

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 9246 - L2 Version 2  
Chandra X-Ray Center

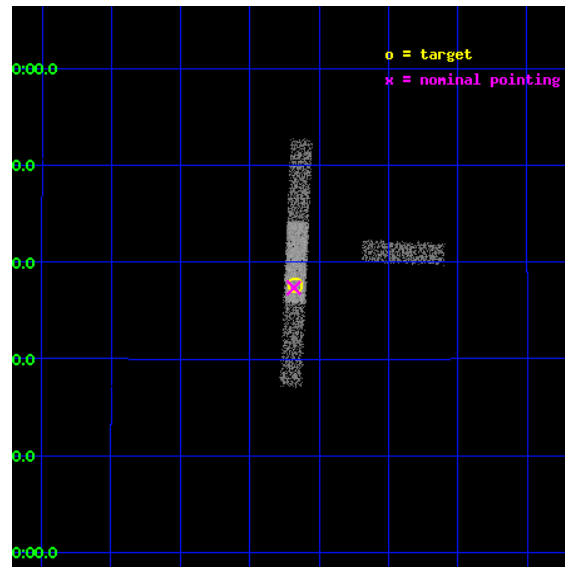
L2 Processing Date : May 30 2012

## 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

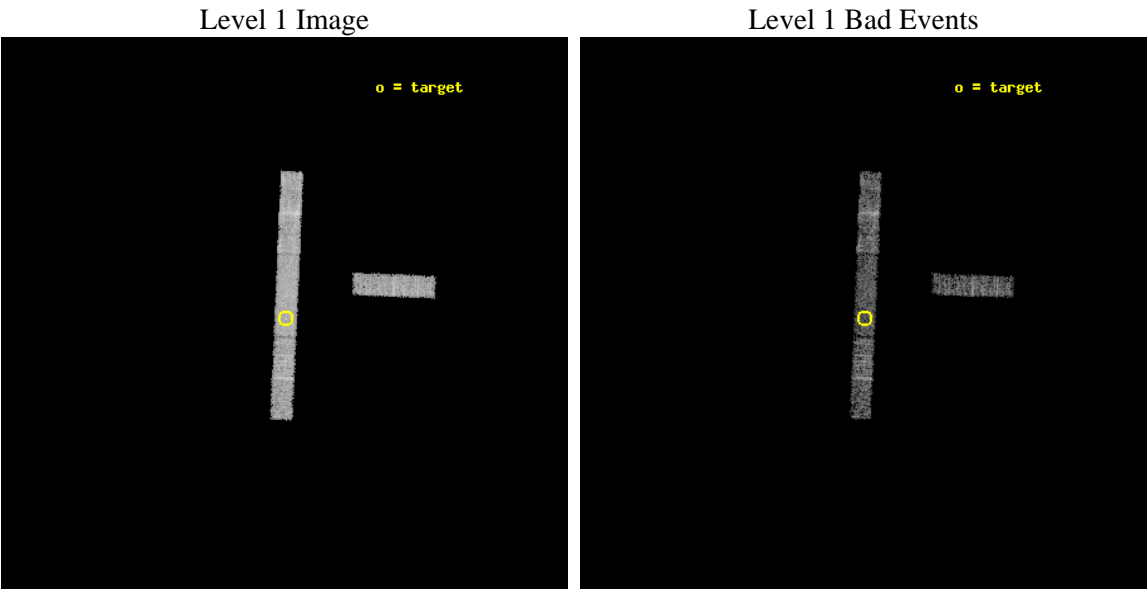
seq_num	701687	Sequence number
obs_id	9246	Observation id
title	Orientation effects in the X-ray and multi-wavelength properties of high-z, 3CRR quasars.	Proposal title
observer	Dr. Belinda Wilkes	Principal investigator
object	3CRR 181	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	112.0425	Observer's specified target RA [deg]
dec_targ	14.626556	Observer's specified target Dec [deg]
ra_nom	112.04548624219	Nominal RA [deg]
dec_nom	14.622602808779	Nominal Dec [deg]
roll_nom	272.56170135791	Nominal Roll [deg]
revision	2	Processing version of data
ontime	3143.0	Sum of GTIs [s]
livetime	3019.0962883271	Livetime [s]
ontime3	3143.0	Sum of GTIs [s]
ontime6	3143.0	Sum of GTIs [s]
ontime7	3143.0	Sum of GTIs [s]
ontime8	3143.0	Sum of GTIs [s]
l2events	8283	Number of level 2 events



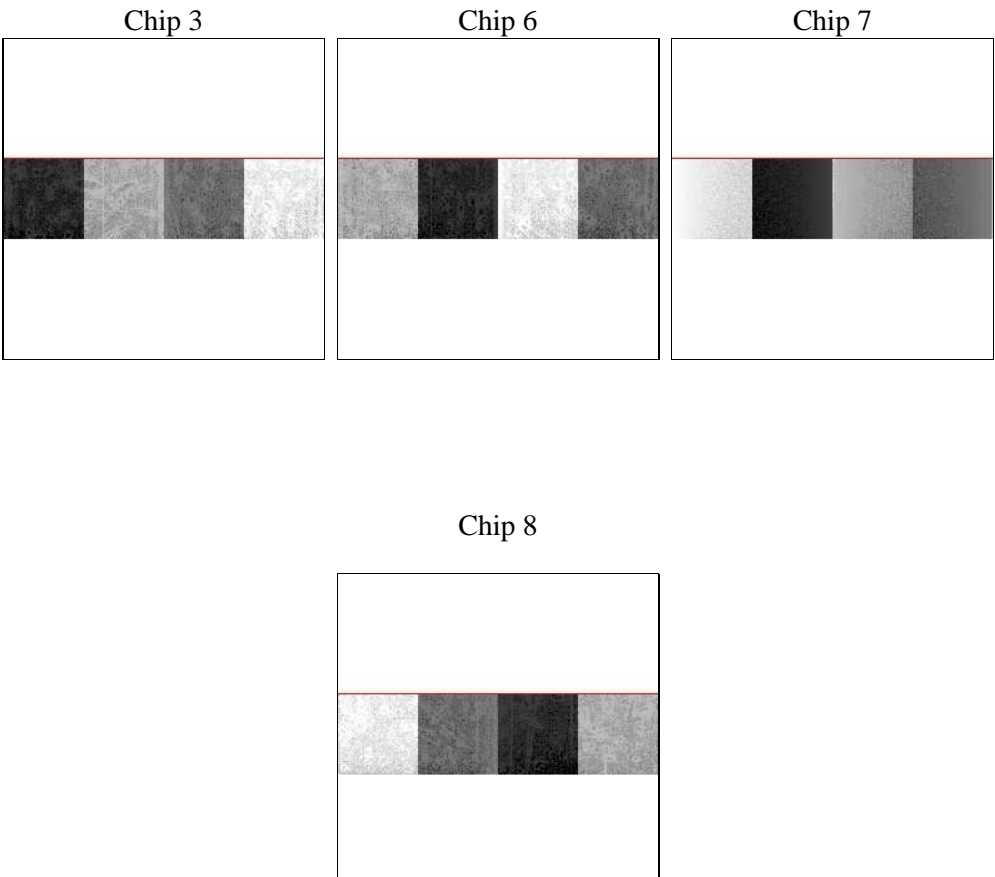
# 2 OBI

## 2.1 OBI

### 2.1.1 Images



### 2.1.2 Bias



Chip 8



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	3000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	3143.0	Sum of GTIs [s]
caldsver	4.4.9	&#160	ontime3	3143.0	Sum of GTIs [s]
date	2012-05-30T22:59:11	Date and time of file creation	ontime6	3143.0	Sum of GTIs [s]
revision	2	Processing version of data	ontime7	3143.0	Sum of GTIs [s]
			ontime8	3143.0	Sum of GTIs [s]
			l1events	55832	Number of level 1 events

