

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 2250 - L2 Version 3  
Chandra X-Ray Center

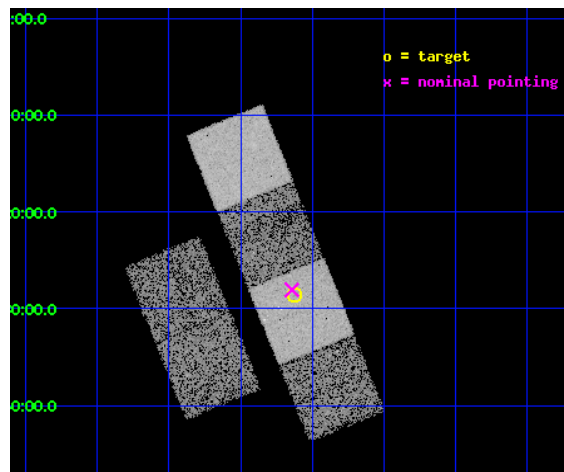
L2 Processing Date : Sep 6 2012

## 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

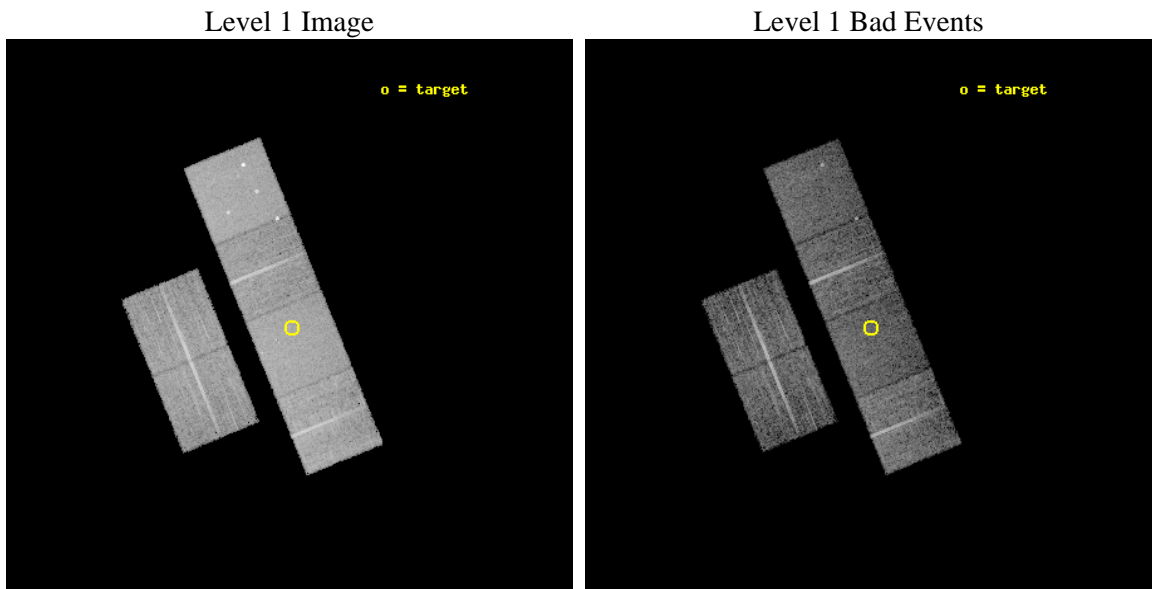
seq_num	900077	Sequence number
obs_id	2250	Observation id
title	THE NATURE OF NARROW-LINE, FIR-LUMINOUS, X-RAY GALAXIES	Proposal t
observer	PROFESSOR TOM SHANKS	Principal investigator
object	F864X:052	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	206.030417	Observer's specified target RA [deg]
dec_targ	-0.475833	Observer's specified target Dec [deg]
ra_nom	206.03572491035	Nominal RA [deg]
dec_nom	-0.46758974326374	Nominal Dec [deg]
roll_nom	67.8368691112	Nominal Roll [deg]
revision	3	Processing version of data
ontime	9753.3962661326	Sum of GTIs [s]
livetime	9629.8928898207	Livetime [s]
ontime2	9753.4373061359	Sum of GTIs [s]
ontime3	9753.2731461376	Sum of GTIs [s]
ontime5	9753.3552261293	Sum of GTIs [s]
ontime6	9753.3141861409	Sum of GTIs [s]
ontime7	9753.3962661326	Sum of GTIs [s]
ontime8	9749.9911758006	Sum of GTIs [s]
l2events	90046	Number of level 2 events



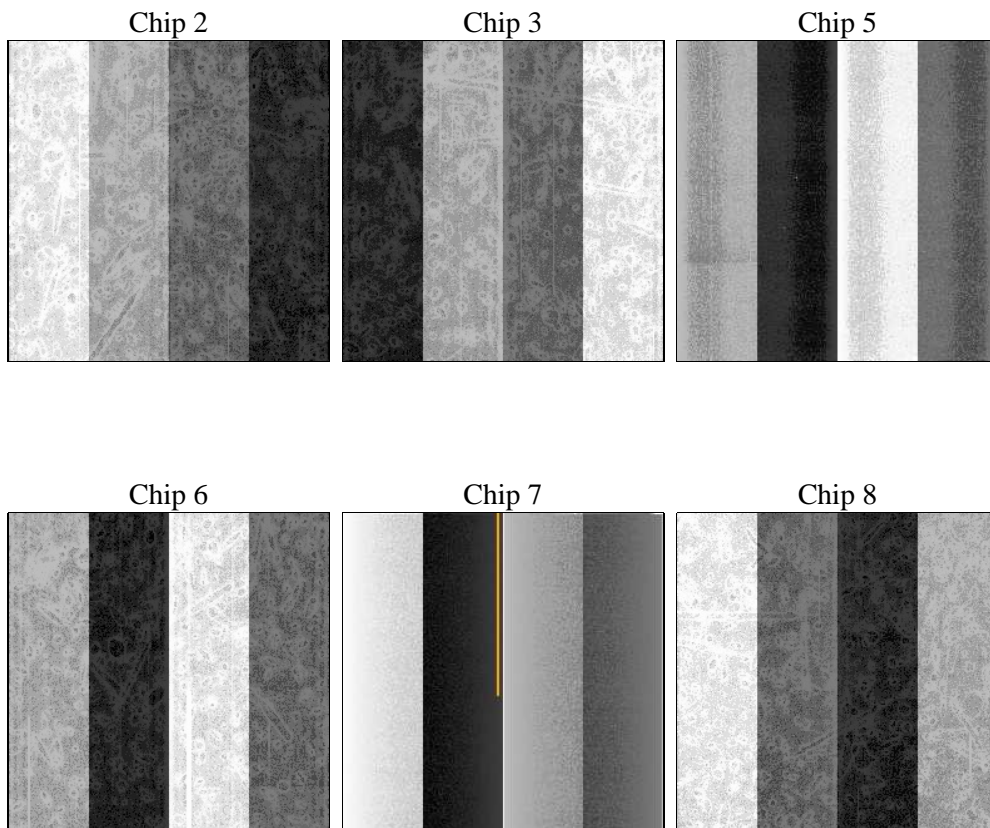
## 2 OBI

### 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	8.4.5	Processing system revision	ontime	9753.3962661326	Sum of GTIs [s]
caldsver	4.5.1.1	&#160	ontime2	9753.4373061359	Sum of GTIs [s]
date	2012-09-06T09:29:55	Date and time of file creation	ontime3	9753.2731461376	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	9753.3552261293	Sum of GTIs [s]
			ontime6	9753.3141861409	Sum of GTIs [s]
			ontime7	9753.3962661326	Sum of GTIs [s]
			ontime8	9749.9911758006	Sum of GTIs [s]
			l1events	411162	Number of level 1 events

