

# V&V Reference Report

## L2 ASCDS Version : 7.6.11

Observation 351 - L2 Version 6  
Chandra X-Ray Center

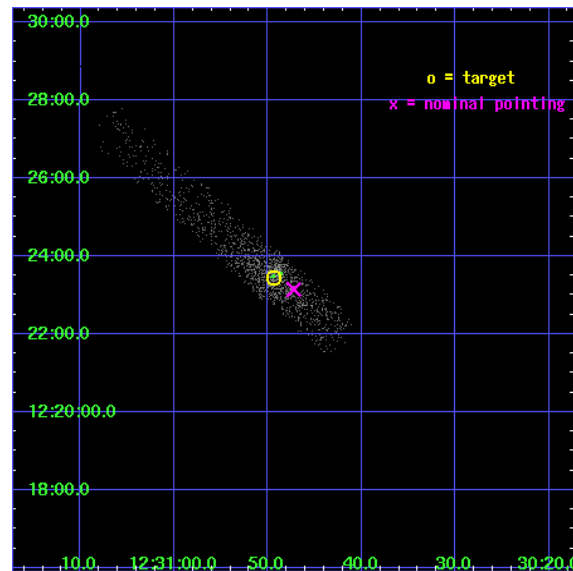
L2 Processing Date : Nov 2 2007

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# 1 Front

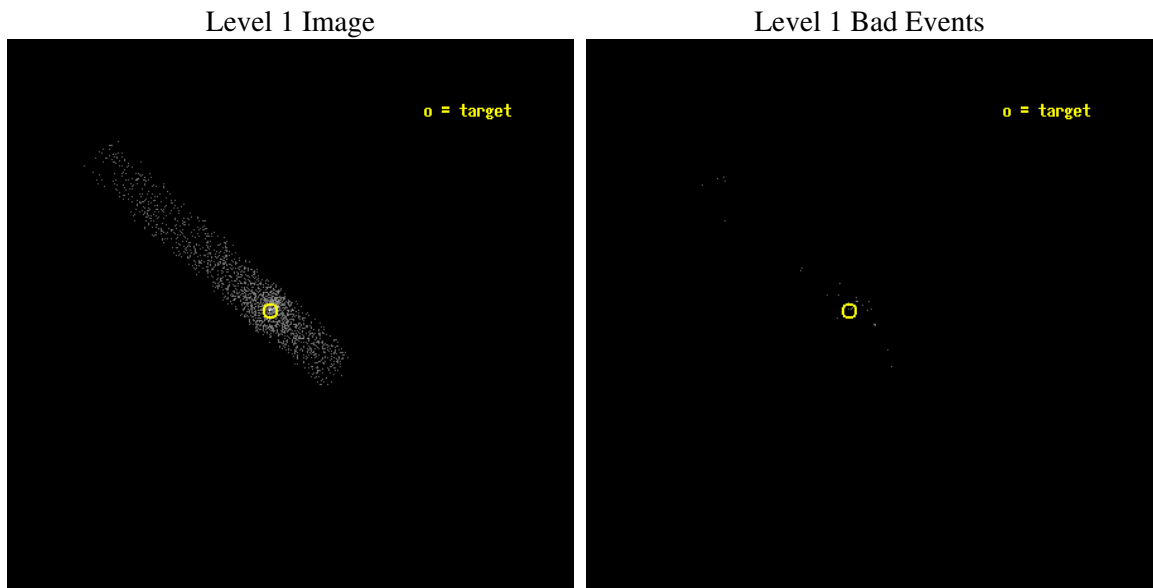
seq_num	700023
obs_id	351
title	STUDIES OF RADIO JETS AND THE NARROW LINE REGIONS
observer	Professor Andrew Wilson
object	M87
dtcycle	0
cycle	P
ra_targ	187.705833
dec_targ	12.391083
ra_nom	187.69682912537
dec_nom	12.385716767091
roll_nom	221.80223060913
revision	6
ontime	586.04862505198
liveltime	102.81554825473
ontime7	586.04862505198
l2events	1744



## 2 OBI Primary

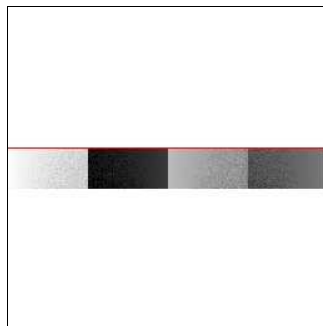
### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias

Chip 7



### 2.1.3 Parameters

obi_num	0
ascdsver	7.6.11.2
caldsver	3.4.1
date	2007-11-02T17:54:32
revision	6

sched_exp_time	1000.000000
ontime	586.04862505198
ontime7	586.04862505198
l1events	2291

