

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 11671 - L2 Version 2  
Chandra X-Ray Center

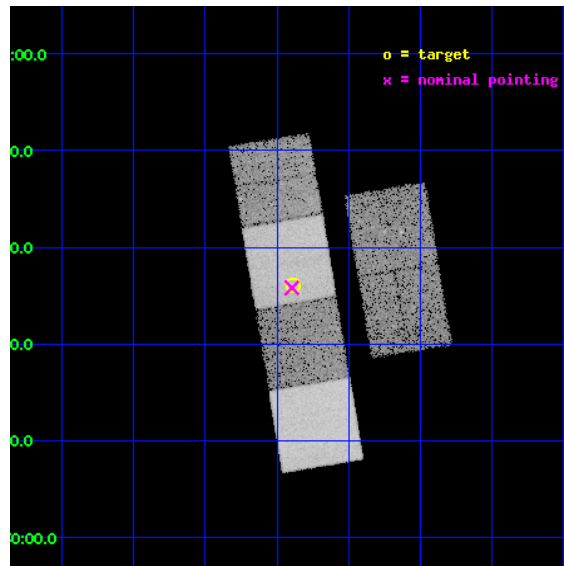
L2 Processing Date : Jul 2 2012

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# 1 Front

seq_num	702257	Sequence number
obs_id	11671	Observation id
title	Investigating the Nuclear Activity of Barred and Unbarred Spiral Galaxies	Proposal title
observer	Dr Leigh Jenkins	Principal investigator
object	NGC 5691	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	219.47225	Observer's specified target RA [deg]
dec_targ	-0.398889	Observer's specified target Dec [deg]
ra_nom	219.47411262903	Nominal RA [deg]
dec_nom	-0.40336408223414	Nominal Dec [deg]
roll_nom	260.44566288345	Nominal Roll [deg]
revision	2	Processing version of data
ontime	15048.585584641	Sum of GTIs [s]
livetime	14858.031332797	Livetime [s]
ontime2	15048.626624644	Sum of GTIs [s]
ontime3	15048.462464631	Sum of GTIs [s]
ontime5	15048.544544637	Sum of GTIs [s]
ontime6	15048.503504634	Sum of GTIs [s]
ontime7	15048.585584641	Sum of GTIs [s]
ontime8	15045.180454254	Sum of GTIs [s]
l2events	183839	Number of level 2 events

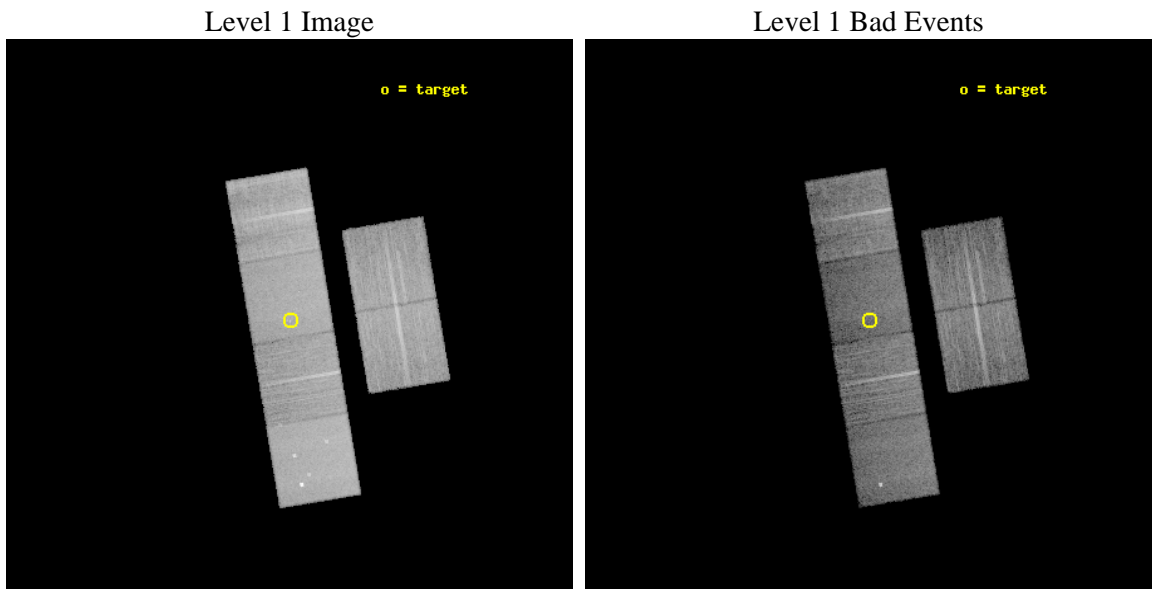




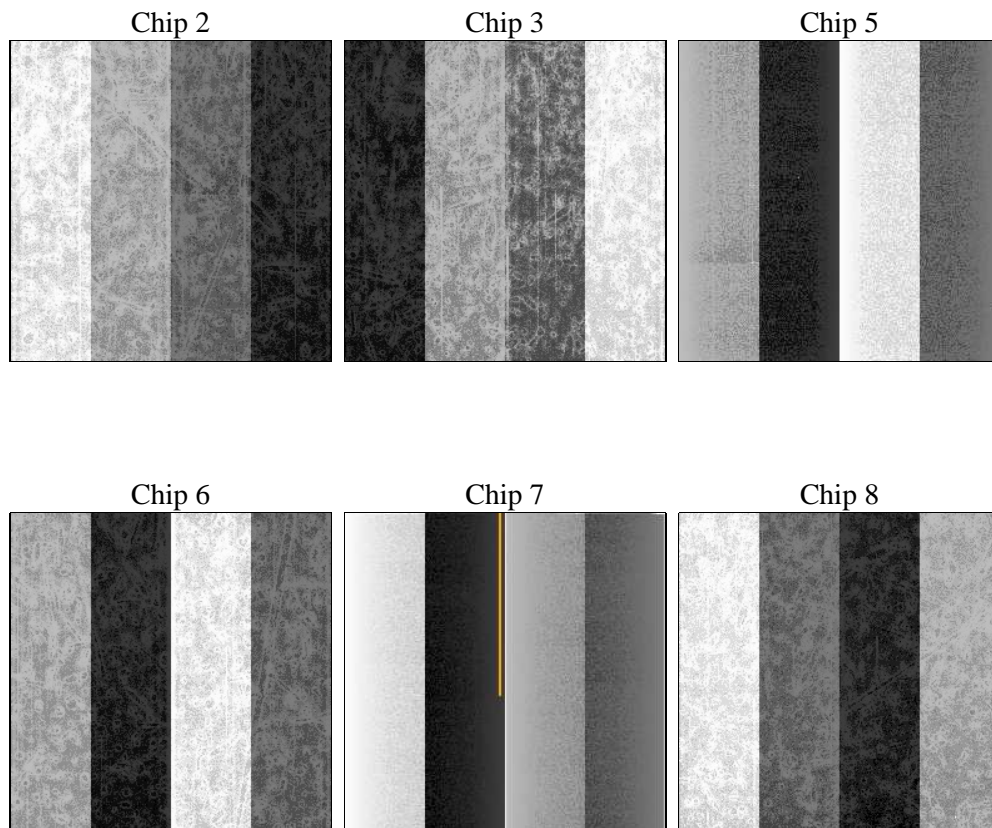
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	15000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	15048.585584641	Sum of GTIs [s]
caldsver	4.5.0	&#160	ontime2	15048.626624644	Sum of GTIs [s]
date	2012-07-02T18:25:26	Date and time of file creation	ontime3	15048.462464631	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	15048.544544637	Sum of GTIs [s]
			ontime6	15048.503504634	Sum of GTIs [s]
			ontime7	15048.585584641	Sum of GTIs [s]
			ontime8	15045.180454254	Sum of GTIs [s]
			l1events	789138	Number of level 1 events

