

# V&V Reference Report

## L2 ASCDS Version : 10.7.1

Observation 21770 - L2 Version 1  
Chandra X-Ray Center

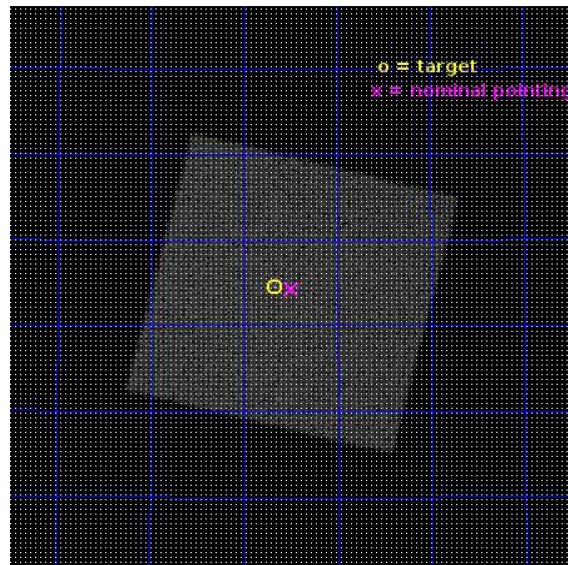
L2 Processing Date : Apr 8 2019

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# 1 Front

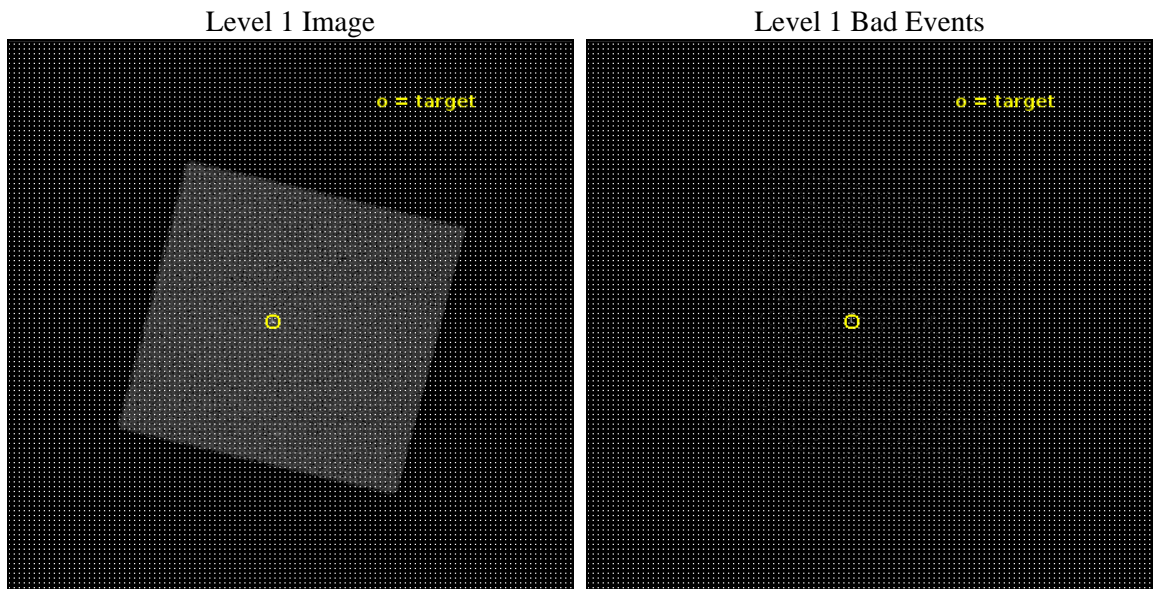
seq_num	291456	Sequence number
obs_id	21770	Observation id
title	AO-20 Calibration Observations to Monitor the Spatial Variations in the HRC-I Gain	Proposal title
observer	CXC Calibration	Principal investigator
object	ArLac	Source name
ra_targ	332.169666	Observer's specified target RA [deg]
dec_targ	45.742509	Observer's specified target Dec [deg]
ra_nom	332.12376674292	Nominal RA [deg]
dec_nom	45.739093168768	Nominal Dec [deg]
roll_nom	59.048834534442	Nominal Roll [deg]
revision	1	Processing version of data
ontime	1192.3313214779	[s]
livetime	1174.6303996824	Ontime multiplied by DTCOR
l2events	152320	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	10.7.1	Processing system revision	ontime	1192.3313214779	[s]
caldbver	4.8.2	&#160	l1events	251449	Number of level 1 events
date	2019-04-08T23:02:02	Date and time of file creation			
revision	1	Processing version of data			

### 2.1.3 Events

#### Level 1 Events

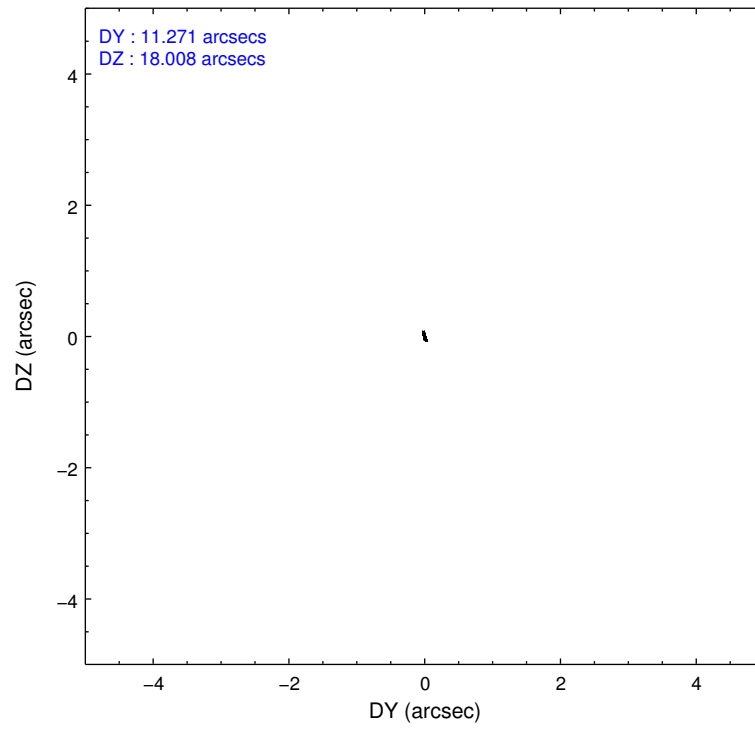
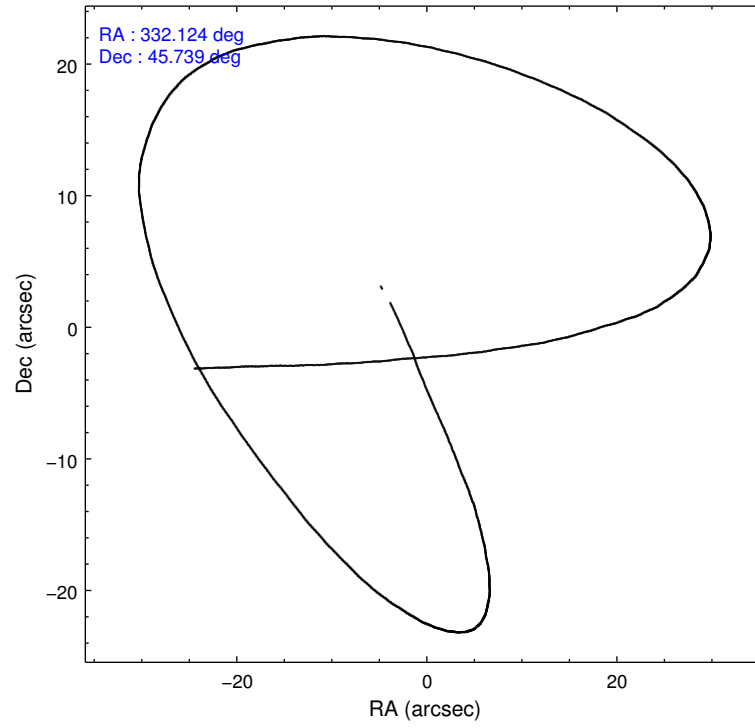
	<b>segment 0</b>
level 1 events	251449
rejected events	52412
rejected %	20%

