

# V&V Reference Report

## L2 ASCDS Version : 7.6.9

Observation 2421 - L2 Version 001  
Chandra X-Ray Center

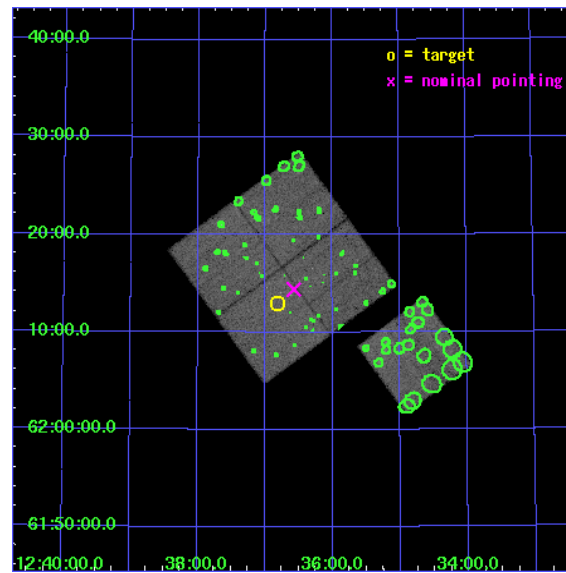
L2 Processing Date : Nov 7 2006

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# 1 Front

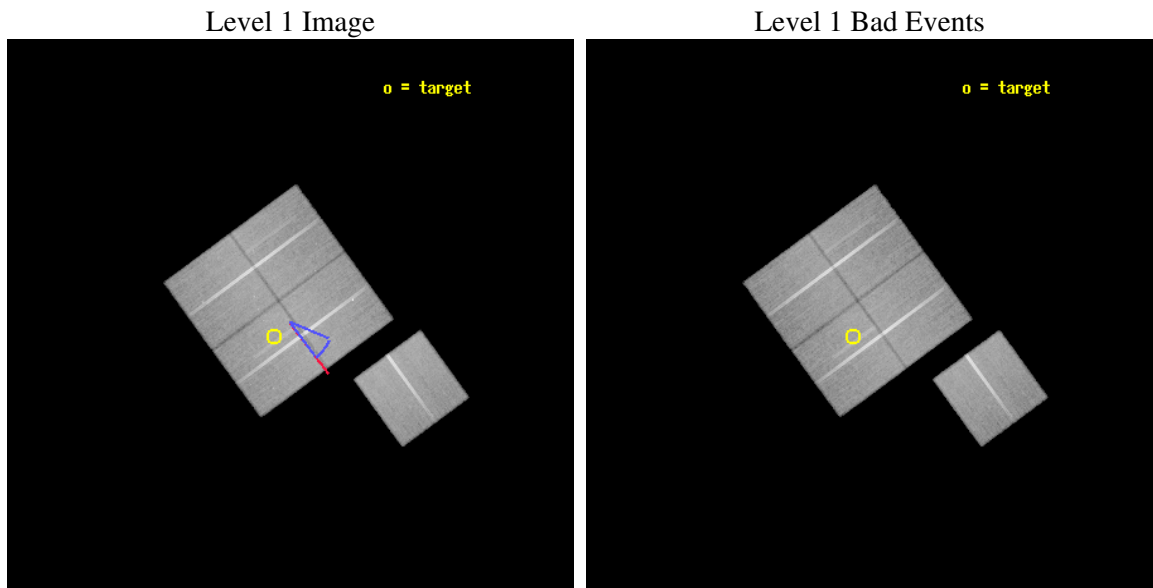
seq_num	900061
obs_id	2421
title	THE CHANDRA DEEP SURVEY OF THE HUBBLE DEEP FIELD NORTH (HDF-N) AREA
observer	Prof. William Brandt
object	HDF-N
dtcycle	0
cycle	P
ra_targ	189.205833
dec_targ	62.216111
ra_nom	189.14306586384
dec_nom	62.240034786902
roll_nom	143.76422055279
revision	2
ontime	62461.899879903
livetime	61645.78917419
ontime0	62455.61795941
ontime1	62461.899879903
ontime2	62458.758919656
ontime3	62461.899879903
ontime6	62455.617939487
l2events	197280



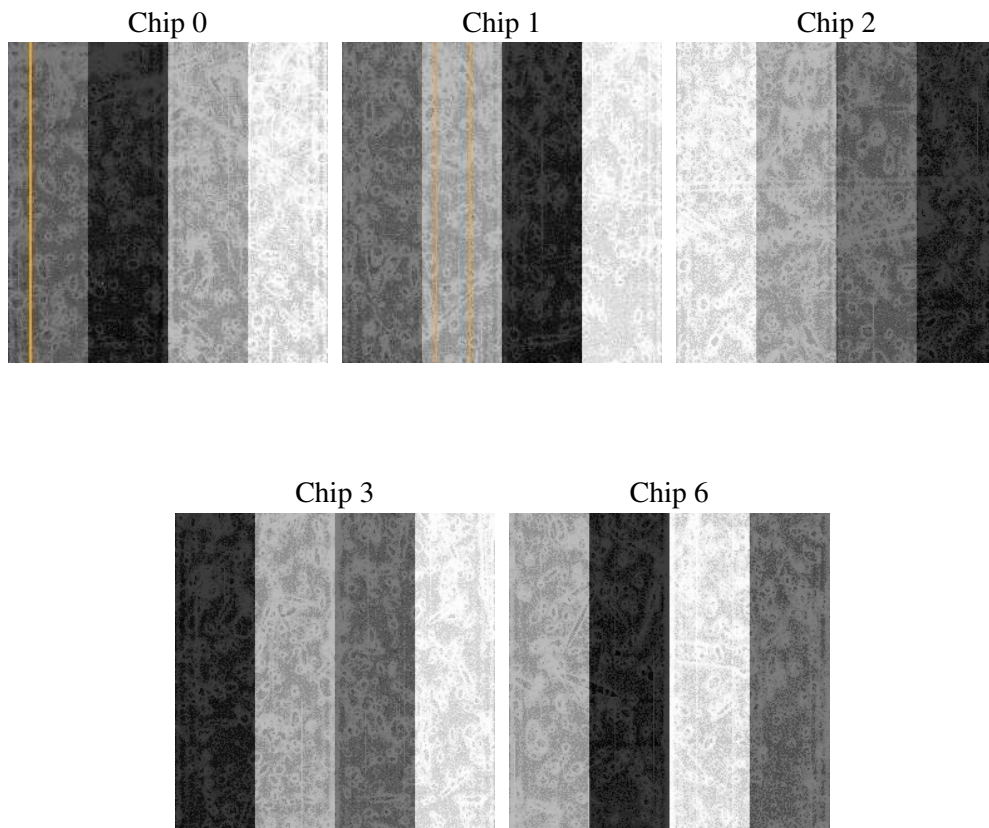
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1
ascdsver	7.6.9
caldbver	3.2.3
date	2006-11-07T22:55:25
revision	2

sched_exp_time	62400.000000
ontime	62468.195093751
ontime0	62461.913173258
ontime1	62468.195093751
ontime2	62465.054133505
ontime3	62468.195093751
ontime6	62461.913153335
l1events	1968403

