

# V&V Reference Report

## L2 ASCDS Version : 8.1.2

Observation 1085 - L2 Version 2

Chandra X-Ray Center

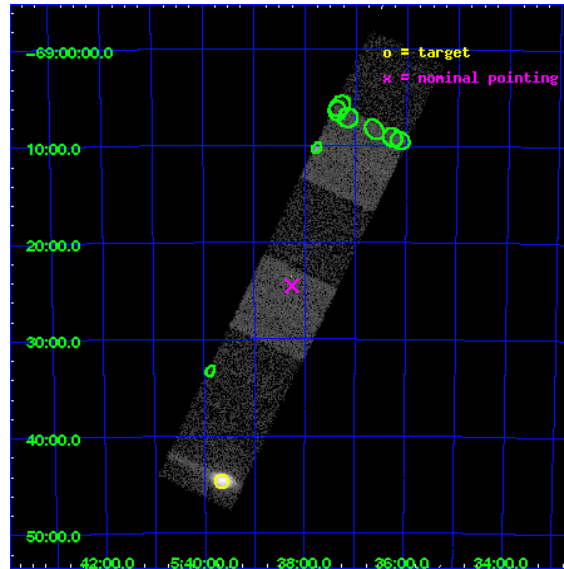
L2 Processing Date : Dec 16 2009

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# 1 Front

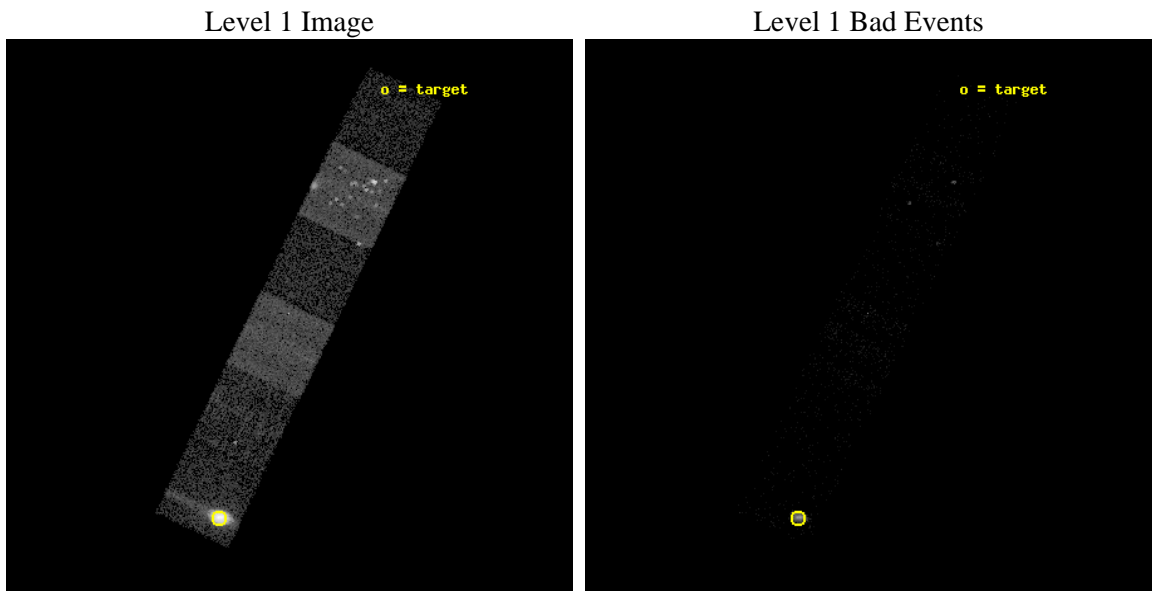
seq_num	480035	Sequence number
obs_id	1085	Observation id
title	&#160	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	LMC X-1	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	84.914583	Observer's specified target RA
dec_targ	-69.743611	Observer's specified target Dec
ra_nom	84.563069145421	Nominal RA
dec_nom	-69.408503607443	Nominal Dec
roll_nom	115.80922286942	Nominal Roll
revision	2	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	110242	Number of level 2 events



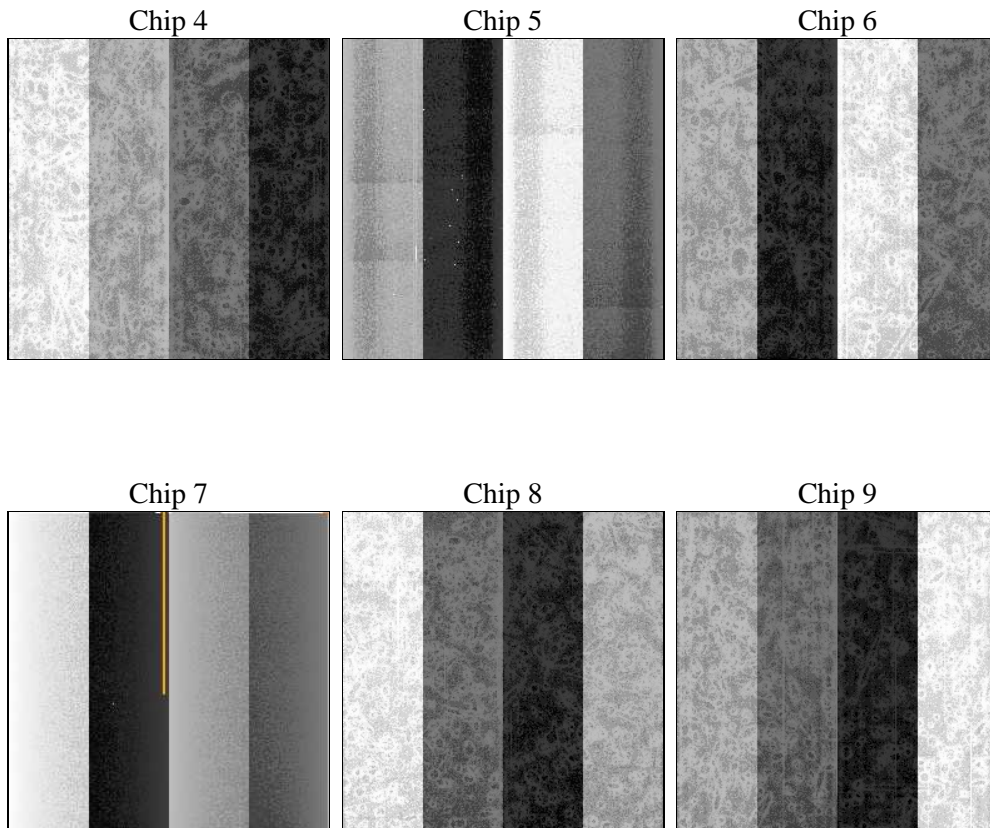
## 2 OBI

### 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	2009-12-16T06:48:34	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	129829	Number of level 1 events

