

# V&V Reference Report

## L2 ASCDS Version : 10.4.2.1

Observation 17447 - L2 Version 1  
Chandra X-Ray Center

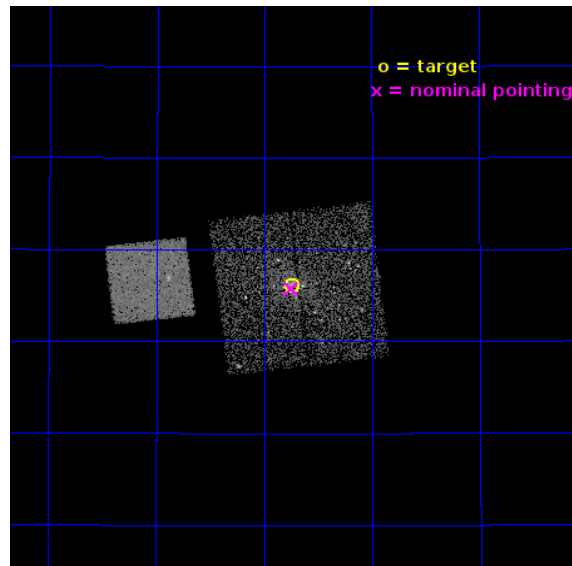
L2 Processing Date : Nov 28 2015

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# 1 Front

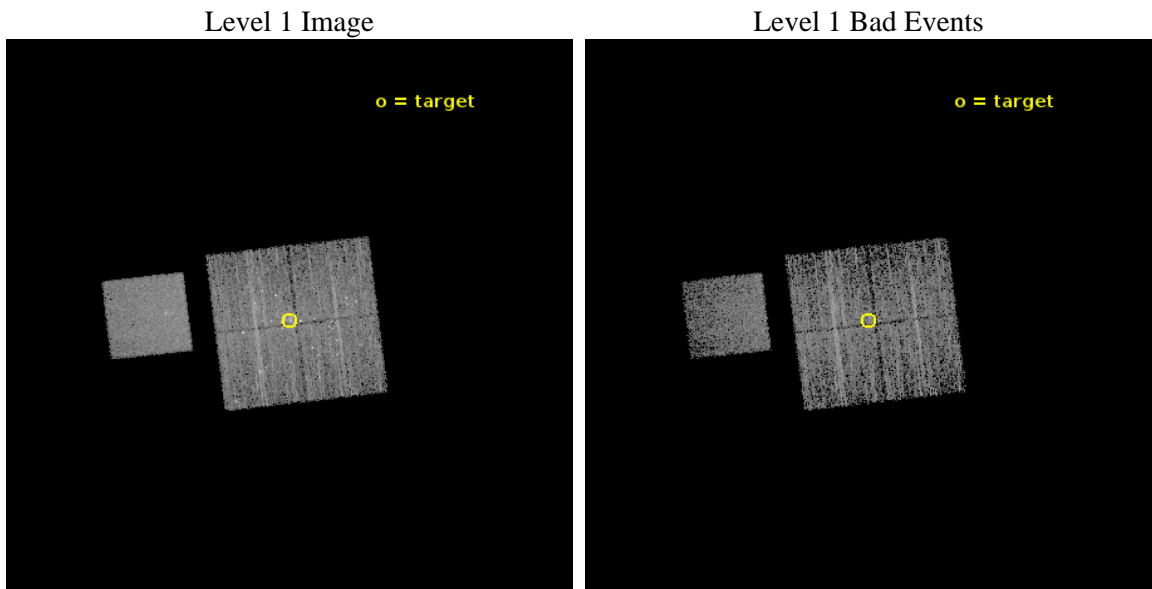
seq_num	401680	Sequence number
obs_id	17447	Observation id
title	Monitoring the central region of M31 for X-ray transients	Proposal
observer	Dr. Stephen Murray	Principal investigator
object	M31 bulge	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	10.685	Observer's specified target RA [deg]
dec_targ	41.269028	Observer's specified target Dec [deg]
ra_nom	10.687015456812	Nominal RA [deg]
dec_nom	41.262853049648	Nominal Dec [deg]
roll_nom	263.11598374686	Nominal Roll [deg]
revision	1	Processing version of data
ontime	5059.2000390291	Sum of GTIs [s]
livetime	4993.0978659903	Livetime [s]
ontime0	5059.2000390291	Sum of GTIs [s]
ontime1	5059.2000390291	Sum of GTIs [s]
ontime2	5059.2000390291	Sum of GTIs [s]
ontime3	5059.2000390291	Sum of GTIs [s]
ontime7	5059.2000390291	Sum of GTIs [s]
l2events	36993	Number of level 2 events



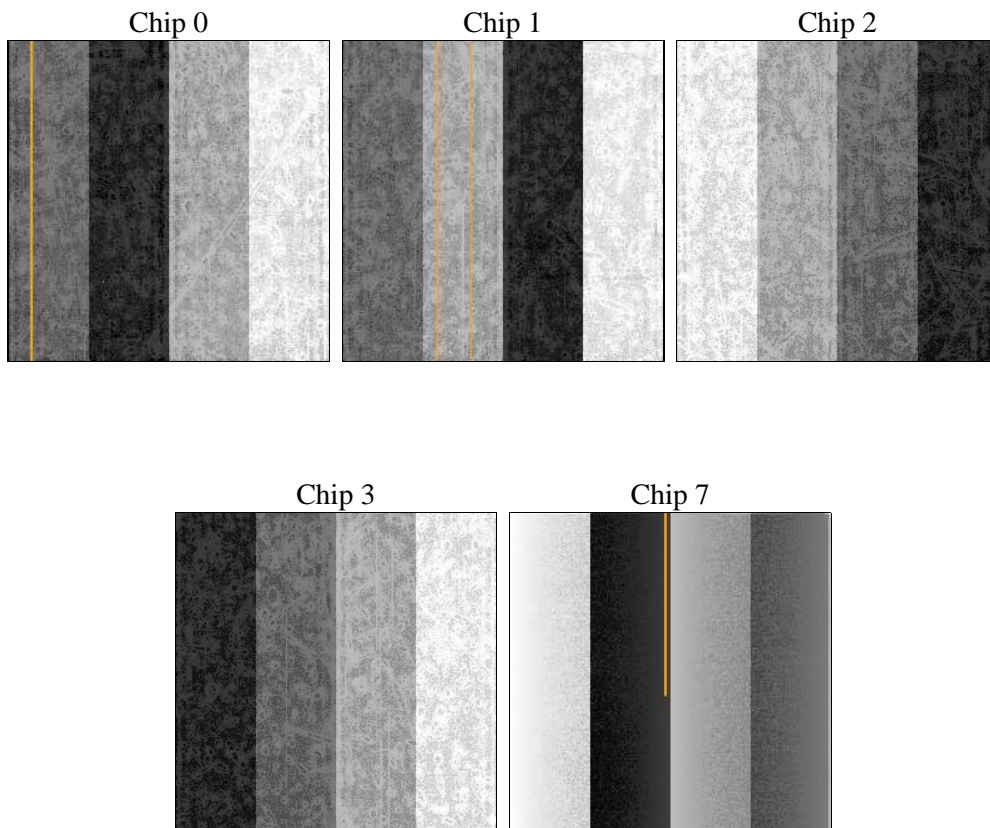
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	10.4.2.1	Processing system revision	ontime	5059.2000390291	Sum of GTIs [s]
caldsver	4.6.10a	&#160	ontime0	5059.2000390291	Sum of GTIs [s]
date	2015-11-29T03:11:35	Date and time of file creation	ontime1	5059.2000390291	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	5059.2000390291	Sum of GTIs [s]
			ontime3	5059.2000390291	Sum of GTIs [s]
			ontime7	5059.2000390291	Sum of GTIs [s]
			l1events	163314	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
level 1 events	29400	29369	32120	33521	38904
rejected events	24057	23390	26663	26513	22355
rejected %	81%	79%	83%	79%	57%

