

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 5325 - L2 Version 3  
Chandra X-Ray Center

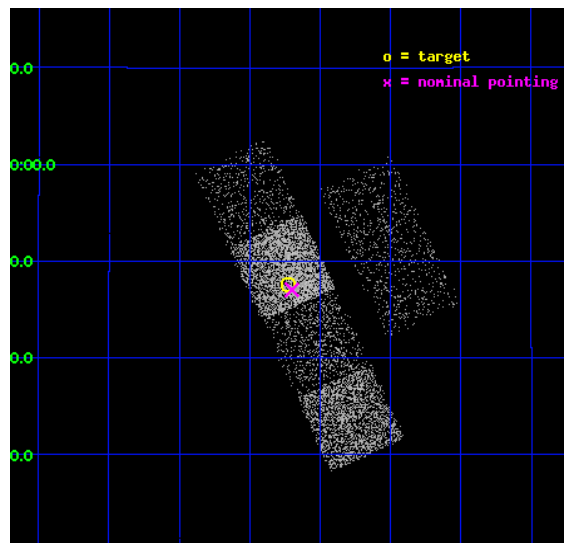
L2 Processing Date : Dec 1 2012

## 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

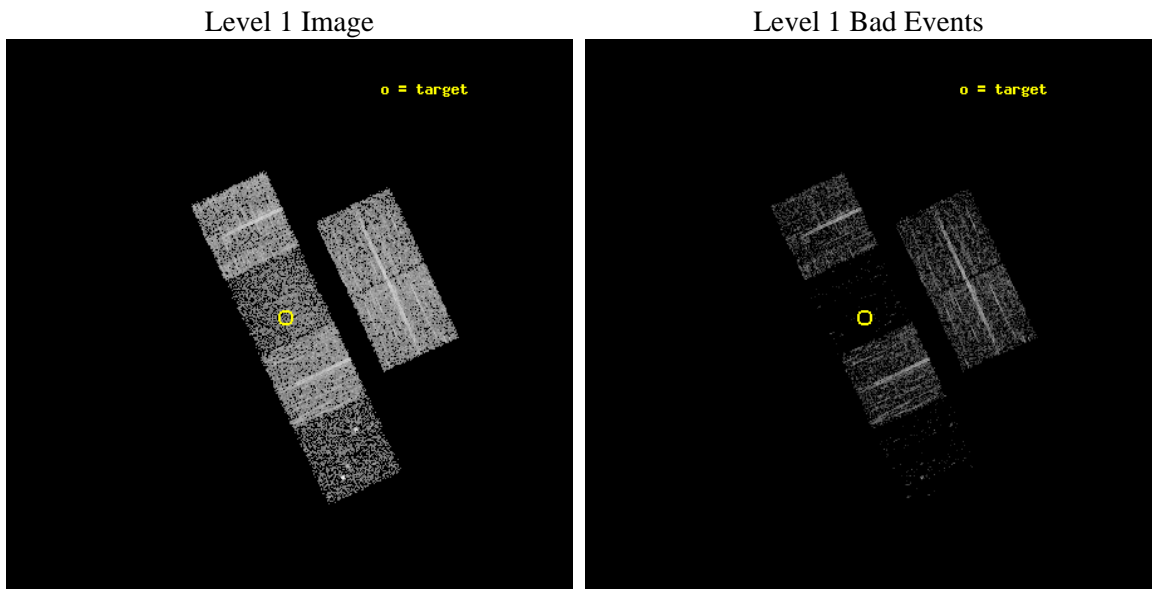
seq_num	100053	Sequence number
obs_id	5325	Observation id
title	Chandra Snapshot Spectral Imaging of Comets C/2001 Q4 (NEAT) and C/2002 T7 (LINEAR)	Proposal title
observer	Dr. Carey Lisse	Principal investigator
object	C/2001 Q4 (NEAT)	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	124.43082	Observer's specified target RA [deg]
dec_targ	10.792146	Observer's specified target Dec [deg]
ra_nom	124.425090064	Nominal RA [deg]
dec_nom	10.784071041551	Nominal Dec [deg]
roll_nom	245.15768493831	Nominal Roll [deg]
revision	3	Processing version of data
ontime	3484.7999870181	Sum of GTIs [s]
livetime	3440.6733512878	Livetime [s]
ontime2	3484.7999870181	Sum of GTIs [s]
ontime3	3481.5590167344	Sum of GTIs [s]
ontime5	3484.7999870181	Sum of GTIs [s]
ontime6	3484.7999870181	Sum of GTIs [s]
ontime7	3484.7999870181	Sum of GTIs [s]
ontime8	3484.7999870181	Sum of GTIs [s]
l2events	9187	Number of level 2 events



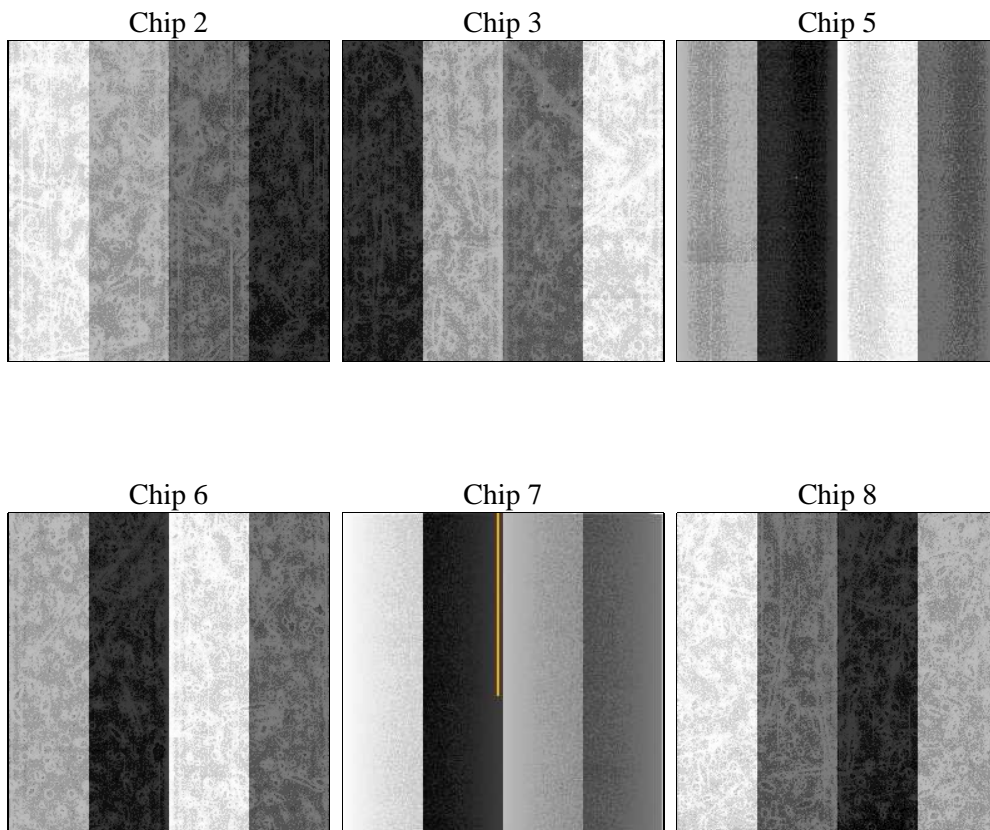
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	3300.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	3484.7999870181	Sum of GTIs [s]
caldbver	4.5.2	&#160	ontime2	3484.7999870181	Sum of GTIs [s]
date	2012-12-01T06:27:16	Date and time of file creation	ontime3	3481.5590167344	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	3484.7999870181	Sum of GTIs [s]
			ontime6	3484.7999870181	Sum of GTIs [s]
			ontime7	3484.7999870181	Sum of GTIs [s]
			ontime8	3484.7999870181	Sum of GTIs [s]
			l1events	72833	Number of level 1 events

