

# V&V Reference Report

## L2 ASCDS Version : 10.7.1

Observation 21788 - L2 Version 1  
Chandra X-Ray Center

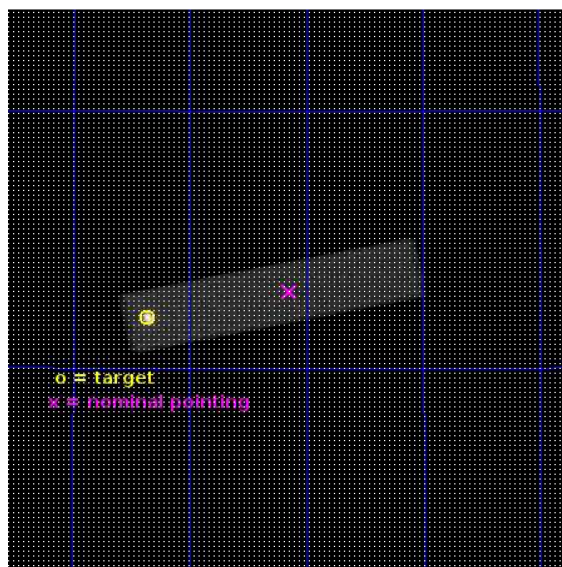
L2 Processing Date : Apr 4 2019

## Contents

<b>1</b>	<b>Front</b>	<b>2</b>
<b>2</b>	<b>OBI</b>	<b>3</b>
2.1	OBI . . . . .	3
2.1.1	Images . . . . .	3
2.1.2	Parameters . . . . .	4
2.1.3	Events . . . . .	4
2.2	Compared Parameters . . . . .	5
2.3	Aspect . . . . .	6
2.4	Star Slots . . . . .	9
2.4.1	Slot 3 . . . . .	9
2.4.2	Slot 4 . . . . .	10
2.4.3	Slot 5 . . . . .	11
2.4.4	Slot 6 . . . . .	12
2.4.5	Slot 7 . . . . .	13
2.5	FID Slots . . . . .	14
2.5.1	Slot 0 . . . . .	14
2.5.2	Slot 1 . . . . .	15
2.5.3	Slot 2 . . . . .	16
<b>A</b>	<b>Summary</b>	<b>17</b>
A.1	Status . . . . .	17
A.2	Comments . . . . .	17

# 1 Front

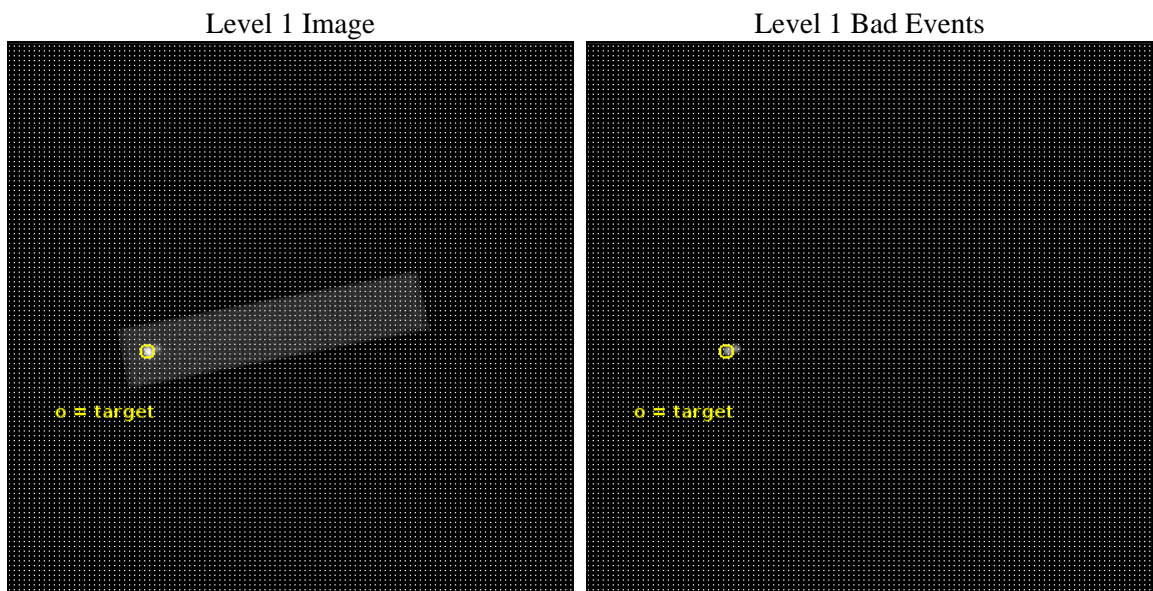
seq_num	291474	Sequence number
obs_id	21788	Observation id
title	AO-20 HRC-S Gain Calibration Observations of HZ43	Proposal title
observer	CXC Calibration	Principal investigator
object	HZ43	Source name
ra_targ	199.090076	Observer's specified target RA [deg]
dec_targ	29.098119	Observer's specified target Dec [deg]
ra_nom	198.78650262278	Nominal RA [deg]
dec_nom	29.14863670788	Nominal Dec [deg]
roll_nom	168.4524365217	Nominal Roll [deg]
revision	1	Processing version of data
ontime	1897.5313636065	[s]
livetime	1533.023512223	Ontime multiplied by DTCOR
l2events	332629	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	1700.000000	[s] Scheduled observation exposure time
ascdsver	10.7.1	Processing system revision	ontime	1897.5313636065	[s]
caldsver	4.8.2	&#160	l1events	406937	Number of level 1 events
date	2019-04-04T11:33:33	Date and time of file creation			
revision	1	Processing version of data			

