

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 1665 - L2 Version 3  
Chandra X-Ray Center

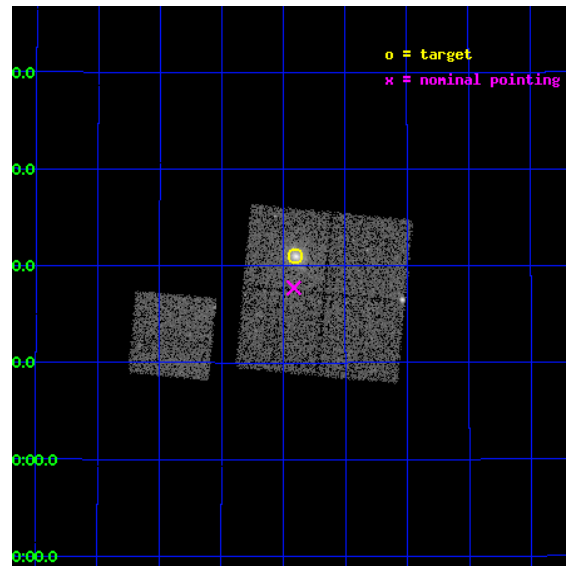
L2 Processing Date : Sep 23 2012

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# 1 Front

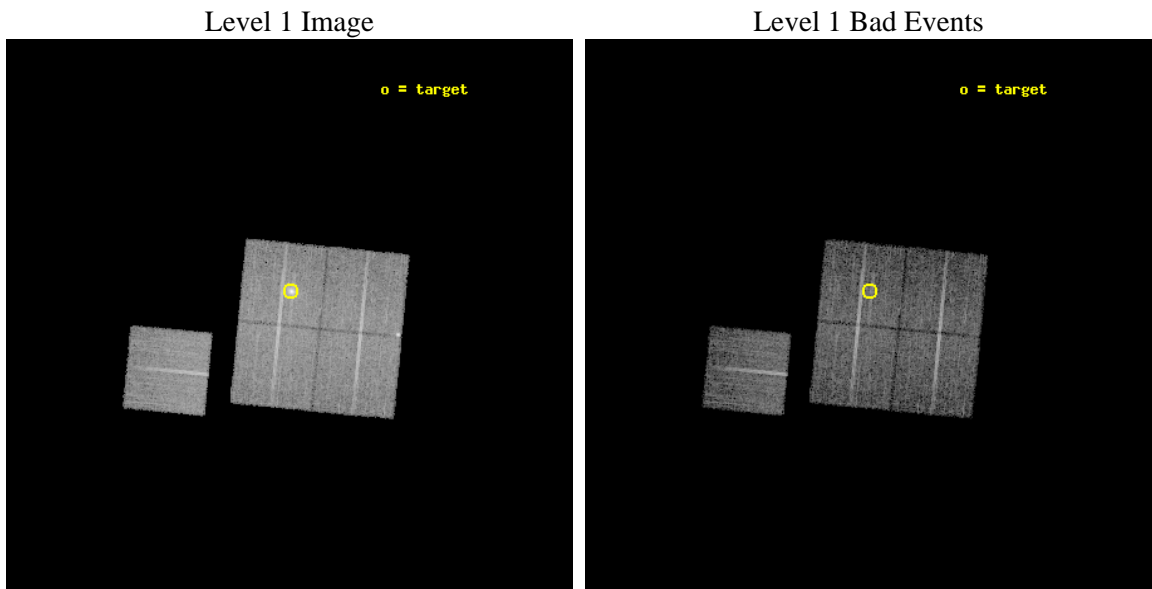
seq_num	800133	Sequence number
obs_id	1665	Observation id
title	DETERMINATION OF H0 AND Q0, 2000 PART 1	Proposal title
observer	DR. LEON VANSPEYBROECK	Principal investigator
object	RXJ 1532.9+3021	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	233.225	Observer's specified target RA [deg]
dec_targ	30.35	Observer's specified target Dec [deg]
ra_nom	233.22878217455	Nominal RA [deg]
dec_nom	30.295696569386	Nominal Dec [deg]
roll_nom	275.5602899281	Nominal Roll [deg]
revision	3	Processing version of data
ontime	10105.984785289	Sum of GTIs [s]
livetime	9973.942654151	Livetime [s]
ontime0	10102.720675141	Sum of GTIs [s]
ontime1	10105.902705282	Sum of GTIs [s]
ontime2	10105.943745285	Sum of GTIs [s]
ontime3	10105.984785289	Sum of GTIs [s]
ontime6	10105.82062529	Sum of GTIs [s]
l2events	41293	Number of level 2 events



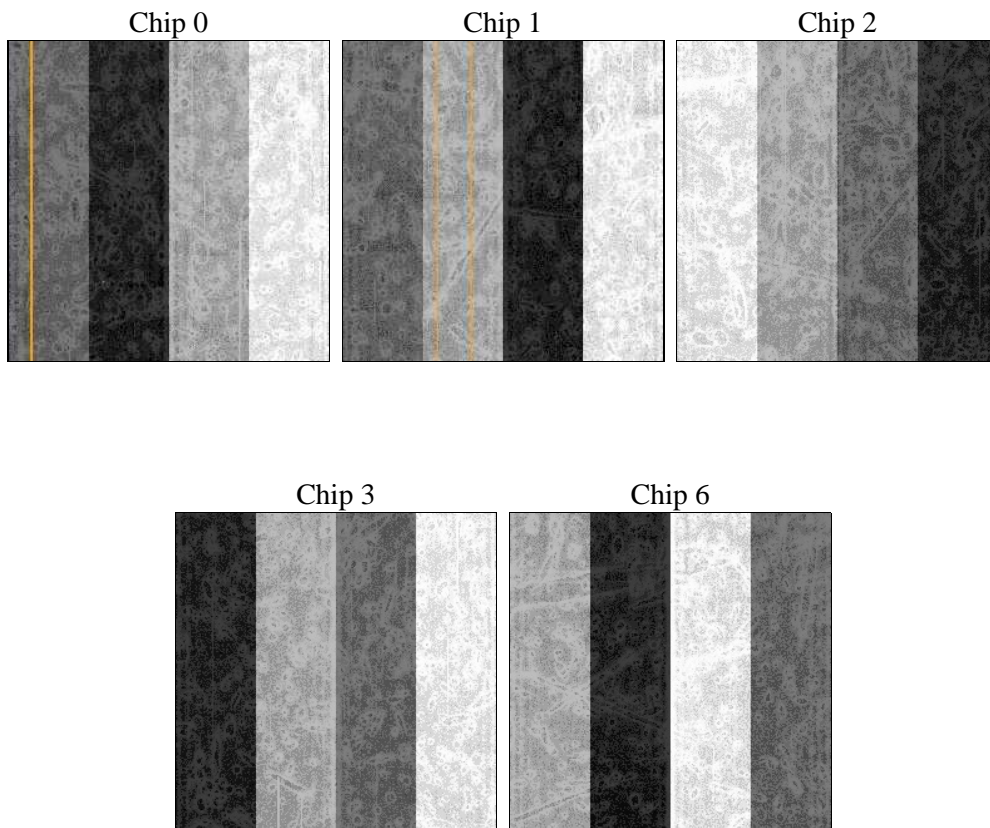
## 2 OBI

### 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	8.4.5	Processing system revision	ontime	10105.984785289	Sum of GTIs [s]
caldbver	4.5.1.1	&#160	ontime0	10102.720675141	Sum of GTIs [s]
date	2012-09-23T15:06:36	Date and time of file creation	ontime1	10105.902705282	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	10105.943745285	Sum of GTIs [s]
			ontime3	10105.984785289	Sum of GTIs [s]
			ontime6	10105.82062529	Sum of GTIs [s]
			l1events	326730	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	61111	60114	66156	71770	67579
rejected events	53378	50953	58671	56621	59720
rejected %	87%	84%	88%	78%	88%

