

# V&V Reference Report

## L2 ASCDS Version : 10.2.1

Observation 15989 - L2 Version 2  
Chandra X-Ray Center

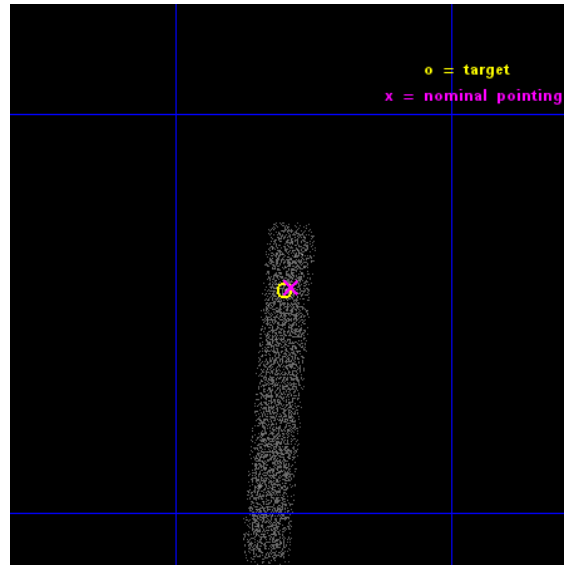
L2 Processing Date : Dec 10 2014

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# 1 Front

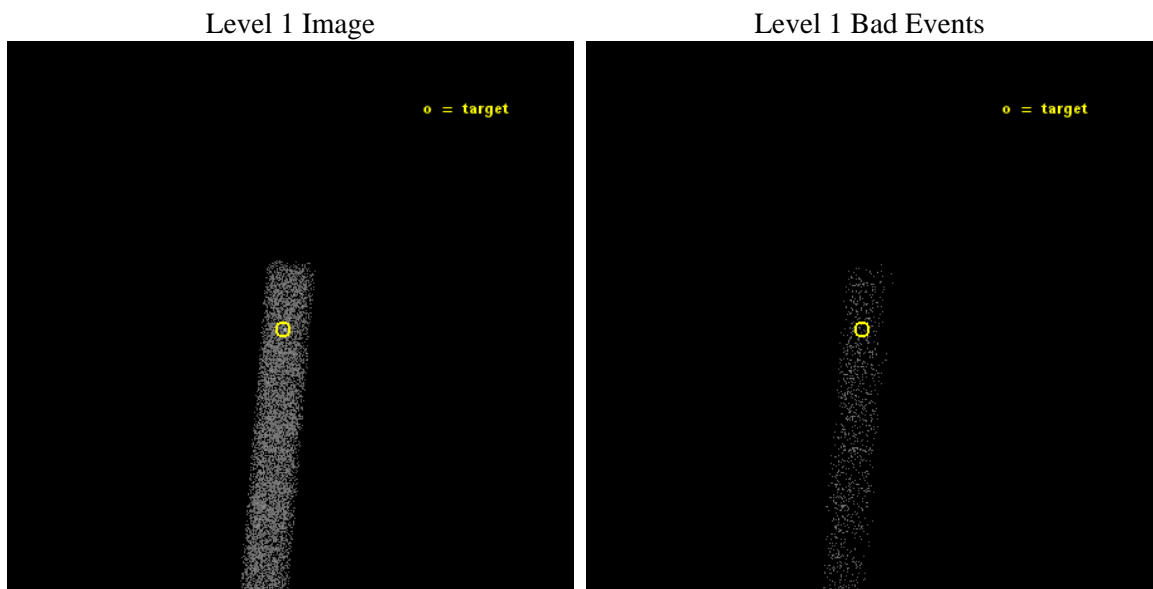
seq_num	502222	Sequence number
obs_id	15989	Observation id
title	What is the Magnetic Field of Magnetar Swift J1822.3-1606?	Proposa
observer	Professor Victoria Kaspi	Principal investigator
object	Swift J1822.3-1606	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	275.575417	Observer's specified target RA [deg]
dec_targ	-16.07375	Observer's specified target Dec [deg]
ra_nom	275.57262895276	Nominal RA [deg]
dec_nom	-16.072365679778	Nominal Dec [deg]
roll_nom	94.853712560108	Nominal Roll [deg]
revision	2	Processing version of data
ontime	12069.951122642	Sum of GTIs [s]
livetime	10946.808563977	Livetime [s]
ontime7	12069.951122642	Sum of GTIs [s]
l2events	5236	Number of level 2 events



## 2 OBI

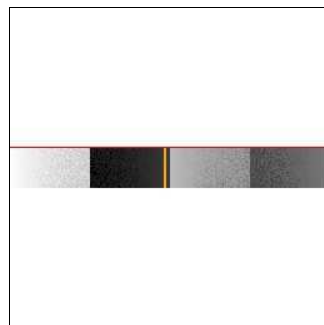
### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias

Chip 7



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	12000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	12069.951122642	Sum of GTIs [s]
caldsver	4.6.4	&#160	ontime7	12069.951122642	Sum of GTIs [s]
date	2014-12-11T02:52:01	Date and time of file creation	l1events	10792	Number of level 1 events
revision	2	Processing version of data			

### 2.1.4 Events

	<b>ccd 7</b>
level 1 events	10792
rejected events	5329
rejected %	49%

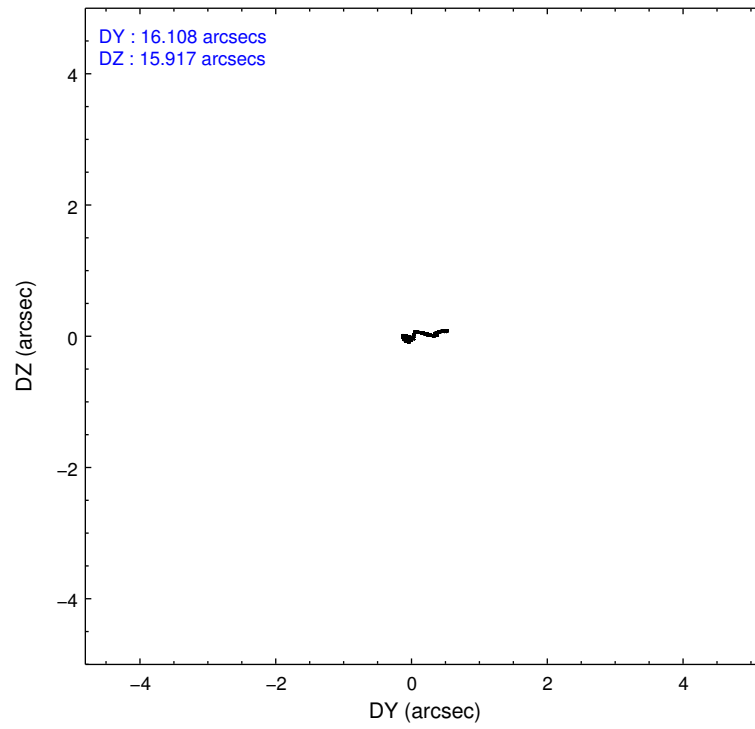
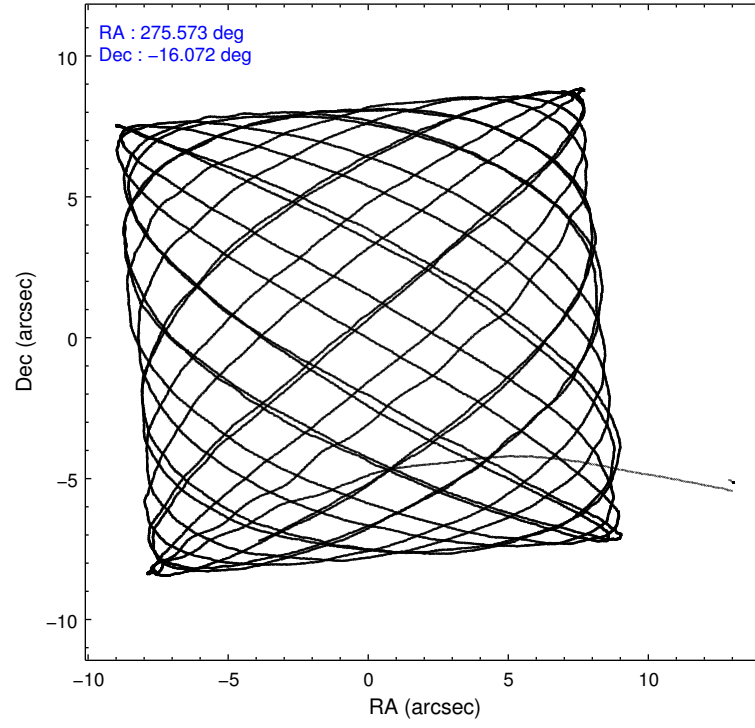
	<b>ccd 7</b>
grade 0 events	637
	5%
grade 1 events	5
	0%
grade 2 events	1019
	9%
grade 3 events	728
	6%
grade 4 events	660
	6%
grade 5 events	1013
	9%
grade 6 events	2419
	22%
grade 7 events	4311
	39%

