

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 539 - L2 Version 6  
Chandra X-Ray Center

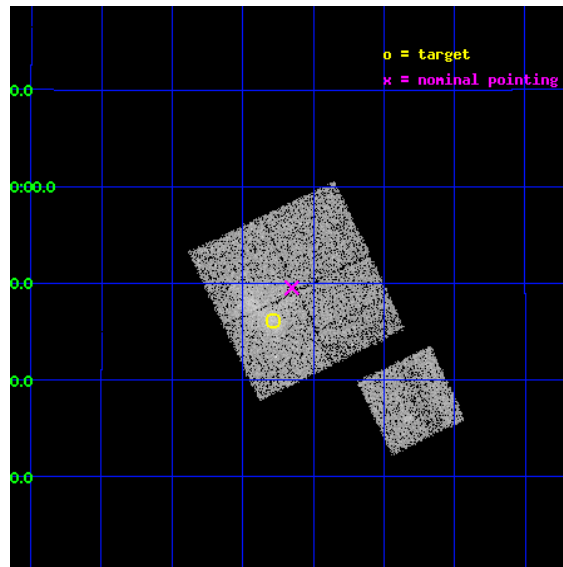
L2 Processing Date : Aug 30 2012

## 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
2.5	FID Slots . . . . .	13
2.5.1	Slot 0 . . . . .	13
2.5.2	Slot 1 . . . . .	14
2.5.3	Slot 2 . . . . .	15
<b>A</b>	<b>Summary</b>	<b>16</b>
A.1	Status . . . . .	16
A.2	Comments . . . . .	16

# 1 Front

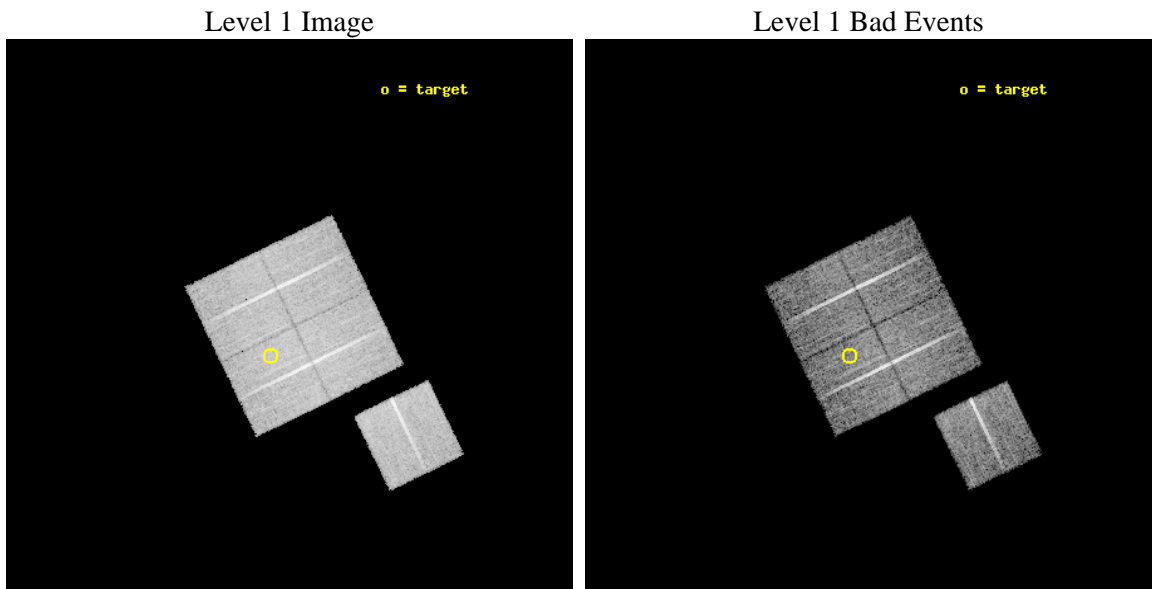
seq_num	800047	Sequence number
obs_id	539	Observation id
title	DETERMINATION OF H0/Q0	Proposal title
observer	DR. LEON VANSPEYBROECK	Principal investigator
object	Z5247	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	188.572	Observer's specified target RA [deg]
dec_targ	9.77	Observer's specified target Dec [deg]
ra_nom	188.53789559545	Nominal RA [deg]
dec_nom	9.8256873890799	Nominal Dec [deg]
roll_nom	154.1254106222	Nominal Roll [deg]
revision	6	Processing version of data
ontime	9404.800008744	Sum of GTIs [s]
liveltime	9285.7107681426	Livetime [s]
ontime0	9401.5590485036	Sum of GTIs [s]
ontime1	9404.800008744	Sum of GTIs [s]
ontime2	9404.800008744	Sum of GTIs [s]
ontime3	9404.800008744	Sum of GTIs [s]
ontime6	9404.800008744	Sum of GTIs [s]
l2events	42587	Number of level 2 events



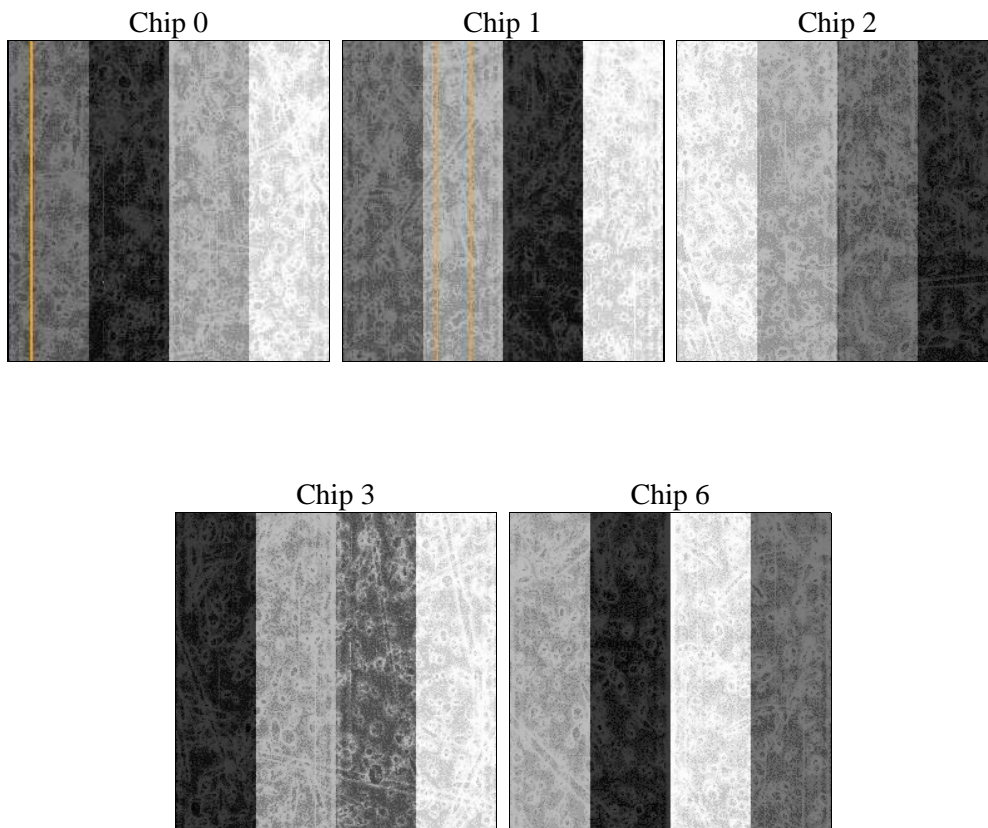
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	9000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	9404.800008744	Sum of GTIs [s]
caldbver	4.5.1.1	&#160	ontime0	9401.5590485036	Sum of GTIs [s]
date	2012-08-30T19:00:36	Date and time of file creation	ontime1	9404.800008744	Sum of GTIs [s]
revision	6	Processing version of data	ontime2	9404.800008744	Sum of GTIs [s]
			ontime3	9404.800008744	Sum of GTIs [s]
			ontime6	9404.800008744	Sum of GTIs [s]
			l1events	409736	Number of level 1 events

