

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 9384 - L2 Version 2  
Chandra X-Ray Center

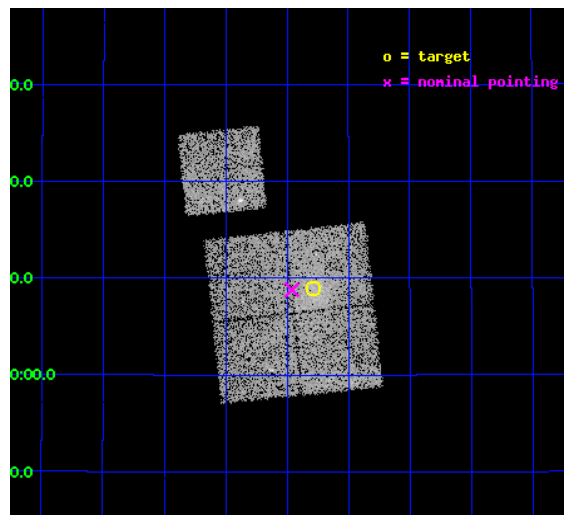
L2 Processing Date : May 4 2012

## 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

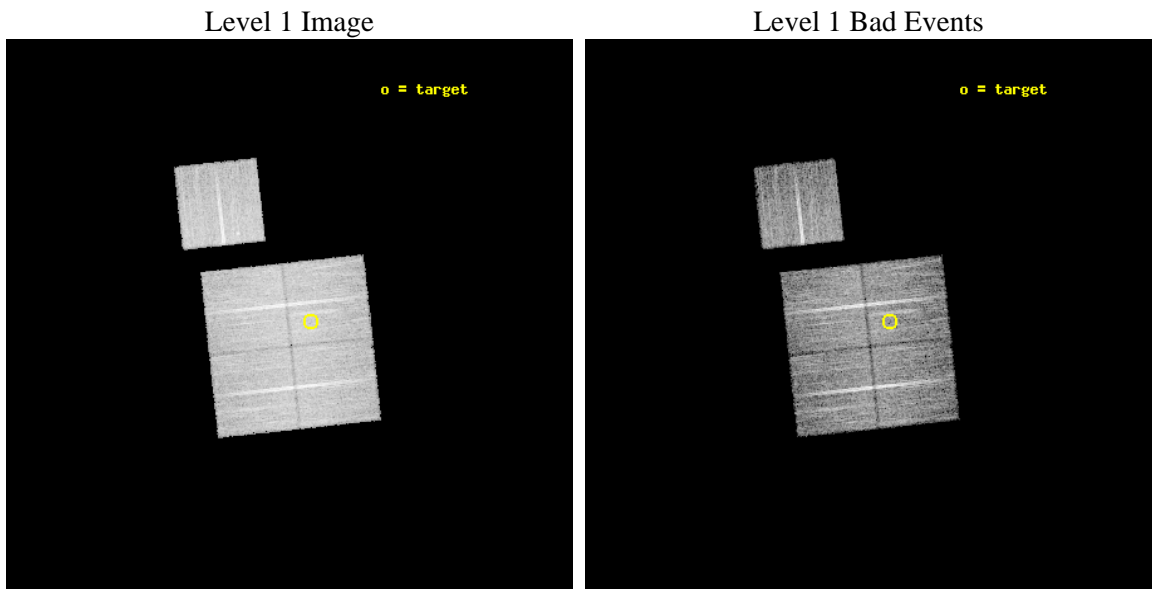
seq_num	800721	Sequence number
obs_id	9384	Observation id
title	SCALING RELATIONS FOR LOW-MASS GALAXY CLUSTERS AND GROUPS	Proposal
observer	Dr. Alexey Vikhlinin	Principal investigator
object	cl1533+3108	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	233.32125	Observer's specified target RA [deg]
dec_targ	31.148611	Observer's specified target Dec [deg]
ra_nom	233.36538558099	Nominal RA [deg]
dec_nom	31.146804307827	Nominal Dec [deg]
roll_nom	353.84782080488	Nominal Roll [deg]
revision	2	Processing version of data
ontime	10120.483403683	Sum of GTIs [s]
livetime	9988.2518374221	Livetime [s]
ontime0	10117.219313323	Sum of GTIs [s]
ontime1	10120.401323676	Sum of GTIs [s]
ontime2	10120.442363679	Sum of GTIs [s]
ontime3	10120.483403683	Sum of GTIs [s]
ontime6	10120.31924367	Sum of GTIs [s]
l2events	36683	Number of level 2 events



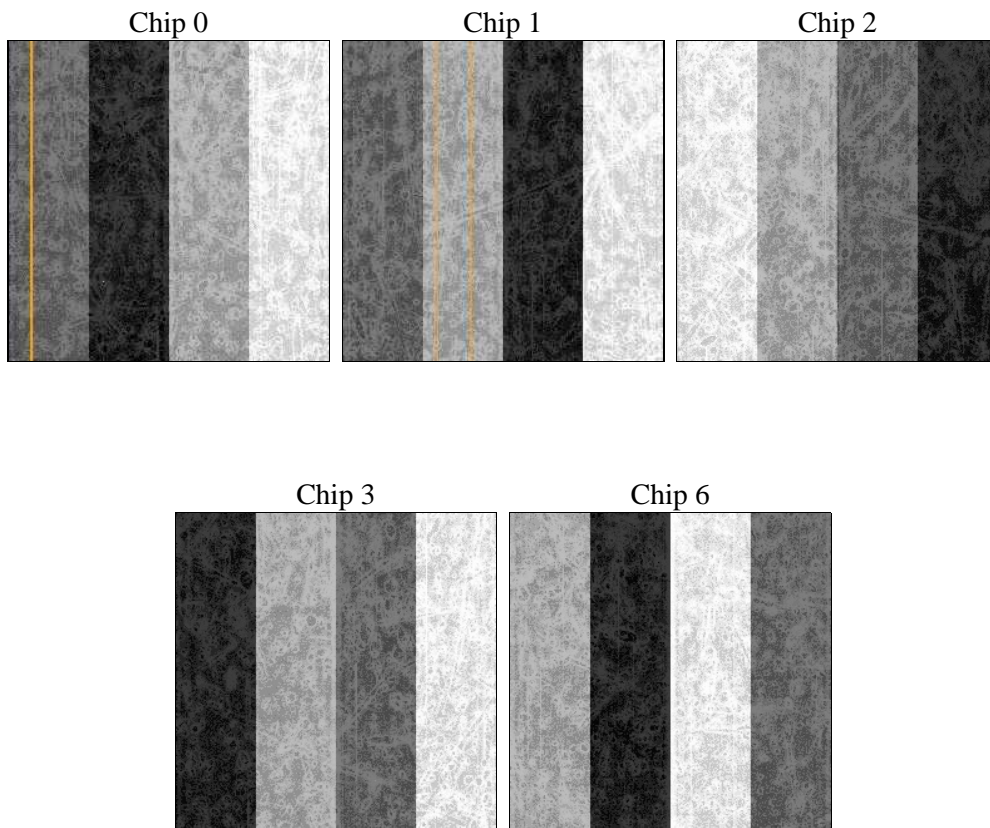
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	10120.483403683	Sum of GTIs [s]
caldsver	4.4.9	&#160	ontime0	10117.219313323	Sum of GTIs [s]
date	2012-05-04T13:44:24	Date and time of file creation	ontime1	10120.401323676	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	10120.442363679	Sum of GTIs [s]
			ontime3	10120.483403683	Sum of GTIs [s]
			ontime6	10120.31924367	Sum of GTIs [s]
			l1events	403279	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	77000	76366	86270	82176	81467
rejected events	68675	66996	78066	72647	73042
rejected %	89%	87%	90%	88%	89%