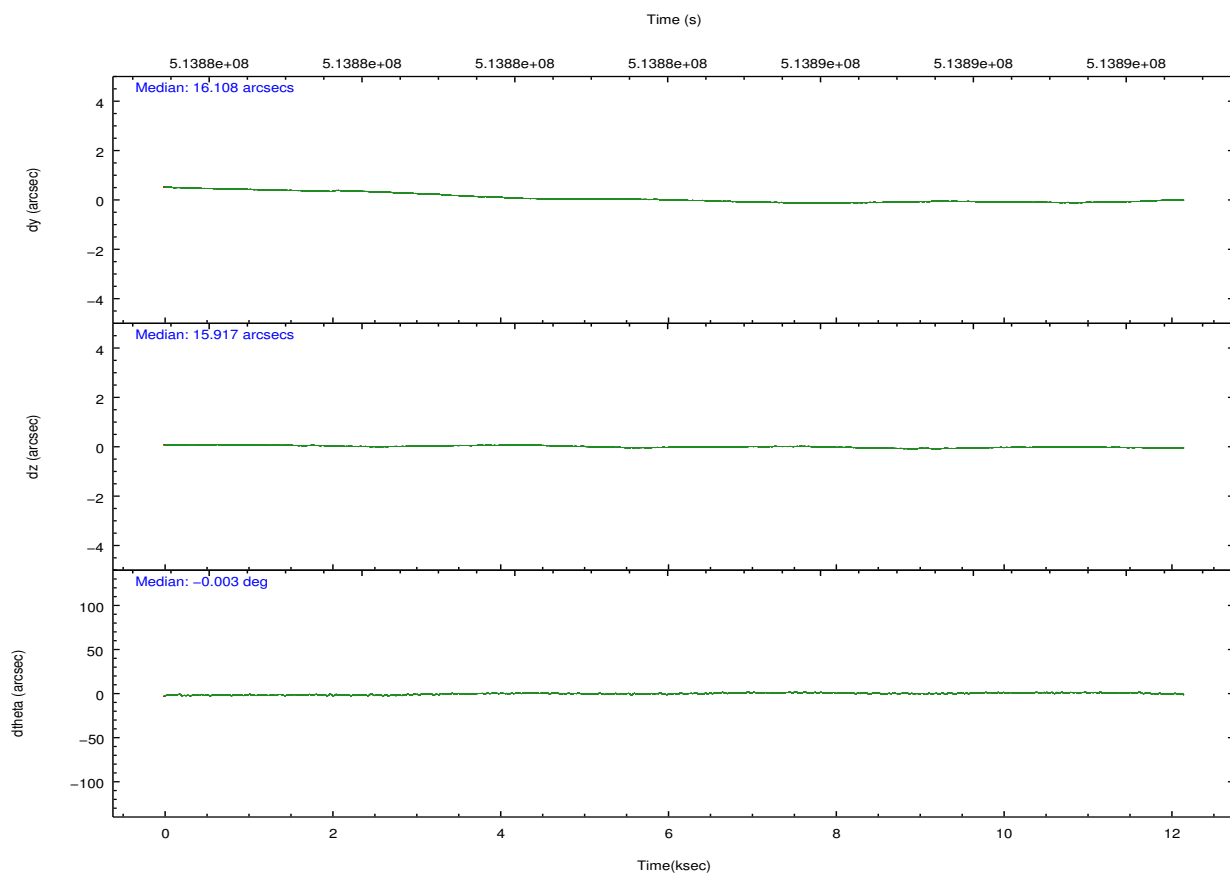
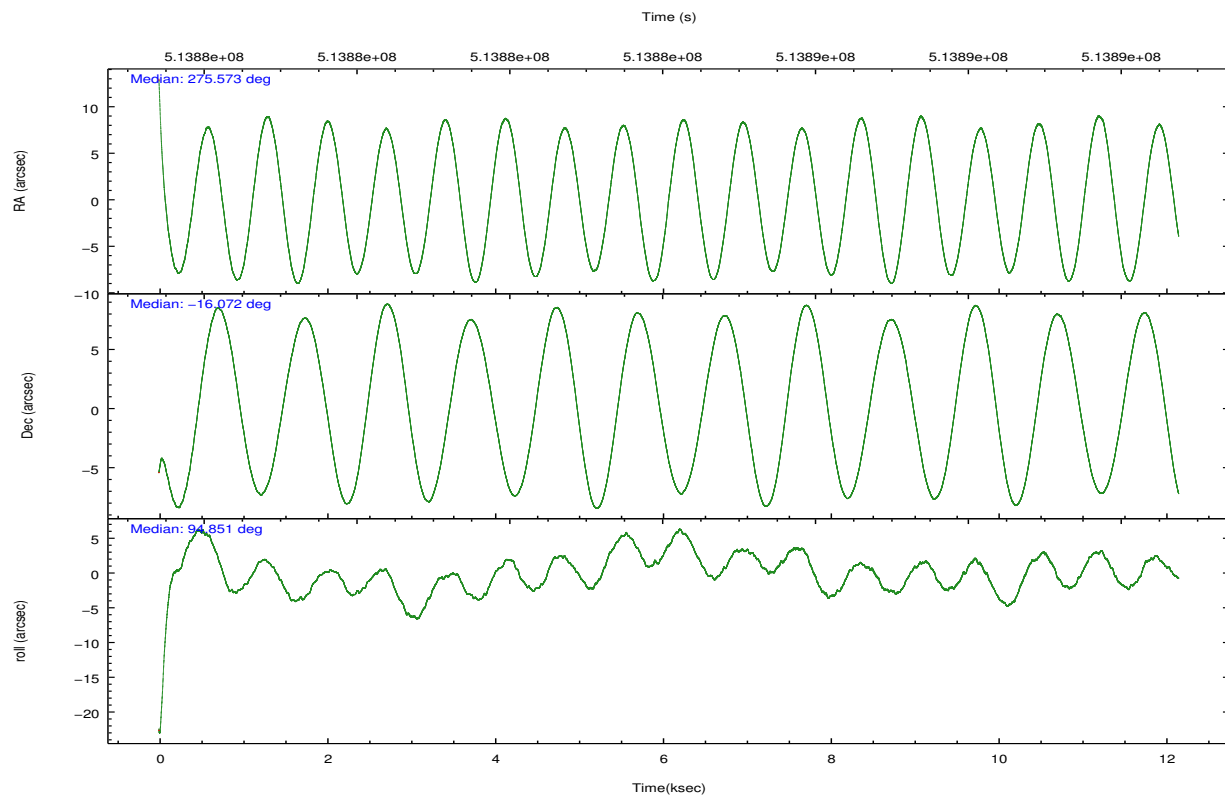


