

# V&V Reference Report

## L2 ASCDS Version : 8.5

Observation 6115 - L2 Version 3  
Chandra X-Ray Center

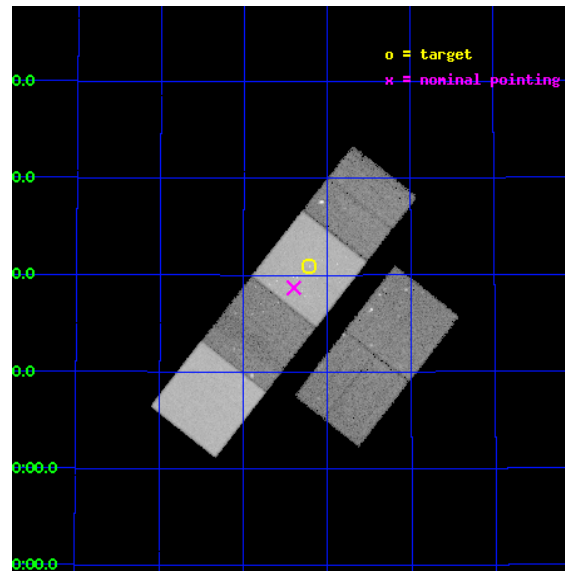
L2 Processing Date : Dec 8 2012

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# 1 Front

seq_num	600390	Sequence number
obs_id	6115	Observation id
title	An Ultra-Deep Study of M101	Proposal title
observer	Dr. K.D. Kuntz	Principal investigator
object	M101	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	210.80375	Observer's specified target RA [deg]
dec_targ	54.348778	Observer's specified target Dec [deg]
ra_nom	210.84972437247	Nominal RA [deg]
dec_nom	54.311726405206	Nominal Dec [deg]
roll_nom	308.11927839925	Nominal Roll [deg]
revision	3	Processing version of data
ontime	36216.929026932	Sum of GTIs [s]
livetime	35758.328464376	Livetime [s]
ontime2	36210.488255918	Sum of GTIs [s]
ontime3	36216.805906922	Sum of GTIs [s]
ontime5	36216.887986928	Sum of GTIs [s]
ontime6	36216.846946925	Sum of GTIs [s]
ontime7	36216.929026932	Sum of GTIs [s]
ontime8	36216.764866948	Sum of GTIs [s]
l2events	460373	Number of level 2 events

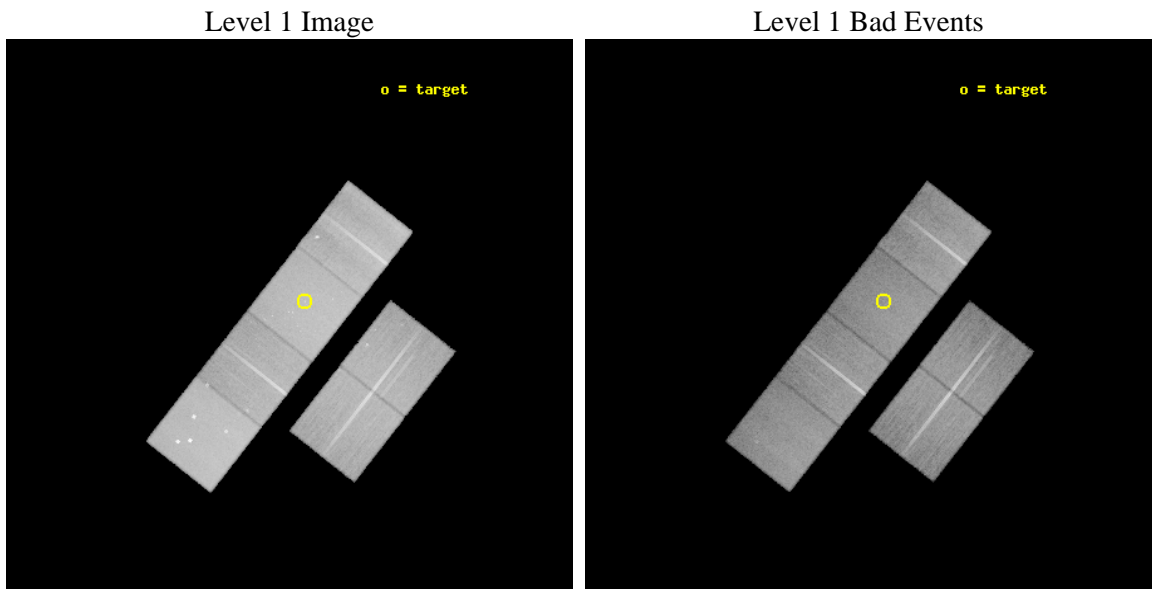




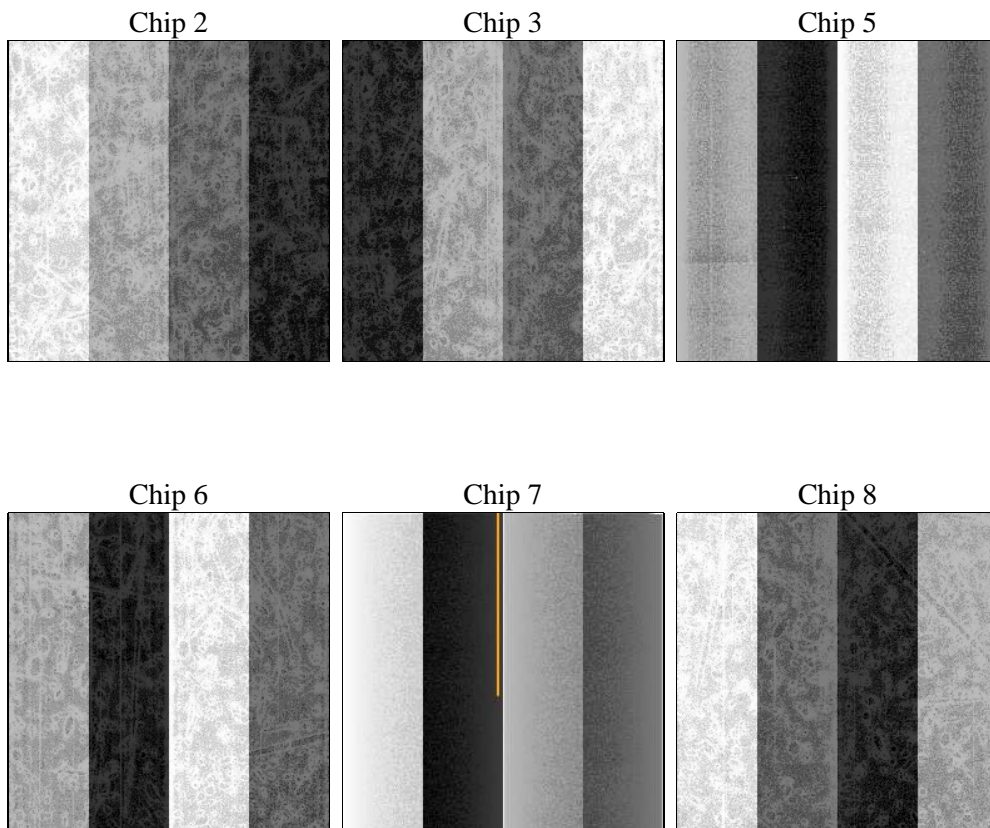
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	36258.425000	[s] Scheduled observation exposure time
ascdsver	8.5	Processing system revision	ontime	36216.929026932	Sum of GTIs [s]
caldsver	4.5.4	&#160	ontime2	36210.488255918	Sum of GTIs [s]
date	2012-12-08T23:50:36	Date and time of file creation	ontime3	36216.805906922	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	36216.887986928	Sum of GTIs [s]
			ontime6	36216.846946925	Sum of GTIs [s]
			ontime7	36216.929026932	Sum of GTIs [s]
			ontime8	36216.764866948	Sum of GTIs [s]
			l1events	1987931	Number of level 1 events

