

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 10449 - L2 Version 3
Chandra X-Ray Center

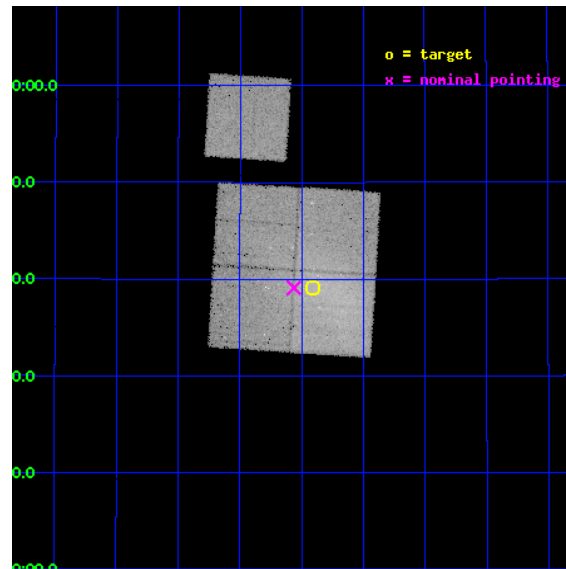
L2 Processing Date : Jun 18 2012

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1 Front

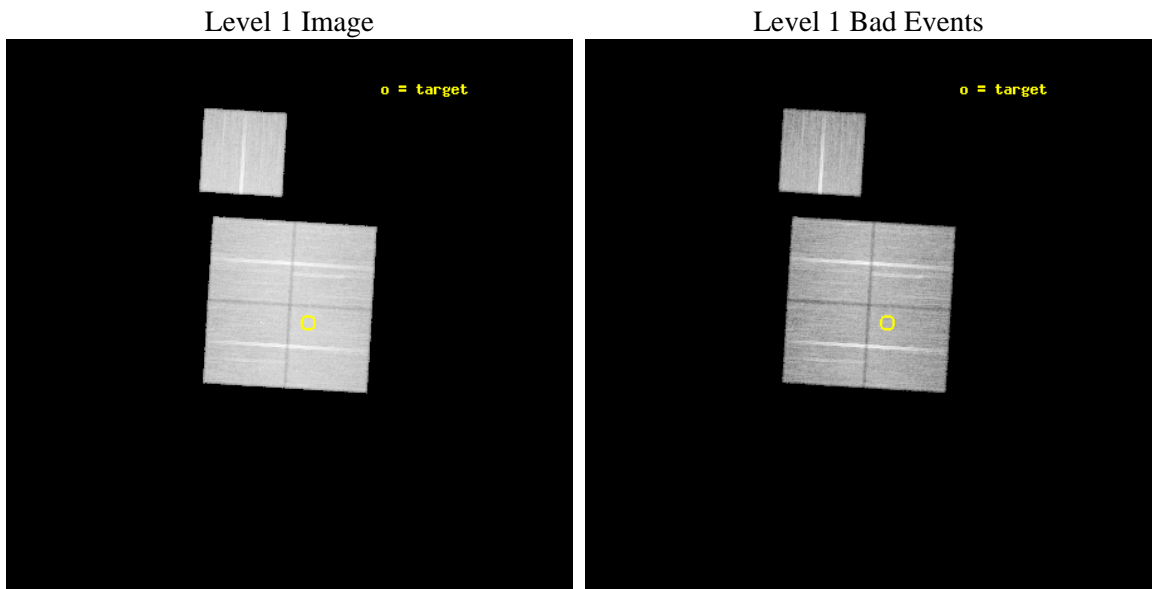
seq_num	800810	Sequence number
obs_id	10449	Observation id
title	A Merger Shock Front due to Subcluster Infall in Abell 2061?	Propo
observer	Mr. Daniel Wik	Principal investigator
object	Abell 2061	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	230.3525	Observer's specified target RA [deg]
dec_targ	30.651667	Observer's specified target Dec [deg]
ra_nom	230.39058452923	Nominal RA [deg]
dec_nom	30.651819954498	Nominal Dec [deg]
roll_nom	3.5102763876037	Nominal Roll [deg]
revision	3	Processing version of data
ontime	31768.759274006	Sum of GTIs [s]
livetime	31353.677046271	Livetime [s]
ontime0	31768.759284079	Sum of GTIs [s]
ontime1	31768.759274006	Sum of GTIs [s]
ontime2	31765.618283808	Sum of GTIs [s]
ontime3	31768.759274006	Sum of GTIs [s]
ontime6	31768.759274006	Sum of GTIs [s]
l2events	162791	Number of level 2 events



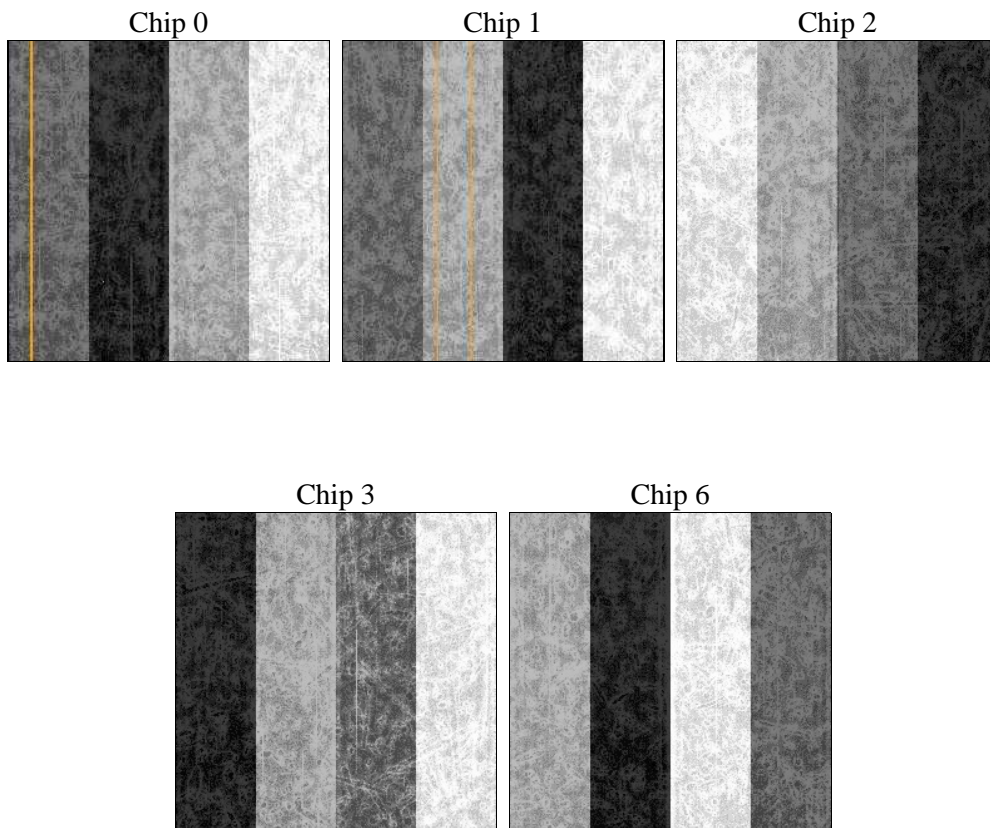
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	32000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	31768.759274006	Sum of GTIs [s]
caldsver	4.4.10	 	ontime0	31768.759284079	Sum of GTIs [s]
date	2012-06-18T16:12:55	Date and time of file creation	ontime1	31768.759274006	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	31765.618283808	Sum of GTIs [s]
			ontime3	31768.759274006	Sum of GTIs [s]
			ontime6	31768.759274006	Sum of GTIs [s]
			l1events	1425259	Number of level 1 events