## 2.2 Compared Parameters

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	275.589209	275.5726289527561	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	-16.094565	-16.072365679778	Subarray start row	449	449
[deg] Pointing Roll	94.701704	94.85371256010765	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)	513878156.184000	513877272.91205			
Observation start date	2014-04-14T15:54:49	2014-04-14T15:41:12			
[s] Observation end time (MET)	513890156.184000	513891122.71282			
Observation end date	2014-04-14T19:14:49	2014-04-14T19:32:02			
Read mode	TIMED	TIMED			

## 2.3 Aspect



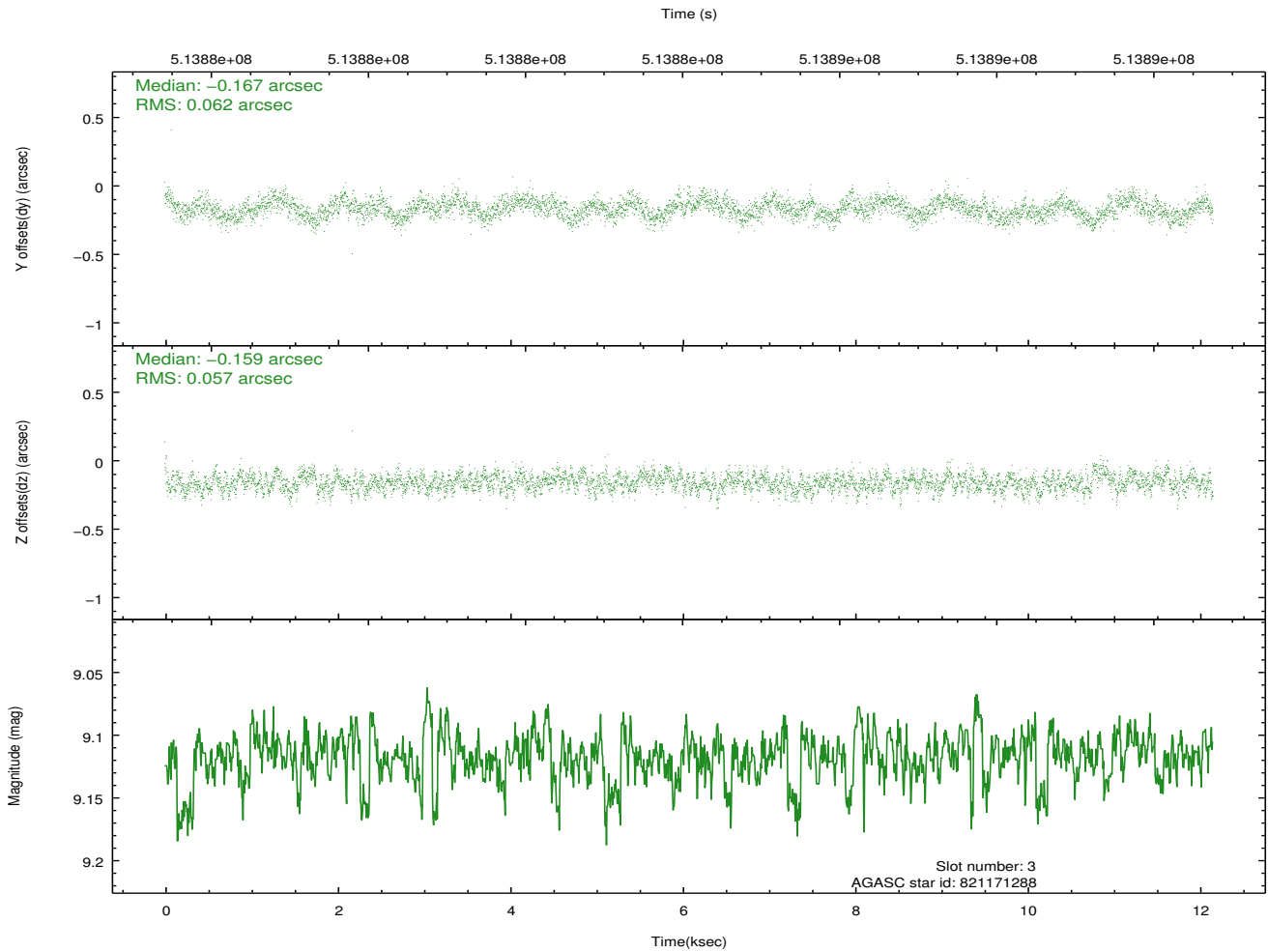
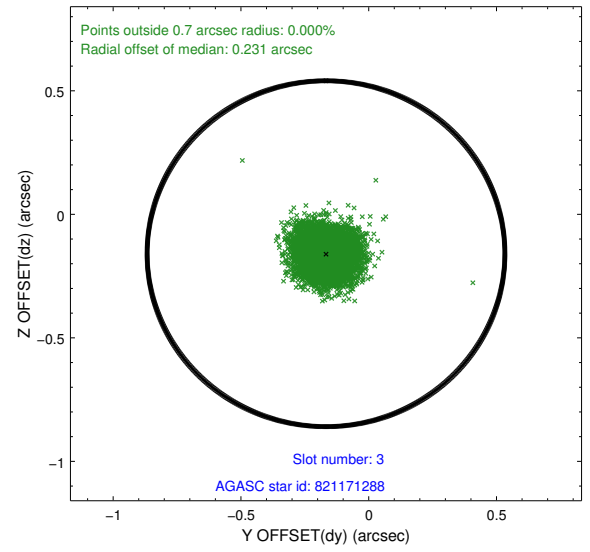
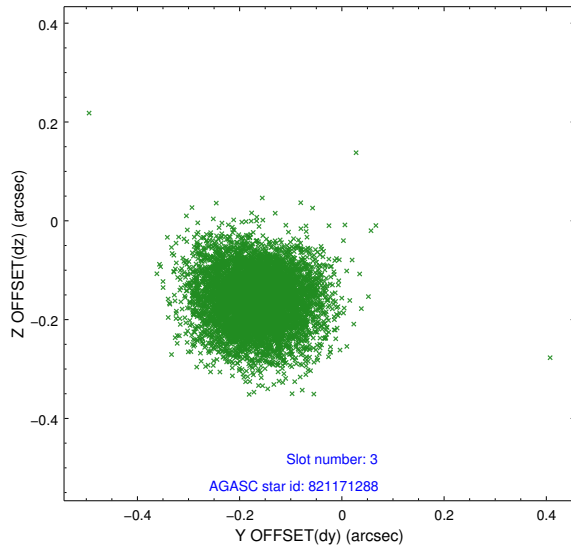


