

# V&V Reference Report

## L2 ASCDS Version : 7.6.8.1

Observation 4355 - L2 Version 001  
Chandra X-Ray Center

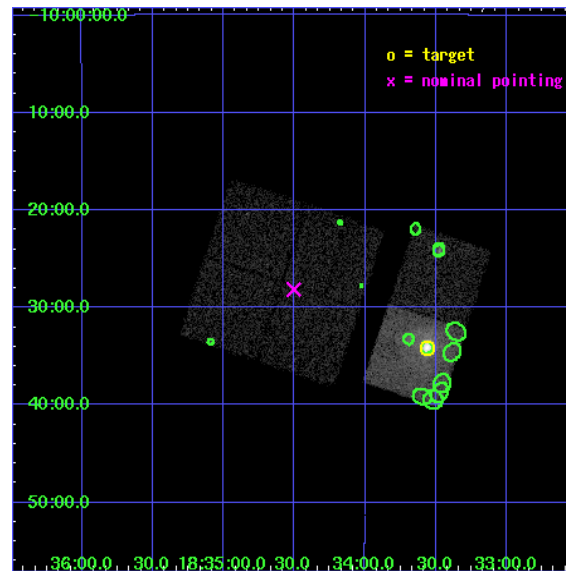
L2 Processing Date : Aug 12 2006

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# 1 Front

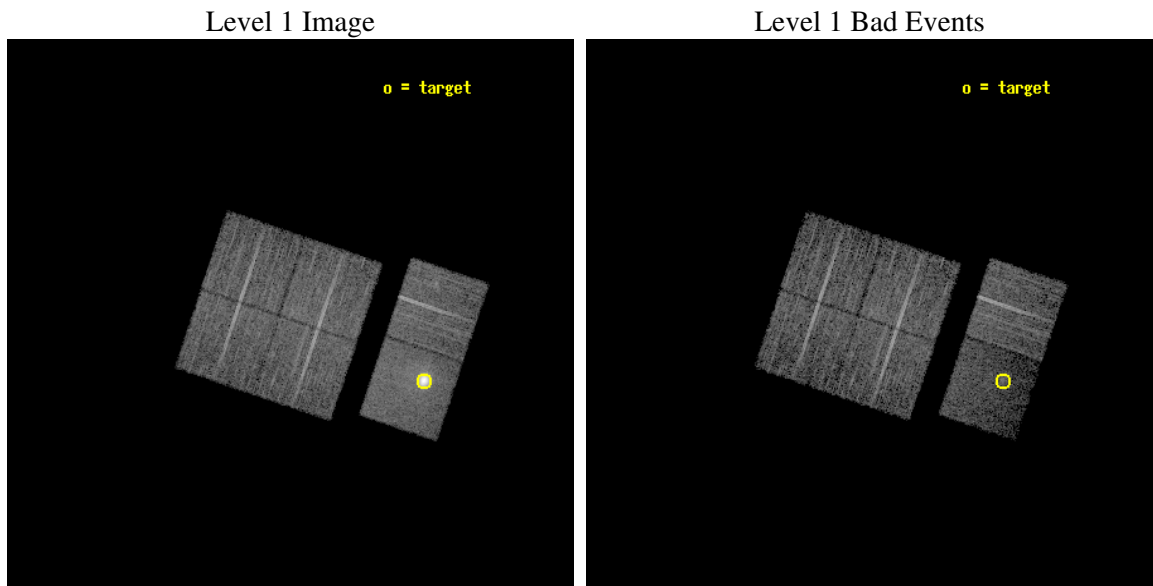
seq_num	590320
obs_id	4355
title	AO4 CALIBRATION OBSERVATIONS TO MEASURE THE MIRROR VIGNETTING
observer	Dr. CXC Calibration
object	G21.5-0.9[Chip S3, T=120, Offsets=-1,15,-2]
dtcycle	0
cycle	P
ra_targ	278.389583
dec_targ	-10.568528
ra_nom	278.62587272427
dec_nom	-10.469258746034
roll_nom	108.61512509031
revision	2
ontime	9558.3999643922
livetime	9437.3657486656
ontime0	9551.917983979
ontime1	9558.3999643922
ontime2	9558.3999643922
ontime3	9558.3999643922
ontime6	9558.3999643922
ontime7	9558.3999643922
l2events	66601



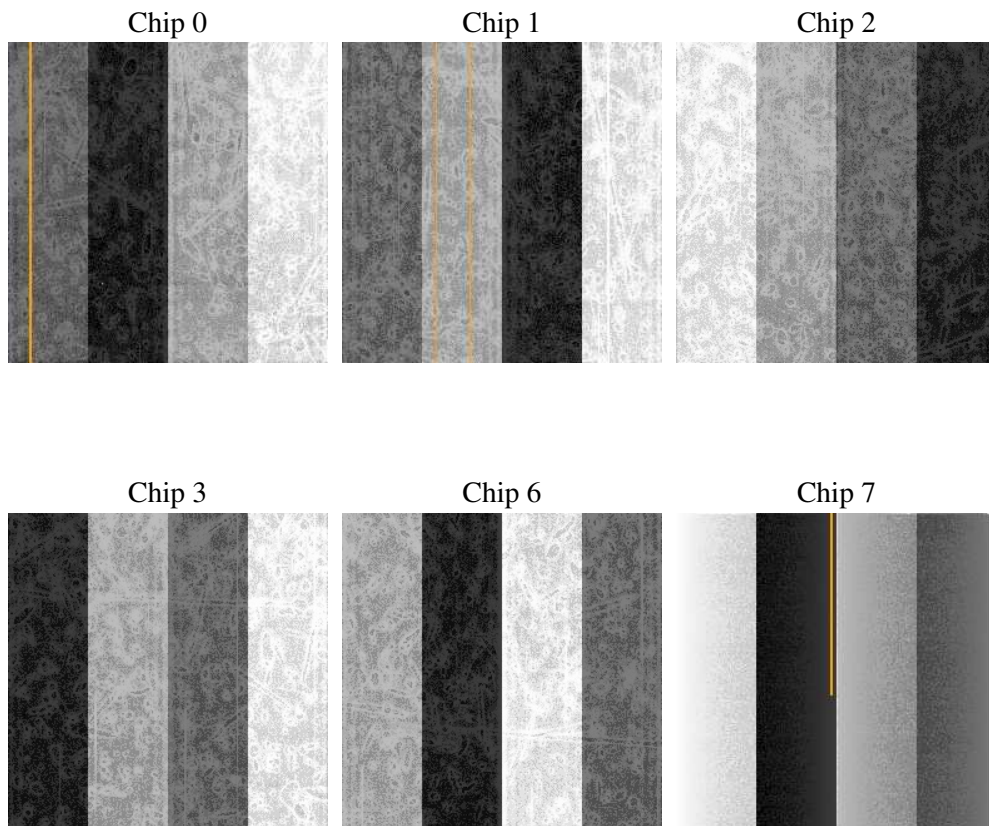
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0
ascdsver	7.6.8.1
caldsver	3.2.3
date	2006-08-12T07:10:51
revision	2

sched_exp_time	9806.000000
ontime	9564.21345523
ontime0	9557.731454879
ontime1	9564.21345523
ontime2	9564.21345523
ontime3	9564.21345523
ontime6	9564.2134352922
ontime7	9564.21345523
l1events	309043

