

# V&V Reference Report

## L2 ASCDS Version : 10.2.2

Observation 15990 - L2 Version 2  
Chandra X-Ray Center

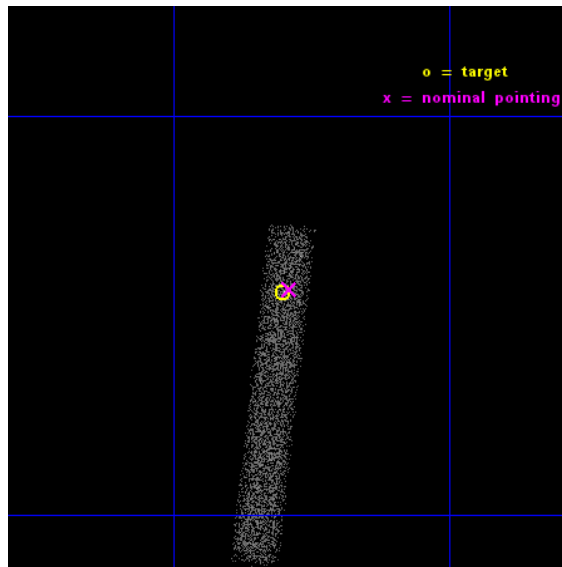
L2 Processing Date : Dec 11 2014

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# 1 Front

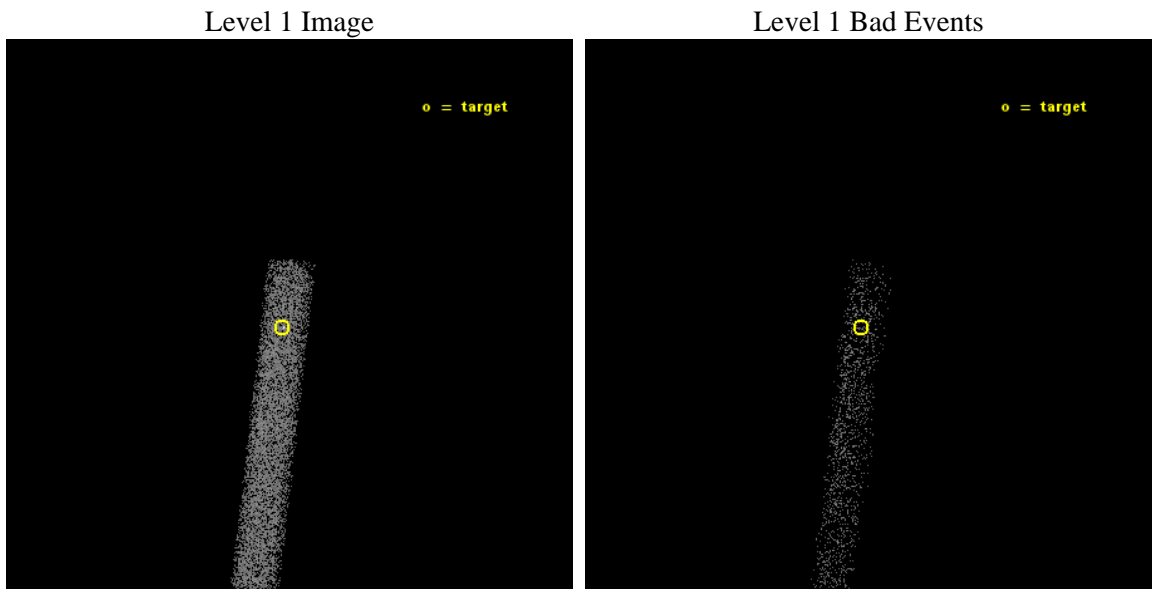
seq_num	502223	Sequence number
obs_id	15990	Observation id
title	What is the Magnetic Field of Magnetar Swift J1822.3-1606?	Proposa
observer	Professor Victoria Kaspi	Principal investigator
object	Swift J1822.3-1606	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	275.575417	Observer's specified target RA [deg]
dec_targ	-16.07375	Observer's specified target Dec [deg]
ra_nom	275.57257918114	Nominal RA [deg]
dec_nom	-16.072432871352	Nominal Dec [deg]
roll_nom	96.655818121591	Nominal Roll [deg]
revision	2	Processing version of data
ontime	14068.399161458	Sum of GTIs [s]
liveltime	12759.295448447	Livetime [s]
ontime7	14068.399161458	Sum of GTIs [s]
l2events	6222	Number of level 2 events



## 2 OBI

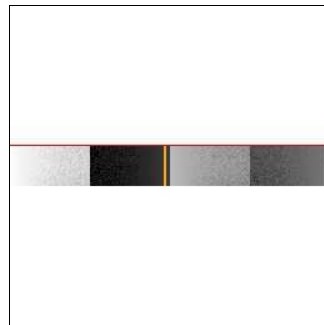
### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias

Chip 7



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	14000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	14068.399161458	Sum of GTIs [s]
caldsver	4.6.4	&#160	ontime7	14068.399161458	Sum of GTIs [s]
date	2014-12-11T20:59:25	Date and time of file creation	l1events	12826	Number of level 1 events
revision	2	Processing version of data			

### 2.1.4 Events

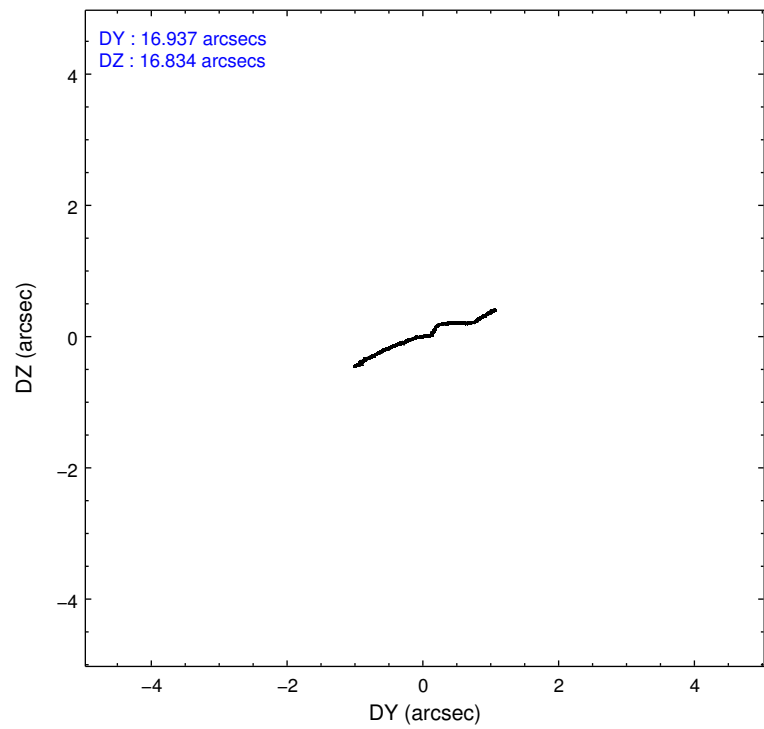
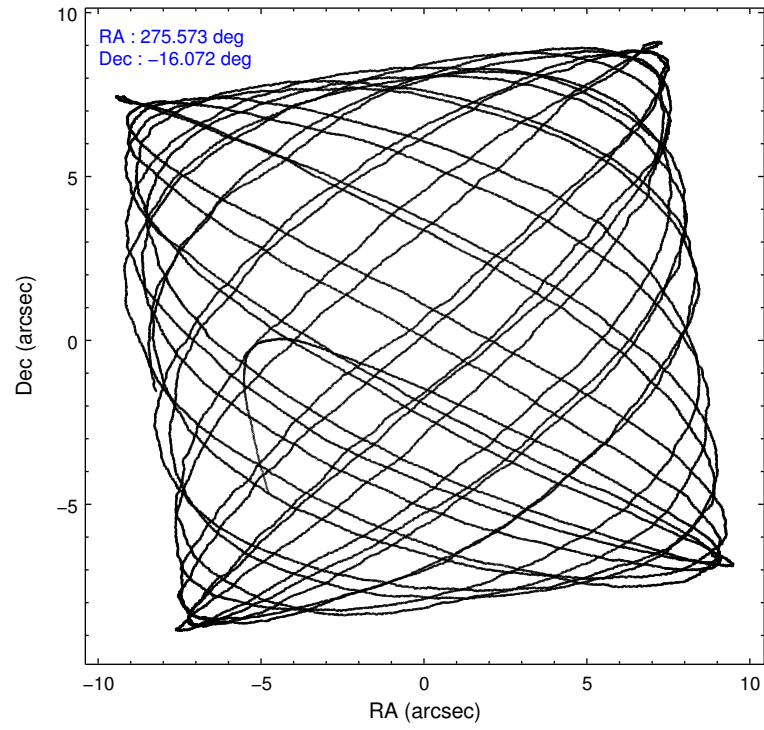
	<b>ccd 7</b>
level 1 events	12826
rejected events	6329
rejected %	49%