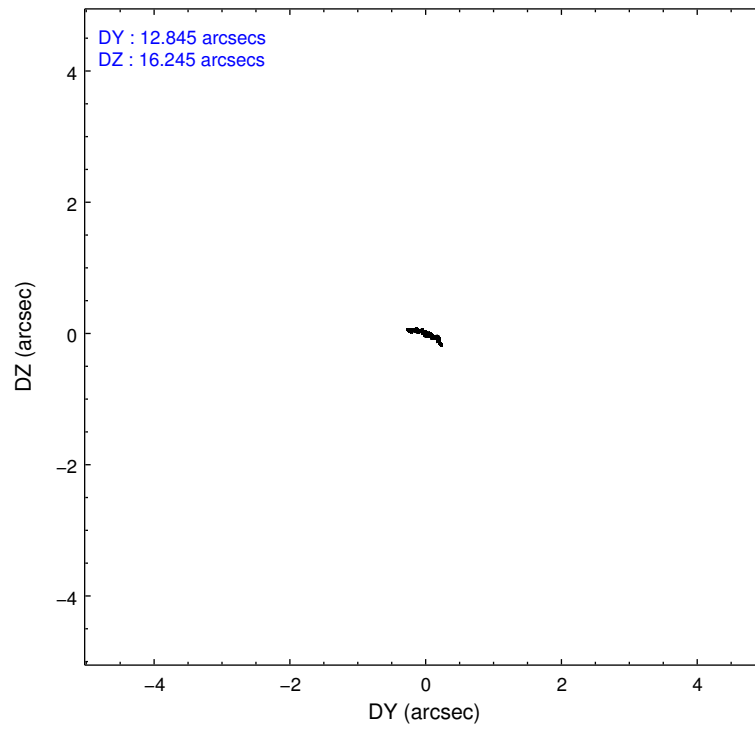
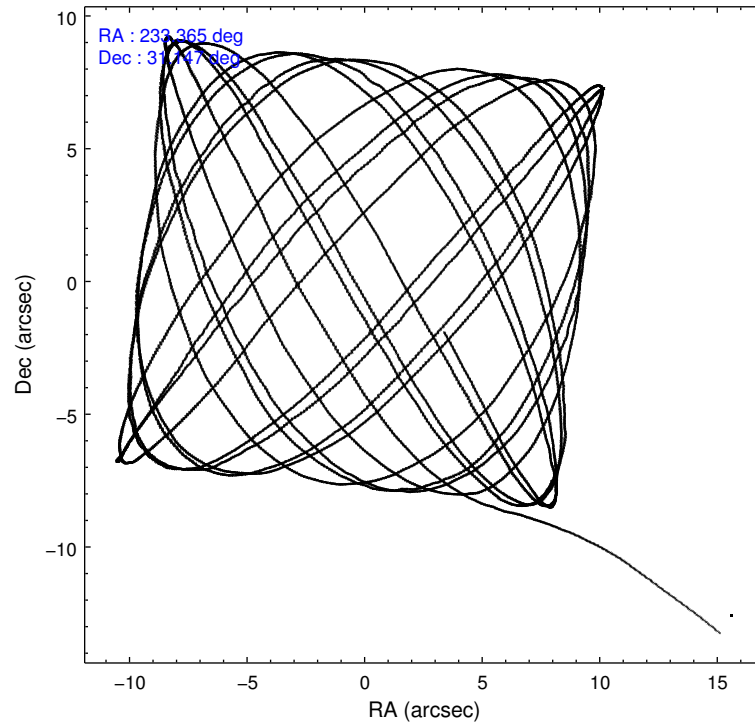
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	3001	3564	3088	4291	3034
	3%	4%	3%	5%	3%
grade 1 events	59	50	41	55	39
	0%	0%	0%	0%	0%
grade 2 events	2069	2102	1967	1817	1798
	2%	2%	2%	2%	2%
grade 3 events	893	937	844	961	971
	1%	1%	0%	1%	1%
grade 4 events	823	933	900	927	913
	1%	1%	1%	1%	1%
grade 5 events	2800	3037	2639	3295	3252
	3%	3%	3%	4%	3%
grade 6 events	1545	1842	1413	1537	1714
	2%	2%	1%	1%	2%
grade 7 events	65810	63901	75378	69293	69746
	85%	83%	87%	84%	85%

