

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 11365 - L2 Version 2  
Chandra X-Ray Center

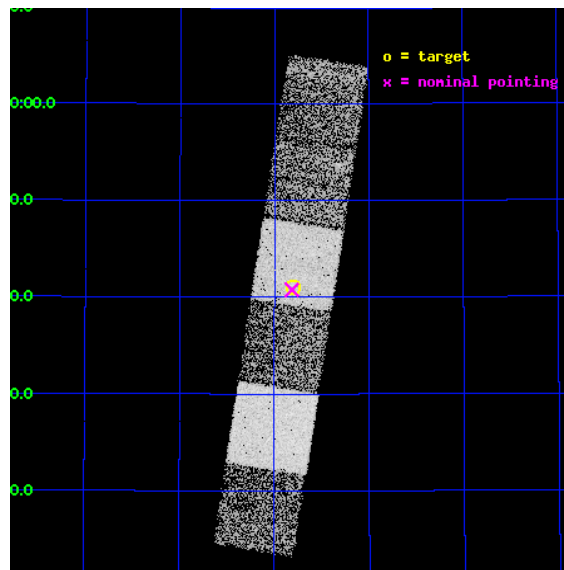
L2 Processing Date : Jun 30 2012

## 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

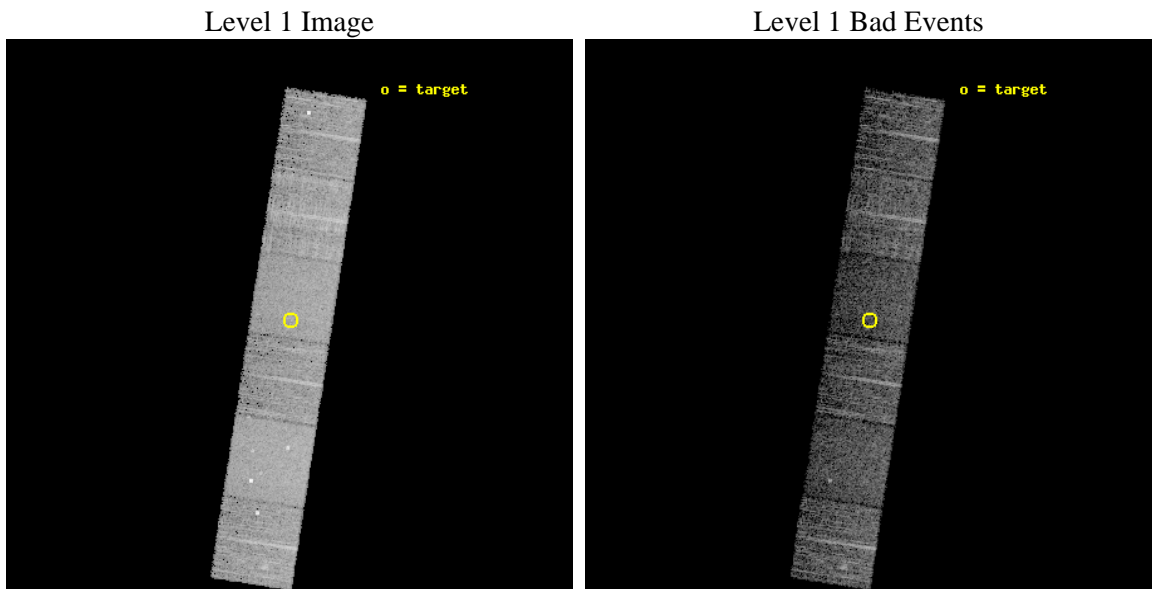
seq_num	600884	Sequence number
obs_id	11365	Observation id
title	Accretion onto nuclear black holes in early type galaxies: comparing field vs. clusters	Proposal title
observer	Elena Gallo	Principal investigator
object	NGC3457	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	177.949	Observer's specified target RA [deg]
dec_targ	48.68311	Observer's specified target Dec [deg]
ra_nom	177.95371947384	Nominal RA [deg]
dec_nom	48.679330695676	Nominal Dec [deg]
roll_nom	278.78831325714	Nominal Roll [deg]
revision	2	Processing version of data
ontime	4543.9999831319	Sum of GTIs [s]
liveltime	4486.4611192772	Livetime [s]
ontime4	4540.75914222	Sum of GTIs [s]
ontime5	4543.9999831319	Sum of GTIs [s]
ontime6	4543.9999831319	Sum of GTIs [s]
ontime7	4543.9999831319	Sum of GTIs [s]
ontime8	4543.9999831319	Sum of GTIs [s]
ontime9	4540.7591123581	Sum of GTIs [s]
l2events	56506	Number of level 2 events



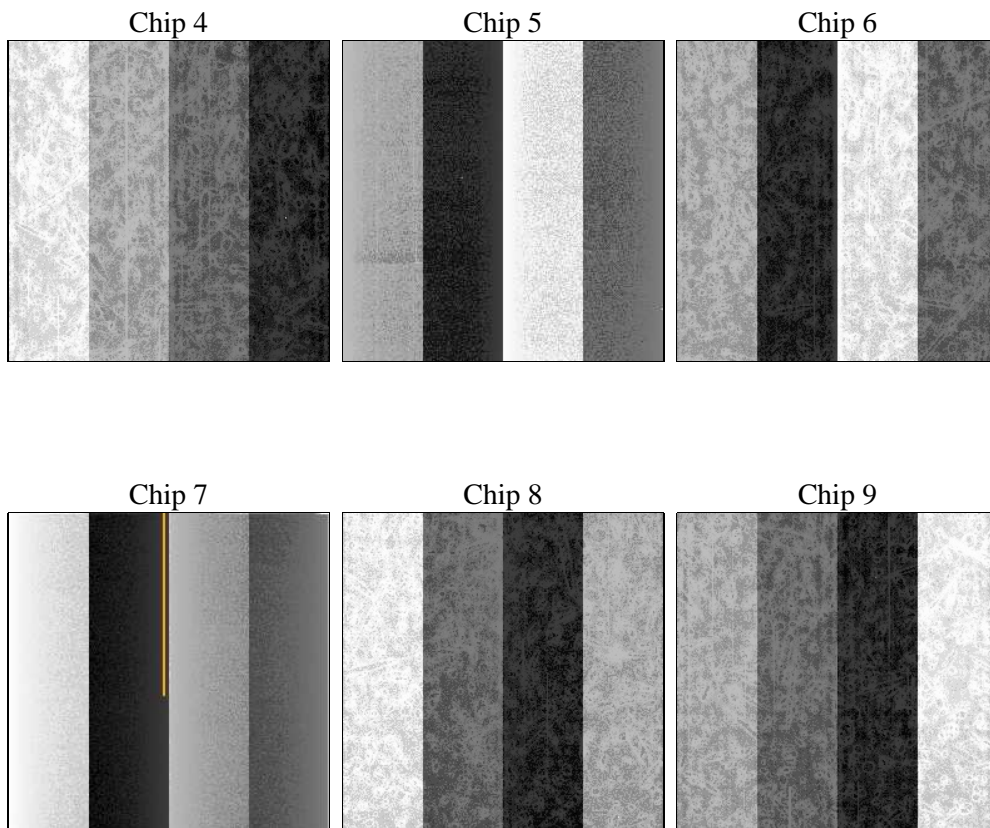
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	4500.063000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	4543.9999831319	Sum of GTIs [s]
caldsver	4.5.0	&#160	ontime4	4540.75914222	Sum of GTIs [s]
date	2012-06-30T13:12:22	Date and time of file creation	ontime5	4543.9999831319	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	4543.9999831319	Sum of GTIs [s]
			ontime7	4543.9999831319	Sum of GTIs [s]
			ontime8	4543.9999831319	Sum of GTIs [s]
			ontime9	4540.7591123581	Sum of GTIs [s]
			l1events	252127	Number of level 1 events