### 2.1.4 Events

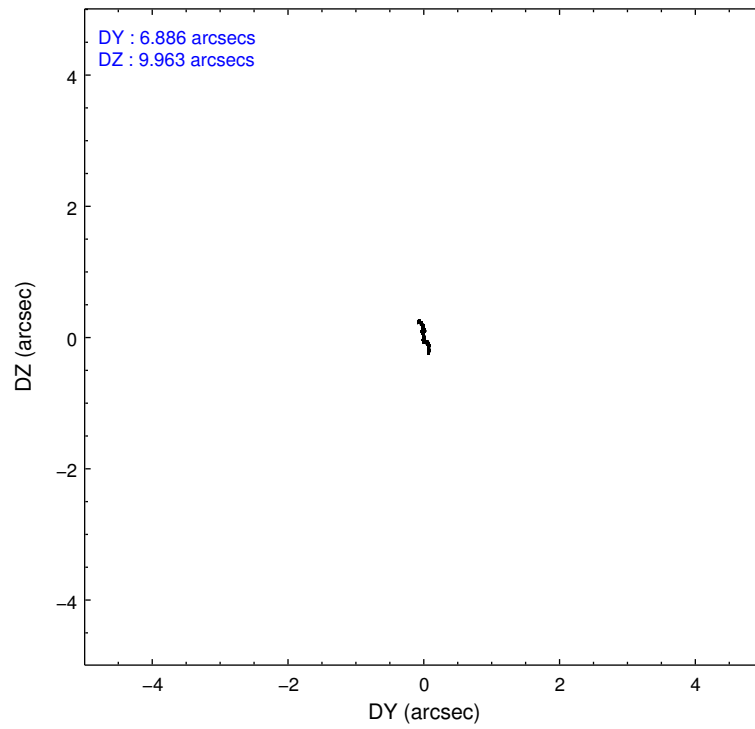
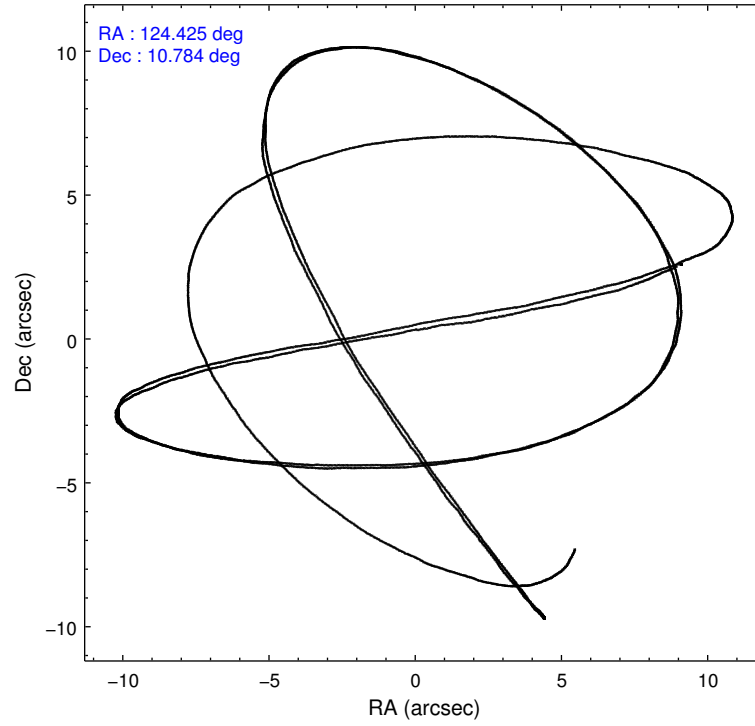
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	17312	13762	4805	14932	5233	16789
rejected events	16550	13176	1170	13857	840	13093
rejected %	95%	95%	24%	92%	16%	77%

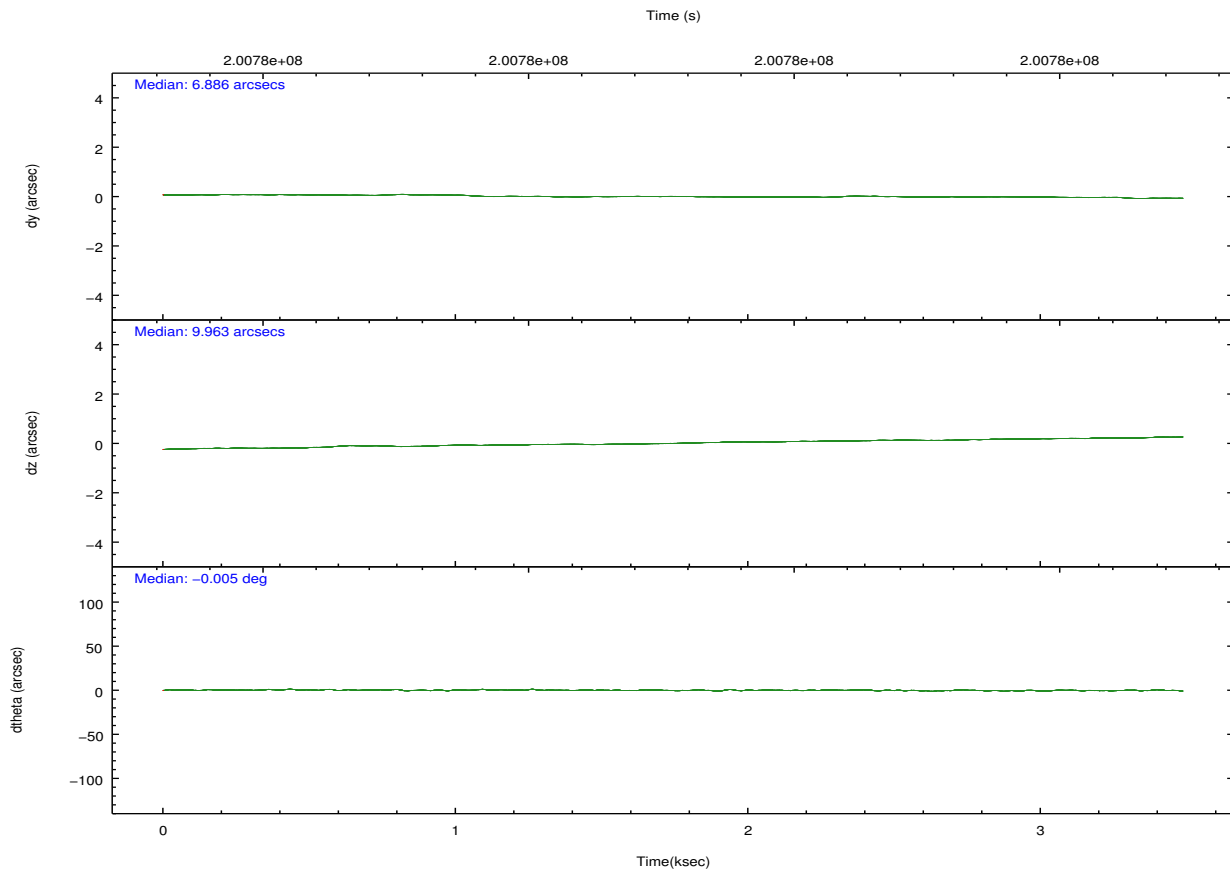
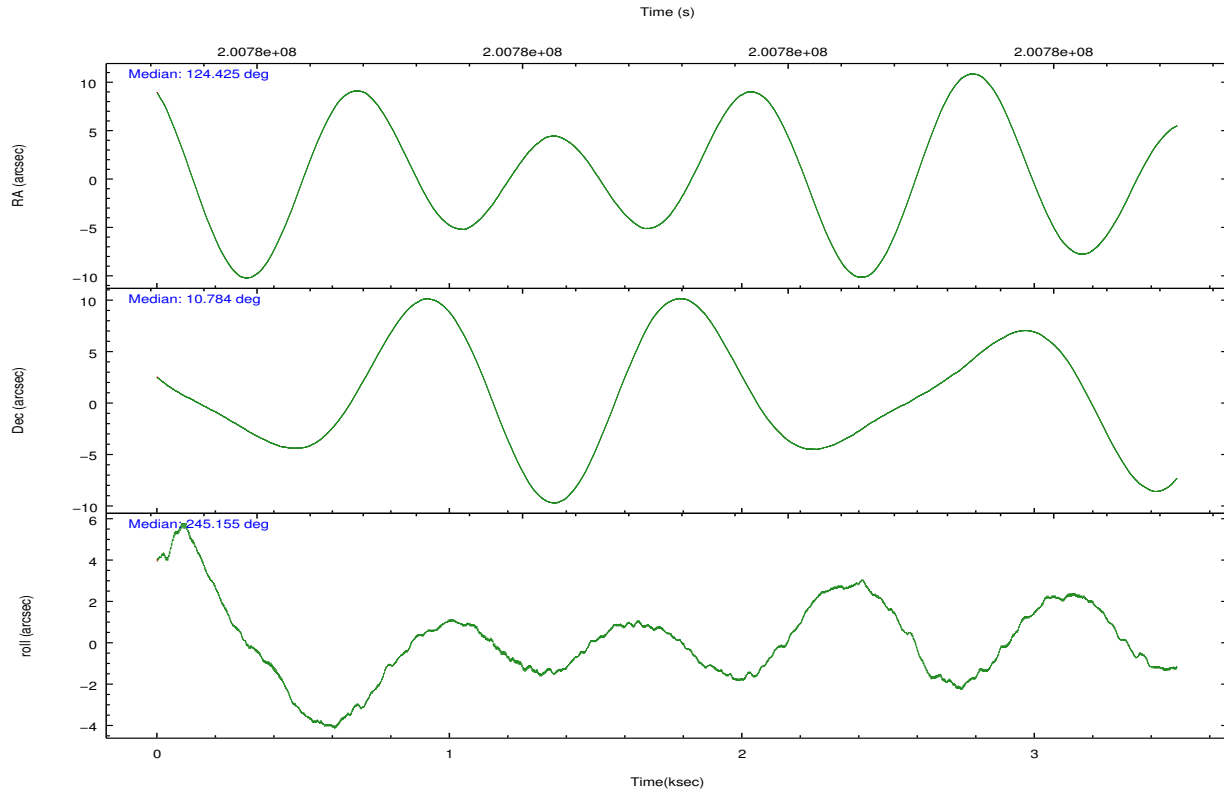
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	387	347	2159	797	2217	1312
	2%	2%	44%	5%	42%	7%
grade 1 events	7	5	56	7	7	17
	0%	0%	1%	0%	0%	0%
grade 2 events	168	60	903	139	1220	917
	0%	0%	18%	0%	23%	5%
grade 3 events	95	110	383	101	513	411
	0%	0%	7%	0%	9%	2%
grade 4 events	86	78	307	80	492	392
	0%	0%	6%	0%	9%	2%
grade 5 events	26	24	123	23	71	82
	0%	0%	2%	0%	1%	0%
grade 6 events	84	55	231	56	309	1009
	0%	0%	4%	0%	5%	6%
grade 7 events	16459	13083	643	13729	404	12649
	95%	95%	13%	91%	7%	75%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	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	124.422316	124.4250900640026	Subarray requested	NONE	NONE
[deg] Pointing Dec	10.811305	10.7840710415513	Alternating exposures requested	N	N
[deg] Pointing Roll	245.001598	245.1576849383127	[s] Primary exposure time	0.000000	3.2
[s] Window start time (MET)	200361664.184000	200361664.184000			
[s] Window stop time (MET)	201484864.184000	201484864.184000			
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	200778988.184000	200778612.80107			
Observation start date	2004-05-12T19:55:24	2004-05-12T19:50:12			
[s] Observation end time (MET)	200782288.184000	200782422.72624			
Observation end date	2004-05-12T20:50:24	2004-05-12T20:53:42			
Read mode	TIMED	TIMED			

