

V&V Reference Report

L2 ASCDS Version : 8.5

Observation 6102 - L2 Version 3
Chandra X-Ray Center

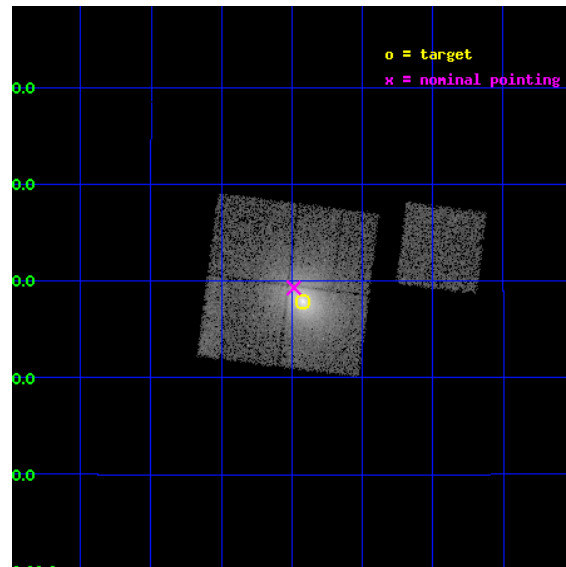
L2 Processing Date : Dec 8 2012

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1 Front

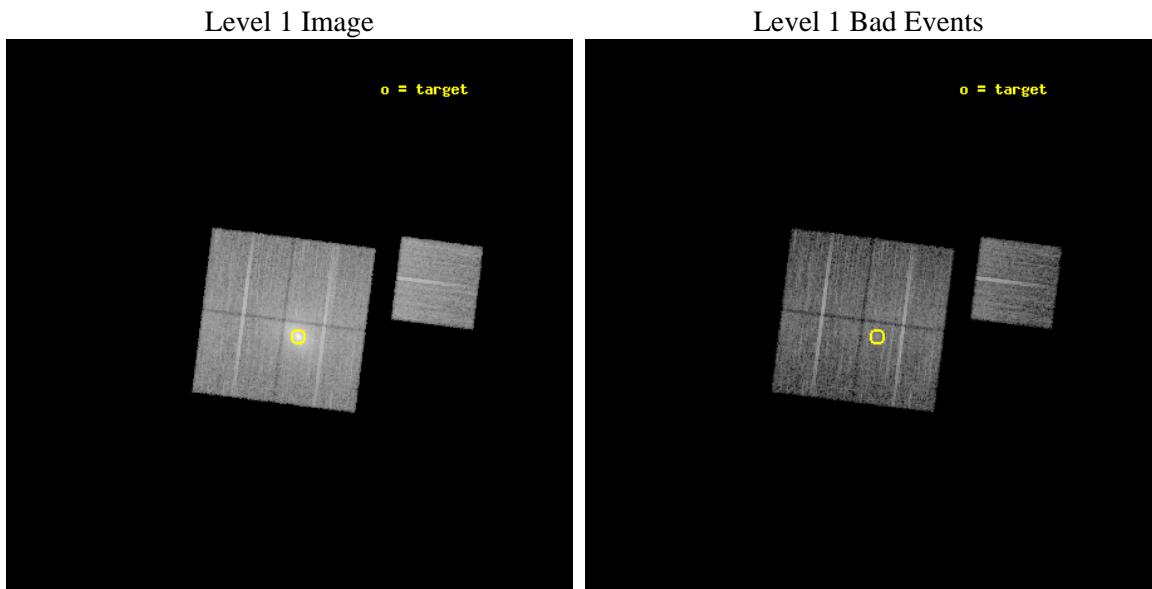
seq_num	800550	Sequence number
obs_id	6102	Observation id
title	Probing dark energy using the X-ray gas mass fraction in dynamically relaxed galaxy clusters	Proposal title
observer	Prof. Steven Allen	Principal investigator
object	Abell 478	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	63.355417	Observer's specified target RA [deg]
dec_targ	10.465194	Observer's specified target Dec [deg]
ra_nom	63.371386691865	Nominal RA [deg]
dec_nom	10.488233911507	Nominal Dec [deg]
roll_nom	97.256606665881	Nominal Roll [deg]
revision	3	Processing version of data
ontime	10127.699980497	Sum of GTIs [s]
livetime	9995.3741243479	Livetime [s]
ontime0	10127.699980497	Sum of GTIs [s]
ontime1	10127.699980497	Sum of GTIs [s]
ontime2	10127.699980497	Sum of GTIs [s]
ontime3	10127.699980497	Sum of GTIs [s]
ontime6	10124.559020251	Sum of GTIs [s]
l2events	106252	Number of level 2 events



