

# V&V Reference Report

## L2 ASCDS Version : 8.1.2

Observation 1073 - L2 Version 3

Chandra X-Ray Center

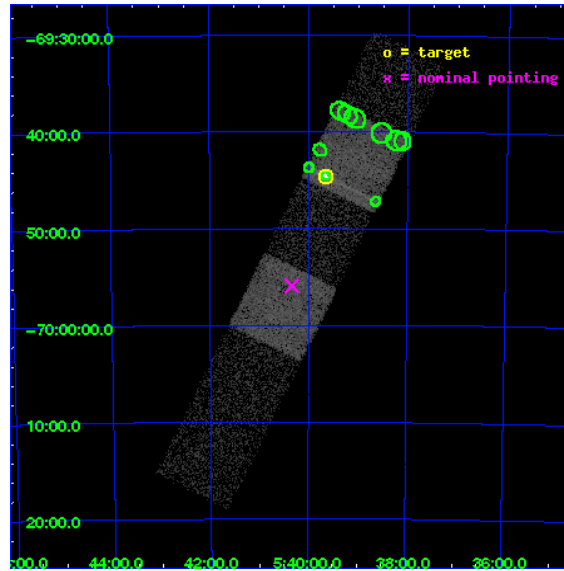
L2 Processing Date : Dec 16 2009

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# 1 Front

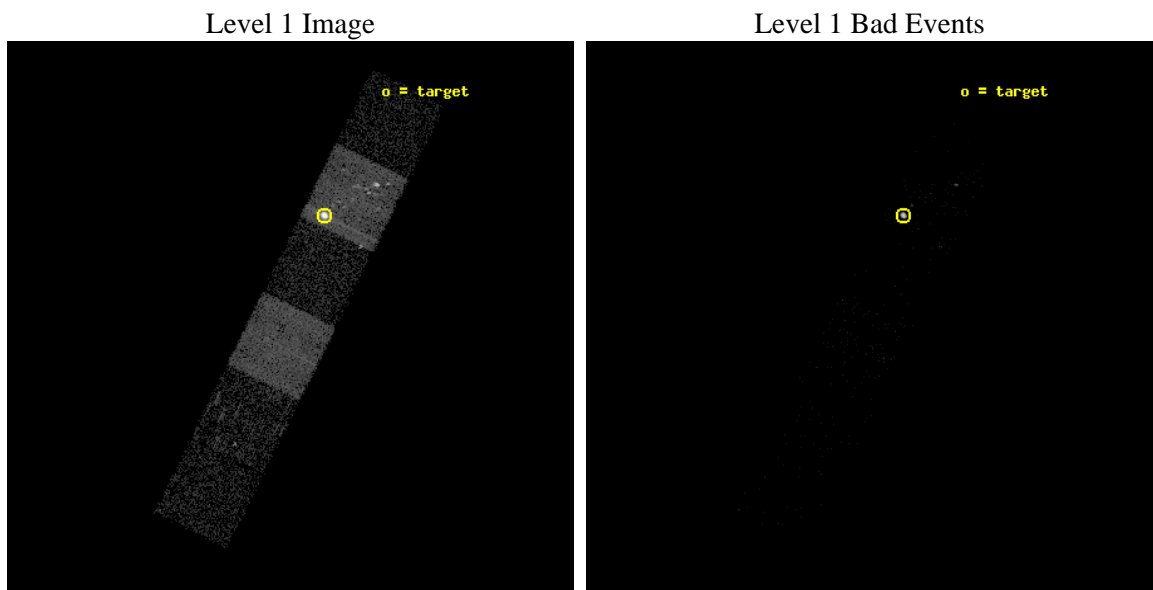
seq_num	480023	Sequence number
obs_id	1073	Observation id
title	&#160	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	LMC X-1	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	84.914583	Observer's specified target RA
dec_targ	-69.743611	Observer's specified target Dec
ra_nom	85.083852966662	Nominal RA
dec_nom	-69.931950385379	Nominal Dec
roll_nom	116.46279075461	Nominal Roll
revision	3	Processing version of data
ontime	755.20000070333	Sum of GTIs [s]
livetime	745.63720356758	Livetime [s]
ontime4	755.20000070333	Sum of GTIs [s]
ontime5	755.20000070333	Sum of GTIs [s]
ontime6	755.20000070333	Sum of GTIs [s]
ontime7	755.20000070333	Sum of GTIs [s]
ontime8	755.20000070333	Sum of GTIs [s]
ontime9	755.20000070333	Sum of GTIs [s]
l2events	62108	Number of level 2 events



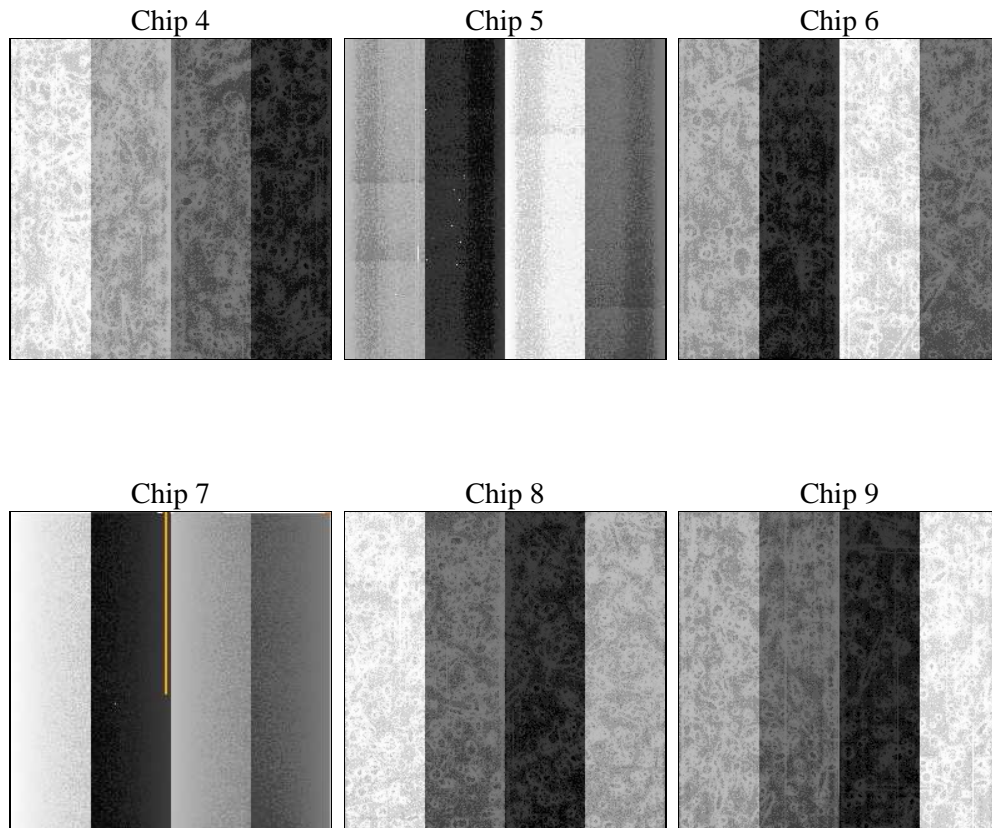
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	1000.000000	Scheduled observation exposure time
ascdsver	8.1.2	ASCDS version number	ontime	755.20000070333	Sum of GTIs [s]
caldbver	4.1.4	&#160	ontime4	755.20000070333	Sum of GTIs [s]
date	2009-12-16T05:59:13	Date and time of file creation	ontime5	755.20000070333	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	755.20000070333	Sum of GTIs [s]
			ontime7	755.20000070333	Sum of GTIs [s]
			ontime8	755.20000070333	Sum of GTIs [s]
			ontime9	755.20000070333	Sum of GTIs [s]
			l1events	74070	Number of level 1 events