### 2.1.4 Events

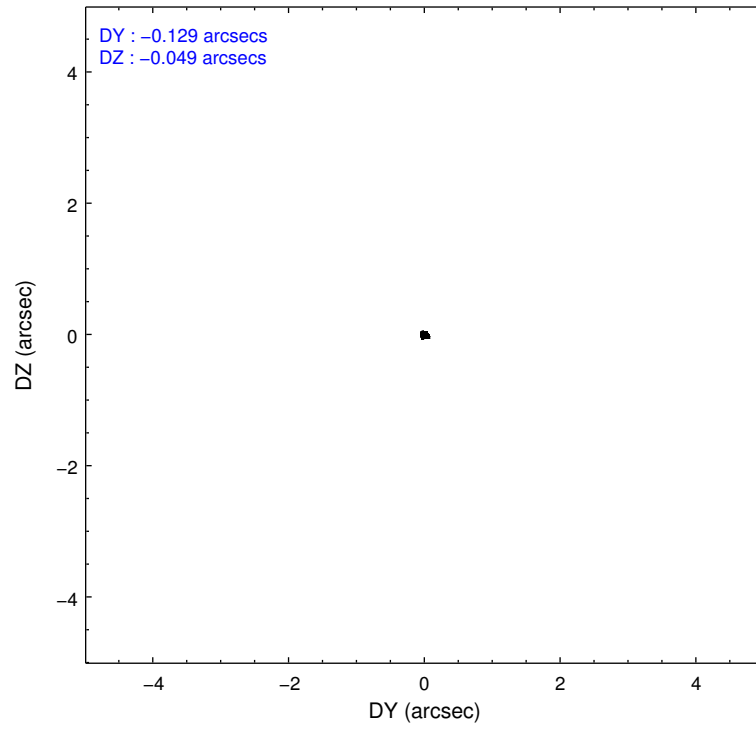
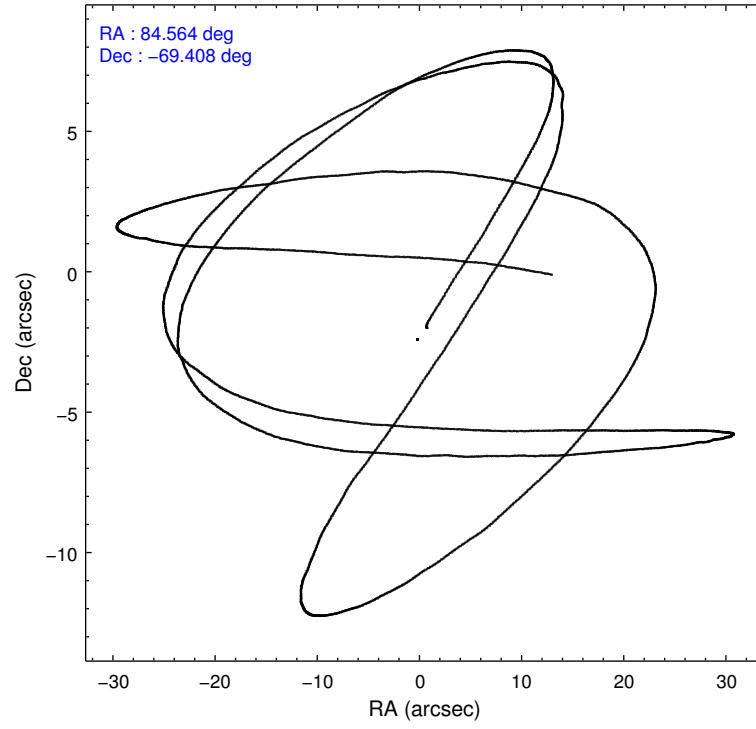
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	3530	22006	4470	14676	5691	79456
rejected events	809	1635	1004	2085	1062	3025
rejected %	22%	7%	22%	14%	18%	3%

