

# V&V Reference Report

## L2 ASCDS Version : 8.5.1

Observation 5001 - L2 Version 3  
Chandra X-Ray Center

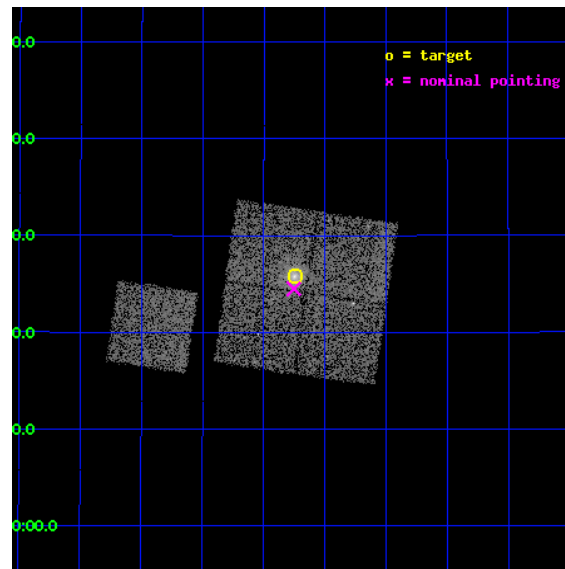
L2 Processing Date : Dec 15 2012

## Contents

<b>1</b>	<b>Front</b>	<b>2</b>
<b>2</b>	<b>OBI</b>	<b>3</b>
2.1	OBI . . . . .	3
2.1.1	Images . . . . .	3
2.1.2	Bias . . . . .	3
2.1.3	Parameters . . . . .	4
2.1.4	Events . . . . .	4
2.2	Compared Parameters . . . . .	5
2.3	Aspect . . . . .	6
2.4	Star Slots . . . . .	9
2.4.1	Slot 3 . . . . .	9
2.4.2	Slot 4 . . . . .	10
2.4.3	Slot 5 . . . . .	11
2.4.4	Slot 6 . . . . .	12
2.4.5	Slot 7 . . . . .	13
2.5	FID Slots . . . . .	14
2.5.1	Slot 0 . . . . .	14
2.5.2	Slot 1 . . . . .	15
2.5.3	Slot 2 . . . . .	16
<b>A</b>	<b>Summary</b>	<b>17</b>
A.1	Status . . . . .	17
A.2	Comments . . . . .	17

# 1 Front

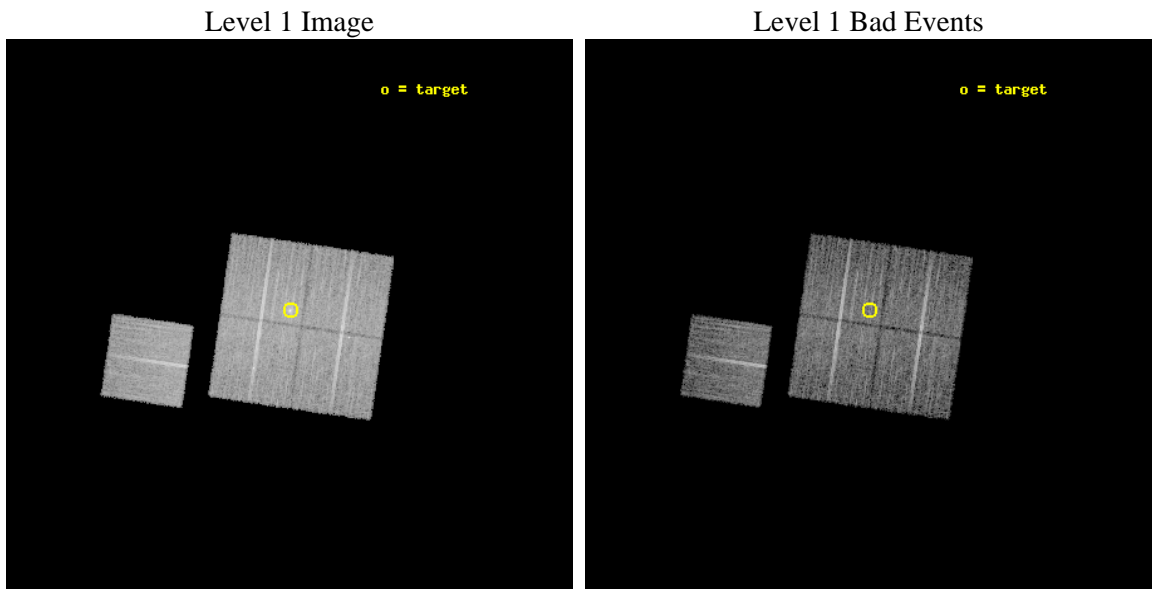
seq_num	800444	Sequence number
obs_id	5001	Observation id
title	Study of Candidate 'Fossil Groups	Proposal title
observer	Dr. Stephen Murray	Principal investigator
object	NGC777	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	30.062083	Observer's specified target RA [deg]
dec_targ	31.429444	Observer's specified target Dec [deg]
ra_nom	30.063479256083	Nominal RA [deg]
dec_nom	31.408447137393	Nominal Dec [deg]
roll_nom	278.34056560792	Nominal Roll [deg]
revision	3	Processing version of data
ontime	10167.99998042	Sum of GTIs [s]
livetime	10035.147575103	Livetime [s]
ontime0	10164.859010071	Sum of GTIs [s]
ontime1	10167.99998042	Sum of GTIs [s]
ontime2	10167.99998042	Sum of GTIs [s]
ontime3	10167.99998042	Sum of GTIs [s]
ontime6	10161.717990041	Sum of GTIs [s]
l2events	31228	Number of level 2 events



