

V&V Reference Report

L2 ASCDS Version : 10.4.3.1

Observation 17233 - L2 Version 1
Chandra X-Ray Center

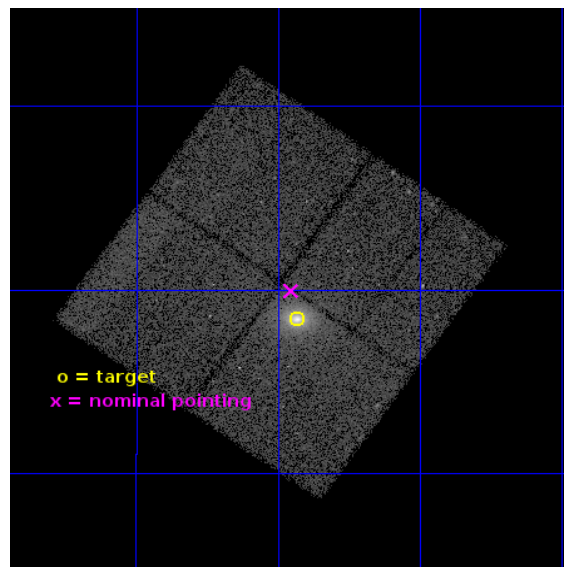
L2 Processing Date : Apr 6 2016

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1 Front

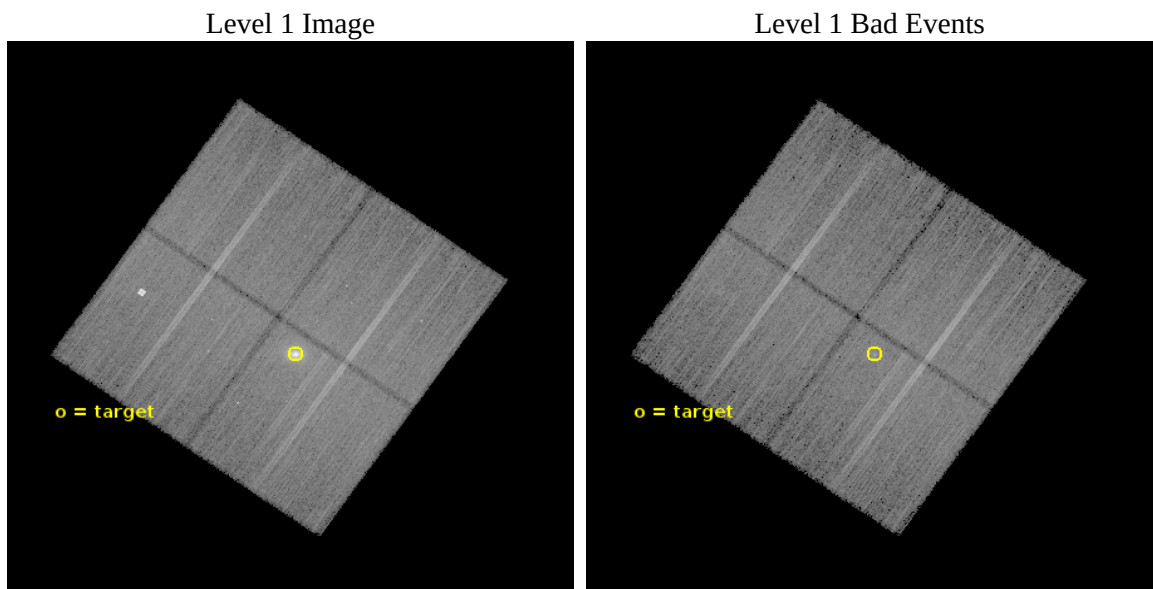
seq_num	801502	Sequence number
obs_id	17233	Observation id
title	Chandra observations of the massive galaxy cluster MACS J1447.4+0827 at z=0.3755	Proposal title
observer	Julie Hlavacek-Larrondo	Principal investigator
object	MACS J1447.4+0827	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	221.857917	Observer's specified target RA [deg]
dec_targ	8.473194	Observer's specified target Dec [deg]
ra_nom	221.86296879608	Nominal RA [deg]
dec_nom	8.4991975206366	Nominal Dec [deg]
roll_nom	125.2079527402	Nominal Roll [deg]
revision	1	Processing version of data
ontime	43083.800331473	Sum of GTIs [s]
livetime	42520.87876231	Livetime [s]
ontime0	43083.800331473	Sum of GTIs [s]
ontime1	43083.800331473	Sum of GTIs [s]
ontime2	43071.236049891	Sum of GTIs [s]
ontime3	43083.800331473	Sum of GTIs [s]
l2events	132123	Number of level 2 events



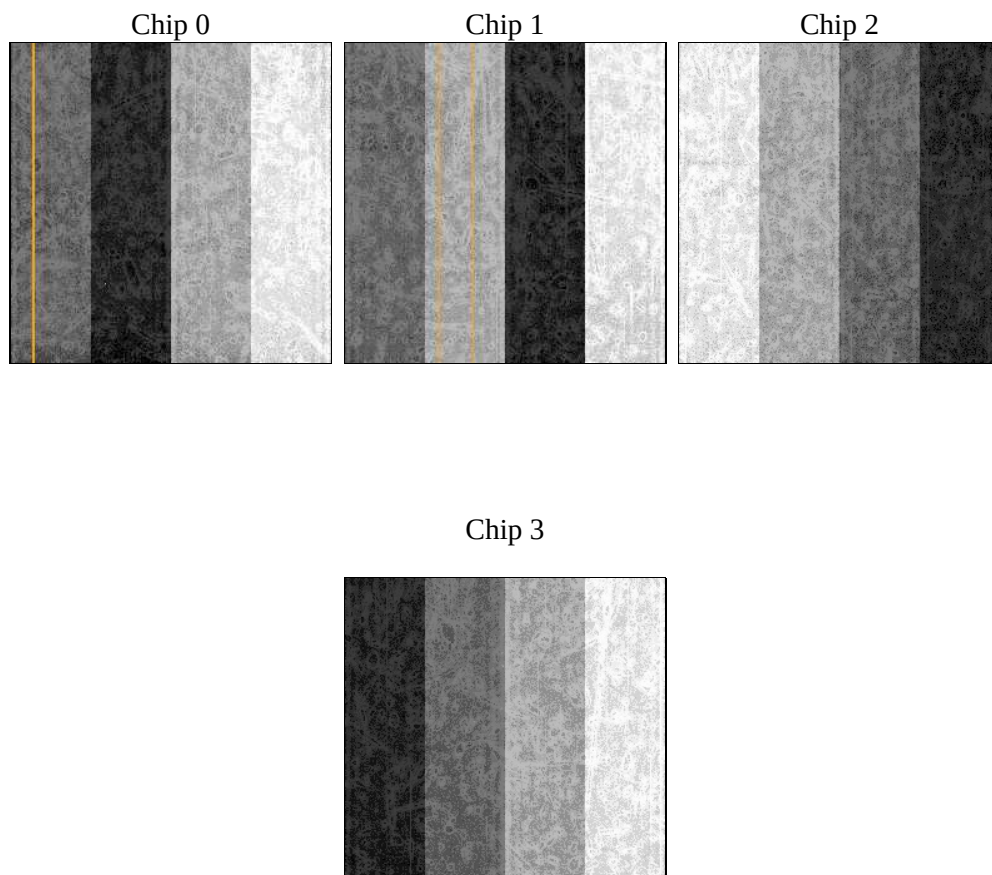
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	43000.000000	[s] Scheduled observation exposure time
ascdsver	10.4.3.1	Processing system revision	ontime	43083.800331473	Sum of GTIs [s]
caldsver	4.7.1	 	ontime0	43083.800331473	Sum of GTIs [s]
date	2016-04-06T19:56:00	Date and time of file creation	ontime1	43083.800331473	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	43071.236049891	Sum of GTIs [s]
			ontime3	43083.800331473	Sum of GTIs [s]
			l1events	1093249	Number of level 1 events

