

# V&V Reference Report

## L2 ASCDS Version : 8.1.2

Observation 1096 - L2 Version 6

Chandra X-Ray Center

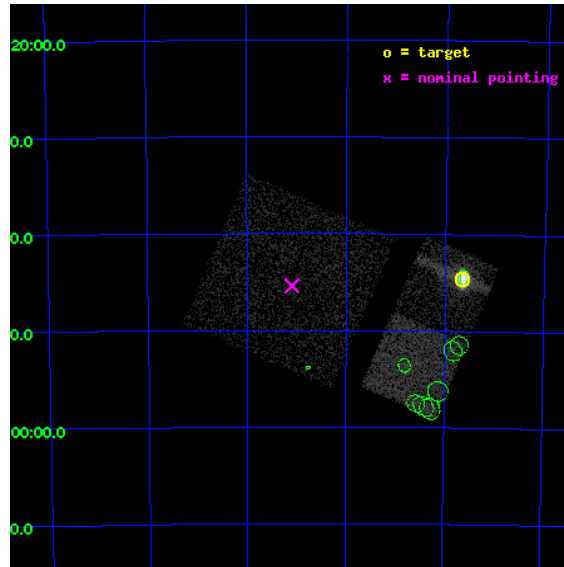
L2 Processing Date : Aug 3 2010

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# 1 Front

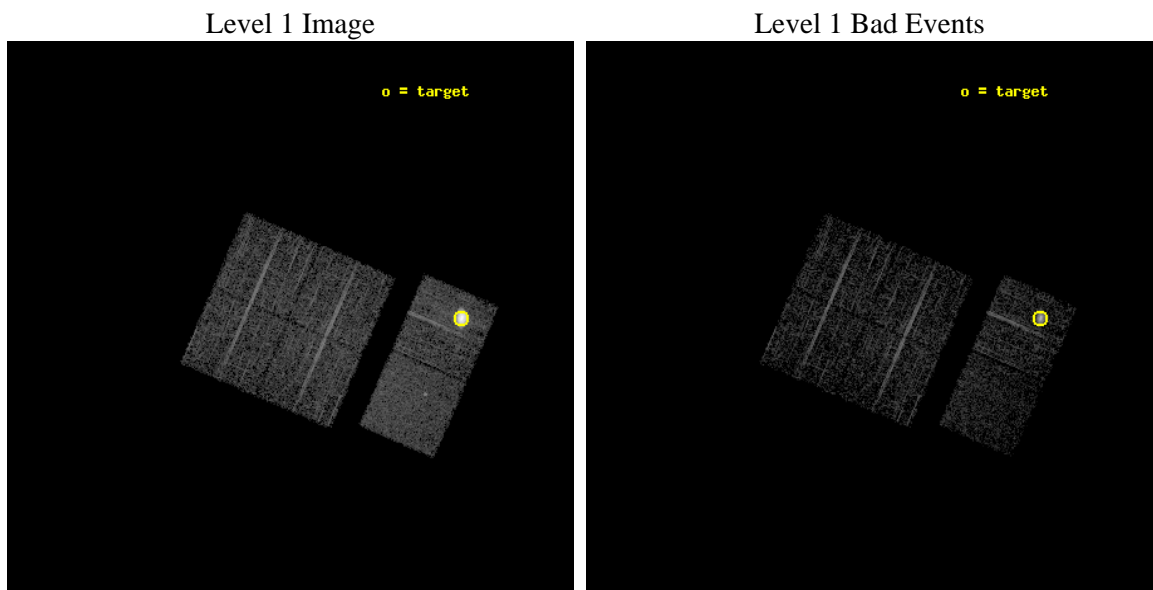
seq_num	480046	Sequence number
obs_id	1096	Observation id
title	&#160	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	LMC X-1	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	84.914583	Observer's specified target RA
dec_targ	-69.743611	Observer's specified target Dec
ra_nom	85.774173559384	Nominal RA
dec_nom	-69.756822454676	Nominal Dec
roll_nom	113.50151028083	Nominal Roll
revision	6	Processing version of data
ontime	1758.5912594497	Sum of GTIs [s]
livetime	1736.322918026	Livetime [s]
ontime0	1758.755419448	Sum of GTIs [s]
ontime1	1758.7143794522	Sum of GTIs [s]
ontime2	1758.6733394489	Sum of GTIs [s]
ontime3	1758.632299453	Sum of GTIs [s]
ontime6	1758.5912594497	Sum of GTIs [s]
ontime7	1758.7964594513	Sum of GTIs [s]
l2events	91439	Number of level 2 events



