

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 353 - L2 Version 5  
Chandra X-Ray Center

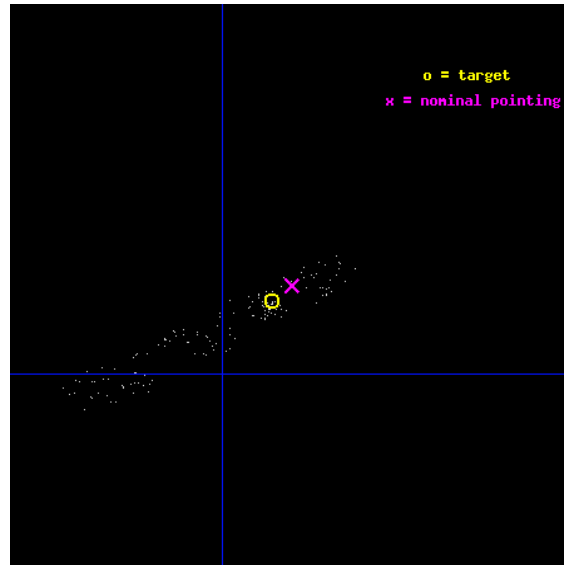
L2 Processing Date : Aug 24 2012

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# 1 Front

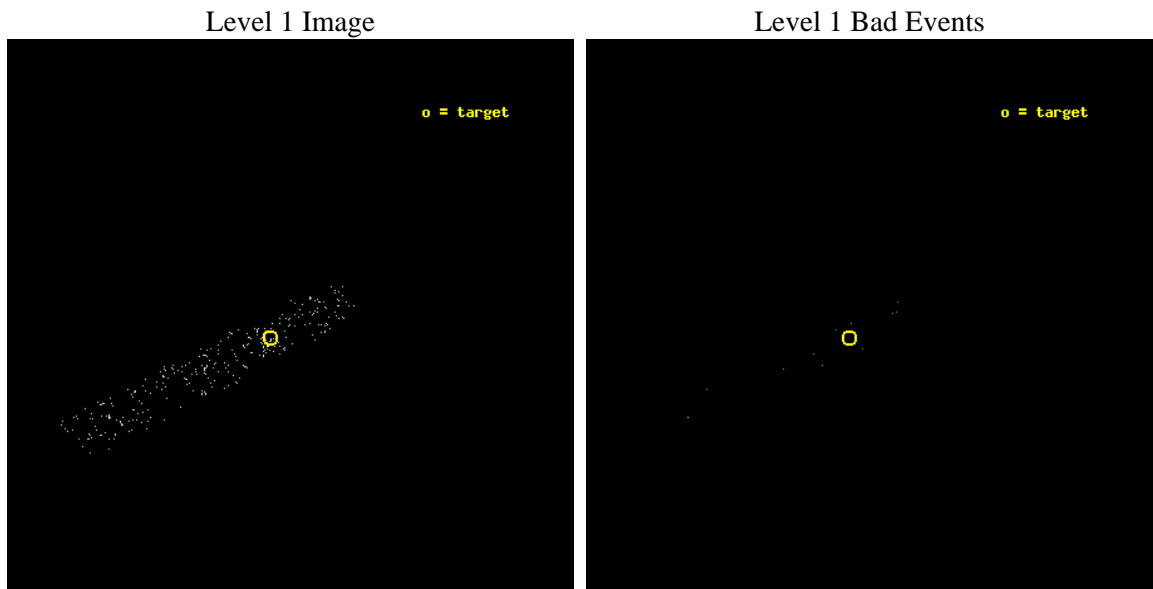
seq_num	700025	Sequence number
obs_id	353	Observation id
title	STUDIES OF RADIO JETS AND THE NARROW LINE REGIONS	Proposal title
observer	Professor Andrew Wilson	Principal investigator
object	M51	Source name
dtcycle	0	&#160
cycle	P	events are from which exps? P[rimary] S[econdar
ra_targ	202.467917	Observer's specified target RA [deg]
dec_targ	47.198333	Observer's specified target Dec [deg]
ra_nom	202.45554594647	Nominal RA [deg]
dec_nom	47.204715957633	Nominal Dec [deg]
roll_nom	152.57240114922	Nominal Roll [deg]
revision	5	Processing version of data
ontime	585.62363809347	Sum of GTIs [s]
livetime	102.74098913921	Livetime [s]
ontime7	585.62363809347	Sum of GTIs [s]
l2events	167	Number of level 2 events



## 2 OBI Primary

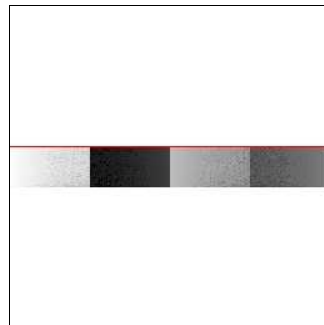
### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias

Chip 7



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	1000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	585.62363809347	Sum of GTIs [s]
caldsver	4.5.1.1	&#160	ontime7	585.62363809347	Sum of GTIs [s]
date	2012-08-24T13:39:39	Date and time of file creation	l1events	384	Number of level 1 events
revision	5	Processing version of data			

