

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 1995 - L2 Version 4  
Chandra X-Ray Center

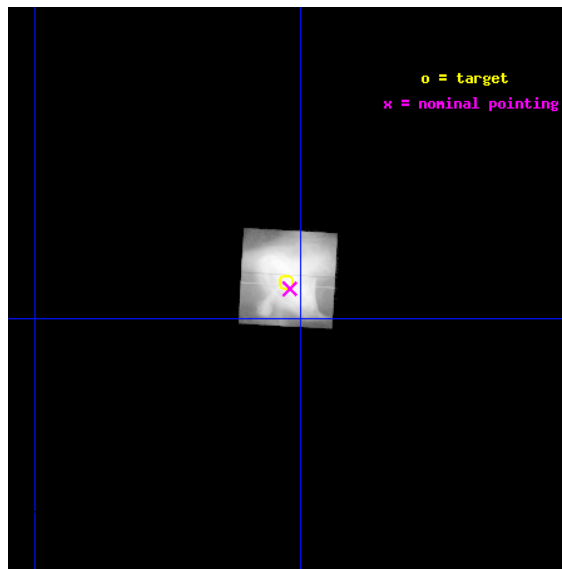
L2 Processing Date : Sep 12 2012

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# 1 Front

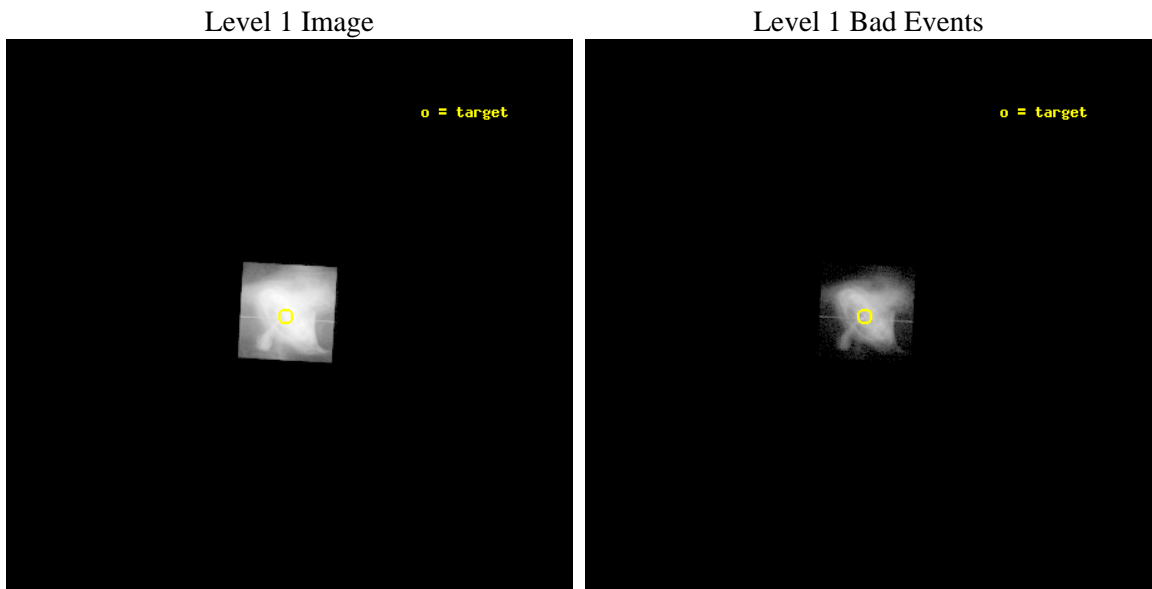
seq_num	500172	Sequence number
obs_id	1995	Observation id
title	COORDINATED CHANDRA/HST OBSERVATIONS OF THE CRAB NEBULA	Proposal t
observer	PROF. JEFF HESTER	Principal investigator
object	CRAB NEBULA	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	83.631667	Observer's specified target RA [deg]
dec_targ	22.015667	Observer's specified target Dec [deg]
ra_nom	83.629963351107	Nominal RA [deg]
dec_nom	22.01275213337	Nominal Dec [deg]
roll_nom	273.21757058258	Nominal Roll [deg]
revision	4	Processing version of data
ontime	15144.236693874	Sum of GTIs [s]
livetime	2647.8715763672	Livetime [s]
ontime7	15144.236693874	Sum of GTIs [s]
l2events	9041374	Number of level 2 events



## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



### 2.1.2 Parameters

obi_num	0	Obi number	sched_exp_time	24995.814000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	15144.236693874	Sum of GTIs [s]
caldsver	4.5.1.1	&#160	ontime7	15144.236693874	Sum of GTIs [s]
date	2012-09-12T05:44:44	Date and time of file creation	l1events	10261473	Number of level 1 events
revision	4	Processing version of data			

### 2.1.3 Events

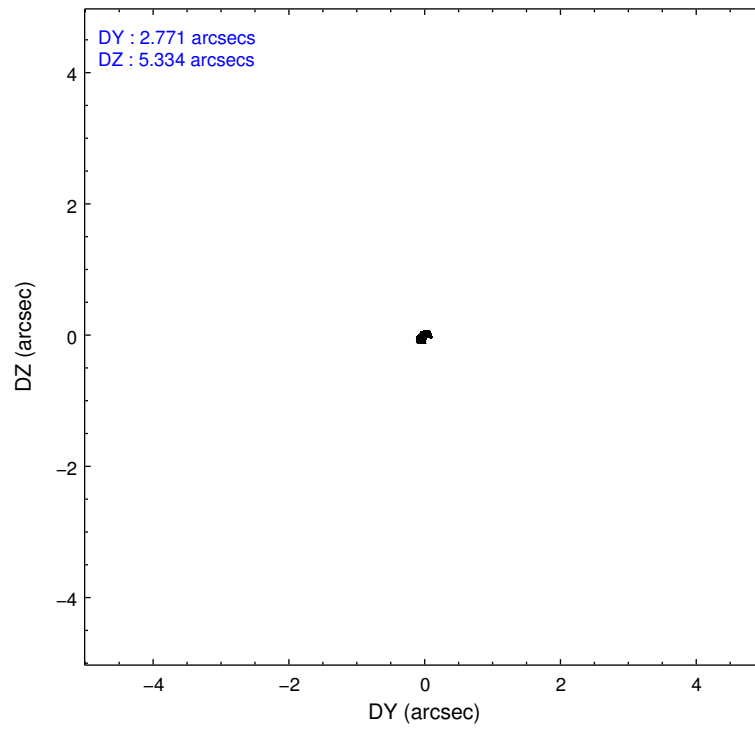
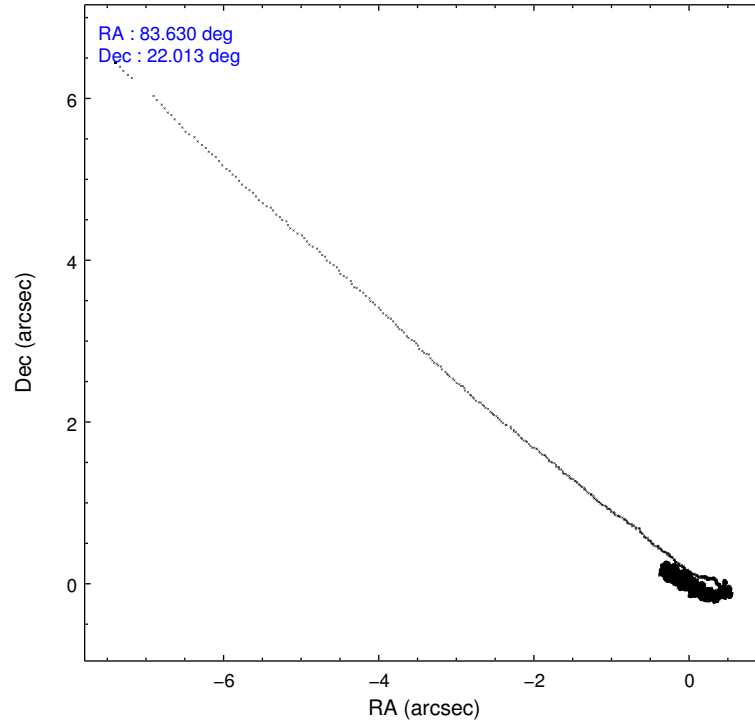
	<b>ccd 7</b>
level 1 events	10261473
rejected events	1112404
rejected %	10%

