

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 5280 - L2 Version 3  
Chandra X-Ray Center

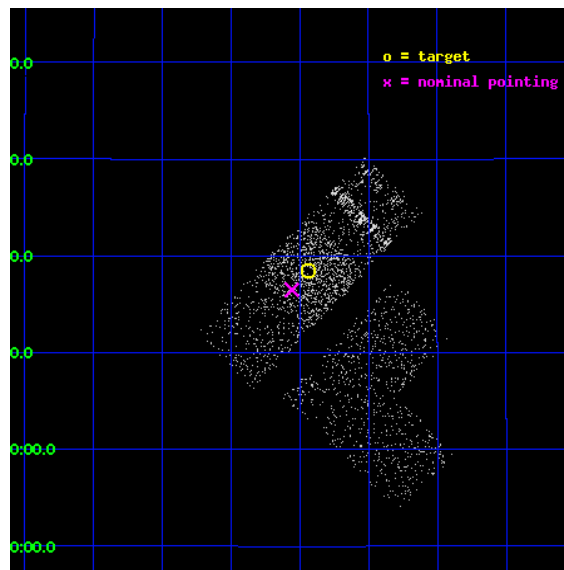
L2 Processing Date : Nov 8 2012

## 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	Bias . . . . .	3
2.1.3	Parameters . . . . .	4
2.1.4	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

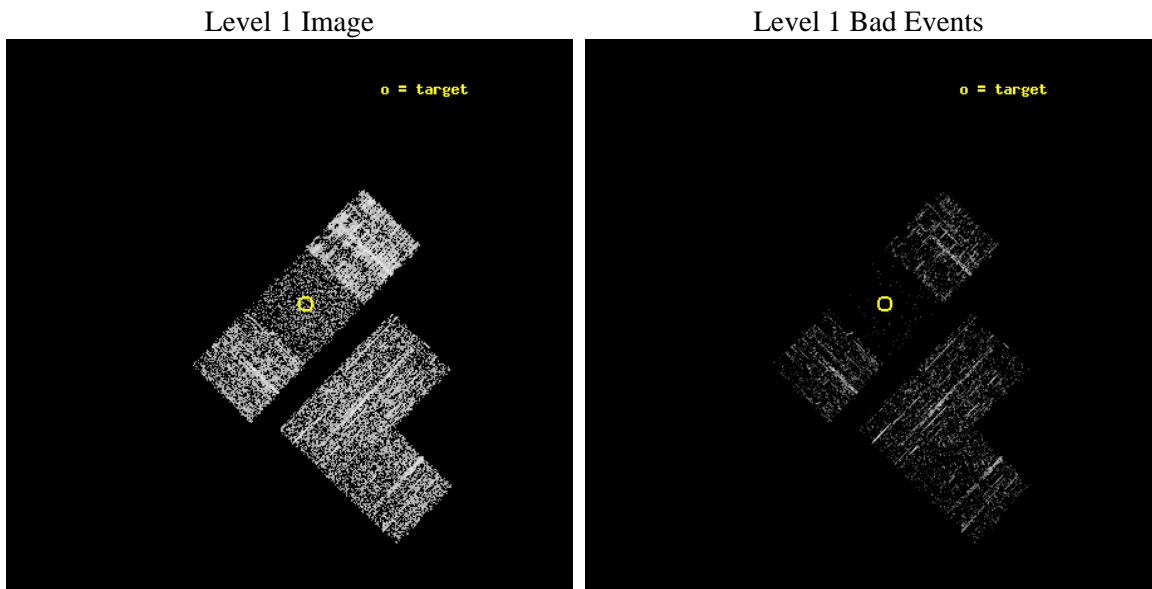
seq_num	100051	Sequence number
obs_id	5280	Observation id
title	High Resolution Imaging of the Source of Comet Encke's X-Rays Over One Nuclear Rotation	Proposal title
observer	Dr. Carey Lisse	Principal investigator
object	2P/Encke (2003)	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	287.10908	Observer's specified target RA [deg]
dec_targ	16.30725	Observer's specified target Dec [deg]
ra_nom	287.13925062815	Nominal RA [deg]
dec_nom	16.274987502743	Nominal Dec [deg]
roll_nom	314.14820425837	Nominal Roll [deg]
revision	3	Processing version of data
ontime	1471.9999945164	Sum of GTIs [s]
liveltime	1453.3606442538	Livetime [s]
ontime0	1471.9999945164	Sum of GTIs [s]
ontime2	1471.9999945164	Sum of GTIs [s]
ontime3	1471.9999945164	Sum of GTIs [s]
ontime6	1471.9999945164	Sum of GTIs [s]
ontime7	1471.9999945164	Sum of GTIs [s]
ontime8	1471.9999945164	Sum of GTIs [s]
l2events	3302	Number of level 2 events



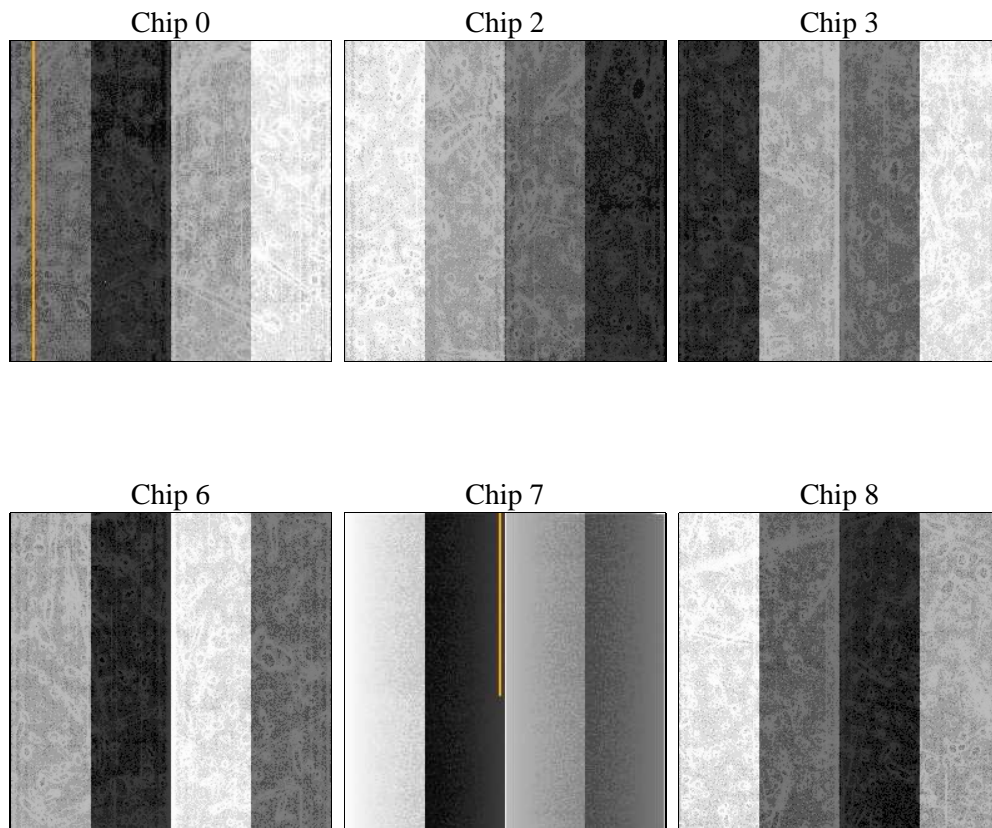
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	1290.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	1471.9999945164	Sum of GTIs [s]
caldsver	4.5.2	&#160	ontime0	1471.9999945164	Sum of GTIs [s]
date	2012-11-08T03:03:38	Date and time of file creation	ontime2	1471.9999945164	Sum of GTIs [s]
revision	3	Processing version of data	ontime3	1471.9999945164	Sum of GTIs [s]
			ontime6	1471.9999945164	Sum of GTIs [s]
			ontime7	1471.9999945164	Sum of GTIs [s]
			ontime8	1471.9999945164	Sum of GTIs [s]
			l1events	38341	Number of level 1 events

