

# V&V Reference Report

## L2 ASCDS Version : 10.0.1

Observation 14546 - L2 Version 2  
Chandra X-Ray Center

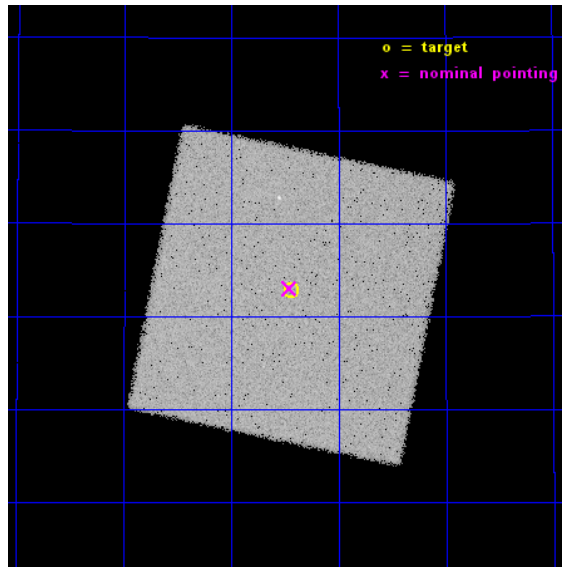
L2 Processing Date : Dec 6 2014

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# 1 Front

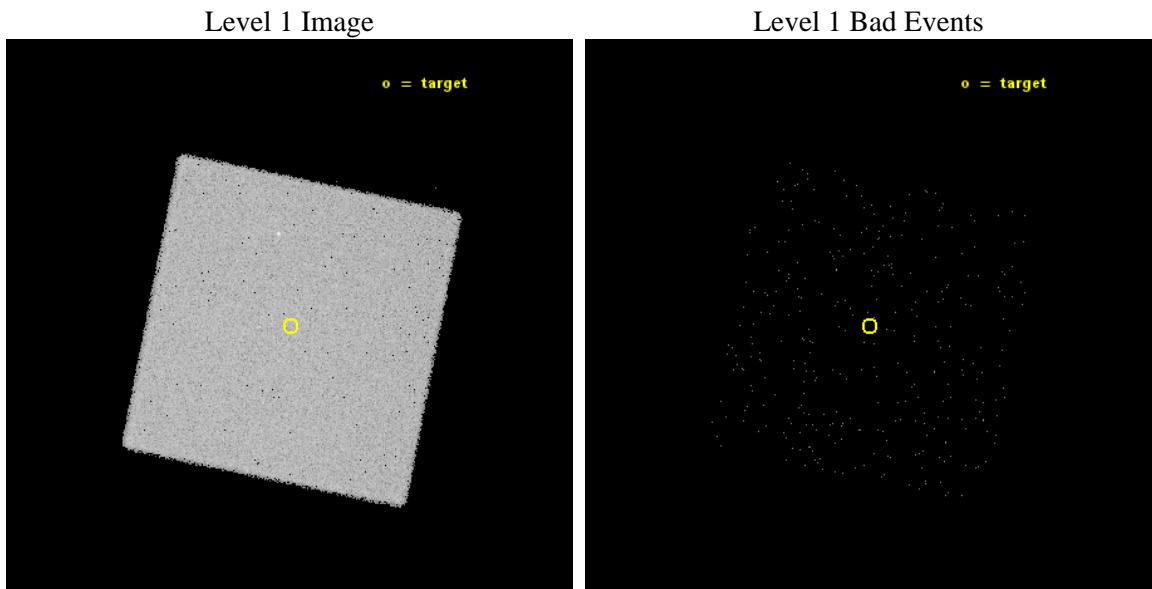
seq_num	200847	Sequence number
obs_id	14546	Observation id
title	Search for X-ray emission from a sample of luminous O-type subdwarfs	&#160
observer	Mr. Nicola La Palombara	Principal investigator
object	BD+37 1977	Source name
ra_targ	141.11	Observer's specified target RA [deg]
dec_targ	36.714806	Observer's specified target Dec [deg]
ra_nom	141.11443207695	Nominal RA [deg]
dec_nom	36.717464036484	Nominal Dec [deg]
roll_nom	56.474365750173	Nominal Roll [deg]
revision	2	Processing version of data
ontime	4132.0314759016	[s]
livetime	4100.8091155348	Ontime multiplied by DTCOR
l2events	239411	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	4132.0314759016	[s]
caldbver	4.6.4	&#160	l1events	428691	Number of level 1 events
date	2014-12-06T22:00:07	Date and time of file creation			
revision	2	Processing version of data			

### 2.1.3 Events

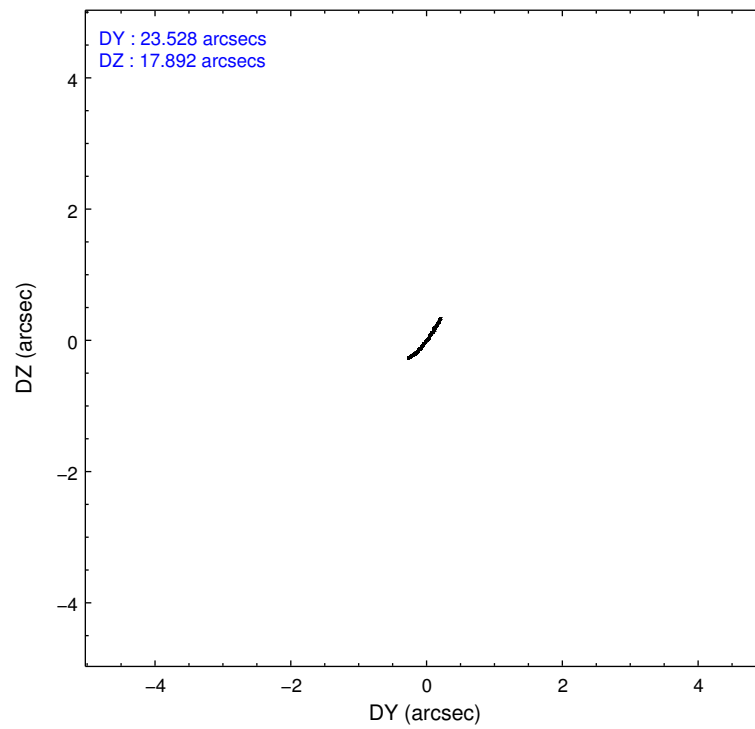
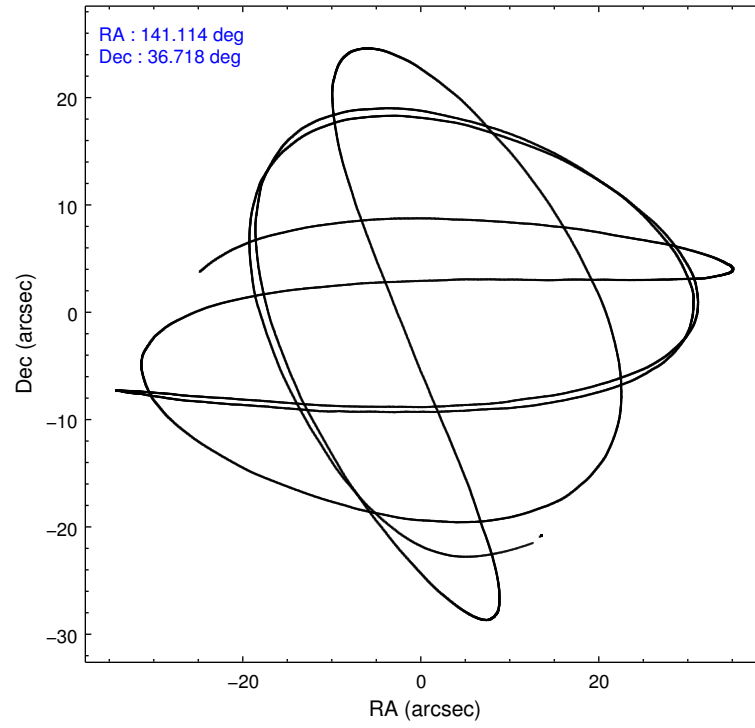
#### Level 1 Events