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	372918	378379	410208	407273	399625
rejected events	326686	330116	364638	362425	354067
rejected %	87%	87%	88%	88%	88%

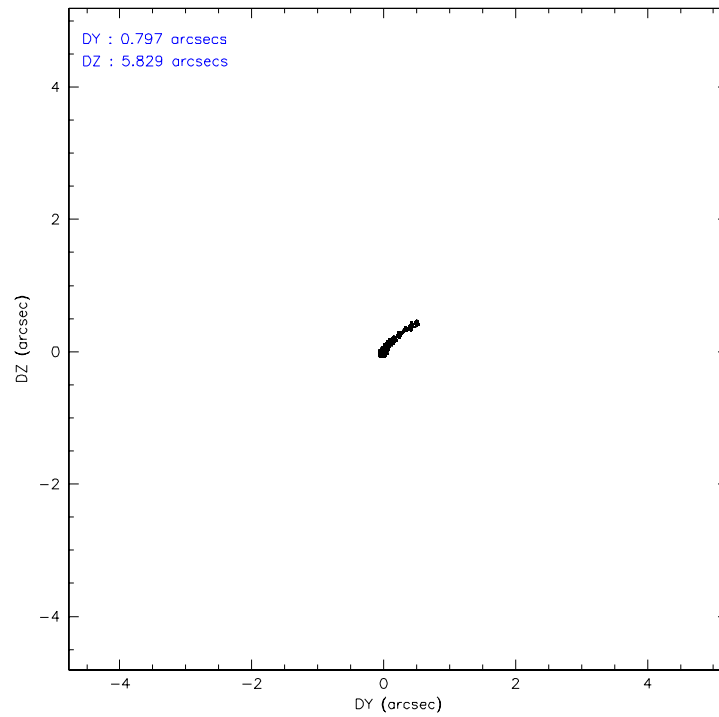
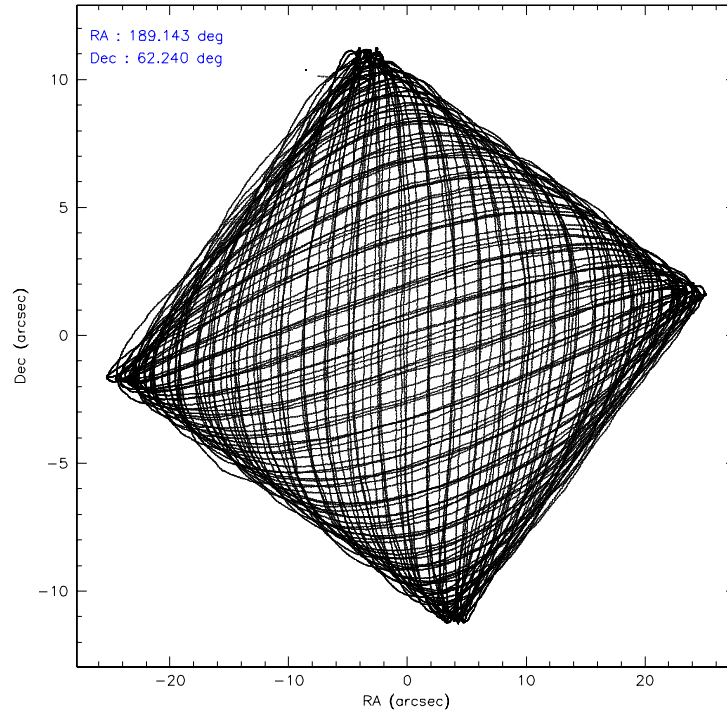
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	19586	19399	19879	19060	18562
	5%	5%	4%	4%	4%
grade 1 events	183	174	179	178	175
	0%	0%	0%	0%	0%
grade 2 events	9540	9935	9727	9016	8961
	2%	2%	2%	2%	2%
grade 3 events	4688	5042	4225	4348	4656
	1%	1%	1%	1%	1%
grade 4 events	4368	5025	4183	4431	4487
	1%	1%	1%	1%	1%
grade 5 events	14452	15454	13666	15423	16537
	3%	4%	3%	3%	4%
grade 6 events	8055	8867	7561	8000	8897
	2%	2%	1%	1%	2%
grade 7 events	312046	314483	350788	346817	337350
	83%	83%	85%	85%	84%

