

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 8180 - L2 Version 2  
Chandra X-Ray Center

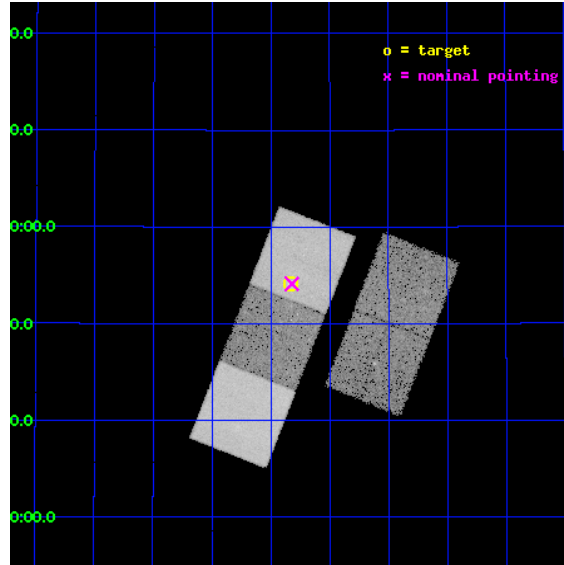
L2 Processing Date : May 1 2012

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# 1 Front

seq_num	600617	Sequence number
obs_id	8180	Observation id
title	X-ray thermal coronae of early-type galaxies in hot clusters	Propo
observer	Dr. Ming Sun	Principal investigator
object	NGC 6107	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	244.332917	Observer's specified target RA [deg]
dec_targ	34.901389	Observer's specified target Dec [deg]
ra_nom	244.3304460071	Nominal RA [deg]
dec_nom	34.902135420429	Nominal Dec [deg]
roll_nom	291.41513707418	Nominal Roll [deg]
revision	2	Processing version of data
ontime	21145.100162625	Sum of GTIs [s]
livetime	20868.823862204	Livetime [s]
ontime2	21141.959192336	Sum of GTIs [s]
ontime3	21145.100162625	Sum of GTIs [s]
ontime5	21145.100162625	Sum of GTIs [s]
ontime6	21145.100162625	Sum of GTIs [s]
ontime7	21145.100162625	Sum of GTIs [s]
l2events	247134	Number of level 2 events

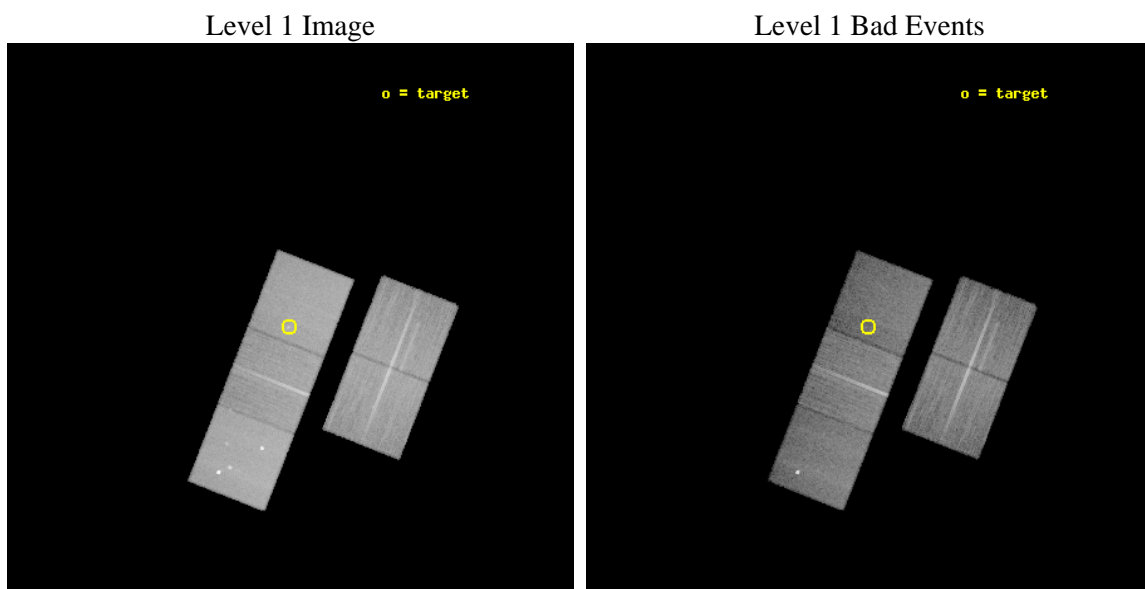




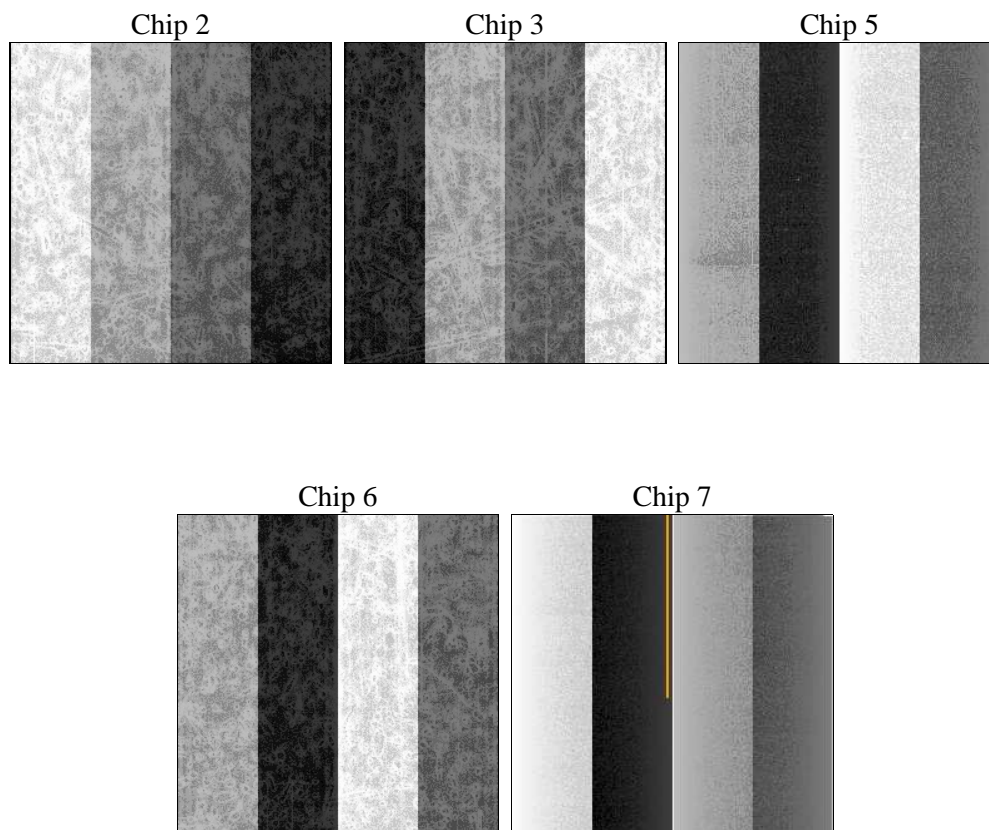
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	20988.761000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	21145.100162625	Sum of GTIs [s]
caldbver	4.4.9	&#160	ontime2	21141.959192336	Sum of GTIs [s]
date	2012-05-01T22:23:30	Date and time of file creation	ontime3	21145.100162625	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	21145.100162625	Sum of GTIs [s]
			ontime6	21145.100162625	Sum of GTIs [s]
			ontime7	21145.100162625	Sum of GTIs [s]
			l1events	977955	Number of level 1 events

