

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 11314 - L2 Version 2  
Chandra X-Ray Center

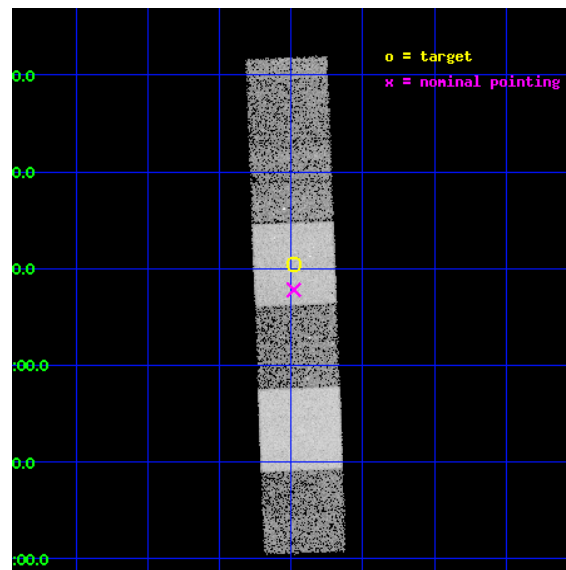
L2 Processing Date : Jul 3 2012

## 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

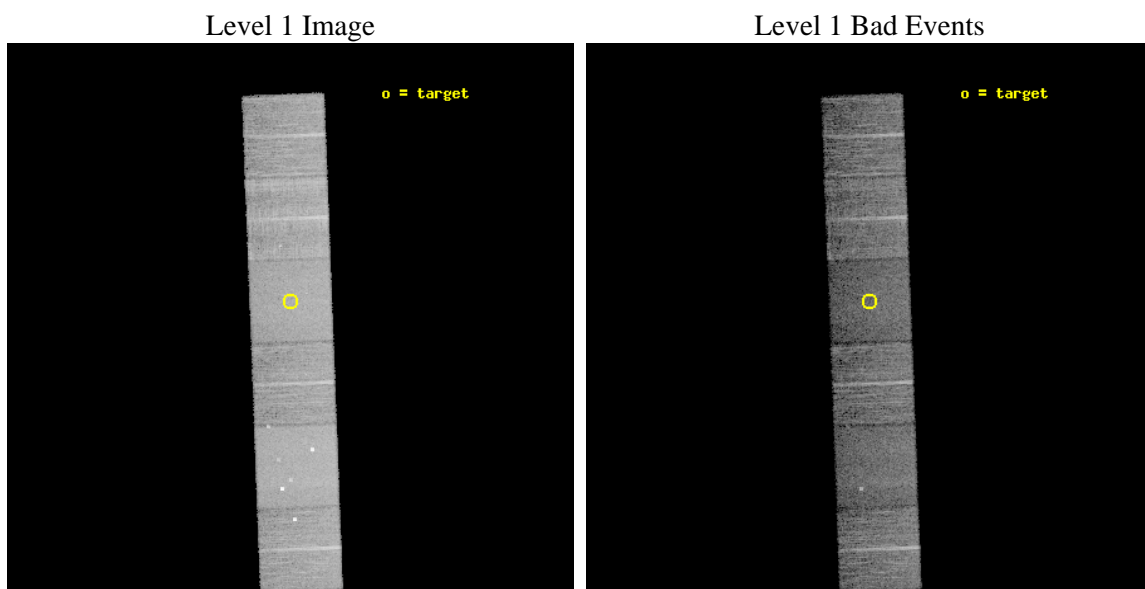
seq_num	600833	Sequence number
obs_id	11314	Observation id
title	Accretion onto nuclear black holes in early type galaxies: comparing field vs. clusters	Proposal title
observer	Elena Gallo	Principal investigator
object	NGC5831	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	225.99454	Observer's specified target RA [deg]
dec_targ	1.173375	Observer's specified target Dec [deg]
ra_nom	225.9953132949	Nominal RA [deg]
dec_nom	1.1300259898855	Nominal Dec [deg]
roll_nom	267.80588353575	Nominal Roll [deg]
revision	2	Processing version of data
ontime	10350.966557026	Sum of GTIs [s]
livetime	10219.896385877	Livetime [s]
ontime4	10351.007597029	Sum of GTIs [s]
ontime5	10350.925517023	Sum of GTIs [s]
ontime6	10350.884477019	Sum of GTIs [s]
ontime7	10350.966557026	Sum of GTIs [s]
ontime8	10350.843437016	Sum of GTIs [s]
ontime9	10350.802397013	Sum of GTIs [s]
l2events	122020	Number of level 2 events



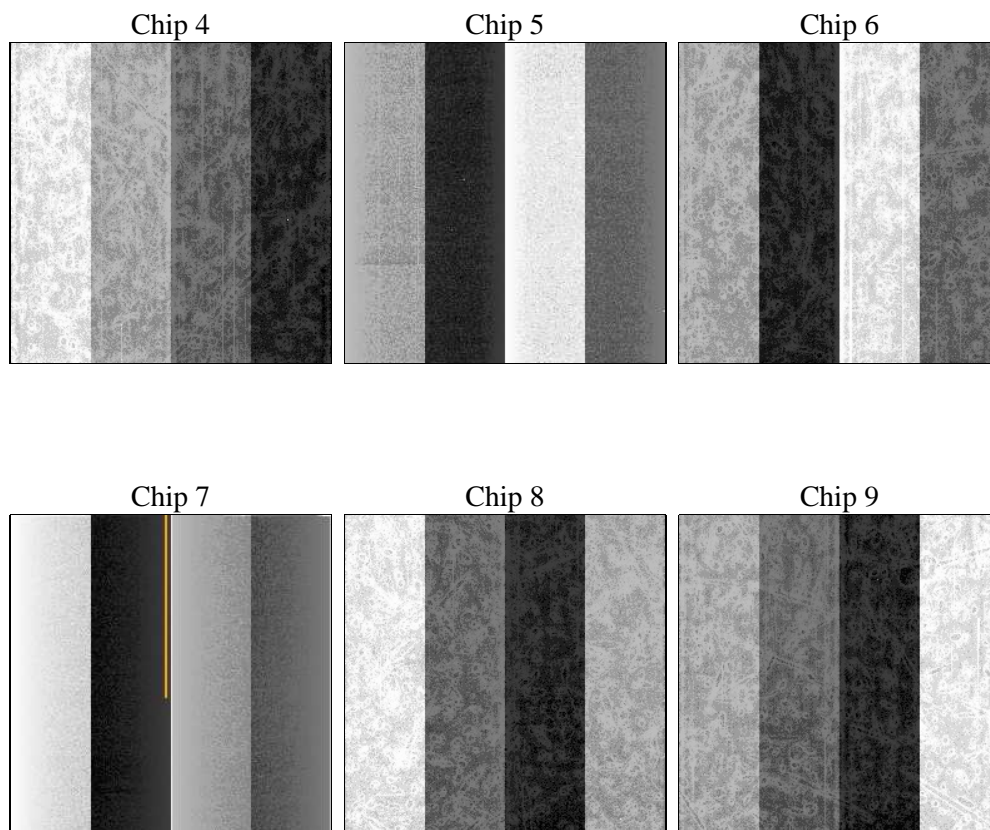
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10300.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	10350.966557026	Sum of GTIs [s]
caldsver	4.5.0	&#160	ontime4	10351.007597029	Sum of GTIs [s]
date	2012-07-03T08:09:06	Date and time of file creation	ontime5	10350.925517023	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	10350.884477019	Sum of GTIs [s]
			ontime7	10350.966557026	Sum of GTIs [s]
			ontime8	10350.843437016	Sum of GTIs [s]
			ontime9	10350.802397013	Sum of GTIs [s]
			l1events	536478	Number of level 1 events

