

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 1639 - L2 Version 3  
Chandra X-Ray Center

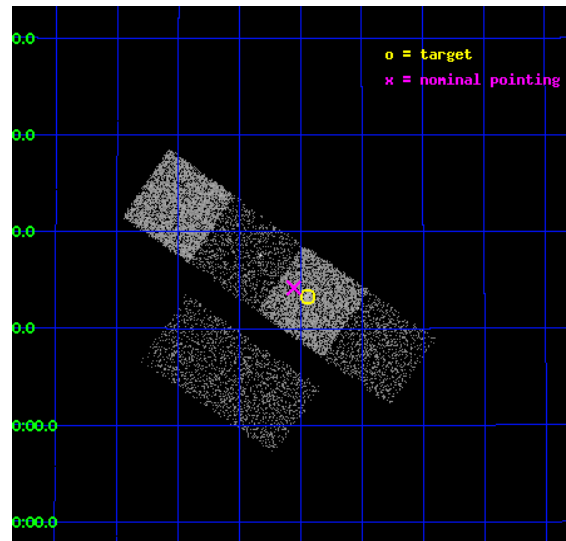
L2 Processing Date : Sep 2 2012

## 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

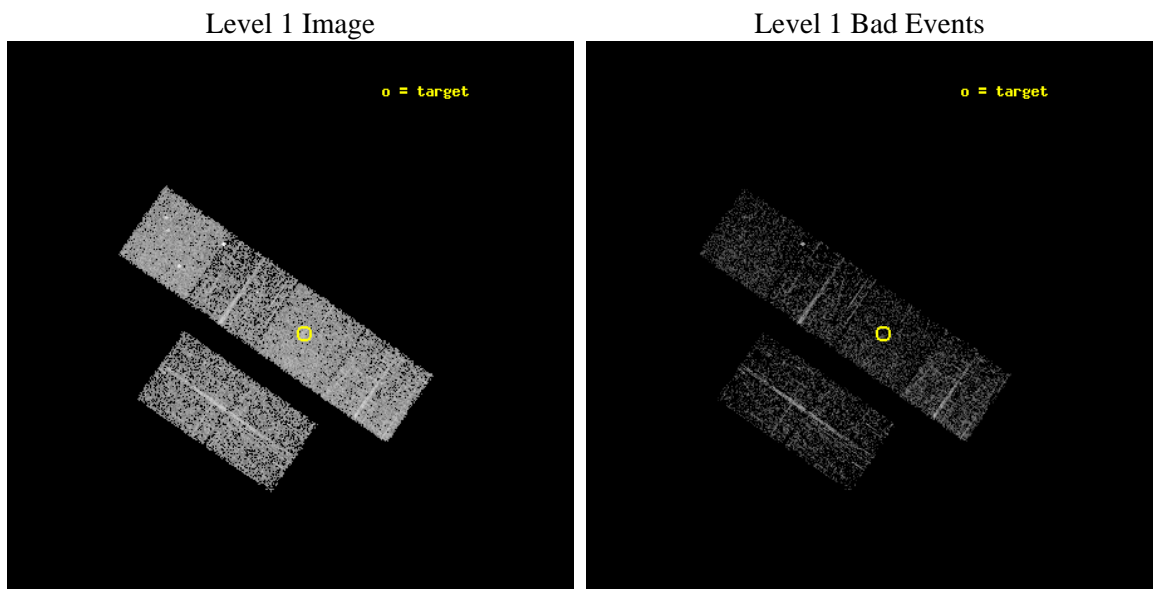
seq_num	700255	Sequence number
obs_id	1639	Observation id
title	THE X-RAY PROPERTIES OF LOW-LUMINOSITY ACTIVE GALACTIC NUCLEI IN NEARBY GALAXIES	Proposal title
observer	Professor Gordon Garmire	Principal investigator
object	NGC 4414	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	186.609583	Observer's specified target RA [deg]
dec_targ	31.221667	Observer's specified target Dec [deg]
ra_nom	186.63872985297	Nominal RA [deg]
dec_nom	31.236914219834	Nominal Dec [deg]
roll_nom	34.851162906118	Nominal Roll [deg]
revision	3	Processing version of data
ontime	1759.1840545982	Sum of GTIs [s]
livetime	1736.9082068454	Livetime [s]
ontime2	1759.2250946015	Sum of GTIs [s]
ontime3	1759.0609346032	Sum of GTIs [s]
ontime5	1759.1430145949	Sum of GTIs [s]
ontime6	1759.1019746065	Sum of GTIs [s]
ontime7	1759.1840545982	Sum of GTIs [s]
ontime8	1755.778964296	Sum of GTIs [s]
l2events	16118	Number of level 2 events



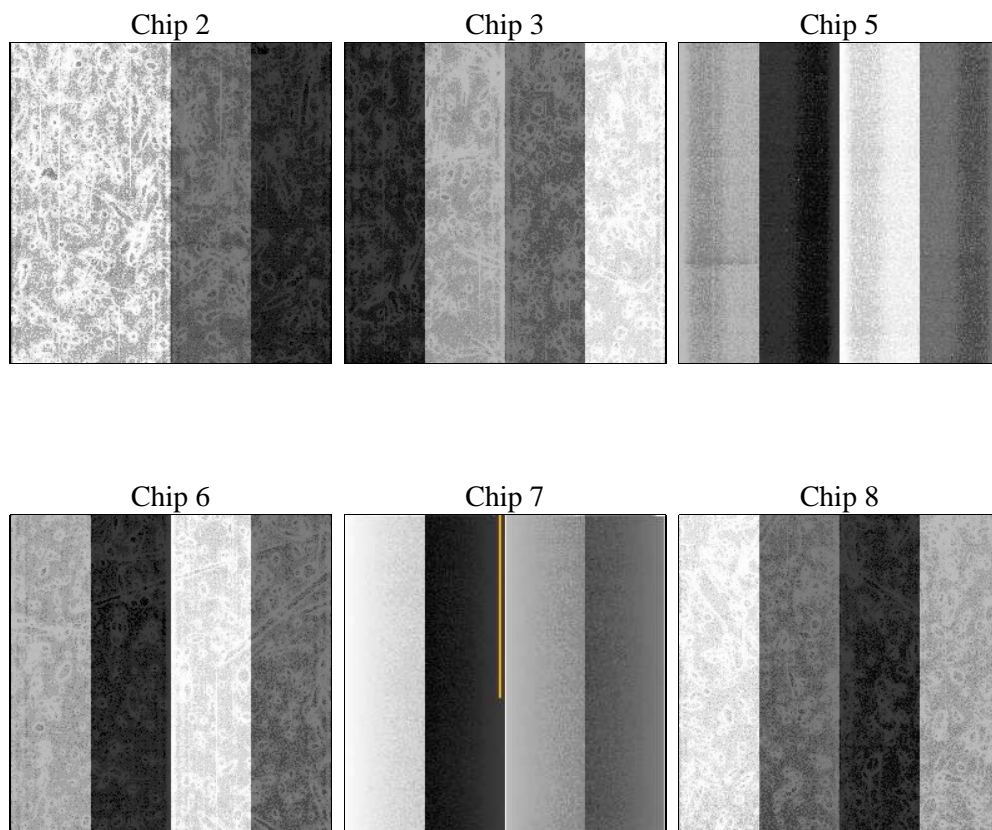
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	2000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	1759.1840545982	Sum of GTIs [s]
caldsver	4.5.1.1	&#160	ontime2	1759.2250946015	Sum of GTIs [s]
date	2012-09-03T00:11:36	Date and time of file creation	ontime3	1759.0609346032	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	1759.1430145949	Sum of GTIs [s]
			ontime6	1759.1019746065	Sum of GTIs [s]
			ontime7	1759.1840545982	Sum of GTIs [s]
			ontime8	1755.778964296	Sum of GTIs [s]
			l1events	73117	Number of level 1 events