### 2.1.4 Events

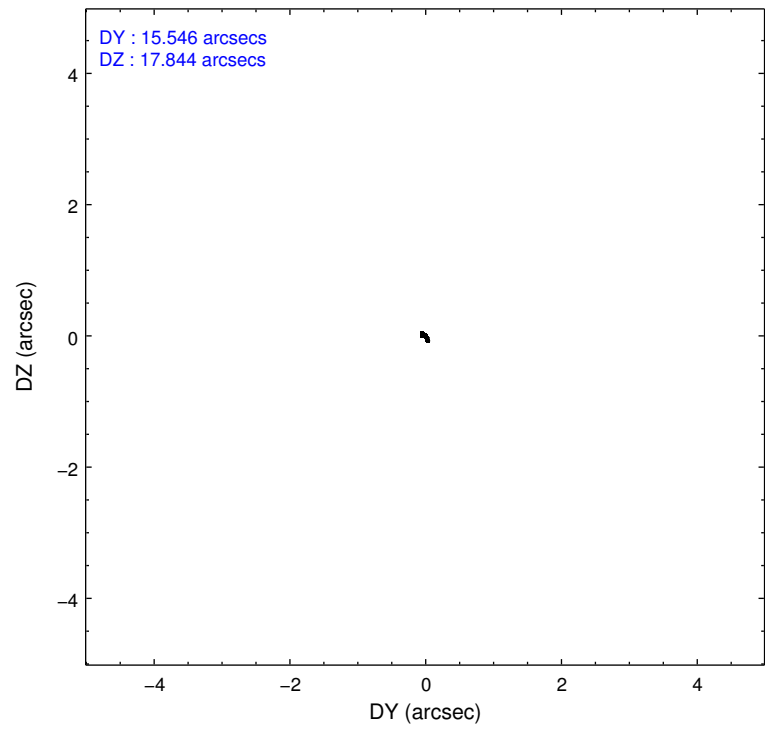
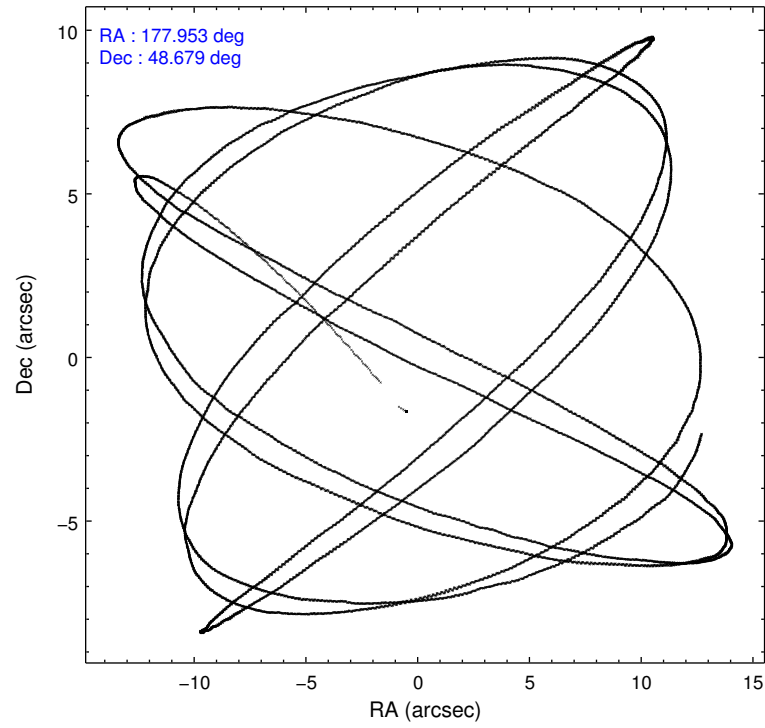
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	41259	53031	34336	41618	46222	35661	grade 0 events	2533	2725	1334	1813	3746	2779
rejected events	36236	26197	30493	22683	34138	30355		6%	5%	3%	4%	8%	7%
rejected %	87%	49%	88%	54%	73%	85%	grade 1 events	48	262	17	49	36	33
								0%	0%	0%	0%	0%	0%
							grade 2 events	953	8660	848	3930	2815	865
								2%	16%	2%	9%	6%	2%
							grade 3 events	425	1008	424	1653	1266	420
								1%	1%	1%	3%	2%	1%
							grade 4 events	418	978	387	1650	1160	388
								1%	1%	1%	3%	2%	1%
							grade 5 events	1621	3818	1566	4385	2320	1729
								3%	7%	4%	10%	5%	4%
							grade 6 events	700	13502	855	9915	3112	864
								1%	25%	2%	23%	6%	2%
							grade 7 events	34561	22078	28905	18223	31767	28583
								83%	41%	84%	43%	68%	80%

