

# V&V Reference Report

## L2 ASCDS Version : 7.6.9

Observation 2234 - L2 Version 001  
Chandra X-Ray Center

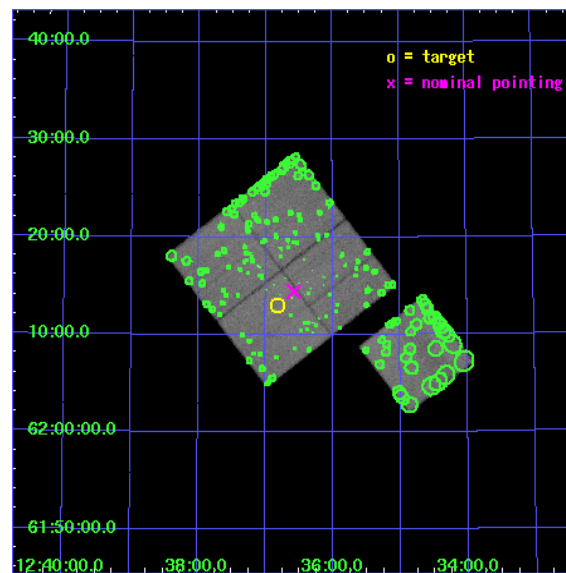
L2 Processing Date : Nov 8 2006

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# 1 Front

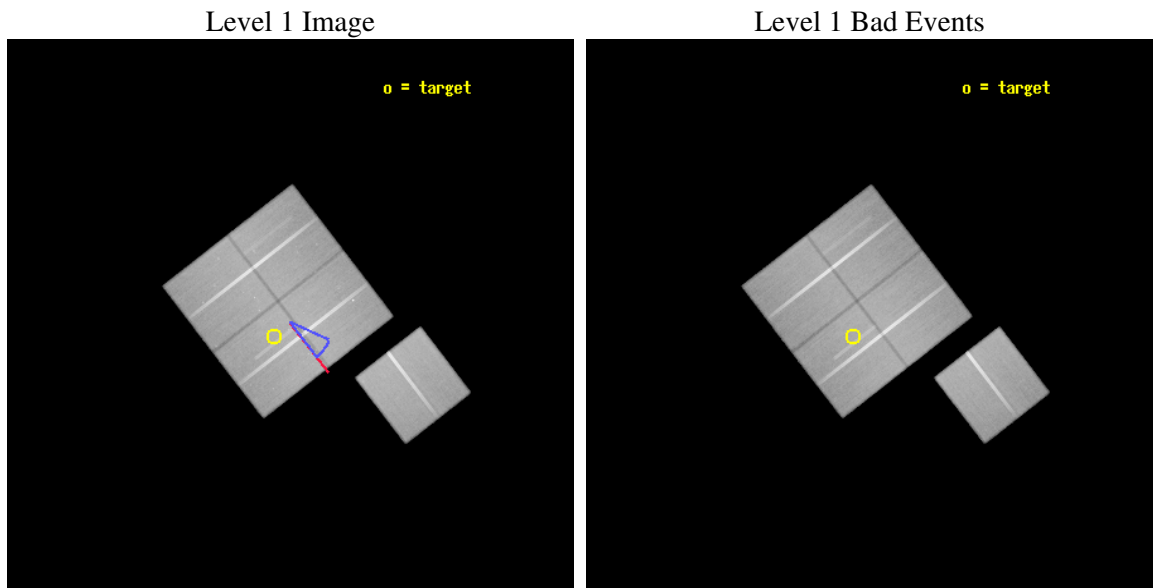
seq_num	900061
obs_id	2234
title	THE CHANDRA DEEP SURVEY OF THE HUBBLE DEEP FIELD NORTH (HDF-N) AREA
observer	Prof. William Brandt
object	HDF-N
dtcycle	0
cycle	P
ra_targ	189.205833
dec_targ	62.216111
ra_nom	189.14443544332
dec_nom	62.240796737711
roll_nom	142.26301258793
revision	2
ontime	168097.17201477
livetime	165900.85871106
ontime0	168109.7357261
ontime1	168103.45385545
ontime2	168103.45396519
ontime3	168097.17201477
ontime6	168106.59493539
l2events	538505



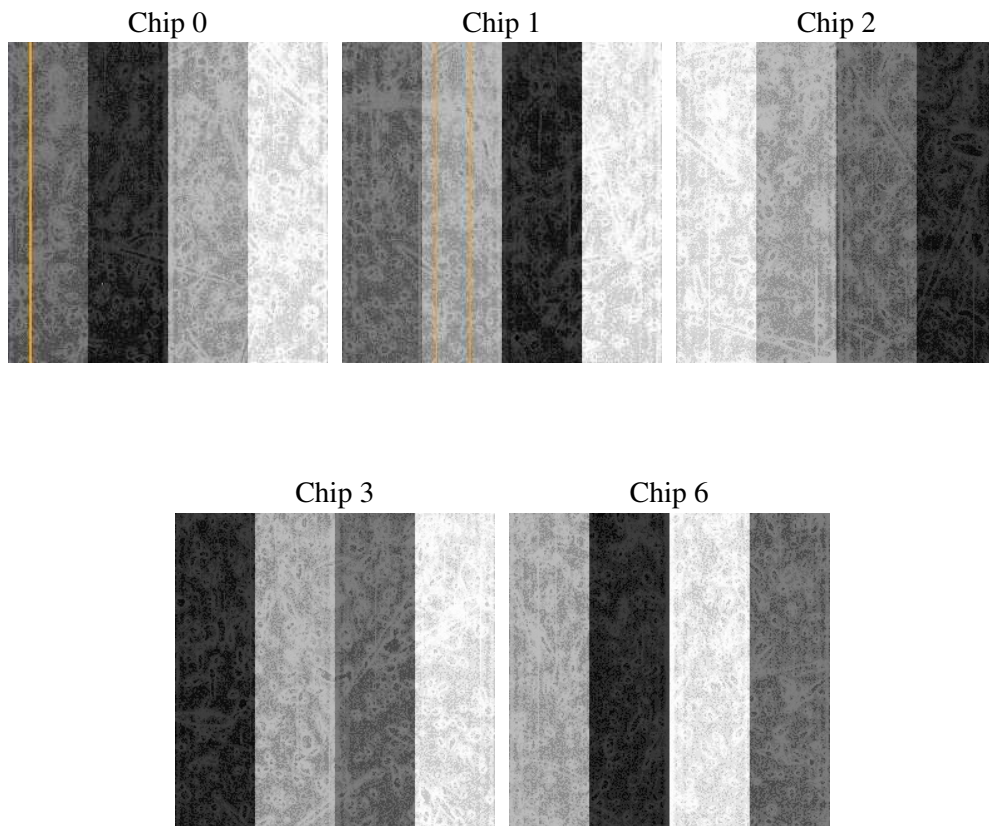
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0
ascdsver	7.6.9
caldsver	3.2.3
date	2006-11-08T04:21:07
revision	2

sched_exp_time	167976.510000
ontime	168125.13730299
ontime0	168137.70101433
ontime1	168131.4191636
ontime2	168131.41925341
ontime3	168125.13730299
ontime6	168134.56024353
l1events	5401025