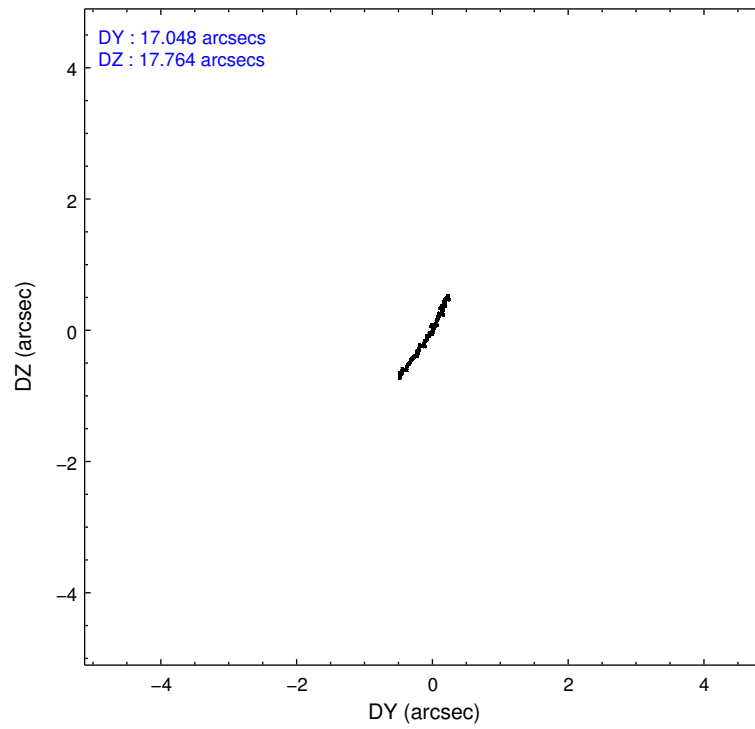
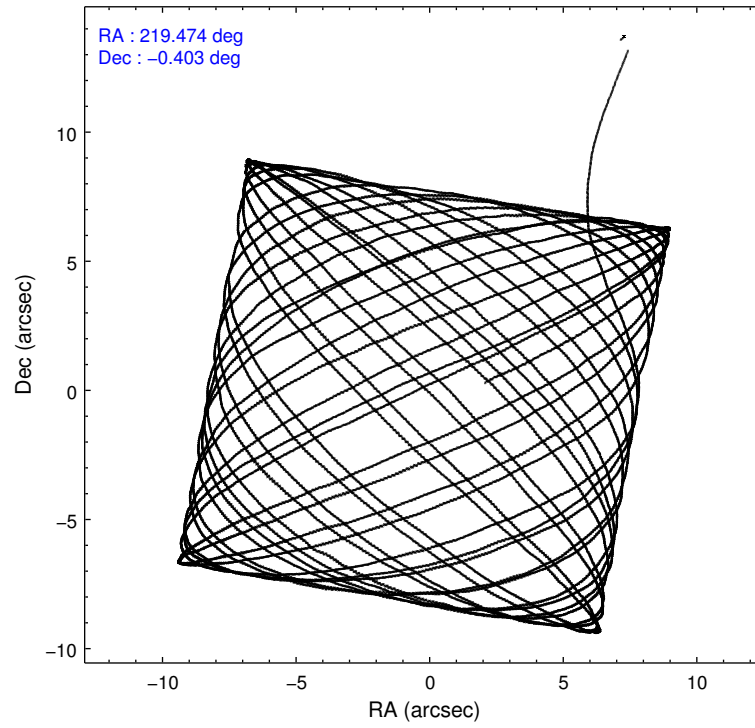
### 2.1.4 Events

