

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 11542 - L2 Version 3  
Chandra X-Ray Center

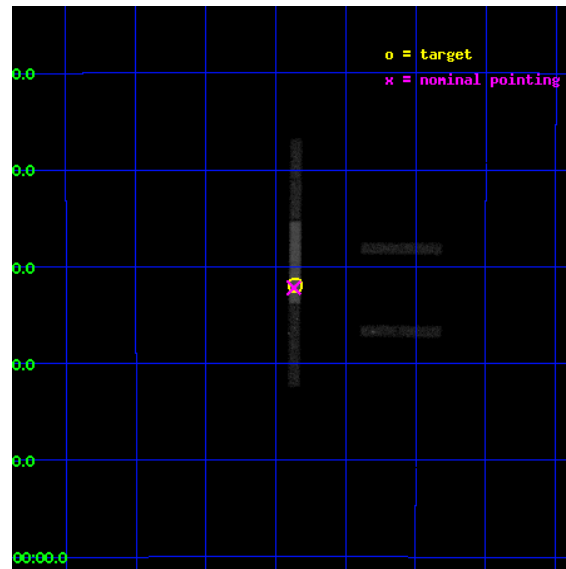
L2 Processing Date : Jun 24 2012

## 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	702128	Sequence number
obs_id	11542	Observation id
title	The Size of Quasar Non-Thermal/X-ray Emission Regions	Proposal tit
observer	Prof. Christopher Kochanek	Principal investigator
object	RXJ1131-1231	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	172.965	Observer's specified target RA [deg]
dec_targ	-12.5325	Observer's specified target Dec [deg]
ra_nom	172.96764357259	Nominal RA [deg]
dec_nom	-12.536588476716	Nominal Dec [deg]
roll_nom	270.53306410063	Nominal Roll [deg]
revision	3	Processing version of data
ontime	27180.999537051	Sum of GTIs [s]
livetime	25675.67159119	Livetime [s]
ontime2	27180.999537051	Sum of GTIs [s]
ontime3	27180.999537051	Sum of GTIs [s]
ontime6	27180.999537051	Sum of GTIs [s]
ontime7	27180.999537051	Sum of GTIs [s]
ontime8	27180.999537051	Sum of GTIs [s]
l2events	54561	Number of level 2 events

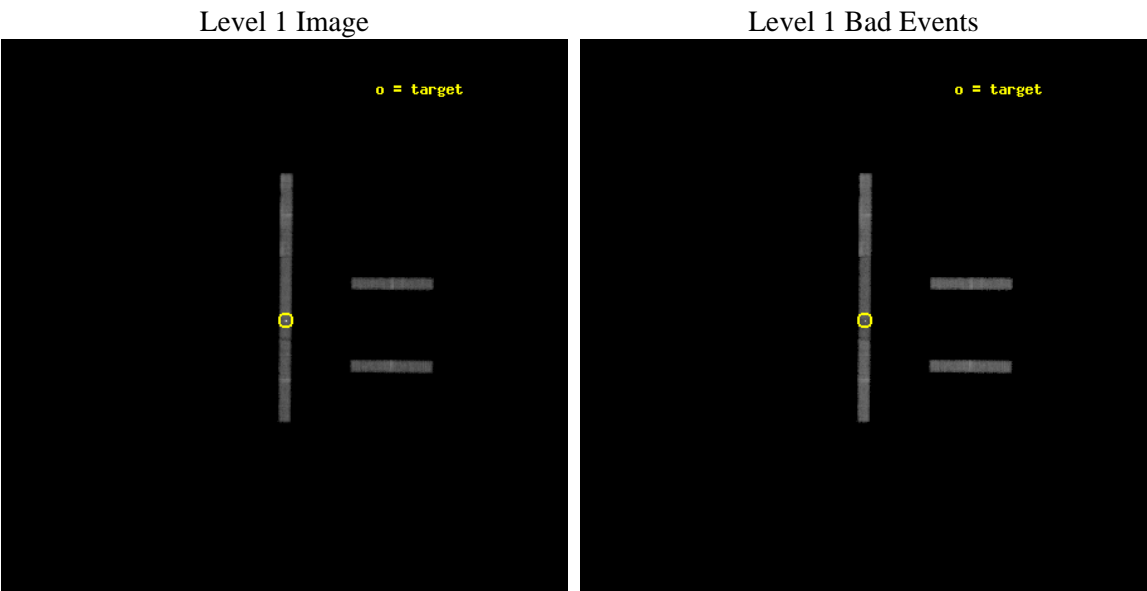




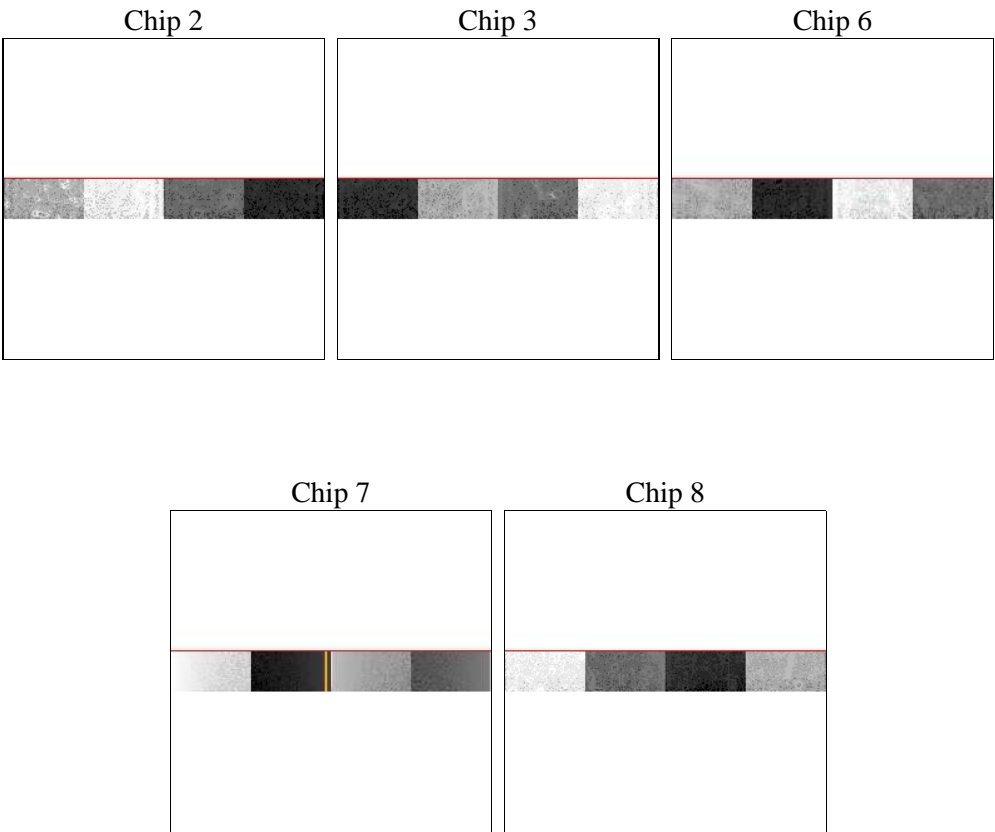
# 2 OBI

## 2.1 OBI

### 2.1.1 Images



### 2.1.2 Bias



Chip 7



Chip 8



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	27000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	27180.999537051	Sum of GTIs [s]
caldbver	4.4.10	&#160	ontime2	27180.999537051	Sum of GTIs [s]
date	2012-06-24T09:01:32	Date and time of file creation	ontime3	27180.999537051	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	27180.999537051	Sum of GTIs [s]
			ontime7	27180.999537051	Sum of GTIs [s]
			ontime8	27180.999537051	Sum of GTIs [s]
			l1events	216461	Number of level 1 events

