

V&V Reference Report

L2 ASCDS Version : 10.7.1

Observation 21437 - L2 Version 2
Chandra X-Ray Center

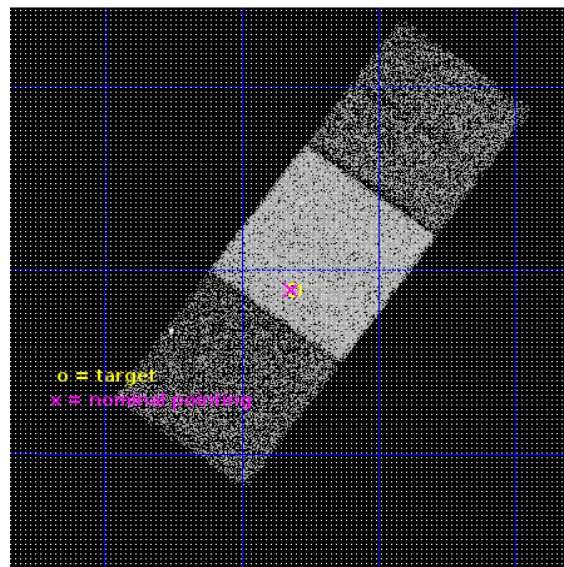
L2 Processing Date : Jan 4 2019

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1 Front

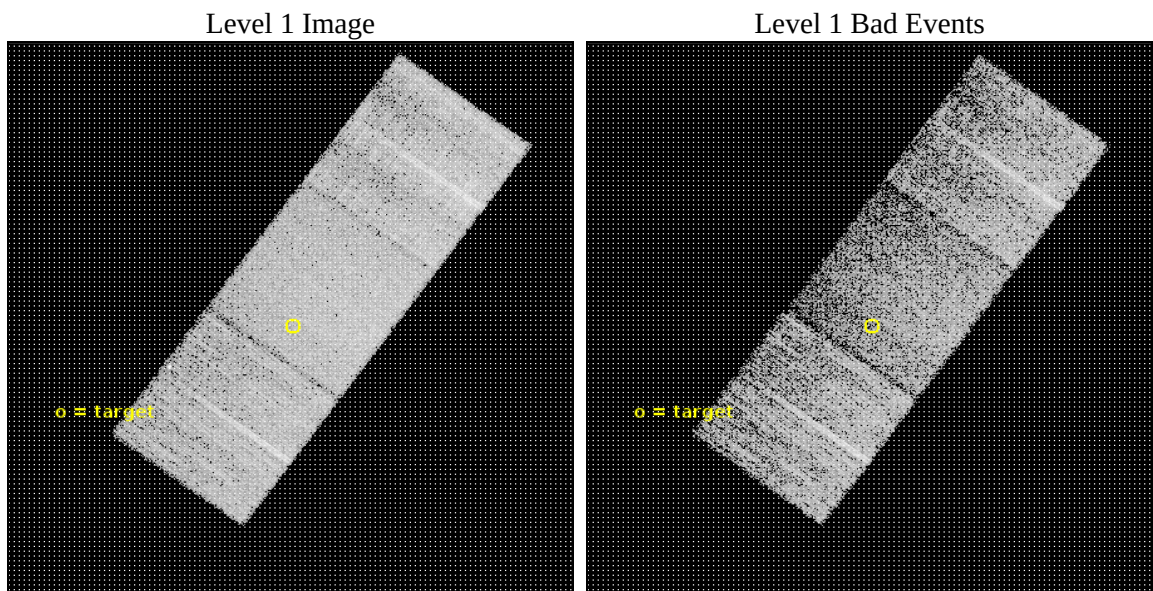
seq_num	703734	Sequence number
obs_id	21437	Observation id
title	Tidal disruption events unveiled: Directly probing the accretion disks through late-time Chandra observations	Proposal title
observer	Edo Berger	Principal investigator
object	PS17dhz	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	336.70125	Observer's specified target RA [deg]
dec_targ	17.147889	Observer's specified target Dec [deg]
ra_nom	336.70449788606	Nominal RA [deg]
dec_nom	17.148895180497	Nominal Dec [deg]
roll_nom	305.96425133726	Nominal Roll [deg]
revision	2	Processing version of data
ontime	10108.561369538	Sum of GTIs [s]
livetime	9976.4855734307	Livetime [s]
ontime6	10108.520329595	Sum of GTIs [s]
ontime7	10108.561369538	Sum of GTIs [s]
ontime8	10108.479289532	Sum of GTIs [s]
l2events	58009	Number of level 2 events



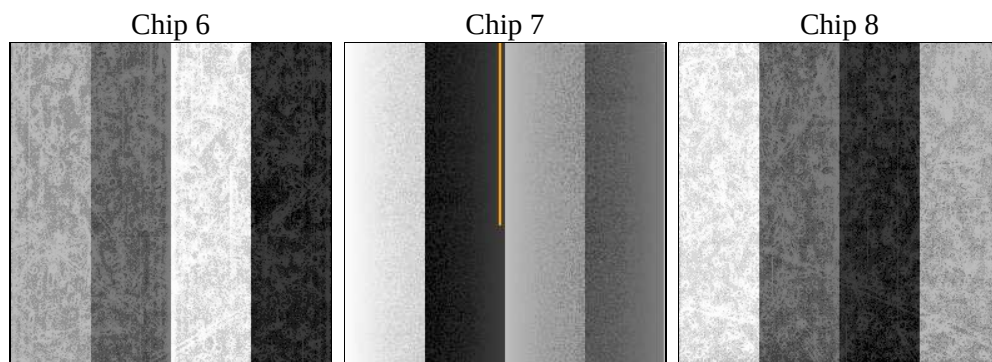
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	10.7.1	Processing system revision	ontime	10108.561369538	Sum of GTIs [s]
caldsver	4.8.2	 	ontime6	10108.520329595	Sum of GTIs [s]
date	2019-01-04T14:21:11	Date and time of file creation	ontime7	10108.561369538	Sum of GTIs [s]
revision	2	Processing version of data	ontime8	10108.479289532	Sum of GTIs [s]
			l1events	279906	Number of level 1 events