### 2.1.4 Events

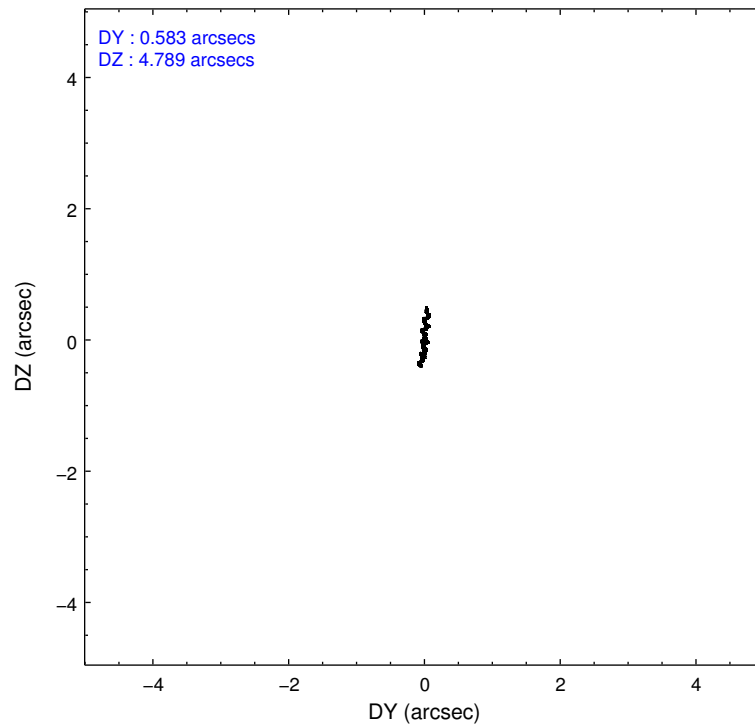
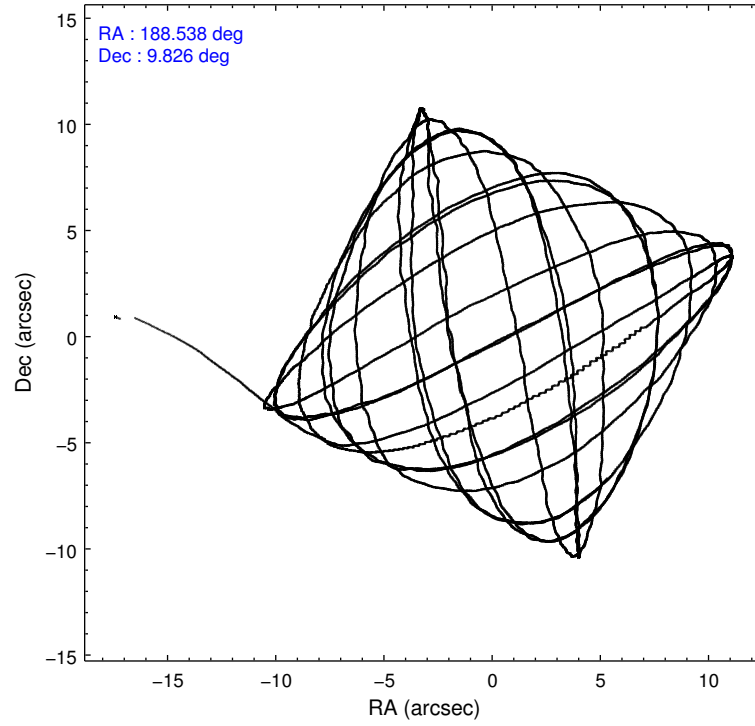
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	77808	79706	85085	85506	81631
rejected events	68410	68363	75982	74548	72404
rejected %	87%	85%	89%	87%	88%

