

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 12057 - L2 Version 3  
Chandra X-Ray Center

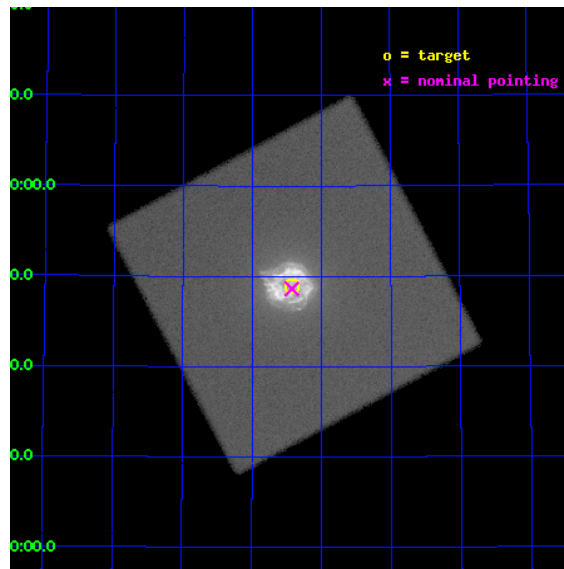
L2 Processing Date : Aug 13 2012

## 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	501325	Sequence number
obs_id	12057	Observation id
title	The Proper Motion of the Central Compact Object in Cassiopeia A	Pr
observer	Dr. Tracey DeLaney	Principal investigator
object	Cassiopeia A	Source name
ra_targ	350.8575	Observer's specified target RA [deg]
dec_targ	58.814833	Observer's specified target Dec [deg]
ra_nom	350.85698603165	Nominal RA [deg]
dec_nom	58.810534776915	Nominal Dec [deg]
roll_nom	287.03499968178	Nominal Roll [deg]
revision	3	Processing version of data
ontime	12178.28186512	[s]
livetime	10465.186557589	Ontime multiplied by DTCOR
l2events	1822261	Number of level 2 events

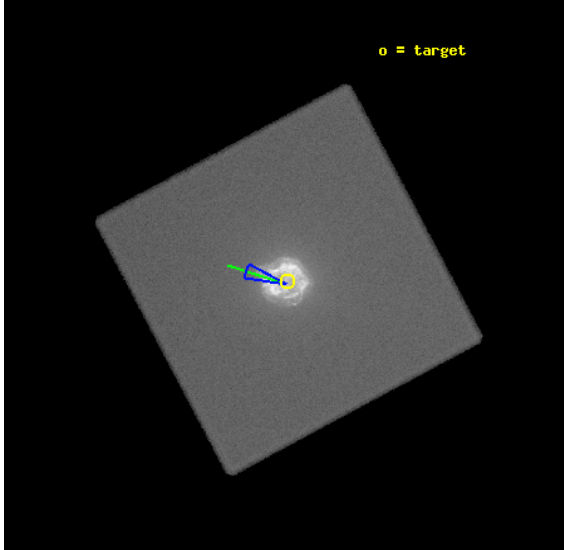


## 2 OBI

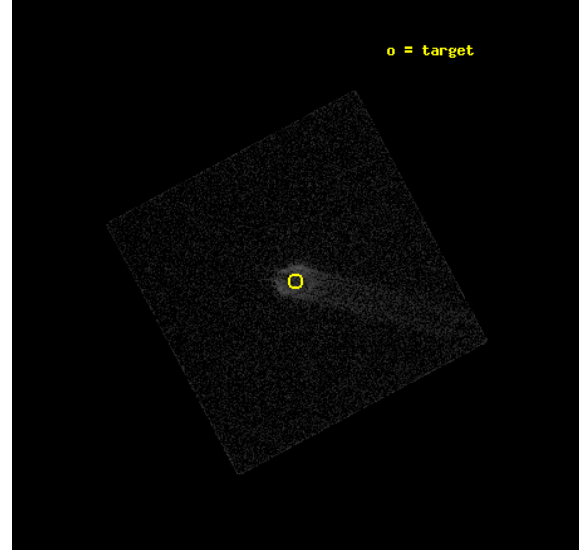
### 2.1 OBI

#### 2.1.1 Images

Level 1 Image



Level 1 Bad Events



### 2.1.2 Parameters

obi_num	0	Obi number	sched_exp_time	12000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	12178.28186512	[s]
caldbver	4.5.1.1	&#160	l1events	2430866	Number of level 1 events
date	2012-08-13T19:38:45	Date and time of file creation			
revision	3	Processing version of data			

### 2.1.3 Events

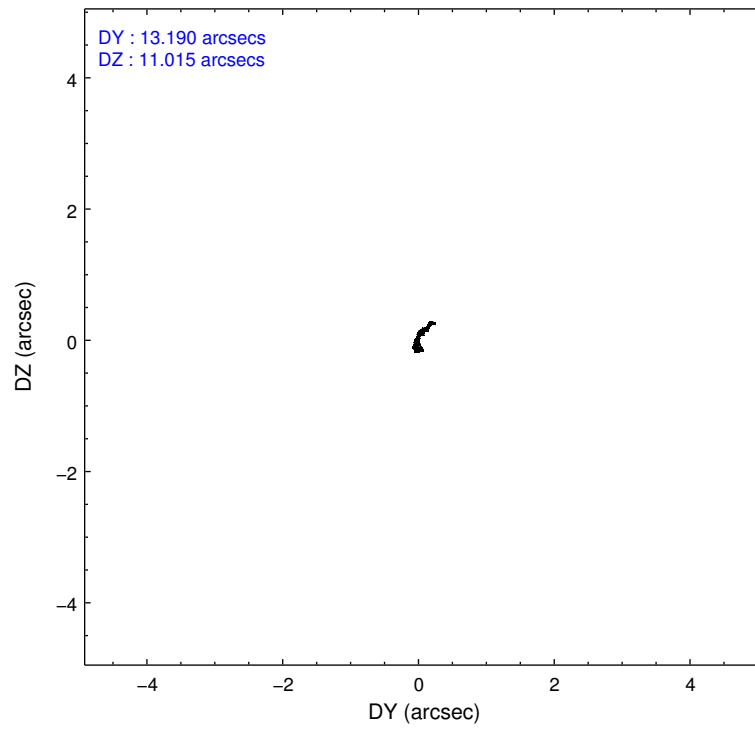
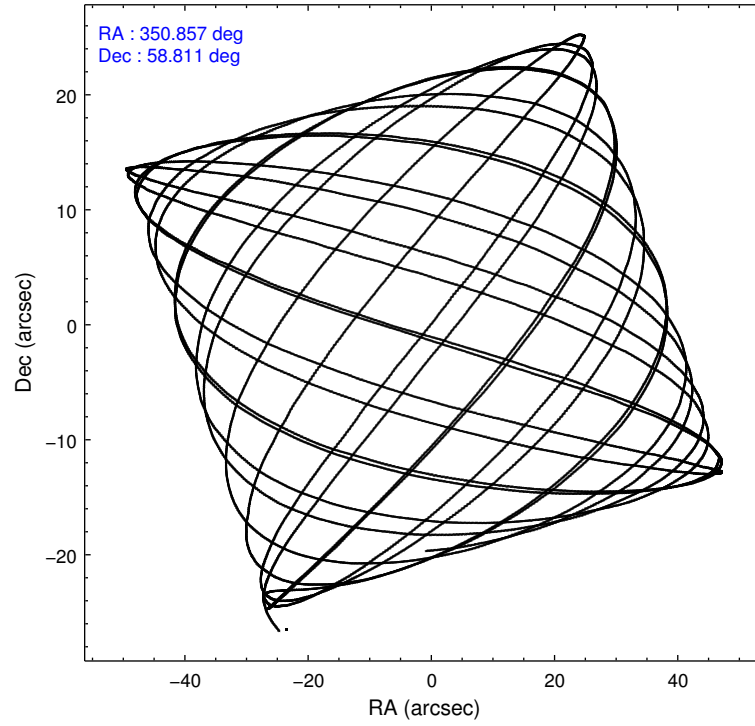
#### Level 1 Events