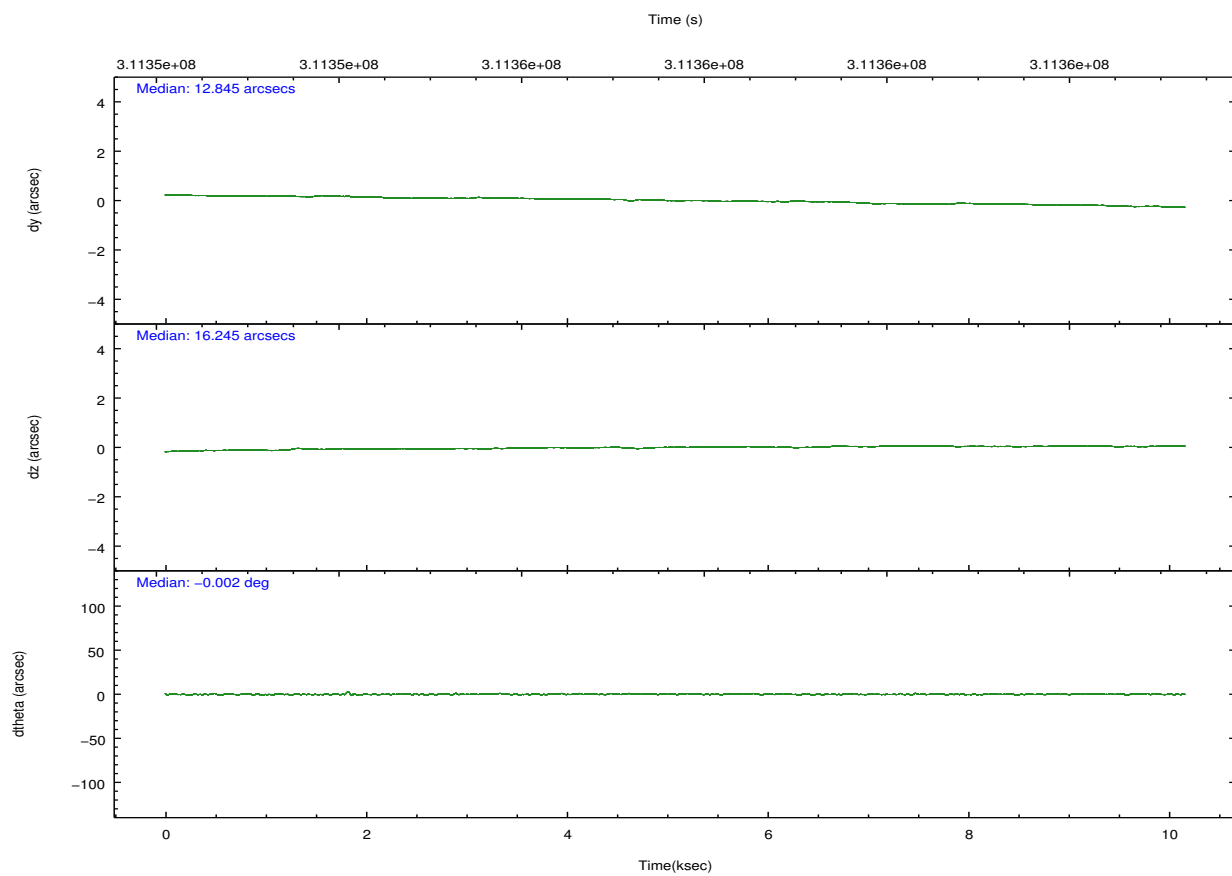
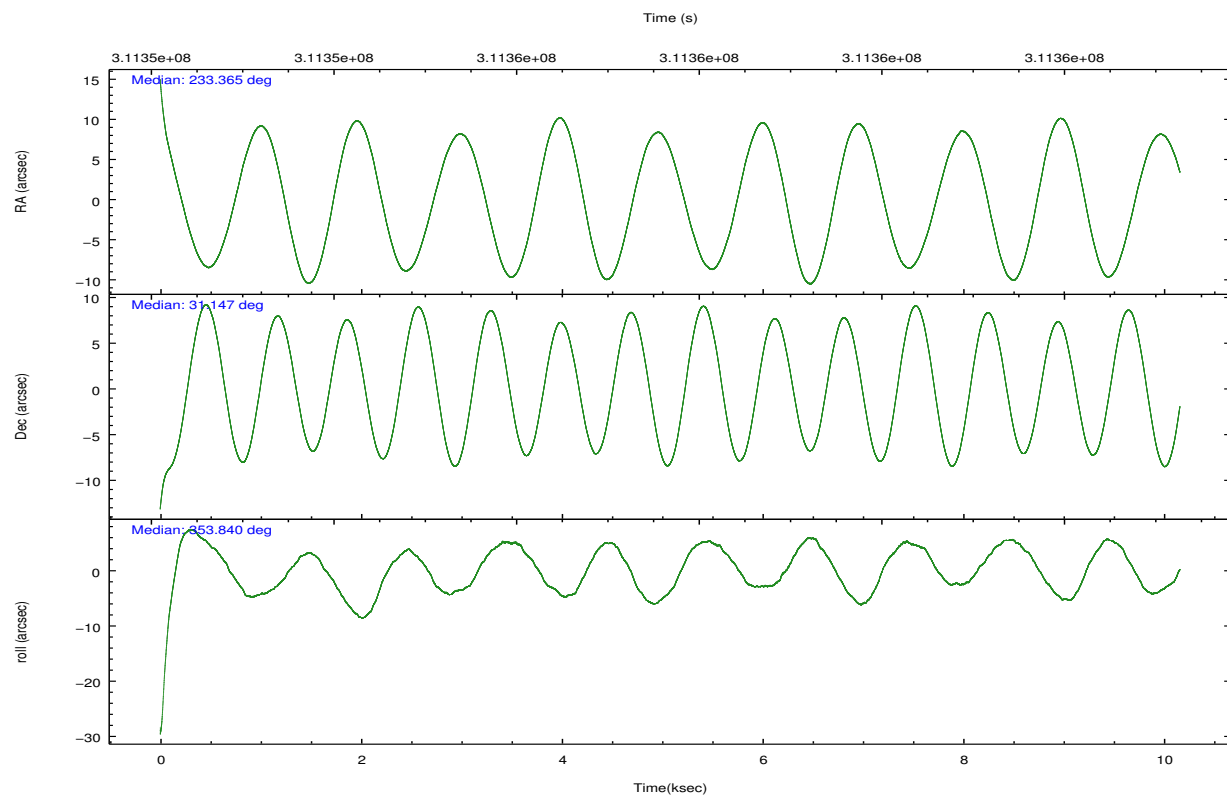


## 2.2 Compared Parameters

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	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	233.336025	233.365385580987	CCD I2 on	Y	Y
[deg] Pointing Dec	31.135630	31.14680430782711	CCD I3 on	Y	Y
[deg] Pointing Roll	353.654346	353.8478208048768	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O1	Y
[mm] SIM translation stage pos	-228.592463	-228.5990329025337	CCD S3 on	N	N
[mm] SIM translation stage offset	-5	-4.993420100396037	CCD S4 on	N	N
[s] Observation start time (MET)	311352760.184000	311351791.60077	CCD S5 on	N	N
Observation start date	2007-11-13T14:51:35	2007-11-13T14:36:31	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	311362760.184000	311363340.27633	On-chip summing requested	N	N
Observation end date	2007-11-13T17:38:15	2007-11-13T17:49:00	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



