

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 2928 - L2 Version 3  
Chandra X-Ray Center

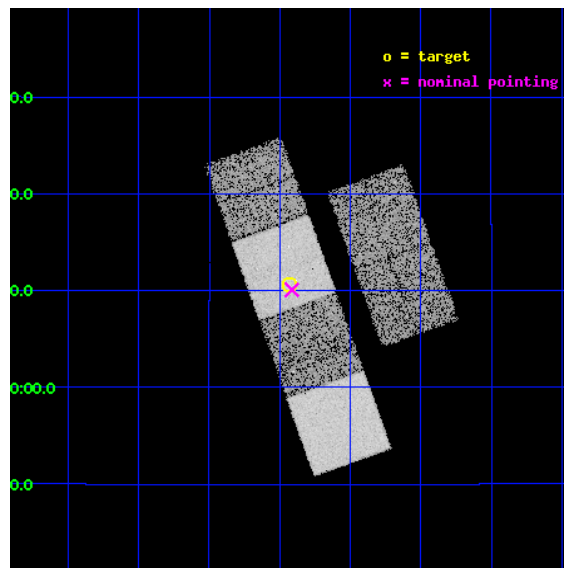
L2 Processing Date : Oct 11 2012

## 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

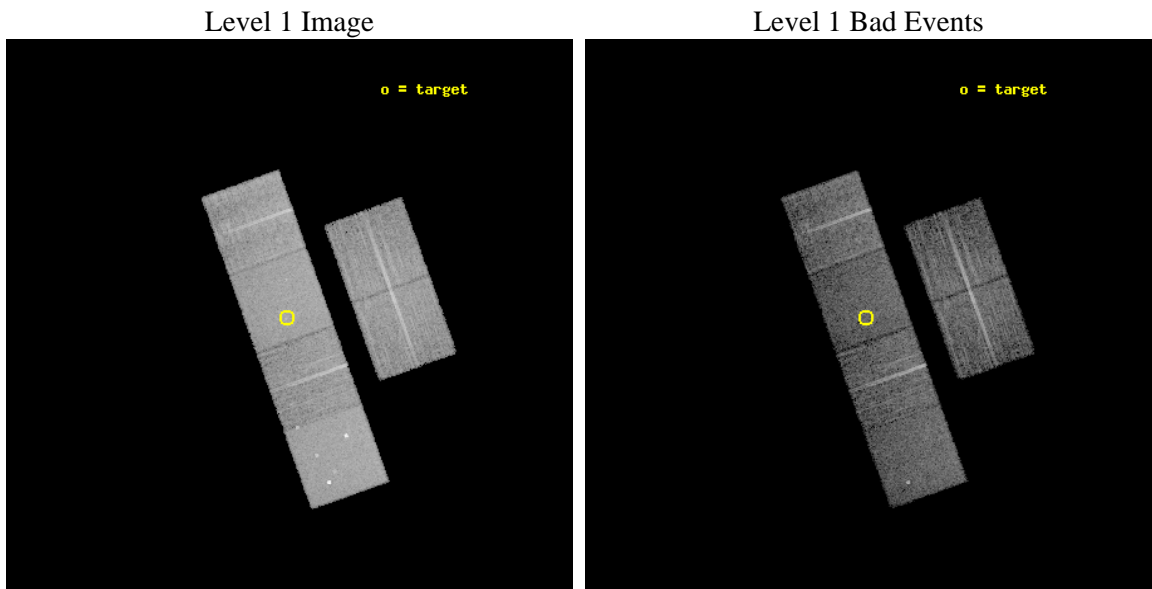
seq_num	600265	Sequence number
obs_id	2928	Observation id
title	CHANDRA SURVEY OF GALAXIES WITH KNOWN BLACK HOLE MASSES	Proposal t
observer	Dr. Andrew Ptak	Principal investigator
object	NGC 4596	Source name
dtycycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	189.983333	Observer's specified target RA [deg]
dec_targ	10.176417	Observer's specified target Dec [deg]
ra_nom	189.97842950873	Nominal RA [deg]
dec_nom	10.167994540974	Nominal Dec [deg]
roll_nom	250.29652134551	Nominal Roll [deg]
revision	3	Processing version of data
ontime	9330.9011816382	Sum of GTIs [s]
livetime	9212.7476924822	Livetime [s]
ontime2	9330.9422216415	Sum of GTIs [s]
ontime3	9330.7780616283	Sum of GTIs [s]
ontime5	9330.8601416349	Sum of GTIs [s]
ontime6	9330.8191016316	Sum of GTIs [s]
ontime7	9330.9011816382	Sum of GTIs [s]
ontime8	9330.7370216548	Sum of GTIs [s]
l2events	97766	Number of level 2 events



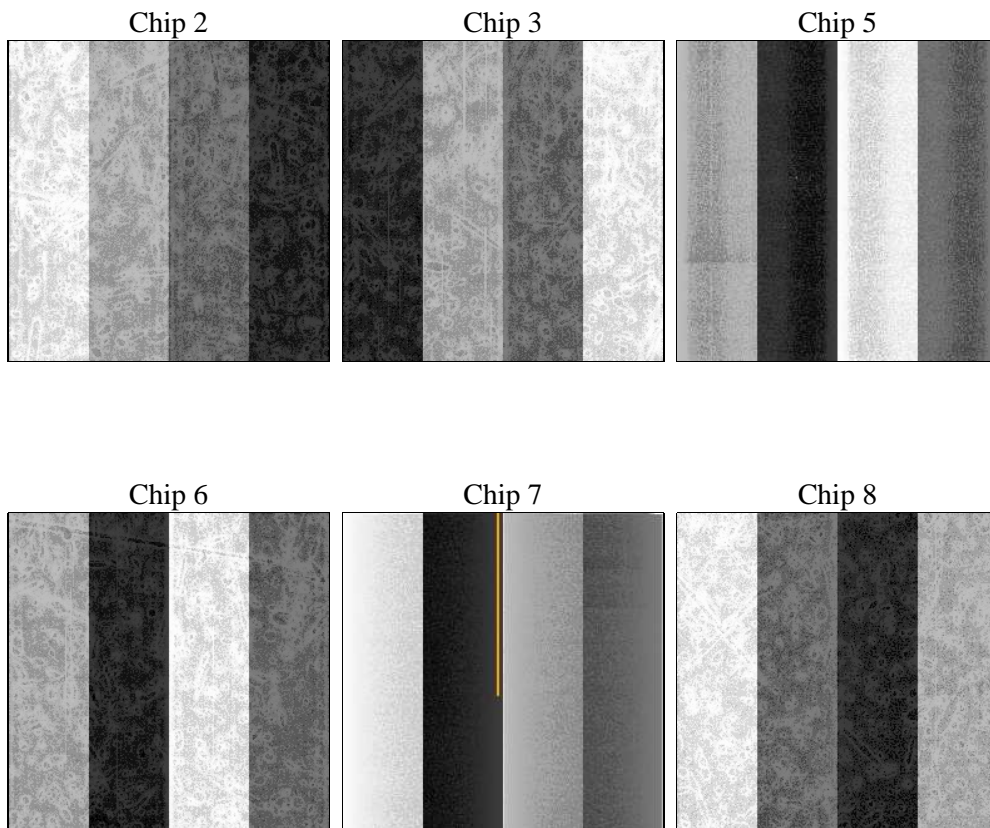
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	9373.923000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	9330.9011816382	Sum of GTIs [s]
caldbver	4.5.2	&#160	ontime2	9330.9422216415	Sum of GTIs [s]
date	2012-10-11T12:56:29	Date and time of file creation	ontime3	9330.7780616283	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	9330.8601416349	Sum of GTIs [s]
			ontime6	9330.8191016316	Sum of GTIs [s]
			ontime7	9330.9011816382	Sum of GTIs [s]
			ontime8	9330.7370216548	Sum of GTIs [s]
			l1events	437078	Number of level 1 events