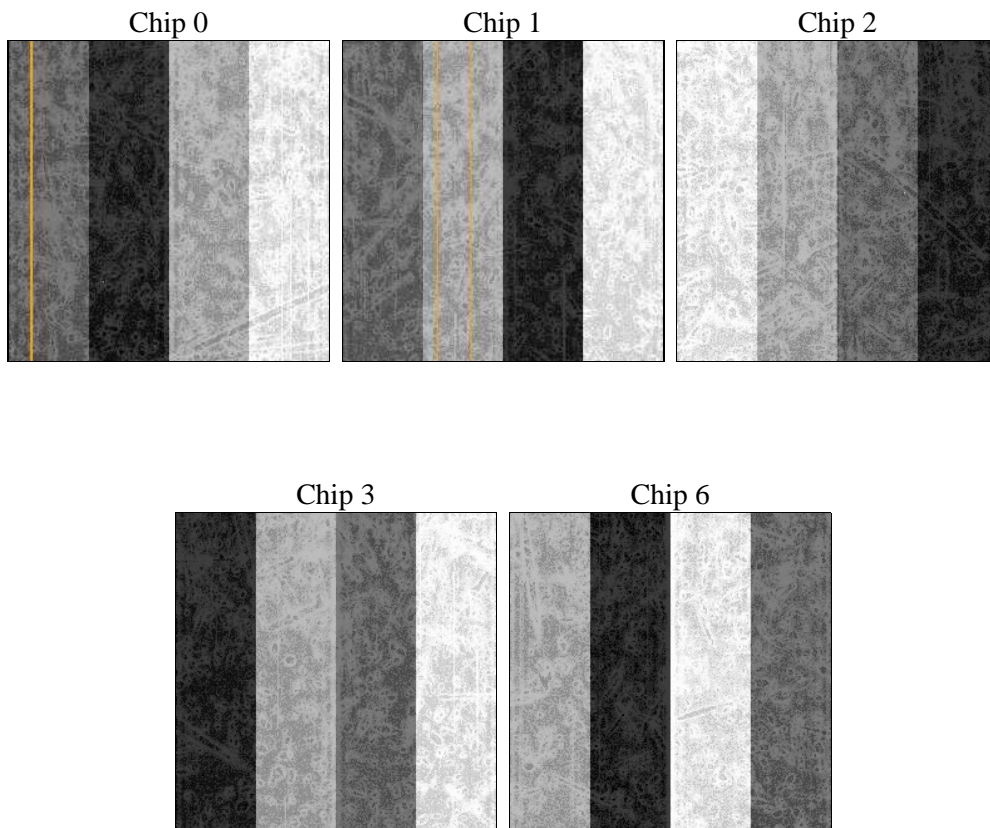
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	3	Obi number	sched_exp_time	10120.000000	[s] Scheduled observation exposure time
ascdsver	8.5.1	Processing system revision	ontime	10167.99998042	Sum of GTIs [s]
caldsver	4.5.5	&#160	ontime0	10164.859010071	Sum of GTIs [s]
date	2012-12-15T04:37:20	Date and time of file creation	ontime1	10167.99998042	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	10167.99998042	Sum of GTIs [s]
			ontime3	10167.99998042	Sum of GTIs [s]
			ontime6	10161.717990041	Sum of GTIs [s]
			l1events	347370	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	64087	66793	72169	73666	70655
rejected events	57350	59345	65286	64426	63949
rejected %	89%	88%	90%	87%	90%

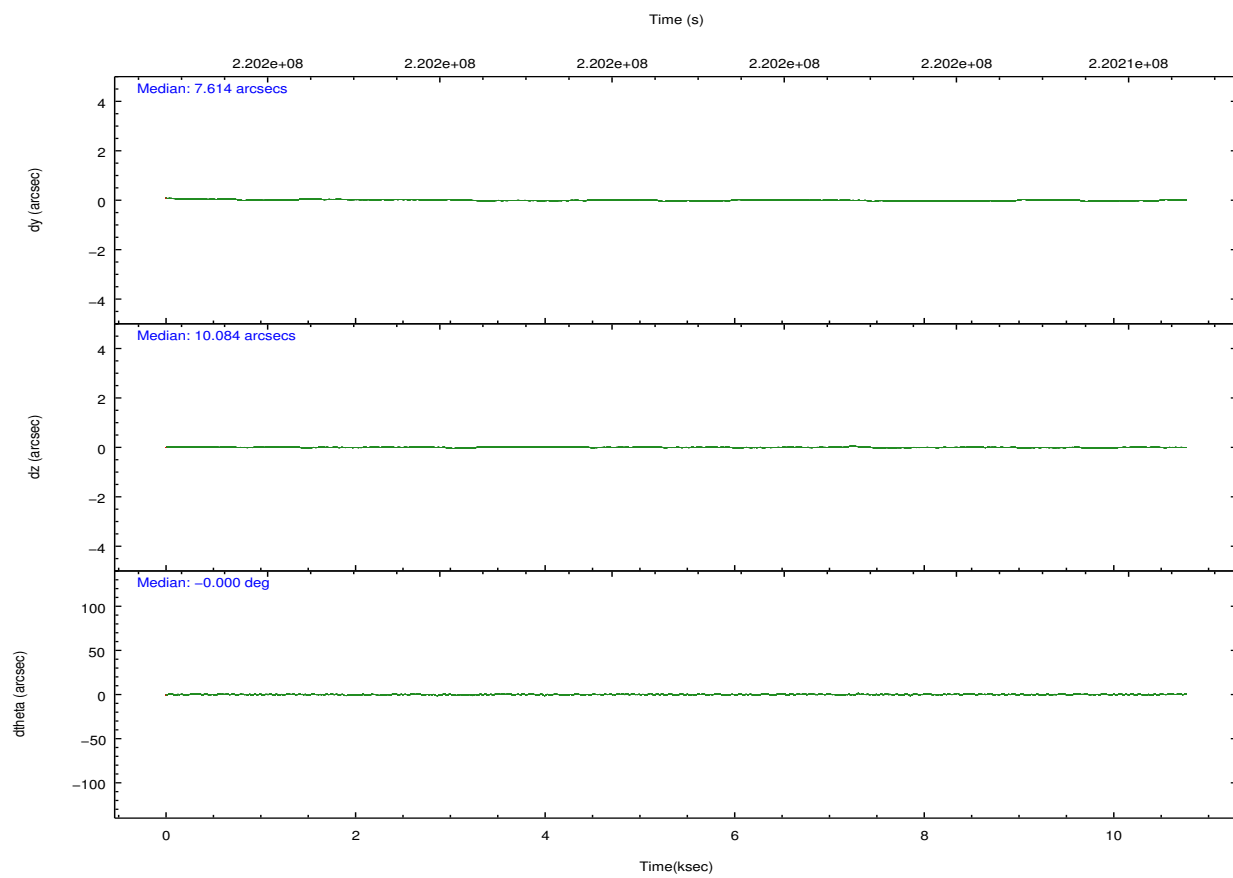
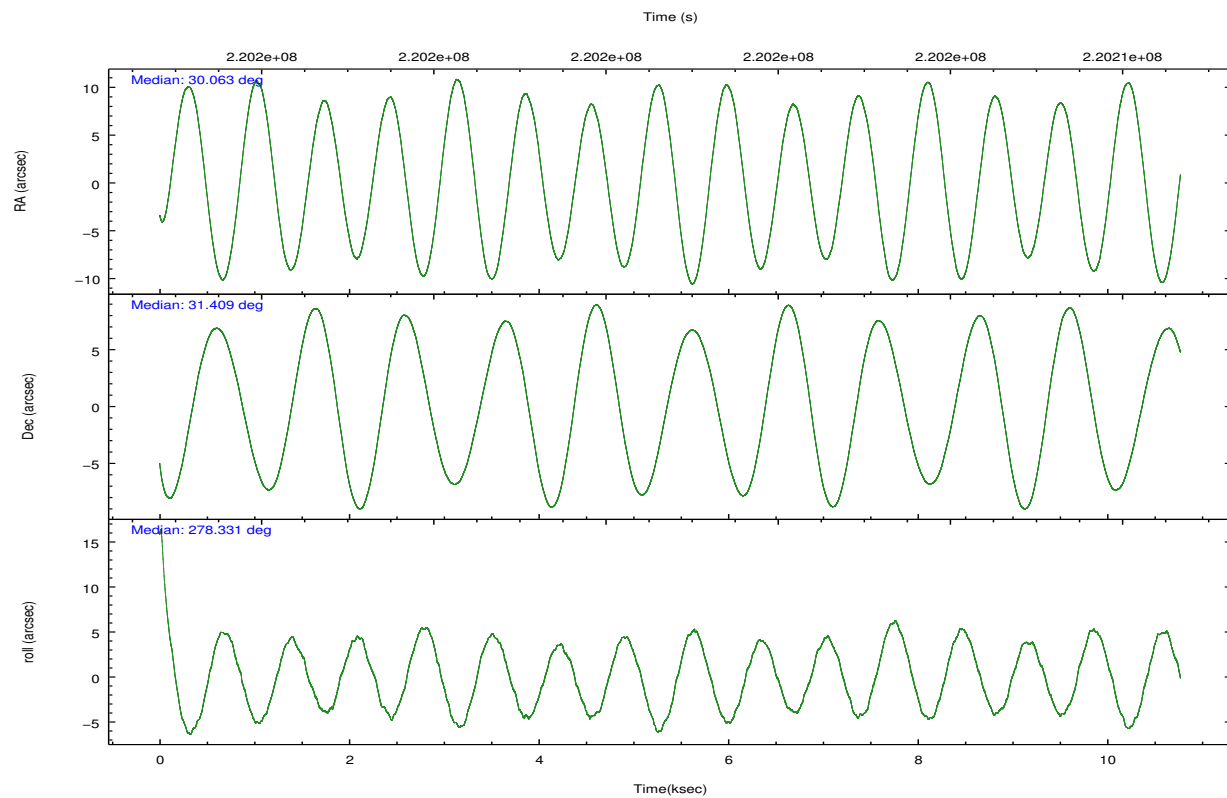
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	2440	2666	2648	4808	2270
	3%	3%	3%	6%	3%
grade 1 events	27	29	47	52	47
	0%	0%	0%	0%	0%
grade 2 events	1566	1624	1553	1548	1439
	2%	2%	2%	2%	2%
grade 3 events	758	868	751	812	787
	1%	1%	1%	1%	1%
grade 4 events	740	814	752	759	742
	1%	1%	1%	1%	1%
grade 5 events	2321	2510	2256	2732	2537
	3%	3%	3%	3%	3%
grade 6 events	1235	1478	1182	1316	1470
	1%	2%	1%	1%	2%
grade 7 events	55000	56804	62980	61639	61363
	85%	85%	87%	83%	86%



## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	30.043469	30.06347925608286	Subarray requested	NONE	NONE
[deg] Pointing Dec	31.429864	31.408447137393	Alternating exposures requested	N	N
[deg] Pointing Roll	278.142300	278.3405656079244	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-231.592463	-231.5986110572947			
[mm] SIM translation stage offset	-2	-1.993841945634955			
[s] Observation start time (MET)	220196007.184000	220194845.29162			
Observation start date	2004-12-23T13:32:23	2004-12-23T13:14:05			
[s] Observation end time (MET)	220206127.184000	220207004.35466			
Observation end date	2004-12-23T16:21:03	2004-12-23T16:36:44			
Read mode	TIMED	TIMED			

## 2.3 Aspect

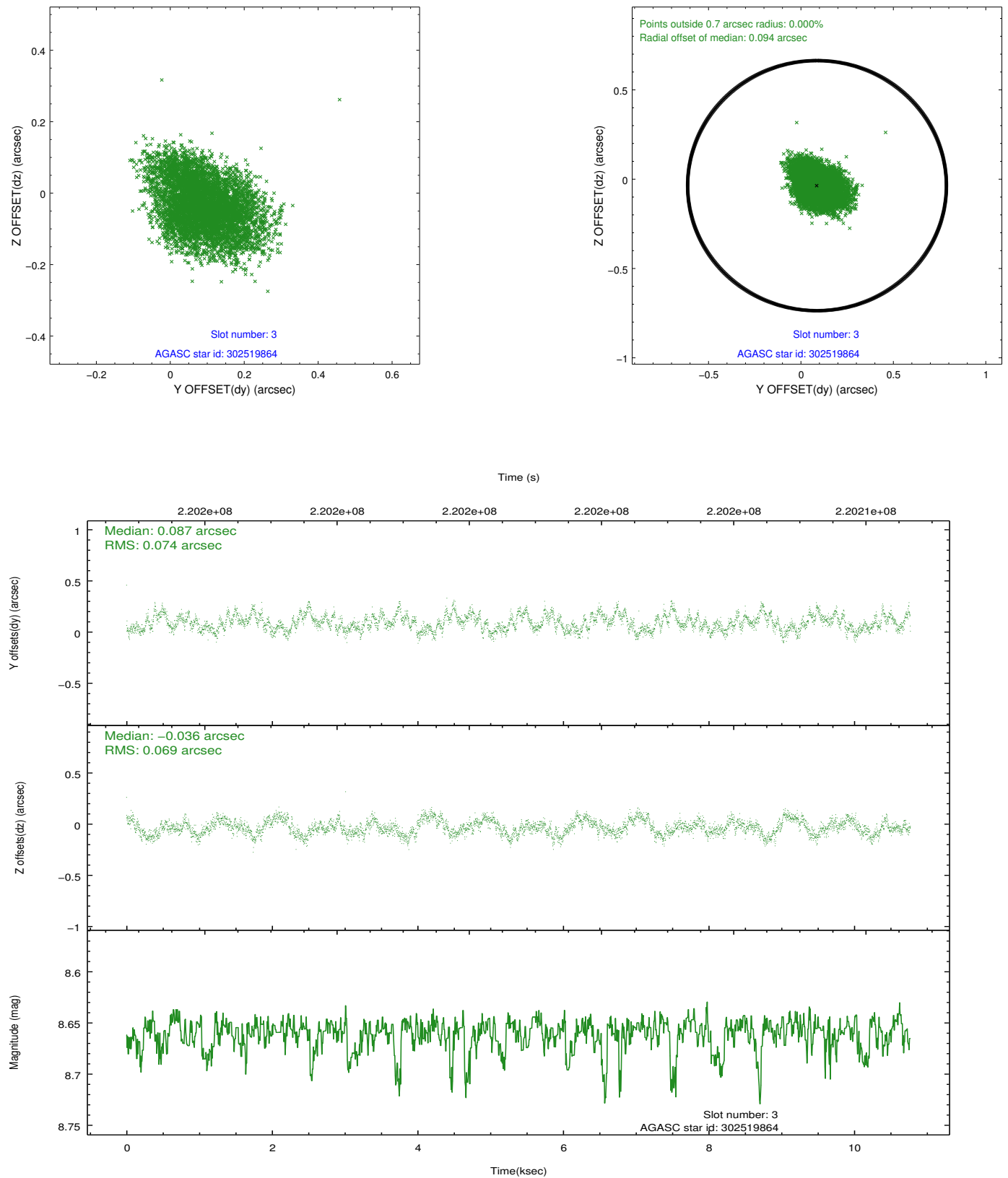


### Slot Statistics

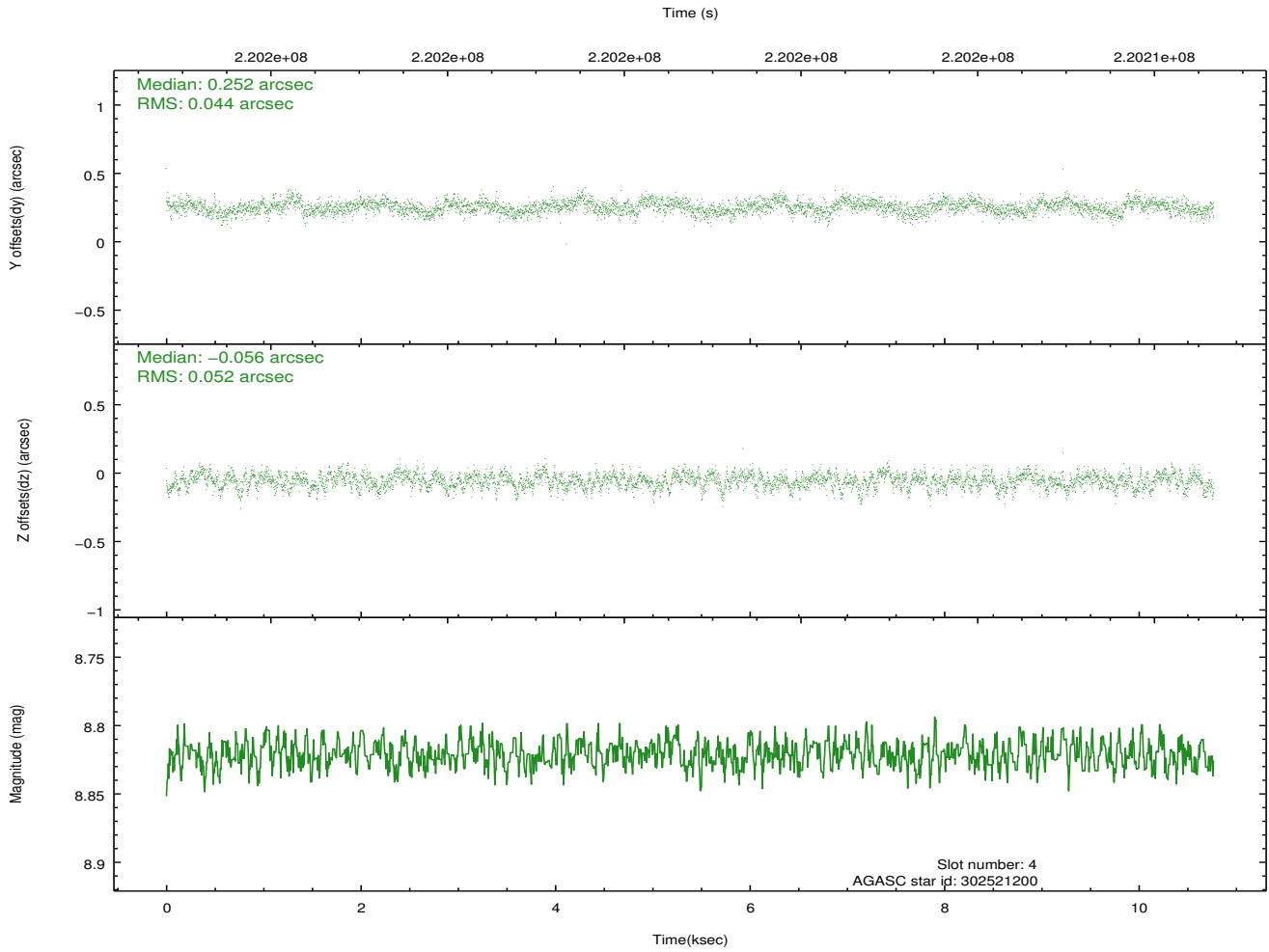
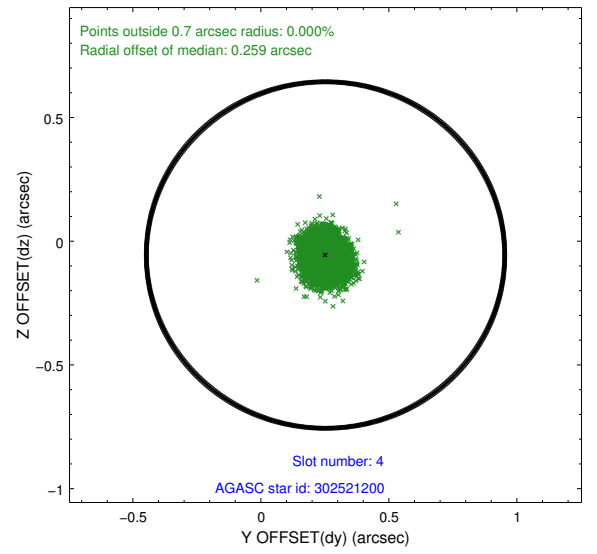
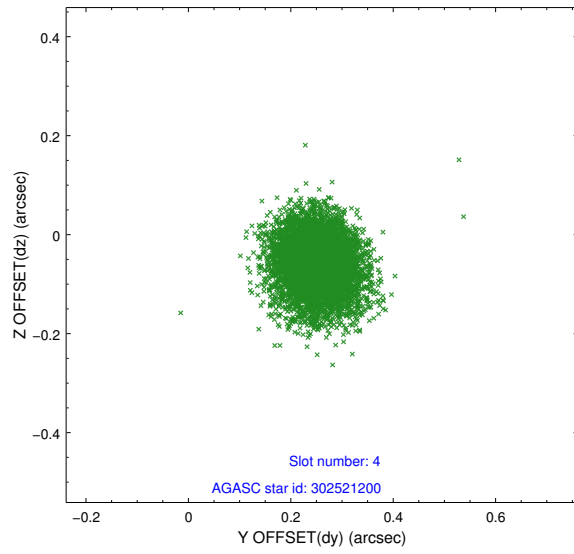
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.24	2628	0.039	-0.023	0.007	0.012	0.000000	0.000000	932.03	-874.46
1	FID	ACIS-I-5	7.23	2627	-0.200	0.044	0.006	0.011	0.000000	0.000000	-1816.00	1022.92
2	FID	ACIS-I-6	7.25	2628	0.070	0.050	0.007	0.011	0.000000	0.000000	397.15	1667.91
3	GUIDE	302519864	8.66	5255	0.087	-0.036	0.109	0.172	29.441810	30.896773	1632.35	-2110.46
4	GUIDE	302521200	8.82	5254	0.252	-0.056	0.072	0.117	30.130226	31.340144	358.28	218.27
5	GUIDE	303046760	7.81	5254	-0.248	0.123	0.058	0.094	30.439087	32.121351	-2295.72	1547.15
6	GUIDE	302522088	8.10	5255	-0.042	0.028	0.070	0.111	29.299958	31.063034	975.19	-2454.84
7	GUIDE	302524496	8.42	5253	-0.049	-0.058	0.071	0.116	29.343712	31.470012	-453.33	-2105.80