### 2.1.4 Events

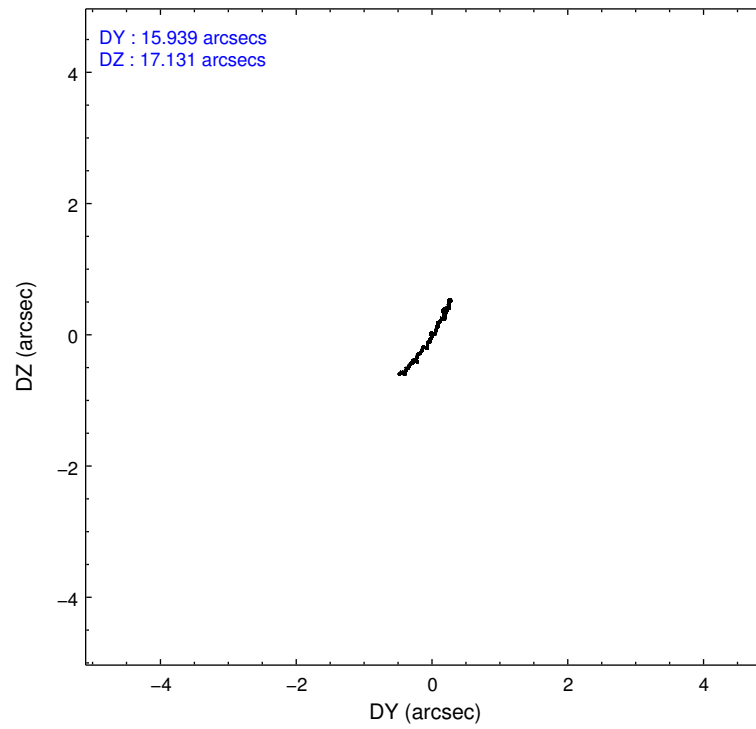
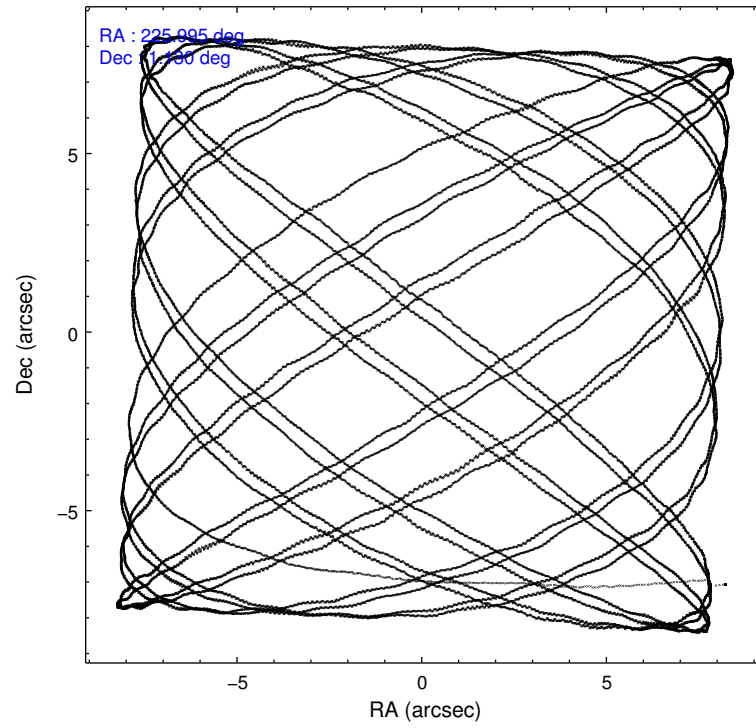
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	84992	114604	74760	90316	98001	73805	grade 0 events	5715	7391	3064	3788	8165	3444
rejected events	73813	56828	66245	49777	71495	64645		6%	6%	4%	4%	8%	4%
rejected %	86%	49%	88%	55%	72%	87%	grade 1 events	73	298	42	131	96	48
								0%	0%	0%	0%	0%	0%
							grade 2 events	2203	17441	1936	8320	5954	1952
								2%	15%	2%	9%	6%	2%
							grade 3 events	959	2181	844	3517	2853	1002
								1%	1%	1%	3%	2%	1%
							grade 4 events	861	2018	870	3572	2655	883
								1%	1%	1%	3%	2%	1%
							grade 5 events	3426	8636	3381	9462	4897	3737
								4%	7%	4%	10%	4%	5%
							grade 6 events	1443	28761	1803	21353	6884	1881
								1%	25%	2%	23%	7%	2%
							grade 7 events	70312	47878	62820	40173	66497	60858
								82%	41%	84%	44%	67%	82%

