

V&V Reference Report

L2 ASCDS Version : 10.6.4

Observation 21134 - L2 Version 1
Chandra X-Ray Center

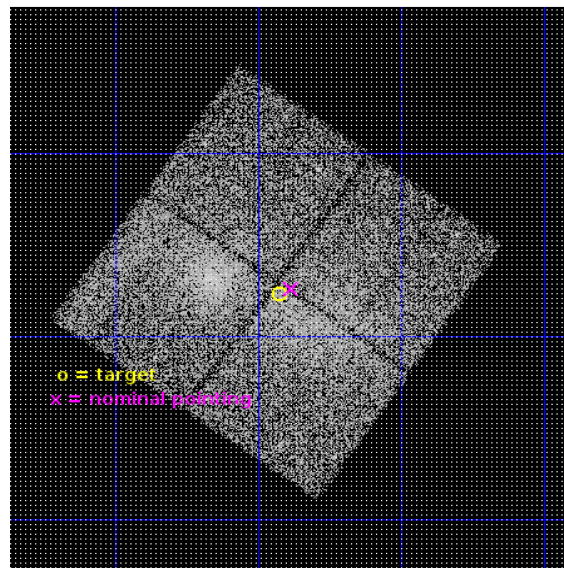
L2 Processing Date : Jul 29 2018

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1 Front

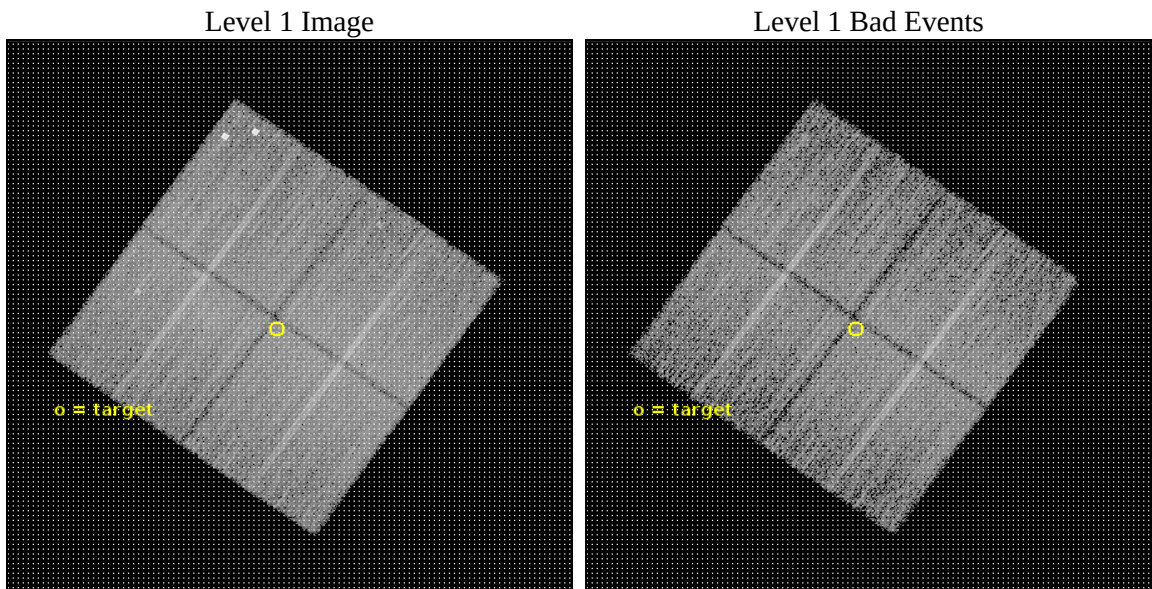
seq_num	801791	Sequence number
obs_id	21134	Observation id
title	1E 2216: THE FIRST SHOCK IN A CLUSTER COLLISION	Proposal title
observer	Jelle Kaastra	Principal investigator
object	1E 2216/1E 2215	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	334.605833	Observer's specified target RA [deg]
dec_targ	-3.795556	Observer's specified target Dec [deg]
ra_nom	334.59564028017	Nominal RA [deg]
dec_nom	-3.7901655252372	Nominal Dec [deg]
roll_nom	125.20802522157	Nominal Roll [deg]
revision	1	Processing version of data
ontime	17077.900131464	Sum of GTIs [s]
livetime	16854.764793679	Livetime [s]
ontime0	17071.618031144	Sum of GTIs [s]
ontime1	17077.900131464	Sum of GTIs [s]
ontime2	17077.900131464	Sum of GTIs [s]
ontime3	17077.900131464	Sum of GTIs [s]
l2events	61196	Number of level 2 events



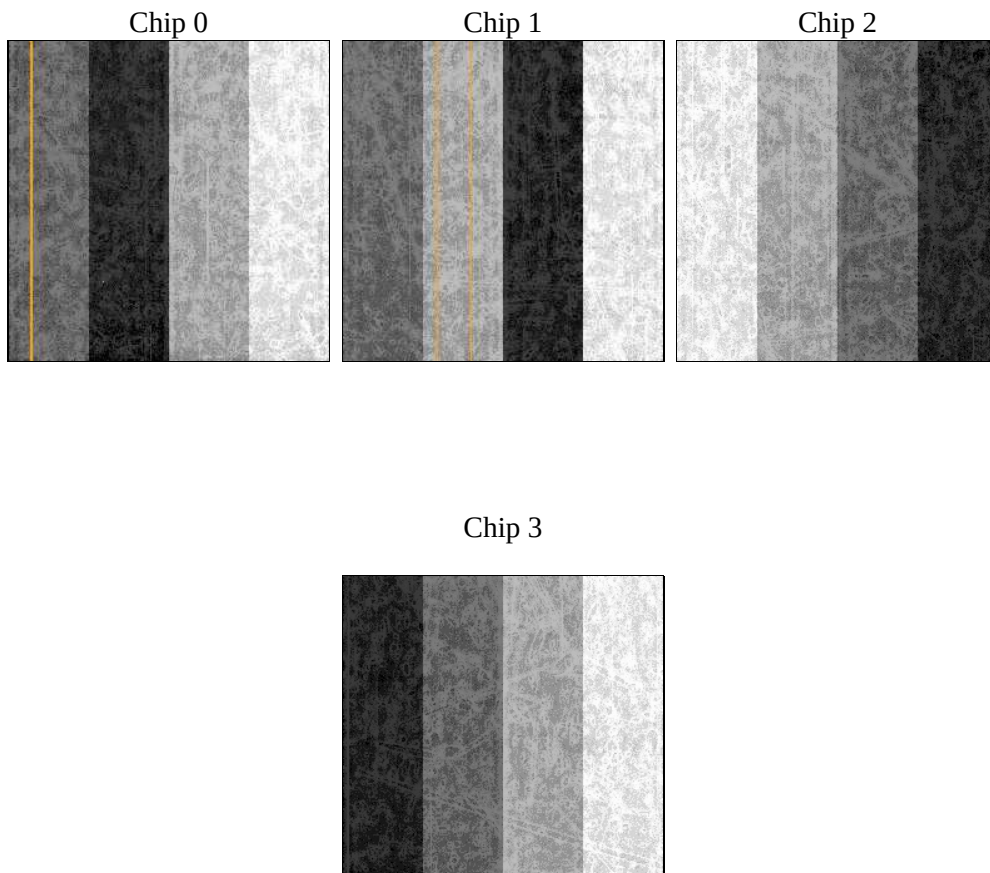
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	17000.000000	[s] Scheduled observation exposure time
ascdsver	10.6.4	Processing system revision	ontime	17077.900131464	Sum of GTIs [s]
caldsver	4.7.8	 	ontime0	17071.618031144	Sum of GTIs [s]
date	2018-07-29T22:12:37	Date and time of file creation	ontime1	17077.900131464	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	17077.900131464	Sum of GTIs [s]
			ontime3	17077.900131464	Sum of GTIs [s]
			l1events	525862	Number of level 1 events

2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	132580	127599	134153	131530
rejected events	106635	105648	116601	114185
rejected %	80%	82%	86%	86%

