

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 231 - L2 Version 4  
Chandra X-Ray Center

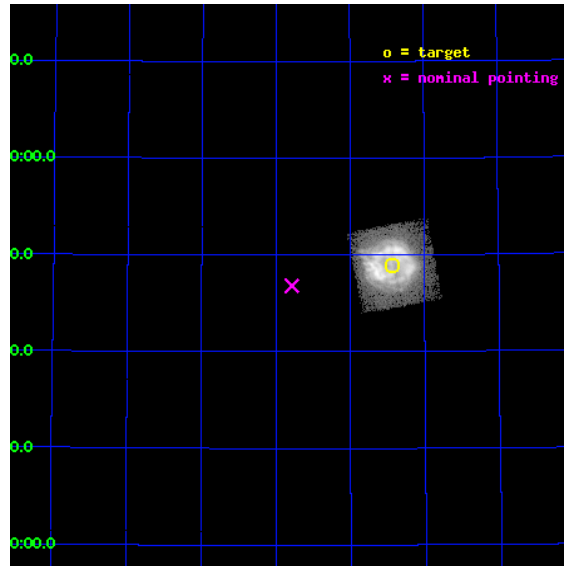
L2 Processing Date : Aug 23 2012

## 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

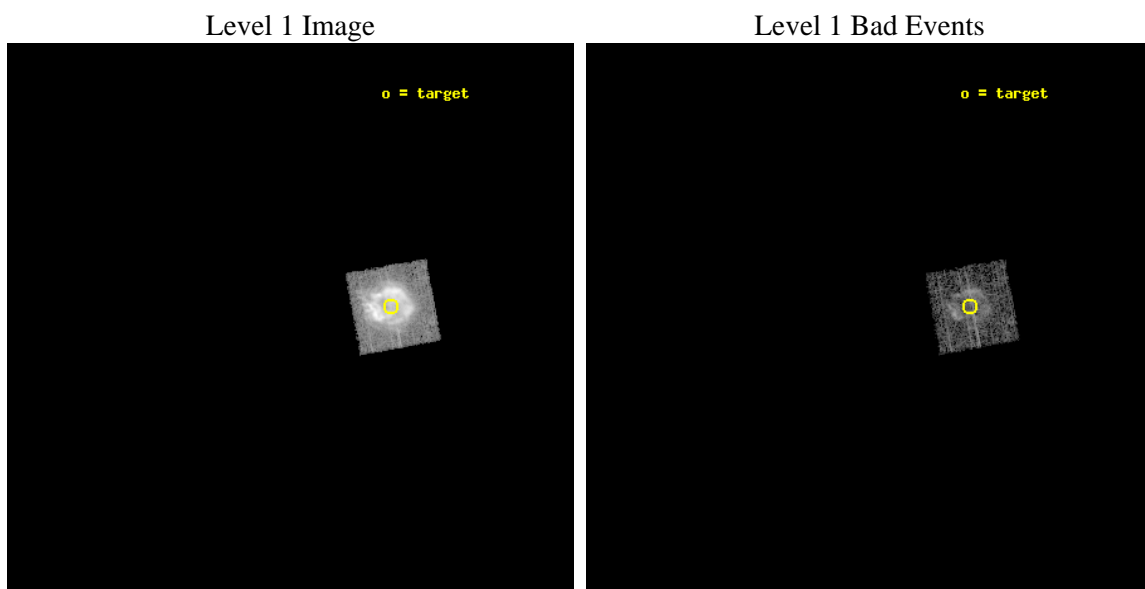
seq_num	590099	Sequence number
obs_id	231	Observation id
title	ACIS CHIP RESPONSE TO CAS A, APR. 99	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	CAS A [Chip S4, T=120, Offsets=-10,0,0]	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	350.8575	Observer's specified target RA [deg]
dec_targ	58.814833	Observer's specified target Dec [deg]
ra_nom	351.1964581969	Nominal RA [deg]
dec_nom	58.78026533523	Nominal Dec [deg]
roll_nom	349.49330350891	Nominal Roll [deg]
revision	4	Processing version of data
ontime	1044.9136983454	Sum of GTIs [s]
livetime	1031.6823719255	Livetime [s]
ontime4	1349.6047298014	Sum of GTIs [s]
ontime5	1349.6457698047	Sum of GTIs [s]
ontime6	1349.4816098064	Sum of GTIs [s]
ontime7	1349.686809808	Sum of GTIs [s]
ontime8	1044.9136983454	Sum of GTIs [s]
ontime9	1349.5226498097	Sum of GTIs [s]
l2events	202654	Number of level 2 events



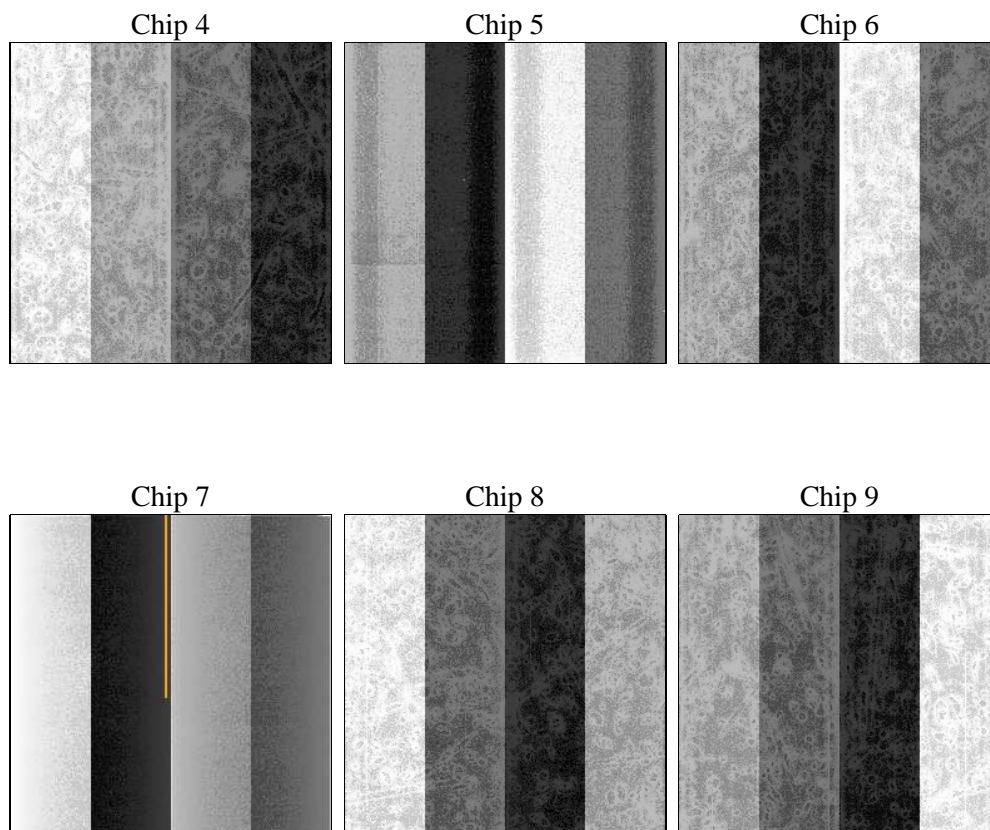
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	1000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	1044.9136983454	Sum of GTIs [s]
caldbver	4.5.1.1	&#160	ontime4	1349.6047298014	Sum of GTIs [s]
date	2012-08-23T19:06:12	Date and time of file creation	ontime5	1349.6457698047	Sum of GTIs [s]
revision	4	Processing version of data	ontime6	1349.4816098064	Sum of GTIs [s]
			ontime7	1349.686809808	Sum of GTIs [s]
			ontime8	1044.9136983454	Sum of GTIs [s]
			ontime9	1349.5226498097	Sum of GTIs [s]
			l1events	268511	Number of level 1 events

