

# V&V Reference Report

## L2 ASCDS Version : 8.1.2

Observation 1056 - L2 Version 3  
Chandra X-Ray Center

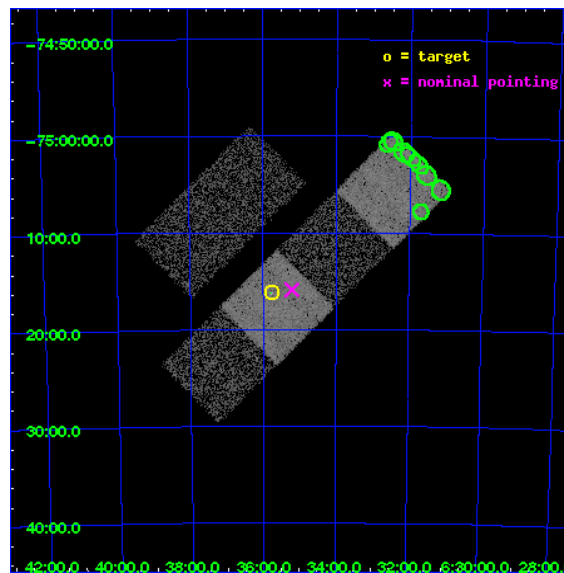
L2 Processing Date : Dec 14 2009

## Contents

<b>1</b>	<b>Front</b>	<b>2</b>
<b>2</b>	<b>OBI</b>	<b>3</b>
2.1	OBI . . . . .	3
2.1.1	Images . . . . .	3
2.1.2	Bias . . . . .	3
2.1.3	Parameters . . . . .	4
2.1.4	Events . . . . .	4
2.2	Compared Parameters . . . . .	5
2.3	Aspect . . . . .	6
2.4	Star Slots . . . . .	9
2.4.1	Slot 3 . . . . .	9
2.4.2	Slot 4 . . . . .	10
2.4.3	Slot 5 . . . . .	11
2.4.4	Slot 7 . . . . .	12
2.5	FID Slots . . . . .	13
2.5.1	Slot 0 . . . . .	13
2.5.2	Slot 1 . . . . .	14
2.5.3	Slot 2 . . . . .	15
<b>3</b>	<b>Point Sources</b>	<b>16</b>
<b>A</b>	<b>Summary</b>	<b>17</b>
A.1	Status . . . . .	17
A.2	Comments . . . . .	17

# 1 Front

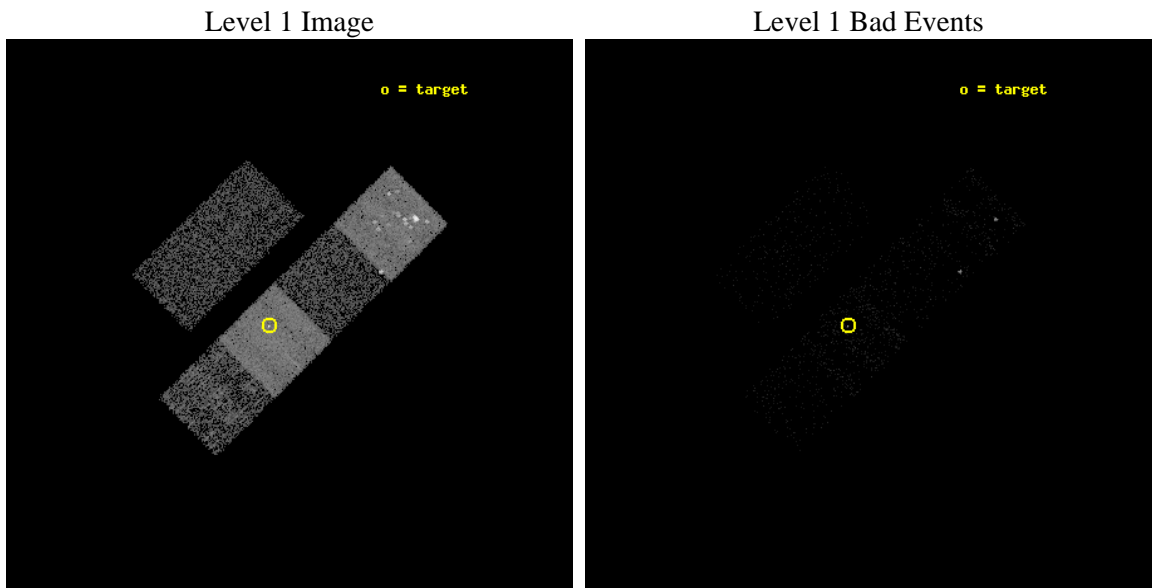
seq_num	780006	Sequence number
obs_id	1056	Observation id
title	&#160	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	PKS0637-752	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	98.94	Observer's specified target RA
dec_targ	-75.27	Observer's specified target Dec
ra_nom	98.802919616819	Nominal RA
dec_nom	-75.265078082683	Nominal Dec
roll_nom	135.24169226031	Nominal Roll
revision	3	Processing version of data
ontime	1753.6000016332	Sum of GTIs [s]
livetime	1731.3948625213	Livetime [s]
ontime2	1753.6000016332	Sum of GTIs [s]
ontime3	1753.6000016332	Sum of GTIs [s]
ontime5	1753.6000016332	Sum of GTIs [s]
ontime6	1753.6000016332	Sum of GTIs [s]
ontime7	1753.6000016332	Sum of GTIs [s]
ontime8	1753.6000016332	Sum of GTIs [s]
l2events	49886	Number of level 2 events



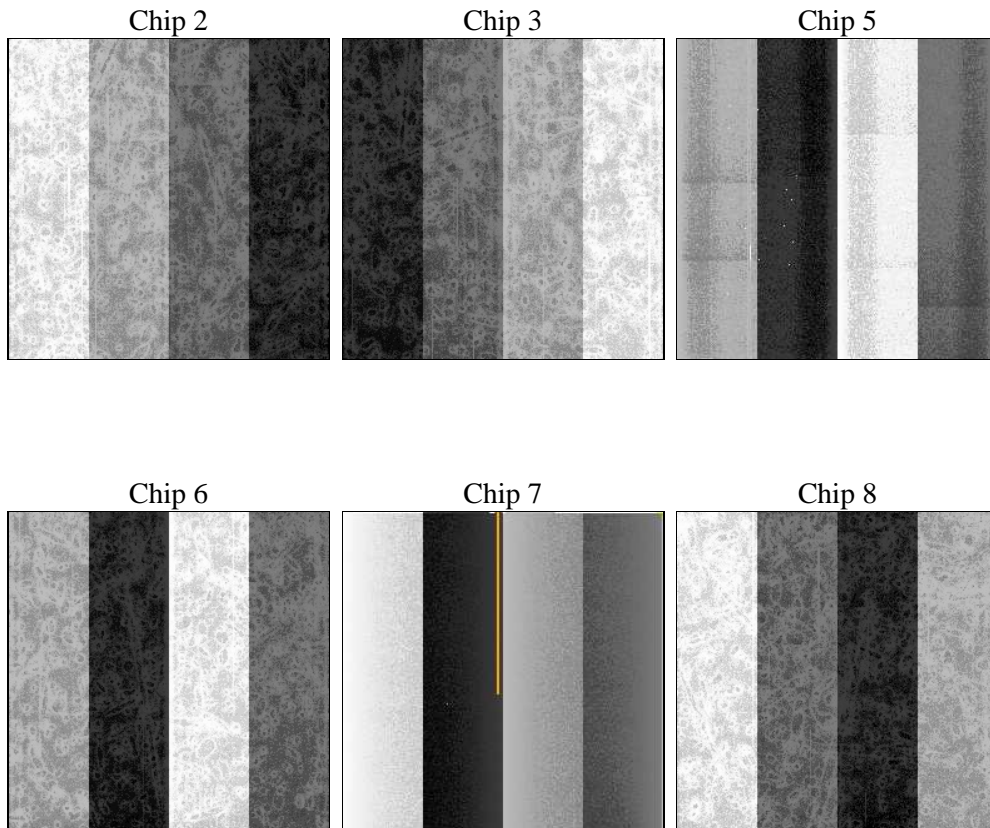
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	2000.000000	Scheduled observation exposure time
ascdsver	8.1.2	ASCDS version number	ontime	1753.6000016332	Sum of GTIs [s]
caldbver	4.1.4	&#160	ontime2	1753.6000016332	Sum of GTIs [s]
date	2009-12-14T08:28:08	Date and time of file creation	ontime3	1753.6000016332	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	1753.6000016332	Sum of GTIs [s]
			ontime6	1753.6000016332	Sum of GTIs [s]
			ontime7	1753.6000016332	Sum of GTIs [s]
			ontime8	1753.6000016332	Sum of GTIs [s]
			l1events	70062	Number of level 1 events

