

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 11796 - L2 Version 2  
Chandra X-Ray Center

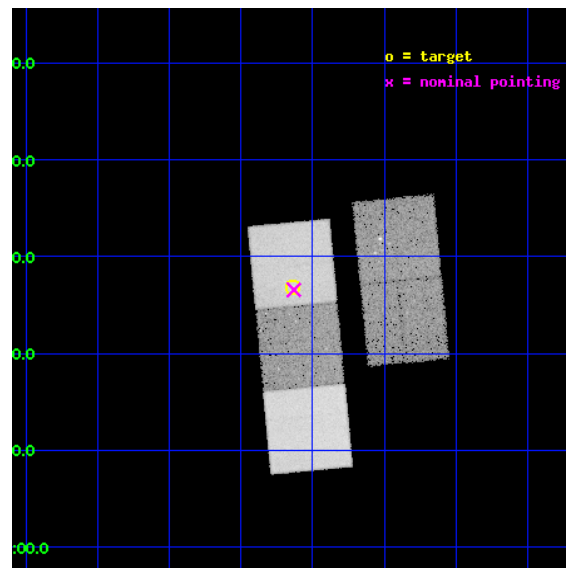
L2 Processing Date : Jun 13 2012

## 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	800912	Sequence number
obs_id	11796	Observation id
title	Chandra observations of low-z galaxy groups	Proposal title
observer	Dr. Stephen Murray	Principal investigator
object	cl2137+0027	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	324.284583	Observer's specified target RA [deg]
dec_targ	0.446944	Observer's specified target Dec [deg]
ra_nom	324.28258682618	Nominal RA [deg]
dec_nom	0.44298819537245	Nominal Dec [deg]
roll_nom	264.53678094732	Nominal Roll [deg]
revision	2	Processing version of data
ontime	25175.10019362	Sum of GTIs [s]
livetime	24846.168975951	Livetime [s]
ontime2	25175.10019362	Sum of GTIs [s]
ontime3	25168.818183005	Sum of GTIs [s]
ontime5	25175.10019362	Sum of GTIs [s]
ontime6	25175.10019362	Sum of GTIs [s]
ontime7	25175.10019362	Sum of GTIs [s]
l2events	310282	Number of level 2 events

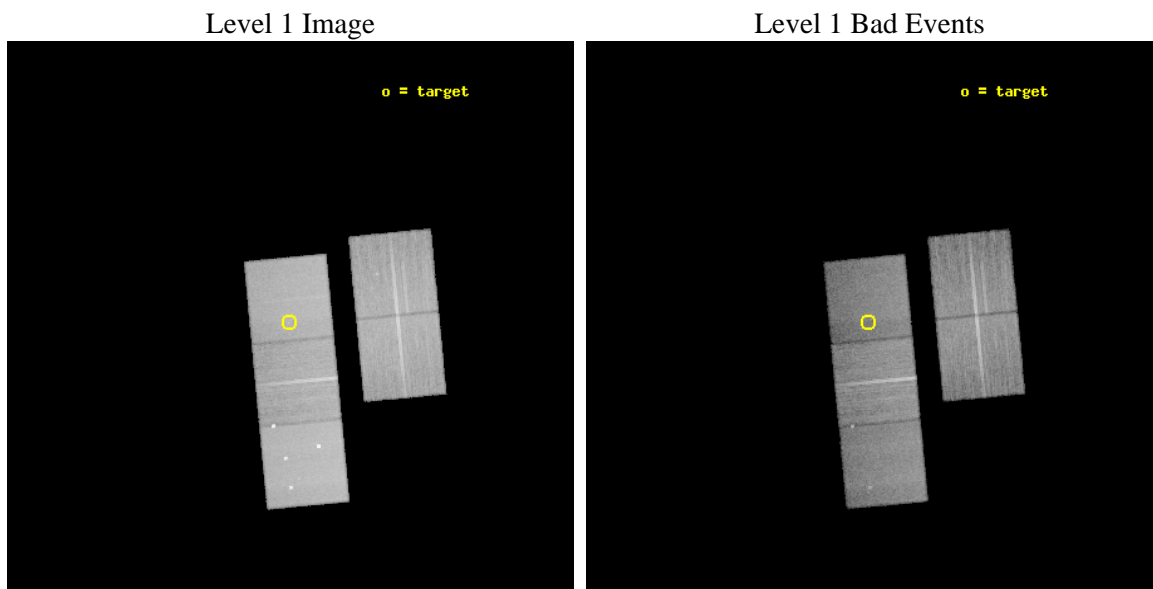




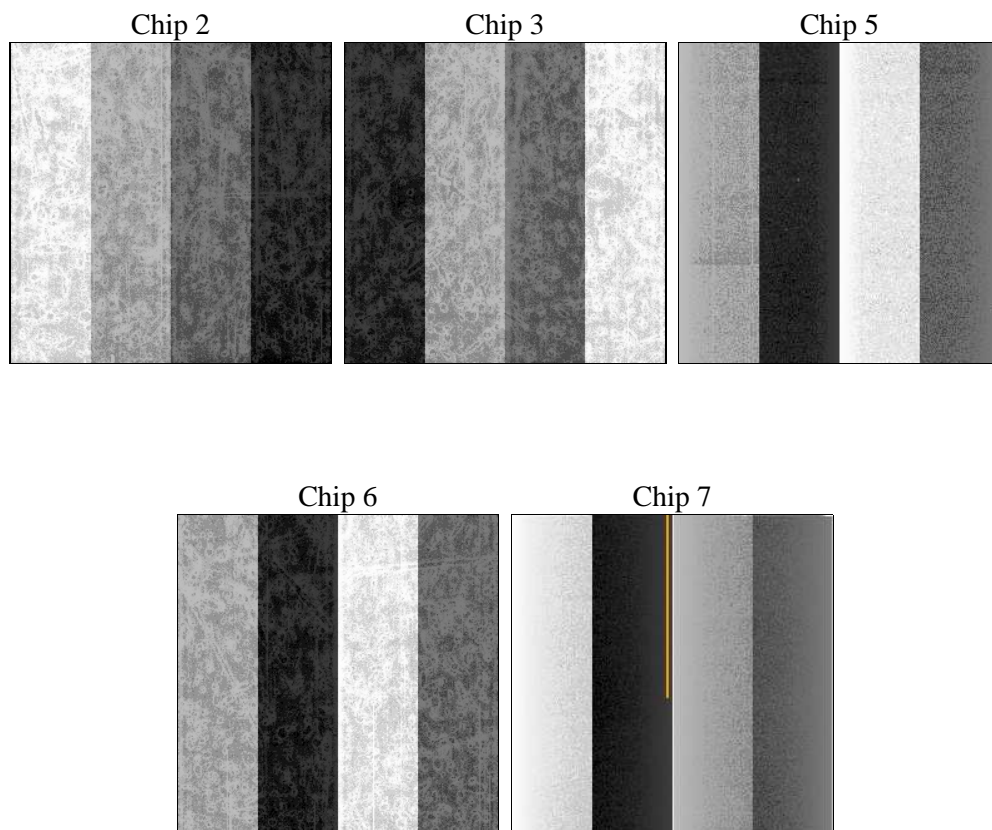
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	25000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	25175.10019362	Sum of GTIs [s]
caldsver	4.4.10	&#160	ontime2	25175.10019362	Sum of GTIs [s]
date	2012-06-13T19:32:12	Date and time of file creation	ontime3	25168.818183005	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	25175.10019362	Sum of GTIs [s]
			ontime6	25175.10019362	Sum of GTIs [s]
			ontime7	25175.10019362	Sum of GTIs [s]
			l1events	1223757	Number of level 1 events