### 2.1.4 Events

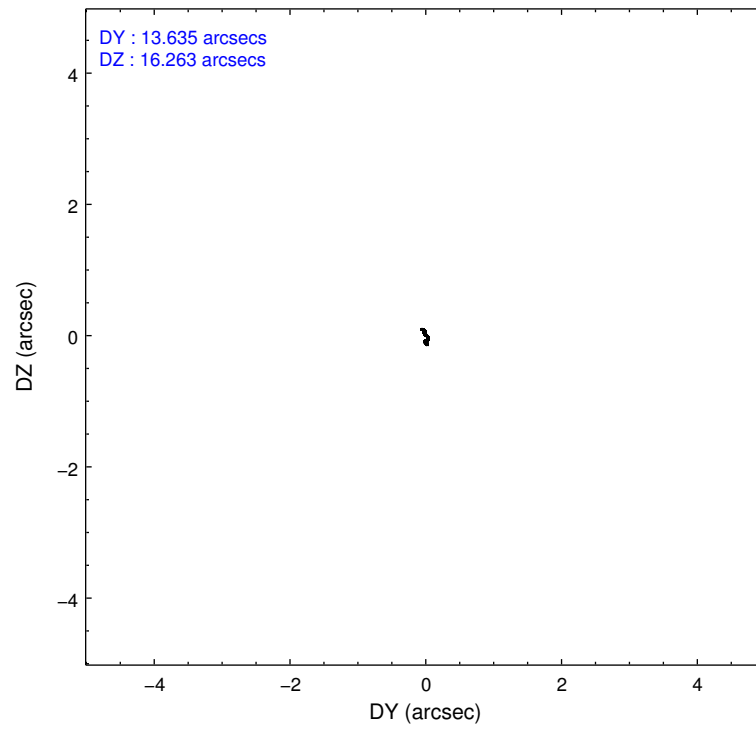
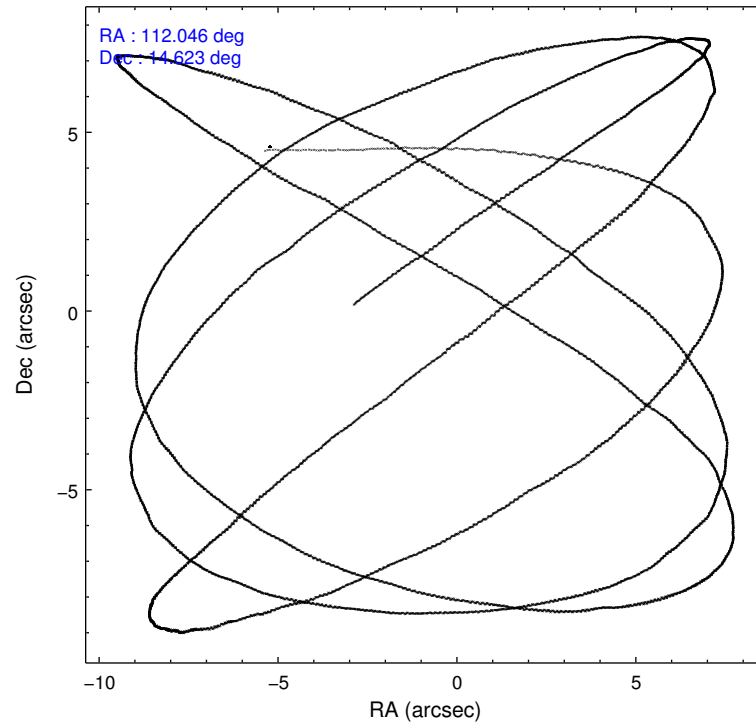
	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	11703	12273	15565	16291
rejected events	10583	11119	10179	13457
rejected %	90%	90%	65%	82%