### 2.1.4 Events

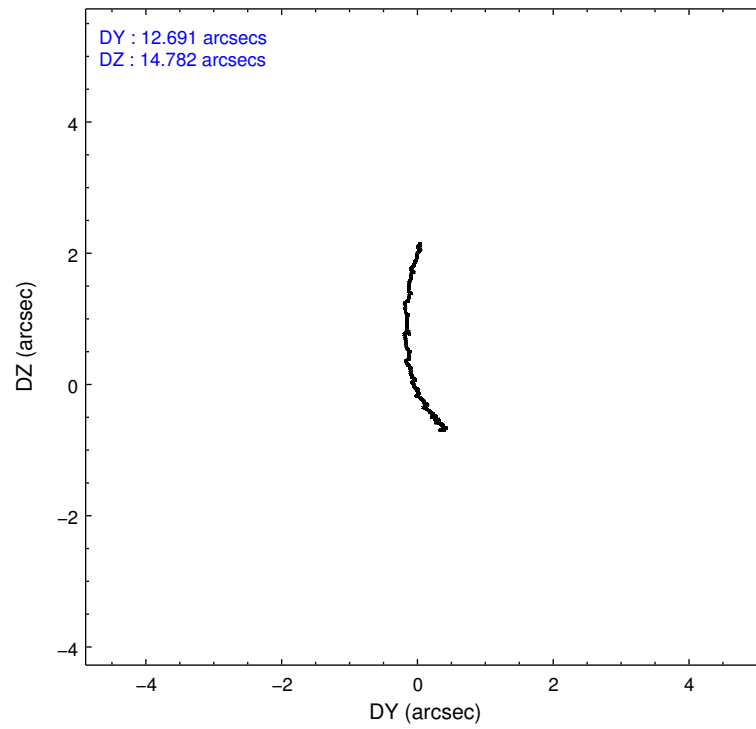
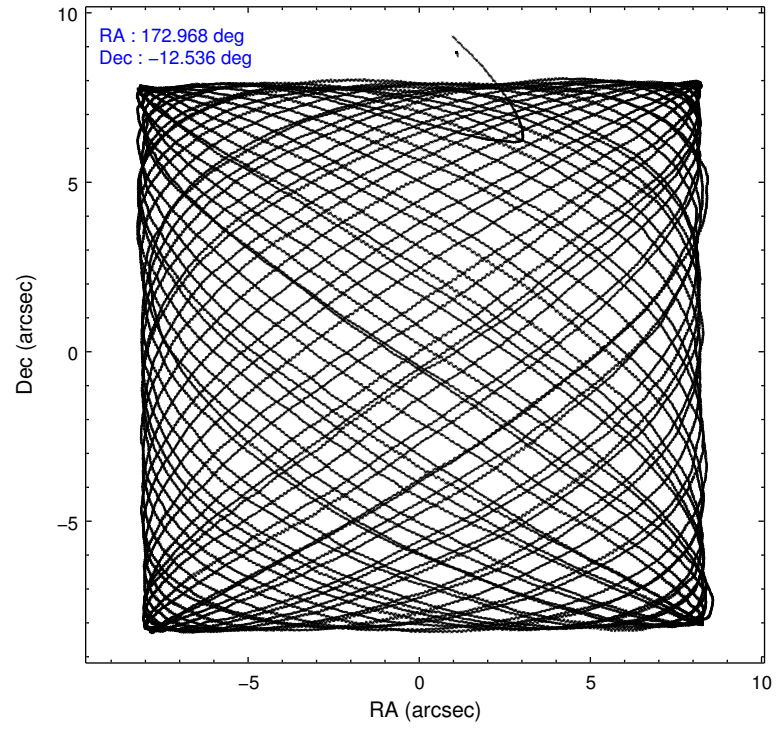
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	33370	32277	35210	65972	49632
rejected events	29893	28989	31447	22221	39265
rejected %	89%	89%	89%	33%	79%