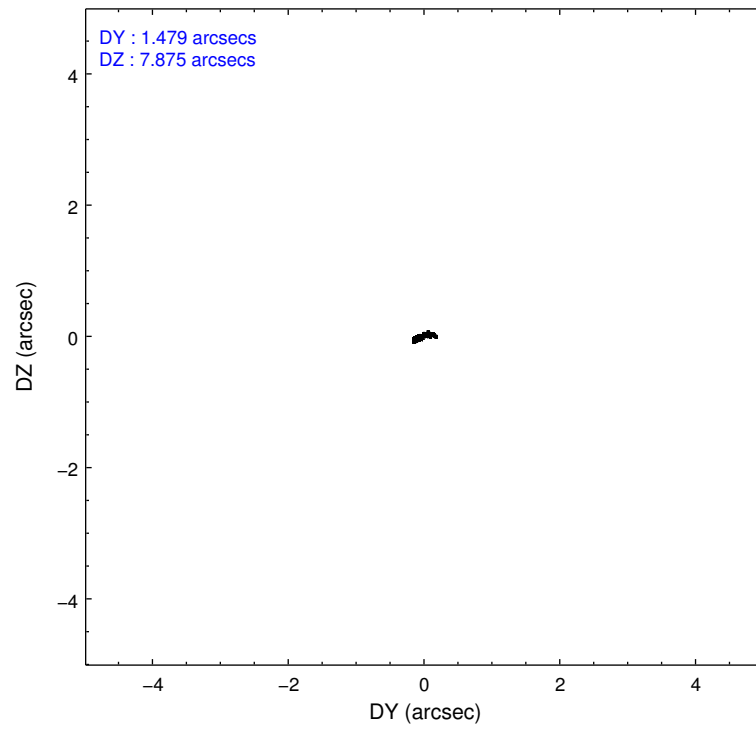
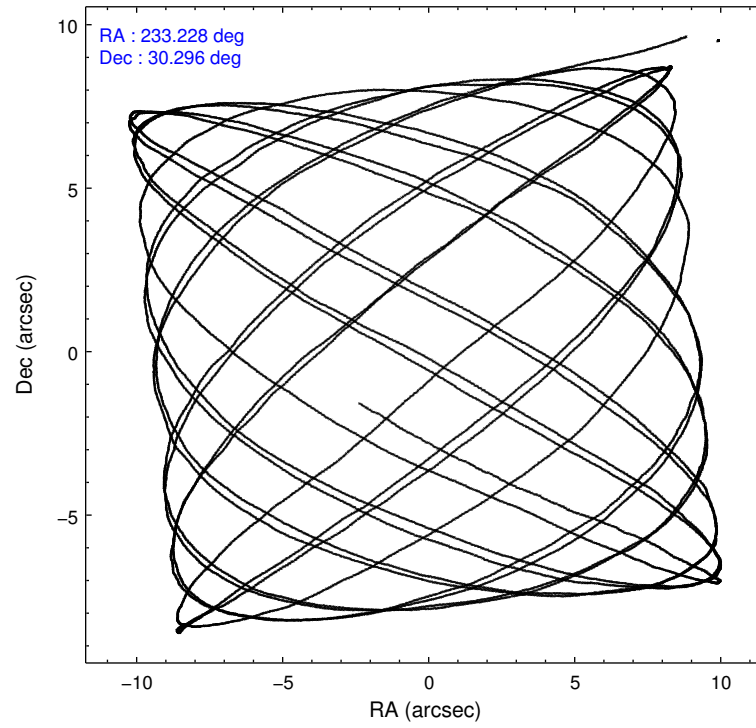
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	3405	4271	3247	9628	3443
	5%	7%	4%	13%	5%
grade 1 events	37	32	30	52	22
	0%	0%	0%	0%	0%
grade 2 events	1642	1746	1576	2217	1483
	2%	2%	2%	3%	2%
grade 3 events	749	808	728	883	749
	1%	1%	1%	1%	1%
grade 4 events	688	830	676	989	709
	1%	1%	1%	1%	1%
grade 5 events	2338	2545	2311	2578	2714
	3%	4%	3%	3%	4%
grade 6 events	1251	1510	1264	1446	1477
	2%	2%	1%	2%	2%
grade 7 events	51001	48372	56324	53977	56982
	83%	80%	85%	75%	84%

