

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 11800 - L2 Version 2  
Chandra X-Ray Center

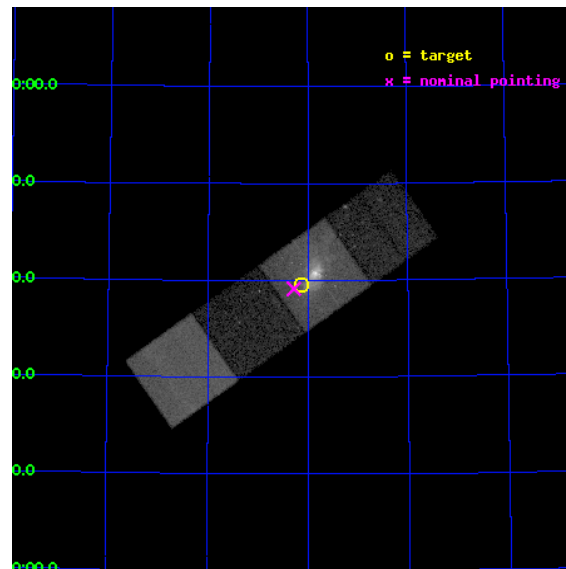
L2 Processing Date : Jun 30 2012

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# 1 Front

seq_num	600738	Sequence number
obs_id	11800	Observation id
title	Wide, deep and sharp: A comprehensive observation of M82, the exemplar of starburst activity	Proposal title
observer	Dr David Strickland	Principal investigator
object	M82-SE	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	149.0325	Observer's specified target RA [deg]
dec_targ	69.659472	Observer's specified target Dec [deg]
ra_nom	149.07078417463	Nominal RA [deg]
dec_nom	69.6521149245	Nominal Dec [deg]
roll_nom	324.67434122664	Nominal Roll [deg]
revision	2	Processing version of data
ontime	17046.891677082	Sum of GTIs [s]
livetime	16824.161487581	Livetime [s]
ontime5	17046.850637078	Sum of GTIs [s]
ontime6	17046.809597075	Sum of GTIs [s]
ontime7	17046.891677082	Sum of GTIs [s]
ontime8	17043.627596676	Sum of GTIs [s]
l2events	175171	Number of level 2 events

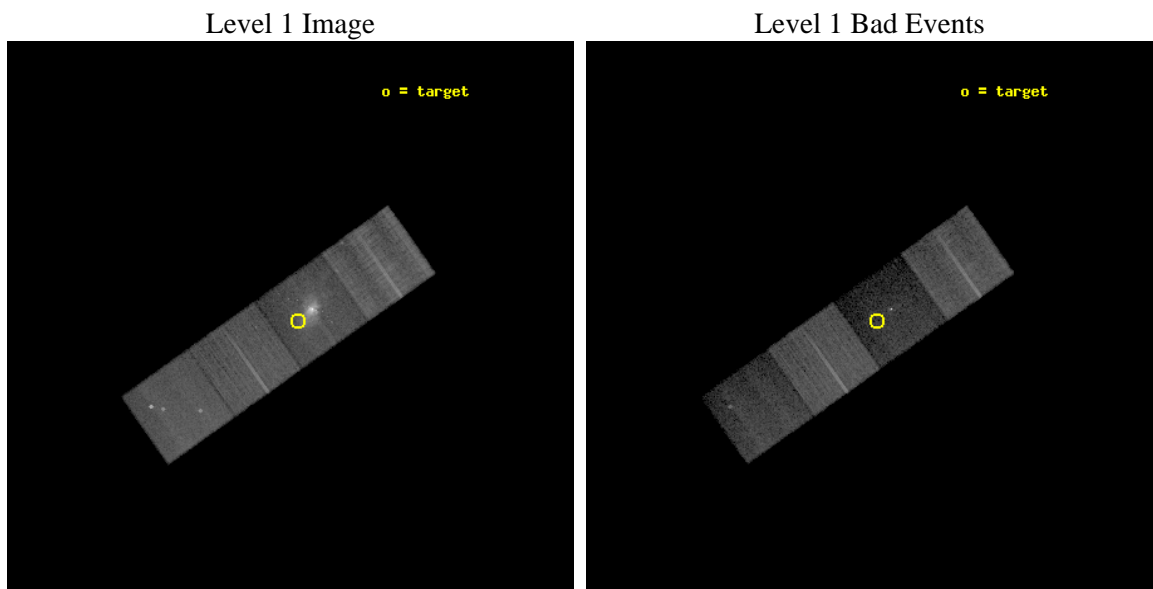




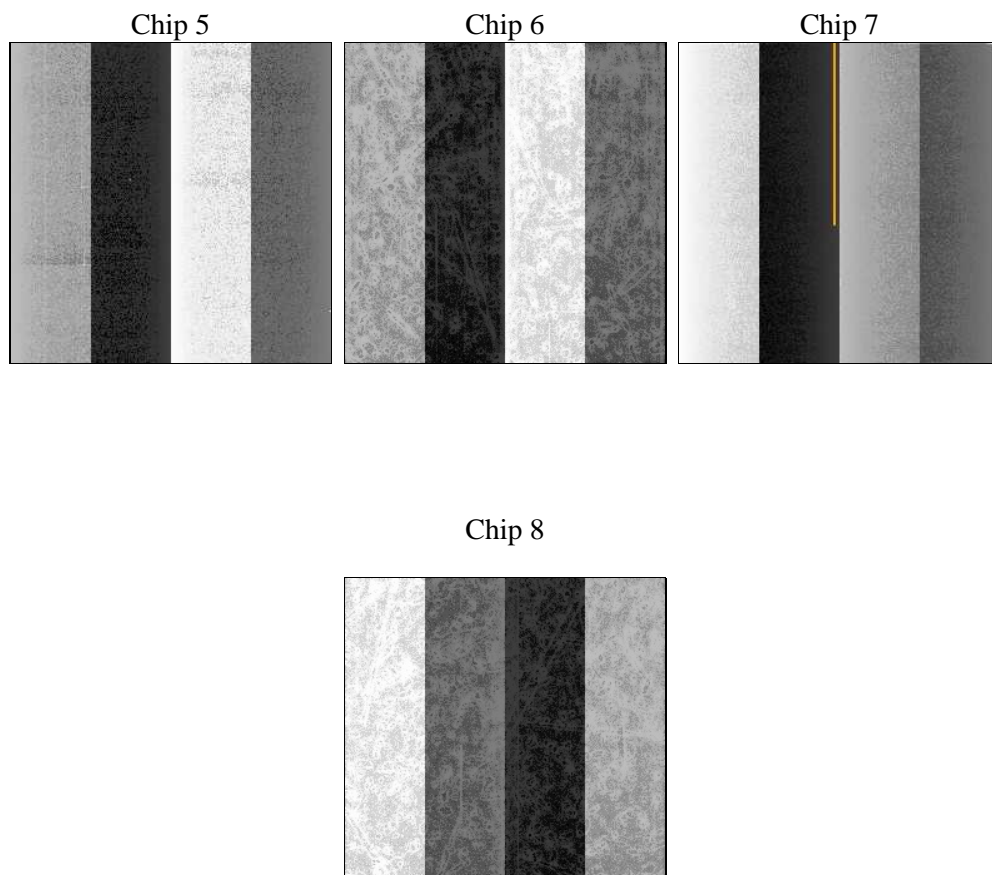
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	17000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	17046.891677082	Sum of GTIs [s]
caldsver	4.5.0	&#160	ontime5	17046.850637078	Sum of GTIs [s]
date	2012-06-30T13:49:46	Date and time of file creation	ontime6	17046.809597075	Sum of GTIs [s]
revision	2	Processing version of data	ontime7	17046.891677082	Sum of GTIs [s]
			ontime8	17043.627596676	Sum of GTIs [s]
			l1events	482675	Number of level 1 events