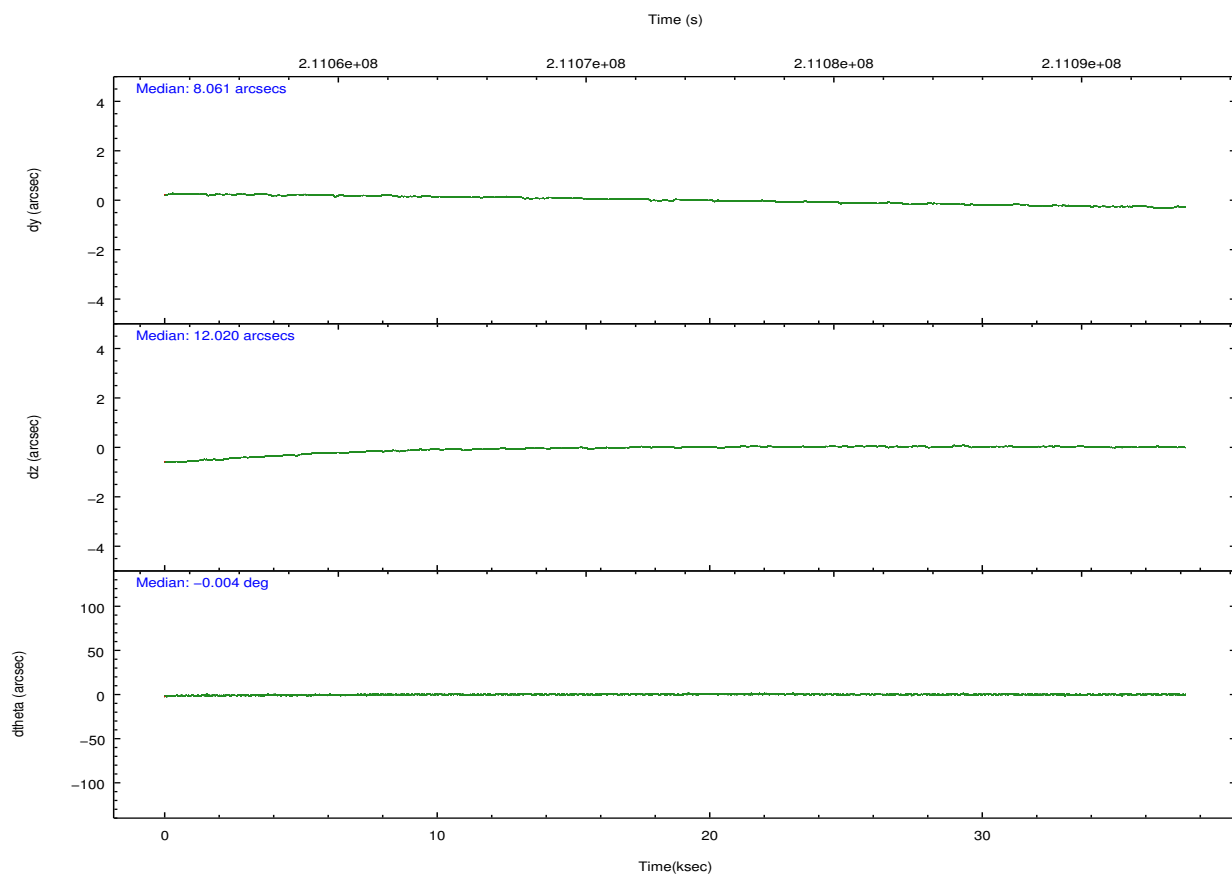
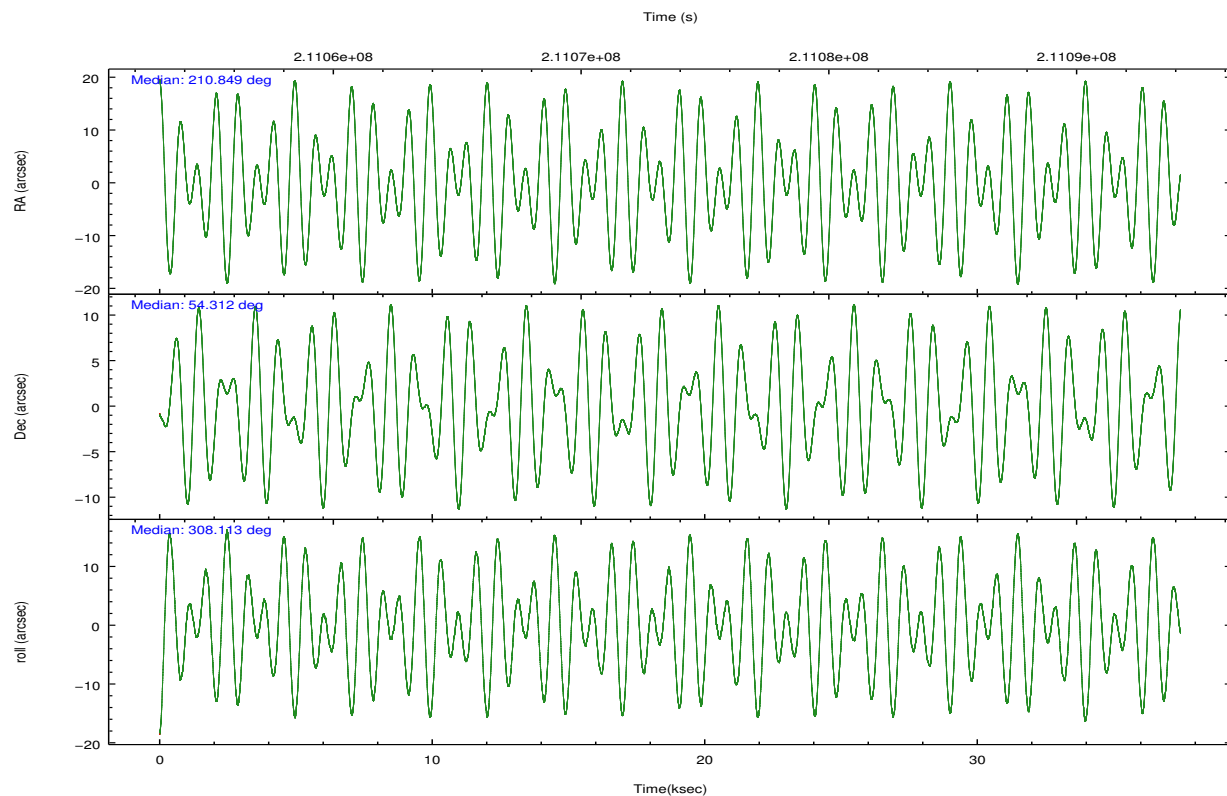
### 2.1.4 Events

