

# V&V Reference Report

## L2 ASCDS Version : 8.1.1

Observation 1113 - L2 Version 4

Chandra X-Ray Center

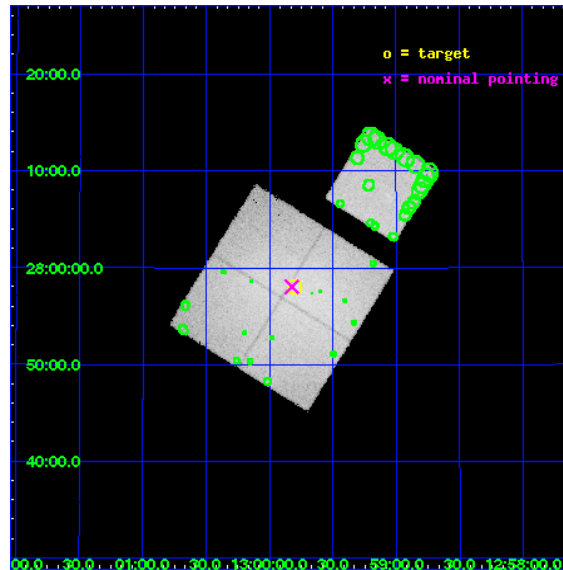
L2 Processing Date : Nov 21 2009

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# 1 Front

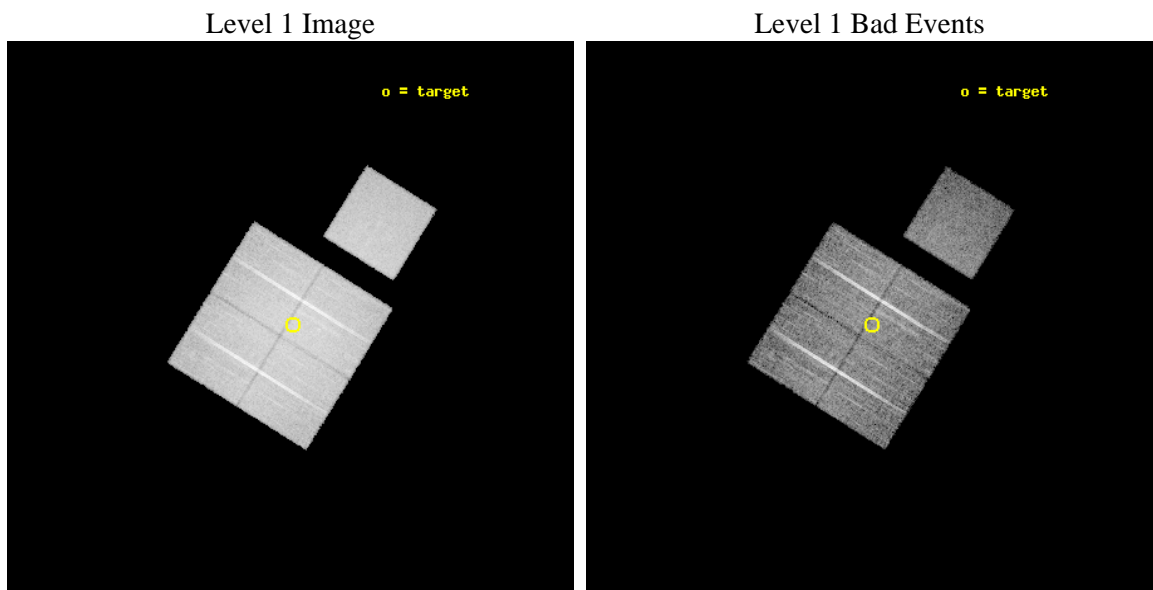
seq_num	880063	Sequence number
obs_id	1113	Observation id
title	&#160	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	COMA CLUSTER	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	194.95	Observer's specified target RA
dec_targ	27.966667	Observer's specified target Dec
ra_nom	194.95595023845	Nominal RA
dec_nom	27.967493743652	Nominal Dec
roll_nom	31.847123096823	Nominal Roll
revision	4	Processing version of data
ontime	9772.0200374126	Sum of GTIs [s]
livetime	9648.2808356949	Livetime [s]
ontime0	9772.1431873292	Sum of GTIs [s]
ontime1	9772.1021473333	Sum of GTIs [s]
ontime2	9772.0610774085	Sum of GTIs [s]
ontime3	9772.0200374126	Sum of GTIs [s]
ontime7	9768.9432371929	Sum of GTIs [s]
l2events	281603	Number of level 2 events



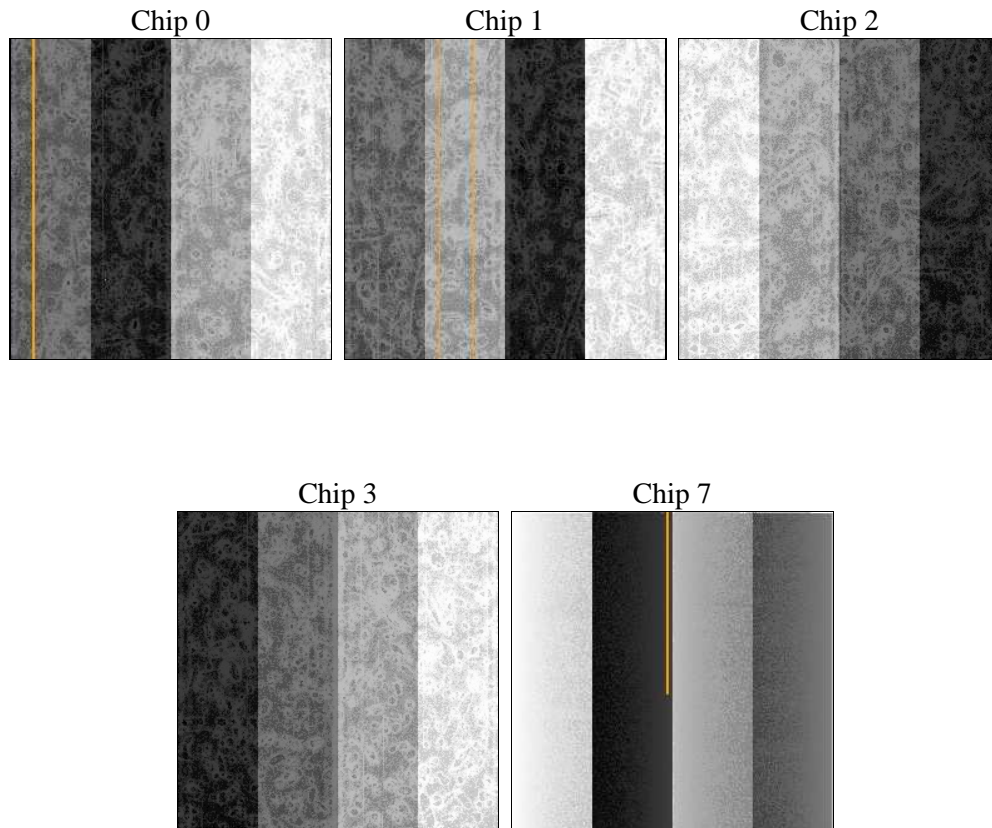
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	10000.000000	Scheduled observation exposure time
ascdsver	8.1.1	ASCDS version number	ontime	9772.0200374126	Sum of GTIs [s]
caldsver	4.1.4	&#160	ontime0	9772.1431873292	Sum of GTIs [s]
date	2009-11-21T09:54:46	Date and time of file creation	ontime1	9772.1021473333	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	9772.0610774085	Sum of GTIs [s]
			ontime3	9772.0200374126	Sum of GTIs [s]
			ontime7	9768.9432371929	Sum of GTIs [s]
			l1events	665100	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
level 1 events	127322	135163	133187	153246	116182
rejected events	76984	74847	84325	82113	58707
rejected %	60%	55%	63%	53%	50%