### 2.1.4 Events

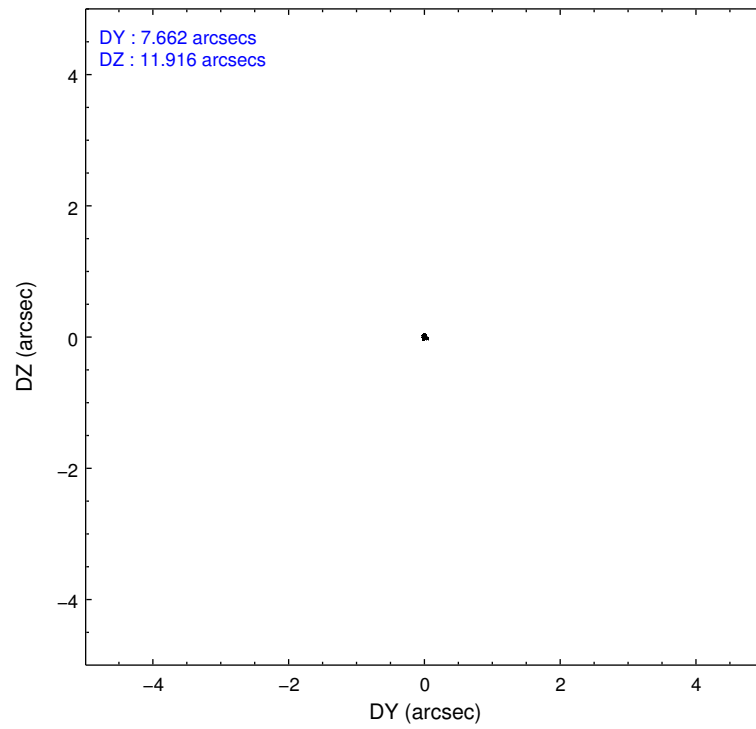
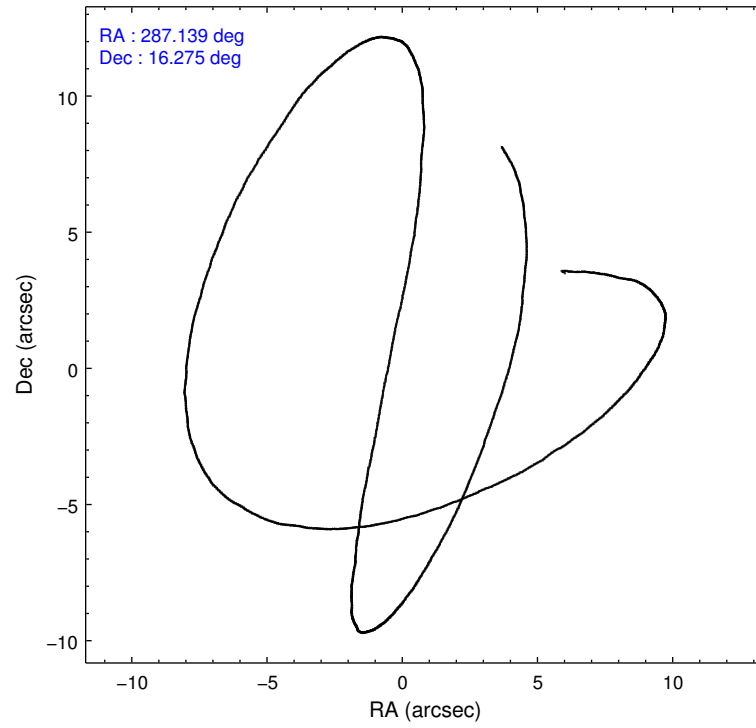
	ccd 0	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	5403	6788	6180	5951	2103	11916
rejected events	4965	6288	5802	5473	881	7195
rejected %	91%	92%	93%	91%	41%	60%