	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	285116	268890	420477	280182	381297	351969	grade 0 events	15103	15161	22991	14074	16747	25093
rejected events	251603	235539	224327	245964	218341	275833		5%	5%	5%	5%	4%	7%
rejected %	88%	87%	53%	87%	57%	78%	grade 1 events	193	156	523	144	355	223
								0%	0%	0%	0%	0%	0%
							grade 2 events	6715	6279	58582	7005	32879	16581
								2%	2%	13%	2%	8%	4%
							grade 3 events	3095	3197	7398	3277	14562	7849
								1%	1%	1%	1%	3%	2%
							grade 4 events	3142	3126	7115	3234	14612	7452
								1%	1%	1%	1%	3%	2%
							grade 5 events	10978	12221	29974	12729	35516	16506
								3%	4%	7%	4%	9%	4%
							grade 6 events	5463	5592	100083	6630	84172	19185
								1%	2%	23%	2%	22%	5%
							grade 7 events	240427	223158	193811	233089	182454	259080
								84%	82%	46%	83%	47%	73%

## 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	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	210.806153	210.8497243724701	Subarray requested	NONE	NONE
[deg] Pointing Dec	54.321537	54.3117264052059	Alternating exposures requested	N	N
[deg] Pointing Roll	307.998039	308.1192783992469	[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)	211056062.184000	211054596.49445			
Observation start date	2004-09-08T18:39:58	2004-09-08T18:16:36			
[s] Observation end time (MET)	211092321.184000	211092549.68364			
Observation end date	2004-09-09T04:44:17	2004-09-09T04:49:09			
Read mode	TIMED	TIMED			

