

# V&V Reference Report

## L2 ASCDS Version : 8.1.2

Observation 1200 - L2 Version 4

Chandra X-Ray Center

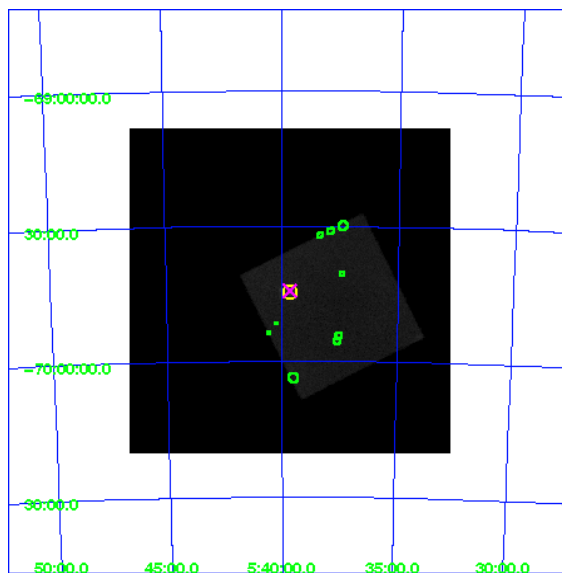
L2 Processing Date : Dec 17 2009

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# 1 Front

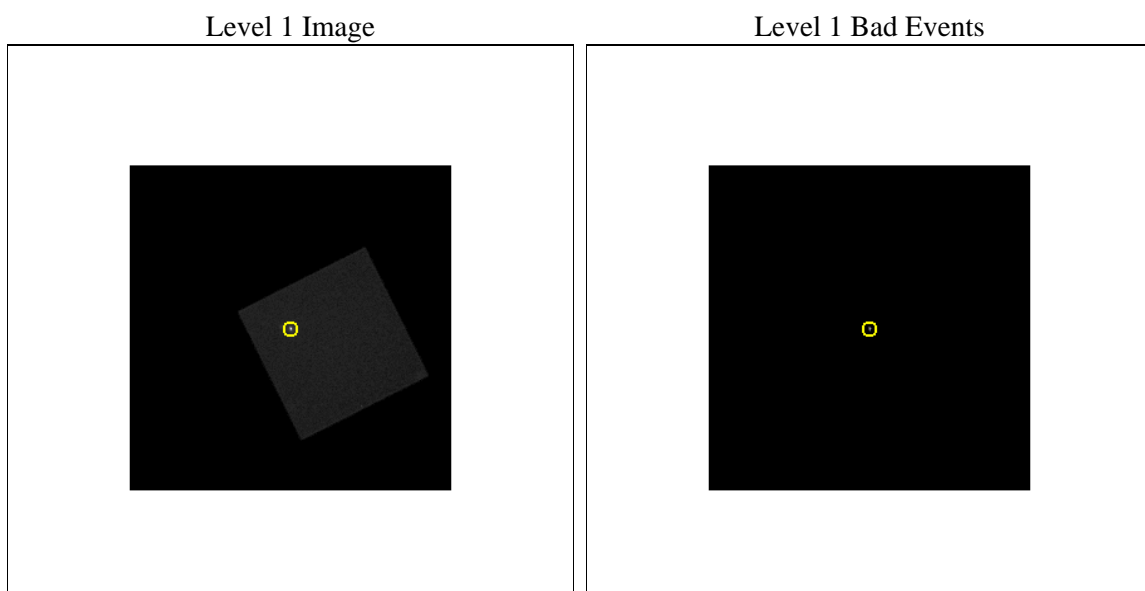
seq_num	480150	Sequence number
obs_id	1200	Observation id
title	&#160	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	LMC X-1	Source name
ra_targ	84.914583	Observer's specified target RA
dec_targ	-69.743611	Observer's specified target Dec
ra_nom	84.915970827394	Nominal RA
dec_nom	-69.73896082154	Nominal Dec
roll_nom	108.40792539619	Nominal Roll
revision	4	Processing version of data
ontime	8326.3315491751	[s]
livetime	8235.9742680872	Ontime multiplied by DTCOR
l2events	452229	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	10000.000000	Scheduled observation exposure time
ascdsver	8.1.2	Processing system revision	ontime	8326.3315491751	[s]
caldbver	4.1.4	&#160	ll events	669574	Number of level 1 events
date	2009-12-17T12:32:23	Date and time of file creation			
revision	5	Processing version of data			

