

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 7648 - L2 Version 3  
Chandra X-Ray Center

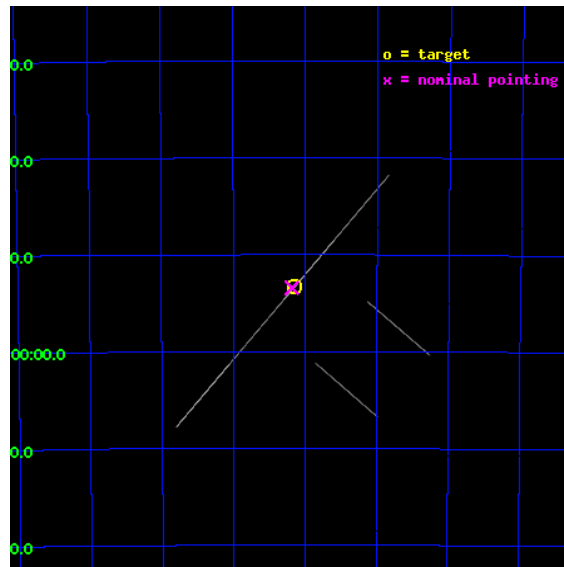
L2 Processing Date : Apr 23 2012

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# 1 Front

seq_num	500777	Sequence number
obs_id	7648	Observation id
title	Tiny Hiccups To Titanic Explosions: Tackling Transients in Anomalous X-ray Pulsars	Proposal title
observer	Professor Victoria Kaspi	Principal investigator
object	1E 1048.1-5937	Source name
ra_targ	162.537083	Observer's specified target RA [deg]
dec_targ	-59.889	Observer's specified target Dec [deg]
ra_nom	162.54632591697	Nominal RA [deg]
dec_nom	-59.890513708354	Nominal Dec [deg]
roll_nom	310.50187015852	Nominal Roll [deg]
revision	3	Processing version of data
ontime	18459.5	Sum of GTIs [s]
livetime	18387.392578125	Livetime [s]
ontime2	18459.5	Sum of GTIs [s]
ontime3	18459.5	Sum of GTIs [s]
ontime5	18459.5	Sum of GTIs [s]
ontime6	18459.5	Sum of GTIs [s]
ontime7	18459.5	Sum of GTIs [s]
ontime8	18459.5	Sum of GTIs [s]
l2events	398103	Number of level 2 events

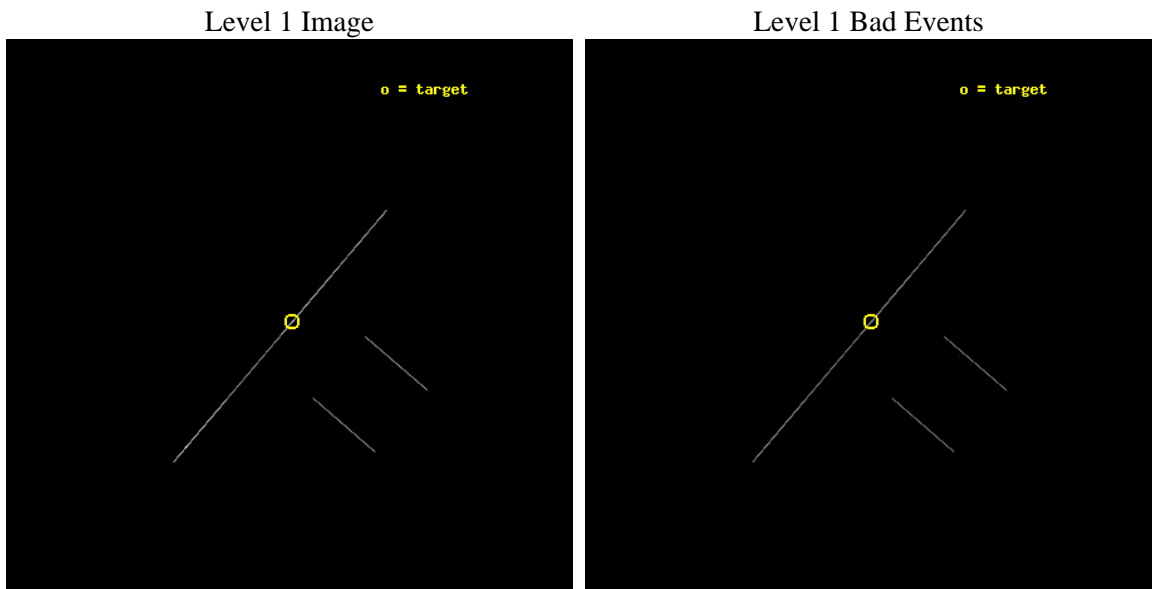




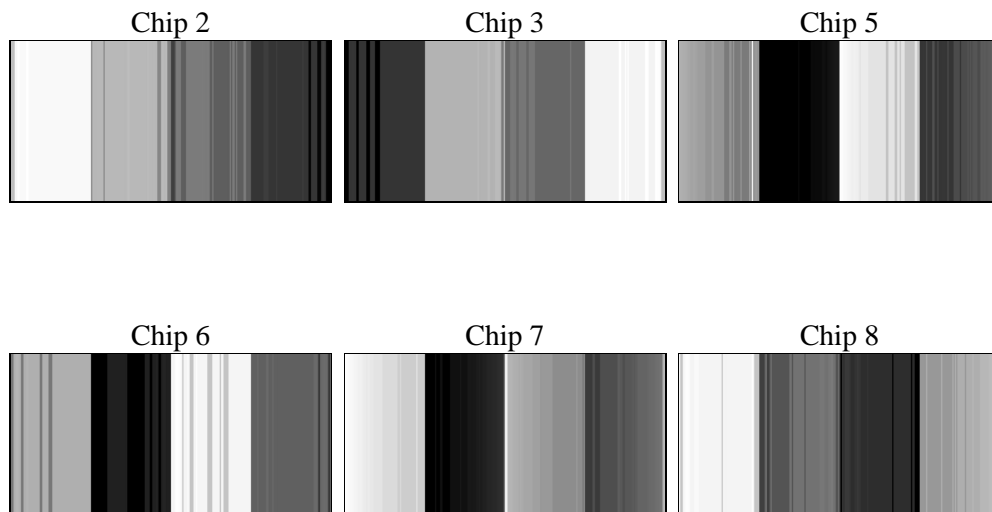
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	18276.756000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	18459.5	Sum of GTIs [s]
caldsver	4.4.9	&#160	ontime2	18459.5	Sum of GTIs [s]
date	2012-04-23T09:30:27	Date and time of file creation	ontime3	18459.5	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	18459.5	Sum of GTIs [s]
			ontime6	18459.5	Sum of GTIs [s]
			ontime7	18459.5	Sum of GTIs [s]
			ontime8	18459.5	Sum of GTIs [s]
			l1events	594819	Number of level 1 events

