

V&V Reference Report

L2 ASCDS Version : 10.7

Observation 20592 - L2 Version 1
Chandra X-Ray Center

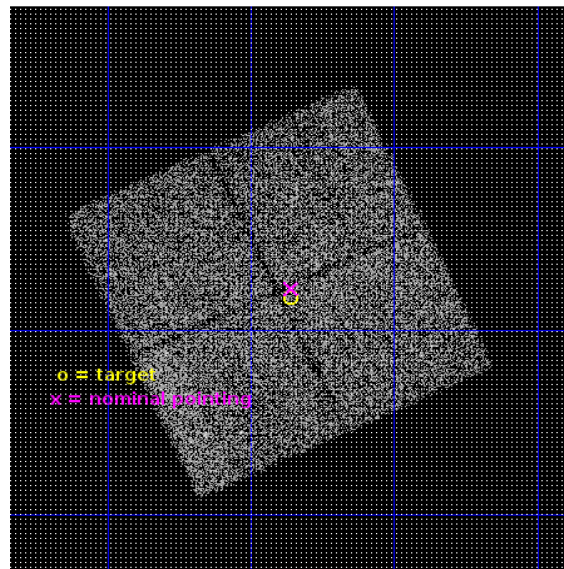
L2 Processing Date : Nov 17 2018

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1 Front

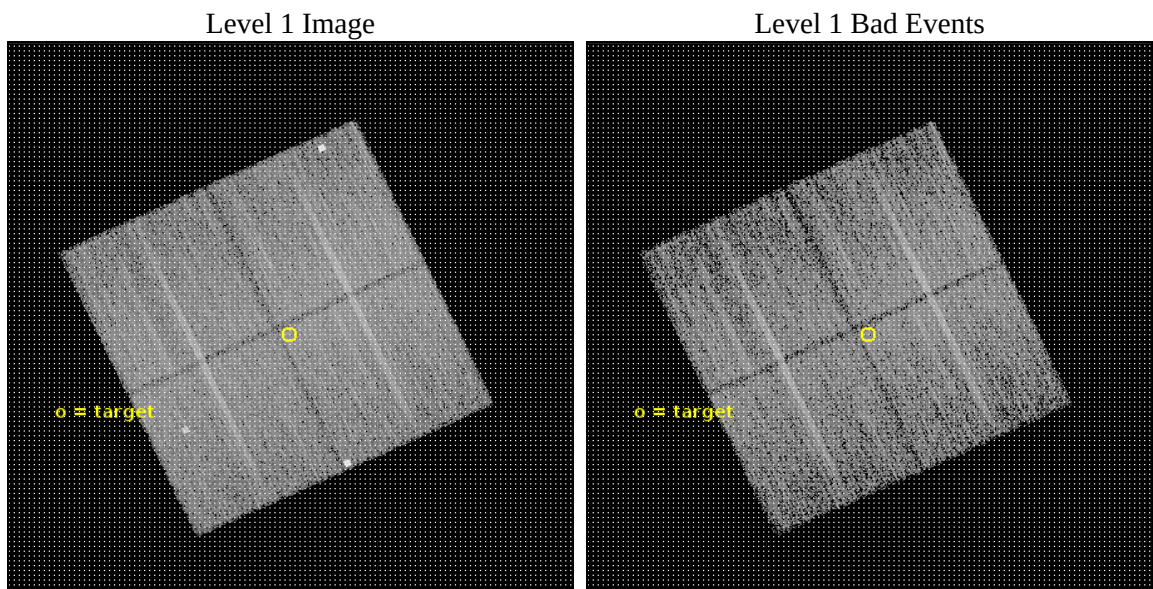
seq_num	801788	Sequence number
obs_id	20592	Observation id
title	Exploring the largest radii of the smallest cluster	Proposal title
observer	Yuanyuan Su	Principal investigator
object	MKW4-E	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	181.715	Observer's specified target RA [deg]
dec_targ	1.863583	Observer's specified target Dec [deg]
ra_nom	181.71462924261	Nominal RA [deg]
dec_nom	1.8715284187177	Nominal Dec [deg]
roll_nom	64.946068882953	Nominal Roll [deg]
revision	1	Processing version of data
ontime	15078.400116086	Sum of GTIs [s]
livetime	14881.389718013	Livetime [s]
ontime0	15078.400116086	Sum of GTIs [s]
ontime1	15078.400116086	Sum of GTIs [s]
ontime2	15078.400116086	Sum of GTIs [s]
ontime3	15078.400116086	Sum of GTIs [s]
l2events	41707	Number of level 2 events



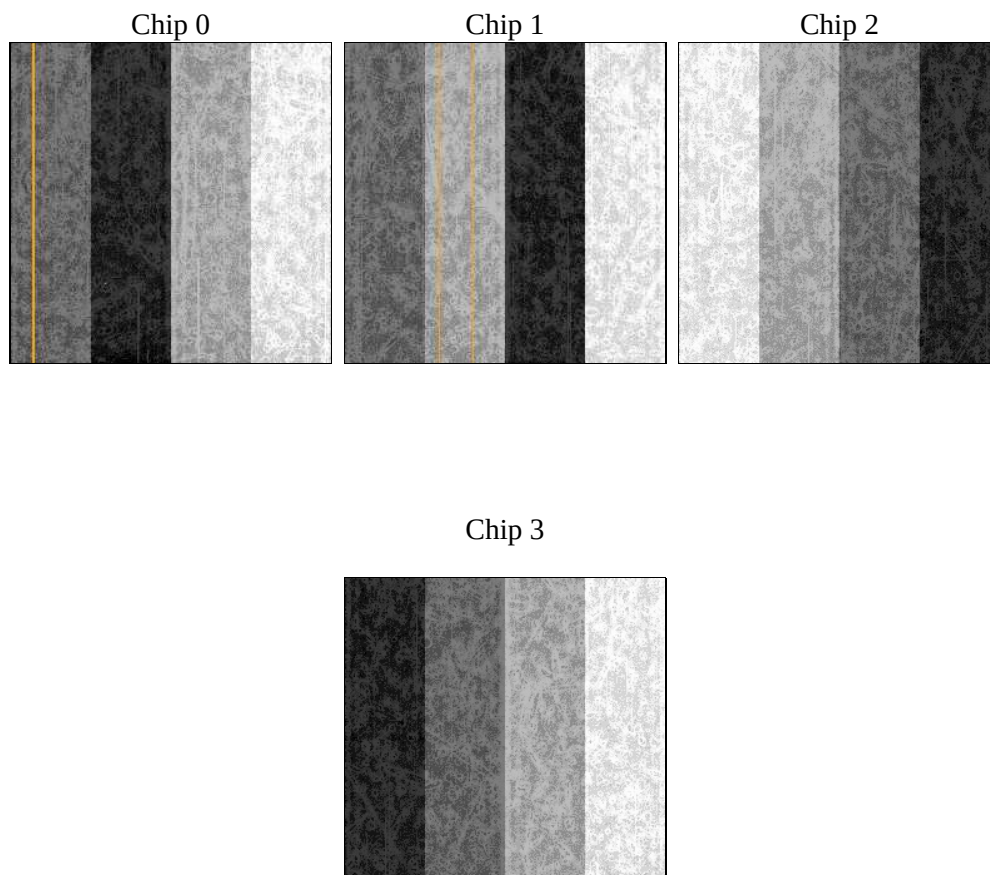
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	15000.000000	[s] Scheduled observation exposure time
ascdsver	10.7	Processing system revision	ontime	15078.400116086	Sum of GTIs [s]
caldsver	4.8.0.1	 	ontime0	15078.400116086	Sum of GTIs [s]
date	2018-11-17T14:19:45	Date and time of file creation	ontime1	15078.400116086	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	15078.400116086	Sum of GTIs [s]
			ontime3	15078.400116086	Sum of GTIs [s]
			l1events	447775	Number of level 1 events