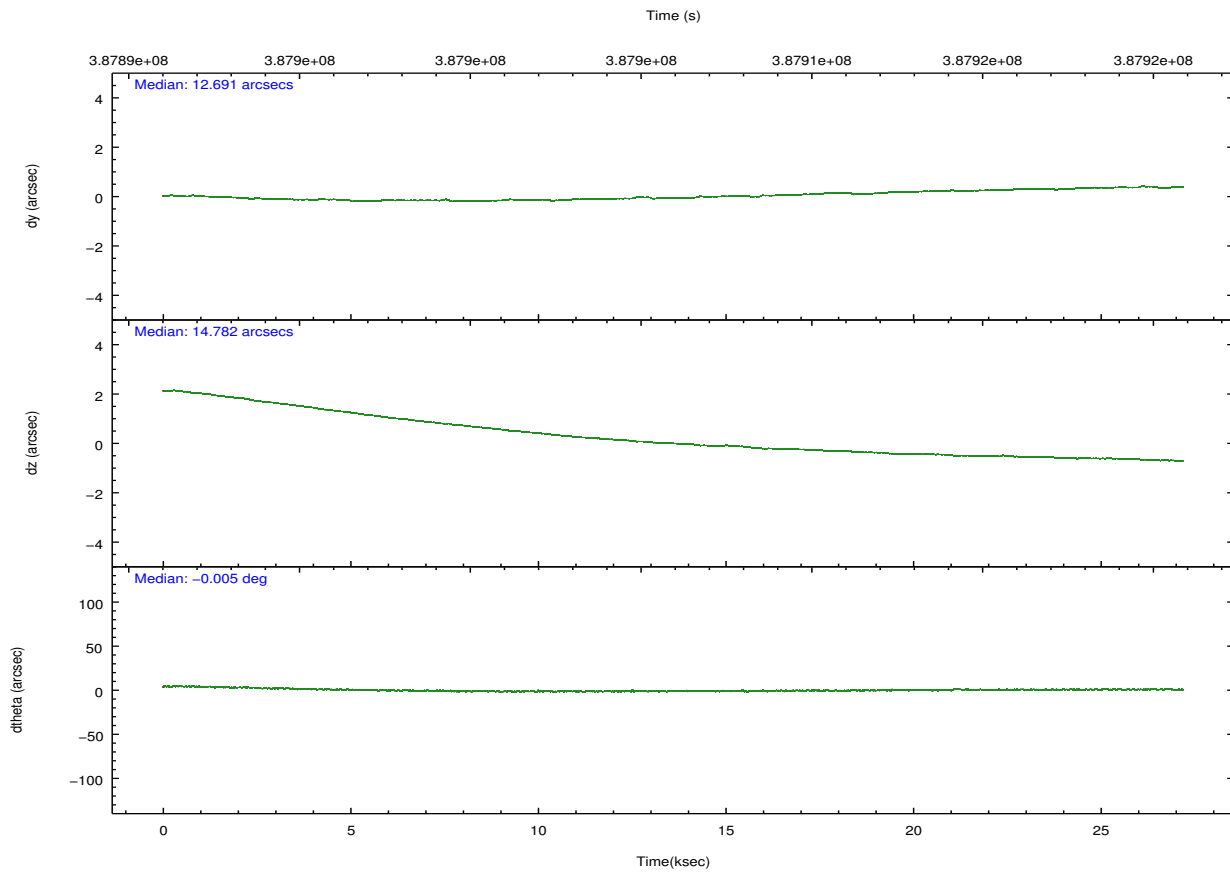
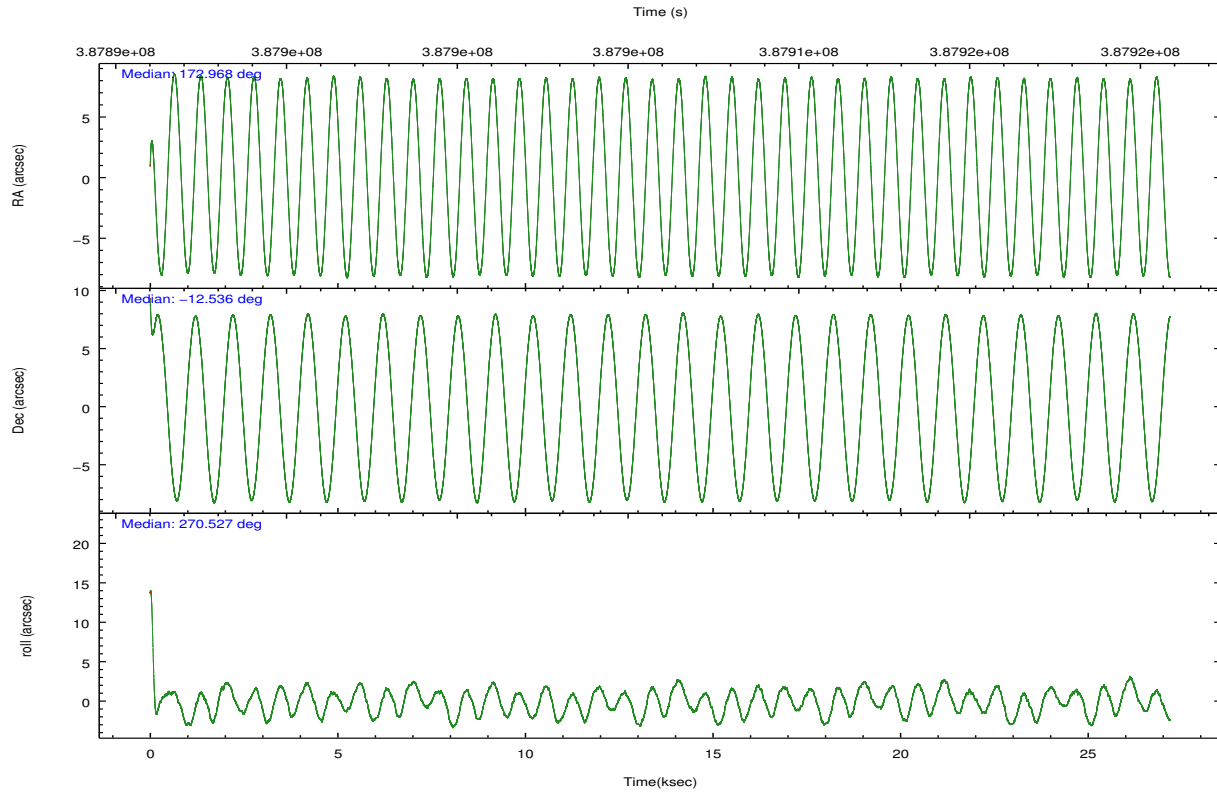
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	1074	906	1186	9300	2669
	3%	2%	3%	14%	5%
grade 1 events	10	9	13	378	14
	0%	0%	0%	0%	0%
grade 2 events	678	686	751	10645	2283
	2%	2%	2%	16%	4%
grade 3 events	630	612	611	5153	1218
	1%	1%	1%	7%	2%
grade 4 events	646	604	645	5037	1182
	1%	1%	1%	7%	2%
grade 5 events	1012	1127	1299	4886	1762
	3%	3%	3%	7%	3%
grade 6 events	600	596	706	14368	3417
	1%	1%	2%	21%	6%
grade 7 events	28720	27737	29999	16205	37087
	86%	85%	85%	24%	74%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23678	ACIS-23678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	172.953088	172.9676435725873	CCD I2 on	O4	Y
[deg] Pointing Dec	-12.513243	-12.53658847671638	CCD I3 on	O3	Y
[deg] Pointing Roll	270.373271	270.5330641006334	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	O1	Y
[mm] SIM translation stage pos	-190.132523	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	O2	Y
[s] Observation start time (MET)	387892530.184000	387891214.26567	CCD S5 on	N	N
Observation start date	2010-04-17T11:54:24	2010-04-17T11:33:34	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	387919530.184000	387920924.91718	On-chip summing requested	N	N
Observation end date	2010-04-17T19:24:24	2010-04-17T19:48:44	Subarray requested	CUSTOM	1/8
Read mode	TIMED	TIMED	Subarray start row	449	449
			Subarray row count	128	128
			Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	0.7