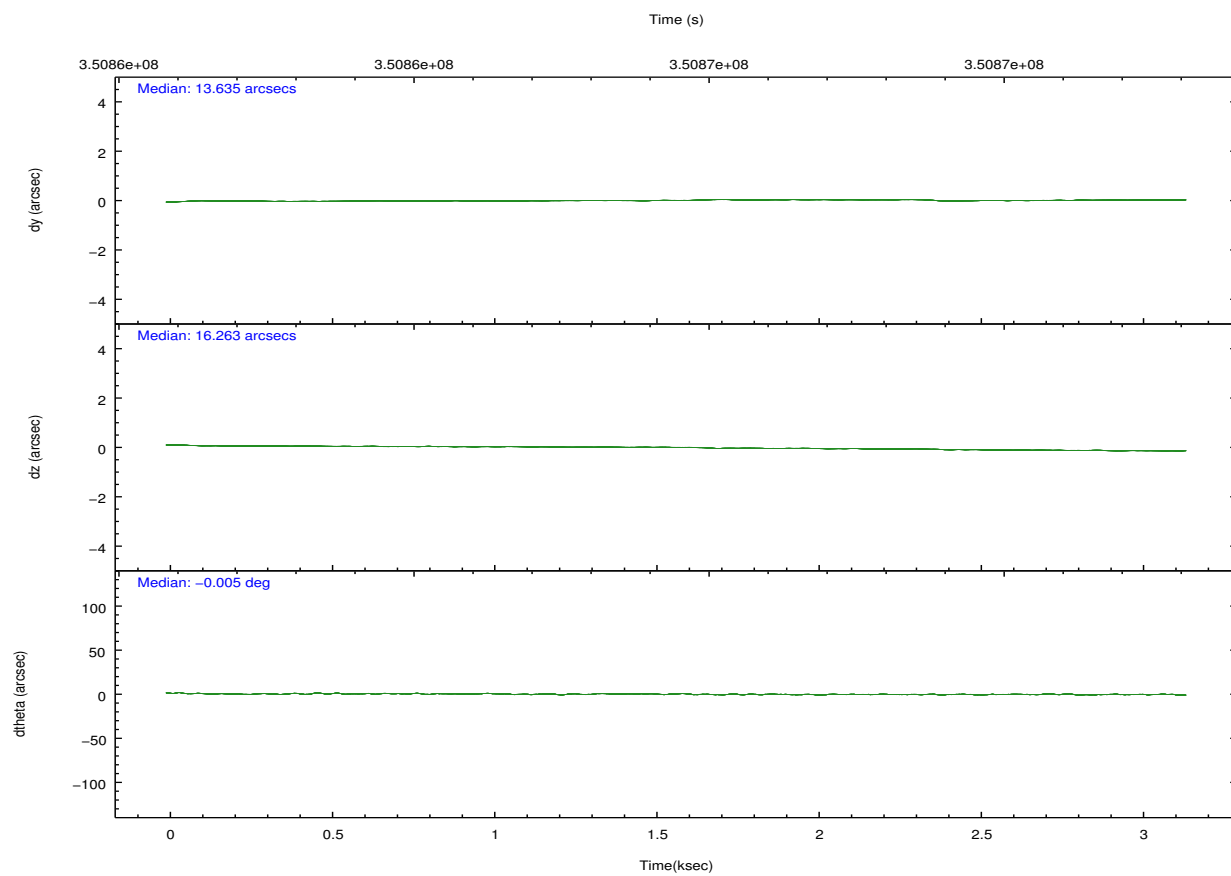
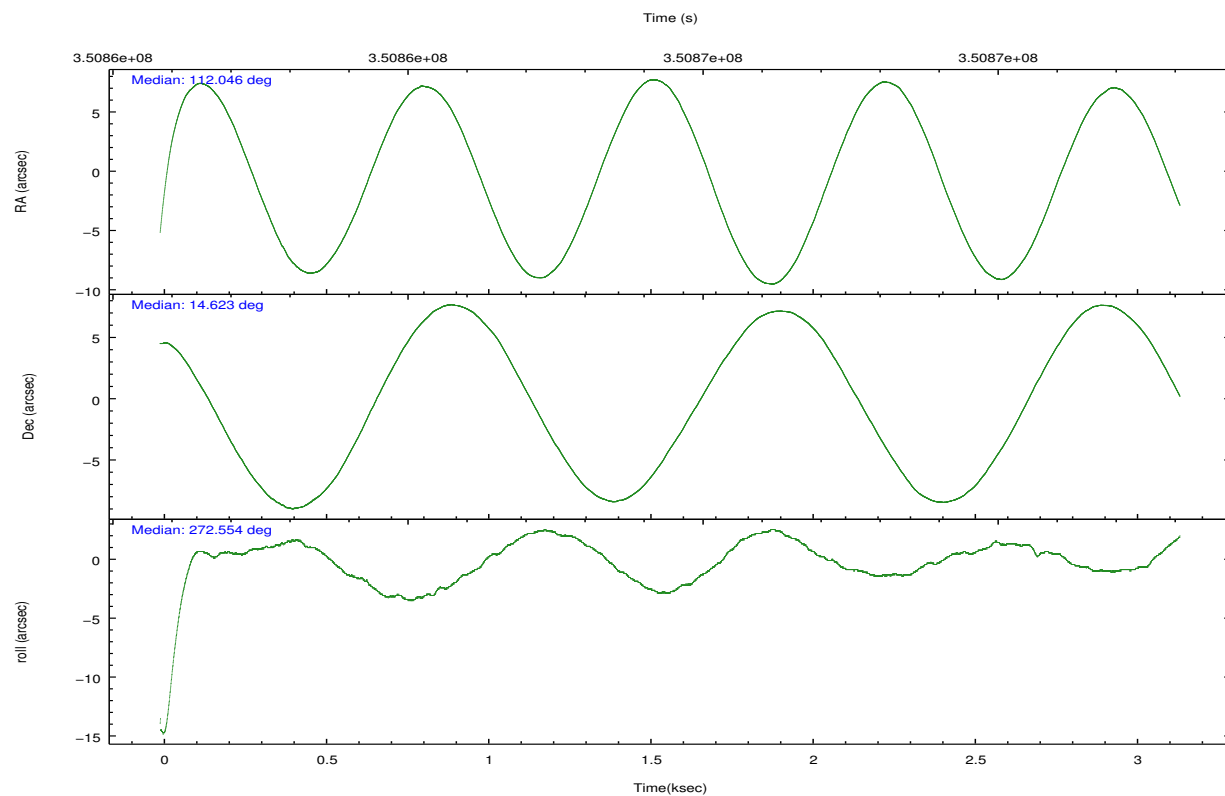
	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	619	525	663	1012
	5%	4%	4%	6%
grade 1 events	10	2	14	10
	0%	0%	0%	0%
grade 2 events	250	302	1439	777
	2%	2%	9%	4%
grade 3 events	199	205	705	377
	1%	1%	4%	2%
grade 4 events	191	190	710	336
	1%	1%	4%	2%
grade 5 events	523	519	1422	714
	4%	4%	9%	4%
grade 6 events	217	271	3400	1021
	1%	2%	21%	6%
grade 7 events	9694	10259	7212	12044
	82%	83%	46%	73%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-3678	ACIS-3678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	112.029788	112.045486242186	CCD I2 on	N	N
[deg] Pointing Dec	14.645389	14.62260280877877	CCD I3 on	O1	Y
[deg] Pointing Roll	272.409097	272.5617013579139	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	O3	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	O2	Y
[s] Observation start time (MET)	350864452.184000	350863299.0688	CCD S5 on	N	N
Observation start date	2009-02-12T22:19:46	2009-02-12T22:01:39	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	350867452.184000	350868593.19406	On-chip summing requested	N	N
Observation end date	2009-02-12T23:09:46	2009-02-12T23:29:53	Subarray requested	CUSTOM	1/4
Read mode	TIMED	TIMED	Subarray start row	385	385
			Subarray row count	256	256
			Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	1

## 2.3 Aspect





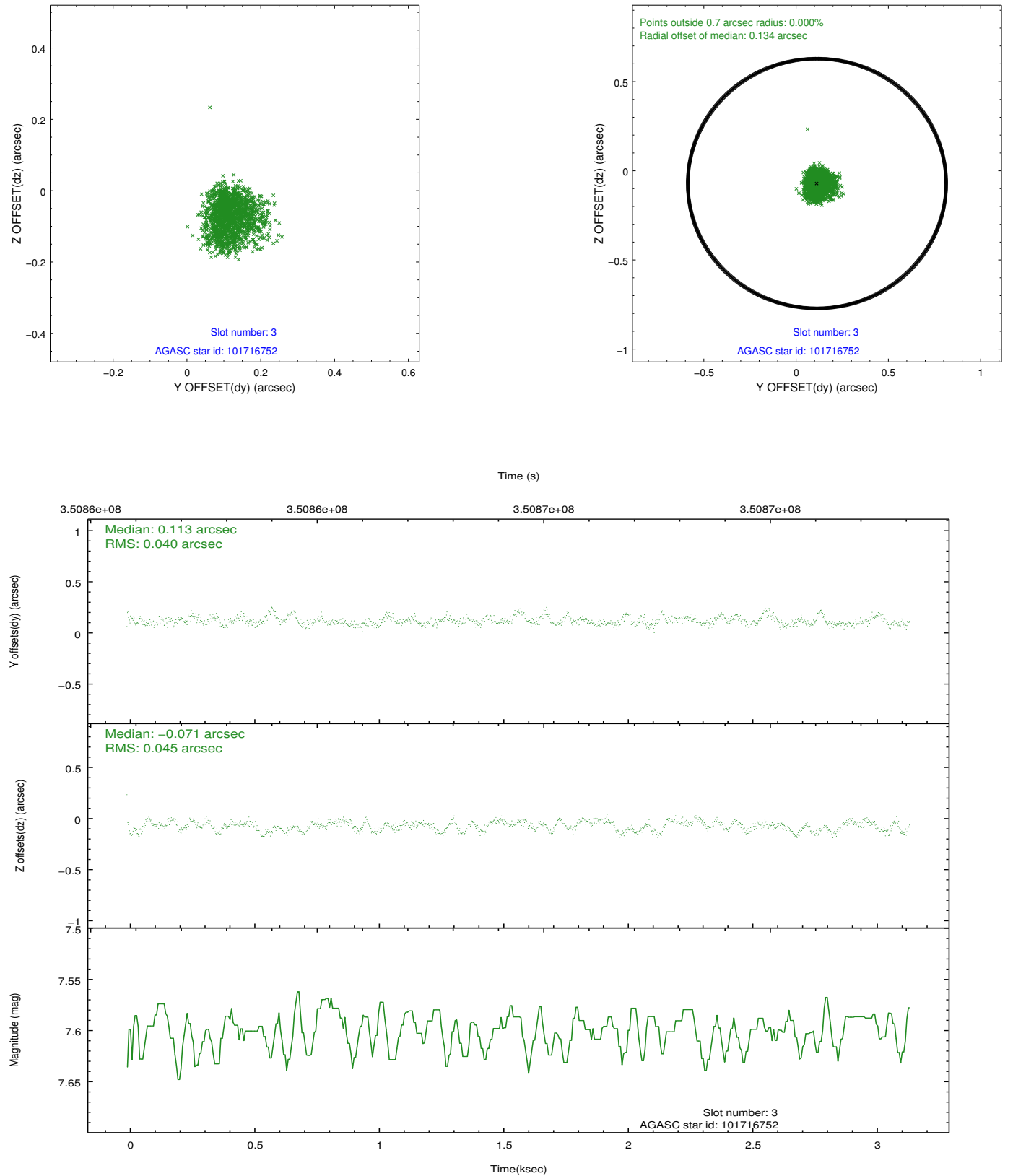
### Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.01	767	0.052	-0.065	0.007	0.011	0.000000	0.000000	929.50	-1733.36
1	FID	ACIS-S-4	7.00	767	0.112	0.025	0.007	0.010	0.000000	0.000000	2148.10	168.79
2	FID	ACIS-S-5	7.03	767	-0.191	0.053	0.006	0.009	0.000000	0.000000	-1817.00	164.73
3	GUIDE	101716752	7.60	1535	0.113	-0.071	0.064	0.101	112.305916	14.358347	1072.81	918.43
4	GUIDE	101719952	8.22	1534	-0.026	0.090	0.053	0.085	111.853620	14.065081	2062.40	-701.92
5	GUIDE	101724176	8.27	1535	0.058	0.130	0.088	0.130	112.512485	14.951096	-1029.18	1722.90
6	GUIDE	178271824	6.72	1535	-0.269	-0.018	0.077	0.132	112.196895	15.109822	-1646.70	651.04
7	GUIDE	101720944	8.40	1534	0.117	-0.122	0.083	0.140	111.355415	14.101290	1854.59	-2434.84

