

# V&V Reference Report

## L2 ASCDS Version : 8.5.1.1

Observation 14228 - L2 Version 2  
Chandra X-Ray Center

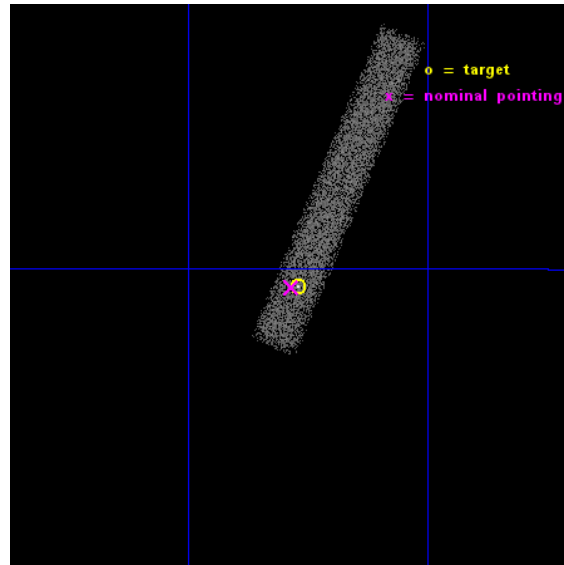
L2 Processing Date : Dec 1 2014

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# 1 Front

seq_num	401424	Sequence number
obs_id	14228	Observation id
title	Crust cooling of accretion heated neutron stars	Proposal title
observer	Dr. Rudy Wijnands	Principal investigator
object	MAXI J0556-332	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	89.1925	Observer's specified target RA [deg]
dec_targ	-33.173972	Observer's specified target Dec [deg]
ra_nom	89.19608139537	Nominal RA [deg]
dec_nom	-33.174455548734	Nominal Dec [deg]
roll_nom	293.51447303786	Nominal Roll [deg]
revision	2	Processing version of data
ontime	25070.398505688	Sum of GTIs [s]
livetime	22737.528120522	Livetime [s]
ontime7	25070.398505688	Sum of GTIs [s]
l2events	12841	Number of level 2 events

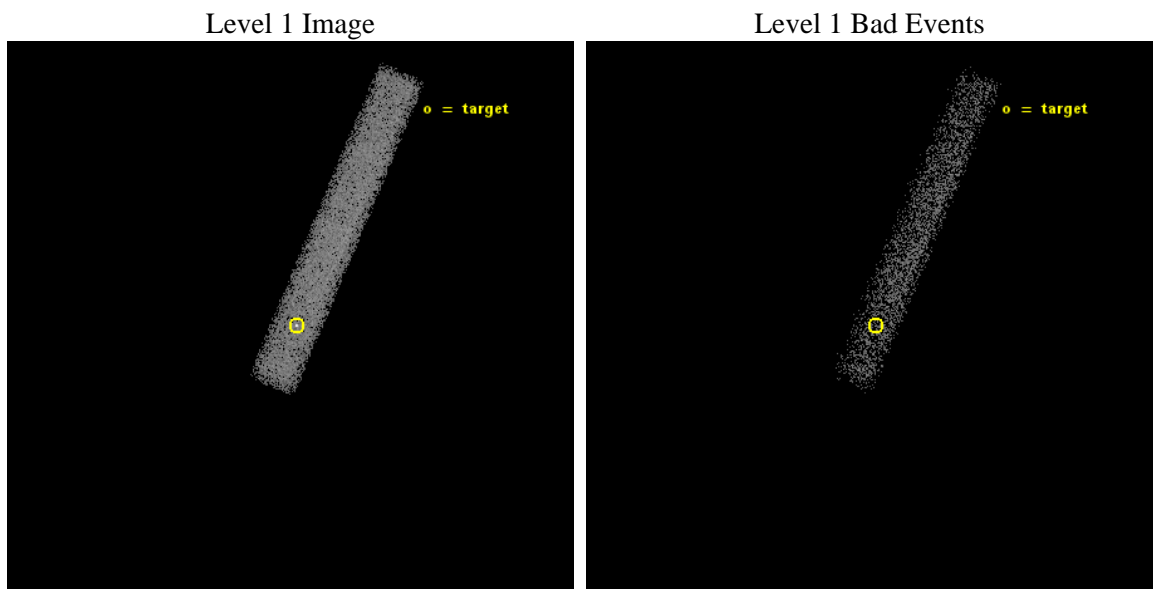




## 2 OBI

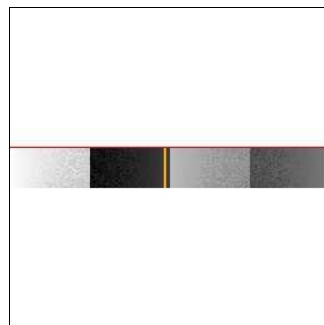
### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias

Chip 7



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	25000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	25070.398505688	Sum of GTIs [s]
caldsver	4.6.4	&#160	ontime7	25070.398505688	Sum of GTIs [s]
date	2014-12-01T13:36:10	Date and time of file creation	l1events	26296	Number of level 1 events
revision	2	Processing version of data			

### 2.1.4 Events

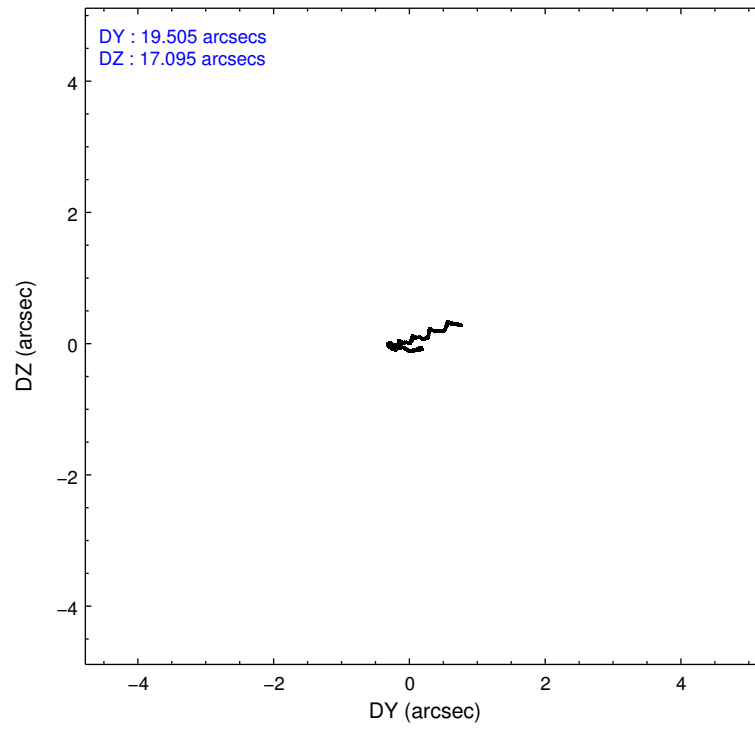
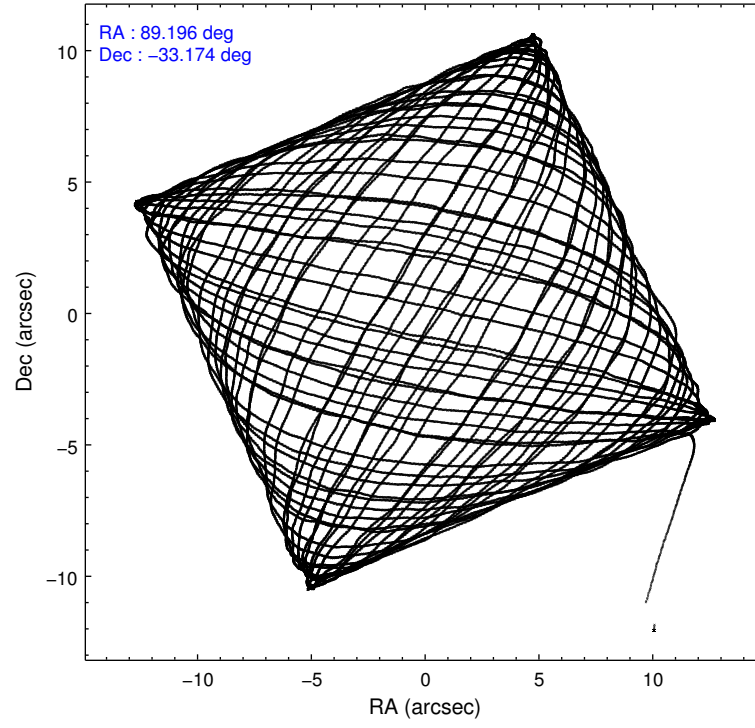
	<b>ccd 7</b>
level 1 events	26296
rejected events	12909
rejected %	49%