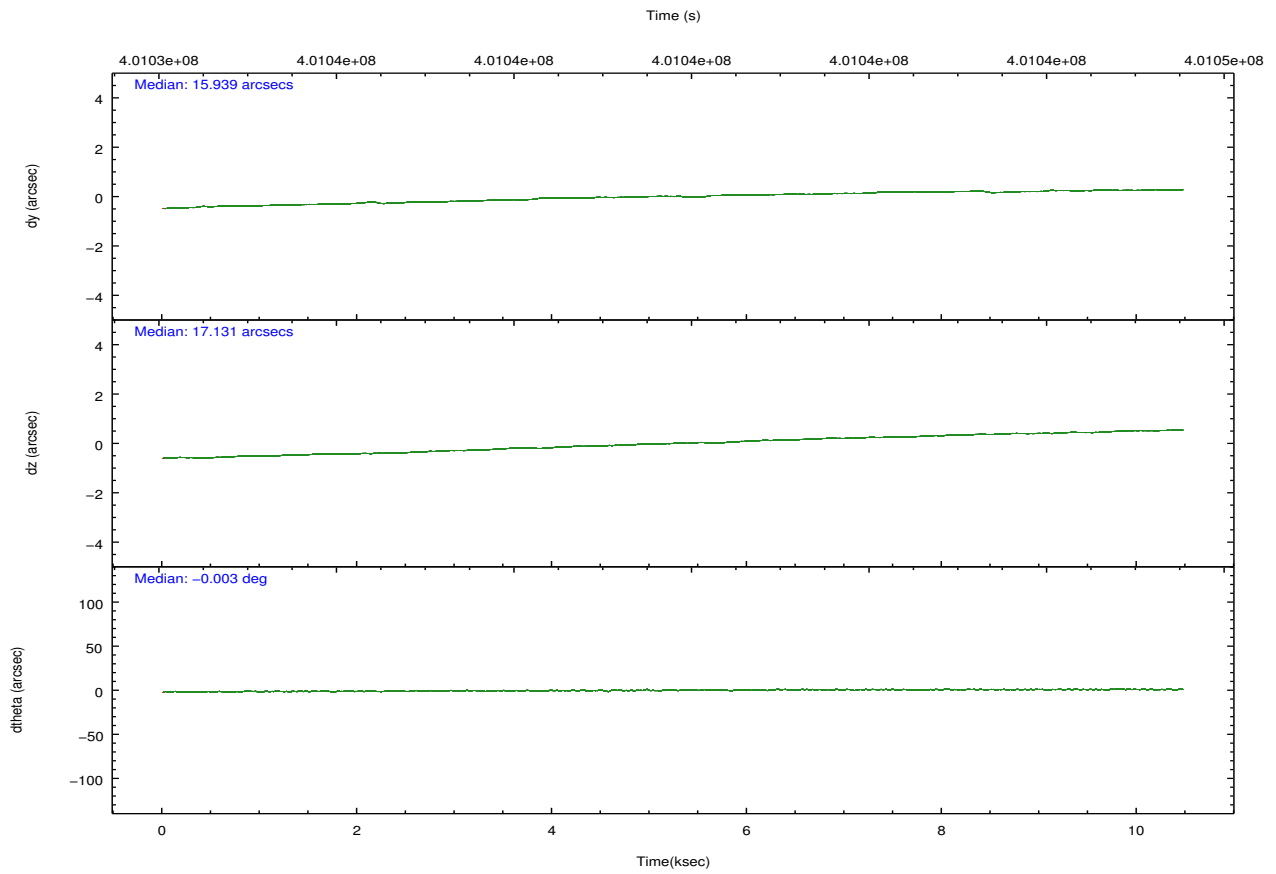
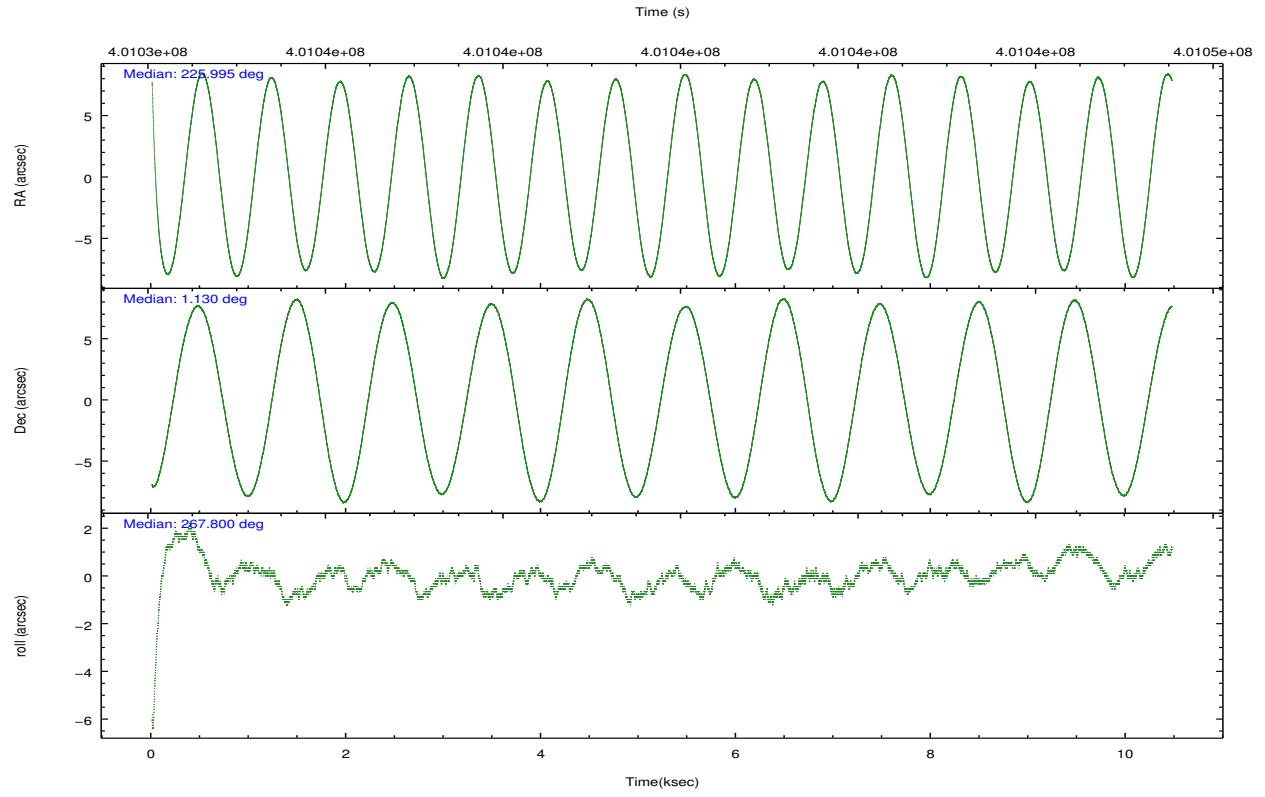


## 2.2 Compared Parameters

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	225.982233	225.9953132949003	CCD I2 on	N	N
[deg] Pointing Dec	1.154024	1.130025989885503	CCD I3 on	N	N
[deg] Pointing Roll	267.649531	267.8058835357549	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)	401034740.184000	401033293.9492	CCD S5 on	O2	Y
Observation start date	2010-09-16T14:31:14	2010-09-16T14:08:13	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	401045040.184000	401045811.76234	On-chip summing requested	N	N
Observation end date	2010-09-16T17:22:54	2010-09-16T17:36:51	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



