

# V&V Reference Report

## L2 ASCDS Version : 8.5.1.1

Observation 15459 - L2 Version 2  
Chandra X-Ray Center

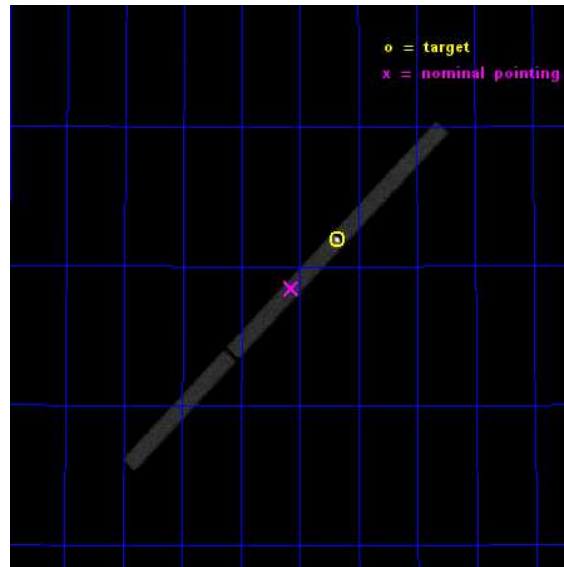
L2 Processing Date : Dec 1 2014

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# 1 Front

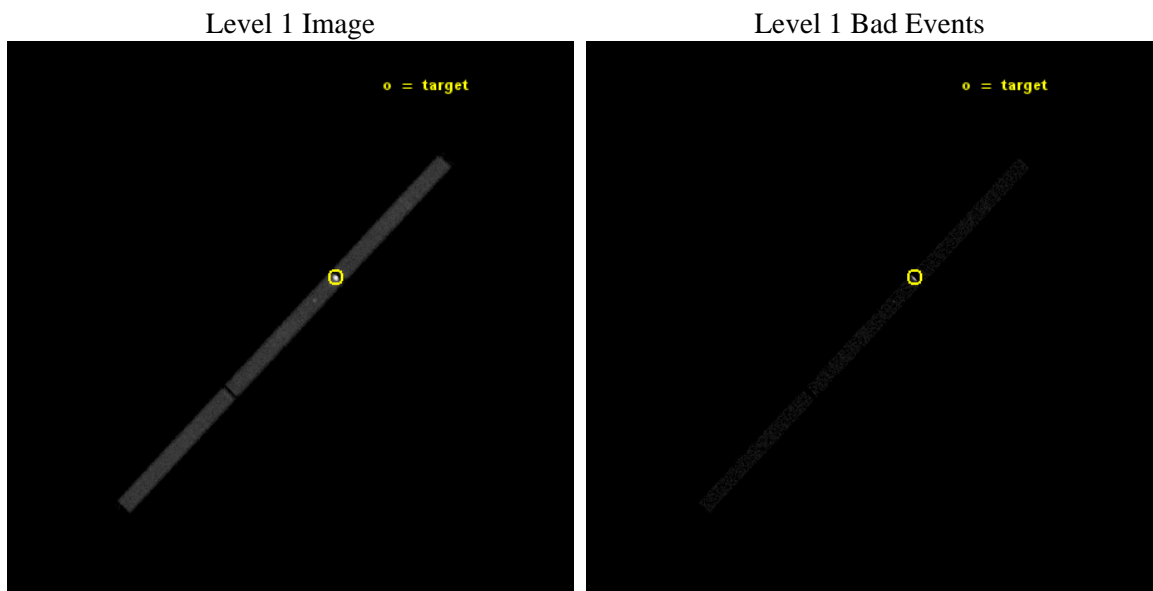
seq_num	291138	Sequence number
obs_id	15459	Observation id
title	AO-14 Calibration Observations of HZ43 to measure the gain accross the HRC-S plate gaps	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	HZ43	Source name
ra_targ	199.090417	Observer's specified target RA [deg]
dec_targ	29.098306	Observer's specified target Dec [deg]
ra_nom	199.28620218329	Nominal RA [deg]
dec_nom	28.921725799322	Nominal Dec [deg]
roll_nom	133.97765028929	Nominal Roll [deg]
revision	2	Processing version of data
ontime	1280.4813192487	[s]
livetime	1012.3877579017	Ontime multiplied by DTCOR
l2events	177546	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	1100.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	1280.4813192487	[s]
caldbver	4.6.4	&#160	l1events	247973	Number of level 1 events
date	2014-12-02T02:22:02	Date and time of file creation			
revision	2	Processing version of data			

### 2.1.3 Events

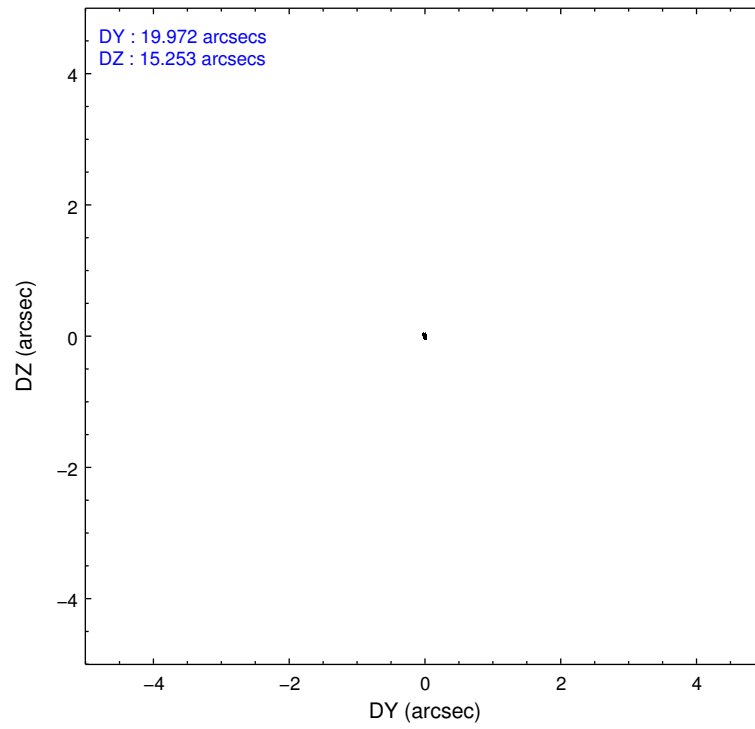
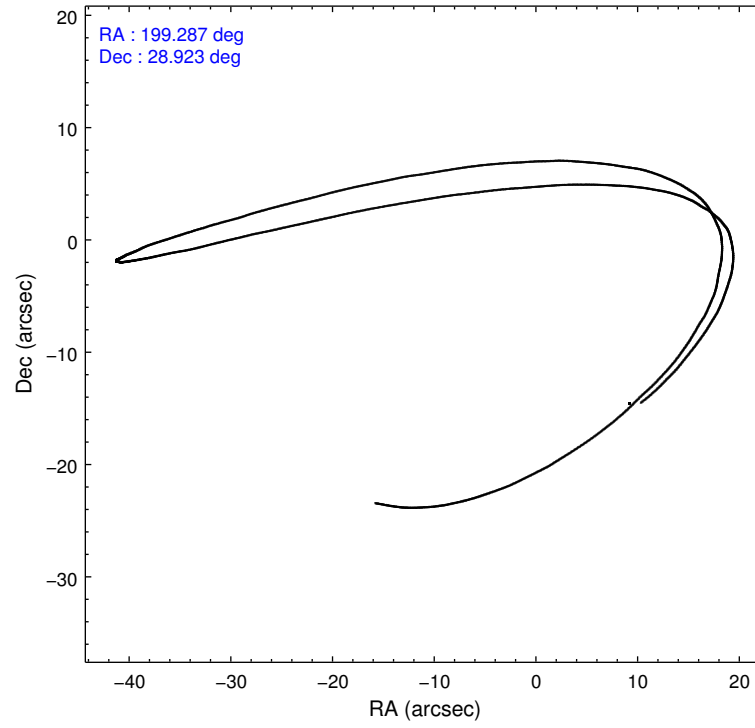
Level 1 Events