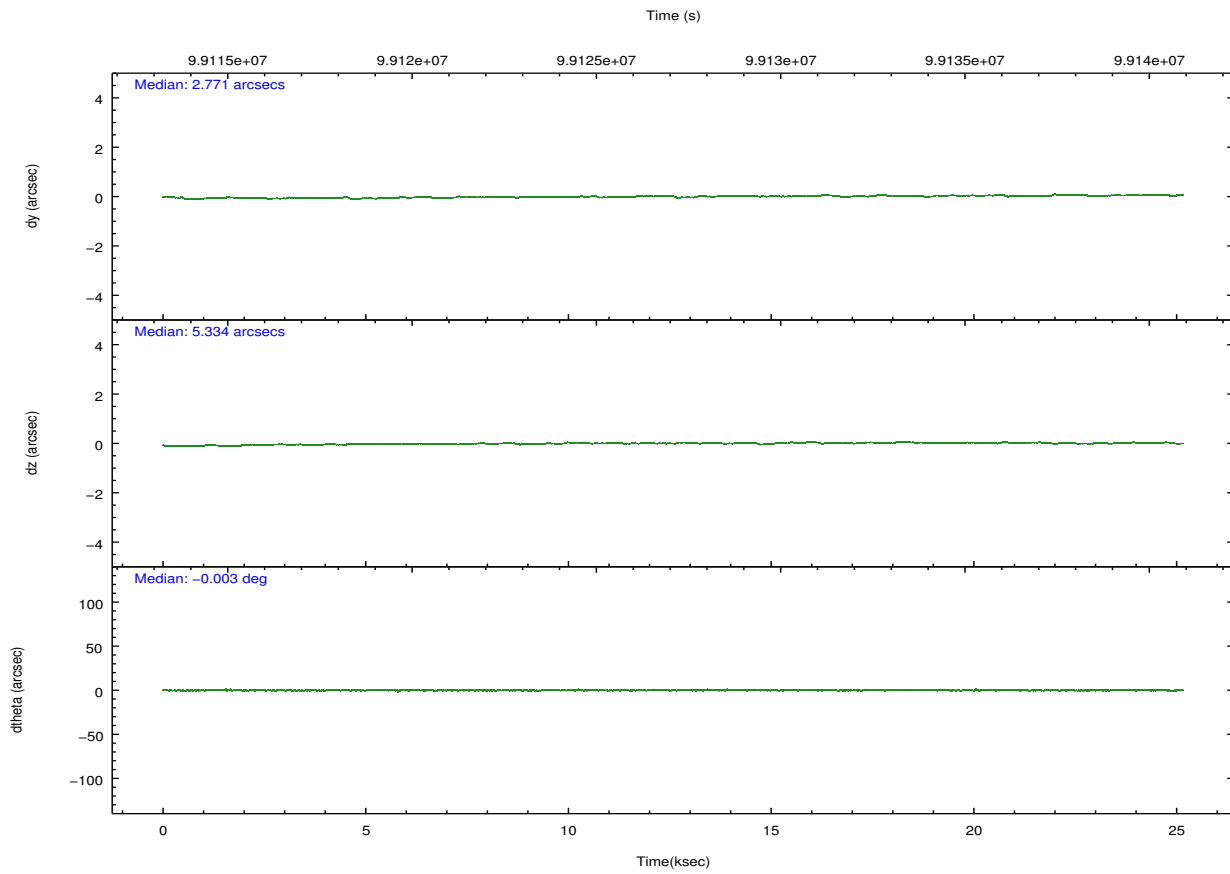
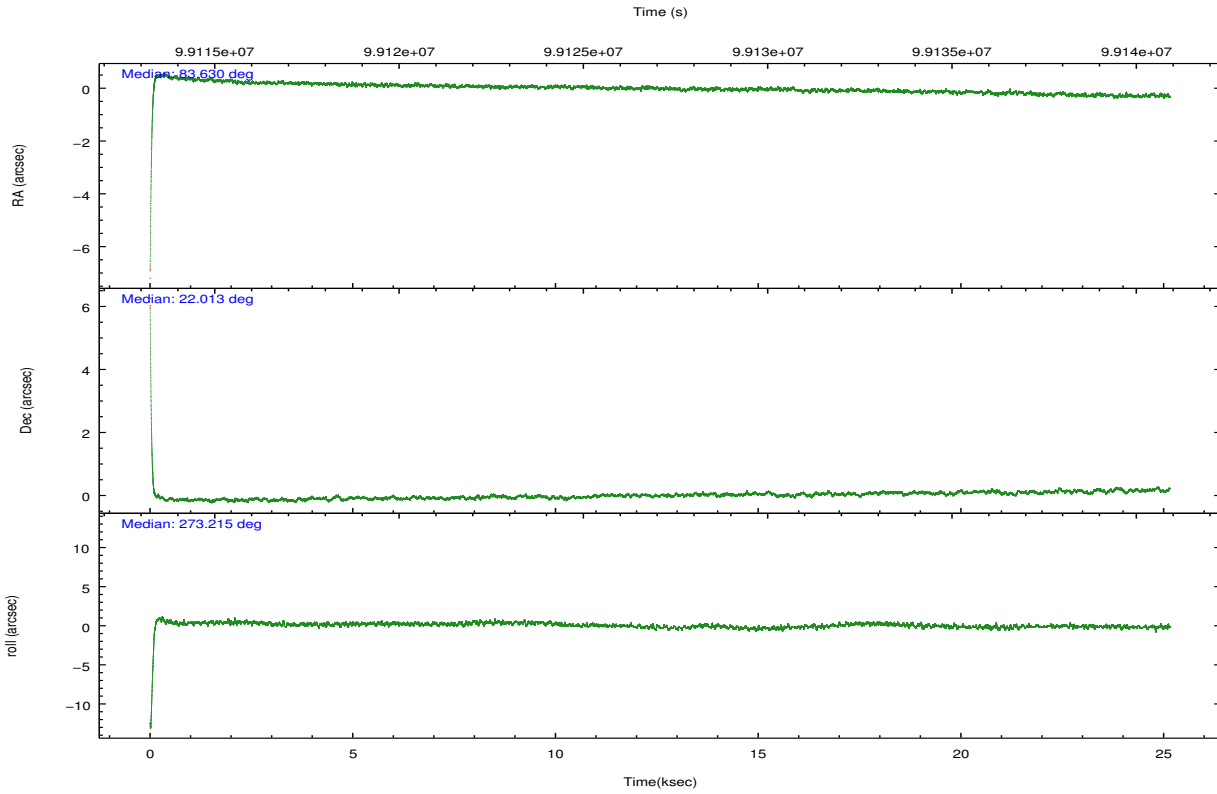
	<b>ccd 7</b>
grade 0 events	2111833
	20%
grade 1 events	138485
	1%
grade 2 events	2449113
	23%
grade 3 events	1079281
	10%
grade 4 events	1050778
	10%
grade 5 events	378925
	3%
grade 6 events	2540709
	24%
grade 7 events	512349
	4%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-7	ACIS-7	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	GRADED	GRADED	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	83.613601	83.62996335110742	Subarray requested	CUSTOM	CUSTOM
[deg] Pointing Dec	22.035474	22.0127521333699	Subarray start row	39	39
[deg] Pointing Roll	273.067084	273.2175705825766	Subarray row count	300	300
[s] Window start time (MET)	99014464.184000	99014464.184000	Alternating exposures requested	N	N
[s] Window stop time (MET)	99277264.184000	99277264.184000	[s] Primary exposure time	0.000000	0.2
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-182.366523	-182.3582601915437			
[mm] SIM translation stage offset	-7.766	-7.774262391464134			
[s] Observation start time (MET)	99114664.184000	99113477.24623001			
Observation start date	2001-02-21T03:50:00	2001-02-21T03:31:17			
[s] Observation end time (MET)	99139659.184000	99139973.497252			
Observation end date	2001-02-21T10:46:35	2001-02-21T10:52:53			
Read mode	TIMED	TIMED			