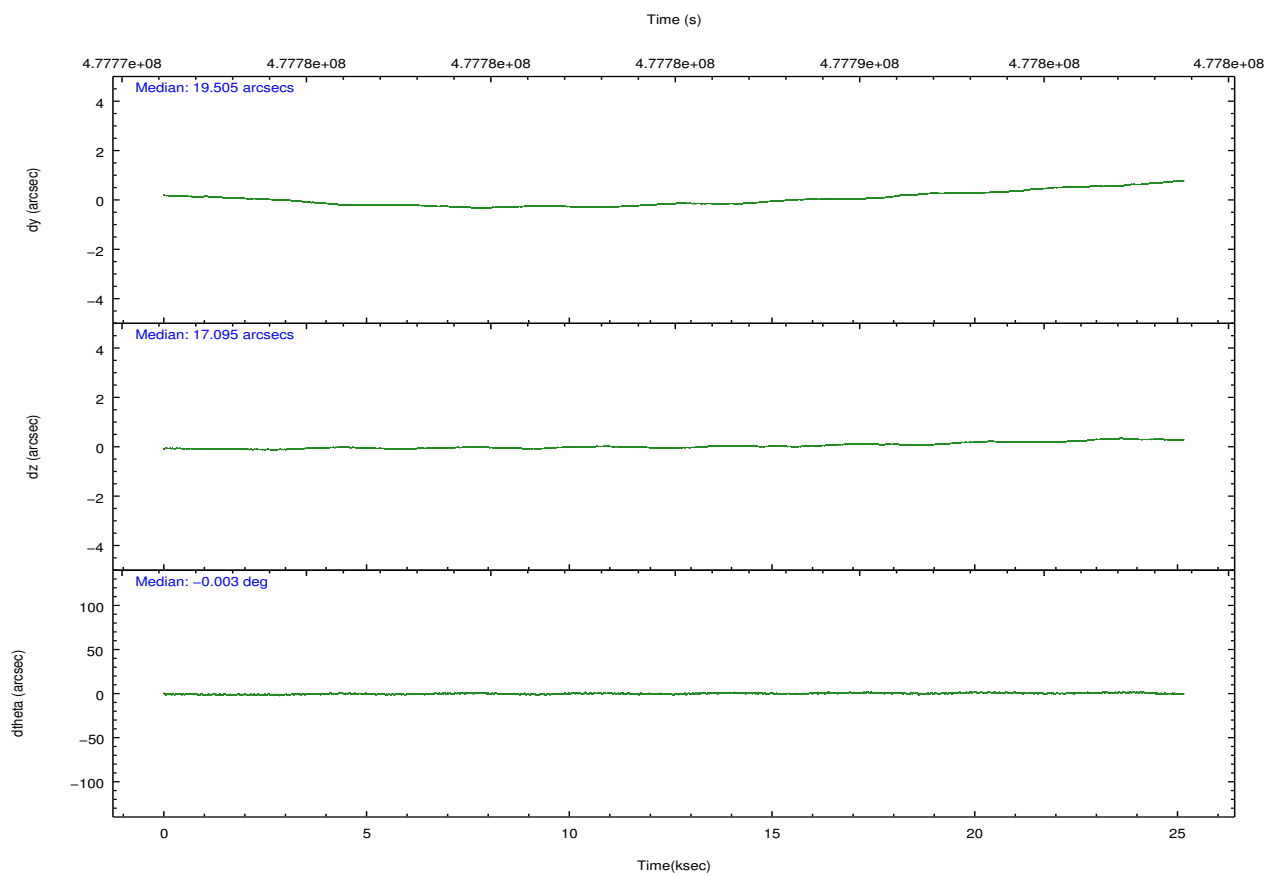
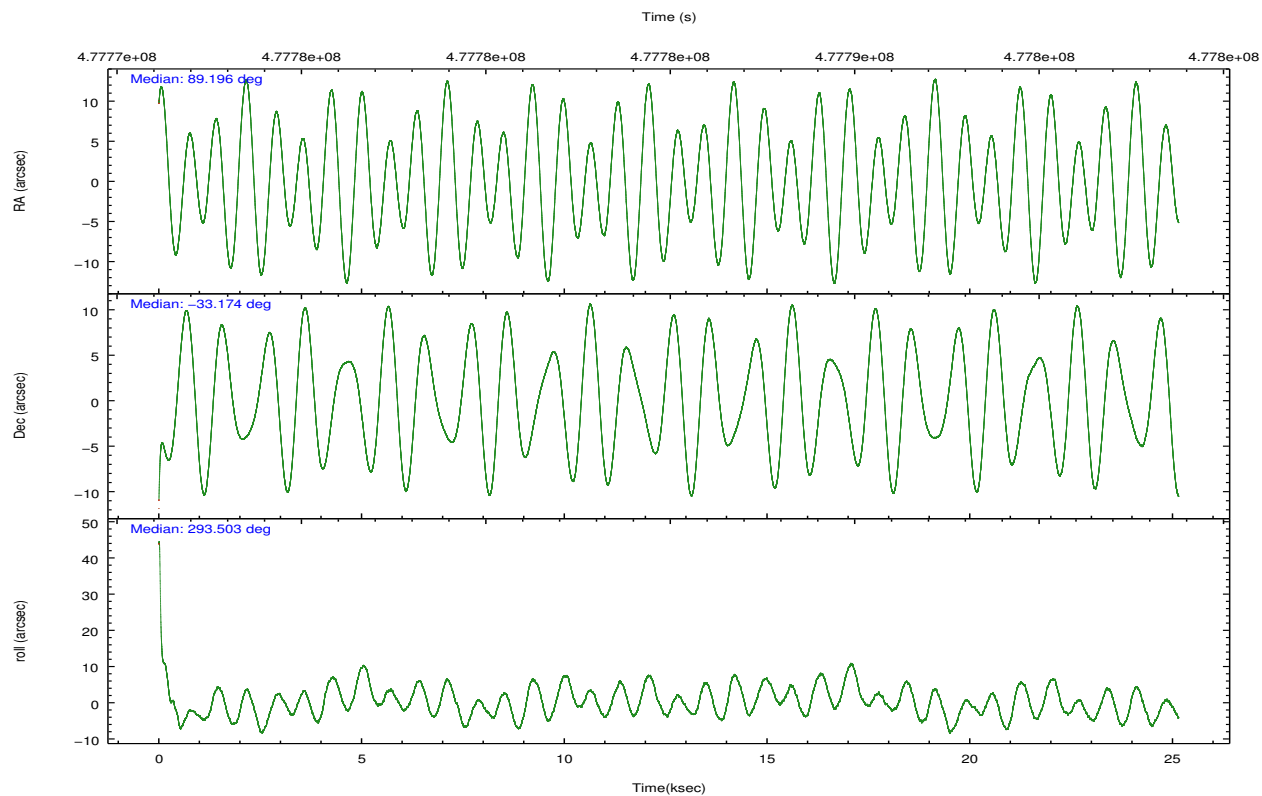
	<b>ccd 7</b>
grade 0 events	1518
	5%
grade 1 events	40
	0%
grade 2 events	2698
	10%
grade 3 events	1801
	6%
grade 4 events	1686
	6%
grade 5 events	2583
	9%
grade 6 events	5684
	21%
grade 7 events	10286
	39%

