

# V&V Reference Report

## L2 ASCDS Version : 8.1.2

Observation 1083 - L2 Version 3

Chandra X-Ray Center

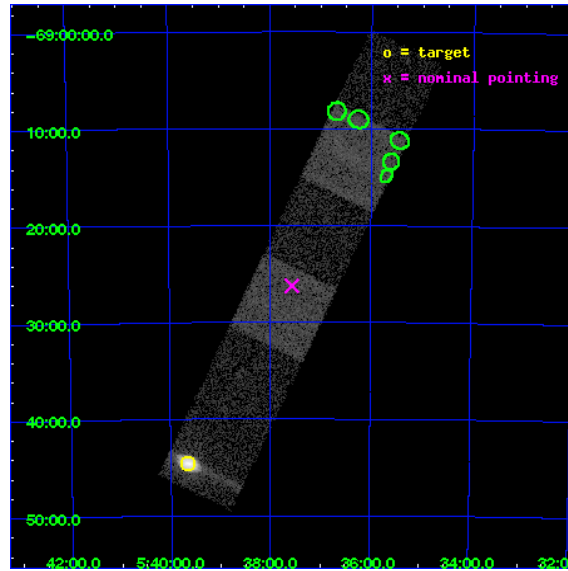
L2 Processing Date : Dec 16 2009

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# 1 Front

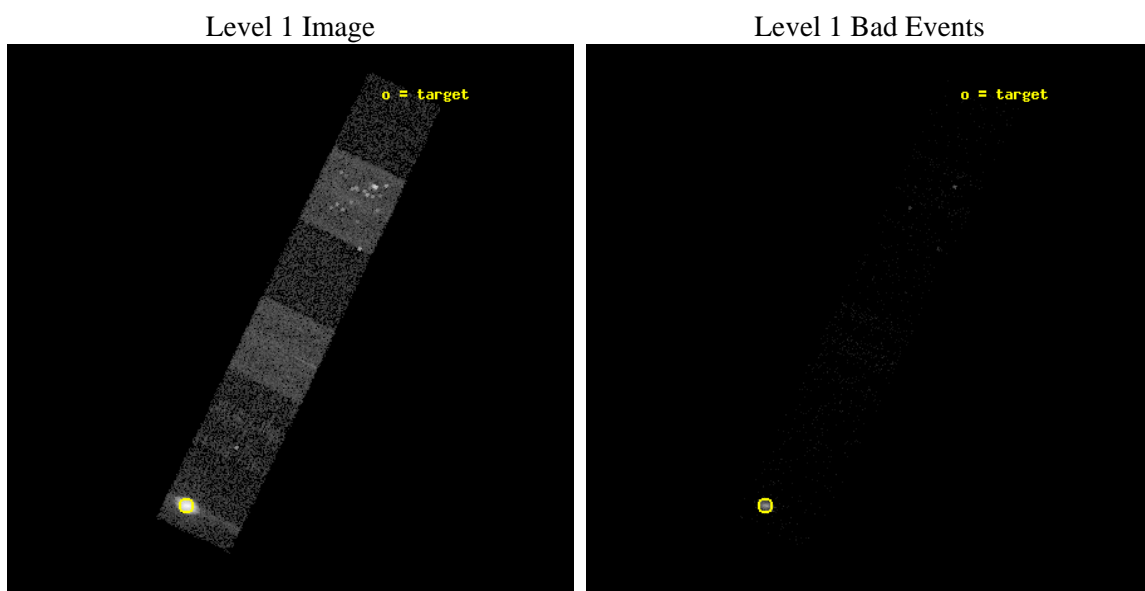
seq_num	480033	Sequence number
obs_id	1083	Observation id
title	&#160	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	LMC X-1	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	84.914583	Observer's specified target RA
dec_targ	-69.743611	Observer's specified target Dec
ra_nom	84.391029663774	Nominal RA
dec_nom	-69.437485180361	Nominal Dec
roll_nom	115.71117783994	Nominal Roll
revision	3	Processing version of data
ontime	1756.8000016361	Sum of GTIs [s]
livetime	1734.5543421975	Livetime [s]
ontime4	1756.8000016361	Sum of GTIs [s]
ontime5	1756.8000016361	Sum of GTIs [s]
ontime6	1756.8000016361	Sum of GTIs [s]
ontime7	1756.8000016361	Sum of GTIs [s]
ontime8	1756.8000016361	Sum of GTIs [s]
ontime9	1756.8000016361	Sum of GTIs [s]
l2events	107001	Number of level 2 events