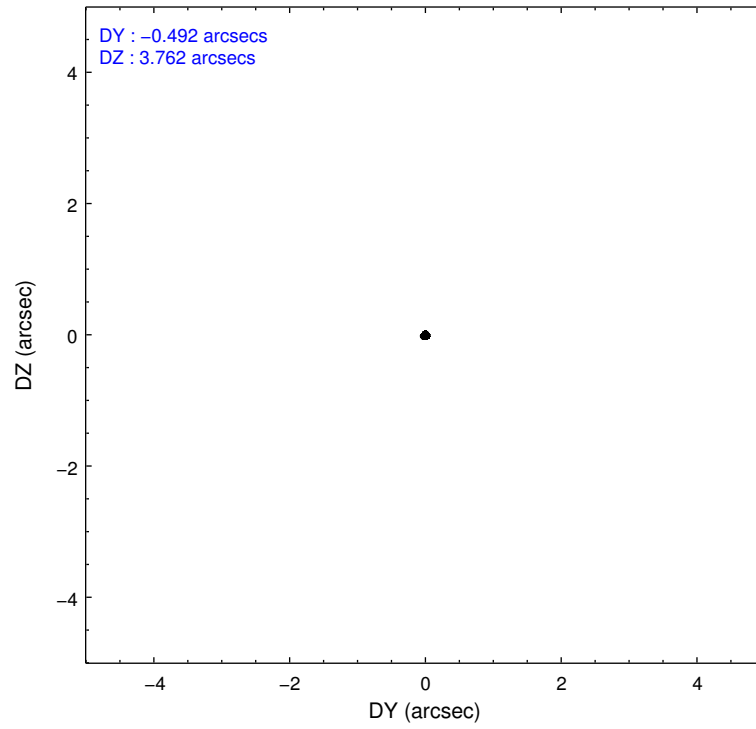
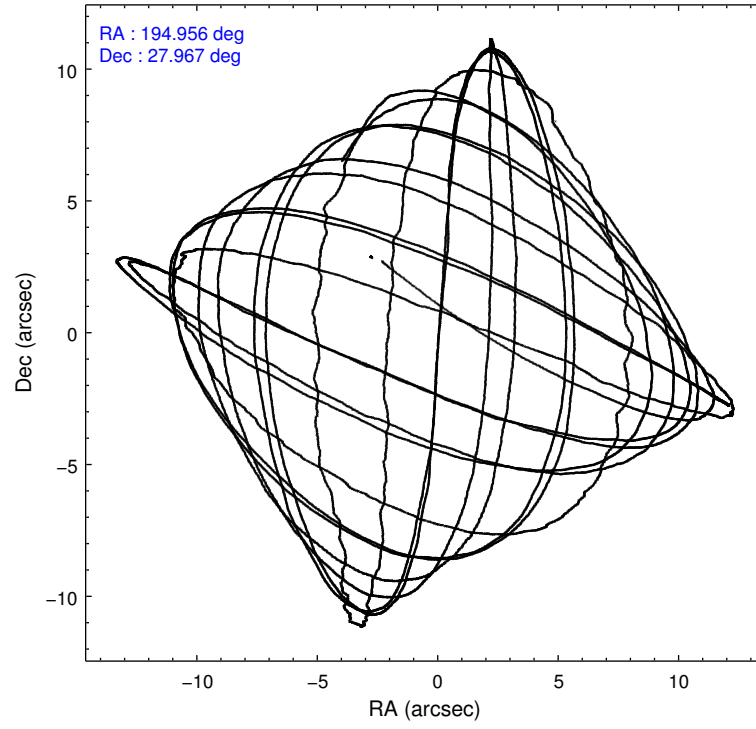
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
grade 0 events	31030	37866	27270	43344	8430
	24%	28%	20%	28%	7%
grade 1 events	111	128	74	126	57
	0%	0%	0%	0%	0%
grade 2 events	12765	14585	15461	19862	13329
	10%	10%	11%	12%	11%
grade 3 events	1594	1935	1327	1868	4343
	1%	1%	0%	1%	3%
grade 4 events	1577	1946	1383	1836	4134
	1%	1%	1%	1%	3%
grade 5 events	1828	1993	1665	1987	5869
	1%	1%	1%	1%	5%
grade 6 events	3414	4020	3458	4273	27257
	2%	2%	2%	2%	23%
grade 7 events	75003	72690	82549	79950	52763
	58%	53%	61%	52%	45%