## 2.4 Star Slots

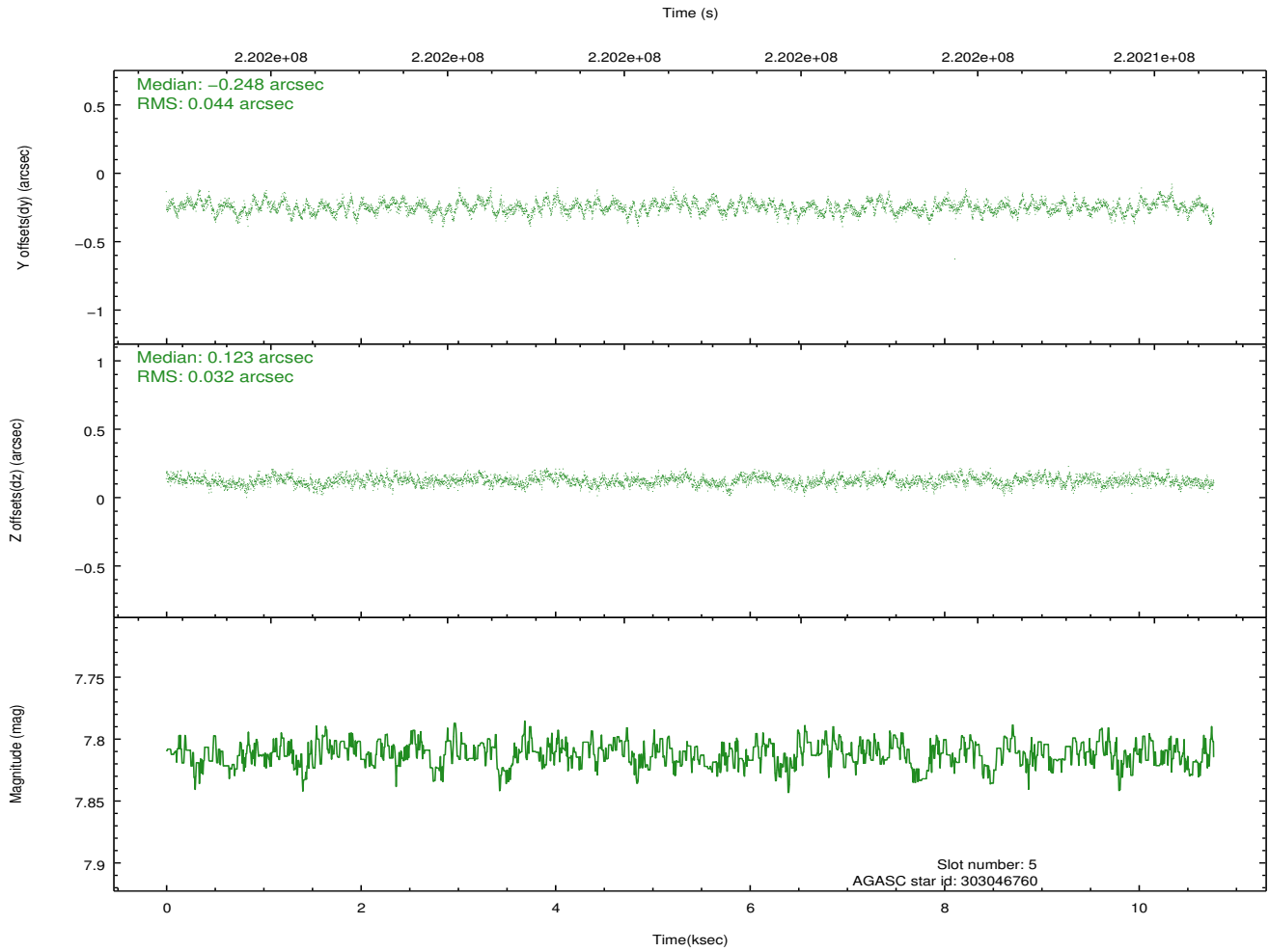
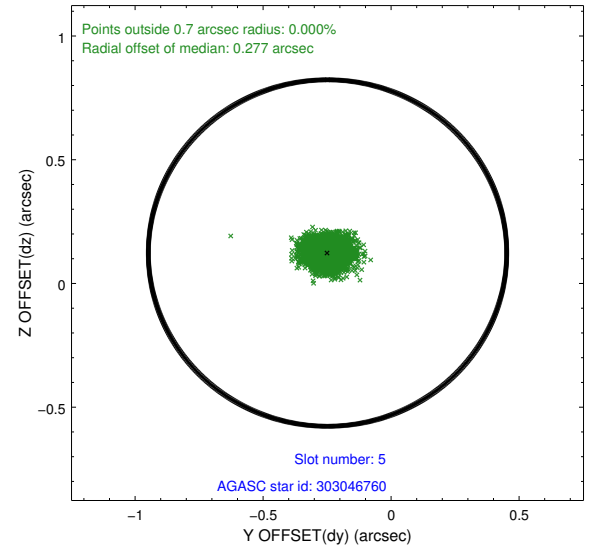
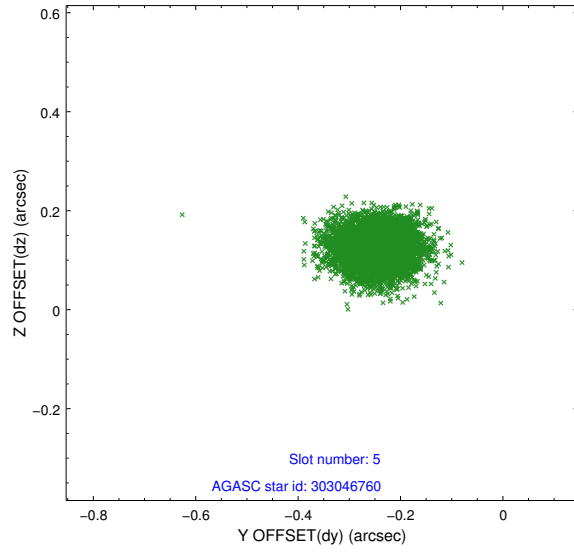
### 2.4.1 Slot 3