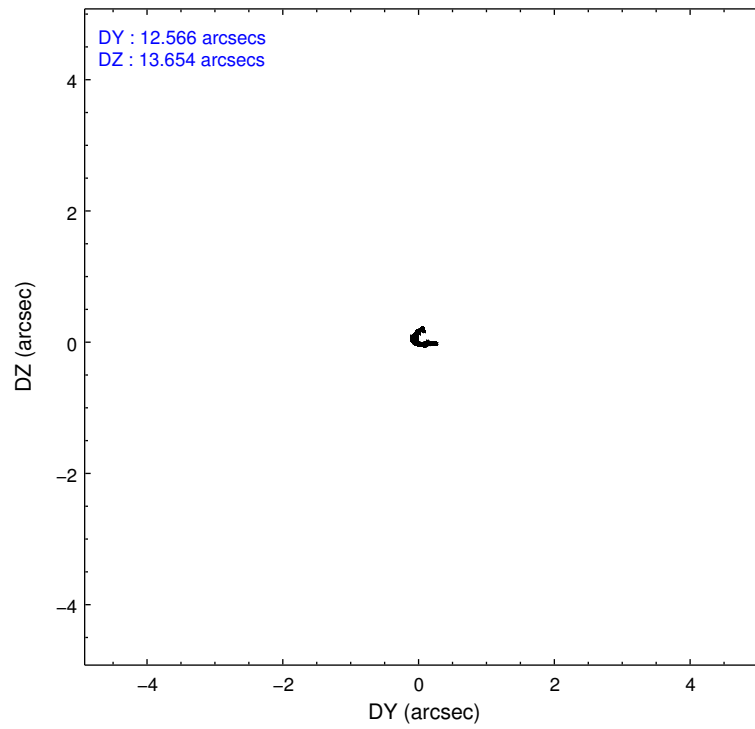
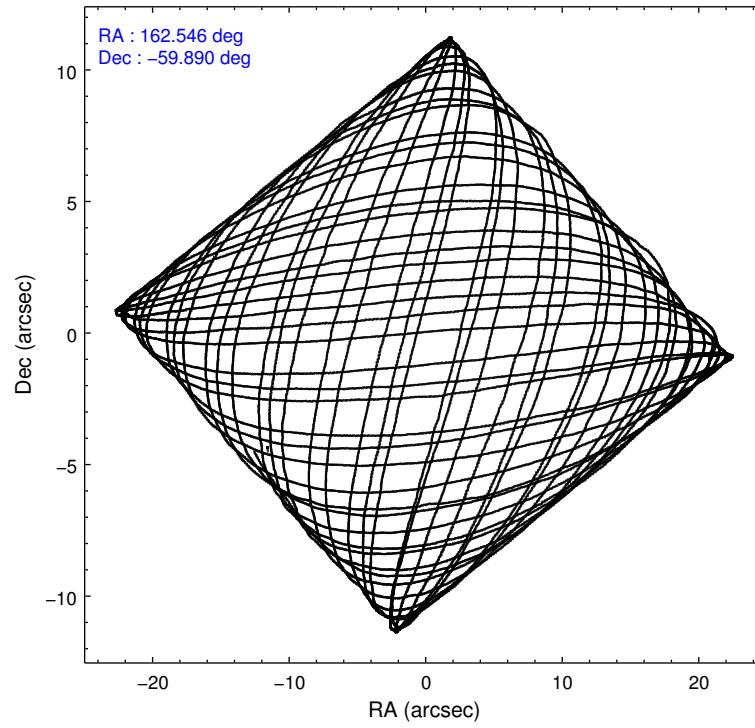
### 2.1.4 Events

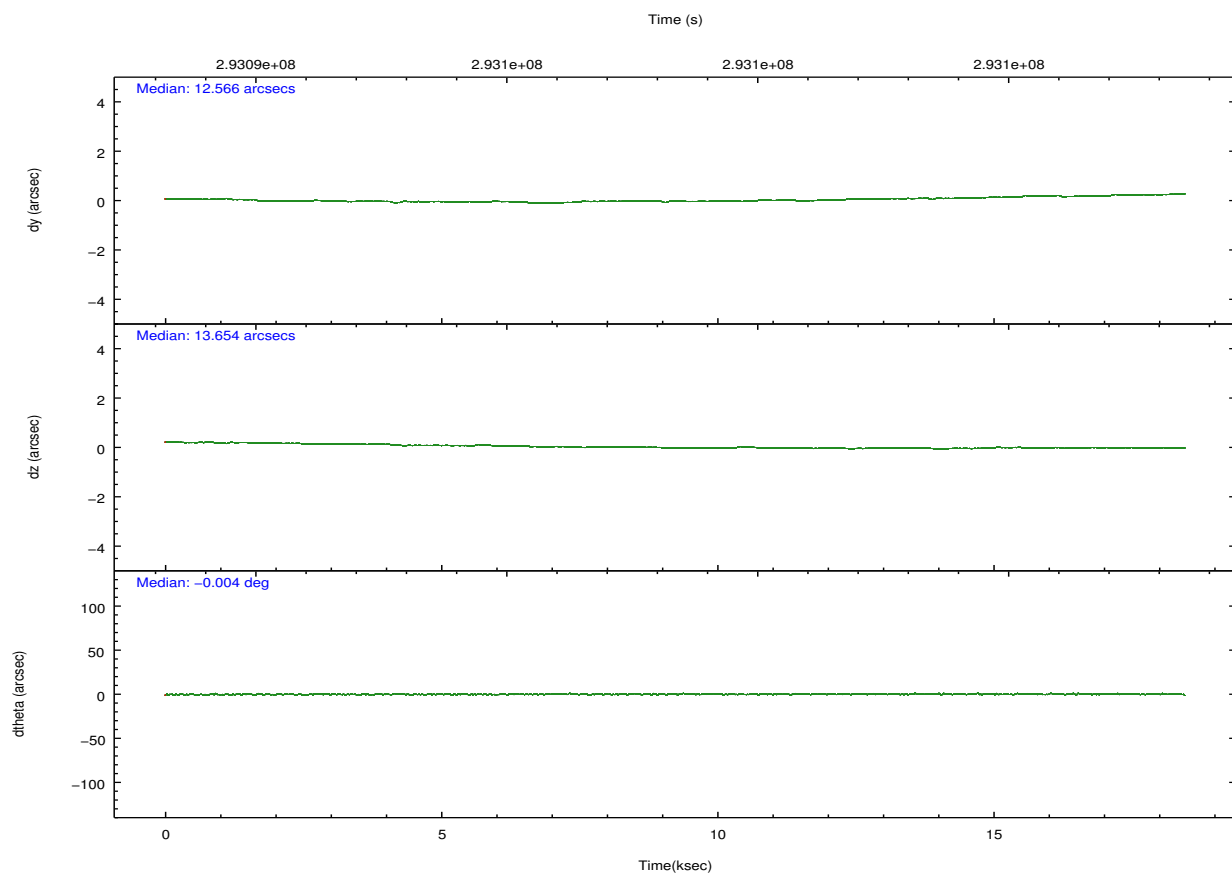
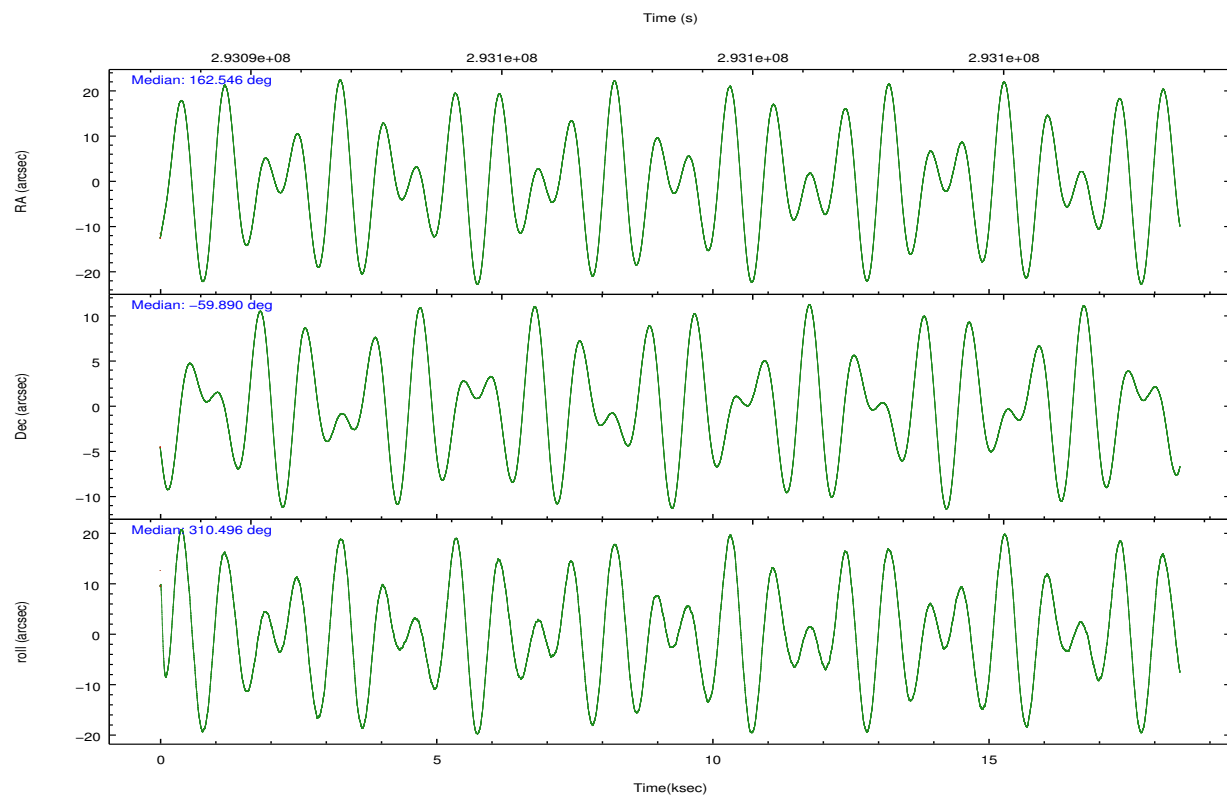
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	36445	39922	198116	40016	199427	80893	grade 0 events	4584	4854	52914	4103	26739	14227
rejected events	6907	7439	16631	8093	21008	11362		12%	12%	26%	10%	13%	17%
rejected %	18%	18%	8%	20%	10%	14%	grade 1 events	177	149	297	138	433	326
								0%	0%	0%	0%	0%	0%
							grade 2 events	11444	12554	51068	12454	48573	21702
								31%	31%	25%	31%	24%	26%
							grade 3 events	3763	4349	3265	4062	15012	8102
								10%	10%	1%	10%	7%	10%
							grade 4 events	3735	3845	3009	3755	14768	7807
								10%	9%	1%	9%	7%	9%
							grade 5 events	6639	7203	15951	7887	20159	10822
								18%	18%	8%	19%	10%	13%
							grade 6 events	6103	6968	71612	7617	73743	17907
								16%	17%	36%	19%	36%	22%
							grade 7 events	0	0	0	0	0	0
								0%	0%	0%	0%	0%	0%