### 2.1.4 Events

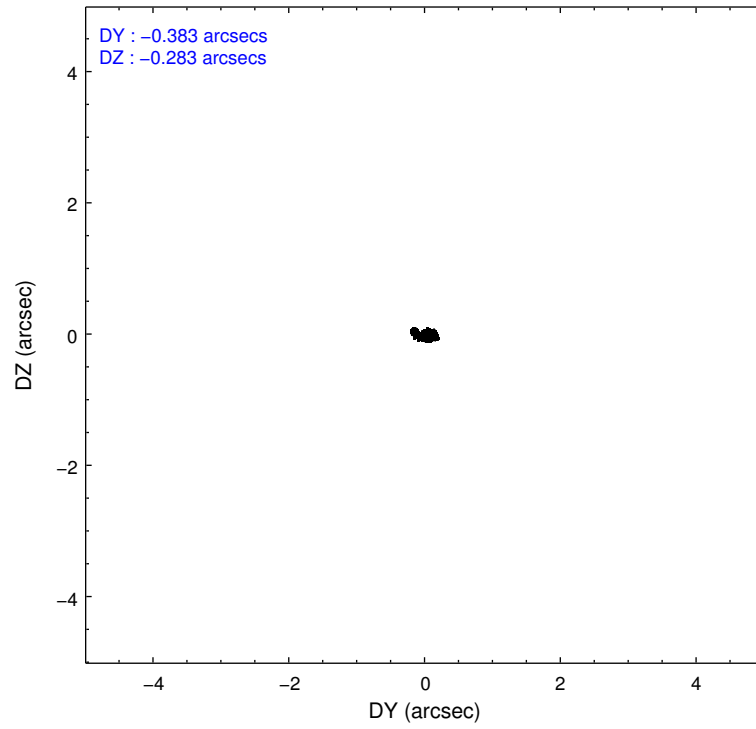
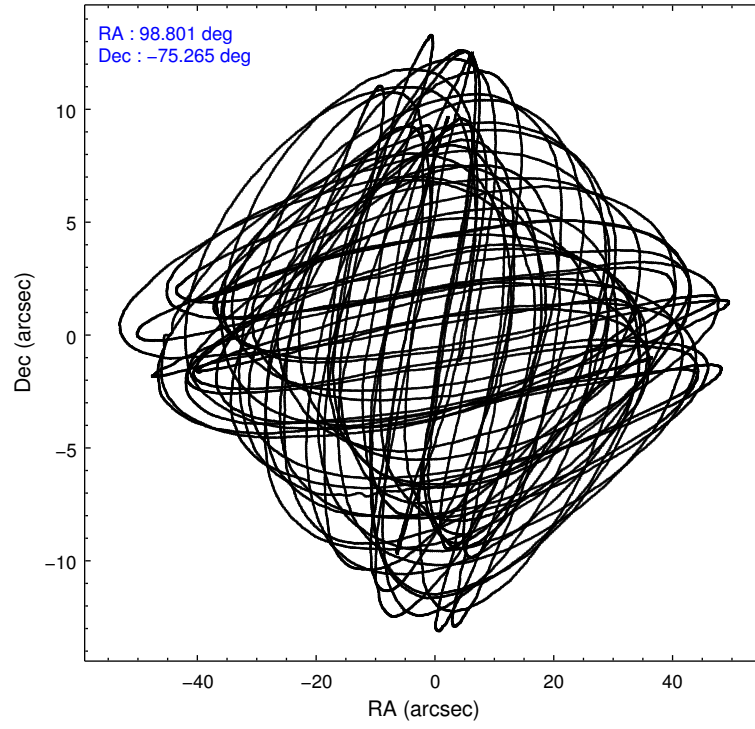
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	4216	4354	28063	4806	22078	6545
rejected events	1136	1233	1957	1414	2446	1357
rejected %	26%	28%	6%	29%	11%	20%

