

V&V Reference Report

L2 ASCDS Version : 10.5.2

Observation 18243 - L2 Version 1
Chandra X-Ray Center

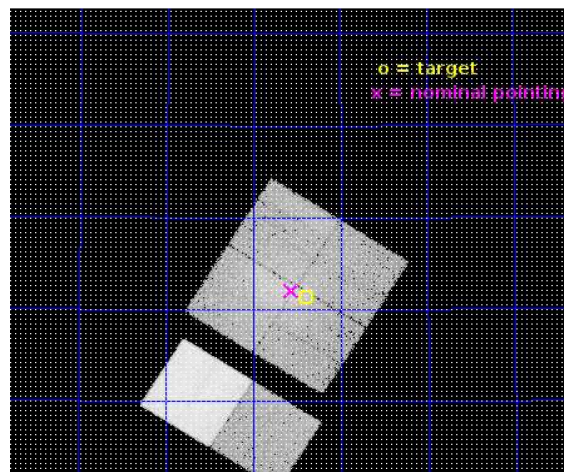
L2 Processing Date : Oct 27 2016

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1 Front

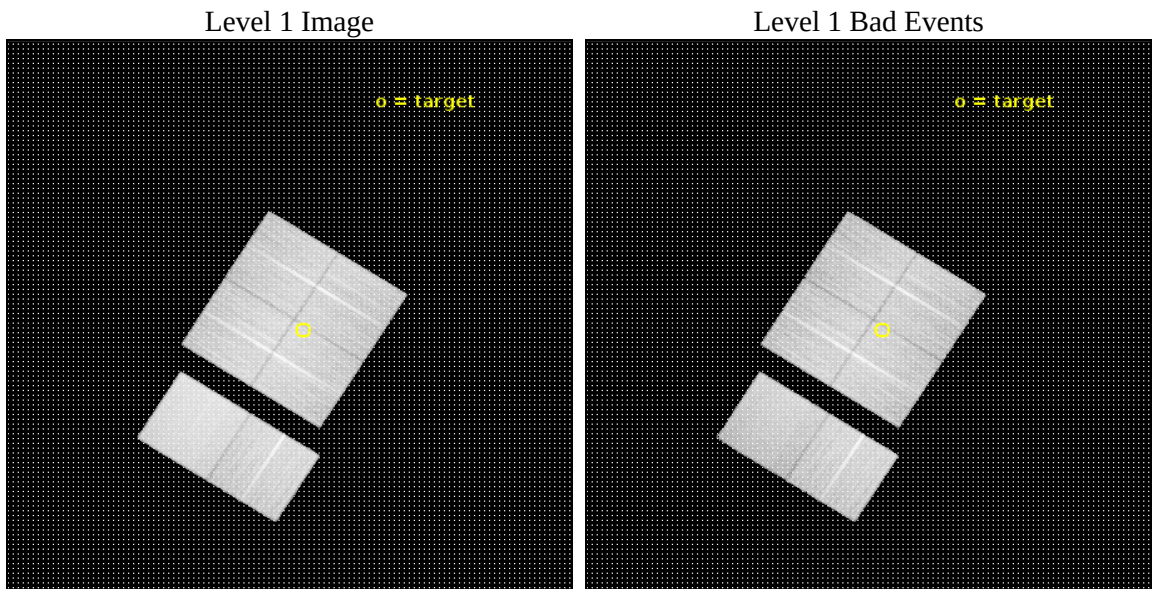
seq_num	801568	Sequence number
obs_id	18243	Observation id
title	A Shock in the Cluster ZwCl0008: A Direct Test of Particle Acceleration Models	Proposal title
observer	Dr Reinout van Weeren	Principal investigator
object	ZwCl 0008.8+5215	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	2.85	Observer's specified target RA [deg]
dec_targ	52.521667	Observer's specified target Dec [deg]
ra_nom	2.8913351067265	Nominal RA [deg]
dec_nom	52.53410551197	Nominal Dec [deg]
roll_nom	212.17588137215	Nominal Roll [deg]
revision	1	Processing version of data
ontime	30944.000461102	Sum of GTIs [s]
livetime	30552.168895023	Livetime [s]
ontime0	30940.759390831	Sum of GTIs [s]
ontime1	30944.000461102	Sum of GTIs [s]
ontime2	30944.000461102	Sum of GTIs [s]
ontime3	30944.000461102	Sum of GTIs [s]
ontime6	30944.000461102	Sum of GTIs [s]
ontime7	30944.000461102	Sum of GTIs [s]
l2events	221744	Number of level 2 events



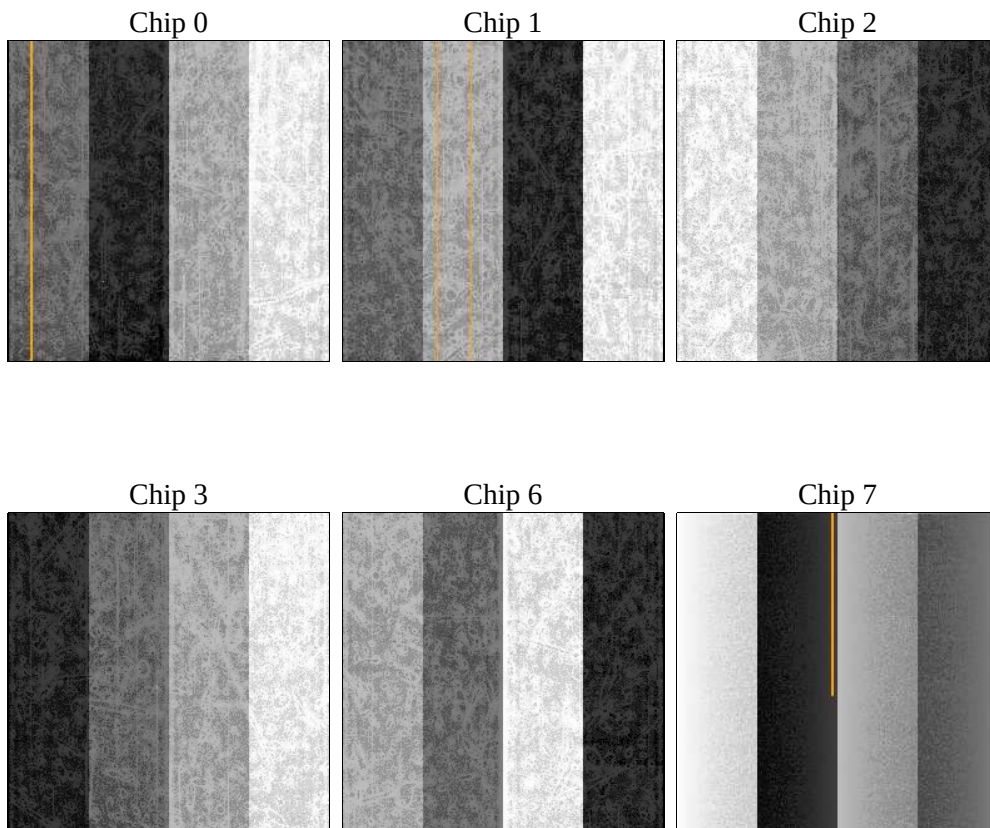
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	31000.000000	[s] Scheduled observation exposure time
ascdsver	10.5.2	Processing system revision	ontime	30944.000461102	Sum of GTIs [s]
caldsver	4.7.2	 	ontime0	30940.759390831	Sum of GTIs [s]
date	2016-10-27T04:41:43	Date and time of file creation	ontime1	30944.000461102	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	30944.000461102	Sum of GTIs [s]
			ontime3	30944.000461102	Sum of GTIs [s]
			ontime6	30944.000461102	Sum of GTIs [s]
			ontime7	30944.000461102	Sum of GTIs [s]
			l1events	1279644	Number of level 1 events