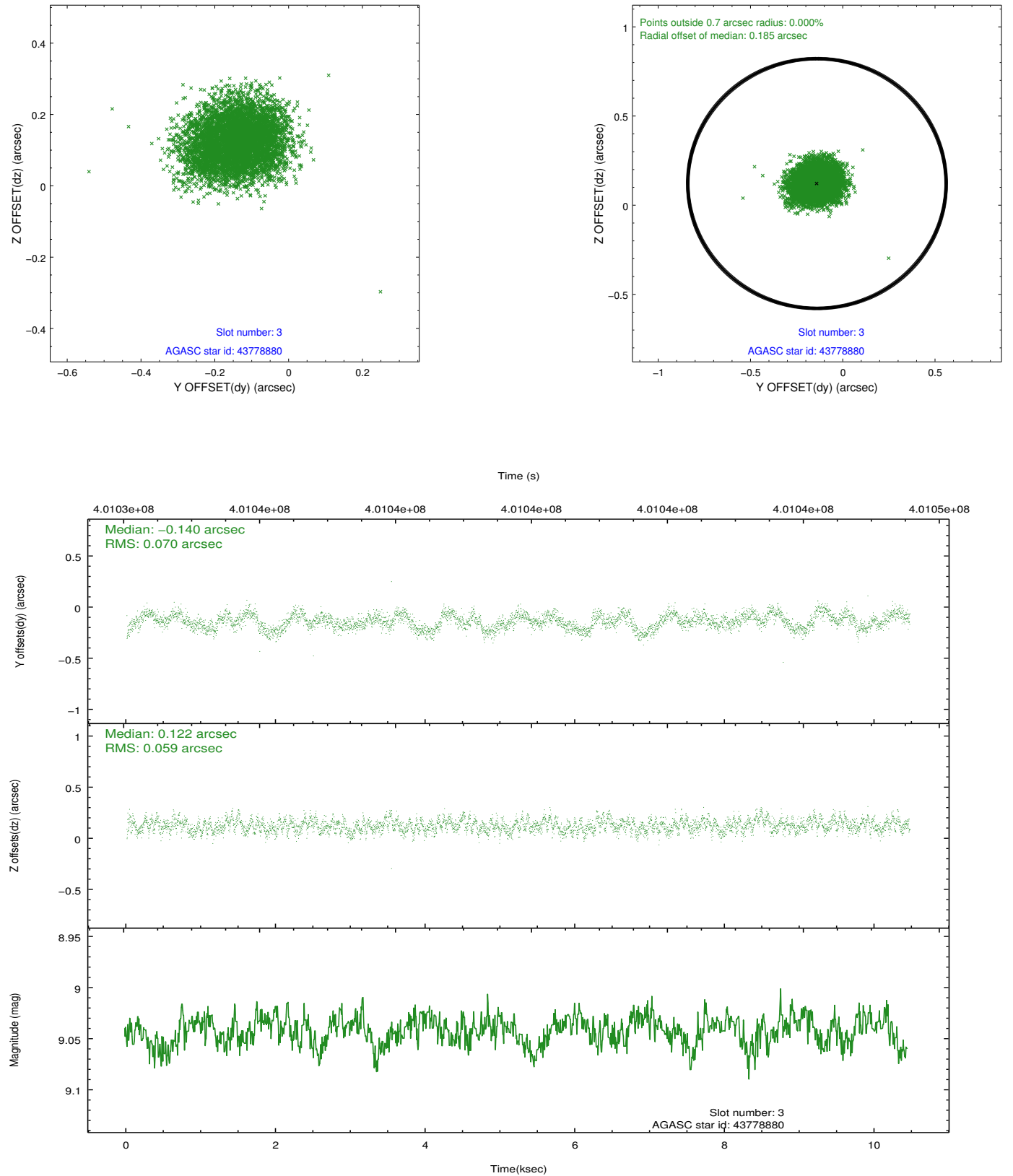


### Slot Statistics

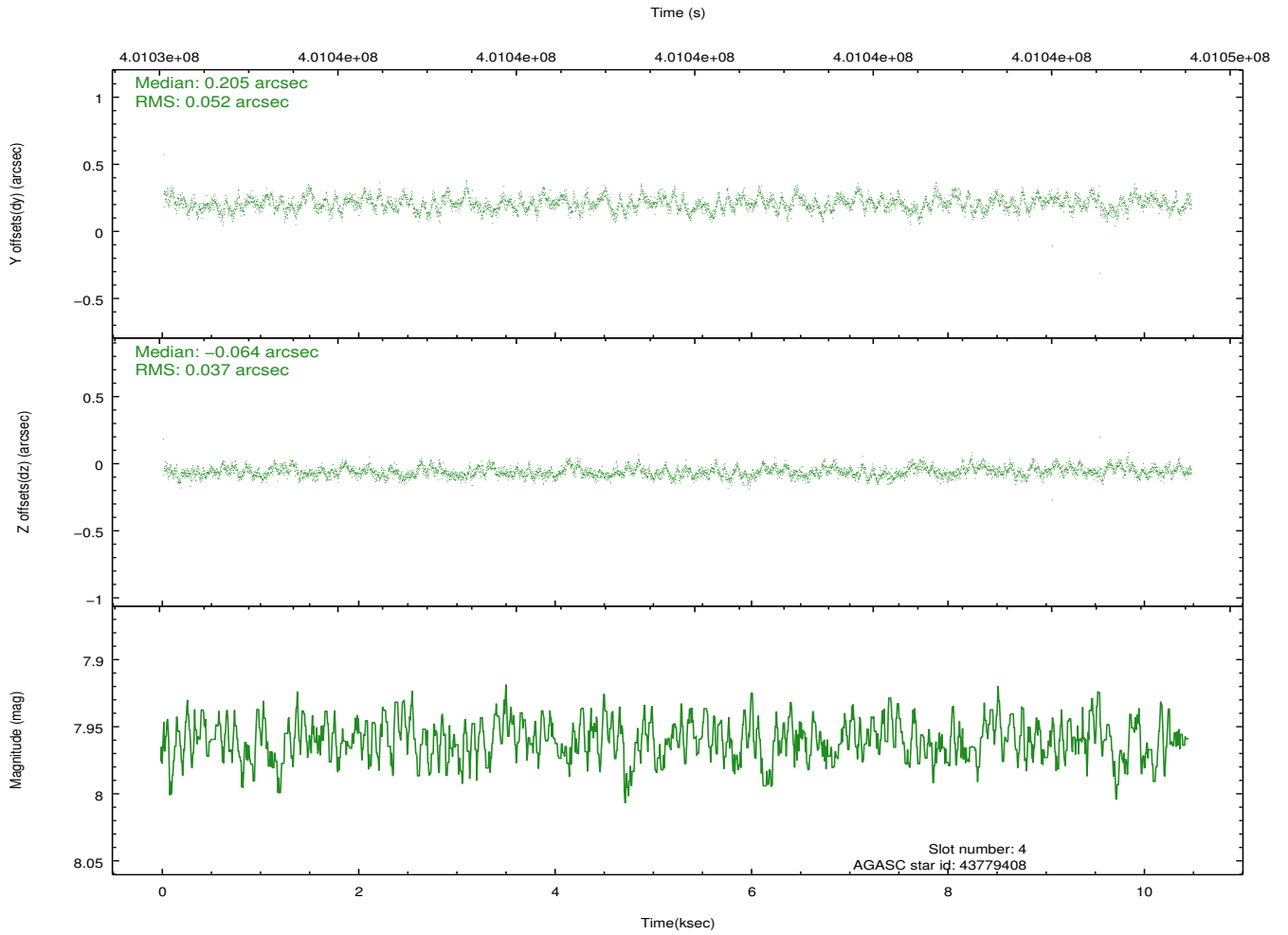
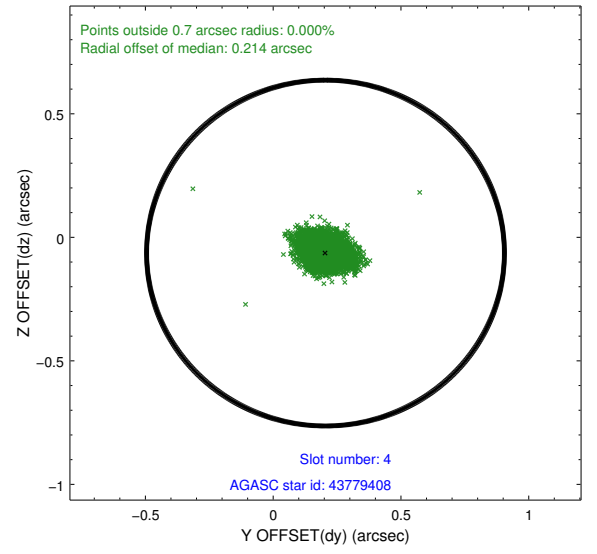
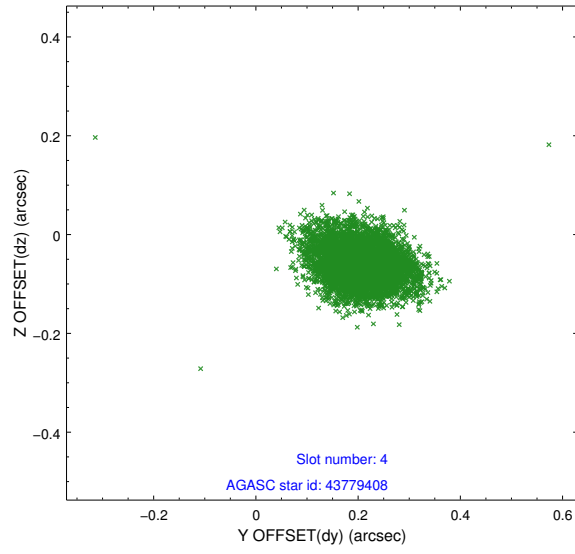
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.88	2553	-0.070	-0.024	0.012	0.018	0.000000	0.000000	-769.01	-1738.50
1	FID	ACIS-S-4	6.96	2553	0.156	0.040	0.013	0.024	0.000000	0.000000	2144.30	169.46
2	FID	ACIS-S-5	6.99	2553	-0.115	-0.007	0.012	0.017	0.000000	0.000000	-1821.22	163.74
3	GUIDE	43778880	9.04	5103	-0.140	0.122	0.099	0.153	225.720242	1.617889	-1630.36	-1010.76
4	GUIDE	43779408	7.96	5100	0.205	-0.064	0.067	0.111	225.433092	0.714839	1660.94	-1910.41
5	GUIDE	43785352	8.51	5105	-0.002	-0.064	0.071	0.117	225.635562	1.031222	493.56	-1229.04
6	GUIDE	43783424	7.71	5106	-0.044	-0.003	0.056	0.089	226.324547	0.493974	2324.03	1328.80
7	GUIDE	43780168	8.24	5101	-0.019	0.002	0.072	0.110	226.369466	0.592115	1964.63	1476.40