### 2.1.4 Events

	<b>ccd 7</b>
level 1 events	384
rejected events	207
rejected %	53%

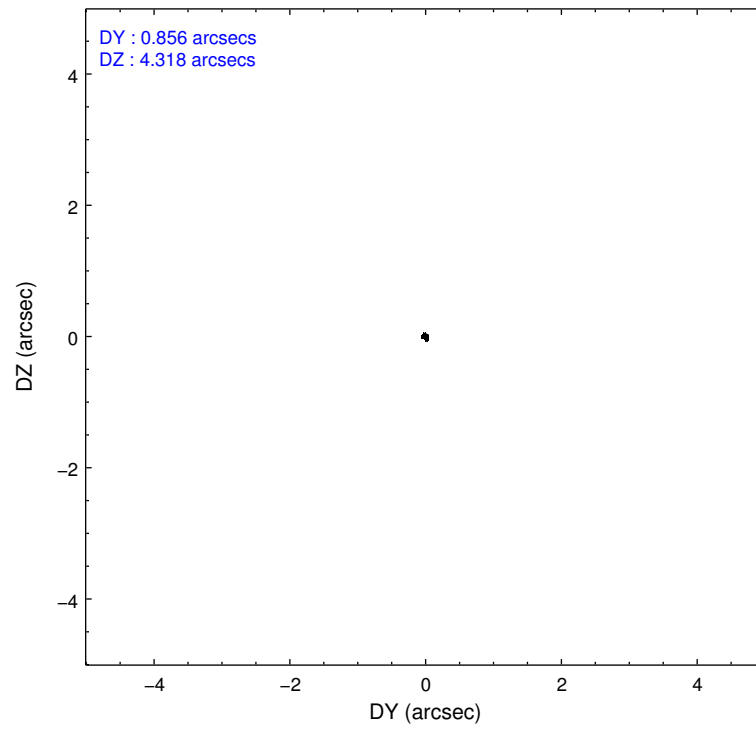
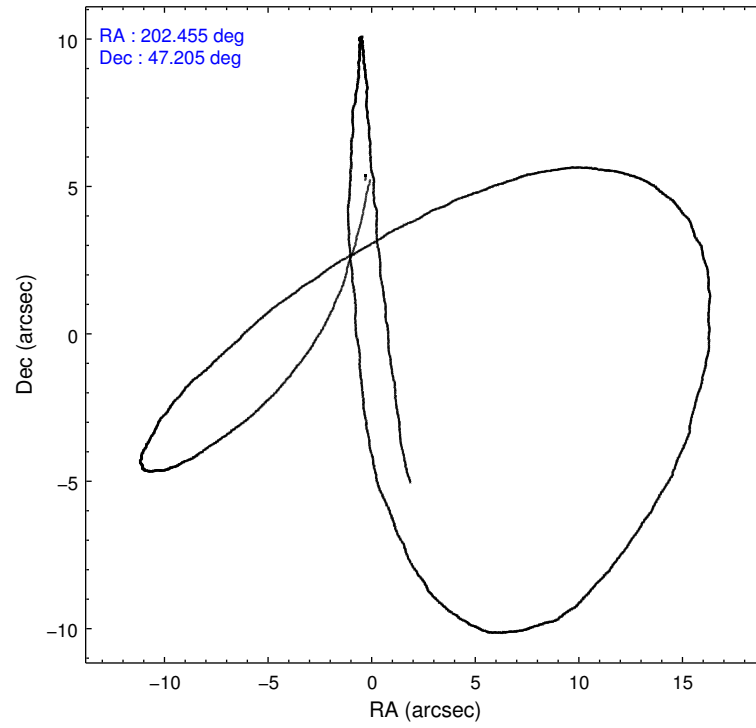
	<b>ccd 7</b>
grade 0 events	36
	9%
grade 1 events	0
	0%
grade 2 events	35
	9%
grade 3 events	36
	9%
grade 4 events	34
	8%
grade 5 events	25
	6%
grade 6 events	59
	15%
grade 7 events	159
	41%

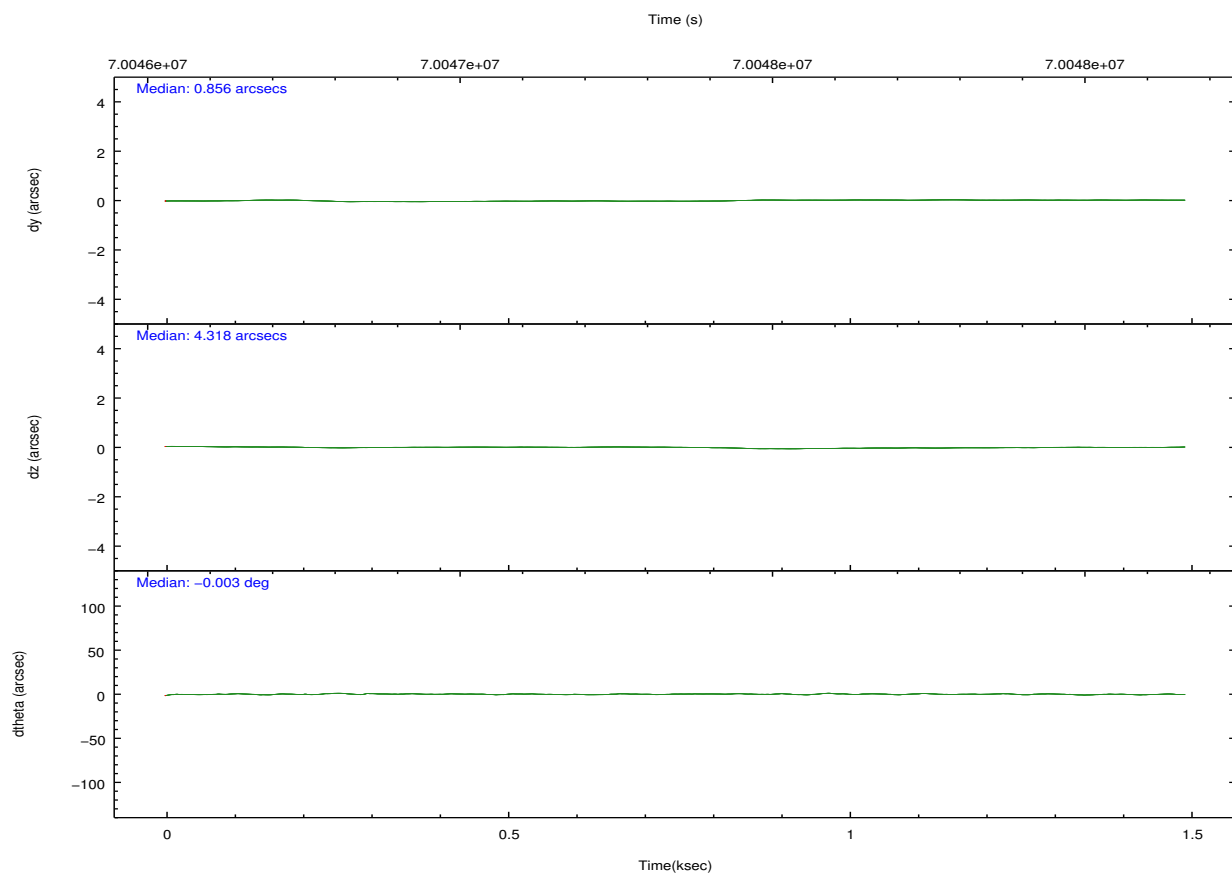
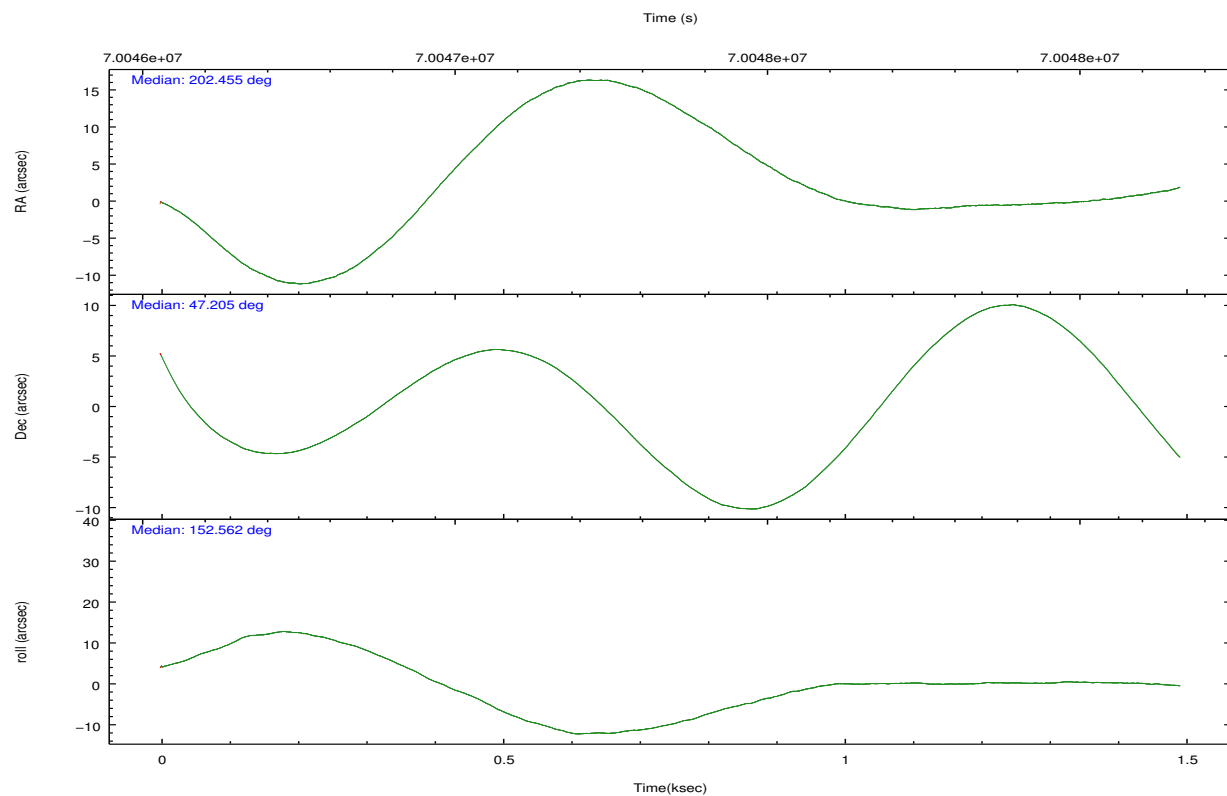
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-7	ACIS-7
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	202.496637	202.4555459464712
[deg] Pointing Dec	47.205815	47.2047159576332
[deg] Pointing Roll	152.385597	152.5724011492219
[mm] SIM focus pos	-0.684267	-0.6828225247311905
[mm] SIM defocus	0	0.001444936568705701
[mm] SIM translation stage pos	-190.132523	-190.1425803651734
[mm] SIM translation stage offset	0	0.01005778216563158
[s] Observation start time (MET)	70047091.184000	70045951.64332201
Observation start date	2000-03-21T17:30:27	2000-03-21T17:12:31
[s] Observation end time (MET)	70048091.184000	70048757.068424
Observation end date	2000-03-21T17:47:07	2000-03-21T17:59:17
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	CUSTOM	1/8
Subarray start row	447	447
Subarray row count	128	128
Alternating exposures requested	Y	Y
[s] Primary exposure time	0.100000	0.1
[s] Secondary exposure time	0.400000	0.4
Duty cycle	2	2