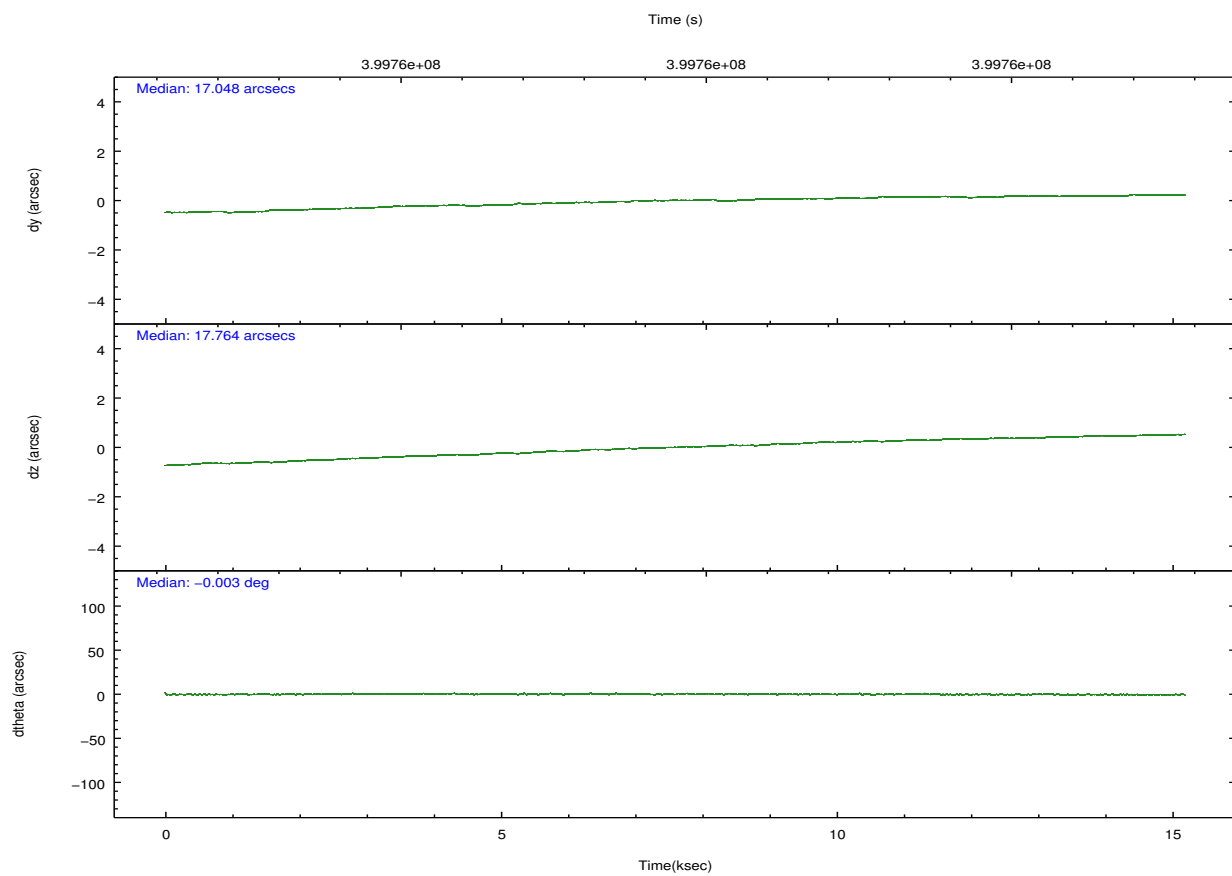
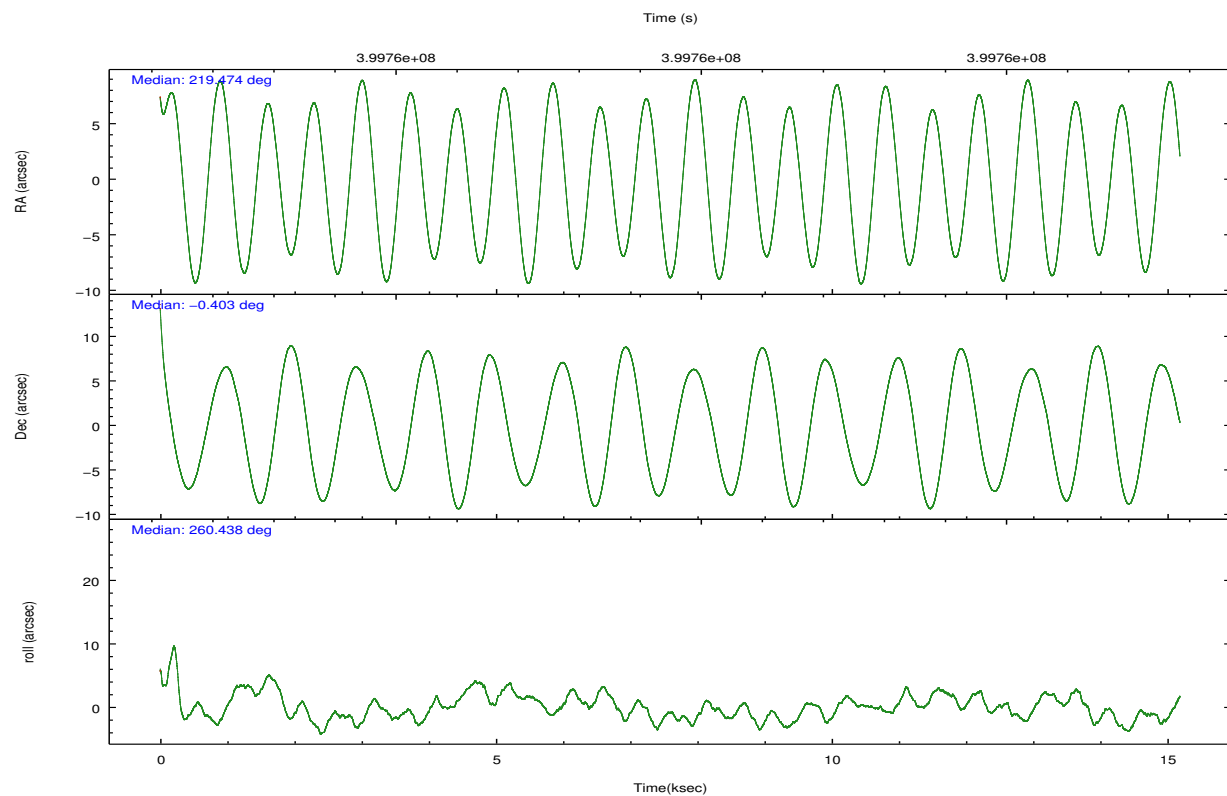
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	117829	107628	169411	111076	136792	146402	grade 0 events	4162	4205	8513	4571	5924	11850
rejected events	106188	96182	85174	98277	74041	106862		3%	3%	5%	4%	4%	8%
rejected %	90%	89%	50%	88%	54%	72%	grade 1 events	83	62	674	73	171	134
								0%	0%	0%	0%	0%	0%
							grade 2 events	2917	2494	25631	2828	13171	9104
								2%	2%	15%	2%	9%	6%
							grade 3 events	1165	1276	3248	1323	5610	4069
								0%	1%	1%	1%	4%	2%
							grade 4 events	1222	1165	3144	1267	5536	3773
								1%	1%	1%	1%	4%	2%
							grade 5 events	4193	4949	13338	5141	14223	7204
								3%	4%	7%	4%	10%	4%
							grade 6 events	2181	2311	43745	2814	32546	10757
								1%	2%	25%	2%	23%	7%
							grade 7 events	101906	91166	71118	93059	59611	99511
								86%	84%	41%	83%	43%	67%

## 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	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	219.464178	219.4741126290324	CCD I2 on	O1	Y
[deg] Pointing Dec	-0.377889	-0.4033640822341414	CCD I3 on	O2	Y
[deg] Pointing Roll	260.288972	260.4456628834533	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	Y	Y
[s] Observation start time (MET)	399752081.184000	399750675.50841	CCD S5 on	N	N
Observation start date	2010-09-01T18:13:35	2010-09-01T17:51:15	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	399767081.184000	399767717.67178	On-chip summing requested	N	N
Observation end date	2010-09-01T22:23:35	2010-09-01T22:35:17	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