### 2.1.4 Events

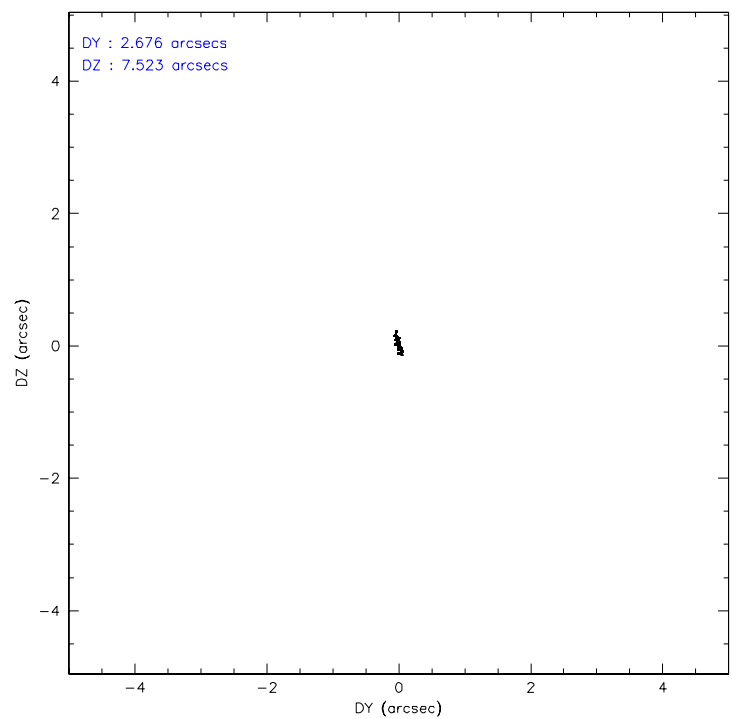
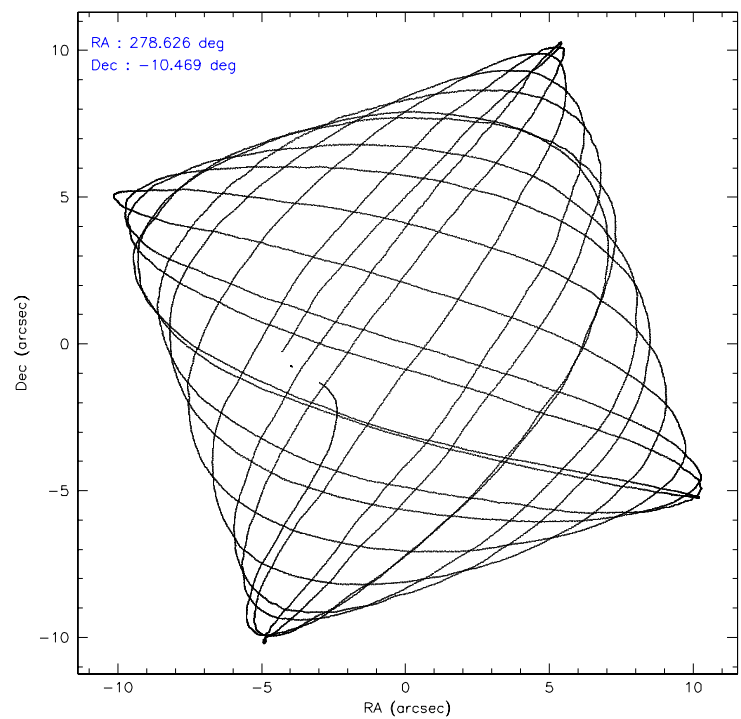
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	45240	44304	51795	47103	50023	70578
rejected events	40422	39248	46815	42614	44052	24331
rejected %	89%	88%	90%	90%	88%	34%