## 2.3 Aspect





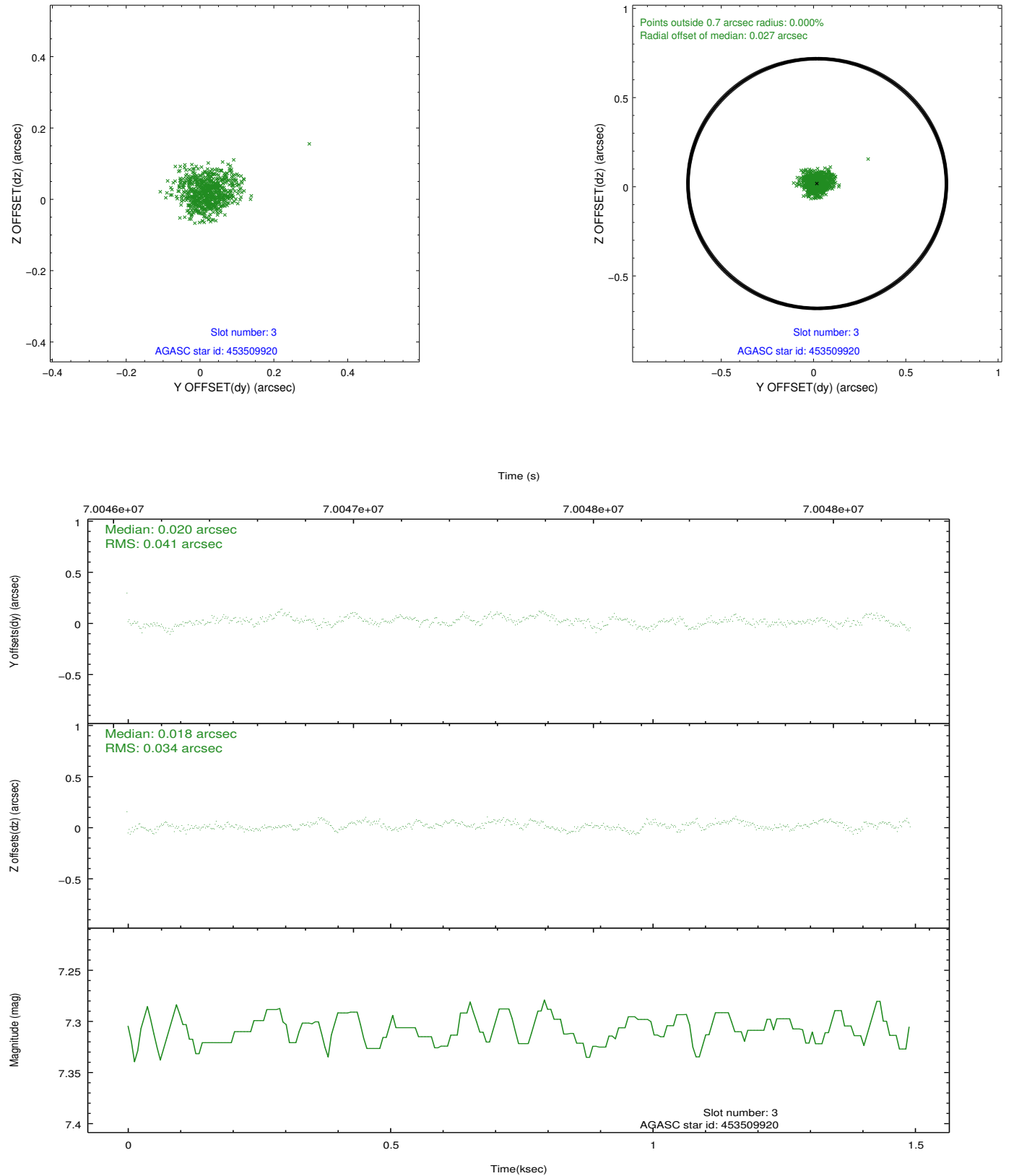
Slot Statistics

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	365	-0.018	-0.013	0.007	0.011	0.000000	0.000000	-753.48	-1725.36
1	FID	ACIS-S-4	7.21	365	0.012	0.012	0.006	0.010	0.000000	0.000000	2157.86	178.55
2	FID	ACIS-S-5	7.24	365	-0.025	0.010	0.007	0.012	0.000000	0.000000	-1800.59	177.31
3	GUIDE	453509920	7.31	729	0.020	0.018	0.057	0.092	202.256826	47.847140	1582.81	-1778.09
4	GUIDE	453904608	7.38	729	-0.046	-0.019	0.067	0.109	202.983748	47.234418	-1004.90	-649.44
5	GUIDE	453511800	9.19	727	0.036	0.023	0.087	0.140	201.825327	46.820165	821.93	1989.35
6	GUIDE	454303504	9.71	728	-0.010	-0.029	0.115	0.179	202.757470	47.708424	279.23	-1894.69
7	UNUSED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00