### 2.1.4 Events

	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	0	0	0	0	268511	0
rejected events	0	0	0	0	49260	0
rejected %	0%	0%	0%	0%	18%	0%

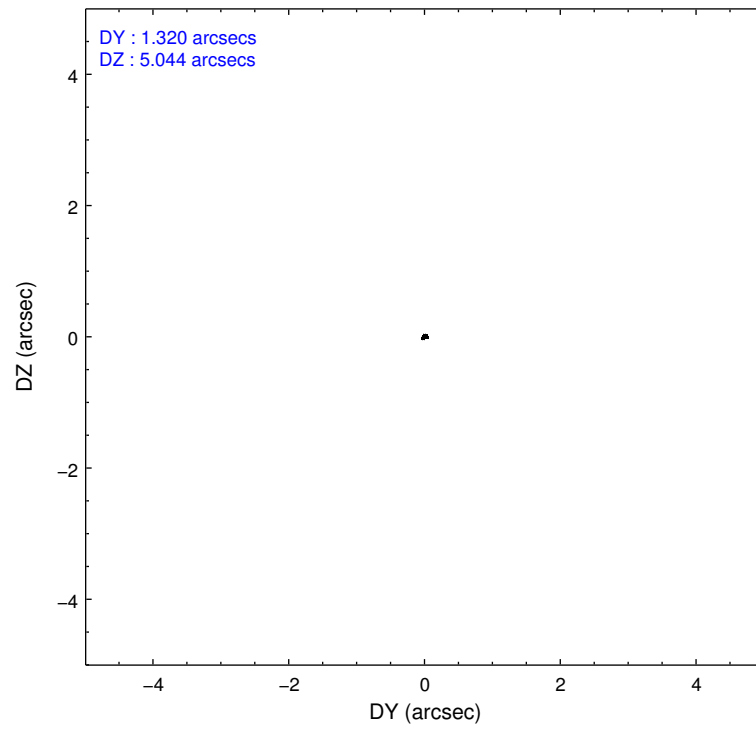
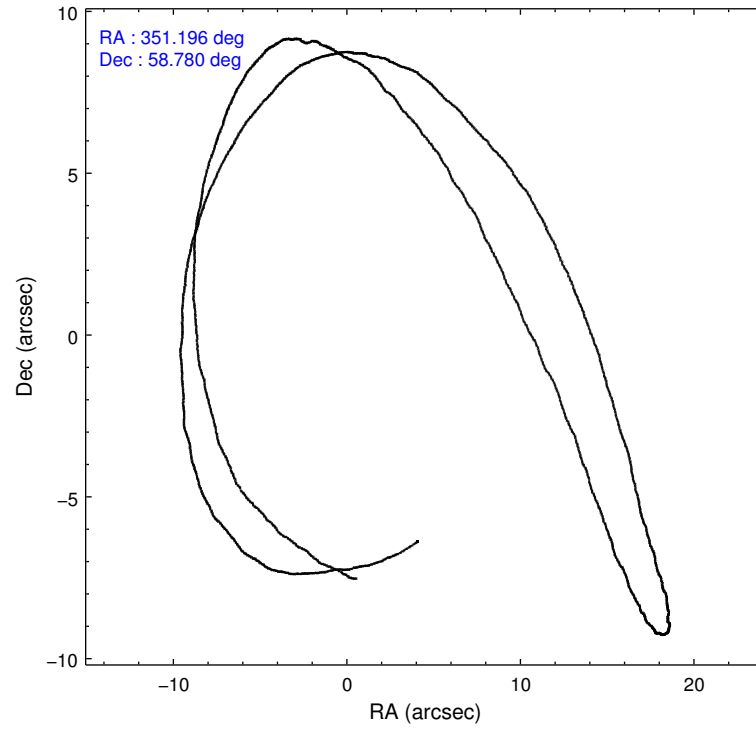
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	0	0	0	0	175399	0
	0%	0%	0%	0%	65%	0%
grade 1 events	0	0	0	0	3760	0
	0%	0%	0%	0%	1%	0%
grade 2 events	0	0	0	0	23882	0
	0%	0%	0%	0%	8%	0%
grade 3 events	0	0	0	0	7734	0
	0%	0%	0%	0%	2%	0%
grade 4 events	0	0	0	0	7920	0
	0%	0%	0%	0%	2%	0%
grade 5 events	0	0	0	0	2523	0
	0%	0%	0%	0%	0%	0%
grade 6 events	0	0	0	0	5766	0
	0%	0%	0%	0%	2%	0%
grade 7 events	0	0	0	0	41527	0
	0%	0%	0%	0%	15%	0%

