

V&V Reference Report

L2 ASCDS Version : 10.5.4

Observation 19533 - L2 Version 1
Chandra X-Ray Center

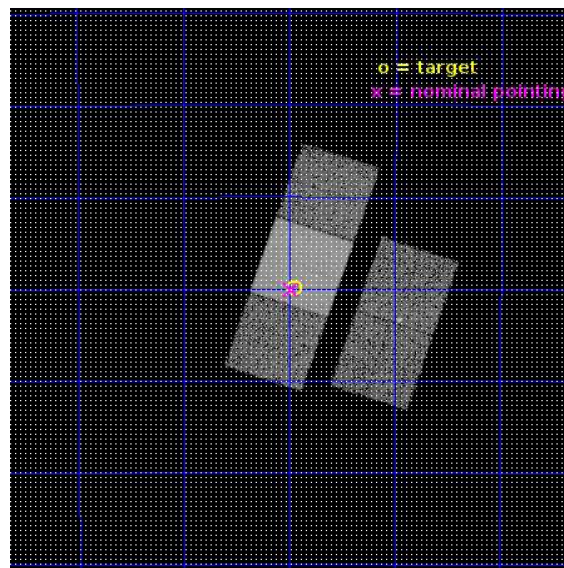
L2 Processing Date : Jun 4 2017

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1 Front

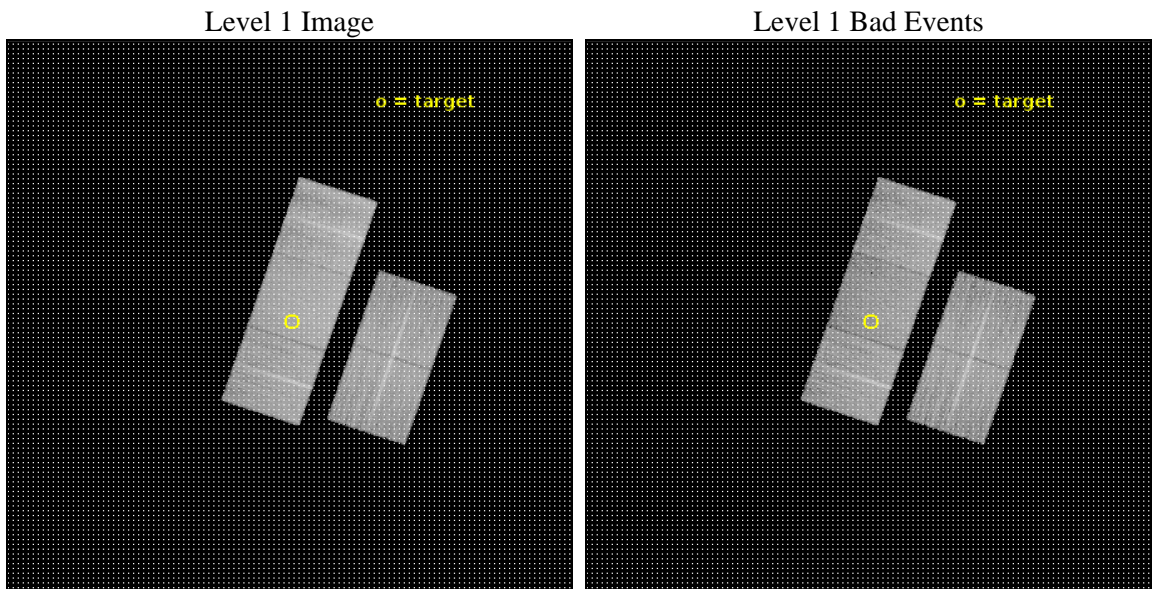
seq_num	703381	Sequence number
obs_id	19533	Observation id
title	Chandra Observations of the Most Extreme Hard X-ray Sources in the NuSTAR Serendipitous Survey	Proposal title
observer	George Lansbury	Principal investigator
object	NuSTARJ141056-4230.0	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	212.7375	Observer's specified target RA [deg]
dec_targ	-42.499	Observer's specified target Dec [deg]
ra_nom	212.74532841707	Nominal RA [deg]
dec_nom	-42.501741136078	Nominal Dec [deg]
roll_nom	288.59753940196	Nominal Roll [deg]
revision	1	Processing version of data
ontime	15856.50012207	Sum of GTIs [s]
livetime	15649.32327459	Livetime [s]
ontime2	15856.4579252	Sum of GTIs [s]
ontime3	15856.50012207	Sum of GTIs [s]
ontime6	15834.512560248	Sum of GTIs [s]
ontime7	15856.50012207	Sum of GTIs [s]
ontime8	15837.652473688	Sum of GTIs [s]
l2events	106527	Number of level 2 events



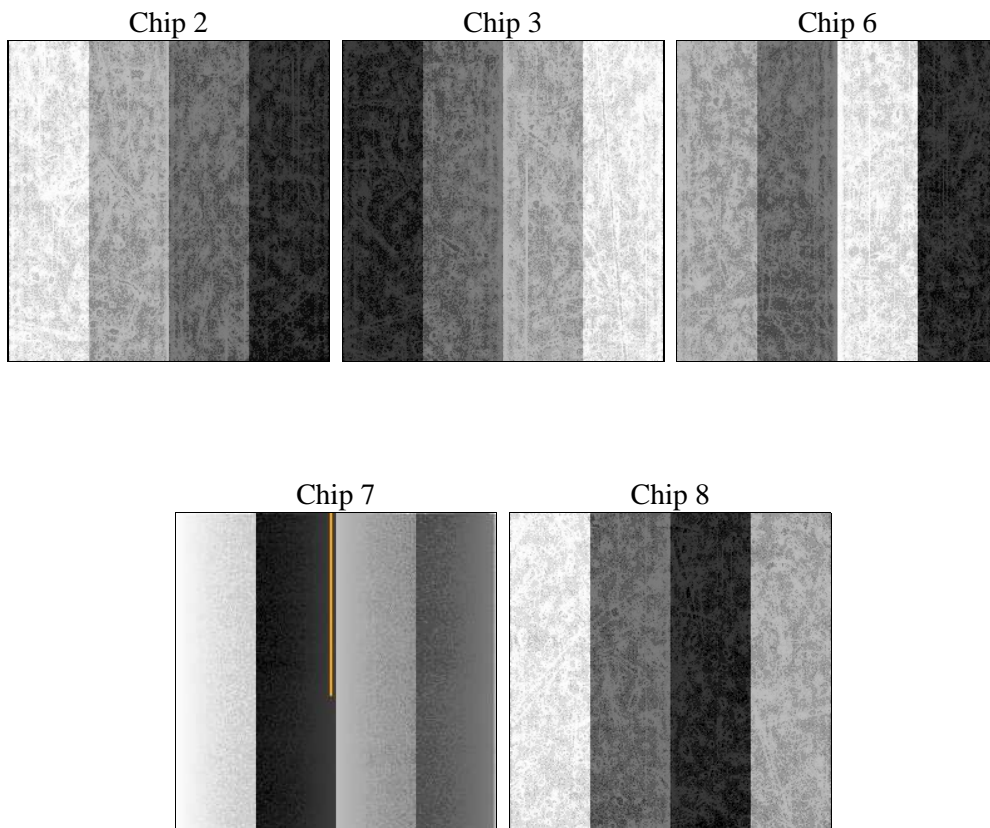
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	15804.678000	[s] Scheduled observation exposure time
ascdsver	10.5.4	Processing system revision	ontime	15856.50012207	Sum of GTIs [s]
caldsver	4.7.4	 	ontime2	15856.4579252	Sum of GTIs [s]
date	2017-06-05T03:07:41	Date and time of file creation	ontime3	15856.50012207	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	15834.512560248	Sum of GTIs [s]
			ontime7	15856.50012207	Sum of GTIs [s]
			ontime8	15837.652473688	Sum of GTIs [s]
			l1events	649653	Number of level 1 events