## 2.4 Star Slots

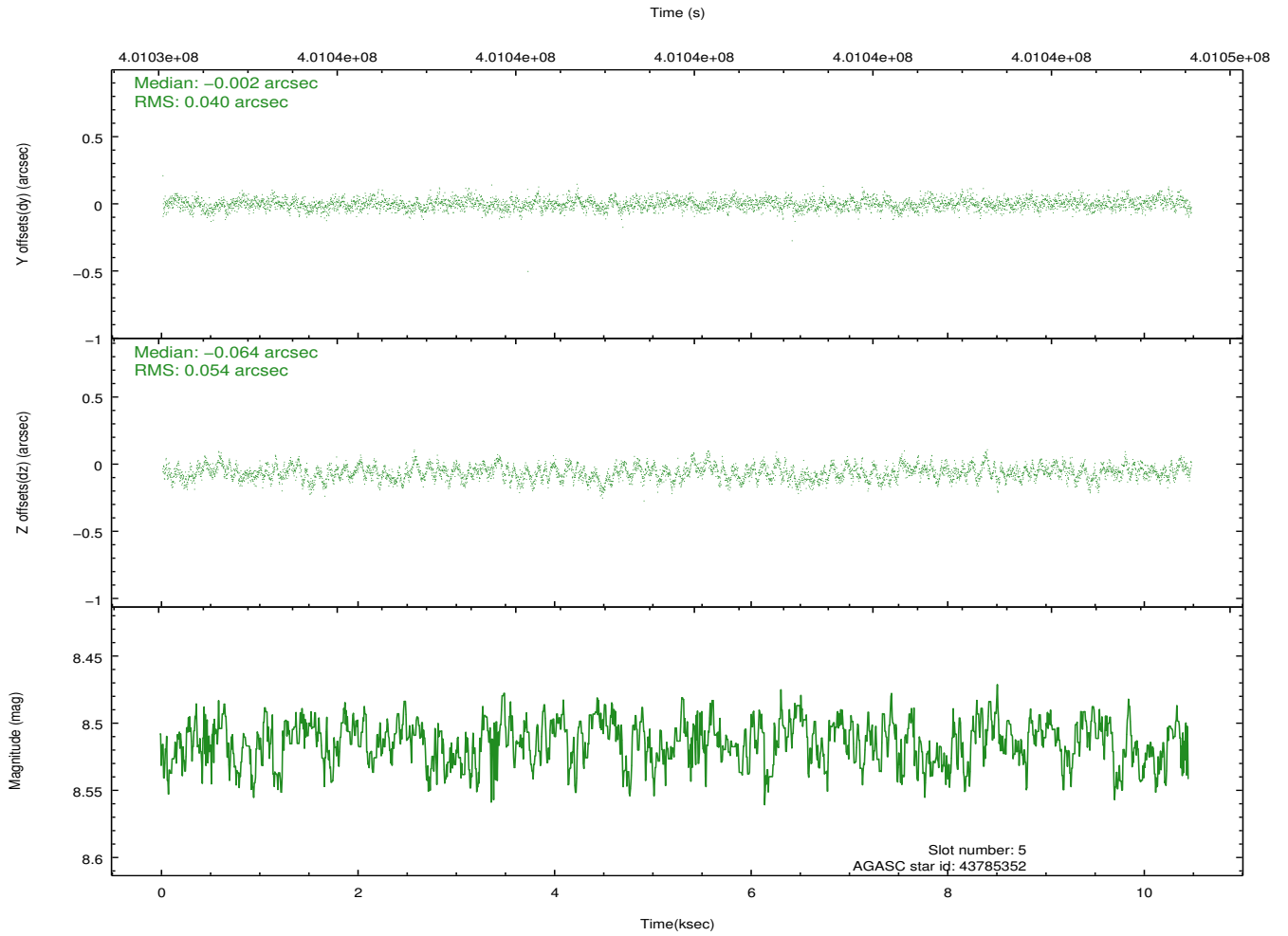
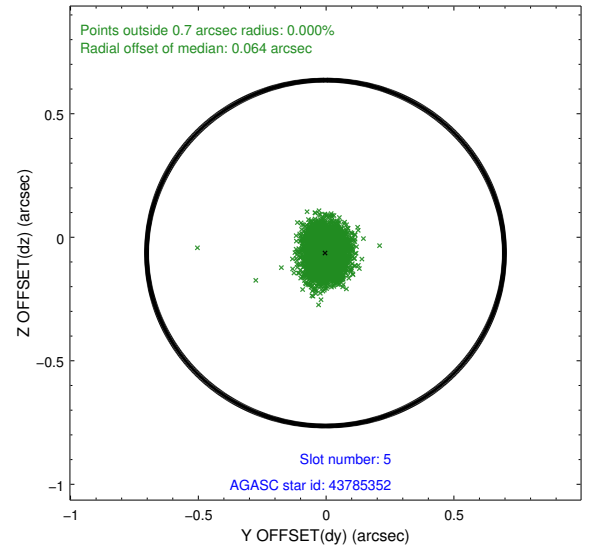
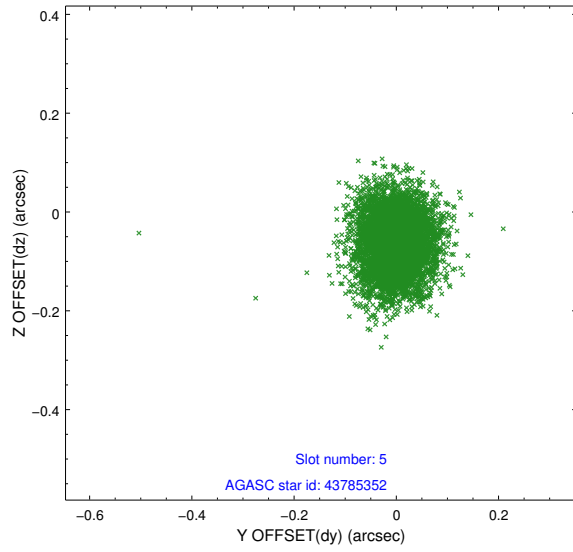
### 2.4.1 Slot 3



