

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 1854 - L2 Version 3  
Chandra X-Ray Center

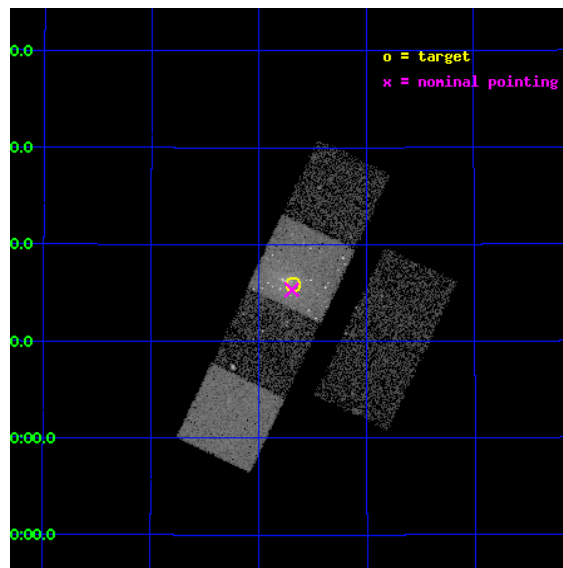
L2 Processing Date : Sep 6 2012

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# 1 Front

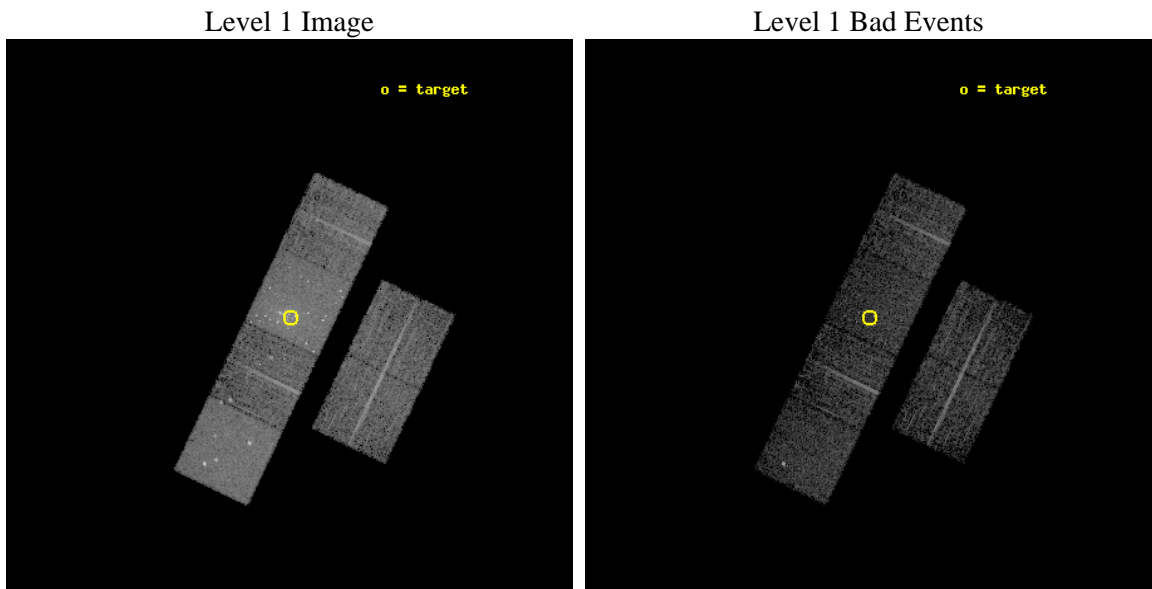
seq_num	600147	Sequence number
obs_id	1854	Observation id
title	M31 MONITORING (FOLLOWUP)	Proposal title
observer	Dr. Stephen Murray	Principal investigator
object	M31 TRANSIENT TBD	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	10.67	Observer's specified target RA [deg]
dec_targ	41.265	Observer's specified target Dec [deg]
ra_nom	10.673487693578	Nominal RA [deg]
dec_nom	41.255480699363	Nominal Dec [deg]
roll_nom	295.58297354524	Nominal Roll [deg]
revision	3	Processing version of data
ontime	4754.3947250098	Sum of GTIs [s]
livetime	4694.1917162489	Livetime [s]
ontime2	4754.4357650131	Sum of GTIs [s]
ontime3	4754.2716050148	Sum of GTIs [s]
ontime5	4754.3536850065	Sum of GTIs [s]
ontime6	4754.3126450181	Sum of GTIs [s]
ontime7	4754.3947250098	Sum of GTIs [s]
ontime8	4754.2305650115	Sum of GTIs [s]
l2events	76189	Number of level 2 events



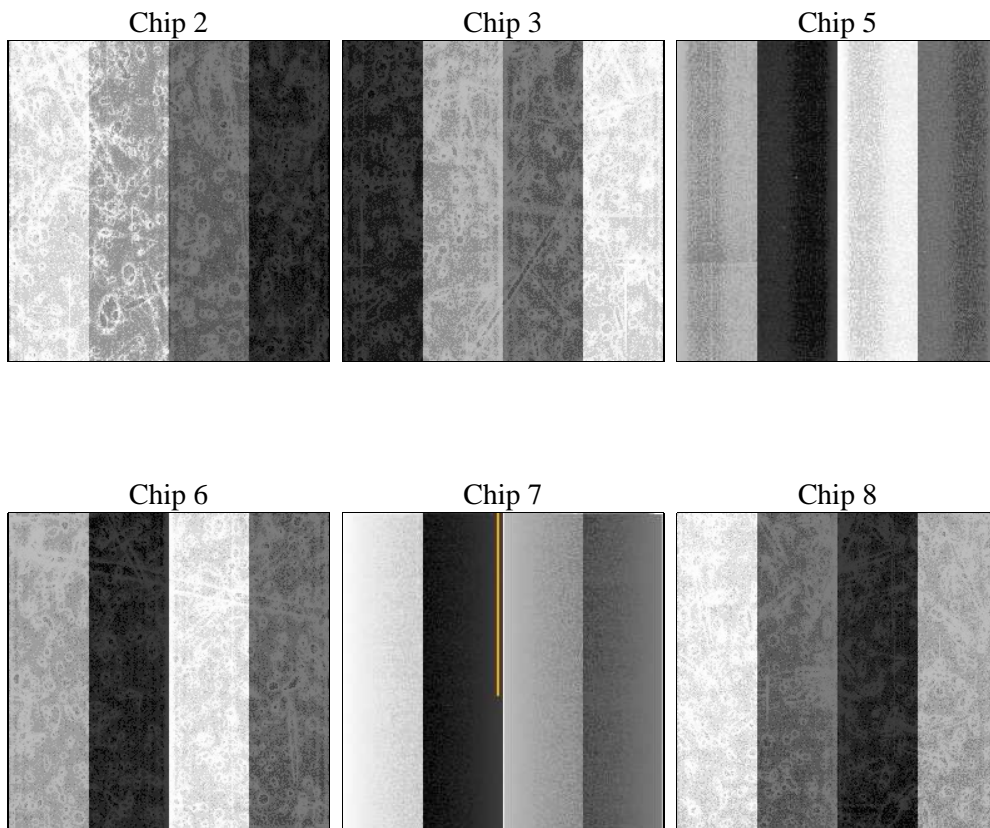
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	2	Obi number	sched_exp_time	4800.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	4754.3947250098	Sum of GTIs [s]
caldsver	4.5.1.1	&#160	ontime2	4754.4357650131	Sum of GTIs [s]
date	2012-09-06T11:15:31	Date and time of file creation	ontime3	4754.2716050148	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	4754.3536850065	Sum of GTIs [s]
			ontime6	4754.3126450181	Sum of GTIs [s]
			ontime7	4754.3947250098	Sum of GTIs [s]
			ontime8	4754.2305650115	Sum of GTIs [s]
			l1events	235633	Number of level 1 events

