

# V&V Reference Report

## L2 ASCDS Version : 10

Observation 15425 - L2 Version 2  
Chandra X-Ray Center

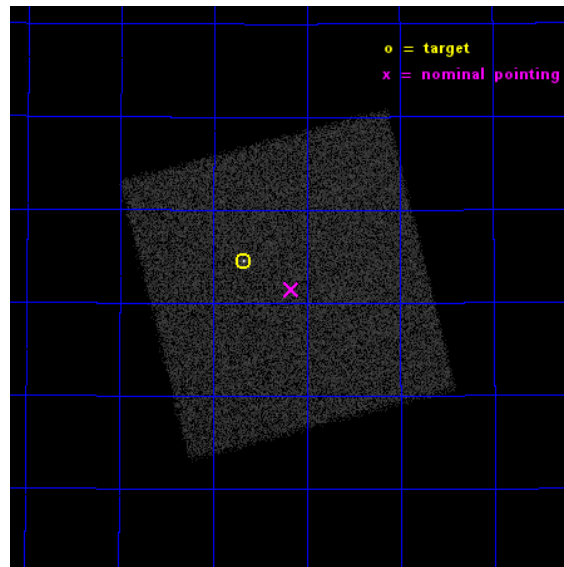
L2 Processing Date : Dec 6 2014

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# 1 Front

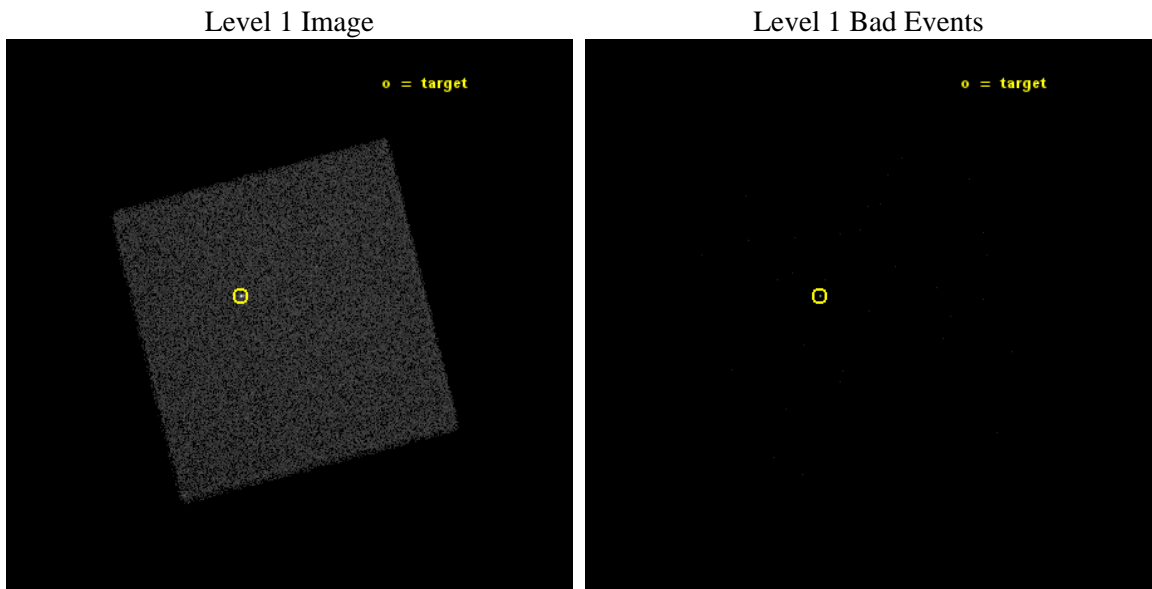
seq_num	291104	Sequence number
obs_id	15425	Observation id
title	AO-14 Calibration Observations to Monitor the Spatial Variations in the HRC-I Gain	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	ArLac	Source name
ra_targ	332.17	Observer's specified target RA [deg]
dec_targ	45.742306	Observer's specified target Dec [deg]
ra_nom	332.04111452983	Nominal RA [deg]
dec_nom	45.691116347676	Nominal Dec [deg]
roll_nom	210.52894647409	Nominal Roll [deg]
revision	2	Processing version of data
ontime	1180.0313144326	[s]
livetime	1170.954730237	Ontime multiplied by DTCOR
l2events	71466	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	1000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	1180.0313144326	[s]
caldbver	4.6.4	&#160	l1events	112842	Number of level 1 events
date	2014-12-06T14:12:45	Date and time of file creation			
revision	2	Processing version of data			

### 2.1.3 Events

#### Level 1 Events

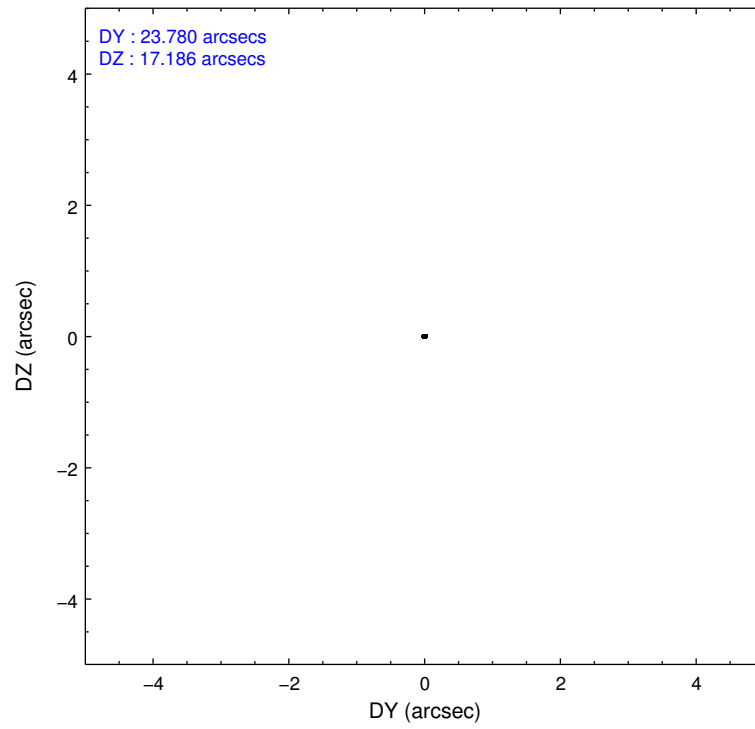
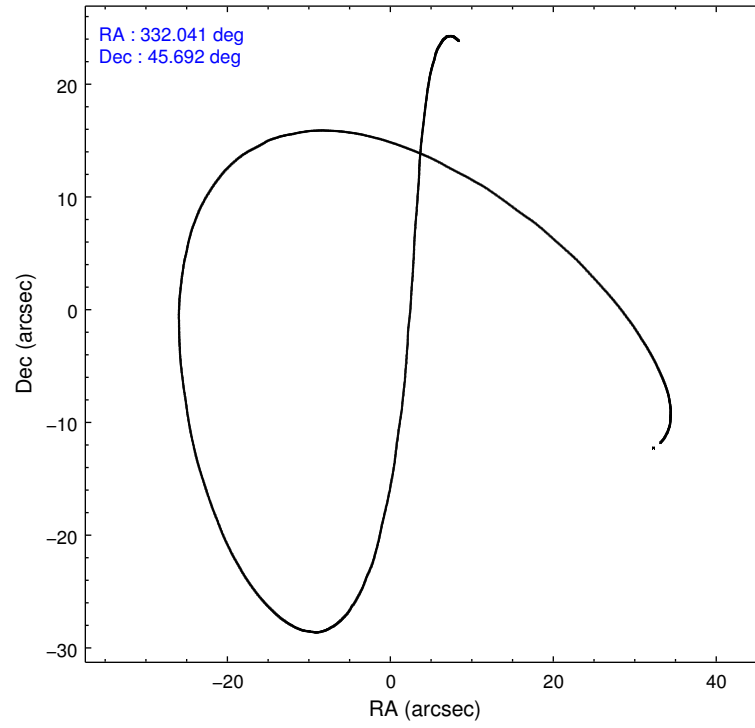
	<b>segment 0</b>
level 1 events	112842
rejected events	17519
rejected %	15%