## 2.3 Aspect



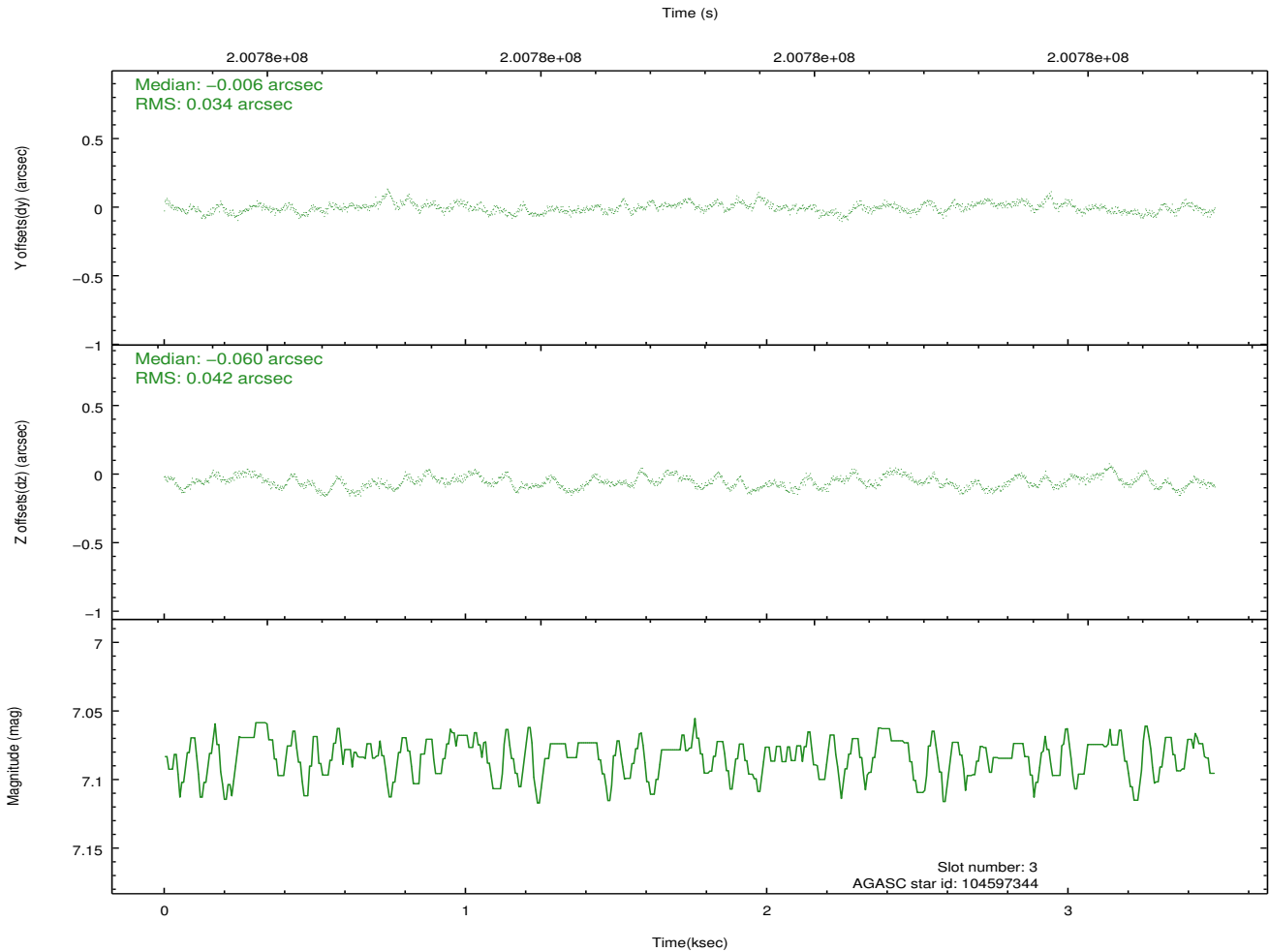
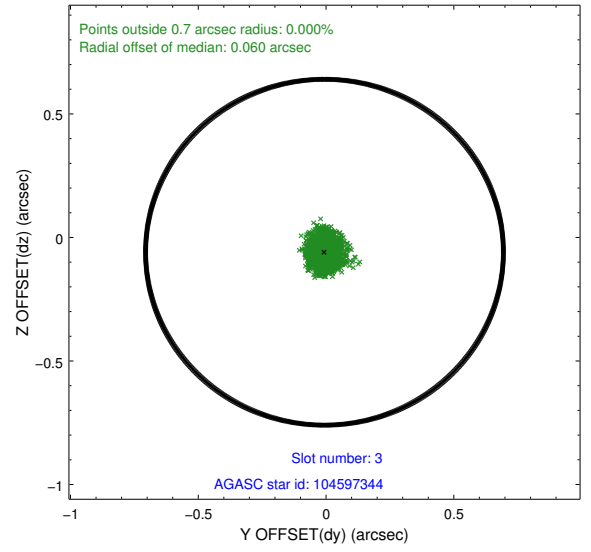
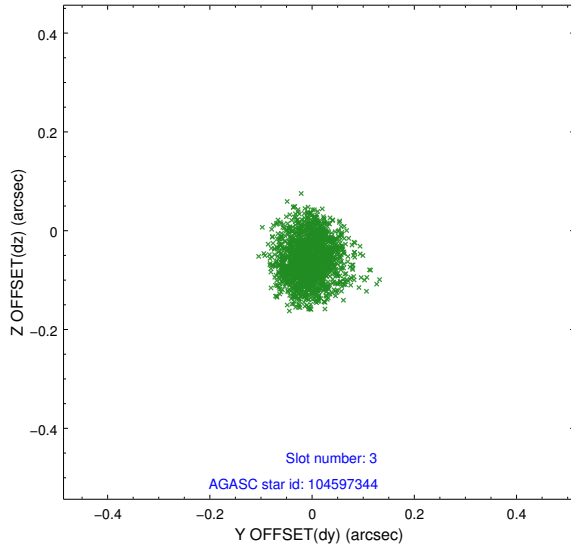