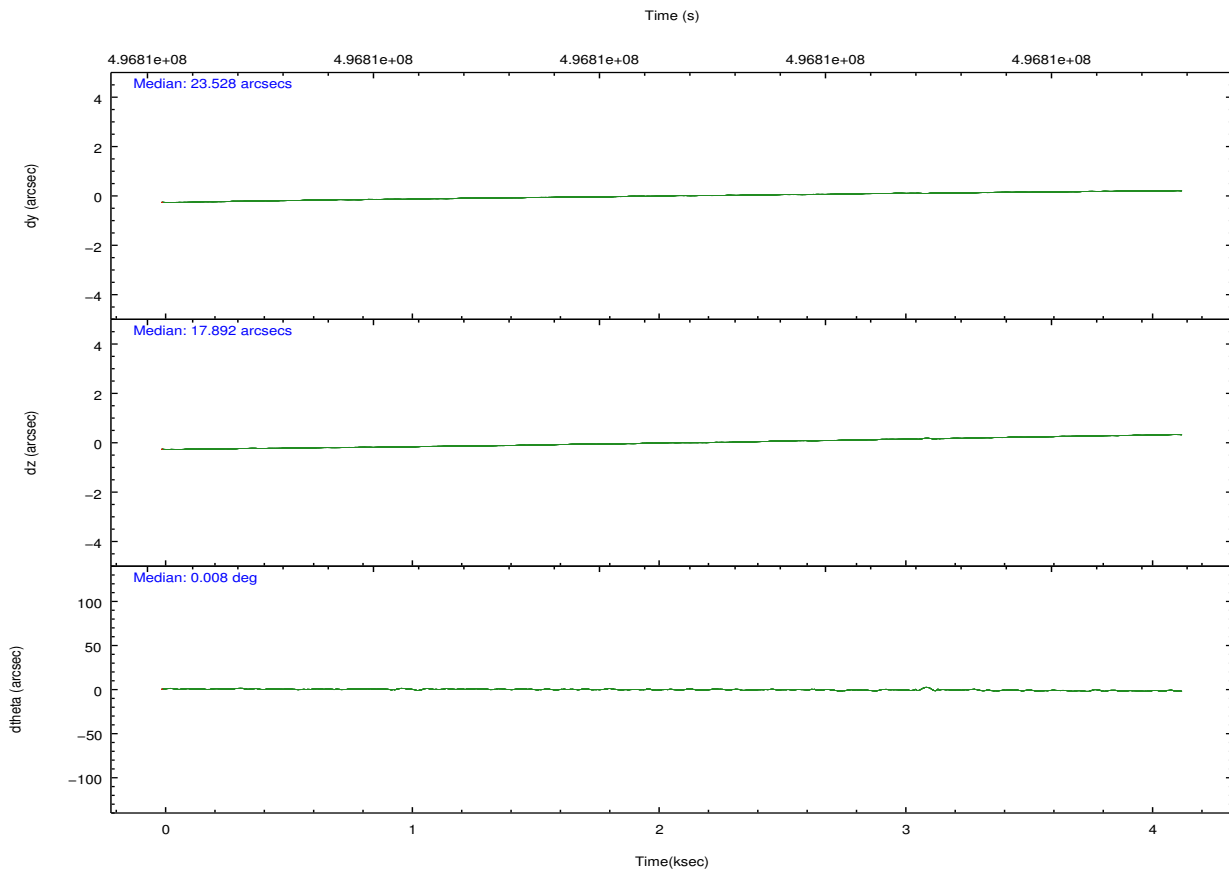
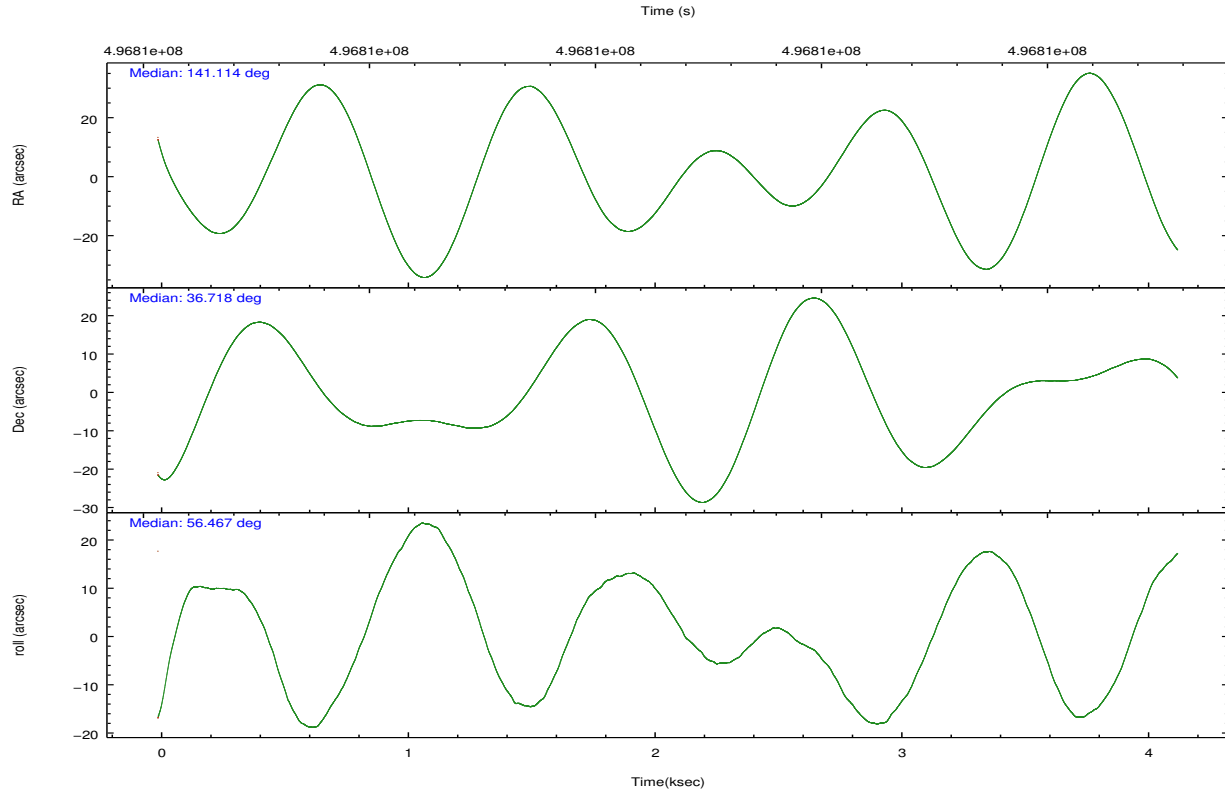
	<b>segment 0</b>
level 1 events	428691
rejected events	104102
rejected %	24%

## 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	141.113033	141.1144320769482			
[deg] Pointing Dec	36.690038	36.71746403648427			
[deg] Pointing Roll	56.570736	56.47436575017318			
[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)	496808375.184000	496806981.42439			
Observation start date	2013-09-29T02:18:28	2013-09-29T01:56:21			
[s] Observation end time (MET)	496812375.184000	496813339.49974			
Observation end date	2013-09-29T03:25:08	2013-09-29T03:42:19			

