

# V&V Reference Report

## L2 ASCDS Version : 7.6.9

Observation 2423 - L2 Version 001  
Chandra X-Ray Center

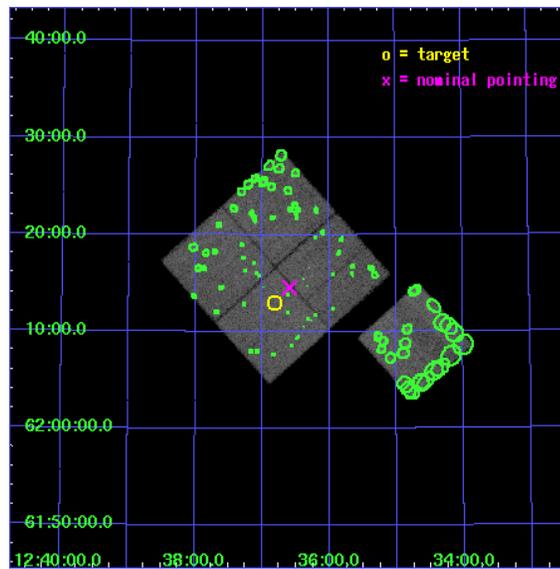
L2 Processing Date : Nov 8 2006

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# 1 Front

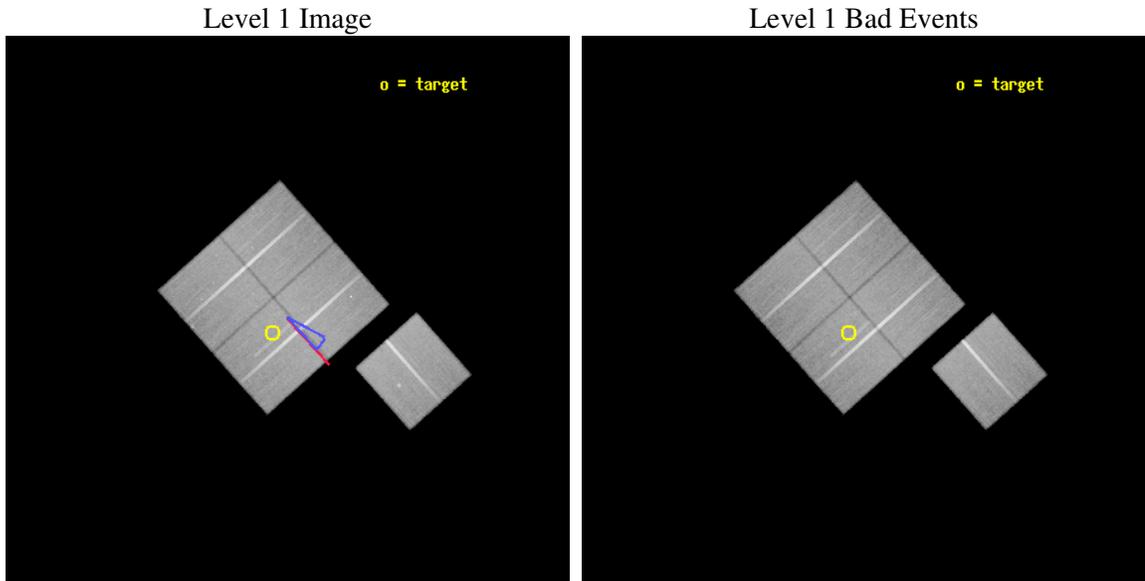
seq_num	900060
obs_id	2423
title	THE CHANDRA DEEP SURVEY OF THE HUBBLE DEEP FIELD NORTH (HDF-N) AREA
observer	Prof. William Brandt
object	HDF-N
dtcycle	0
cycle	P
ra_targ	189.205833
dec_targ	62.216111
ra_nom	189.14827013381
dec_nom	62.242747224176
roll_nom	138.25961205
revision	2
ontime	69322.158876553
livetime	68416.4138366
ontime0	69322.15890646
ontime1	69325.299866706
ontime2	69319.017946228
ontime3	69322.158876553
ontime6	69322.158896476
l2events	216192



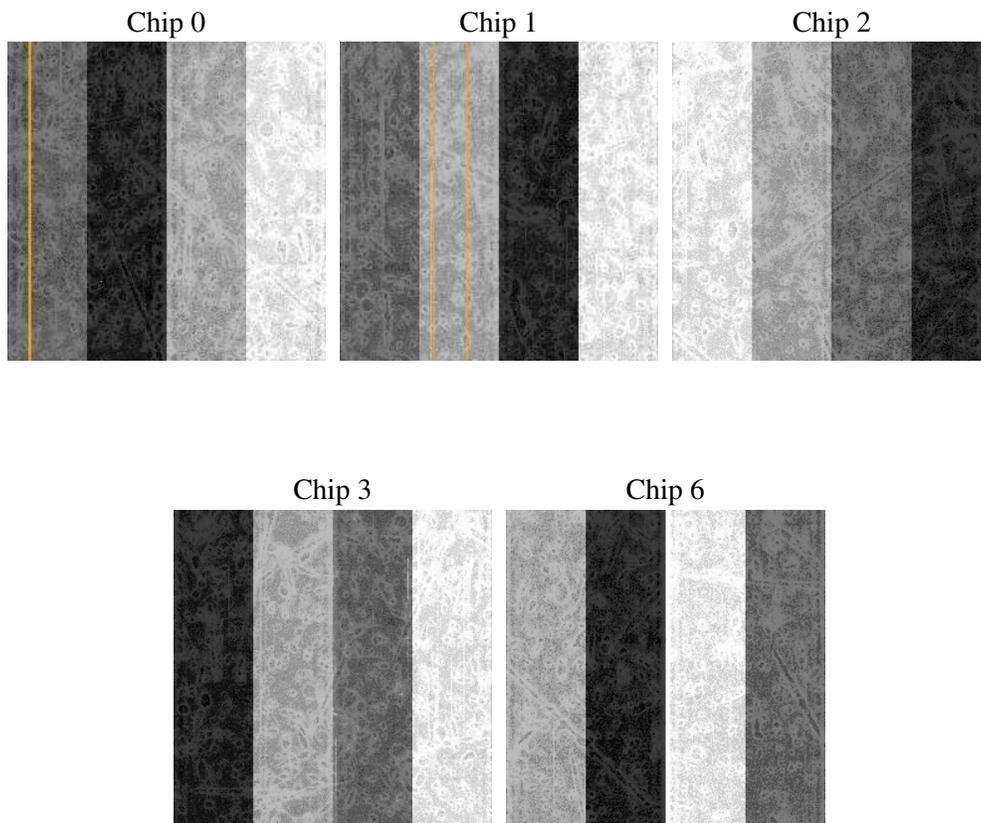
## 2 OBI

### 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	2006-11-09T01:59:07
revision	2

sched_exp_time	69248.869000
ontime	69328.146734849
ontime0	69331.287774846
ontime1	69334.428735092
ontime2	69328.146814615
ontime3	69328.146734849
ontime6	69331.287764862
l1events	2170292