## 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	CC33_FAINT	CC33_FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	162.494678	162.5463259169656	Subarray requested	NONE	NONE
[deg] Pointing Dec	-59.881686	-59.8905137083545	Alternating exposures requested	N	N
[deg] Pointing Roll	310.300551	310.5018701585229	[s] Primary exposure time	0.000000	0
[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)	293089300.184000	293088747.64958			
Observation start date	2007-04-16T05:40:35	2007-04-16T05:32:27			
[s] Observation end time (MET)	293107577.184000	293107802.91299			
Observation end date	2007-04-16T10:45:12	2007-04-16T10:50:02			
Read mode	CONTINUOUS	CONTINUOUS			

## 2.3 Aspect



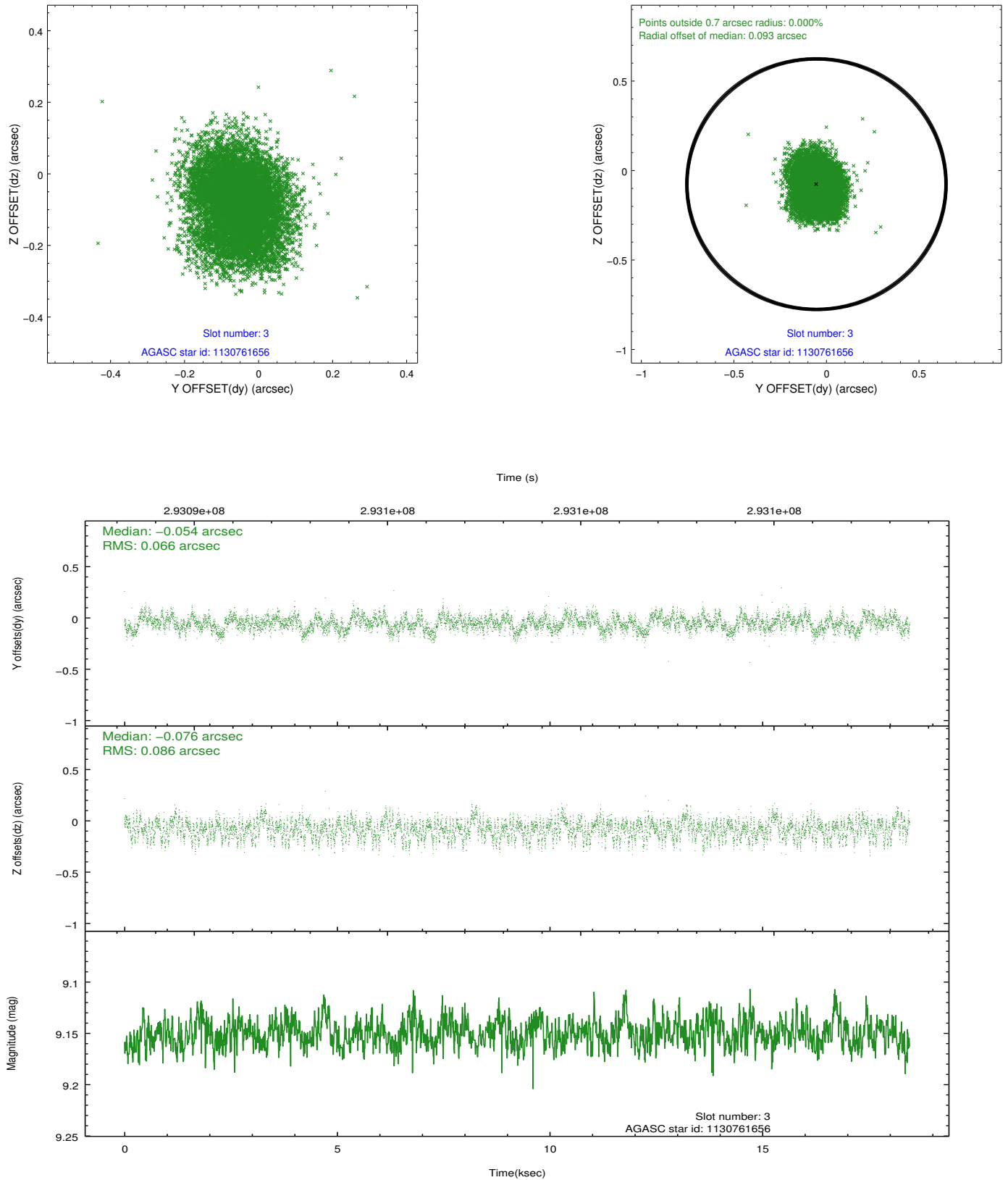


### Slot Statistics

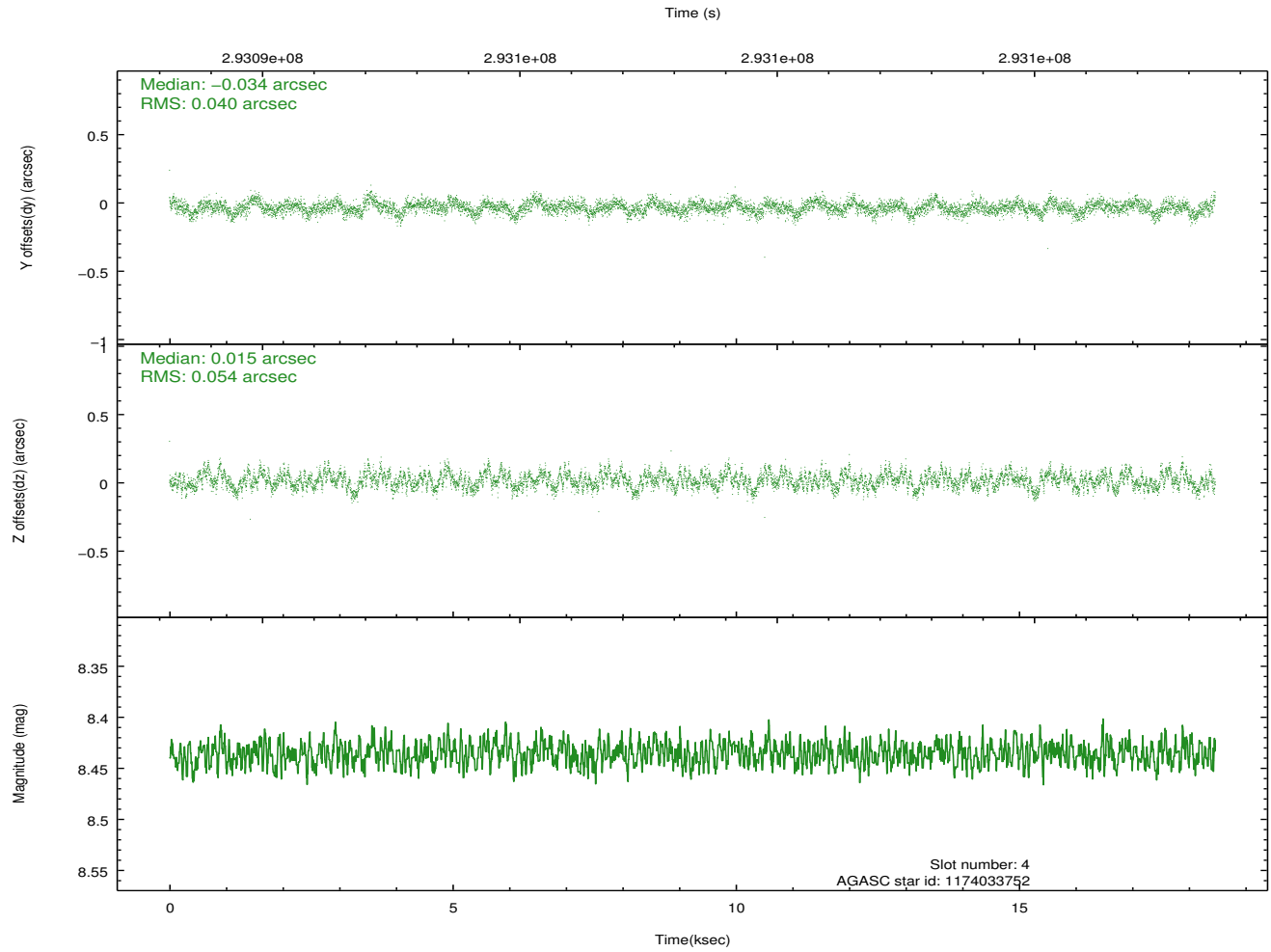
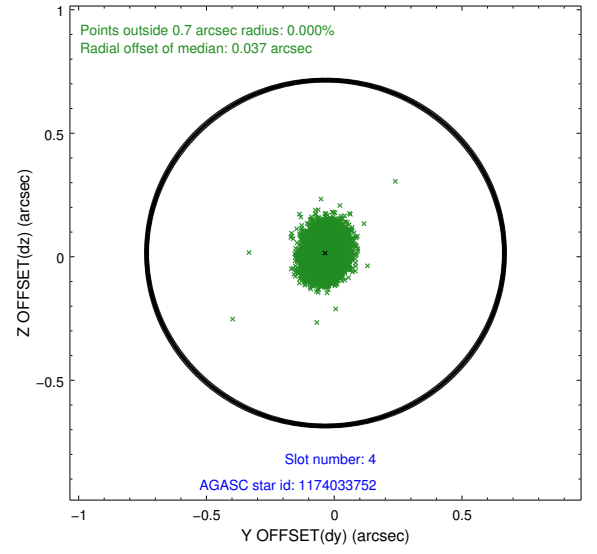
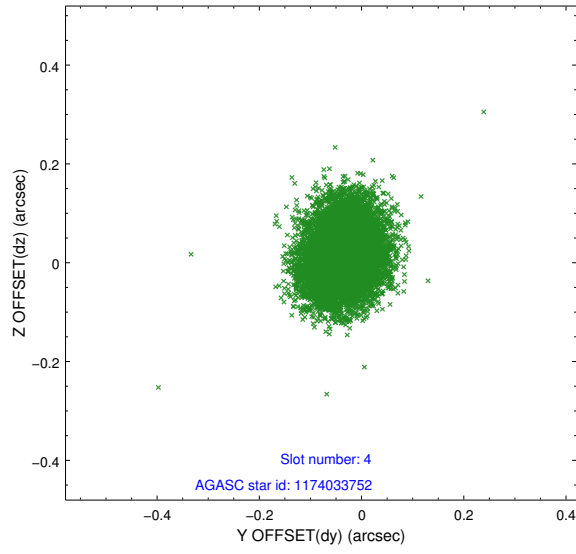
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	4503	-0.031	-0.058	0.007	0.012	0.000000	0.000000	-765.53	-1735.09
1	FID	ACIS-S-4	7.19	4504	0.148	0.031	0.006	0.013	0.000000	0.000000	2147.82	173.26
2	FID	ACIS-S-5	7.23	4503	-0.148	0.036	0.008	0.014	0.000000	0.000000	-1818.22	167.17
3	GUIDE	1130761656	9.15	8998	-0.054	-0.076	0.117	0.187	163.475867	-59.582518	345.19	2051.99
4	GUIDE	1174033752	8.44	9003	-0.034	0.015	0.071	0.115	162.418977	-60.164599	689.28	-761.80
5	GUIDE	1174150720	8.94	8933	0.090	0.025	0.071	0.114	164.104813	-60.030464	2308.09	1839.27
6	GUIDE	1130640672	8.29	9006	-0.019	-0.104	0.060	0.095	162.096044	-59.540805	-1404.50	237.55
7	GUIDE	1174033144	8.71	8999	0.017	0.142	0.081	0.125	161.168741	-60.059230	-1035.05	-2245.56