## 2.3 Aspect



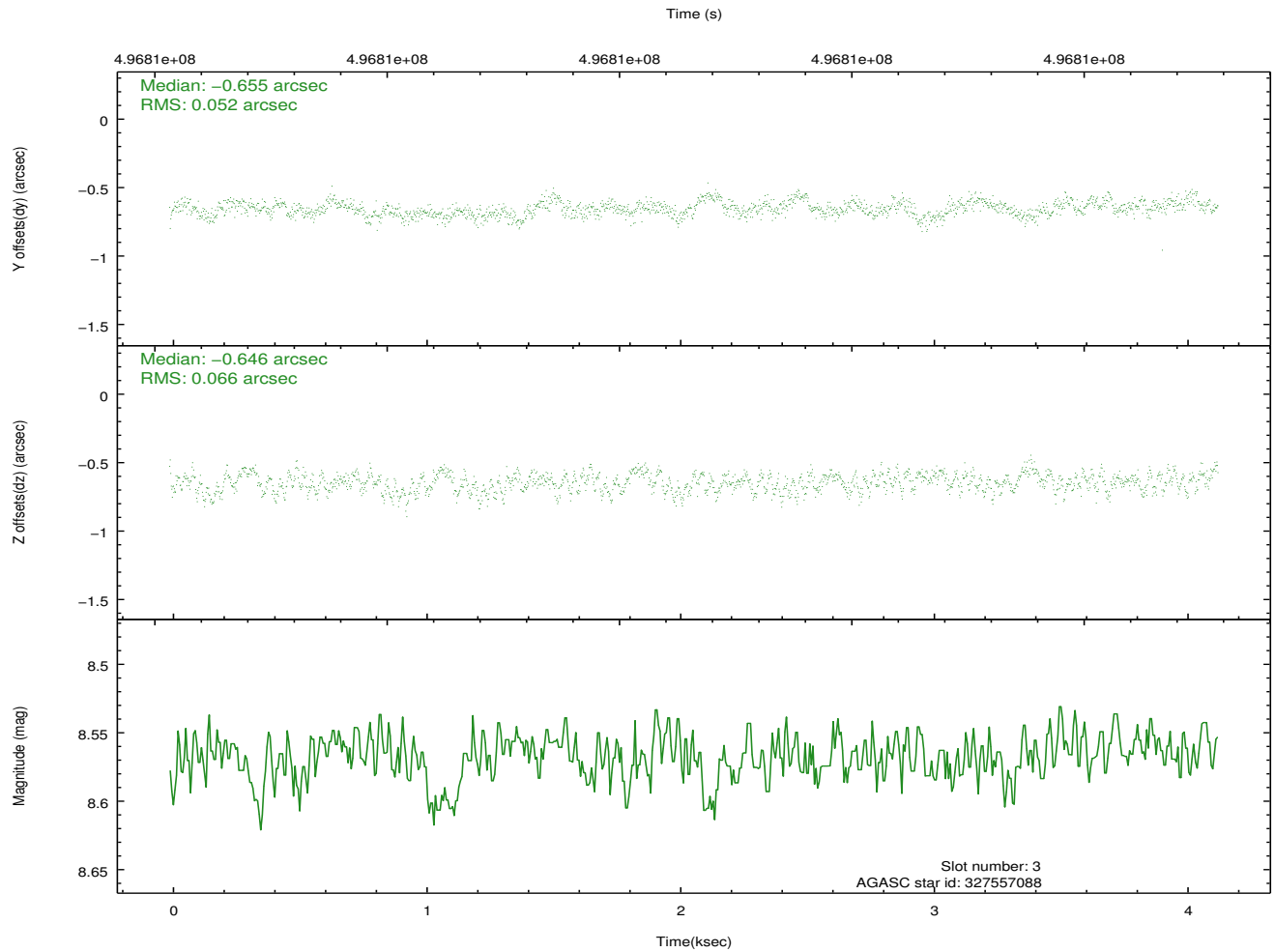
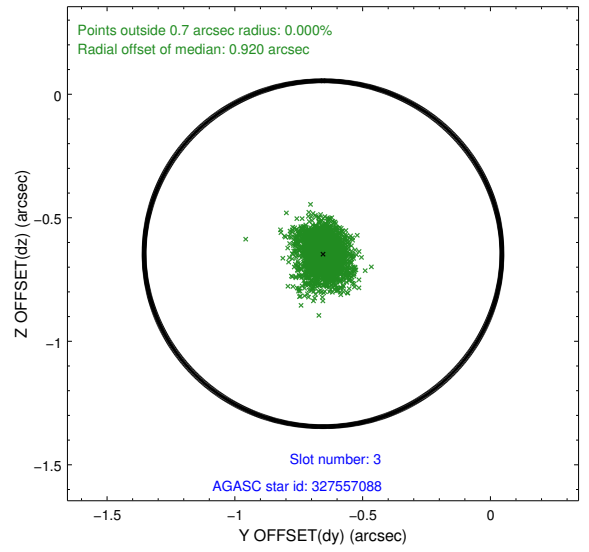
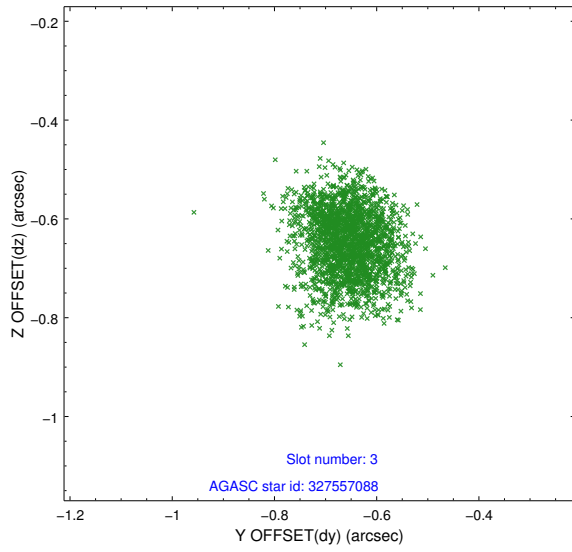