### 2.1.4 Events

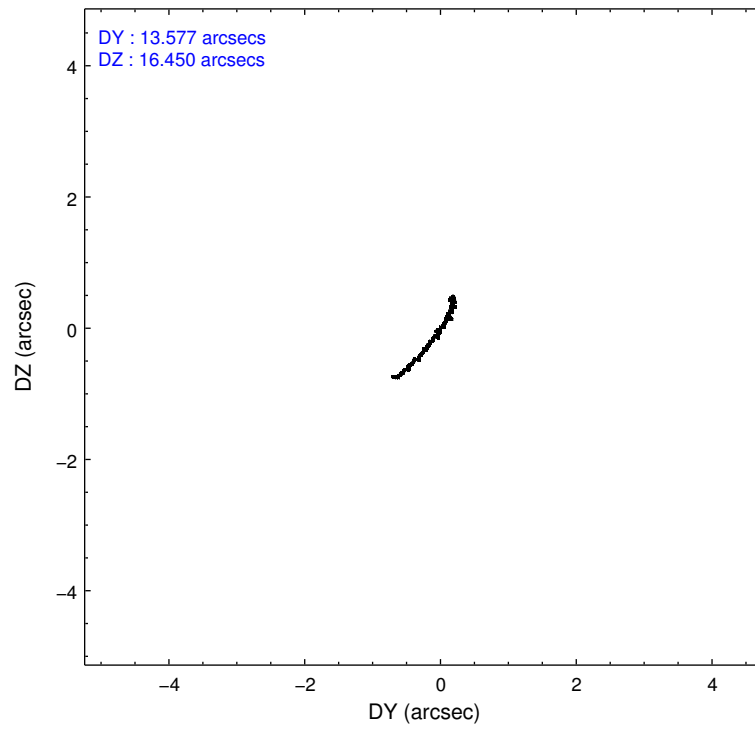
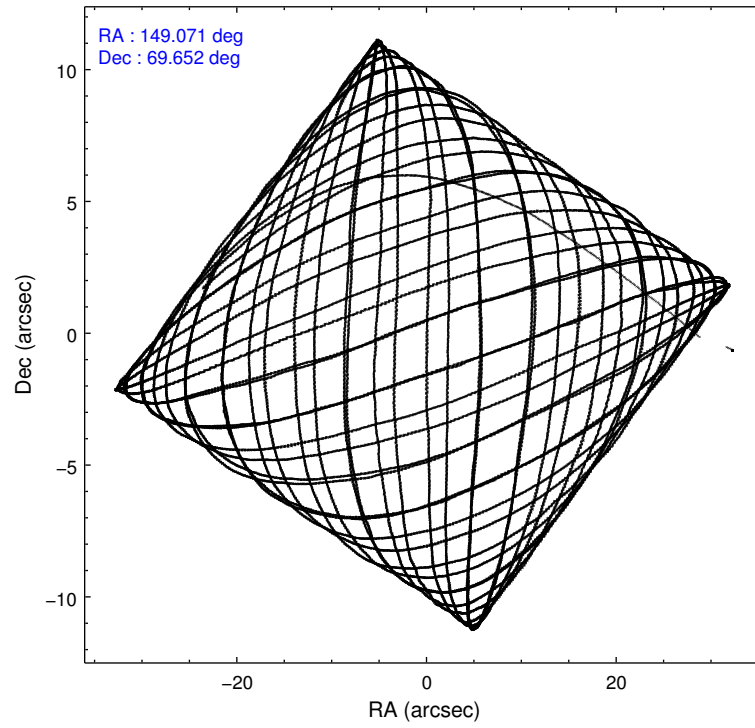
	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	106974	107354	134638	133709
rejected events	41280	96568	34171	94569
rejected %	38%	89%	25%	70%