### 2.1.3 Events

#### Level 1 Events

	<b>segment 0</b>
level 1 events	669574
rejected events	13085
rejected %	1%

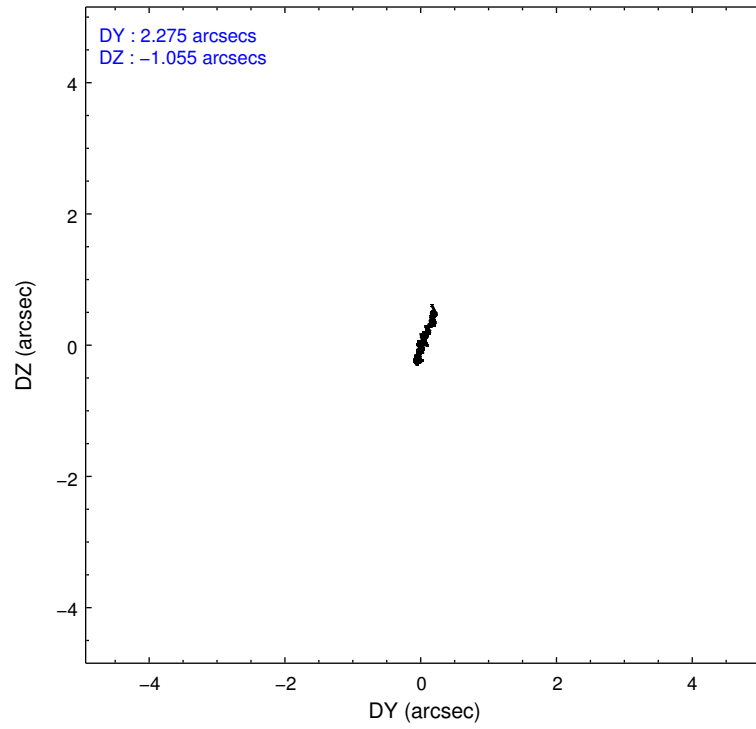
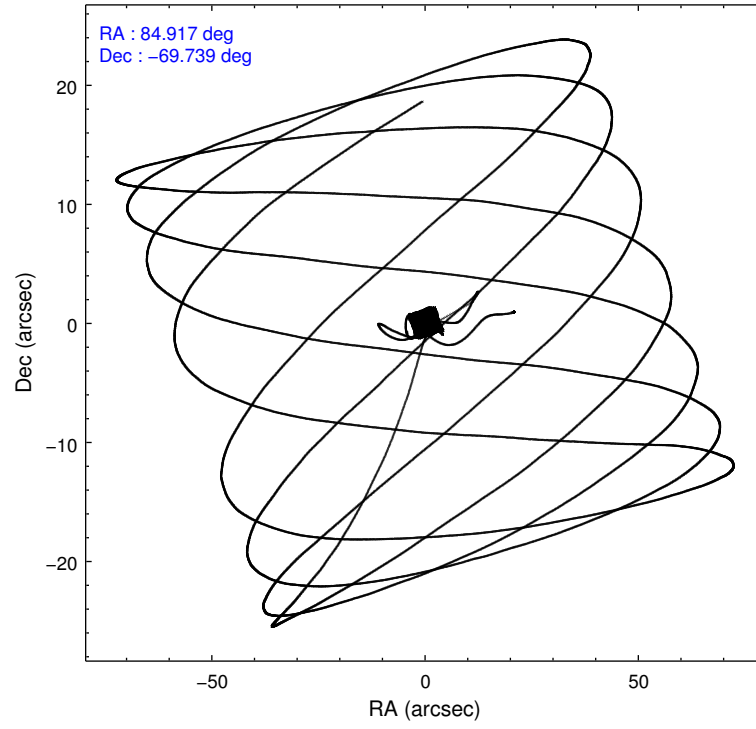