### 2.1.3 Events

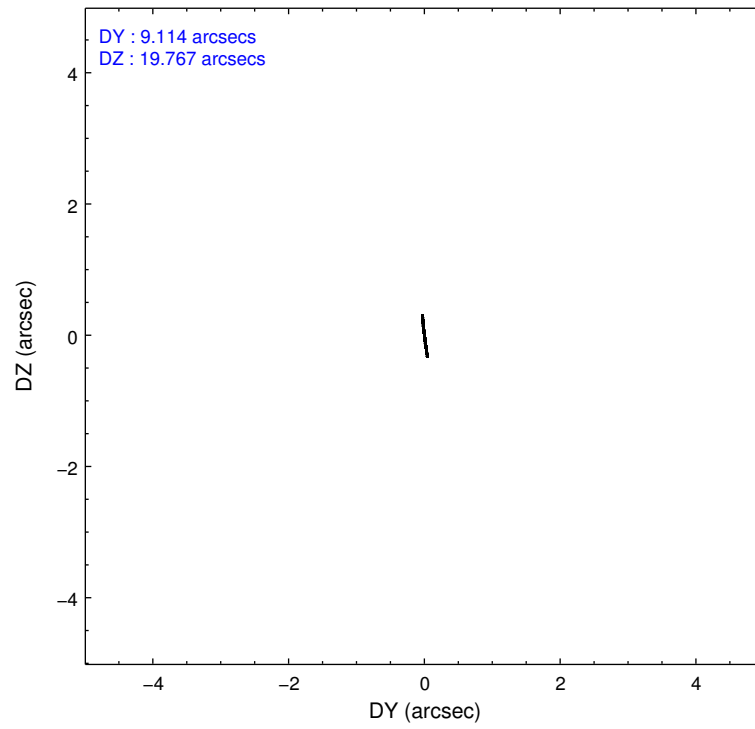
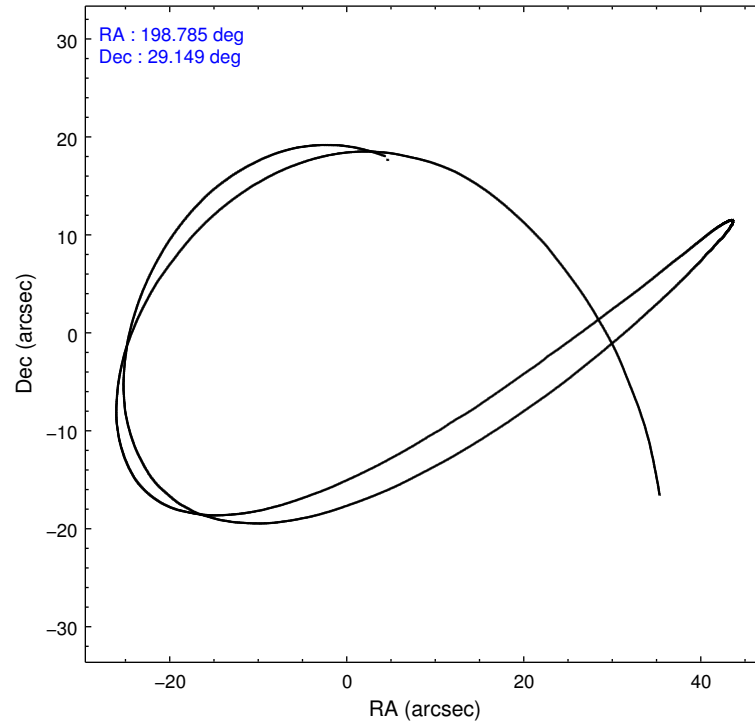
Level 1 Events

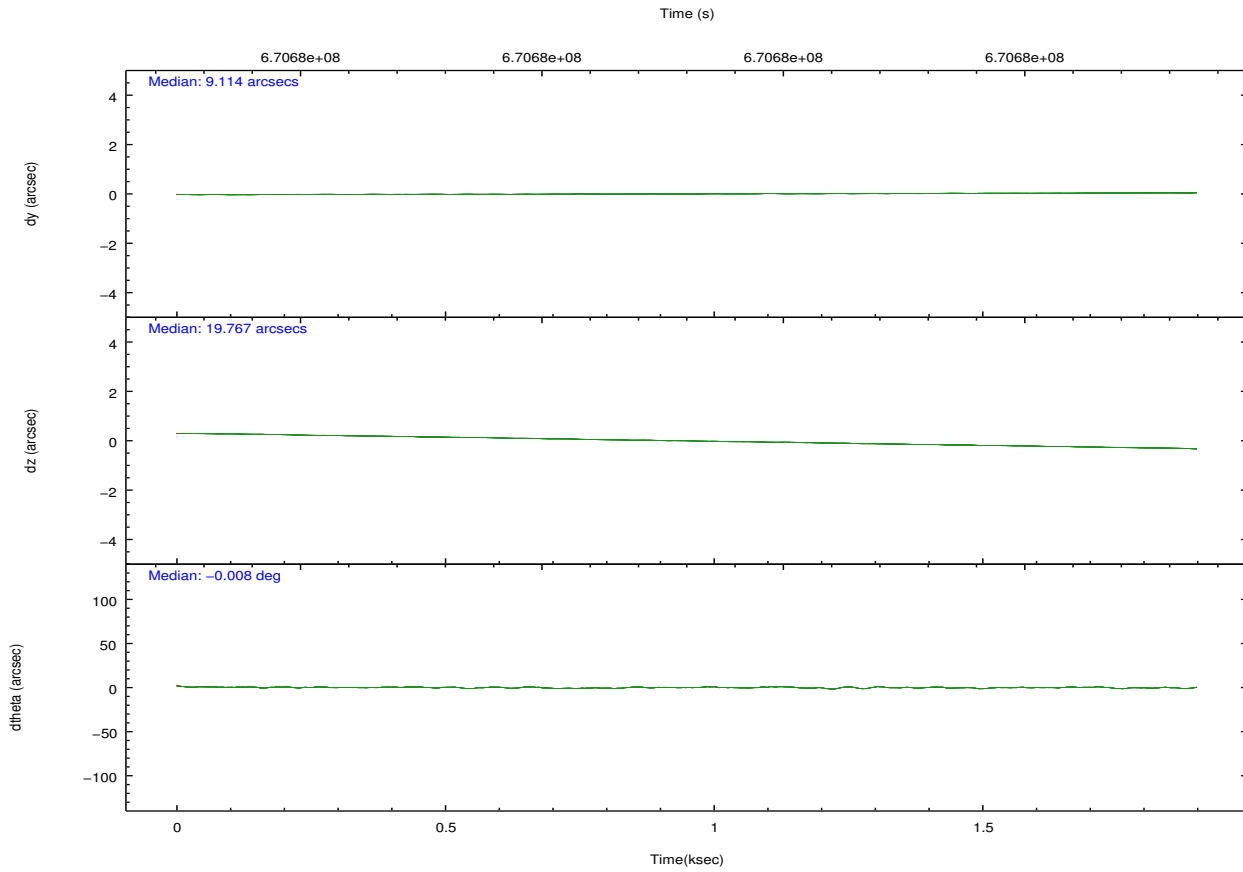
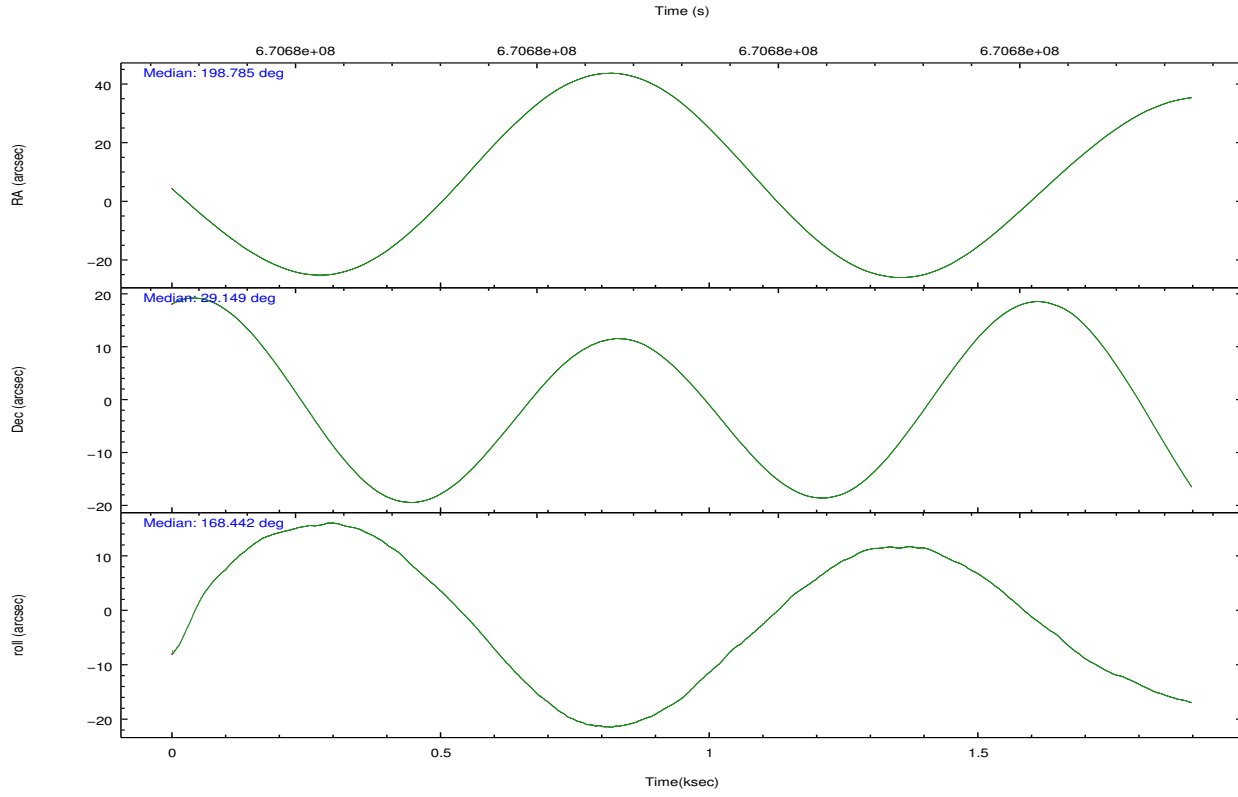
	<b>segment 1</b>	<b>segment 2</b>	<b>segment 3</b>
level 1 events	703	405531	703
rejected events	703	55646	703
rejected %	100%	13%	100%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	HRC	HRC	Obspar format version number	7	7
Detector	HRC-S	HRC-S	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	OBSERVING	OBSERVING			
Observation mode	POINTING	POINTING			
[deg] Pointing RA	198.818318	198.7865026227778			
[deg] Pointing Dec	29.158554	29.14863670788034			
[deg] Pointing Roll	168.369605	168.4524365217041			
[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)	670680052.184000	670679675.8522201			
Observation start date	2019-04-03T11:59:43	2019-04-03T11:54:35			
[s] Observation end time (MET)	670681752.184000	670681886.26485			
Observation end date	2019-04-03T12:28:03	2019-04-03T12:31:26			