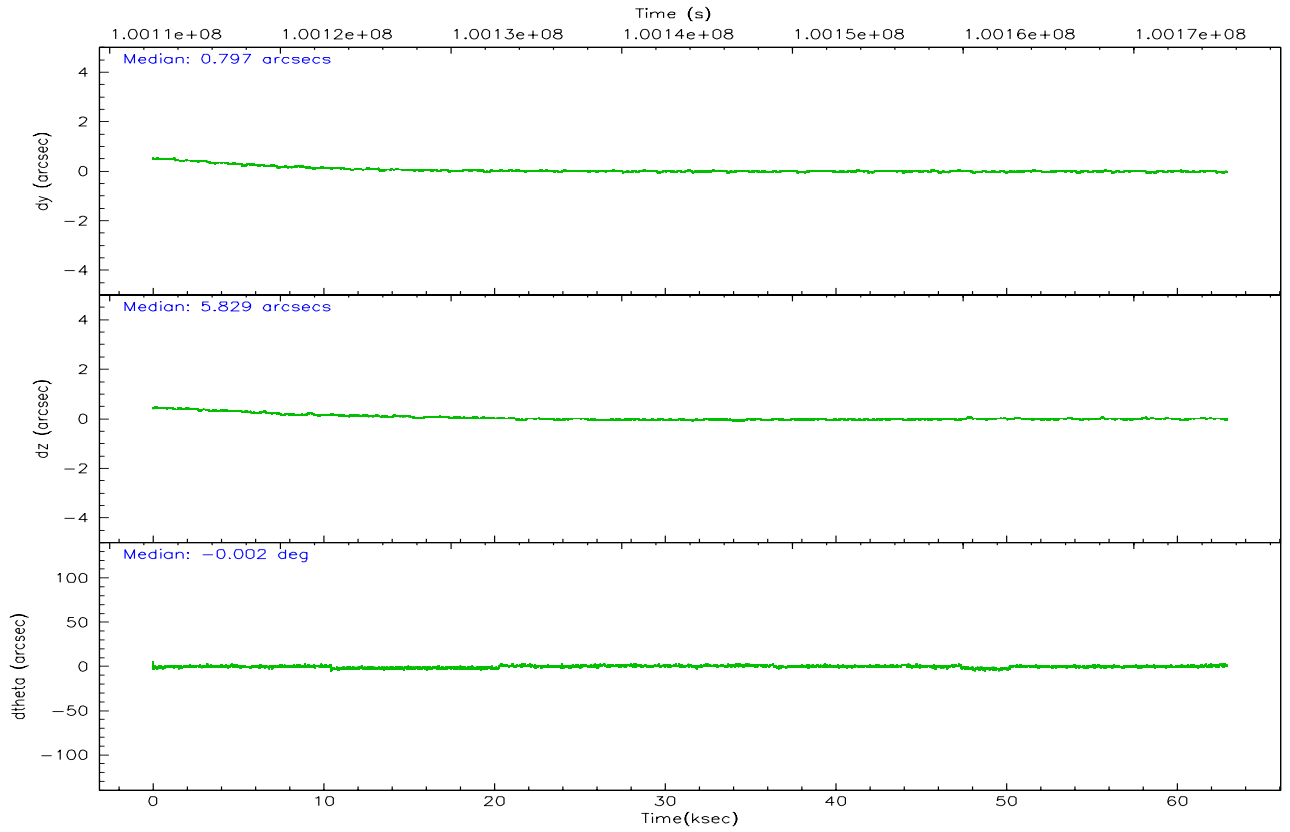
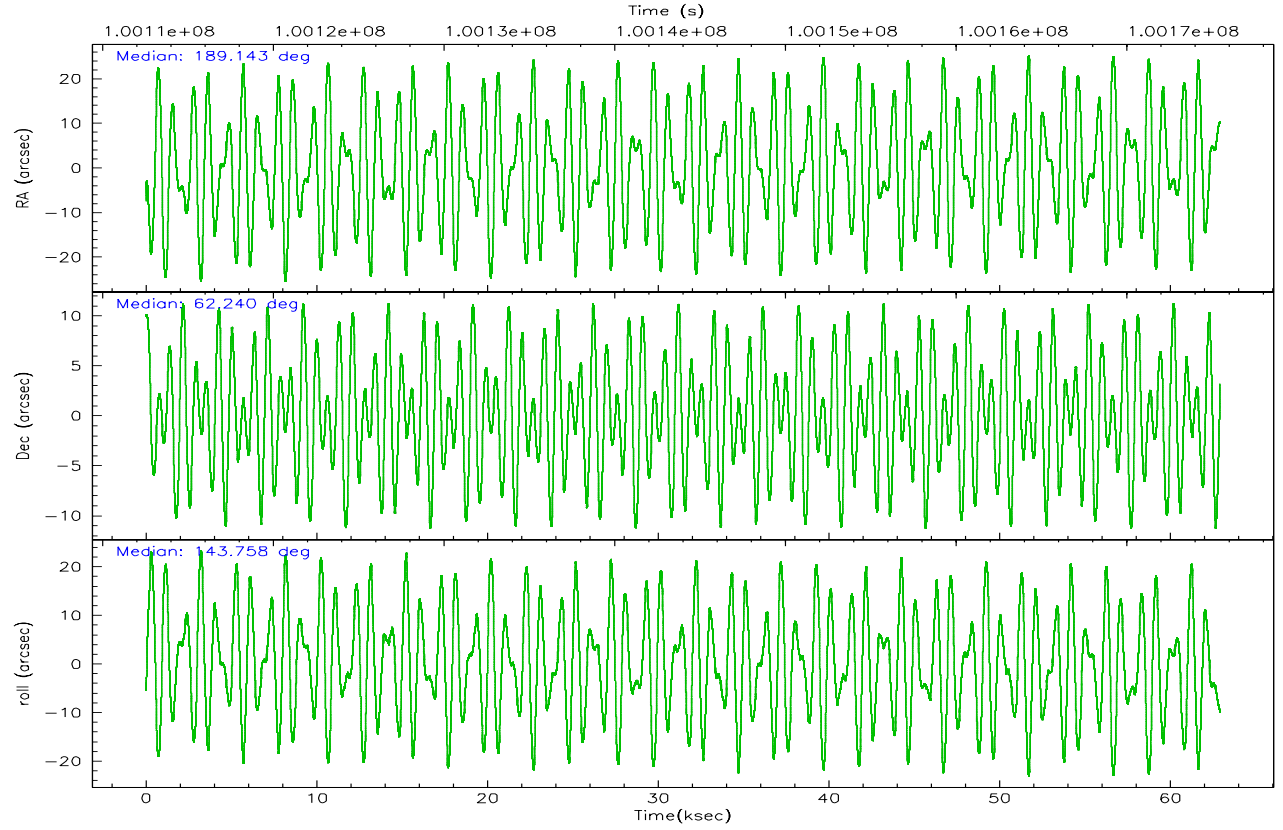


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-01236	ACIS-01236	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
Pointing RA	189.201688	189.1430658638402	Subarray requested	NONE	NONE
Pointing Dec	62.237035	62.24003478690176	Alternating exposures requested	N	N
Pointing Roll	143.503660	143.7642205527942	Primary exposure time	0.000000	3.1
Roll angle	128.000000	128.000000			
Roll tolerance	15.000000	15.000000			
Roll constraint allows 180D rotation	N	N			
SIM focus pos (mm)	-0.782348	-0.7809083437167272			
SIM defocus (mm)	0	0.001439871863259334			
SIM translation stage pos (mm)	-227.712463	-227.7139939163845			
SIM translation stage offset (mm)	-5.88	-5.878459086545149			
Observation start time	100113075.184000	100111948.74727			
Observation start date	2001-03-04T17:10:11	2001-03-04T16:52:28			
Observation end time	100175475.184000	100175995.87474			
Observation end date	2001-03-05T10:30:11	2001-03-05T10:39:55			
Read mode	TIMED	TIMED			