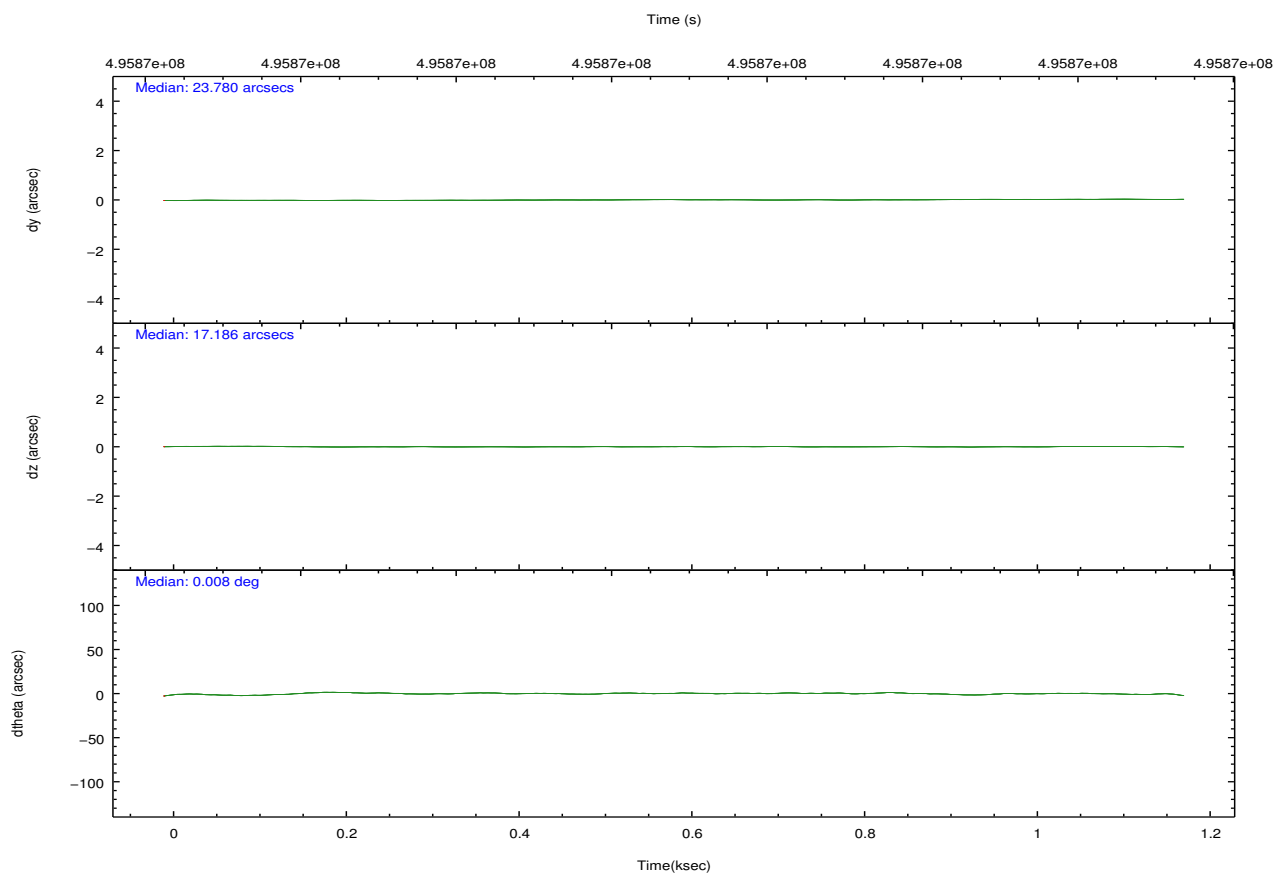
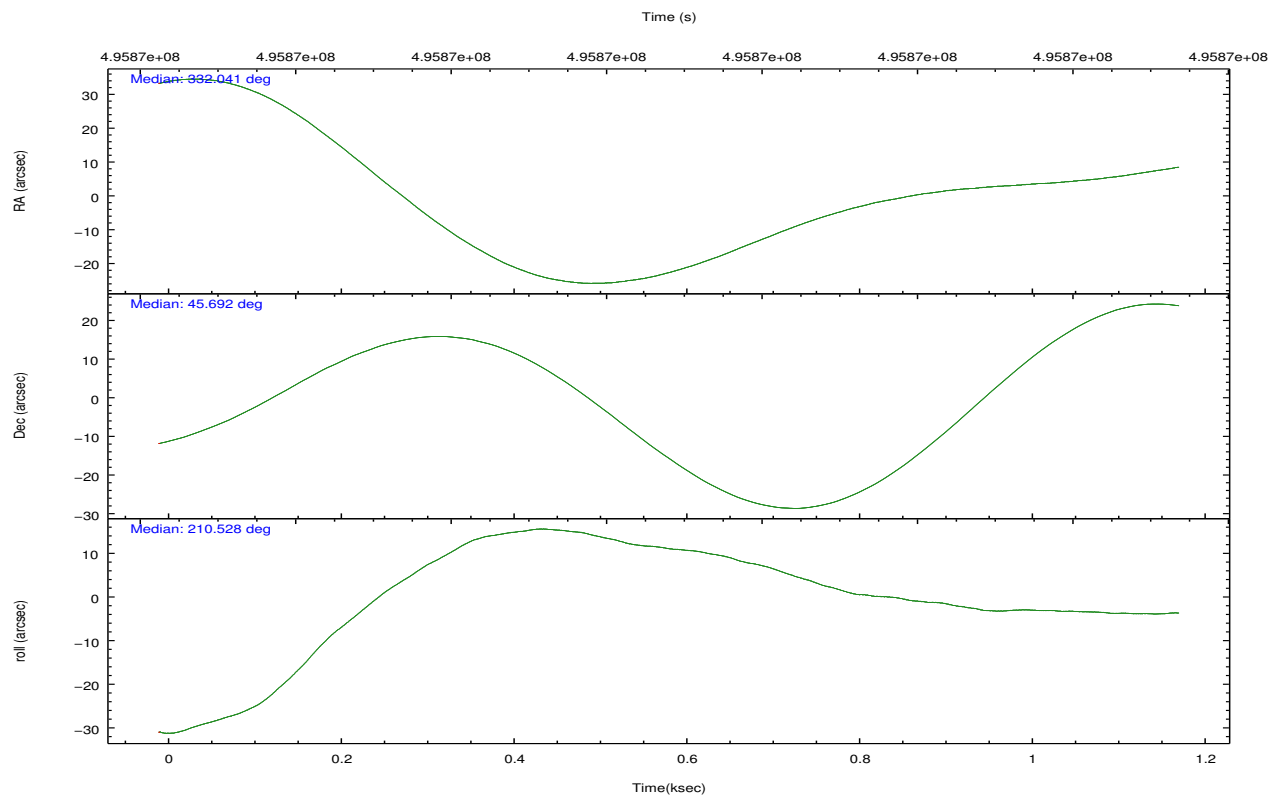
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	HRC	HRC
Detector	HRC-I	HRC-I
Grating	NONE	NONE
Data mode	OBSERVING	OBSERVING
Observation mode	POINTING	POINTING
[deg] Pointing RA	332.059091	332.0411145298307
[deg] Pointing Dec	45.714769	45.69111634767582
[deg] Pointing Roll	210.611573	210.5289464740922
[mm] SIM focus pos	-1.040293	-1.038866356238299
[mm] SIM defocus	0	0.001426264420575141
[mm] SIM translation stage pos	126.985494	126.9854943052878
[mm] SIM translation stage offset	0	-5.413686238853188e-06
[s] Observation start time (MET)	495872457.184000	495872081.4358
Observation start date	2013-09-18T06:19:50	2013-09-18T06:14:41
[s] Observation end time (MET)	495873457.184000	495873594.33588
Observation end date	2013-09-18T06:36:30	2013-09-18T06:39:54