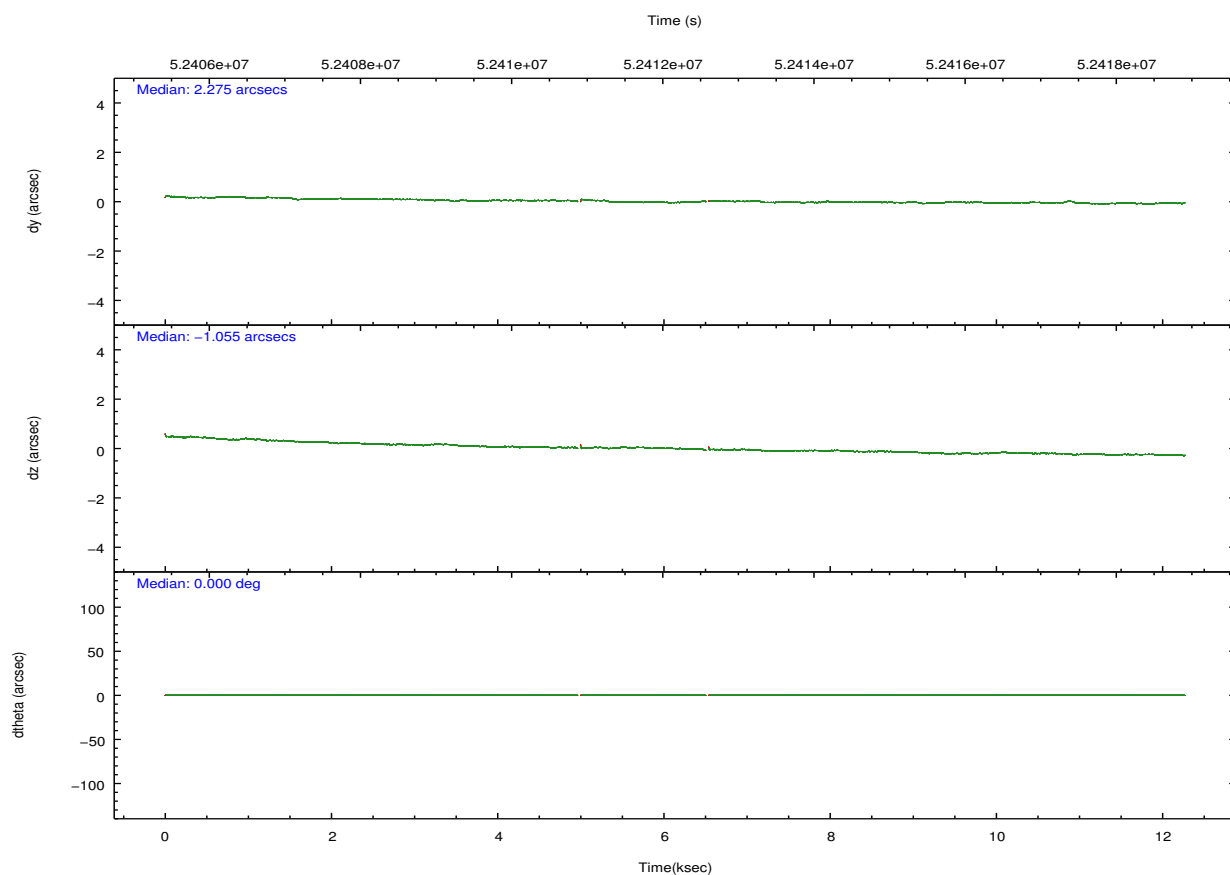
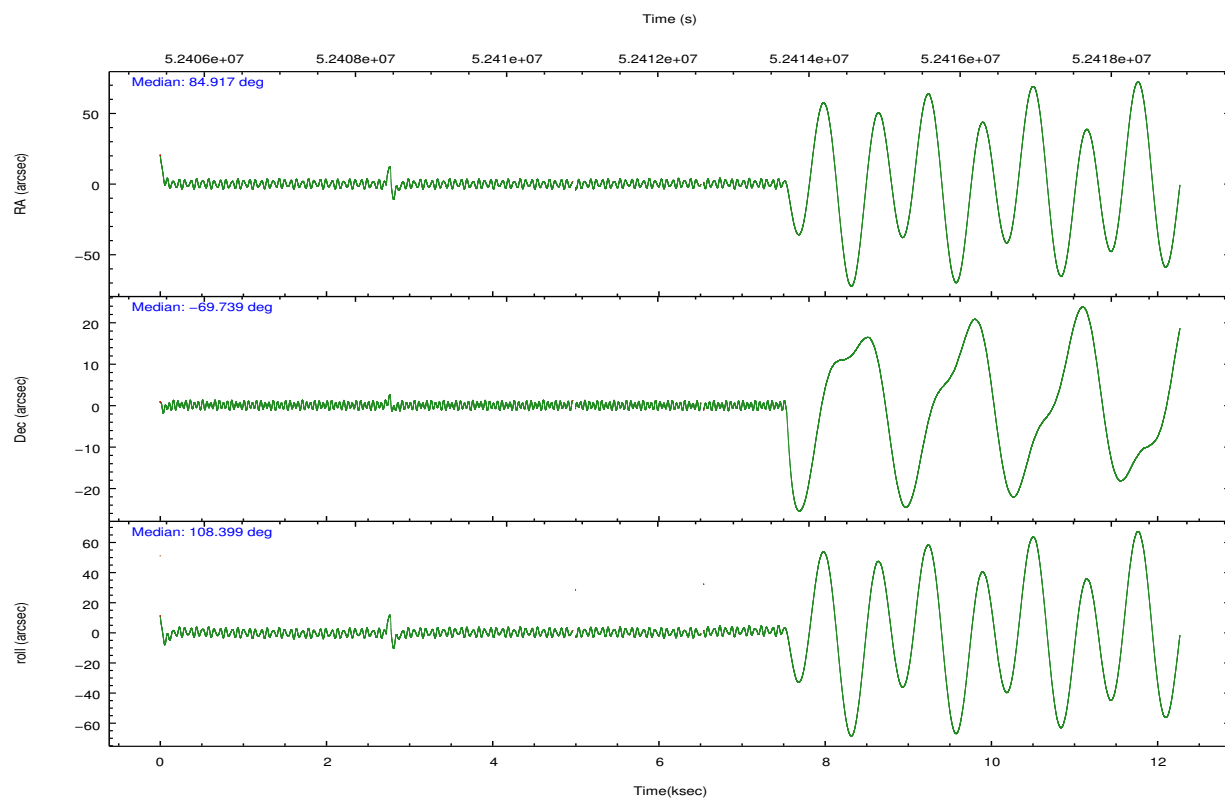
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	HRC	HRC
Detector	HRC-I	HRC-I
Grating	NONE	NONE
Data mode	OBSERVING	OBSERVING
Observation mode	POINTING	POINTING
Pointing RA	84.975260	84.91597082739422
Pointing Dec	-69.756969	-69.73896082153996
Pointing Roll	108.559037	108.4079253961924
SIM focus pos (mm)	-0.025969	-0.7362356599963374
SIM defocus (mm)	1.014324	0.3040569606625371
SIM translation stage pos (mm)	97.722534	97.71634987982785
SIM translation stage offset (mm)	29.26296	29.26913901177372
Observation start time	52406464.184000	52405028.545295
Observation start date	1999-08-30T13:20:00	1999-08-30T12:57:08
Observation end time	52419664.184000	52418365.845774
Observation end date	1999-08-30T17:00:00	1999-08-30T16:39:25

Parameter	Planned	Actual
Obspar format version number	6	6
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED