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
grade 0 events	2740	2913	3140	4262	1364
	9%	9%	9%	12%	3%
grade 1 events	22	93	54	66	41
	0%	0%	0%	0%	0%
grade 2 events	1048	1245	904	1064	3623
	3%	4%	2%	3%	9%
grade 3 events	433	429	367	476	1294
	1%	1%	1%	1%	3%
grade 4 events	375	459	377	449	1226
	1%	1%	1%	1%	3%
grade 5 events	1259	1378	1199	1536	3749
	4%	4%	3%	4%	9%
grade 6 events	750	941	676	773	9064
	2%	3%	2%	2%	23%
grade 7 events	22773	21911	25403	24895	18543
	77%	74%	79%	74%	47%

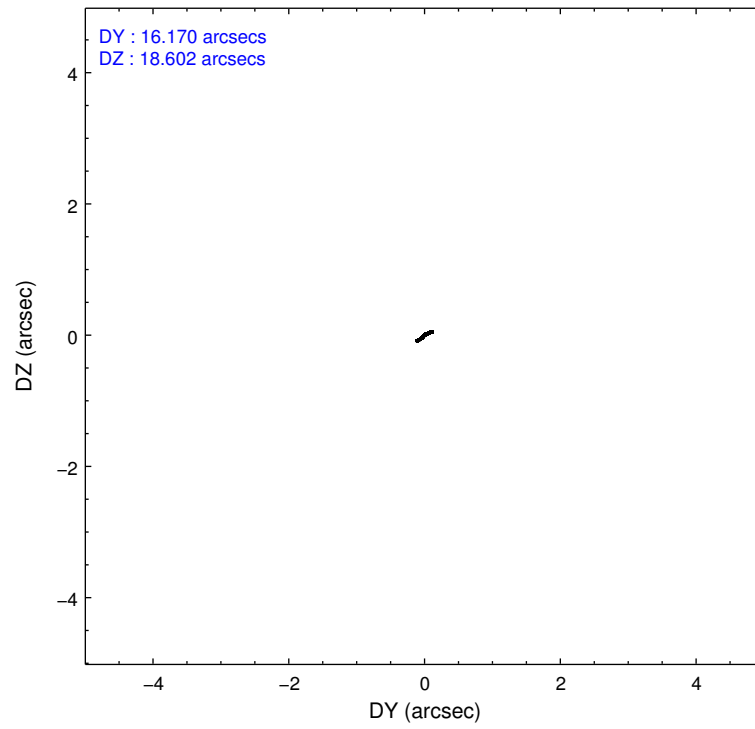
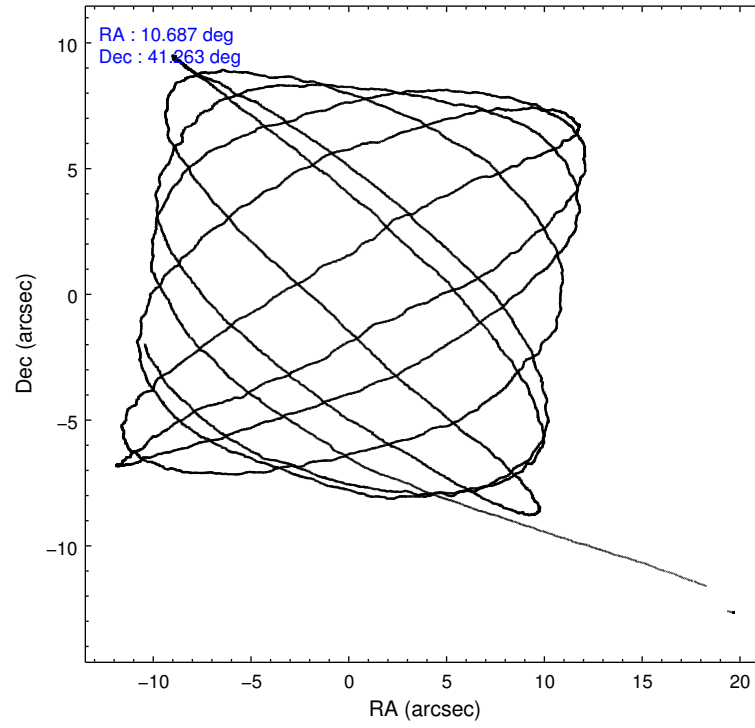