### 2.1.4 Events

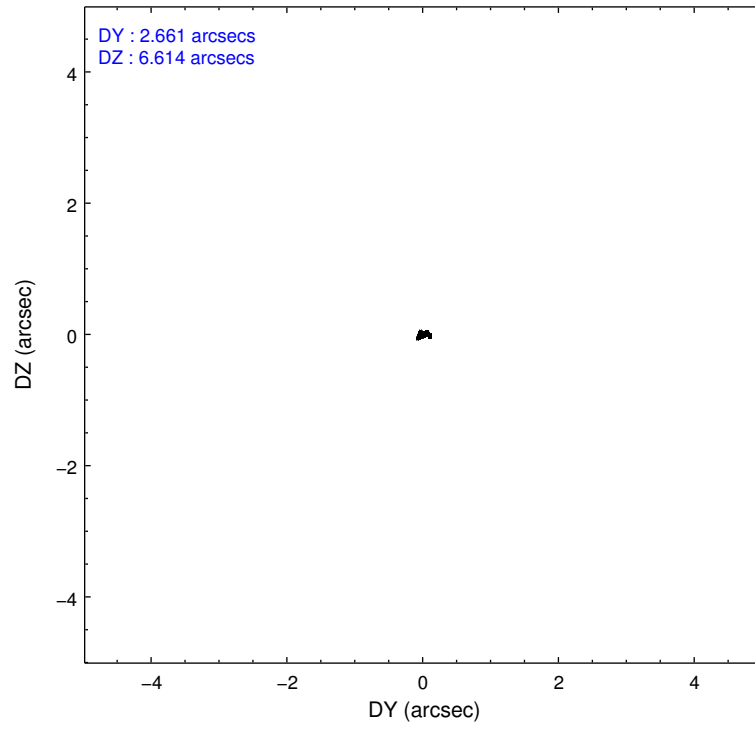
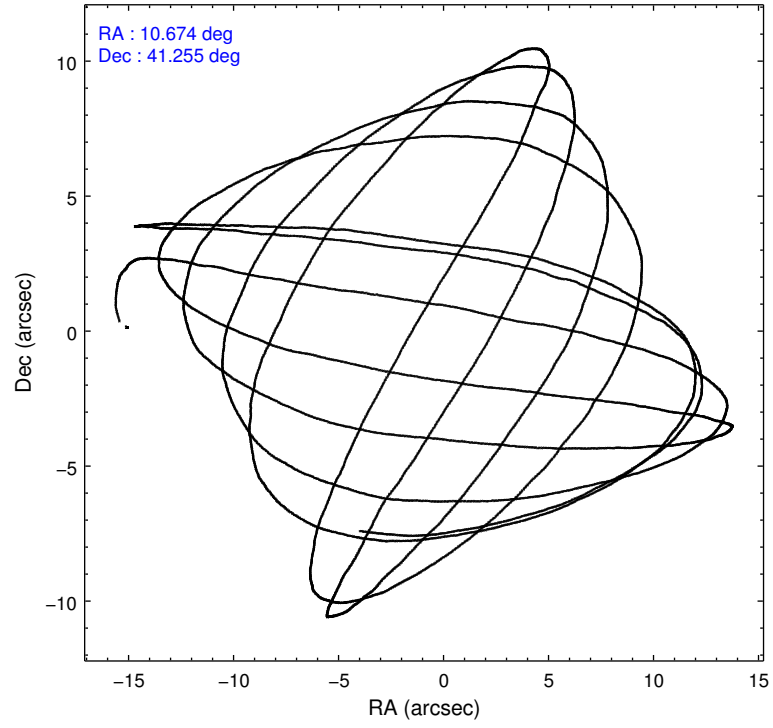
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	29796	29342	48441	30538	61849	35667	grade 0 events	1835	1717	4145	3139	7649	2918
rejected events	25924	25626	22850	25083	22848	27749		6%	5%	8%	10%	12%	8%
rejected %	87%	87%	47%	82%	36%	77%	grade 1 events	17	13	84	24	120	20
								0%	0%	0%	0%	0%	0%
							grade 2 events	758	717	7459	900	8715	1550
								2%	2%	15%	2%	14%	4%
							grade 3 events	349	332	1244	350	4012	821
								1%	1%	2%	1%	6%	2%
							grade 4 events	321	318	1141	370	3989	784
								1%	1%	2%	1%	6%	2%
							grade 5 events	1039	1156	3240	1273	3977	1532
								3%	3%	6%	4%	6%	4%
							grade 6 events	610	632	11657	702	14687	1847
								2%	2%	24%	2%	23%	5%
							grade 7 events	24867	24457	19471	23780	18700	26195
								83%	83%	40%	77%	30%	73%