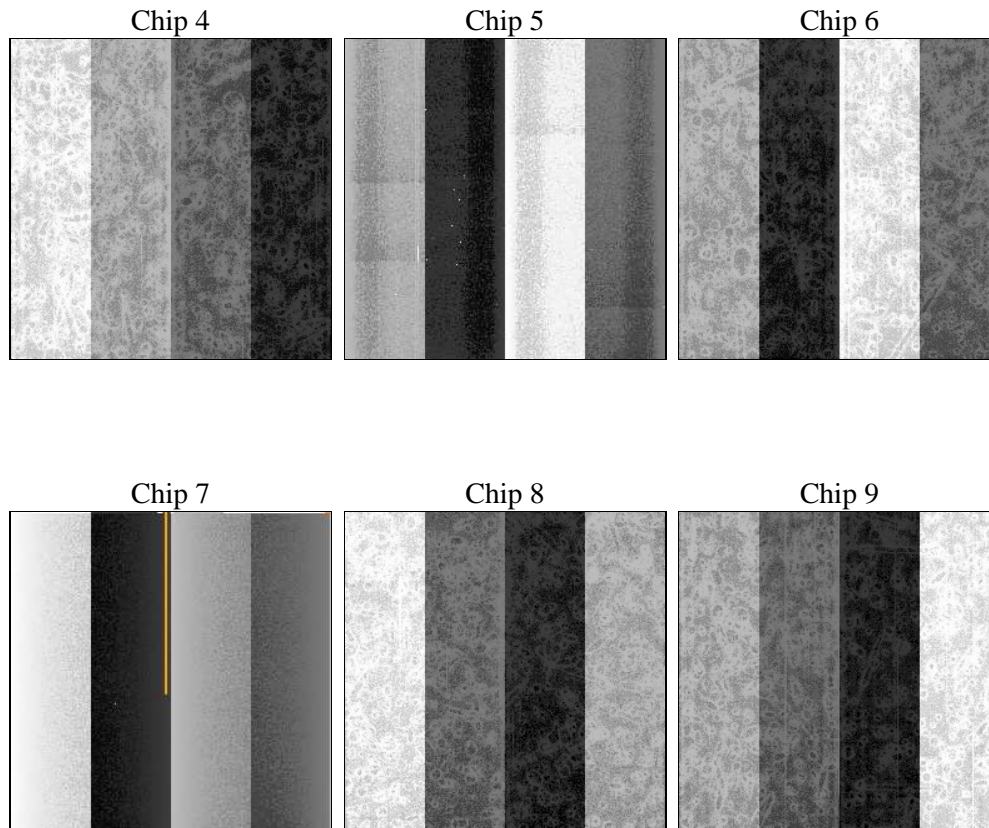
## 2 OBI

### 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	1756.8000016361	Sum of GTIs [s]
caldsver	4.1.4	&#160	ontime4	1756.8000016361	Sum of GTIs [s]
date	2009-12-16T06:53:56	Date and time of file creation	ontime5	1756.8000016361	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	1756.8000016361	Sum of GTIs [s]
			ontime7	1756.8000016361	Sum of GTIs [s]
			ontime8	1756.8000016361	Sum of GTIs [s]
			ontime9	1756.8000016361	Sum of GTIs [s]
			l1events	126981	Number of level 1 events

### 2.1.4 Events

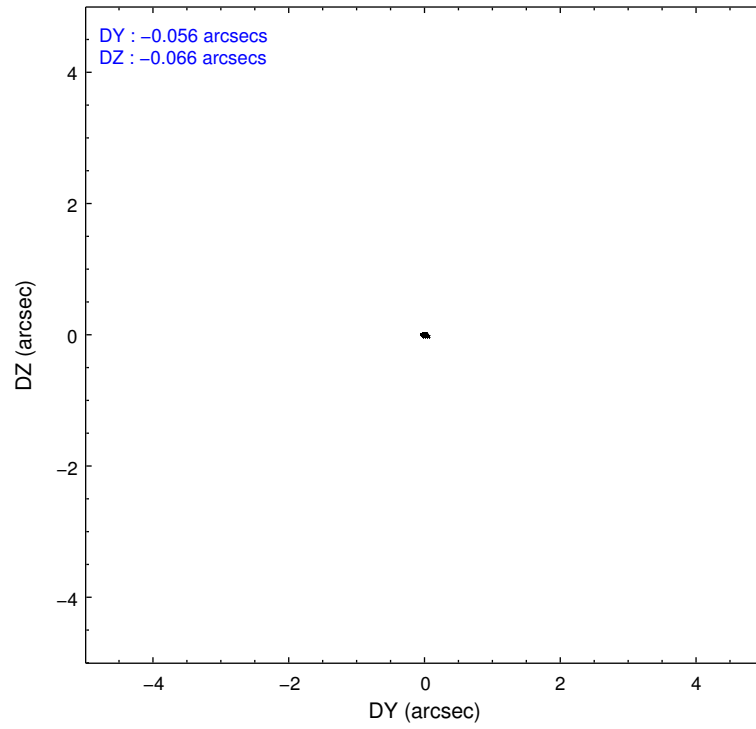
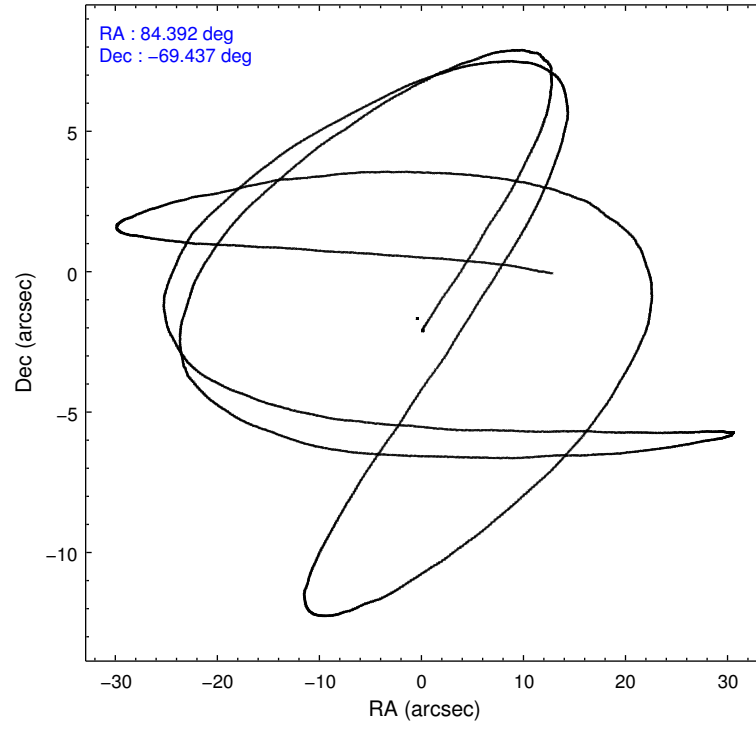
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	3394	21413	4471	14185	5800	77718
rejected events	766	1475	993	1956	1085	3099
rejected %	22%	6%	22%	13%	18%	3%