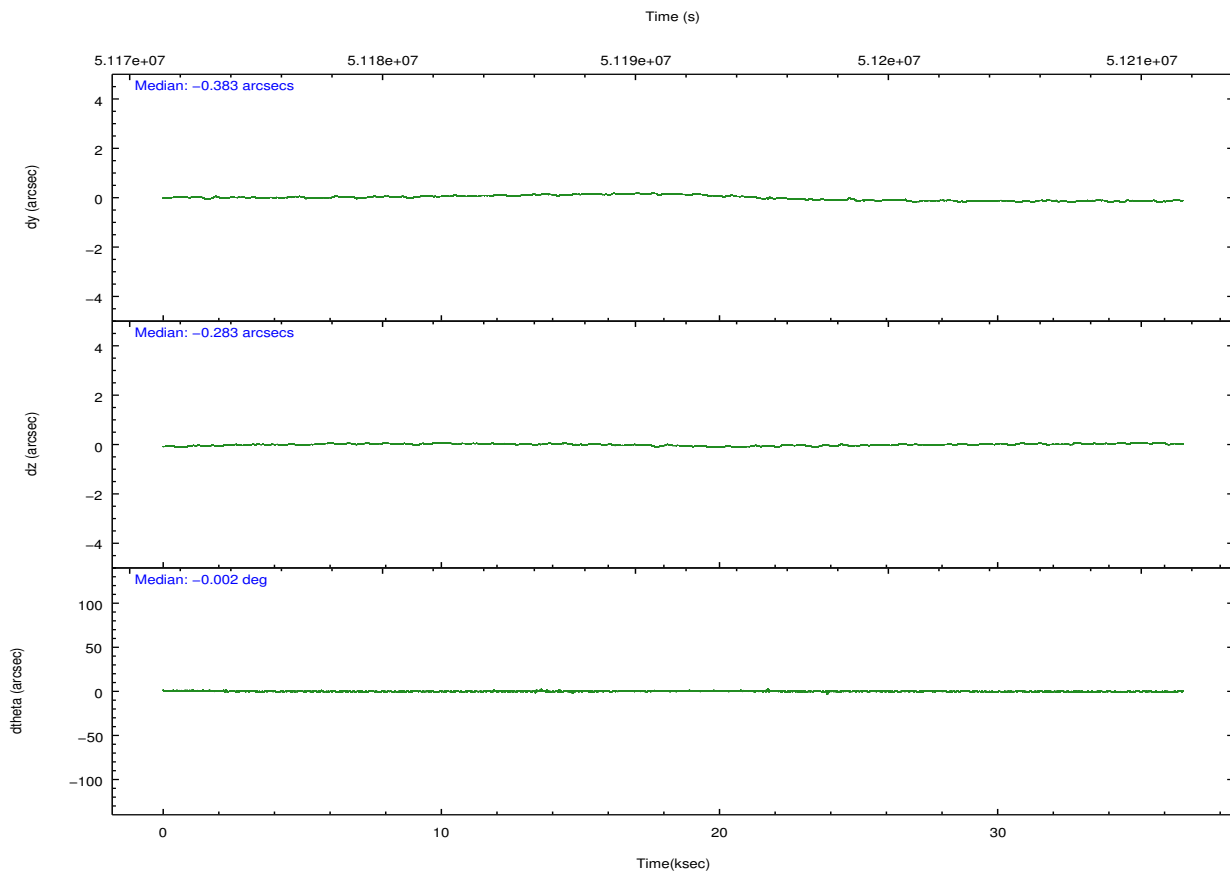
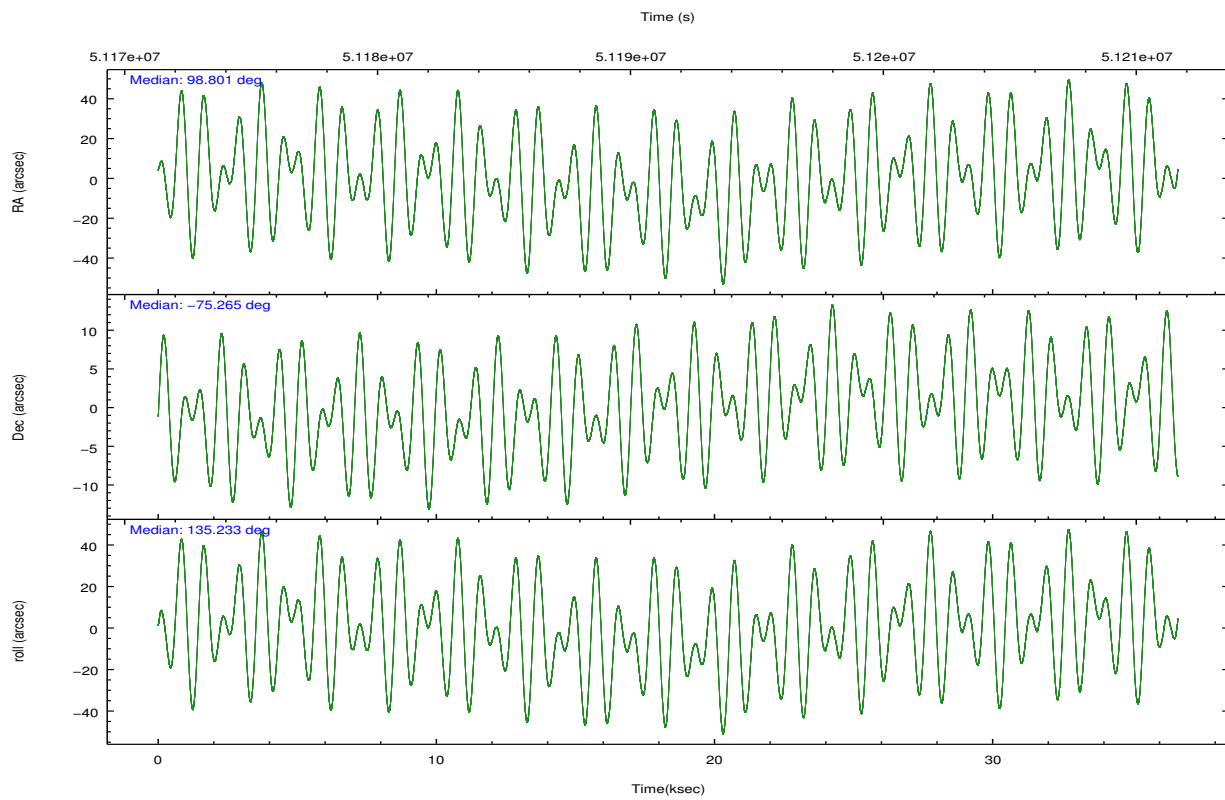
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	802	846	6340	930	1514	1313
	19%	19%	22%	19%	6%	20%
grade 1 events	7	9	75	10	47	15
	0%	0%	0%	0%	0%	0%
grade 2 events	685	643	4545	655	2635	1184
	16%	14%	16%	13%	11%	18%
grade 3 events	281	299	1428	310	1531	501
	6%	6%	5%	6%	6%	7%
grade 4 events	267	279	1268	289	1358	453
	6%	6%	4%	6%	6%	6%
grade 5 events	1123	1217	1700	1390	2376	1334
	26%	27%	6%	28%	10%	20%
grade 6 events	1051	1061	12575	1222	12617	1745
	24%	24%	44%	25%	57%	26%
grade 7 events	0	0	132	0	0	0
	0%	0%	0%	0%	0%	0%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-235678	ACIS-235678	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	98.907582	98.80291961681873	Subarray requested	NONE	NONE
Pointing Dec	-75.272615	-75.26507808268255	Alternating exposures requested	N	N
Pointing Roll	135.186283	135.2416922603121	Primary exposure time	0.000000	3.2
SIM focus pos (mm)	-1.180069	-1.346558362777969			
SIM defocus (mm)	-0.495802	-0.6622909014780725			
SIM translation stage pos (mm)	-190.132523	-190.1325231039672			
SIM translation stage offset (mm)	0	5.209593894051068e-07			
Observation start time	51173644.184000	51172981.62997			
Observation start date	1999-08-16T06:53:00	1999-08-16T06:43:01			
Observation end time	51175644.184000	51209944.156273			
Observation end date	1999-08-16T07:26:20	1999-08-16T16:59:04			
Read mode	TIMED	TIMED			

## 2.3 Aspect



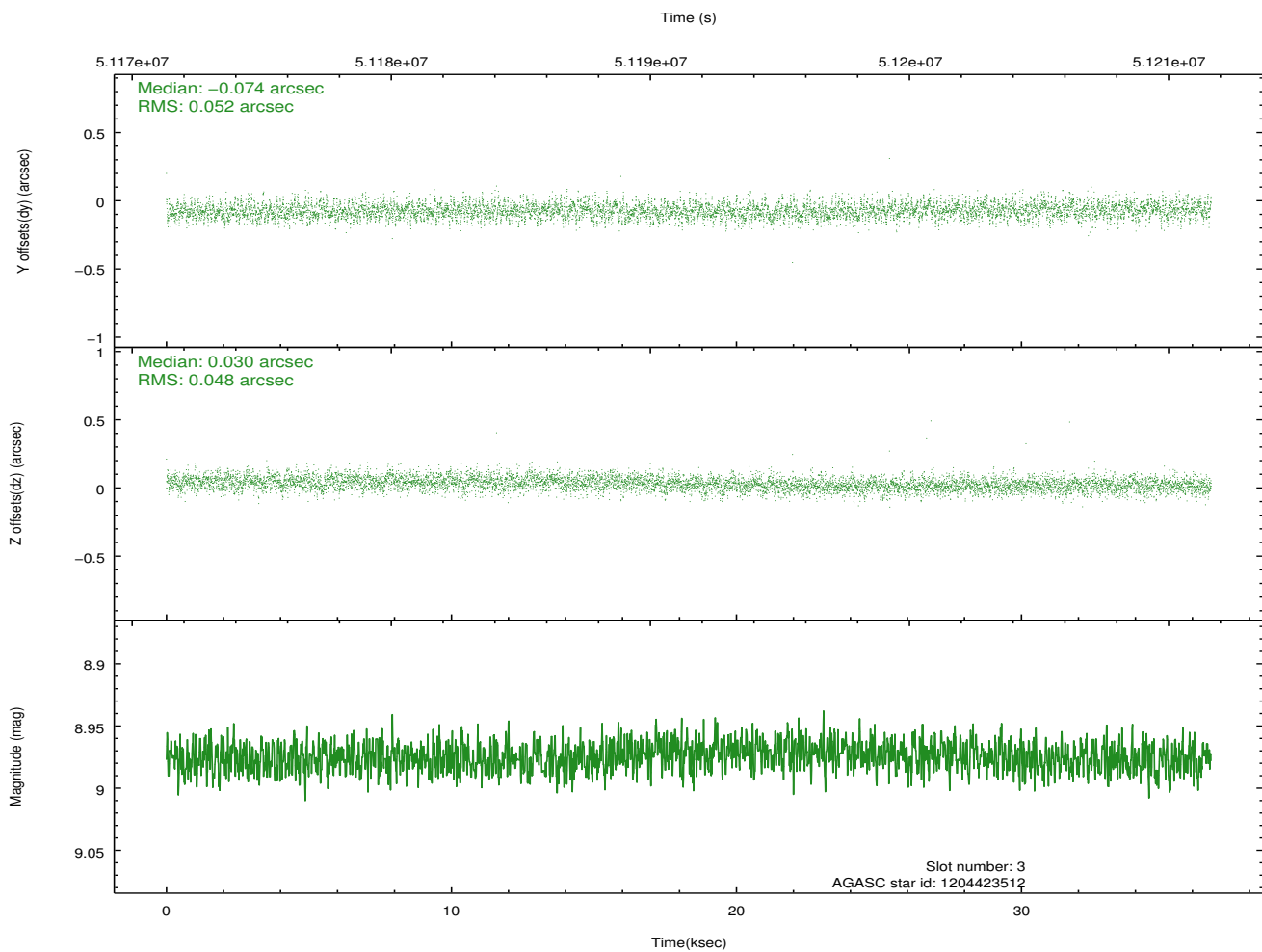
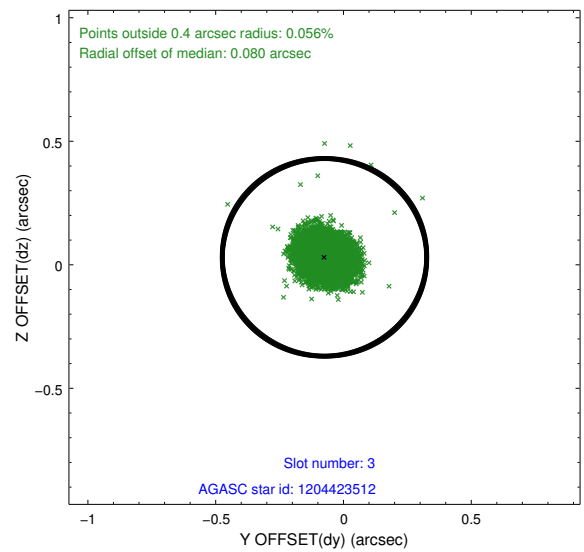
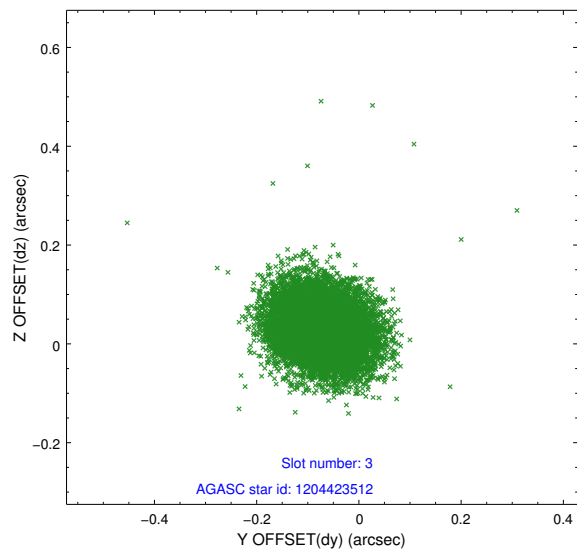