## 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	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	89.169548	89.19608139537044	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	-33.158487	-33.17445554873442	Subarray start row	449	449
[deg] Pointing Roll	293.343307	293.5144730378569	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)	477772537.184000	477771568.04046			
Observation start date	2013-02-20T18:34:30	2013-02-20T18:19:28			
[s] Observation end time (MET)	477797537.184000	477798789.47942			
Observation end date	2013-02-21T01:31:10	2013-02-21T01:53:09			
Read mode	TIMED	TIMED			

## 2.3 Aspect



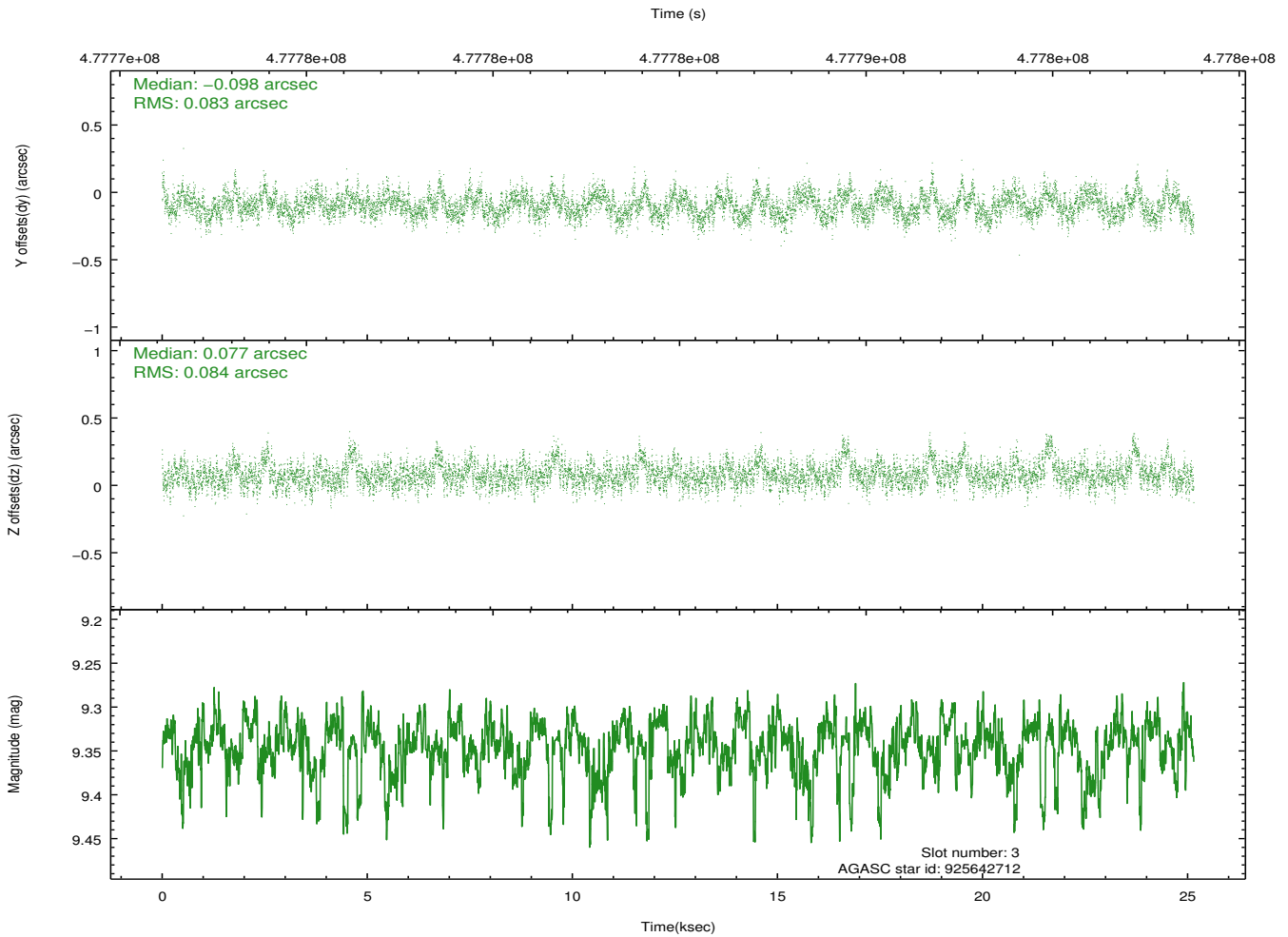
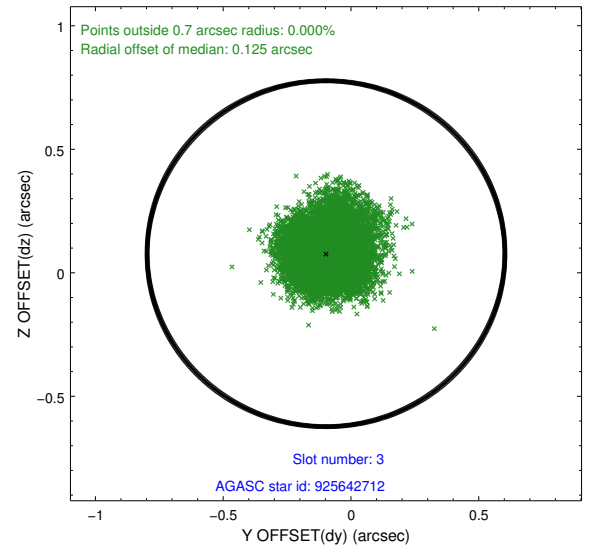
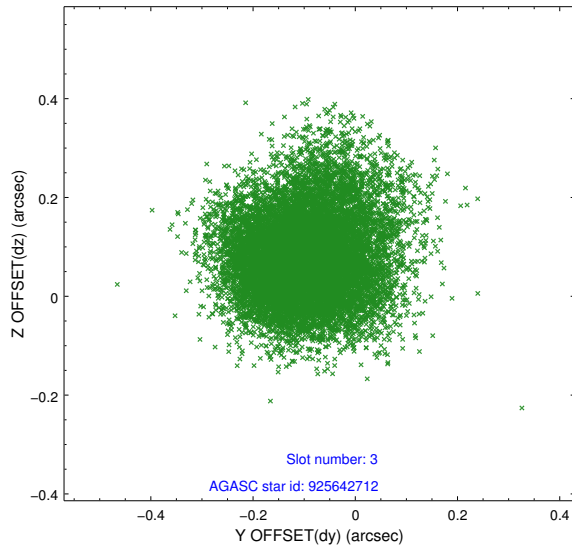