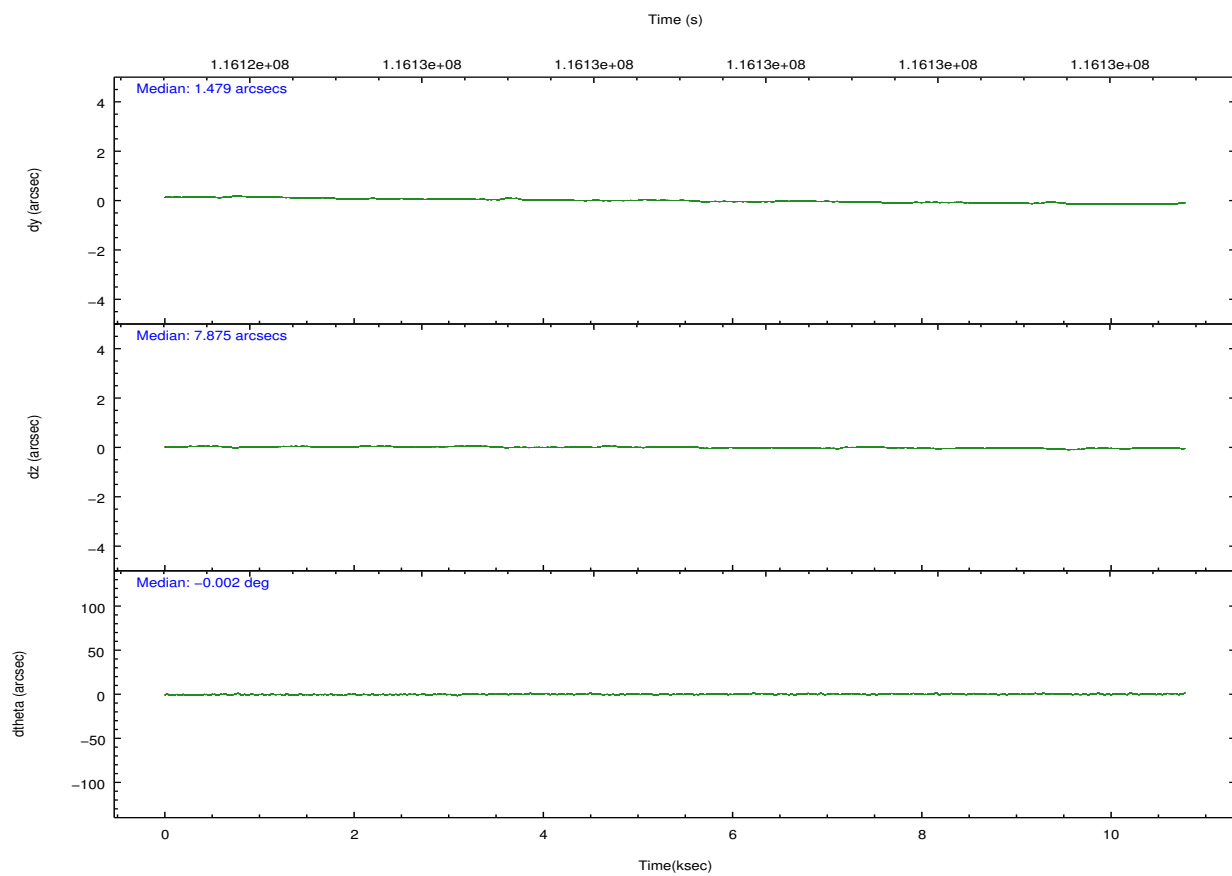
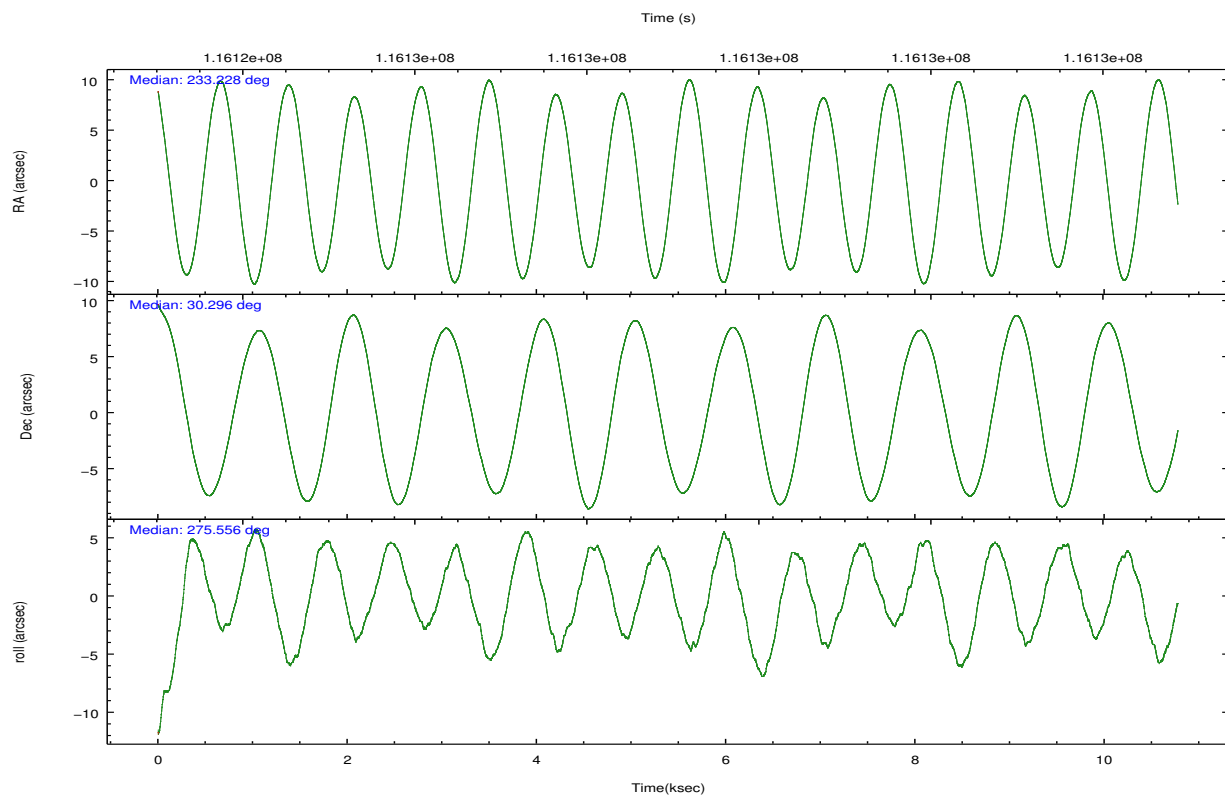


## 2.2 Compared Parameters

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	233.210241	233.2287821745505	Subarray requested	NONE	NONE
[deg] Pointing Dec	30.318006	30.29569656938641	Alternating exposures requested	N	N
[deg] Pointing Roll	275.360962	275.5602899280951	[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	-225.840463	-225.8433433320239			
[mm] SIM translation stage offset	-7.752	-7.749109670905796			
[s] Observation start time (MET)	116124332.184000	116123083.33428			
Observation start date	2001-09-06T00:44:28	2001-09-06T00:24:43			
[s] Observation end time (MET)	116134332.184000	116134700.17224			
Observation end date	2001-09-06T03:31:08	2001-09-06T03:38:20			
Read mode	TIMED	TIMED			