2.1.4 Events

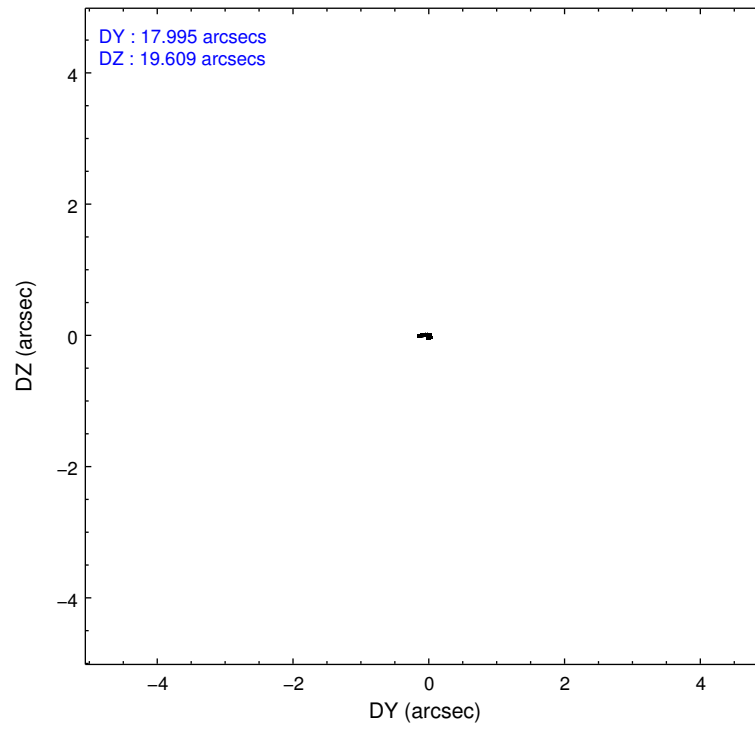
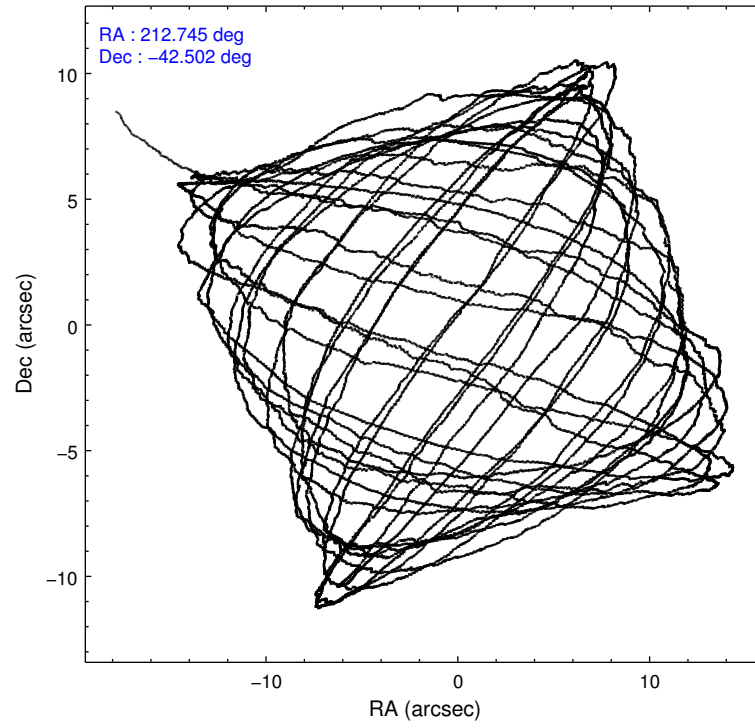
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	118221	112444	121165	148157	149666
rejected events	105874	100374	108042	85232	112481
rejected %	89%	89%	89%	57%	75%