### Slot Statistics

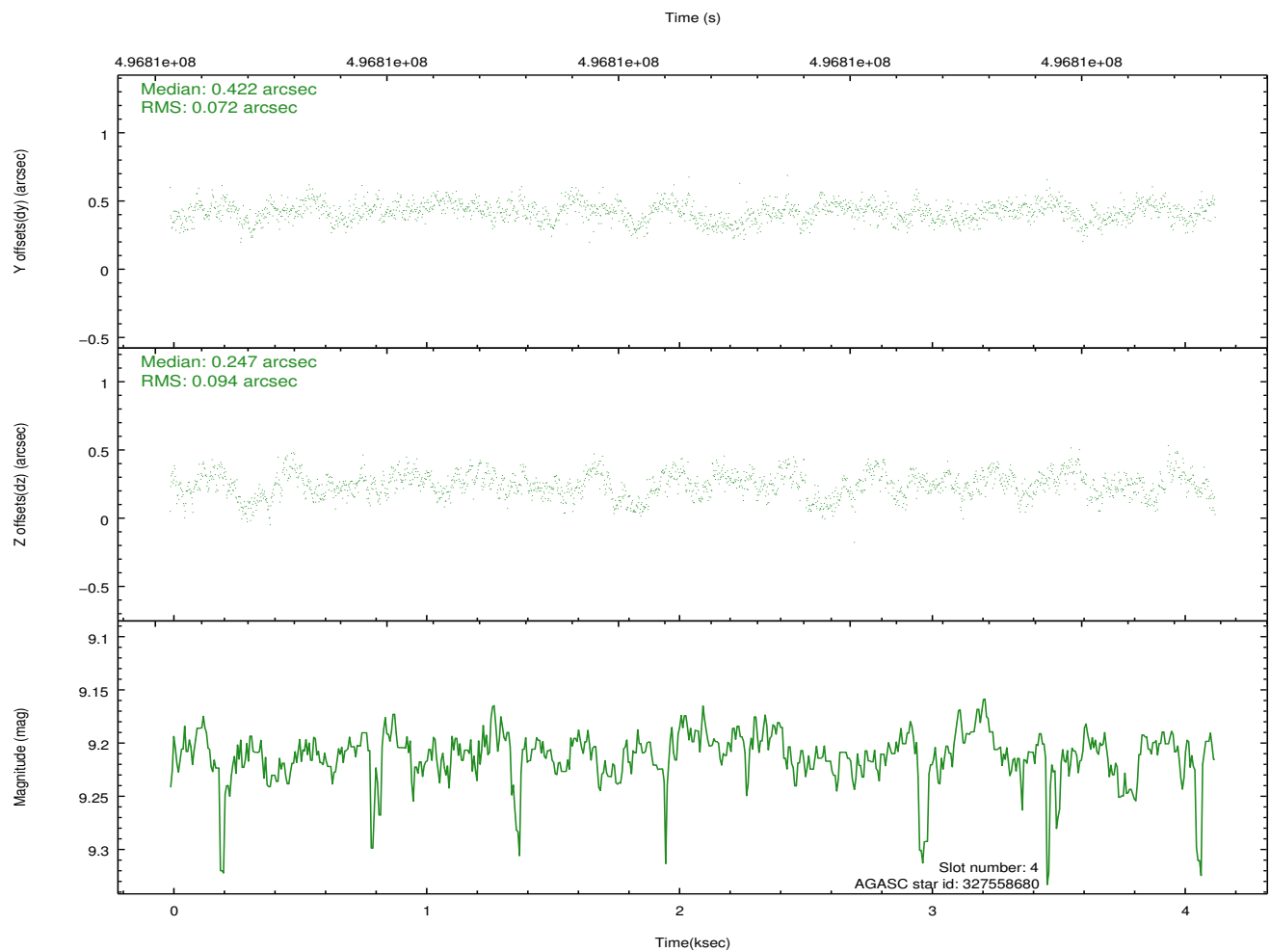
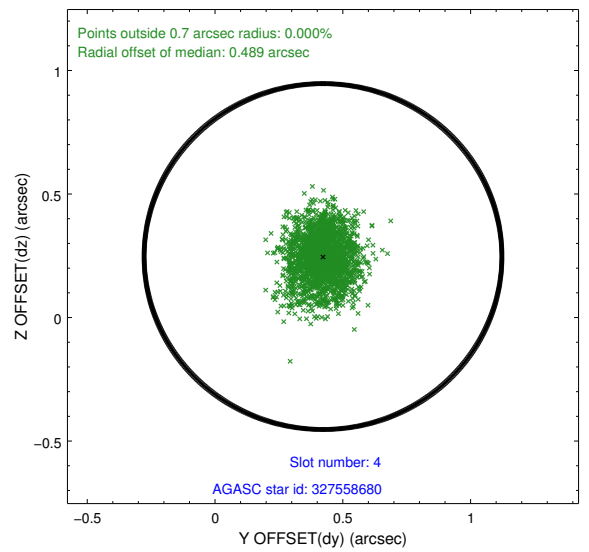
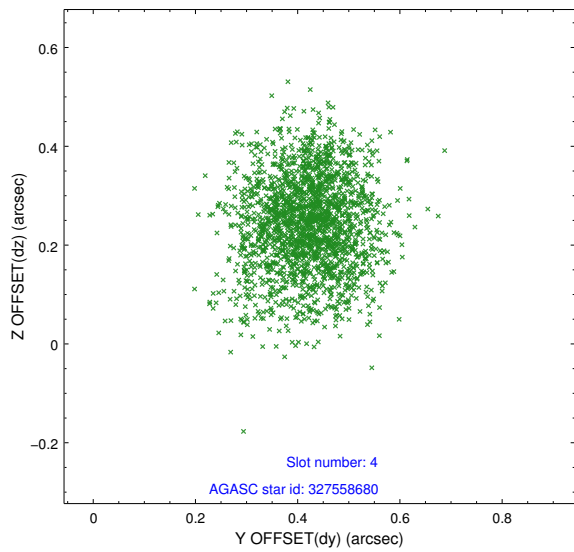
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		HRC-I-1	6.94	1009	-0.091	0.054	0.008	0.015	0.000000	0.000000	-779.62	-1306.03
1	FID		HRC-I-2	6.98	1008	0.237	-0.124	0.008	0.014	0.000000	0.000000	832.56	-1309.04
2	FID		HRC-I-3	7.02	1009	-0.027	-0.020	0.007	0.015	0.000000	0.000000	-1207.26	997.16
3	GUIDE	used	327557088	8.57	2016	-0.655	-0.646	0.089	0.144	140.796557	37.388041	1598.23	2140.07
4	GUIDE	used	327558680	9.21	2006	0.422	0.247	0.126	0.204	140.866436	36.073180	-2249.49	-621.01
5	GUIDE	used	327685736	7.07	2017	-0.004	0.042	0.108	0.185	141.093695	36.587090	-342.51	-157.39
6	GUIDE	used	327688696	7.21	2017	0.014	0.148	0.091	0.147	141.671671	36.457453	195.55	-1809.26
7	GUIDE	used	327691432	8.88	2016	0.206	0.220	0.115	0.190	141.086157	36.212279	-1478.55	-883.41

## 2.4 Star Slots

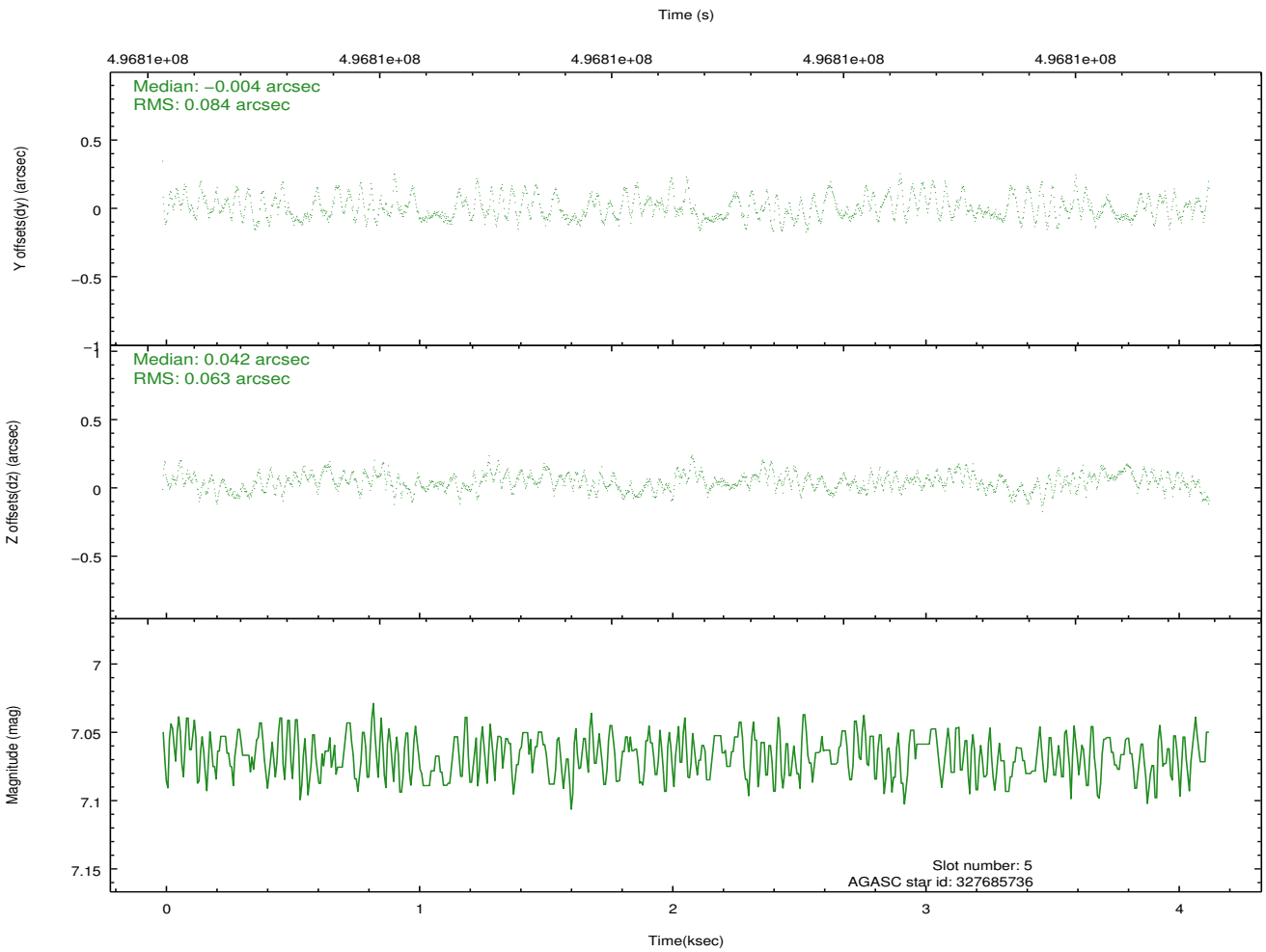
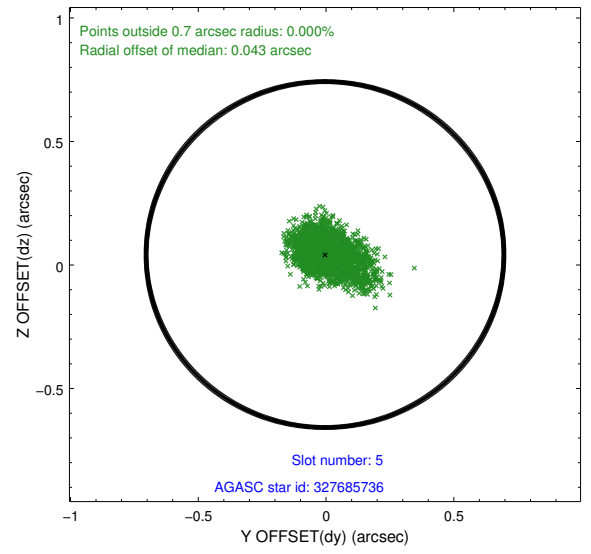
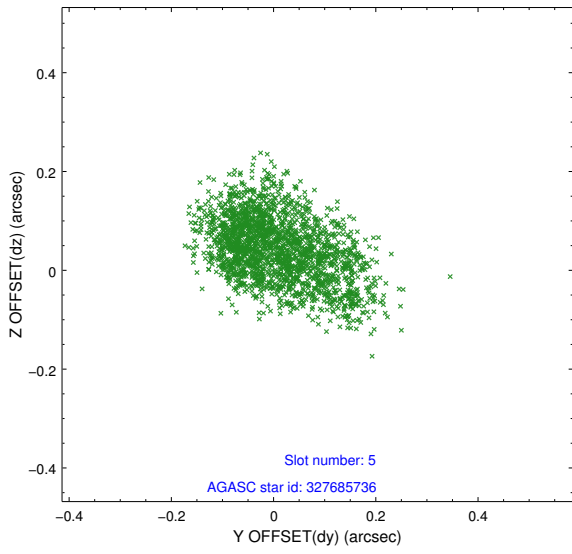
### 2.4.1 Slot 3