## 2.3 Aspect



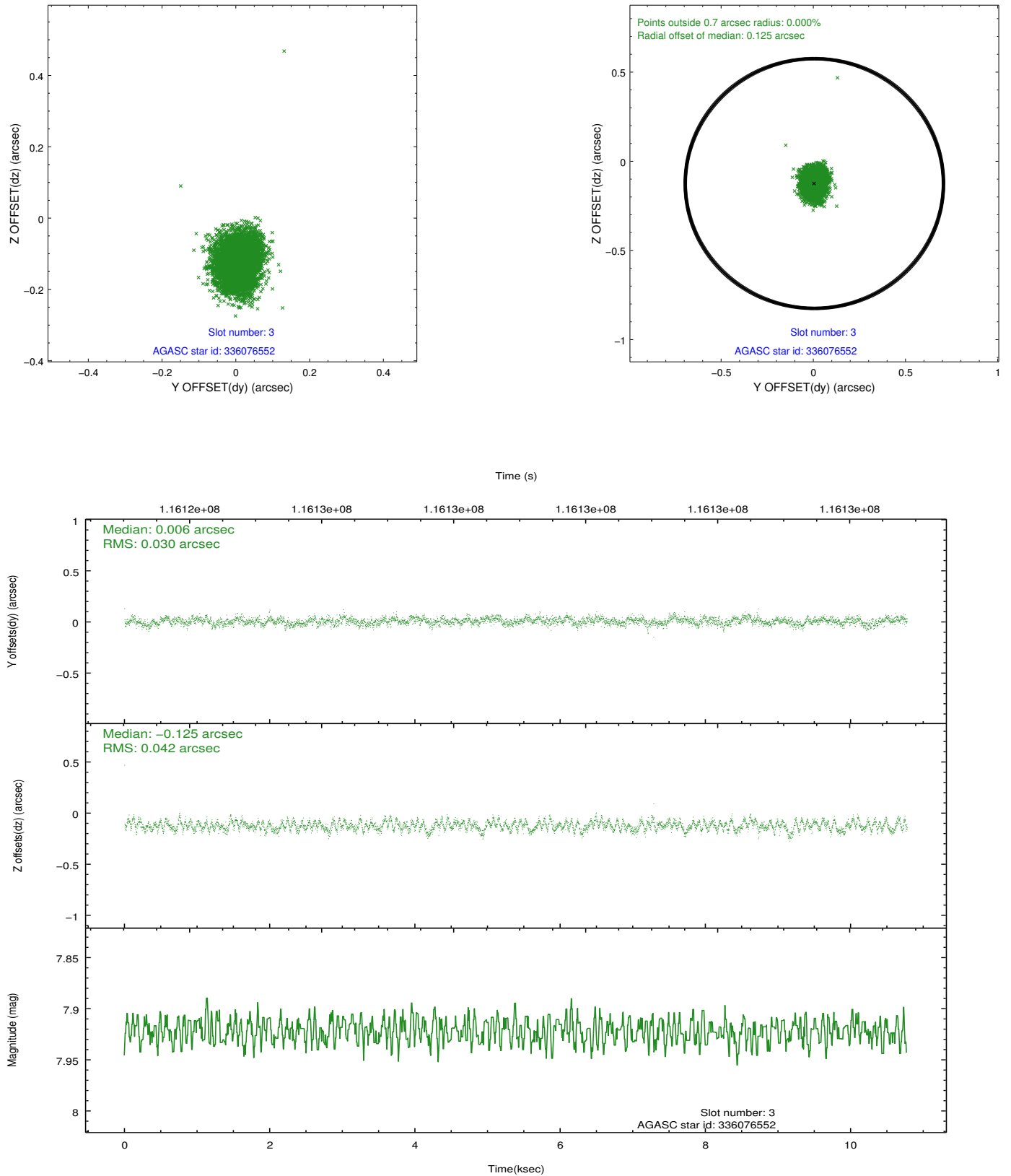


### Slot Statistics

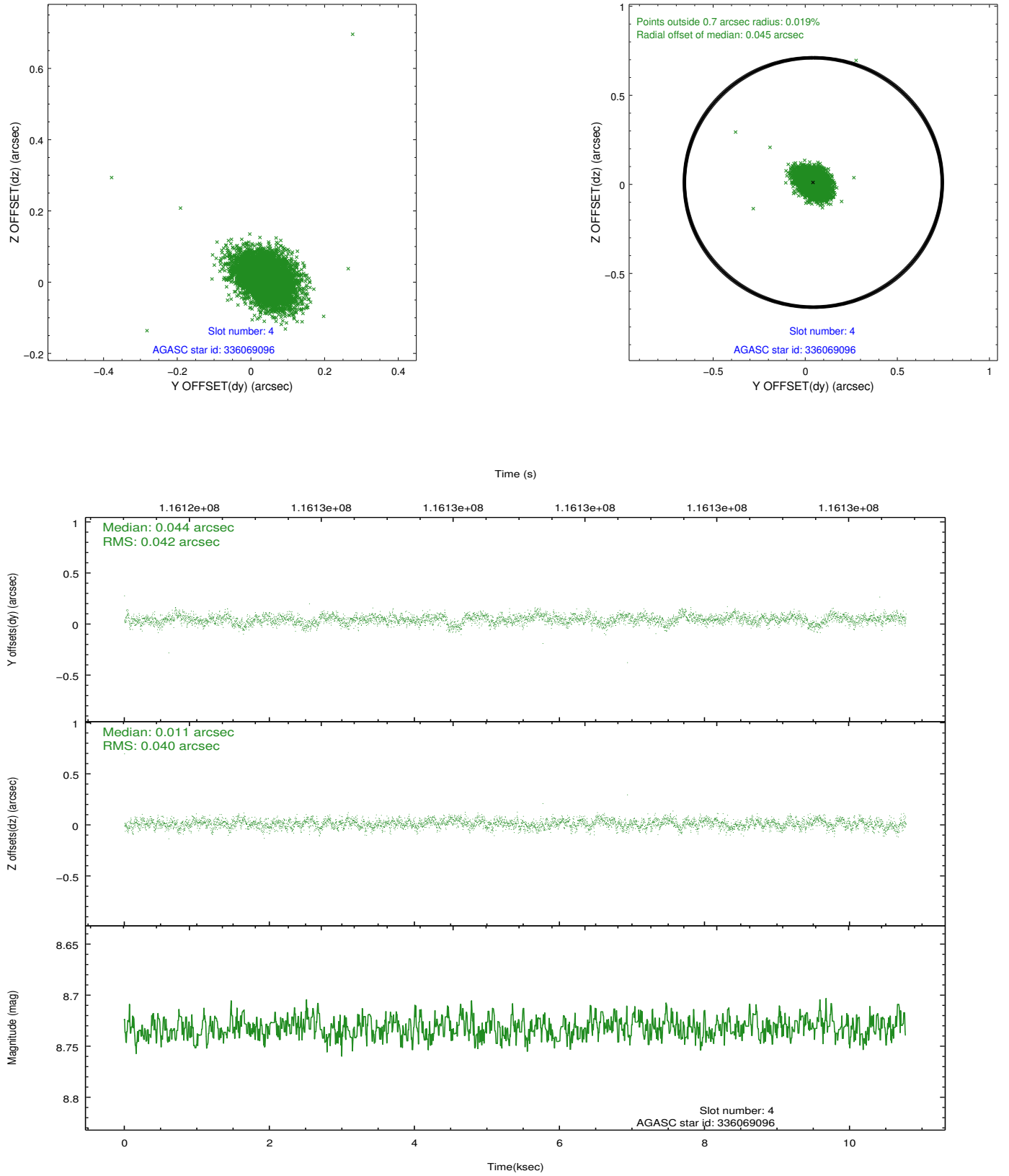
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.23	2629	0.075	-0.018	0.006	0.011	0.000000	0.000000	938.28	-990.39
1	FID	ACIS-I-5	7.22	2629	-0.166	0.096	0.006	0.011	0.000000	0.000000	-1809.79	906.92
2	FID	ACIS-I-6	7.27	2629	-0.001	-0.007	0.007	0.011	0.000000	0.000000	403.25	1551.86
3	GUIDE	336076552	7.92	5257	0.006	-0.125	0.055	0.089	233.235475	30.281222	139.54	66.69
4	GUIDE	336069096	8.73	5255	0.044	0.011	0.060	0.099	232.784424	30.008451	983.63	-1424.34
5	GUIDE	336068920	9.08	5256	0.036	0.110	0.081	0.128	233.818662	30.014906	1259.05	1787.88
6	GUIDE	336070048	9.09	5257	-0.028	-0.002	0.082	0.132	232.735573	30.873902	-2131.92	-1271.75
7	GUIDE	336074336	9.28	5253	-0.056	0.011	0.086	0.142	232.713714	30.669381	-1406.42	-1411.53