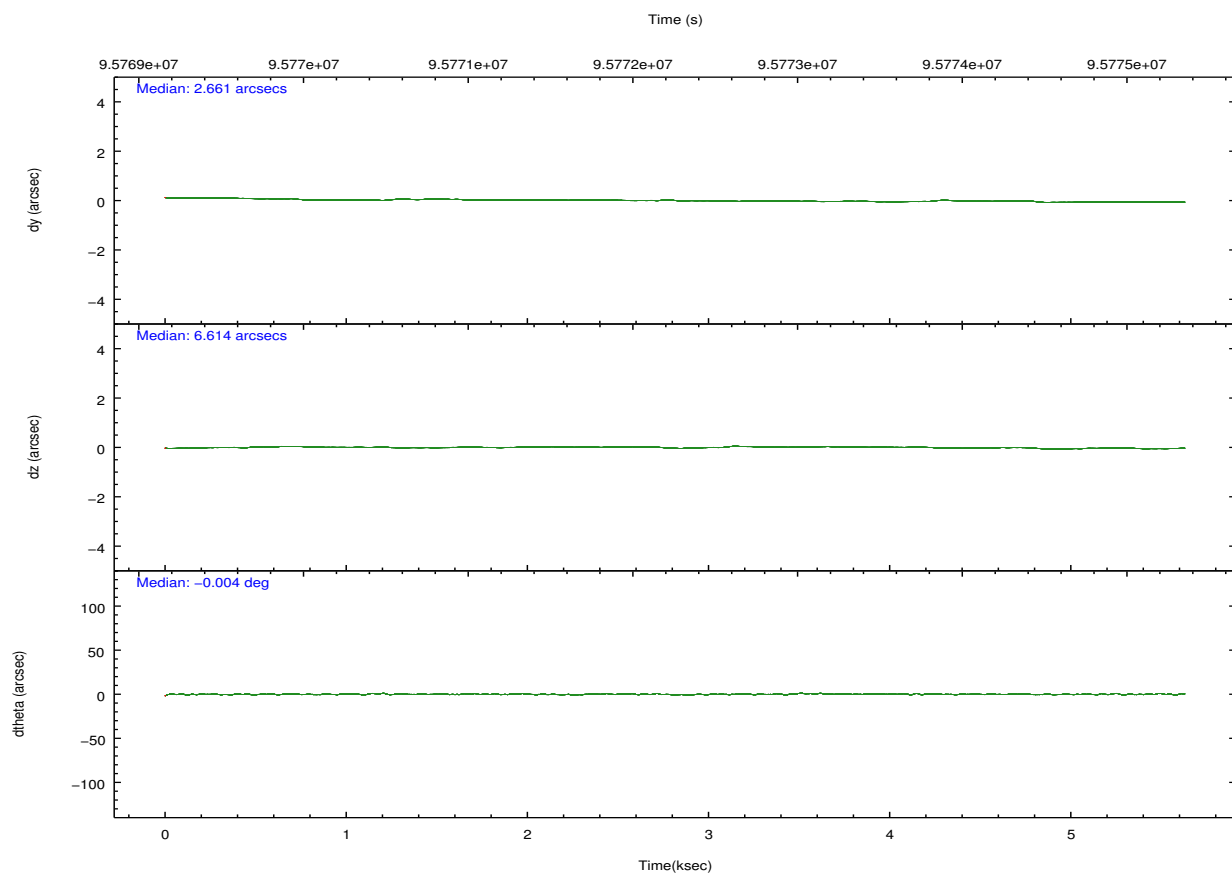
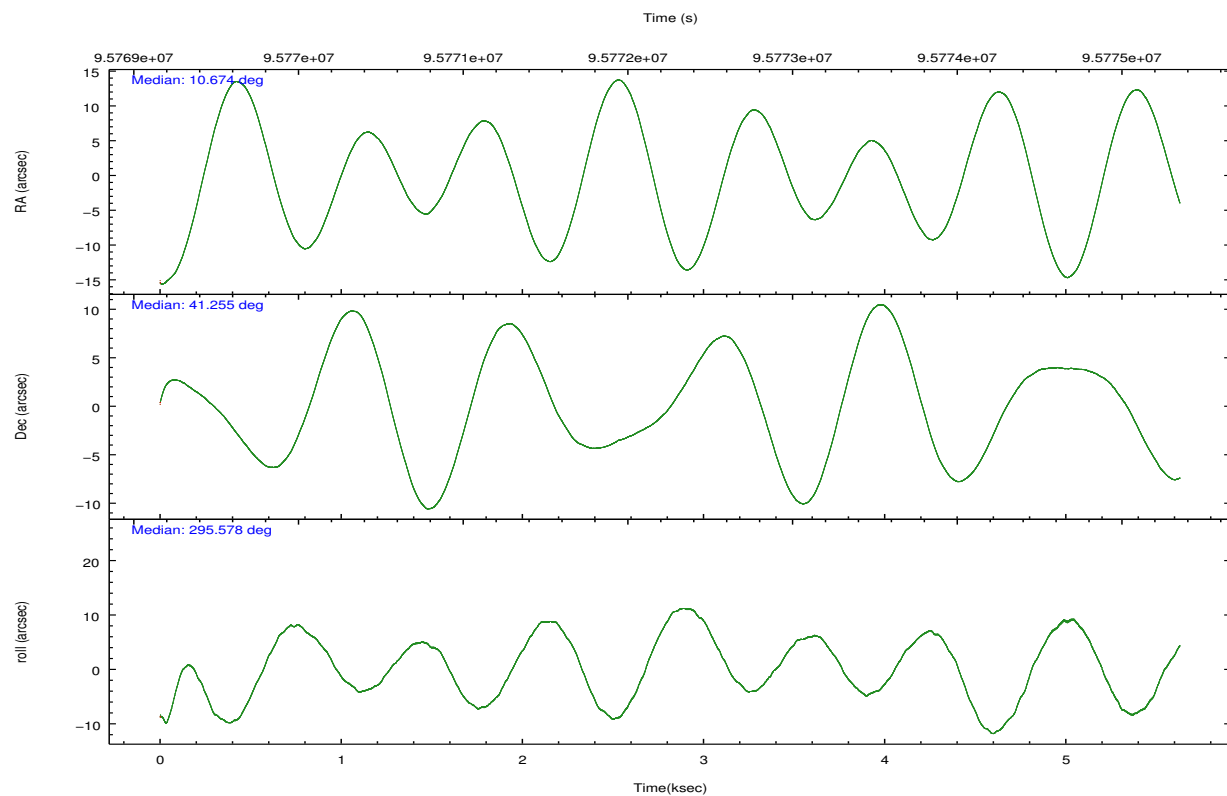


## 2.2 Compared Parameters

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	10.643267	10.67348769357841	Subarray requested	NONE	NONE
[deg] Pointing Dec	41.270767	41.25548069936254	Alternating exposures requested	N	N
[deg] Pointing Roll	295.446282	295.5829735452426	[s] Primary exposure time	0.000000	3.2
[s] Window start time (MET)	95299264.184000	95299264.184000			
[s] Window stop time (MET)	95904064.184000	95904064.184000			
[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)	95770270.184000	95768993.342481			
Observation start date	2001-01-13T10:50:06	2001-01-13T10:29:53			
[s] Observation end time (MET)	95775070.184000	95775796.26774199			
Observation end date	2001-01-13T12:10:06	2001-01-13T12:23:16			
Read mode	TIMED	TIMED			