## 2.3 Aspect



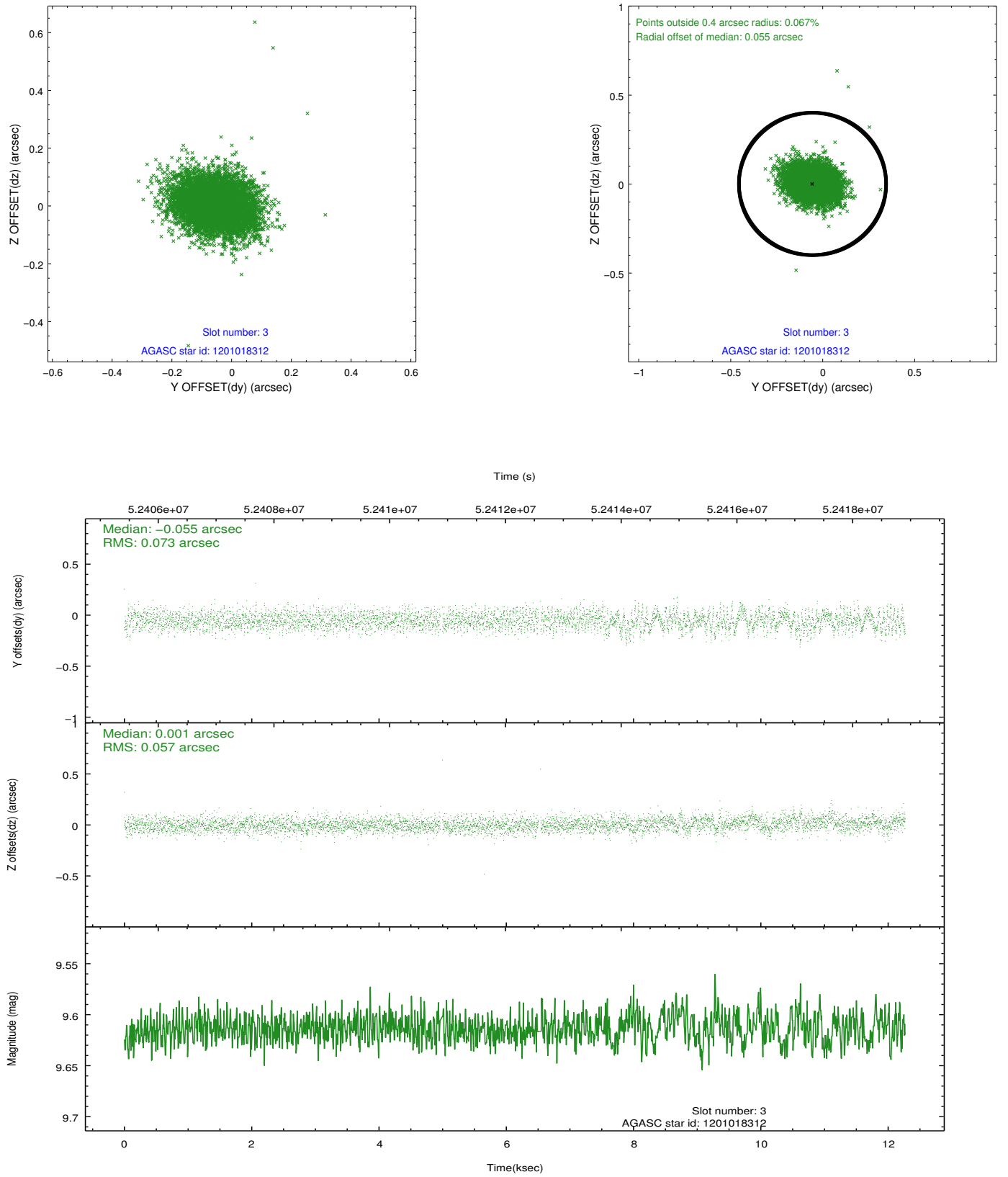


Slot Statistics

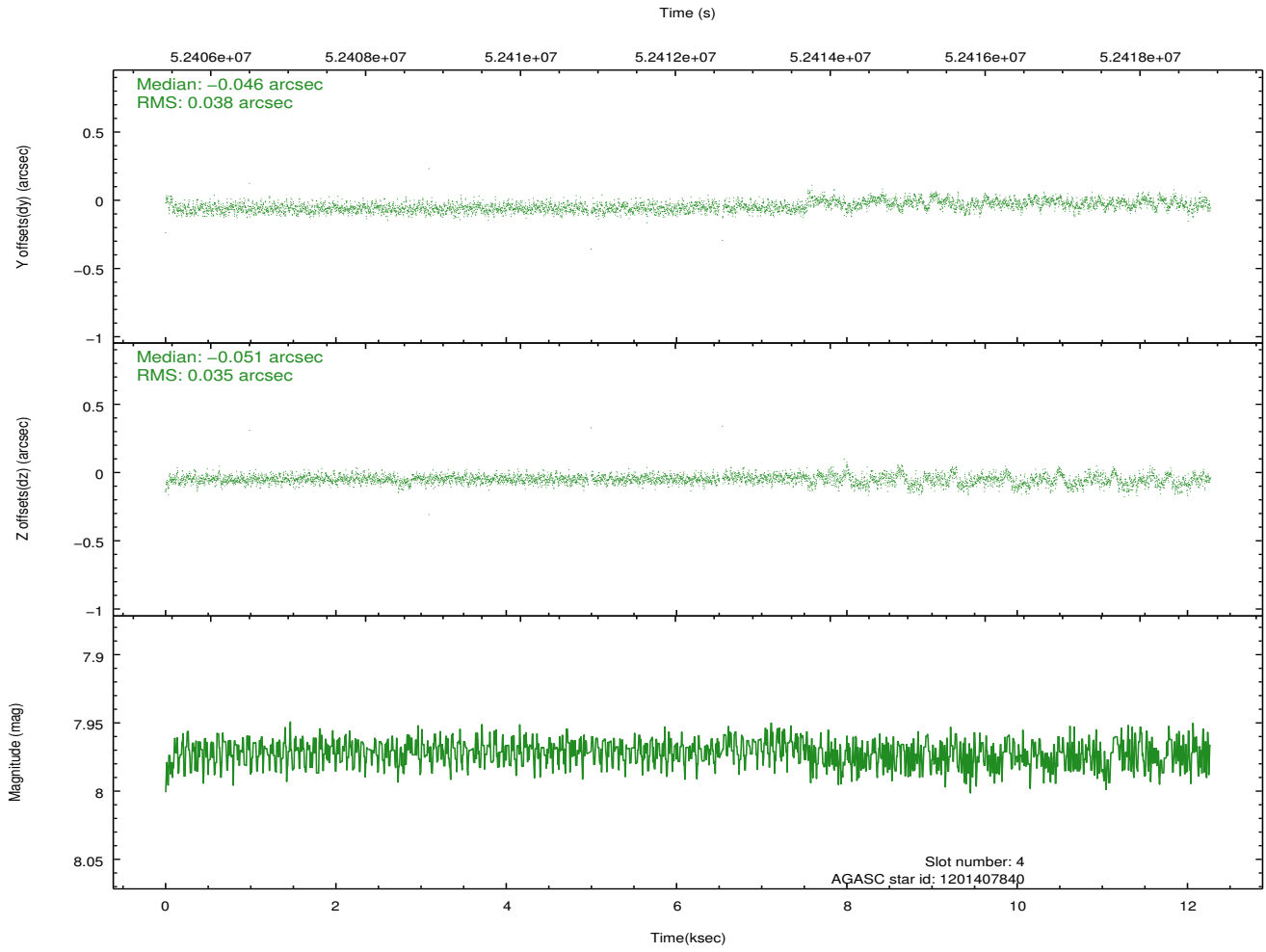
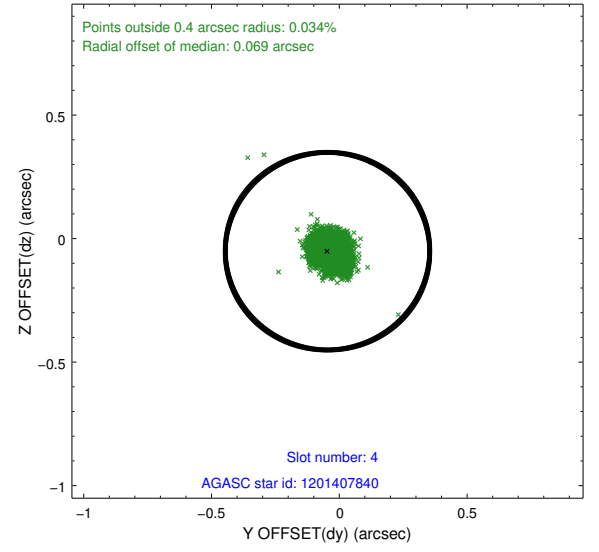
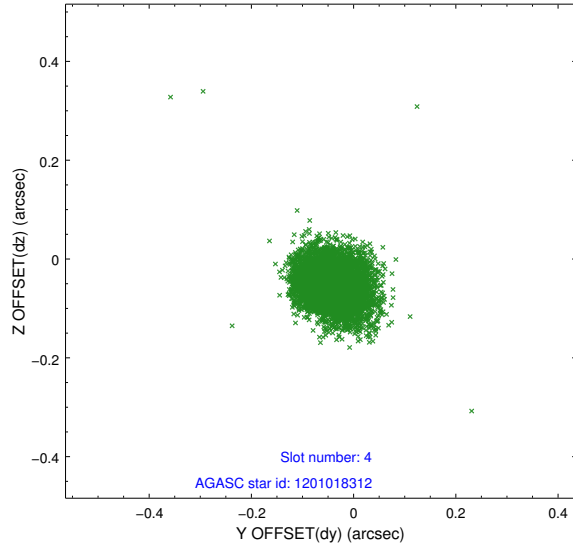
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	HRC-I-1	6.97	5953	0.078	0.009	0.055	0.055	0.000000	0.000000	-756.52	-688.25
1	UNUSED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
2	UNUSED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
3	GUIDE	1201018312	9.61	5943	-0.055	0.001	0.096	0.159	86.298231	-69.115627	1631.76	-2337.77
4	GUIDE	1201407840	7.97	5951	-0.046	-0.051	0.053	0.089	83.696303	-70.172201	-935.31	1961.29
5	GUIDE	1201411368	10.07	5935	0.033	-0.077	0.175	0.263	83.629696	-70.495613	-2023.23	2385.62
6	UNUSED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
7	GUIDE	1201540776	9.62	5944	0.049	0.127	0.082	0.139	85.107945	-69.858480	-398.86	-38.63