### Slot Statistics

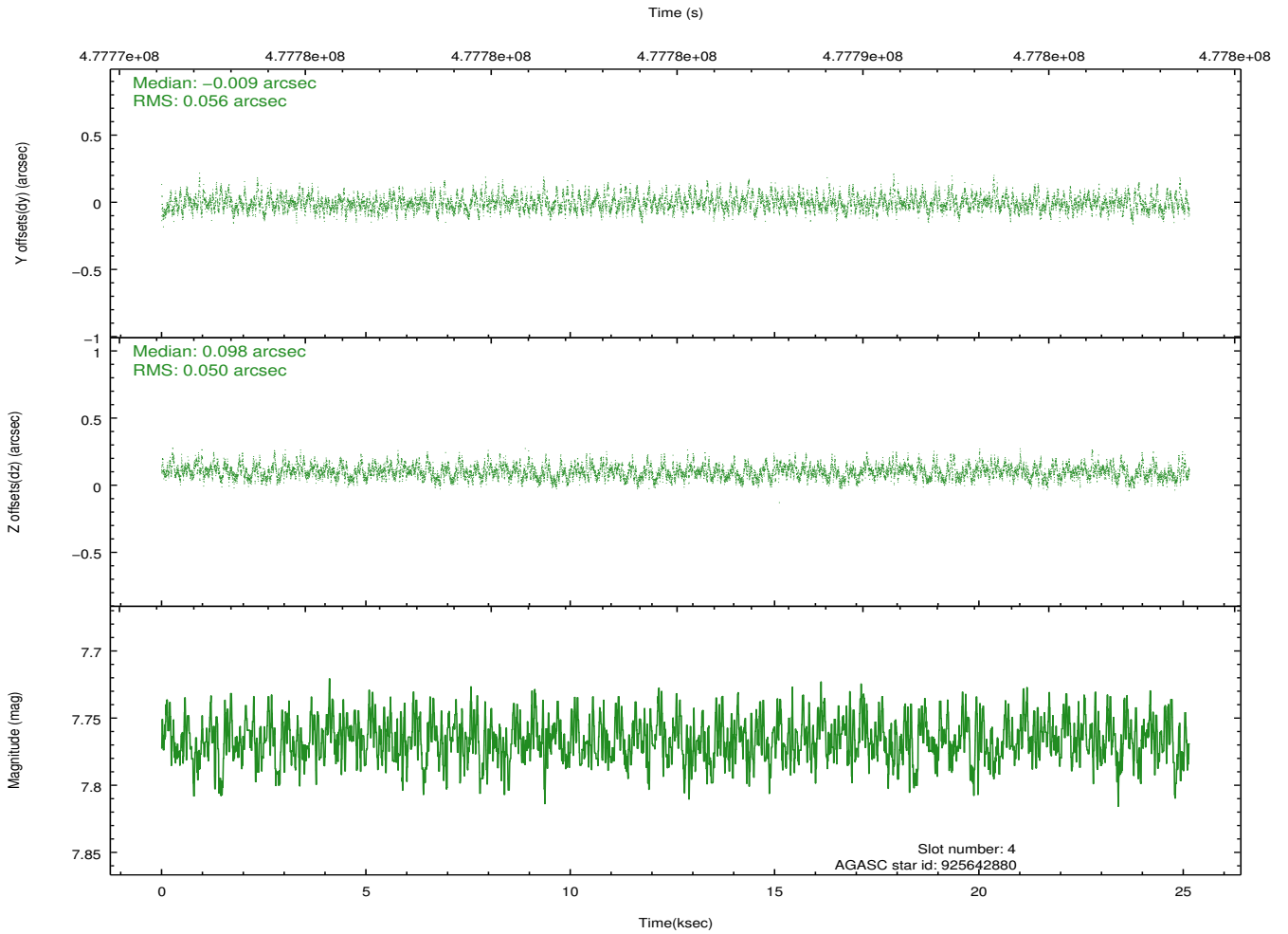
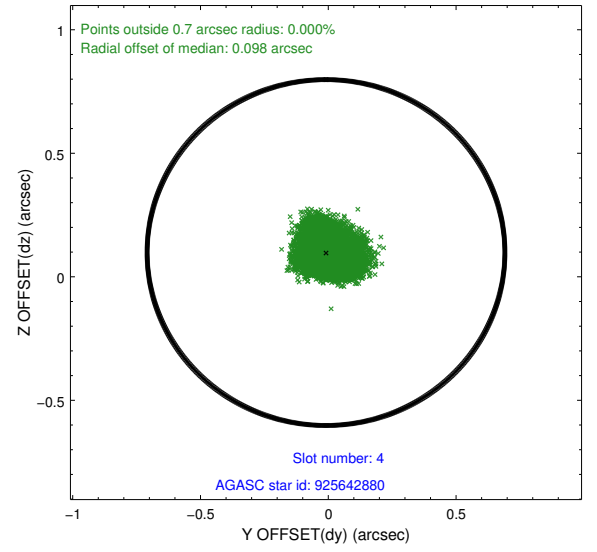
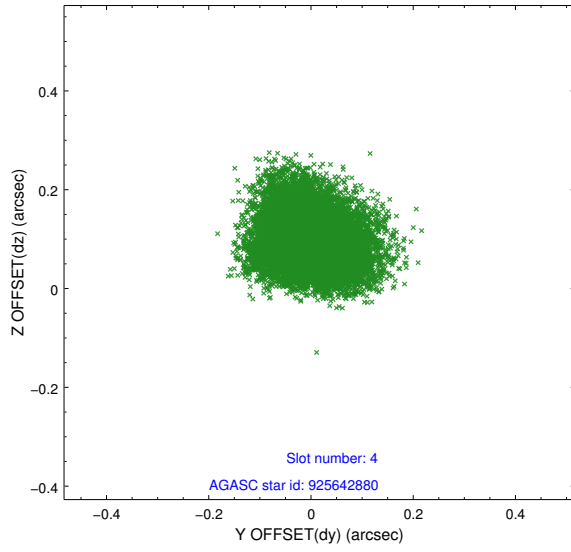
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.97	6135	-0.117	-0.049	0.009	0.015	0.000000	0.000000	-772.79	-1738.61
1	FID		ACIS-S-4	7.05	6134	0.289	0.070	0.008	0.014	0.000000	0.000000	2140.87	169.82
2	FID		ACIS-S-5	7.08	6135	-0.204	-0.012	0.010	0.017	0.000000	0.000000	-1825.53	163.61
3	GUIDE	used	925642712	9.34	12193	-0.098	0.077	0.125	0.205	89.246145	-33.485552	1172.96	-255.30
4	GUIDE	used	925642880	7.77	12267	-0.009	0.098	0.081	0.130	89.133148	-33.434507	869.64	-493.68
5	GUIDE	used	925643520	9.24	12147	-0.028	-0.091	0.120	0.194	88.970468	-33.727415	1646.33	-1359.36
6	GUIDE	used	925645552	7.59	12267	-0.080	0.086	0.075	0.120	88.738097	-33.665766	1167.97	-1911.33
7	GUIDE	used	926158304	8.65	12263	0.211	-0.175	0.114	0.194	88.773773	-33.925420	2069.70	-2179.80