### 2.1.4 Events

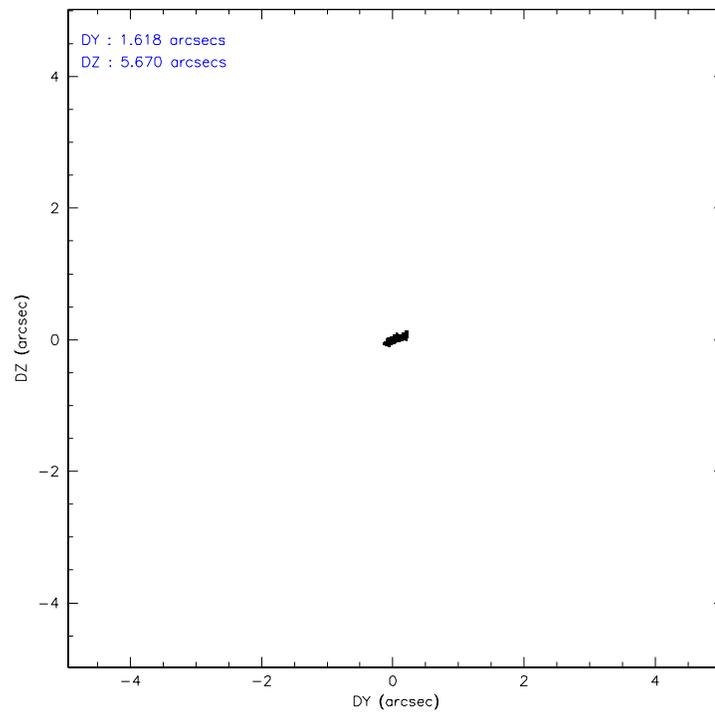
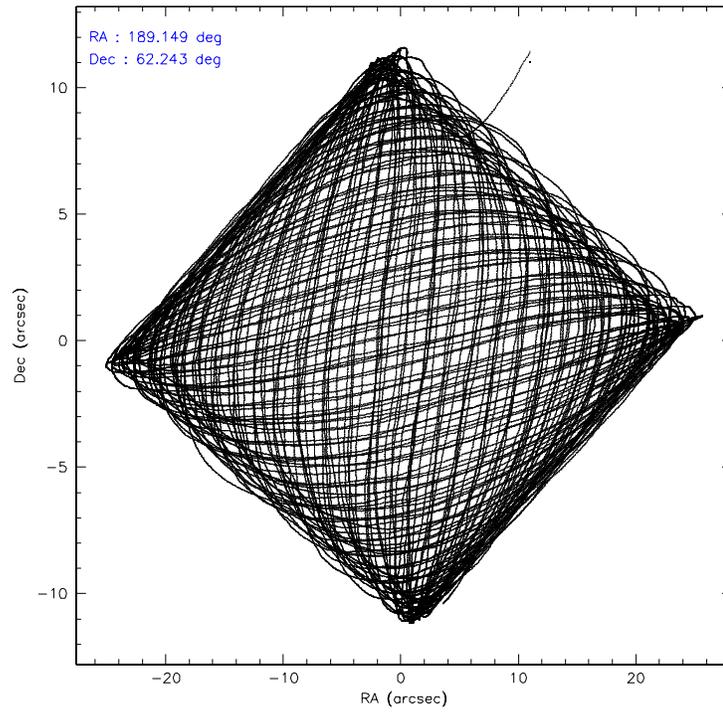
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	409903	414688	449180	446638	449883
rejected events	359498	361156	399386	397647	399034
rejected %	87%	87%	88%	89%	88%

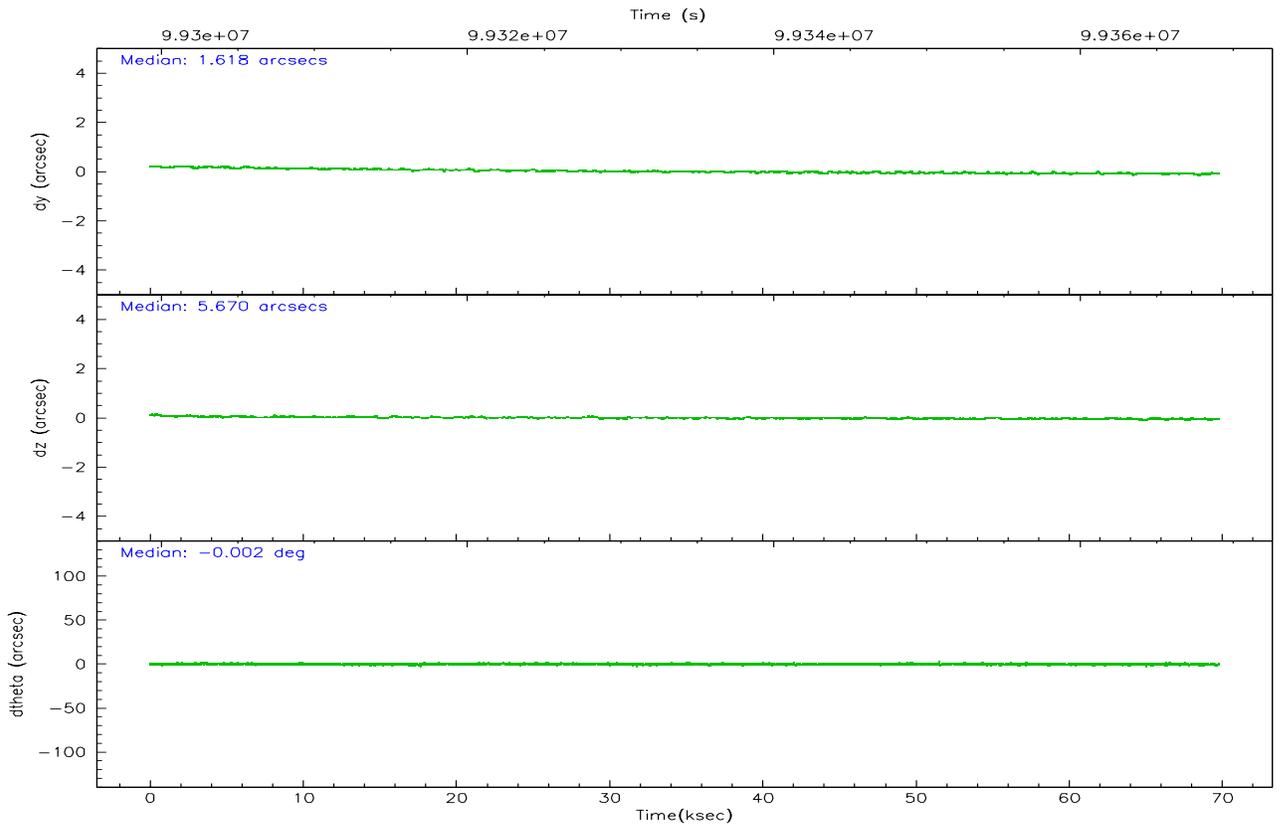
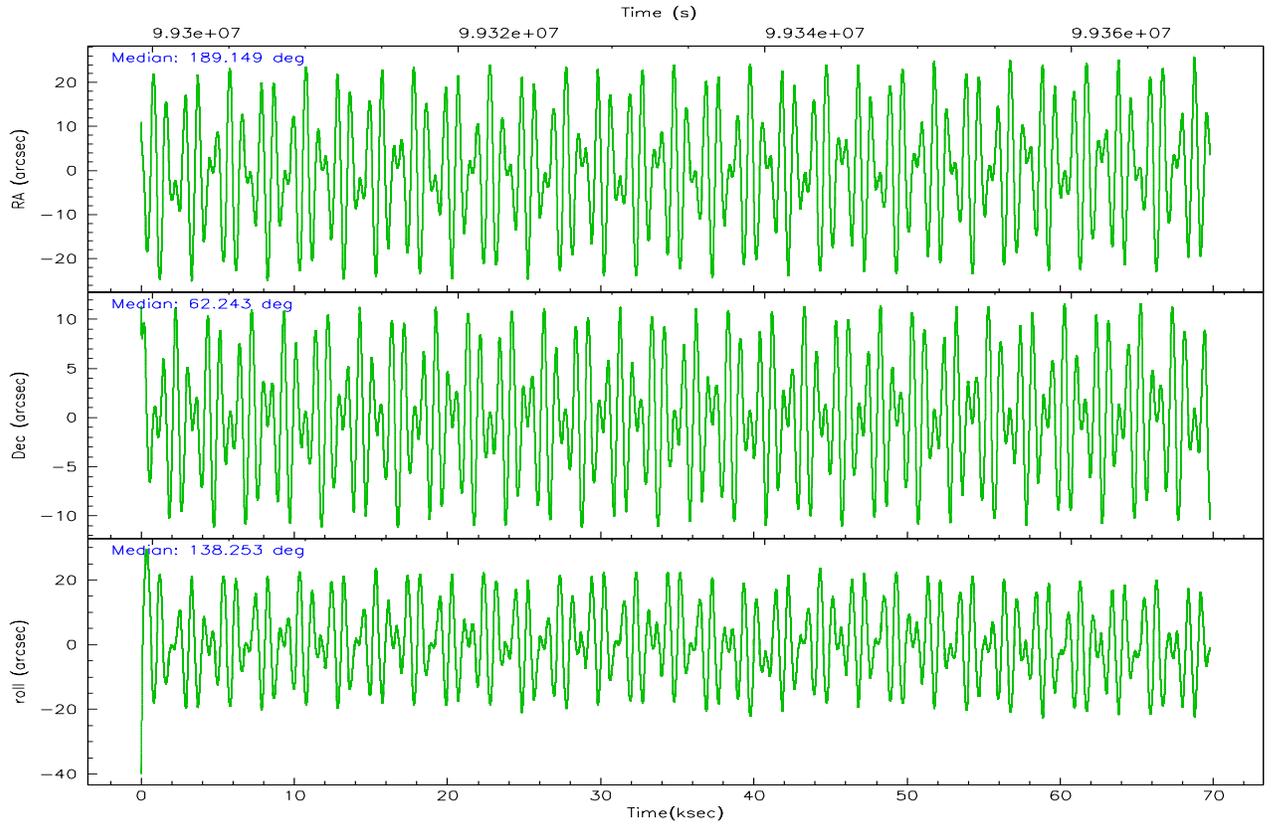
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	20950	21855	21405	20629	20900
	5%	5%	4%	4%	4%
grade 1 events	184	184	183	228	201
	0%	0%	0%	0%	0%
grade 2 events	10754	10802	10643	9756	9897
	2%	2%	2%	2%	2%
grade 3 events	5094	5568	4742	4938	5118
	1%	1%	1%	1%	1%
grade 4 events	4802	5473	4633	4657	5088
	1%	1%	1%	1%	1%
grade 5 events	15528	16781	15046	17017	17974
	3%	4%	3%	3%	3%
grade 6 events	8813	9841	8379	9013	9864
	2%	2%	1%	2%	2%
grade 7 events	343778	344184	384149	380400	380841
	83%	82%	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	189.206020	189.1482701338119	Subarray requested	NONE	NONE
Pointing Dec	62.237134	62.24274722417583	Alternating exposures requested	N	N
Pointing Roll	137.999830	138.2596120499992	Primary exposure time	0.000000	3.1
Roll angle	128.000000	128.000000			
Roll tolerance	10.000000	10.000000			
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	99299824.184000	99298677.840876			
Observation start date	2001-02-23T07:16:00	2001-02-23T06:57:57			
Observation end time	99369072.184000	99369386.956104			
Observation end date	2001-02-24T02:30:08	2001-02-24T02:36:26			
Read mode	TIMED	TIMED			

