

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 11348 - L2 Version 2  
Chandra X-Ray Center

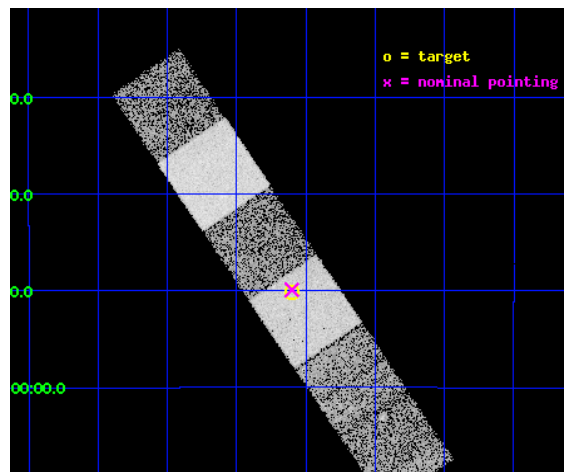
L2 Processing Date : Jun 15 2012

## 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

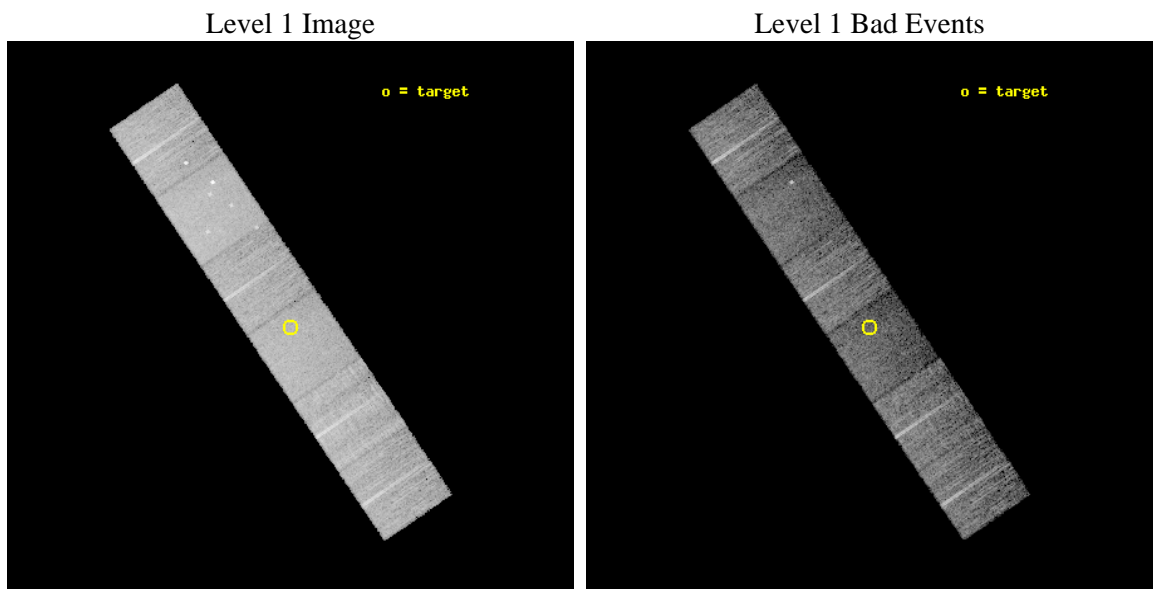
seq_num	600867	Sequence number
obs_id	11348	Observation id
title	Accretion onto nuclear black holes in early type galaxies: comparing field vs. clusters	Proposal title
observer	Elena Gallo	Principal investigator
object	NGC1172	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	45.4002	Observer's specified target RA [deg]
dec_targ	-14.83661	Observer's specified target Dec [deg]
ra_nom	45.4003729598	Nominal RA [deg]
dec_nom	-14.831788774778	Nominal Dec [deg]
roll_nom	55.856465119674	Nominal Roll [deg]
revision	2	Processing version of data
ontime	6537.5999757051	Sum of GTIs [s]
livetime	6454.8169483427	Livetime [s]
ontime4	6537.5999757051	Sum of GTIs [s]
ontime5	6537.5999757051	Sum of GTIs [s]
ontime6	6537.5999757051	Sum of GTIs [s]
ontime7	6537.5999757051	Sum of GTIs [s]
ontime8	6537.5999757051	Sum of GTIs [s]
ontime9	6537.5999757051	Sum of GTIs [s]
l2events	88992	Number of level 2 events