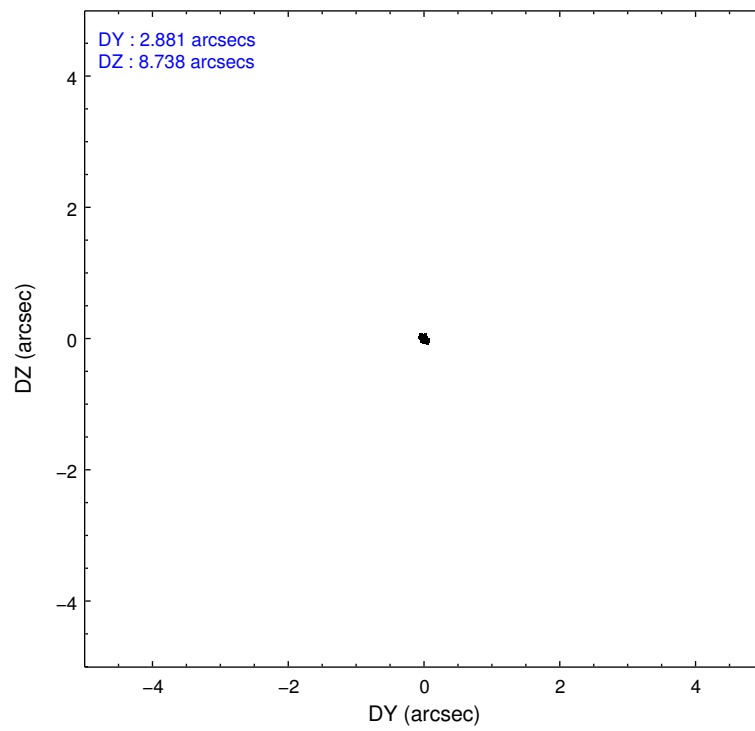
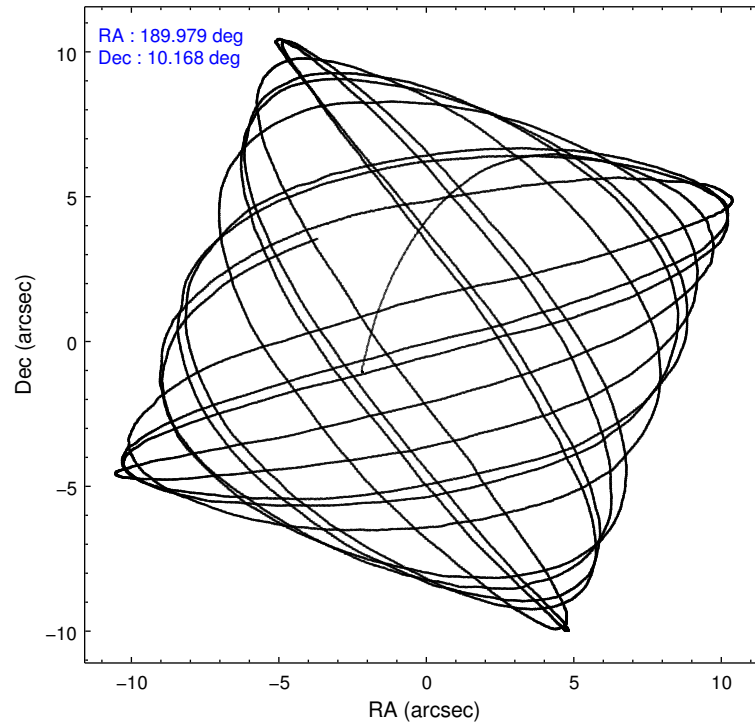
### 2.1.4 Events

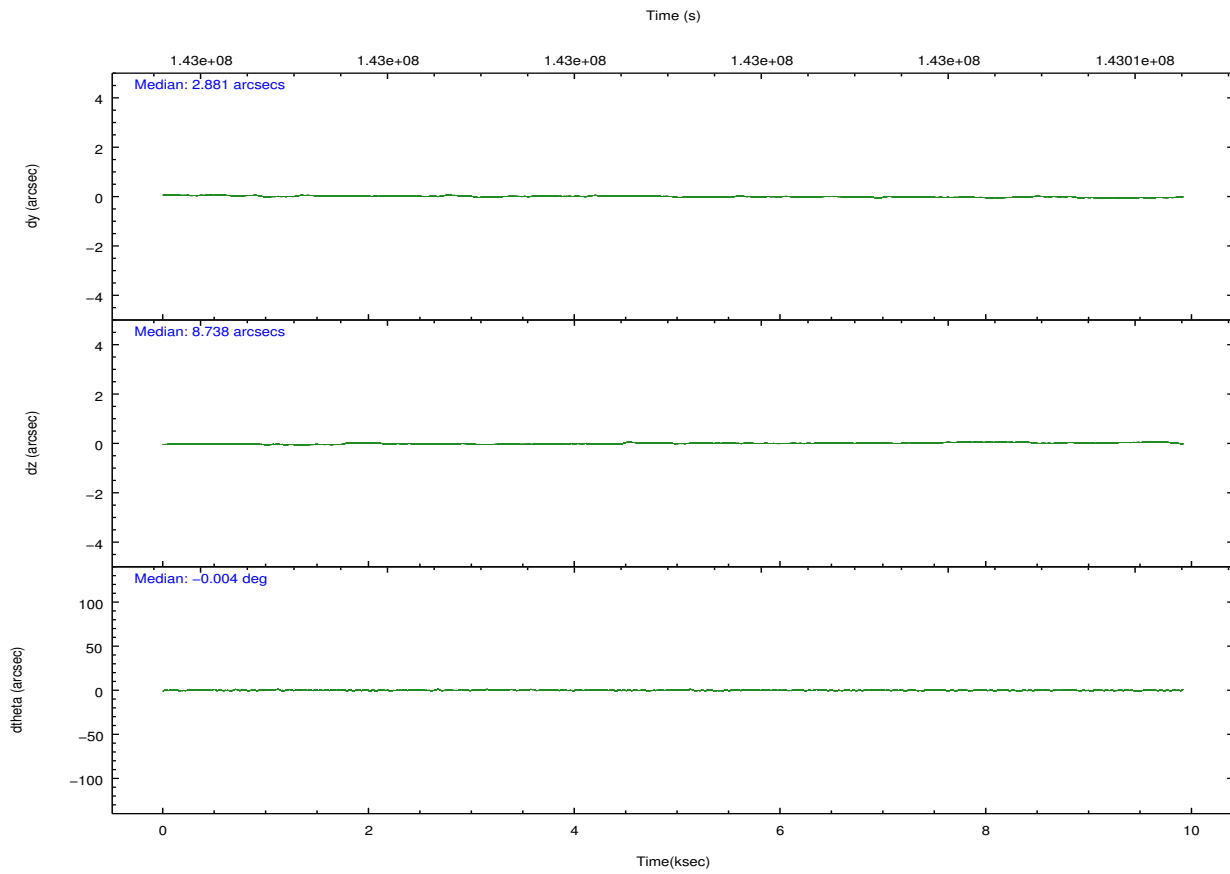
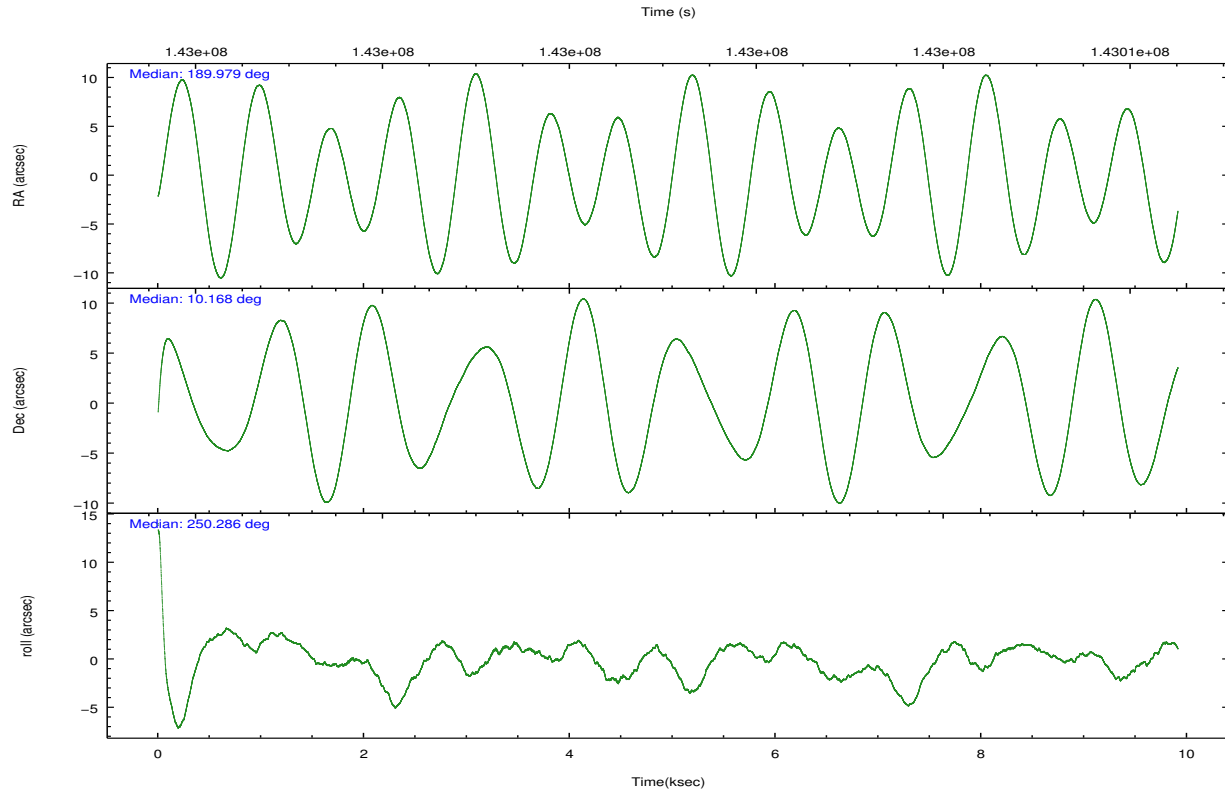
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	63084	60823	92290	62726	80511	77644	grade 0 events	3139	3058	6278	3078	3835	4976
rejected events	55834	53795	48750	55408	45884	61995		4%	5%	6%	4%	4%	6%
rejected %	88%	88%	52%	88%	56%	79%	grade 1 events	34	28	117	27	76	43
								0%	0%	0%	0%	0%	0%
							grade 2 events	1603	1450	12655	1449	6912	3538
								2%	2%	13%	2%	8%	4%
							grade 3 events	641	671	1660	716	3220	1614
								1%	1%	1%	1%	3%	2%
							grade 4 events	639	677	1697	692	3023	1450
								1%	1%	1%	1%	3%	1%
							grade 5 events	2301	2385	6642	2745	7831	3400
								3%	3%	7%	4%	9%	4%
							grade 6 events	1237	1179	21277	1390	17661	4078
								1%	1%	23%	2%	21%	5%
							grade 7 events	53490	51375	41964	52629	37953	58545
								84%	84%	45%	83%	47%	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	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	189.973135	189.978429508734	Subarray requested	NONE	NONE
[deg] Pointing Dec	10.194751	10.16799454097385	Alternating exposures requested	N	N
[deg] Pointing Roll	250.140817	250.2965213455086	[s] Primary exposure time	0.000000	3.2
[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)	142996639.184000	142995504.2927			
Observation start date	2002-07-14T01:16:15	2002-07-14T00:58:24			
[s] Observation end time (MET)	143006013.184000	143006327.78065			
Observation end date	2002-07-14T03:52:29	2002-07-14T03:58:47			
Read mode	TIMED	TIMED			