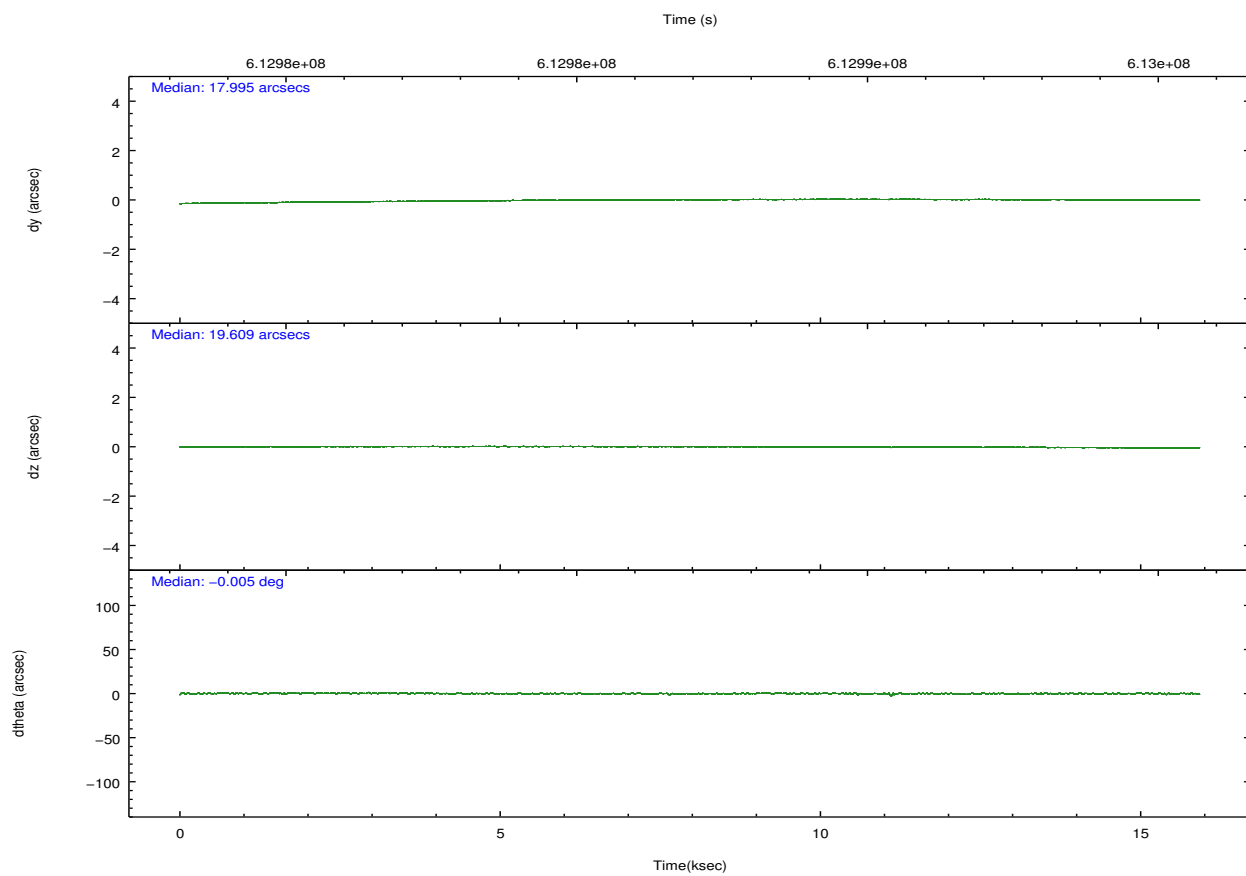
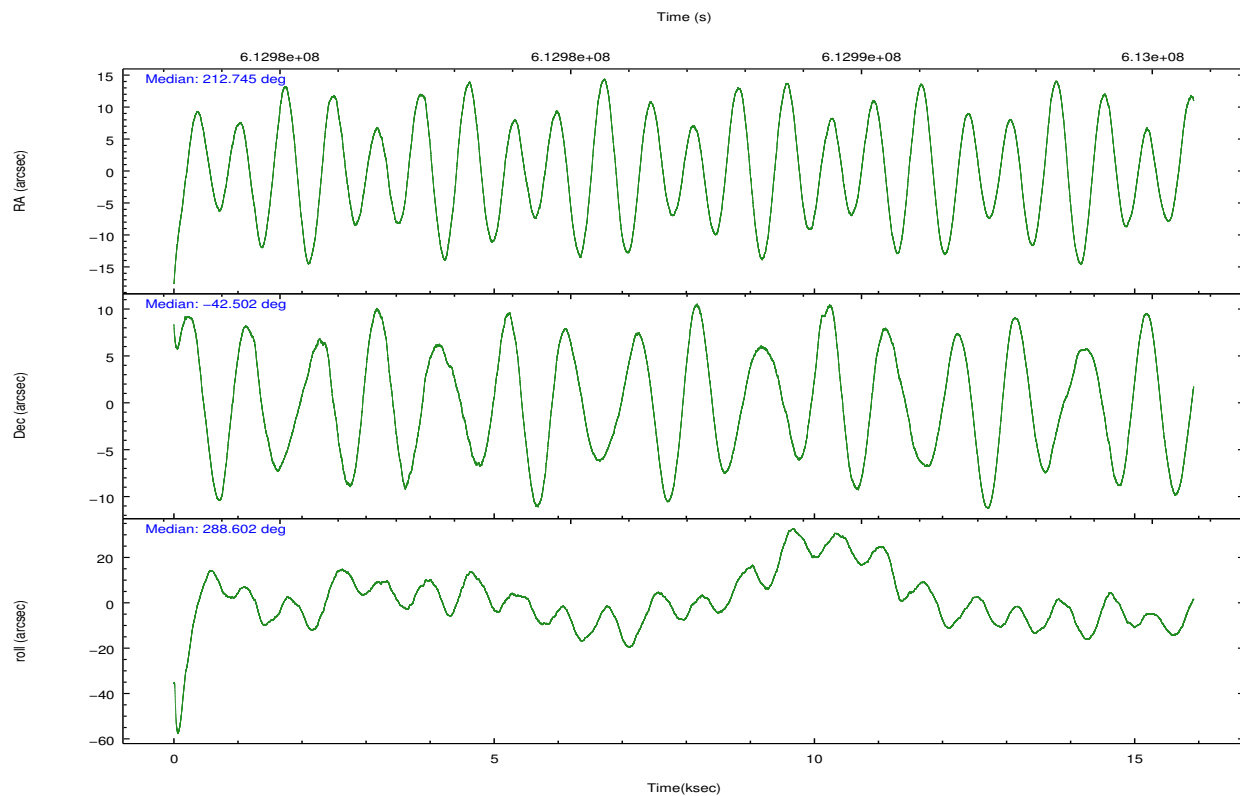
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	4847	4494	4104	5053	10129
	4%	3%	3%	3%	6%
grade 1 events	65	73	33	177	102
	0%	0%	0%	0%	0%
grade 2 events	2798	2552	3325	13719	9503
	2%	2%	2%	9%	6%
grade 3 events	1206	1199	1195	4636	3664
	1%	1%	0%	3%	2%
grade 4 events	1233	1328	1166	4382	3283
	1%	1%	0%	2%	2%
grade 5 events	3985	5184	4949	13446	7826
	3%	4%	4%	9%	5%
grade 6 events	2278	2505	3340	35159	10614
	1%	2%	2%	23%	7%
grade 7 events	101809	95109	103053	71585	104545
	86%	84%	85%	48%	69%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23678	ACIS-23678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	212.717090	212.7453284170685	CCD I2 on	O1	Y
[deg] Pointing Dec	-42.483852	-42.50174113607752	CCD I3 on	Y	Y
[deg] Pointing Roll	288.421819	288.5975394019572	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.145094680475	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01257209746719923	CCD S4 on	Y	Y
[s] Observation start time (MET)	612979087.184000	612977724.27617	CCD S5 on	N	N
Observation start date	2017-06-04T15:56:58	2017-06-04T15:35:24	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	612994892.184000	612995111.35218	On-chip summing requested	N	N
Observation end date	2017-06-04T20:20:23	2017-06-04T20:25:11	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