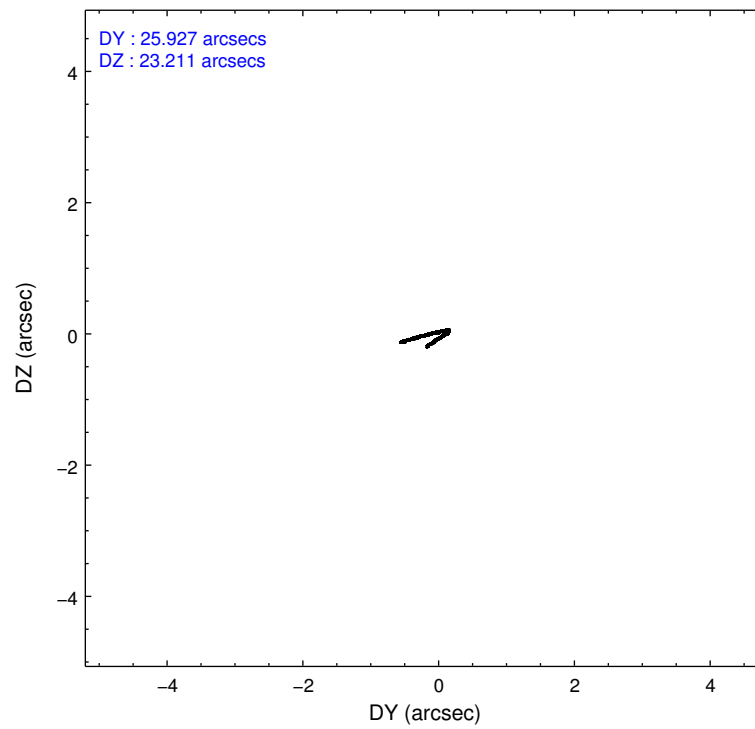
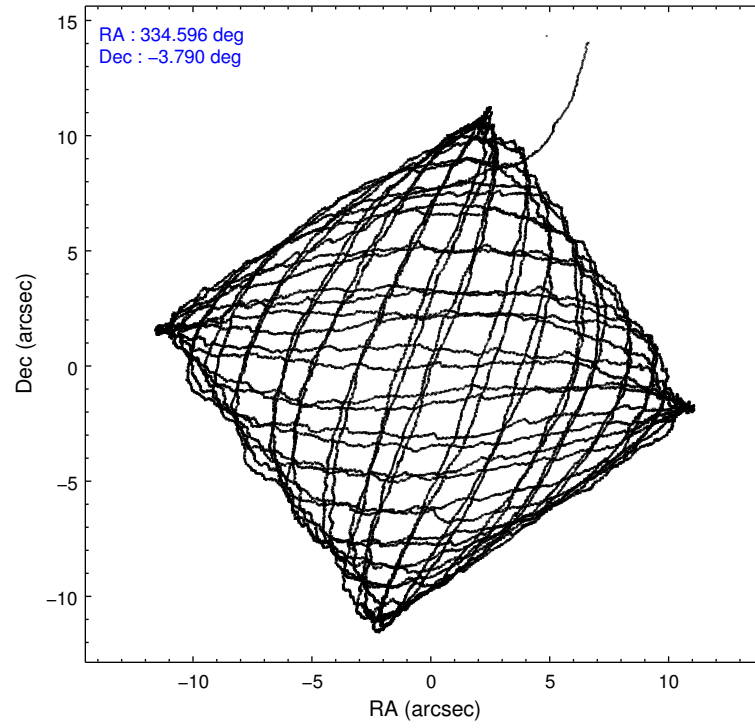
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	16291	10243	7873	7863
	12%	8%	5%	5%
grade 1 events	119	111	94	103
	0%	0%	0%	0%
grade 2 events	3733	4662	3702	3307
	2%	3%	2%	2%
grade 3 events	1515	1645	1466	1493
	1%	1%	1%	1%
grade 4 events	1438	1651	1514	1590
	1%	1%	1%	1%
grade 5 events	5536	5652	5164	6208
	4%	4%	3%	4%
grade 6 events	2981	3756	3004	3100
	2%	2%	2%	2%
grade 7 events	100967	99879	111336	107866
	76%	78%	82%	82%

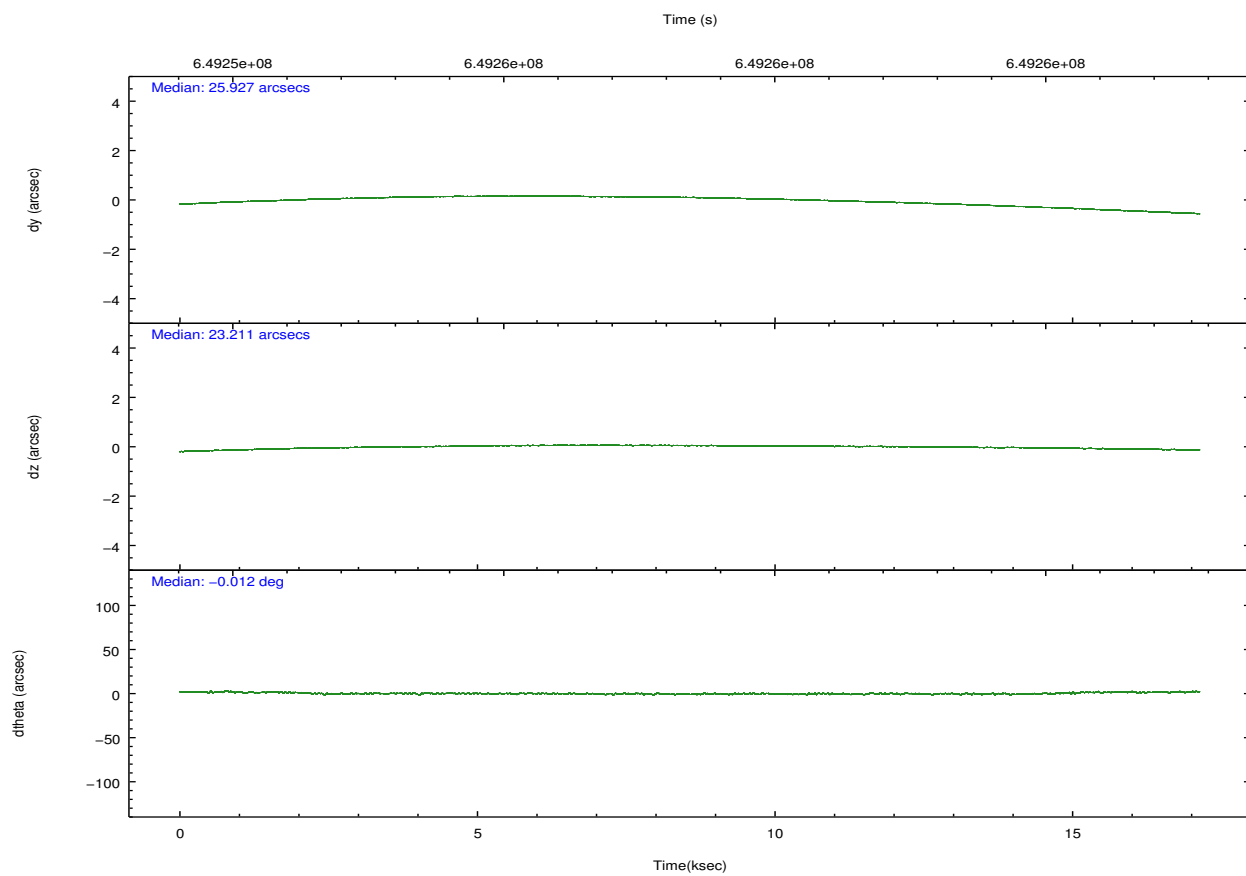
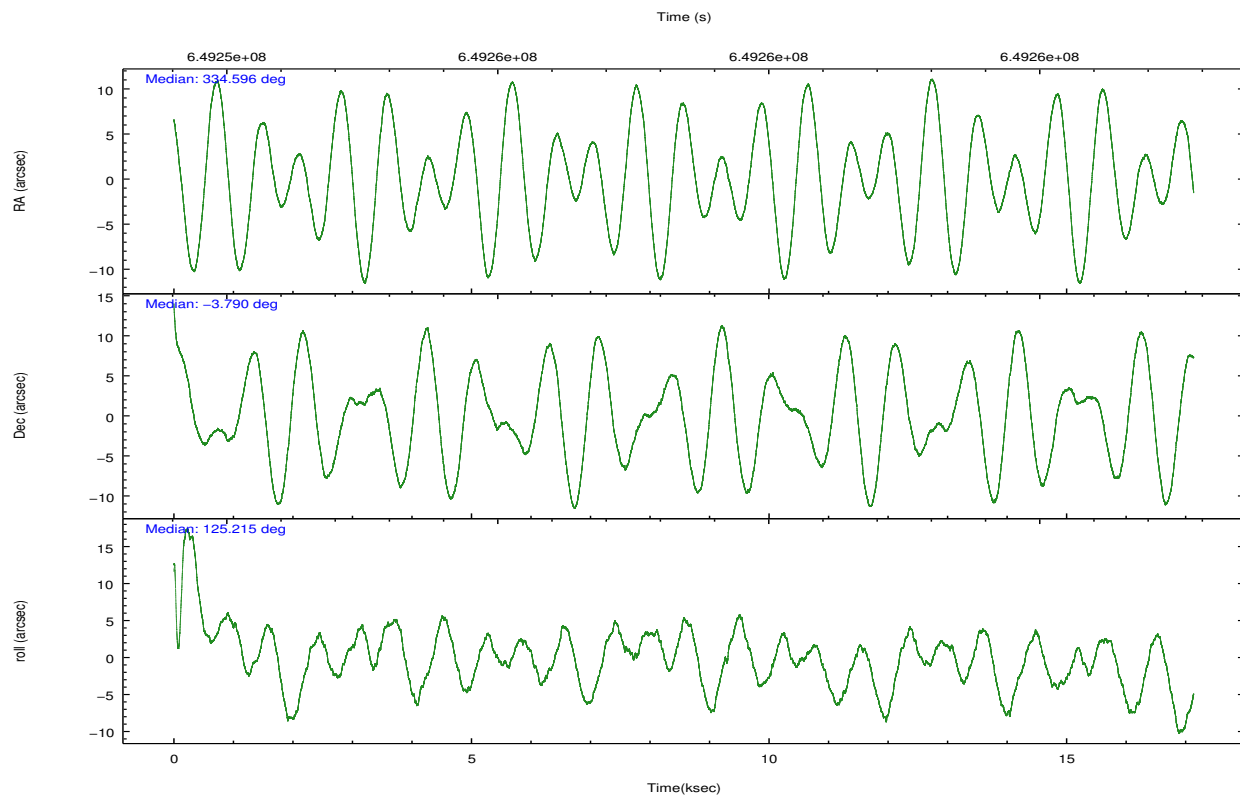
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-0123	ACIS-0123
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	334.620793	334.5956402801748
[deg] Pointing Dec	-3.801663	-3.790165525237248
[deg] Pointing Roll	125.000987	125.2080252215673
[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)	649250013.184000	649248399.9829201
Observation start date	2018-07-29T11:12:24	2018-07-29T10:46:39
[s] Observation end time (MET)	649267013.184000	649267898.04658
Observation end date	2018-07-29T15:55:44	2018-07-29T16:11:38
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
CCD I0 on	Y	Y
CCD I1 on	Y	Y
CCD I2 on	Y	Y
CCD I3 on	Y	Y
CCD S0 on	N	N
CCD S1 on	N	N
CCD S2 on	N	N
CCD S3 on	O1	N
CCD S4 on	N	N
CCD S5 on	N	N
Number of optional ACIS chips dropped	1	1
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.1