### Slot Statistics

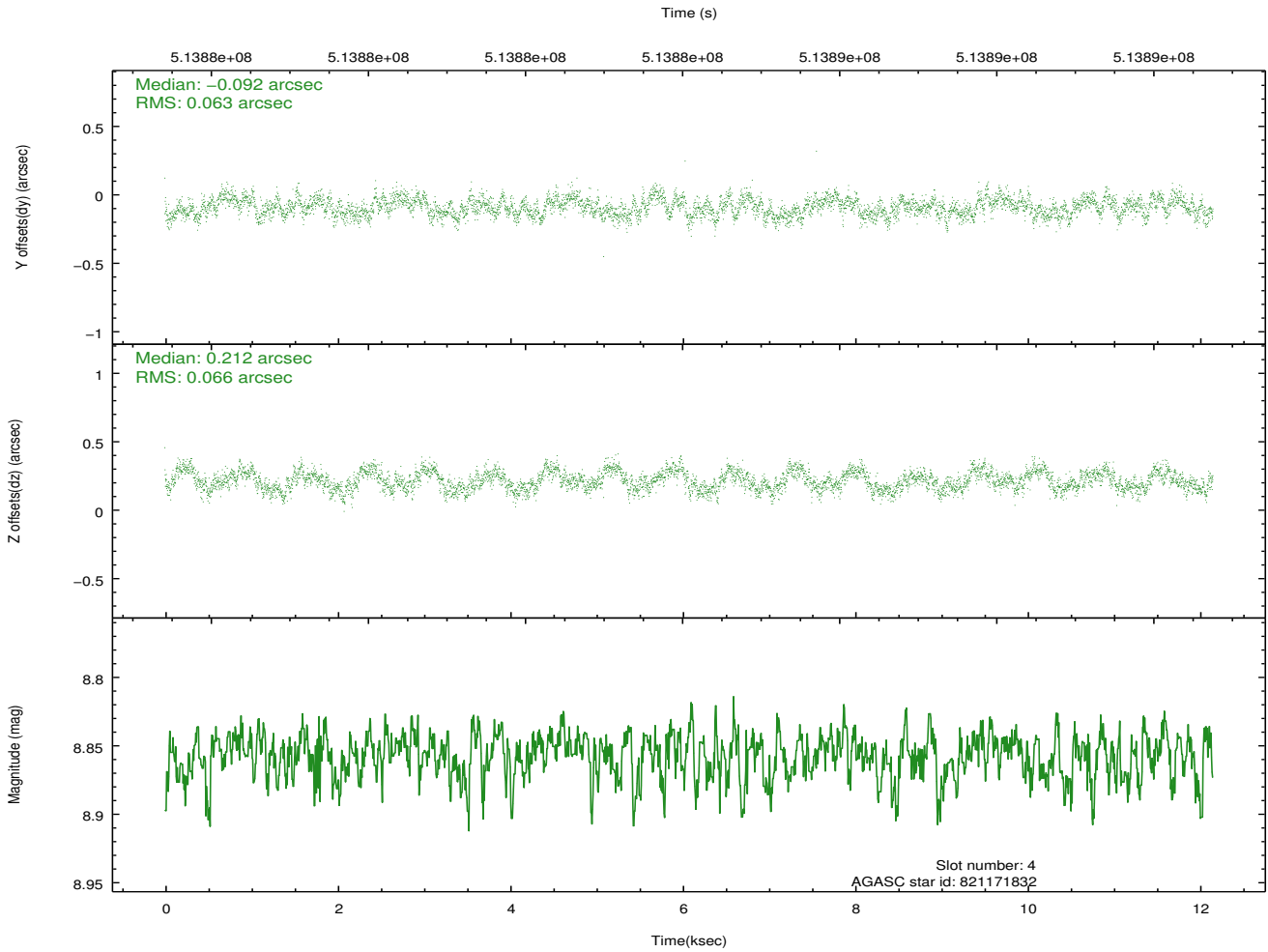
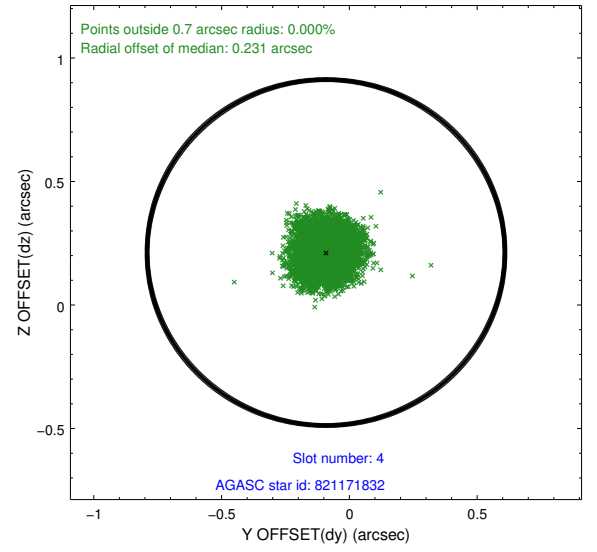
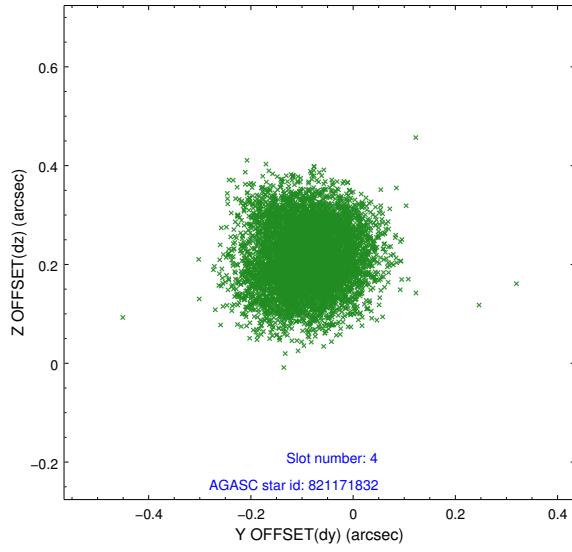
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.04	2965	-0.146	-0.098	0.006	0.011	0.000000	0.000000	-769.37	-1737.41
1	FID		ACIS-S-4	7.13	2965	0.193	0.065	0.007	0.011	0.000000	0.000000	2144.10	170.76
2	FID		ACIS-S-6	7.27	2965	-0.075	0.041	0.008	0.014	0.000000	0.000000	393.26	808.63
3	GUIDE	used	821171288	9.12	5924	-0.167	-0.159	0.089	0.143	275.426002	-15.652858	1630.97	433.58
4	GUIDE	used	821171832	8.86	5926	-0.092	0.212	0.099	0.153	275.792275	-15.610164	1680.35	-844.15
5	GUIDE	used	821179456	9.20	5926	0.286	0.065	0.113	0.194	275.488731	-16.518451	-1491.77	470.72
6	GUIDE	used	821180448	7.18	5930	0.005	-0.045	0.064	0.103	275.453560	-16.324585	-787.09	535.10
7	GUIDE	used	821169272	7.24	5929	-0.033	-0.067	0.065	0.106	275.312025	-16.375484	-930.08	1037.24