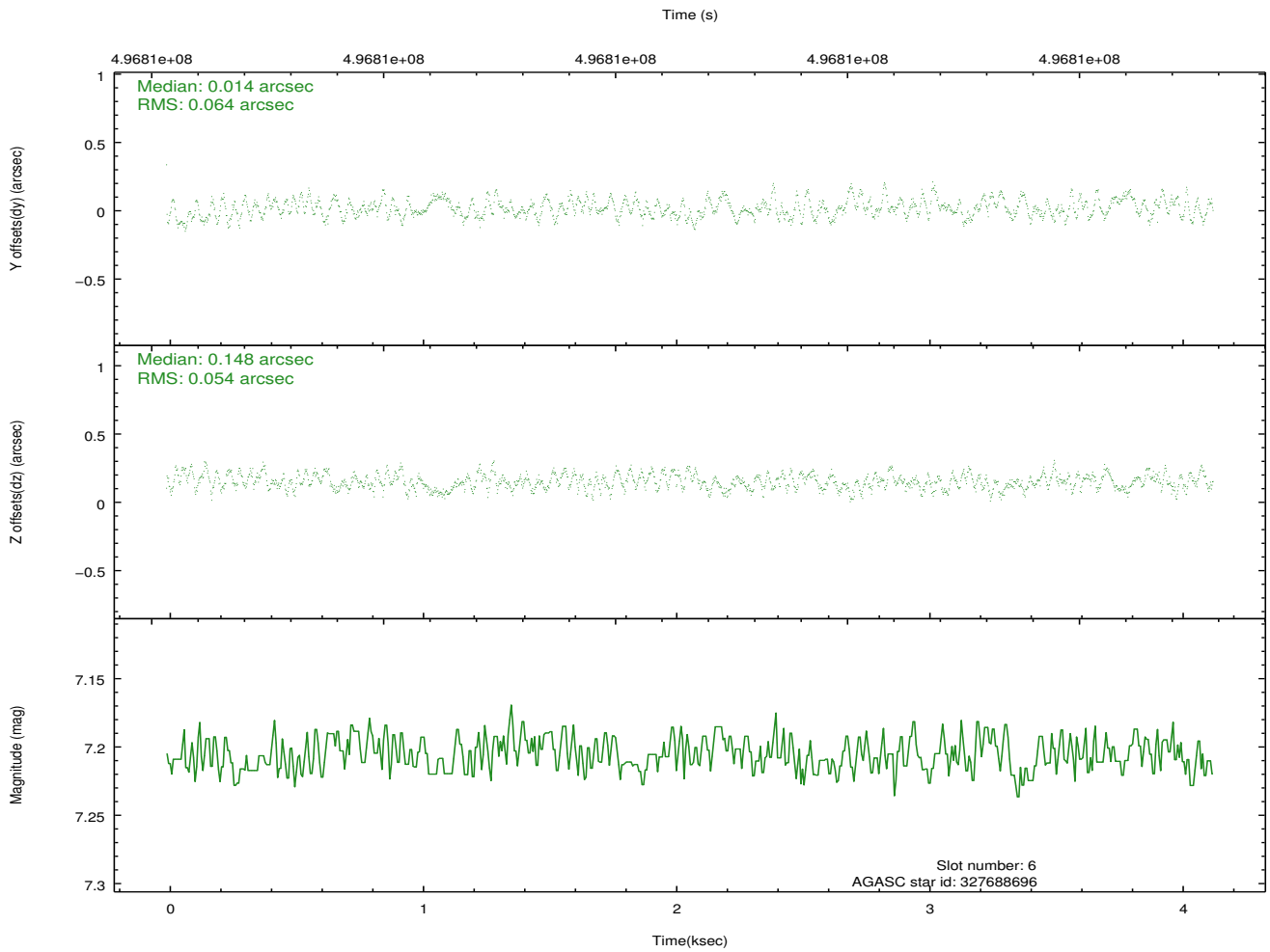
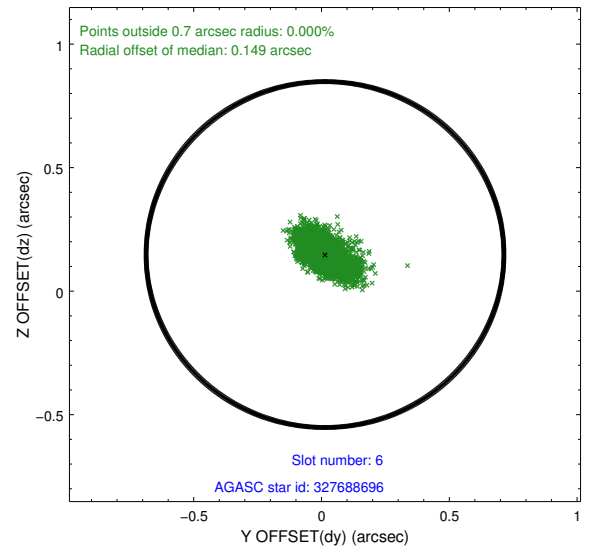
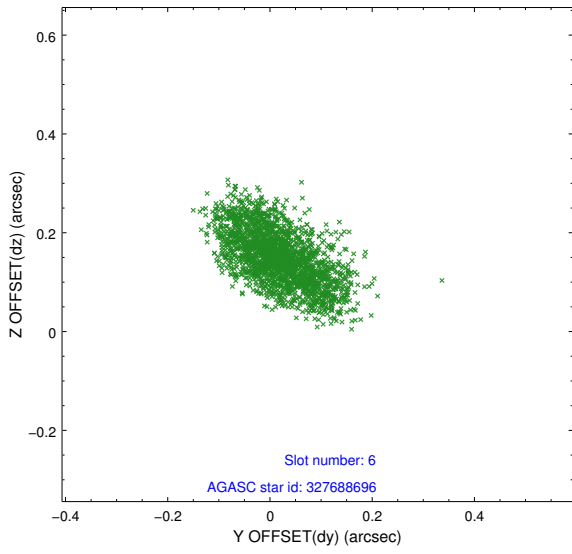
## 2.4.2 Slot 4