2.1.4 Events

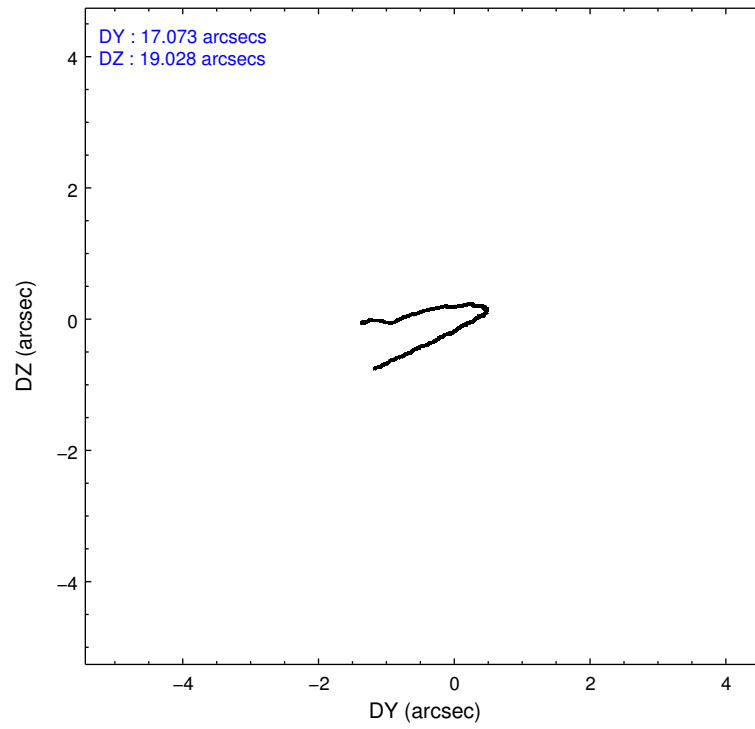
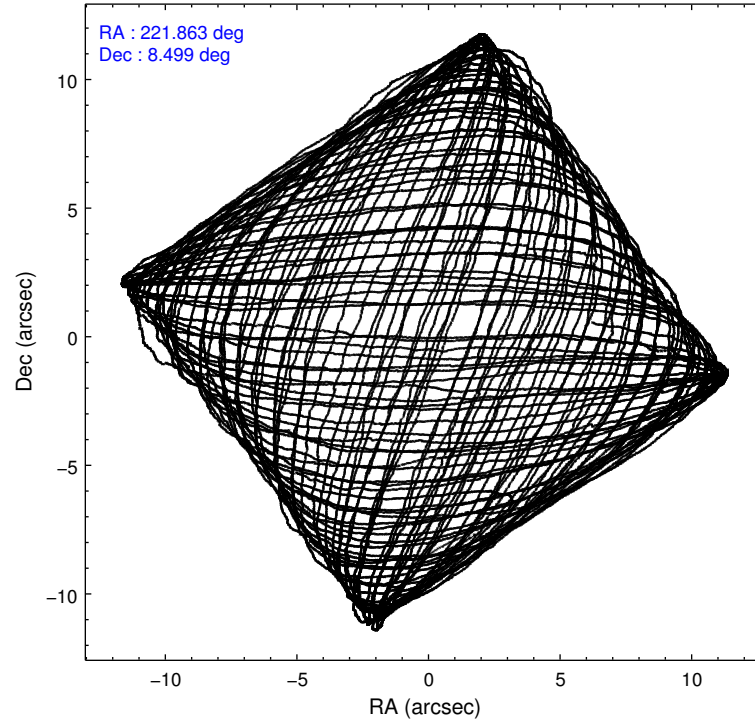
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	248707	270780	272335	301427
rejected events	218467	227143	241355	243885
rejected %	87%	83%	88%	80%

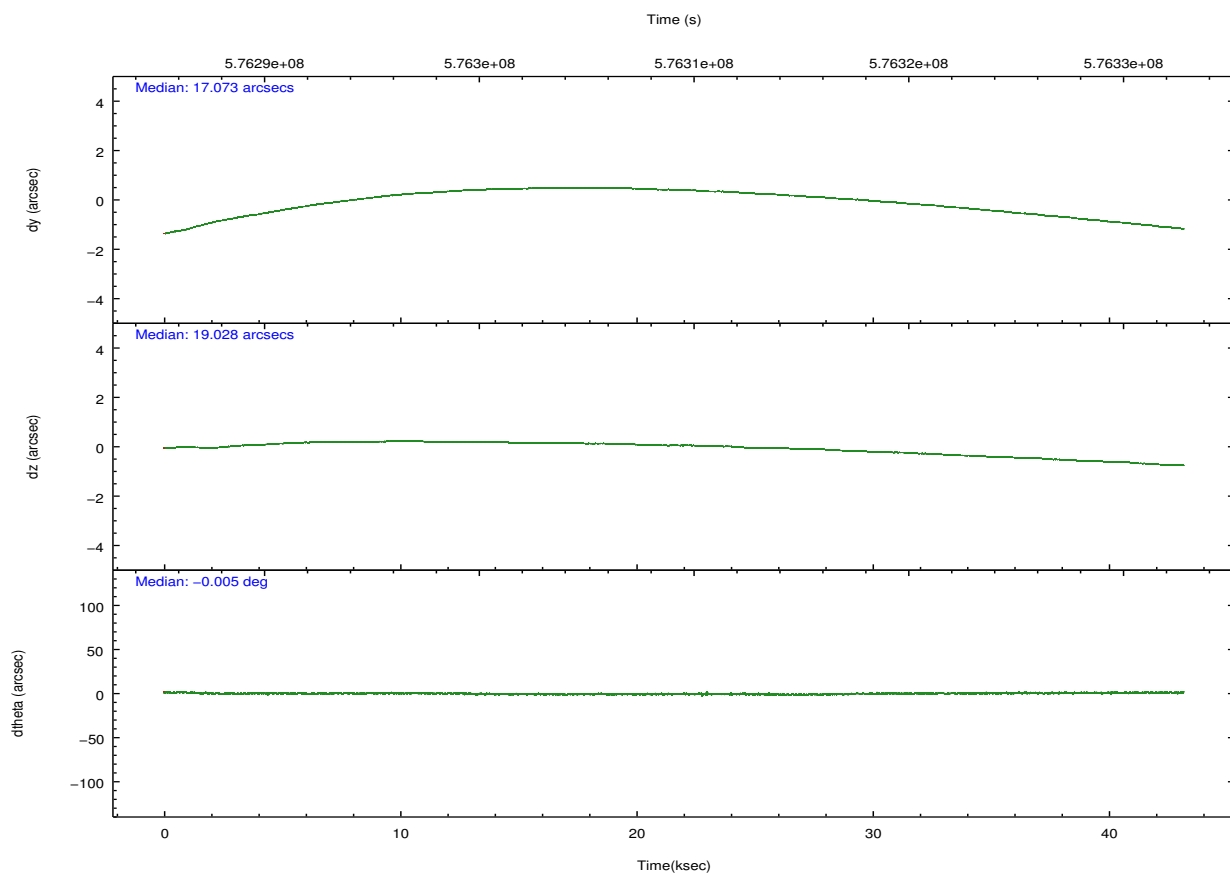
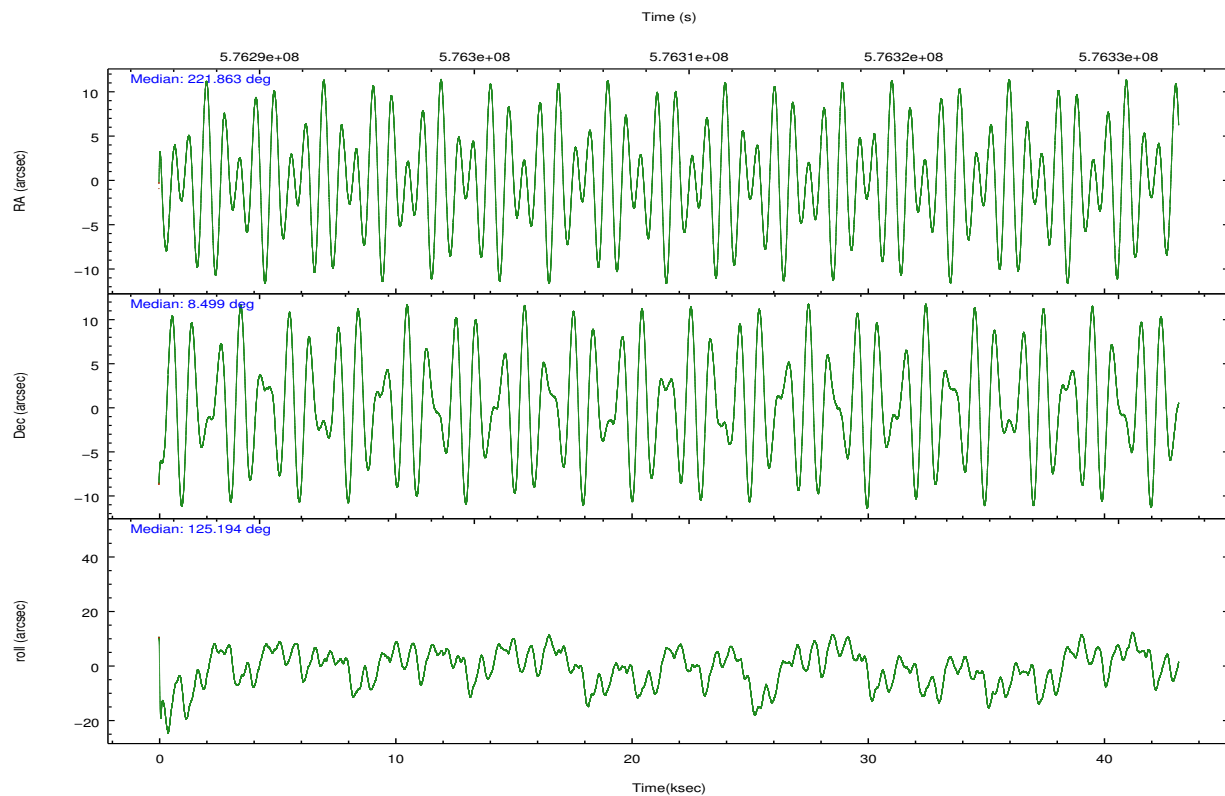
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	10246	21417	11925	33681
	4%	7%	4%	11%
grade 1 events	121	210	151	290
	0%	0%	0%	0%
grade 2 events	7614	8503	7245	9204
	3%	3%	2%	3%
grade 3 events	3043	3059	3000	3849
	1%	1%	1%	1%
grade 4 events	2946	3131	2996	4004
	1%	1%	1%	1%
grade 5 events	11712	12076	10792	13345
	4%	4%	3%	4%
grade 6 events	6398	7536	5819	6807
	2%	2%	2%	2%
grade 7 events	206627	214848	230407	230247
	83%	79%	84%	76%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-0123	ACIS-0123	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	221.888342	221.8629687960809	CCD I2 on	Y	Y
[deg] Pointing Dec	8.487721	8.499197520636612	CCD I3 on	Y	Y
[deg] Pointing Roll	124.995512	125.2079527401974	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	O1	N
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	O2	N
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	576287629.184000	576286471.60999	CCD S5 on	N	N
Observation start date	2016-04-05T23:52:41	2016-04-05T23:34:31	Number of optional ACIS chips dropped	2	2
[s] Observation end time (MET)	576330629.184000	576331640.80007	On-chip summing requested	N	N
Observation end date	2016-04-06T11:49:21	2016-04-06T12:07:20	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