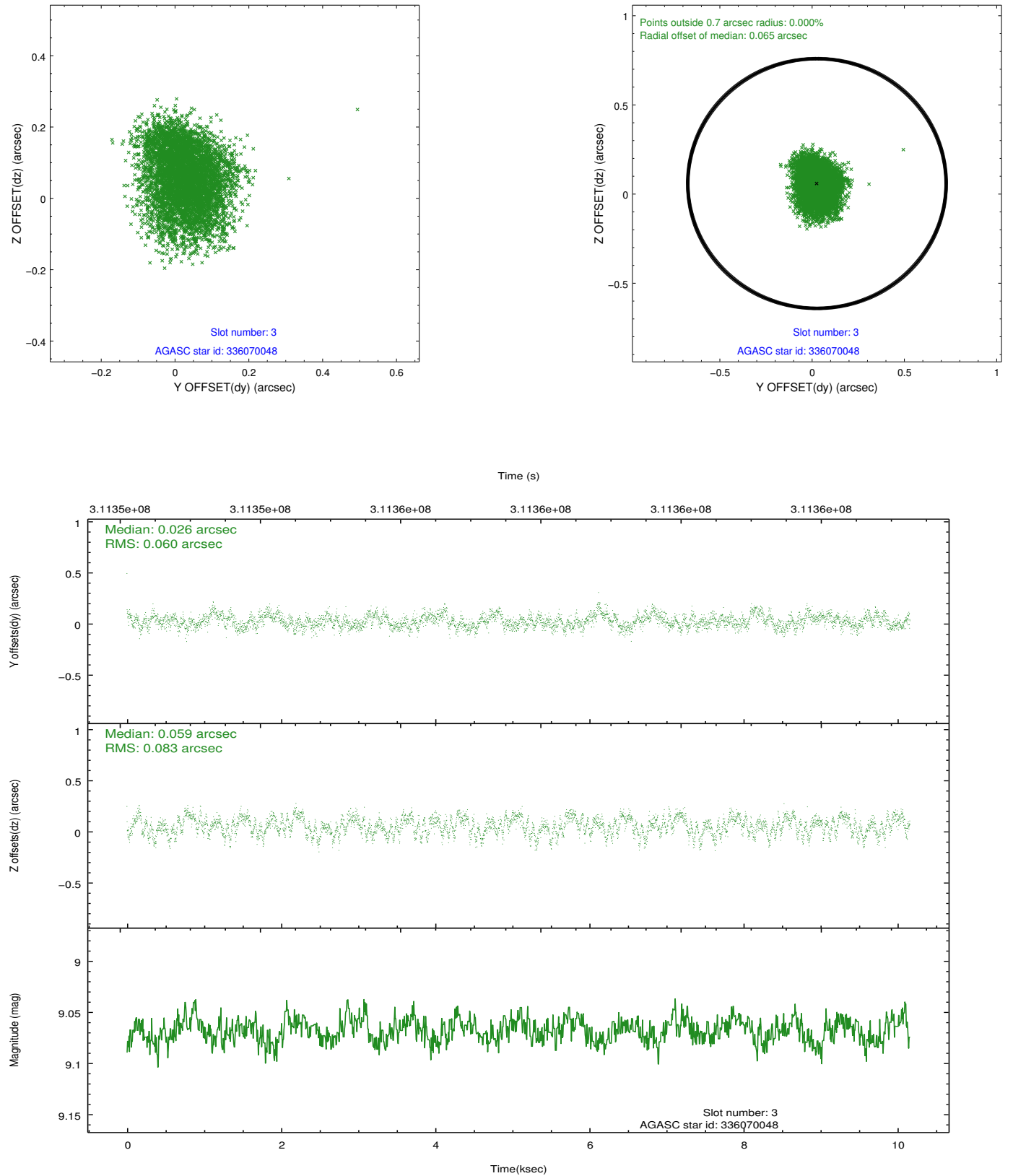


### Slot Statistics

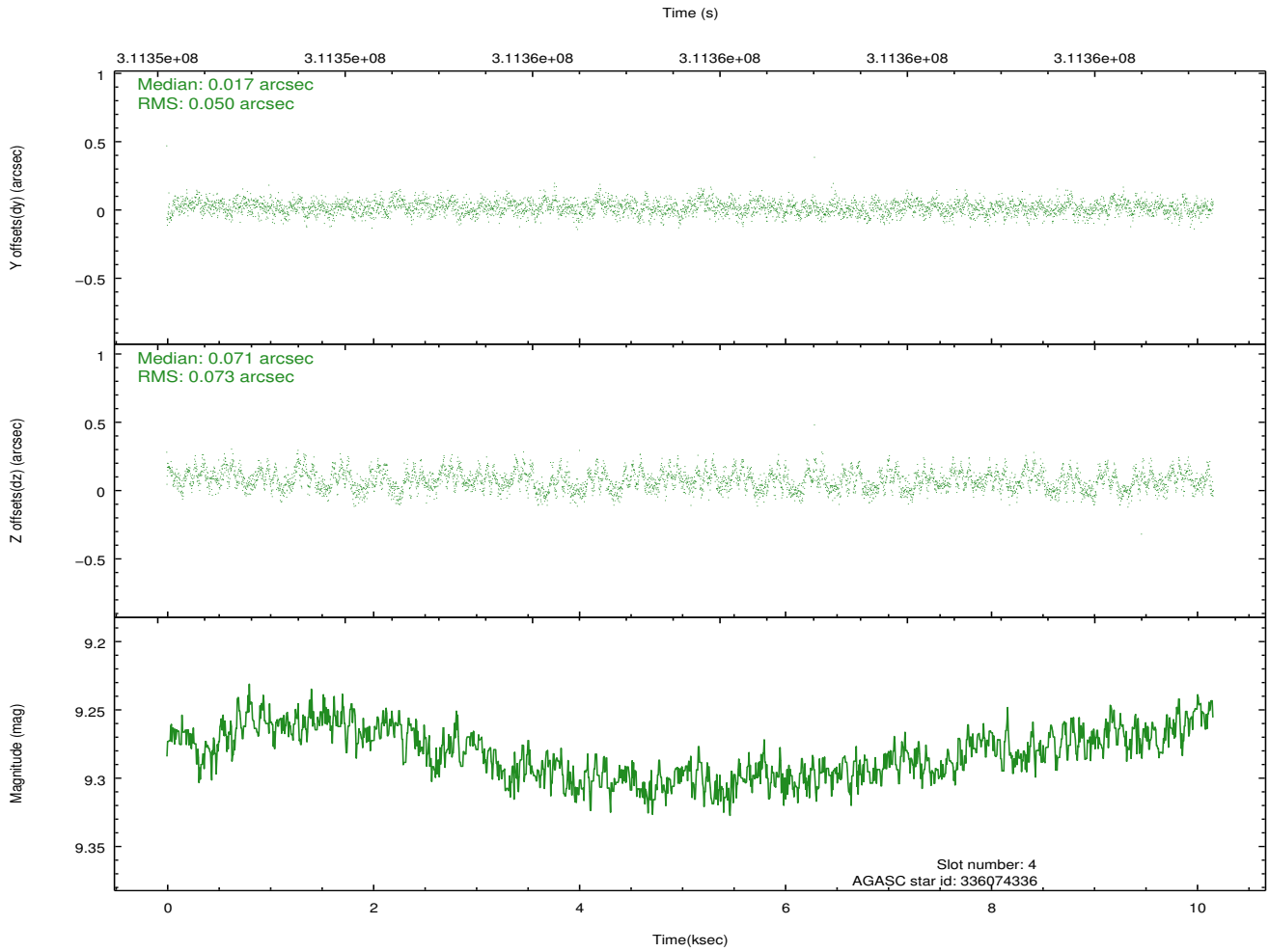
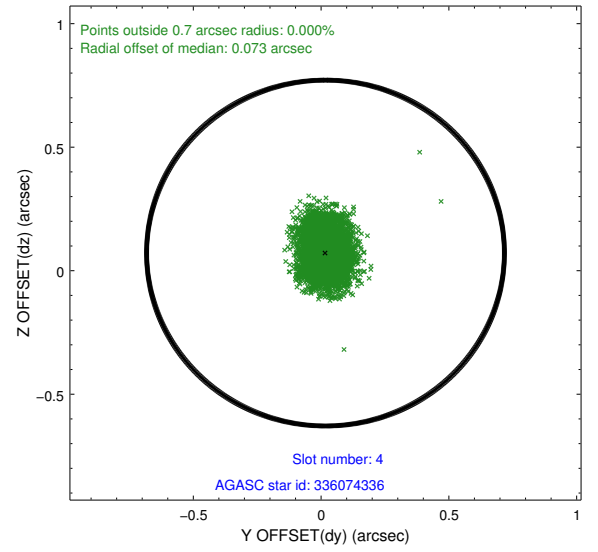
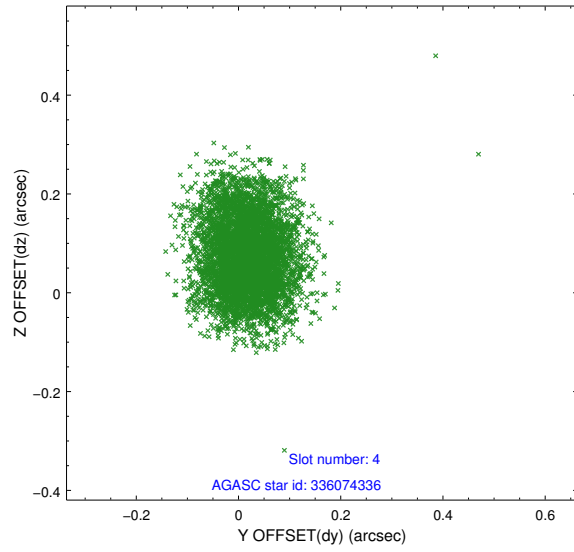
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.22	2479	0.068	-0.033	0.008	0.021	0.000000	0.000000	926.65	-942.36
1	FID	ACIS-I-5	7.21	2479	-0.233	0.065	0.008	0.015	0.000000	0.000000	-1821.48	954.90
2	FID	ACIS-I-6	7.23	2479	0.074	0.038	0.009	0.016	0.000000	0.000000	391.62	1599.98
3	GUIDE	336070048	9.07	4954	0.026	0.059	0.110	0.173	232.735573	30.873902	-1739.87	-1136.05
4	GUIDE	336074336	9.28	4951	0.017	0.071	0.094	0.154	232.713714	30.669381	-1730.25	-1875.66
5	GUIDE	336075680	9.67	4954	0.106	0.020	0.101	0.167	233.167312	31.486745	-654.71	1199.48
6	GUIDE	336071376	6.81	4958	-0.094	-0.187	0.066	0.115	232.594868	31.285934	-2326.99	293.46
7	GUIDE	336071320	8.52	4950	-0.062	0.037	0.069	0.115	233.196463	30.495852	-175.98	-2336.04