### 2.1.4 Events

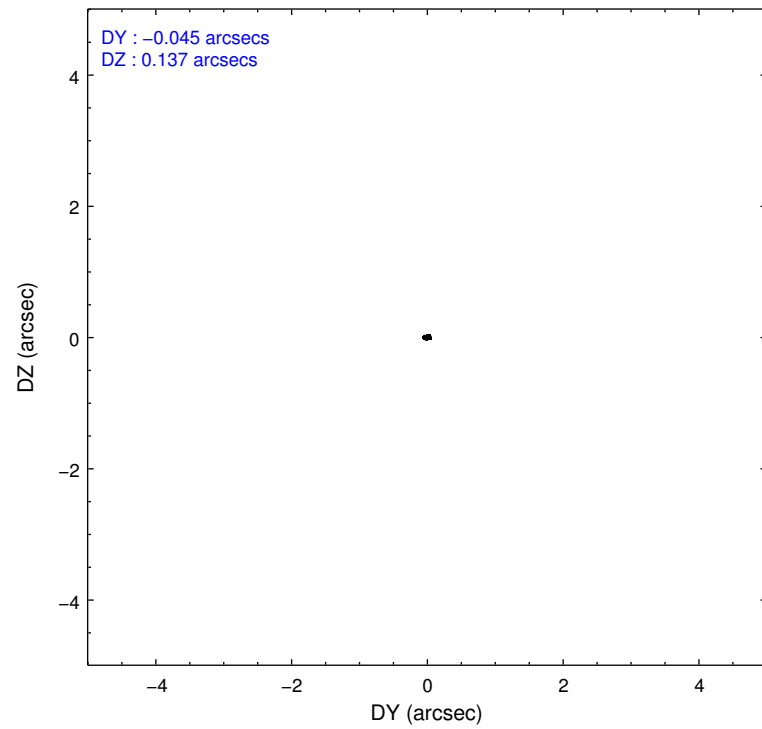
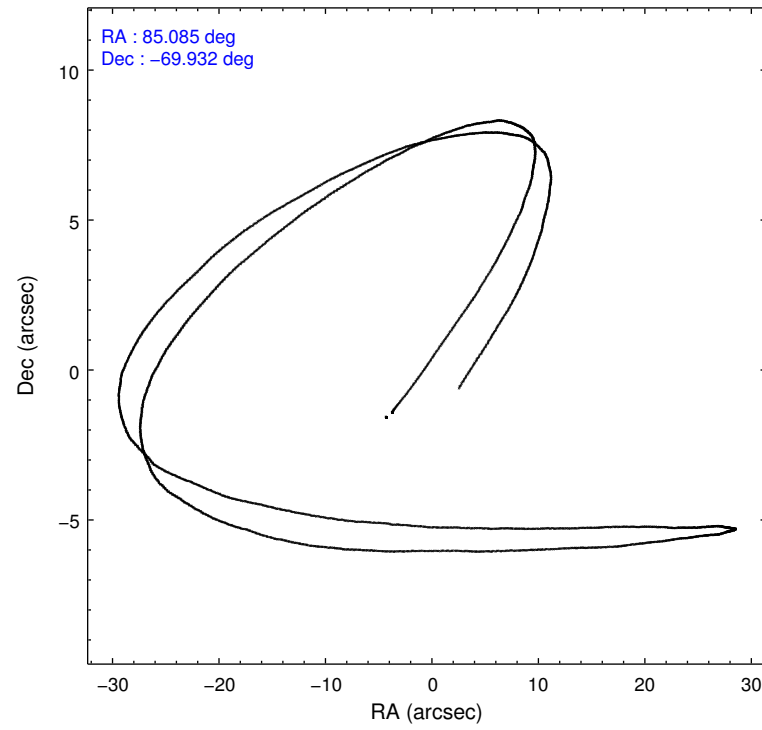
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	2063	48532	2896	15069	3247	2263
rejected events	355	4600	489	954	497	452
rejected %	17%	9%	16%	6%	15%	19%

