

# V&V Reference Report

## L2 ASCDS Version : 10.2.2

Observation 16480 - L2 Version 2  
Chandra X-Ray Center

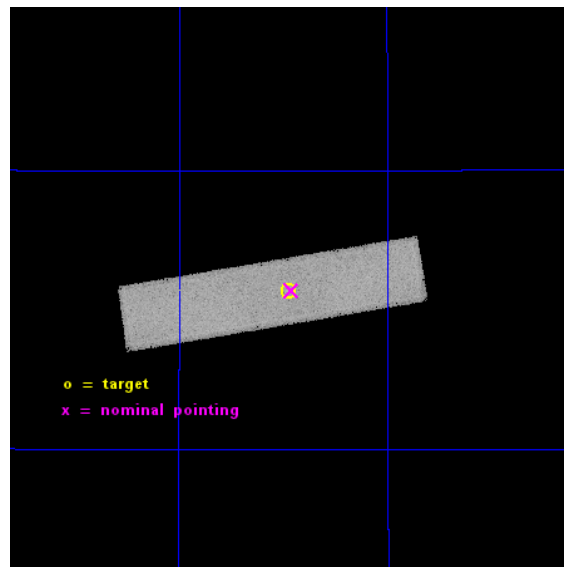
L2 Processing Date : Dec 11 2014

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# 1 Front

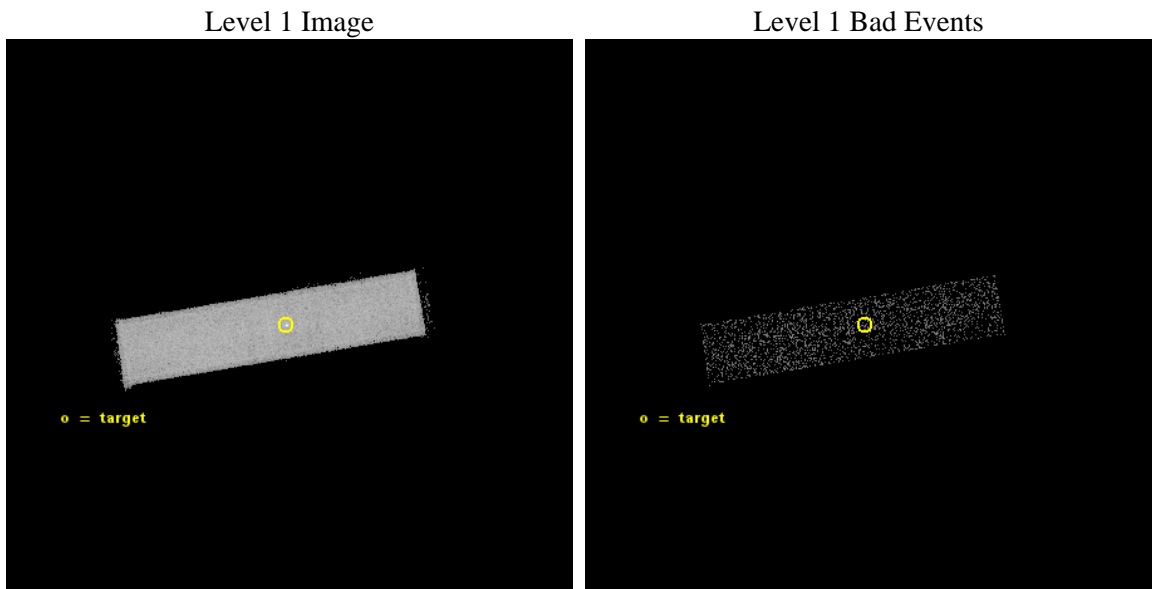
seq_num	291192	Sequence number
obs_id	16480	Observation id
title	AO-15 Measurements of the optical/UV Transmission of the HRC Filters.	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	Vega	Source name
ra_targ	279.235833	Observer's specified target RA [deg]
dec_targ	38.78475	Observer's specified target Dec [deg]
ra_nom	279.22982580464	Nominal RA [deg]
dec_nom	38.785835538298	Nominal Dec [deg]
roll_nom	170.69319873541	Nominal Roll [deg]
revision	2	Processing version of data
ontime	2157.8813694119	[s]
livetime	2144.6023438282	Ontime multiplied by DTCOR
l2events	95882	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	10.3.1	Processing system revision	ontime	2157.8813694119	[s]
caldsver	4.6.4	&#160	l1events	123135	Number of level 1 events
date	2014-12-12T01:43:53	Date and time of file creation			
revision	2	Processing version of data			

### 2.1.3 Events

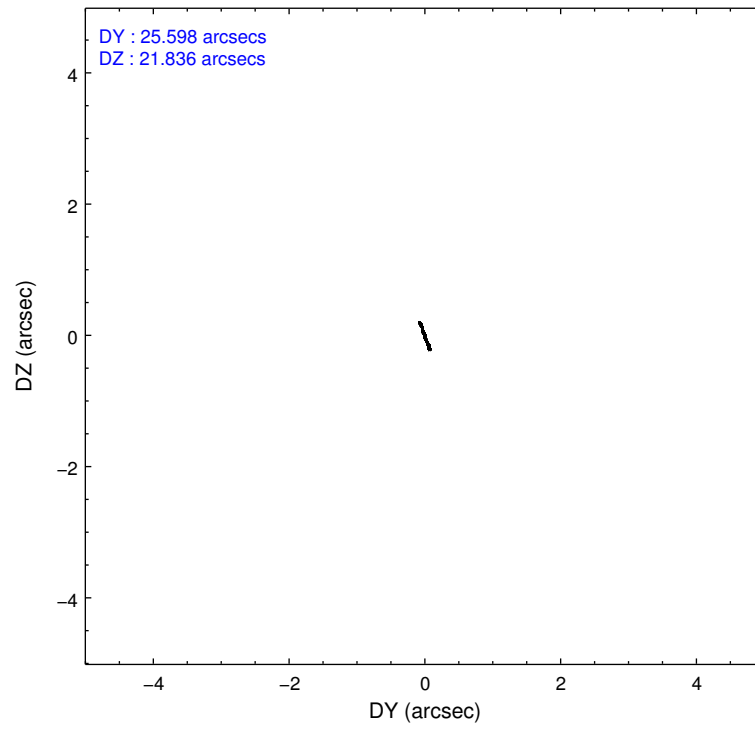
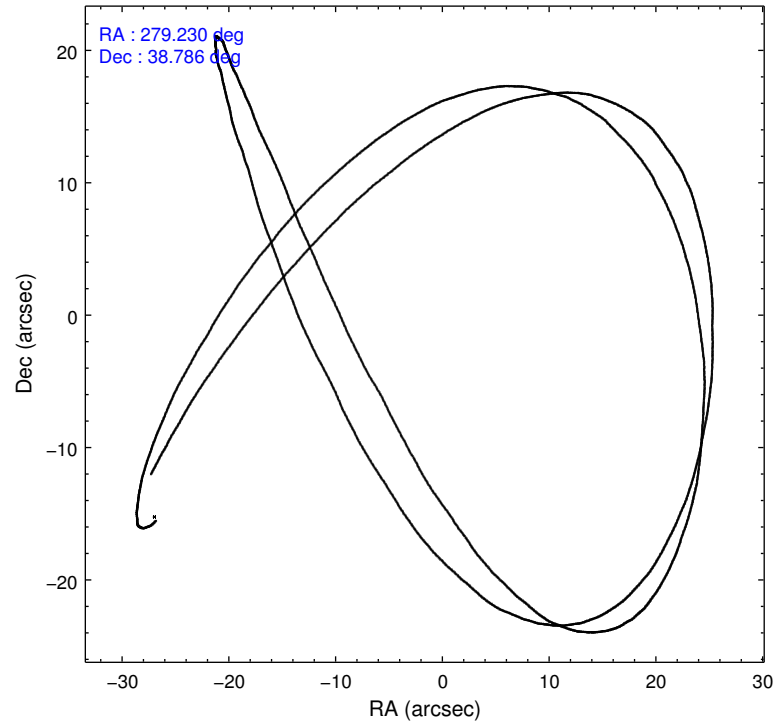
Level 1 Events

