

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 10021 - L2 Version 2  
Chandra X-Ray Center

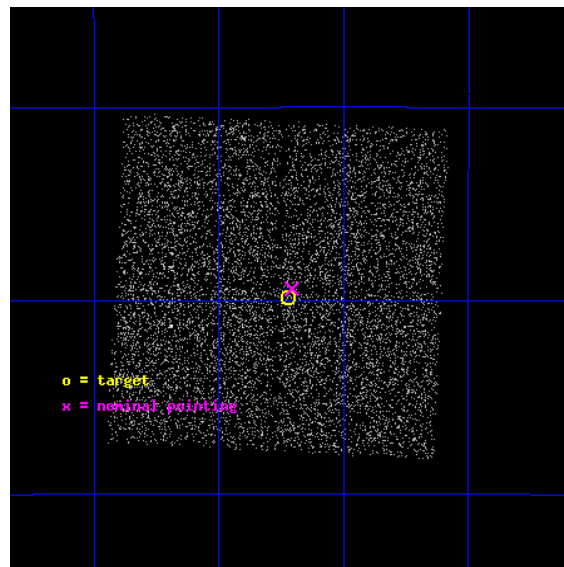
L2 Processing Date : Jun 1 2012

## 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

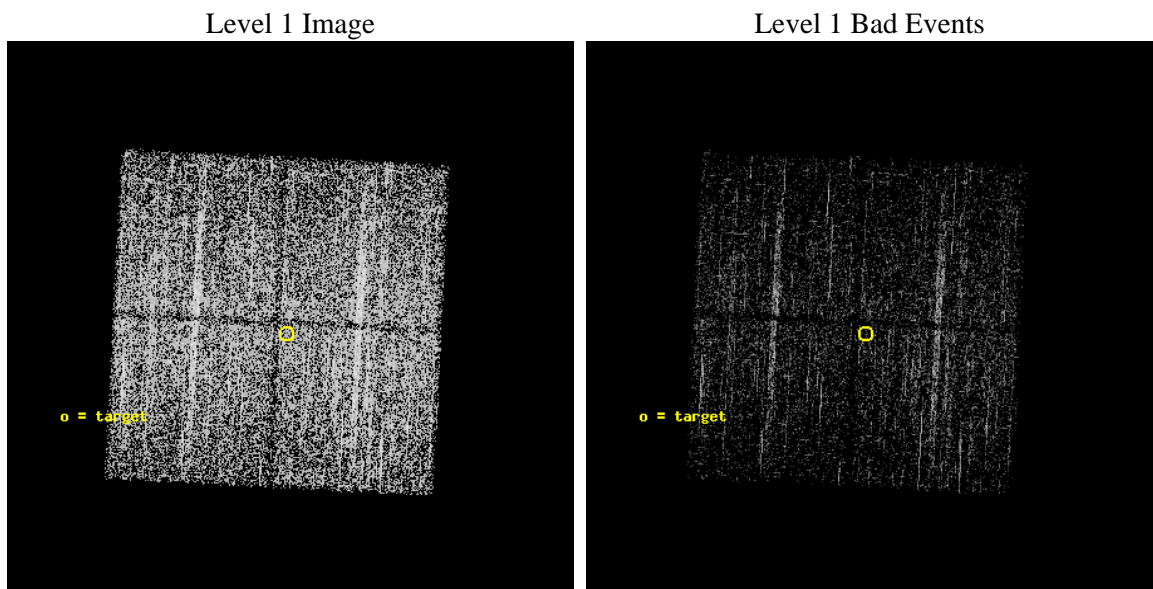
seq_num	400985	Sequence number
obs_id	10021	Observation id
title	Completing the Galactic Bulge Survey: categorising the plethora of faint X-ray sources in the Galactic Bulge	Proposal title
observer	dr Peter Jonker	Principal investigator
object	GBS6-10	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	263.430333	Observer's specified target RA [deg]
dec_targ	-29.497194	Observer's specified target Dec [deg]
ra_nom	263.42704435668	Nominal RA [deg]
dec_nom	-29.489767616611	Nominal Dec [deg]
roll_nom	92.932441378313	Nominal Roll [deg]
revision	2	Processing version of data
ontime	2176.200016737	Sum of GTIs [s]
livetime	2147.7663614232	Livetime [s]
ontime0	2176.200016737	Sum of GTIs [s]
ontime1	2176.200016737	Sum of GTIs [s]
ontime2	2176.200016737	Sum of GTIs [s]
ontime3	2176.200016737	Sum of GTIs [s]
l2events	10518	Number of level 2 events



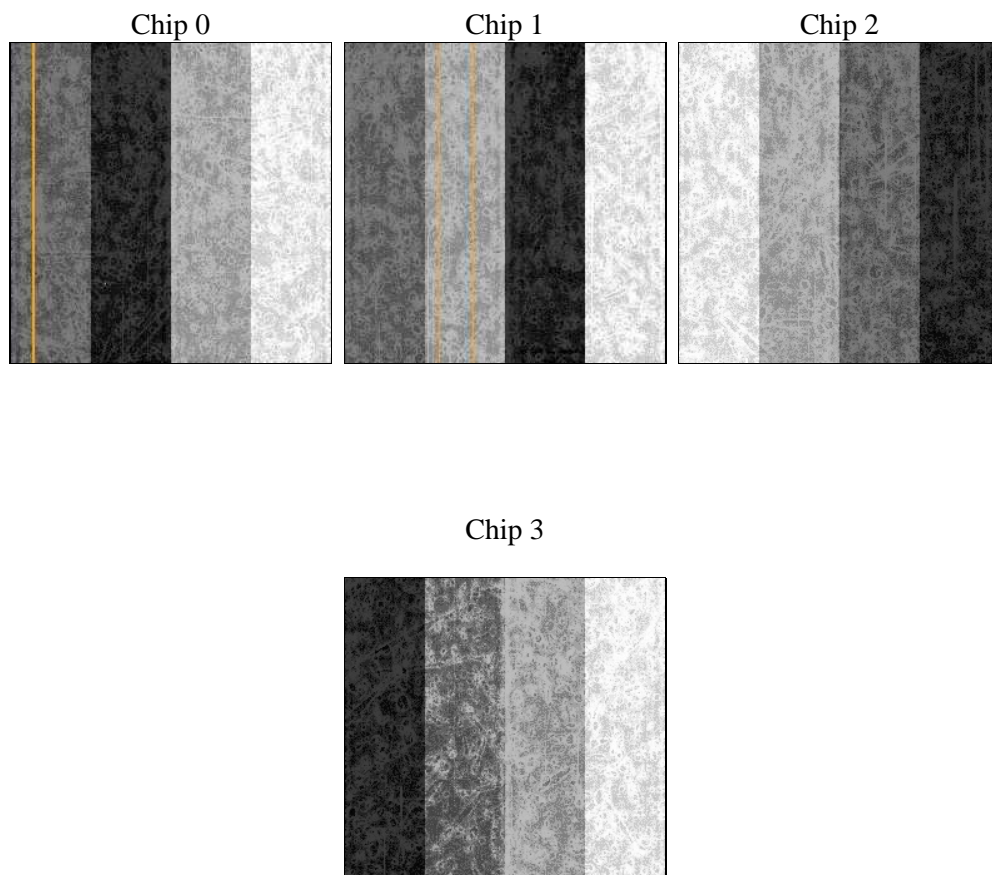
## 2 OBI

### 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	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	2176.200016737	Sum of GTIs [s]
caldsver	4.4.9	&#160	ontime0	2176.200016737	Sum of GTIs [s]
date	2012-06-01T05:47:43	Date and time of file creation	ontime1	2176.200016737	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	2176.200016737	Sum of GTIs [s]
			ontime3	2176.200016737	Sum of GTIs [s]
			l1events	92124	Number of level 1 events