## 2.4 Star Slots

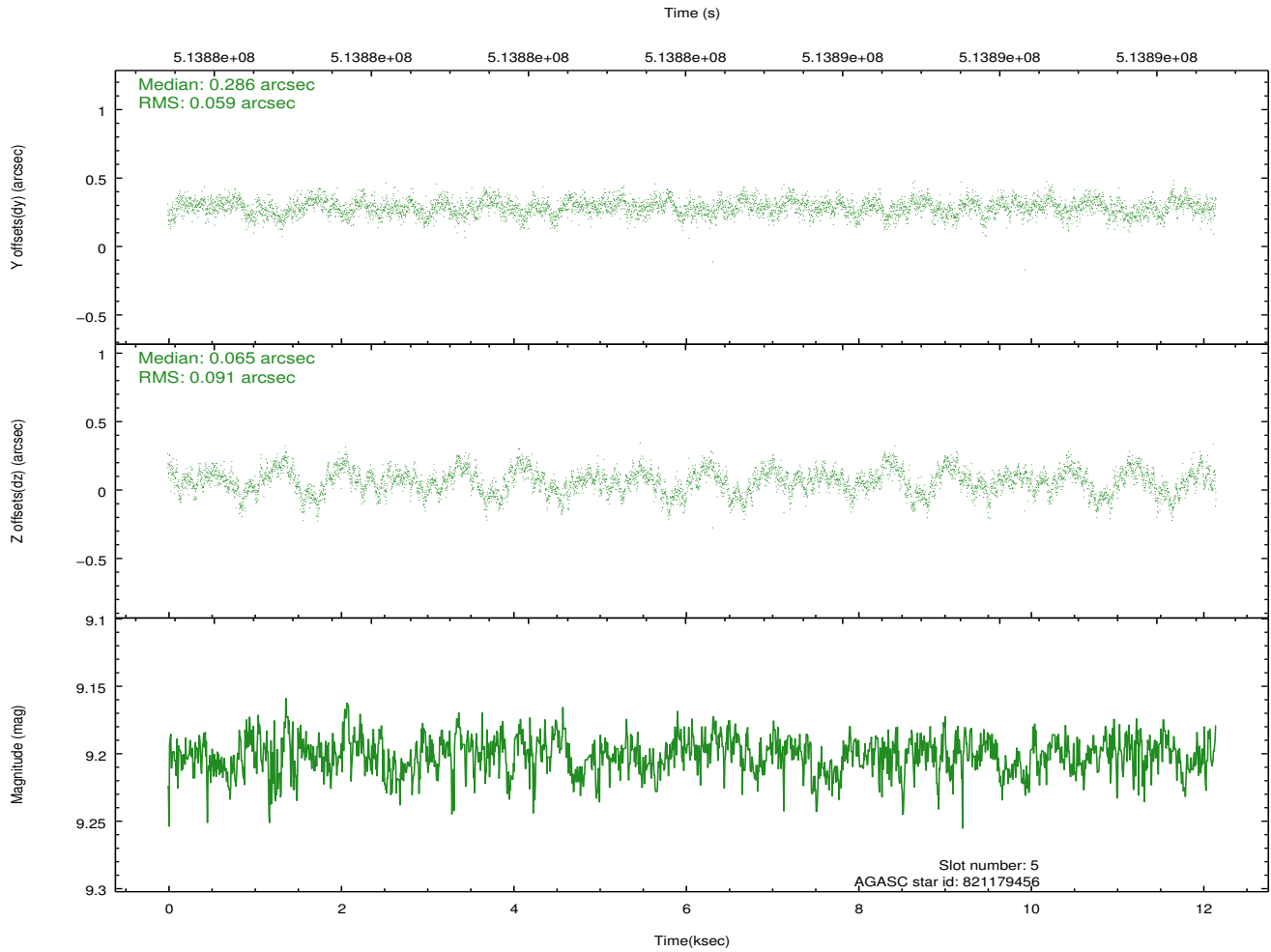
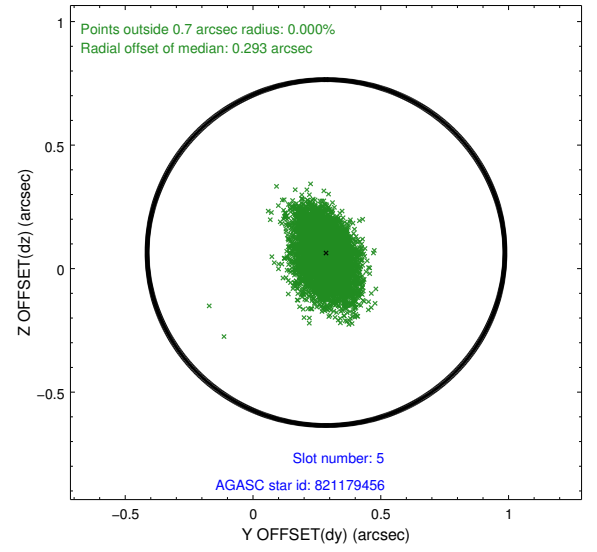
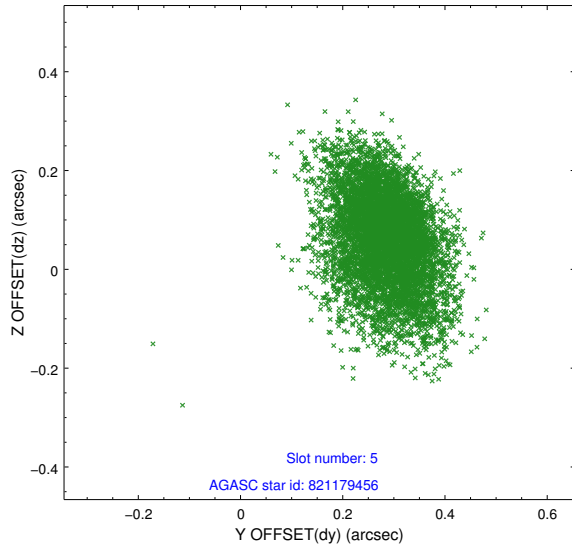
### 2.4.1 Slot 3