### 2.1.4 Events

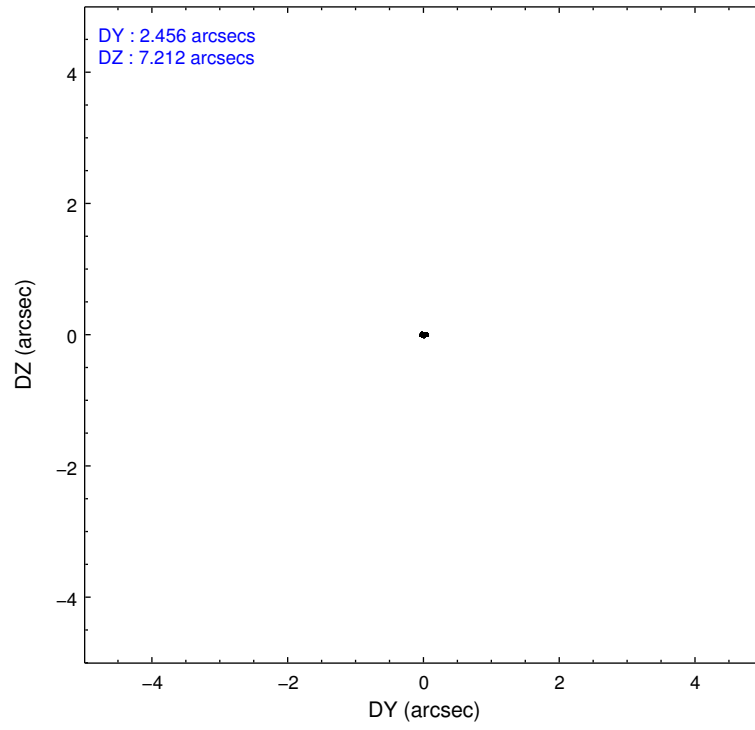
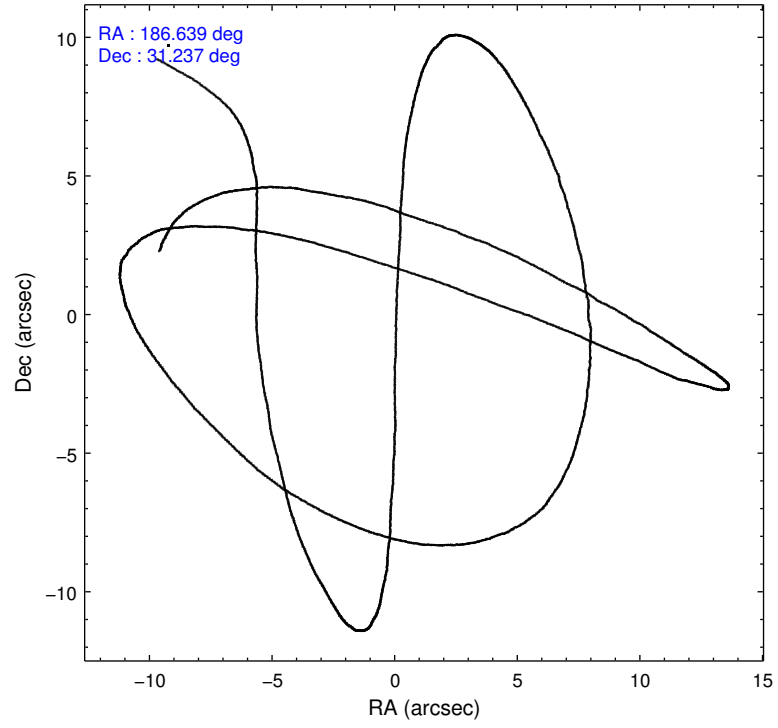
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	10016	10007	14988	10019	13326	14761
rejected events	8831	8767	7748	8664	7657	12241
rejected %	88%	87%	51%	86%	57%	82%