### 2.1.4 Events

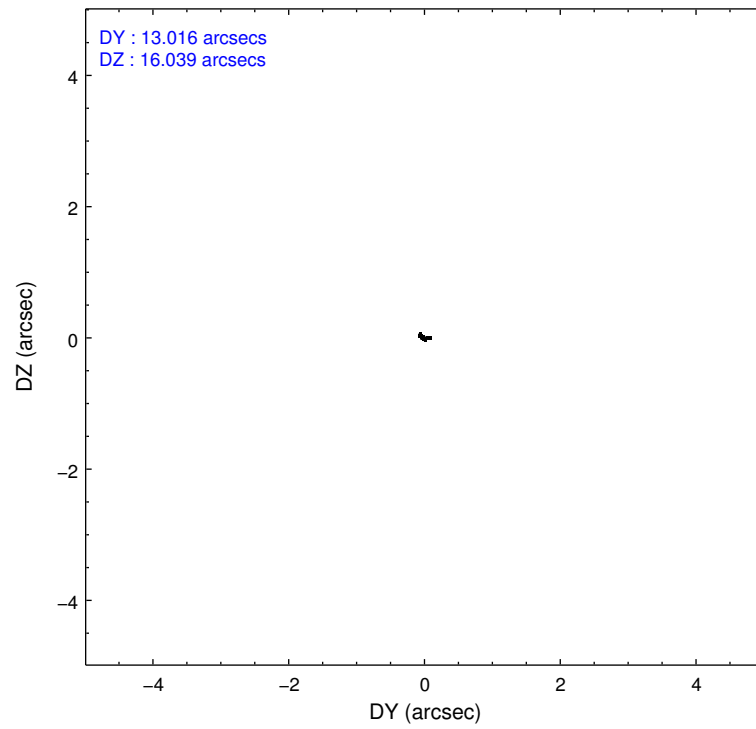
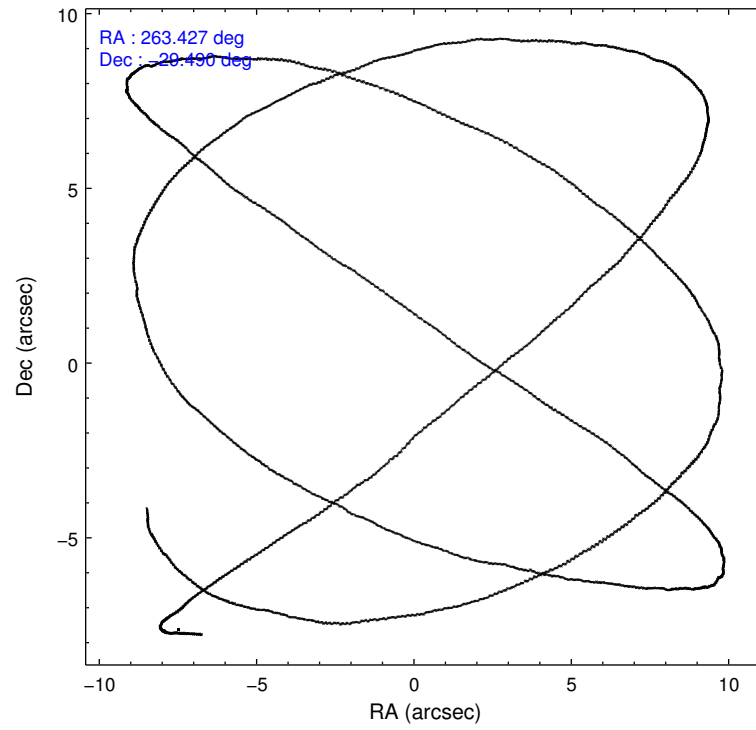
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	22064	22396	22520	25144
rejected events	19071	19147	19565	22233
rejected %	86%	85%	86%	88%