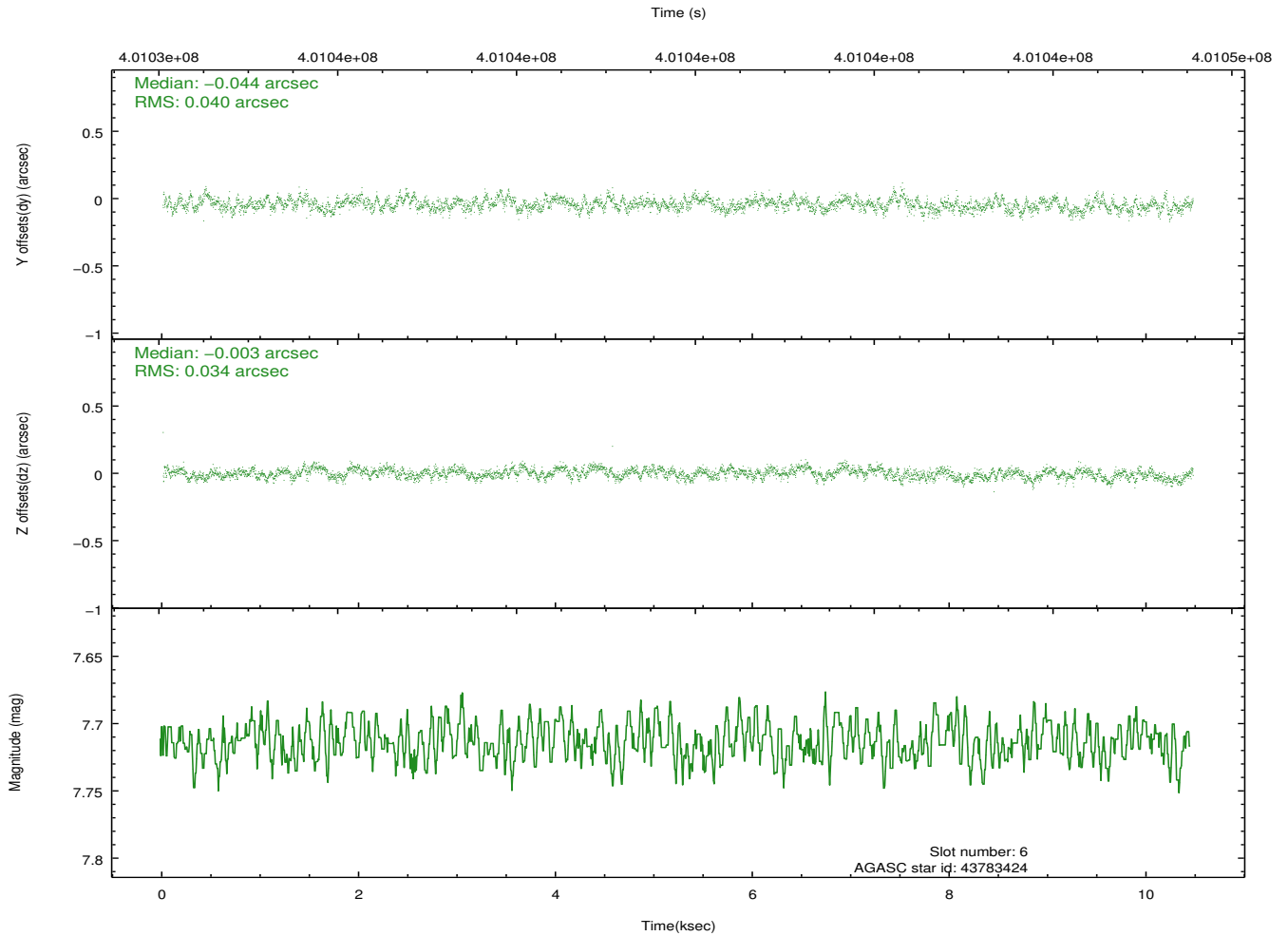
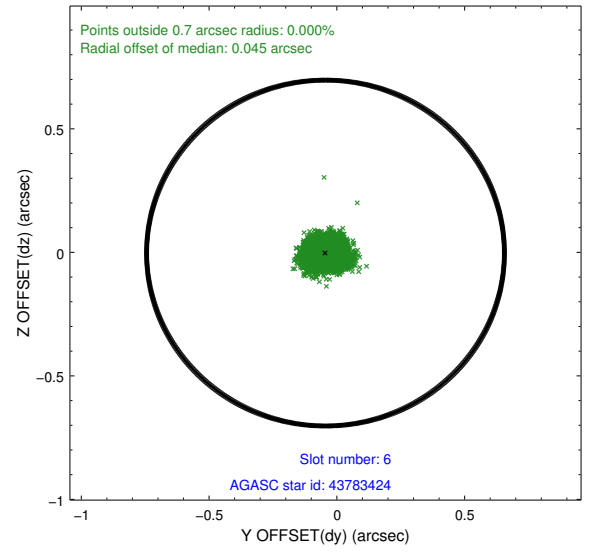
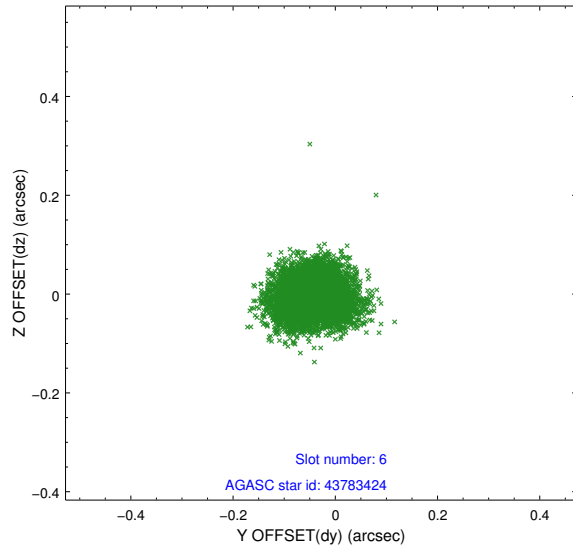
## 2.4.2 Slot 4