2.1.4 Events

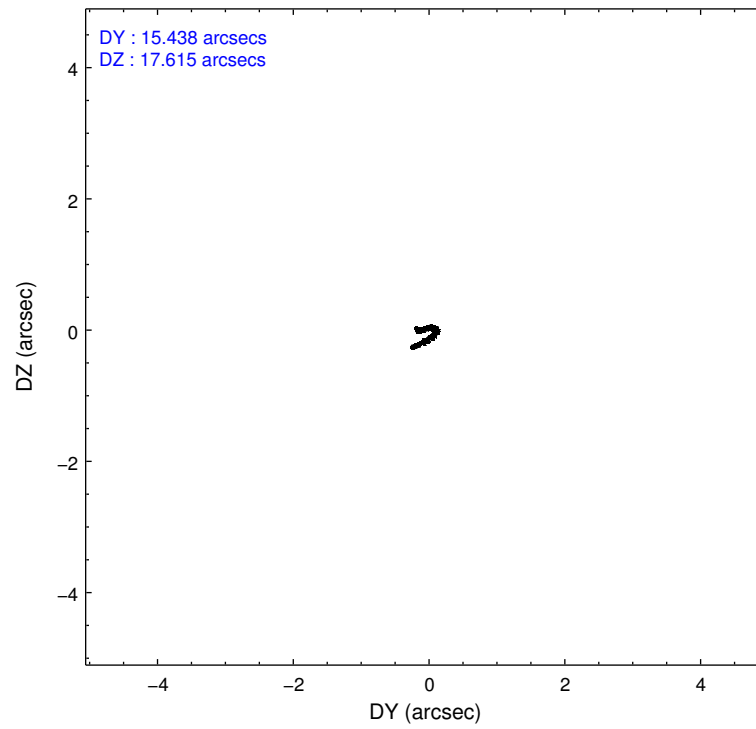
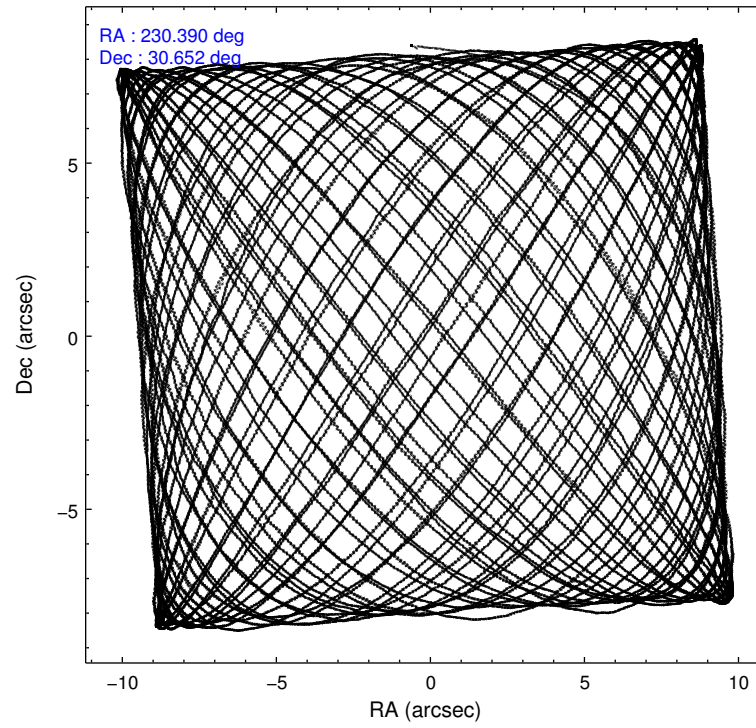
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	267297	290185	298061	287755	281961
rejected events	233757	229795	265080	253746	252637
rejected %	87%	79%	88%	88%	89%