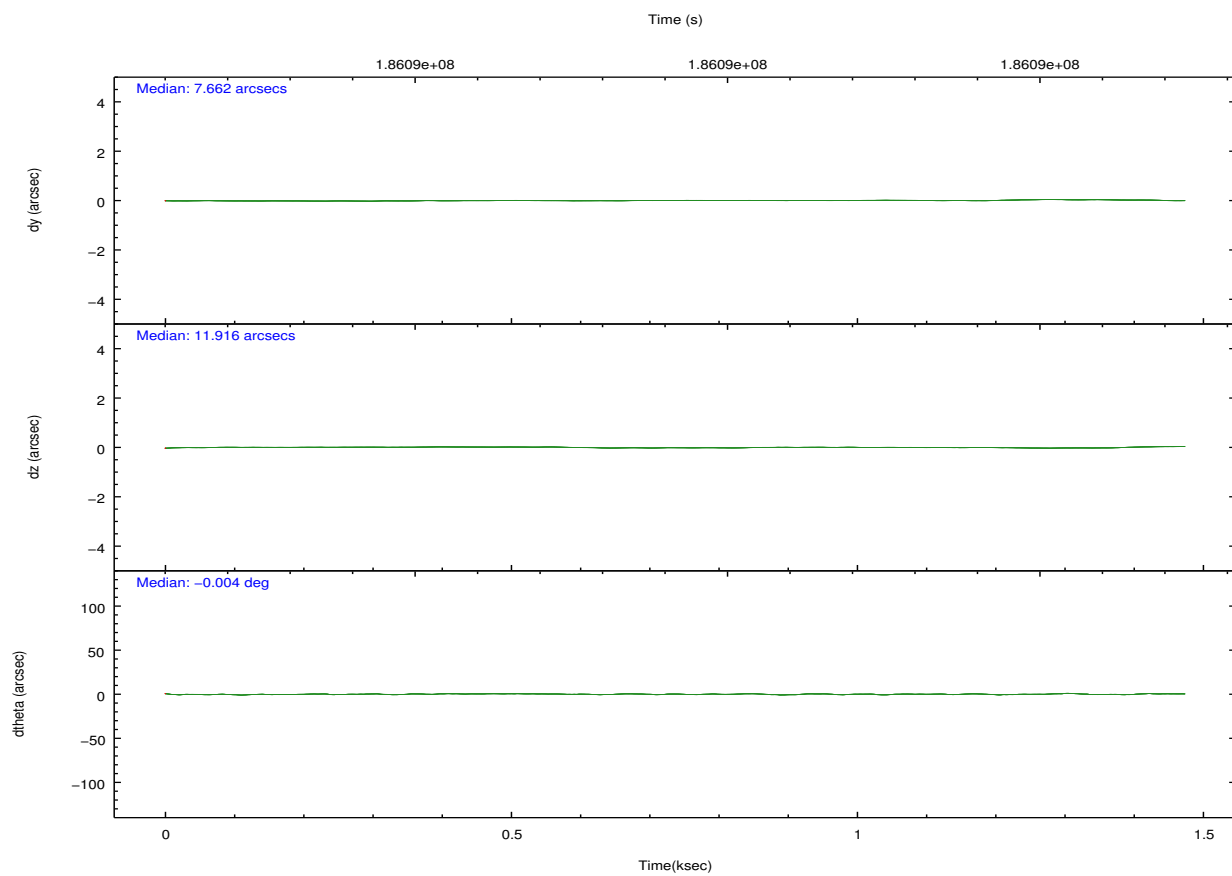
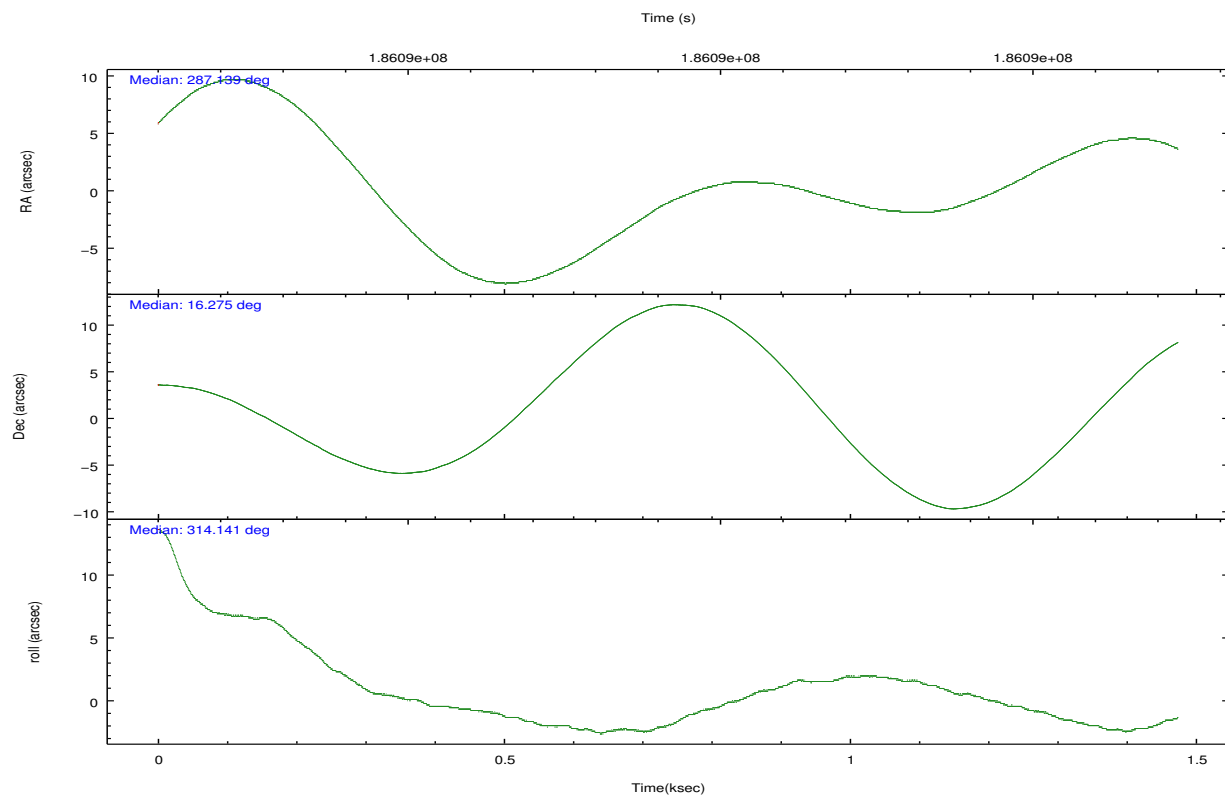
	ccd 0	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	248	266	222	292	345	1691
	4%	3%	3%	4%	16%	14%
grade 1 events	0	0	3	1	4	10
	0%	0%	0%	0%	0%	0%
grade 2 events	145	170	85	143	407	854
	2%	2%	1%	2%	19%	7%
grade 3 events	42	43	58	49	180	963
	0%	0%	0%	0%	8%	8%
grade 4 events	44	60	45	40	159	896
	0%	0%	0%	0%	7%	7%
grade 5 events	57	44	59	61	159	160
	1%	0%	0%	1%	7%	1%
grade 6 events	46	73	46	54	412	1389
	0%	1%	0%	0%	19%	11%
grade 7 events	4821	6132	5662	5311	437	5953
	89%	90%	91%	89%	20%	49%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-023678	ACIS-023678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	287.111451	287.1392506281466	Subarray requested	NONE	NONE
[deg] Pointing Dec	16.282340	16.27498750274296	Alternating exposures requested	N	N
[deg] Pointing Roll	313.999323	314.1482042583708	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	186085864.184000	186085487.77079			
Observation start date	2003-11-24T18:30:00	2003-11-24T18:24:47			
[s] Observation end time (MET)	186087154.184000	186087287.67087			
Observation end date	2003-11-24T18:51:30	2003-11-24T18:54:47			
Read mode	TIMED	TIMED			

## 2.3 Aspect





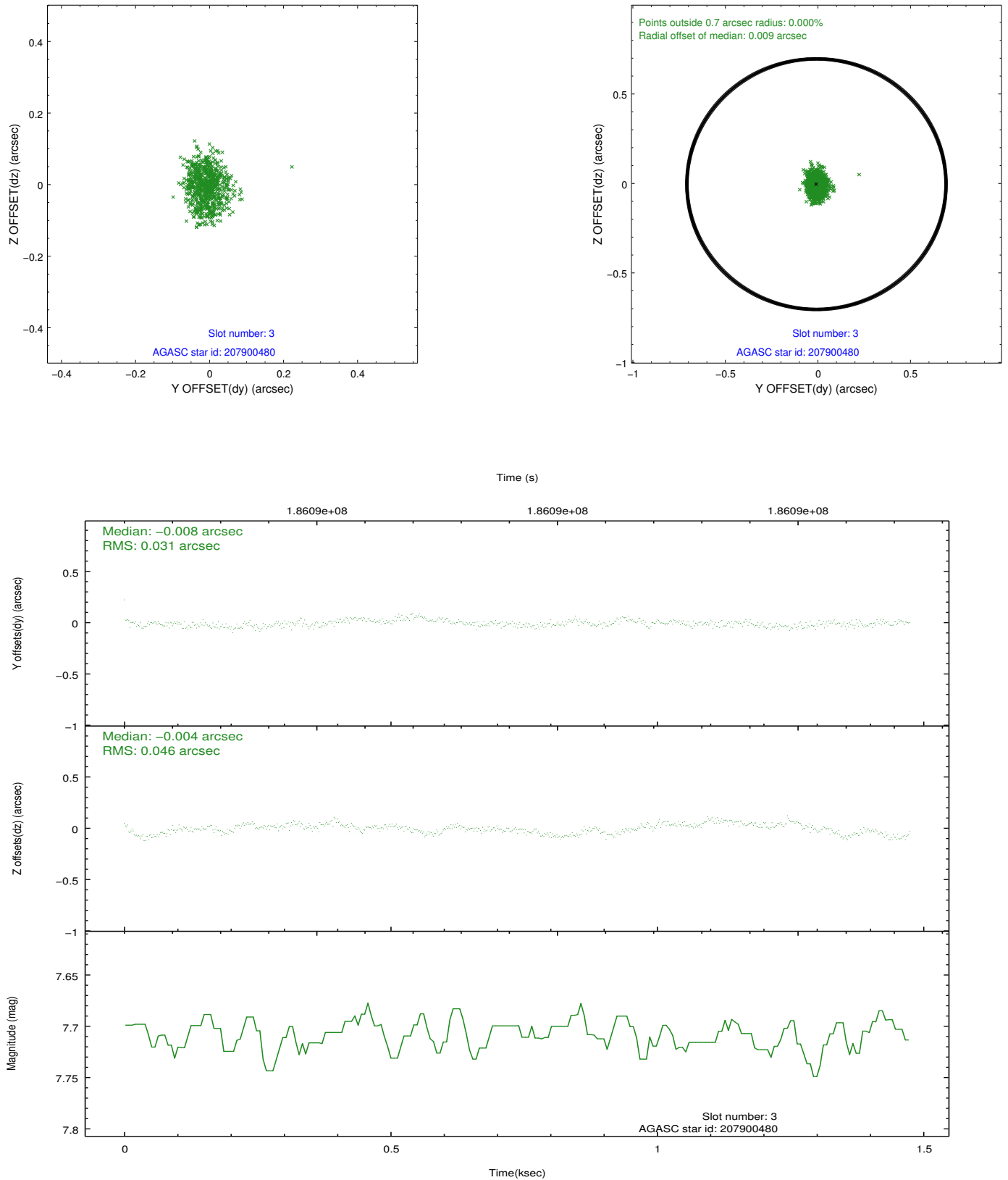
### Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	360	-0.006	-0.005	0.006	0.010	0.000000	0.000000	-760.44	-1733.22
1	FID	ACIS-S-4	7.20	360	0.036	0.004	0.005	0.009	0.000000	0.000000	2150.84	170.62
2	FID	ACIS-S-5	7.23	360	-0.061	0.009	0.006	0.010	0.000000	0.000000	-1807.56	169.41
3	GUIDE	207900480	7.71	720	-0.008	-0.004	0.060	0.096	286.932282	16.070409	116.92	-975.71
4	GUIDE	207904120	7.67	720	-0.035	0.086	0.073	0.108	286.904195	16.289988	-518.62	-497.27
5	GUIDE	207909176	8.42	720	-0.015	-0.096	0.072	0.118	287.357845	16.116738	1018.41	198.53
6	GUIDE	207916440	6.83	720	-0.207	0.047	0.077	0.128	287.167522	16.851310	-1339.33	1561.50
7	GUIDE	207907984	9.33	718	0.284	-0.028	0.188	0.269	287.467981	15.973007	1654.59	117.05

