

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 3960 - L2 Version 3  
Chandra X-Ray Center

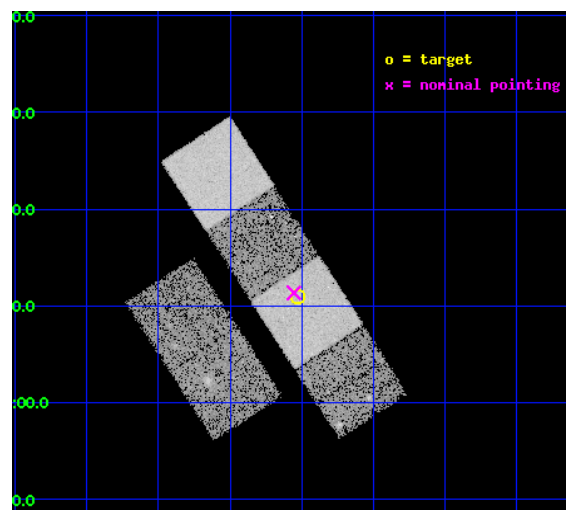
L2 Processing Date : Oct 19 2012

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# 1 Front

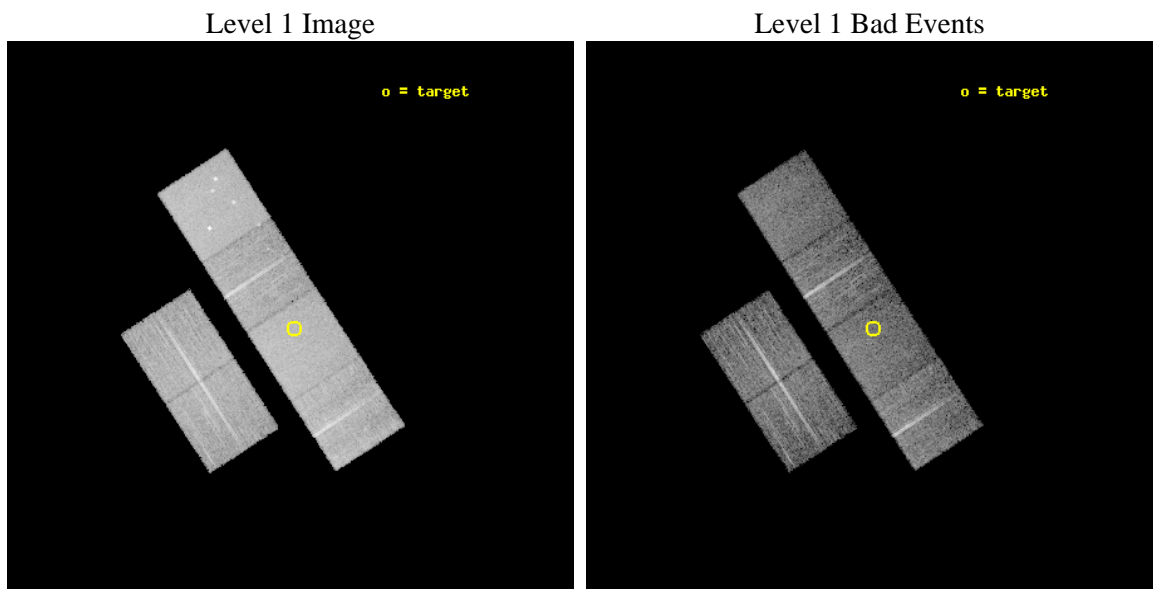
seq_num	700639	Sequence number
obs_id	3960	Observation id
title	A CHANDRA AND XMM-NEWTON STUDY OF THE MOST DISTANT QUASARS: X-RAYING THE FIRST MASSIVE BLACK HOLES	Proposal title
observer	Prof. William Brandt	Principal investigator
object	SDSS J144231+011055	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	220.632083	Observer's specified target RA [deg]
dec_targ	1.182028	Observer's specified target Dec [deg]
ra_nom	220.63866113825	Nominal RA [deg]
dec_nom	1.1890740344843	Nominal Dec [deg]
roll_nom	56.960218688275	Nominal Roll [deg]
revision	3	Processing version of data
ontime	11148.799958467	Sum of GTIs [s]
livetime	11007.627140392	Livetime [s]
ontime2	11148.799958467	Sum of GTIs [s]
ontime3	11148.799958467	Sum of GTIs [s]
ontime5	11148.799958467	Sum of GTIs [s]
ontime6	11148.799958467	Sum of GTIs [s]
ontime7	11148.799958467	Sum of GTIs [s]
ontime8	11148.799958467	Sum of GTIs [s]
l2events	109311	Number of level 2 events



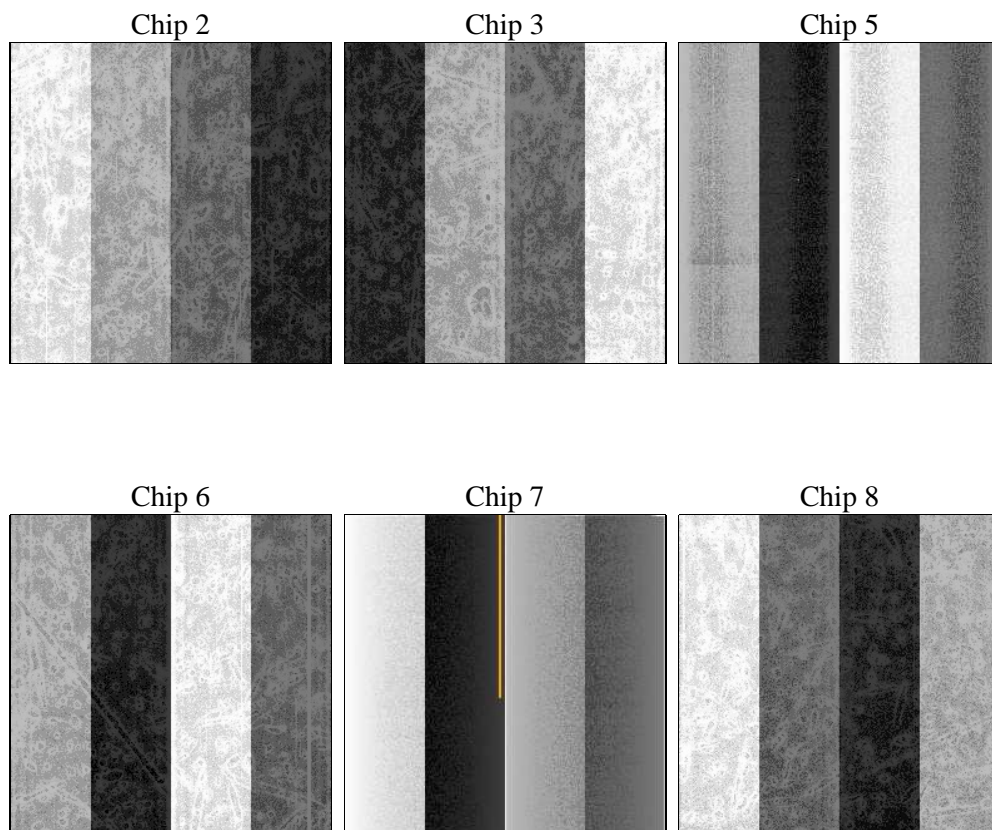
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	11031.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	11148.799958467	Sum of GTIs [s]
caldbver	4.5.2	&#160	ontime2	11148.799958467	Sum of GTIs [s]
date	2012-10-19T05:39:49	Date and time of file creation	ontime3	11148.799958467	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	11148.799958467	Sum of GTIs [s]
			ontime6	11148.799958467	Sum of GTIs [s]
			ontime7	11148.799958467	Sum of GTIs [s]
			ontime8	11148.799958467	Sum of GTIs [s]
			l1events	490151	Number of level 1 events