## 2.3 Aspect



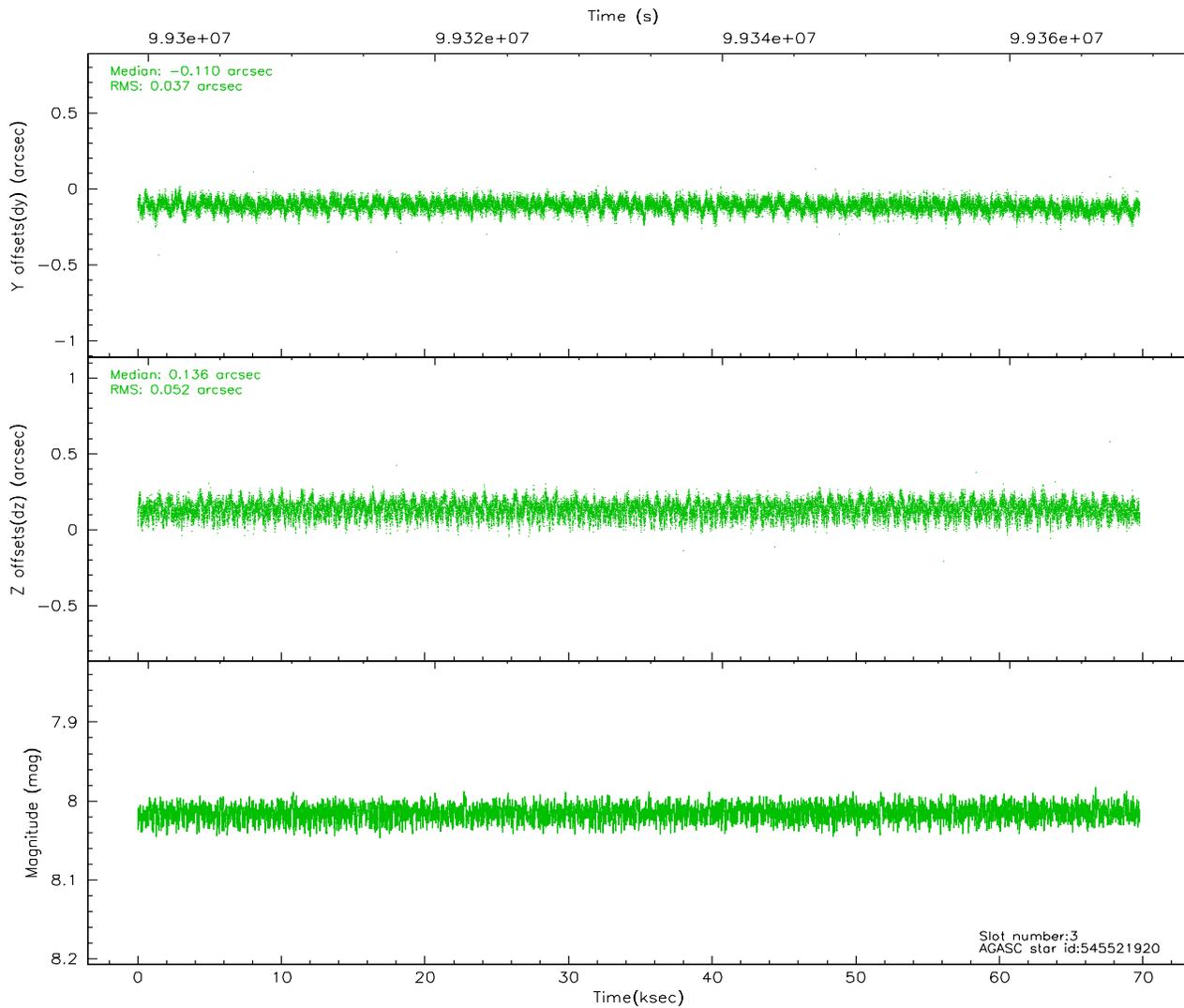
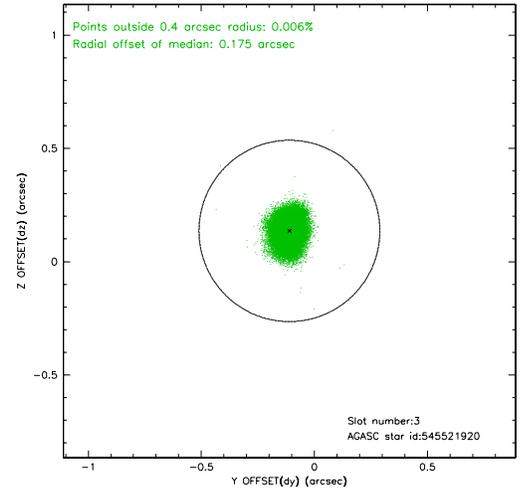
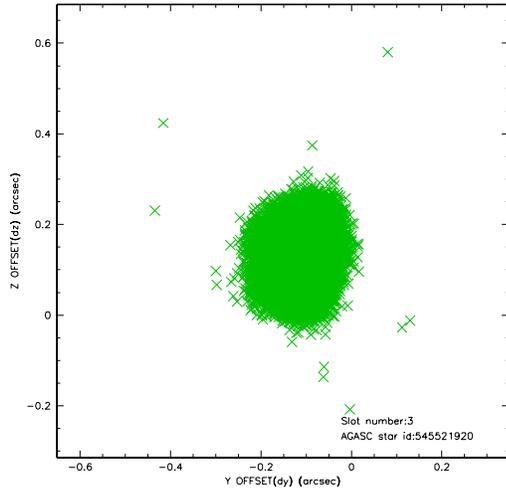