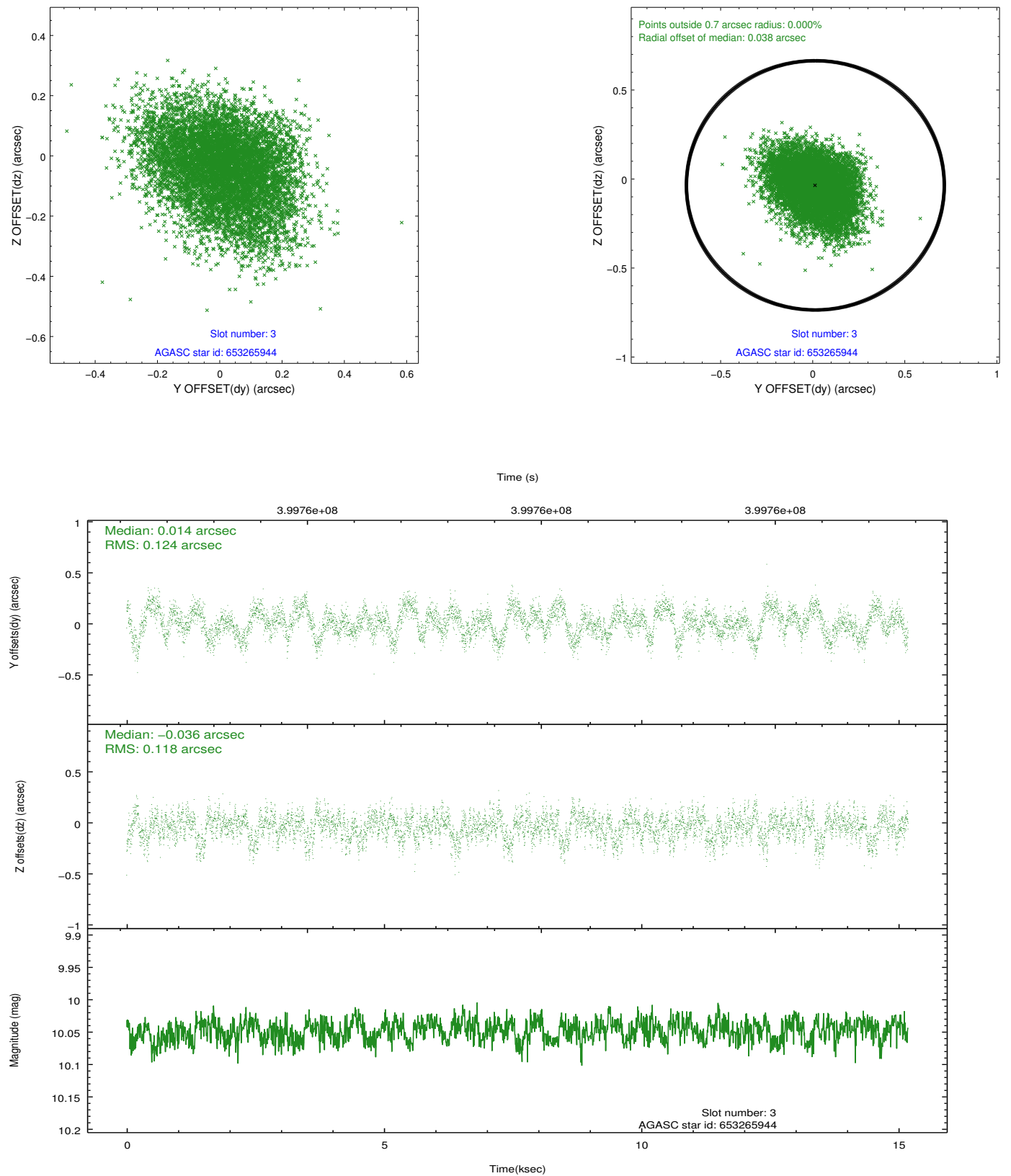


### Slot Statistics

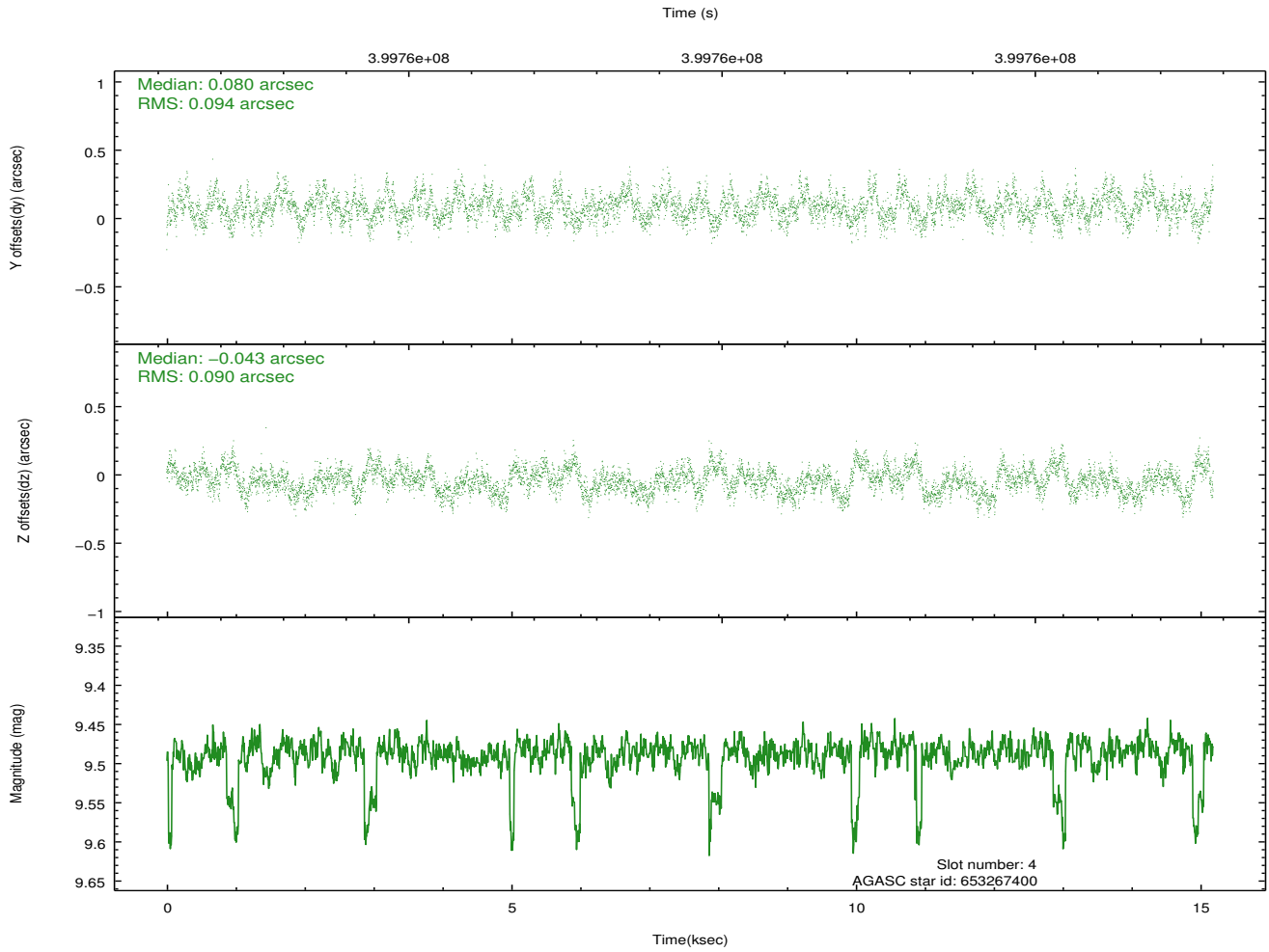
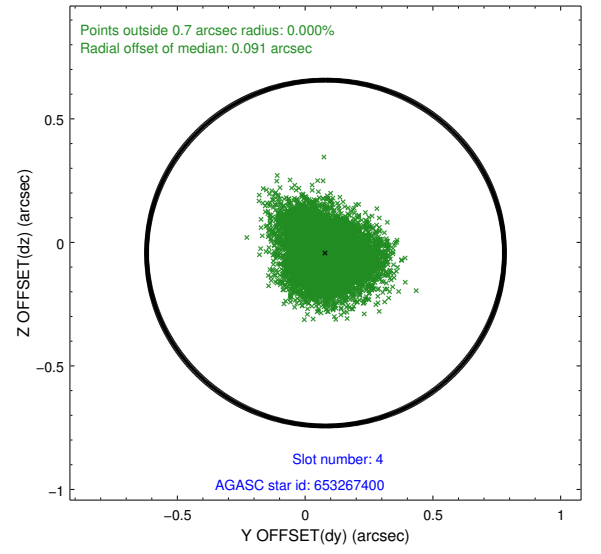
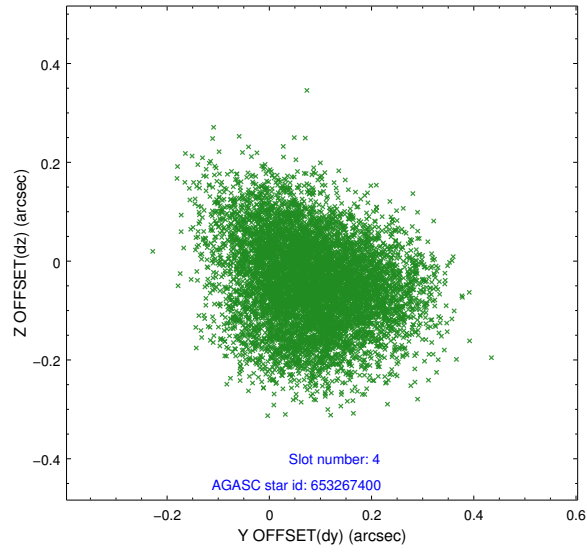
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.89	3705	-0.060	-0.045	0.010	0.017	0.000000	0.000000	-770.11	-1739.15
1	FID	ACIS-S-4	6.97	3705	0.180	0.042	0.007	0.013	0.000000	0.000000	2143.31	169.04
2	FID	ACIS-S-5	7.01	3704	-0.152	0.013	0.014	0.023	0.000000	0.000000	-1822.62	163.11
3	GUIDE	653265944	10.05	7400	0.014	-0.036	0.184	0.294	219.244912	-0.143641	-697.63	-920.50
4	GUIDE	653267400	9.49	7367	0.080	-0.043	0.139	0.220	219.110054	-0.918702	2134.74	-927.81
5	GUIDE	653398064	9.73	7396	-0.110	0.057	0.128	0.205	219.748008	-0.332373	-333.26	978.95
6	GUIDE	653399592	9.50	7381	-0.073	0.065	0.131	0.205	219.801782	-0.782410	1230.48	1443.02
7	GUIDE	653398896	8.59	7393	0.095	-0.036	0.072	0.115	220.022855	-1.071827	2123.78	2403.91