### 2.1.4 Events

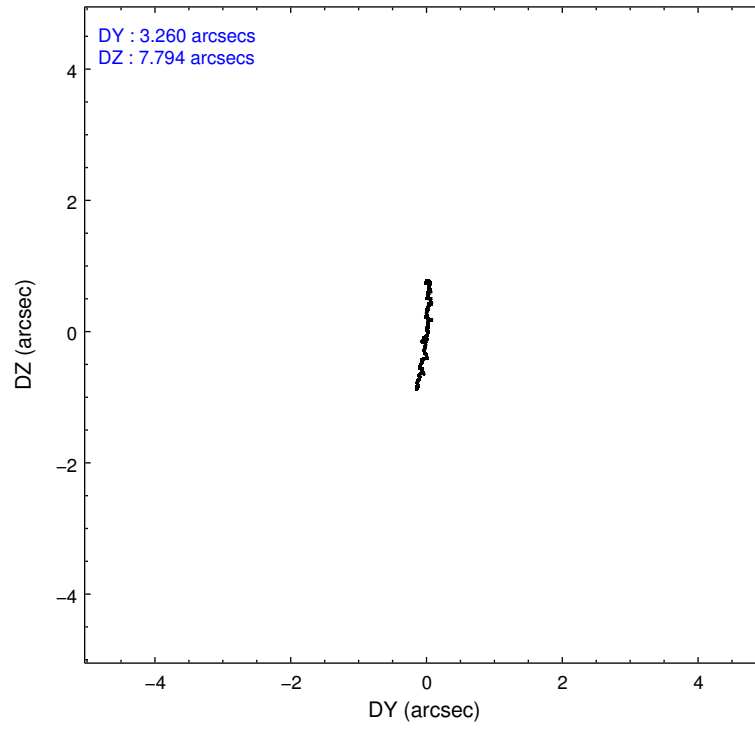
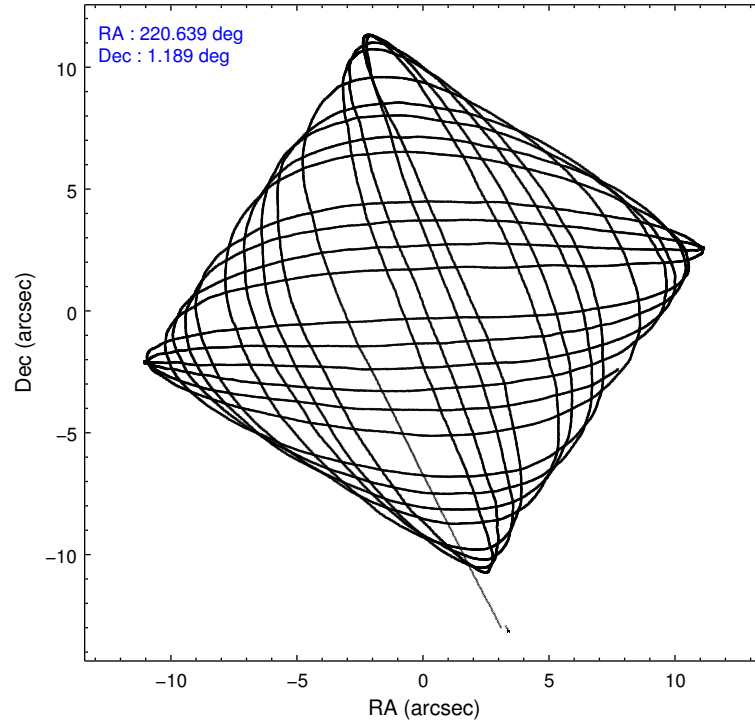
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	72092	68241	101755	68846	92067	87150	grade 0 events	3775	4009	6218	3490	3658	6648
rejected events	63774	59644	55192	60450	54400	67816		5%	5%	6%	5%	3%	7%
rejected %	88%	87%	54%	87%	59%	77%	grade 1 events	43	37	164	25	95	65
								0%	0%	0%	0%	0%	0%
							grade 2 events	1686	1552	13528	1751	7602	3859
								2%	2%	13%	2%	8%	4%
							grade 3 events	803	879	1921	839	3428	2367
								1%	1%	1%	1%	3%	2%
							grade 4 events	787	828	1798	808	3353	2176
								1%	1%	1%	1%	3%	2%
							grade 5 events	2637	2961	7369	3130	8600	3995
								3%	4%	7%	4%	9%	4%
							grade 6 events	1396	1485	23937	1644	20294	4667
								1%	2%	23%	2%	22%	5%
							grade 7 events	60965	56490	46820	57159	45037	63373
								84%	82%	46%	83%	48%	72%