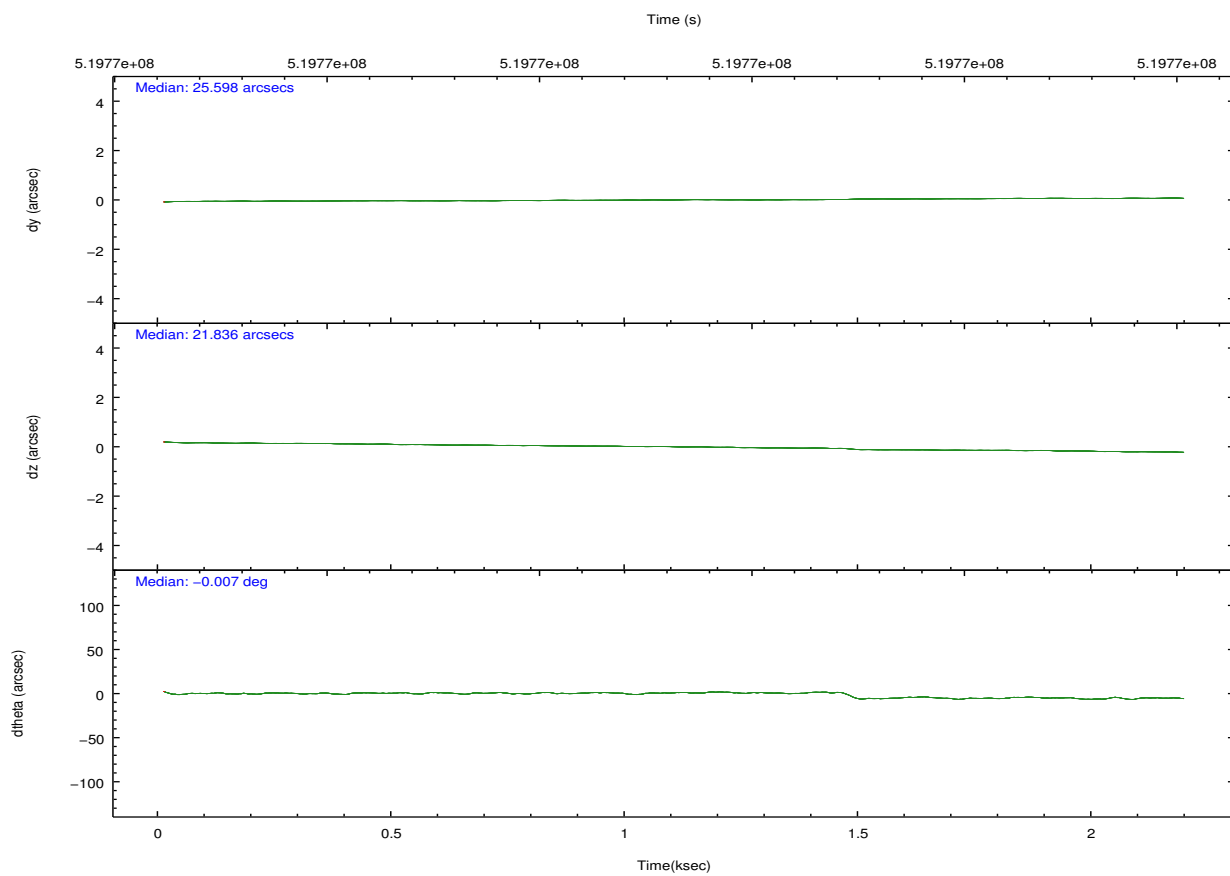
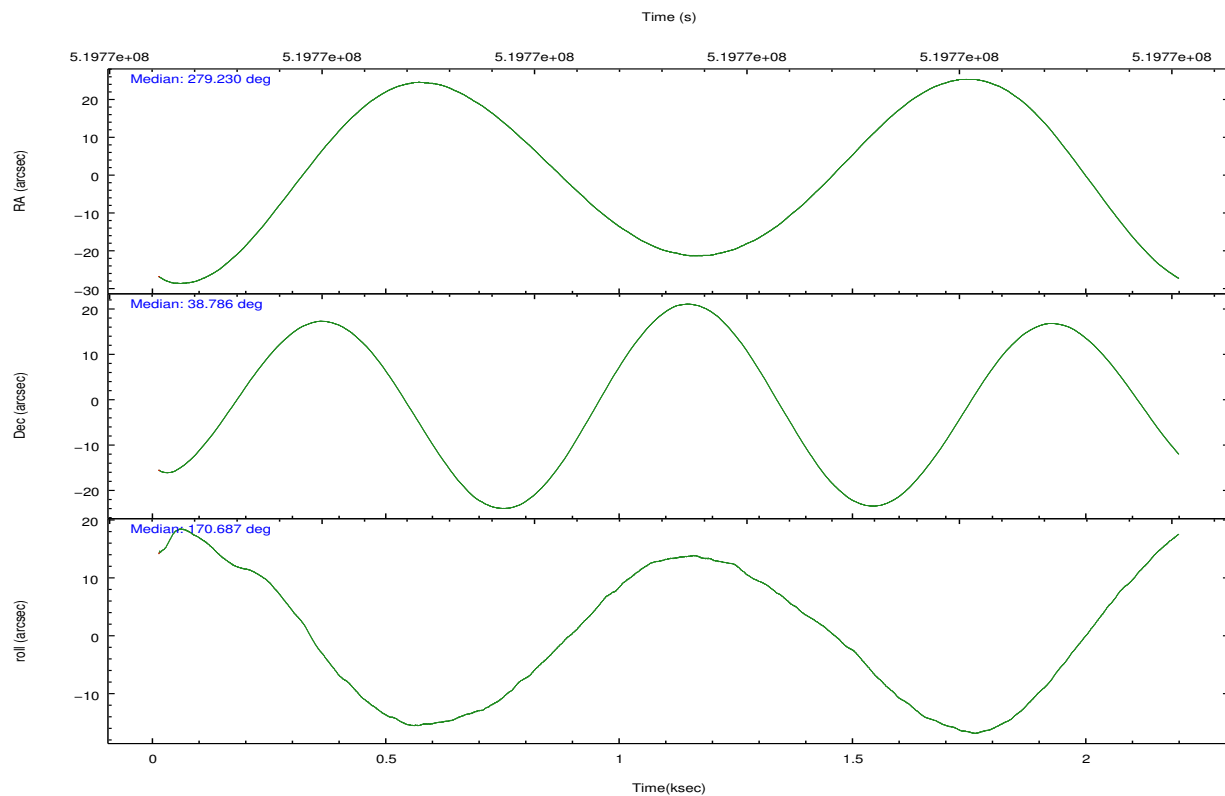
	segment 1	segment 2	segment 3
level 1 events	0	123135	0
rejected events	0	10337	0
rejected %	0%	8%	0%