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

## 2.3 Aspect



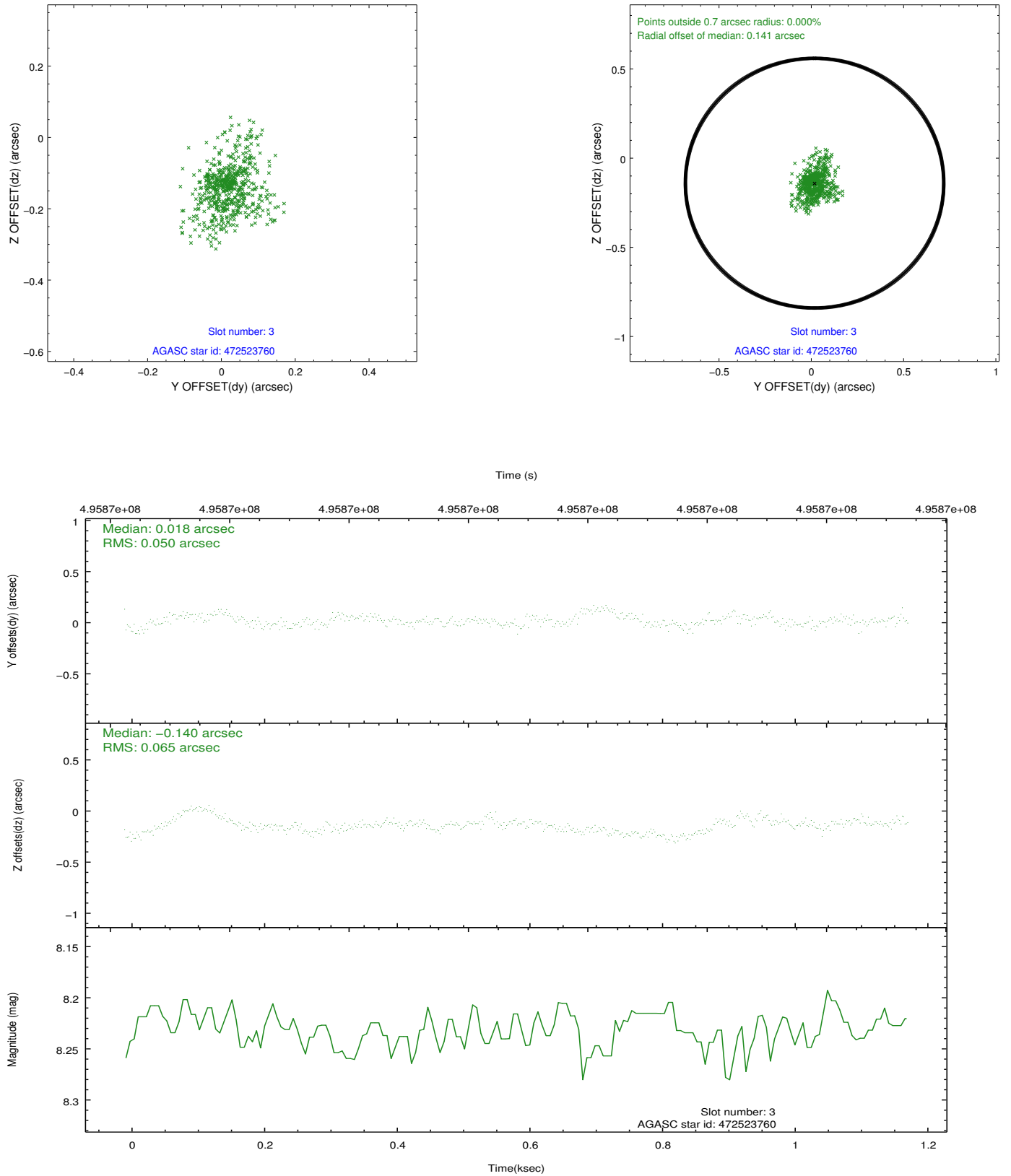


### Slot Statistics

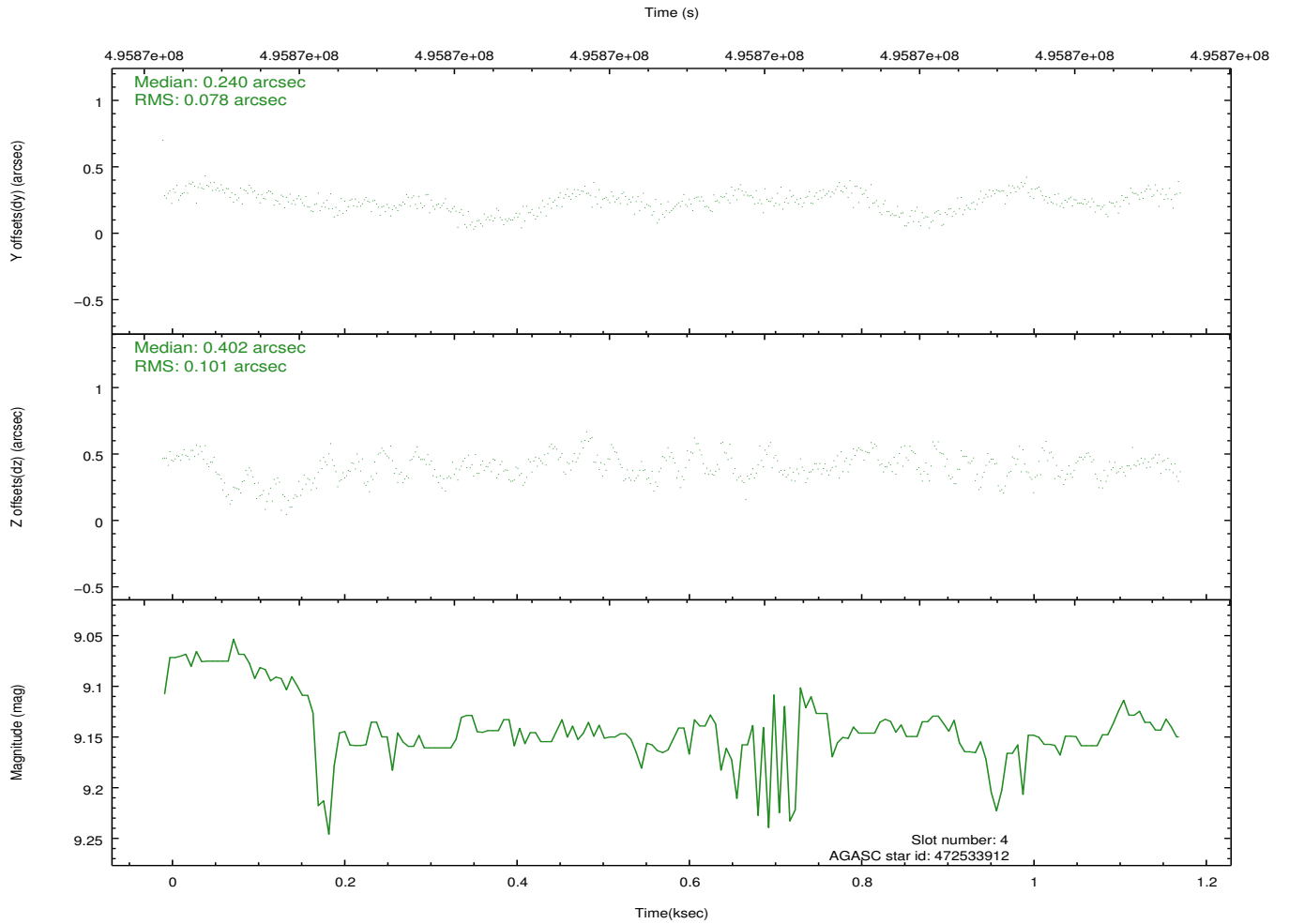
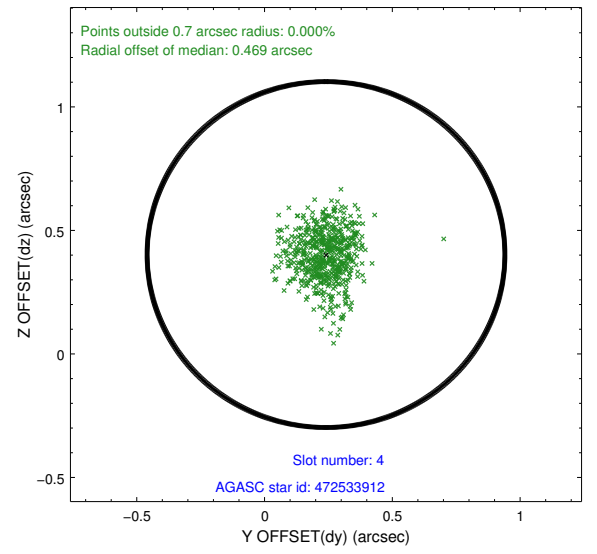
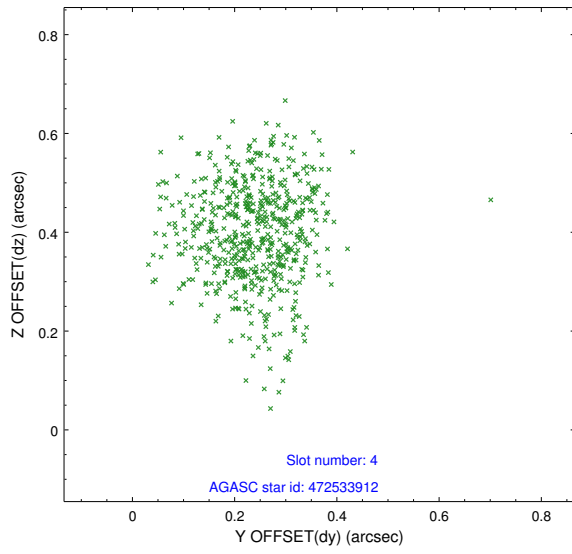
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		HRC-I-1	6.99	288	-0.093	0.036	0.009	0.019	0.000000	0.000000	-779.90	-1305.36
1	FID		HRC-I-2	7.03	289	0.261	-0.144	0.007	0.014	0.000000	0.000000	830.38	-1311.61
2	FID		HRC-I-3	7.08	288	-0.048	0.019	0.011	0.029	0.000000	0.000000	-1205.49	994.63
3	GUIDE	used	472523760	8.23	577	0.018	-0.140	0.086	0.156	331.645363	45.403260	1471.67	430.90
4	GUIDE	used	472533912	9.15	577	0.240	0.402	0.135	0.219	331.791136	46.368695	-621.85	-2364.15
5	GUIDE	used	472655152	9.42	577	0.160	0.044	0.148	0.267	332.504239	45.862991	-1232.85	103.14
6	GUIDE	used	420754040	9.05	577	-0.062	-0.277	0.119	0.182	331.917939	44.882543	1833.39	2395.90
7	GUIDE	used	472527720	7.01	576	-0.359	-0.026	0.101	0.174	331.460205	45.112509	2415.26	1091.20