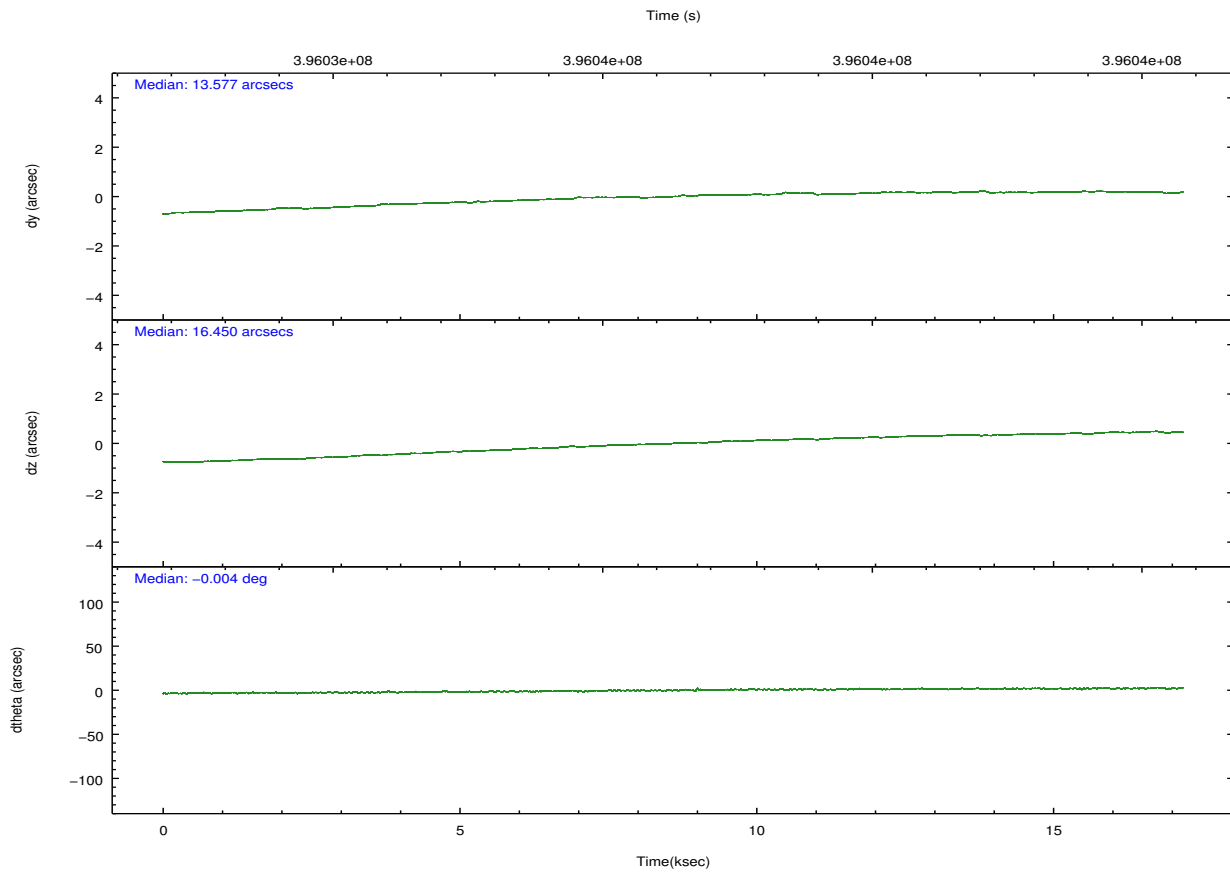
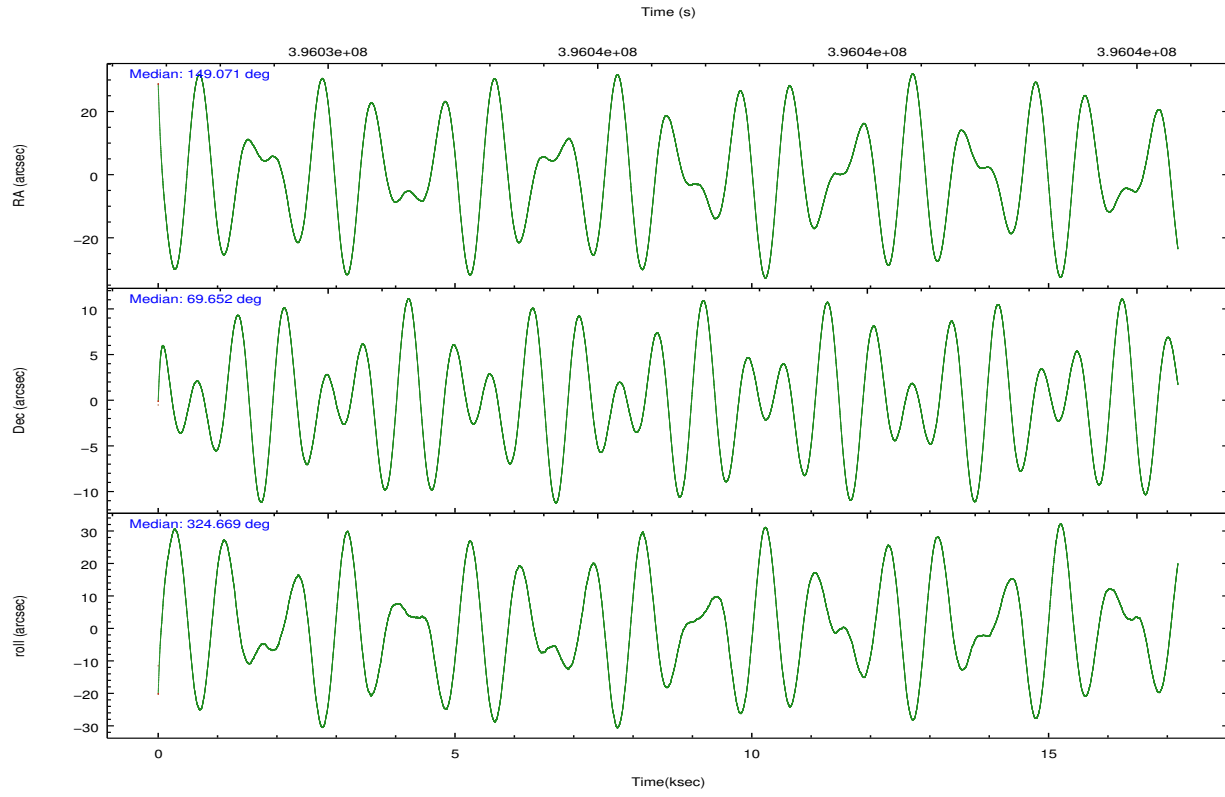
	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	10676	4615	23897	11744
	9%	4%	17%	8%
grade 1 events	631	59	460	121
	0%	0%	0%	0%
grade 2 events	20808	2325	25850	9320
	19%	2%	19%	6%
grade 3 events	3198	1081	10725	4214
	2%	1%	7%	3%
grade 4 events	3037	1043	10741	3788
	2%	0%	7%	2%
grade 5 events	8480	2264	8726	4174
	7%	2%	6%	3%
grade 6 events	27994	1728	29286	10079
	26%	1%	21%	7%
grade 7 events	32150	94239	24953	90269
	30%	87%	18%	67%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-5678	ACIS-5678	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	148.992401	149.0707841746288	CCD I2 on	N	N
[deg] Pointing Dec	69.654253	69.6521149244997	CCD I3 on	N	N
[deg] Pointing Roll	324.591199	324.674341226635	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O2	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	O1	Y
[s] Observation start time (MET)	396027891.184000	396026966.1428	CCD S5 on	N	N
Observation start date	2010-07-20T15:43:45	2010-07-20T15:29:26	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	396044891.184000	396045689.30625	On-chip summing requested	N	N
Observation end date	2010-07-20T20:27:05	2010-07-20T20:41:29	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