## 2.4 Star Slots

### 2.4.1 Slot 3

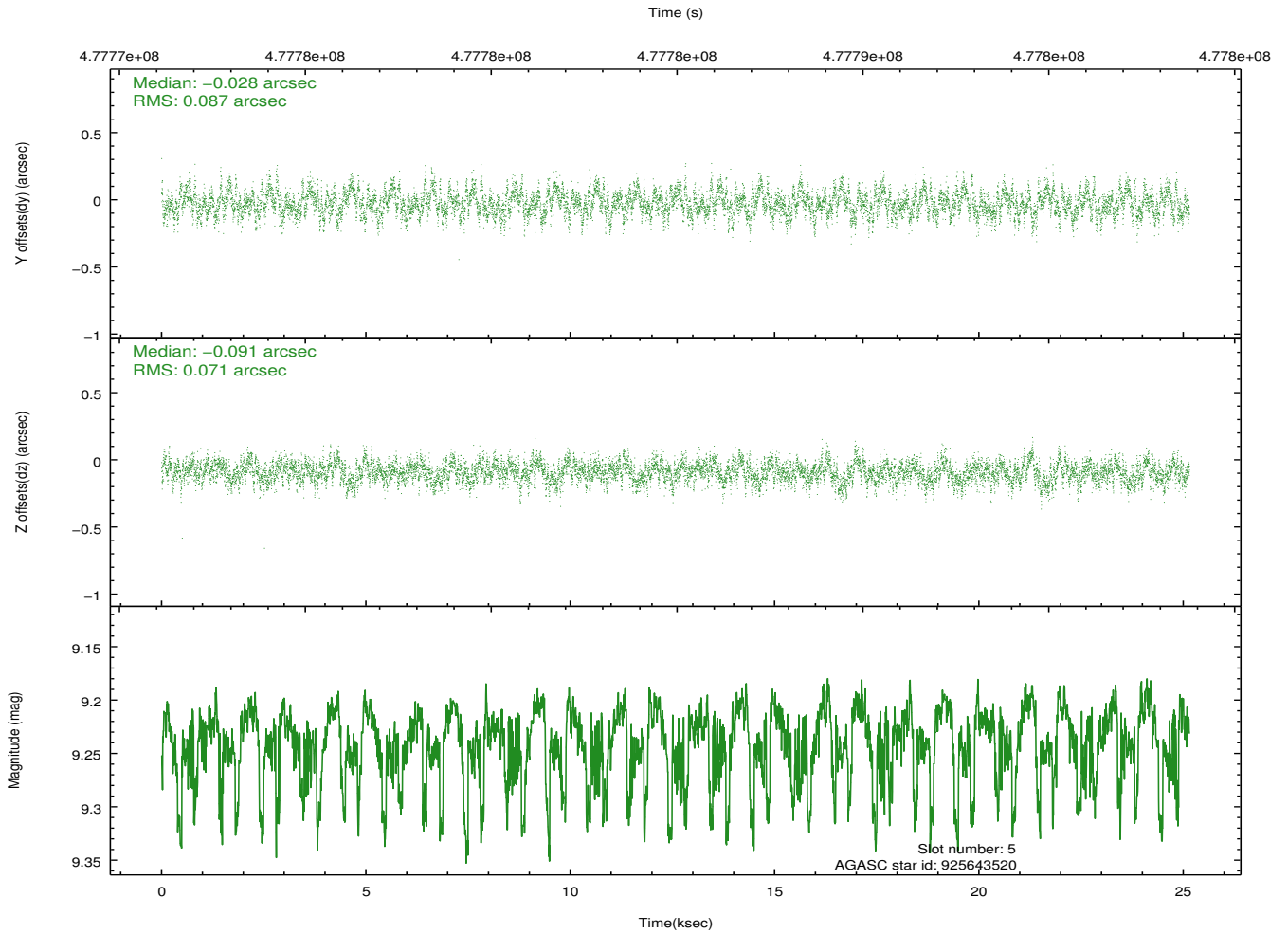
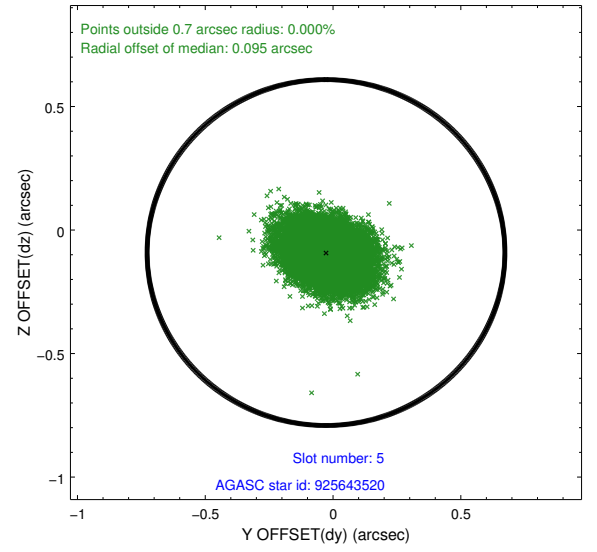
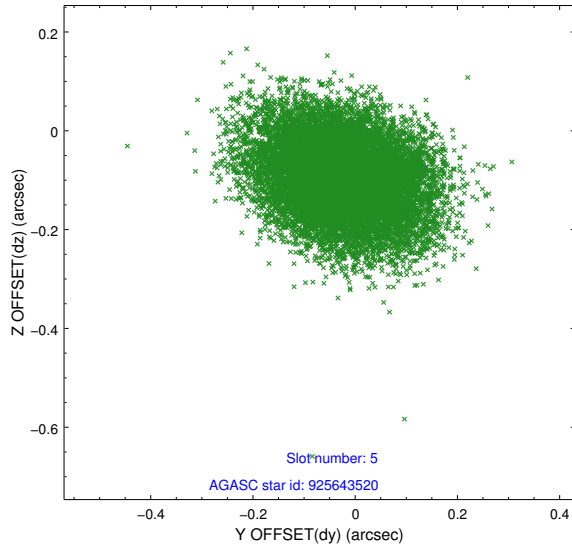


## 2.4.2 Slot 4

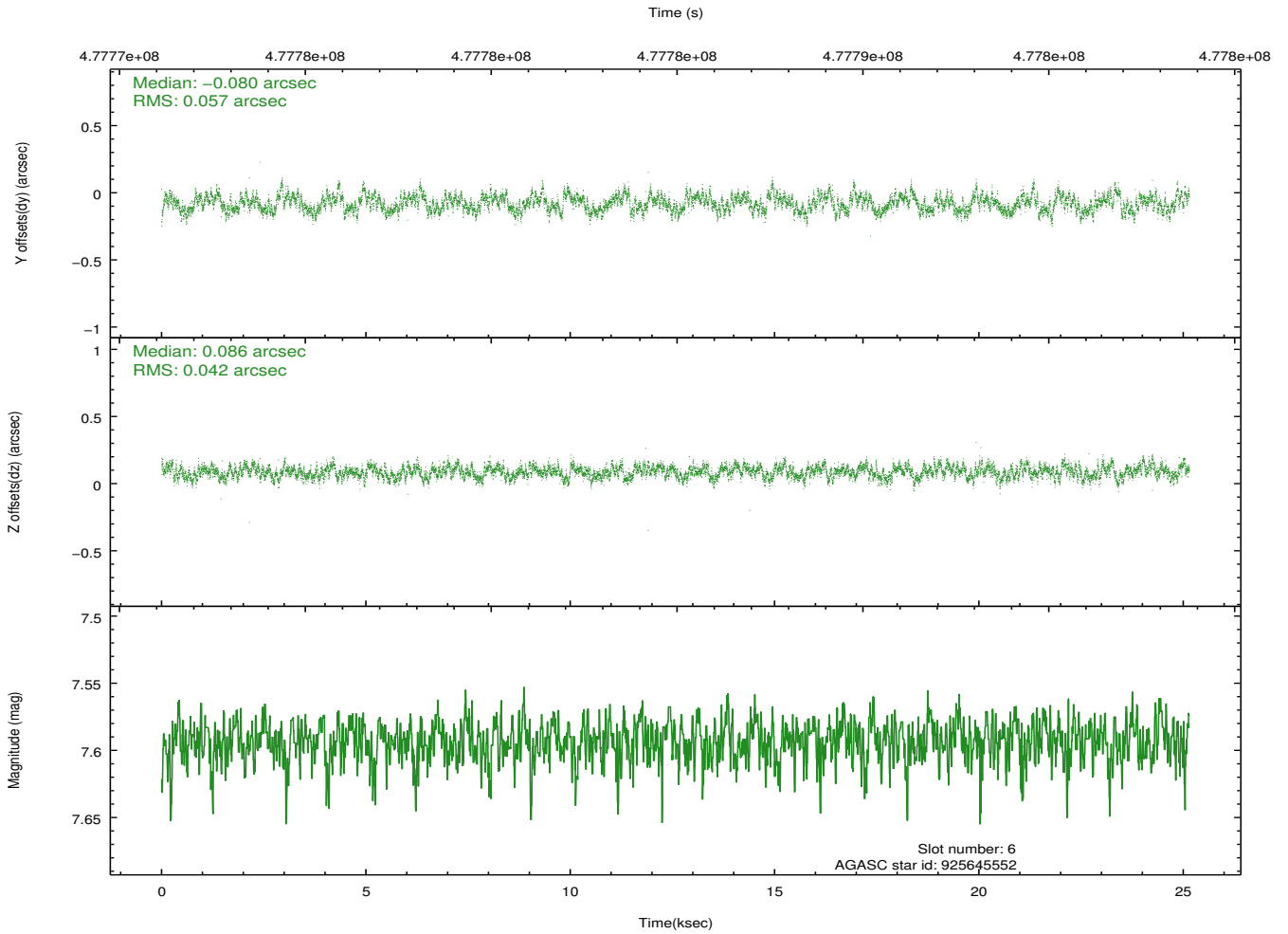
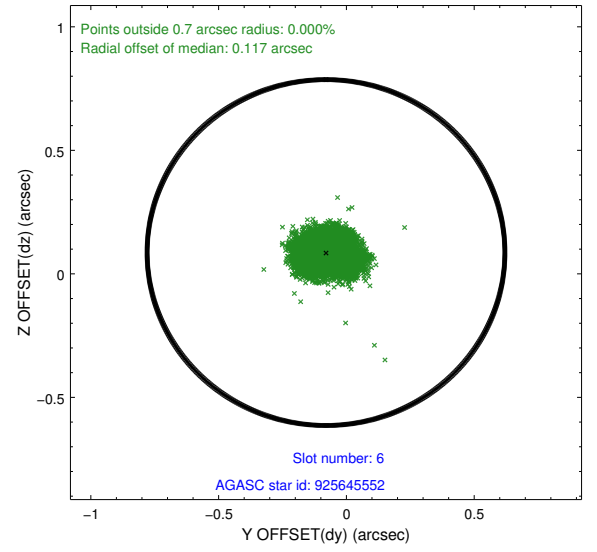
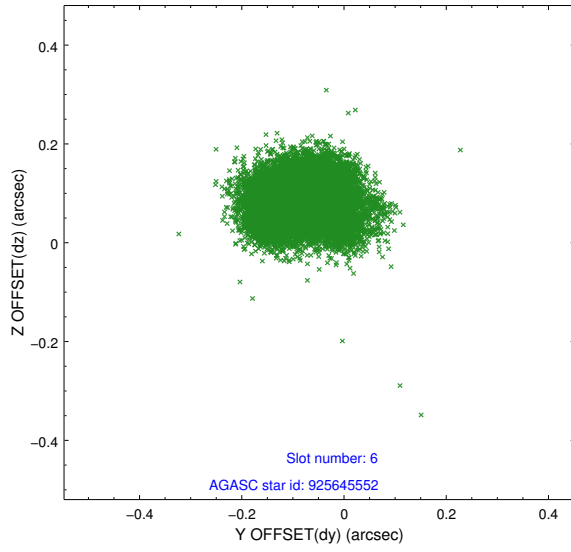