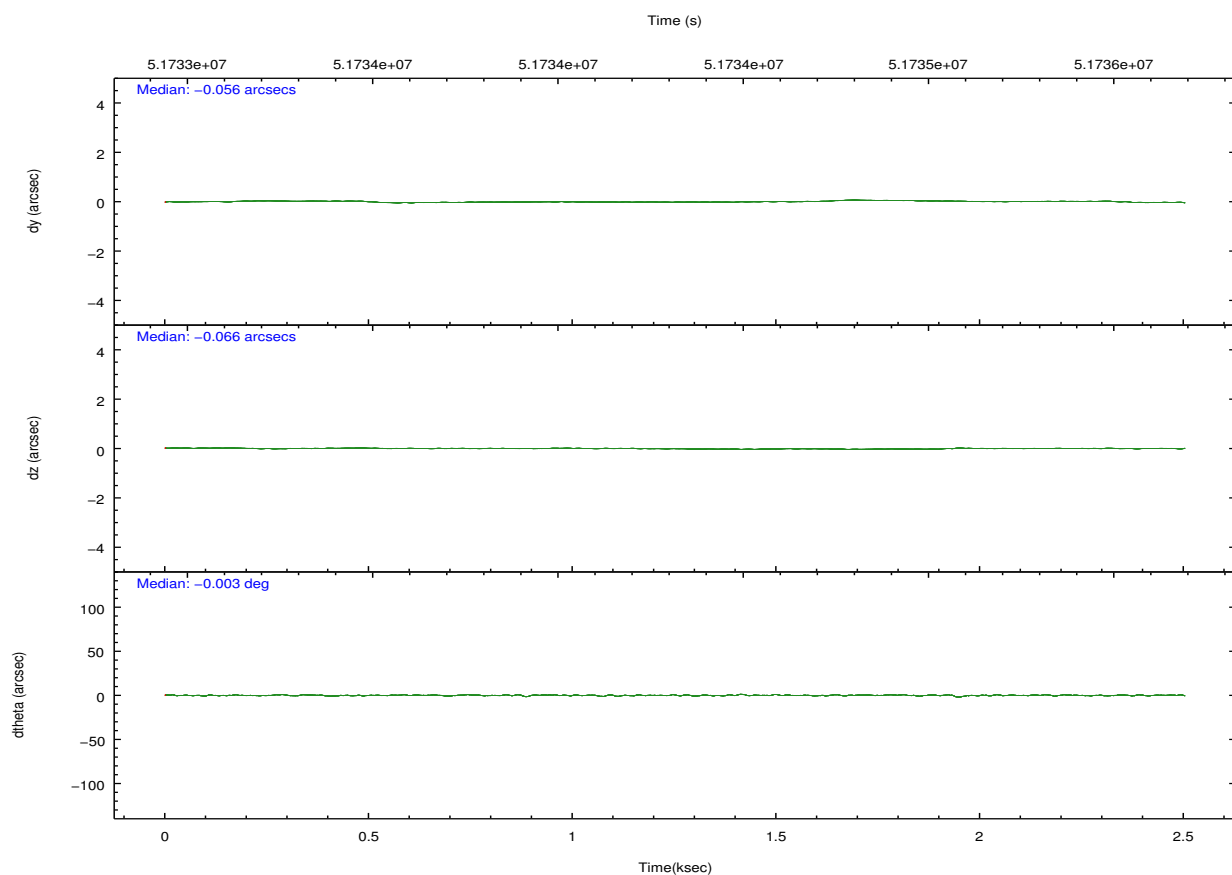
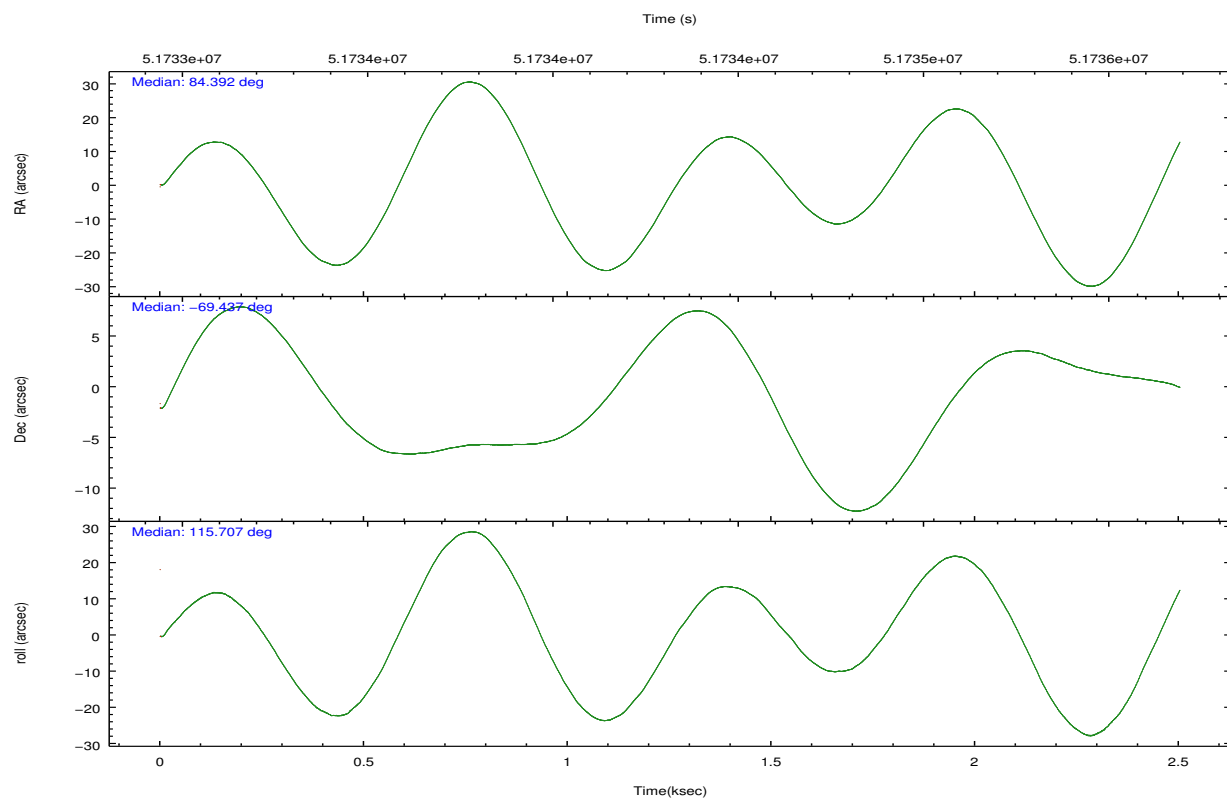
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	764	6097	1171	811	1643	56459
	22%	28%	26%	5%	28%	72%
grade 1 events	9	102	7	9	14	1171
	0%	0%	0%	0%	0%	1%
grade 2 events	585	3501	709	1776	1046	9462
	17%	16%	15%	12%	18%	12%
grade 3 events	212	884	235	949	335	3006
	6%	4%	5%	6%	5%	3%
grade 4 events	174	787	233	785	320	2896
	5%	3%	5%	5%	5%	3%
grade 5 events	755	1304	970	1898	1045	1644
	22%	6%	21%	13%	18%	2%
grade 6 events	895	8738	1146	7957	1397	3080
	26%	40%	25%	56%	24%	3%
grade 7 events	0	0	0	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-456789	ACIS-456789	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	84.455665	84.39102966377355	Subarray requested	NONE	NONE
Pointing Dec	-69.453697	-69.43748518036111	Alternating exposures requested	N	N
Pointing Roll	115.615071	115.7111778399394	Primary exposure time	0.000000	3.2
SIM focus pos (mm)	-0.684267	-0.865731118321573			
SIM defocus (mm)	0	-0.1814636570216768			
SIM translation stage pos (mm)	-190.132523	-190.1199515274594			
SIM translation stage offset (mm)	0	-0.012571055548392			
Observation start time	51733569.184000	51732895.533624			
Observation start date	1999-08-22T18:25:05	1999-08-22T18:14:55			
Observation end time	51735569.184000	51735695.833725			
Observation end date	1999-08-22T18:58:25	1999-08-22T19:01:35			
Read mode	TIMED	TIMED			