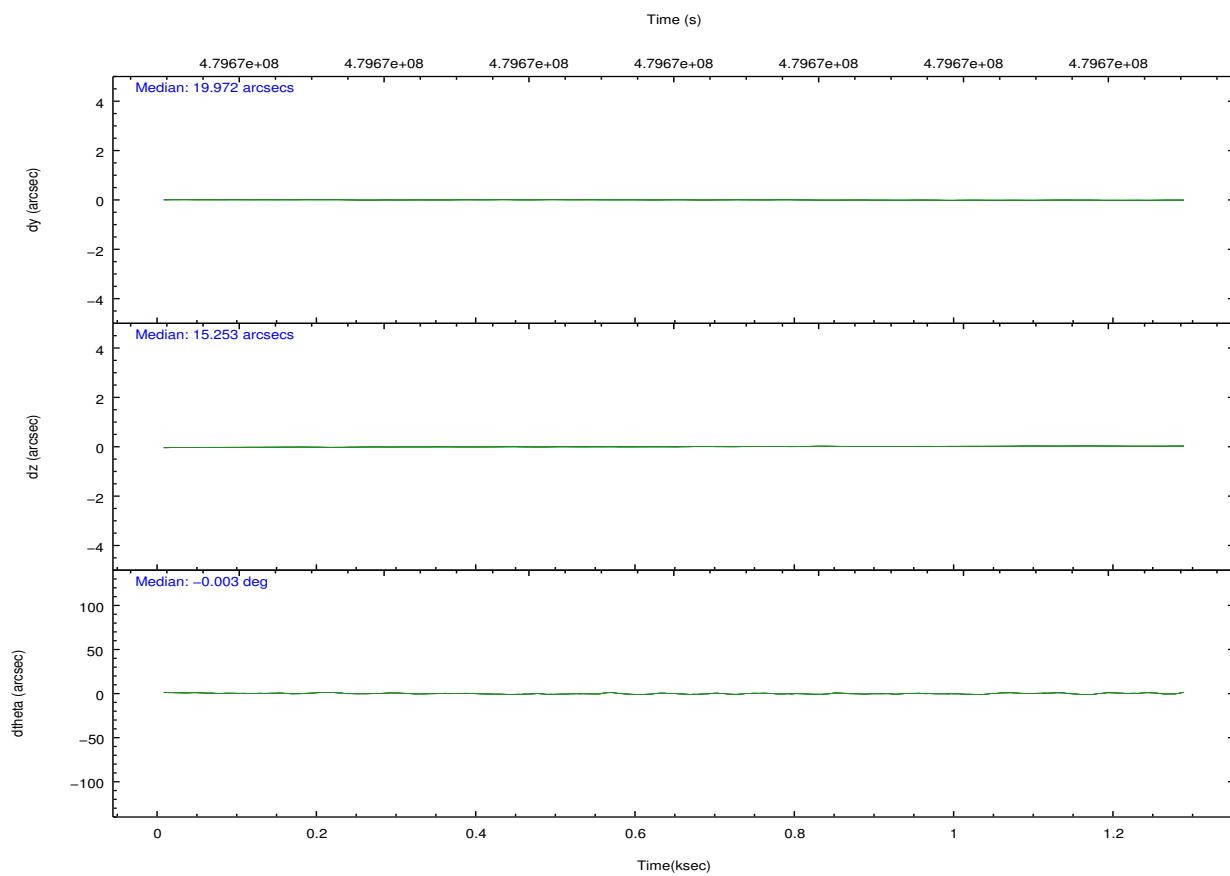
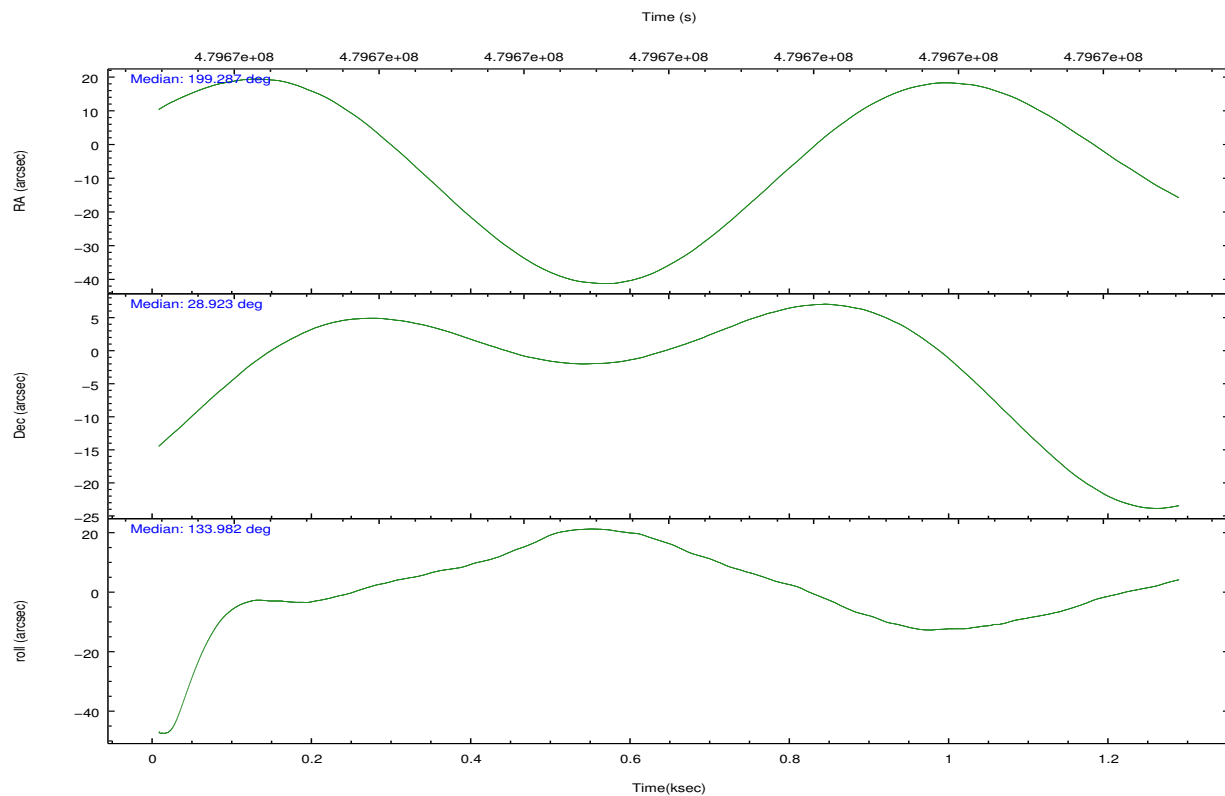
	<b>segment 1</b>	<b>segment 2</b>	<b>segment 3</b>
level 1 events	36275	174667	37031
rejected events	8058	31195	7978
rejected %	22%	17%	21%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	HRC	HRC	Obspar format version number	7	7
Detector	HRC-S	HRC-S	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	OBSERVING	OBSERVING			
Observation mode	POINTING	POINTING			
[deg] Pointing RA	199.317058	199.2862021832945			
[deg] Pointing Dec	28.915281	28.92172579932237			
[deg] Pointing Roll	133.895484	133.9776502892933			
[mm] SIM focus pos	-1.533336	-1.526339935833849			
[mm] SIM defocus	7.710433287538843e-07	0.006996703570447904			
[mm] SIM translation stage pos	250.455976	250.466033080201			
[mm] SIM translation stage offset	0	-0.01005468664627074			
[s] Observation start time (MET)	479669949.184000	479669573.4556			
Observation start date	2013-03-14T17:38:02	2013-03-14T17:32:53			
[s] Observation end time (MET)	479671049.184000	479671183.73068			
Observation end date	2013-03-14T17:56:22	2013-03-14T17:59:43			