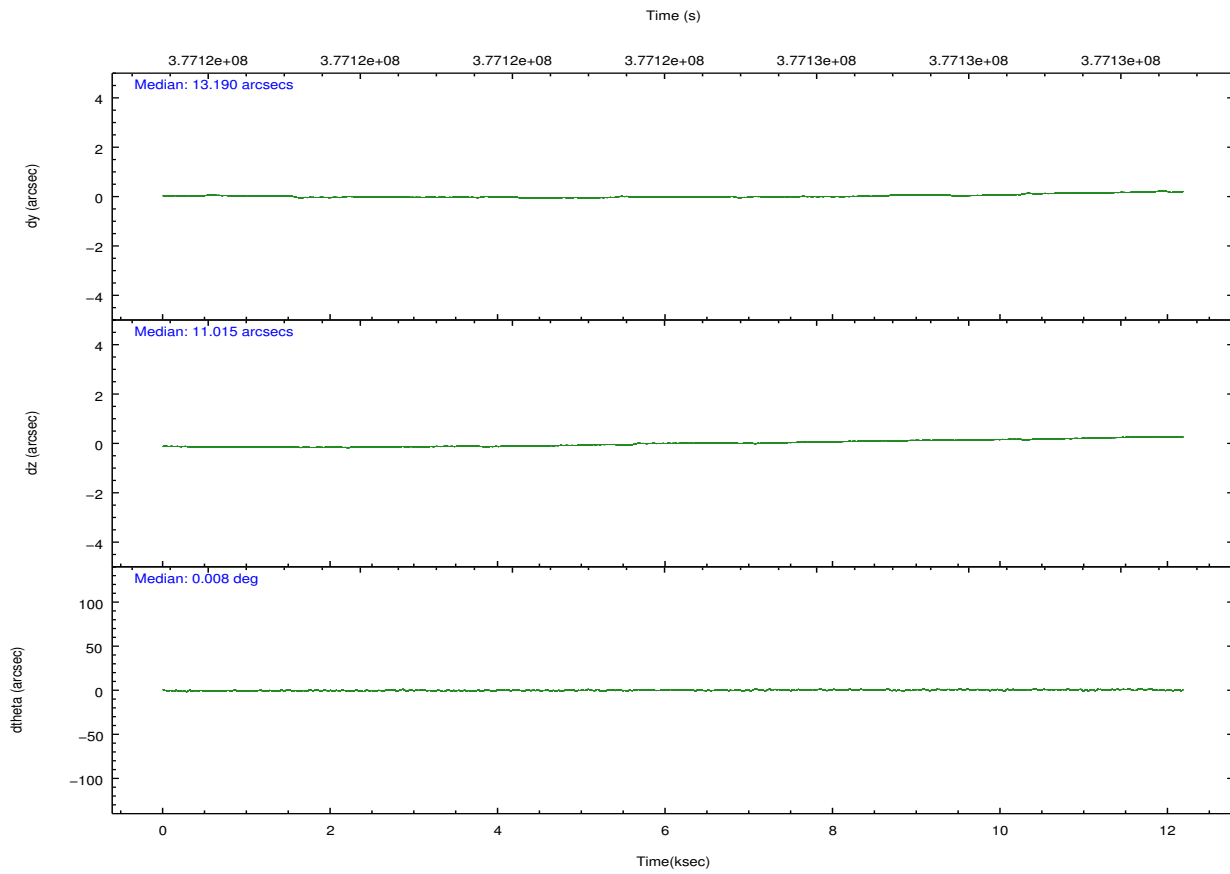
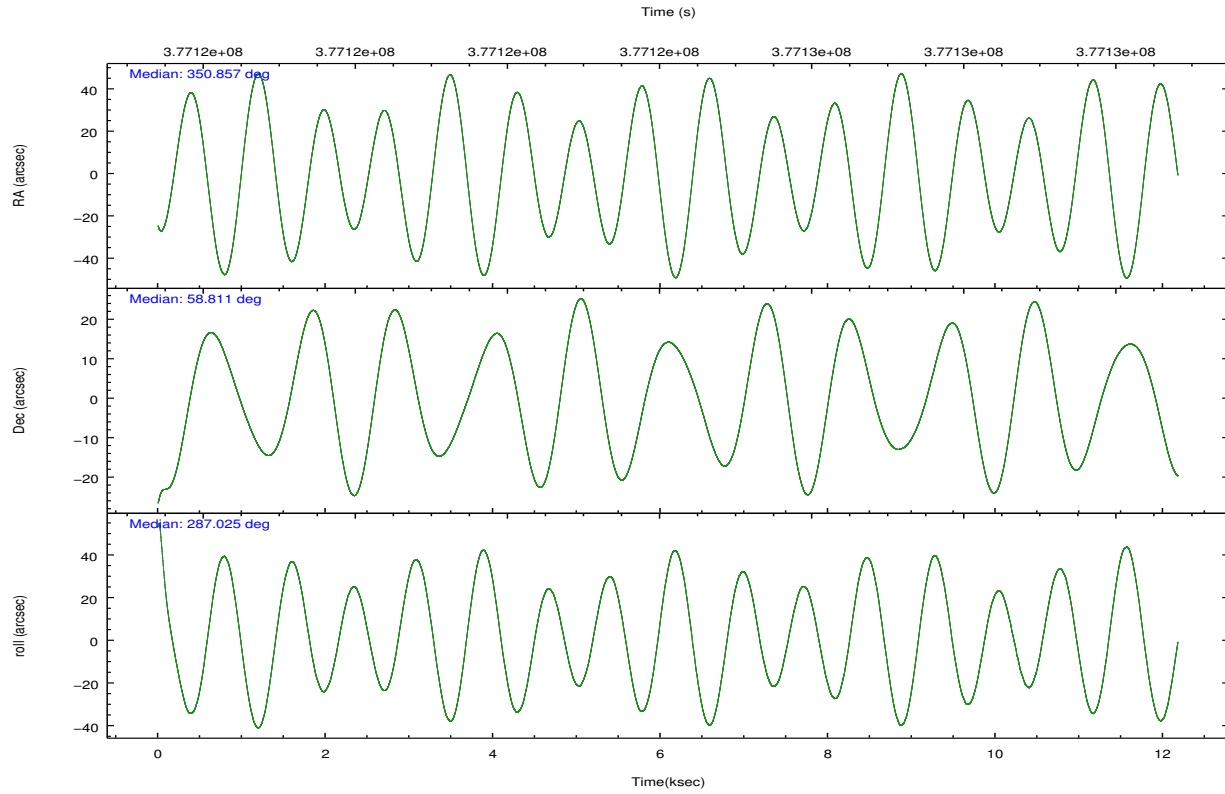
	<b>segment 0</b>
level 1 events	2430866
rejected events	185203
rejected %	7%

## 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	350.817578	350.8569860316505			
[deg] Pointing Dec	58.828683	58.81053477691474			
[deg] Pointing Roll	287.164156	287.0349996817839			
[deg] Roll angle	287.130000	287.130000			
[deg] Roll tolerance	10.000000	10.000000			
Roll constraint allows 180D rotation	N	N			
[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)	377118201.184000	377117209.63216			
Observation start date	2009-12-13T19:02:15	2009-12-13T18:46:49			
[s] Observation end time (MET)	377130201.184000	377130835.47035			
Observation end date	2009-12-13T22:22:15	2009-12-13T22:33:55			