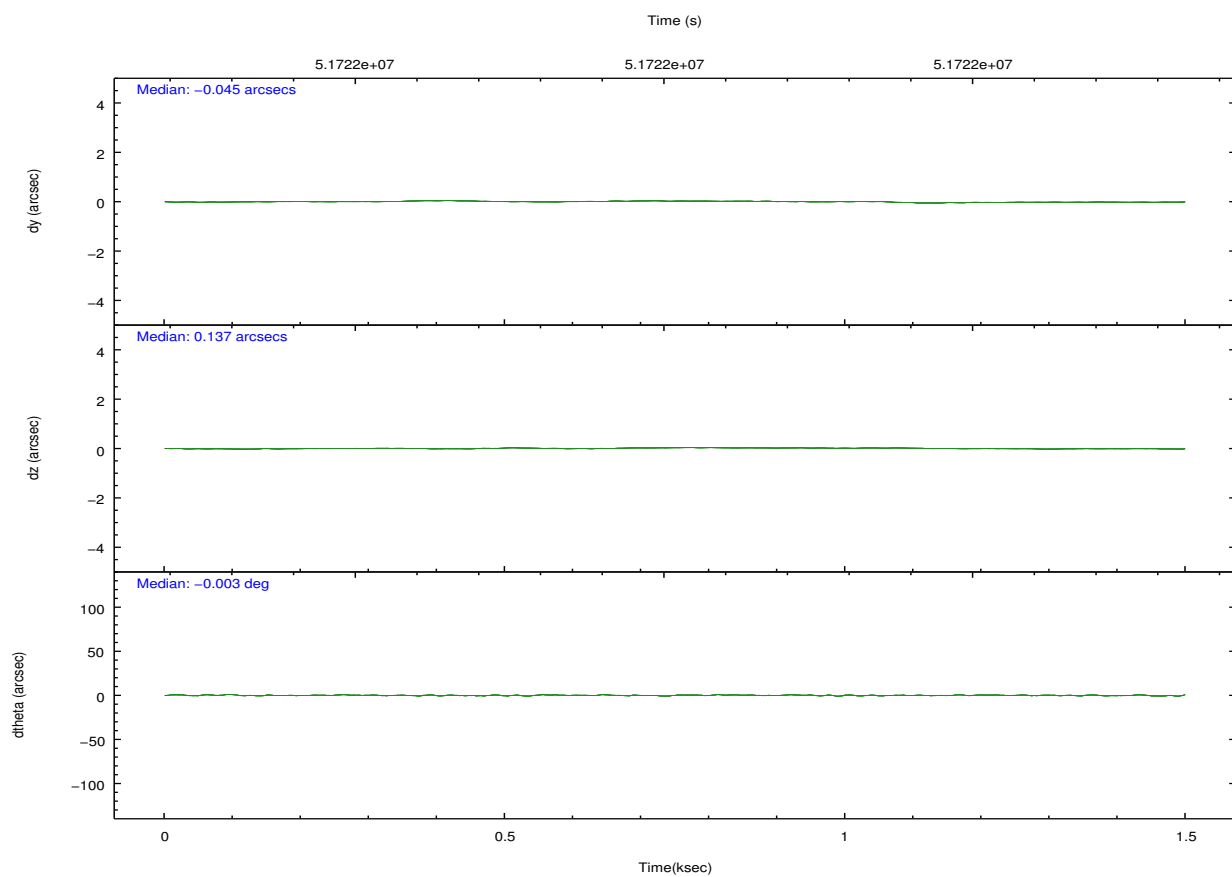
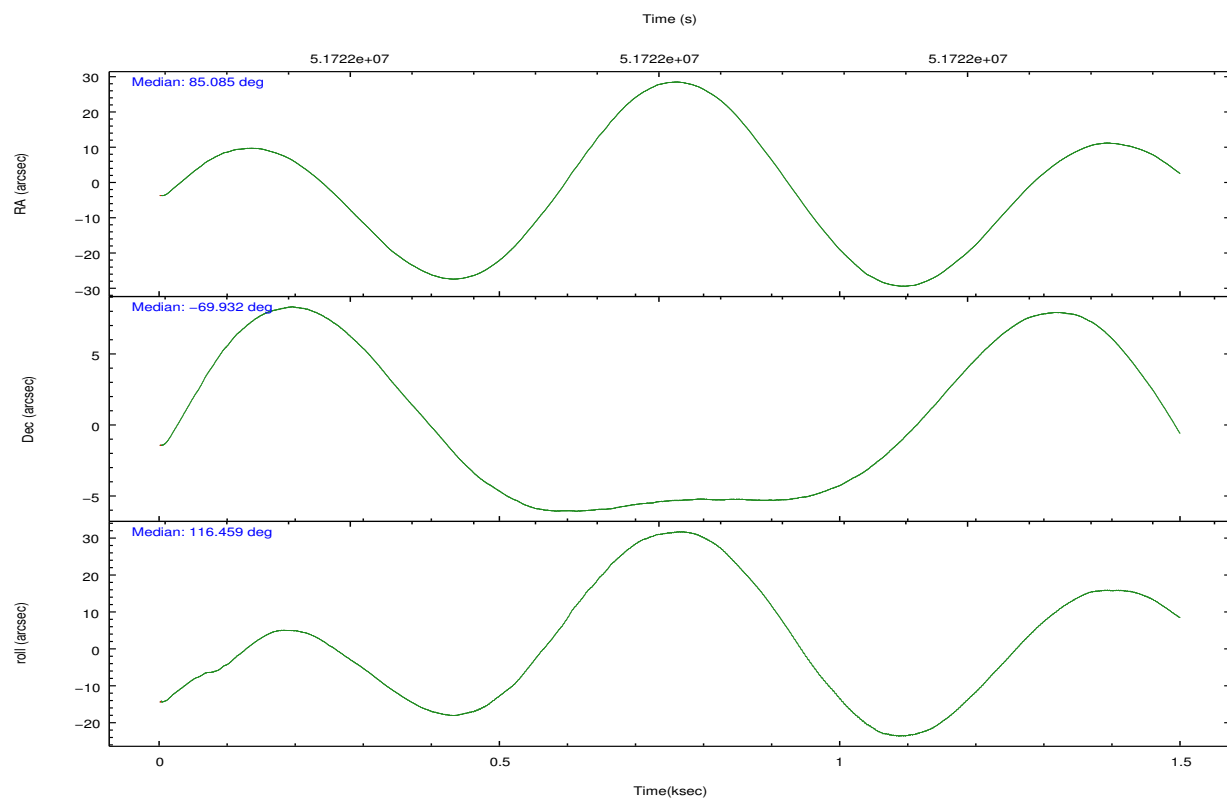
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	740	10257	1128	1096	1205	756
	35%	21%	38%	7%	37%	33%
grade 1 events	7	867	3	7	8	4
	0%	1%	0%	0%	0%	0%
grade 2 events	389	9427	551	1834	589	372
	18%	19%	19%	12%	18%	16%
grade 3 events	92	5041	114	962	175	117
	4%	10%	3%	6%	5%	5%
grade 4 events	87	3524	101	917	154	98
	4%	7%	3%	6%	4%	4%
grade 5 events	338	3423	462	885	467	434
	16%	7%	15%	5%	14%	19%
grade 6 events	410	15993	537	9368	649	482
	19%	32%	18%	62%	19%	21%
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	85.150228	85.08385296666198	Subarray requested	NONE	NONE
Pointing Dec	-69.948124	-69.93195038537918	Alternating exposures requested	N	N
Pointing Roll	116.368558	116.4627907546139	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	51721769.184000	51721095.733199			
Observation start date	1999-08-22T15:08:25	1999-08-22T14:58:15			
Observation end time	51722769.184000	51722895.633264			
Observation end date	1999-08-22T15:25:05	1999-08-22T15:28:15			
Read mode	TIMED	TIMED			