## 2.3 Aspect



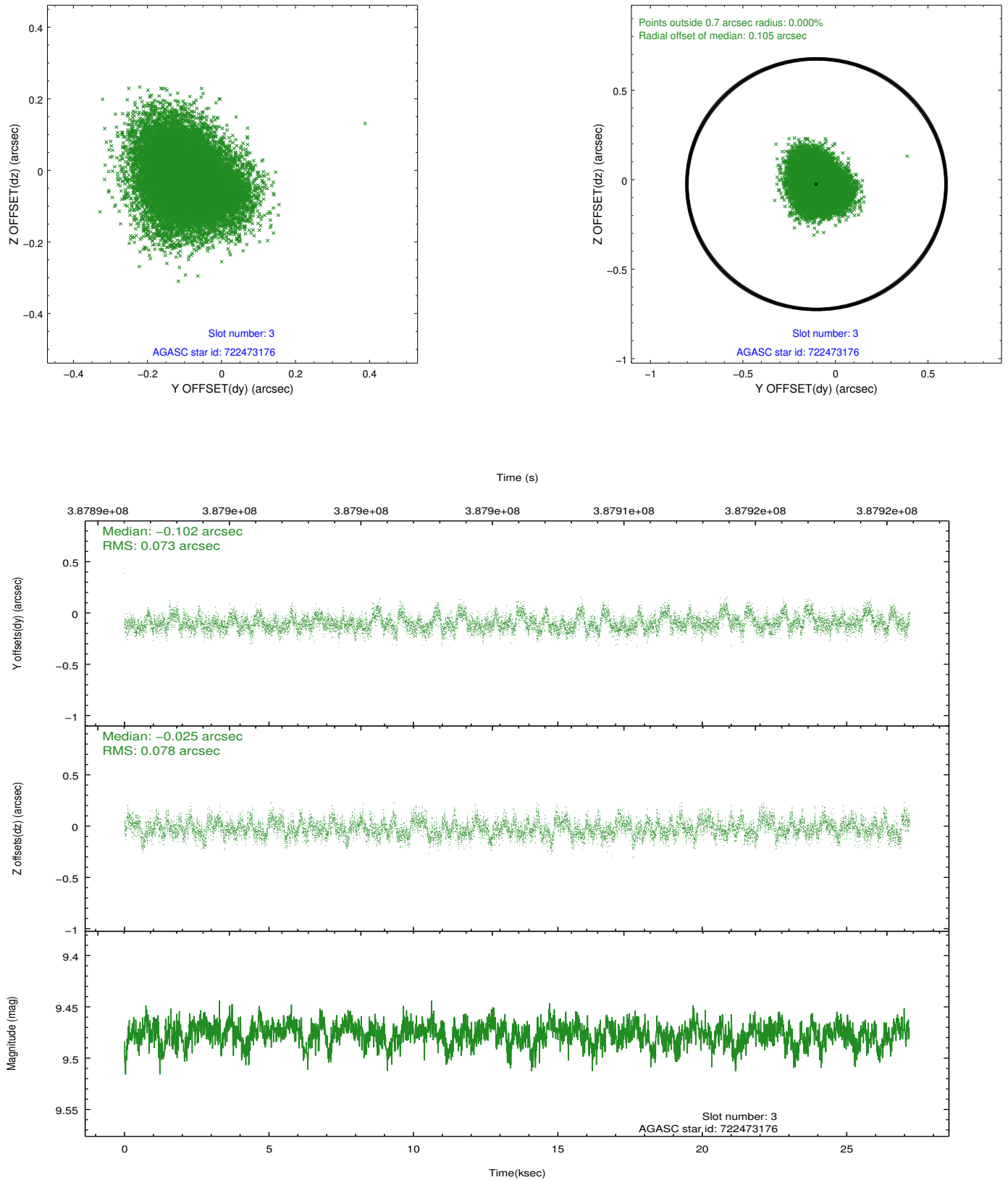


### Slot Statistics

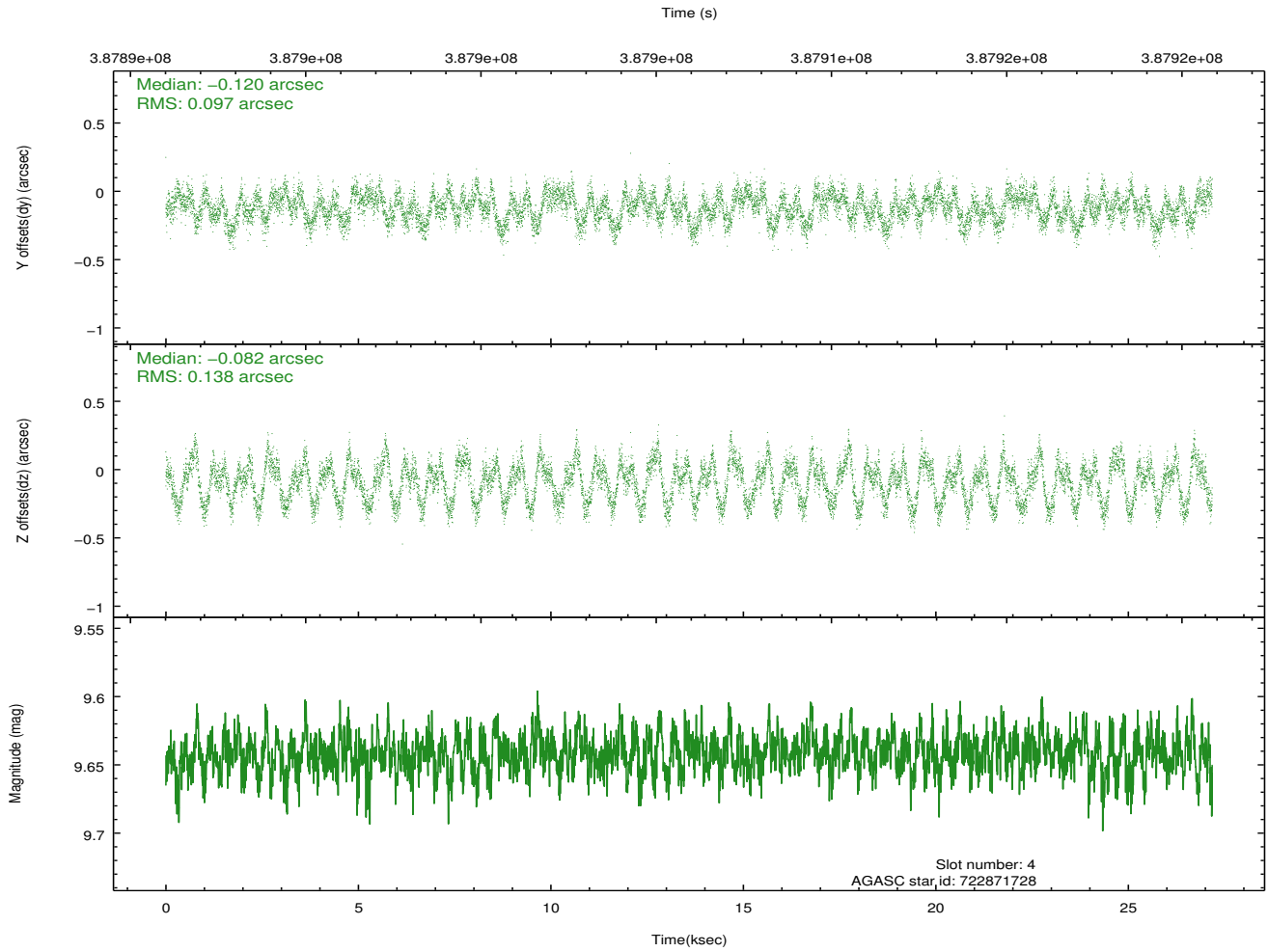
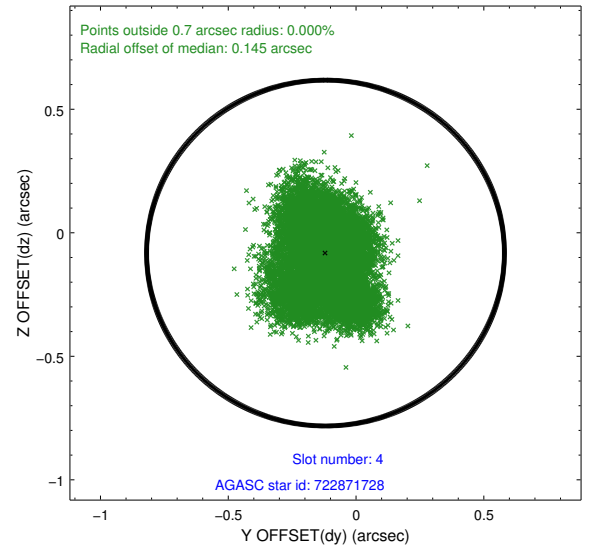
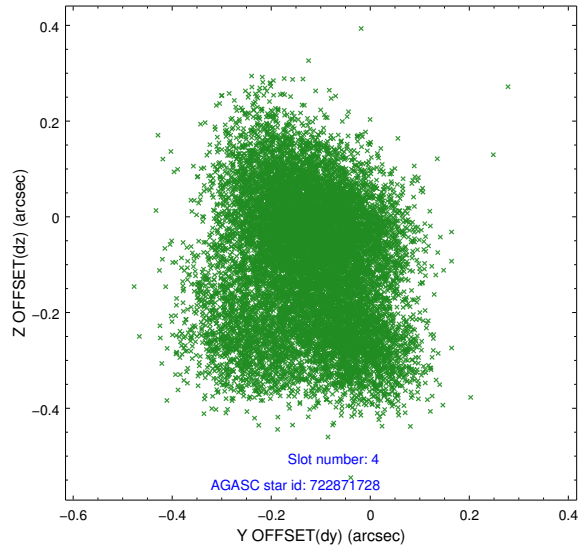
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.90	6631	-0.040	-0.025	0.012	0.020	0.000000	0.000000	-765.66	-1736.43
1	FID	ACIS-S-4	6.98	6630	0.138	0.026	0.010	0.016	0.000000	0.000000	2147.73	172.03
2	FID	ACIS-S-5	7.01	6630	-0.130	0.009	0.010	0.017	0.000000	0.000000	-1818.49	165.75
3	GUIDE	722473176	9.48	13242	-0.102	-0.025	0.115	0.182	172.599746	-12.066793	-1613.94	-1233.79
4	GUIDE	722871728	9.64	13242	-0.120	-0.082	0.185	0.286	173.202235	-12.568355	204.50	873.89
5	GUIDE	722873464	7.32	13259	0.005	-0.014	0.067	0.107	172.661543	-13.050266	1928.21	-1034.41
6	GUIDE	722469552	9.50	13242	-0.086	-0.156	0.125	0.200	172.271393	-12.124699	-1410.68	-2390.57
7	GUIDE	722993960	9.52	13243	0.298	0.290	0.127	0.200	173.641836	-13.179656	2418.19	2398.82