2.1.4 Events

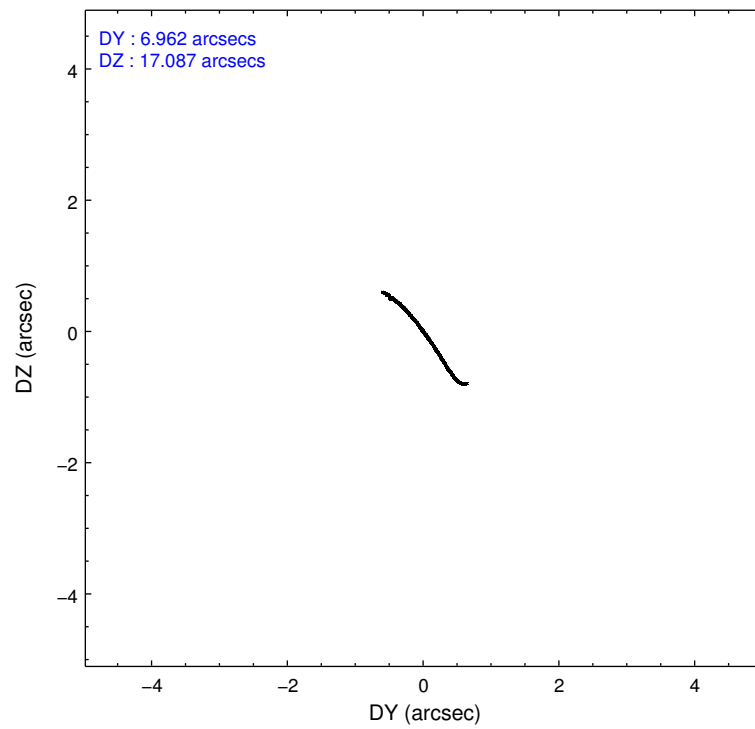
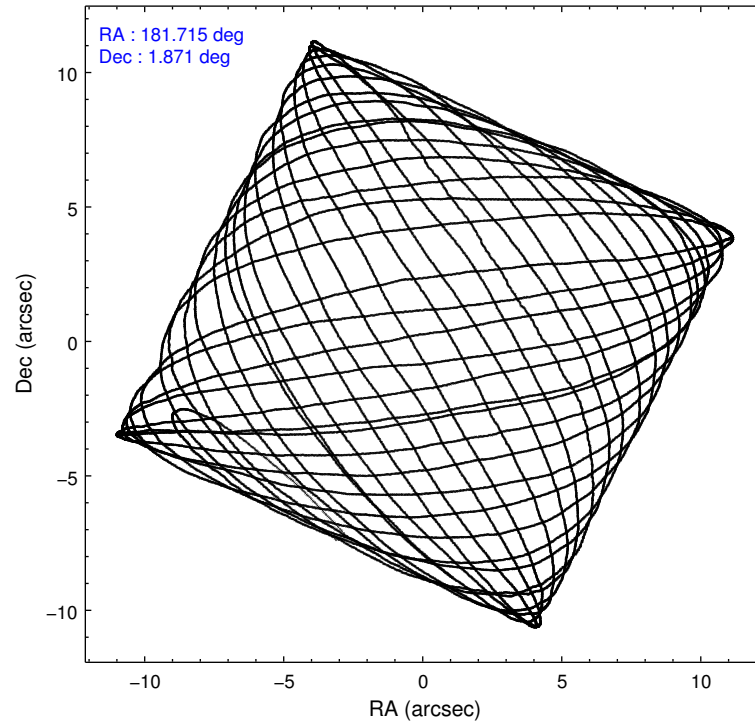
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	102686	105830	121711	117548
rejected events	90460	90571	105104	101308
rejected %	88%	85%	86%	86%