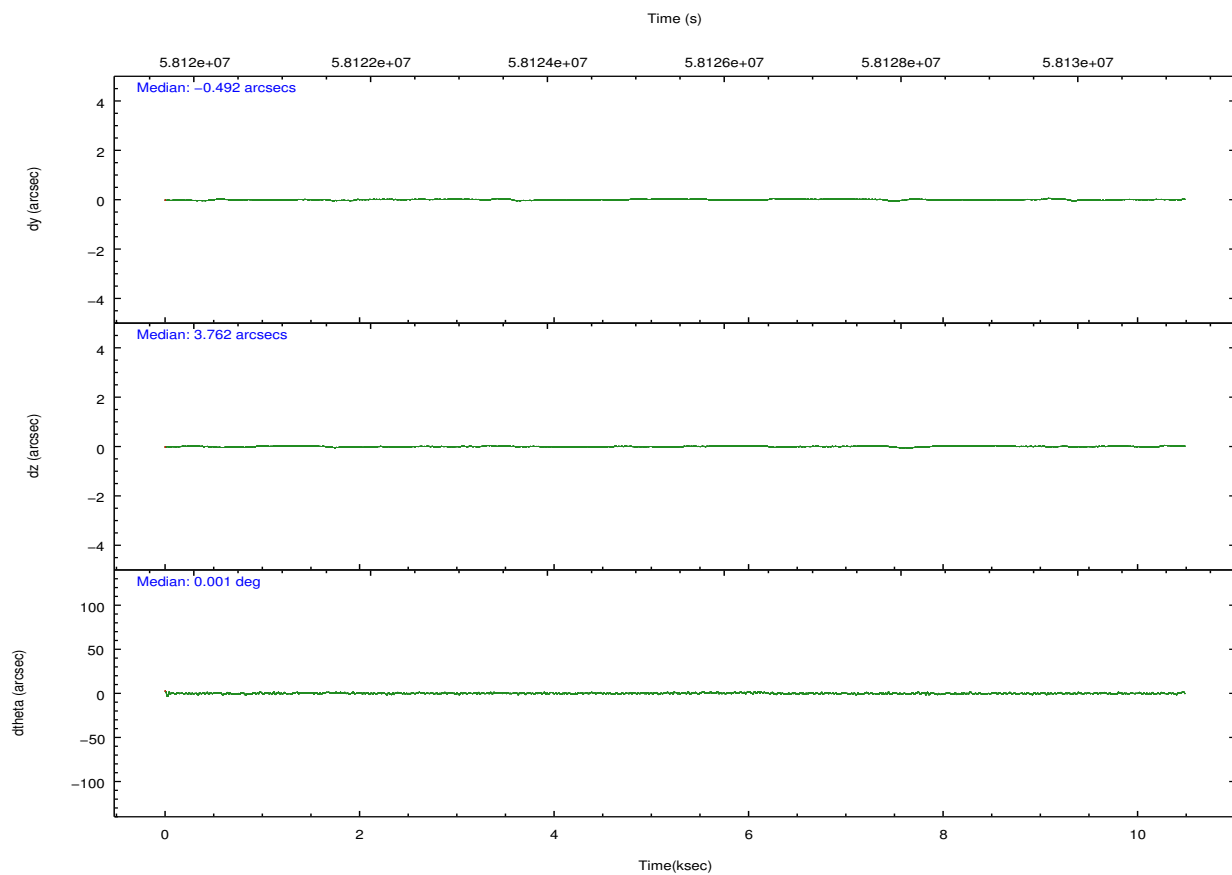
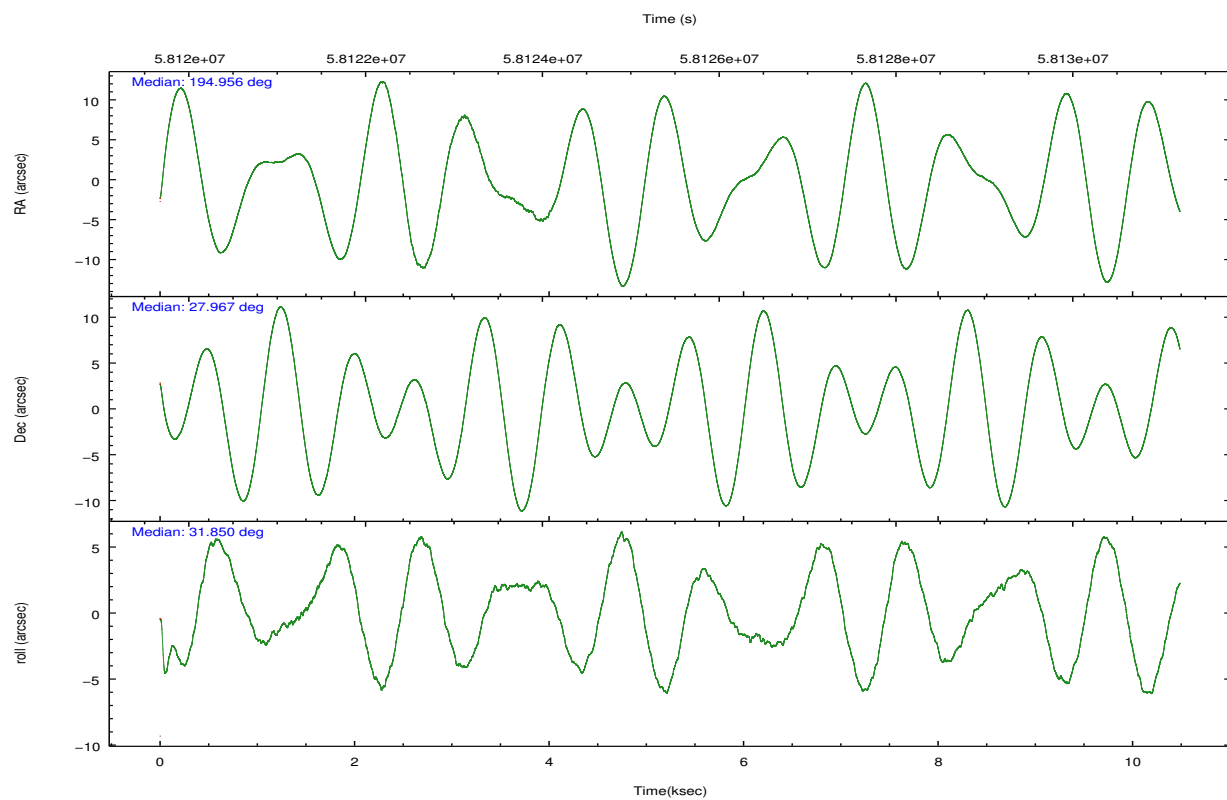


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-01237	ACIS-01237	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	194.940677	194.9559502384465	Subarray requested	NONE	NONE
Pointing Dec	27.943188	27.96749374365161	Alternating exposures requested	N	N
Pointing Roll	31.645605	31.84712309682291	Primary exposure time	0.000000	3.2
SIM focus pos (mm)	-0.782348	-0.7809083437167272			
SIM defocus (mm)	0	0.001439871863259334			
SIM translation stage pos (mm)	-230.592463	-230.5903706213692			
SIM translation stage offset (mm)	-3	-3.002082381560513			
Observation start time	58120687.184000	58120021.318767			
Observation start date	1999-11-04T16:37:03	1999-11-04T16:27:01			
Observation end time	58130687.184000	58130821.231657			
Observation end date	1999-11-04T19:23:43	1999-11-04T19:27:01			
Read mode	TIMED	TIMED			

