

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 3684 - L2 Version 3  
Chandra X-Ray Center

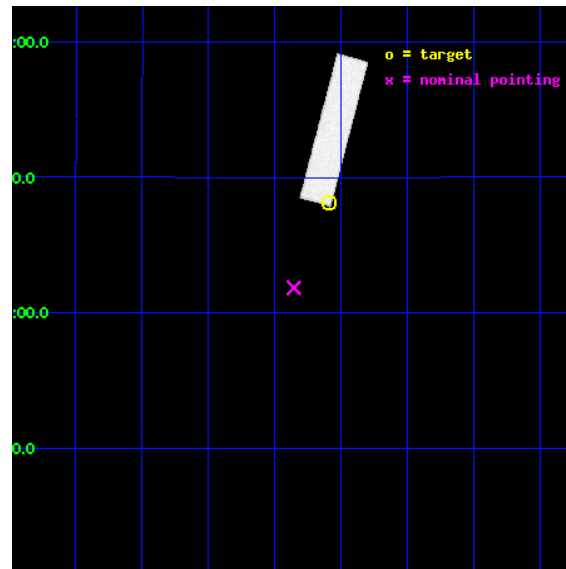
L2 Processing Date : Oct 22 2012

## 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

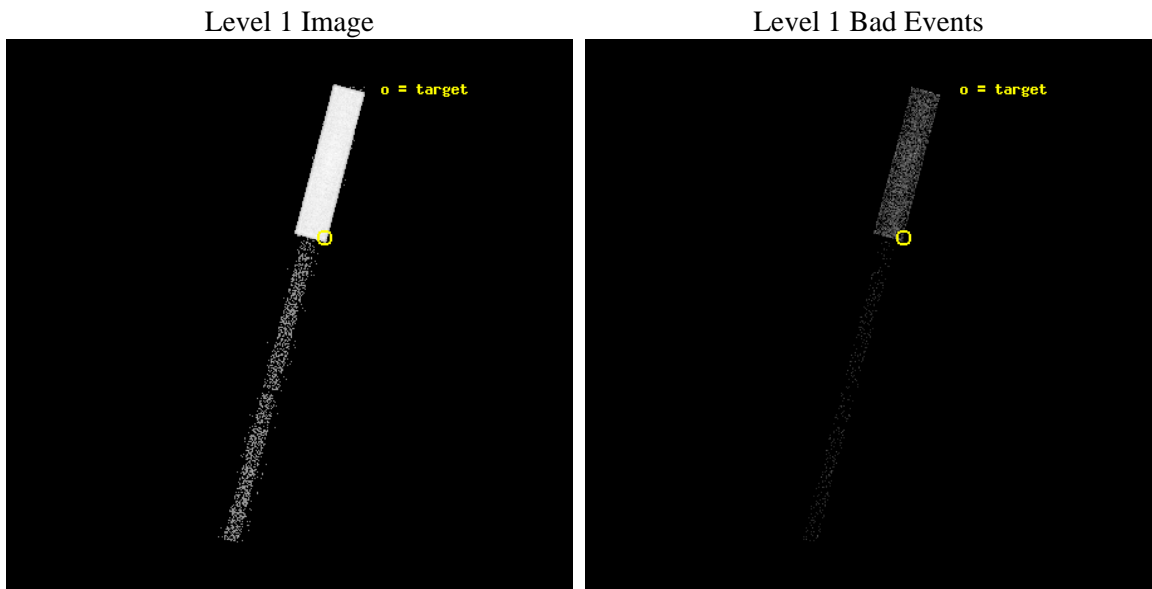
seq_num	290238	Sequence number
obs_id	3684	Observation id
title	AO4 MEASUREMENTS OF THE OPTICAL/UV TRANSMISSION OF THE HRC AND ACIS FILTERS	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	BETELGEUSE	Source name
ra_targ	88.792917	Observer's specified target RA [deg]
dec_targ	7.407056	Observer's specified target Dec [deg]
ra_nom	88.927472264111	Nominal RA [deg]
dec_nom	7.0925680175629	Nominal Dec [deg]
roll_nom	284.69497778215	Nominal Roll [deg]
revision	3	Processing version of data
ontime	2142.5063399374	[s]
livetime	2132.3482561538	Ontime multiplied by DTCOR
l2events	71305	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	2000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	2142.5063399374	[s]
caldsver	4.5.2	&#160	l1events	111539	Number of level 1 events
date	2012-10-22T04:04:48	Date and time of file creation			
revision	3	Processing version of data			

### 2.1.3 Events

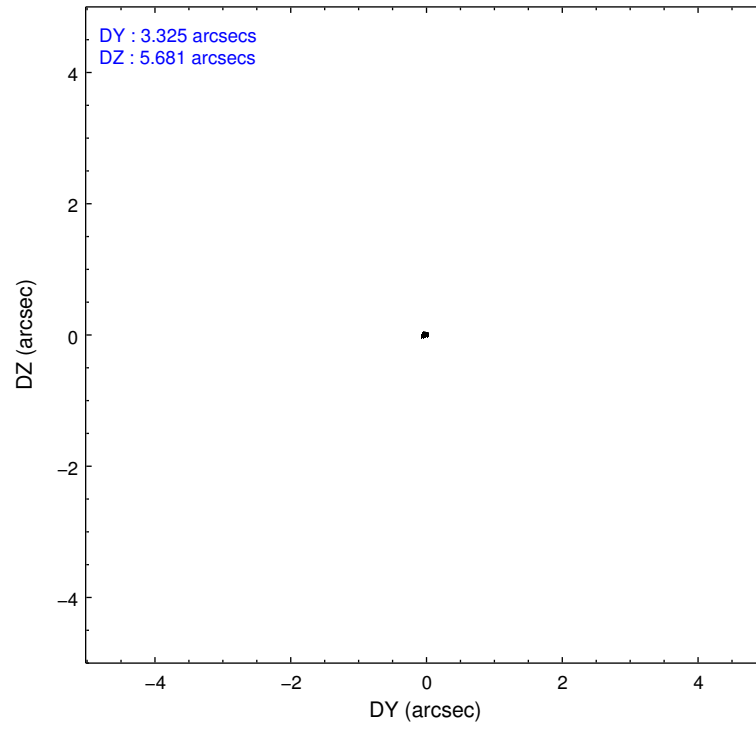
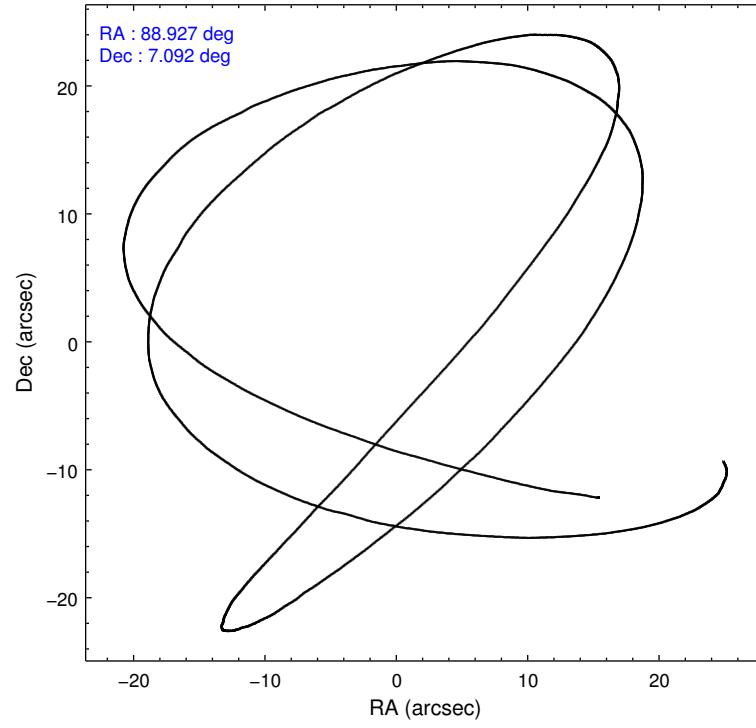
Level 1 Events