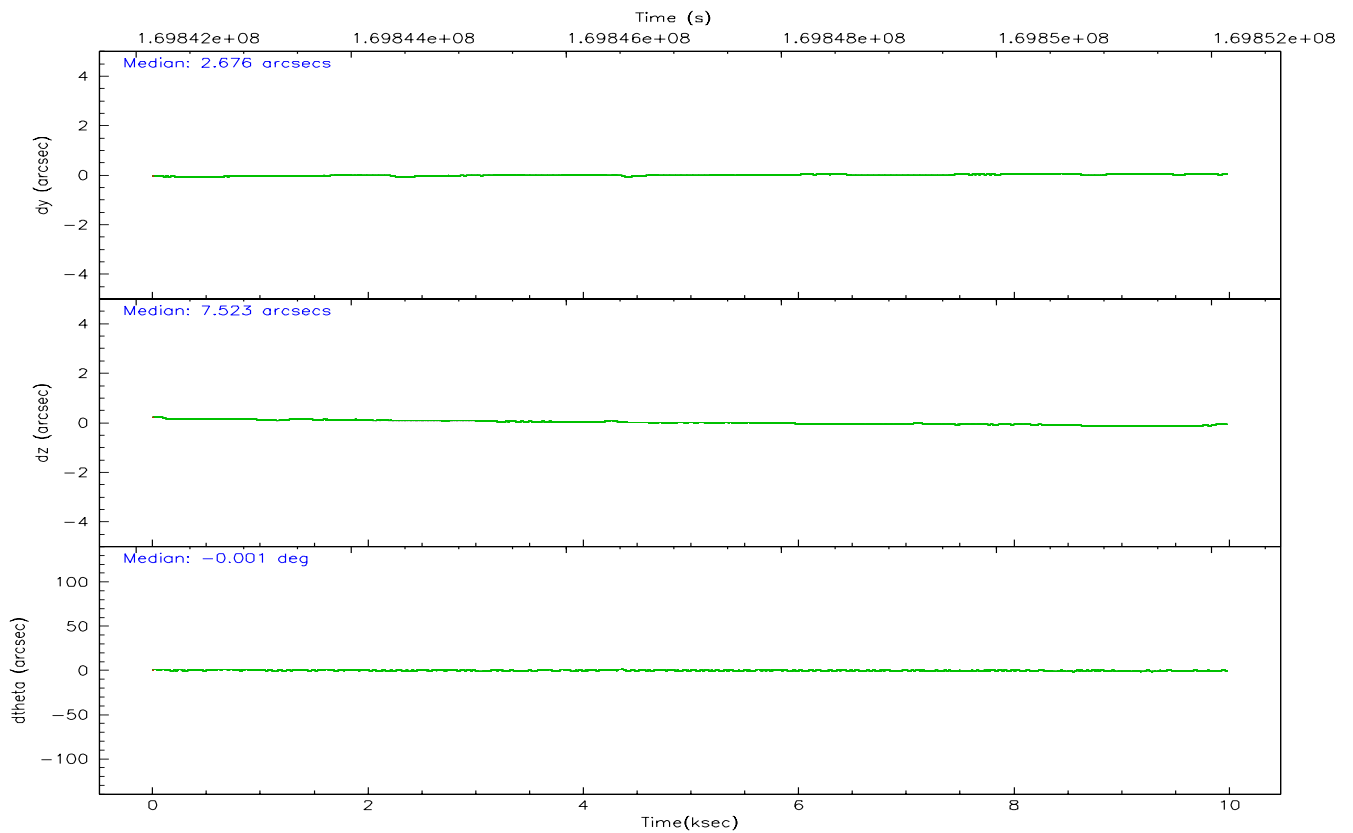
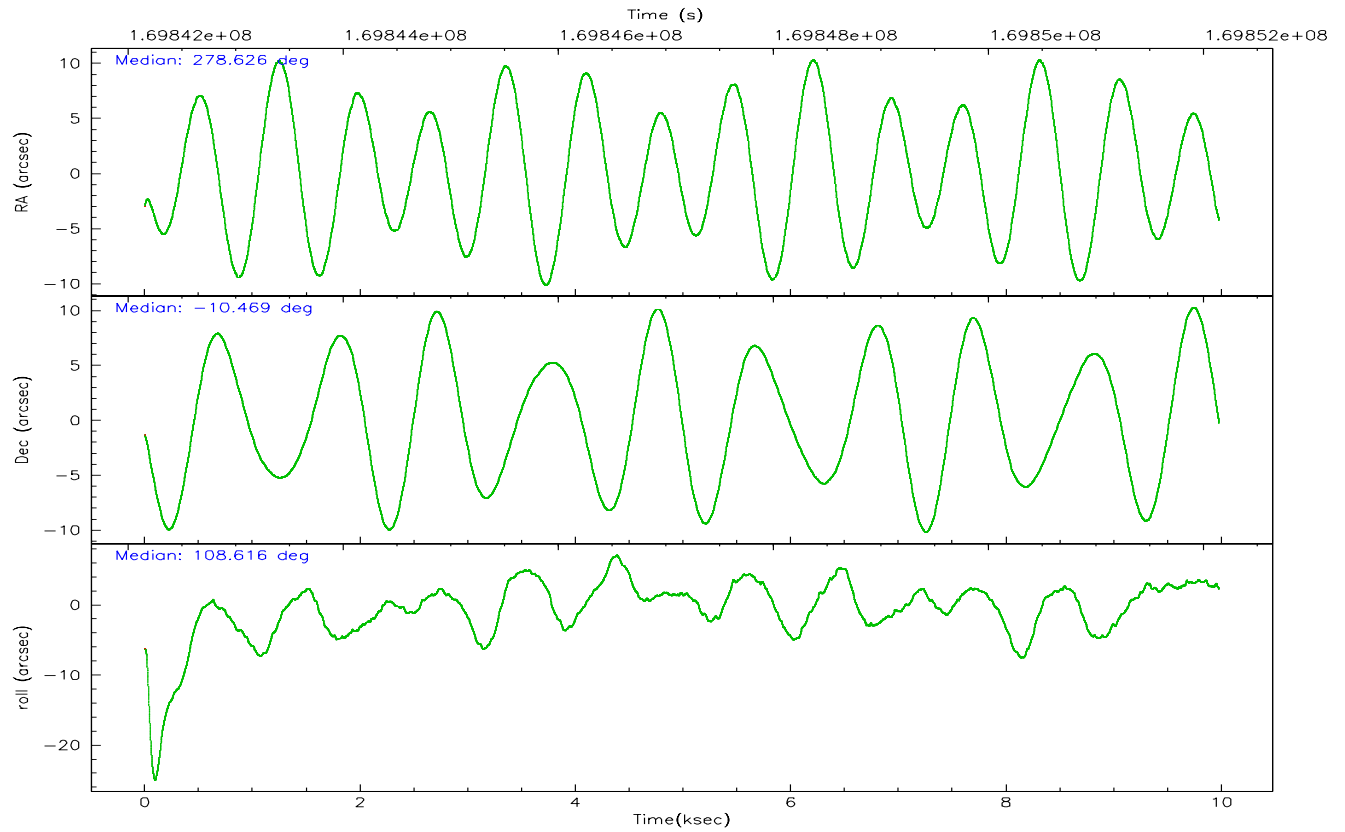
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	1805	1872	2072	1726	2647	6581
	3%	4%	4%	3%	5%	9%
grade 1 events	22	18	21	26	21	29
	0%	0%	0%	0%	0%	0%
grade 2 events	1107	1084	1054	919	1210	12162
	2%	2%	2%	1%	2%	17%
grade 3 events	549	602	547	525	609	4101
	1%	1%	1%	1%	1%	5%
grade 4 events	513	580	575	540	529	4010
	1%	1%	1%	1%	1%	5%
grade 5 events	1355	1507	1290	1556	1617	3722
	2%	3%	2%	3%	3%	5%
grade 6 events	846	919	733	781	978	19421
	1%	2%	1%	1%	1%	27%
grade 7 events	39043	37722	45503	41030	42412	20552
	86%	85%	87%	87%	84%	29%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-012367	ACIS-012367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	On-chip summing requested	N	N
Observation mode	POINTING	POINTING	Subarray requested	NONE	NONE
Pointing RA	278.646859	278.6258727242656	Alternating exposures requested	N	N
Pointing Dec	-10.487258	-10.46925874603438	Primary exposure time	0.000000	3.2
Pointing Roll	108.410237	108.6151250903086			
Window start time	168134464.184000	168134464.184000			
Window stop time	173318464.184000	173318464.184000			
SIM focus pos (mm)	-0.782348	-0.7809083437167272			
SIM defocus (mm)	0	0.001439871863259334			
SIM translation stage pos (mm)	-231.230463	-231.2340353385685			
SIM translation stage offset (mm)	-2.362	-2.358417664361156			
Observation start time	169842335.184000	169841966.6506			
Observation start date	2003-05-20T18:24:31	2003-05-20T18:19:26			
Observation end time	169852141.184000	169853066.37607			
Observation end date	2003-05-20T21:07:57	2003-05-20T21:24:26			
Read mode	TIMED	TIMED			