## 2.4 Star Slots

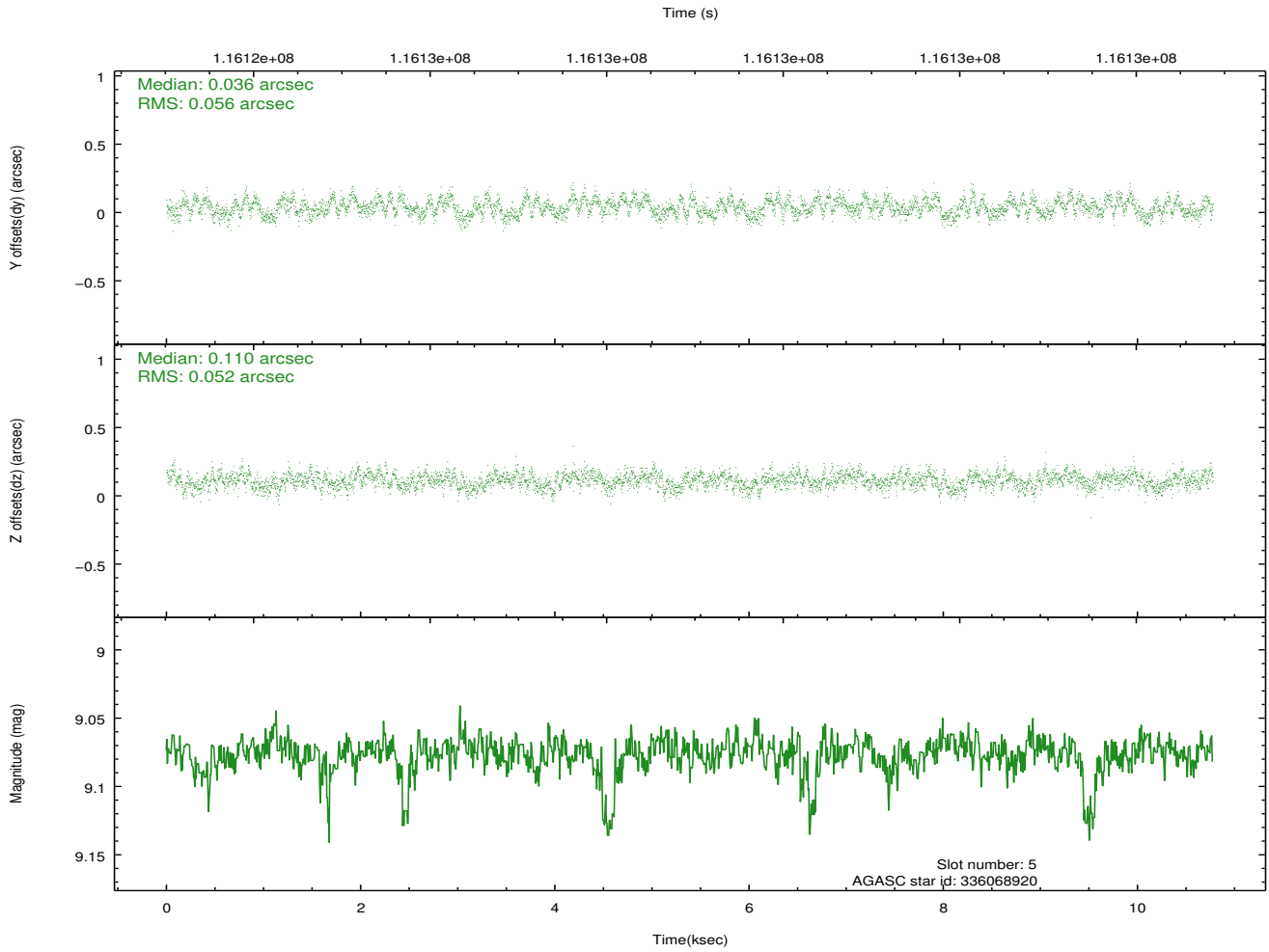
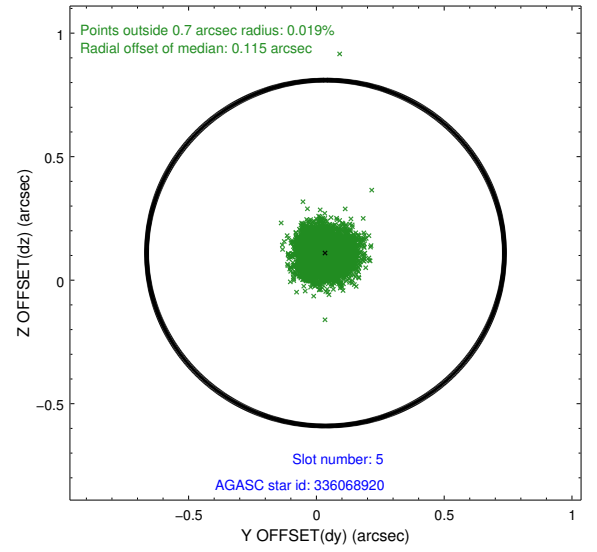
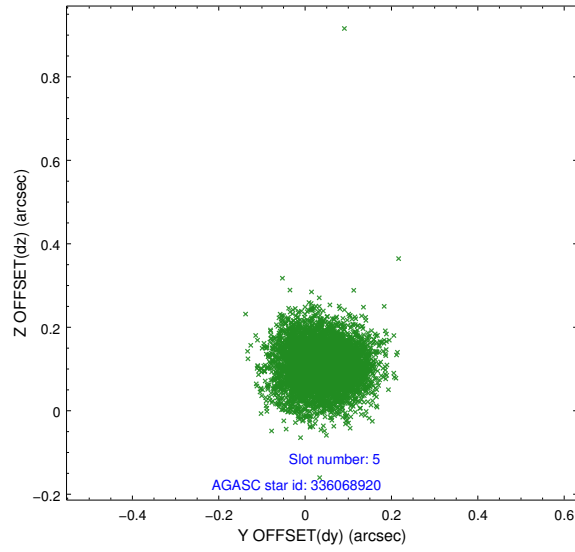
### 2.4.1 Slot 3