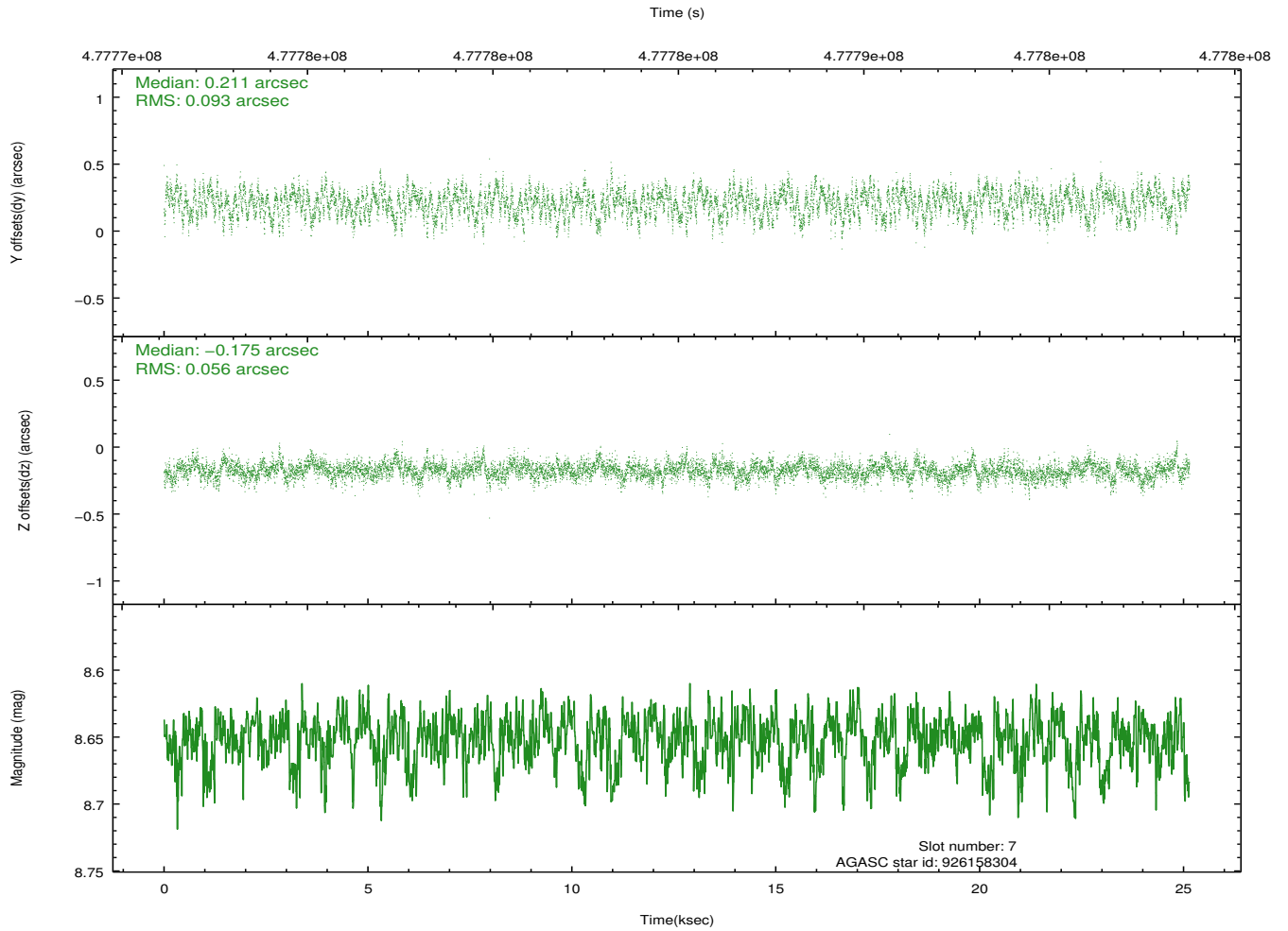
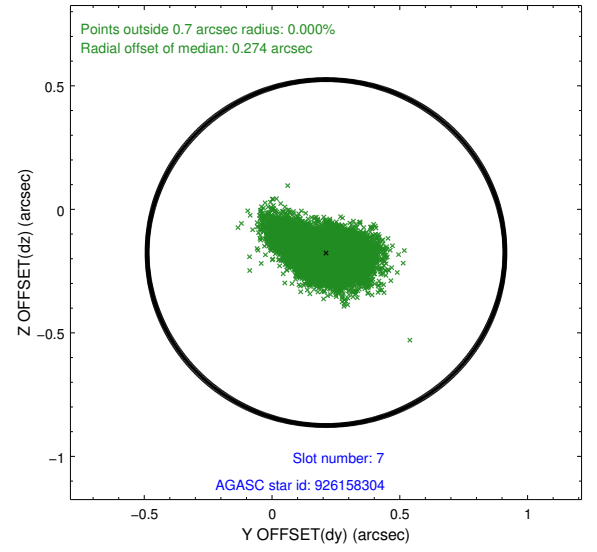
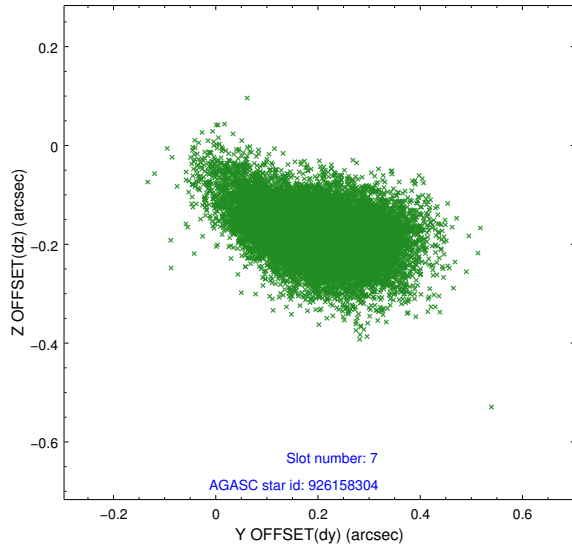
### 2.4.3 Slot 5