## 2.3 Aspect

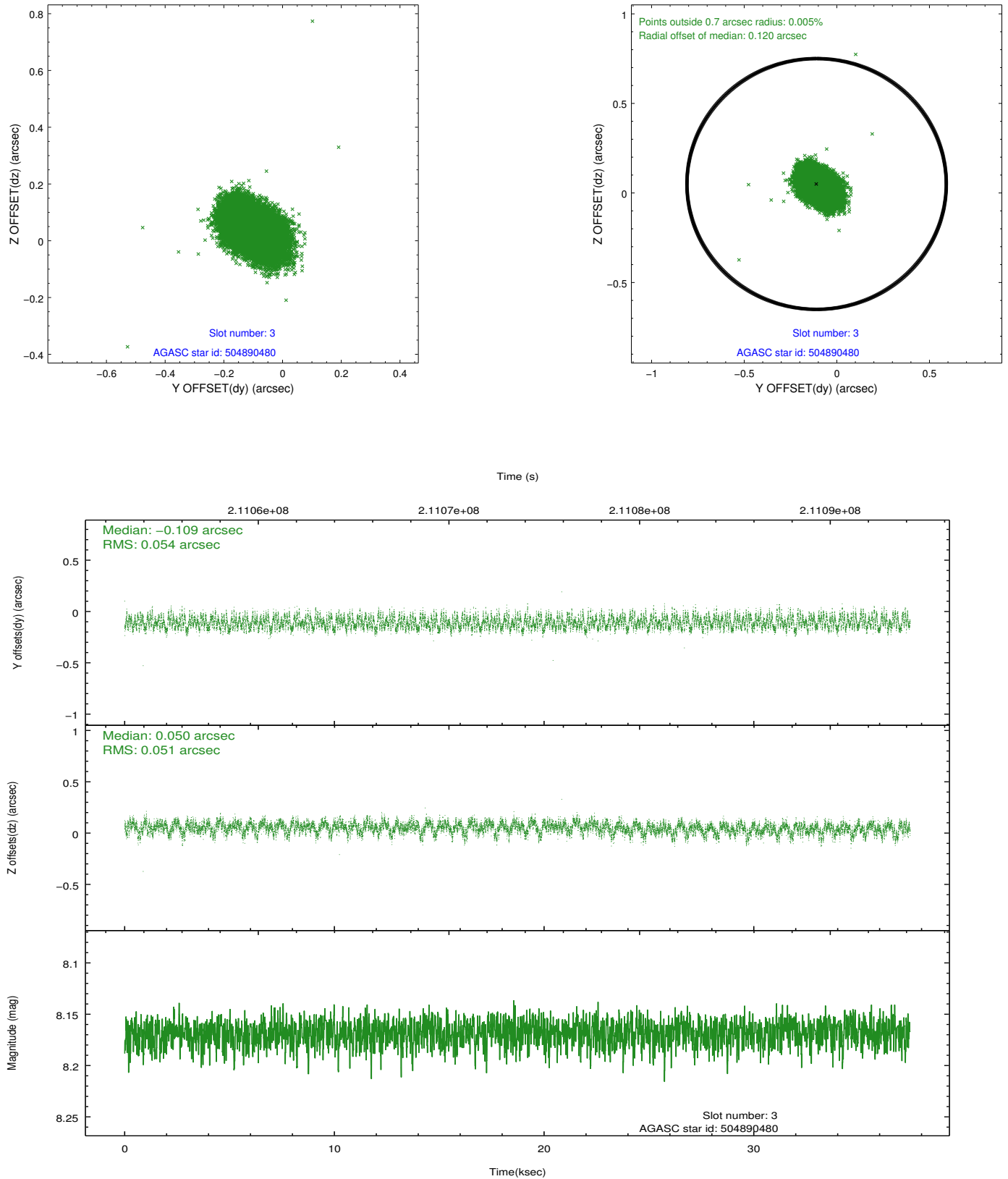


### Slot Statistics

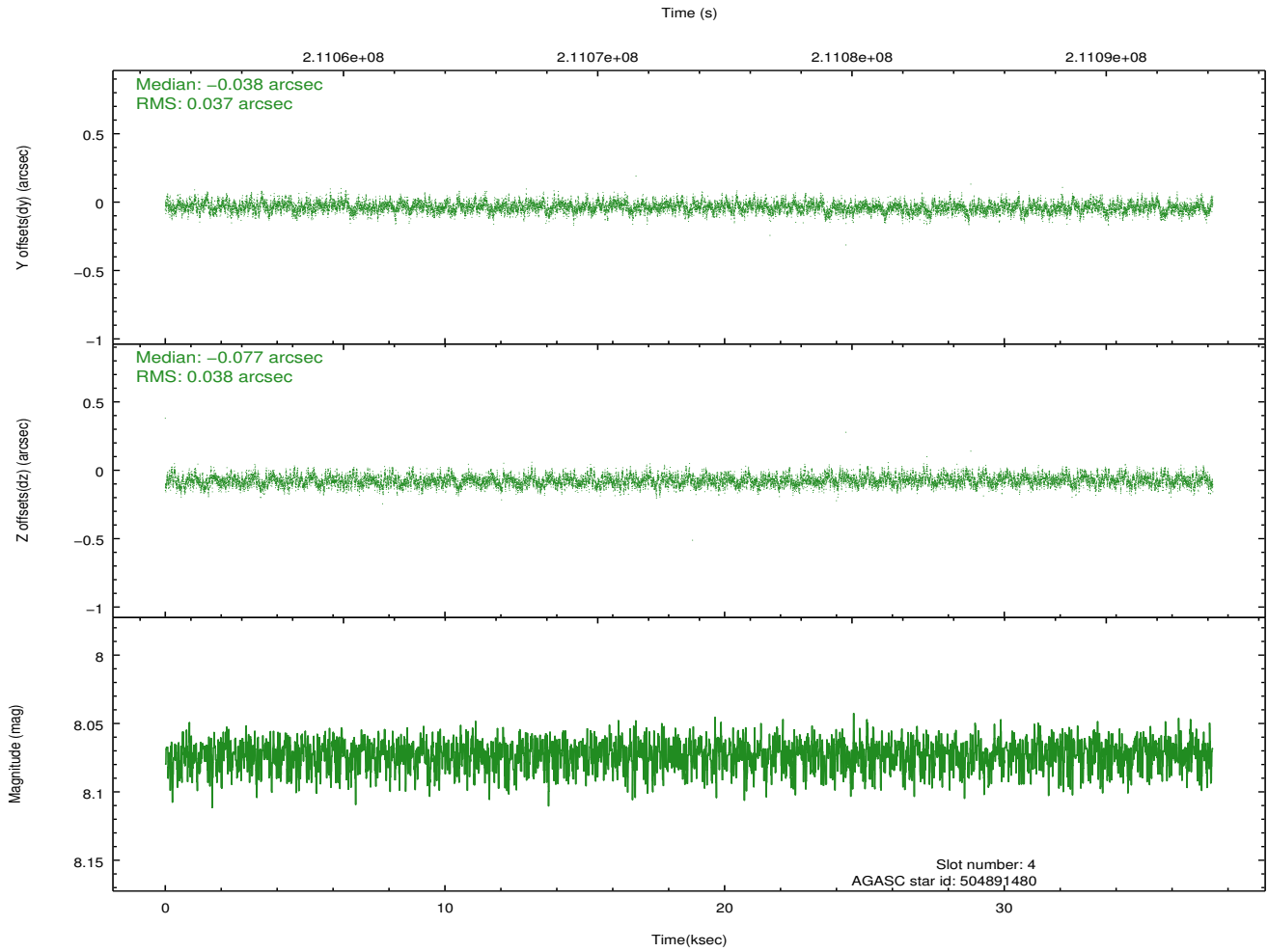
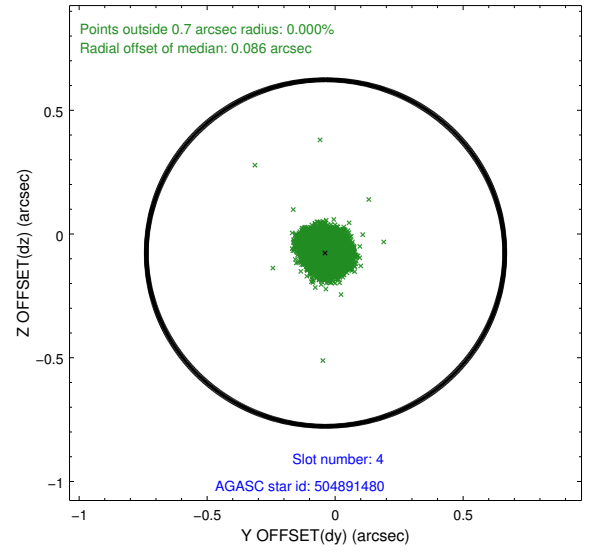
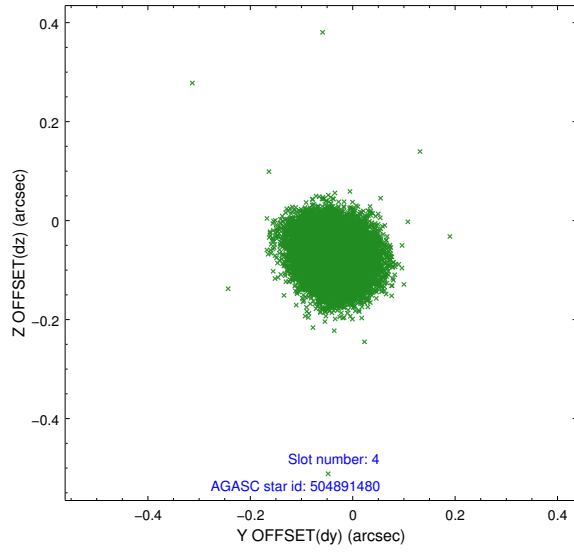
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	9134	-0.011	-0.016	0.011	0.017	0.000000	0.000000	-760.86	-1733.25
1	FID	ACIS-S-4	7.20	9136	0.076	0.010	0.011	0.019	0.000000	0.000000	2152.50	175.22
2	FID	ACIS-S-5	7.23	9136	-0.096	0.016	0.010	0.016	0.000000	0.000000	-1813.74	168.94
3	GUIDE	504890480	8.17	18269	-0.109	0.050	0.079	0.127	210.132463	53.768436	681.77	-2351.35
4	GUIDE	504891480	8.07	18271	-0.038	-0.077	0.056	0.091	210.708012	54.666096	-1103.20	602.79
5	GUIDE	504894408	9.28	18261	0.034	0.098	0.094	0.153	211.942794	54.047749	2240.47	1299.03
6	GUIDE	504894856	8.98	18259	0.012	-0.041	0.084	0.140	209.819510	54.132689	-756.26	-2049.16
7	GUIDE	505292416	9.29	18260	0.102	-0.031	0.093	0.151	210.920759	55.040479	-1894.56	1779.85