## 2.3 Aspect



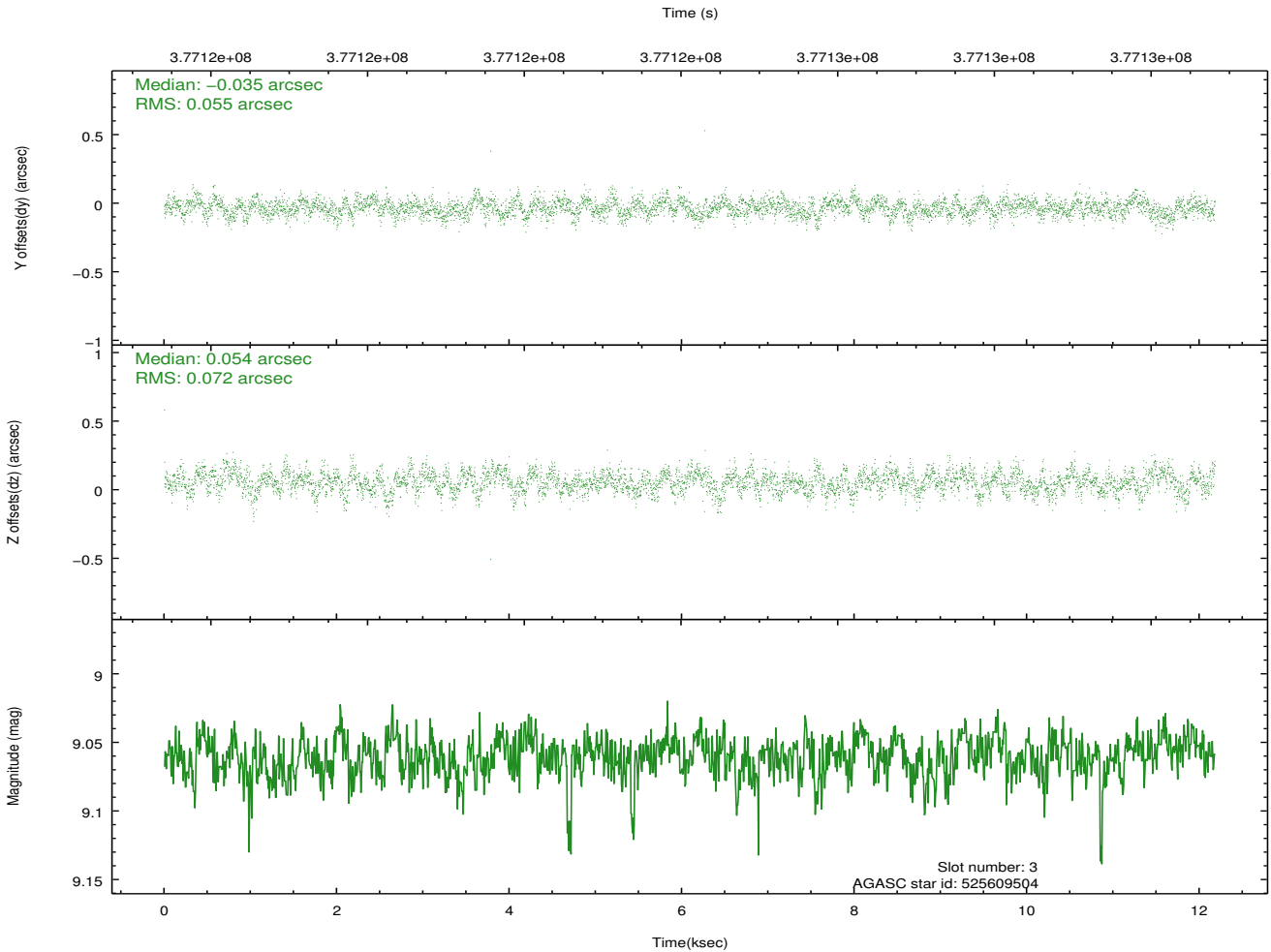
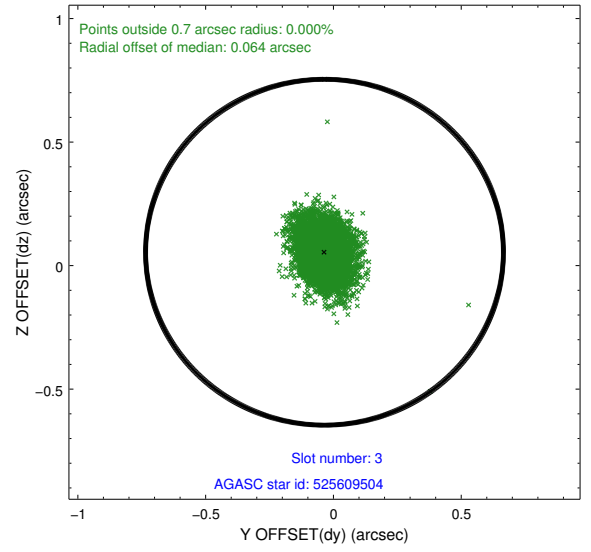
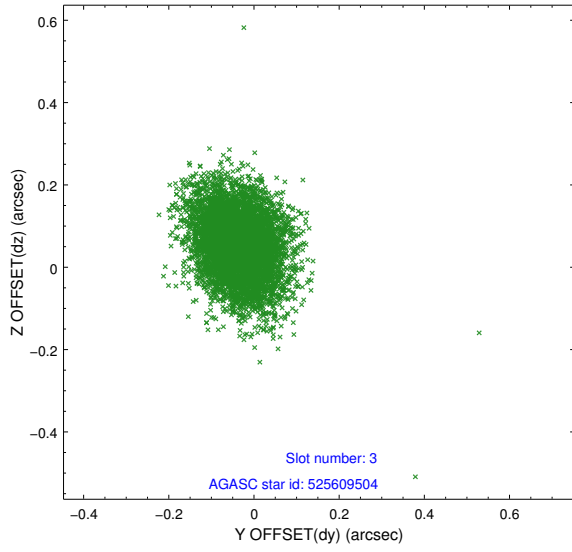