## 2.4 Star Slots

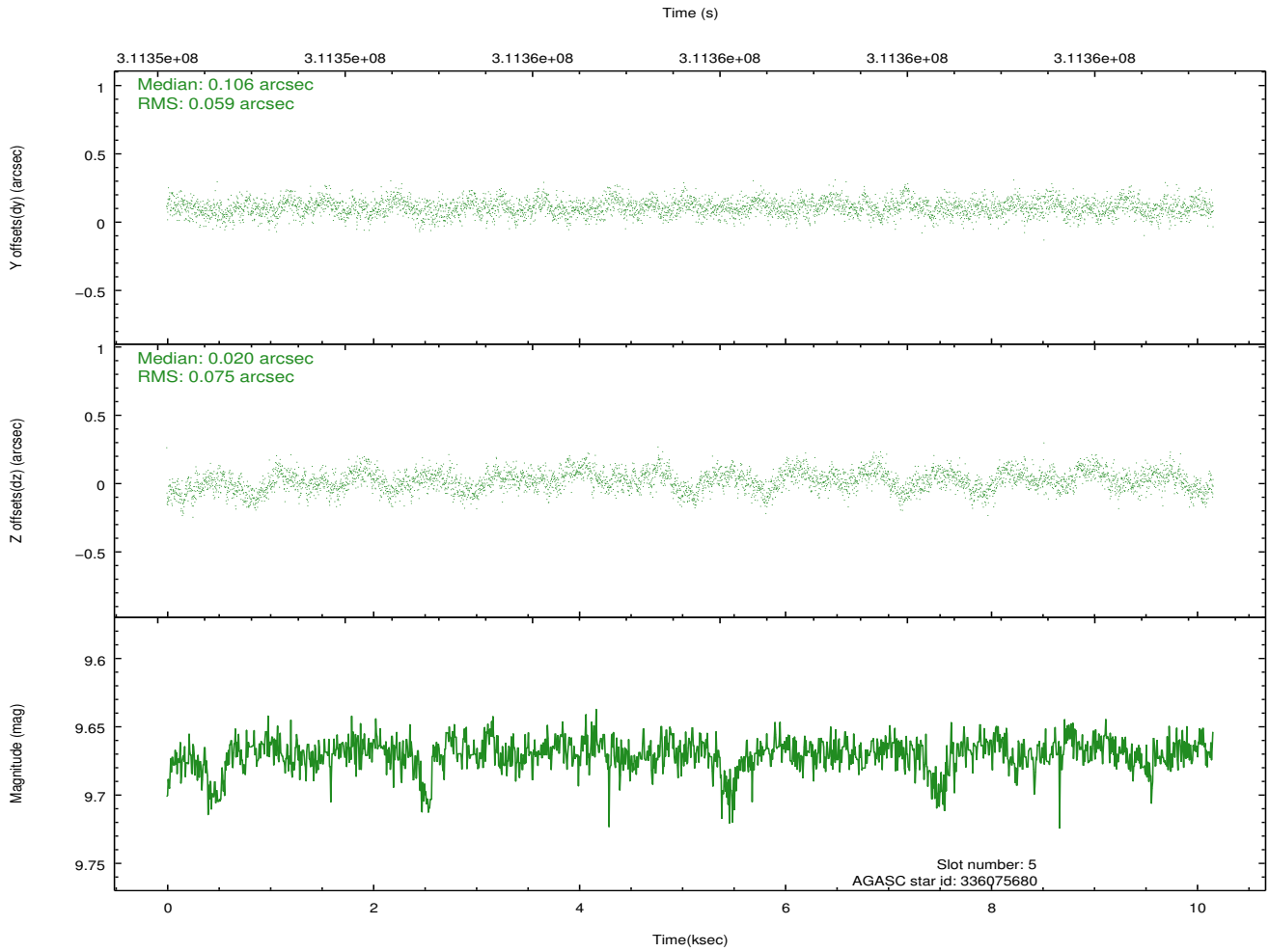
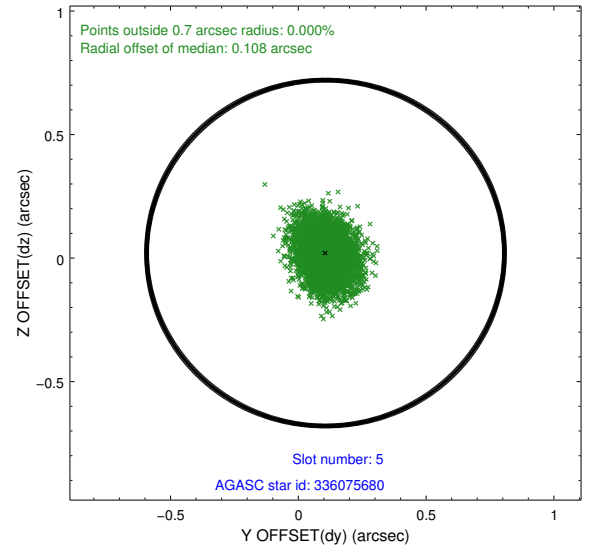
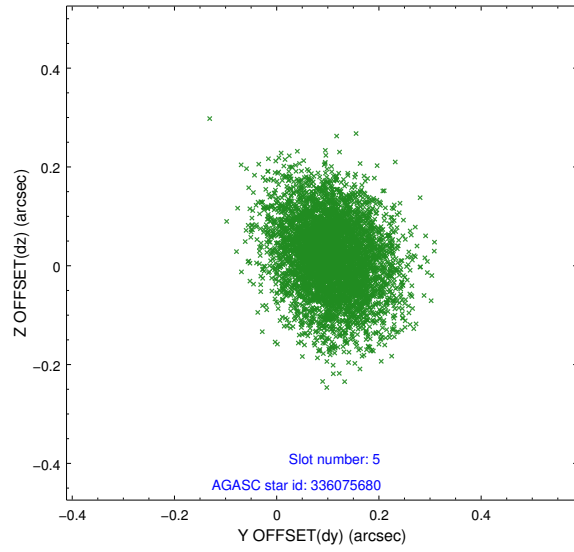
### 2.4.1 Slot 3