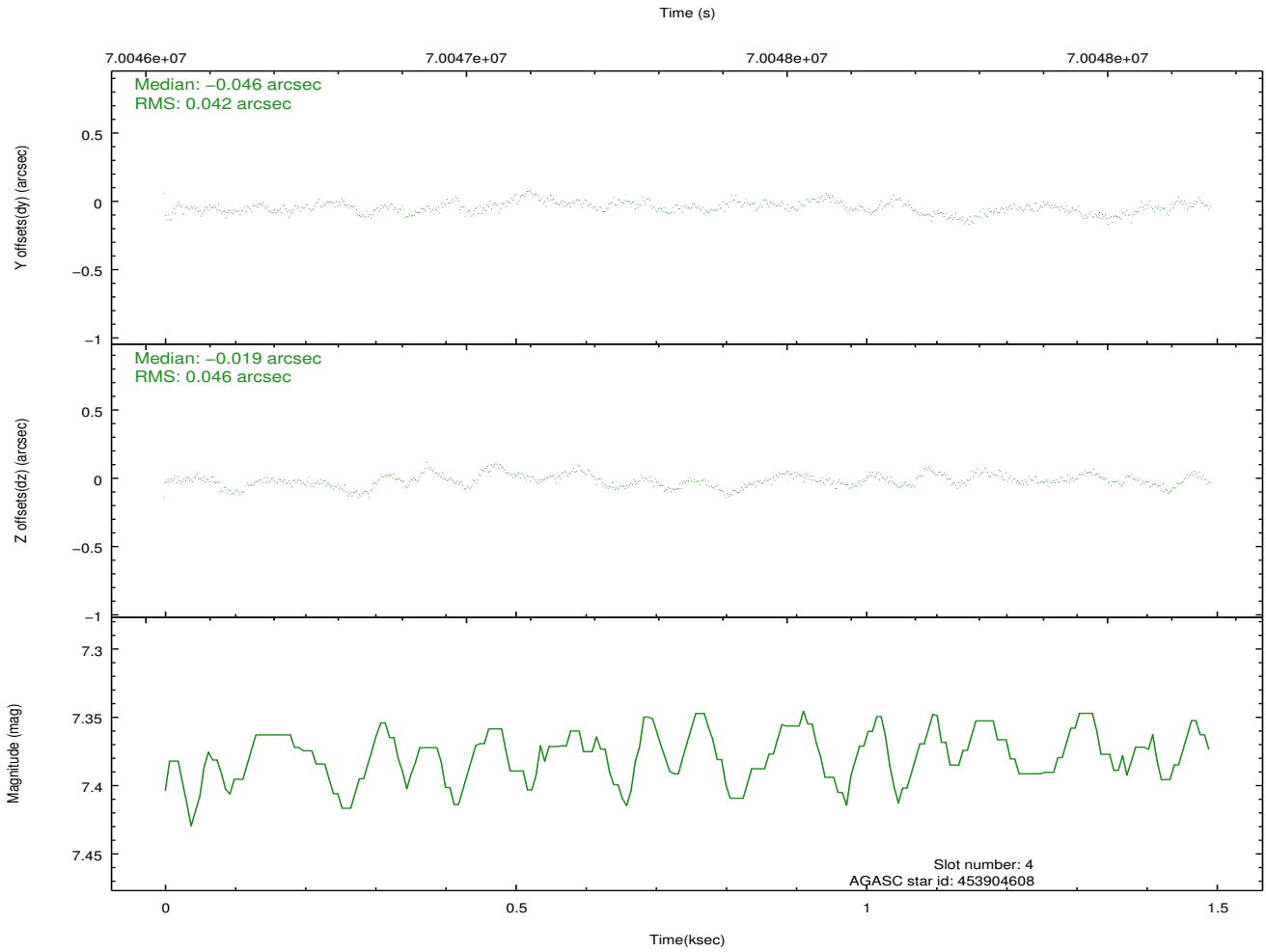
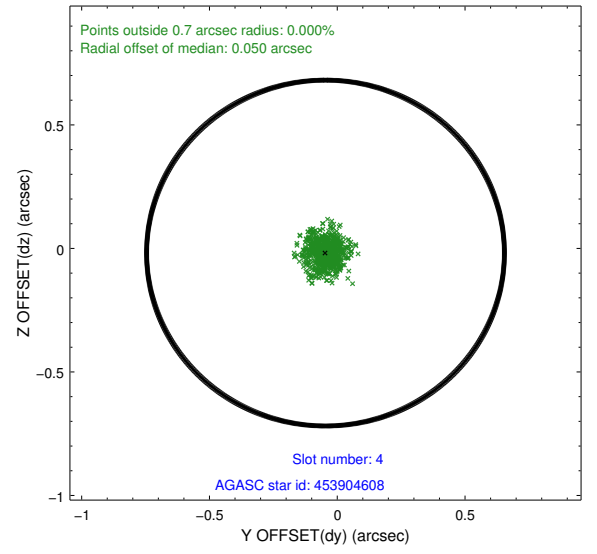
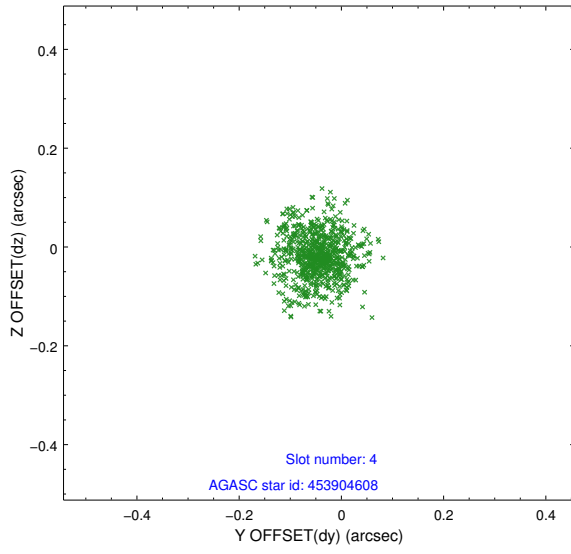