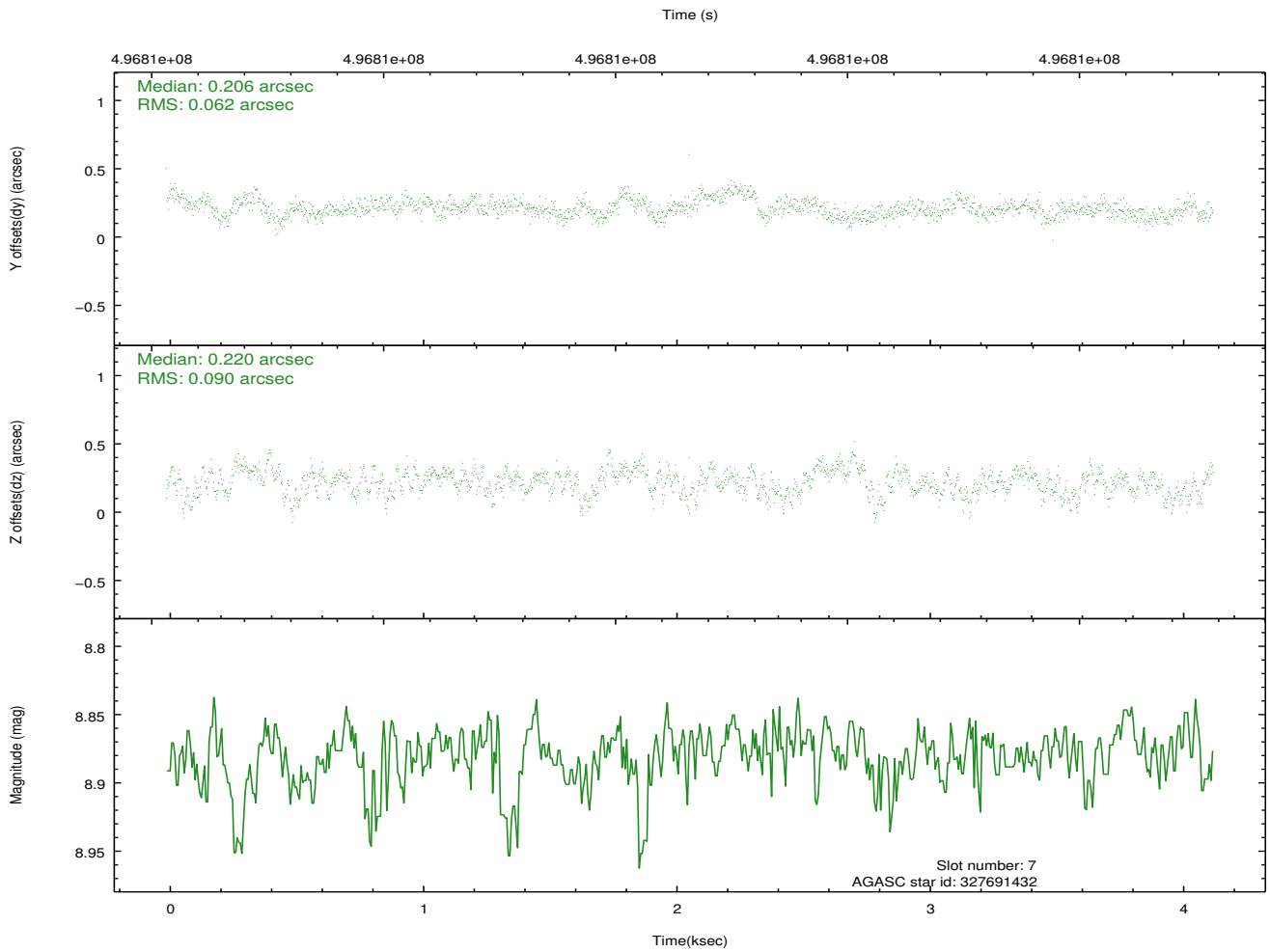
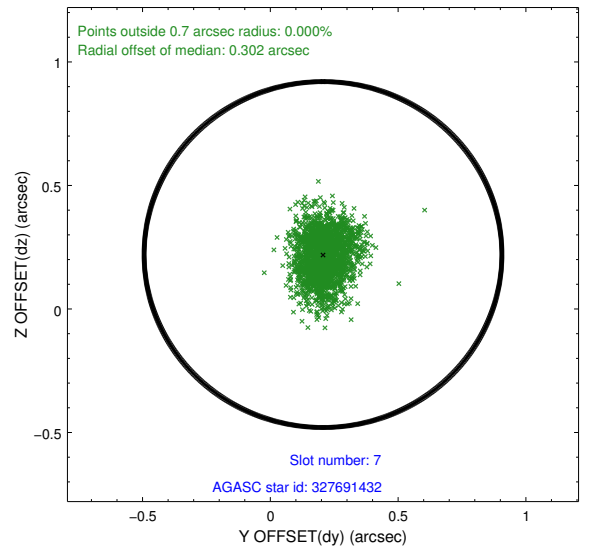
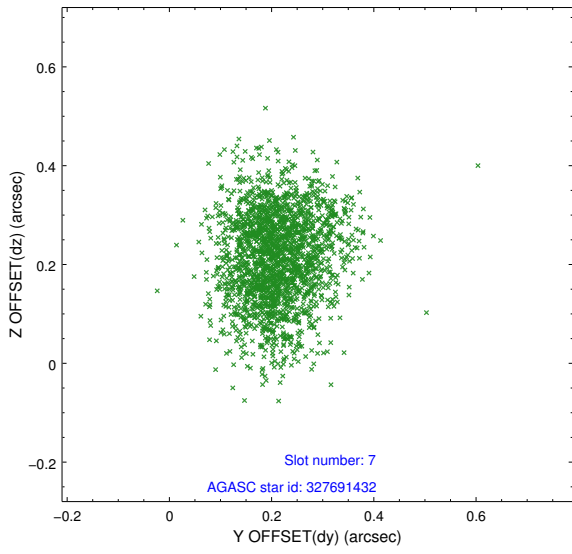
### 2.4.3 Slot 5



