

# V&V Reference Report

## L2 ASCDS Version : 8.5.1

Observation 15554 - L2 Version 3  
Chandra X-Ray Center

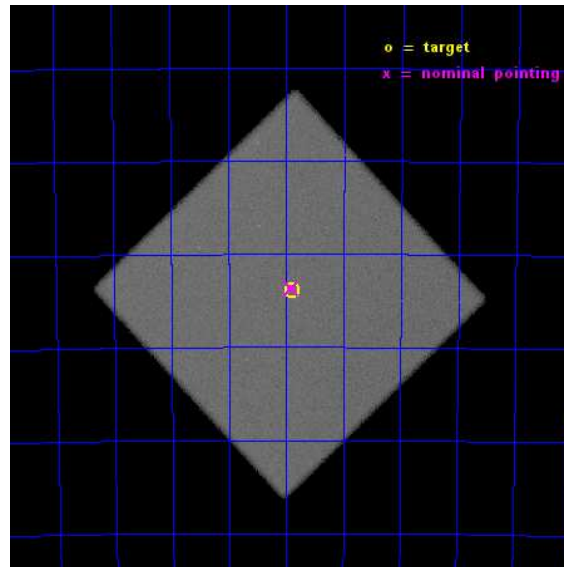
L2 Processing Date : Dec 1 2014

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# 1 Front

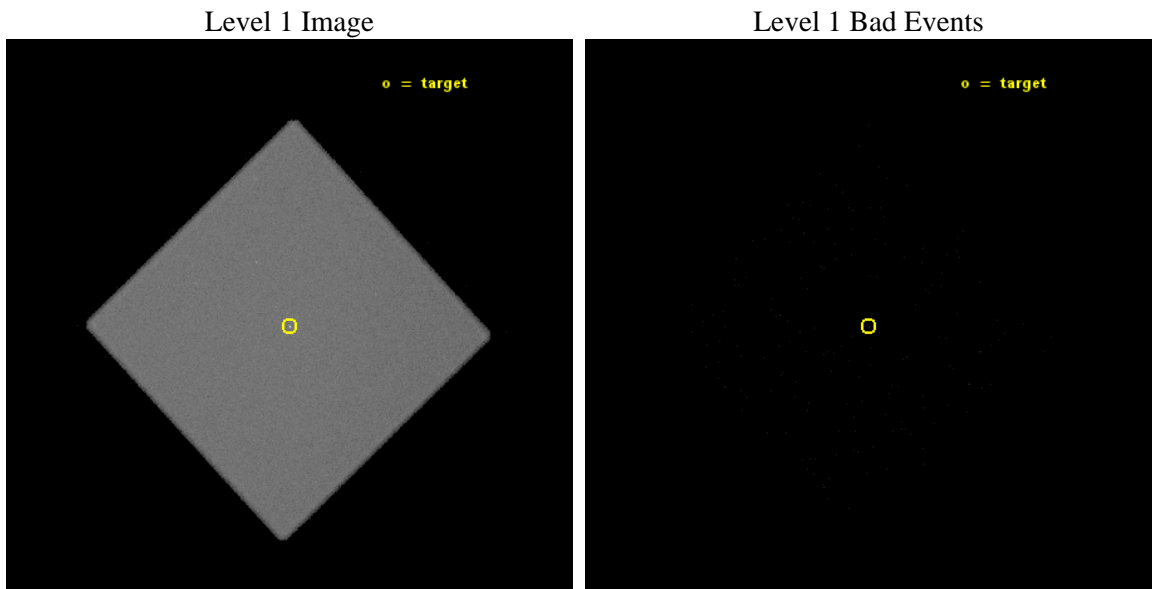
seq_num	291145	Sequence number
obs_id	15554	Observation id
title	HRC-I PSF with RT Cru	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	RT Cru	Source name
ra_targ	188.72375	Observer's specified target RA [deg]
dec_targ	-64.565556	Observer's specified target Dec [deg]
ra_nom	188.72722046893	Nominal RA [deg]
dec_nom	-64.56154570232	Nominal Dec [deg]
roll_nom	91.579396035814	Nominal Roll [deg]
revision	3	Processing version of data
ontime	19428.876047313	[s]
livetime	19197.775654574	Ontime multiplied by DTCOR
l2events	1218357	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	19300.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	19428.876047313	[s]
caldbver	4.6.4	&#160	l1events	1753291	Number of level 1 events
date	2014-11-30T23:50:03	Date and time of file creation			
revision	3	Processing version of data			

### 2.1.3 Events

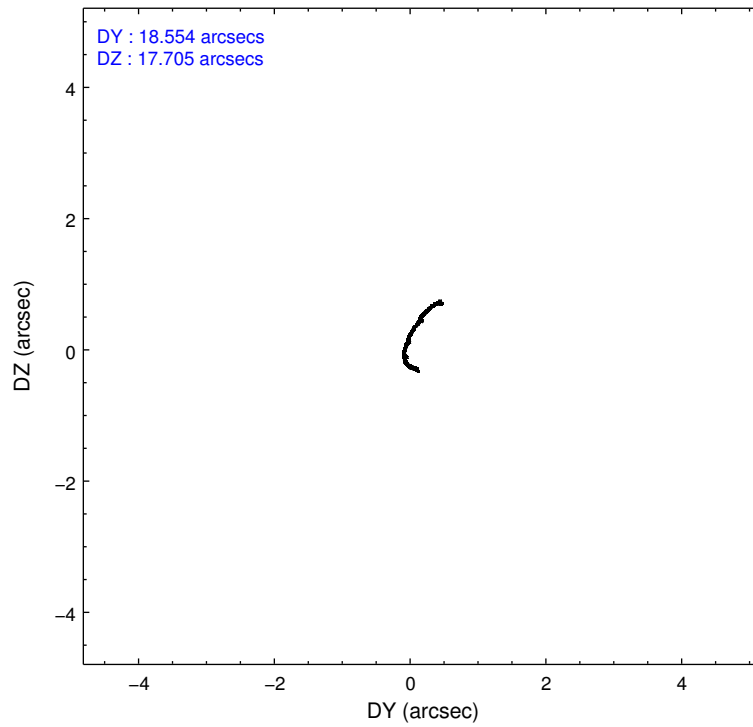
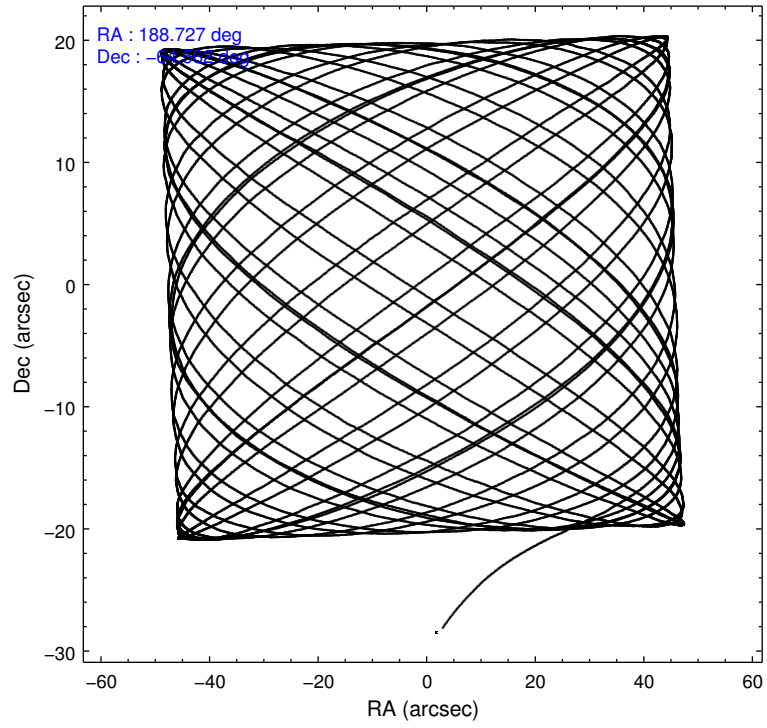
#### Level 1 Events