## 2.4 Star Slots

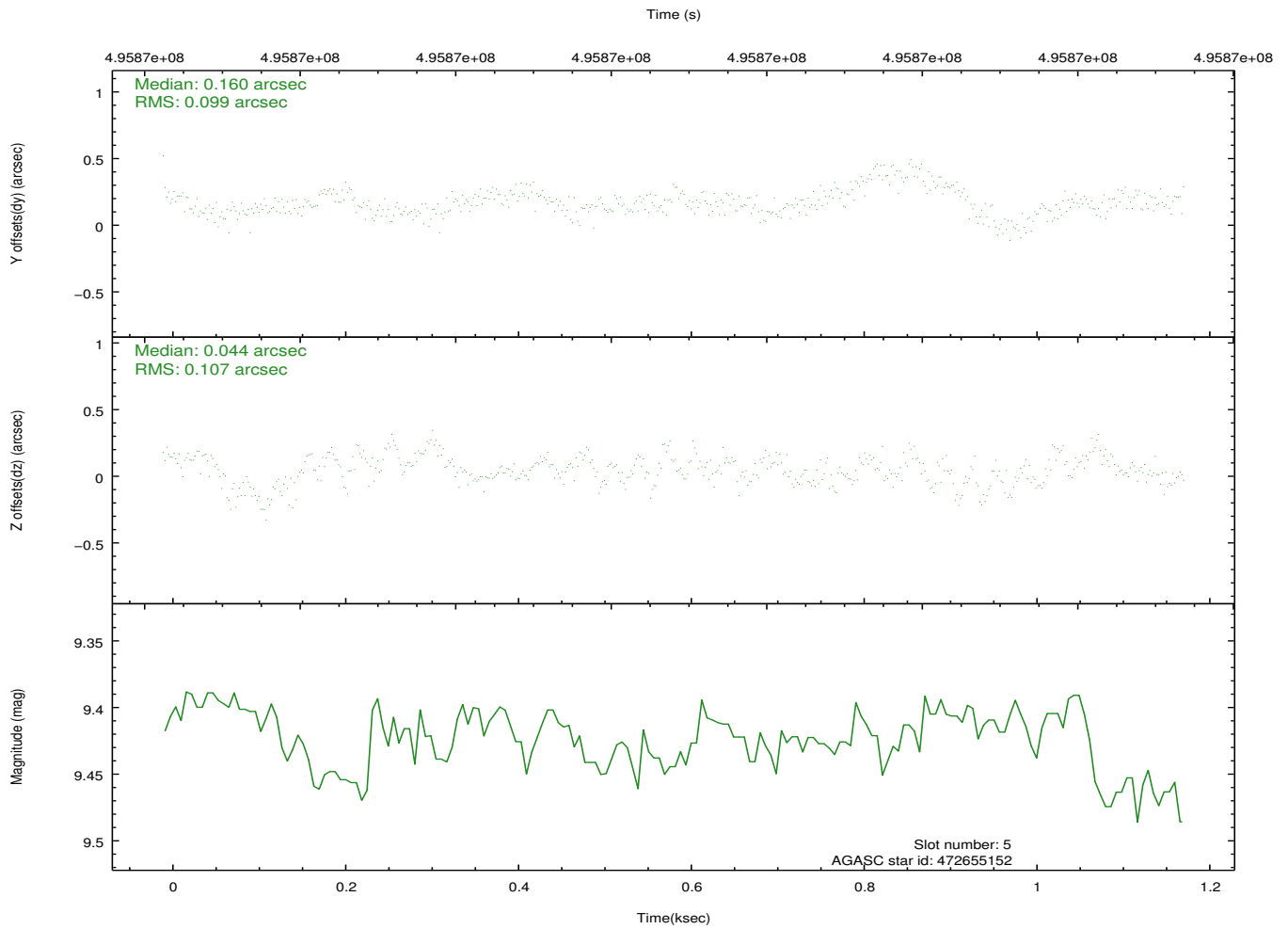
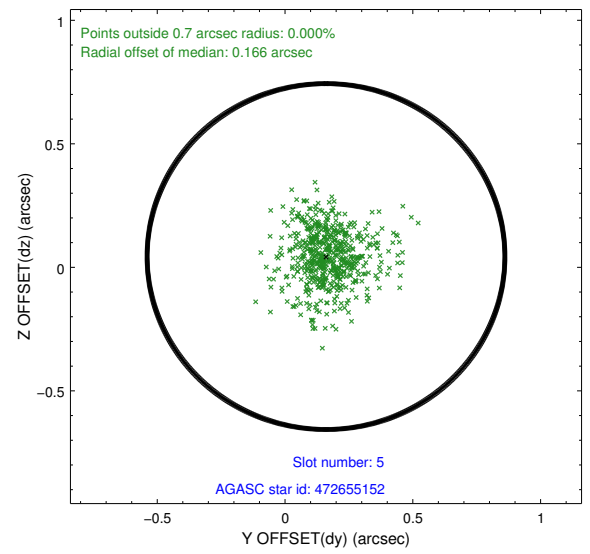
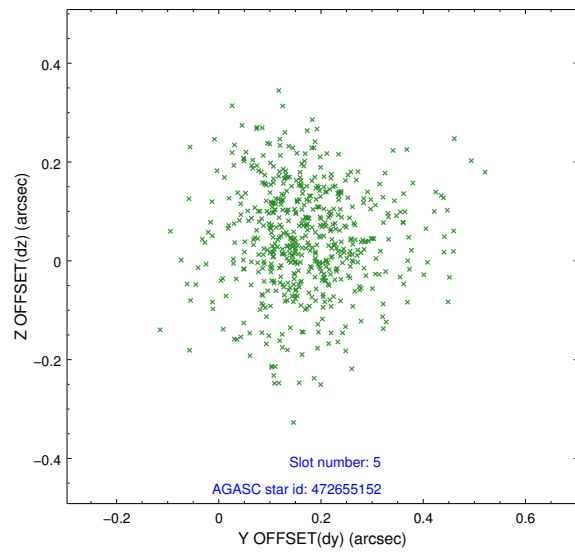