### 2.1.4 Events

	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	59728	57624	84256	58382	75033	76139	grade 0 events	2855	2882	5707	2846	3160	4821
rejected events	52978	50827	44799	51496	43167	61169		4%	5%	6%	4%	4%	6%
rejected %	88%	88%	53%	88%	57%	80%	grade 1 events	22	23	225	27	80	38
								0%	0%	0%	0%	0%	0%
							grade 2 events	1441	1415	10944	1400	6214	3195
								2%	2%	12%	2%	8%	4%
							grade 3 events	607	655	1703	651	2861	1601
								1%	1%	2%	1%	3%	2%
							grade 4 events	657	624	1581	657	2883	1519
								1%	1%	1%	1%	3%	1%
							grade 5 events	1980	2276	6263	2408	7104	3018
								3%	3%	7%	4%	9%	3%
							grade 6 events	1193	1223	19555	1334	16782	3843
								1%	2%	23%	2%	22%	5%
							grade 7 events	50973	48526	38278	49059	35949	58104
								85%	84%	45%	84%	47%	76%

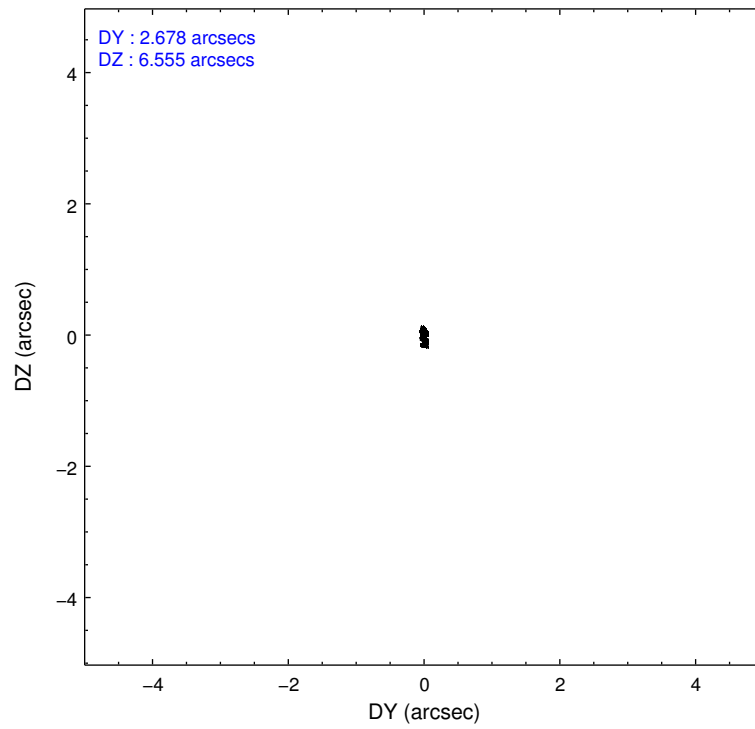
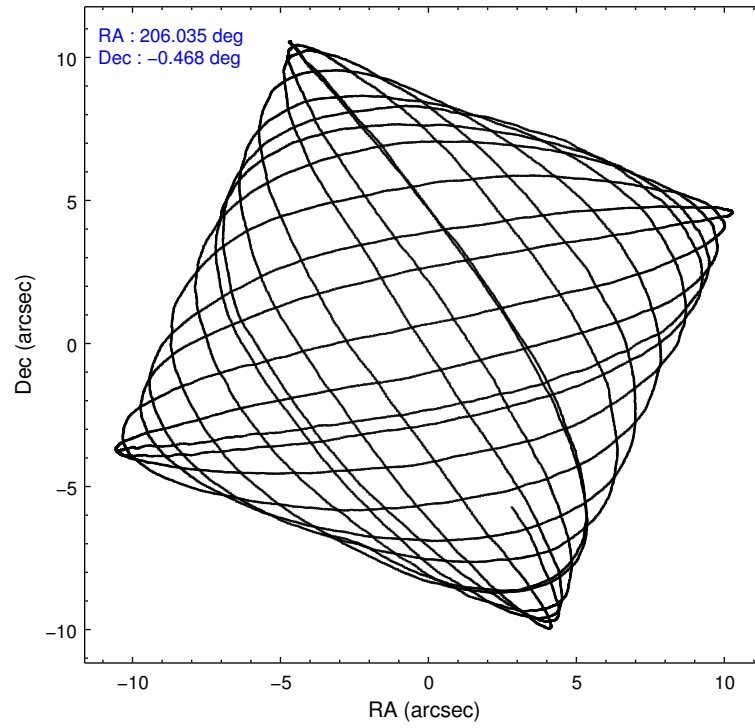