## 2.3 Aspect





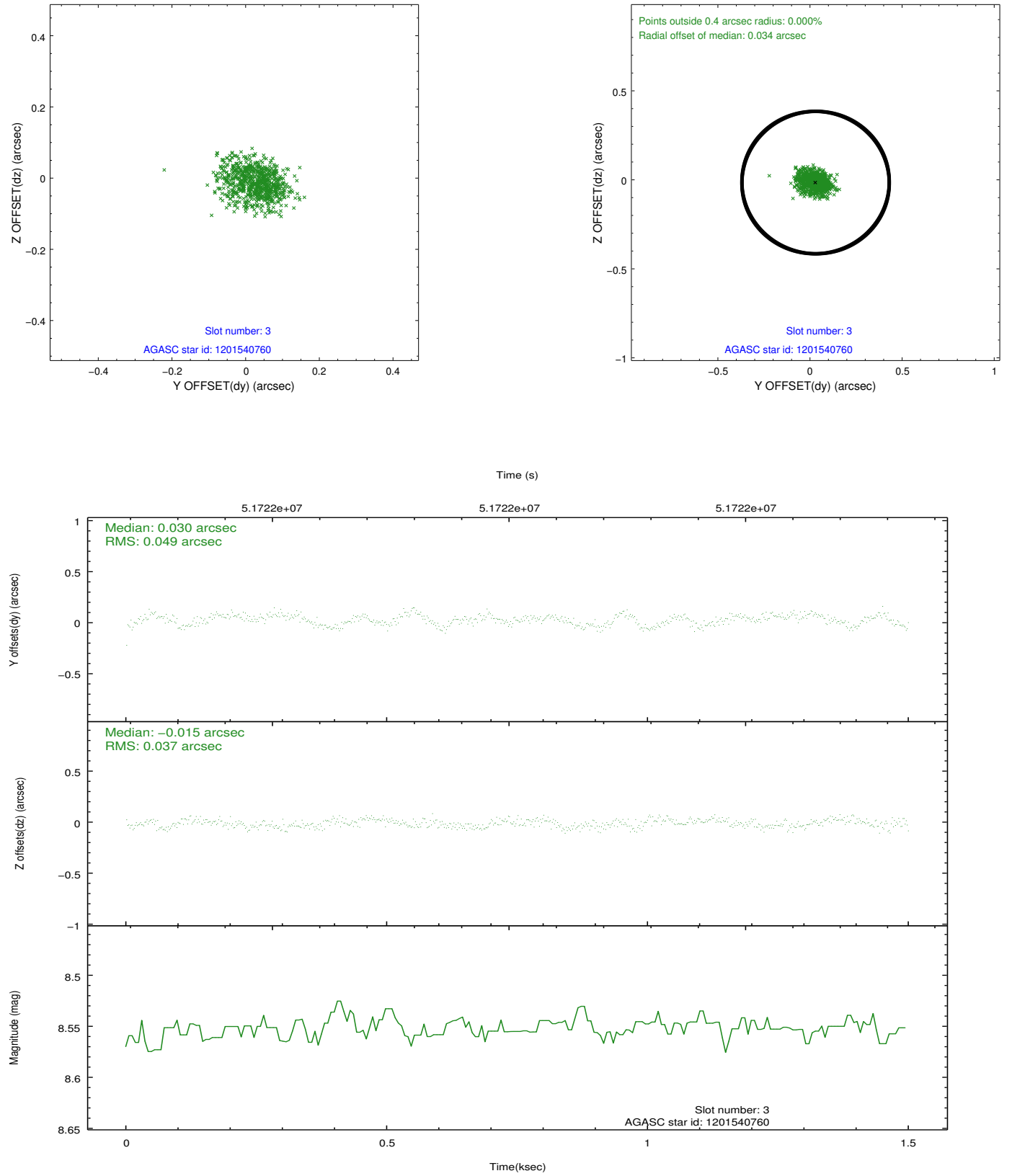
Slot Statistics

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	732	-0.032	-0.020	0.007	0.012	0.000000	0.000000	-752.56	-1721.51
1	FID	ACIS-S-4	7.22	732	0.135	0.021	0.006	0.011	0.000000	0.000000	2159.91	184.74
2	FID	ACIS-S-5	7.25	732	-0.135	0.008	0.007	0.011	0.000000	0.000000	-1802.70	180.89
3	GUIDE	1201540760	8.55	732	0.030	-0.015	0.065	0.106	84.403691	-70.419249	-1126.22	1564.25
4	GUIDE	1201406992	9.29	730	0.046	0.031	0.087	0.143	83.682859	-69.471866	2335.72	911.94
5	GUIDE	1201542312	9.74	728	-0.054	0.024	0.079	0.129	86.031967	-70.422284	-2007.13	-188.67
6	UNUSED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
7	GUIDE	1201540568	9.95	731	-0.020	-0.047	0.095	0.161	85.901764	-70.070643	-814.17	-626.56

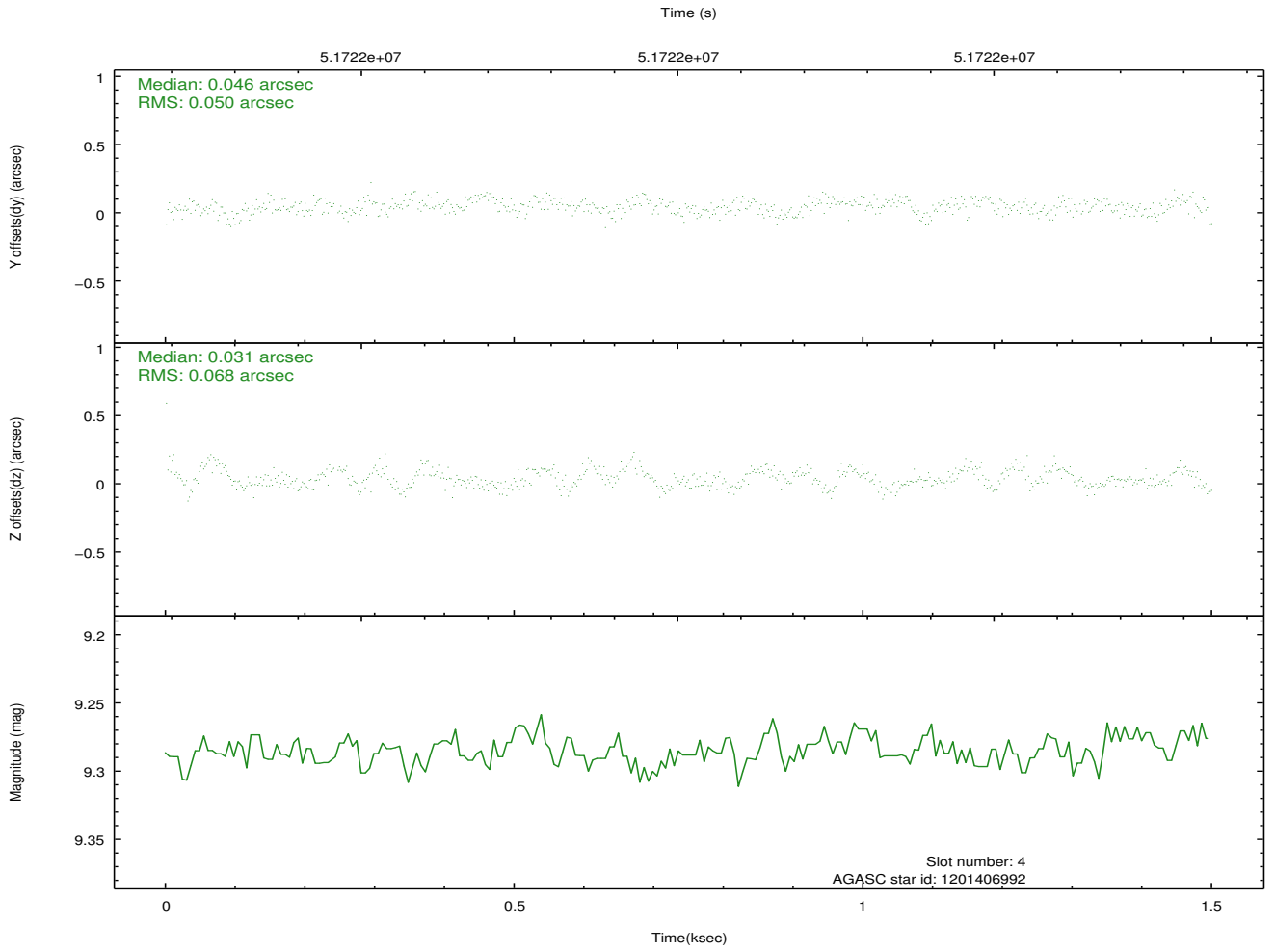
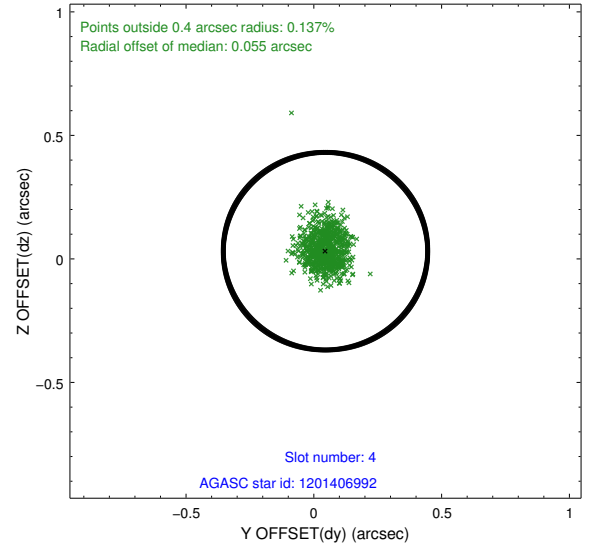
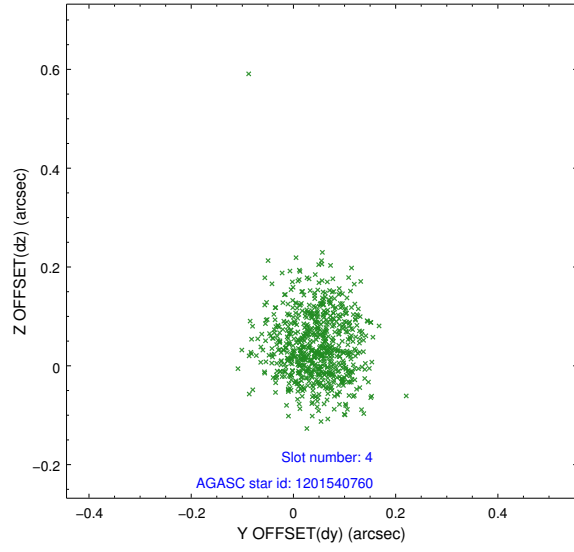