## 2.3 Aspect



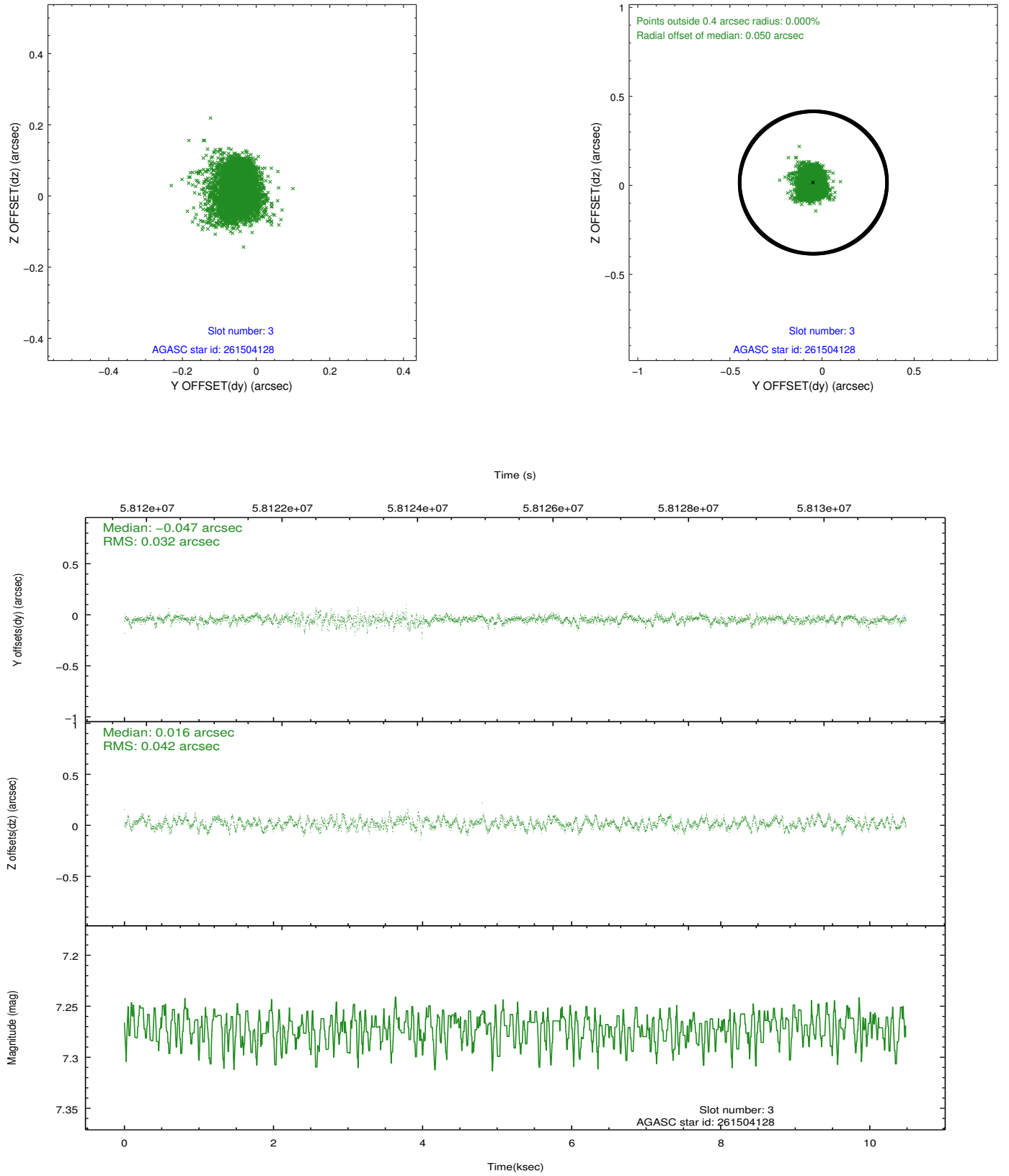


Slot Statistics

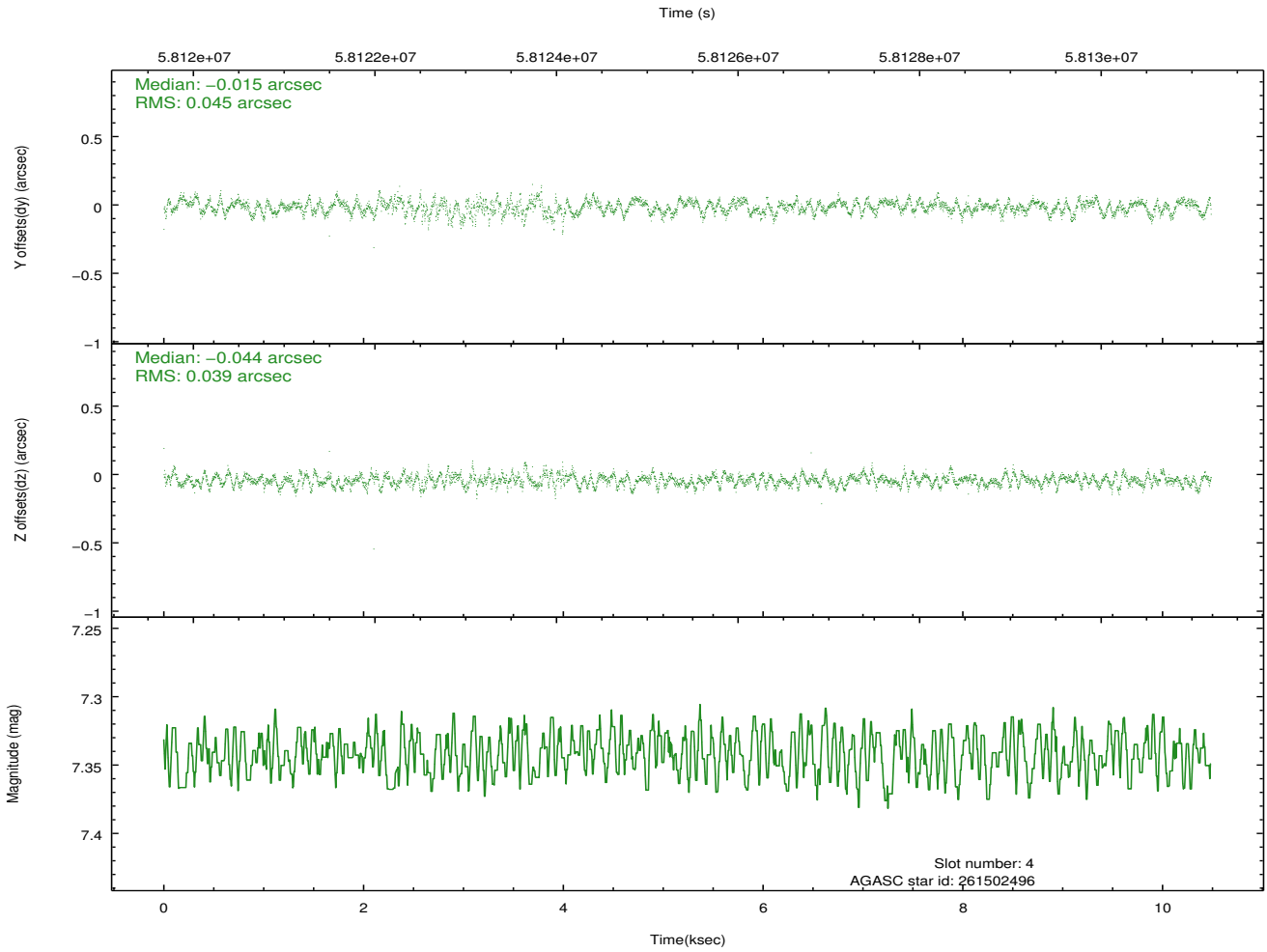
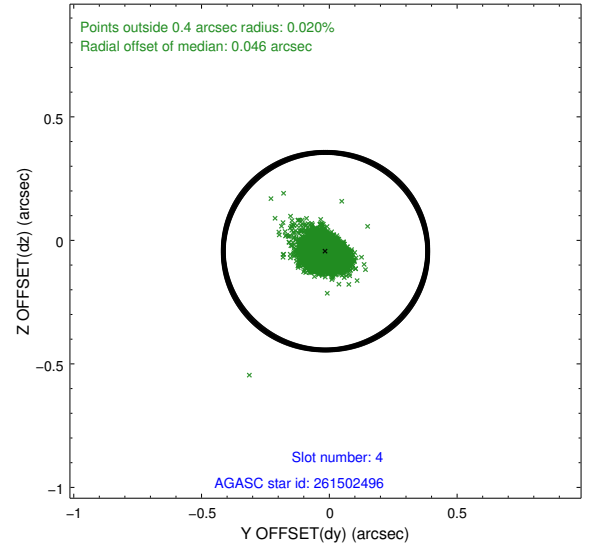
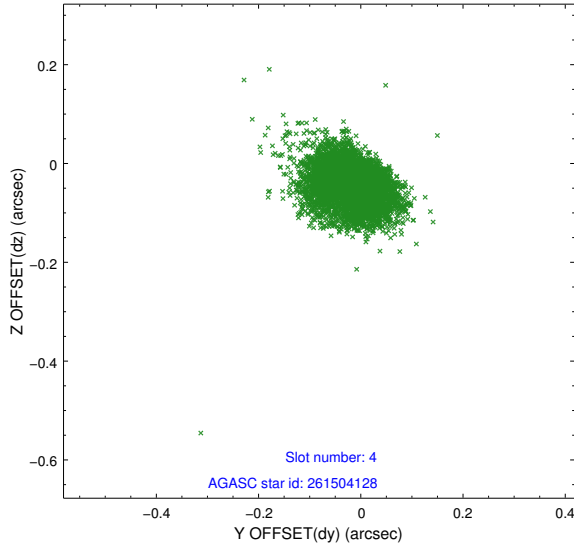
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.21	5114	-0.044	0.090	0.010	0.016	0.000000	0.000000	-754.10	-894.46
1	FID	ACIS-I-4	7.21	5115	0.065	0.009	0.006	0.011	0.000000	0.000000	2160.09	1011.33
2	FID	ACIS-I-5	7.23	5115	-0.123	-0.030	0.010	0.016	0.000000	0.000000	-1807.51	1009.21
3	GUIDE	261504128	7.27	5116	-0.047	0.016	0.055	0.092	194.640935	28.319570	-96.88	1653.01
4	GUIDE	261502496	7.34	5116	-0.015	-0.044	0.061	0.100	194.887297	28.065668	87.22	464.75
5	GUIDE	261498392	8.31	5109	0.006	-0.000	0.072	0.113	194.888587	28.238913	418.25	993.20
6	GUIDE	261492080	9.29	5113	-0.093	-0.024	0.084	0.138	194.976344	28.631585	1396.57	2050.87
7	GUIDE	261505232	9.78	5109	0.152	0.047	0.115	0.184	194.216553	27.802521	-2224.46	785.24