## 2.3 Aspect





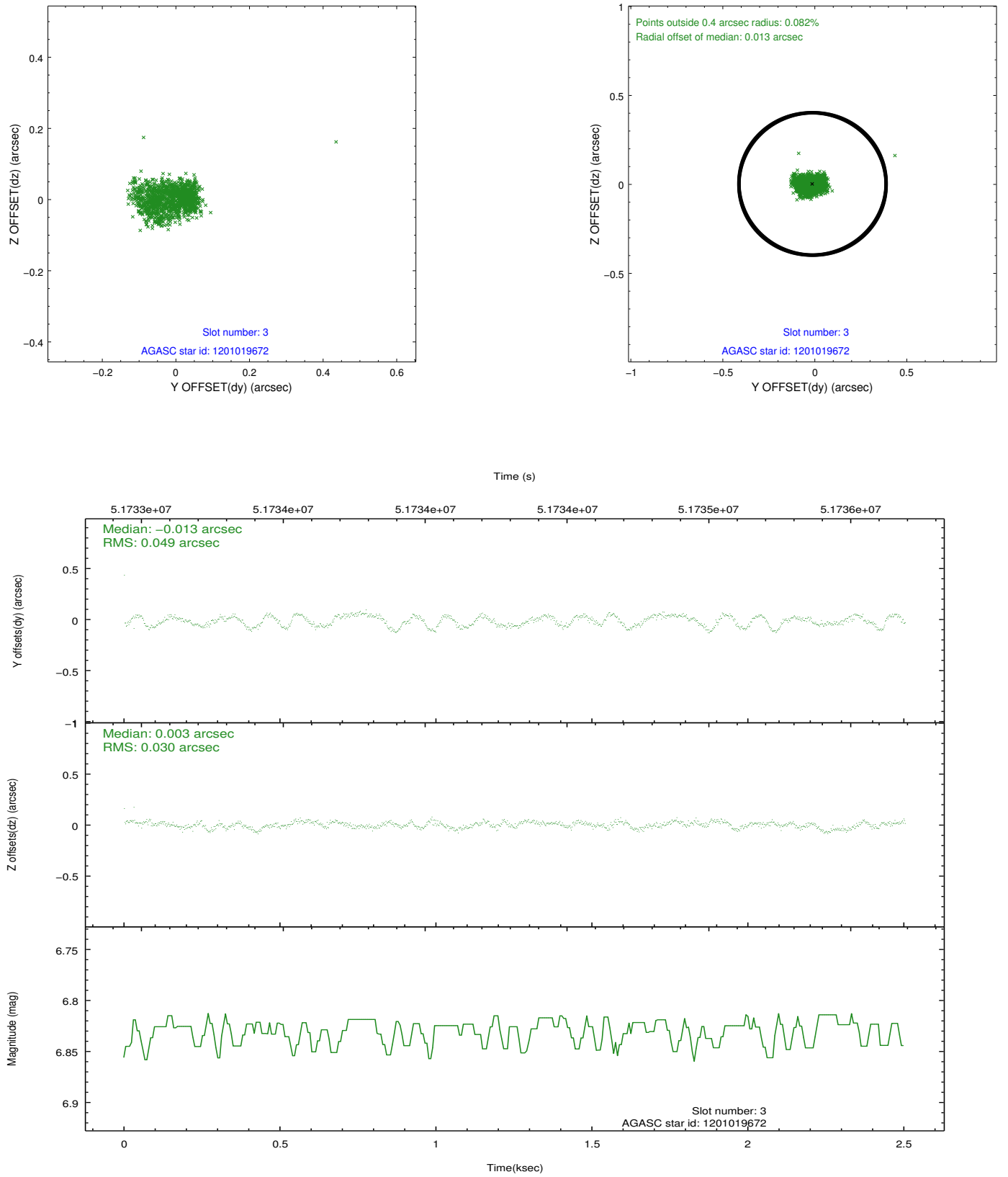
Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-4	7.22	1222	0.128	-0.056	0.006	0.011	0.000000	0.000000	2160.94	187.24
1	FID	ACIS-S-5	7.26	1221	-0.144	-0.041	0.006	0.011	0.000000	0.000000	-1803.88	180.95
2	FID	ACIS-S-6	7.35	1221	-0.013	0.111	0.007	0.011	0.000000	0.000000	407.79	824.78
3	GUIDE	1201019672	6.83	1221	-0.013	0.003	0.060	0.092	85.312192	-68.770187	1728.44	-2066.35
4	GUIDE	1201541752	7.35	1222	0.013	0.090	0.040	0.065	85.373891	-70.033762	-2378.04	-112.38
5	GUIDE	1201407840	7.97	1222	-0.024	-0.088	0.062	0.098	83.696303	-70.172201	-1939.77	1957.35
6	GUIDE	1201019200	9.48	1221	0.026	0.005	0.099	0.154	84.213591	-68.777384	2328.93	-765.29
7	UNUSED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00