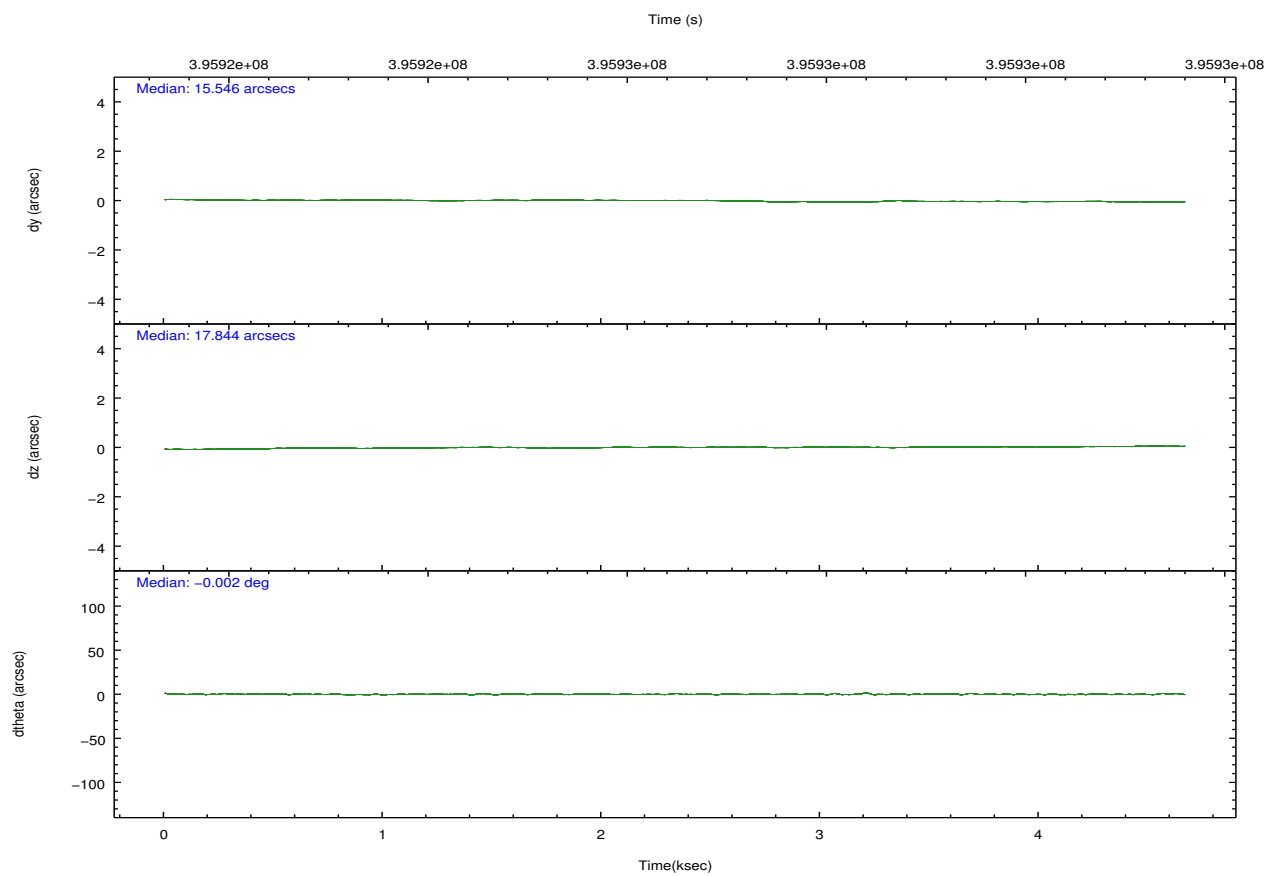
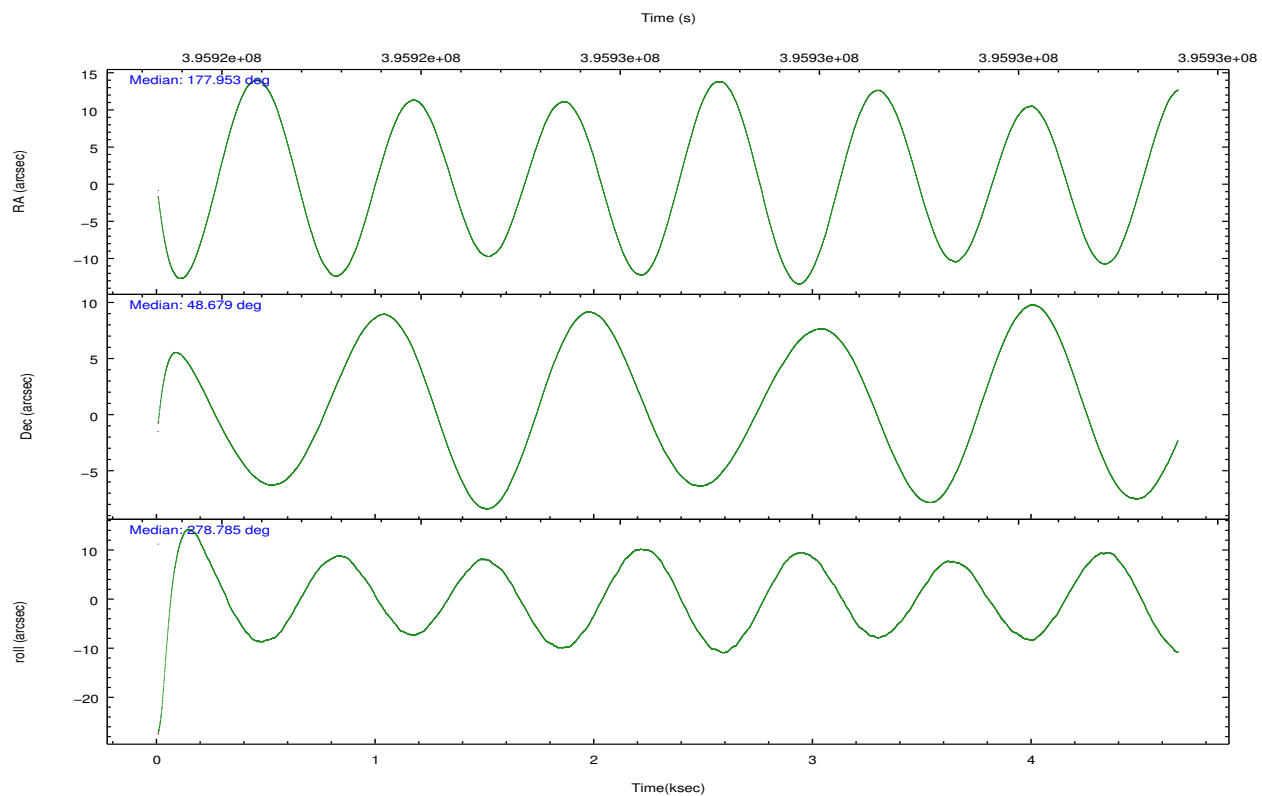


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-456789	ACIS-456789	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	177.927371	177.9537194738414	CCD I2 on	N	N
[deg] Pointing Dec	48.700502	48.67933069567562	CCD I3 on	N	N
[deg] Pointing Roll	278.651567	278.7883132571367	CCD S0 on	O1	Y
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	Y	Y
[s] Observation start time (MET)	395924076.184000	395922462.26246	CCD S5 on	O2	Y
Observation start date	2010-07-19T10:53:30	2010-07-19T10:27:42	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	395928576.184000	395928801.88778	On-chip summing requested	N	N
Observation end date	2010-07-19T12:08:30	2010-07-19T12:13:21	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