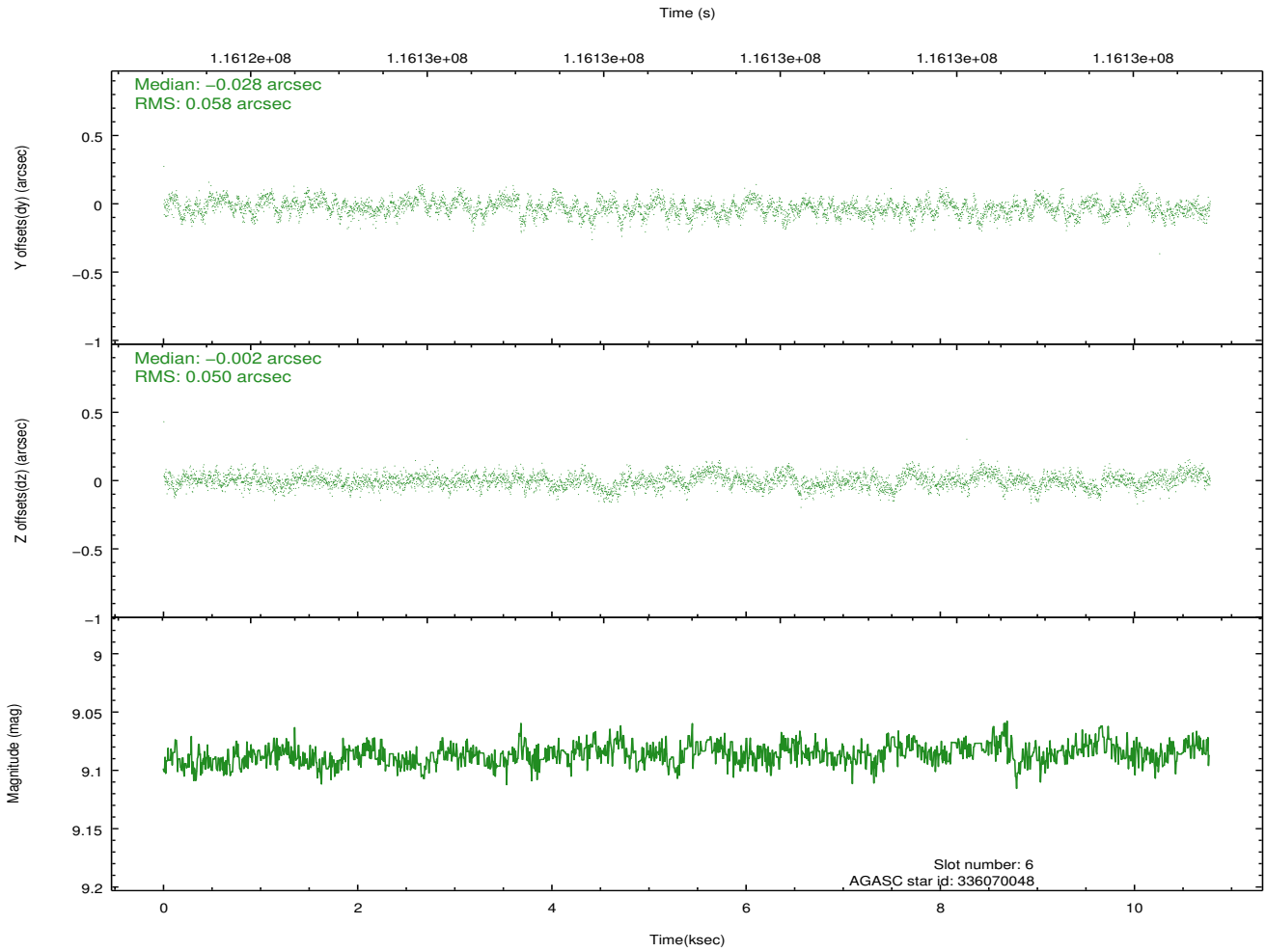
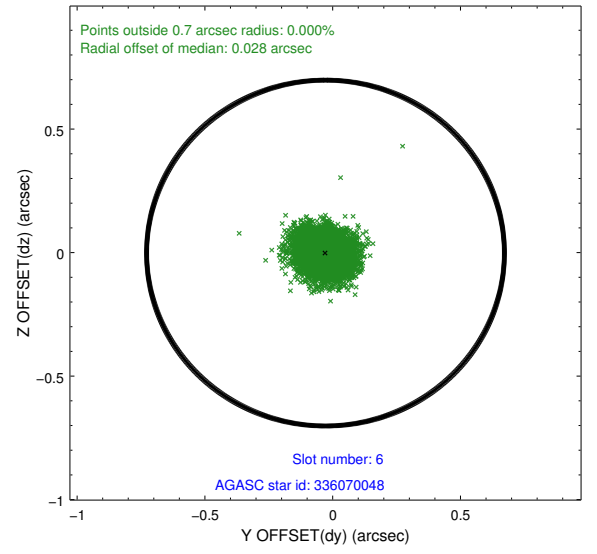
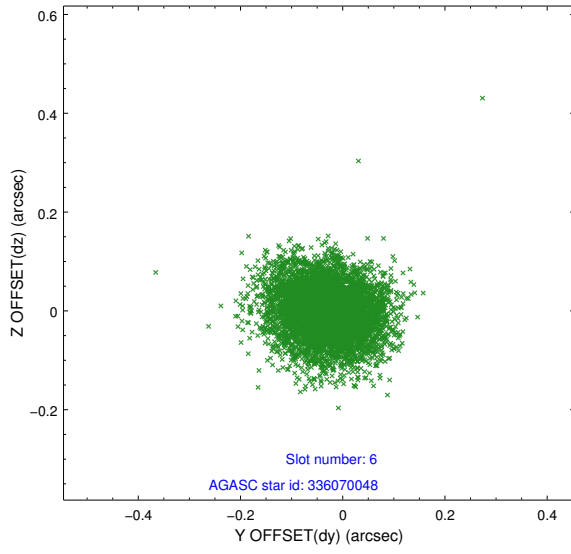