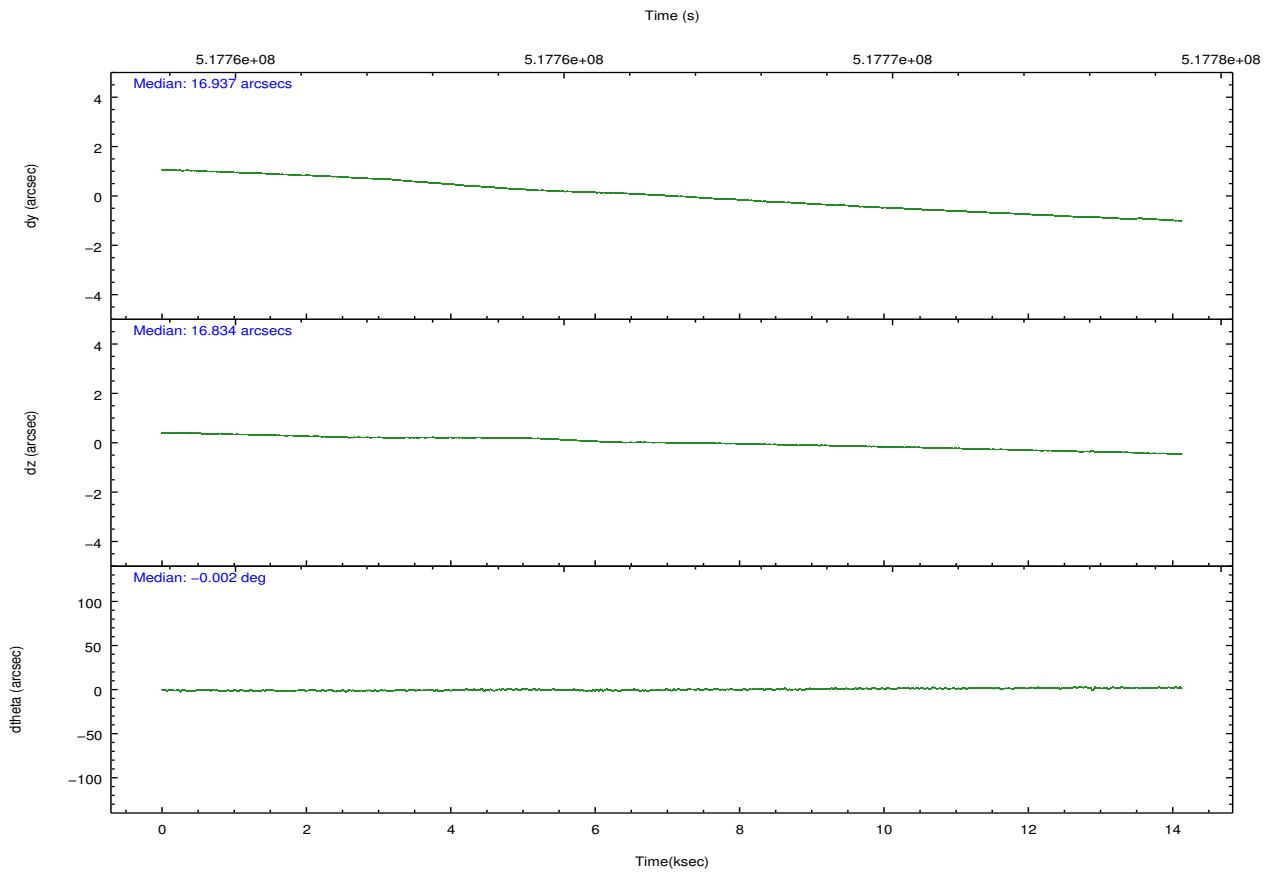
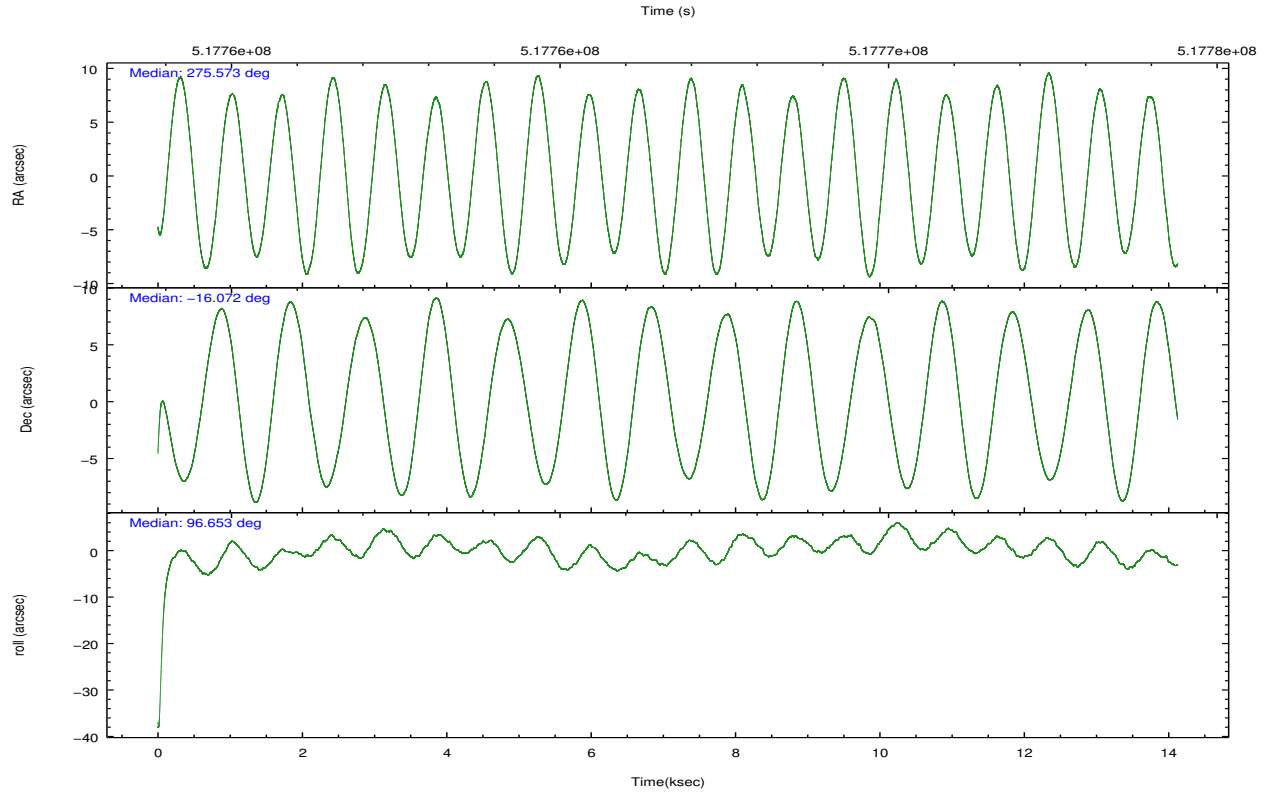
	<b>ccd 7</b>
grade 0 events	768
	5%
grade 1 events	20
	0%
grade 2 events	1310
	10%
grade 3 events	806
	6%
grade 4 events	819
	6%
grade 5 events	1207
	9%
grade 6 events	2795
	21%
grade 7 events	5101
	39%

## 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	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	275.589880	275.572579181143	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	-16.094139	-16.07243287135246	Subarray start row	449	449
[deg] Pointing Roll	96.504015	96.655818121591	Subarray row count	128	128
[mm] SIM focus pos	-0.684267	-0.6828225247311905	Alternating exposures requested	N	N
[mm] SIM defocus	0	0.001444936568705701	[s] Primary exposure time	0.000000	0.4
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	517759709.184000	517758270.60129			
Observation start date	2014-05-29T14:07:22	2014-05-29T13:44:30			
[s] Observation end time (MET)	517773709.184000	517774710.5772			
Observation end date	2014-05-29T18:00:42	2014-05-29T18:18:30			
Read mode	TIMED	TIMED			