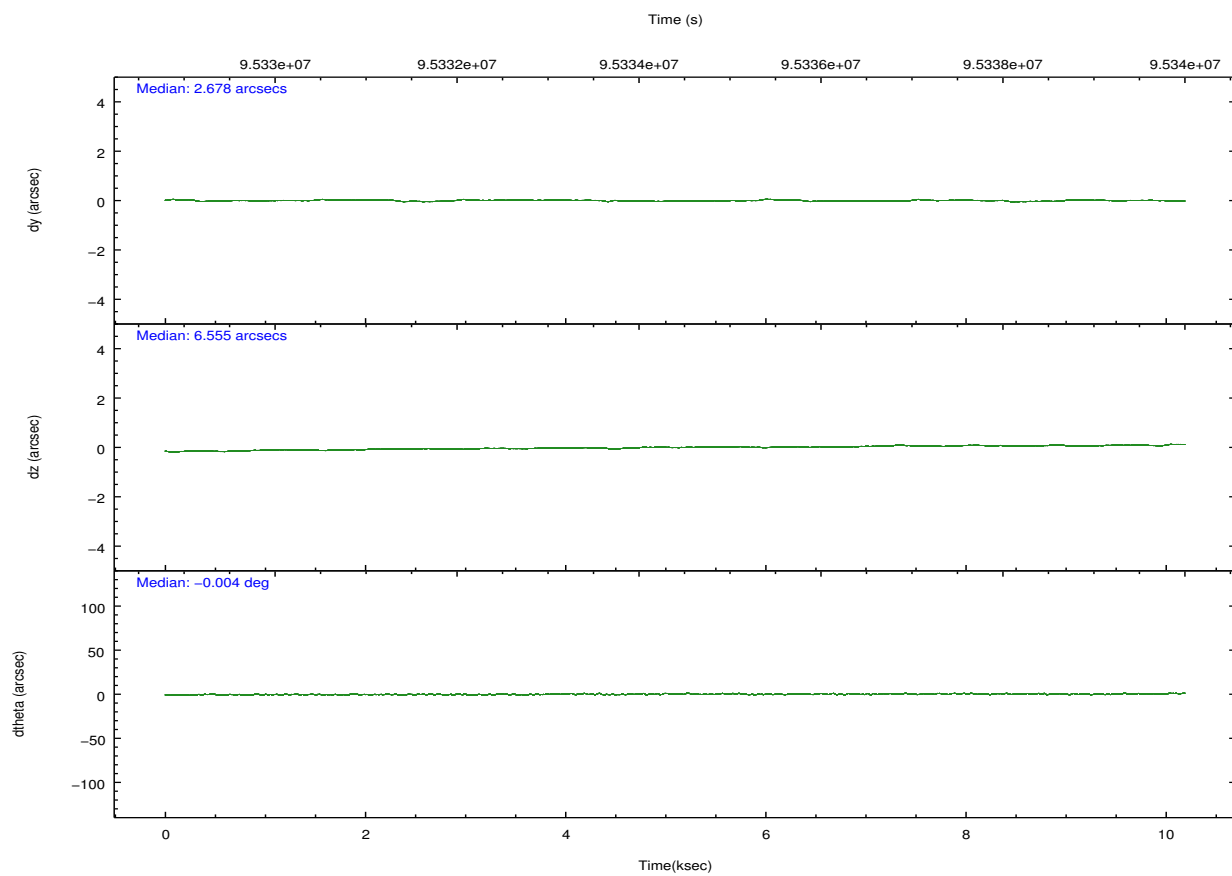
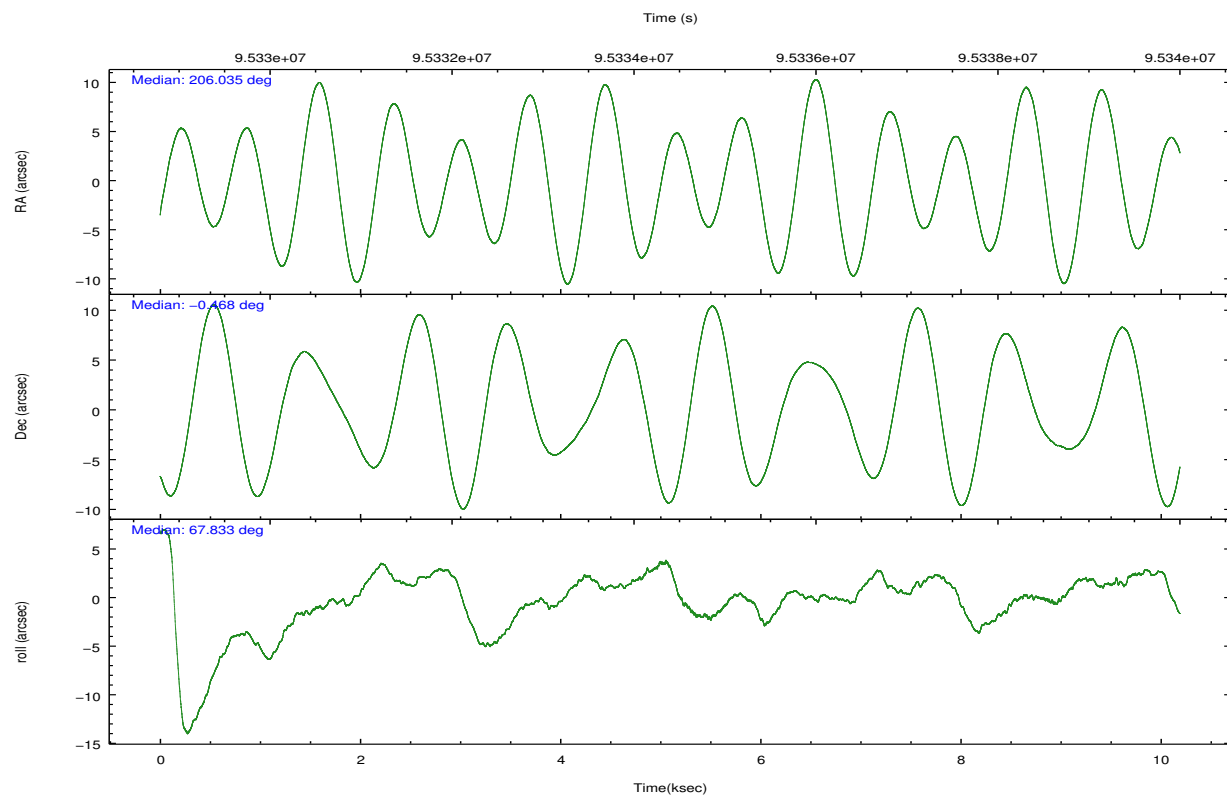
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-235678	ACIS-235678
Grating	NONE	NONE
Data mode	FAINT	FAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	206.039662	206.0357249103522
[deg] Pointing Dec	-0.494576	-0.4675897432637439
[deg] Pointing Roll	67.680274	67.83686911119976
[mm] SIM focus pos	-0.684267	-0.6828225247311905
[mm] SIM defocus	0	0.001444936568705701
[mm] SIM translation stage pos	-190.132523	-190.1425803651734
[mm] SIM translation stage offset	0	0.01005778216563158
[s] Observation start time (MET)	95329491.184000	95329115.08810399
Observation start date	2001-01-08T08:23:47	2001-01-08T08:18:35
[s] Observation end time (MET)	95339491.184000	95339624.926007
Observation end date	2001-01-08T11:10:27	2001-01-08T11:13:44
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