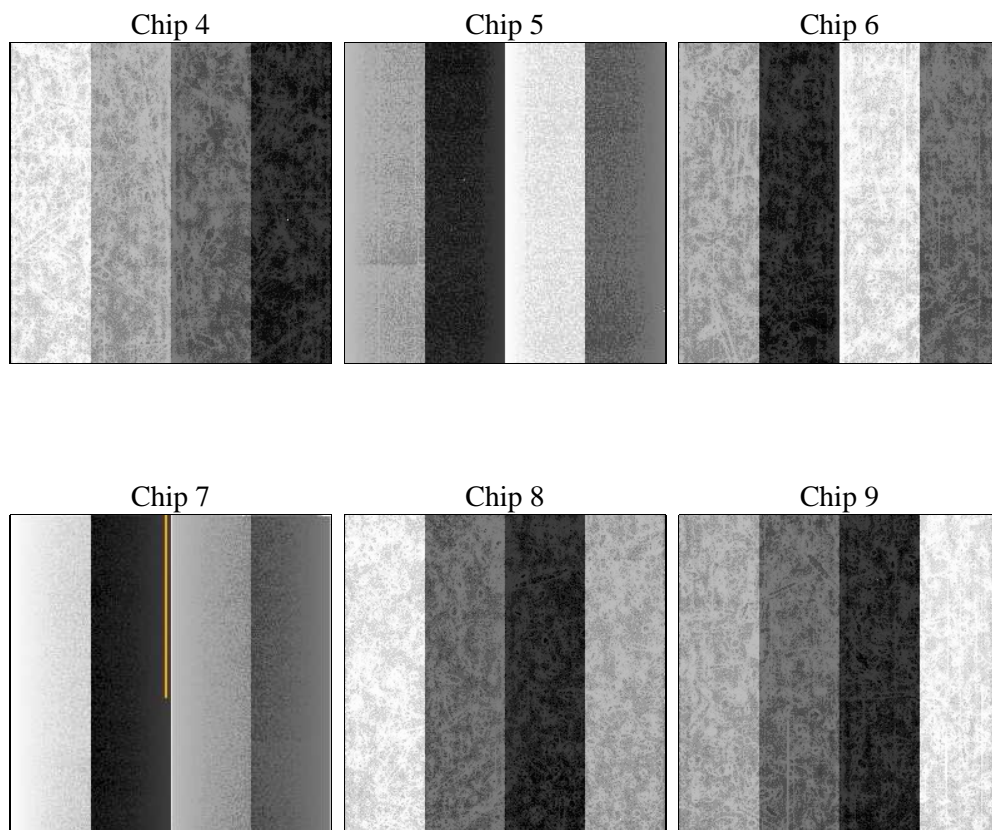
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	6500.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	6537.5999757051	Sum of GTIs [s]
caldsver	4.4.10	&#160	ontime4	6537.5999757051	Sum of GTIs [s]
date	2012-06-15T11:48:21	Date and time of file creation	ontime5	6537.5999757051	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	6537.5999757051	Sum of GTIs [s]
			ontime7	6537.5999757051	Sum of GTIs [s]
			ontime8	6537.5999757051	Sum of GTIs [s]
			ontime9	6537.5999757051	Sum of GTIs [s]
			l1events	406488	Number of level 1 events

