

# V&V Reference Report

## L2 ASCDS Version : 8.5.1.1

Observation 15457 - L2 Version 2  
Chandra X-Ray Center

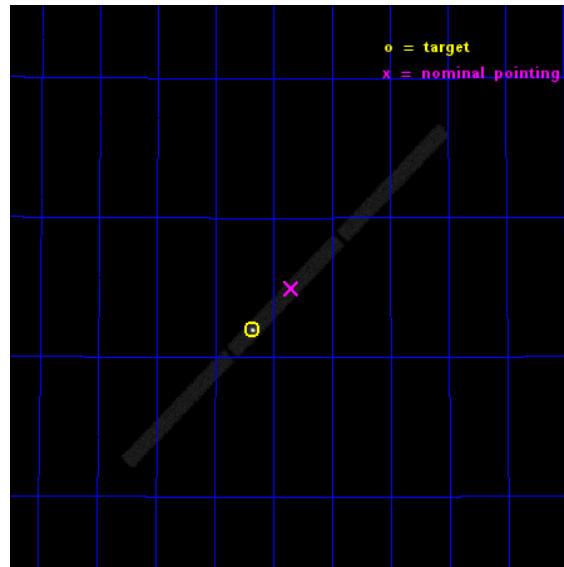
L2 Processing Date : Dec 1 2014

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# 1 Front

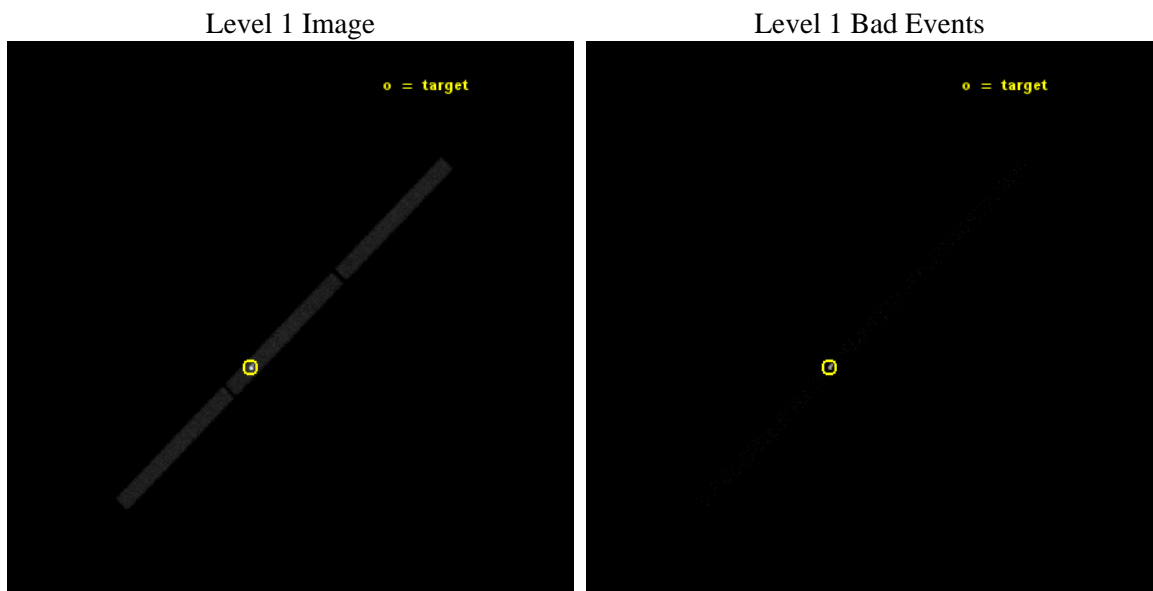
seq_num	291136	Sequence number
obs_id	15457	Observation id
title	AO-14 Calibration Observations of HZ43 to measure the gain accross the HRC-S plate gaps	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	HZ43	Source name
ra_targ	199.090417	Observer's specified target RA [deg]
dec_targ	29.098306	Observer's specified target Dec [deg]
ra_nom	198.92349236291	Nominal RA [deg]
dec_nom	29.247150944715	Nominal Dec [deg]
roll_nom	134.73107227401	Nominal Roll [deg]
revision	2	Processing version of data
ontime	1278.4313191175	[s]
livetime	845.7429513347	Ontime multiplied by DTCOR
l2events	216472	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	1278.4313191175	[s]
caldbver	4.6.4	&#160	l1events	296730	Number of level 1 events
date	2014-12-02T02:16:15	Date and time of file creation			
revision	2	Processing version of data			

### 2.1.3 Events

Level 1 Events

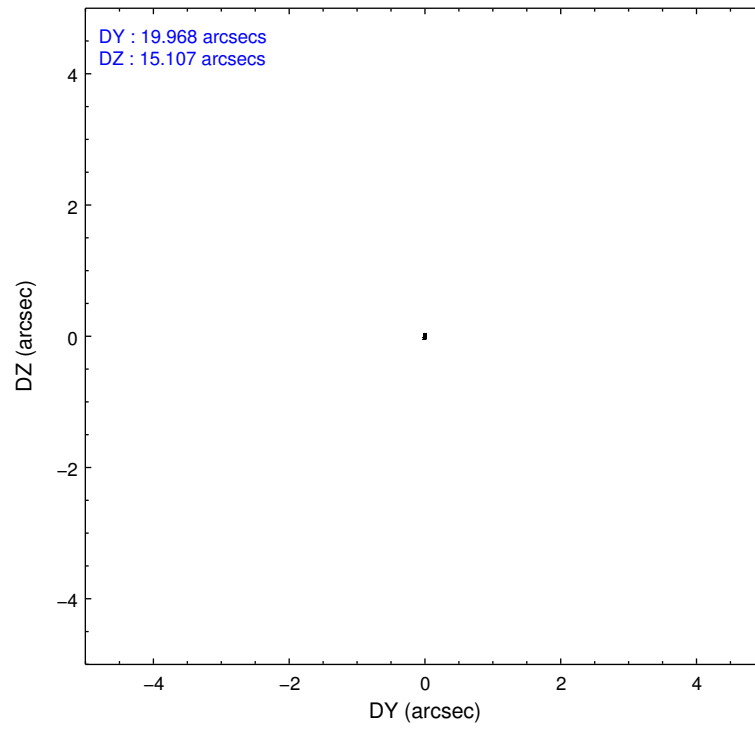
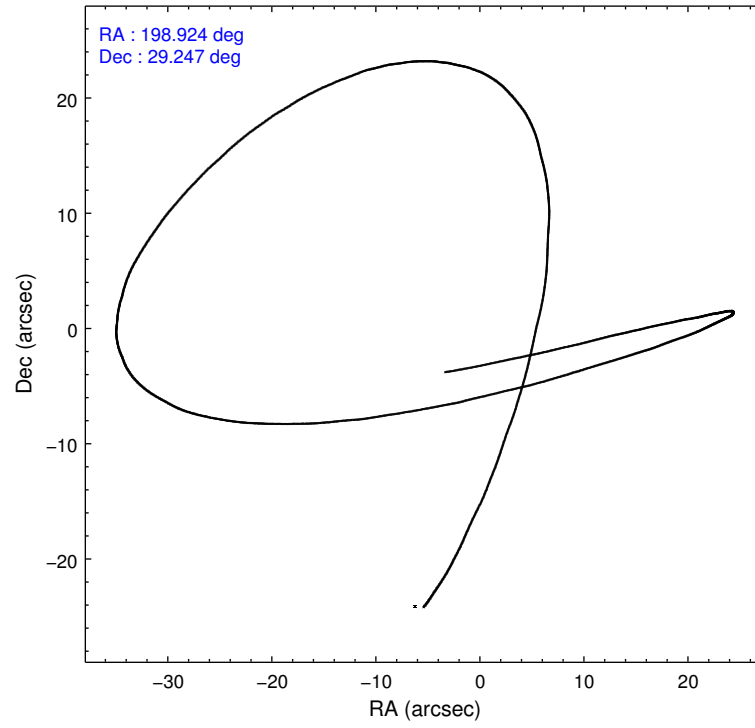
	<b>segment 1</b>	<b>segment 2</b>	<b>segment 3</b>
level 1 events	30128	236506	30096
rejected events	6216	48548	6238
rejected %	20%	20%	20%