## 2.4 Star Slots

### 2.4.1 Slot 3

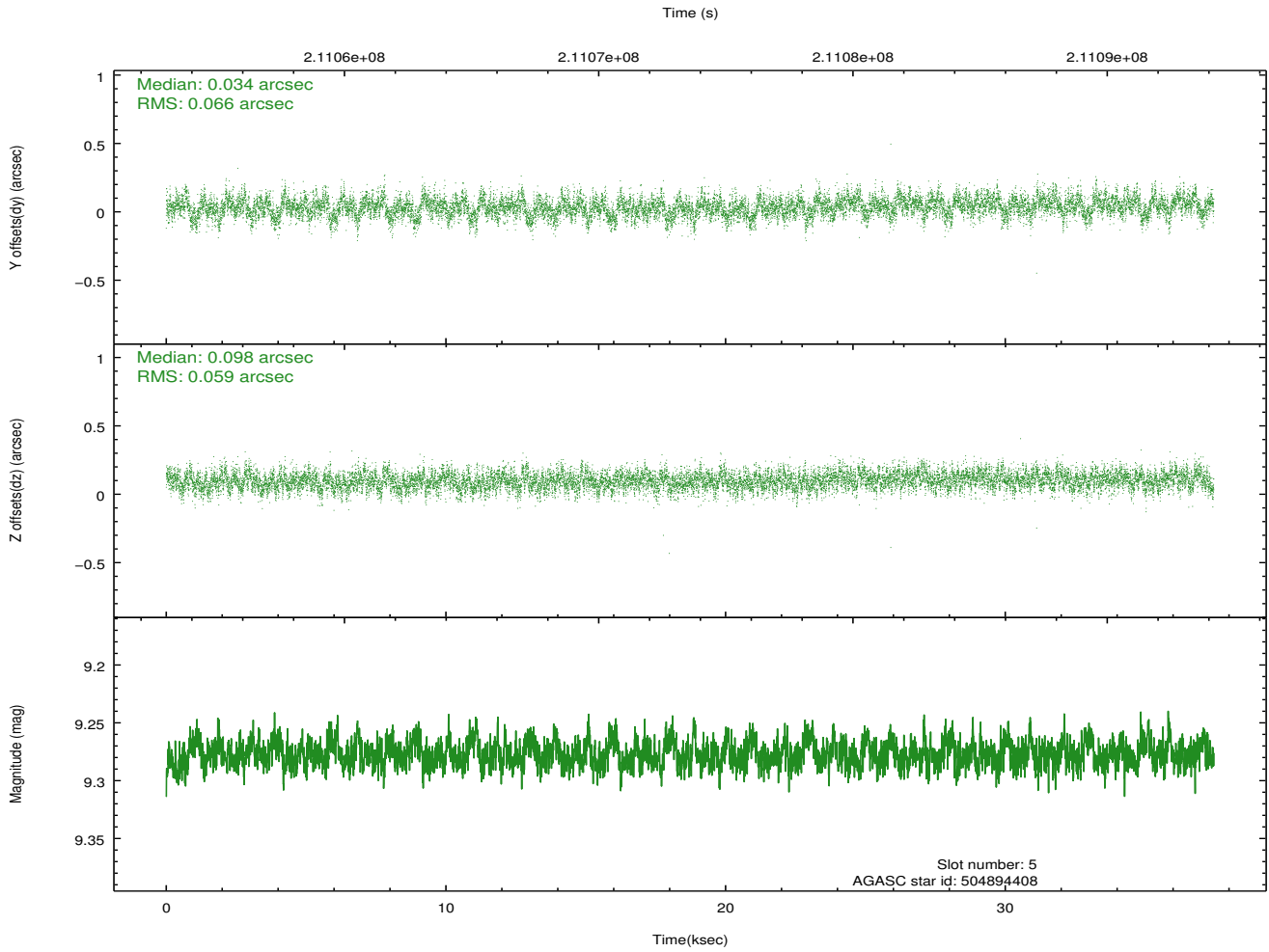
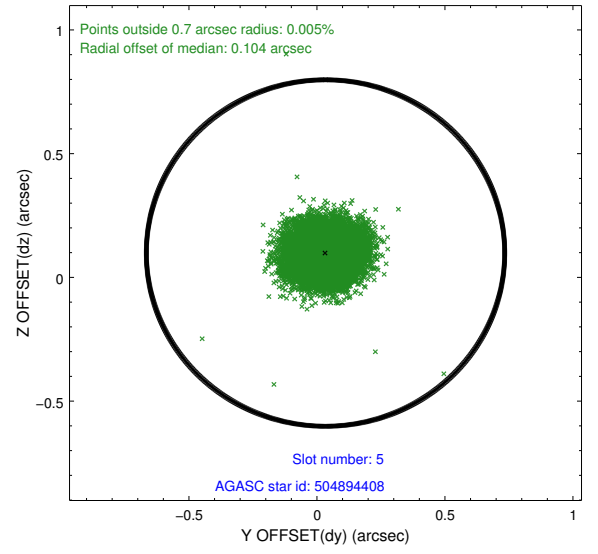
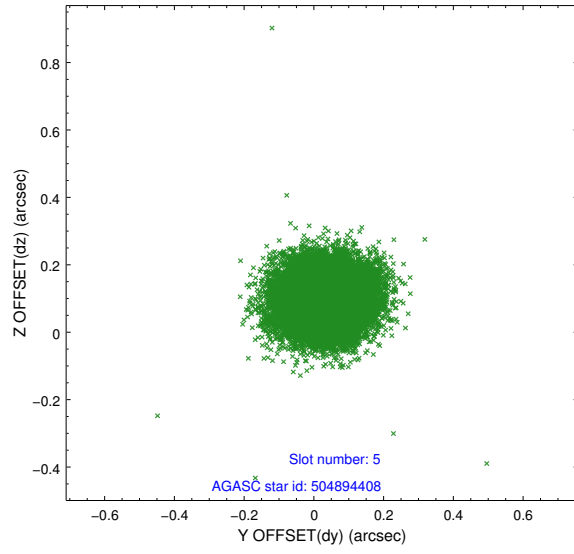