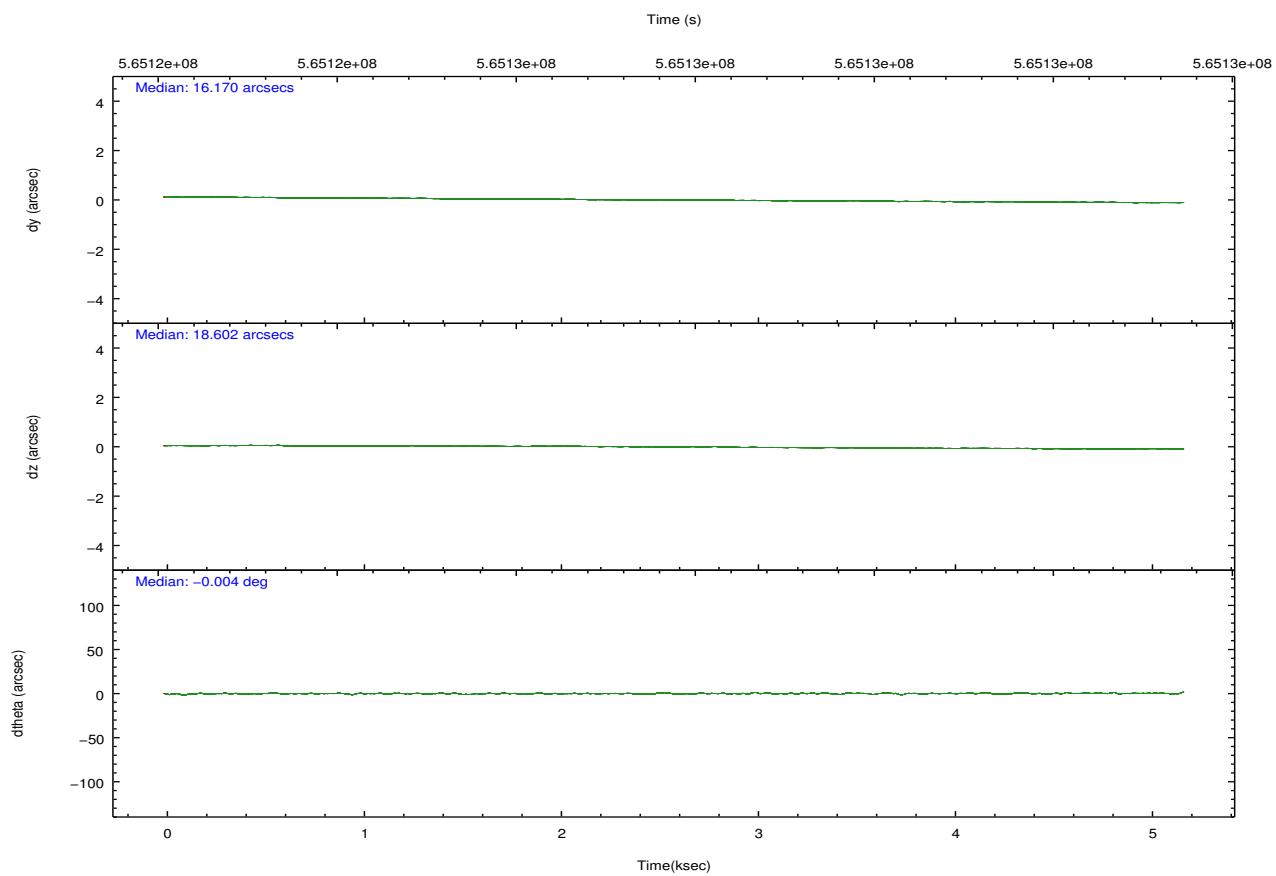
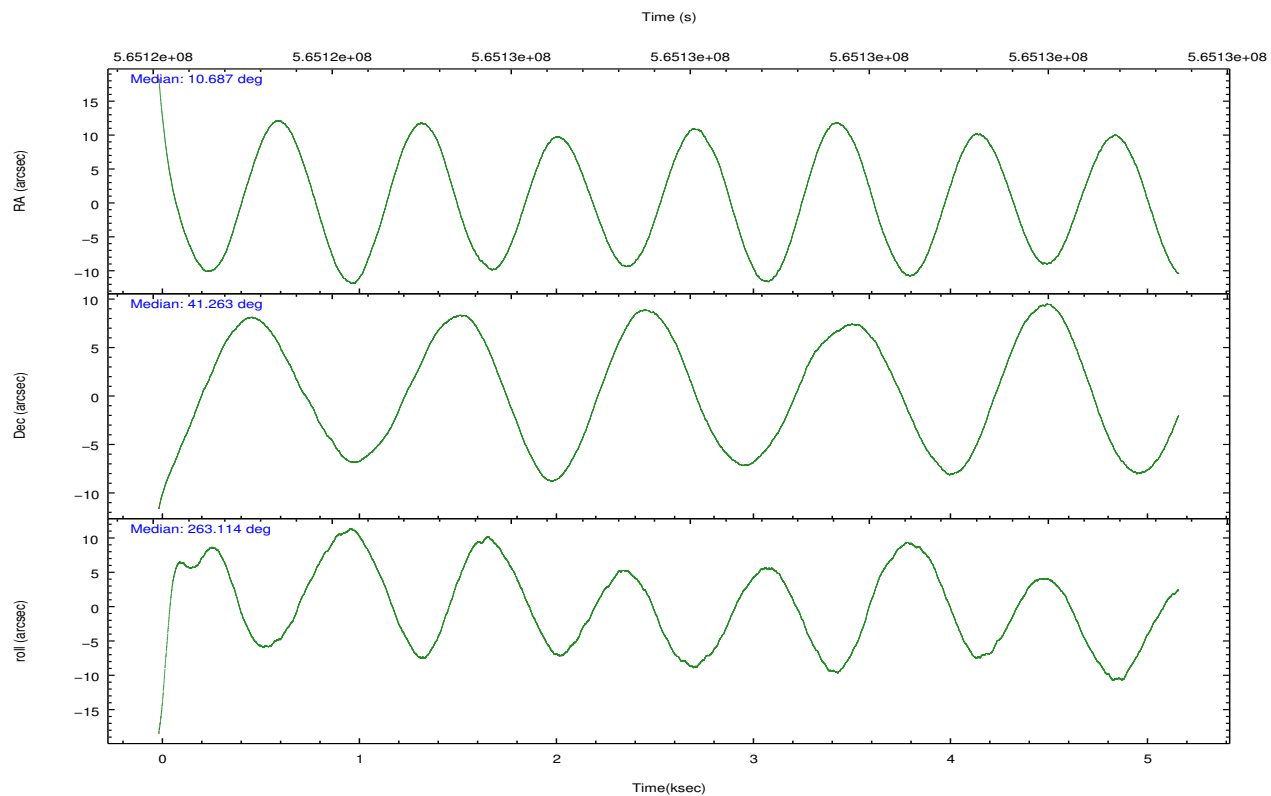
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-01237	ACIS-01237
Grating	NONE	NONE
Data mode	FAINT	FAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	10.672446	10.68701545681156
[deg] Pointing Dec	41.288264	41.2628530496482
[deg] Pointing Roll	262.916939	263.1159837468599
[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)	565124446.184000	565123383.1021399
Observation start date	2015-11-28T18:59:38	2015-11-28T18:43:03
[s] Observation end time (MET)	565129446.184000	565130717.49005
Observation end date	2015-11-28T20:22:58	2015-11-28T20:45:17
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
CCD I0 on	Y	Y
CCD I1 on	Y	Y
CCD I2 on	Y	Y
CCD I3 on	Y	Y
CCD S0 on	N	N
CCD S1 on	N	N
CCD S2 on	N	N
CCD S3 on	O1	Y
CCD S4 on	N	N
CCD S5 on	N	N
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