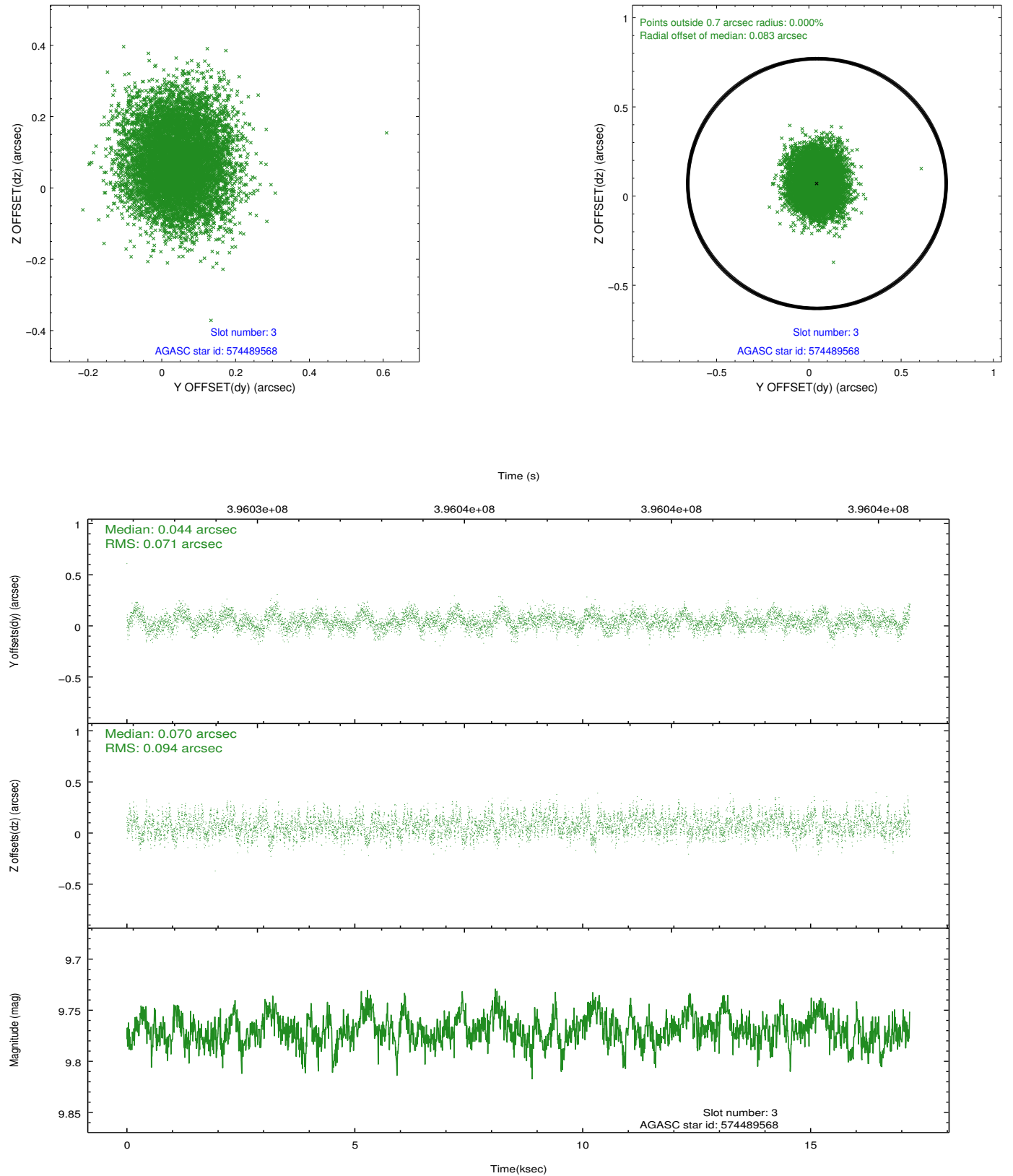


### Slot Statistics

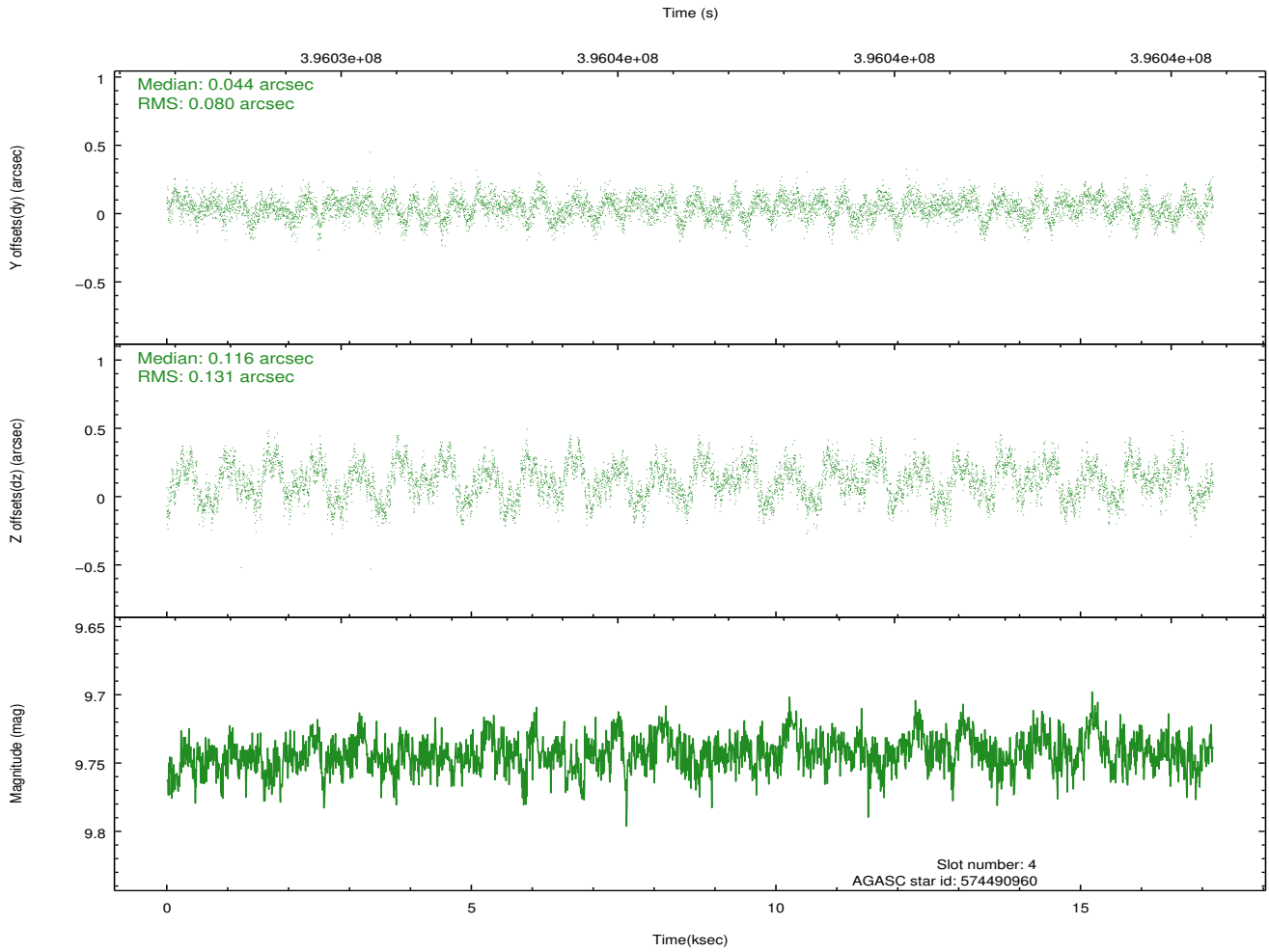
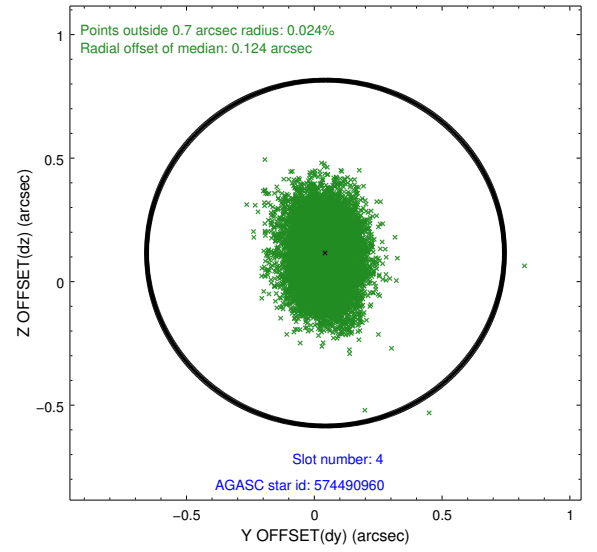
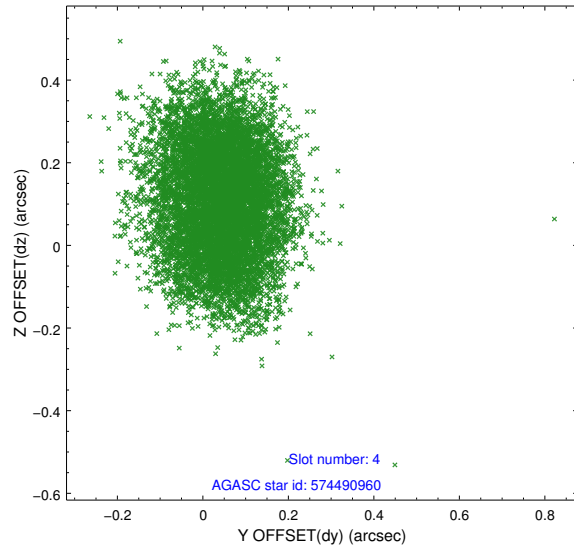
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.88	4191	-0.030	-0.006	0.010	0.015	0.000000	0.000000	-766.46	-1737.81
1	FID	ACIS-S-4	6.96	4191	0.150	0.016	0.008	0.015	0.000000	0.000000	2146.89	170.44
2	FID	ACIS-S-5	6.99	4191	-0.152	-0.002	0.009	0.018	0.000000	0.000000	-1819.10	164.37
3	GUIDE	574489568	9.77	8372	0.044	0.070	0.126	0.201	147.223974	69.438157	-1389.63	-1902.93
4	GUIDE	574490960	9.74	8370	0.044	0.116	0.165	0.260	148.185918	69.658768	-835.56	-566.44
5	GUIDE	574491872	9.26	8377	0.060	0.139	0.124	0.190	147.207613	69.765453	-2059.69	-937.63
6	GUIDE	574886464	9.82	8301	-0.016	-0.218	0.144	0.230	149.898674	70.203982	-251.00	2259.79
7	GUIDE	574886496	8.50	8374	-0.129	-0.112	0.065	0.105	148.945563	70.041136	-854.05	1102.27