## 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	279.263583	279.229825804635			
[deg] Pointing Dec	38.797058	38.78583553829759			
[deg] Pointing Roll	170.604731	170.6931987354092			
[s] Window start time (MET)	517968067.184000	517968067.184000			
[s] Window stop time (MET)	523152067.184000	523152067.184000			
[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)	519767911.184000	519767532.0874			
Observation start date	2014-06-21T19:57:24	2014-06-21T19:52:12			
[s] Observation end time (MET)	519769911.184000	519770044.87504			
Observation end date	2014-06-21T20:30:44	2014-06-21T20:34:04			

## 2.3 Aspect





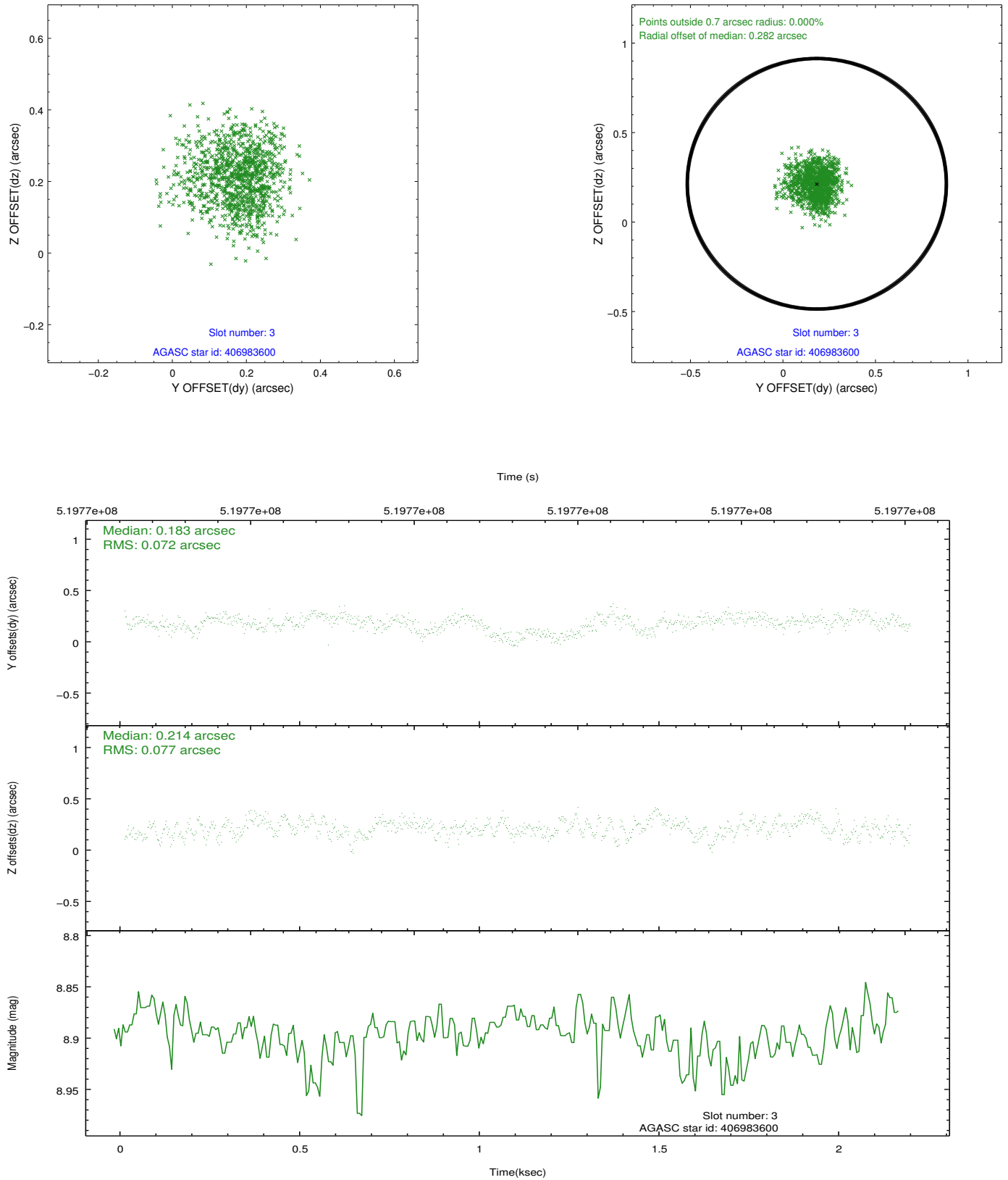
### Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		HRC-S-2	6.96	534	0.187	-0.106	0.050	0.075	0.000000	0.000000	1219.53	-463.43
1	FID		HRC-S-3	7.00	533	-0.120	-0.076	0.015	0.027	0.000000	0.000000	-1180.93	557.75
2	FID		HRC-S-4	6.93	534	0.338	-0.113	0.053	0.079	0.000000	0.000000	1215.98	562.36
3	GUIDE	used	406983600	8.90	1067	0.183	0.214	0.114	0.180	279.940957	39.020708	-1737.46	-1108.38
4	GUIDE	used	406985120	7.44	1067	0.061	0.010	0.094	0.159	278.839732	38.894839	1228.32	-155.88
5	GUIDE	used	407510432	8.15	1067	0.100	0.009	0.128	0.216	278.762778	39.530640	1805.56	-2381.09
6	GUIDE	used	406987272	6.92	1067	-0.510	-0.606	0.089	0.137	278.536588	38.437504	1814.42	1601.55
7	GUIDE	used	407521232	8.63	1065	0.167	0.373	0.104	0.185	279.628883	39.431715	-626.39	-2418.96