2.1.4 Events

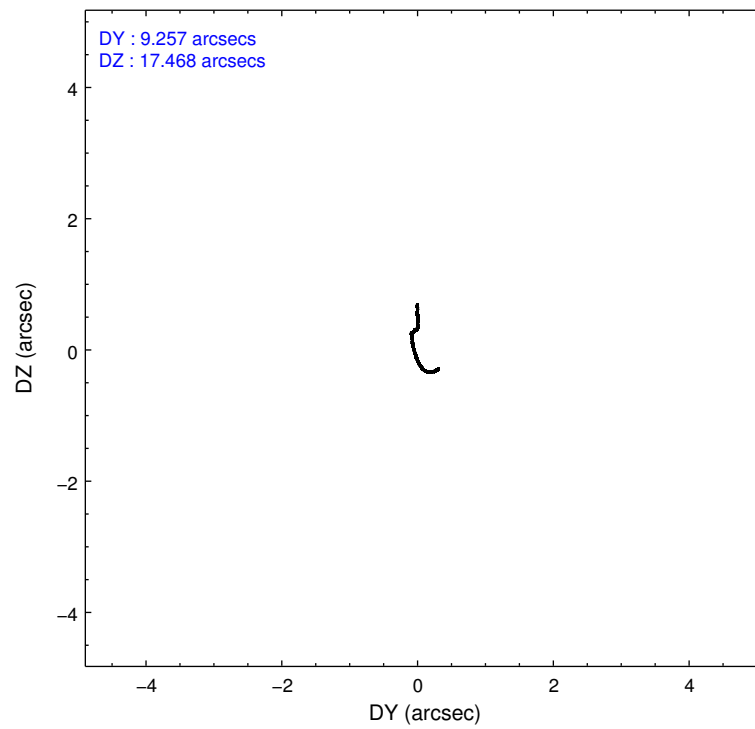
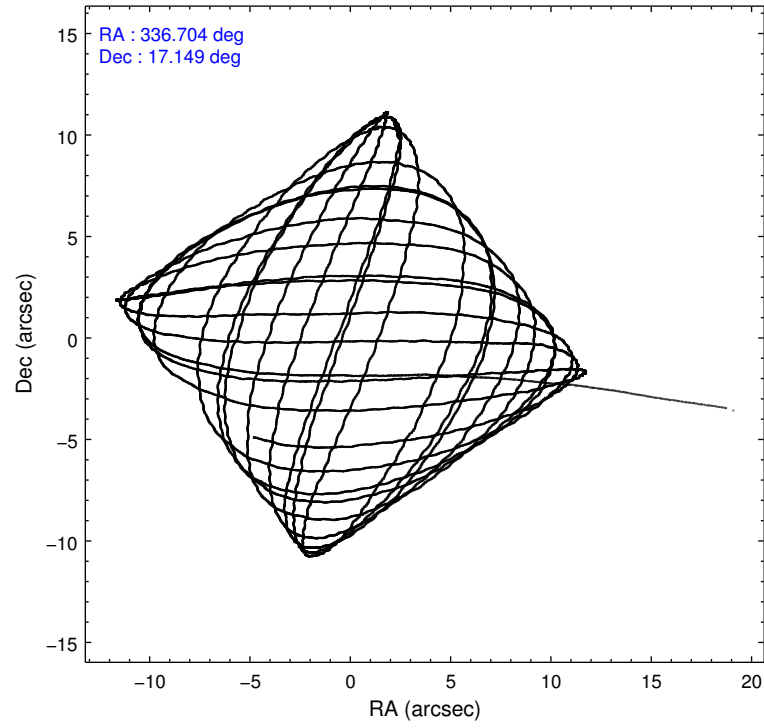
	ccd 6	ccd 7	ccd 8
level 1 events	81993	97171	100742
rejected events	73101	55209	73274
rejected %	89%	56%	72%

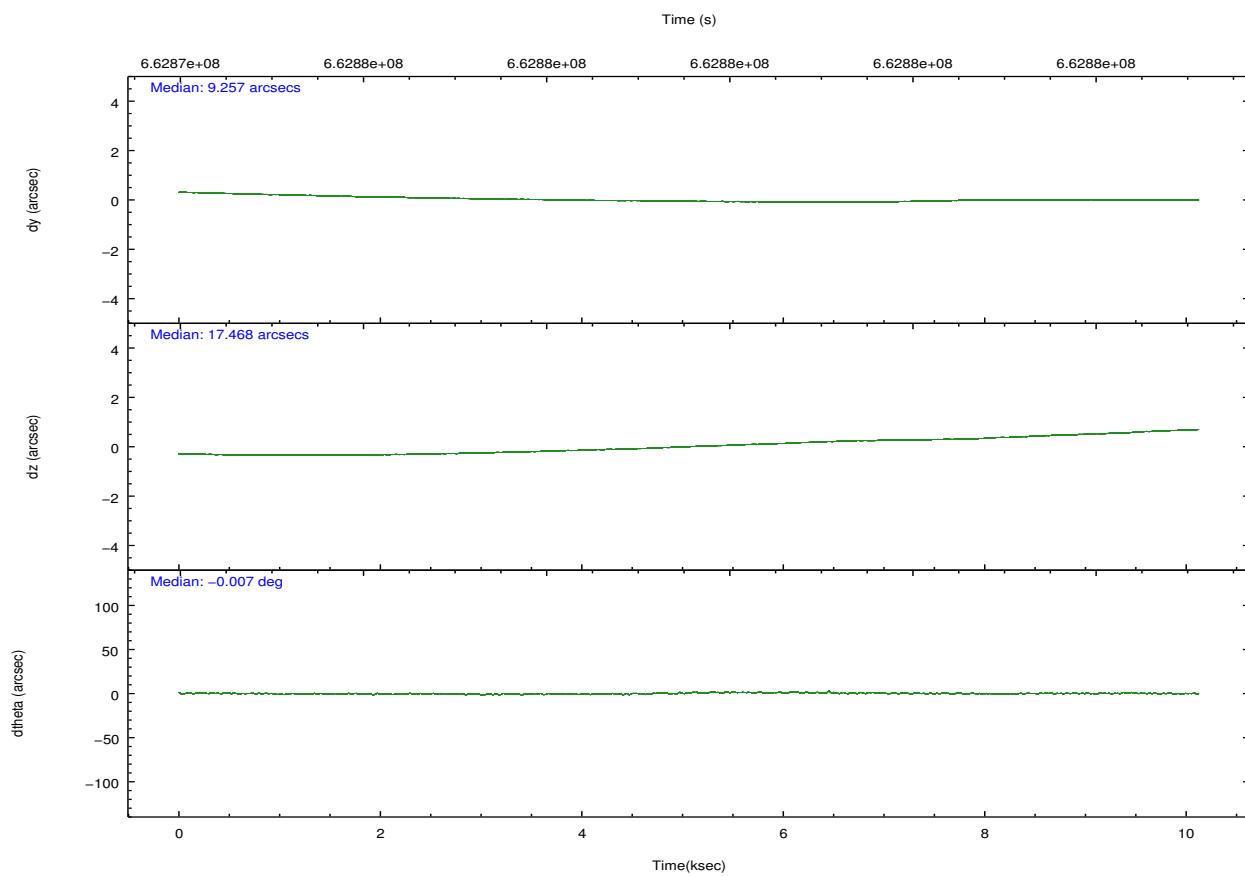
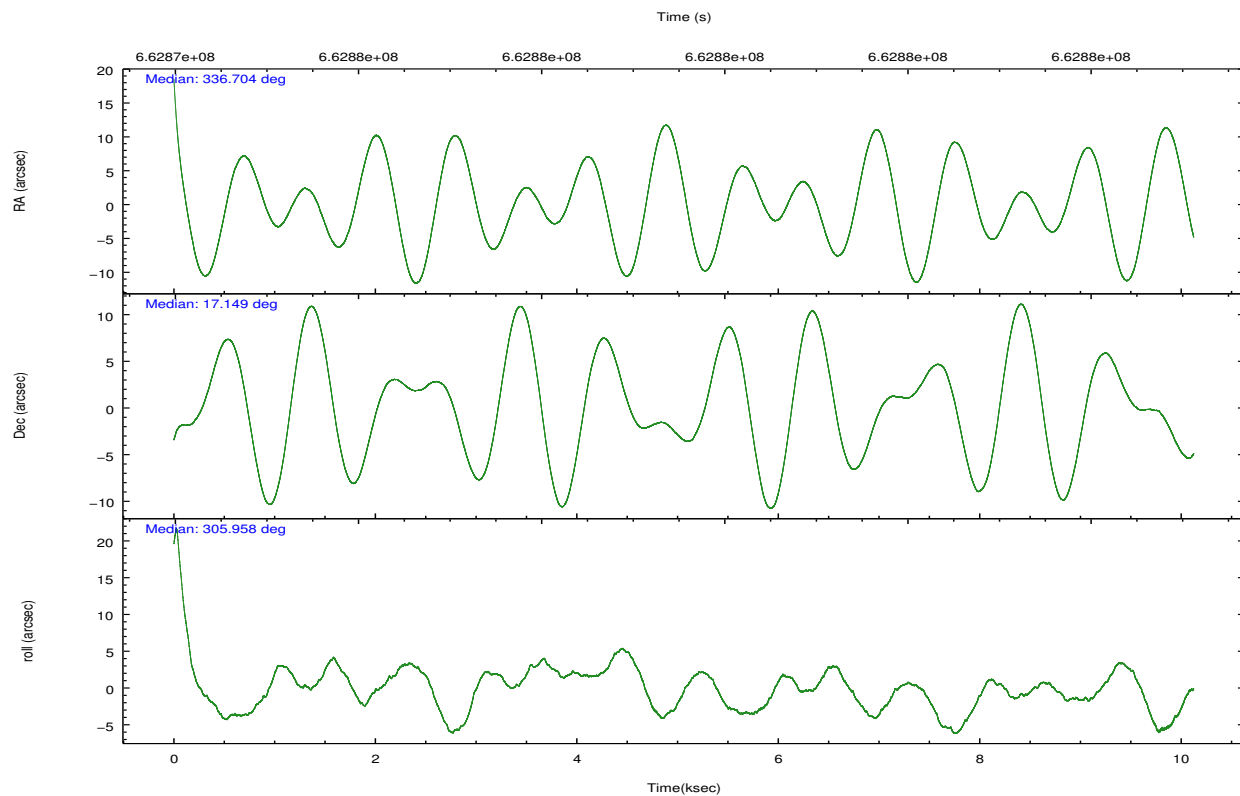
	ccd 6	ccd 7	ccd 8
grade 0 events	2894	3437	8369
	3%	3%	8%
grade 1 events	42	153	77
	0%	0%	0%
grade 2 events	2202	8758	6439
	2%	9%	6%
grade 3 events	841	3358	2883
	1%	3%	2%
grade 4 events	764	3187	2775
	0%	3%	2%
grade 5 events	3300	9200	5232
	4%	9%	5%
grade 6 events	2194	23244	7008
	2%	23%	6%
grade 7 events	69756	45834	67959
	85%	47%	67%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-678	ACIS-678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	336.678102	336.704497886058	Subarray requested	NONE	NONE
[deg] Pointing Dec	17.159758	17.14889518049714	Alternating exposures requested	N	N
[deg] Pointing Roll	305.815404	305.9642513372569	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	662874640.184000	662873461.93572			
Observation start date	2019-01-03T03:49:31	2019-01-03T03:31:01			
[s] Observation end time (MET)	662884640.184000	662885709.66145			
Observation end date	2019-01-03T06:36:11	2019-01-03T06:55:09			
Read mode	TIMED	TIMED			