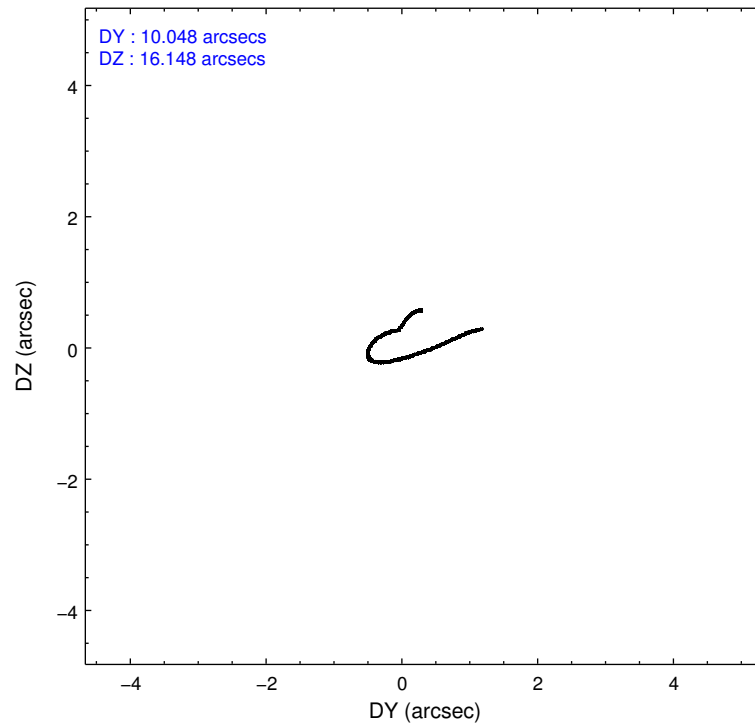
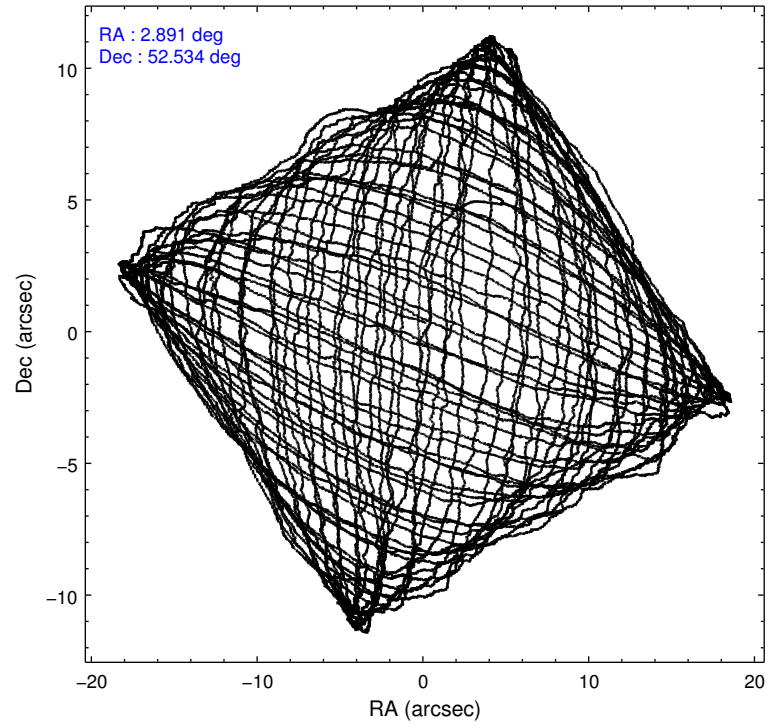
2.1.4 Events

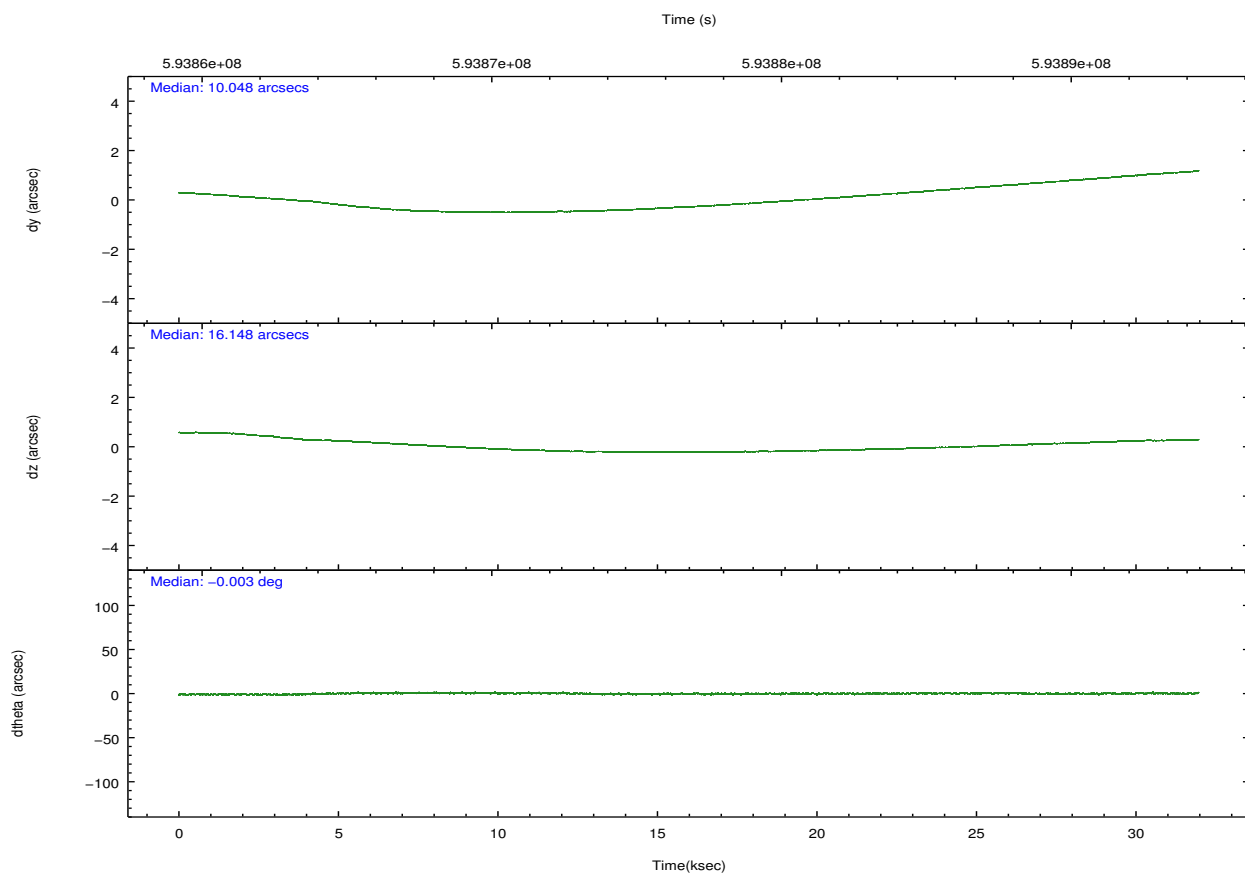
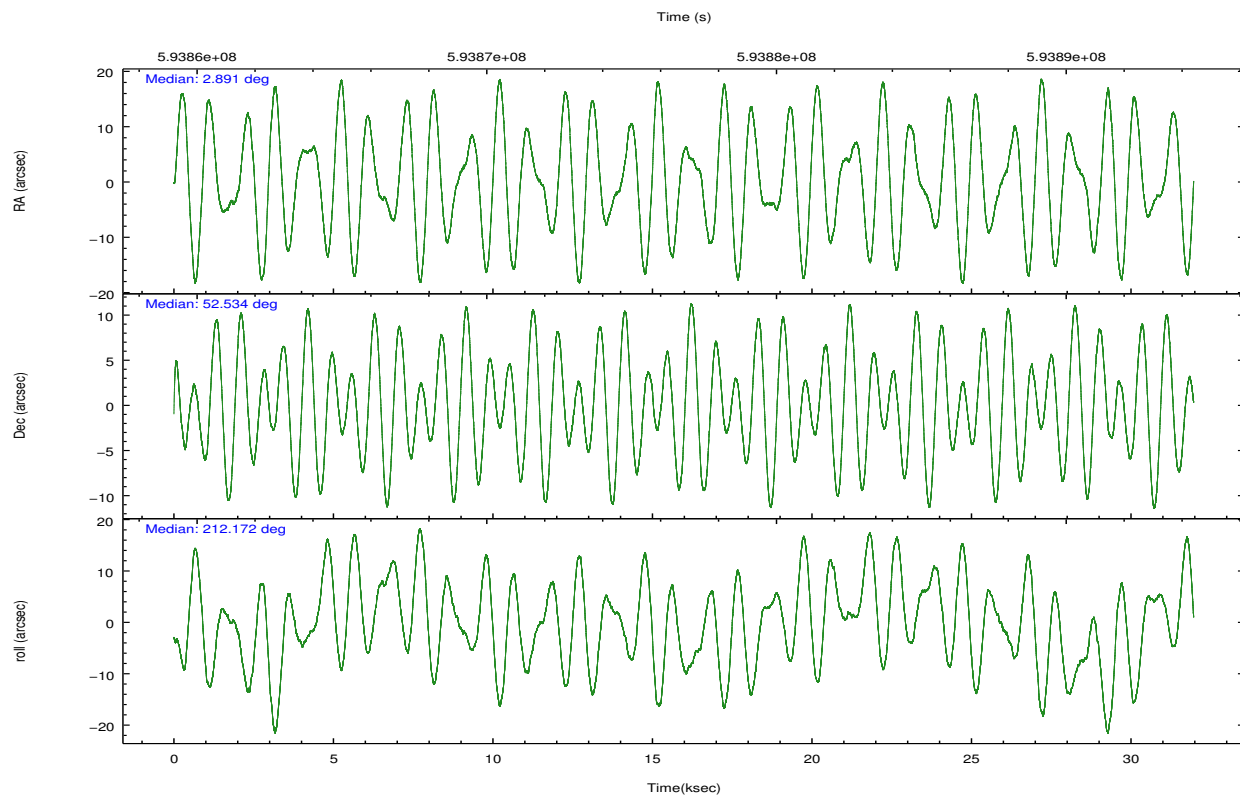
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	189091	190082	209289	210940	214143	266099	grade 0 events	8786	10172	9943	12979	7674	9604
rejected events	165323	163011	184692	182492	190729	150550		4%	5%	4%	6%	3%	3%
rejected %	87%	85%	88%	86%	89%	56%	grade 1 events	121	112	135	146	105	396
								0%	0%	0%	0%	0%	0%
							grade 2 events	5715	6288	5670	5626	5527	24371
								3%	3%	2%	2%	2%	9%
							grade 3 events	2298	2466	2306	2532	2290	9092
								1%	1%	1%	1%	1%	3%
							grade 4 events	2373	2412	2288	2481	2248	9054
								1%	1%	1%	1%	1%	3%
							grade 5 events	8707	9184	8186	9851	9888	26410
								4%	4%	3%	4%	4%	9%
							grade 6 events	4598	5735	4395	4833	5677	63439
								2%	3%	2%	2%	2%	23%
							grade 7 events	156493	153713	176366	172492	180734	123733
								82%	80%	84%	81%	84%	46%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	2.912384	2.891335106726501	CCD I2 on	Y	Y
[deg] Pointing Dec	52.558562	52.53410551197025	CCD I3 on	Y	Y
[deg] Pointing Roll	211.950488	212.1758813721466	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	O2	Y
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	O1	Y
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	593861783.184000	593859796.26842	CCD S5 on	N	N
Observation start date	2016-10-26T09:35:15	2016-10-26T09:03:16	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	593892783.184000	593893719.67038	On-chip summing requested	N	N
Observation end date	2016-10-26T18:11:55	2016-10-26T18:28:39	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