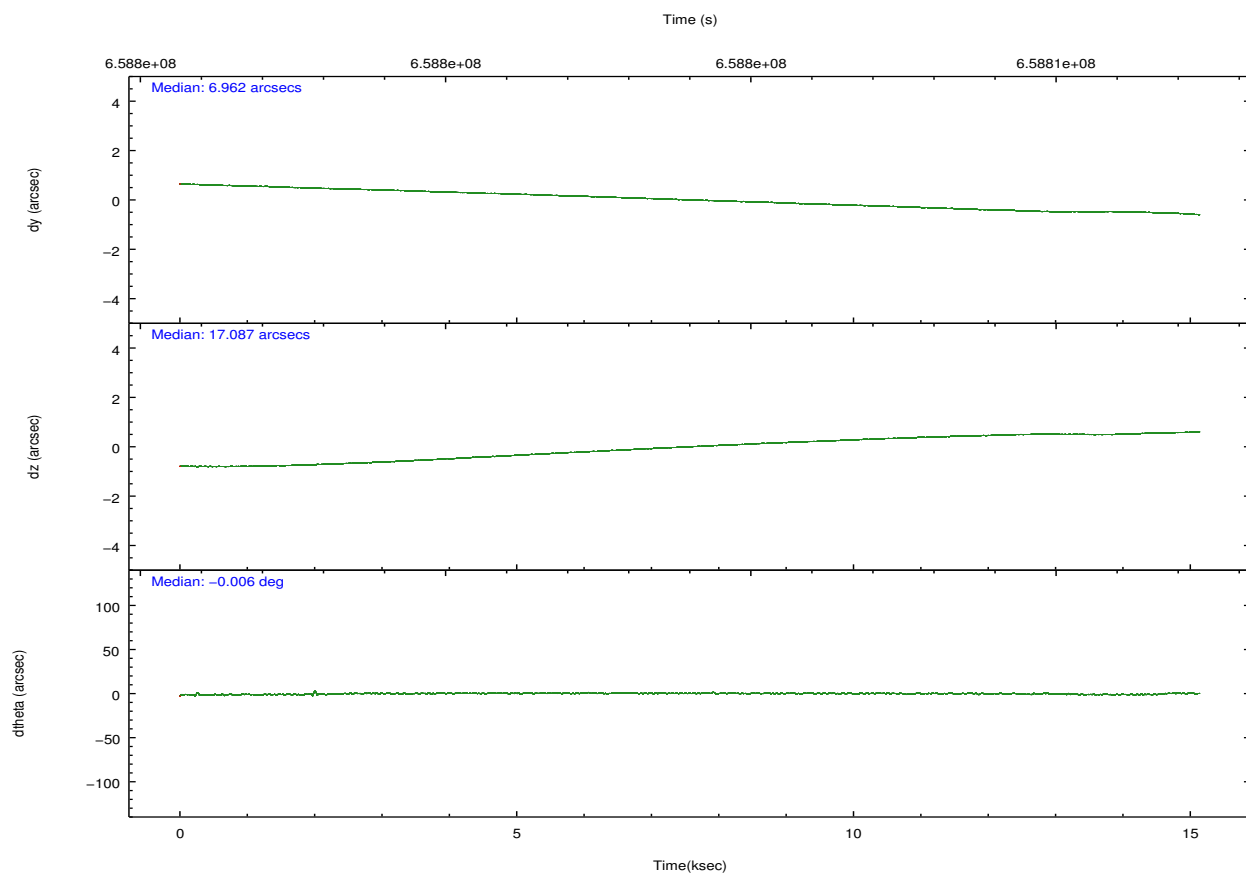
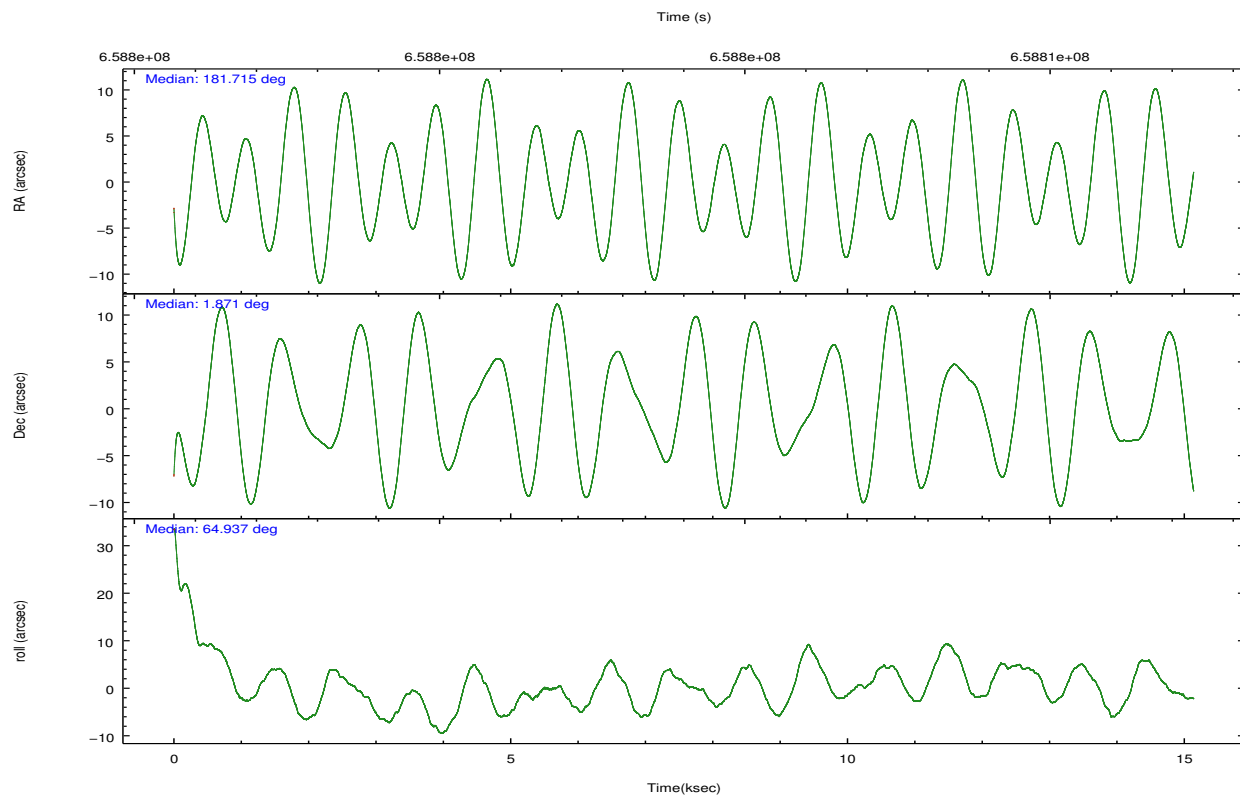
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	4169	5719	8878	8788
	4%	5%	7%	7%
grade 1 events	55	69	96	78
	0%	0%	0%	0%
grade 2 events	3030	3887	2873	2521
	2%	3%	2%	2%
grade 3 events	1243	1251	1181	1184
	1%	1%	0%	1%
grade 4 events	1164	1191	1195	1216
	1%	1%	0%	1%
grade 5 events	4610	4663	4495	5300
	4%	4%	3%	4%
grade 6 events	2622	3216	2483	2536
	2%	3%	2%	2%
grade 7 events	85793	85834	100510	95925
	83%	81%	82%	81%

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	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	181.717127	181.7146292426126	Subarray requested	NONE	NONE
[deg] Pointing Dec	1.844054	1.871528418717654	Alternating exposures requested	N	N
[deg] Pointing Roll	64.737288	64.94606888295331	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	658796568.184000	658795247.04263			
Observation start date	2018-11-16T23:01:39	2018-11-16T22:40:47			
[s] Observation end time (MET)	658811568.184000	658812648.46866			
Observation end date	2018-11-17T03:11:39	2018-11-17T03:30:48			
Read mode	TIMED	TIMED			