## 2.3 Aspect





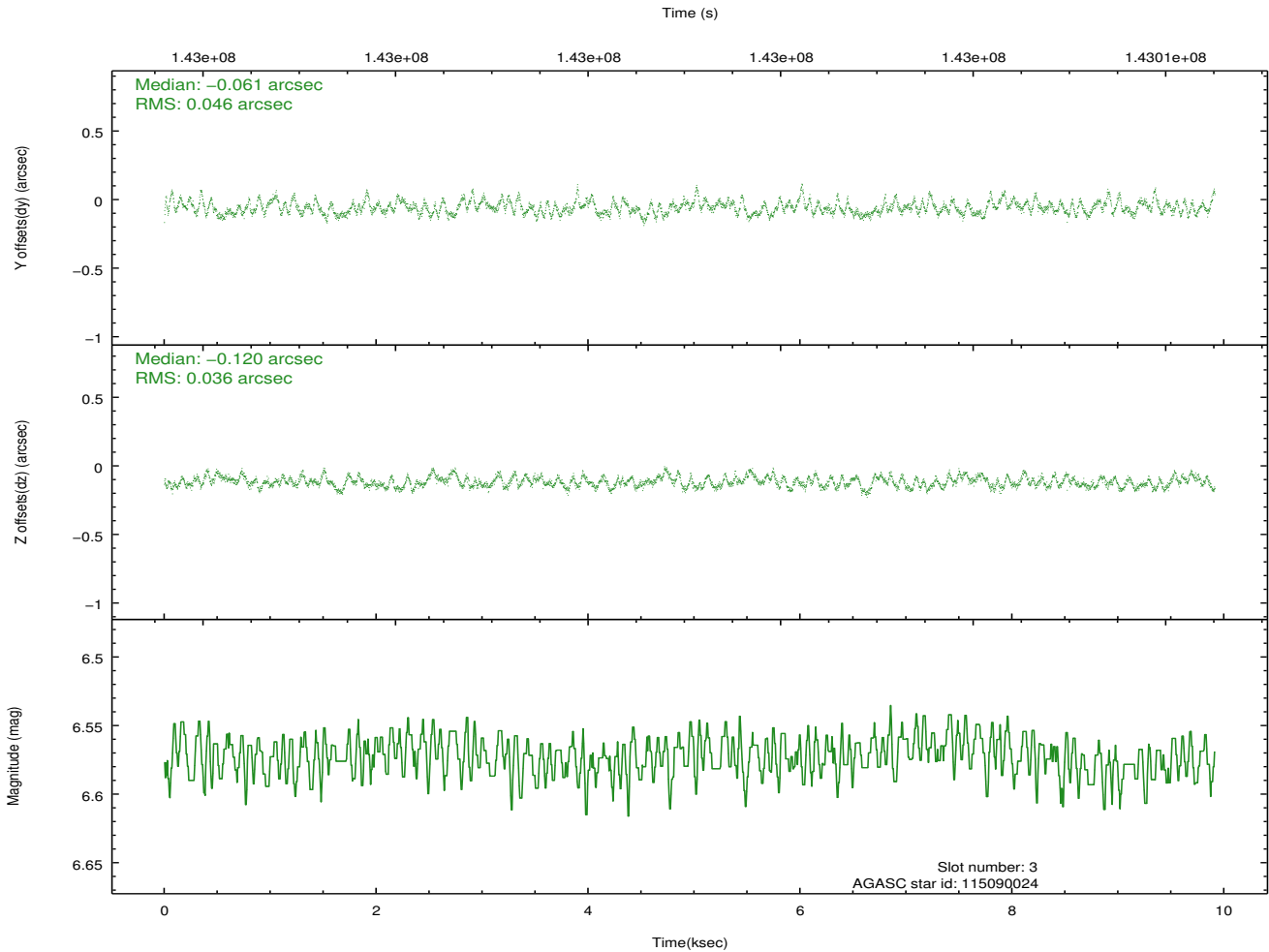
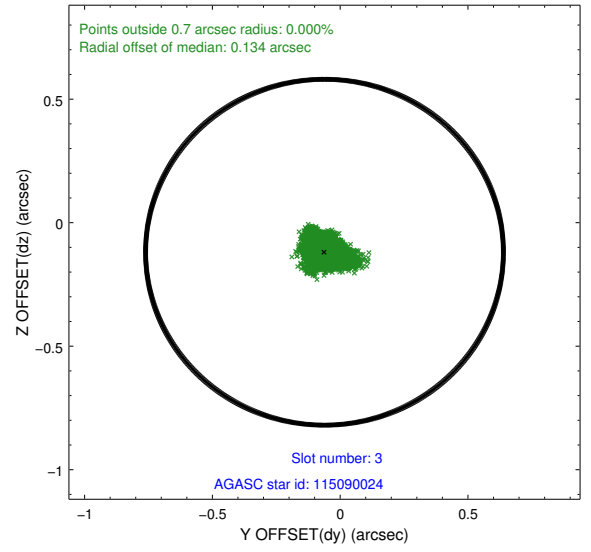
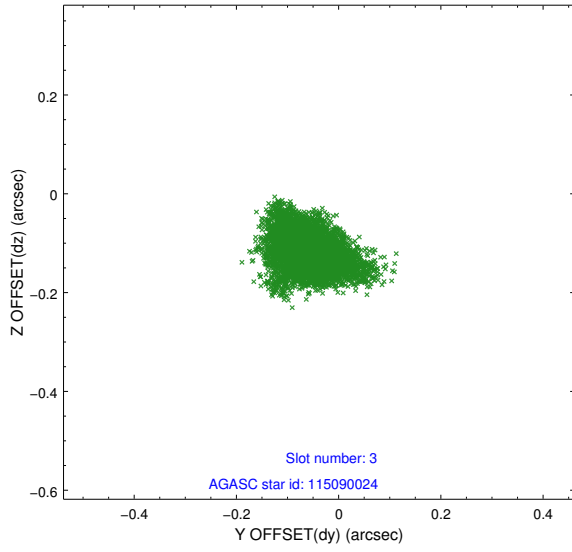
### Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	2417	-0.016	-0.002	0.006	0.010	0.000000	0.000000	-755.54	-1729.95
1	FID	ACIS-S-4	7.20	2417	-0.014	0.008	0.006	0.010	0.000000	0.000000	2157.50	177.98
2	FID	ACIS-S-5	7.24	2418	-0.000	0.002	0.007	0.011	0.000000	0.000000	-1807.67	172.27
3	GUIDE	115090024	6.57	4837	-0.061	-0.120	0.061	0.101	190.393304	10.426268	-1289.22	1114.84
4	GUIDE	115087152	7.19	4837	-0.247	-0.005	0.050	0.079	189.409753	10.584138	-641.72	-2352.28
5	GUIDE	114691472	9.12	4832	0.161	0.025	0.074	0.123	189.516151	9.813551	1841.87	-1059.55
6	GUIDE	115087240	9.25	4835	-0.002	0.107	0.093	0.149	189.980657	10.358703	-562.54	-176.19
7	GUIDE	115089624	9.66	4833	0.149	-0.005	0.105	0.166	189.471947	10.002512	1254.79	-1436.89