### 2.1.4 Events

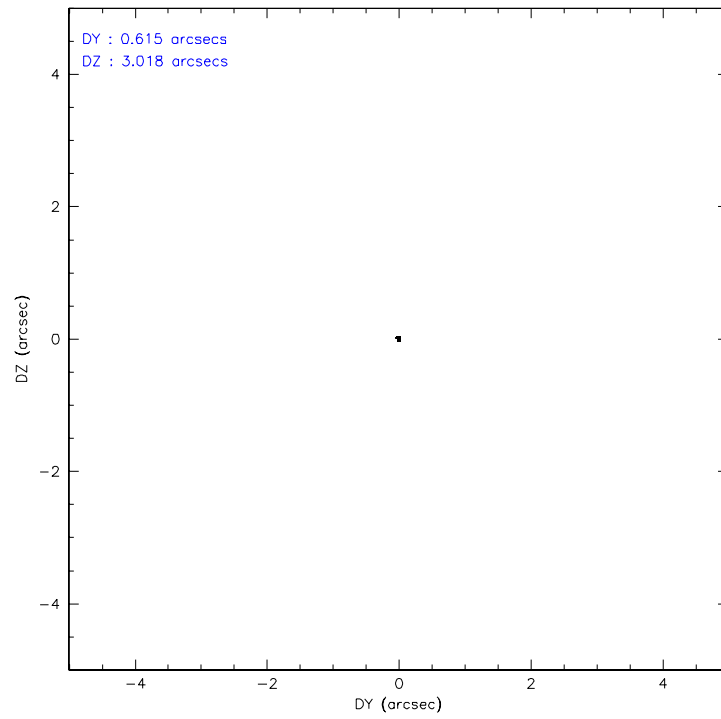
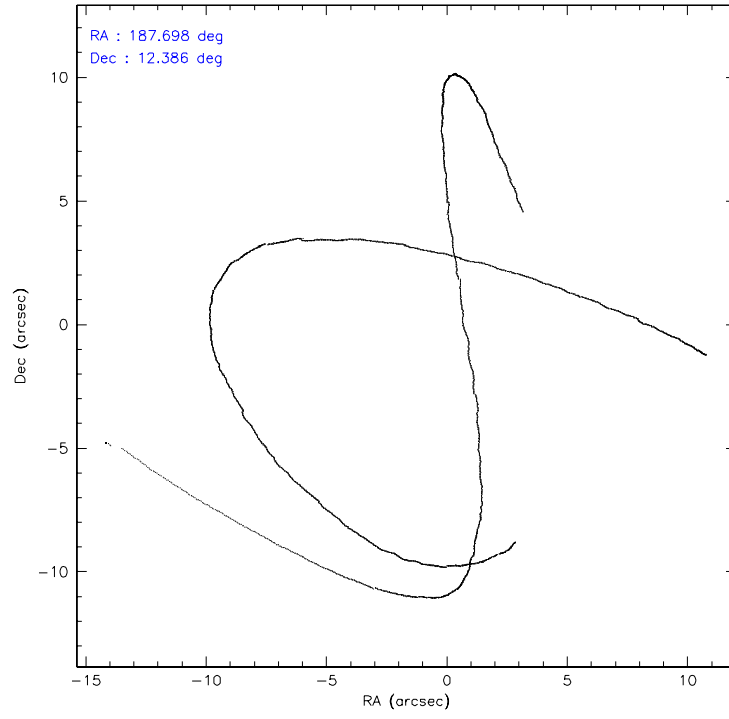
	<b>ccd 7</b>
level 1 events	2291
rejected events	511
rejected %	22%