2.3 Aspect



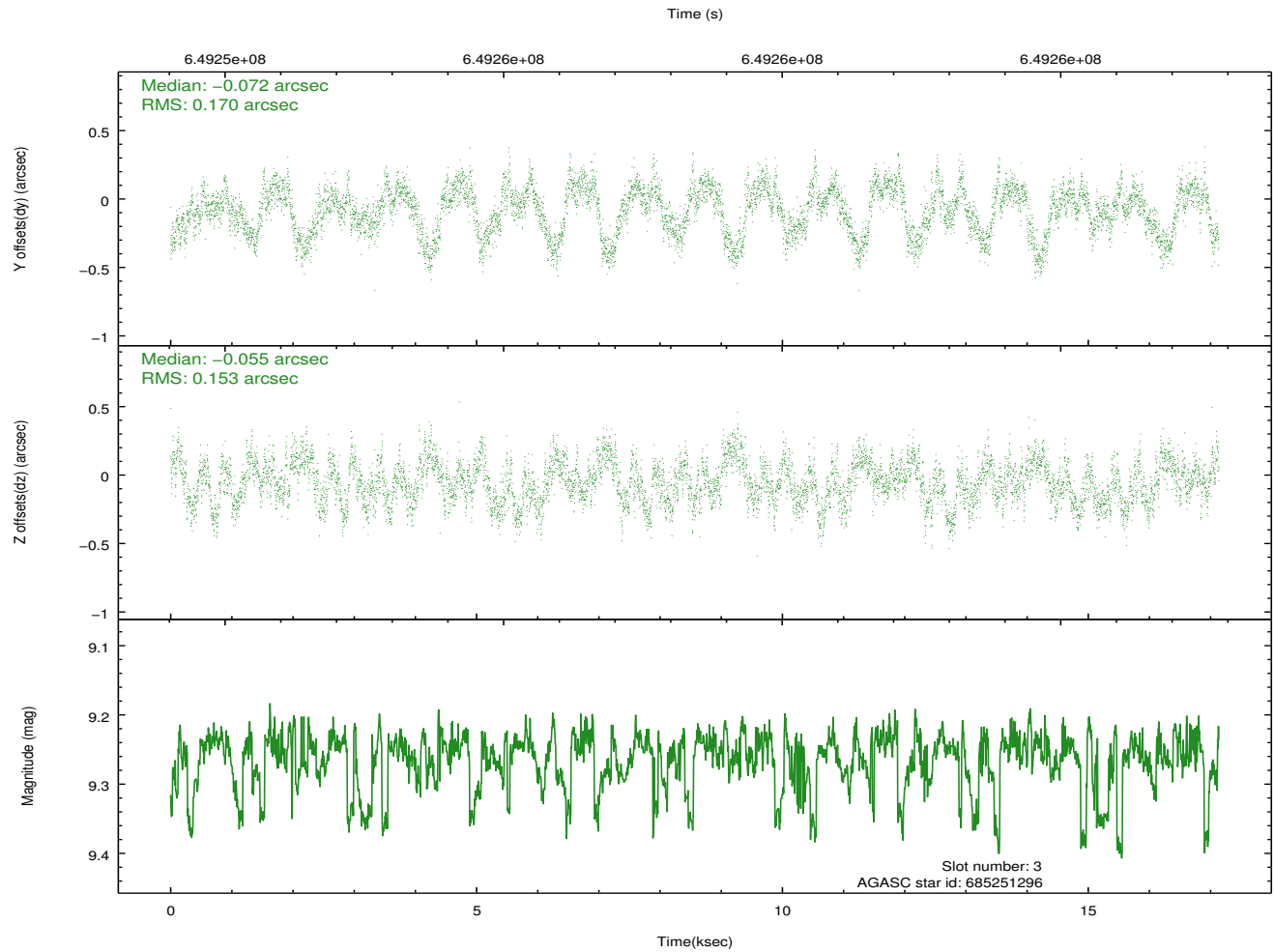
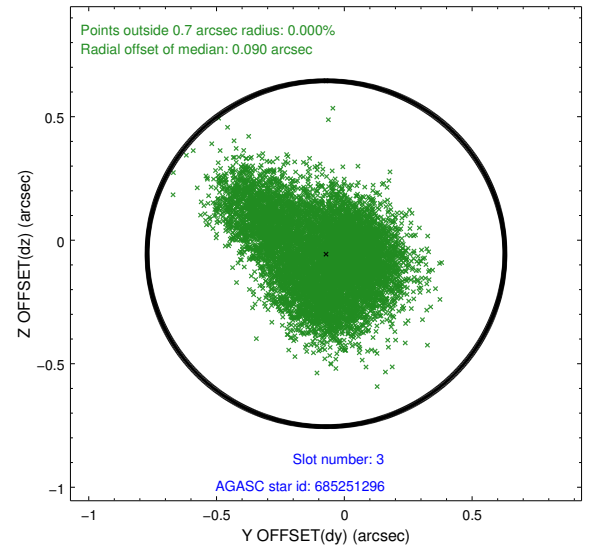
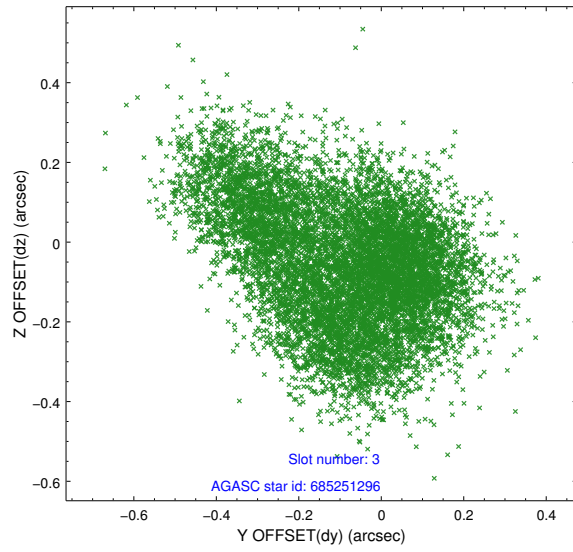