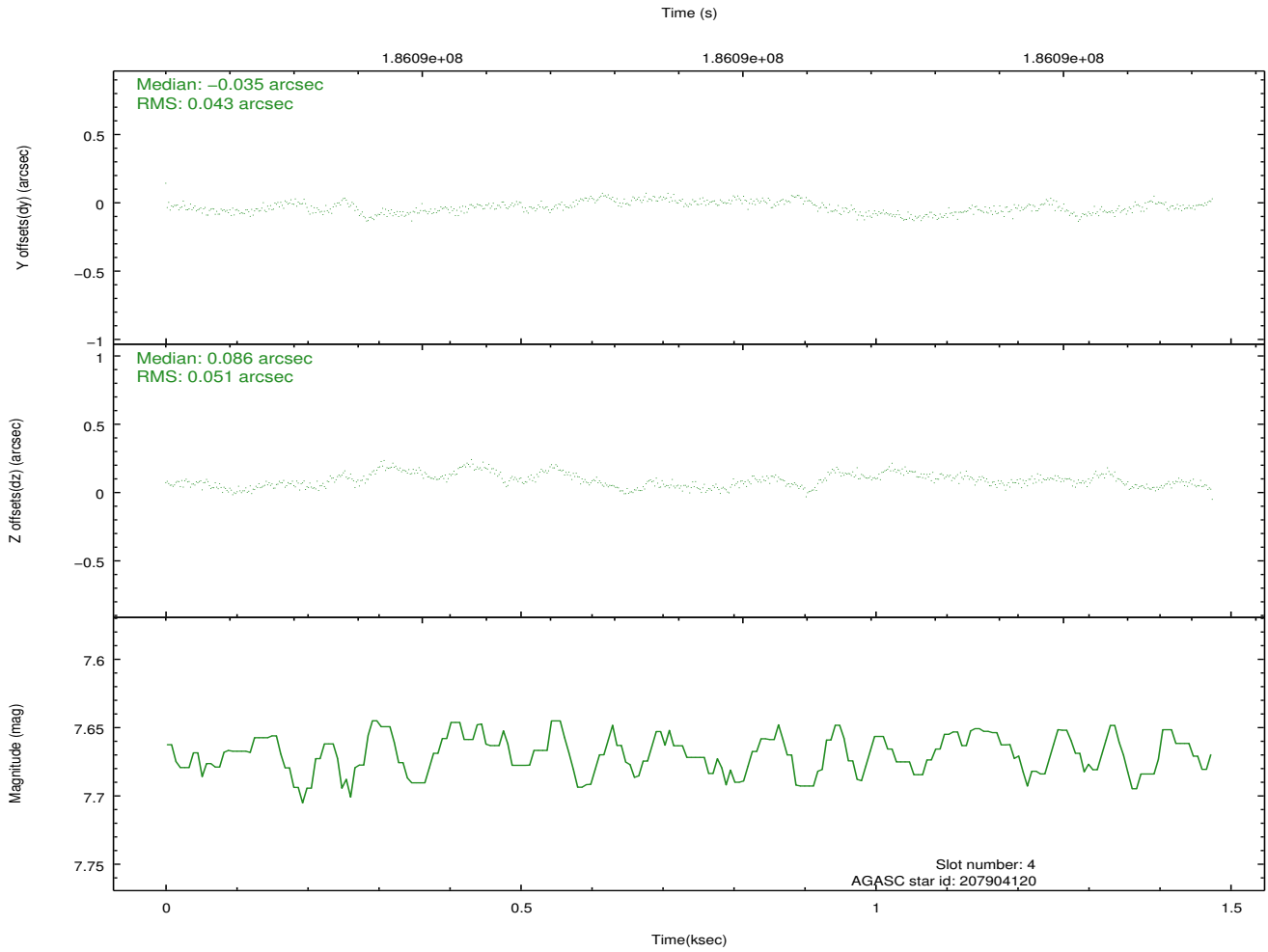
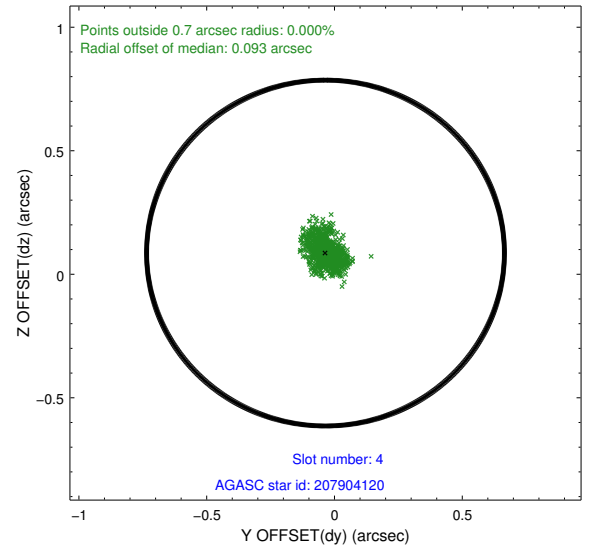
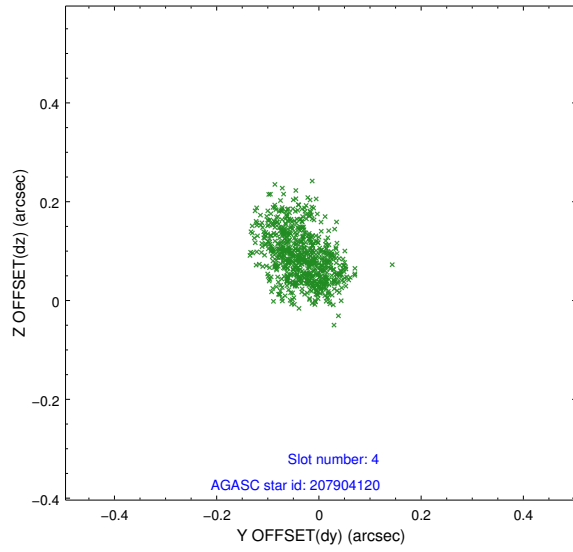