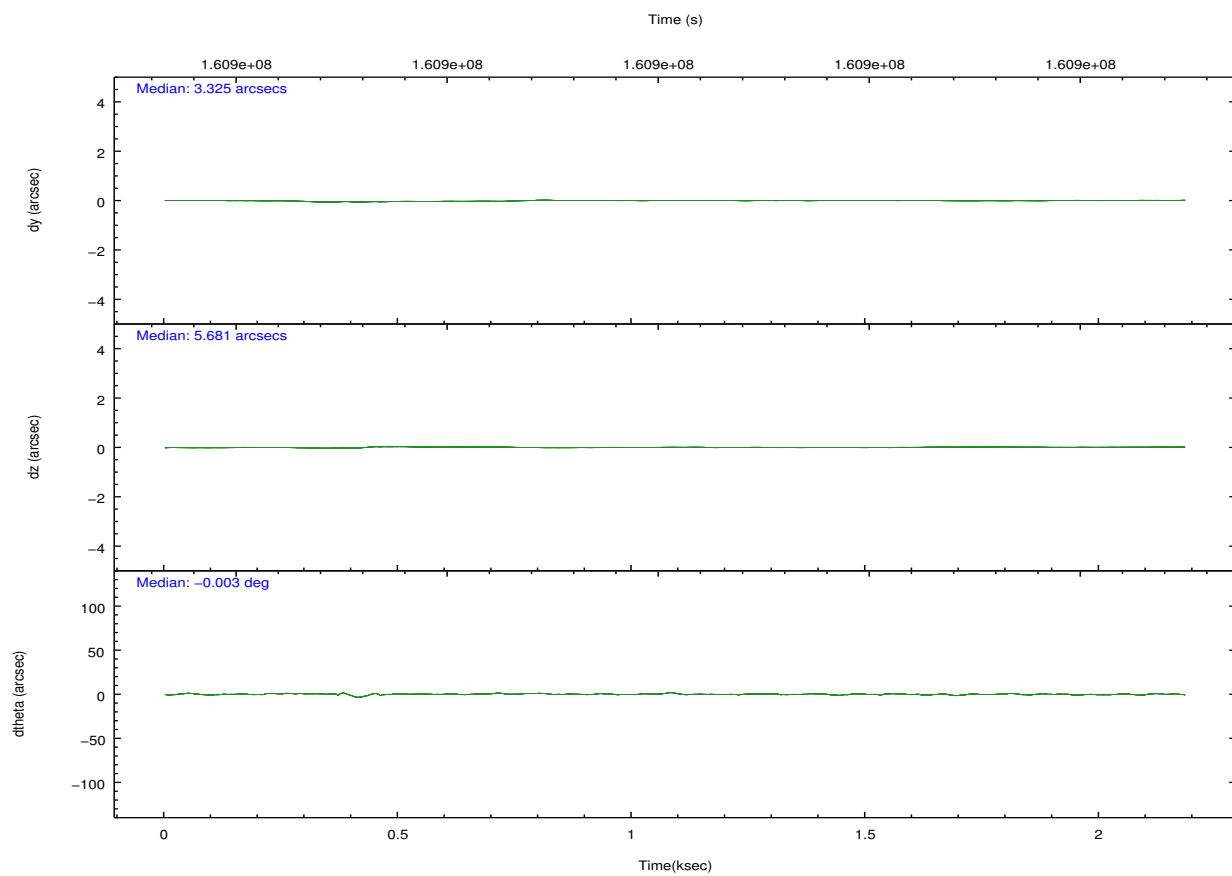
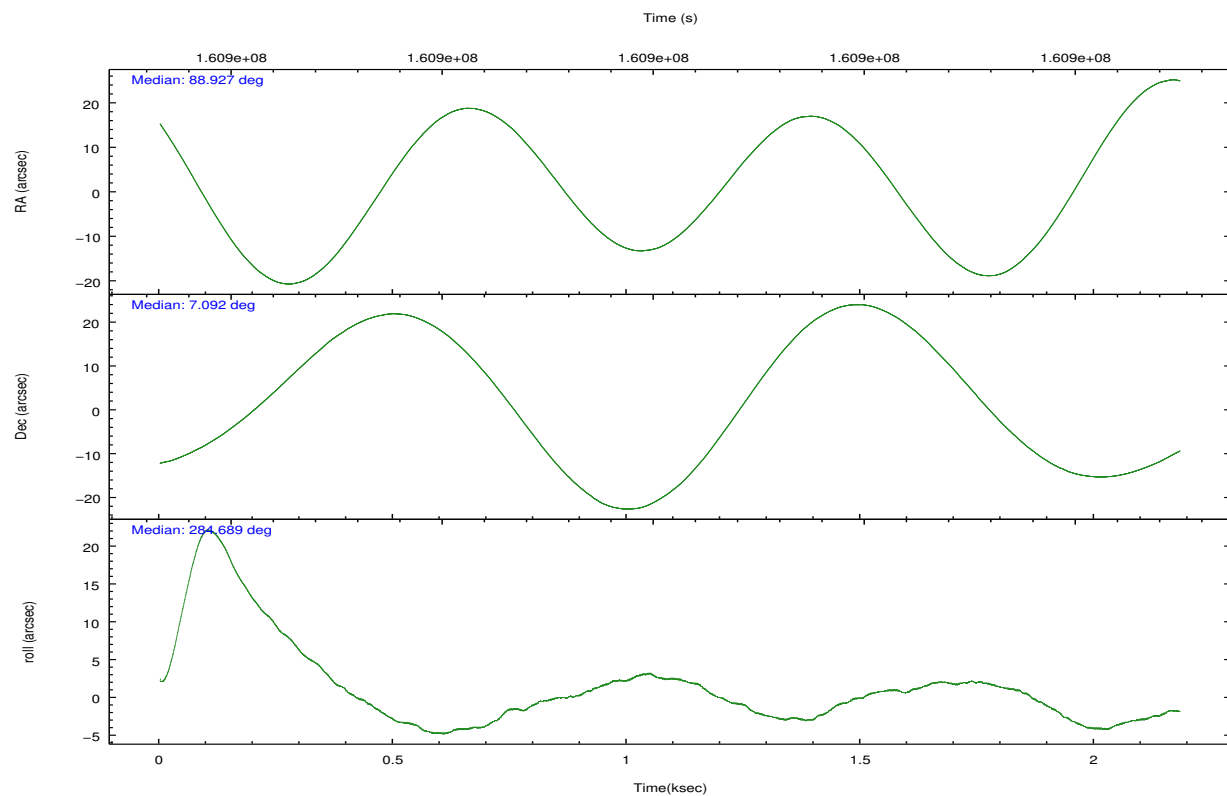
	<b>segment 1</b>	<b>segment 2</b>	<b>segment 3</b>
level 1 events	109187	1147	1205
rejected events	16606	1119	1205
rejected %	15%	97%	100%