## 2.4 Star Slots

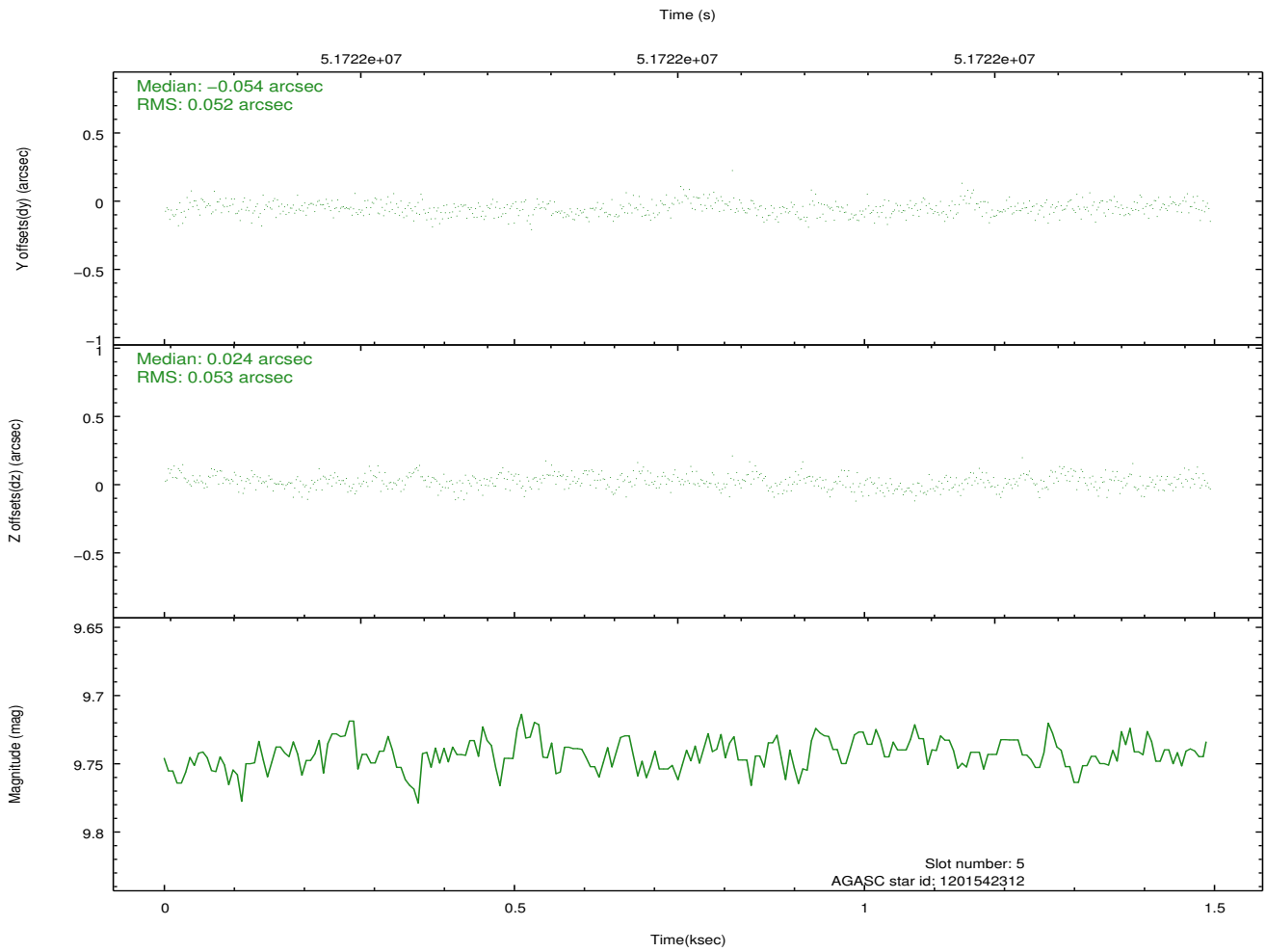
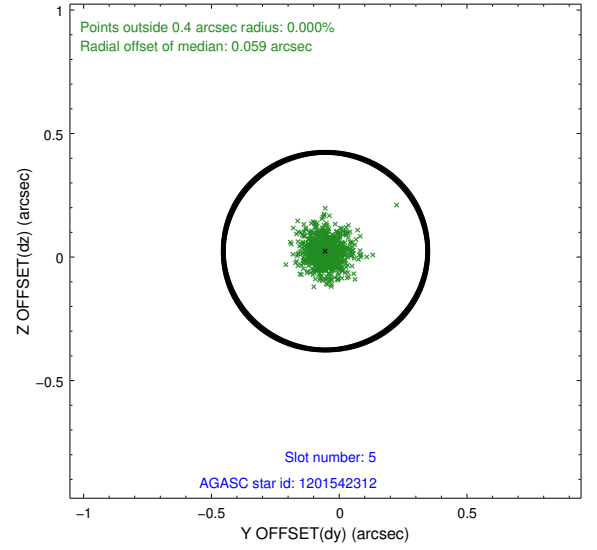
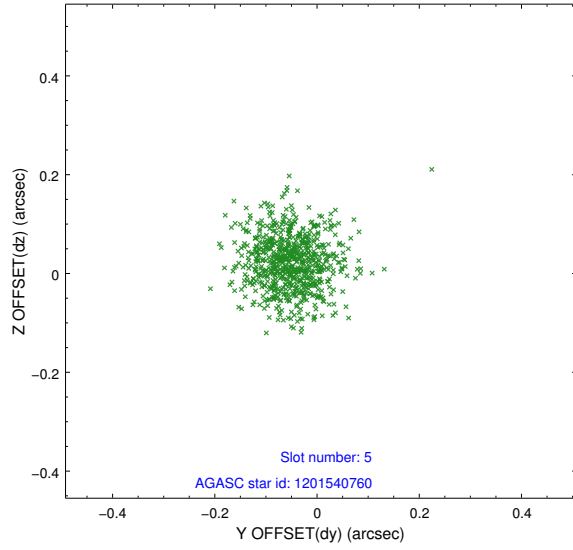
### 2.4.1 Slot 3