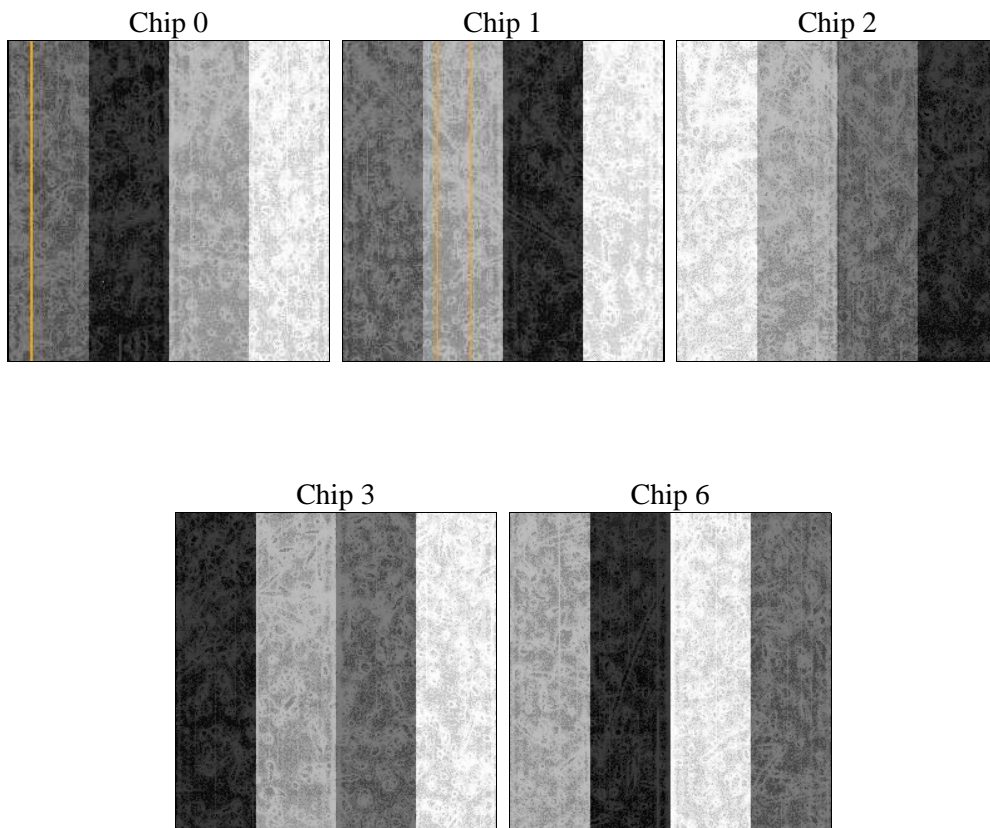
2 OBI

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	8.5	Processing system revision	ontime	10127.699980497	Sum of GTIs [s]
caldbver	4.5.4	 	ontime0	10127.699980497	Sum of GTIs [s]
date	2012-12-08T23:39:42	Date and time of file creation	ontime1	10127.699980497	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	10127.699980497	Sum of GTIs [s]