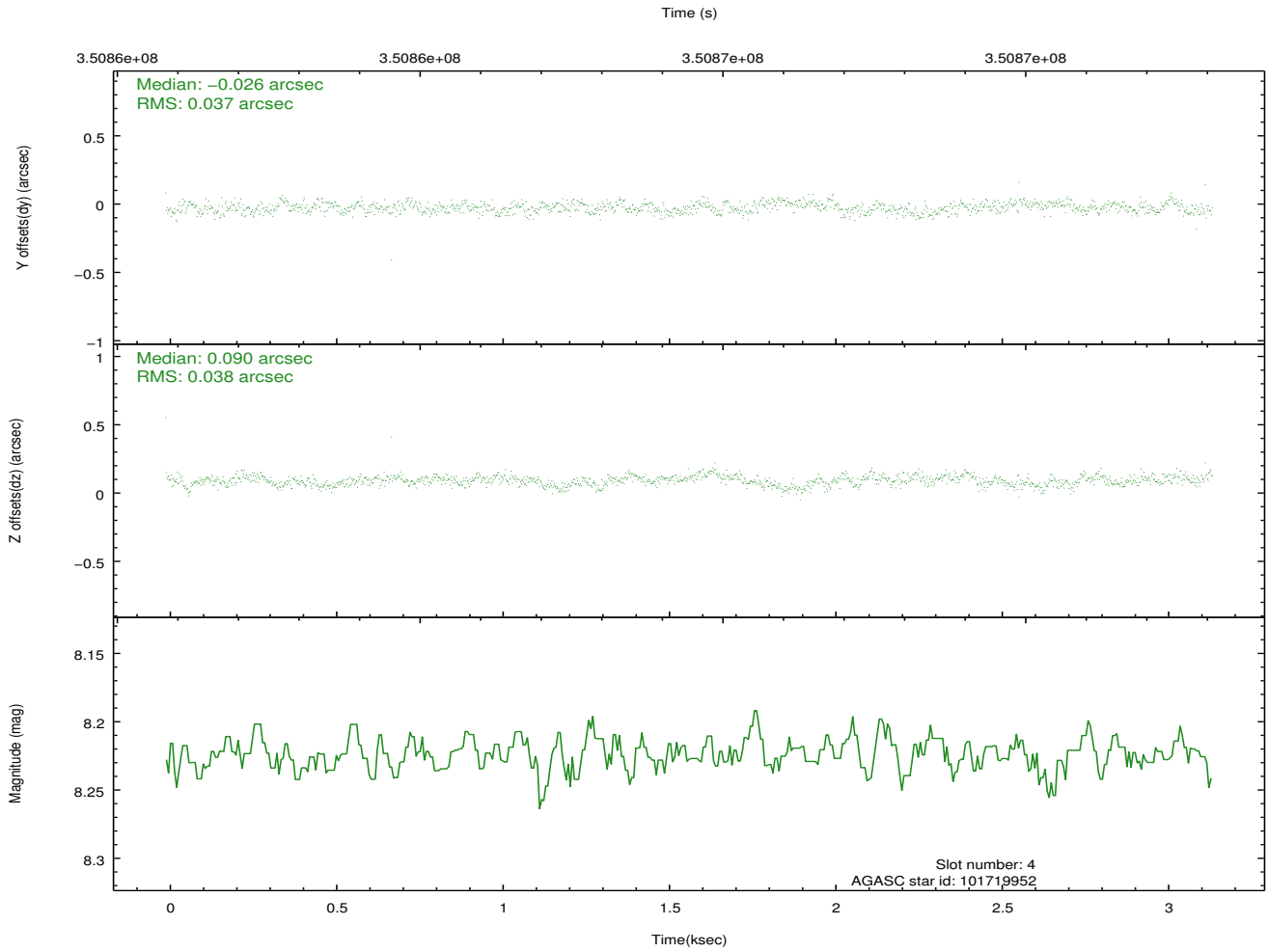
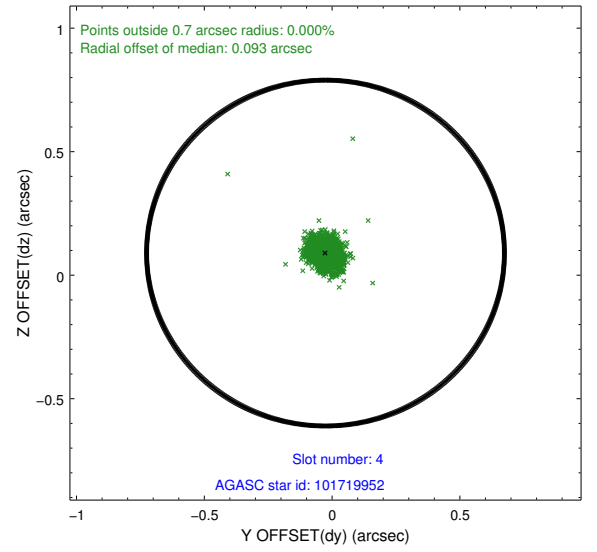
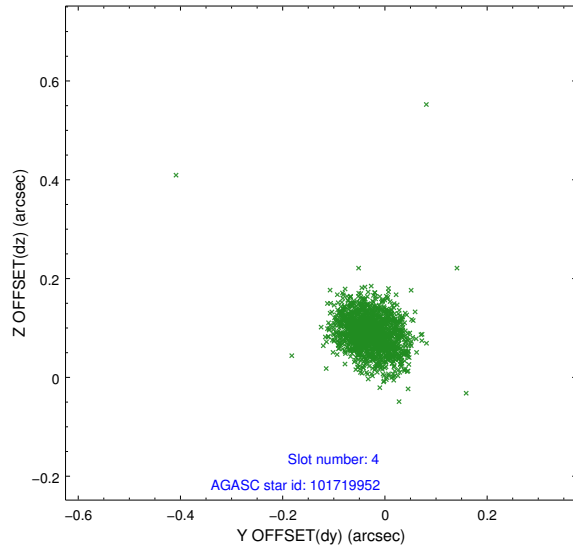