### Slot Statistics

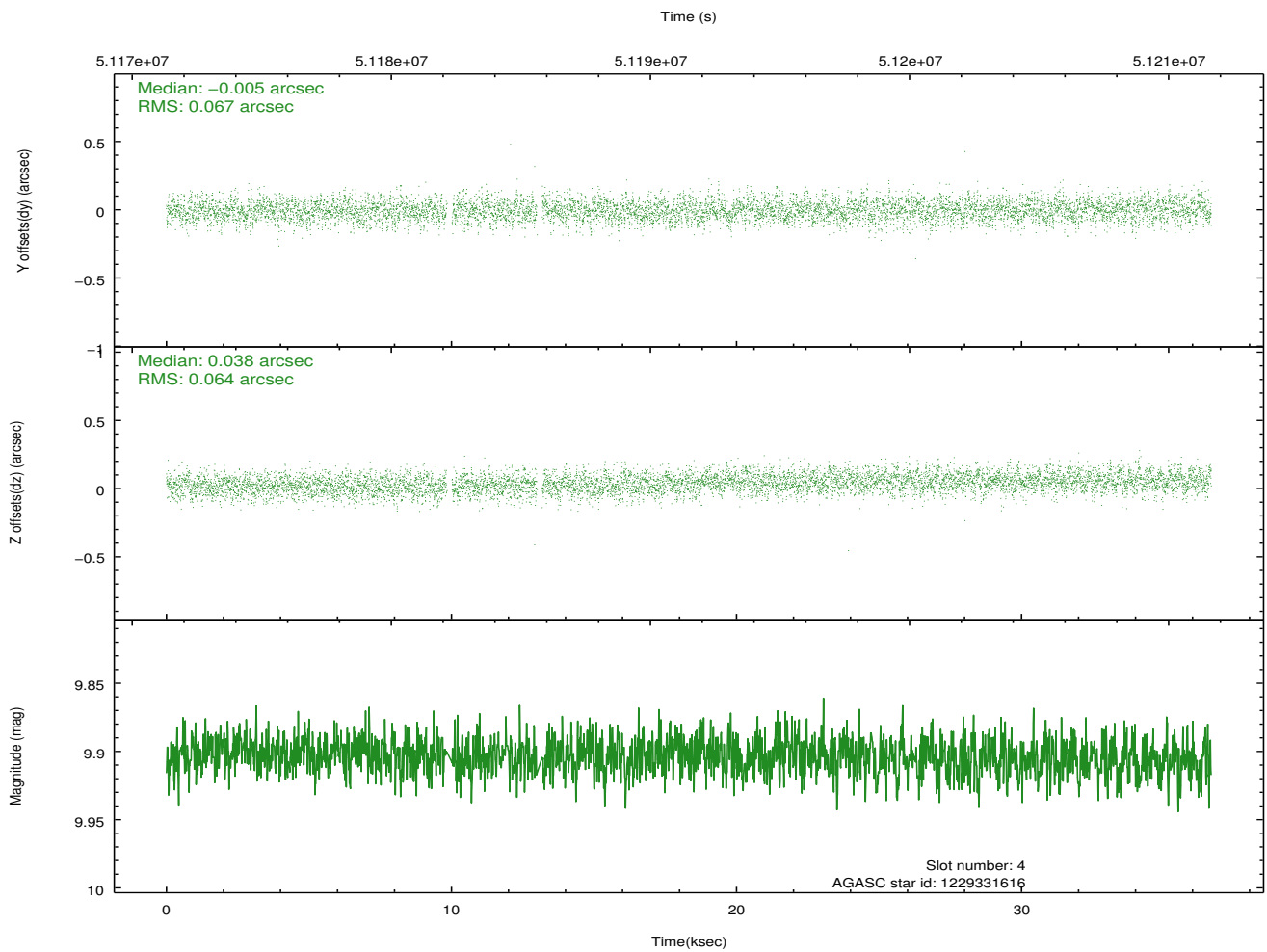
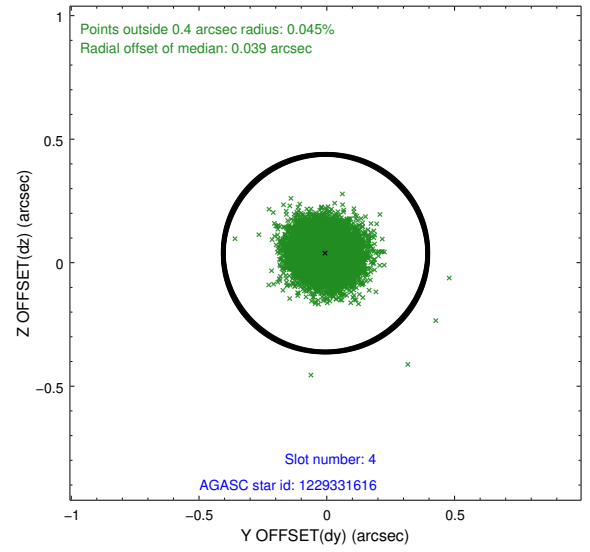
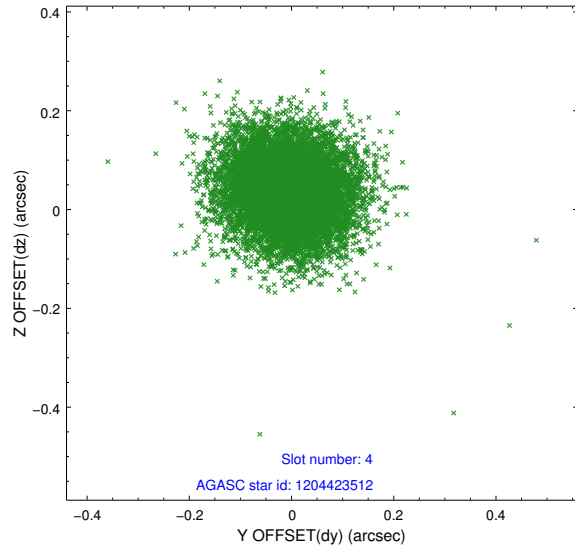
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.13	8931	-0.026	-0.042	0.007	0.012	0.000000	0.000000	-752.18	-1720.74
1	FID	ACIS-S-4	7.22	8933	0.160	0.024	0.007	0.013	0.000000	0.000000	2161.13	187.58
2	FID	ACIS-S-5	7.25	8933	-0.165	0.027	0.008	0.013	0.000000	0.000000	-1805.00	181.39
3	GUIDE	1204423512	8.97	8917	-0.074	0.030	0.074	0.121	100.368786	-74.674048	519.43	-2497.29
4	GUIDE	1229331616	9.90	8811	-0.005	0.038	0.098	0.157	96.182998	-75.347362	1528.27	1978.42
5	GUIDE	1229333040	9.78	8909	0.014	-0.043	0.098	0.158	99.562583	-75.788185	-1722.25	909.91
6	UNUSED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
7	GUIDE	1204427384	9.89	8871	0.064	-0.025	0.112	0.177	98.538441	-74.593615	1971.37	-1485.21