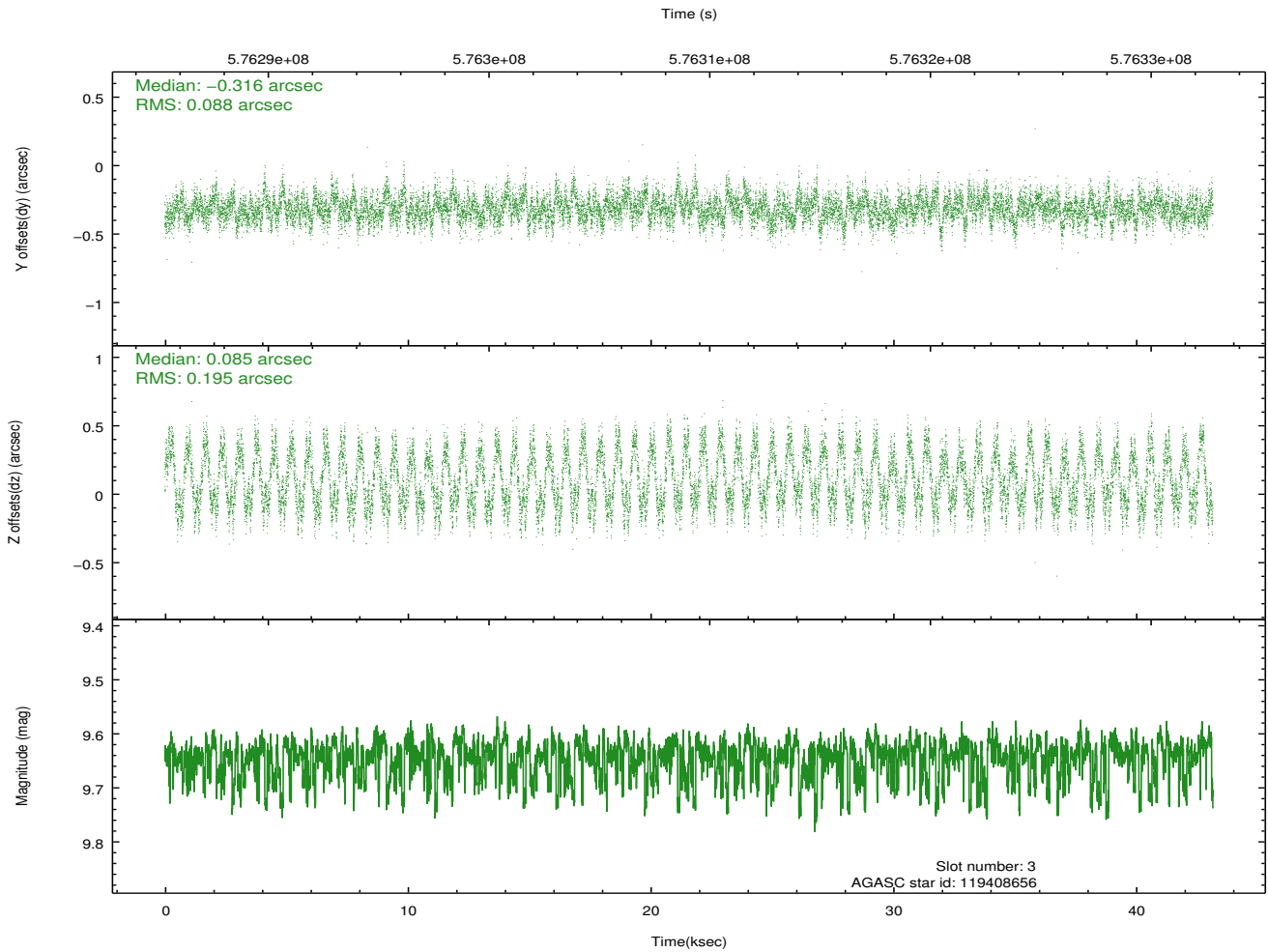
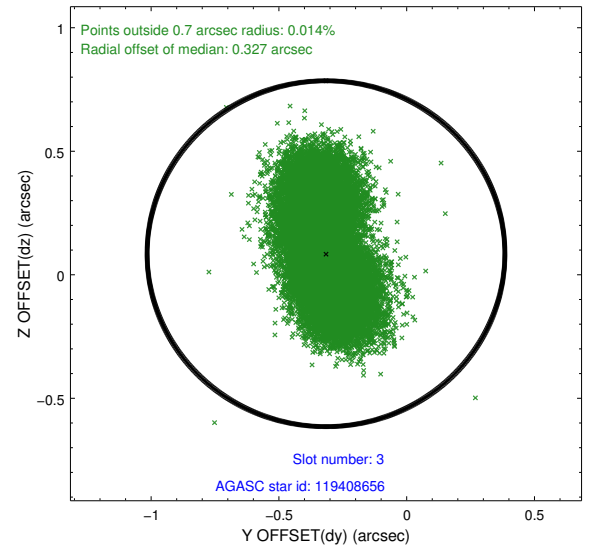
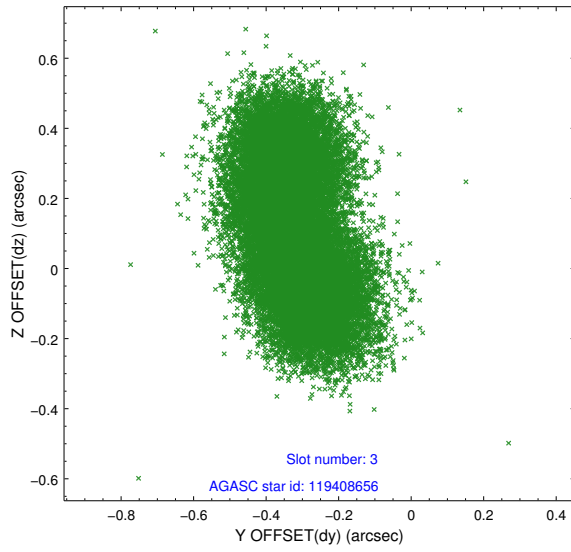