## 2.3 Aspect



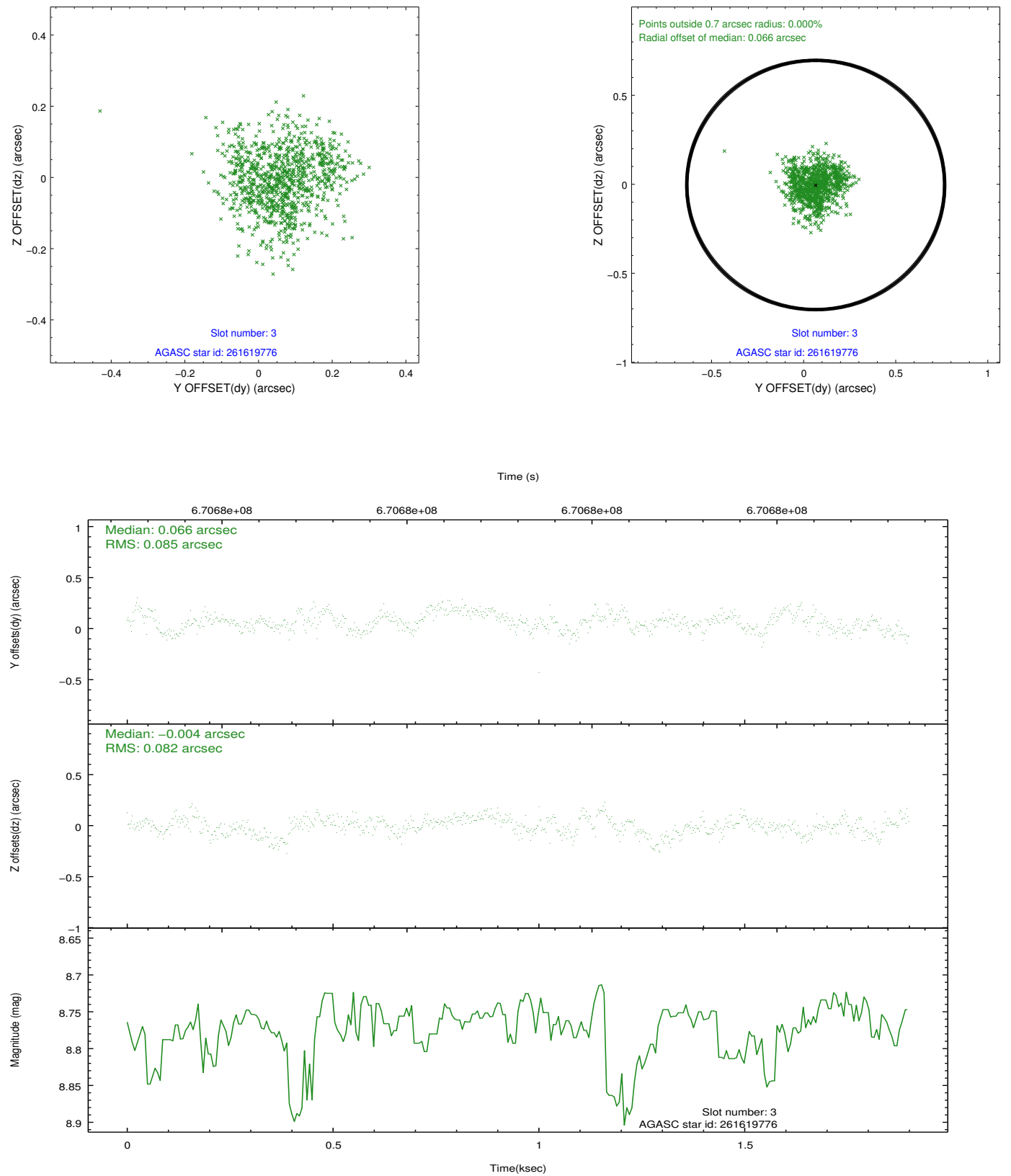


Slot Statistics

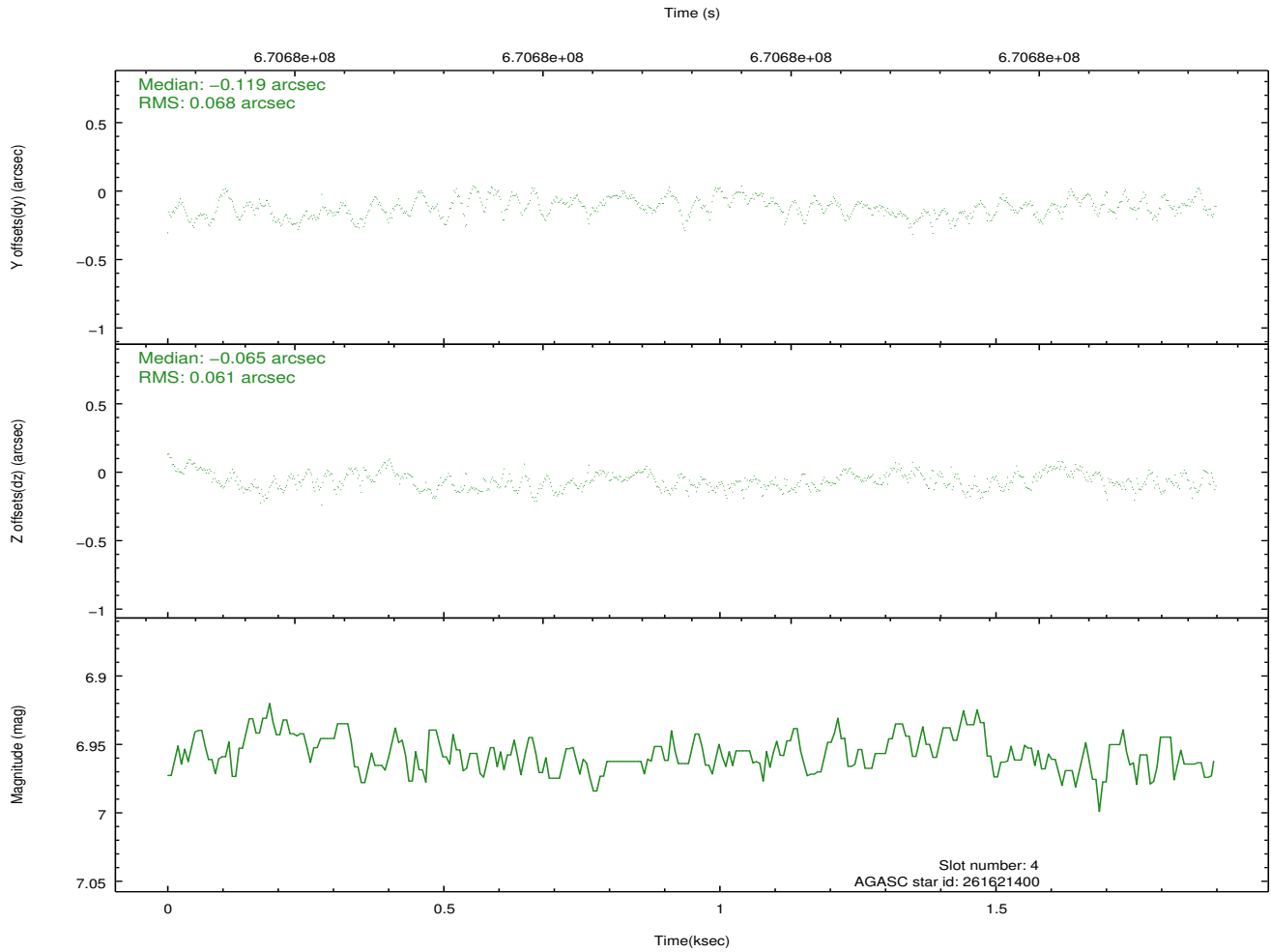
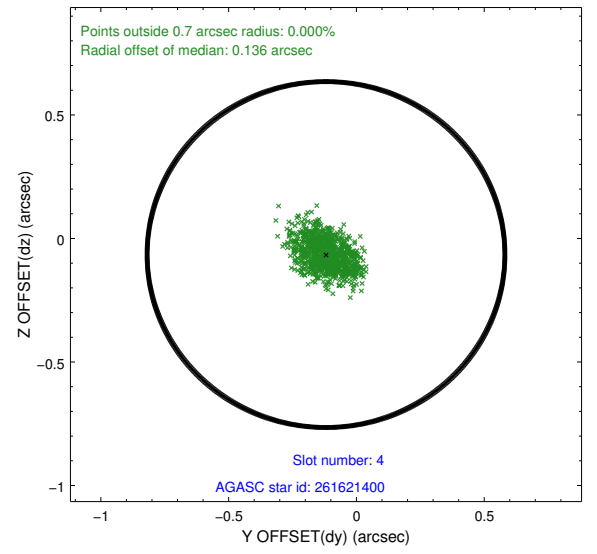
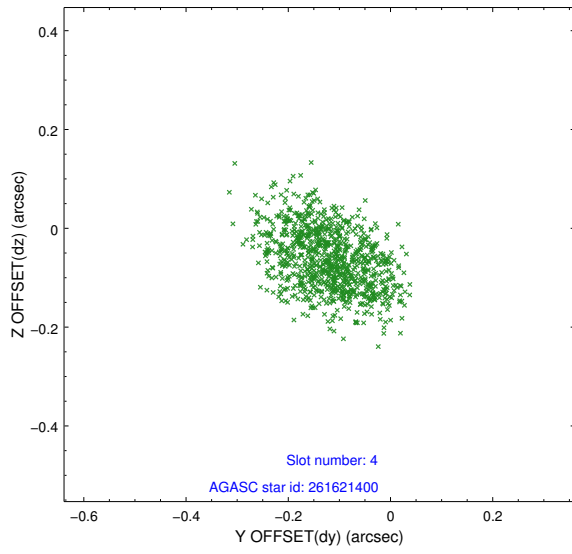
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		HRC-S-1	7.09	464	1.000	-0.057	-0.233	0.007	0.011	0.000000	0.000000	-1163.42	-468
1	FID		HRC-S-2	7.05	464	1.000	0.404	-0.137	0.005	0.010	0.000000	0.000000	1234.19	-462
2	FID		HRC-S-3	7.07	464	1.000	0.042	0.068	0.007	0.011	0.000000	0.000000	-1163.46	559
3	GUIDE	used	261619776	8.77	923	1.000	0.066	-0.004	0.128	0.195	198.654383	29.401174	675.67	-750
4	GUIDE	used	261621400	6.96	926	1.000	-0.119	-0.065	0.099	0.153	198.901600	28.741982	-561.92	1416
5	GUIDE	used	261624080	7.09	927	1.000	0.072	-0.018	0.098	0.178	198.424651	29.817768	1680.15	-2074
6	GUIDE	used	261626352	8.58	927	1.000	0.036	-0.095	0.132	0.218	198.417097	29.781420	1682.23	-1947
7	GUIDE	used	261629720	8.08	924	1.000	-0.038	0.190	0.095	0.150	199.236176	29.044452	-1371.52	134