## 2.4 Star Slots

### 2.4.1 Slot 3

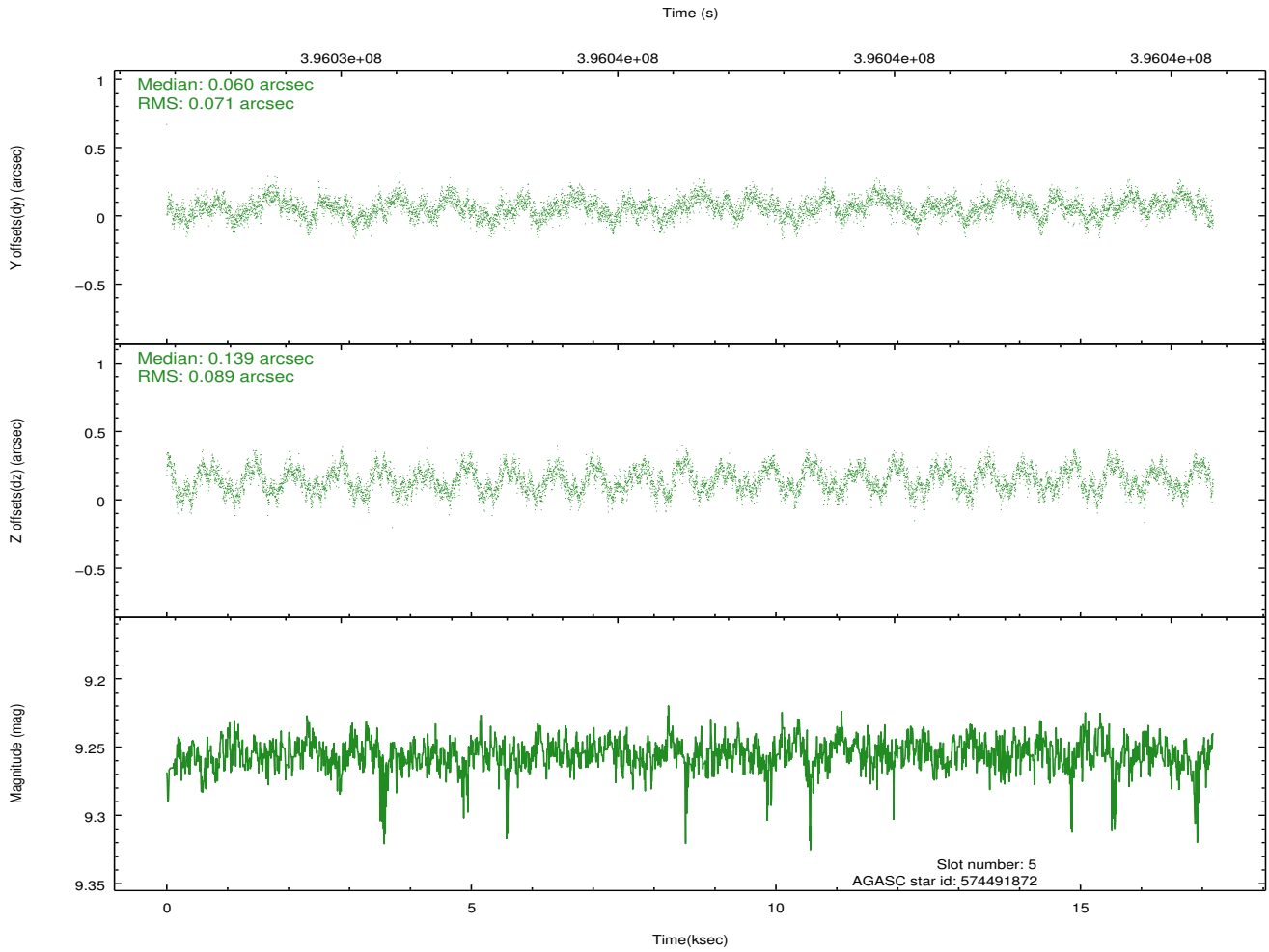
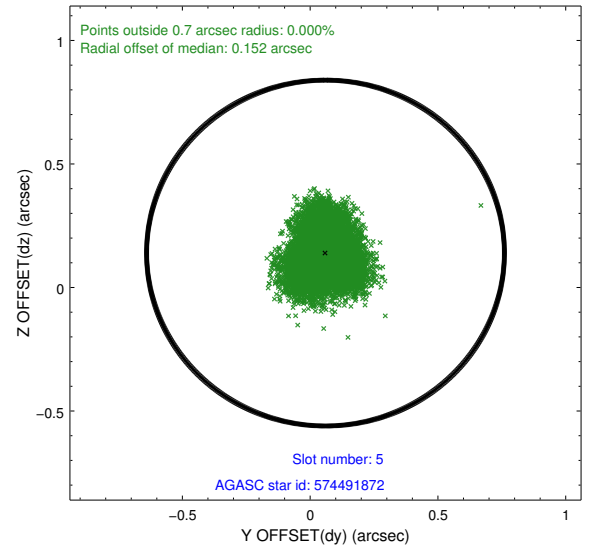
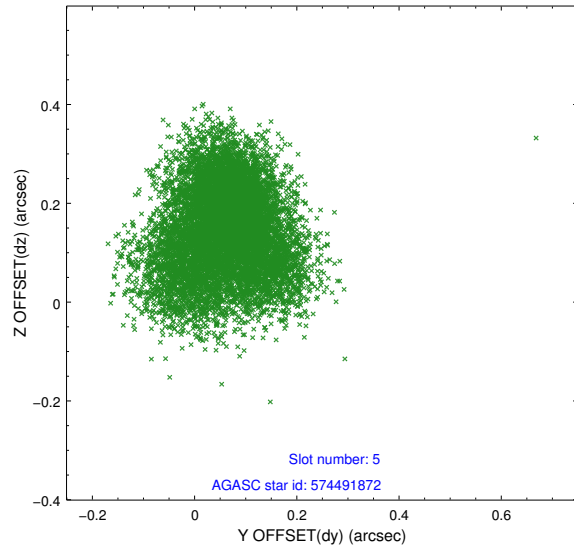


