

# V&V Reference Report

## L2 ASCDS Version : 10.1

Observation 14554 - L2 Version 3  
Chandra X-Ray Center

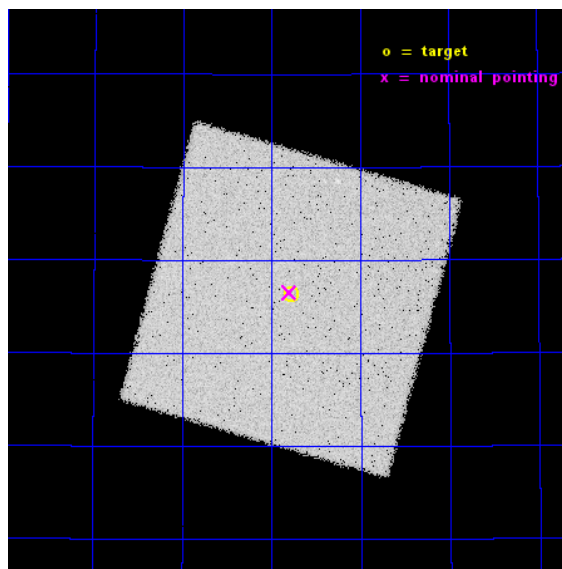
L2 Processing Date : Dec 8 2014

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# 1 Front

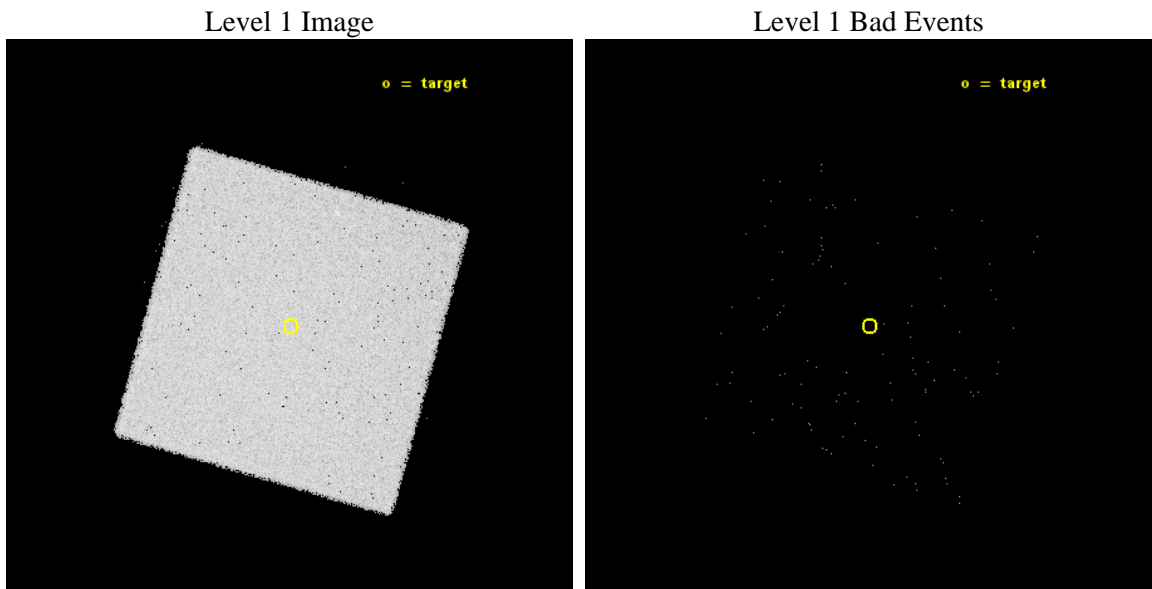
seq_num	200855	Sequence number
obs_id	14554	Observation id
title	Search for X-ray emission from a sample of luminous O-type subdwarfs	&#160
observer	Mr. Nicola La Palombara	Principal investigator
object	BD+48 1777	Source name
ra_targ	142.695	Observer's specified target RA [deg]
dec_targ	48.273278	Observer's specified target Dec [deg]
ra_nom	142.70005193816	Nominal RA [deg]
dec_nom	48.275609072412	Nominal Dec [deg]
roll_nom	60.710770186614	Nominal Roll [deg]
revision	3	Processing version of data
ontime	4132.0314760804	[s]
livetime	4101.0829527064	Ontime multiplied by DTCOR
l2events	237000	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	4000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	4132.0314760804	[s]
caldbver	4.6.4	&#160	l1events	409219	Number of level 1 events
date	2014-12-08T17:17:01	Date and time of file creation			
revision	3	Processing version of data			

### 2.1.3 Events

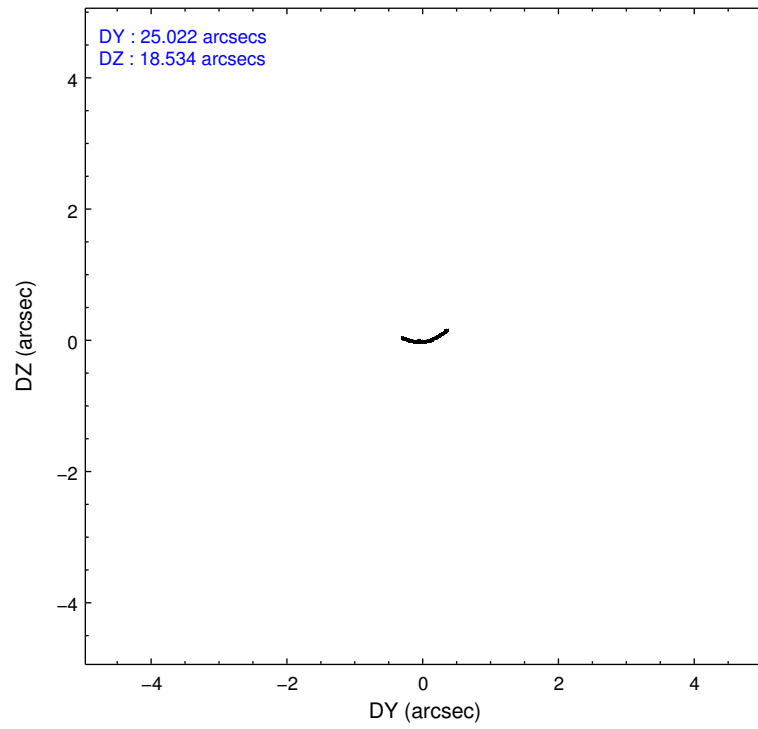
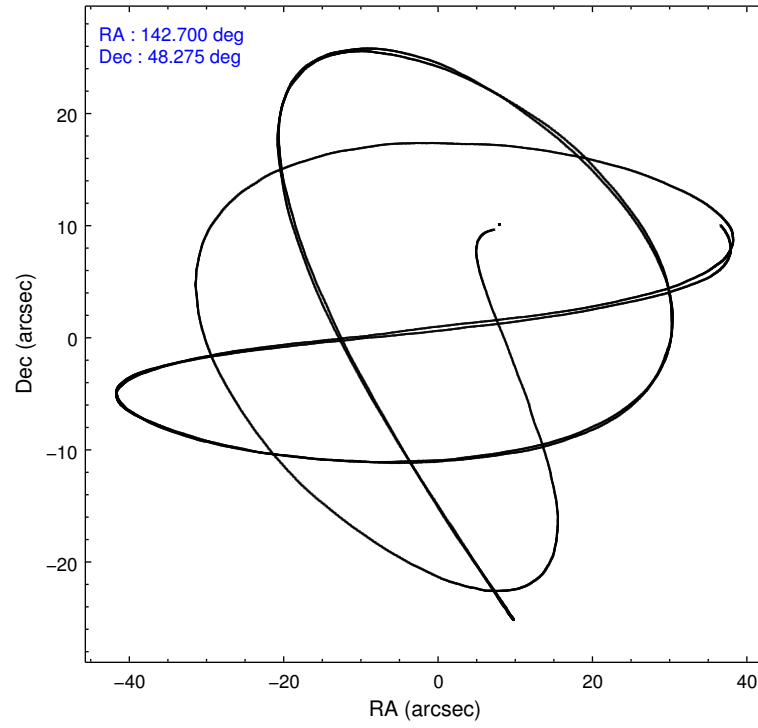
#### Level 1 Events