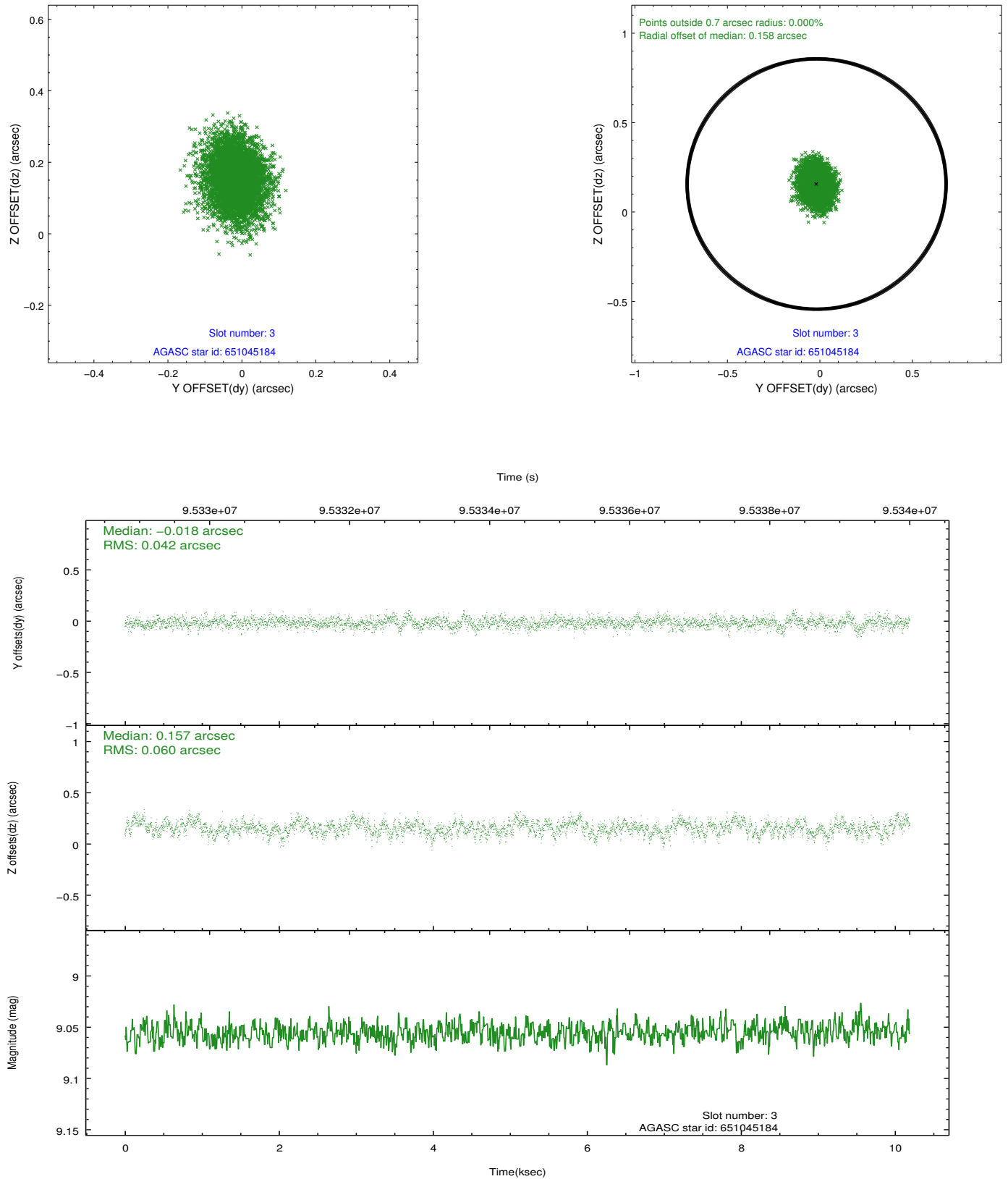


### Slot Statistics

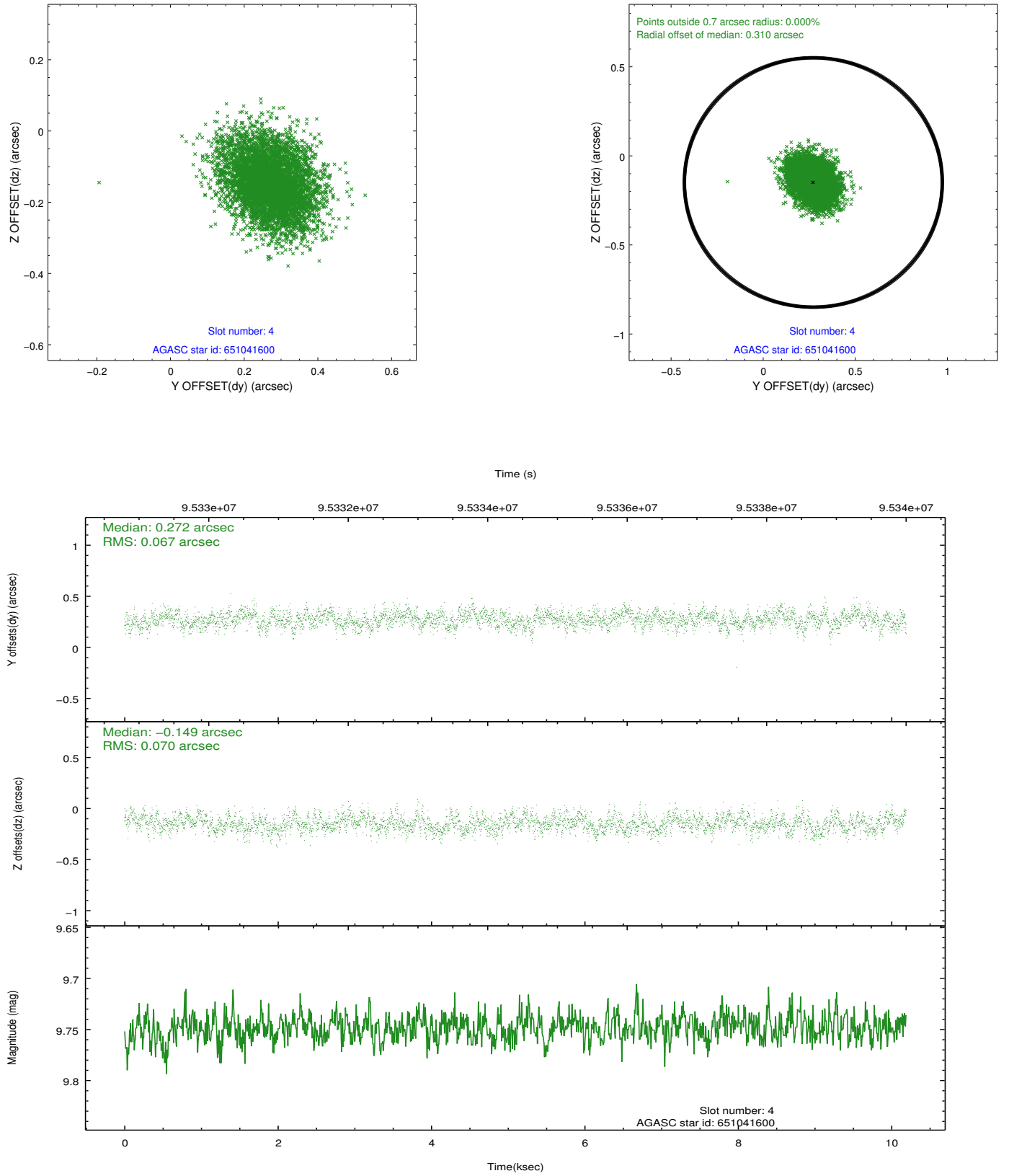
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.12	2485	-0.019	0.017	0.007	0.012	0.000000	0.000000	-755.32	-1727.63
1	FID	ACIS-S-4	7.20	2486	-0.041	0.005	0.006	0.010	0.000000	0.000000	2157.69	180.32
2	FID	ACIS-S-5	7.24	2486	0.028	-0.012	0.007	0.011	0.000000	0.000000	-1807.46	174.55
3	GUIDE	651045184	9.06	4970	-0.018	0.157	0.077	0.127	206.266135	-0.772896	-616.13	-1135.13
4	GUIDE	651041600	9.75	4968	0.272	-0.149	0.103	0.168	205.528560	-0.868420	-1942.61	1189.77
5	GUIDE	651041072	9.82	4971	-0.135	-0.118	0.105	0.169	205.728858	-0.270240	322.64	1341.36
6	GUIDE	40380232	9.75	4968	-0.256	-0.096	0.115	0.188	205.925897	0.181116	2095.49	1302.47
7	GUIDE	651042528	10.25	4970	0.136	0.205	0.124	0.201	206.154197	-0.918582	-1253.75	-961.26