## 2.4 Star Slots

### 2.4.1 Slot 3

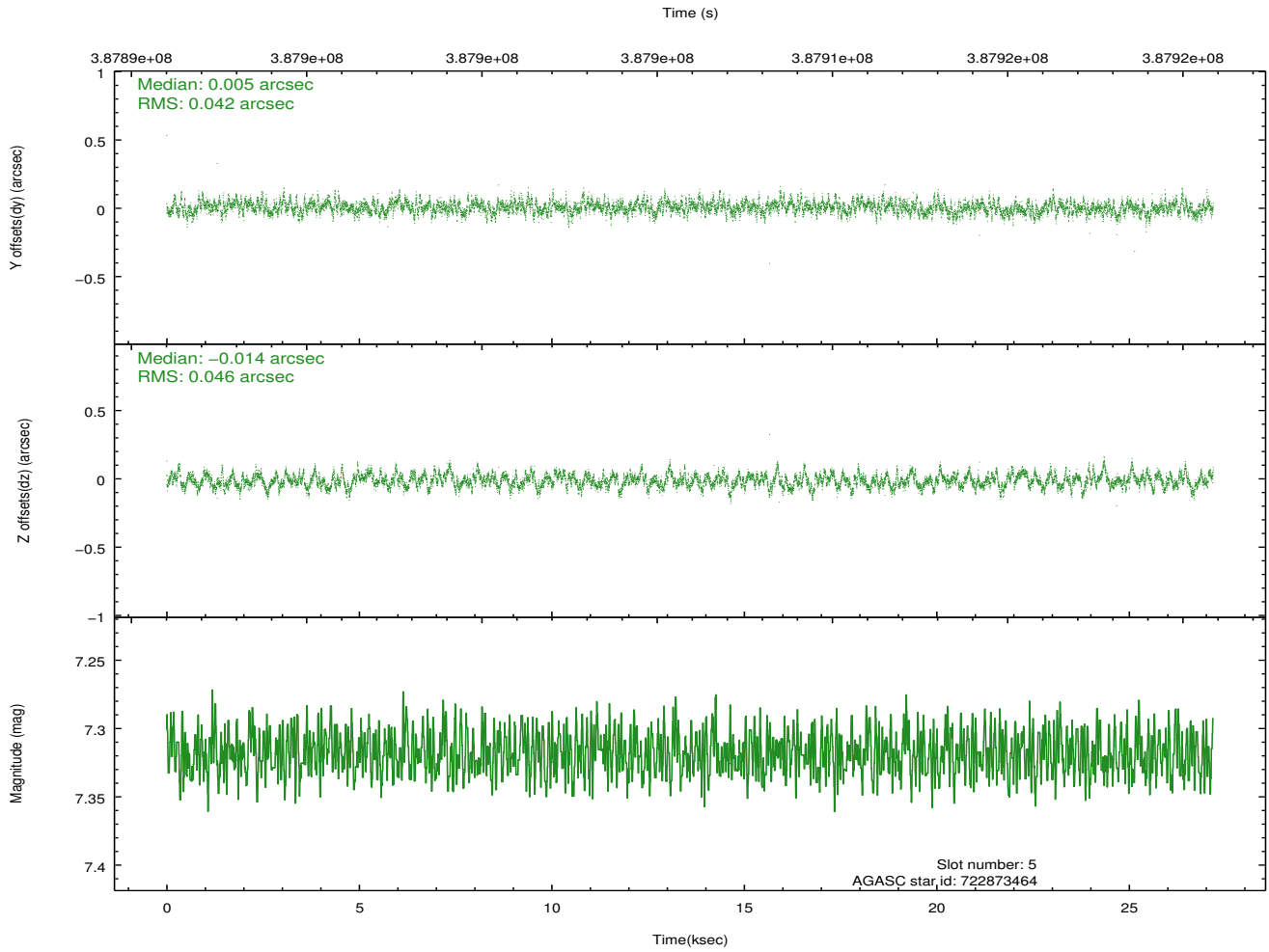
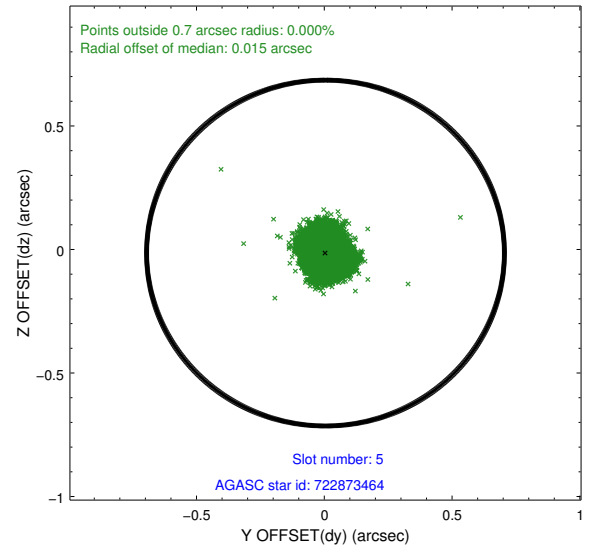
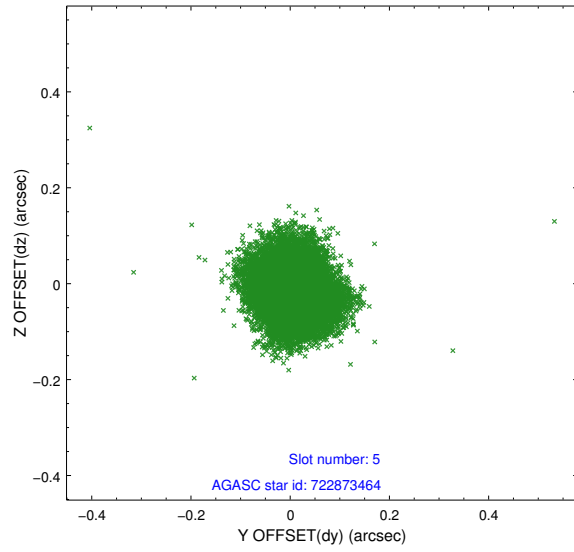