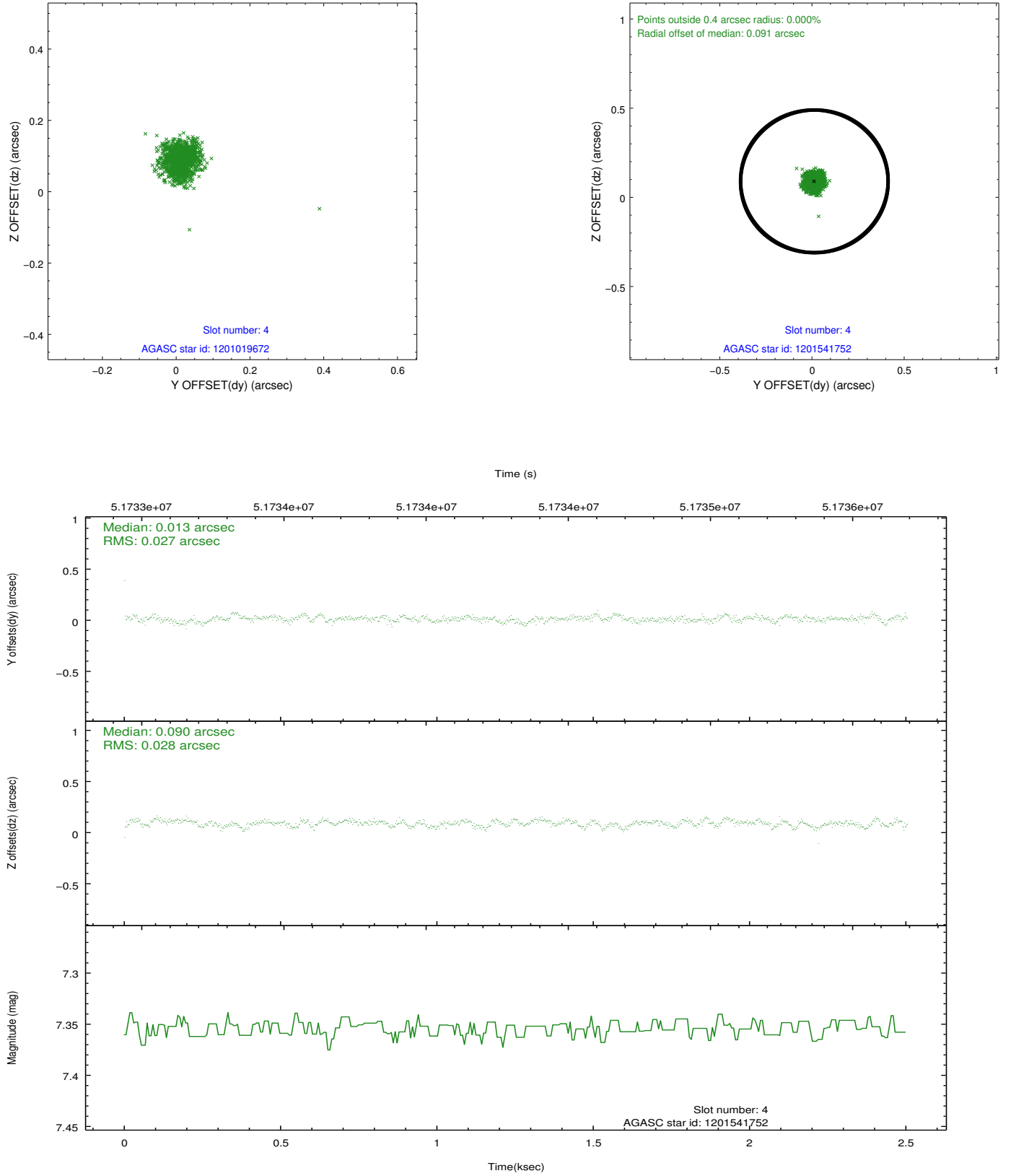


## 2.4 Star Slots

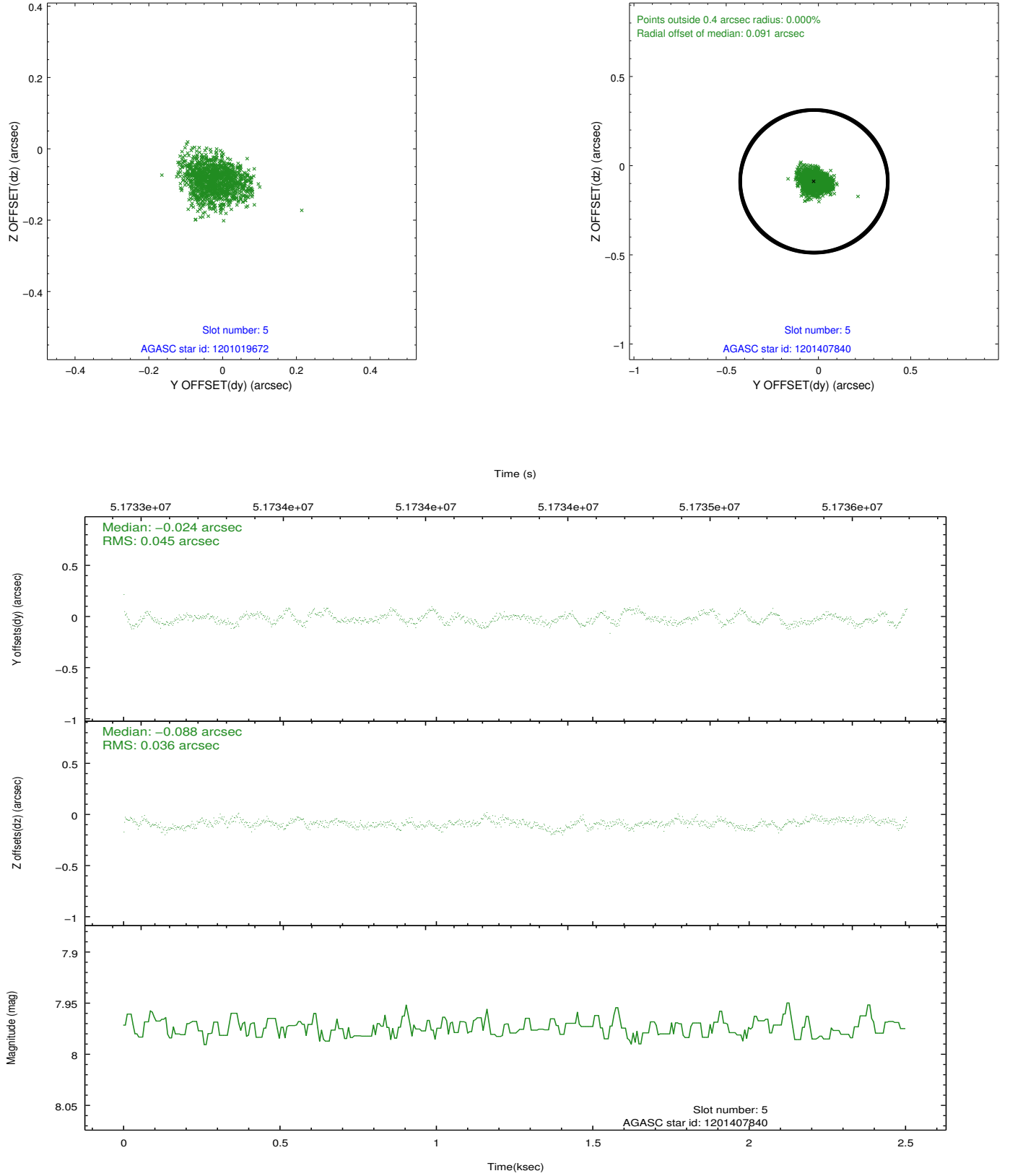
### 2.4.1 Slot 3