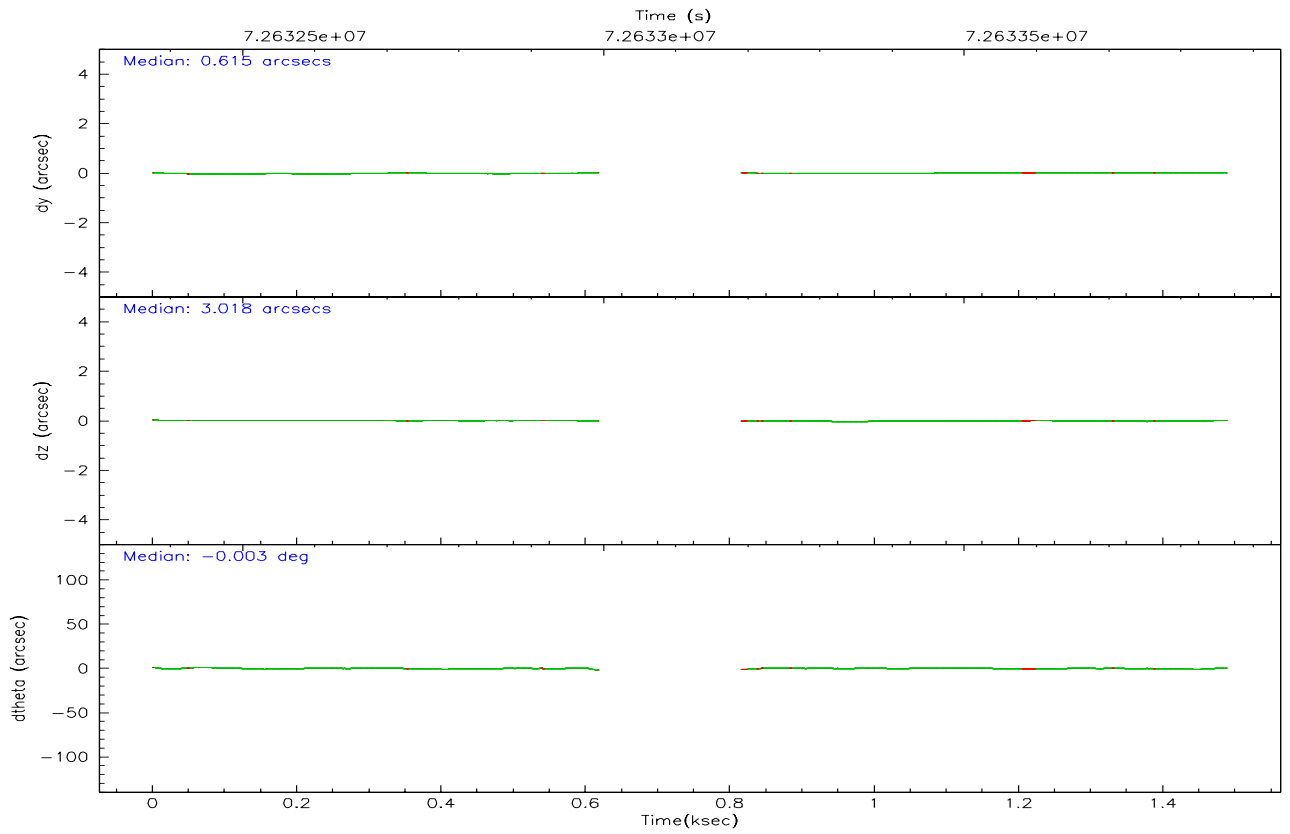
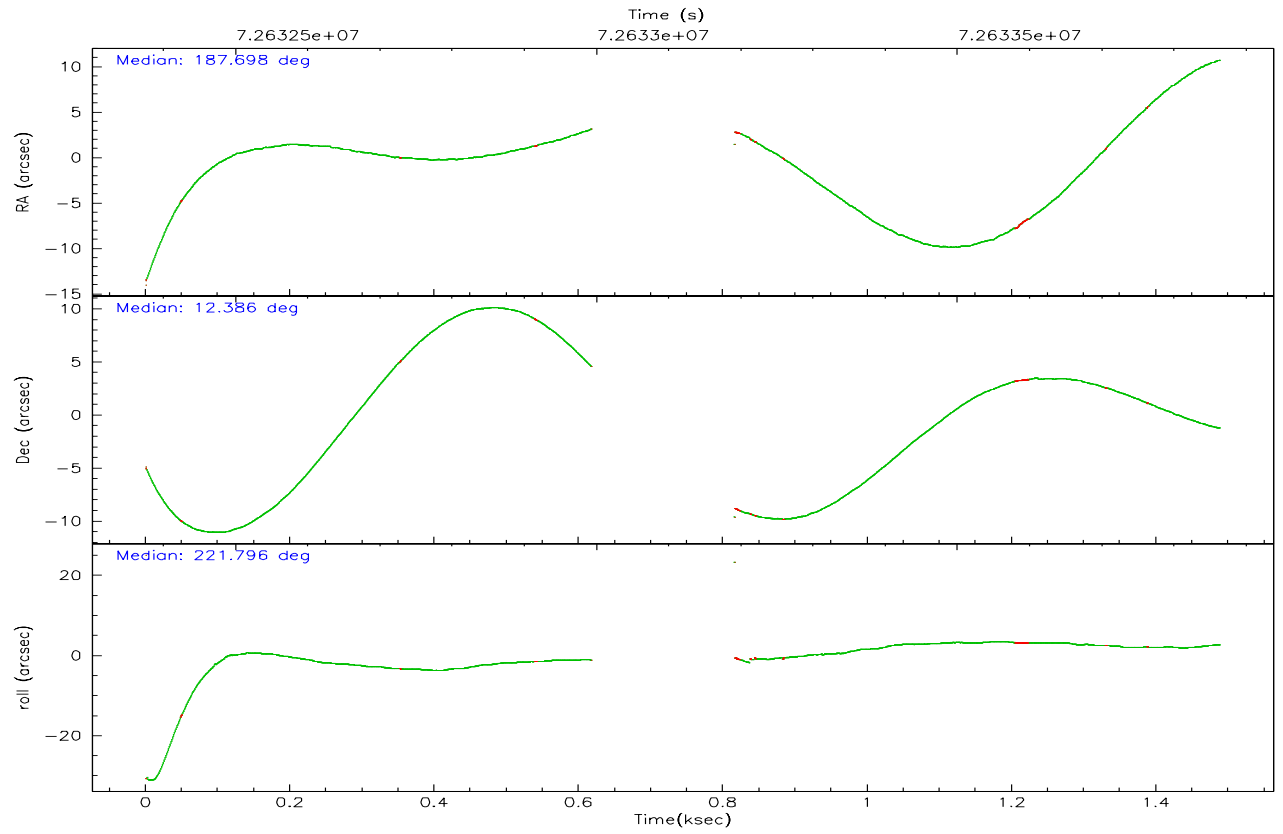
	<b>ccd 7</b>
grade 0 events	686
	29%
grade 1 events	0
	0%
grade 2 events	564
	24%
grade 3 events	255
	11%
grade 4 events	245
	10%
grade 5 events	41
	1%
grade 6 events	351
	15%
grade 7 events	149
	6%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-7	ACIS-7	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	187.705761	187.6968291253718	Subarray requested	CUSTOM	1/8
Pointing Dec	12.411991	12.38571676709139	Subarray start row	447	447
Pointing Roll	221.644022	221.8022306091285	Subarray row count	128	128
SIM focus pos (mm)	-0.684267	-0.6828225247311905	Alternating exposures requested	Y	Y
SIM defocus (mm)	0	0.001444936568705701	Primary exposure time	0.100000	0.1
SIM translation stage pos (mm)	-190.132523	-190.1425803651734	Secondary exposure time	0.400000	0.4
SIM translation stage offset (mm)	0	0.01005778216563158	Duty cycle	1	1
Observation start time	72632865.184000	72631890.41302399			
Observation start date	2000-04-20T15:46:41	2000-04-20T15:31:30			
Observation end time	72633865.184000	72634036.25060301			
Observation end date	2000-04-20T16:03:21	2000-04-20T16:07:16			
Read mode	TIMED	TIMED			