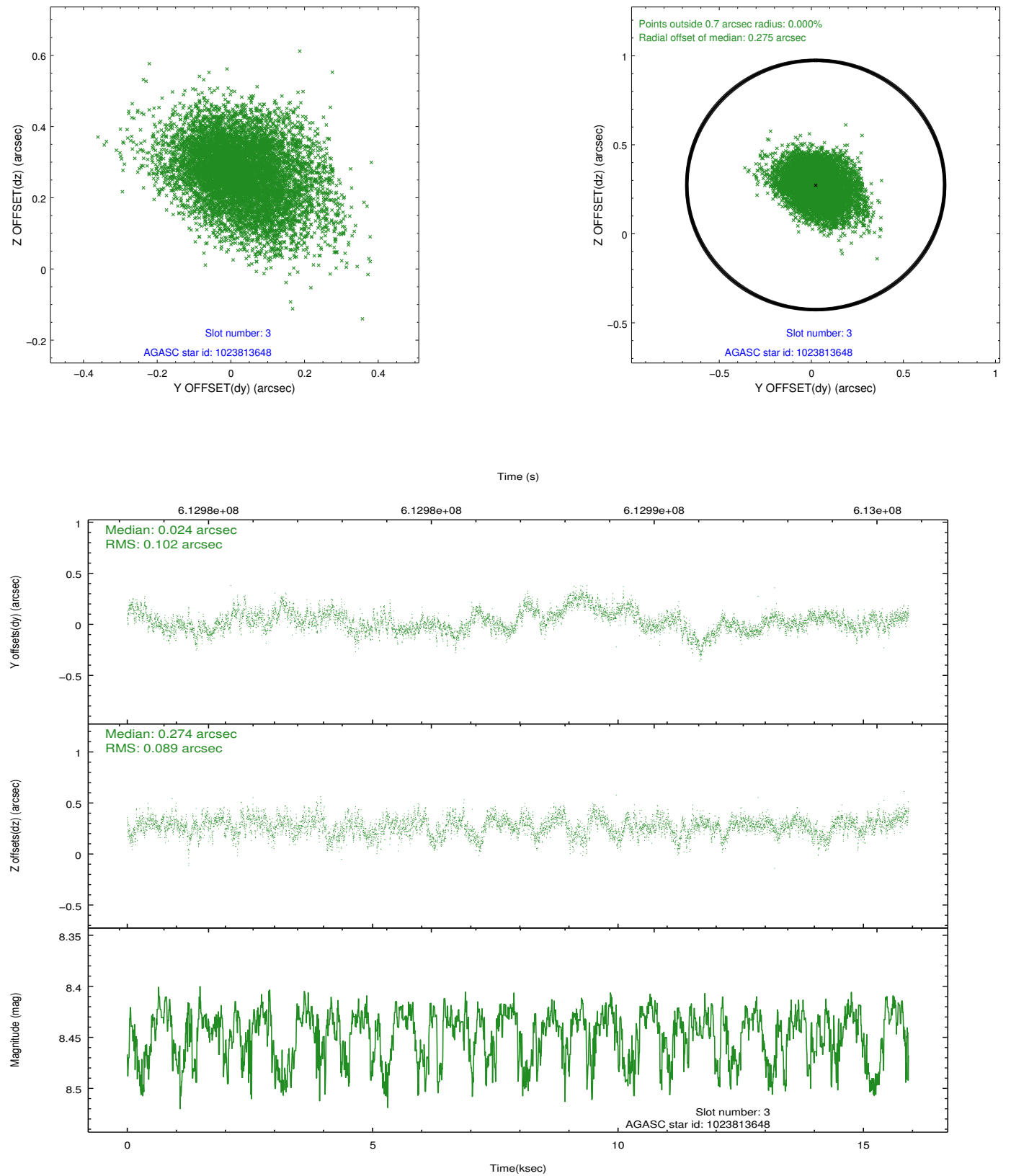


Slot Statistics

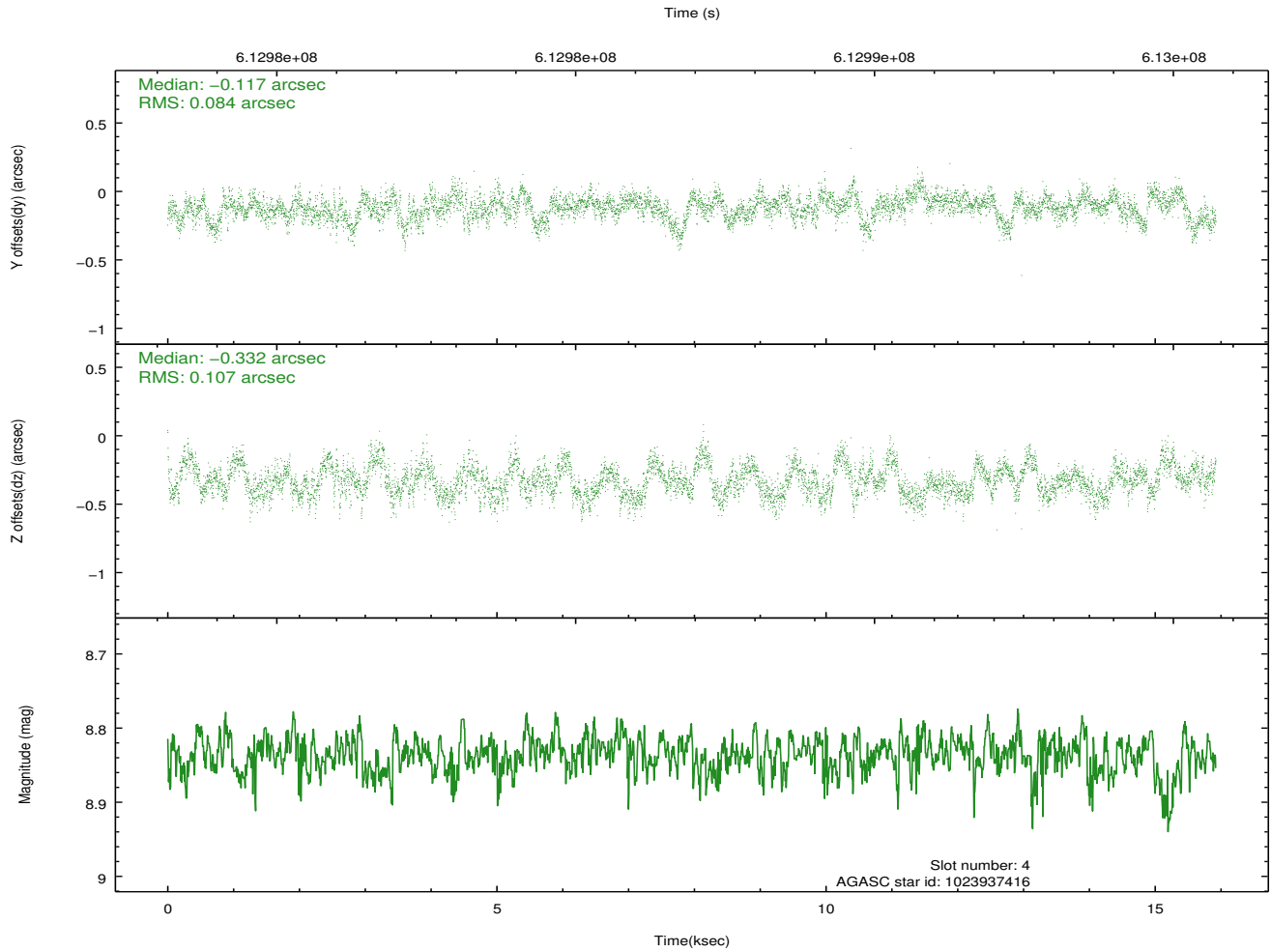
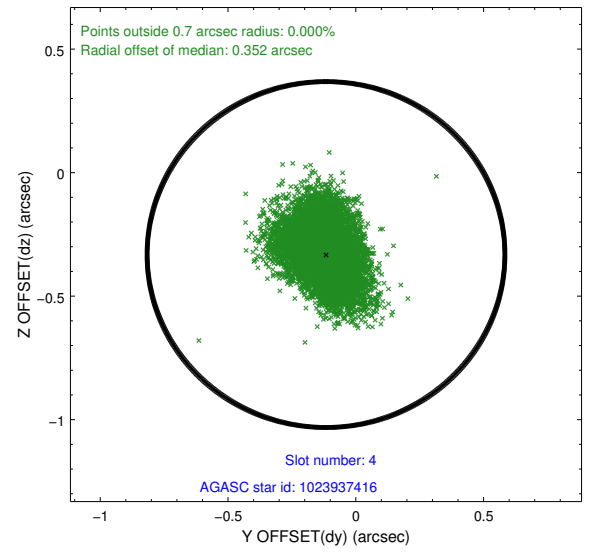
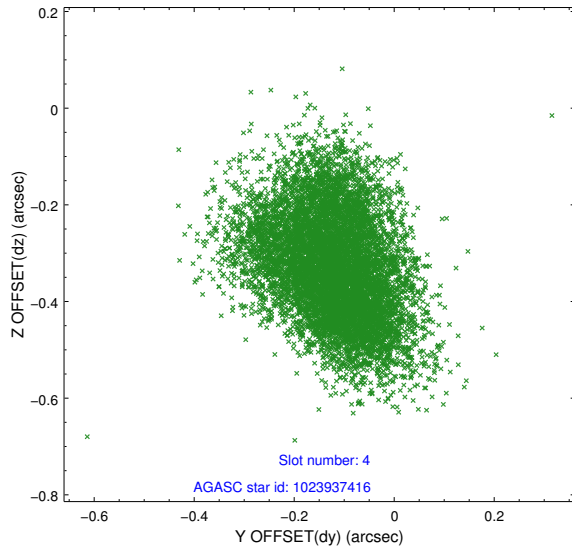
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.13	3883	-0.210	-0.112	0.008	0.013	0.000000	0.000000	-771.19	-1741.13
1	FID		ACIS-S-4	7.24	3882	0.534	0.131	0.007	0.013	0.000000	0.000000	2142.66	167.38
2	FID		ACIS-S-5	7.24	3884	-0.355	-0.010	0.008	0.013	0.000000	0.000000	-1823.87	161.12
3	GUIDE	used	1023813648	8.44	7761	0.024	0.274	0.142	0.239	212.262640	-42.984832	1336.26	-1705.83
4	GUIDE	used	1023937416	8.84	7763	-0.117	-0.332	0.145	0.234	213.145279	-42.589083	721.31	955.97
5	GUIDE	used	1023940600	9.68	7753	0.285	0.045	0.177	0.299	212.700886	-42.928169	1505.36	-544.70
6	GUIDE	used	1023955984	9.76	7708	-0.135	0.208	0.319	0.519	212.918662	-41.808888	-2133.26	1281.39
7	GUIDE	used	1023941648	9.40	7756	-0.056	-0.191	0.176	0.294	213.812398	-42.804647	2025.83	2369.85