### Slot Statistics

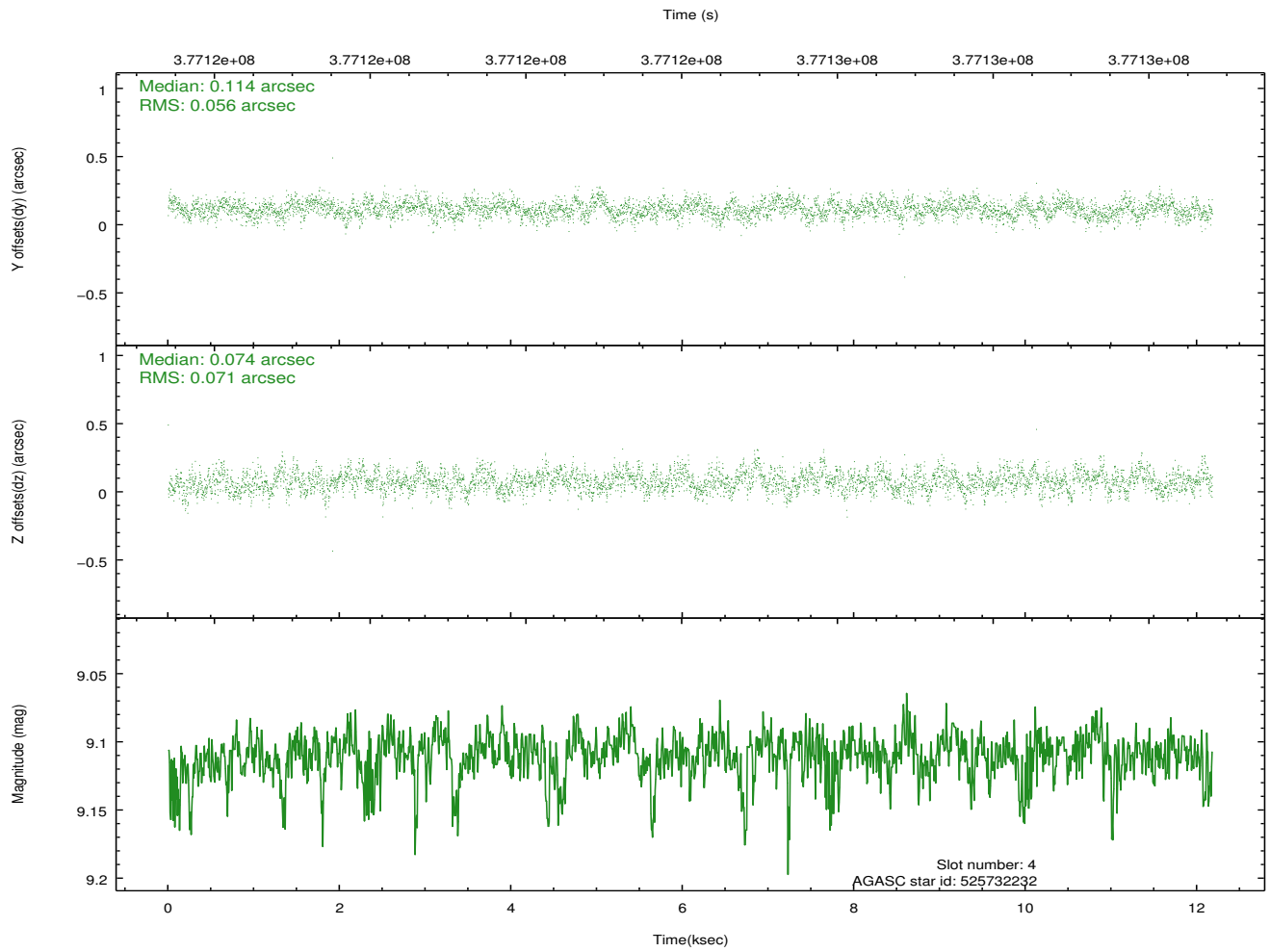
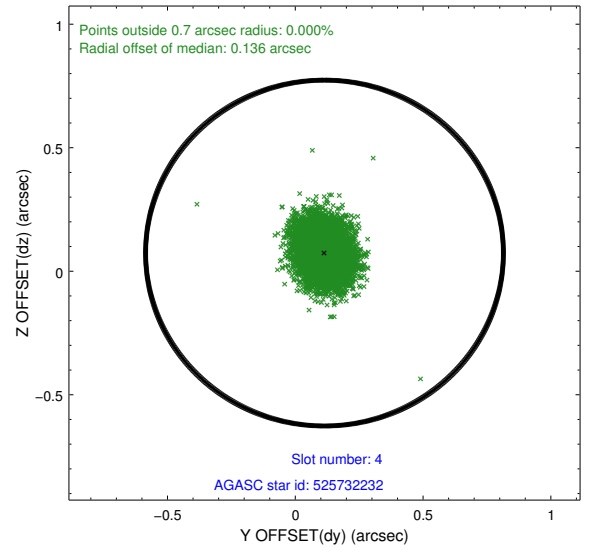
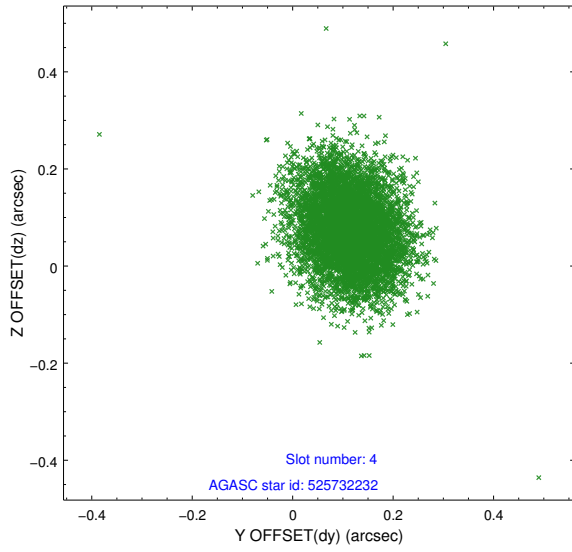
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	HRC-I-1	6.92	2971	-0.074	0.007	0.007	0.011	0.000000	0.000000	-769.02	-1298.99
1	FID	HRC-I-2	6.96	2971	0.207	-0.099	0.011	0.021	0.000000	0.000000	843.63	-1301.08
2	FID	HRC-I-3	7.01	2971	-0.014	0.004	0.011	0.022	0.000000	0.000000	-1197.20	1005.12
3	GUIDE	525609504	9.06	5928	-0.035	0.054	0.095	0.158	349.896632	58.356658	1099.17	-2159.91
4	GUIDE	525732232	9.11	5932	0.114	0.074	0.095	0.155	351.669550	58.757012	707.79	1447.45
5	GUIDE	525732488	8.41	5937	-0.006	0.001	0.076	0.128	350.087090	58.516915	660.35	-1640.72
6	GUIDE	525735456	7.06	5942	-0.115	-0.073	0.067	0.102	350.628183	59.307249	-1749.31	175.28
7	GUIDE	525735976	8.83	5939	0.042	-0.055	0.084	0.138	350.142956	58.277622	1512.60	-1803.56

## 2.4 Star Slots

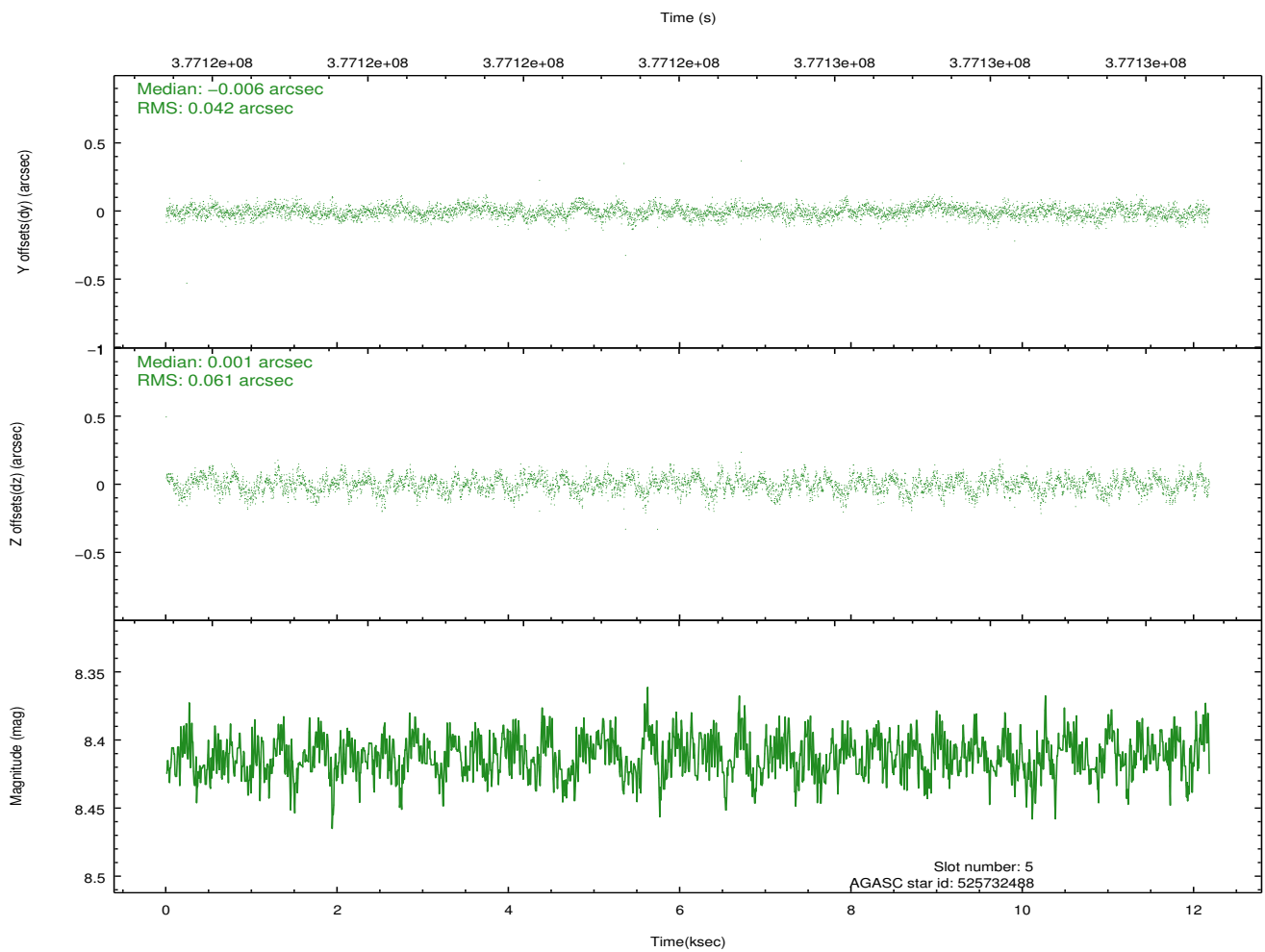
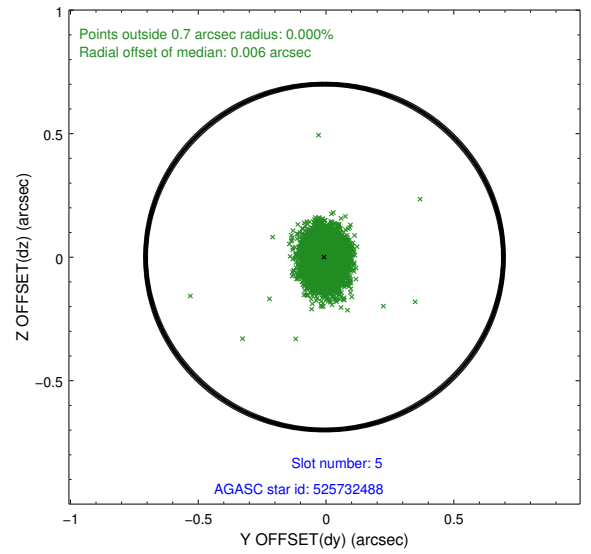
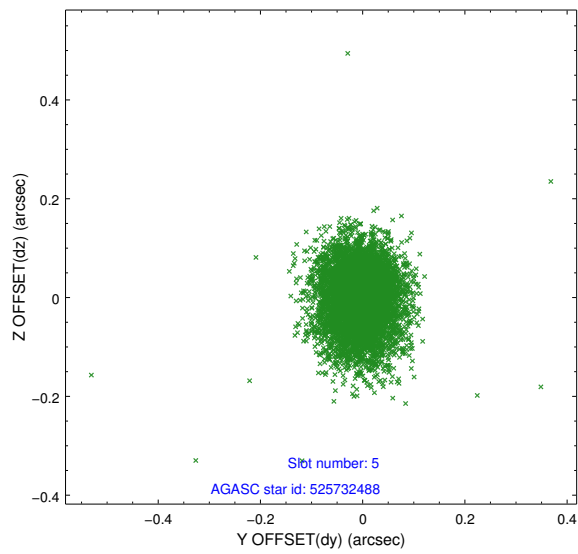
### 2.4.1 Slot 3