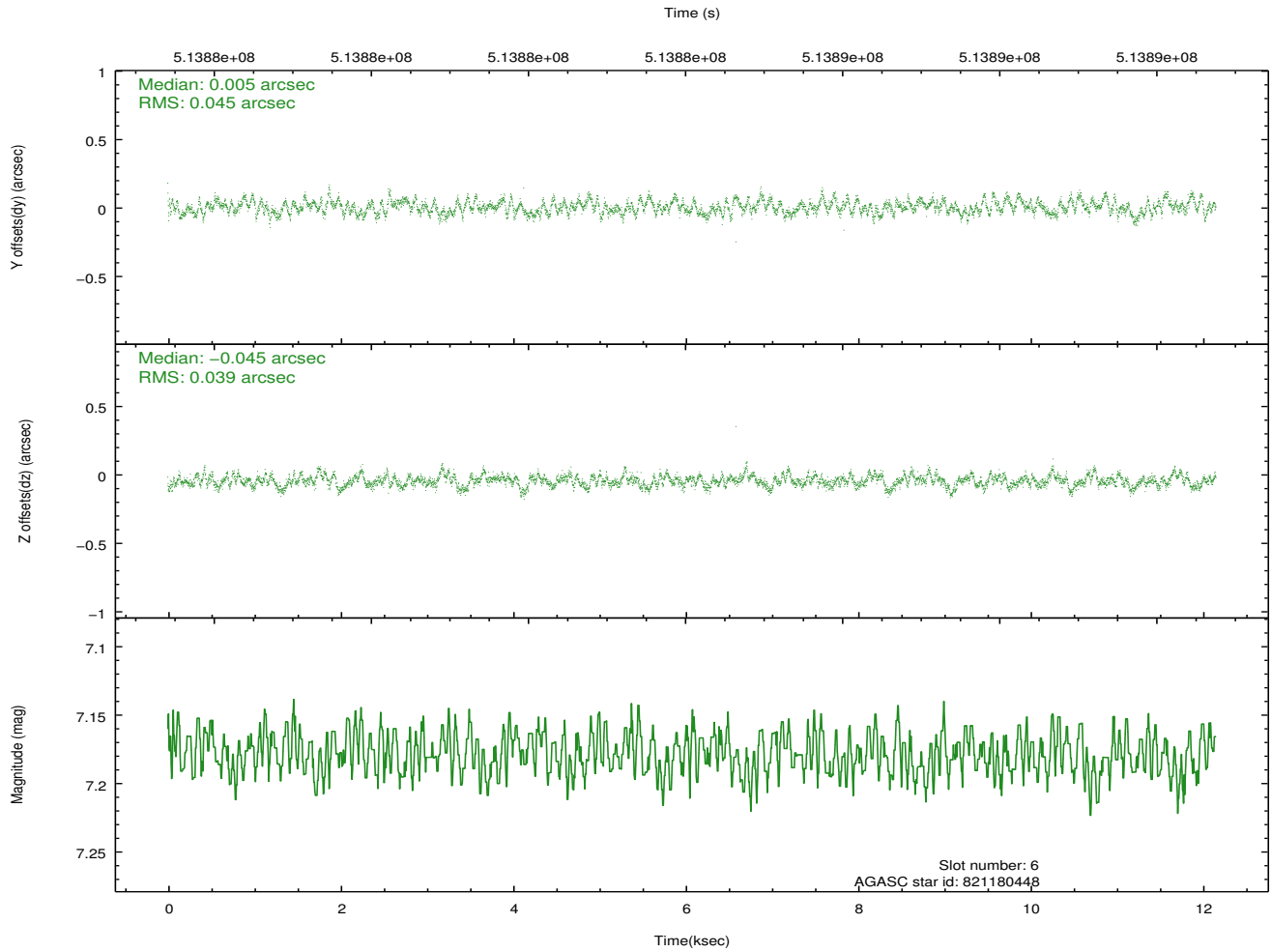
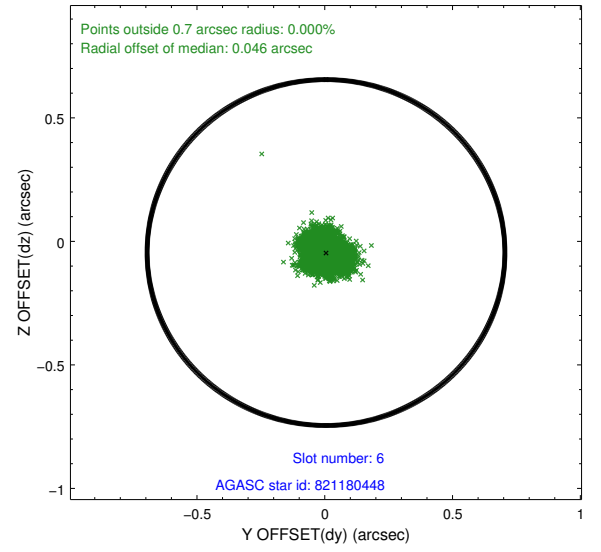
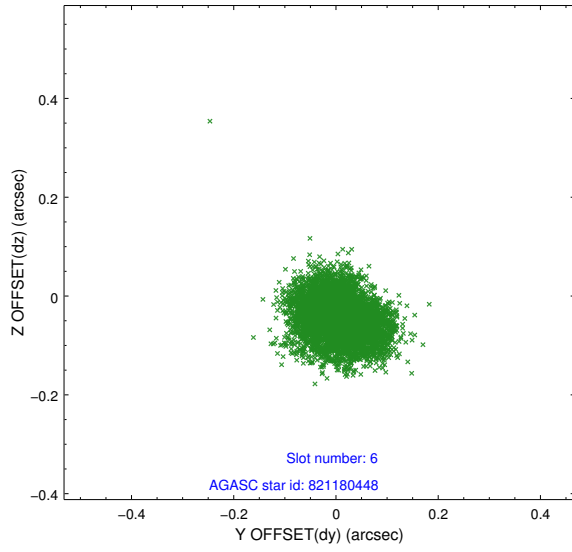
## 2.4.2 Slot 4



### 2.4.3 Slot 5

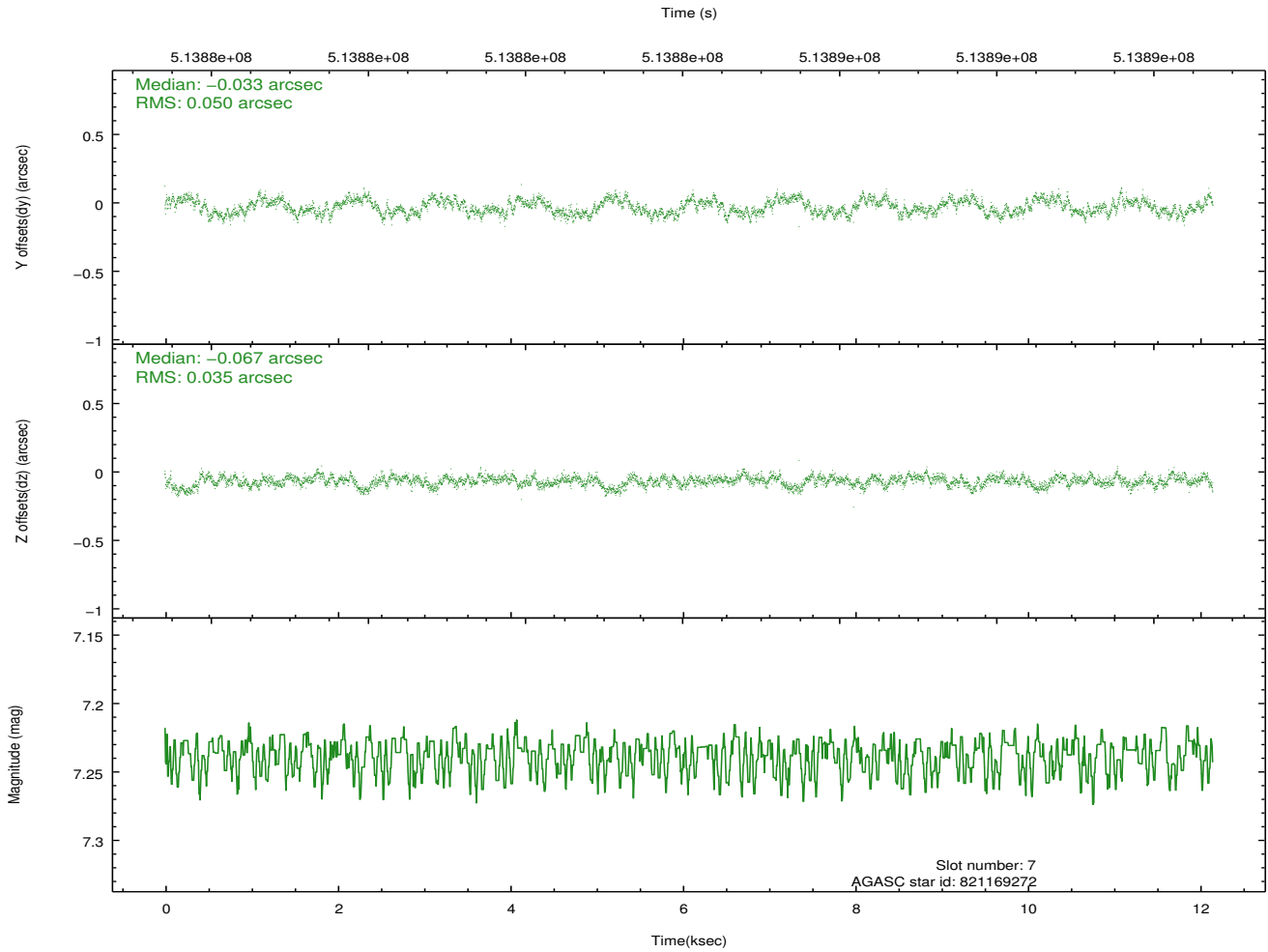
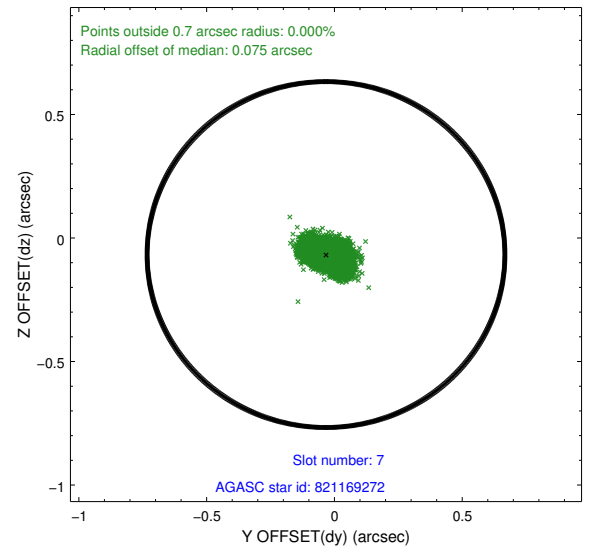
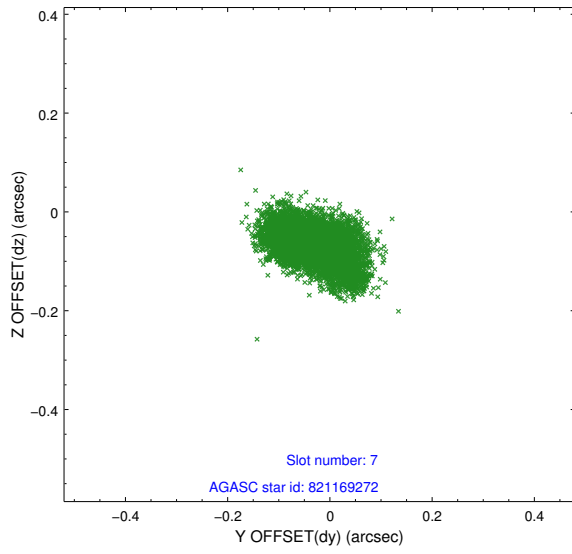