Slot Statistics

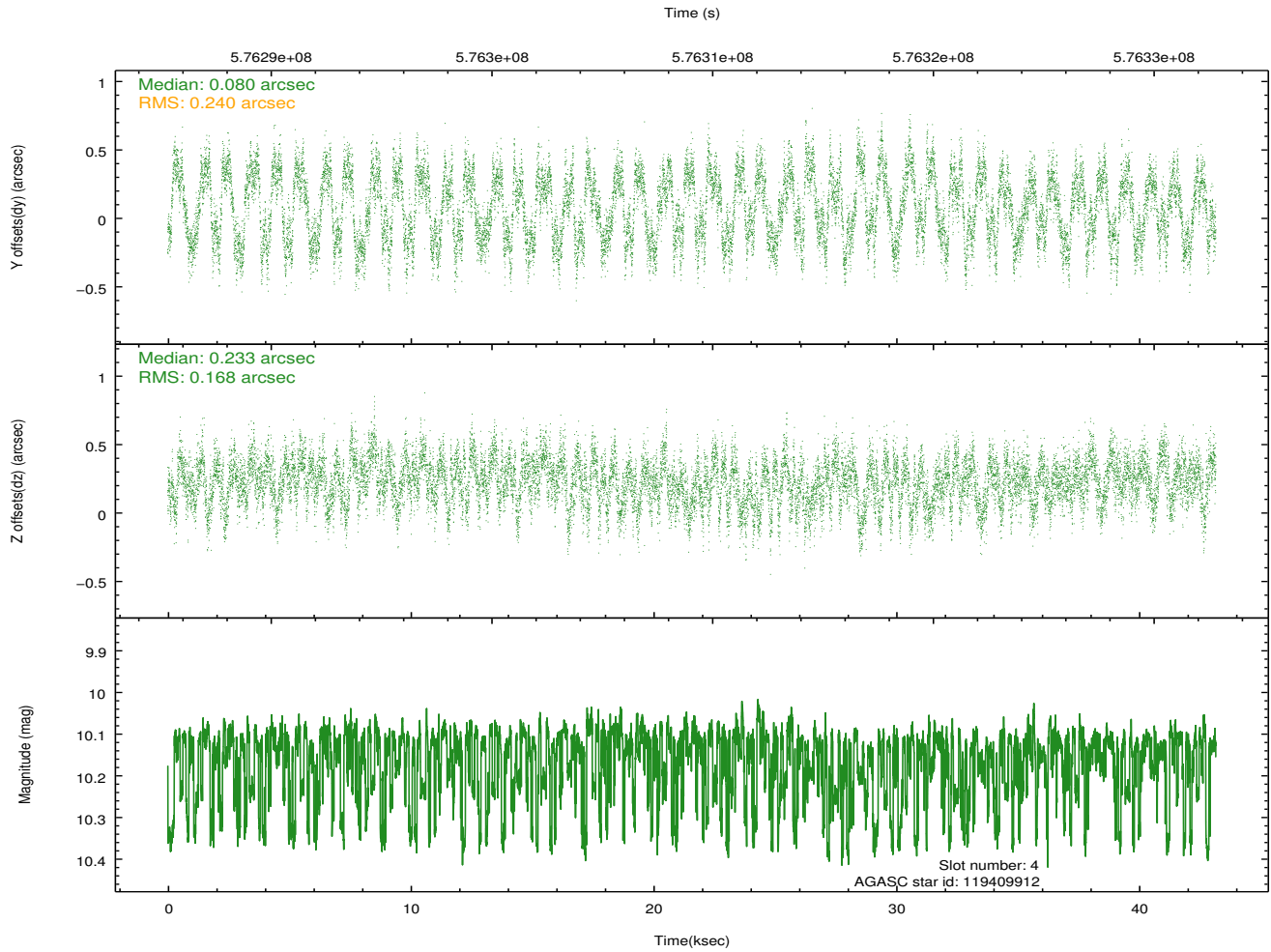
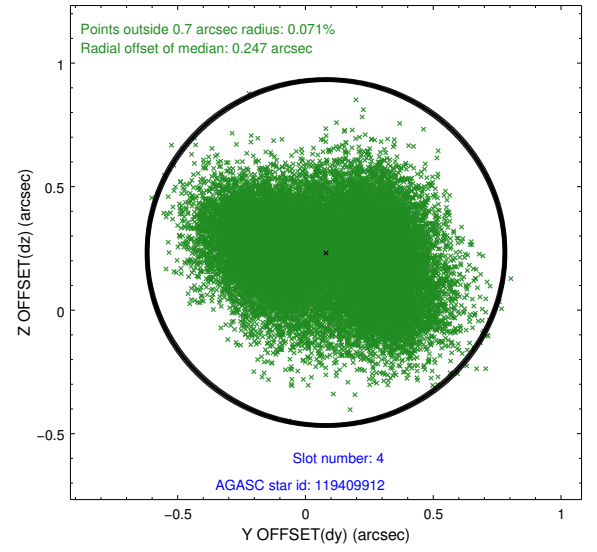
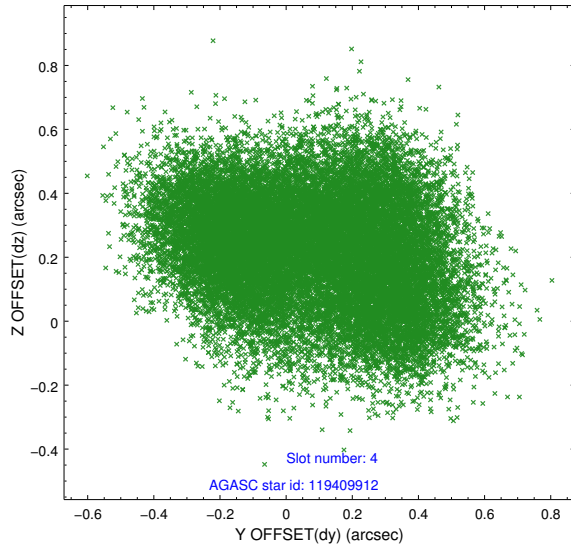
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.25	10529	0.066	-0.015	0.010	0.018	0.000000	0.000000	922.57	-842.61
1	FID		ACIS-I-5	7.24	10530	-0.375	0.026	0.011	0.025	0.000000	0.000000	-1826.07	1054.77
2	FID		ACIS-I-6	7.26	10529	0.217	0.061	0.014	0.026	0.000000	0.000000	388.13	1699.43
3	GUIDE	used	119408656	9.64	21024	-0.316	0.085	0.233	0.362	222.086631	8.778551	453.60	-1177.87
4	GUIDE	used	119409912	10.15	21011	0.080	0.233	0.322	0.475	221.948931	8.958726	1266.27	-1148.11
5	GUIDE	used	119410576	9.41	21025	-0.003	-0.253	0.239	0.387	221.814476	8.510828	219.86	168.33
6	GUIDE	used	119419488	7.82	21056	0.096	-0.264	0.140	0.200	221.772256	8.208674	-585.40	914.95
7	GUIDE	used	120327320	9.59	21022	0.150	0.197	0.195	0.320	222.306742	8.399268	-1114.29	-1038.19