## 2.4.2 Slot 4

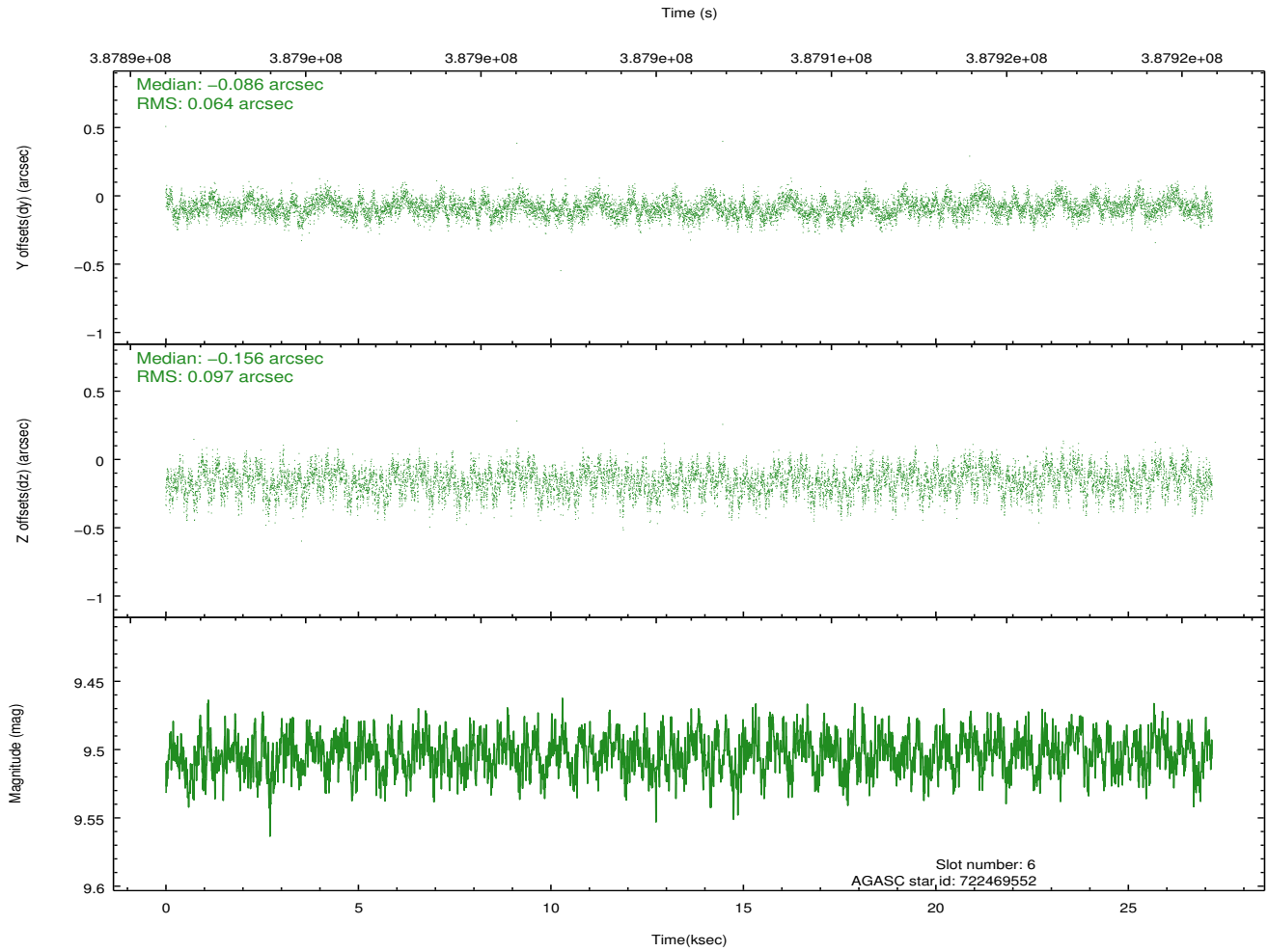
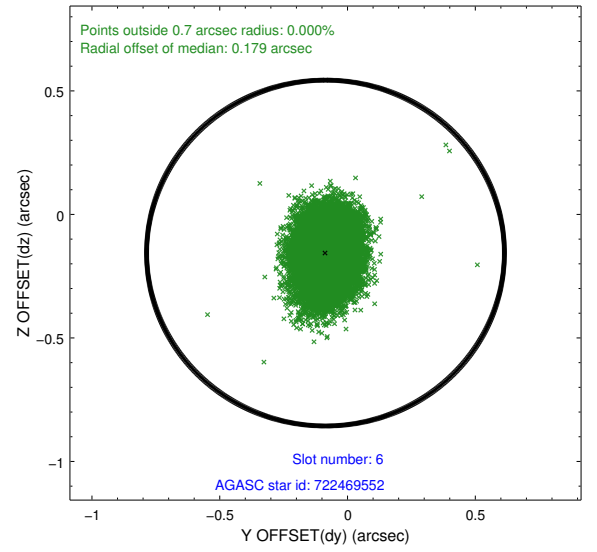
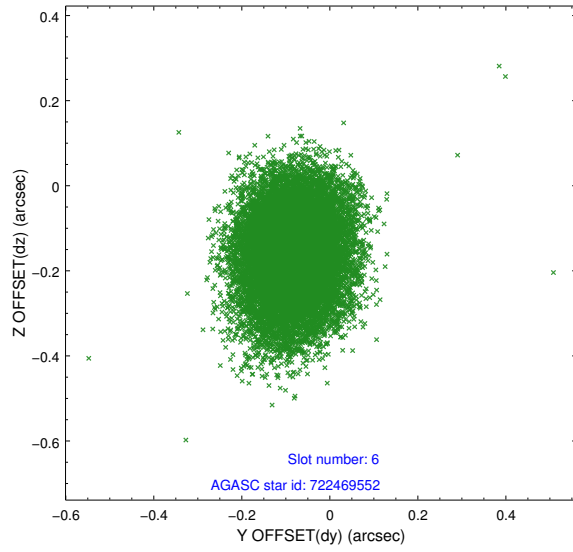