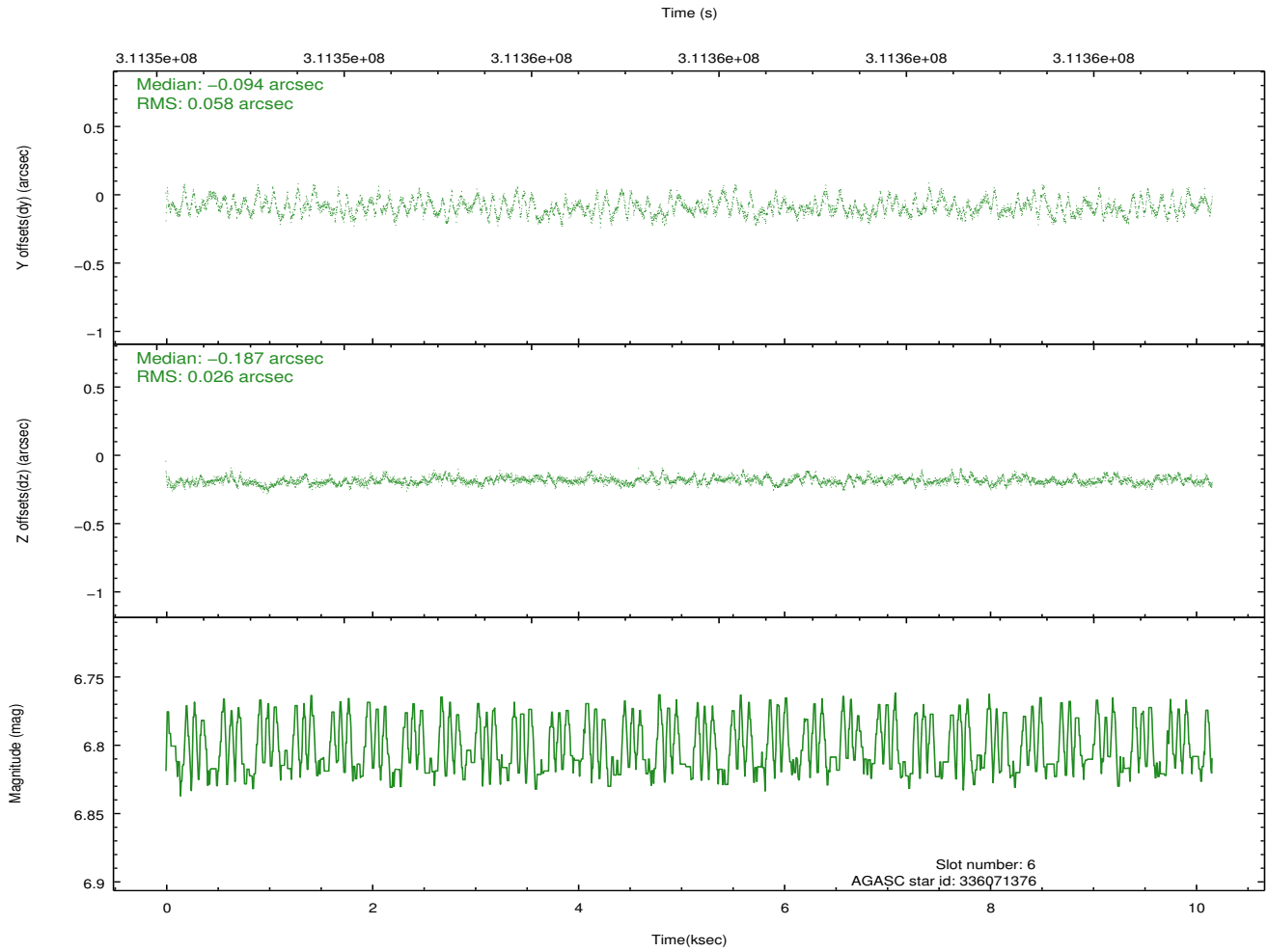
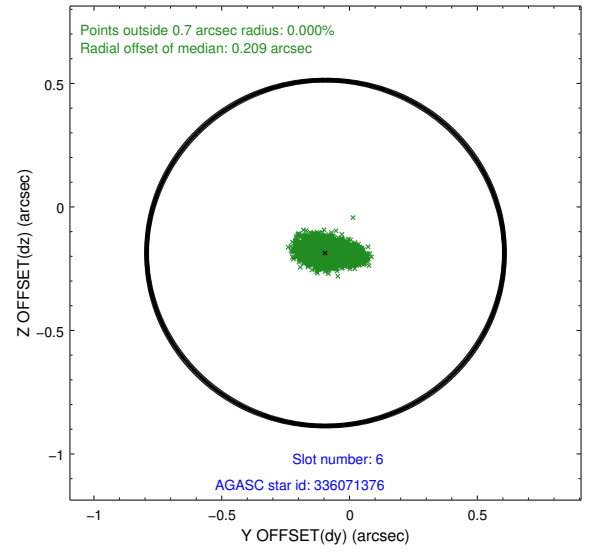
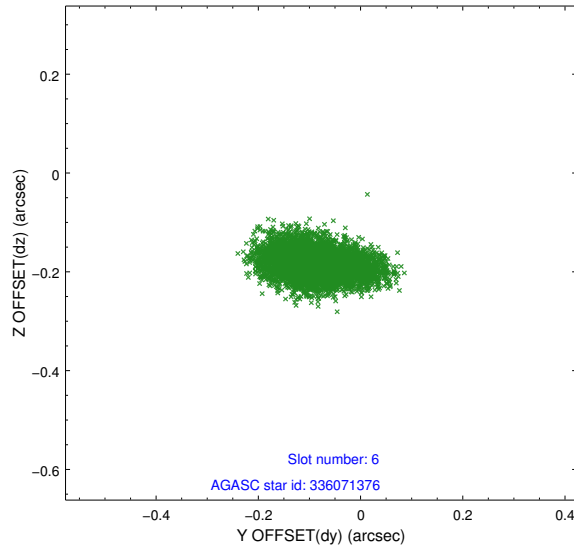
## 2.4.2 Slot 4