## 2.4 Star Slots

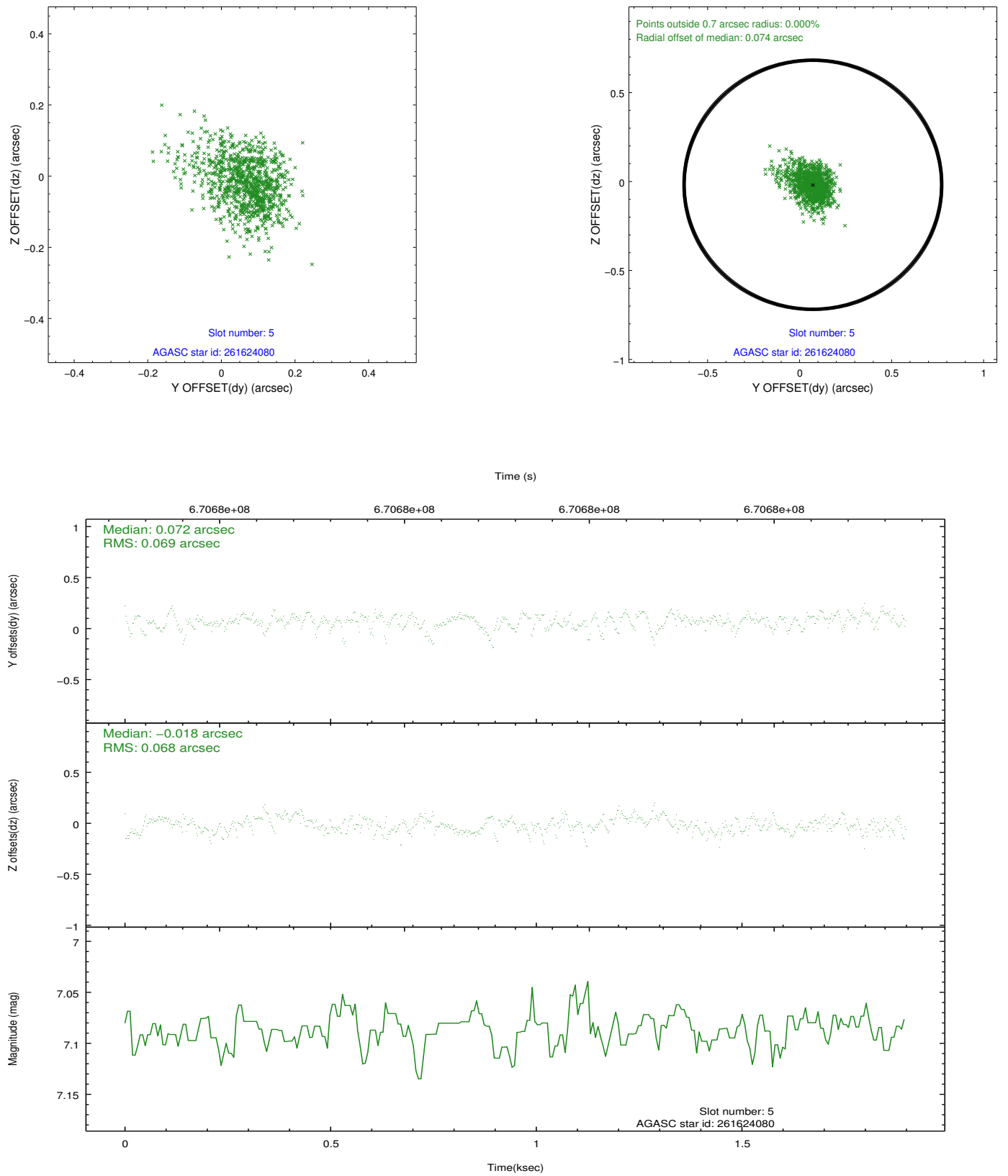
### 2.4.1 Slot 3



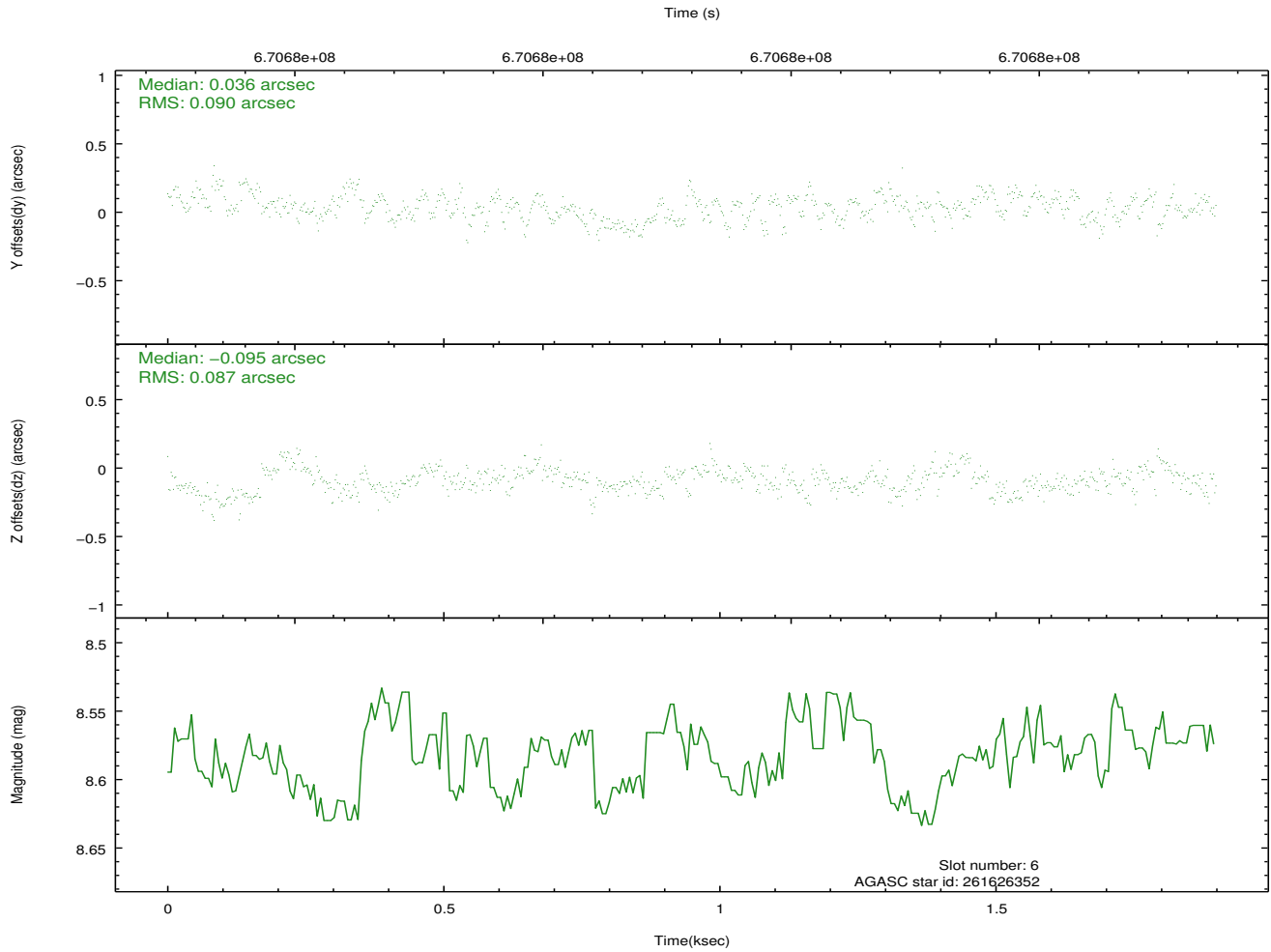
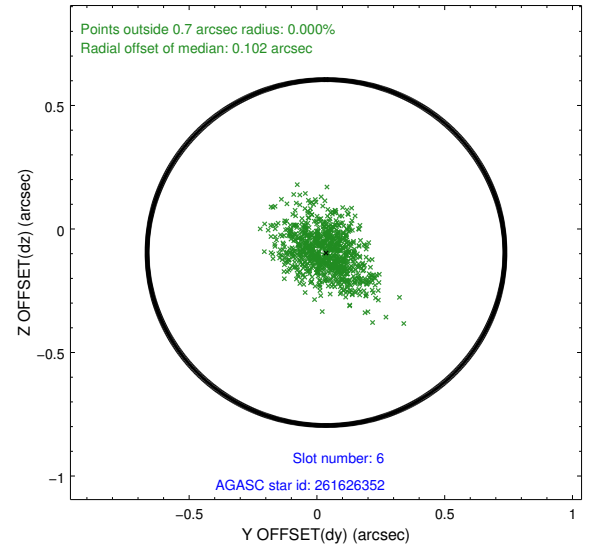