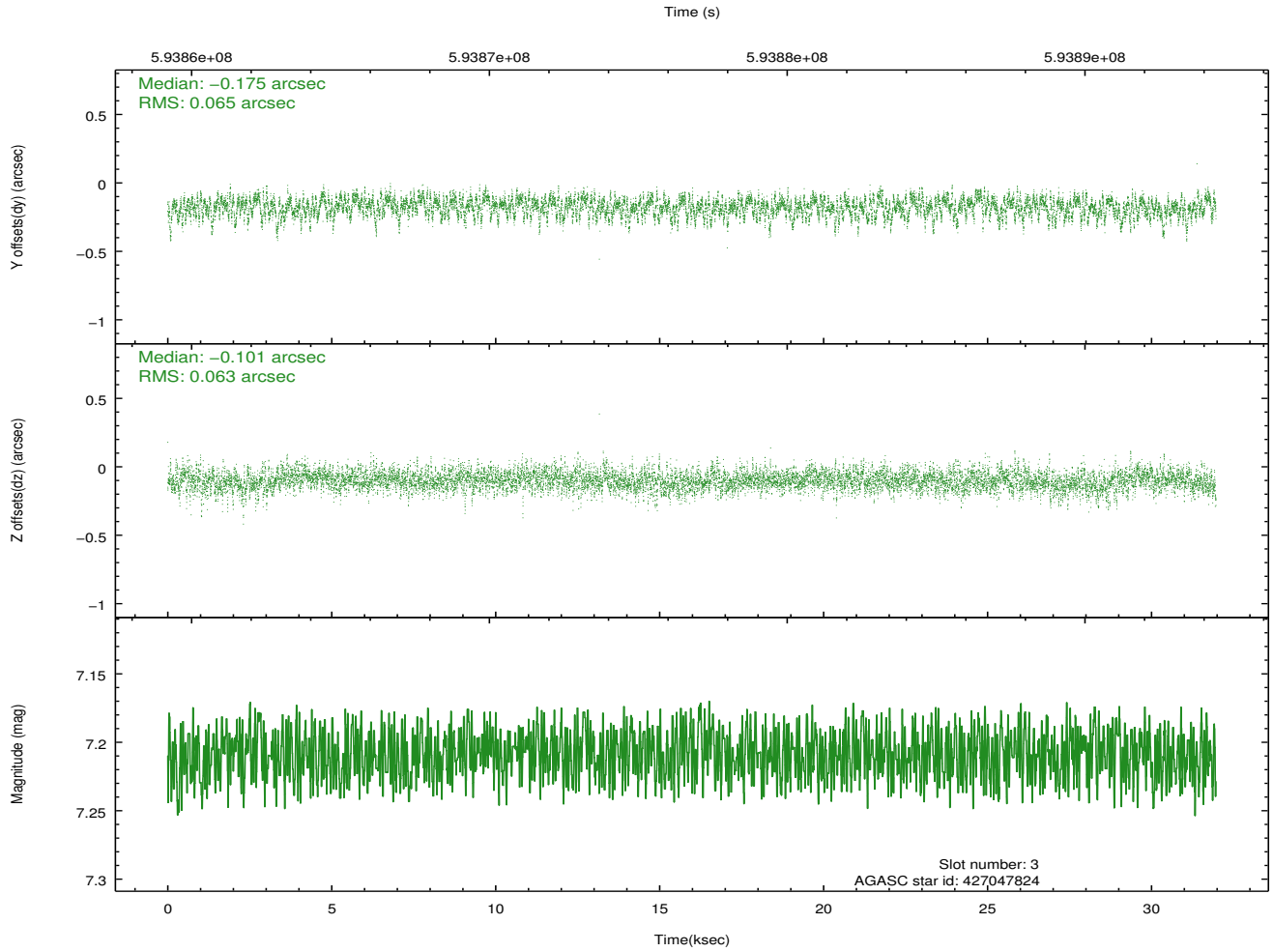
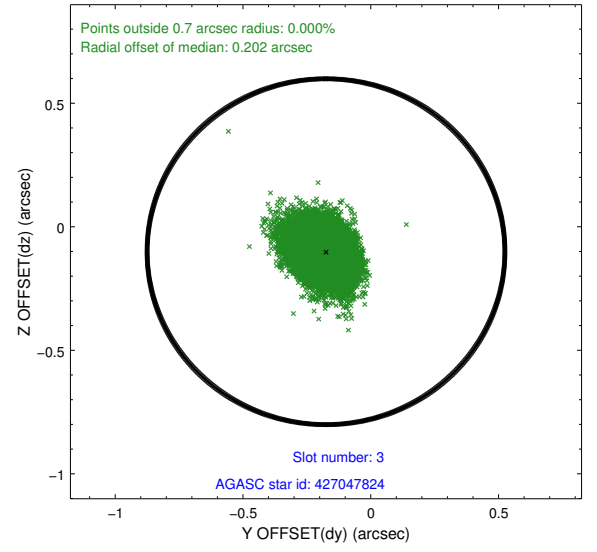
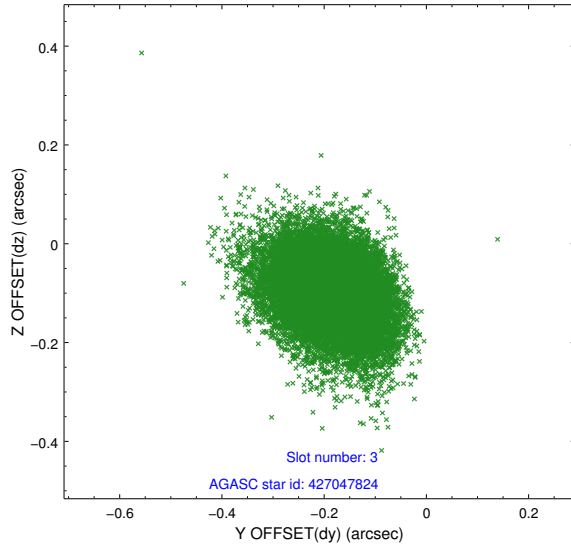