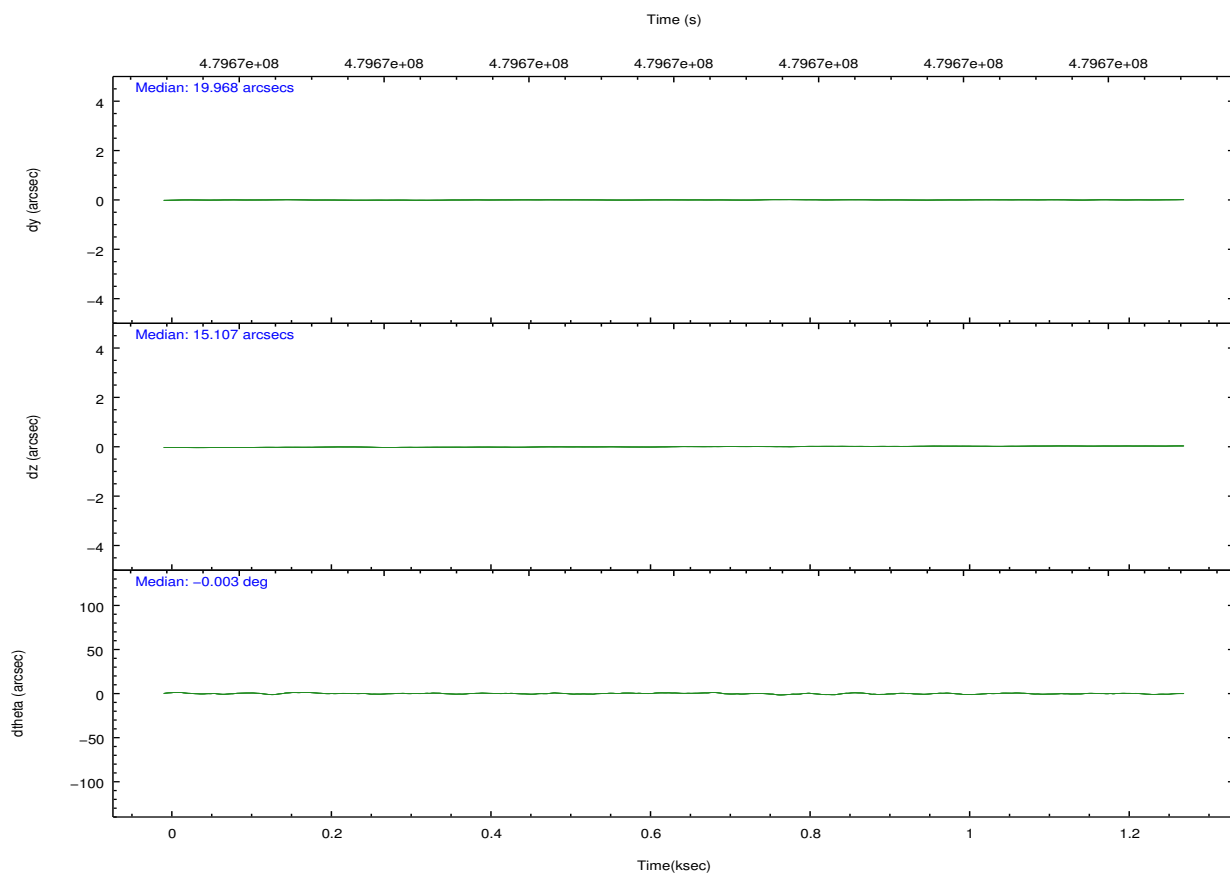
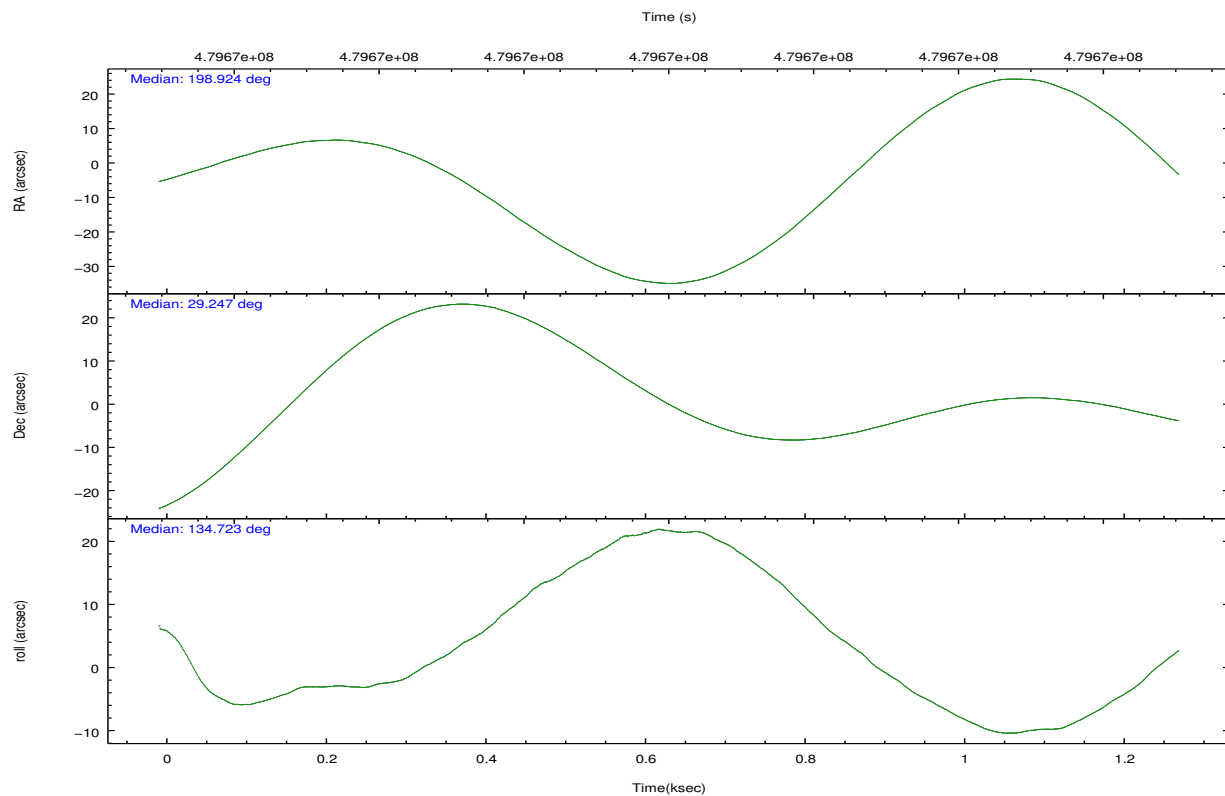
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	HRC	HRC
Detector	HRC-S	HRC-S
Grating	NONE	NONE
Data mode	OBSERVING	OBSERVING
Observation mode	POINTING	POINTING
[deg] Pointing RA	198.954517	198.9234923629077
[deg] Pointing Dec	29.240882	29.24715094471471
[deg] Pointing Roll	134.648539	134.7310722740083
[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)	479666729.184000	479666353.93042
Observation start date	2013-03-14T16:44:22	2013-03-14T16:39:13
[s] Observation end time (MET)	479667829.184000	479667963.69301
Observation end date	2013-03-14T17:02:42	2013-03-14T17:06:03