			ontime3	10127.699980497	Sum of GTIs [s]
			ontime6	10124.559020251	Sum of GTIs [s]
			l1events	480633	Number of level 1 events

2.1.4 Events

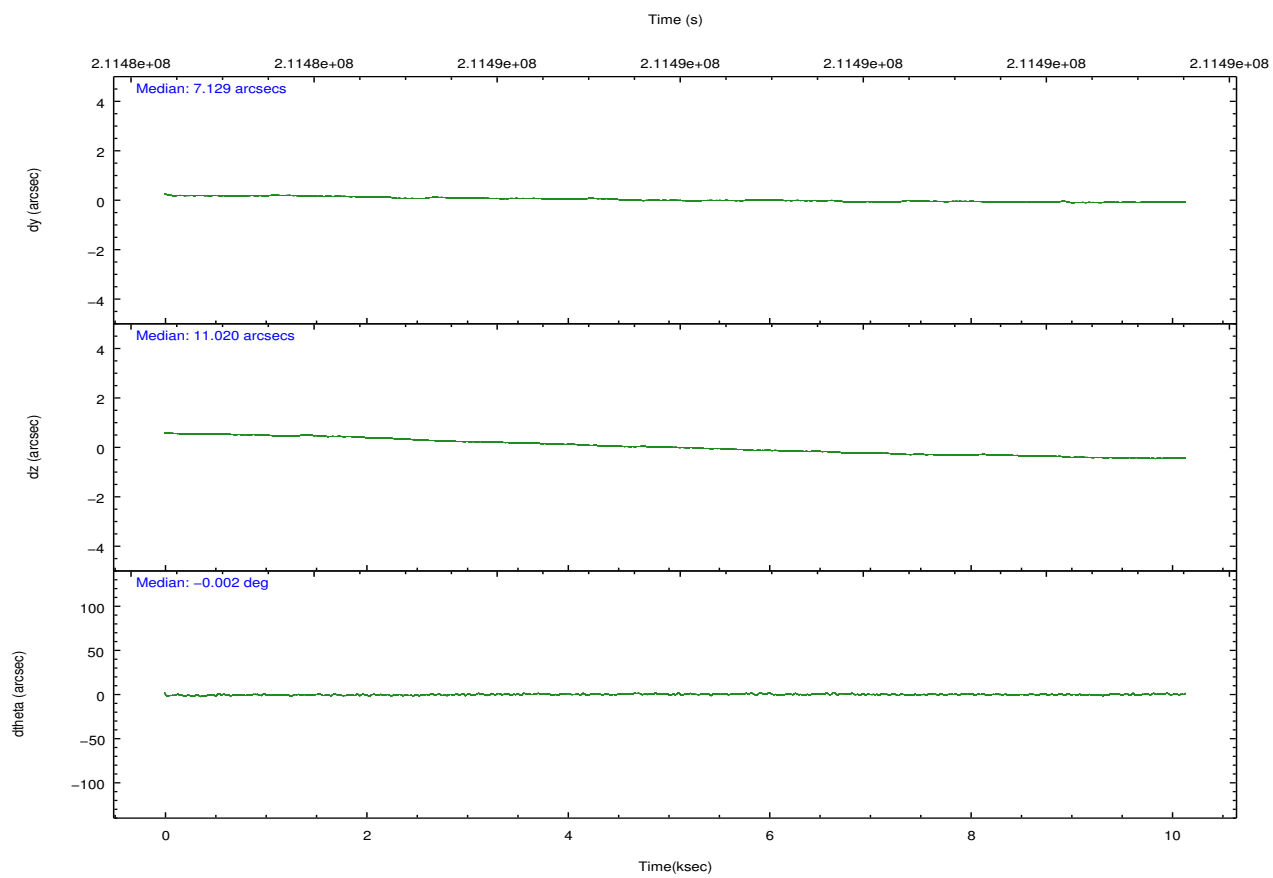
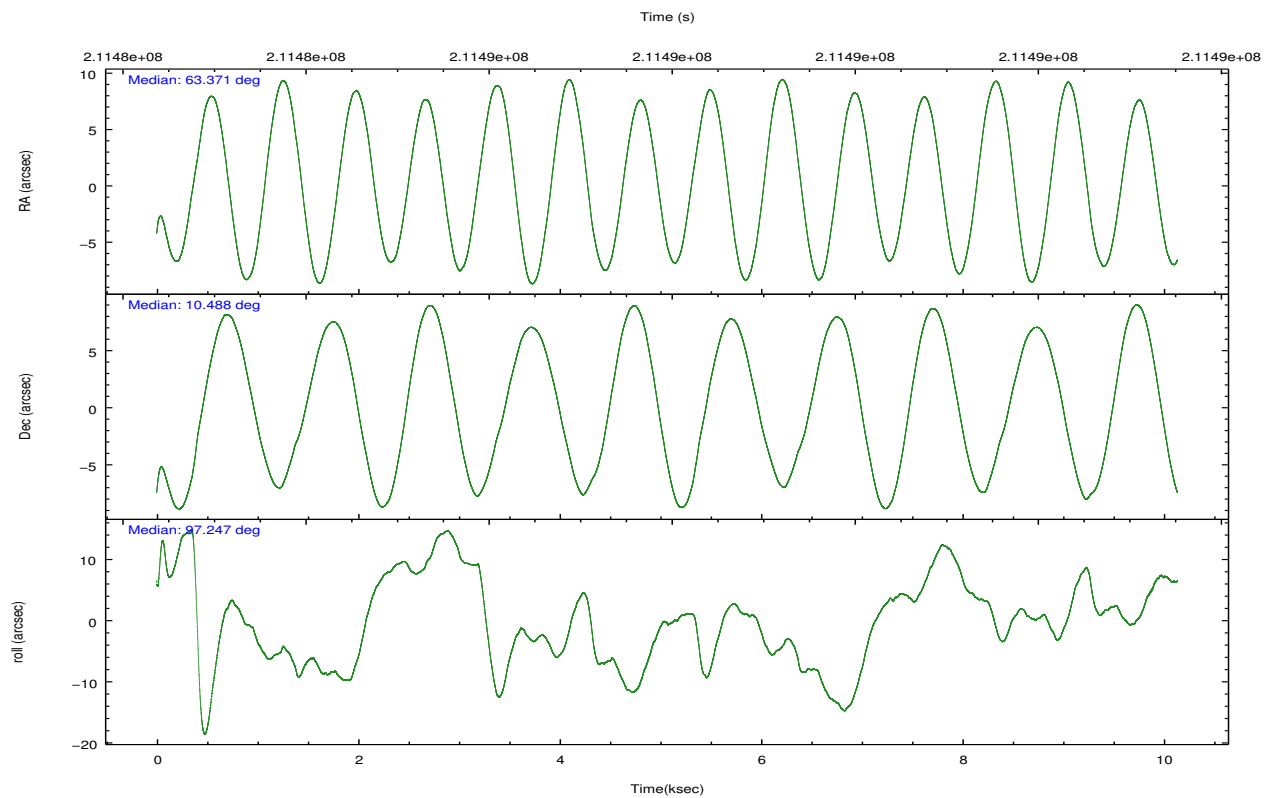
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	78355	81050	96090	140273	84865
rejected events	66302	65527	78270	75670	75514
rejected %	84%	80%	81%	53%	88%