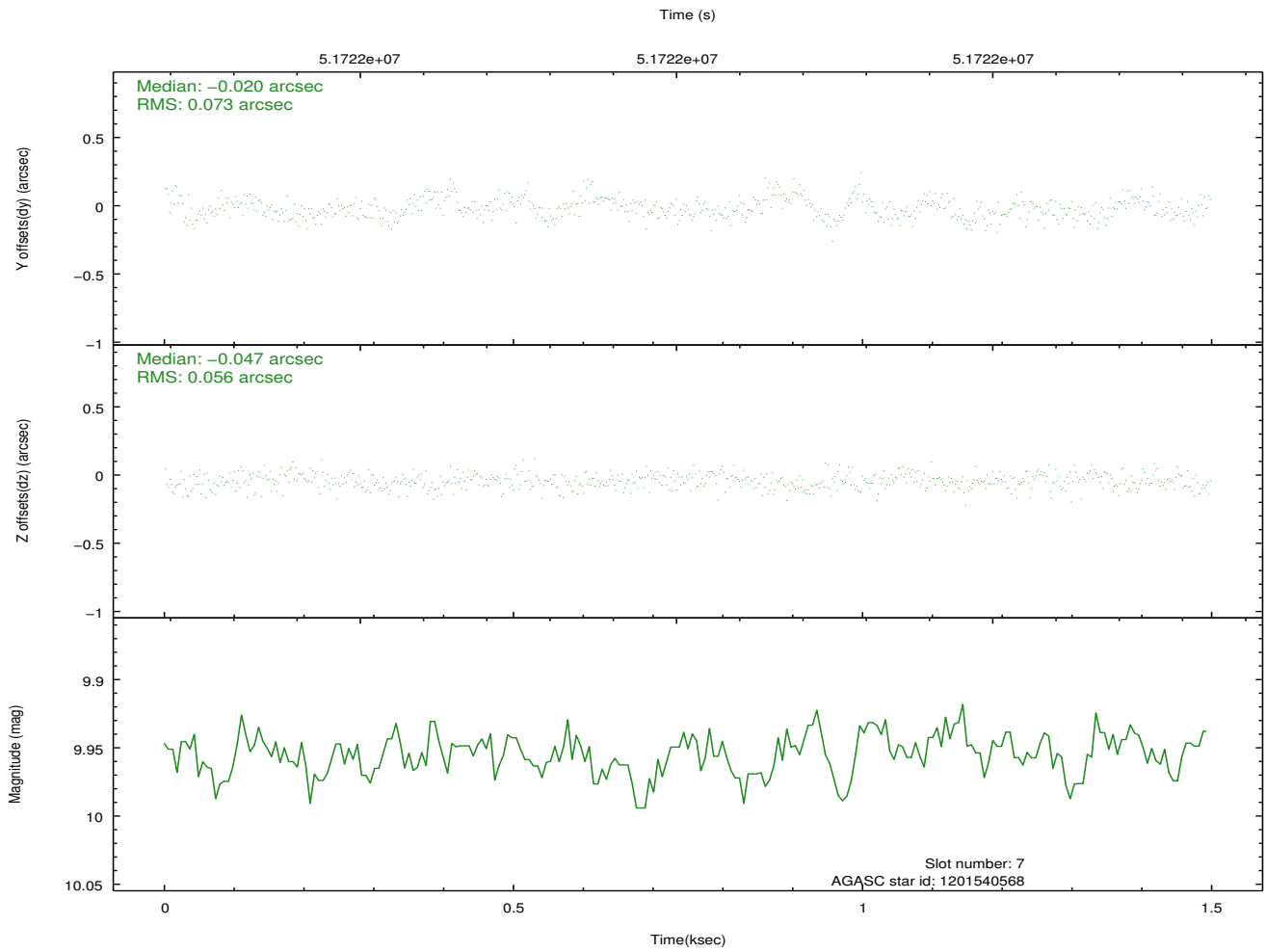
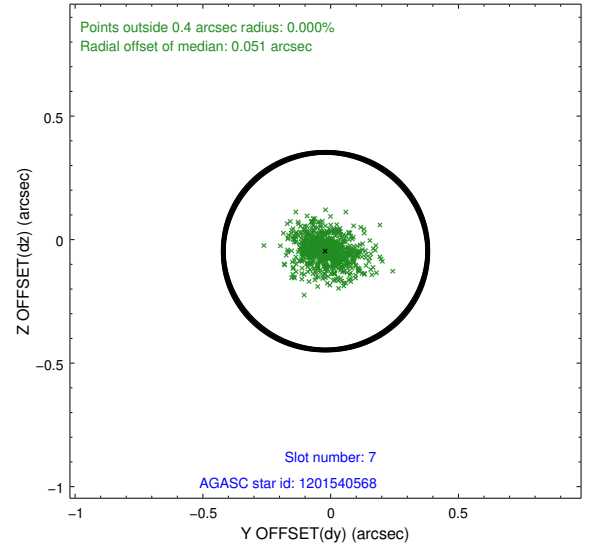
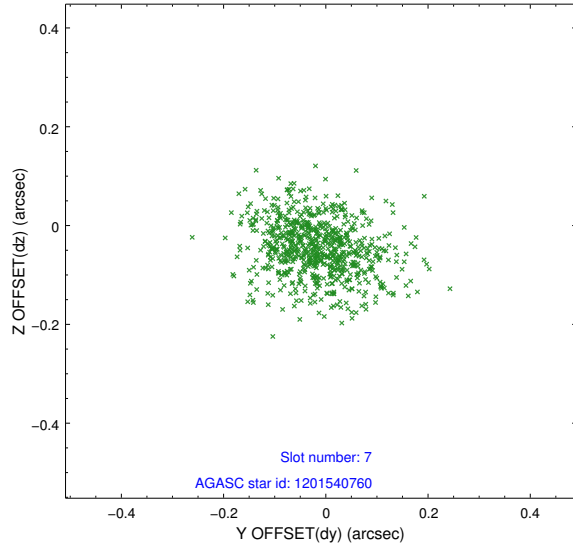
## 2.4.2 Slot 4