2.4 Star Slots

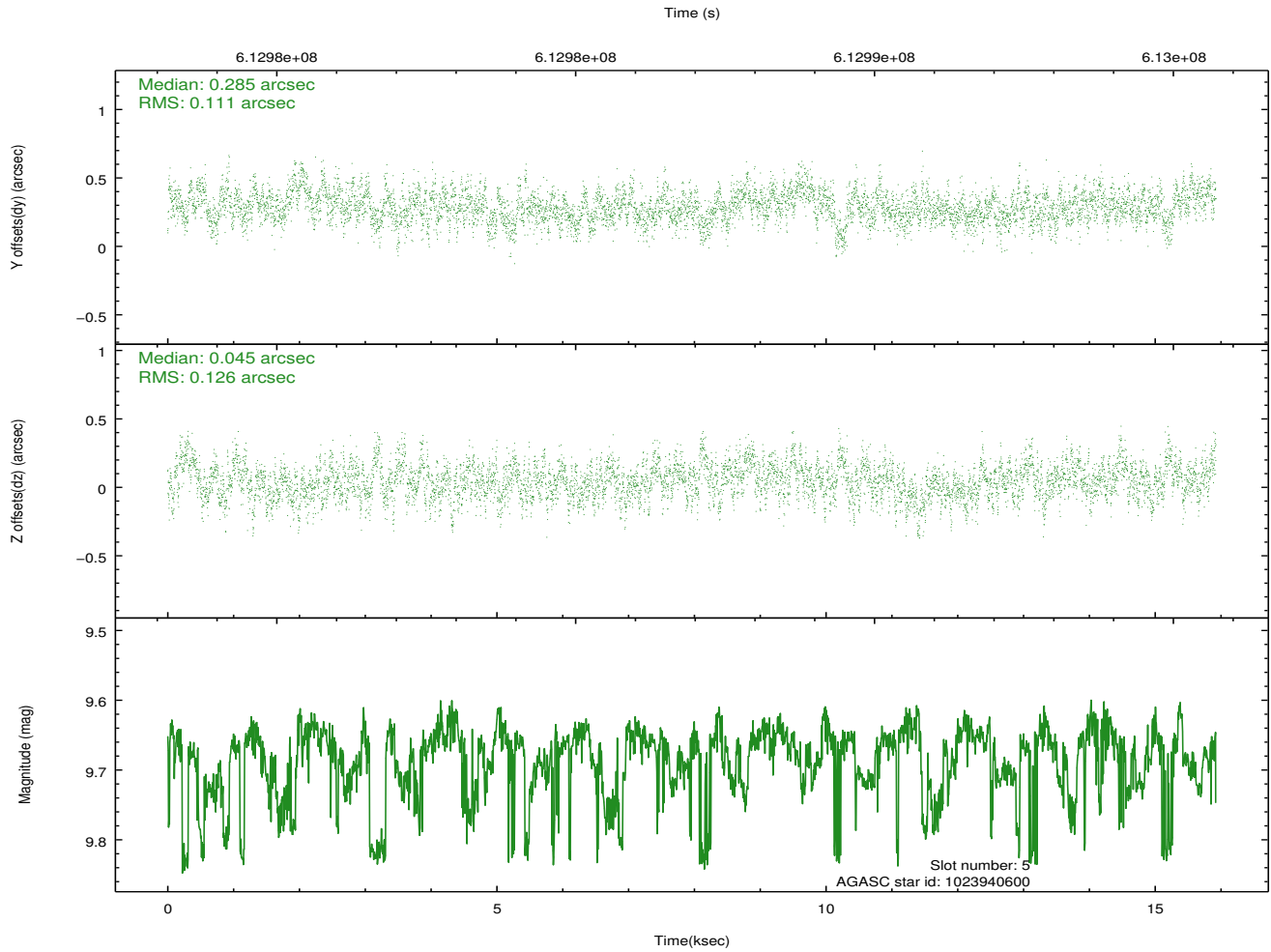
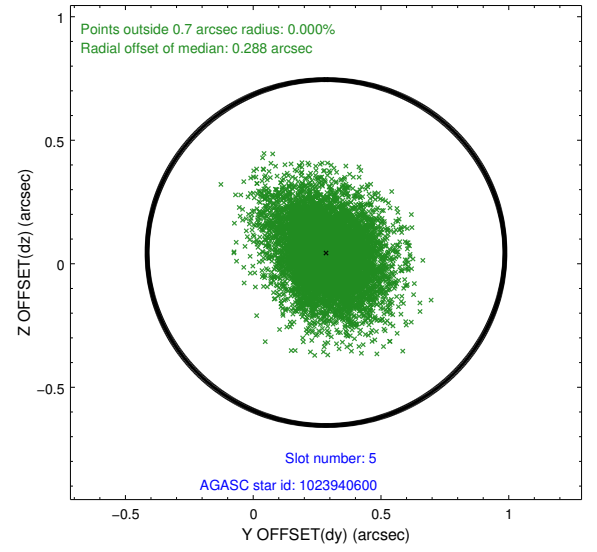
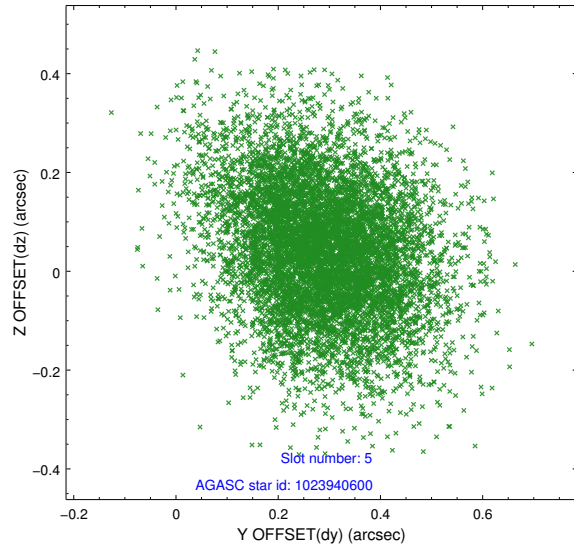
2.4.1 Slot 3