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	6599	8643	11188	49961	4376
	8%	10%	11%	35%	5%
grade 1 events	81	62	96	403	34
	0%	0%	0%	0%	0%
grade 2 events	2492	3063	3039	7702	2177
	3%	3%	3%	5%	2%
grade 3 events	969	1171	1081	2709	825
	1%	1%	1%	1%	0%
grade 4 events	895	1063	1443	2667	798
	1%	1%	1%	1%	0%
grade 5 events	2448	2673	2322	2894	2707
	3%	3%	2%	2%	3%
grade 6 events	1469	2058	1581	2968	1495
	1%	2%	1%	2%	1%
grade 7 events	63402	62317	75340	70969	72453
	80%	76%	78%	50%	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	63.388379	63.37138669186515	Subarray requested	NONE	NONE
[deg] Pointing Dec	10.466520	10.48823391150739	Alternating exposures requested	N	N
[deg] Pointing Roll	97.044840	97.25660666588135	[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)	211483008.184000	211481851.87601			
Observation start date	2004-09-13T17:15:44	2004-09-13T16:57:31			
[s] Observation end time (MET)	211493008.184000	211493998.12656			
Observation end date	2004-09-13T20:02:24	2004-09-13T20:19:58			
Read mode	TIMED	TIMED			

2.3 Aspect

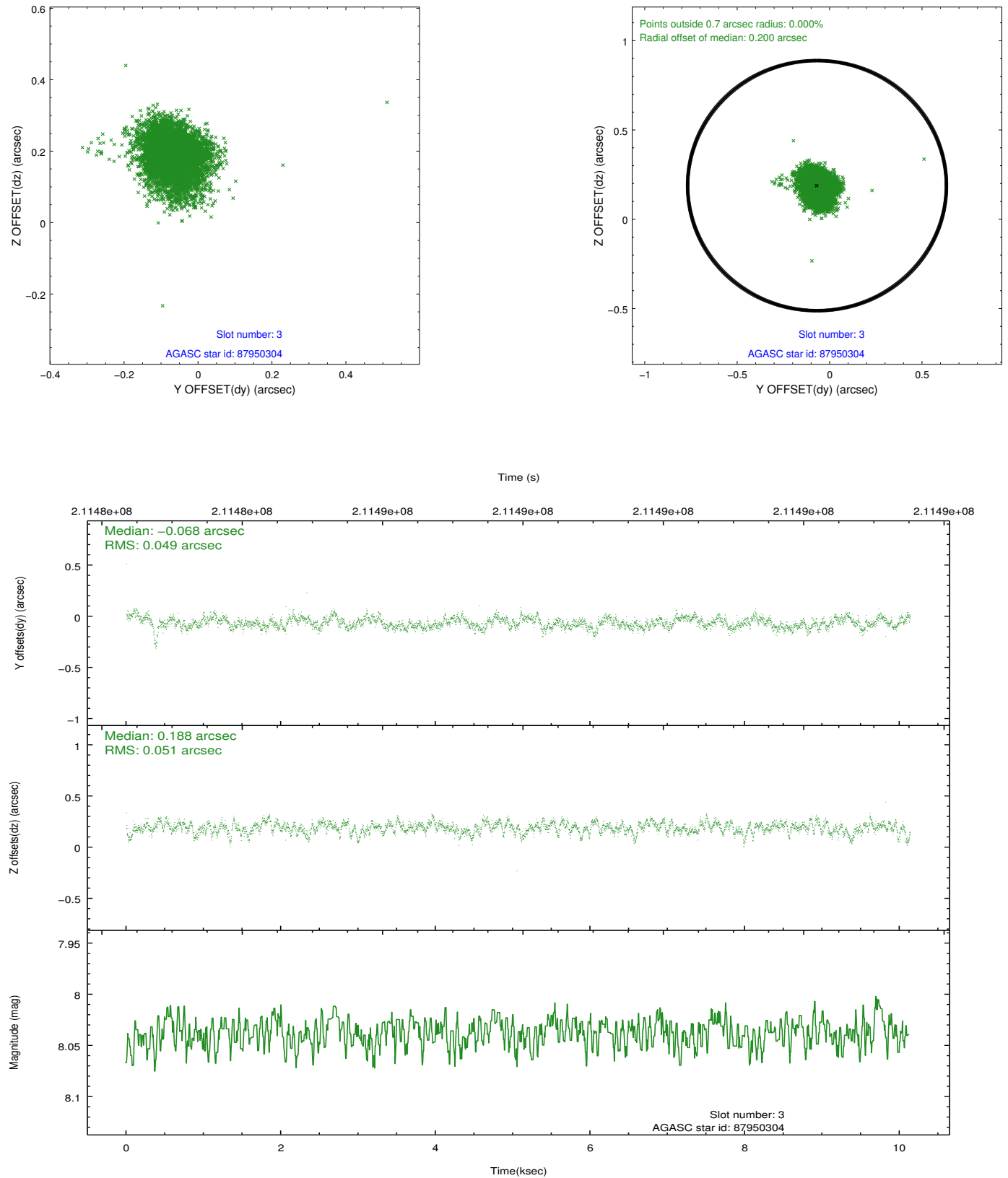


Slot Statistics

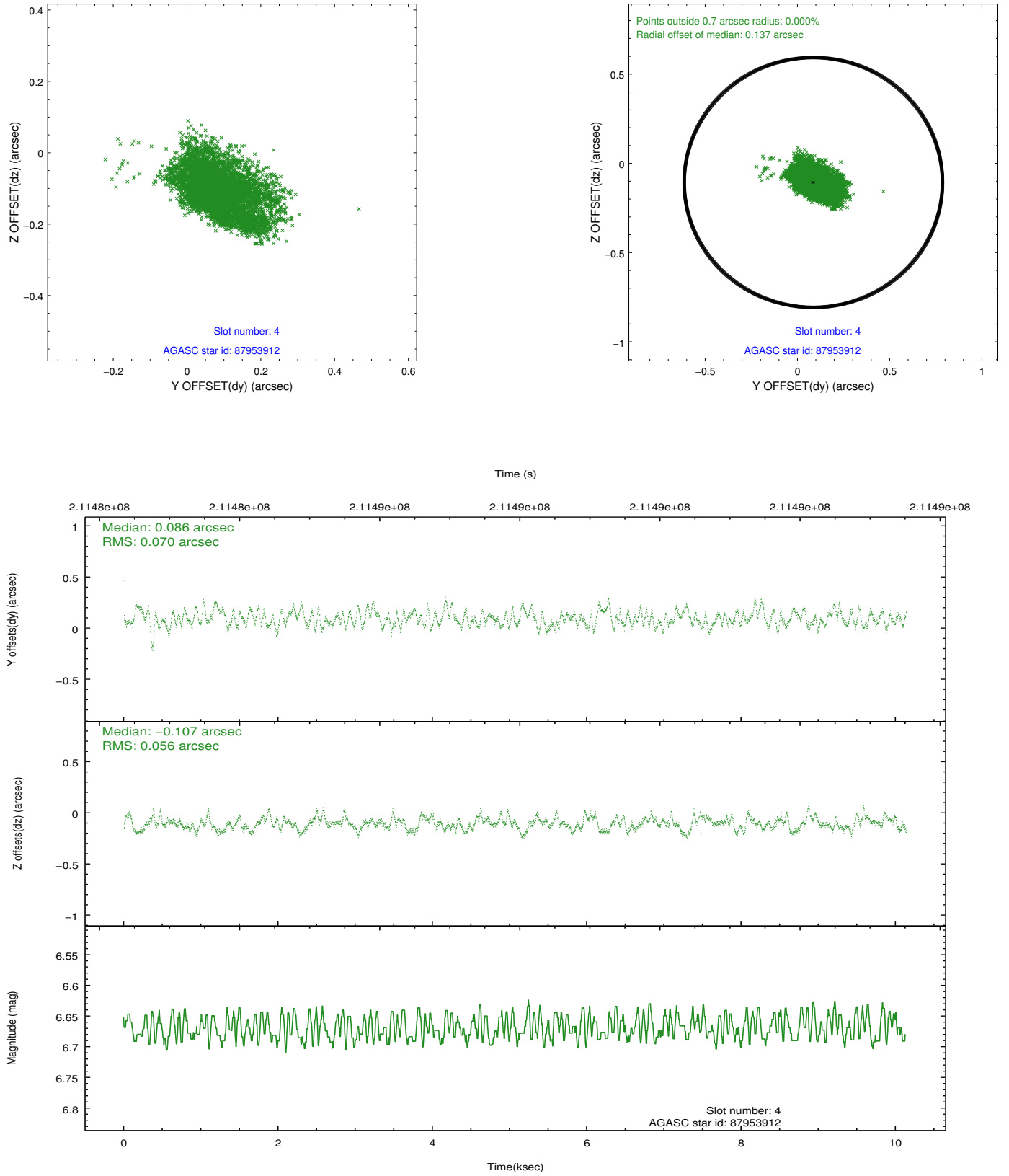
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.14	2473	-0.072	-0.093	0.015	0.024	0.000000	0.000000	-761.73	-841.00
1	FID	ACIS-I-4	7.18	2473	0.130	0.070	0.010	0.016	0.000000	0.000000	2152.30	1065.08
2	FID	ACIS-I-5	7.22	2473	-0.159	0.091	0.010	0.016	0.000000	0.000000	-1814.97	1063.54
3	GUIDE	87950304	8.04	4946	-0.068	0.188	0.074	0.123	63.753878	10.748130	848.69	-1407.13
4	GUIDE	87953912	6.67	4946	0.086	-0.107	0.095	0.156	63.394036	10.212467	-909.79	91.53
5	GUIDE	87954016	9.26	4945	0.157	-0.064	0.087	0.141	63.197646	10.607026	584.83	607.61
6	GUIDE	87955152	7.69	4870	-0.214	0.035	0.070	0.116	63.504124	11.027236	1953.46	-653.13
7	BAD	87955344	10.62	4705	0.022	-0.047	0.174	0.295	63.321713	10.049181	-1461.51	418.33