## 2.3 Aspect



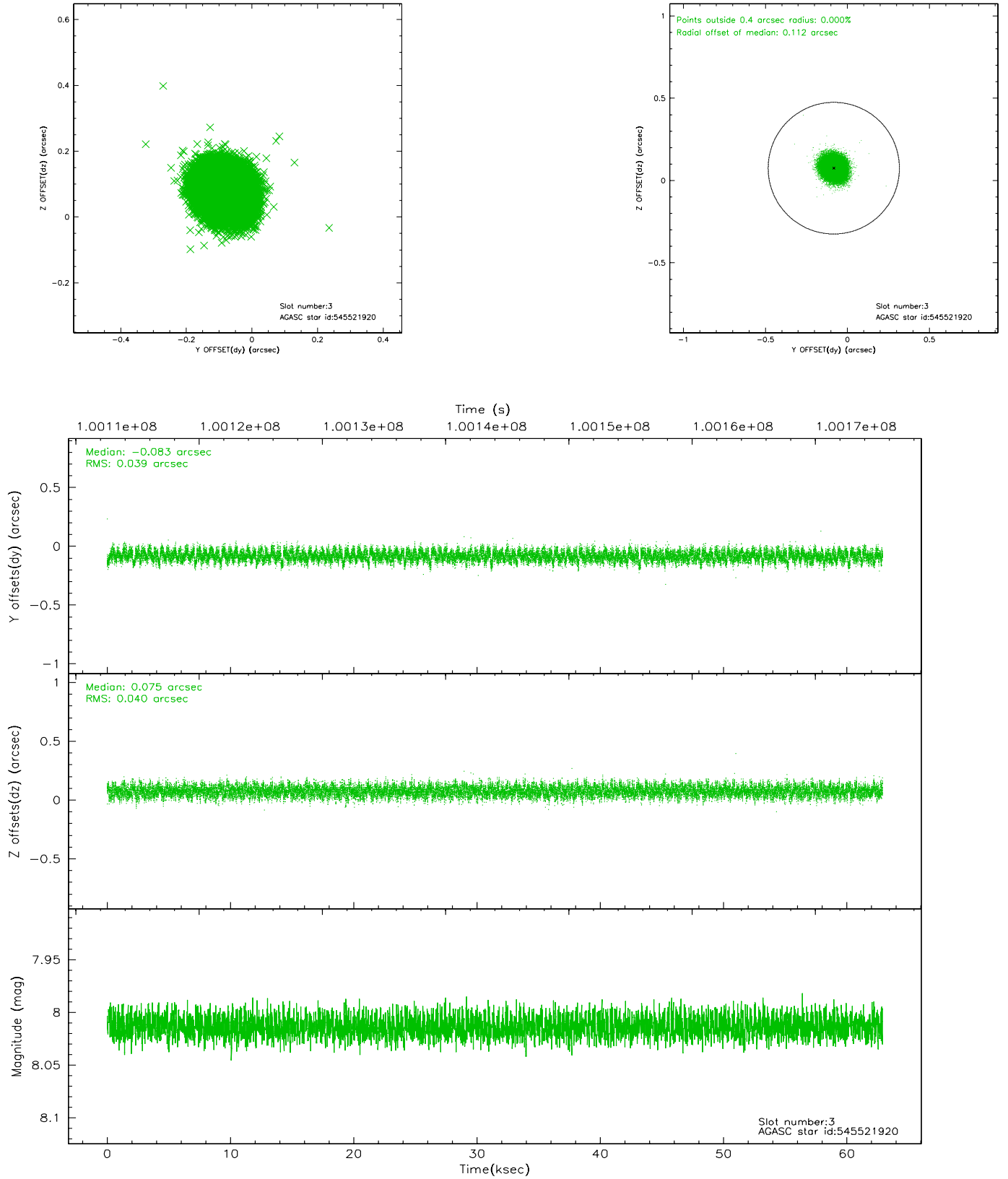


### Slot Statistics

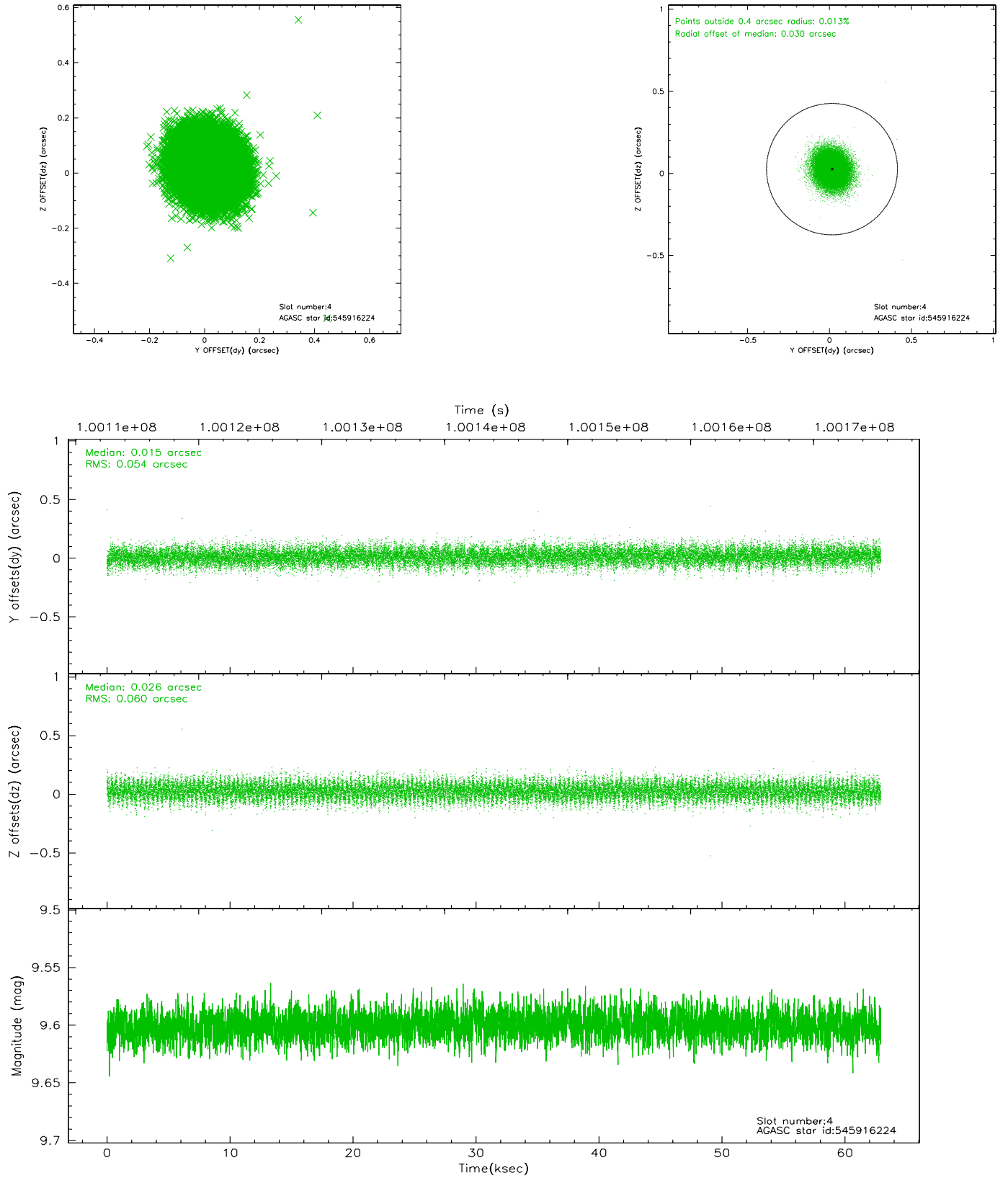
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.16	15343	-0.092	0.026	0.013	0.023	0.000000	0.000000	-755.68	-955.45
1	FID	ACIS-I-4	7.15	15339	-0.097	0.133	0.008	0.013	0.000000	0.000000	2158.37	950.80
2	FID	ACIS-I-6	7.26	15341	0.090	-0.095	0.015	0.024	0.000000	0.000000	404.83	1591.97
3	GUIDE	545521920	8.01	30681	-0.083	0.075	0.061	0.094	190.203465	62.042567	-1768.06	-454.08
4	GUIDE	545916224	9.60	30678	0.015	0.026	0.087	0.140	188.817359	62.651242	1398.76	-822.67
5	GUIDE	545916288	10.05	30664	0.176	-0.061	0.133	0.211	188.813969	62.949161	2036.41	-1685.42
6	GUIDE	545523632	10.07	30661	-0.002	-0.168	0.150	0.234	188.952319	61.550910	-1125.32	2238.40
7	GUIDE	545915360	9.30	30677	-0.105	0.130	0.105	0.170	190.127769	62.766153	-87.15	-2447.93