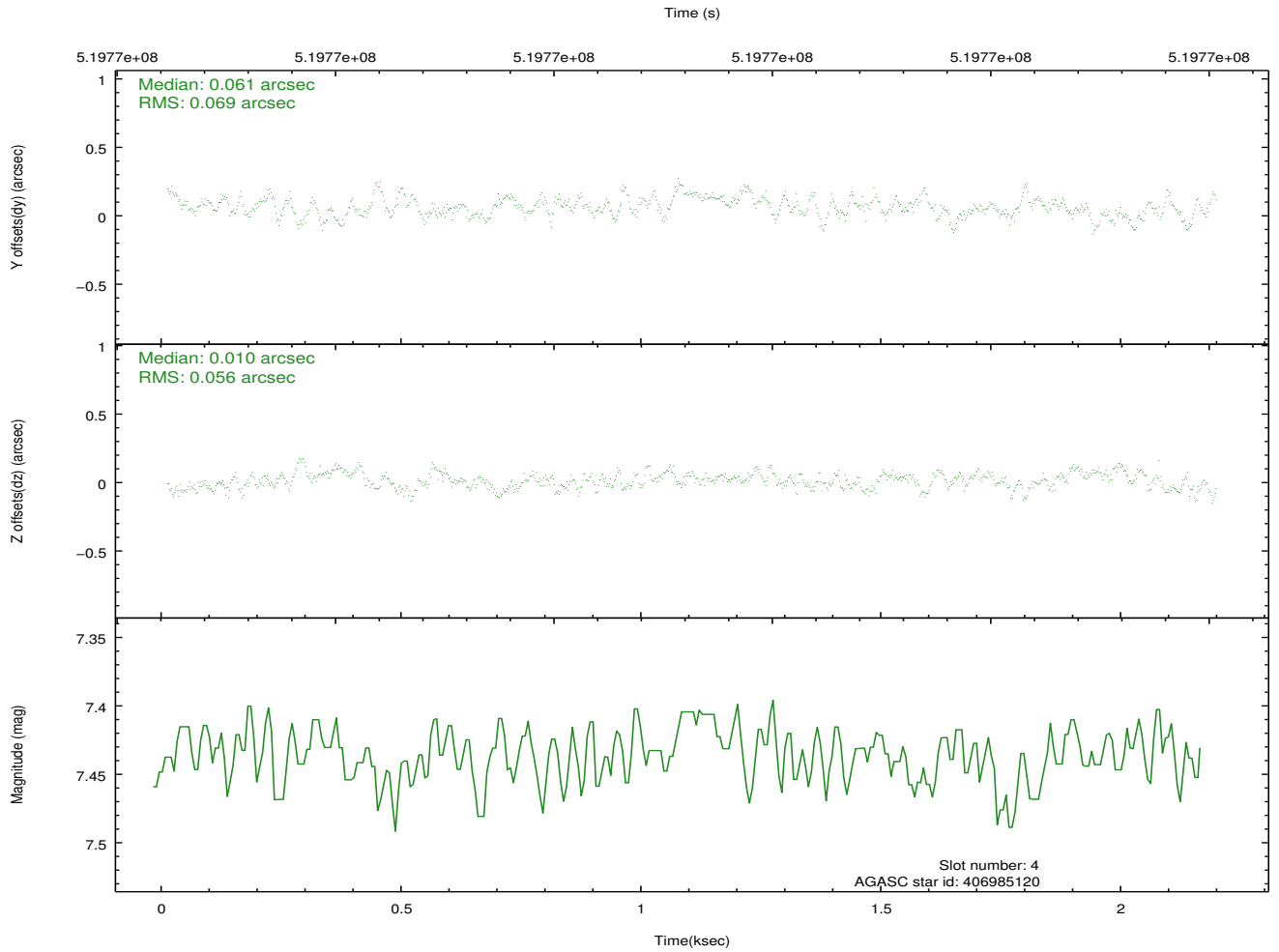
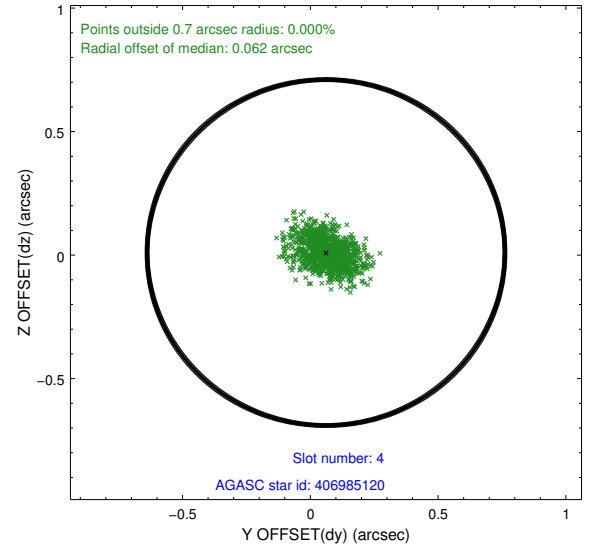
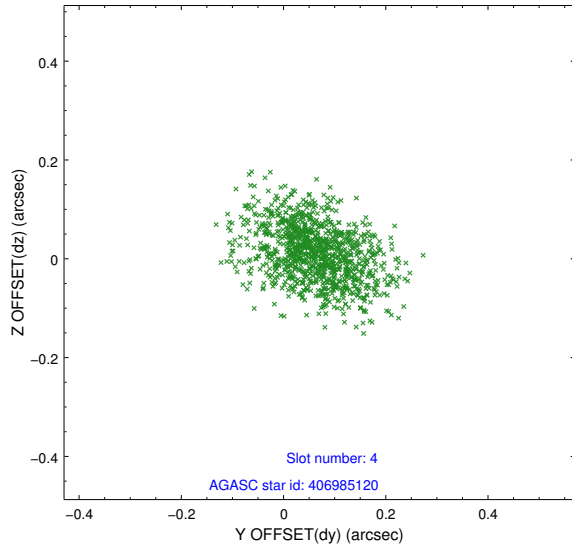


## 2.4 Star Slots

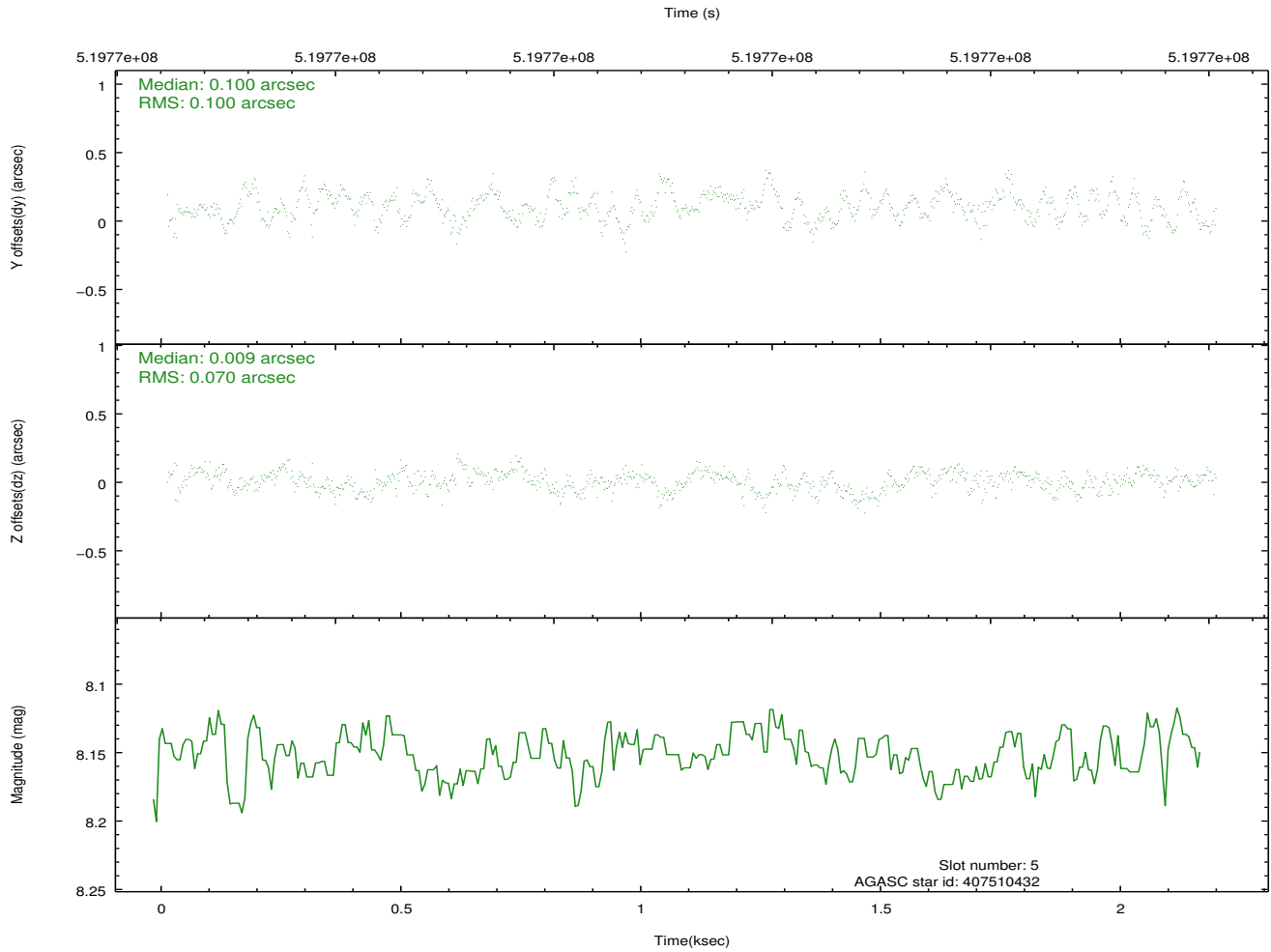
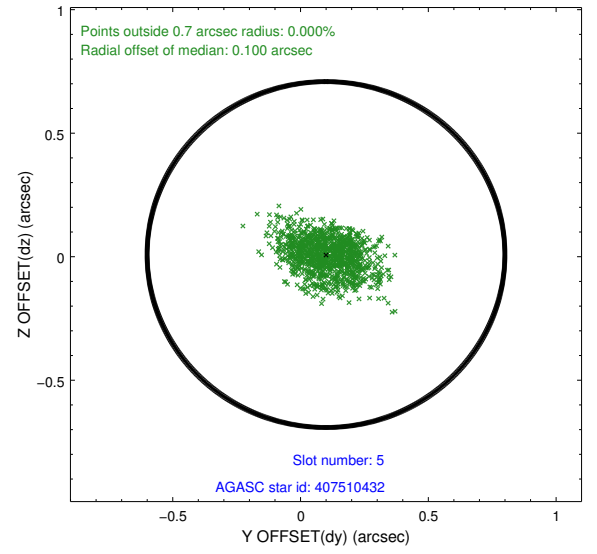
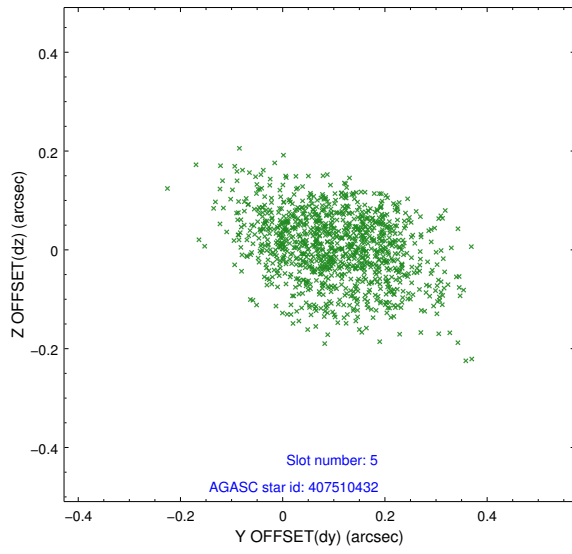
### 2.4.1 Slot 3