2.4 Star Slots

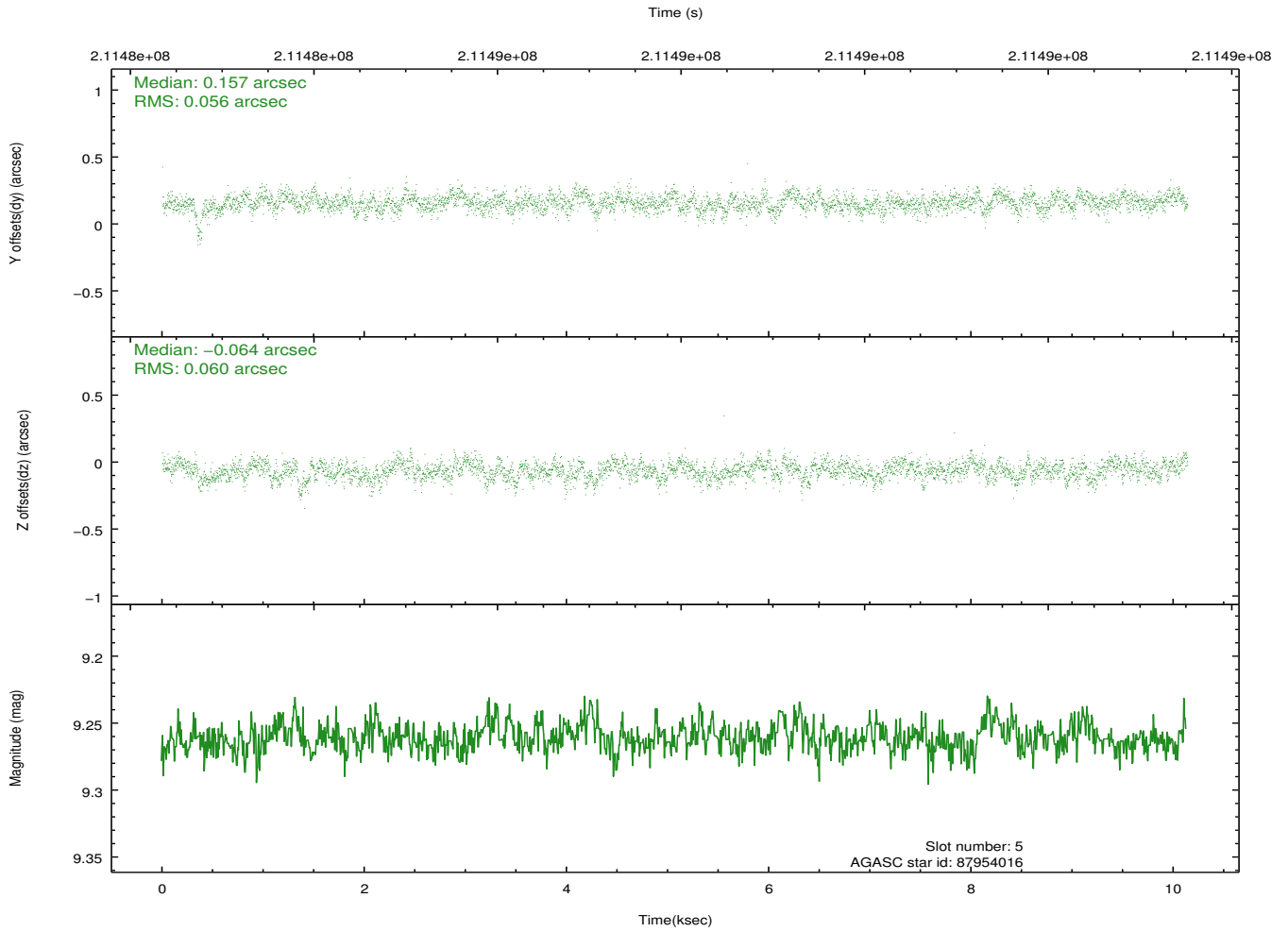
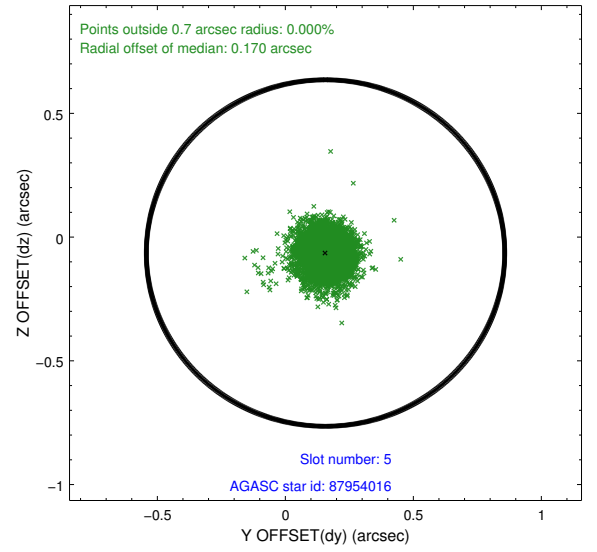
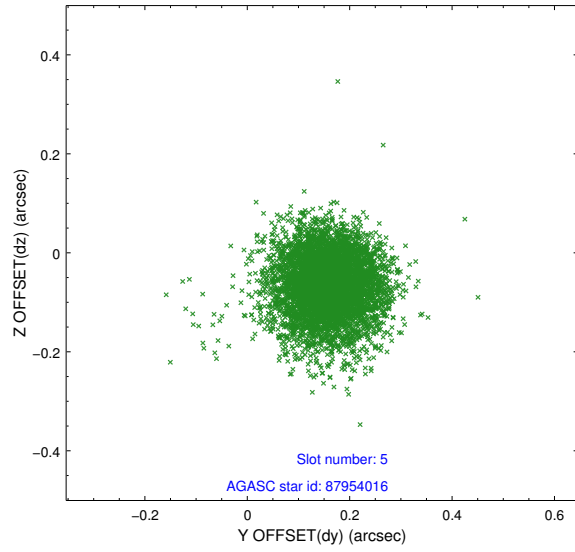
2.4.1 Slot 3