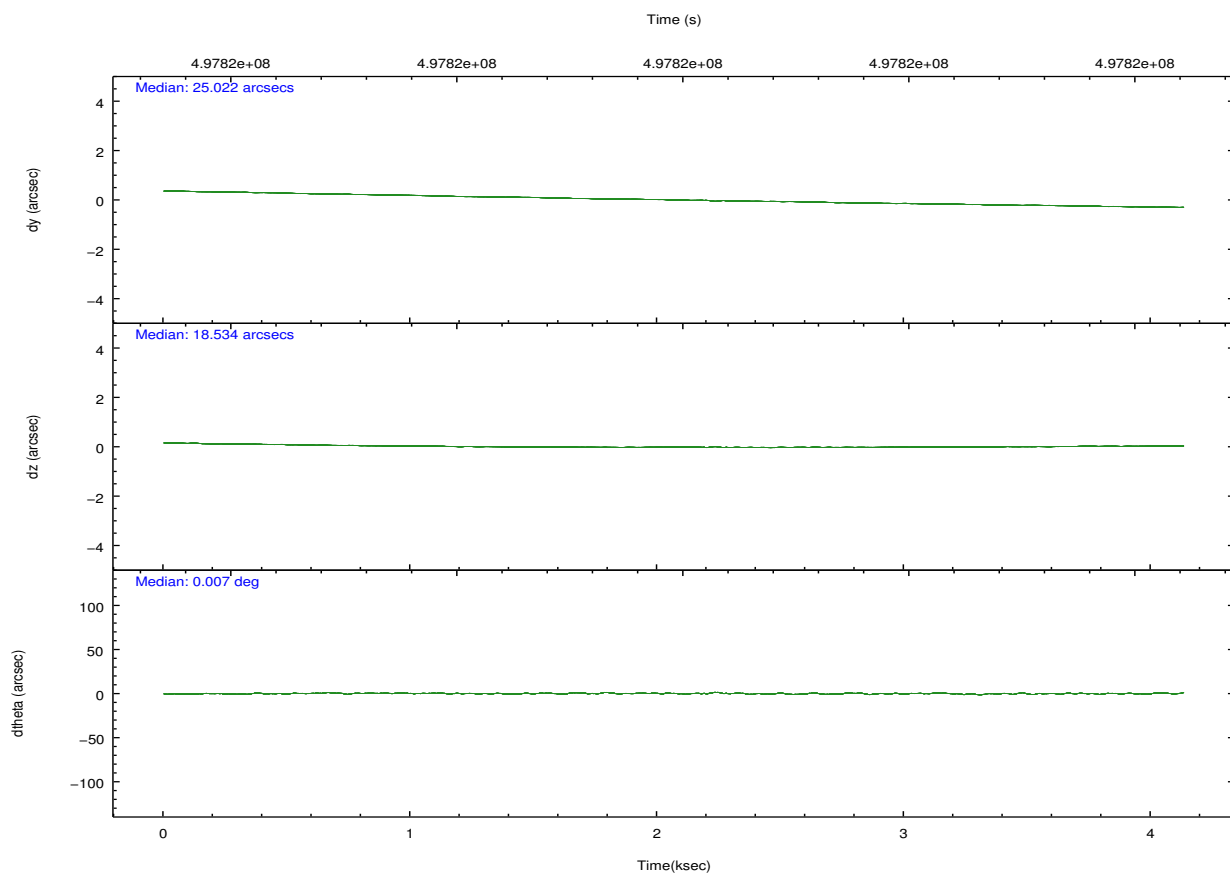
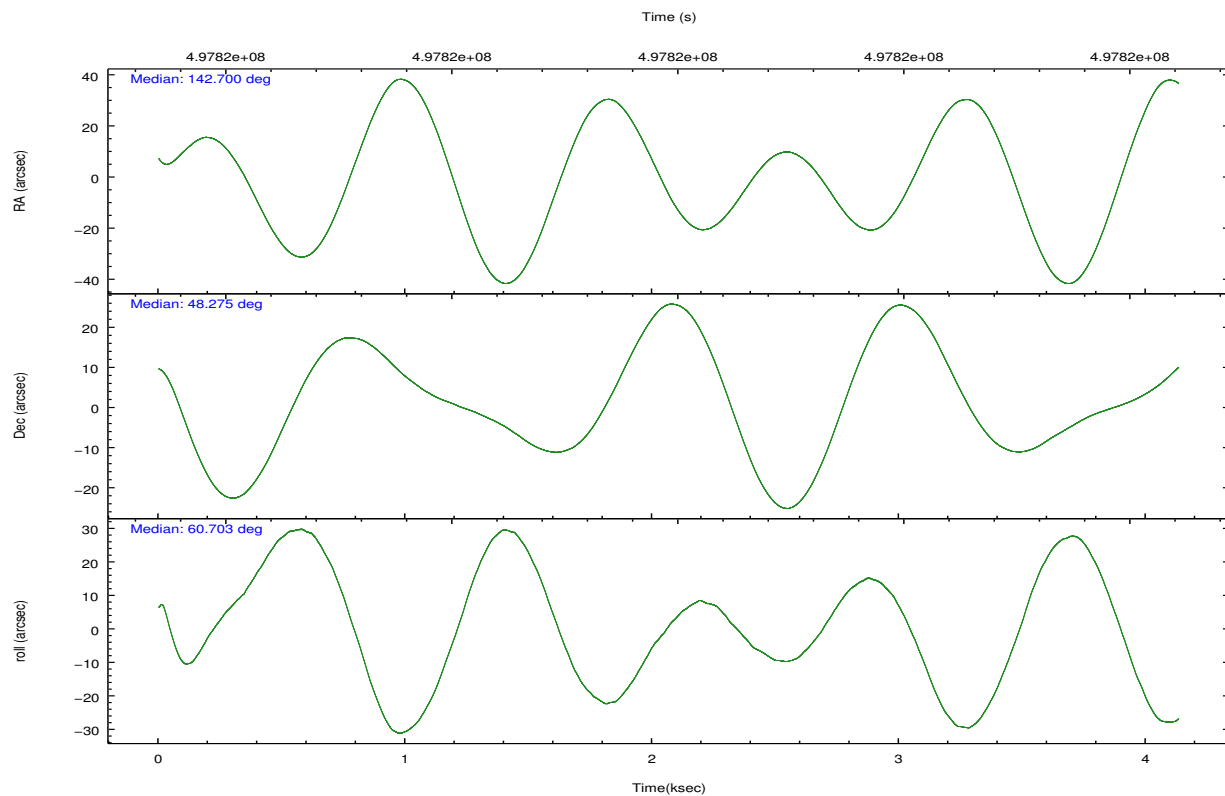
	<b>segment 0</b>
level 1 events	409219
rejected events	88122
rejected %	21%