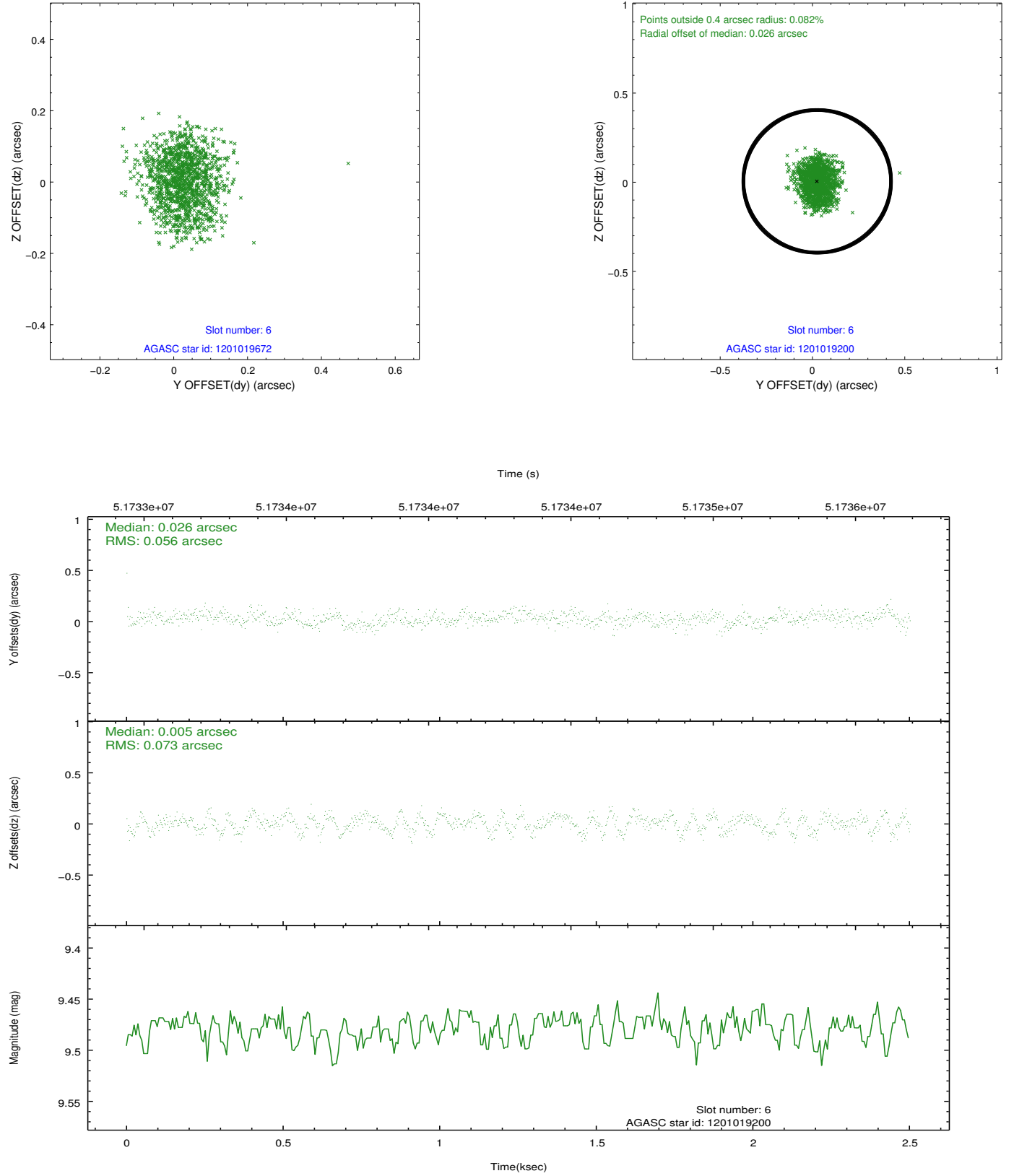
## 2.4.2 Slot 4



### 2.4.3 Slot 5

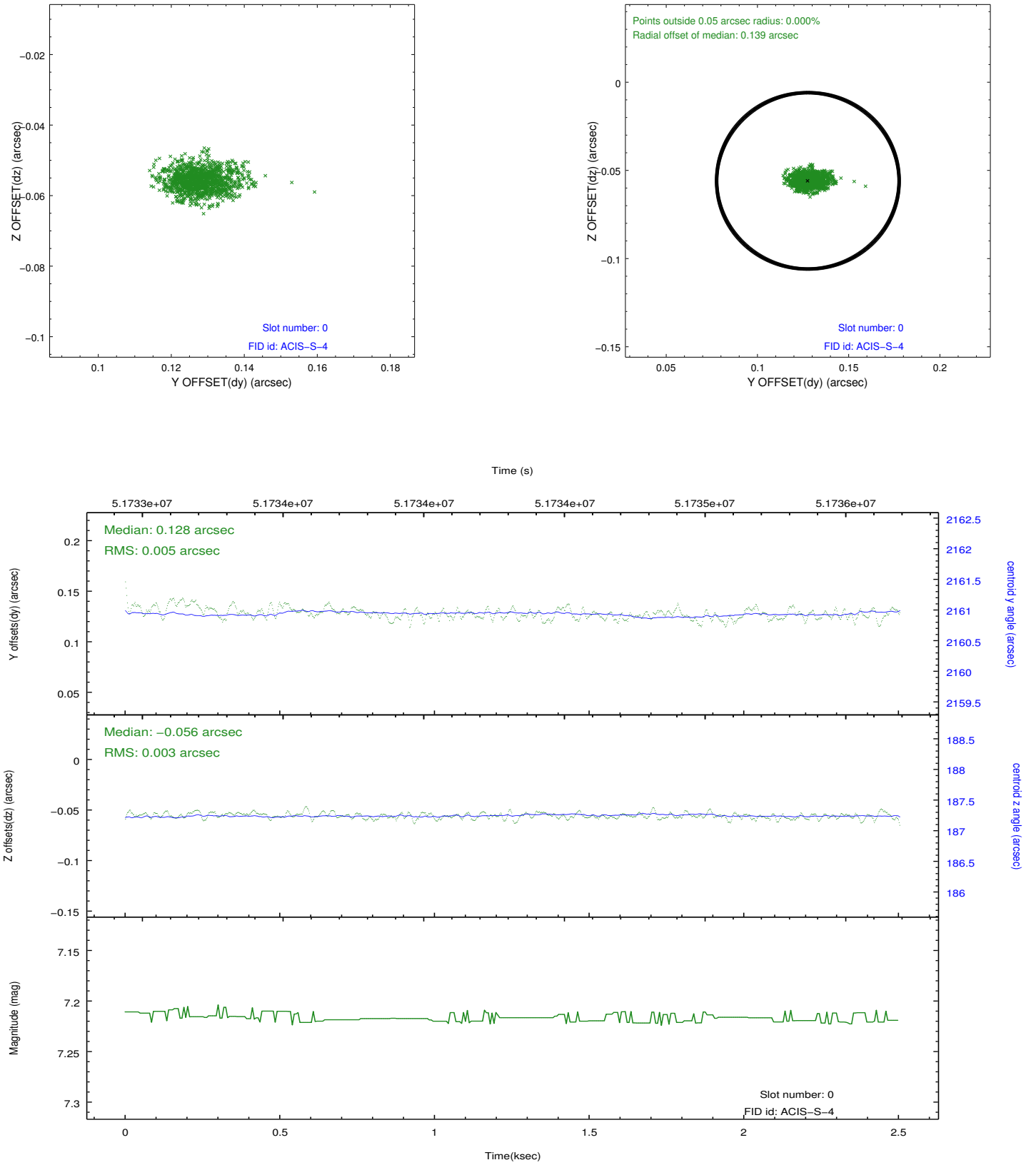