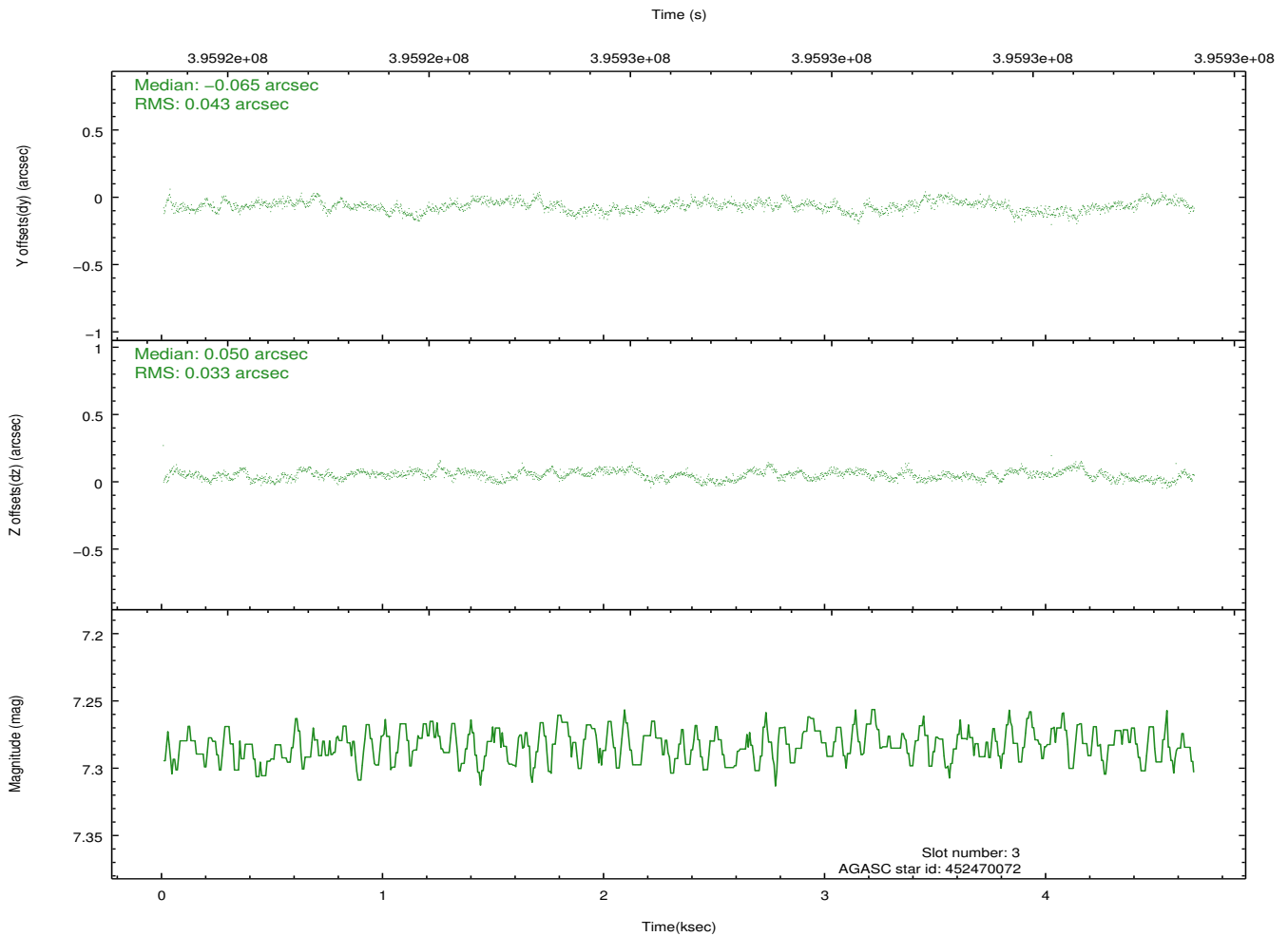
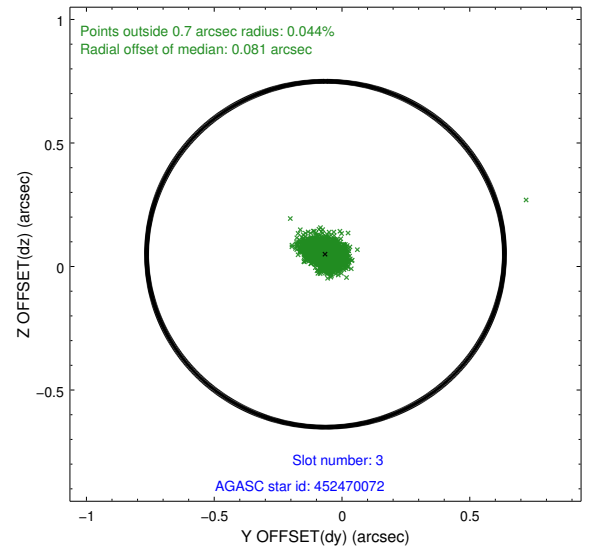
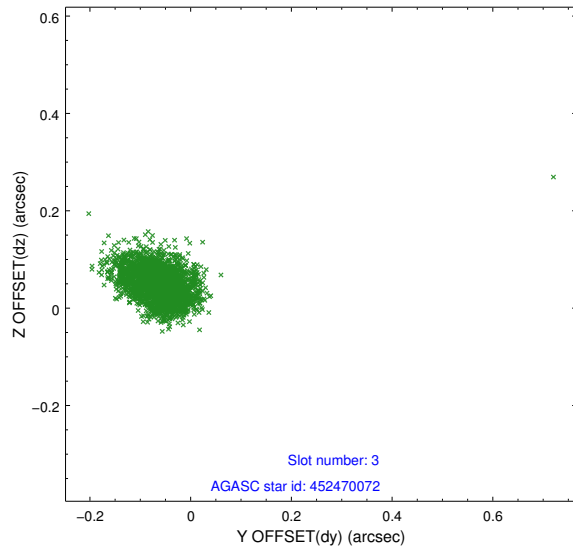


### Slot Statistics

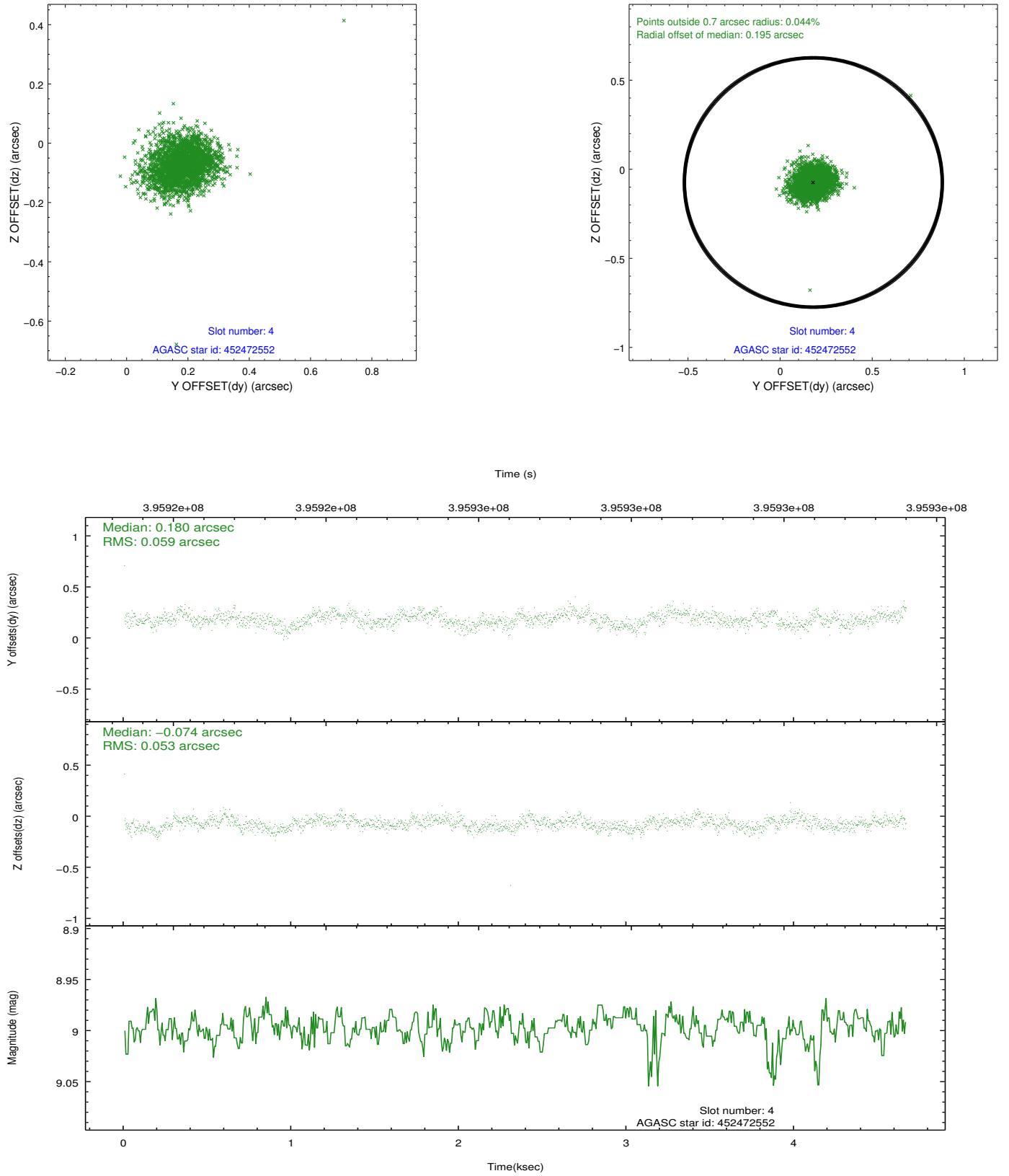
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.88	1138	-0.066	-0.038	0.006	0.010	0.000000	0.000000	-768.64	-1739.26
1	FID	ACIS-S-4	6.97	1138	0.159	0.042	0.006	0.010	0.000000	0.000000	2144.32	167.85
2	FID	ACIS-S-5	6.99	1138	-0.123	0.004	0.006	0.011	0.000000	0.000000	-1819.80	163.10
3	GUIDE	452470072	7.28	2276	-0.065	0.050	0.055	0.088	177.061194	48.523768	306.81	-2134.90
4	GUIDE	452472552	9.00	2275	0.180	-0.074	0.082	0.132	178.062313	48.221427	1753.64	60.16
5	GUIDE	452728128	7.27	2275	-0.153	-0.031	0.055	0.089	178.666422	48.933126	-572.18	1854.18
6	GUIDE	452730840	8.65	2276	0.065	0.064	0.074	0.126	177.454175	49.232184	-2063.76	-812.36
7	GUIDE	452729664	9.22	2273	-0.024	-0.011	0.097	0.155	178.225787	49.395908	-2372.02	1068.30

