

# V&V Reference Report

## L2 ASCDS Version : 8.5.1.1

Observation 5945 - L2 Version 3  
Chandra X-Ray Center

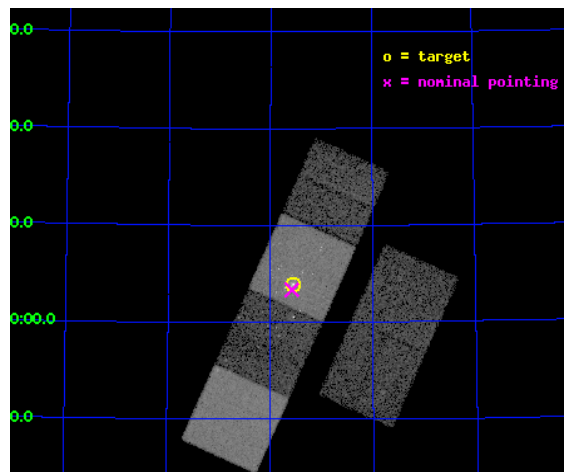
L2 Processing Date : Dec 25 2012

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# 1 Front

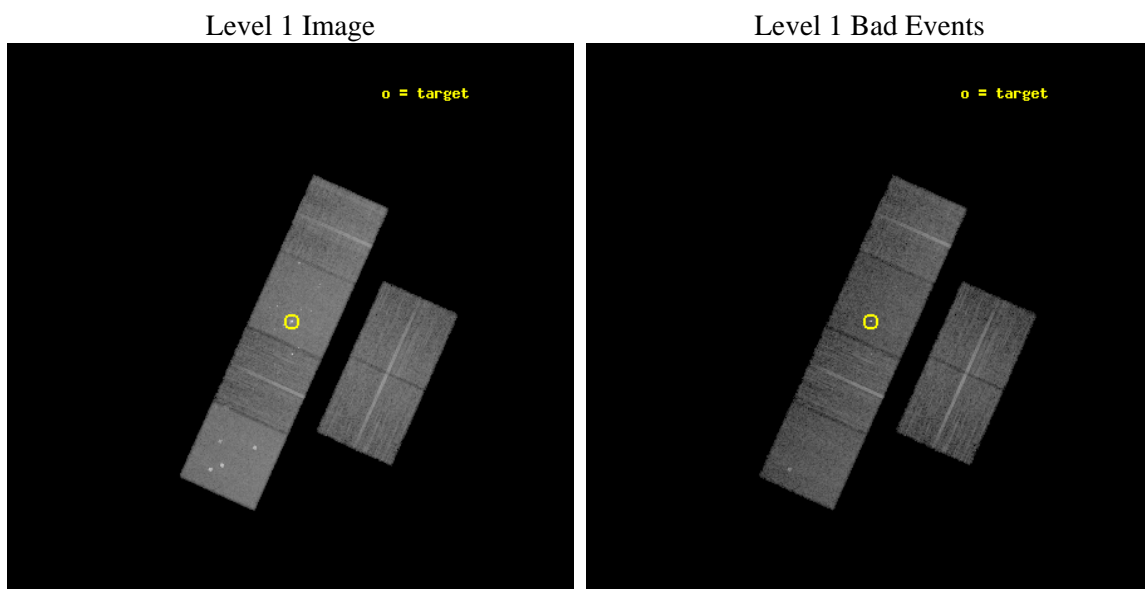
seq_num	600464	Sequence number
obs_id	5945	Observation id
title	An Unprecedented View of a Galaxy's Dynamic X-ray Source Population	&#160
observer	Prof. David Pooley	Principal investigator
object	M81	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	148.888333	Observer's specified target RA [deg]
dec_targ	69.065306	Observer's specified target Dec [deg]
ra_nom	148.89487751249	Nominal RA [deg]
dec_nom	69.05595119329	Nominal Dec [deg]
roll_nom	294.19567755328	Nominal Roll [deg]
revision	3	Processing version of data
ontime	11724.799956322	Sum of GTIs [s]
livetime	11576.333479448	Livetime [s]
ontime2	11724.799956322	Sum of GTIs [s]
ontime3	11724.799956322	Sum of GTIs [s]
ontime5	11724.799956322	Sum of GTIs [s]
ontime6	11724.799956322	Sum of GTIs [s]
ontime7	11724.799956322	Sum of GTIs [s]
ontime8	11724.799956322	Sum of GTIs [s]
l2events	163016	Number of level 2 events



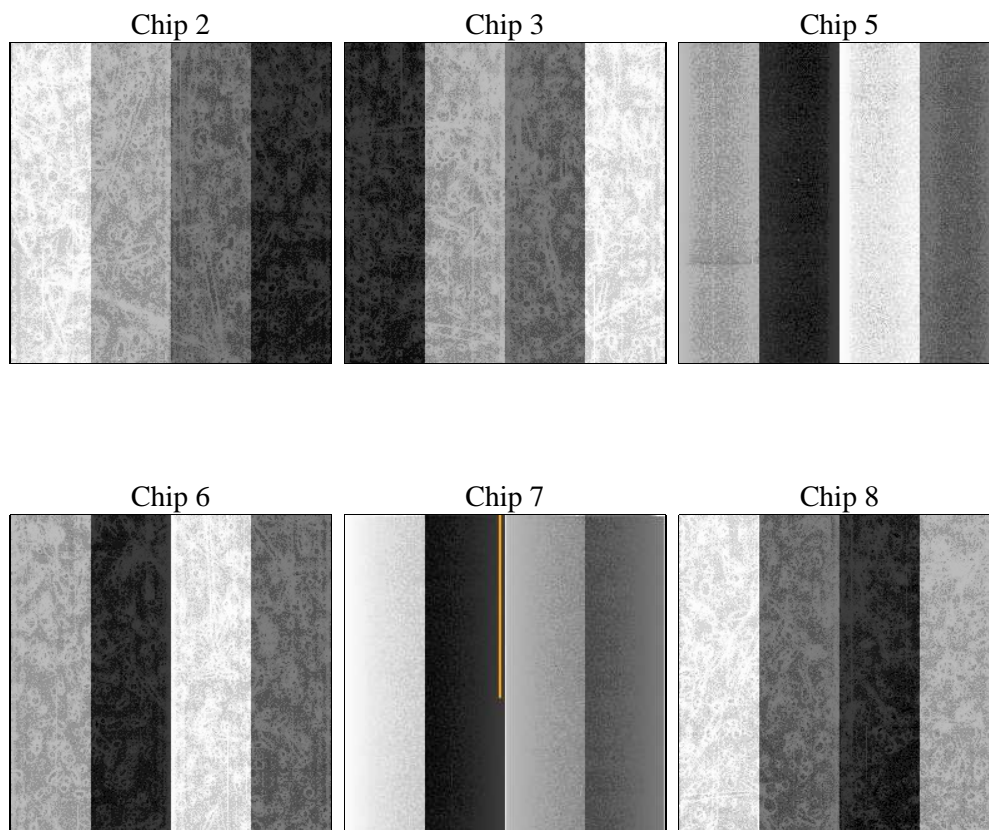
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	11584.031000	[s] Scheduled observation exposure time
ascdsver	8.5.1.1	Processing system revision	ontime	11724.799956322	Sum of GTIs [s]
caldsver	4.5.5	&#160	ontime2	11724.799956322	Sum of GTIs [s]
date	2012-12-25T06:15:25	Date and time of file creation	ontime3	11724.799956322	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	11724.799956322	Sum of GTIs [s]
			ontime6	11724.799956322	Sum of GTIs [s]
			ontime7	11724.799956322	Sum of GTIs [s]
			ontime8	11724.799956322	Sum of GTIs [s]
			l1events	705468	Number of level 1 events