## 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	88.906402	88.92747226411073			
[deg] Pointing Dec	7.111922	7.092568017562884			
[deg] Pointing Roll	284.630241	284.6949777821533			
[s] Window start time (MET)	160488064.184000	160488064.184000			
[s] Window stop time (MET)	162820864.184000	162820864.184000			
[mm] SIM focus pos	-1.429586	-1.428180813131781			
[mm] SIM defocus	0.1037507710433287	0.1051558262725154			
[mm] SIM translation stage pos	250.455976	250.466033080201			
[mm] SIM translation stage offset	0	-0.01005468664627074			
[s] Observation start time (MET)	160897130.184000	160896753.86087			
Observation start date	2003-02-06T05:37:46	2003-02-06T05:32:33			
[s] Observation end time (MET)	160899130.184000	160899299.96098			
Observation end date	2003-02-06T06:11:06	2003-02-06T06:14:59			

## 2.3 Aspect





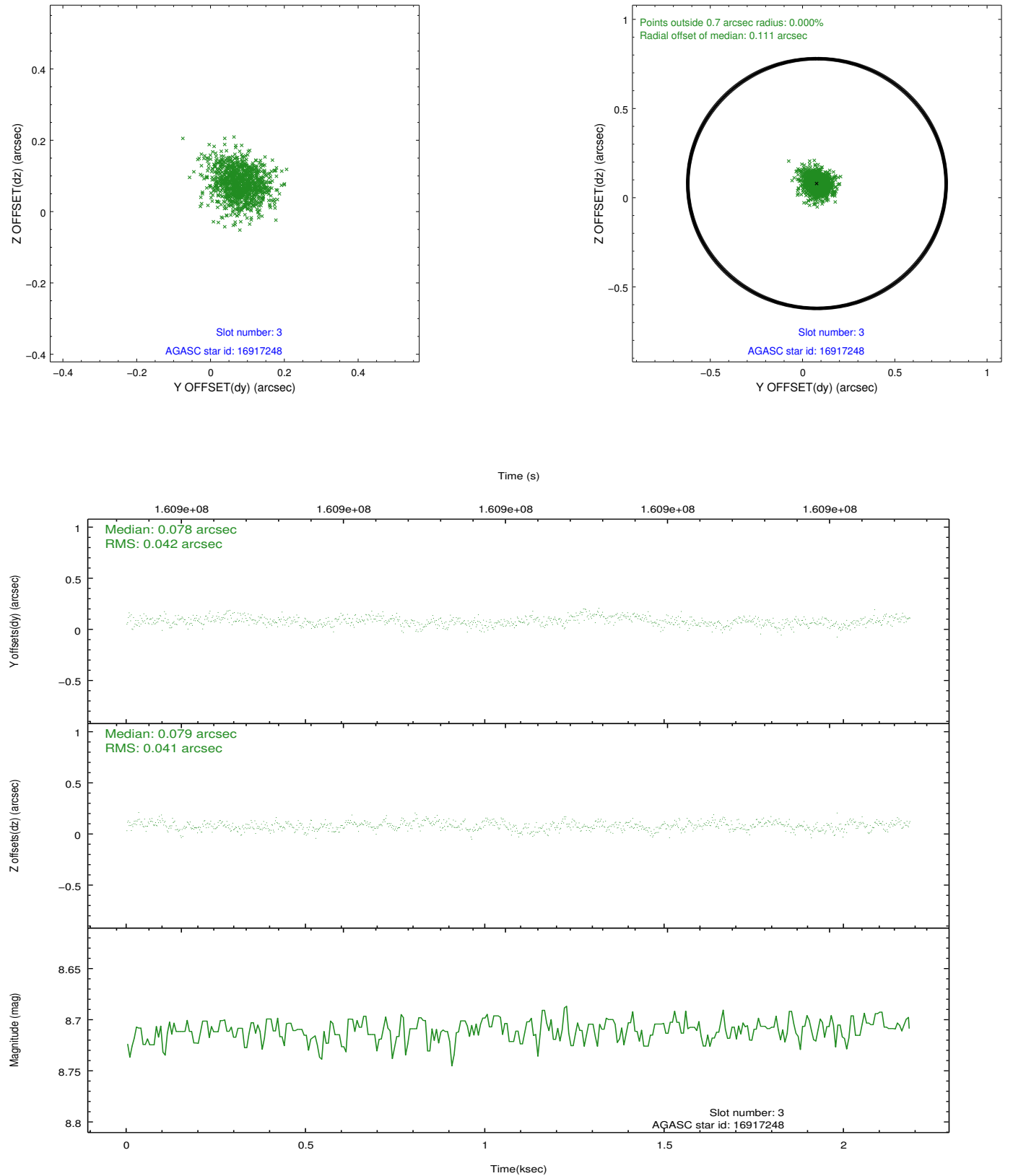
### Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	HRC-S-1	7.02	533	0.159	-0.177	0.006	0.011	0.000000	0.000000	-1157.35	-454.24
1	FID	HRC-S-2	7.01	533	0.095	-0.098	0.005	0.011	0.000000	0.000000	1240.10	-447.67
2	FID	HRC-S-3	7.03	533	0.136	-0.027	0.007	0.012	0.000000	0.000000	-1157.76	574.60
3	GUIDE	16917248	8.71	1066	0.078	0.079	0.062	0.106	89.306967	6.774731	1535.79	1080.27
4	GUIDE	93852536	9.63	1066	-0.084	-0.069	0.096	0.157	88.414730	7.576698	-2061.42	-1273.18
5	GUIDE	16918912	8.65	1066	0.091	0.038	0.078	0.126	89.257075	6.922287	974.87	1040.15
6	GUIDE	16910592	8.97	1066	-0.035	-0.077	0.080	0.130	88.532936	6.726769	1005.04	-1640.11
7	GUIDE	16918456	9.57	1060	-0.052	0.023	0.121	0.185	89.526896	7.059699	741.35	2097.30