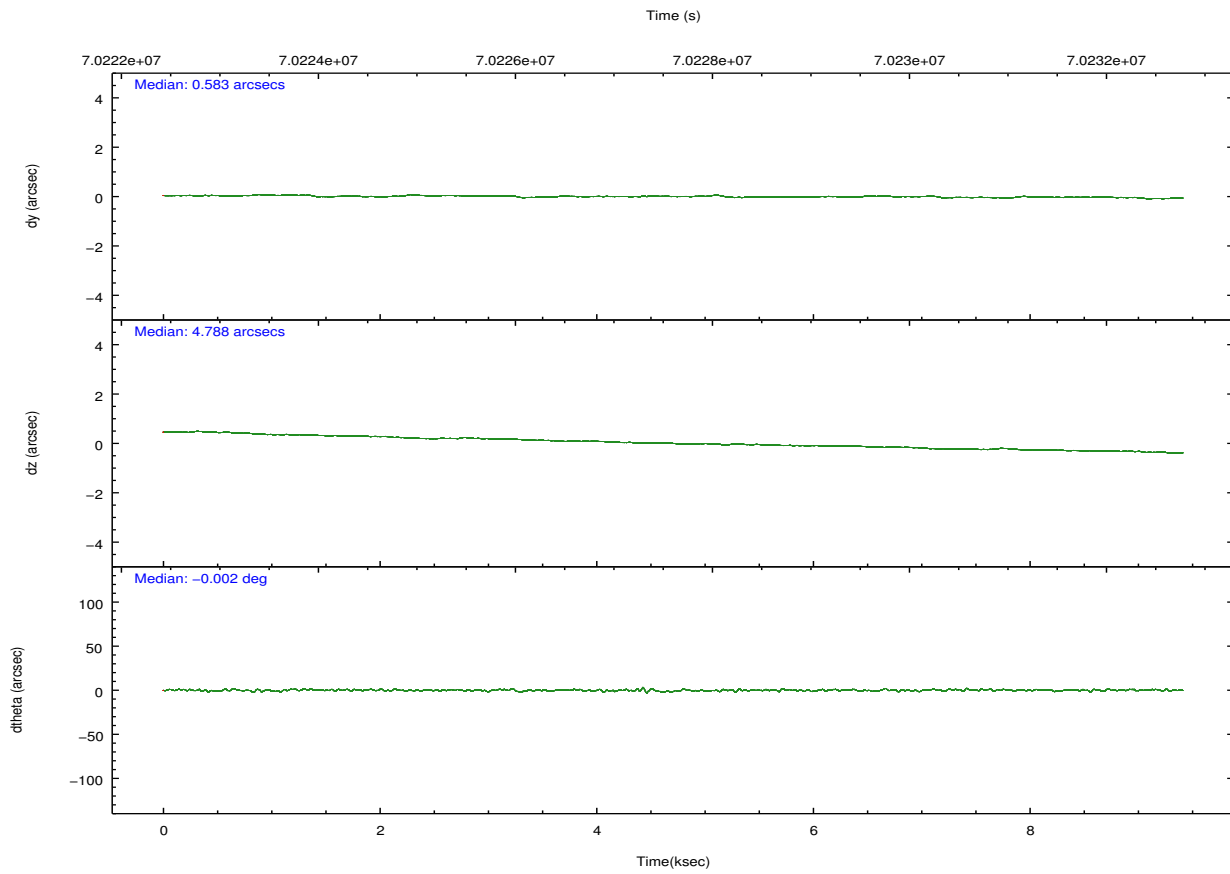
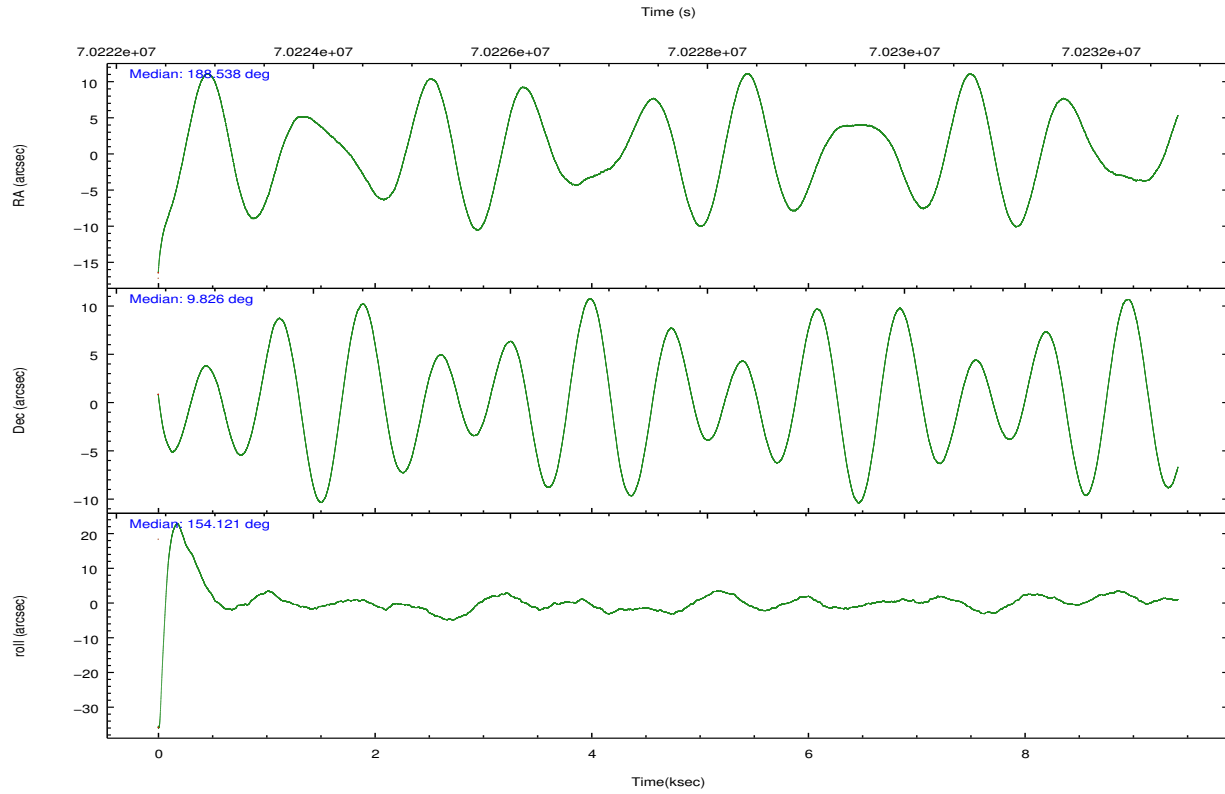
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	4911	6102	4761	6565	4744
	6%	7%	5%	7%	5%
grade 1 events	41	35	40	41	51
	0%	0%	0%	0%	0%
grade 2 events	2397	2590	2298	2394	2290
	3%	3%	2%	2%	2%
grade 3 events	920	1103	811	893	911
	1%	1%	0%	1%	1%
grade 4 events	854	1104	832	883	871
	1%	1%	0%	1%	1%
grade 5 events	2495	2632	2497	2605	2881
	3%	3%	2%	3%	3%
grade 6 events	1819	2052	1861	1769	1859
	2%	2%	2%	2%	2%
grade 7 events	64371	64088	71985	70356	68024
	82%	80%	84%	82%	83%

## 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	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	188.565913	188.5378955954454	Subarray requested	NONE	NONE
[deg] Pointing Dec	9.827494	9.825687389079949	Alternating exposures requested	N	N
[deg] Pointing Roll	153.912020	154.1254106222042	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-236.532463	-236.5241547330508			
[mm] SIM translation stage offset	2.94	2.931701730121091			
[s] Observation start time (MET)	70223308.184000	70221219.47473			
Observation start date	2000-03-23T18:27:24	2000-03-23T17:53:39			
[s] Observation end time (MET)	70232308.184000	70233127.41266499			
Observation end date	2000-03-23T20:57:24	2000-03-23T21:12:07			
Read mode	TIMED	TIMED			

## 2.3 Aspect



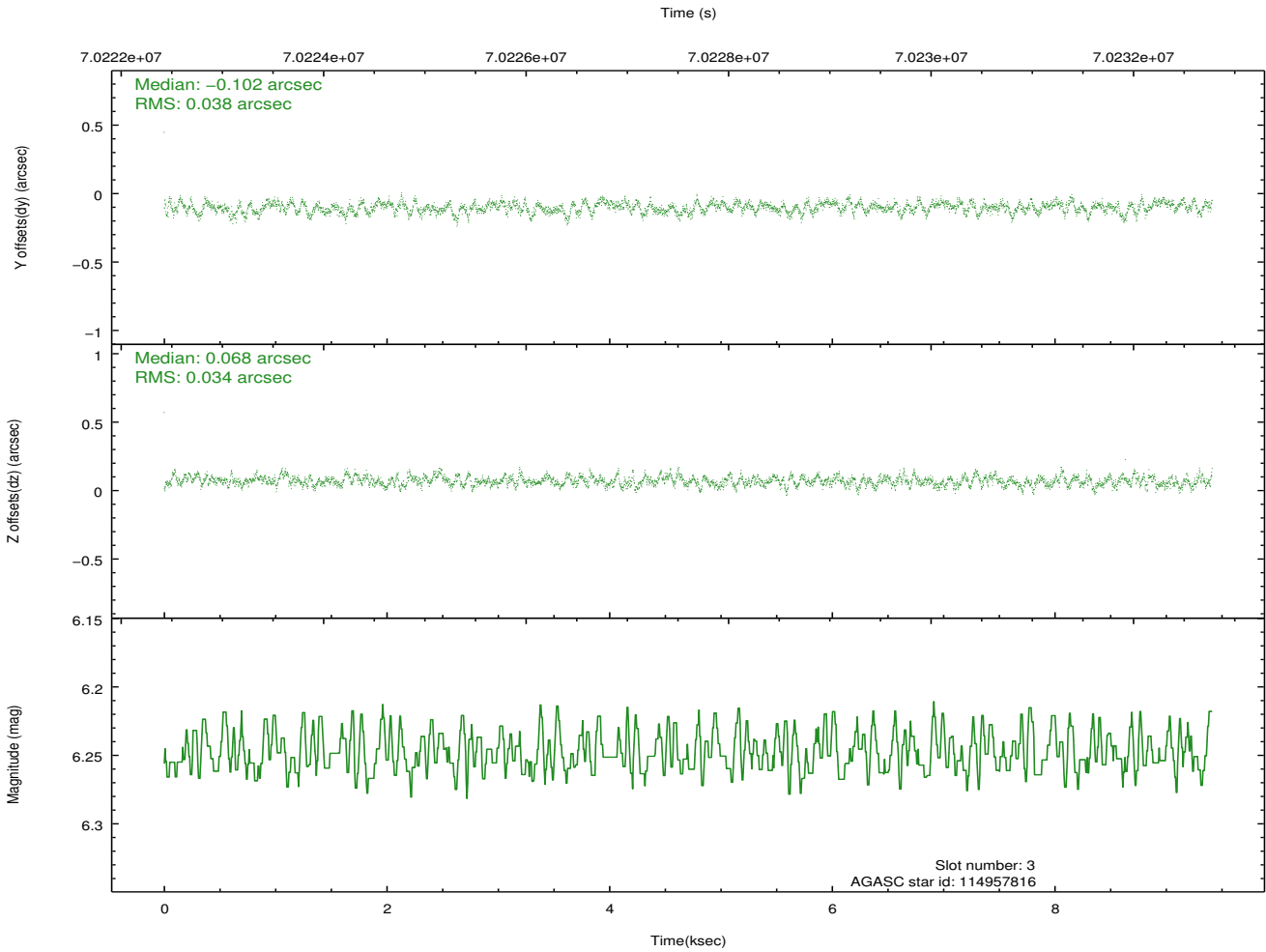
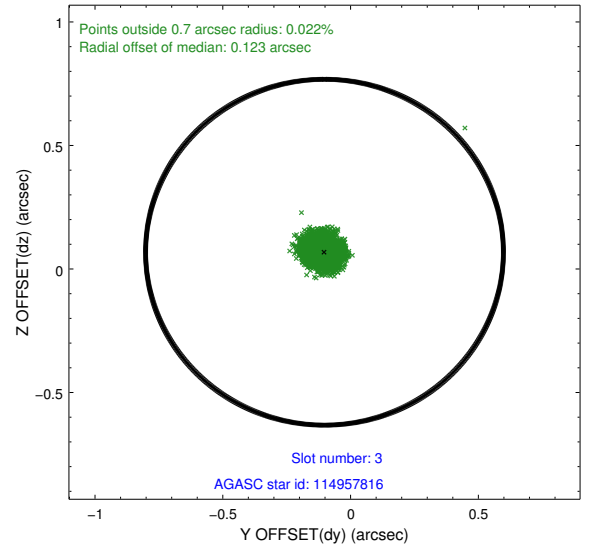
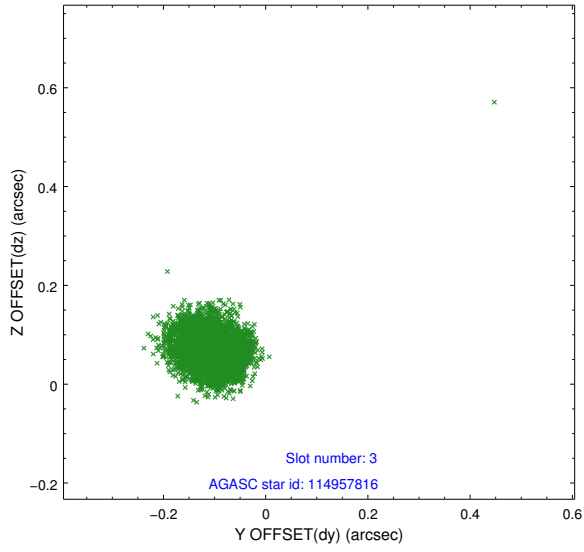