## 2.4 Star Slots

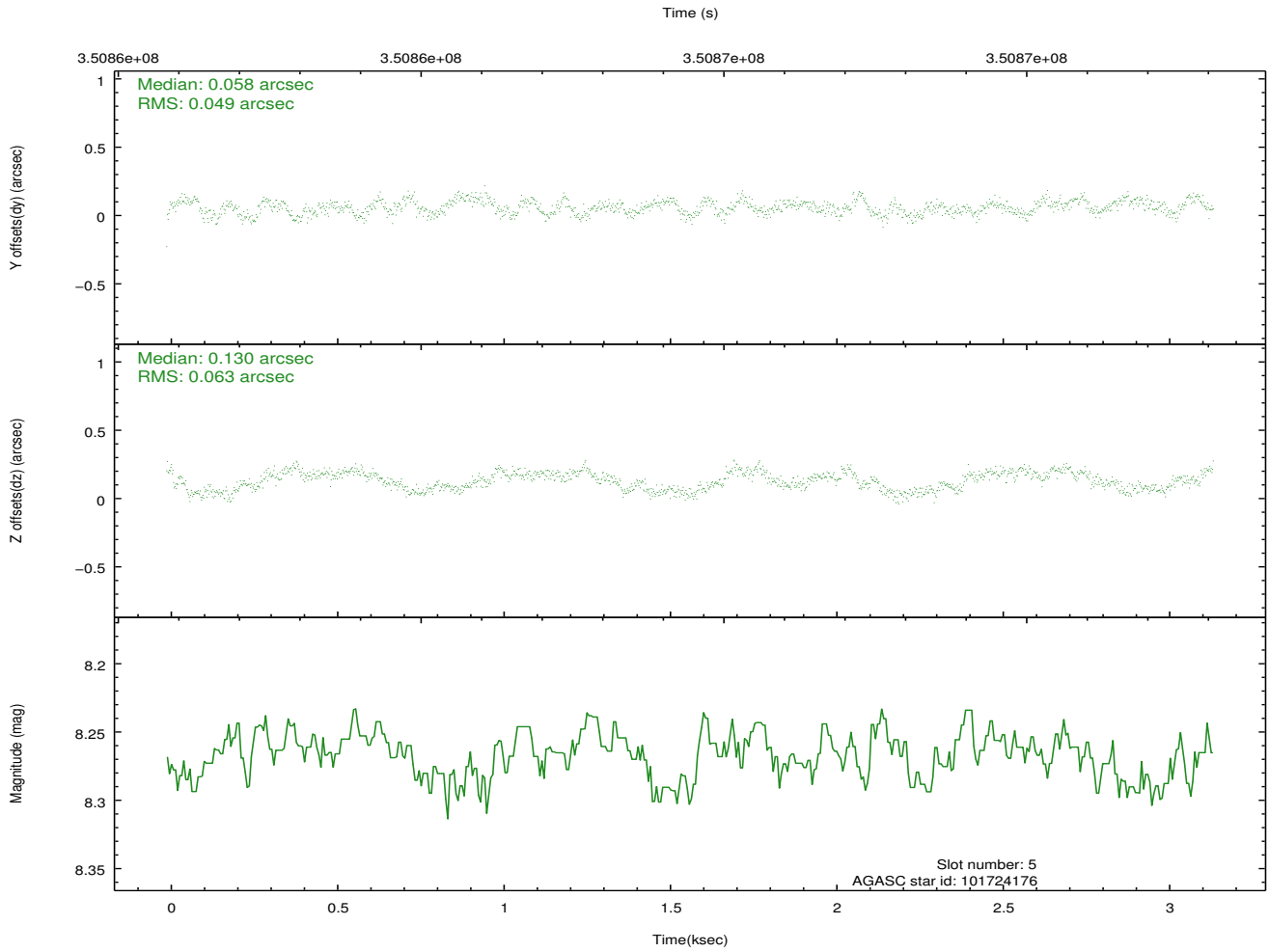
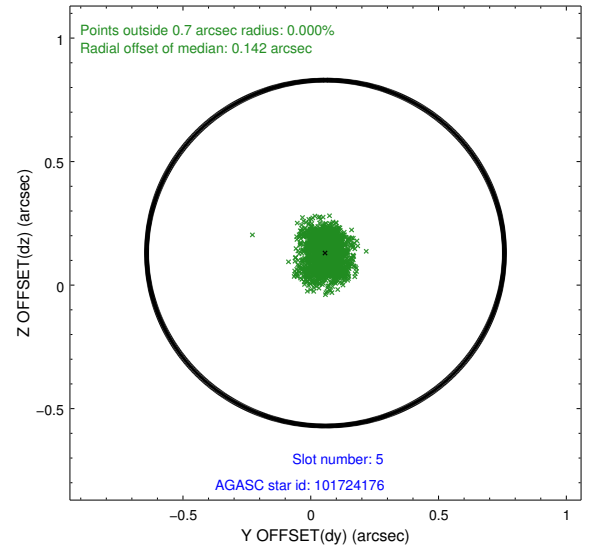
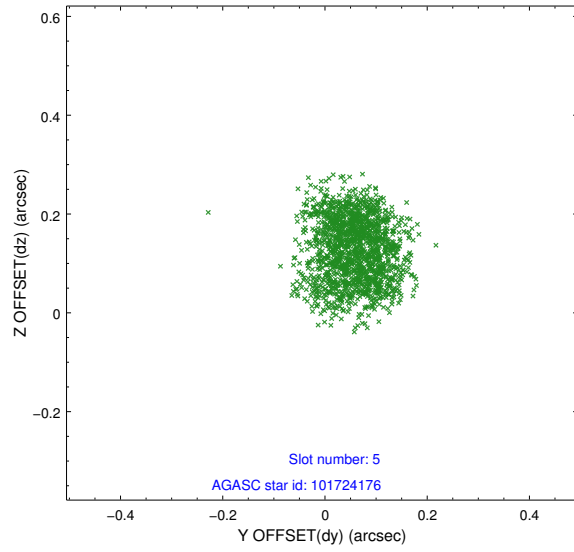
### 2.4.1 Slot 3