## 2.4.2 Slot 4

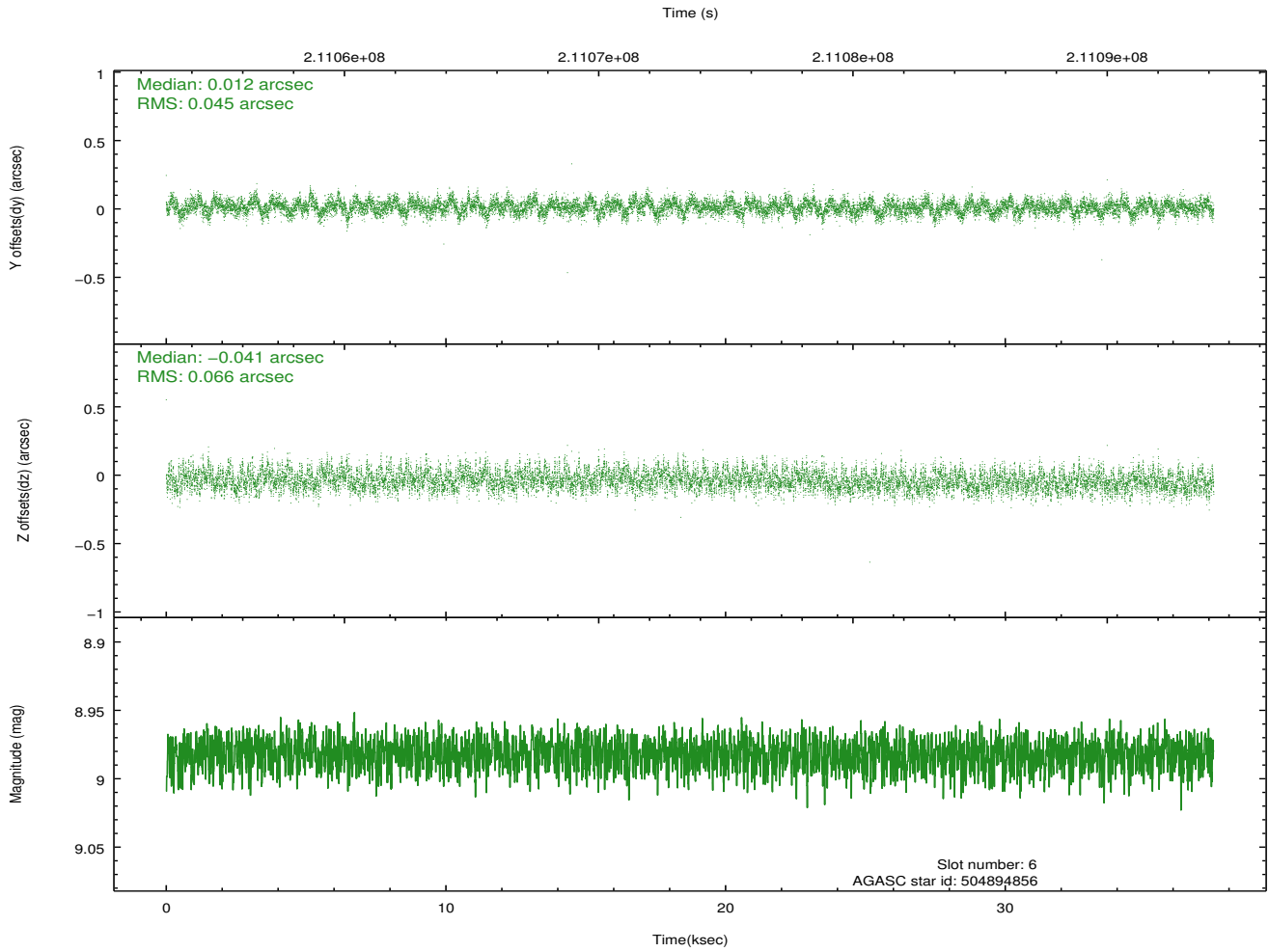
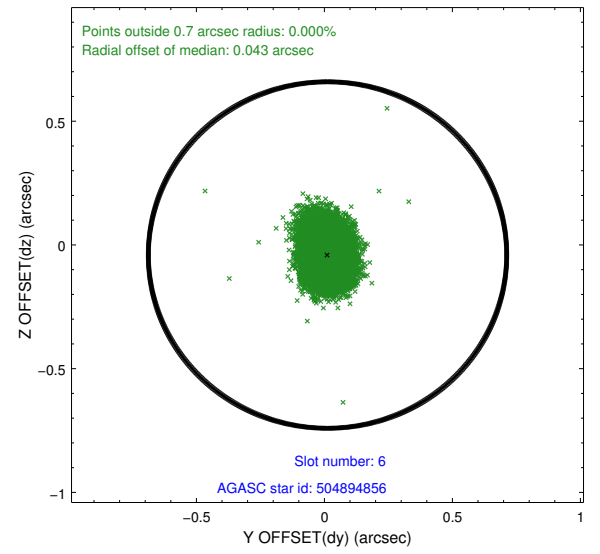
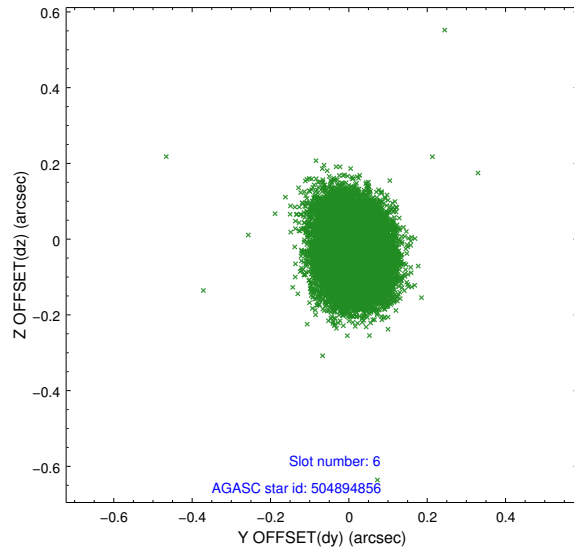