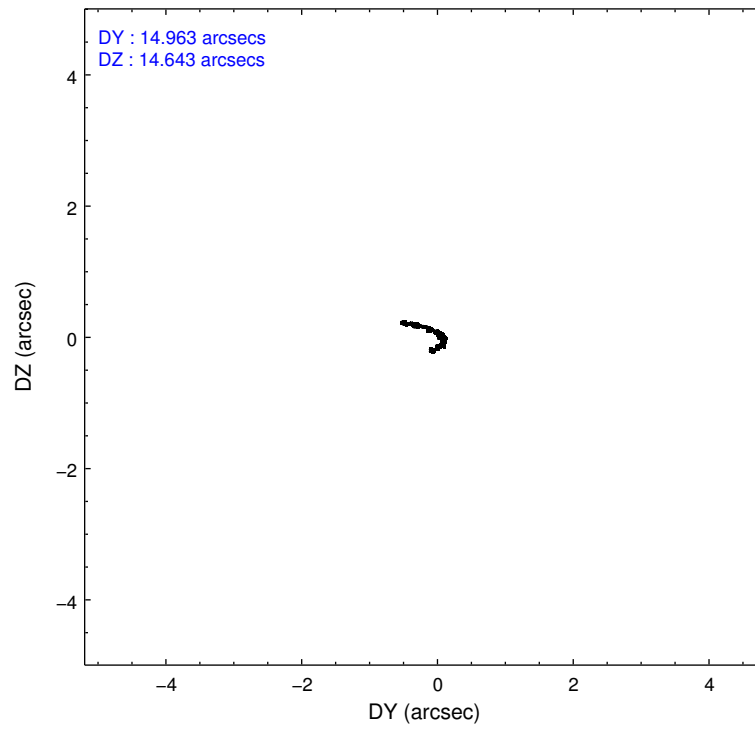
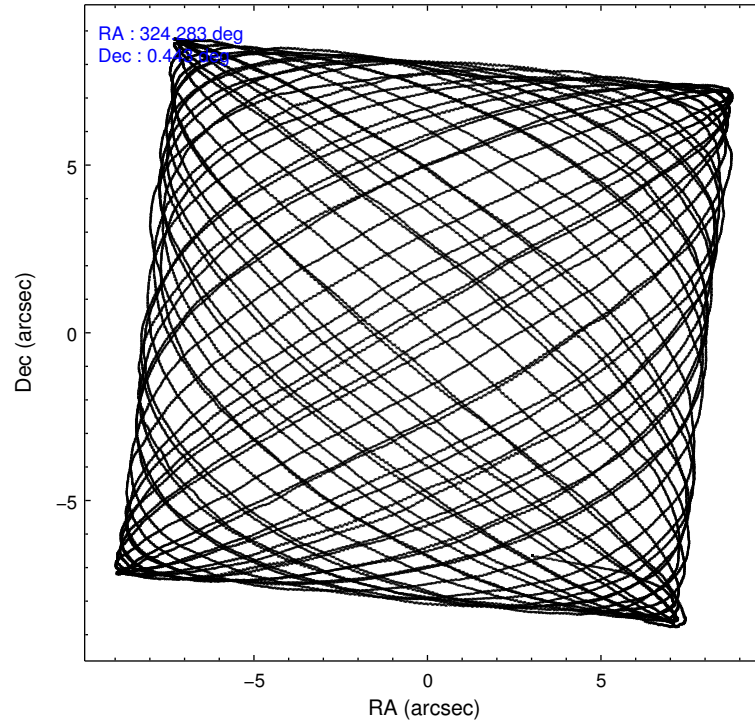
### 2.1.4 Events