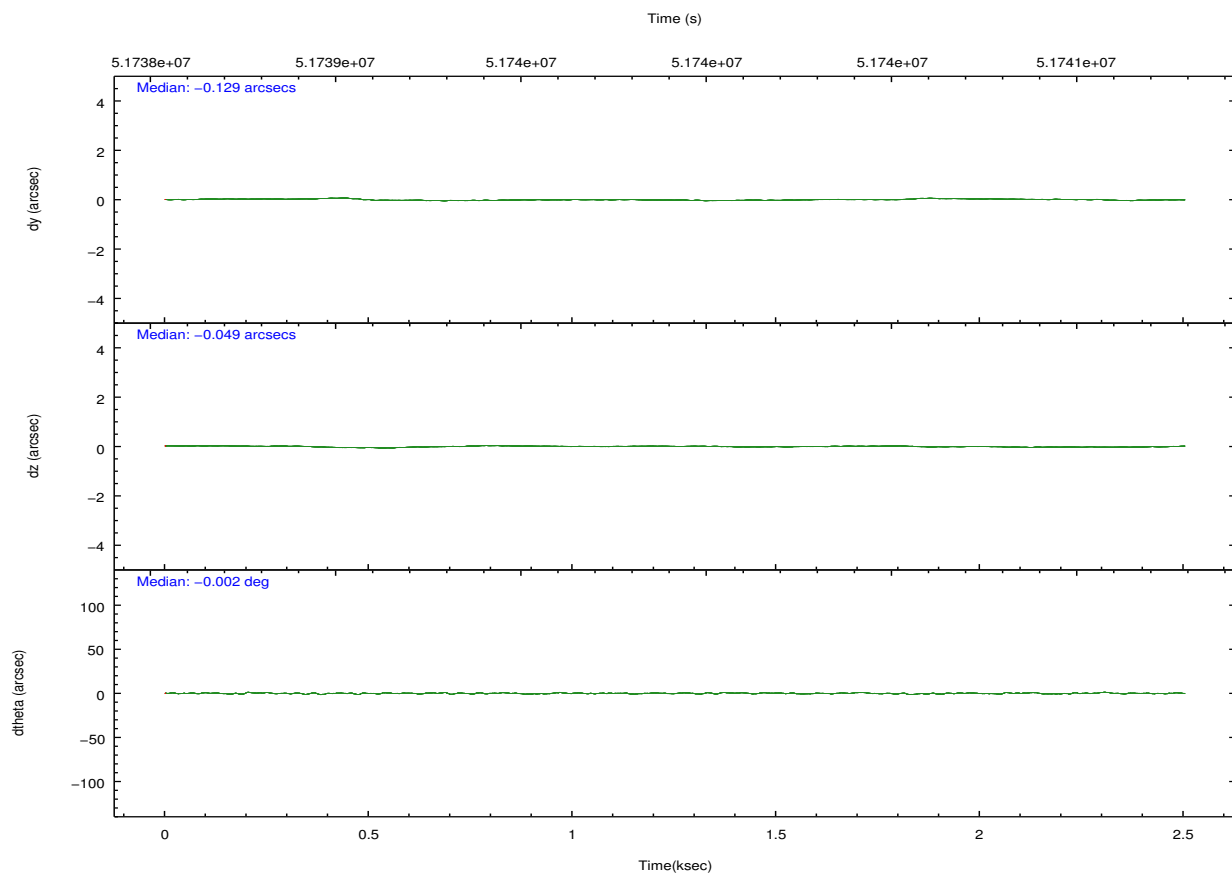
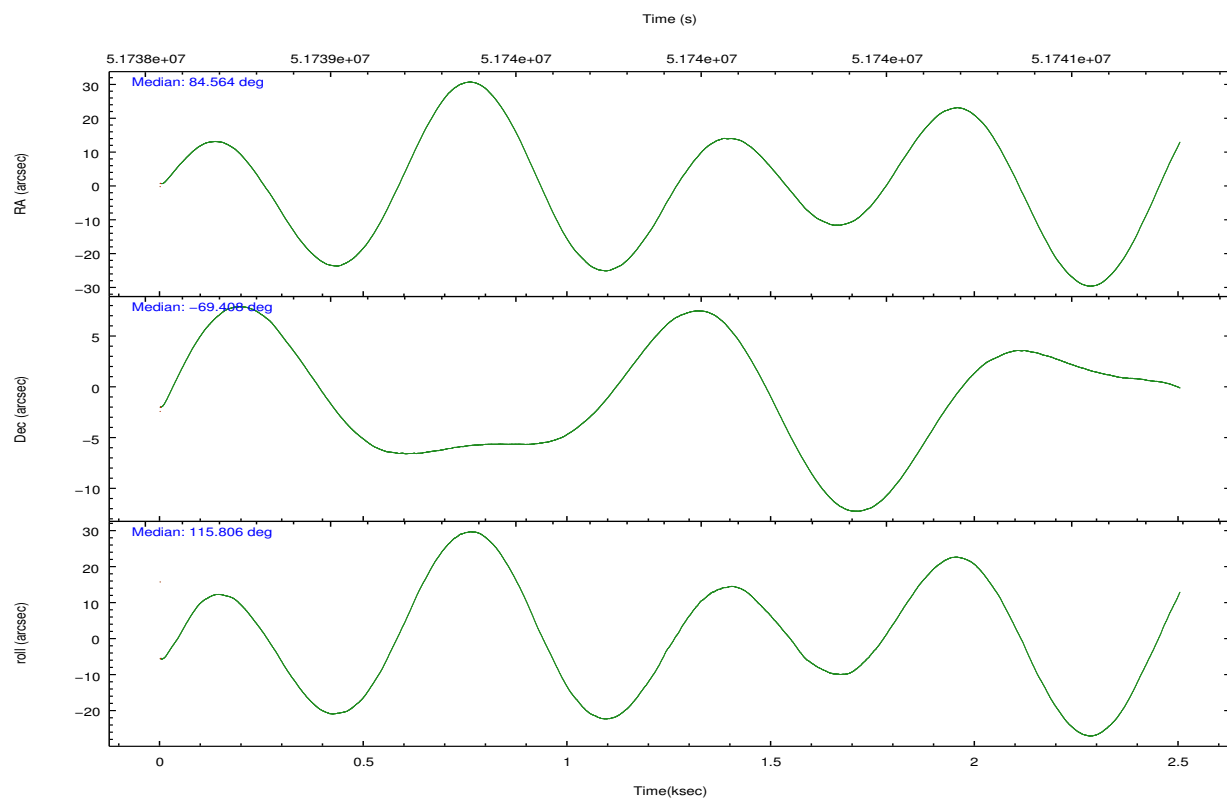
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	738	5984	1217	921	1639	57992
	20%	27%	27%	6%	28%	72%
grade 1 events	2	120	5	23	9	1184
	0%	0%	0%	0%	0%	1%
grade 2 events	661	3612	673	1724	1011	9269
	18%	16%	15%	11%	17%	11%
grade 3 events	224	965	214	995	333	3012
	6%	4%	4%	6%	5%	3%
grade 4 events	188	878	193	855	315	3092
	5%	3%	4%	5%	5%	3%
grade 5 events	792	1442	995	2026	1044	1680
	22%	6%	22%	13%	18%	2%
grade 6 events	925	9005	1171	8132	1340	3227
	26%	40%	26%	55%	23%	4%
grade 7 events	0	0	2	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	84.627724	84.563069145421	Subarray requested	NONE	NONE
Pointing Dec	-69.424676	-69.4085036074427	Alternating exposures requested	N	N
Pointing Roll	115.713123	115.8092228694164	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	51739169.184000	51738496.133825			
Observation start date	1999-08-22T19:58:25	1999-08-22T19:48:16			
Observation end time	51741169.184000	51741296.433926			
Observation end date	1999-08-22T20:31:45	1999-08-22T20:34:56			
Read mode	TIMED	TIMED			