## 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	142.701384	142.7000519381592			
[deg] Pointing Dec	48.248756	48.27560907241221			
[deg] Pointing Roll	60.805237	60.71077018661353			
[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)	497821032.184000	497819799.86726			
Observation start date	2013-10-10T19:36:05	2013-10-10T19:16:39			
[s] Observation end time (MET)	497825032.184000	497825872.48009			
Observation end date	2013-10-10T20:42:45	2013-10-10T20:57:52			

## 2.3 Aspect



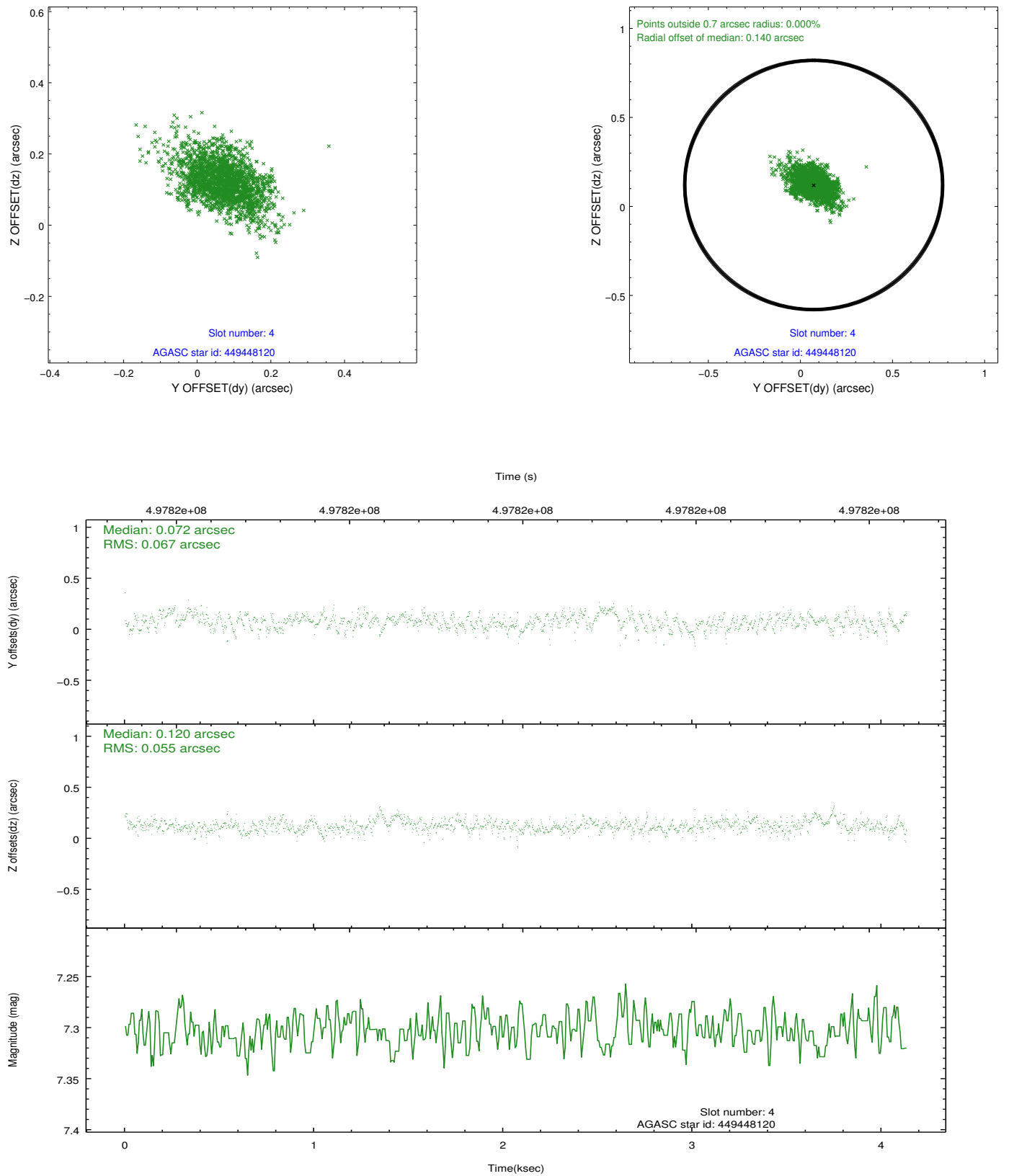


### Slot Statistics

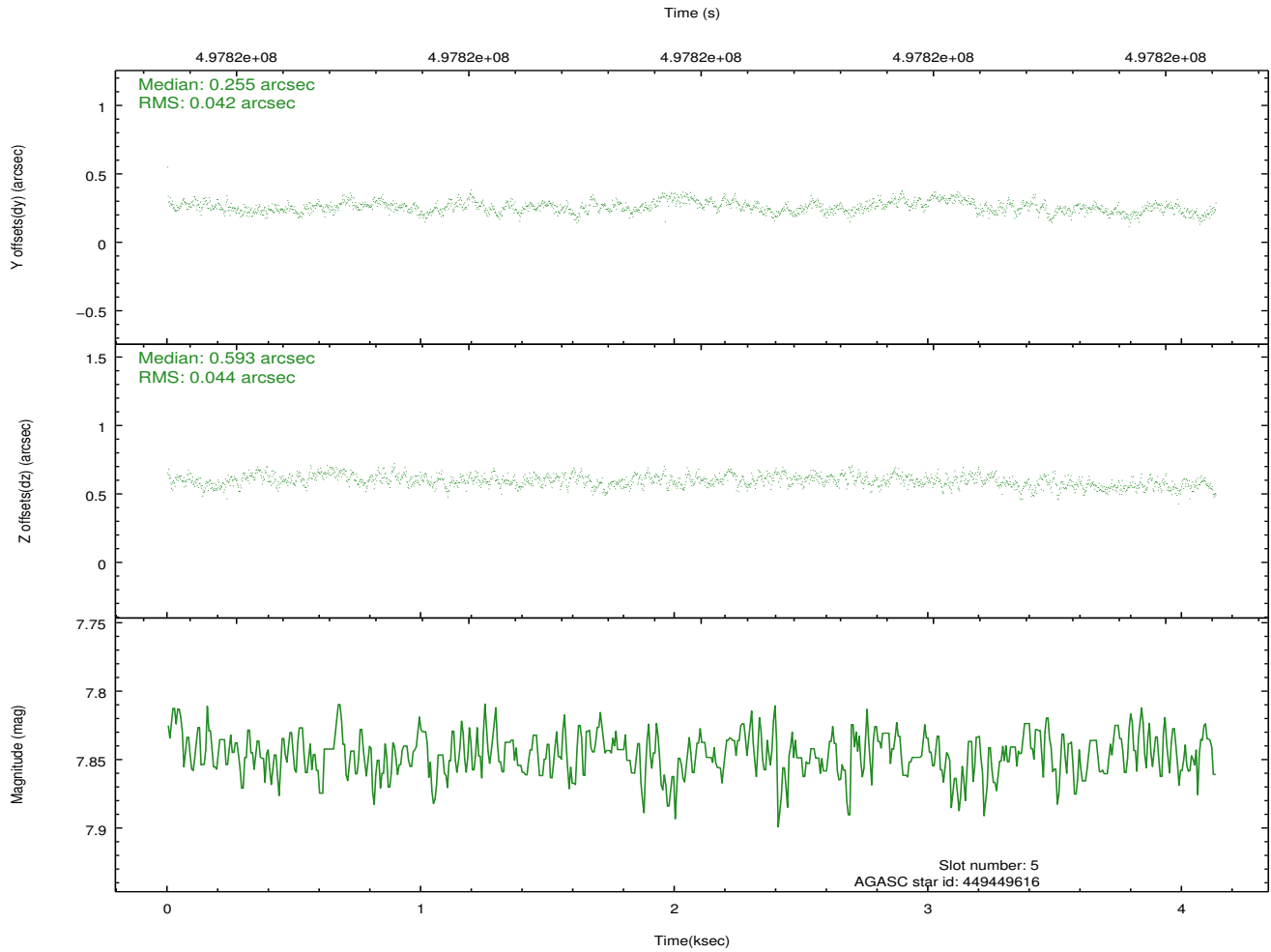
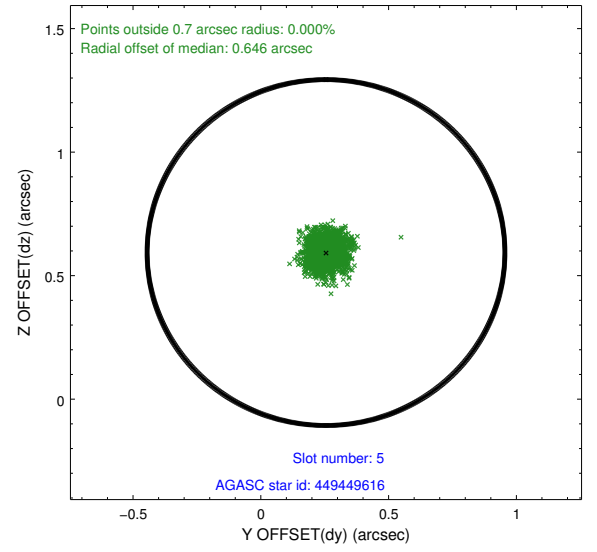
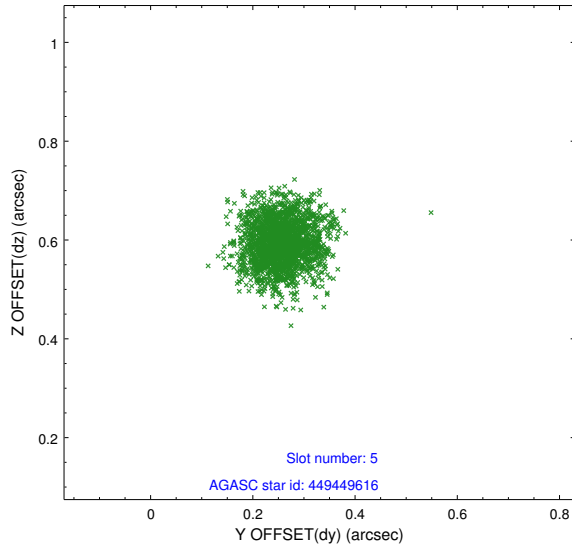
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		HRC-I-1	7.03	1008	-0.125	0.018	0.008	0.013	0.000000	0.000000	-781.21	-1306.74
1	FID		HRC-I-2	7.07	1008	0.256	-0.100	0.011	0.021	0.000000	0.000000	831.03	-1309.69
2	FID		HRC-I-3	7.12	1009	-0.012	-0.008	0.009	0.022	0.000000	0.000000	-1208.80	996.49
3	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
4	GUIDE	used	449448120	7.30	2017	0.072	0.120	0.089	0.152	143.961364	48.491598	2252.60	-2183.74
5	GUIDE	used	449449616	7.85	2017	0.255	0.593	0.065	0.104	143.259007	47.608063	-1346.18	-2303.88
6	GUIDE	used	449456240	7.85	2017	-0.016	0.106	0.078	0.132	143.139943	48.331492	774.61	-769.32
7	GUIDE	used	449317536	7.83	2015	-0.315	-0.825	0.085	0.141	142.079134	48.881473	1276.13	2399.80