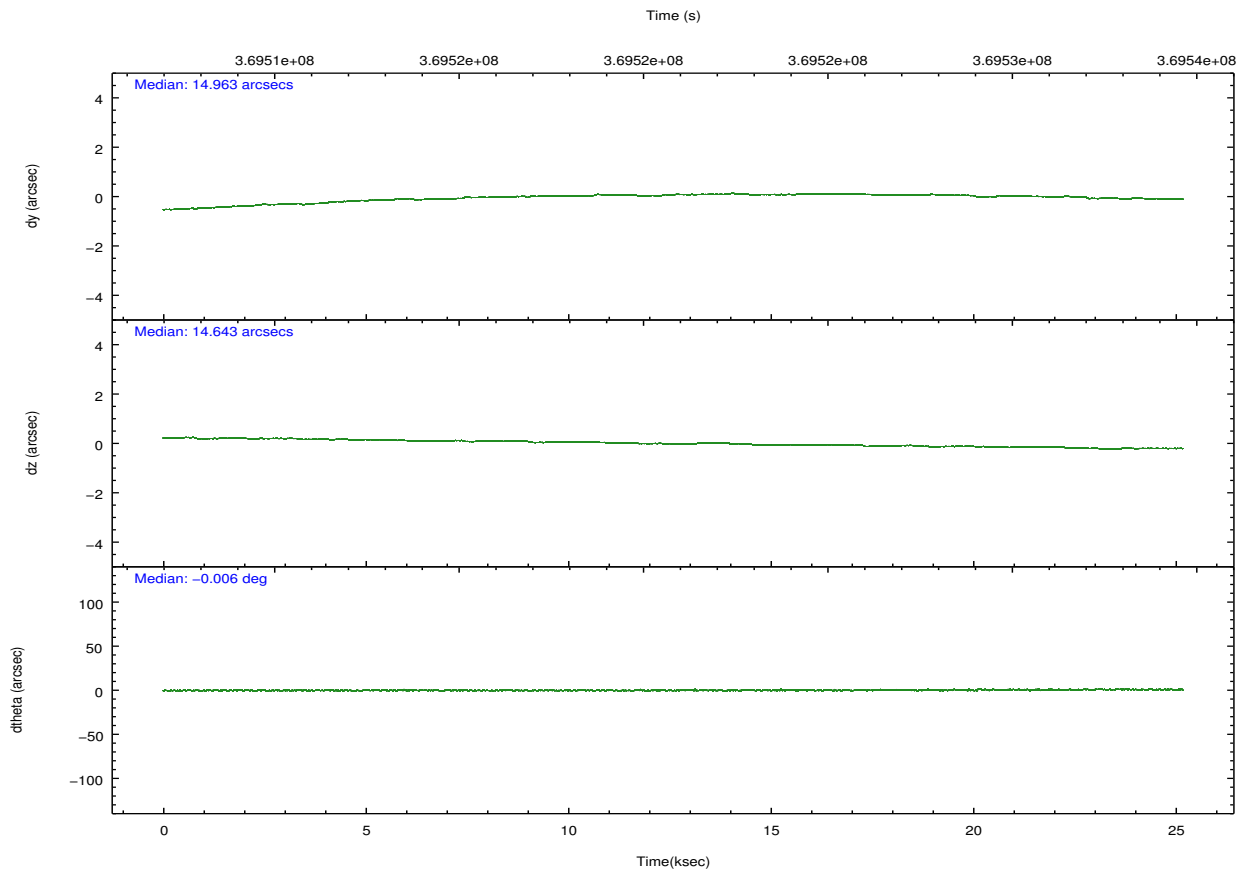
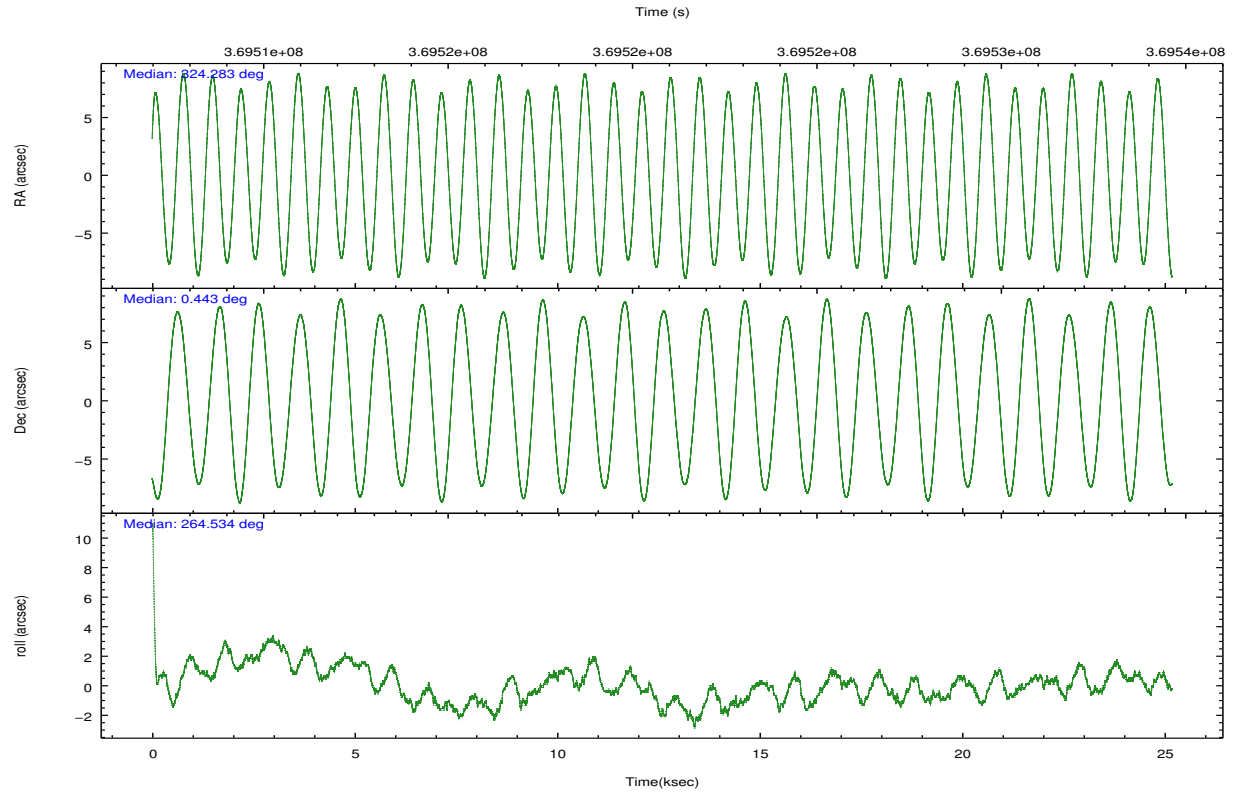
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	223290	210920	318378	219733	251436	grade 0 events	7499	7979	18541	8346	10687
rejected events	202194	189475	158402	196418	138185		3%	3%	5%	3%	4%
rejected %	90%	89%	49%	89%	54%	grade 1 events	139	119	1046	131	322
							0%	0%	0%	0%	0%
						grade 2 events	5247	4556	48382	5186	23255
							2%	2%	15%	2%	9%
						grade 3 events	2195	2368	6271	2438	10223
							0%	1%	1%	1%	4%
						grade 4 events	2252	2328	5891	2458	9901
							1%	1%	1%	1%	3%
						grade 5 events	7174	9075	23900	9172	26026
							3%	4%	7%	4%	10%
						grade 6 events	3938	4260	81160	4923	59354
							1%	2%	25%	2%	23%
						grade 7 events	194846	180235	133187	187079	111668
							87%	85%	41%	85%	44%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23567	ACIS-23567	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	324.270882	324.2825868261795	CCD I2 on	O1	Y
[deg] Pointing Dec	0.467724	0.4429881953724517	CCD I3 on	Y	Y
[deg] Pointing Roll	264.380239	264.5367809473249	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	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	N	N
[s] Observation start time (MET)	369508388.184000	369507370.93641	CCD S5 on	N	N
Observation start date	2009-09-16T17:12:02	2009-09-16T16:56:10	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	369533388.184000	369534425.30027	On-chip summing requested	N	N
Observation end date	2009-09-17T00:08:42	2009-09-17T00:27:05	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