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED

## 2.3 Aspect



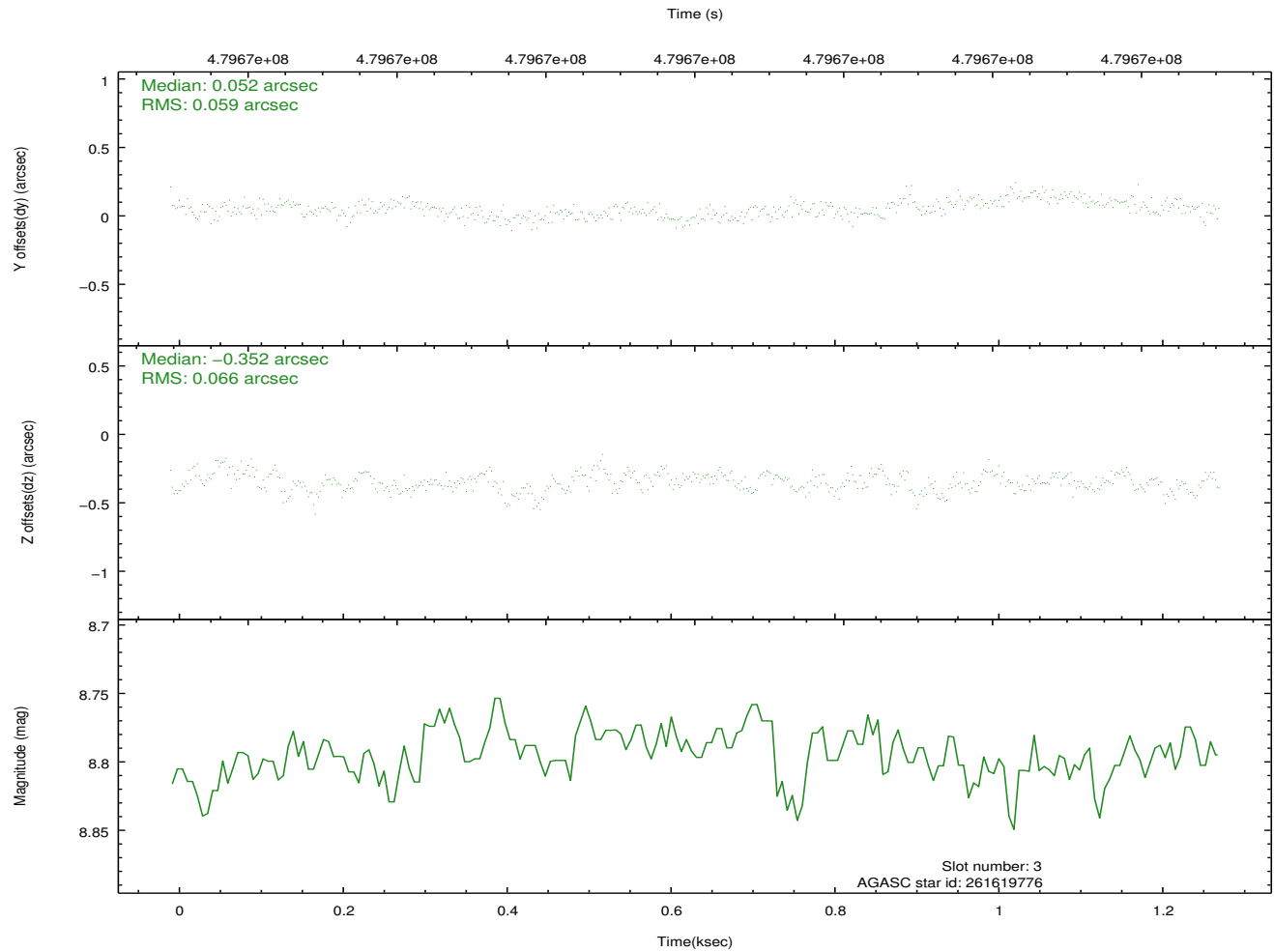
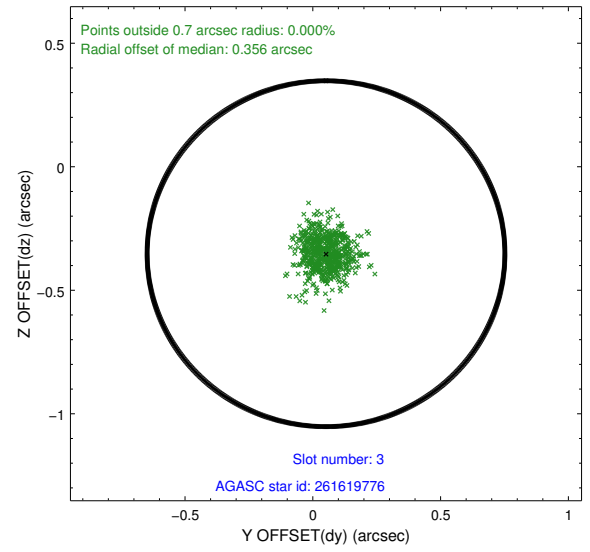
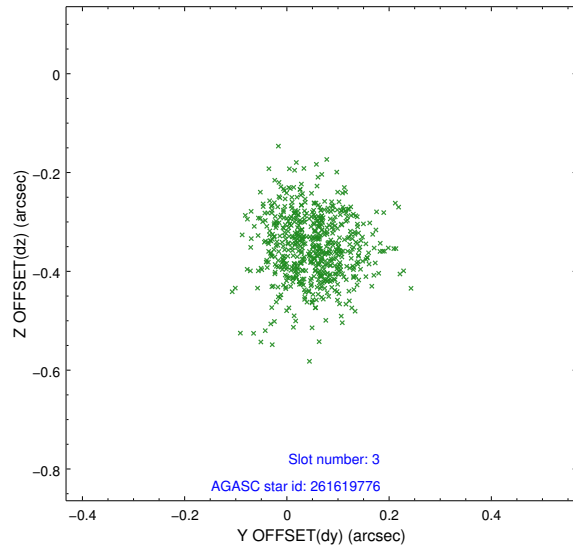