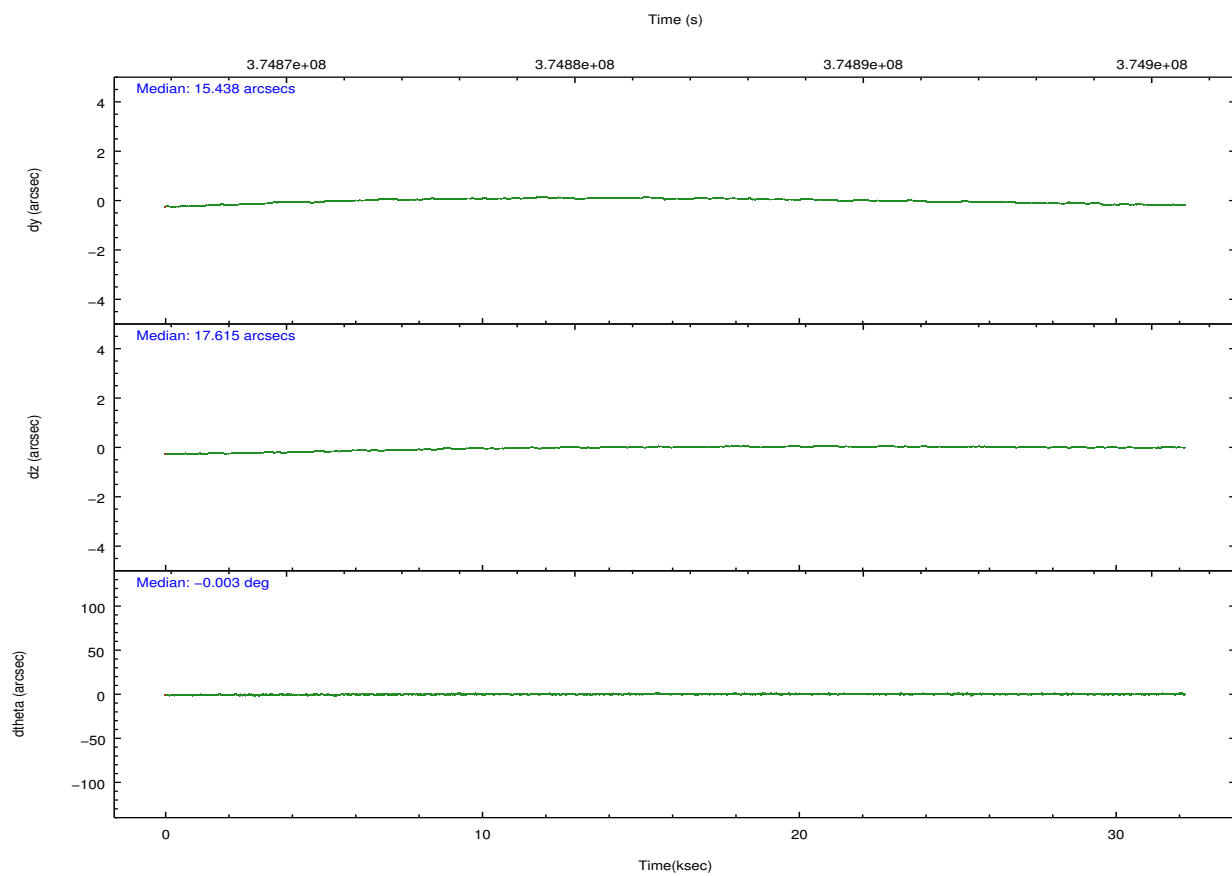
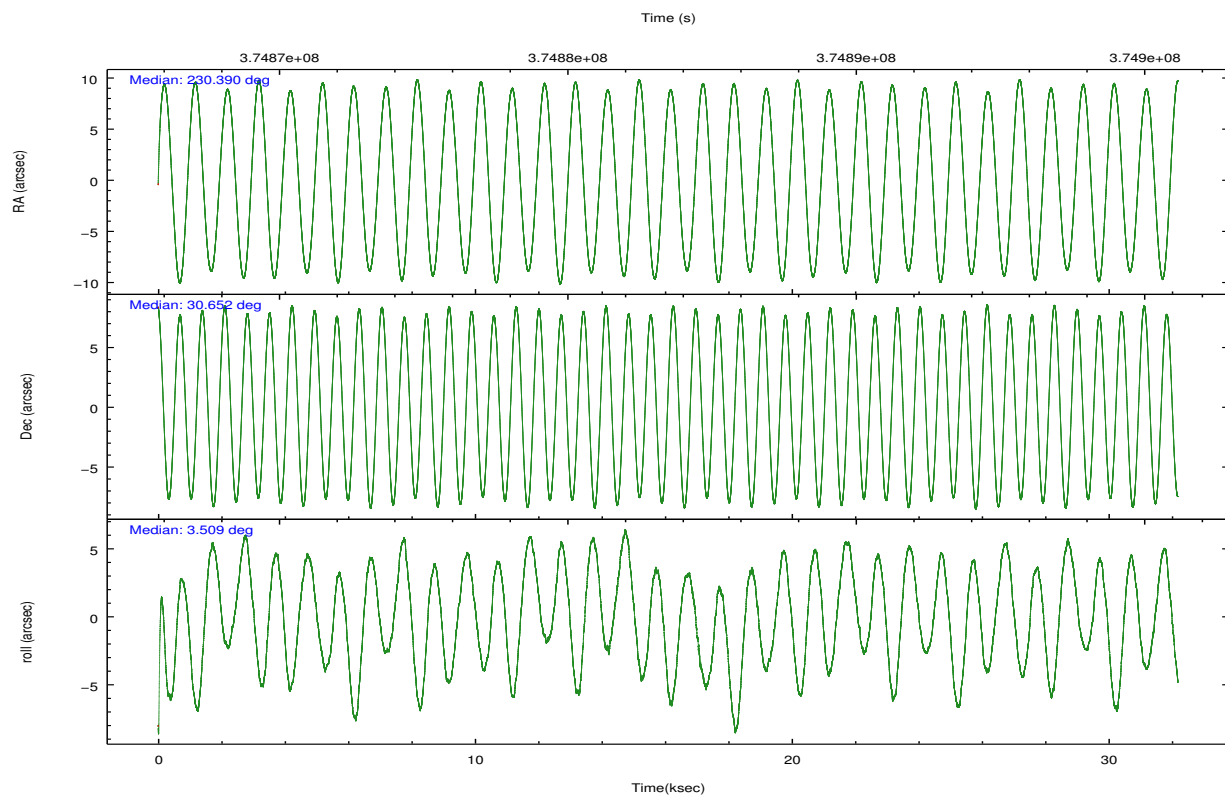
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	13877	34347	13946	14938	10190
	5%	11%	4%	5%	3%
grade 1 events	219	278	202	193	134
	0%	0%	0%	0%	0%
grade 2 events	7595	10377	7385	6888	6606
	2%	3%	2%	2%	2%
grade 3 events	3254	4221	3119	3258	3238
	1%	1%	1%	1%	1%
grade 4 events	3071	4184	3117	3202	3038
	1%	1%	1%	1%	1%
grade 5 events	10124	11225	9859	11791	11485
	3%	3%	3%	4%	4%
grade 6 events	5748	7267	5419	5723	6258
	2%	2%	1%	1%	2%
grade 7 events	223409	218286	255014	241762	241012
	83%	75%	85%	84%	85%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	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	230.364004	230.3905845292257	Subarray requested	NONE	NONE
[deg] Pointing Dec	30.636553	30.65181995449797	Alternating exposures requested	N	N
[deg] Pointing Roll	3.315143	3.510276387603702	[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	-241.192463	-241.1907239327461			
[mm] SIM translation stage offset	7.6	7.598270929816437			
[s] Observation start time (MET)	374867562.184000	374866891.20614			
Observation start date	2009-11-17T17:51:36	2009-11-17T17:41:31			
[s] Observation end time (MET)	374899562.184000	374900989.88286			
Observation end date	2009-11-18T02:44:56	2009-11-18T03:09:49			
Read mode	TIMED	TIMED			