## 2.4.2 Slot 4

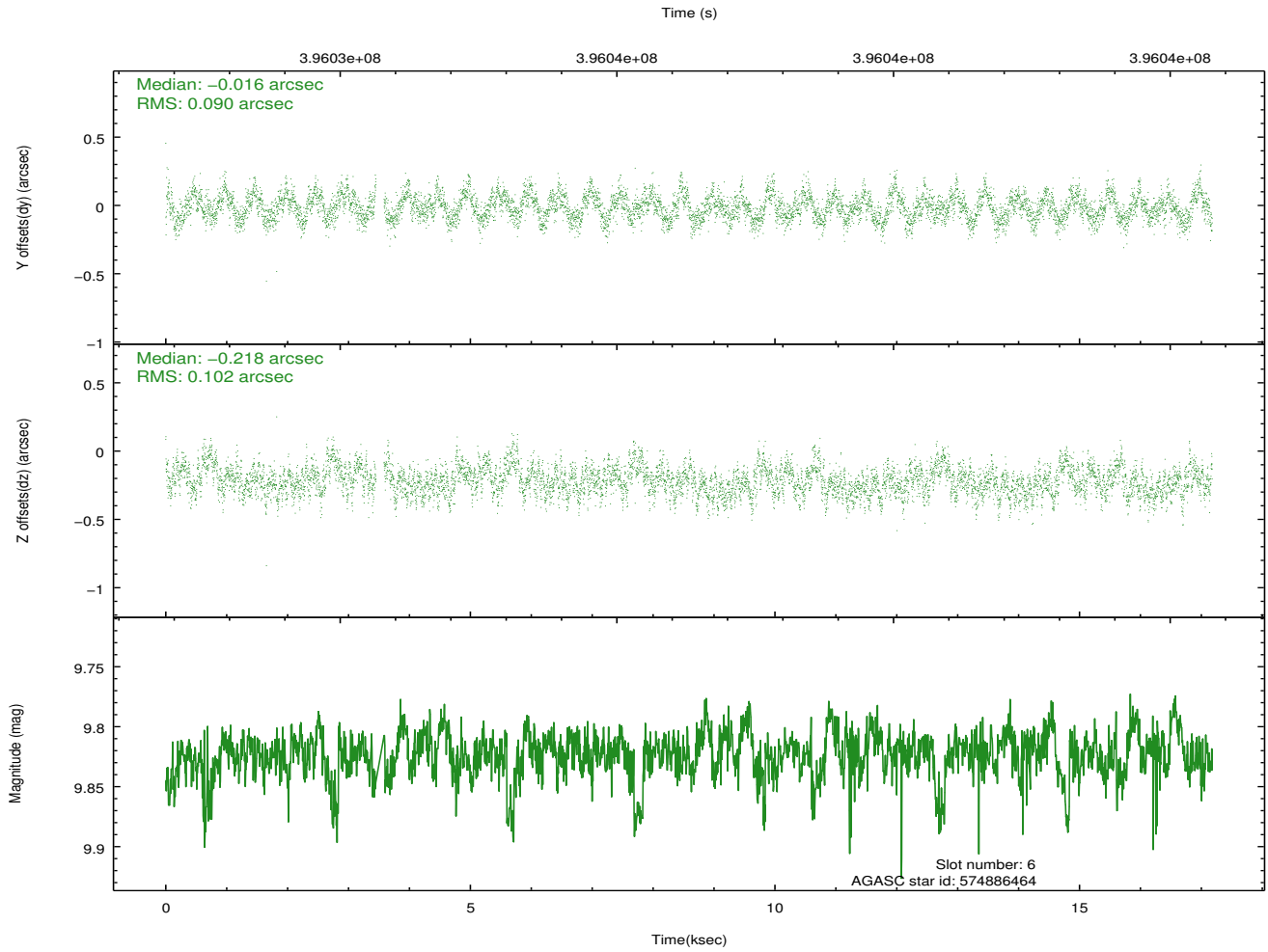
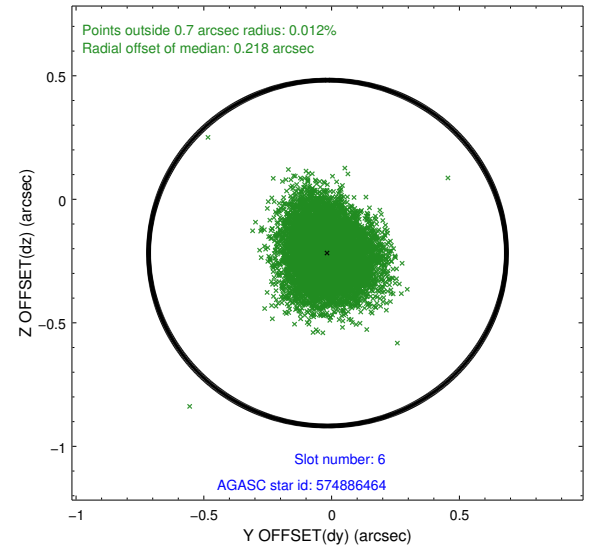
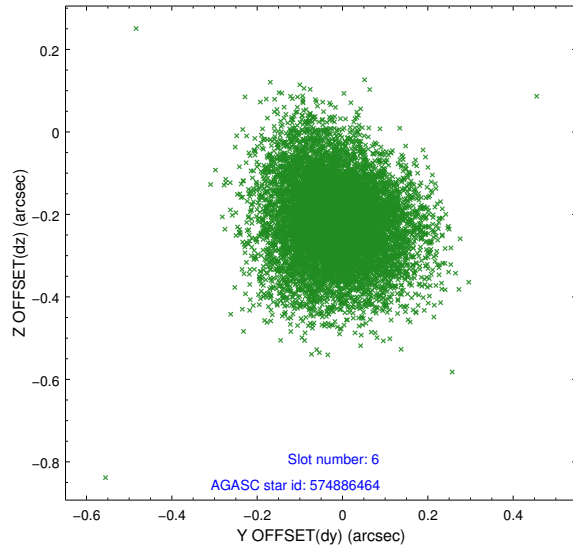