## 2.3 Aspect





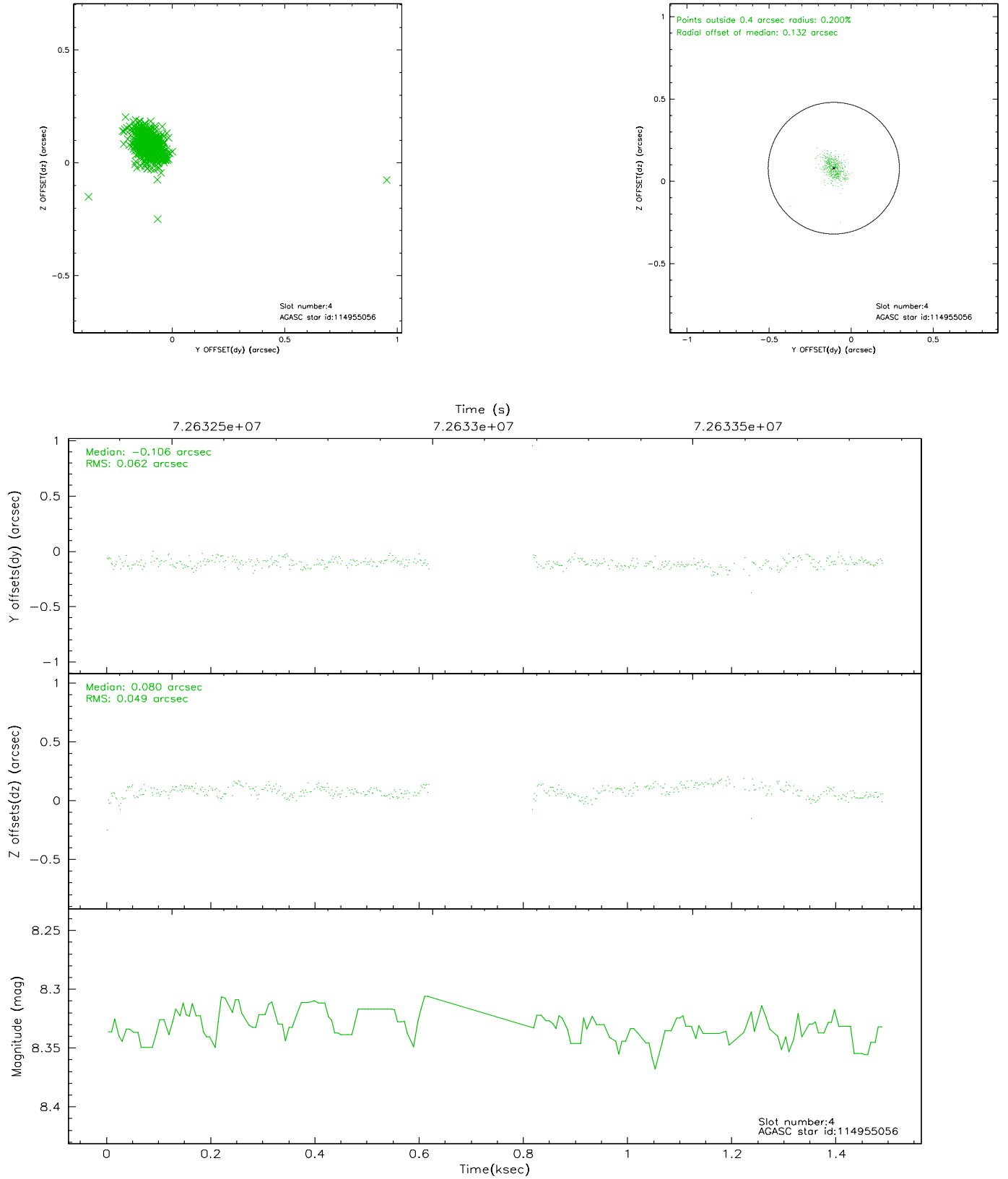
### Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	265	0.010	0.018	0.007	0.011	0.000000	0.000000	-753.23	-1723.99
1	FID	ACIS-S-4	7.21	192	-0.032	-0.009	0.005	0.008	0.000000	0.000000	2156.21	175.58
2	FID	ACIS-S-5	6.99	206	-0.008	-0.001	0.007	0.010	0.000000	0.000000	-1795.77	179.01
3	OMITTED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
4	GUIDE	114955056	8.33	500	-0.106	0.080	0.061	0.106	187.914001	12.127854	132.55	1251.12
5	GUIDE	114952824	8.57	443	0.012	0.004	0.060	0.103	187.703904	12.486727	-172.46	-202.86
6	GUIDE	114952424	9.34	512	0.066	-0.061	0.079	0.127	187.477948	11.953762	1696.28	698.97
7	GUIDE	114952792	9.51	511	0.036	-0.014	0.094	0.150	187.070263	12.344747	1833.80	-1304.73