2.3 Aspect



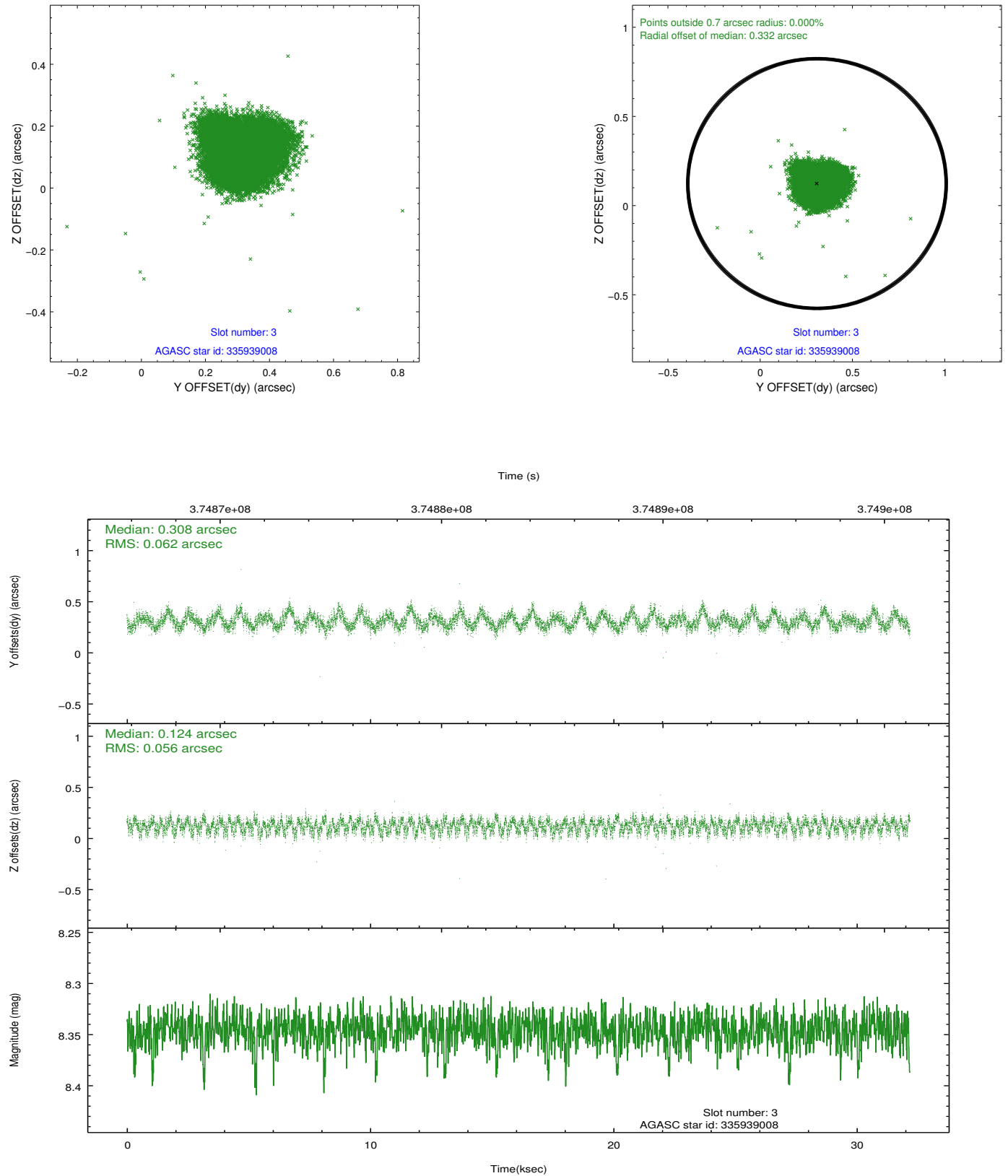


Slot Statistics

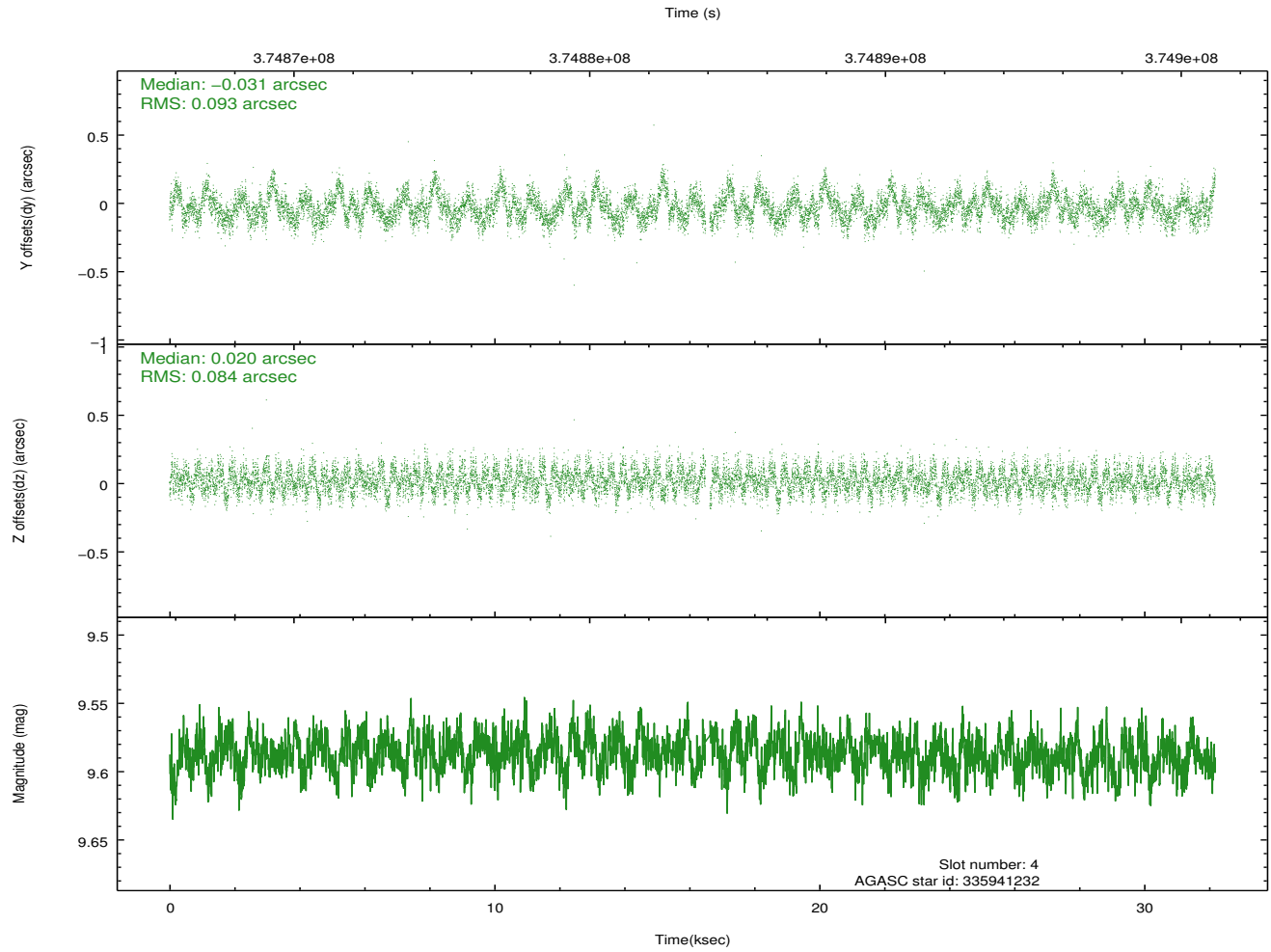
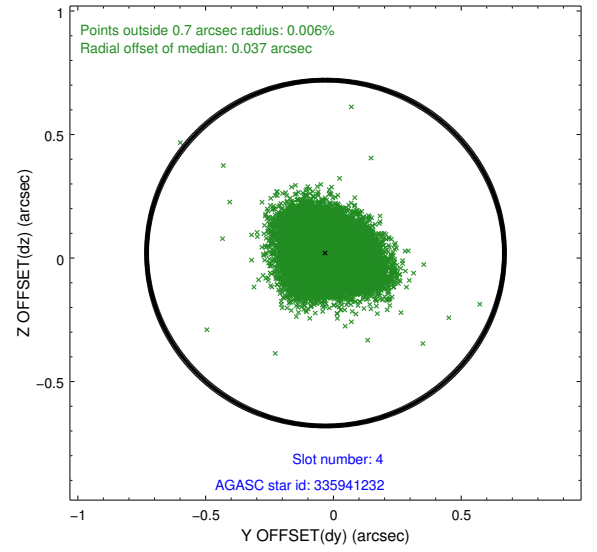
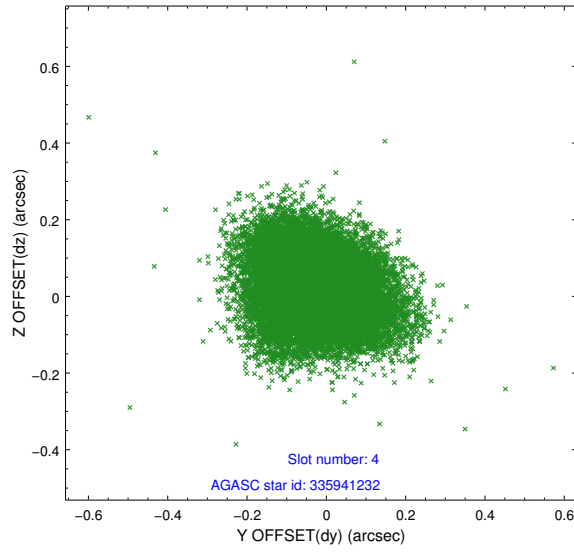
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.04	7851	-0.040	0.056	0.008	0.015	0.000000	0.000000	924.14	-684.98
1	FID	ACIS-I-5	7.01	7851	-0.110	-0.002	0.006	0.010	0.000000	0.000000	-1824.04	1212.39
2	FID	ACIS-I-6	6.98	7851	0.060	0.015	0.008	0.014	0.000000	0.000000	389.67	1857.01
3	GUIDE	335939008	8.35	15692	0.308	0.124	0.091	0.138	230.690845	30.547934	993.95	-375.31
4	GUIDE	335941232	9.59	15618	-0.031	0.020	0.133	0.211	230.429370	30.908033	258.03	964.44
5	GUIDE	335947592	8.96	15665	0.178	-0.214	0.088	0.144	229.764112	30.694443	-1841.58	320.31
6	GUIDE	336080456	8.71	15690	-0.384	-0.065	0.079	0.127	231.016319	30.688216	2027.04	74.93
7	GUIDE	266210480	8.07	15684	-0.077	0.138	0.073	0.116	229.713991	29.917480	-2174.16	-2460.69