Slot Statistics

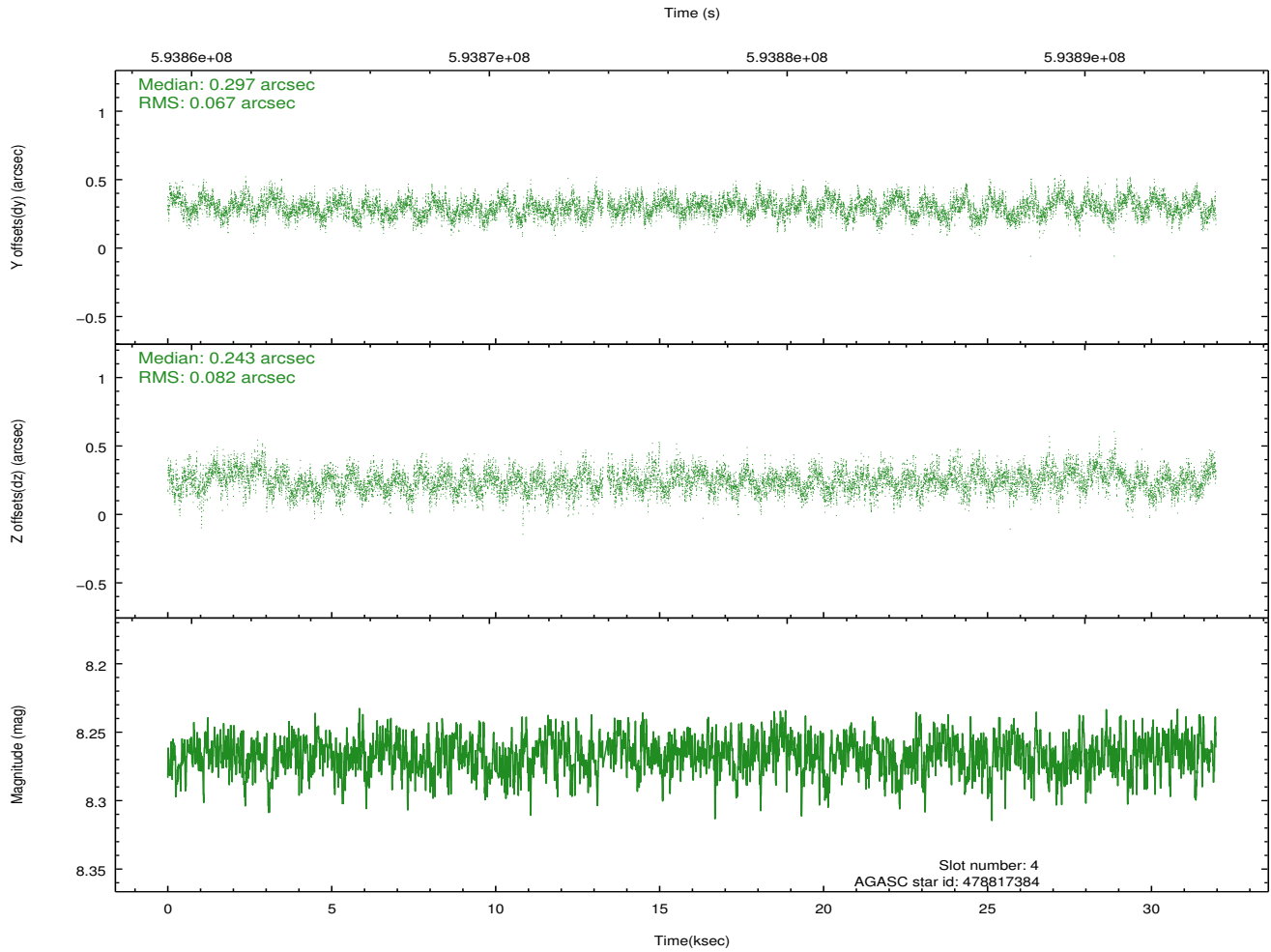
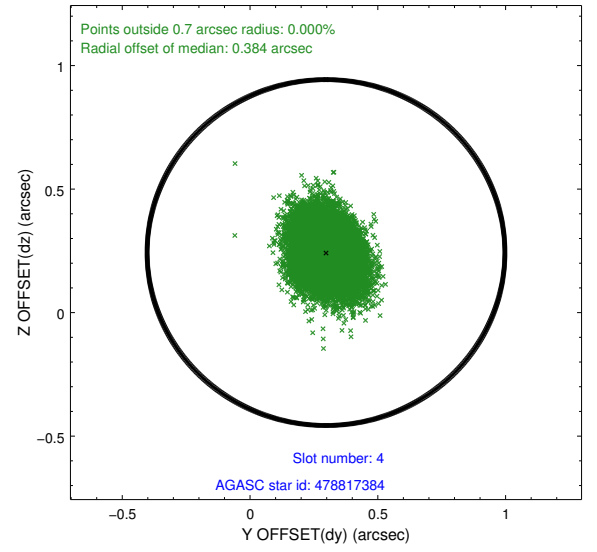
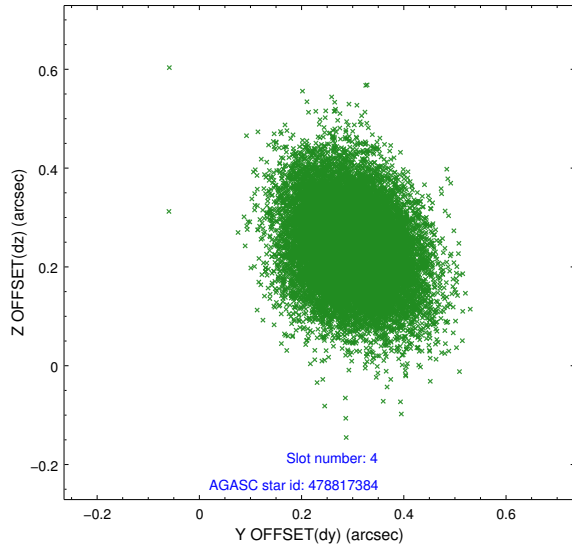
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.16	7795	0.088	-0.107	0.016	0.024	0.000000	0.000000	929.57	-839.91
1	FID		ACIS-I-5	7.15	7797	-0.321	0.044	0.009	0.015	0.000000	0.000000	-1818.96	1057.63
2	FID		ACIS-I-6	7.14	7797	0.142	0.135	0.013	0.029	0.000000	0.000000	395.05	1702.34
3	GUIDE	used	427047824	7.21	15594	-0.175	-0.101	0.095	0.157	2.434338	52.028309	1906.59	1056.90
4	GUIDE	used	478817384	8.27	15523	0.297	0.243	0.112	0.183	3.580009	52.860975	-1810.26	-161.28
5	GUIDE	used	478818512	8.12	15590	0.015	0.114	0.102	0.172	3.766666	52.639607	-1743.63	730.77
6	GUIDE	used	427036424	7.23	15590	-0.362	-0.309	0.097	0.166	2.620815	51.912344	1779.78	1630.40
7	GUIDE	used	478675600	8.87	15583	0.233	0.056	0.130	0.219	1.576615	52.651140	2285.34	-1849.07