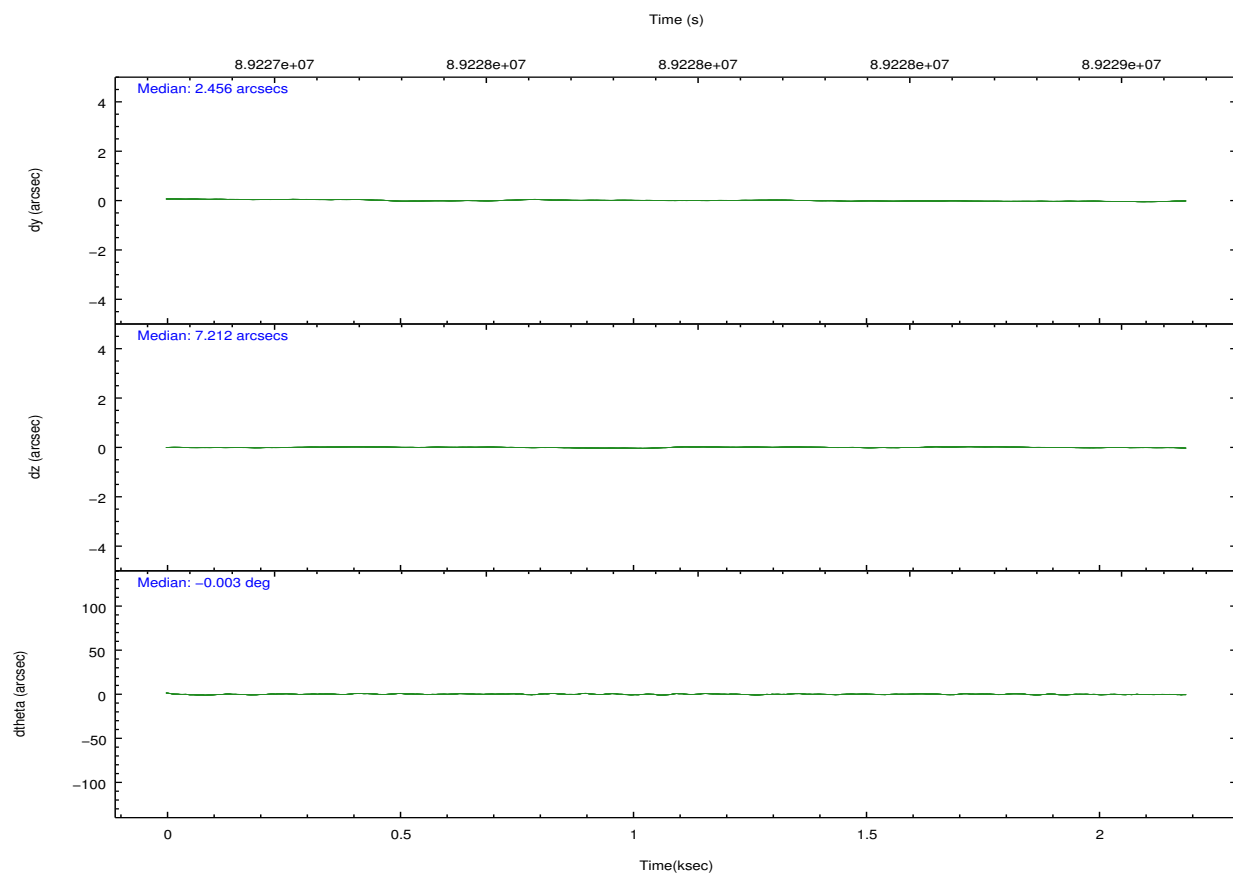
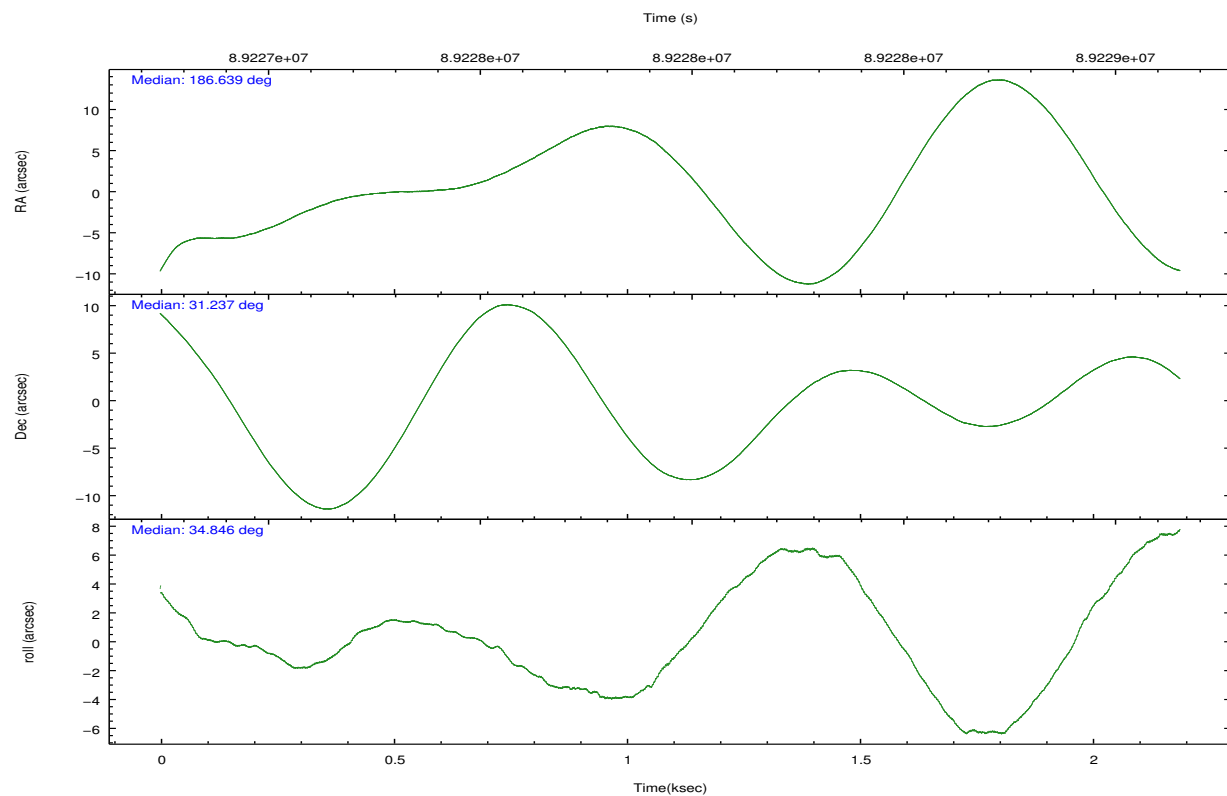
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	531	558	843	594	629	892
	5%	5%	5%	5%	4%	6%
grade 1 events	5	4	63	6	20	15
	0%	0%	0%	0%	0%	0%
grade 2 events	246	232	2007	251	1216	502
	2%	2%	13%	2%	9%	3%
grade 3 events	114	132	352	126	499	309
	1%	1%	2%	1%	3%	2%
grade 4 events	101	88	269	152	510	301
	1%	0%	1%	1%	3%	2%
grade 5 events	315	369	1194	392	1219	428
	3%	3%	7%	3%	9%	2%
grade 6 events	195	233	3781	235	2822	518
	1%	2%	25%	2%	21%	3%
grade 7 events	8509	8391	6479	8263	6411	11796
	84%	83%	43%	82%	48%	79%

## 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	186.625469	186.6387298529694	Subarray requested	NONE	NONE
[deg] Pointing Dec	31.212013	31.23691421983414	Alternating exposures requested	N	N
[deg] Pointing Roll	34.701431	34.85116290611756	[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)	89227042.184000	89226284.330275			
Observation start date	2000-10-29T17:16:18	2000-10-29T17:04:44			
[s] Observation end time (MET)	89229042.184000	89229274.25538801			
Observation end date	2000-10-29T17:49:38	2000-10-29T17:54:34			
Read mode	TIMED	TIMED			