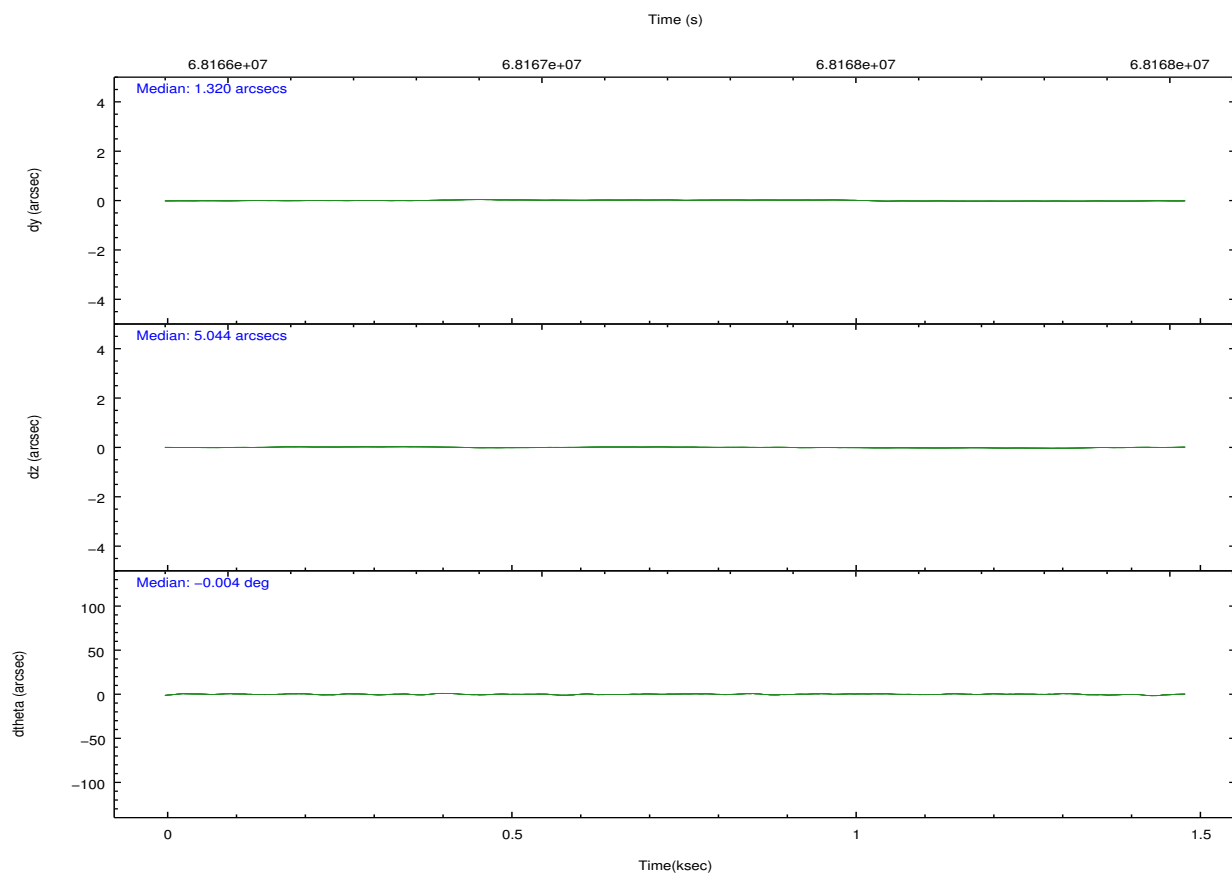
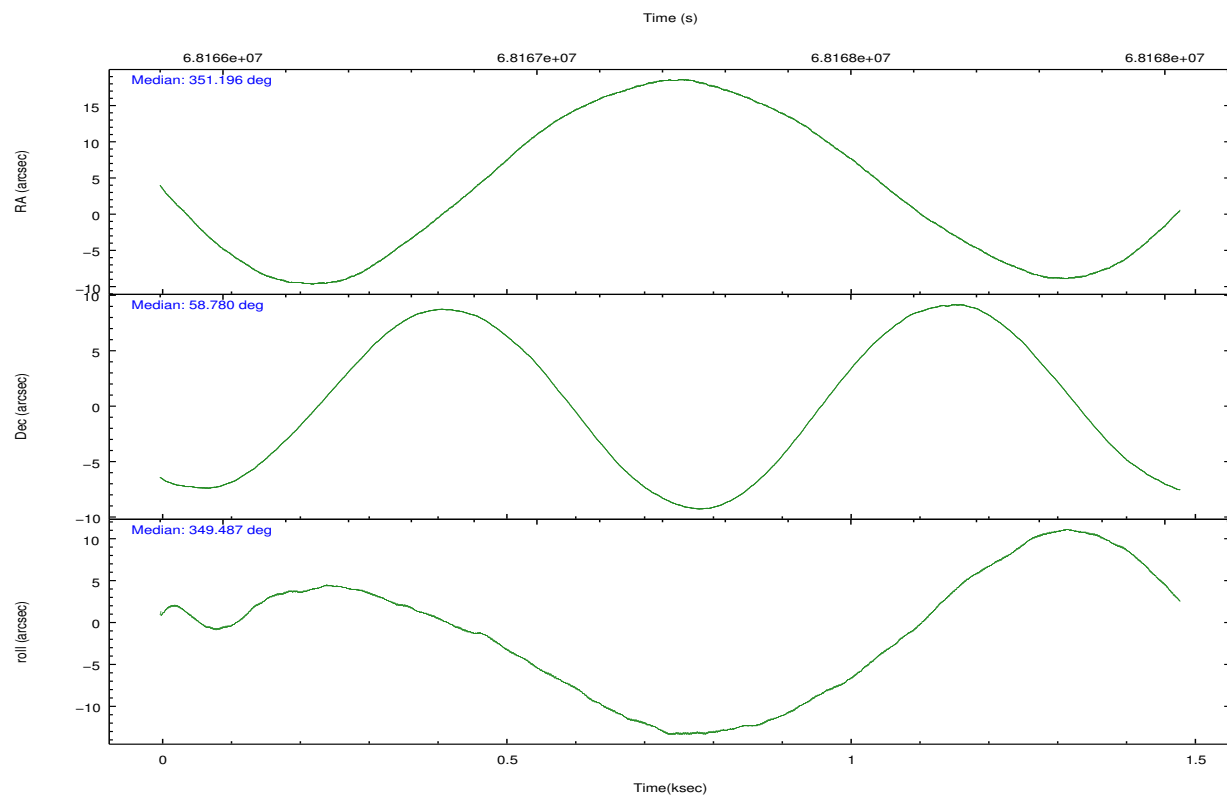
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-456789	ACIS-456789
Grating	NONE	NONE
Data mode	FAINT	FAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	351.147407	351.1964581968961
[deg] Pointing Dec	58.771077	58.78026533522996
[deg] Pointing Roll	349.378644	349.4933035089067
[s] Window start time (MET)	65750464.184000	65750464.184000
[s] Window stop time (MET)	68256064.184000	68256064.184000
[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)	68166950.184000	68166284.53715099
Observation start date	2000-02-28T23:14:46	2000-02-28T23:04:44
[s] Observation end time (MET)	68167950.184000	68168084.437217
Observation end date	2000-02-28T23:31:26	2000-02-28T23:34:44
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





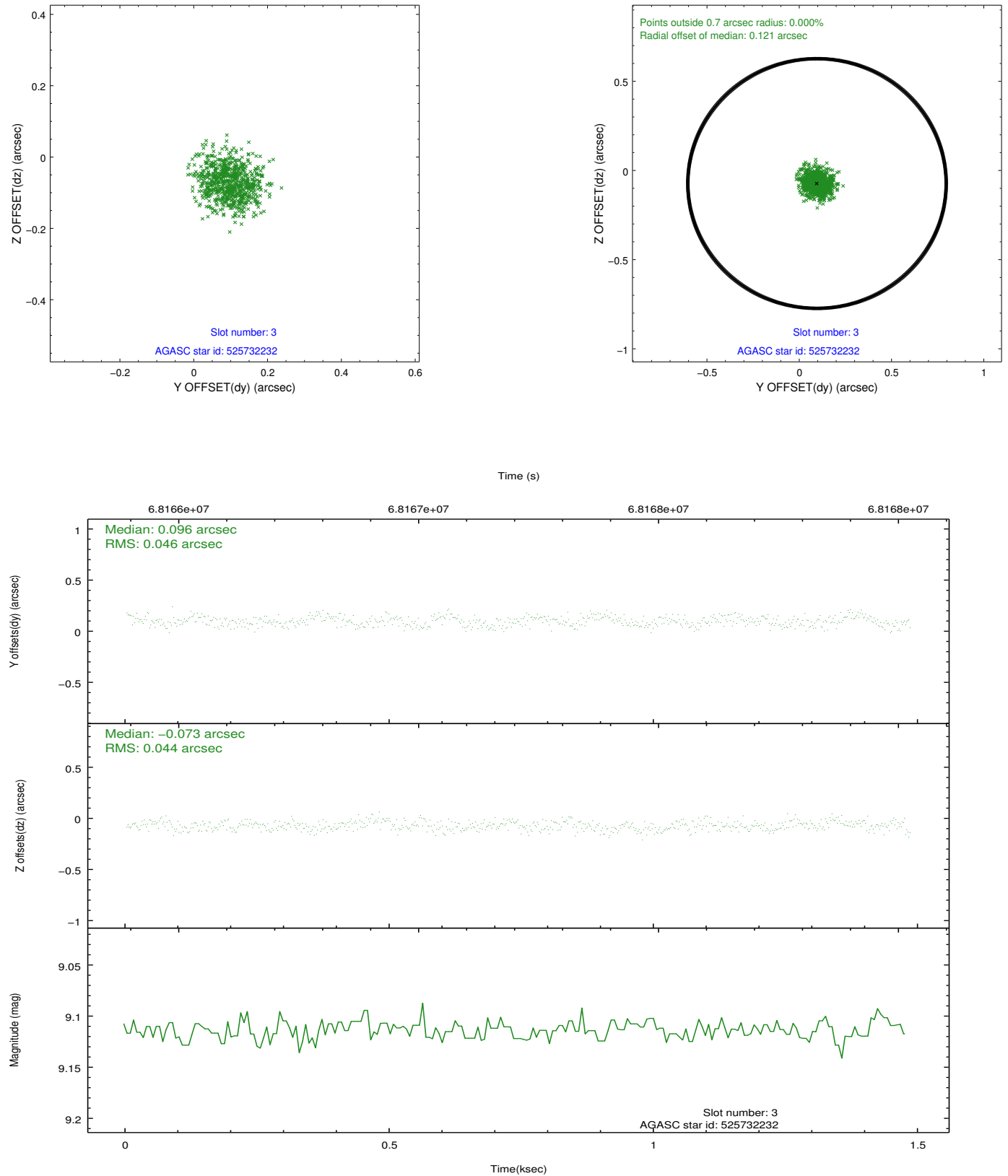
### Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	362	-0.032	-0.005	0.006	0.011	0.000000	0.000000	-753.96	-1726.10
1	FID	ACIS-S-4	7.20	362	0.009	0.017	0.006	0.009	0.000000	0.000000	2157.36	177.78
2	FID	ACIS-S-5	7.24	362	-0.008	-0.003	0.007	0.011	0.000000	0.000000	-1801.01	176.53
3	GUIDE	525732232	9.11	724	0.096	-0.073	0.068	0.108	351.669550	58.757012	968.52	133.62
4	GUIDE	525609504	9.08	724	-0.054	0.025	0.118	0.183	349.896632	58.356658	-2047.80	-1880.26
5	GUIDE	525737208	9.38	724	-0.077	0.001	0.129	0.195	351.154109	59.407897	-412.12	2252.83
6	GUIDE	525207384	9.74	724	0.045	-0.024	0.108	0.174	351.880308	58.083642	1827.08	-2164.62
7	GUIDE	525737880	9.76	722	-0.008	0.062	0.092	0.150	351.070641	59.208299	-425.29	1517.98