## 2.3 Aspect



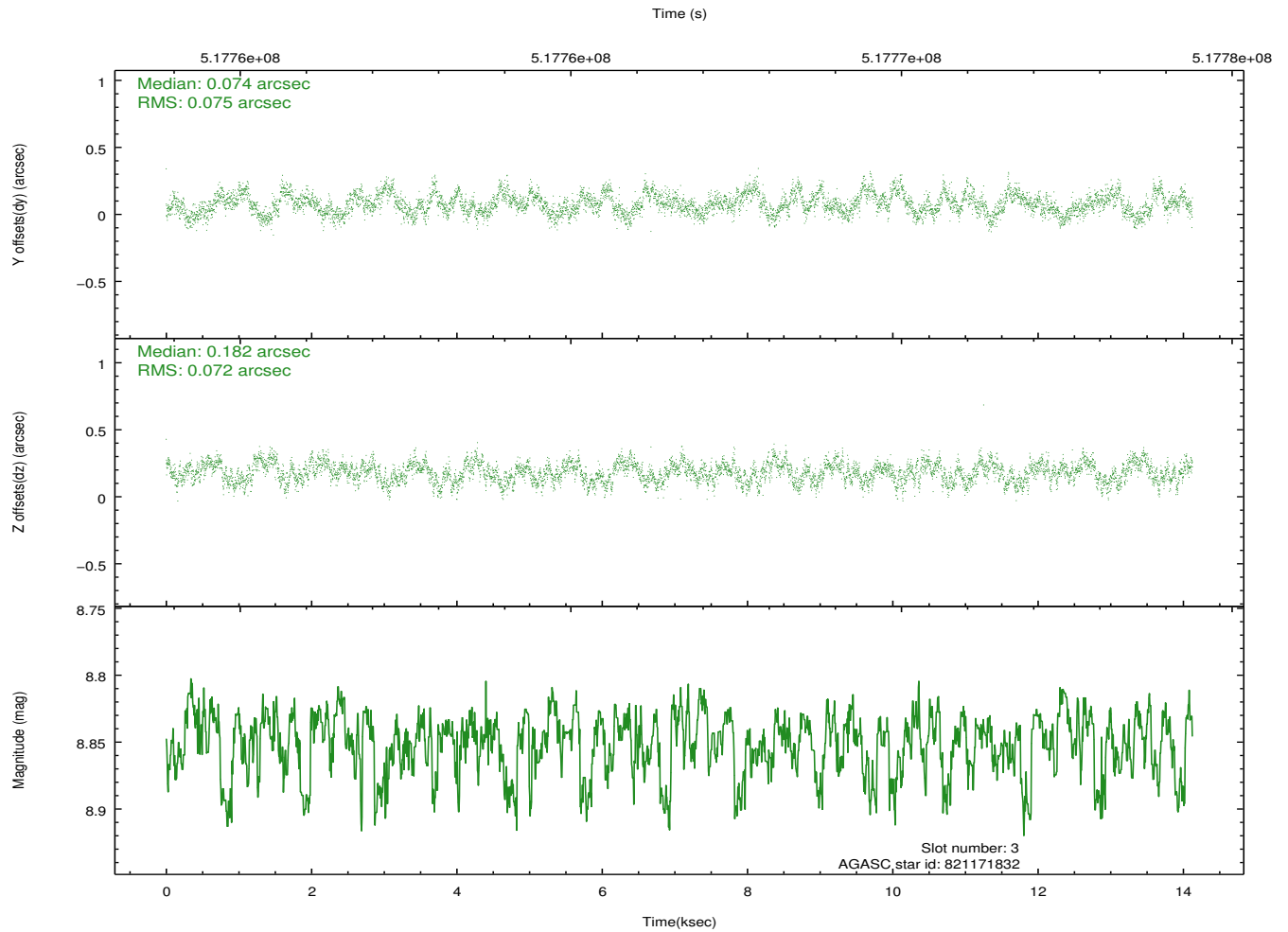
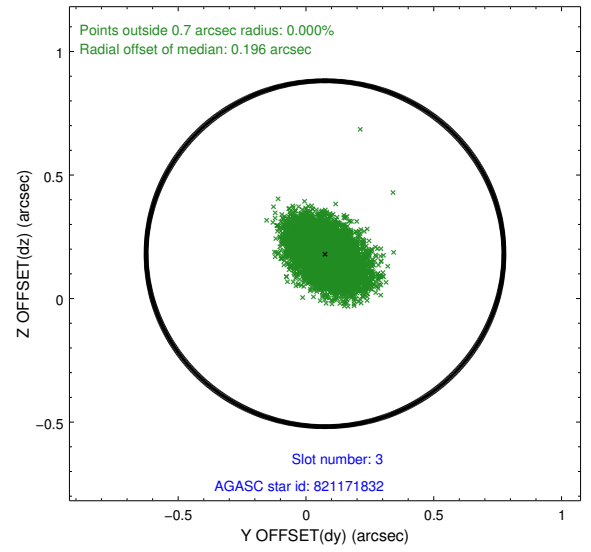
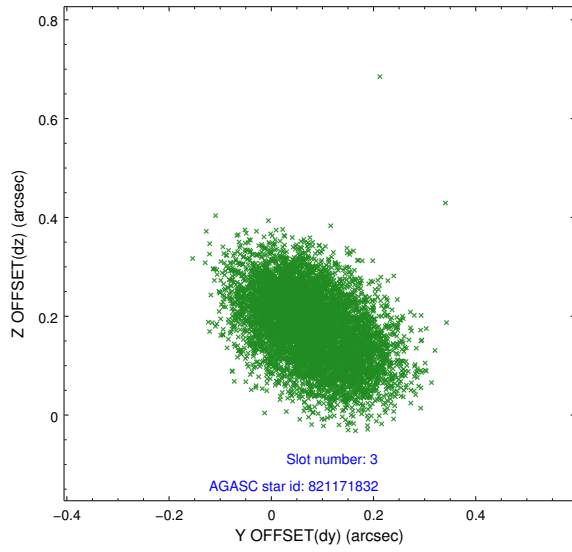