## 2.3 Aspect





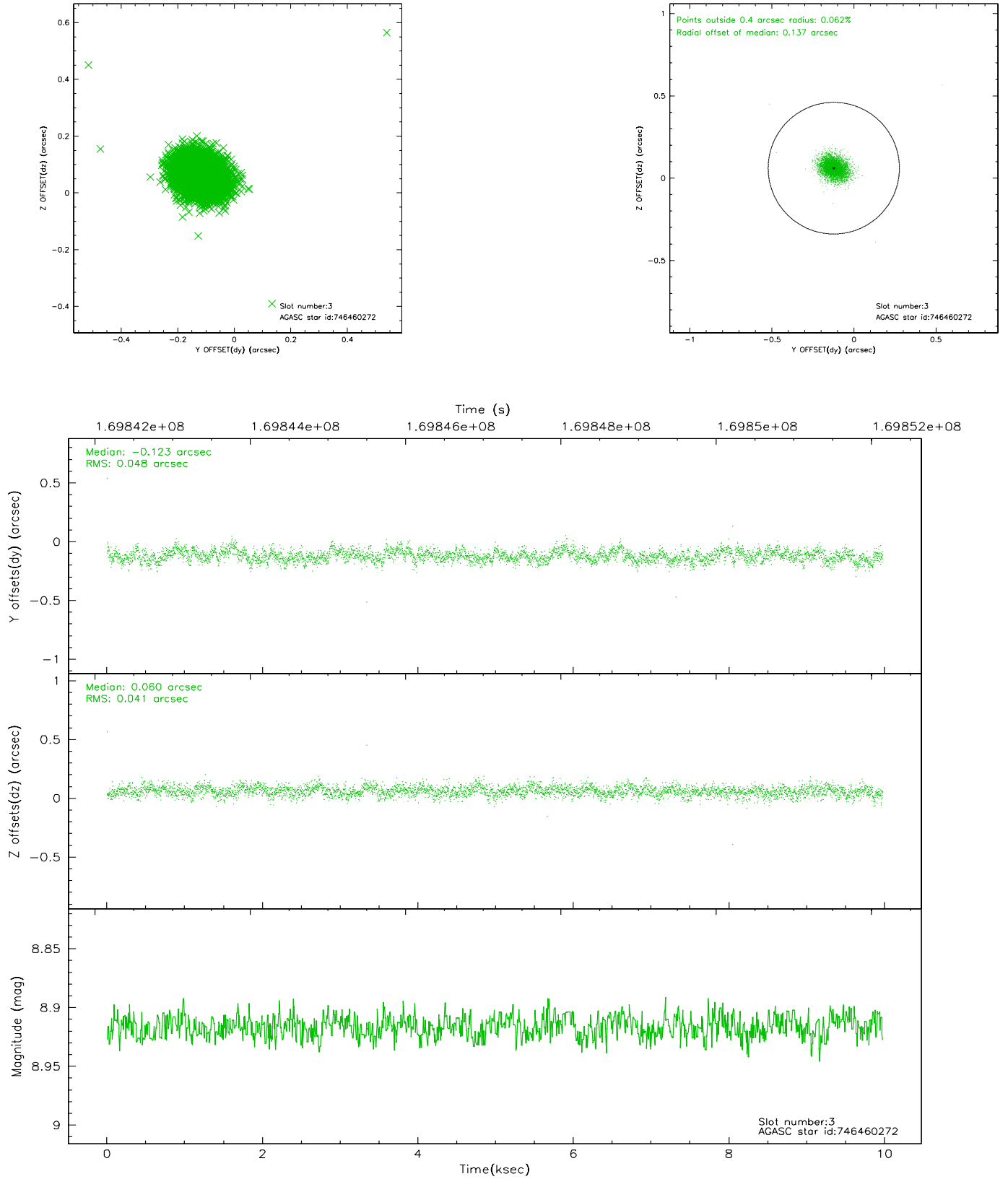
### Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.25	2434	-0.012	0.019	0.006	0.010	0.000000	0.000000	937.05	-879.28
1	FID	ACIS-I-5	7.23	2433	-0.078	0.031	0.006	0.010	0.000000	0.000000	-1810.79	1017.98
2	FID	ACIS-I-6	7.23	2434	-0.001	0.021	0.007	0.011	0.000000	0.000000	402.08	1663.04
3	GUIDE	746460272	8.92	4866	-0.123	0.060	0.065	0.105	278.847488	-10.152127	920.24	-1055.45
4	GUIDE	746460328	9.79	4863	-0.106	0.048	0.125	0.207	278.603974	-9.898096	2060.69	-525.60
5	GUIDE	746462392	8.52	4867	0.110	0.076	0.069	0.112	279.038421	-10.890715	-1815.96	-854.61
6	GUIDE	746462456	8.39	4868	0.063	-0.241	0.064	0.103	278.652171	-10.530173	-152.90	30.63
7	GUIDE	746462896	9.64	4858	0.057	0.056	0.102	0.164	279.425007	-10.726062	-1687.99	-2338.71