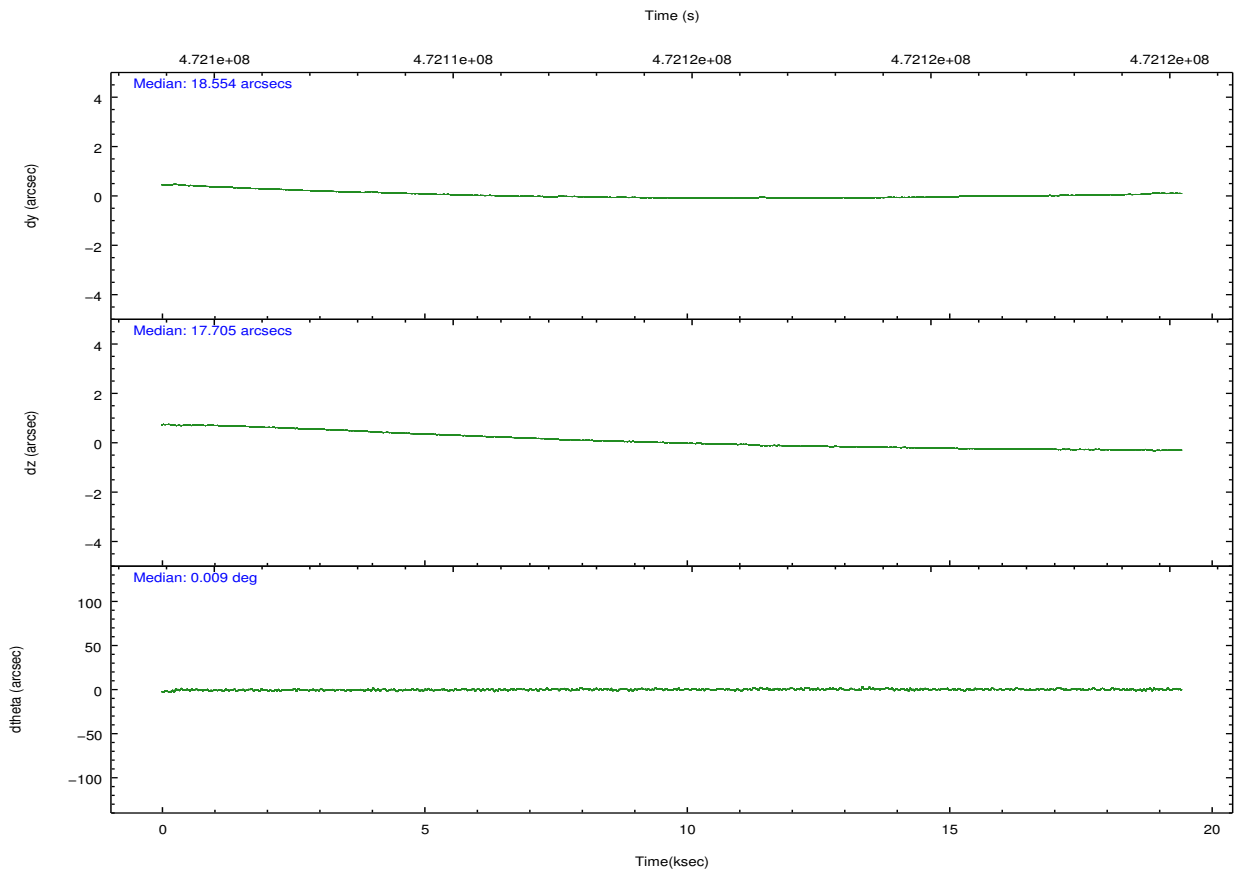
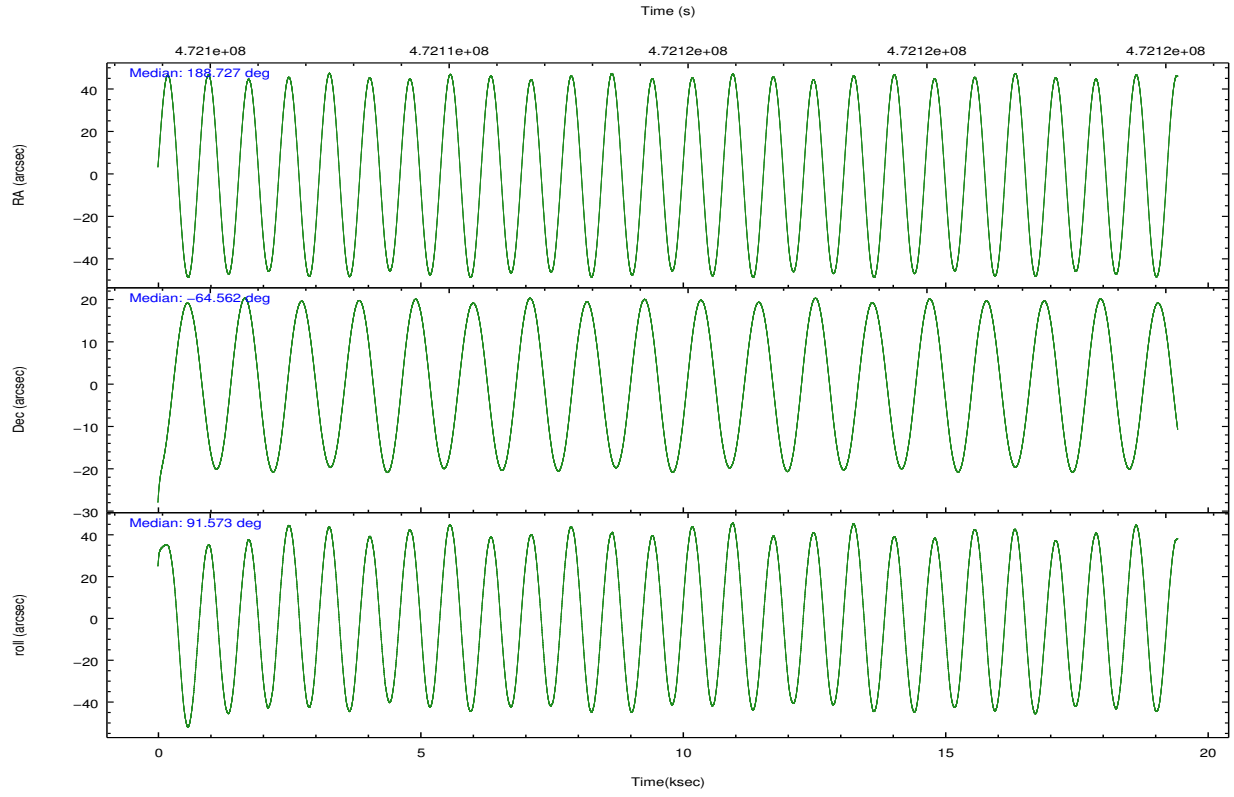
	<b>segment 0</b>
level 1 events	1753291
rejected events	90452
rejected %	5%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	HRC	HRC	Obspar format version number	7	7
Detector	HRC-I	HRC-I	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	OBSERVING	OBSERVING			
Observation mode	POINTING	POINTING			
[deg] Pointing RA	188.761564	188.7272204689328			
[deg] Pointing Dec	-64.584426	-64.56154570231976			
[deg] Pointing Roll	91.705889	91.57939603581367			
[mm] SIM focus pos	-1.040293	-1.038866356238299			
[mm] SIM defocus	0	0.001426264420575141			
[mm] SIM translation stage pos	126.985494	126.9829799899862			
[mm] SIM translation stage offset	0	0.002508901615314585			
[s] Observation start time (MET)	472104983.184000	472103823.05974			
Observation start date	2012-12-17T04:15:16	2012-12-17T03:57:03			
[s] Observation end time (MET)	472124283.184000	472124937.03588			
Observation end date	2012-12-17T09:36:56	2012-12-17T09:48:57			