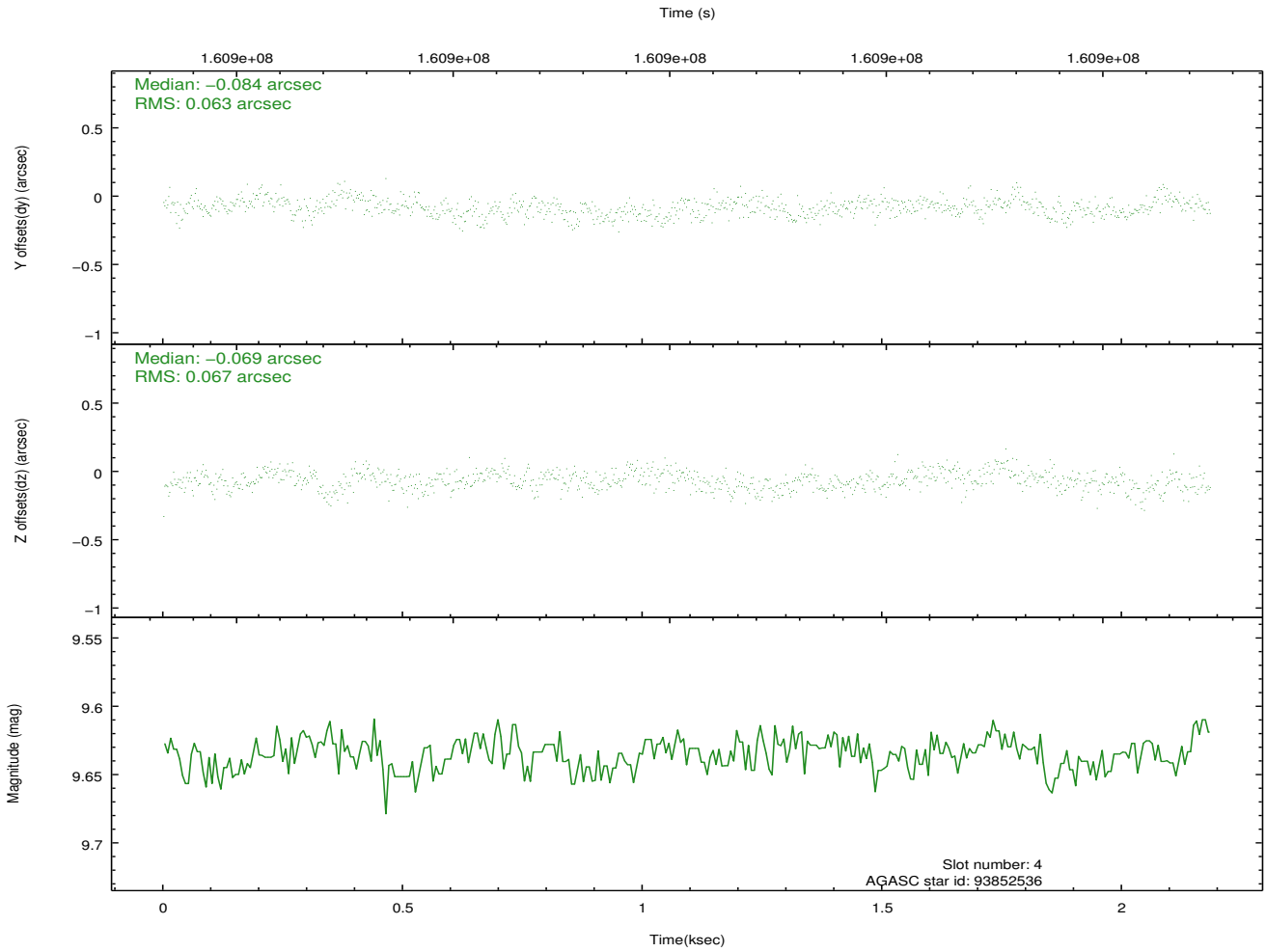
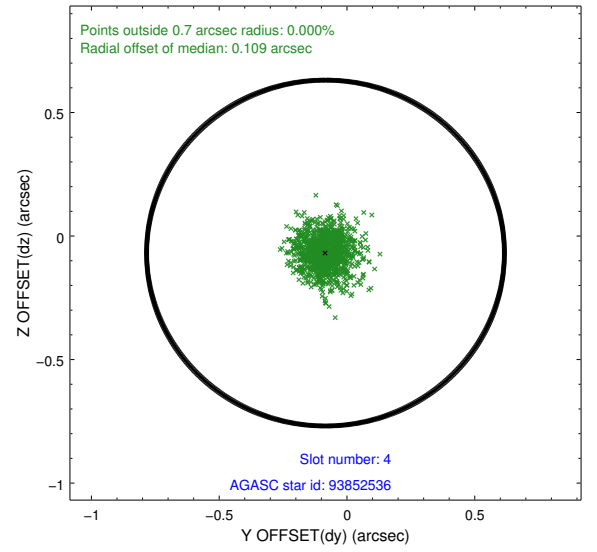
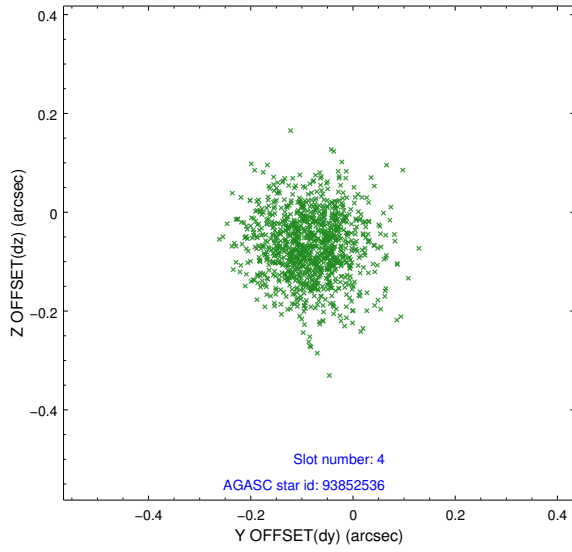