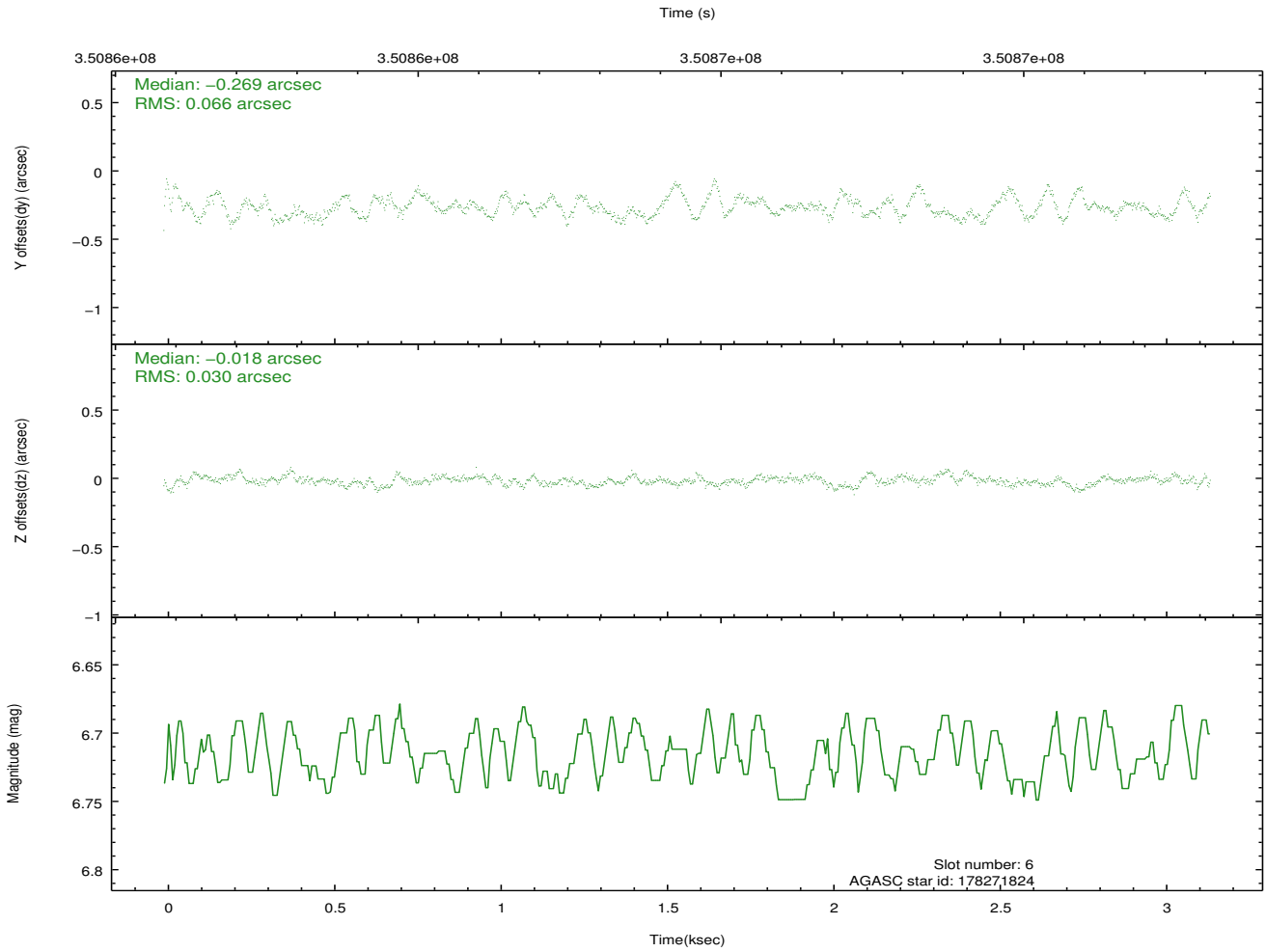
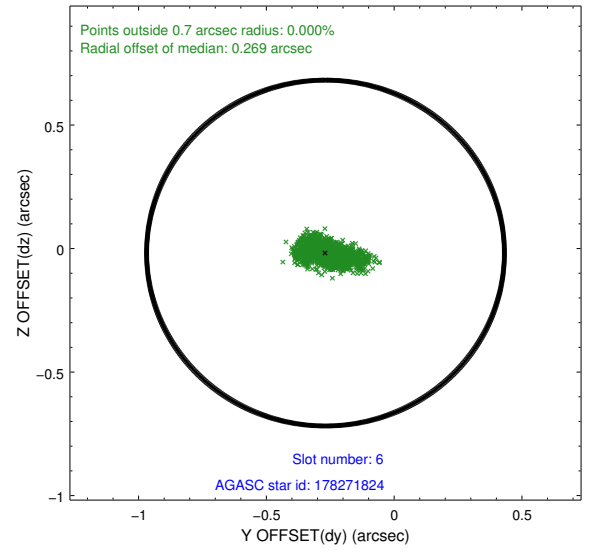
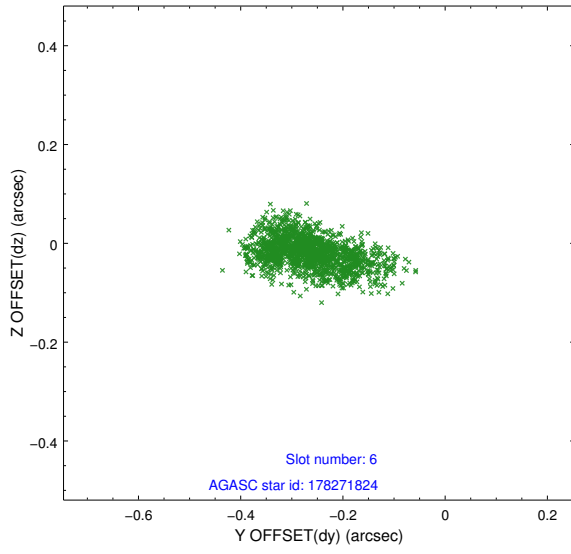
## 2.4.2 Slot 4