### Slot Statistics

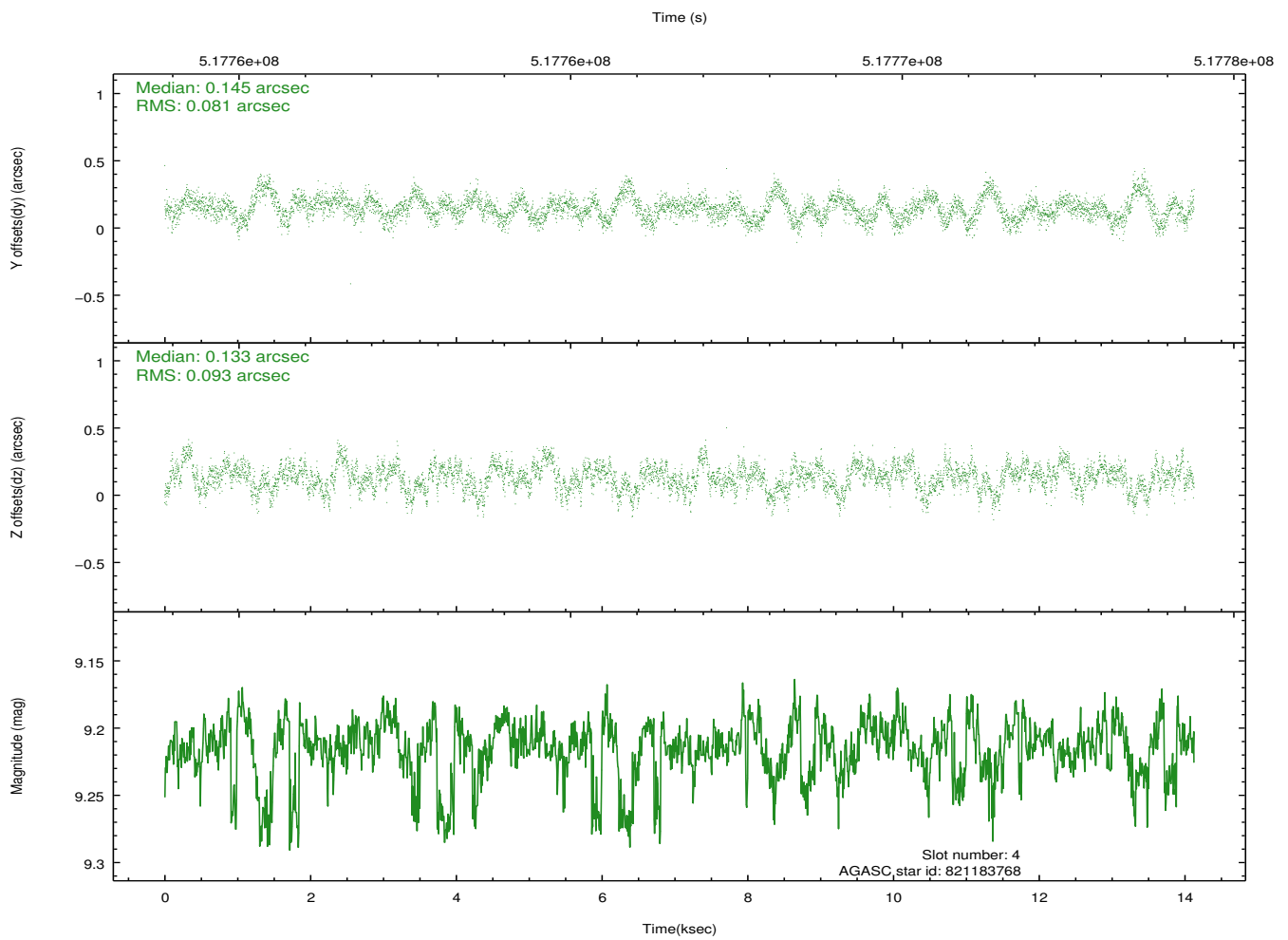
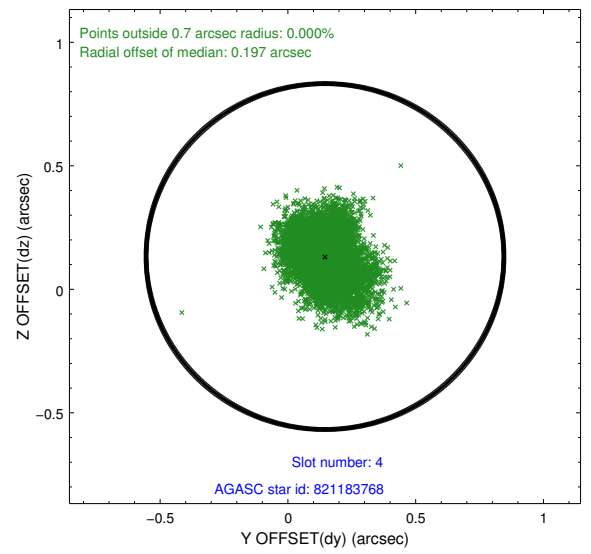
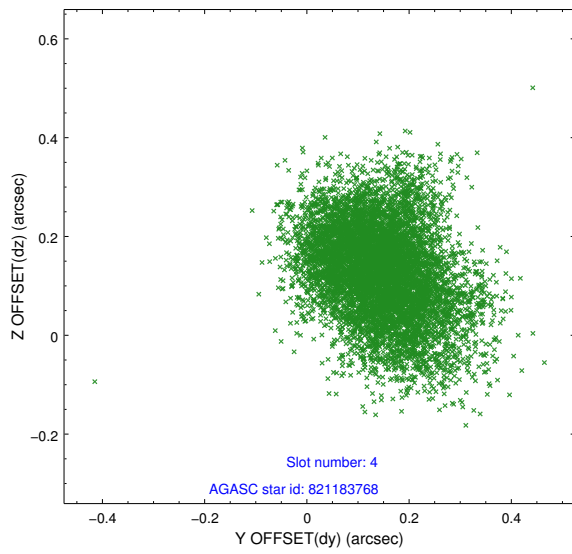
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-1	7.11	3446	0.099	-0.047	0.018	0.030	0.000000	0.000000	926.06	-1733.99
1	FID		ACIS-S-2	7.03	3443	-0.216	-0.050	0.012	0.024	0.000000	0.000000	-769.97	-1738.79
2	FID		ACIS-S-4	7.11	3446	0.095	0.102	0.010	0.016	0.000000	0.000000	2143.26	169.91
3	GUIDE	used	821171832	8.85	6891	0.074	0.182	0.112	0.177	275.792275	-15.610164	1651.48	-894.25
4	GUIDE	used	821183768	9.21	6886	0.145	0.133	0.130	0.215	275.638665	-16.595886	-1813.28	37.35
5	GUIDE	used	821179256	7.36	6892	-0.252	-0.338	0.076	0.124	274.840900	-15.612800	2010.73	2384.31
6	GUIDE	used	821169272	7.23	6891	0.019	-0.017	0.068	0.108	275.312025	-16.375484	-897.93	1068.68
7	GUIDE	used	821181752	7.55	6891	0.009	0.042	0.059	0.096	275.331456	-16.373905	-900.22	1001.22

## 2.4 Star Slots

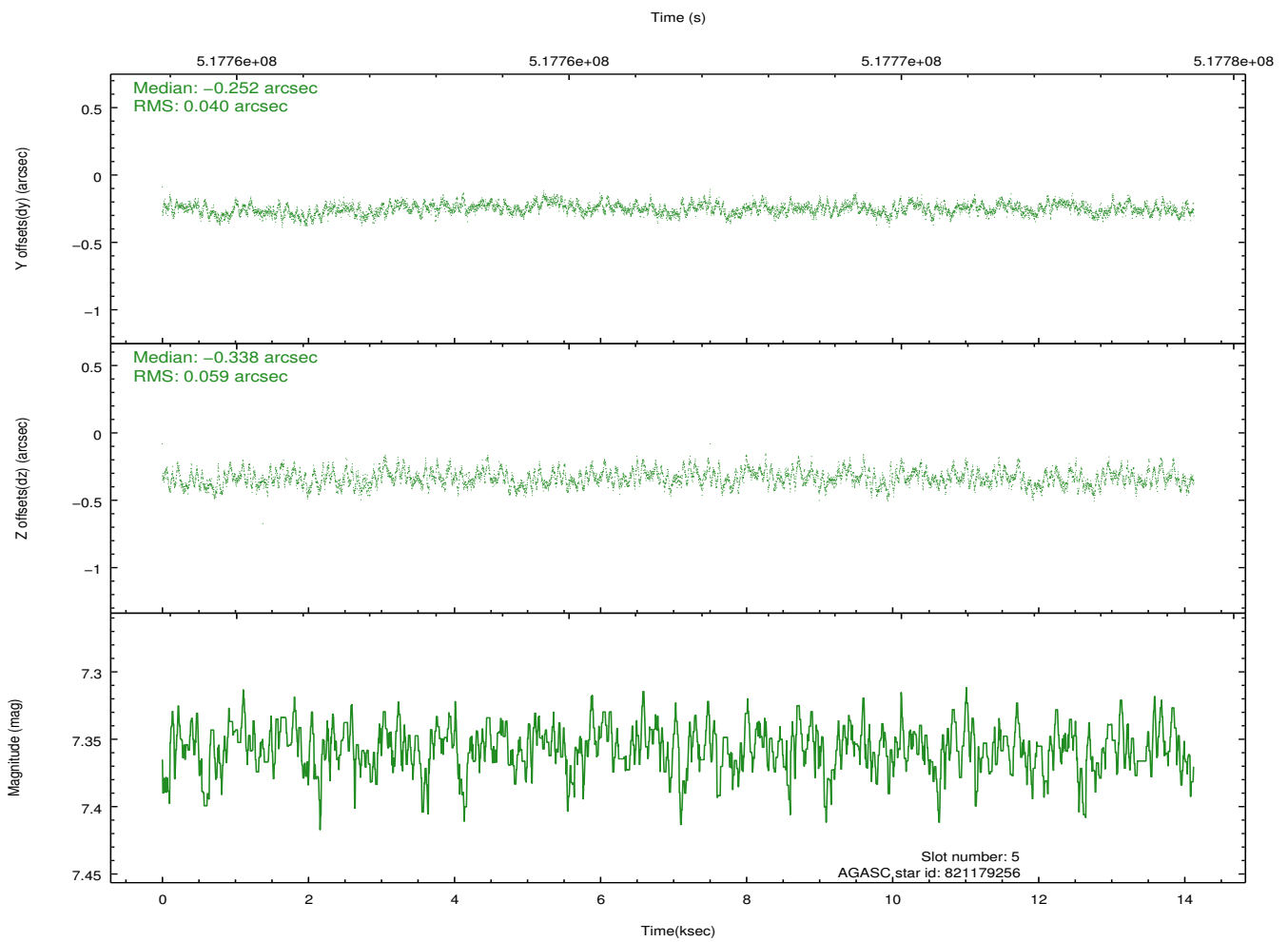
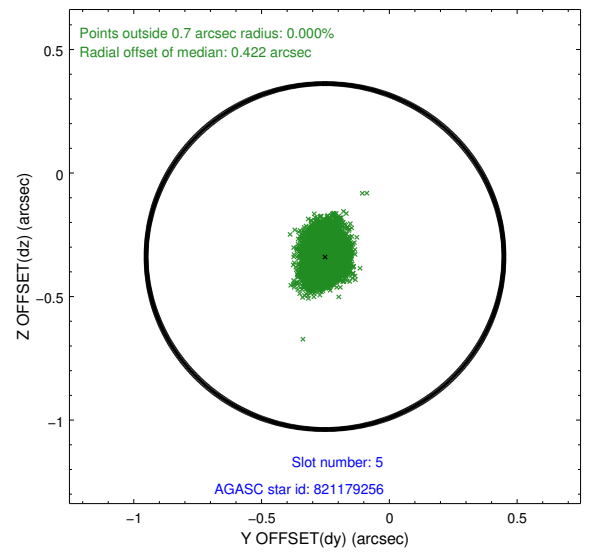
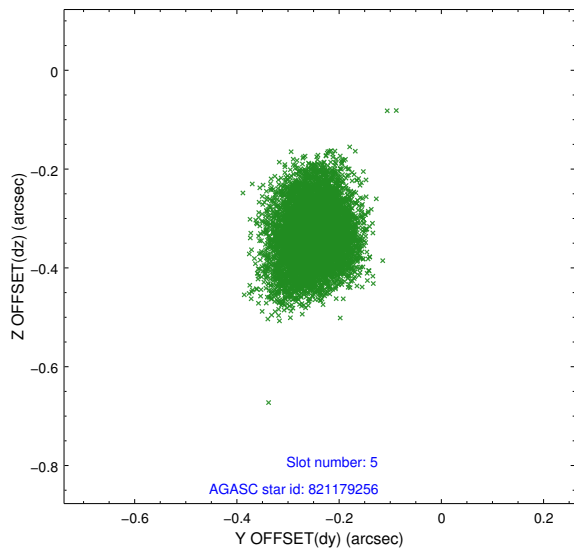
### 2.4.1 Slot 3