## 2.3 Aspect





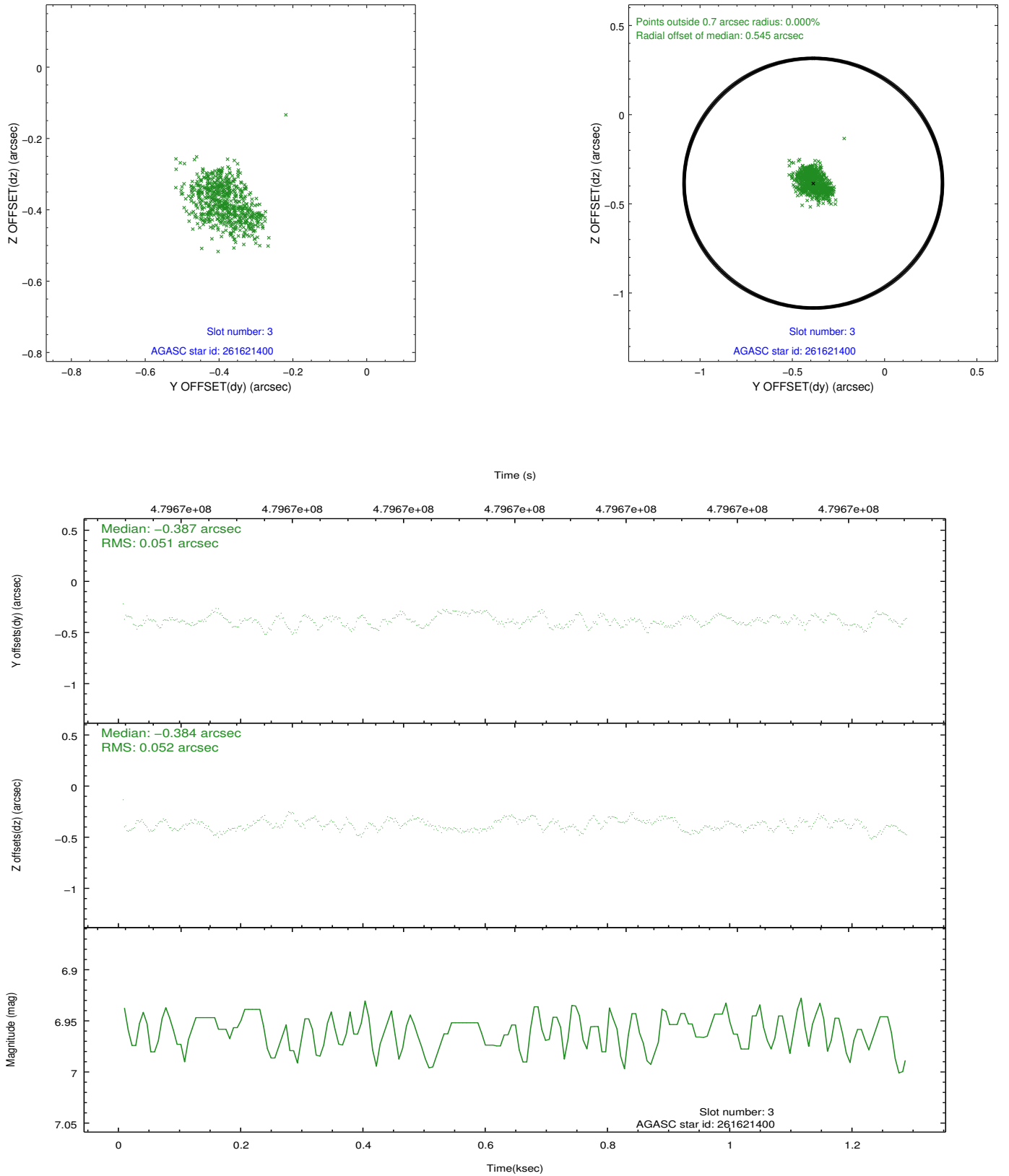
### Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		HRC-S-1	6.98	313	0.016	-0.207	0.007	0.011	0.000000	0.000000	-1174.57	-464.16
1	FID		HRC-S-2	6.96	313	0.269	-0.111	0.004	0.008	0.000000	0.000000	1221.59	-458.22
2	FID		HRC-S-3	7.00	313	0.104	0.016	0.007	0.011	0.000000	0.000000	-1173.29	564.11
3	GUIDE	used	261621400	6.96	626	-0.387	-0.384	0.077	0.116	198.901600	28.741982	464.28	1378.30
4	GUIDE	used	261623624	9.11	626	0.459	0.167	0.096	0.161	199.611555	28.454113	-1837.72	483.63
5	GUIDE	used	261624456	7.32	626	-0.052	-0.001	0.067	0.123	199.758056	28.567828	-1864.66	-136.23
6	GUIDE	used	261626376	9.71	626	0.003	0.041	0.156	0.258	198.947288	29.347445	1927.22	-241.40
7	GUIDE	used	261629720	8.11	625	-0.019	0.176	0.077	0.119	199.236176	29.044452	517.54	-136.76