## 2.4.2 Slot 4



### 2.4.3 Slot 5

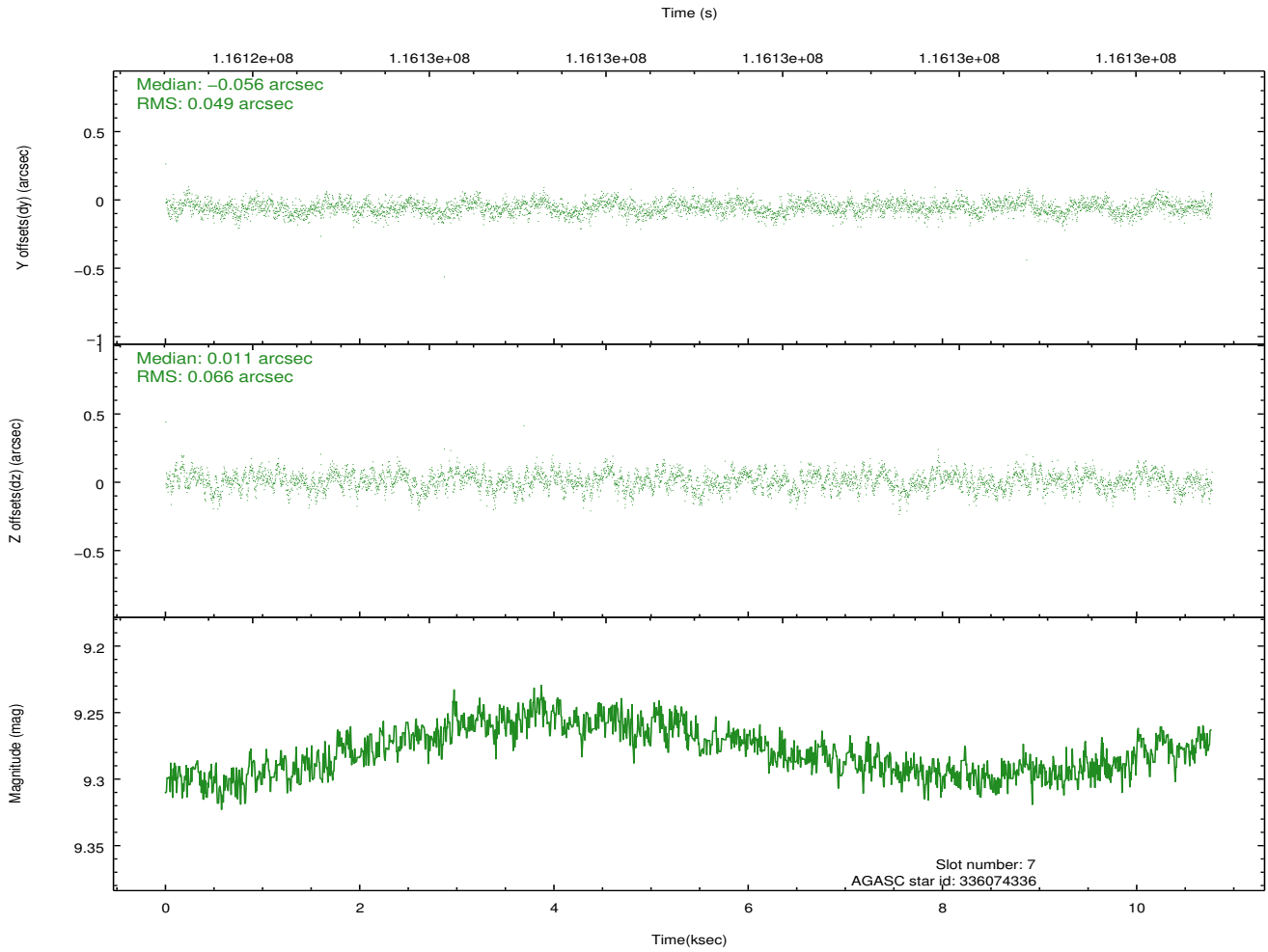
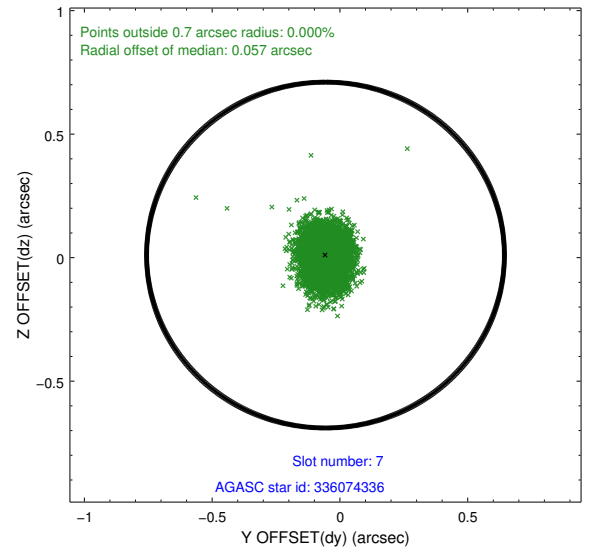
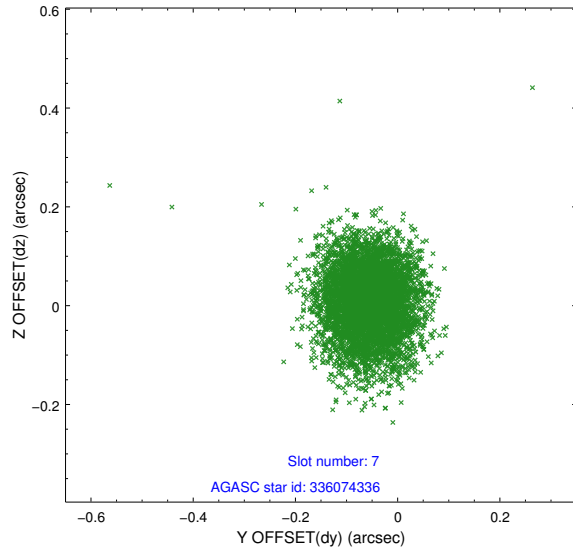