2.3 Aspect



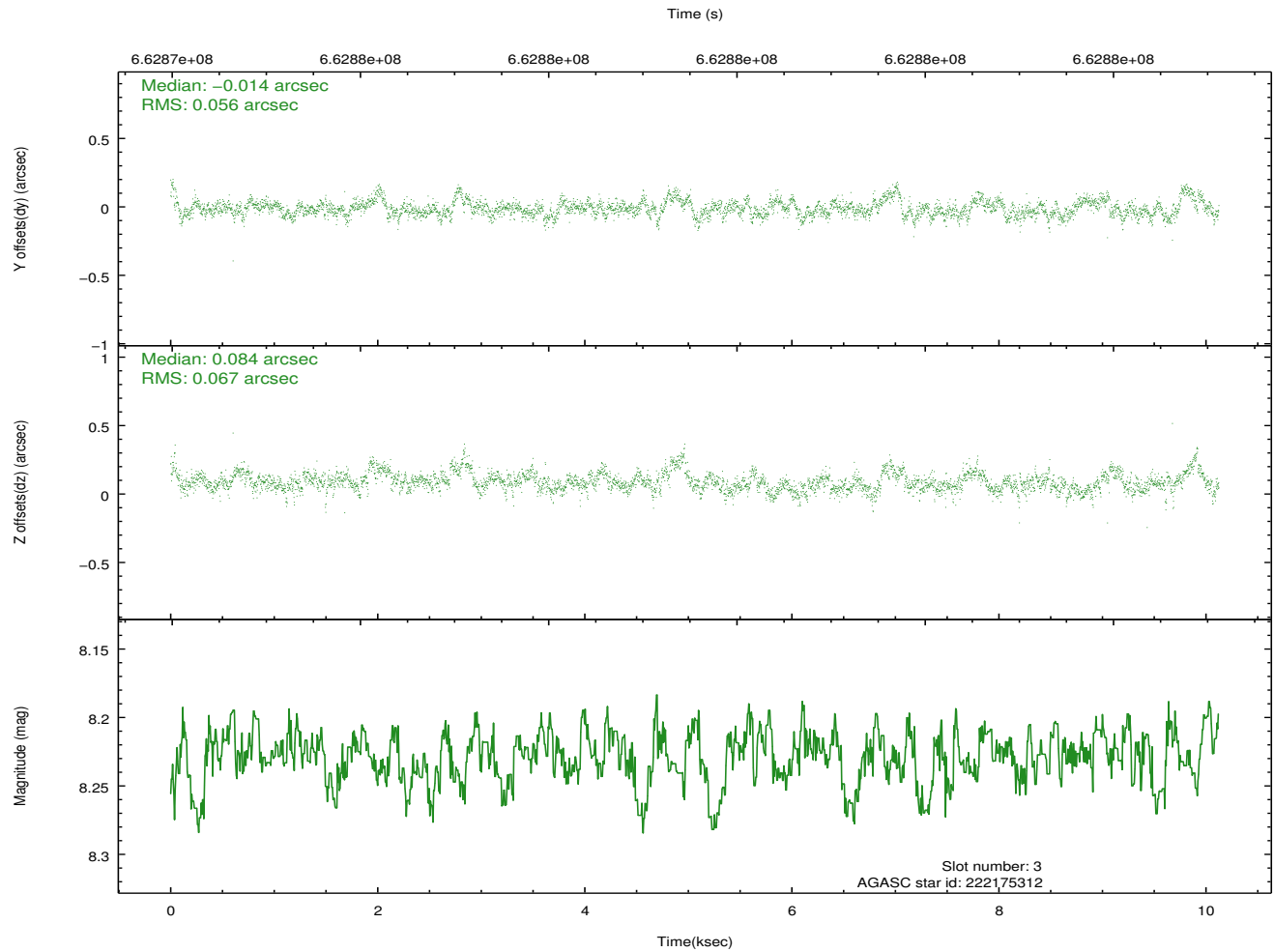
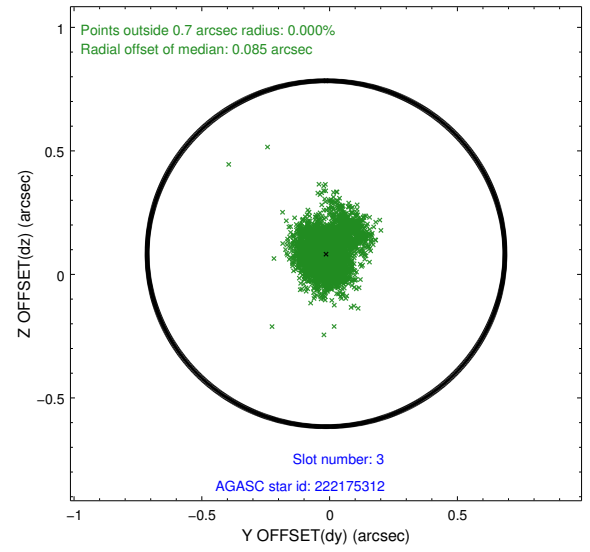
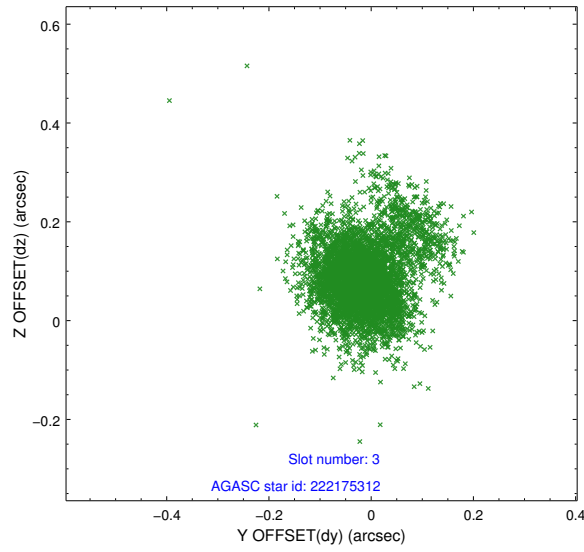