### 2.4.4 Slot 6

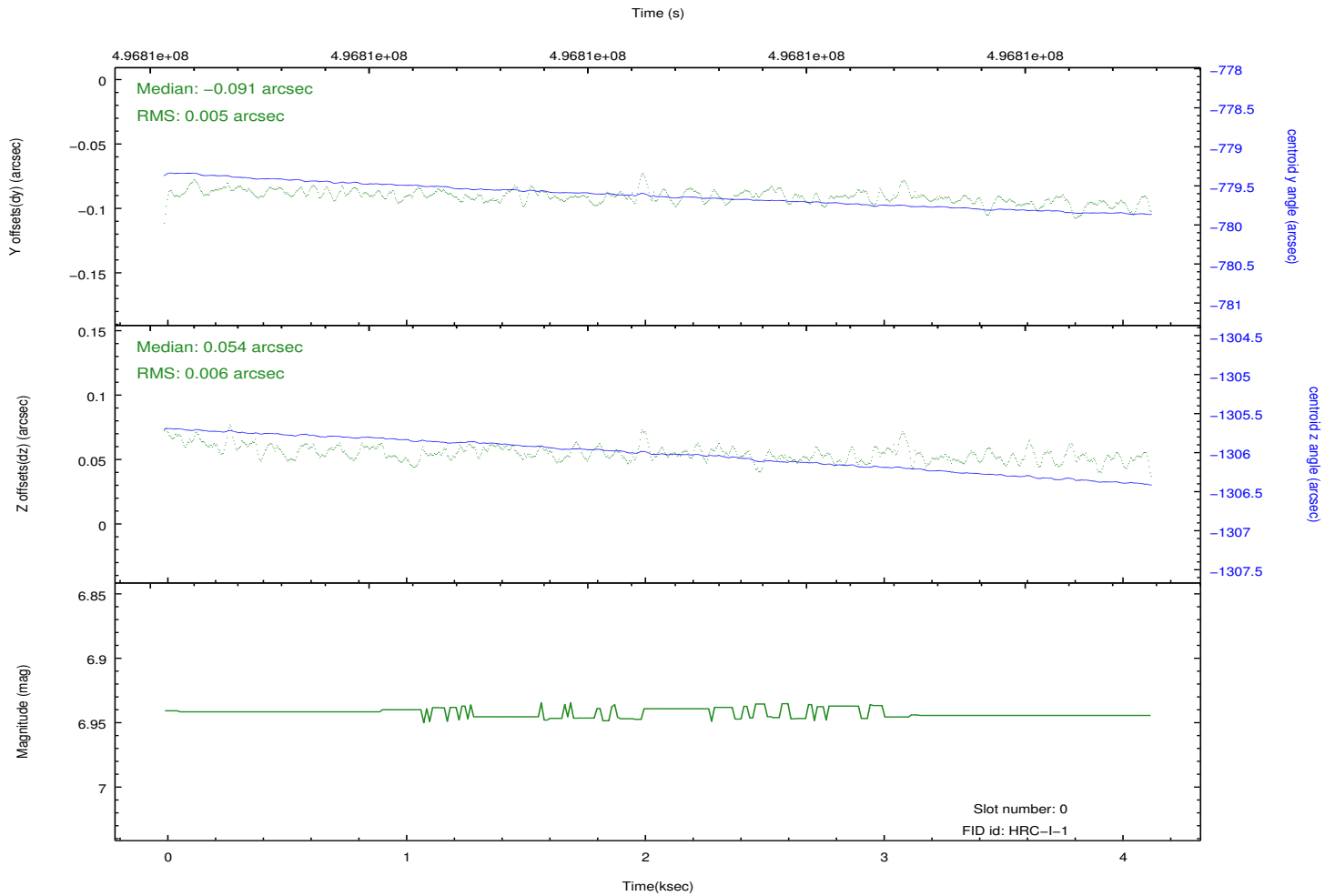
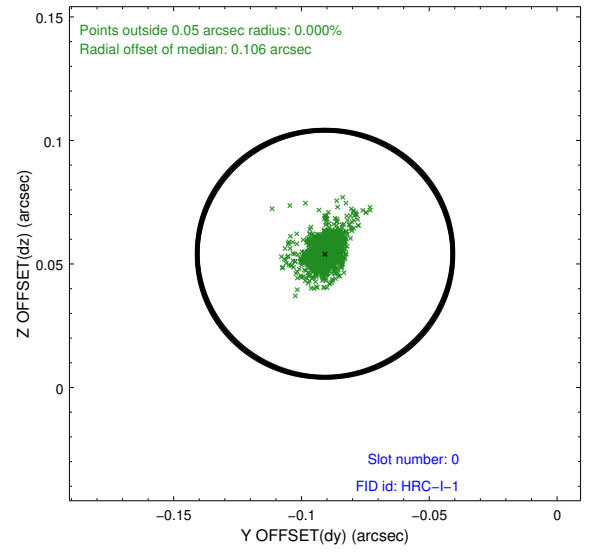
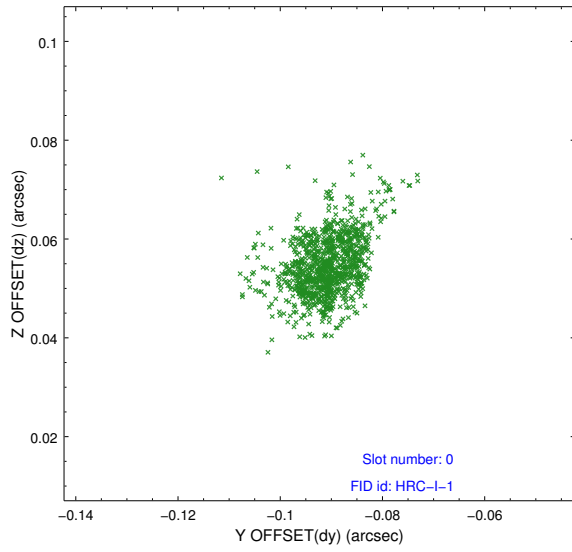


### 2.4.5 Slot 7

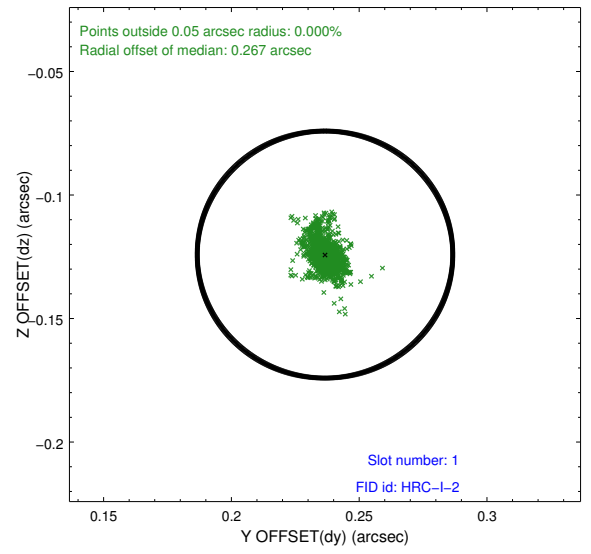
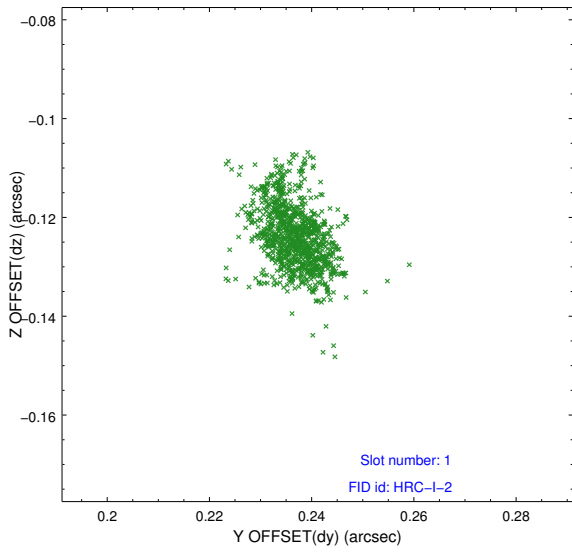