### 2.1.4 Events

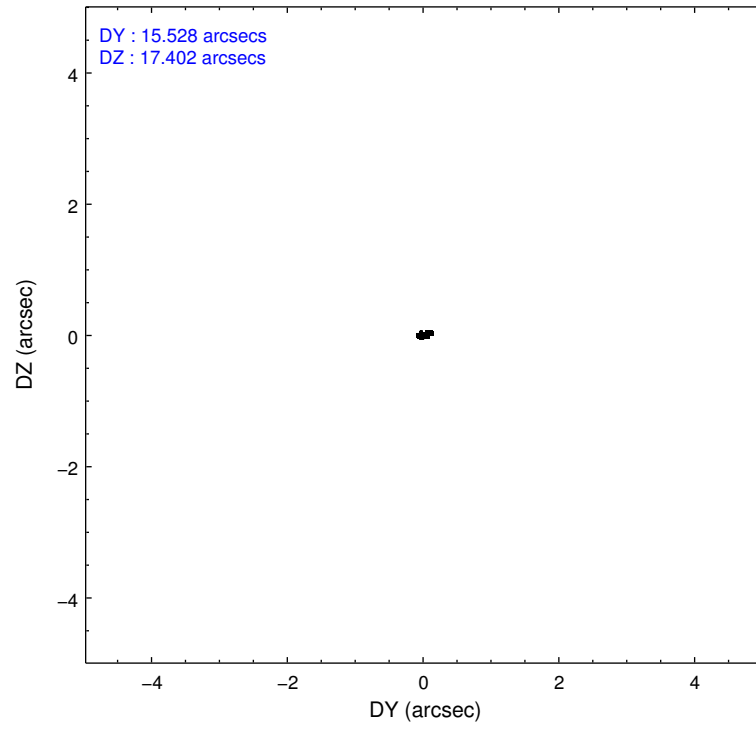
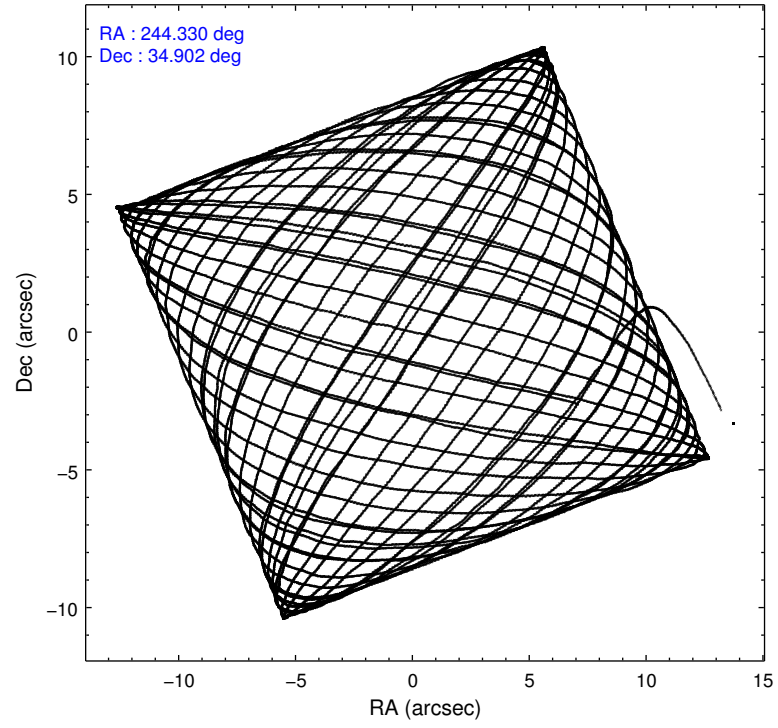
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	178601	167647	249910	177710	204087
rejected events	161800	151328	129204	158320	109518
rejected %	90%	90%	51%	89%	53%