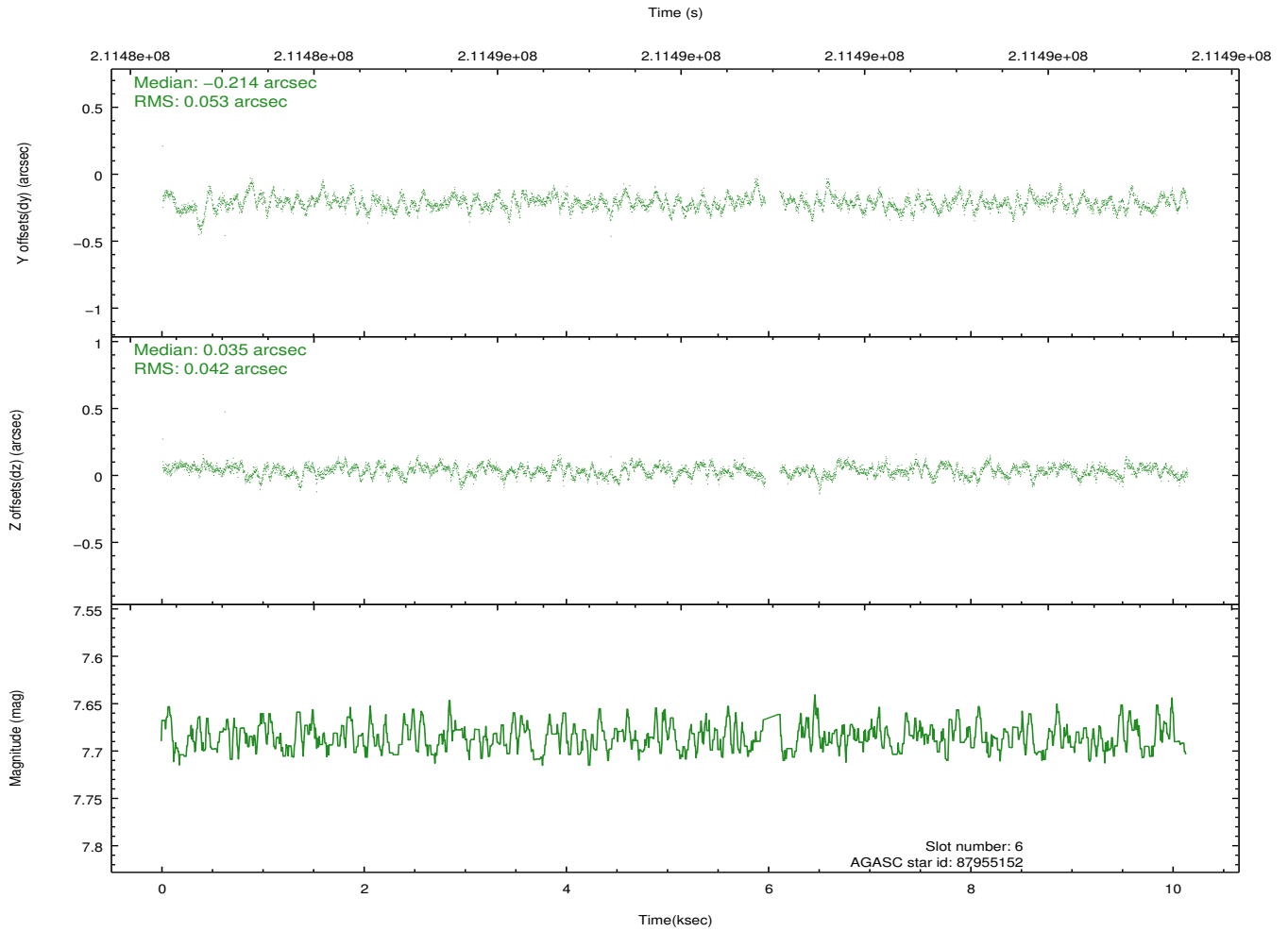
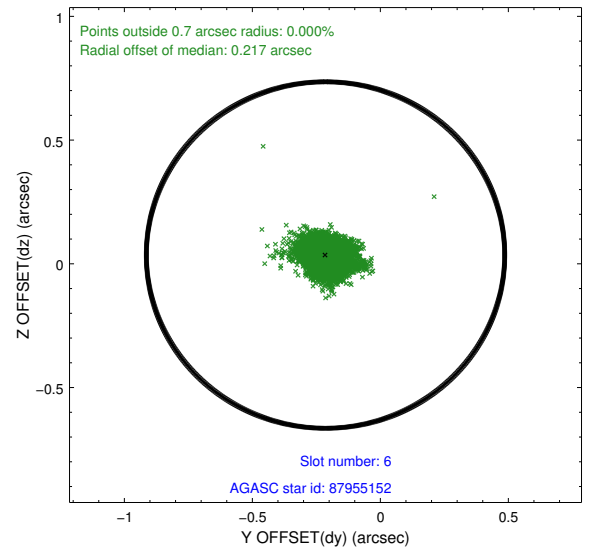
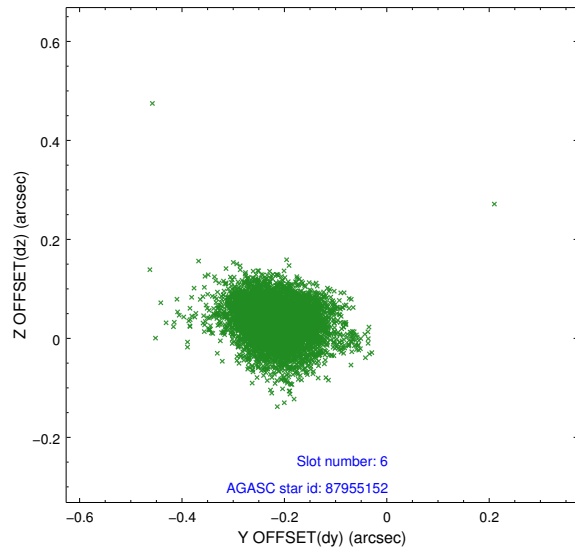
2.4.2 Slot 4