### Slot Statistics

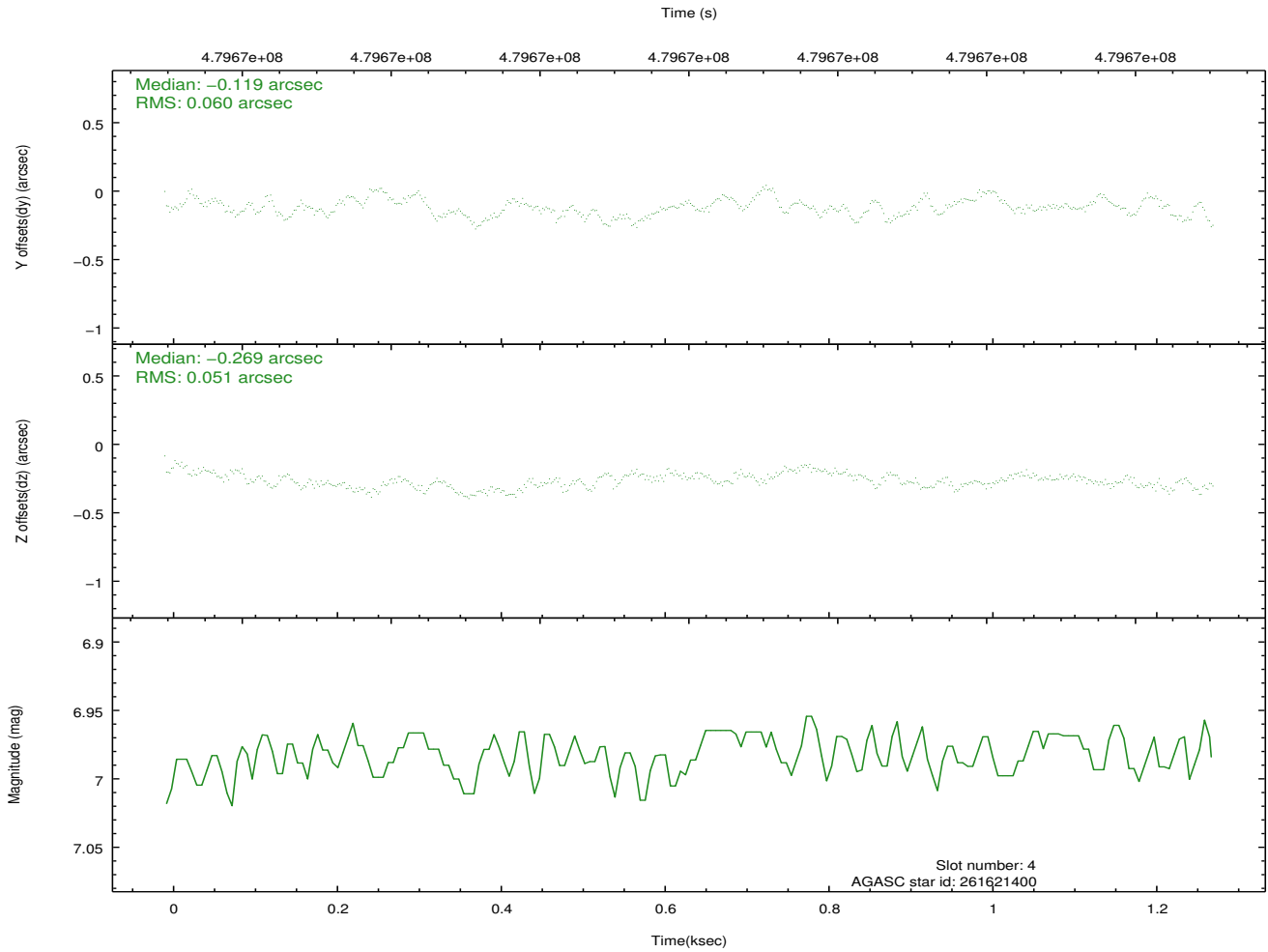
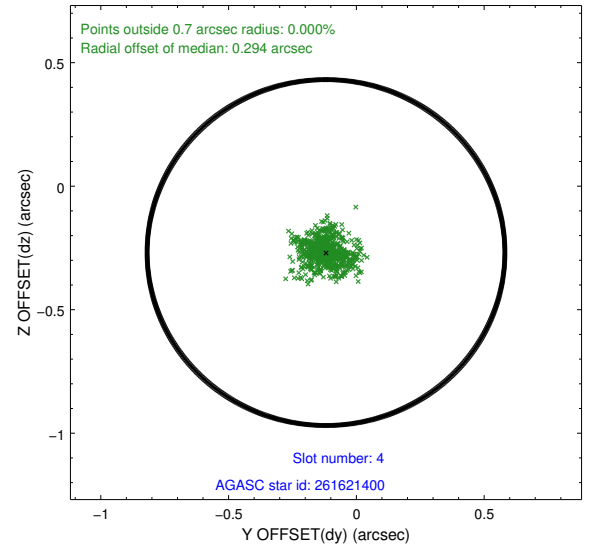
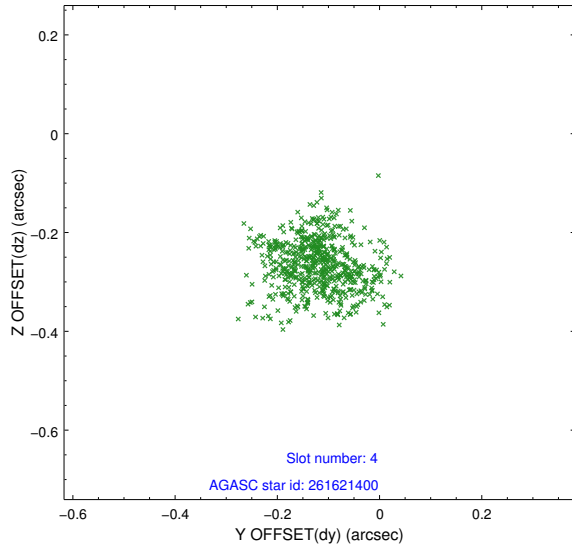
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		HRC-S-1	6.98	312	0.016	-0.211	0.005	0.009	0.000000	0.000000	-1174.57	-464.01
1	FID		HRC-S-2	6.95	312	0.268	-0.110	0.005	0.010	0.000000	0.000000	1221.57	-458.07
2	FID		HRC-S-3	7.00	312	0.107	0.020	0.007	0.011	0.000000	0.000000	-1173.27	564.27
3	GUIDE	used	261619776	8.80	625	0.052	-0.352	0.092	0.155	198.654383	29.401174	1074.56	265.97
4	GUIDE	used	261621400	6.98	625	-0.119	-0.269	0.088	0.135	198.901600	28.741982	-1156.07	1384.24
5	GUIDE	used	261623040	9.13	622	-0.148	0.175	0.113	0.182	198.792686	29.757643	1679.80	-942.21
6	GUIDE	used	261626376	9.69	621	0.007	0.175	0.226	0.408	198.947288	29.347445	294.64	-251.39
7	GUIDE	used	261629720	8.12	624	0.212	0.274	0.087	0.158	199.236176	29.044452	-1122.09	-131.74