Slot Statistics

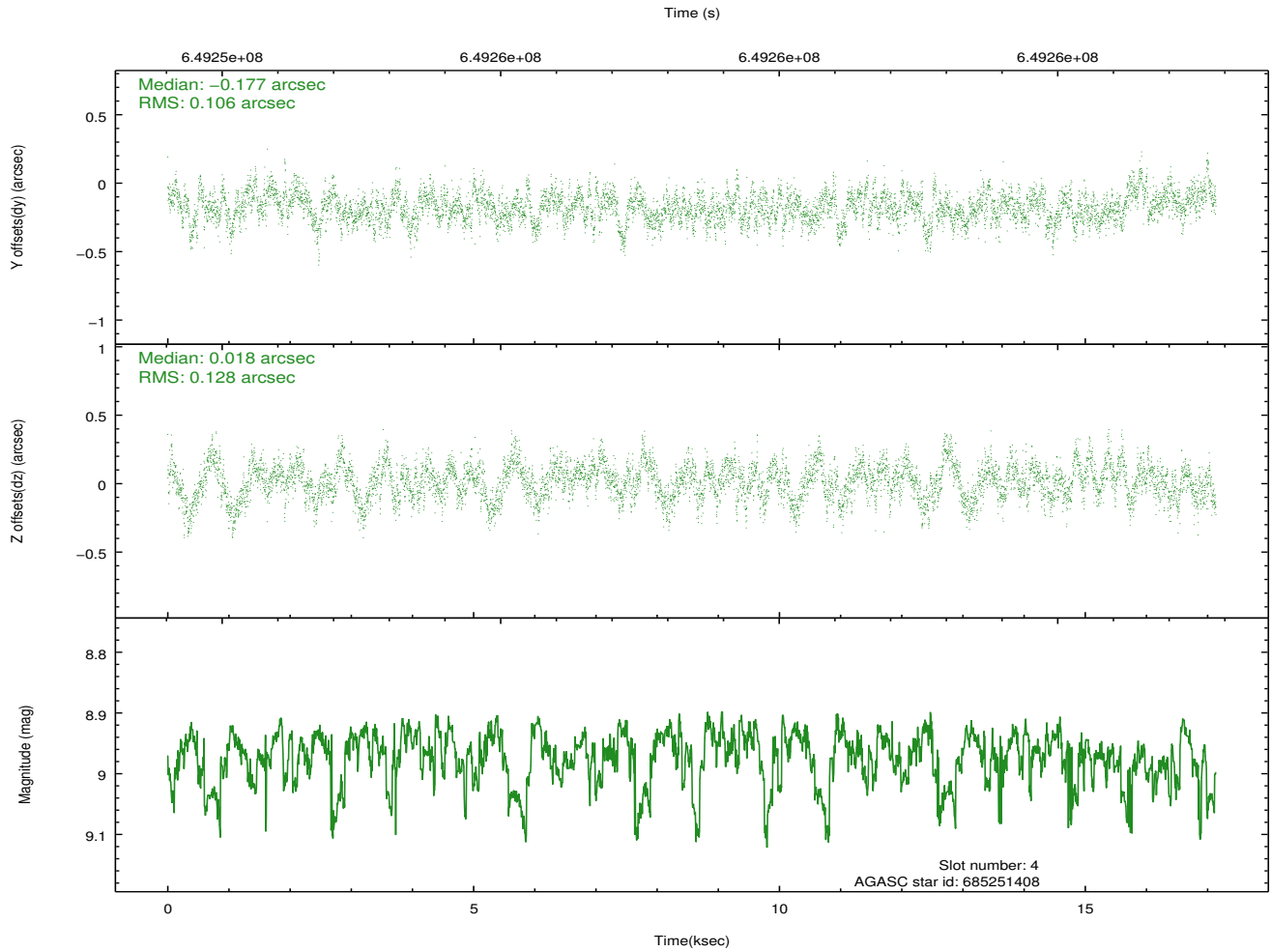
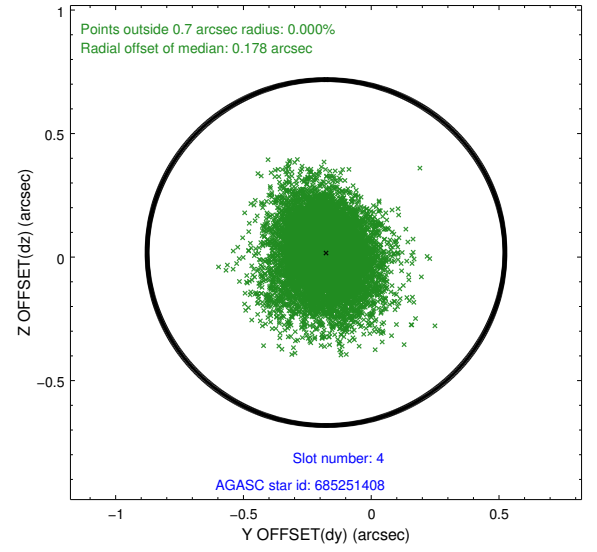
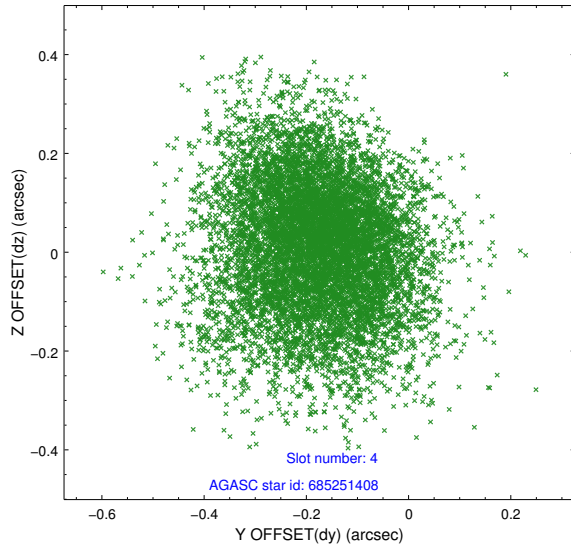
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.20	4178	1.000	0.233	-0.004	0.009	0.017	0.000000	0.000000	913.68	-846
1	FID		ACIS-I-2	7.10	4180	1.000	-0.184	-0.101	0.012	0.022	0.000000	0.000000	-780.70	-853
2	FID		ACIS-I-5	7.17	4179	1.000	-0.140	0.176	0.015	0.031	0.000000	0.000000	-1835.41	1050
3	GUIDE	used	685251296	9.26	8348	1.000	-0.072	-0.055	0.243	0.395	334.433018	-3.343248	1739.26	-393
4	GUIDE	used	685251408	8.97	8345	1.000	-0.177	0.018	0.175	0.292	334.512424	-3.172976	2077.77	-978
5	GUIDE	used	685254528	8.07	8358	1.000	0.165	0.226	0.186	0.289	334.954282	-4.066255	-1466.39	-432
6	GUIDE	used	685257144	9.10	8344	1.000	-0.286	-0.485	0.177	0.298	334.457122	-4.250644	-986.70	1408
7	GUIDE	used	685388192	8.77	8350	1.000	0.386	0.310	0.153	0.250	335.135532	-4.161413	-2121.10	-769