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	1020040	1037240	1129744	1109314	1104687
rejected events	894763	905052	1004896	987813	980119
rejected %	87%	87%	88%	89%	88%

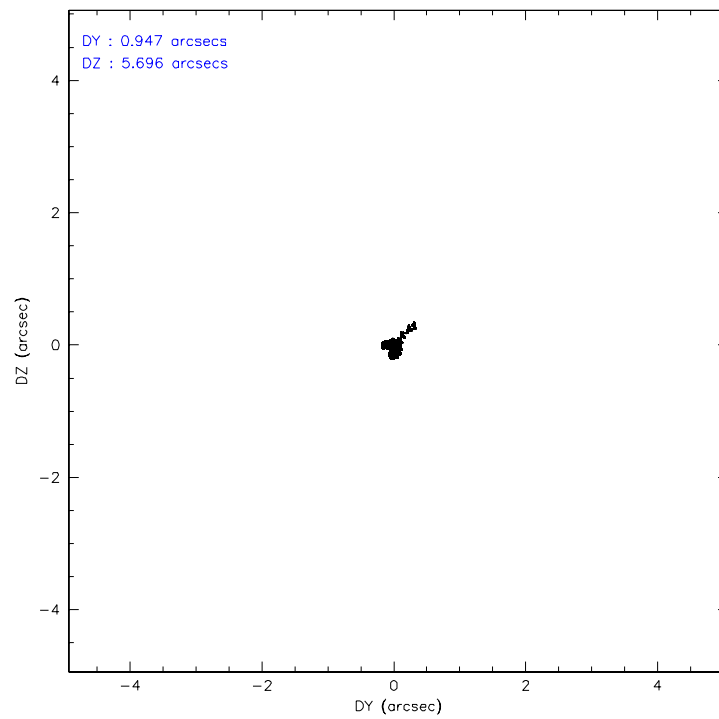
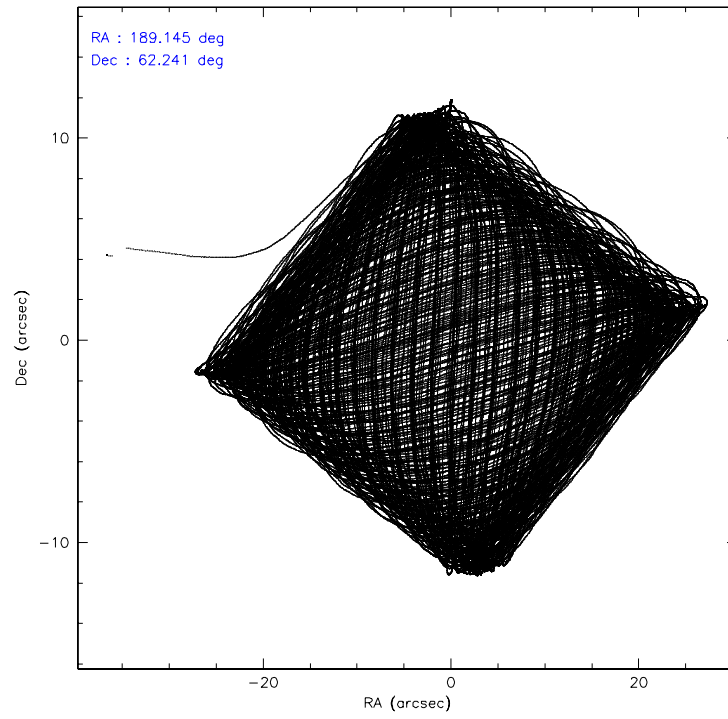
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	52344	53530	53706	51323	50724
	5%	5%	4%	4%	4%
grade 1 events	514	471	502	536	497
	0%	0%	0%	0%	0%
grade 2 events	26476	26658	26435	24368	24770
	2%	2%	2%	2%	2%
grade 3 events	12782	13571	11722	12044	12641
	1%	1%	1%	1%	1%
grade 4 events	11686	13593	11590	11923	12140
	1%	1%	1%	1%	1%
grade 5 events	39517	42154	38095	42700	45289
	3%	4%	3%	3%	4%
grade 6 events	22002	24860	21422	21869	24318
	2%	2%	1%	1%	2%
grade 7 events	854719	862403	966272	944551	934308
	83%	83%	85%	85%	84%