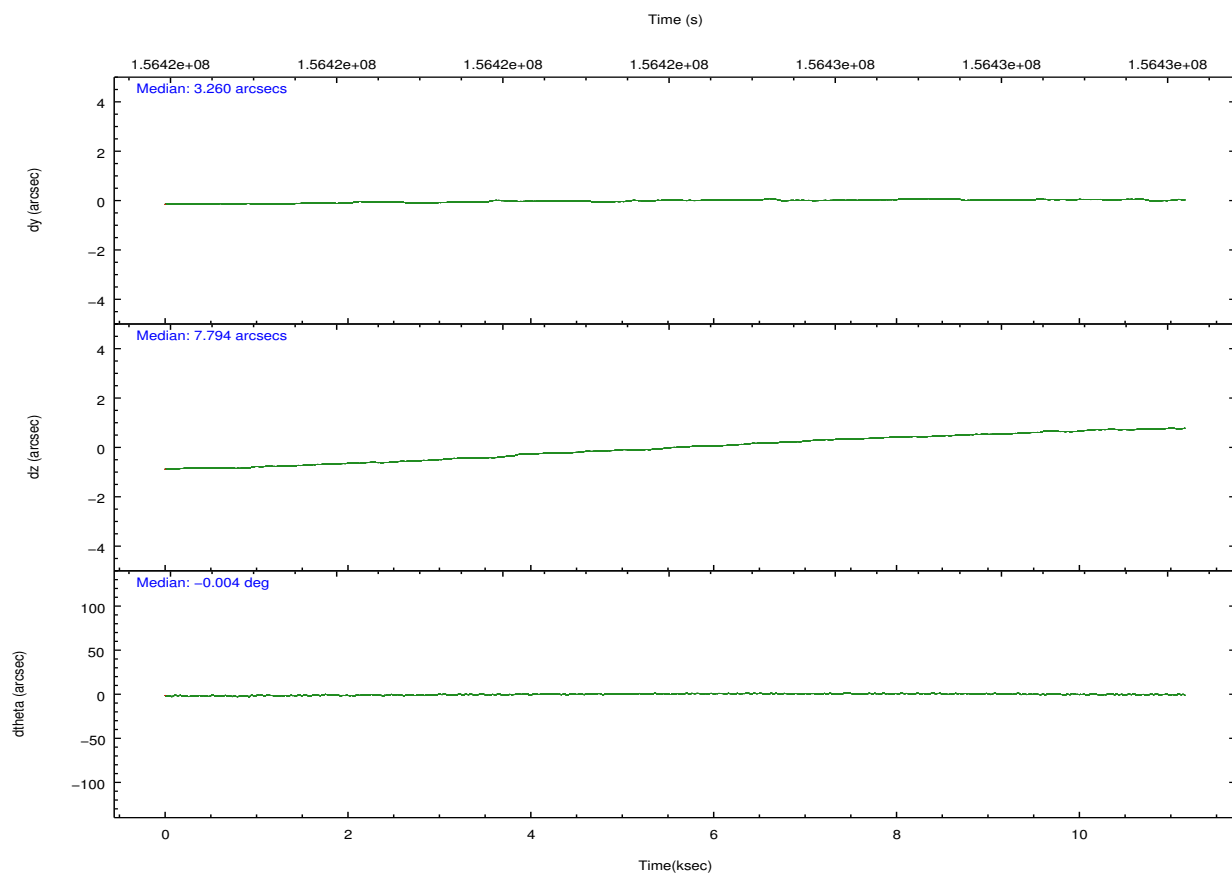
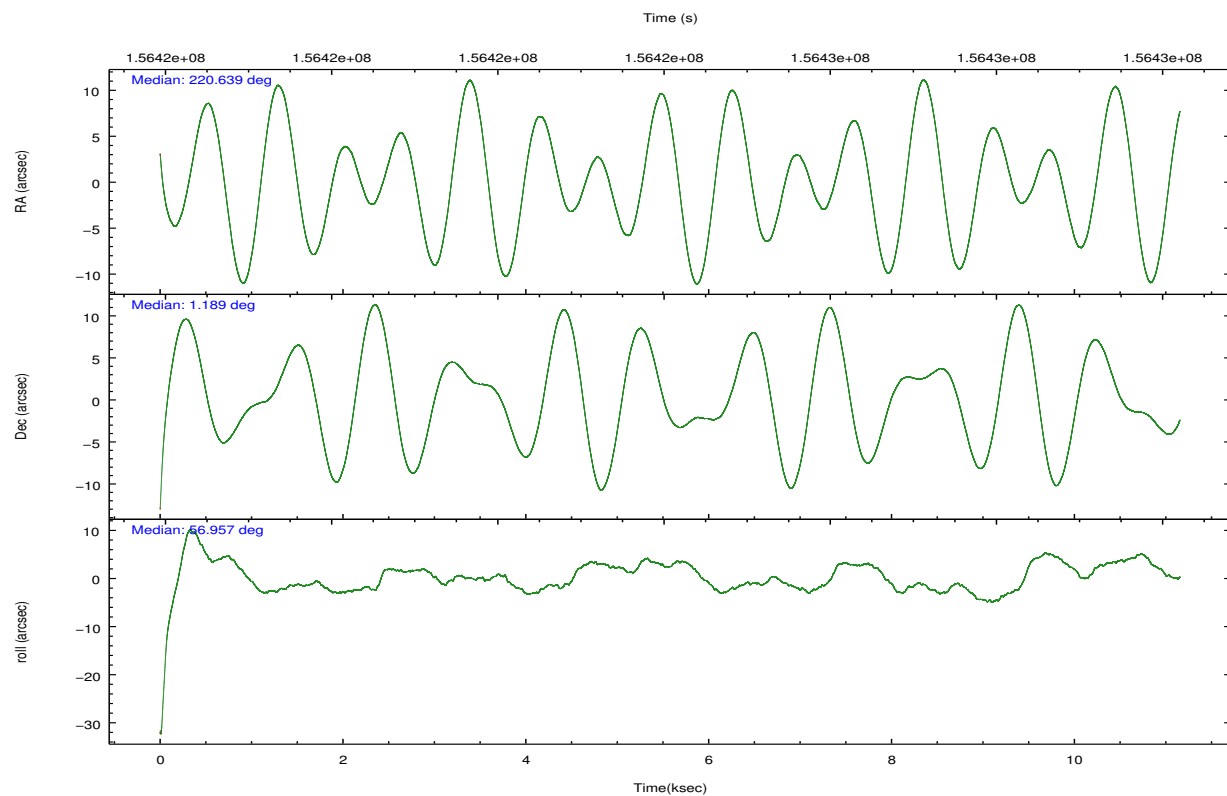


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	220.637617	220.6386611382498	Subarray requested	NONE	NONE
[deg] Pointing Dec	1.161875	1.189074034484281	Alternating exposures requested	N	N
[deg] Pointing Roll	56.803639	56.96021868827474	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	156418620.184000	156417486.24844			
Observation start date	2002-12-16T09:35:56	2002-12-16T09:18:06			
[s] Observation end time (MET)	156429651.184000	156430053.77397			
Observation end date	2002-12-16T12:39:47	2002-12-16T12:47:33			
Read mode	TIMED	TIMED			