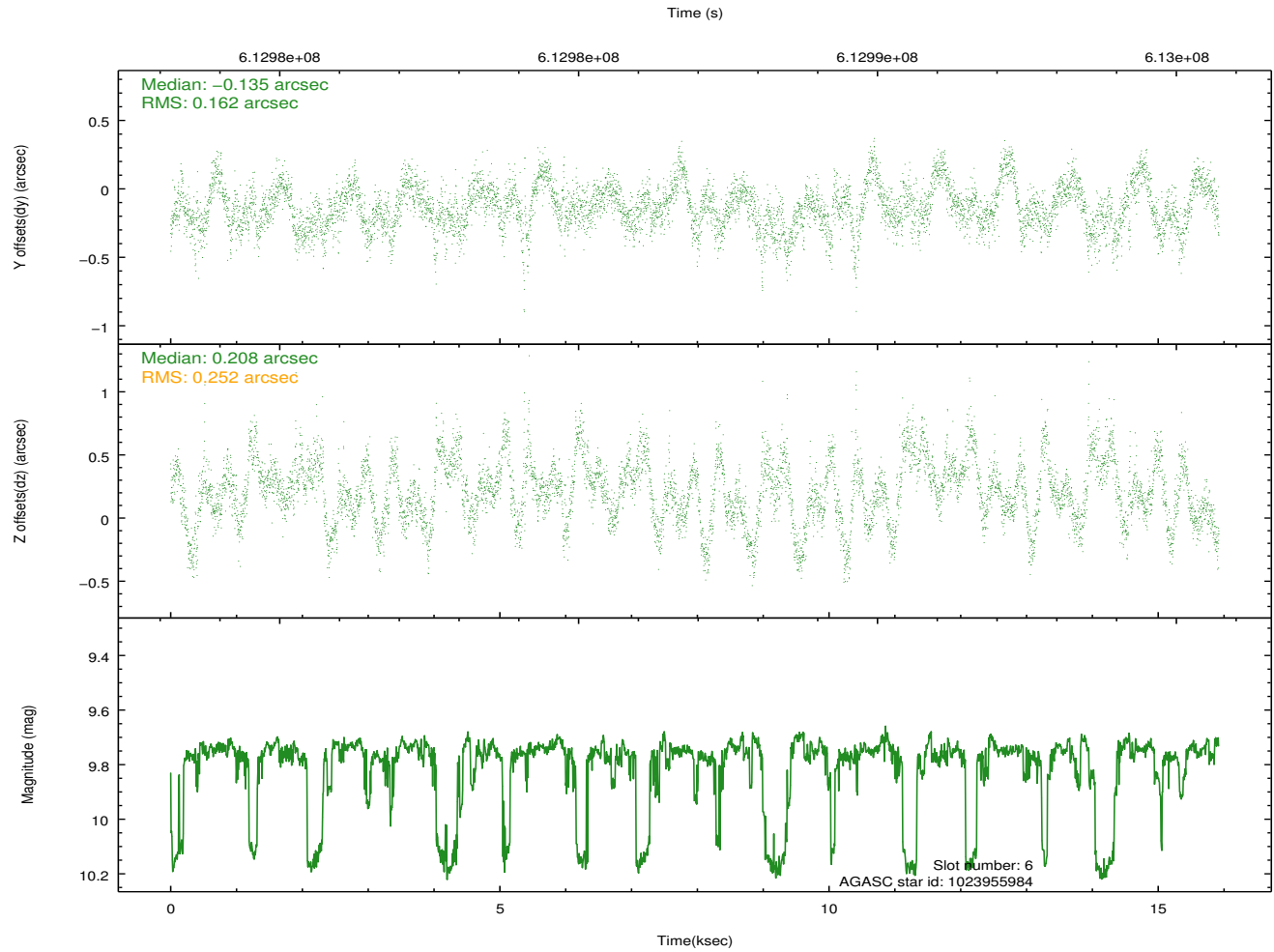
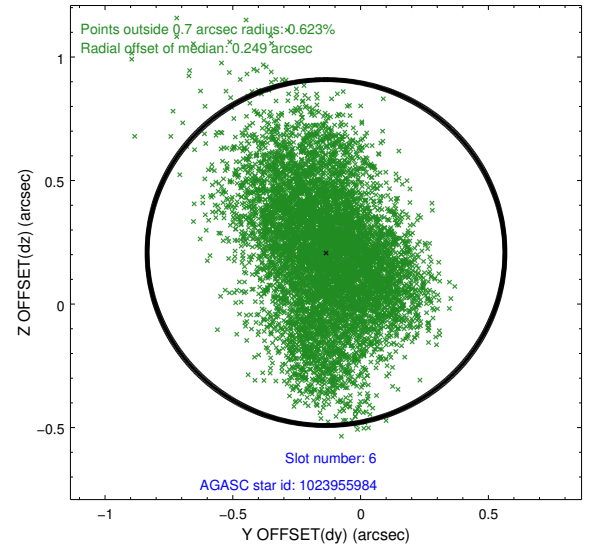
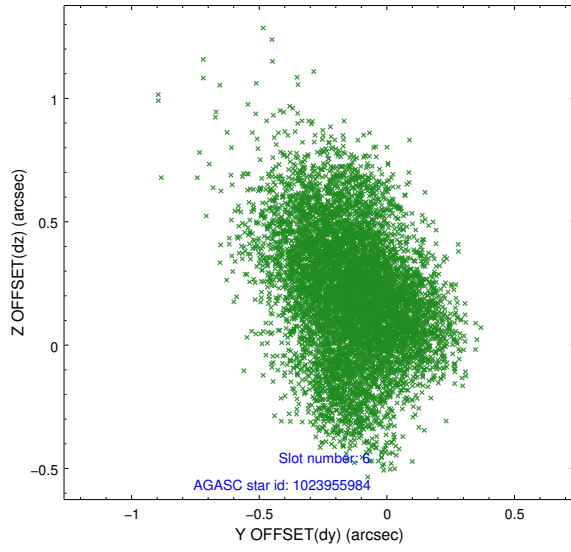
2.4.2 Slot 4