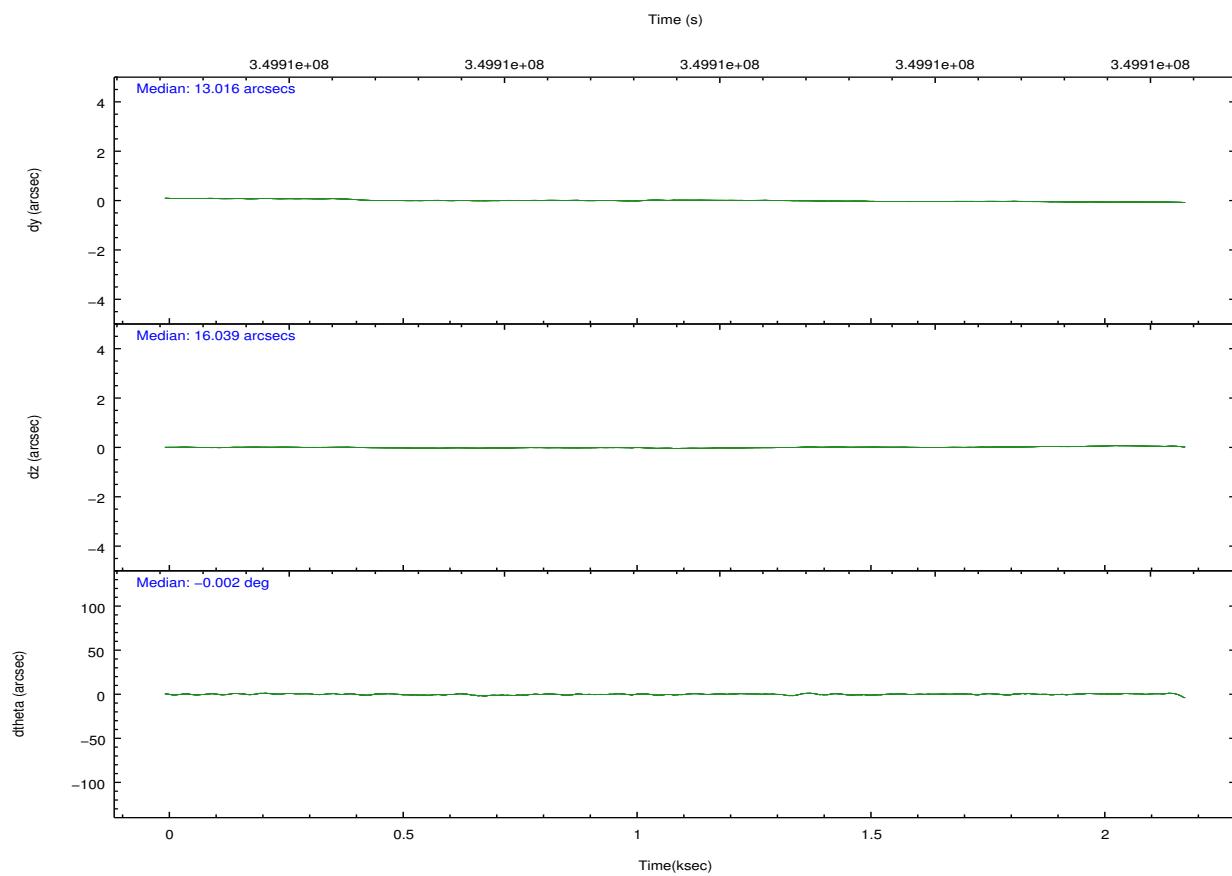
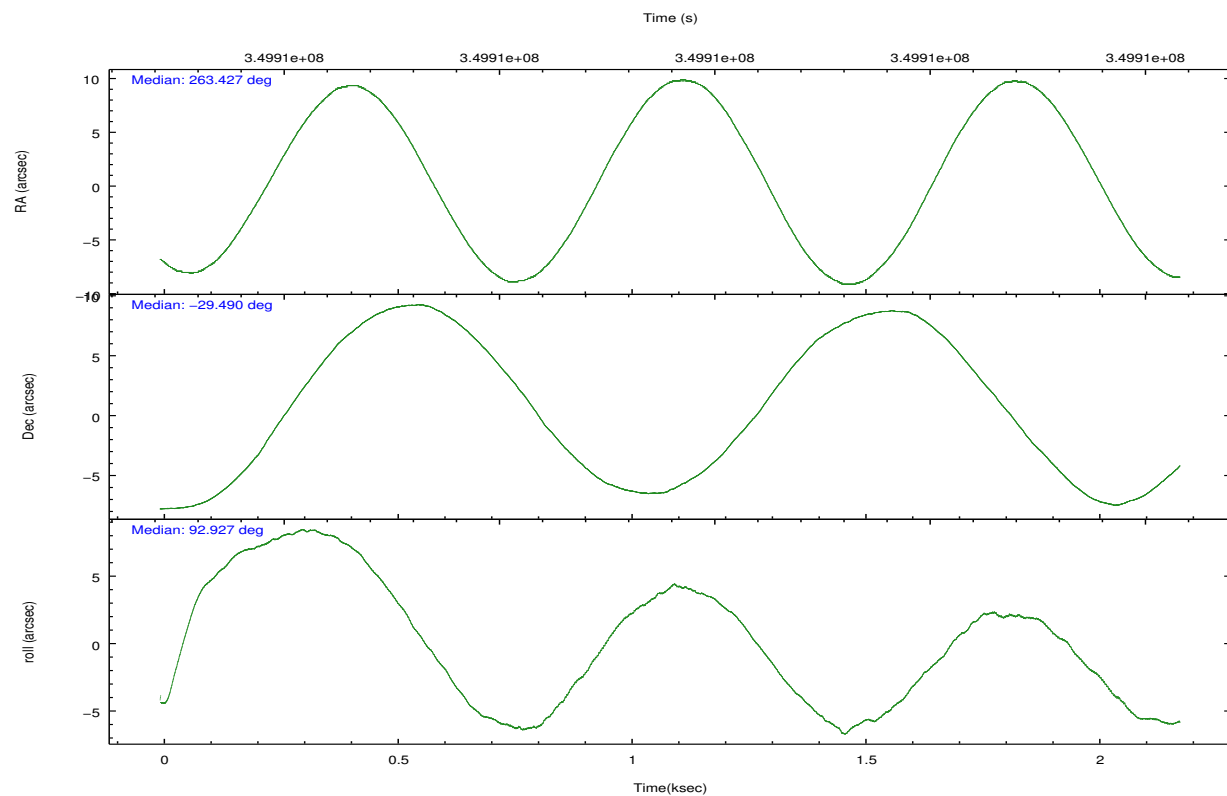
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	1439	1427	1577	1448
	6%	6%	7%	5%
grade 1 events	12	16	24	14
	0%	0%	0%	0%
grade 2 events	735	825	646	612
	3%	3%	2%	2%
grade 3 events	292	281	245	300
	1%	1%	1%	1%
grade 4 events	248	330	290	291
	1%	1%	1%	1%
grade 5 events	1005	1141	956	1242
	4%	5%	4%	4%
grade 6 events	547	671	483	534
	2%	2%	2%	2%
grade 7 events	17786	17705	18299	20703
	80%	79%	81%	82%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-0123	ACIS-0123	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	263.444404	263.427044356683	Subarray requested	NONE	NONE
[deg] Pointing Dec	-29.512628	-29.48976761661132	Alternating exposures requested	N	N
[deg] Pointing Roll	92.732328	92.93244137831256	[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	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	349911980.184000	349911604.45909			
Observation start date	2009-02-01T21:45:14	2009-02-01T21:40:04			
[s] Observation end time (MET)	349913980.184000	349914999.77176			
Observation end date	2009-02-01T22:18:34	2009-02-01T22:36:39			
Read mode	TIMED	TIMED			