2.4 Star Slots

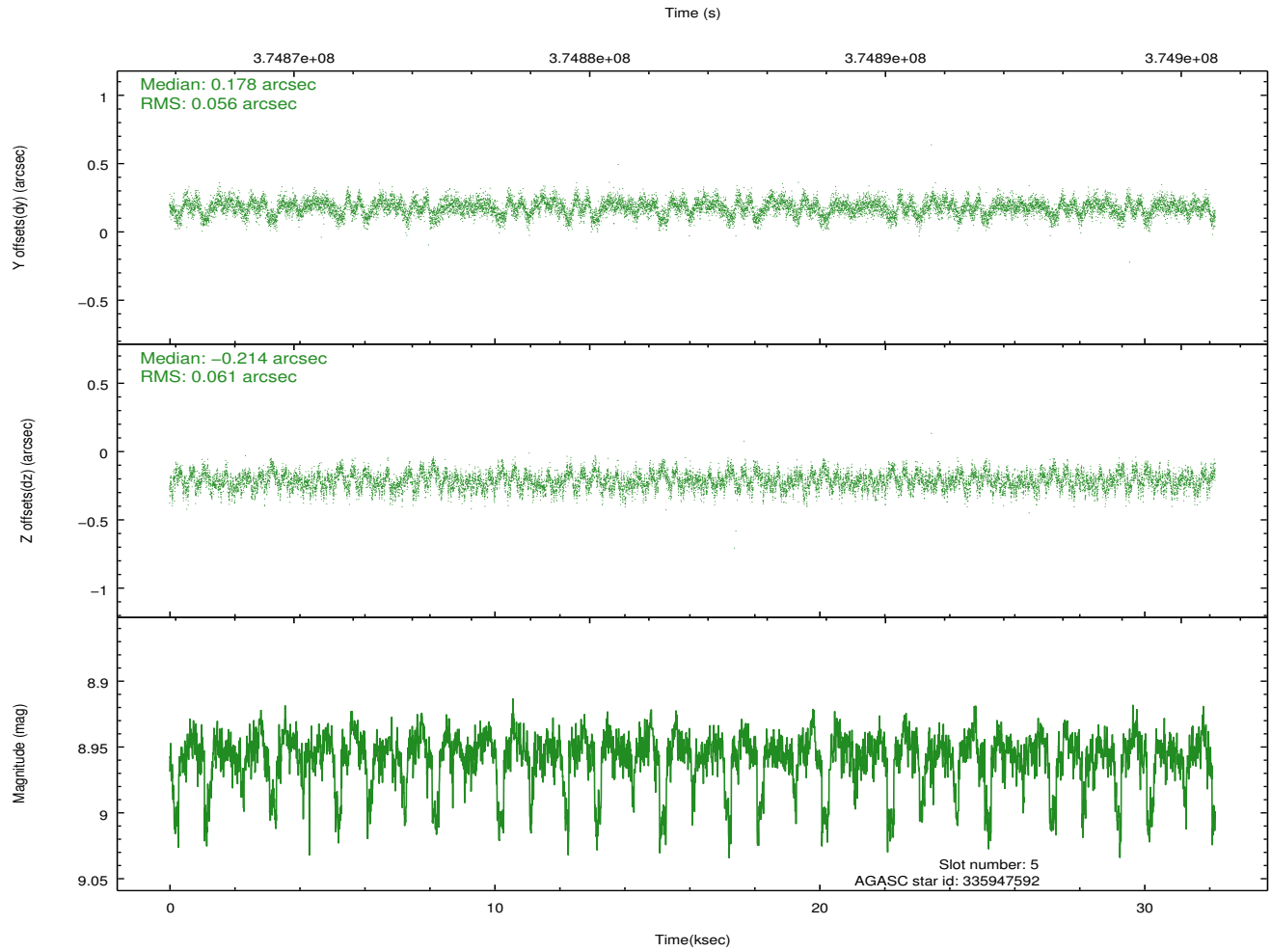
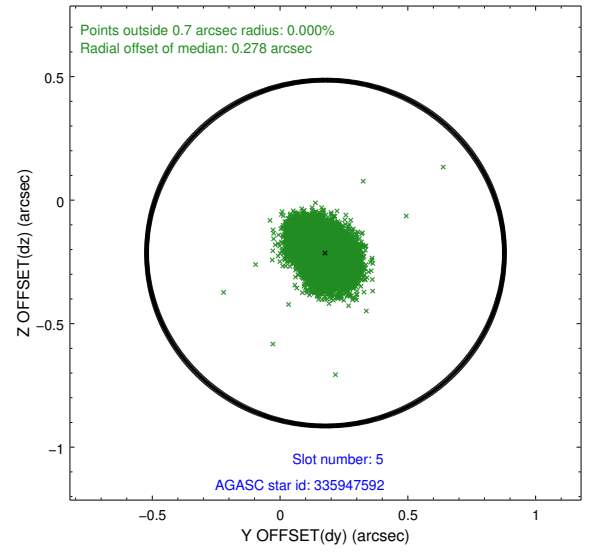
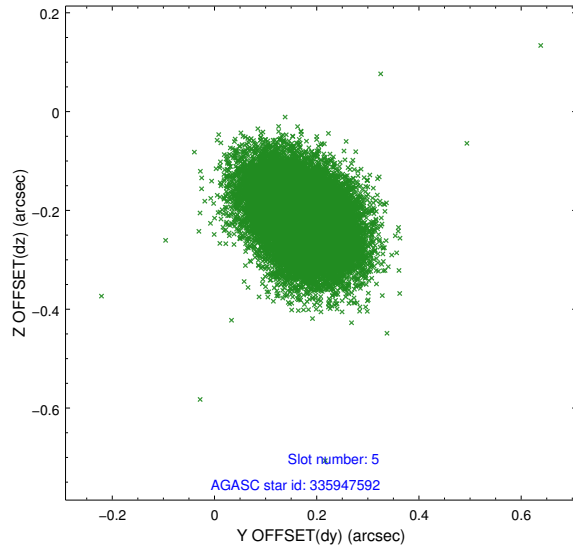
2.4.1 Slot 3