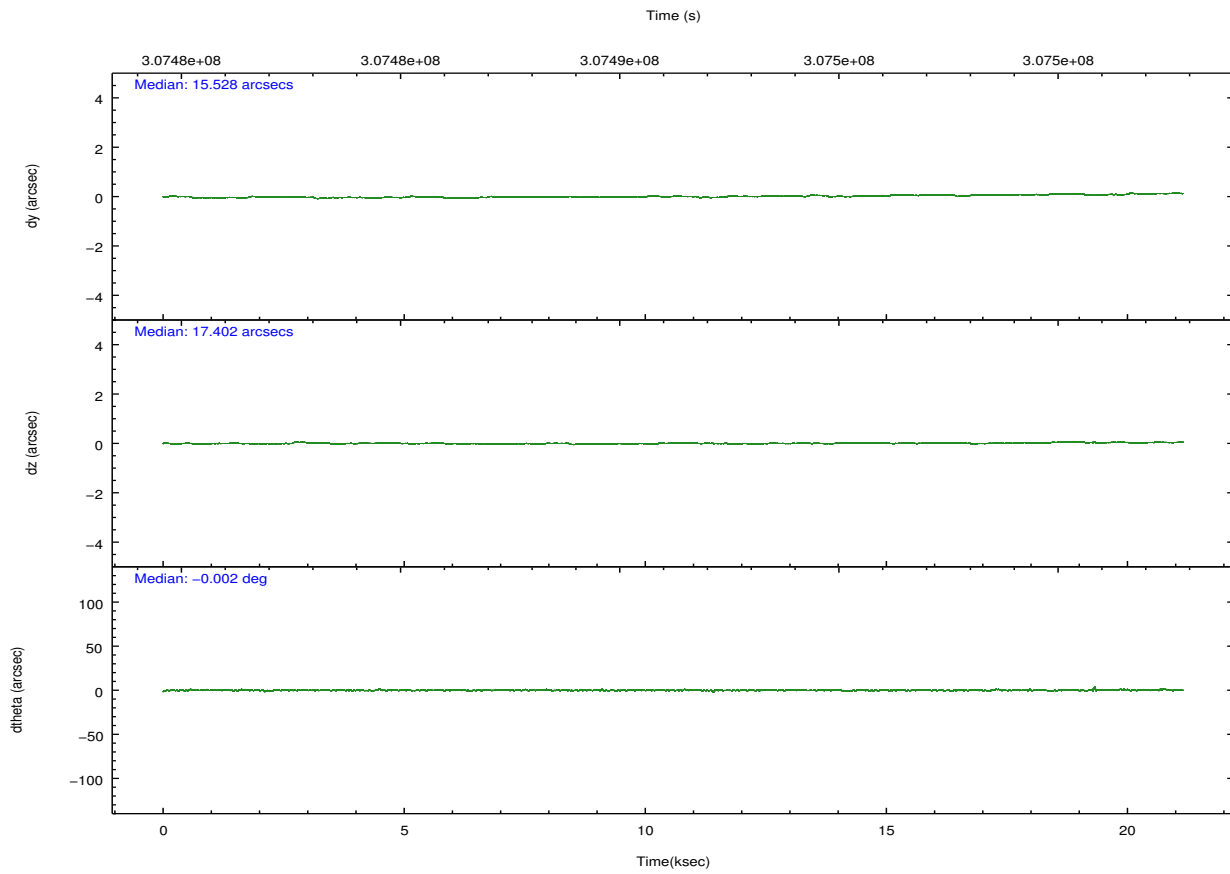
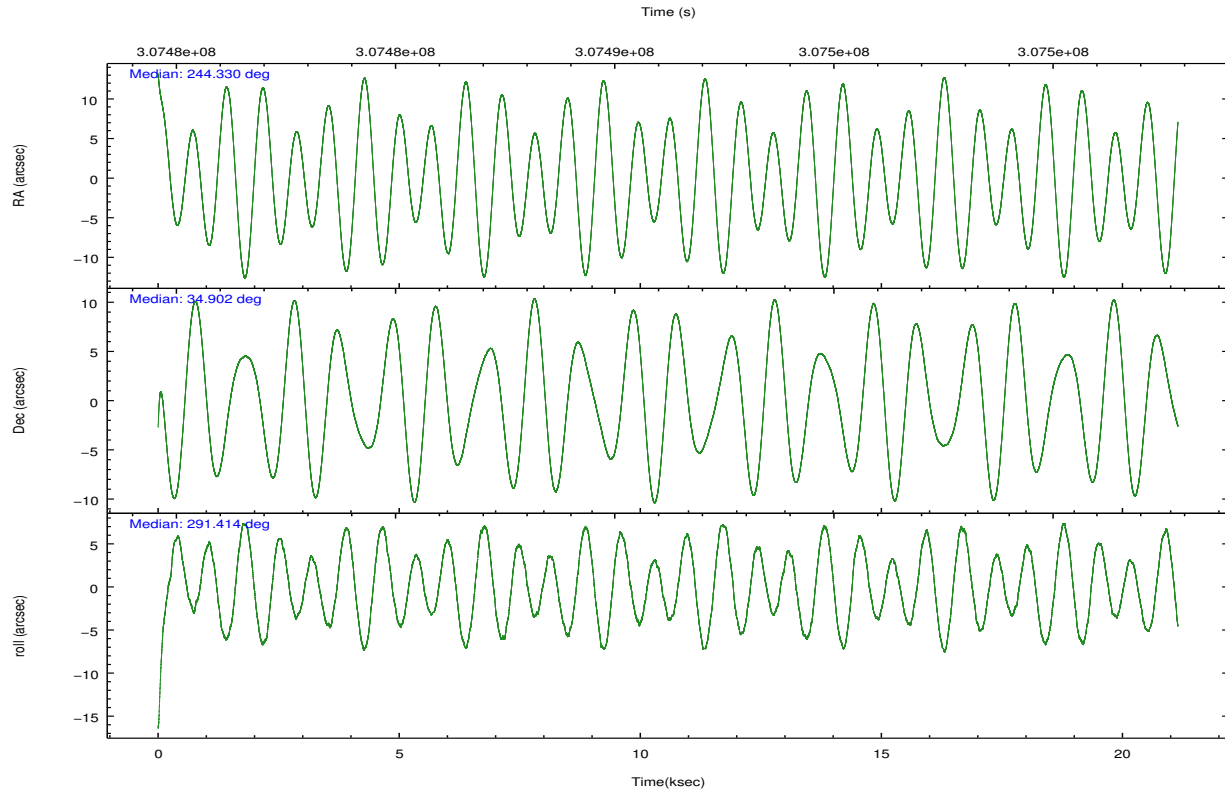
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	6560	6391	14726	8065	10756
	3%	3%	5%	4%	5%
grade 1 events	95	93	475	93	256
	0%	0%	0%	0%	0%
grade 2 events	4085	3455	37014	4207	19826
	2%	2%	14%	2%	9%
grade 3 events	1833	1953	5435	2013	9058
	1%	1%	2%	1%	4%
grade 4 events	1872	1844	4927	1913	9079
	1%	1%	1%	1%	4%
grade 5 events	5392	7008	20457	7086	20476
	3%	4%	8%	3%	10%
grade 6 events	3028	3271	62897	3826	48854
	1%	1%	25%	2%	23%
grade 7 events	155736	143632	103979	150507	85782
	87%	85%	41%	84%	42%

## 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	244.304108	244.3304460070993	CCD I2 on	O2	Y
[deg] Pointing Dec	34.918899	34.90213542042896	CCD I3 on	O3	Y
[deg] Pointing Roll	291.273586	291.4151370741768	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O1	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)	307480801.184000	307479446.98902	CCD S5 on	N	N
Observation start date	2007-09-29T19:18:56	2007-09-29T18:57:26	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	307501790.184000	307502011.85261	On-chip summing requested	N	N
Observation end date	2007-09-30T01:08:45	2007-09-30T01:13:31	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