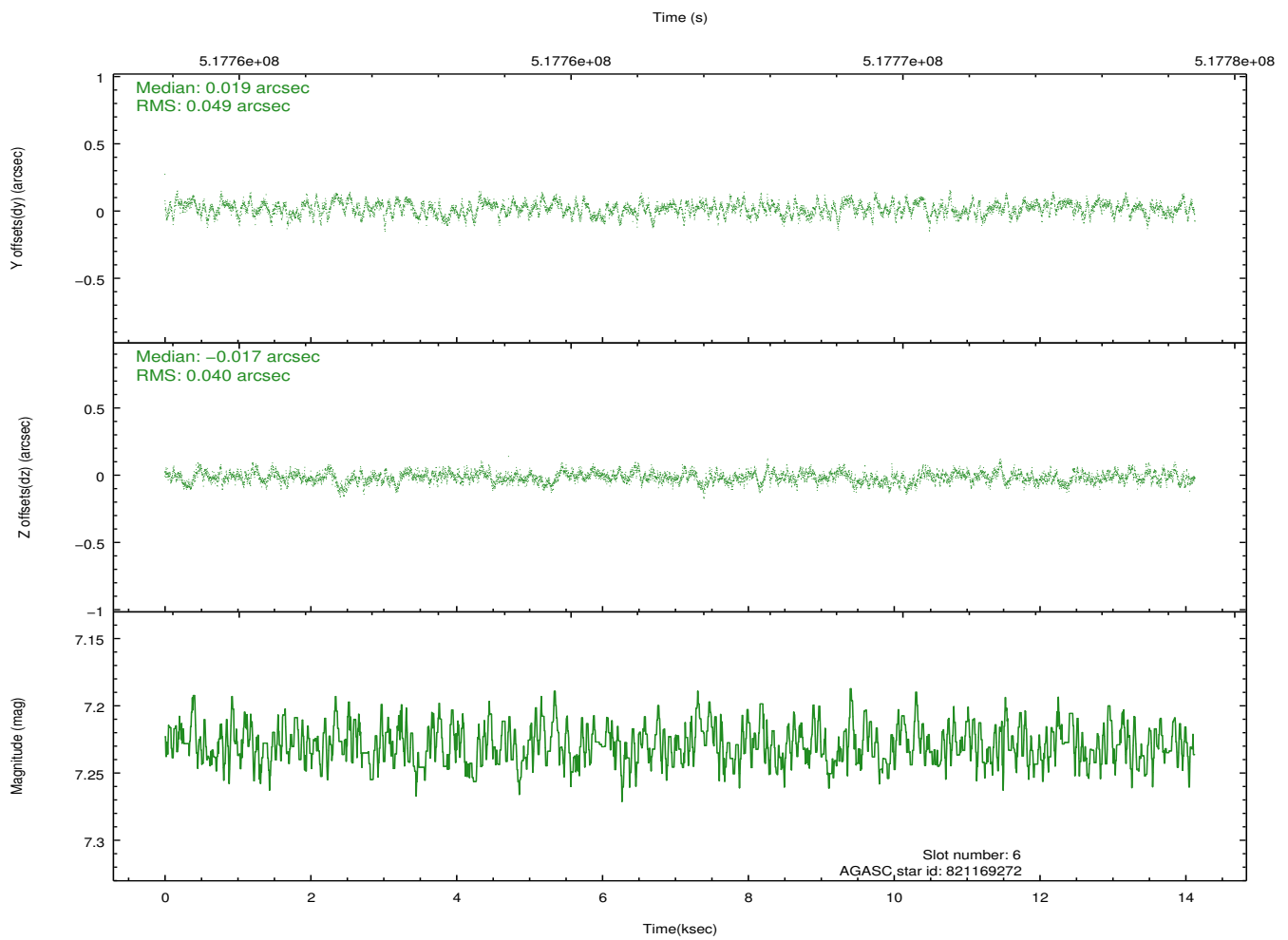
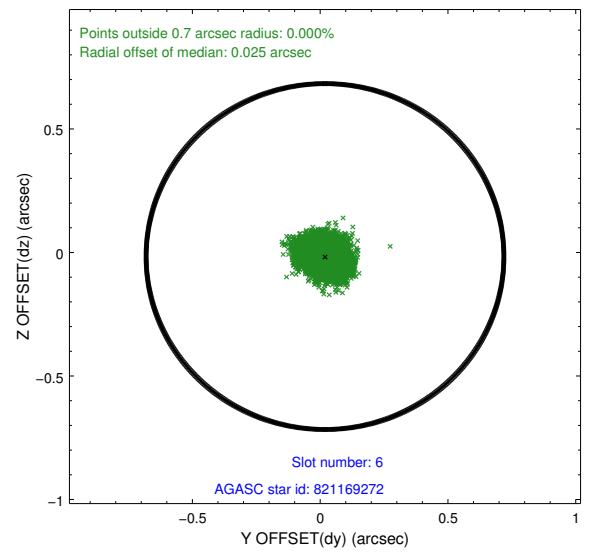
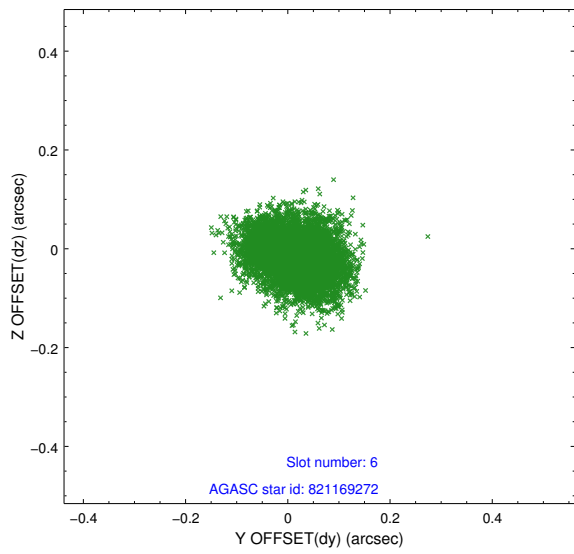
## 2.4.2 Slot 4