## 2.4 Star Slots

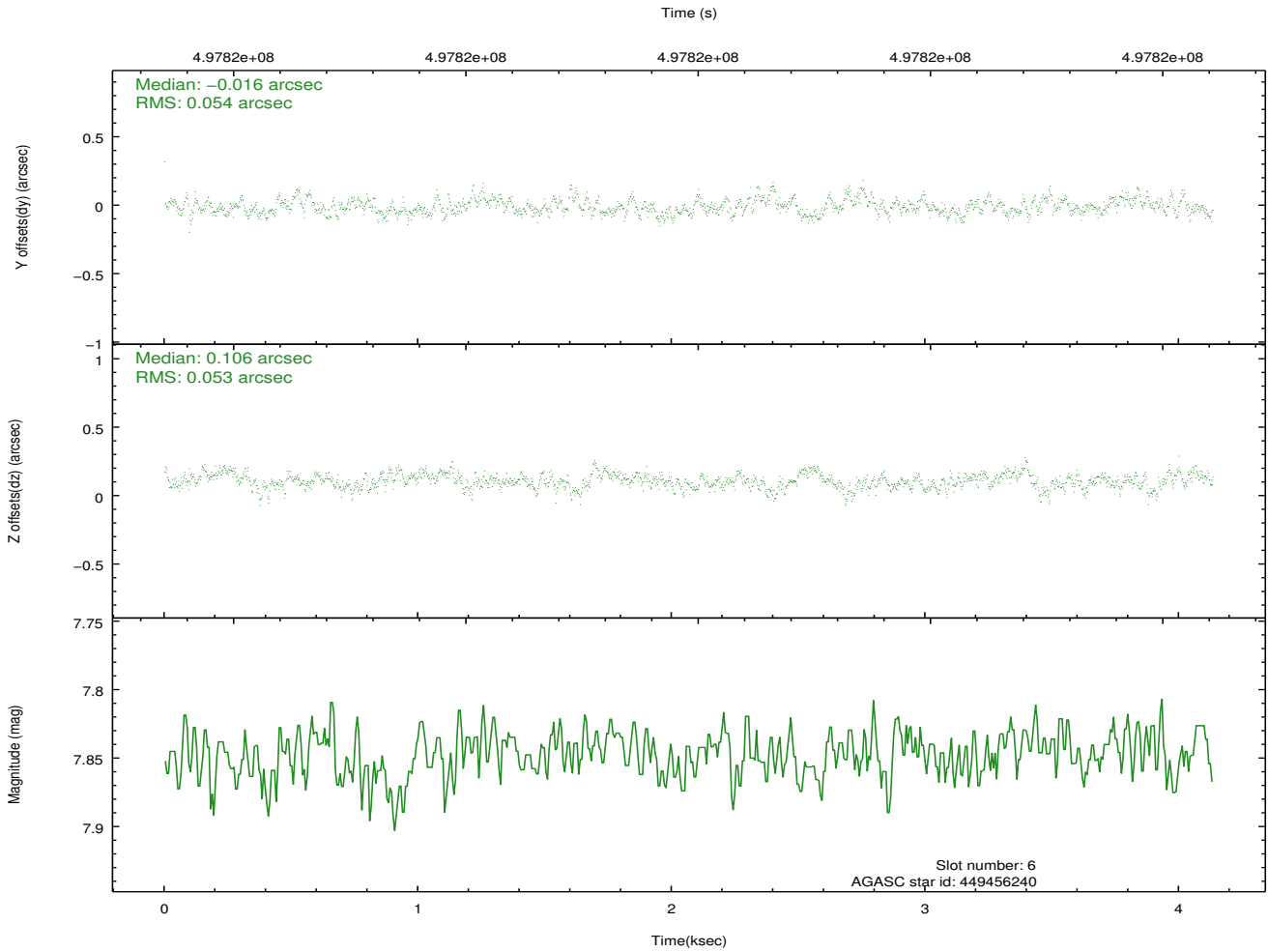
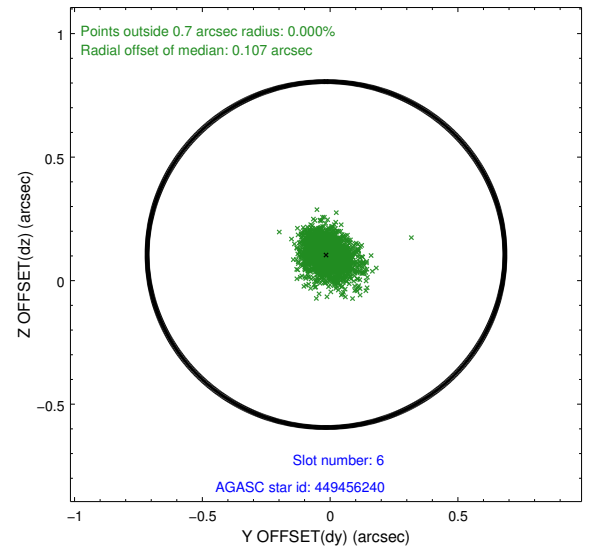
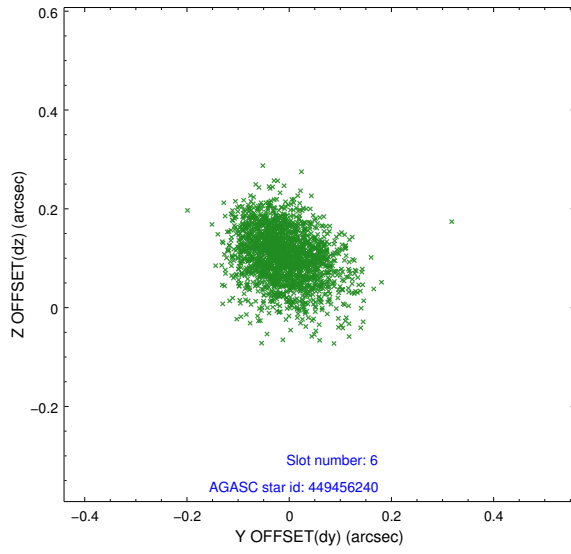
### 2.4.1 Slot 4