### 2.1.4 Events

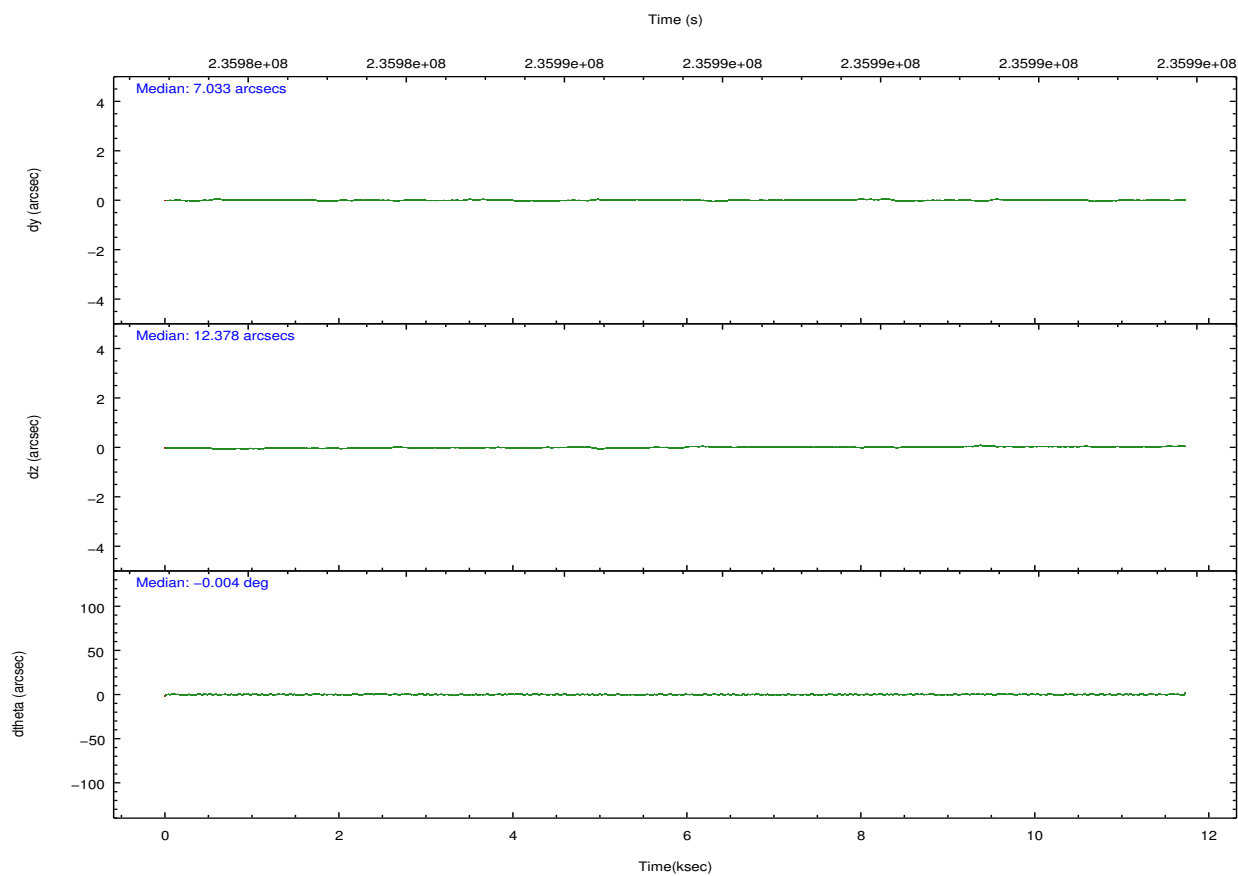
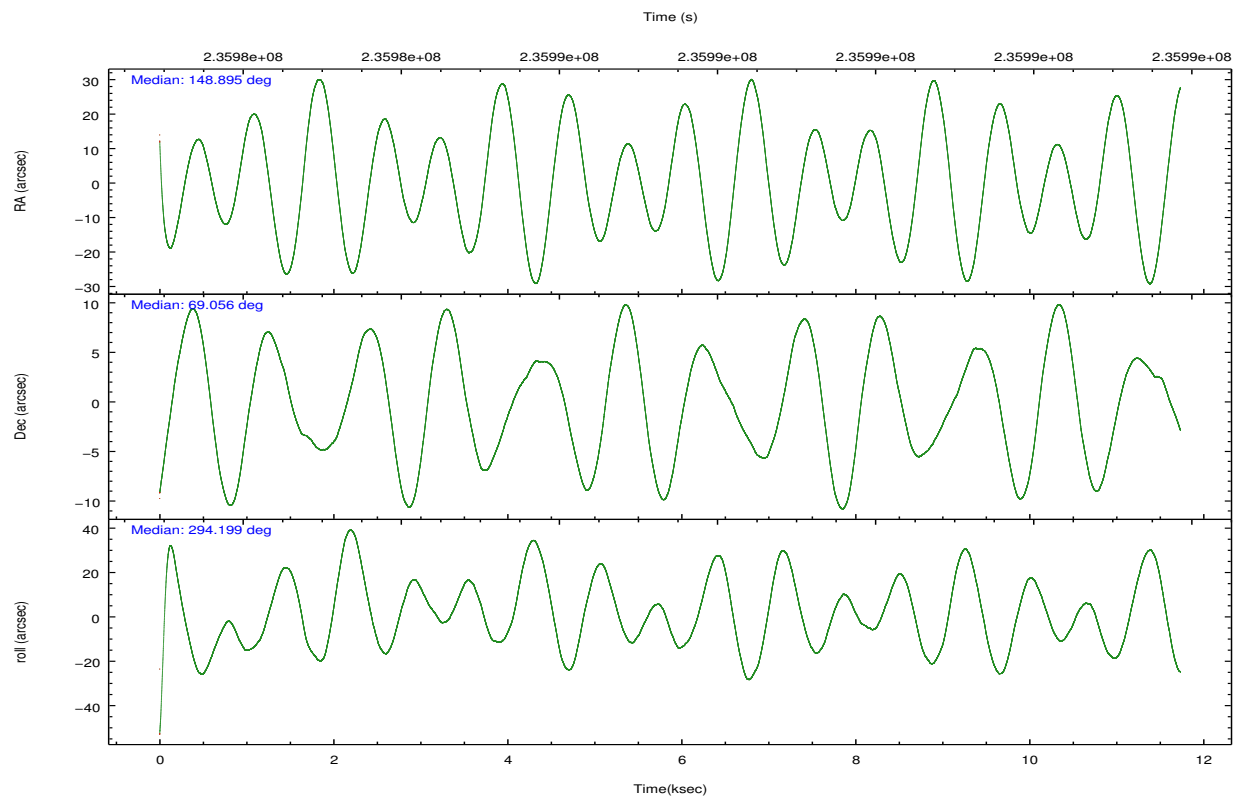
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	96834	92505	151052	99027	144973	121077	grade 0 events	5183	5000	12385	6583	7433	8435
rejected events	85803	81793	81219	85705	82519	95874		5%	5%	8%	6%	5%	6%
rejected %	88%	88%	53%	86%	56%	79%	grade 1 events	64	65	646	102	241	88
								0%	0%	0%	0%	0%	0%
							grade 2 events	2355	2153	20202	2742	13504	5855
								2%	2%	13%	2%	9%	4%
							grade 3 events	1084	1060	2665	1165	5823	2819
								1%	1%	1%	1%	4%	2%
							grade 4 events	1111	1074	2525	1154	5847	2533
								1%	1%	1%	1%	4%	2%
							grade 5 events	3809	4341	10565	4527	12941	5787
								3%	4%	6%	4%	8%	4%
							grade 6 events	1829	1947	35416	2324	32449	6699
								1%	2%	23%	2%	22%	5%
							grade 7 events	81399	76865	66648	80430	66735	88861
								84%	83%	44%	81%	46%	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	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	148.832504	148.8948775124855	Subarray requested	NONE	NONE
[deg] Pointing Dec	69.071543	69.05595119328957	Alternating exposures requested	N	N
[deg] Pointing Roll	294.097377	294.1956775532751	[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)	235981684.184000	235980352.87032			
Observation start date	2005-06-24T06:27:00	2005-06-24T06:05:52			
[s] Observation end time (MET)	235993268.184000	235993491.32092			
Observation end date	2005-06-24T09:40:04	2005-06-24T09:44:51			
Read mode	TIMED	TIMED			