## 2.4 Star Slots

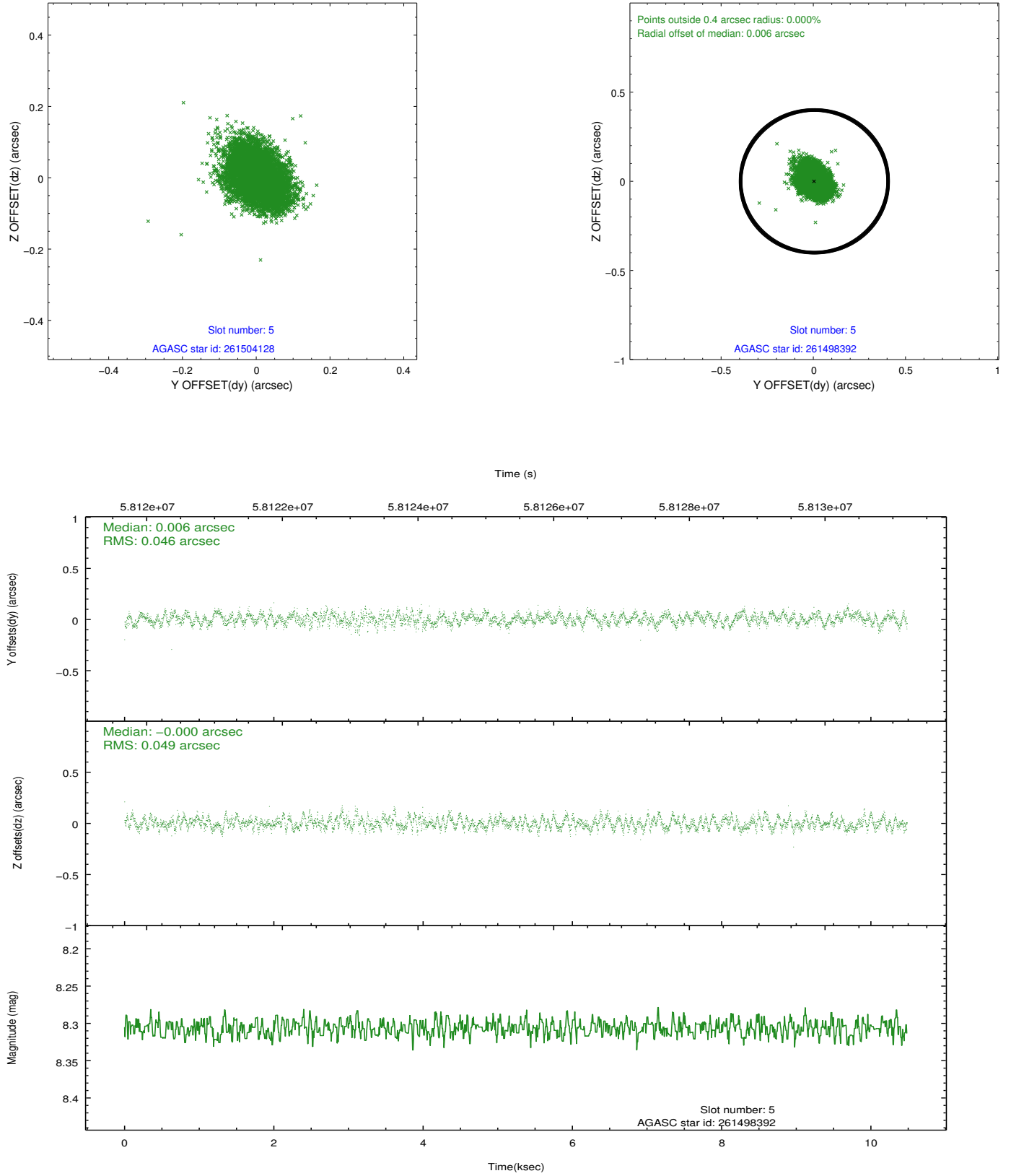
### 2.4.1 Slot 3



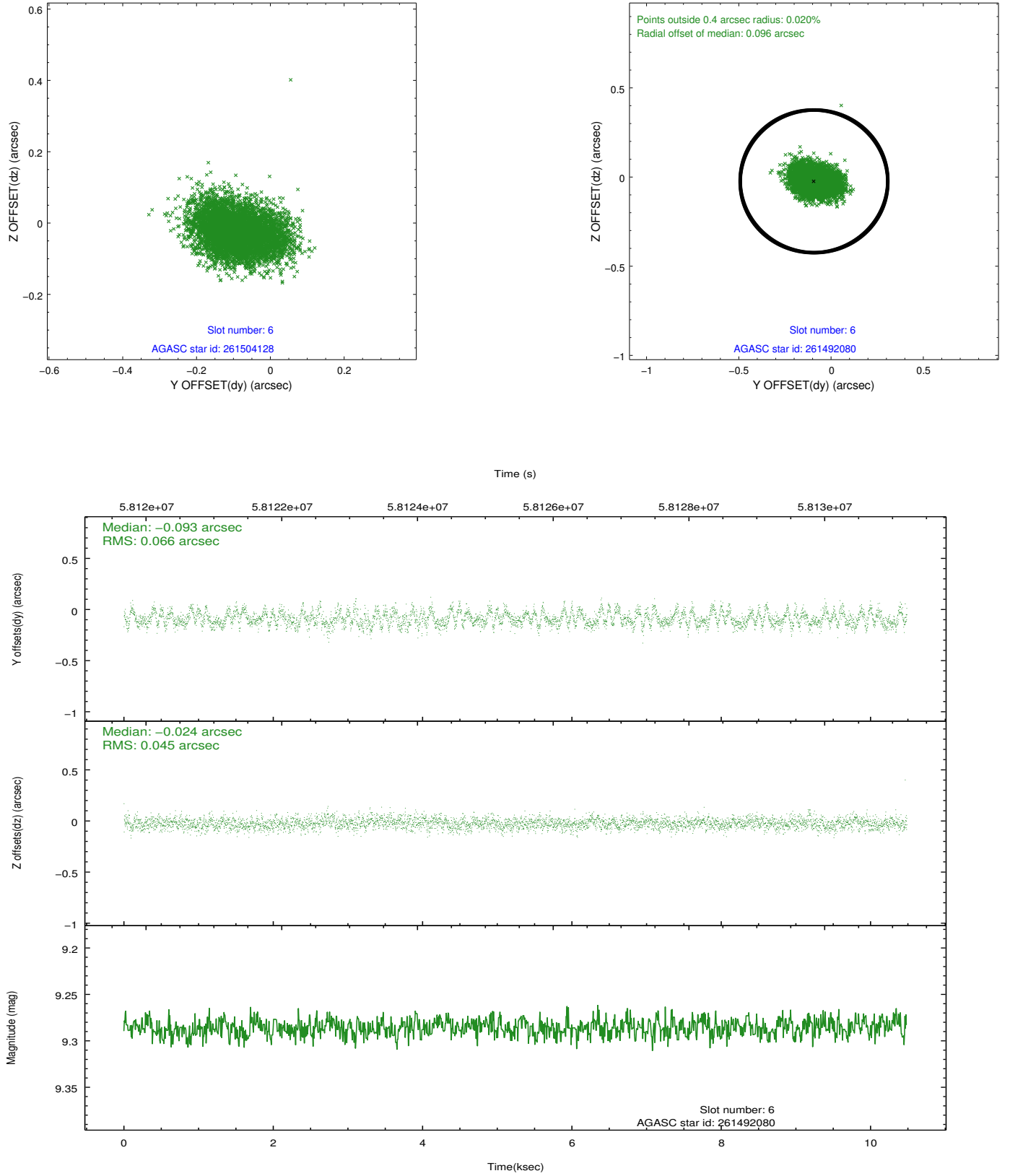