## 2.3 Aspect



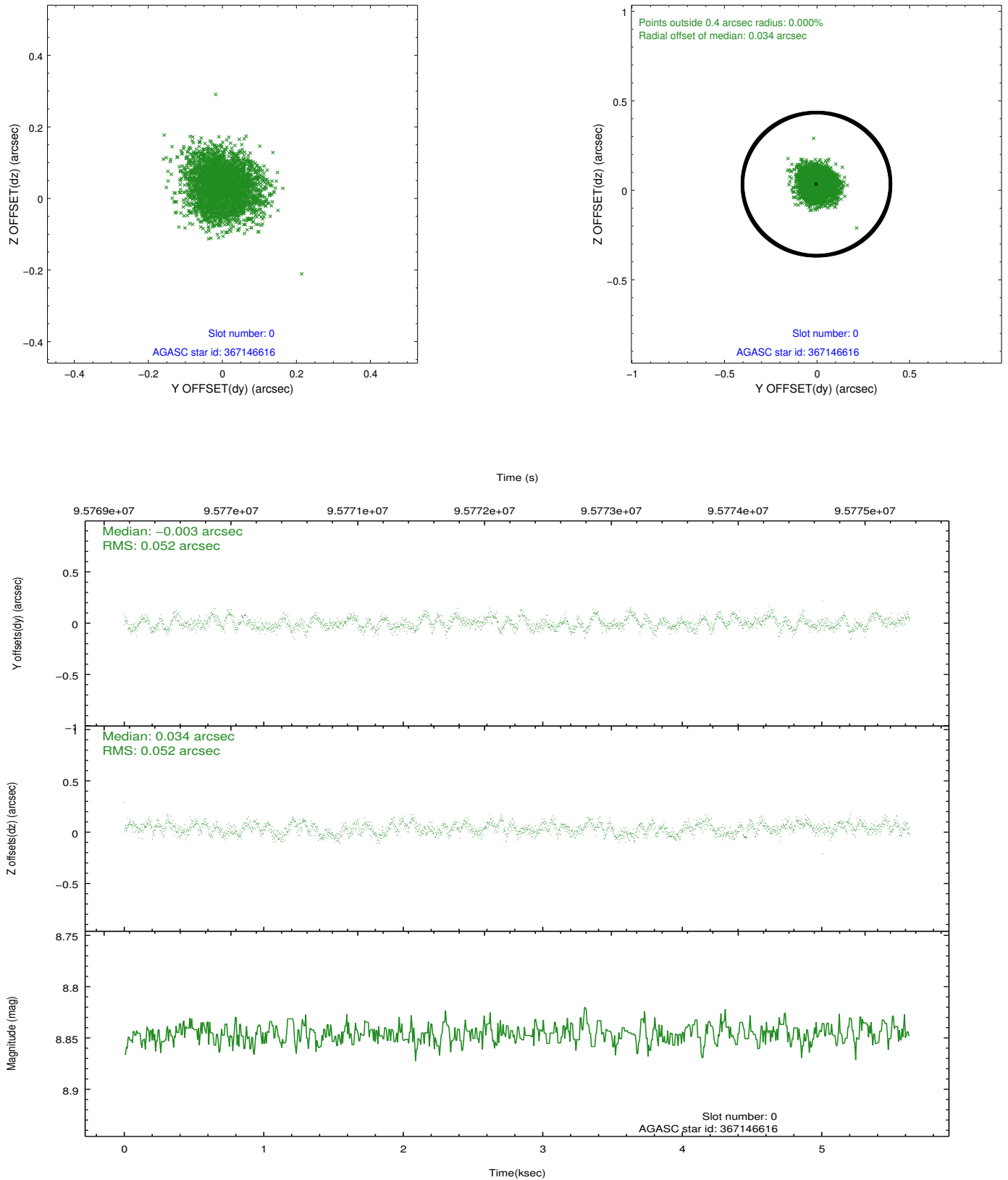


### Slot Statistics

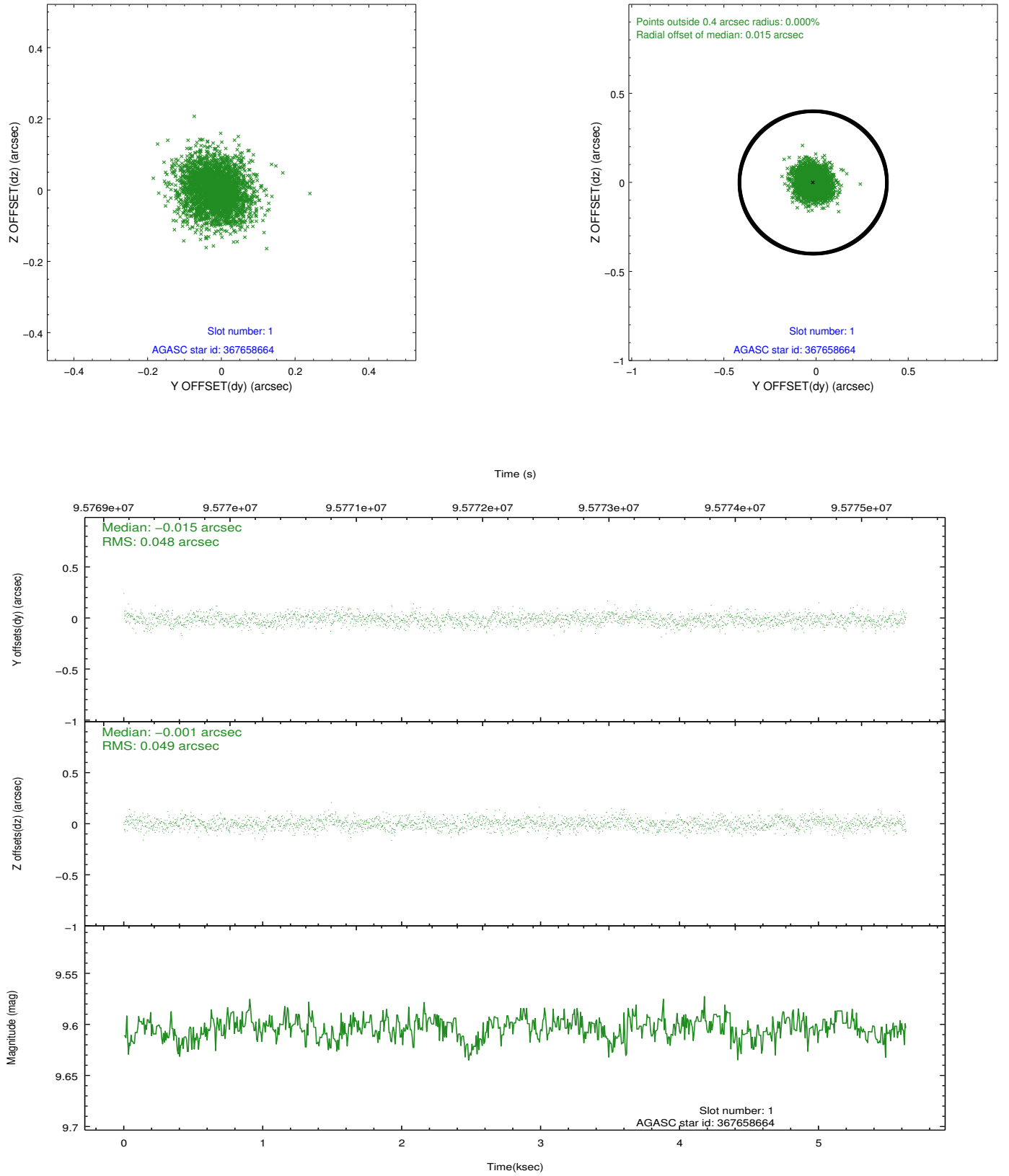
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	GUIDE	367146616	8.85	2747	-0.003	0.034	0.080	0.123	11.418645	41.190163	1154.83	1775.26
1	GUIDE	367658664	9.60	2741	-0.015	-0.001	0.073	0.121	10.374070	41.369746	-635.97	-503.56
2	GUIDE	367665472	9.48	2747	-0.053	0.024	0.073	0.125	10.241611	41.730843	-1962.93	-263.03
3	FID	ACIS-S-2	7.11	1374	-0.014	0.018	0.007	0.012	0.000000	0.000000	-755.31	-1727.75
4	FID	ACIS-S-4	7.20	1374	-0.041	0.002	0.005	0.009	0.000000	0.000000	2157.46	179.63
5	FID	ACIS-S-5	7.23	1374	0.024	-0.011	0.007	0.011	0.000000	0.000000	-1806.75	174.49
6	GUIDE	367148872	7.22	2747	0.115	-0.076	0.064	0.122	10.505940	40.688258	1730.66	-1240.51
7	GUIDE	367674552	8.85	2745	-0.034	0.021	0.063	0.100	11.016238	41.570845	-546.49	1370.68