## 2.4 Star Slots

### 2.4.1 Slot 3

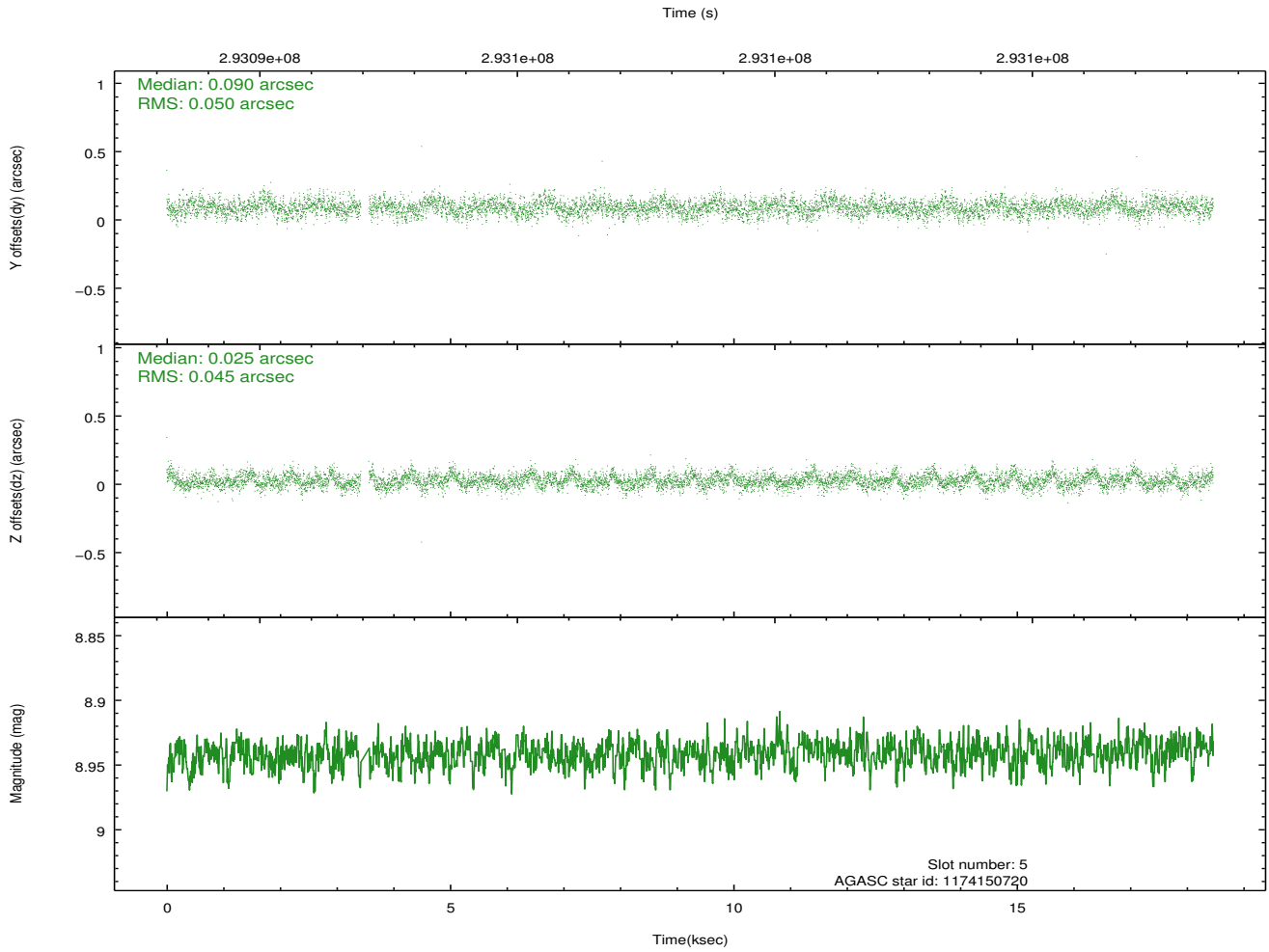
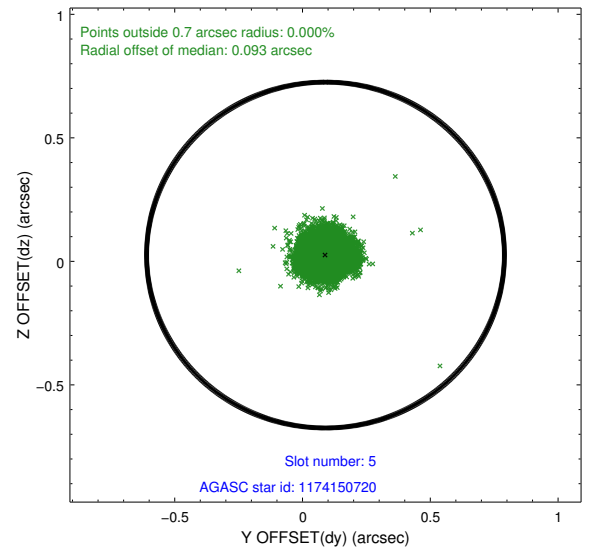
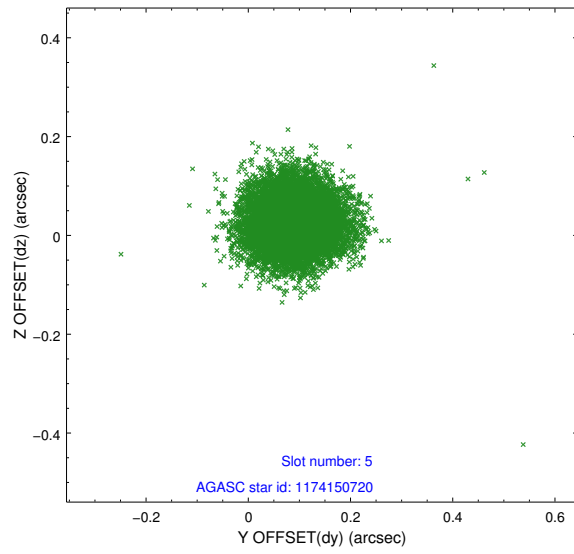