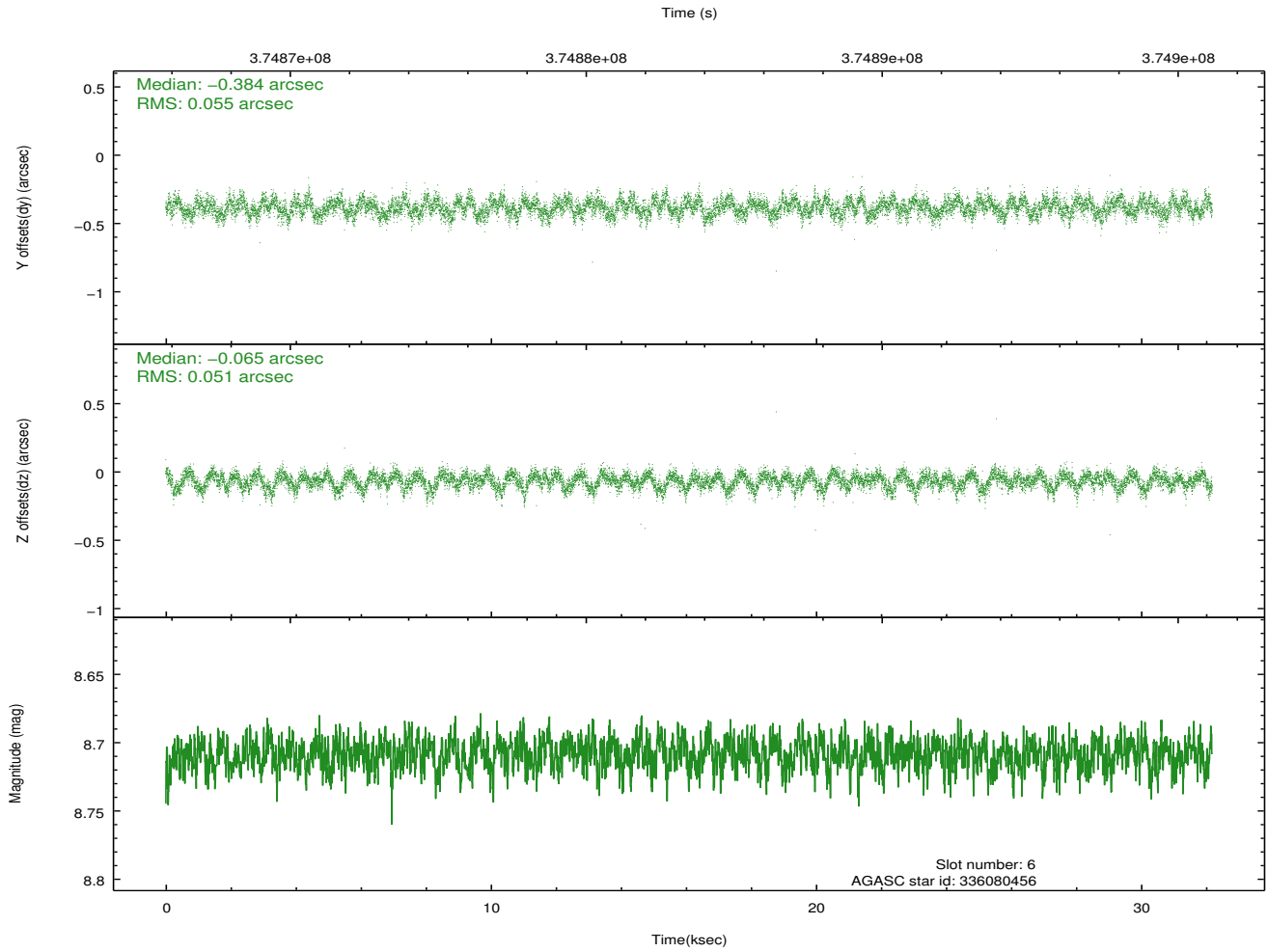
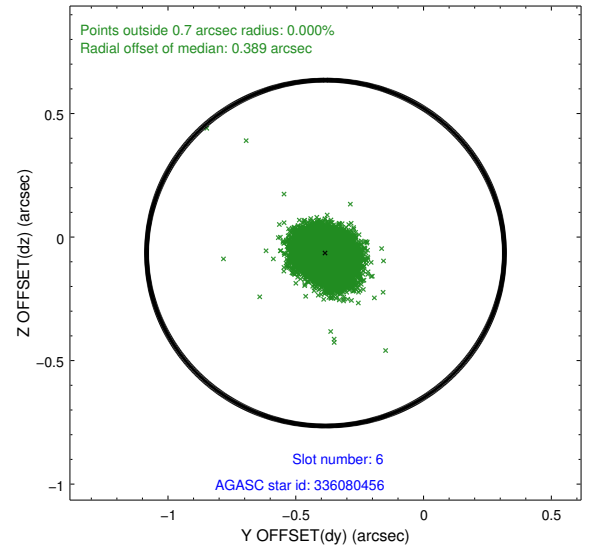
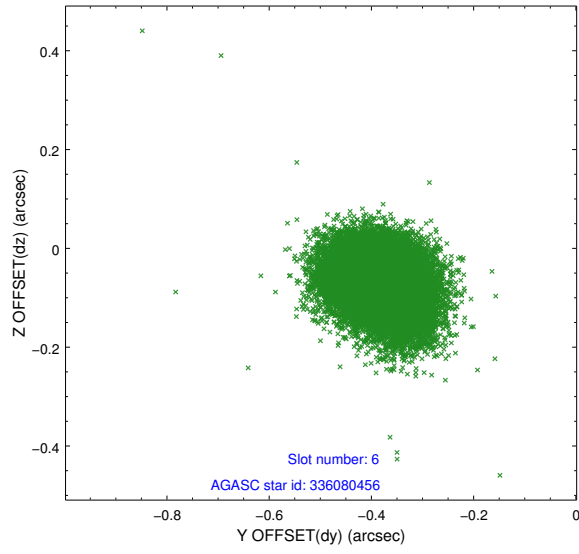
2.4.2 Slot 4