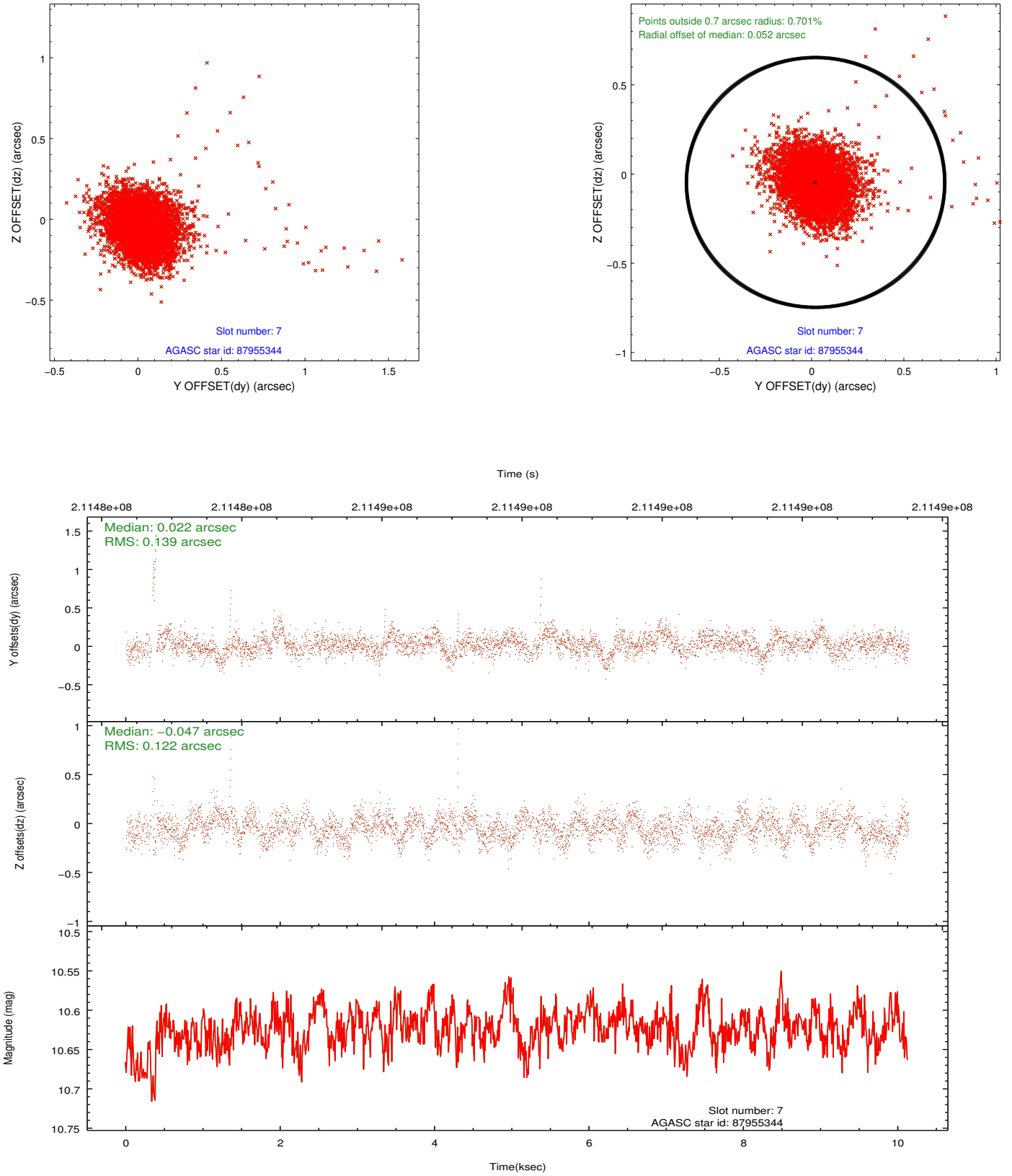
2.4.3 Slot 5



2.4.4 Slot 6

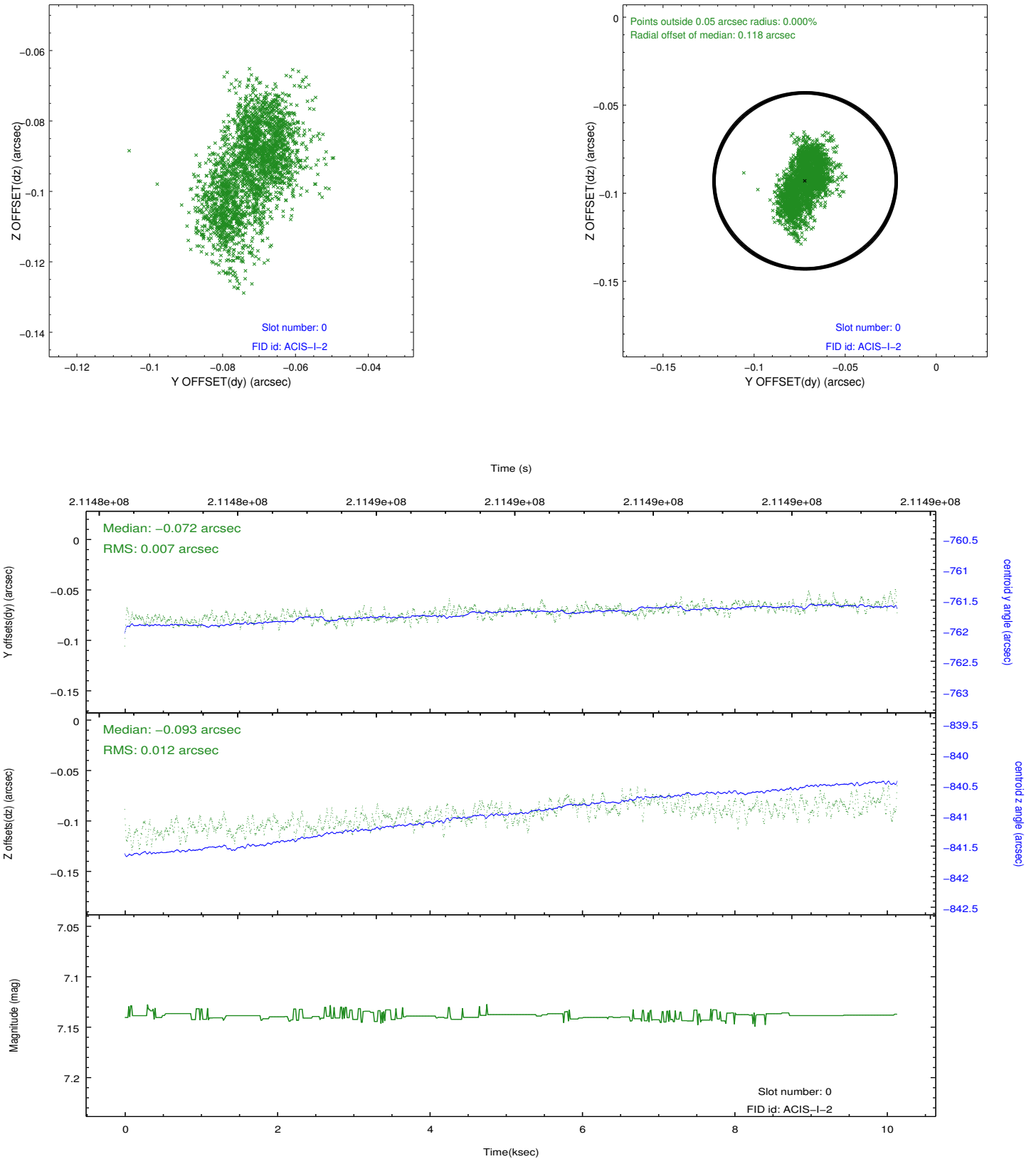


2.4.5 Slot 7

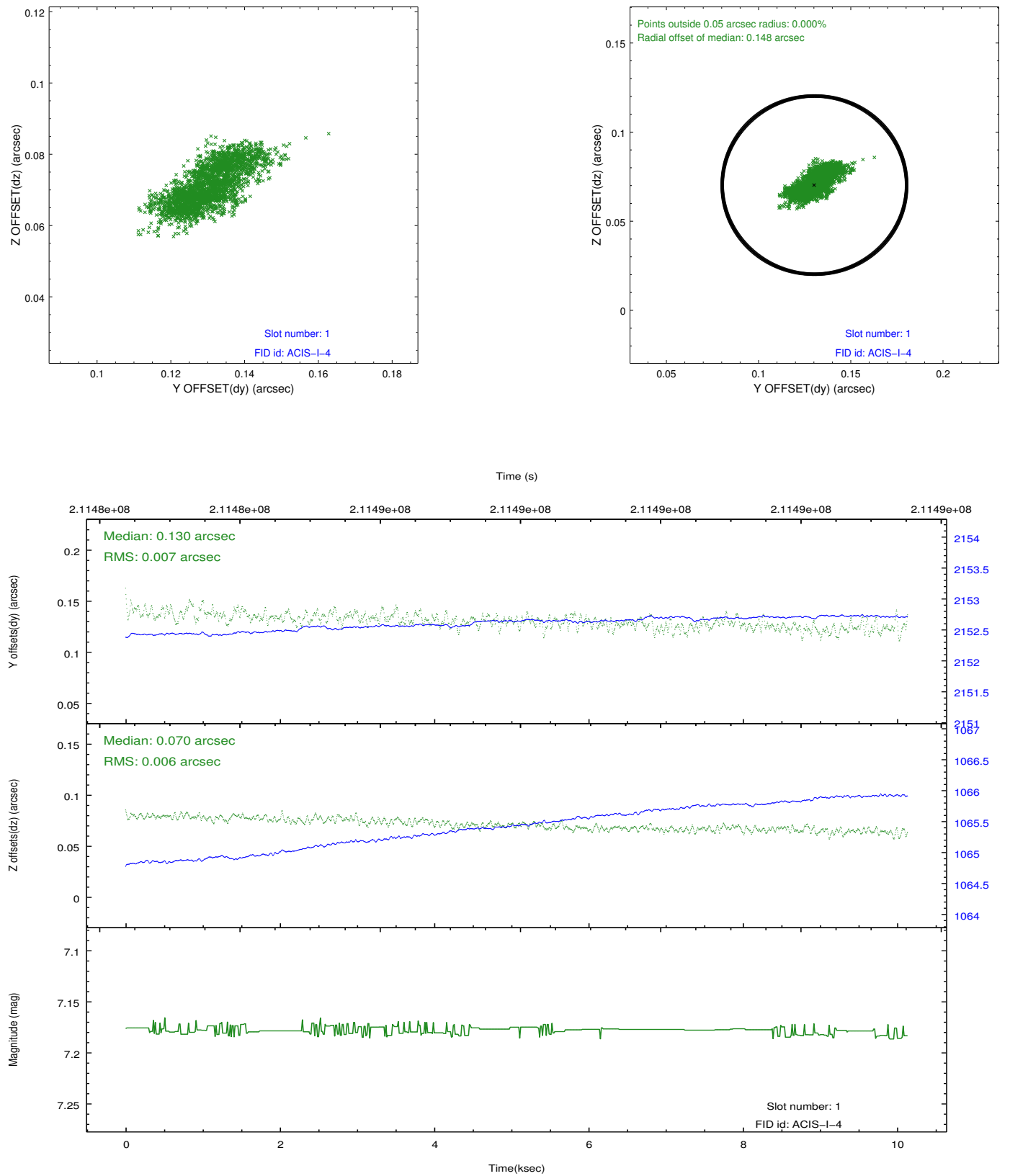


2.5 FID Slots