### Slot Statistics

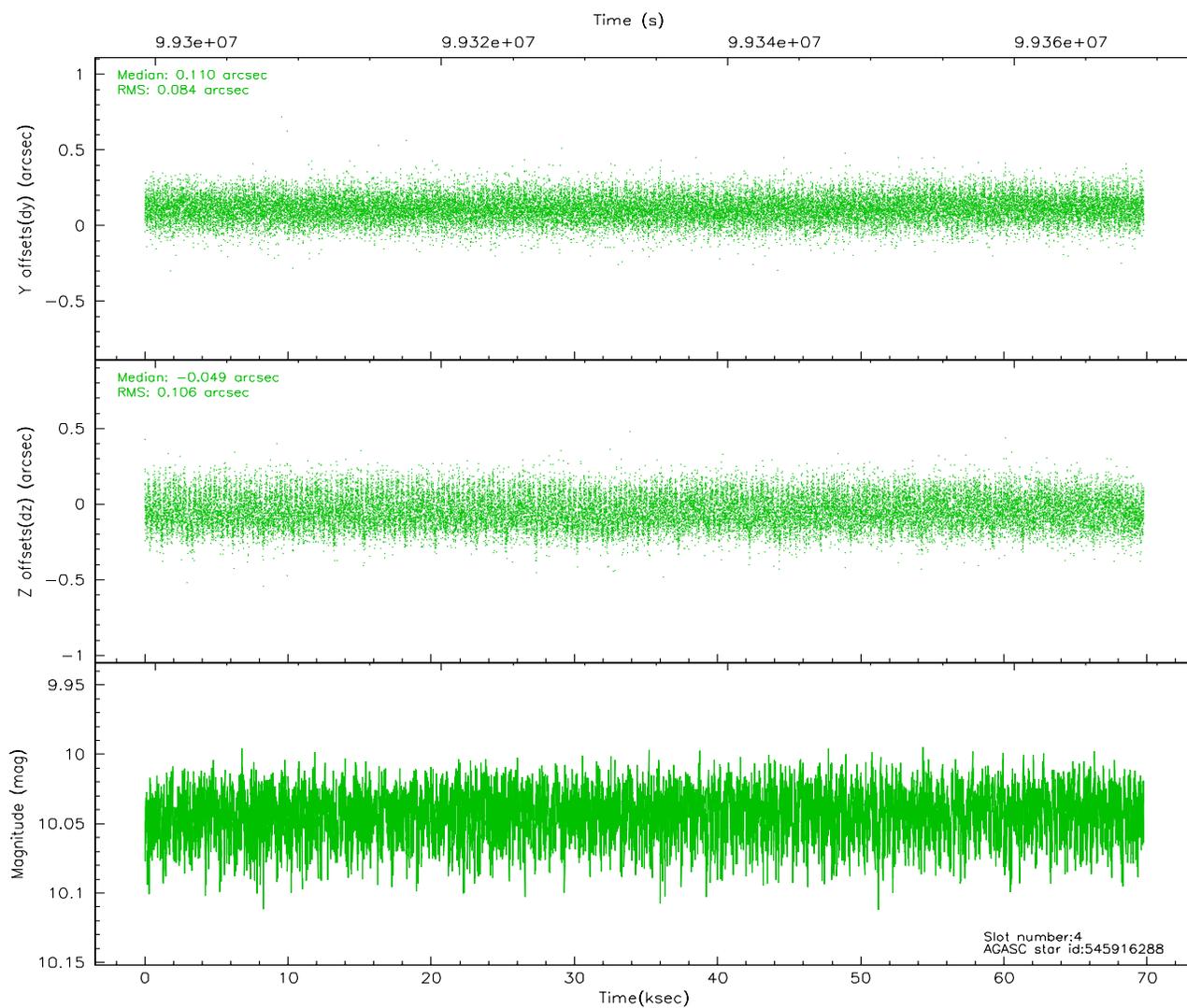
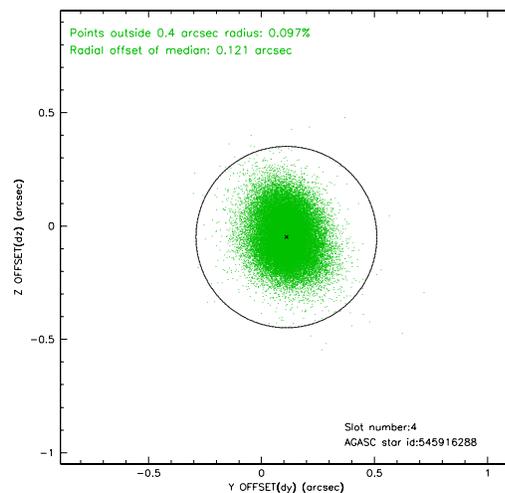
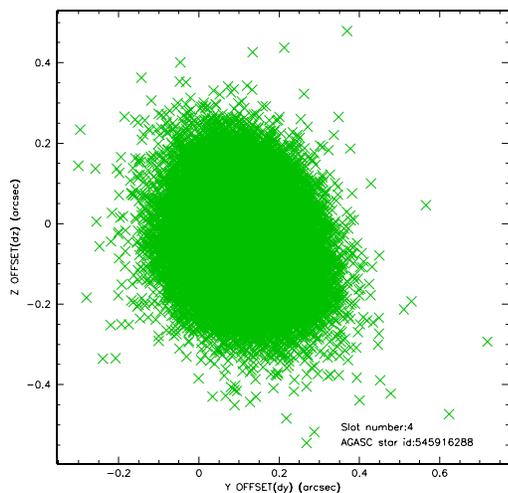
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.17	17016	-0.056	-0.037	0.011	0.019	0.000000	0.000000	-756.45	-955.30
1	FID	ACIS-I-4	7.15	17017	-0.060	0.048	0.009	0.029	0.000000	0.000000	2157.60	950.95
2	FID	ACIS-I-5	7.23	17014	0.013	0.057	0.011	0.019	0.000000	0.000000	-1809.98	947.98
3	GUIDE	545521920	8.01	34030	-0.110	0.136	0.068	0.110	190.203465	62.042567	-1710.34	-615.19
4	GUIDE	545916288	10.04	33994	0.110	-0.049	0.144	0.231	188.813969	62.949161	2194.46	-1476.36
5	GUIDE	545521832	10.11	33940	0.004	0.061	0.121	0.213	188.976813	62.367279	599.16	-92.16
6	GUIDE	545523632	10.06	34011	0.023	-0.174	0.126	0.203	188.952319	61.550910	-1328.59	2126.48
7	GUIDE	545916224	9.59	34016	-0.026	0.016	0.102	0.165	188.817359	62.651242	1477.23	-678.60