## 2.3 Aspect



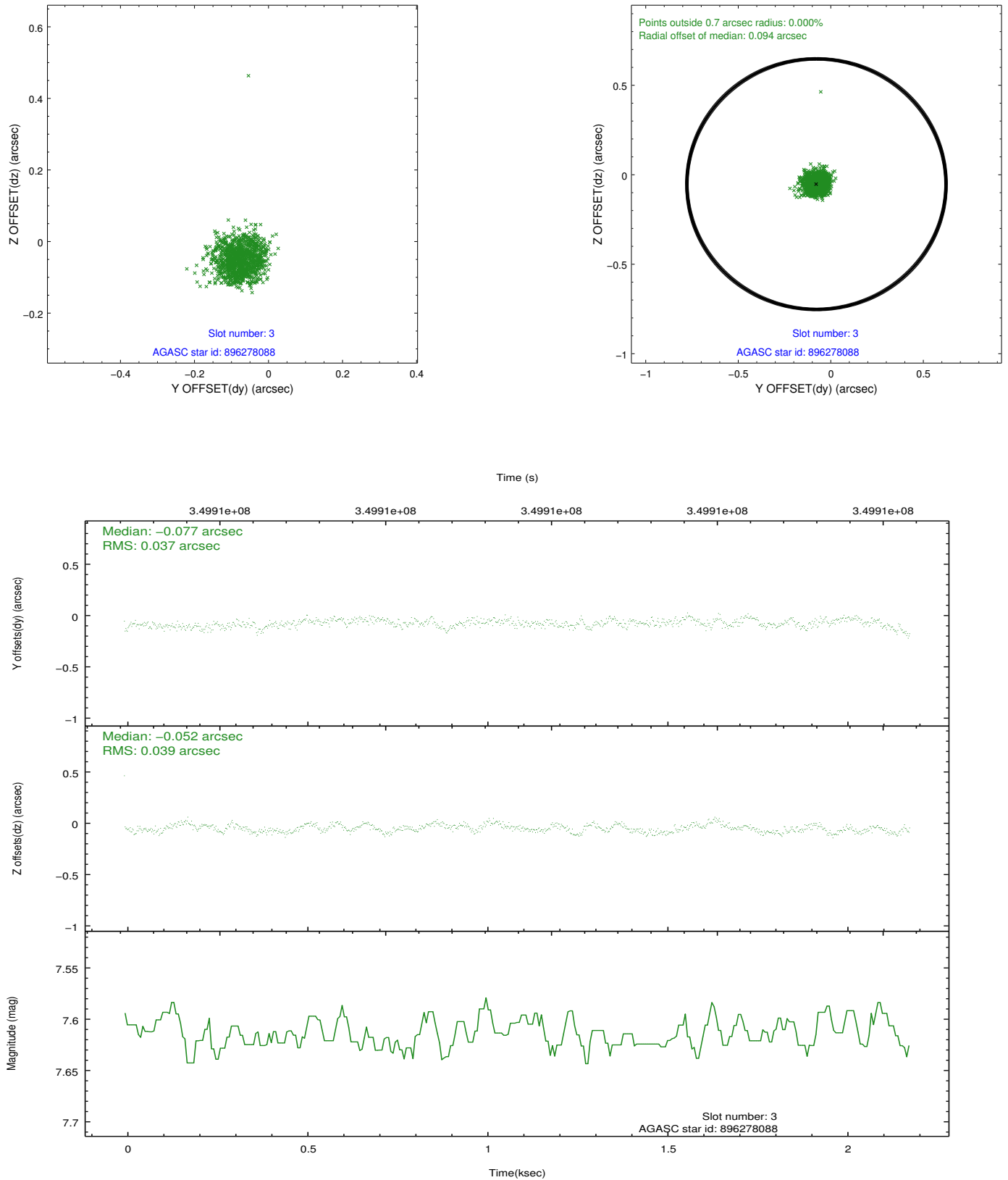


### Slot Statistics

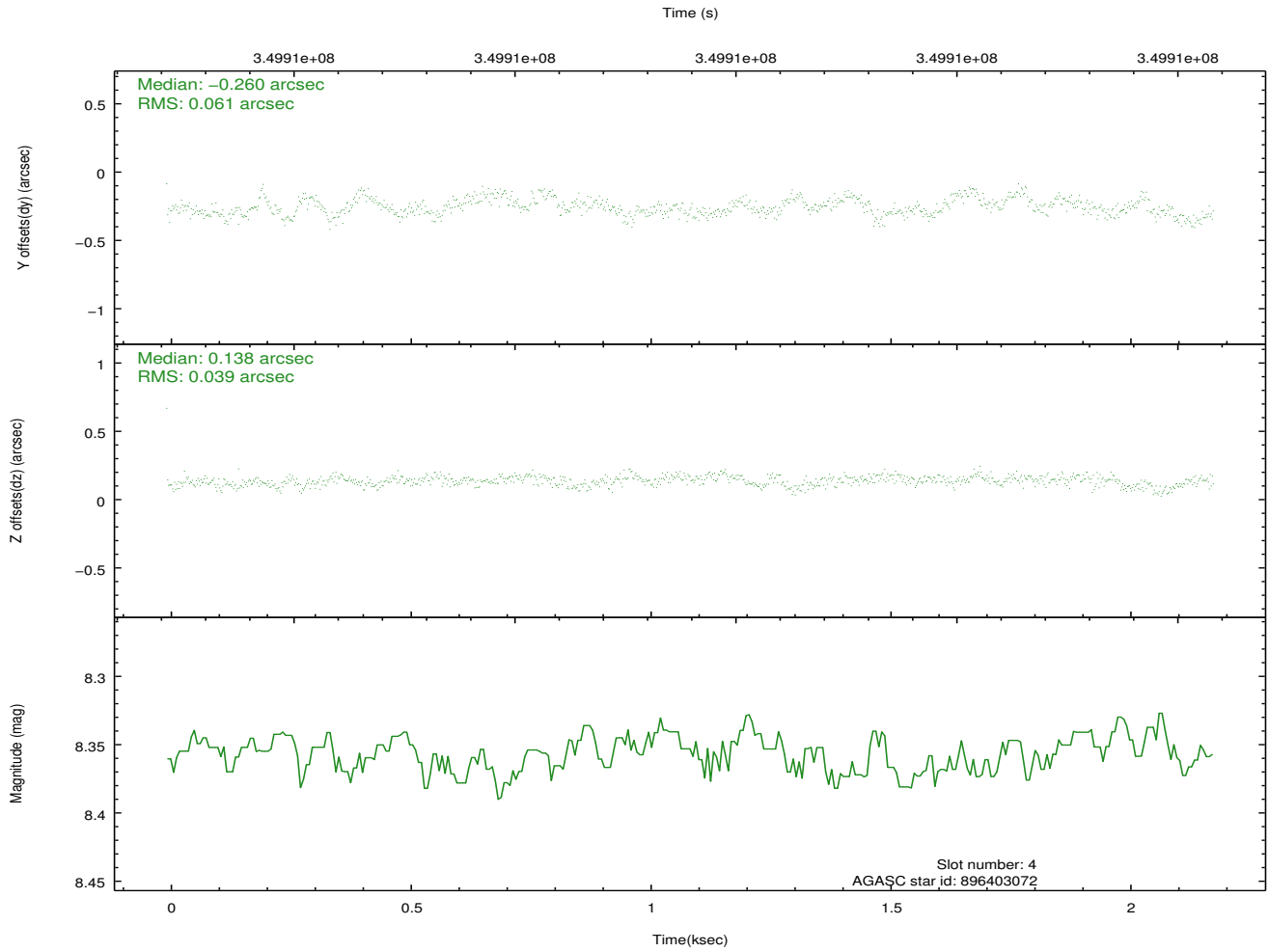
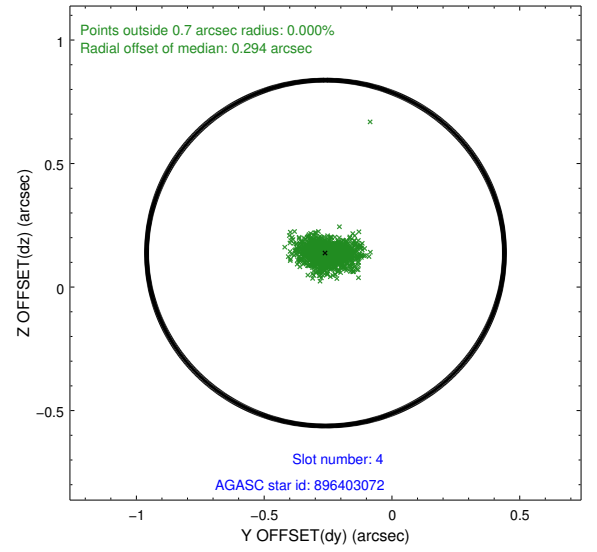
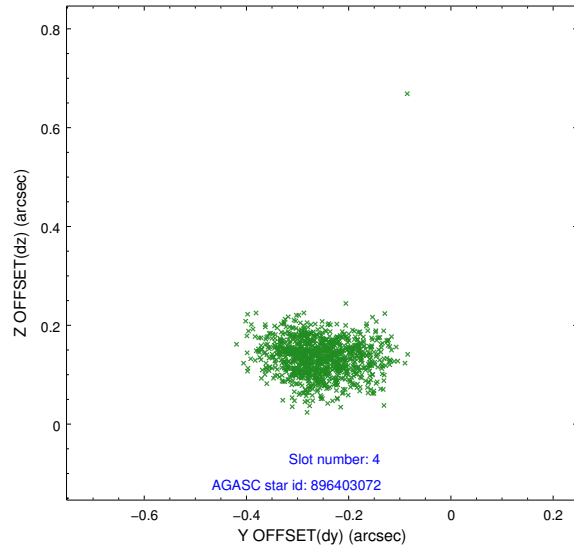
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-4	6.97	532	0.123	0.043	0.007	0.013	0.000000	0.000000	2146.58	1060.25
1	FID	ACIS-I-5	7.05	532	-0.218	0.036	0.006	0.011	0.000000	0.000000	-1817.88	1059.93
2	FID	ACIS-I-6	7.04	532	-0.005	-0.012	0.008	0.014	0.000000	0.000000	388.79	1704.21
3	GUIDE	896278088	7.61	1065	-0.077	-0.052	0.056	0.086	263.476198	-29.223388	1035.94	-149.34
4	GUIDE	896403072	8.36	1065	-0.260	0.138	0.074	0.126	263.956439	-28.943077	1969.26	-1708.69
5	GUIDE	966662760	8.69	1063	-0.037	-0.113	0.085	0.142	262.815203	-30.091834	-1992.44	2055.47
6	GUIDE	966663320	8.38	1065	0.217	-0.153	0.111	0.162	263.144579	-30.119819	-2141.48	1038.59
7	GUIDE	966794640	9.32	1059	0.154	0.195	0.114	0.189	263.854004	-30.029028	-1921.09	-1185.46