### 2.4.1 Slot 3



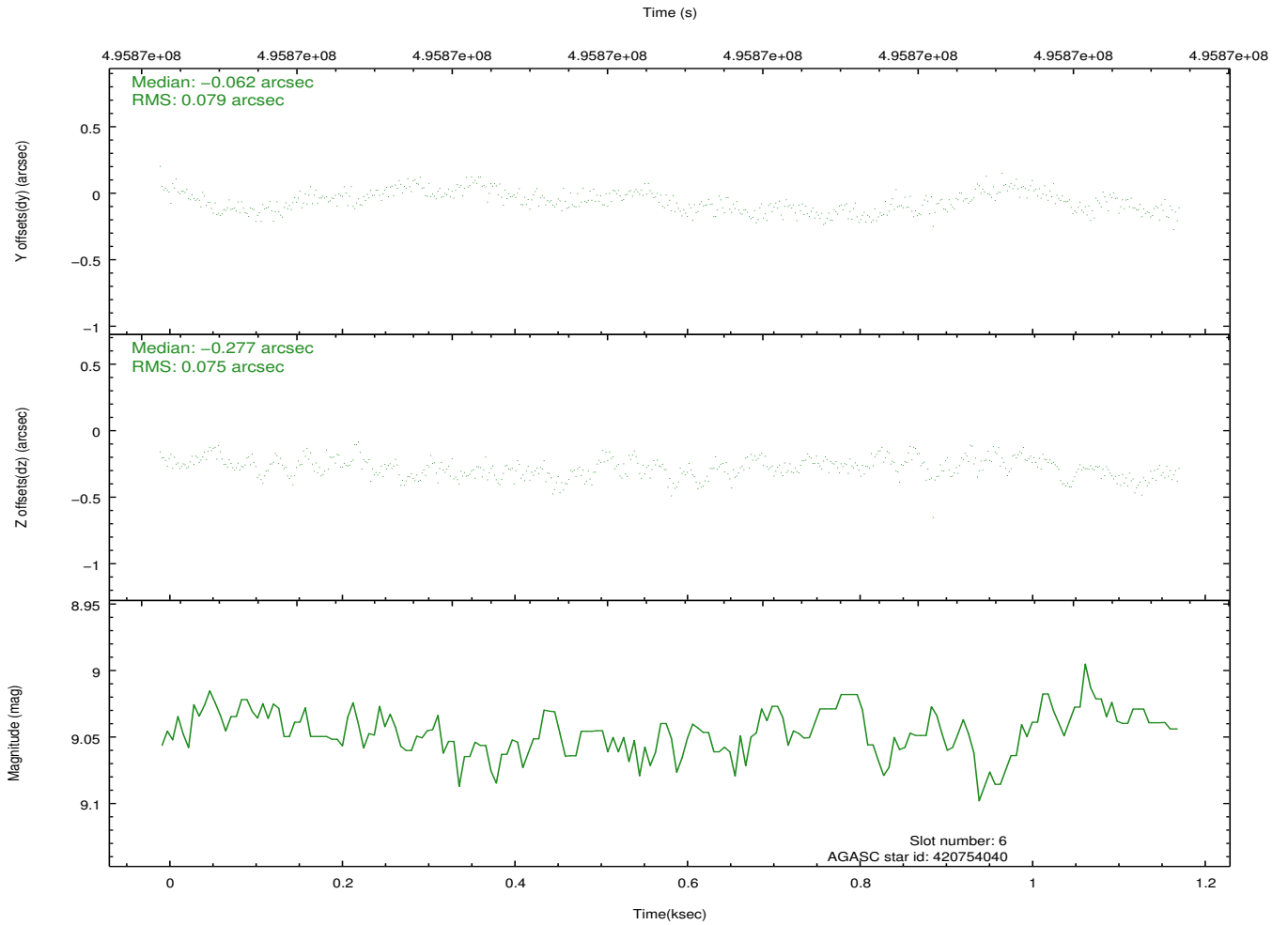
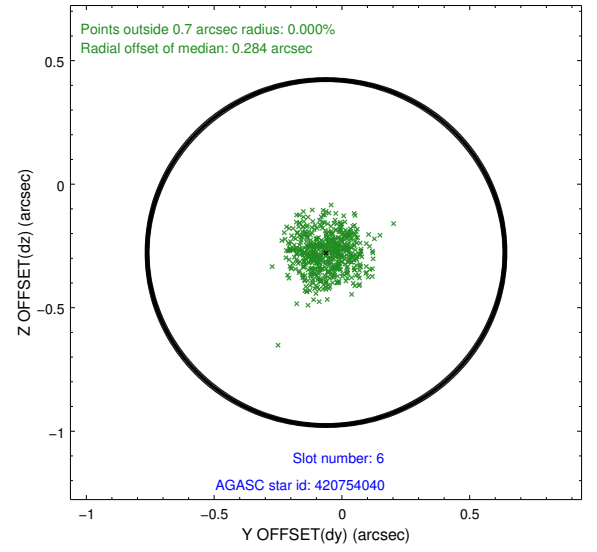
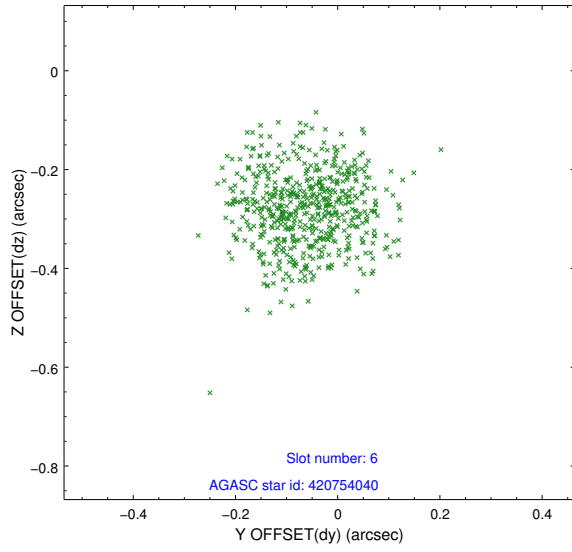
## 2.4.2 Slot 4