## 2.4 Star Slots

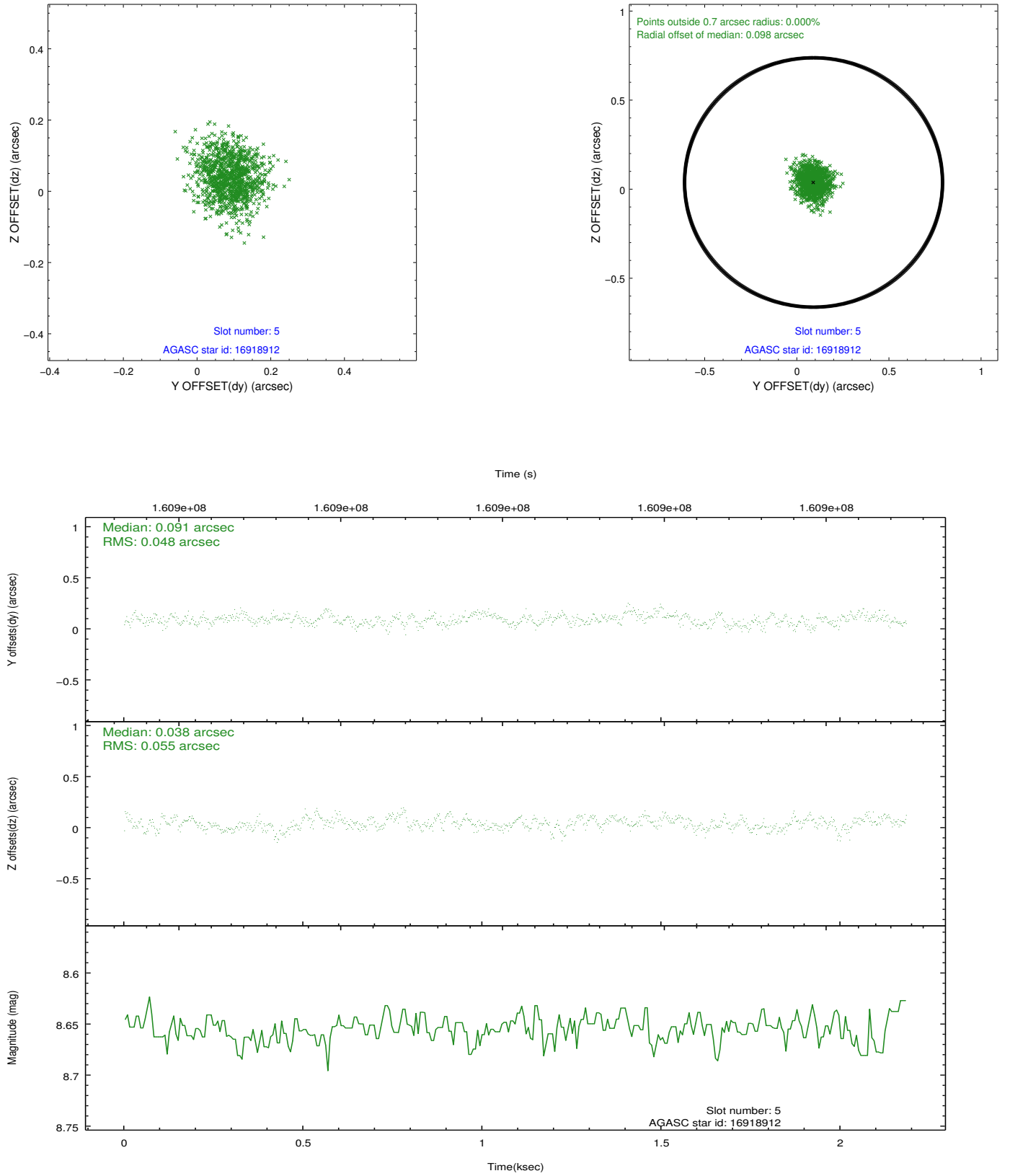
### 2.4.1 Slot 3



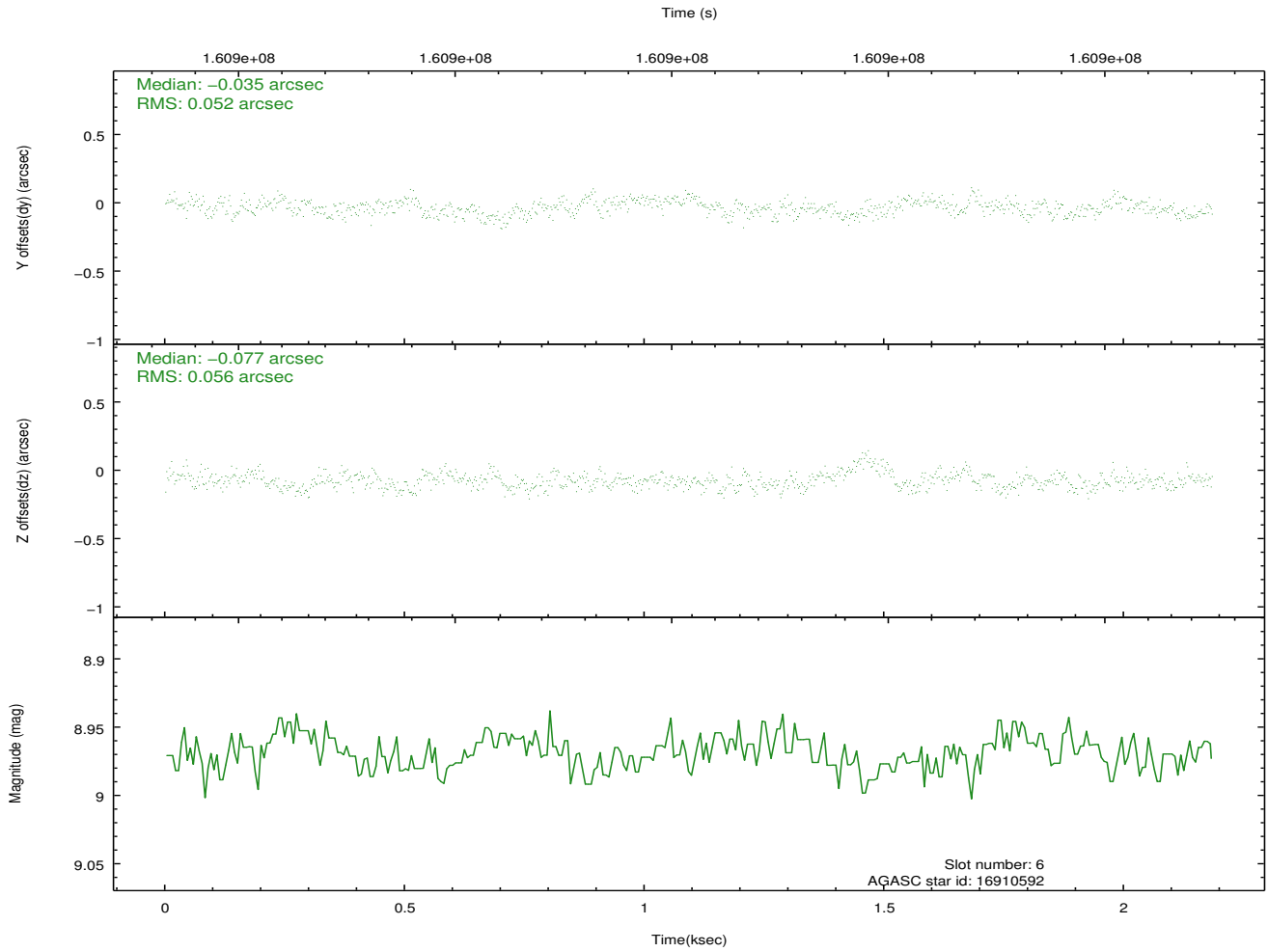
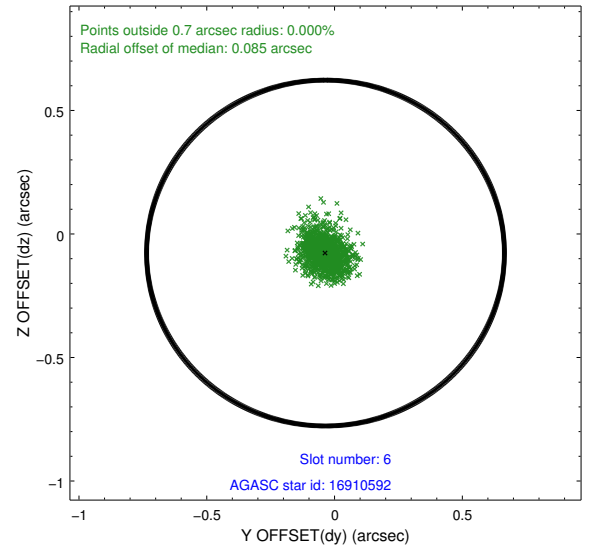
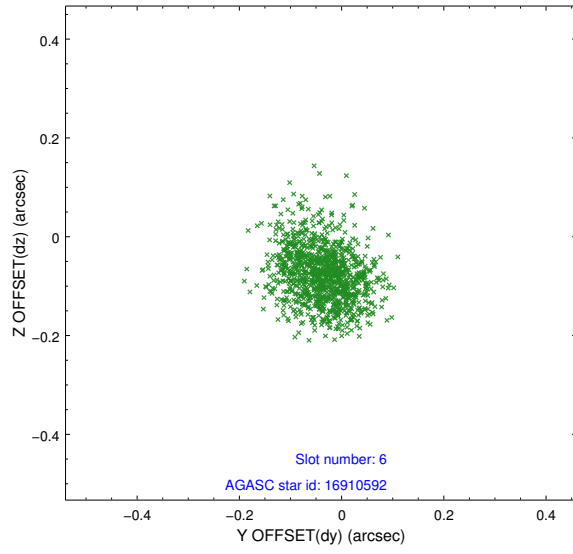
## 2.4.2 Slot 4