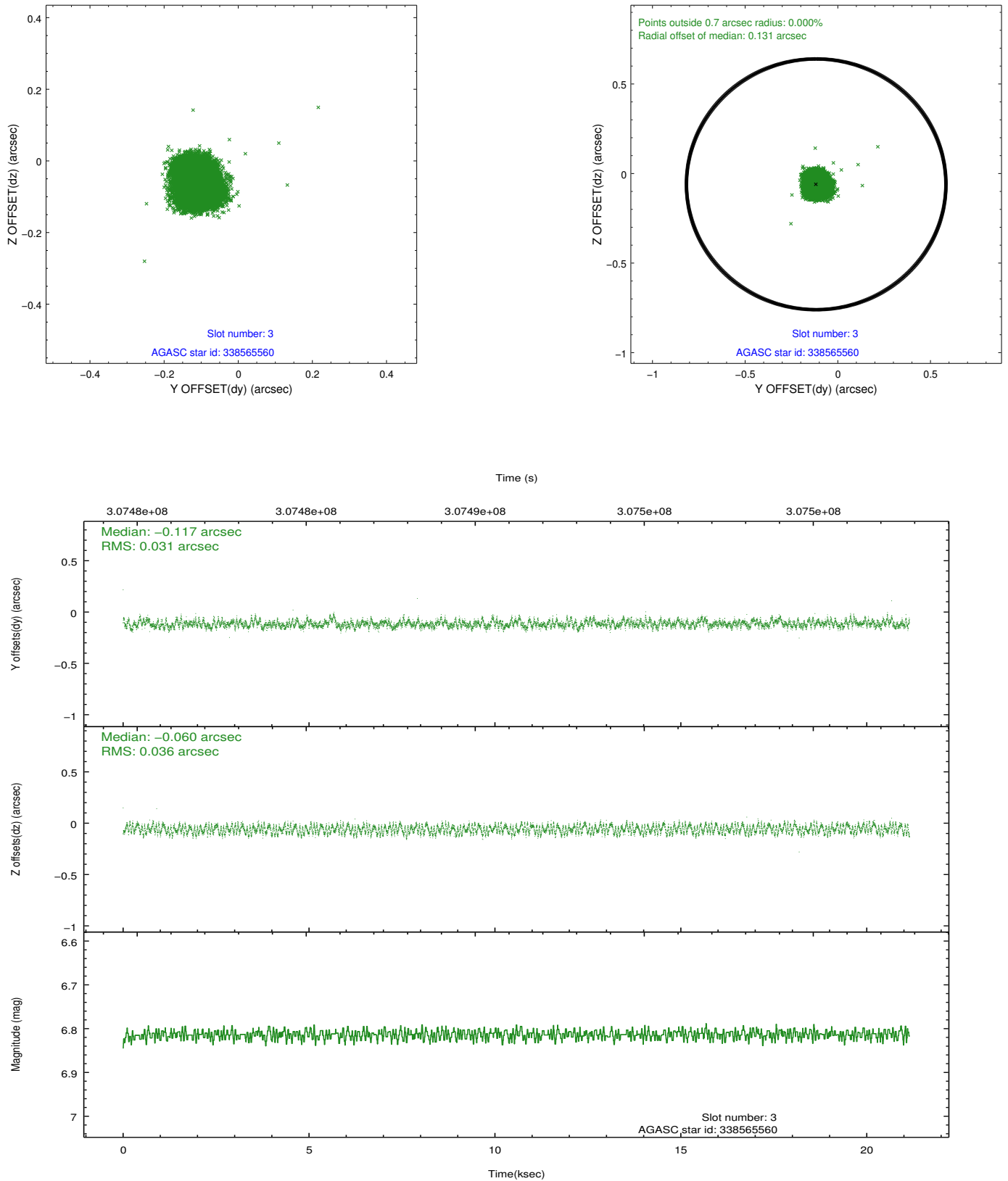


### Slot Statistics

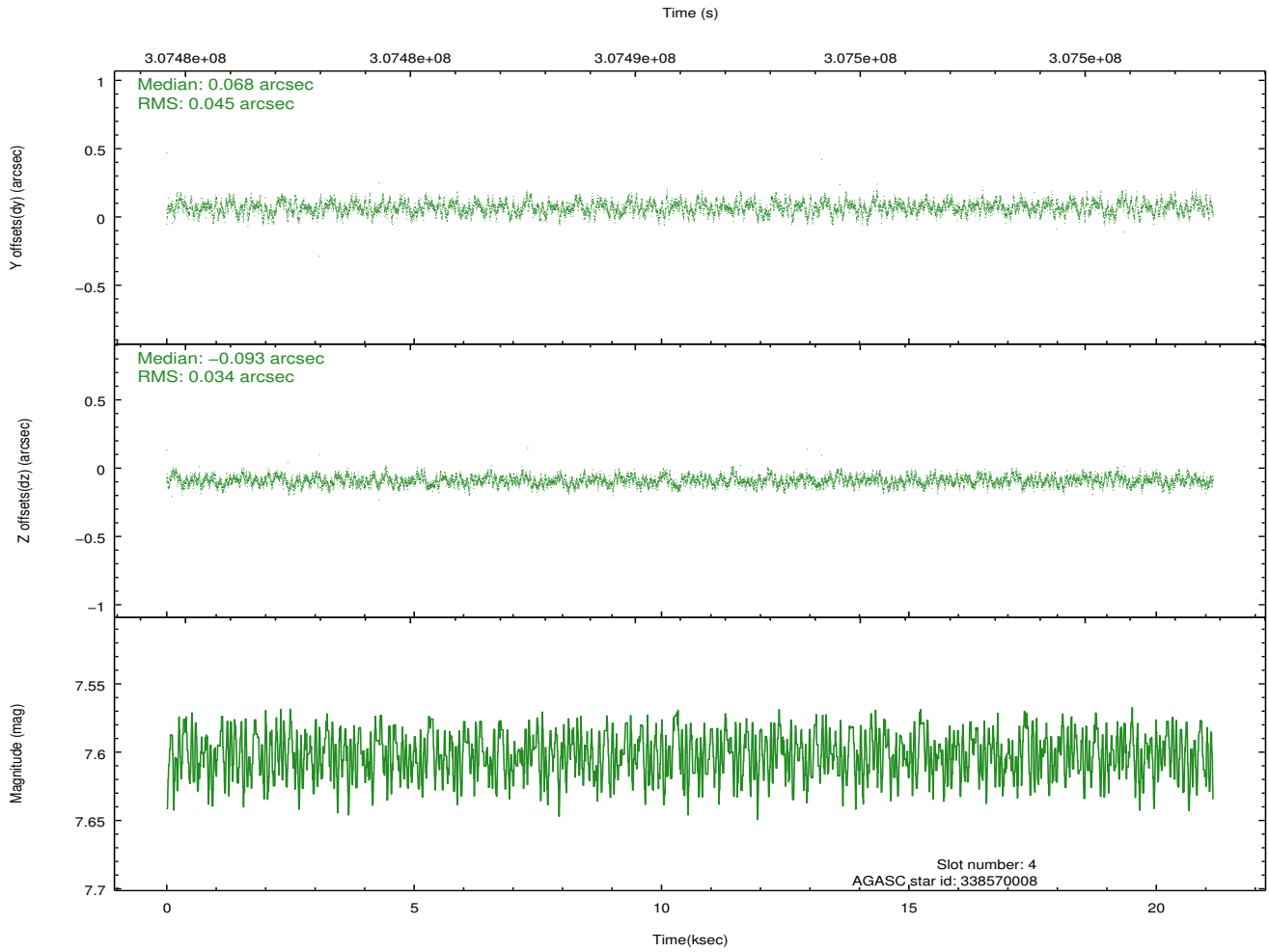
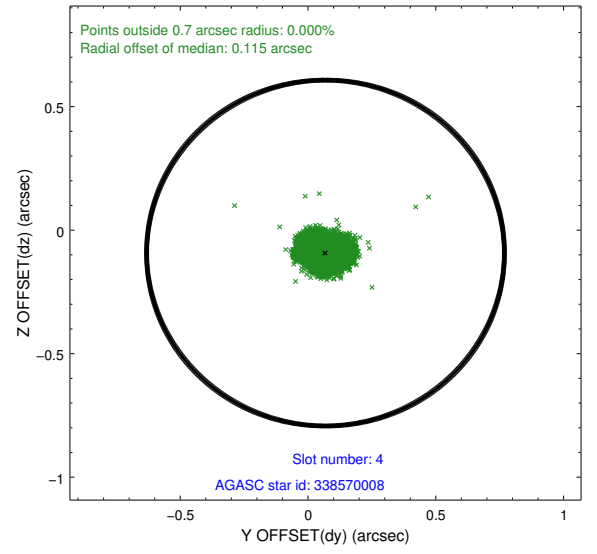
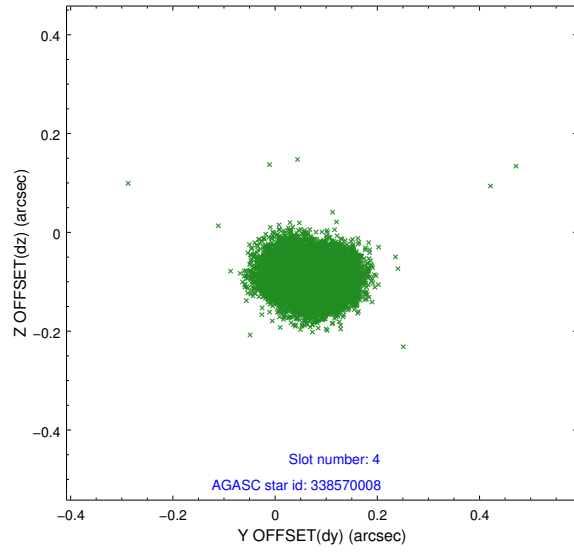
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.09	5159	-0.067	-0.046	0.008	0.014	0.000000	0.000000	-768.64	-1738.82
1	FID	ACIS-S-4	7.19	5158	0.156	0.045	0.006	0.012	0.000000	0.000000	2144.84	169.49
2	FID	ACIS-S-5	7.22	5159	-0.120	0.010	0.007	0.012	0.000000	0.000000	-1821.27	163.44
3	GUIDE	338565560	6.81	10318	-0.117	-0.060	0.052	0.078	245.145714	34.627796	1871.66	1947.11
4	GUIDE	338570008	7.60	10316	0.068	-0.093	0.060	0.095	244.524487	34.482759	1700.72	39.86
5	GUIDE	338576432	8.78	10309	0.139	0.083	0.079	0.129	243.692839	34.516402	687.89	-2212.97
6	GUIDE	338956680	7.10	10318	-0.059	-0.001	0.055	0.086	243.355448	35.198926	-1963.59	-2230.16
7	GUIDE	338954984	8.74	10310	-0.033	0.073	0.067	0.109	243.868741	35.485553	-2366.28	-448.35