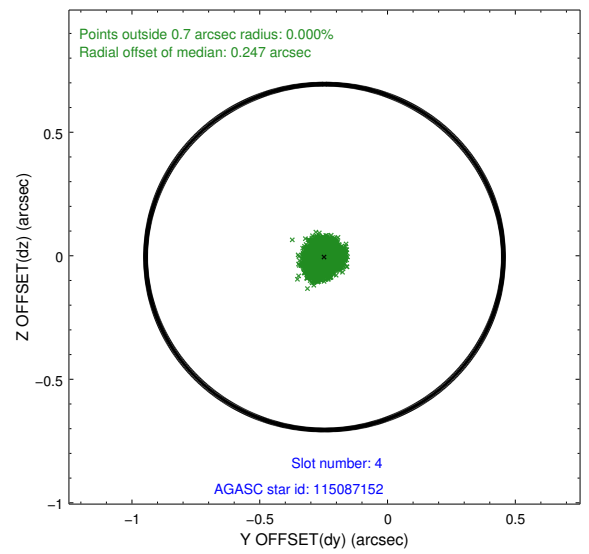
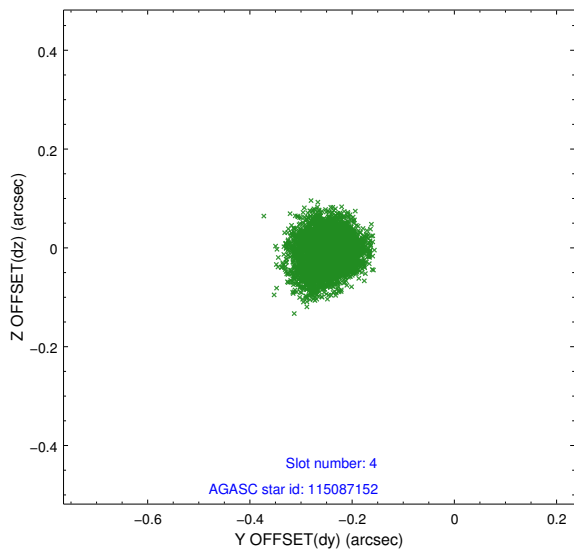
∞