## 2.4 Star Slots

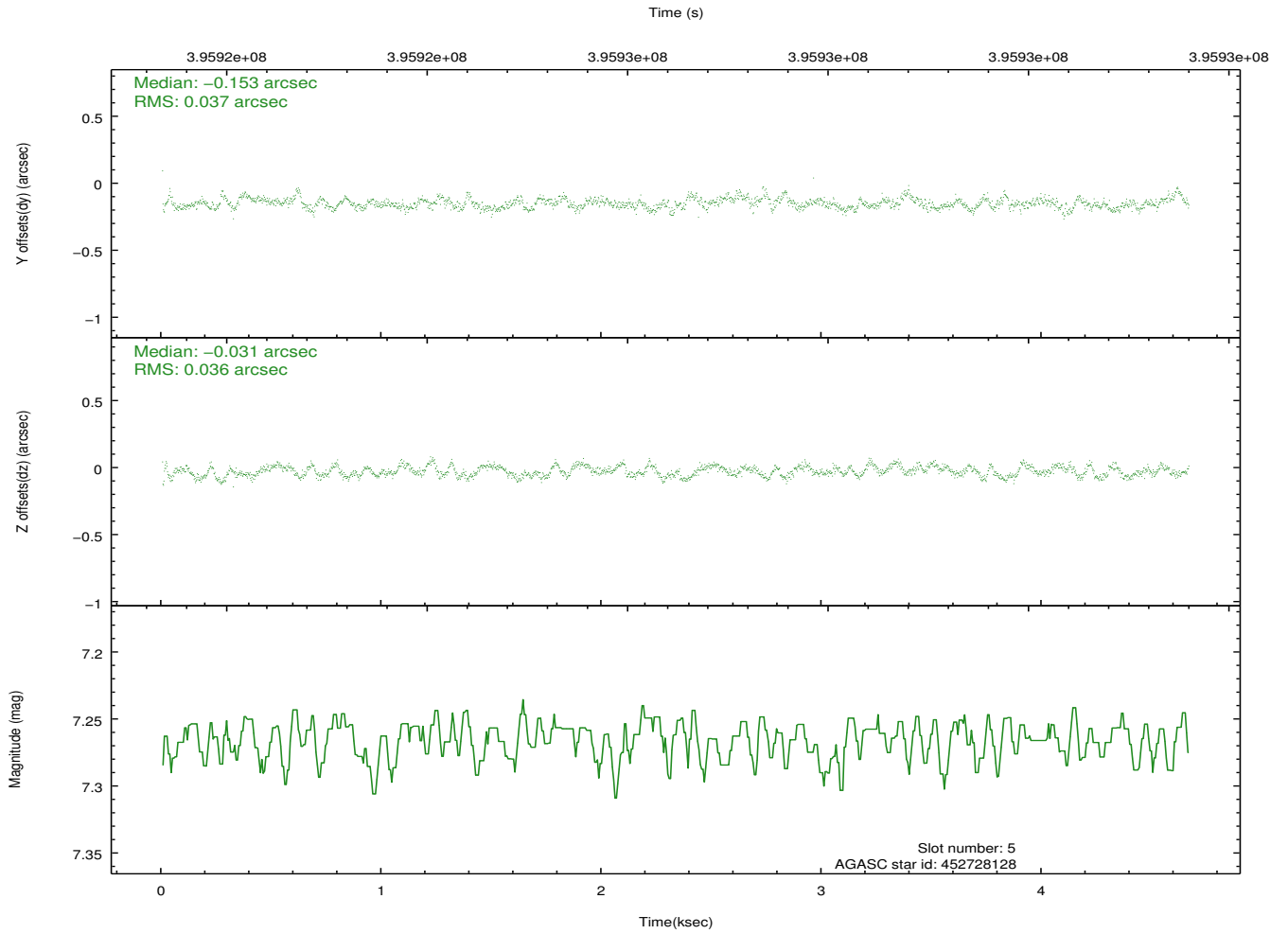
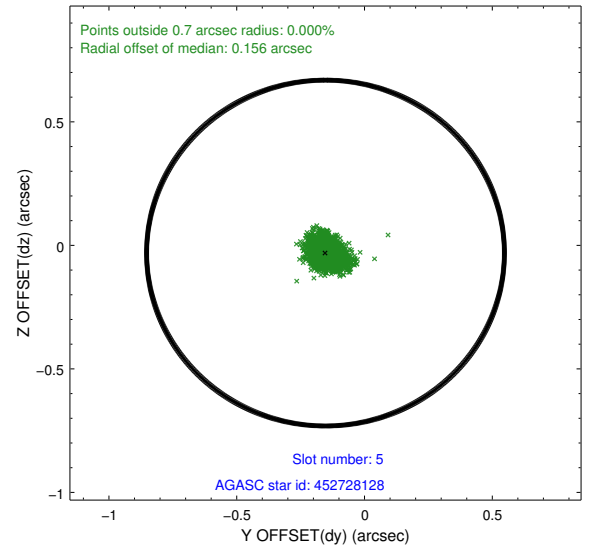
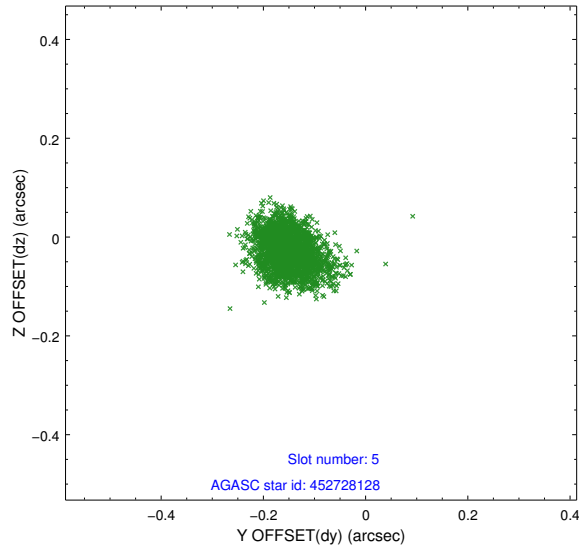
### 2.4.1 Slot 3