## 2.3 Aspect





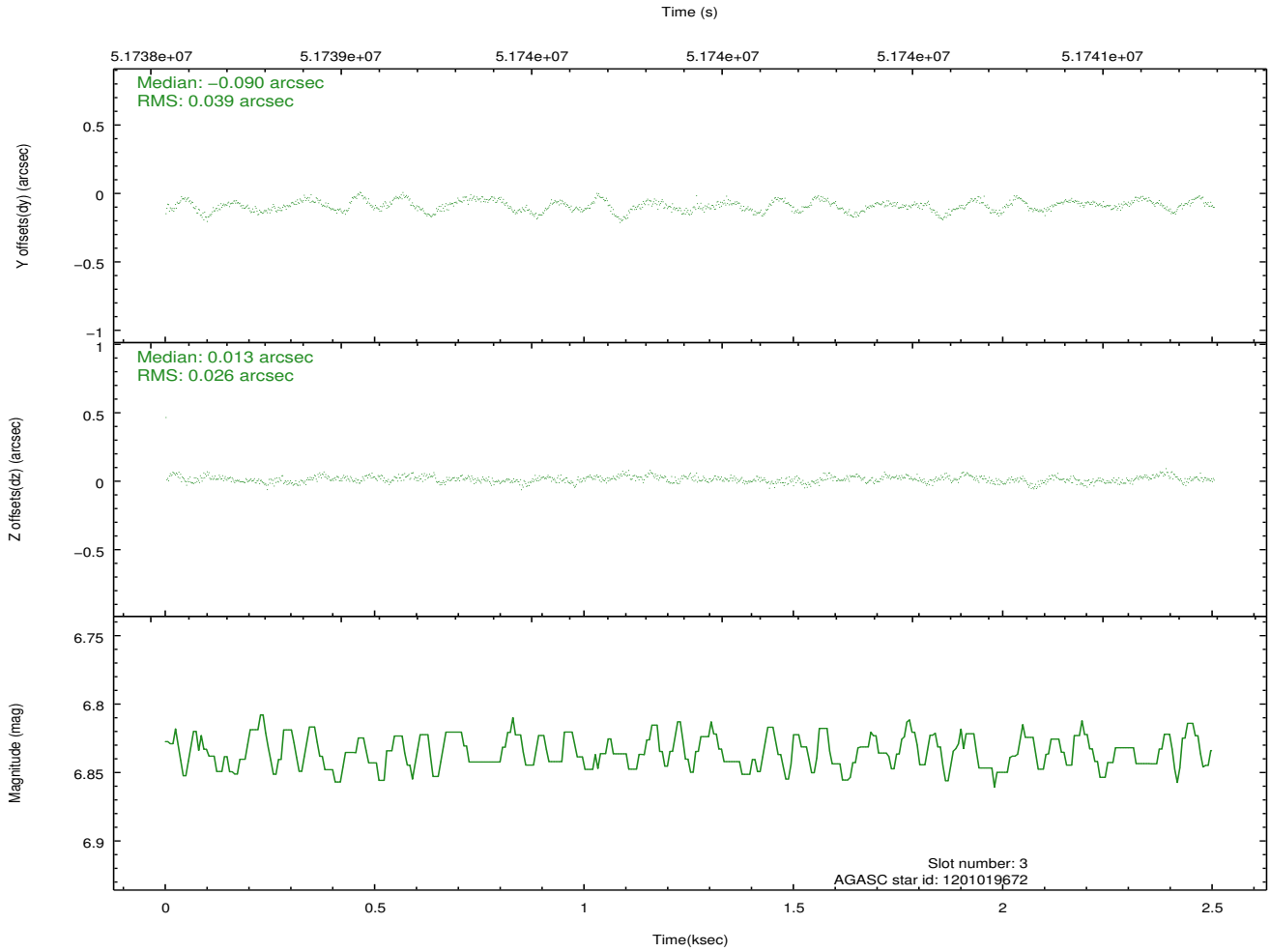
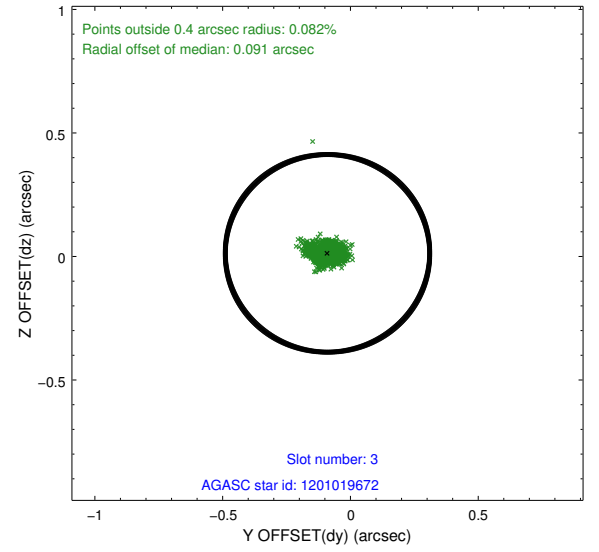
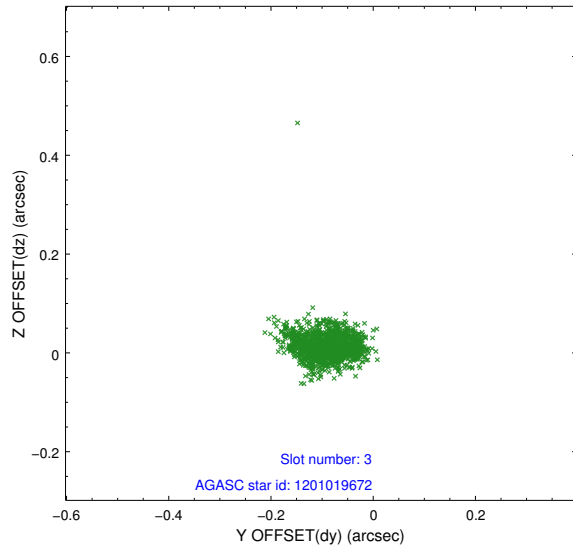
Slot Statistics

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	1222	-0.077	-0.046	0.005	0.008	0.000000	0.000000	-752.55	-1721.32
1	FID	ACIS-S-4	7.21	1219	0.056	0.049	0.005	0.008	0.000000	0.000000	2160.32	185.87
2	UNUSED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
3	GUIDE	1201019672	6.84	1222	-0.090	0.013	0.048	0.077	85.312192	-68.770187	1730.41	-1823.21
4	GUIDE	1201541752	7.35	1222	-0.001	-0.013	0.060	0.092	85.373891	-70.033762	-2378.10	126.38
5	GUIDE	1201407840	7.98	1222	0.007	0.010	0.078	0.131	83.696303	-70.172201	-1942.05	2196.78
6	GUIDE	1201019200	9.48	1222	0.023	0.043	0.094	0.146	84.213591	-68.777384	2329.58	-521.29
7	GUIDE	1201540776	9.59	1213	0.049	-0.045	0.089	0.150	85.107945	-69.858480	-1666.40	142.34