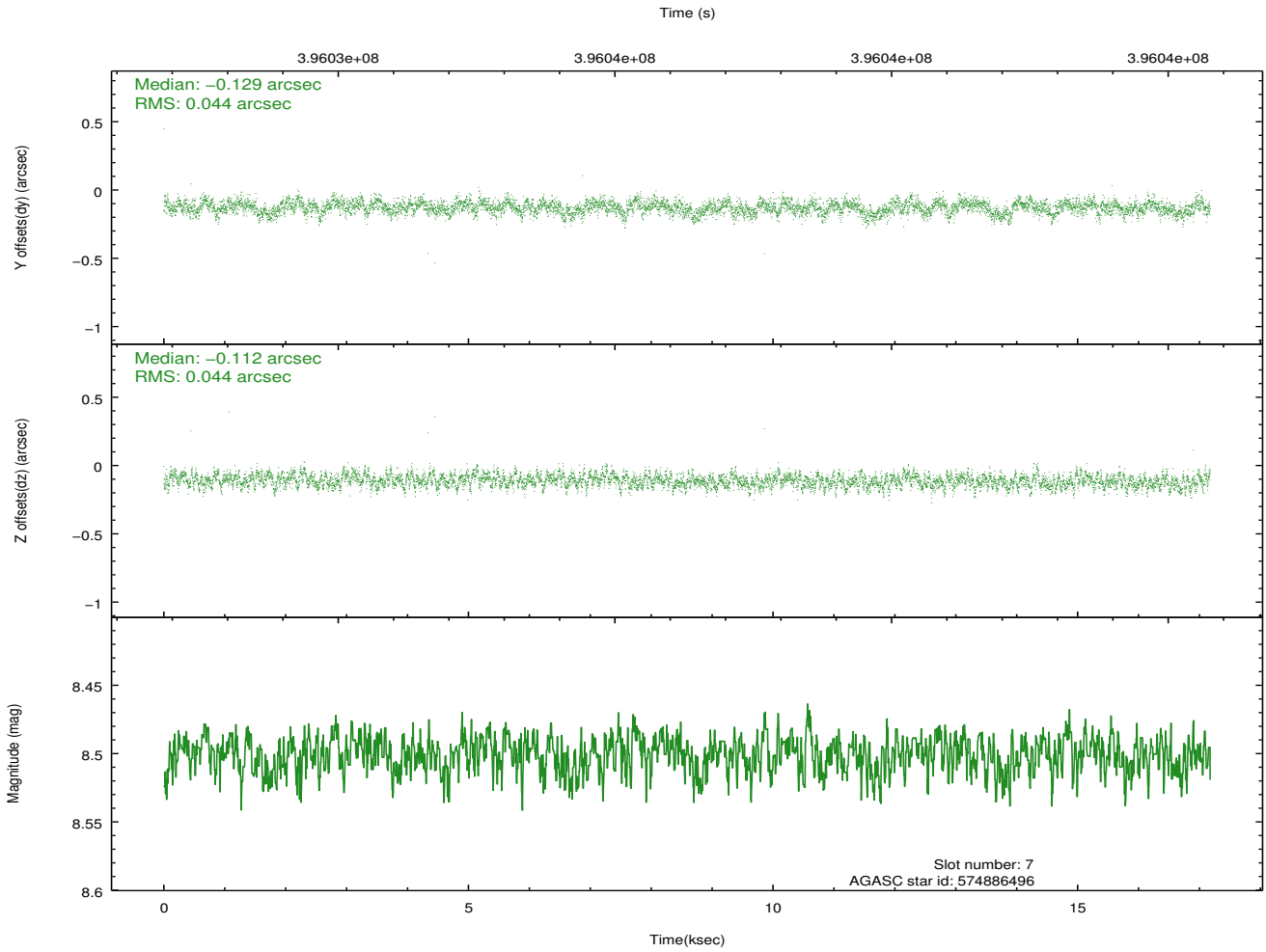
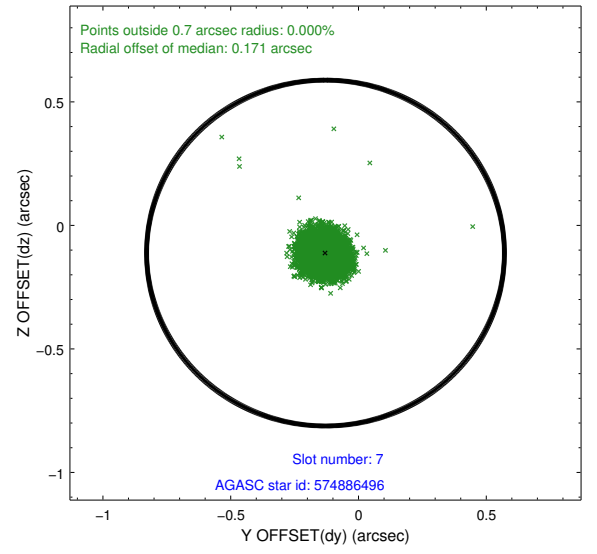
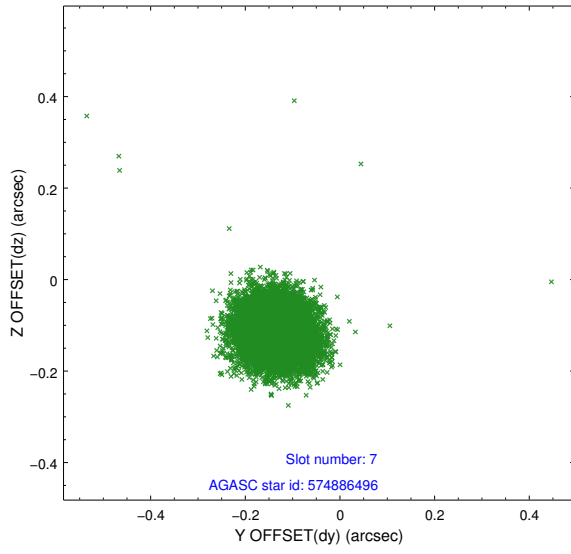
### 2.4.3 Slot 5