## 2.3 Aspect





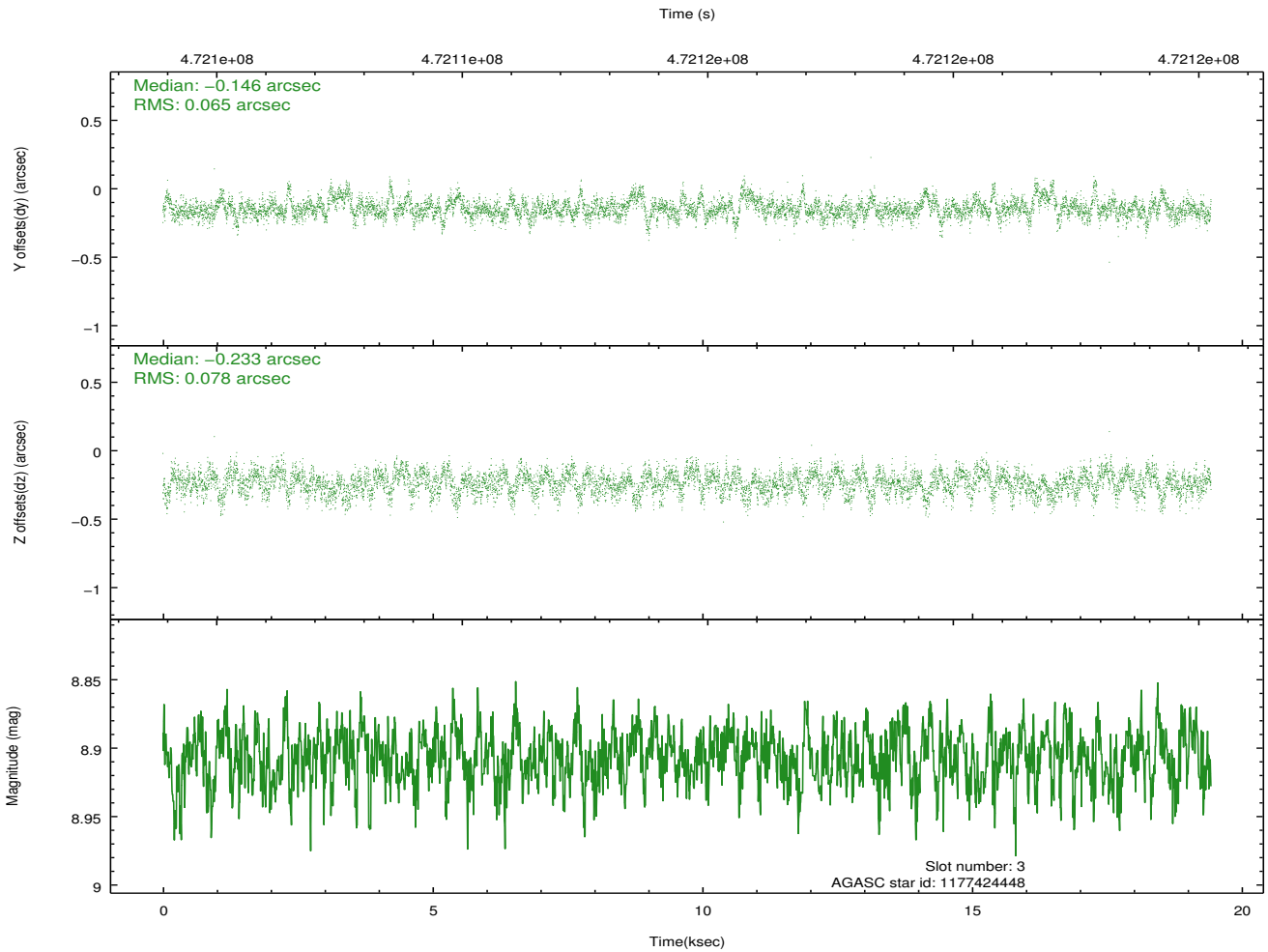
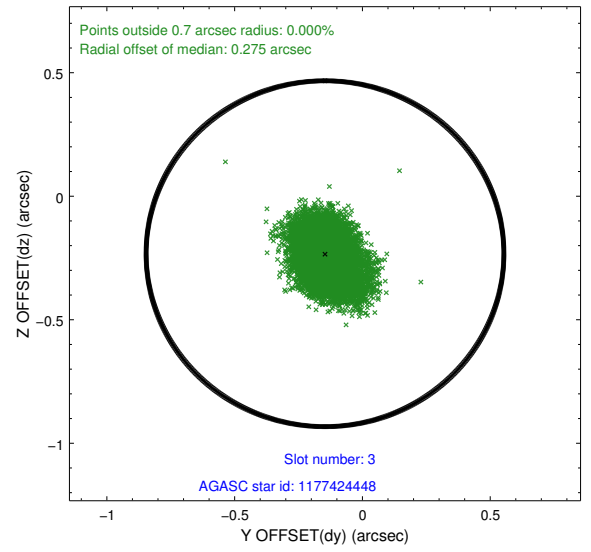
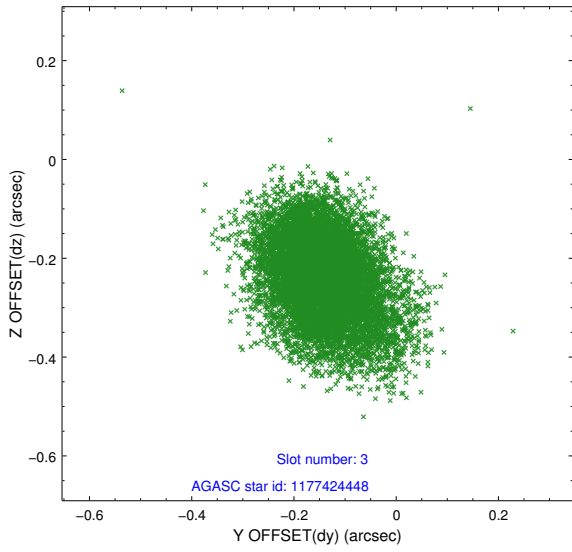
### Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
1	FID		HRC-I-2	7.03	4739	0.034	-0.071	0.005	0.010	0.000000	0.000000	838.15	-1307.61
2	FID		HRC-I-4	7.01	4739	0.045	0.011	0.005	0.010	0.000000	0.000000	1268.52	995.93
3	GUIDE	used	1177424448	8.91	9471	-0.146	-0.233	0.105	0.182	187.374397	-64.183371	1483.96	2131.55
4	GUIDE	used	1177432960	8.24	9477	0.105	-0.033	0.066	0.111	187.860990	-64.880924	-1035.50	1407.99
5	GUIDE	used	1177437064	8.49	9478	0.158	-0.068	0.085	0.136	188.278403	-64.794171	-735.11	763.62
6	GUIDE	used	1179128056	7.90	9478	-0.037	0.235	0.067	0.111	189.145049	-64.556116	82.50	-595.28
7	GUIDE	used	1177436552	8.85	9434	-0.084	0.098	0.084	0.136	188.059614	-64.178277	1488.14	1057.24