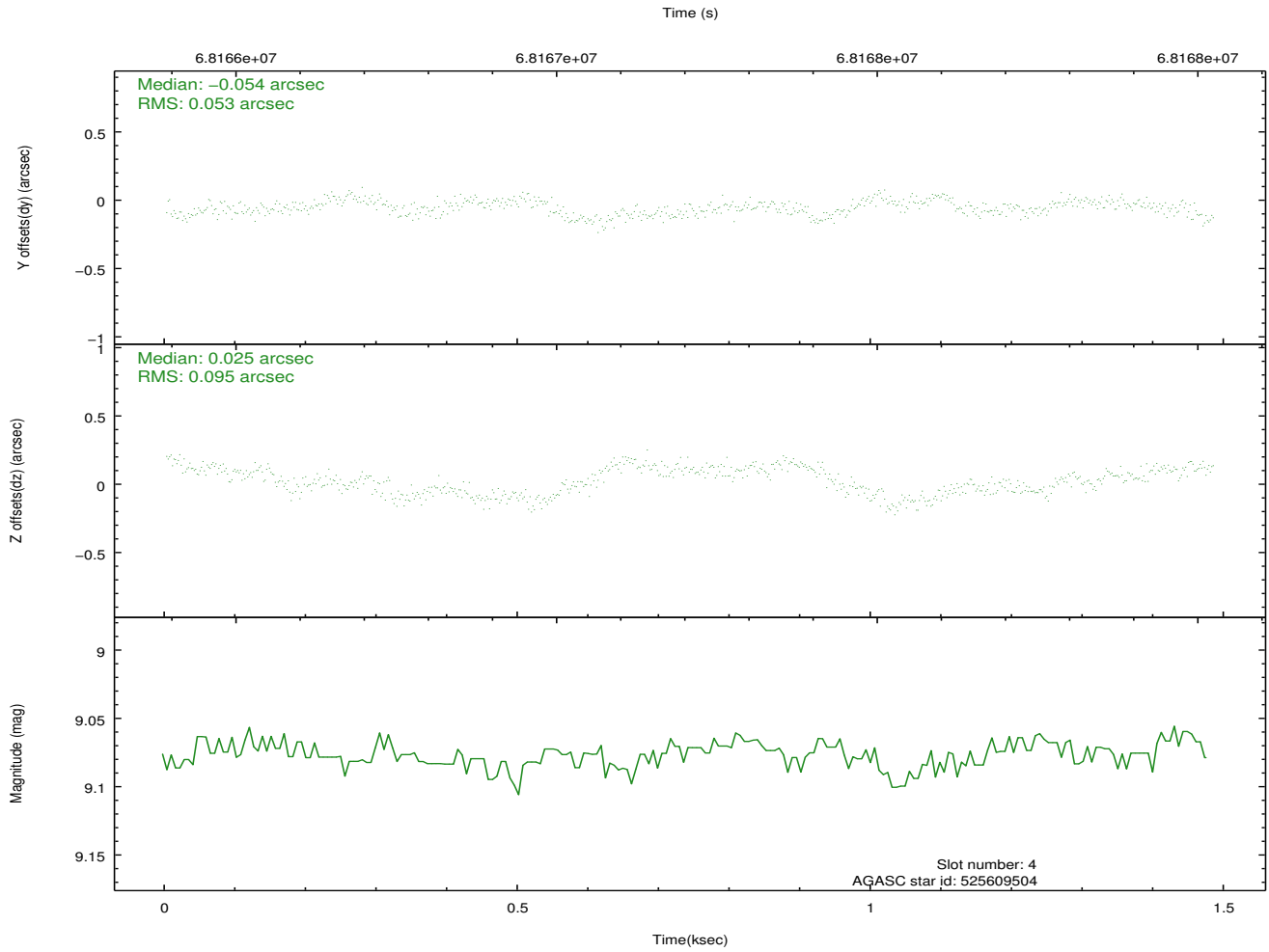
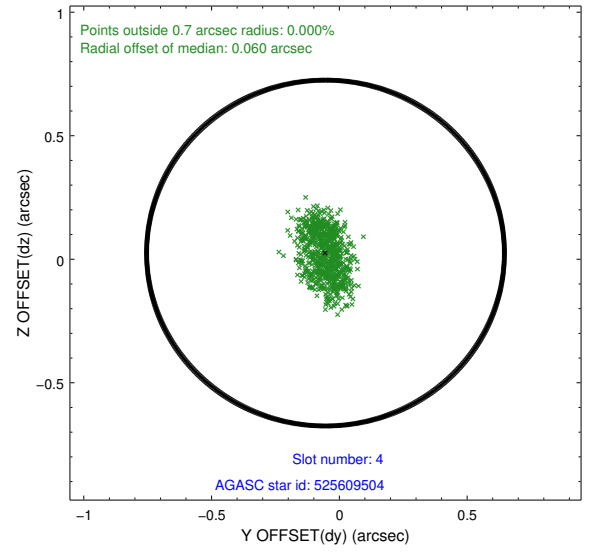
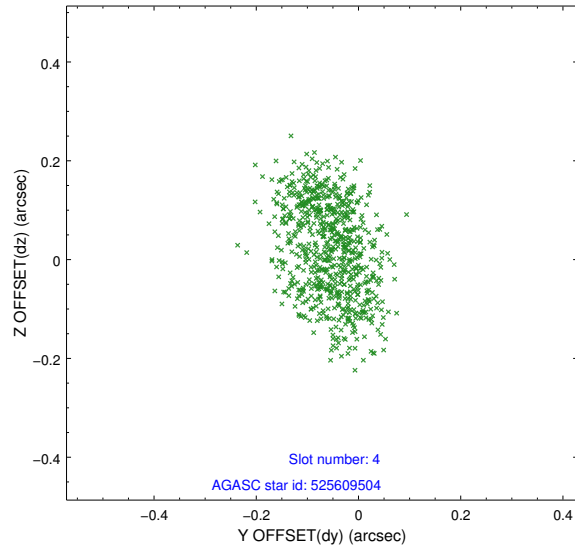