## 2.4.4 Slot 6



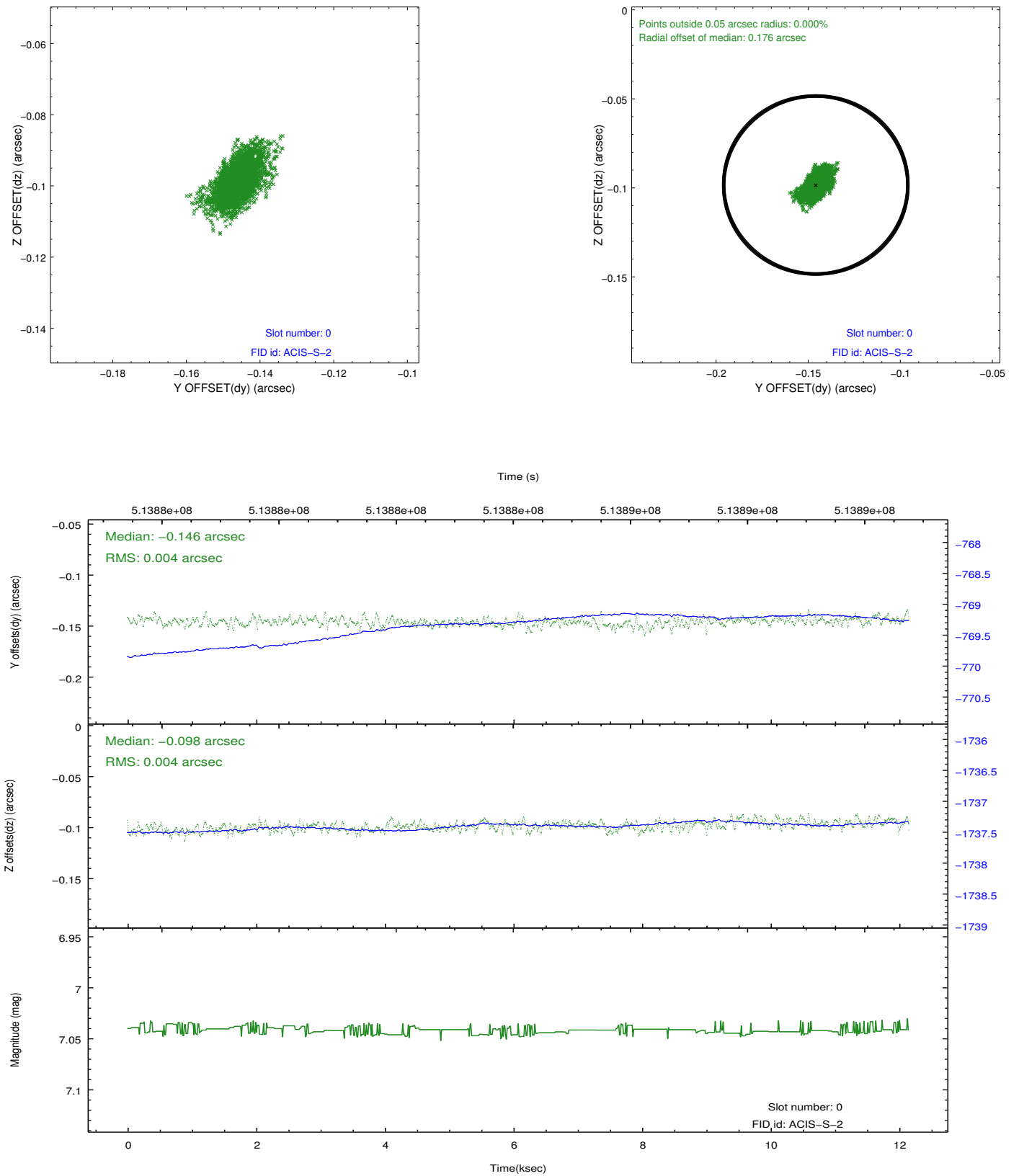


## 2.4.5 Slot 7

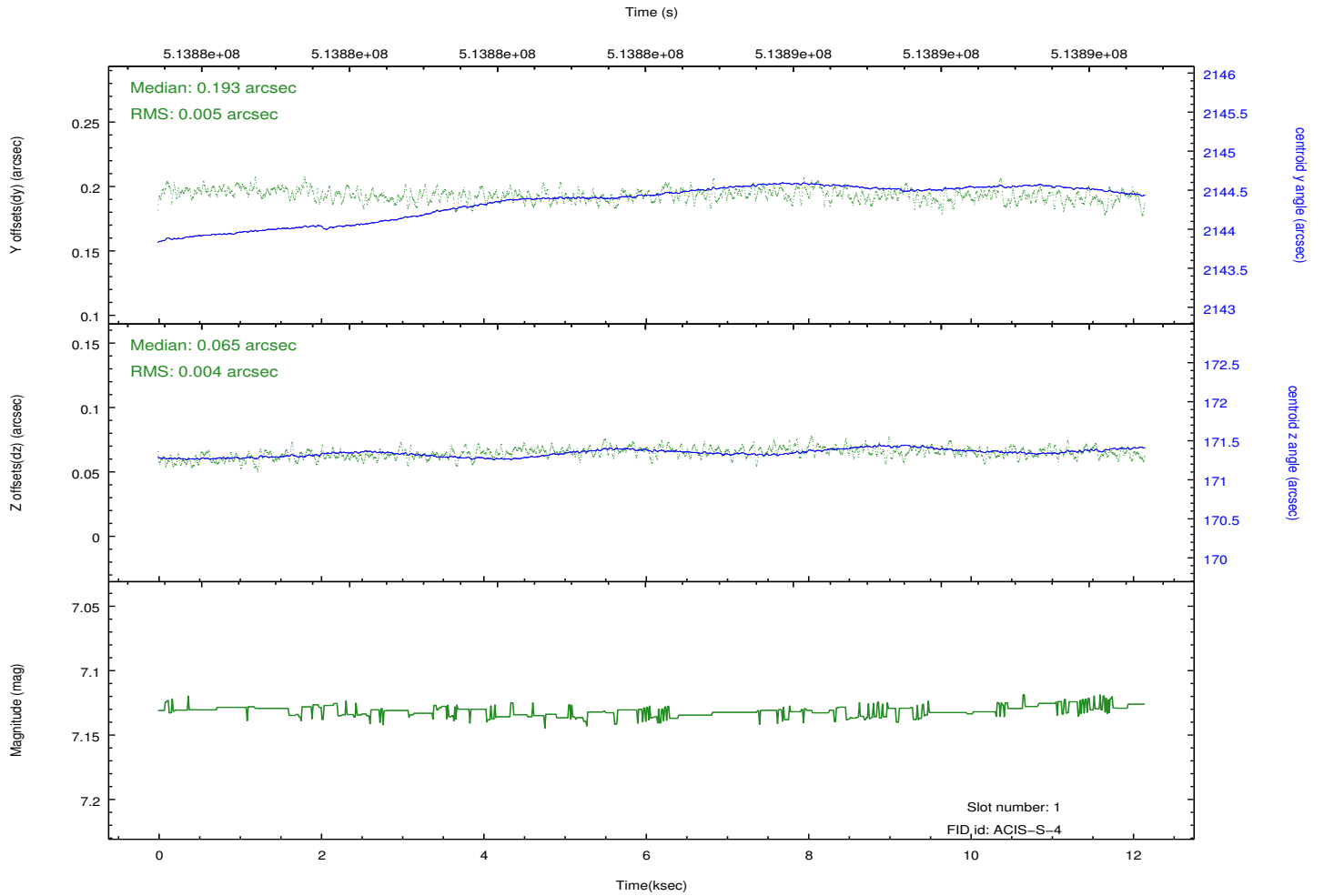
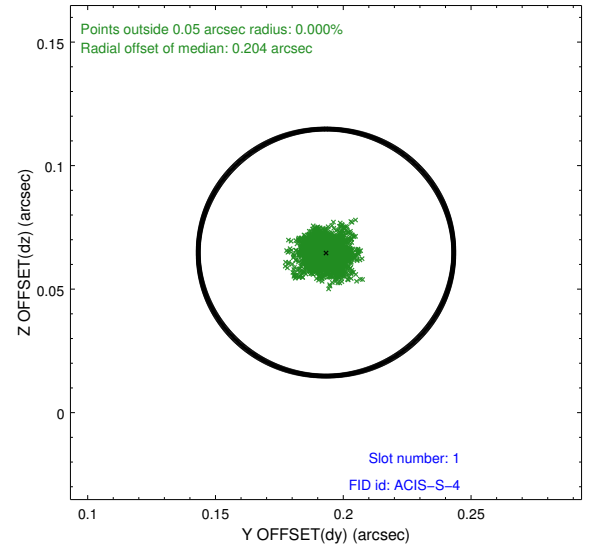
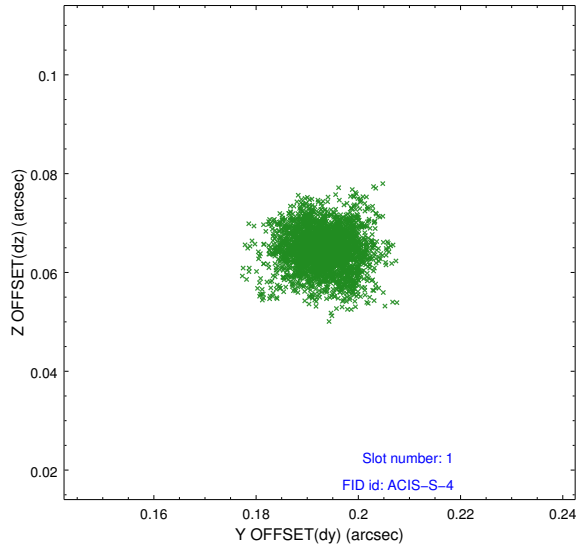