## 2.4 Star Slots

### 2.4.1 Slot 3

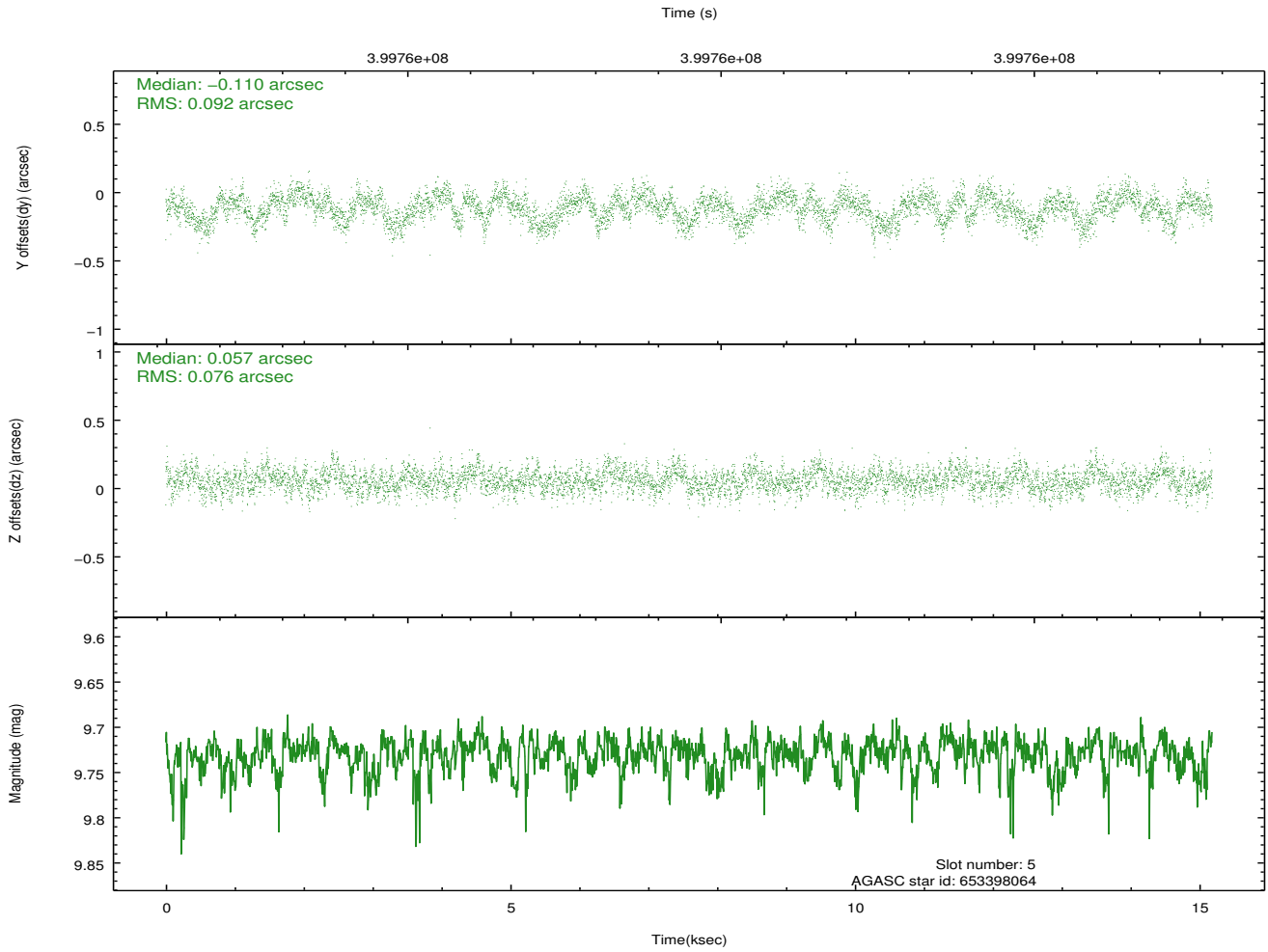
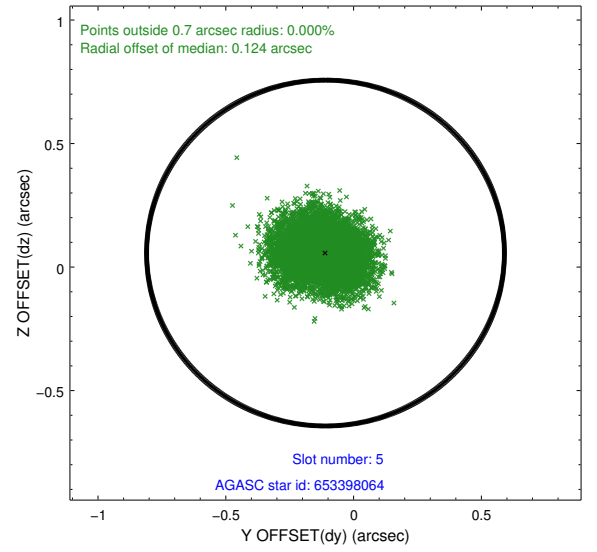
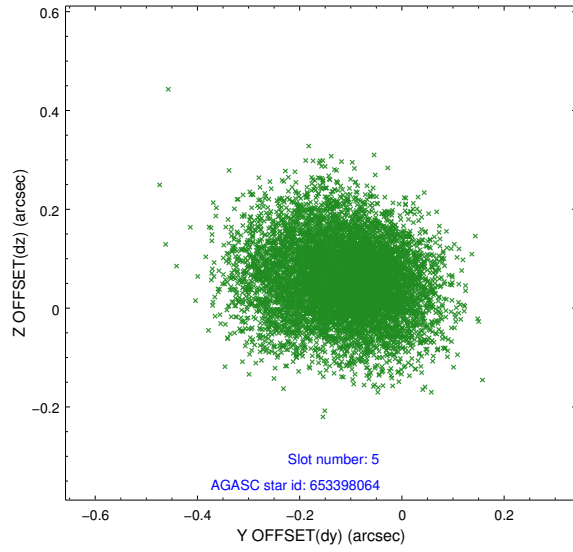