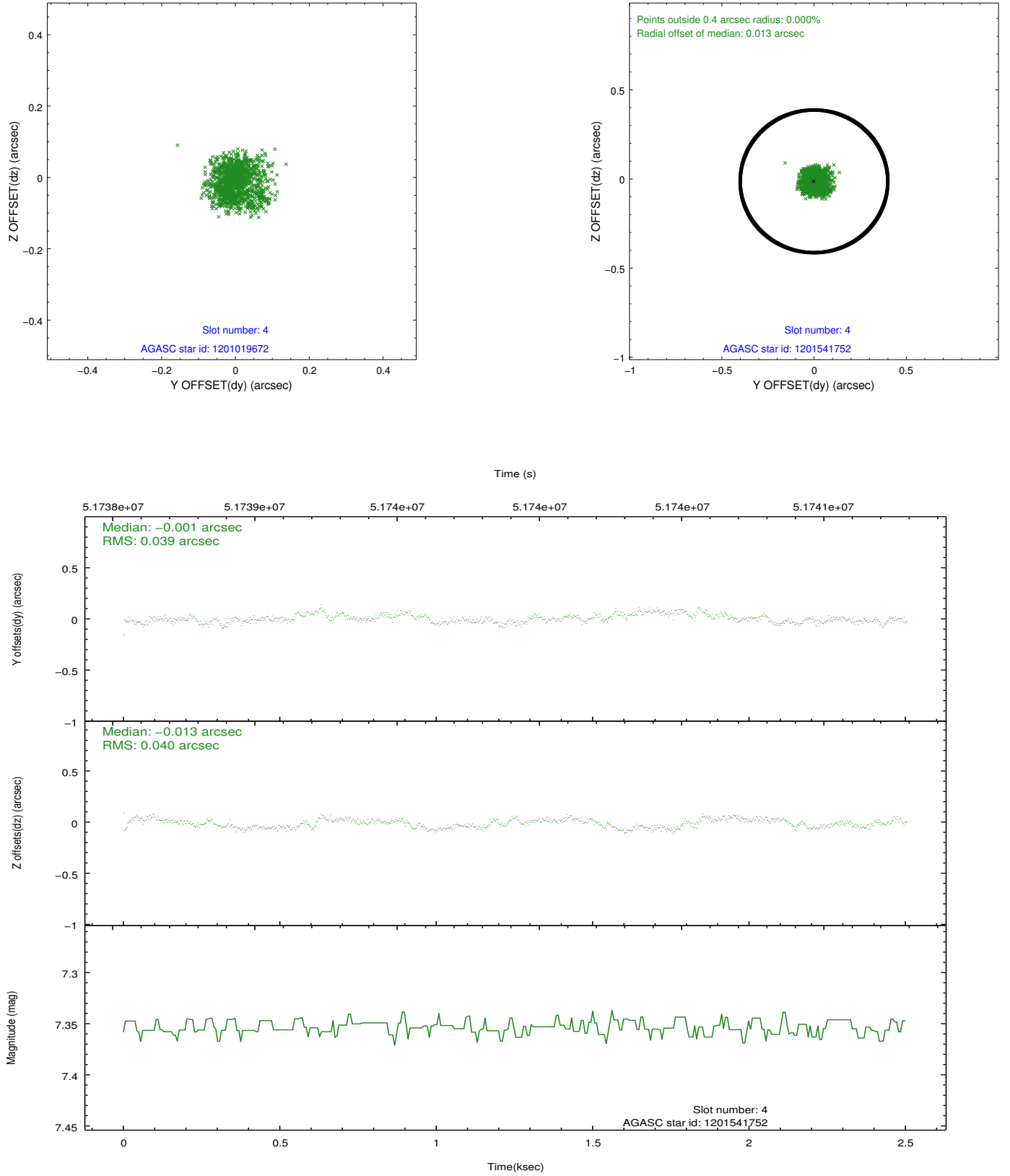


## 2.4 Star Slots

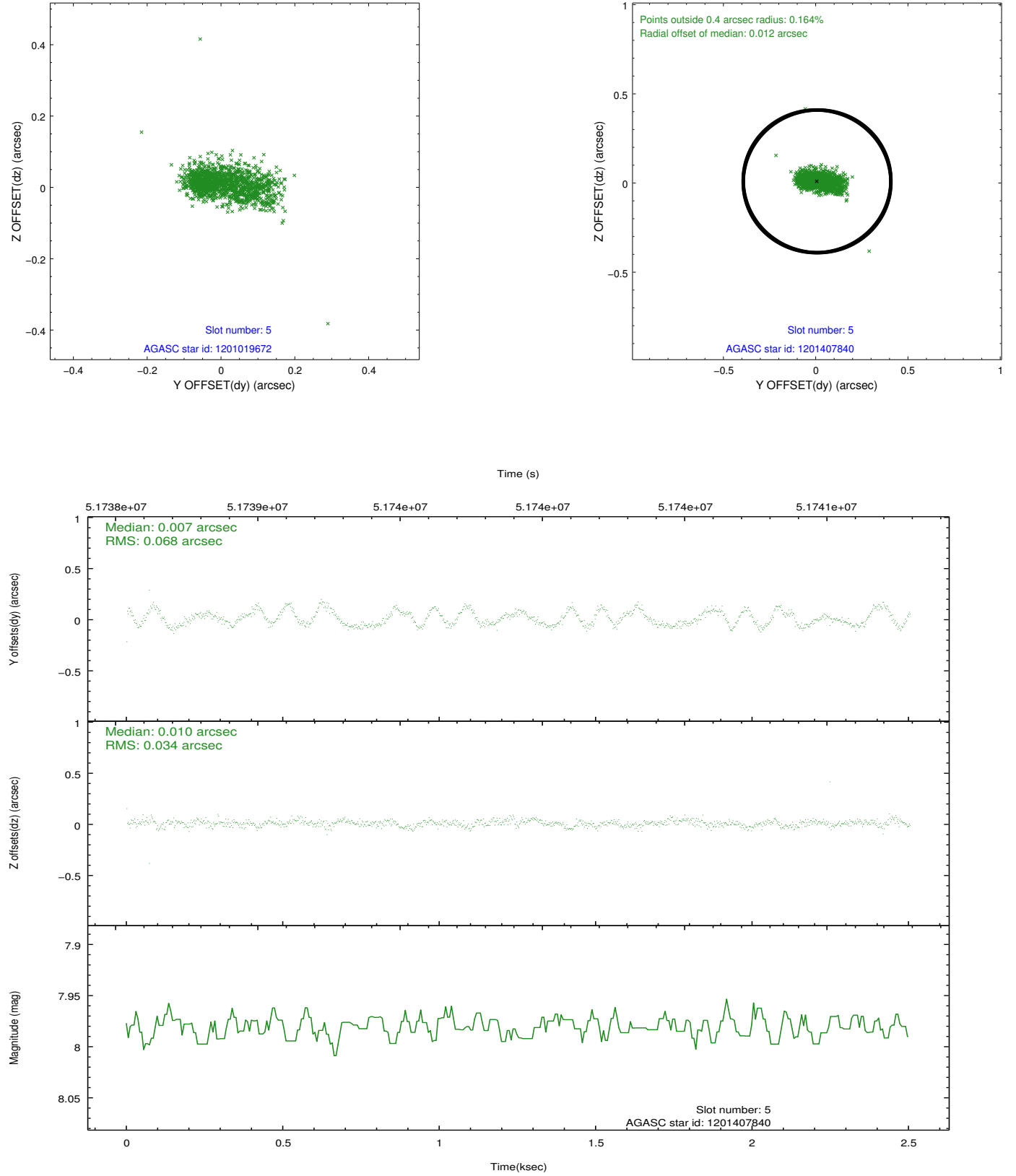