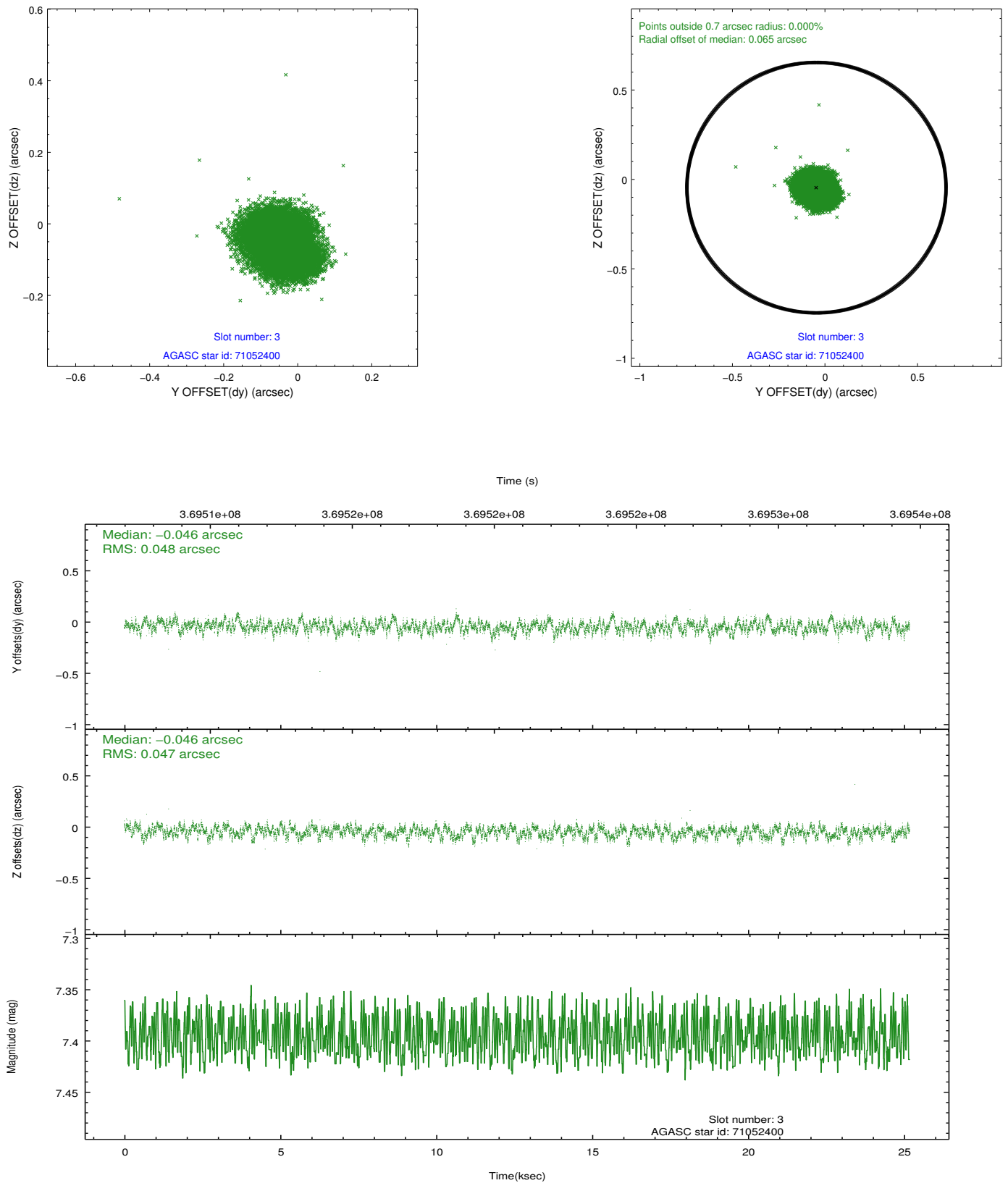


### Slot Statistics

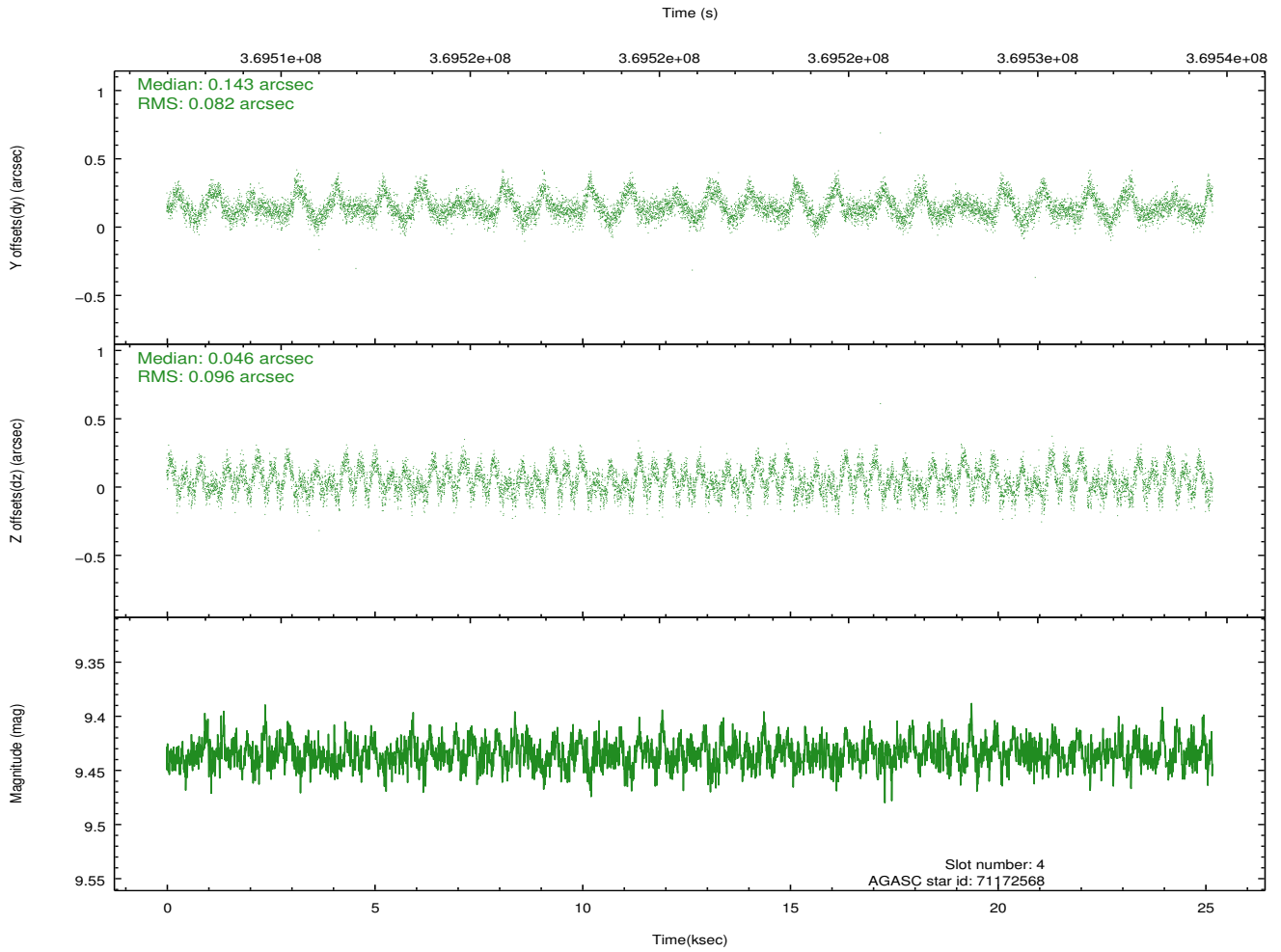
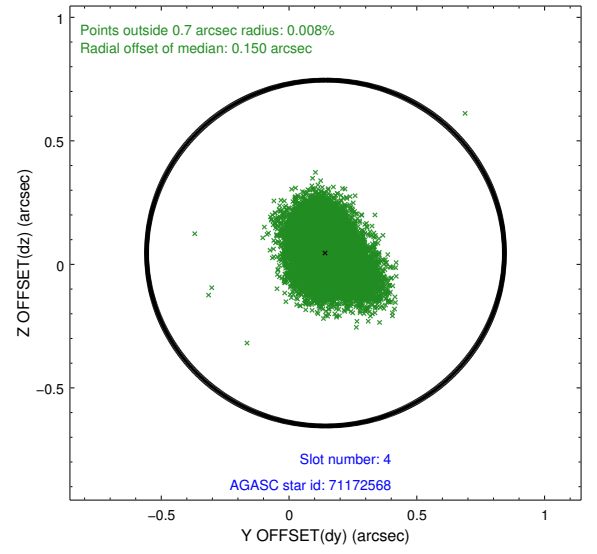
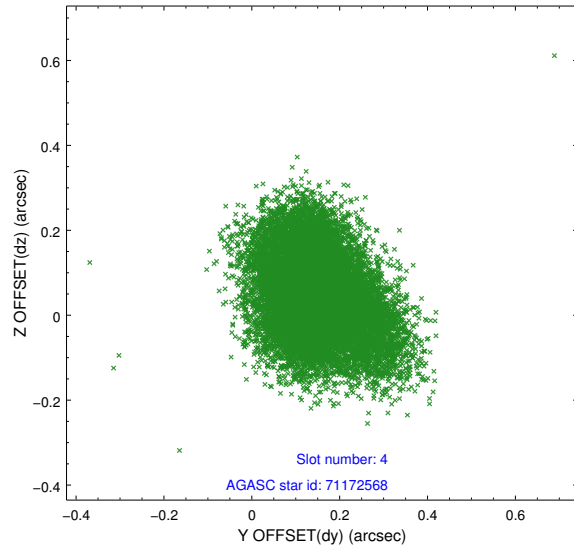
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	6.96	6142	0.054	-0.024	0.007	0.012	0.000000	0.000000	928.24	-1731.61
1	FID	ACIS-S-5	7.00	6141	-0.150	0.026	0.008	0.013	0.000000	0.000000	-1820.92	165.85
2	FID	ACIS-S-6	7.11	6142	0.074	0.010	0.009	0.014	0.000000	0.000000	393.66	809.95
3	GUIDE	71052400	7.40	12282	-0.046	-0.046	0.072	0.114	323.846527	0.975539	-1668.87	-1700.14
4	GUIDE	71172568	9.43	12270	0.143	0.046	0.136	0.213	324.532065	0.600974	-569.41	888.61
5	GUIDE	71181464	9.83	12259	-0.045	0.109	0.147	0.249	324.607014	0.343108	327.90	1248.38
6	GUIDE	682754344	8.59	12279	-0.168	0.033	0.097	0.159	324.720709	-0.181355	2166.78	1840.76
7	GUIDE	71182072	9.76	12265	0.111	-0.140	0.172	0.282	324.899621	0.308301	349.73	2308.80