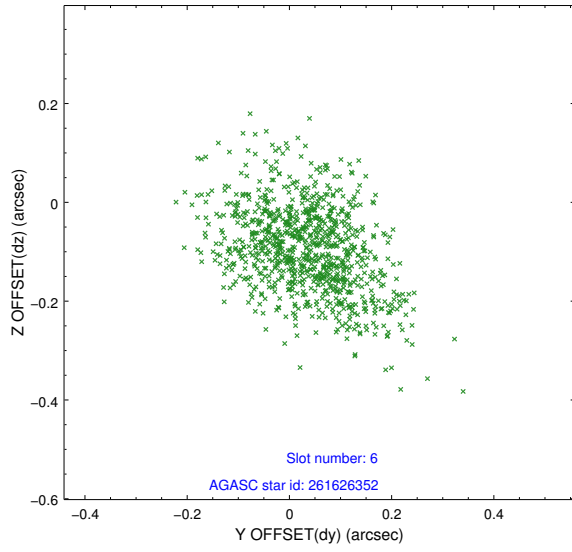
## 2.4.2 Slot 4



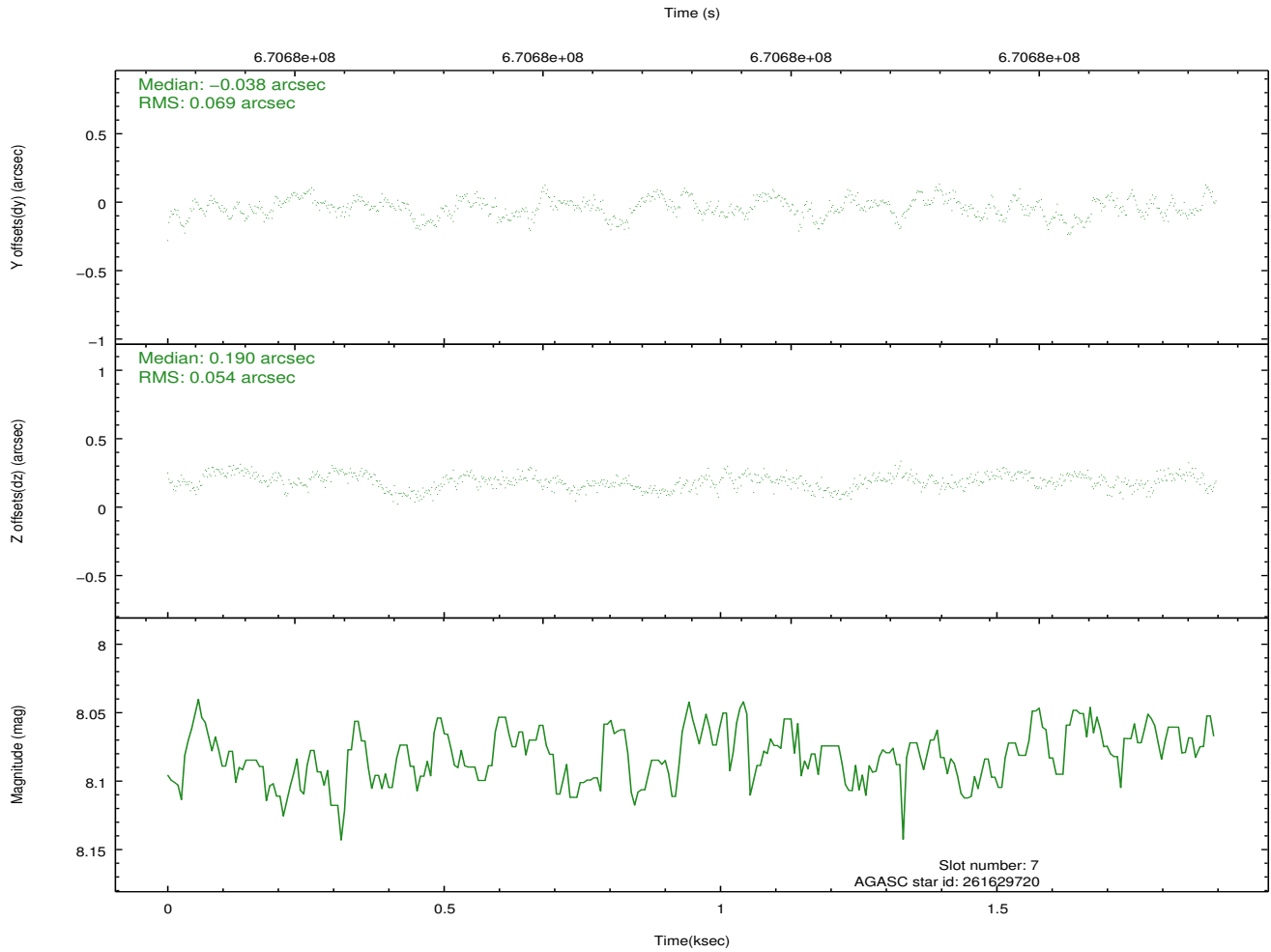
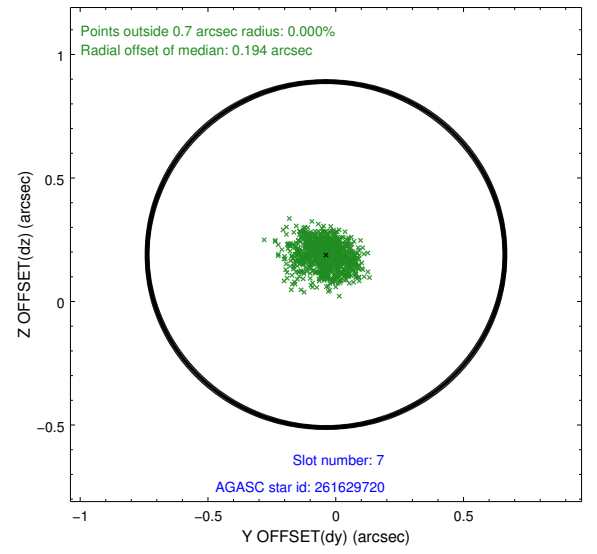
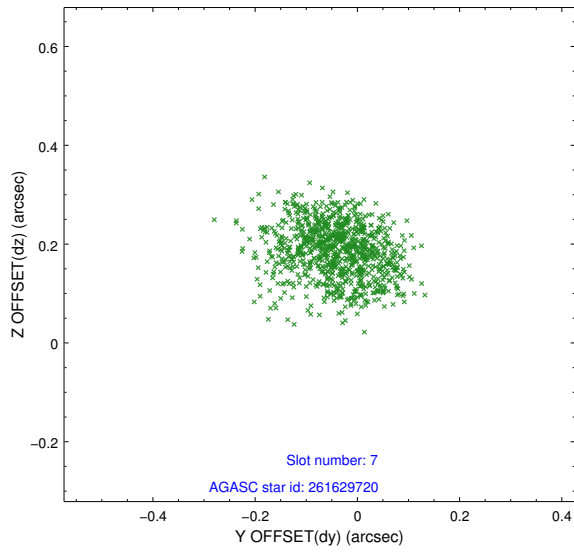
### 2.4.3 Slot 5