## 2.4 Star Slots

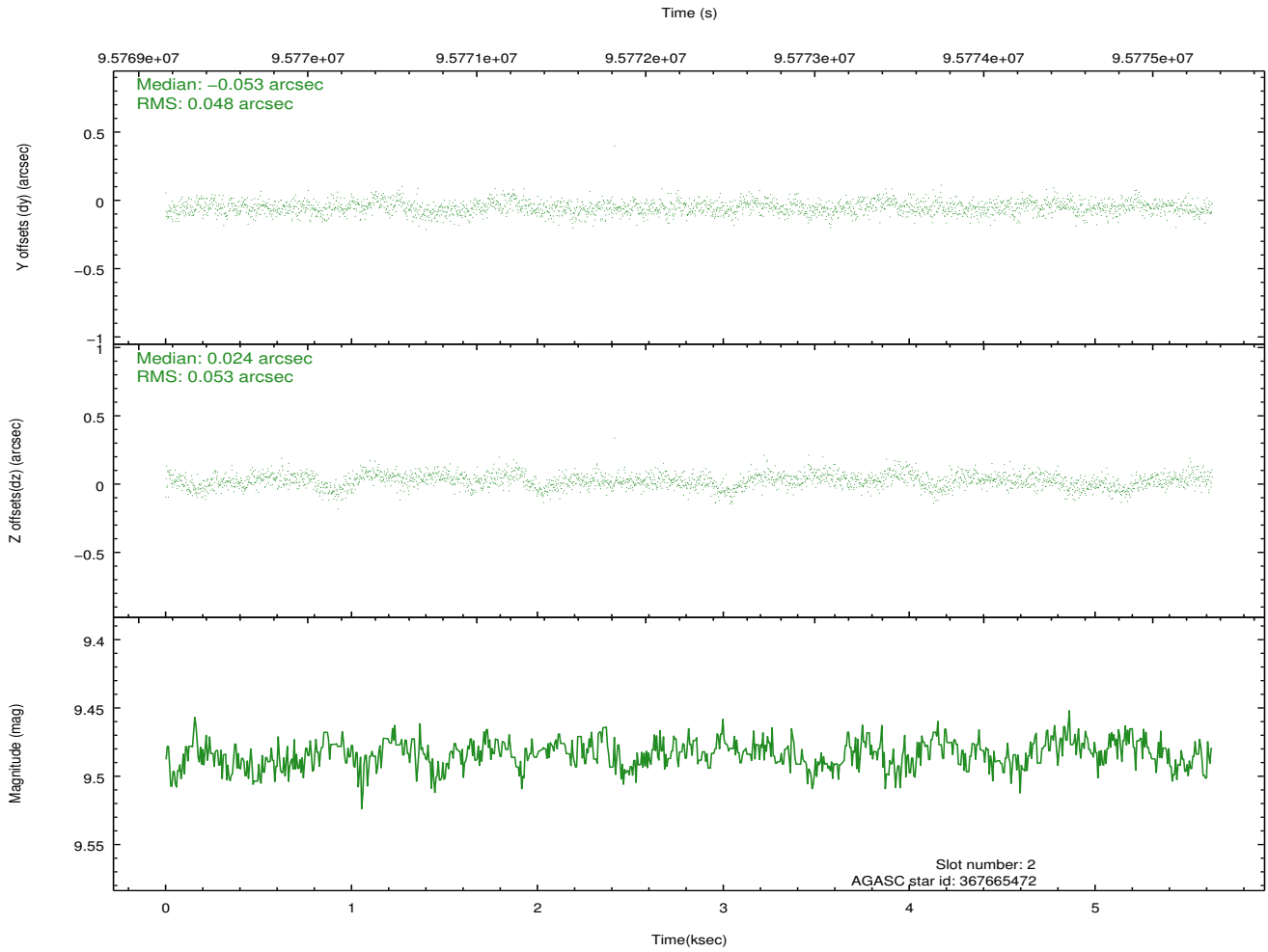
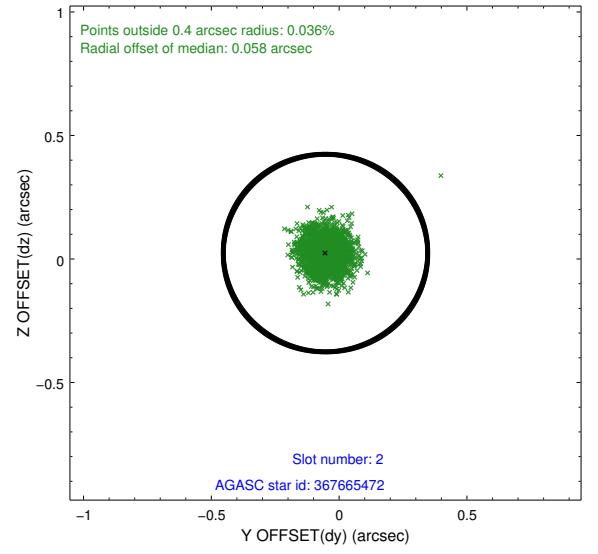
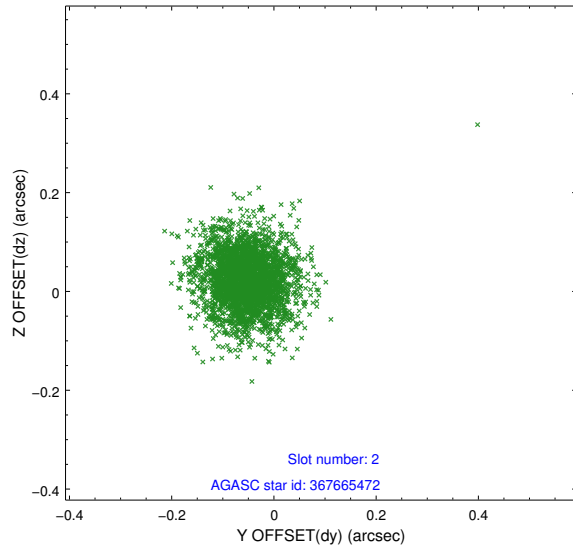
### 2.4.1 Slot 0