## 2.3 Aspect





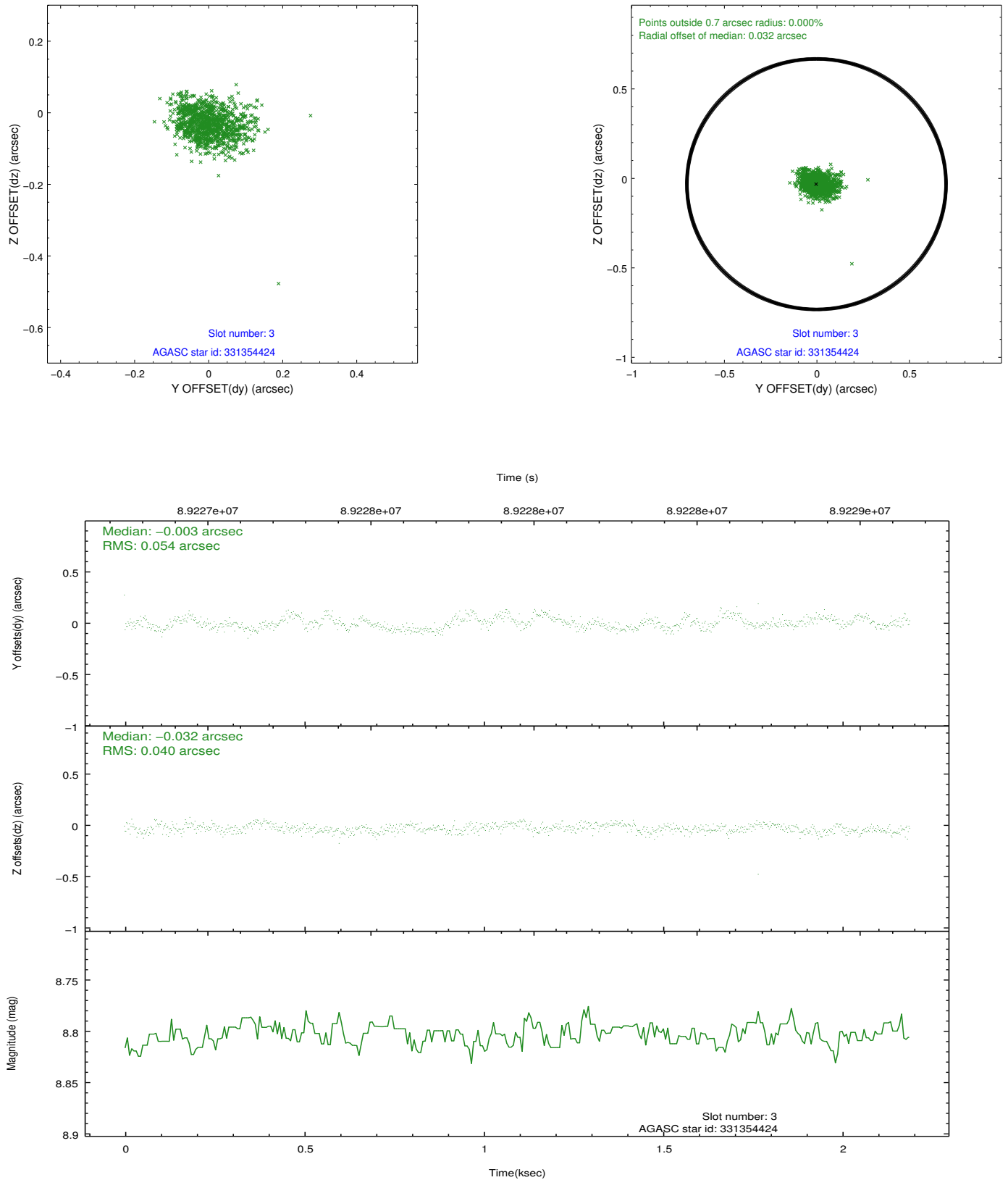
### Slot Statistics

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	534	-0.016	-0.006	0.007	0.013	0.000000	0.000000	-755.12	-1728.38
1	FID	ACIS-S-4	7.20	534	-0.033	0.009	0.006	0.010	0.000000	0.000000	2156.82	177.01
2	FID	ACIS-S-5	7.23	534	0.017	0.005	0.007	0.012	0.000000	0.000000	-1804.07	174.11
3	GUIDE	331354424	8.80	1069	-0.003	-0.032	0.068	0.116	186.124806	31.280357	-1124.01	1081.91
4	GUIDE	331352496	8.91	1069	-0.177	0.140	0.102	0.167	187.573373	30.994368	1965.59	-2298.01
5	GUIDE	331354152	9.87	1069	0.205	0.114	0.137	0.210	186.354977	30.589774	-1961.15	-1365.95
6	GUIDE	331354520	9.93	1066	-0.101	-0.080	0.151	0.251	187.123469	31.673606	2200.92	499.10
7	GUIDE	331354912	8.09	1068	0.060	-0.128	0.072	0.111	185.673324	31.248883	-2323.97	1787.82

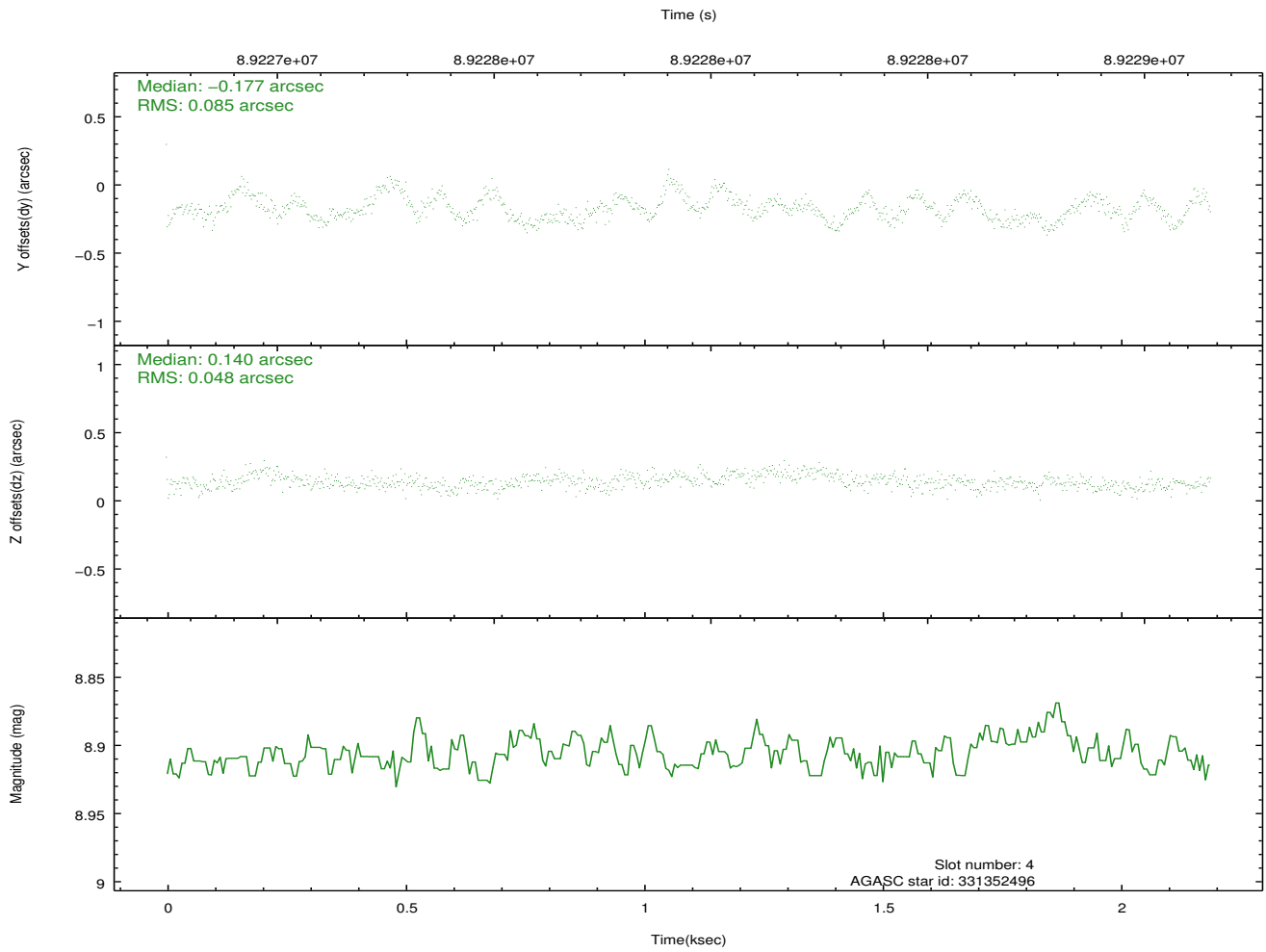
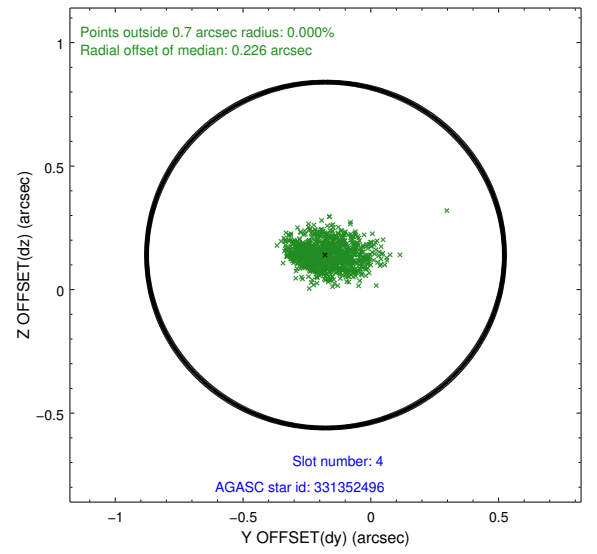
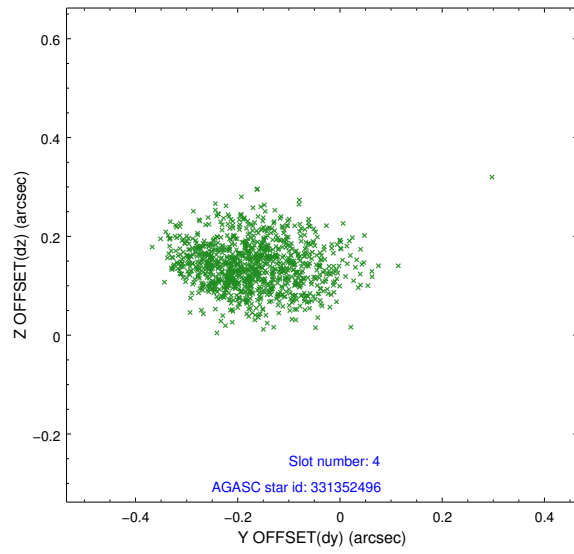