2.4 Star Slots

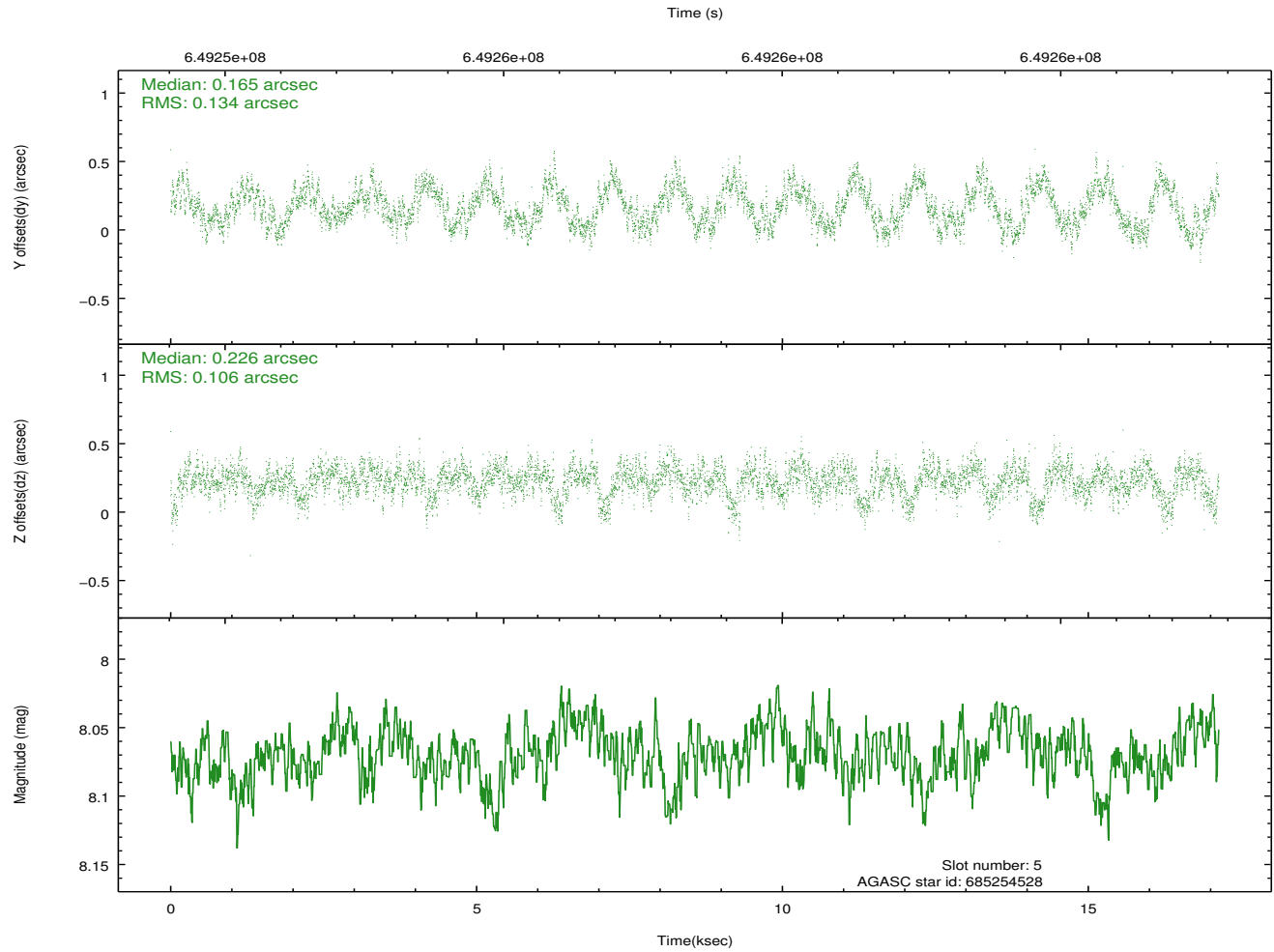
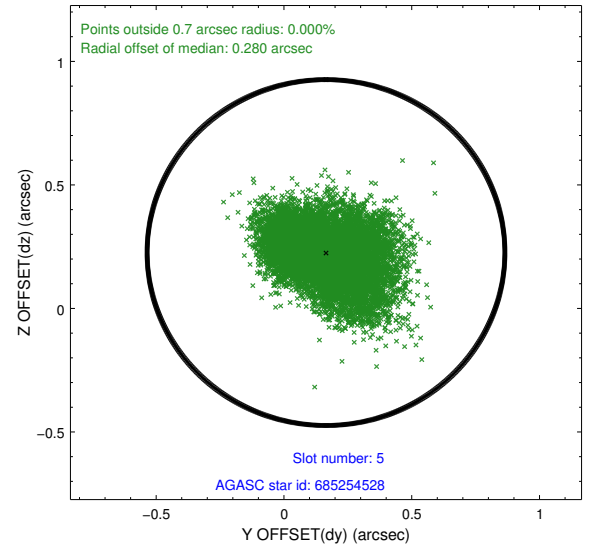
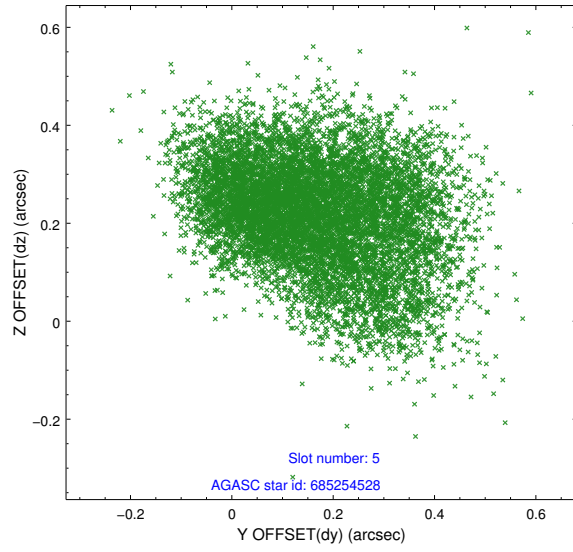
2.4.1 Slot 3