## 2.4 Star Slots

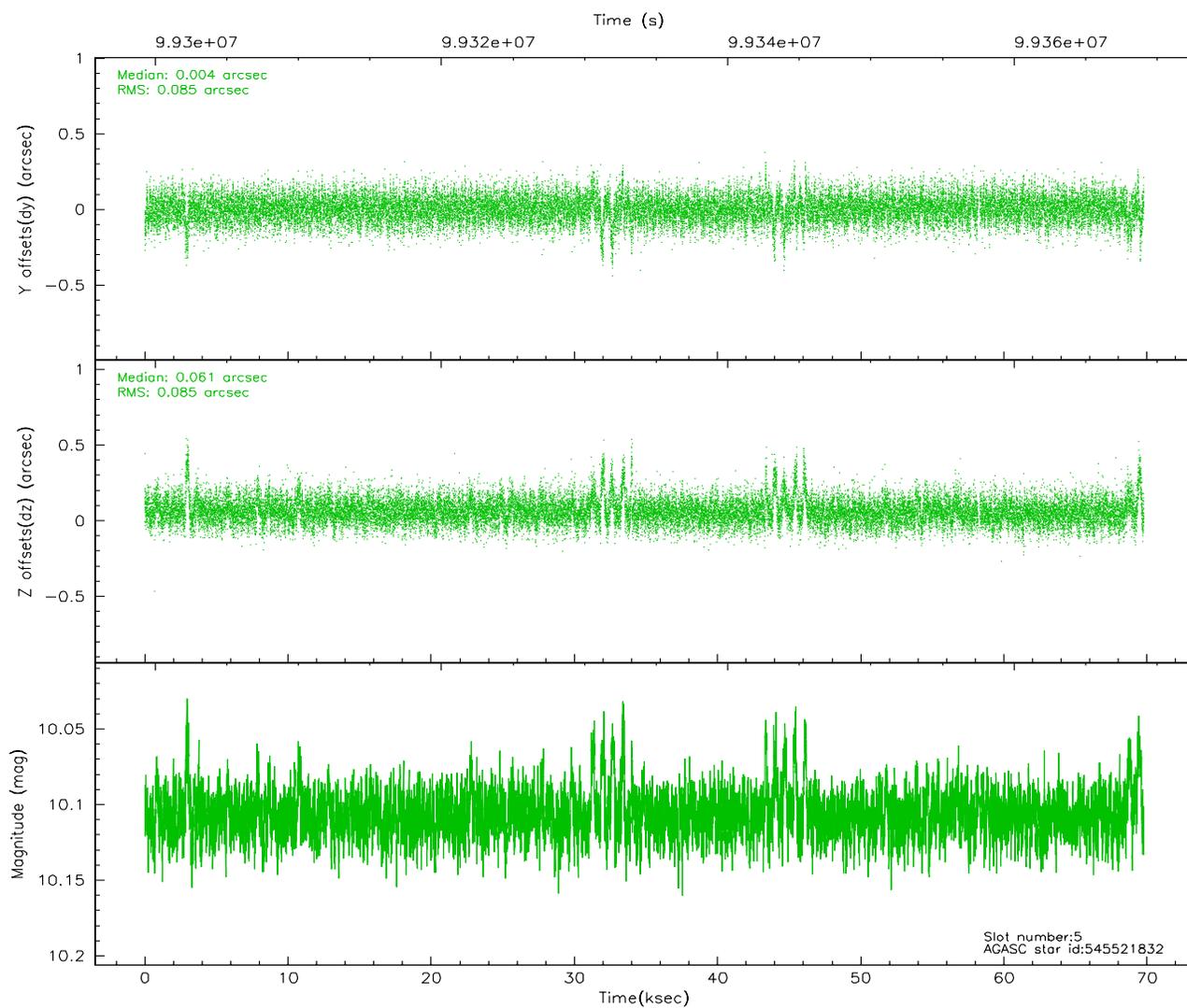
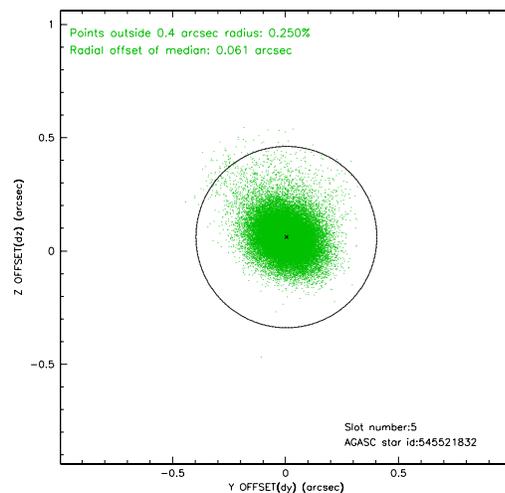
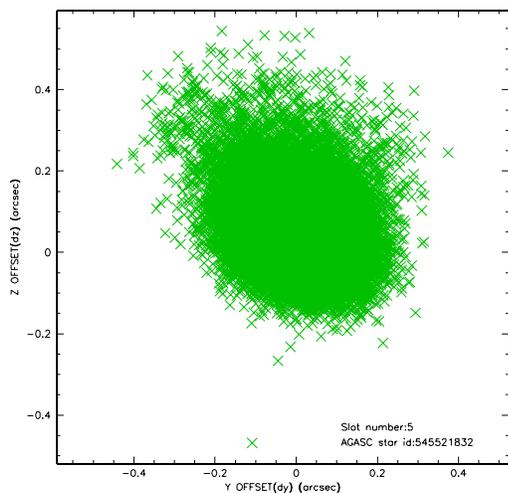
### 2.4.1 Slot 3



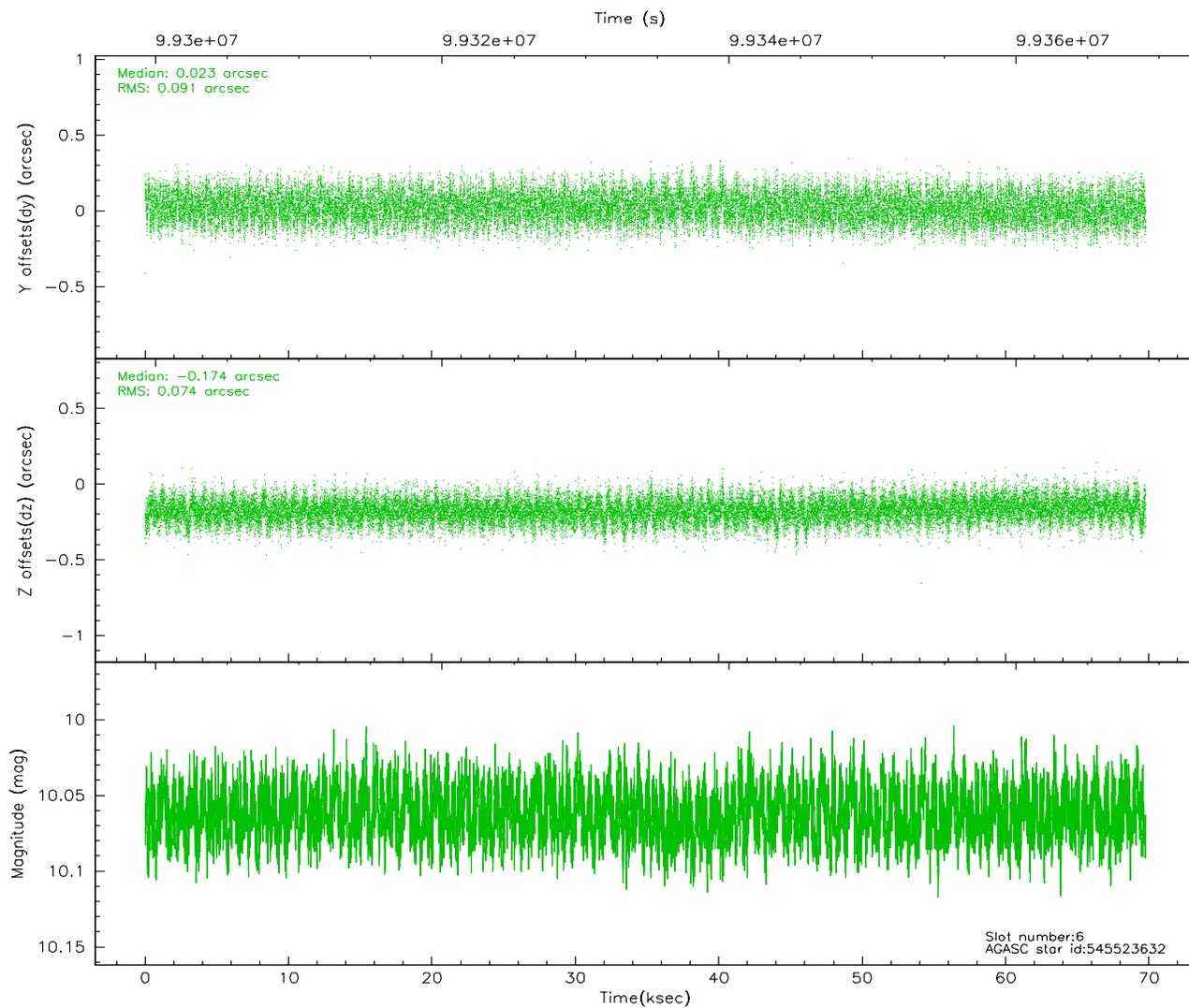
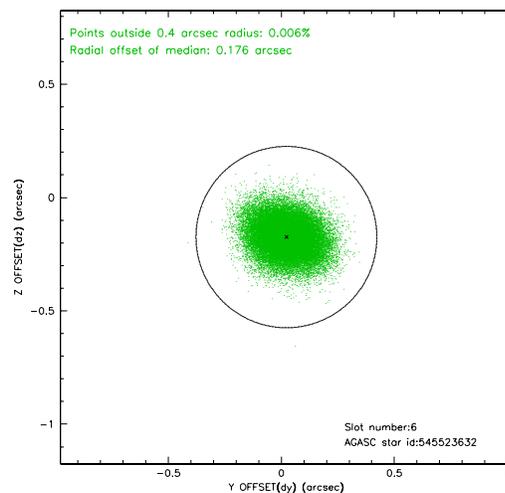
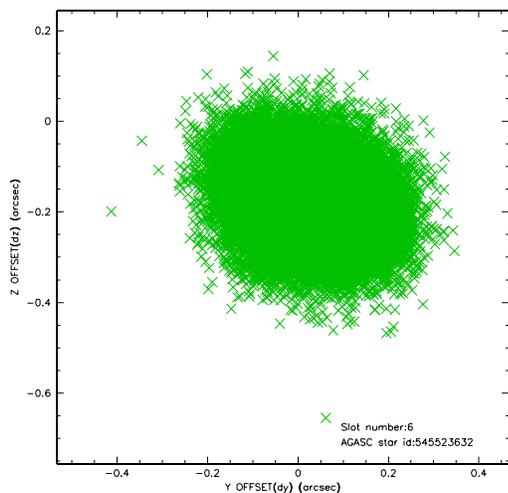
## 2.4.2 Slot 4