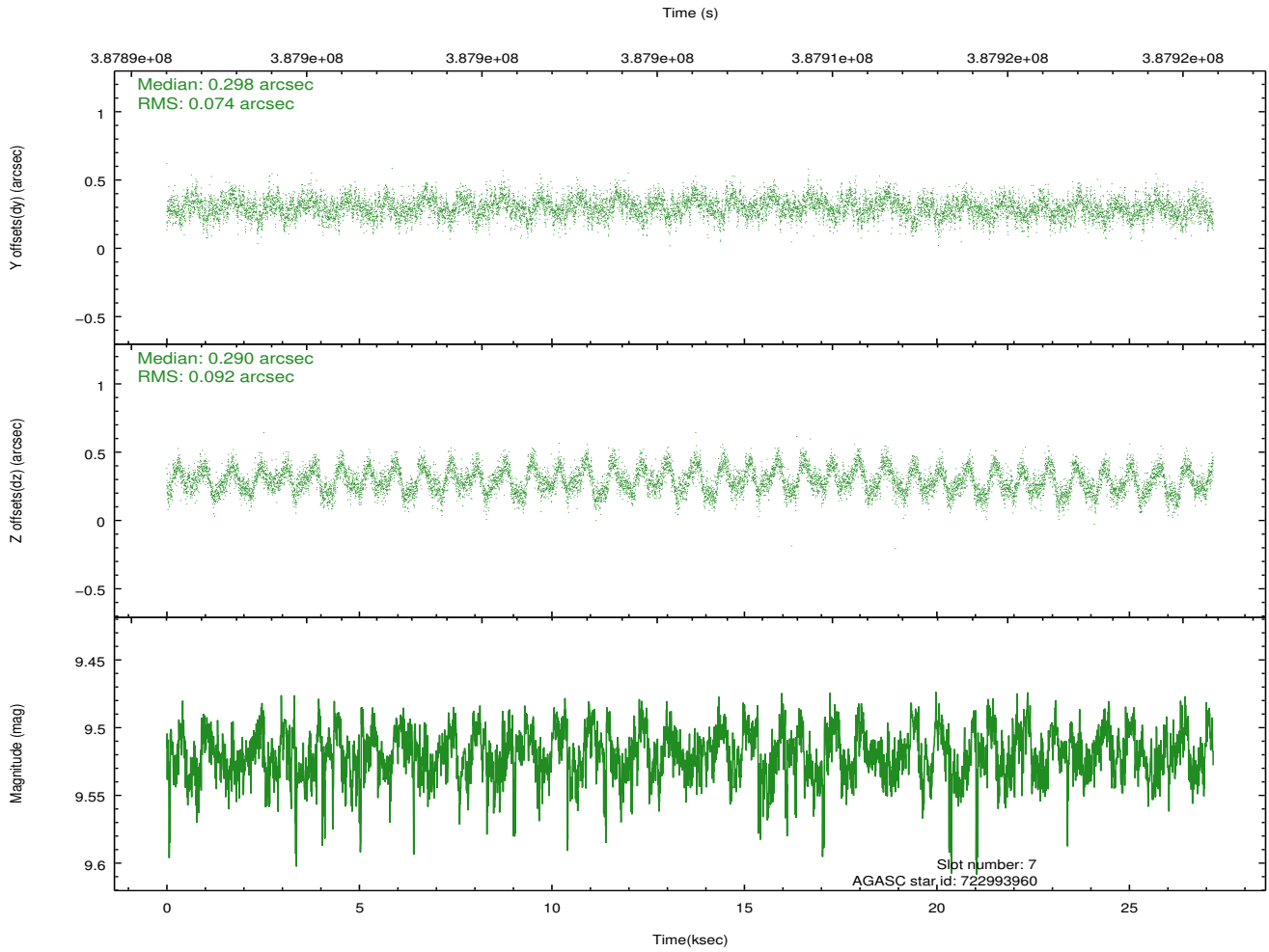
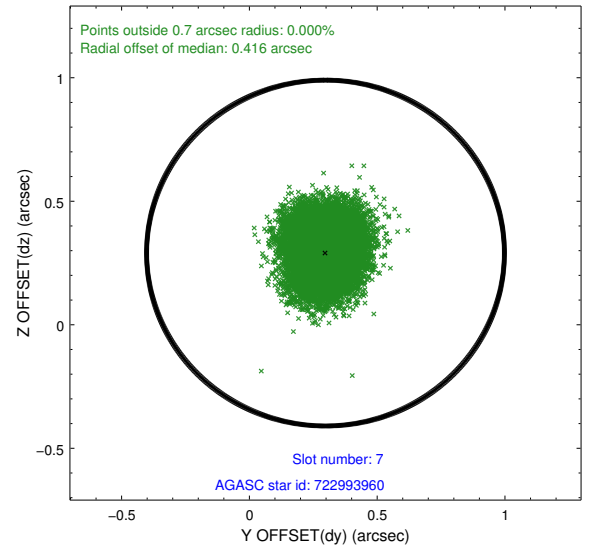
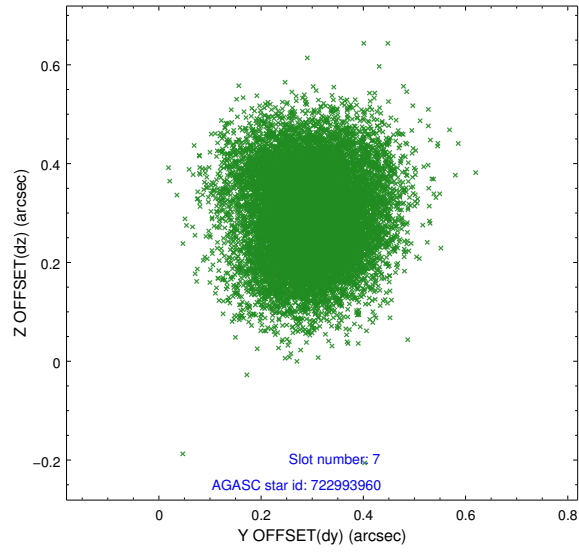
### 2.4.3 Slot 5



