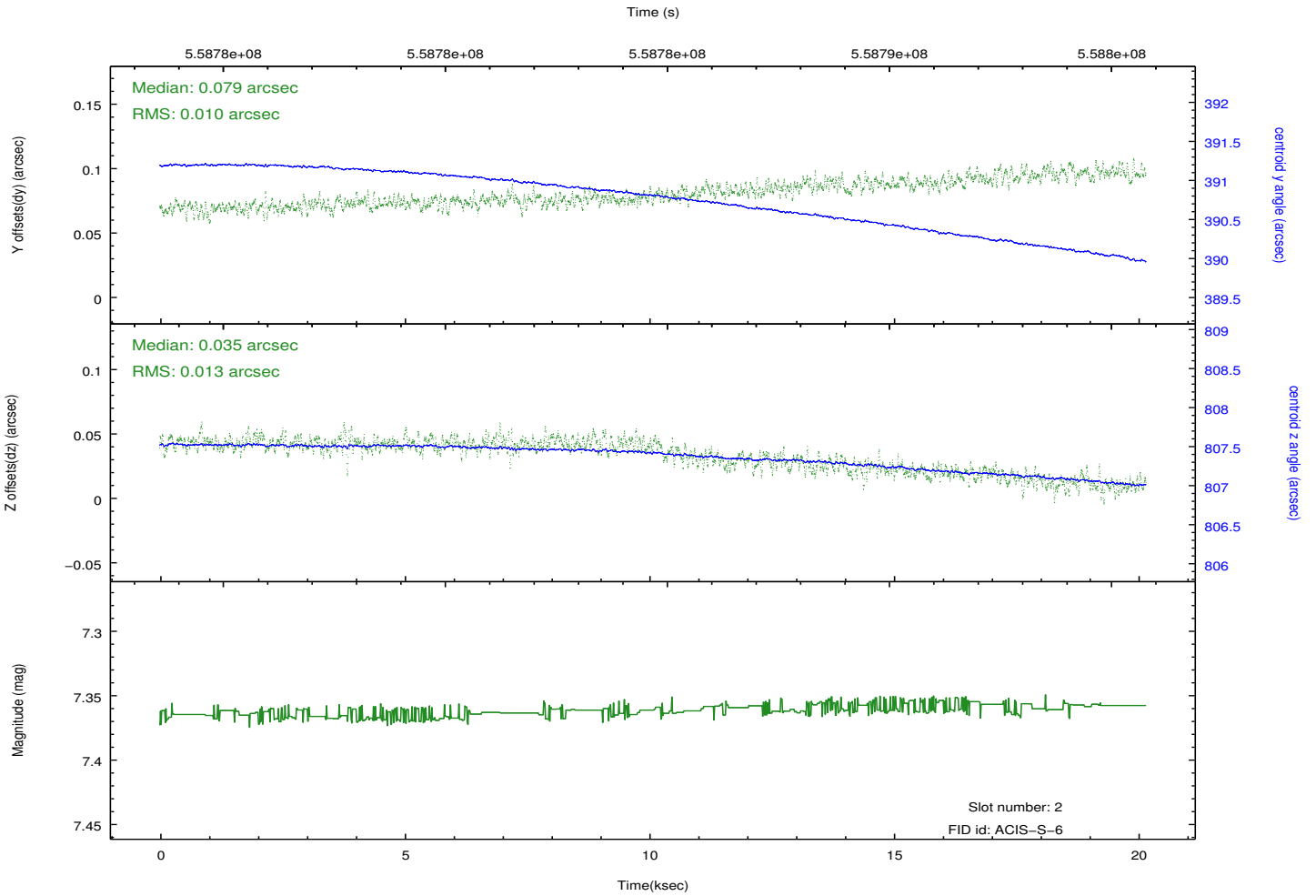
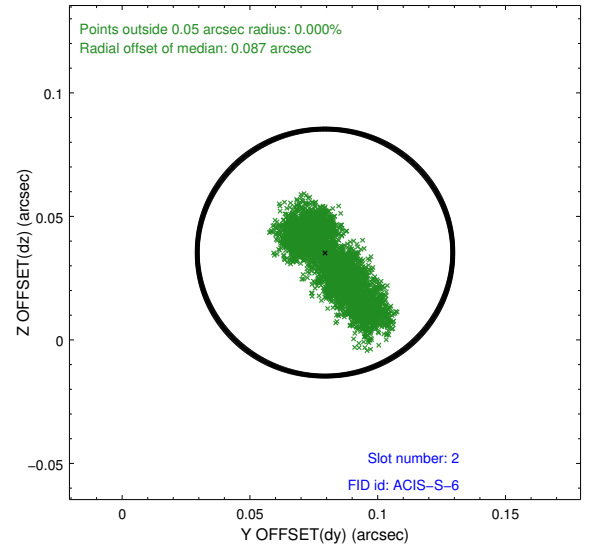
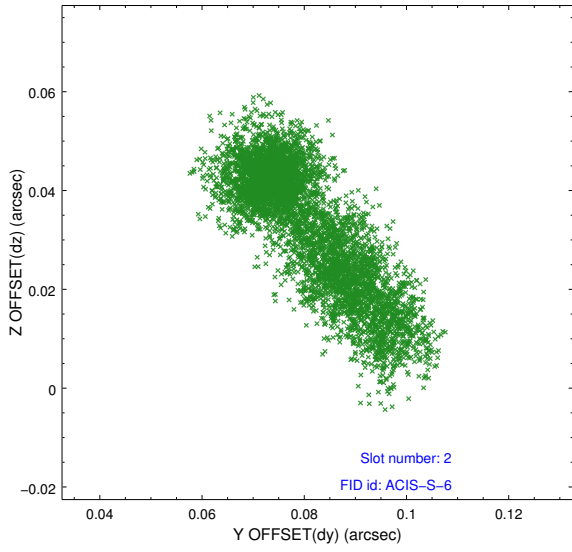
2.5.1 Slot 0



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)	2015.09.17
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	19.957211635947

A.2 Comments