### Slot Statistics

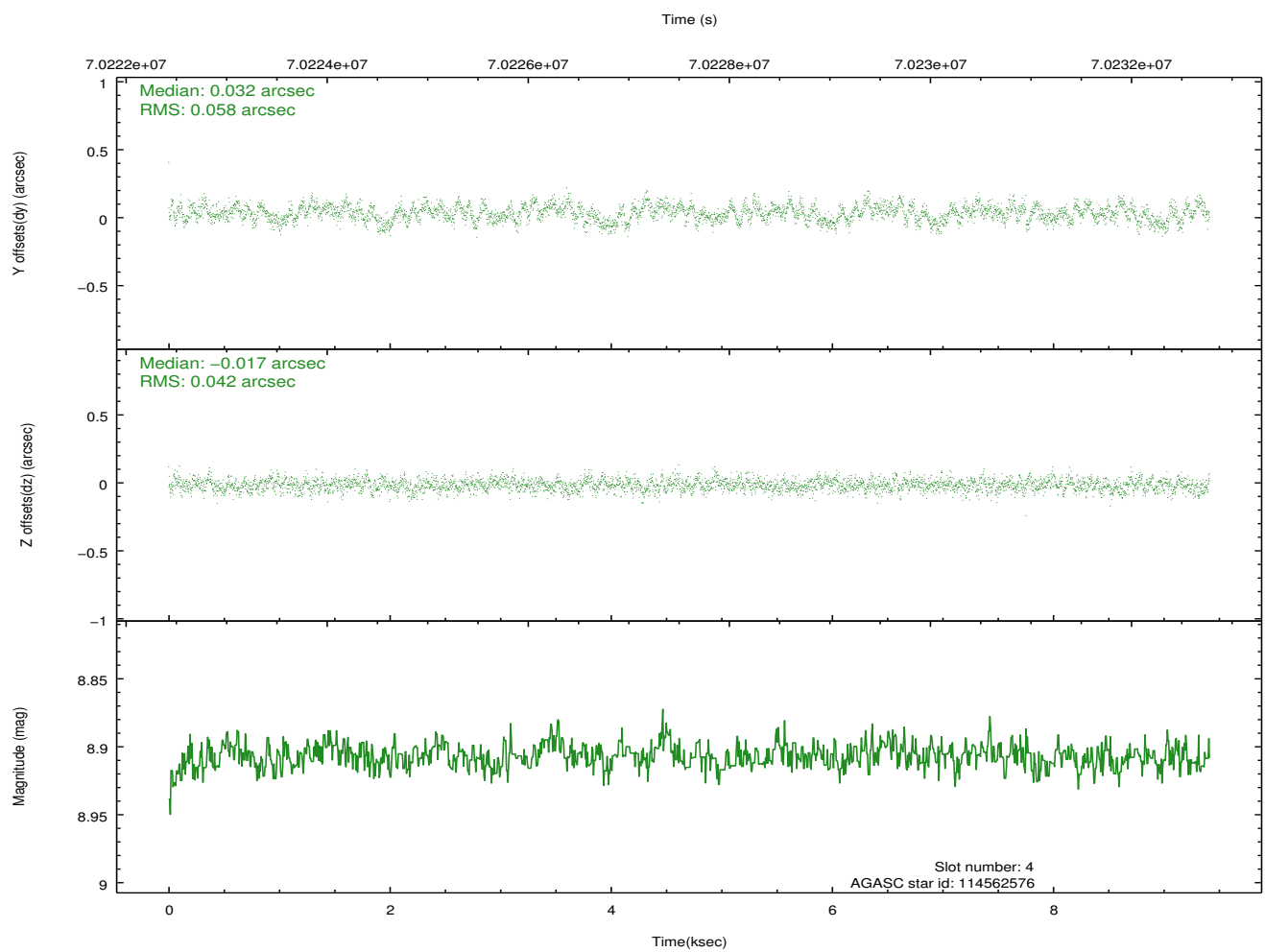
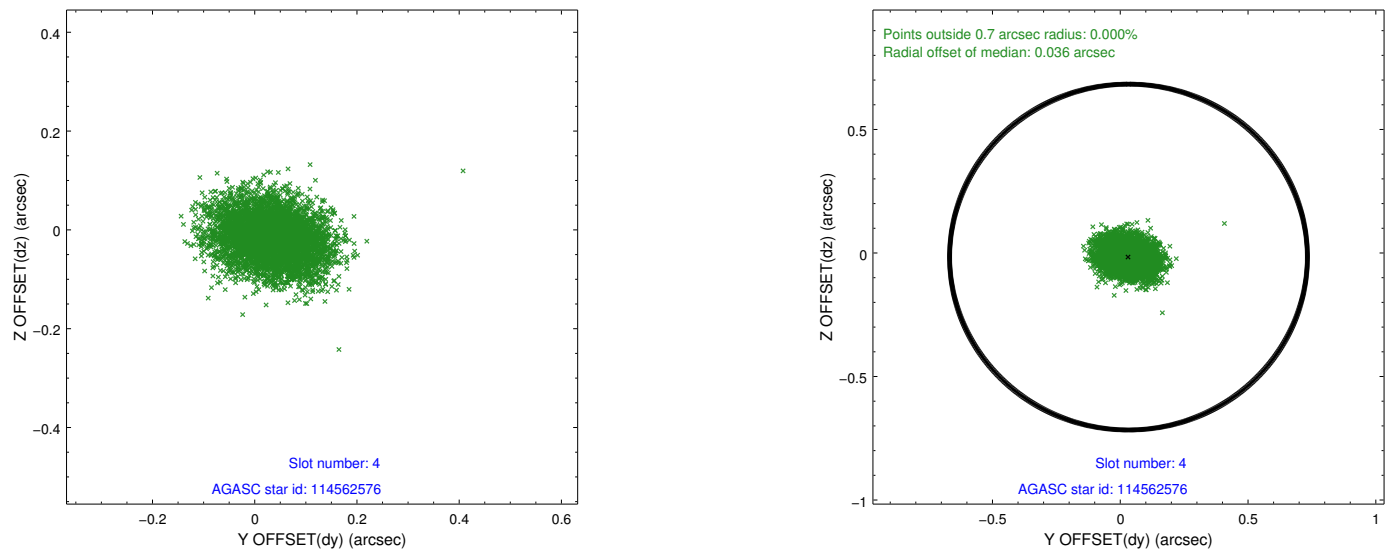
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.15	2294	-0.040	0.017	0.008	0.012	0.000000	0.000000	-754.73	-774.56
1	FID	ACIS-I-4	7.22	2297	-0.021	0.022	0.011	0.017	0.000000	0.000000	2159.11	1131.36
2	FID	ACIS-I-6	7.26	2297	-0.039	0.025	0.012	0.019	0.000000	0.000000	405.95	1774.58
3	GUIDE	114957816	6.25	4593	-0.102	0.068	0.053	0.085	188.261994	10.295673	1707.91	-1041.12
4	GUIDE	114562576	8.91	4592	0.032	-0.017	0.076	0.123	188.579291	9.672237	-288.36	480.34
5	GUIDE	114557512	9.52	4591	0.015	-0.053	0.078	0.125	188.882545	9.657451	-1278.55	54.62
6	GUIDE	114557088	9.03	4592	0.059	0.001	0.065	0.106	188.466353	9.531660	-151.45	1111.39
7	OMITTED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00