2.3 Aspect



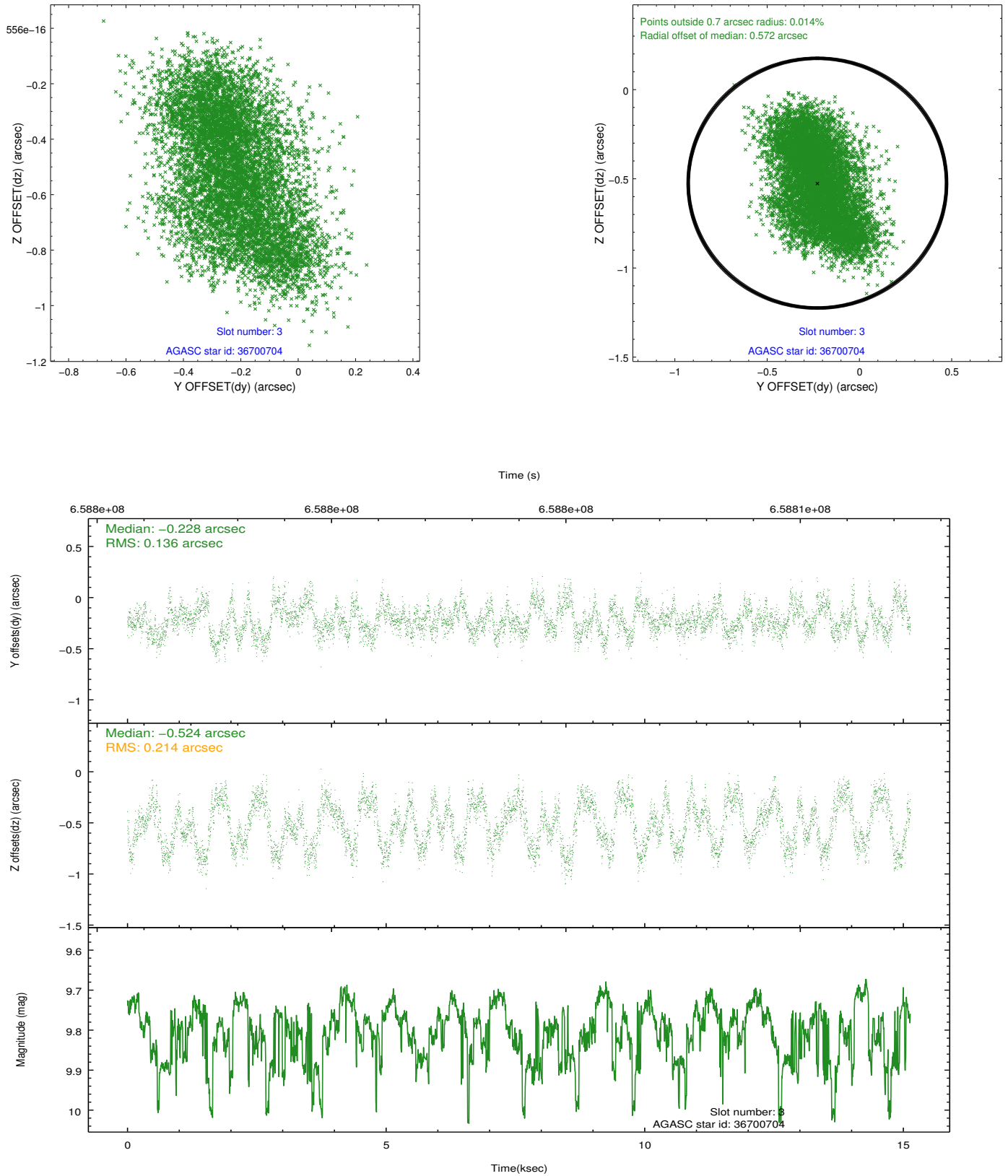


Slot Statistics

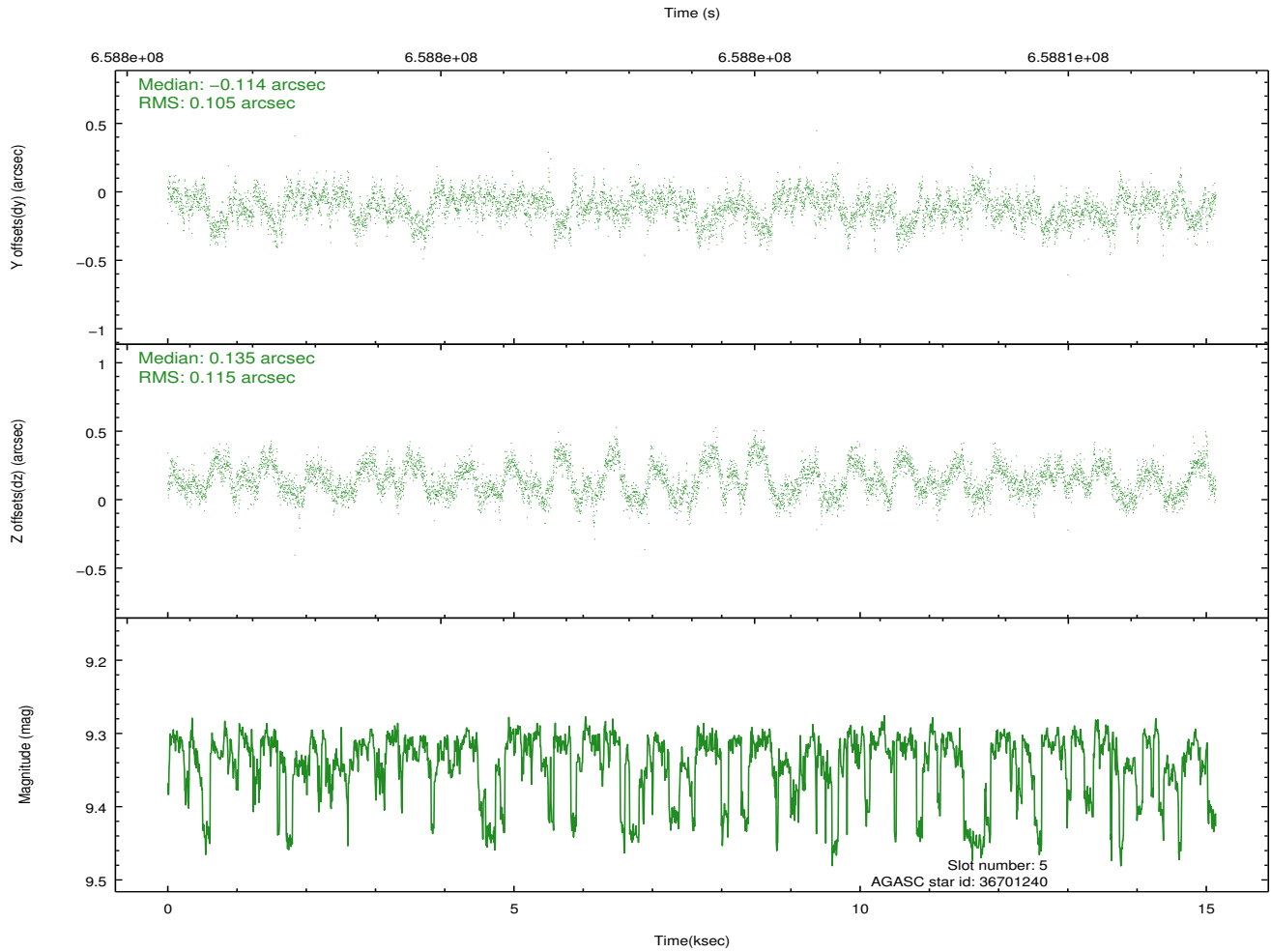
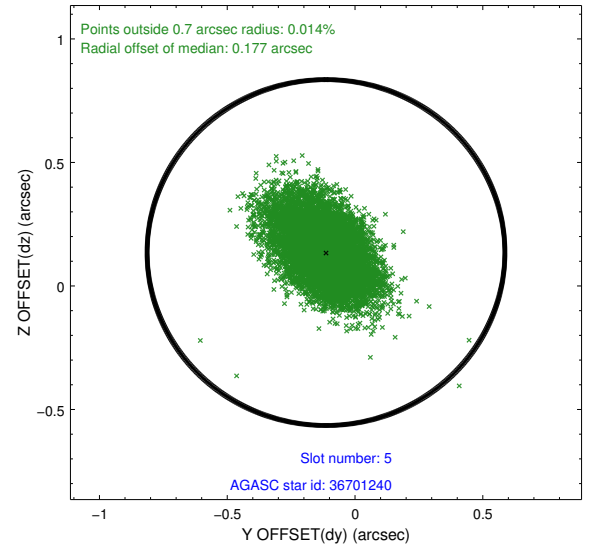
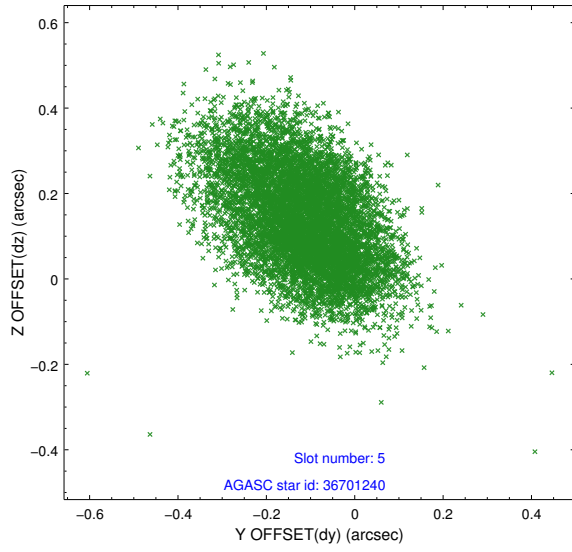
ot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.26	3693	1.000	0.142	-0.155	0.039	0.052	0.000000	0.000000	932.91	-840
1	FID		ACIS-I-5	7.23	3692	1.000	-0.480	0.052	0.015	0.026	0.000000	0.000000	-1815.79	1056
2	FID		ACIS-I-6	7.21	3693	1.000	0.246	0.172	0.050	0.062	0.000000	0.000000	398.05	1701
3	GUIDE	used	36700704	9.80	7372	1.000	-0.228	-0.524	0.280	0.420	181.490734	2.322169	1208.69	1471
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	36701240	9.33	7372	1.000	-0.114	0.135	0.165	0.268	182.320751	2.252710	2258.11	-1334
6	GUIDE	used	36703344	7.99	7381	1.000	0.034	-0.048	0.096	0.168	181.053552	1.462035	-2263.38	1574
7	GUIDE	used	36704288	9.42	7370	1.000	0.291	0.435	0.185	0.305	181.916987	1.602195	-484.35	-1019