2.4 Star Slots

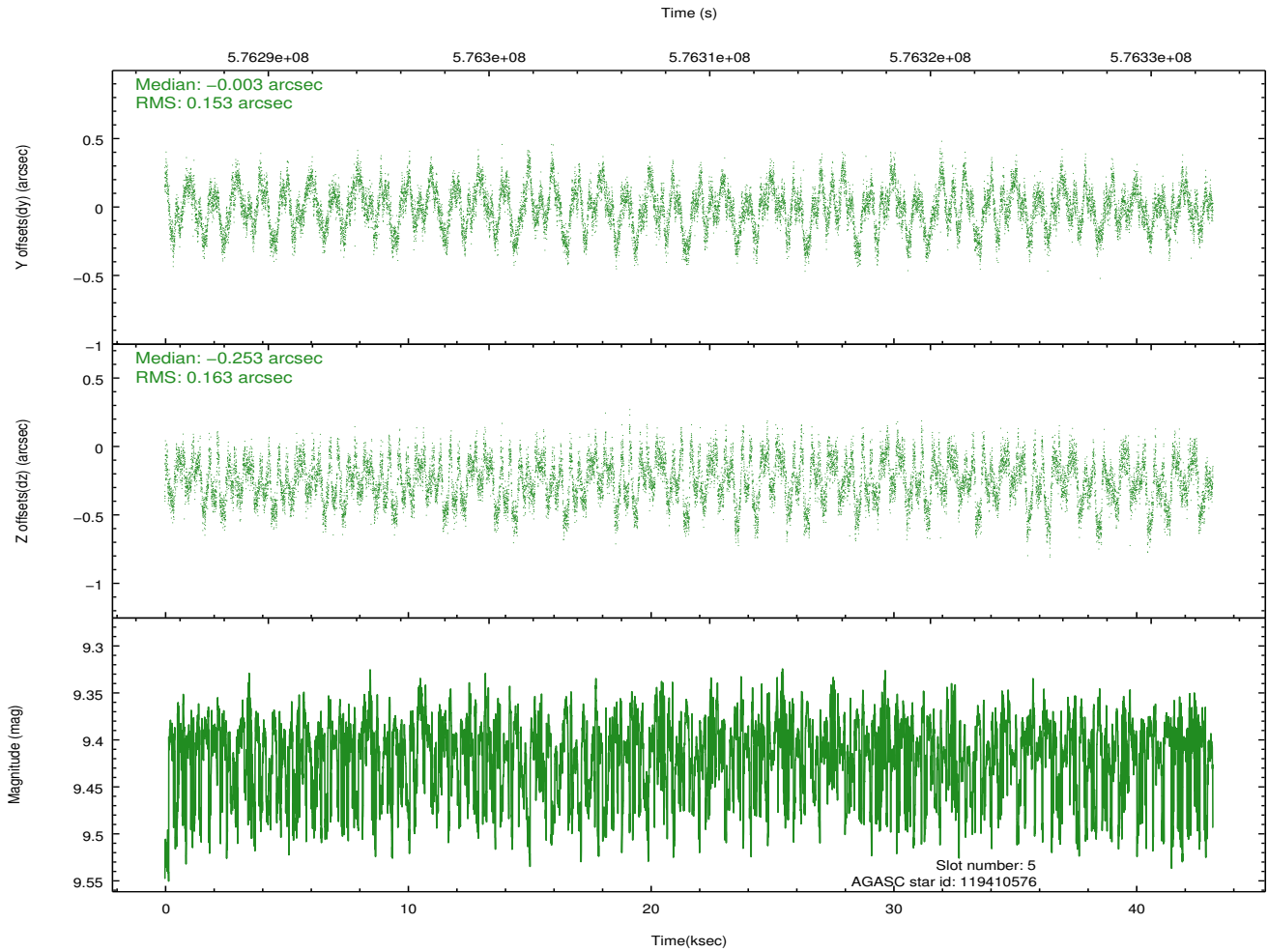
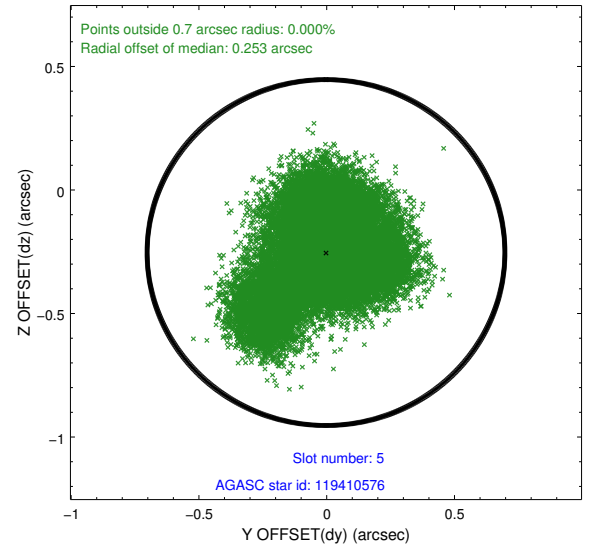
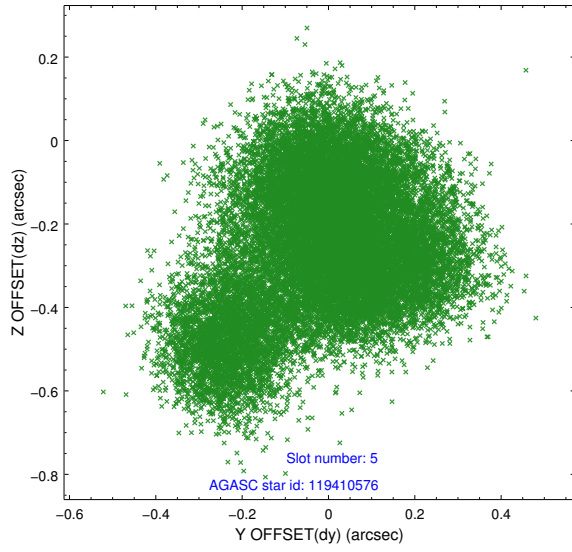
2.4.1 Slot 3