## 2.4.4 Slot 6

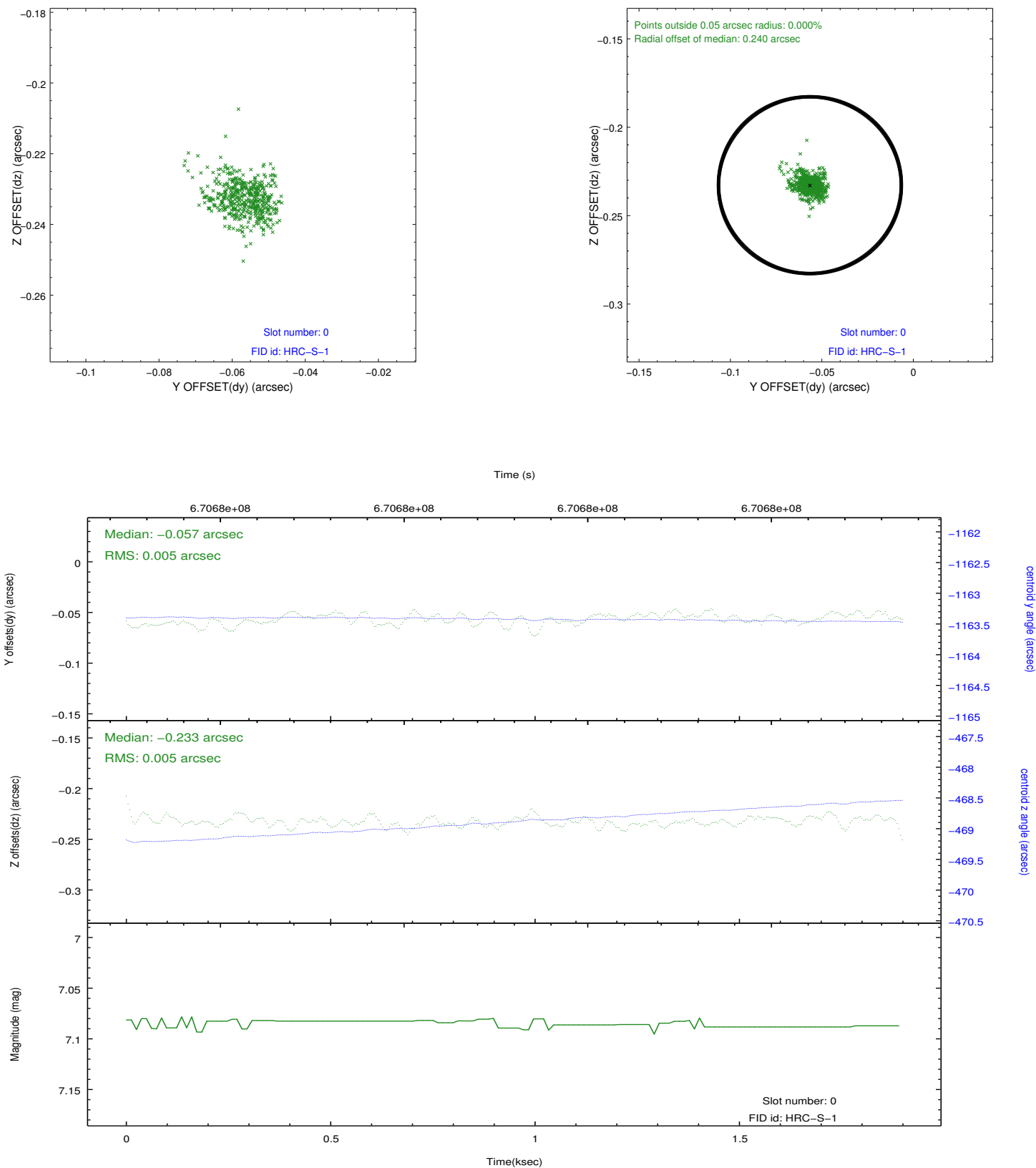


## 2.4.5 Slot 7

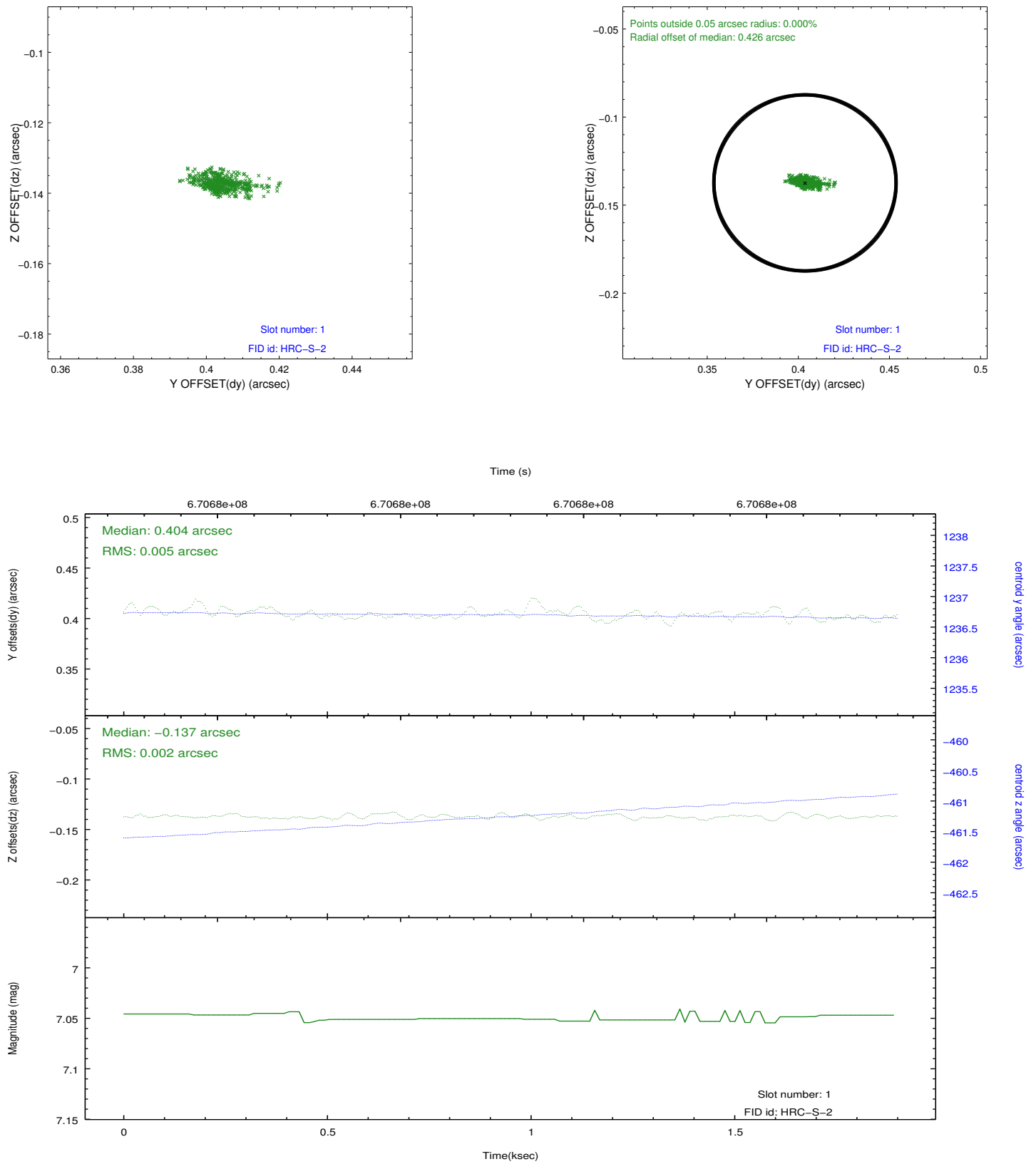


## 2.5 FID Slots

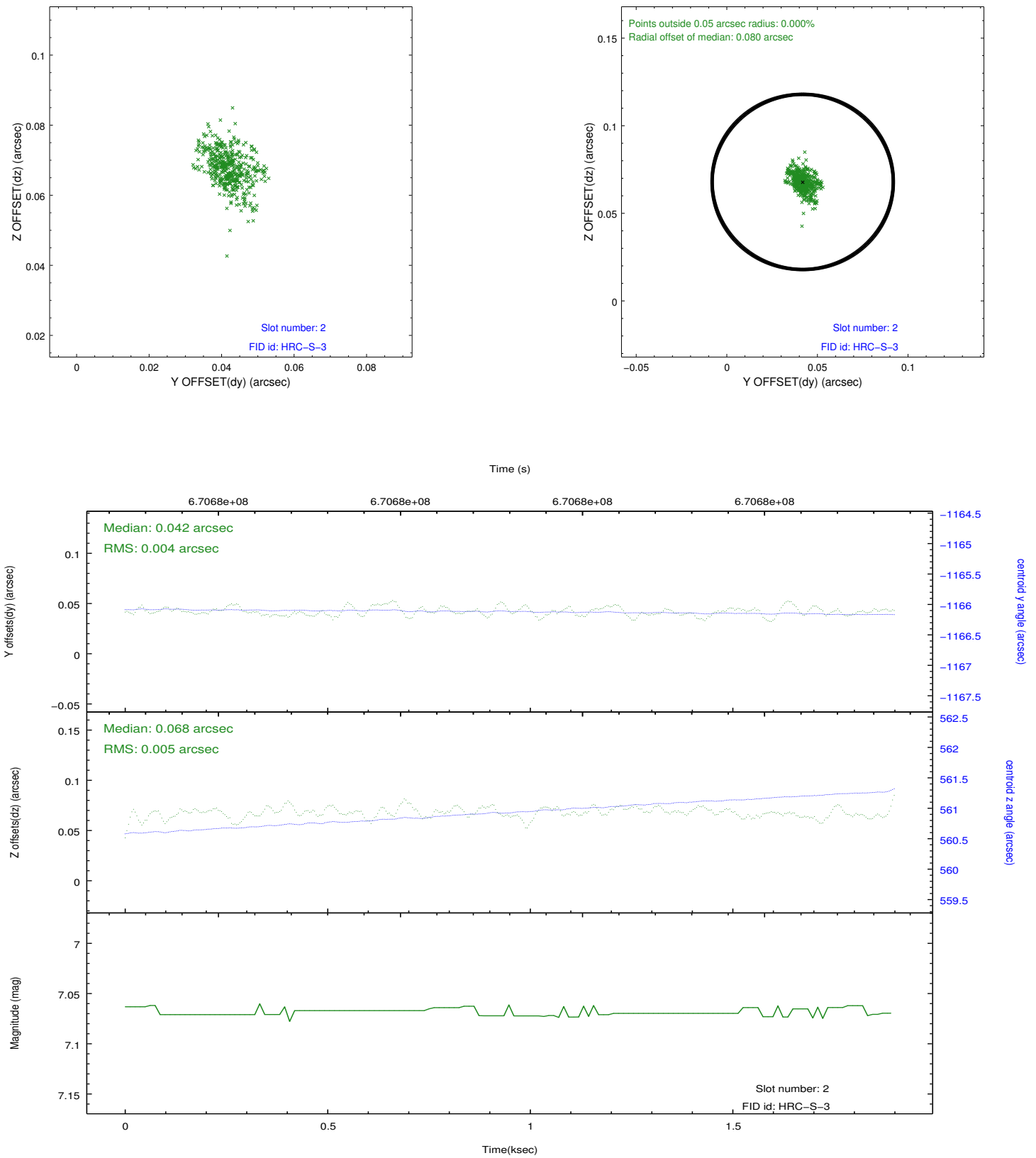
### 2.5.1 Slot 0



## 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)	2019.04.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.8975313636065

### A.2 Comments