## 2.3 Aspect



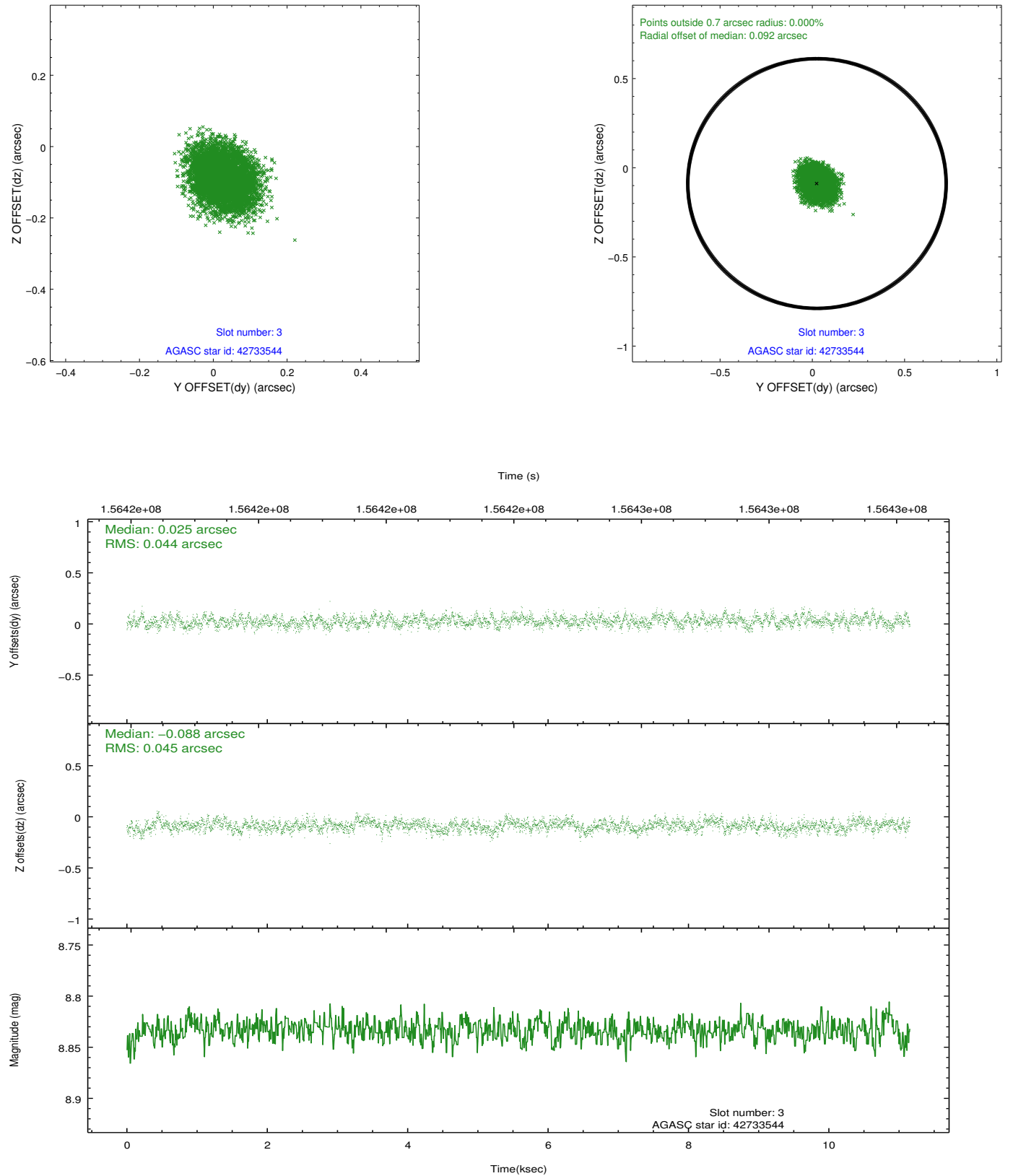


### Slot Statistics

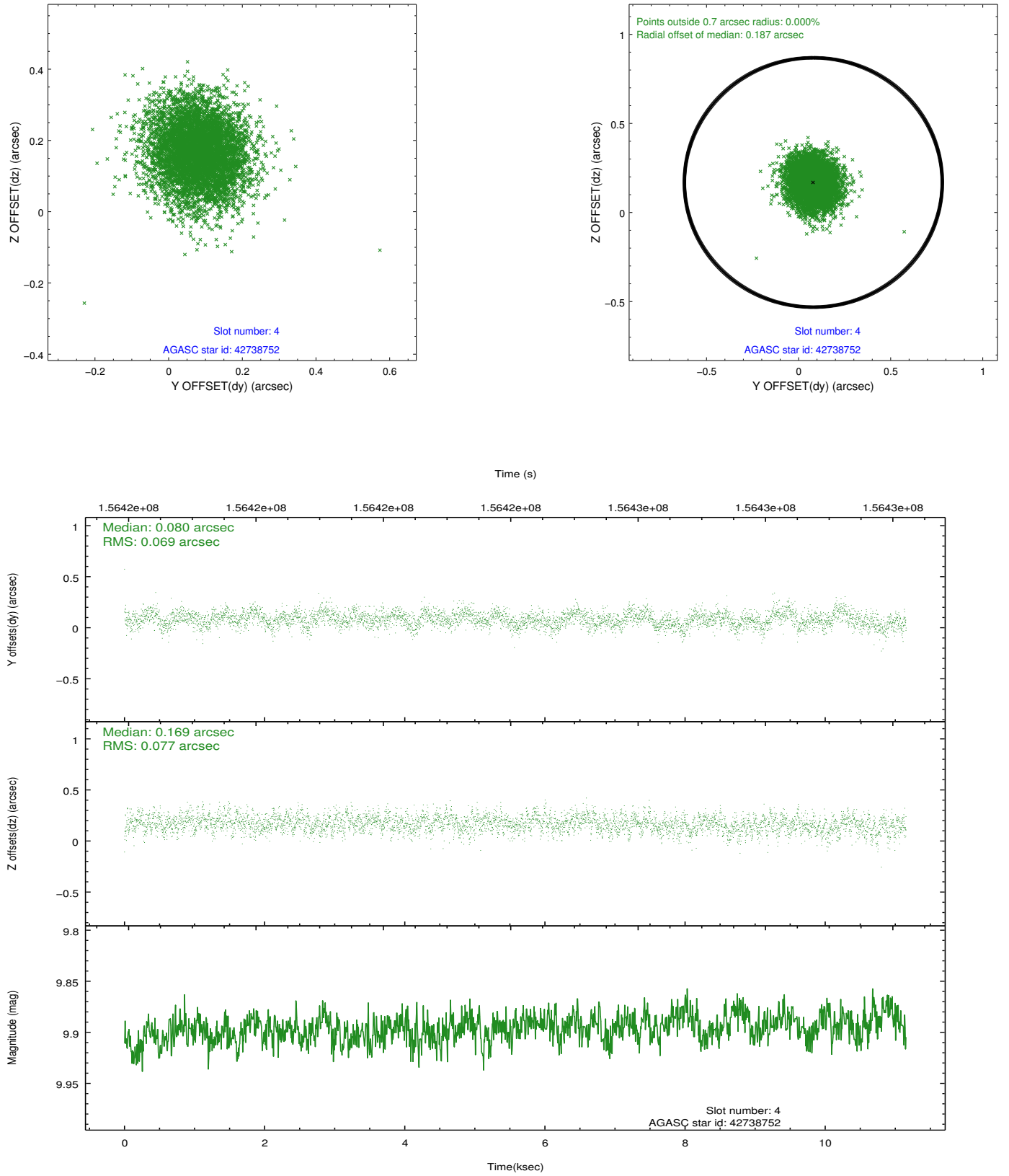
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.12	2721	-0.017	-0.013	0.010	0.016	0.000000	0.000000	-755.91	-1728.91
1	FID	ACIS-S-4	7.20	2721	0.014	0.012	0.006	0.012	0.000000	0.000000	2157.20	179.12
2	FID	ACIS-S-5	7.24	2721	-0.028	0.011	0.010	0.018	0.000000	0.000000	-1808.16	173.32
3	GUIDE	42733544	8.83	5441	0.025	-0.088	0.068	0.109	220.636772	1.286282	373.30	247.23
4	GUIDE	42738752	9.90	5436	0.080	0.169	0.109	0.178	220.955002	0.889090	-195.81	-1493.94
5	GUIDE	42739904	9.40	5439	0.044	0.076	0.083	0.137	221.063801	1.147543	797.04	-1312.46
6	GUIDE	42734040	10.11	5438	0.037	-0.066	0.124	0.205	220.520497	1.589788	1058.62	1195.42
7	GUIDE	42732896	7.80	5440	-0.189	-0.085	0.057	0.099	220.804479	1.824716	2325.57	803.93