### Slot Statistics

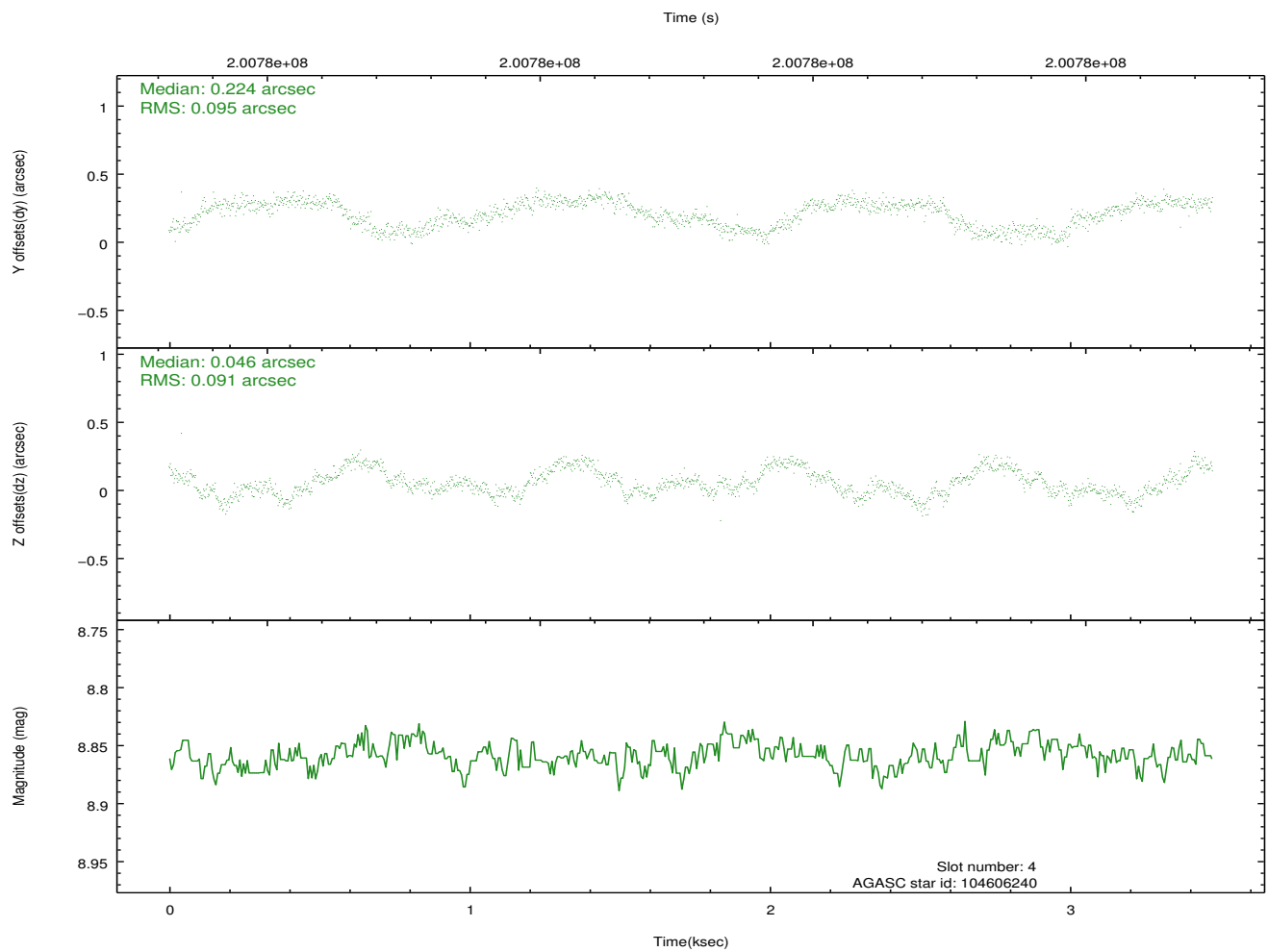
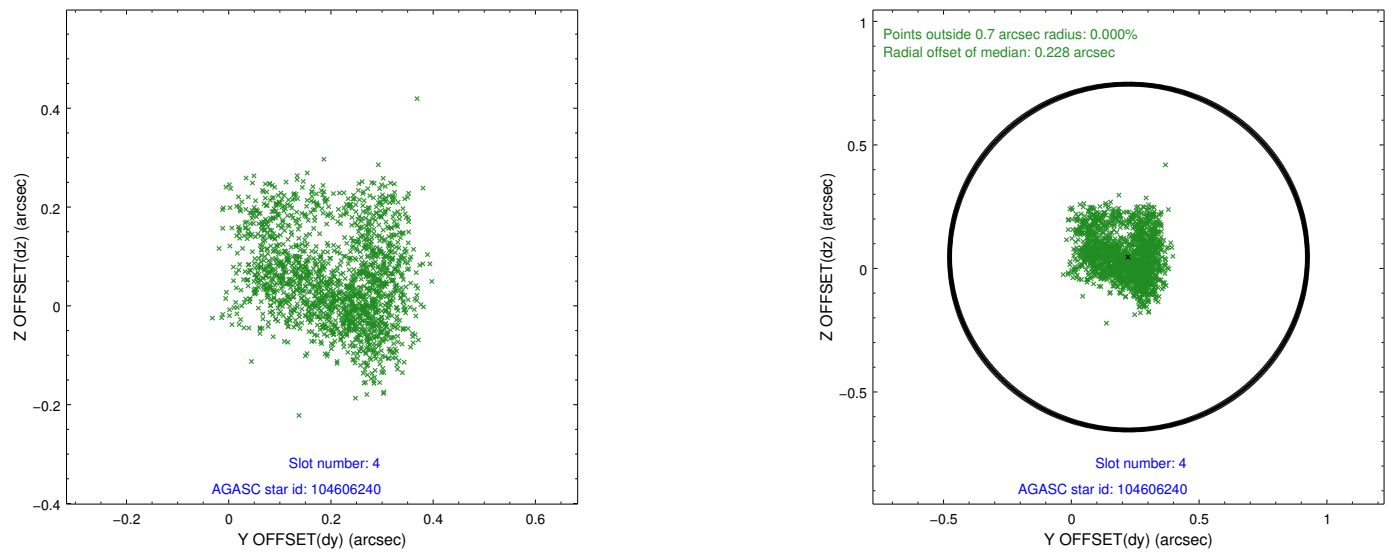
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	851	-0.051	-0.015	0.008	0.012	0.000000	0.000000	-759.67	-1731.25
1	FID	ACIS-S-4	7.20	851	0.079	0.029	0.005	0.010	0.000000	0.000000	2152.89	175.45
2	FID	ACIS-S-5	7.23	851	-0.059	-0.005	0.007	0.012	0.000000	0.000000	-1810.22	171.09
3	GUIDE	104597344	7.08	1702	-0.006	-0.060	0.059	0.091	124.136828	11.043606	-332.32	-1267.55
4	GUIDE	104606240	8.86	1694	0.224	0.046	0.144	0.219	124.221640	10.540343	1183.87	-231.83
5	GUIDE	104729968	9.26	1699	0.119	0.090	0.084	0.133	124.567030	10.276646	1528.21	1278.36
6	GUIDE	104730232	8.45	1702	-0.162	-0.096	0.076	0.117	124.558345	11.086584	-1100.87	17.74
7	GUIDE	105125392	7.59	1700	-0.163	0.004	0.074	0.111	124.280650	11.351214	-1551.43	-1274.33