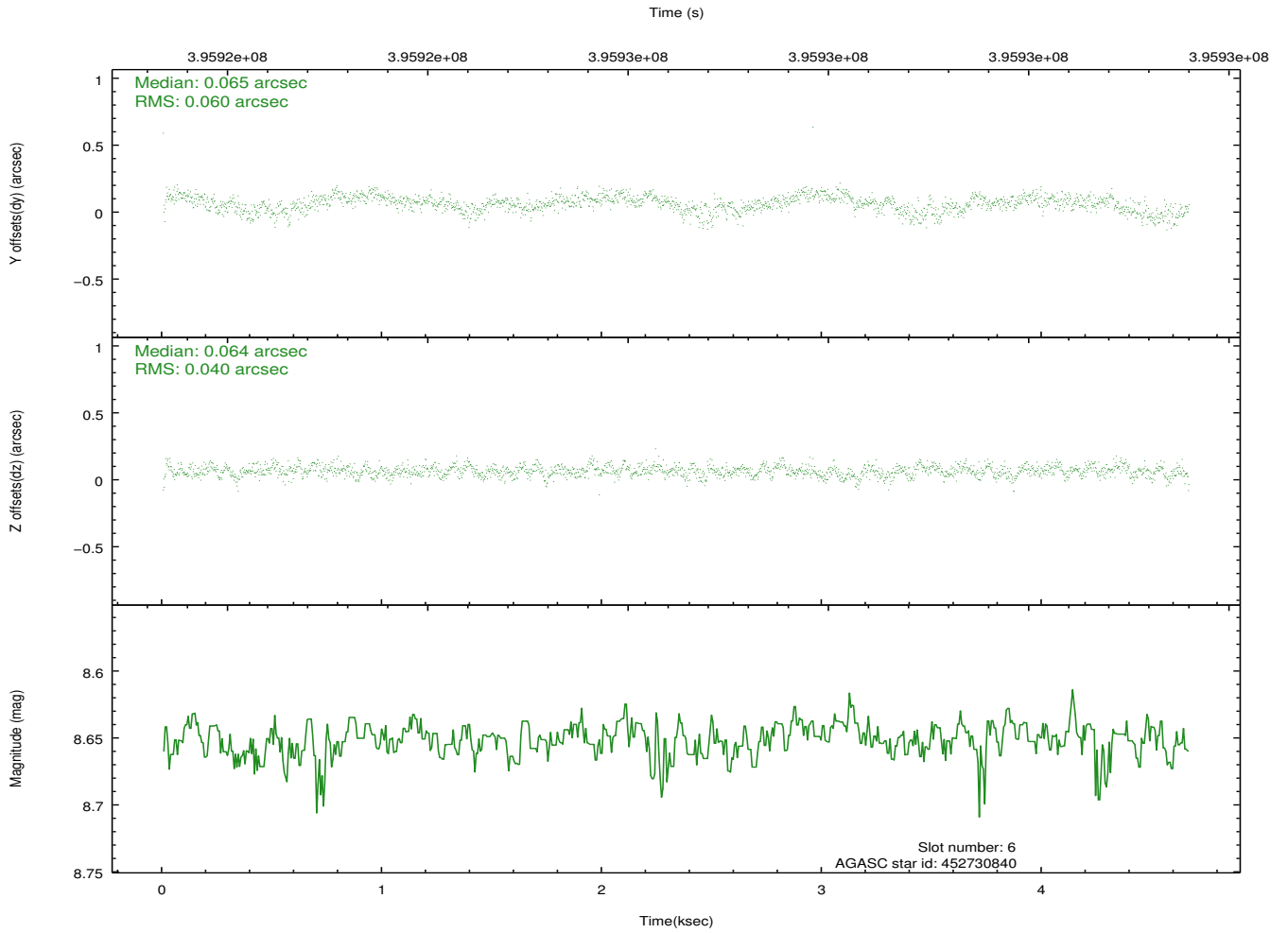
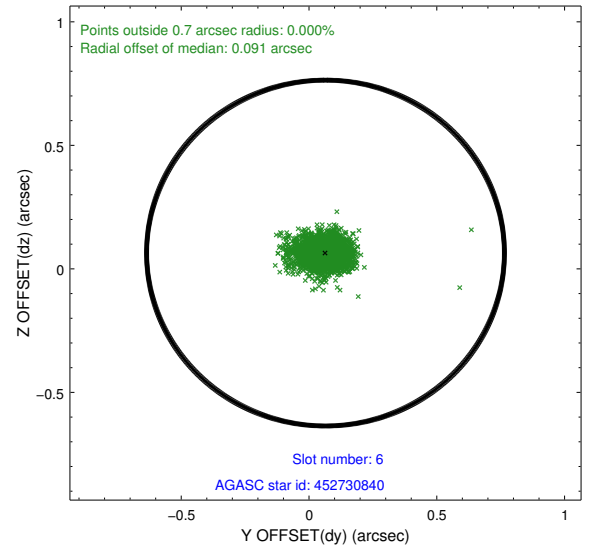
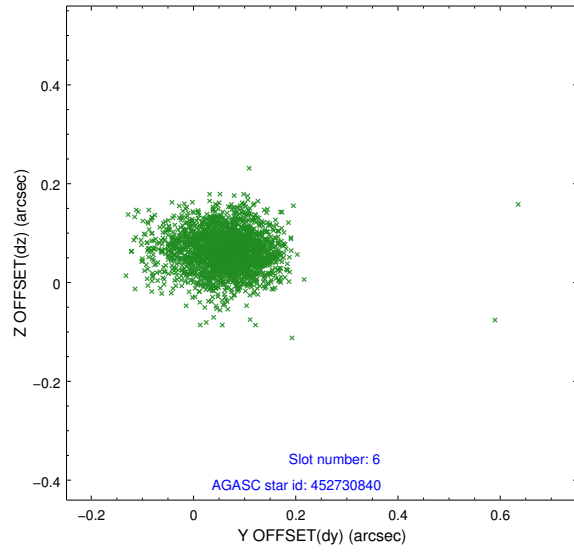
## 2.4.2 Slot 4