## 2.3 Aspect



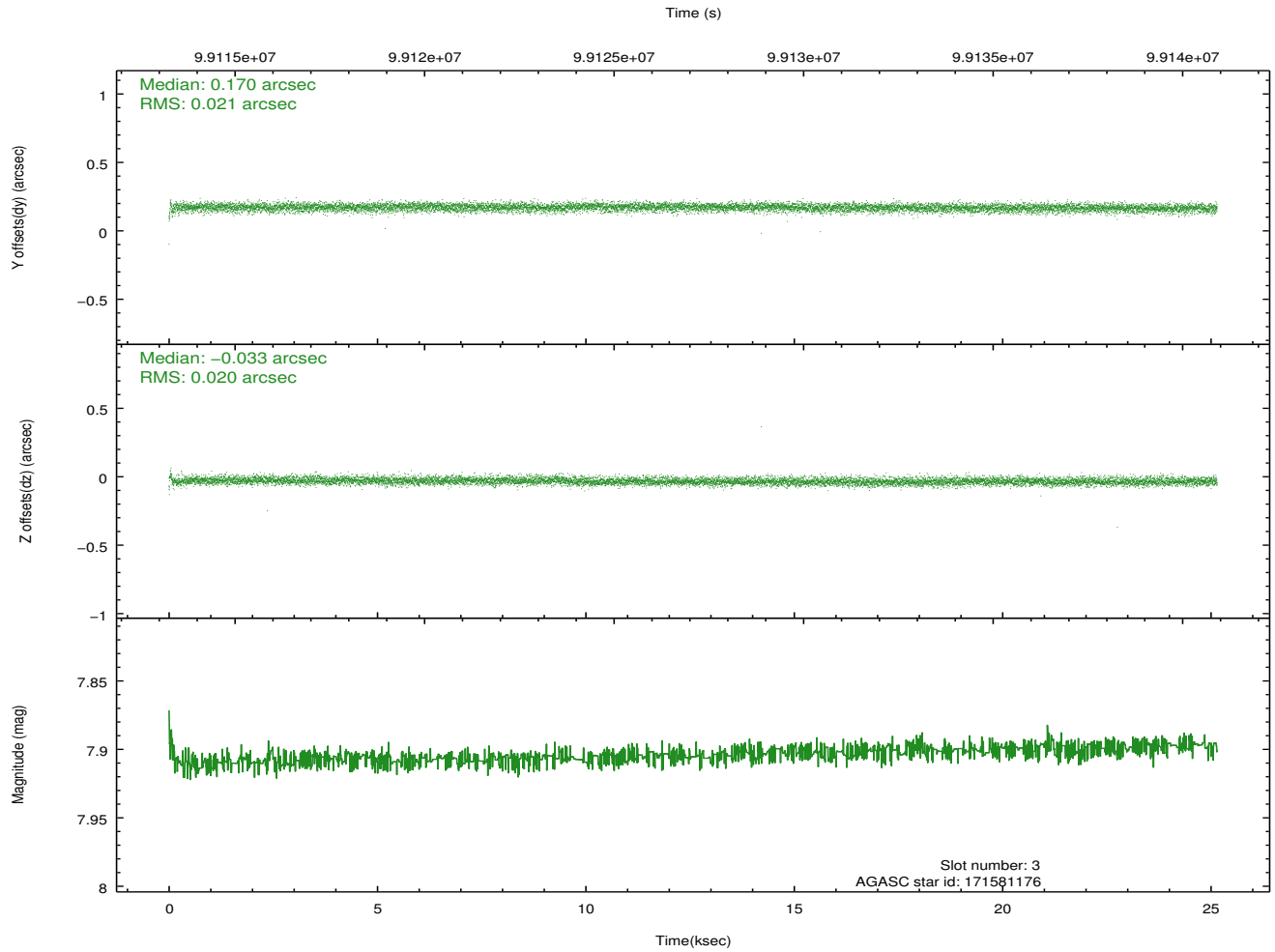
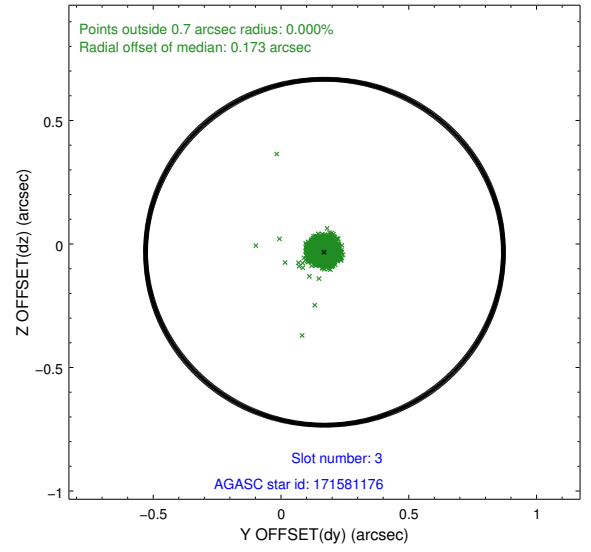
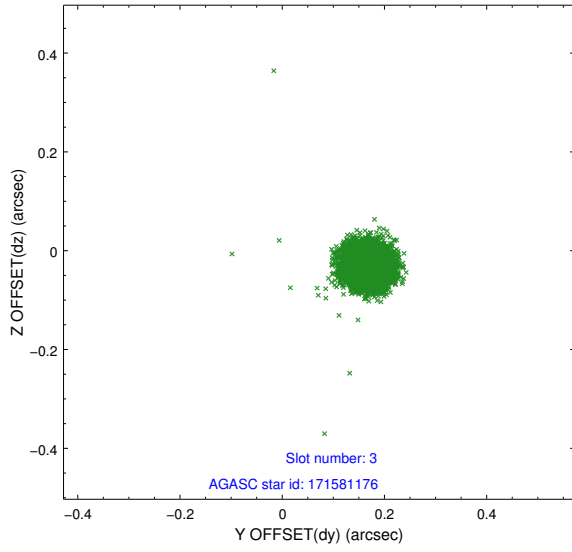