## 2.4 Star Slots

### 2.4.1 Slot 3

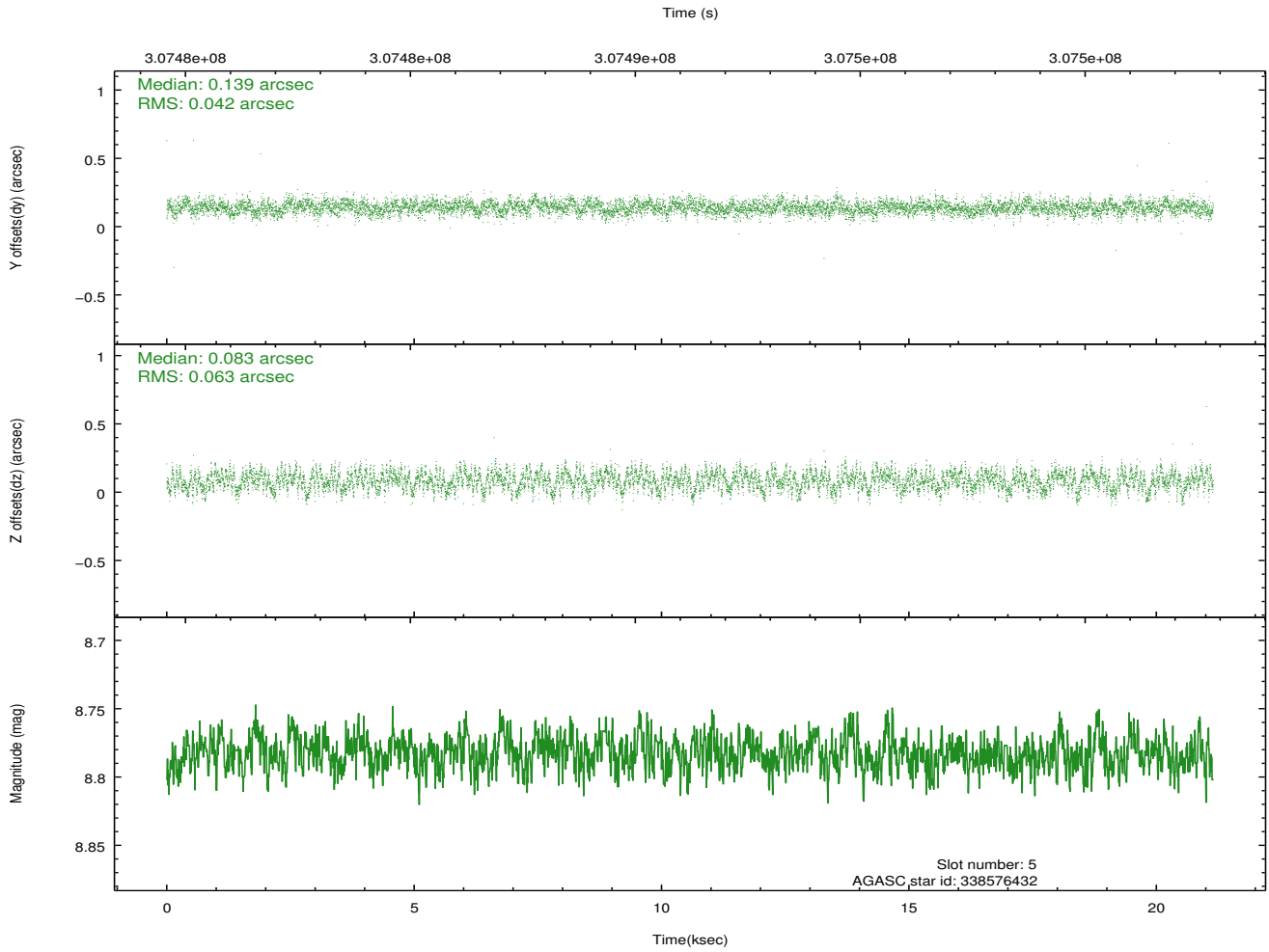
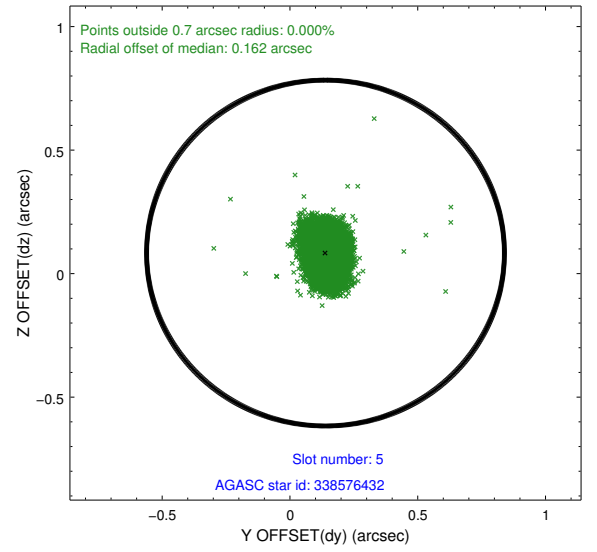
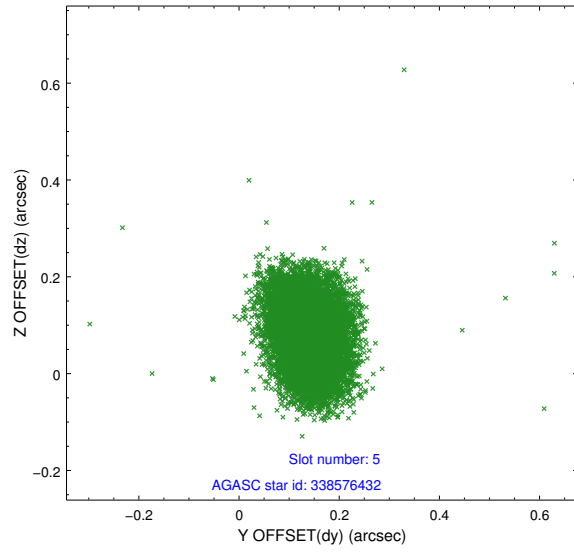