## 2.4 Star Slots

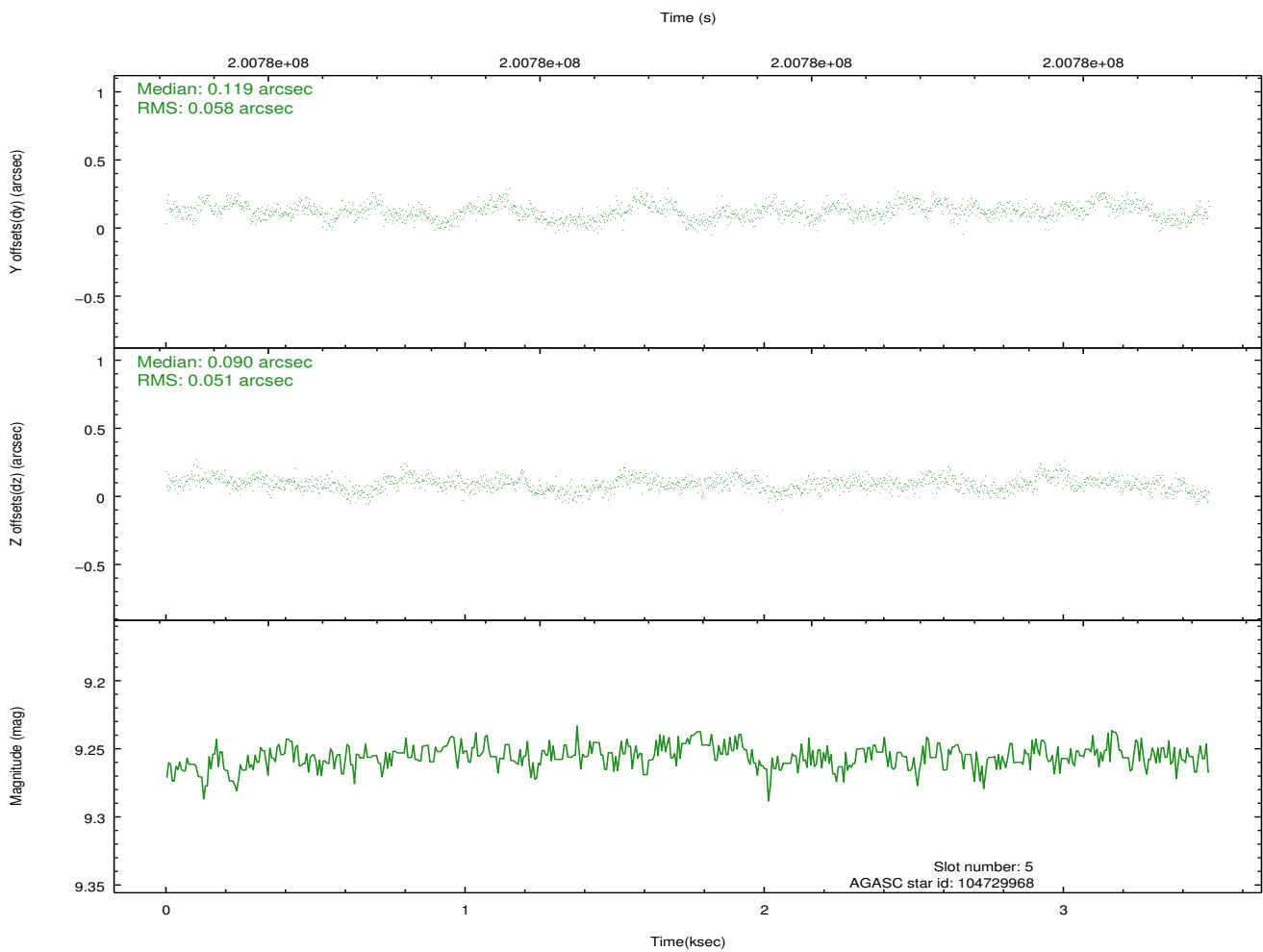
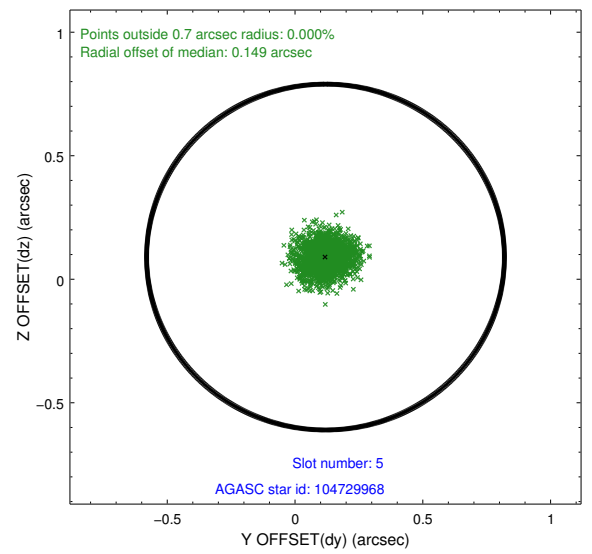
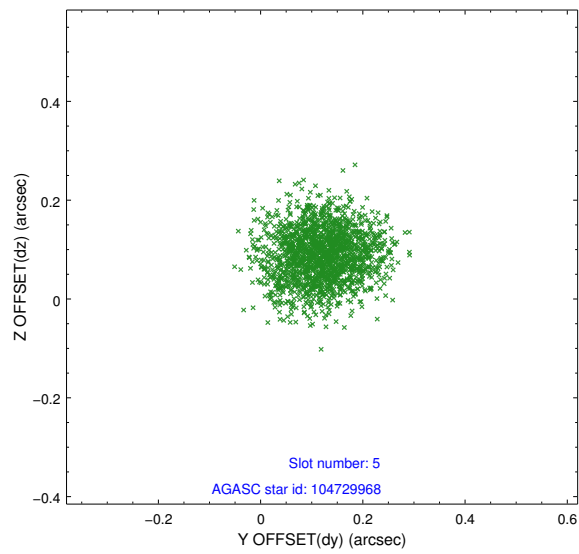
### 2.4.1 Slot 3



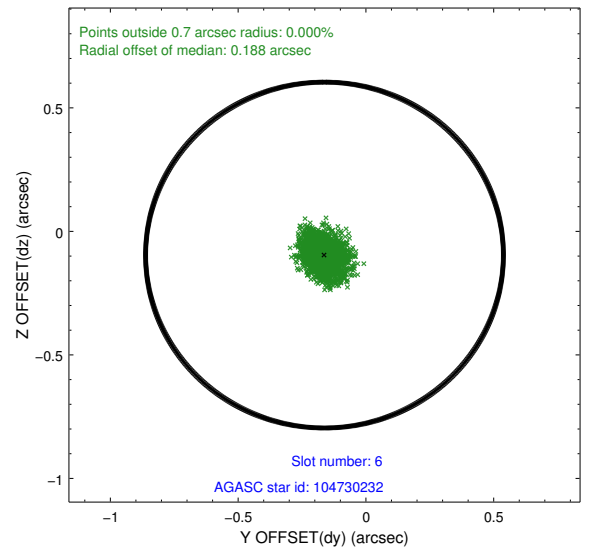
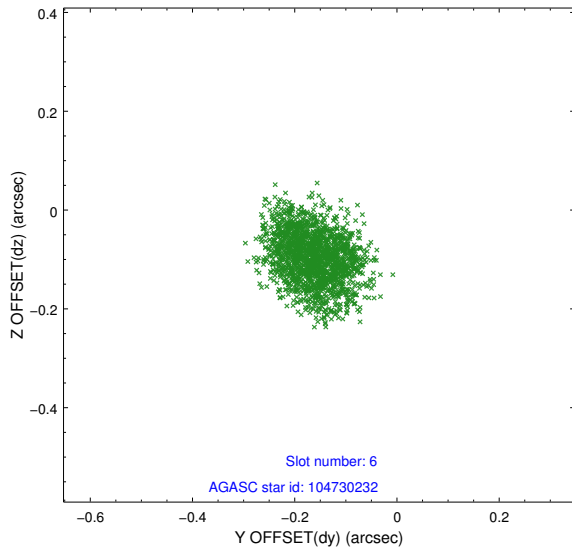
## 2.4.2 Slot 4