## 2.4 Star Slots

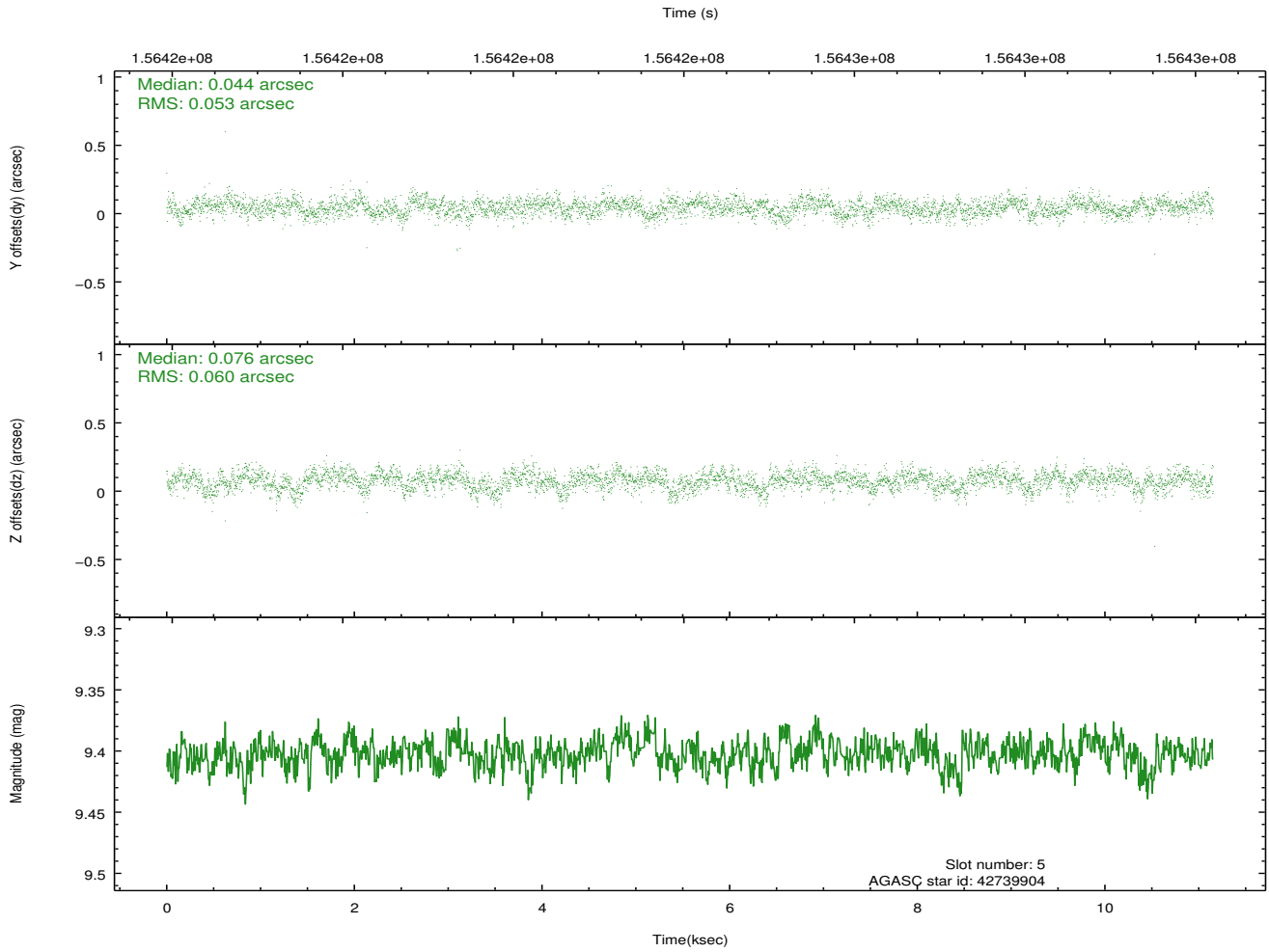
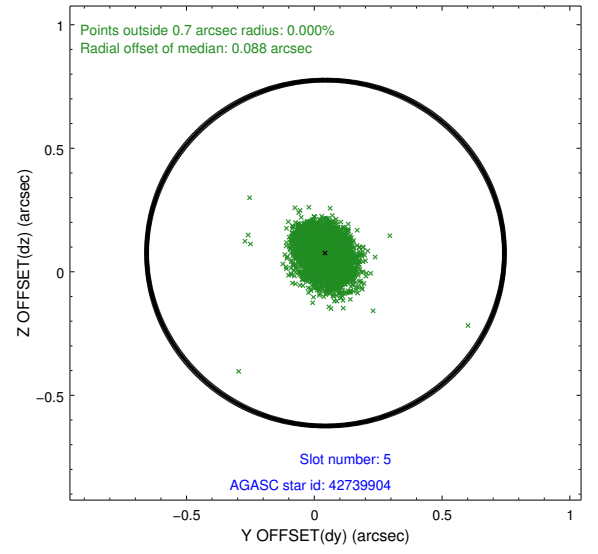
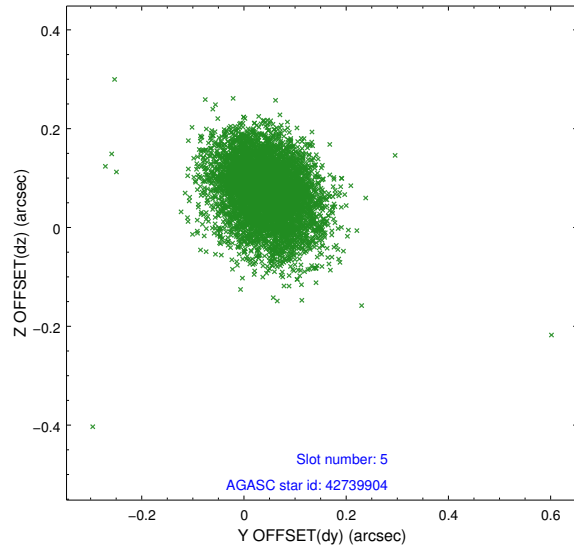
### 2.4.1 Slot 3