## 2.4 Star Slots

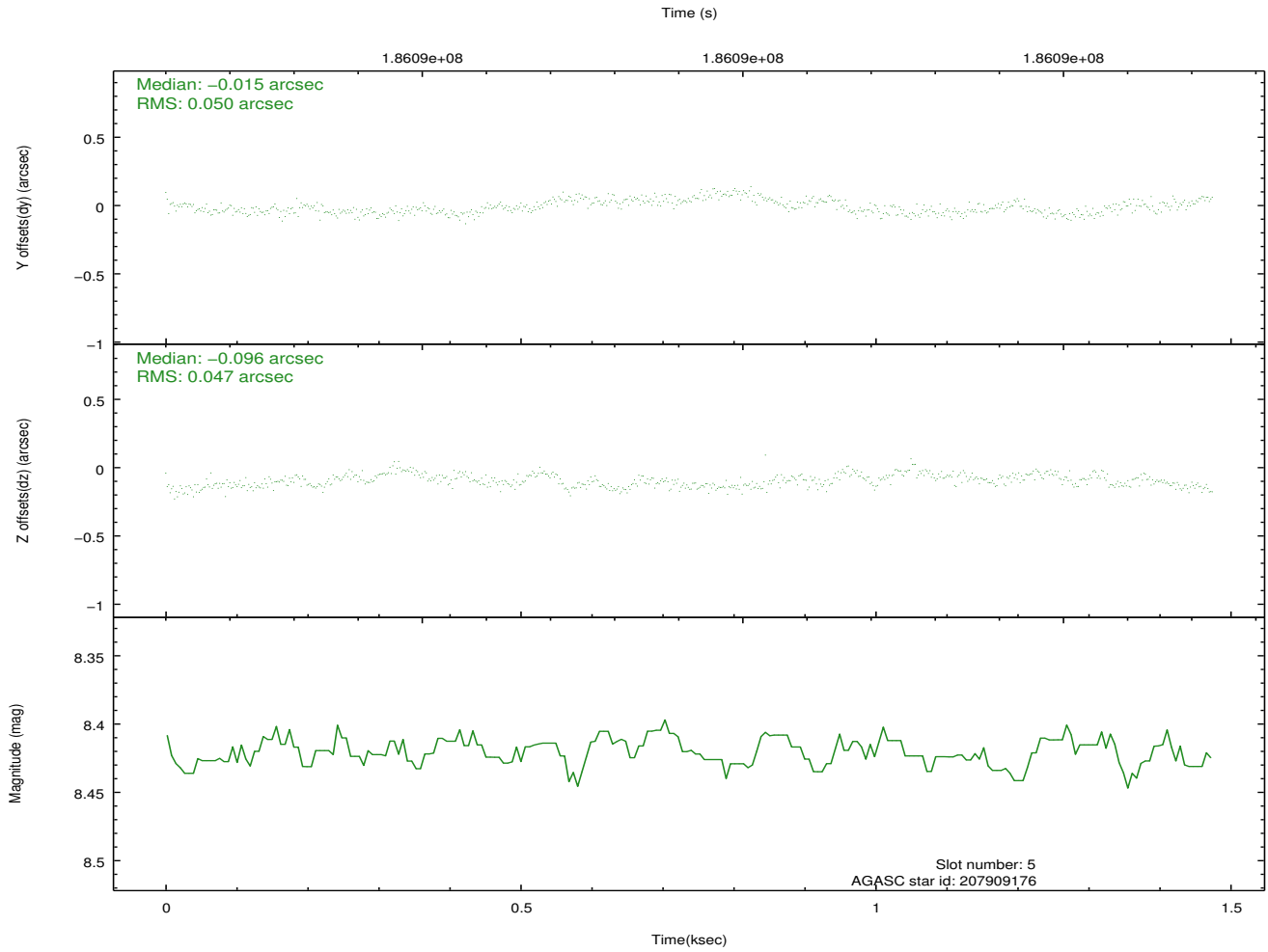
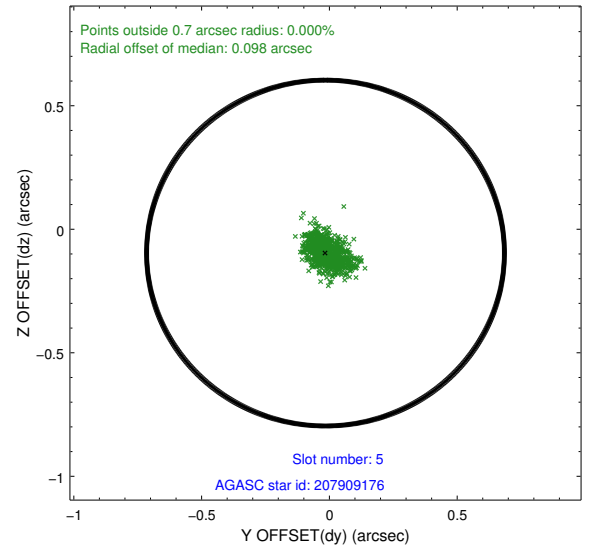
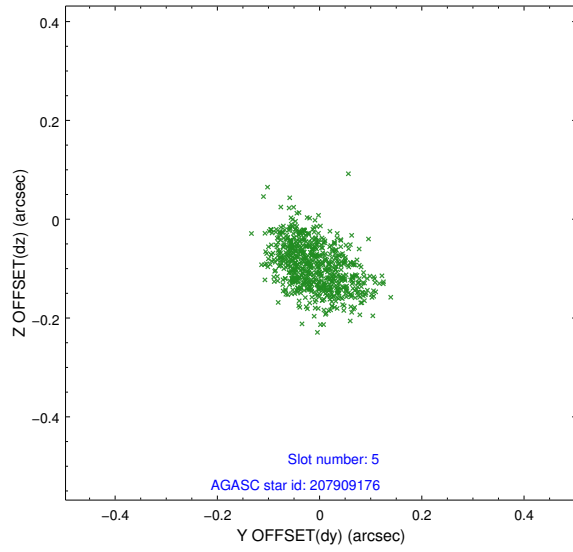
### 2.4.1 Slot 3