Slot Statistics

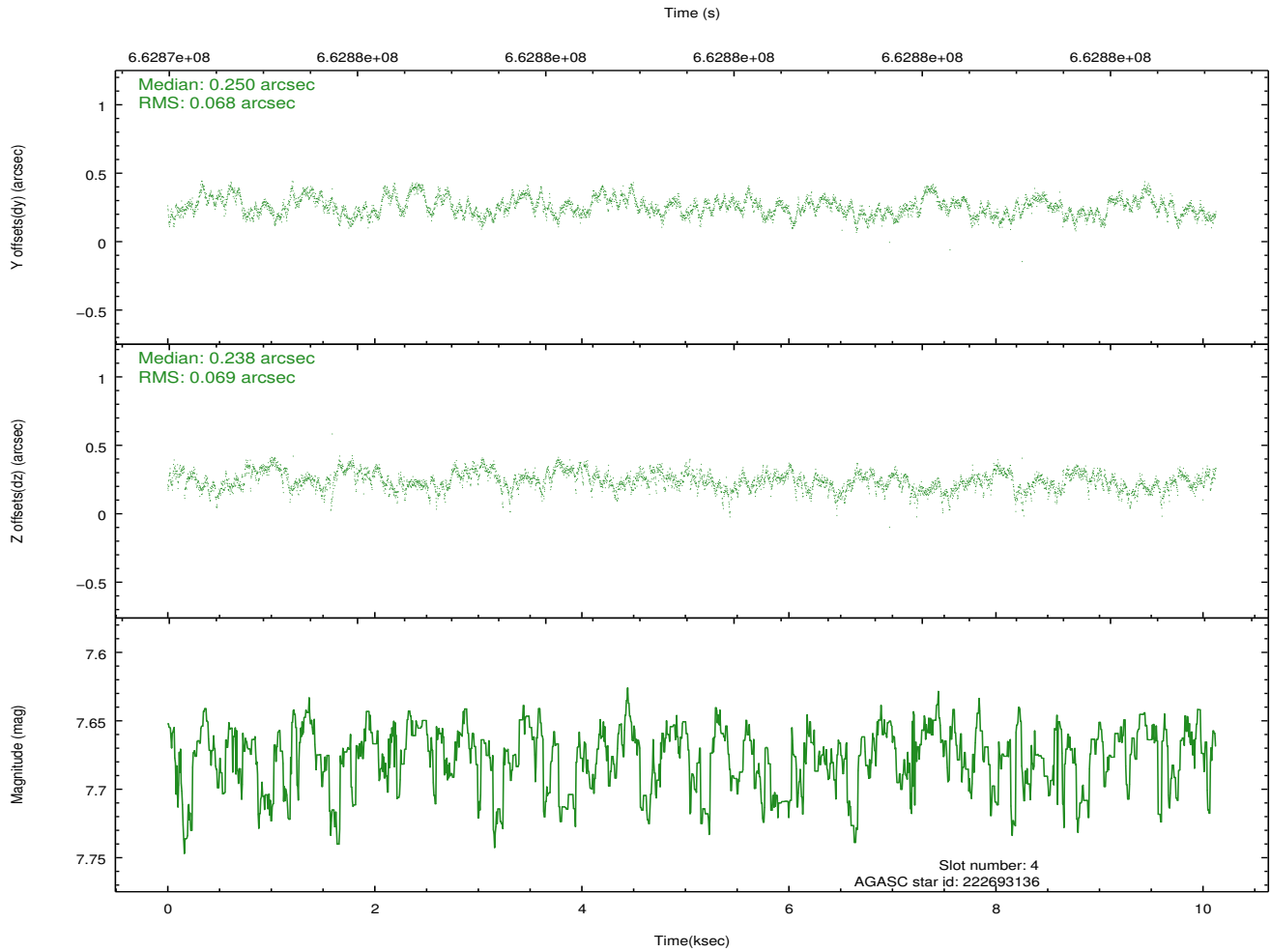
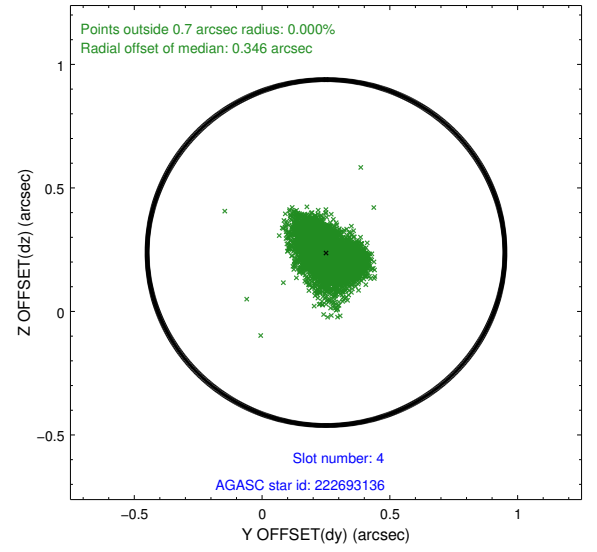
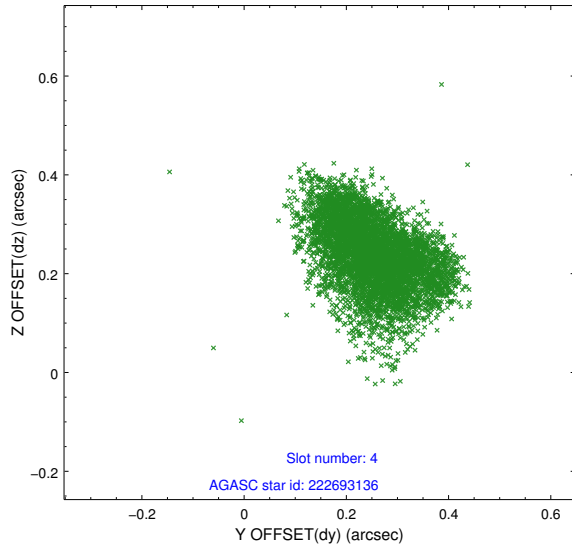
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-1	7.15	2470	1.000	0.034	-0.063	0.013	0.018	0.000000	0.000000	934.02	-1734
1	FID		ACIS-S-4	7.18	2469	1.000	0.506	0.032	0.012	0.019	0.000000	0.000000	2152.13	169
2	FID		ACIS-S-5	7.16	2470	1.000	-0.568	0.043	0.008	0.014	0.000000	0.000000	-1814.85	163
3	GUIDE	used	222175312	8.23	4939	1.000	-0.014	0.084	0.087	0.163	336.318853	16.780824	381.55	-1801
4	GUIDE	used	222693136	7.67	4938	1.000	0.250	0.238	0.104	0.162	336.053572	17.017460	-844.39	-2041
5	GUIDE	used	222694224	8.94	4933	1.000	-0.197	-0.103	0.132	0.209	337.203441	17.132162	1136.23	1408
6	GUIDE	used	222696048	8.96	4934	1.000	0.047	-0.239	0.137	0.211	337.499767	17.077329	1891.40	2121
7	GUIDE	used	222698248	8.38	4936	1.000	-0.093	0.015	0.094	0.152	336.733633	17.523482	-949.48	921