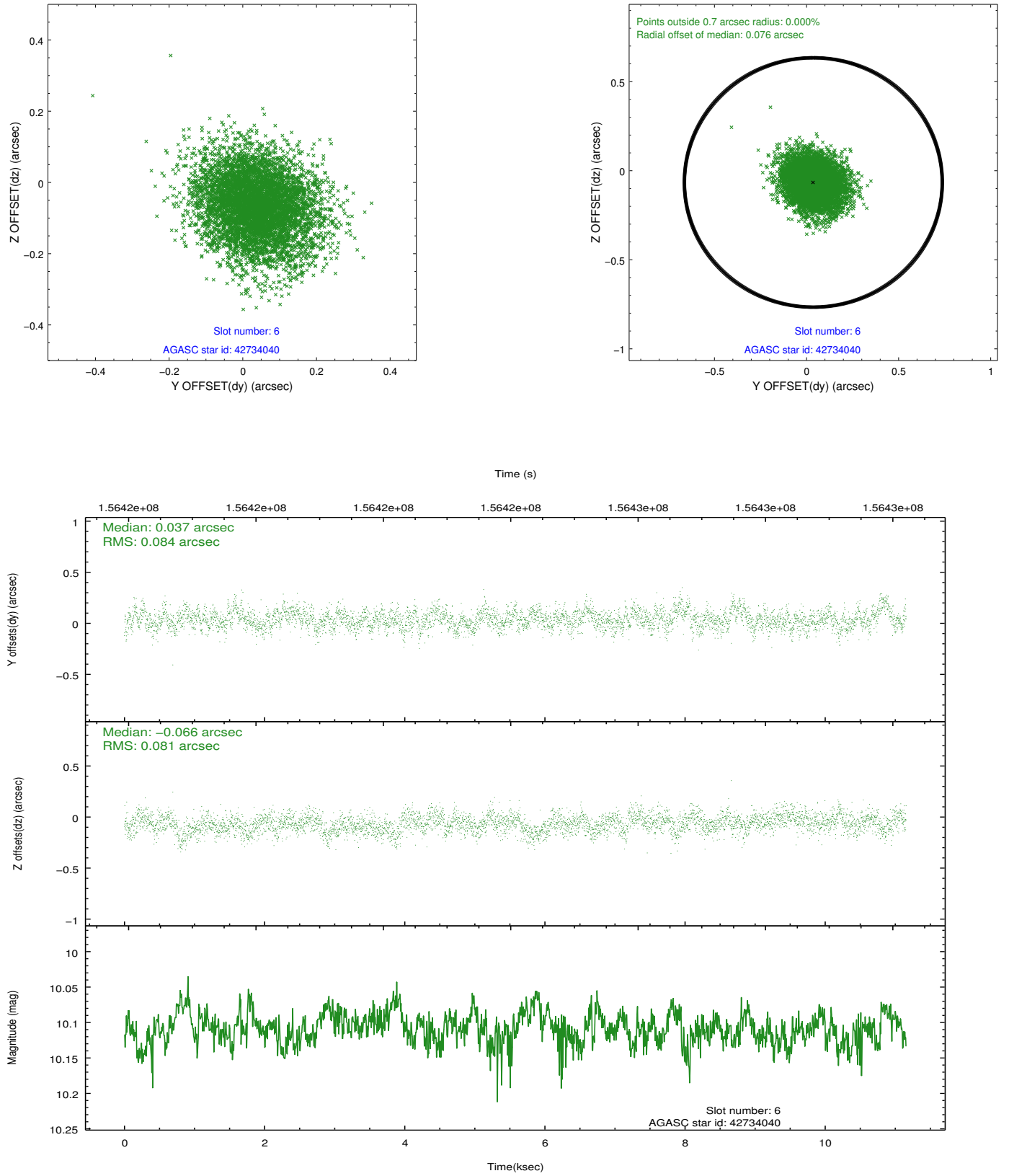
## 2.4.2 Slot 4



### 2.4.3 Slot 5

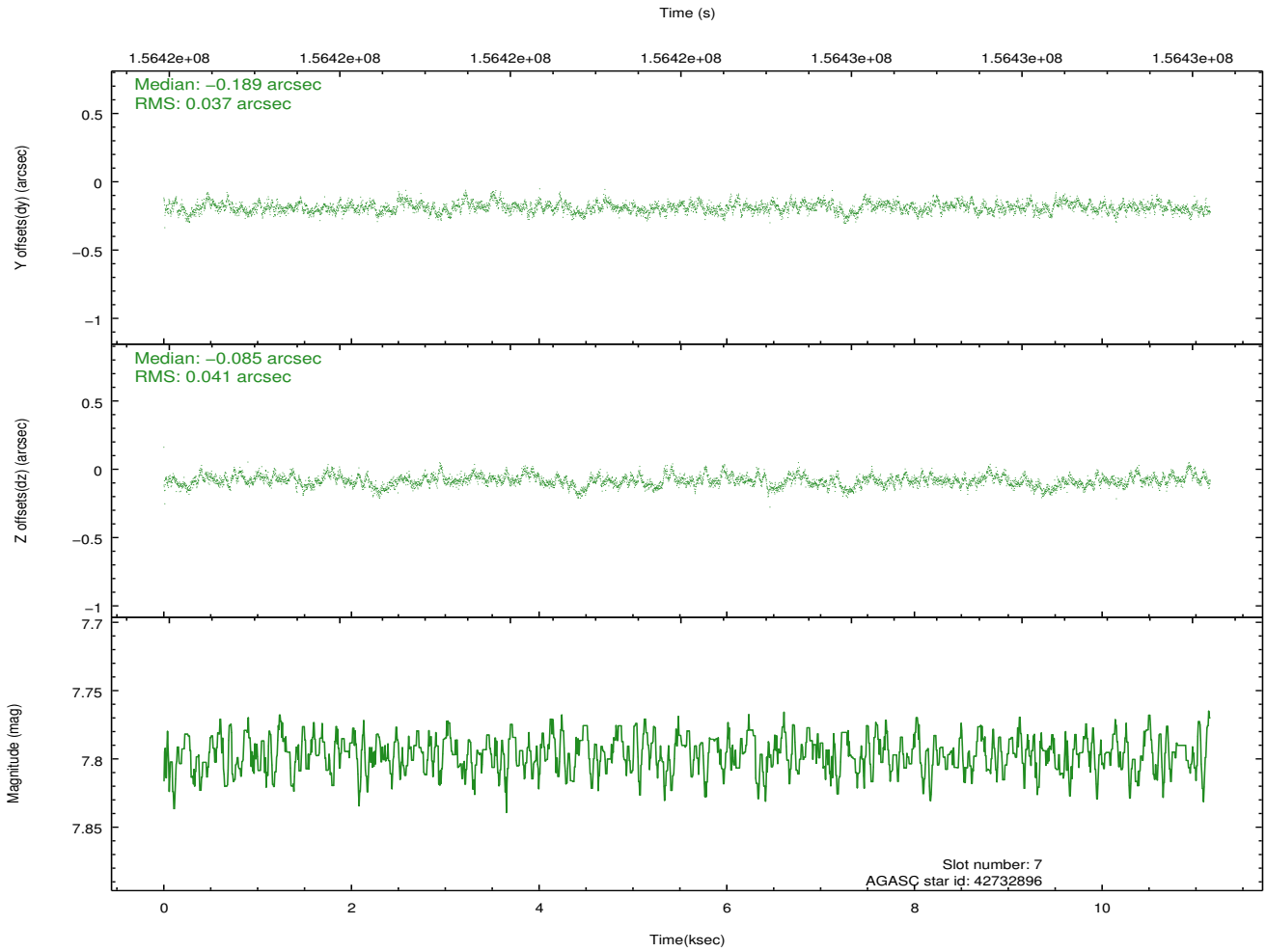
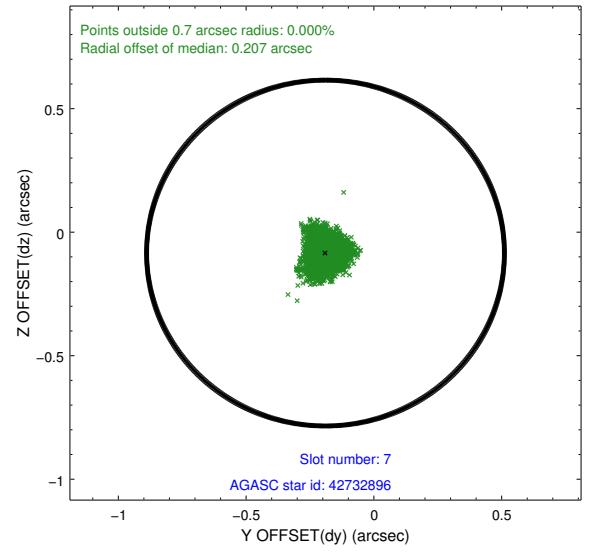
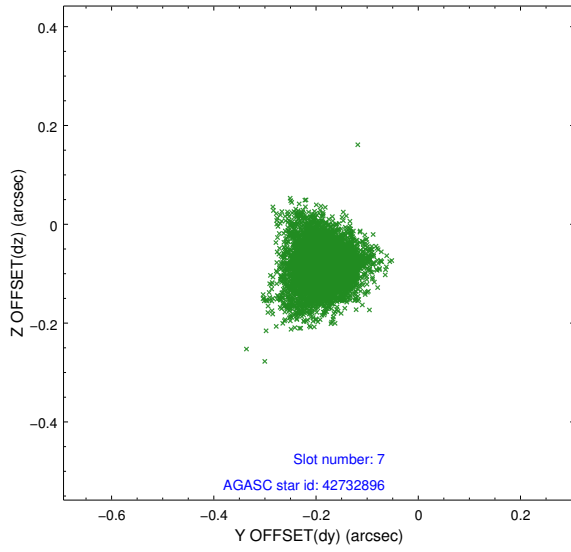