## 2.4 Star Slots

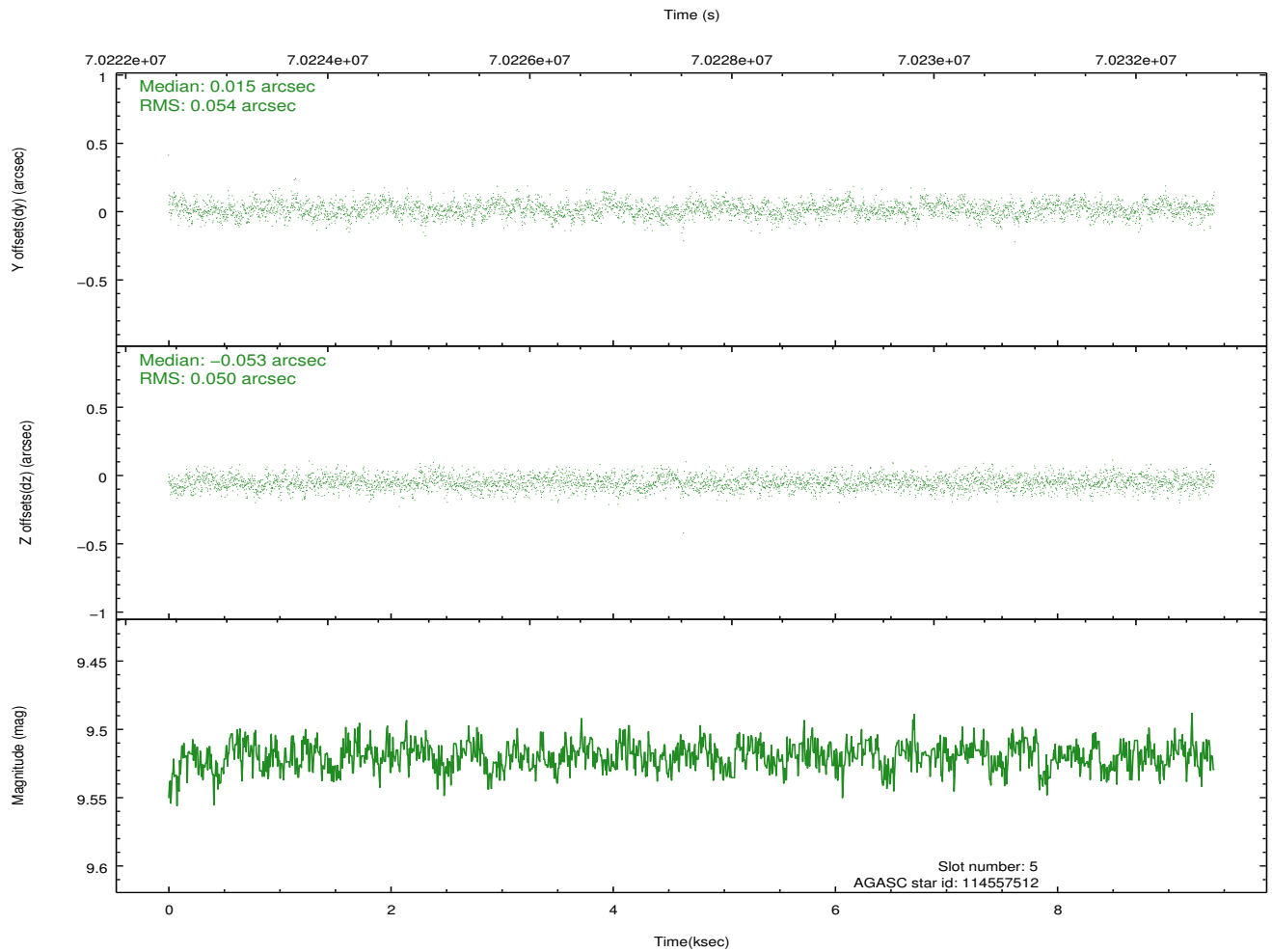
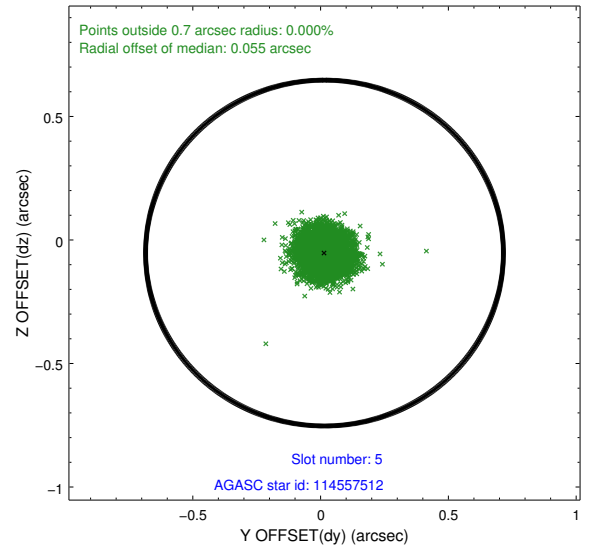
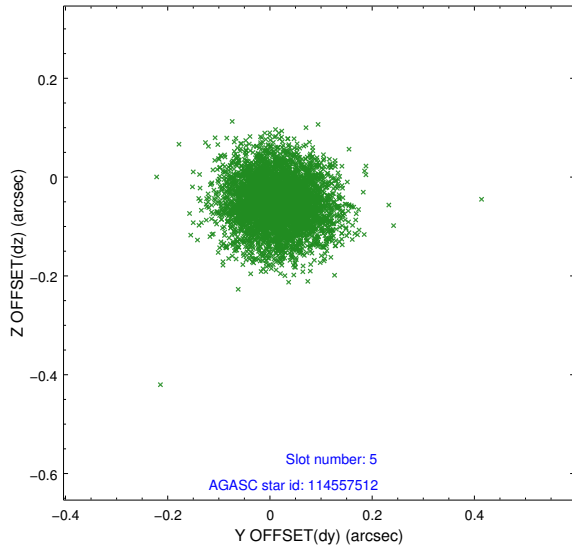
### 2.4.1 Slot 3