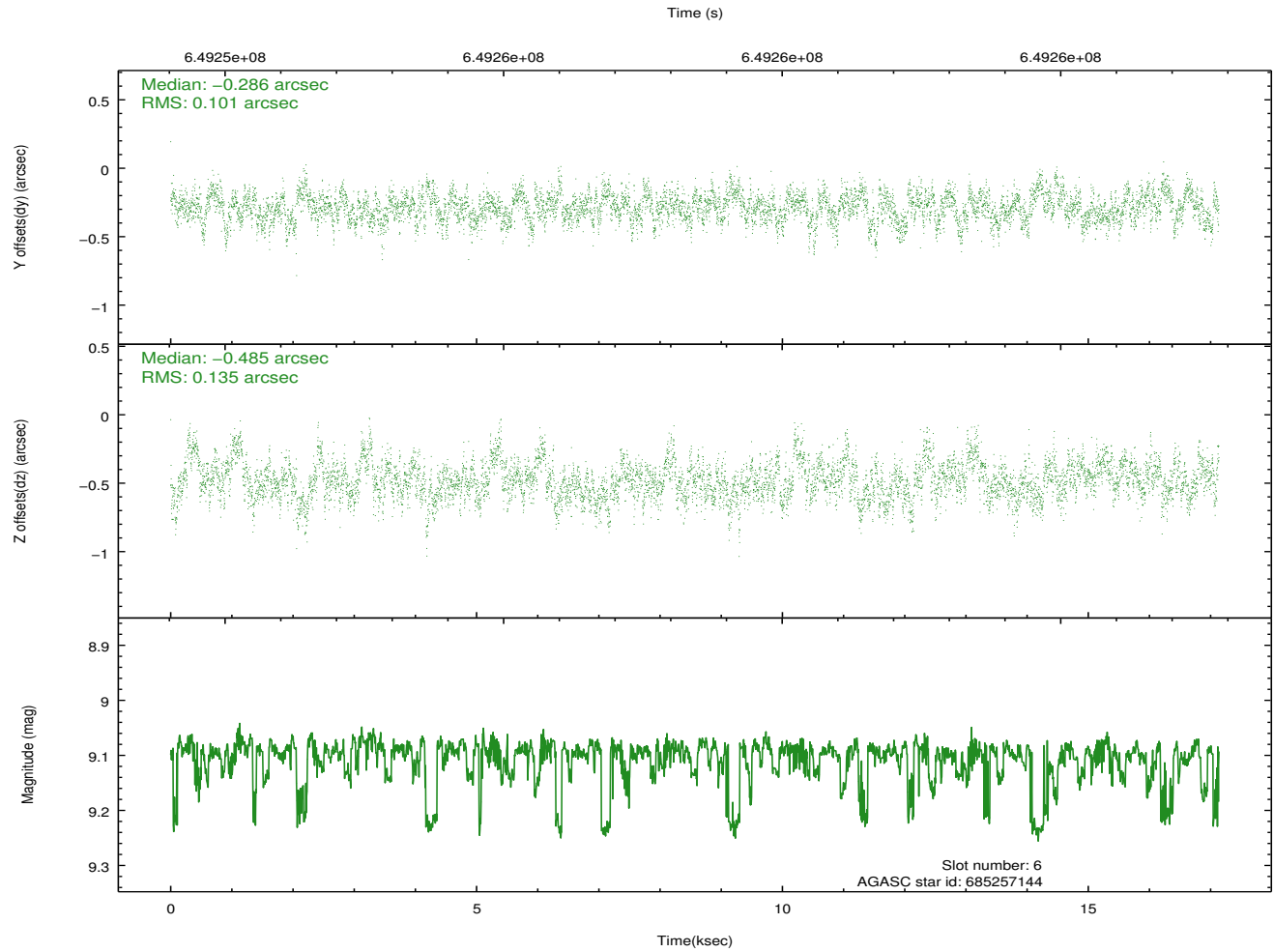
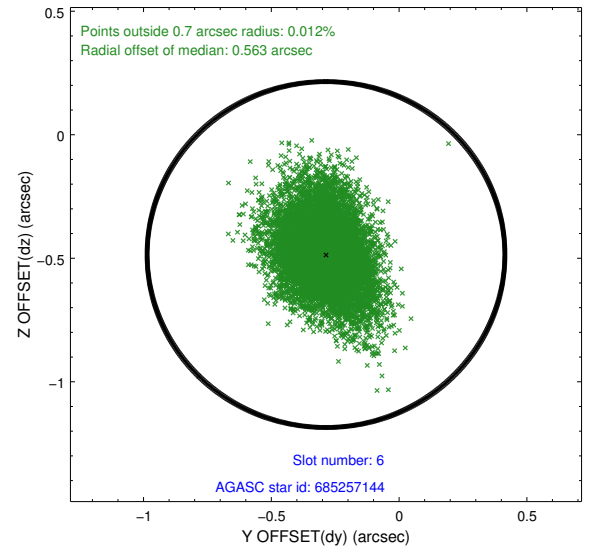
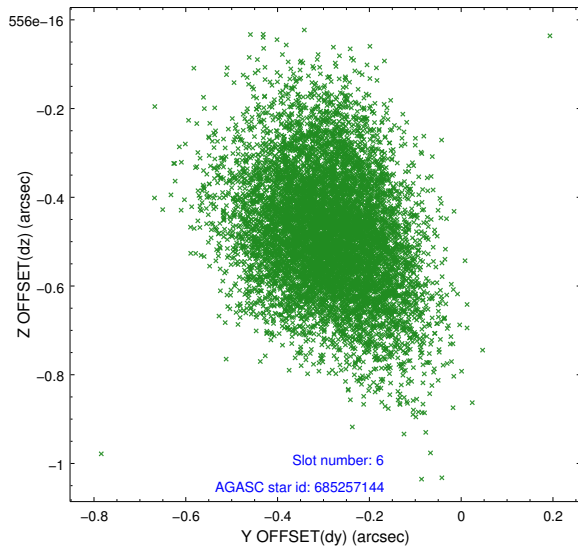
2.4.2 Slot 4



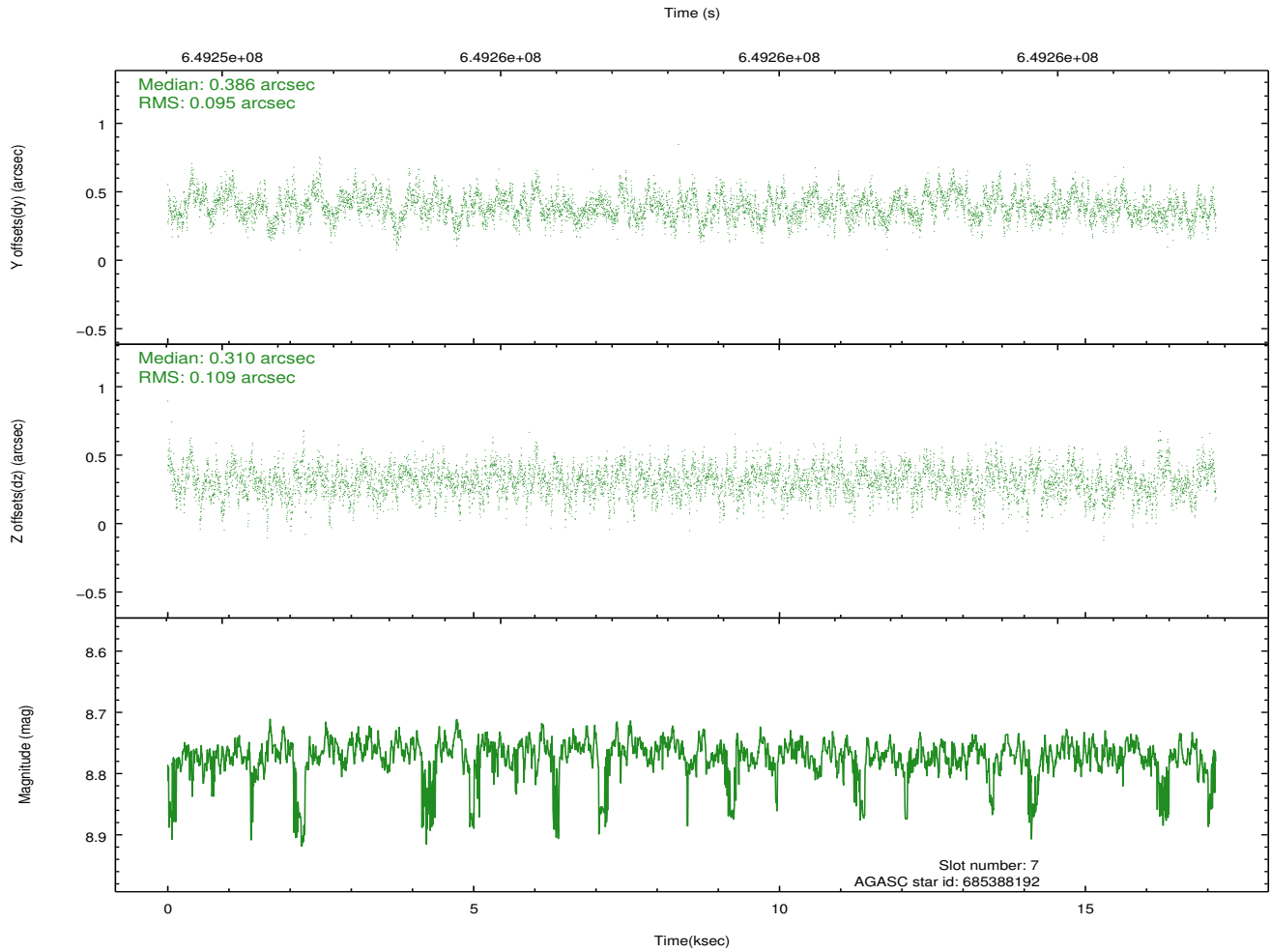
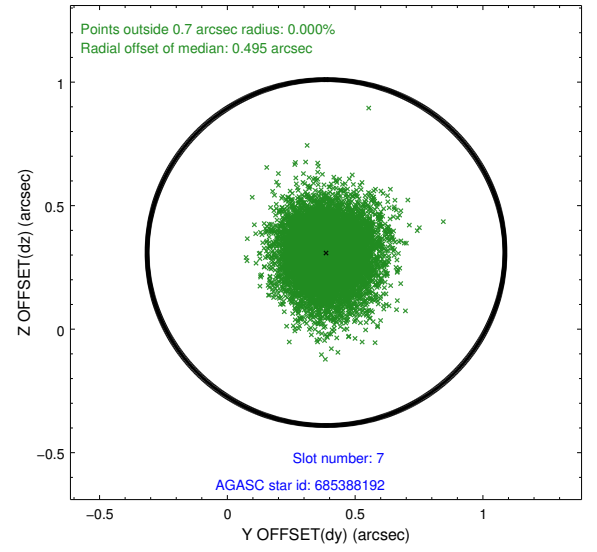
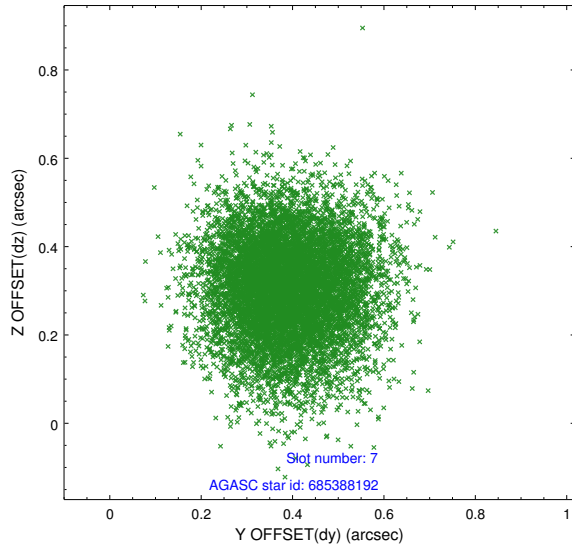
2.4.3 Slot 5