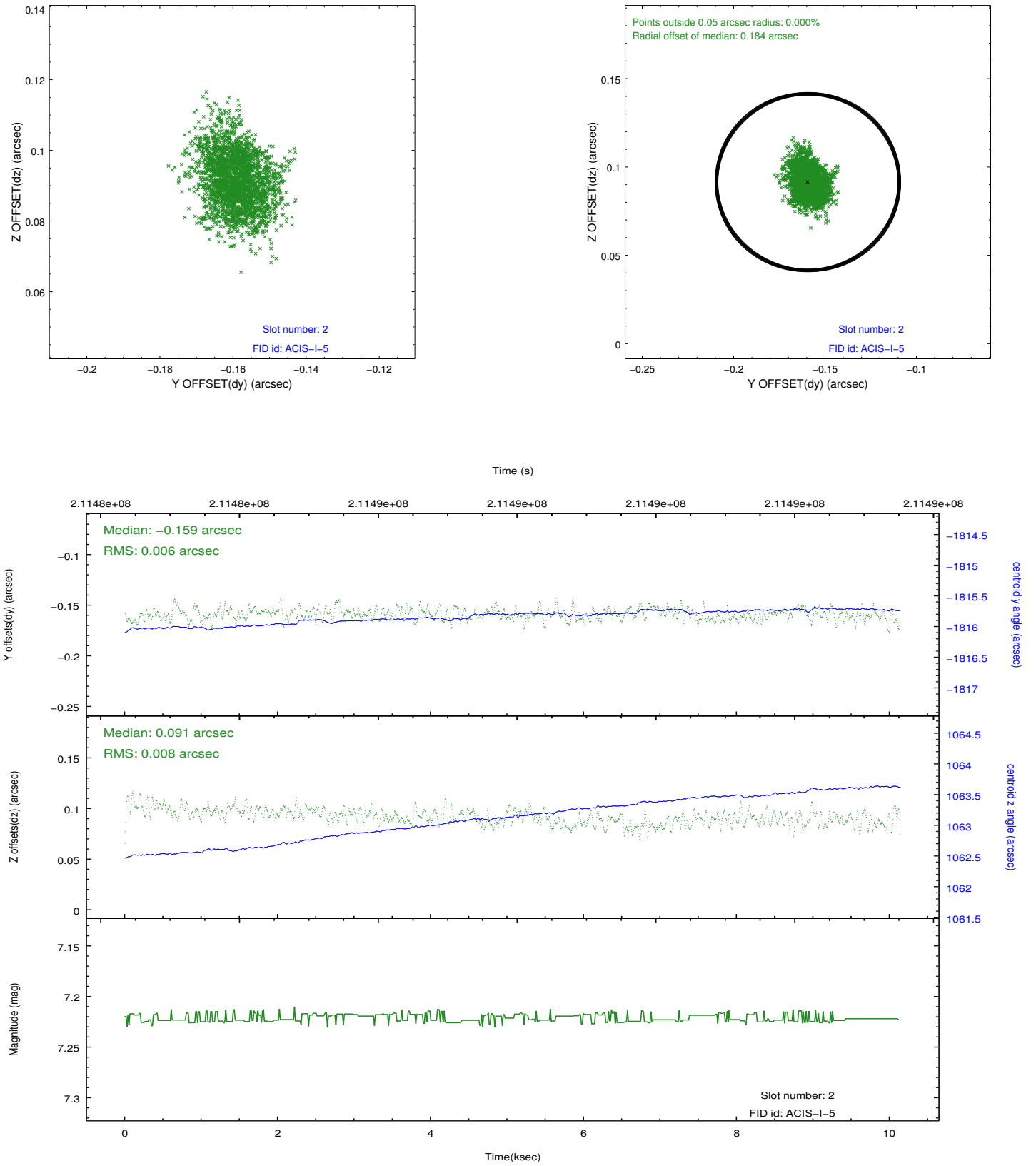
2.5.1 Slot 0



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)	2013.02.01
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.127

A.2 Comments