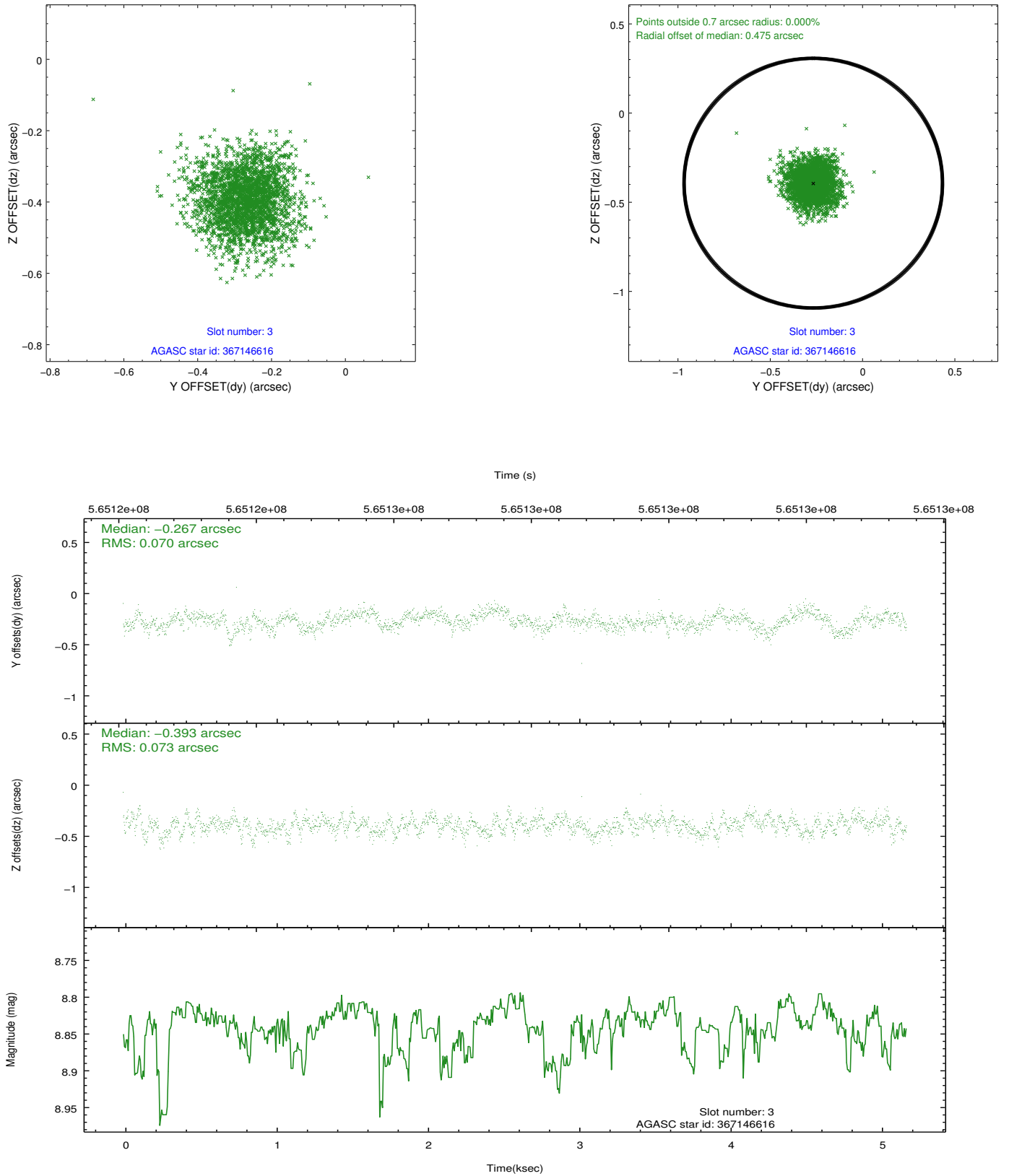


### Slot Statistics

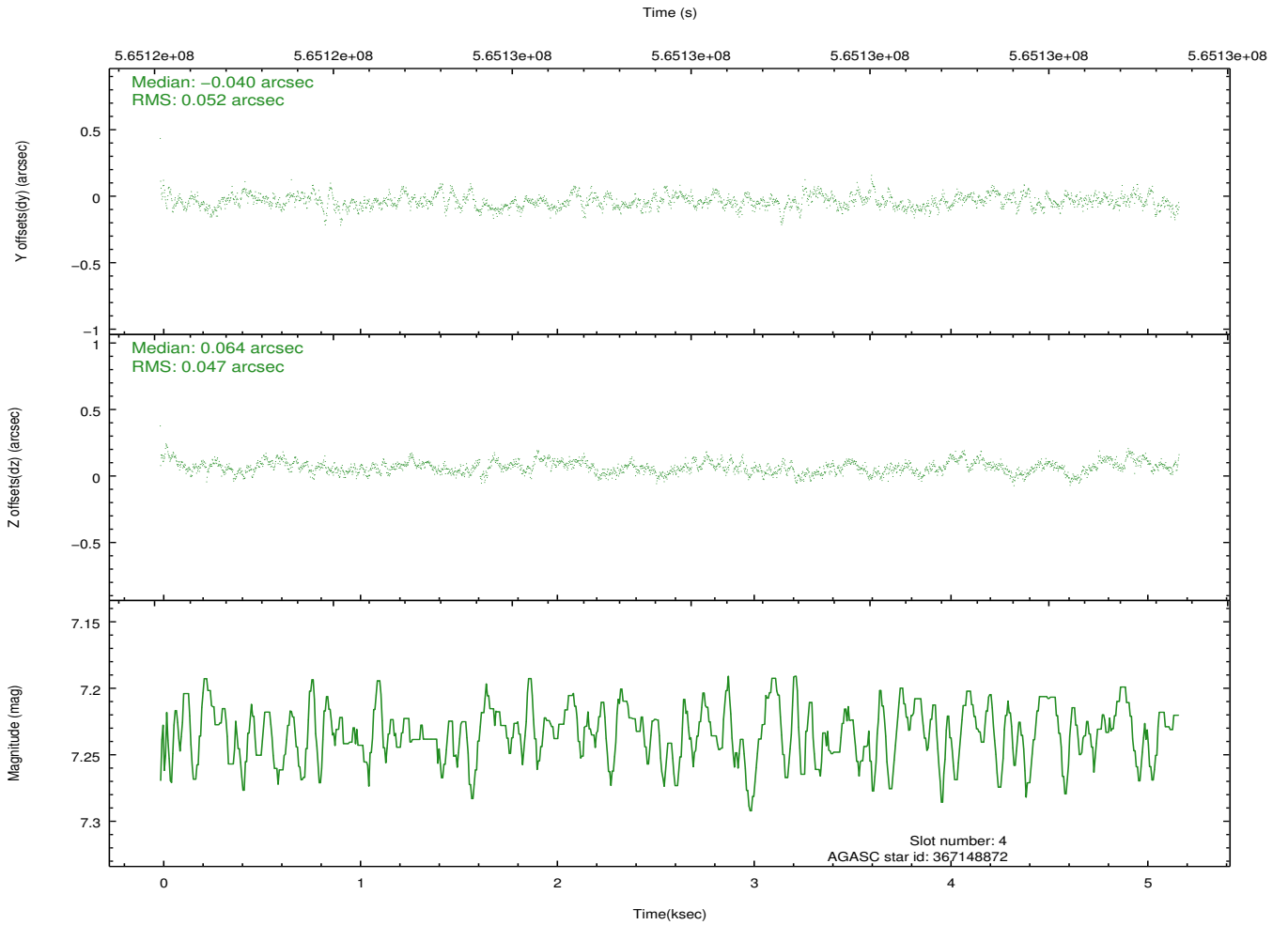
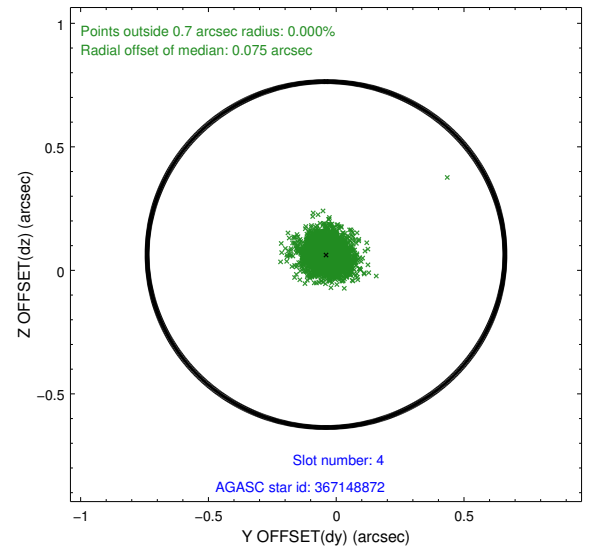
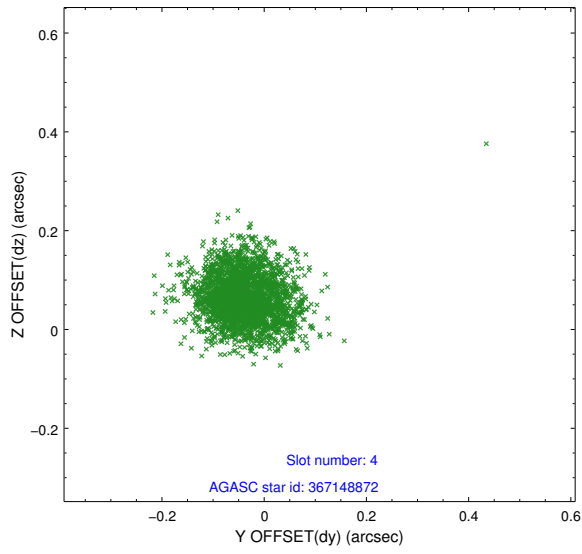
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.26	1263	0.063	0.005	0.006	0.011	0.000000	0.000000	923.36	-842.24
1	FID		ACIS-I-5	7.28	1263	-0.343	0.036	0.006	0.010	0.000000	0.000000	-1824.59	1054.57
2	FID		ACIS-I-6	7.27	1263	0.189	0.029	0.006	0.010	0.000000	0.000000	387.64	1700.49
3	GUIDE	used	367146616	8.84	2520	-0.267	-0.393	0.107	0.175	11.418645	41.190163	92.24	2048.29
4	GUIDE	used	367148872	7.23	2526	-0.040	0.064	0.074	0.119	10.505940	40.688258	2200.17	-183.76
5	GUIDE	used	367657896	8.99	2524	0.085	0.025	0.126	0.209	11.197765	41.313576	-268.94	1397.91
6	GUIDE	used	367663272	9.26	2526	0.106	0.370	0.121	0.196	10.656279	41.699429	-1462.76	-225.86
7	GUIDE	used	367674552	8.83	2525	0.120	-0.066	0.112	0.179	11.016238	41.570845	-1125.89	793.35