## 2.4 Star Slots

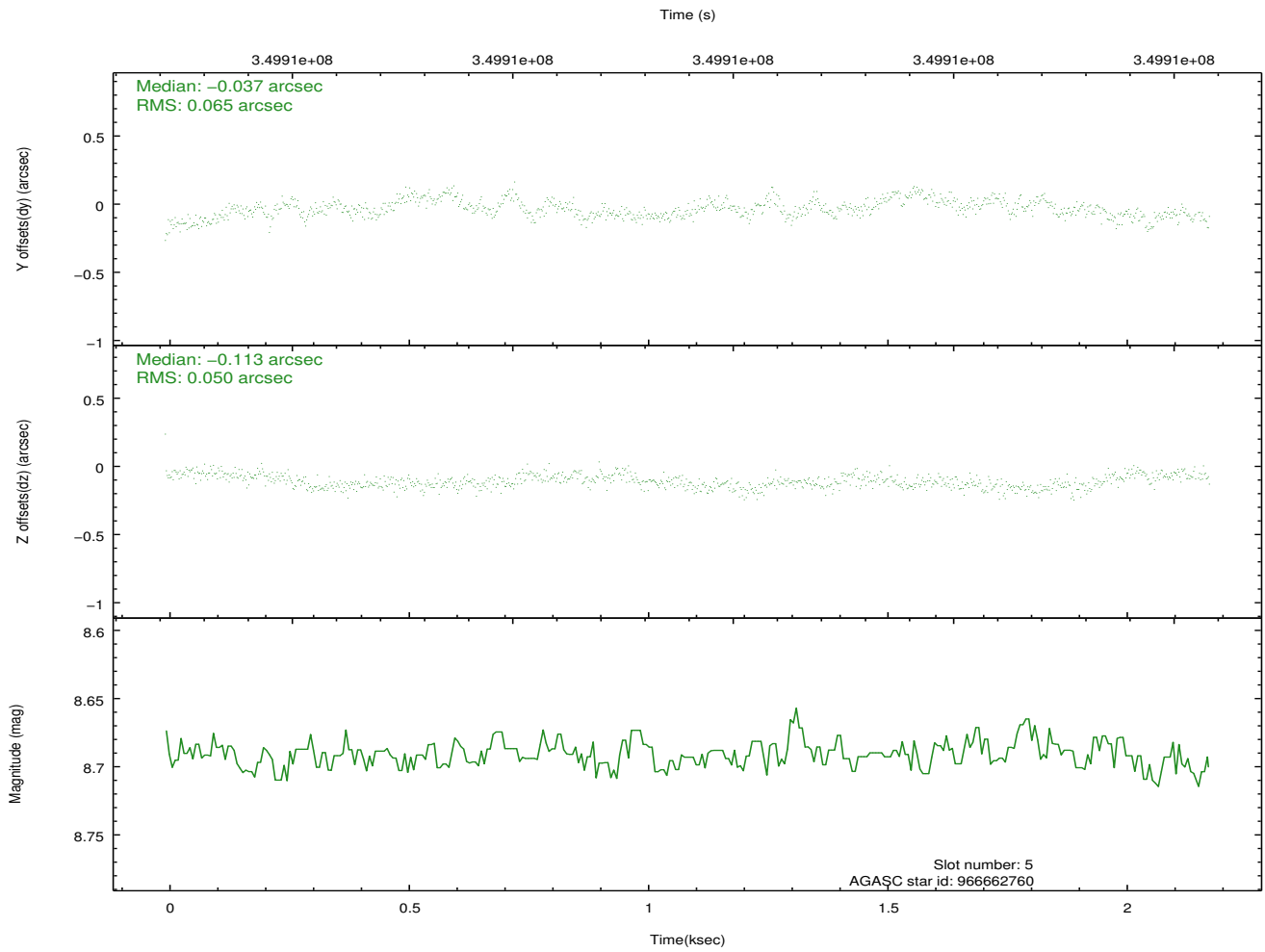
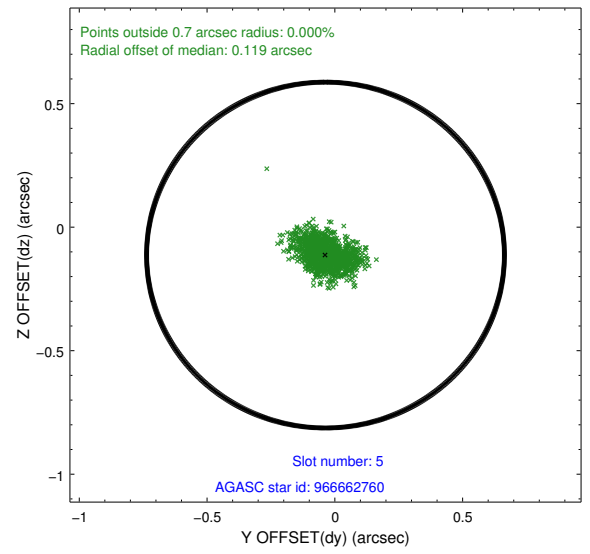
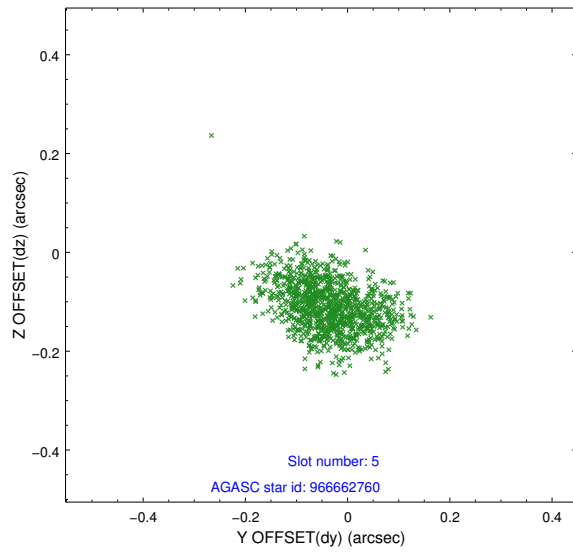
### 2.4.1 Slot 3