## 2.3 Aspect

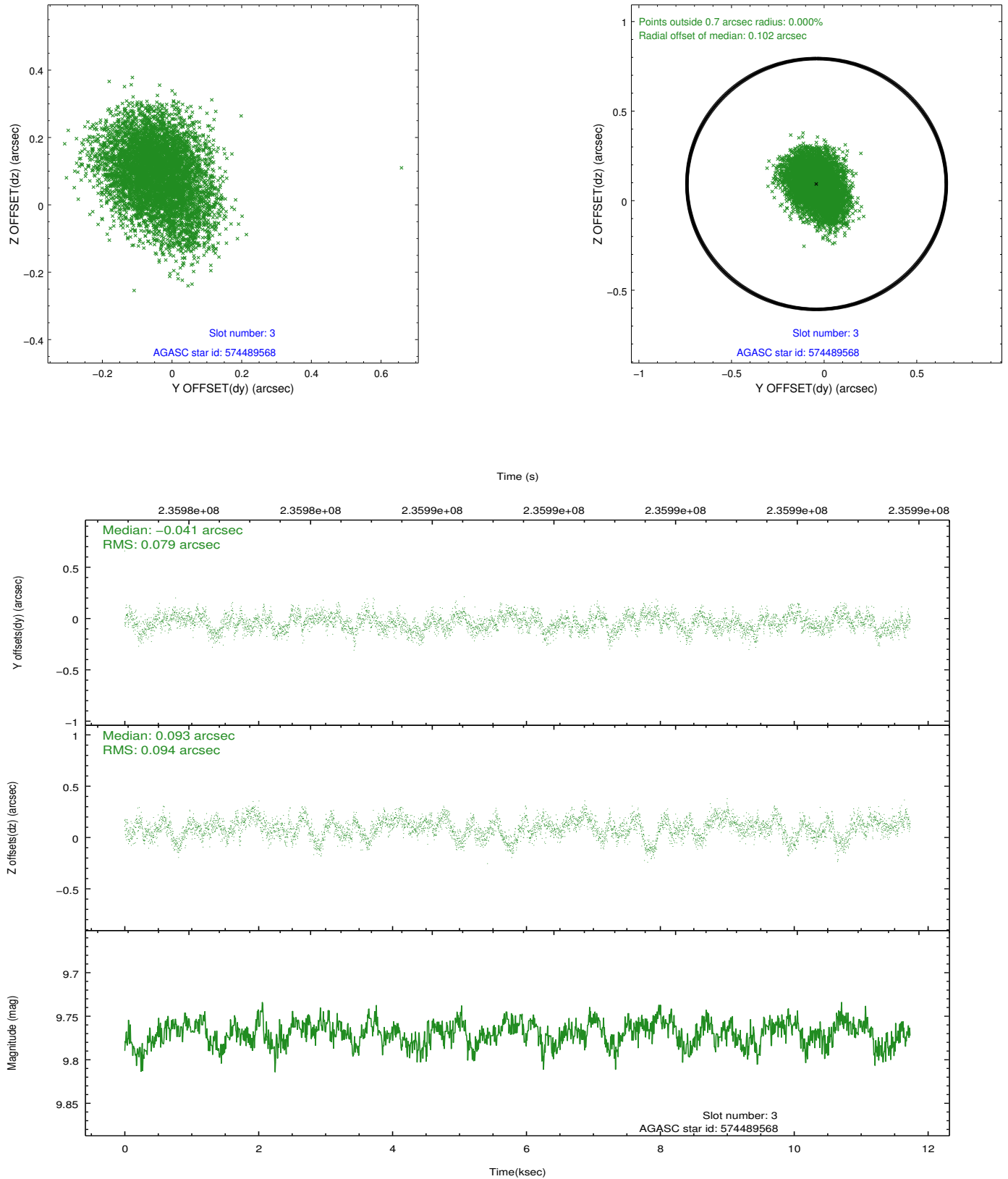


### Slot Statistics

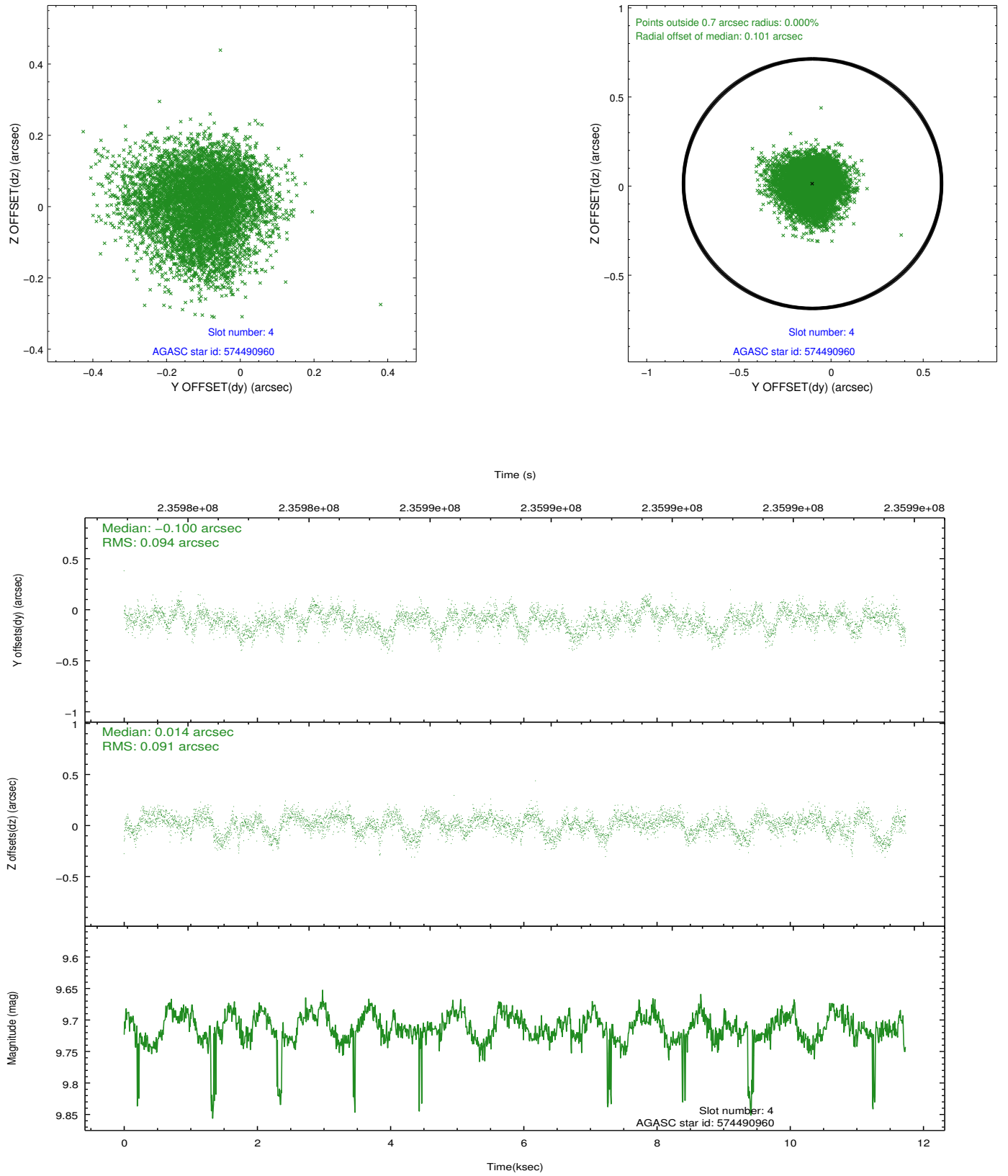
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.18	2862	0.039	-0.070	0.007	0.011	0.000000	0.000000	936.24	-1729.41
1	FID	ACIS-S-4	7.20	2863	0.035	0.034	0.006	0.011	0.000000	0.000000	2153.93	174.38
2	FID	ACIS-S-5	7.23	2862	-0.100	0.048	0.006	0.011	0.000000	0.000000	-1812.18	168.57
3	GUIDE	574489568	9.77	5718	-0.041	0.093	0.130	0.212	147.223974	69.438157	-2058.75	-1306.28
4	GUIDE	574490960	9.71	5701	-0.100	0.014	0.140	0.220	148.185918	69.658768	-2263.57	126.14
5	GUIDE	574491280	9.34	5716	-0.066	-0.051	0.086	0.139	148.611567	69.450135	-1357.99	301.19
6	GUIDE	574497600	10.45	5509	0.122	0.052	0.198	0.369	147.824120	68.451903	1482.51	-2123.49
7	GUIDE	574496312	10.29	5703	0.098	-0.098	0.166	0.264	149.547505	68.718299	1538.55	335.45