## 2.4 Star Slots

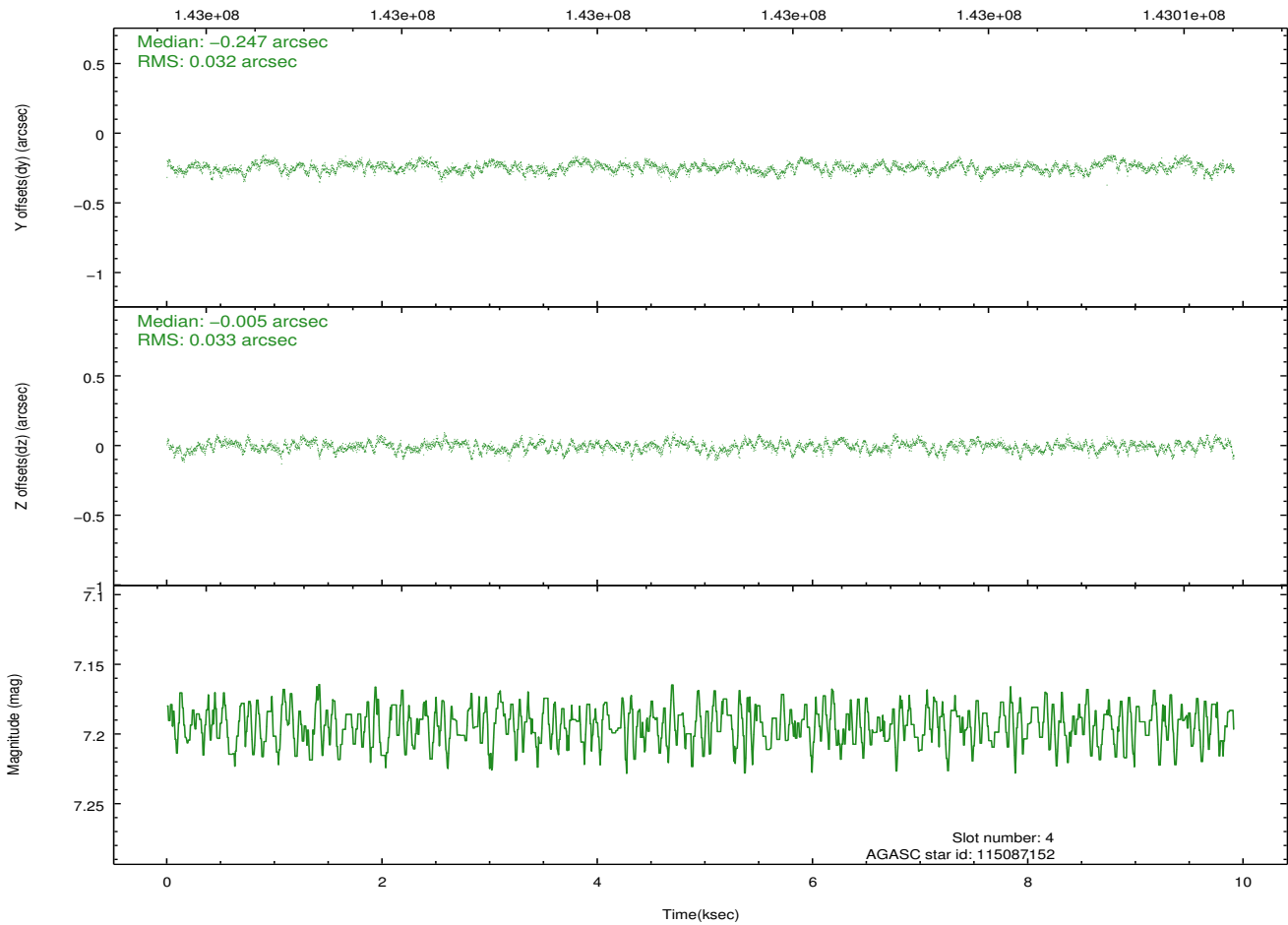
### 2.4.1 Slot 3



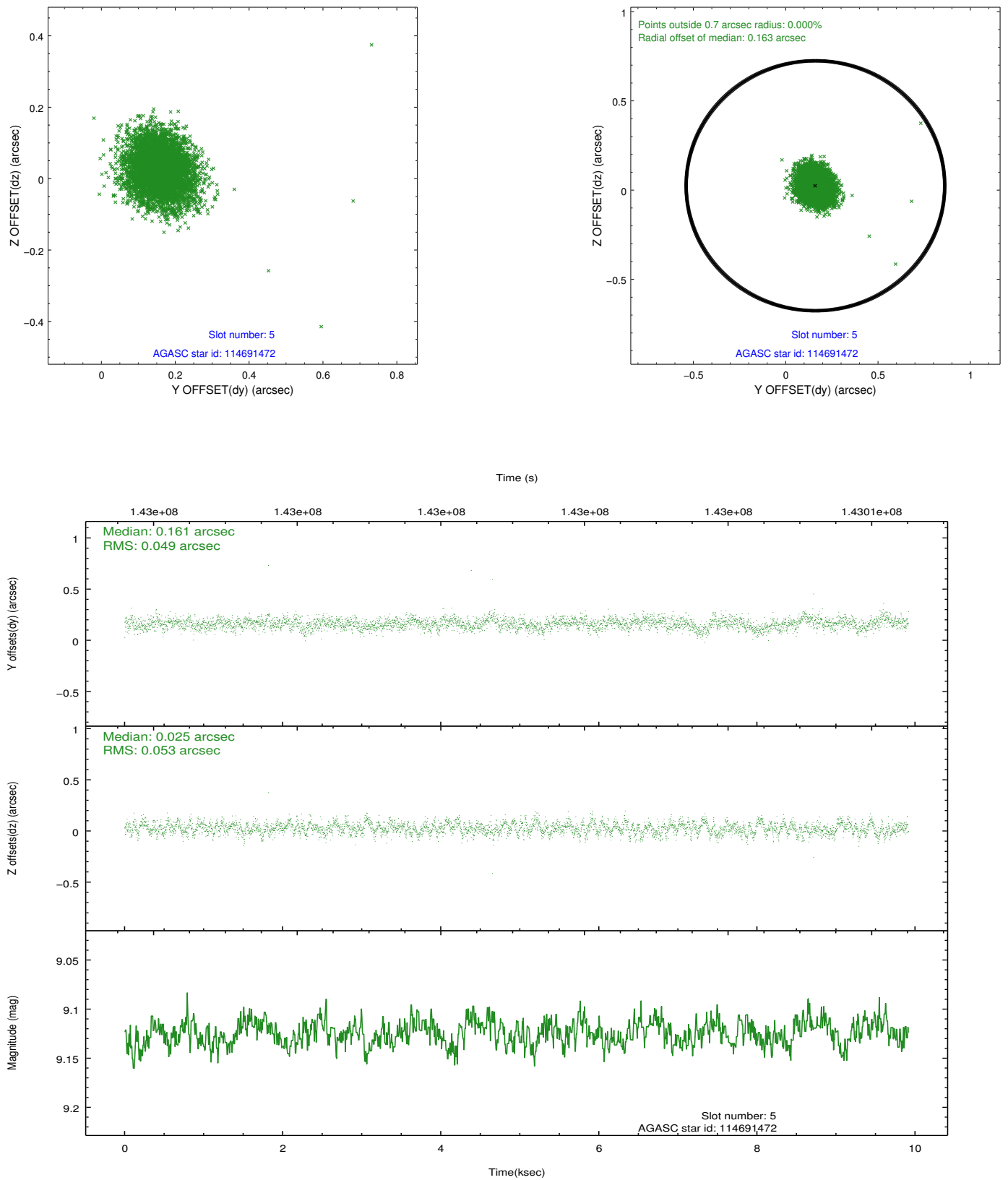
## 2.4.2 Slot 4



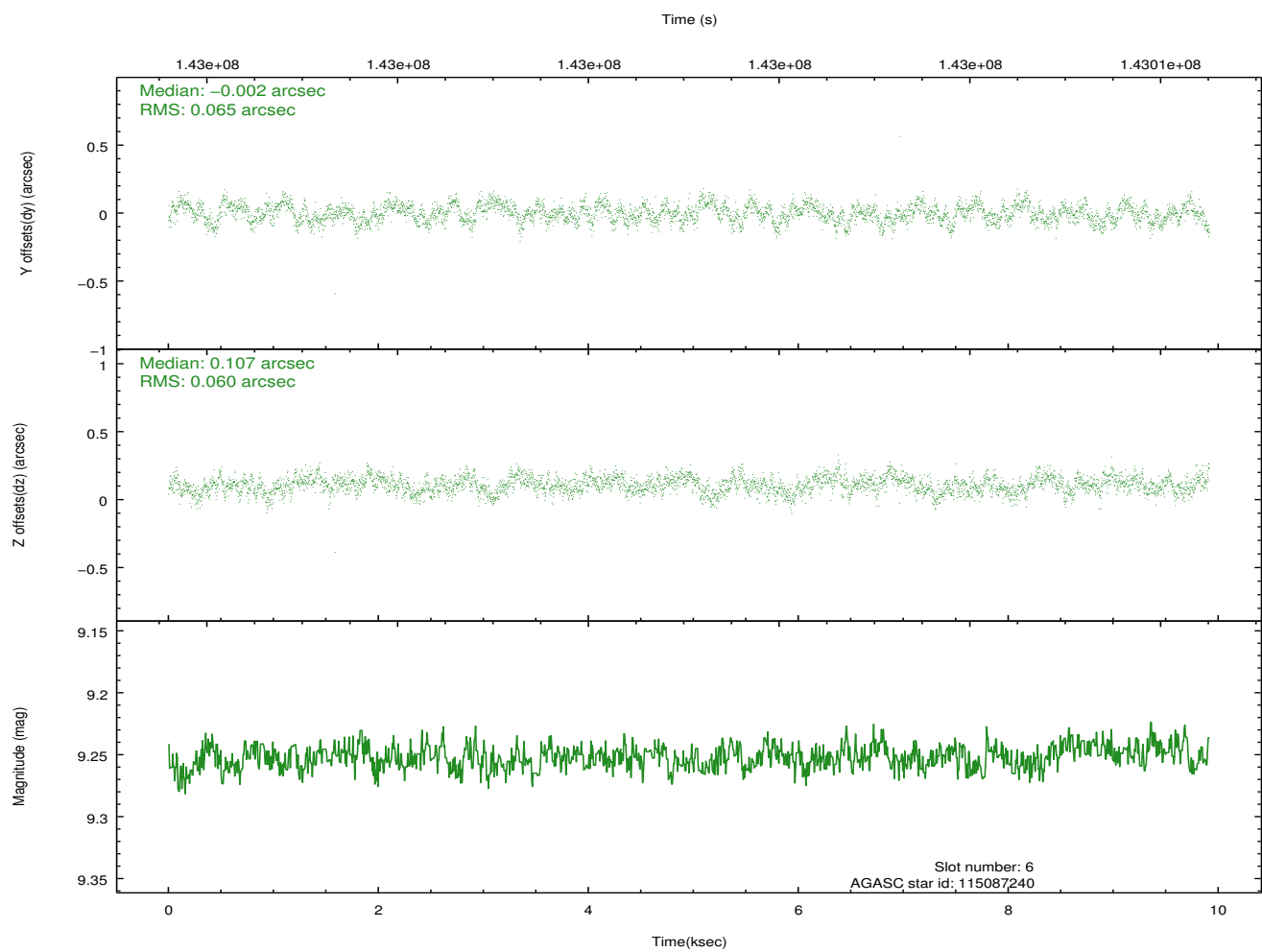
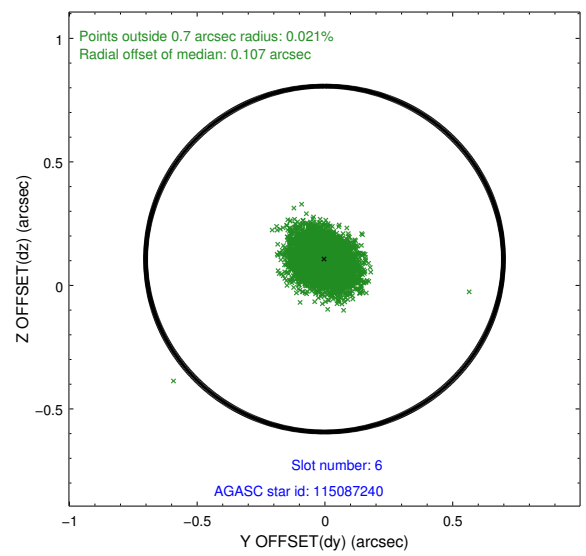
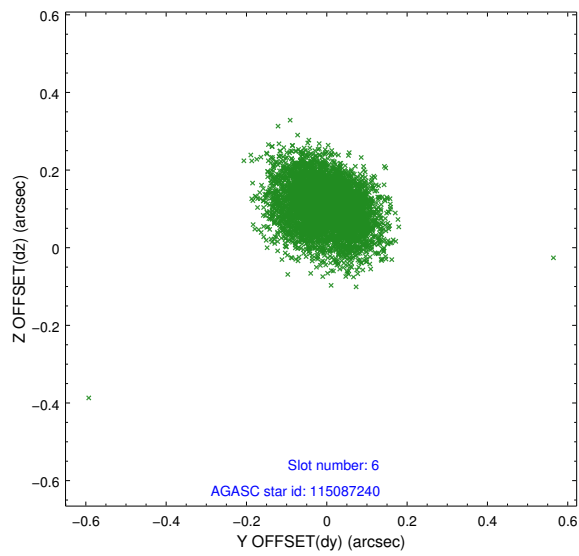
Time (s)