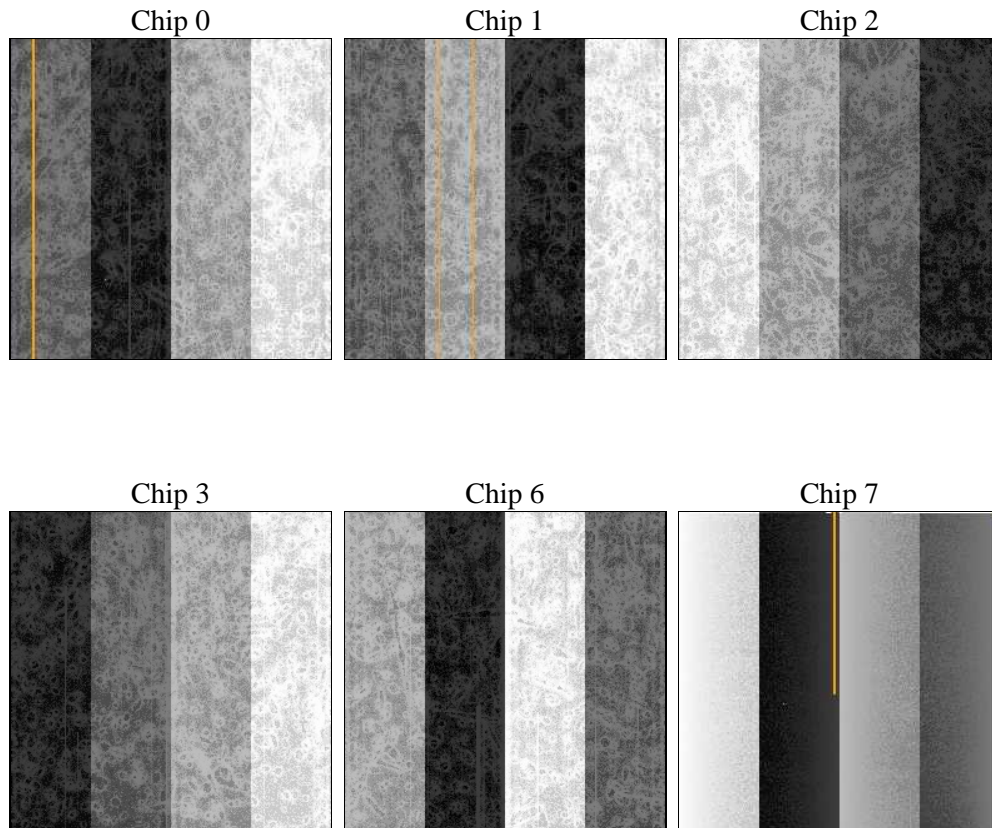
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	2000.000000	Scheduled observation exposure time
ascdsver	8.3.2	ASCDS version number	ontime	1758.5912594497	Sum of GTIs [s]
caldsver	4.3.0	&#160	ontime0	1758.755419448	Sum of GTIs [s]
date	2010-08-03T22:08:43	Date and time of file creation	ontime1	1758.7143794522	Sum of GTIs [s]
revision	6	Processing version of data	ontime2	1758.6733394489	Sum of GTIs [s]
			ontime3	1758.632299453	Sum of GTIs [s]
			ontime6	1758.5912594497	Sum of GTIs [s]
			ontime7	1758.7964594513	Sum of GTIs [s]
			l1events	185106	Number of level 1 events

### 2.1.4 Events

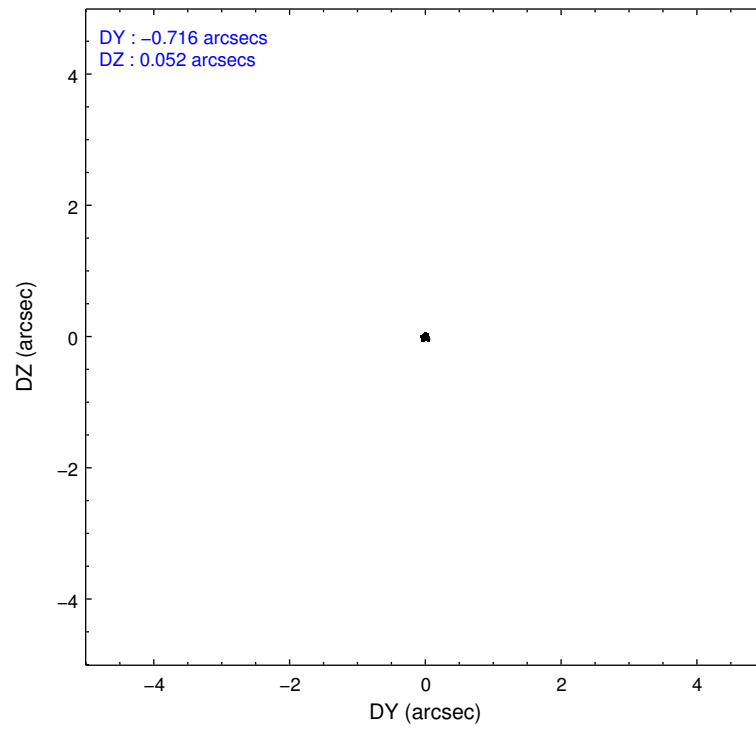
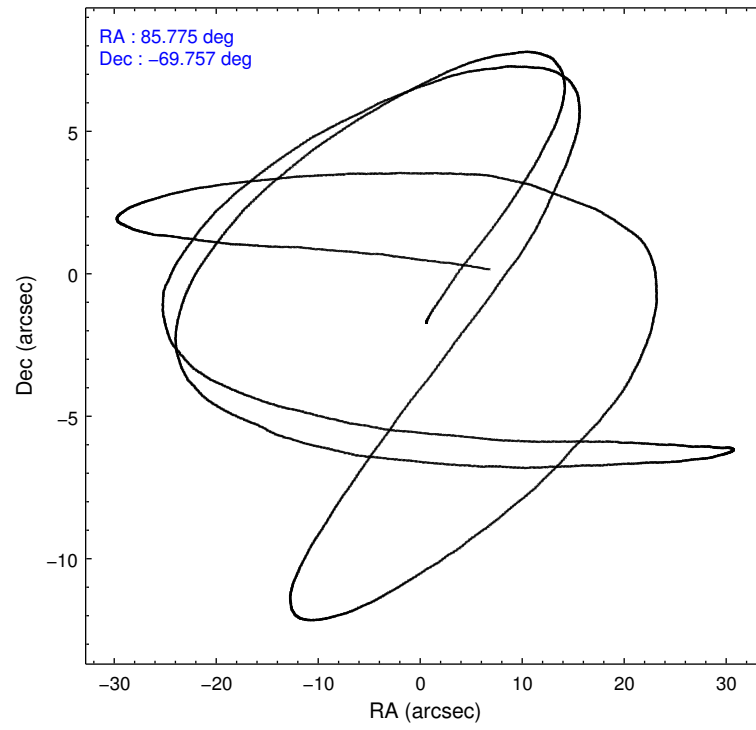
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	17795	16181	18130	17374	96366	19260
rejected events	15583	14075	15753	15351	20016	10992
rejected %	87%	86%	86%	88%	20%	57%