## 2.4 Star Slots

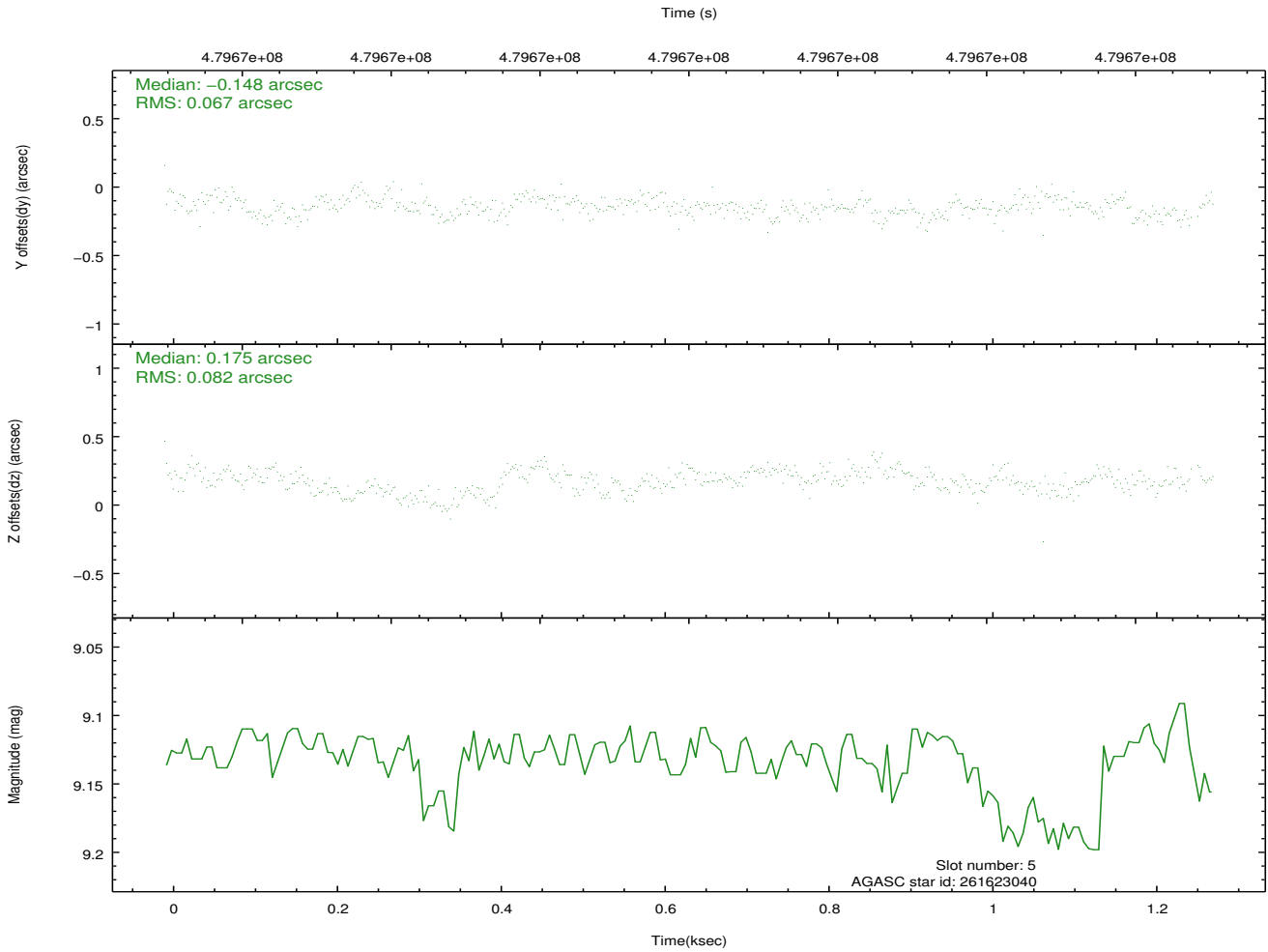
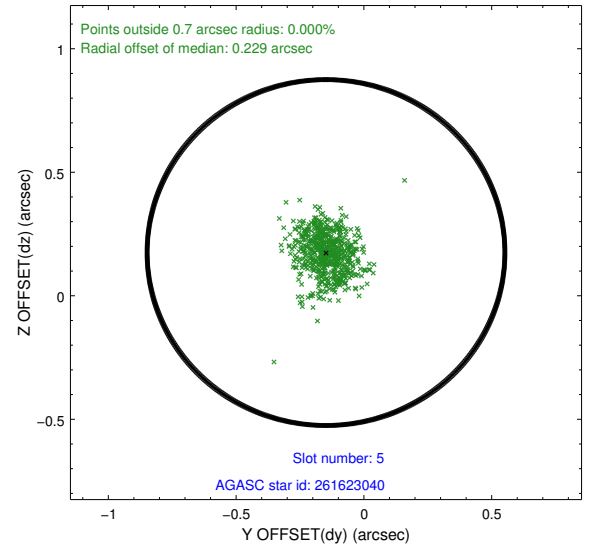
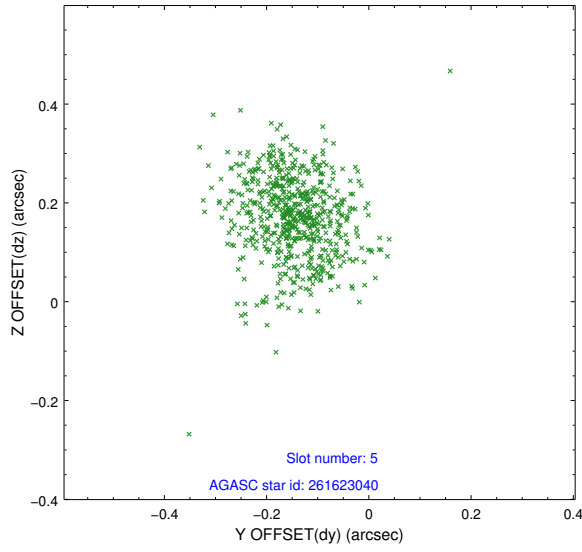
### 2.4.1 Slot 3



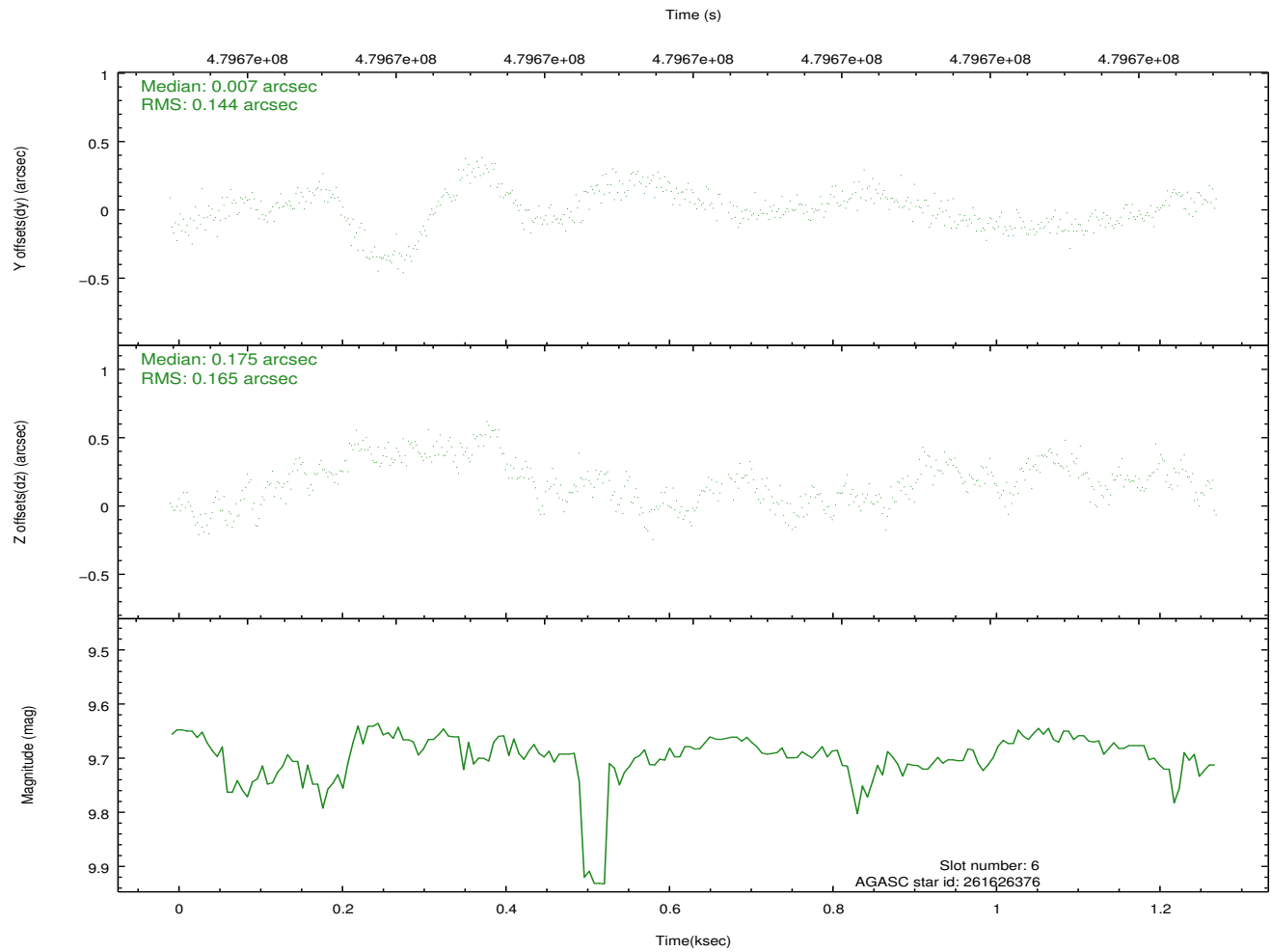
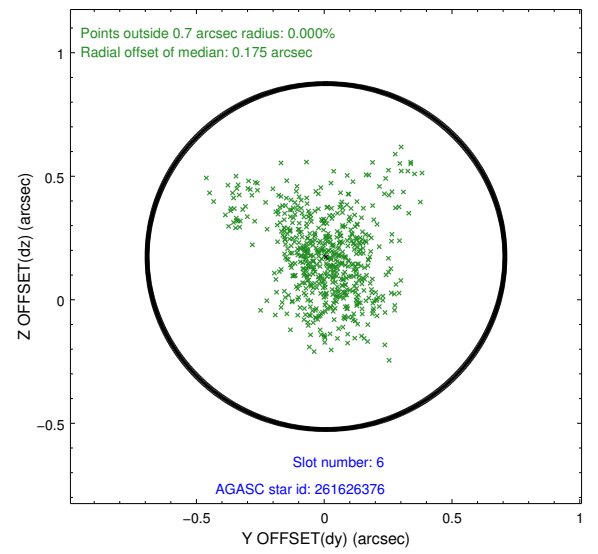
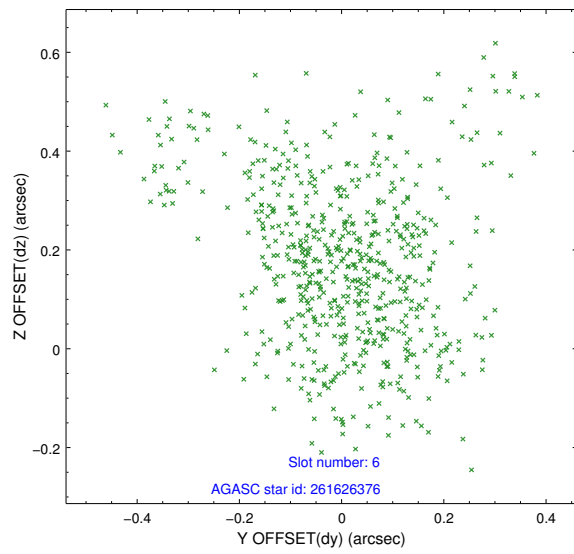
## 2.4.2 Slot 4