### Slot Statistics

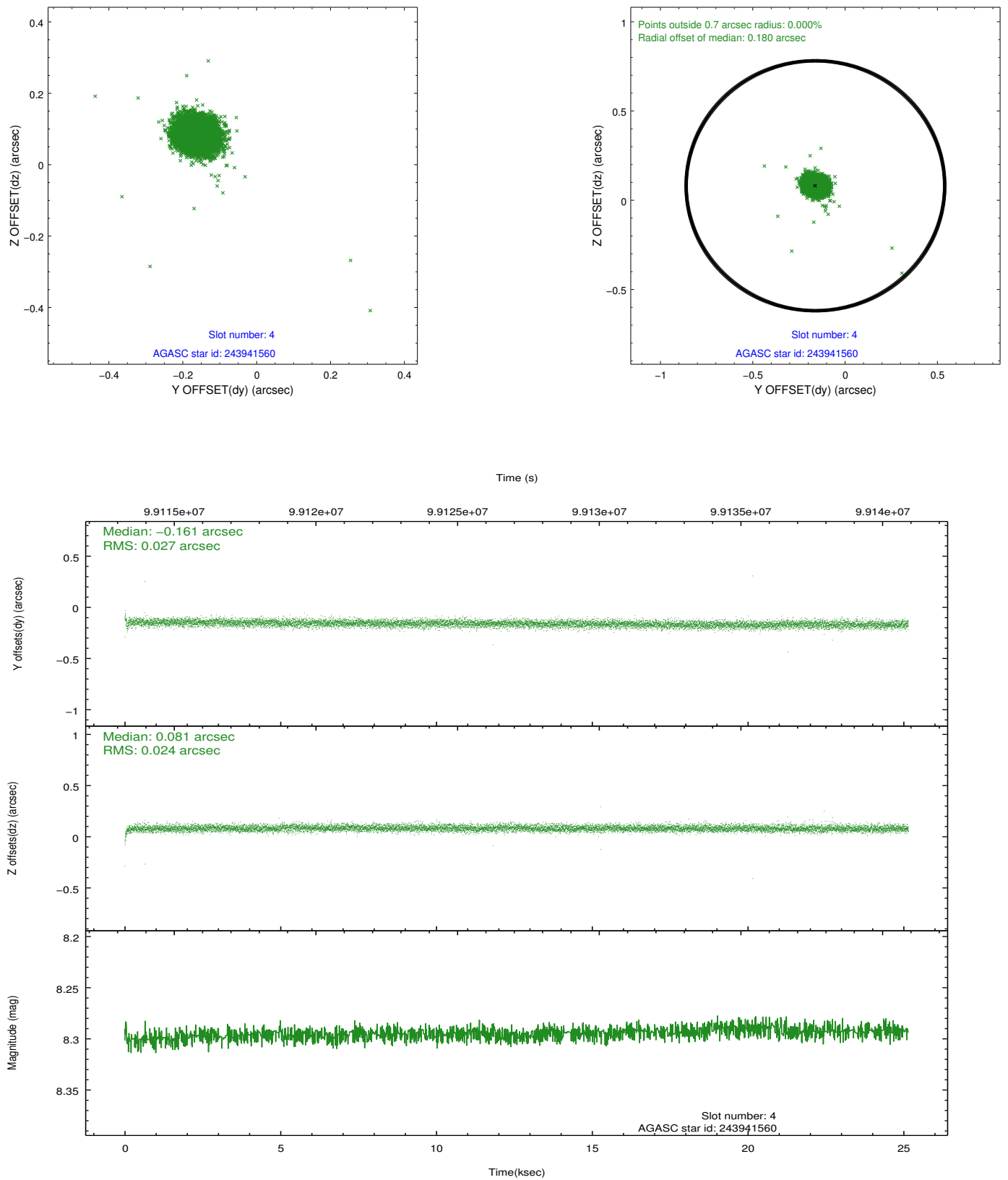
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-3	7.35	6134	-0.077	-0.018	0.007	0.011	0.000000	0.000000	58.24	-2015.69
1	FID	ACIS-S-4	7.19	6135	0.020	0.049	0.006	0.010	0.000000	0.000000	2158.53	21.70
2	FID	ACIS-S-5	7.23	6135	0.029	-0.023	0.006	0.011	0.000000	0.000000	-1807.50	15.53
3	GUIDE	171581176	7.90	12265	0.170	-0.033	0.030	0.050	83.918863	21.403256	2327.75	900.23
4	GUIDE	243941560	8.29	12270	-0.161	0.081	0.036	0.059	83.733264	22.568598	-1894.21	500.12
5	GUIDE	171585880	8.39	12268	-0.110	-0.117	0.037	0.061	83.676260	22.176319	-494.32	235.75
6	GUIDE	171586976	8.47	12268	-0.041	0.053	0.039	0.063	83.857953	22.438065	-1403.37	889.67
7	GUIDE	171597832	9.15	12265	0.142	0.014	0.058	0.098	83.183230	21.366702	2326.20	-1569.26

## 2.4 Star Slots

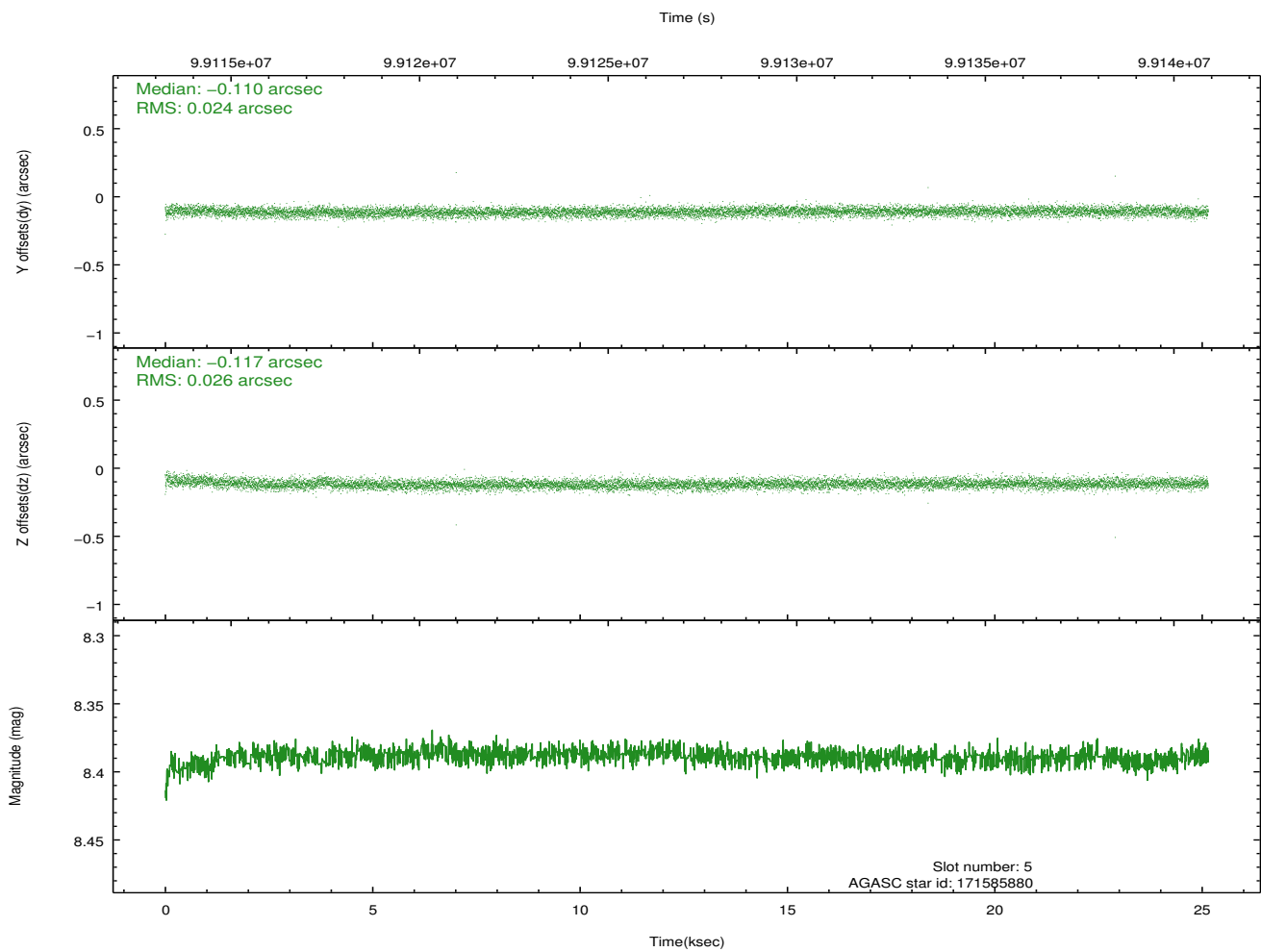
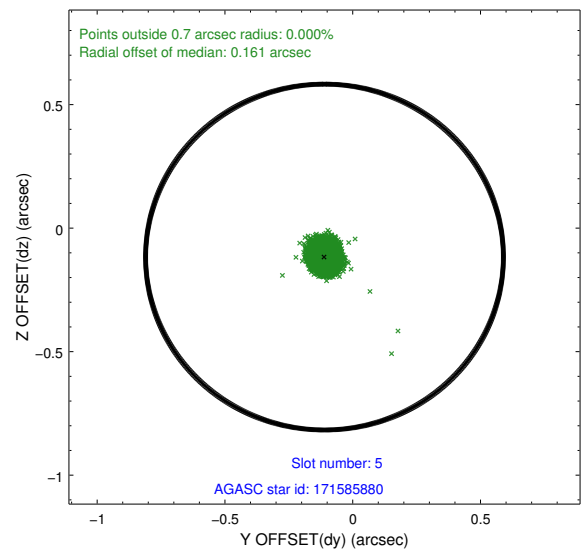
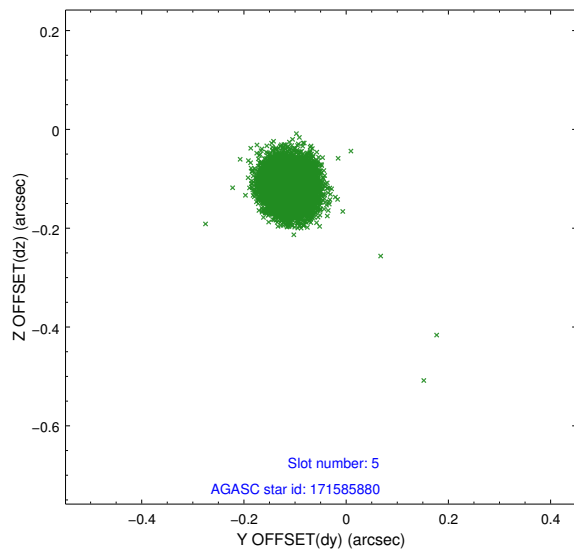
### 2.4.1 Slot 3