## 2.4 Star Slots

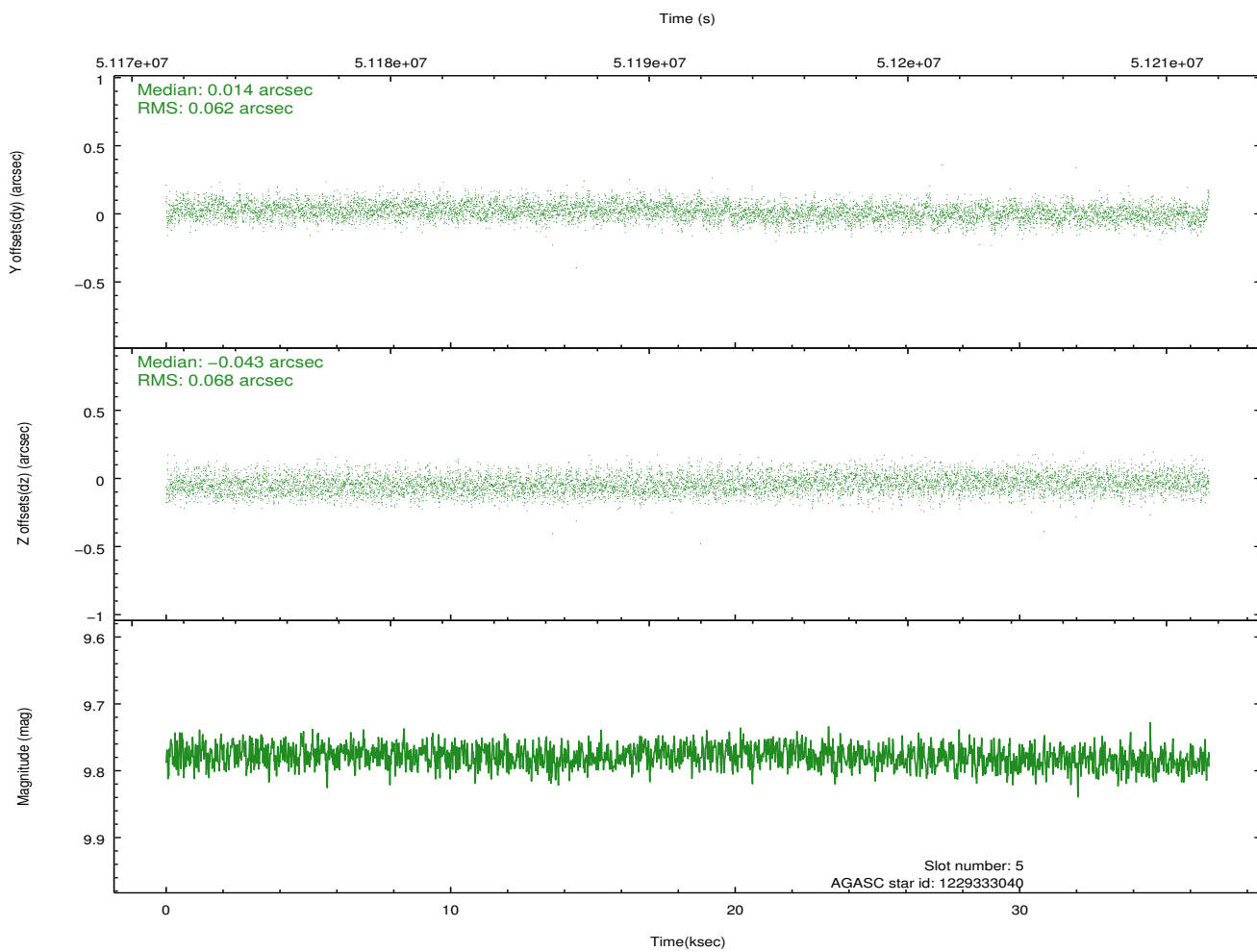
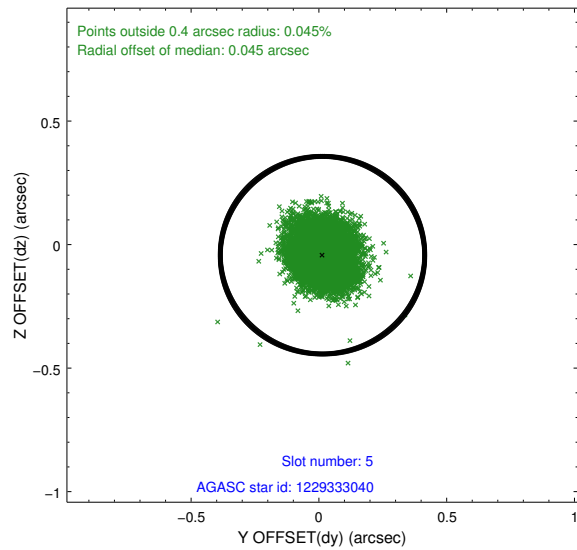
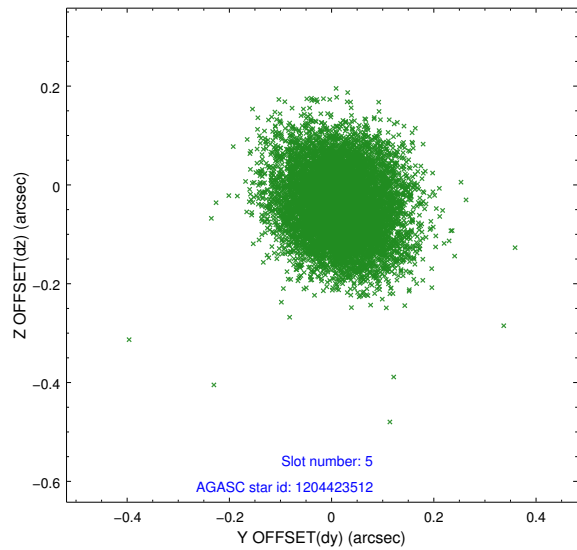
### 2.4.1 Slot 3