## 2.4 Star Slots

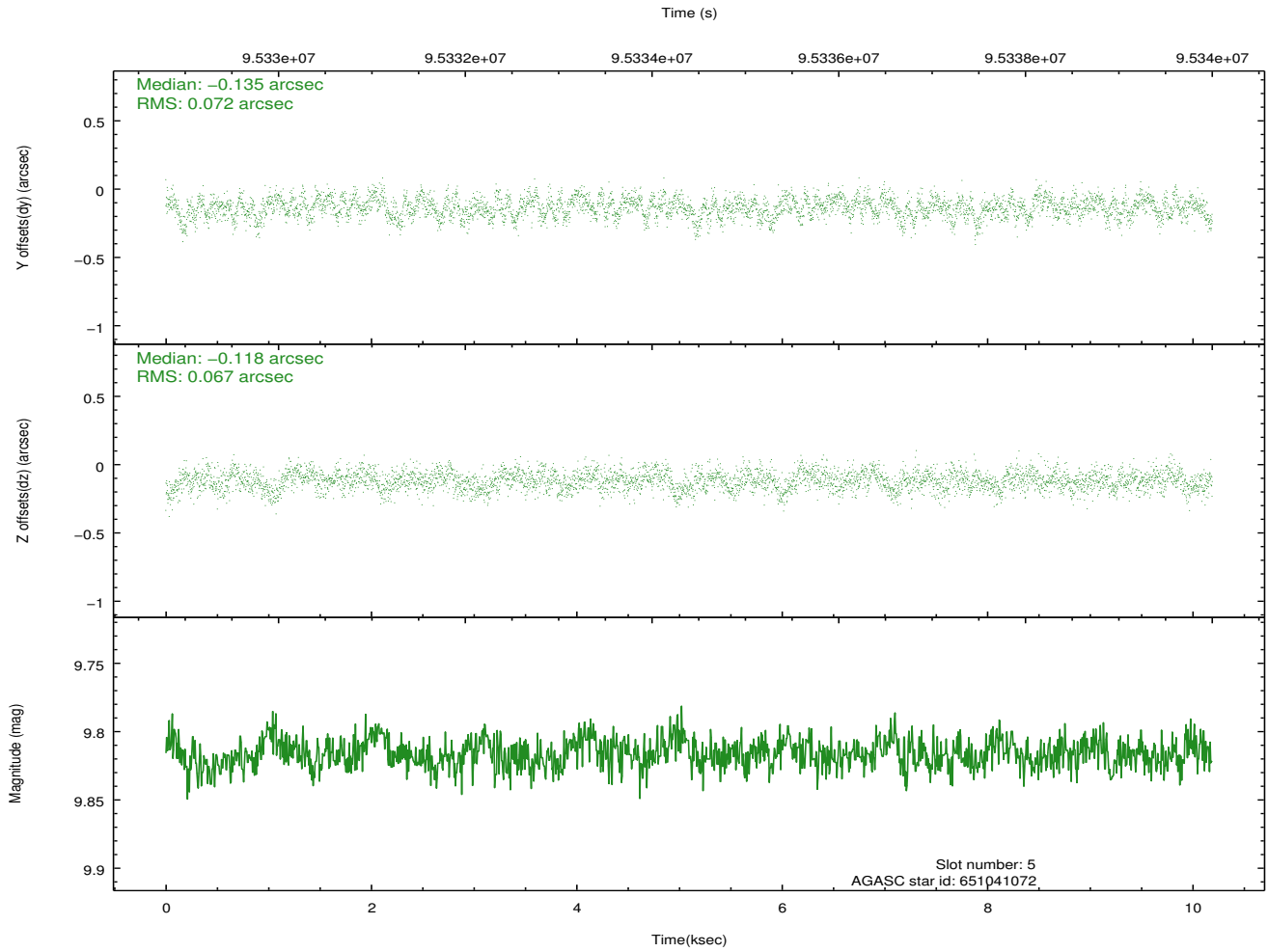
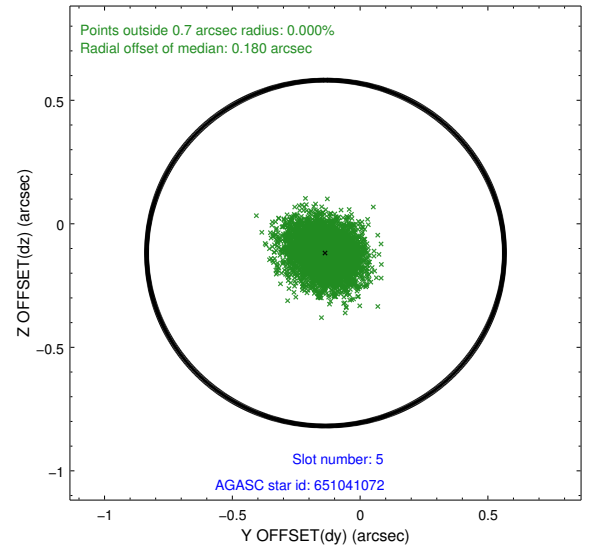
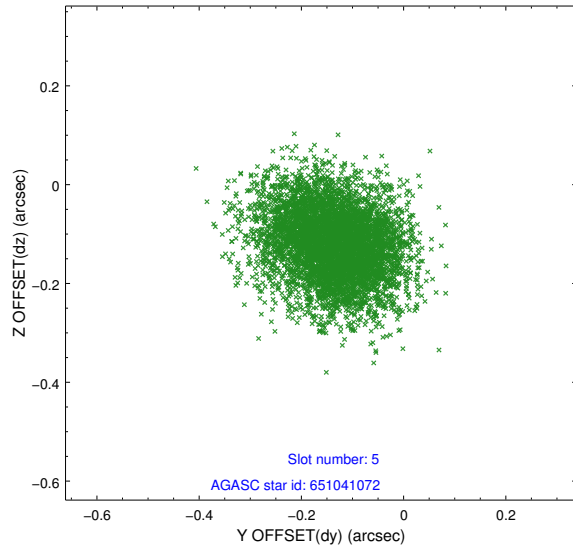
### 2.4.1 Slot 3