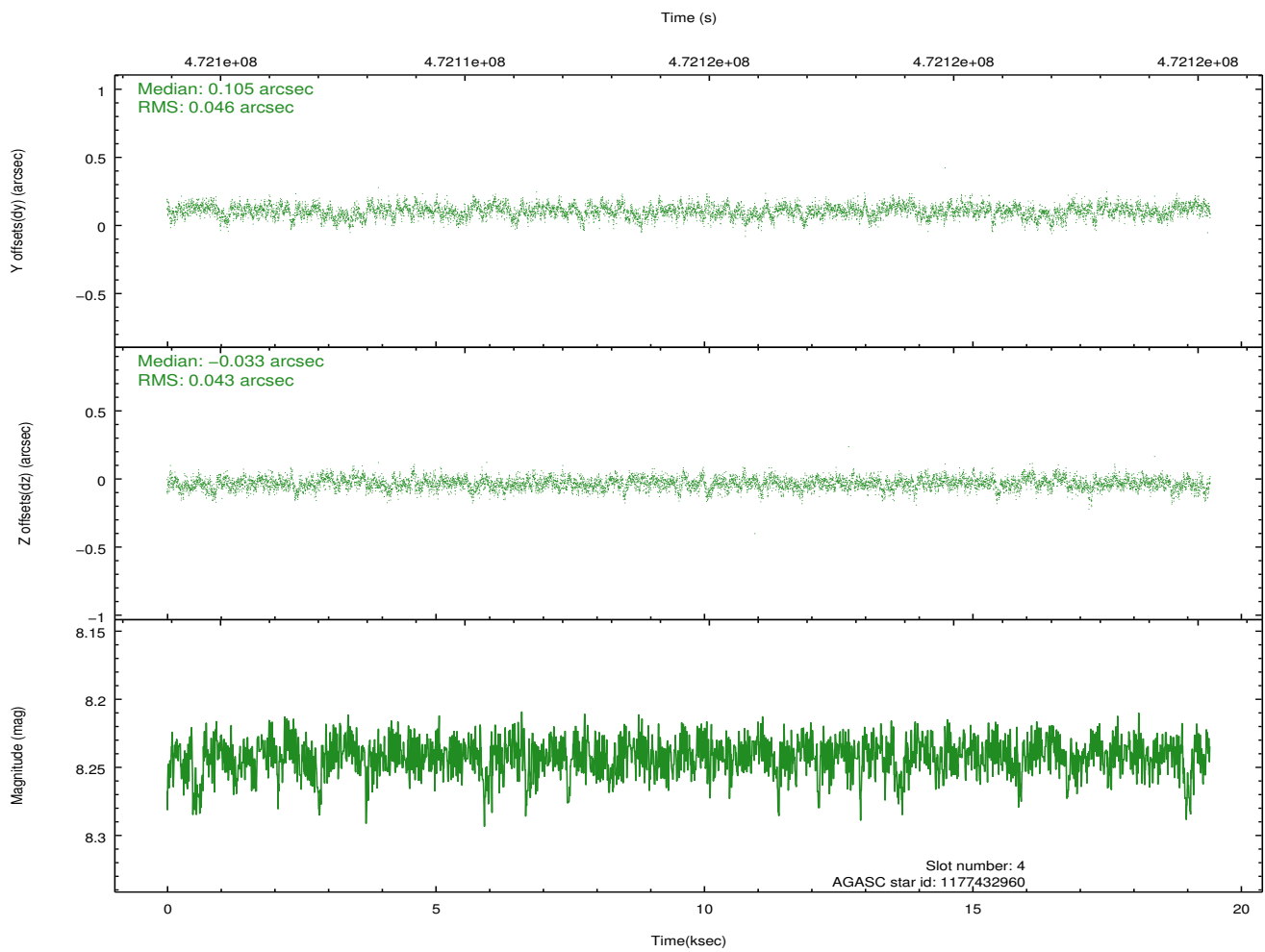
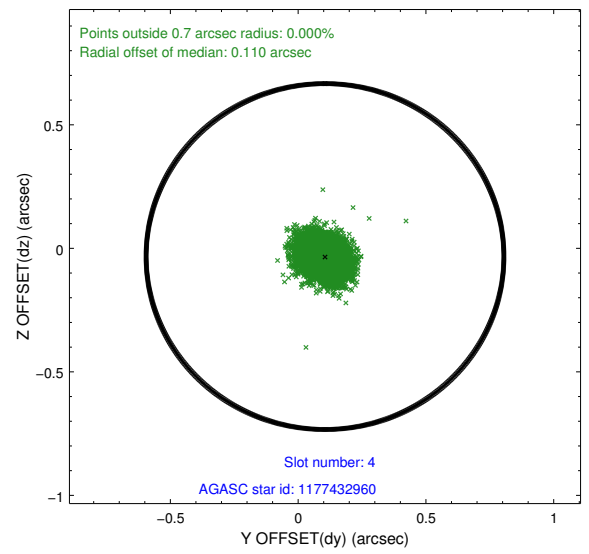
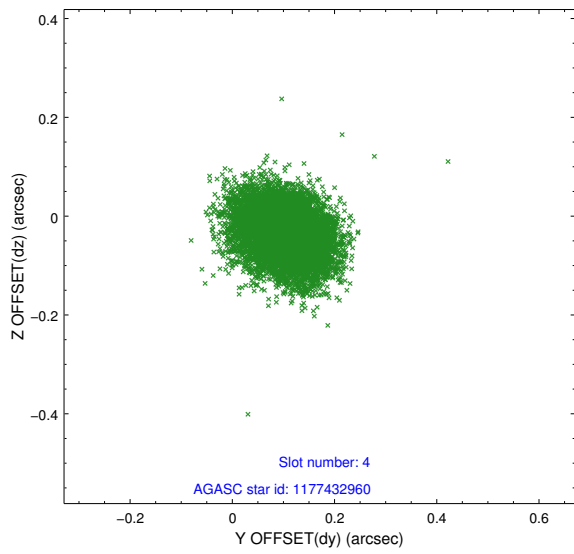
∞