## 2.4 Star Slots

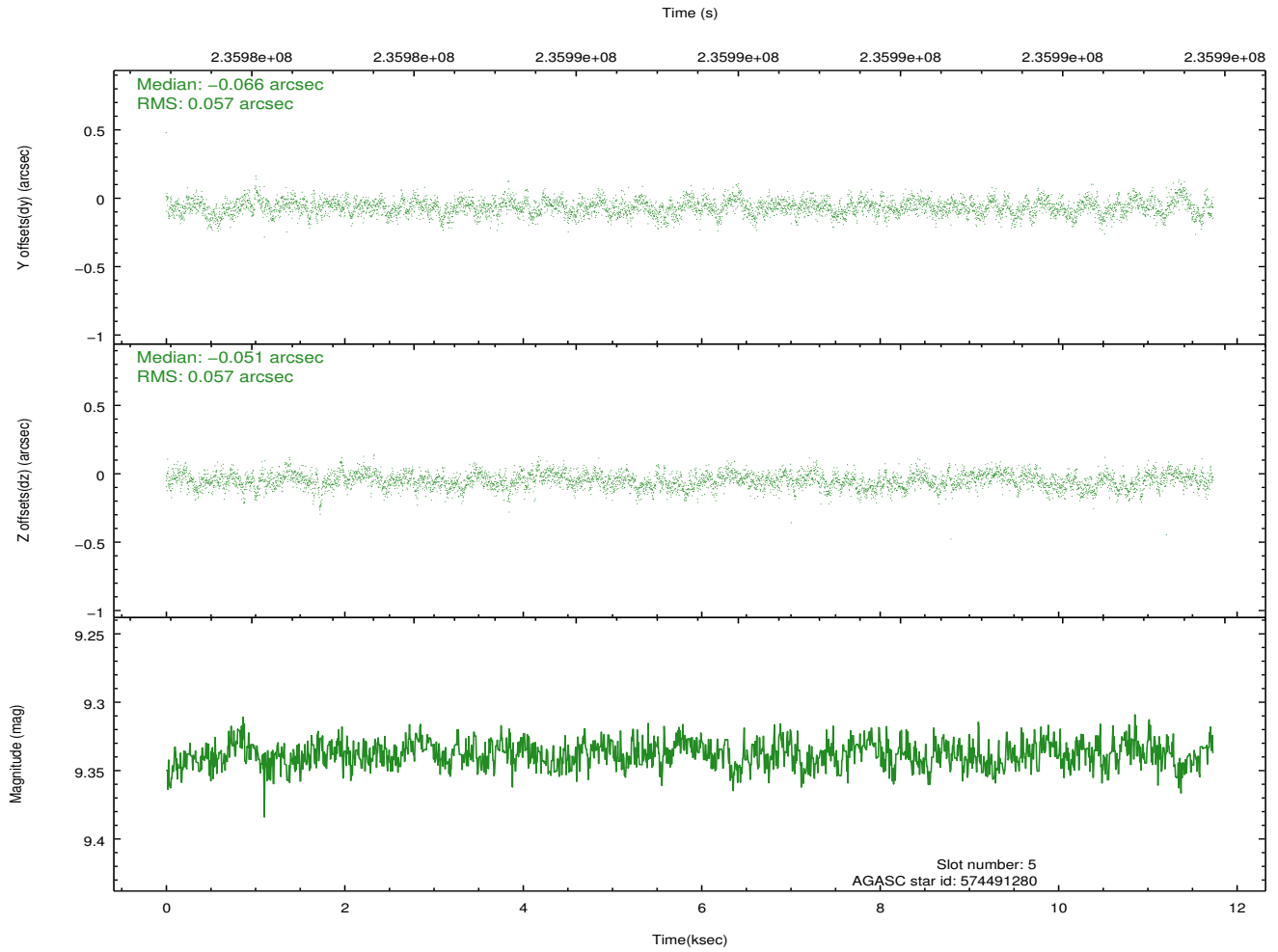
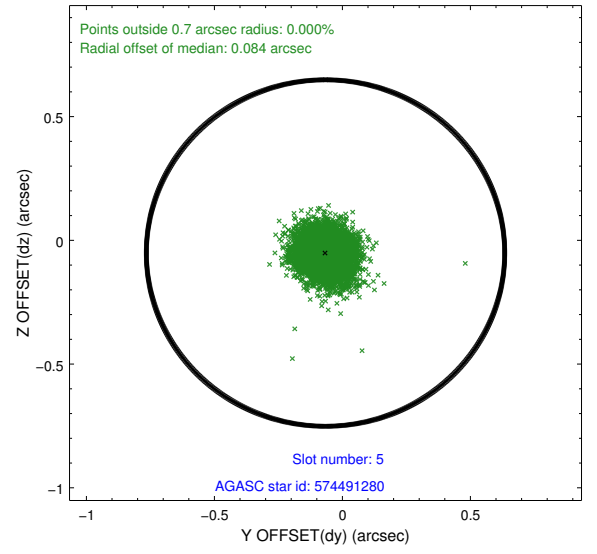
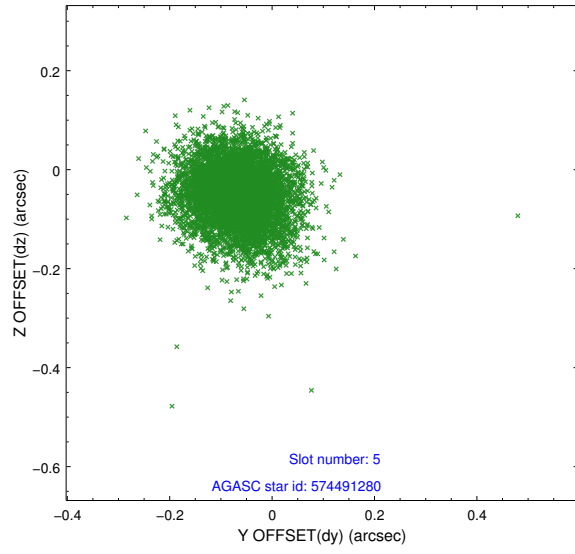
### 2.4.1 Slot 3