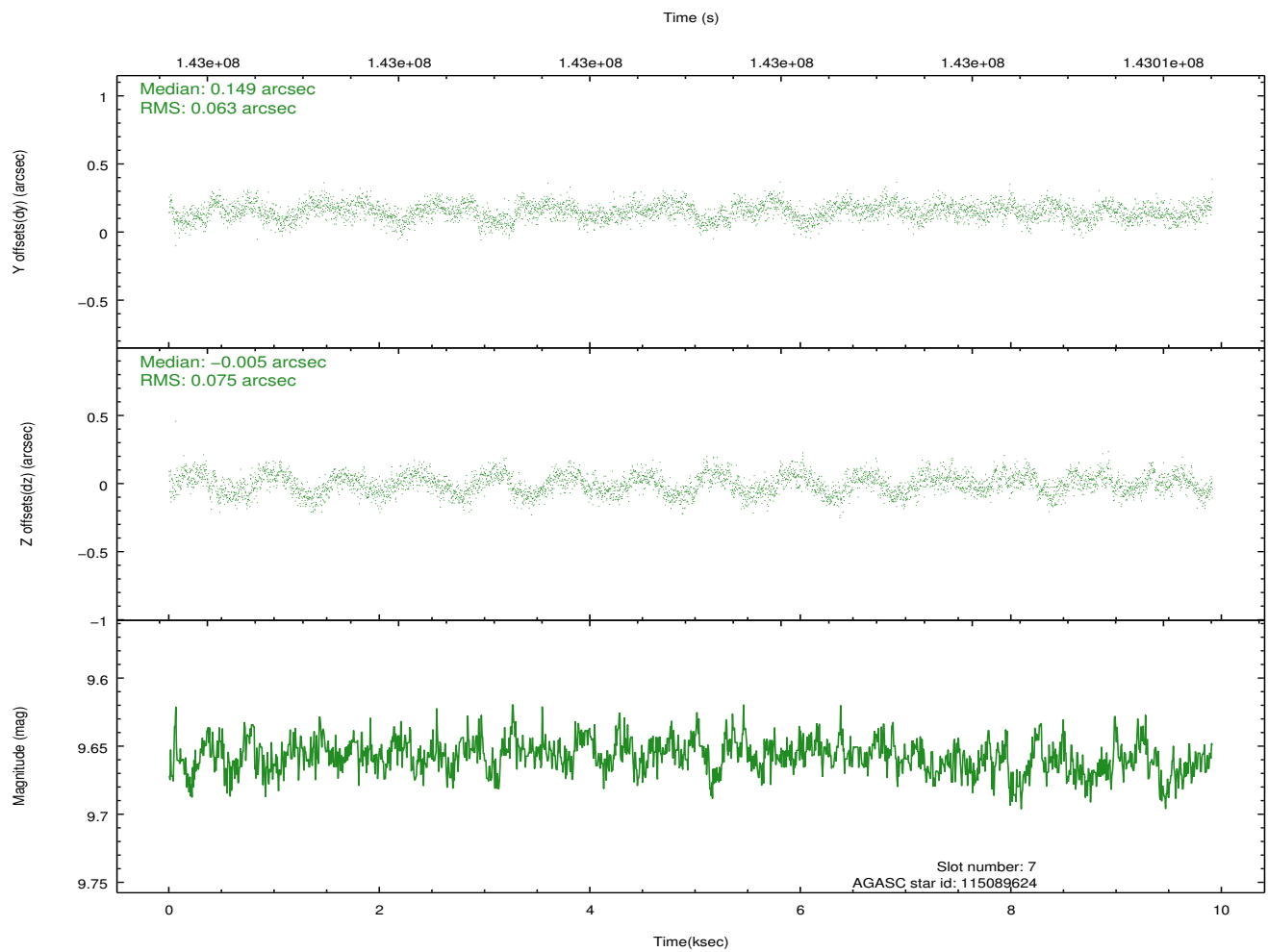
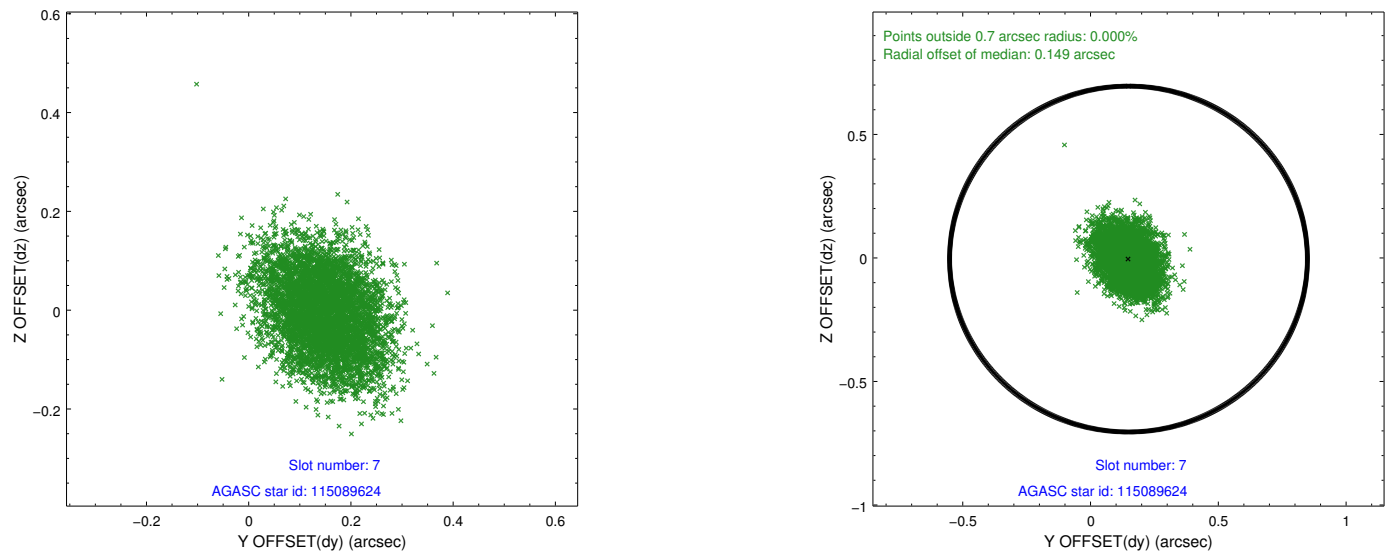
### 2.4.3 Slot 5