## 2.4 Star Slots

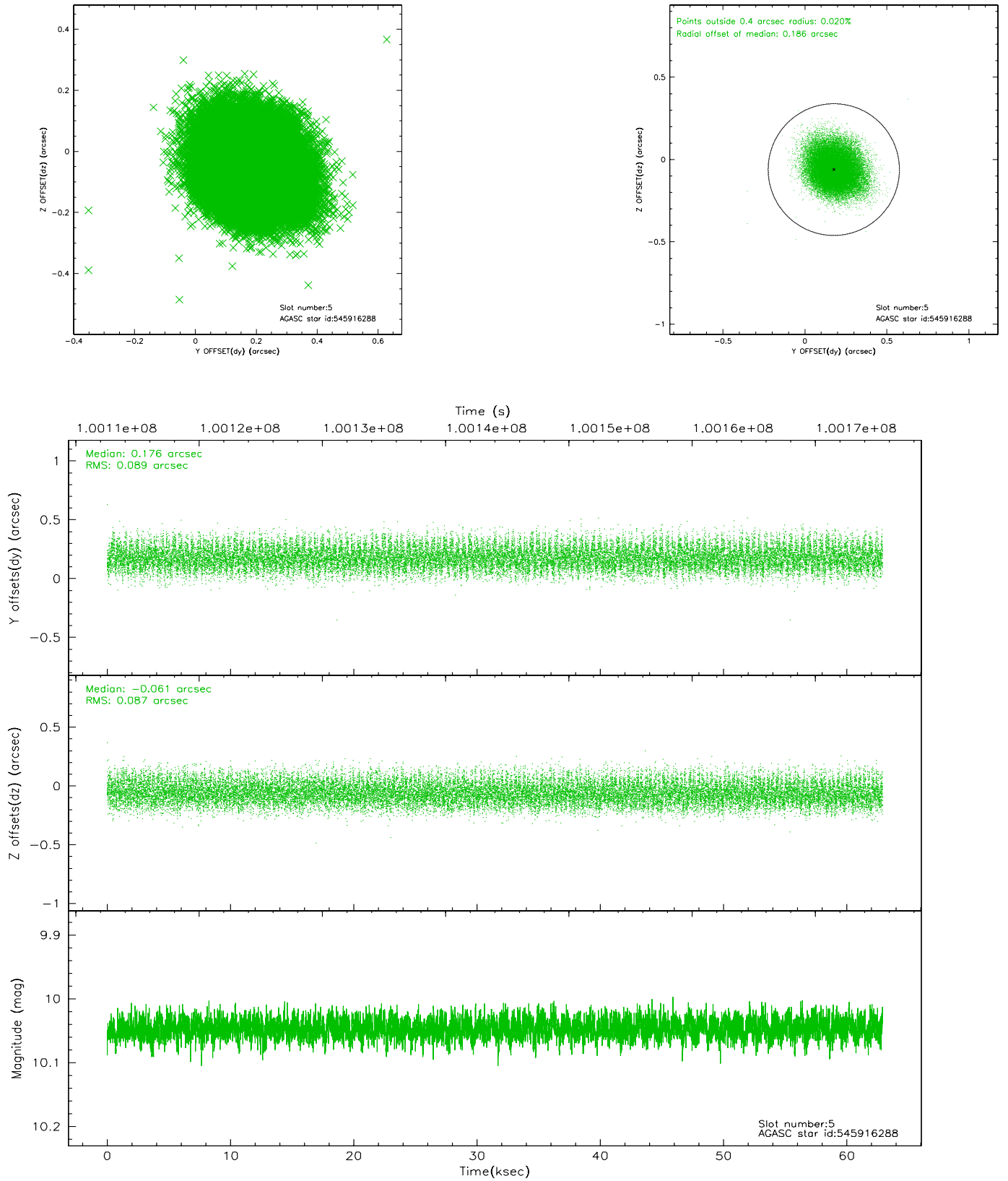
### 2.4.1 Slot 3



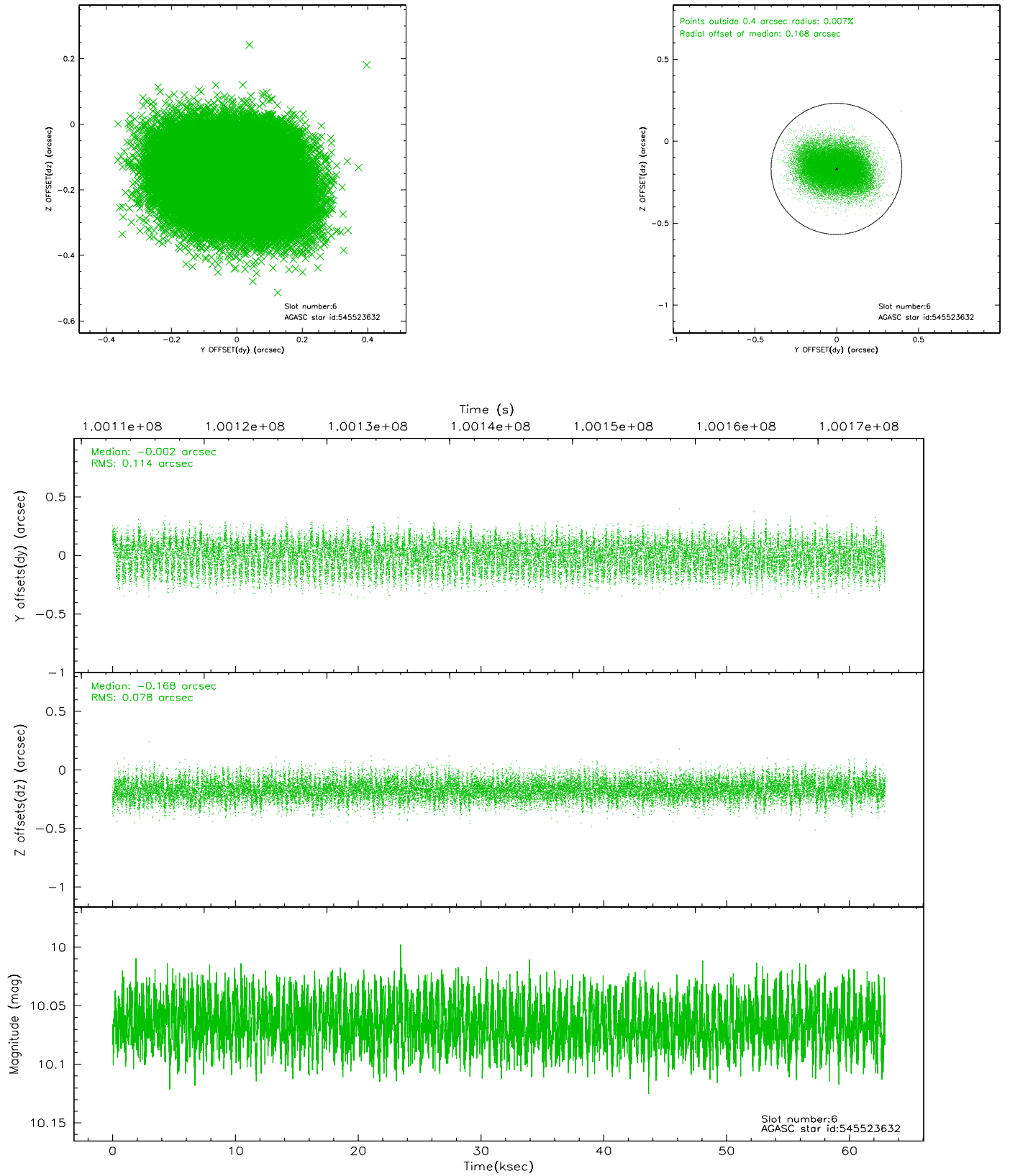
## 2.4.2 Slot 4



### 2.4.3 Slot 5

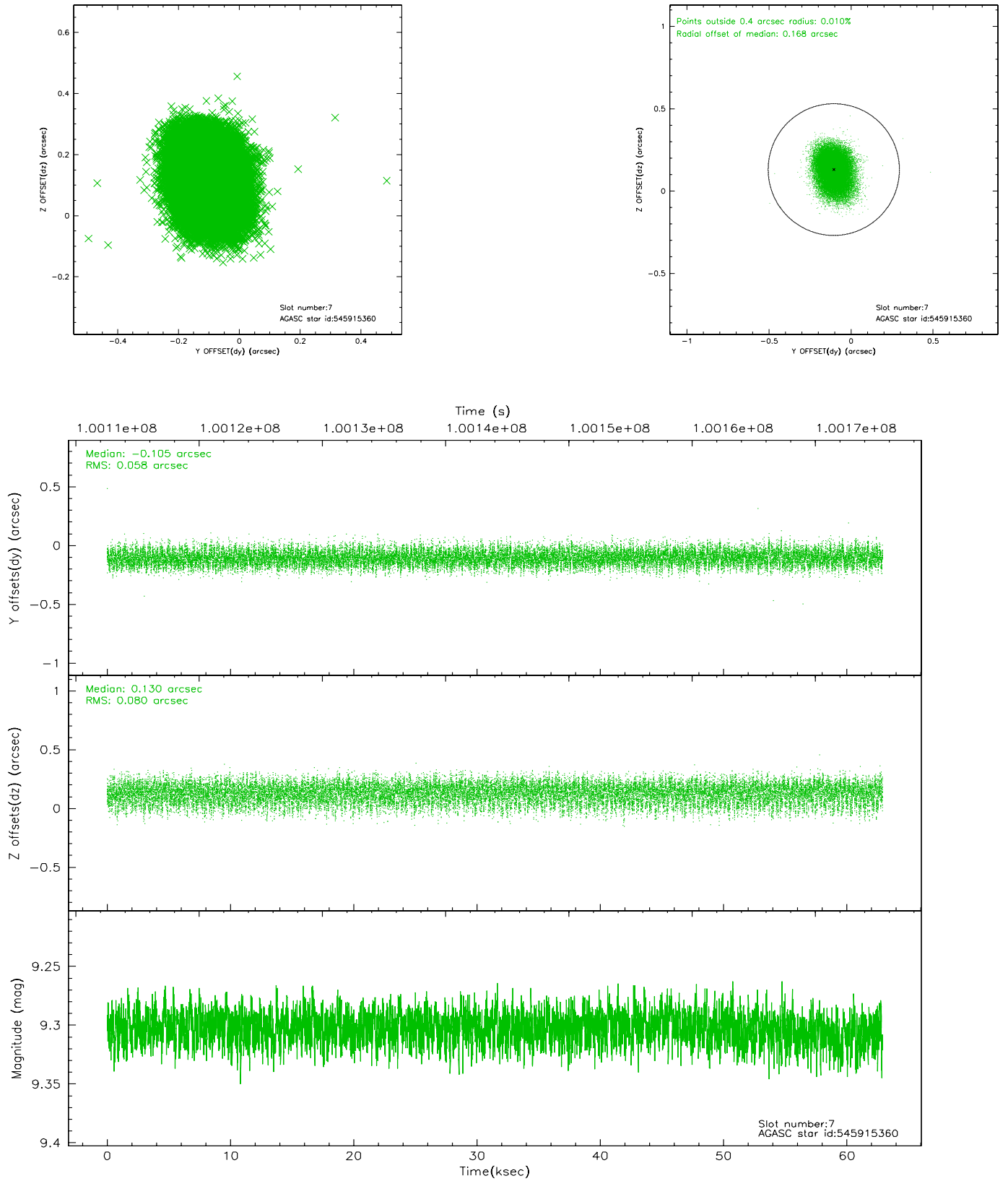