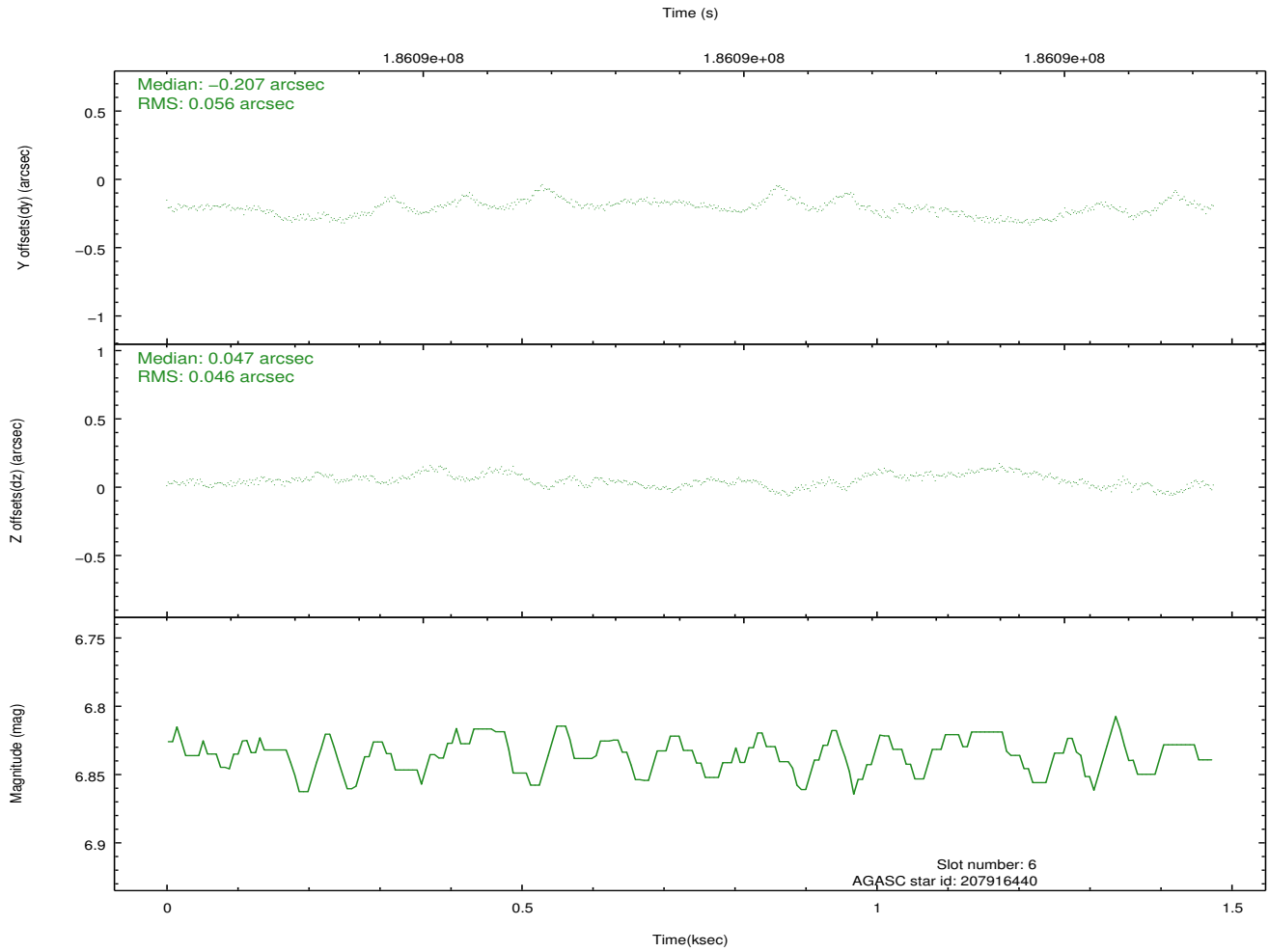
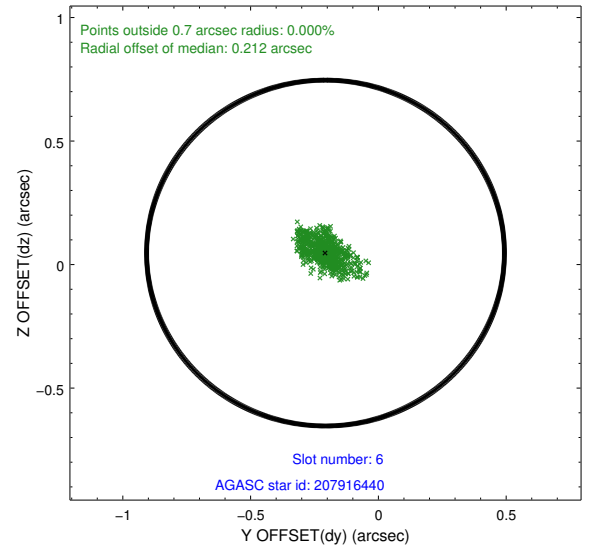
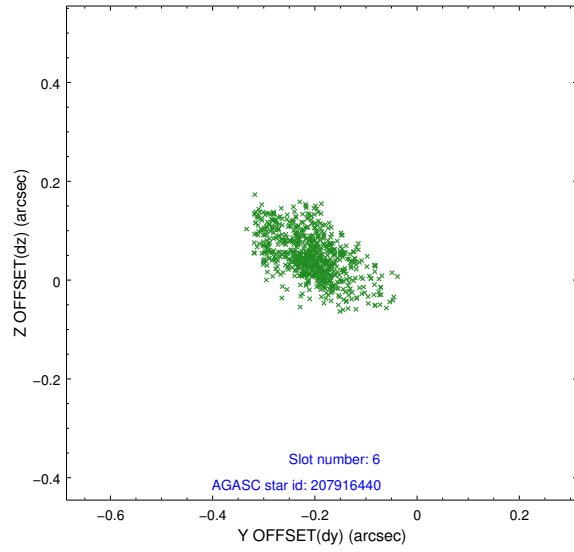
## 2.4.2 Slot 4