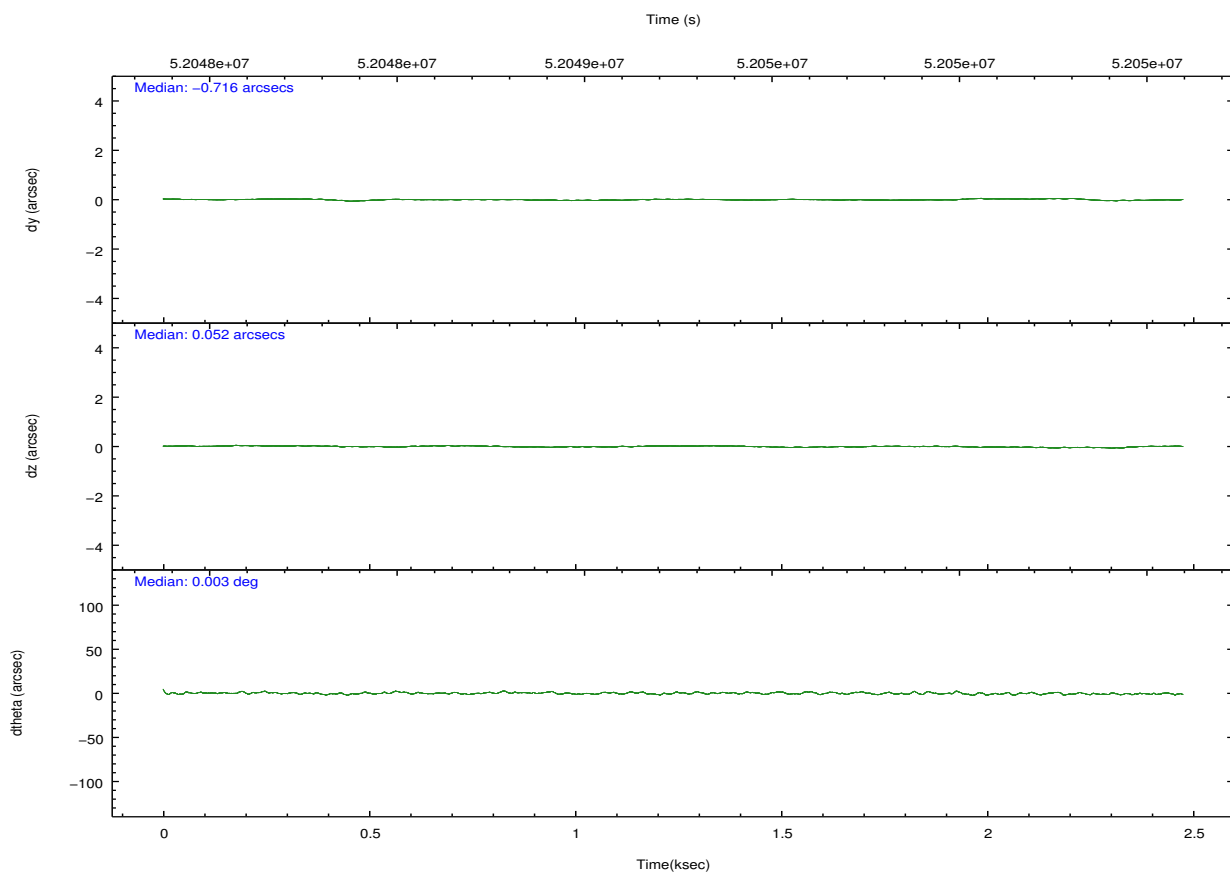
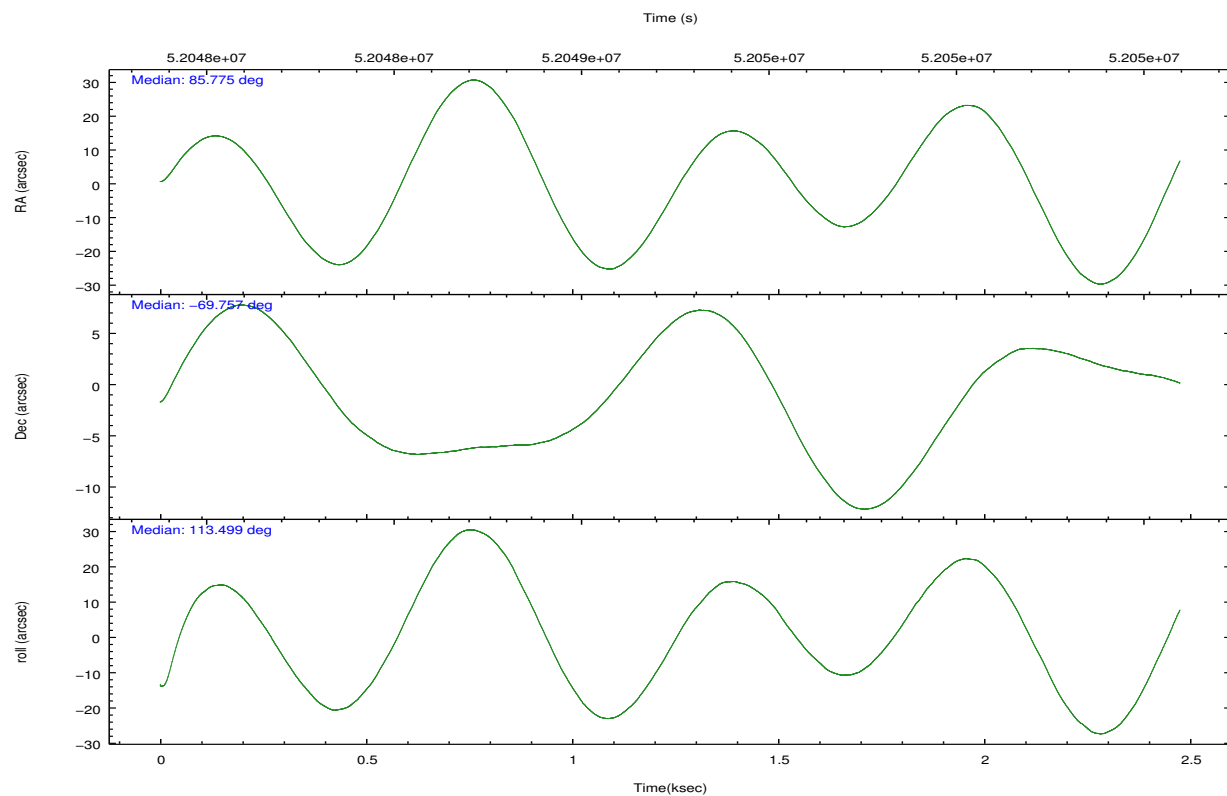
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	1167	995	1382	1004	58017	933
	6%	6%	7%	5%	60%	4%
grade 1 events	9	5	14	3	2040	8
	0%	0%	0%	0%	2%	0%
grade 2 events	416	418	415	423	9752	1277
	2%	2%	2%	2%	10%	6%
grade 3 events	175	183	148	170	3089	829
	0%	1%	0%	0%	3%	4%
grade 4 events	163	167	153	154	3043	732
	0%	1%	0%	0%	3%	3%
grade 5 events	435	462	385	434	1434	1165
	2%	2%	2%	2%	1%	6%
grade 6 events	293	350	282	275	2577	4511
	1%	2%	1%	1%	2%	23%
grade 7 events	15137	13601	15351	14911	16414	9805
	85%	84%	84%	85%	17%	50%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-012367	ACIS-012367	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	85.838083	85.77417355938398	Subarray requested	NONE	NONE
Pointing Dec	-69.774265	-69.75682245467613	Alternating exposures requested	N	N
Pointing Roll	113.352803	113.501510280826	Primary exposure time	0.000000	3.2
SIM focus pos (mm)	-0.782348	-0.7362356599963374			
SIM defocus (mm)	0	0.04611255558364913			
SIM translation stage pos (mm)	-233.592463	-233.5874344608287			
SIM translation stage offset (mm)	0	-0.005018542100998502			
Observation start time	52048475.184000	52047808.857453			
Observation start date	1999-08-26T09:53:31	1999-08-26T09:43:28			
Observation end time	52050475.184000	52050608.645054			
Observation end date	1999-08-26T10:26:51	1999-08-26T10:30:08			
Read mode	TIMED	TIMED			