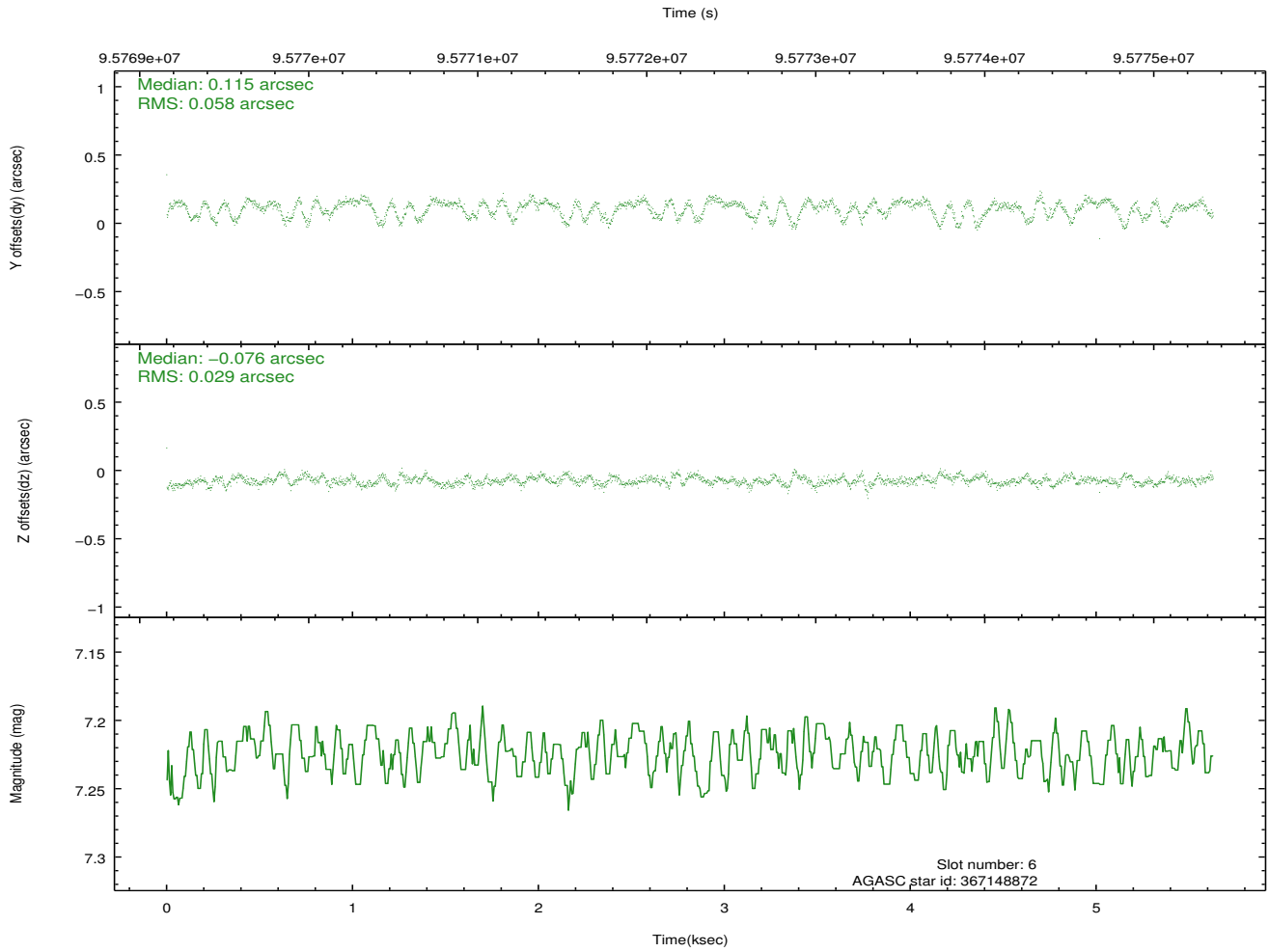
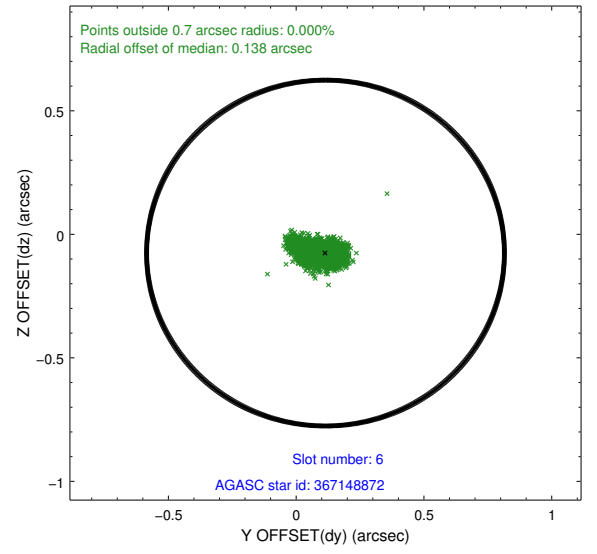
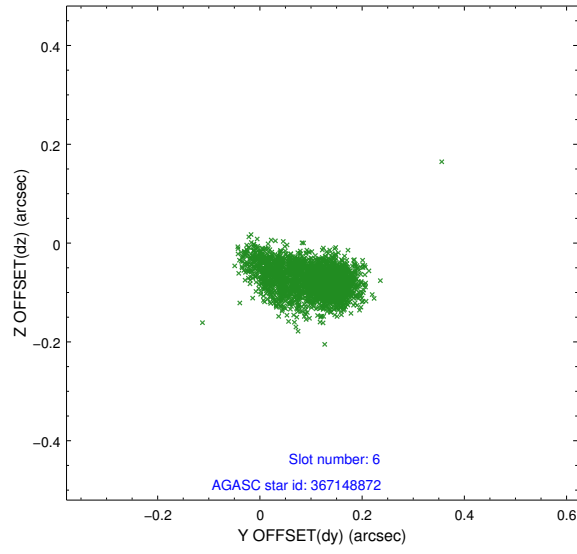