## 2.5 FID Slots

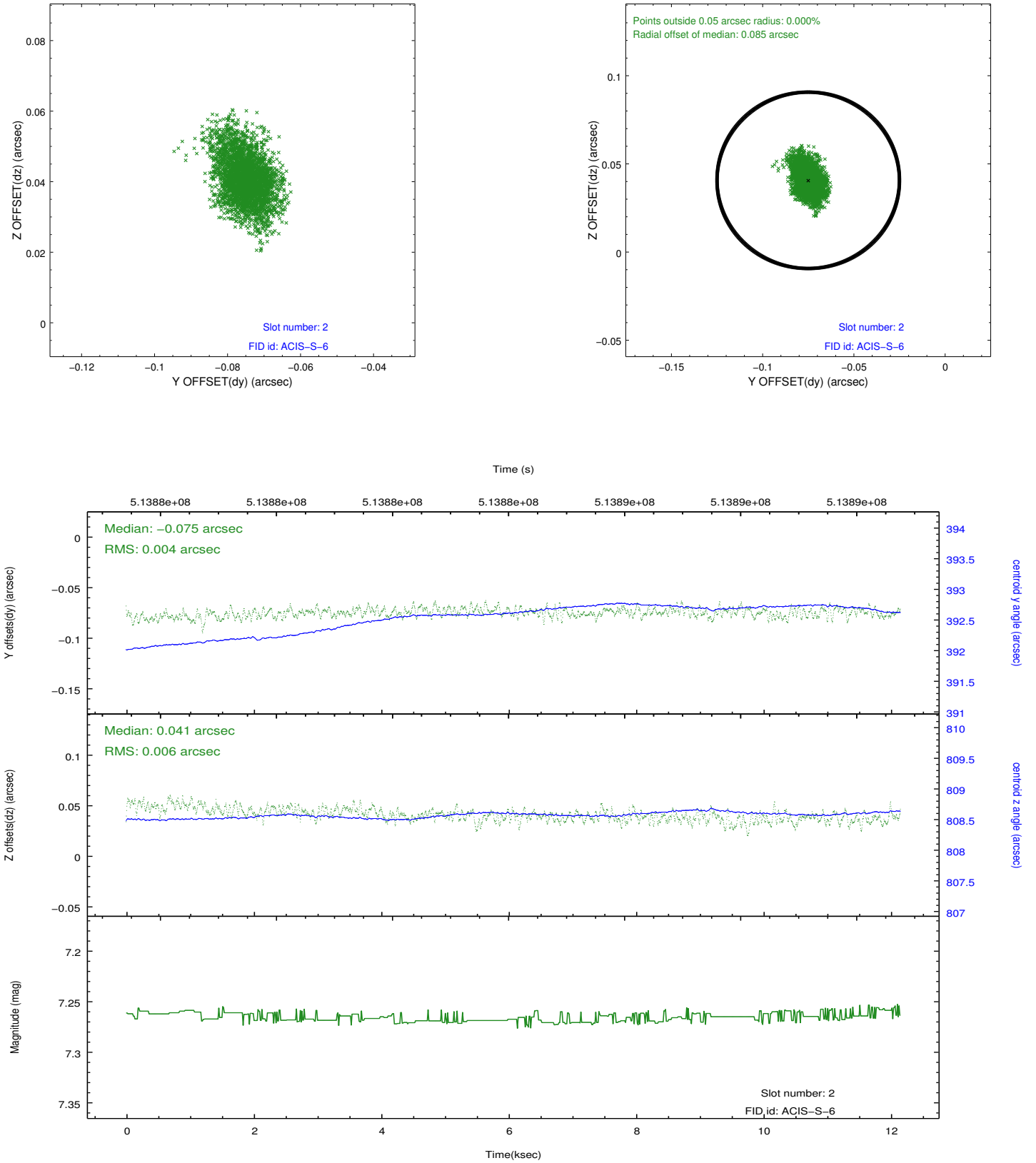
### 2.5.1 Slot 0



## 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	12.069951122642

## 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.