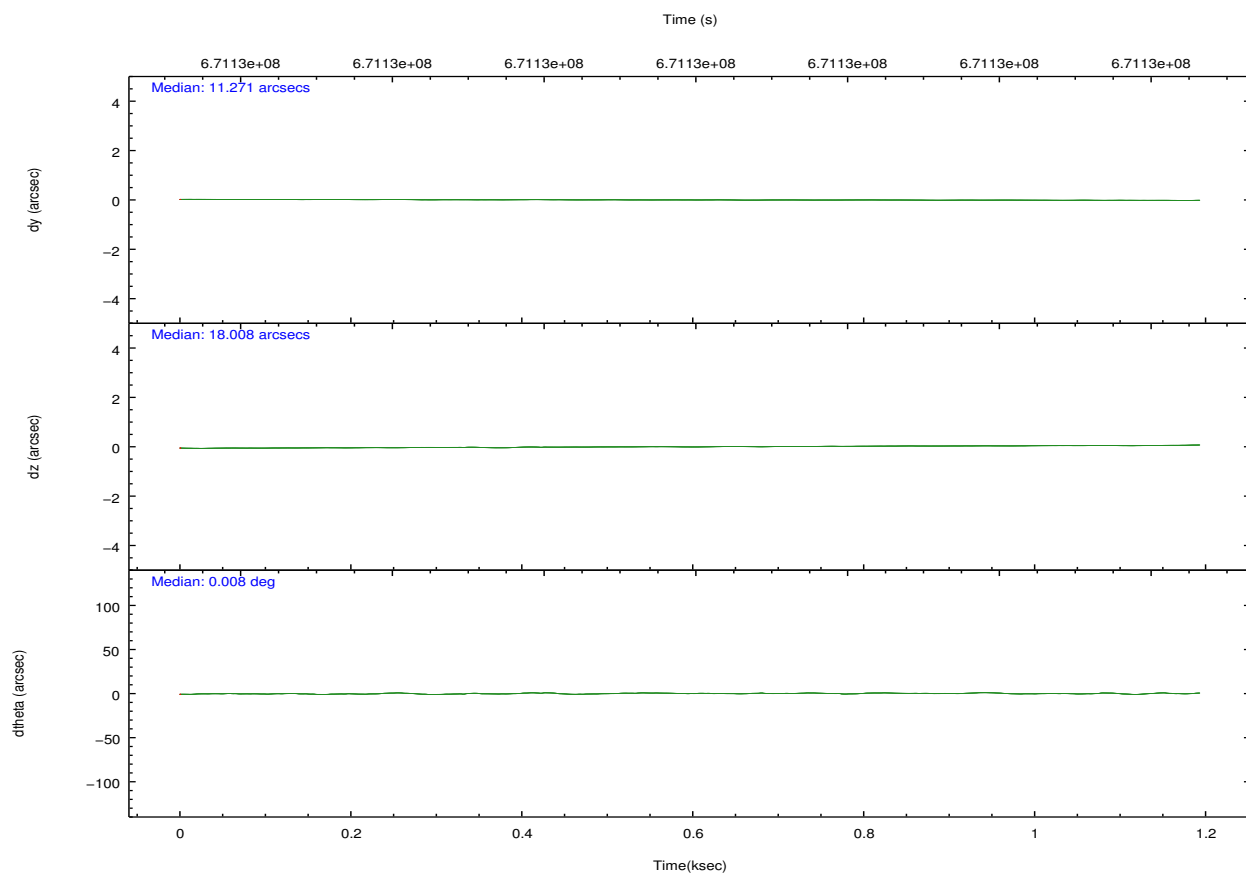
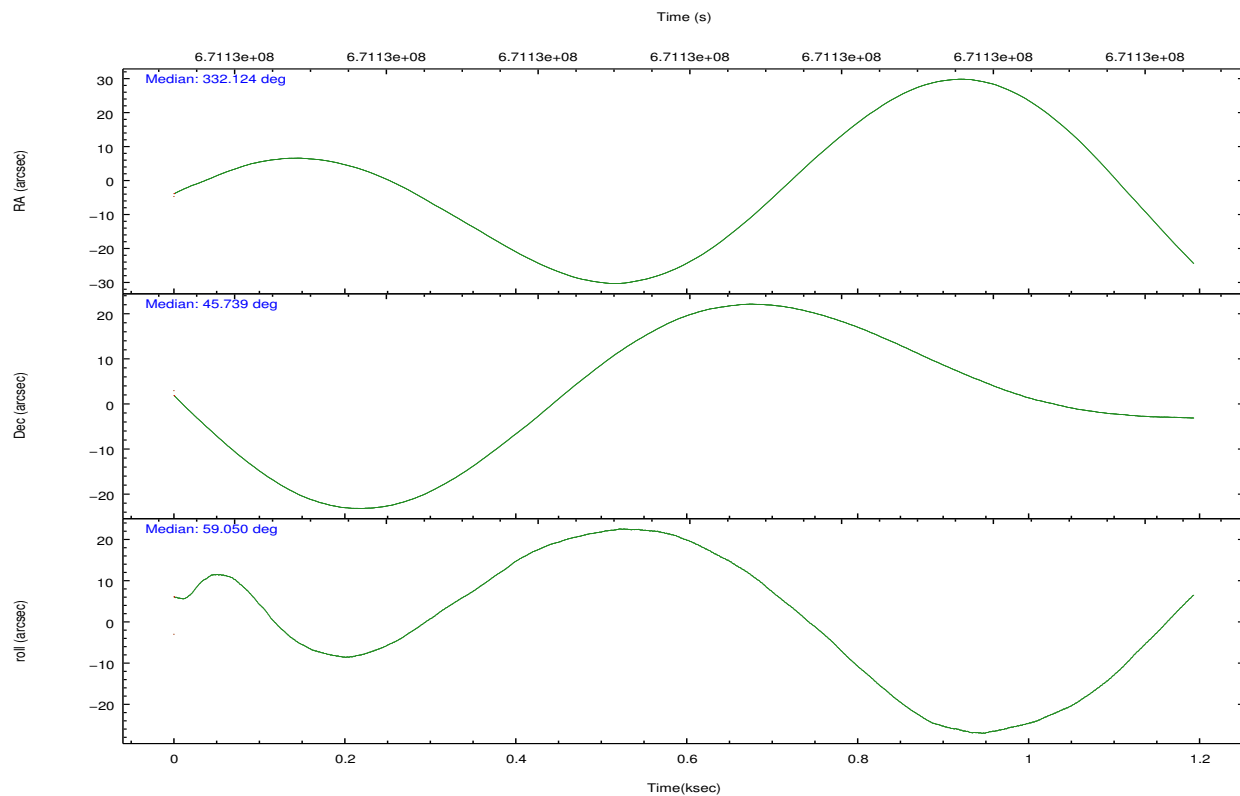
## 2.2 Compared Parameters