2.4 Star Slots

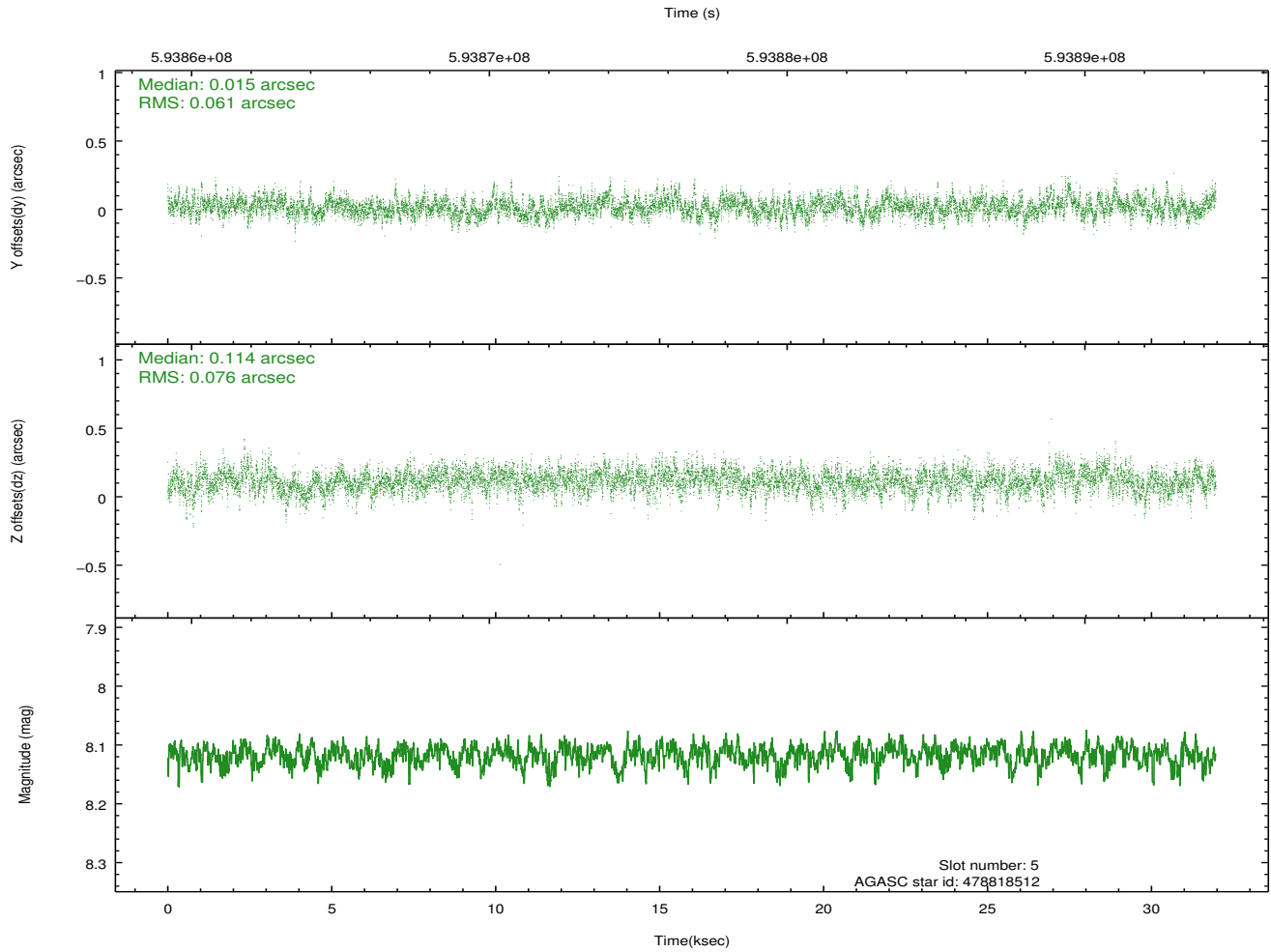
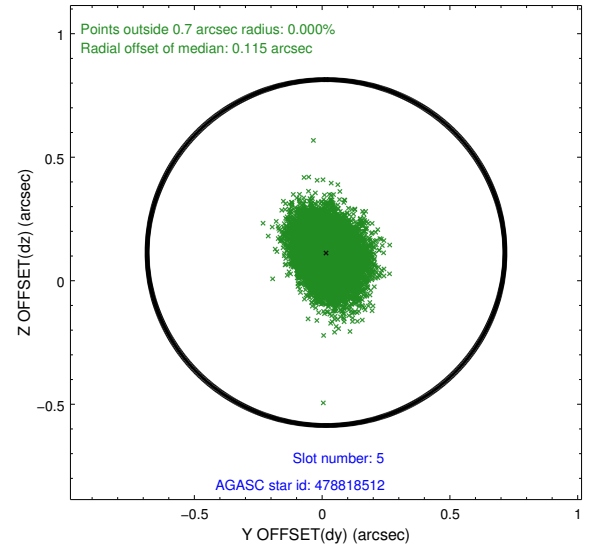
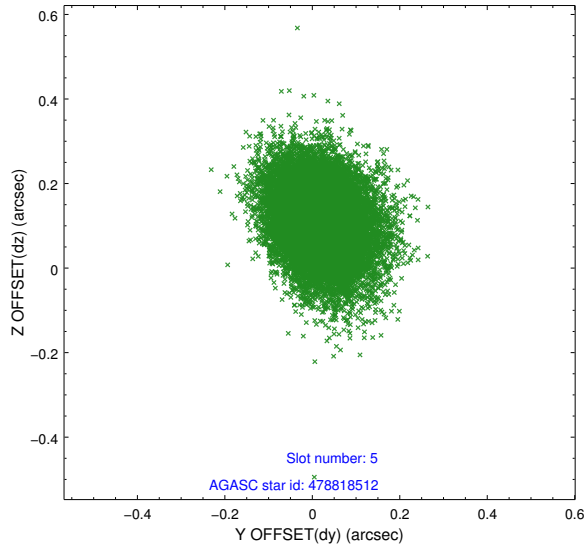
2.4.1 Slot 3