## 2.4 Star Slots

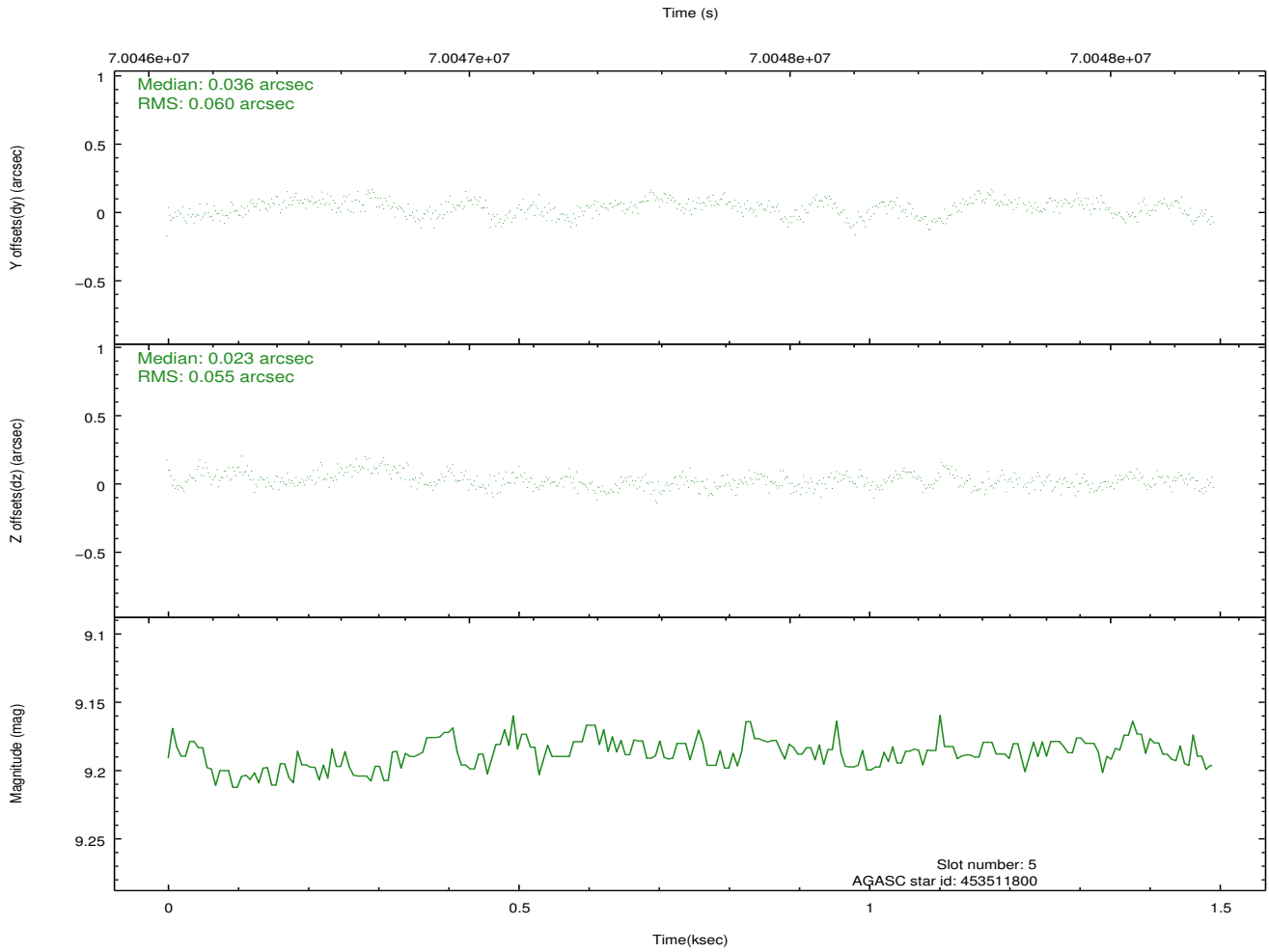
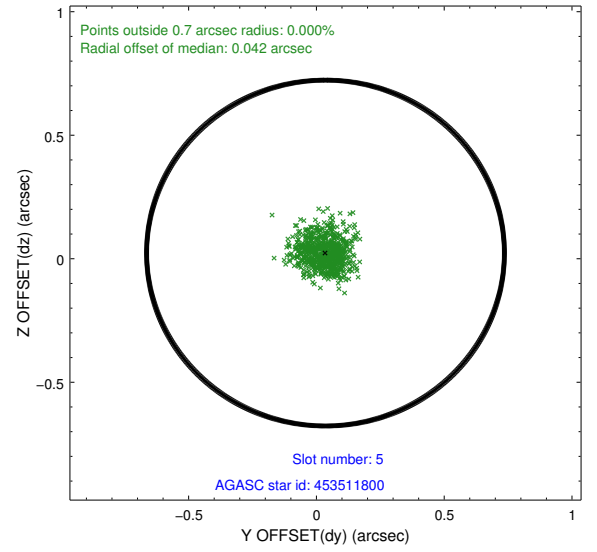
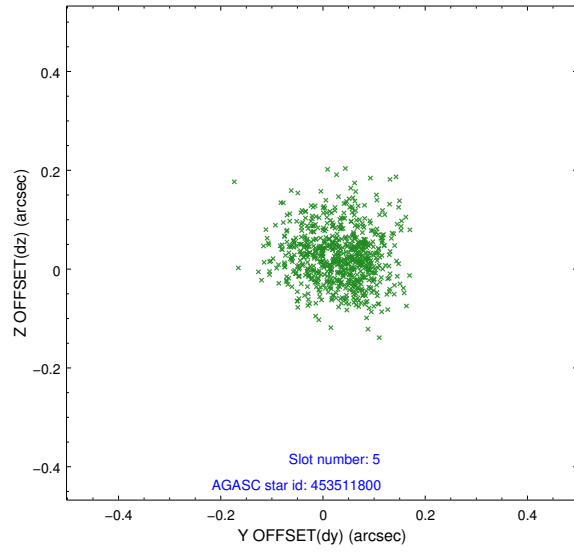
### 2.4.1 Slot 3