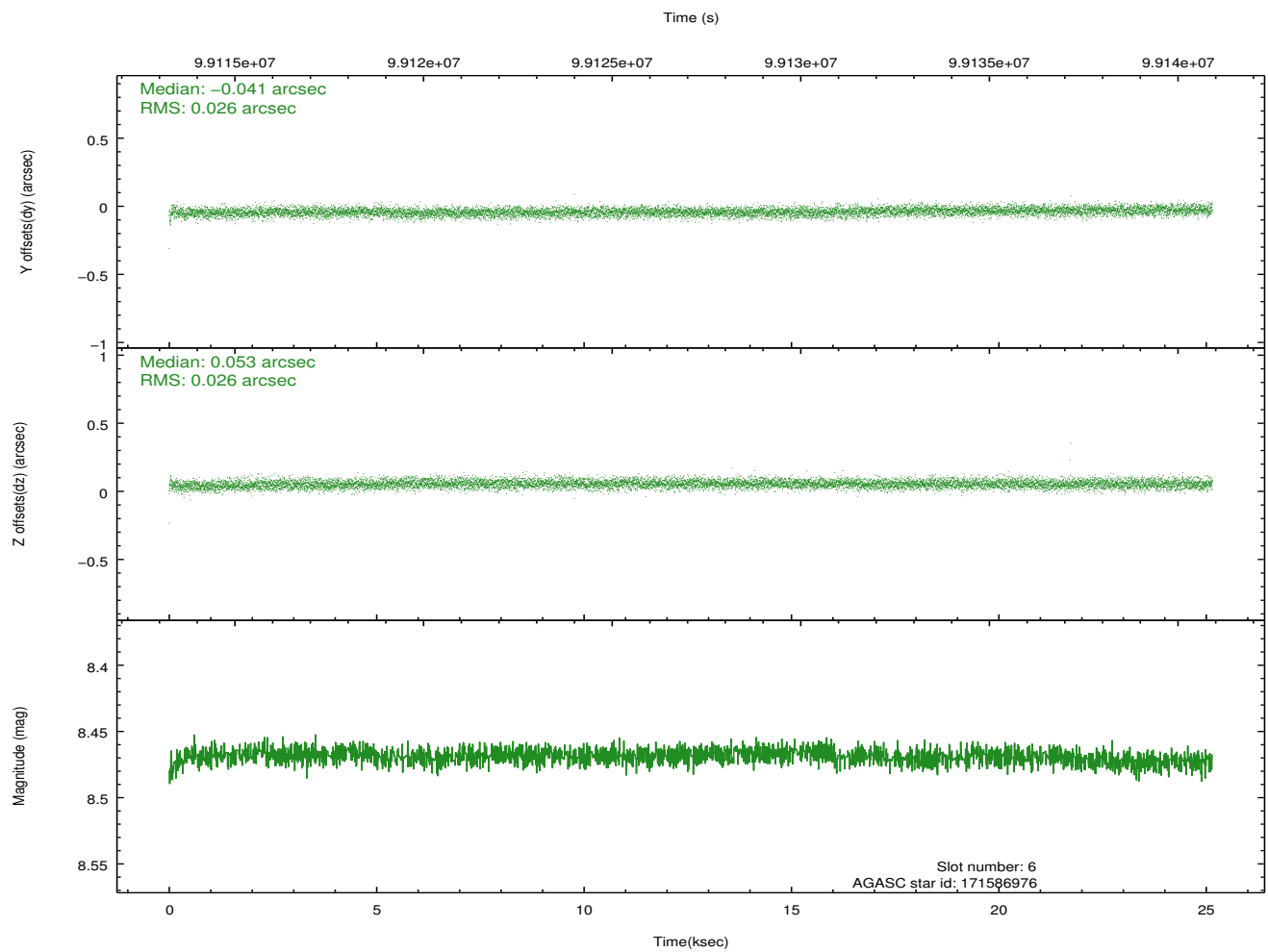
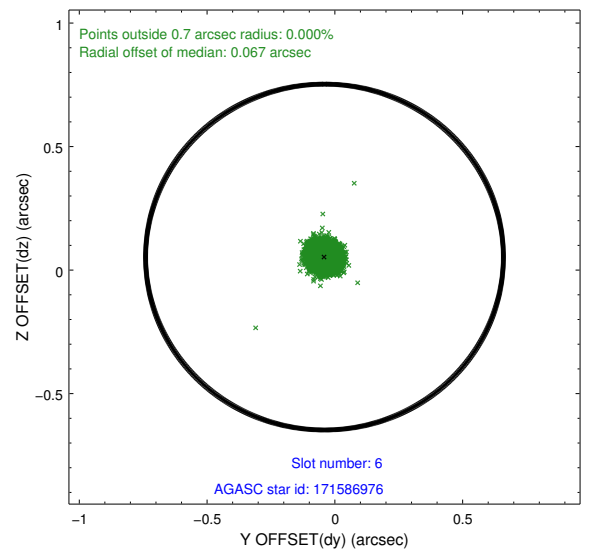
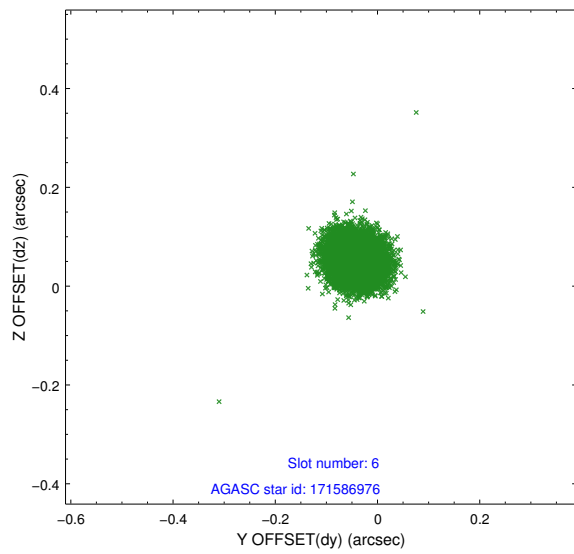
## 2.4.2 Slot 4