## 2.4 Star Slots

### 2.4.1 Slot 3

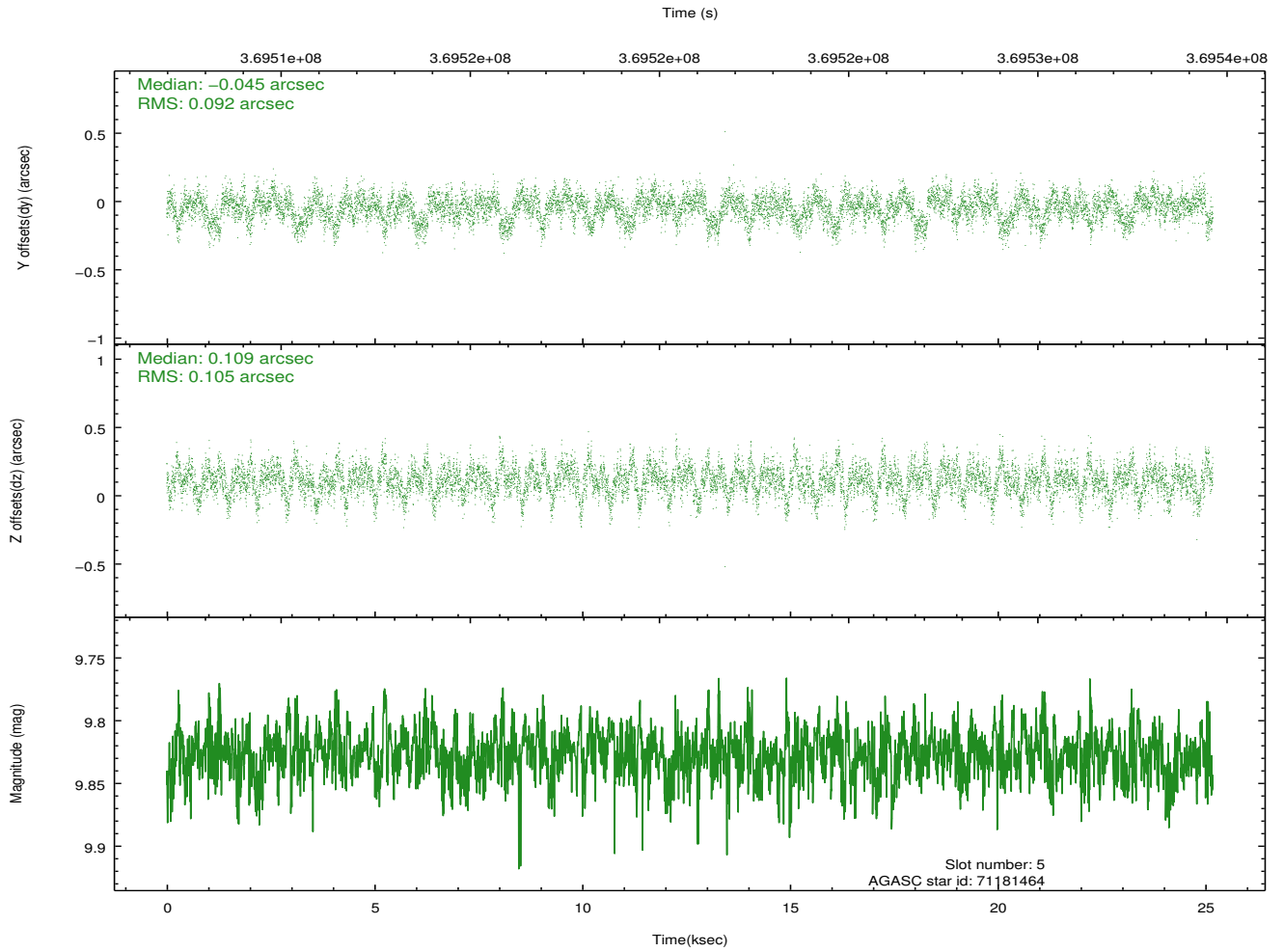
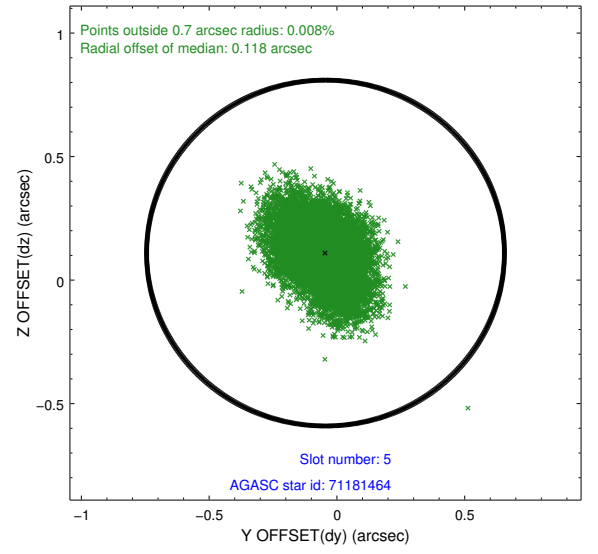
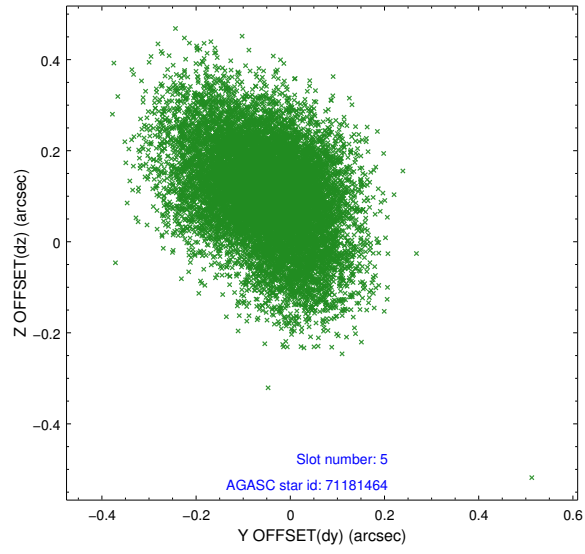