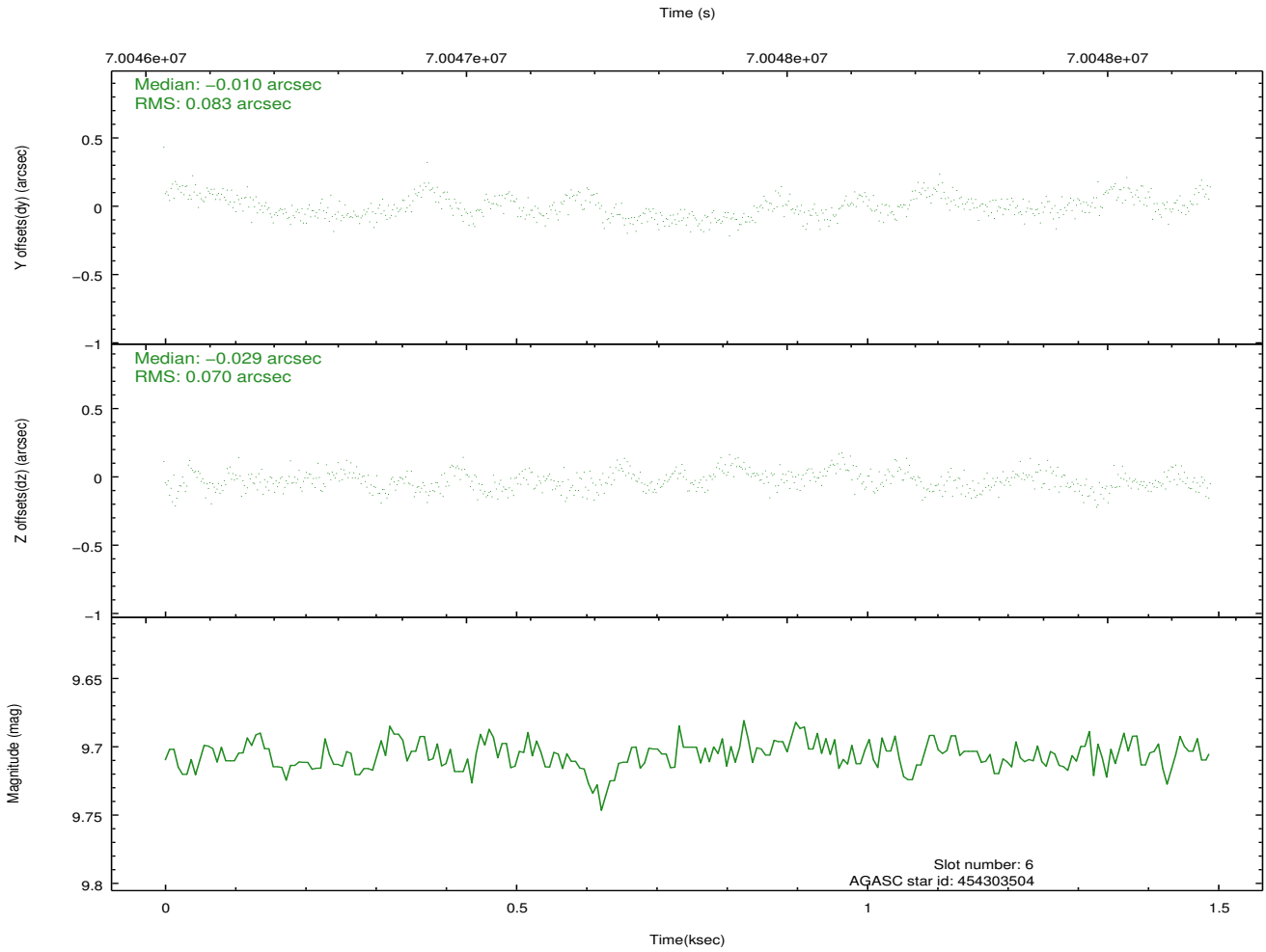
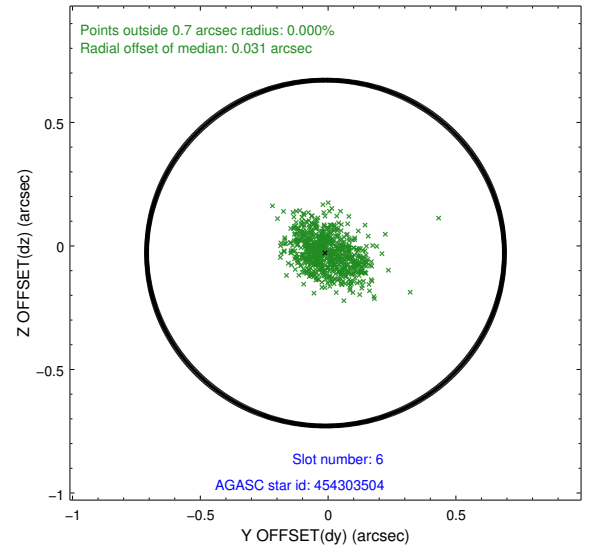
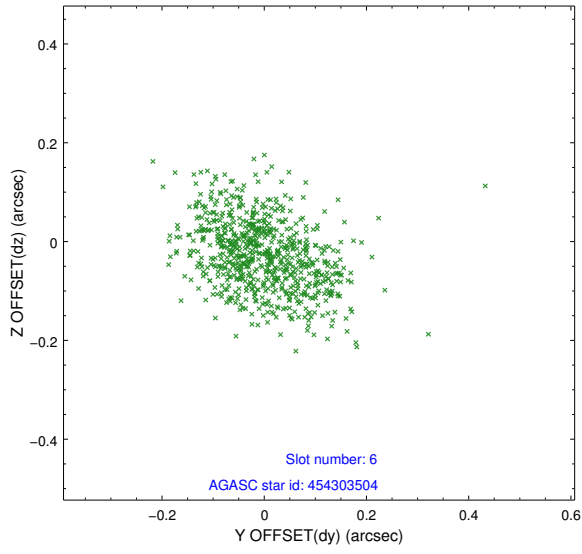
## 2.4.2 Slot 4