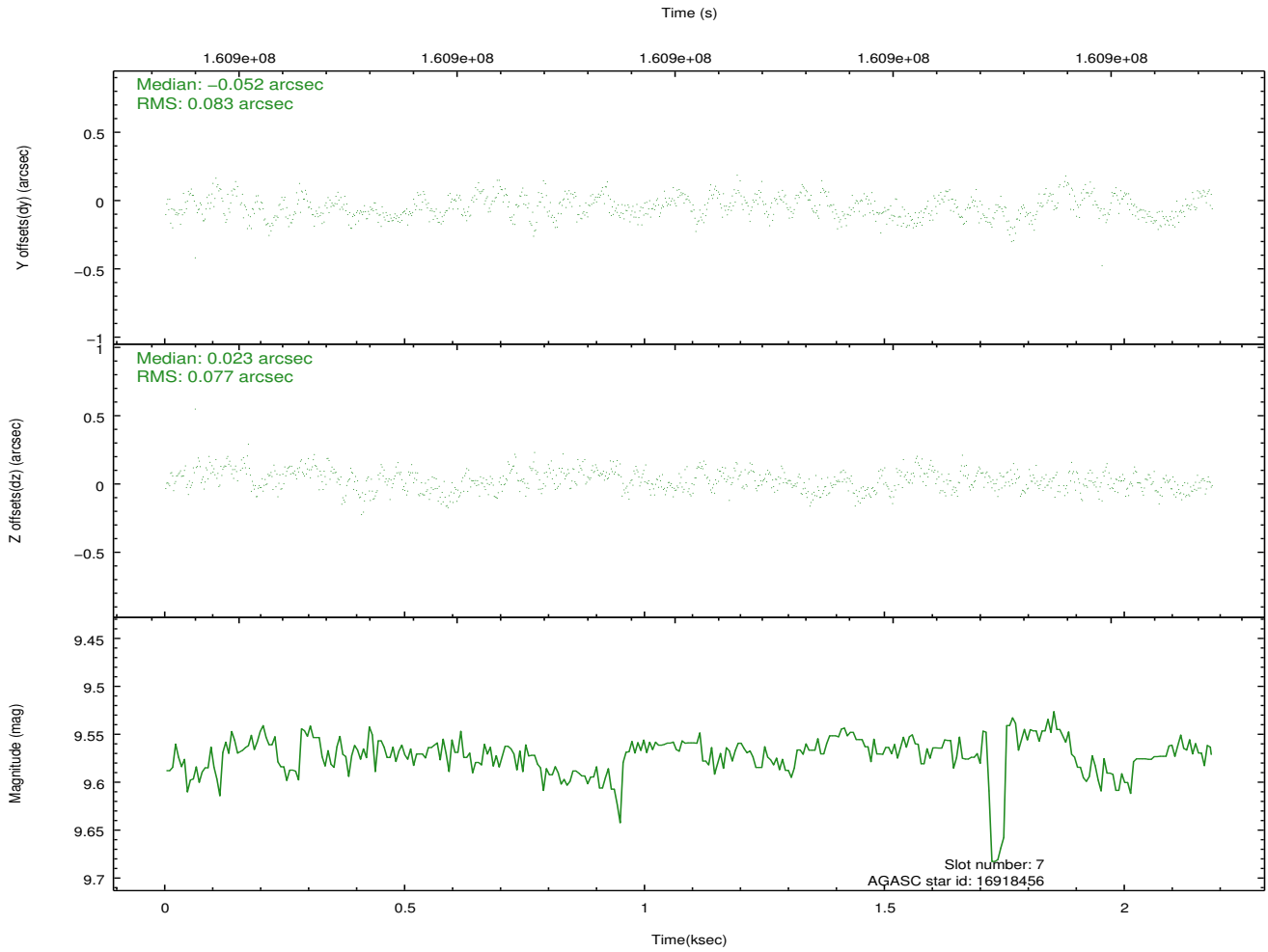
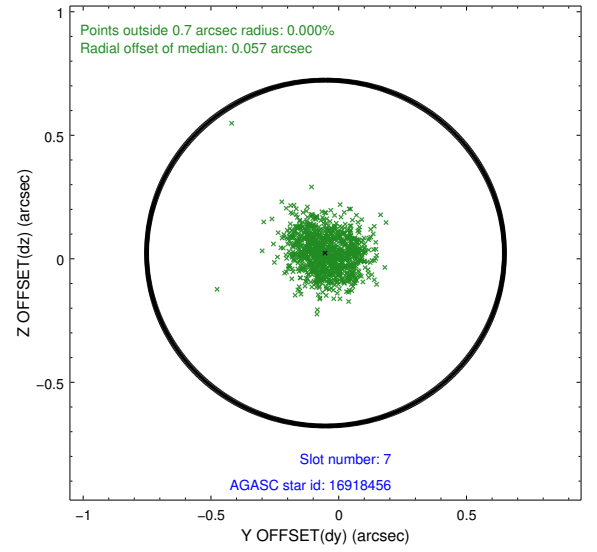
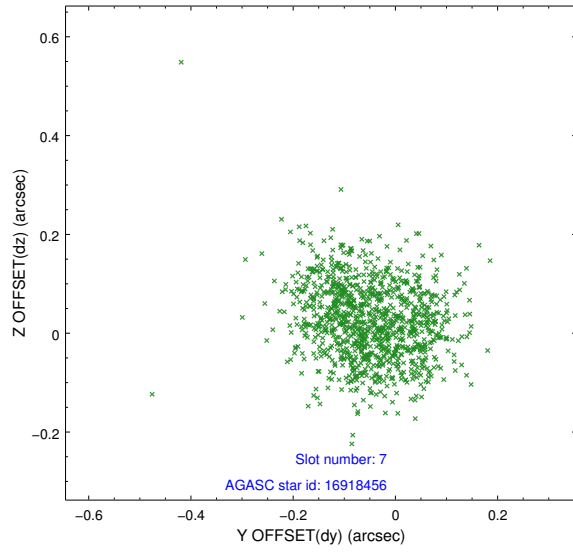
### 2.4.3 Slot 5