2.4.4 Slot 6

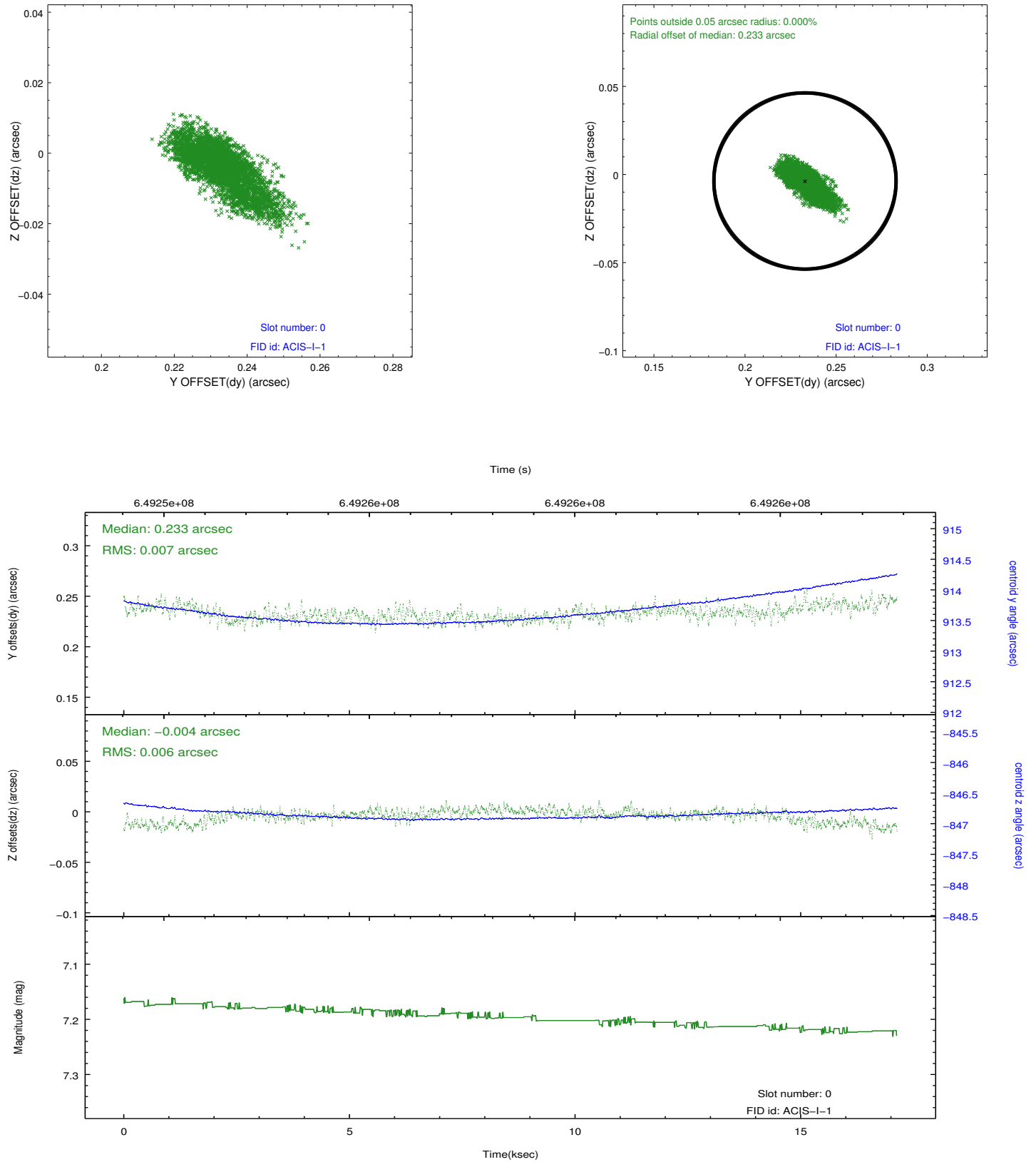


2.4.5 Slot 7

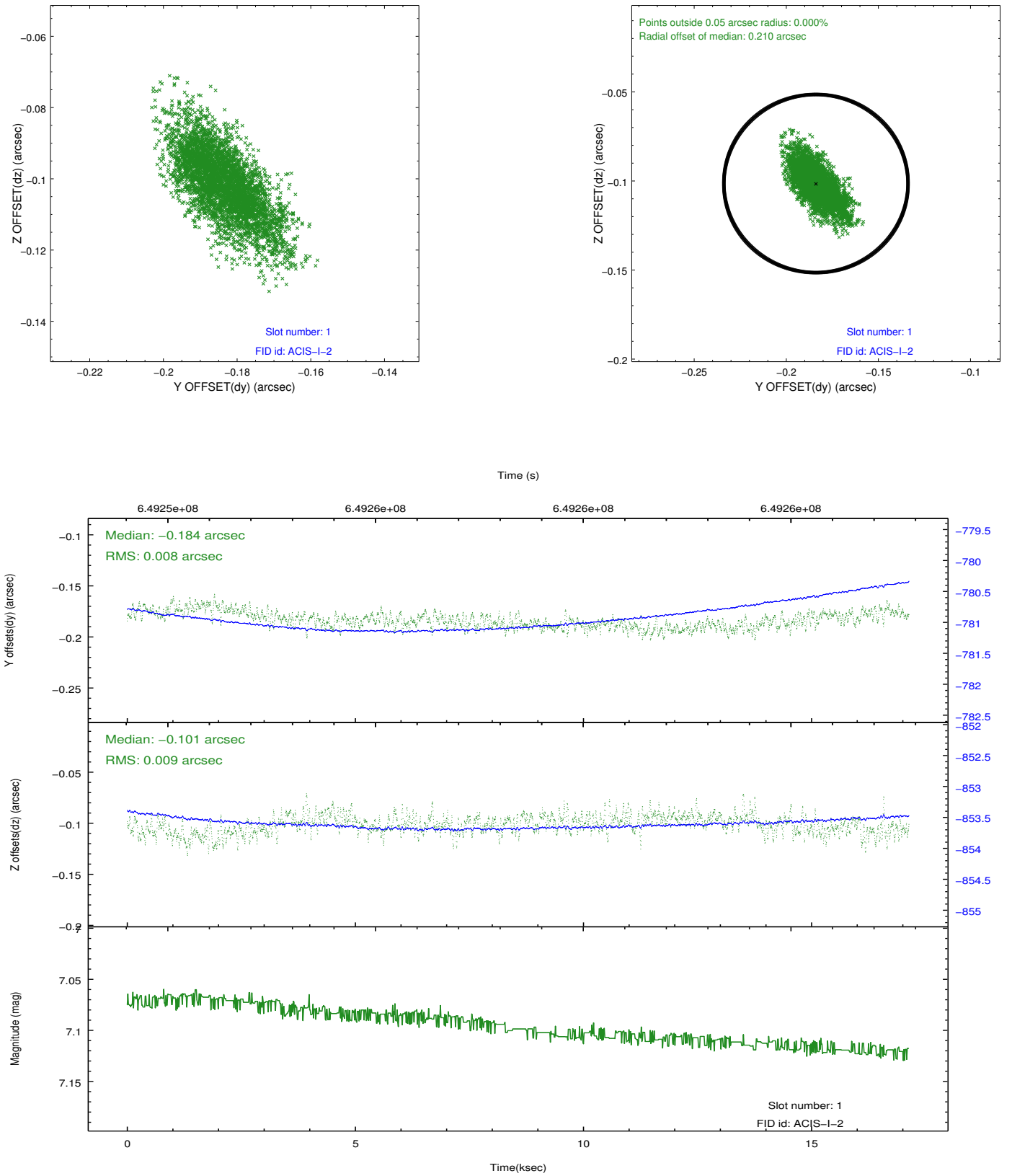


2.5 FID Slots

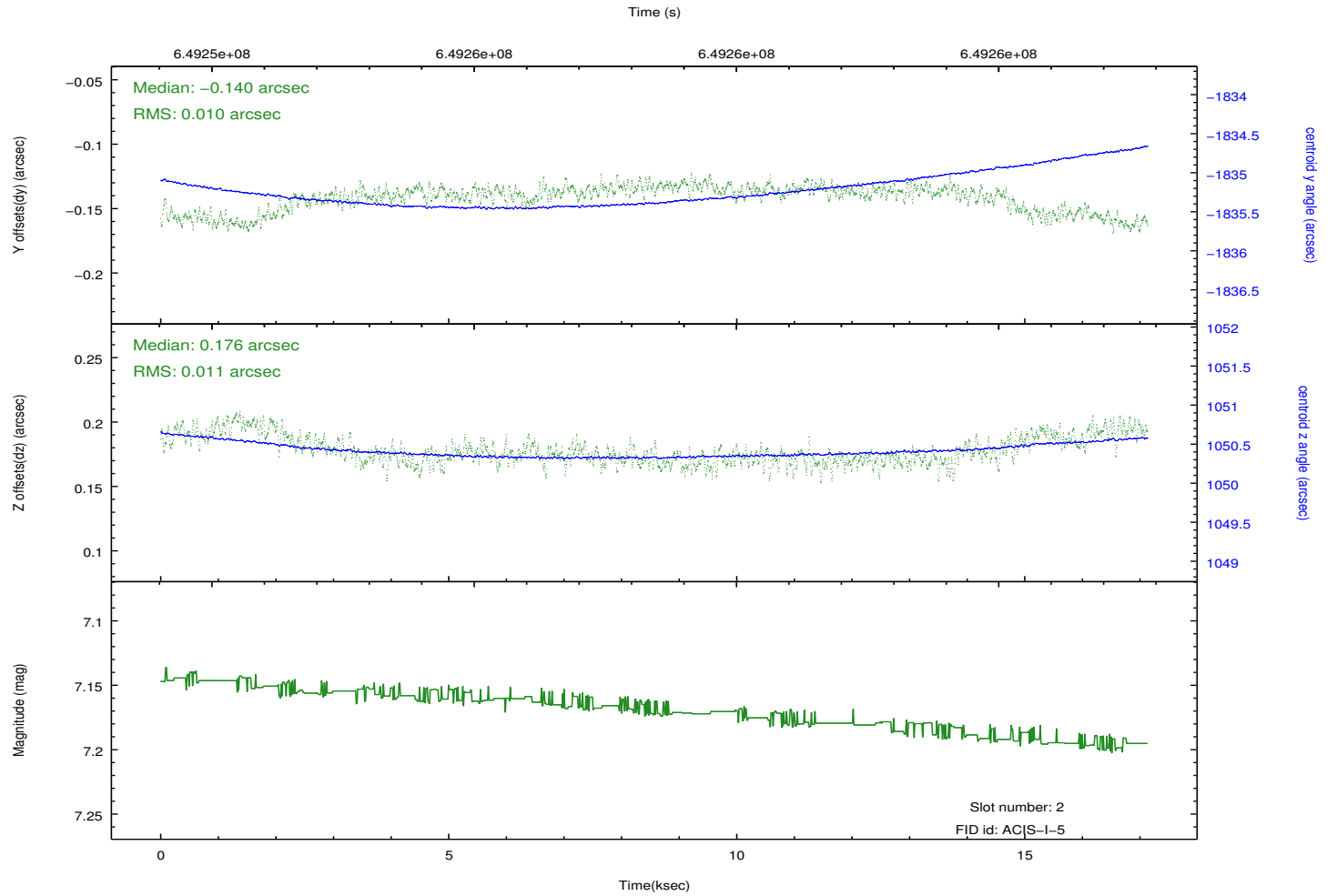
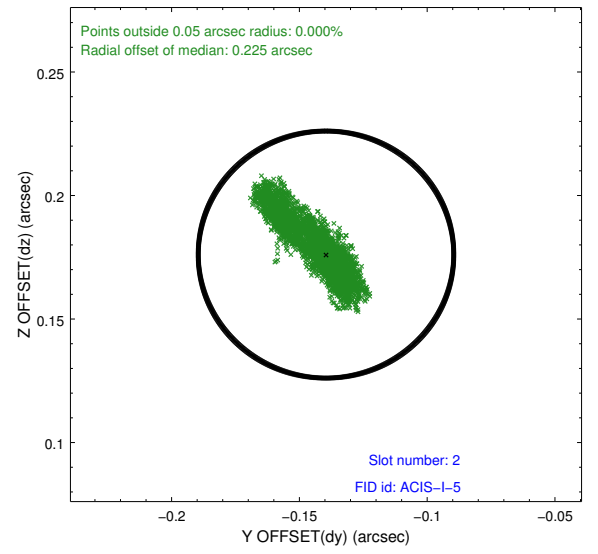
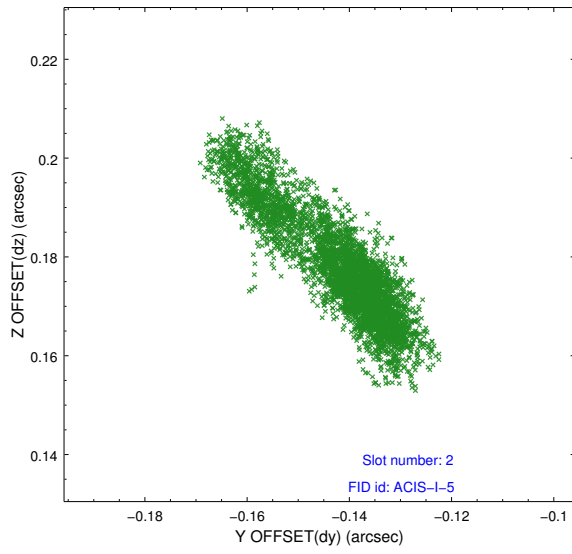
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2018.07.30
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	17.077900131464

A.2 Comments

Optional chip S3 not included.