### 2.4.3 Slot 5

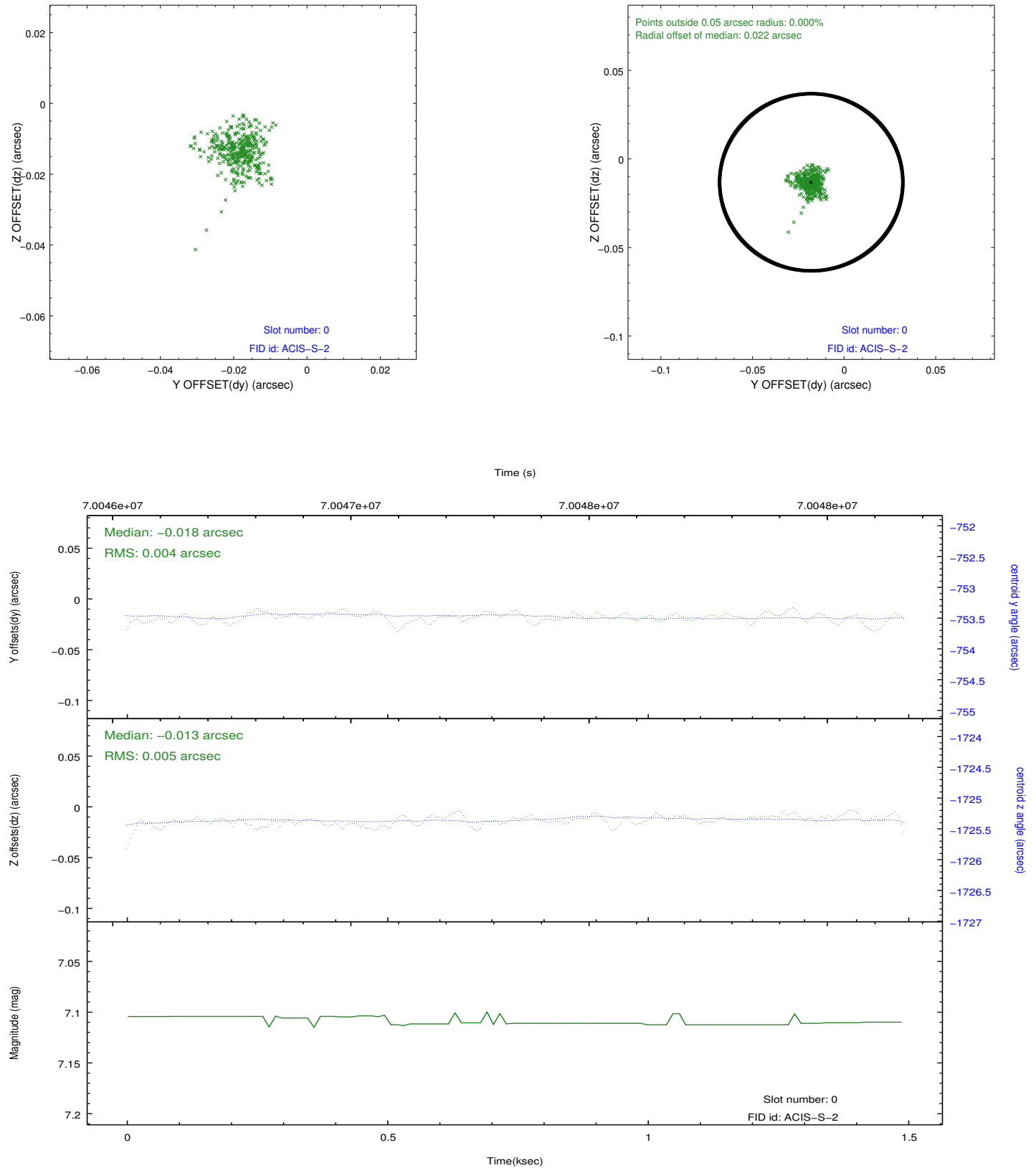


## 2.4.4 Slot 6

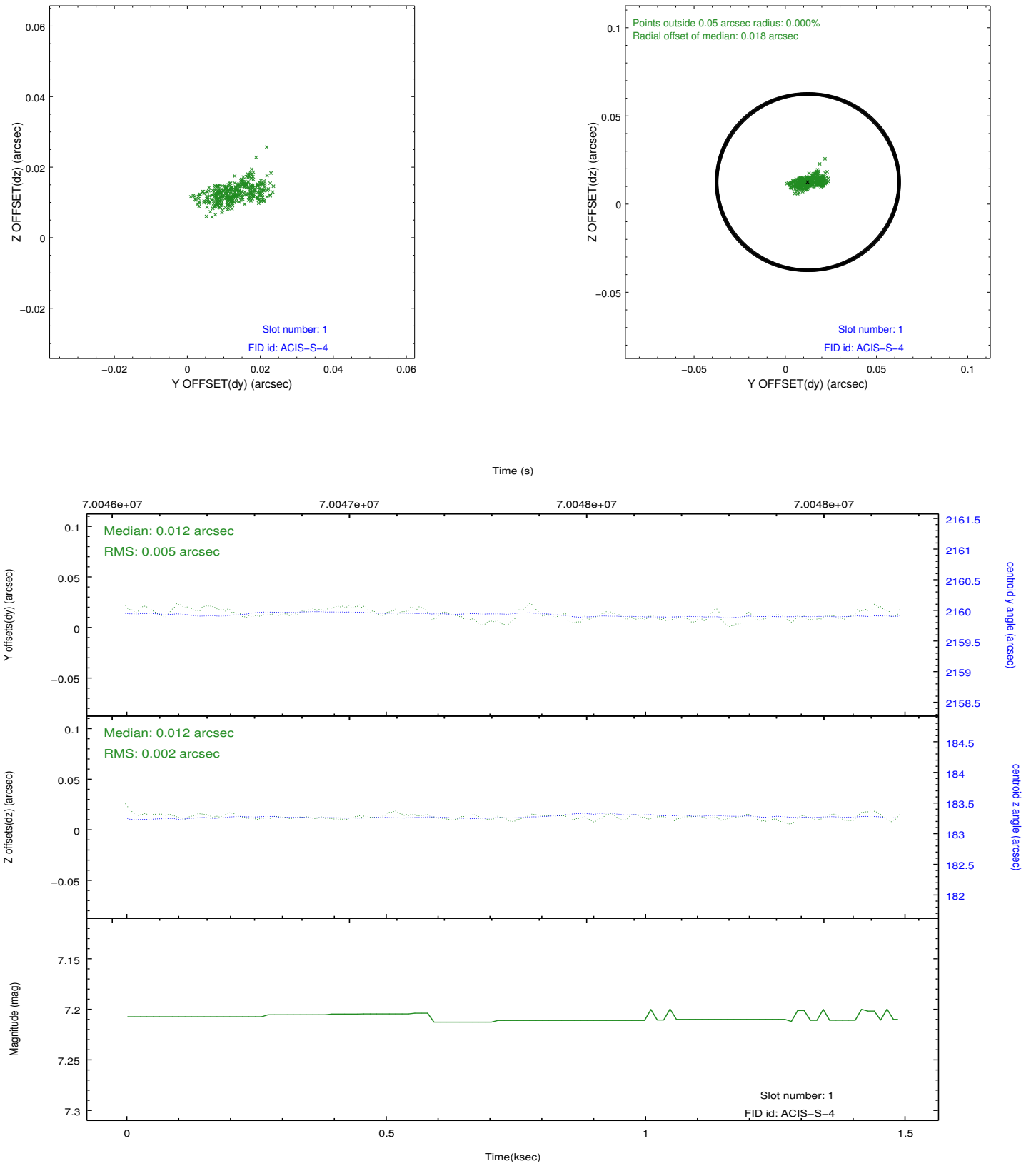


## 2.5 FID Slots

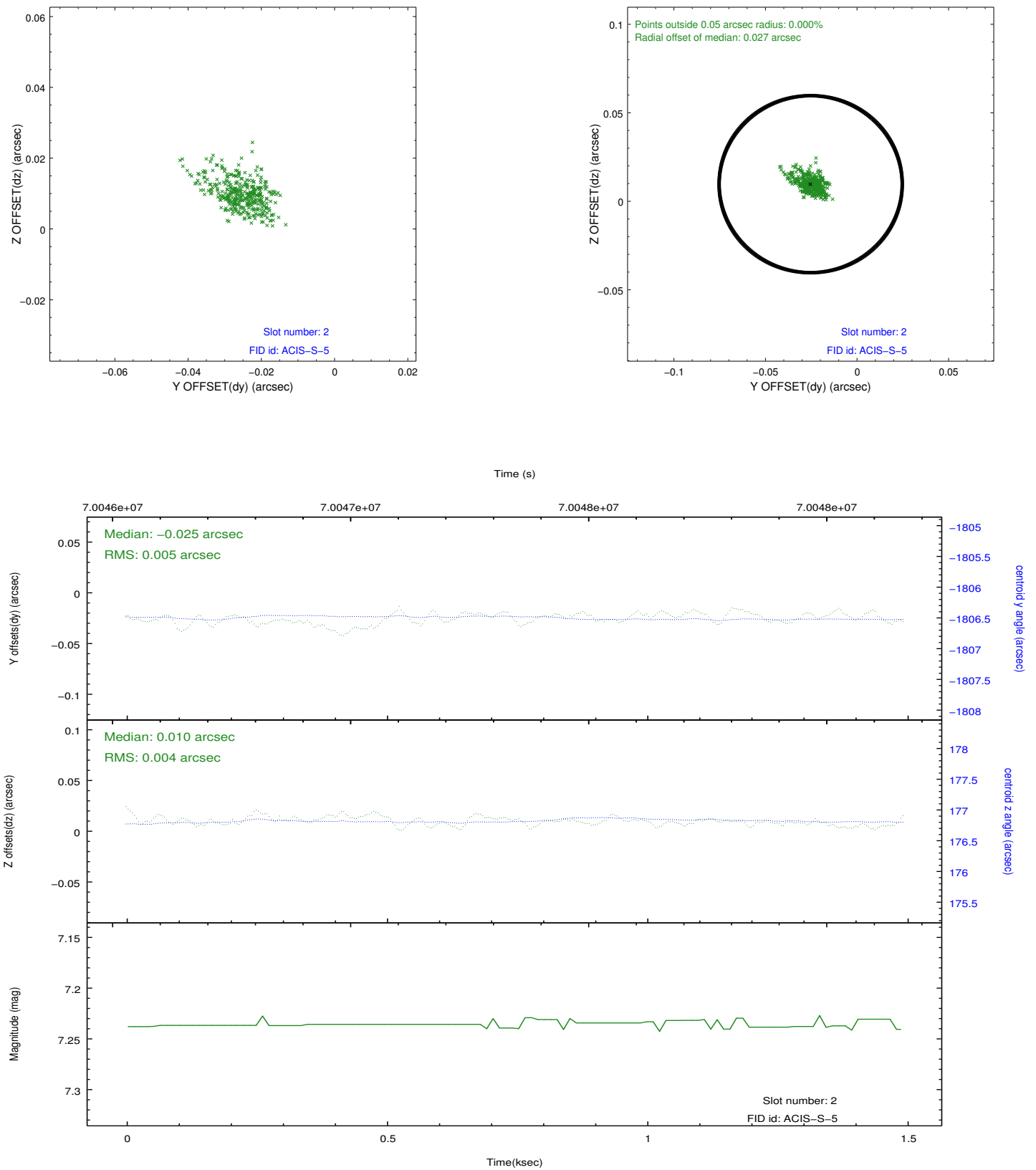
### 2.5.1 Slot 0



## 2.5.2 Slot 1



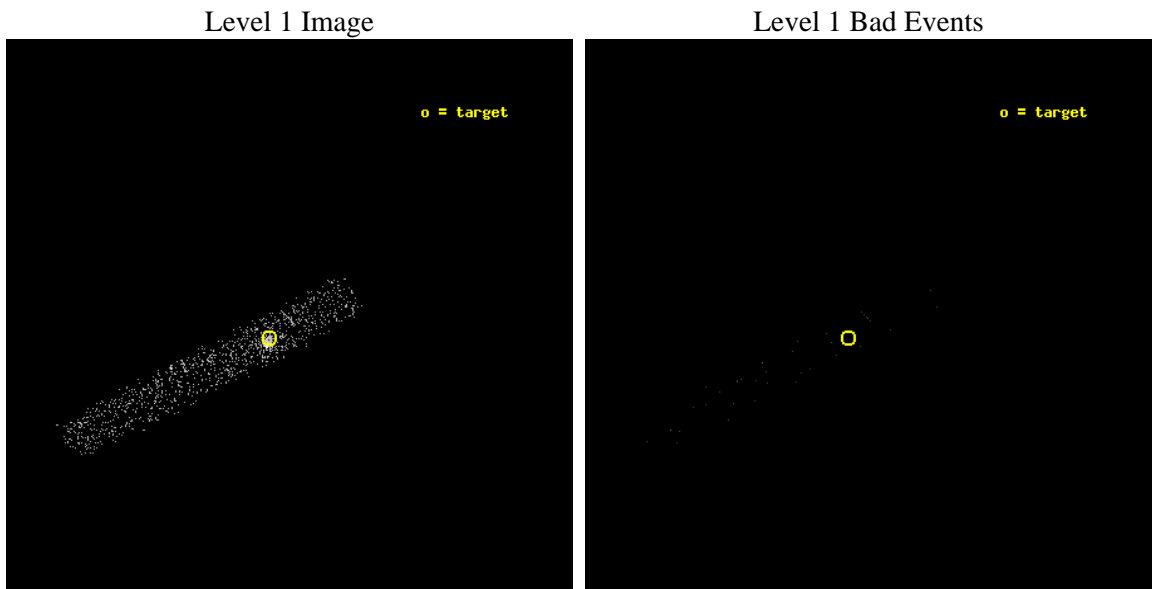
### 2.5.3 Slot 2



## 3 OBI Secondary

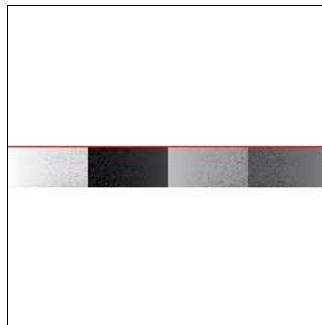
### 3.1 OBI

#### 3.1.1 Images



#### 3.1.2 Bias

Chip 7





### 3.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	1000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	905.89009620249	Sum of GTIs [s]
caldsver	4.5.1.1	&#160	ontime7	905.89009620249	Sum of GTIs [s]
date	2012-08-24T13:39:05	Date and time of file creation	l1events	1596	Number of level 1 events
revision	5	Processing version of data			

### 3.1.4 Events

	<b>ccd 7</b>
level 1 events	1596
rejected events	751
rejected %	47%

	<b>ccd 7</b>
grade 0 events	224
	14%
grade 1 events	0
	0%
grade 2 events	202
	12%
grade 3 events	133
	8%
grade 4 events	117
	7%
grade 5 events	109
	6%
grade 6 events	291
	18%
grade 7 events	520
	32%

## A Summary

### A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.08.27
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.491

### A.2 Comments