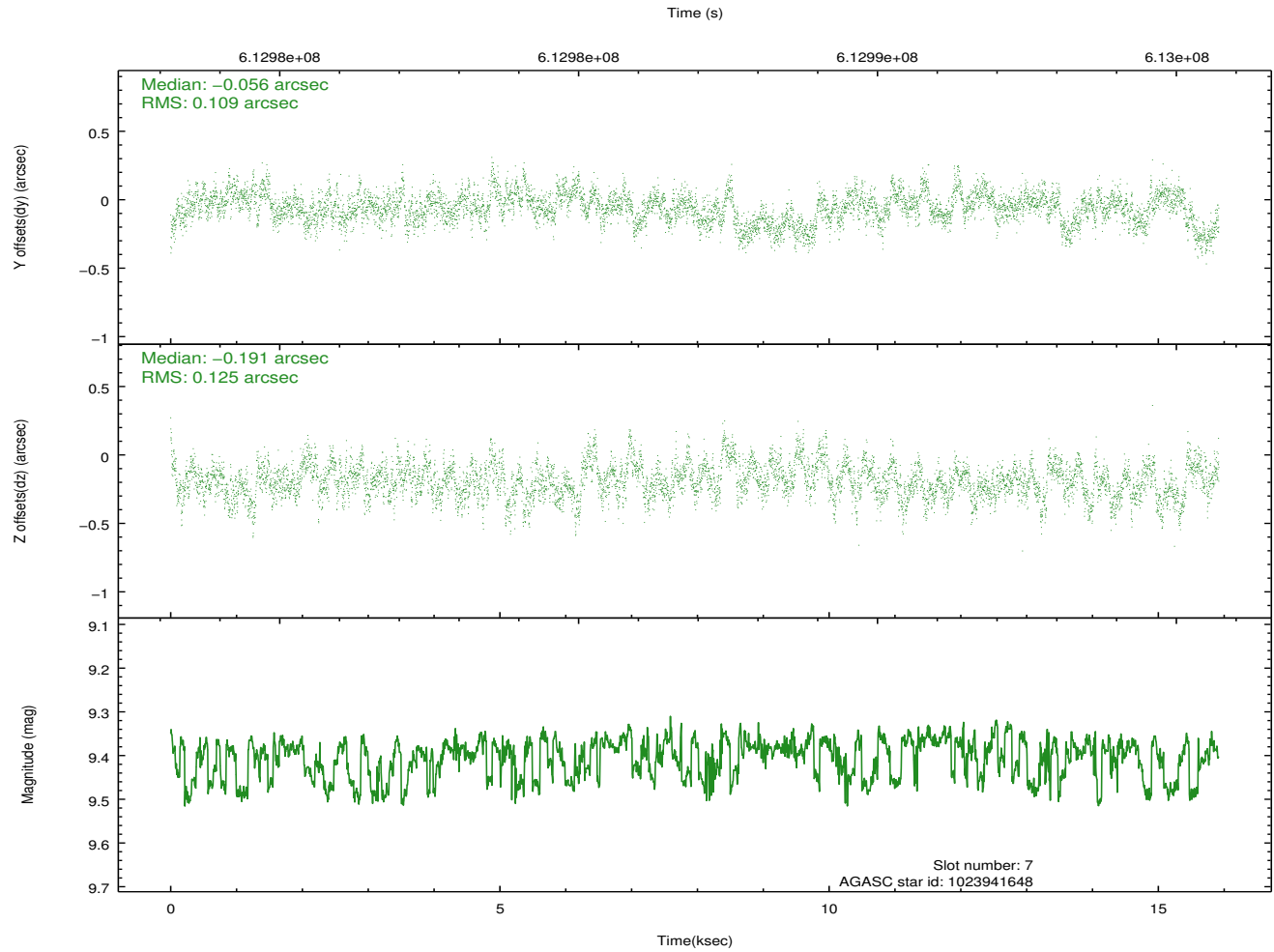
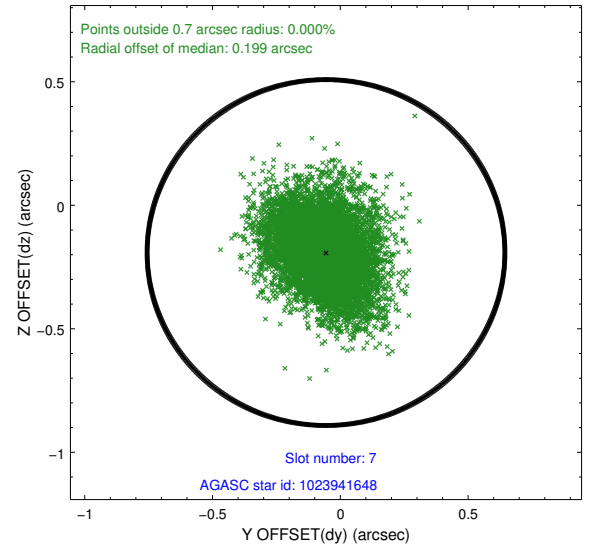
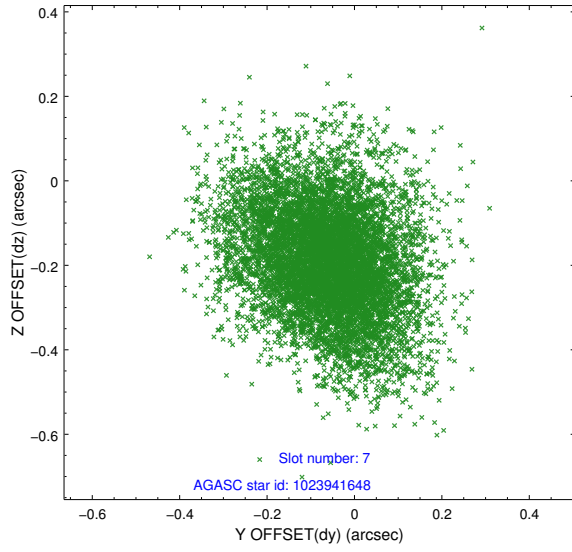
2.4.3 Slot 5