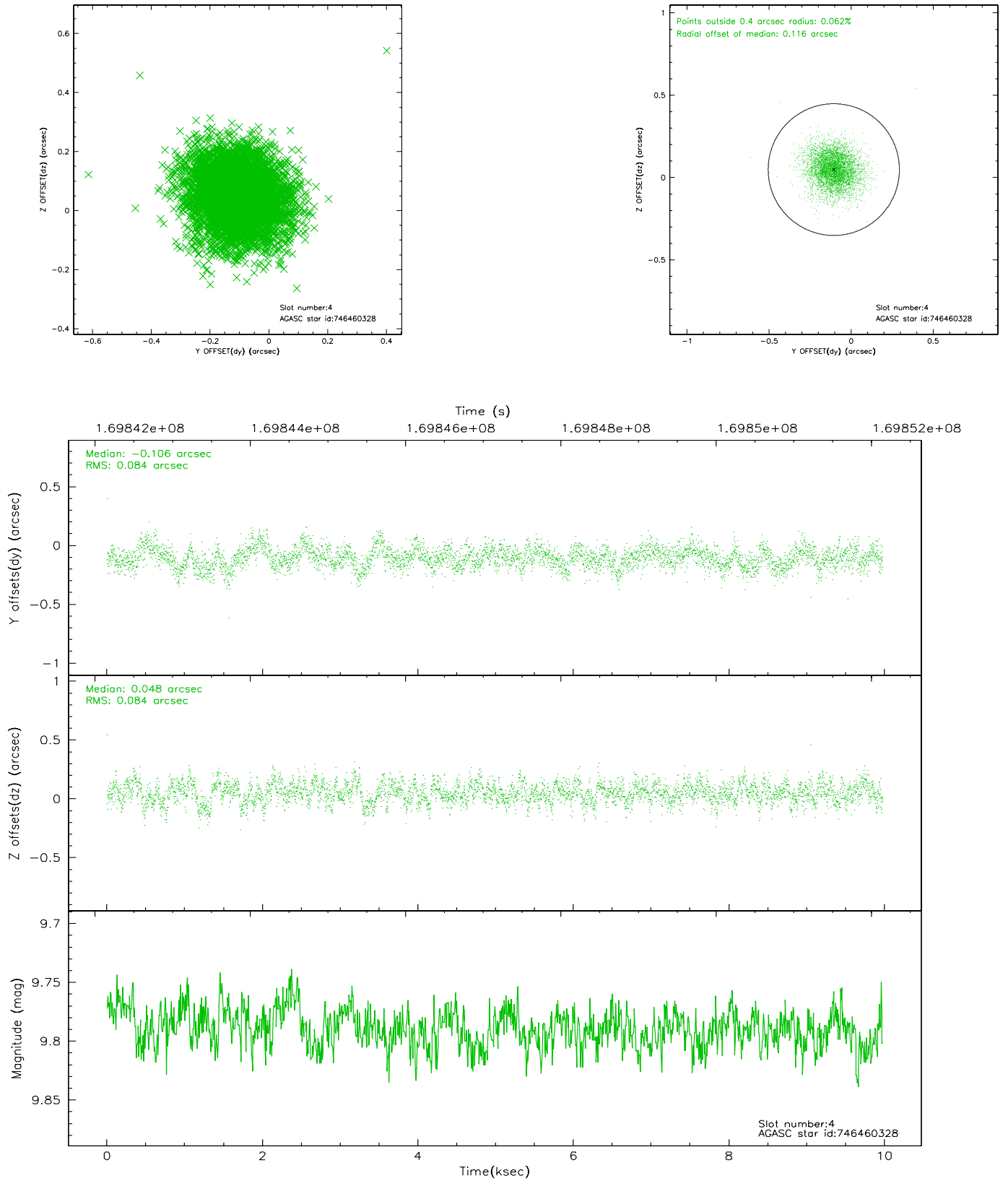


## 2.4 Star Slots

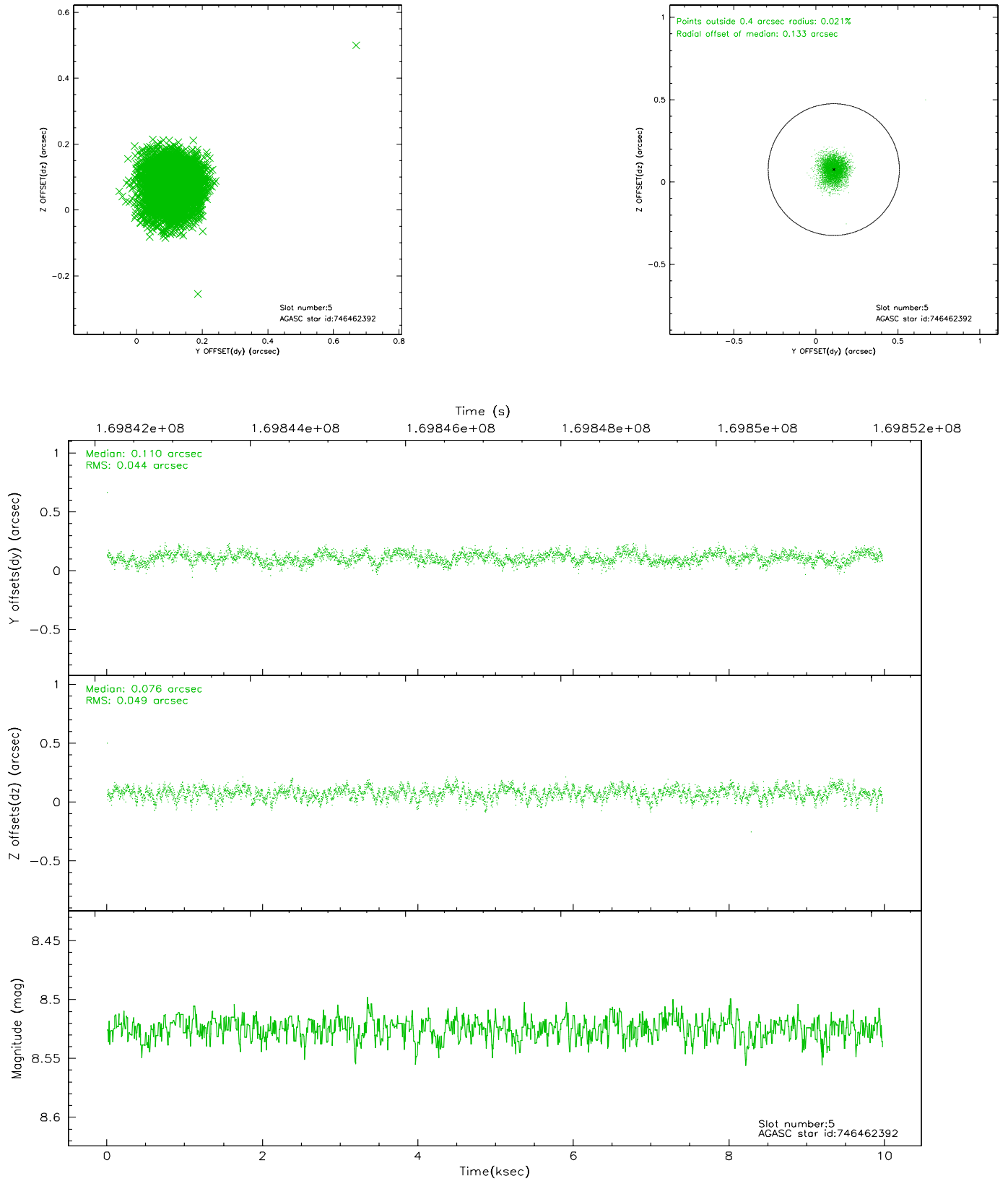
### 2.4.1 Slot 3



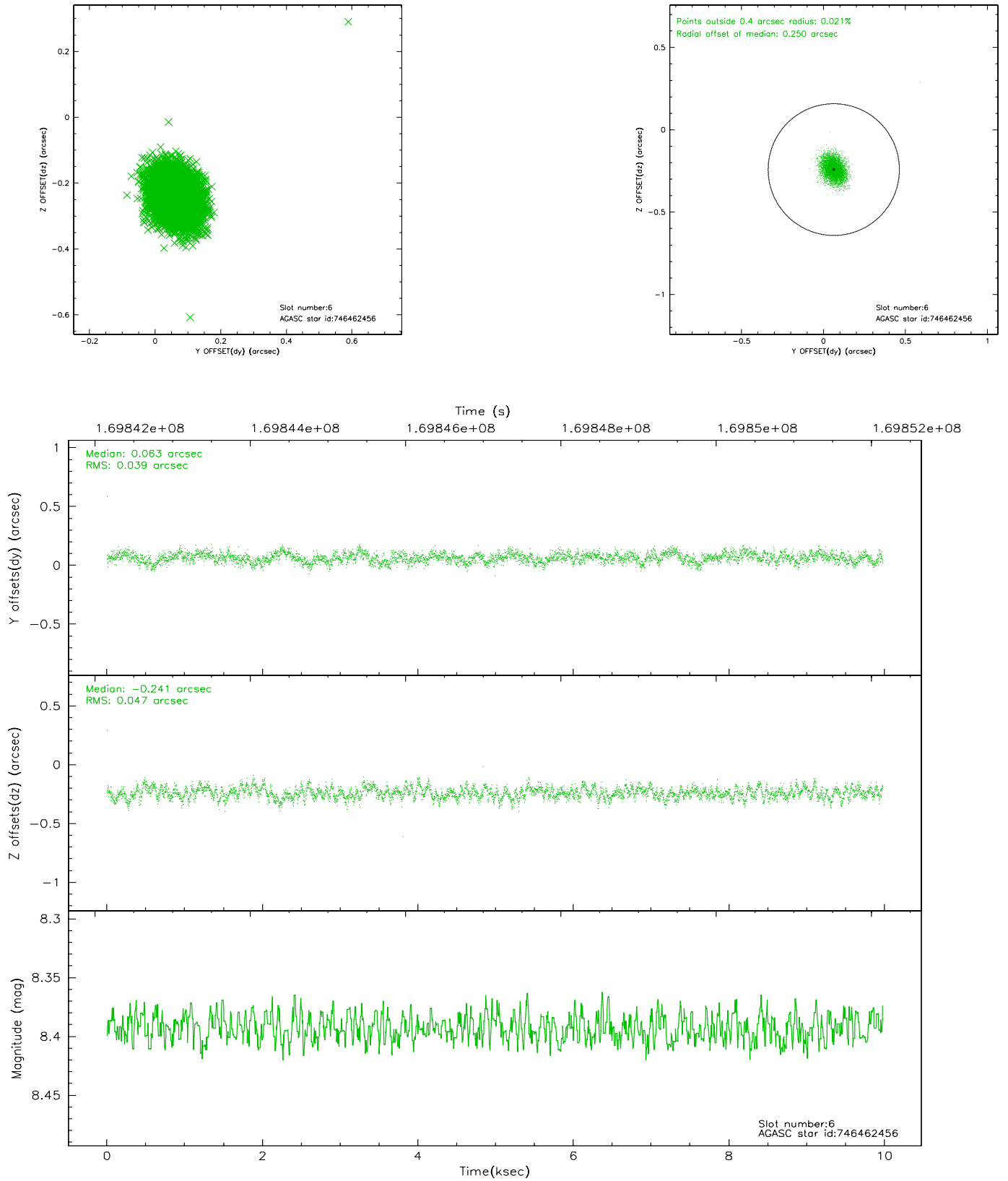