## 2.4.2 Slot 4

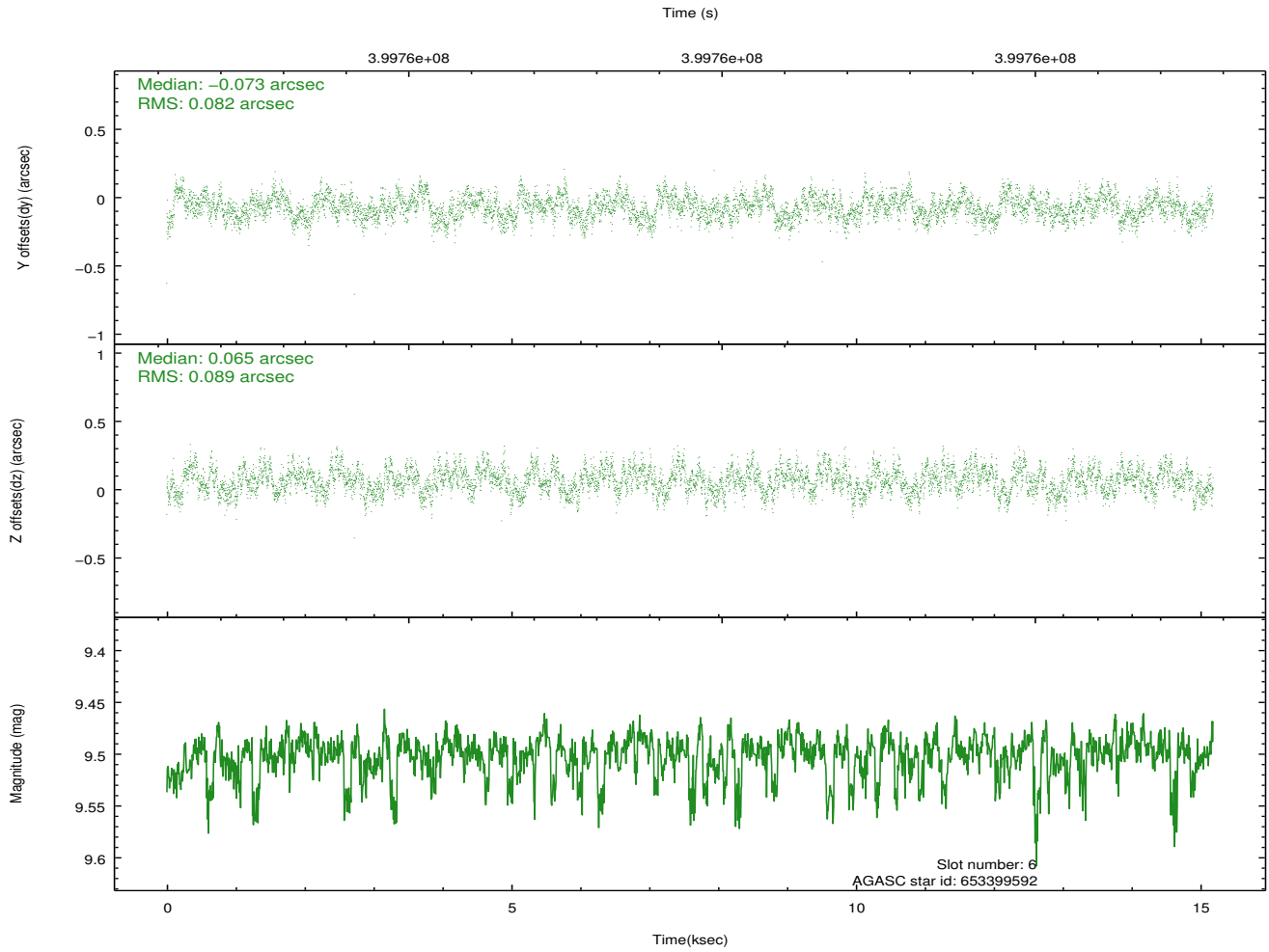
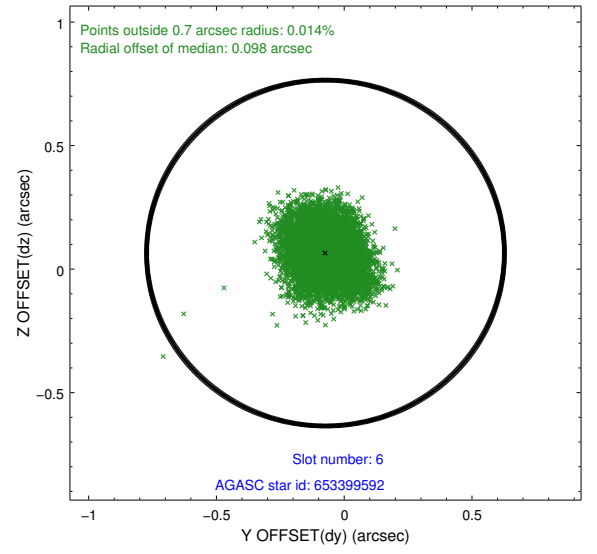
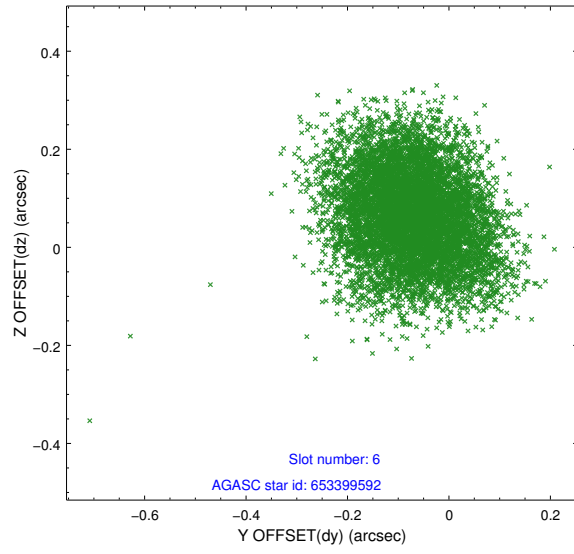