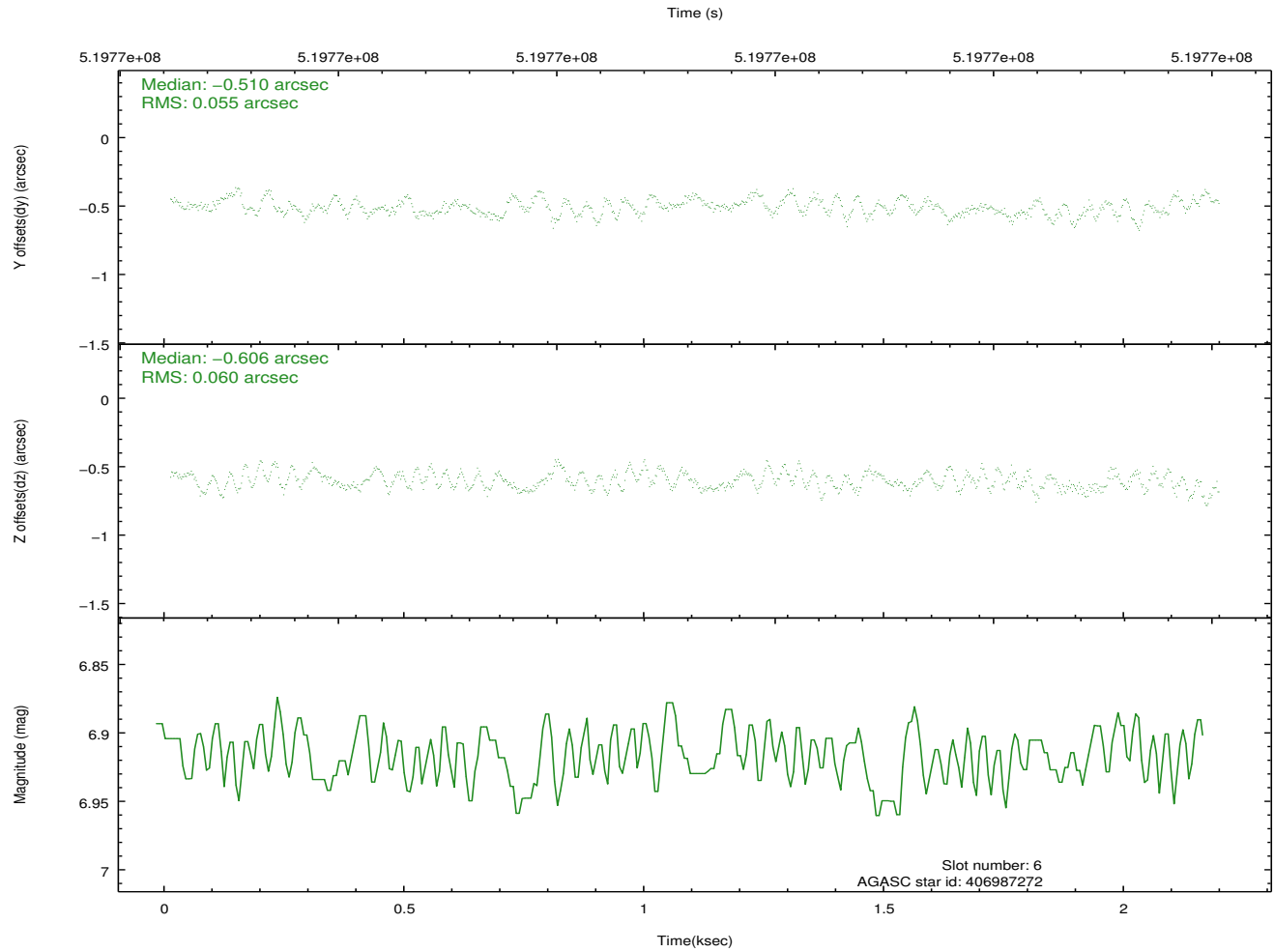
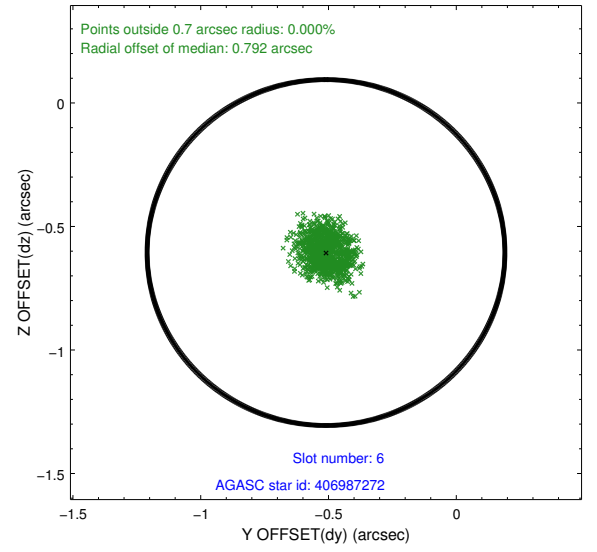
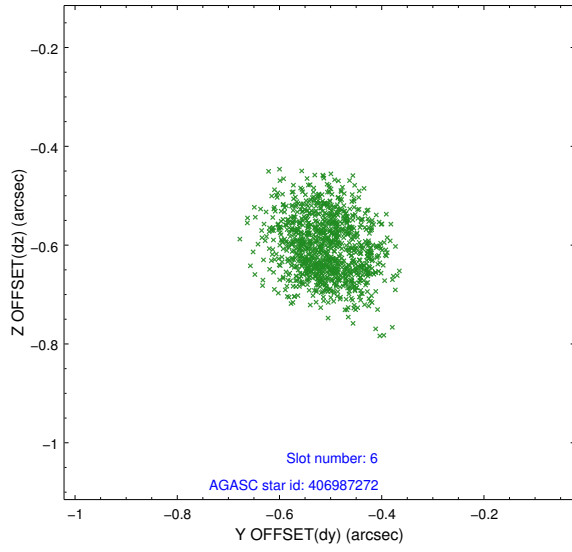
## 2.4.2 Slot 4