## 2.4 Star Slots

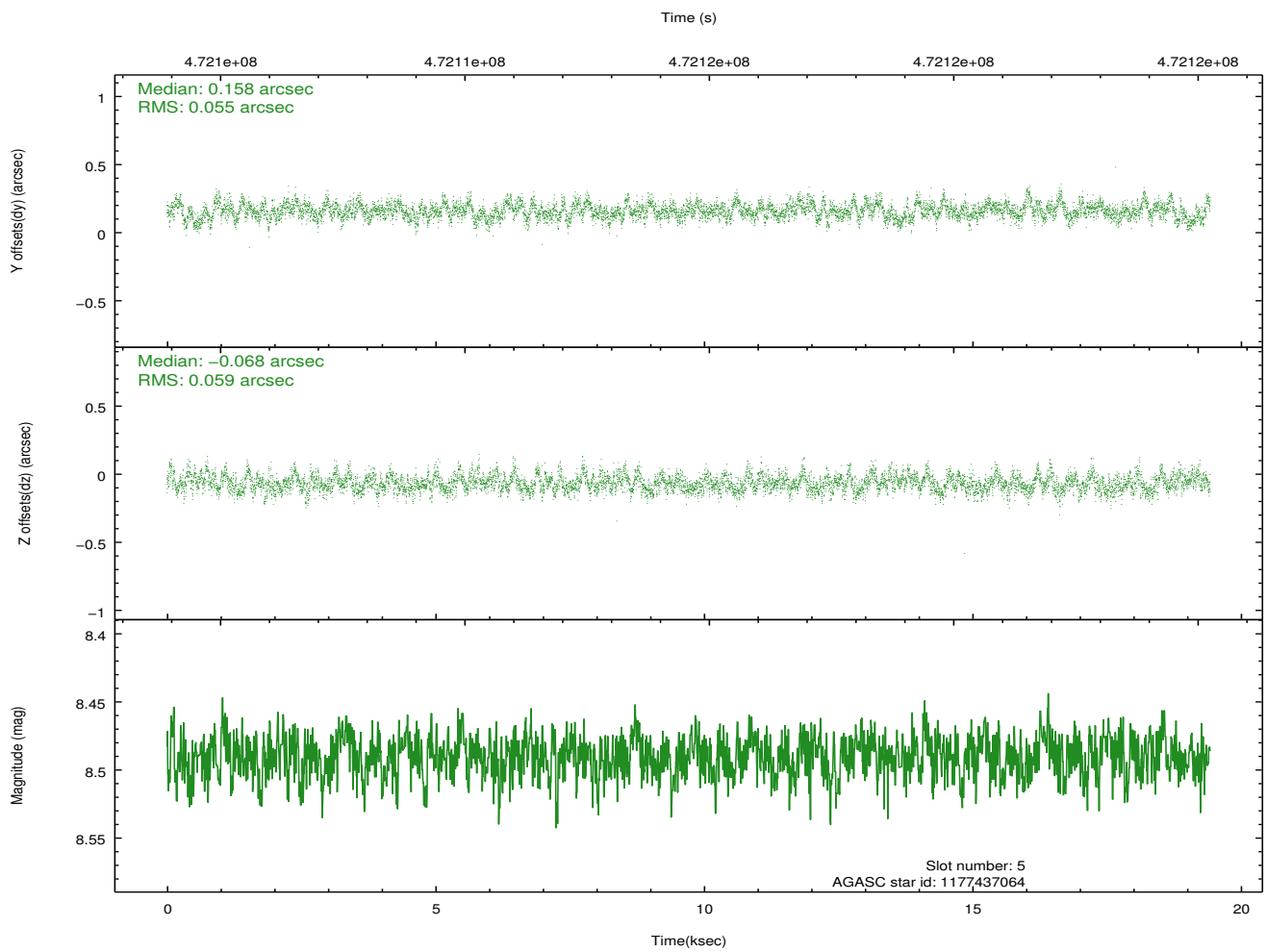
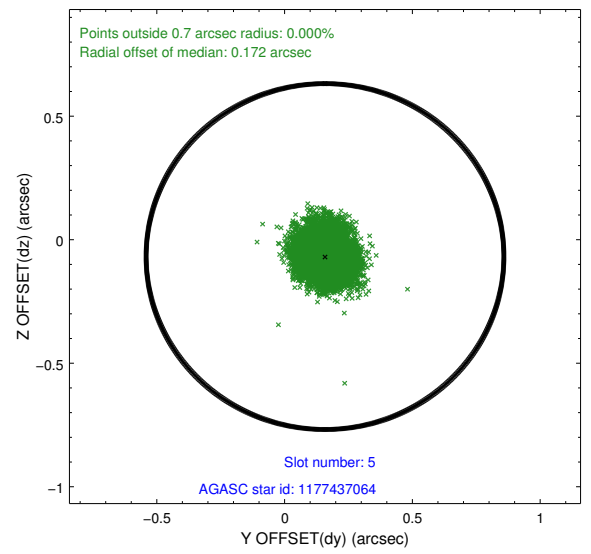
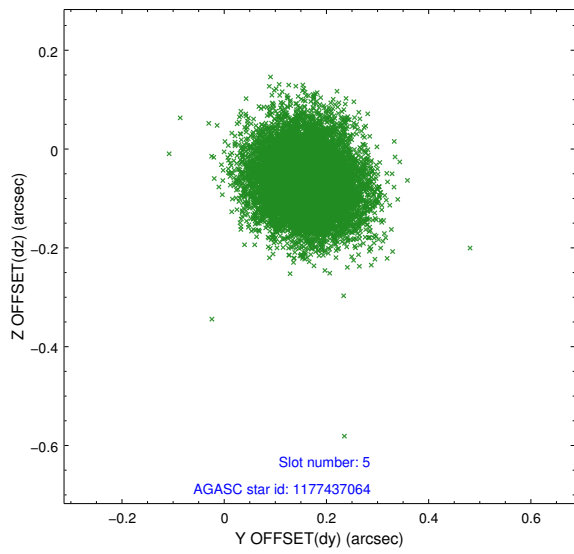
### 2.4.1 Slot 3