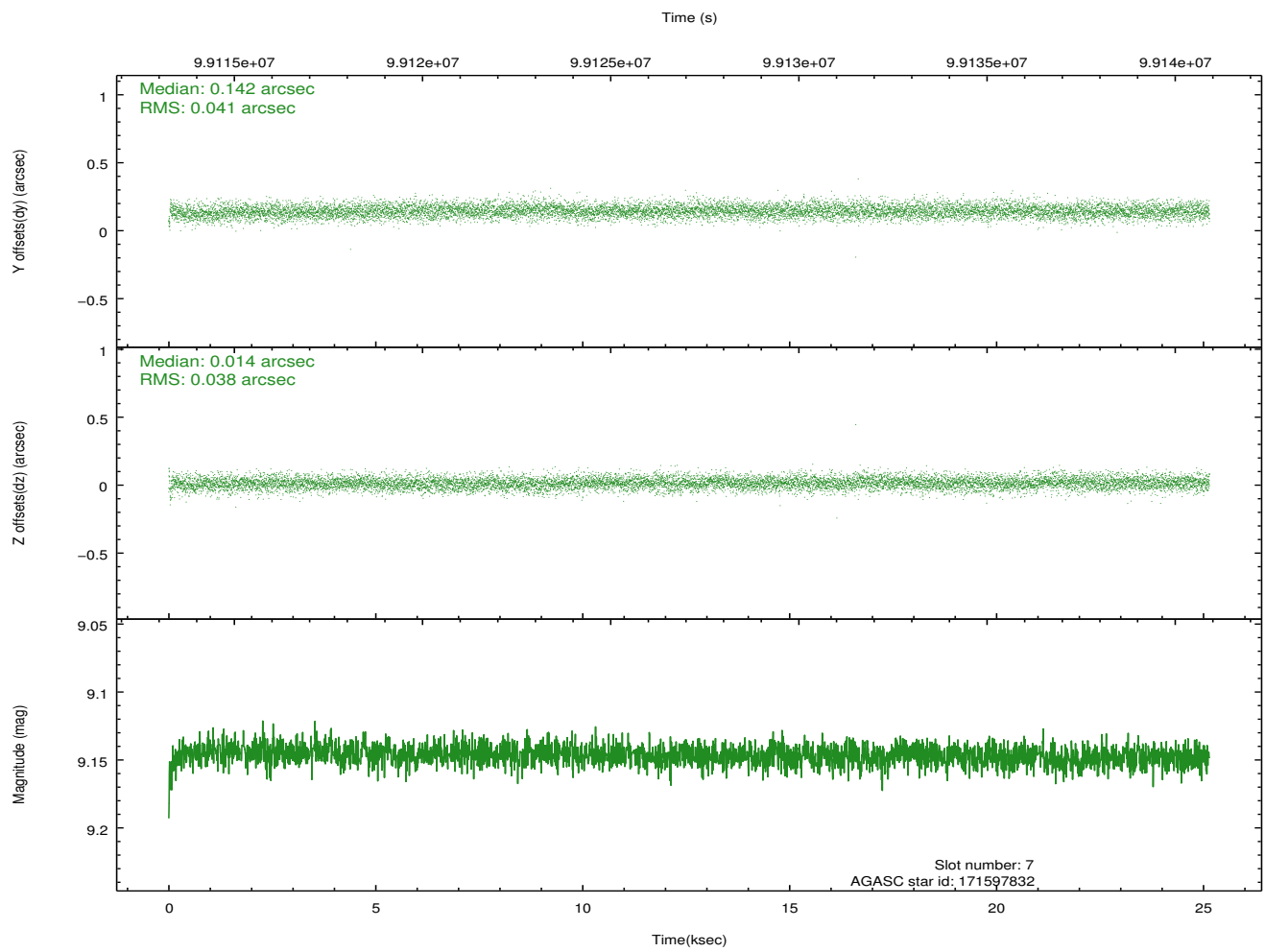
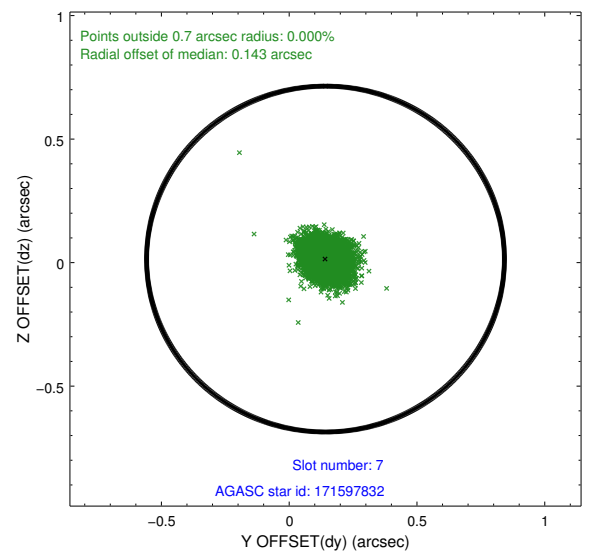
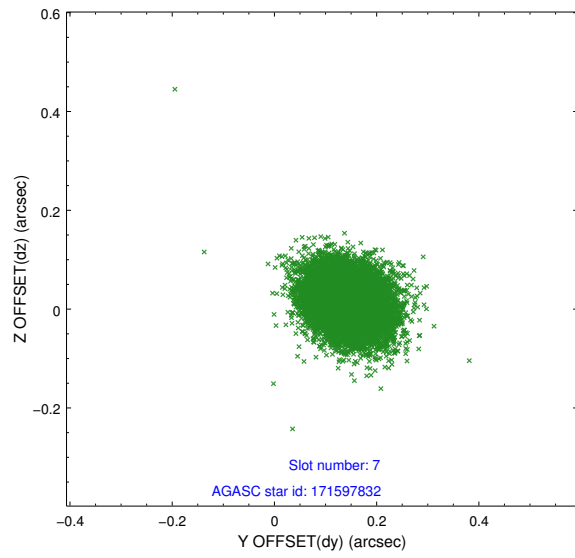
### 2.4.3 Slot 5