2.4 Star Slots

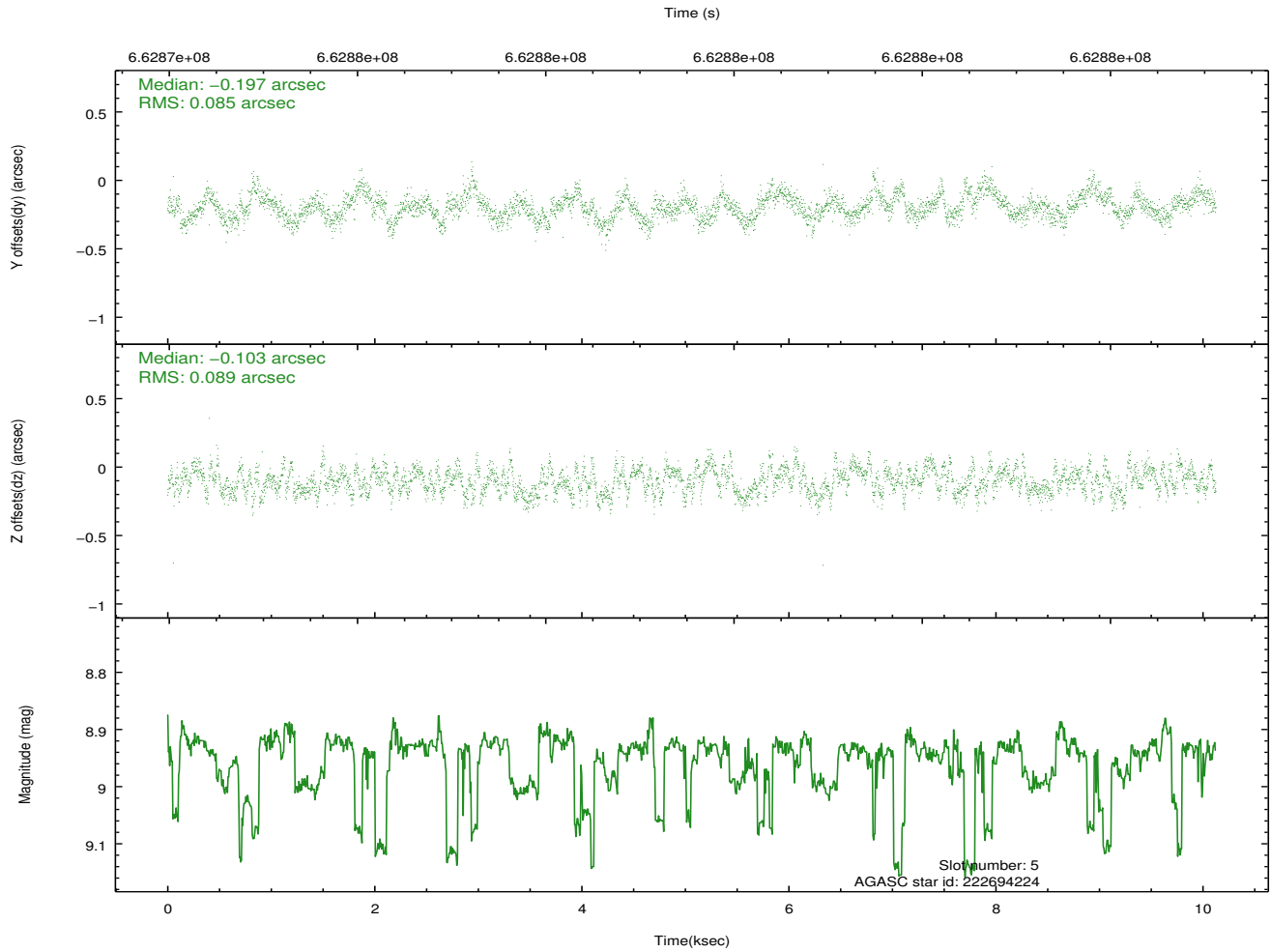
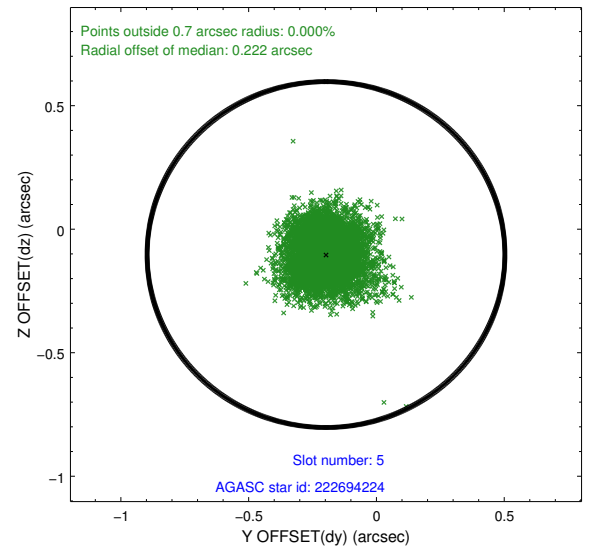
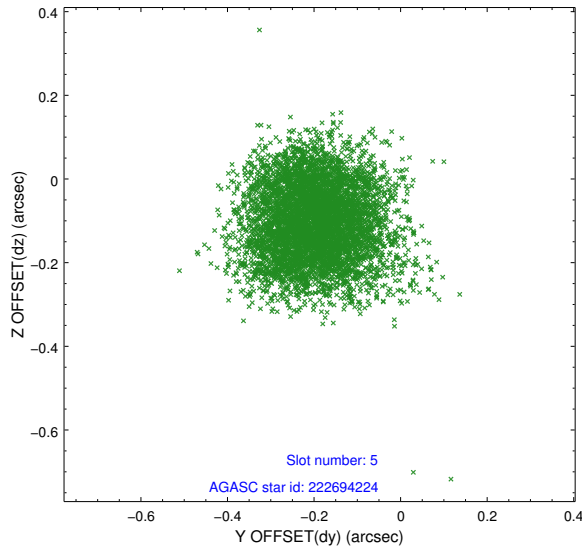
2.4.1 Slot 3