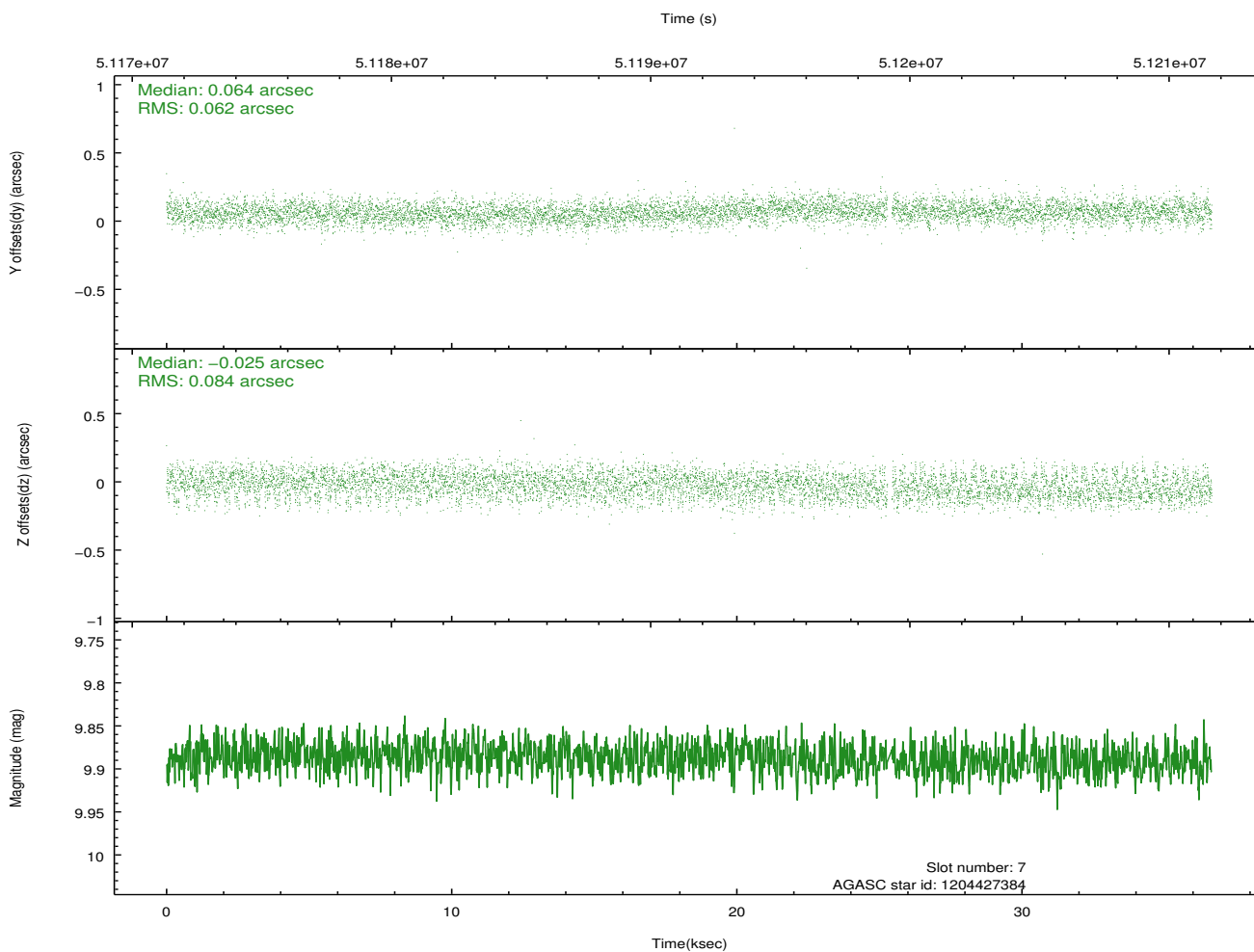
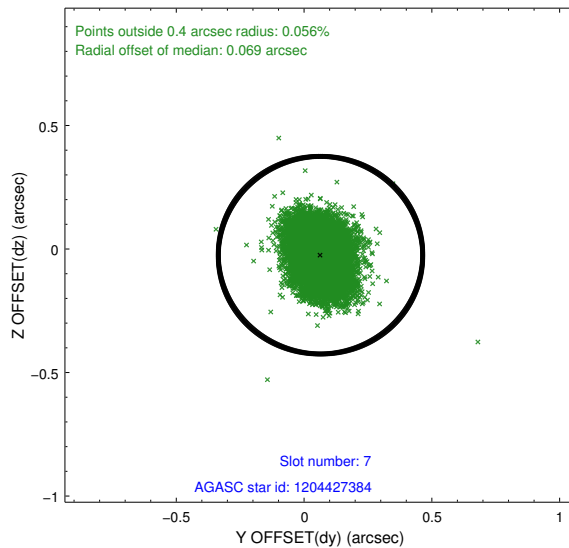
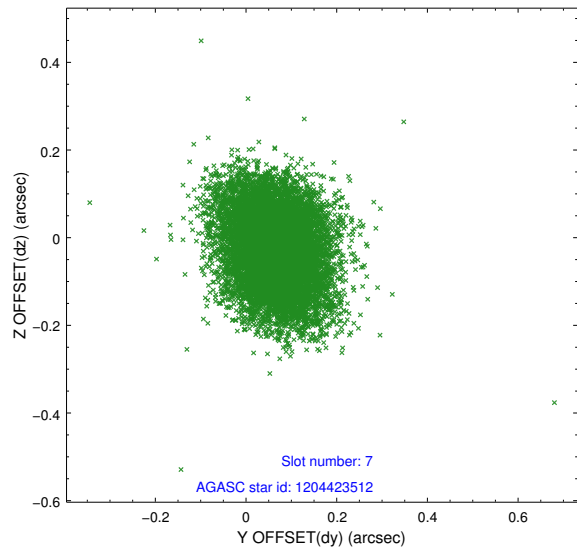
## 2.4.2 Slot 4



### 2.4.3 Slot 5

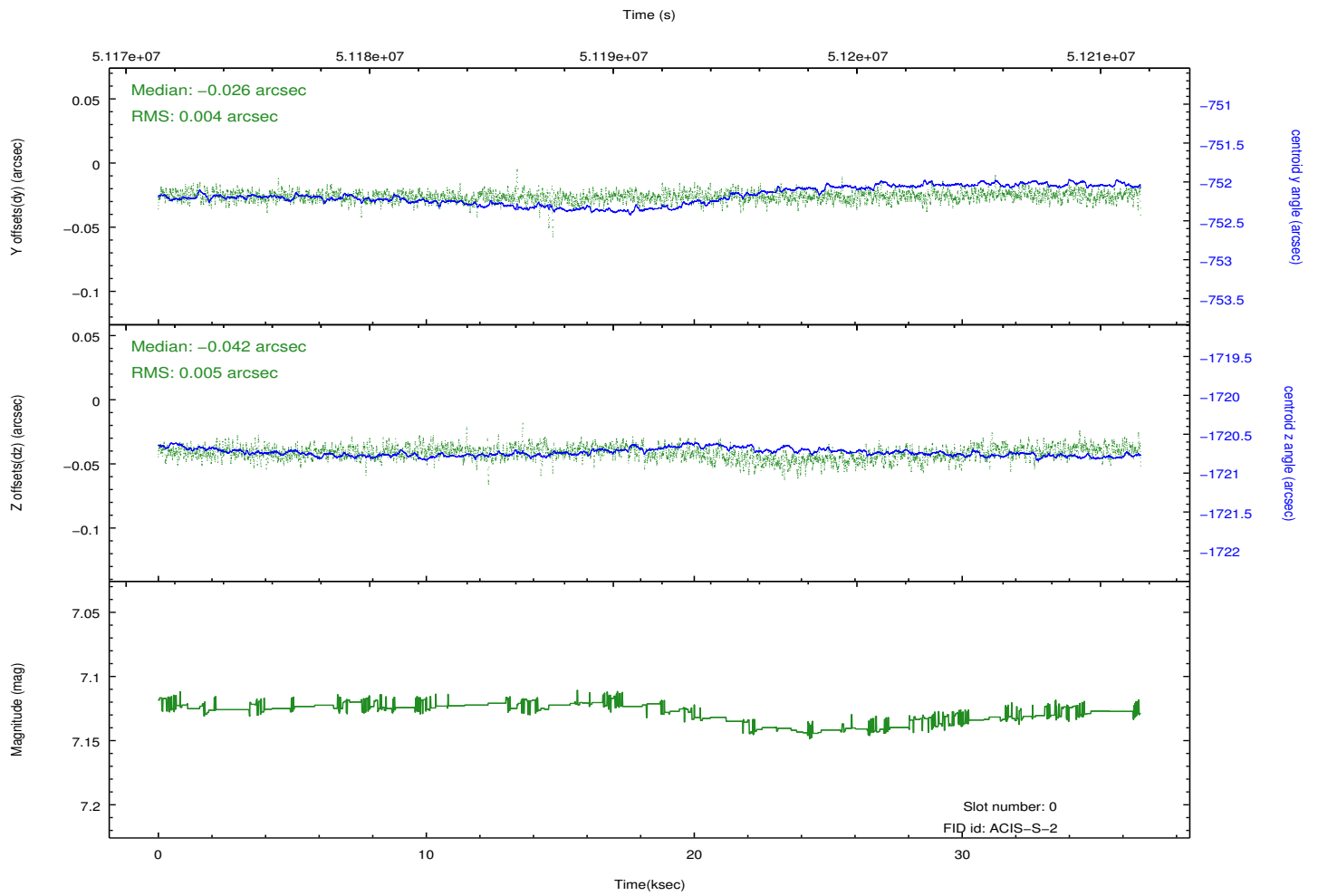
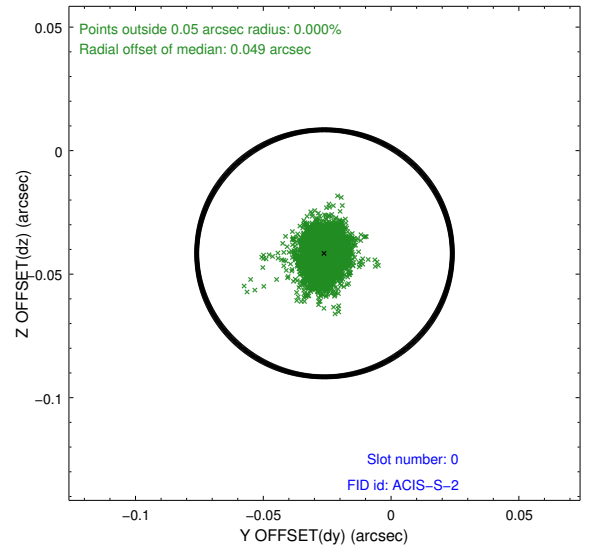
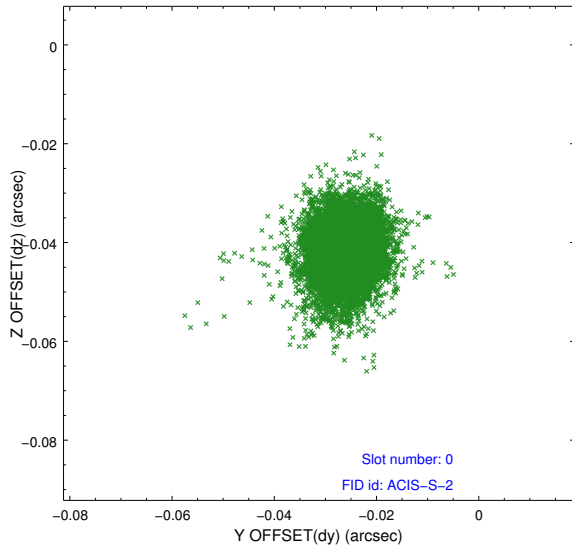