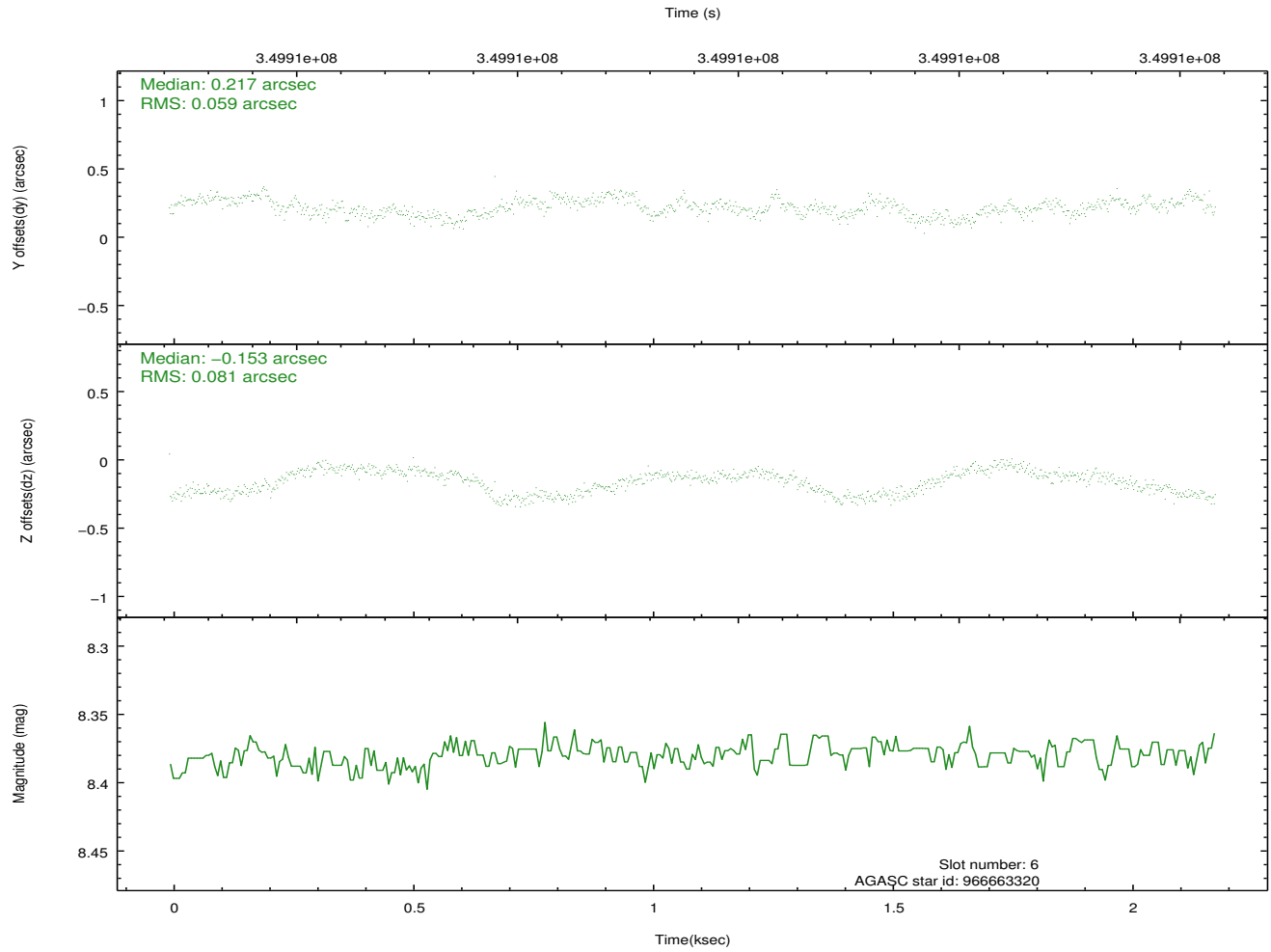
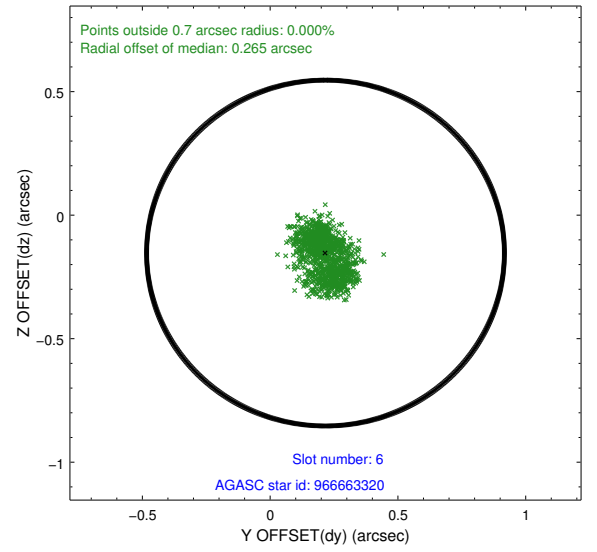
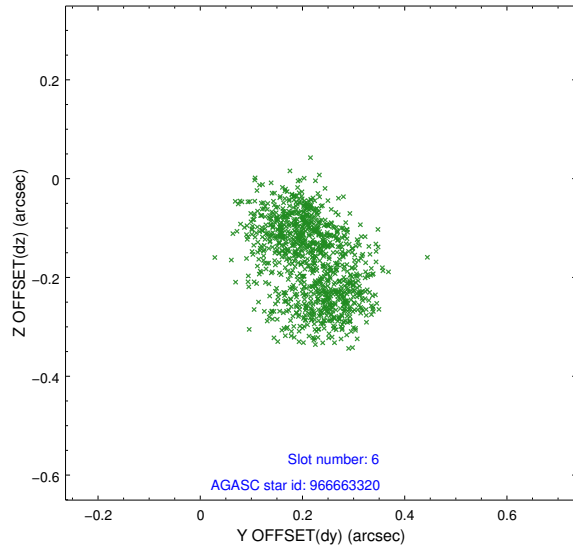
## 2.4.2 Slot 4