## 2.4.2 Slot 4

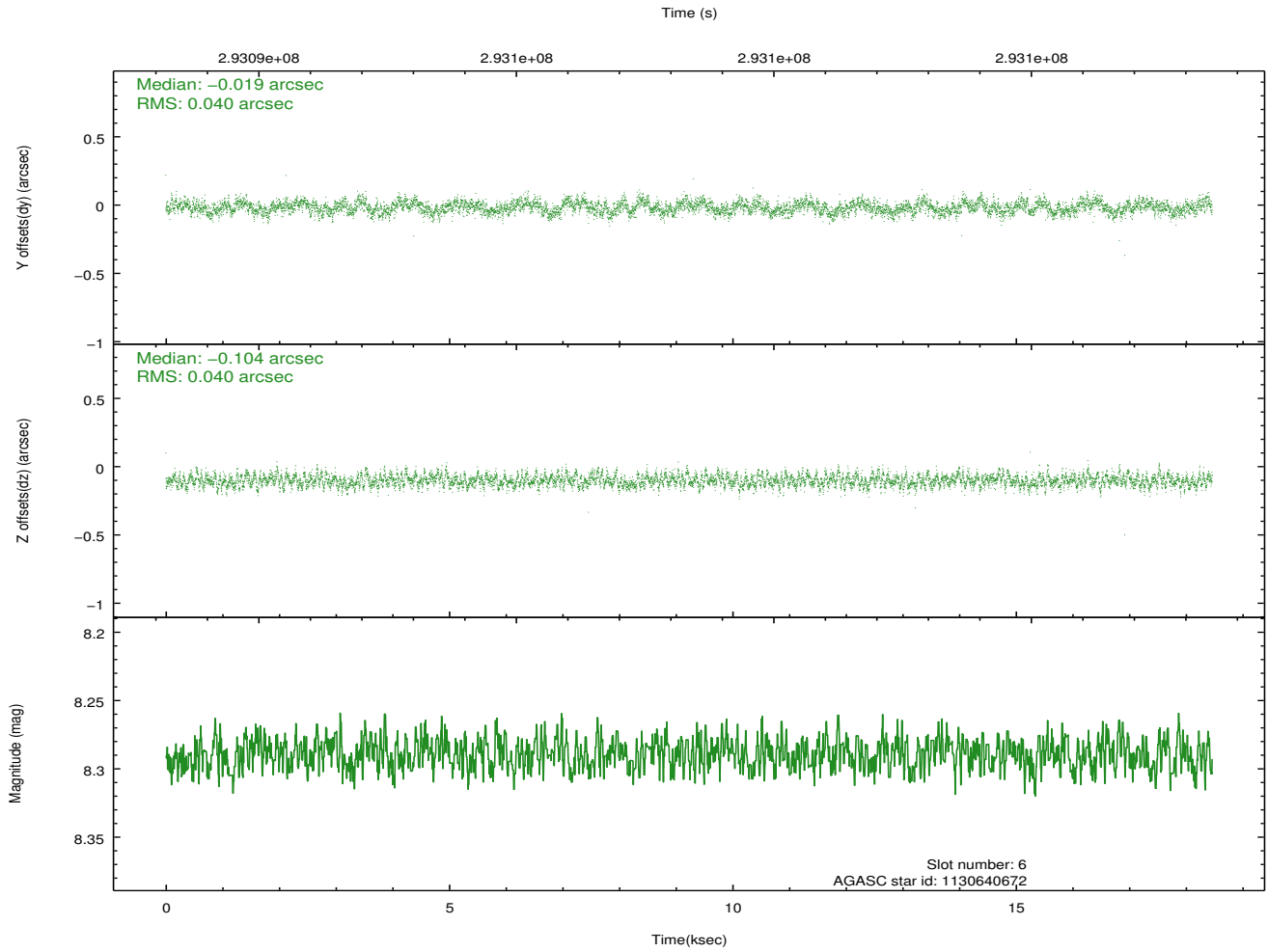
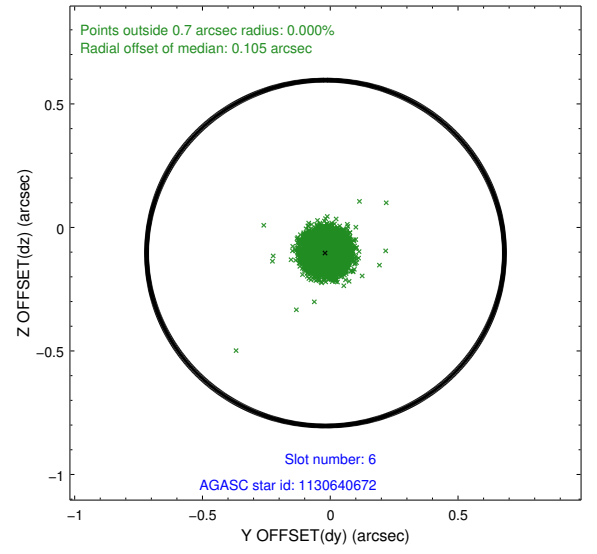
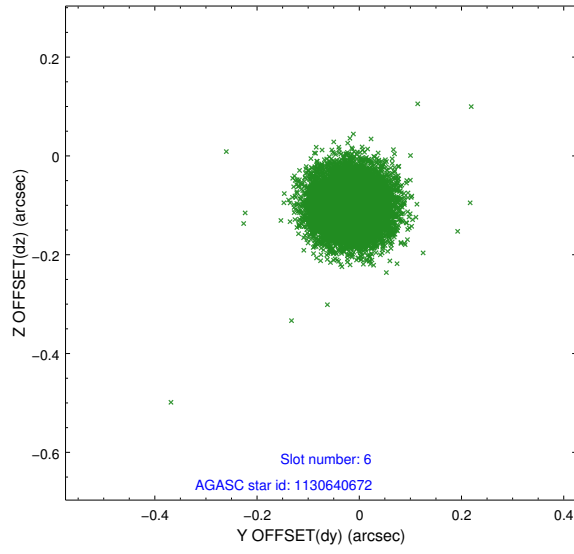