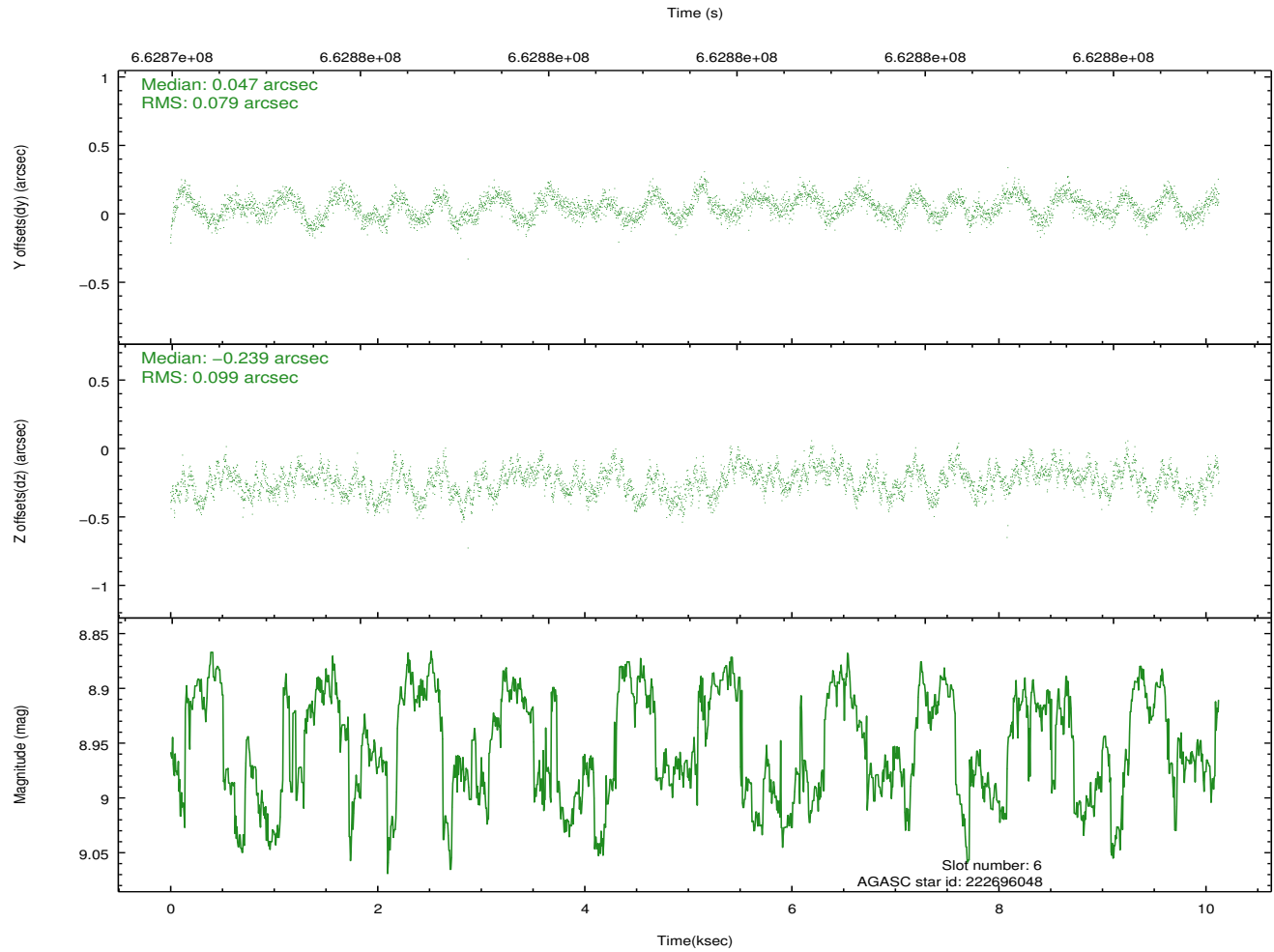
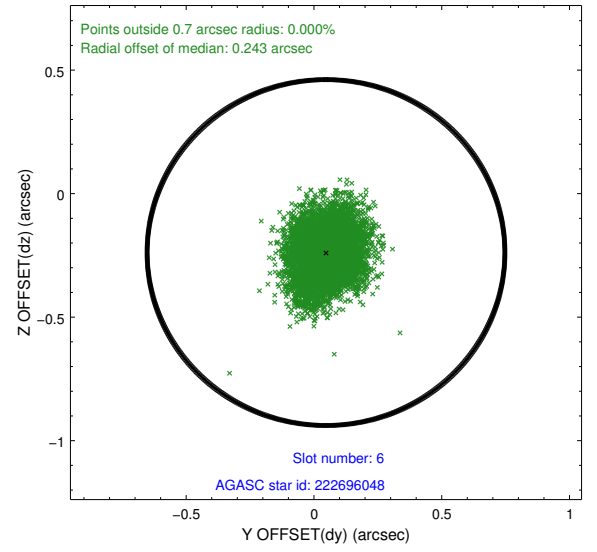
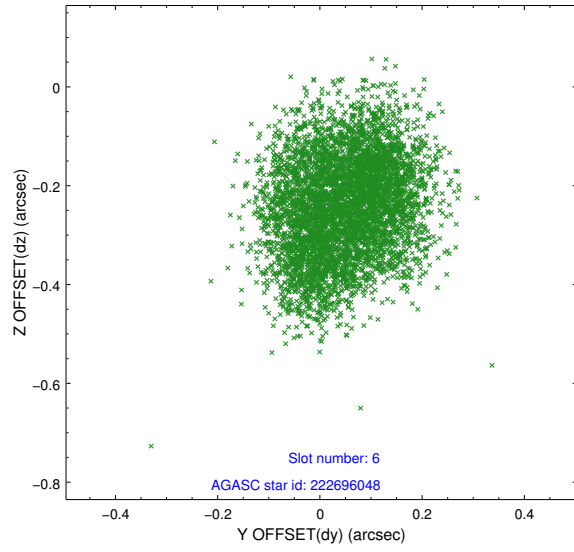
2.4.2 Slot 4