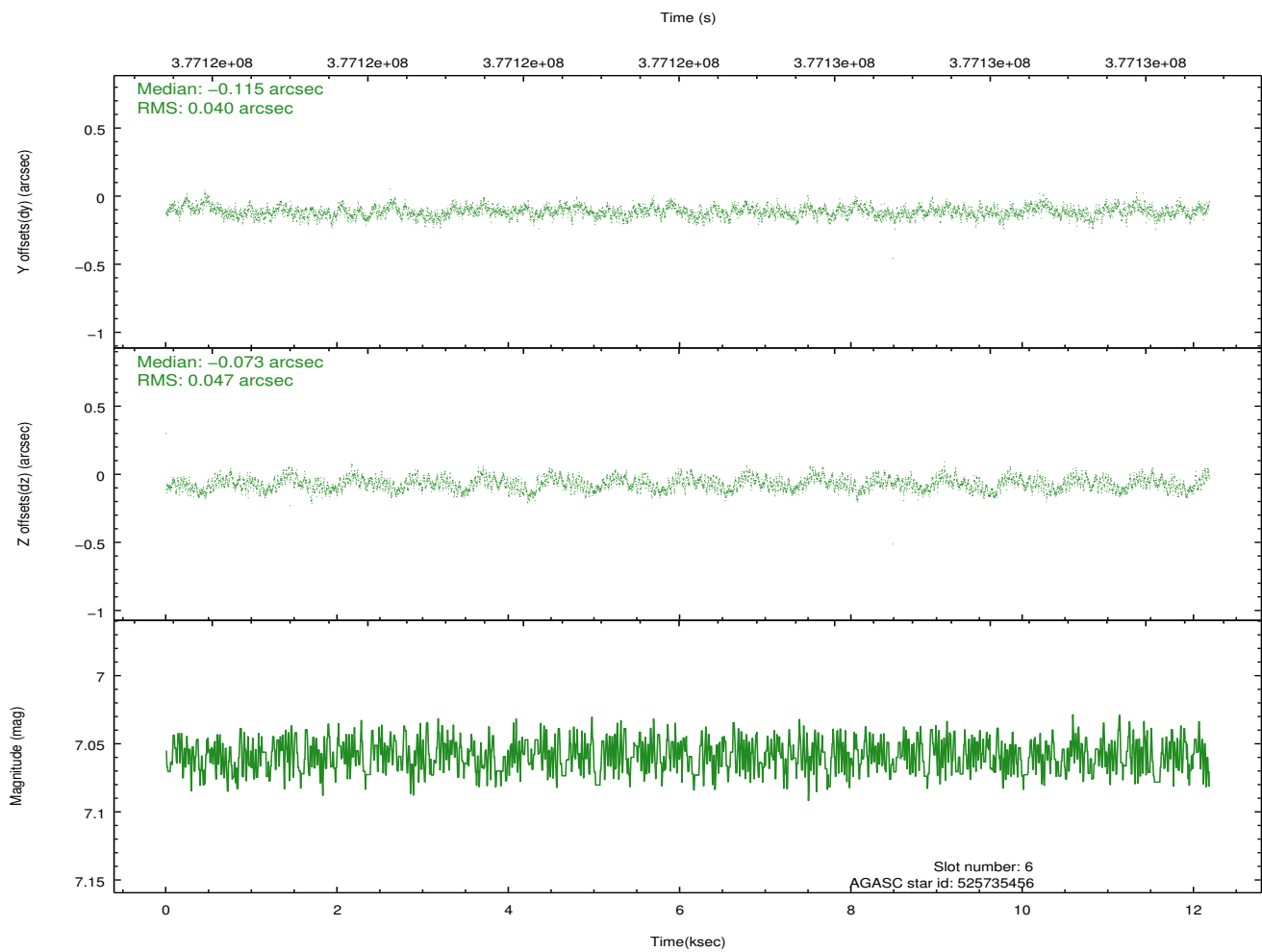
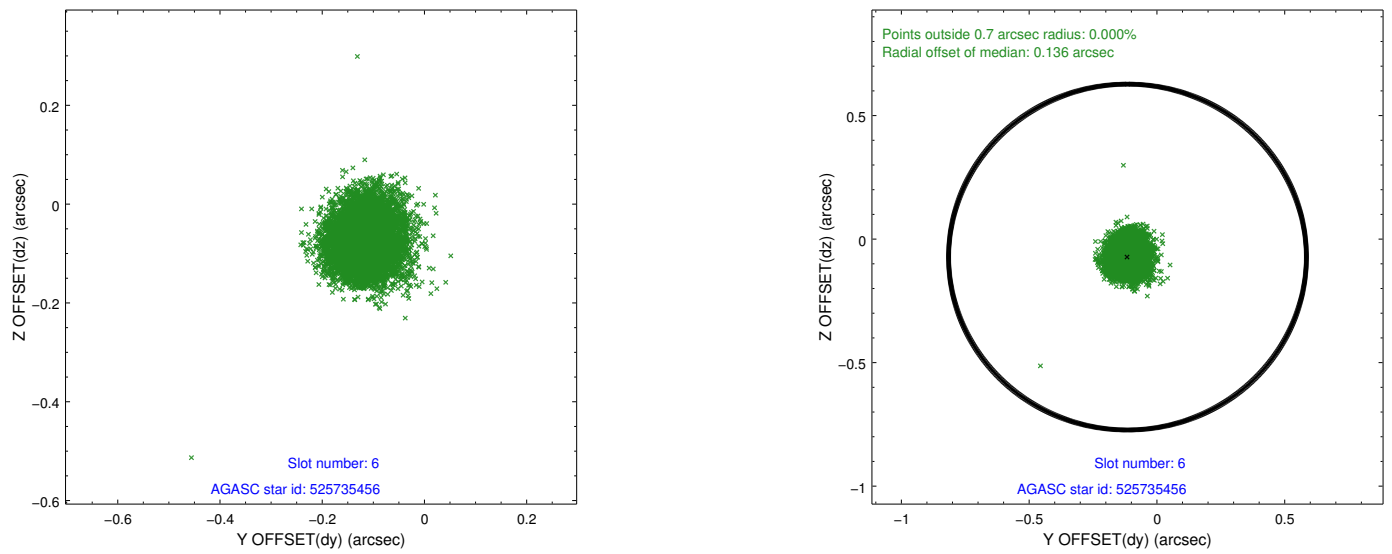
### 2.4.2 Slot 4