## 2.4.2 Slot 4

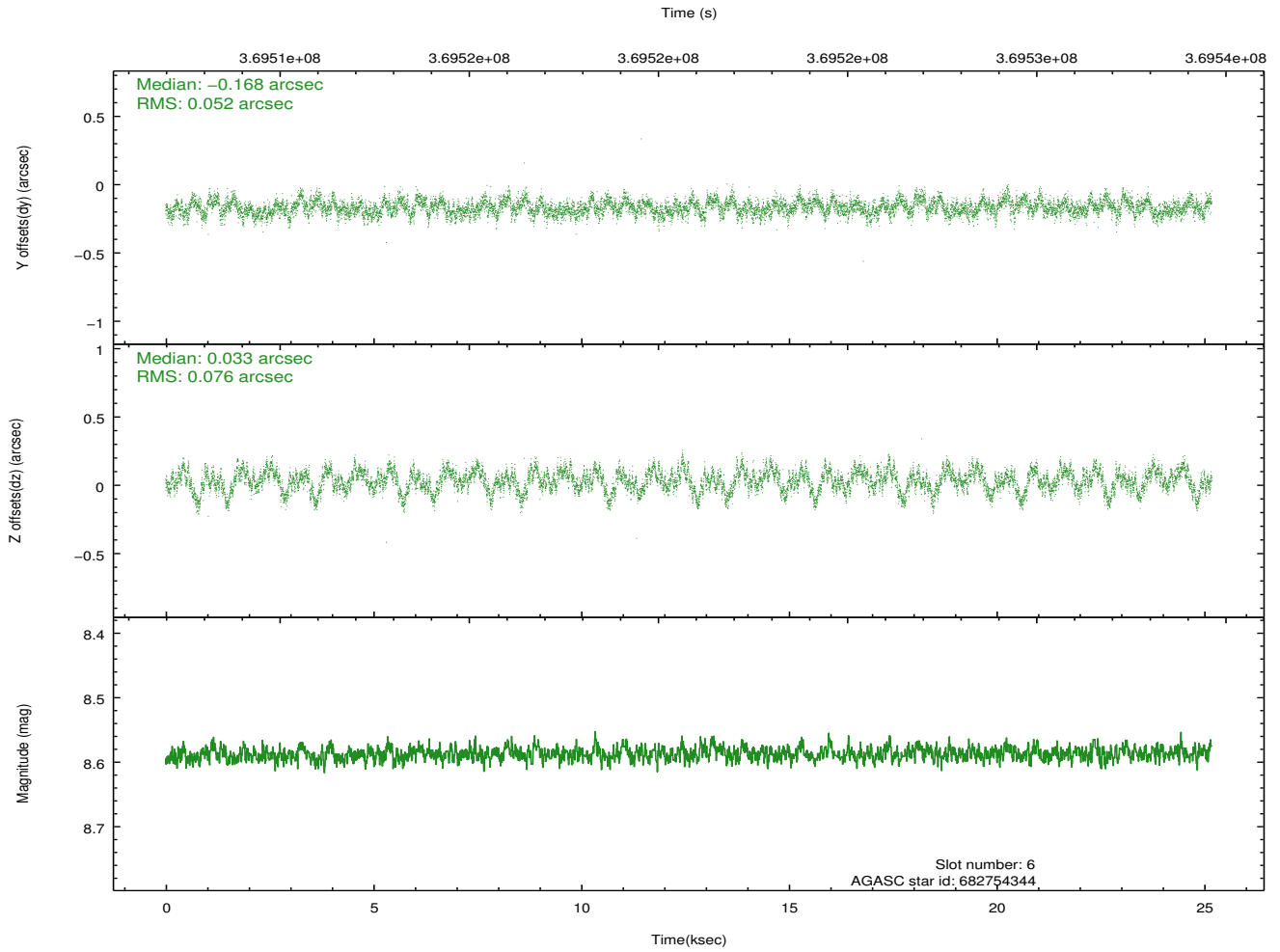
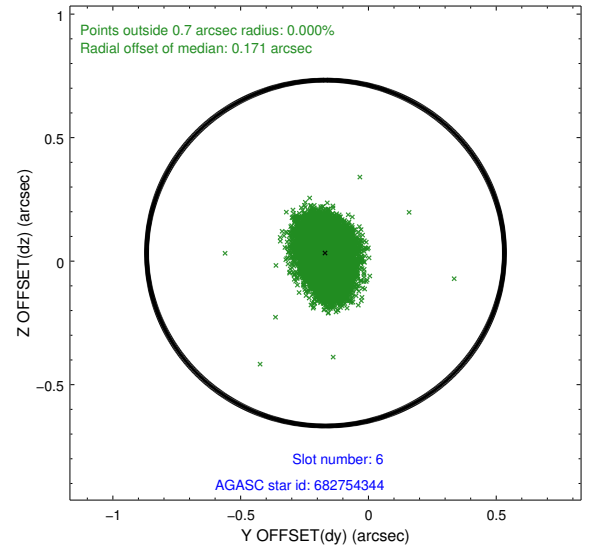
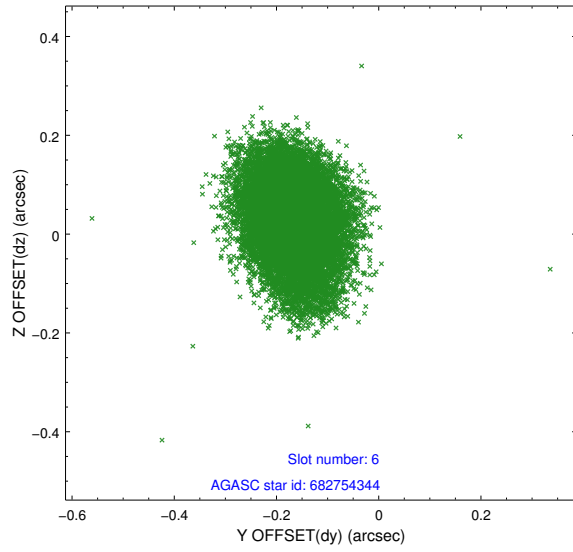