## 2.4 Star Slots

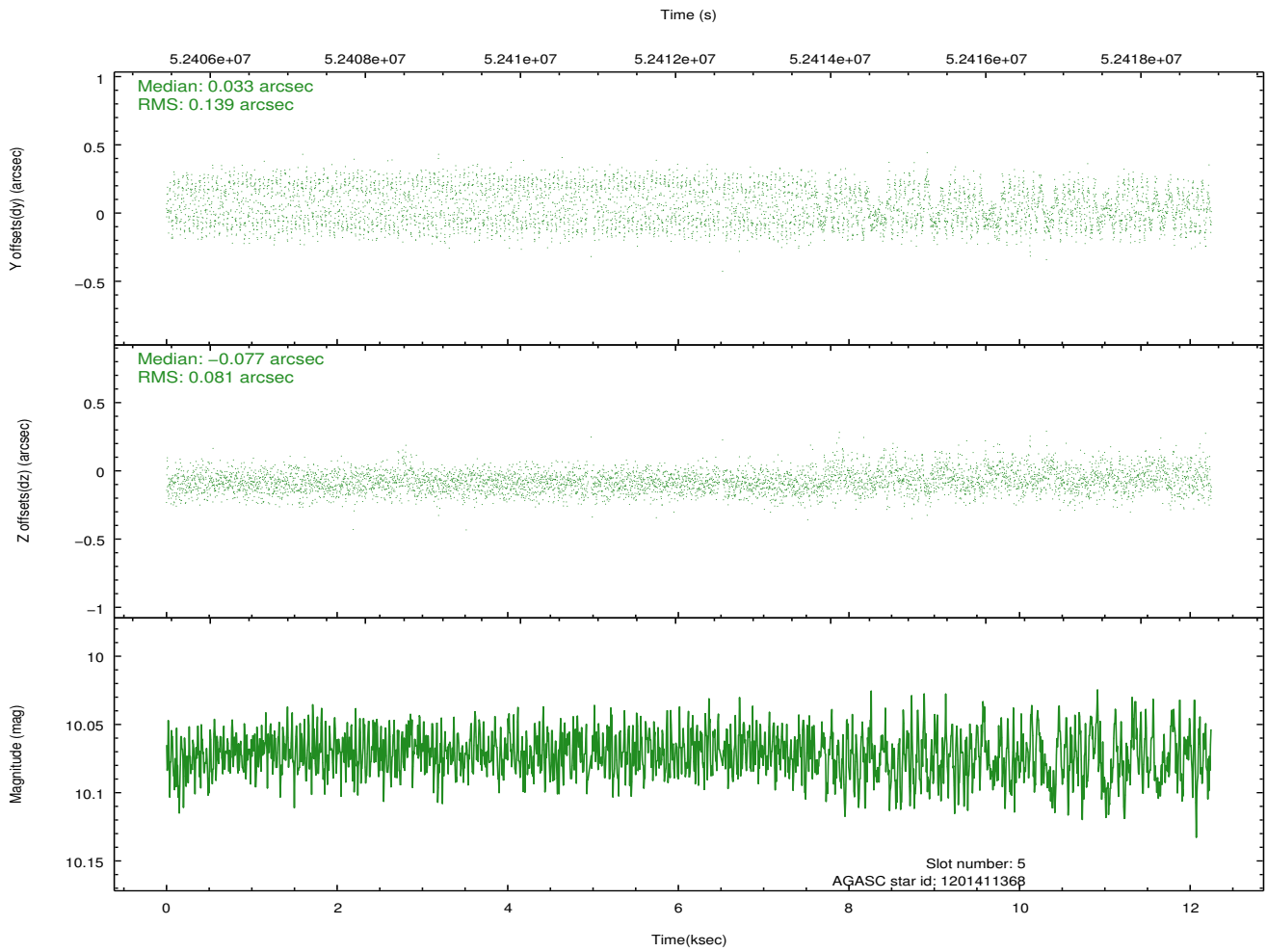
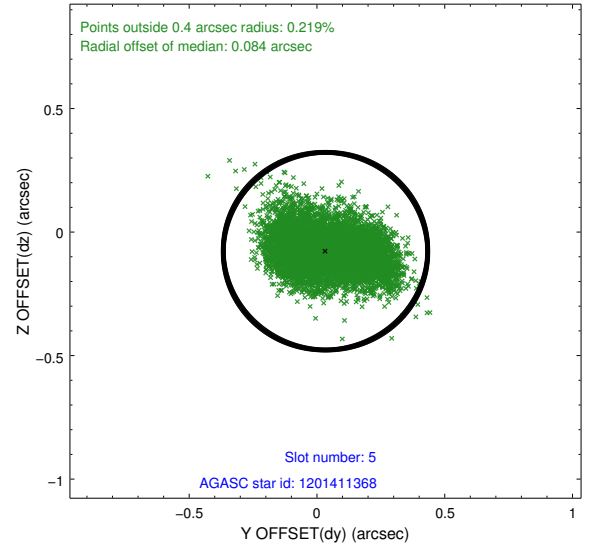
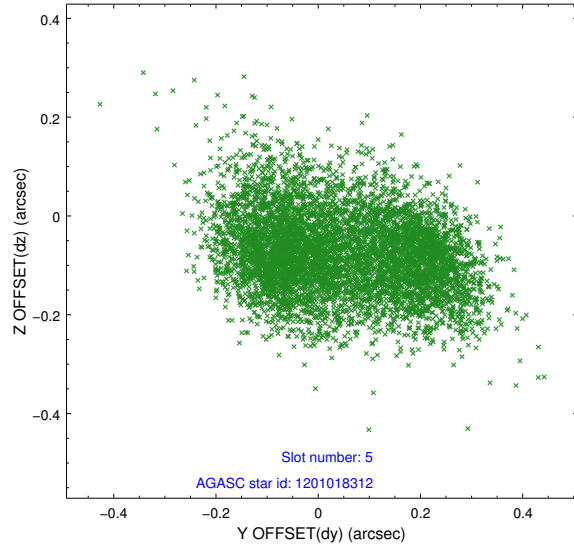
### 2.4.1 Slot 3