## 2.4.4 Slot 6

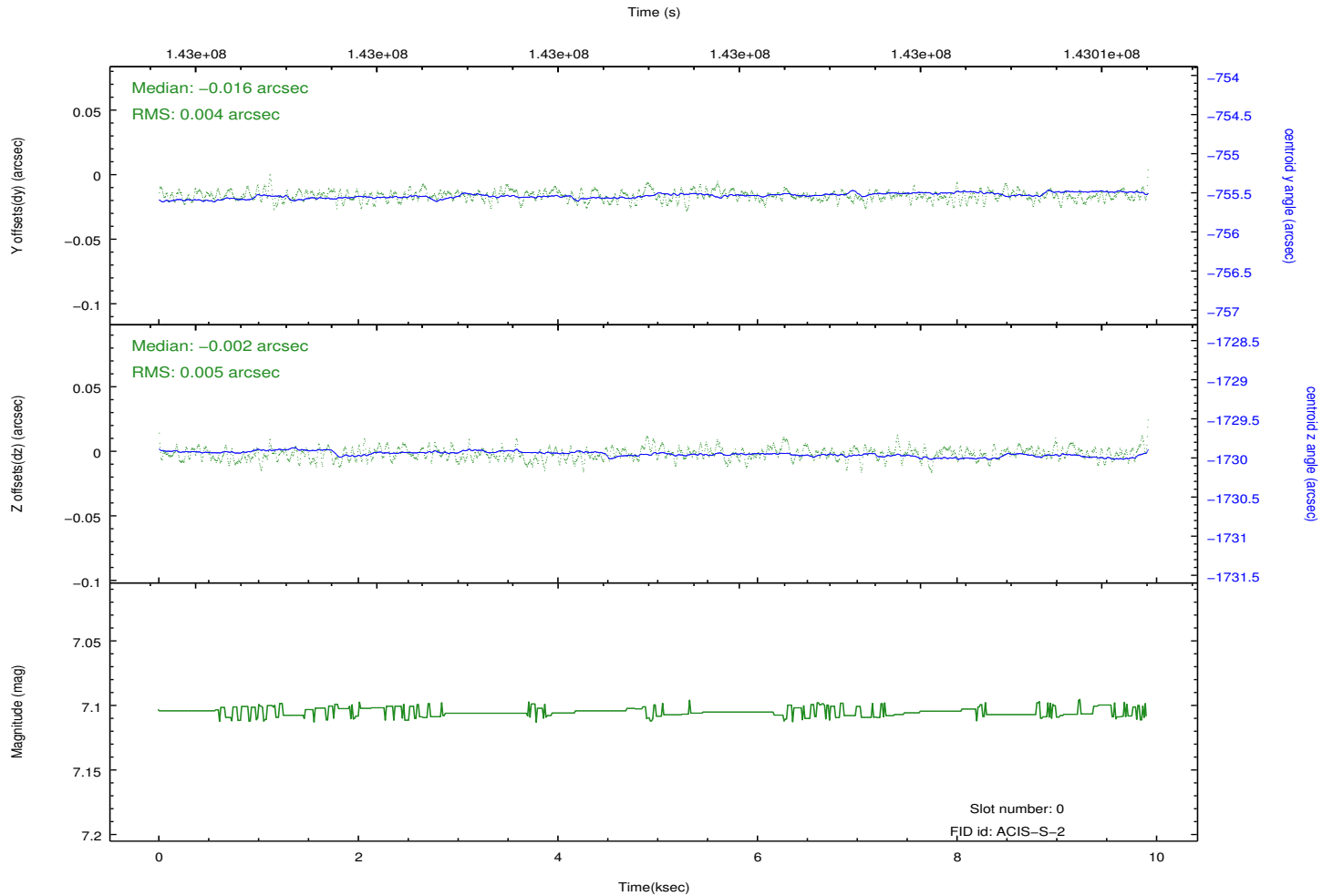
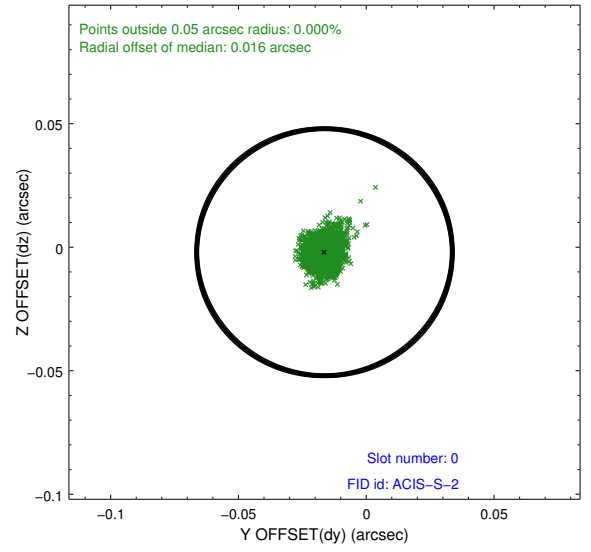
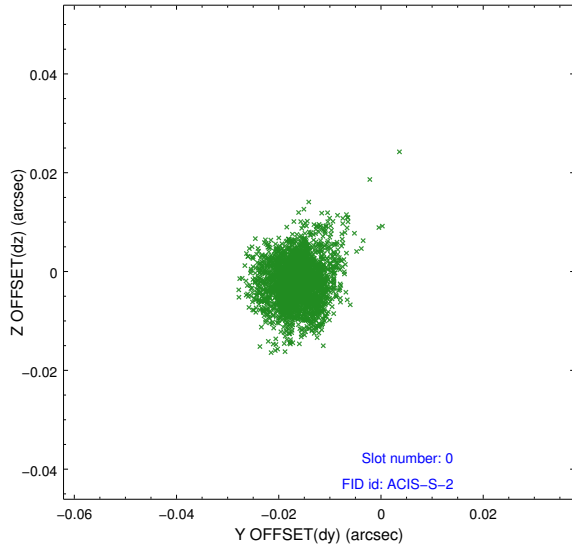


## 2.4.5 Slot 7

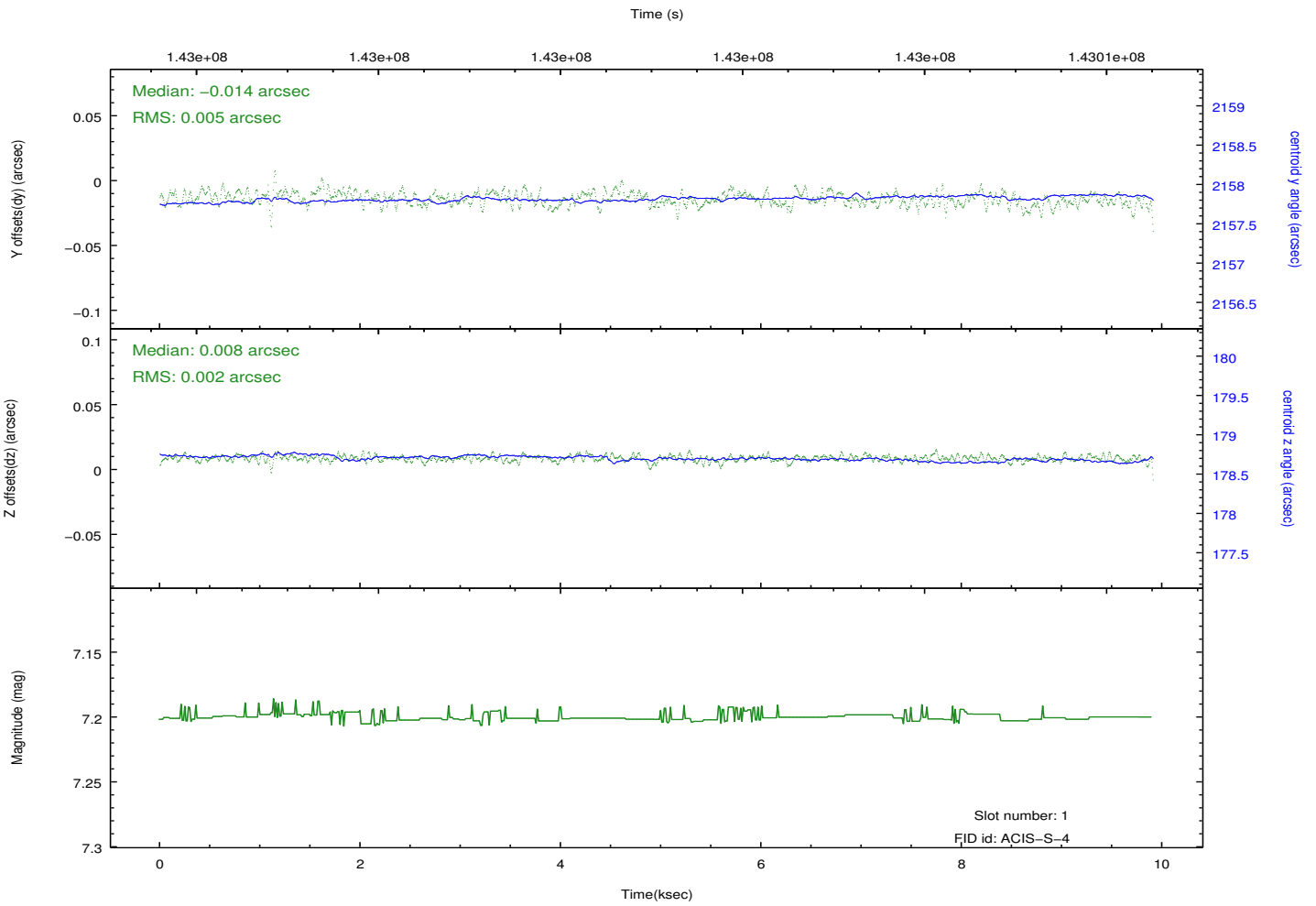
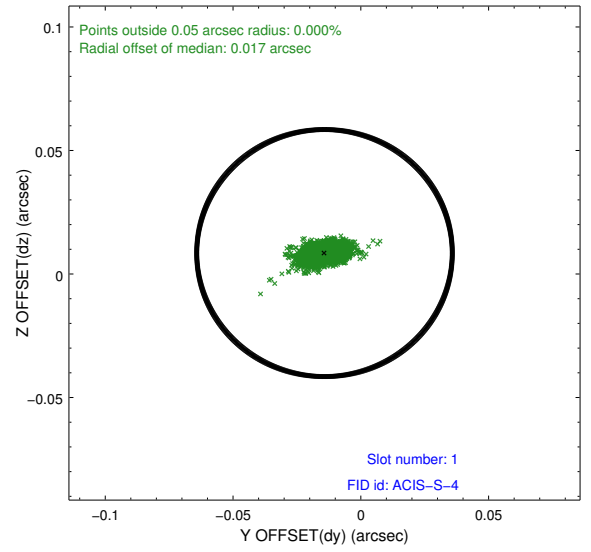
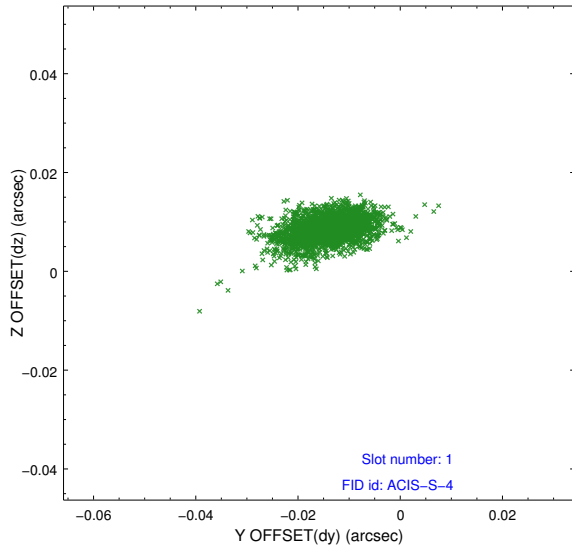