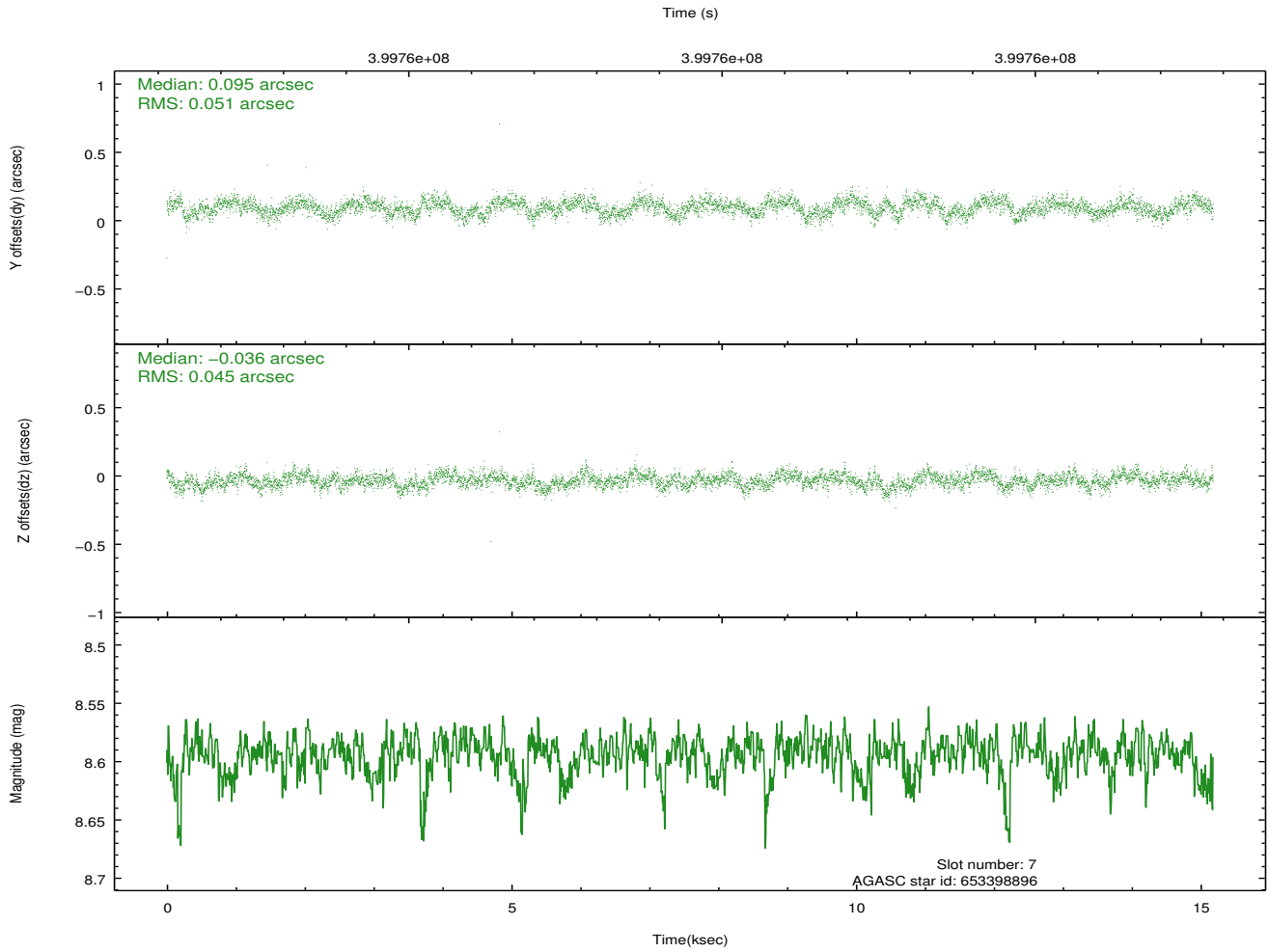
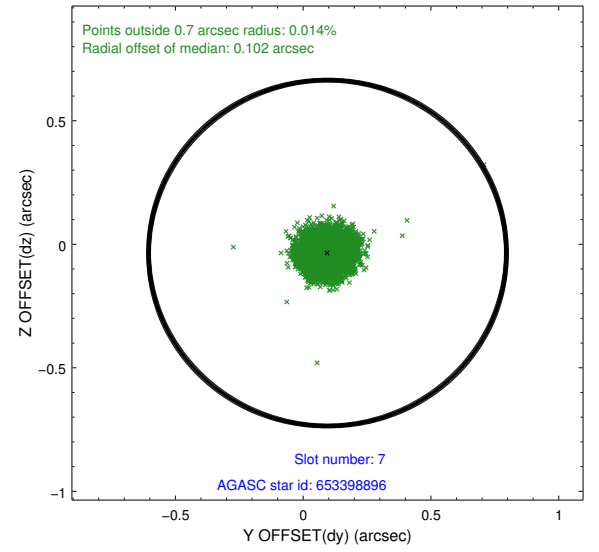
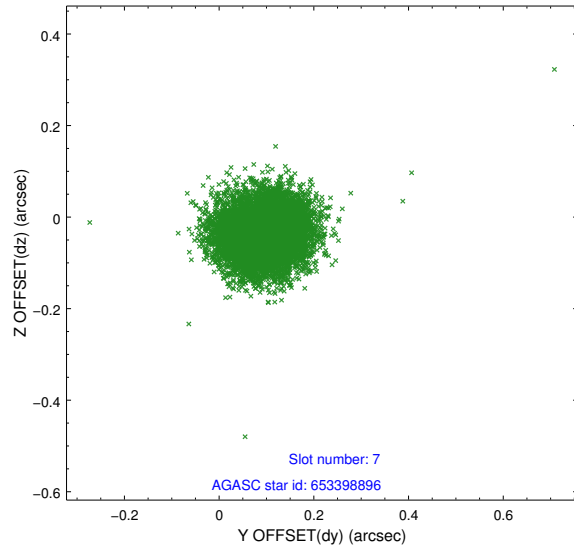
### 2.4.3 Slot 5