### 2.4.3 Slot 5

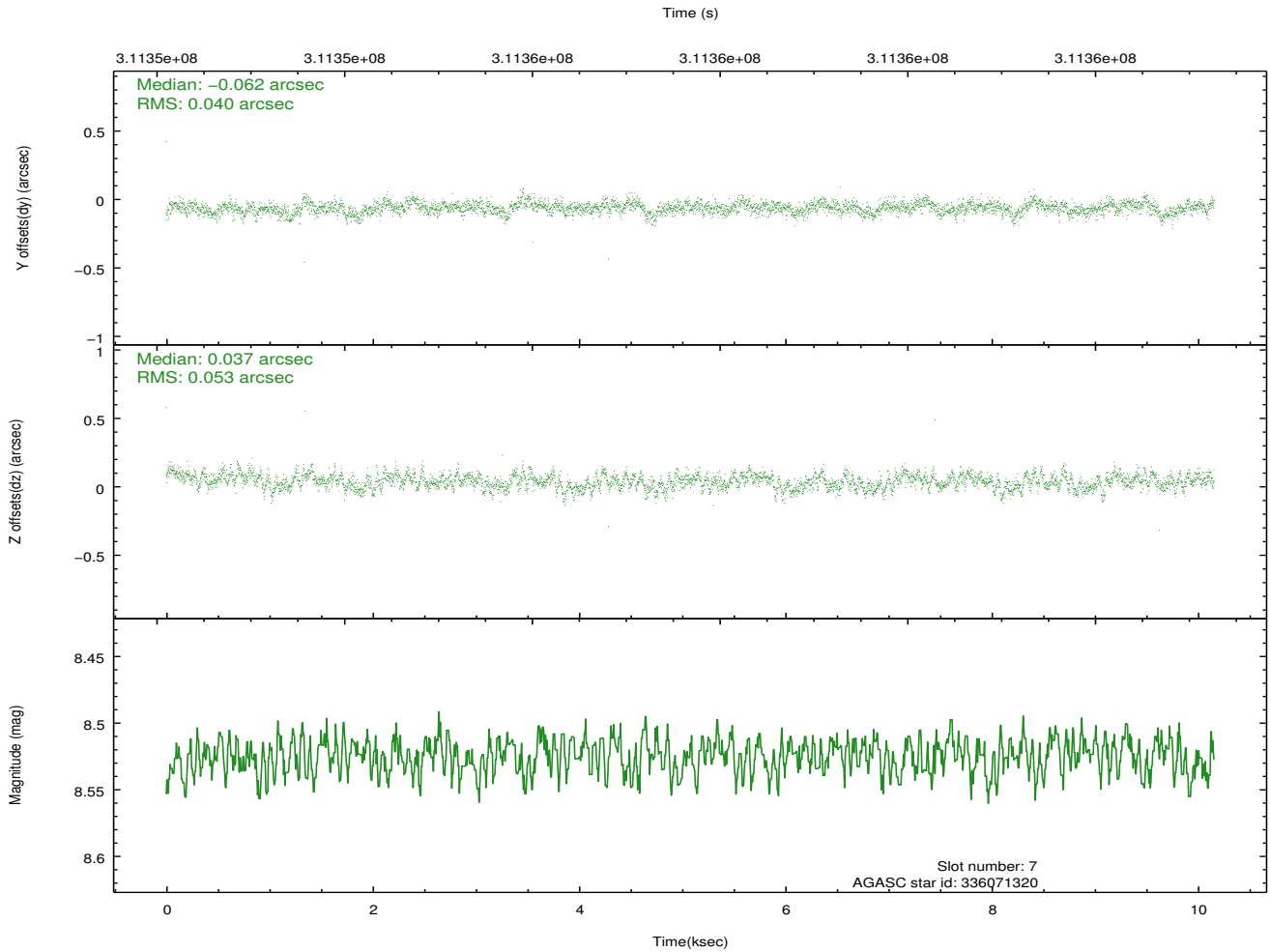
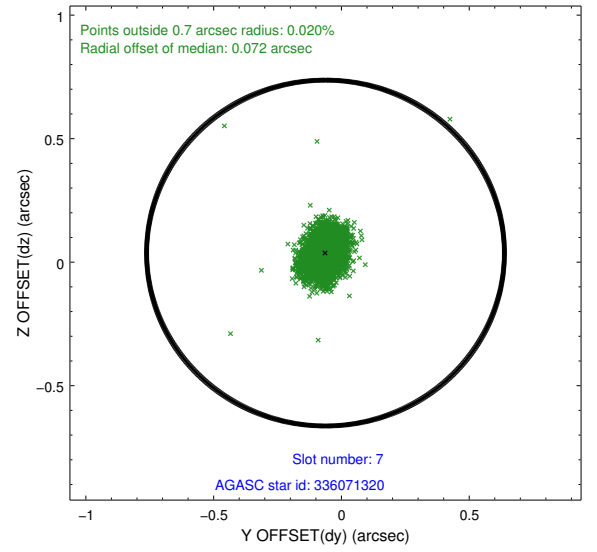
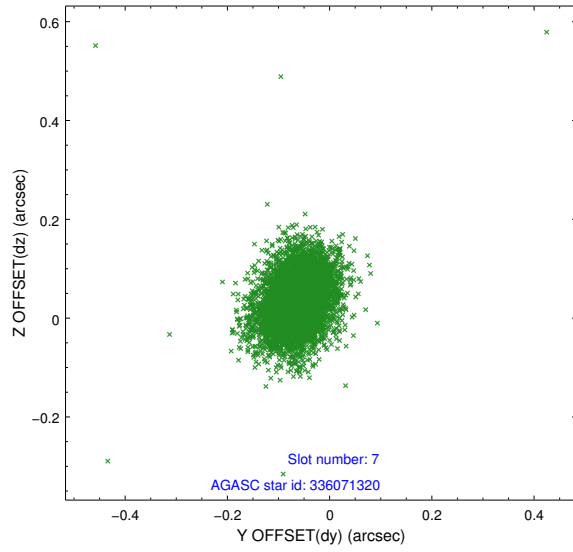