### 2.4.3 Slot 5

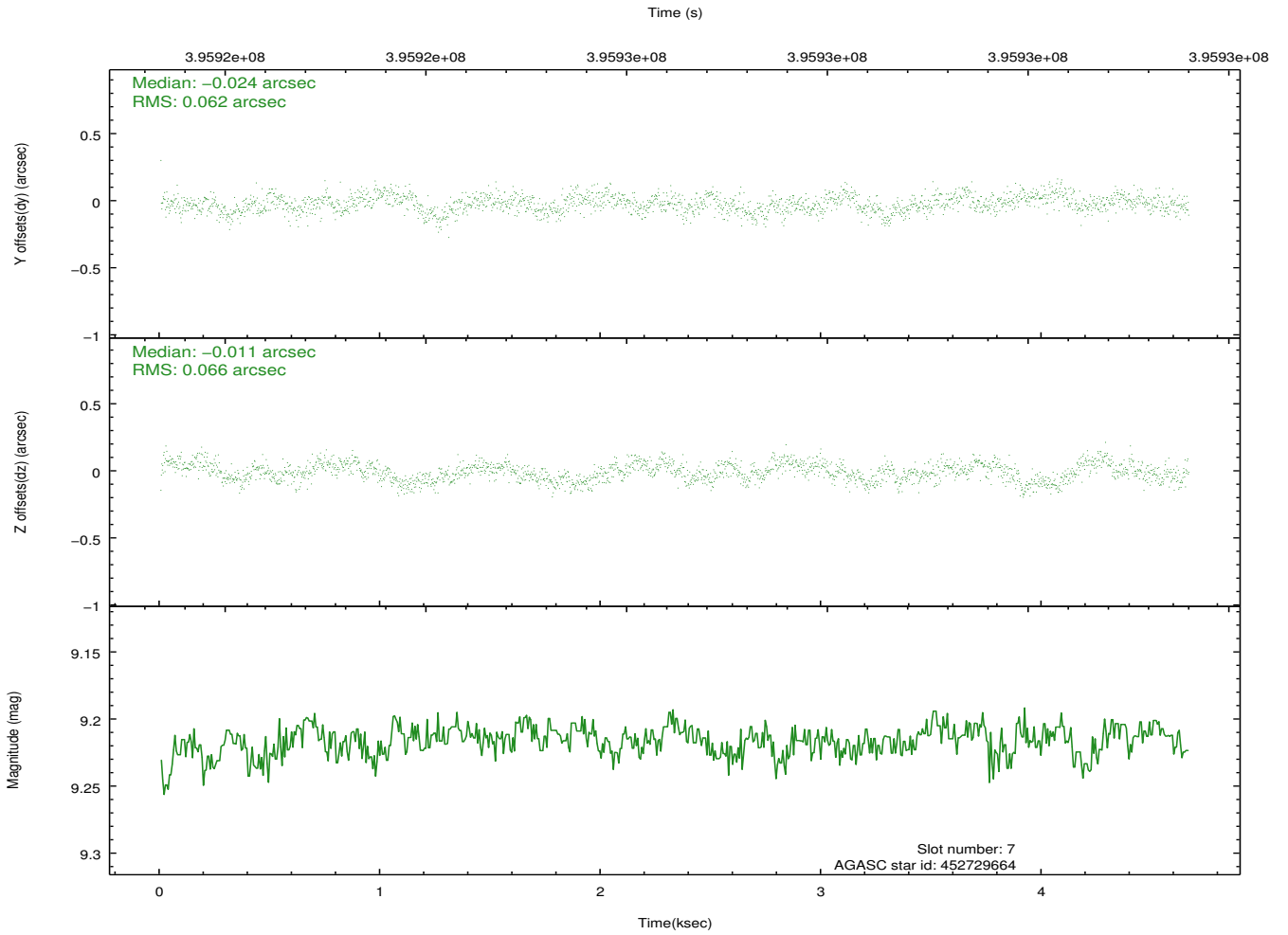
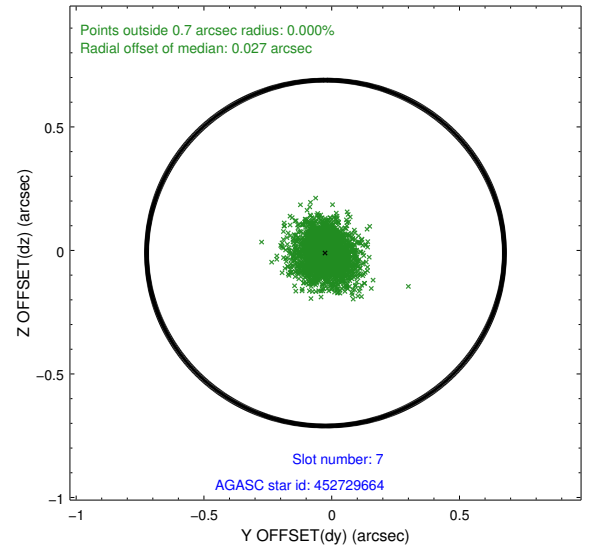
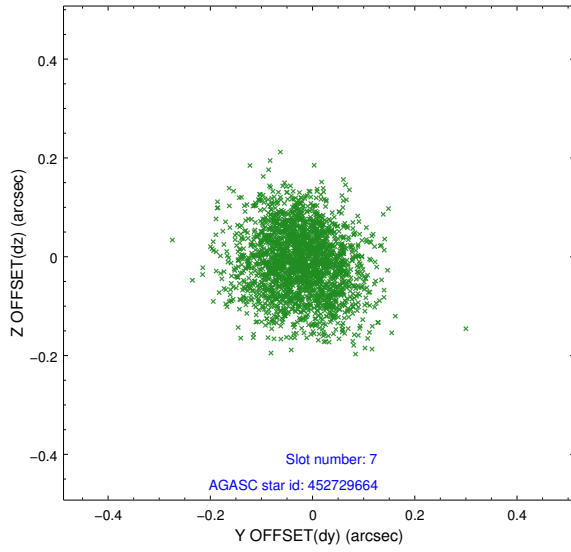