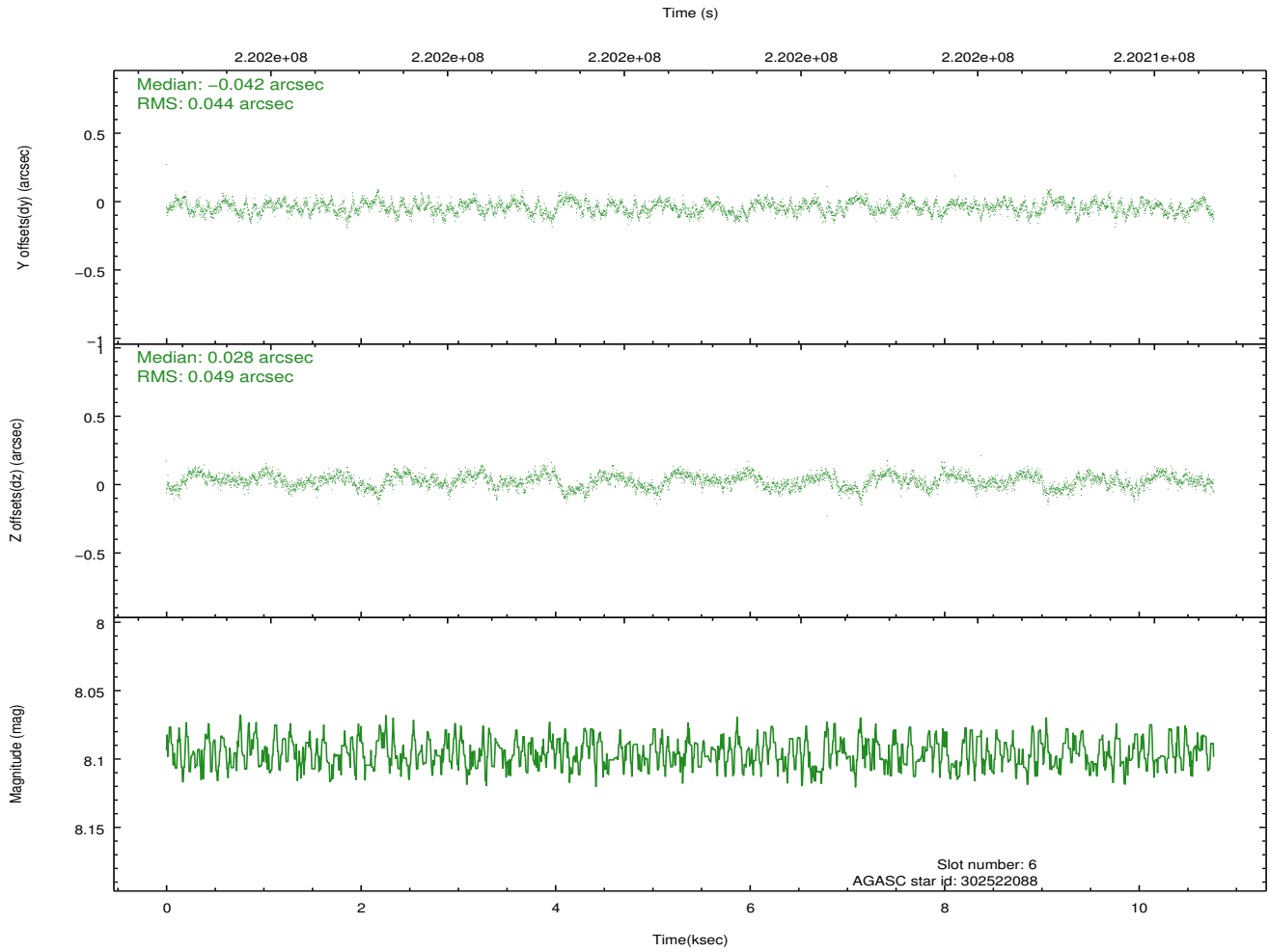
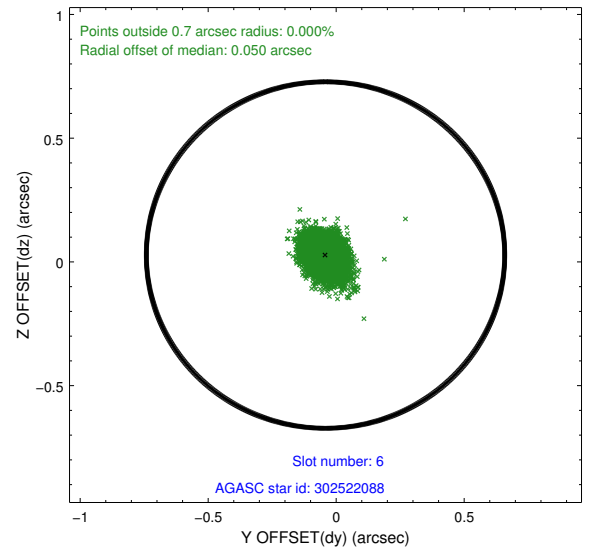
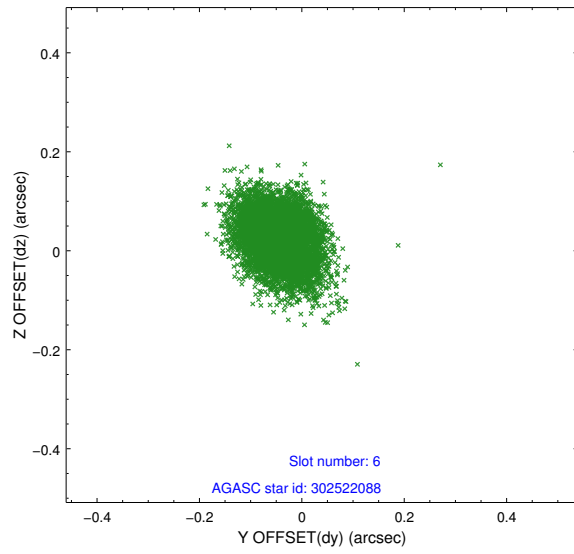