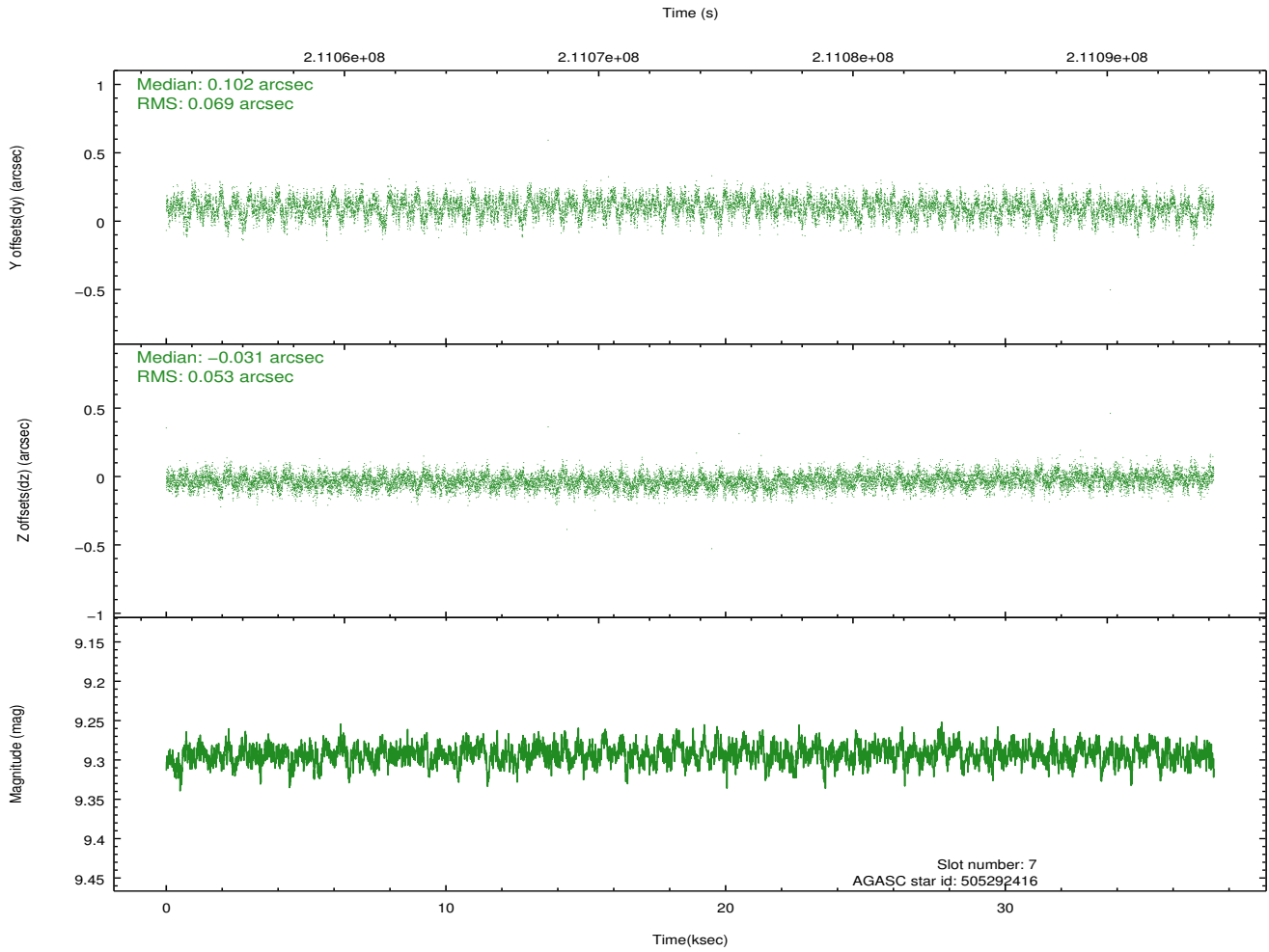
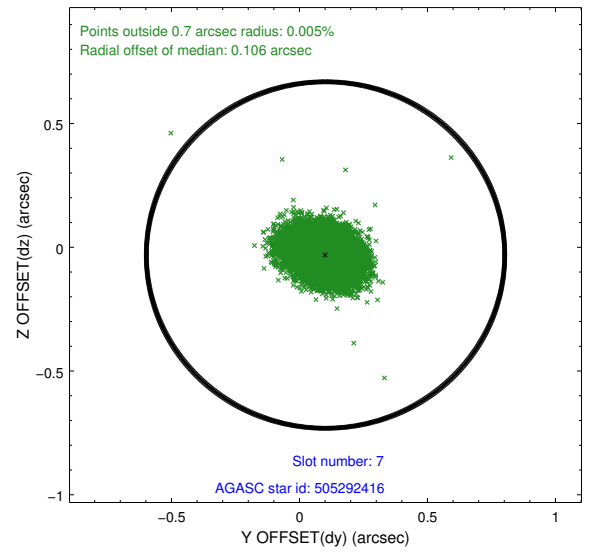
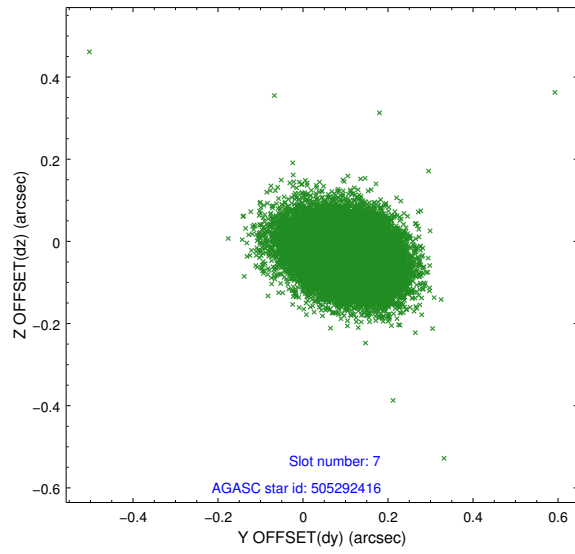
### 2.4.3 Slot 5