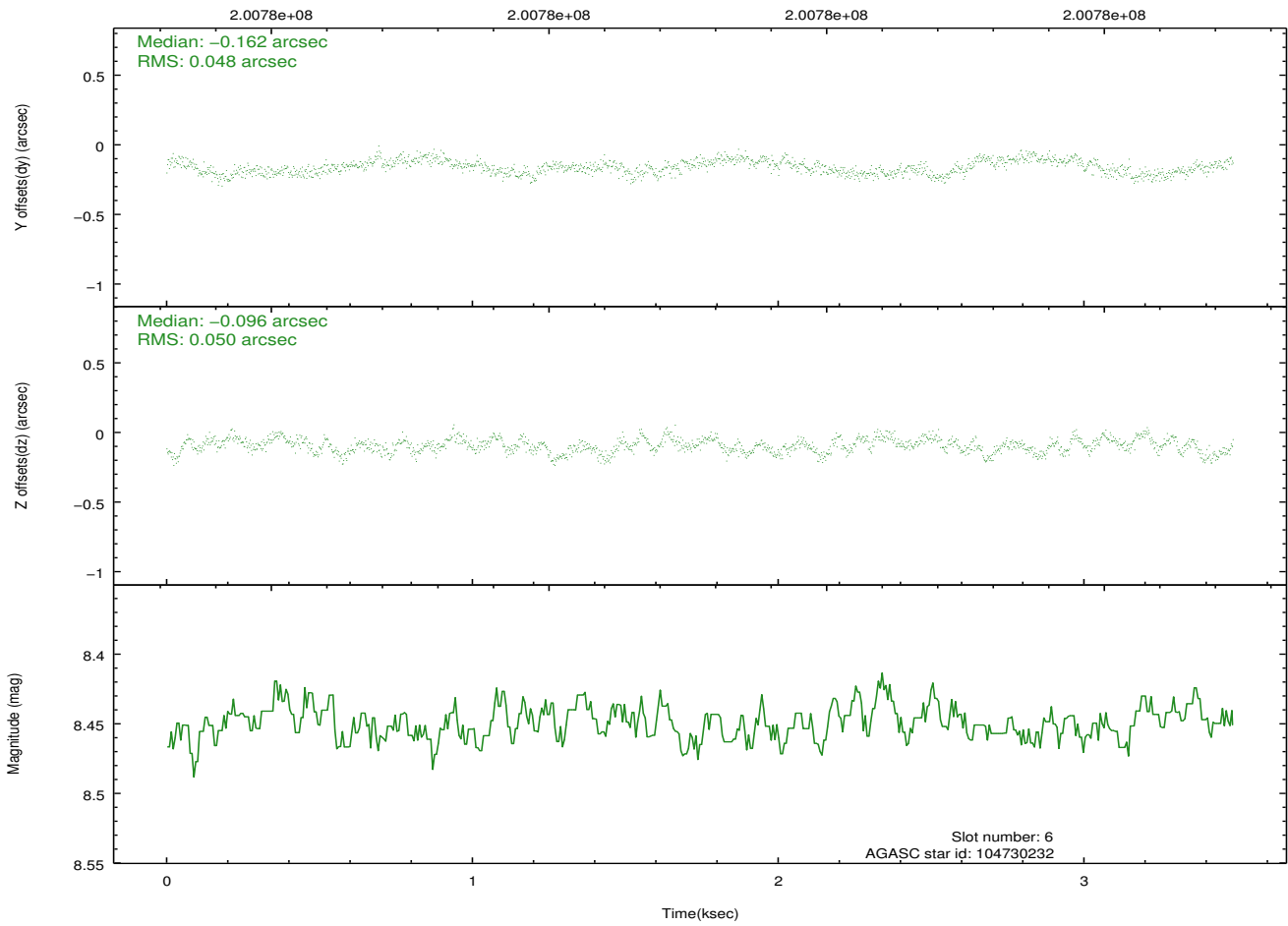
### 2.4.3 Slot 5



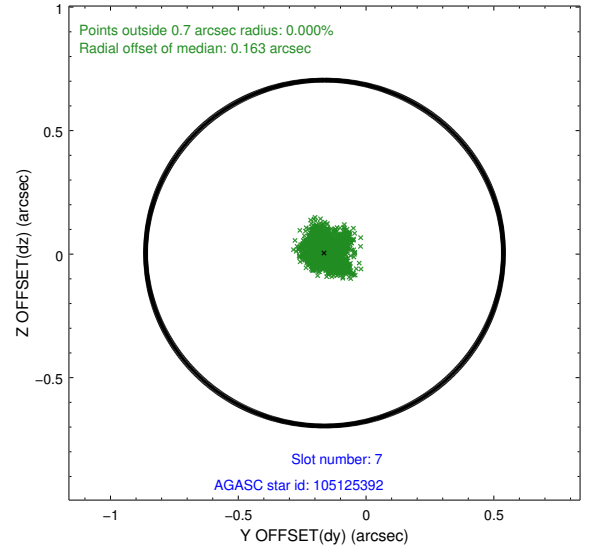
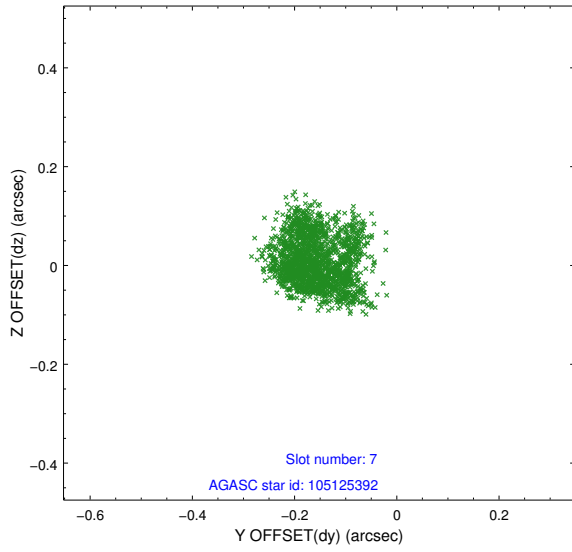
### 2.4.4 Slot 6



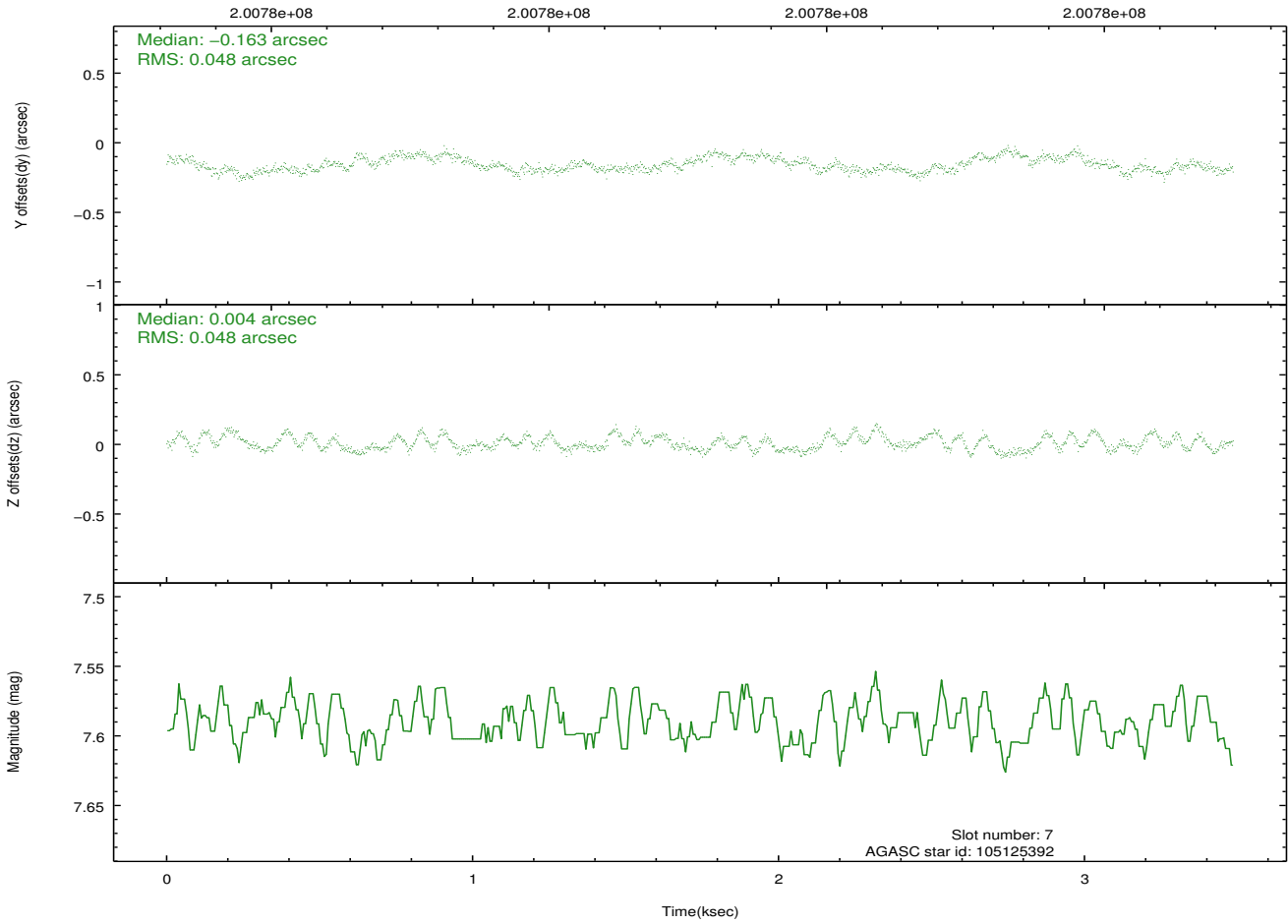
Time (s)