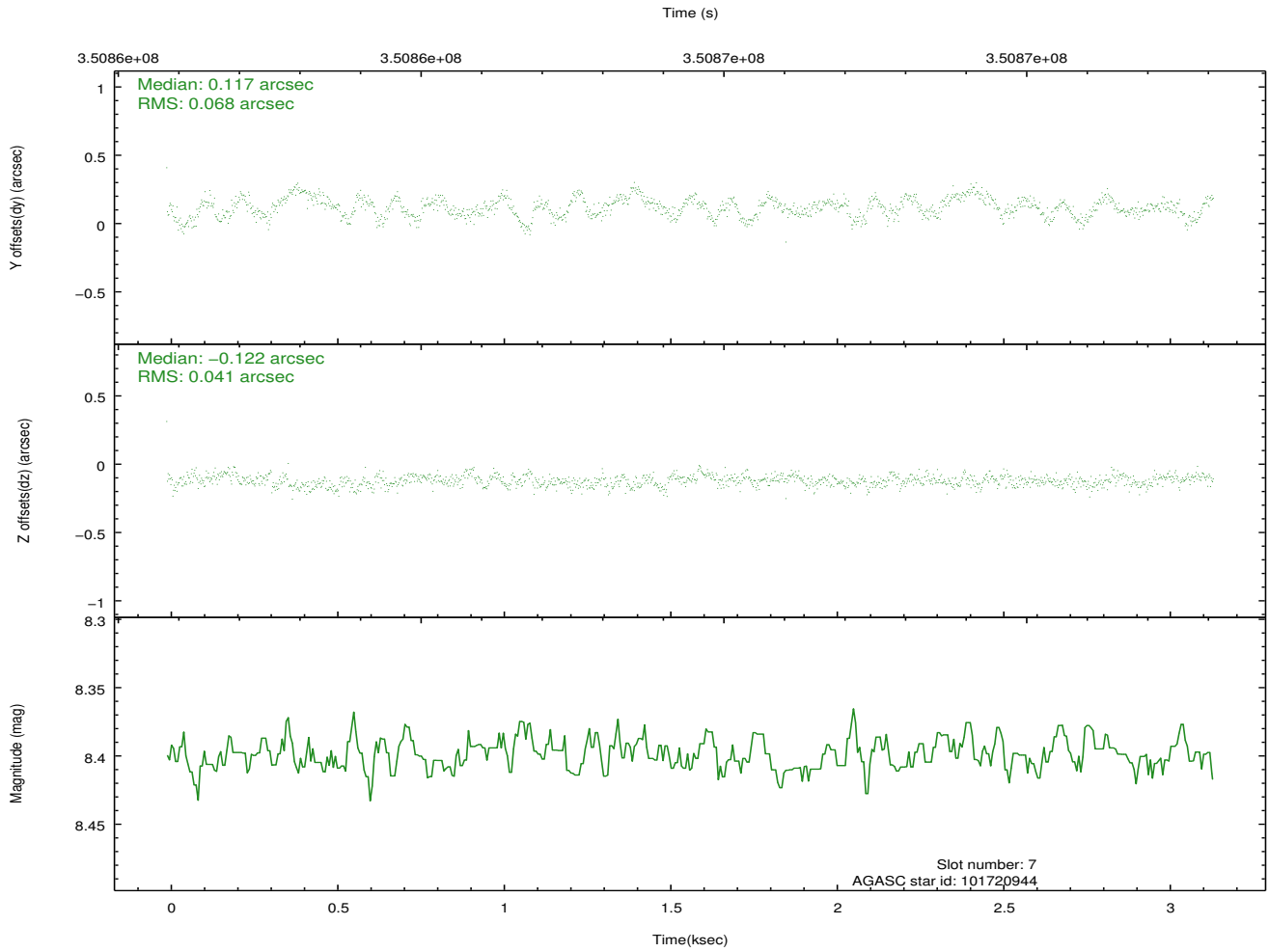
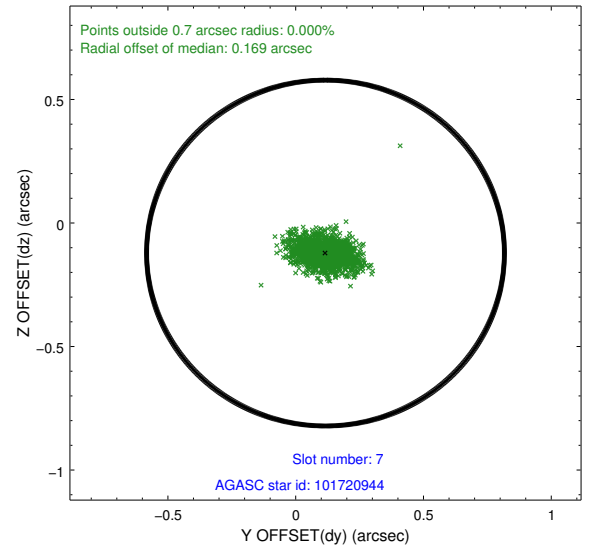
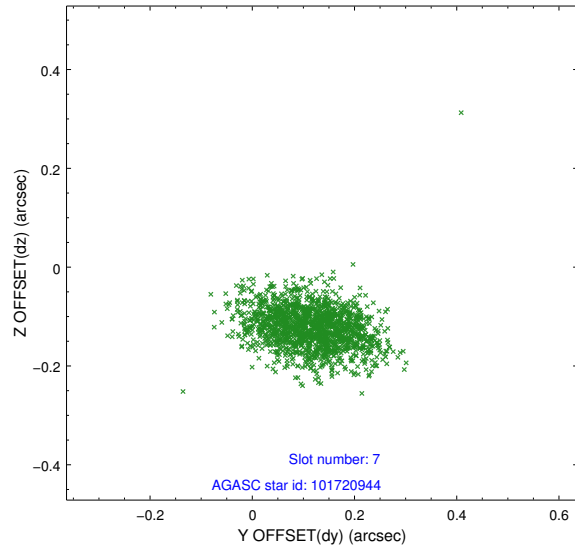
### 2.4.3 Slot 5