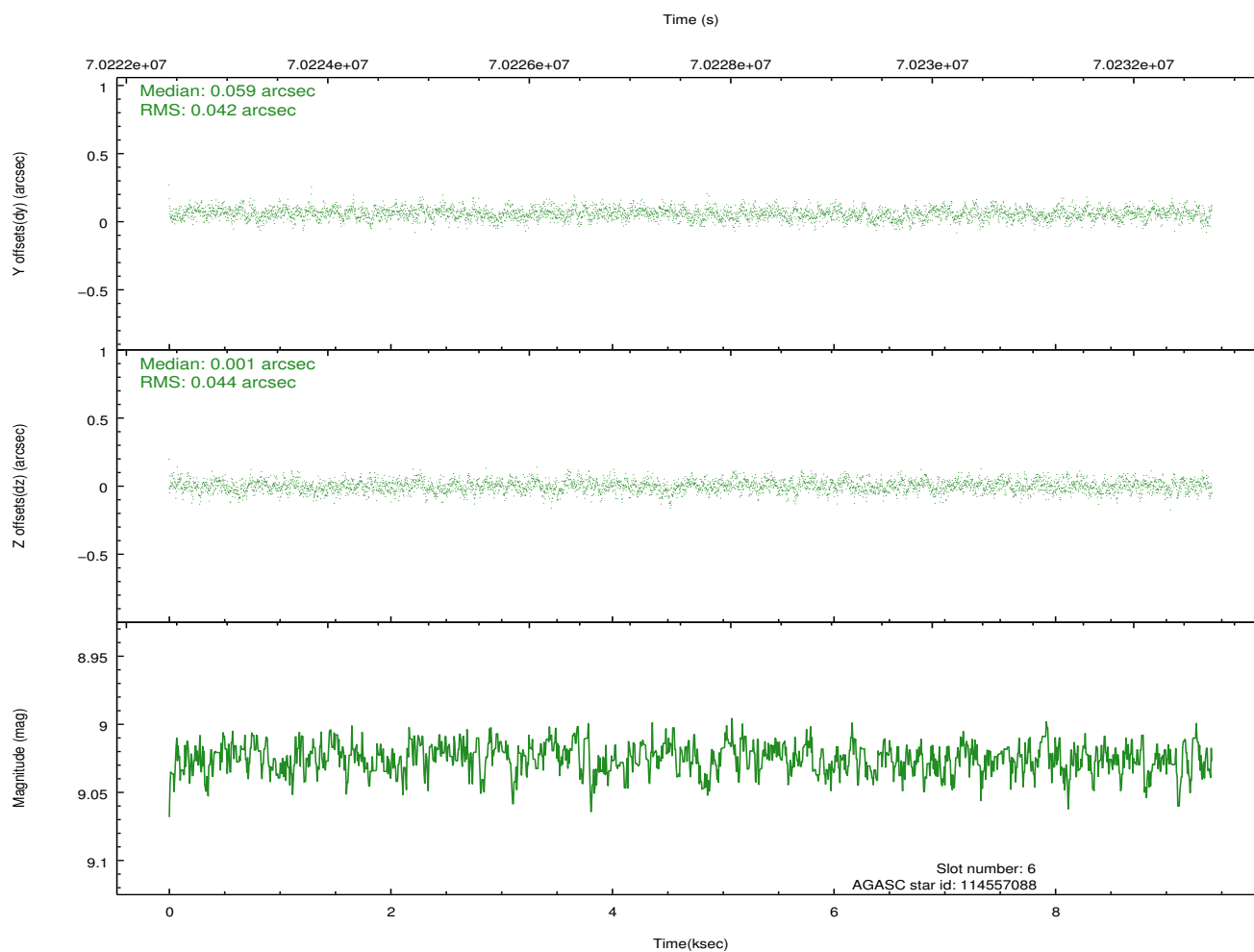
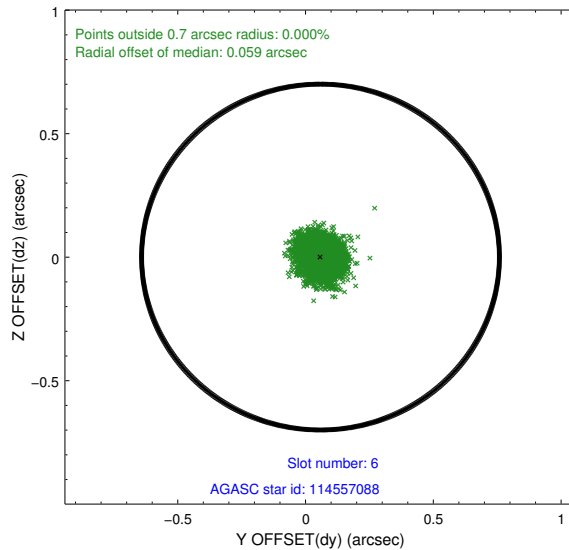
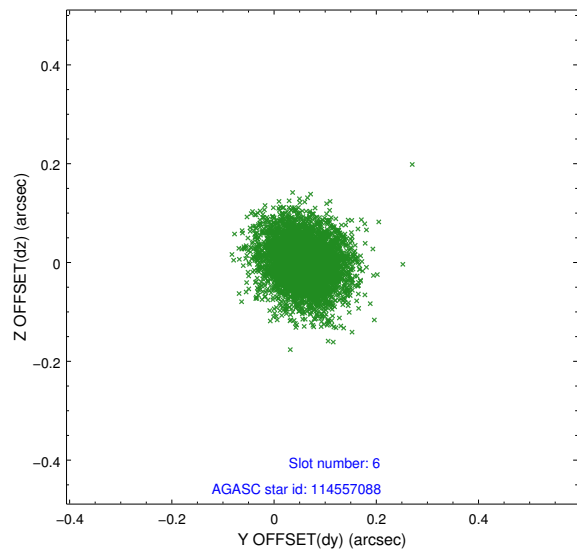
## 2.4.2 Slot 4