2.4 Star Slots

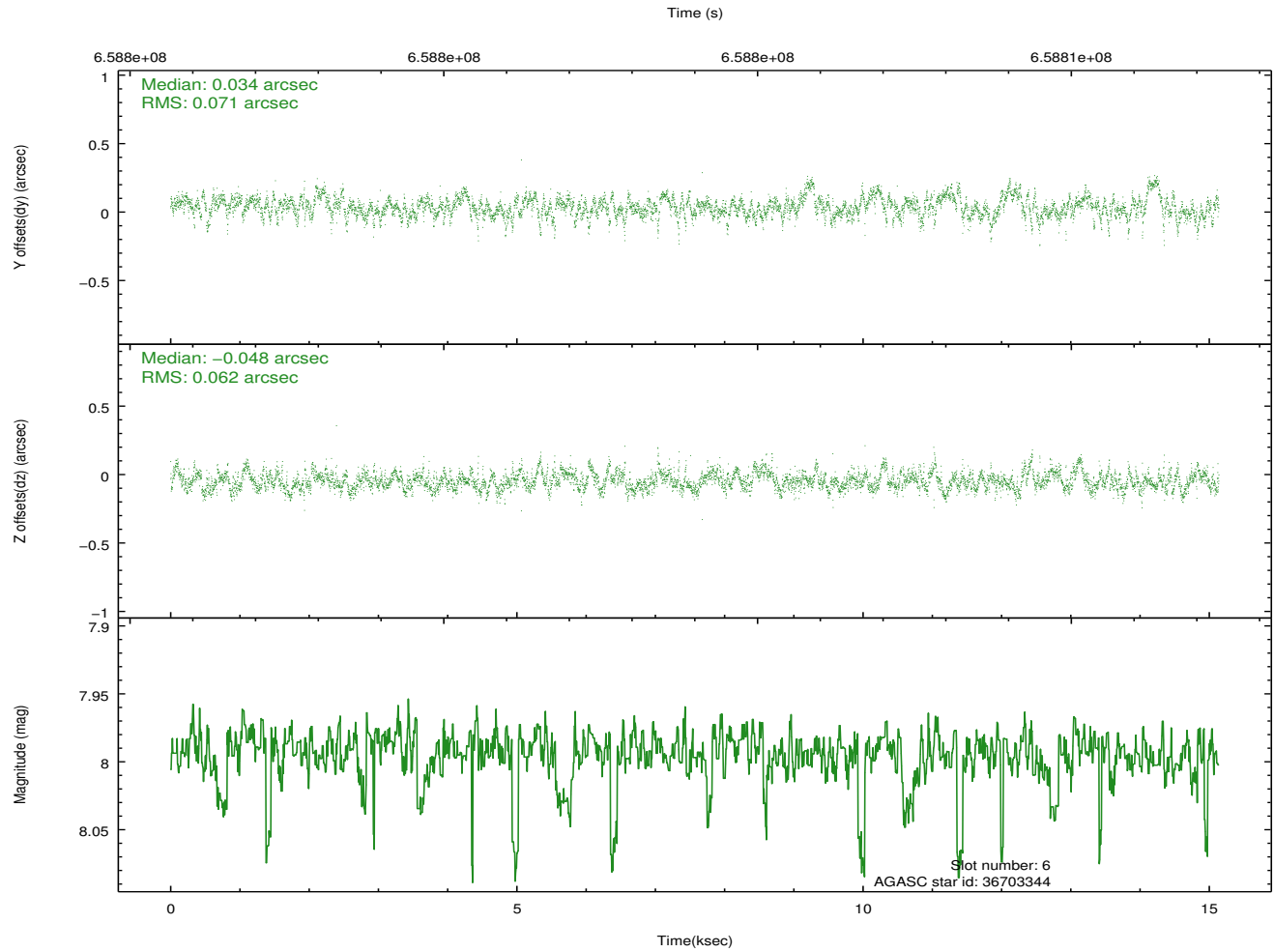
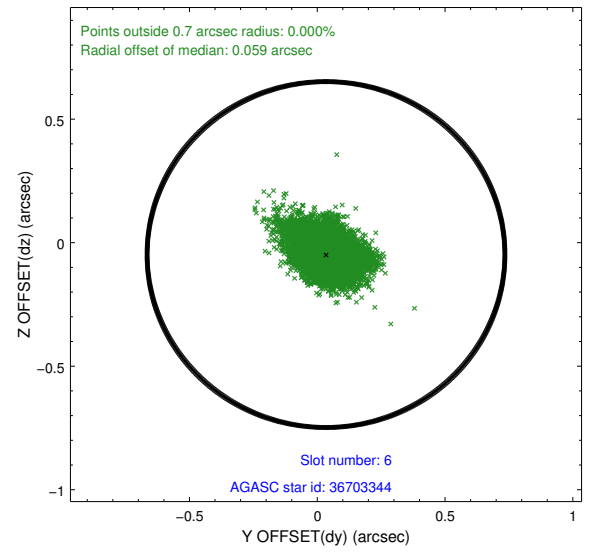
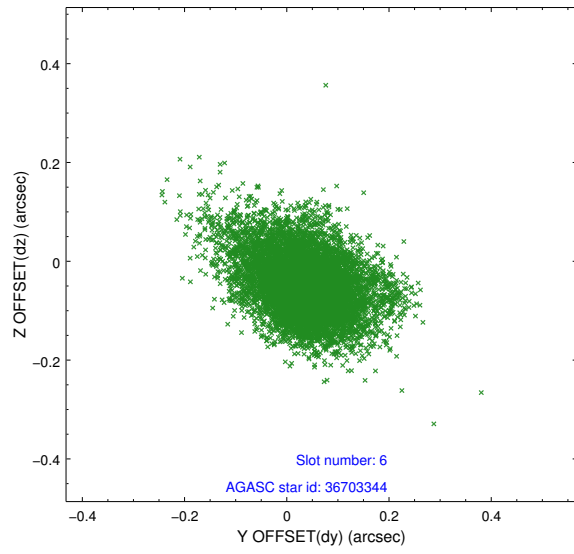
2.4.1 Slot 3