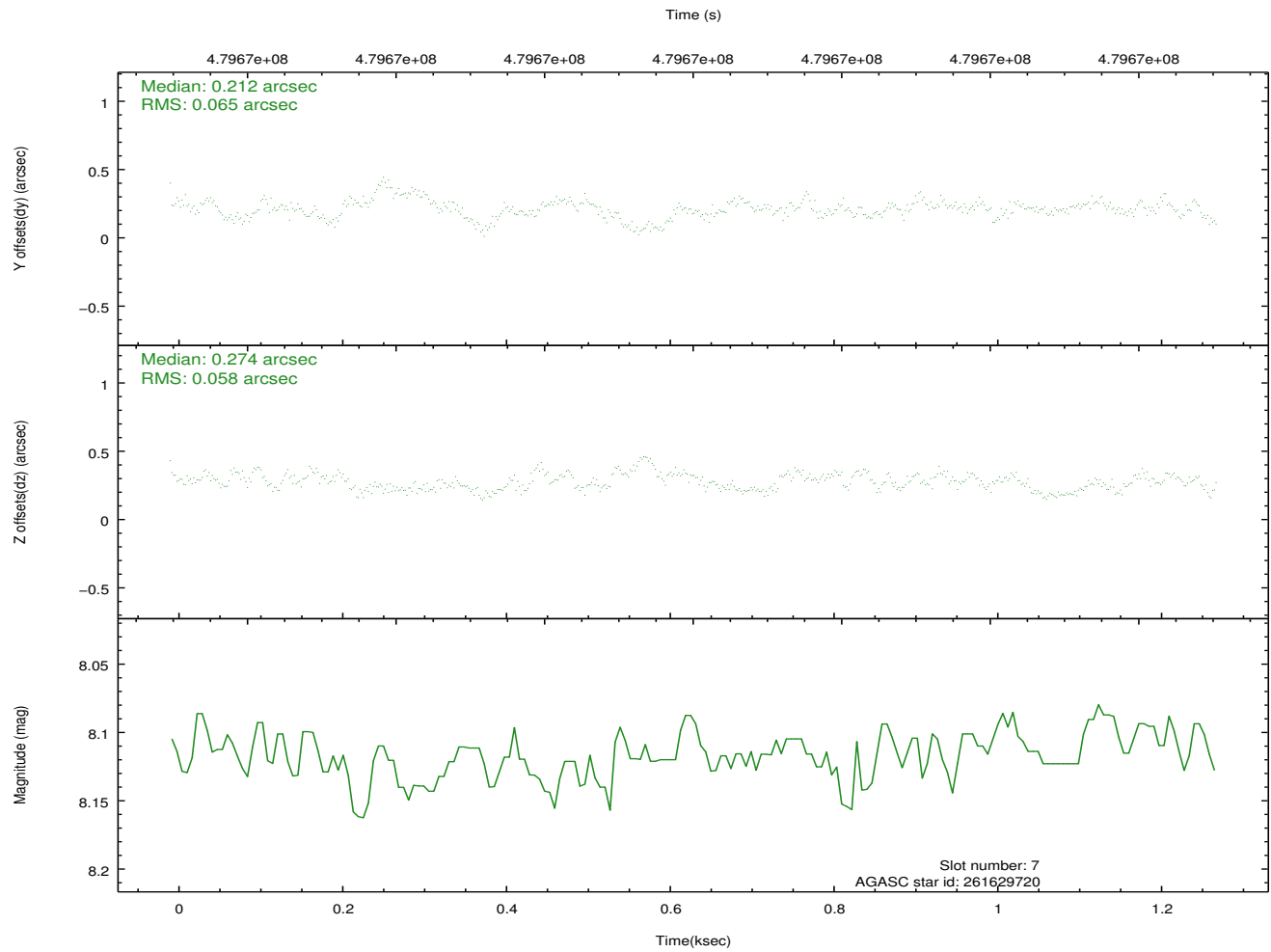
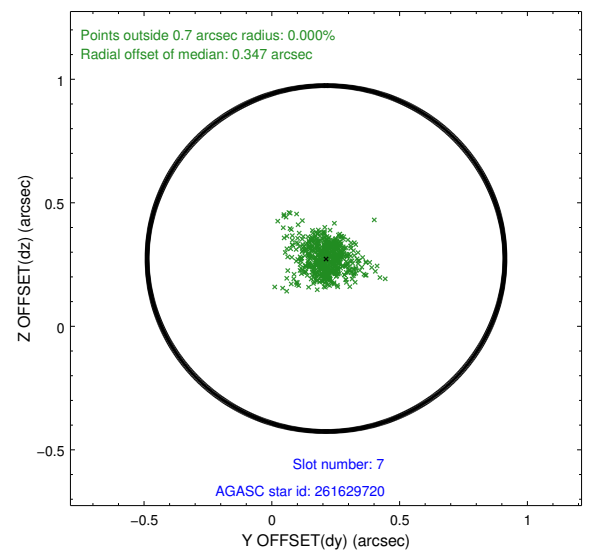
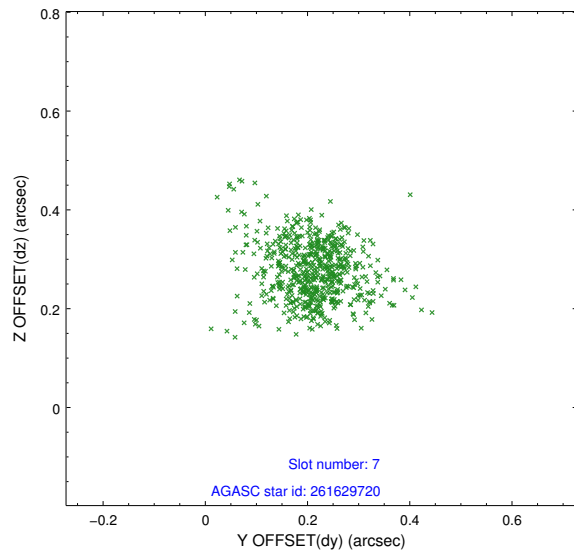
### 2.4.3 Slot 5