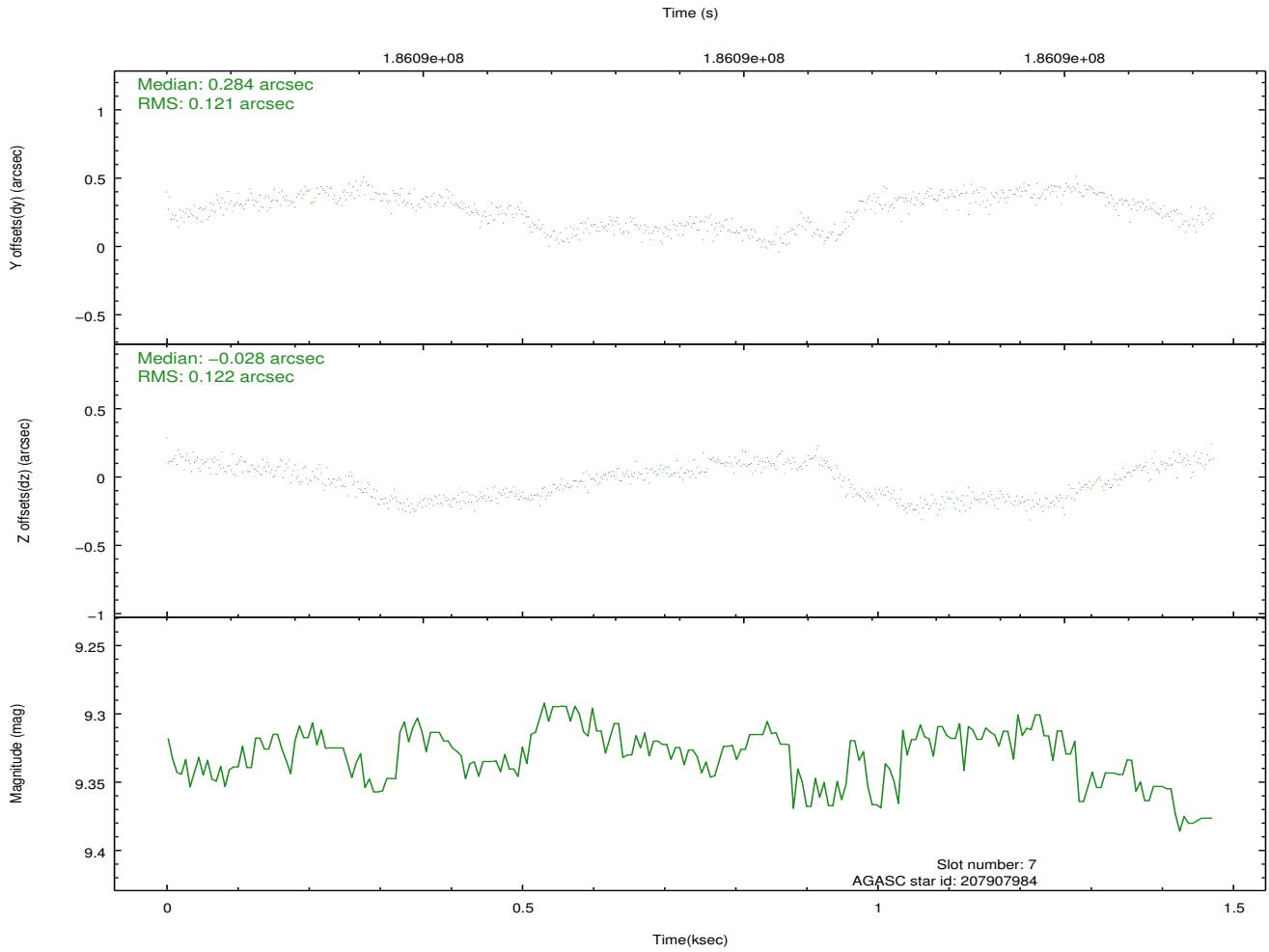
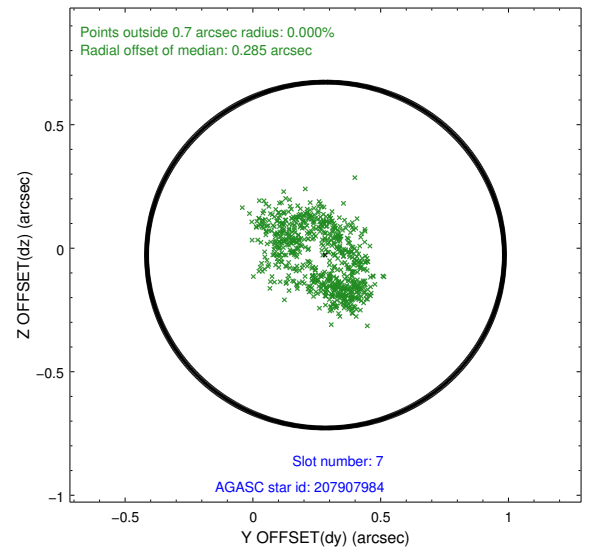
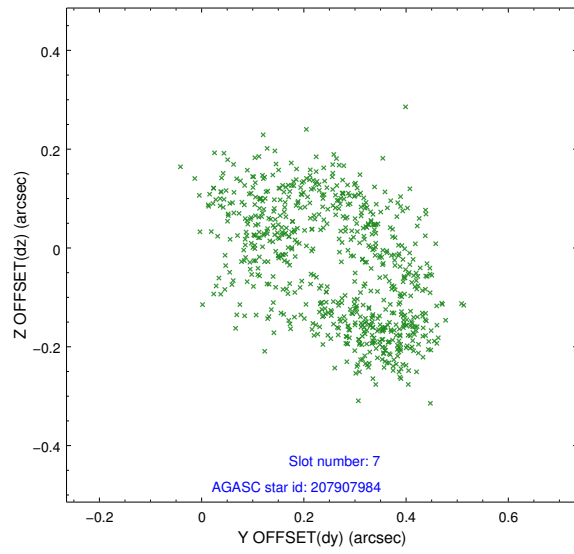
### 2.4.3 Slot 5