## 2.4.4 Slot 6



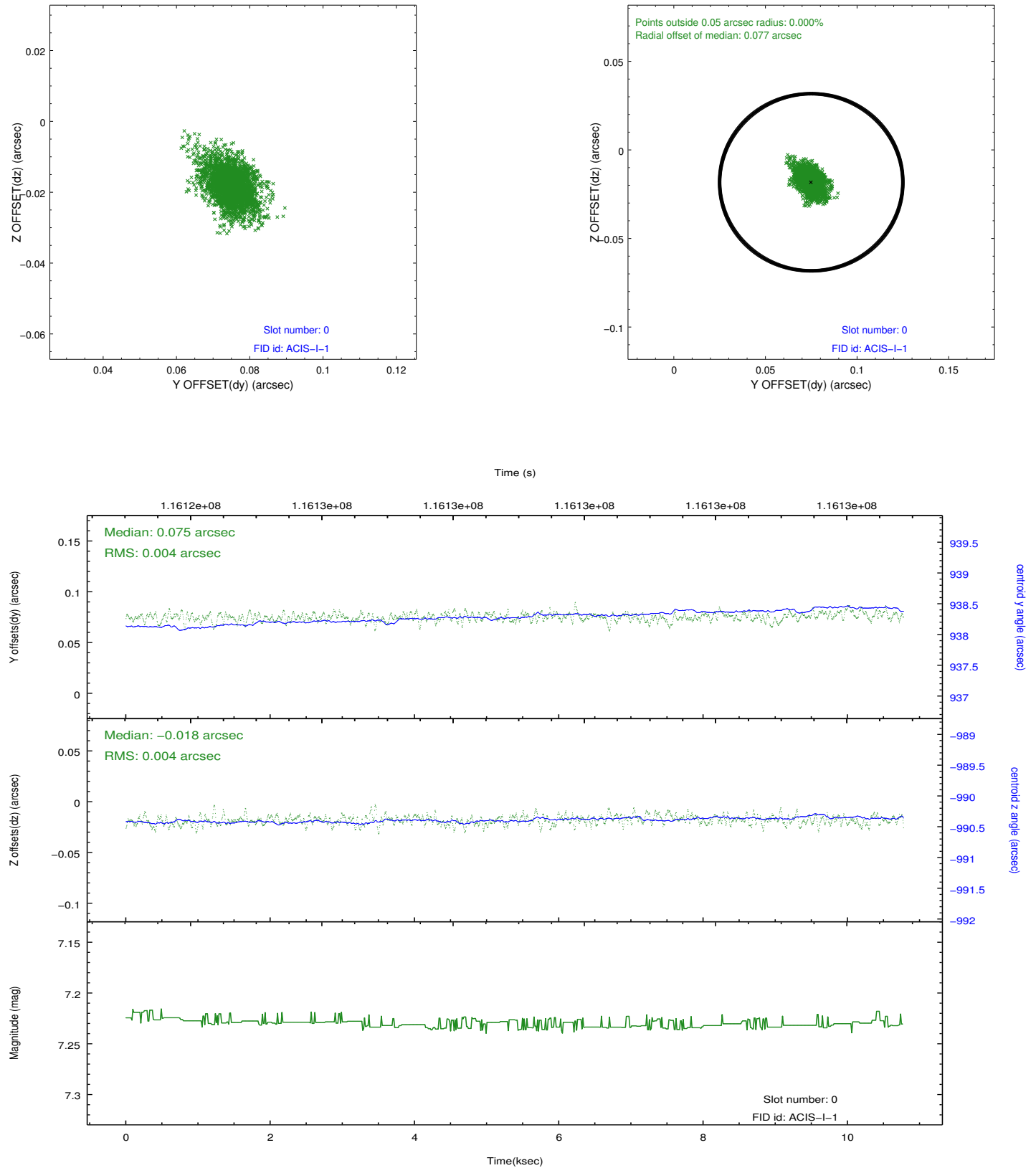


## 2.4.5 Slot 7

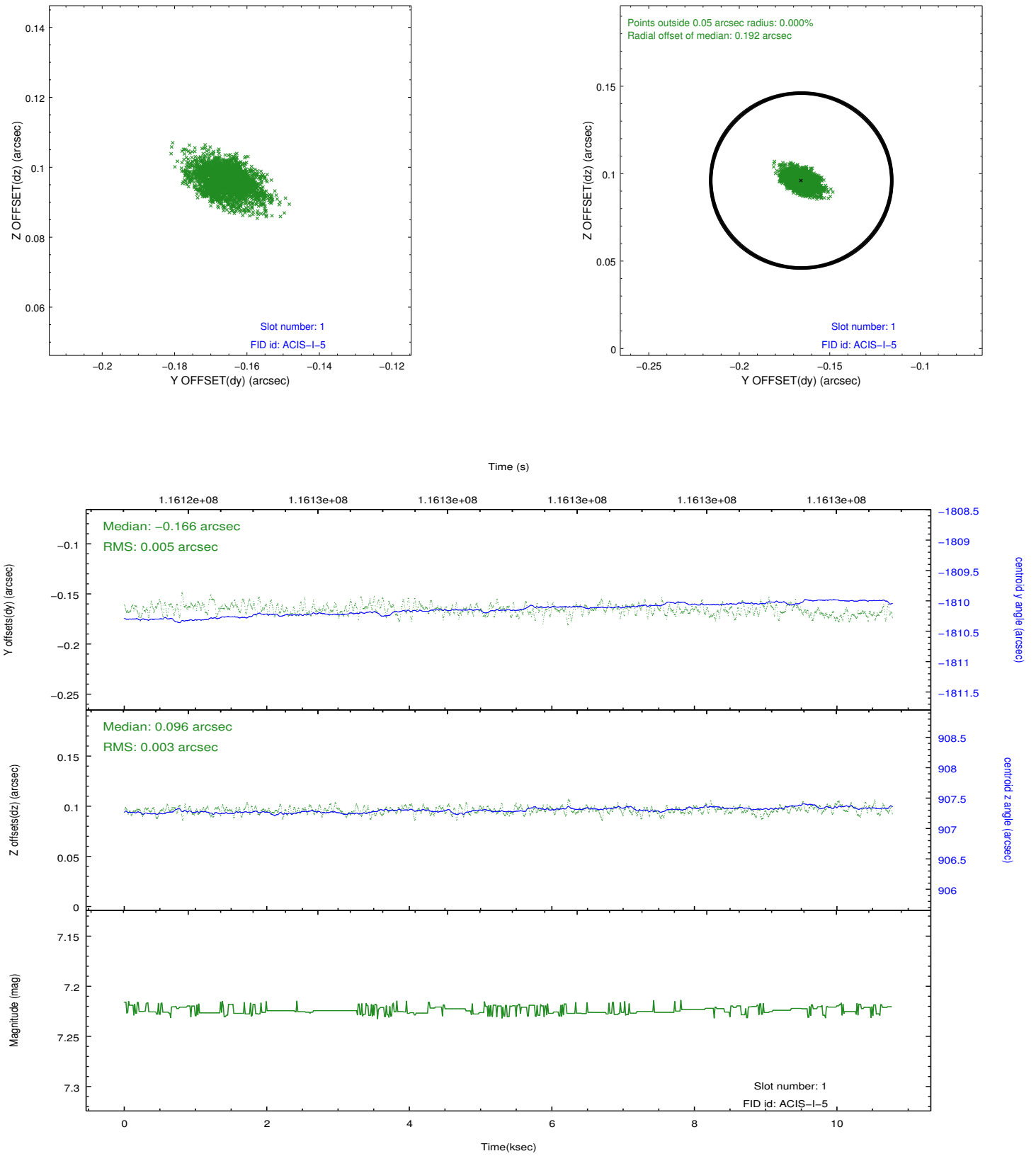


## 2.5 FID Slots

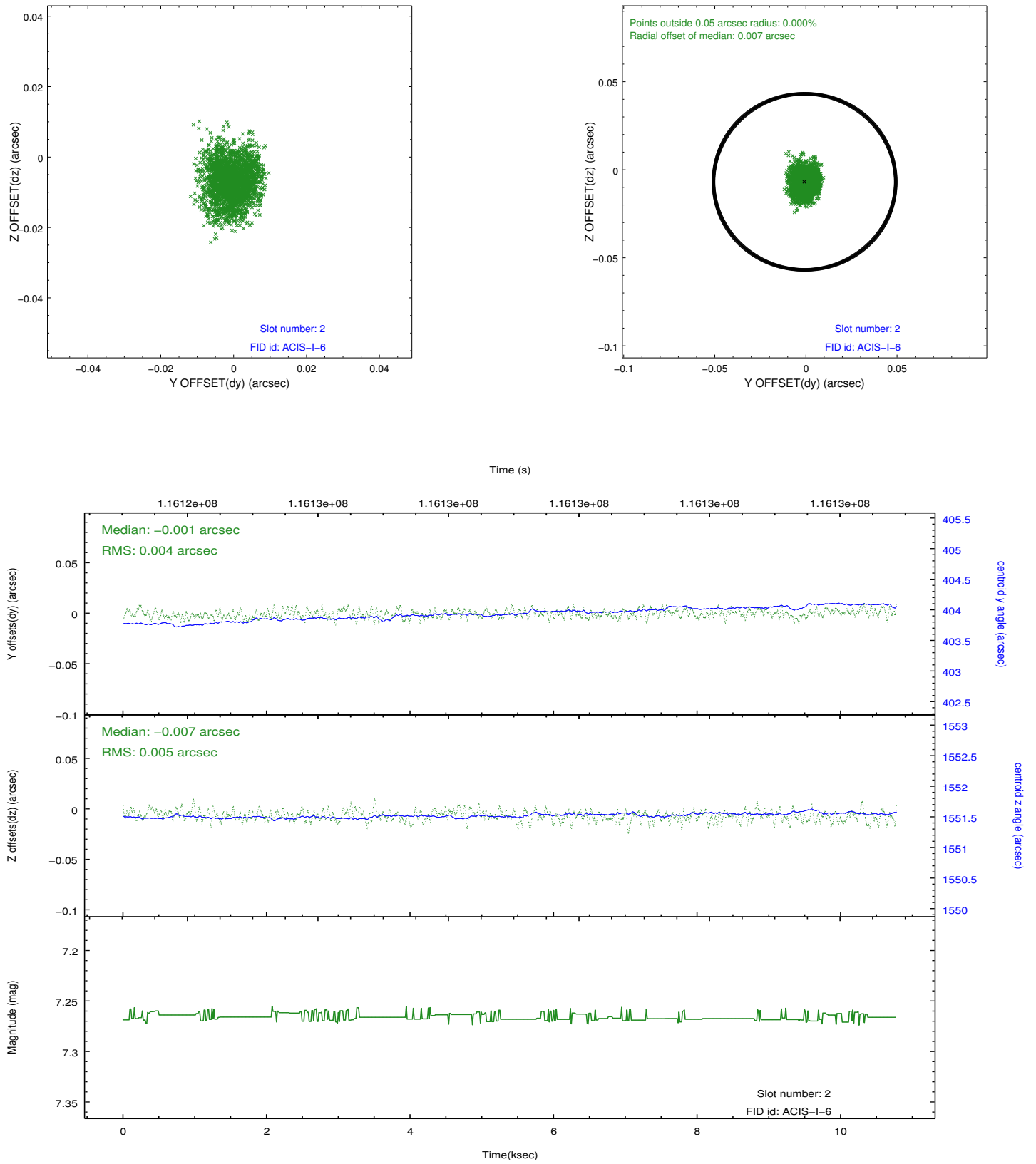
### 2.5.1 Slot 0



## 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)	2012.09.26
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.109

### A.2 Comments