## 2.4 Star Slots

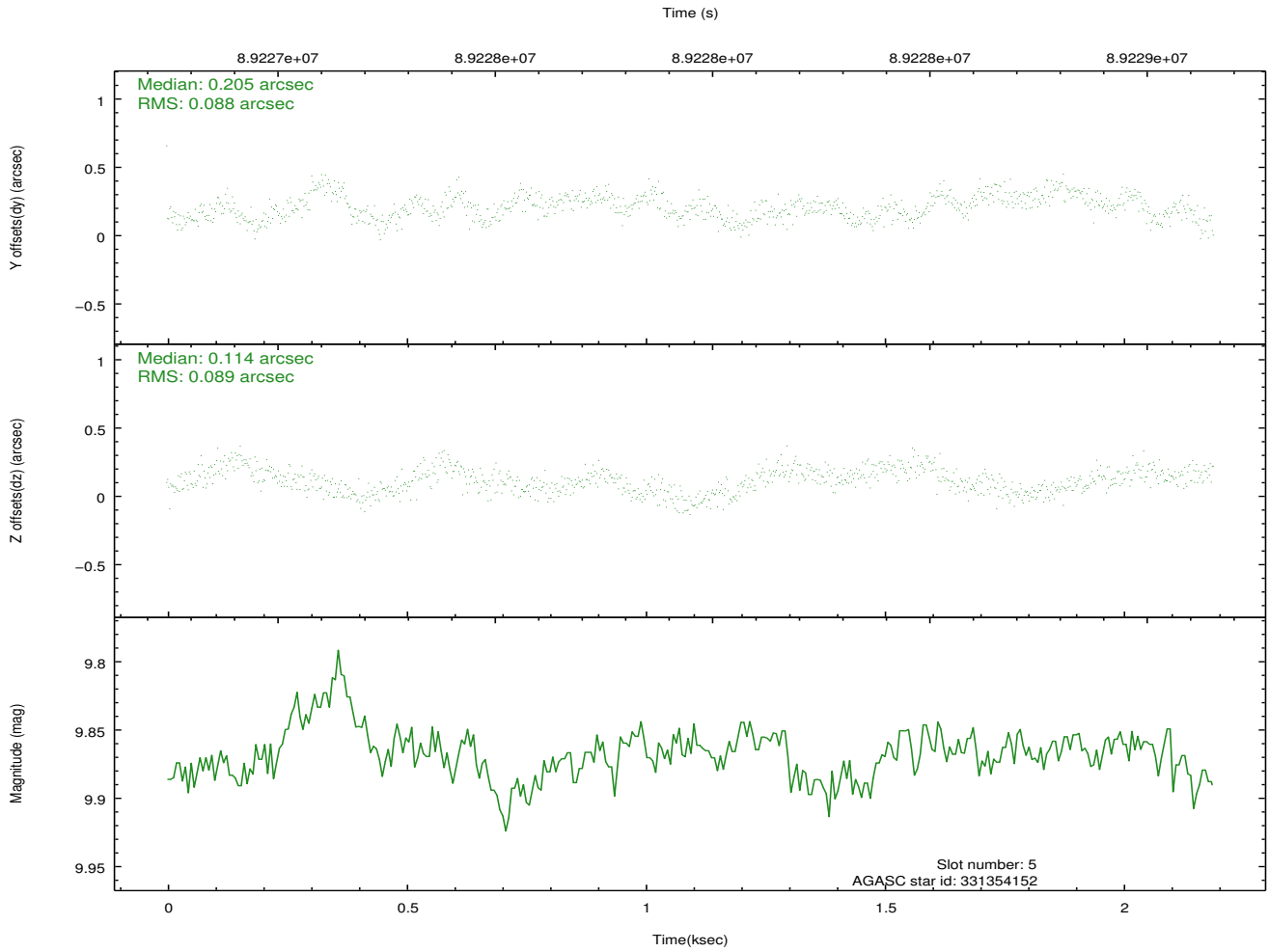
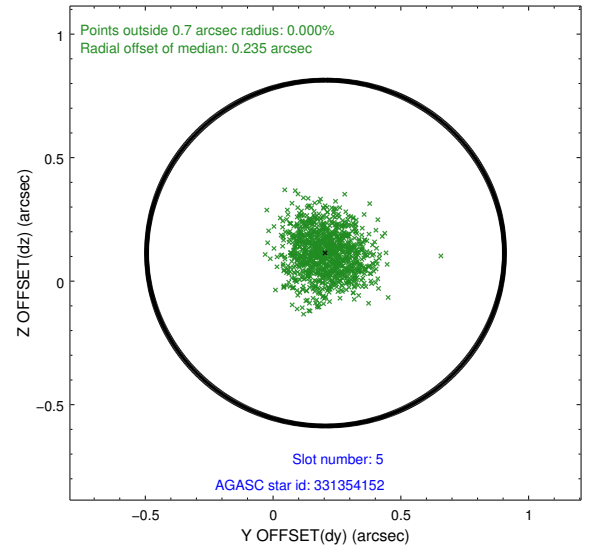
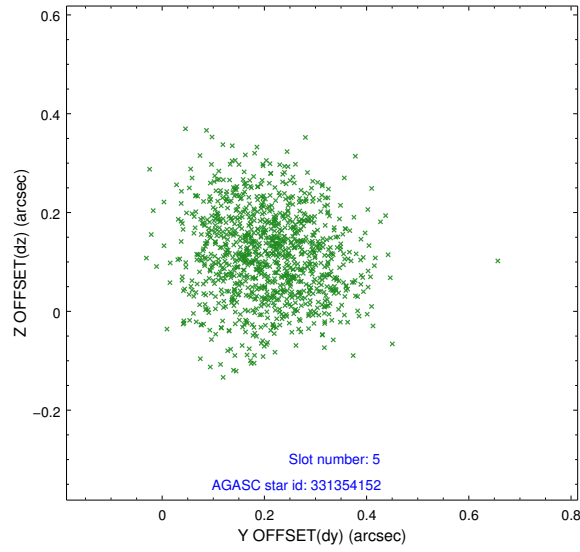
### 2.4.1 Slot 3