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	332.122792	332.1237667429183
[deg] Pointing Dec	45.712472	45.73909316876839
[deg] Pointing Roll	59.145001	59.04883453444172
[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)	671126984.184000	671126607.65396
Observation start date	2019-04-08T16:08:35	2019-04-08T16:03:27
[s] Observation end time (MET)	671127984.184000	671128117.47905
Observation end date	2019-04-08T16:25:15	2019-04-08T16:28:37

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

## 2.3 Aspect





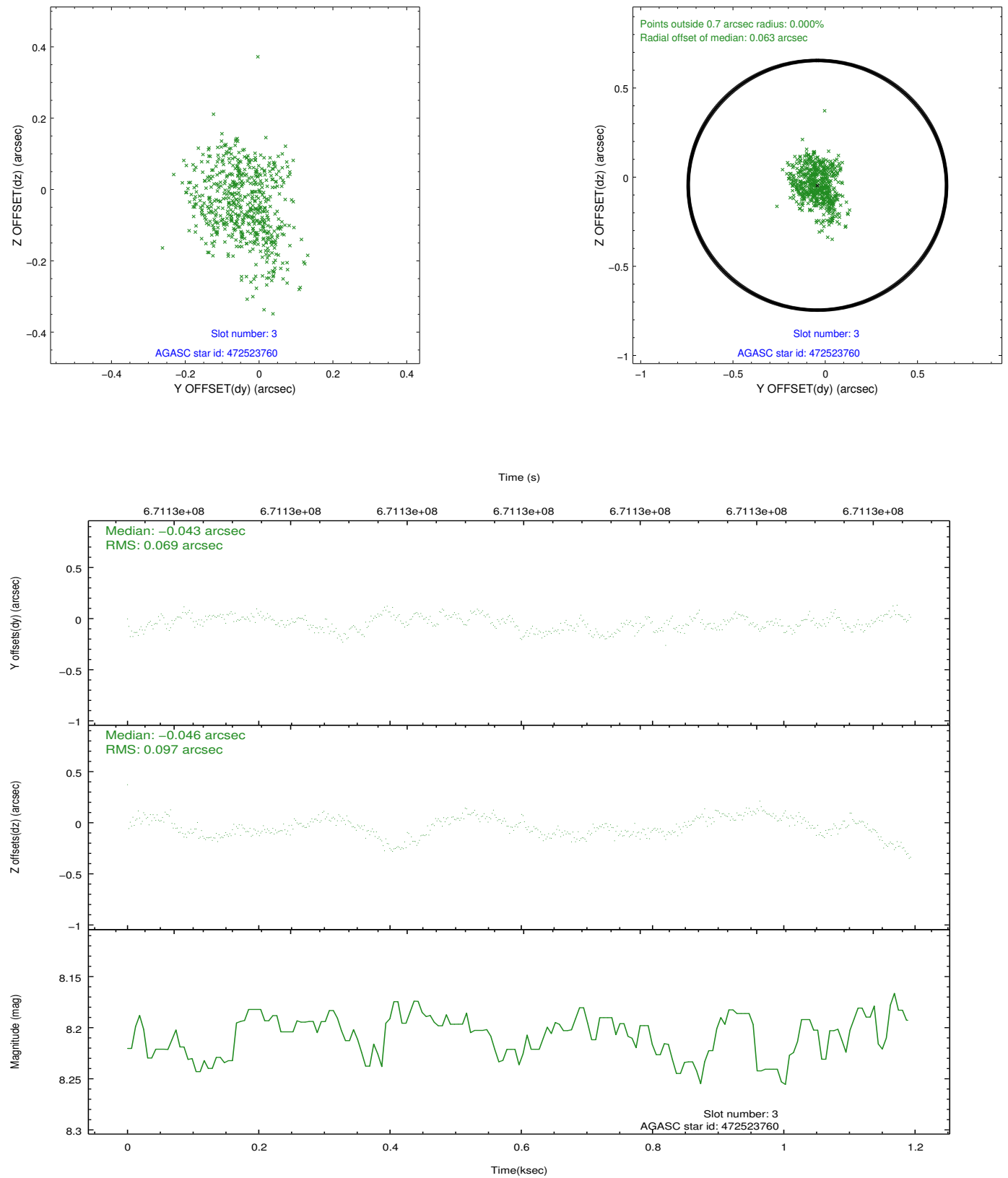
Slot Statistics

pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		HRC-I-2	7.04	291	1.000	0.106	-0.136	0.007	0.015	0.000000	0.000000	845.80	-1307
1	FID		HRC-I-3	7.09	292	1.000	-0.386	0.051	0.006	0.010	0.000000	0.000000	-1192.96	993
2	FID		HRC-I-4	7.03	292	1.000	0.399	-0.001	0.007	0.013	0.000000	0.000000	1272.12	999
3	GUIDE	used	472523760	8.20	583	1.000	-0.043	-0.046	0.127	0.203	331.645363	45.403260	-1570.91	471
4	GUIDE	used	472525528	6.62	583	1.000	-0.013	-0.106	0.135	0.219	331.551102	45.248694	-2173.70	394
5	GUIDE	used	472533912	9.11	582	1.000	-0.267	-0.470	0.169	0.260	331.791136	46.368695	1603.80	1924
6	GUIDE	used	472665256	8.99	583	1.000	-0.237	0.154	0.159	0.281	332.808125	46.195041	2376.82	-563
7	GUIDE	used	472649352	9.70	581	1.000	0.545	0.486	0.263	0.438	332.034169	45.325407	-1305.77	-518