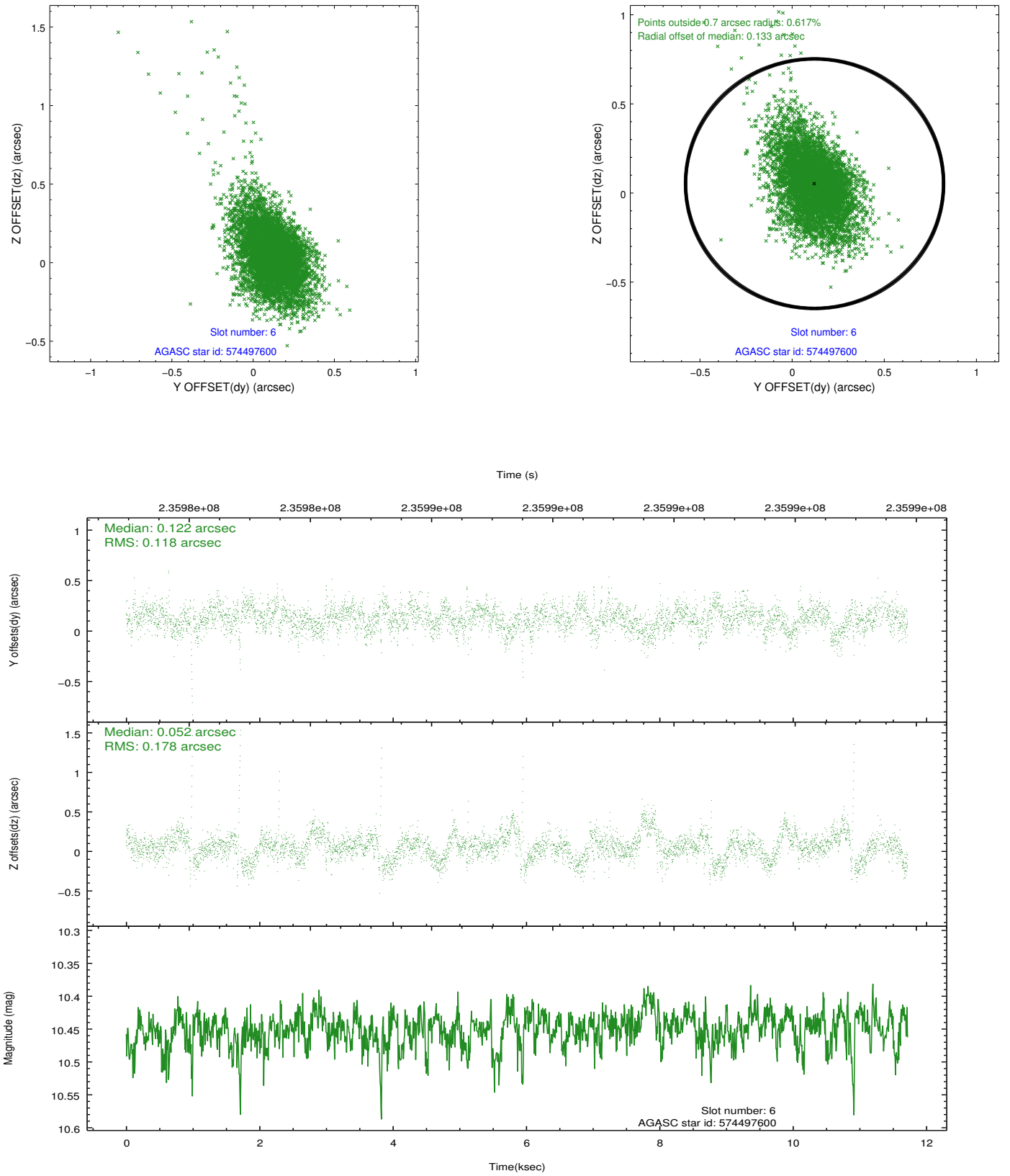
## 2.4.2 Slot 4



### 2.4.3 Slot 5

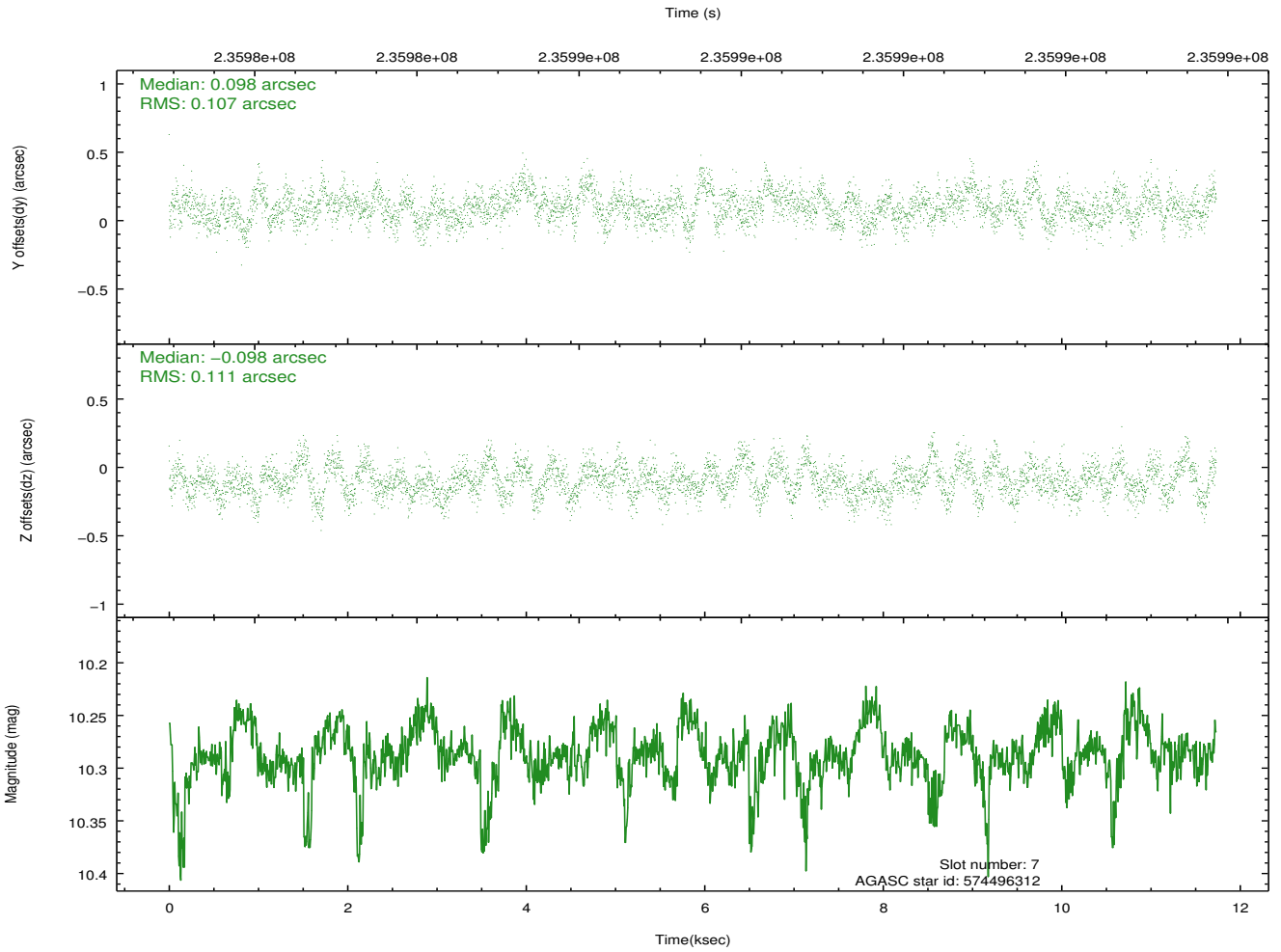