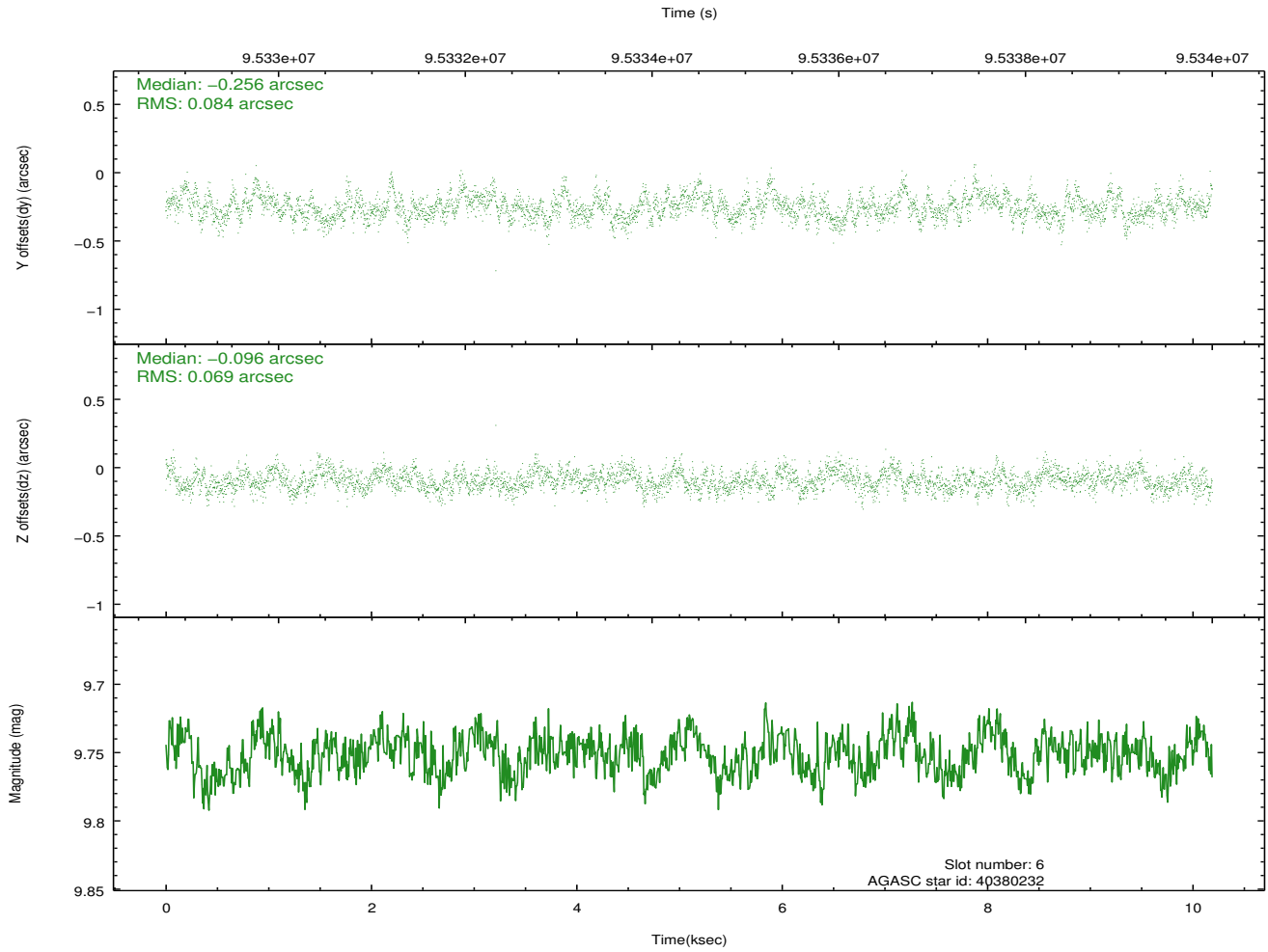
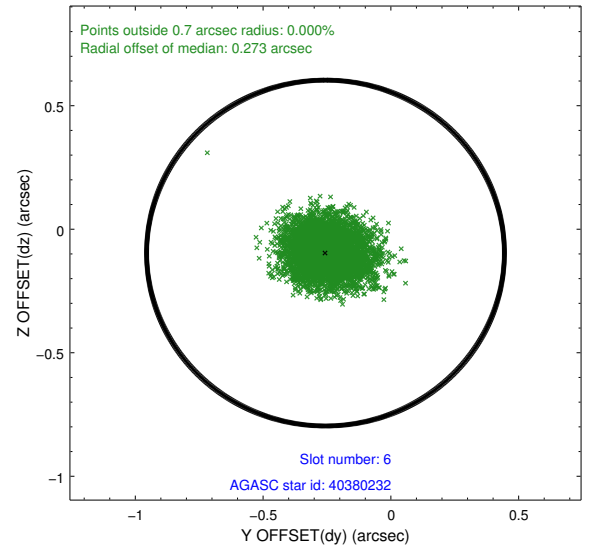
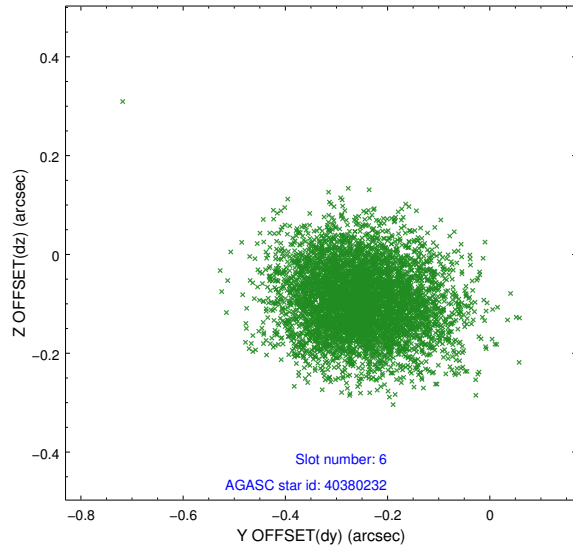
## 2.4.2 Slot 4