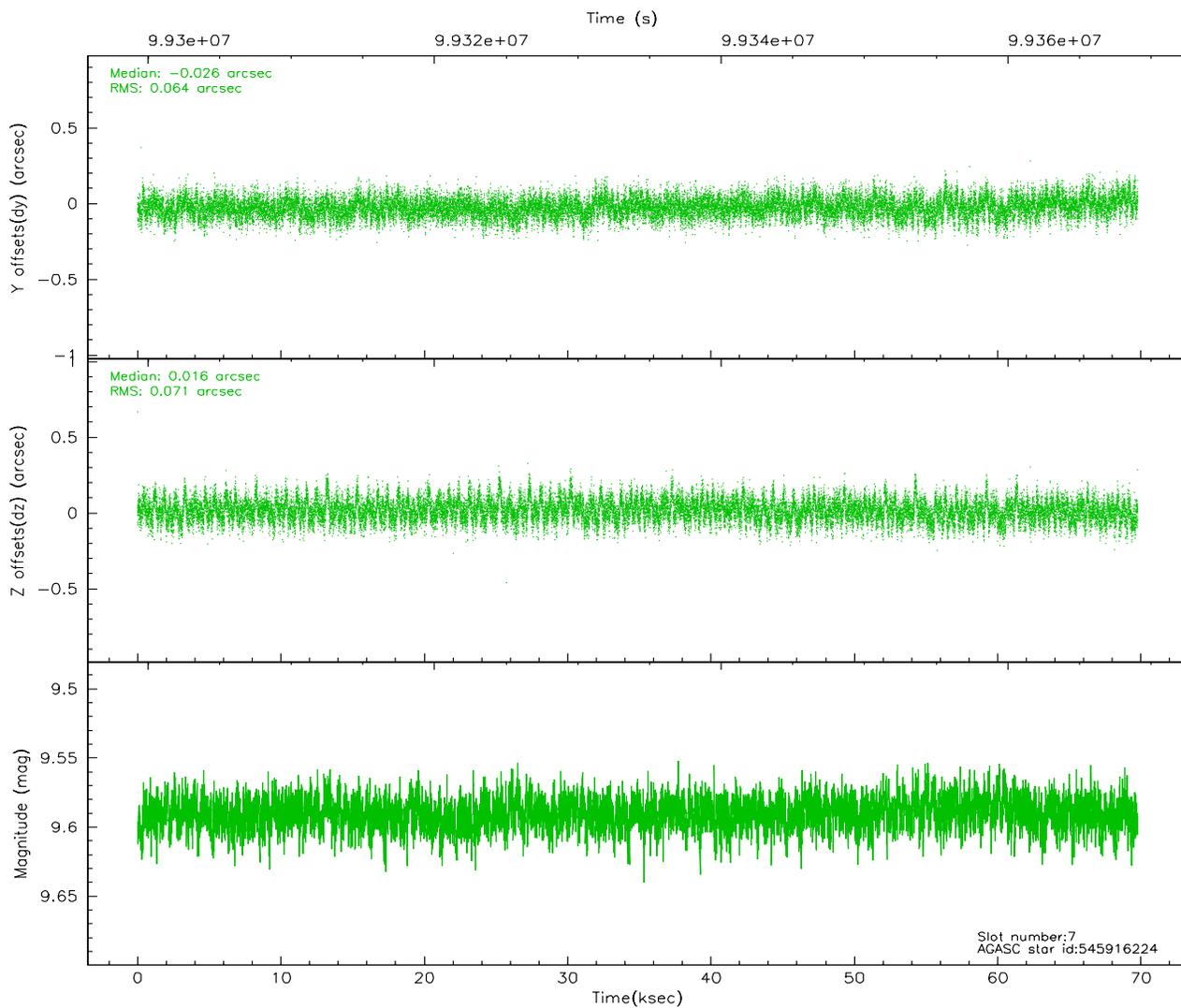
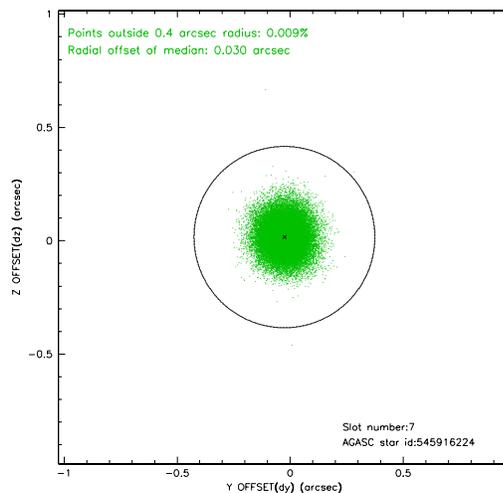
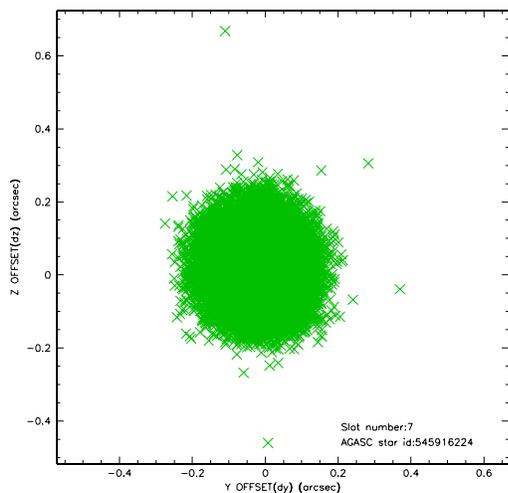
### 2.4.3 Slot 5