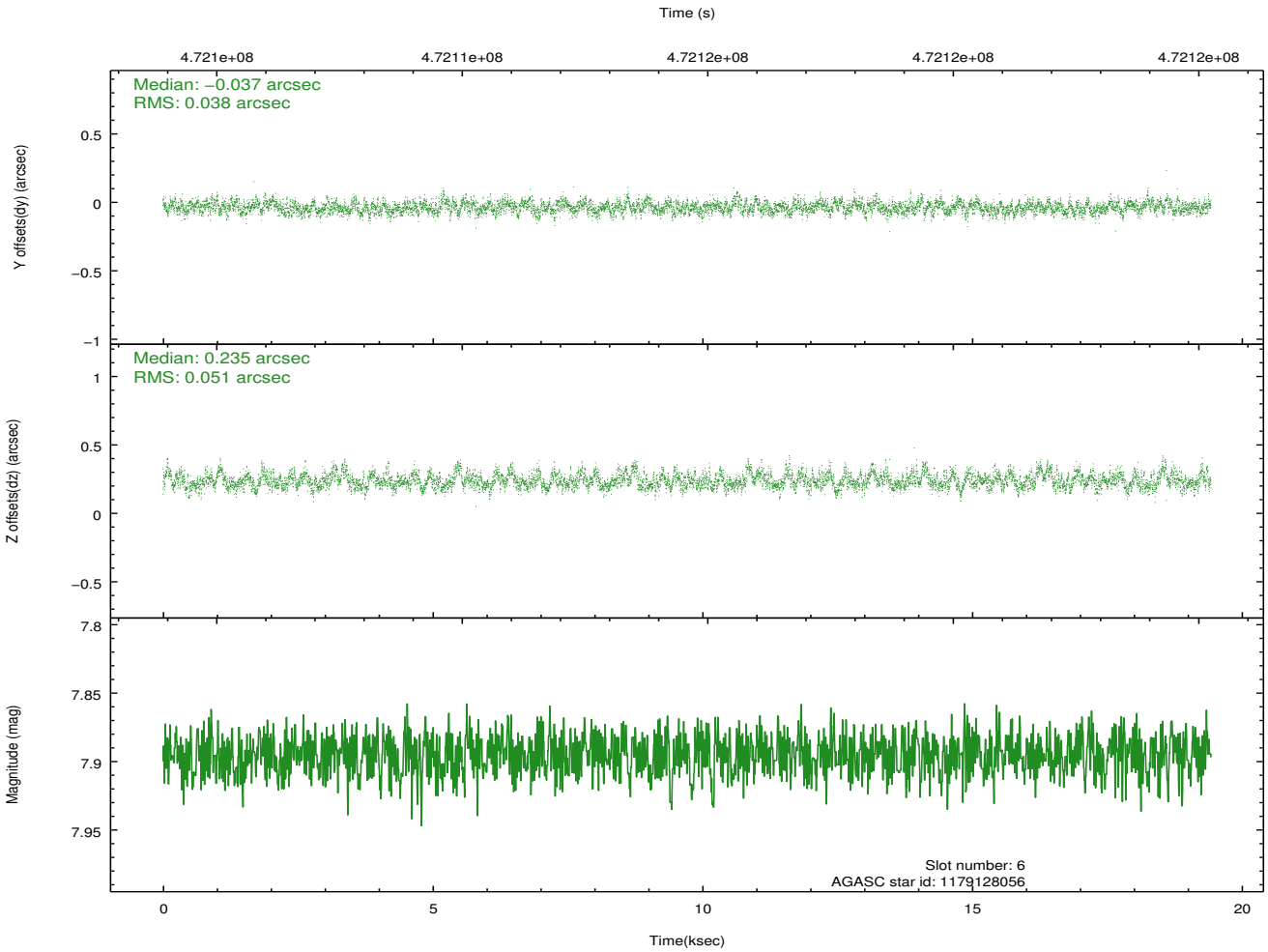
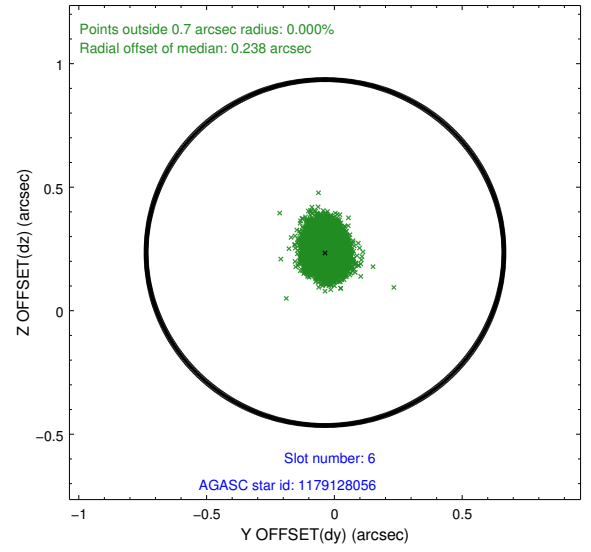
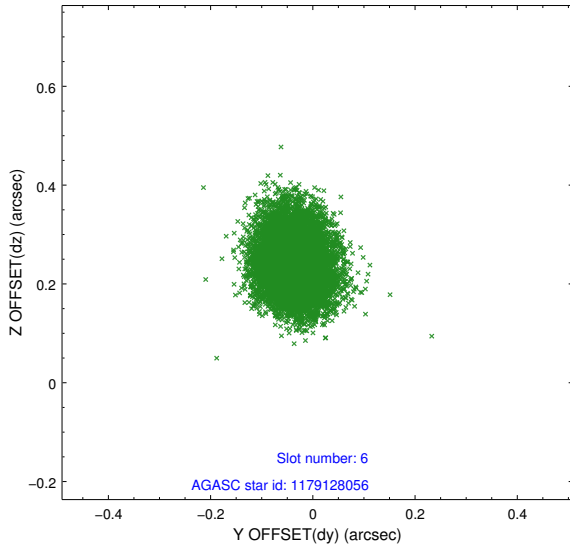
## 2.4.2 Slot 4



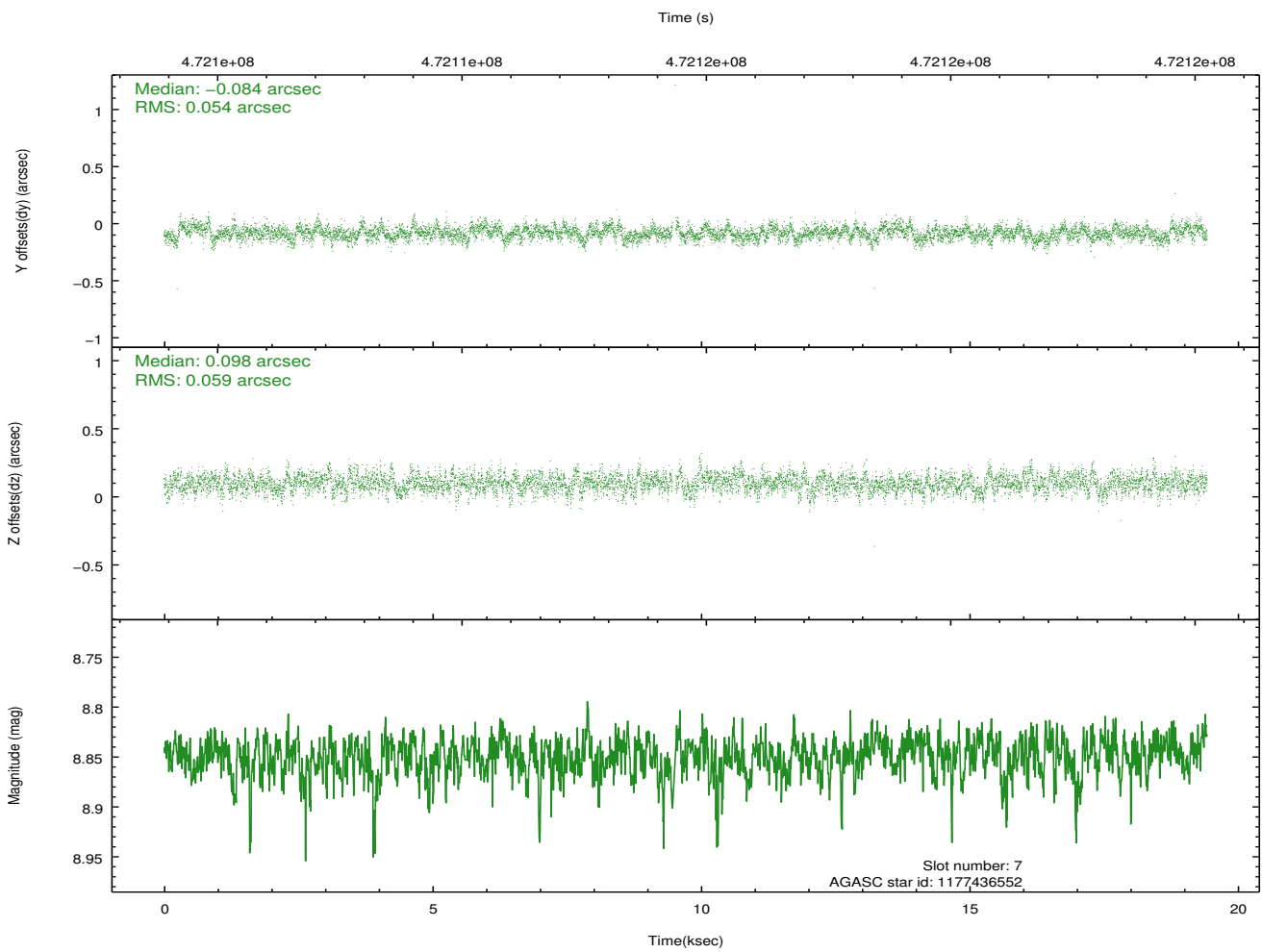
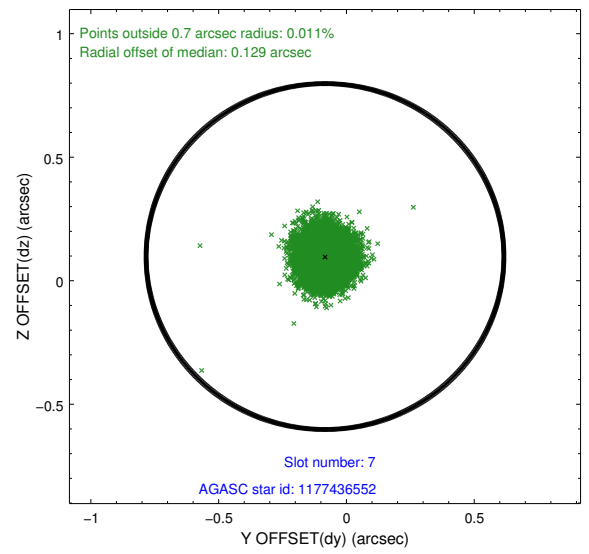
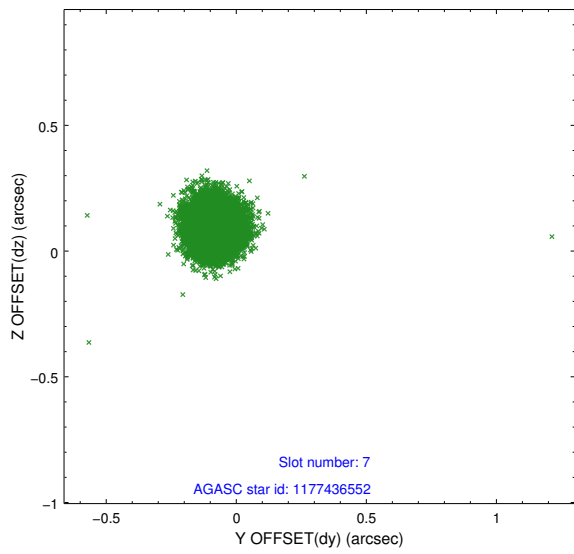
### 2.4.3 Slot 5