## 2.4.2 Slot 4



### 2.4.3 Slot 5

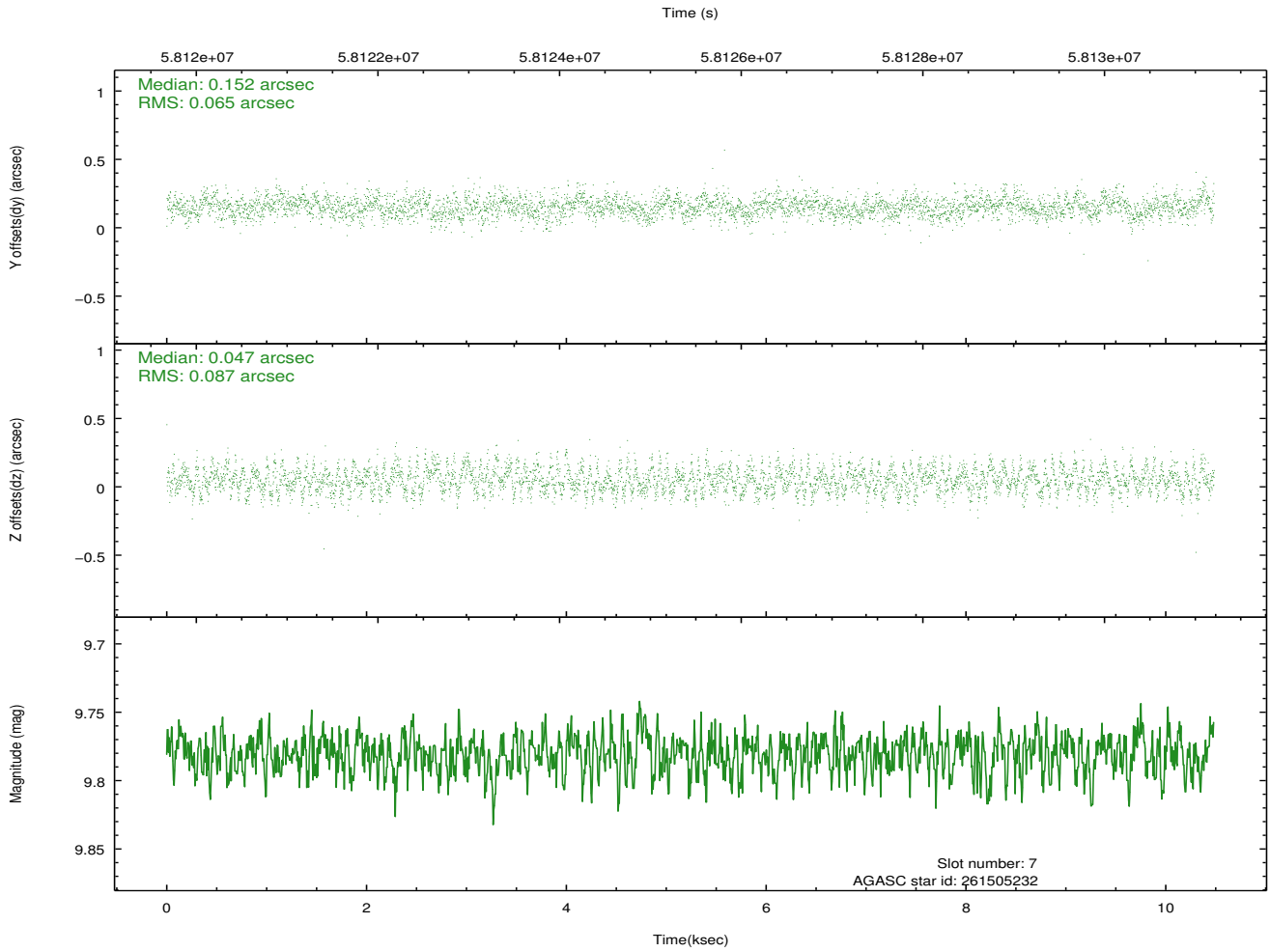
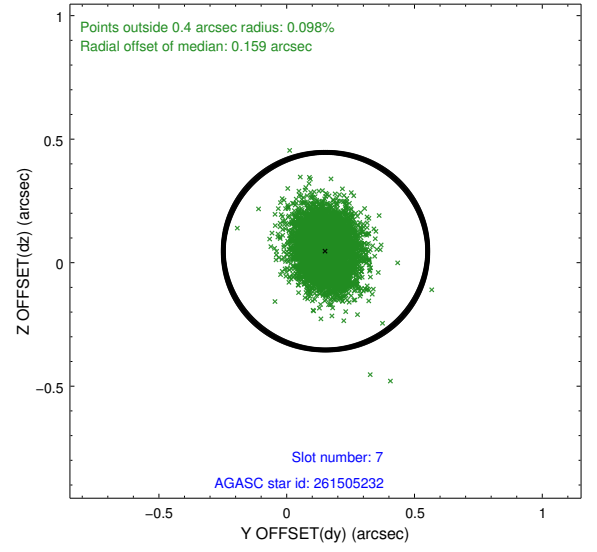
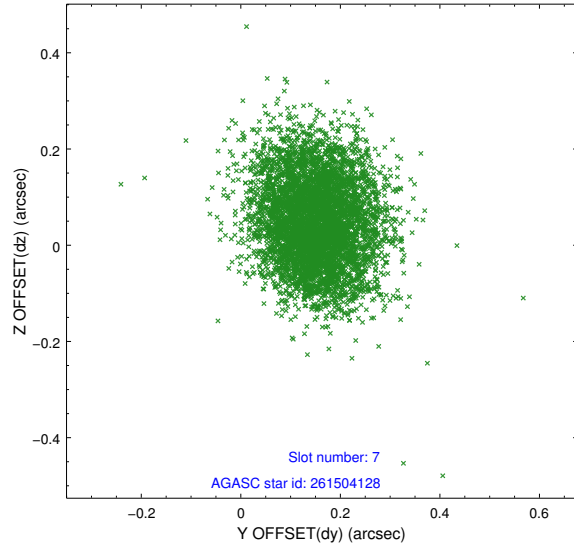