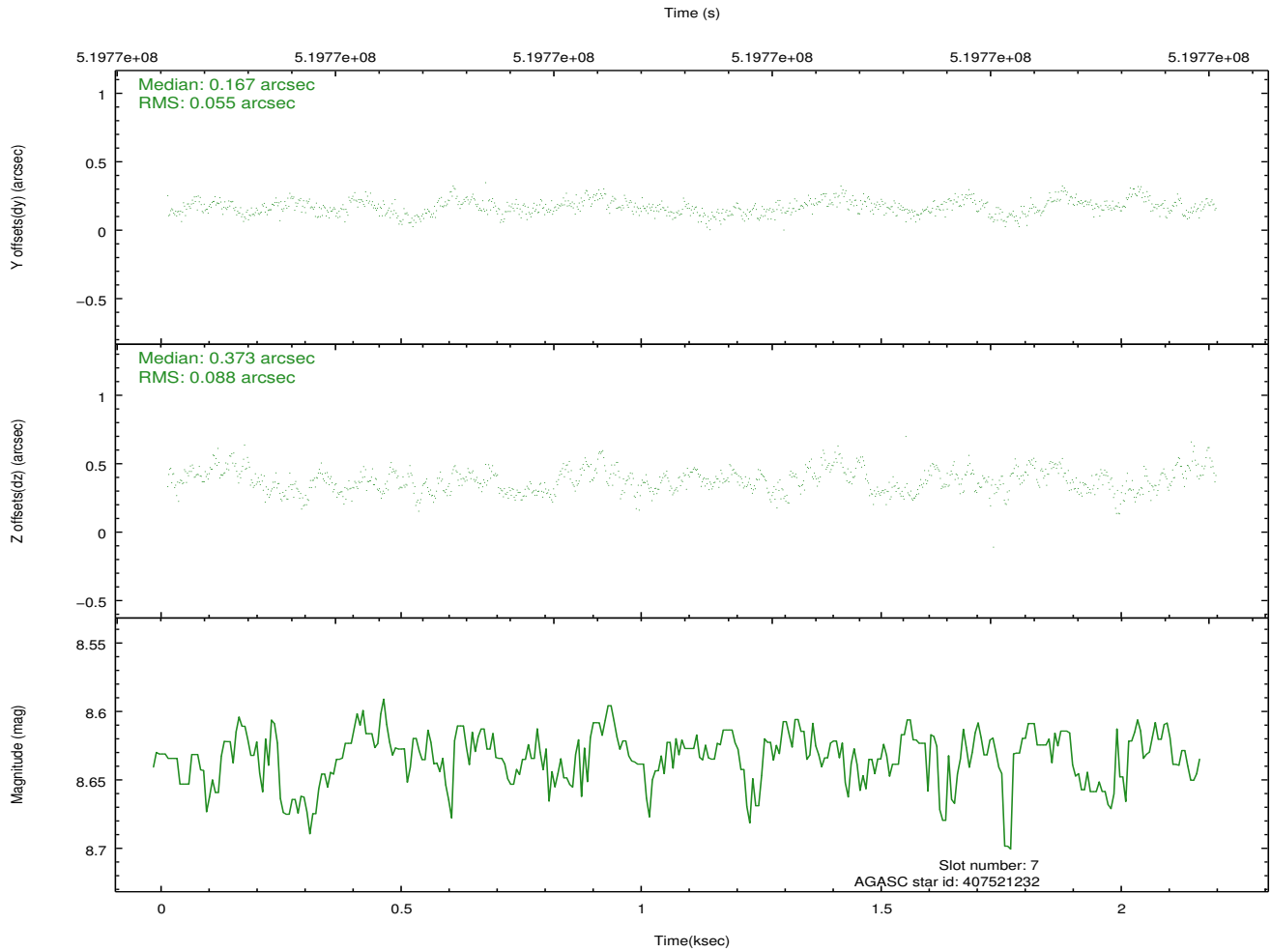
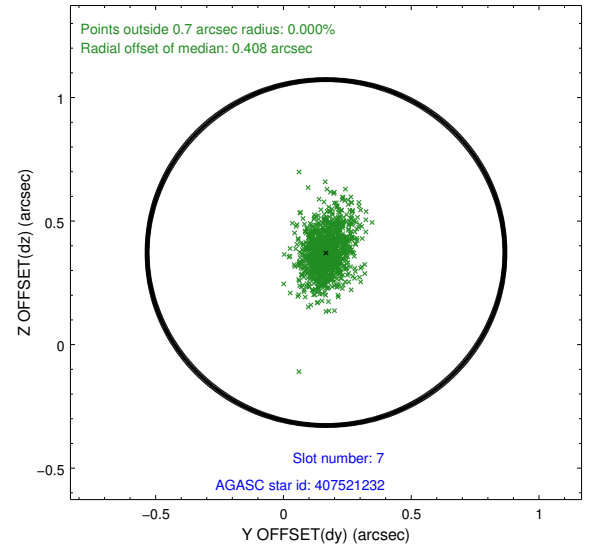
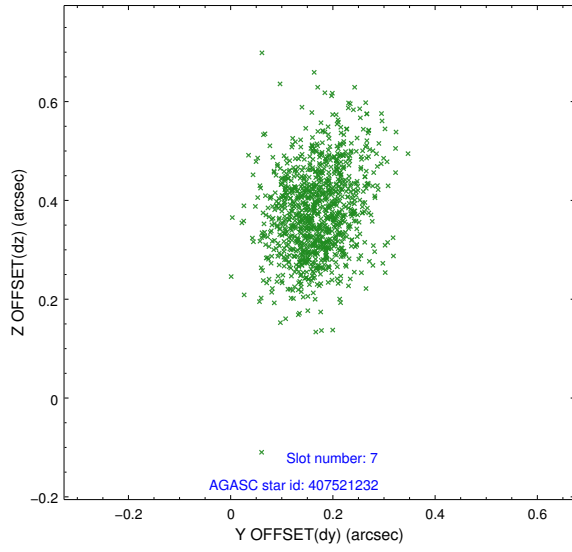
### 2.4.3 Slot 5