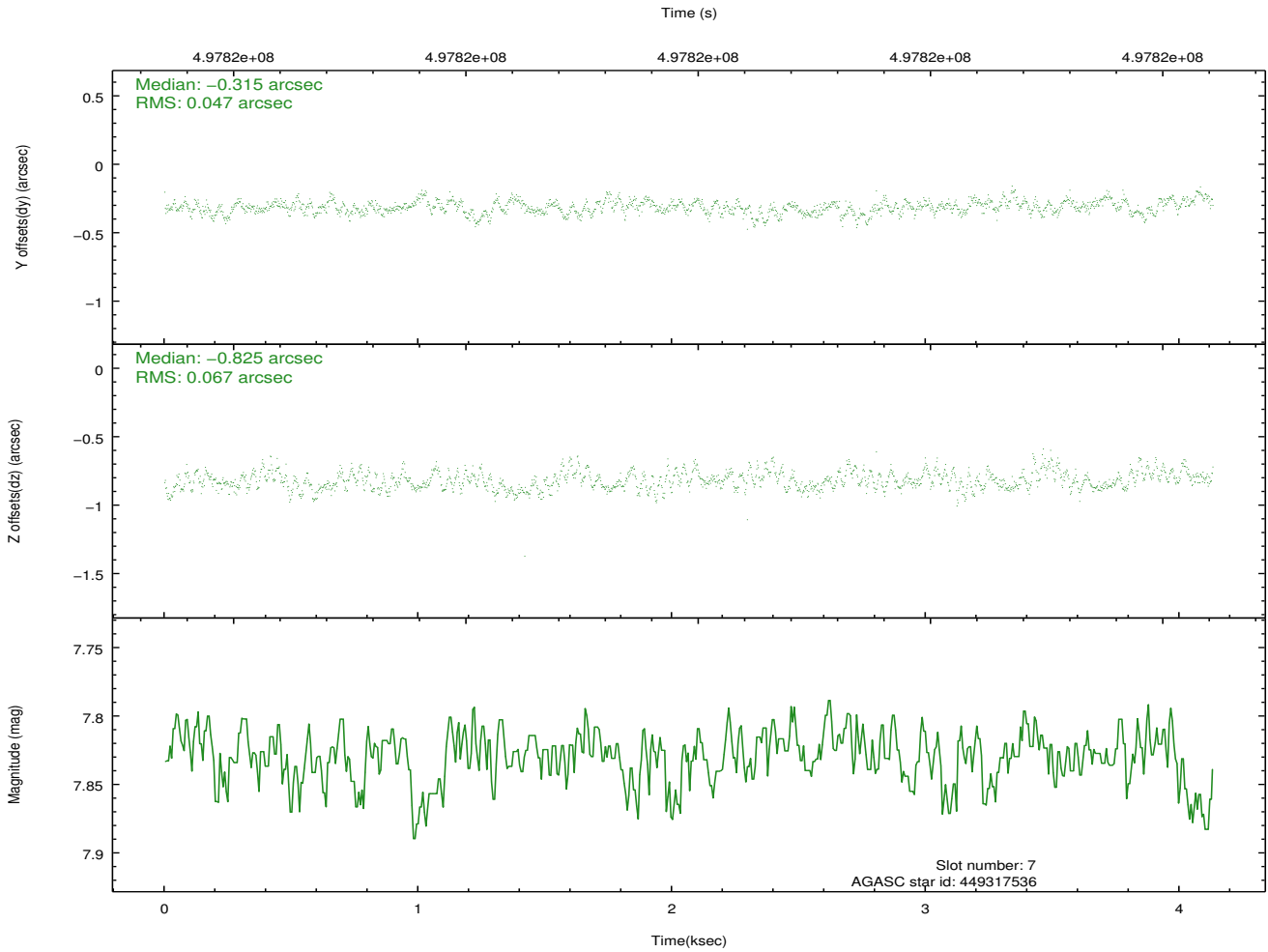
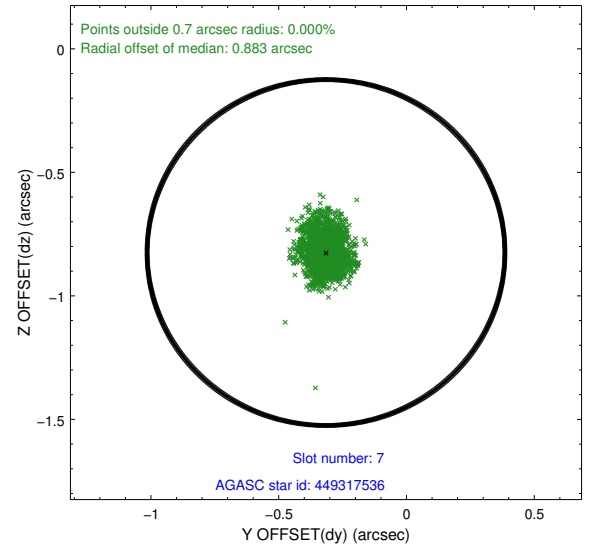
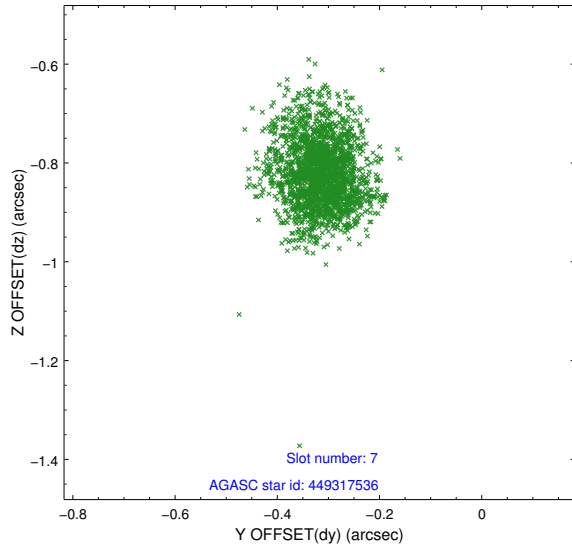
## 2.4.2 Slot 5