## 2.4.4 Slot 6



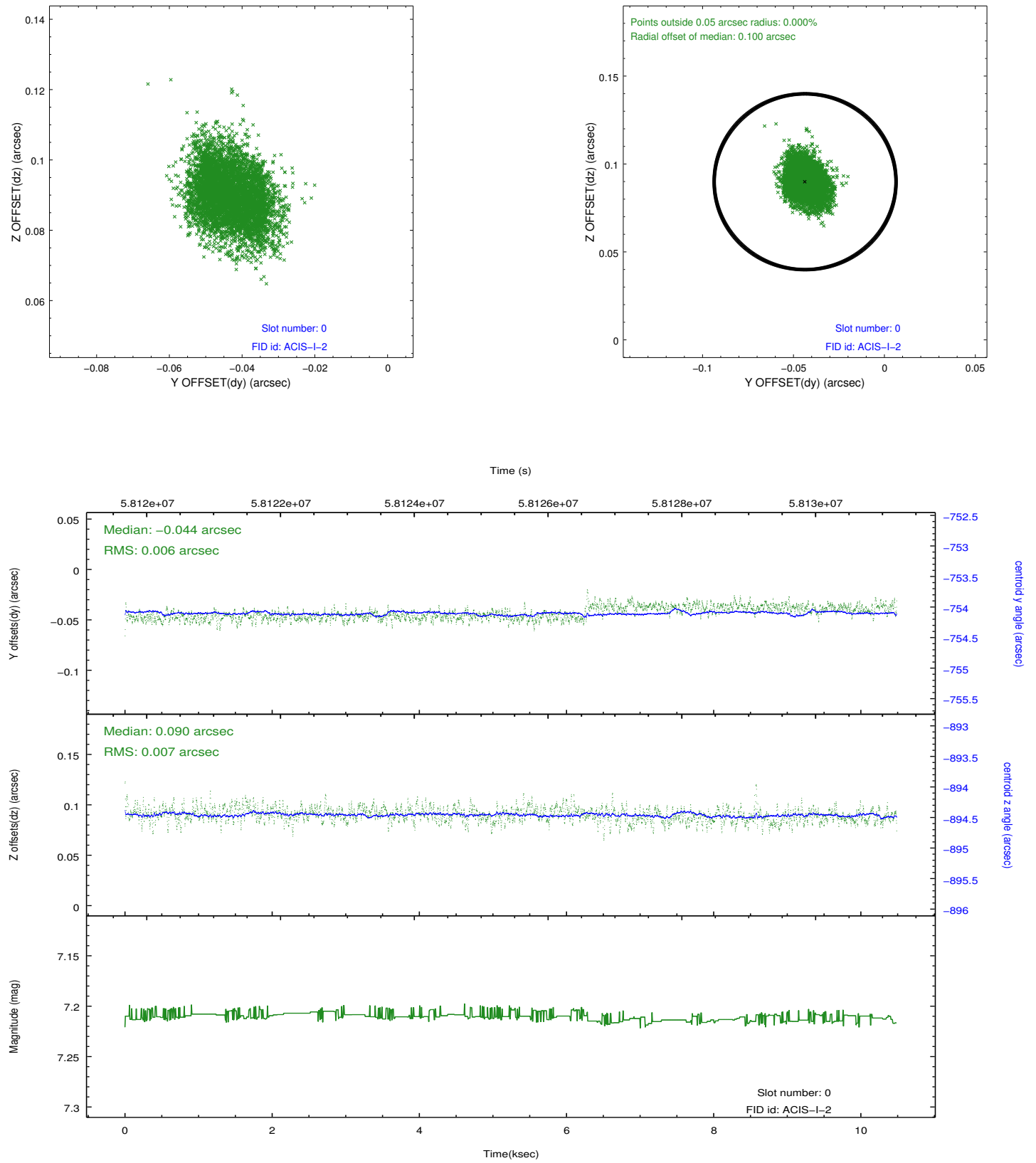


## 2.4.5 Slot 7

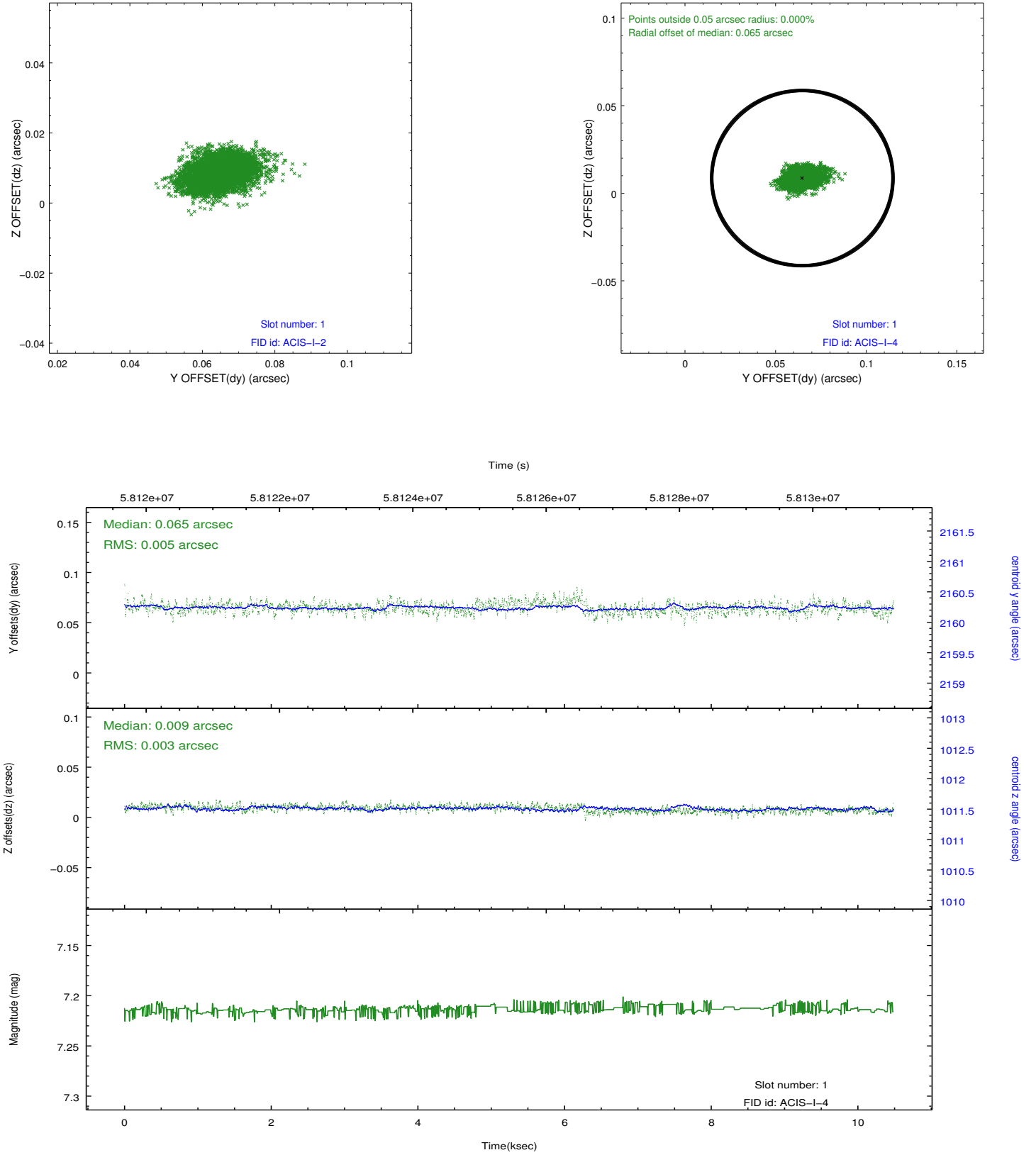


## 2.5 FID Slots

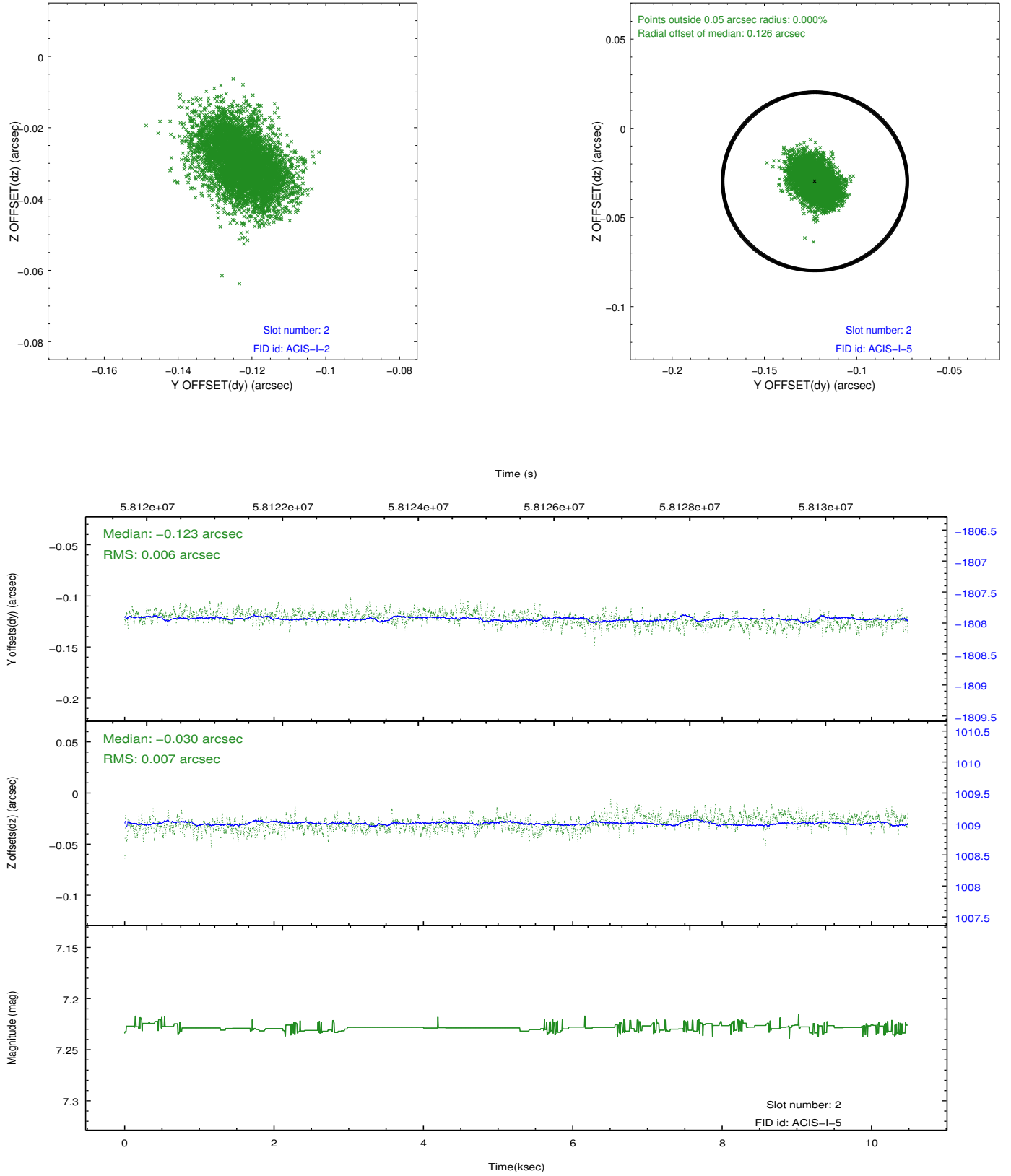
### 2.5.1 Slot 0



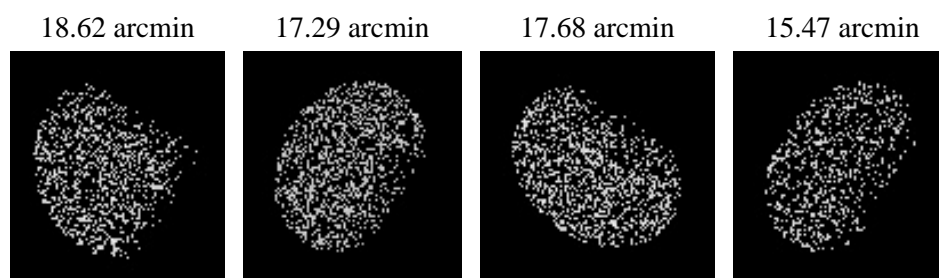
## 2.5.2 Slot 1



### 2.5.3 Slot 2



### 3 Point Sources



# A Summary

## A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2010.07.30
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.772

## A.2 Comments

ACIS imaging on I array.

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The focal plane temperature is approximately -110 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.