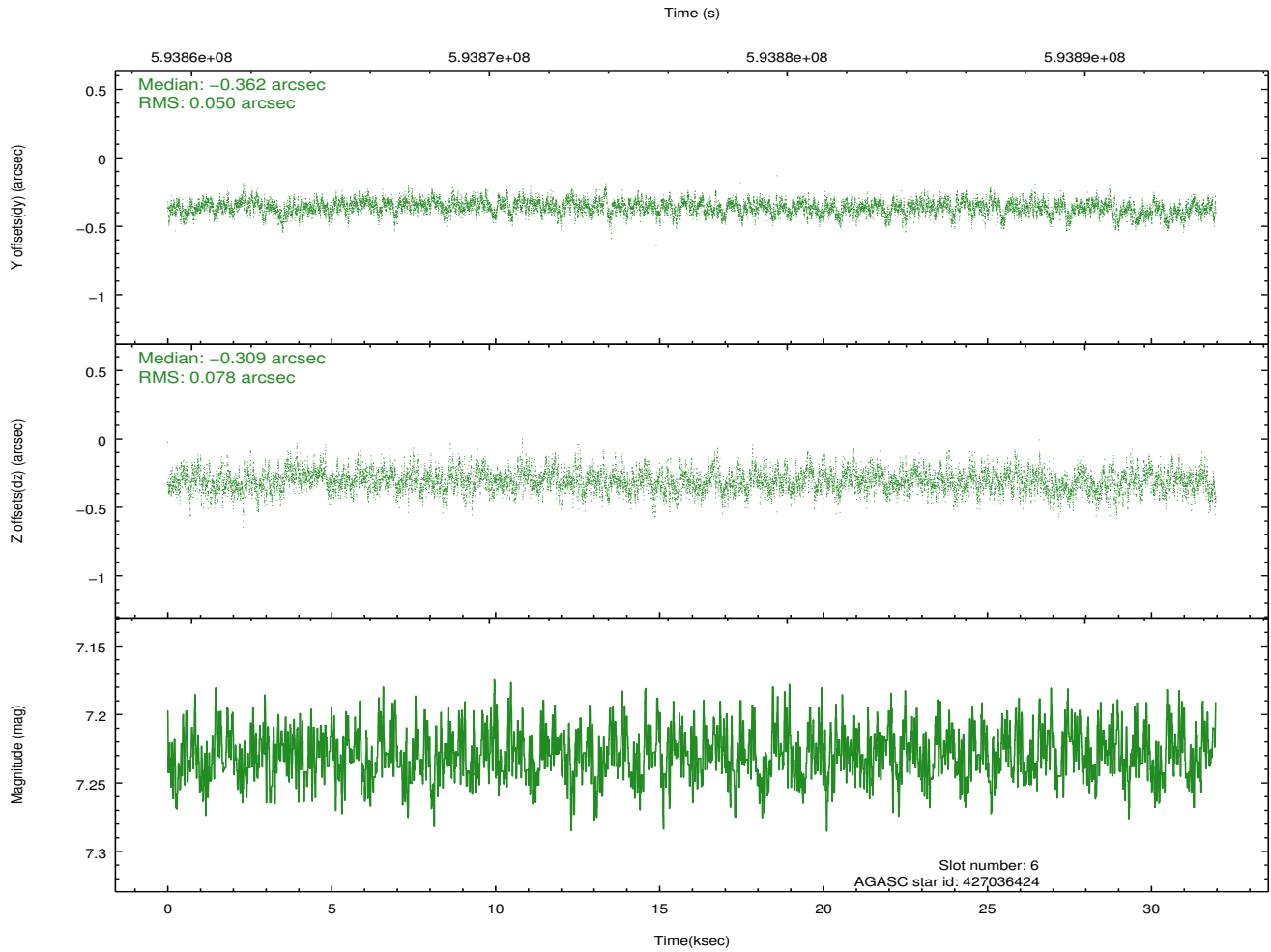
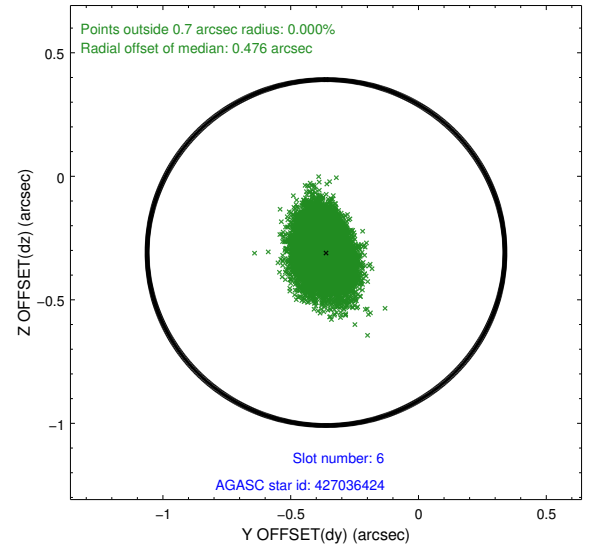
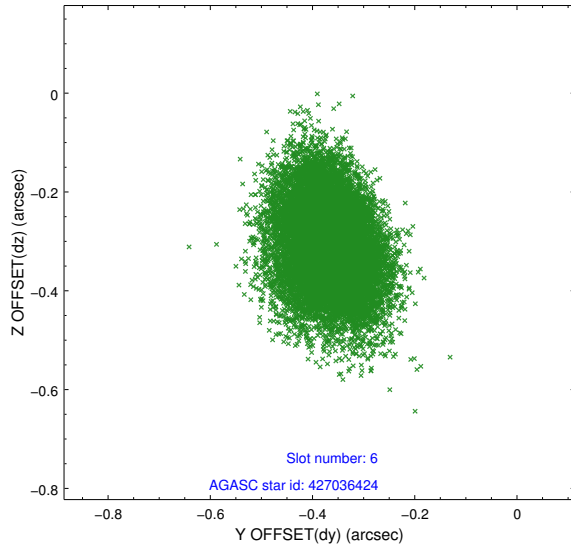
2.4.2 Slot 4



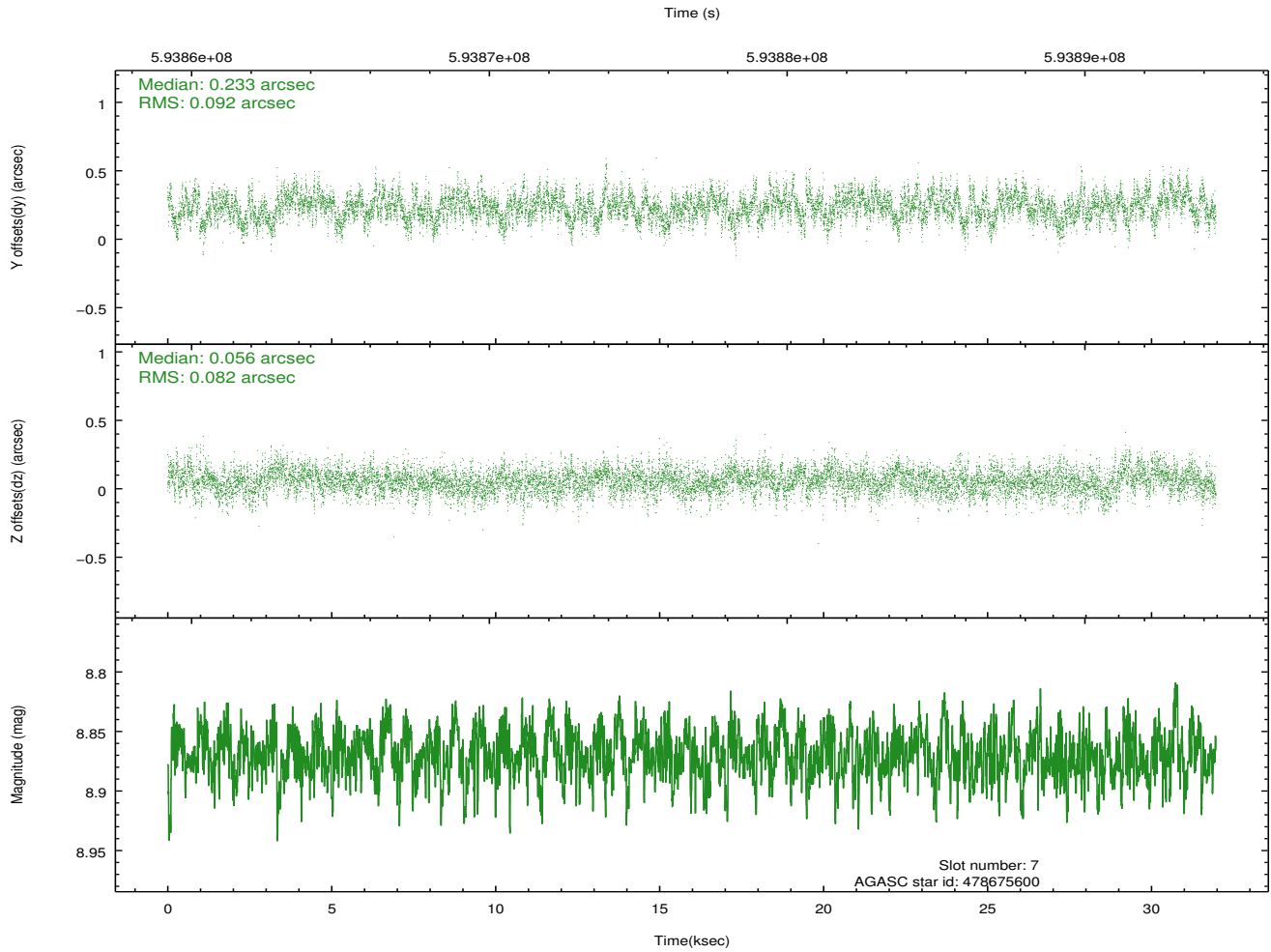
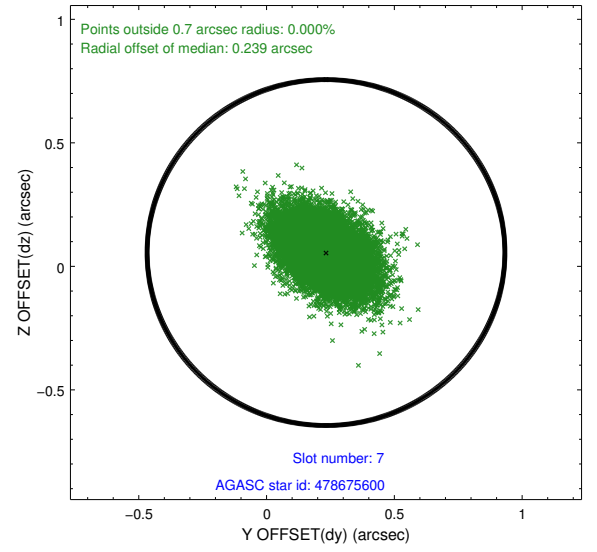
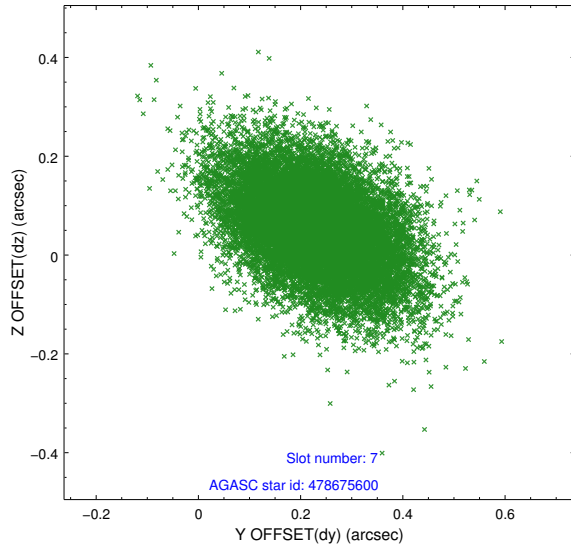
2.4.3 Slot 5