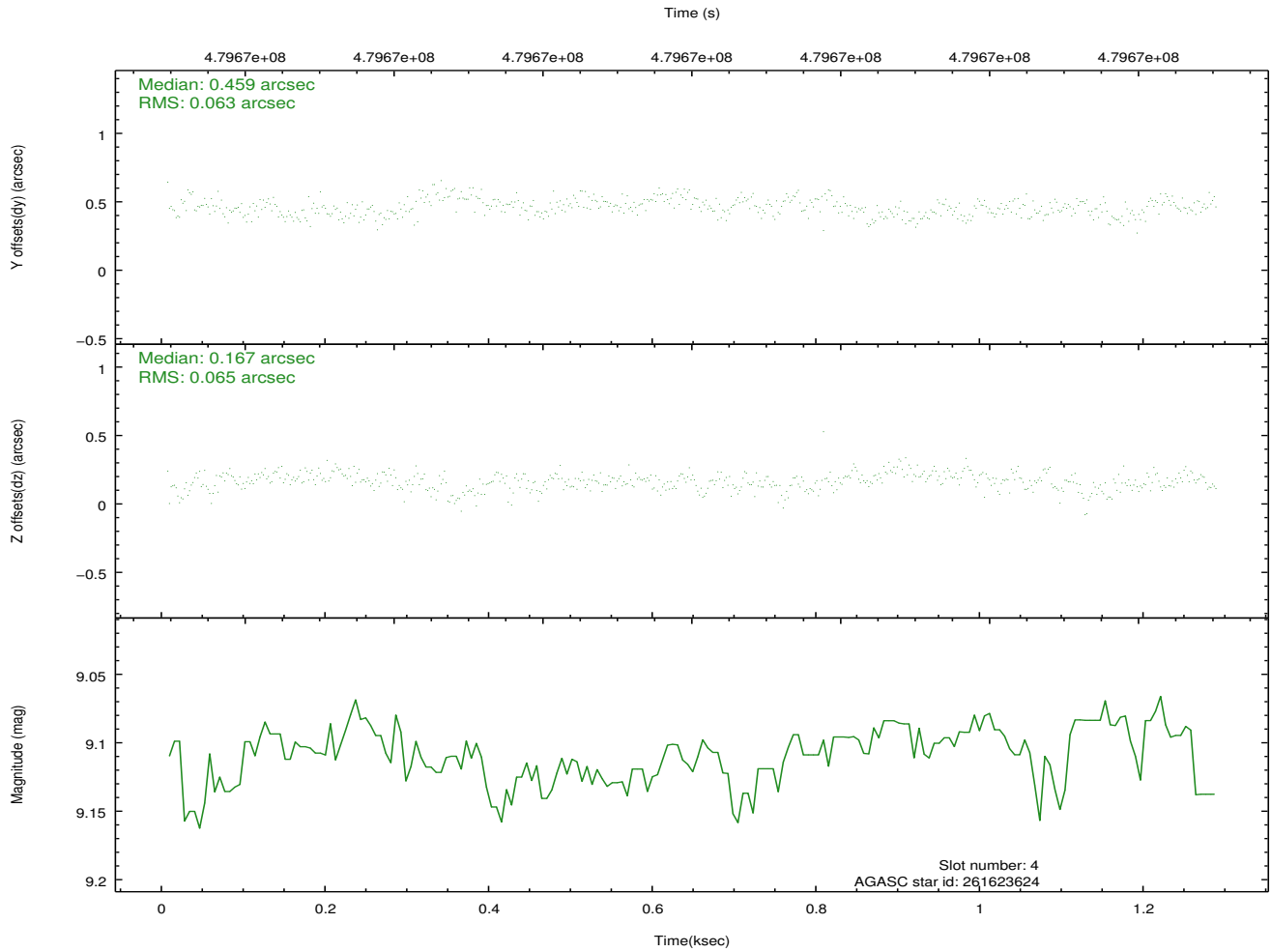
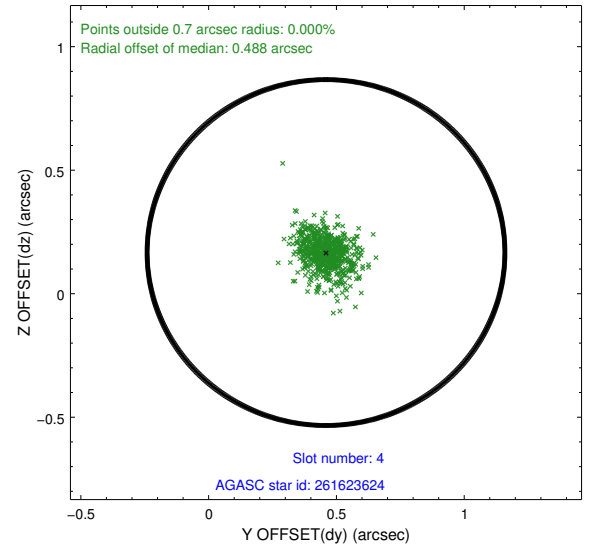
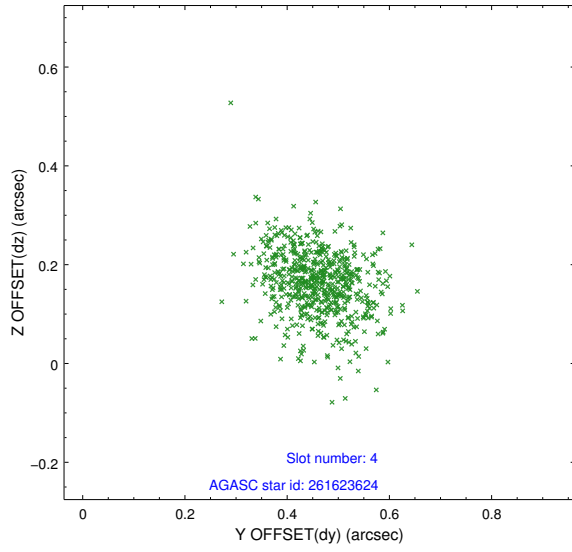