## 2.4.4 Slot 6

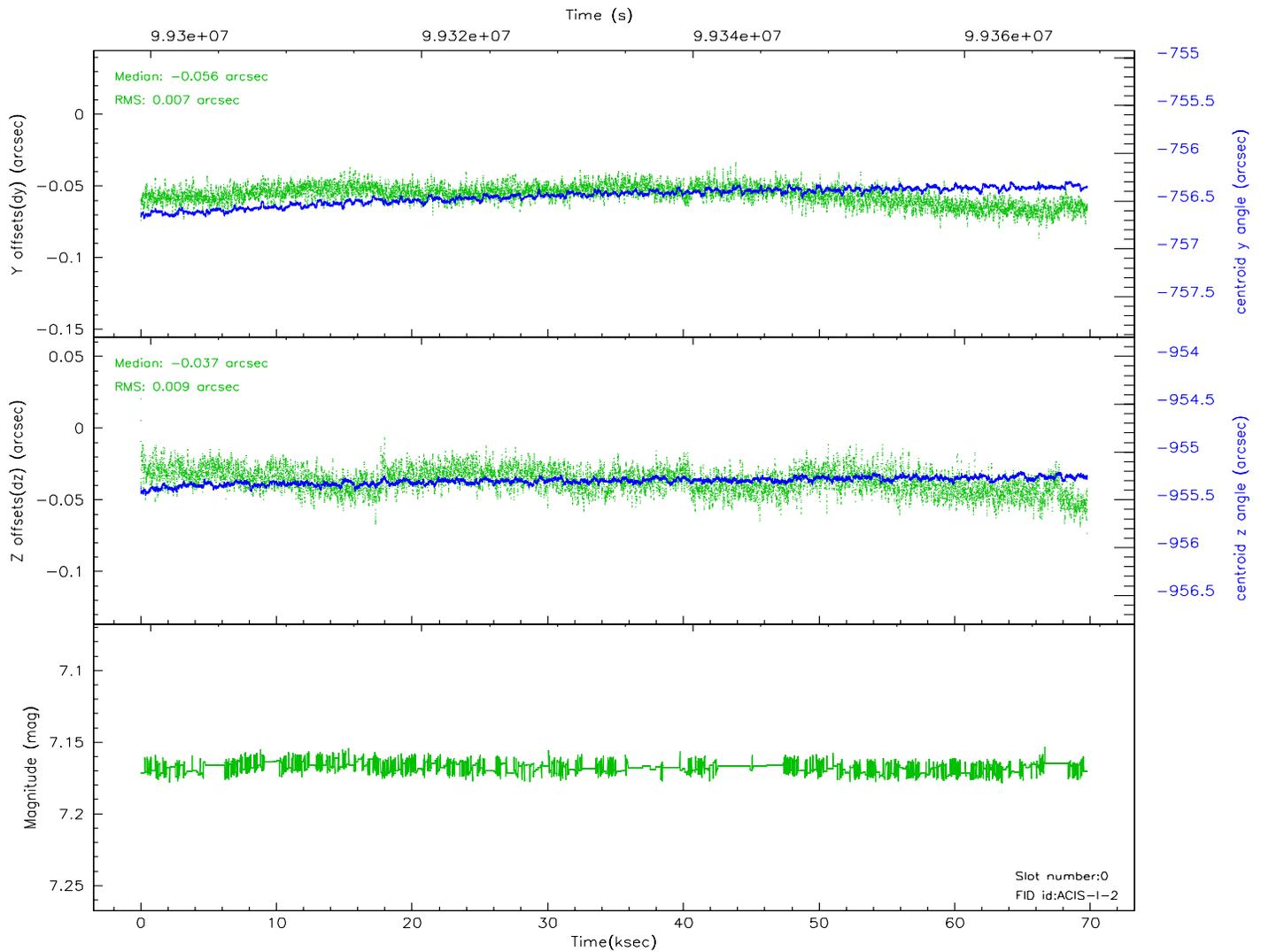
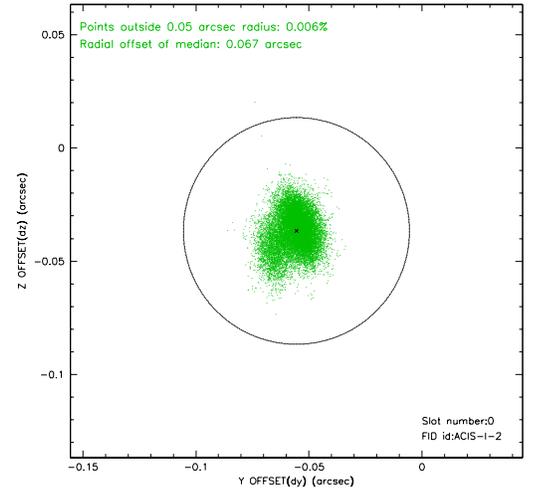
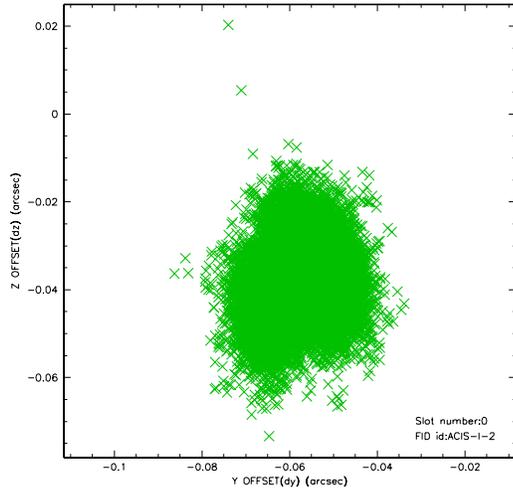


## 2.4.5 Slot 7

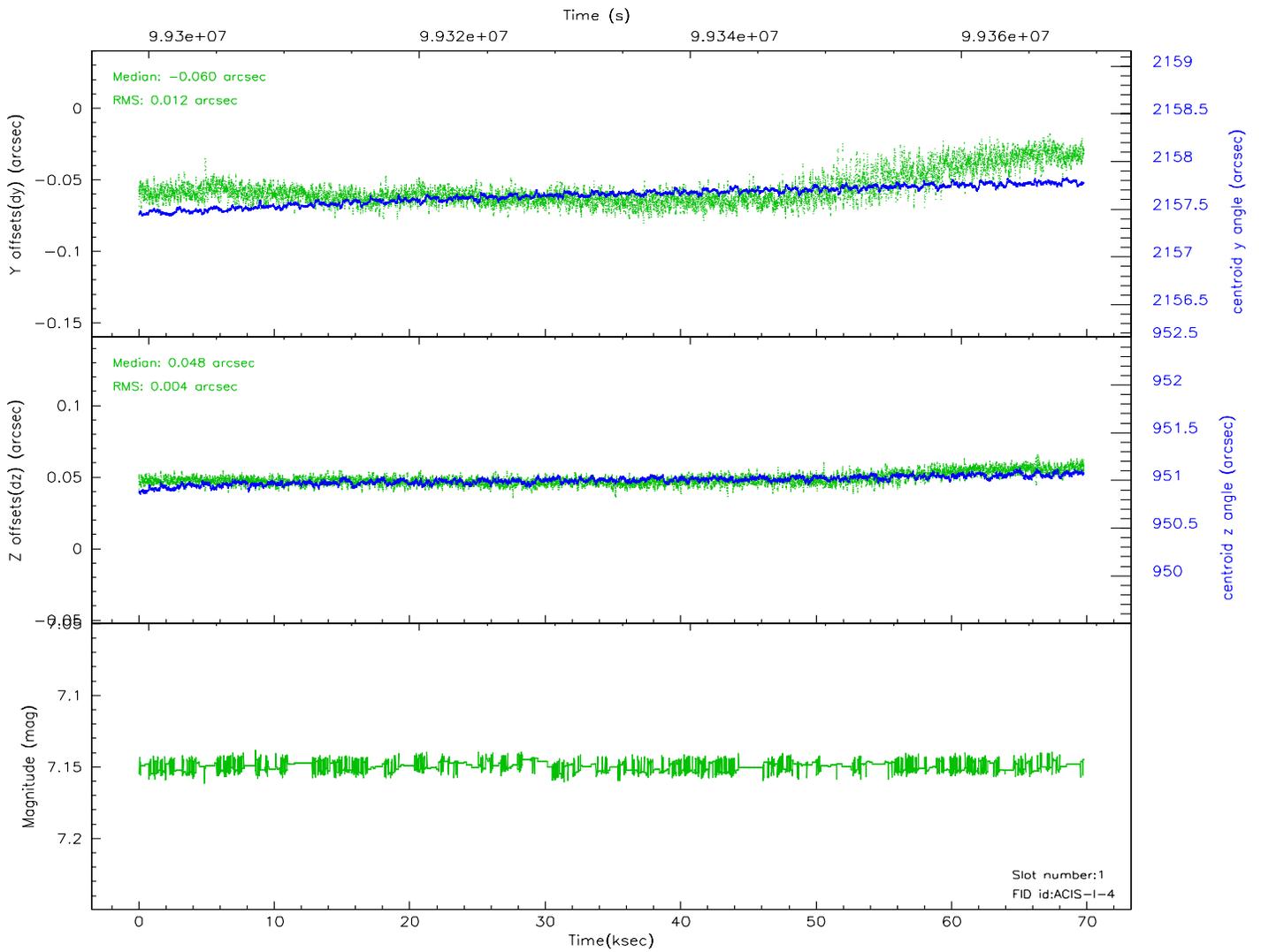
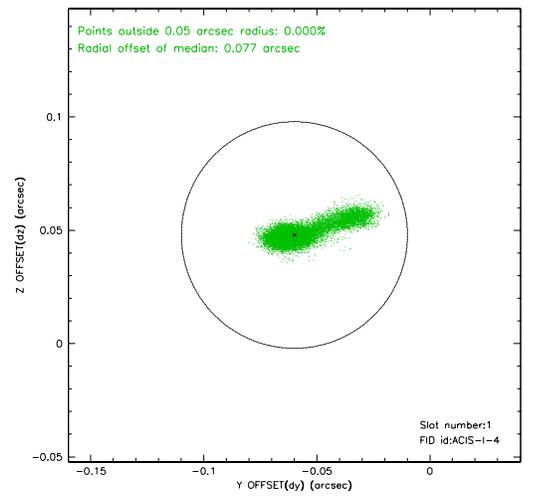
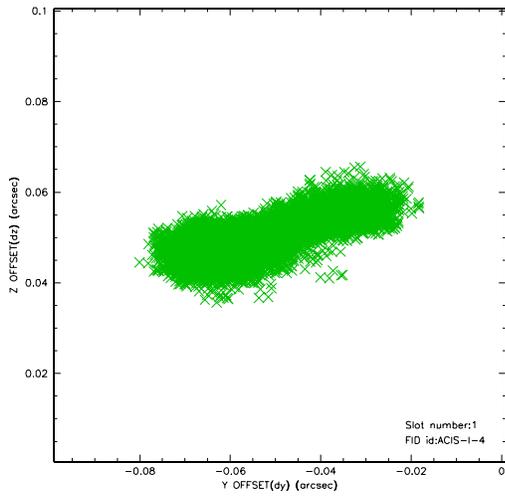