## 2.4 Star Slots

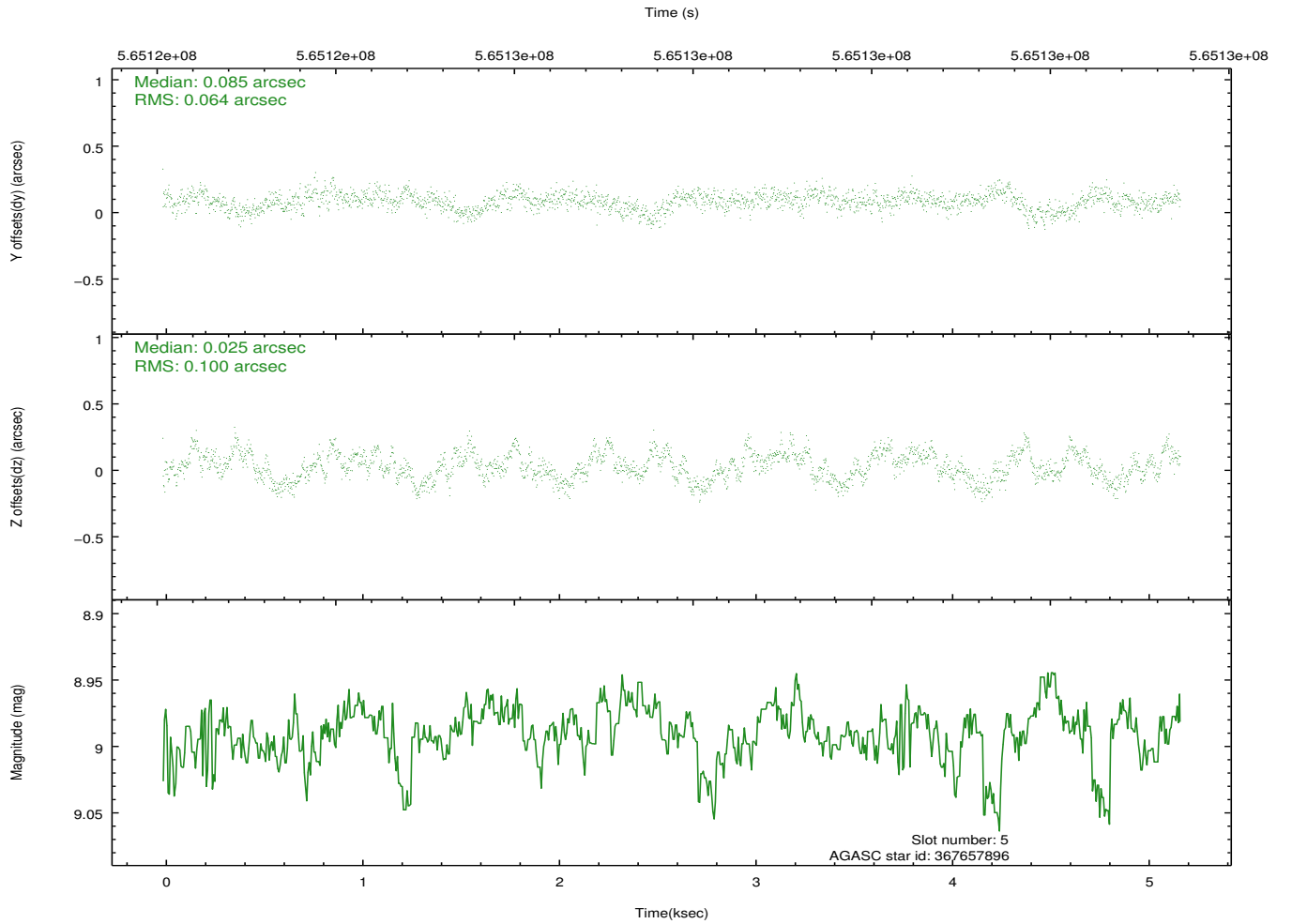
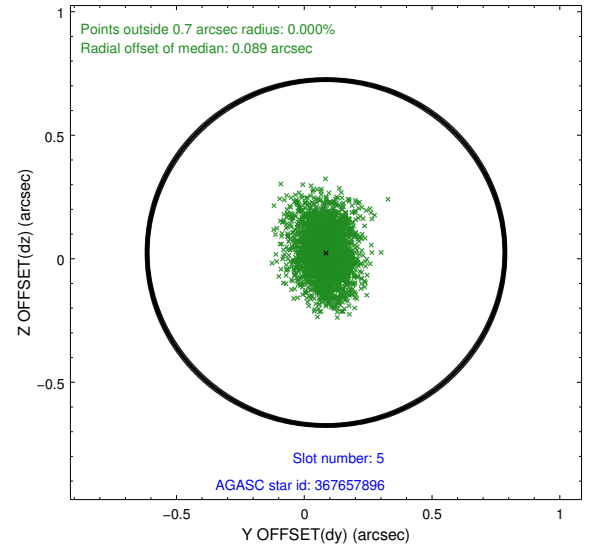
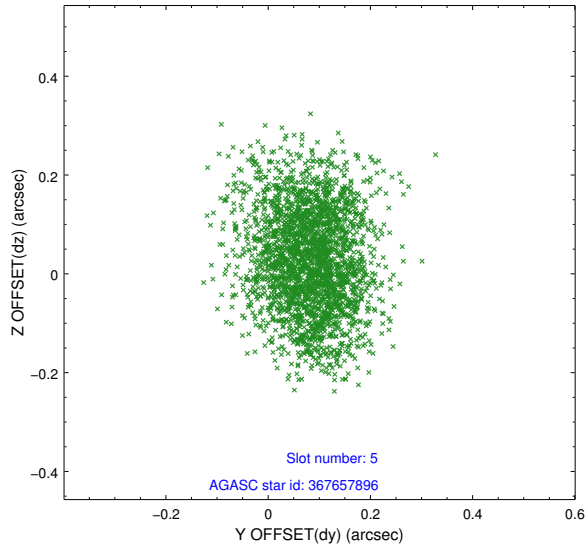
### 2.4.1 Slot 3