### 2.4.3 Slot 5

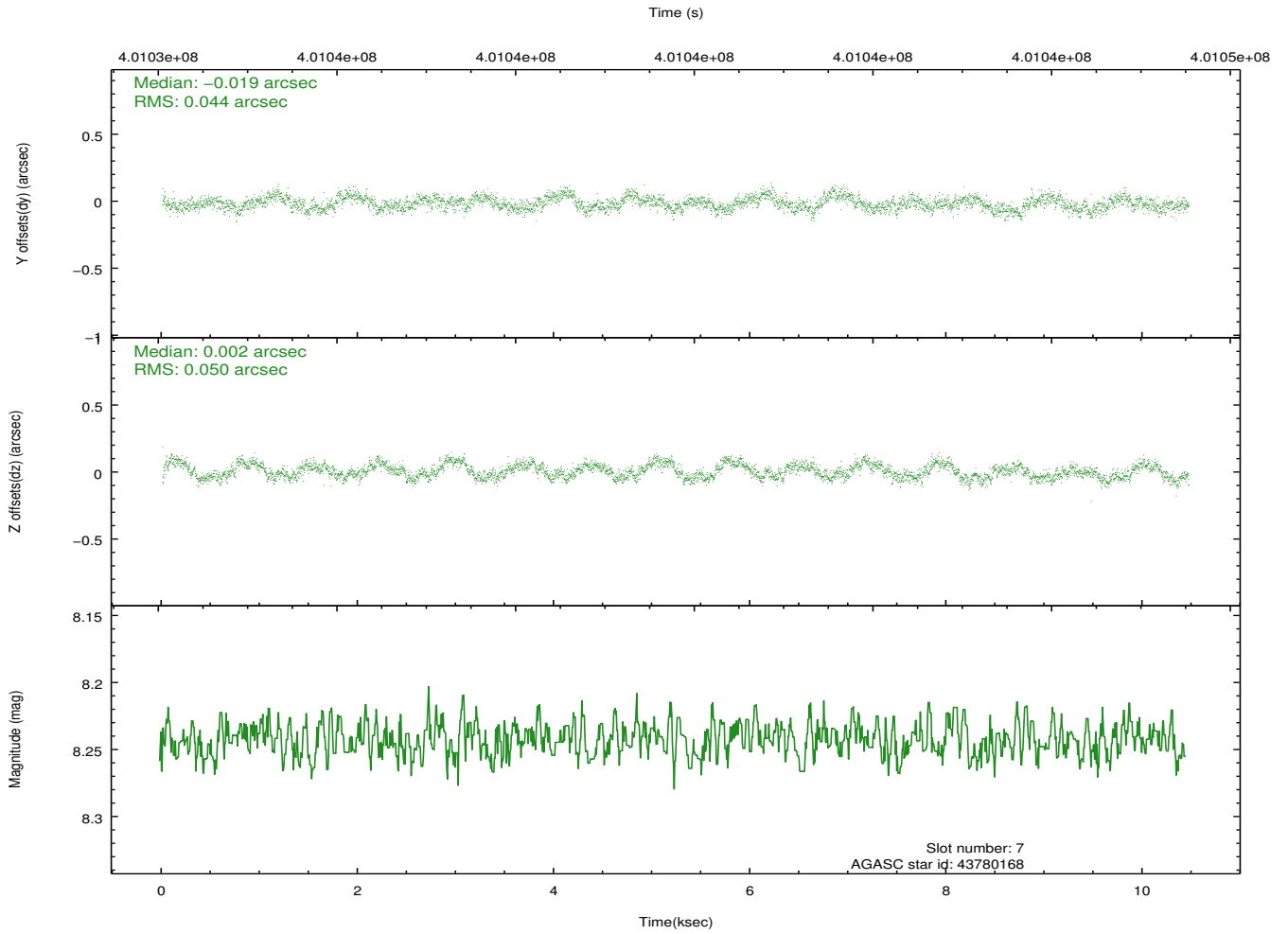
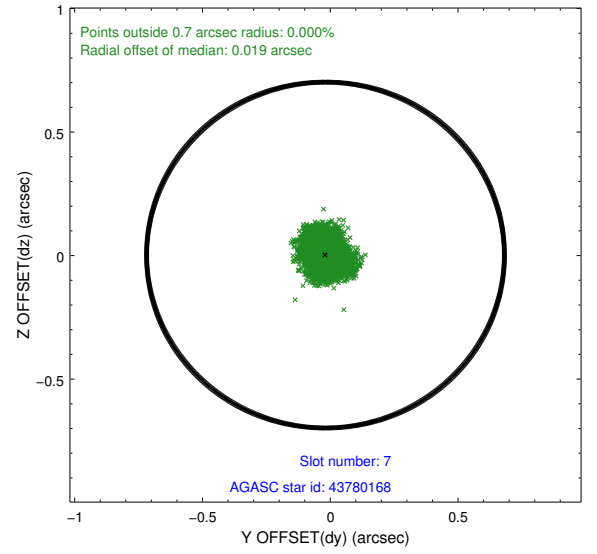
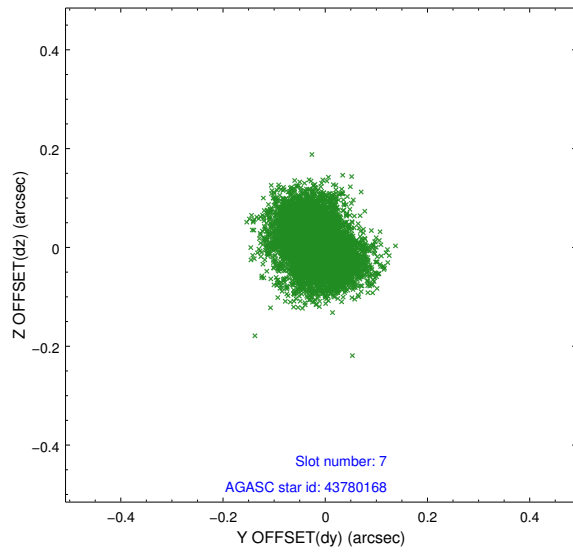