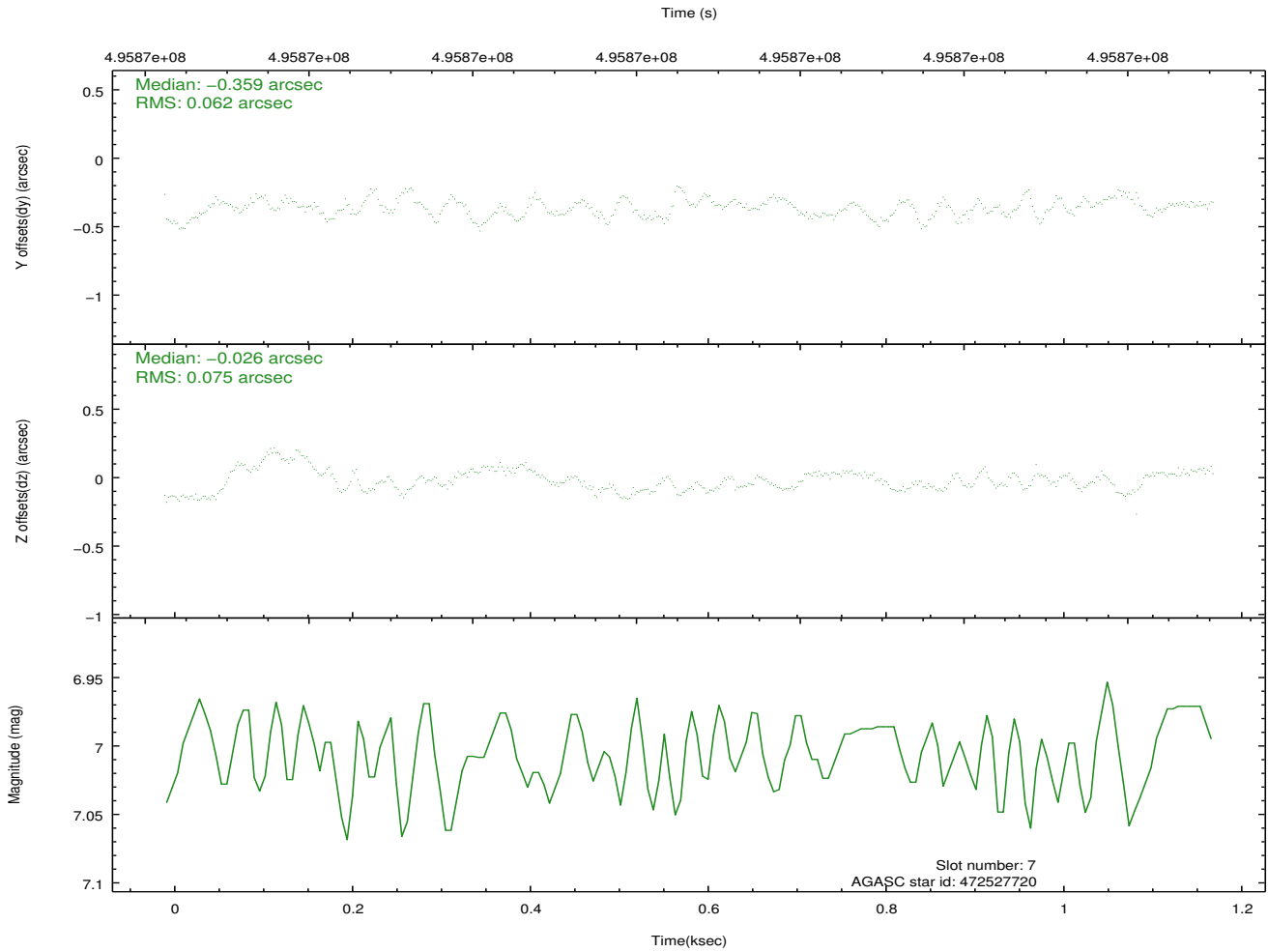
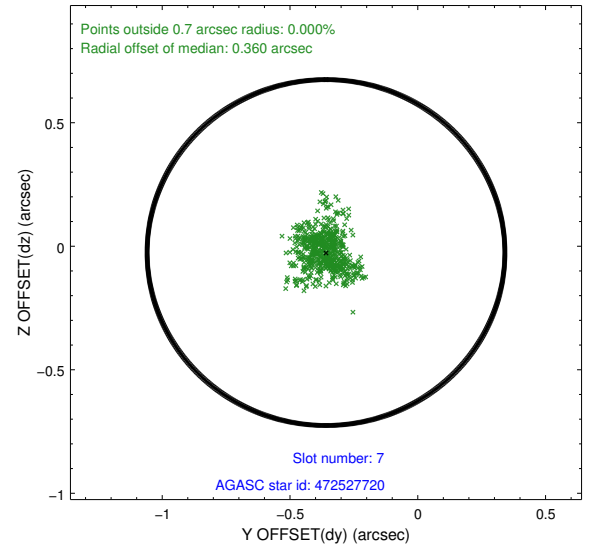
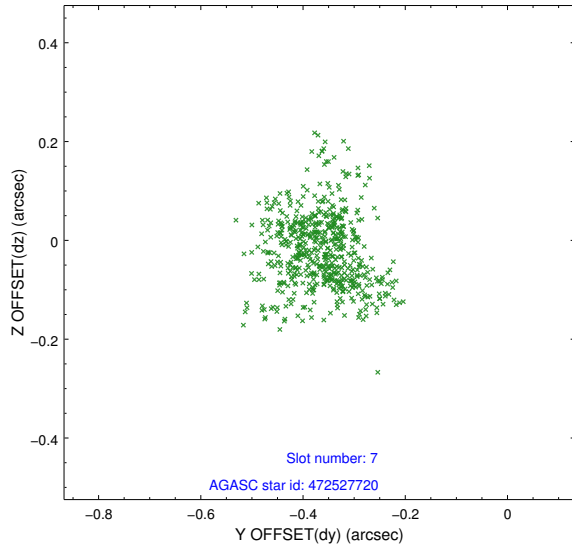
### 2.4.3 Slot 5