## 2.4.2 Slot 4

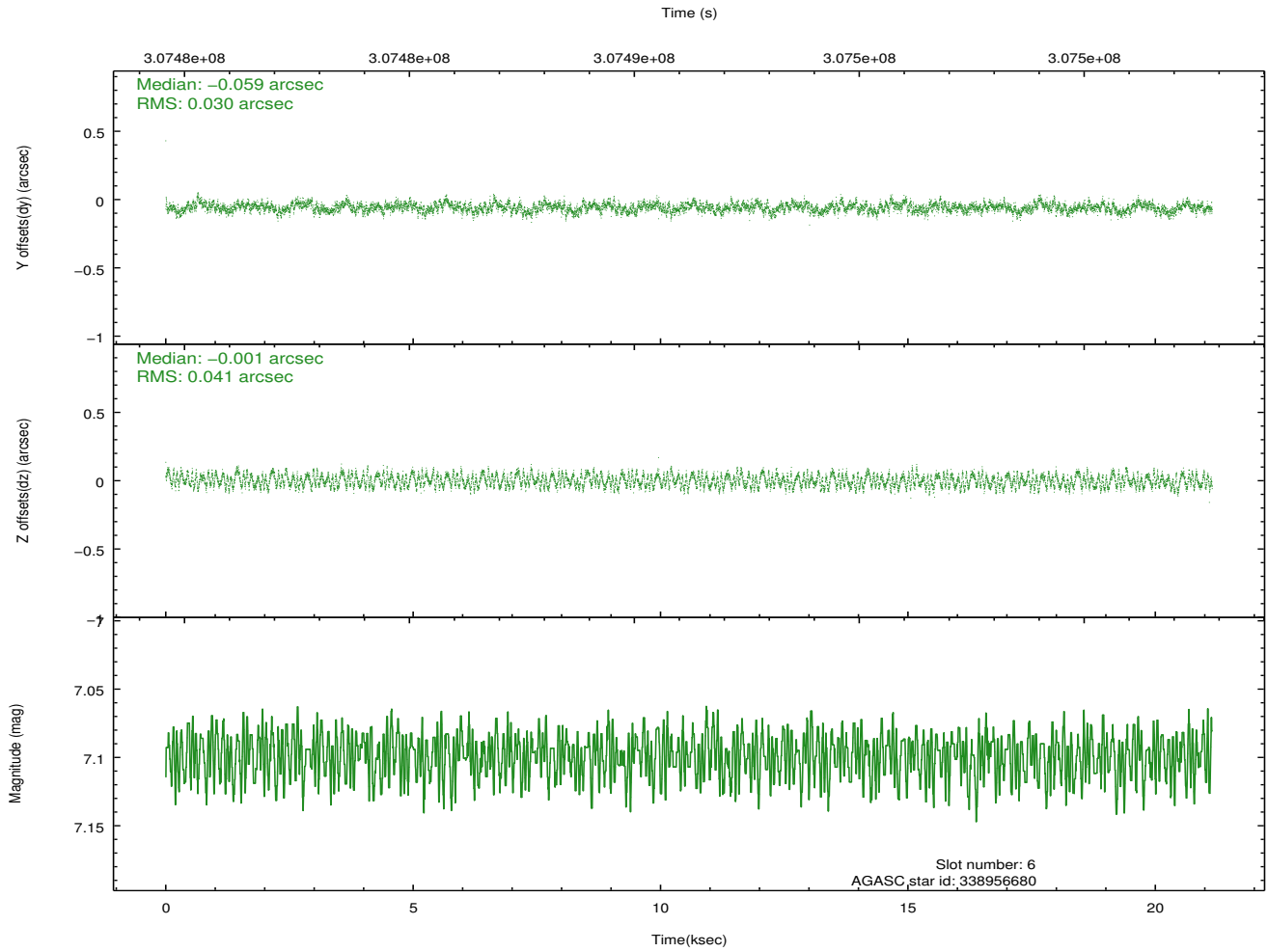
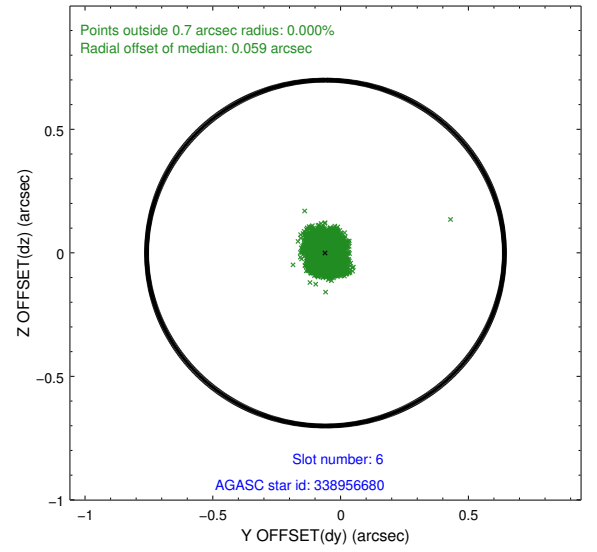
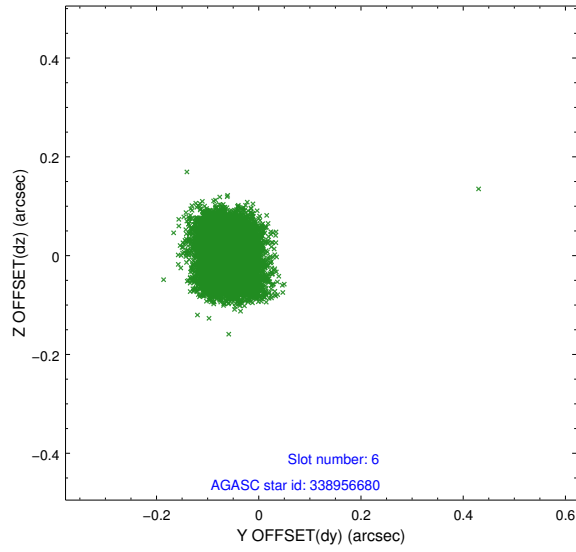