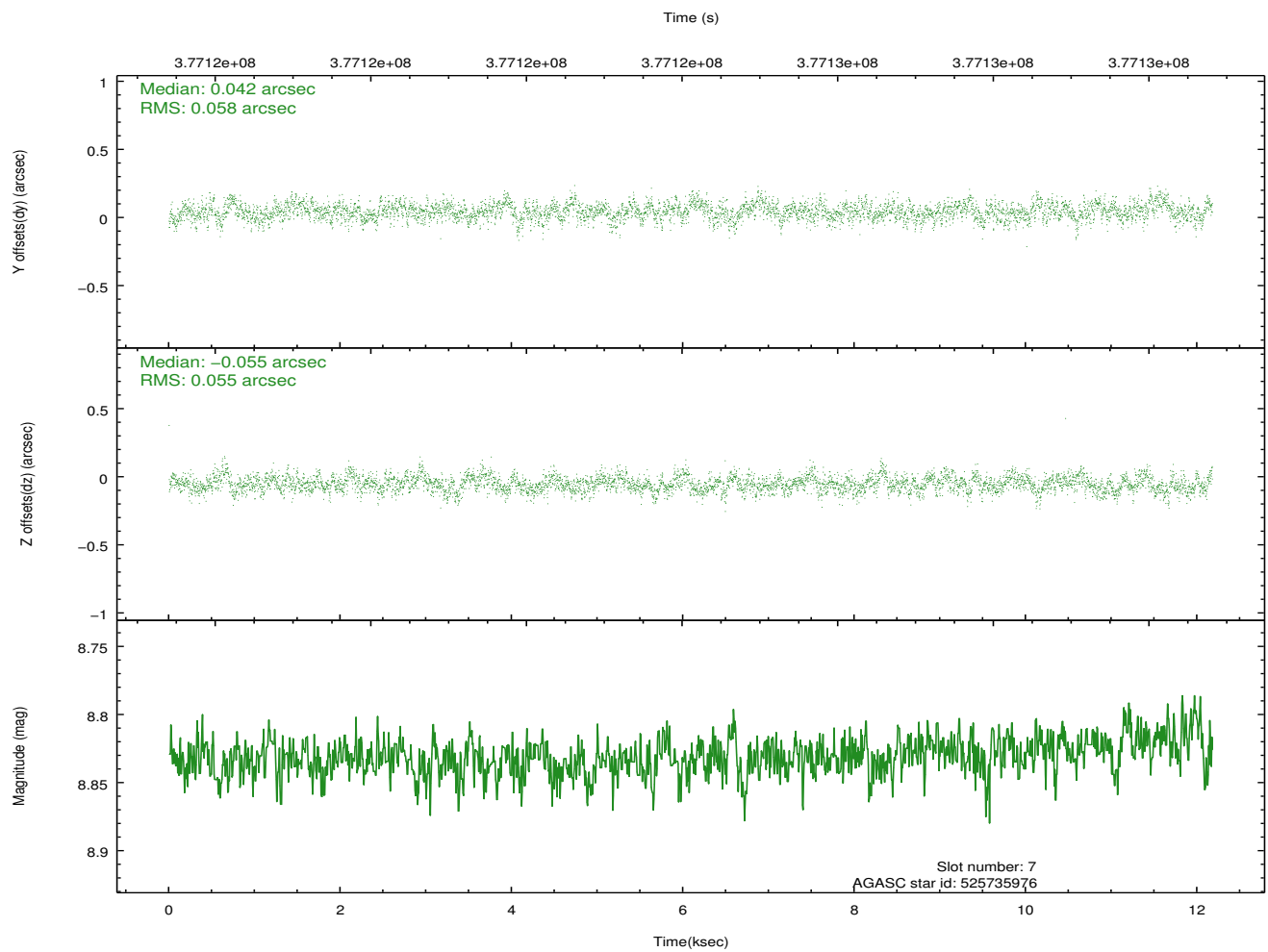
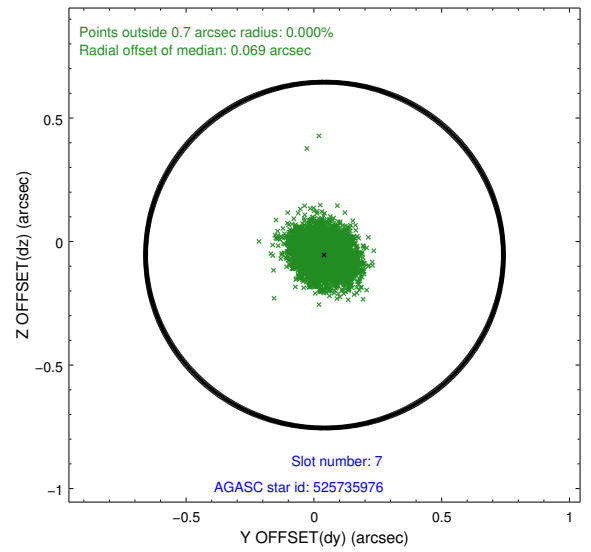
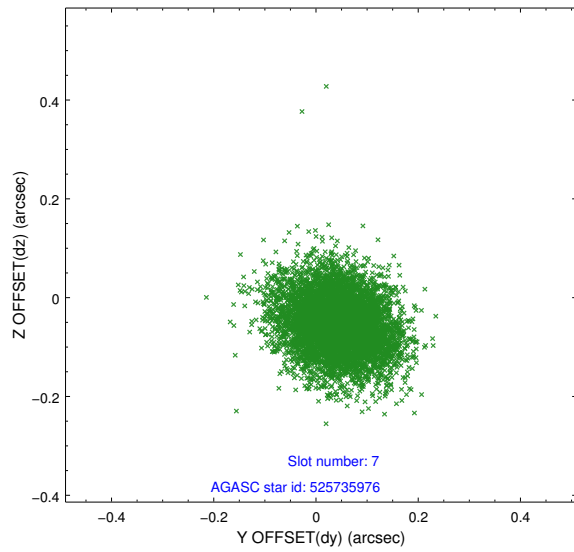
### 2.4.3 Slot 5