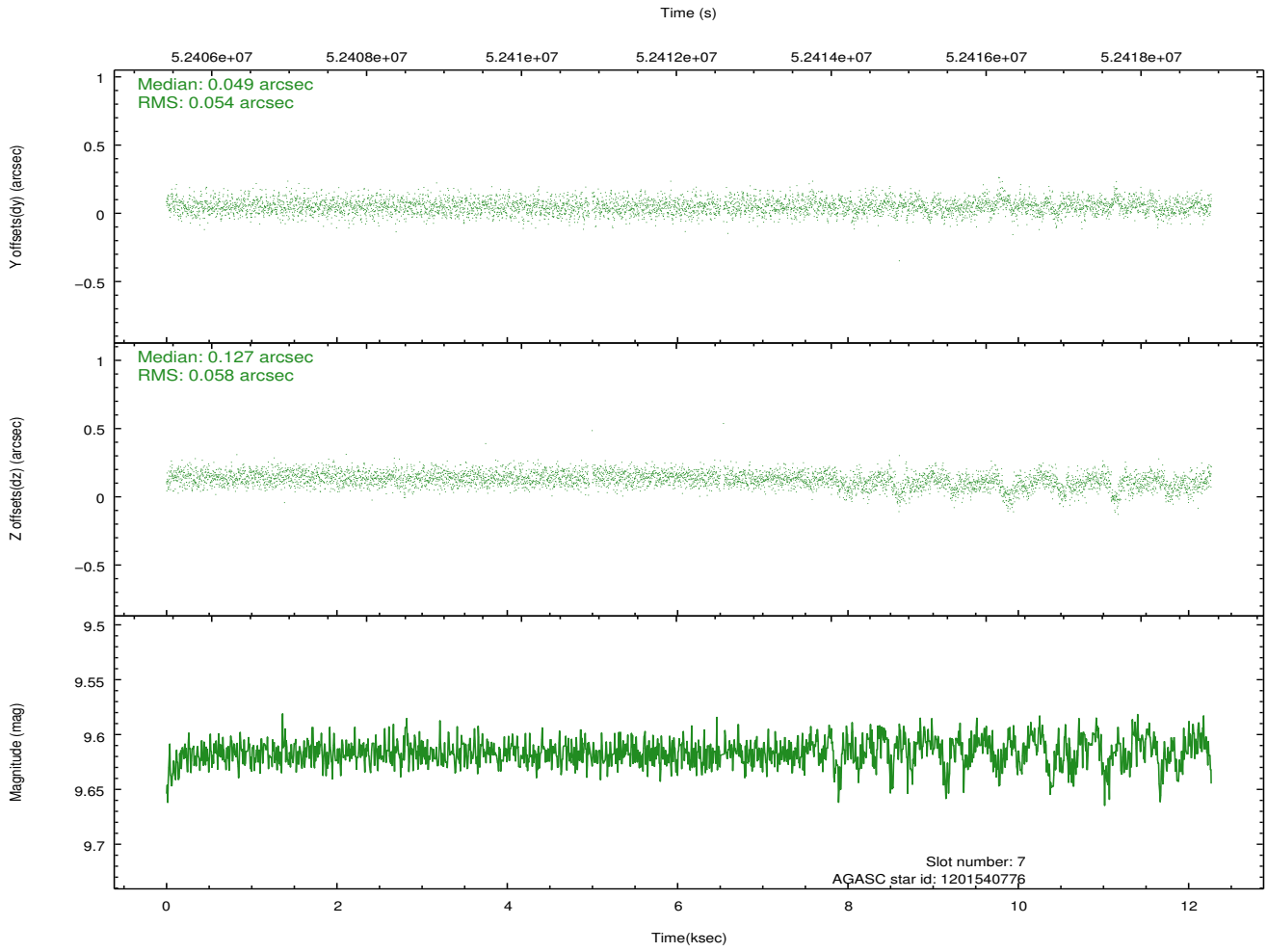
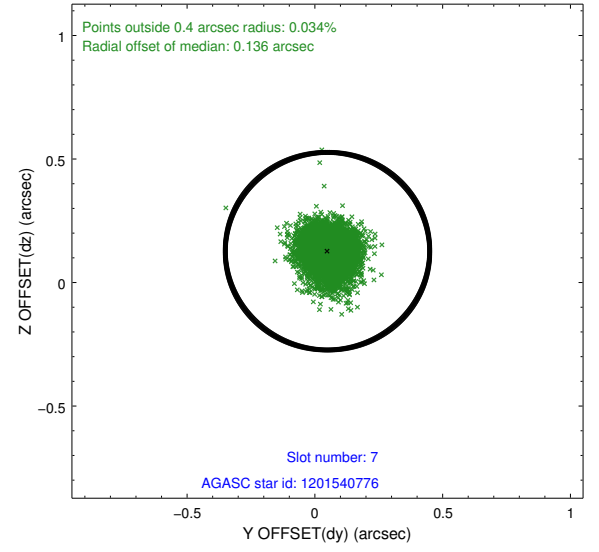
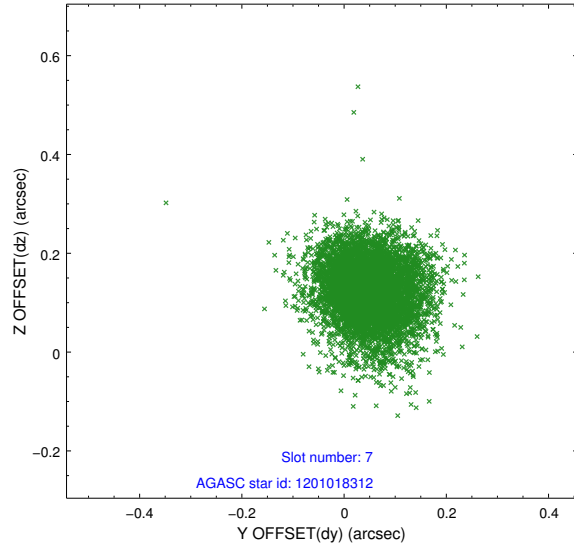
## 2.4.2 Slot 4