### 2.4.4 Slot 6

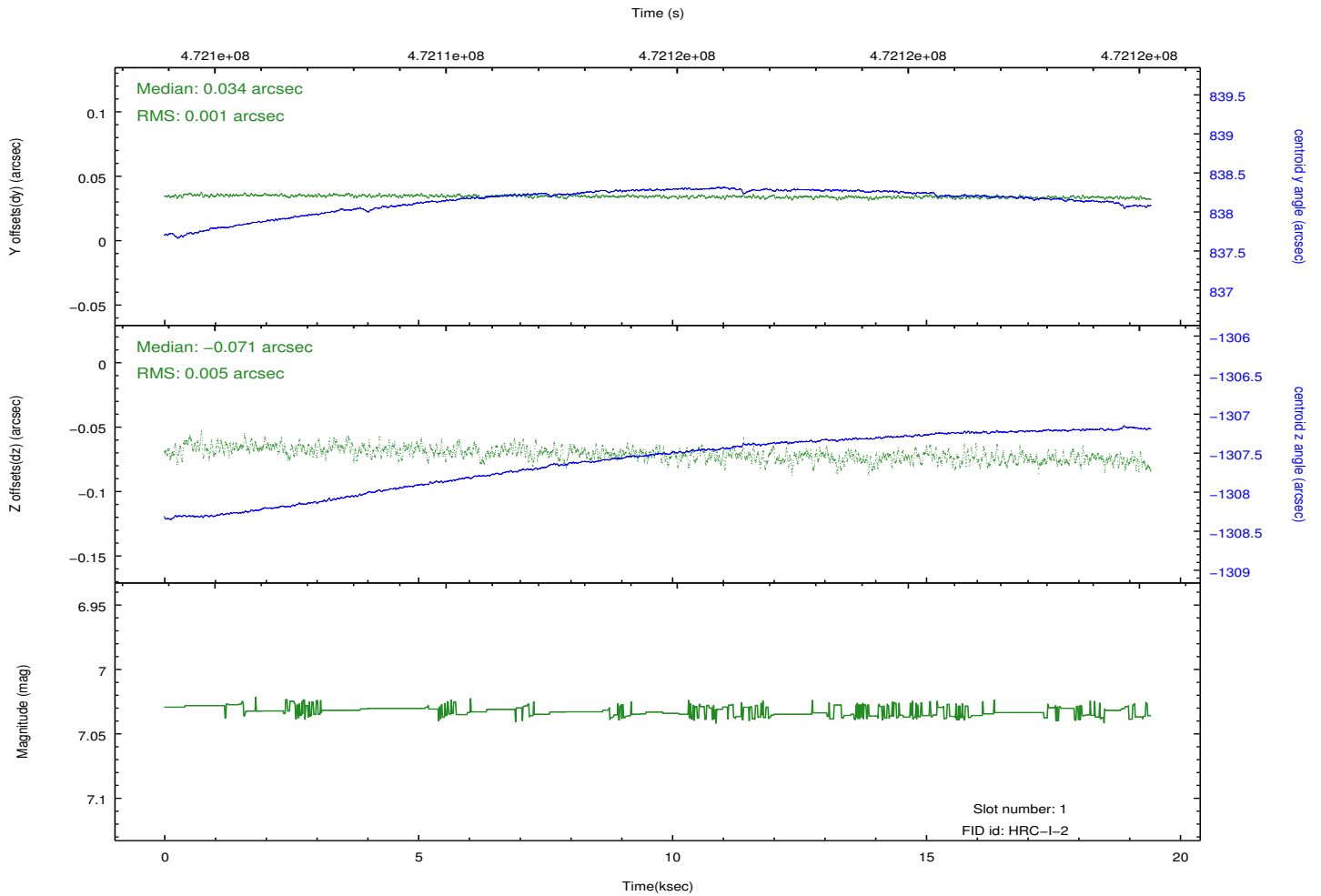
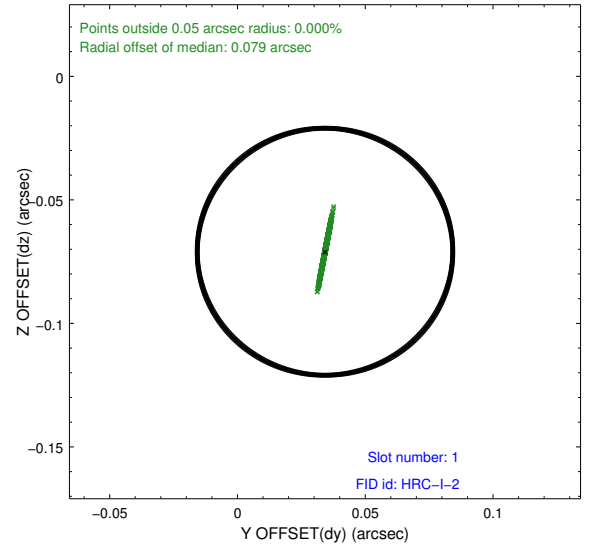
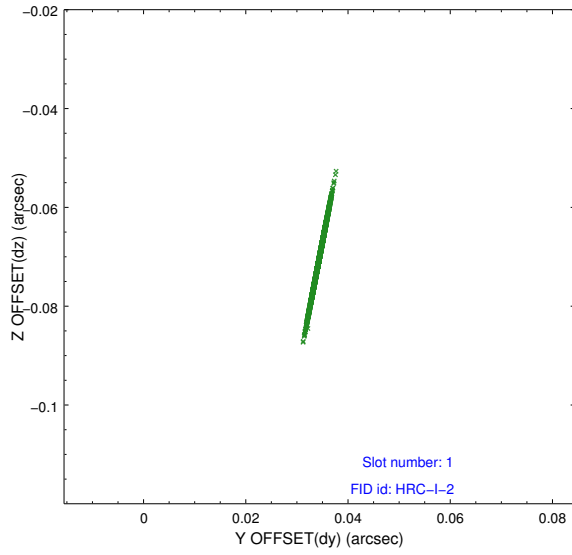