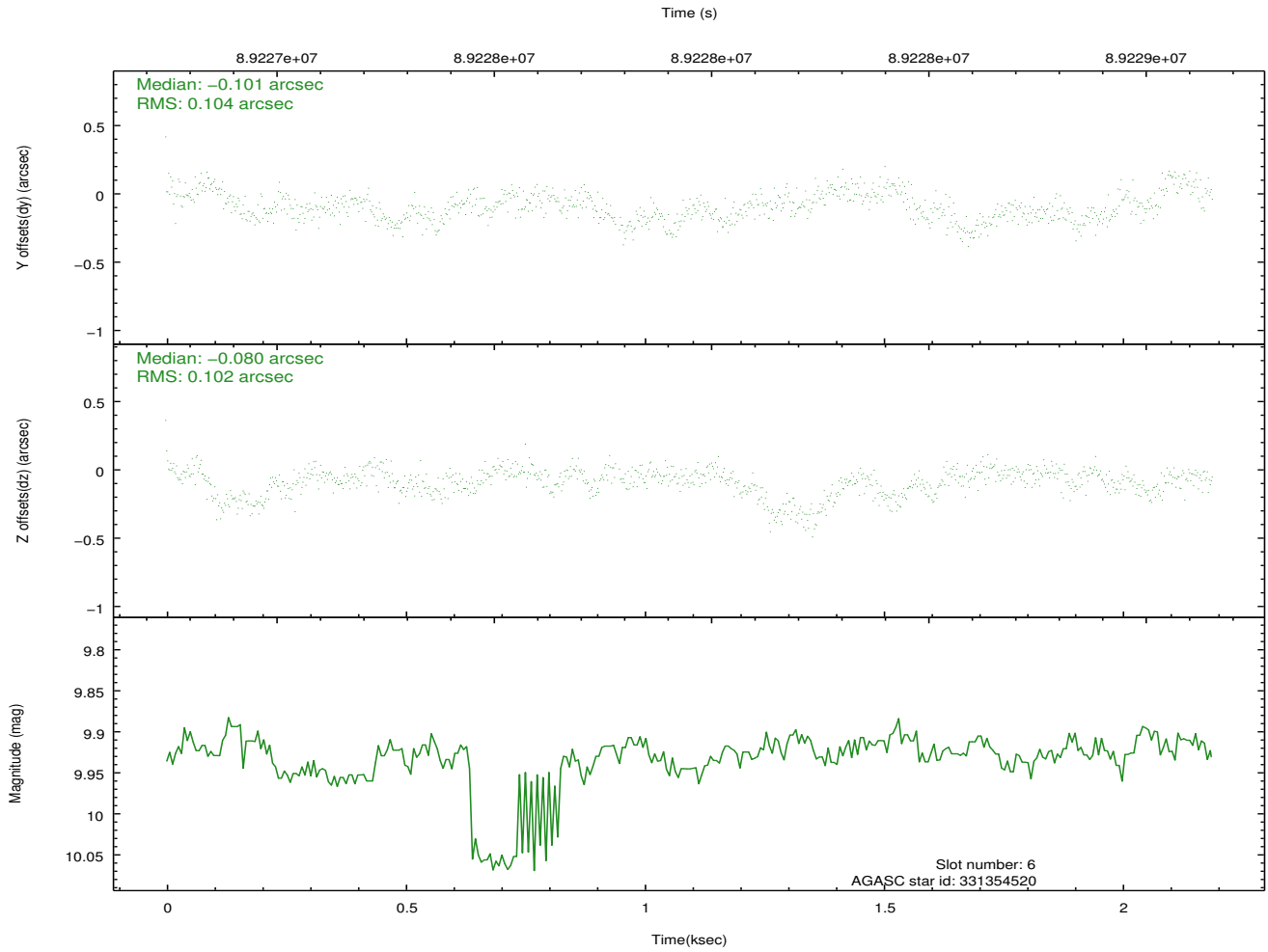
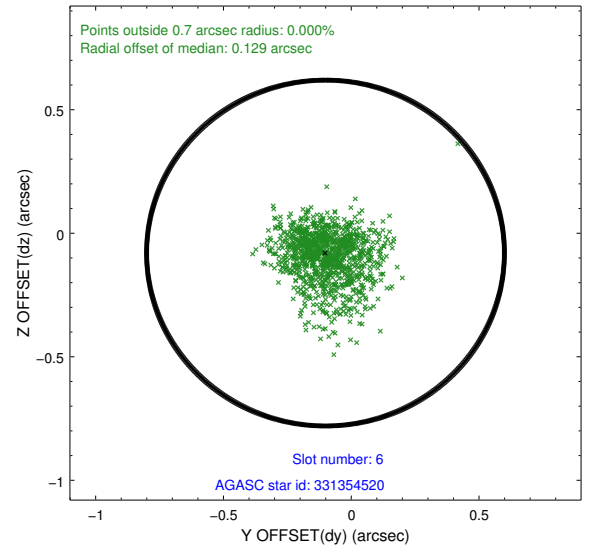
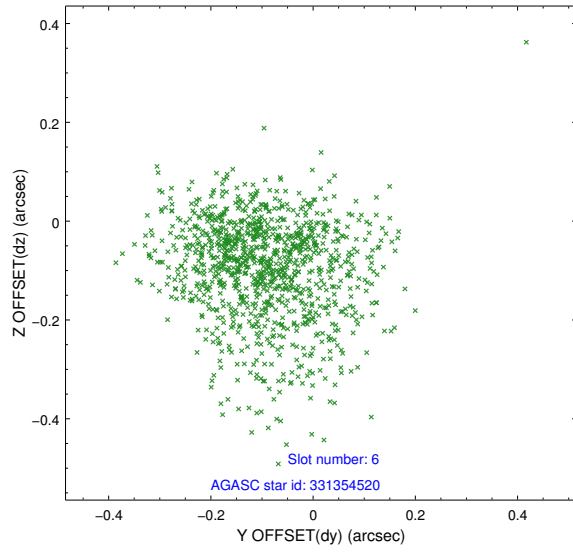
## 2.4.2 Slot 4