## 2.4.4 Slot 6



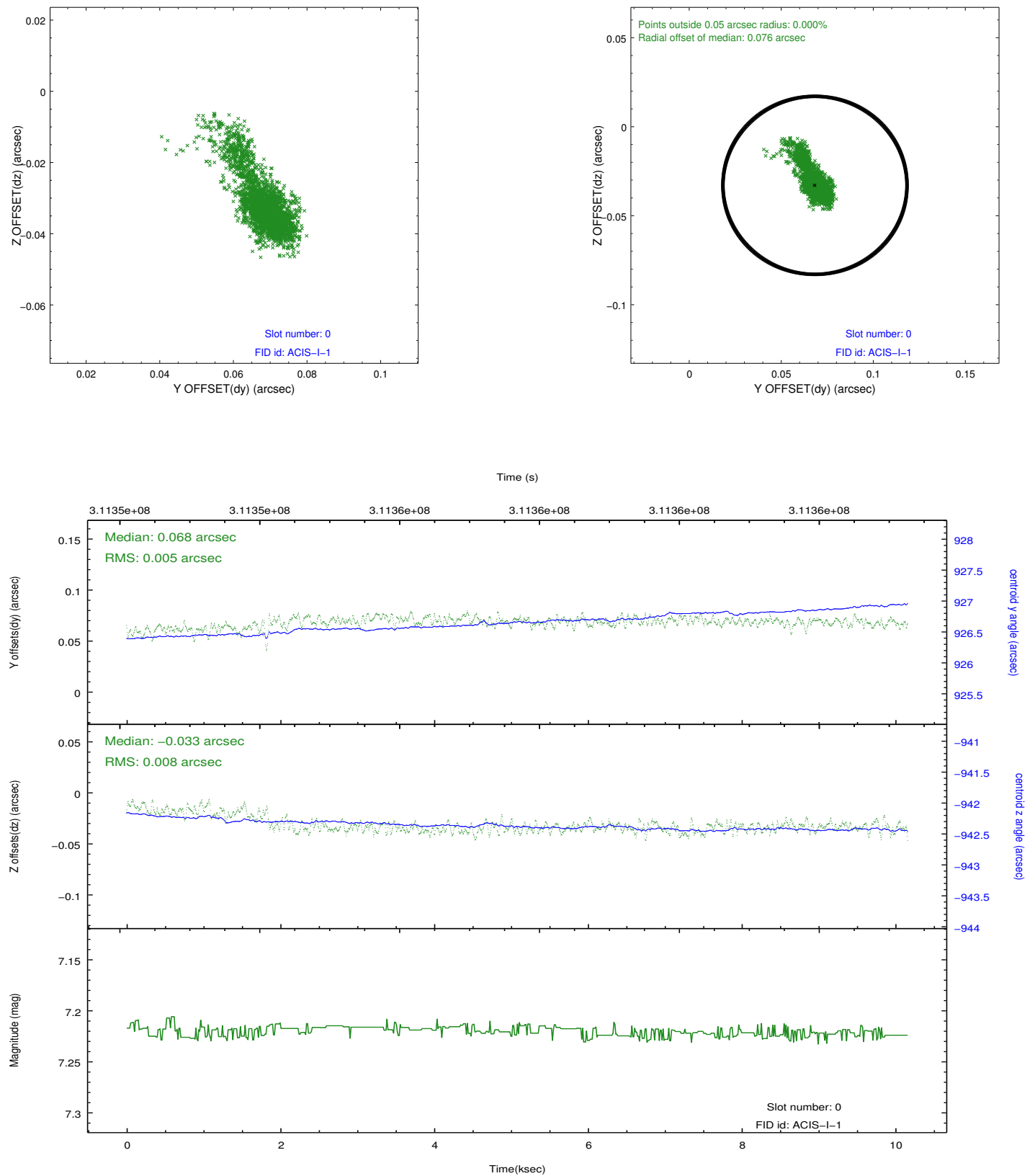


## 2.4.5 Slot 7

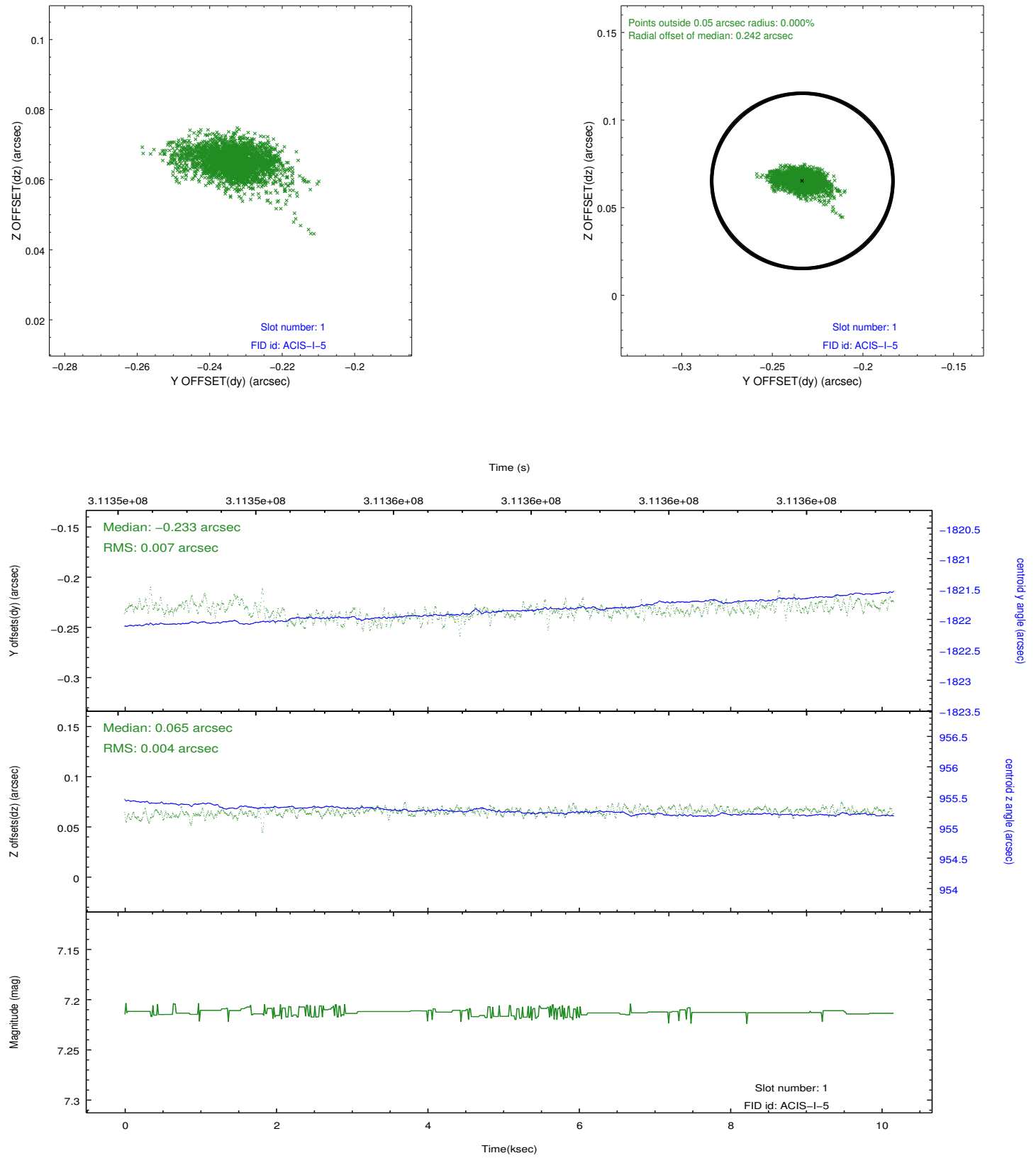


## 2.5 FID Slots

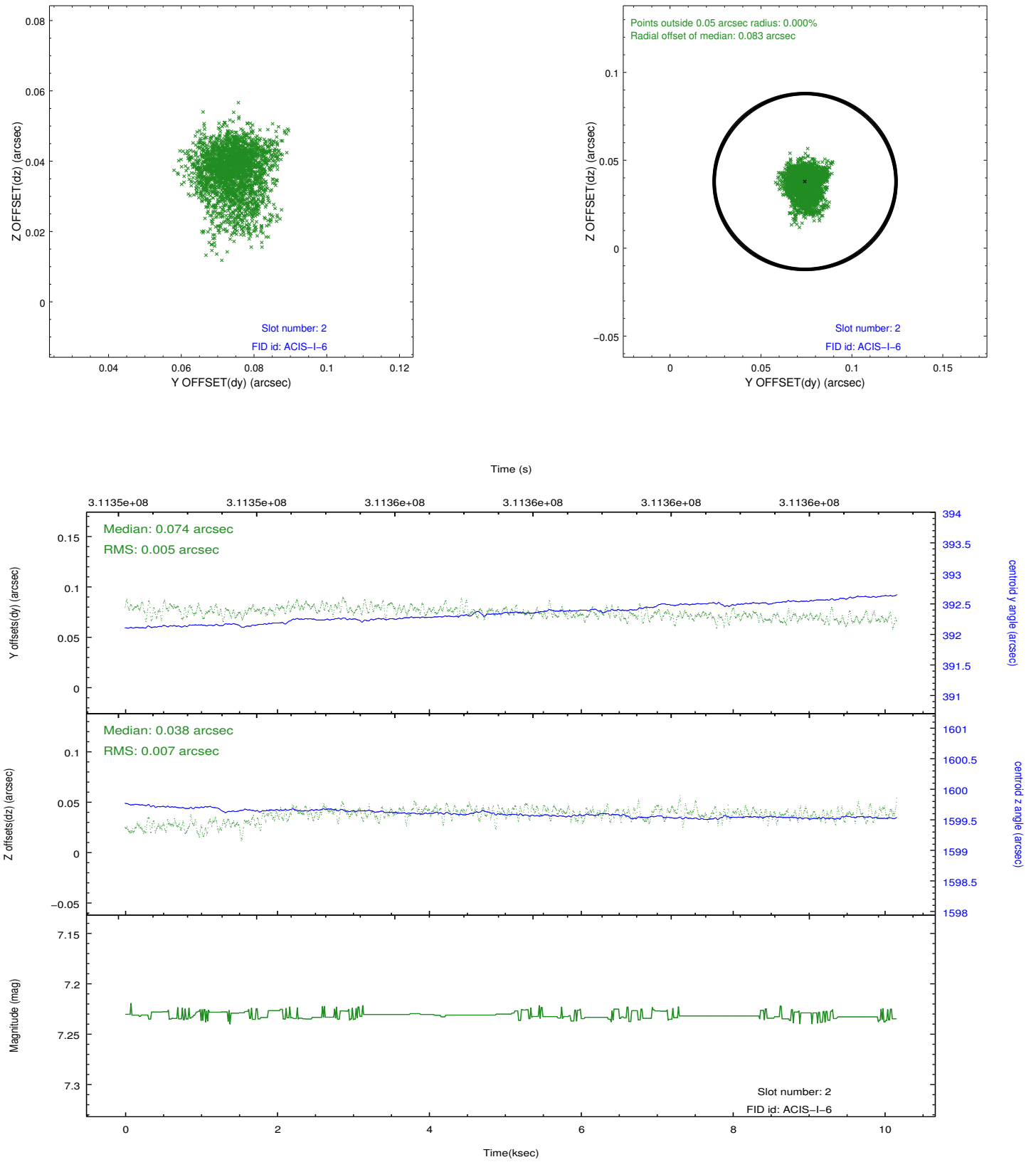
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.05.07
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.1215

### A.2 Comments