## 2.4.4 Slot 6

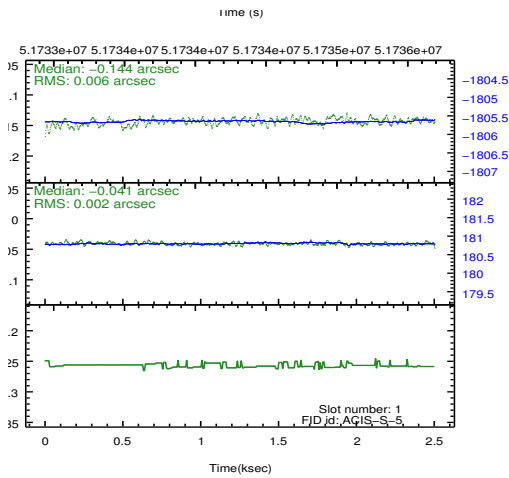
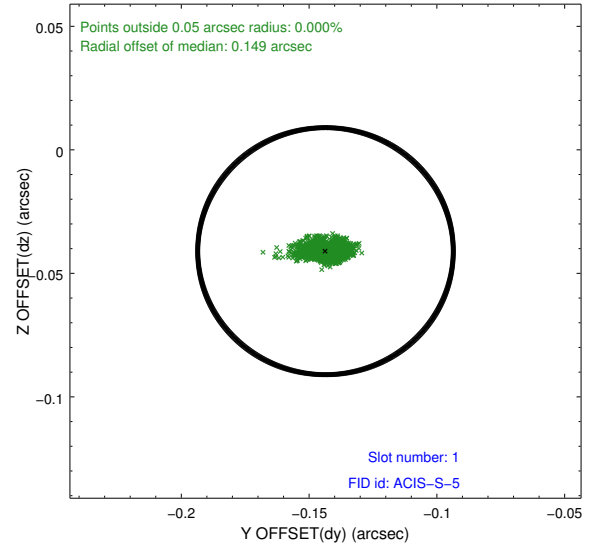
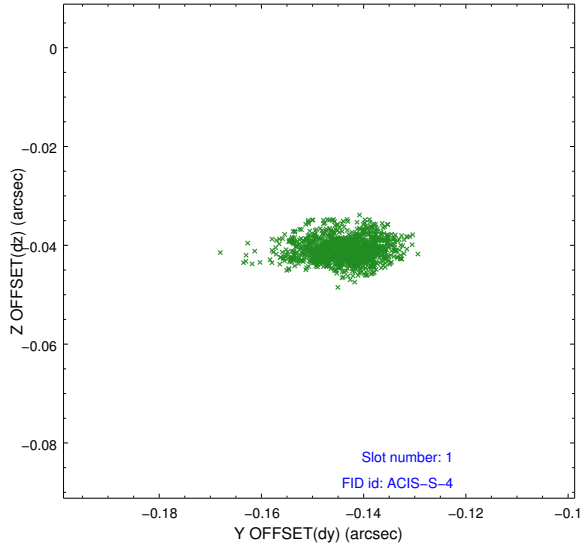