## 2.4.2 Slot 1



### 2.4.3 Slot 2

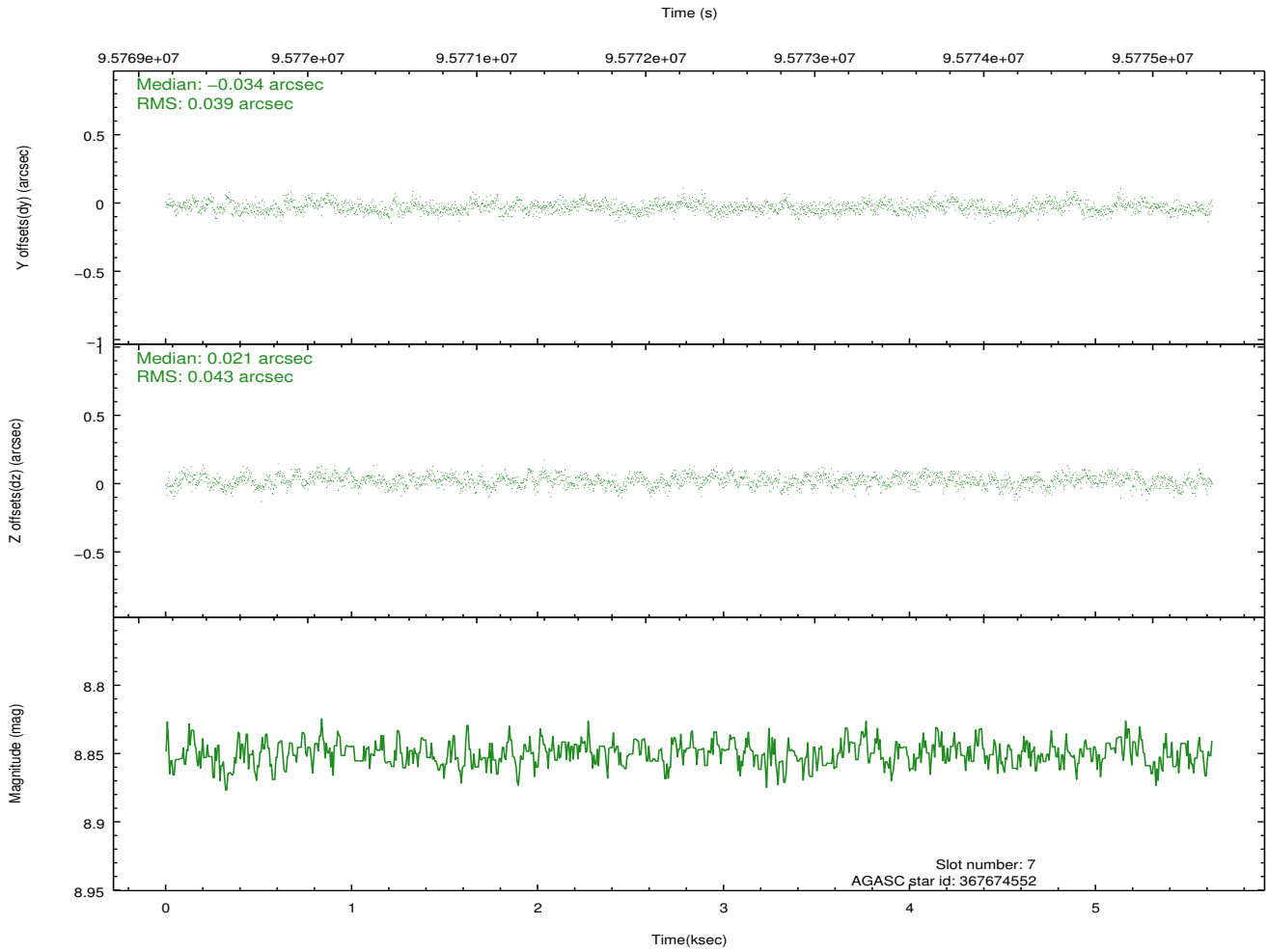
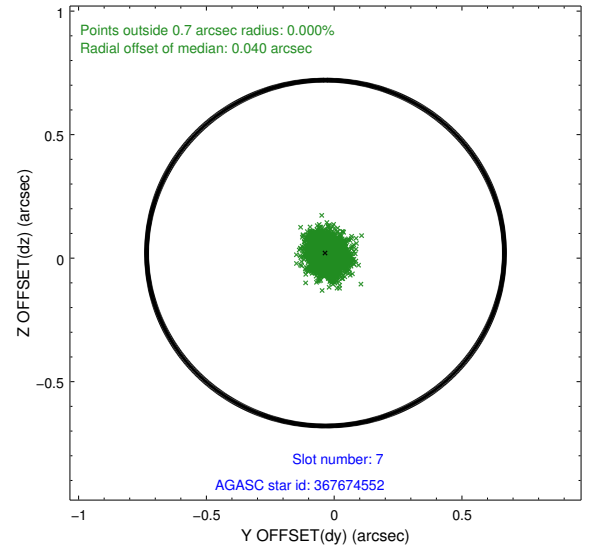
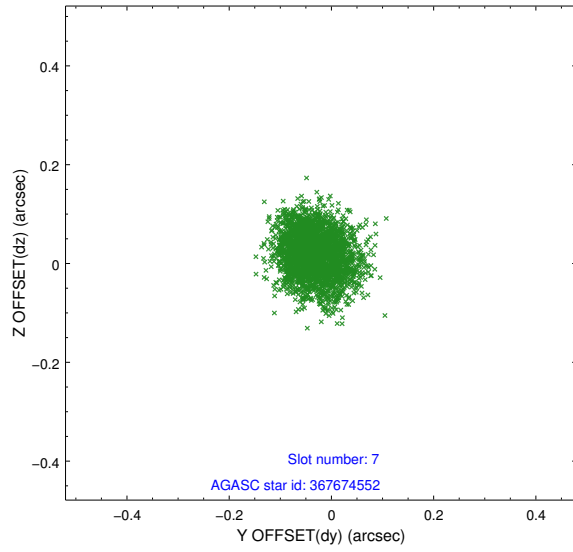