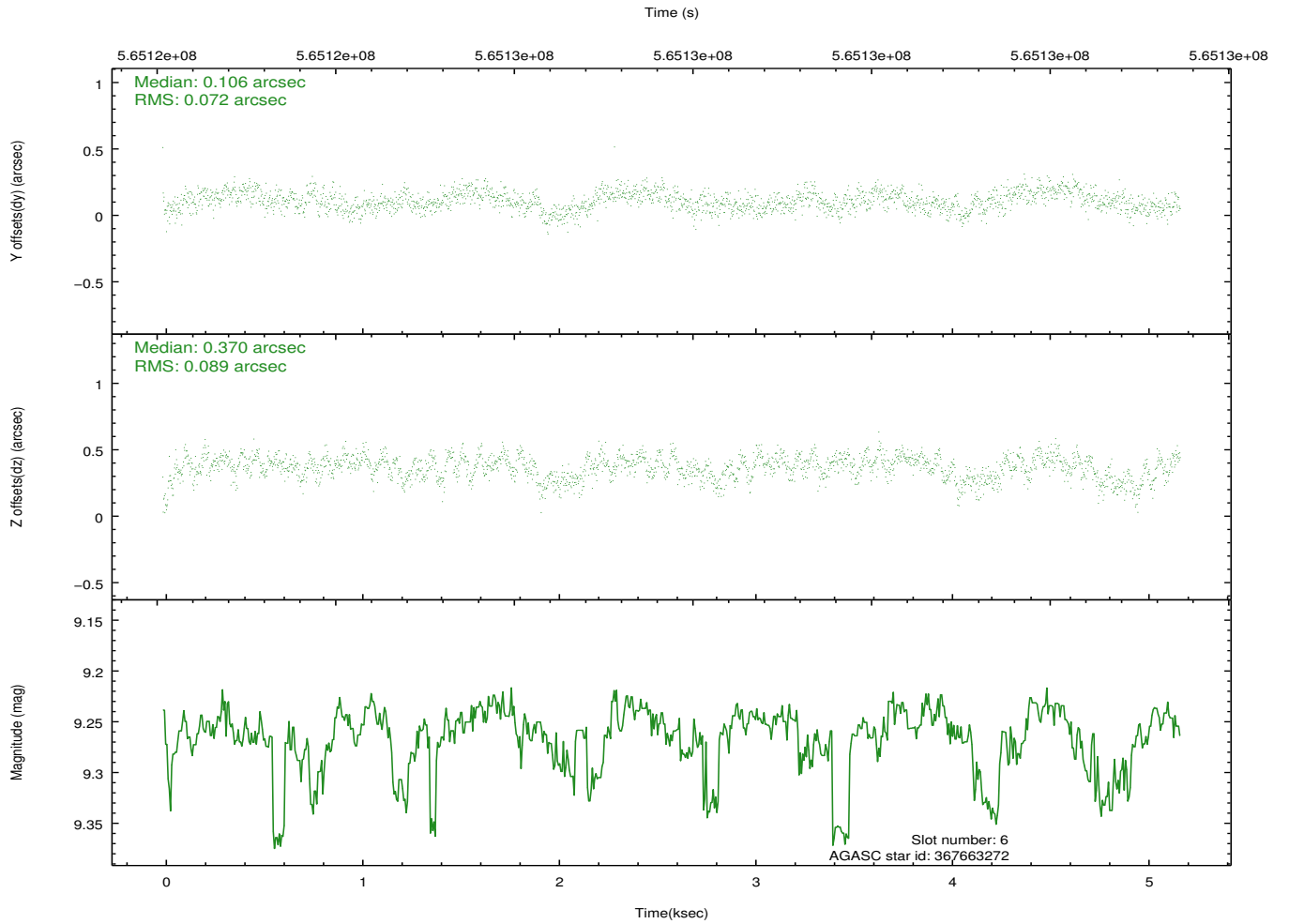
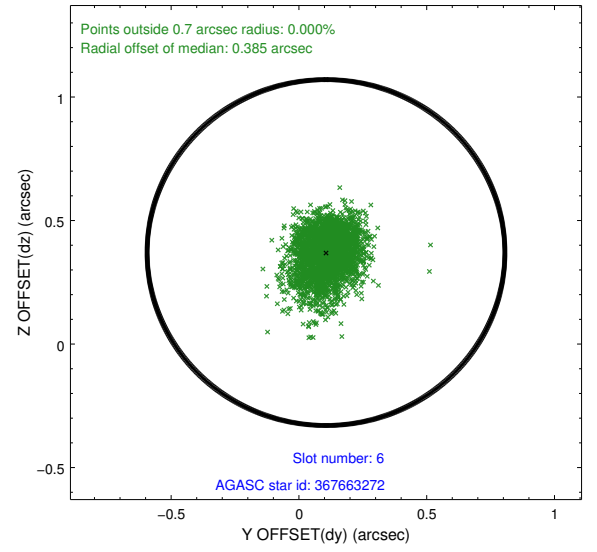
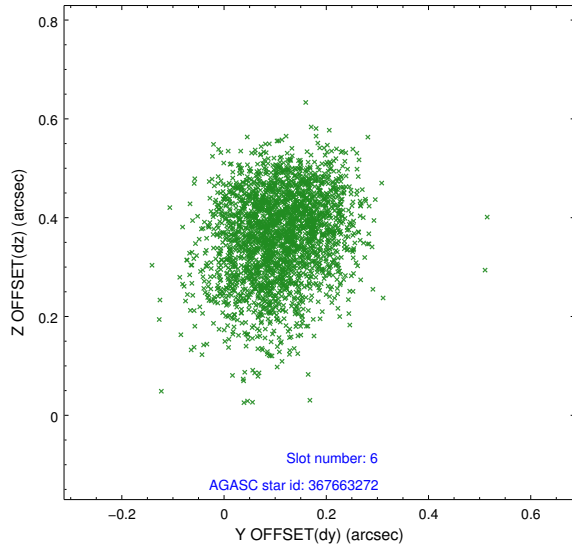
## 2.4.2 Slot 4