## 2.4.4 Slot 6

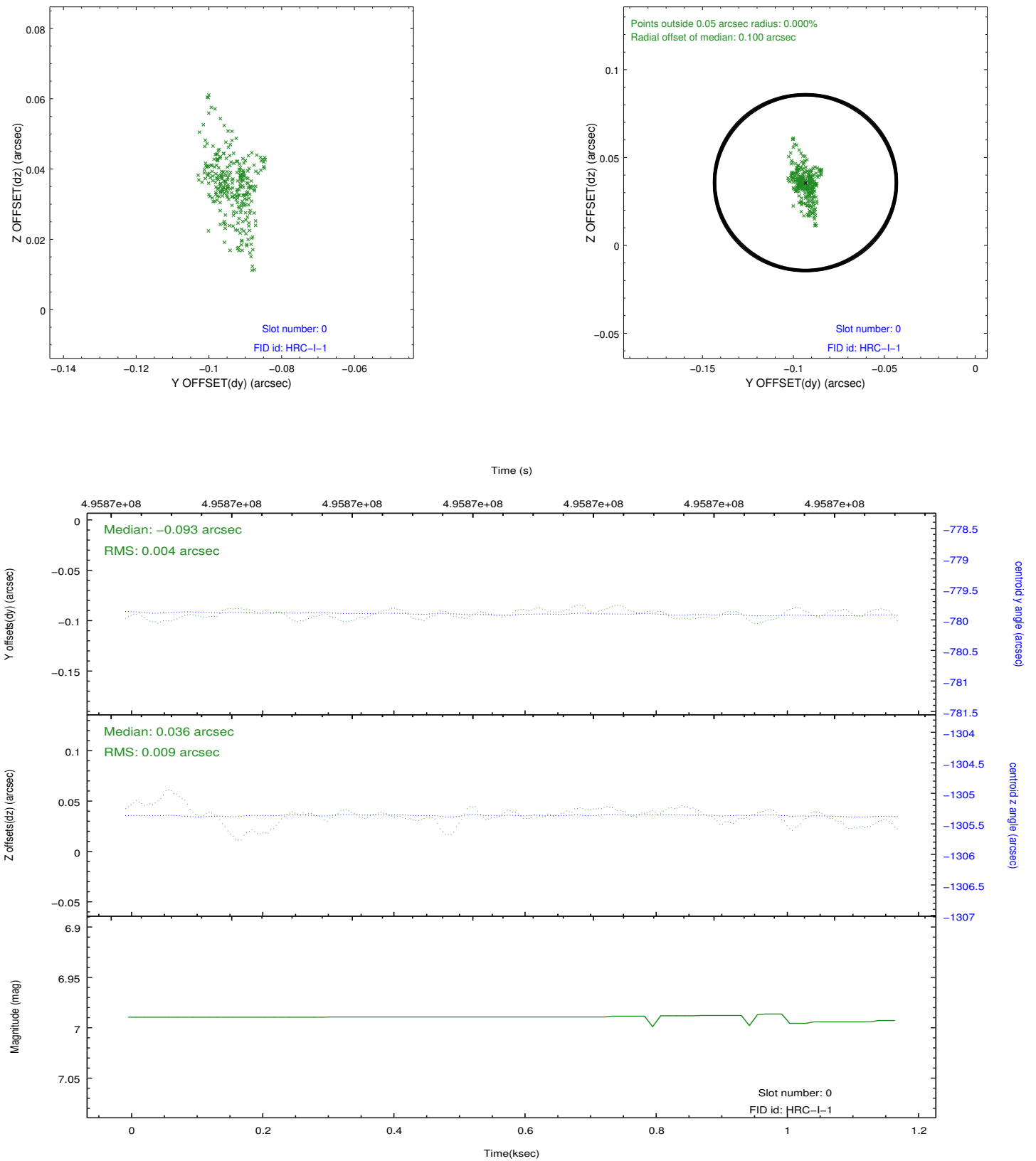


## 2.4.5 Slot 7

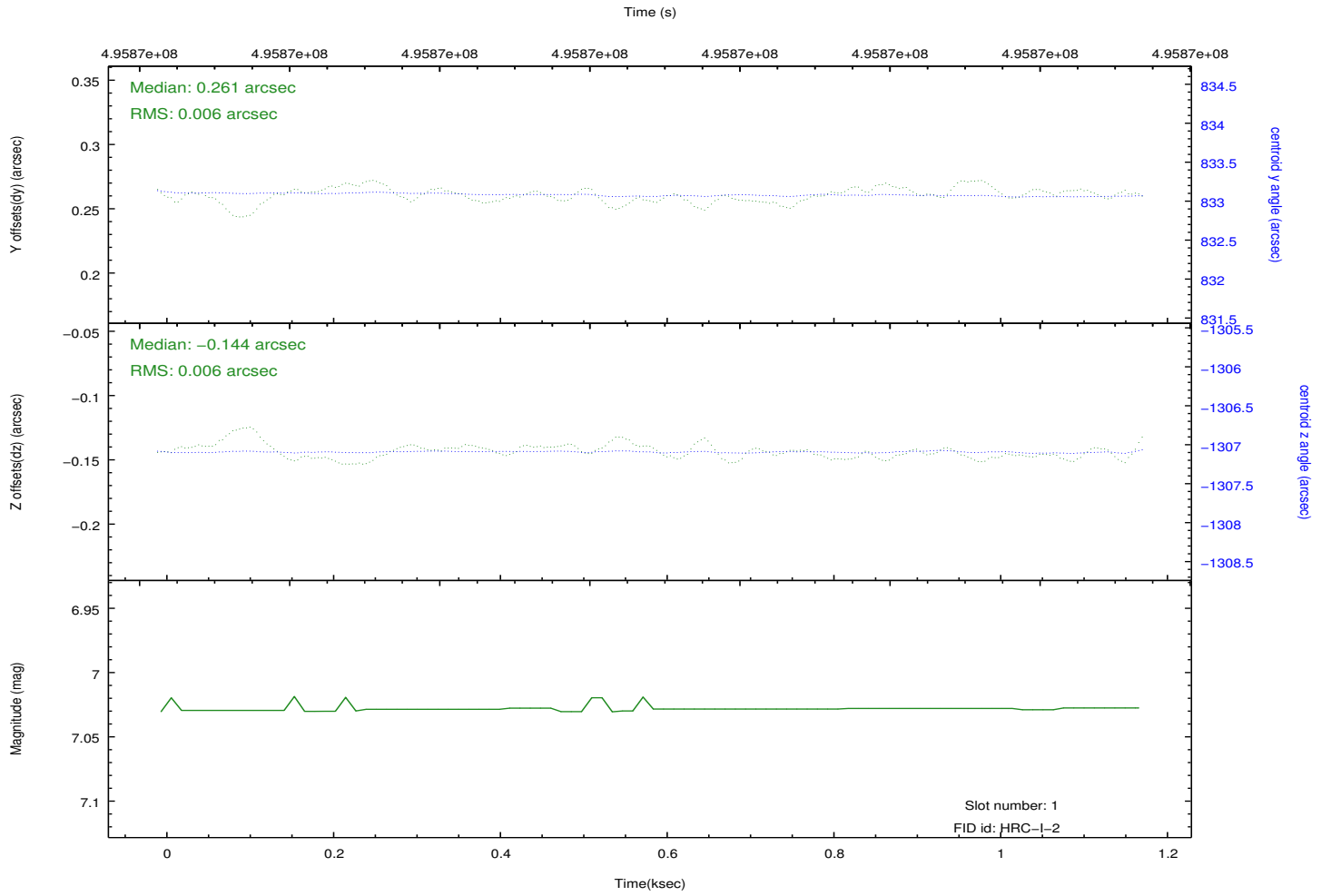
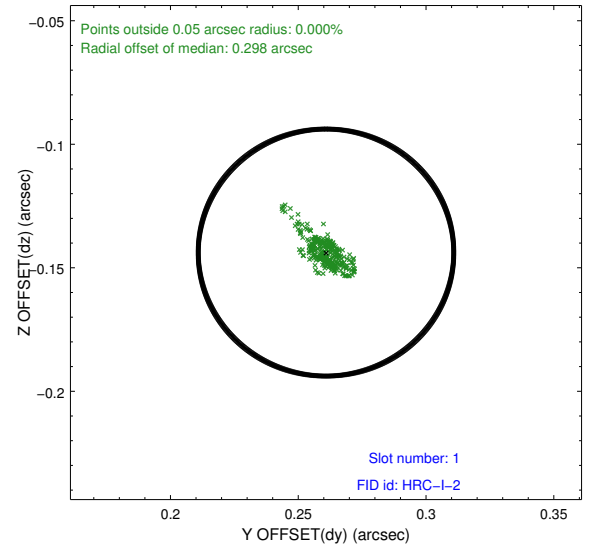
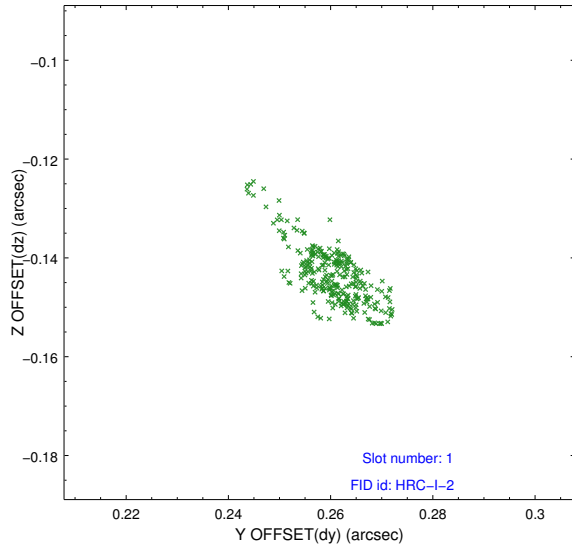


## 2.5 FID Slots

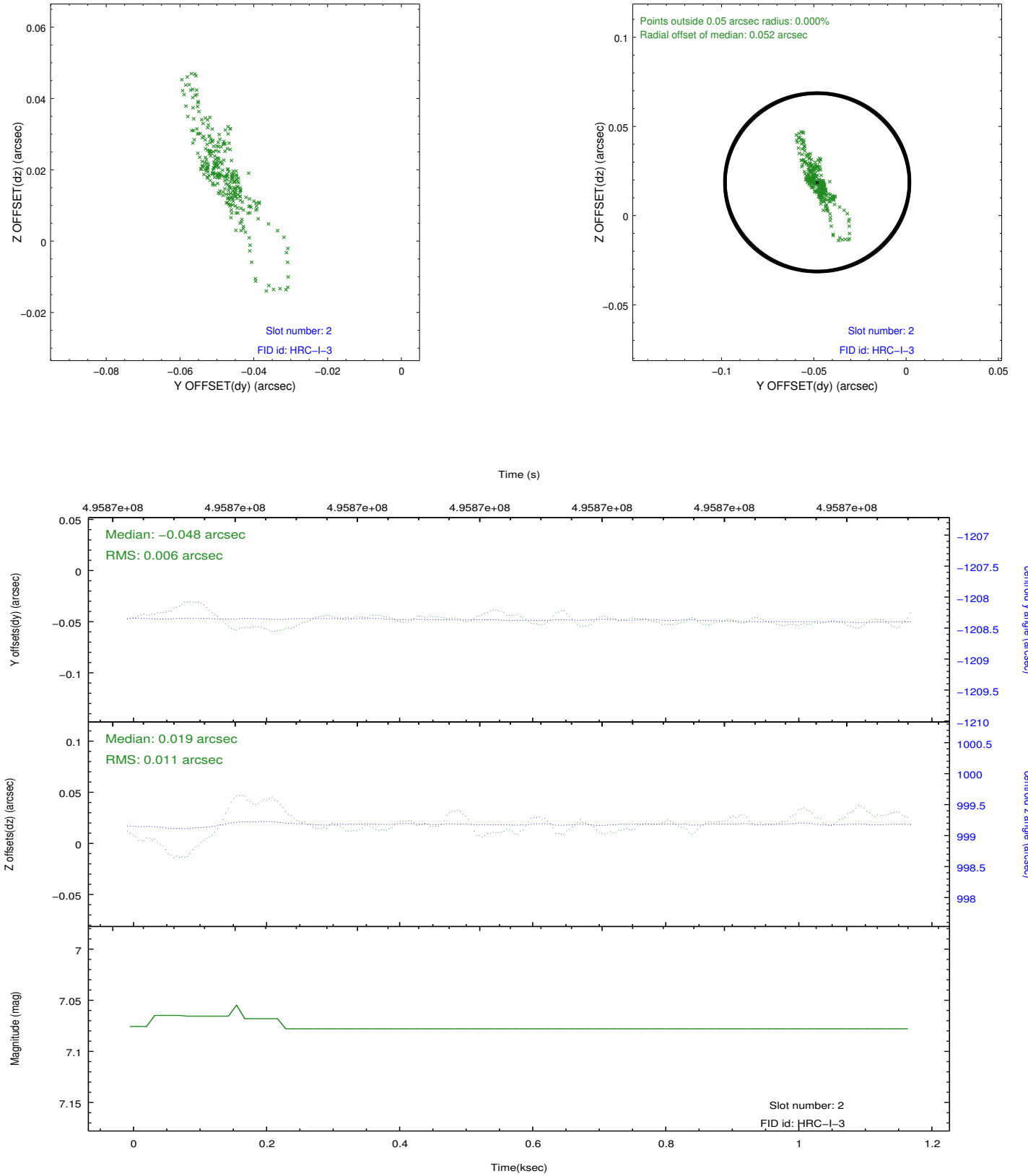
### 2.5.1 Slot 0



## 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)	2014.12.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.1800313144326

## 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.