### 2.4.3 Slot 5

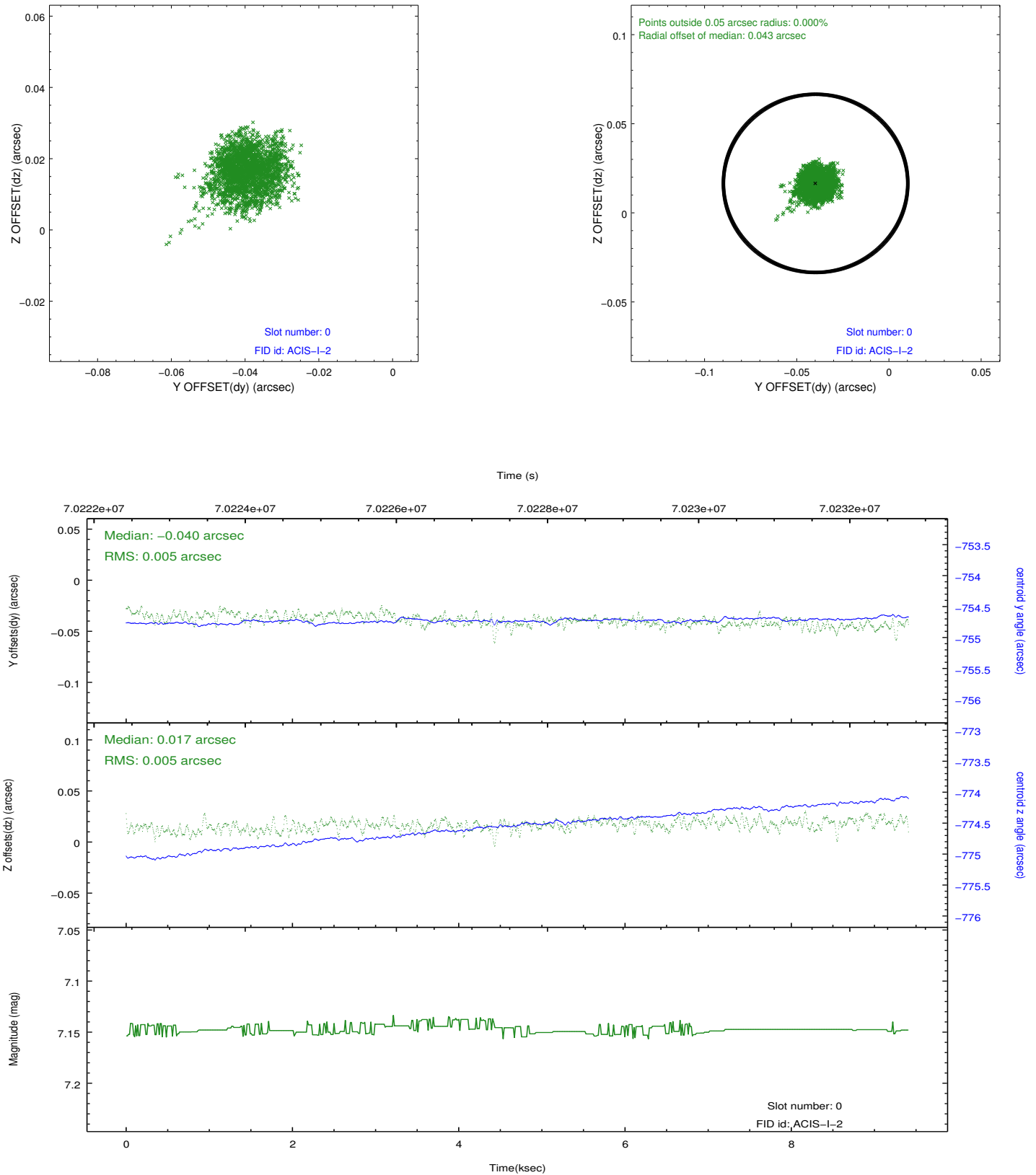


## 2.4.4 Slot 6

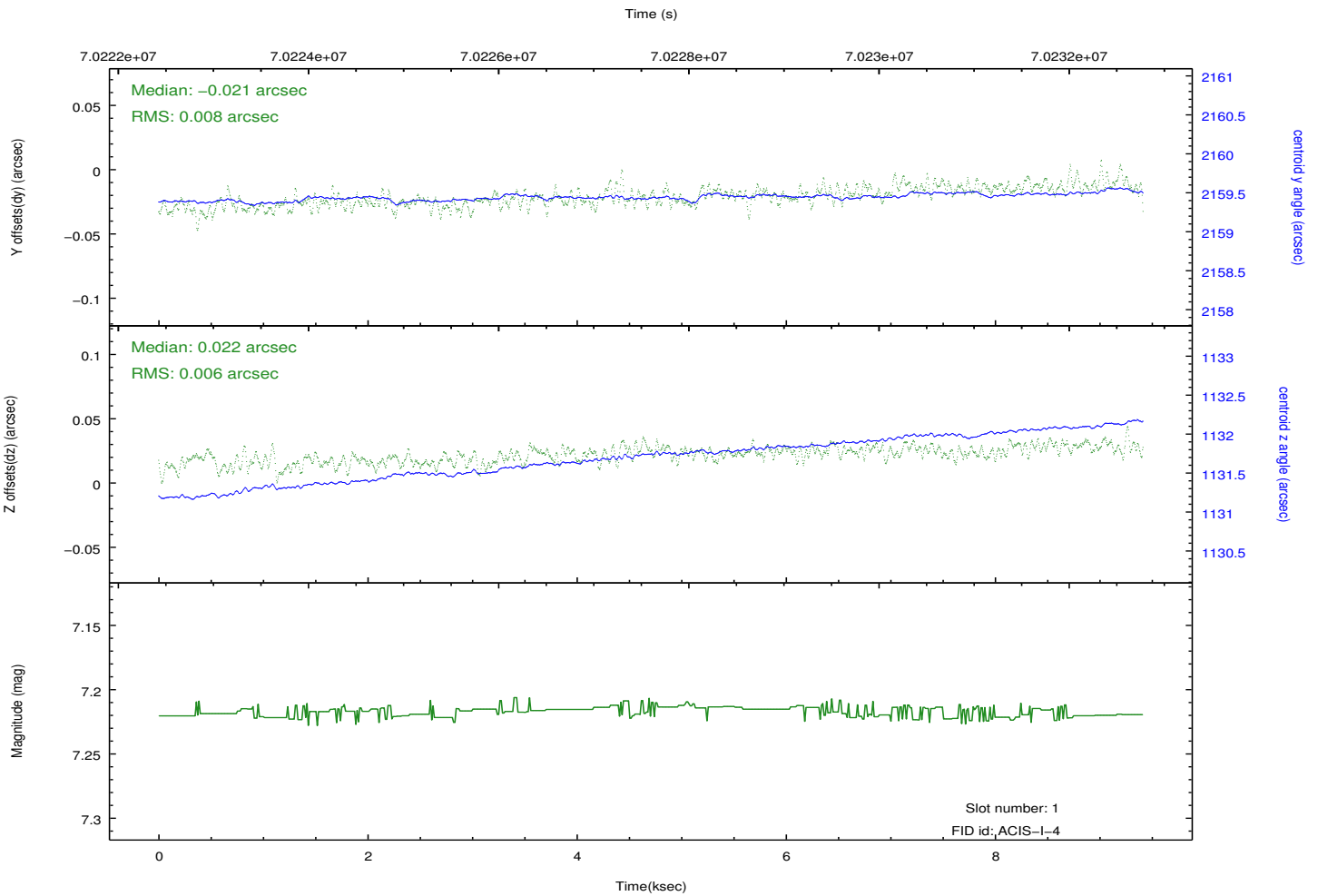
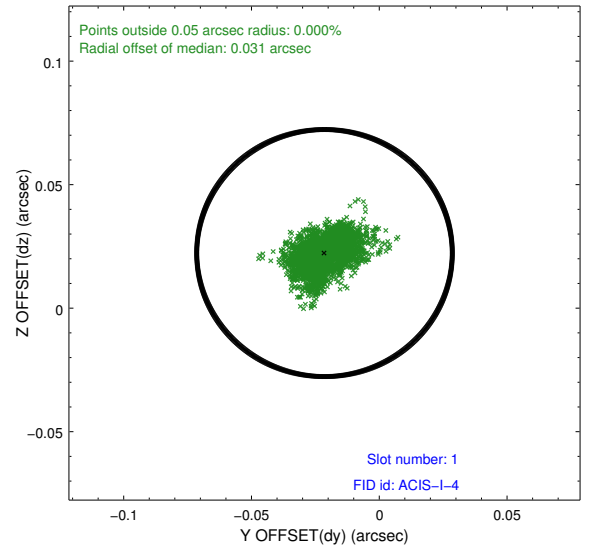
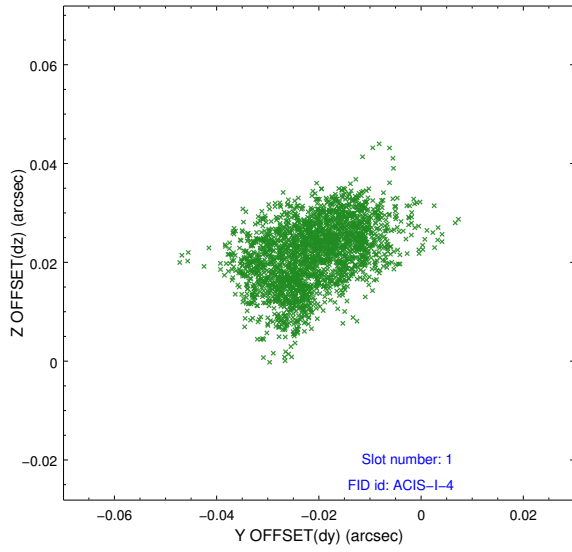