## 2.4.4 Slot 6

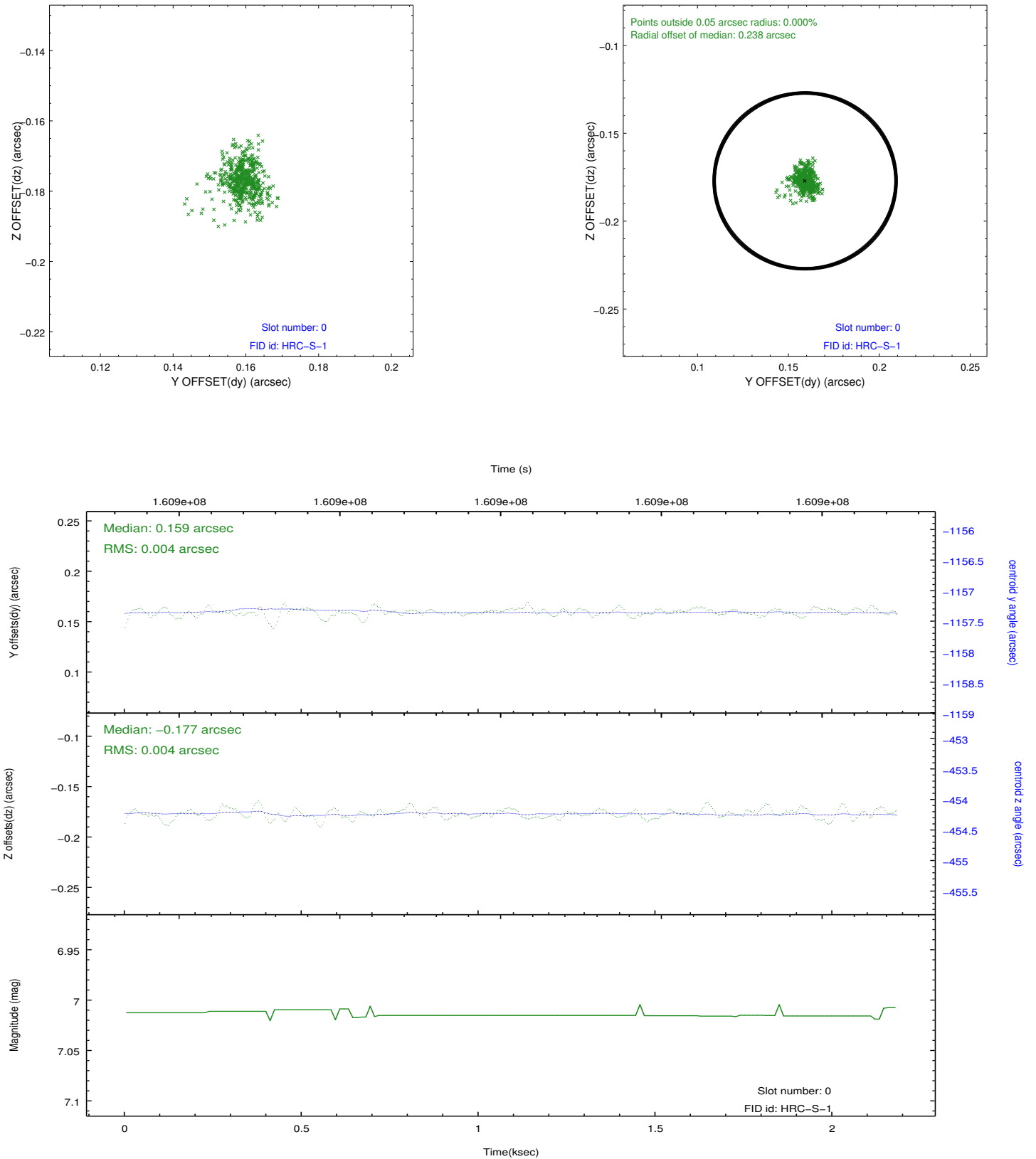


## 2.4.5 Slot 7

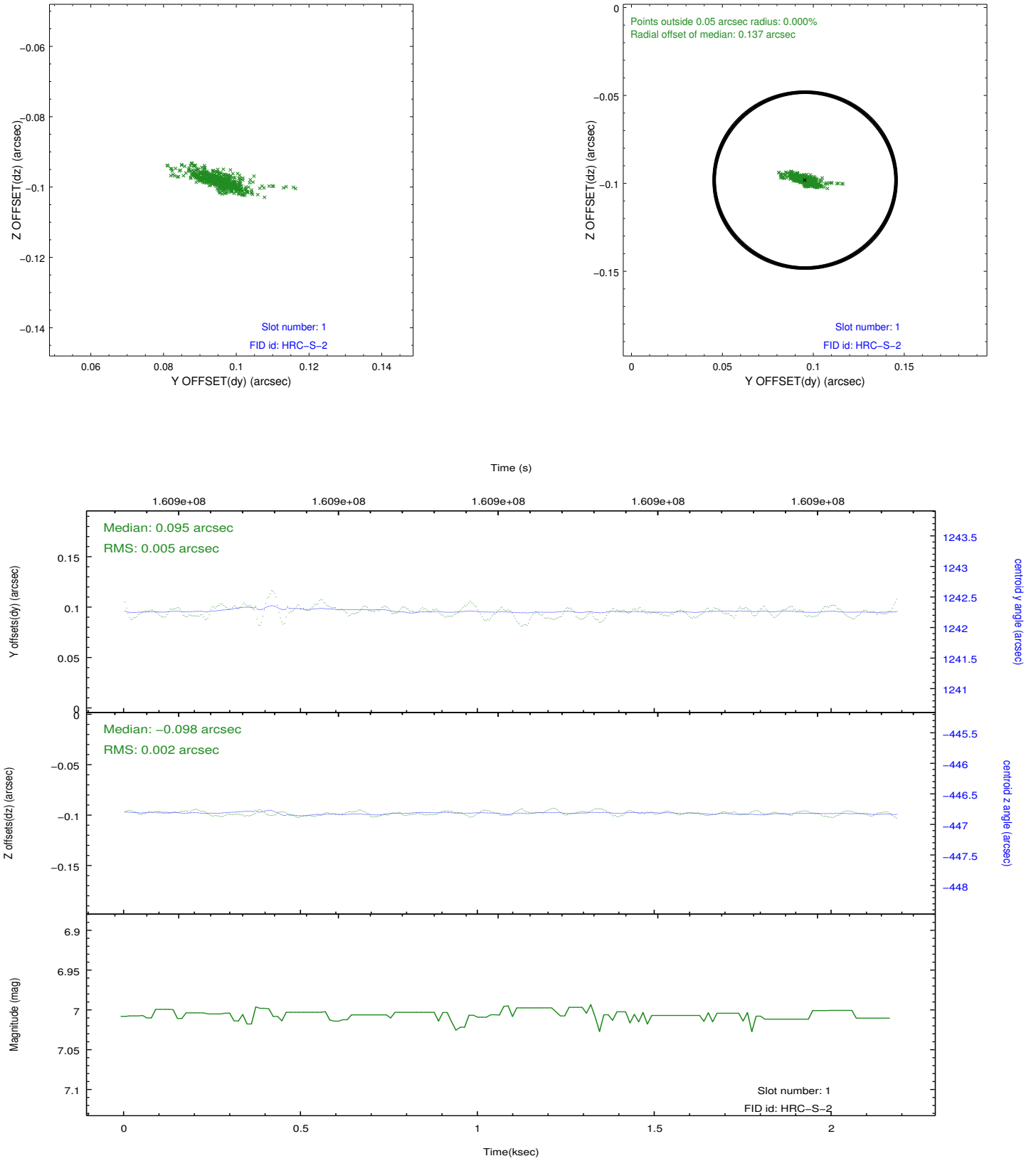


## 2.5 FID Slots

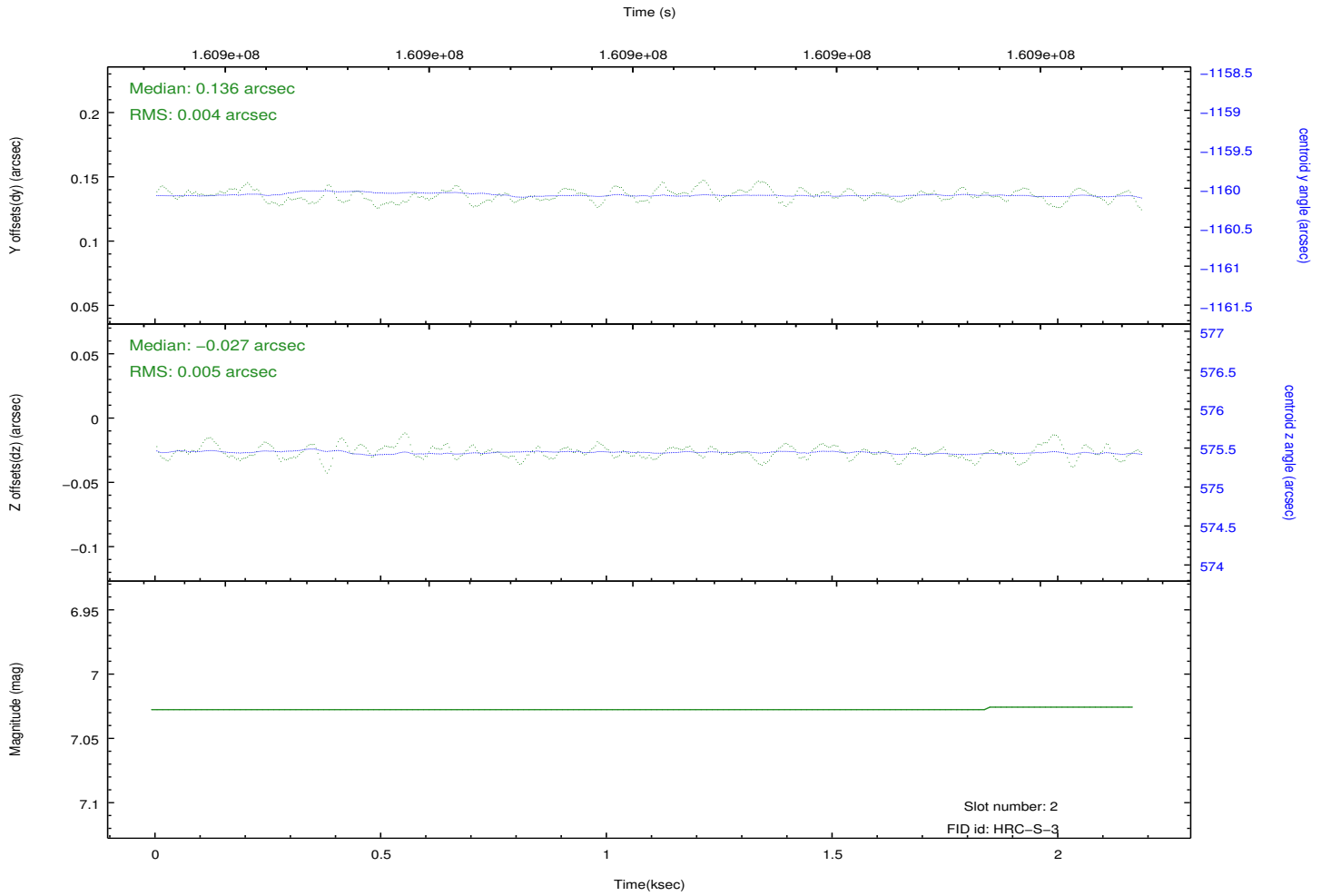
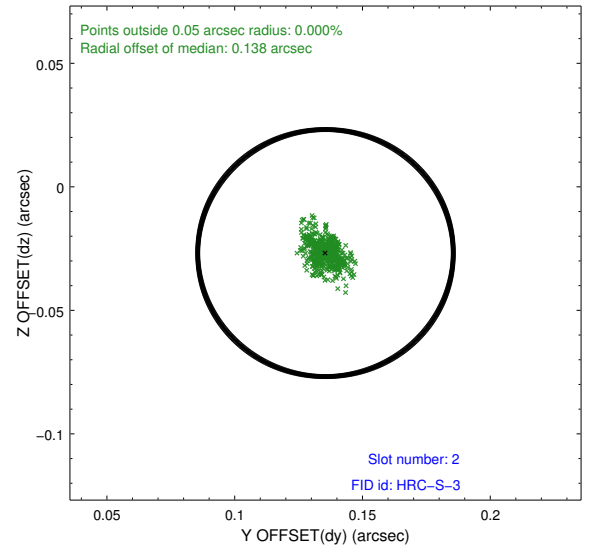
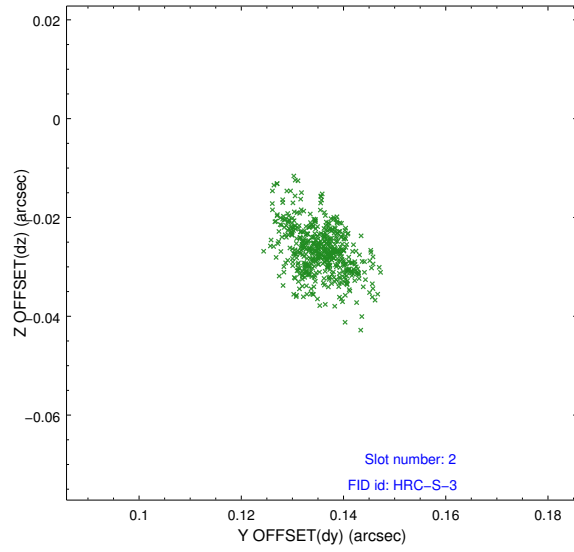
### 2.5.1 Slot 0



## 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)	2012.11.05
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	2.142

### A.2 Comments

Window constraint met. The chip is off-axis, and the target is on the edge of the chip.