## 2.4.2 Slot 4



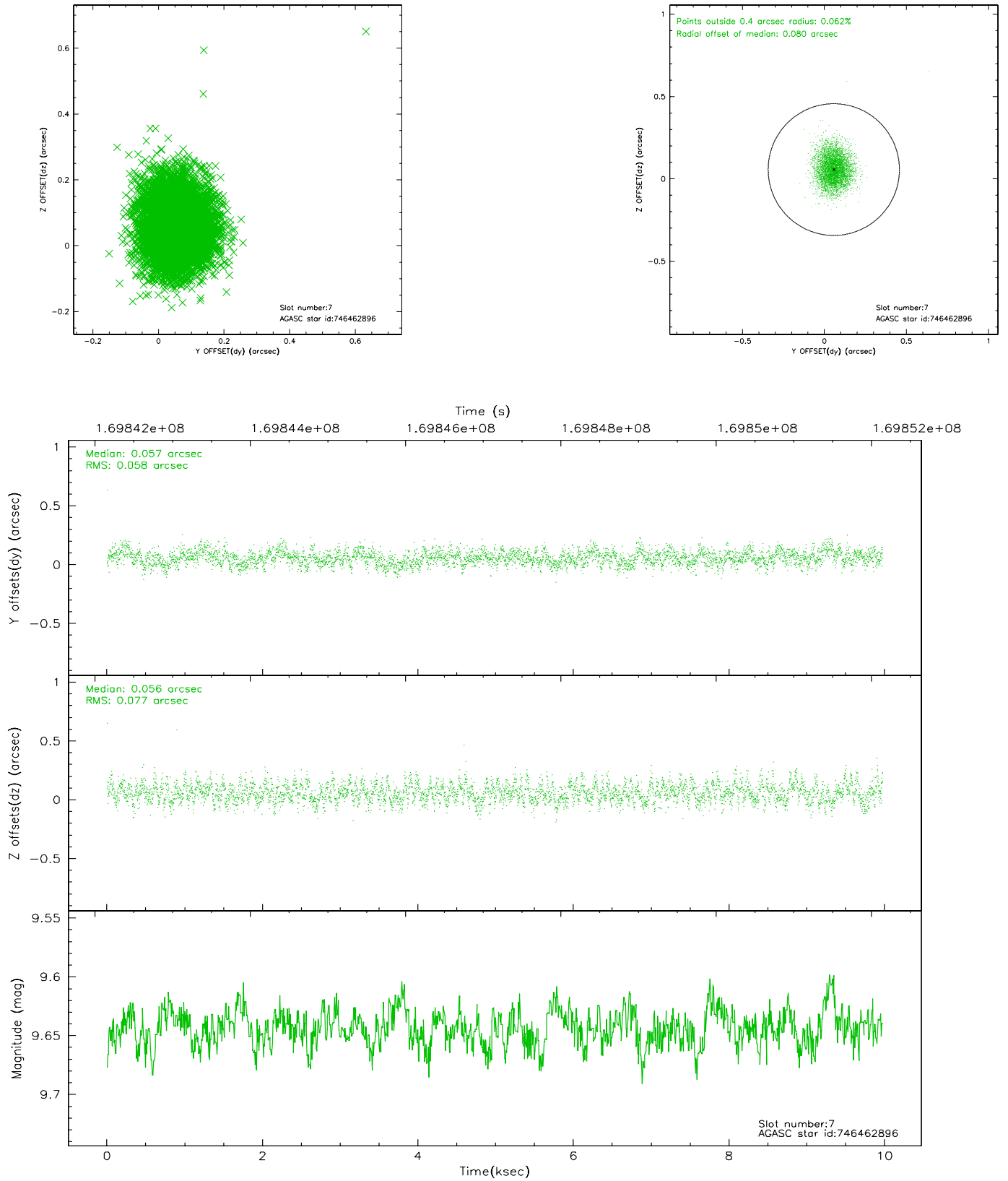
### 2.4.3 Slot 5



## 2.4.4 Slot 6

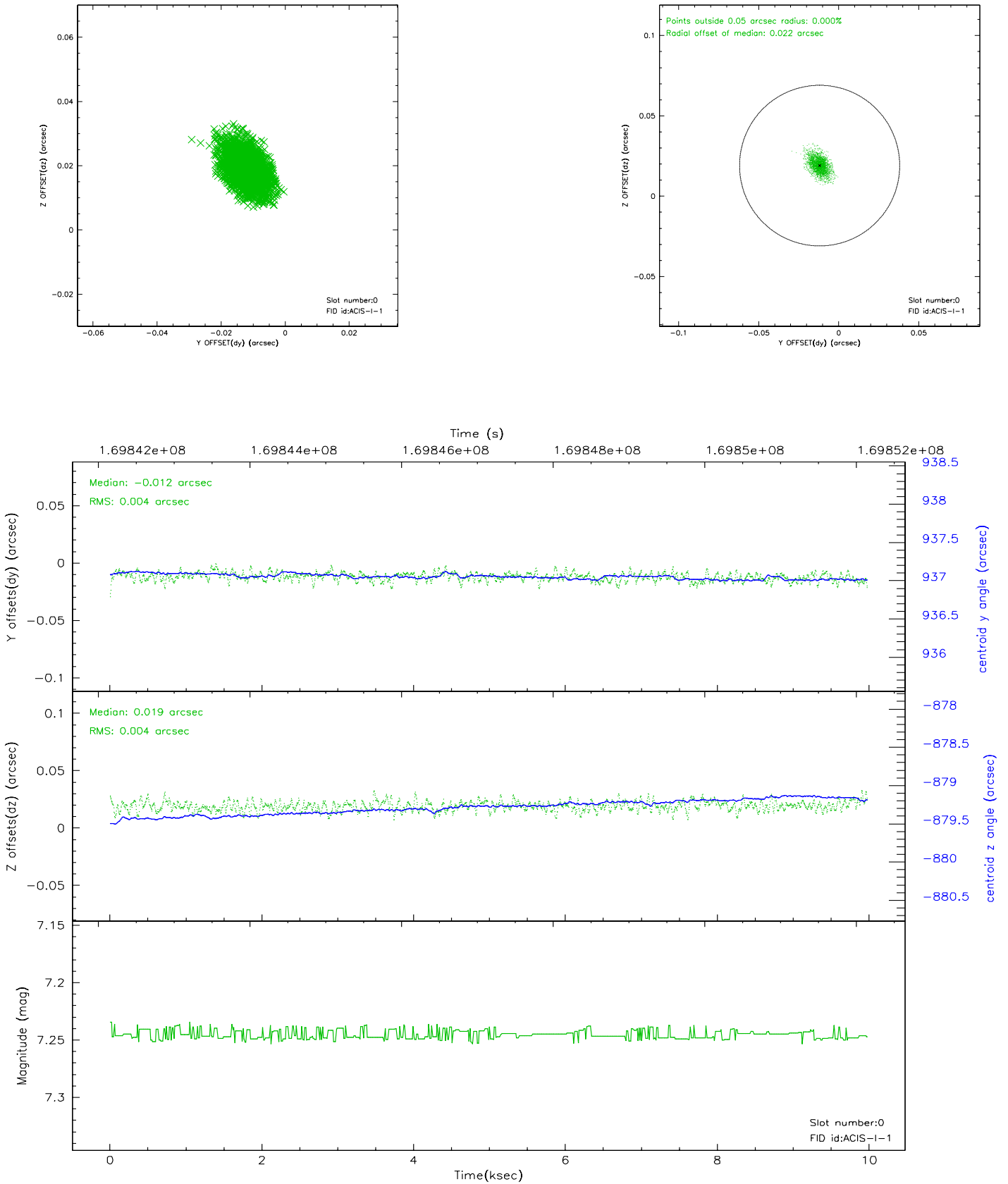


## 2.4.5 Slot 7

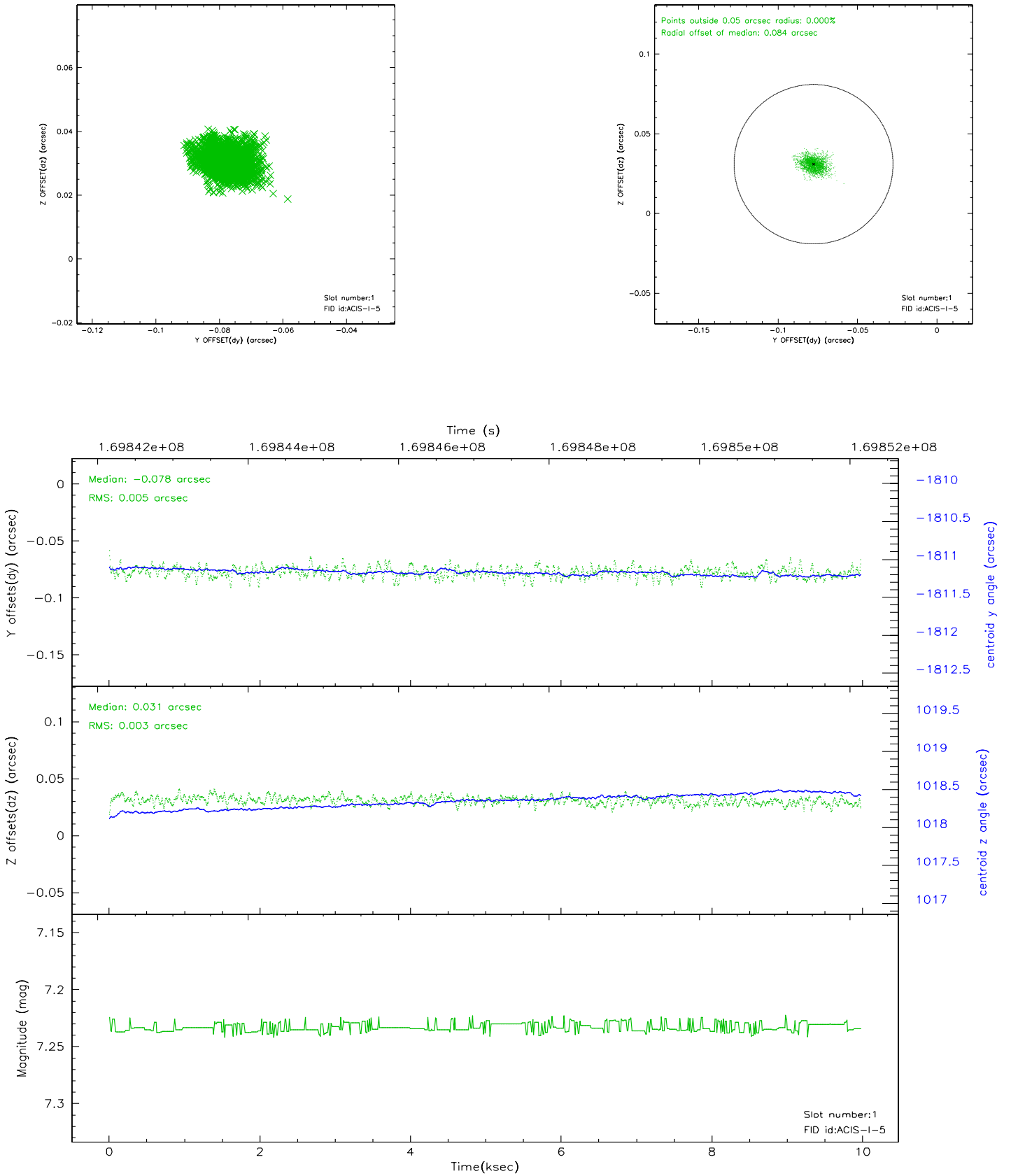