## 2.4.4 Slot 6

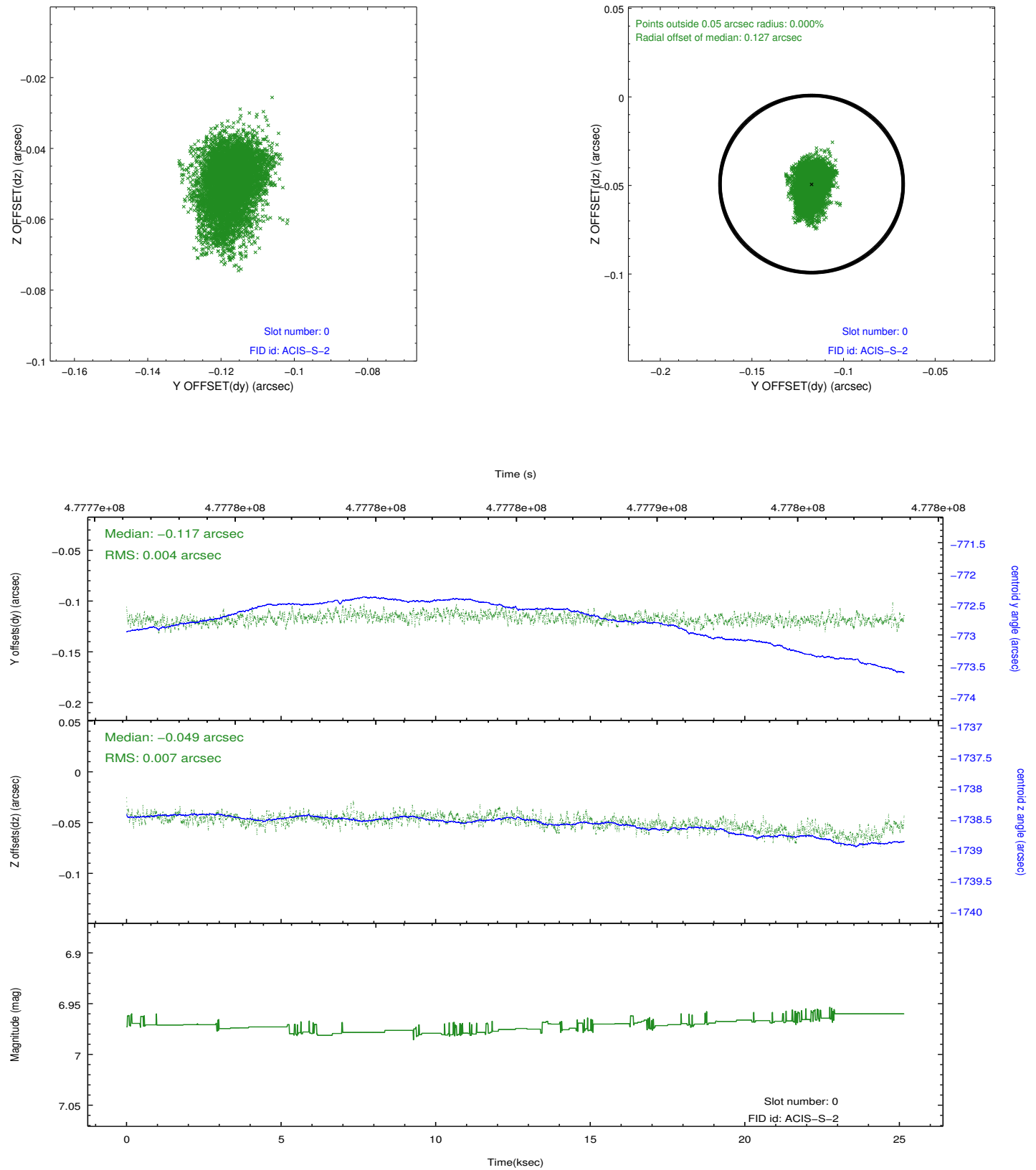


## 2.4.5 Slot 7

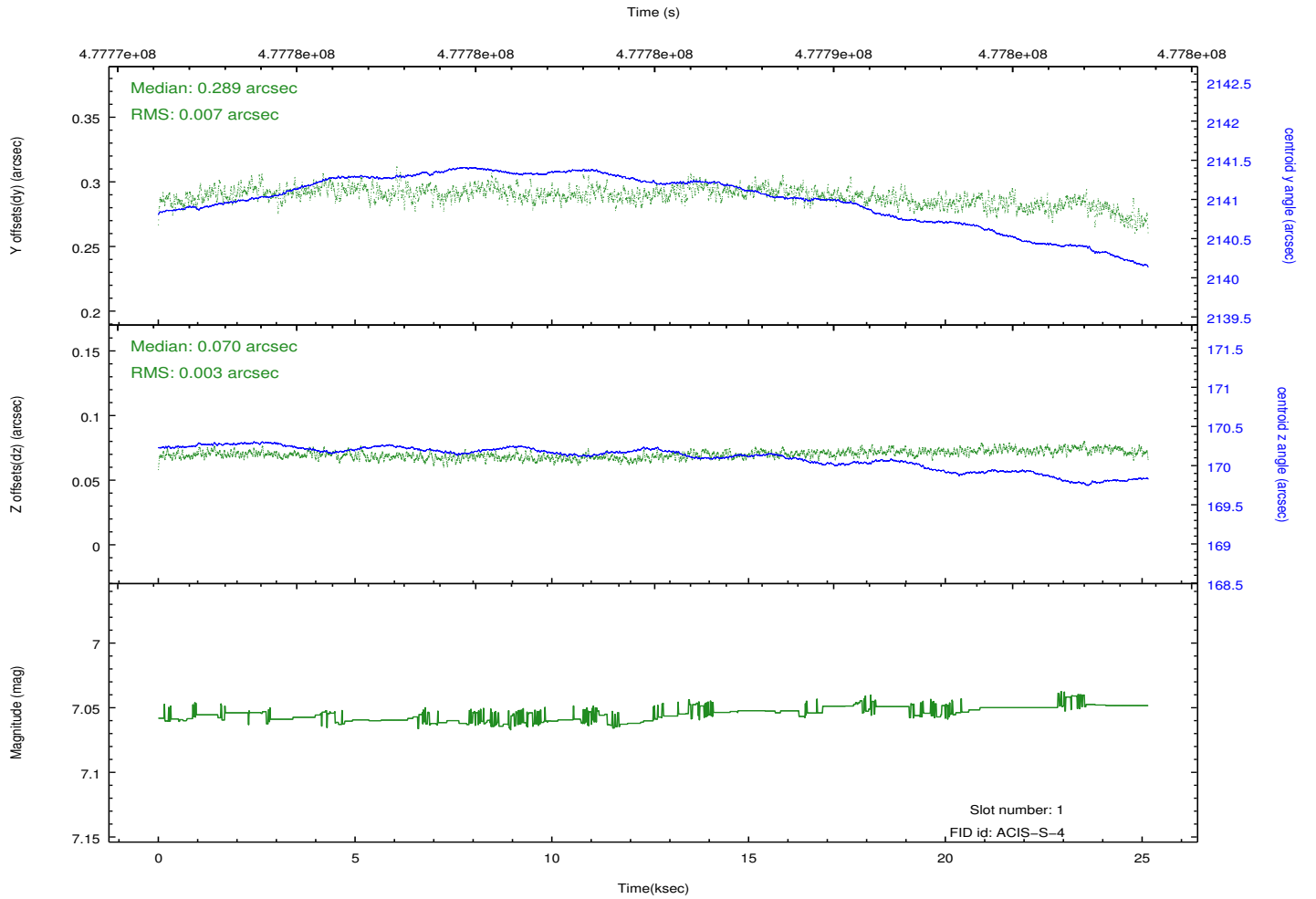
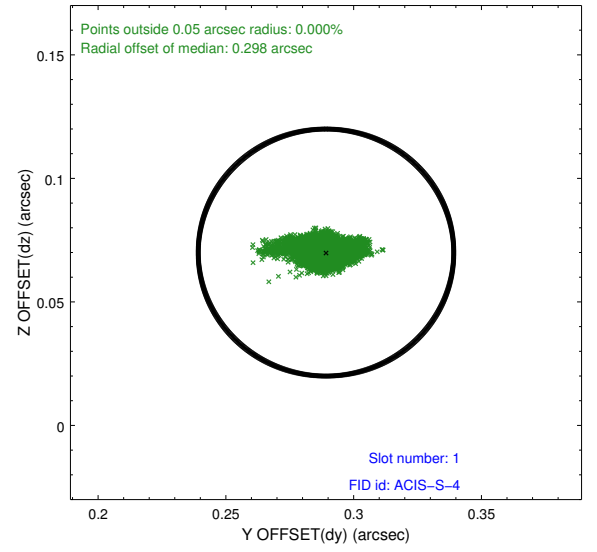
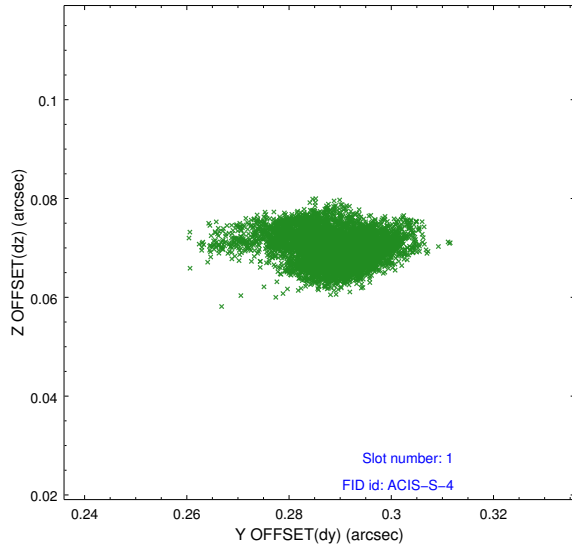