## 2.4 Star Slots

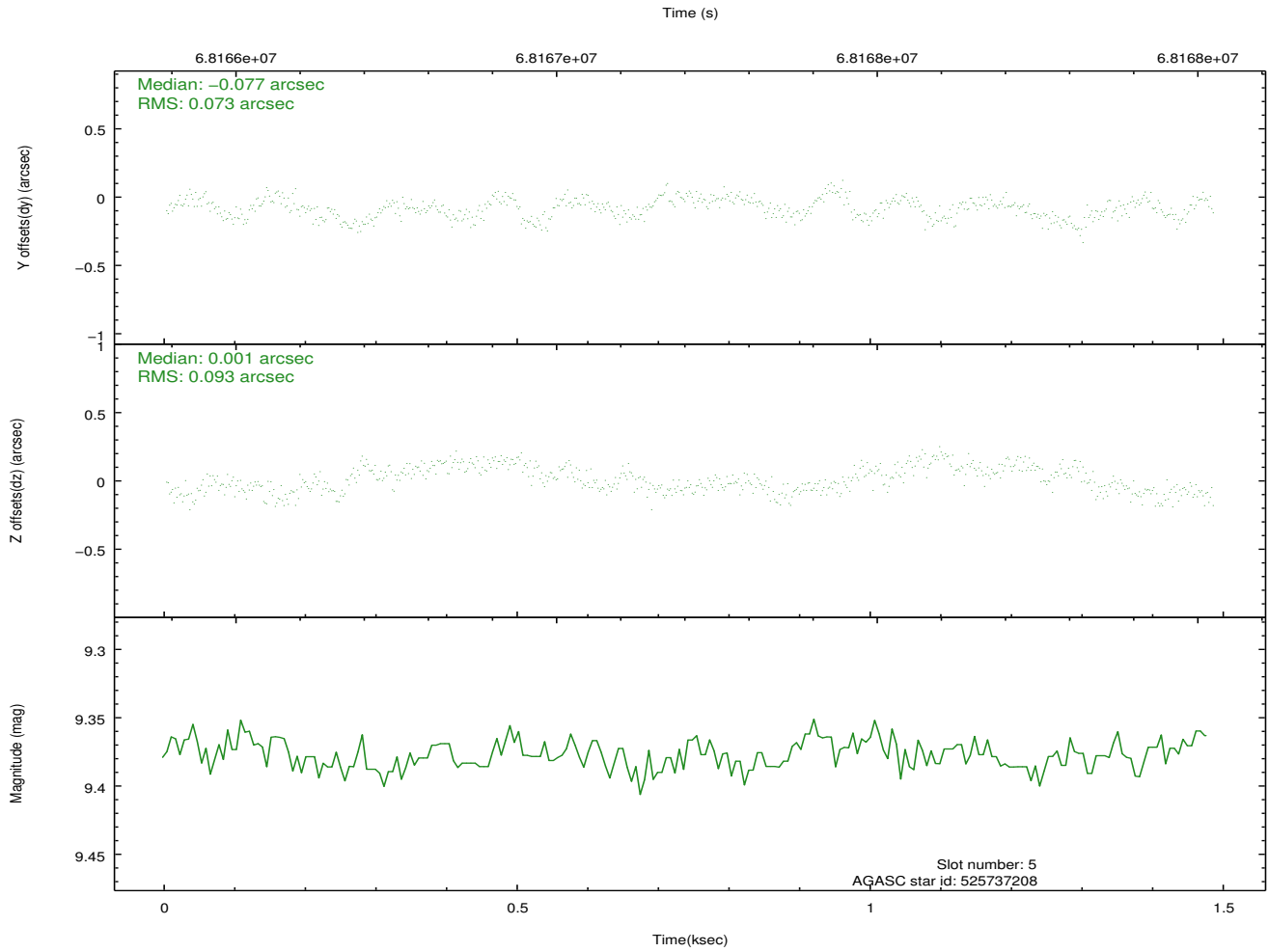
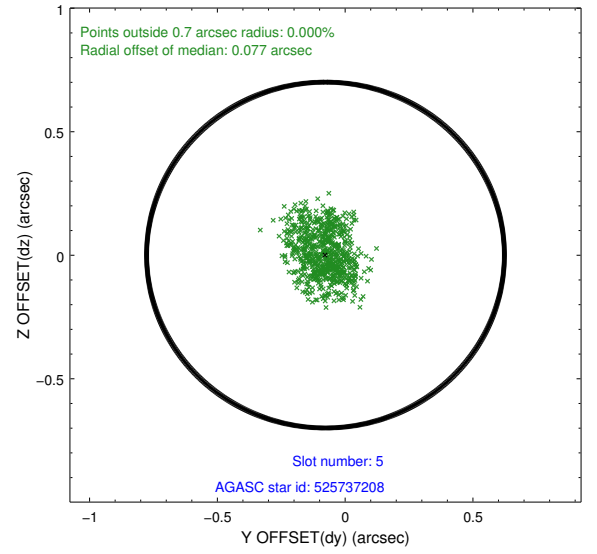
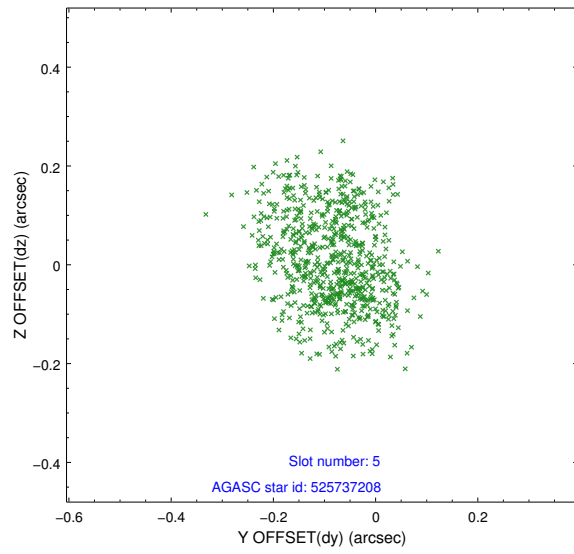
### 2.4.1 Slot 3