### 2.4.1 Slot 3



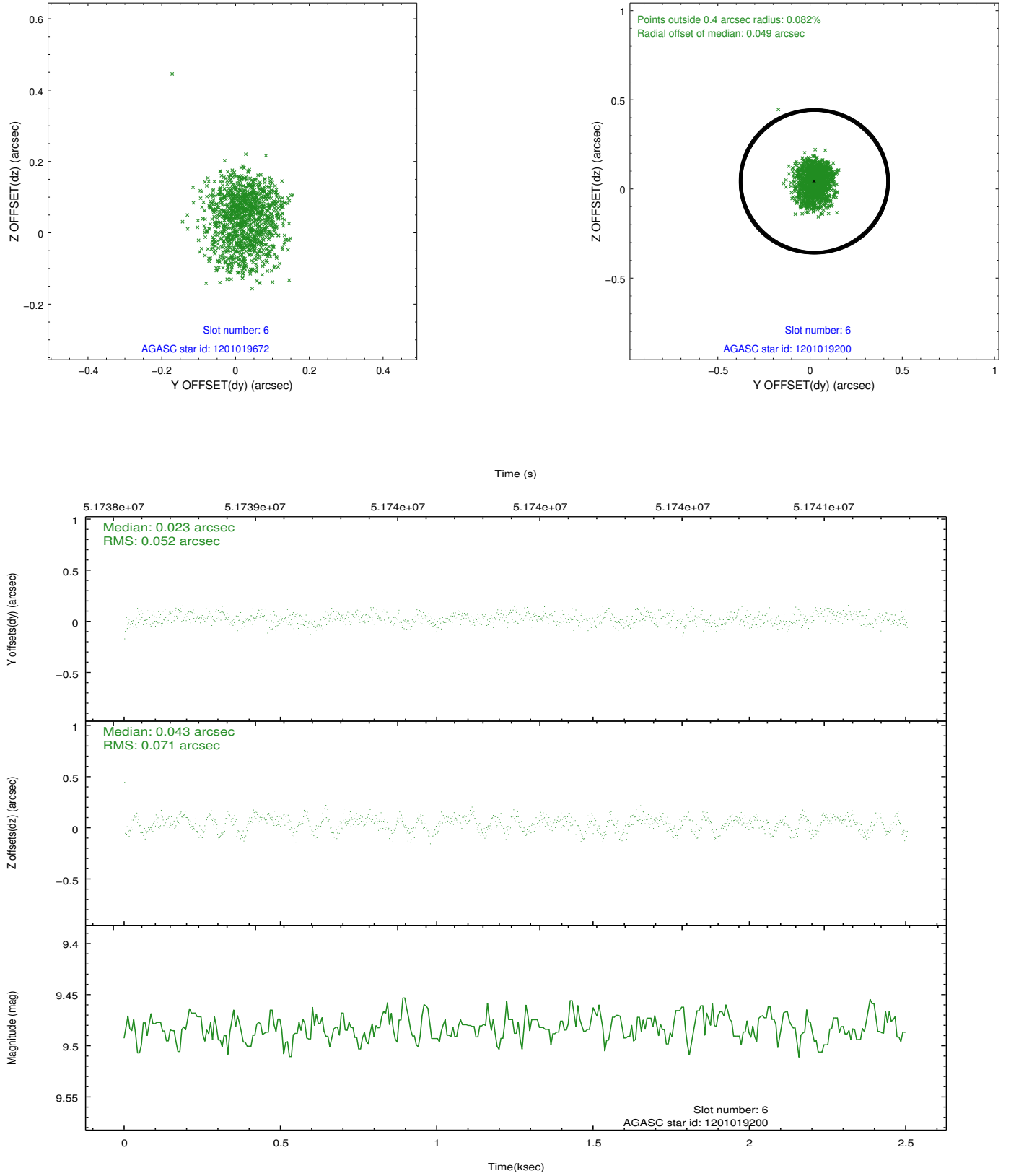
## 2.4.2 Slot 4



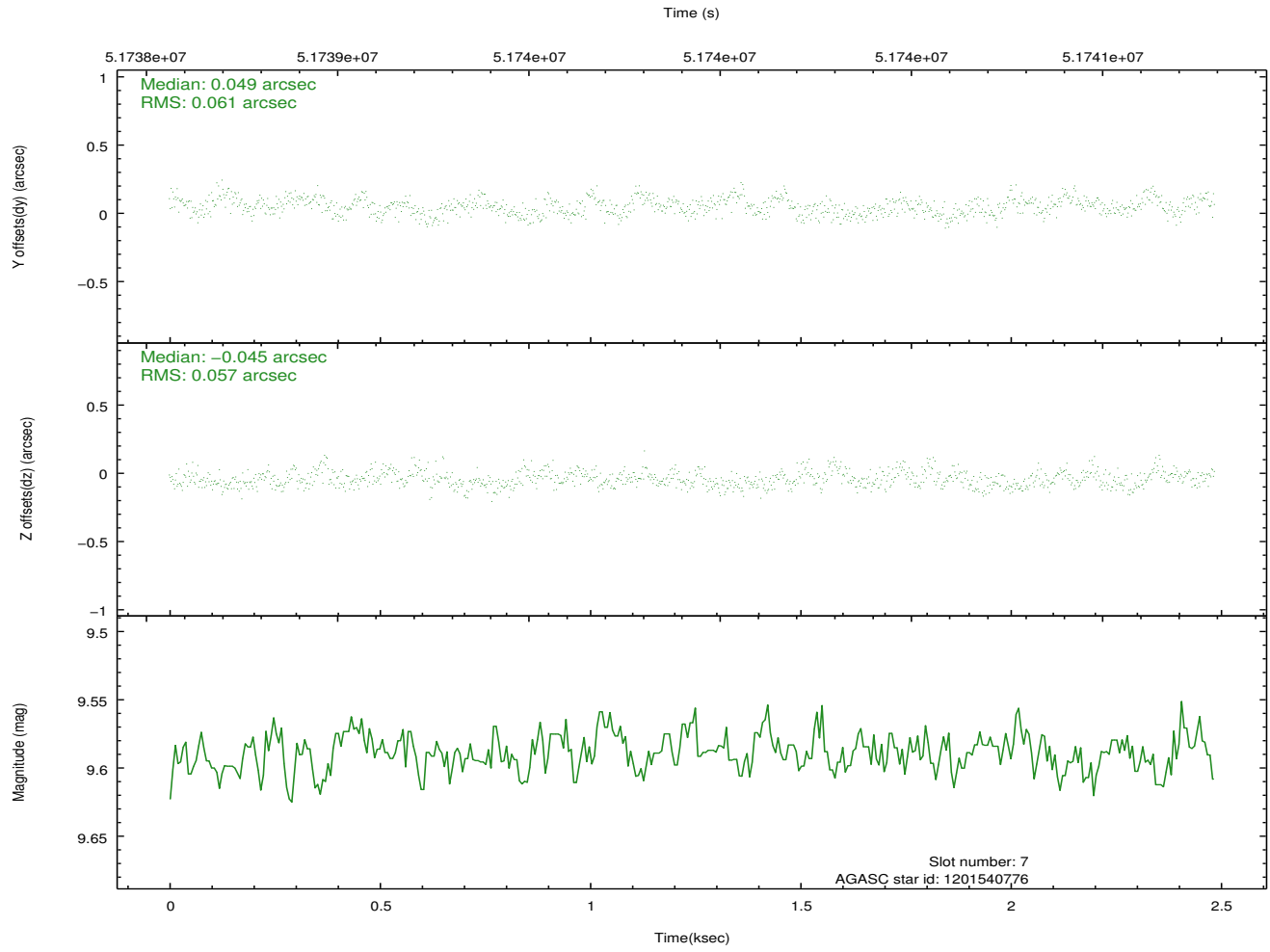