### 2.4.3 Slot 5

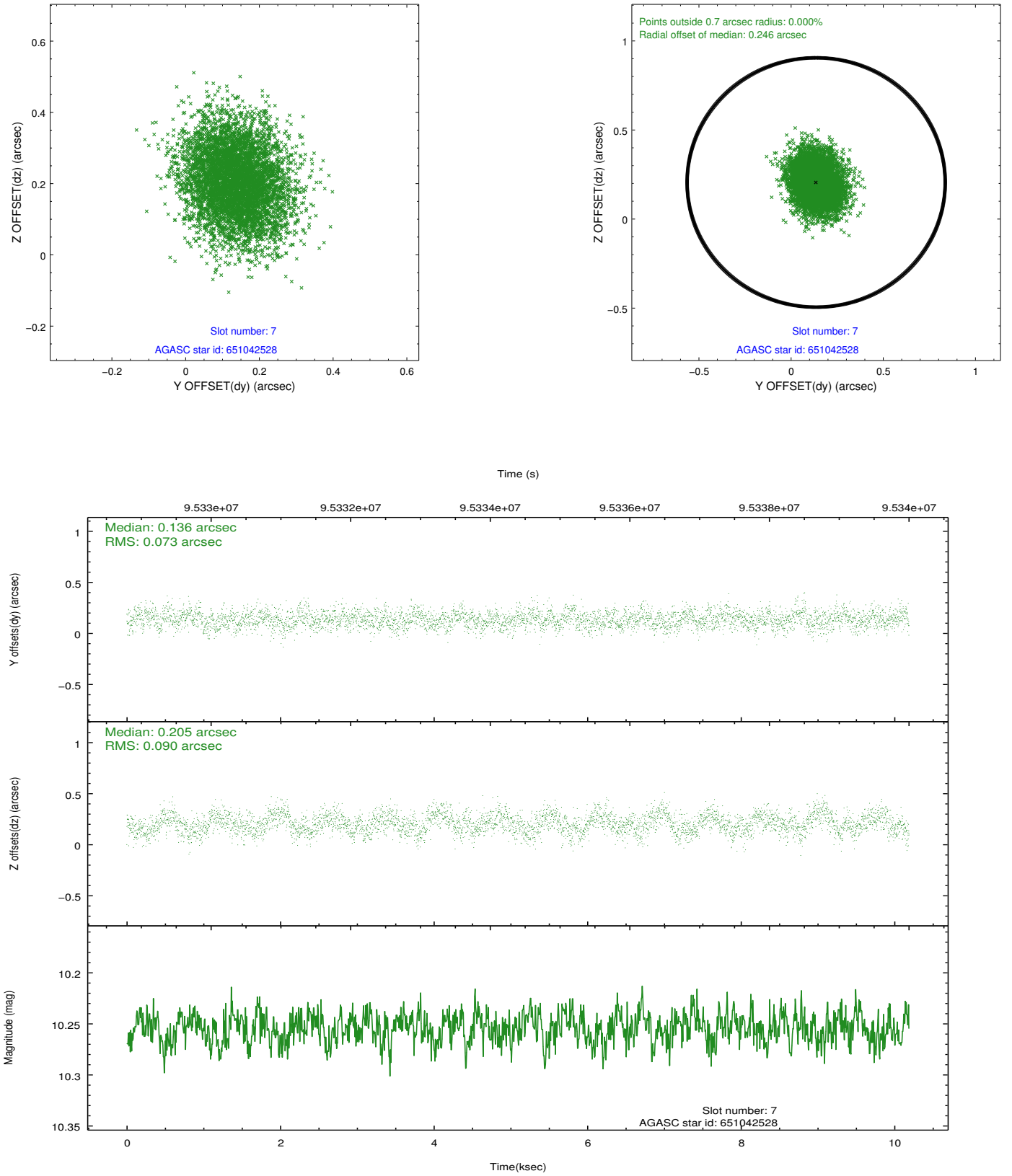


## 2.4.4 Slot 6



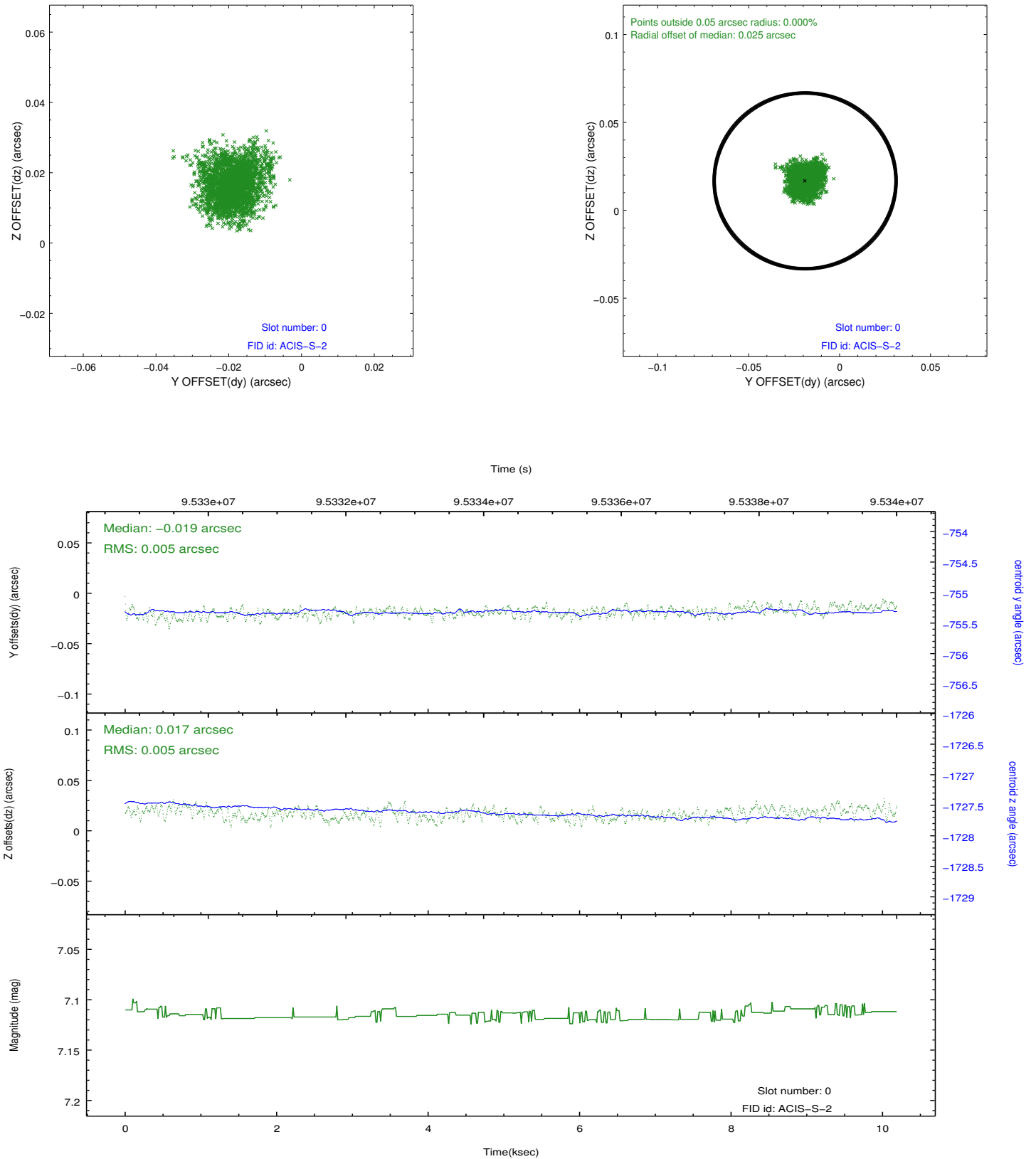


## 2.4.5 Slot 7

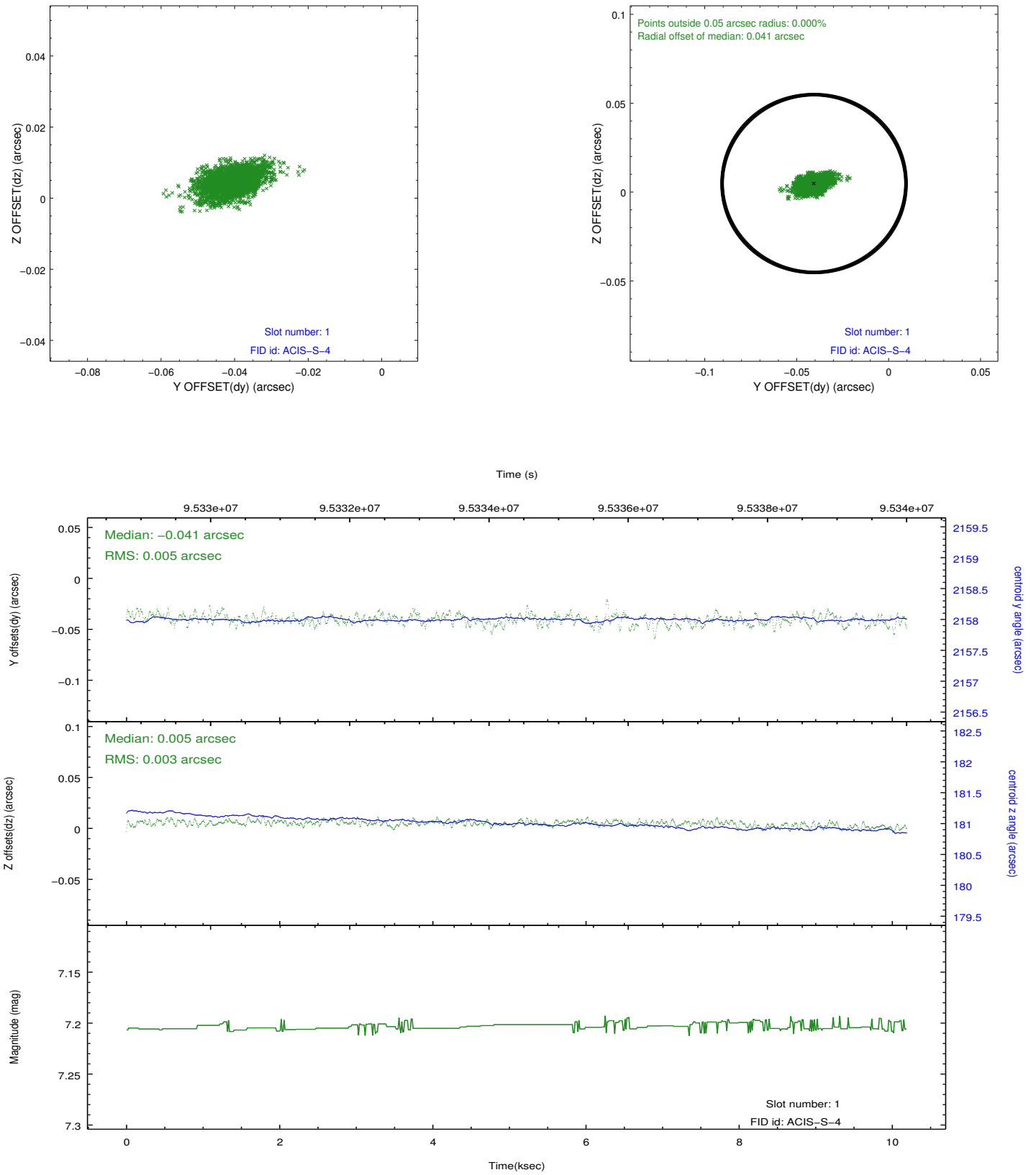