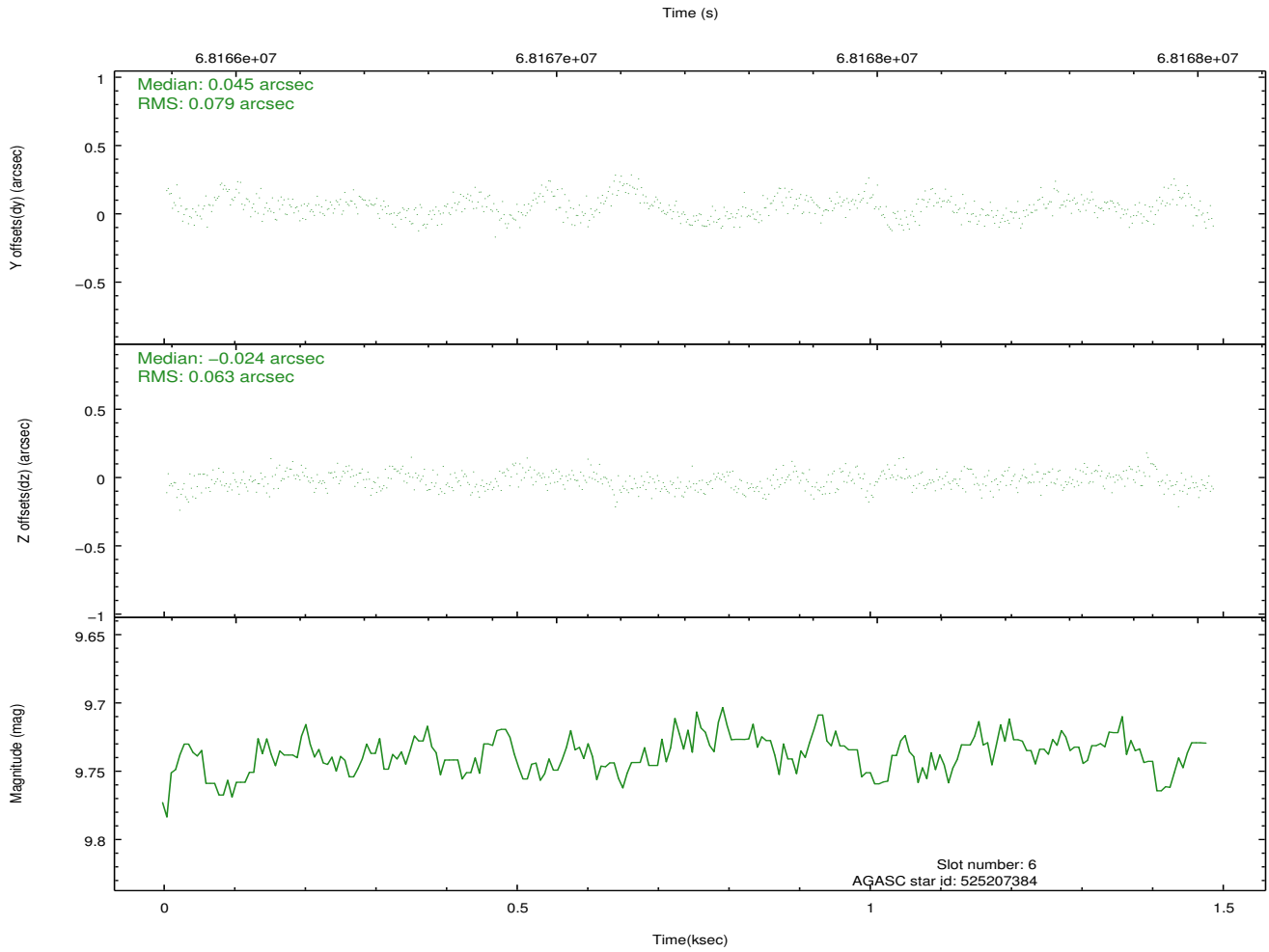
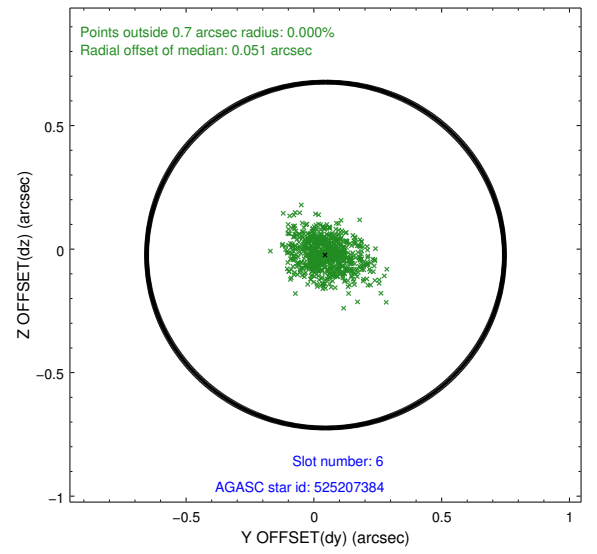
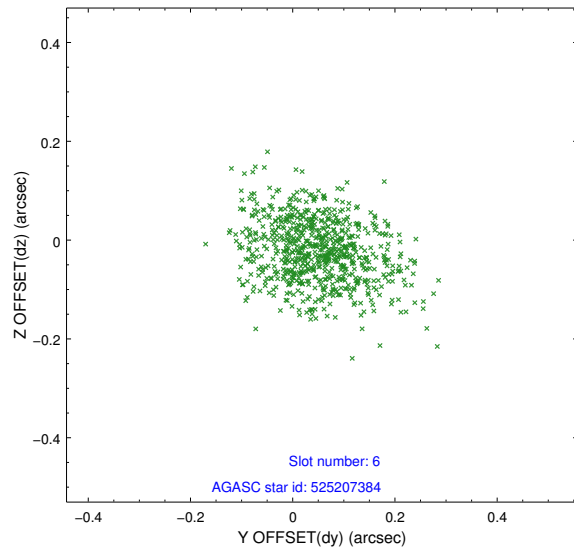
## 2.4.2 Slot 4