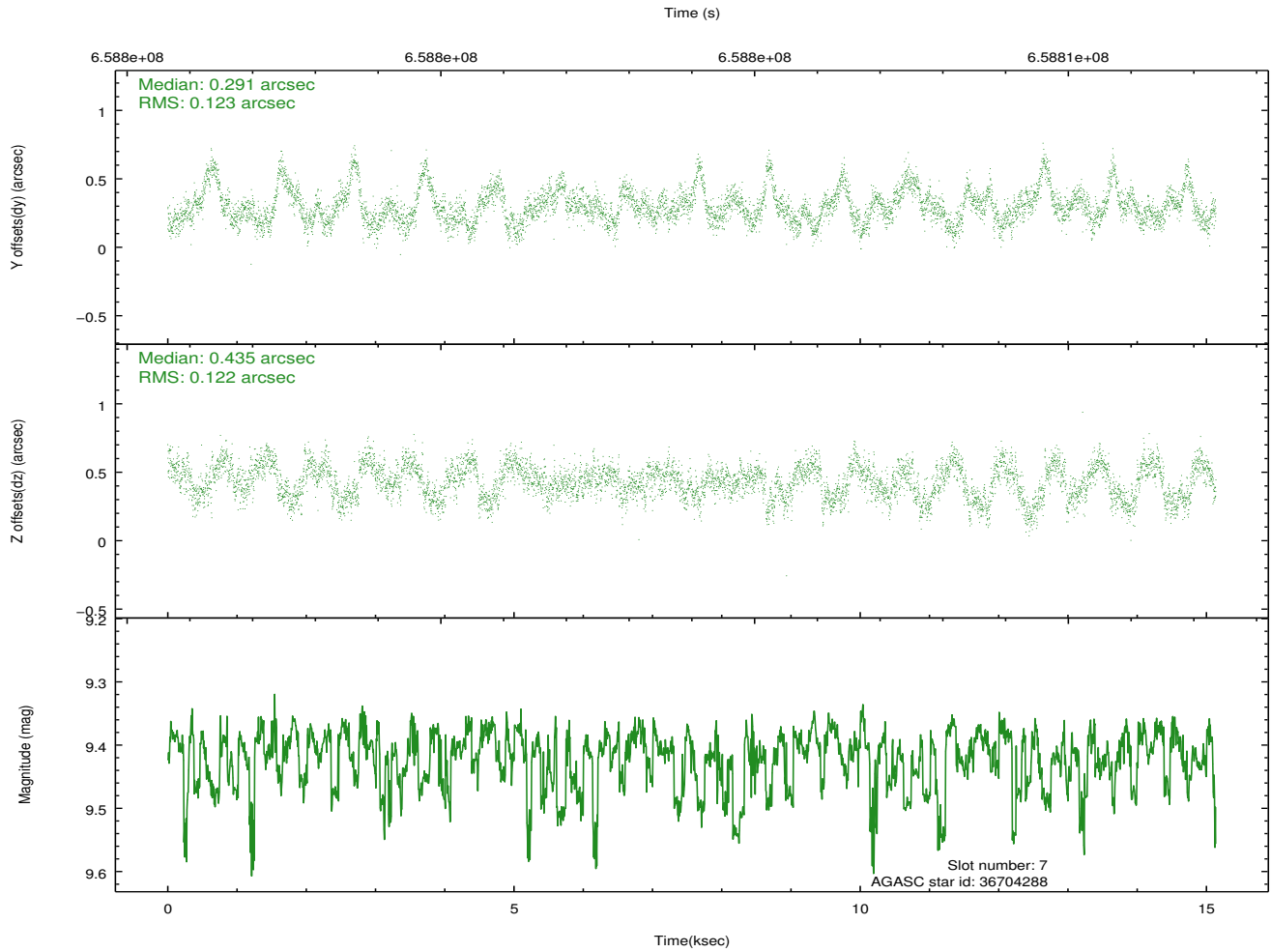
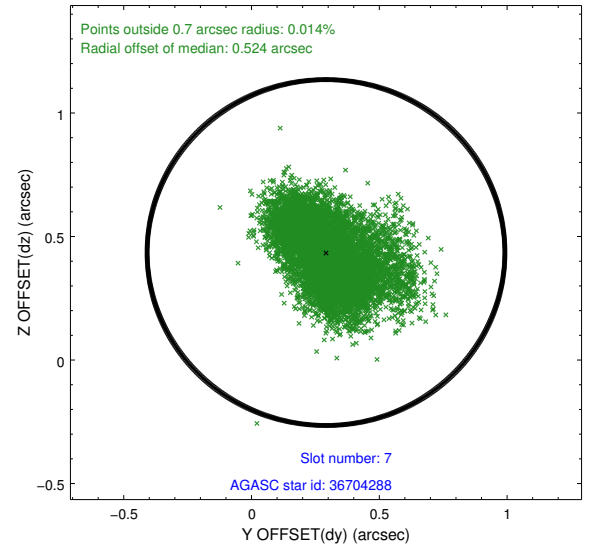
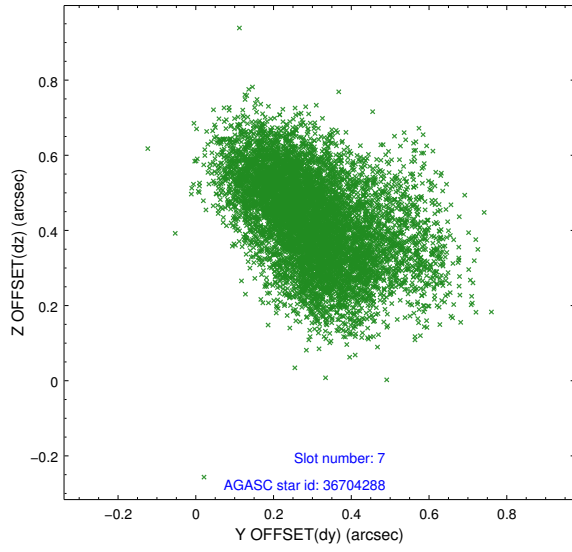
2.4.2 Slot 5