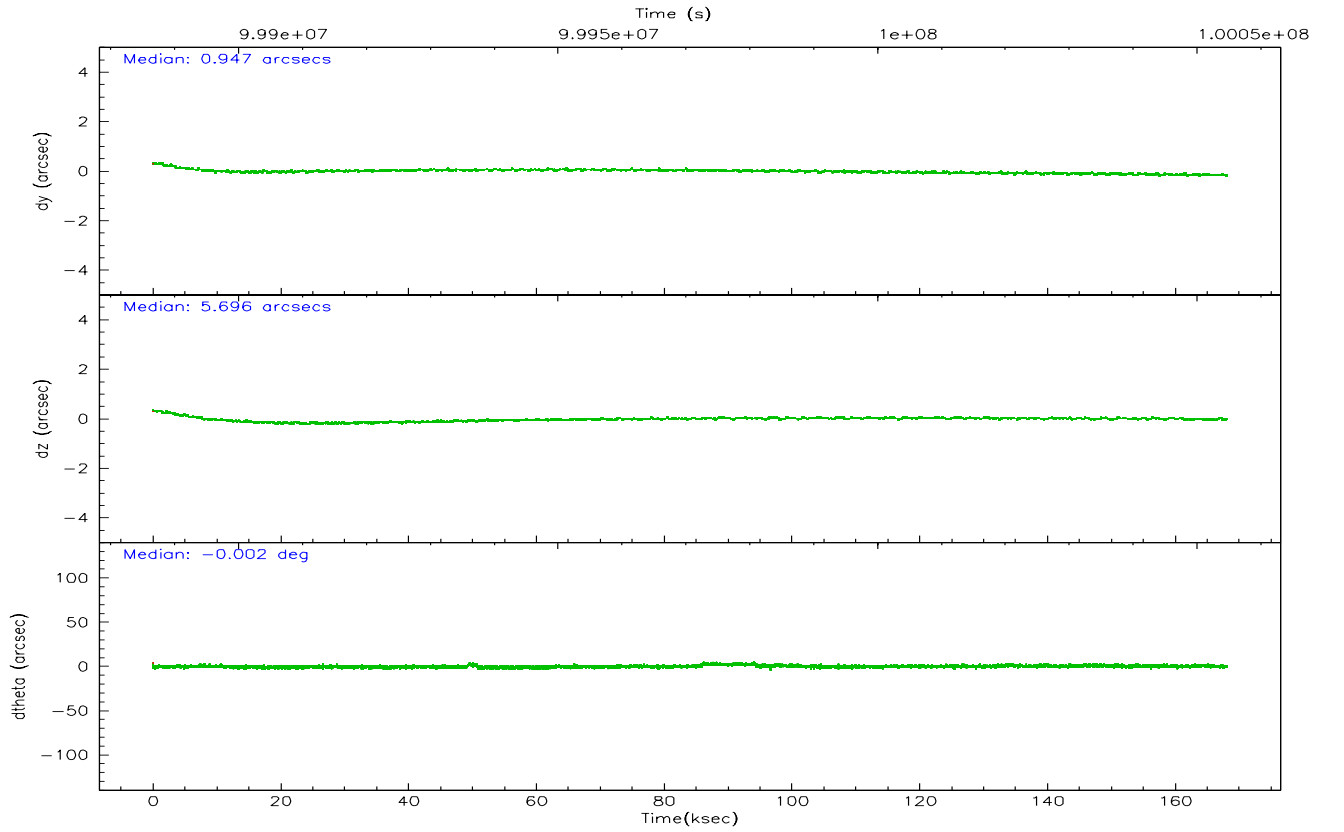
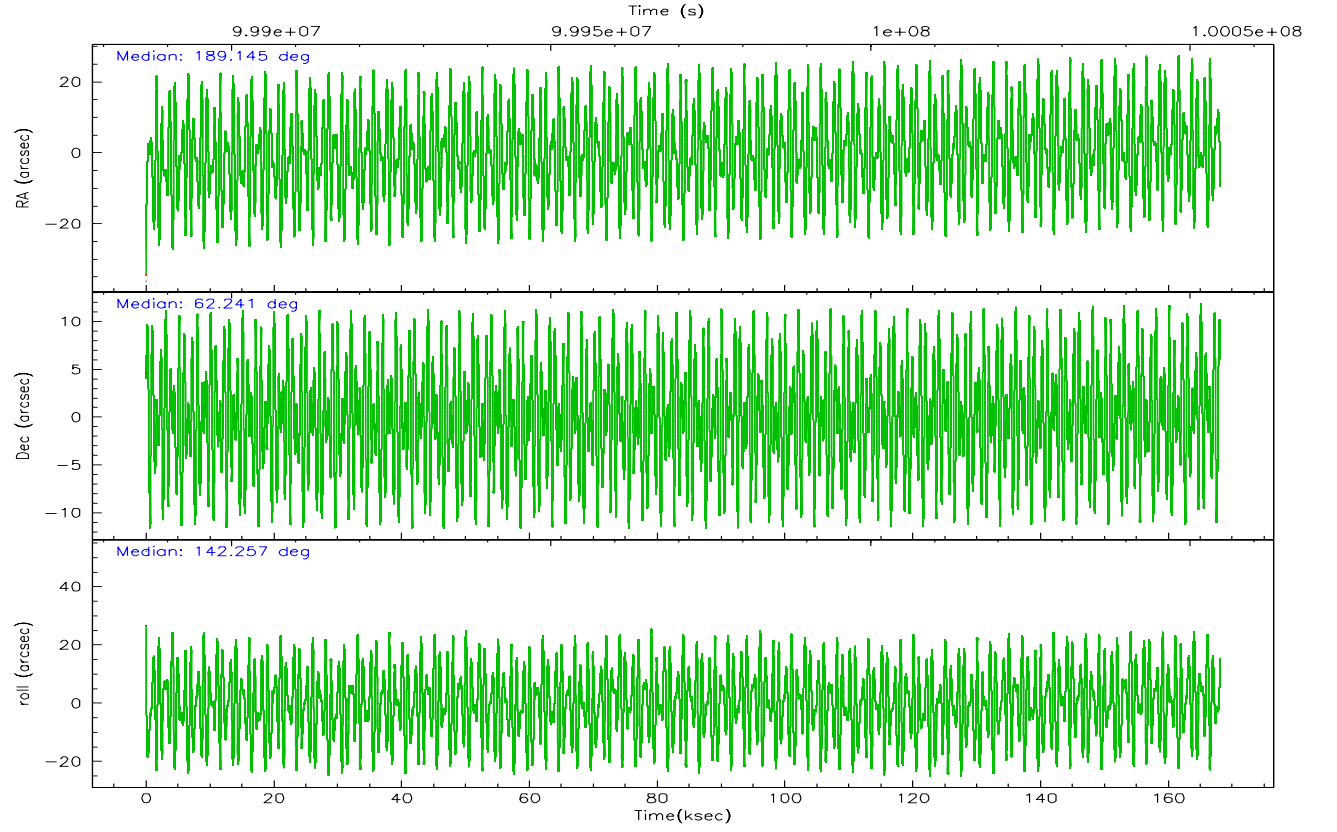


## 2.2 Compared Parameters

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	189.202855	189.144435443317	Subarray requested	NONE	NONE
Pointing Dec	62.237075	62.24079673771148	Alternating exposures requested	N	N
Pointing Roll	142.002625	142.2630125879288	Primary exposure time	0.000000	3.1
Roll angle	128.000000	128.000000			
Roll tolerance	14.000000	14.000000			
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	99886751.184000	99885629.763528			
Observation start date	2001-03-02T02:18:07	2001-03-02T02:00:29			
Observation end time	100054728.184000	100055042.28257			
Observation end date	2001-03-04T00:57:44	2001-03-04T01:04:02			
Read mode	TIMED	TIMED			