## 2.4.4 Slot 6

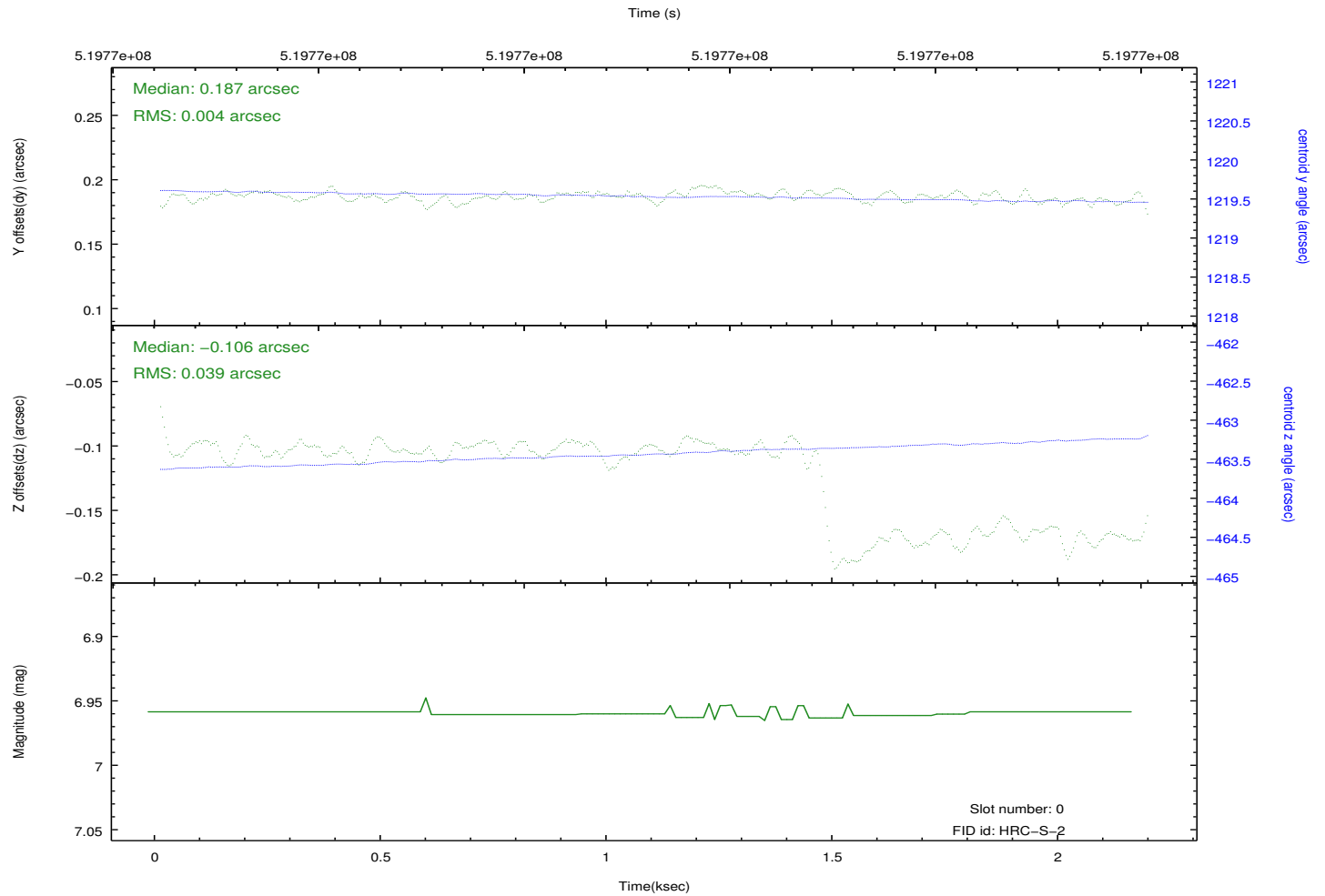
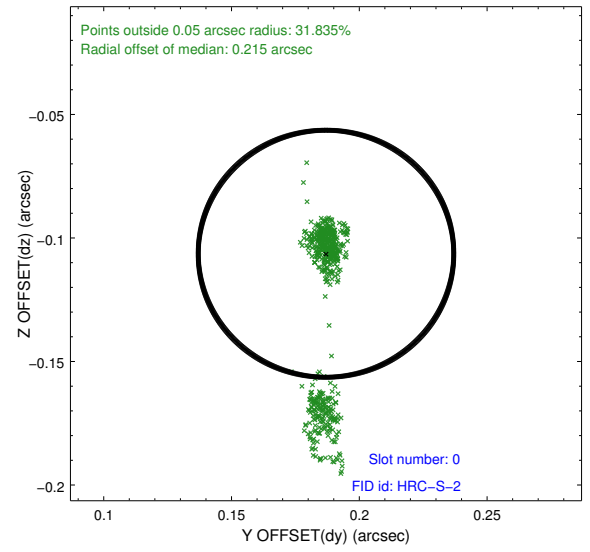
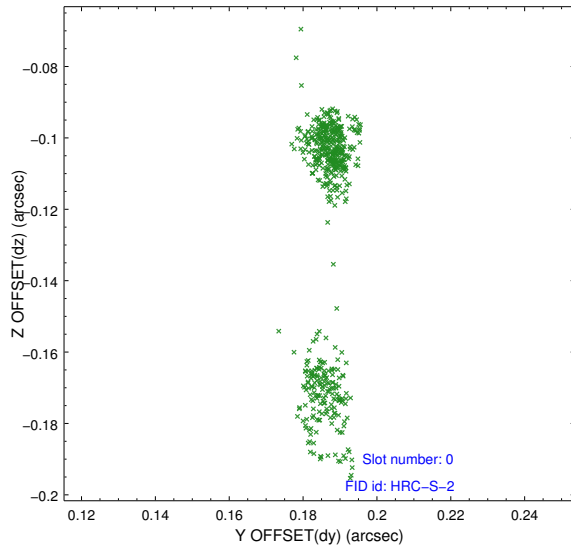