2.4.3 Slot 6

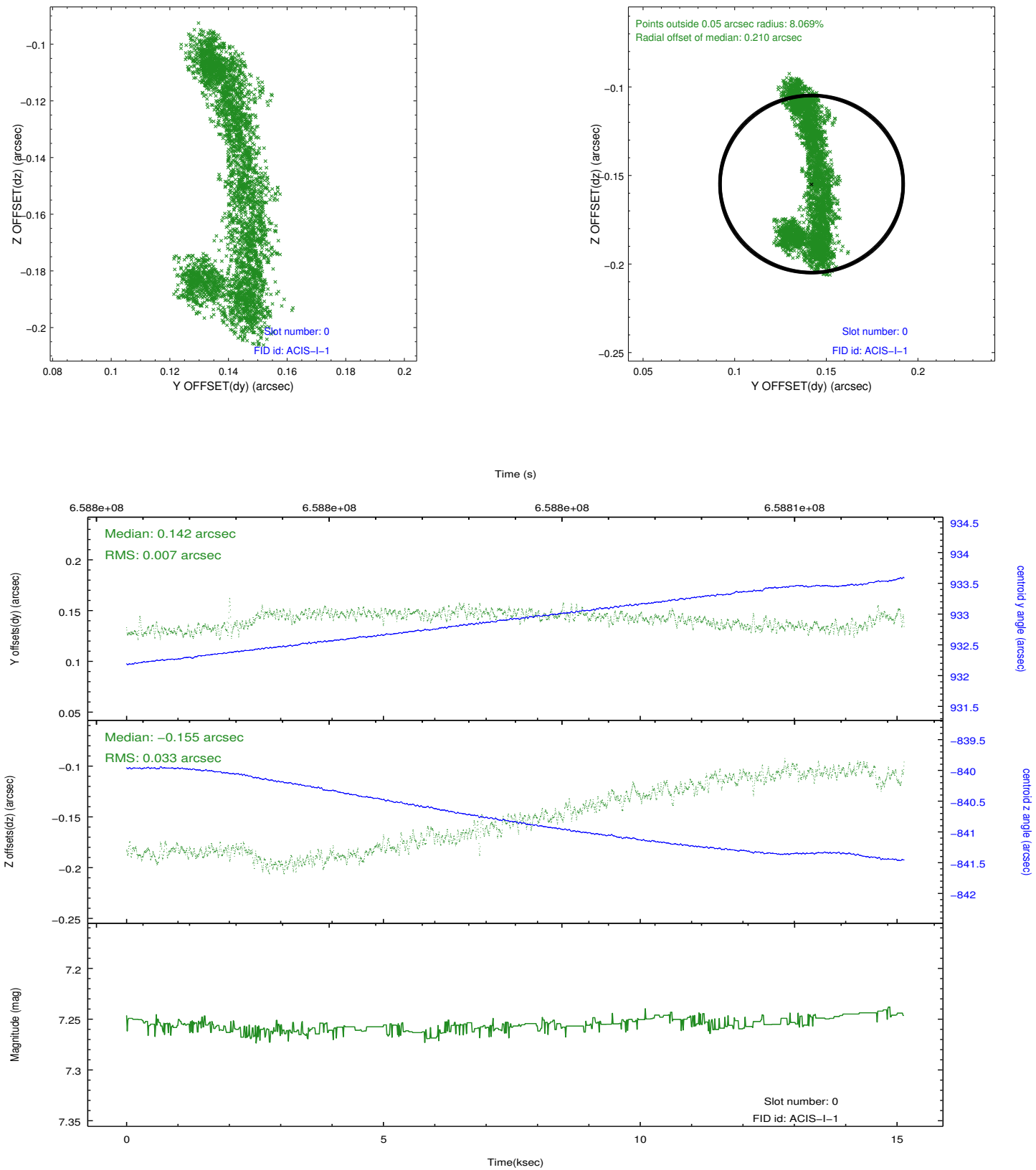


2.4.4 Slot 7

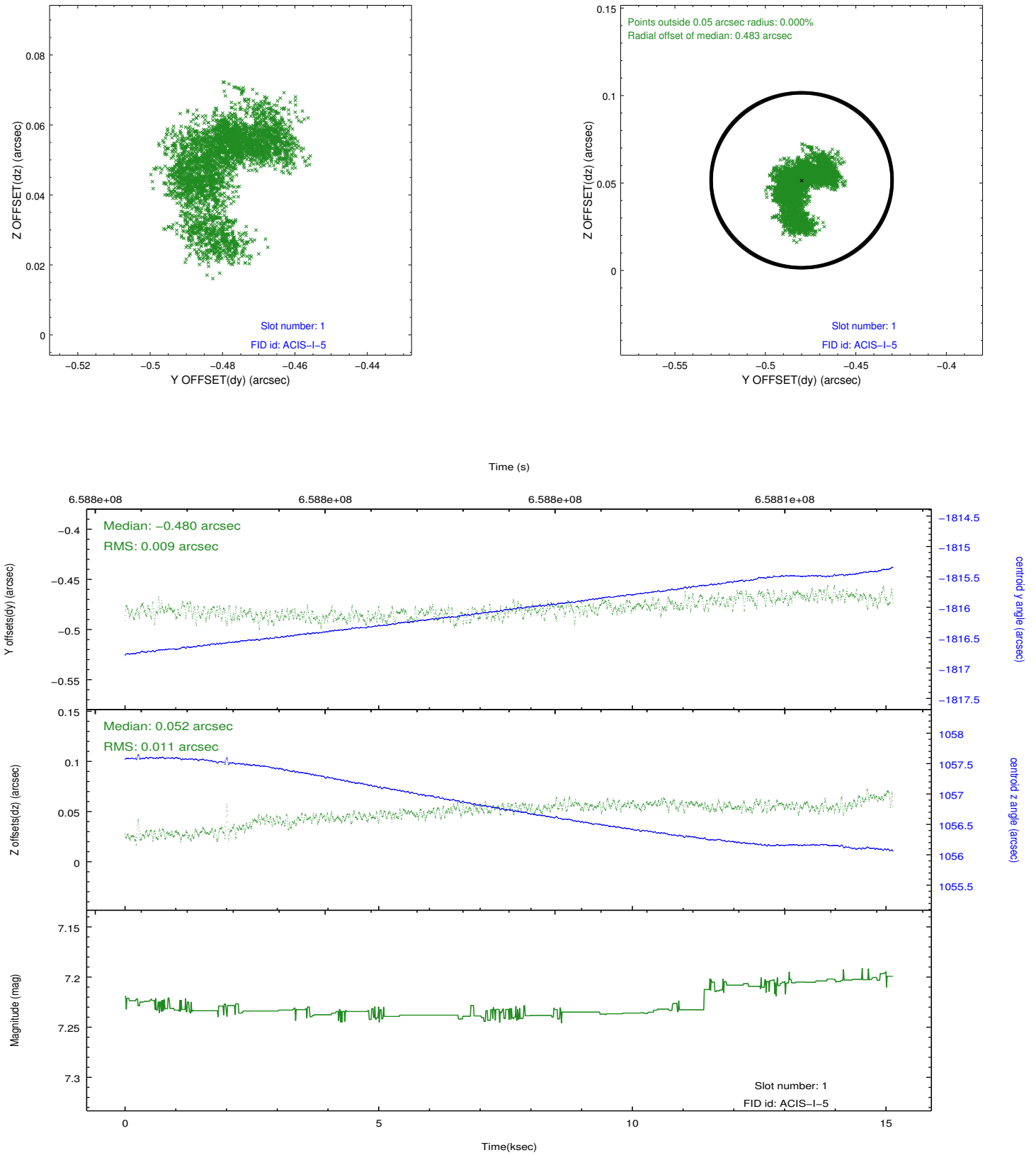


2.5 FID Slots

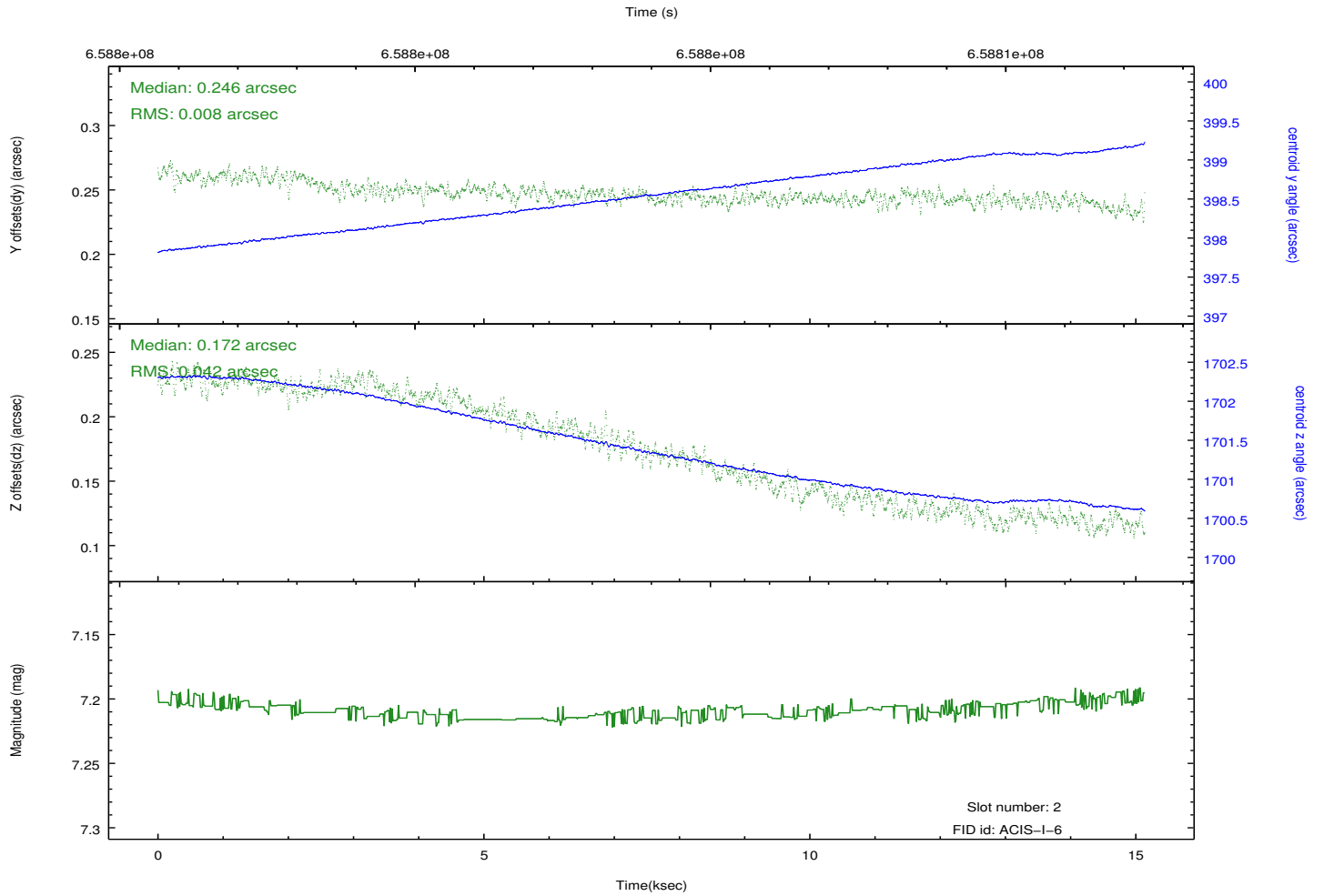
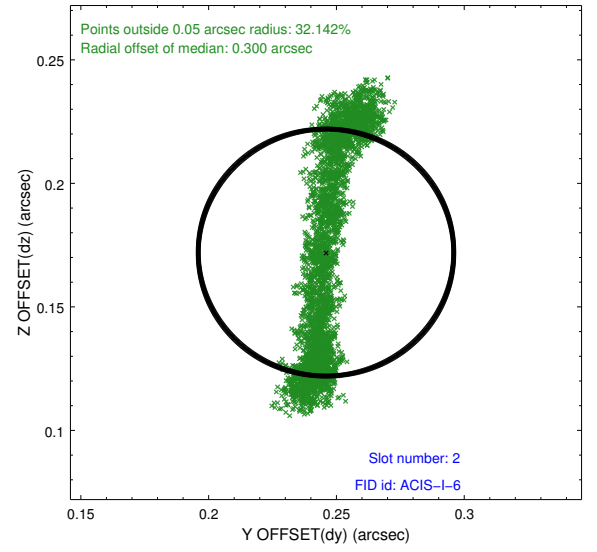
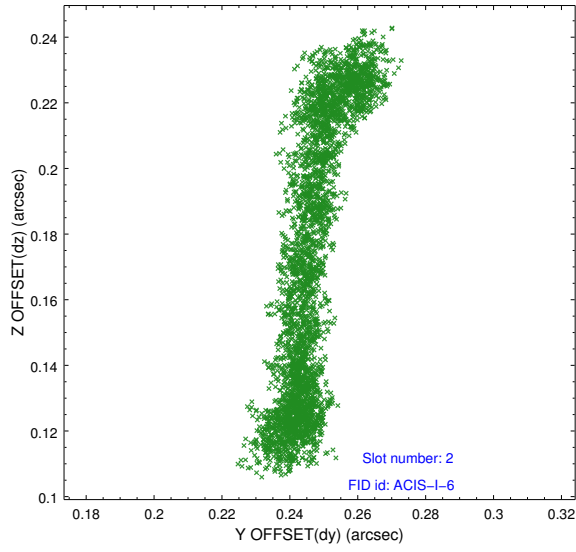
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2018.11.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	15.078400116086

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 slot from the solution.