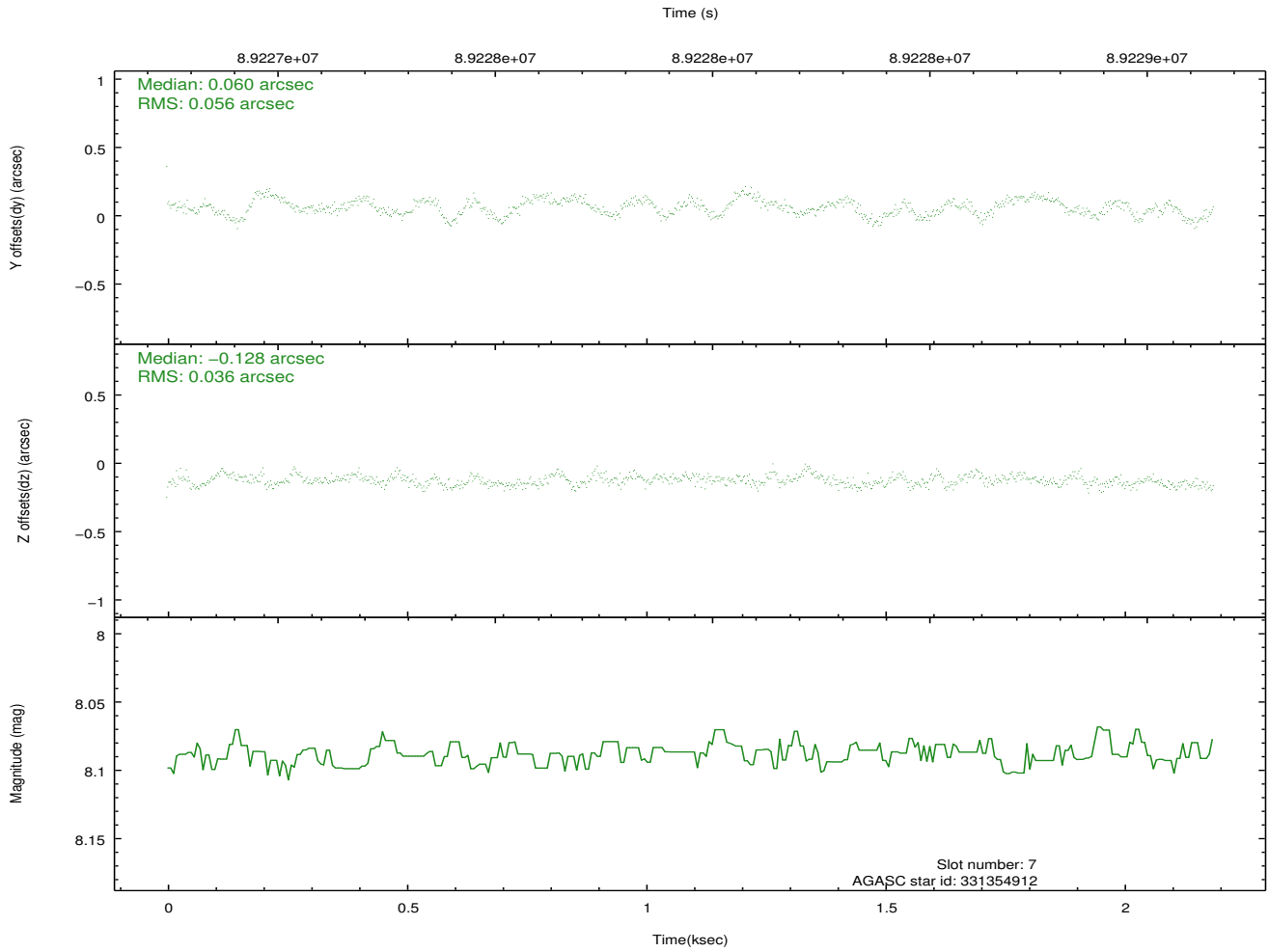
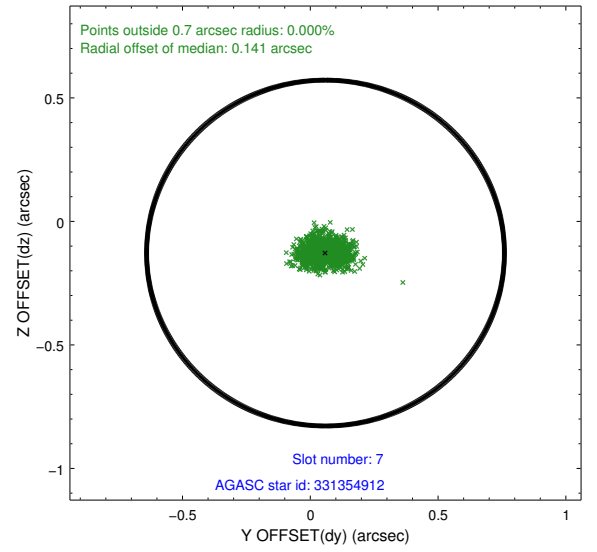
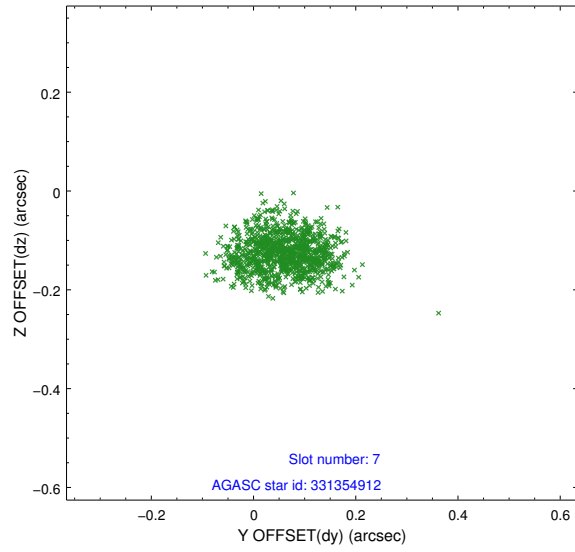
### 2.4.3 Slot 5