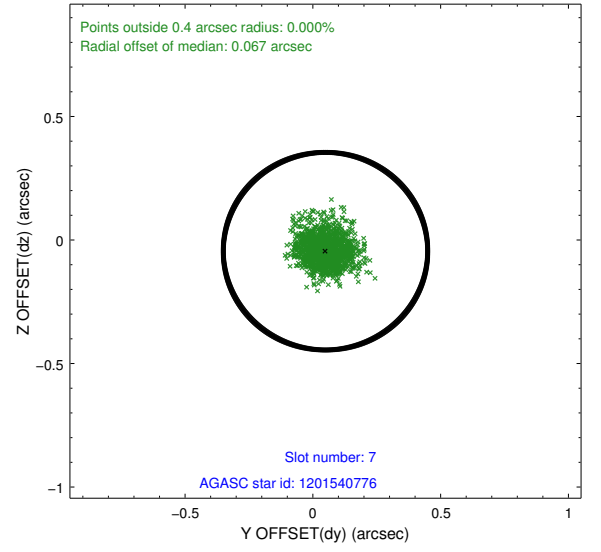
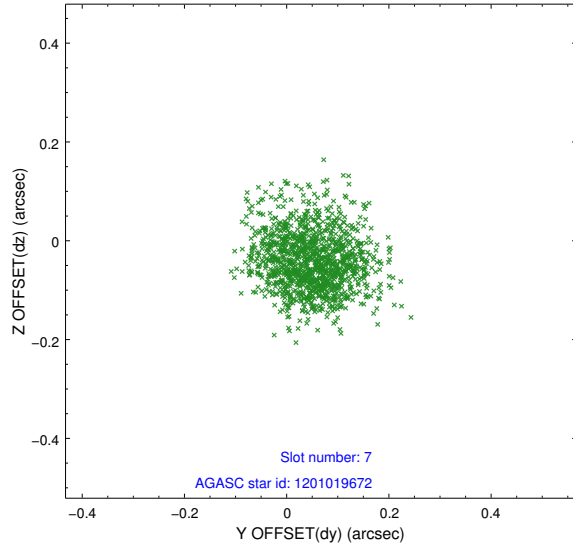
### 2.4.3 Slot 5