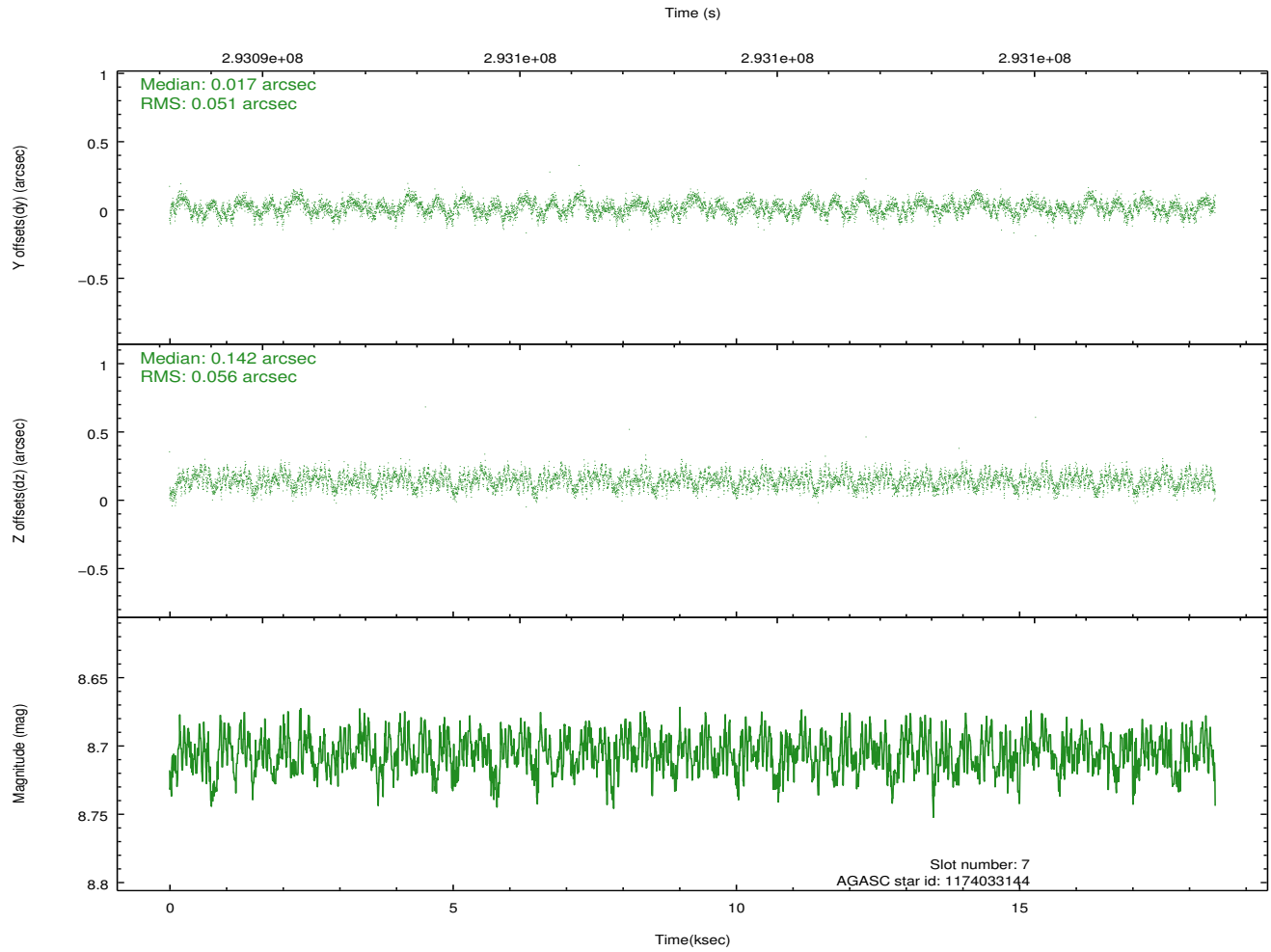
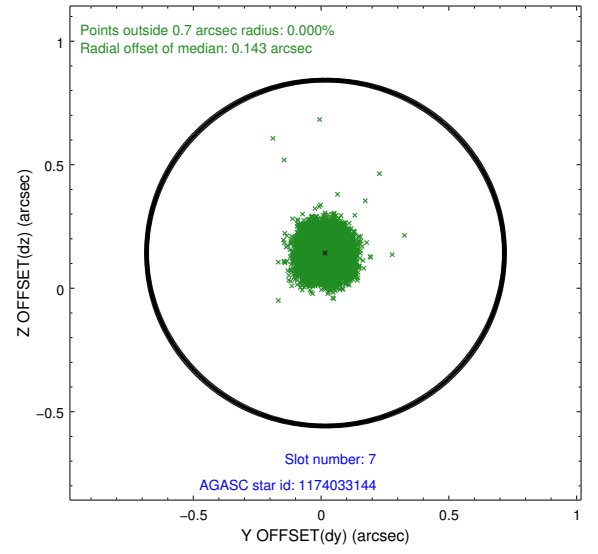
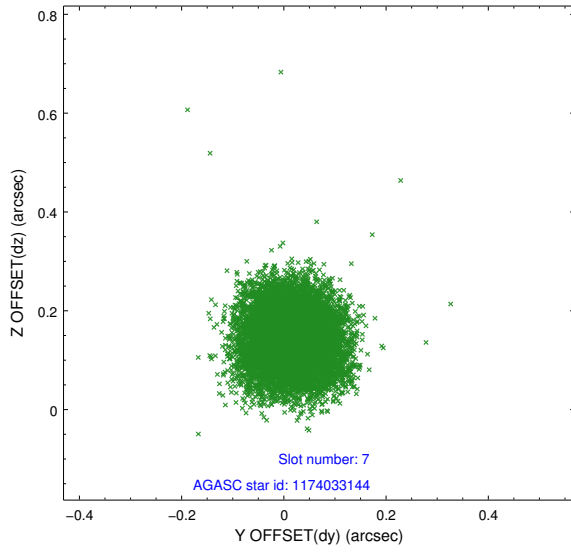
### 2.4.3 Slot 5