## 2.4.4 Slot 6



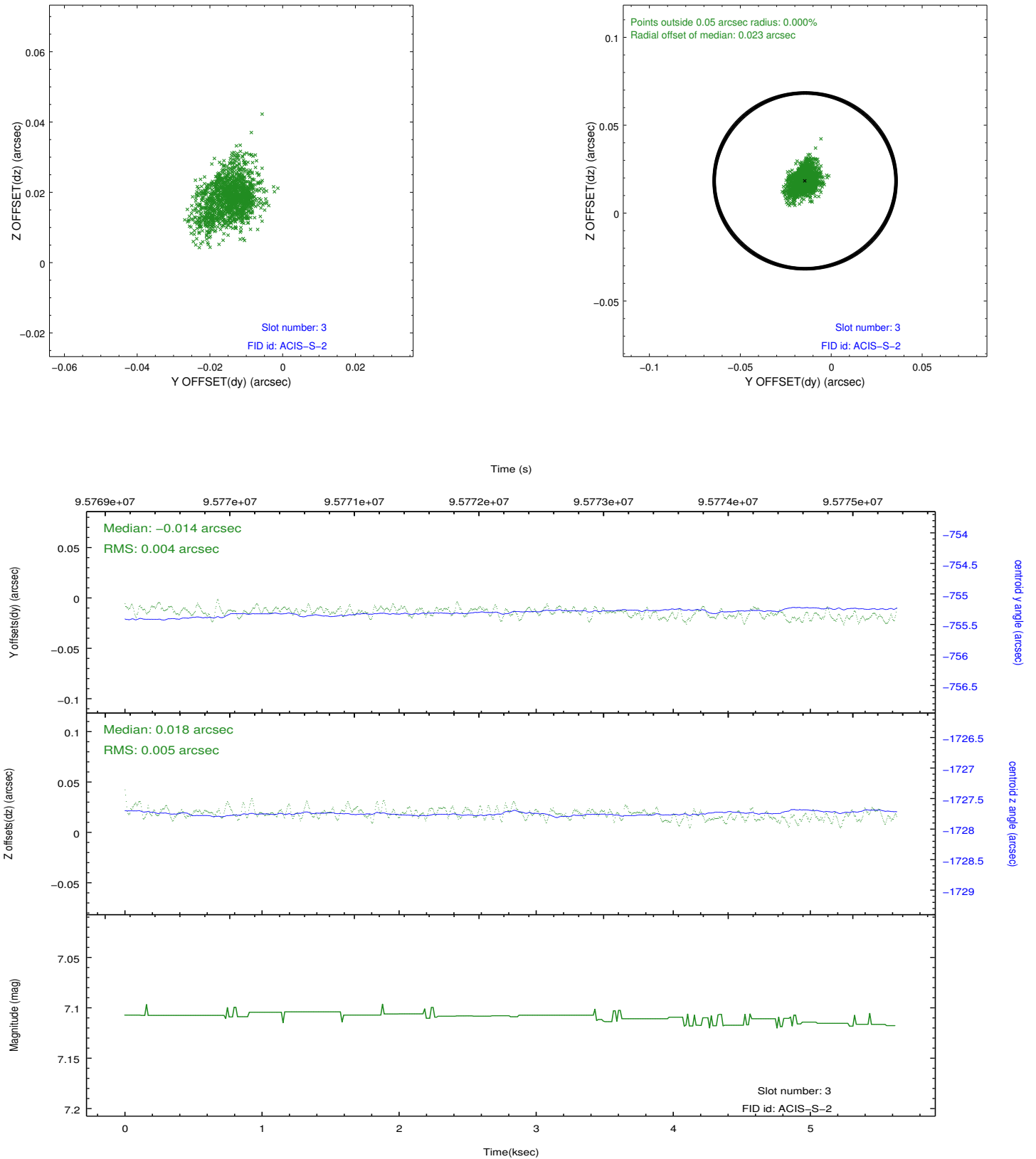


## 2.4.5 Slot 7

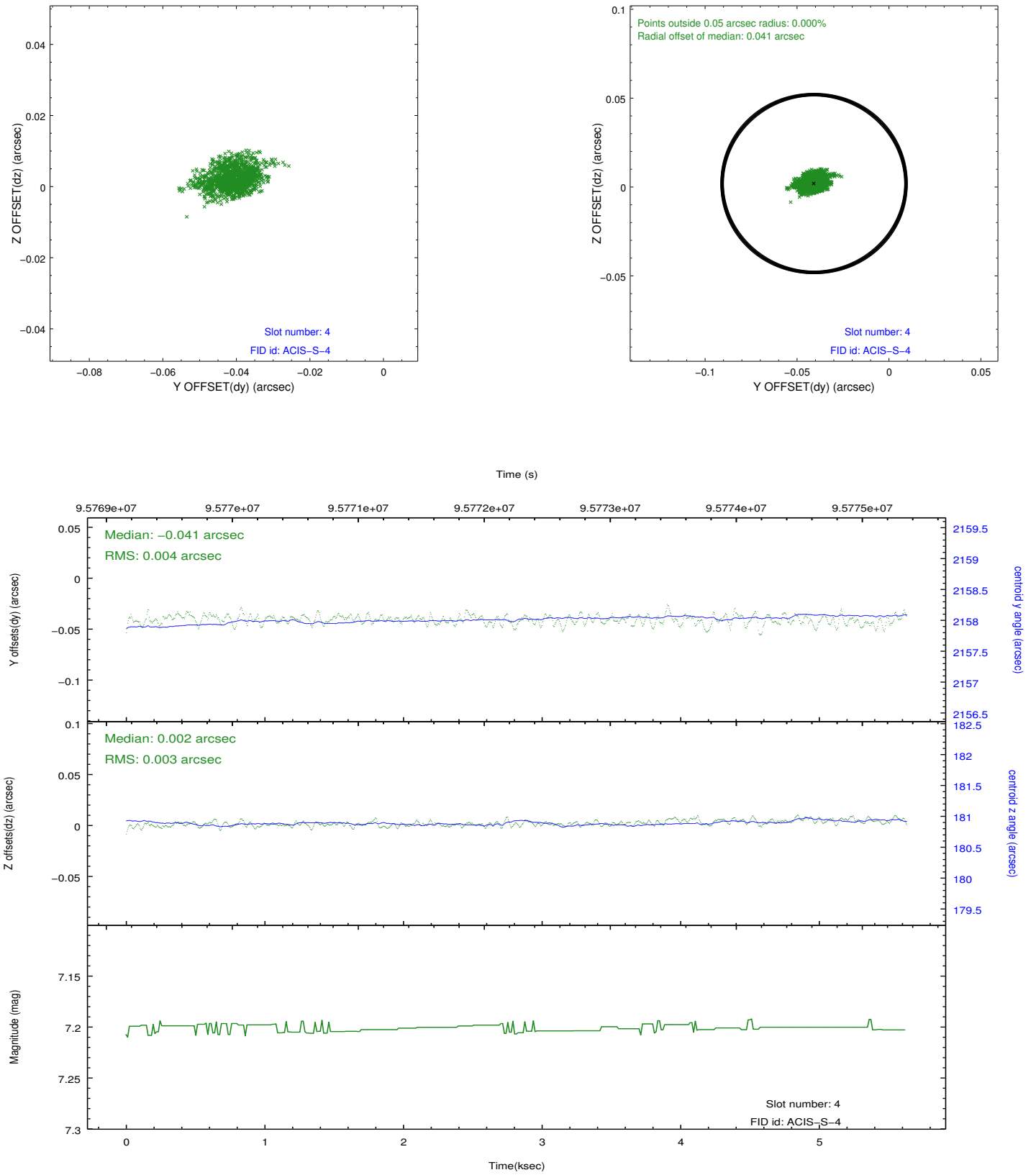


## 2.5 FID Slots

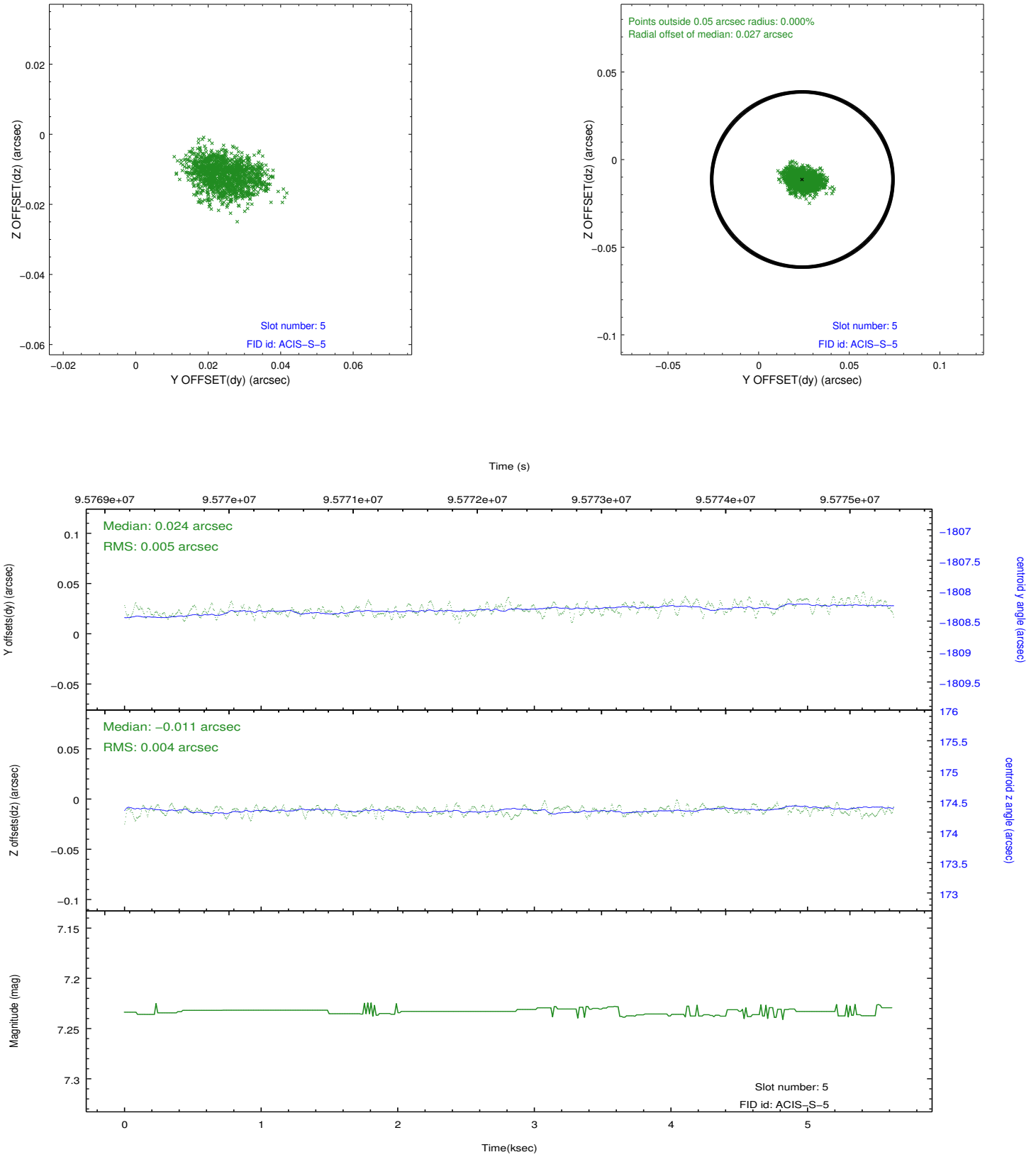
### 2.5.1 Slot 3



## 2.5.2 Slot 4



### 2.5.3 Slot 5



## A Summary

### A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.09.14
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.755

### A.2 Comments

Window constraint met.