## 2.5 FID Slots

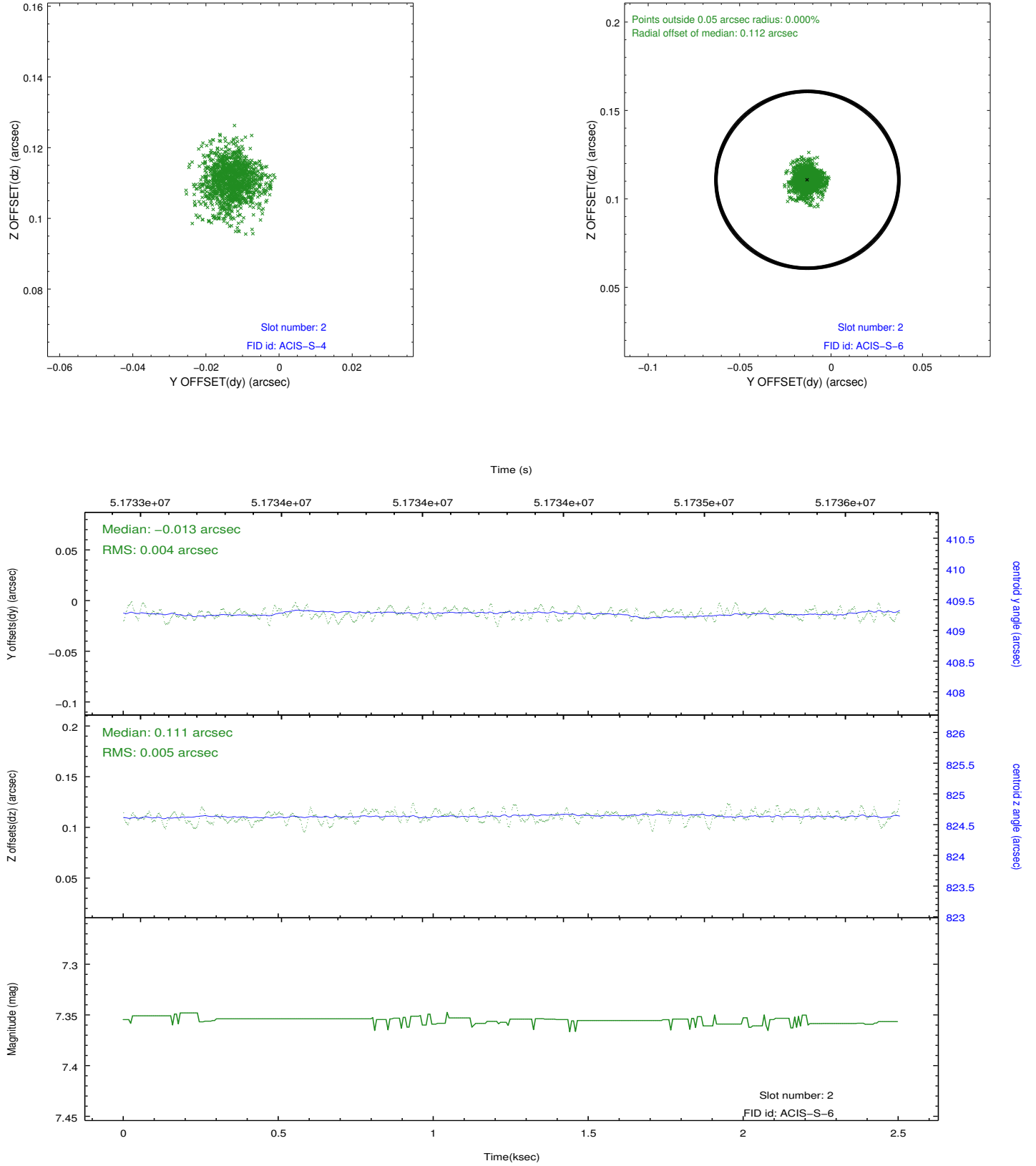
### 2.5.1 Slot 0



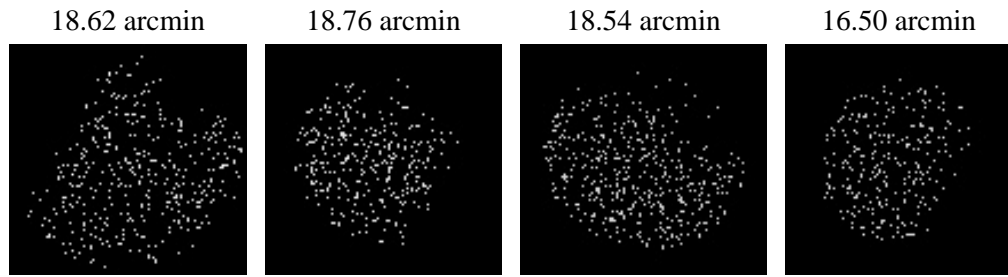
## 2.5.2 Slot 1



### 2.5.3 Slot 2



### 3 Point Sources





# A Summary

## A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2010.07.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.654

## A.2 Comments

Target is very off-axis on S5.

===

Charge time for this ObsId remains at original value of 1.654 ks, although with the current processing the charge time would have been 1.7568 ksec.

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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.

Slot 7 was not utilized in this observation.