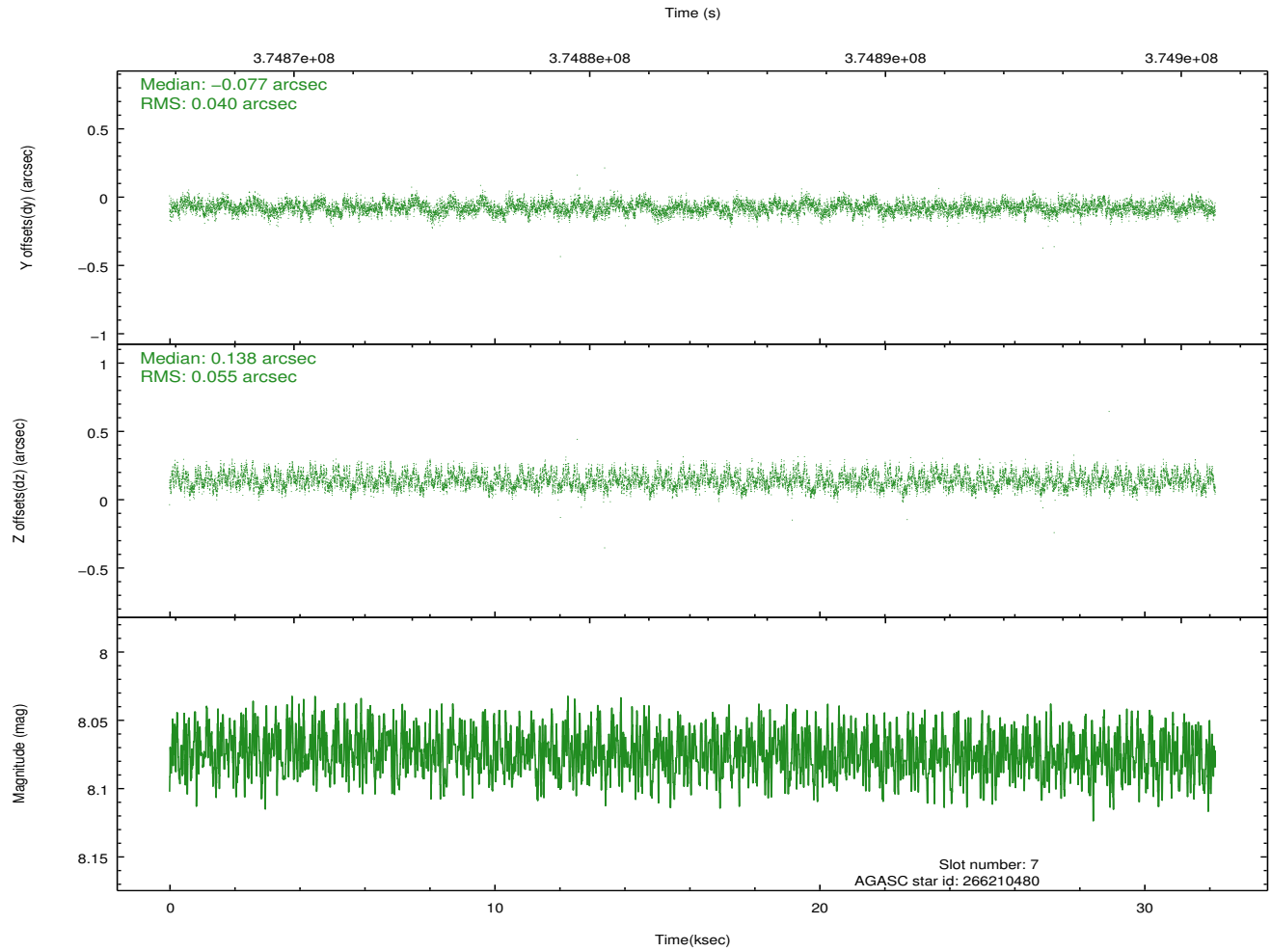
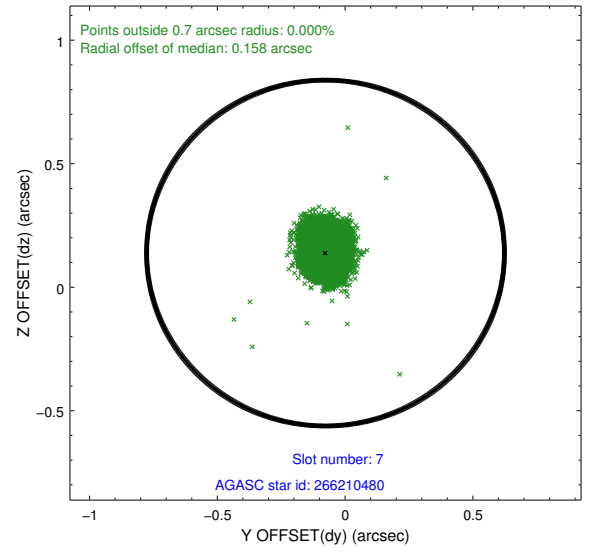
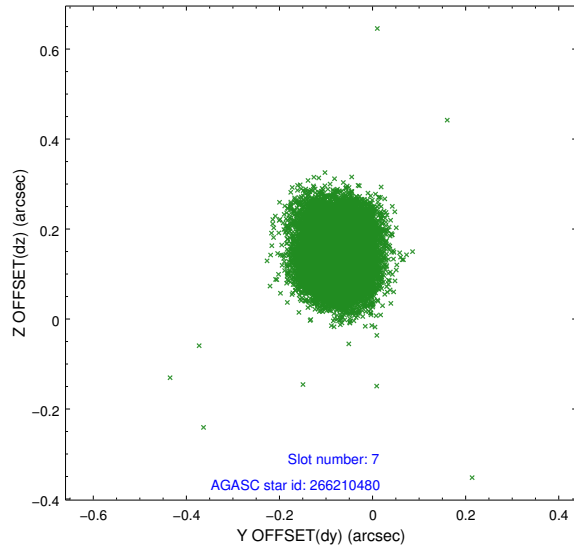
2.4.3 Slot 5