## 2.5 FID Slots

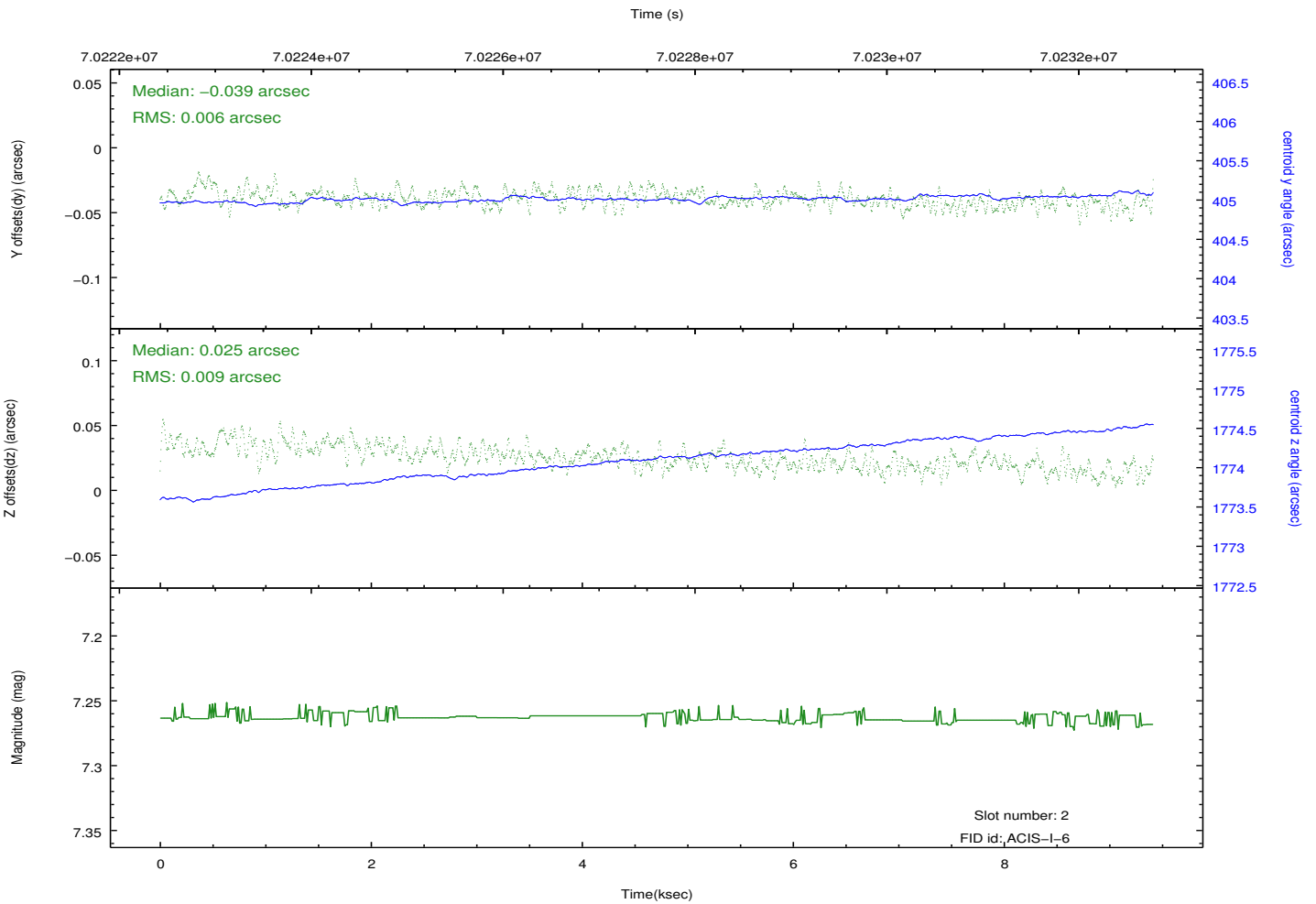
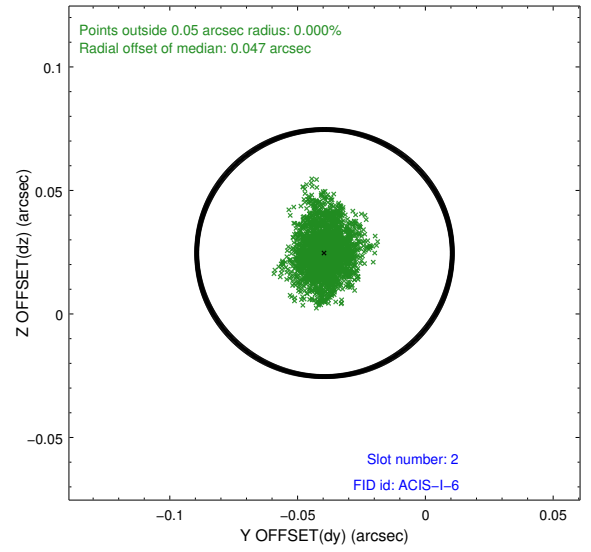
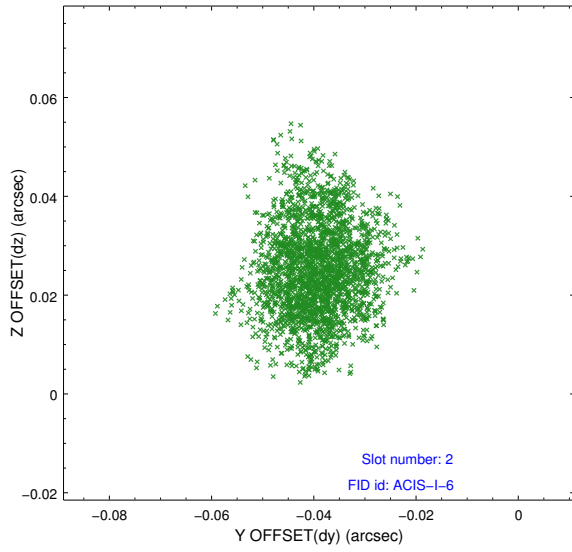
### 2.5.1 Slot 0



## 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)	2012.09.06
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.404

## A.2 Comments

The guide star in slot 7 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this guide star from the solution.