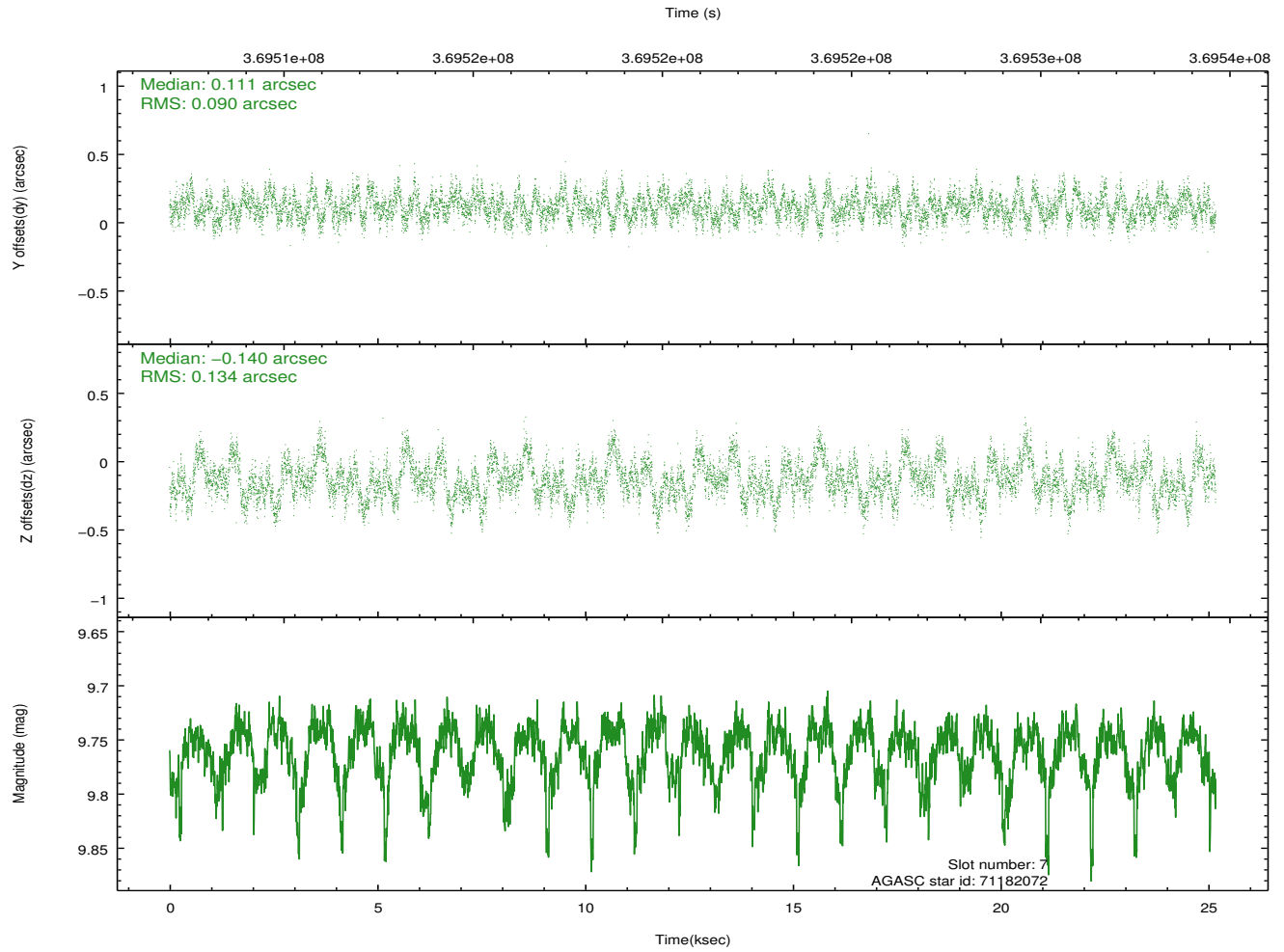
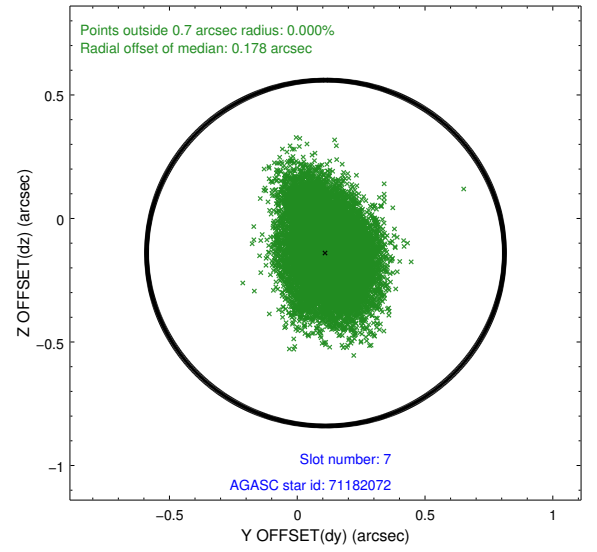
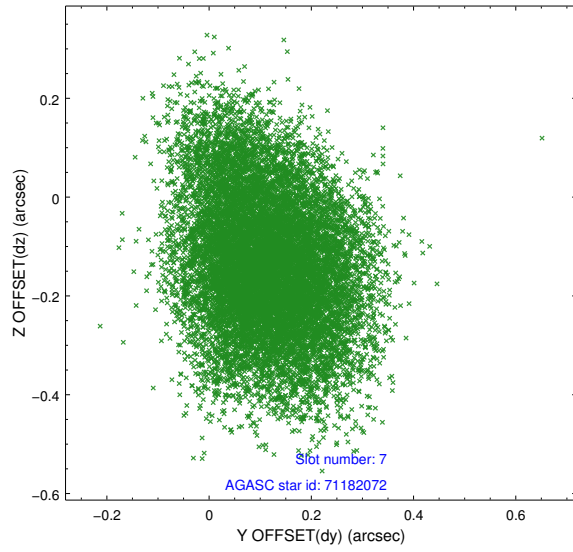
### 2.4.3 Slot 5