## 2.4.4 Slot 6

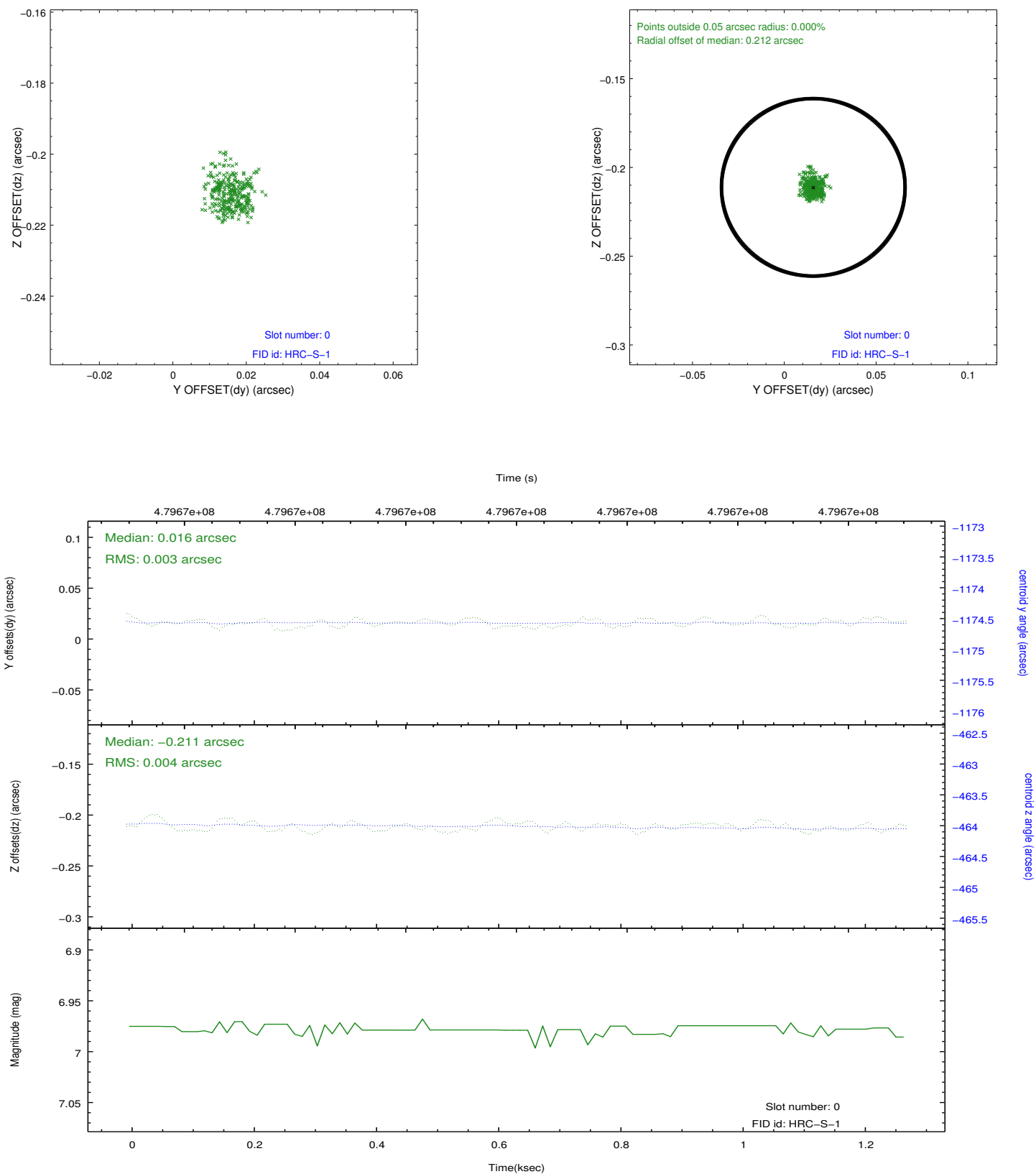


## 2.4.5 Slot 7

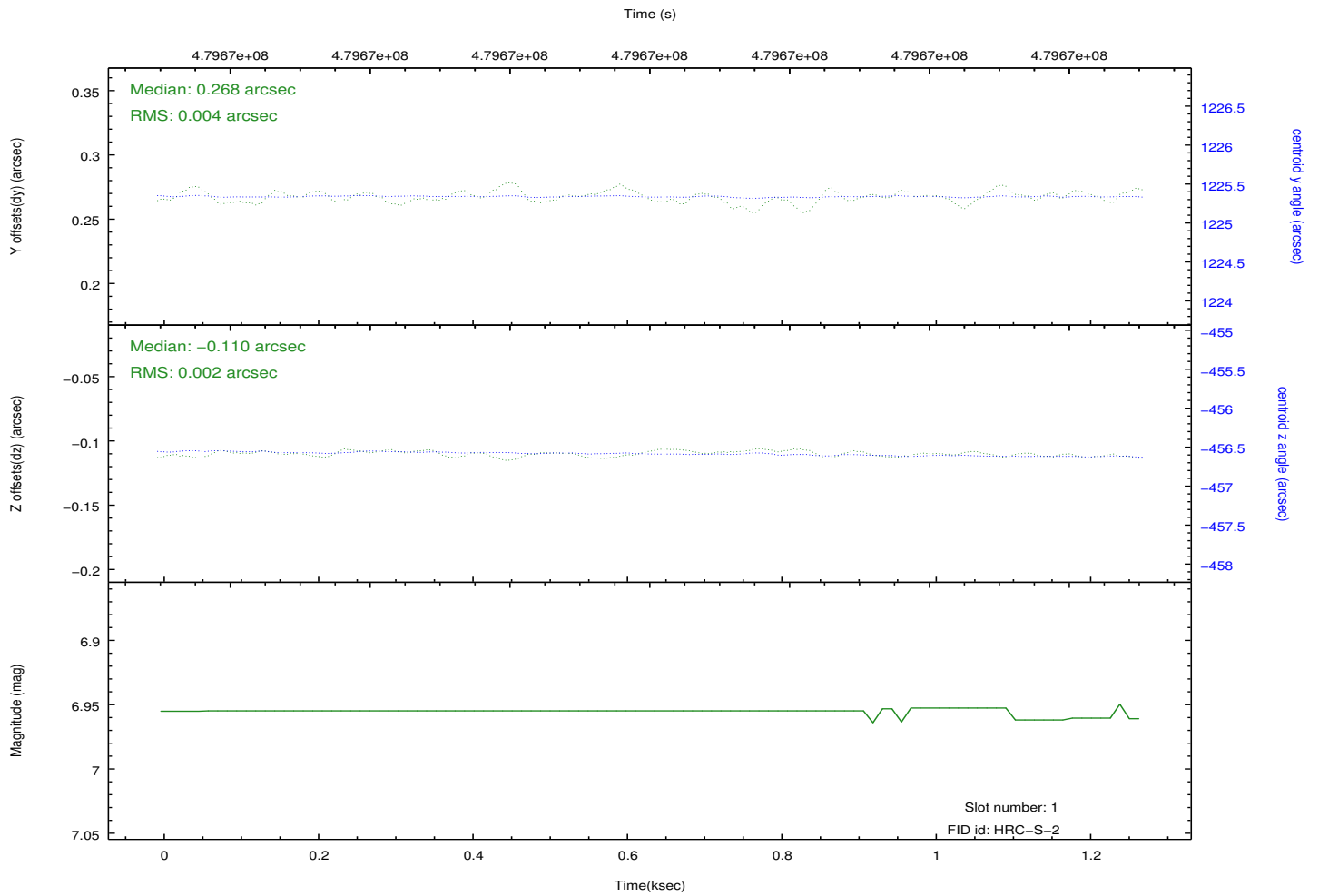
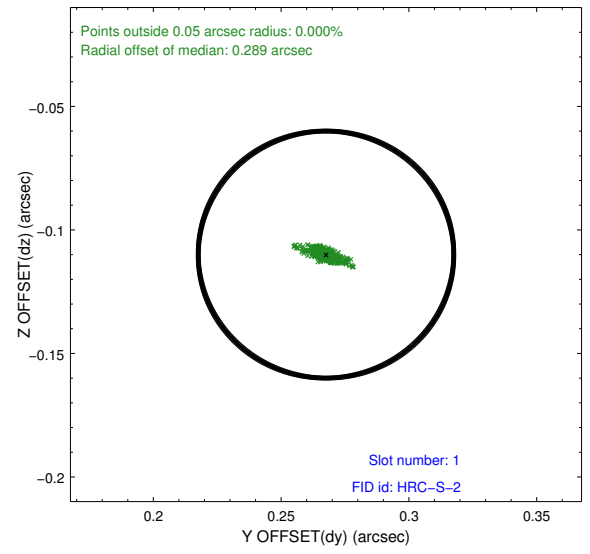
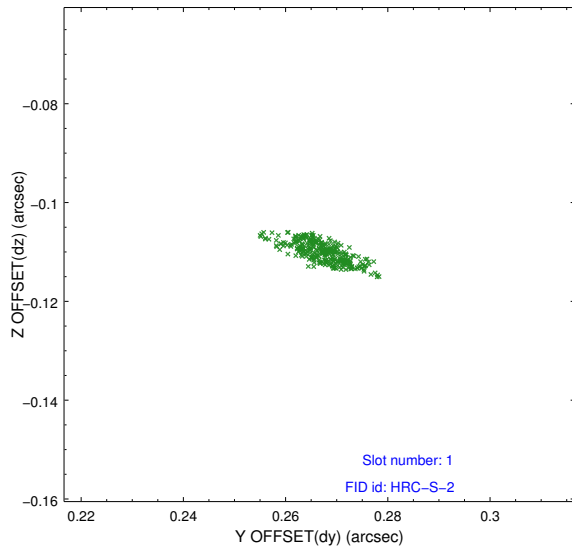