## 2.3 Aspect



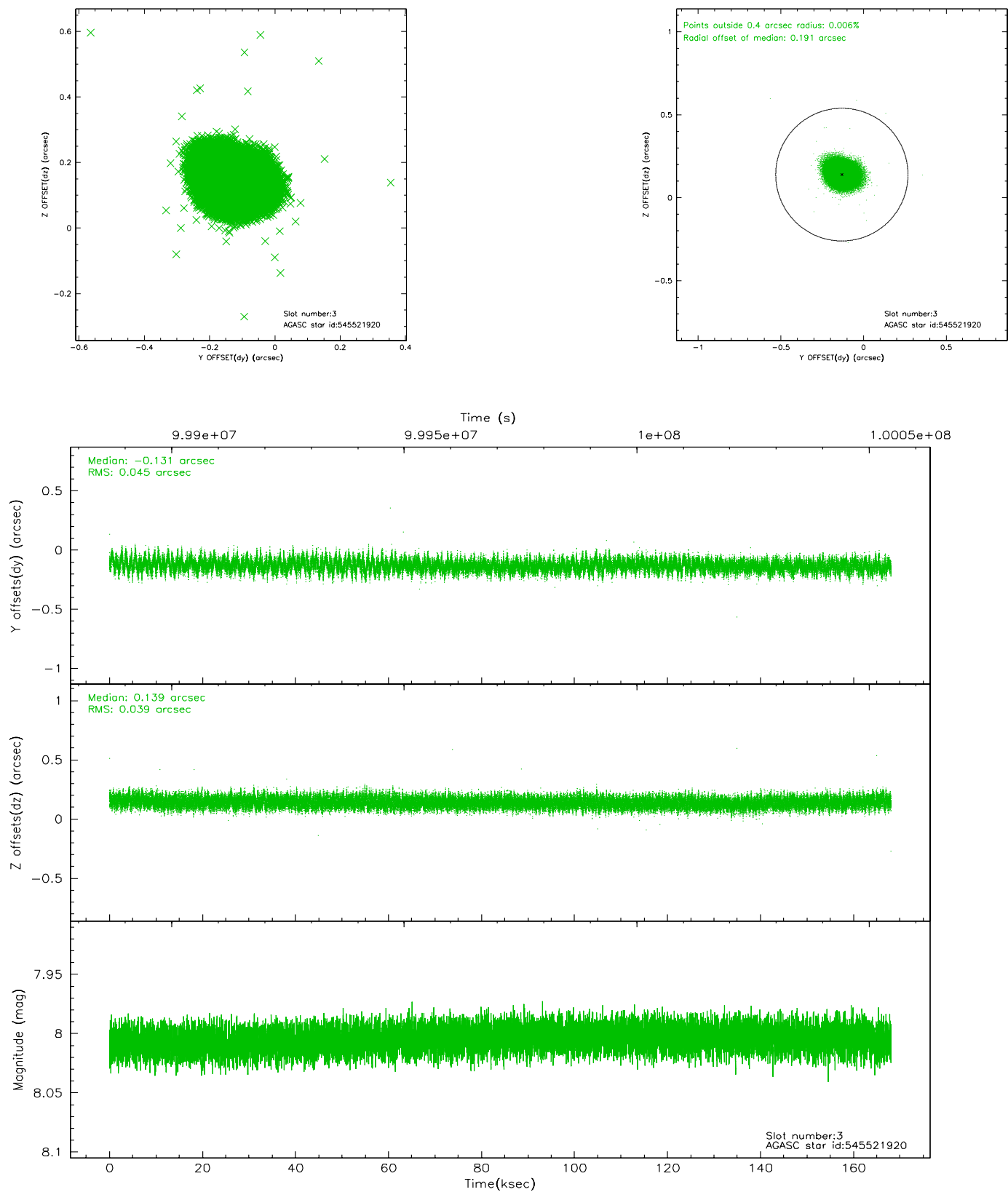


### Slot Statistics

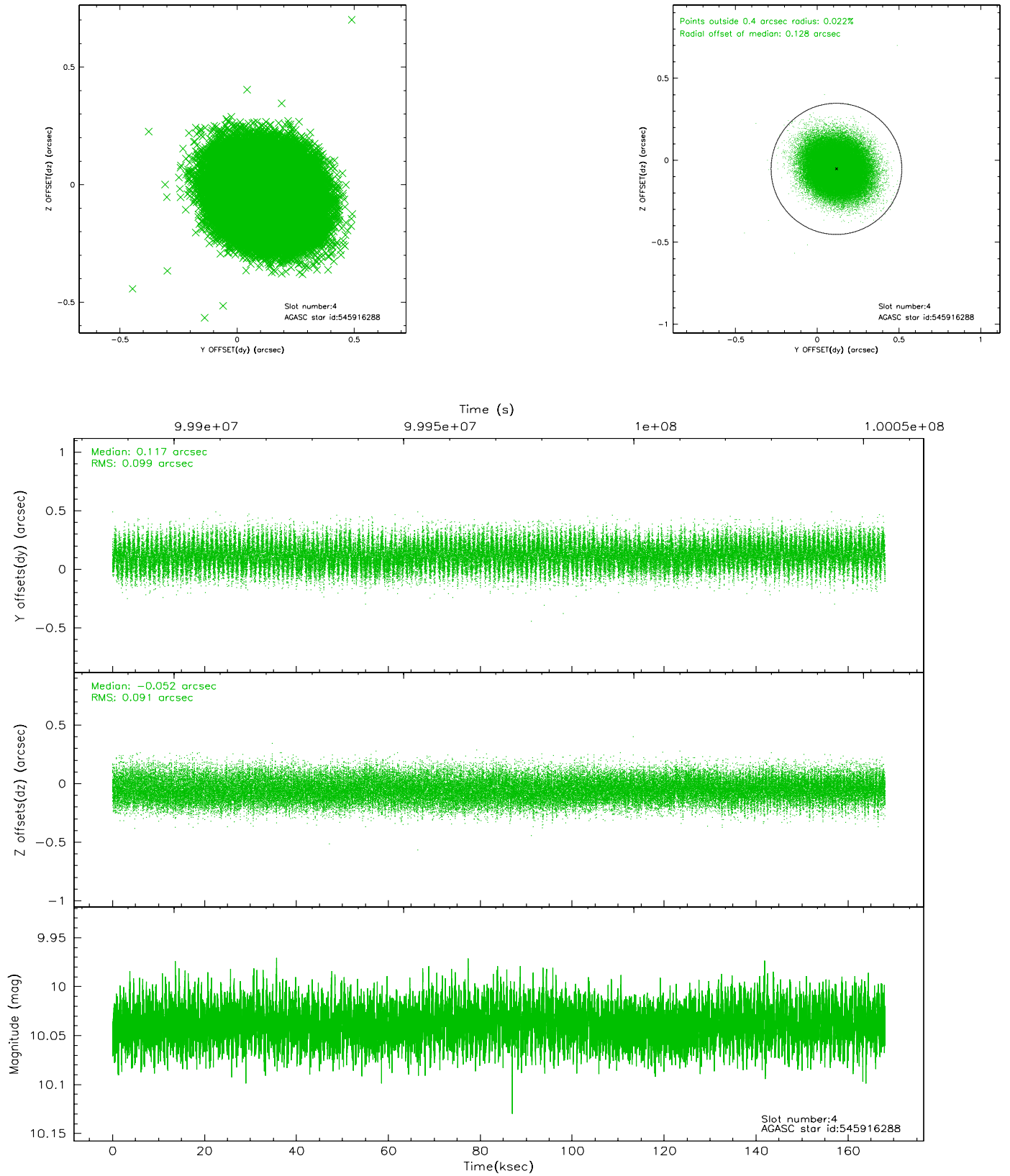
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.16	41000	-0.093	0.020	0.007	0.014	0.000000	0.000000	-755.77	-955.25
1	FID	ACIS-I-4	7.15	40994	-0.094	0.130	0.008	0.016	0.000000	0.000000	2158.31	951.05
2	FID	ACIS-I-6	7.26	40996	0.088	-0.086	0.011	0.022	0.000000	0.000000	404.64	1592.15
3	GUIDE	545521920	8.01	81997	-0.131	0.139	0.063	0.103	190.203465	62.042567	-1753.64	-498.20
4	GUIDE	545916288	10.04	81947	0.117	-0.052	0.146	0.228	188.813969	62.949161	2081.65	-1629.65
5	GUIDE	545521832	10.10	81848	0.001	0.086	0.138	0.224	188.976813	62.367279	586.68	-137.50
6	GUIDE	545523632	10.05	81870	-0.002	-0.154	0.141	0.225	188.952319	61.550910	-1181.58	2210.18
7	GUIDE	545916224	9.59	81940	0.012	-0.017	0.098	0.172	188.817359	62.651242	1421.82	-783.89