## 2.4.5 Slot 7

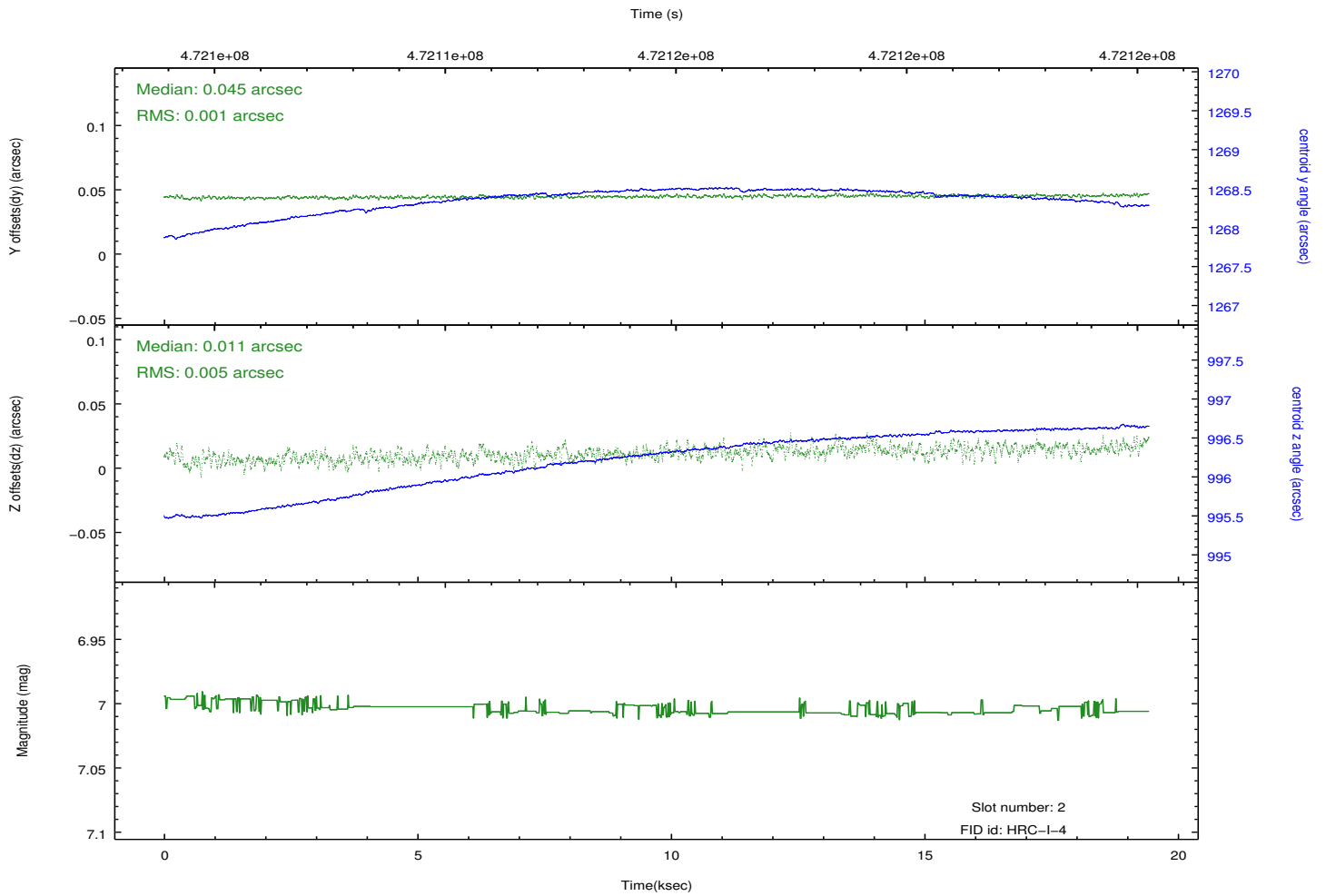
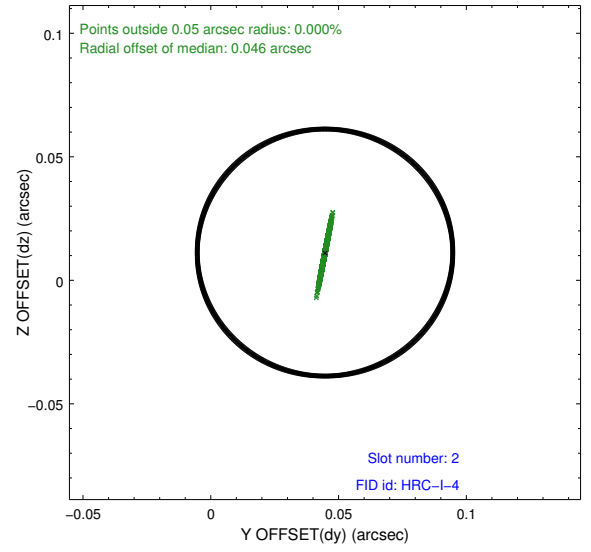
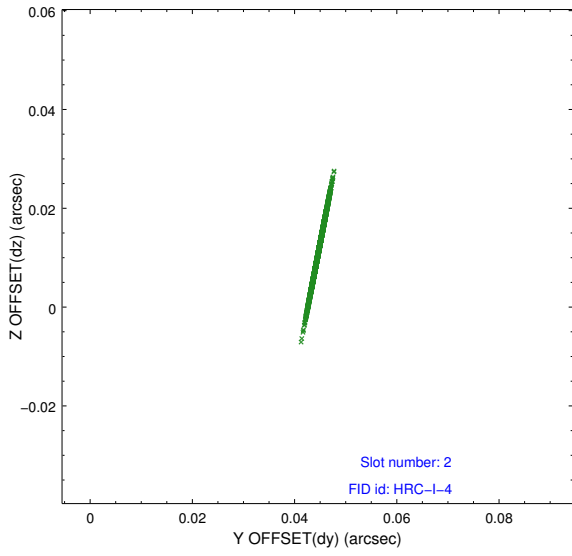


## 2.5 FID Slots

### 2.5.1 Slot 1



## 2.5.2 Slot 2



# A Summary

## A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2014.12.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	19.428876047313

## A.2 Comments

The fid light in slot 0 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this fid light from the solution.

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.