## 2.5 FID Slots

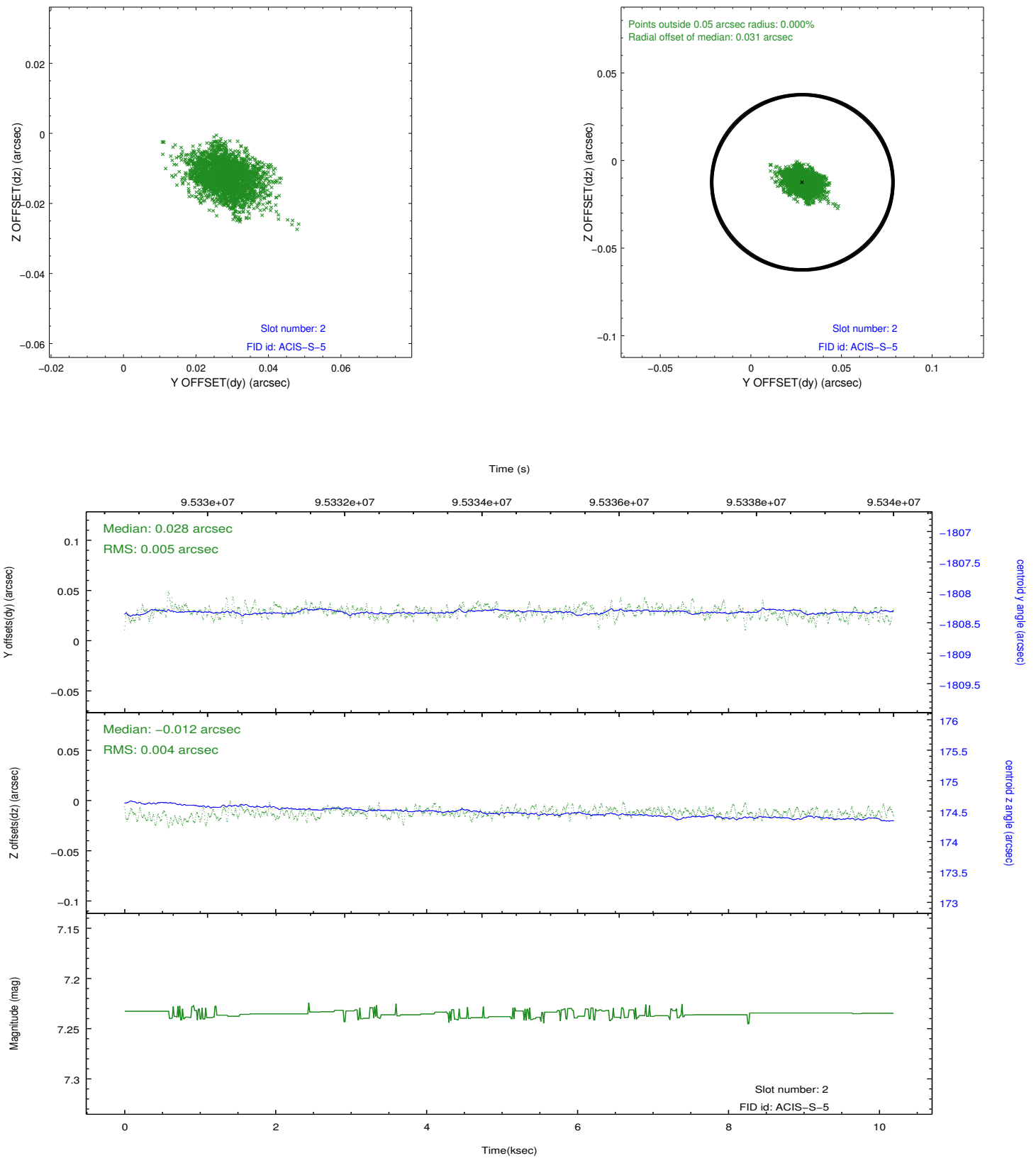
### 2.5.1 Slot 0



## 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)	2012.09.14
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.753

### A.2 Comments