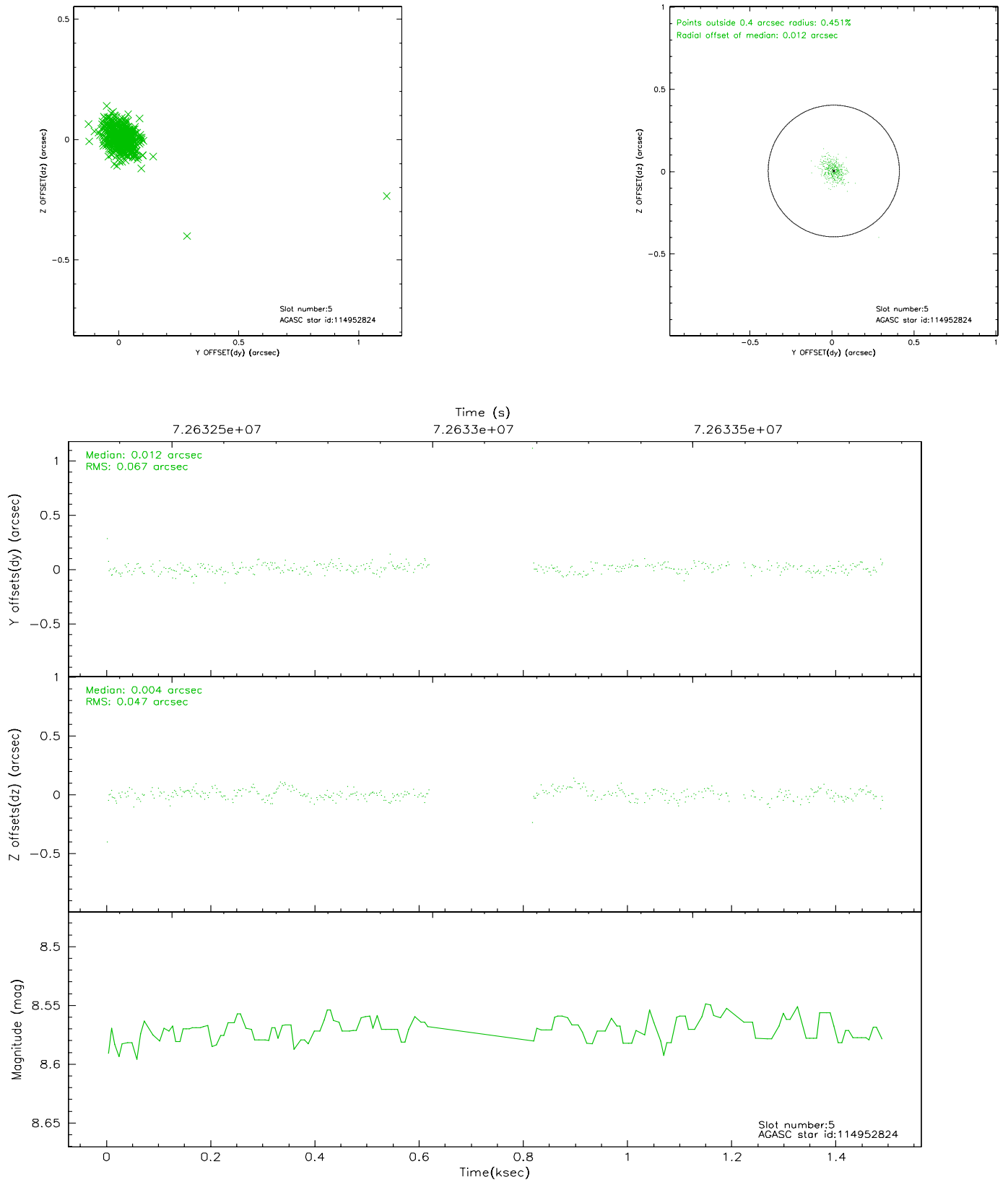


## 2.4 Star Slots

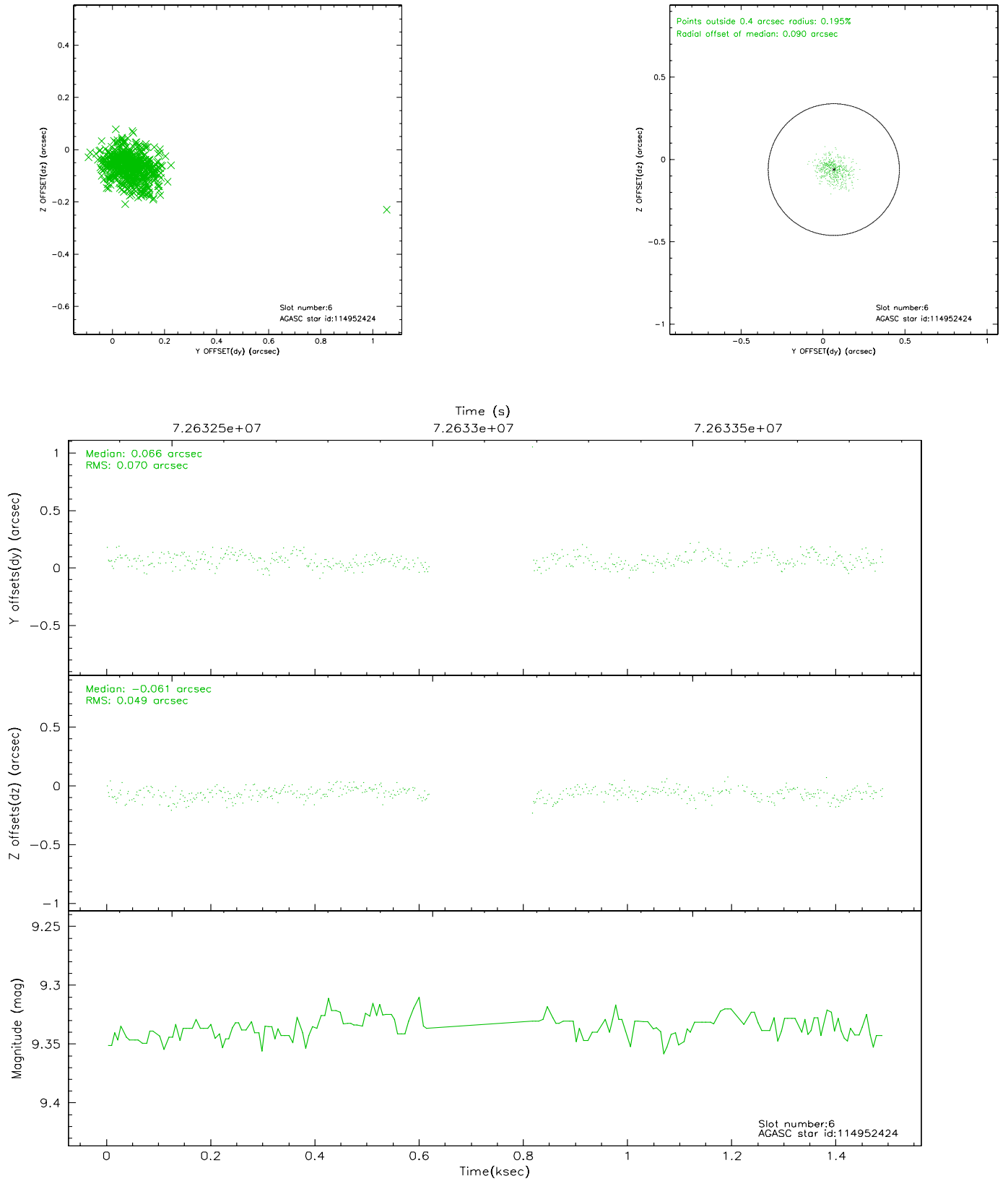
### 2.4.1 Slot 4



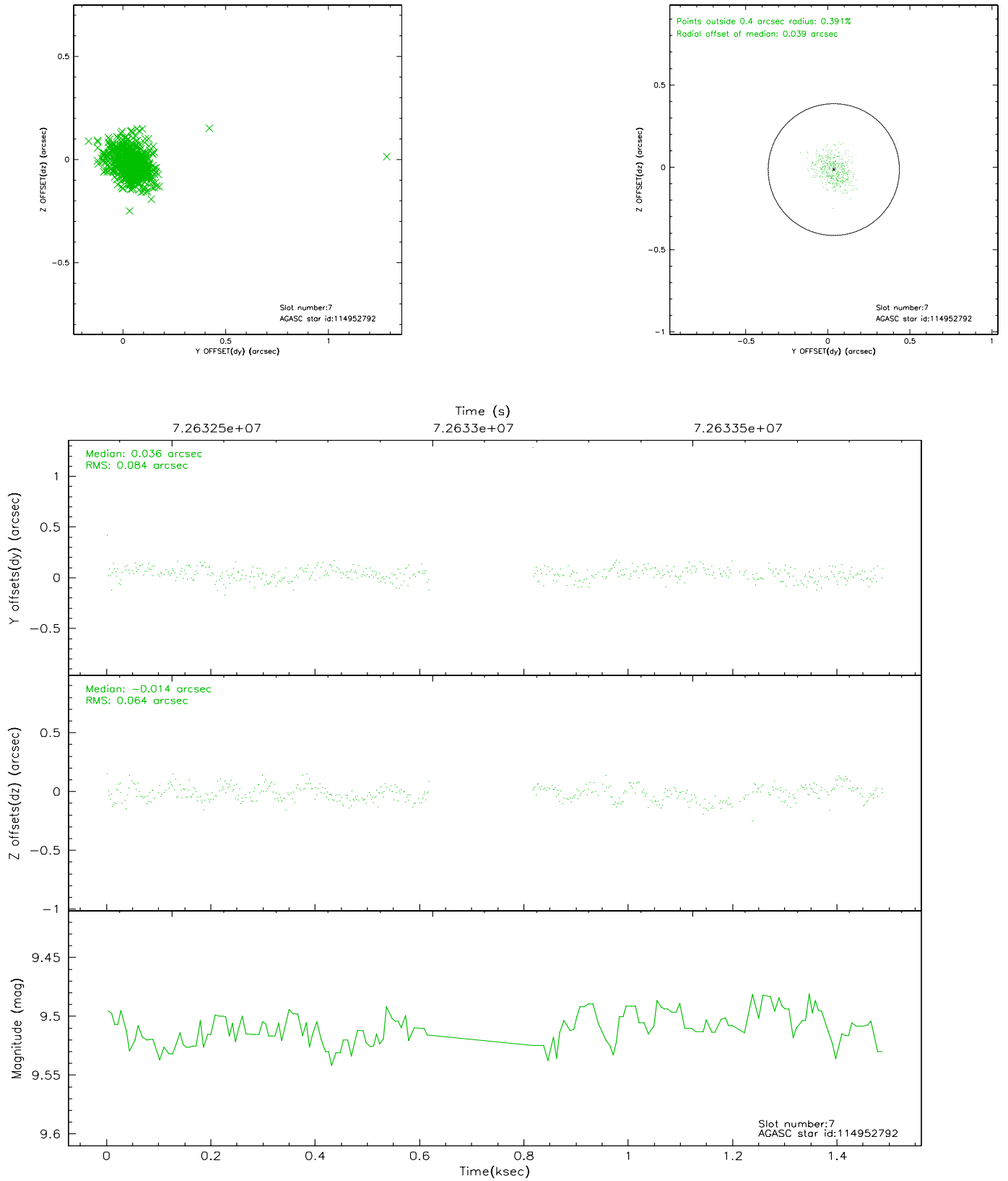
## 2.4.2 Slot 5



### 2.4.3 Slot 6

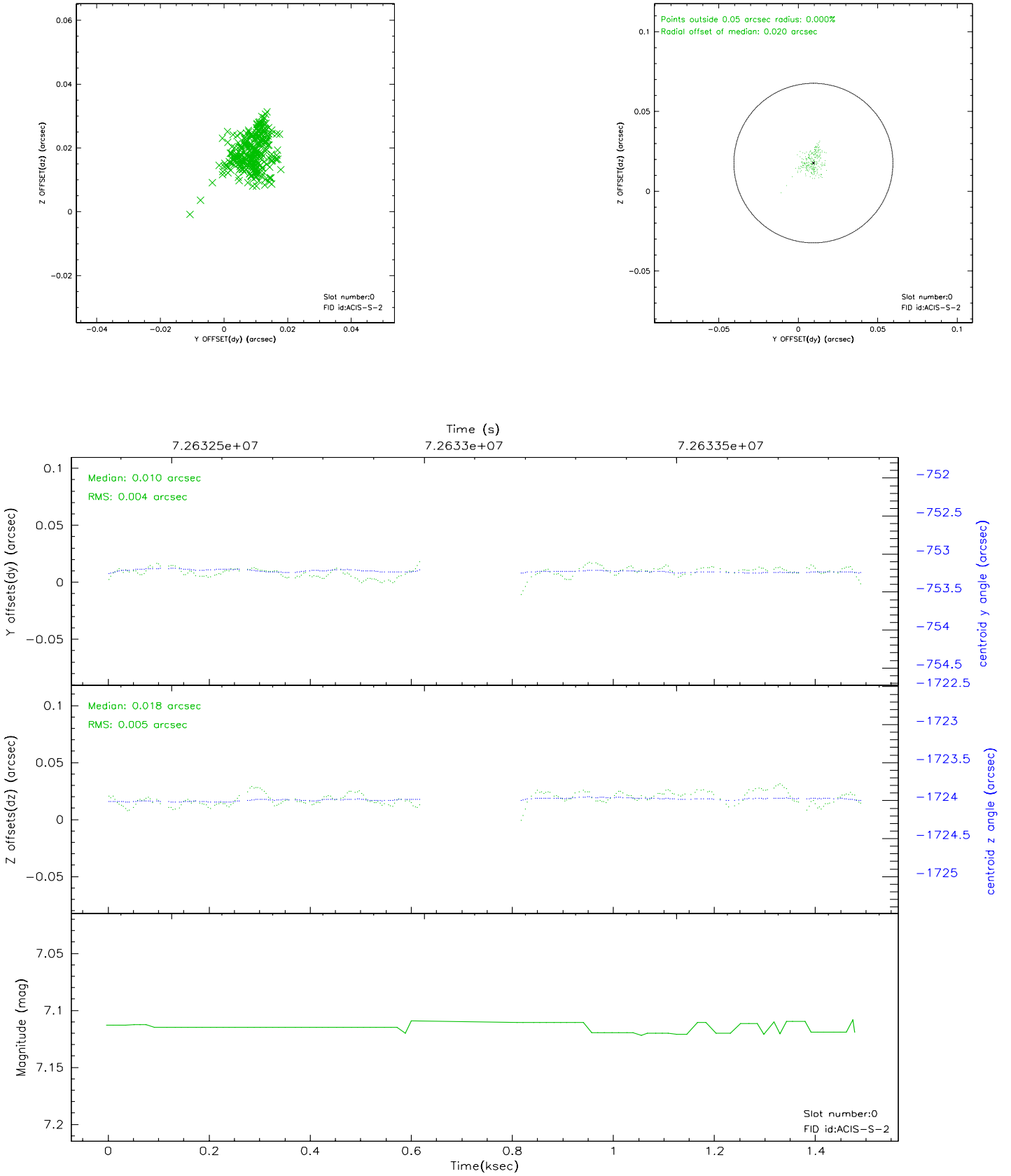


## 2.4.4 Slot 7

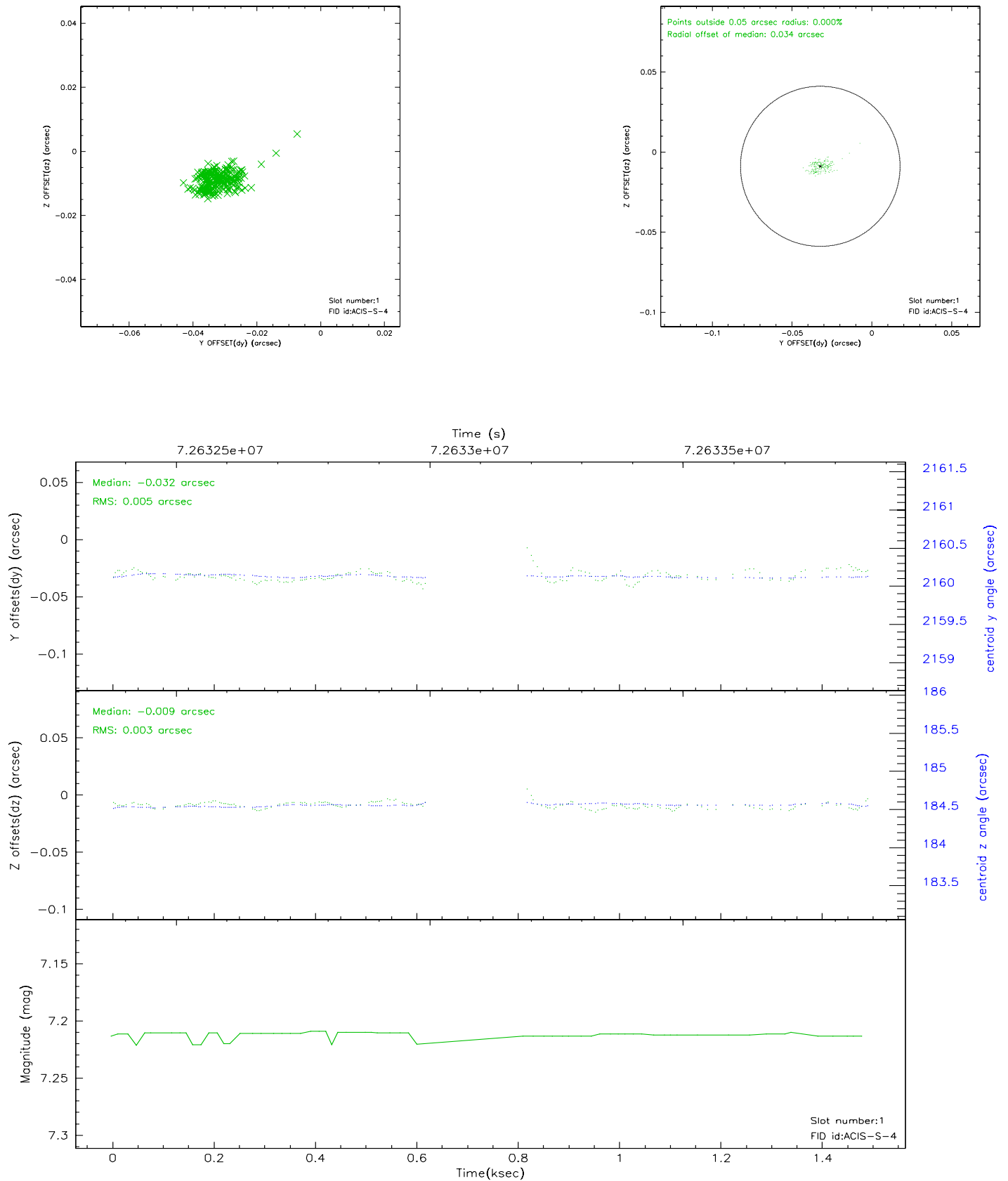


## 2.5 FID Slots

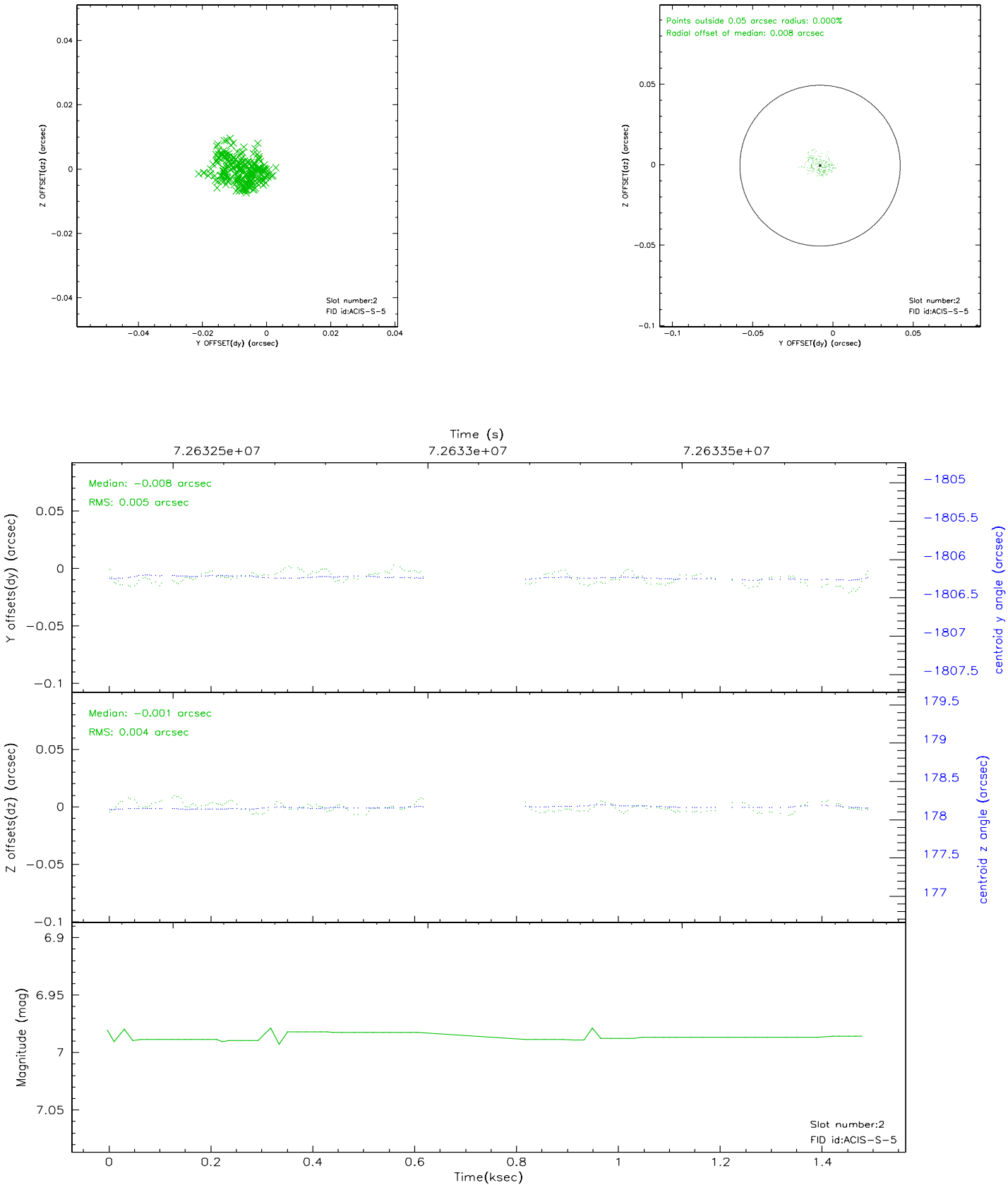
### 2.5.1 Slot 0



## 2.5.2 Slot 1



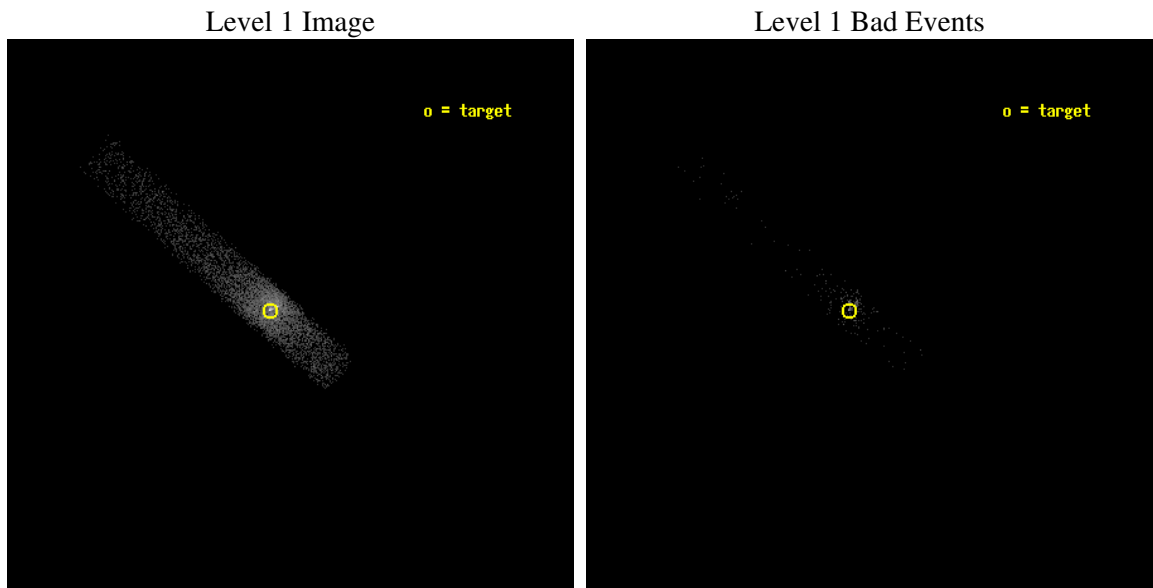
2.5.3 Slot 2



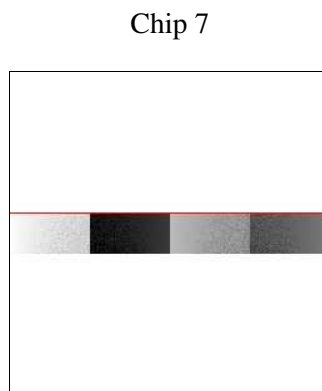