## 2.4.2 Slot 4



### 2.4.3 Slot 5

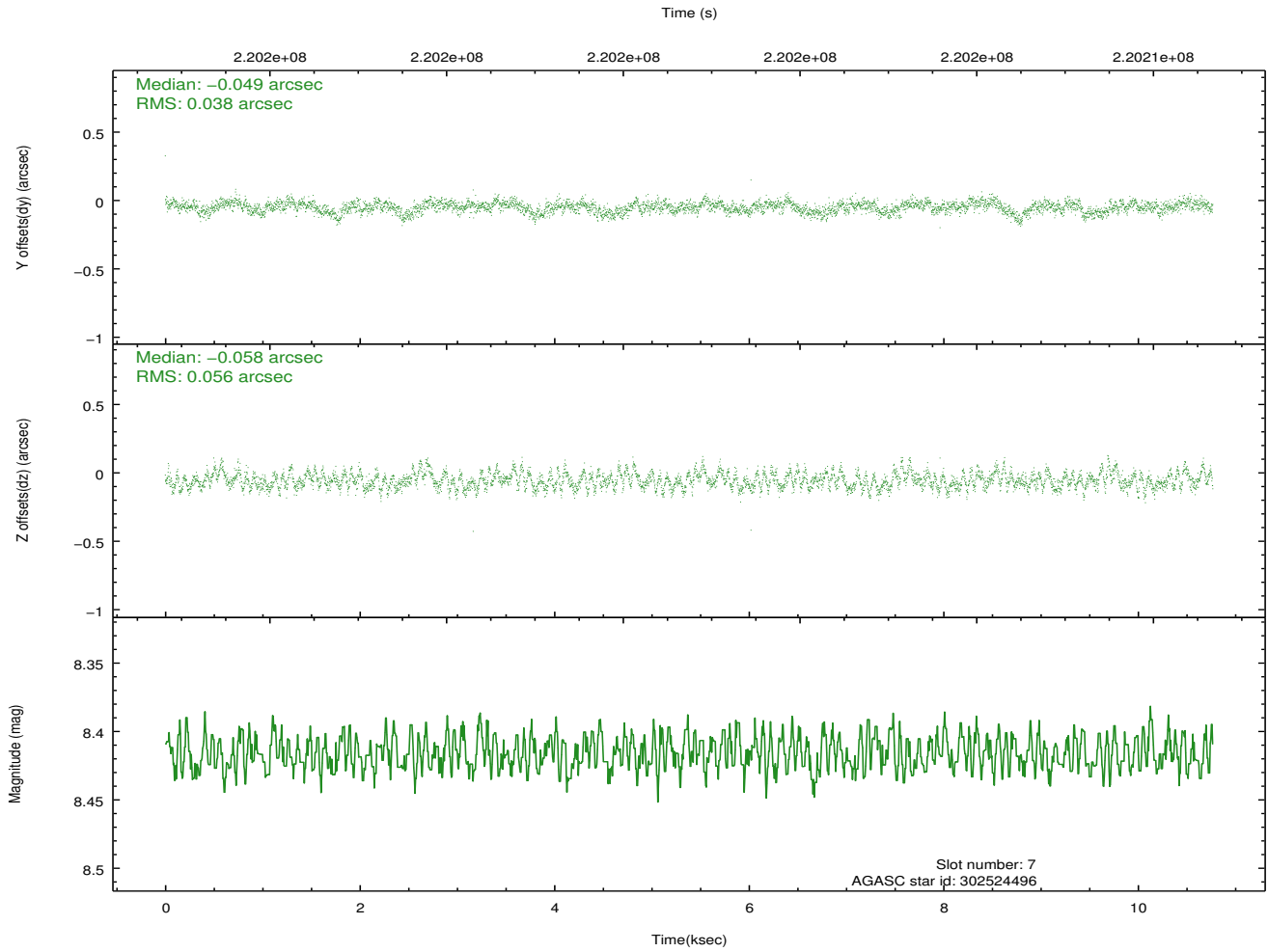
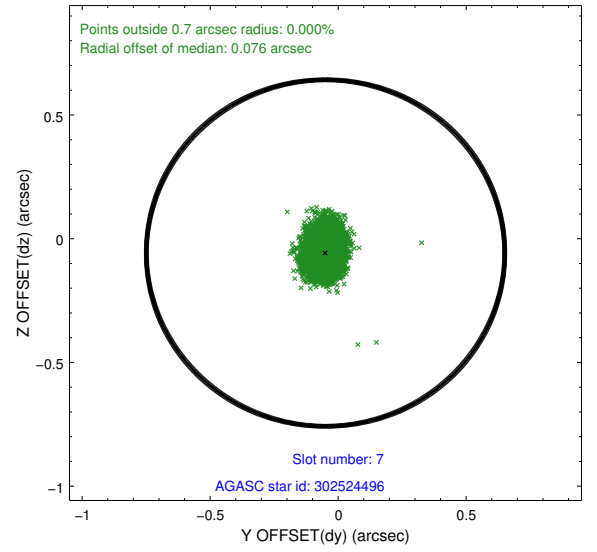
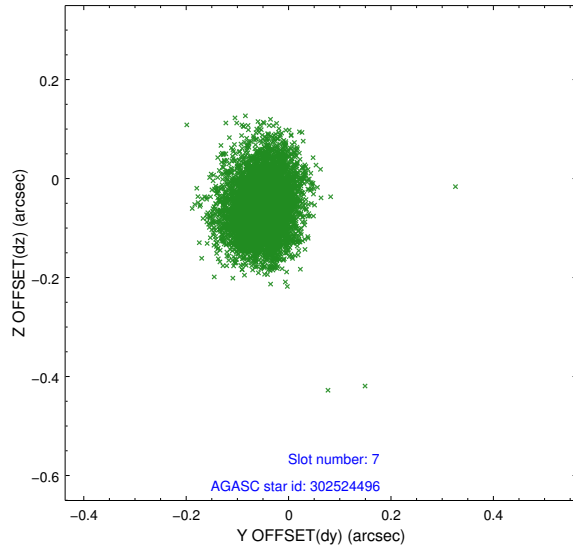