## 2.4 Star Slots

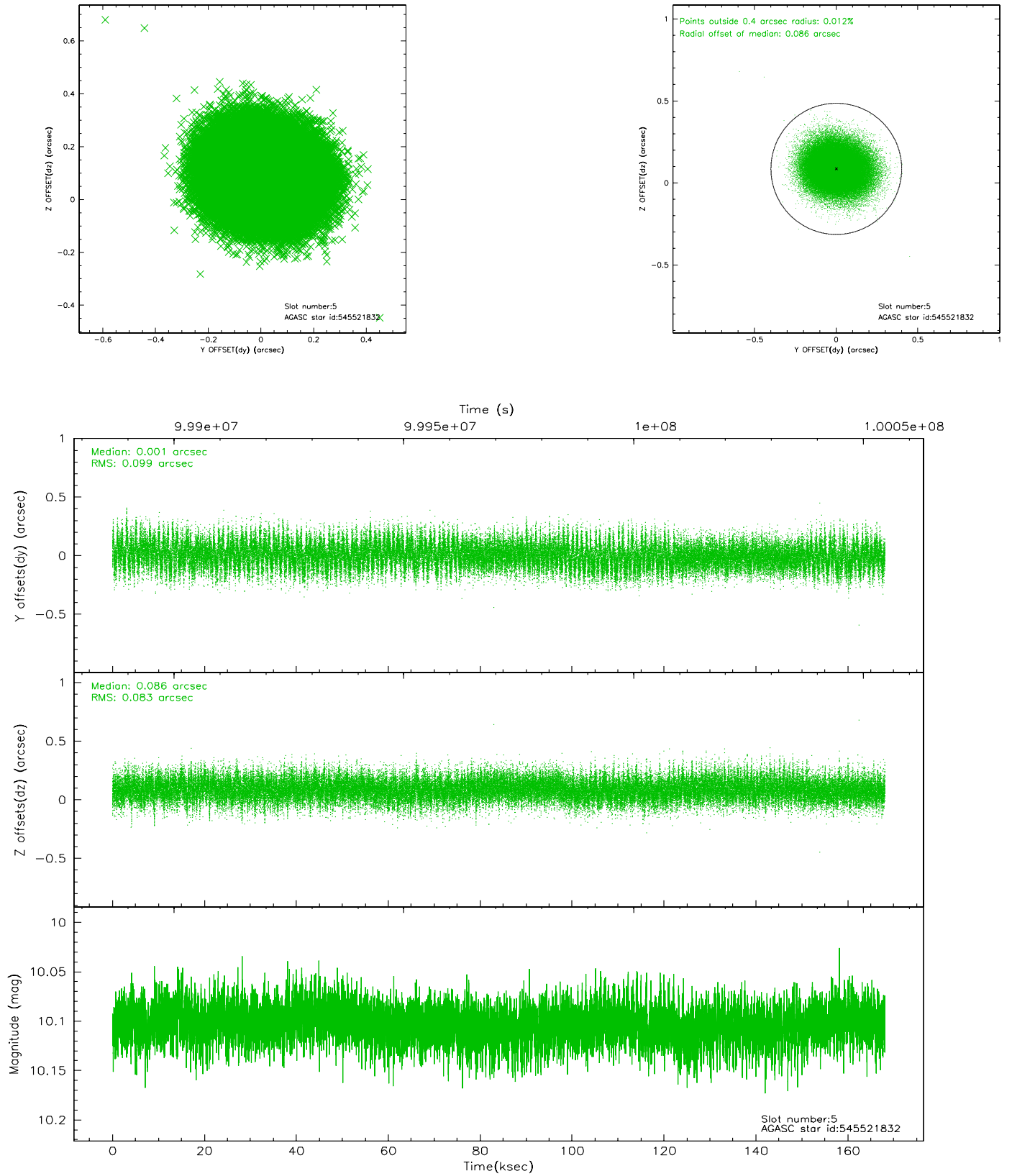
### 2.4.1 Slot 3



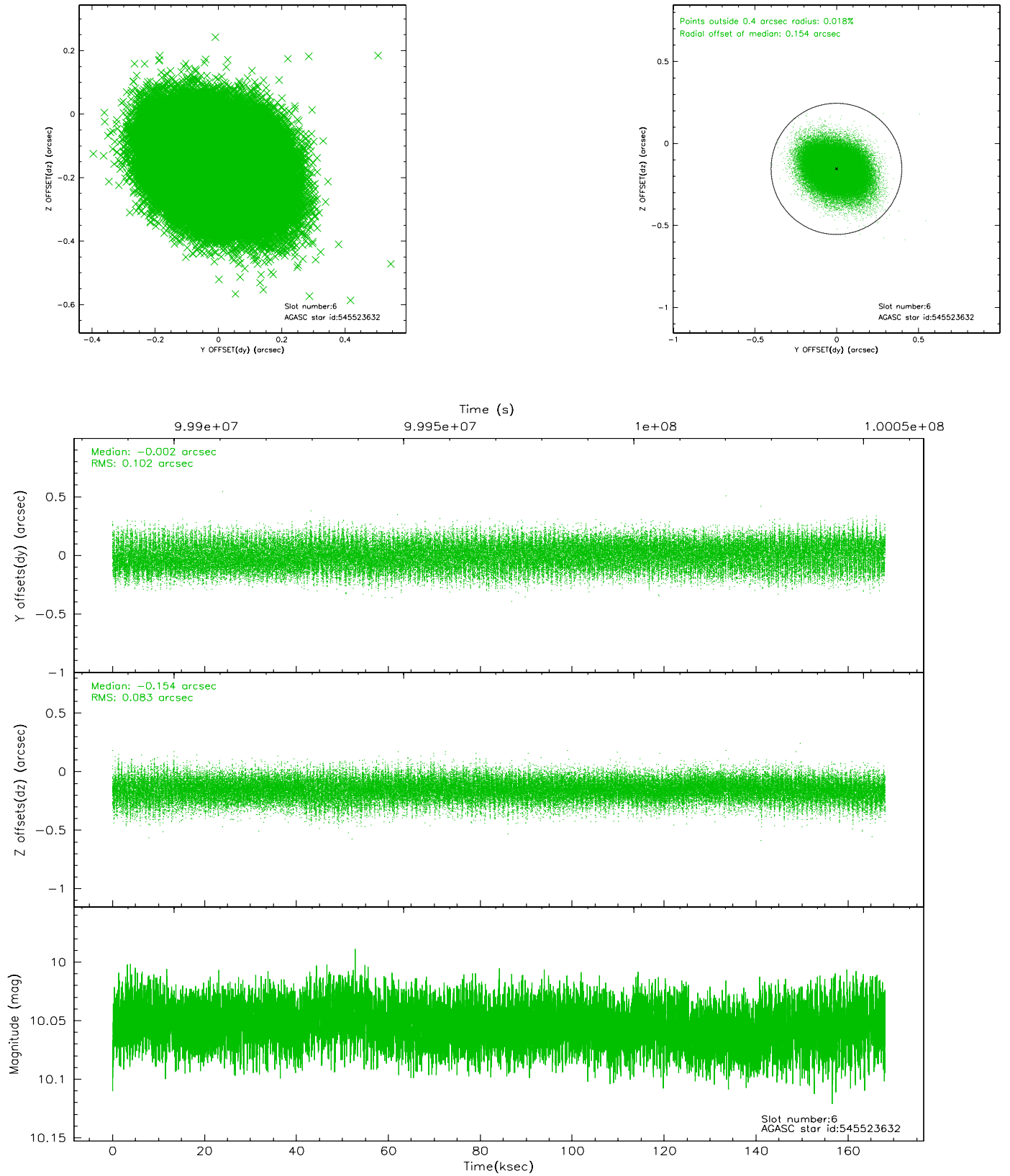
## 2.4.2 Slot 4



### 2.4.3 Slot 5