### 2.4.3 Slot 5



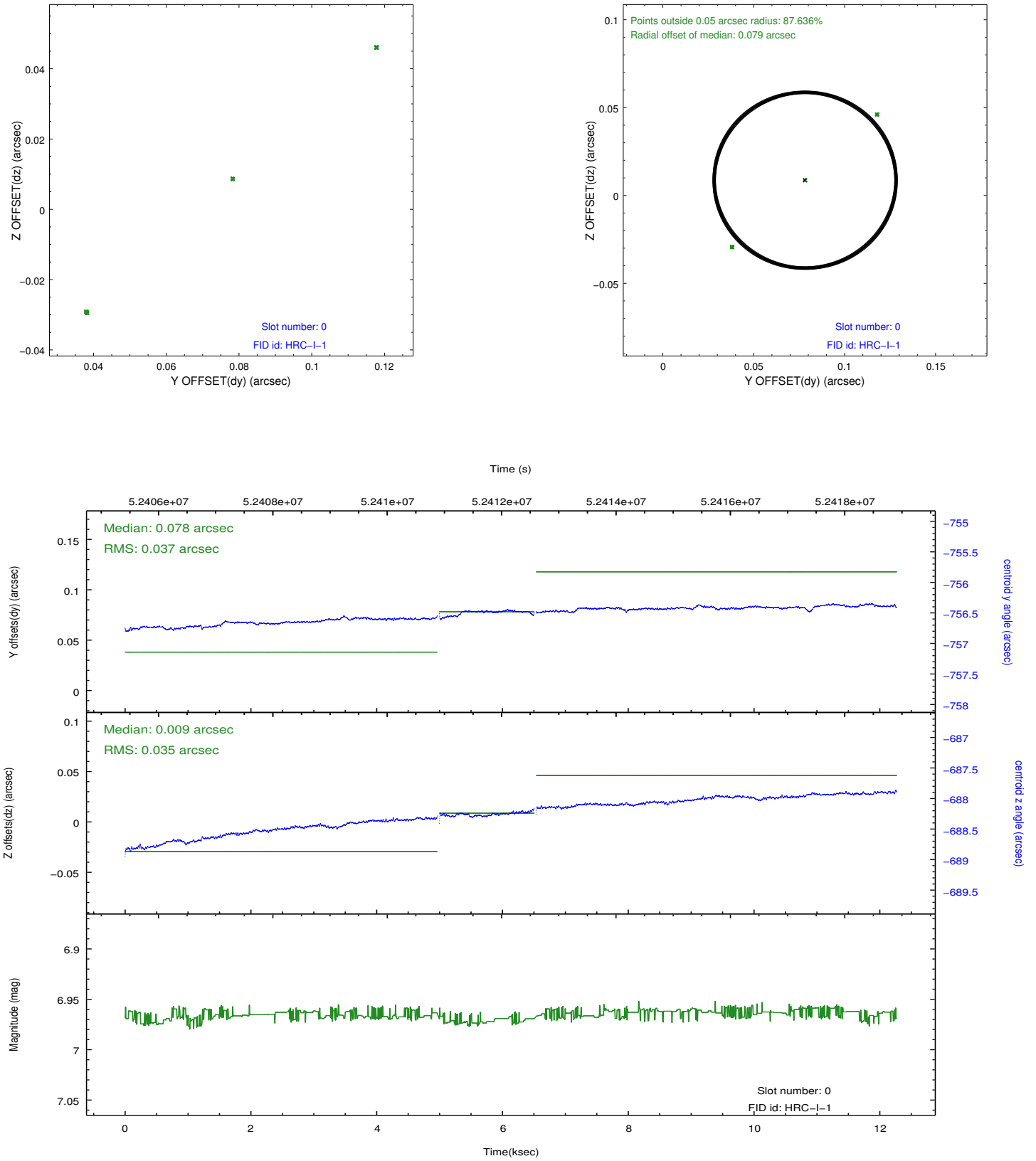
## 2.4.4 Slot 7





## 2.5 FID Slots

### 2.5.1 Slot 0



### 3 Point Sources

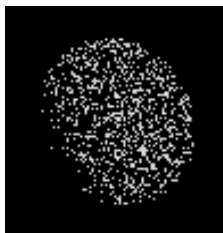
4.33 arcmin



18.65 arcmin



19.38 arcmin



14.06 arcmin



# A Summary

## A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2010.01.19
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	13

## A.2 Comments

BEWARE: HRC focus adjustments were made twice during the acquisition of this

observation. Dither amplitude was changed from 1.1 arcsec to 20 arcsec partway through the observation. There was no affect on the processing from this change in dither amplitude.

=====

An artifact appears in the event 2 data with morphology similar to a jet.

This feature is instrumental and is the result of a few events with bad positions. This is likely due to the characteristics of the HRC degap map for very off-axis sources and/or signal saturation.

=====

Charge time for this observation remains at previous value of 13.0 ksec, although

with the current processing the charge time would have been 8.3 ksec. HRC high voltage was not turned on immediately.

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Only one fid light and 4 guide stars were available for use with this observation. While 4 guide stars is considered adequate for a good aspect solution, use of only 1 fid light will definitely degrade the boresight calibration.

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