## 2.4.5 Slot 7

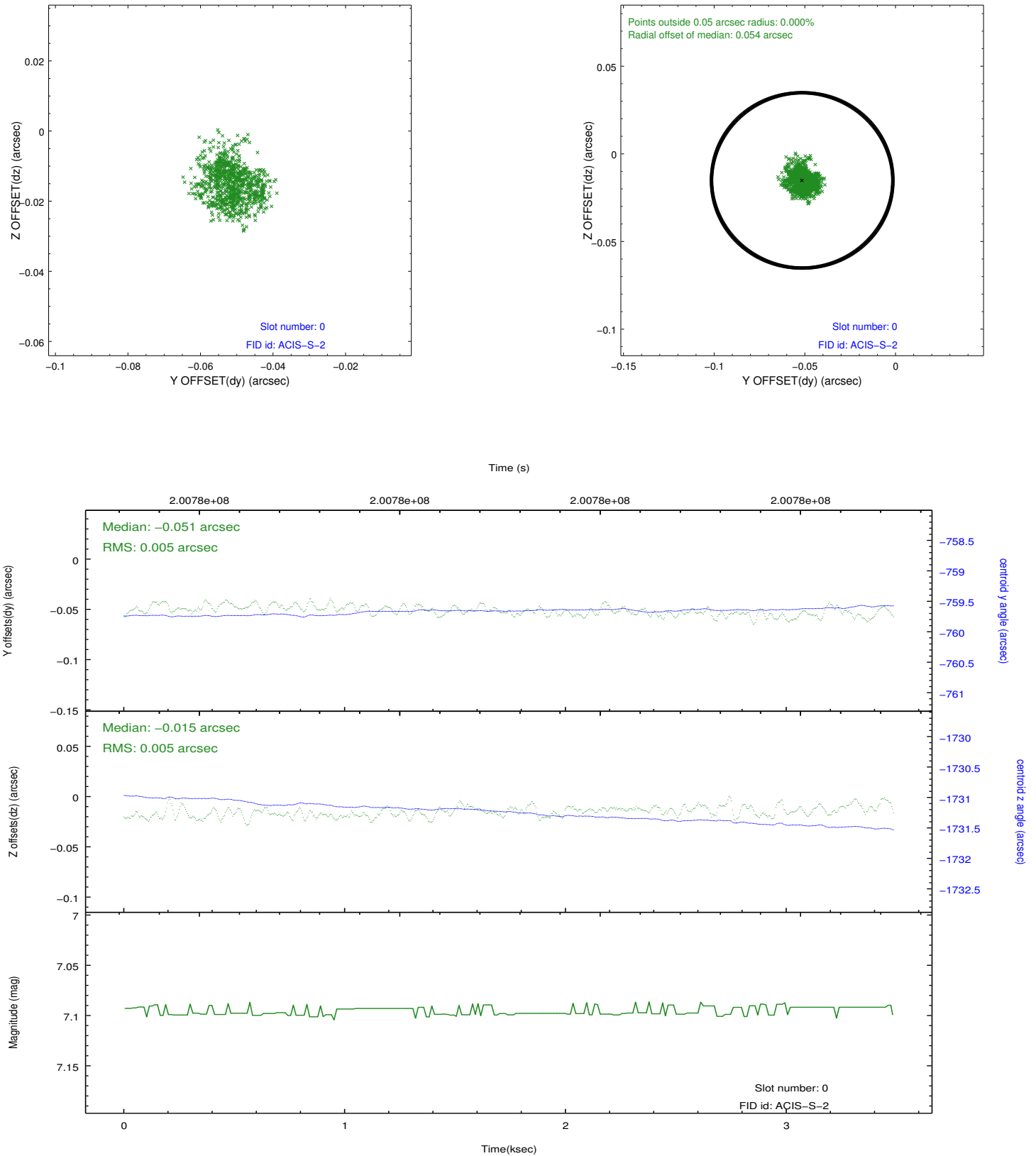


Time (s)

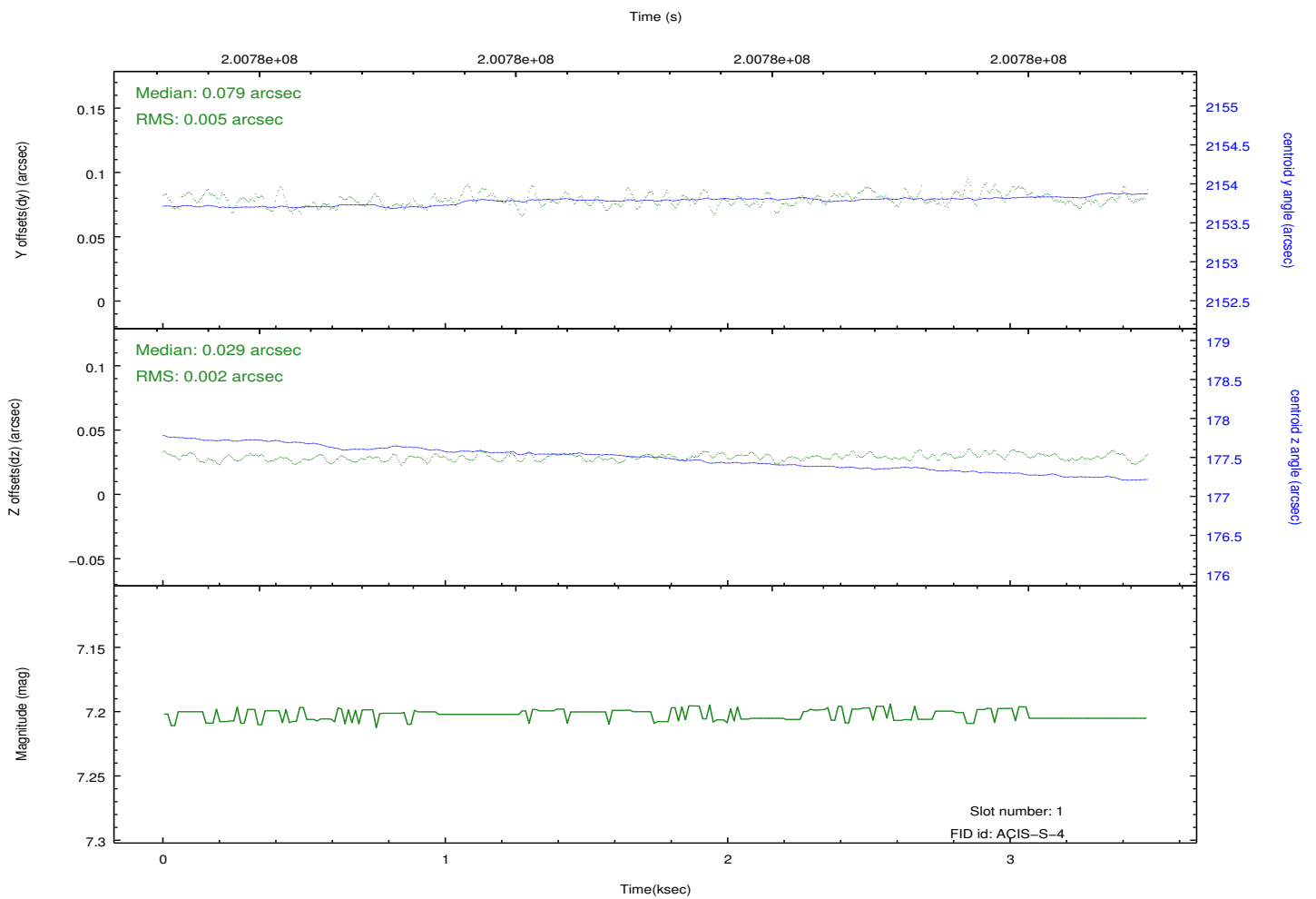
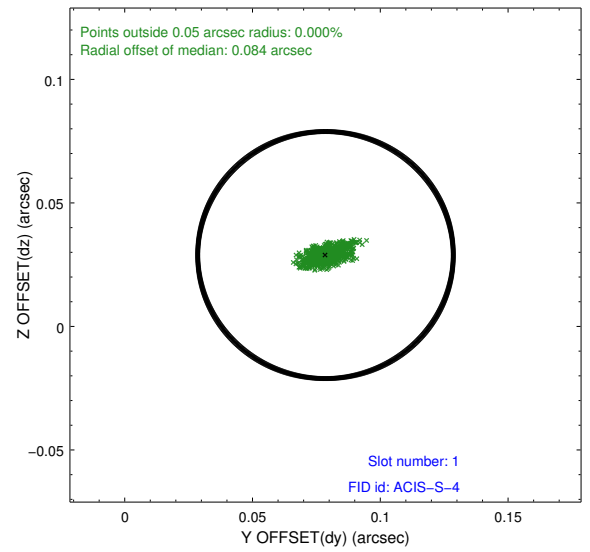
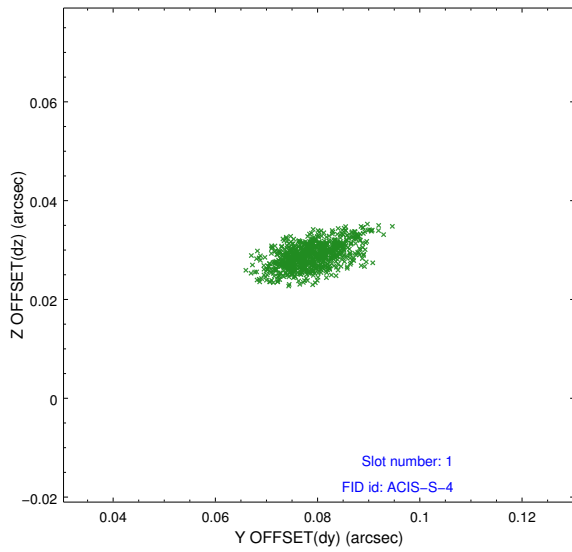