## 2.4.4 Slot 7

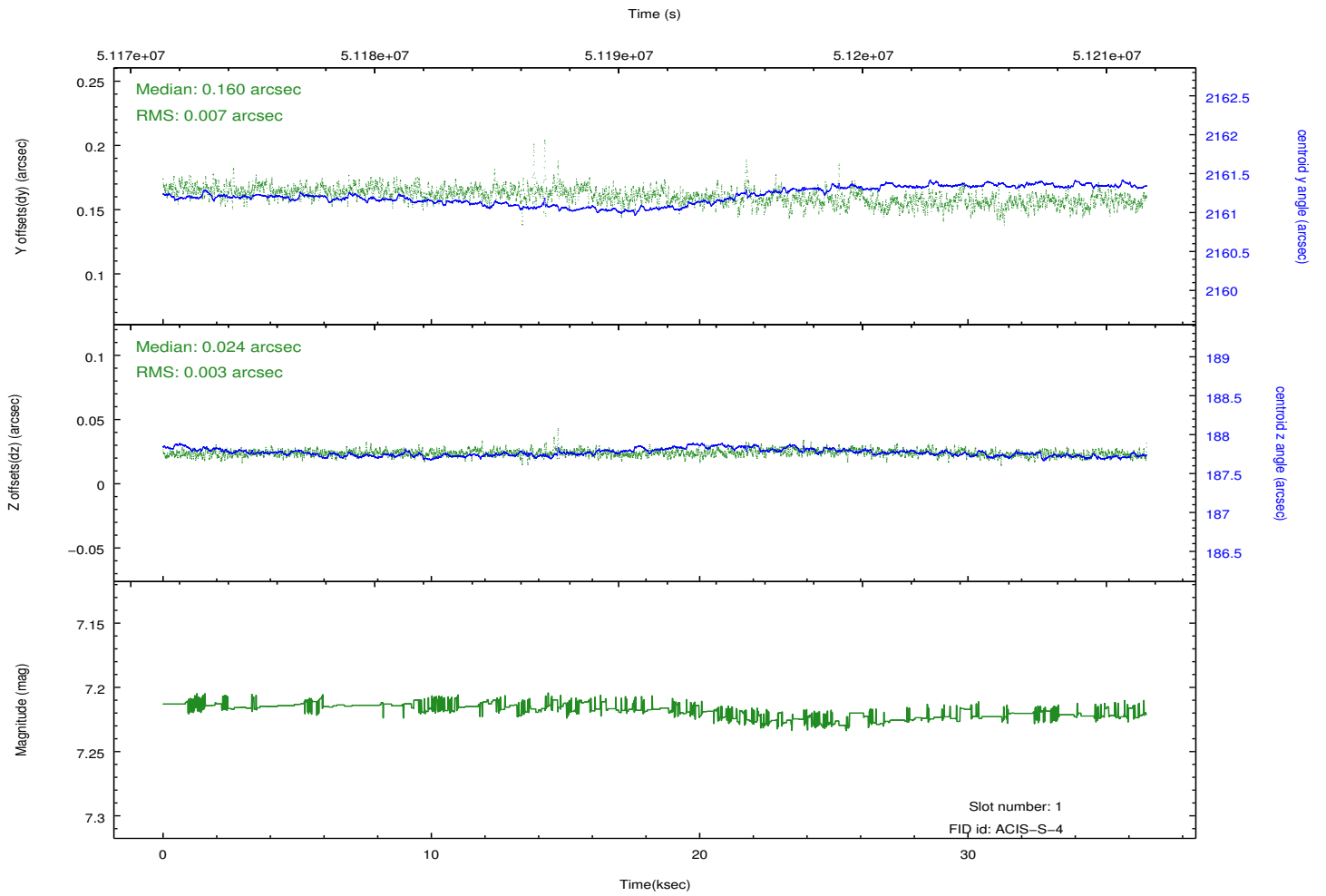
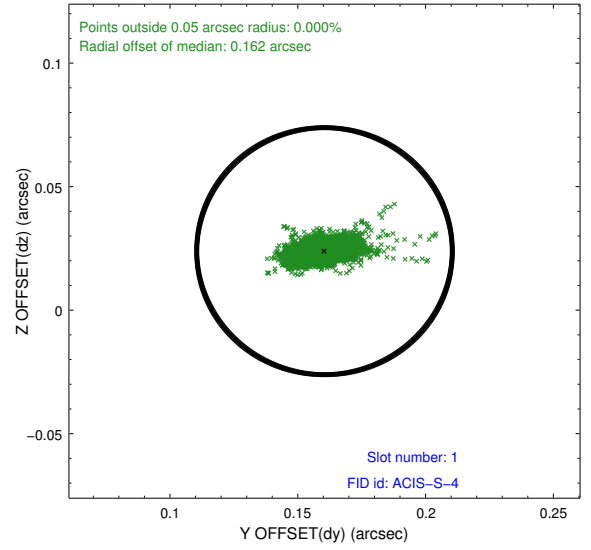
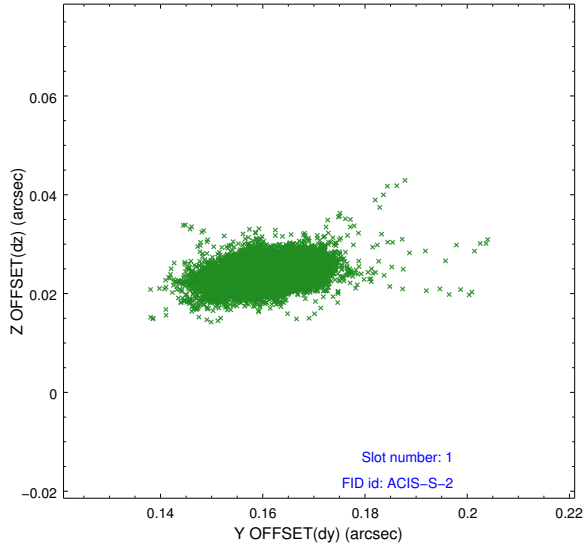