## 2.5 FID Slots

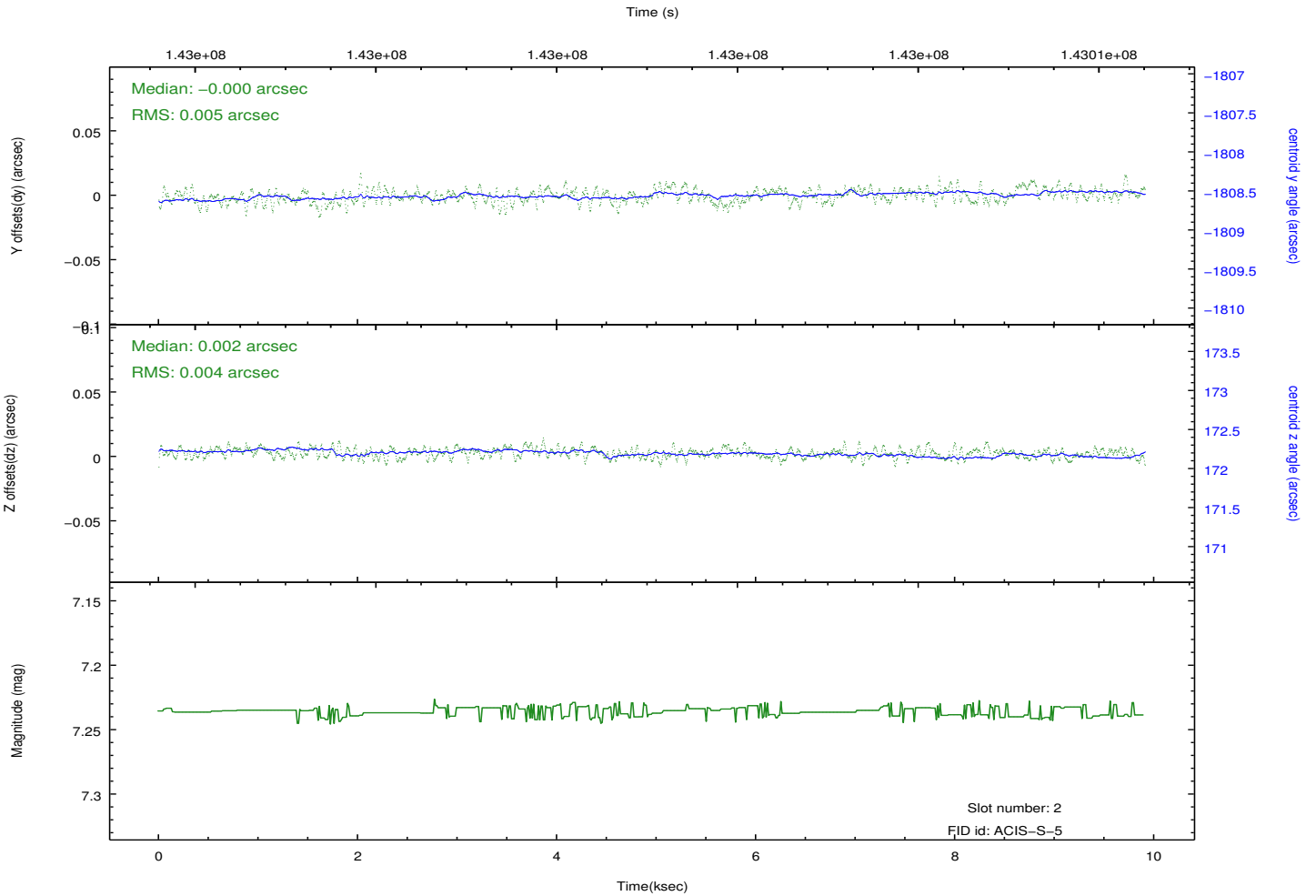
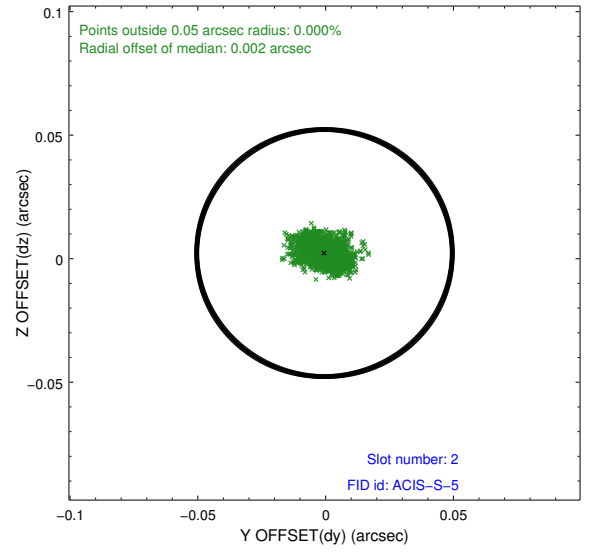
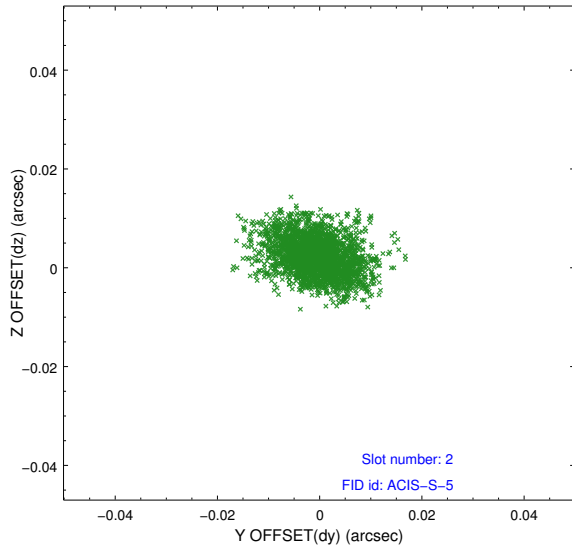
### 2.5.1 Slot 0



## 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)	2012.10.19
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.331

## A.2 Comments