## 2.4.4 Slot 6

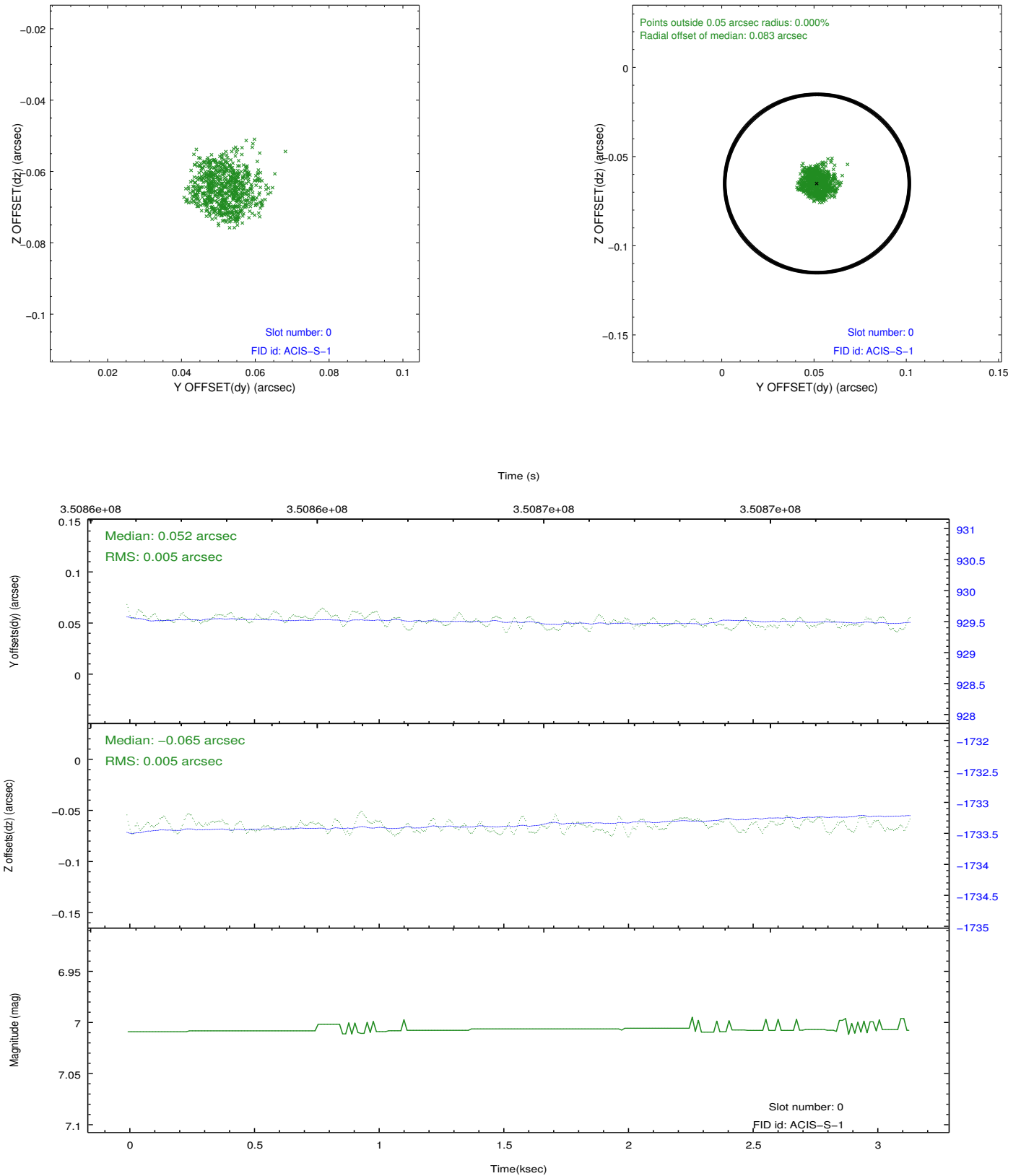


## 2.4.5 Slot 7

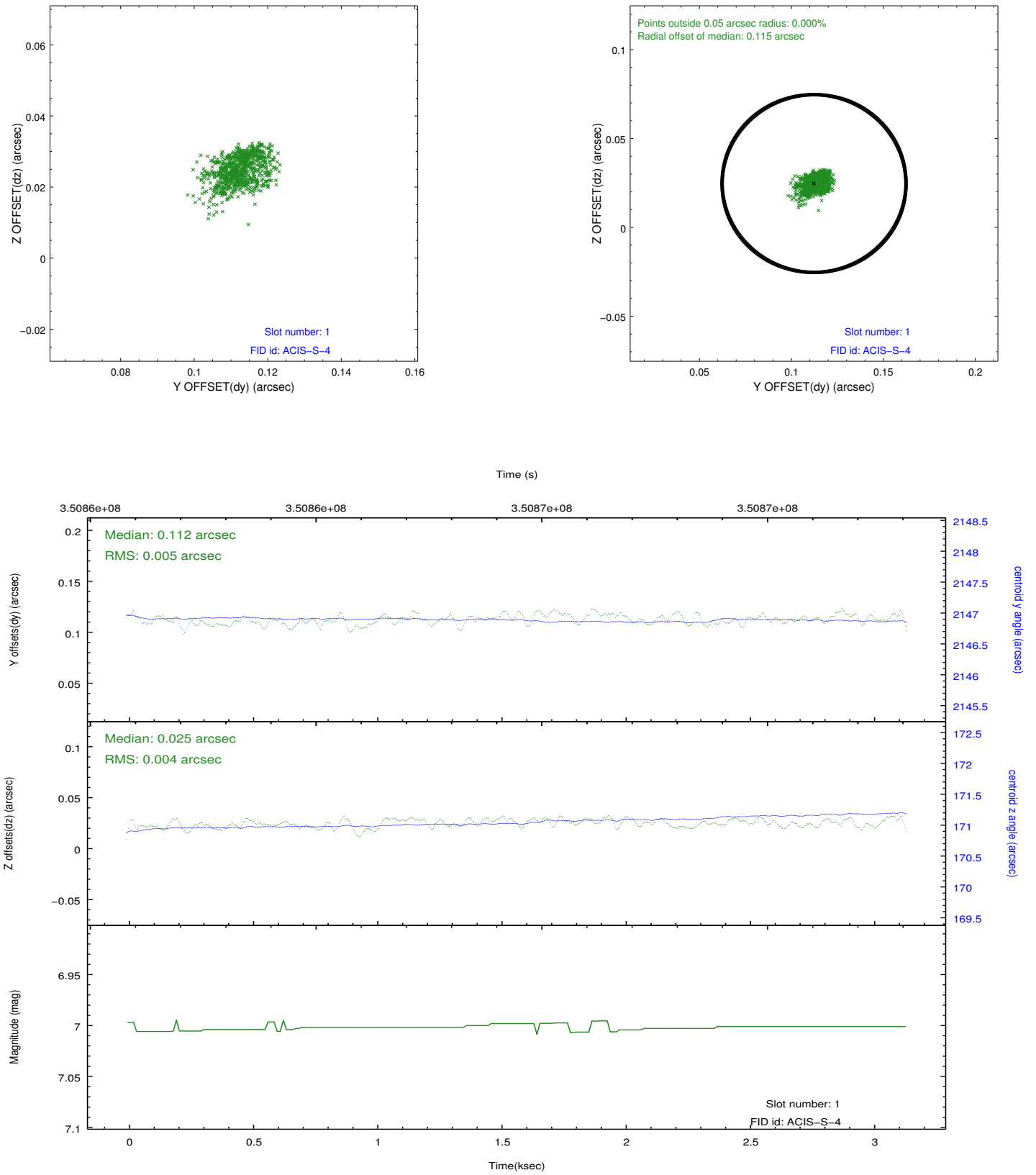


## 2.5 FID Slots

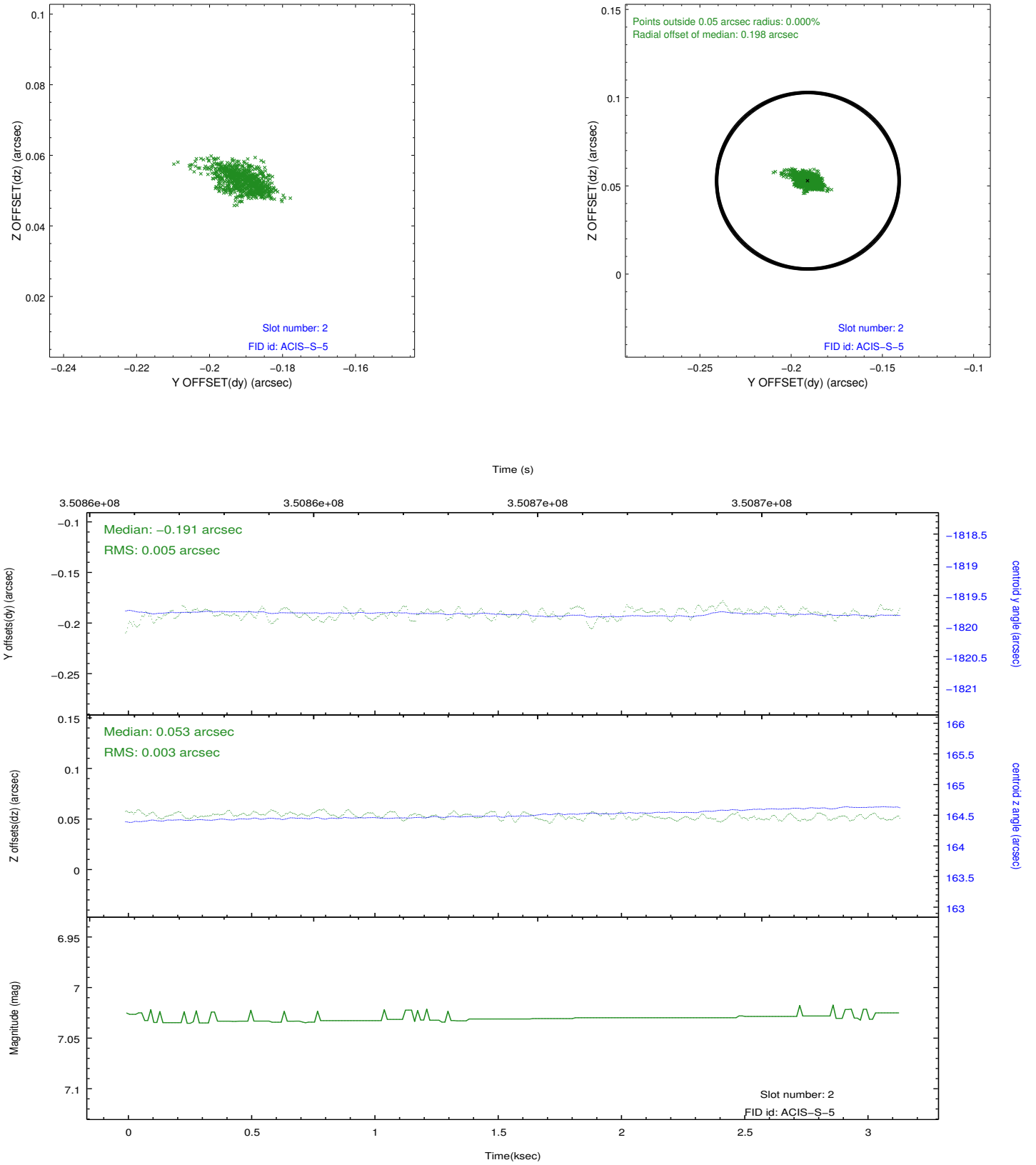
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2





## A Summary

### A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.06.05
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	3.143

### A.2 Comments