2.4.4 Slot 6

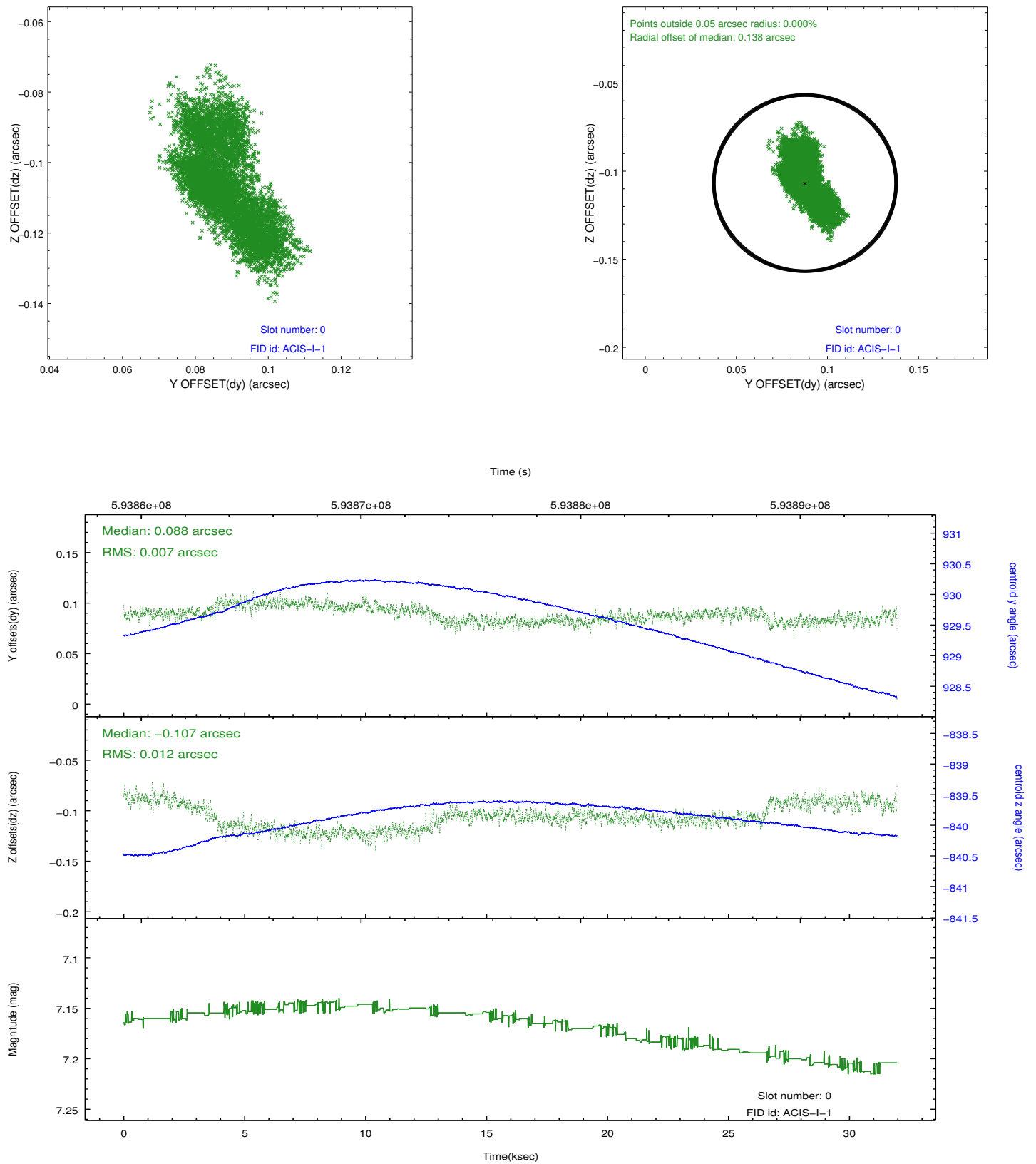


2.4.5 Slot 7

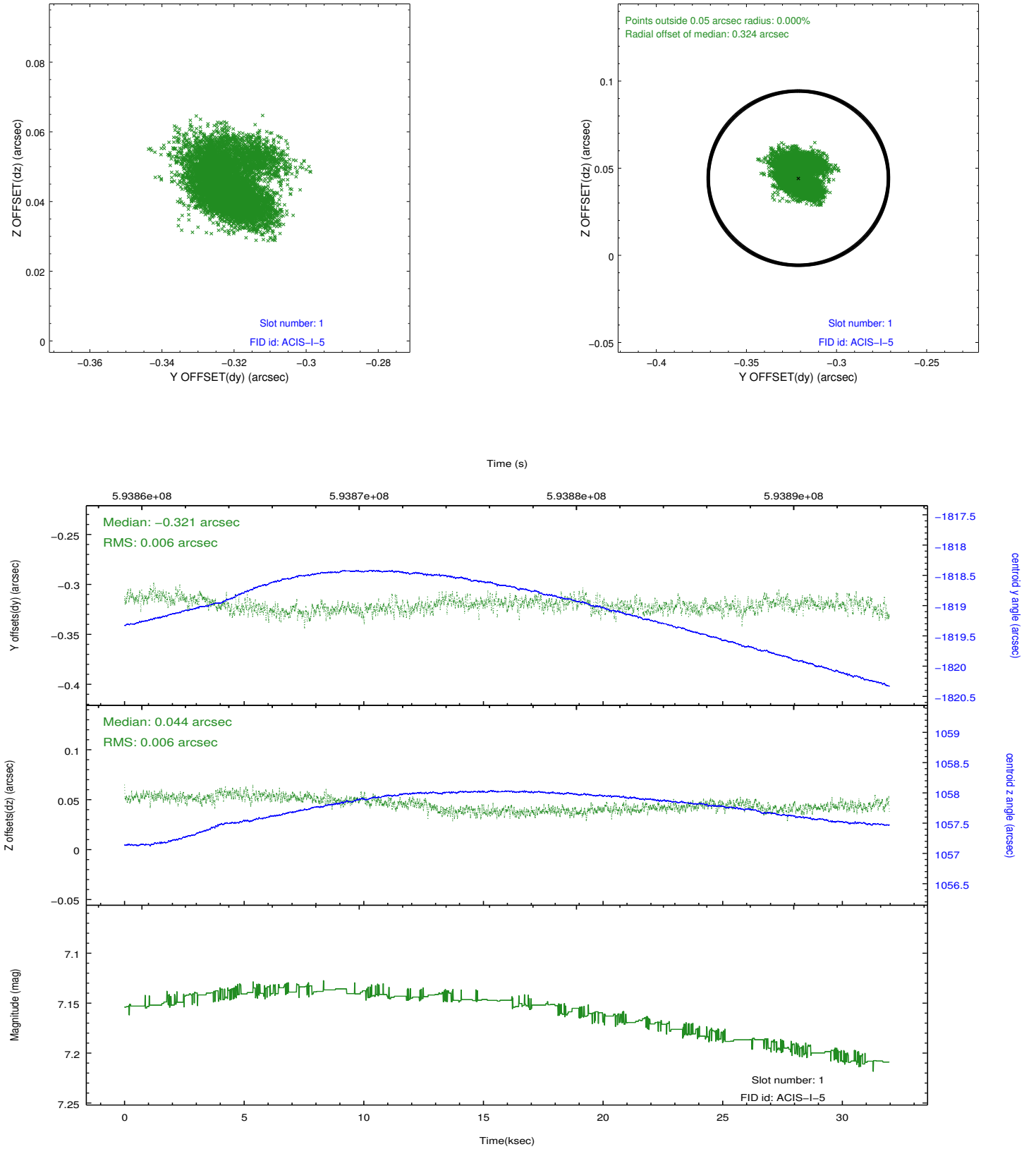


2.5 FID Slots

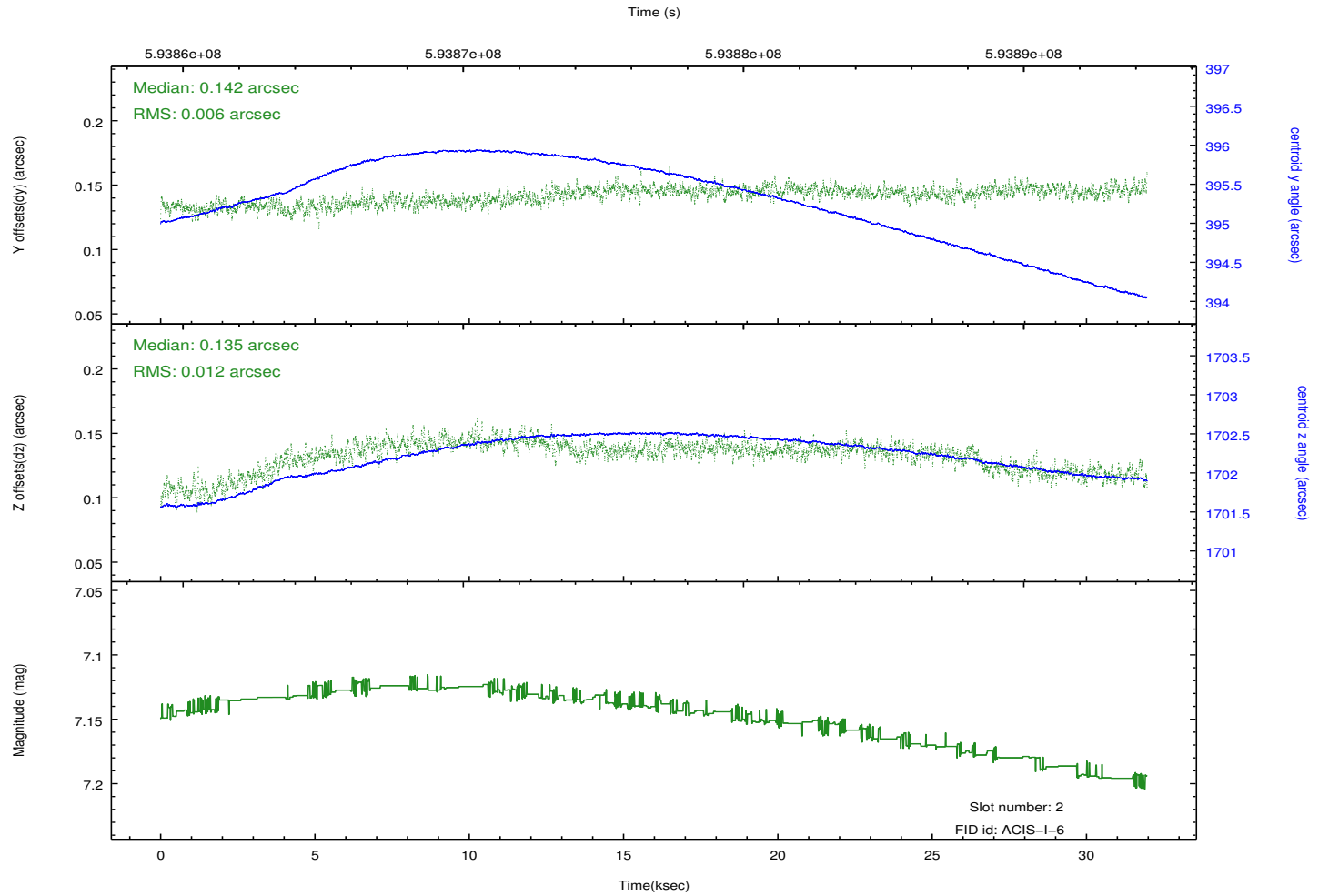
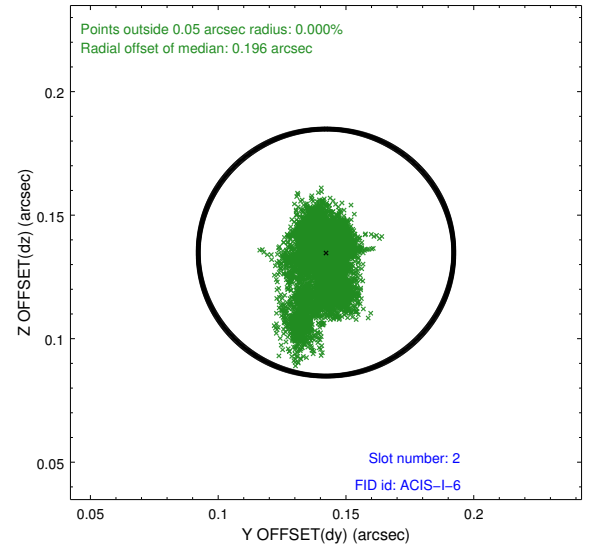
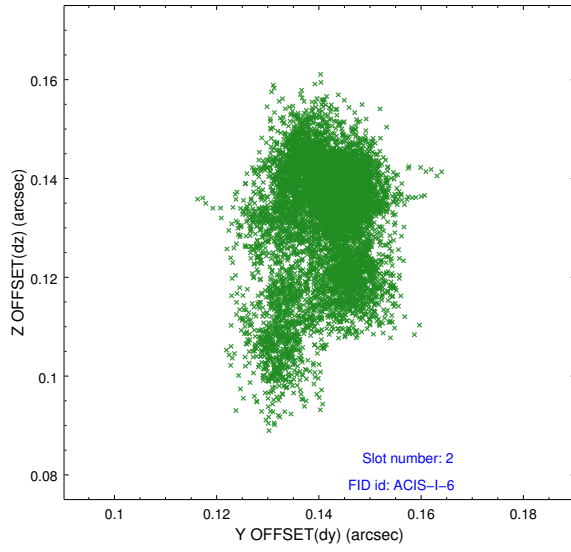
2.5.1 Slot 0



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)	2016.10.27
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.944000461102

A.2 Comments