## 2.3 Aspect





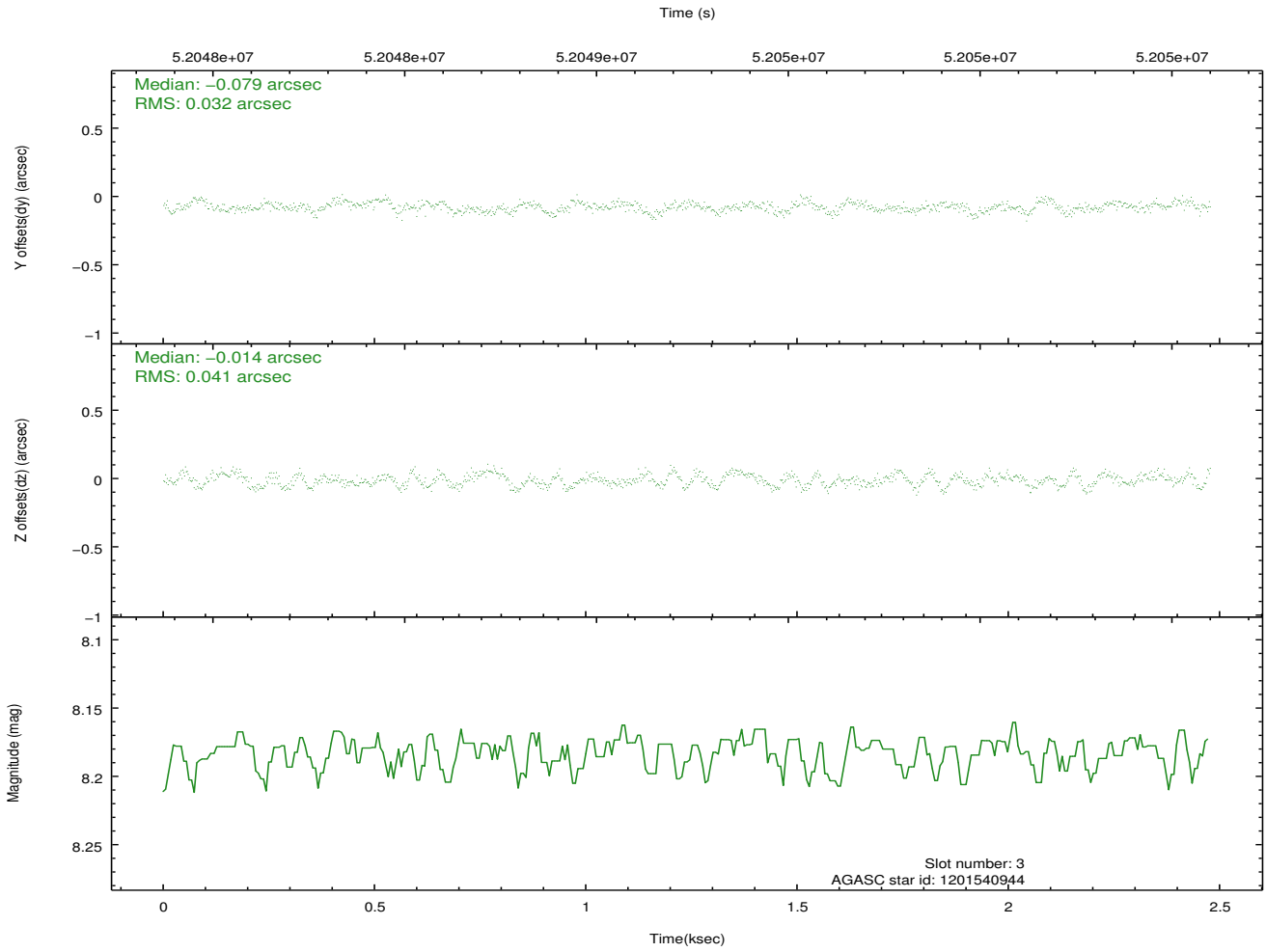
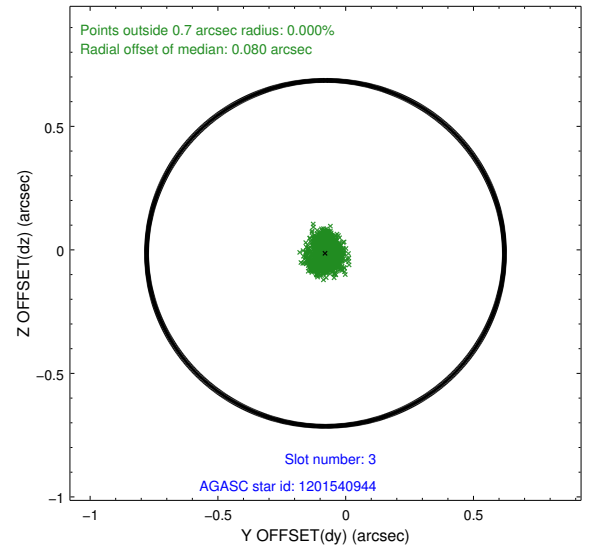
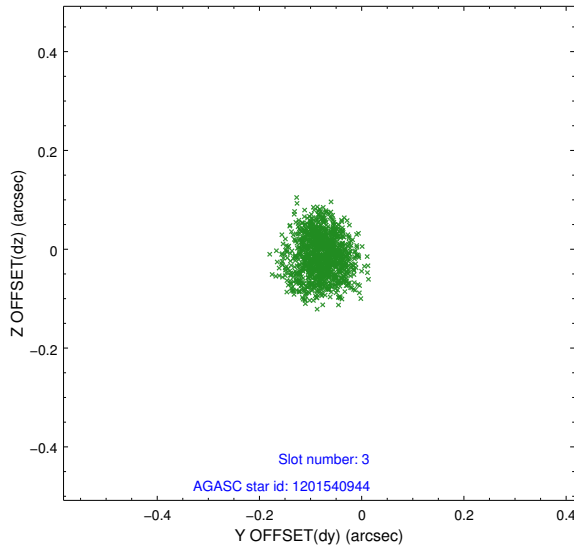
Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.20	1209	-0.088	-0.014	0.005	0.009	0.000000	0.000000	-753.73	-829.57
1	FID	ACIS-I-4	7.24	1209	0.019	0.057	0.005	0.009	0.000000	0.000000	2160.07	1075.81
2	OMITTED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
3	GUIDE	1201540944	8.18	1206	-0.079	-0.014	0.058	0.087	87.496877	-69.685010	-553.02	-2019.57
4	OMITTED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
5	GUIDE	1201406992	9.28	1209	0.116	0.089	0.100	0.152	83.682859	-69.471866	2032.86	2083.30
6	GUIDE	1201542312	9.73	1207	-0.032	-0.080	0.113	0.170	86.031967	-70.422284	-2233.65	711.59
7	UNUSED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00