## 2.4.4 Slot 6



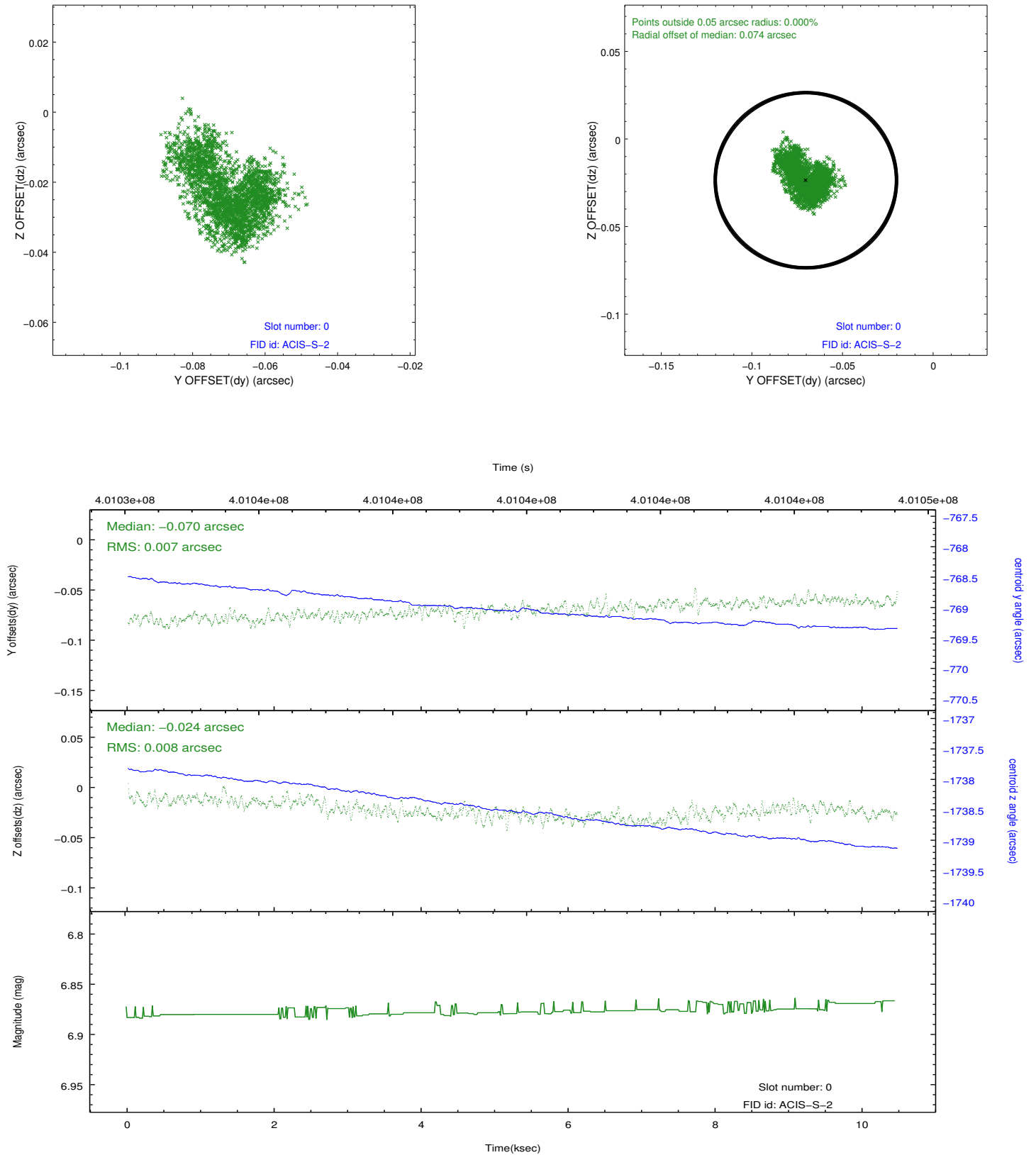


## 2.4.5 Slot 7

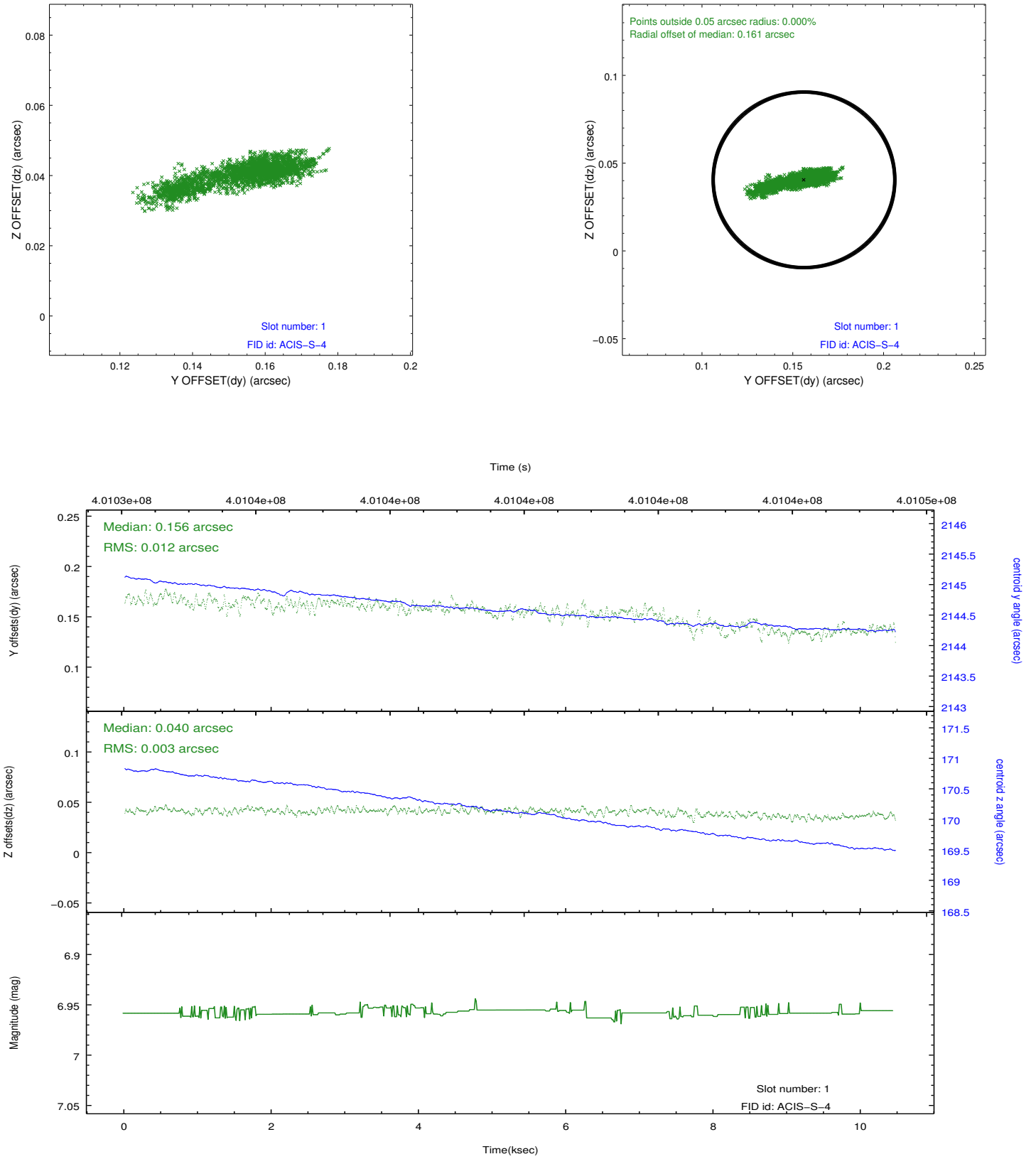


## 2.5 FID Slots

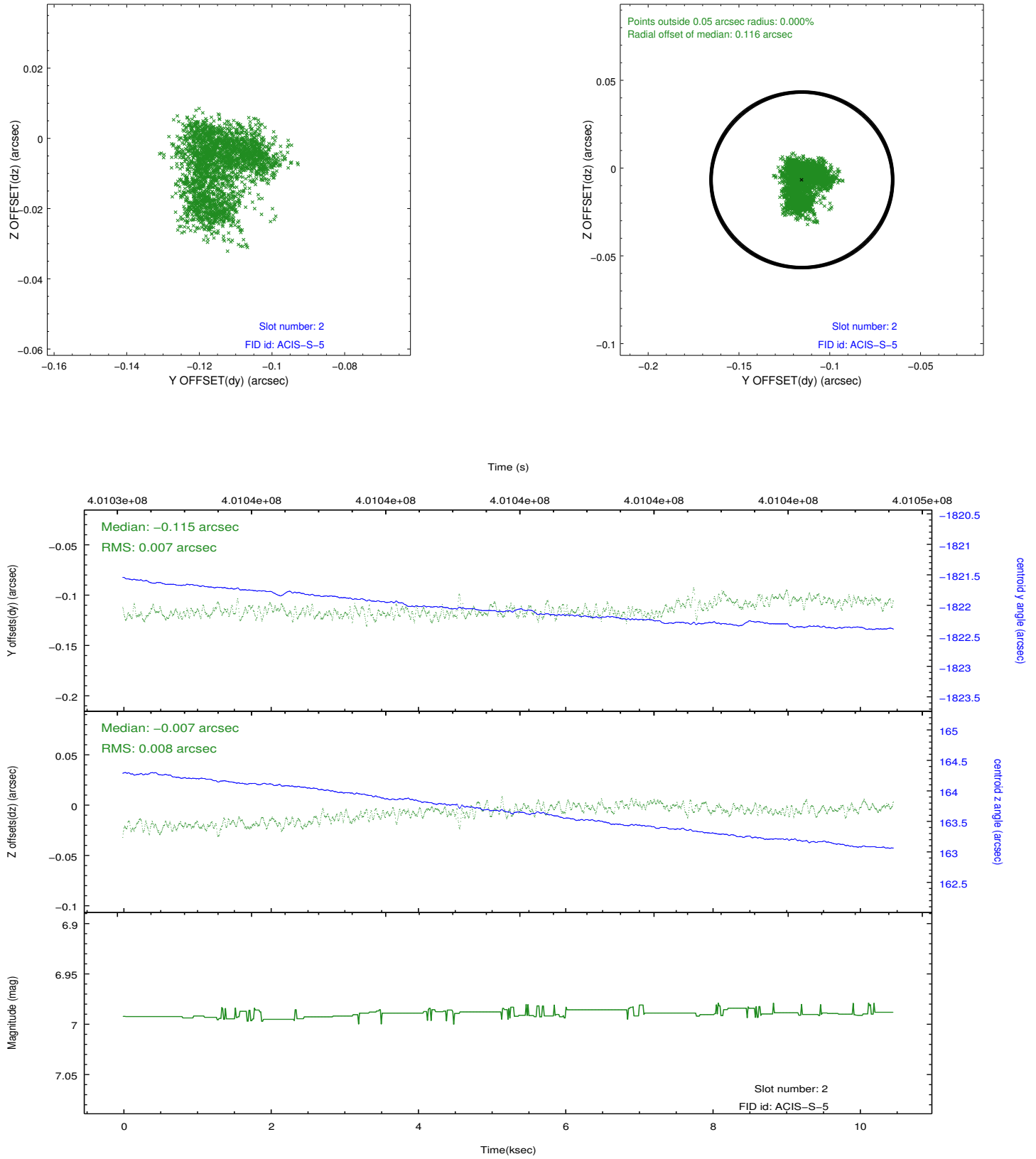
### 2.5.1 Slot 0



## 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)	2012.07.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.35096655798

### A.2 Comments

Joint proposal with HST.