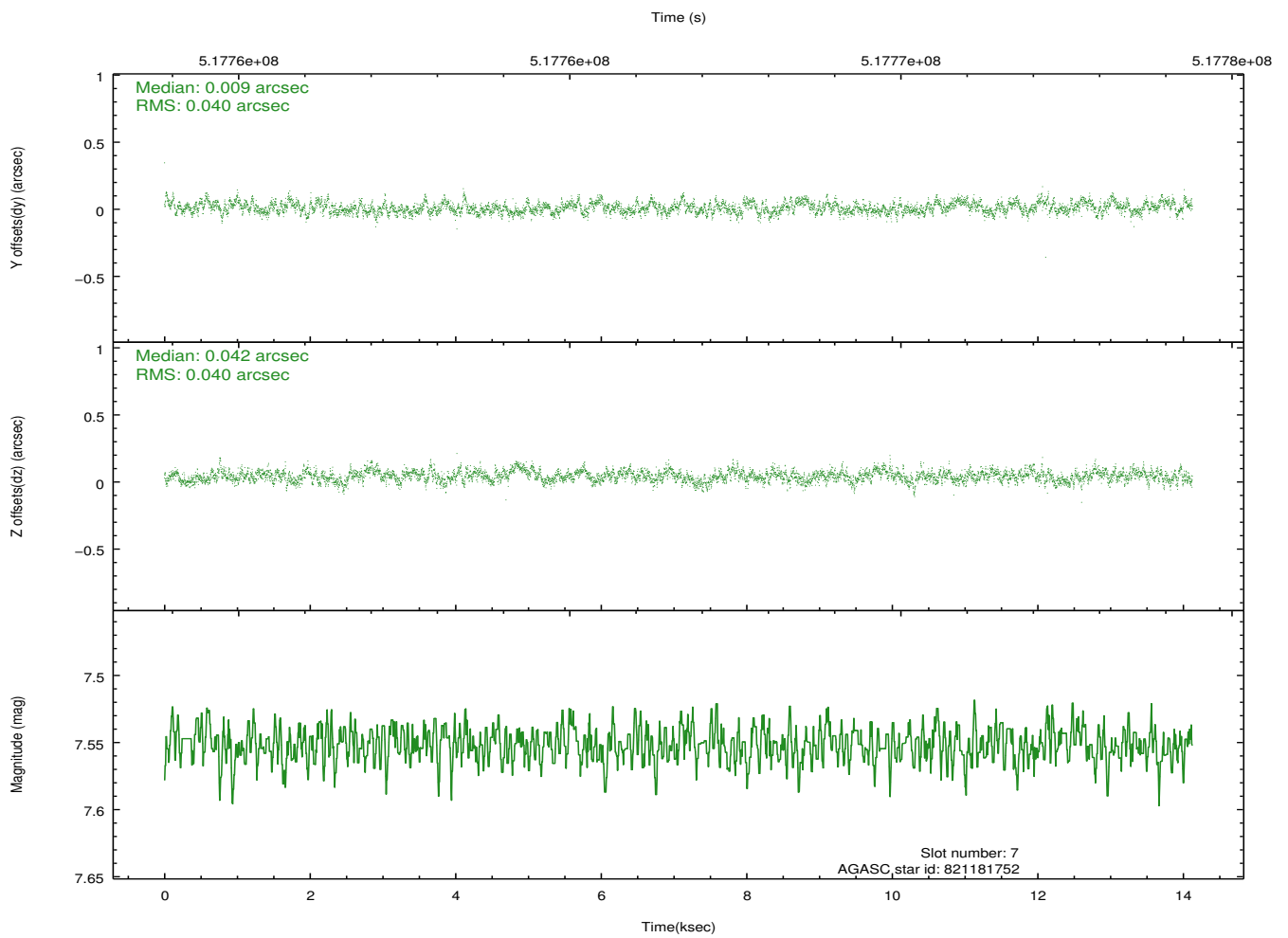
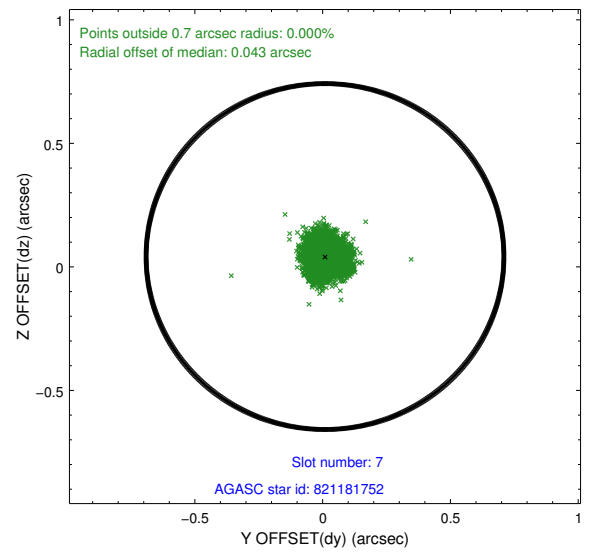
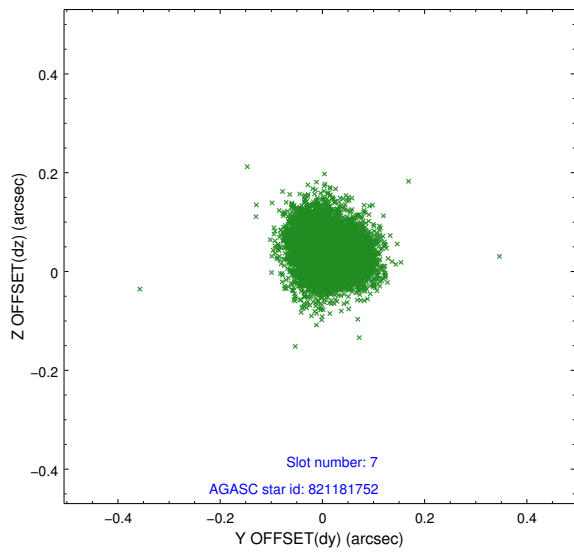
### 2.4.3 Slot 5