## 2.4.4 Slot 6



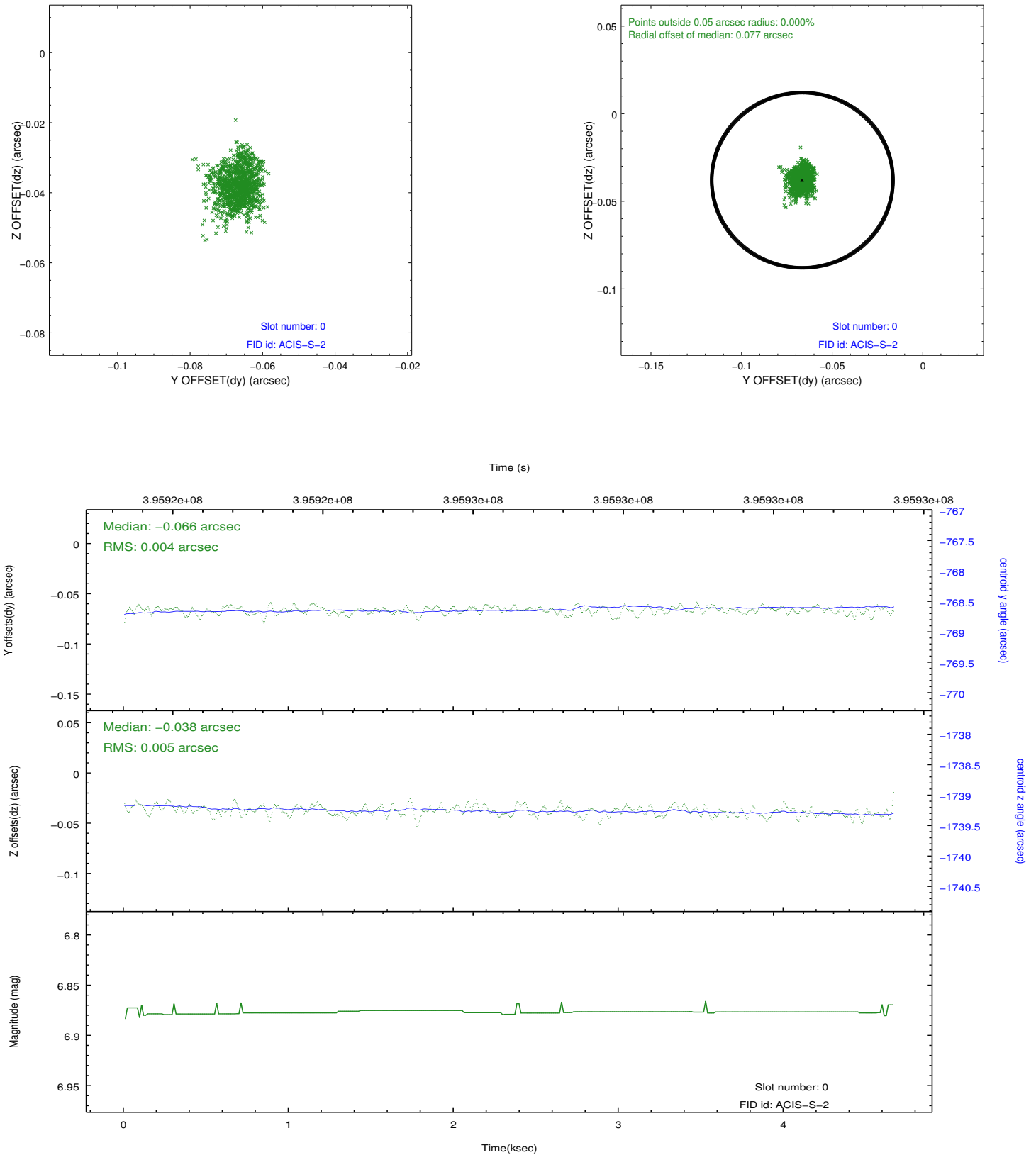


## 2.4.5 Slot 7

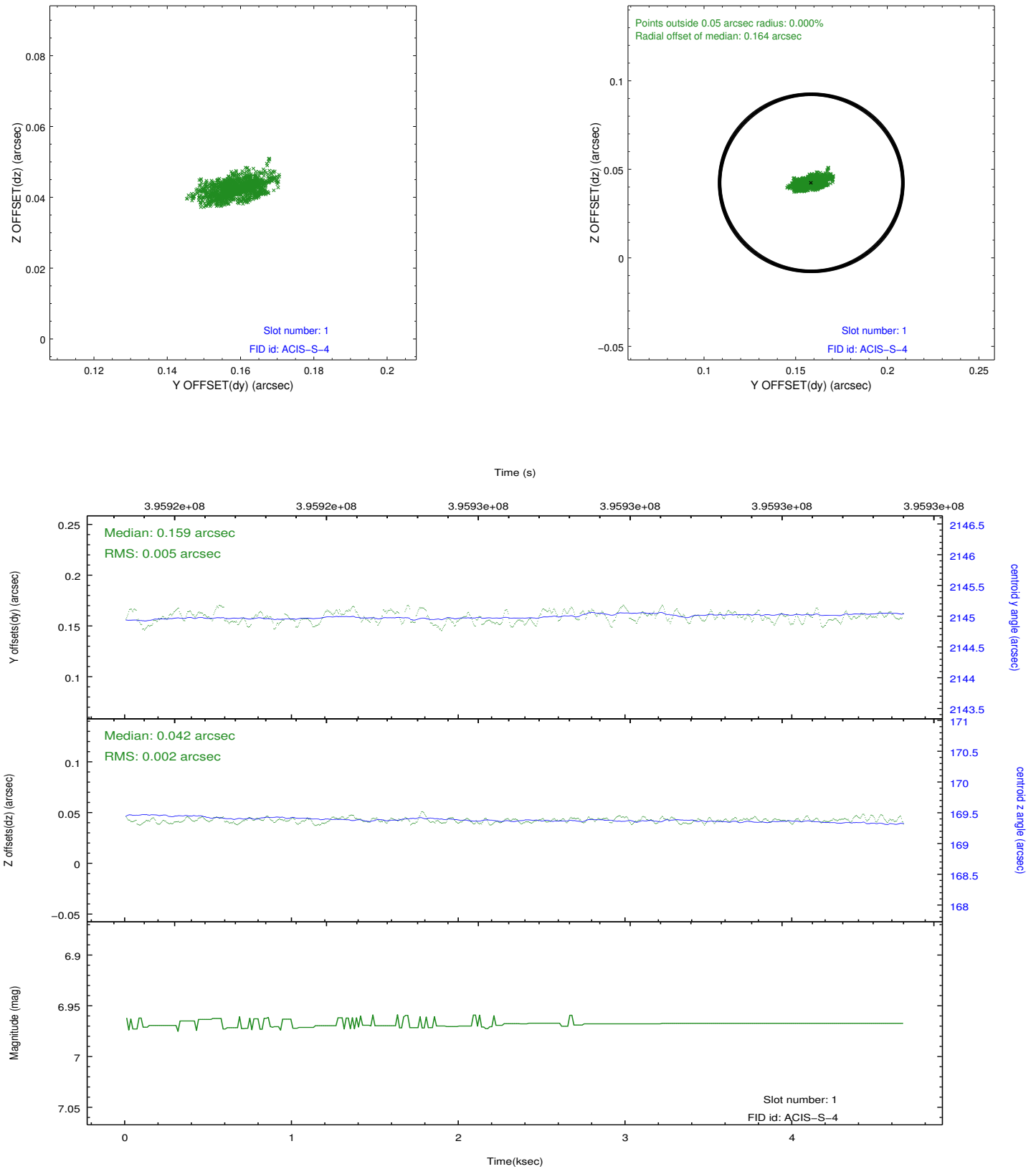


## 2.5 FID Slots

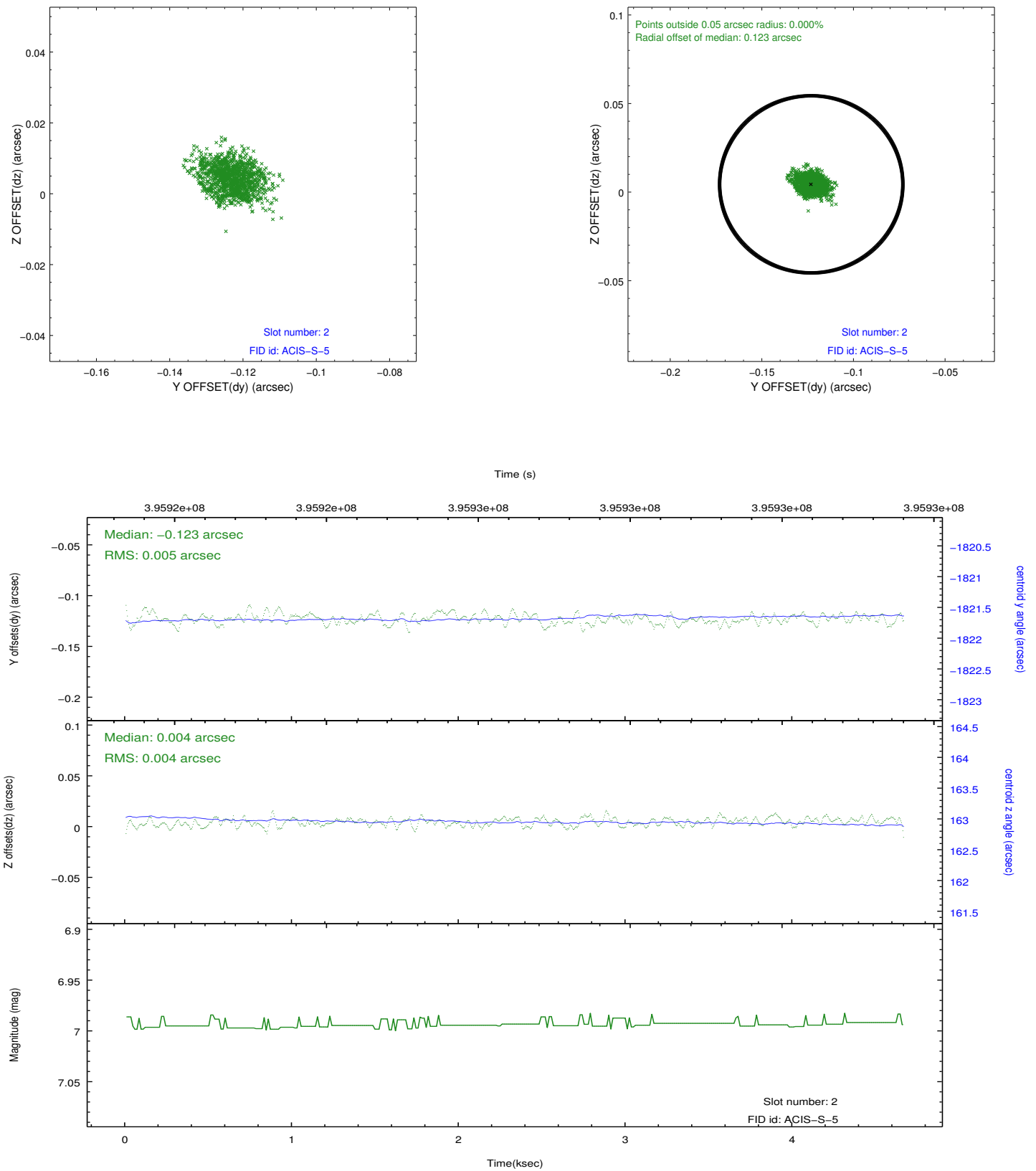
### 2.5.1 Slot 0



## 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)	2012.07.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.5439999831319

### A.2 Comments