## 2.4.4 Slot 6

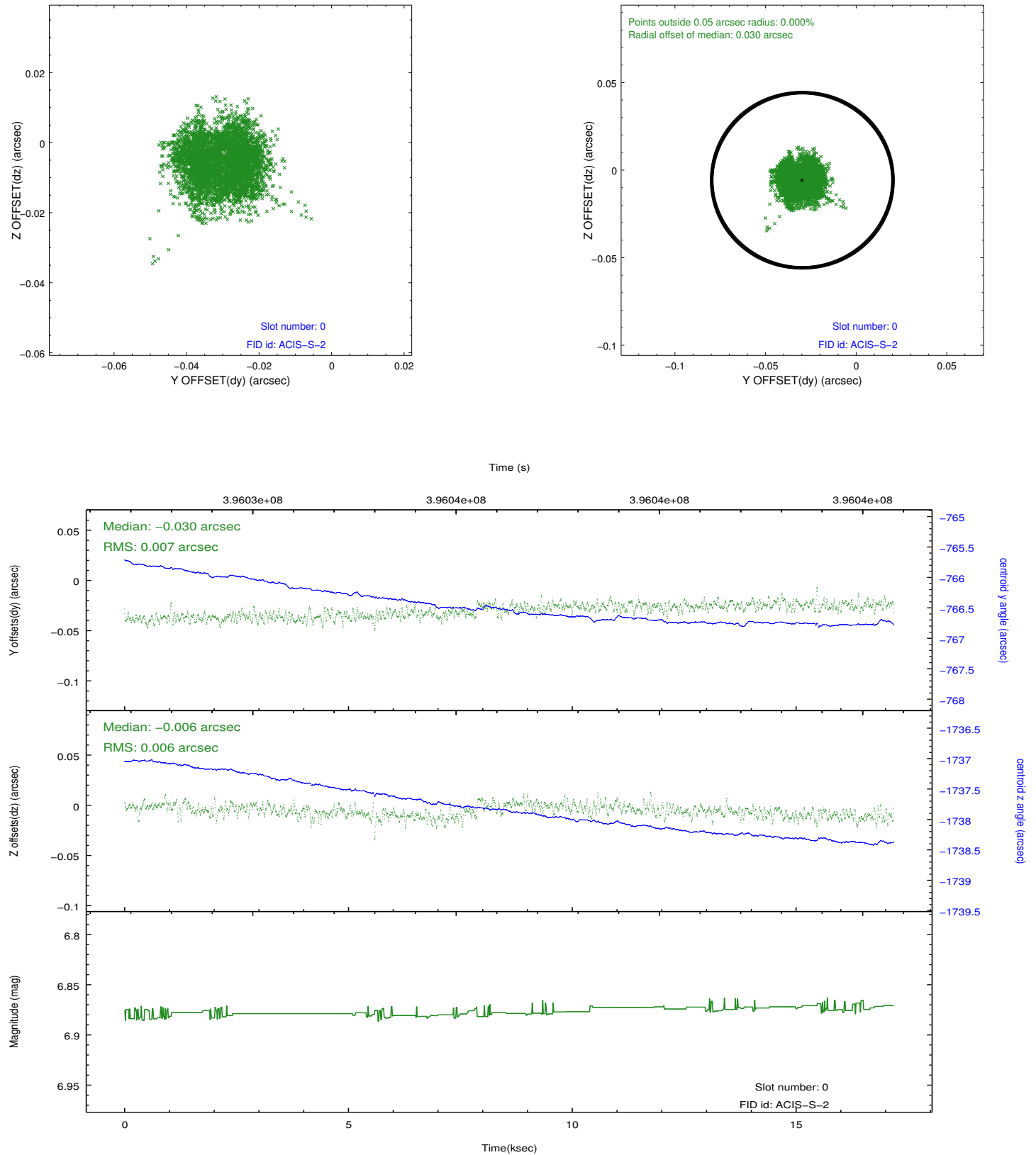


## 2.4.5 Slot 7

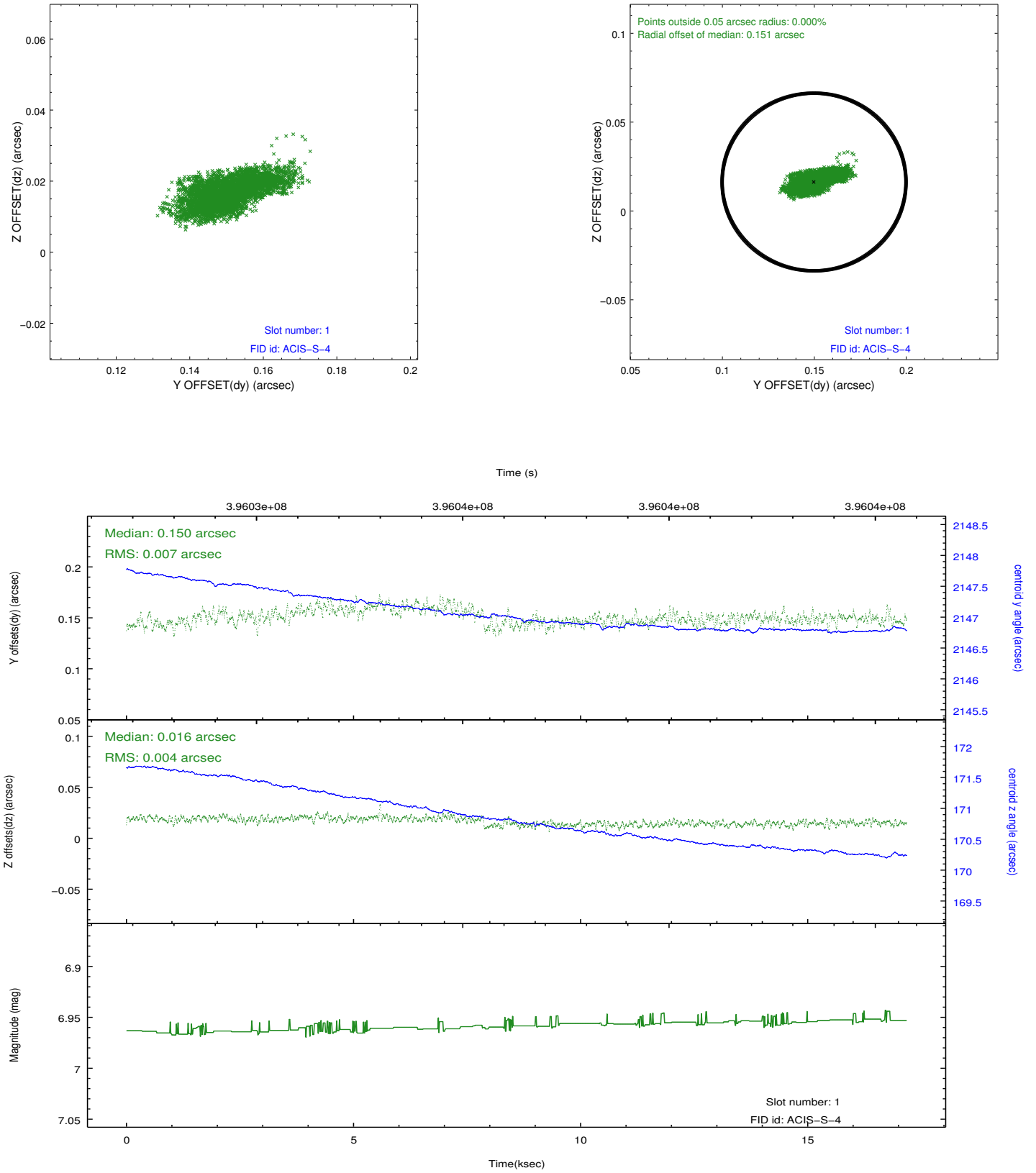


## 2.5 FID Slots

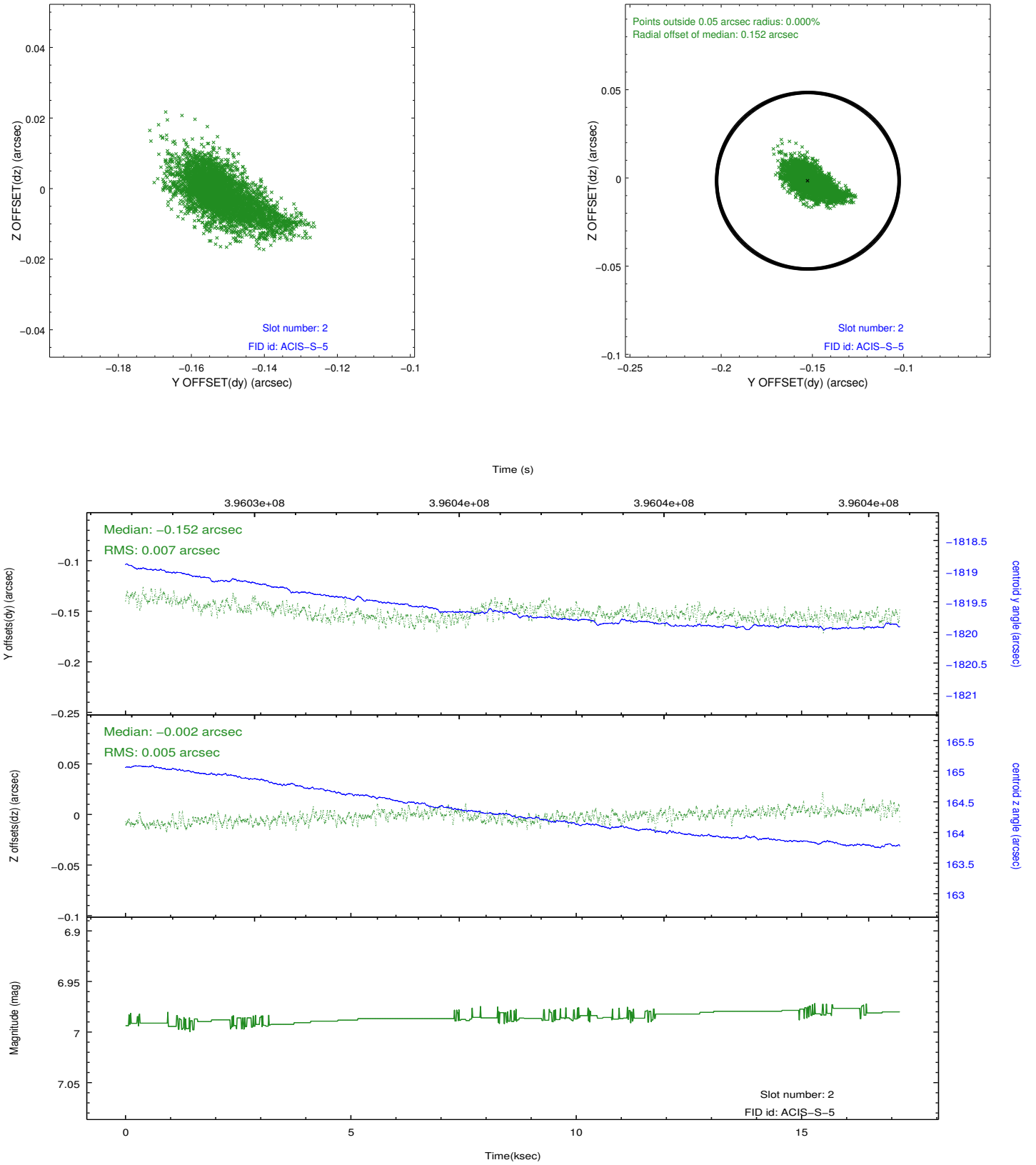
### 2.5.1 Slot 0



## 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)	2012.07.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	17.046891673803

### A.2 Comments

Central source is piled up.