## 2.4.4 Slot 6

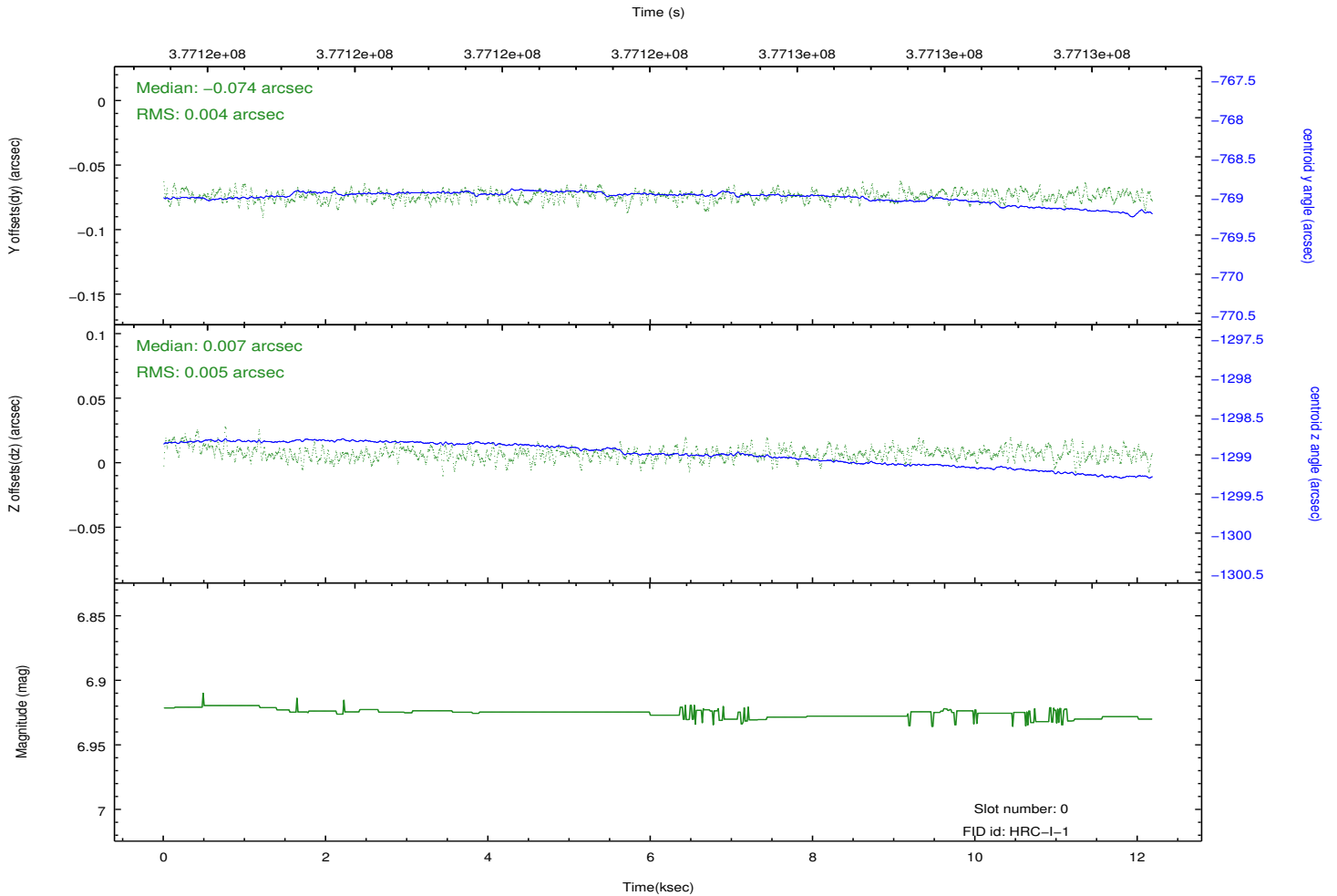
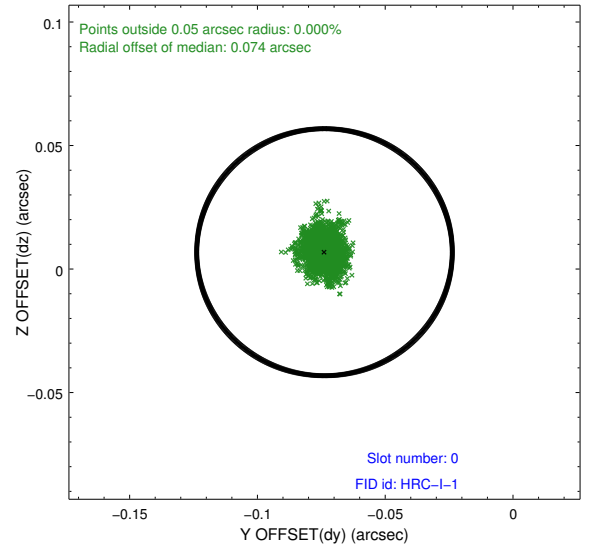
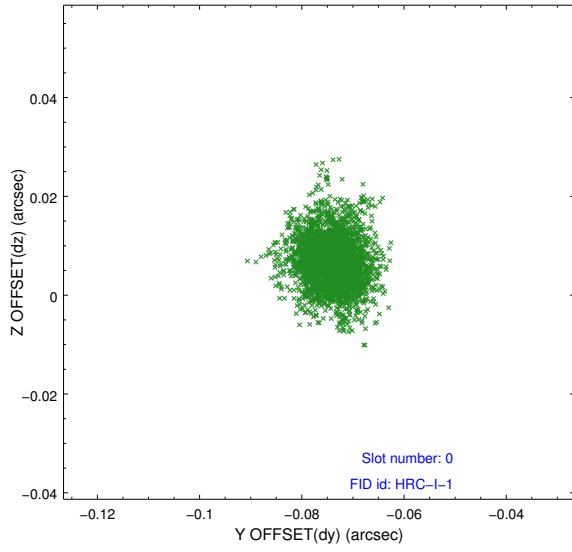


## 2.4.5 Slot 7

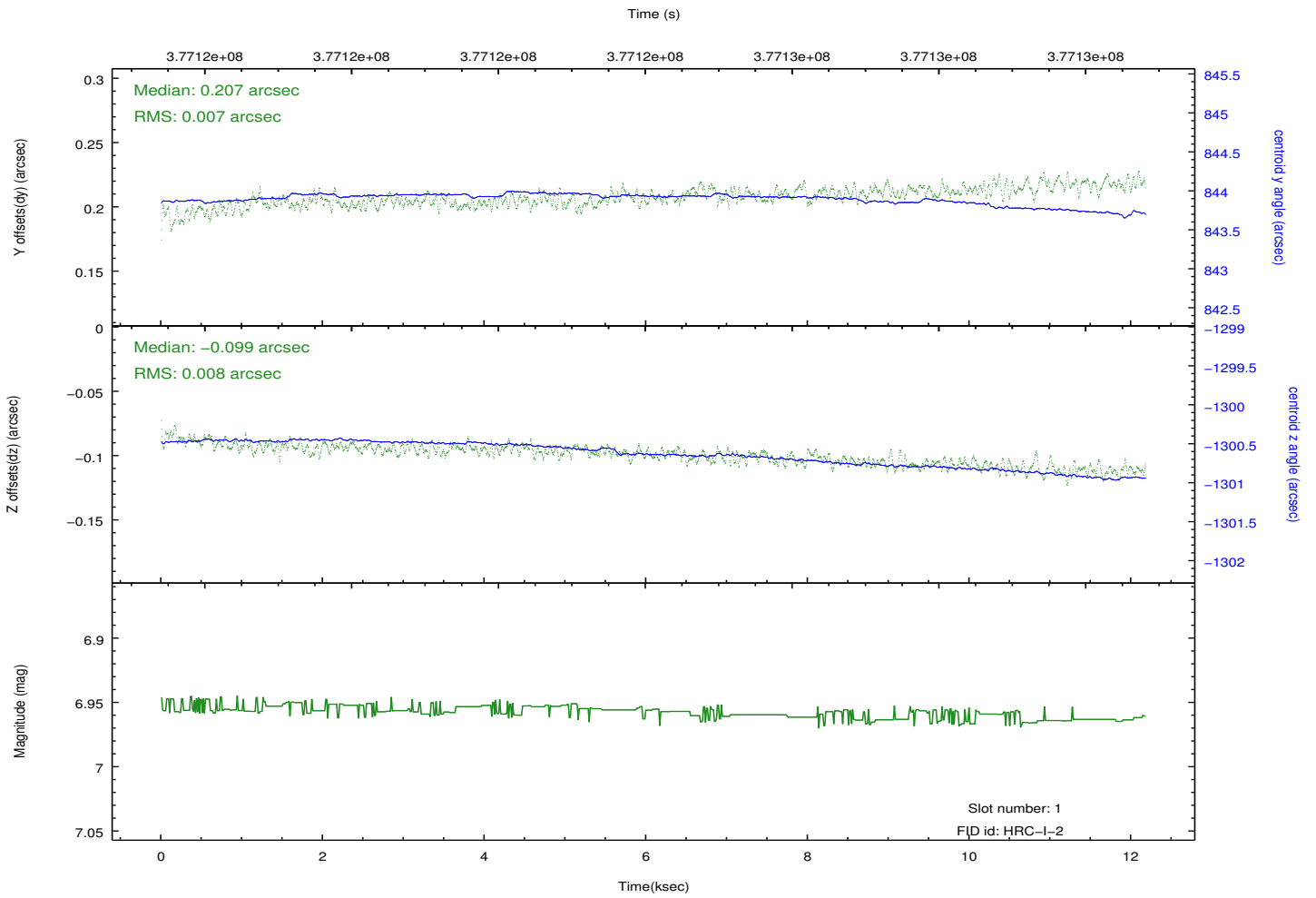
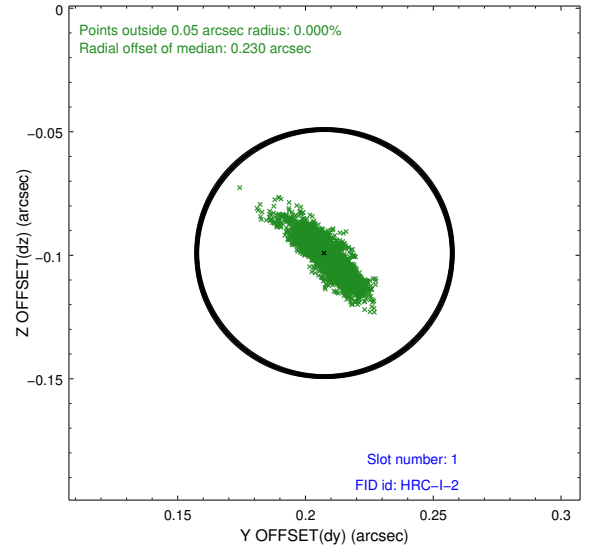
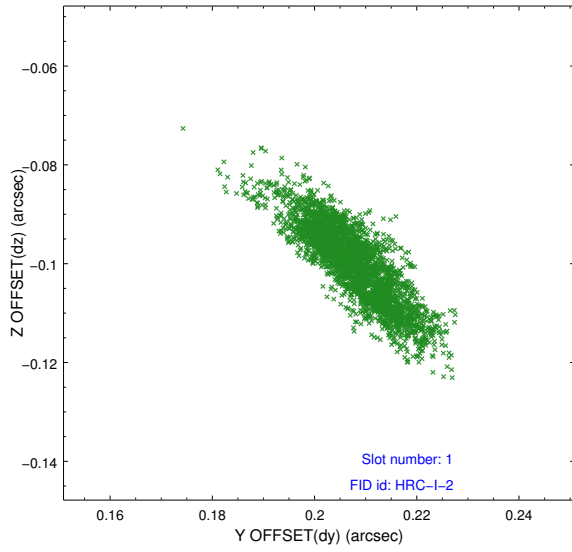