## 2.5 FID Slots

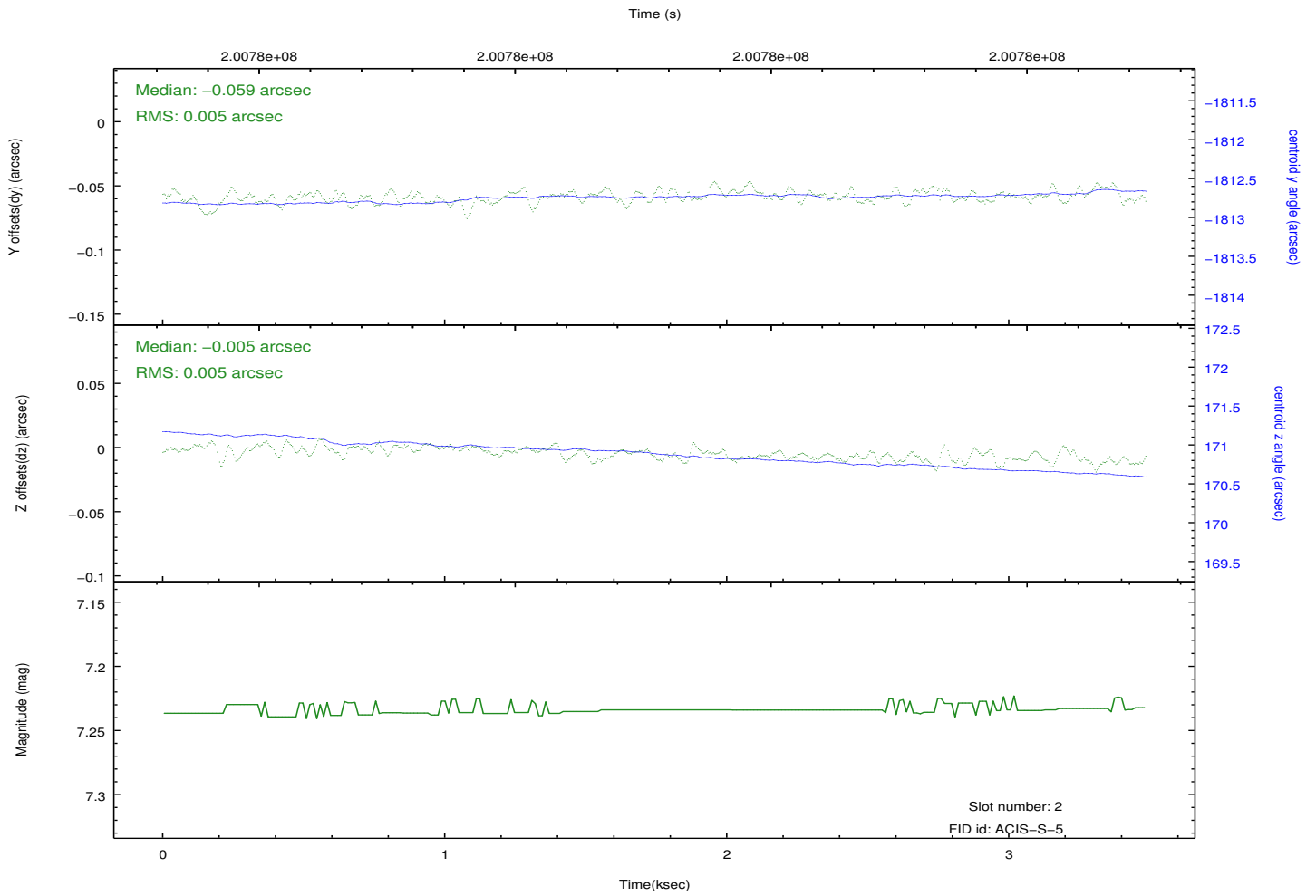
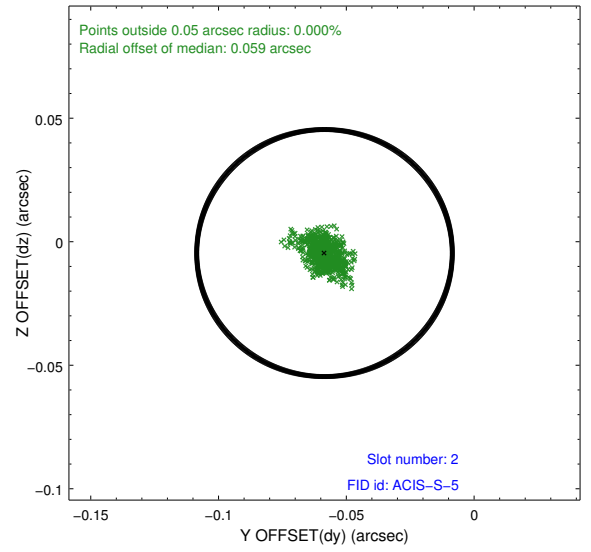
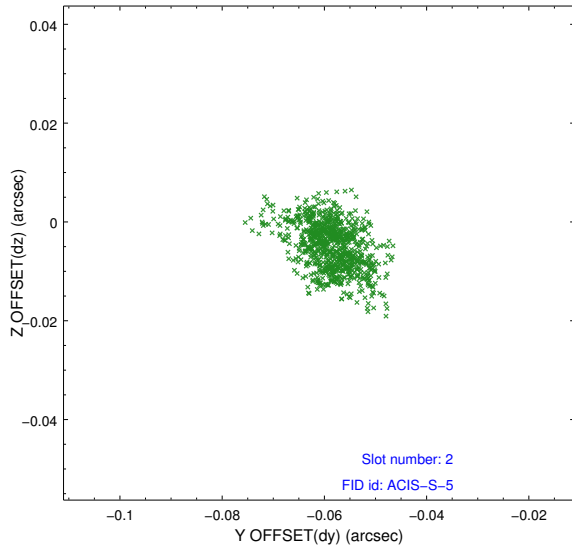
### 2.5.1 Slot 0



## 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)	2012.12.17
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	3.484

## A.2 Comments

Window constraint met. Roll preference met.

=====

This is a moving target. Users will need to run `sso_freeze` or similar software to position the events in the reference frame of the target.