### 2.4.3 Slot 5

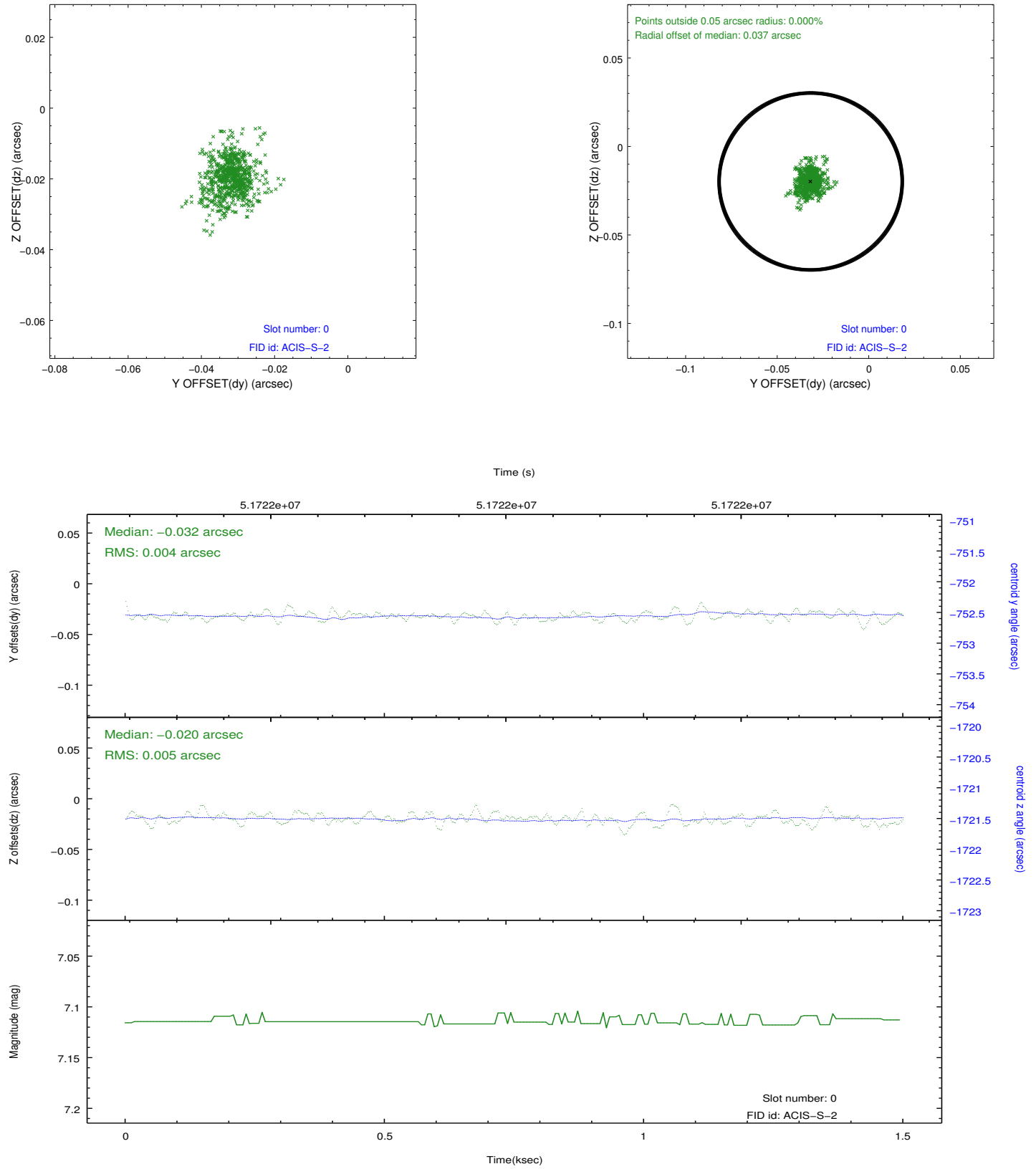


## 2.4.4 Slot 7

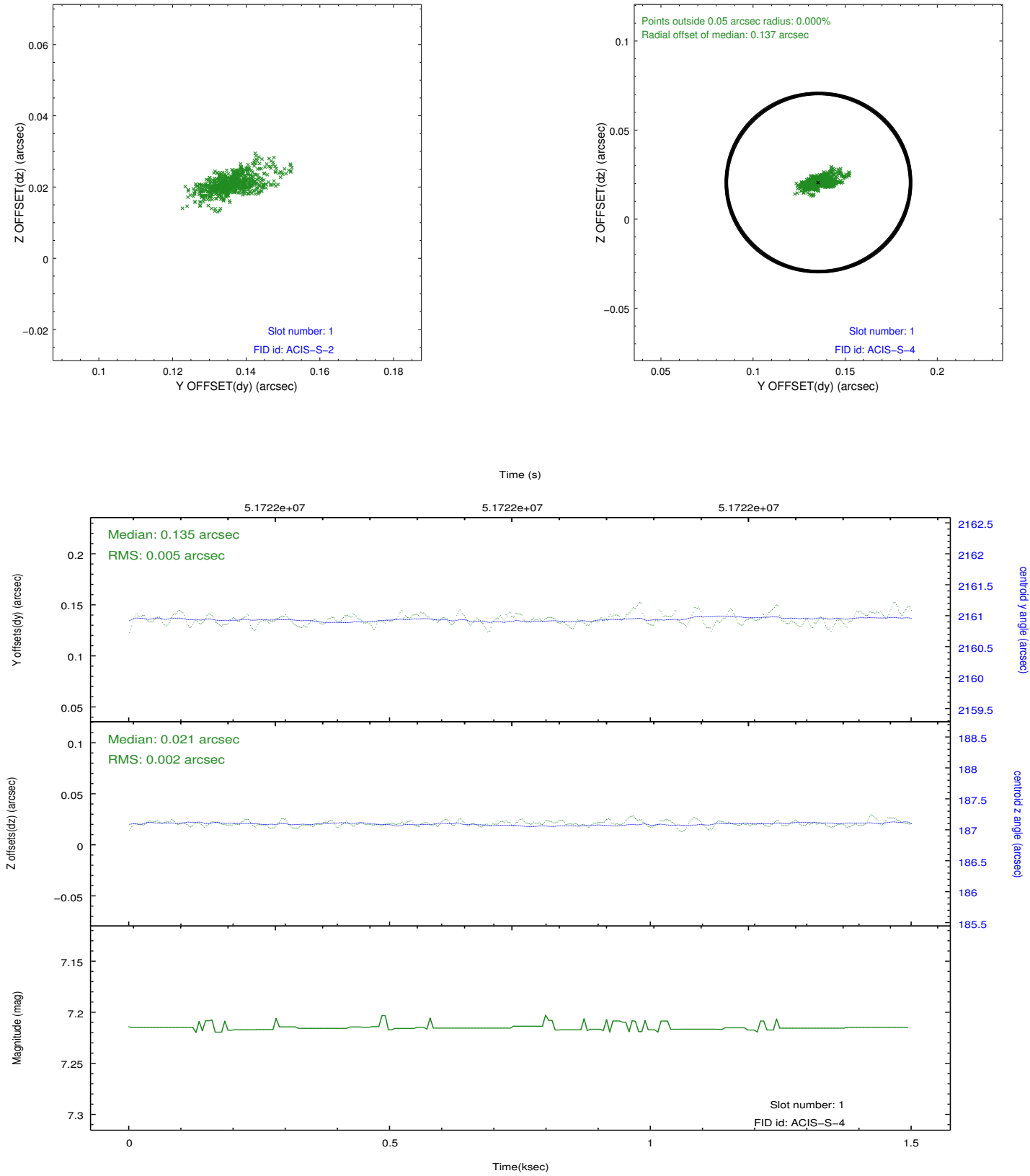


## 2.5 FID Slots

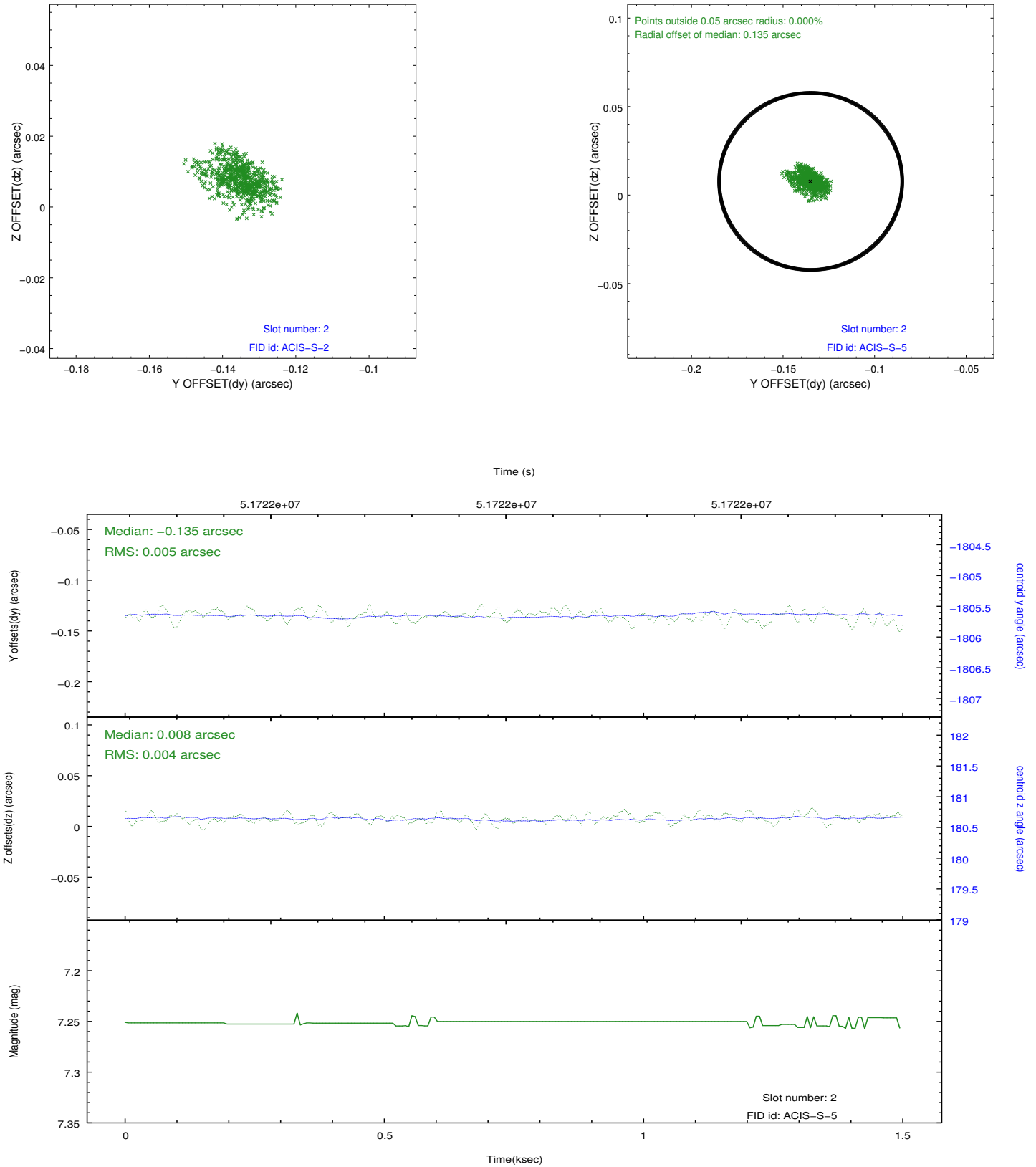
### 2.5.1 Slot 0



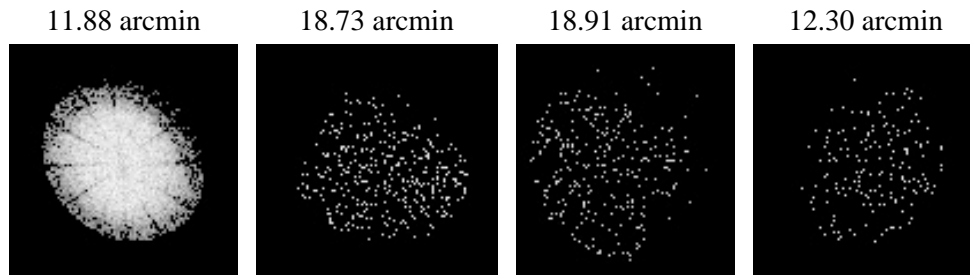
2.5.2 Slot 1



### 2.5.3 Slot 2



### 3 Point Sources





# A Summary

## A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2010.07.27
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	0.758

## A.2 Comments

Target is very off-axis on S1.

Charge time for this ObsId remains at previous value of 0.758 ksec, although  
with the current processing the charge time would have been 0.755 ksec.  
==

Slot 6 was not utilized in this observation.

===

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.