## 2.4.4 Slot 6

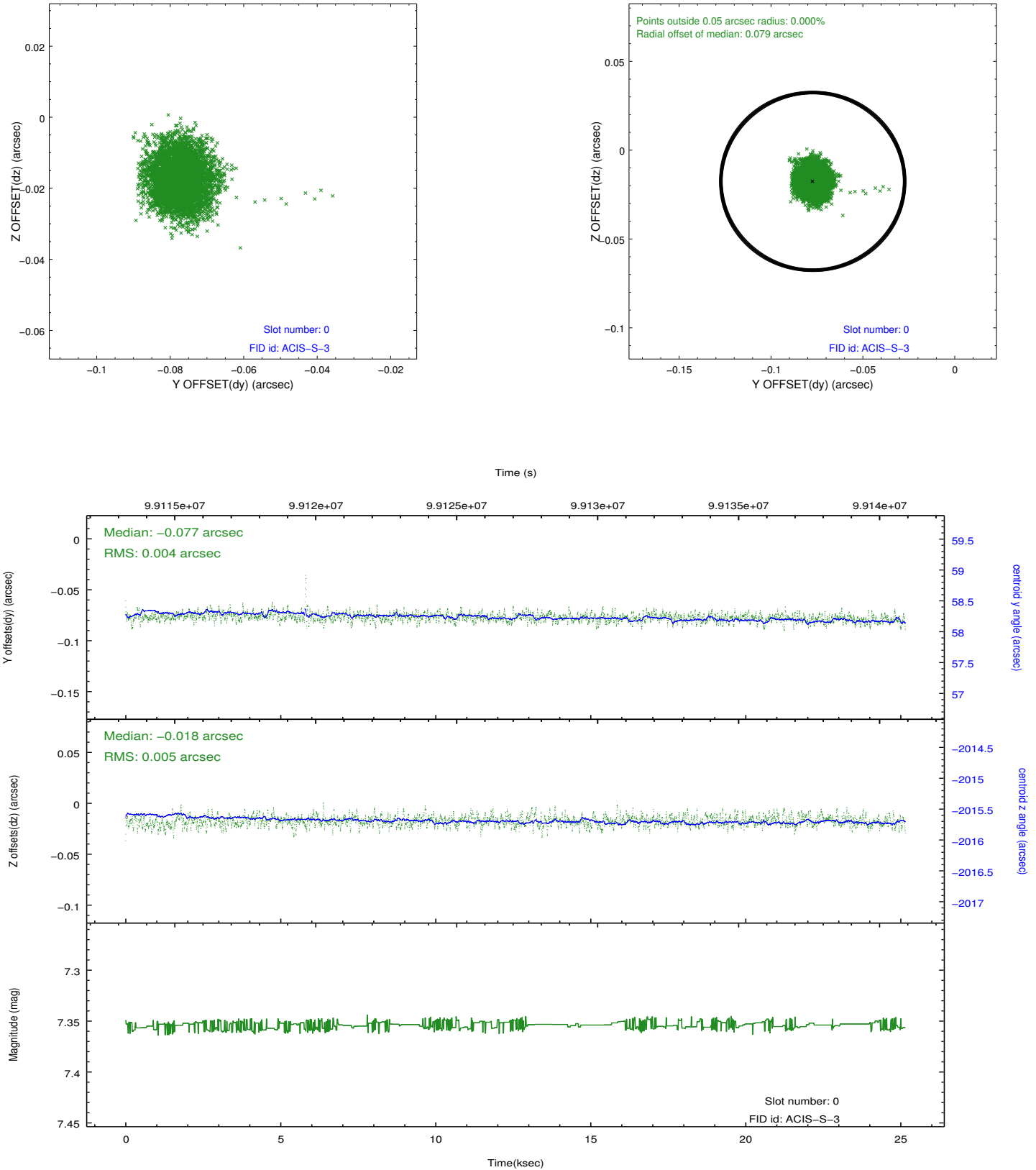


## 2.4.5 Slot 7

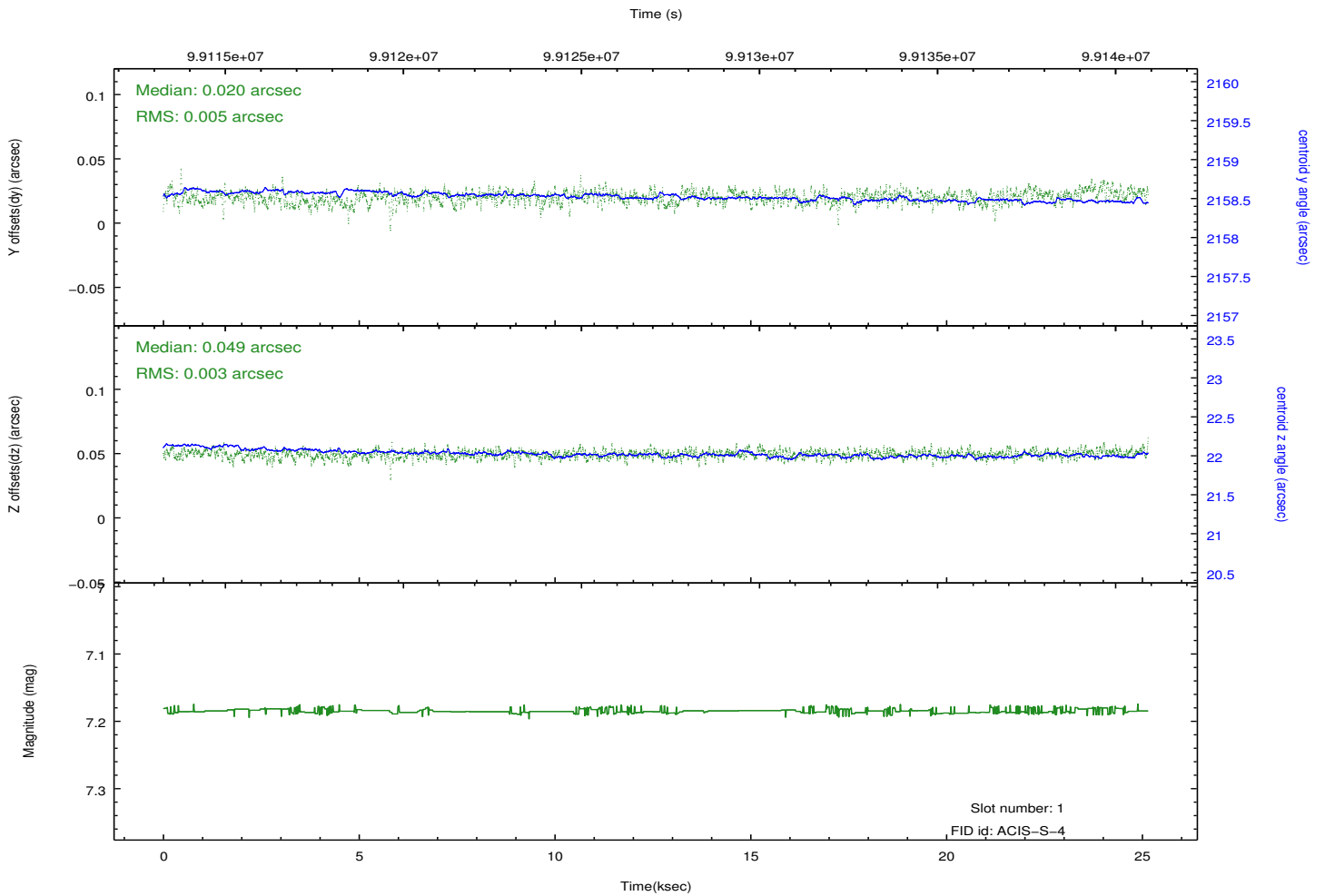
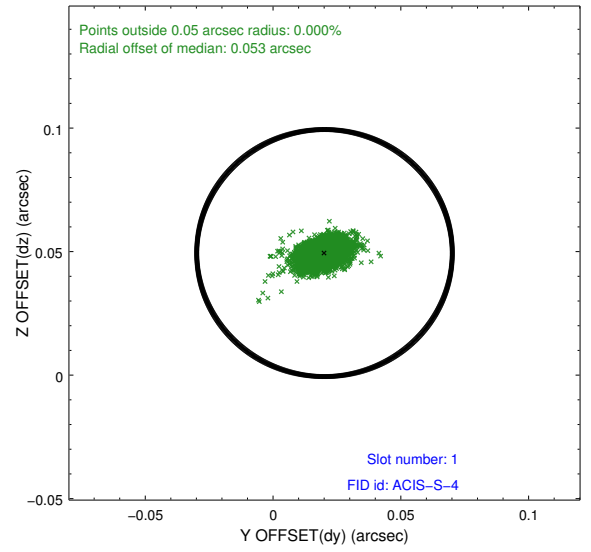
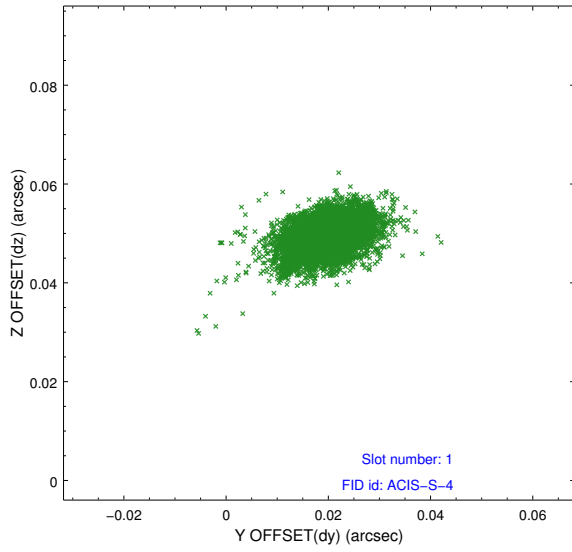