## 2.5 FID Slots

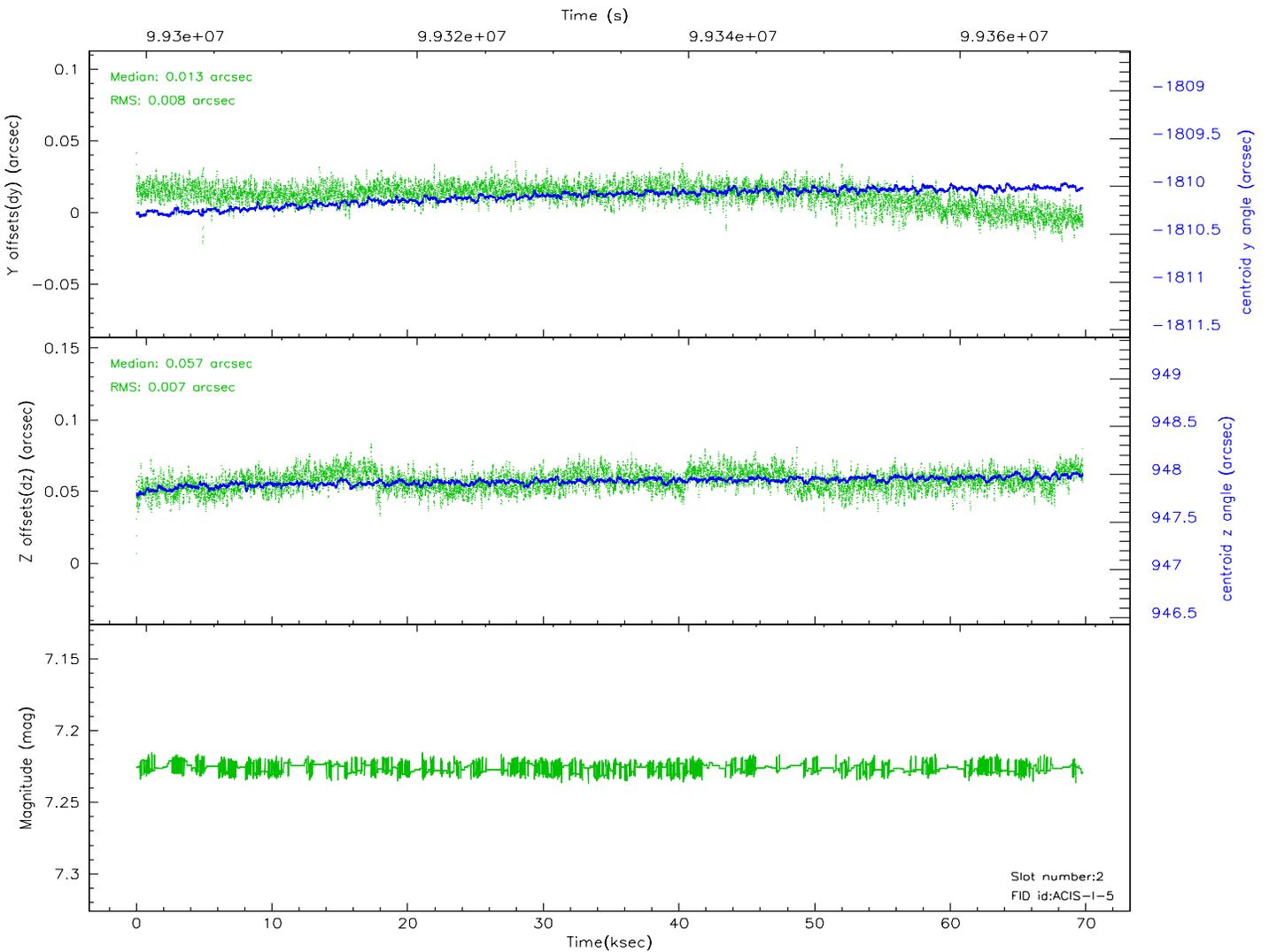
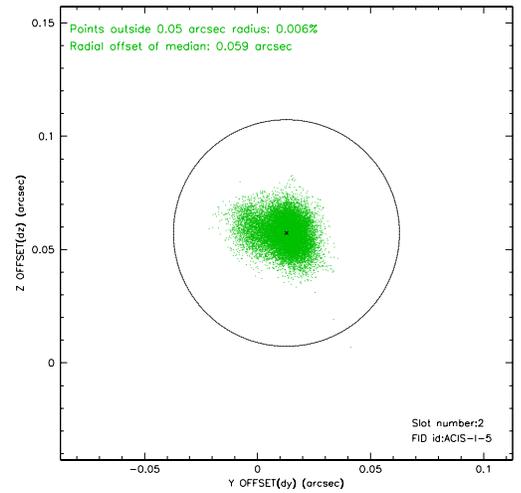
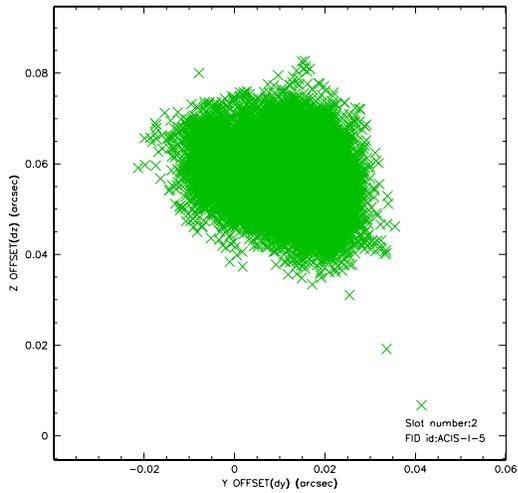
### 2.5.1 Slot 0



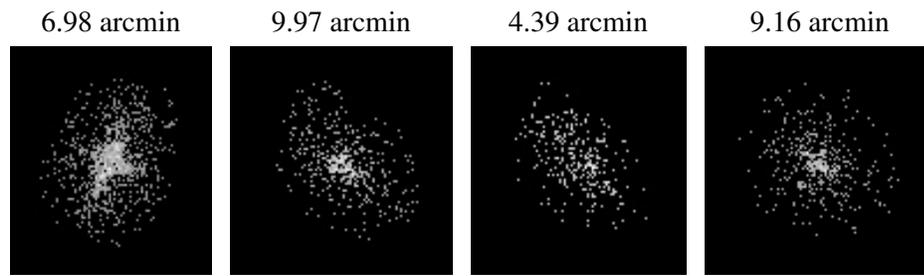
## 2.5.2 Slot 1



### 2.5.3 Slot 2



### 3 Point Sources



# A Summary

## A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2006.11.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	69.325

## A.2 Comments

Roll constraint: Requested: 128 +/- 10 Actual: 138.5 Roll constraint sufficiently satisfied.

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.