## 2.5 FID Slots

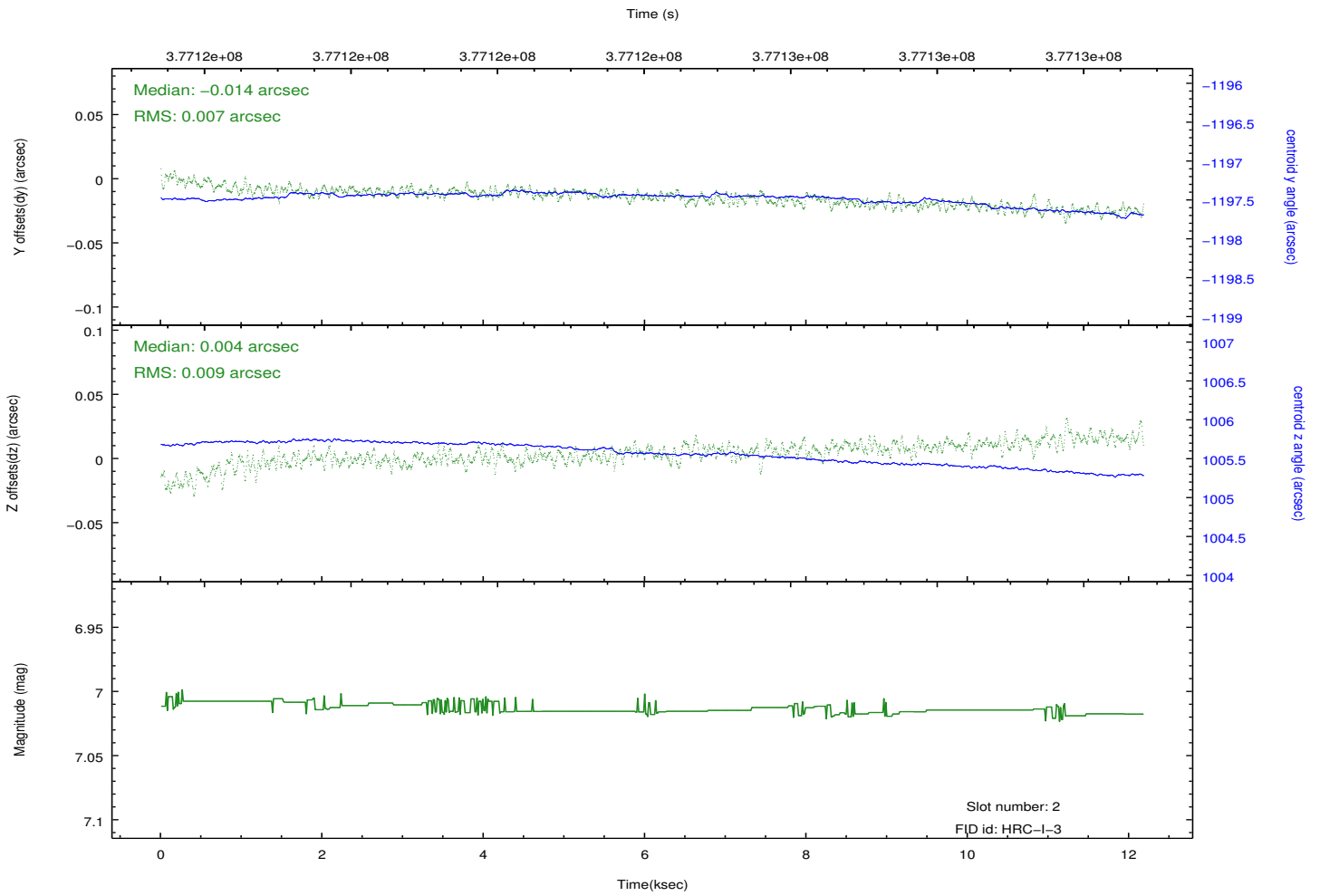
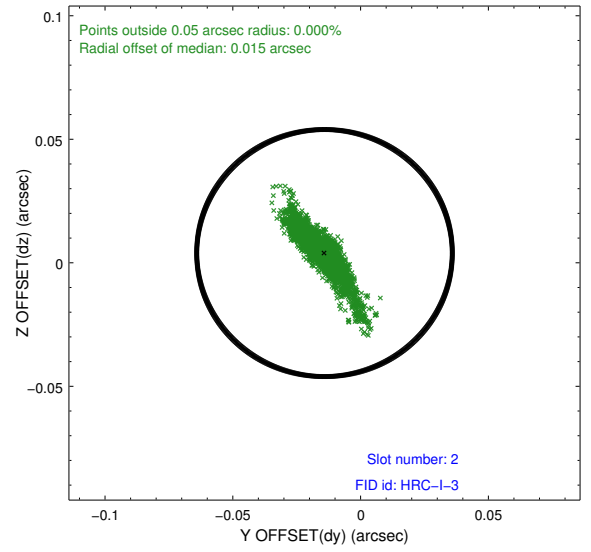
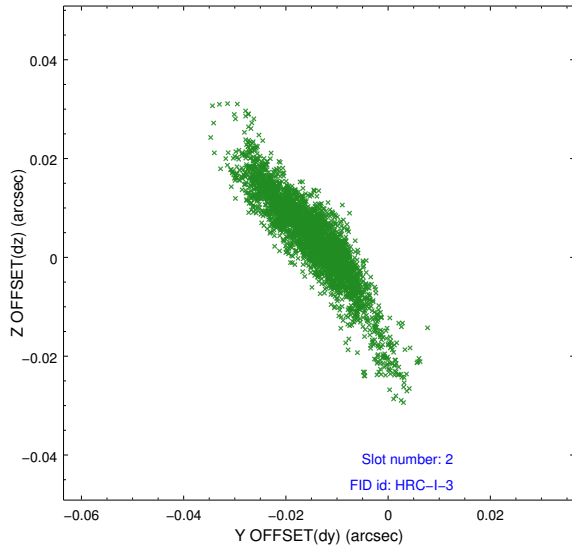
### 2.5.1 Slot 0



## 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)	2012.08.22
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	12.178025614083

## A.2 Comments

Roll constraint met.