### 2.4.3 Slot 6

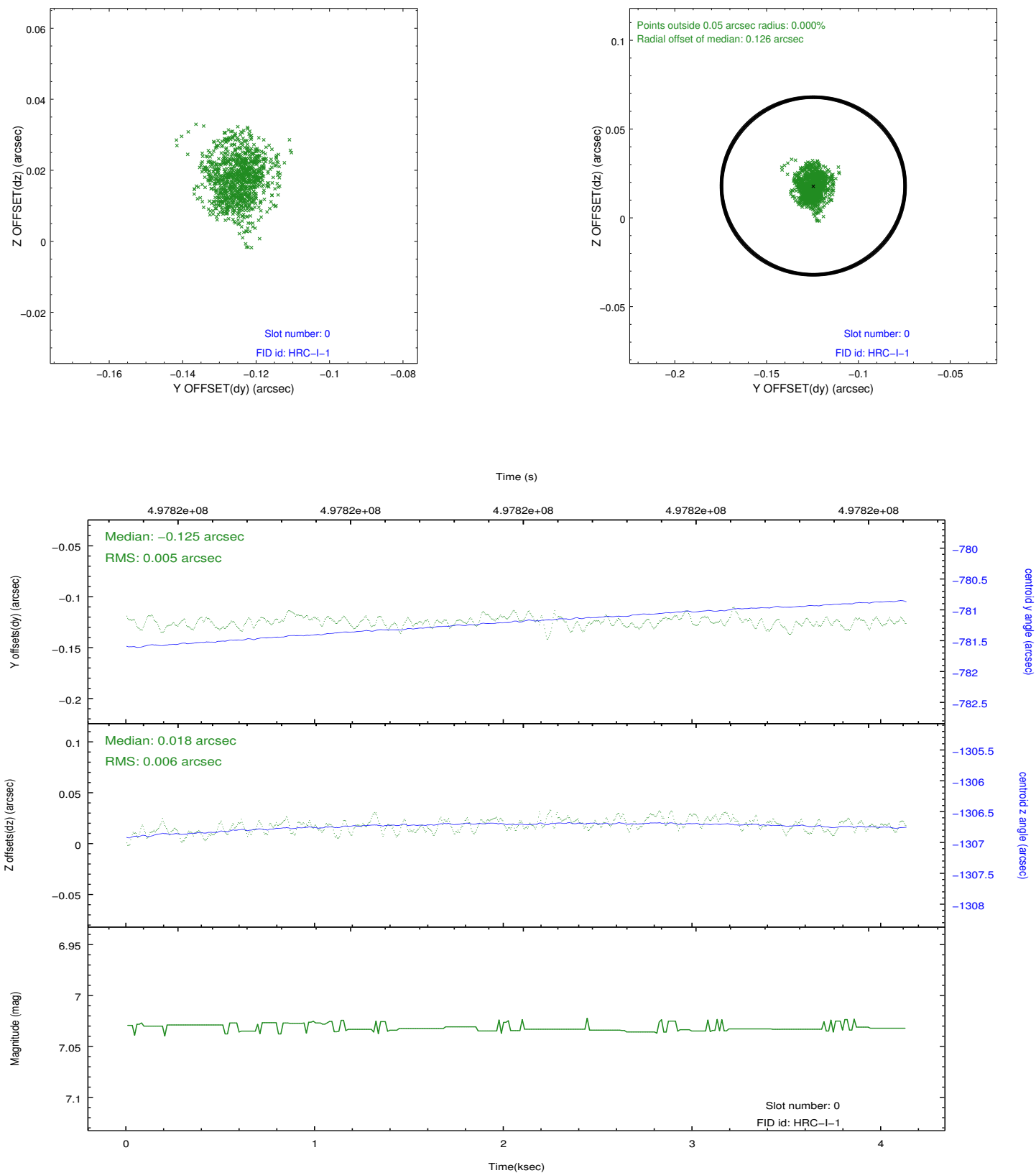


## 2.4.4 Slot 7

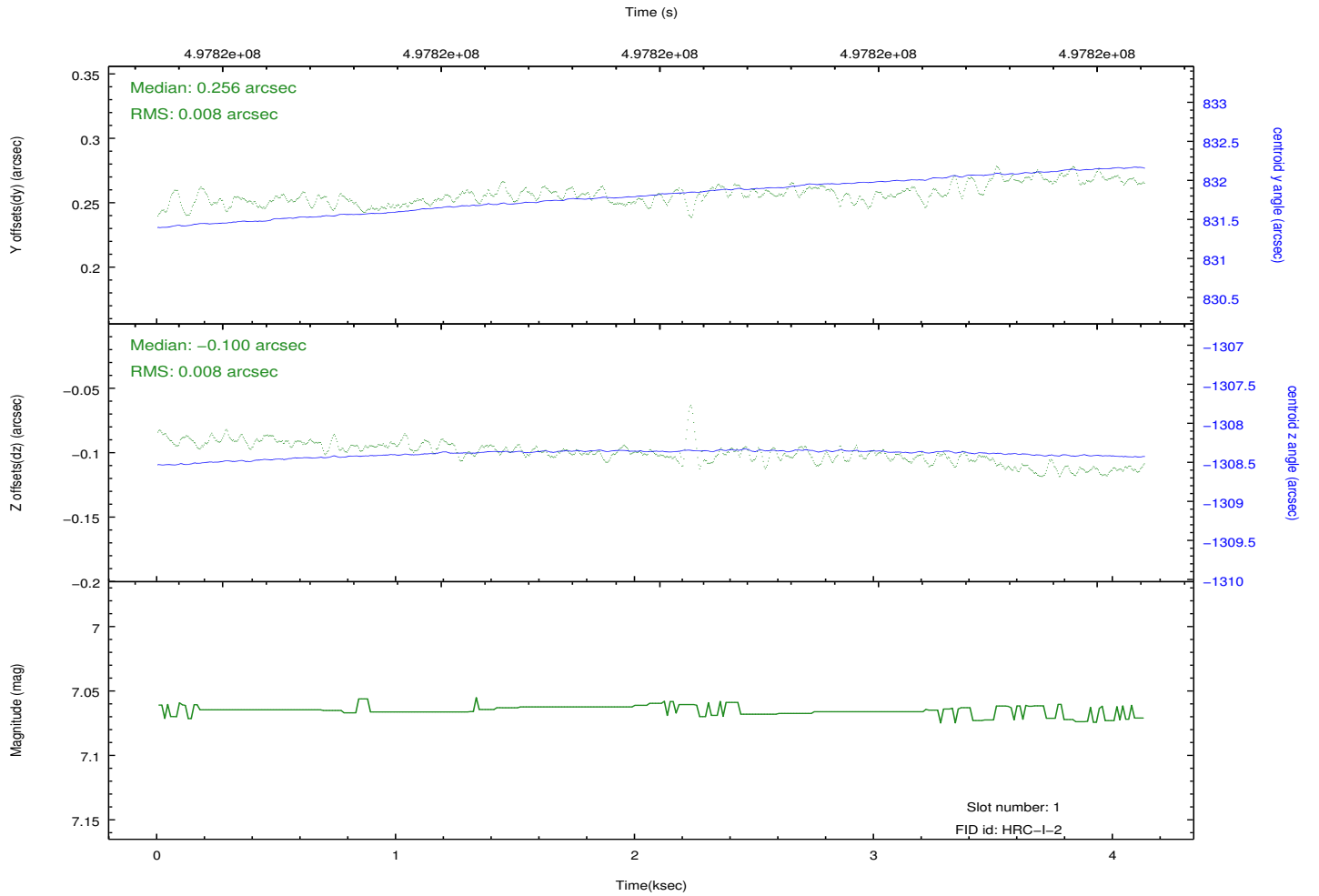
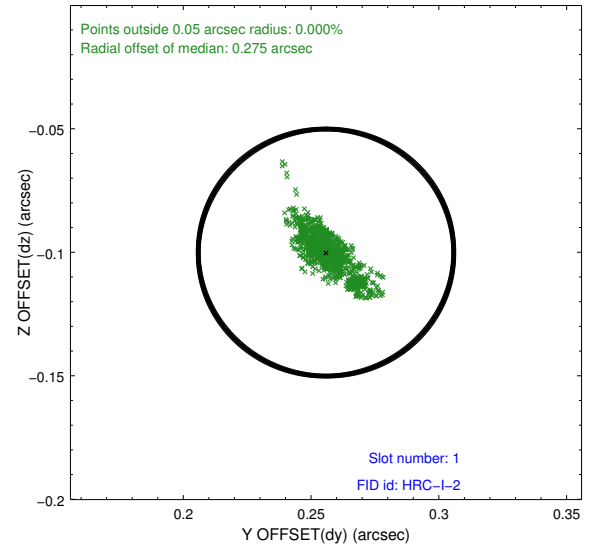
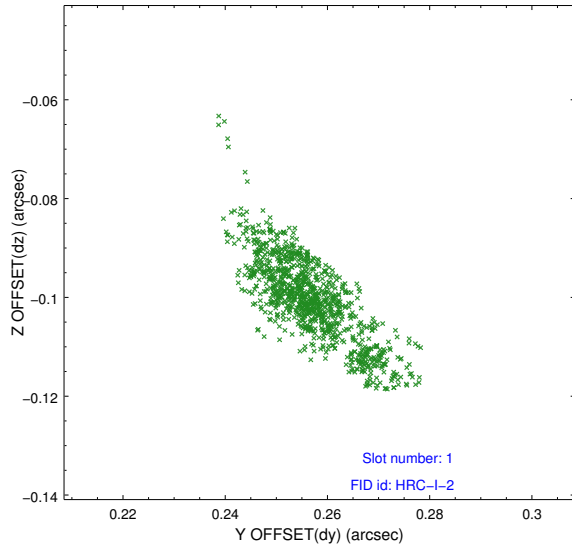