2.4.4 Slot 6

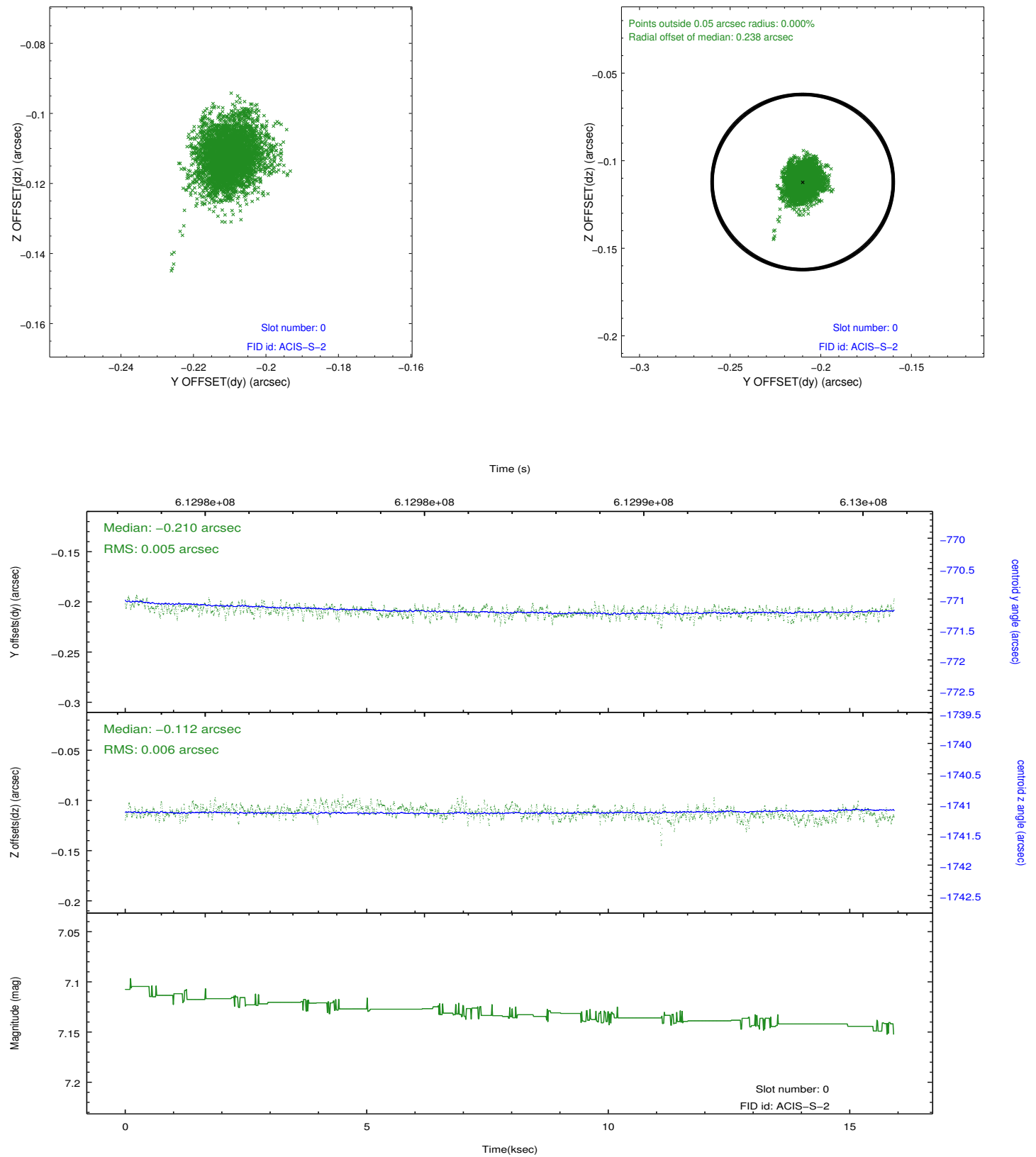


2.4.5 Slot 7

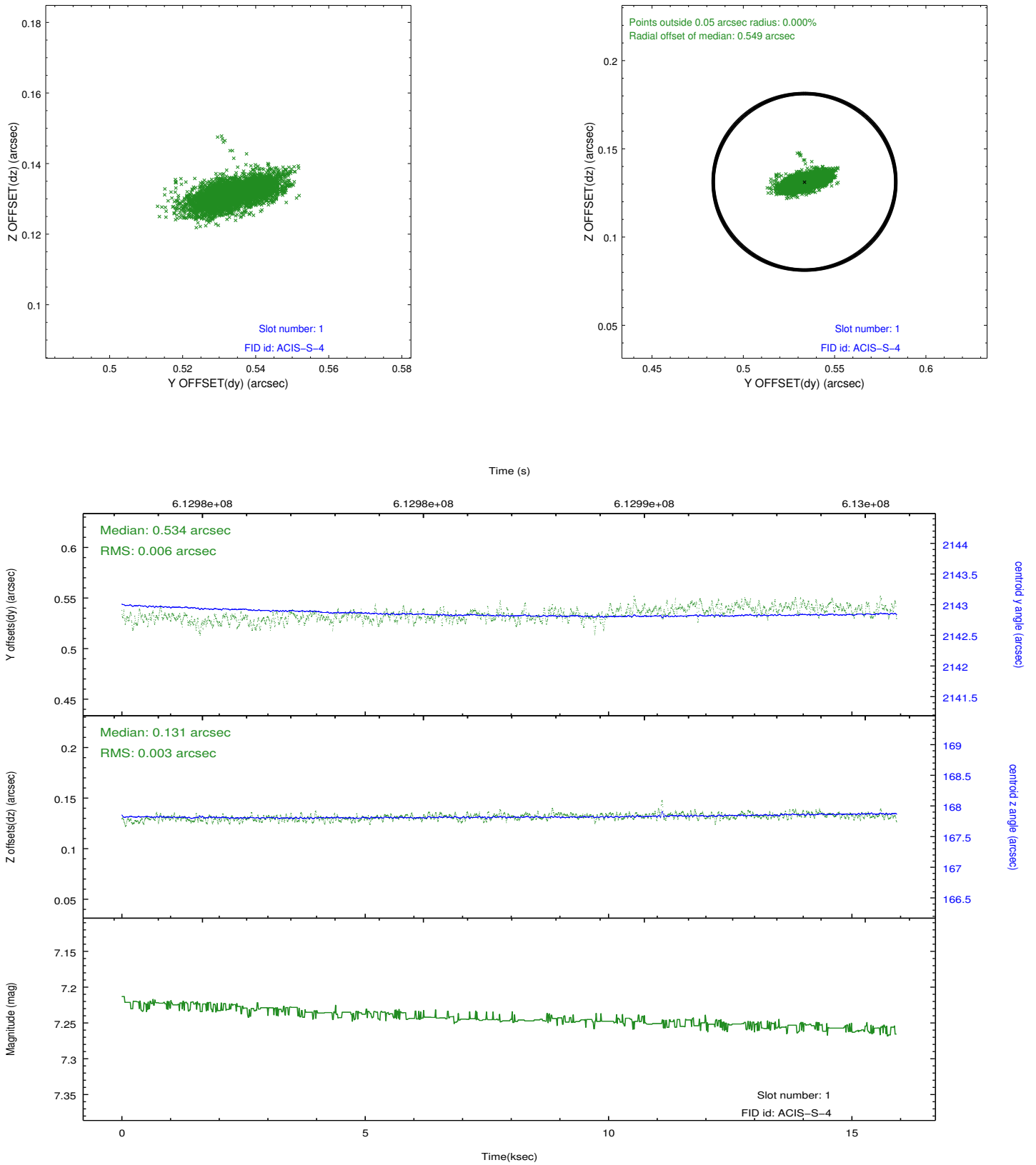


2.5 FID Slots

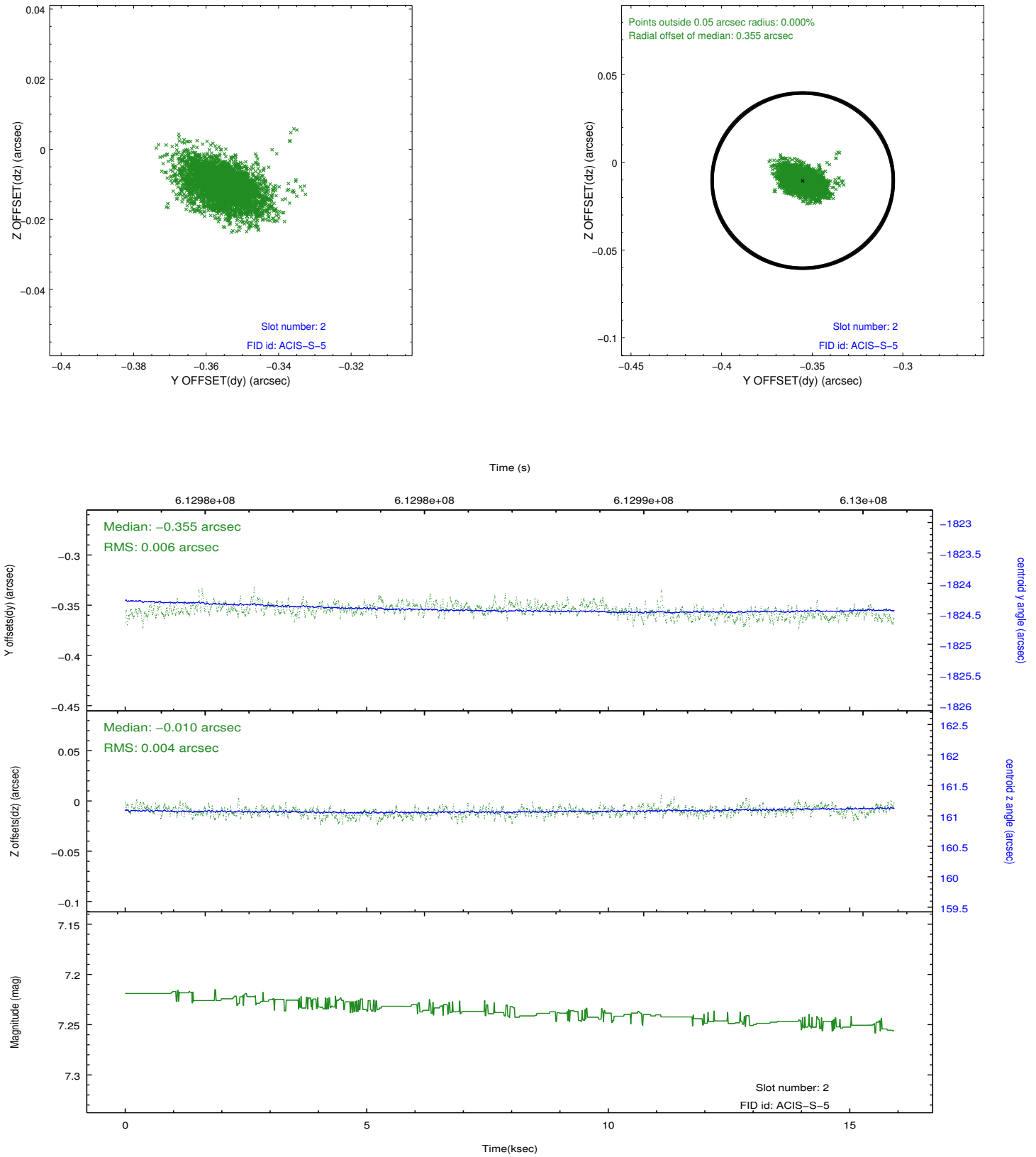
2.5.1 Slot 0



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)	2017.06.05
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	15.85650012207

A.2 Comments