## 3 OBI Secondary

### 3.1 OBI

#### 3.1.1 Images



#### 3.1.2 Bias





### 3.1.3 Parameters

obi_num	0
ascdsver	7.6.11.2
caldbver	3.4.1
date	2007-11-02T17:40:57
revision	6

sched_exp_time	1000.000000
ontime	502.97077335417
ontime7	502.97077335417
l1events	8053

### 3.1.4 Events

	<b>ccd 7</b>
level 1 events	8053
rejected events	1608
rejected %	19%

	<b>ccd 7</b>
grade 0 events	2671
	33%
grade 1 events	10
	0%
grade 2 events	1870
	23%
grade 3 events	909
	11%
grade 4 events	948
	11%
grade 5 events	116
	1%
grade 6 events	1258
	15%
grade 7 events	271
	3%

## 4 Point Sources

## A Summary

### A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2007.11.14
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.143

### A.2 Comments

Obsid 351 suffers from frequent data dropouts and patchy telemetry. The parameters that specify the minimum amount of time the aspect camera must be tracking the fid lights and guide stars was manually adjusted for this processing. The parameters were changed from 95% of the observation to 90% of the observation in order to allow all the fid light data to be used in determining the aspect solution for this observation.

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The guide star in slot 3 was removed from the aspect solution due to poor data quality. The aspect solution is significantly improved by removing this guide star from the solution.

=====

Charge time for this ObsId remains at original value of 1.143 ks, although with the current processing the charge time would have been 1.089 ksec.