## 2.4.4 Slot 6



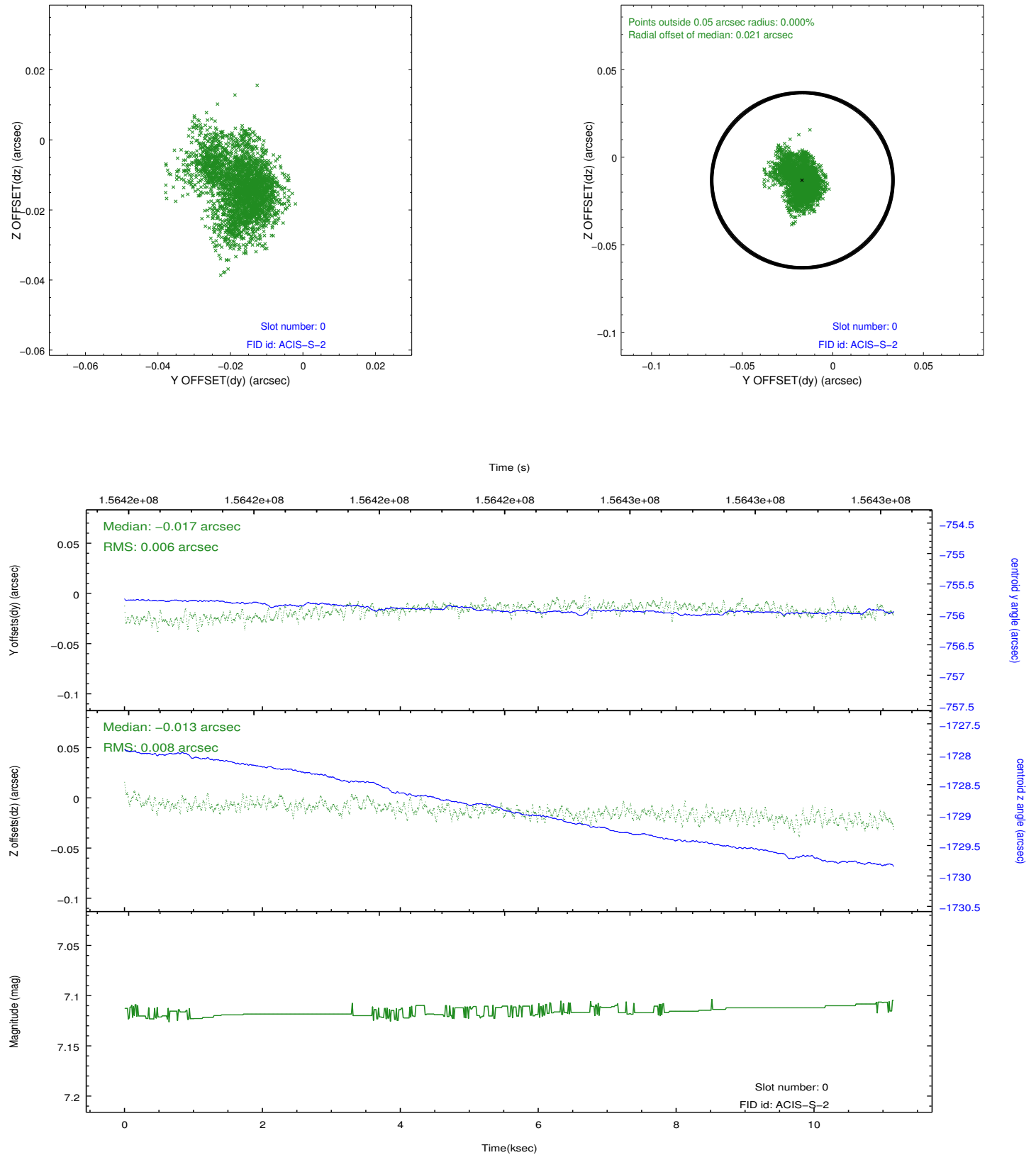


## 2.4.5 Slot 7

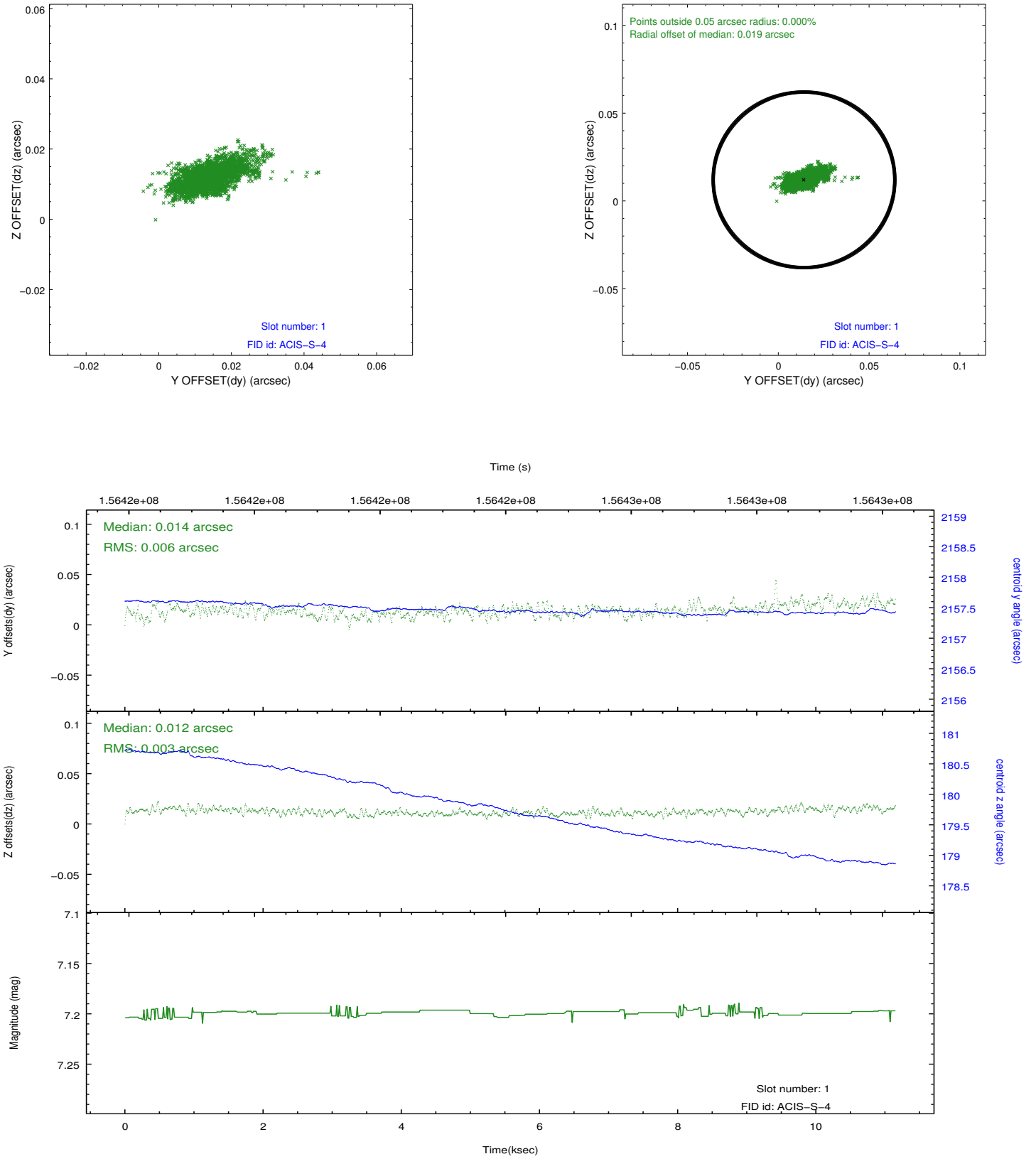


## 2.5 FID Slots

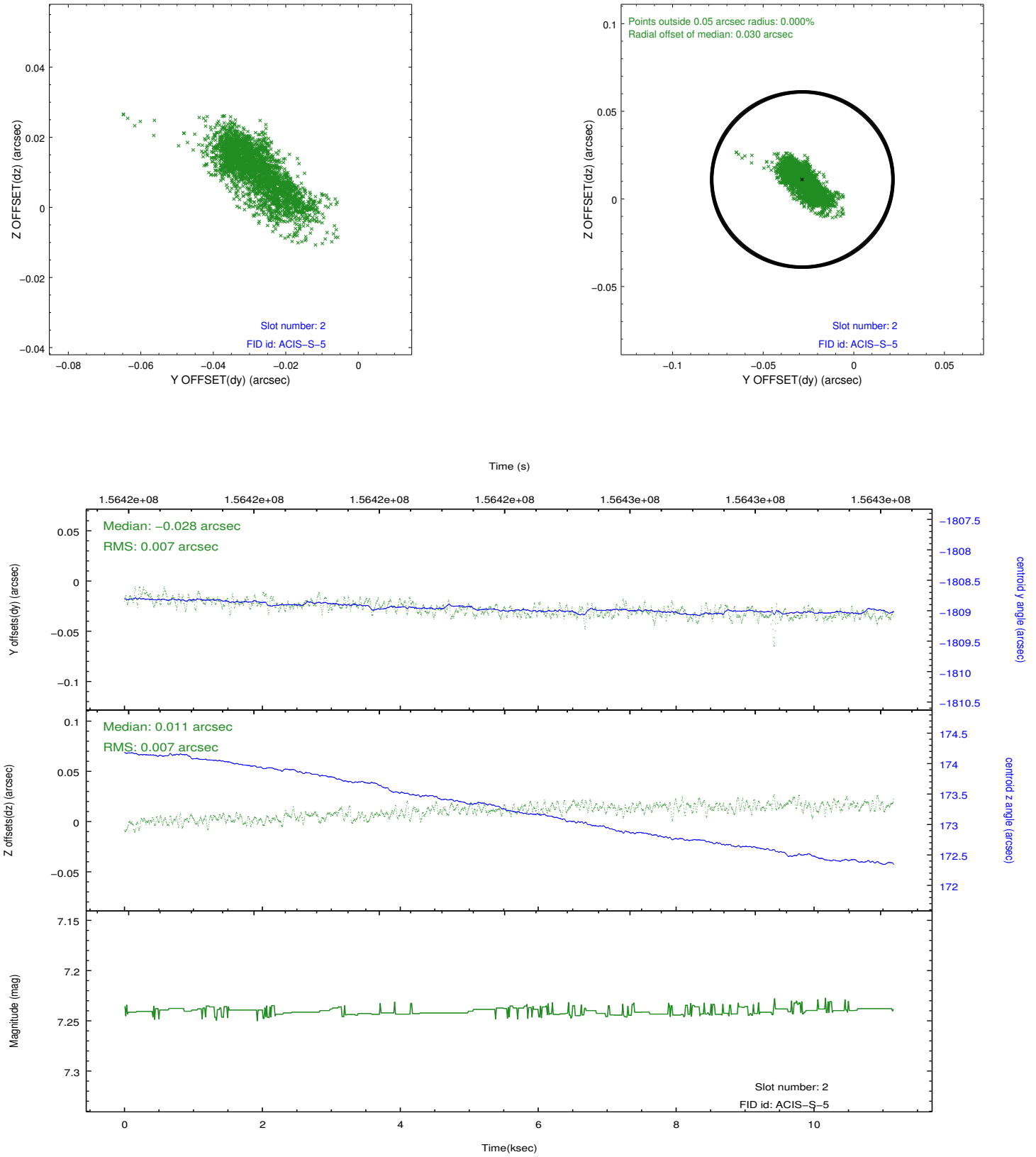
### 2.5.1 Slot 0



## 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)	2012.10.31
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	11.148

### A.2 Comments