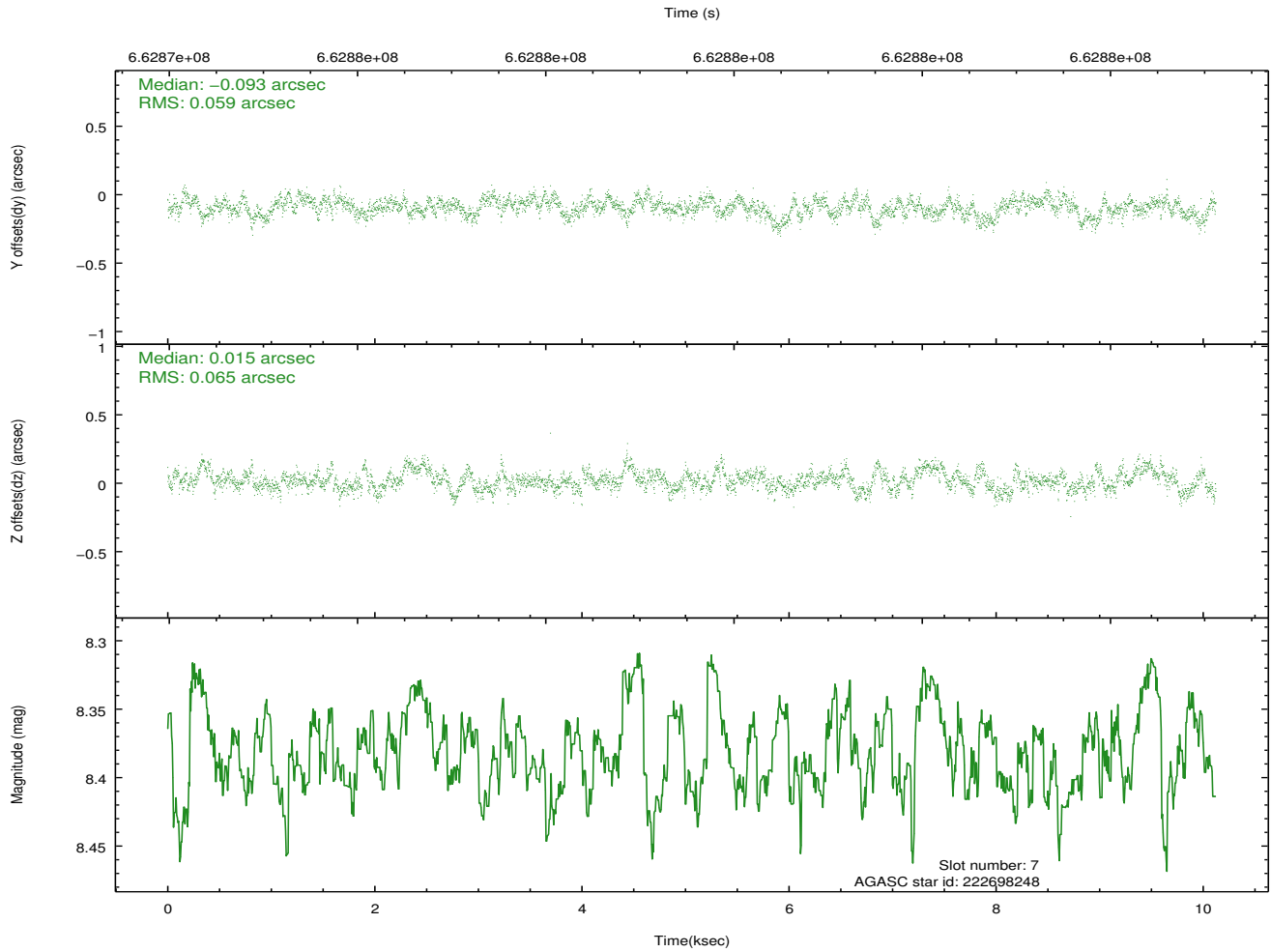
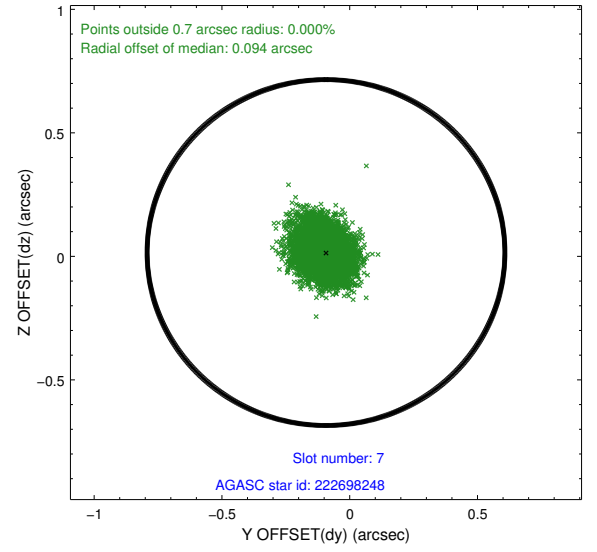
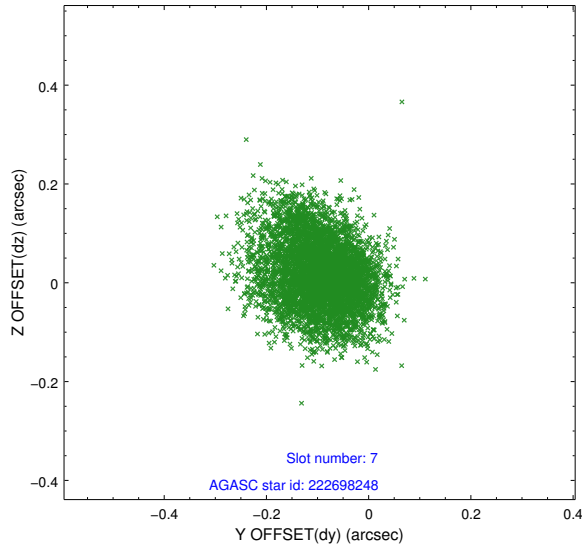
2.4.3 Slot 5