## 2.4.4 Slot 6

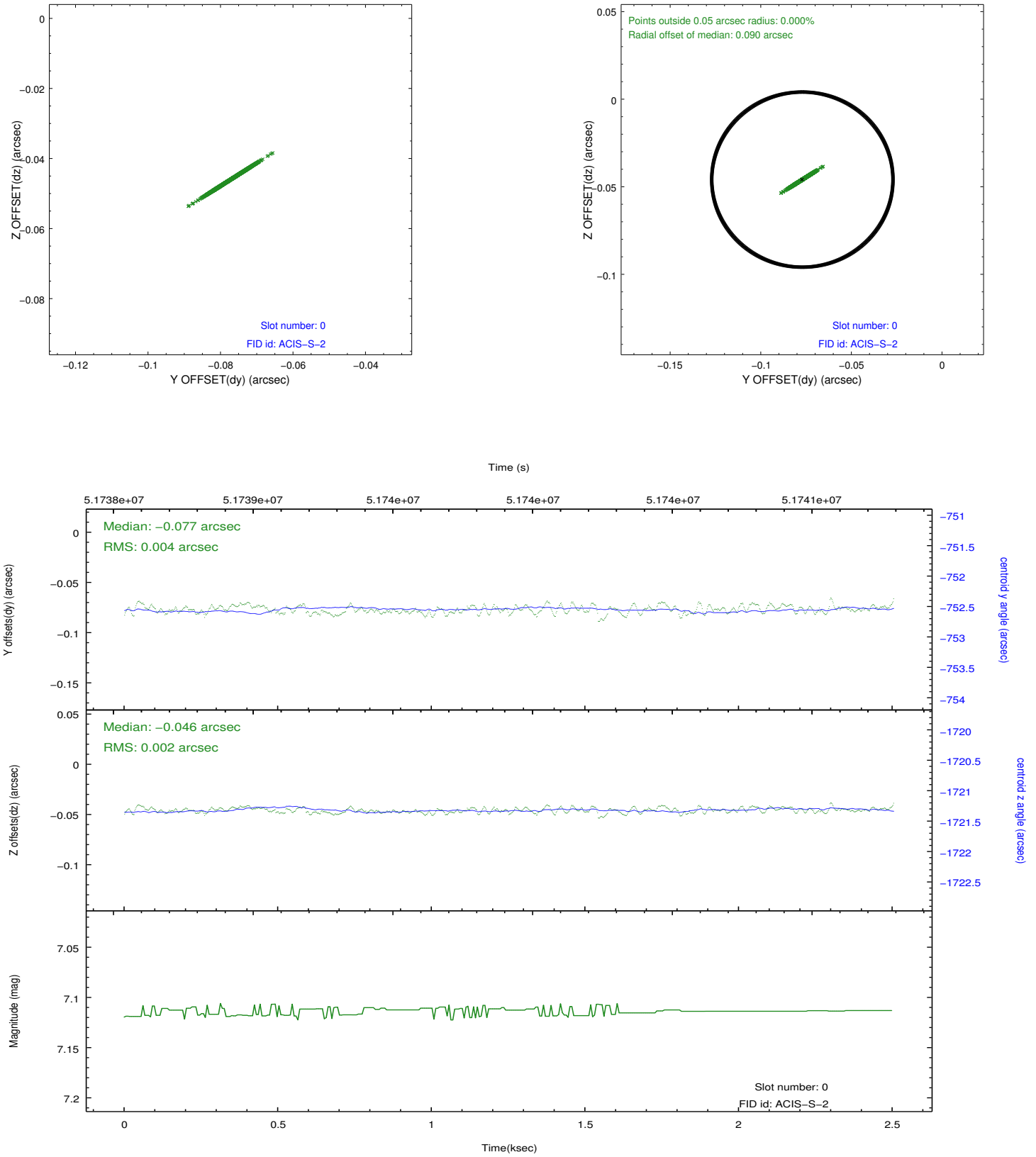


## 2.4.5 Slot 7

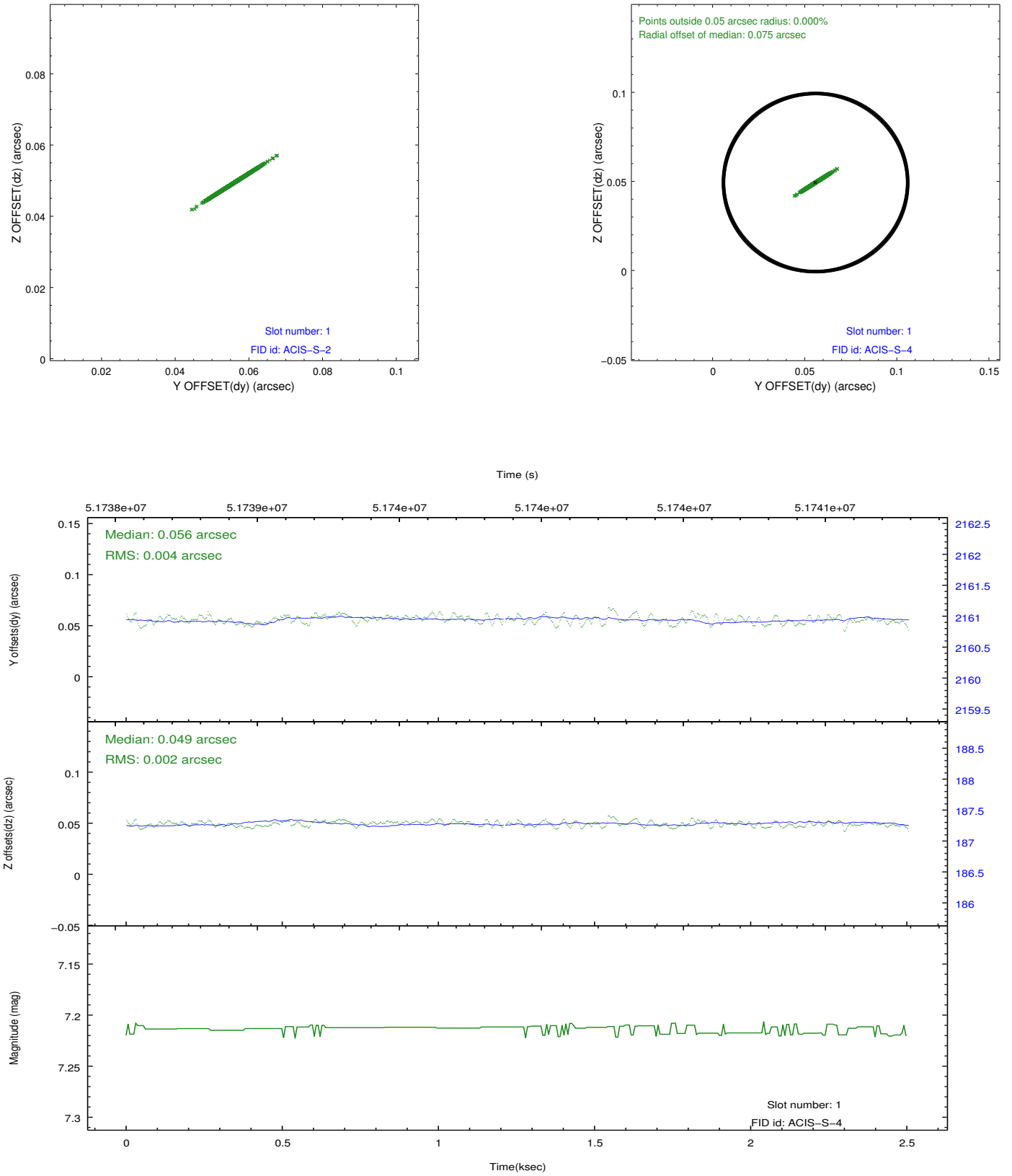


## 2.5 FID Slots

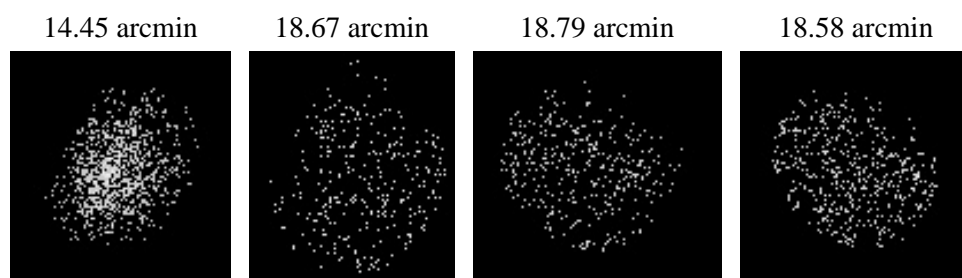
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 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	1.76

## A.2 Comments

Target very off-axis on S5.

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Charge time for this ObsId remains at previous value of 1.76 ksec, although with the current processing the charge time would have been 1.75 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.

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Fid light in slot 2 was not acquired in this observation.