## 2.4.4 Slot 6

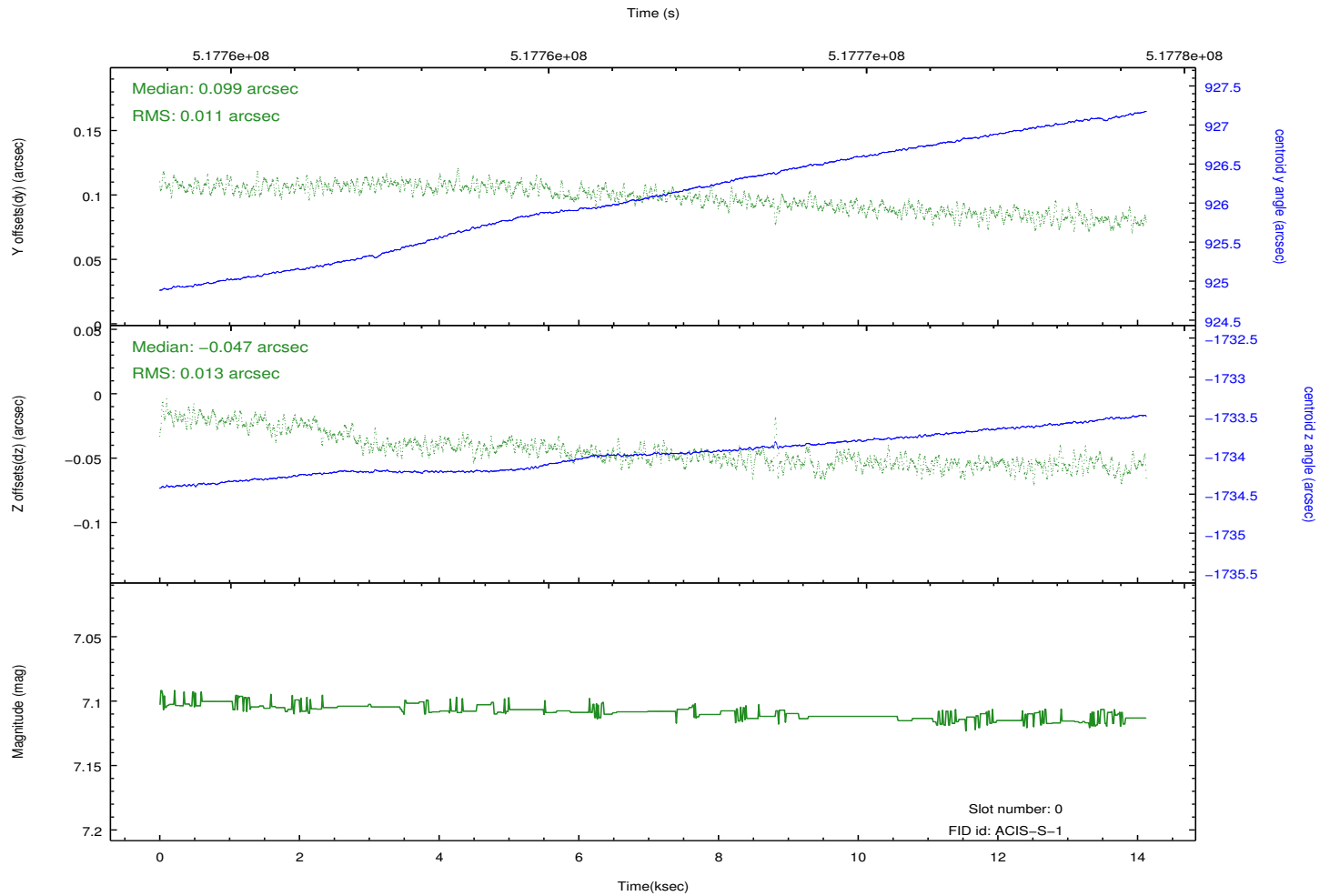
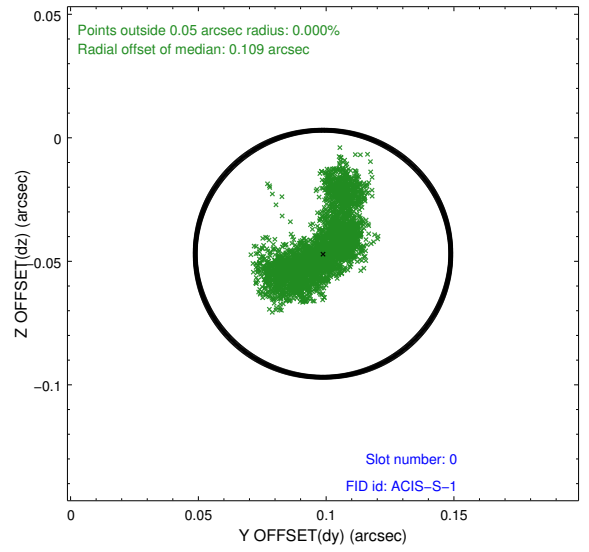
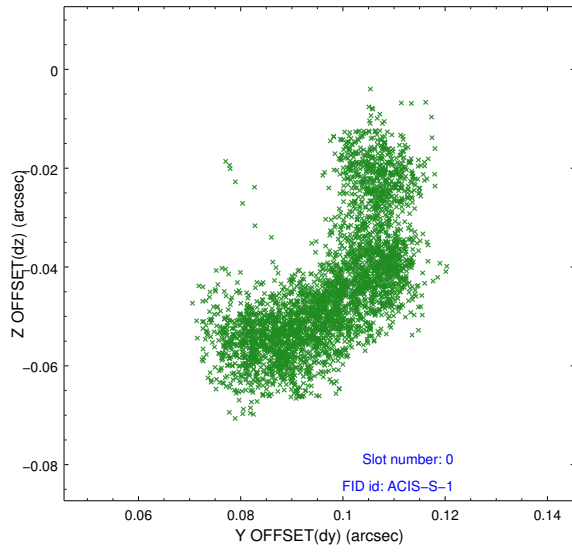


## 2.4.5 Slot 7

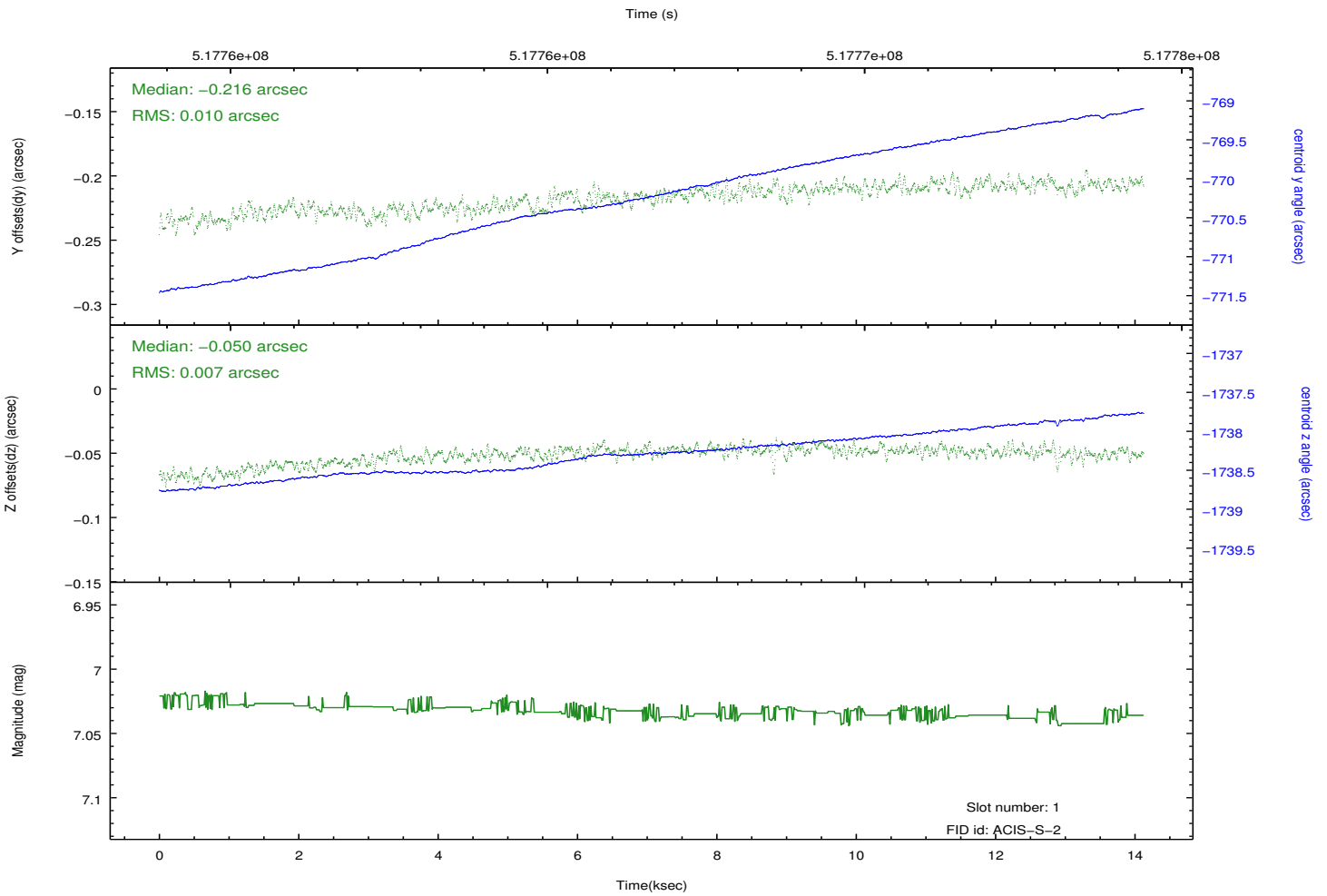
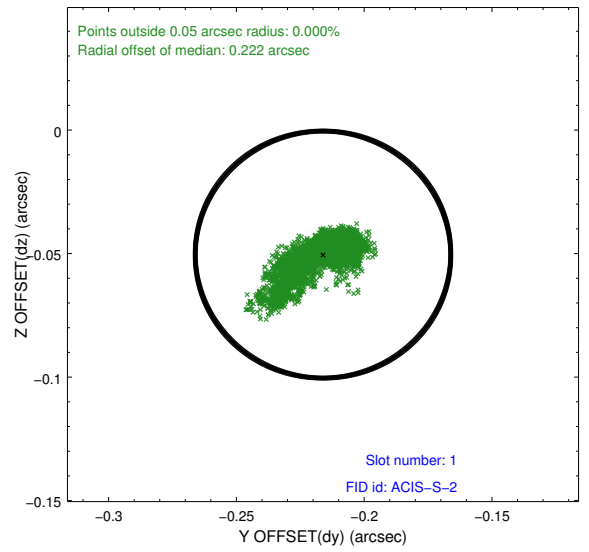
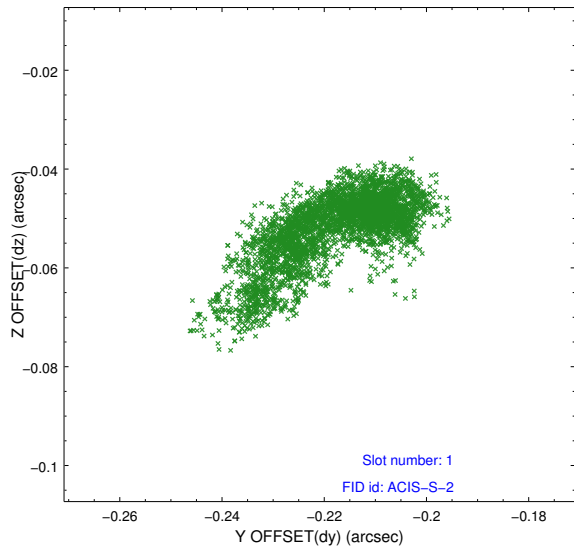