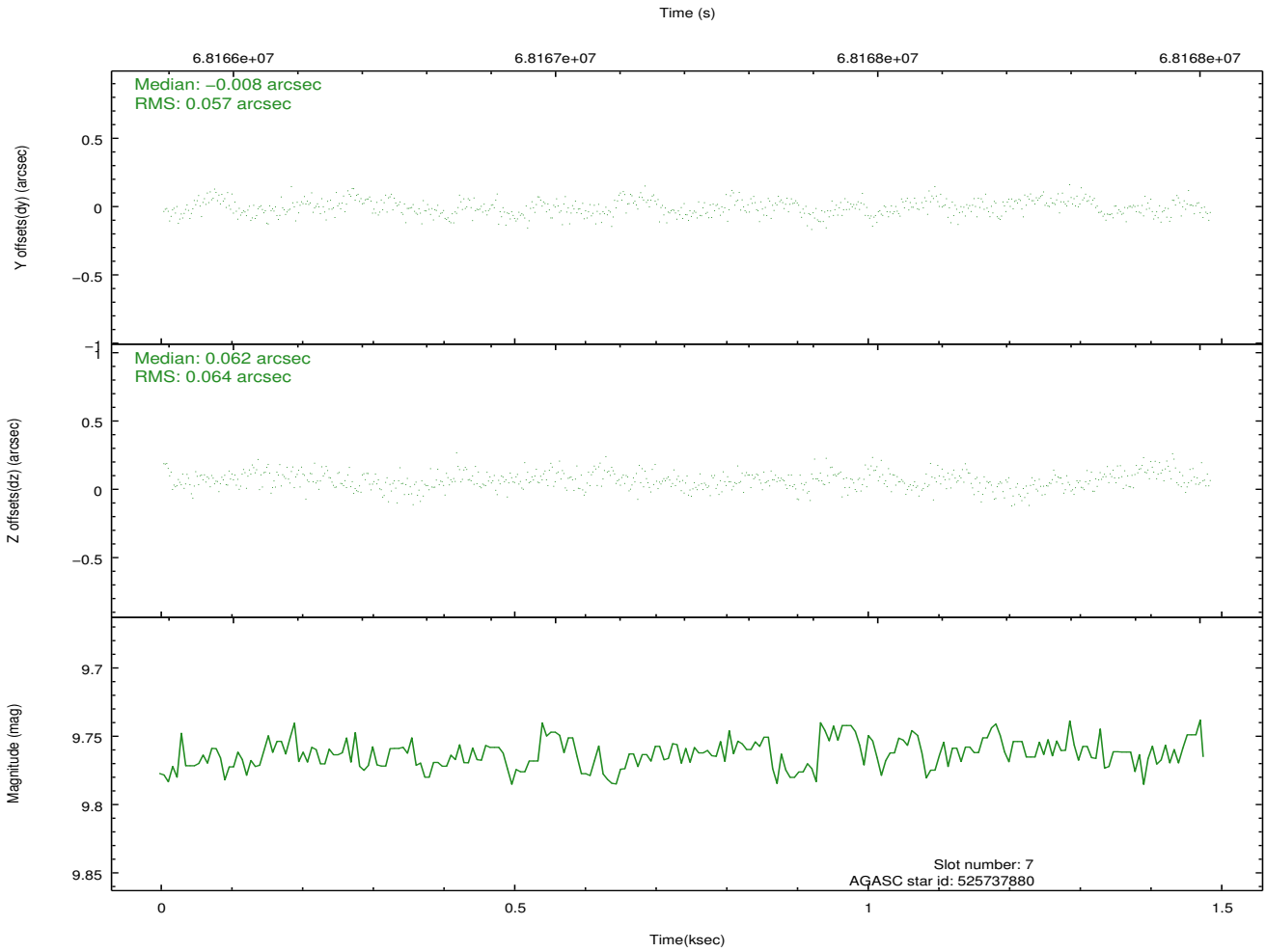
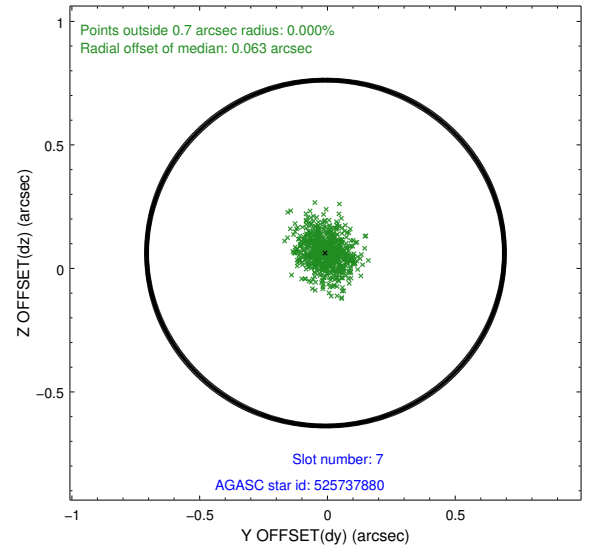
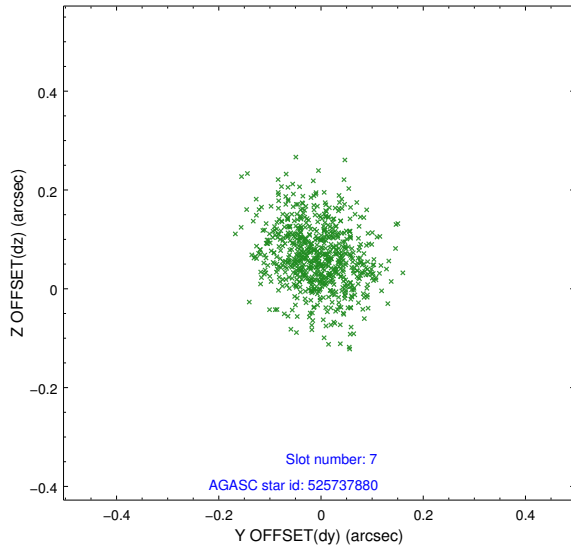
### 2.4.3 Slot 5