## 2.4.4 Slot 6

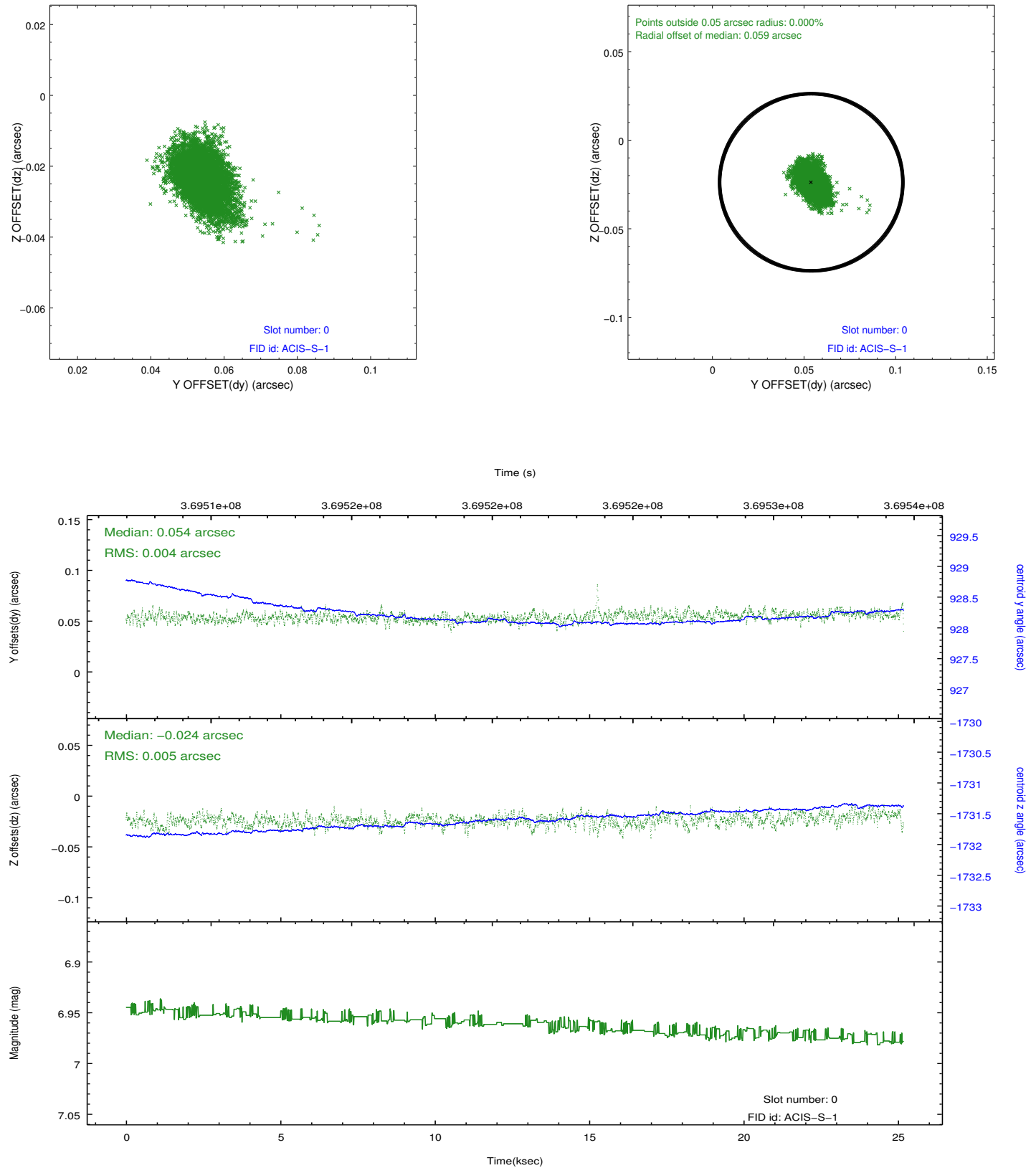


## 2.4.5 Slot 7

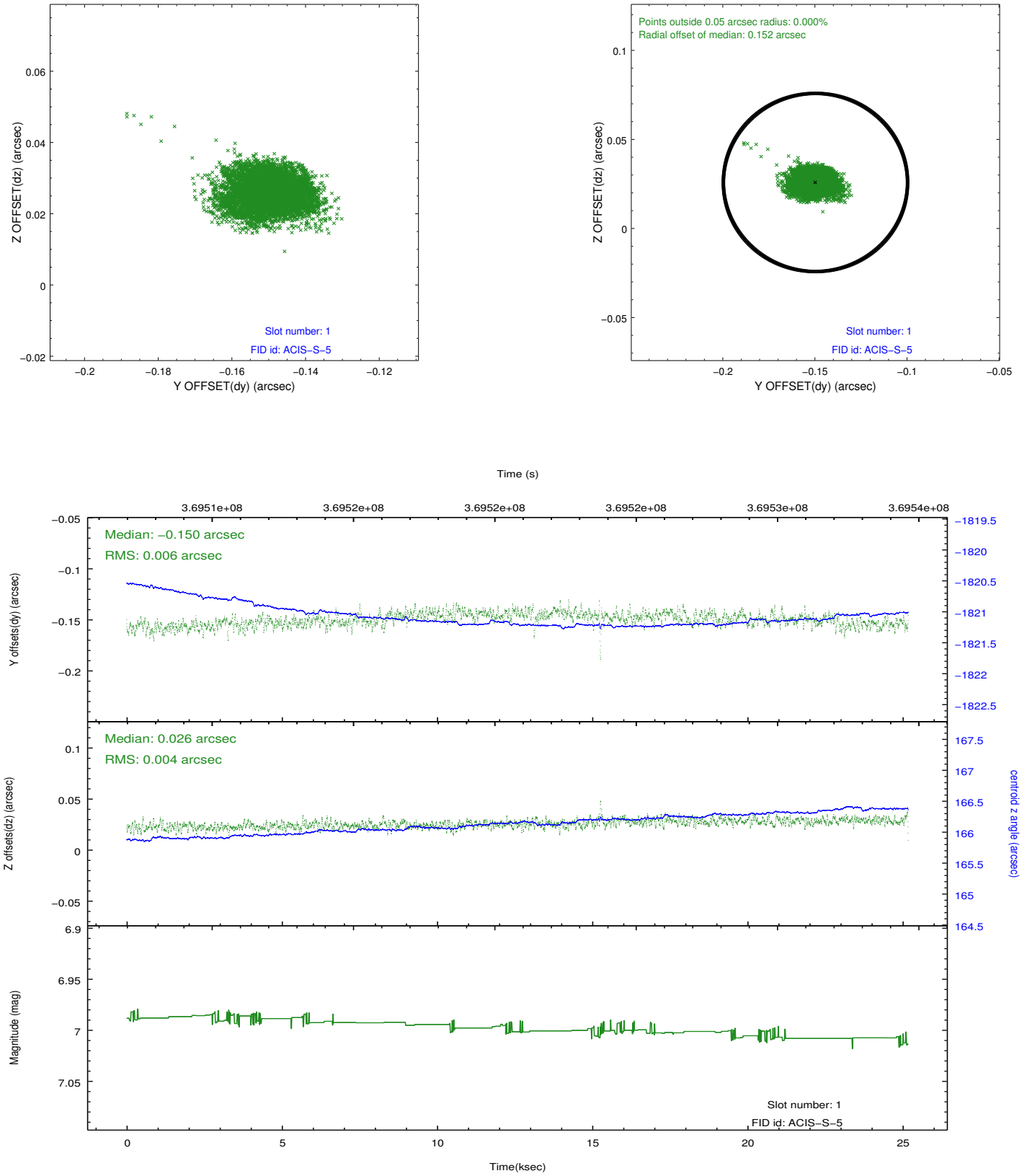


## 2.5 FID Slots

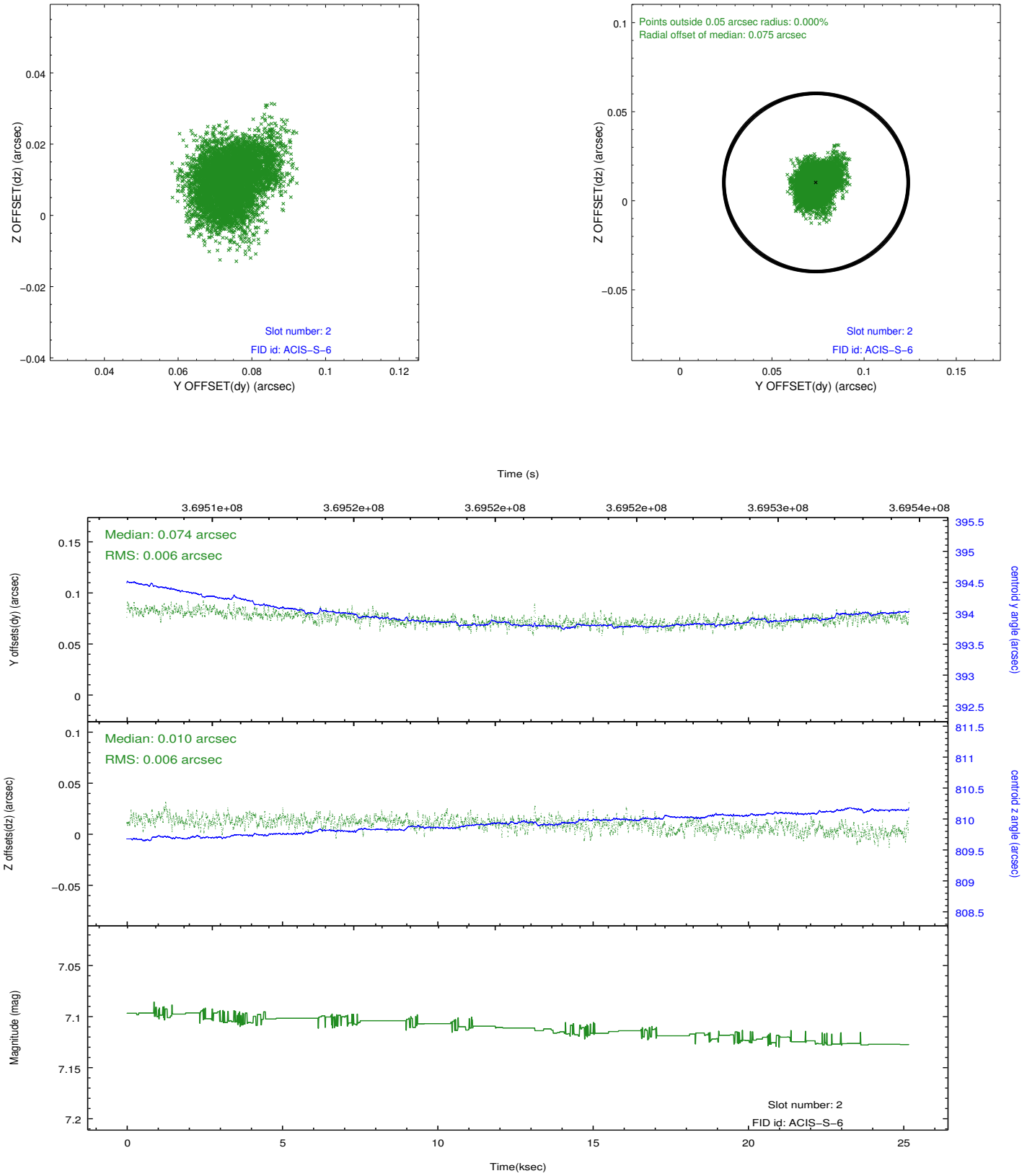
### 2.5.1 Slot 0



## 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)	2012.06.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	25.17510019362

### A.2 Comments