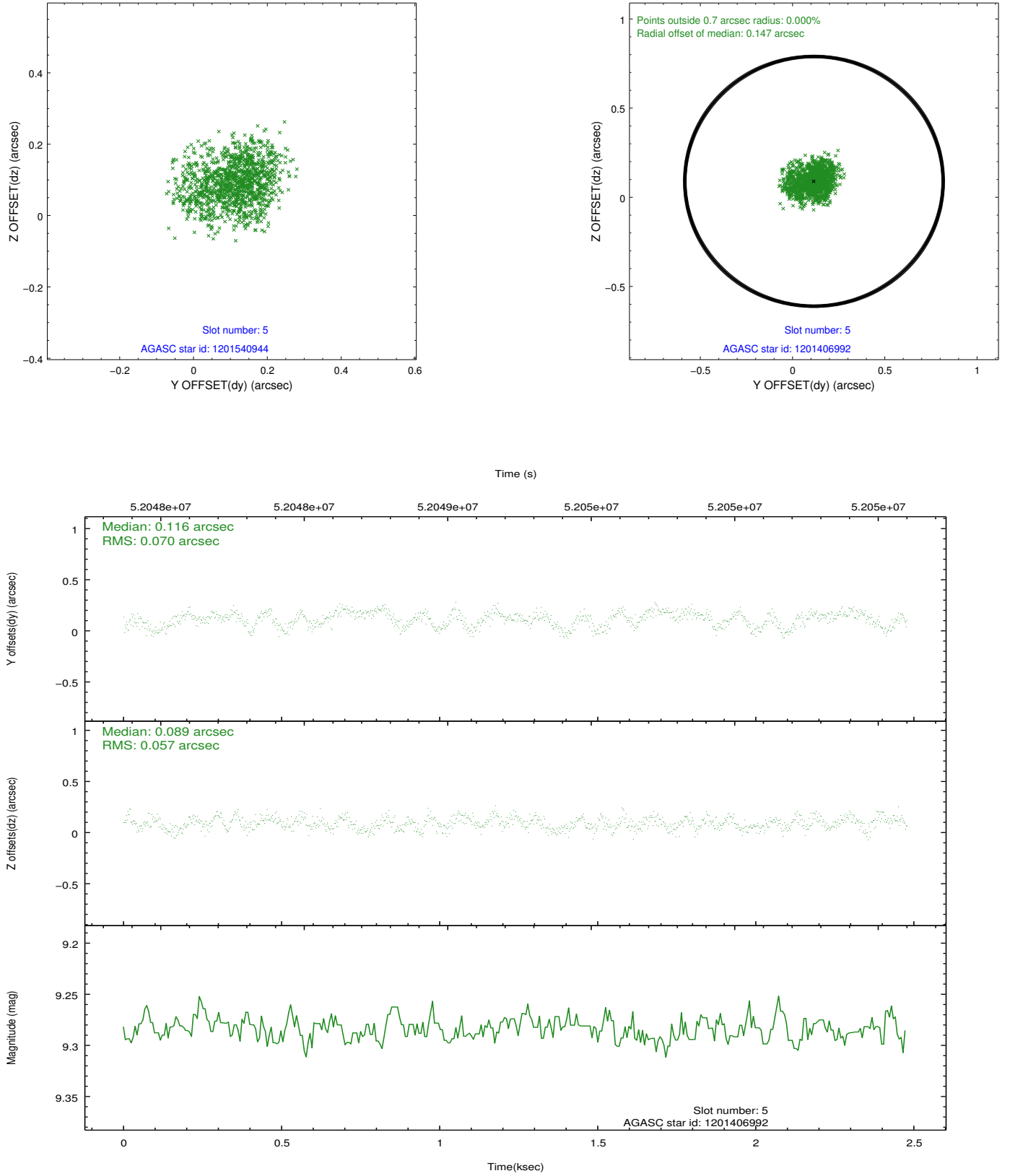


## 2.4 Star Slots

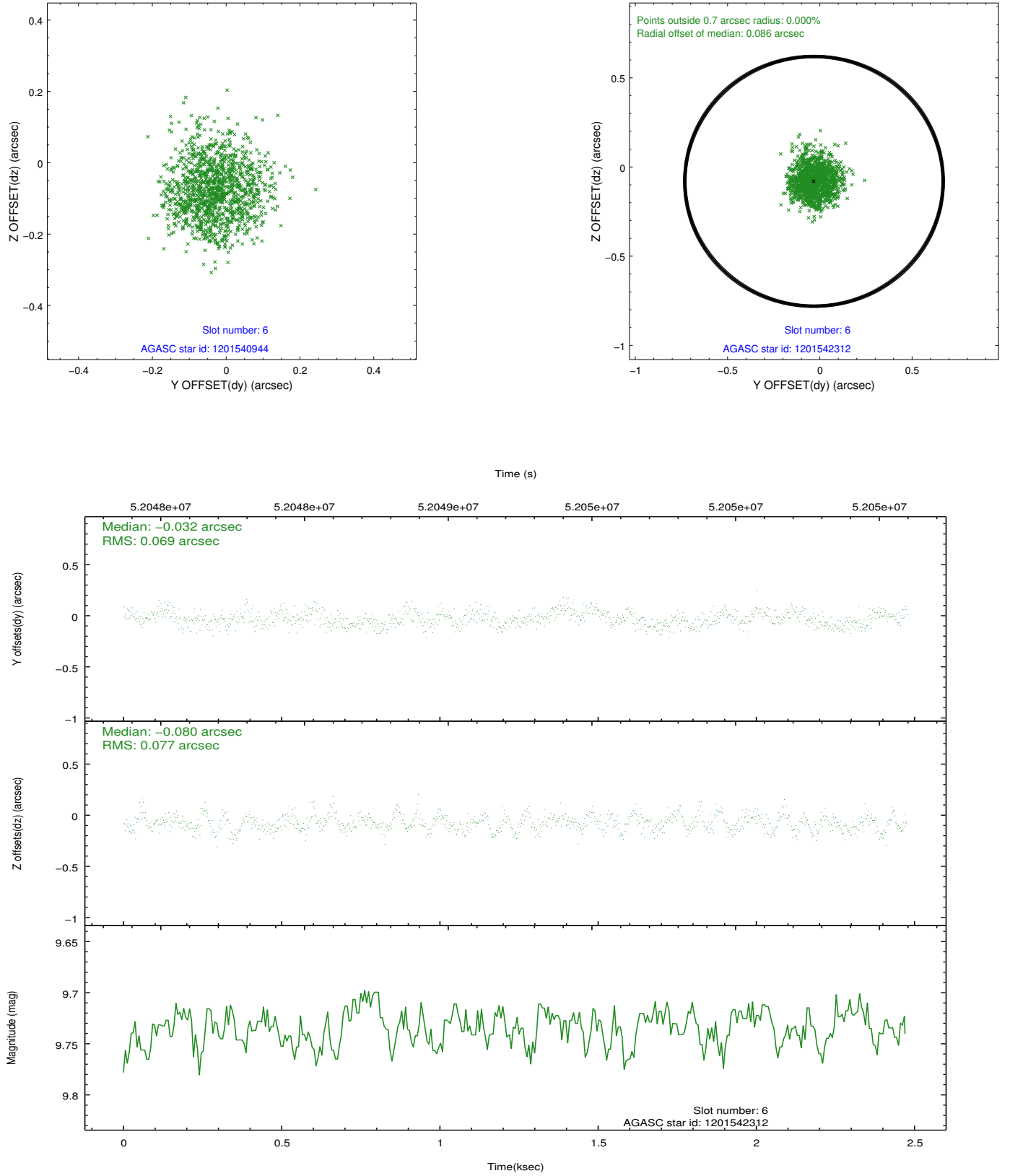
### 2.4.1 Slot 3



## 2.4.2 Slot 5

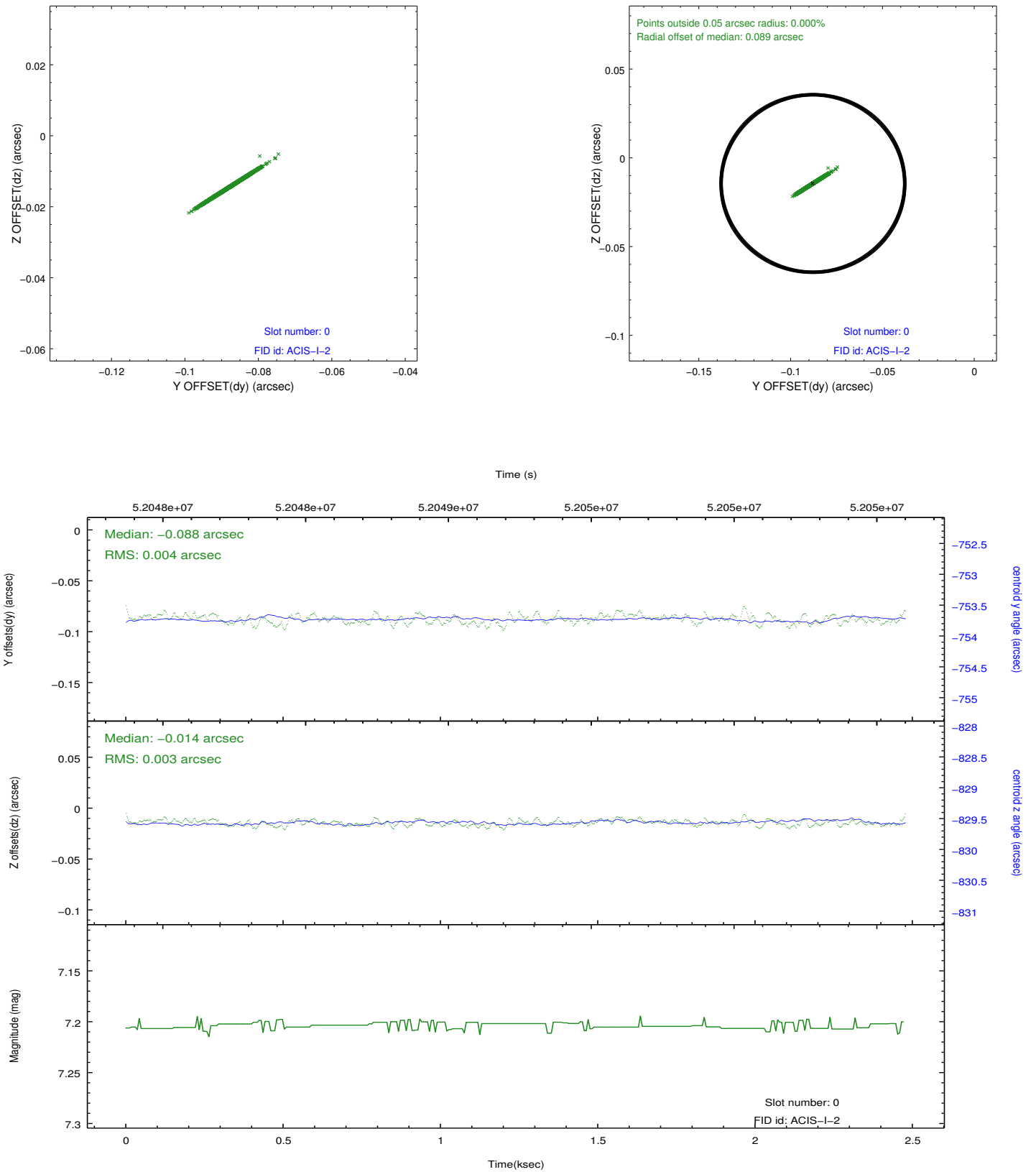


### 2.4.3 Slot 6

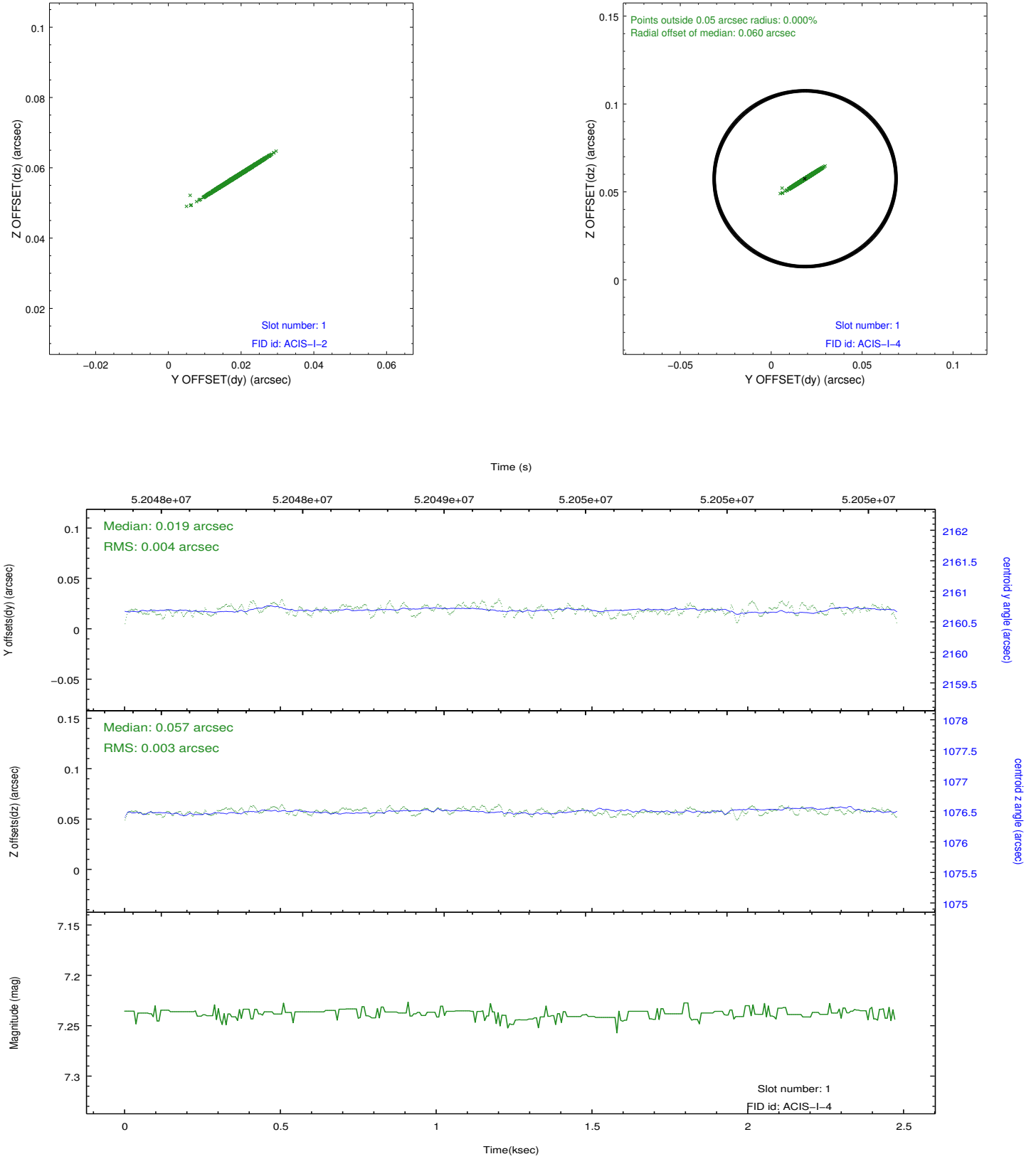


## 2.5 FID Slots

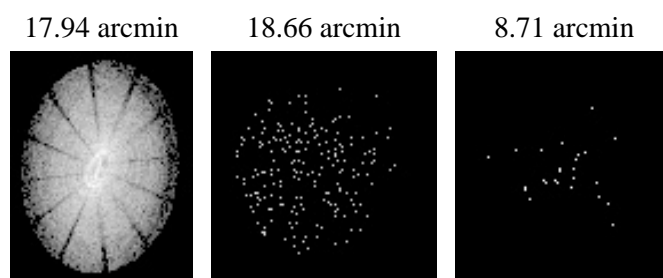
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 3 Point Sources



# A Summary

## A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2010.08.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.76

## A.2 Comments

Target is very off-axis on chip S1.

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A fid light was accidentally tracked in slot 4 as a guide star, resulting in the loss of both the fid light in slot 2 and the guide star in slot 4.

Also, the guide star in slot 7 was not utilized in this observation.

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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.