## 2.4.4 Slot 6

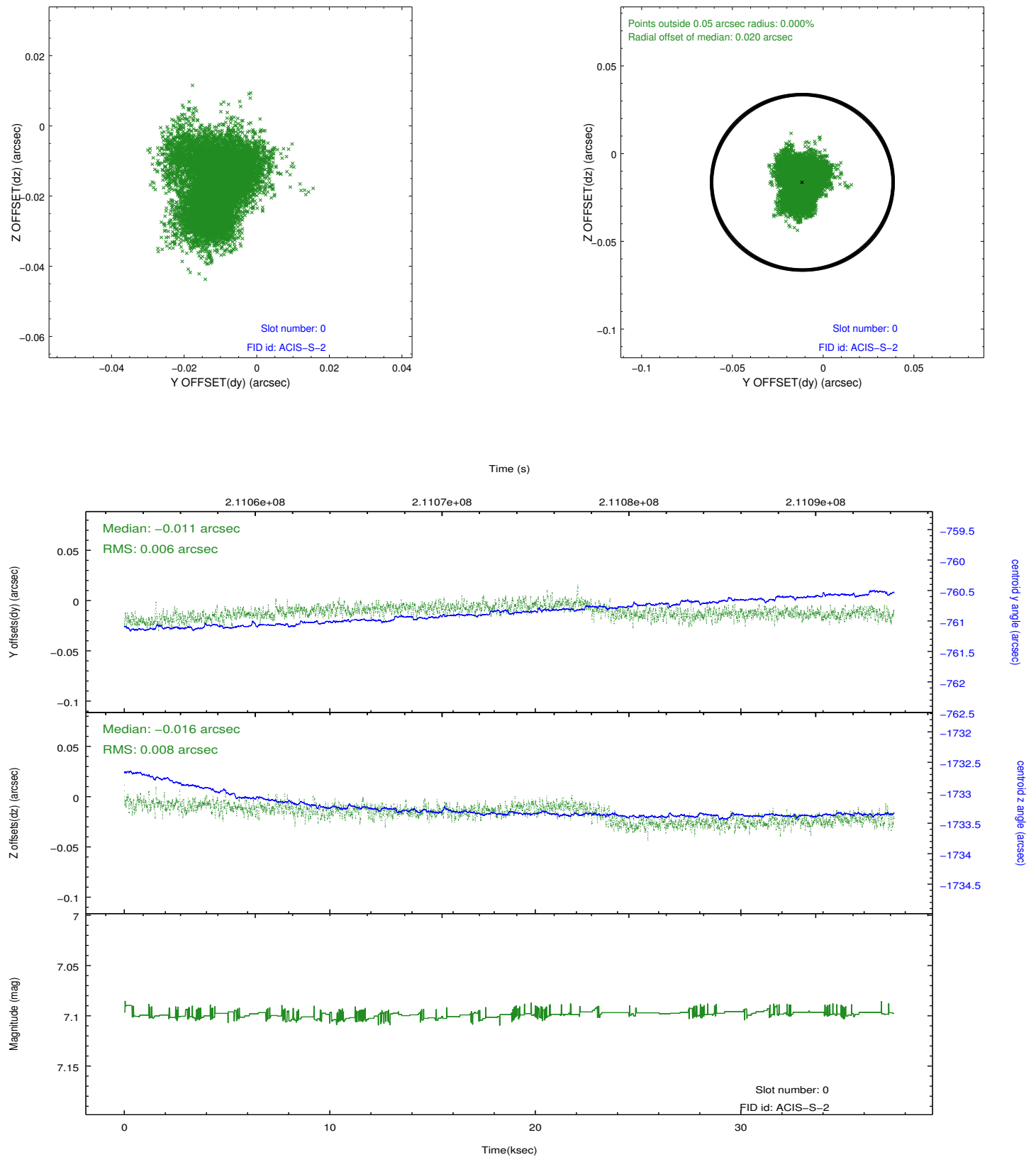


### 2.4.5 Slot 7

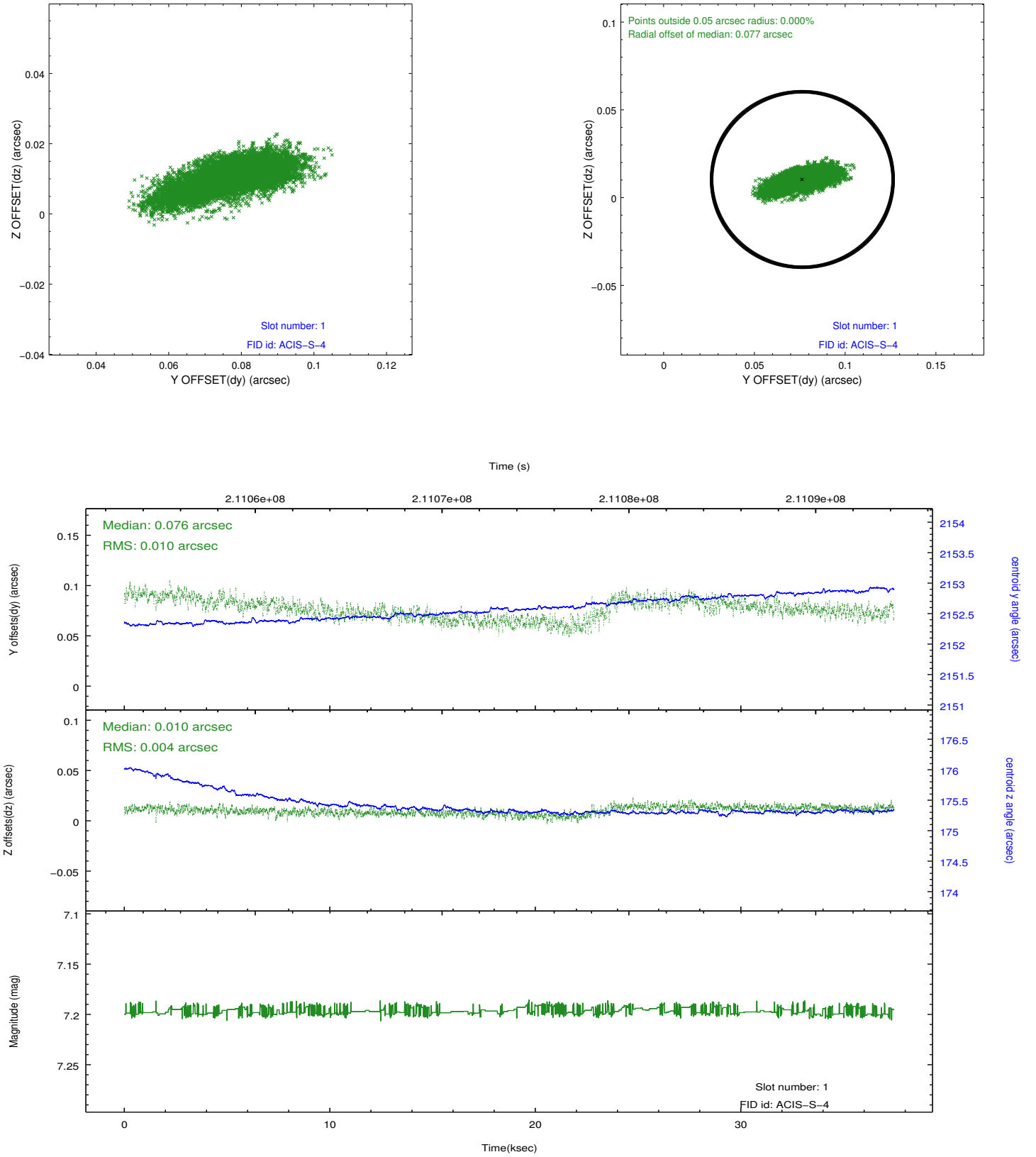


## 2.5 FID Slots

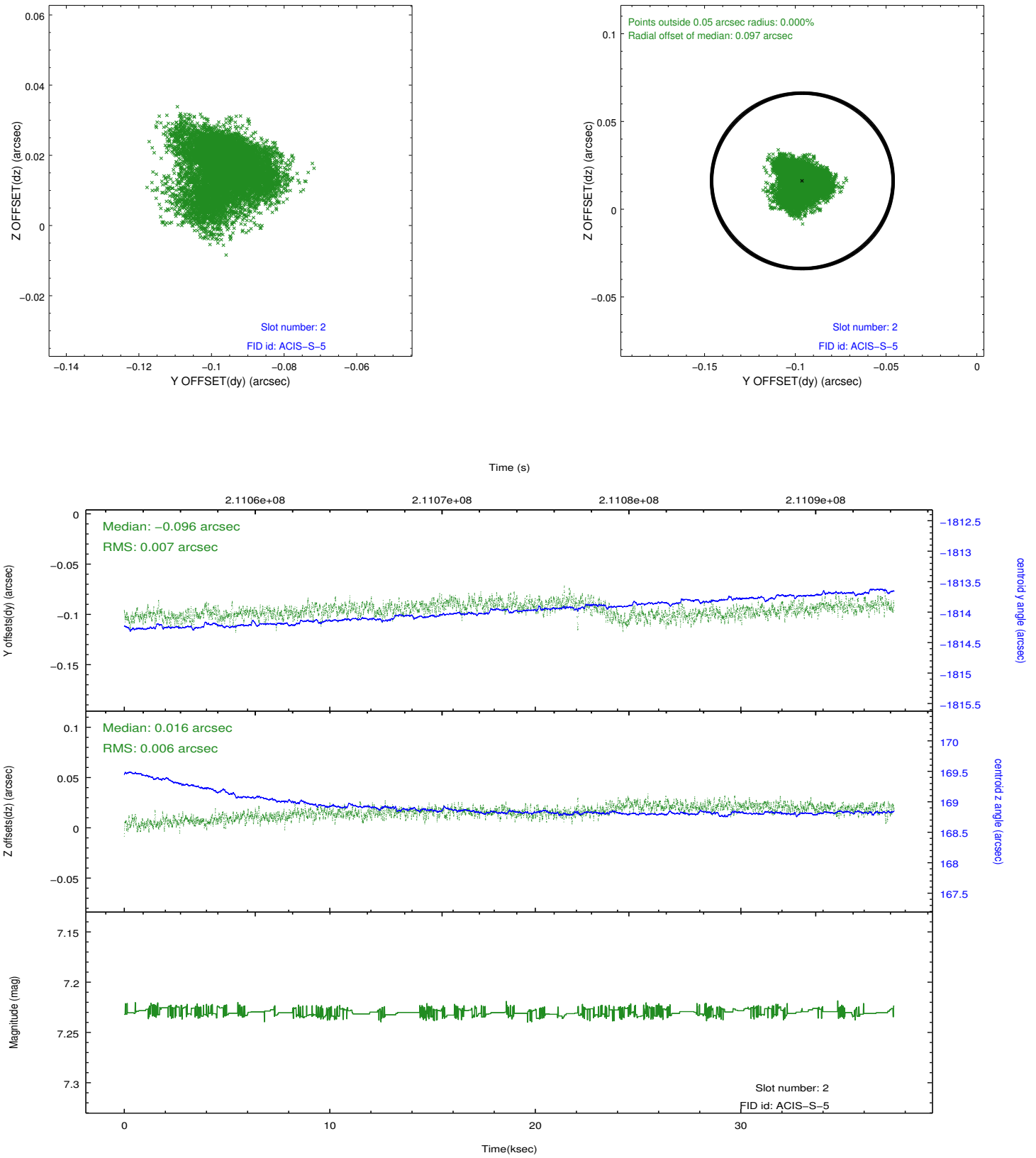
### 2.5.1 Slot 0



## 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)	2012.12.31
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	36.204

### A.2 Comments