## 2.4 Star Slots

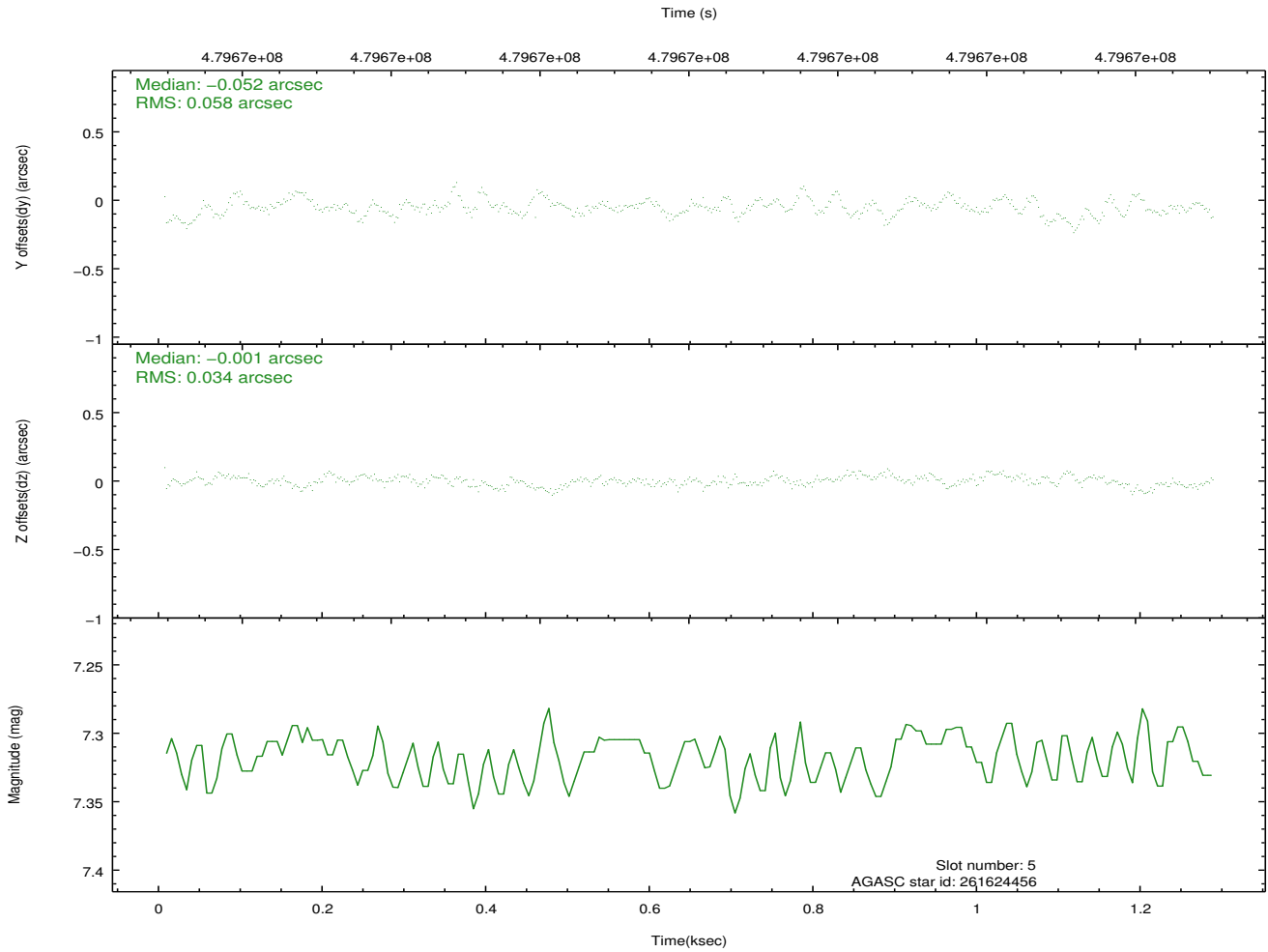
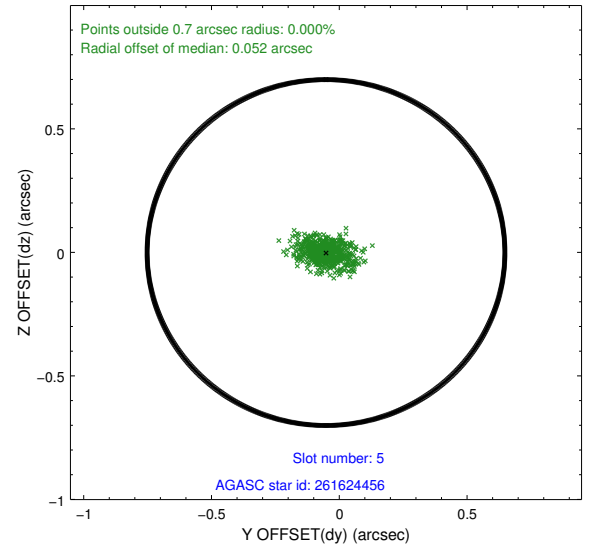
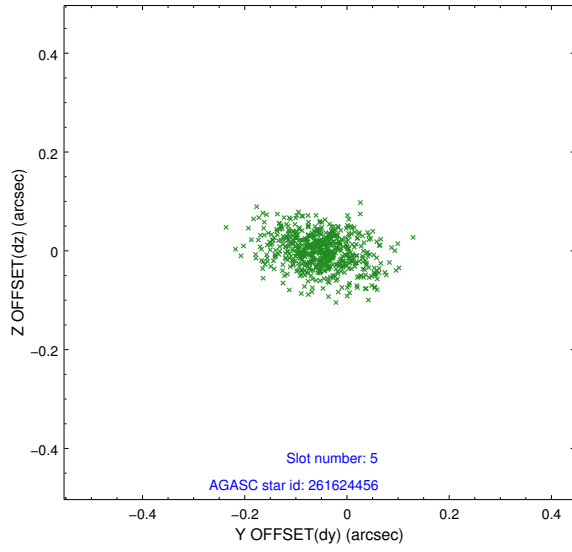
### 2.4.1 Slot 3



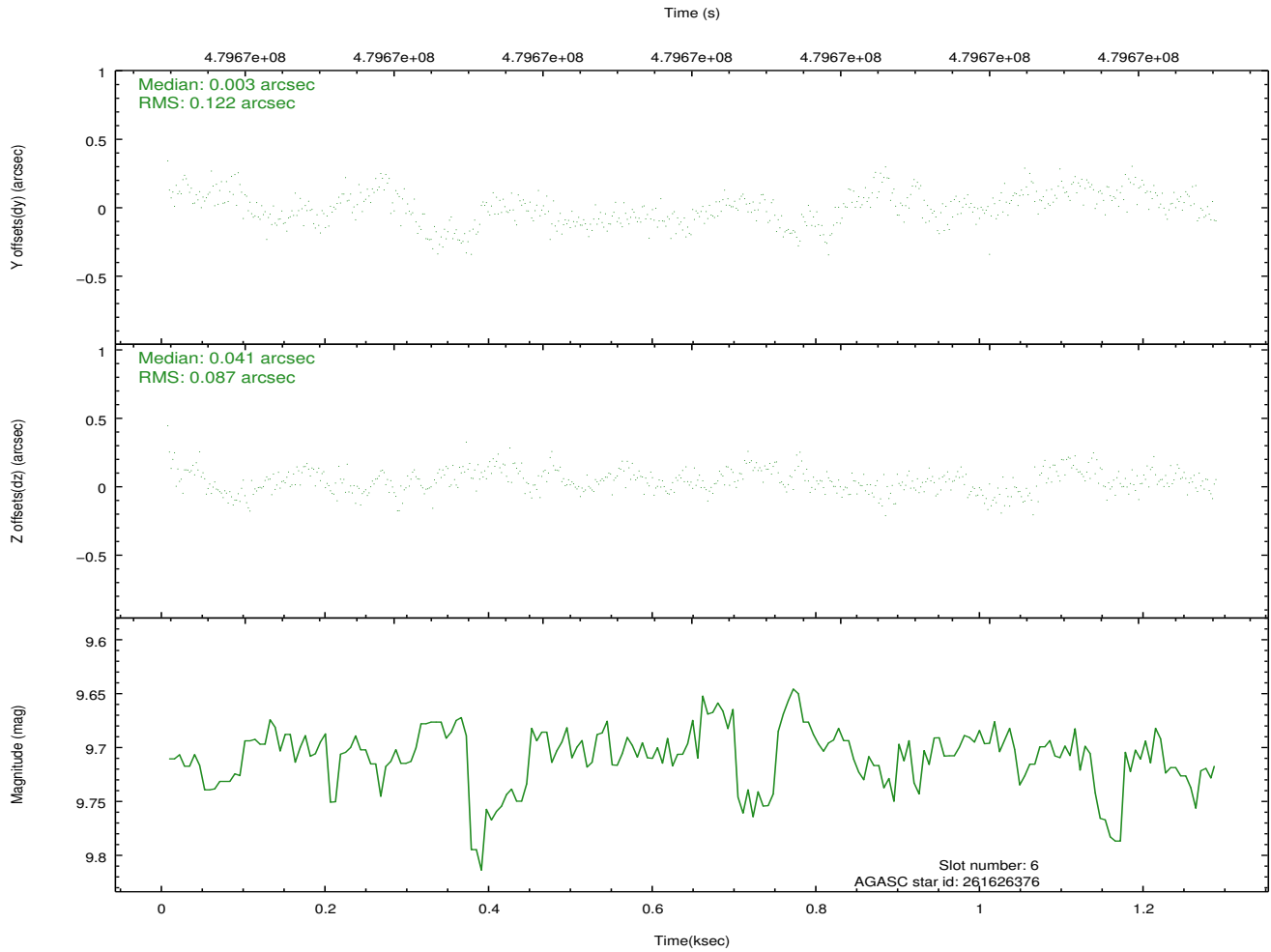
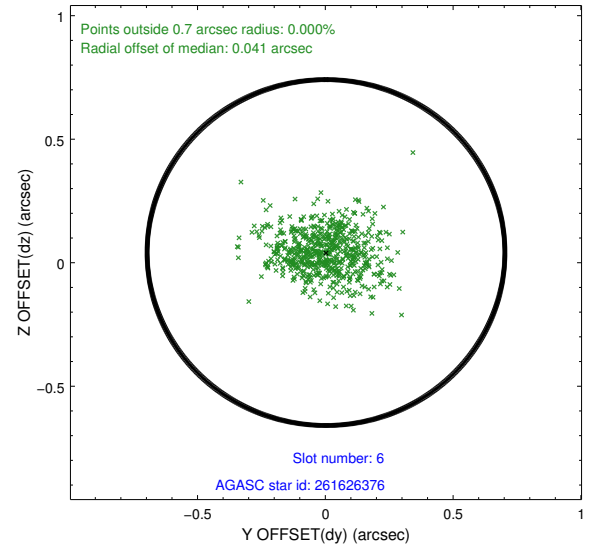
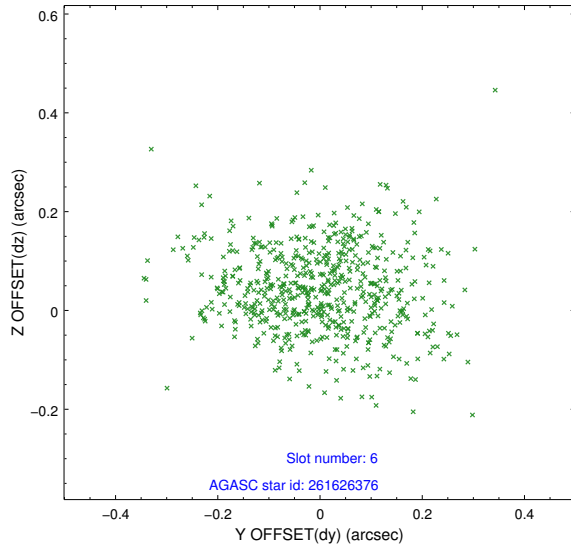
## 2.4.2 Slot 4