## 2.4.4 Slot 6

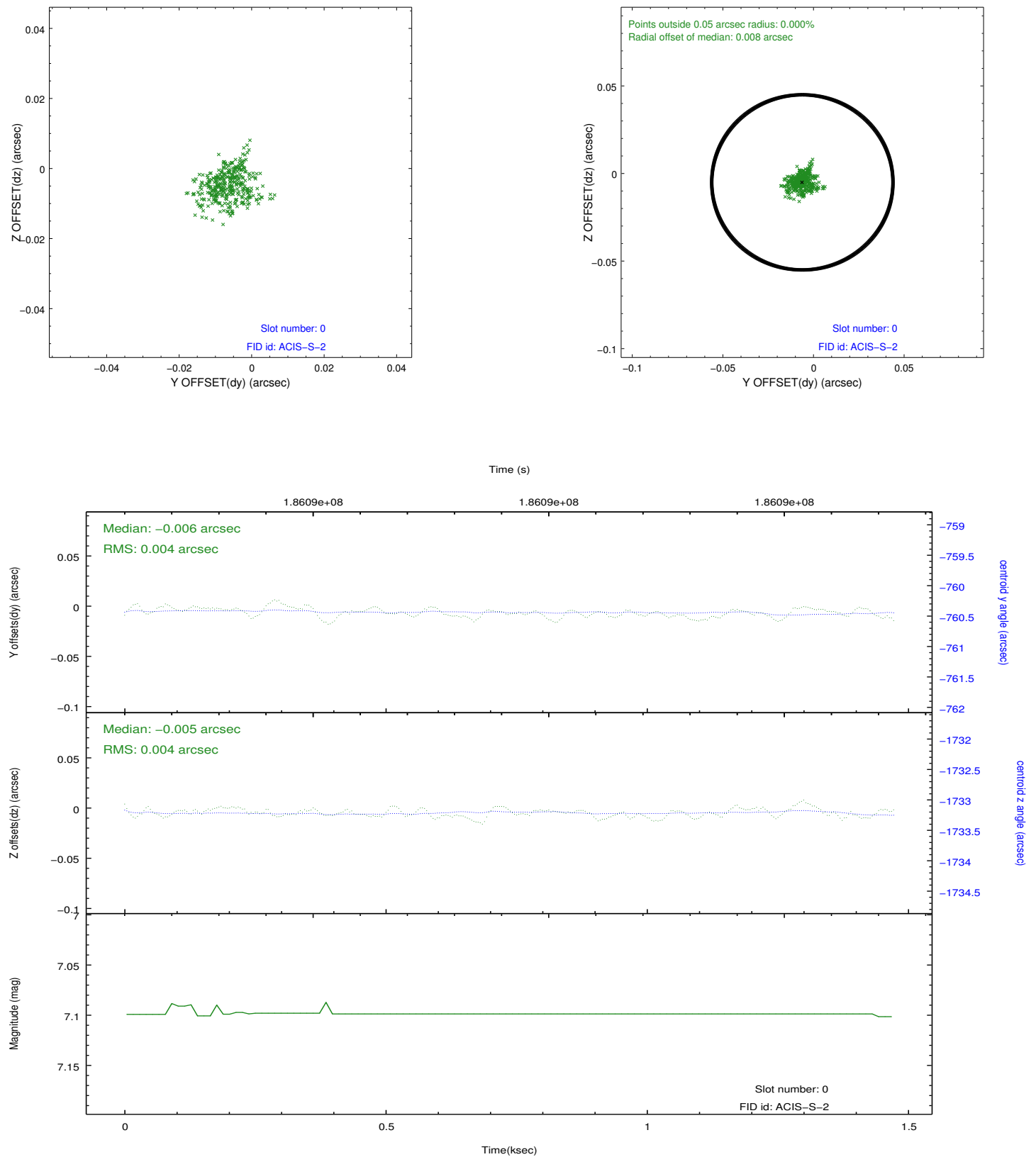


## 2.4.5 Slot 7

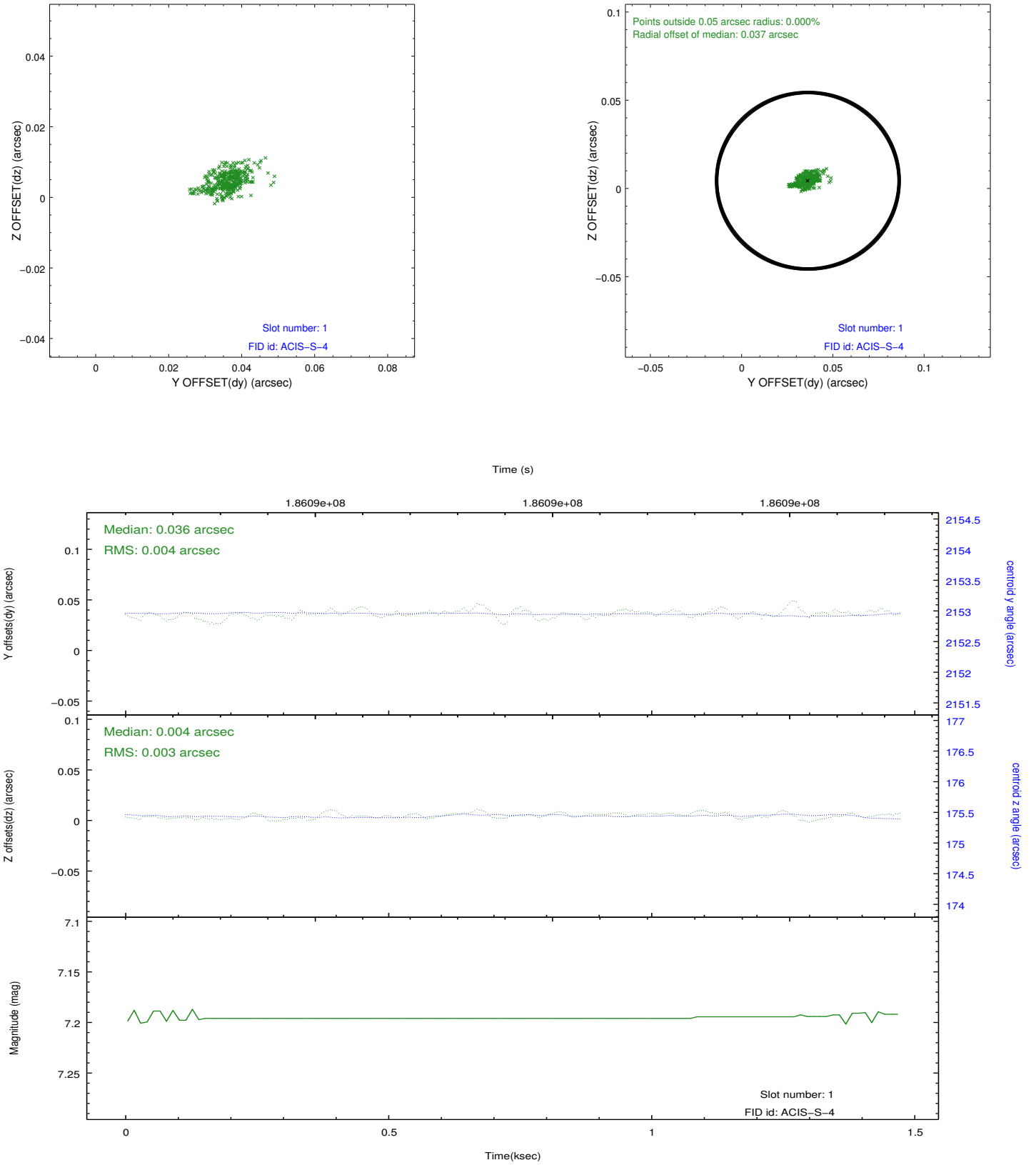


## 2.5 FID Slots

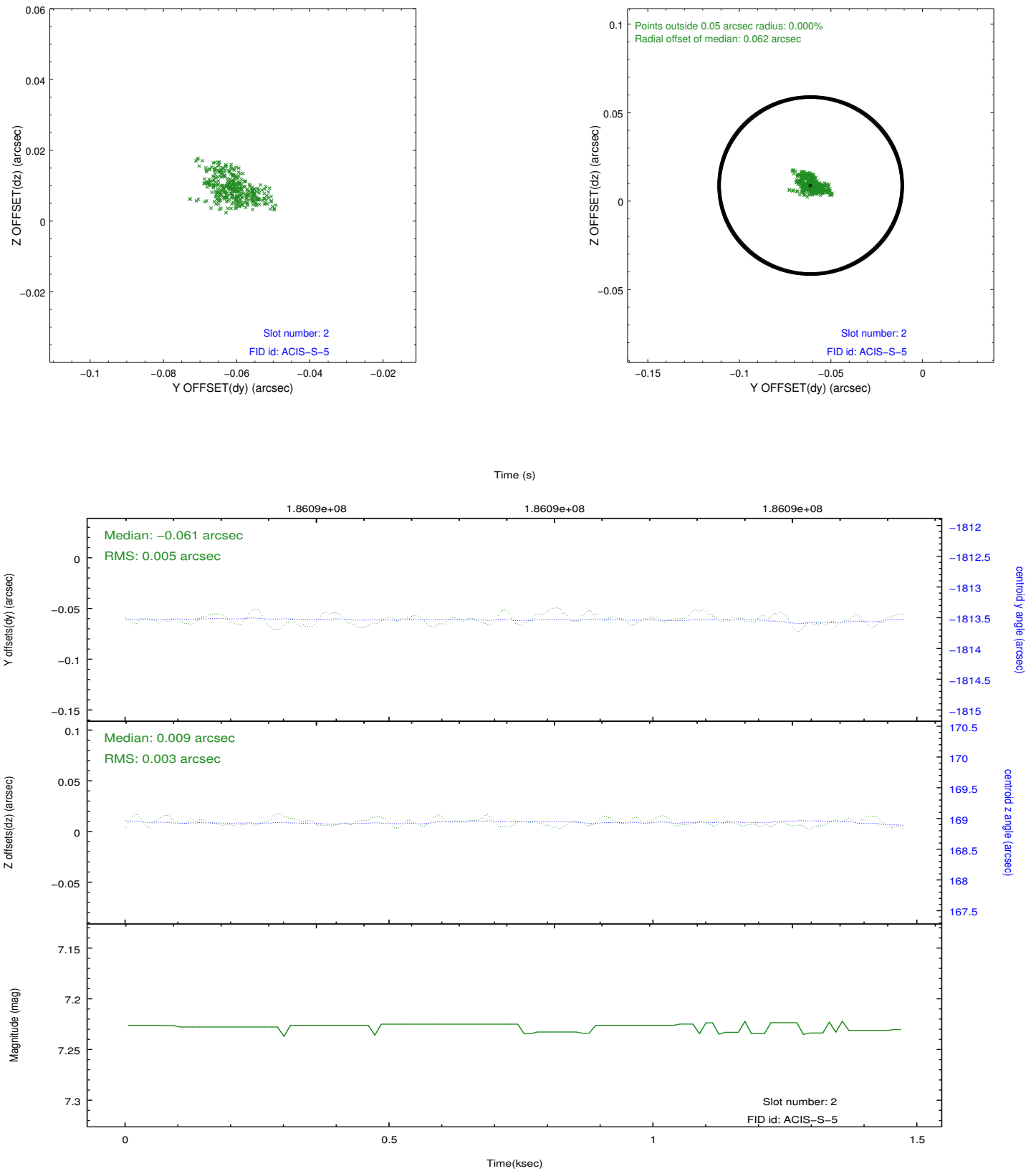
### 2.5.1 Slot 0



## 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)	2012.12.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.471

## A.2 Comments

This is a moving target. Users will need to run `sso_freeze` or similar software to position the events in the reference frame of the target.