## 2.4.4 Slot 6



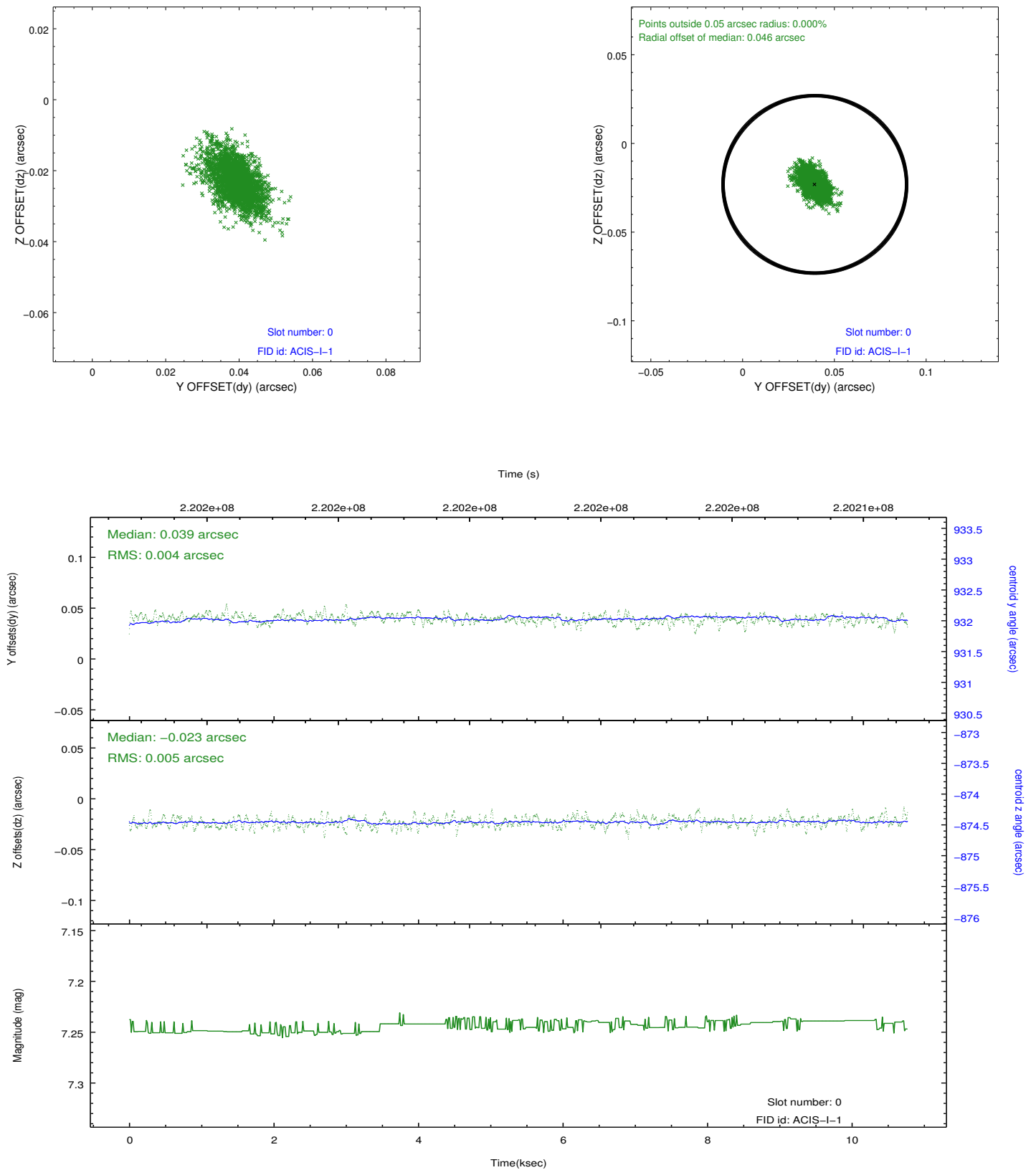


## 2.4.5 Slot 7

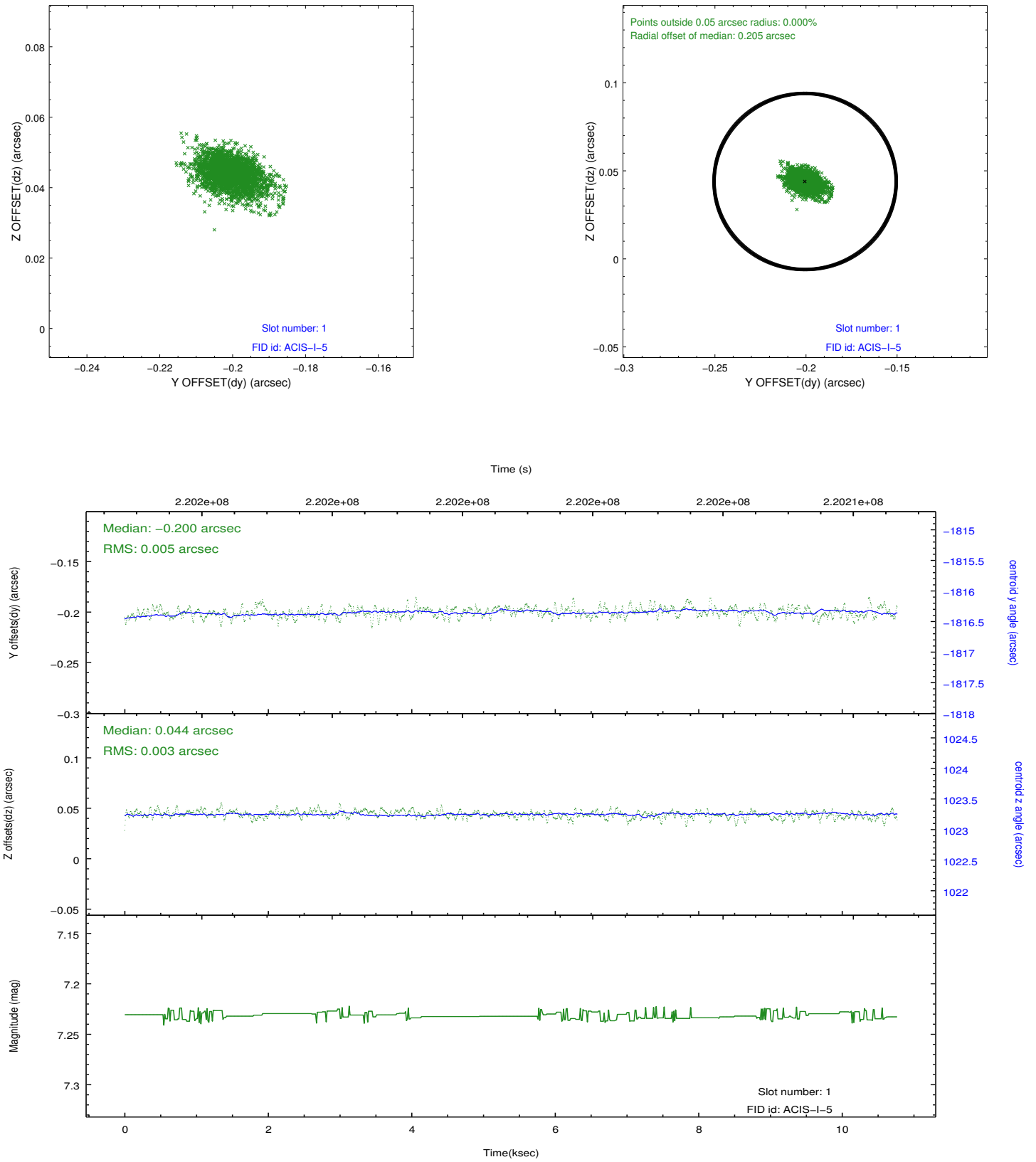


## 2.5 FID Slots

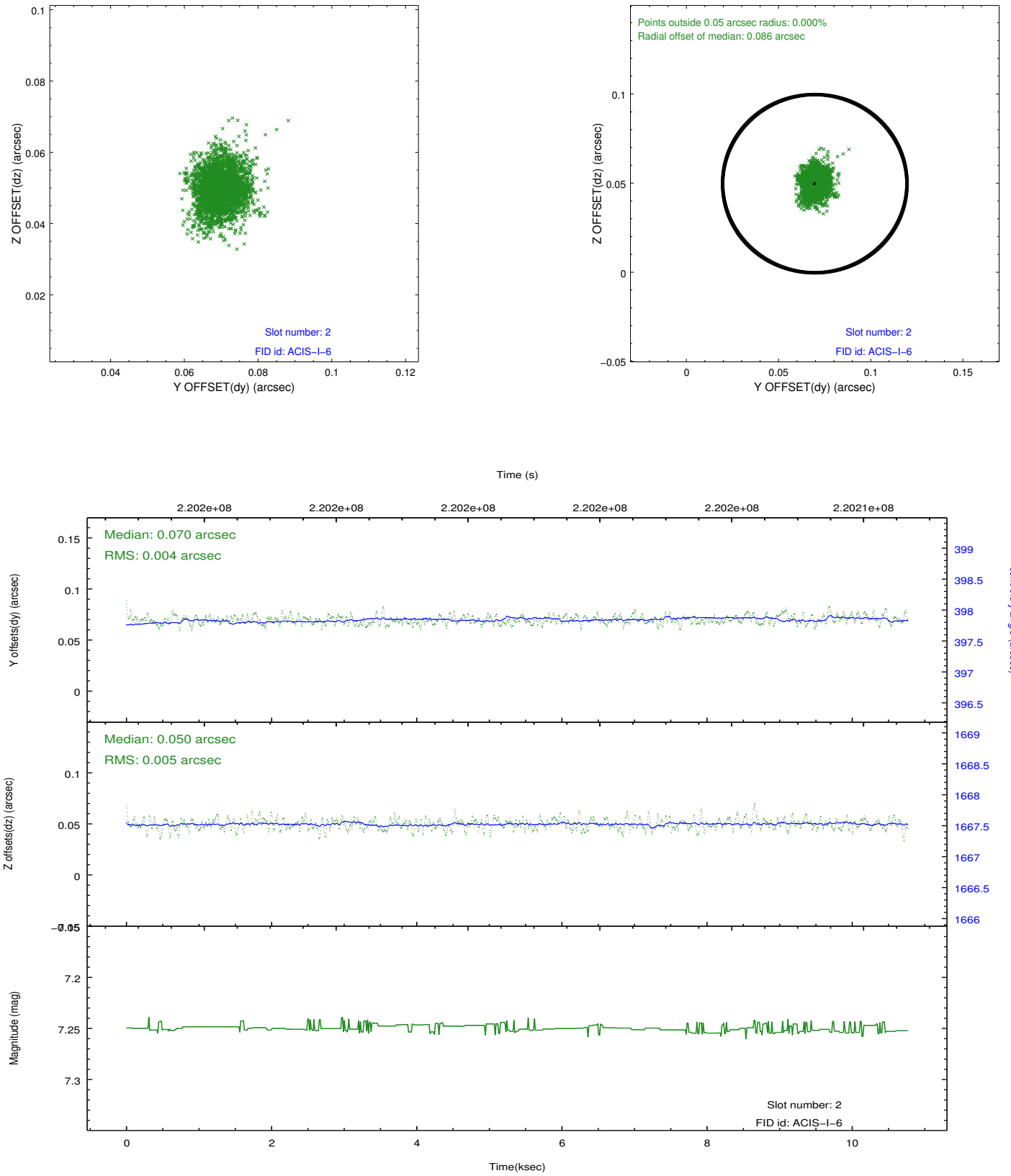
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2013.01.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.16799

### A.2 Comments