### 2.4.3 Slot 5

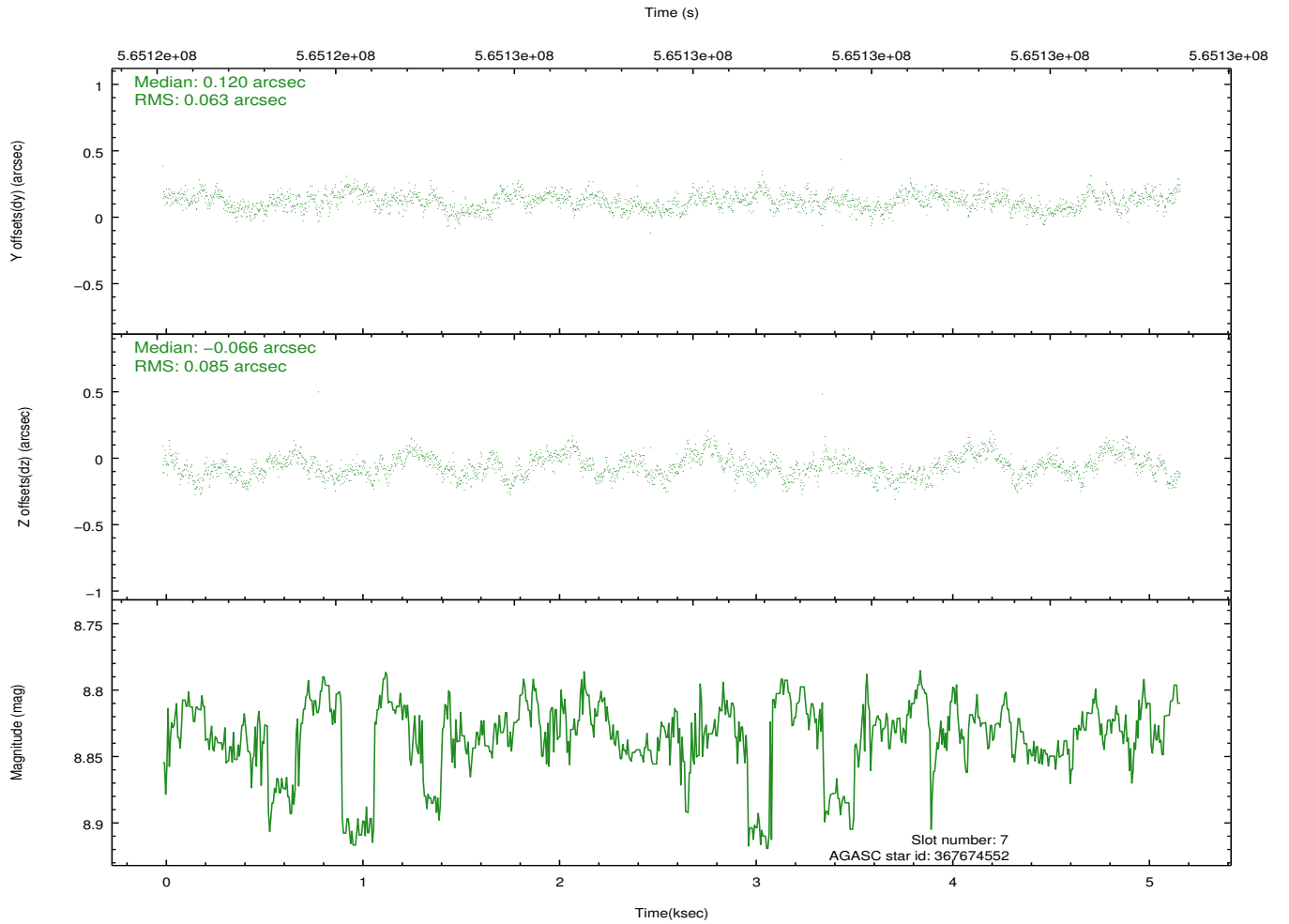
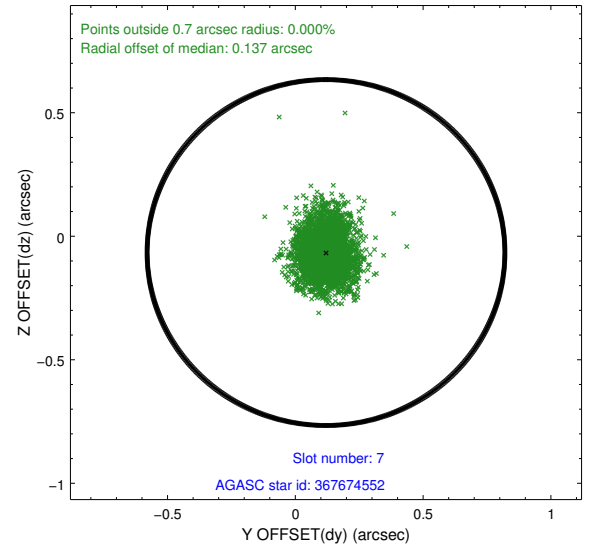
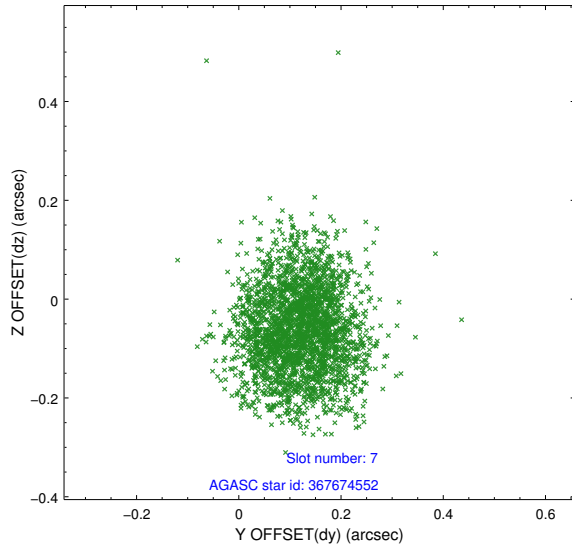