## 2.4.4 Slot 6

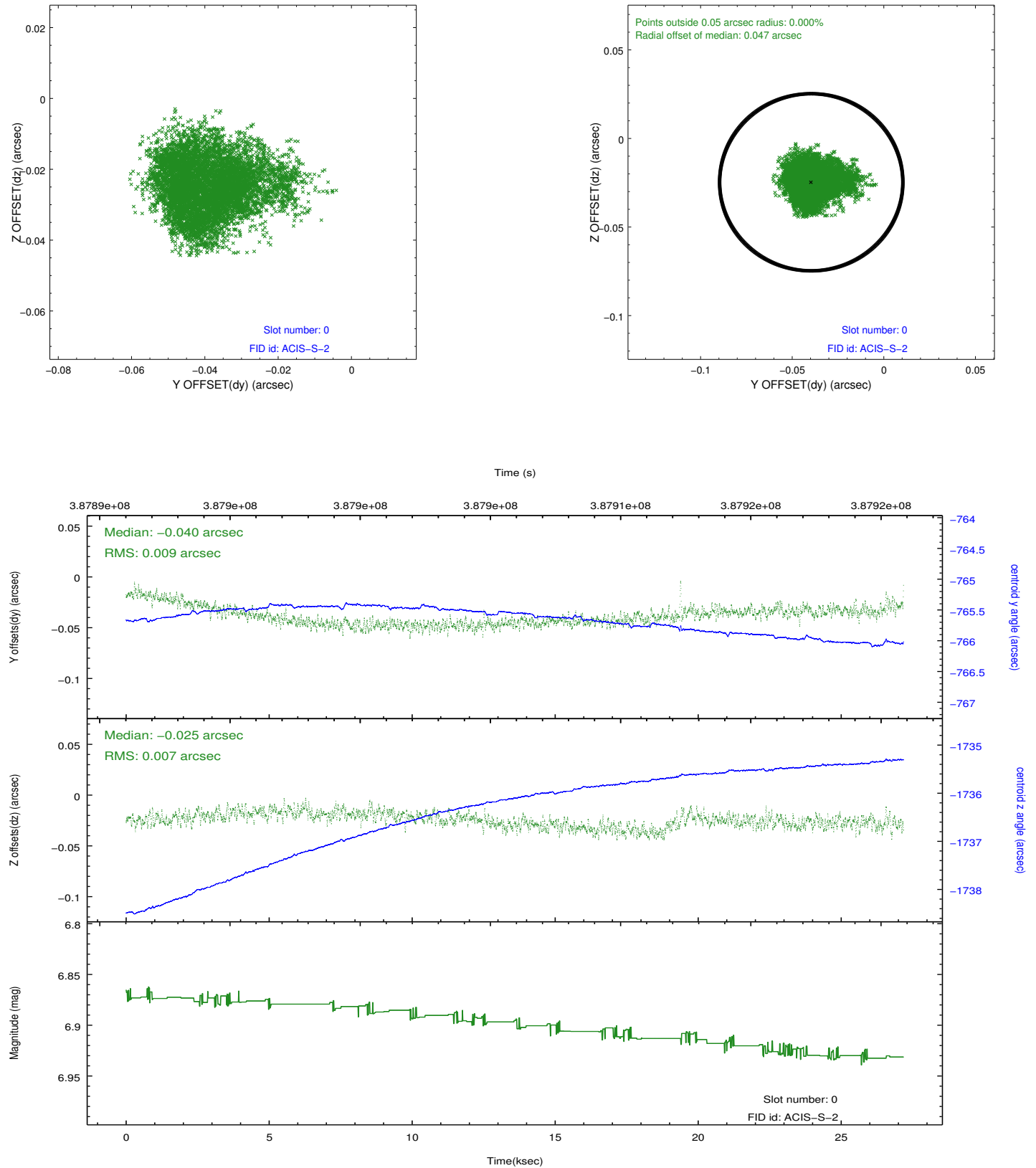


## 2.4.5 Slot 7

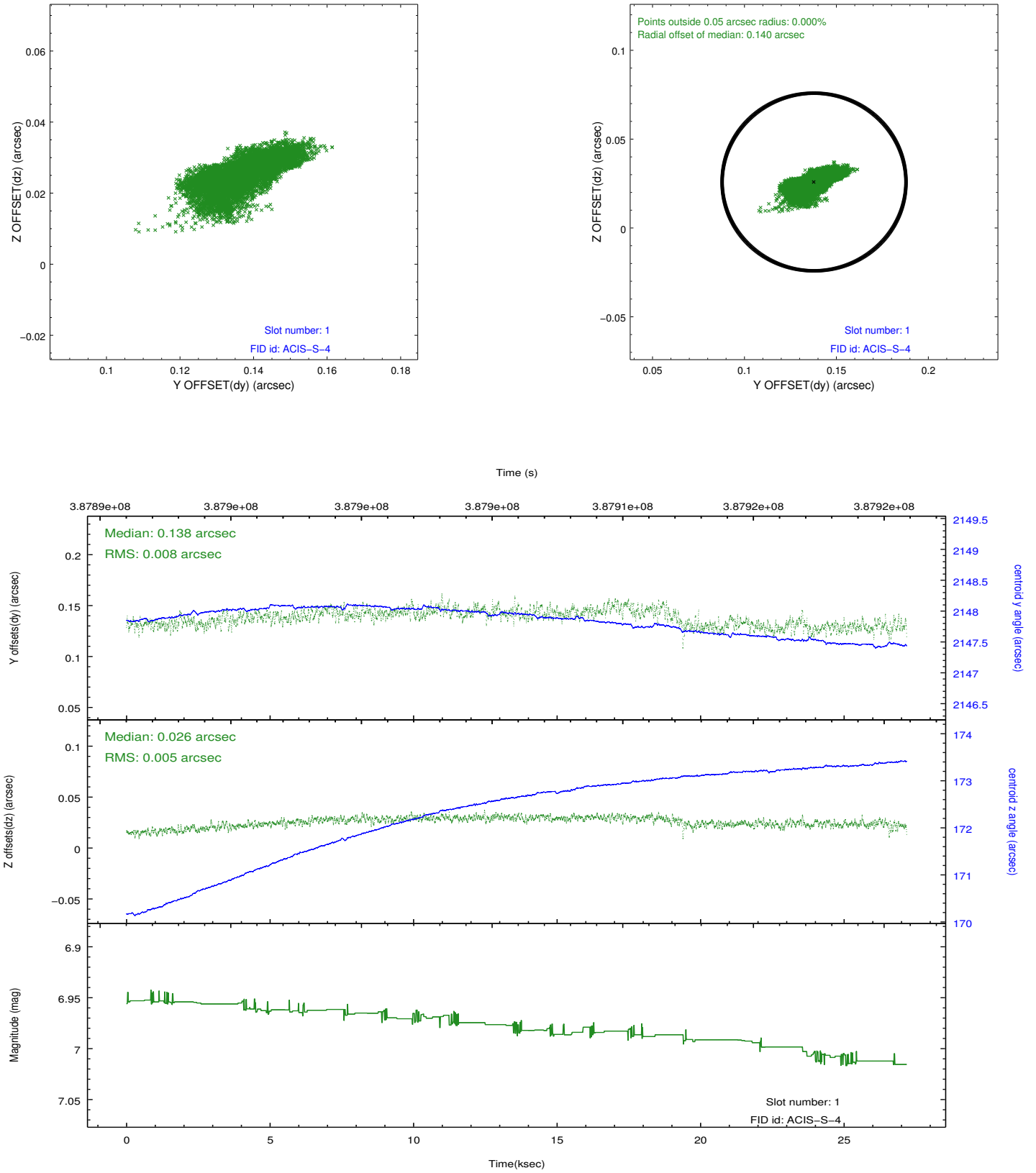


## 2.5 FID Slots

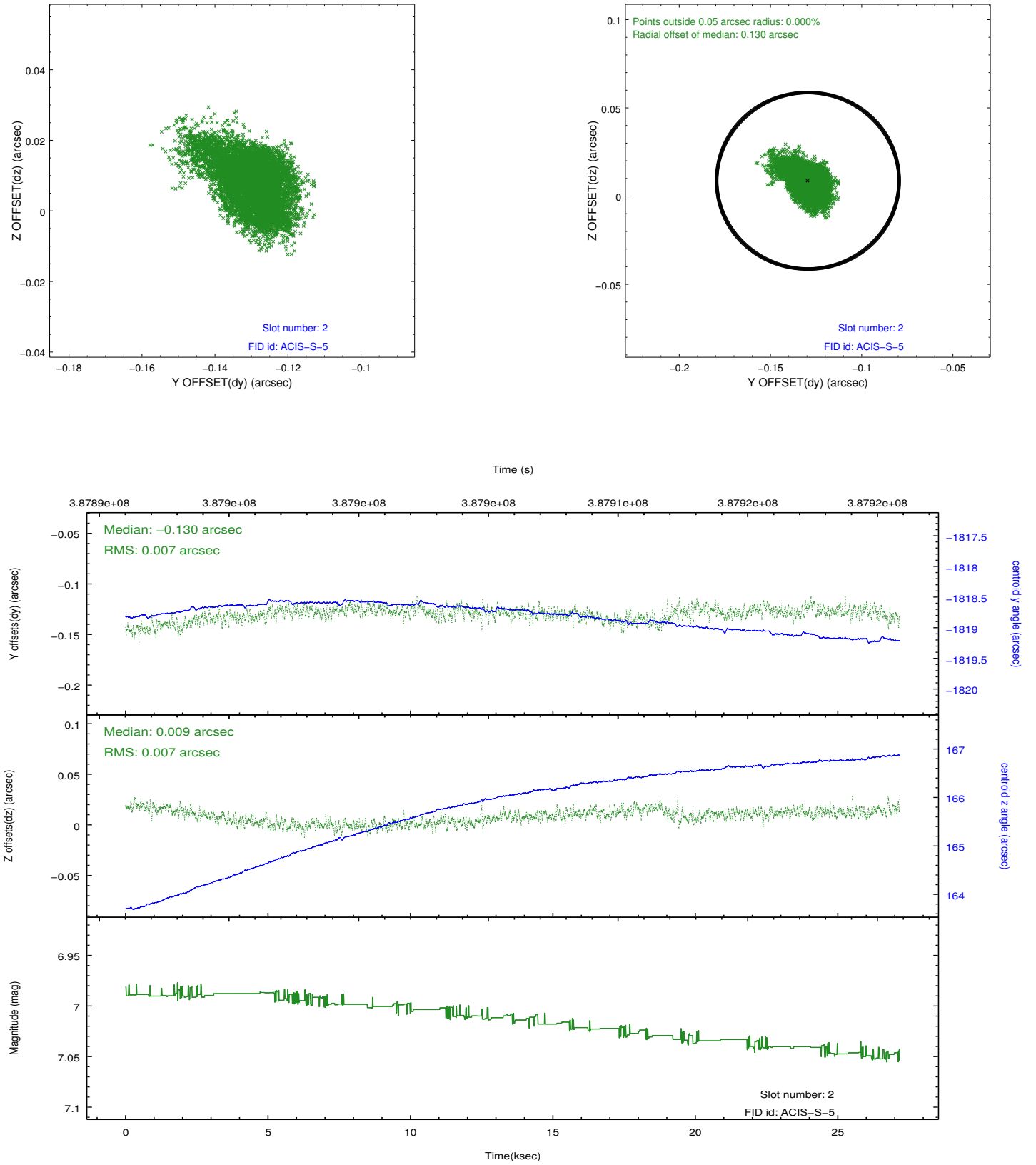
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.06.29
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	27.1809995

### A.2 Comments