## 2.5 FID Slots

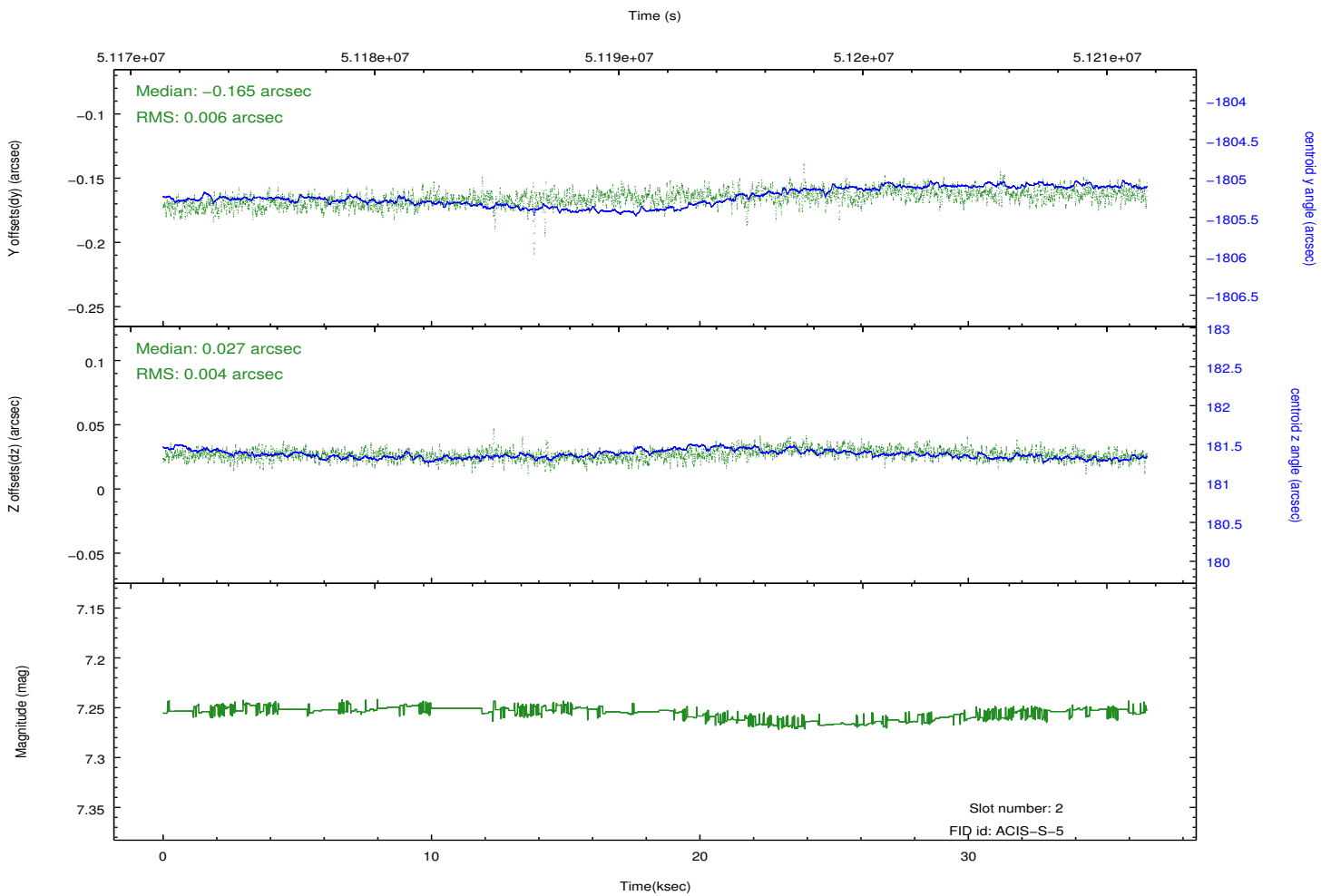
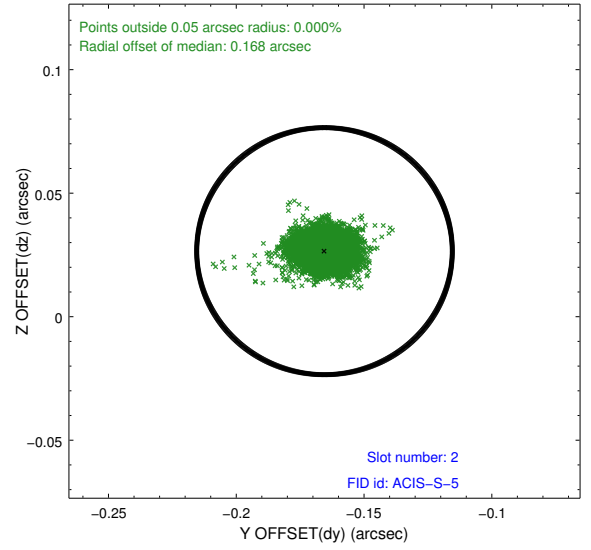
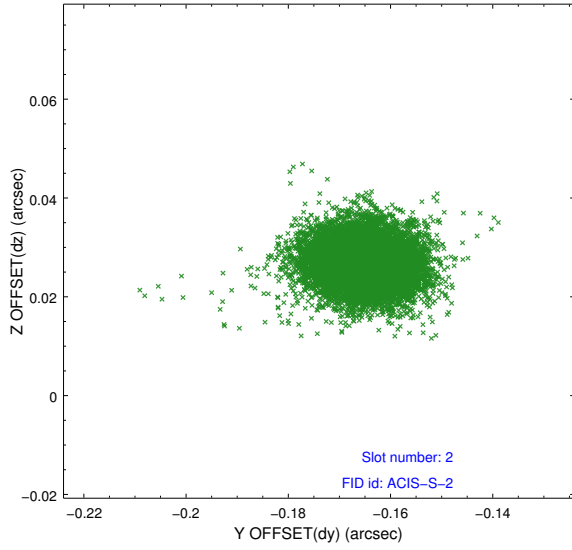
### 2.5.1 Slot 0



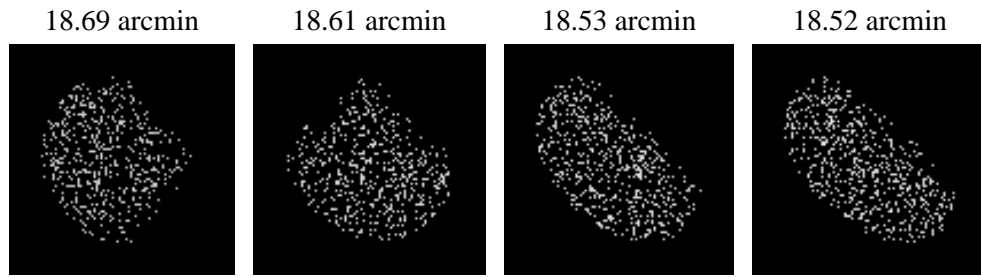
## 2.5.2 Slot 1



### 2.5.3 Slot 2



### 3 Point Sources



# A Summary

## A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2010.05.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.756

## A.2 Comments

Optical axis determination with PKS0637. Target off-axis. SIM focus at motor step -932.

===

Charge time for this ObsId remains at previous value of 1.756 ksec, although with the current processing the charge time would have been 1.753 ksec.

==

No guide star in slot 6.

===

The focal plane temperature is approximately -100 C during this observation. This reprocessing of the data applies no CTI correction because none is available for this temperature at present.

The ACIS CTI correction has not been calibrated at this temperature, because it was early in the mission, and ACIS had not yet been lowered to the standard -119.7 C. Both front and back illuminated chips are affected. However a T\_GAIN correction has been applied to the BI chips (ACIS-5 and ACIS-7) data included here.

The ACIS spectral response calibration is less accurate at these warmer temperatures than it is at -119.7 C. Users whose science objectives depend on the most accurate spectral response (ie: 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.