## 2.4.4 Slot 6

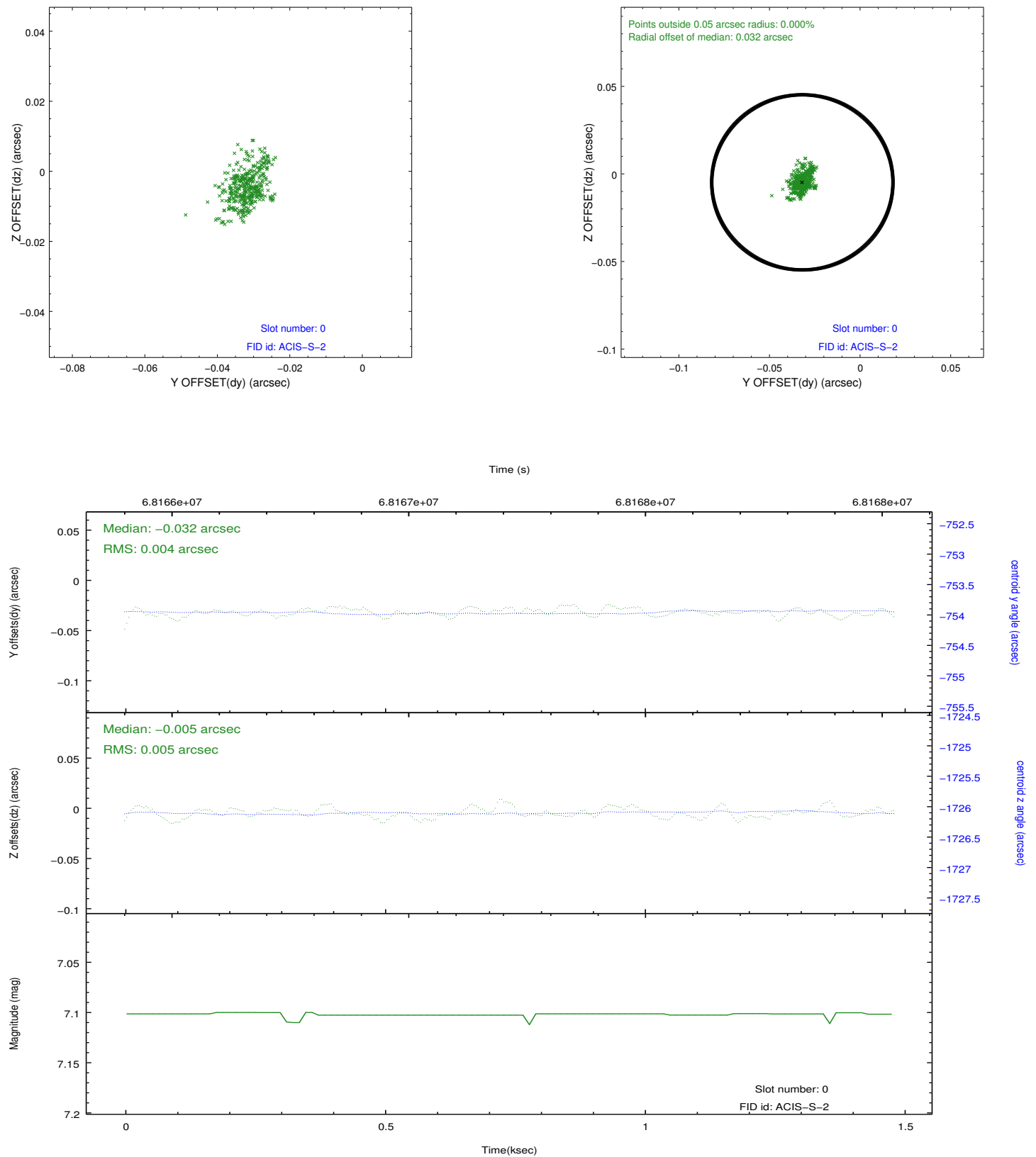


### 2.4.5 Slot 7

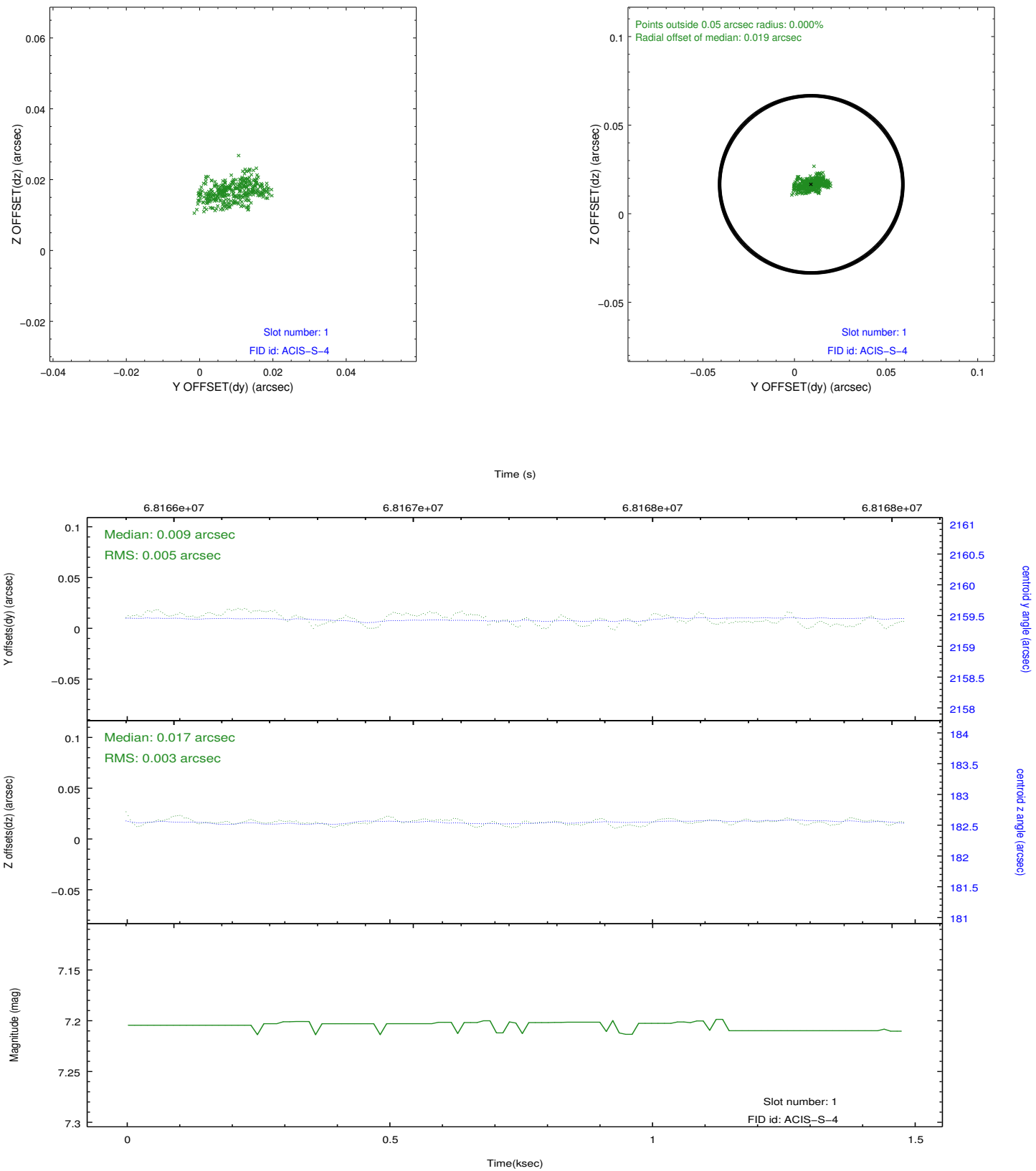


## 2.5 FID Slots

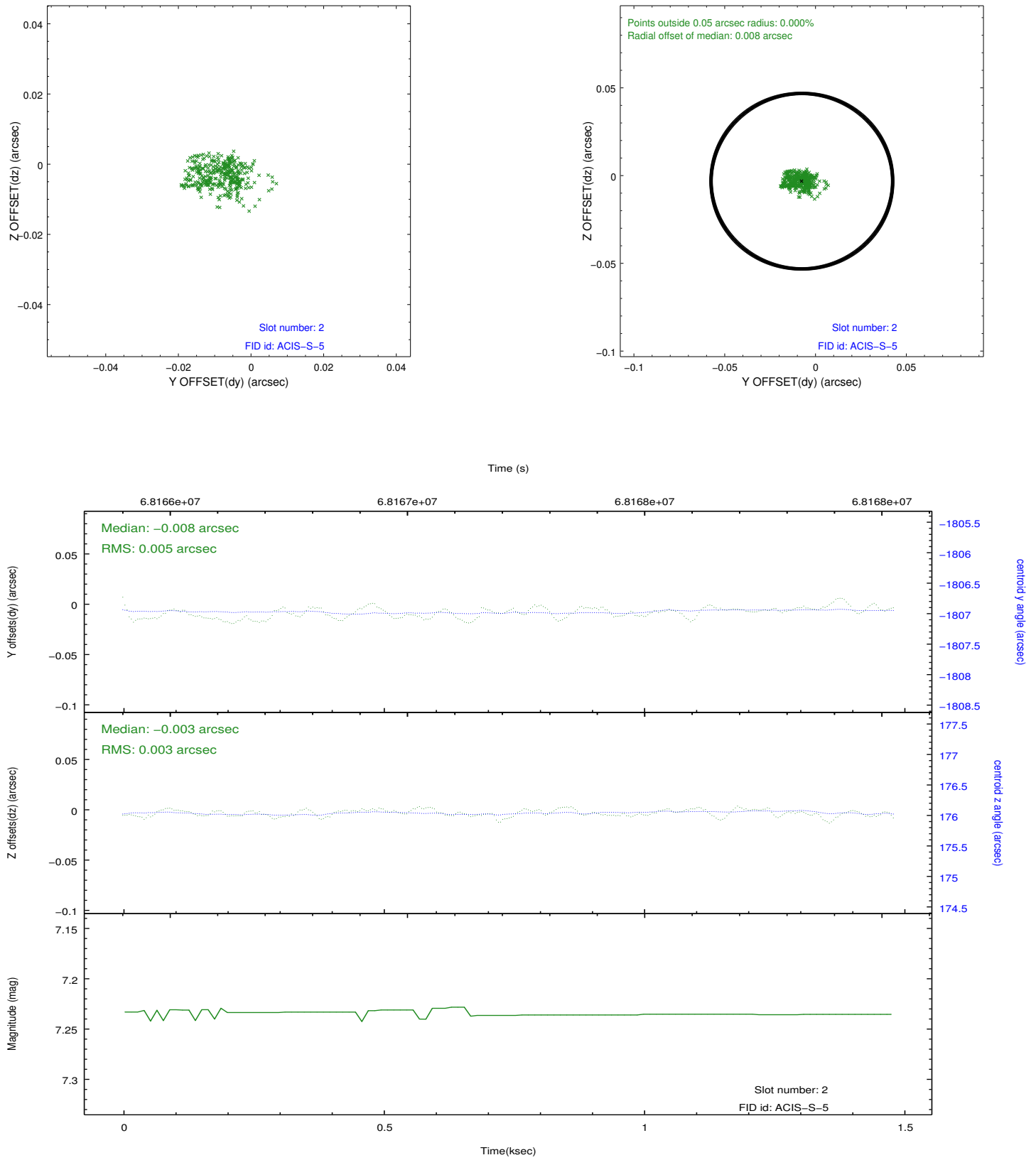
### 2.5.1 Slot 0



## 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)	2012.08.24
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.049

## A.2 Comments

Charge time for this ObsId remains at previous value of 1.049 ks, although with the current processing the charge time would have been 1.045 ksec. Window constraint met.