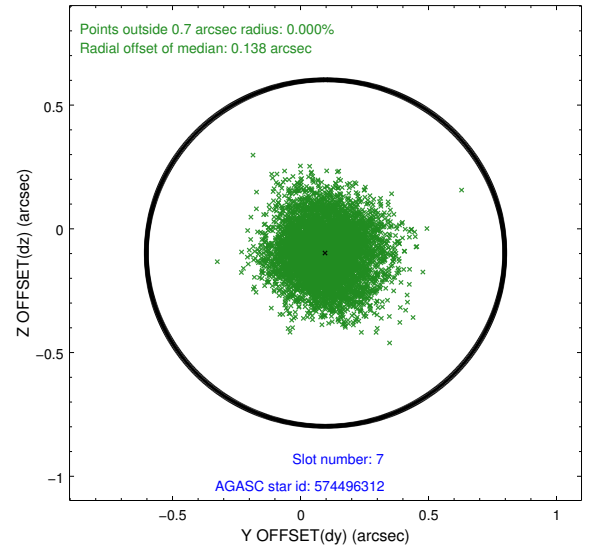
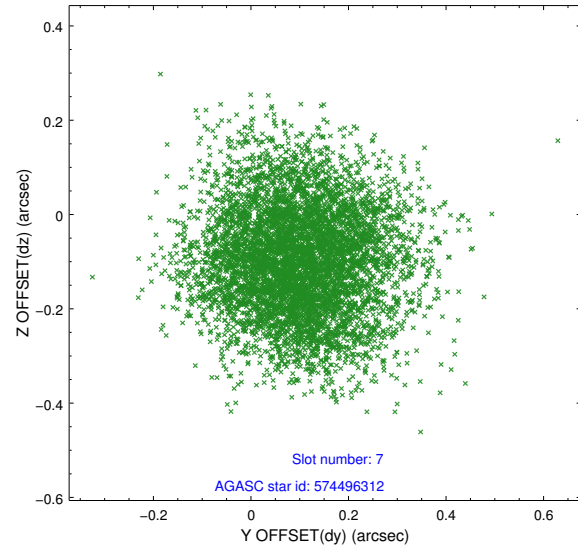