## 2.5 FID Slots

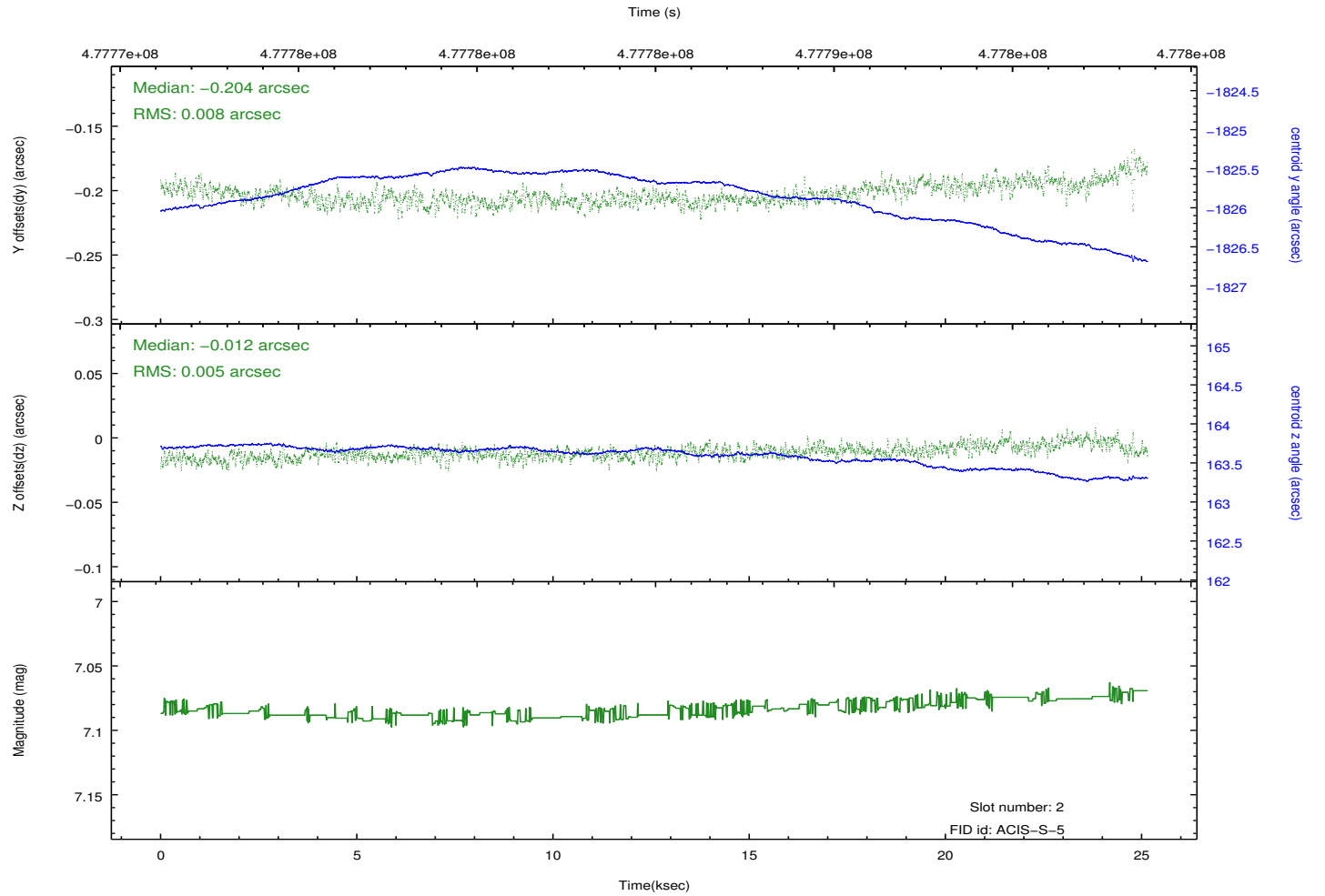
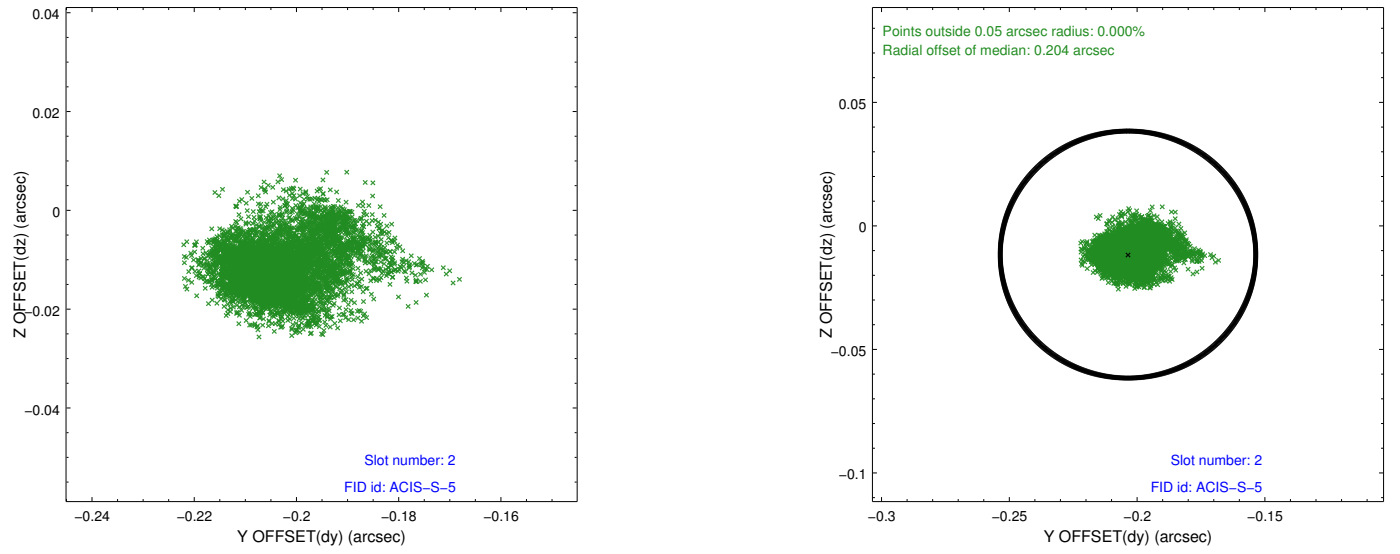
### 2.5.1 Slot 0



## 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)	2014.12.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	25.070398505688

## 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.