## 2.4.4 Slot 6



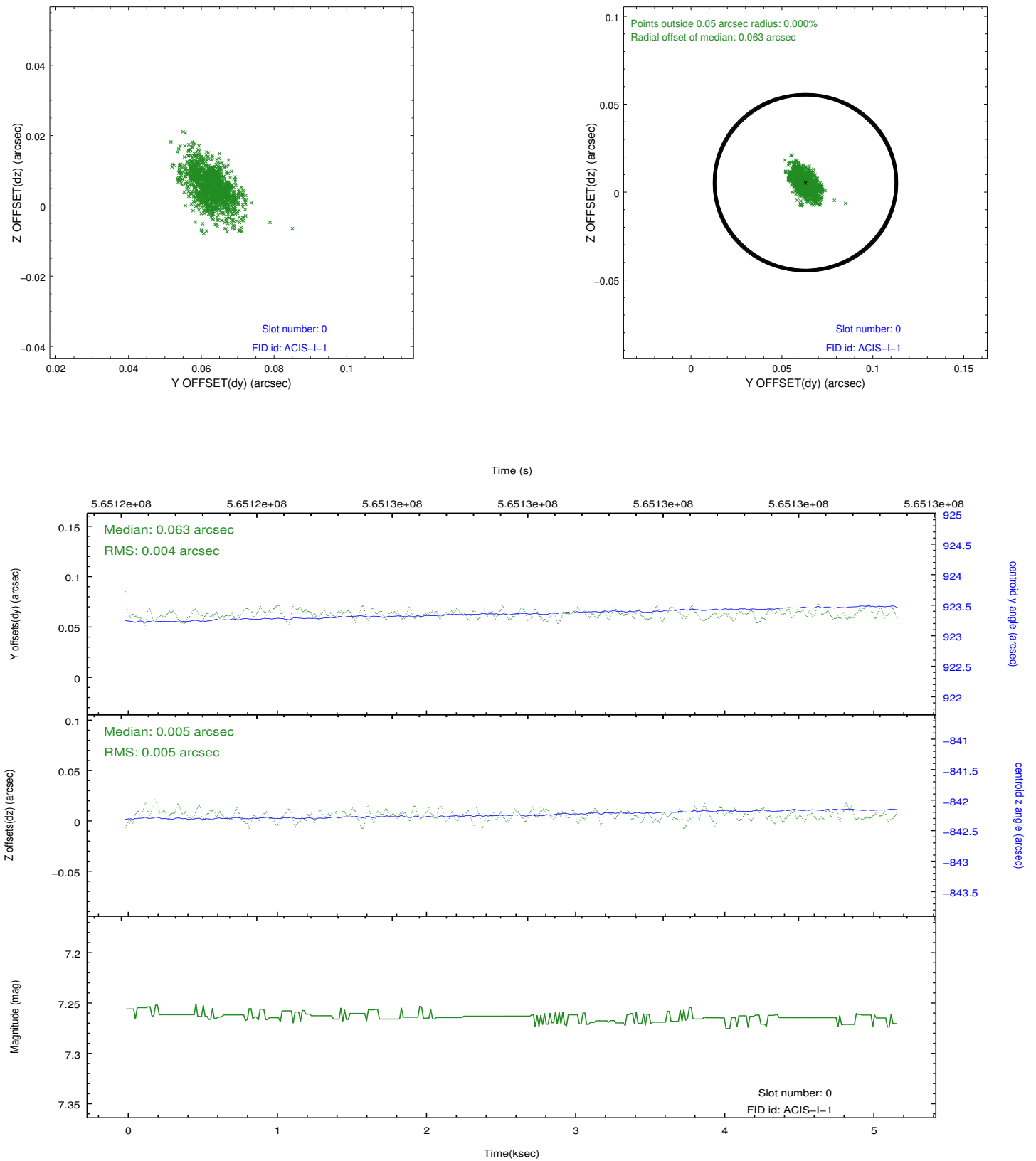


## 2.4.5 Slot 7

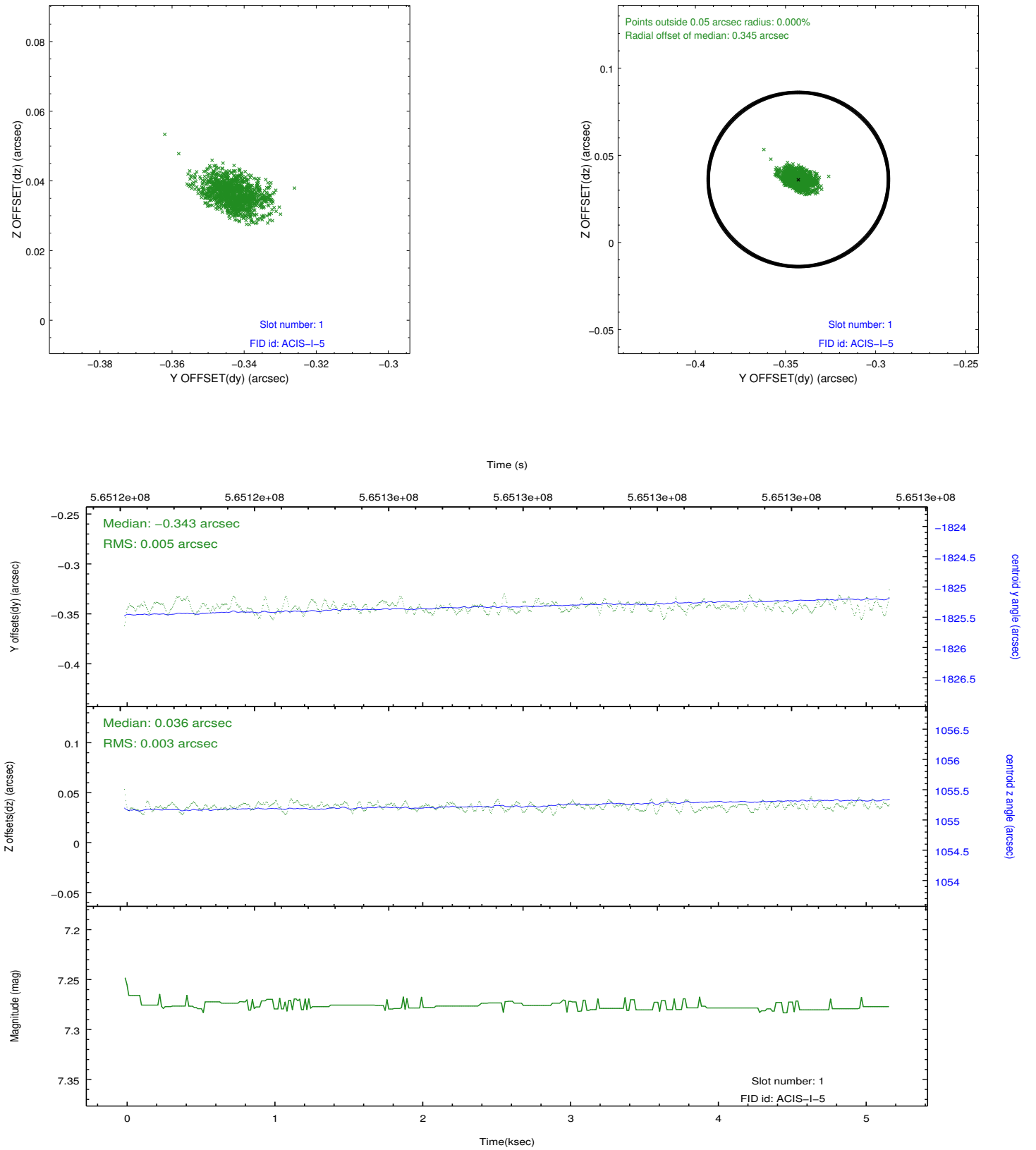


## 2.5 FID Slots

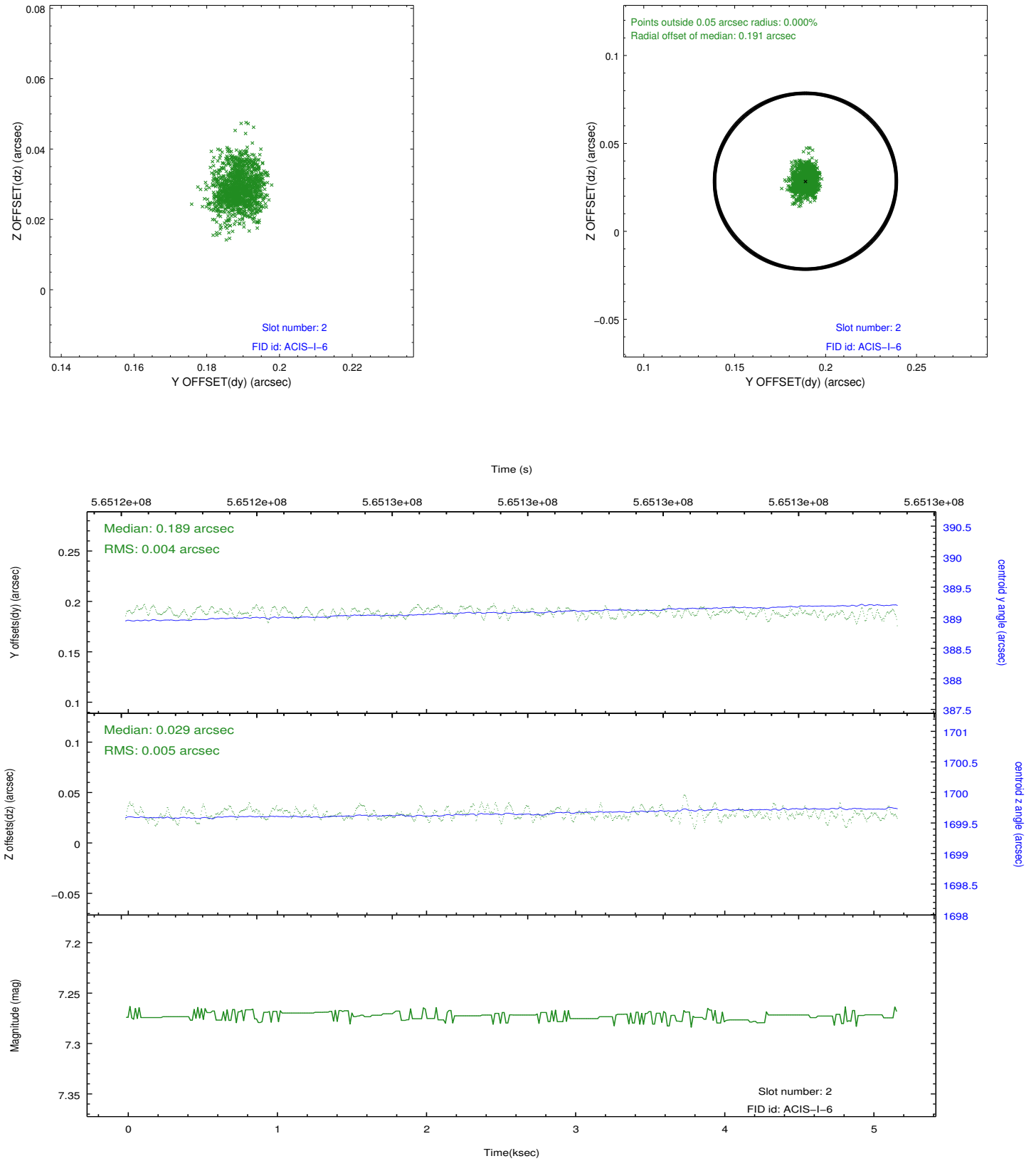
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2015.11.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.0592000390291

### A.2 Comments