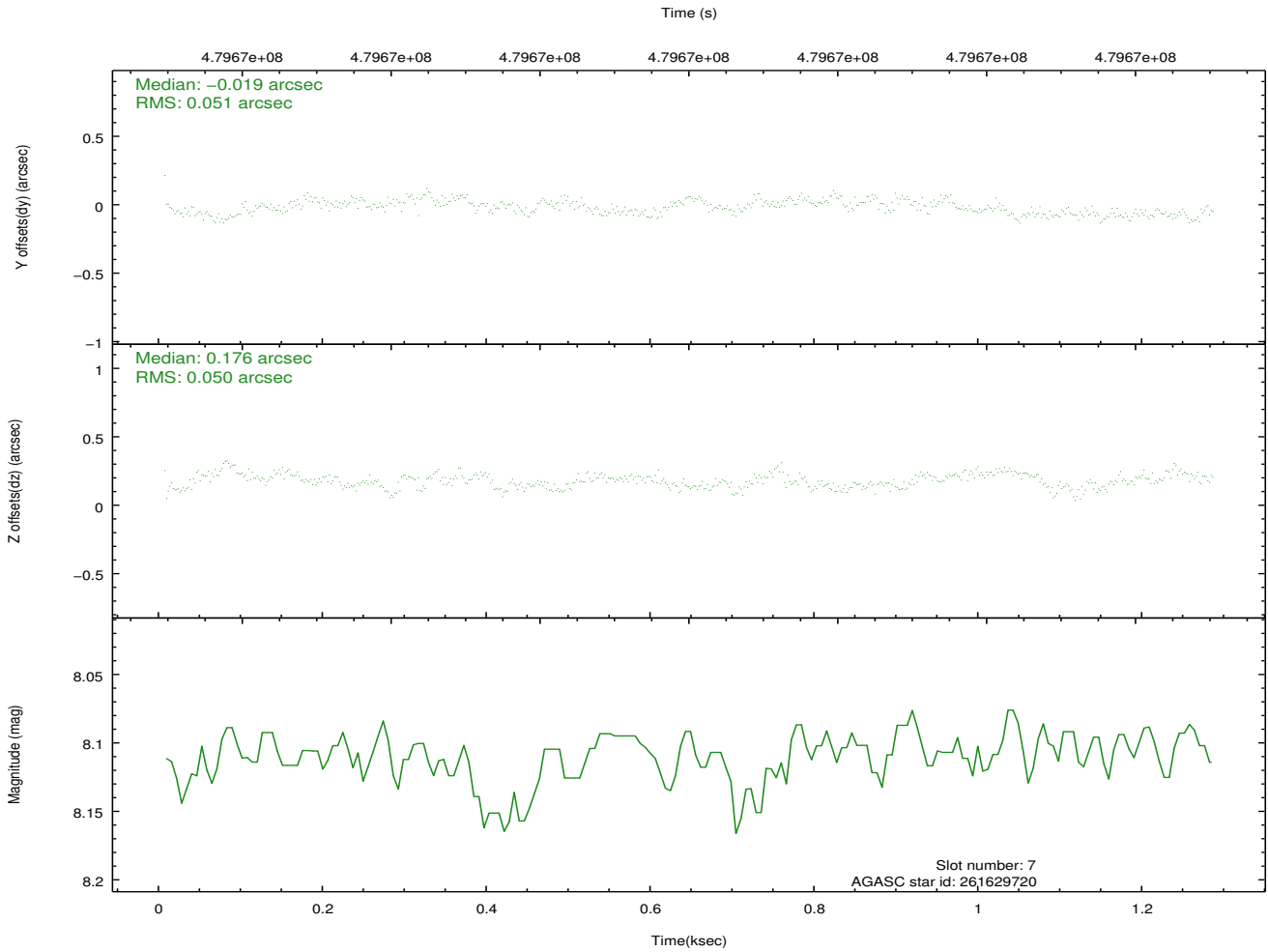
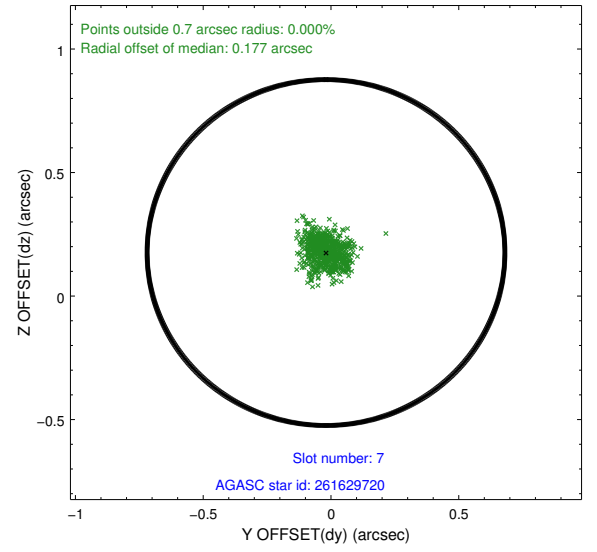
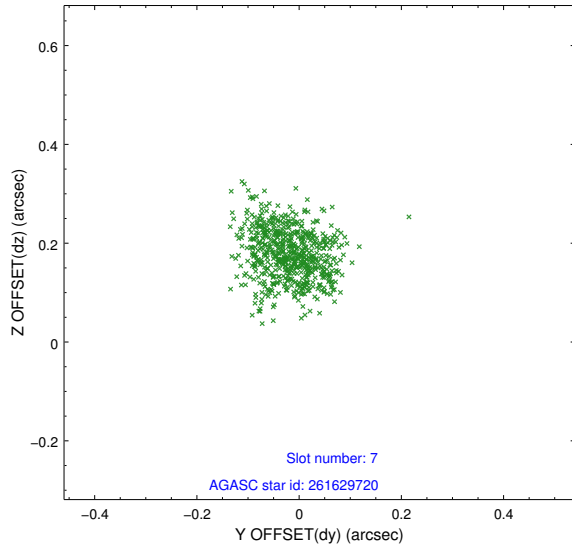
### 2.4.3 Slot 5