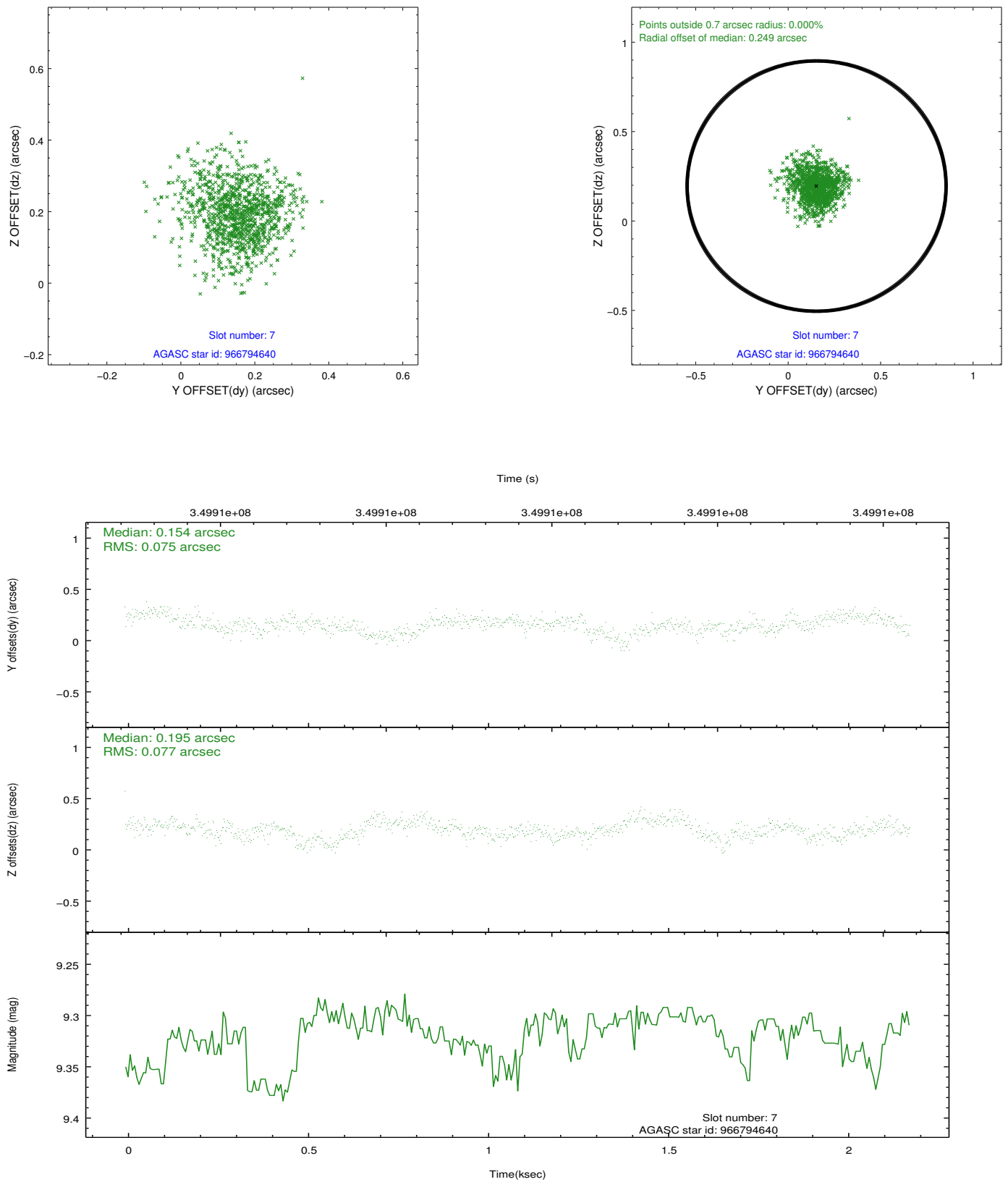
### 2.4.3 Slot 5



## 2.4.4 Slot 6

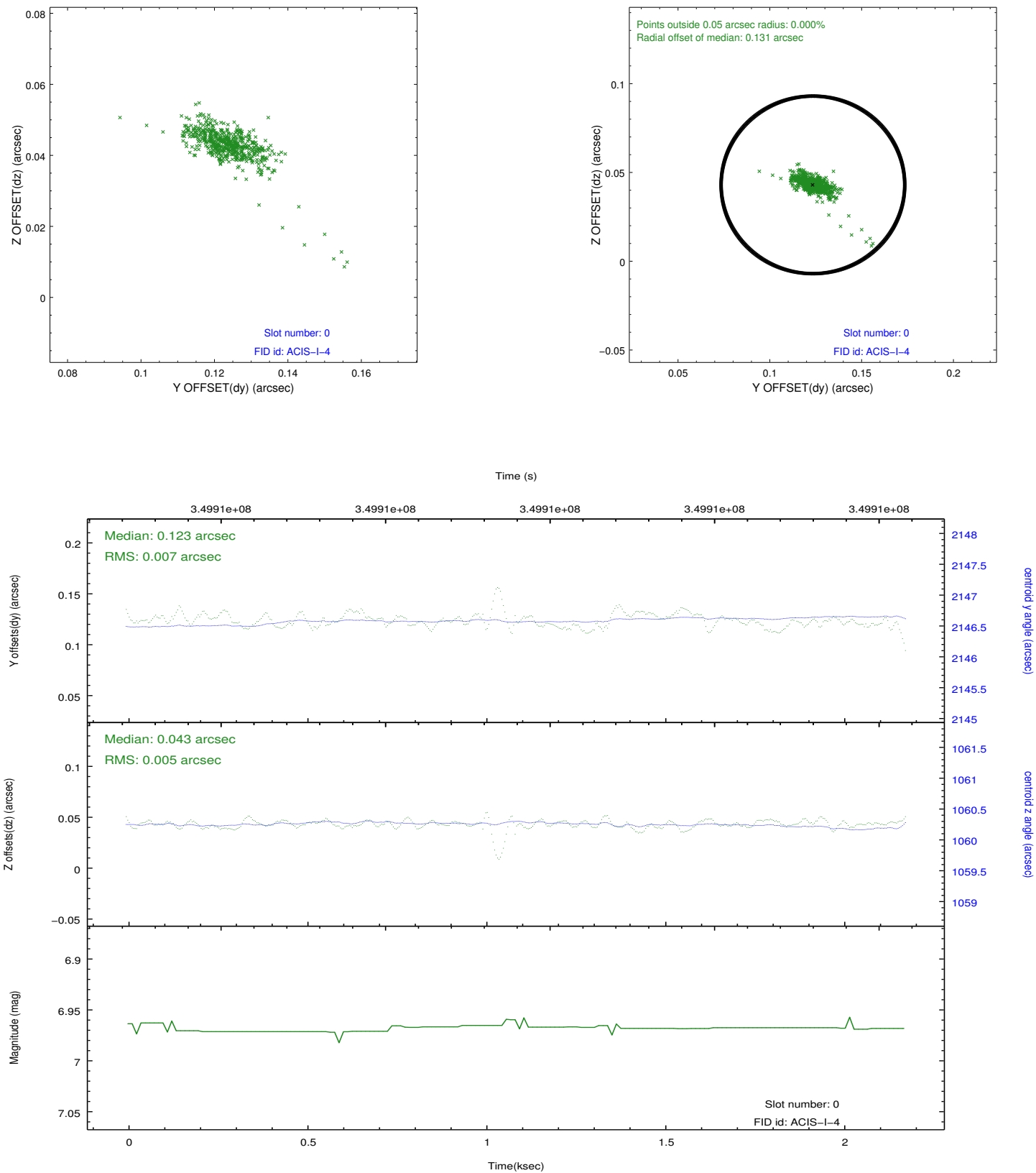


## 2.4.5 Slot 7

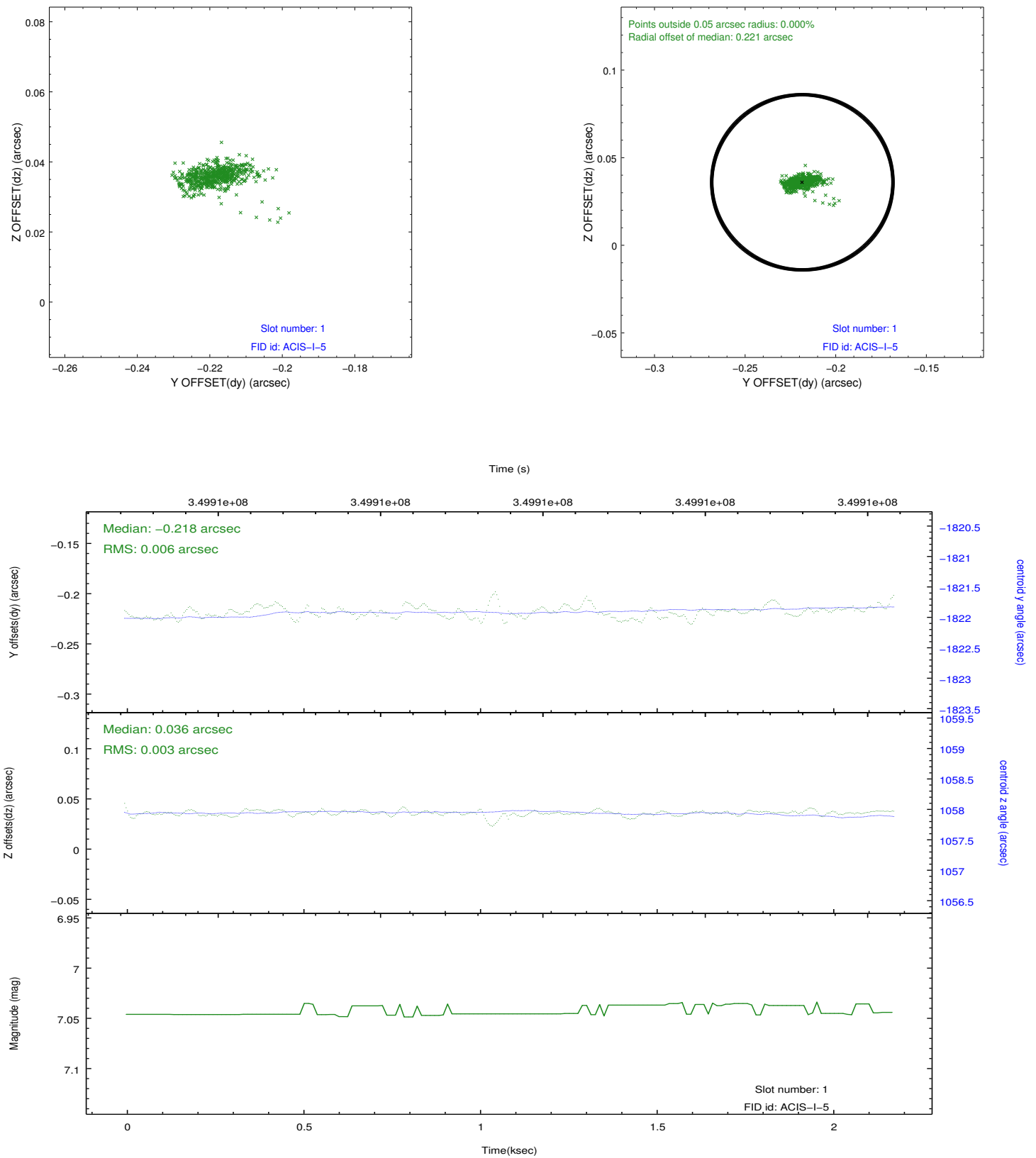


## 2.5 FID Slots

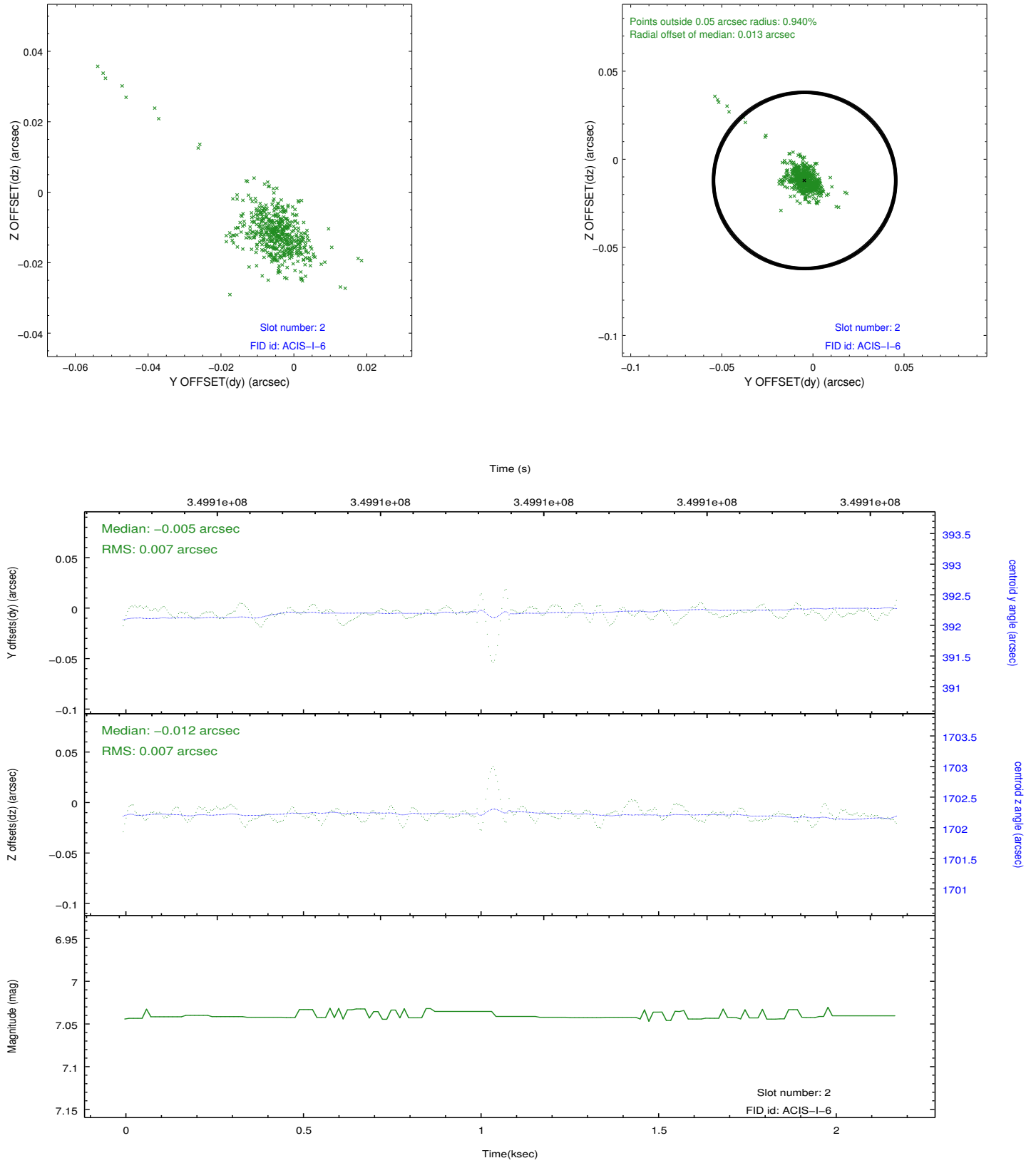
### 2.5.1 Slot 0



## 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)	2012.06.06
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	2.17620001

## A.2 Comments

Joint proposal with NOAO.