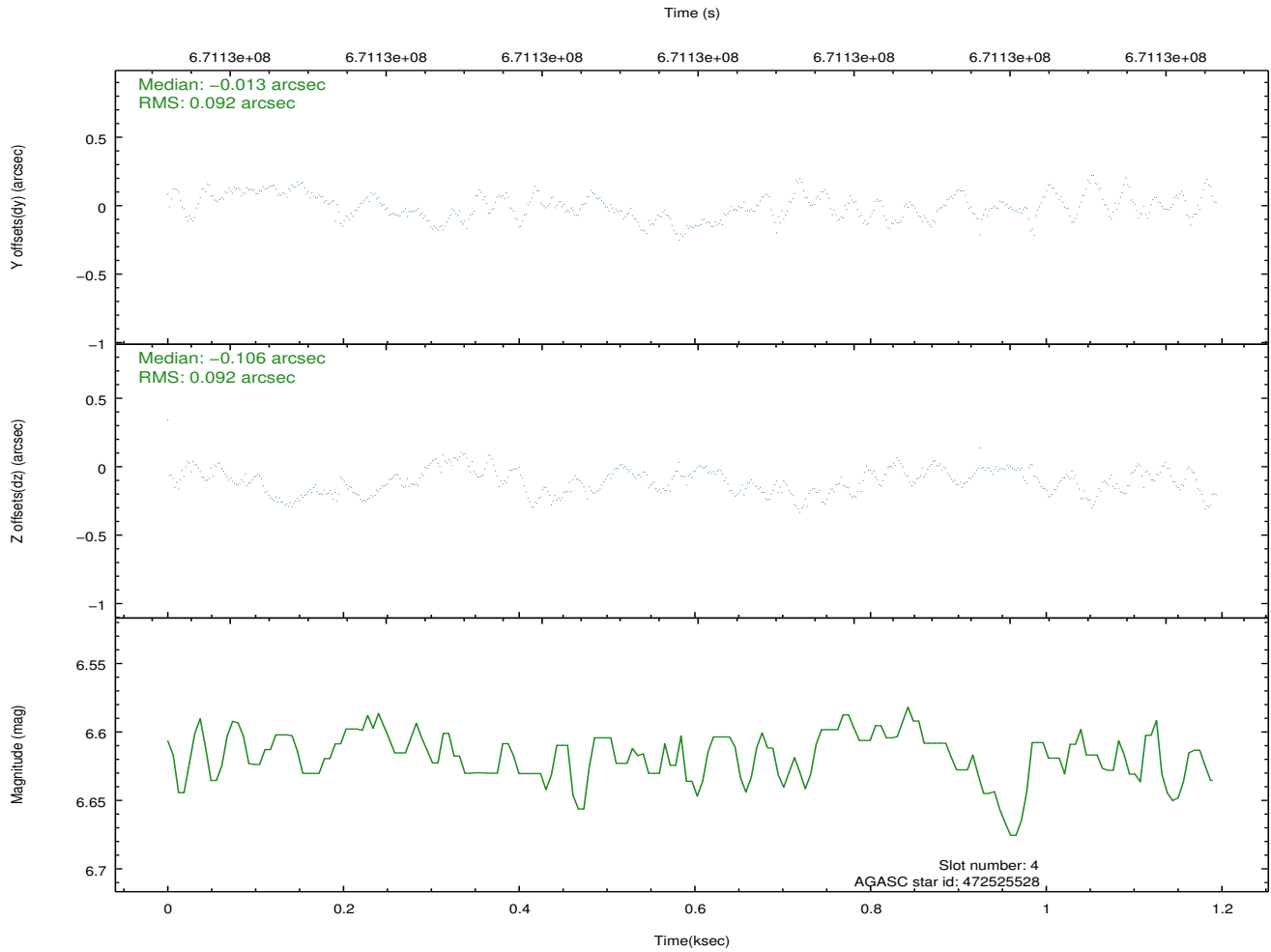
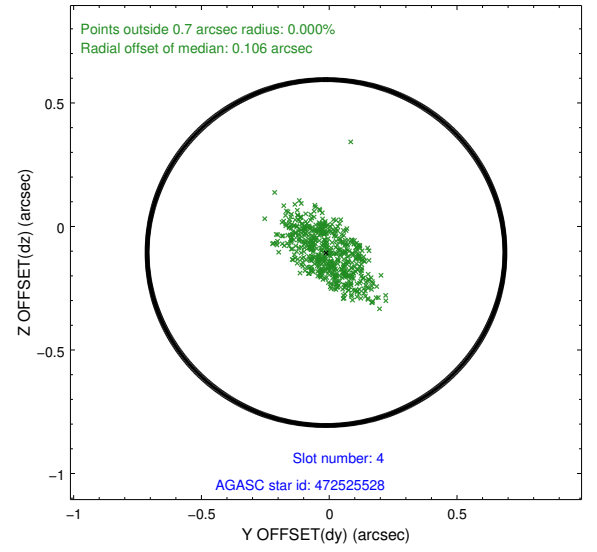
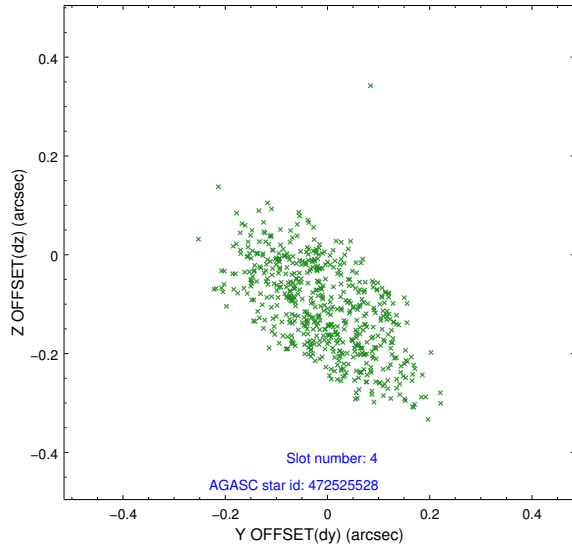