## 2.4.4 Slot 6

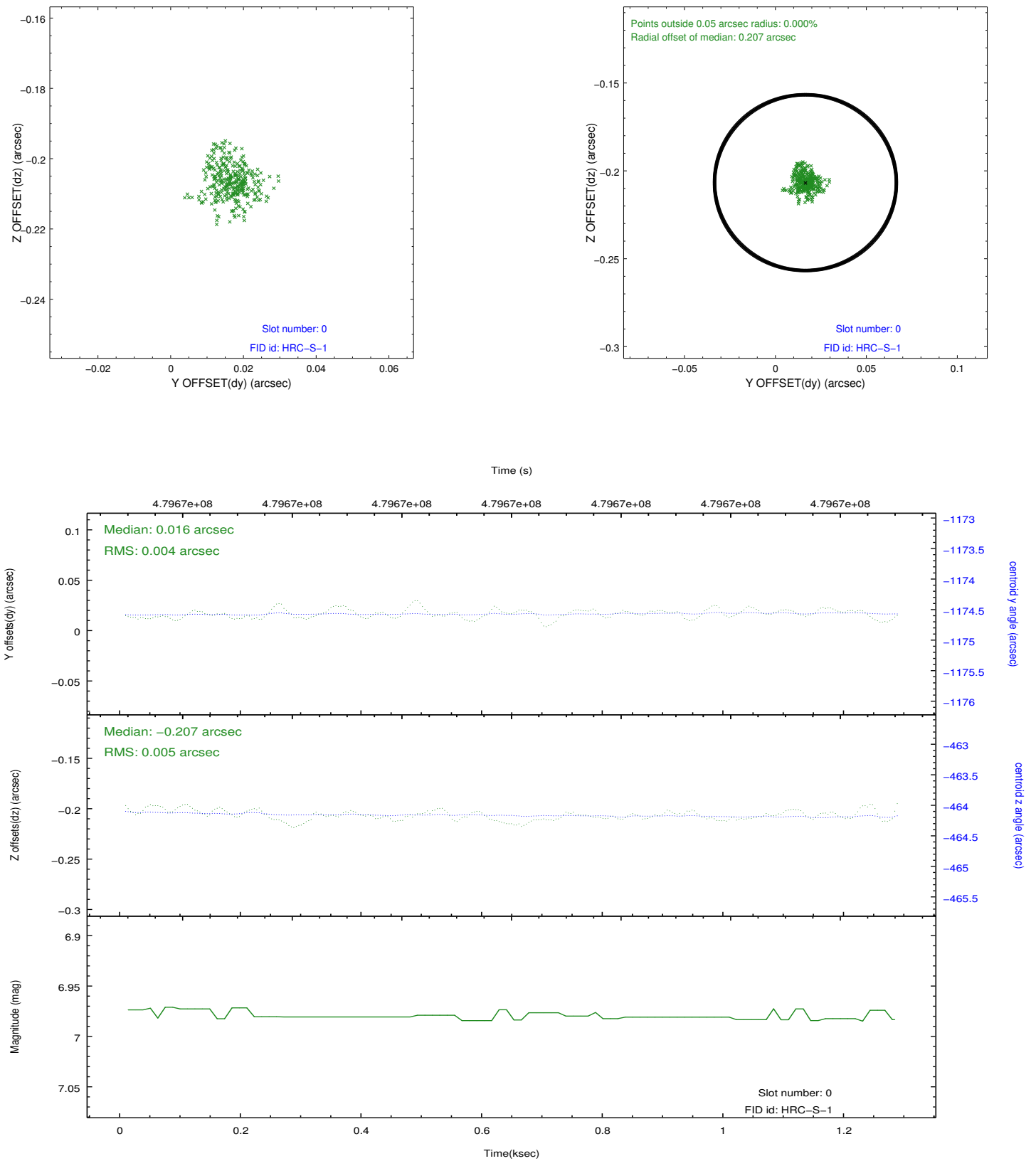


## 2.4.5 Slot 7

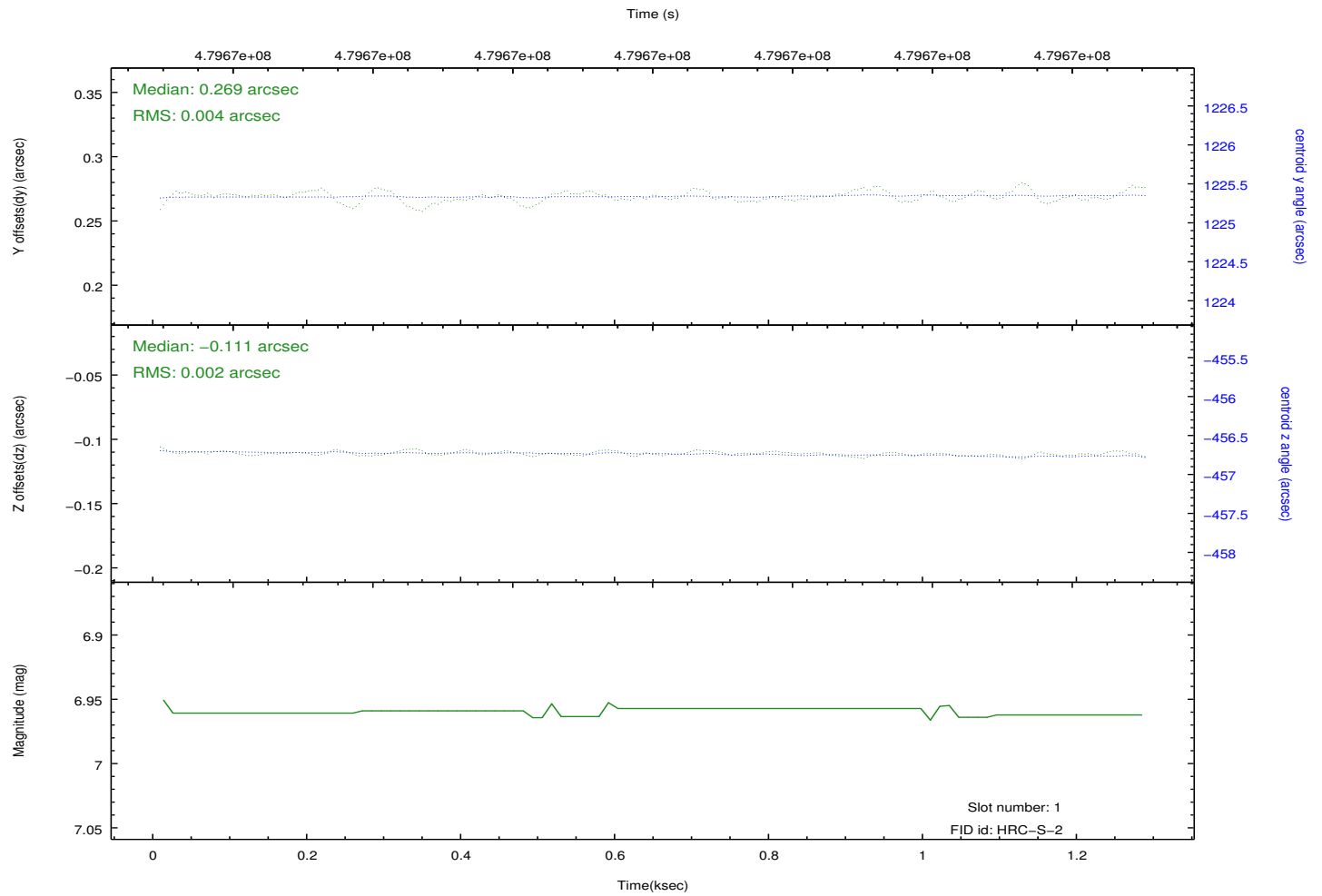
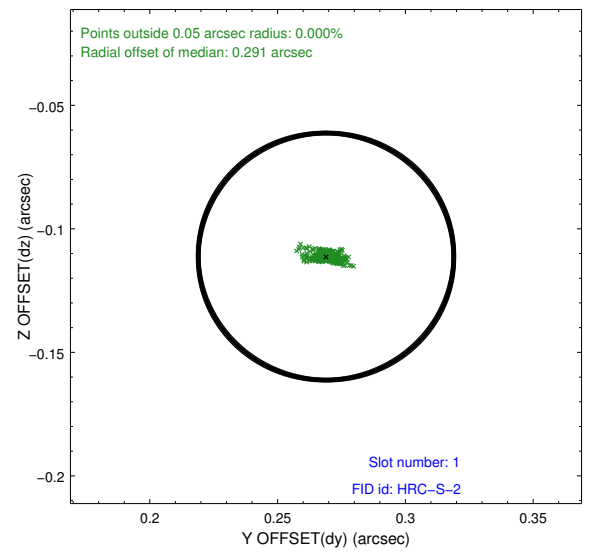
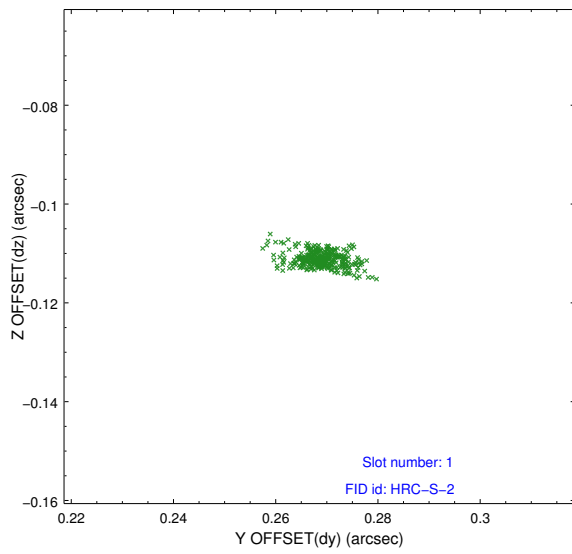