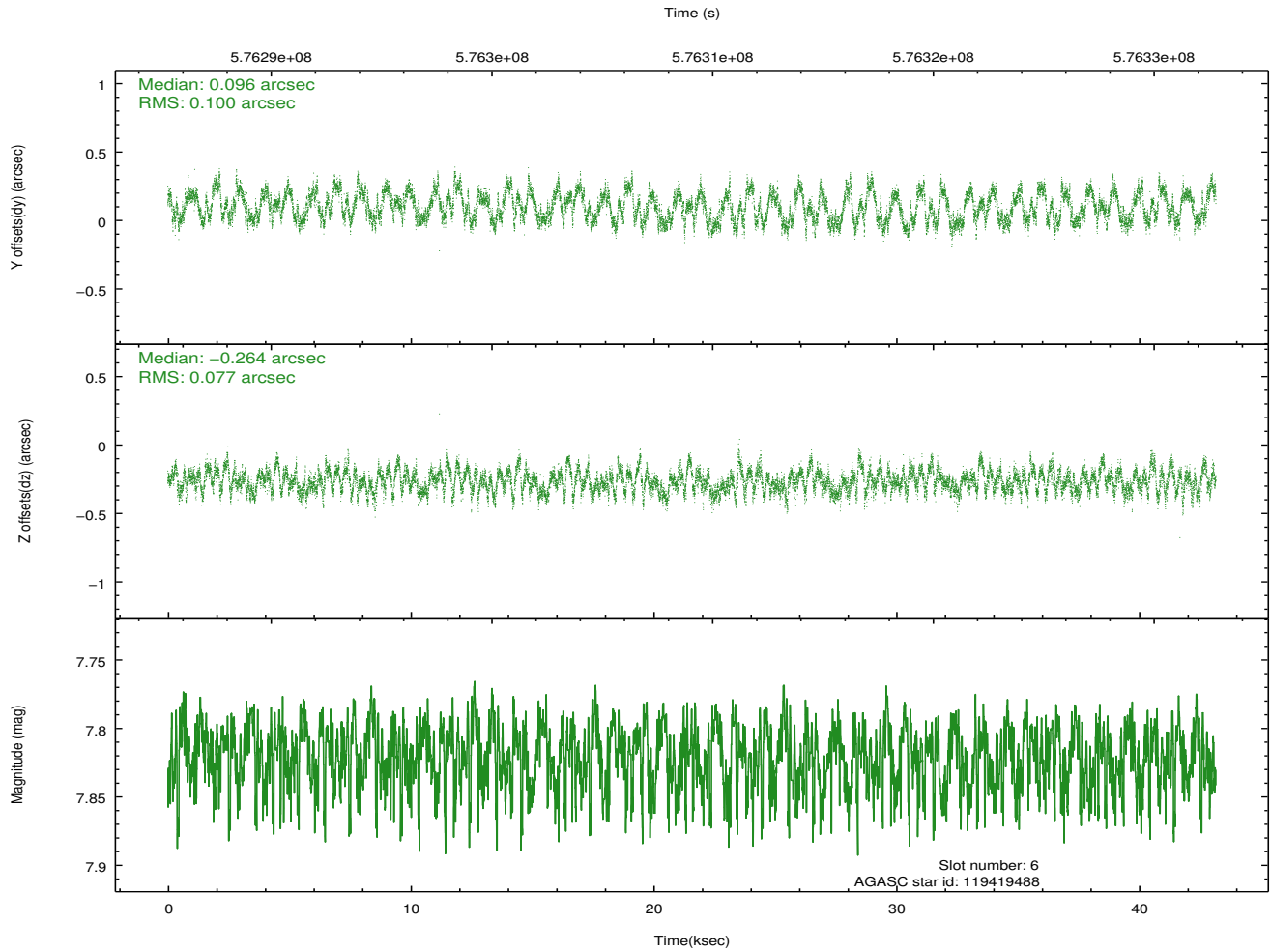
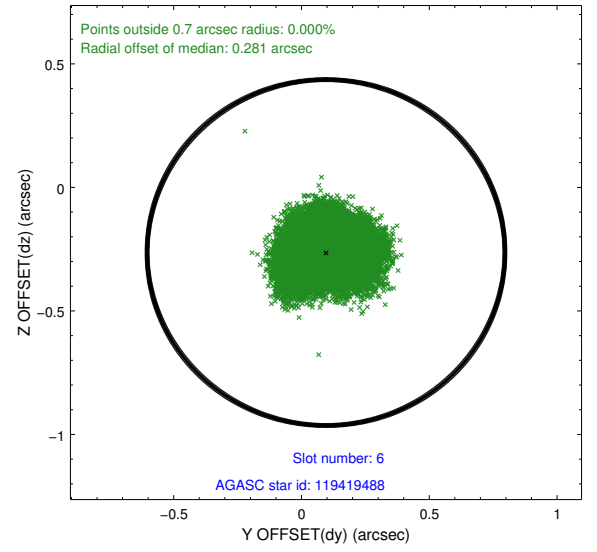
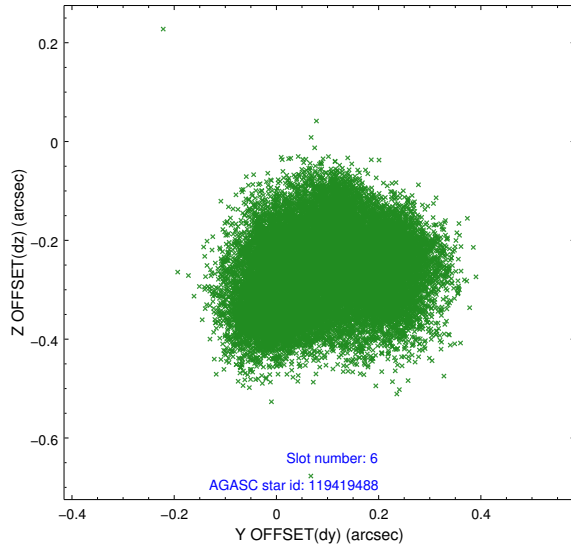
2.4.2 Slot 4



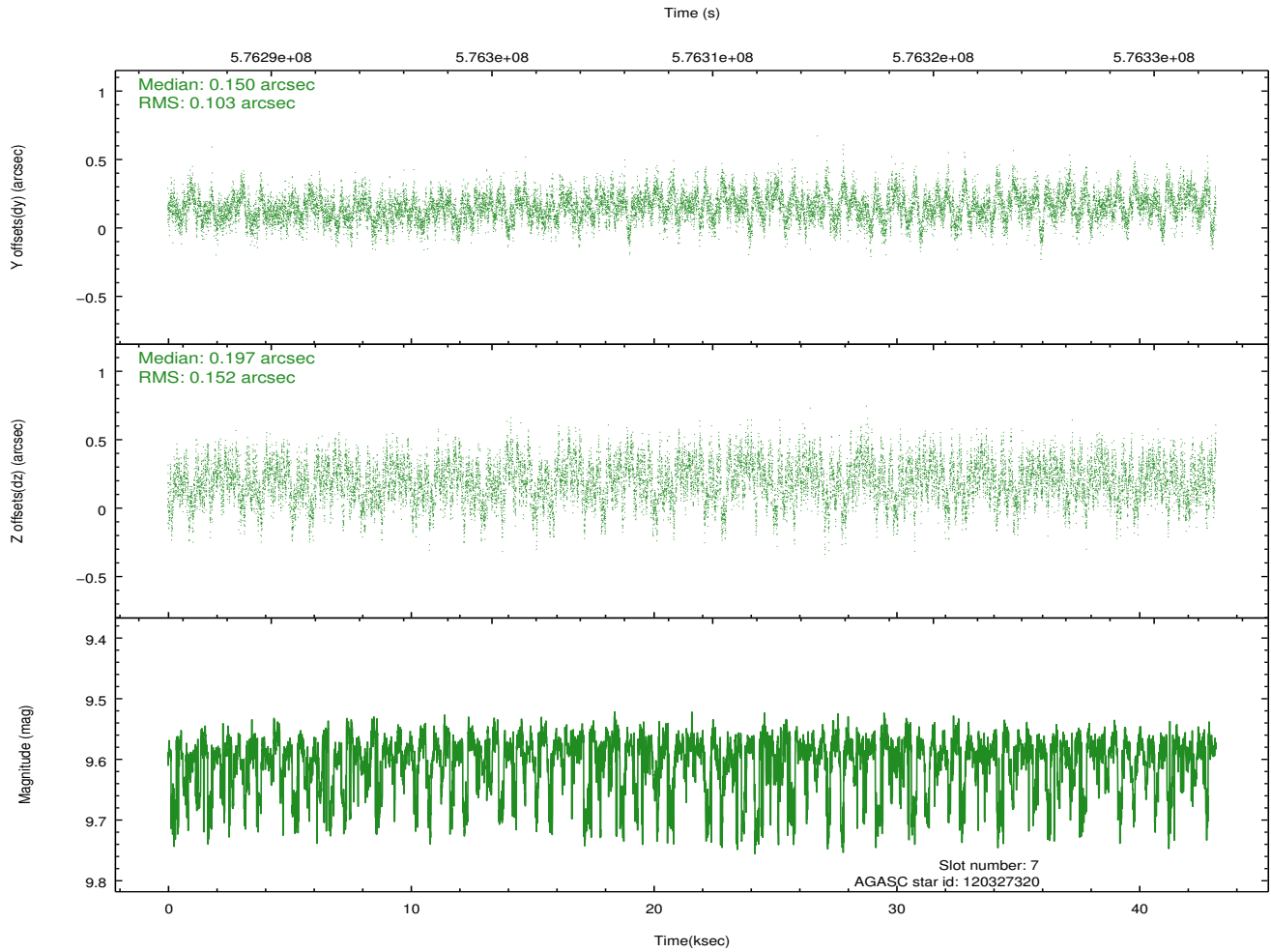
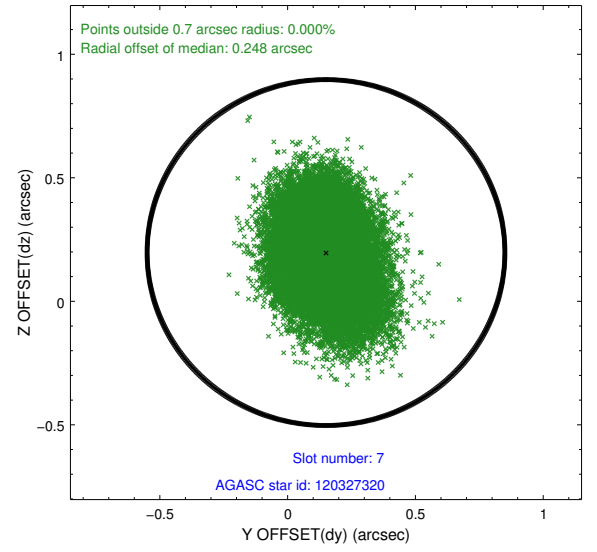
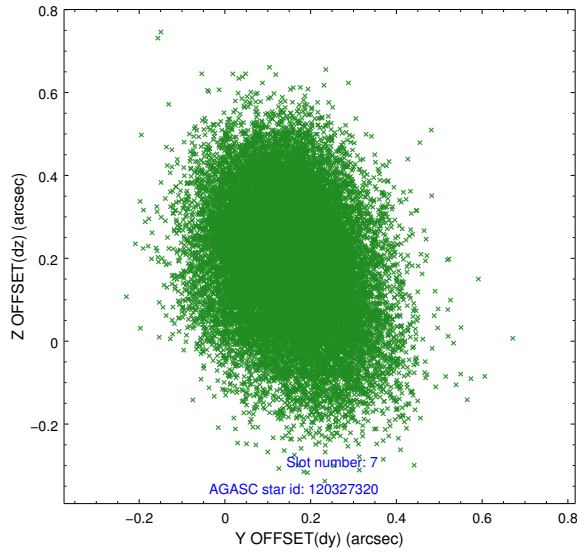
2.4.3 Slot 5