## 2.4 Star Slots

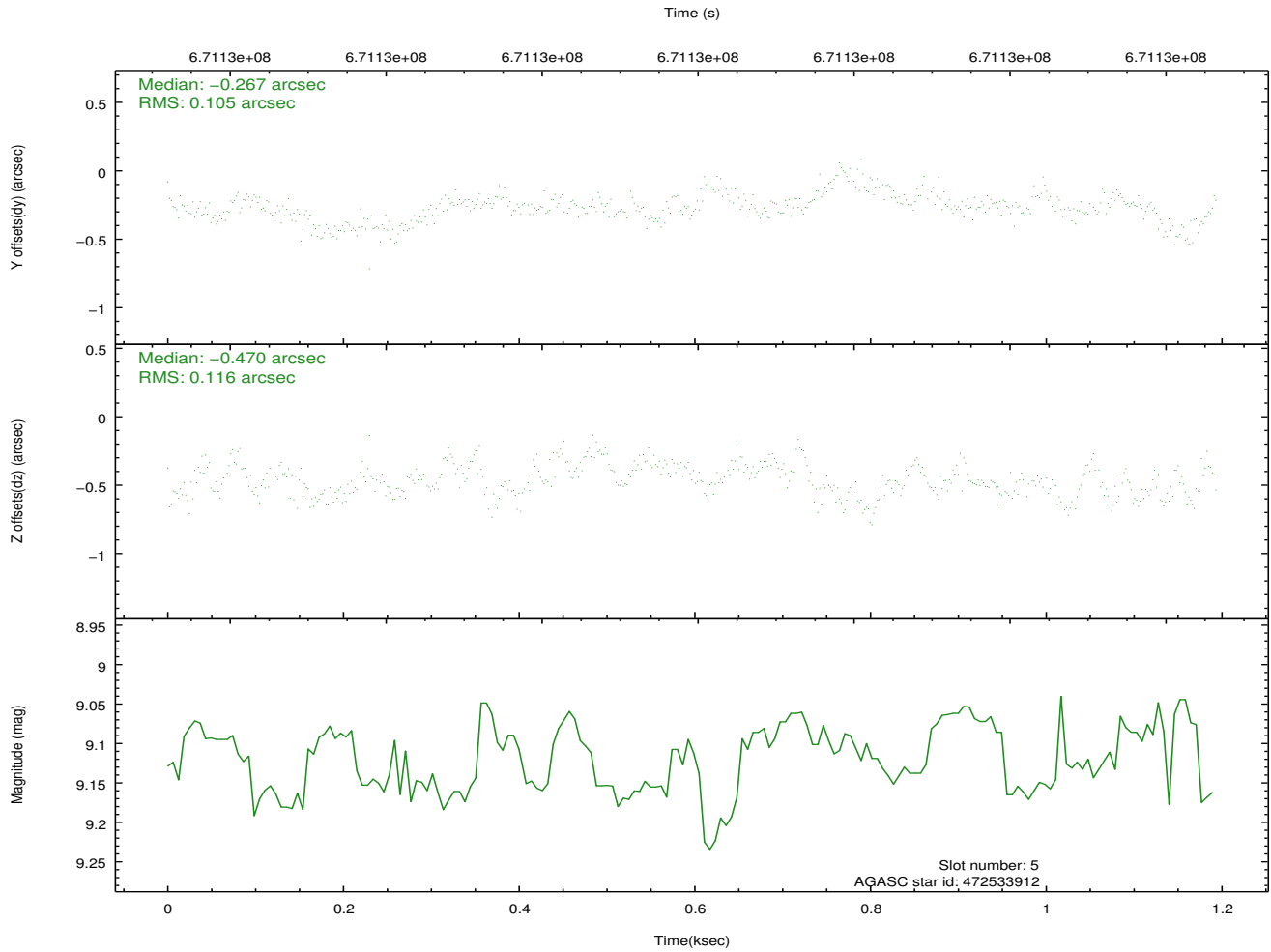
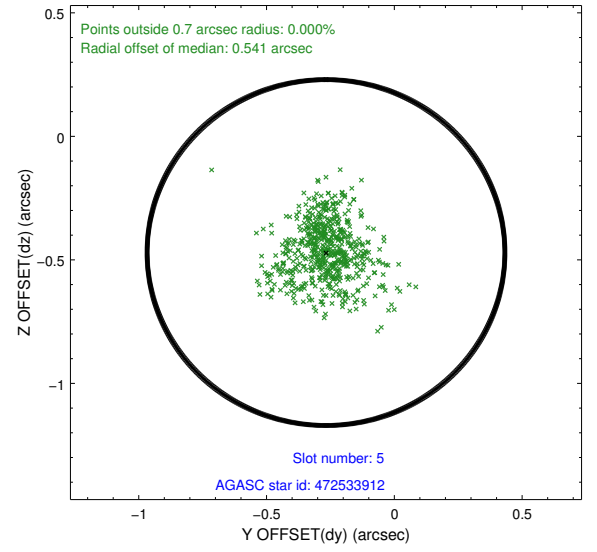
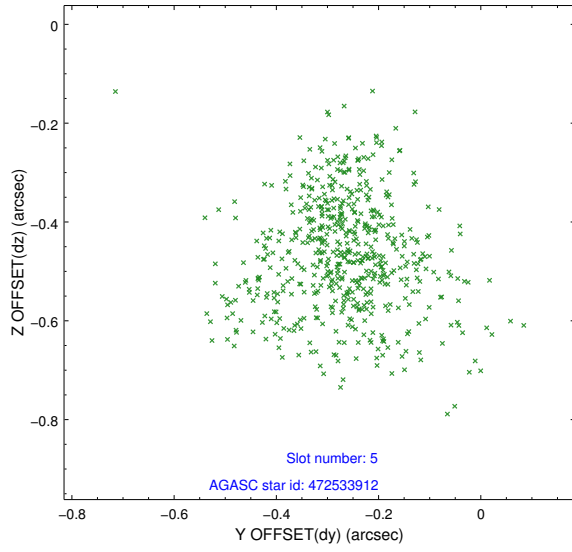
### 2.4.1 Slot 3