## 2.5 FID Slots

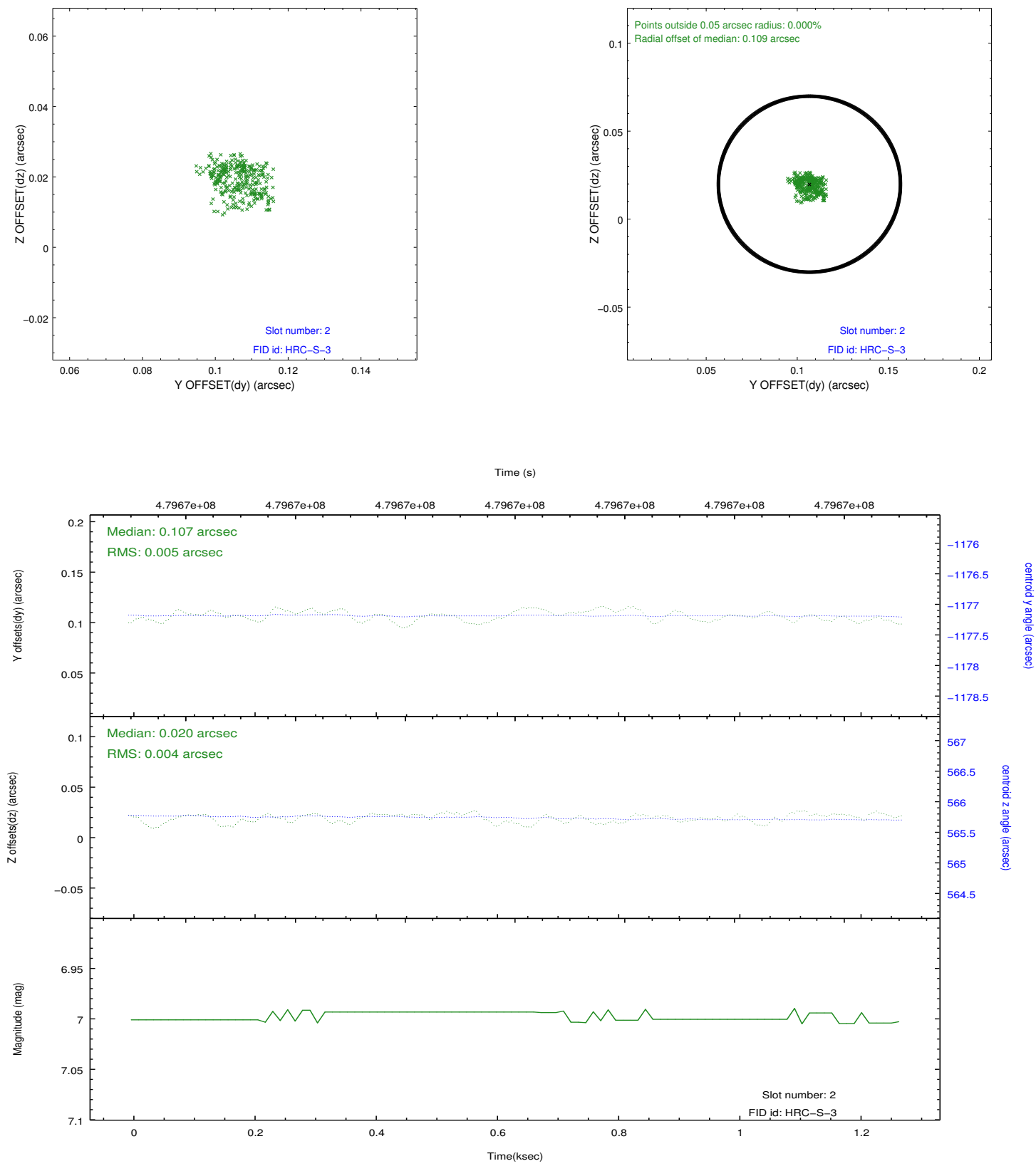
### 2.5.1 Slot 0



## 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	1.2784313191175

## 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.