2.4.4 Slot 6

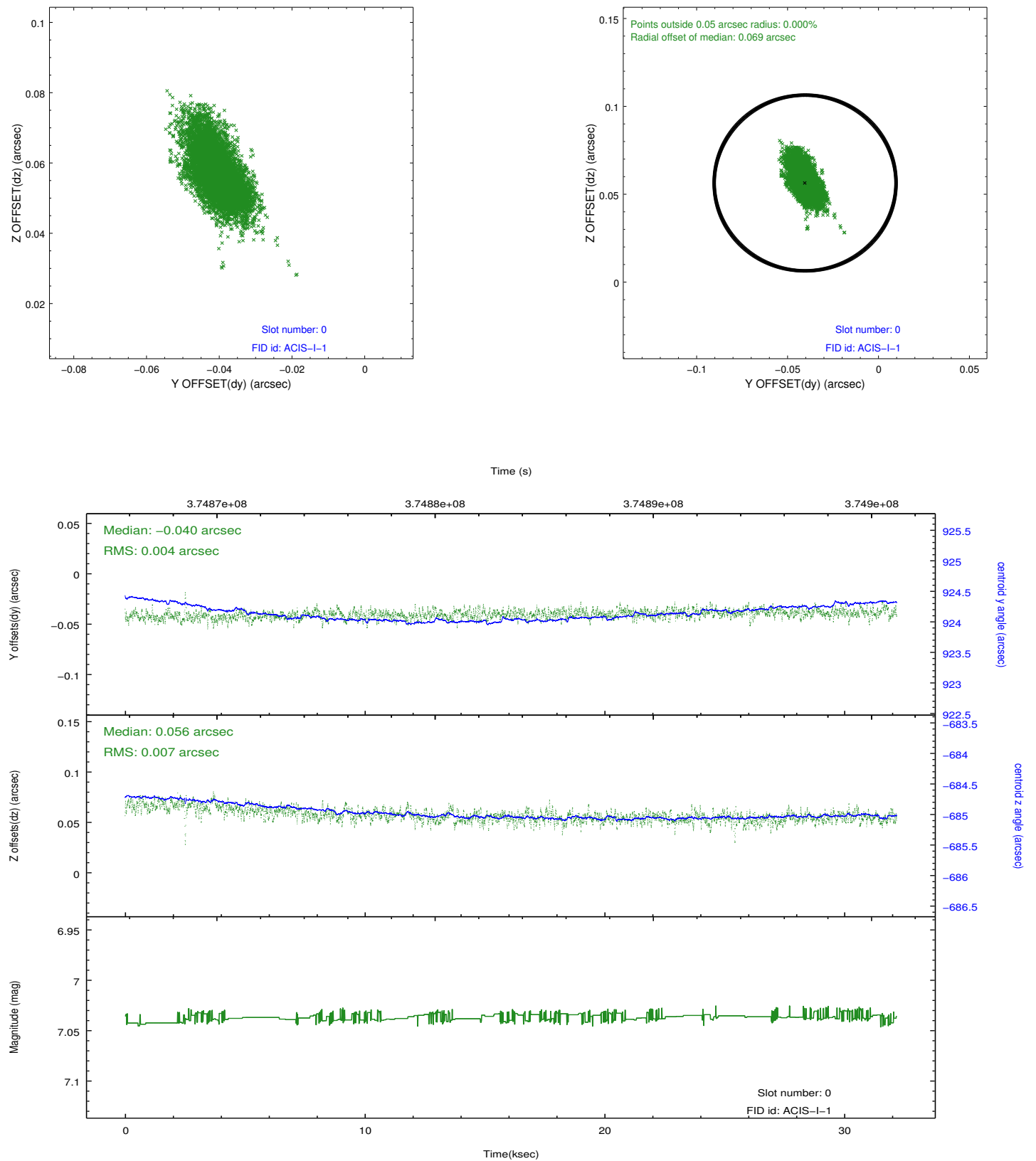


2.4.5 Slot 7

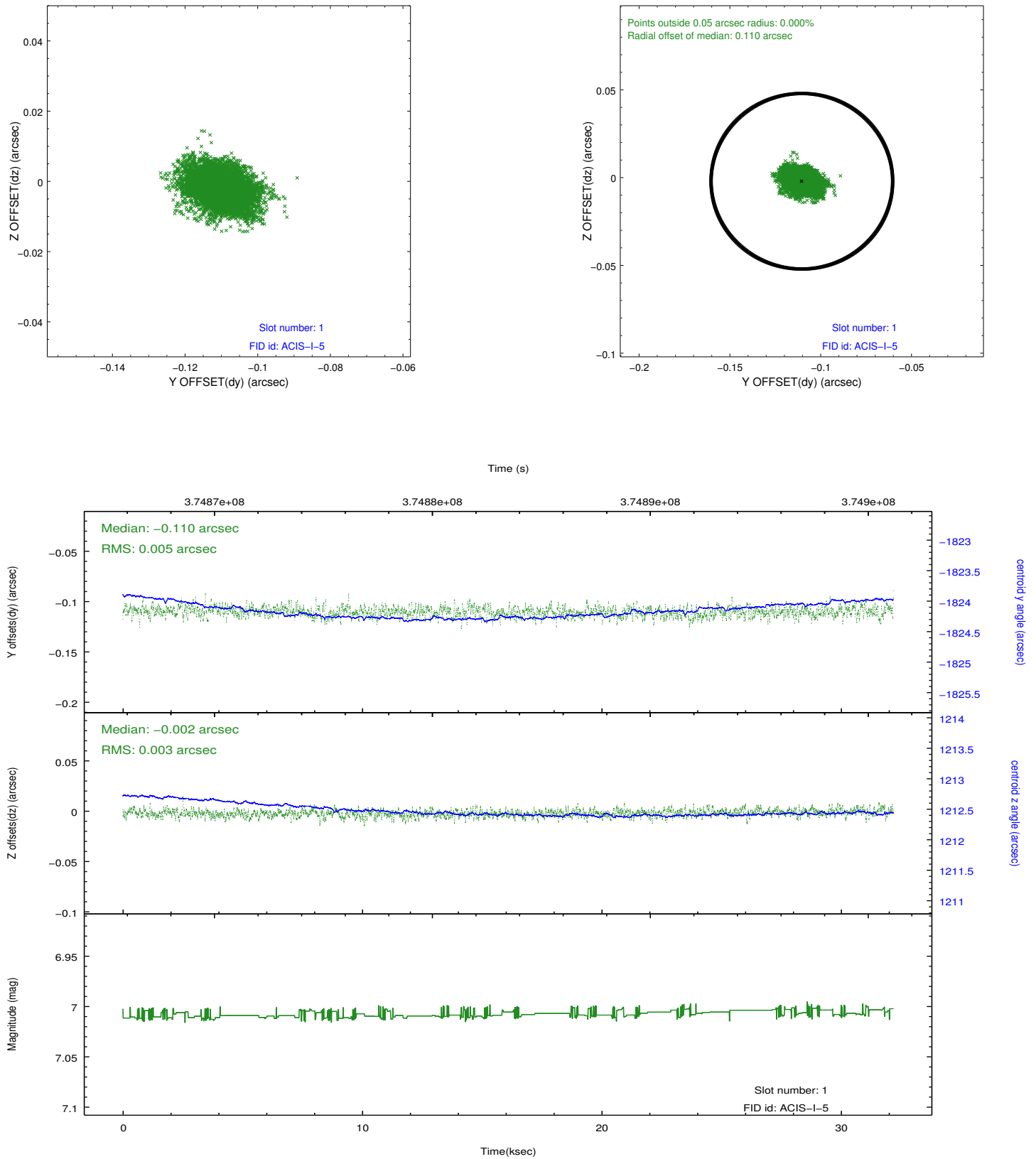


2.5 FID Slots

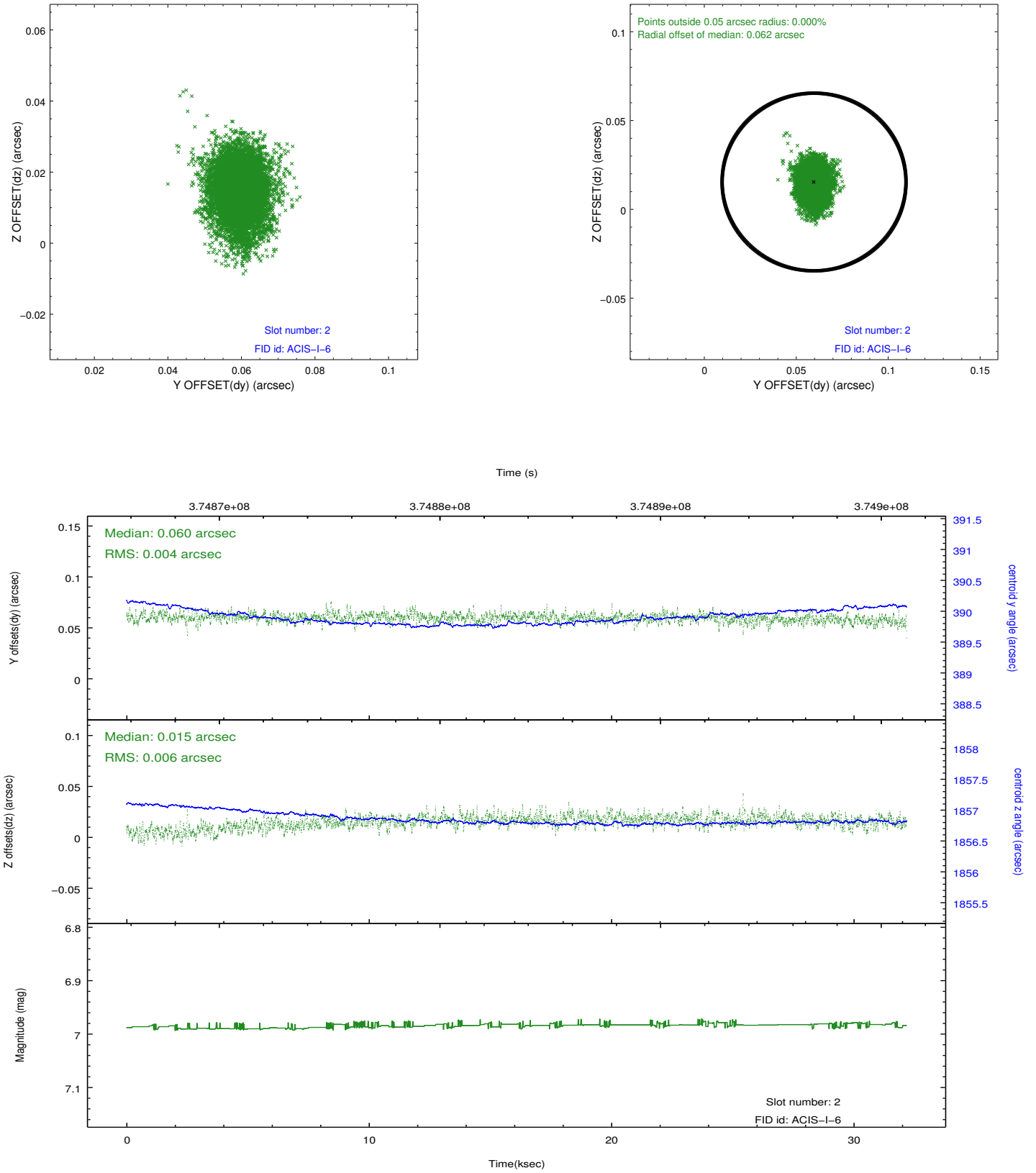
2.5.1 Slot 0



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)	2012.06.25
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	31.768759274006

A.2 Comments

A spatial region of the original bias map for CCD = 2 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 = 2 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 (sky coords):
(230.46225,30.73925), (230.46175,30.74605), (230.43008,30.74439), (230.43850,30.73800)

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Roll preference met.