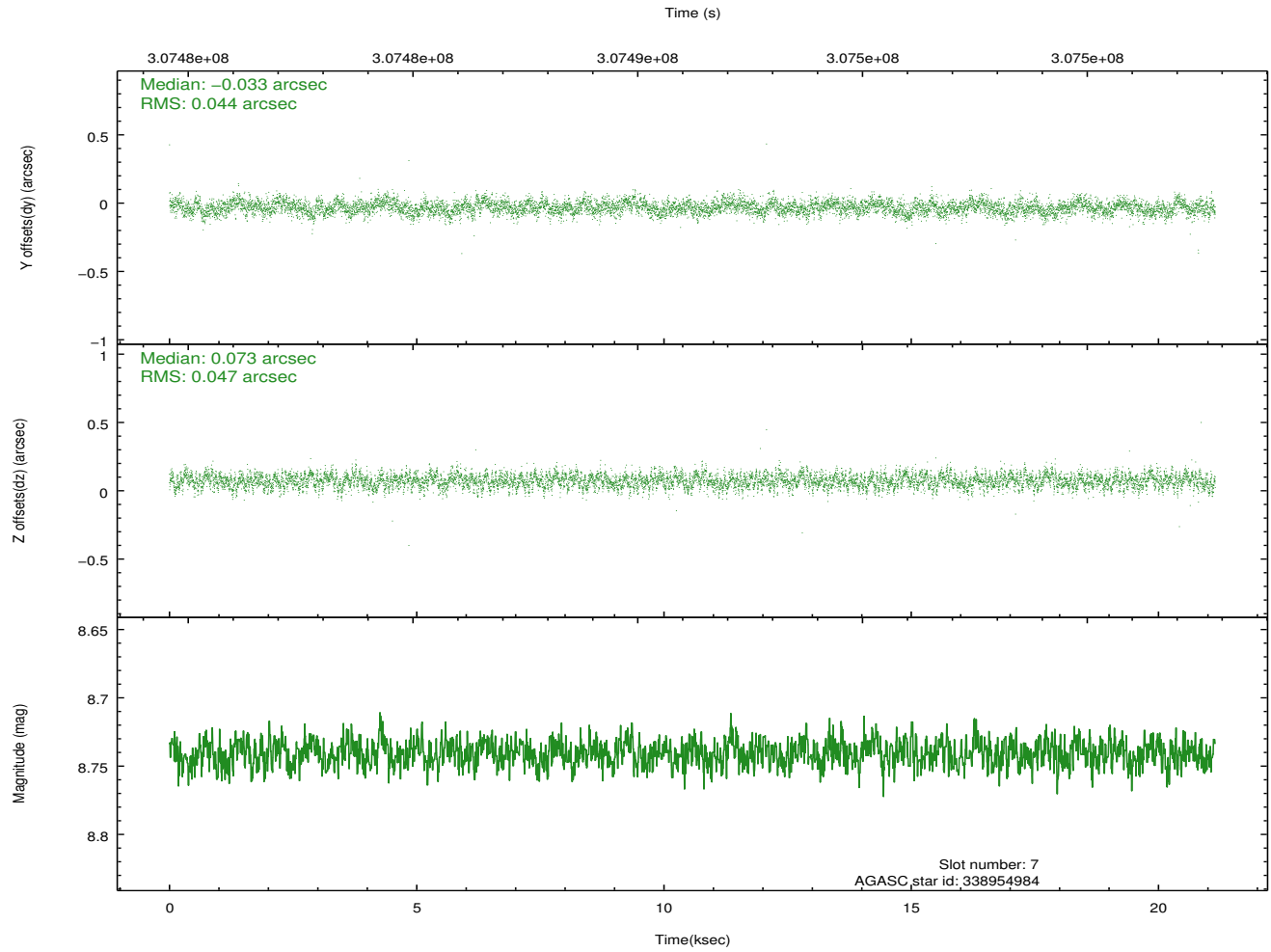
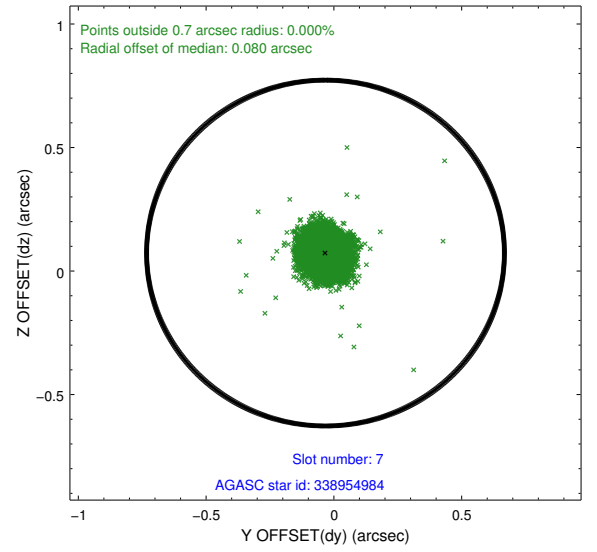
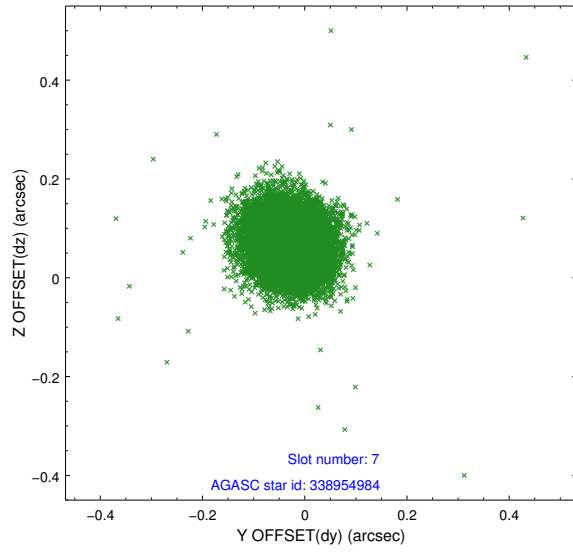
### 2.4.3 Slot 5