## 2.5 FID Slots

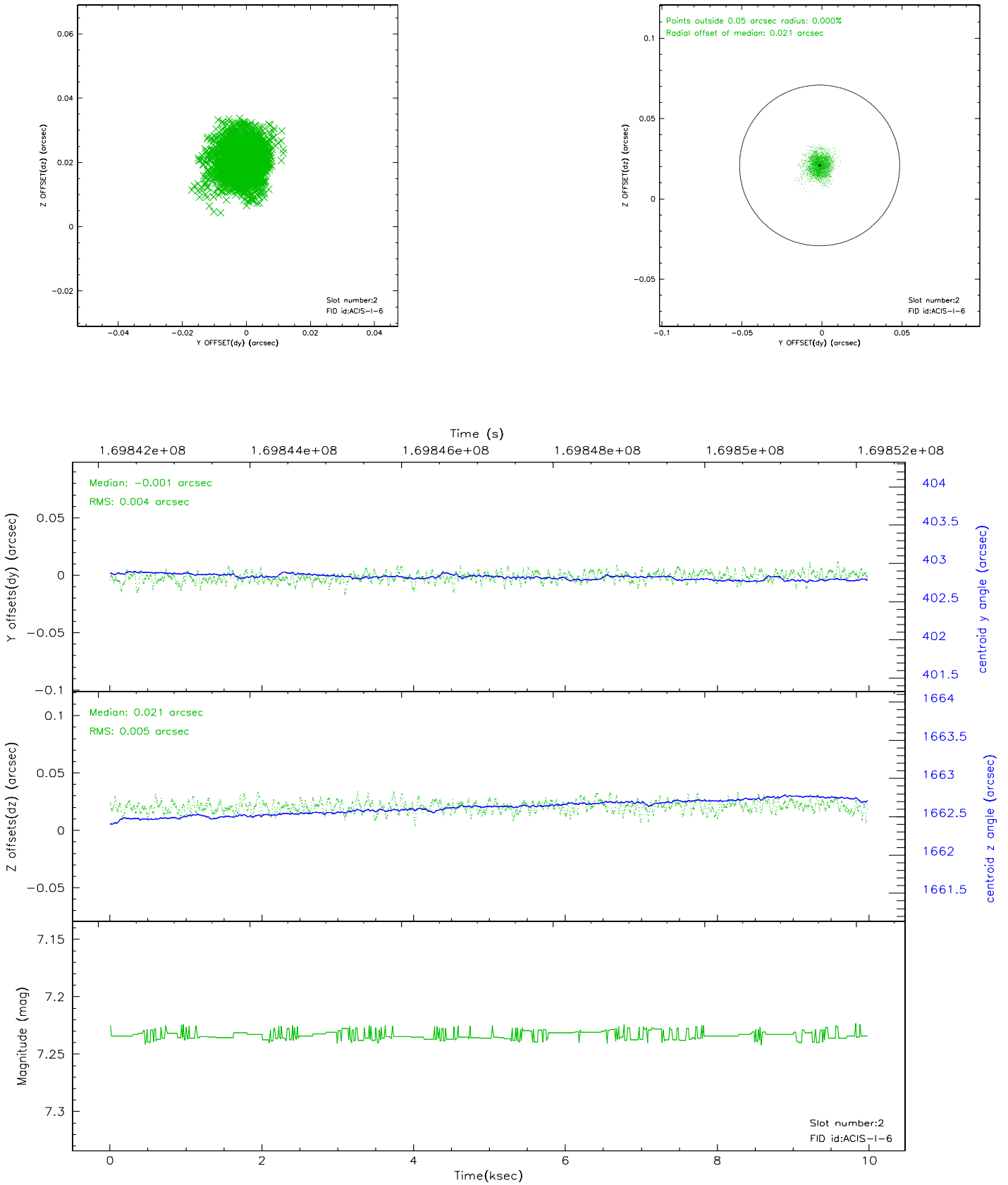
### 2.5.1 Slot 0



## 2.5.2 Slot 1

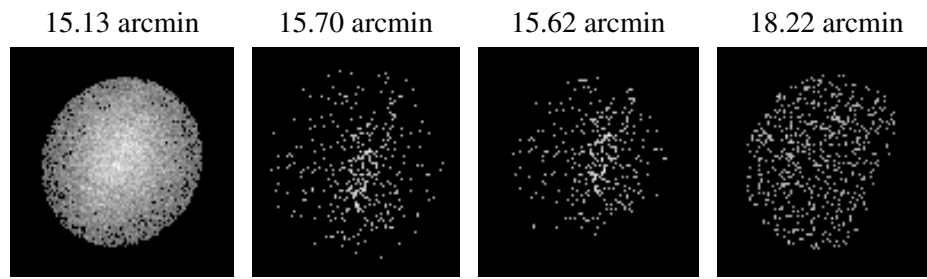


### 2.5.3 Slot 2





### 3 Point Sources



## A Summary

### A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2006.08.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.561

### A.2 Comments

Window constraint met.