## 2.5 FID Slots

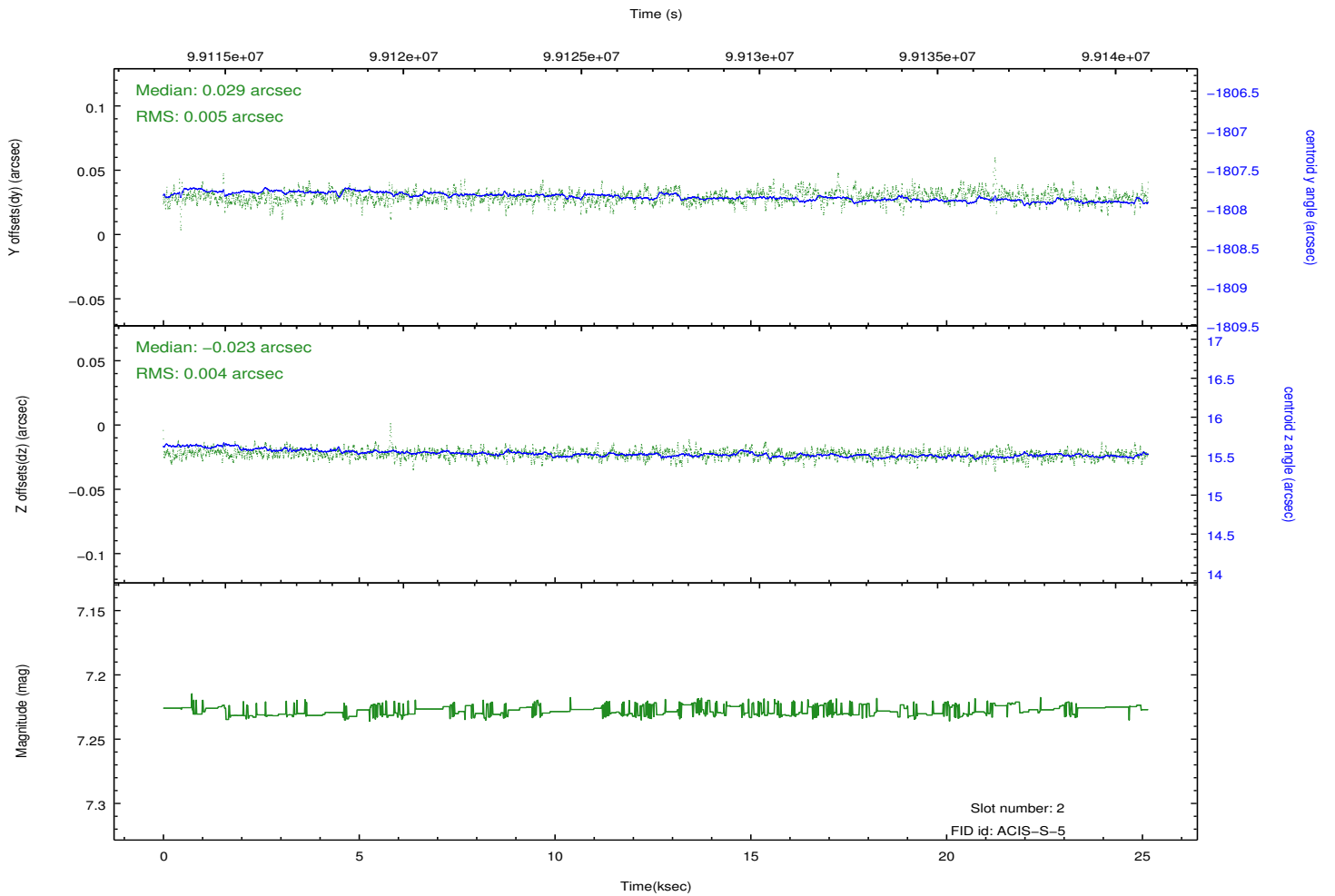
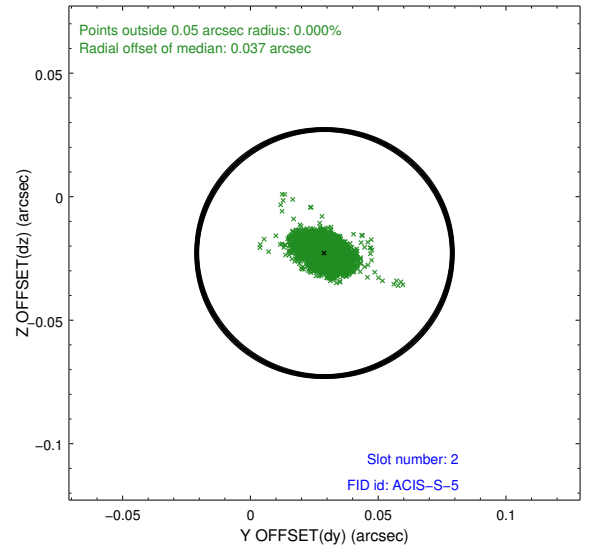
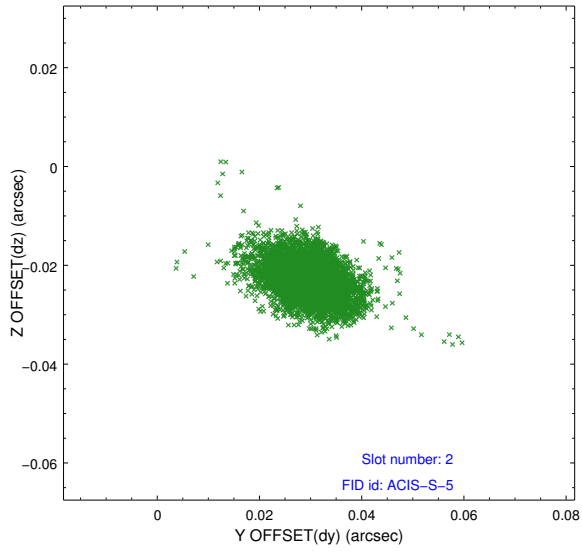
### 2.5.1 Slot 0



## 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)	2012.09.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	23.4

## A.2 Comments

Charge time for this ObsId remains at original value of 23.4 ks, although with the current processing the charge time would have been 15.144237 ks. Exclusion window centered on pulsar to eliminate the flux from the central object and study the faint filaments and structure of the supernova. Node boundary of CCD chip is clearly seen in Level 2 data as dark stripe across image because this observation was not dithered. There are many dropped exposures due to saturated telemetry. Window constraint met.