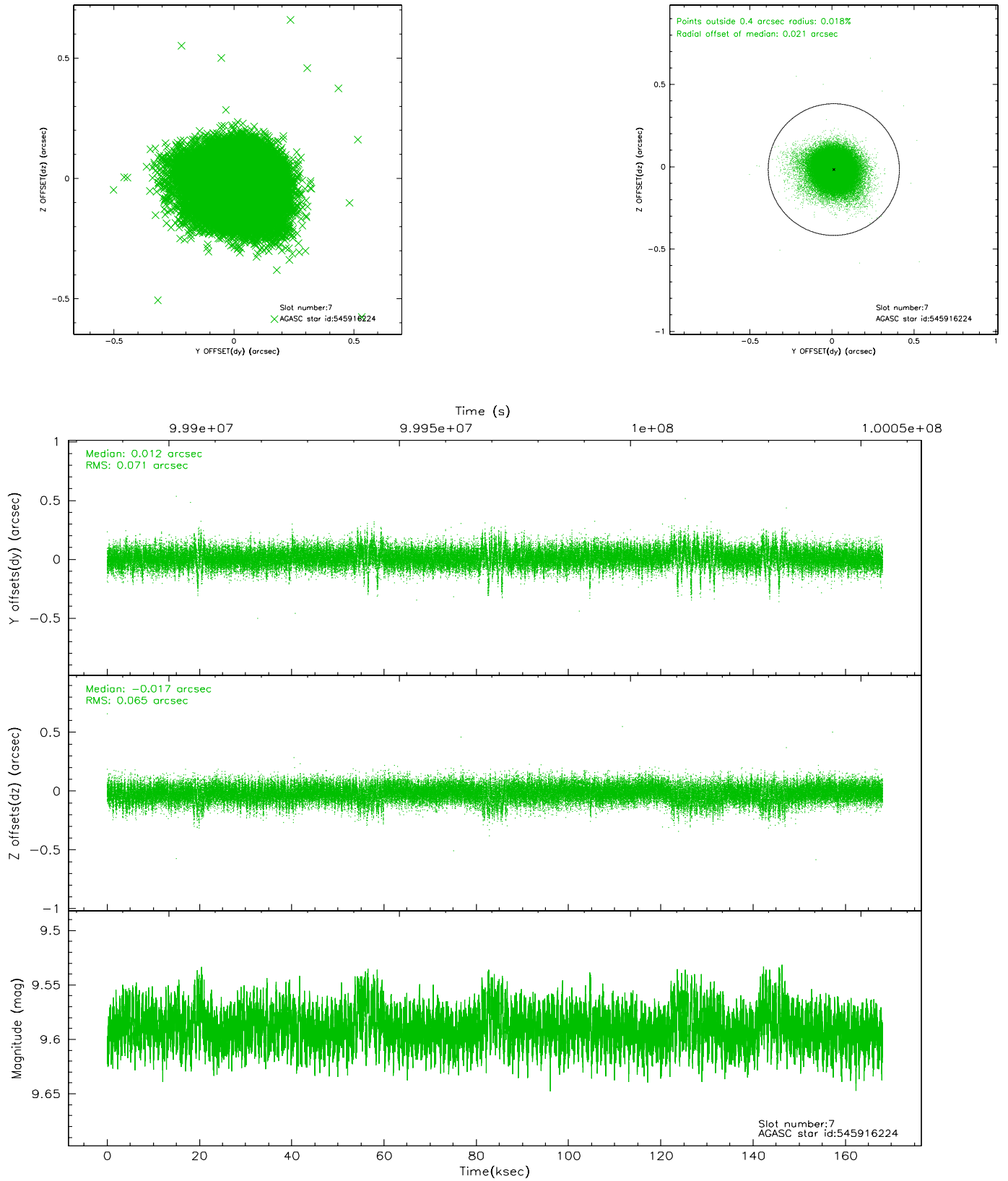


## 2.4.4 Slot 6



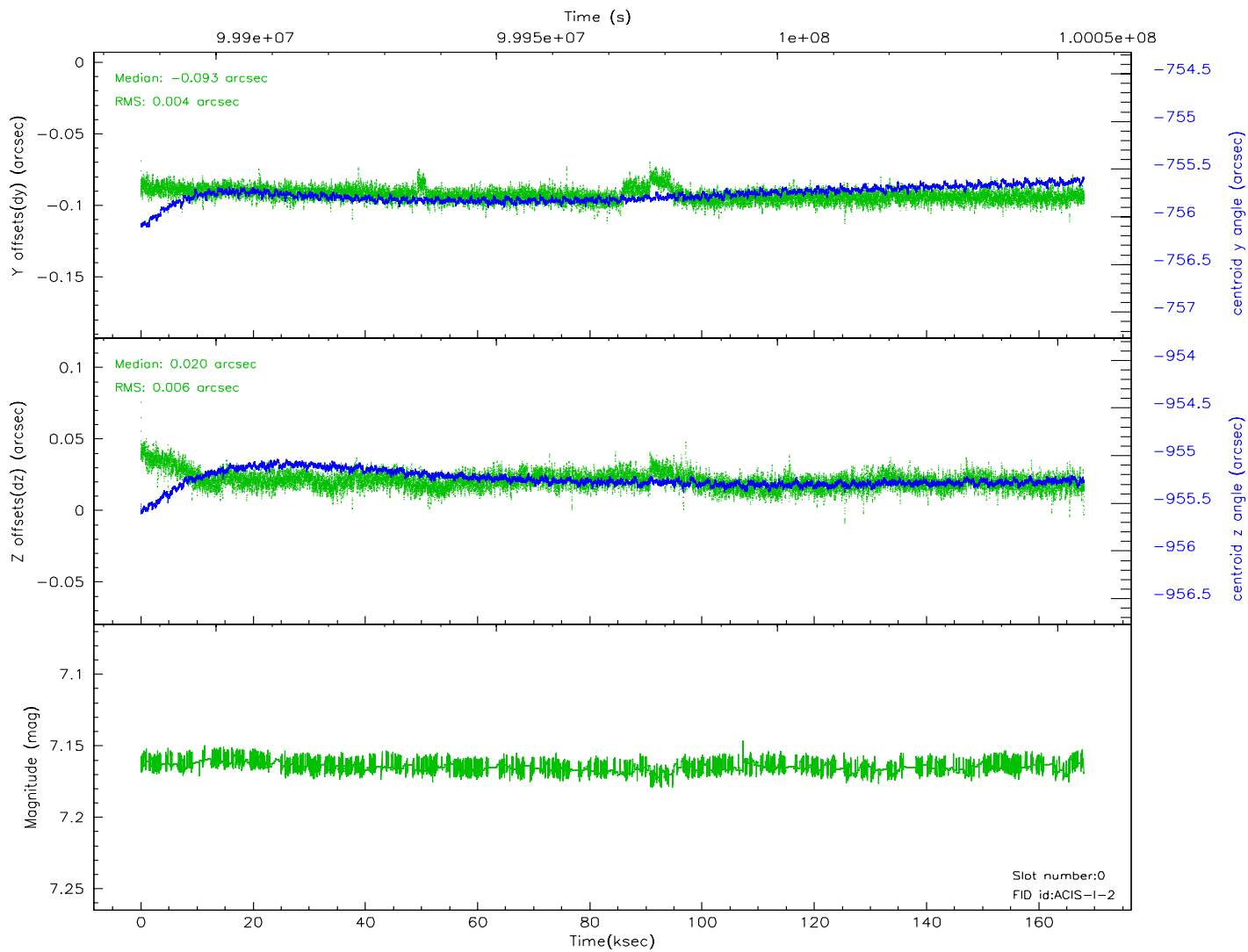
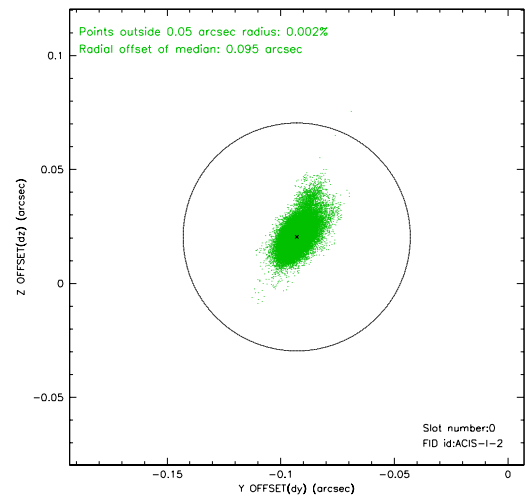
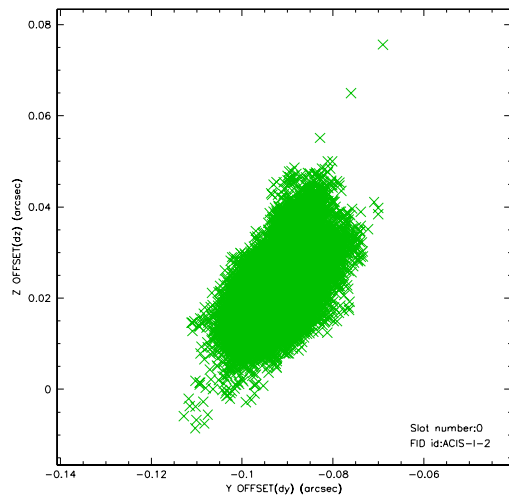