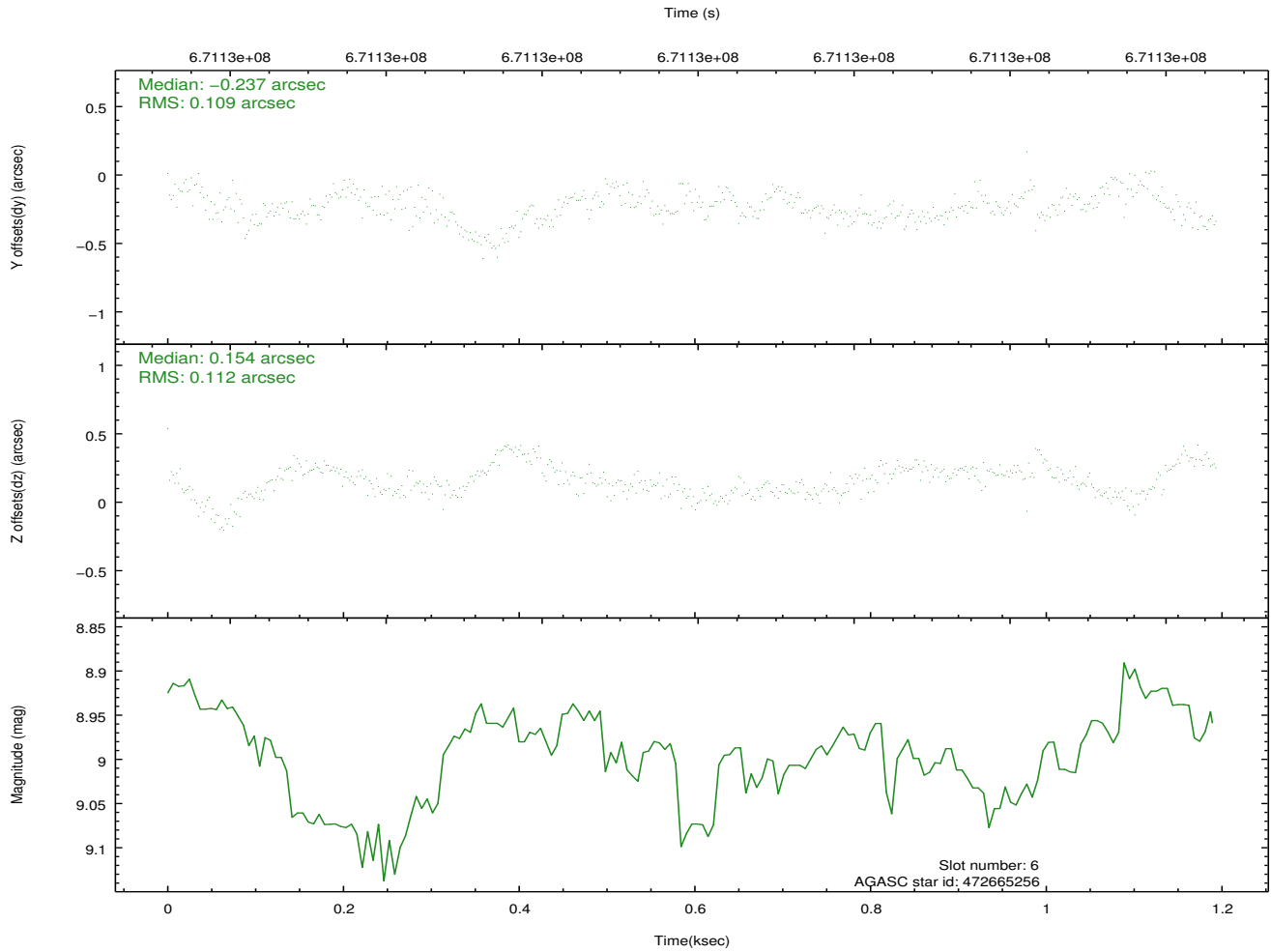
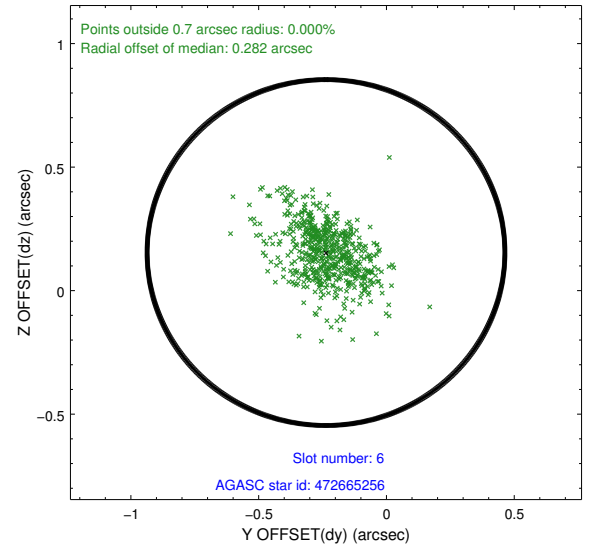
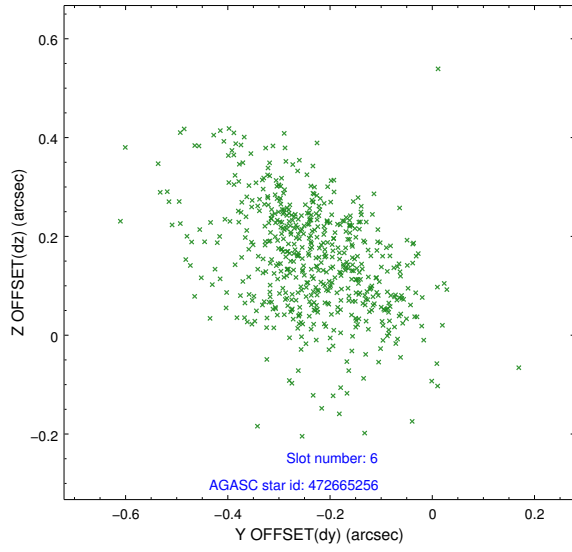
## 2.4.2 Slot 4



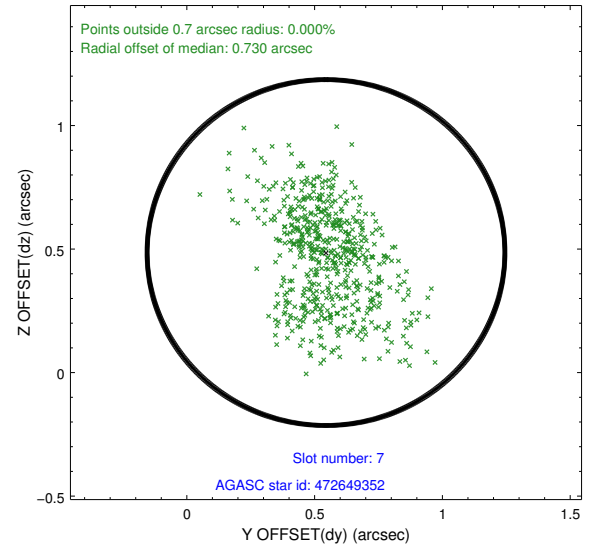
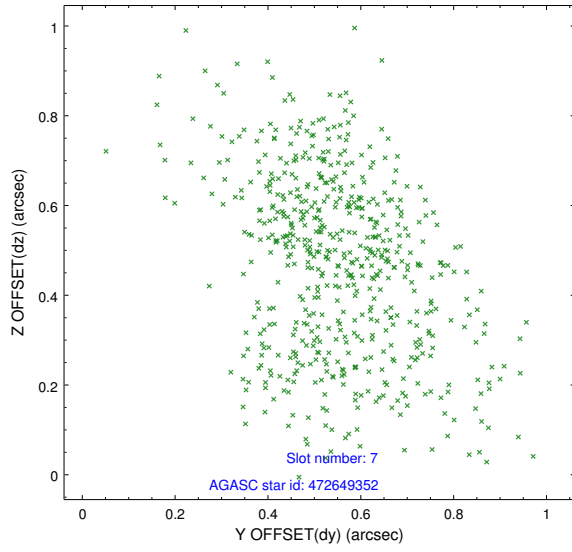
### 2.4.3 Slot 5