## 2.5 FID Slots

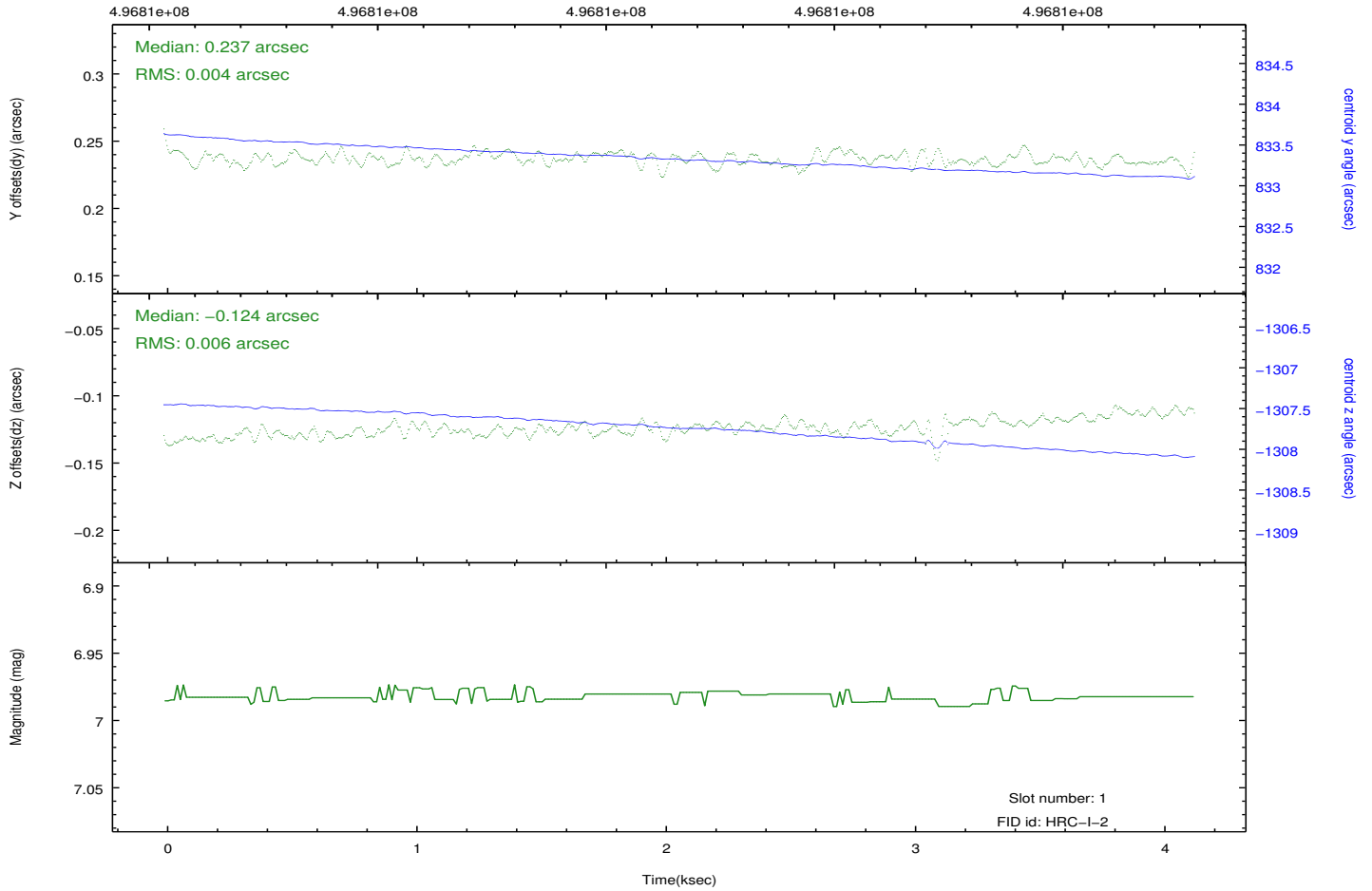
### 2.5.1 Slot 0



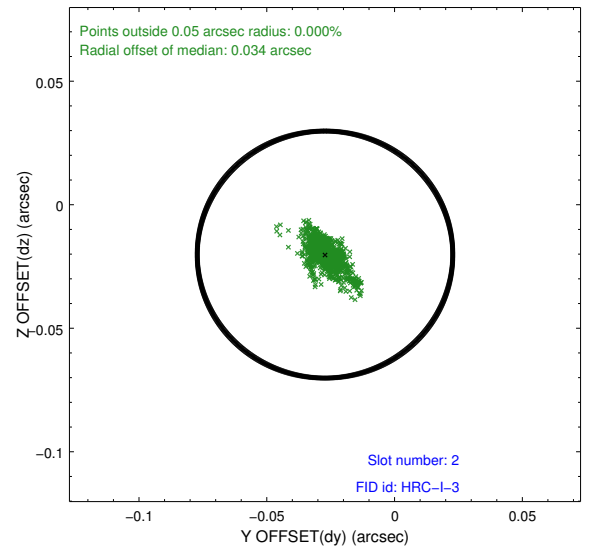
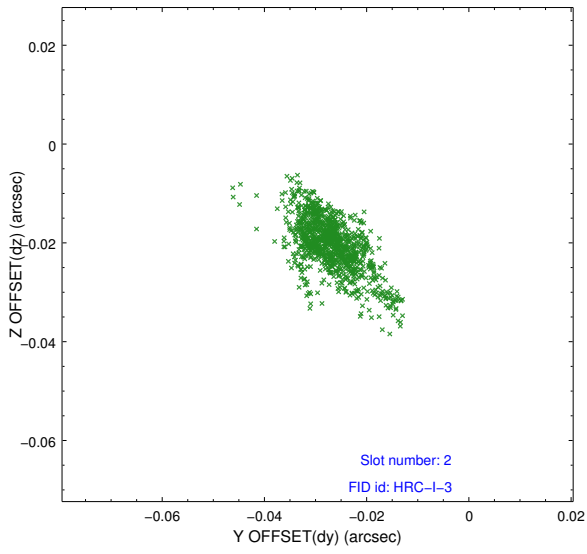
## 2.5.2 Slot 1



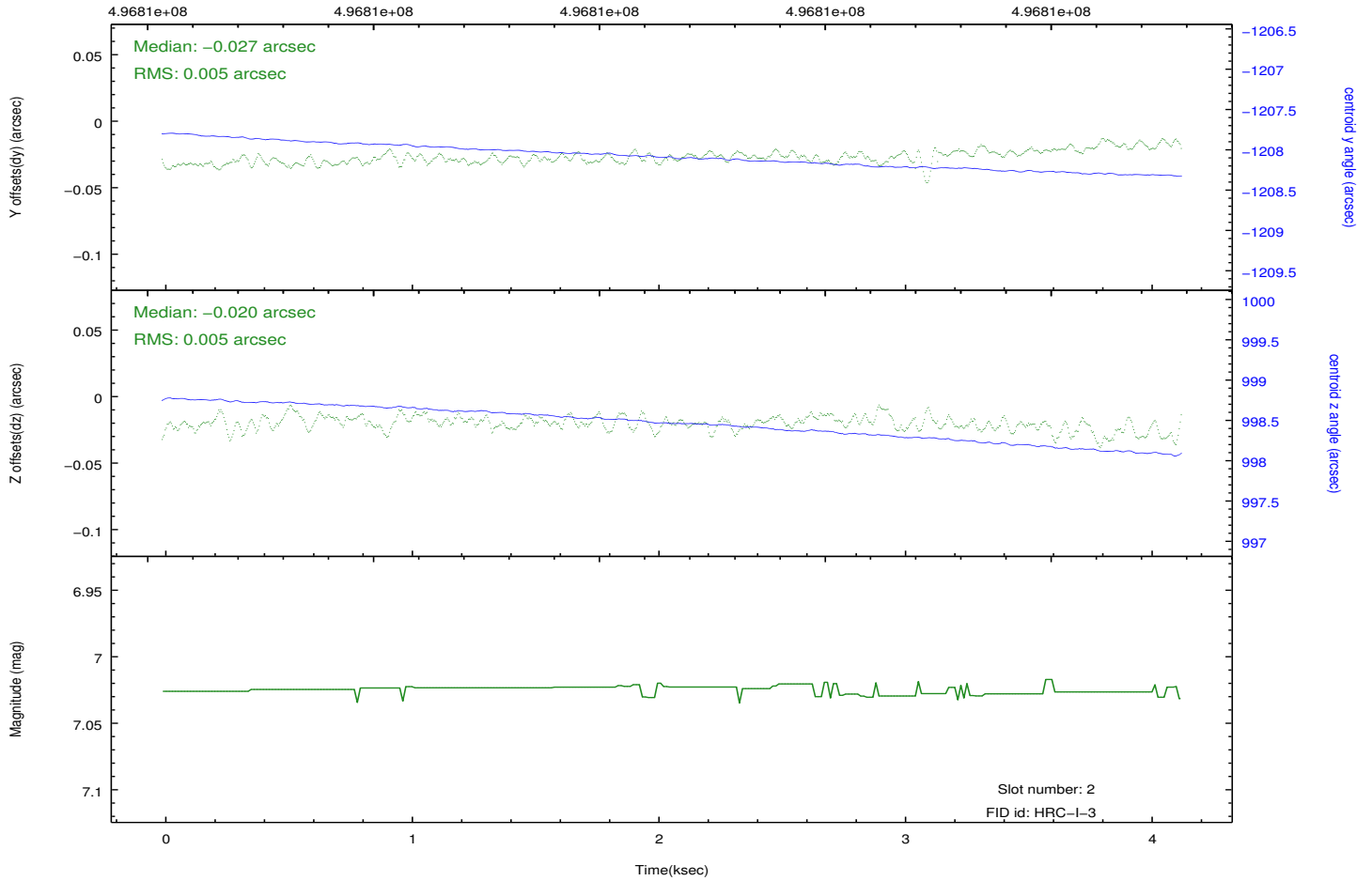
Time (s)



### 2.5.3 Slot 2



Time (s)



# A Summary

## A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2014.12.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.1320314759016

## 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.