## 2.5 FID Slots

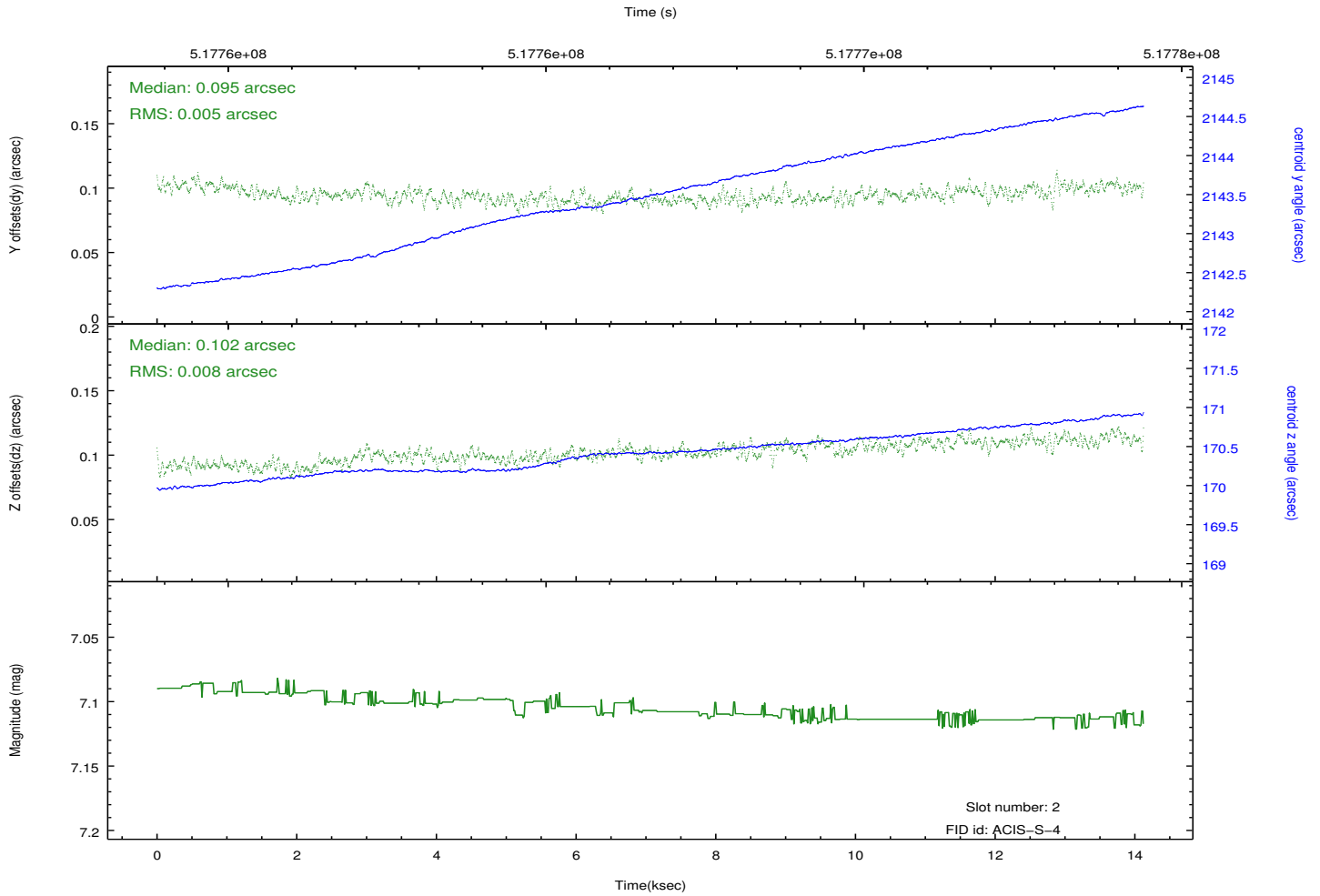
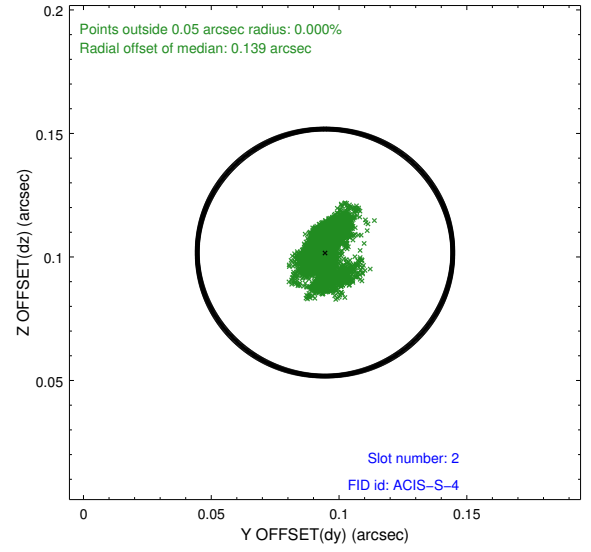
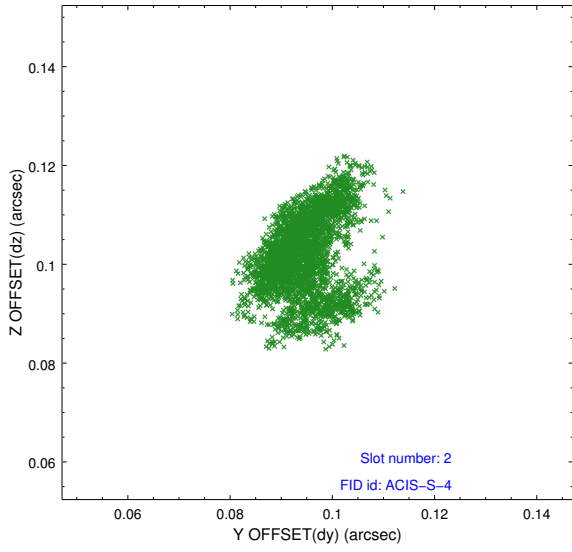
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



# A Summary

## A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2014.12.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	14.068399161458

## A.2 Comments

These data have been reprocessed with new aspect alignment calibration files that correct small mean offsets (up to 0.4 arcsecs) and improve overall astrometric accuracy. The new calibration was determined using data from the time period being reprocessed and was performed using cross-correlation of X-ray sources with radio and optical counterparts.