## 2.4.4 Slot 6



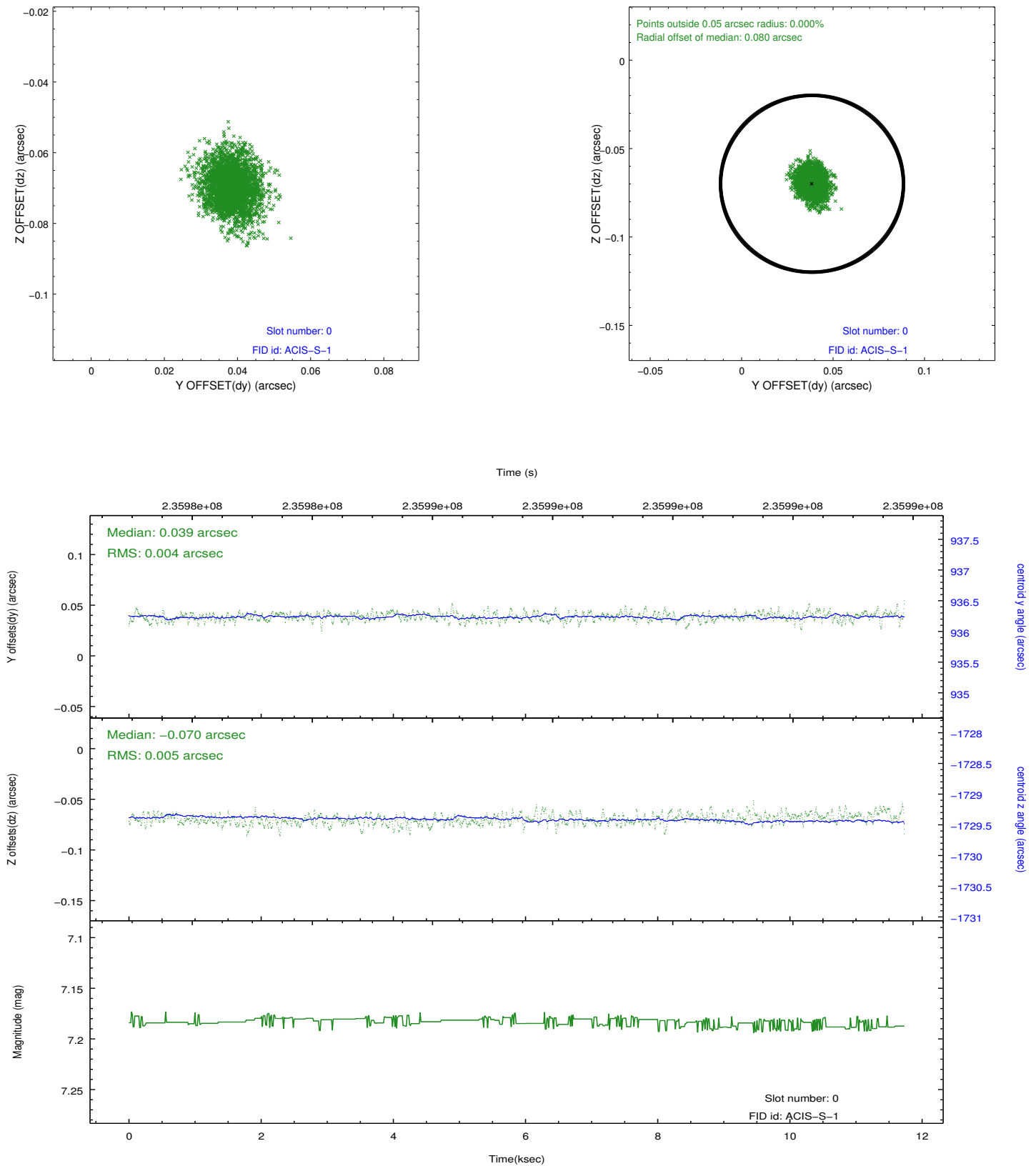


## 2.4.5 Slot 7

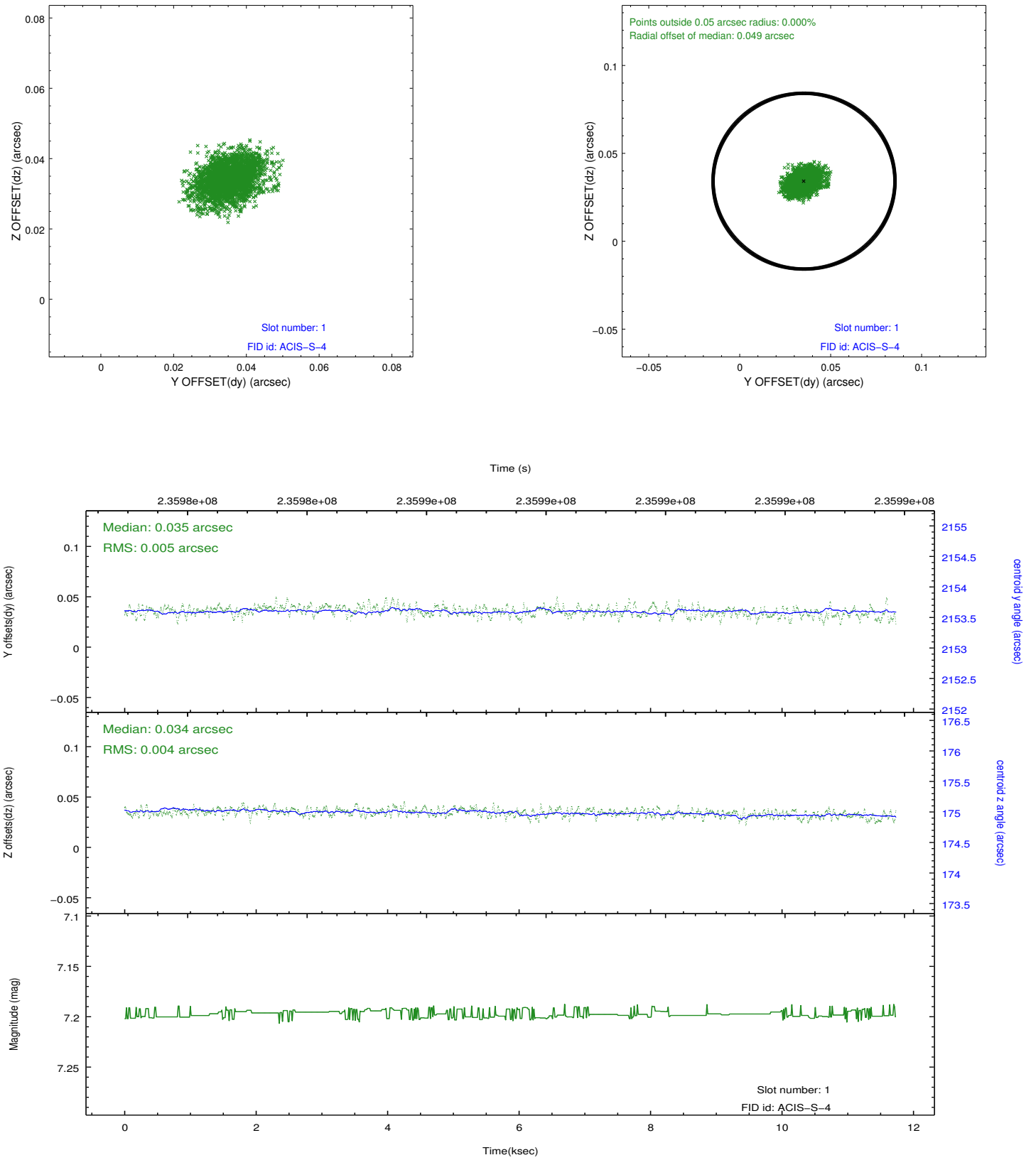


## 2.5 FID Slots

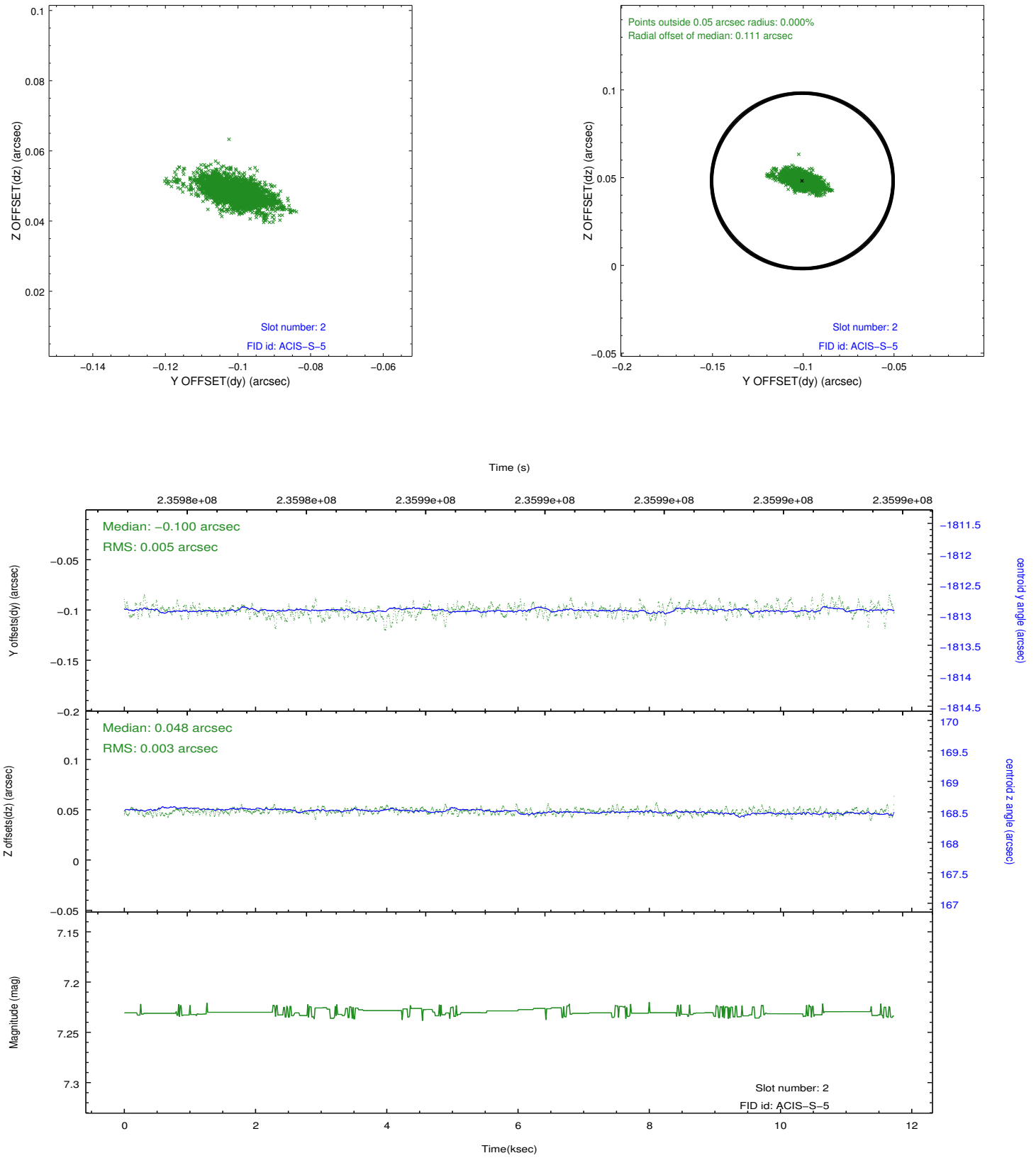
### 2.5.1 Slot 0



## 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)	2013.01.17
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	11.72479

### A.2 Comments

Preferred roll angle met. Monitor constraint met.