2.4.4 Slot 6

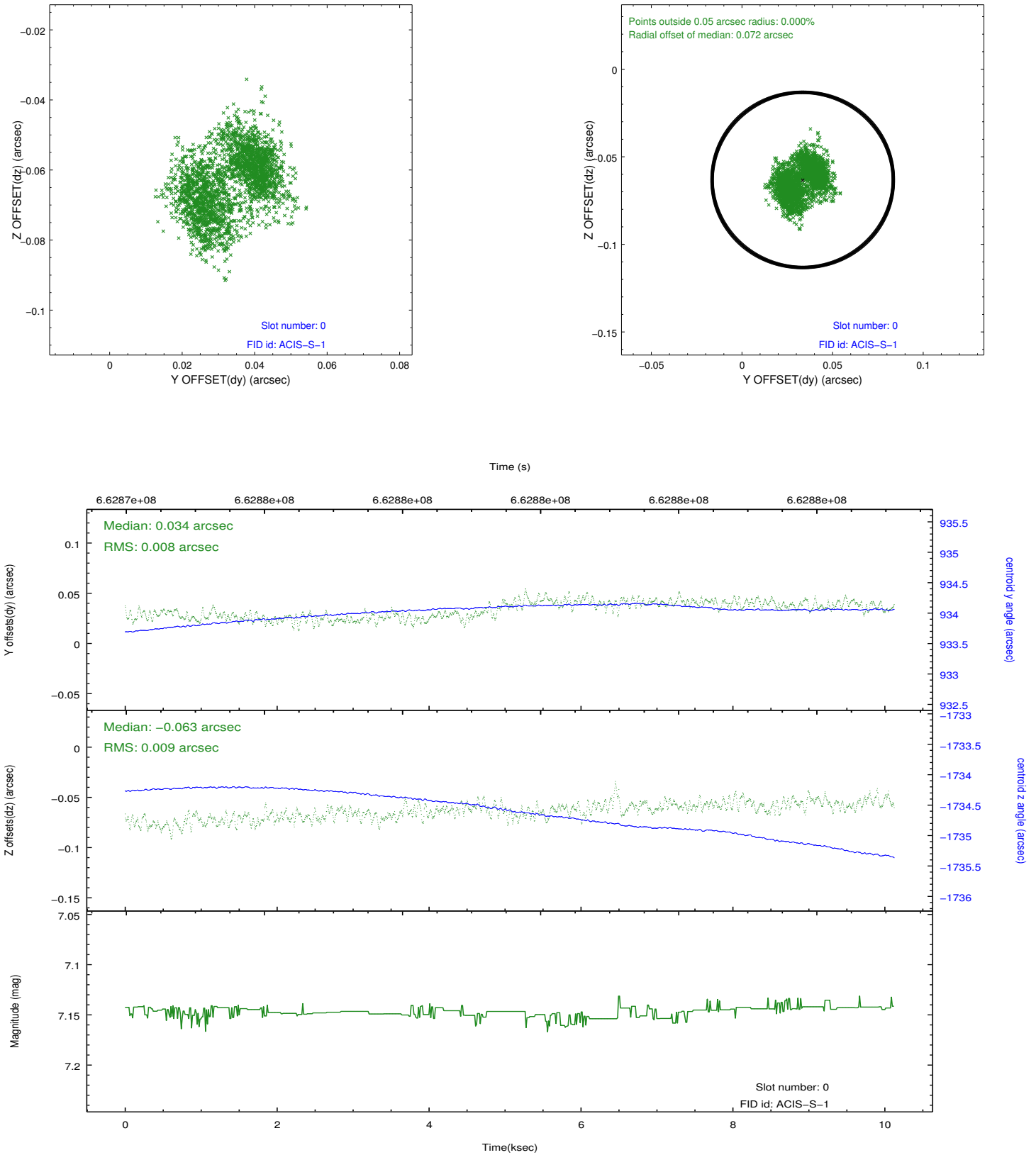


2.4.5 Slot 7

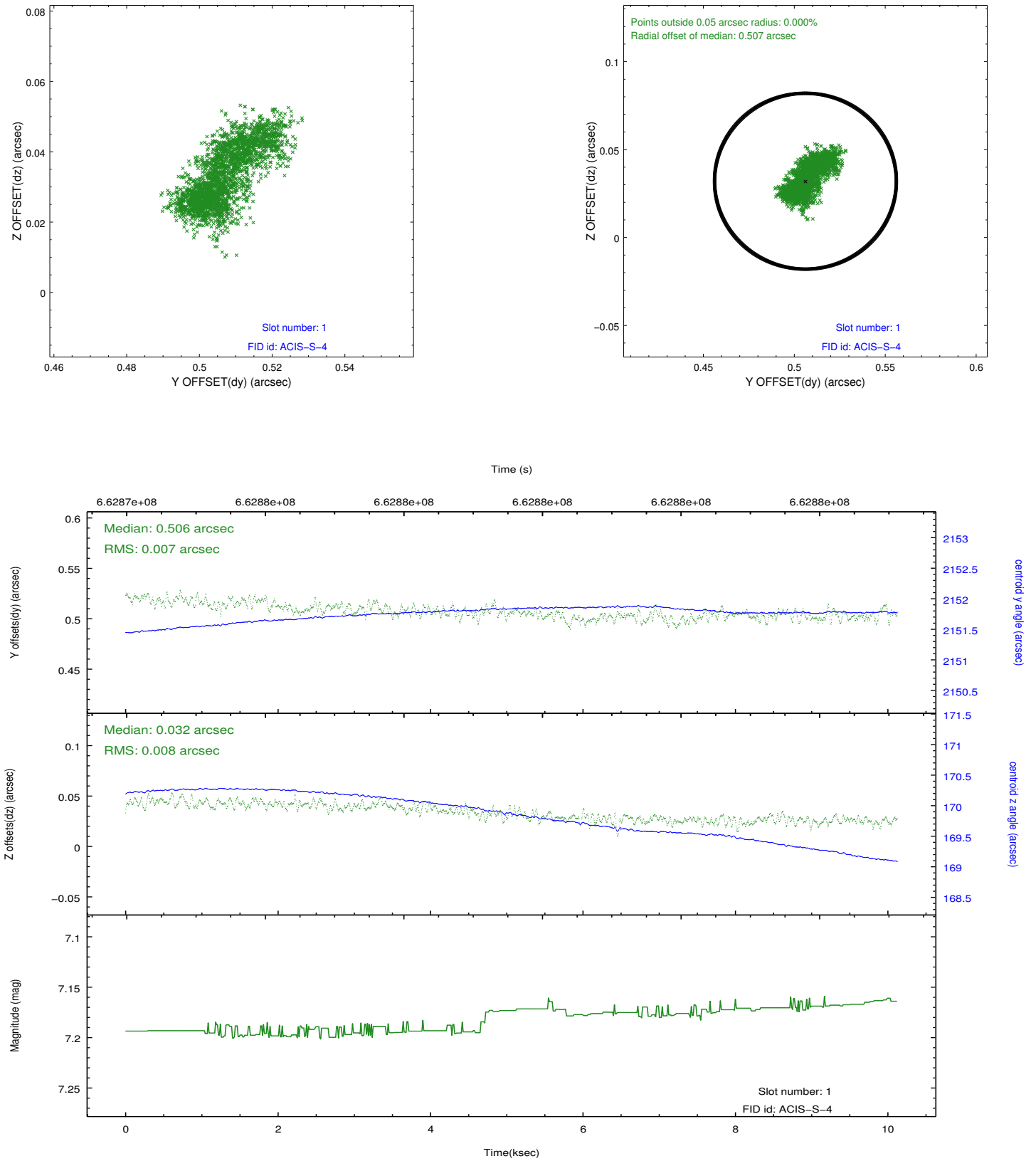


2.5 FID Slots

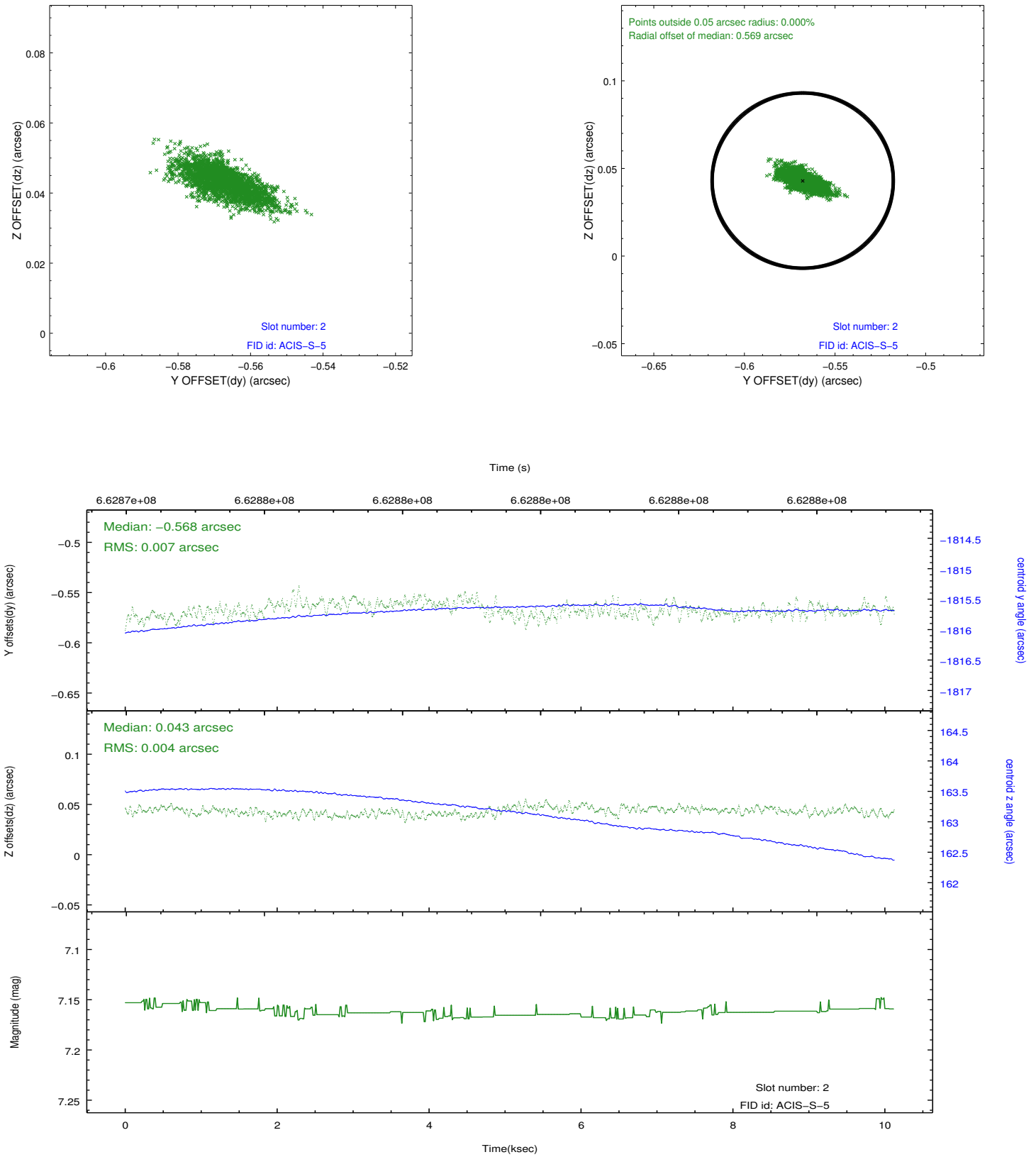
2.5.1 Slot 0



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)	2019.01.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.108561369538

A.2 Comments

A spatial region of the original bias map for CCD = 6 suffered from anomalously high data values. Pixels in the event data that were bias-corrected by one of the original affected bias pixels may have an apparent energy shift. While the change in energy is expected to be small (~ 20 eV), it depends on many parameters that have not yet been fully explored for this bias anomaly. The bias map for CCD = 6 has been reconstructed for this processing to remove this anomaly using scaled data from a comparable bias map from another observation. The pixels affected by the anomaly are bounded by sky coords: (336.83052,17.09793), (336.82884,17.10014), (336.77639,17.06372), (336.77807,17.06151).