2.4.4 Slot 6

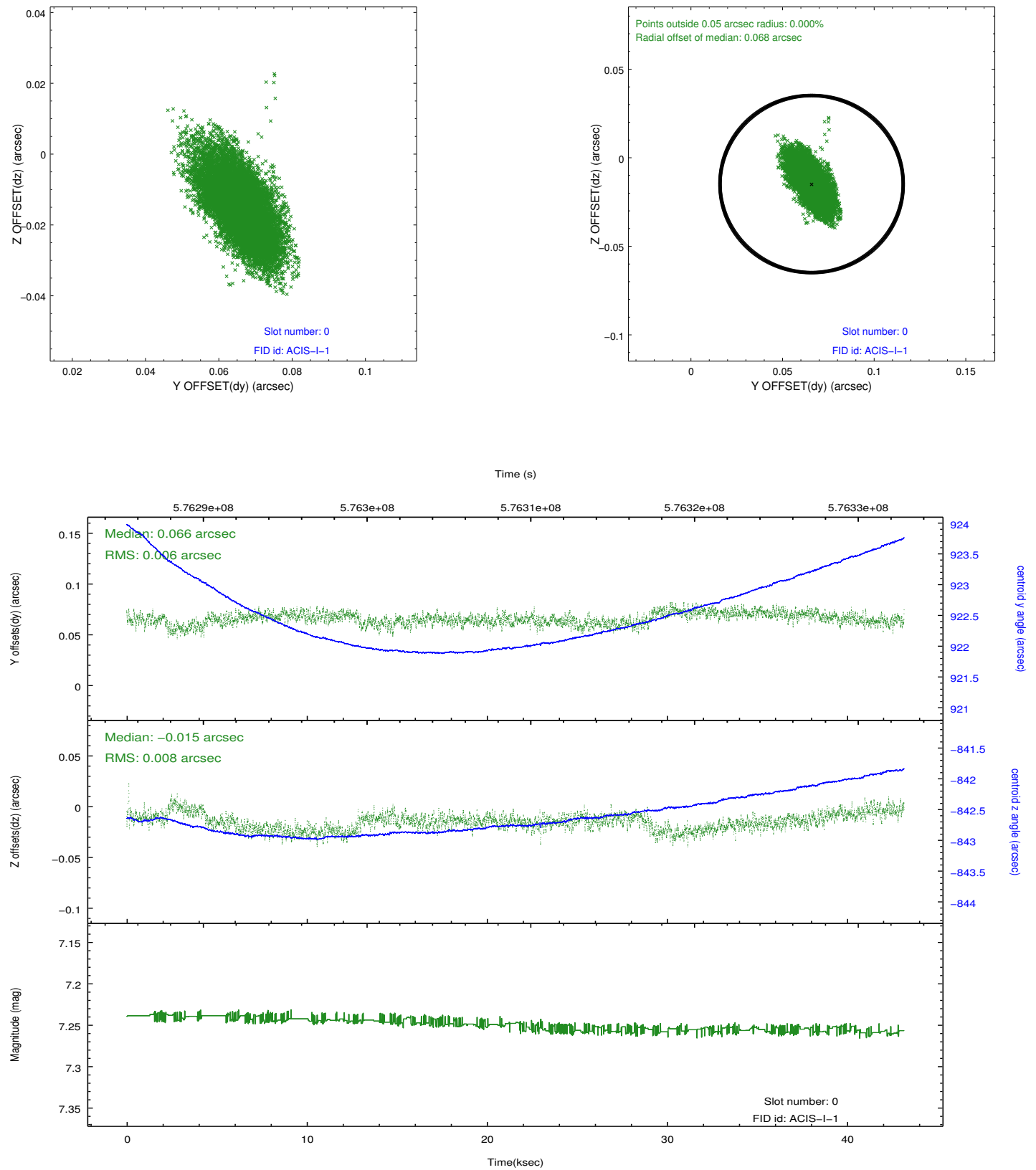


2.4.5 Slot 7

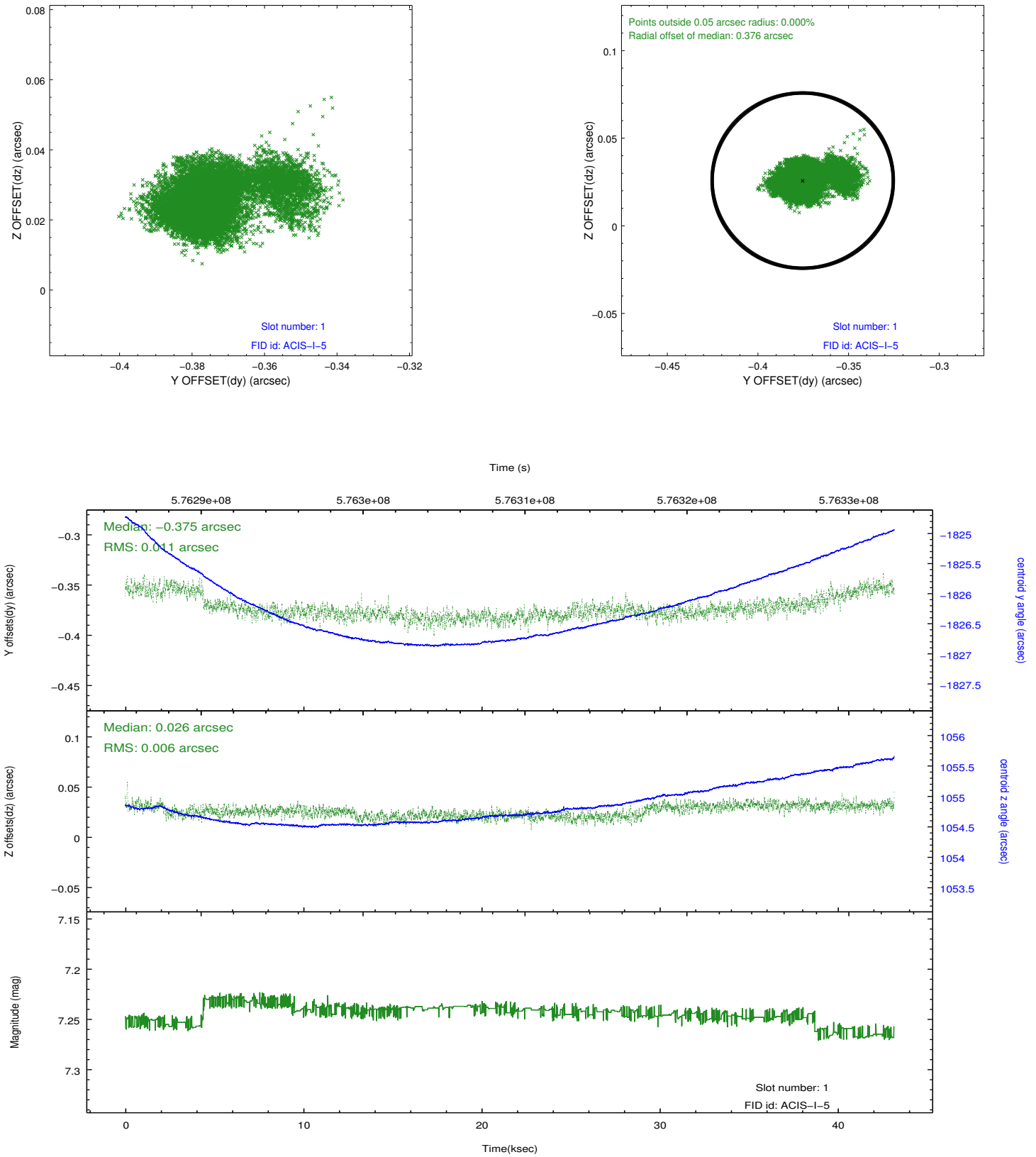


2.5 FID Slots

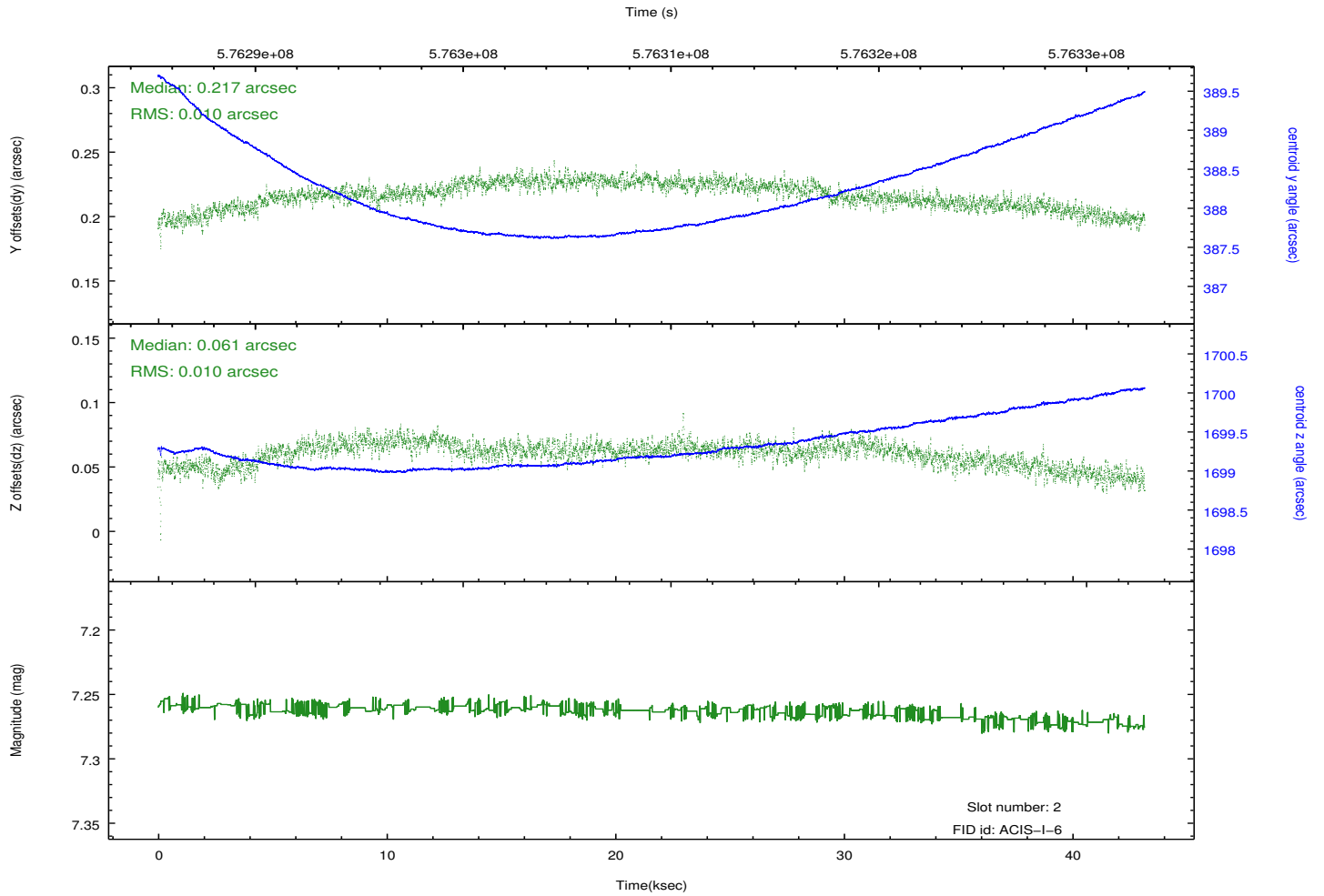
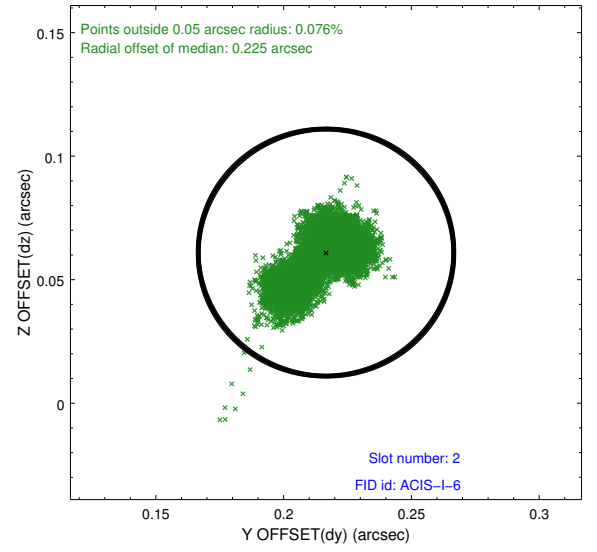
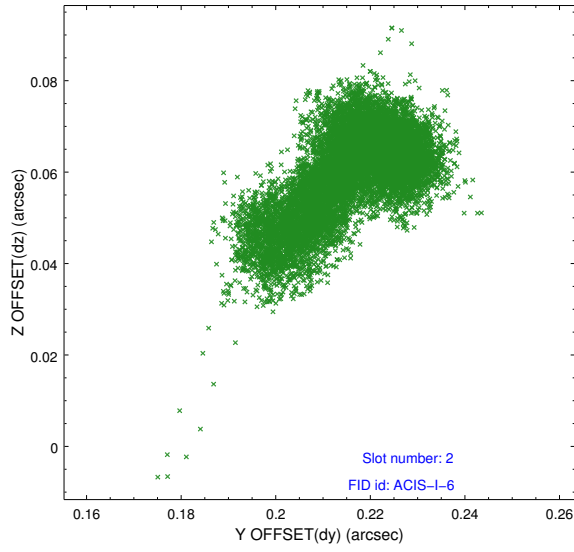
2.5.1 Slot 0



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)	2016.04.06
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	43.083800331473

A.2 Comments

Joint proposal with NRAO.

Two optional chips were dropped.