## 2.5 FID Slots

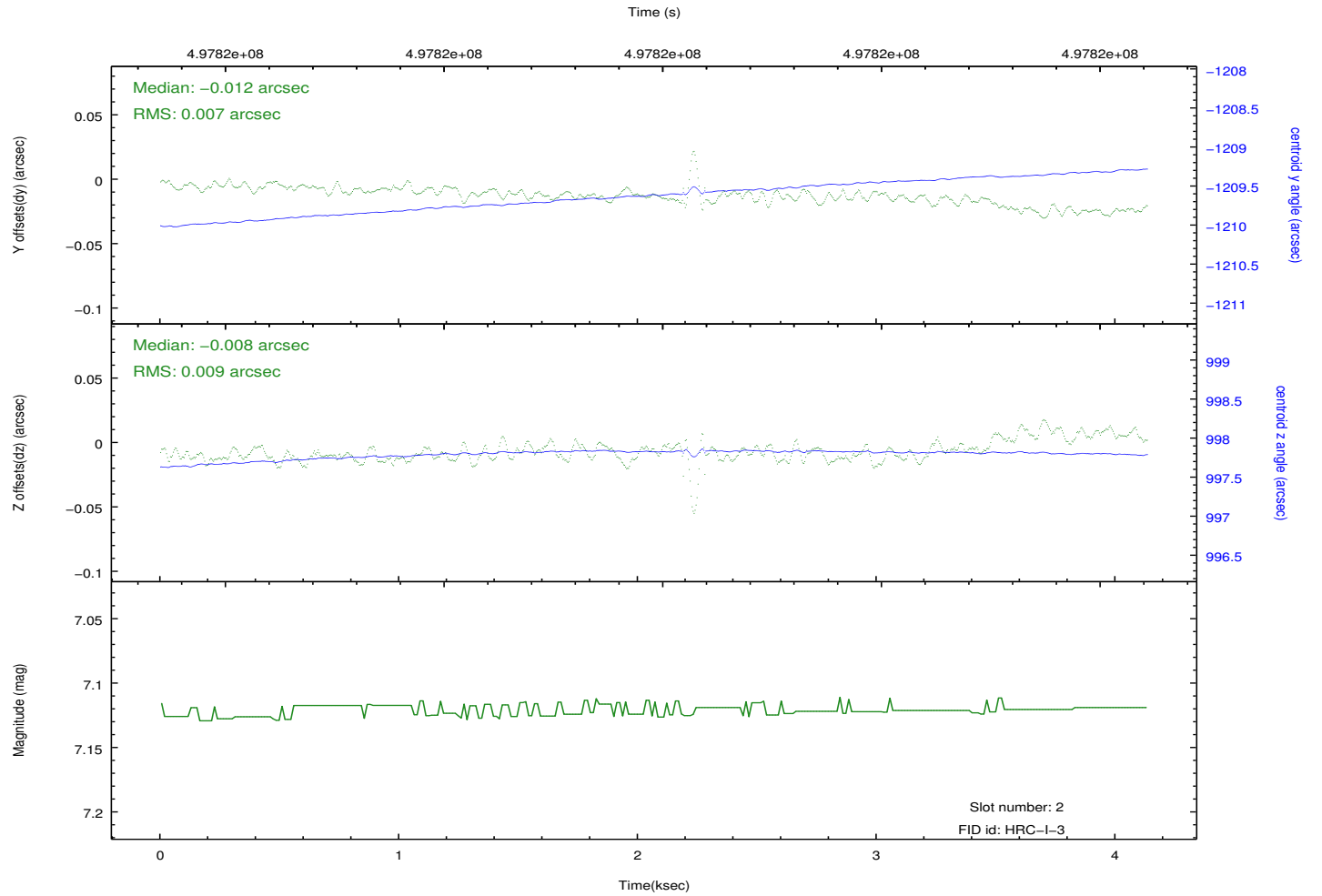
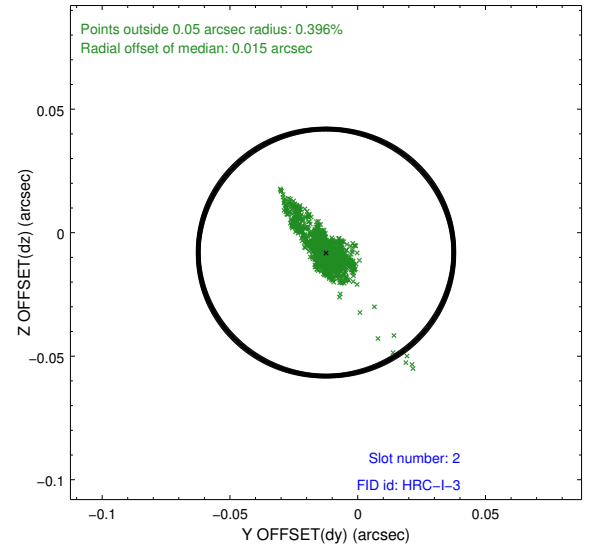
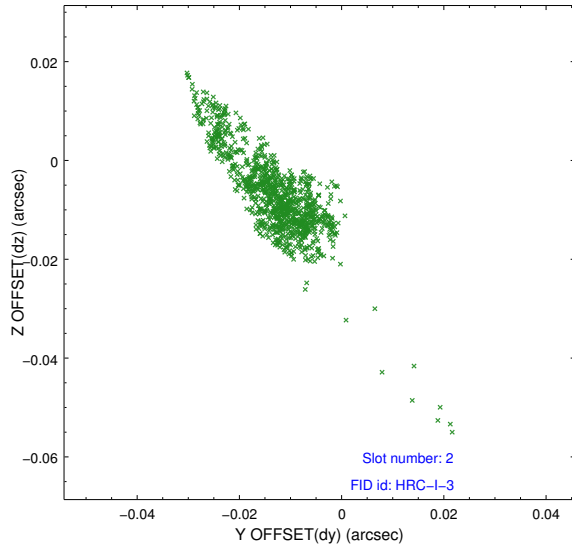
### 2.5.1 Slot 0



## 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)	2014.12.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.1320314760804

## A.2 Comments

The guide star in slot 3 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this star 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.