## 2.4.5 Slot 7

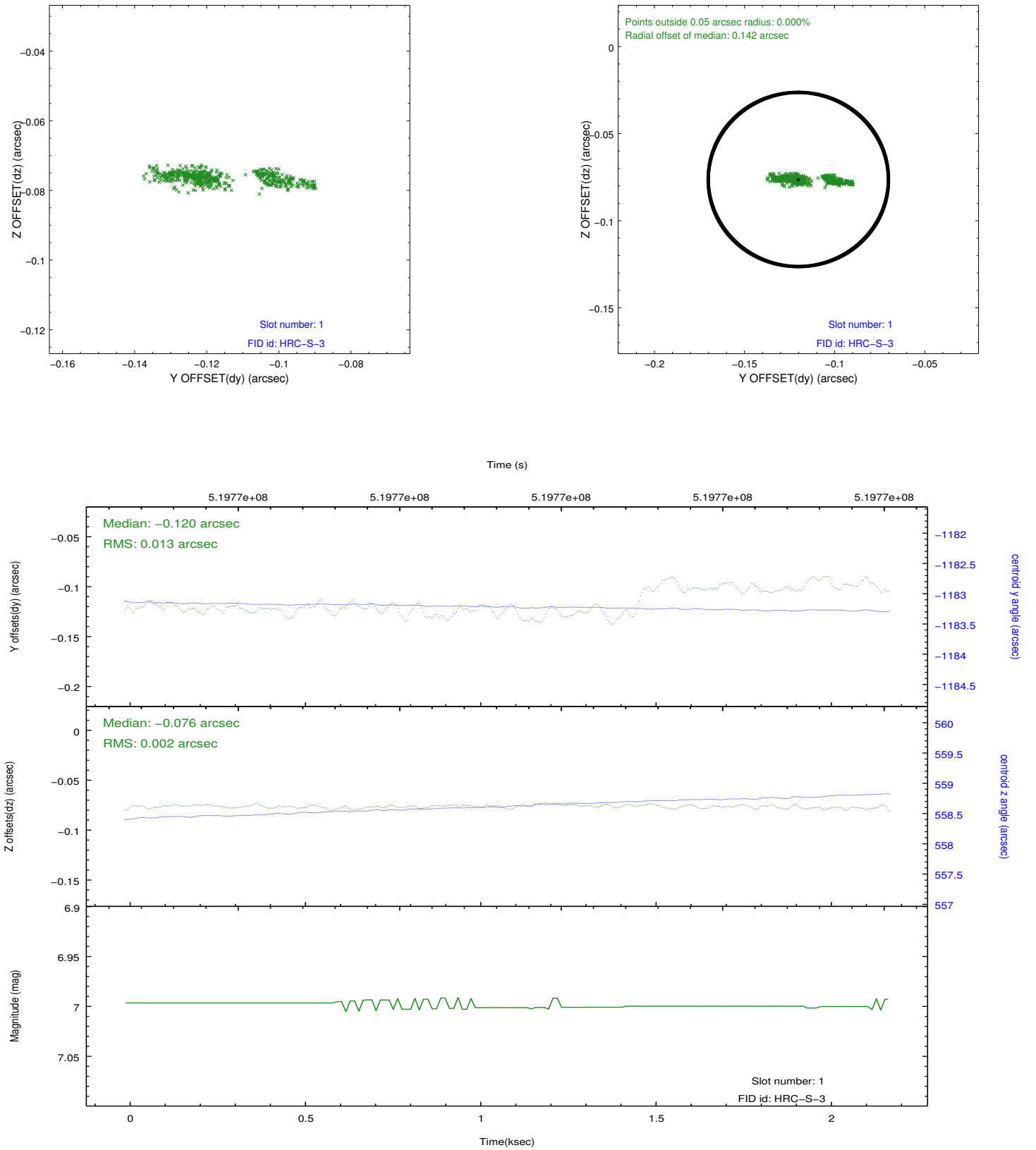


## 2.5 FID Slots

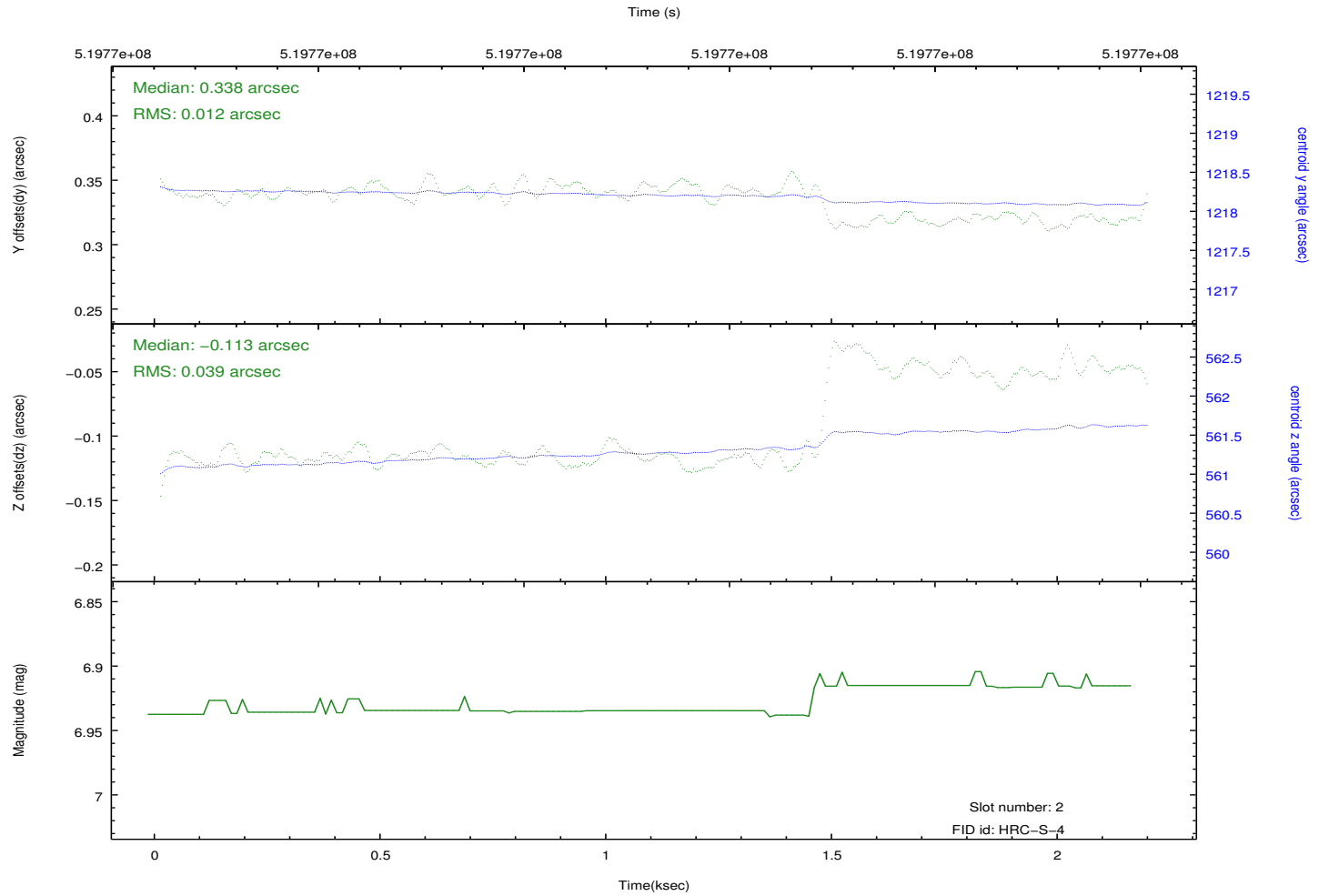
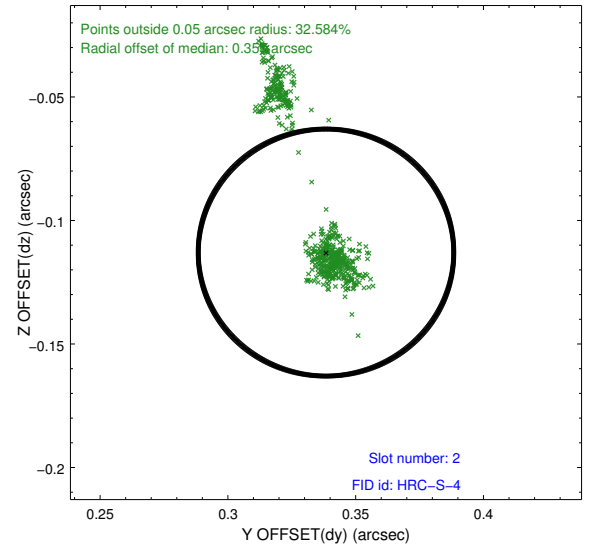
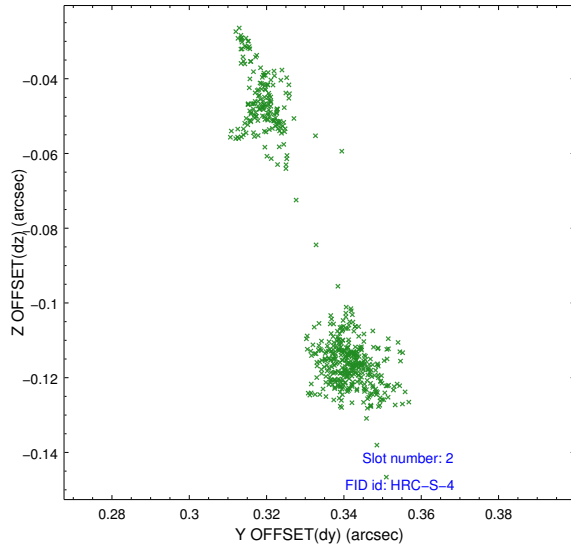
### 2.5.1 Slot 0



## 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)	2014.12.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	2.1578813694119

## A.2 Comments

Window constraint met.

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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.