## 2.4.4 Slot 6

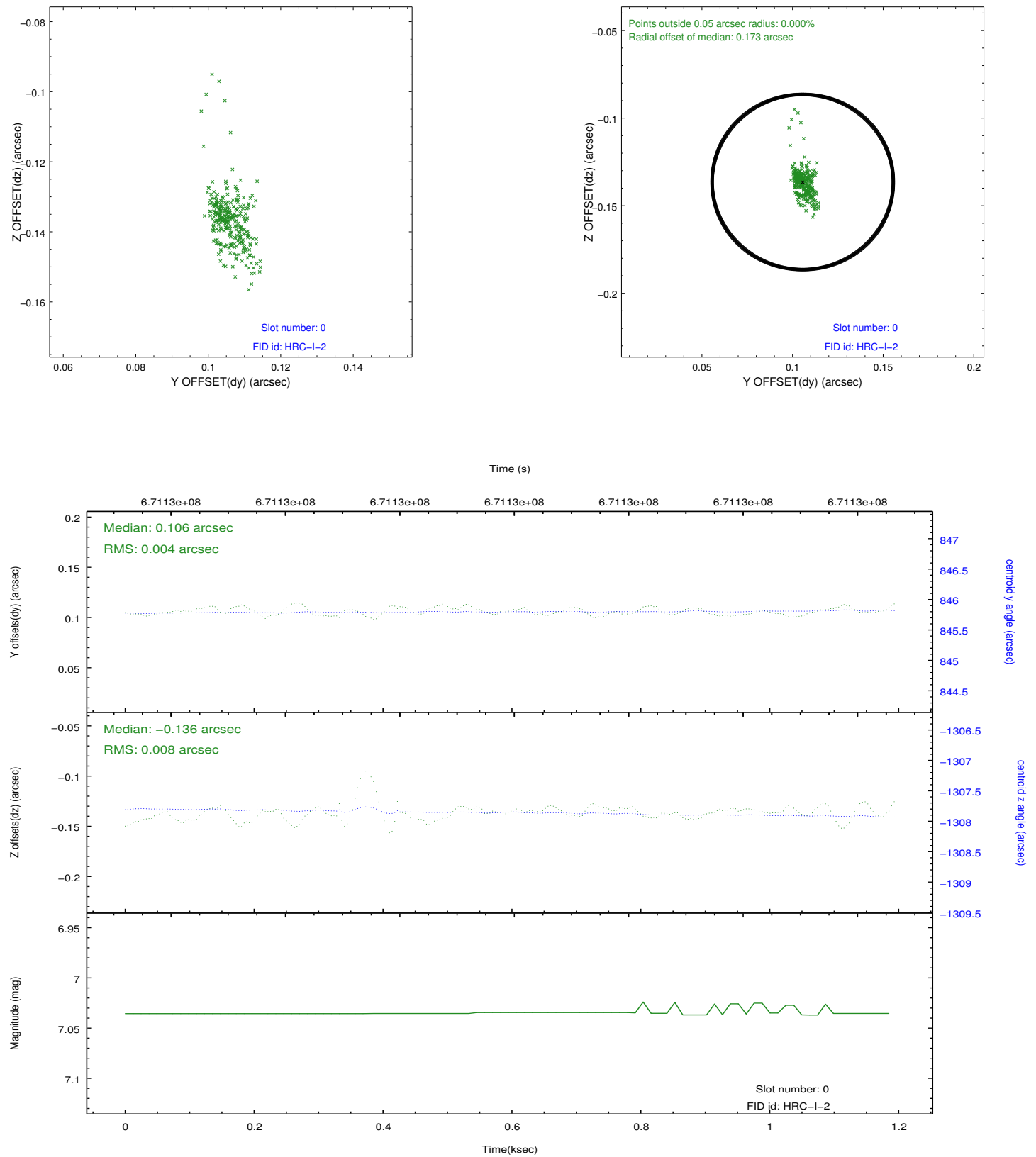


## 2.4.5 Slot 7

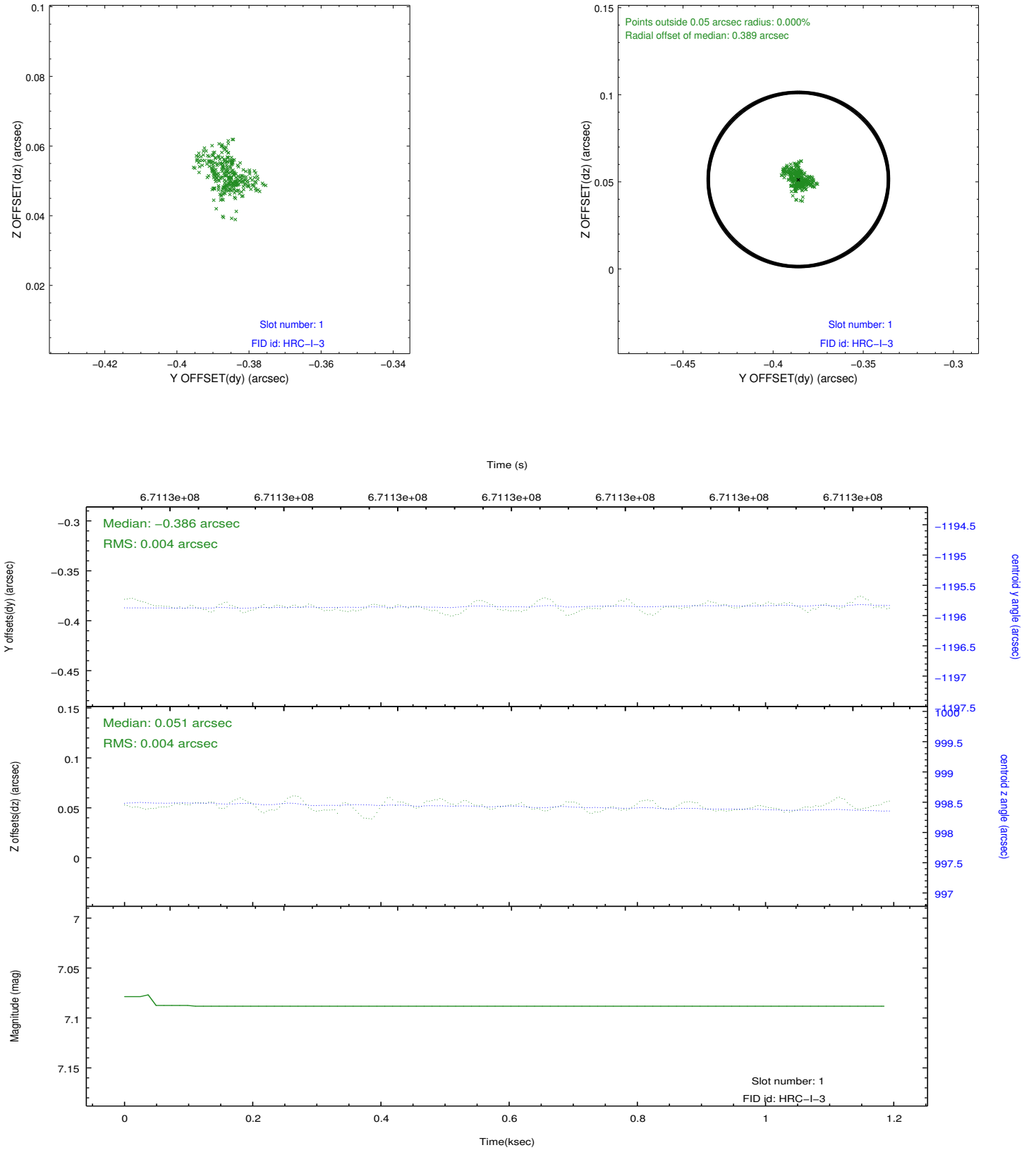


## 2.5 FID Slots

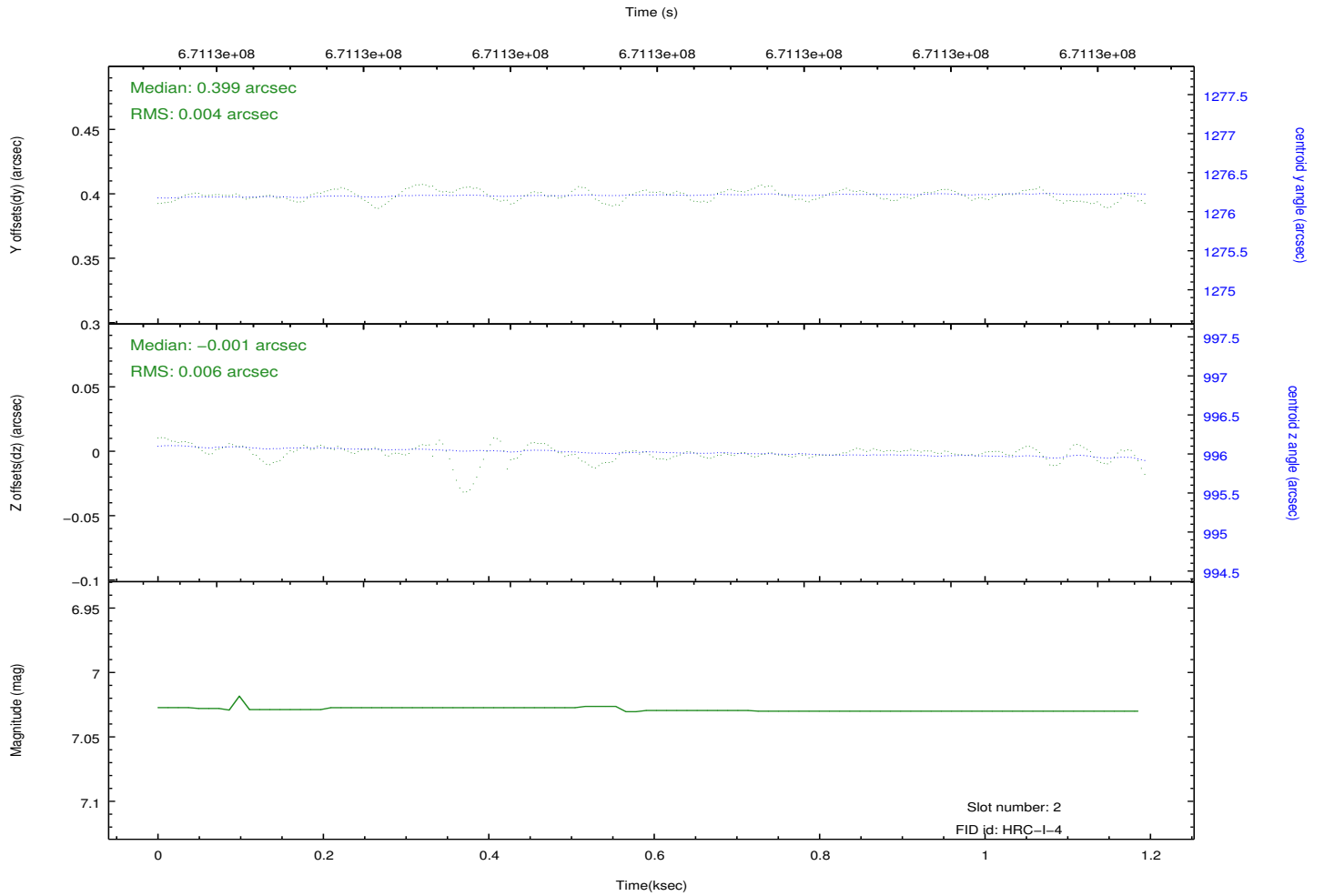
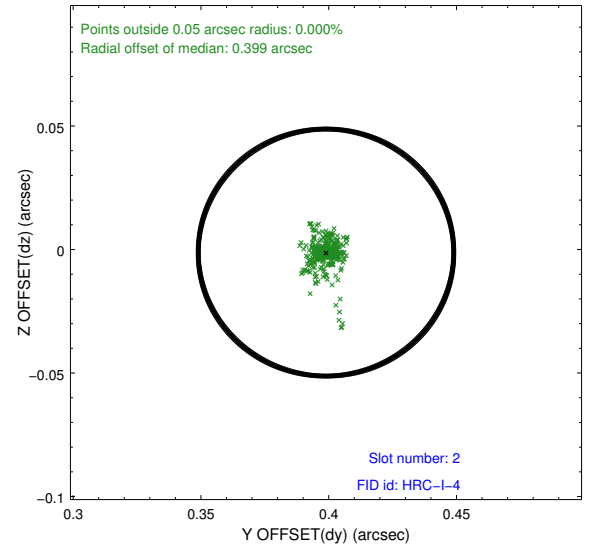
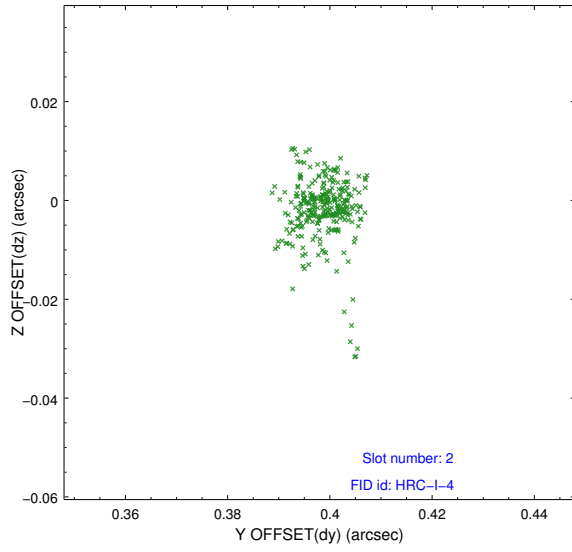
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2





## **A Summary**

### **A.1 Status**

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2019.04.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.1923313214779

### **A.2 Comments**