## 2.4.4 Slot 6

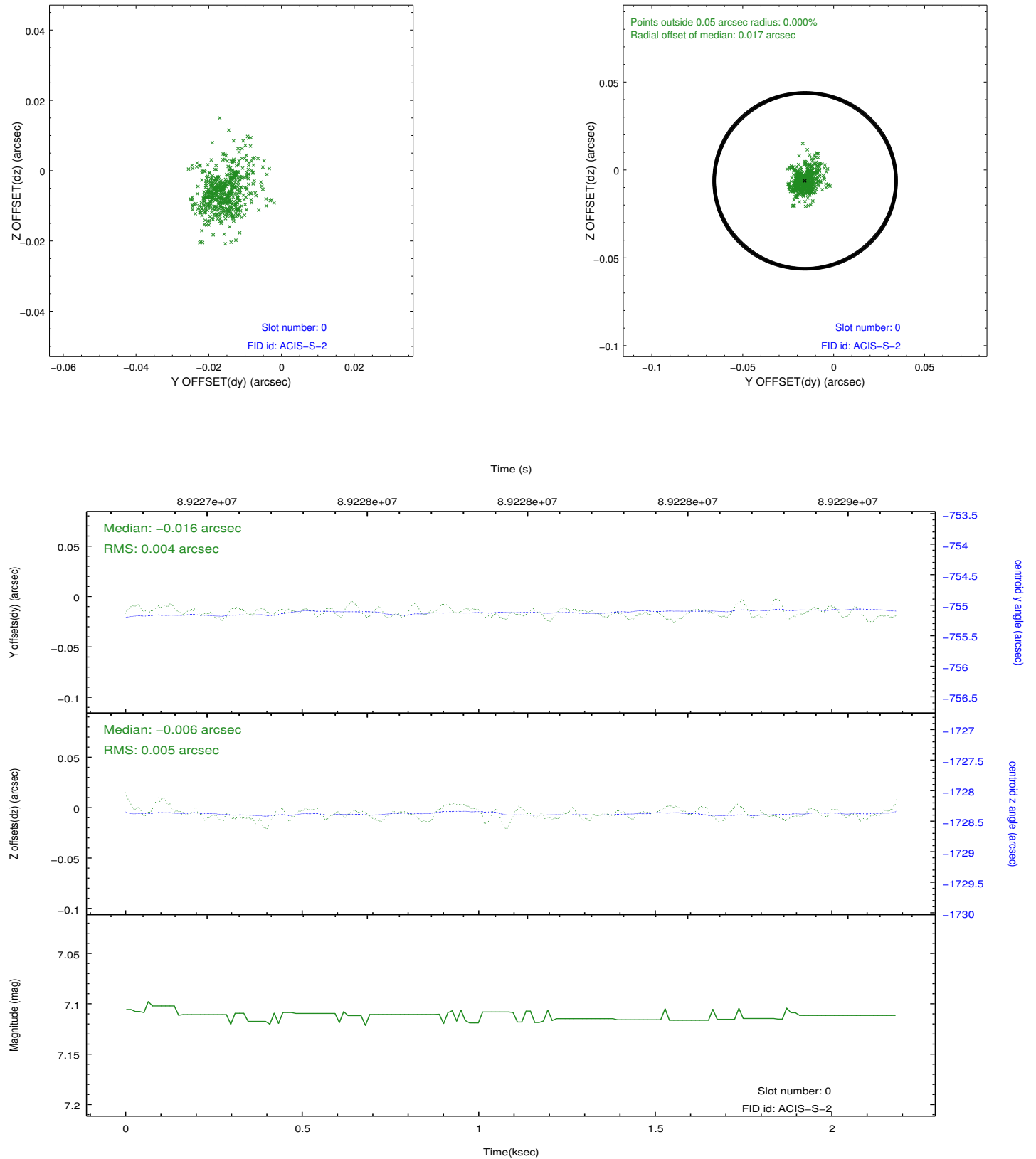


## 2.4.5 Slot 7

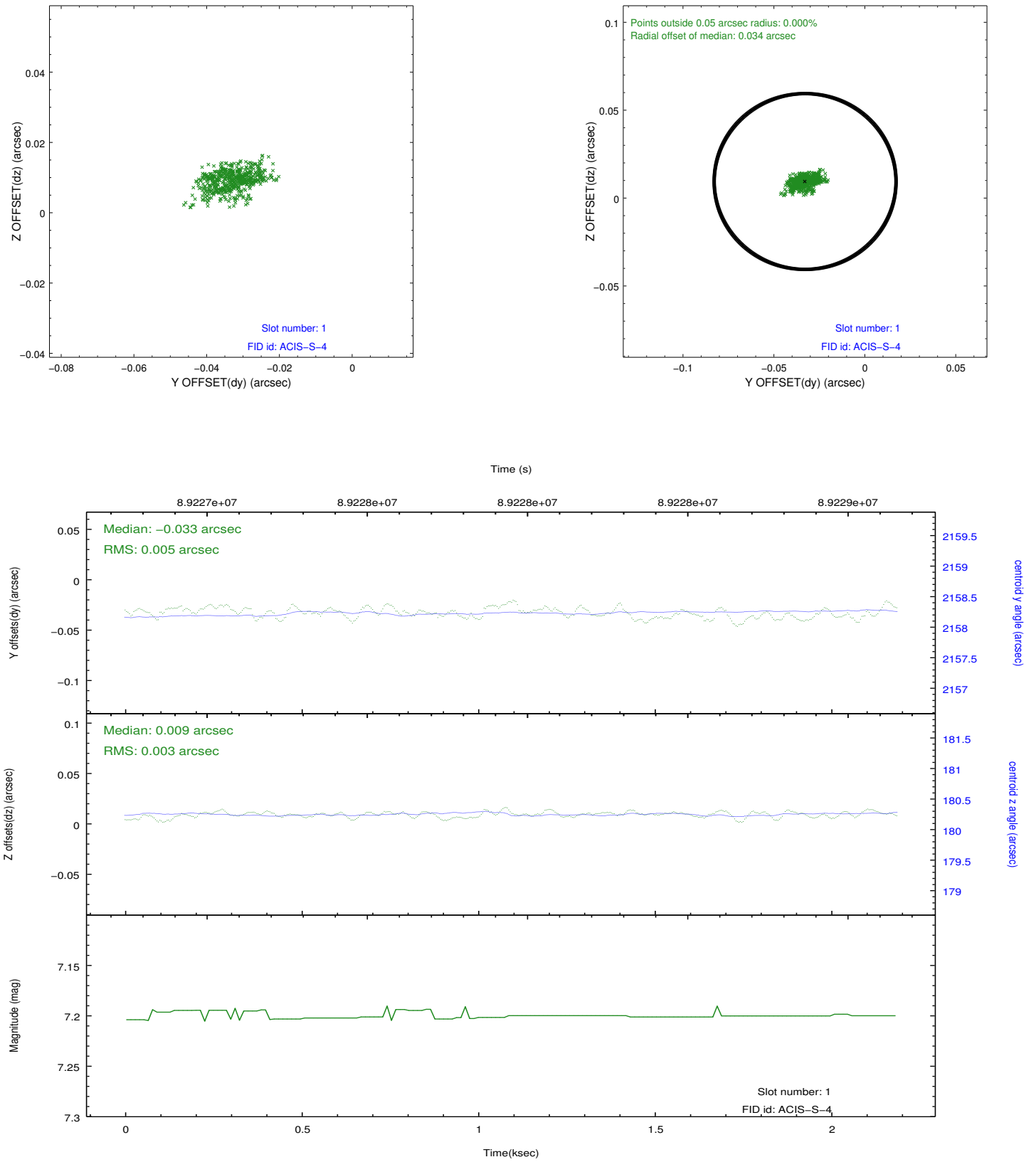


## 2.5 FID Slots

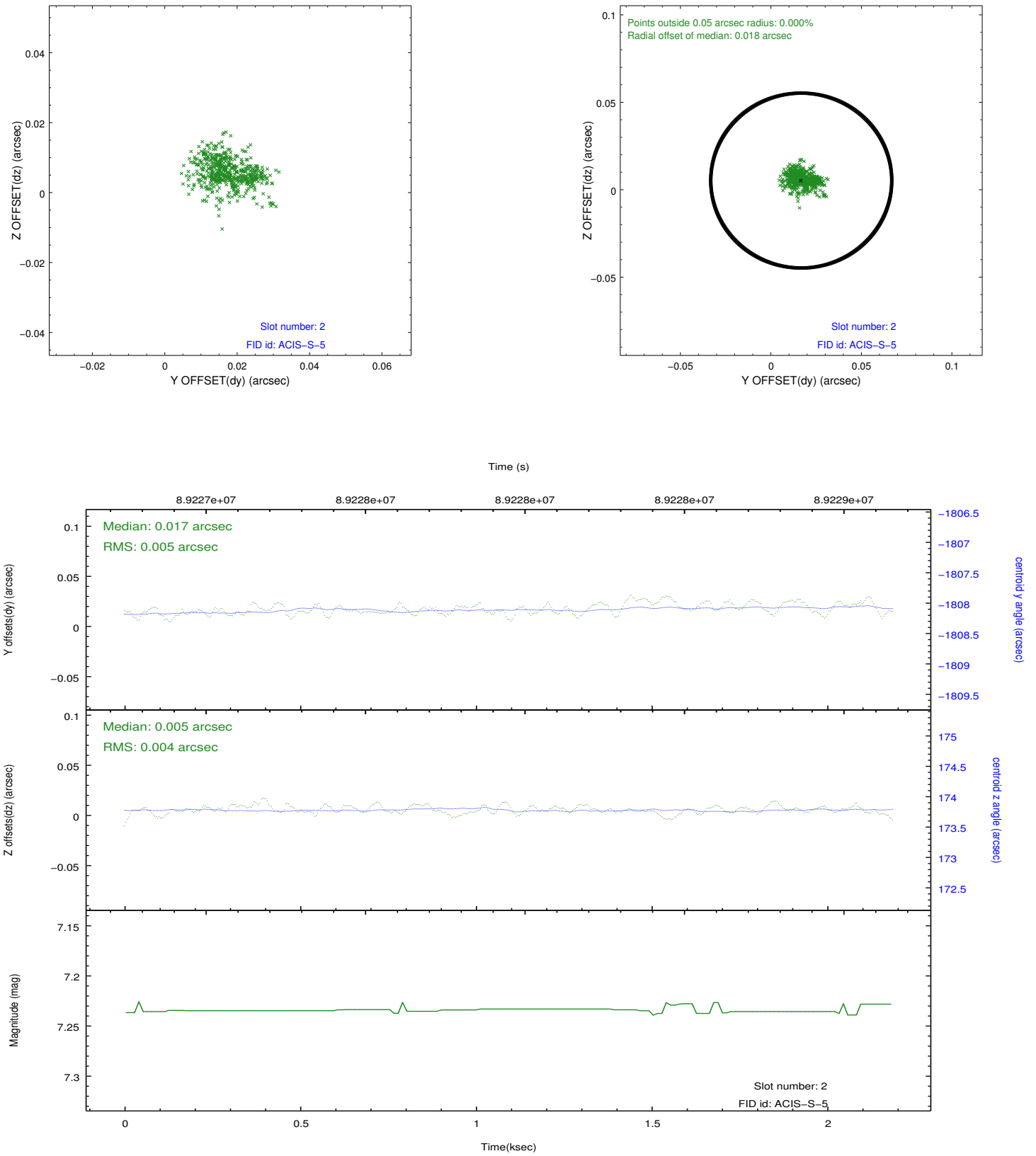
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2





## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2012.09.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.76

### A.2 Comments