## 2.4.4 Slot 6

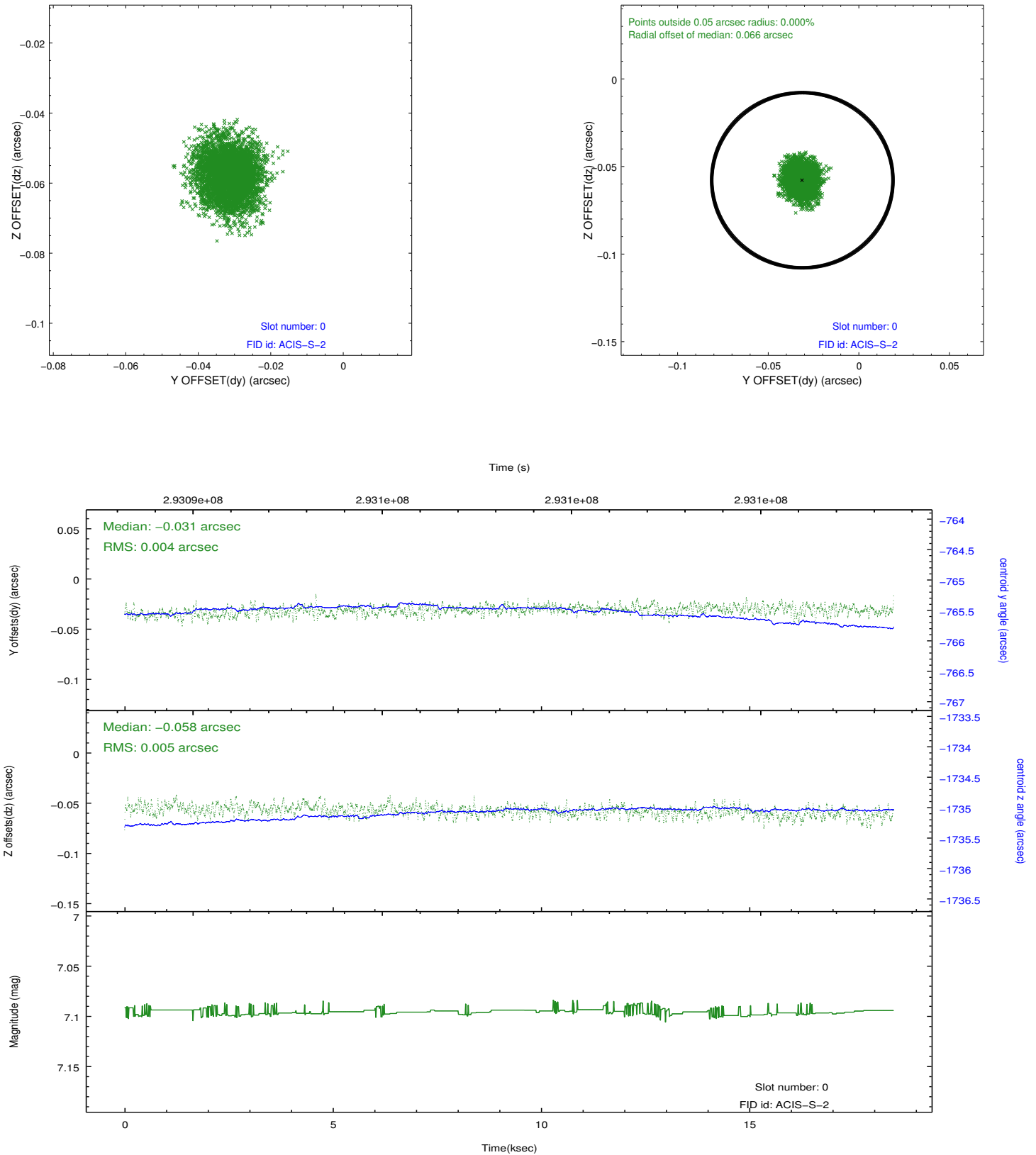


### 2.4.5 Slot 7

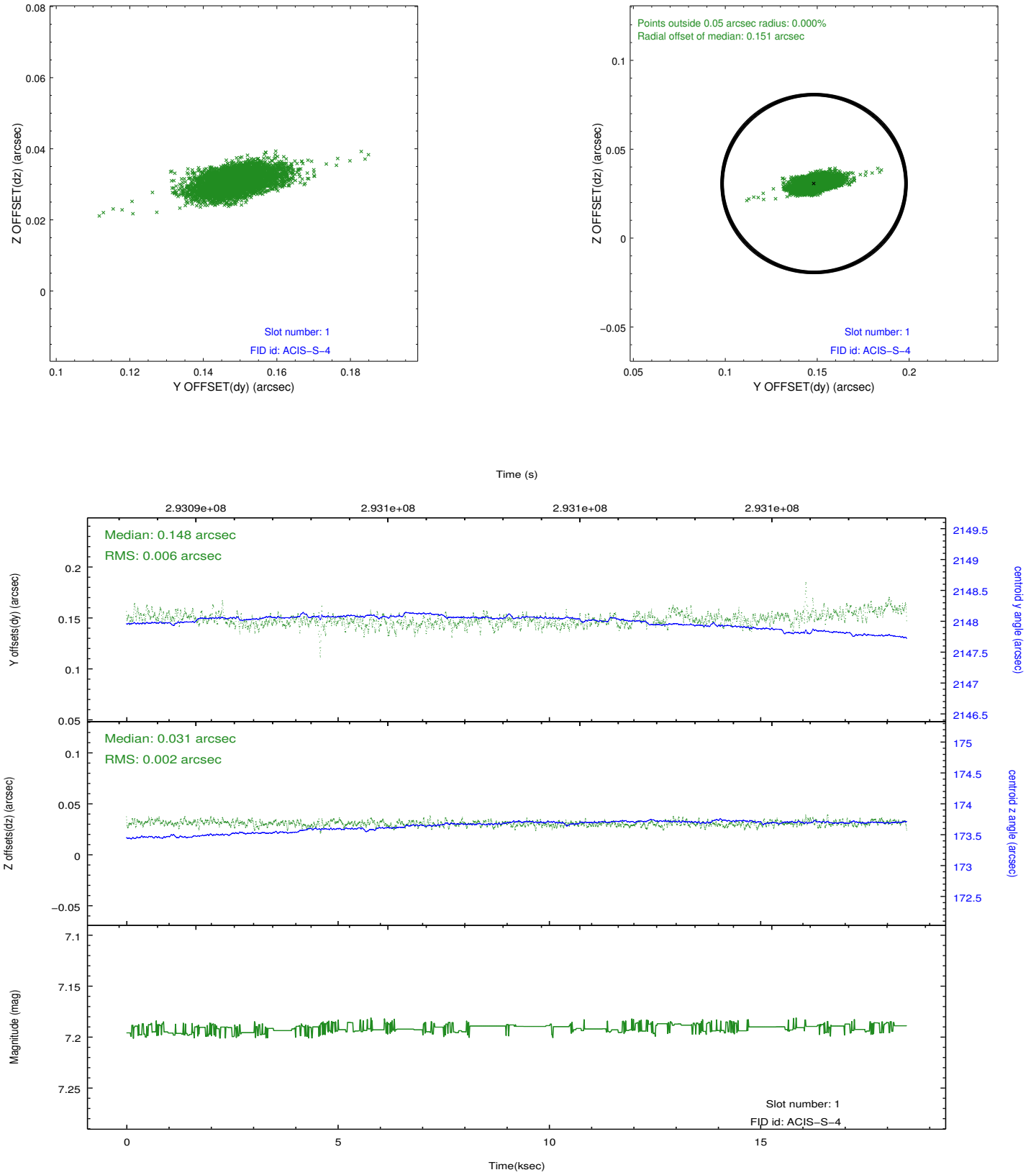


## 2.5 FID Slots

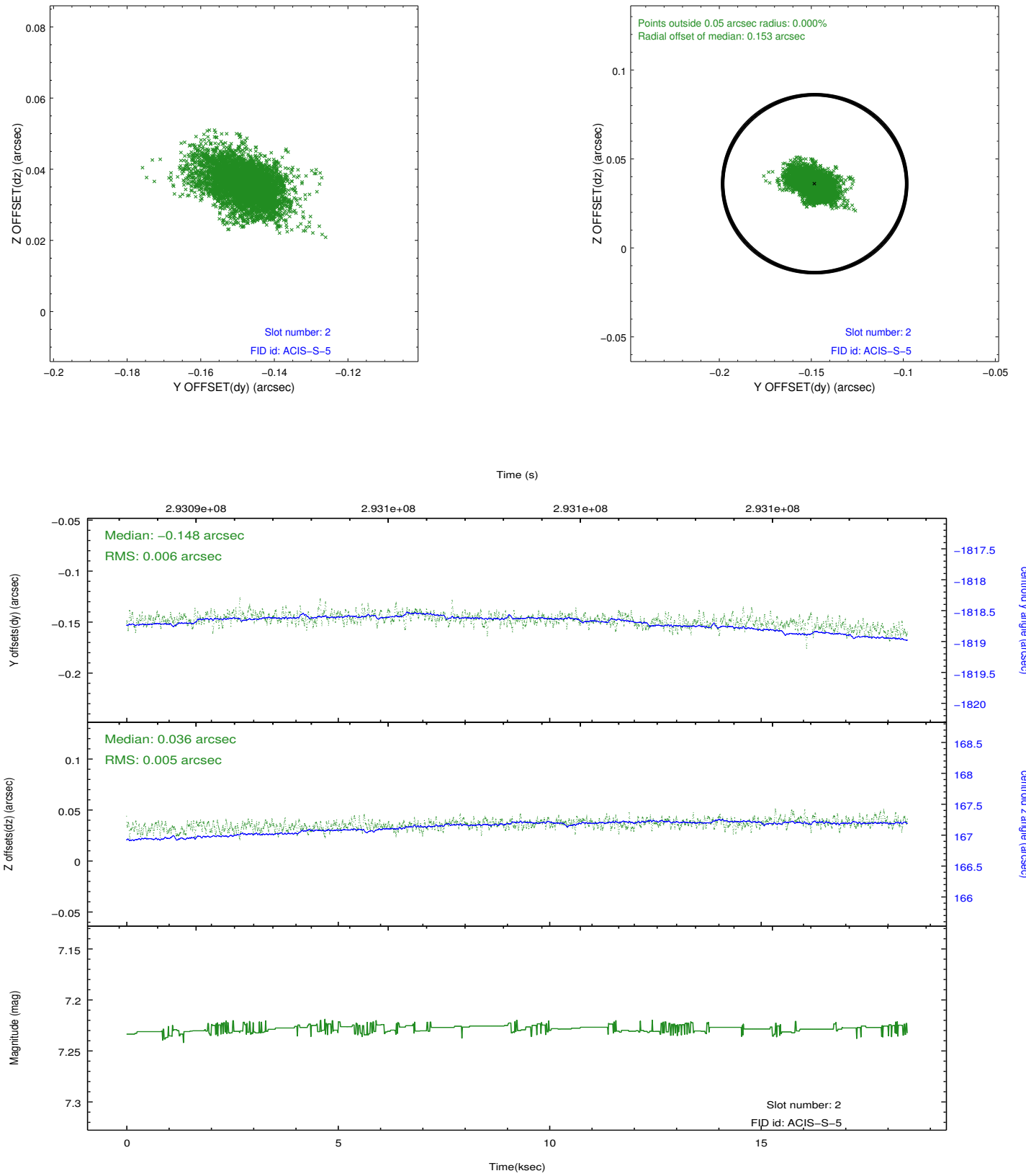
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.04.23
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	18.4595

### A.2 Comments