## 2.4.4 Slot 6



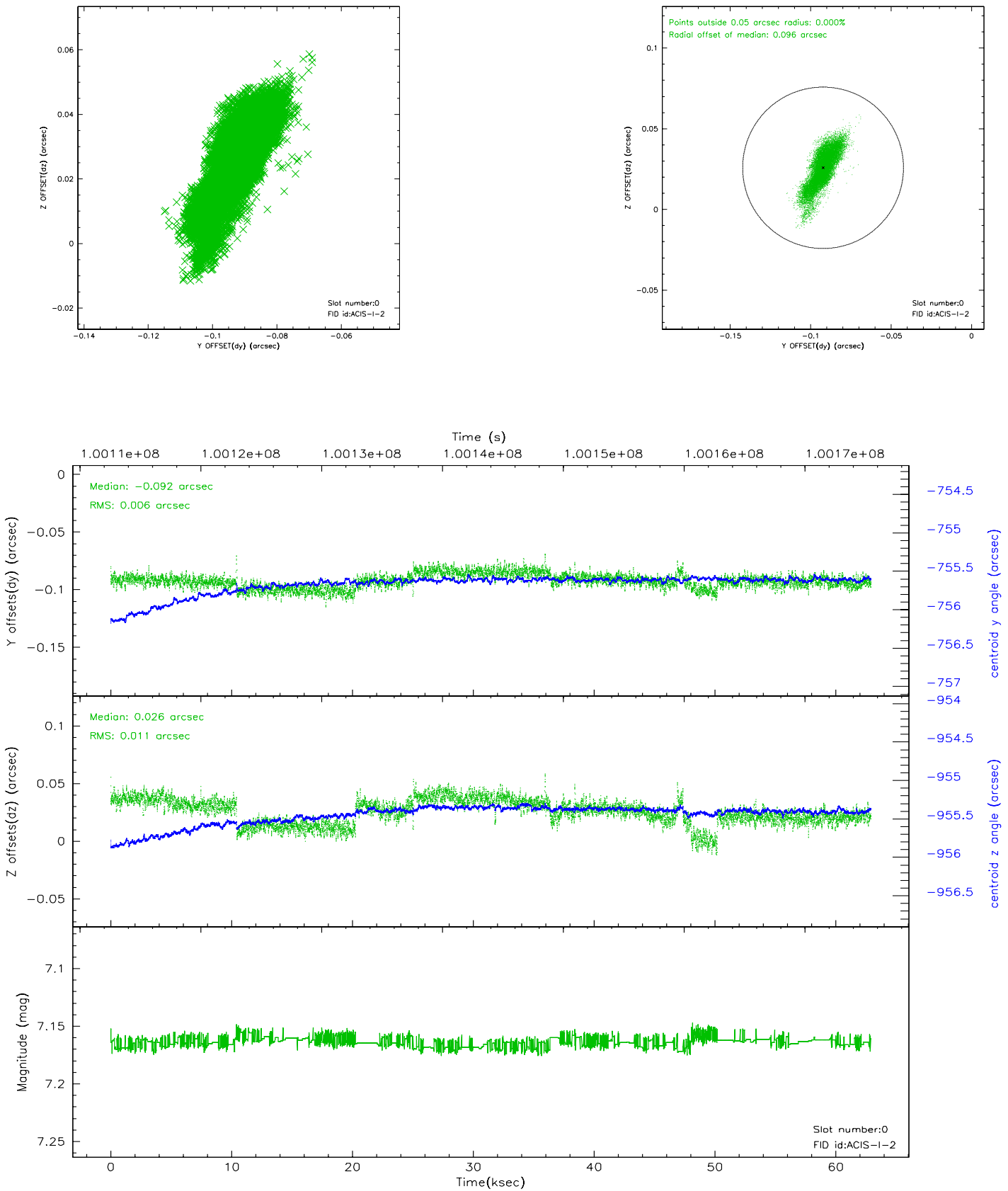


## 2.4.5 Slot 7

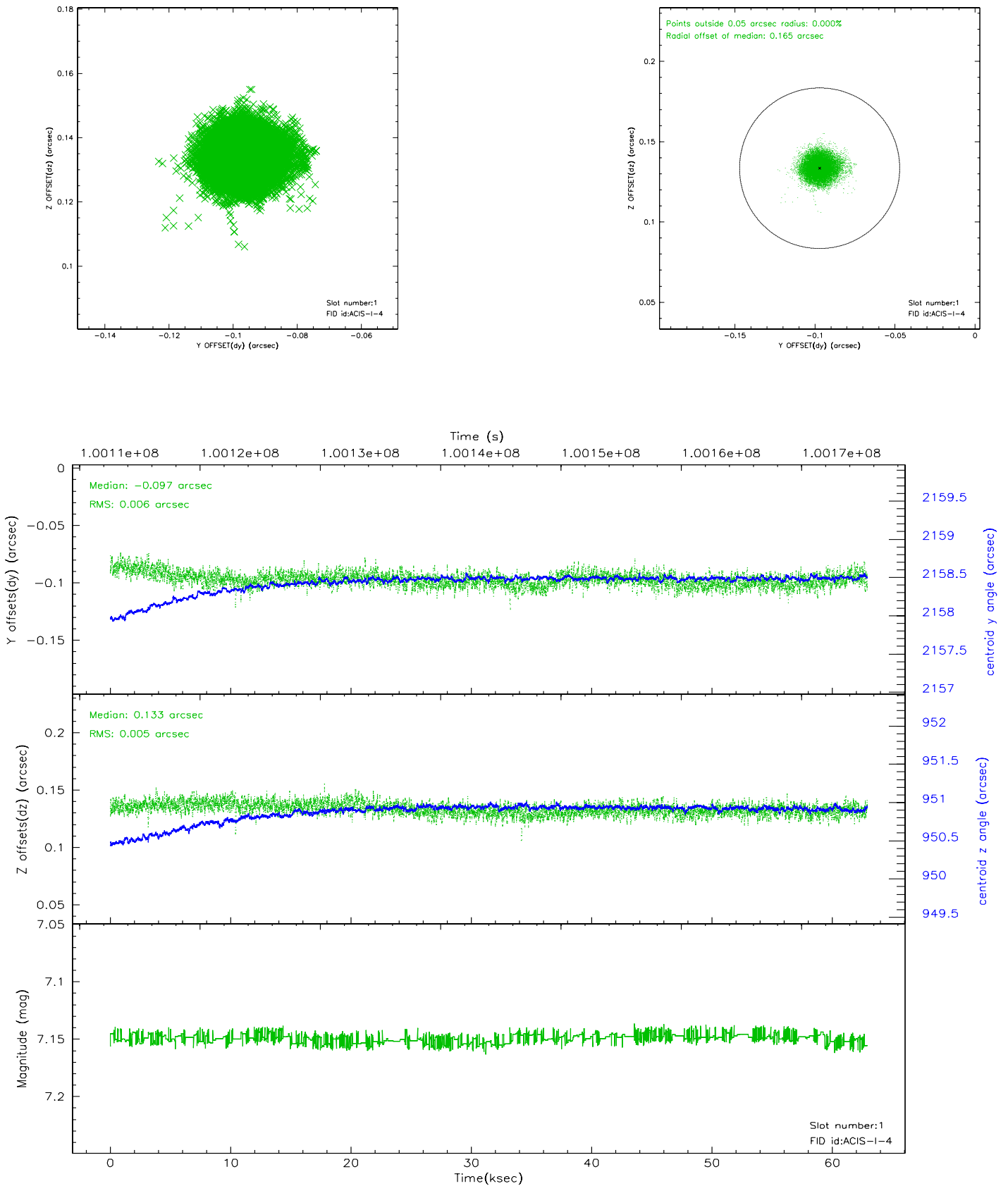


## 2.5 FID Slots

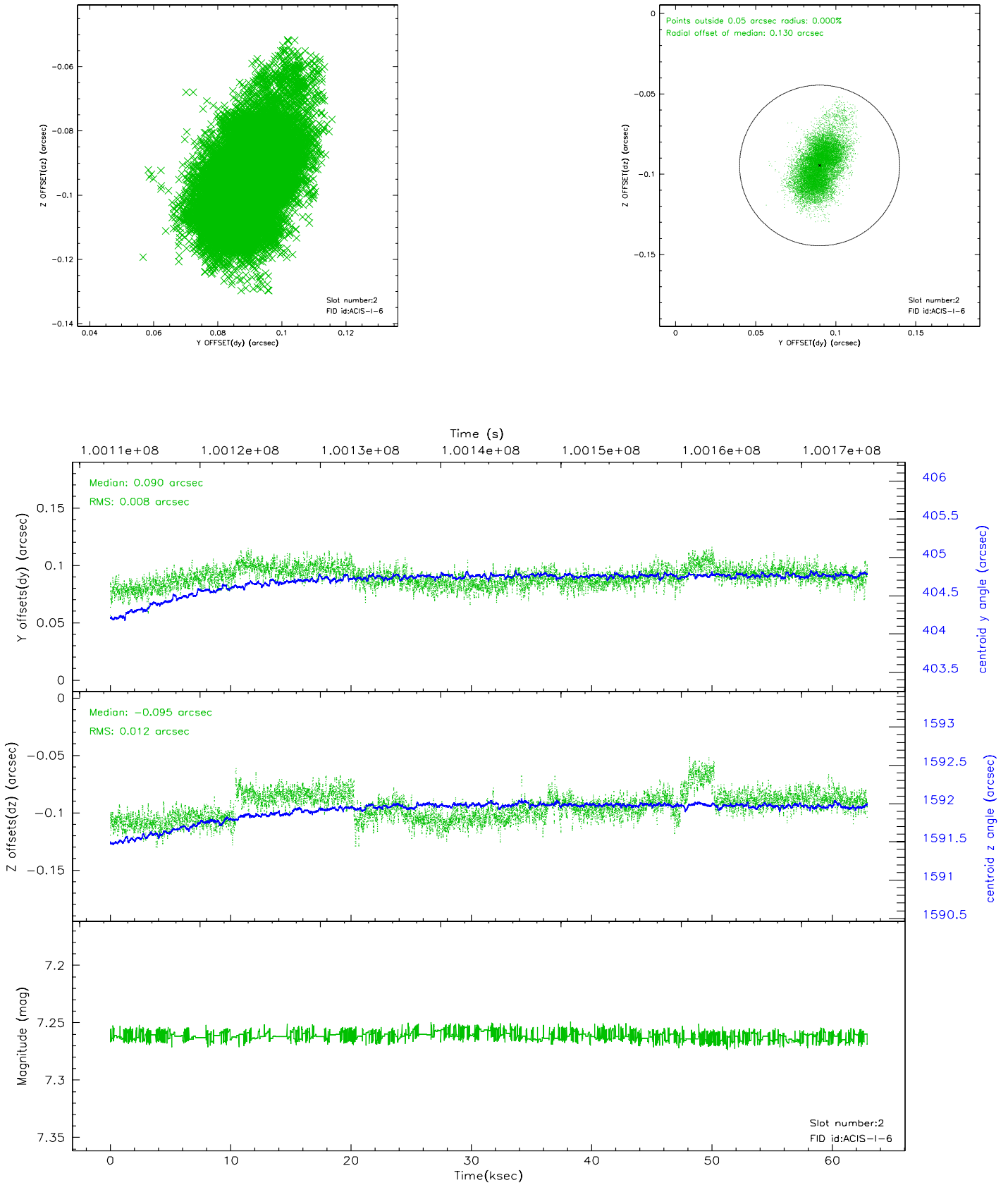
### 2.5.1 Slot 0



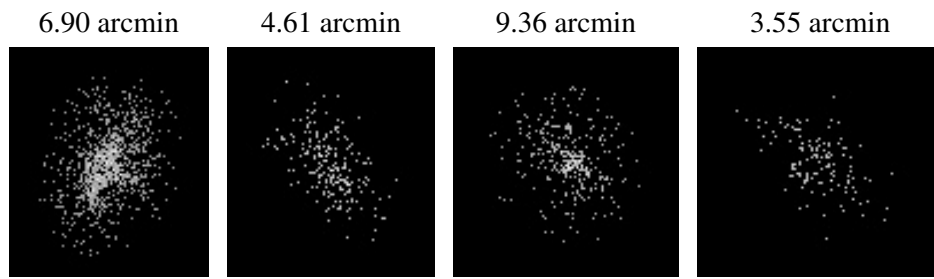
## 2.5.2 Slot 1



### 2.5.3 Slot 2



### 3 Point Sources



# A Summary

## A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2006.11.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	62.464

## A.2 Comments

Roll constraint not met: roll constraint 128 +/- 15 degrees, actual roll 143.76 degrees.

Field position meets positional requirements (maximize on specified region) tolerably well: 1 corner of field included, 2 corners just off chip edges; 4th corner not covered.