## 2.5 FID Slots

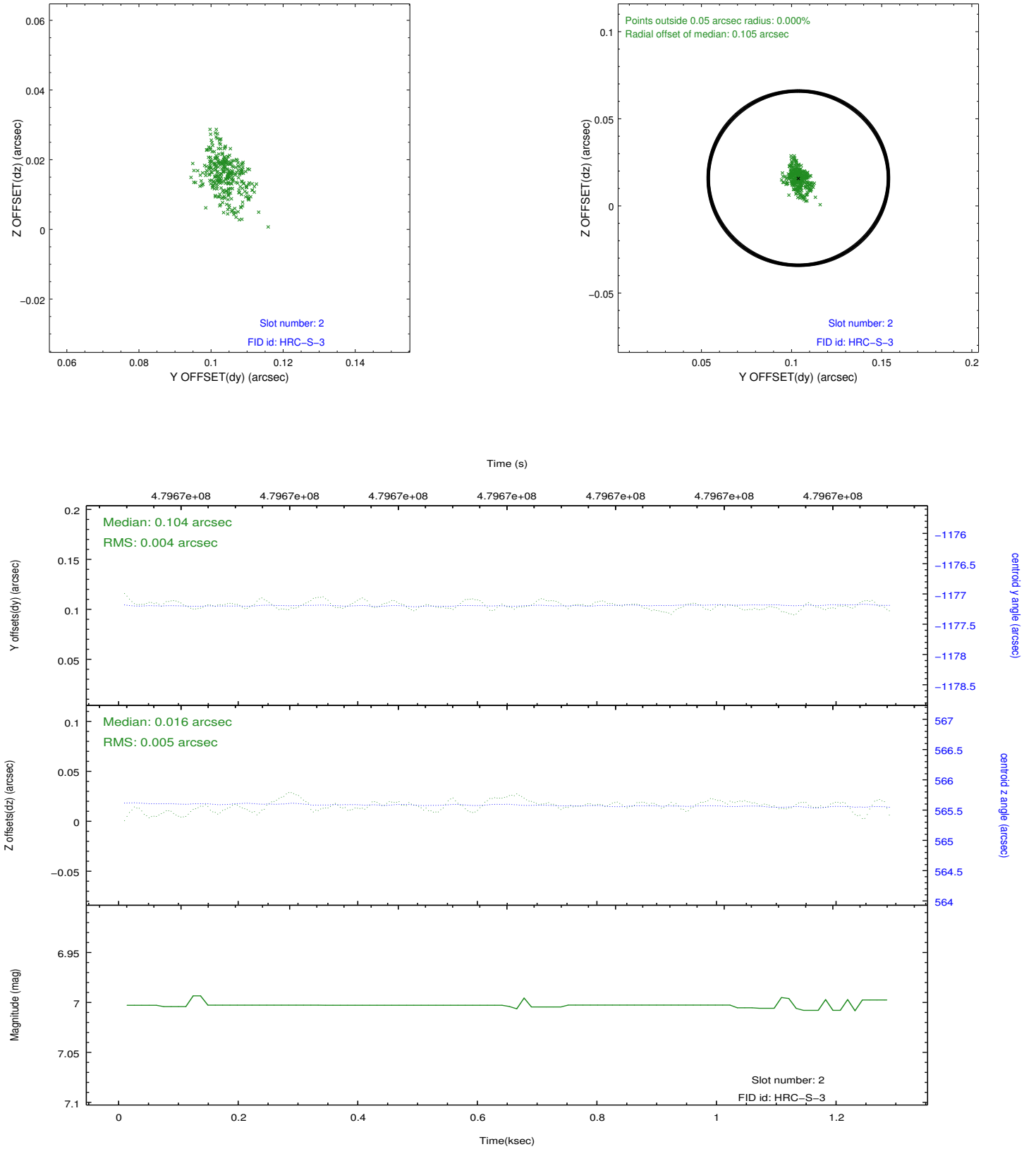
### 2.5.1 Slot 0



## 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	1.2804813192487

## 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.