## 2.4.4 Slot 6

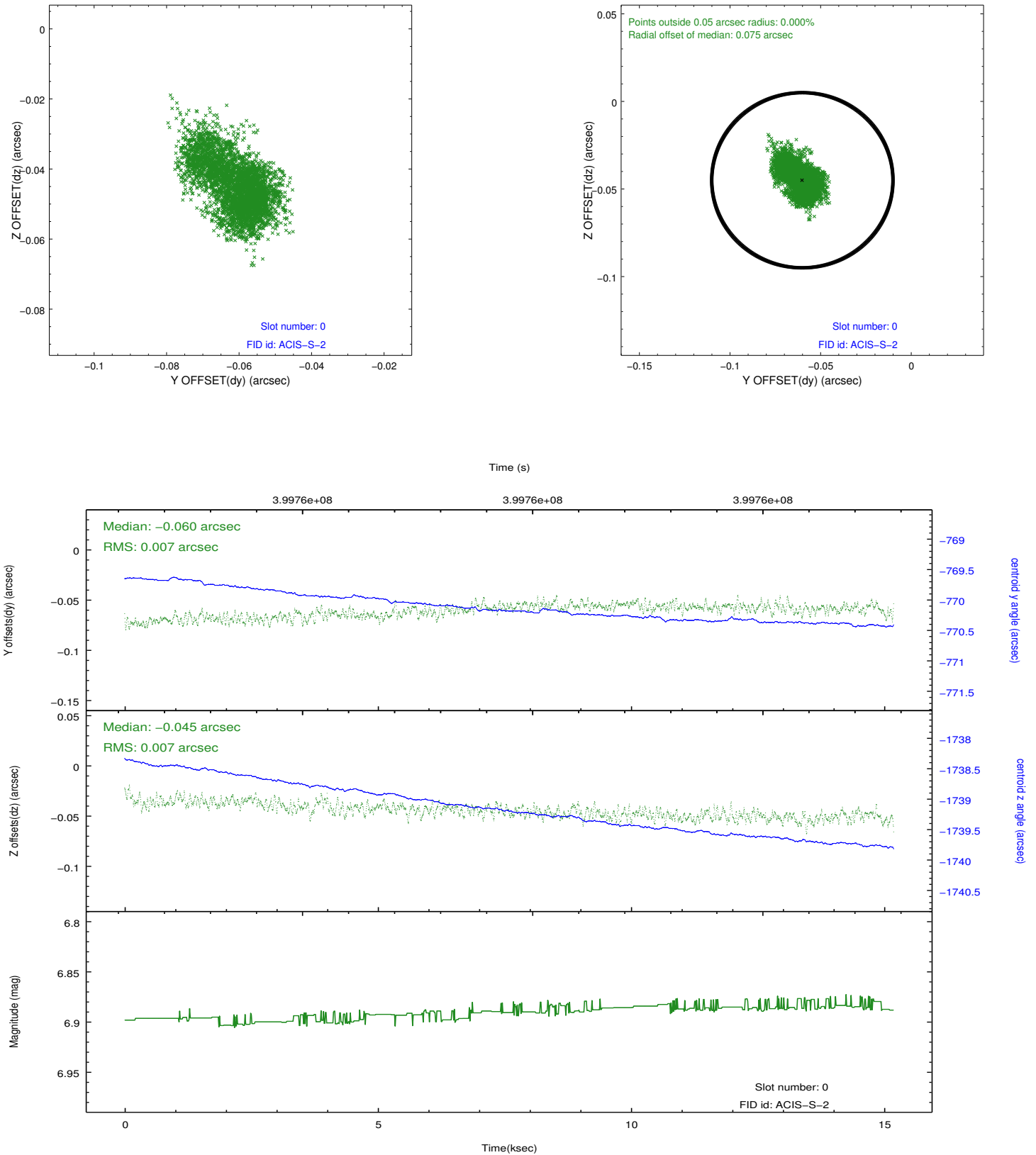


## 2.4.5 Slot 7

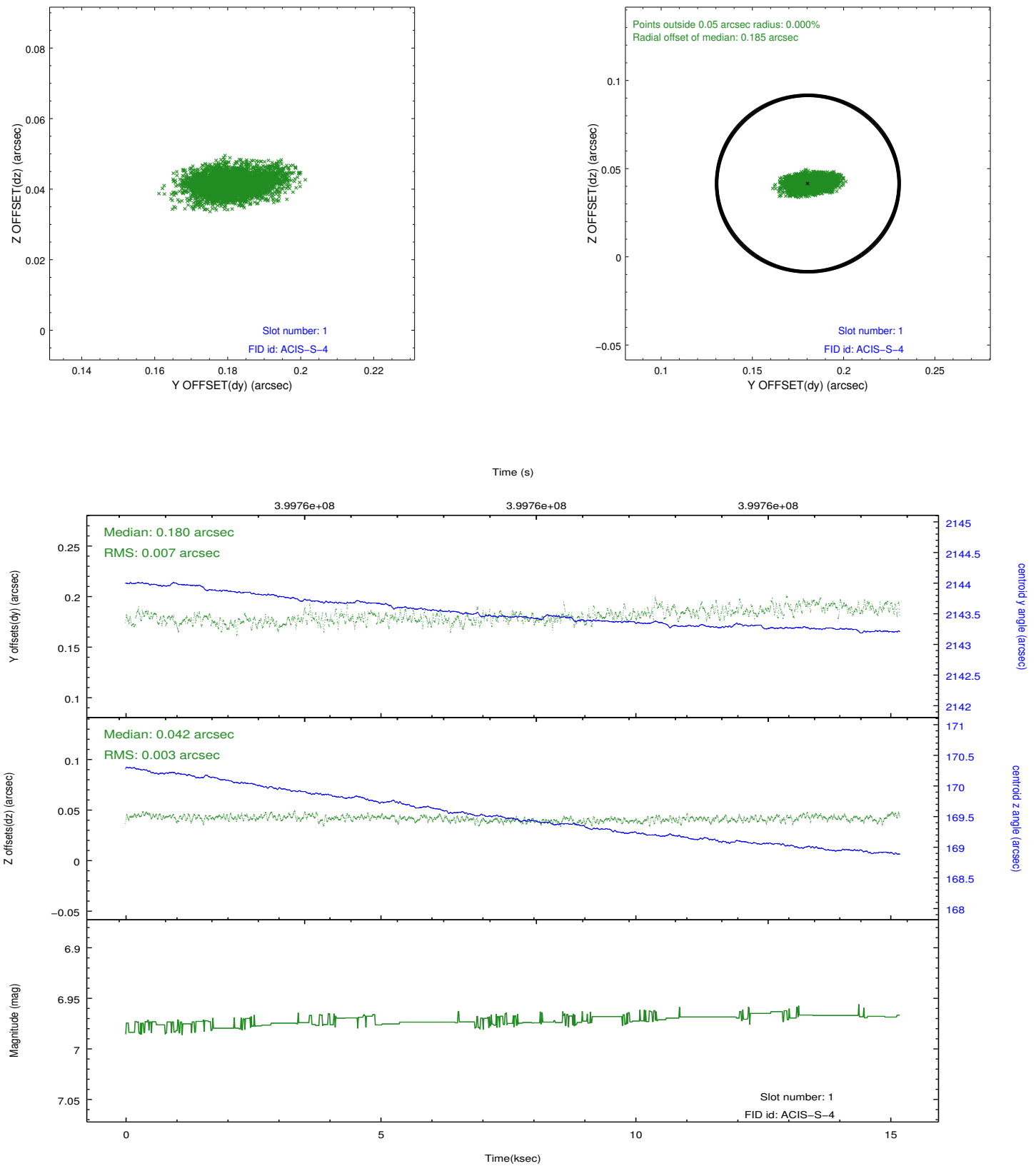


## 2.5 FID Slots

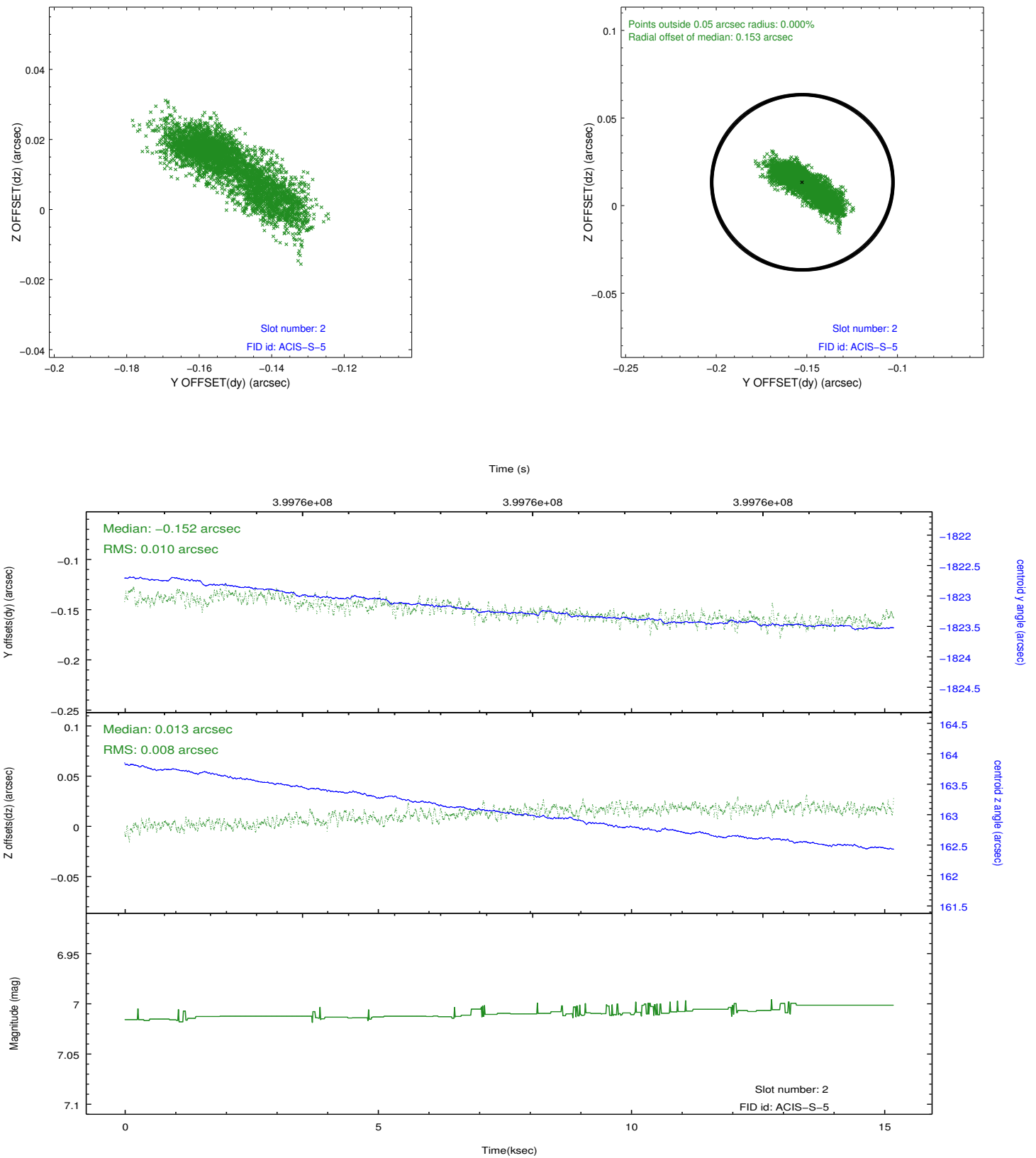
### 2.5.1 Slot 0



## 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)	2012.07.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	15.048585578501

### A.2 Comments