## 2.4.5 Slot 7

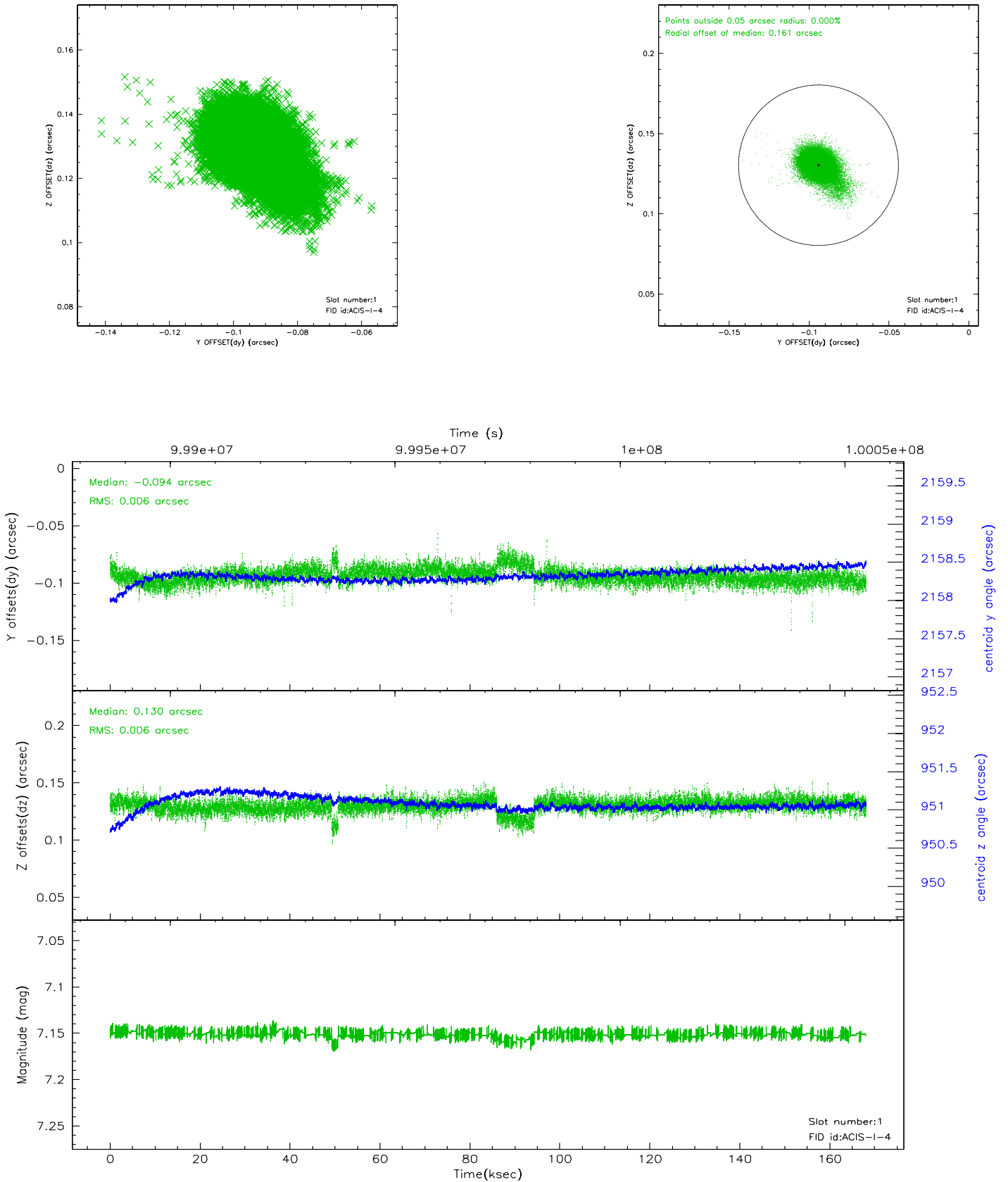


## 2.5 FID Slots

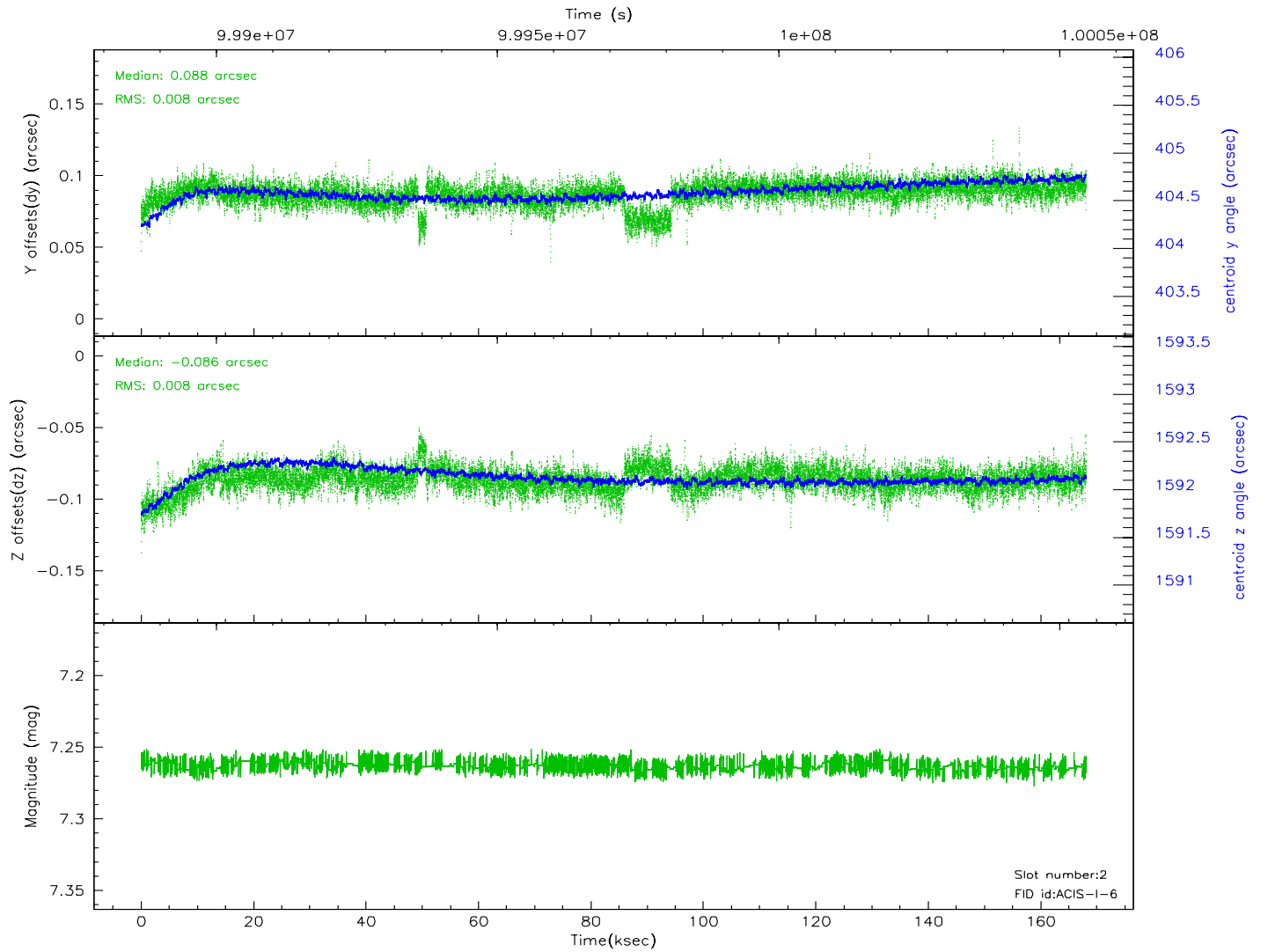
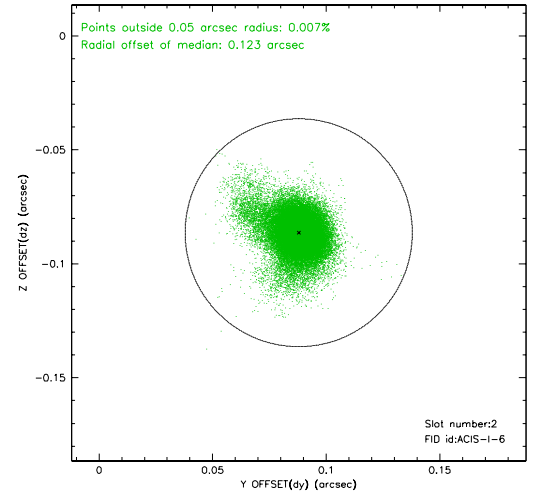
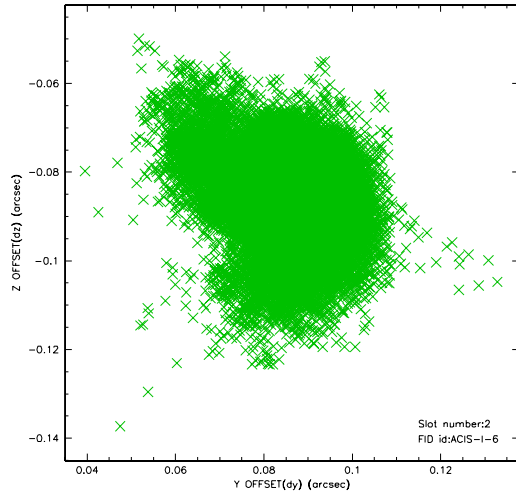
### 2.5.1 Slot 0



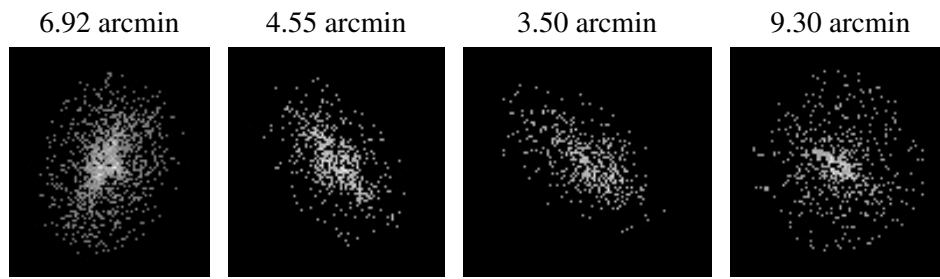
## 2.5.2 Slot 1



### 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	168

## A.2 Comments

Roll constraint not met: requested 128 +/- 14, observed 142.26 degrees.

Focal plane temperature is warmer than -118.7 C degrees during the last 2 ksec of this observation. The ACIS spectral response calibration for the front-illuminated chips is less accurate at these warmer temperatures than it is at -119.7 C. The back-illuminatd chips are not affected at the focal plane temperatures recorded for this observation. Users whose science objectives depend on the most accurate spectral response (i.e.: fitting line-rich spectra) may notice an effect. Users whose science objectives do not depend on the most accurate spectral response should not notice an effect.