## 2.4.4 Slot 6

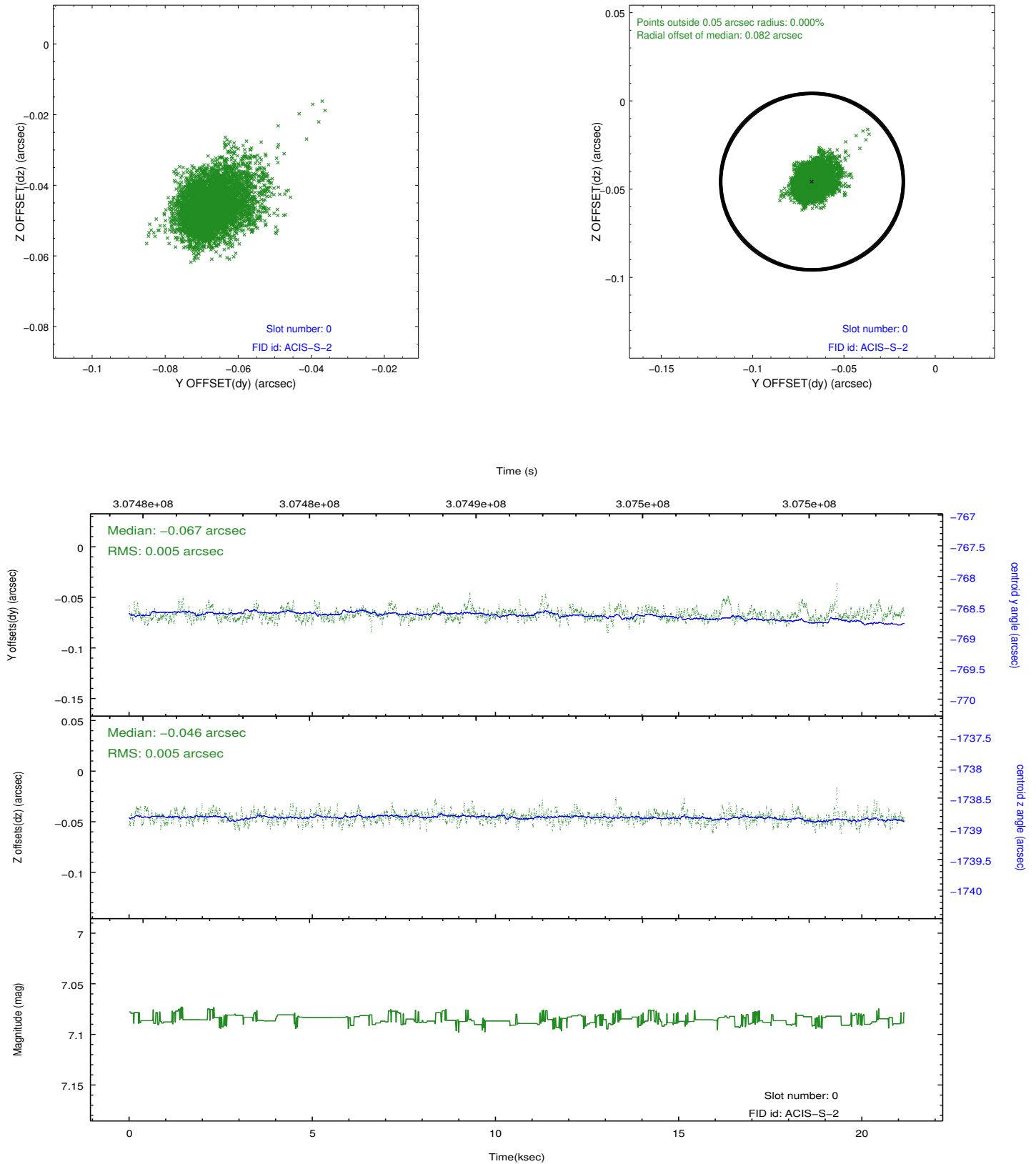


## 2.4.5 Slot 7

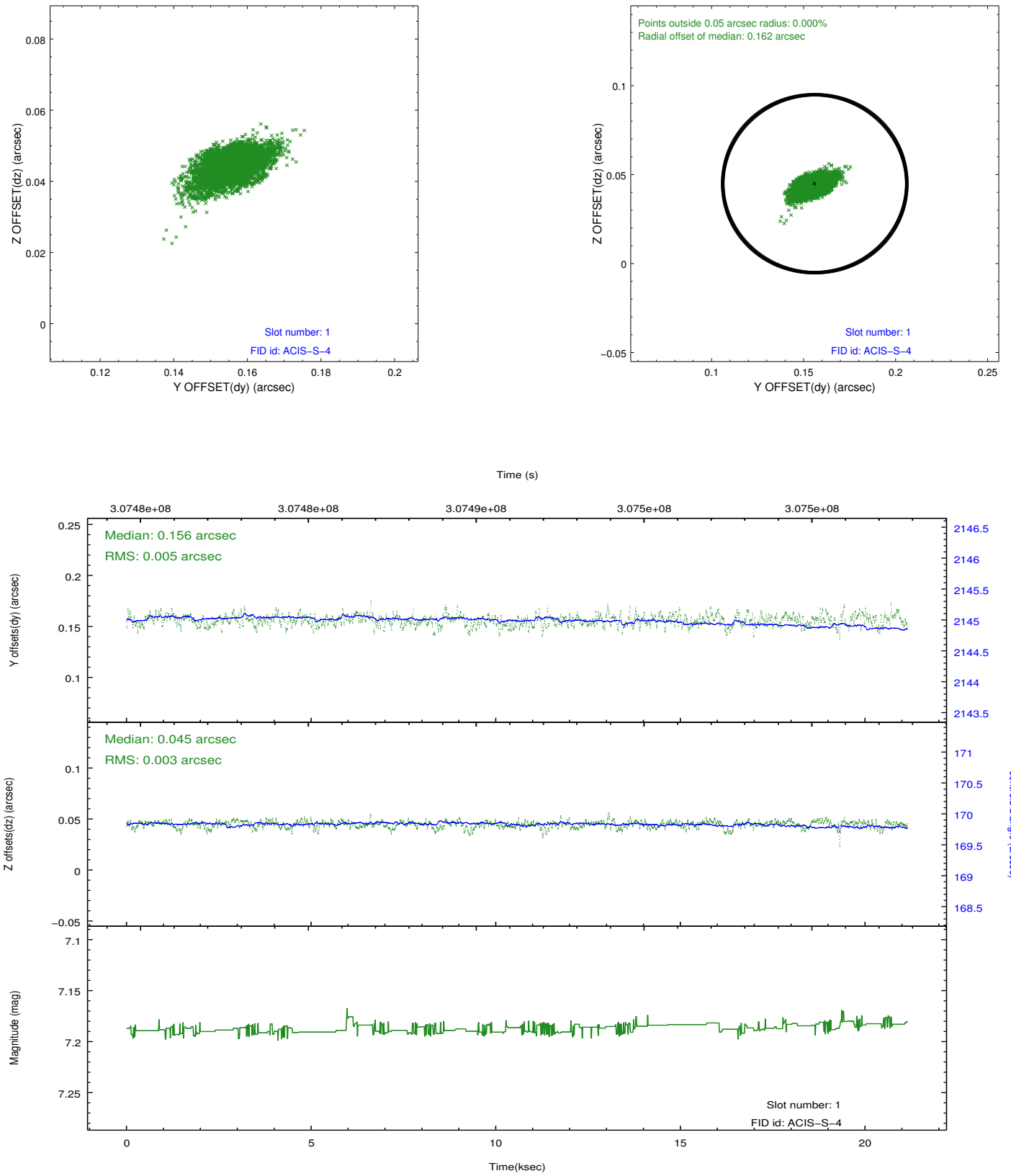


## 2.5 FID Slots

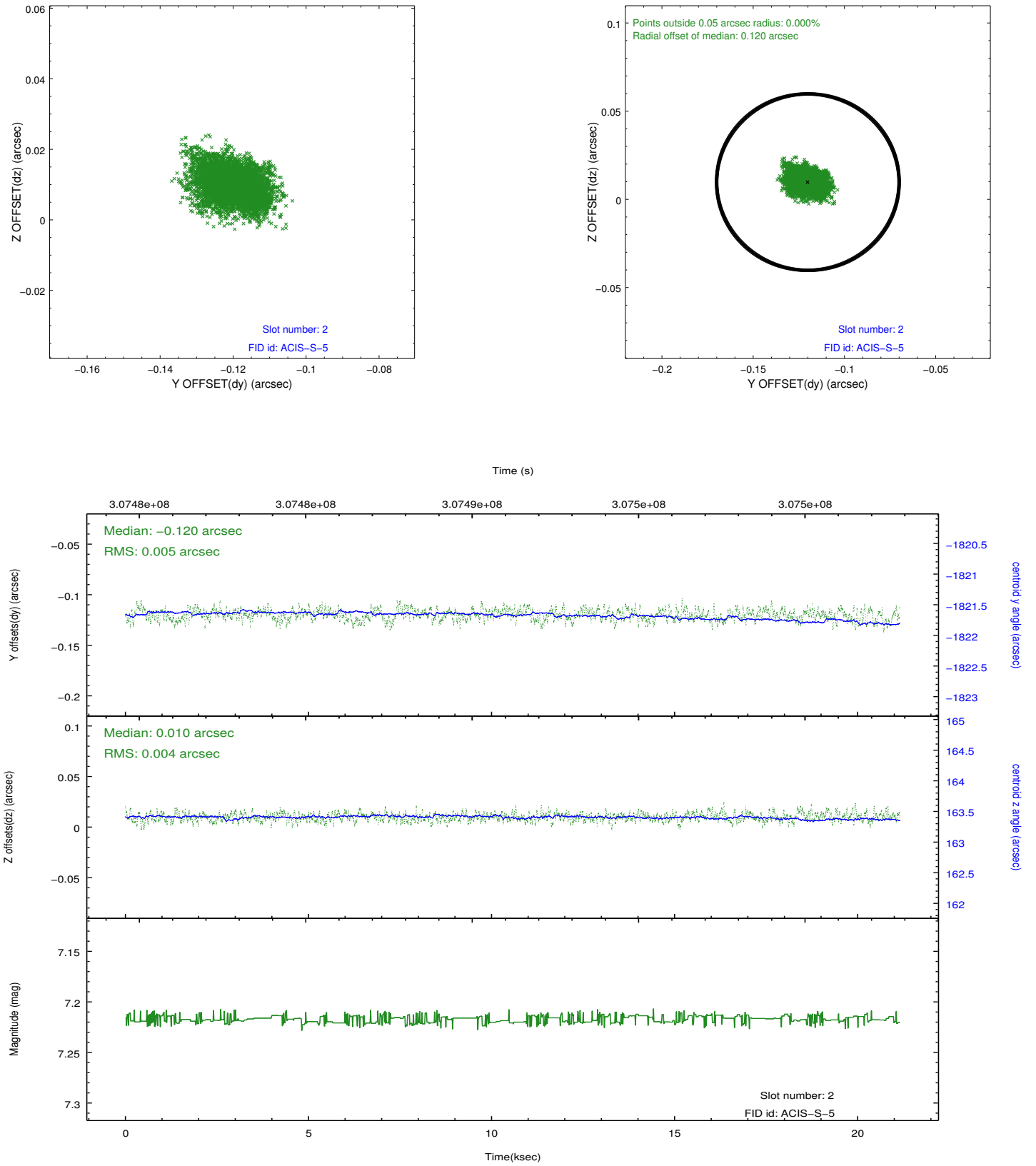
### 2.5.1 Slot 0



## 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)	2012.05.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	21.1451001

### A.2 Comments