### 2.1.4 Events

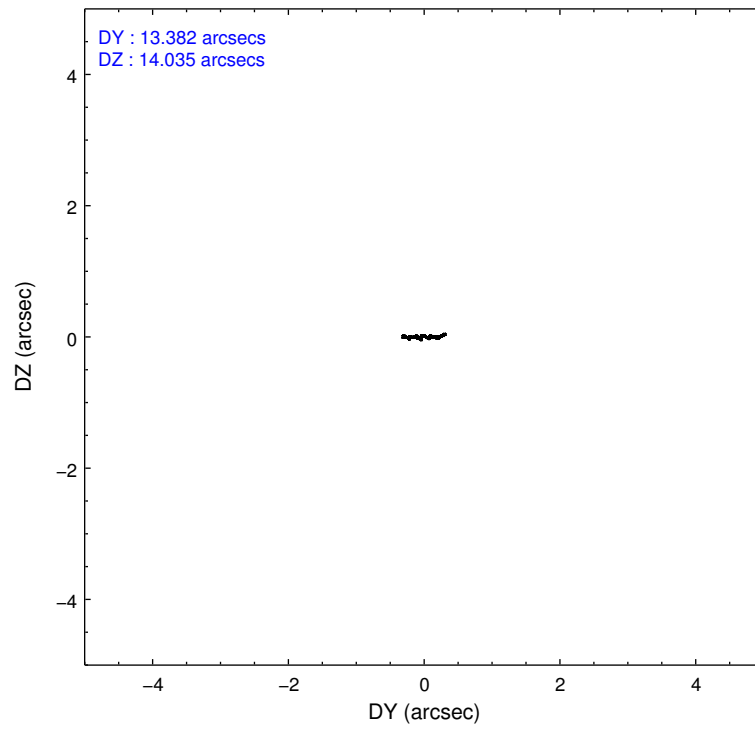
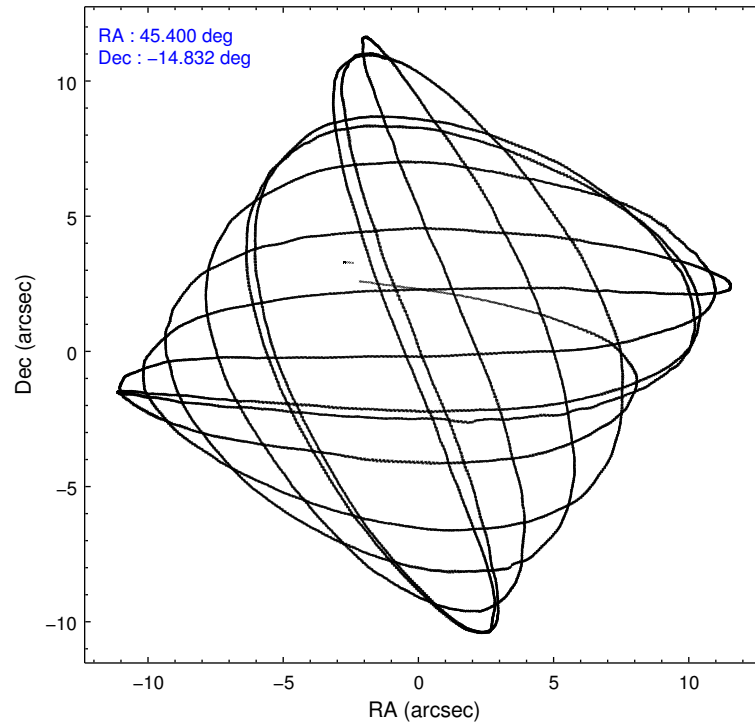
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	67394	82386	59461	65883	74251	57113	grade 0 events	3262	4052	2053	2741	5595	2417
rejected events	60166	41484	53502	36157	55606	50607		4%	4%	3%	4%	7%	4%
rejected %	89%	50%	89%	54%	74%	88%	grade 1 events	68	180	32	103	60	31
								0%	0%	0%	0%	0%	0%
							grade 2 events	1609	12603	1367	5957	4255	1418
								2%	15%	2%	9%	5%	2%
							grade 3 events	637	1662	628	2633	2042	674
								0%	2%	1%	3%	2%	1%
							grade 4 events	673	1614	604	2660	1787	655
								0%	1%	1%	4%	2%	1%
							grade 5 events	2384	6451	2346	6928	3484	2606
								3%	7%	3%	10%	4%	4%
							grade 6 events	1054	21026	1312	15765	4971	1347
								1%	25%	2%	23%	6%	2%
							grade 7 events	57707	34798	51119	29096	52057	47965
								85%	42%	85%	44%	70%	83%

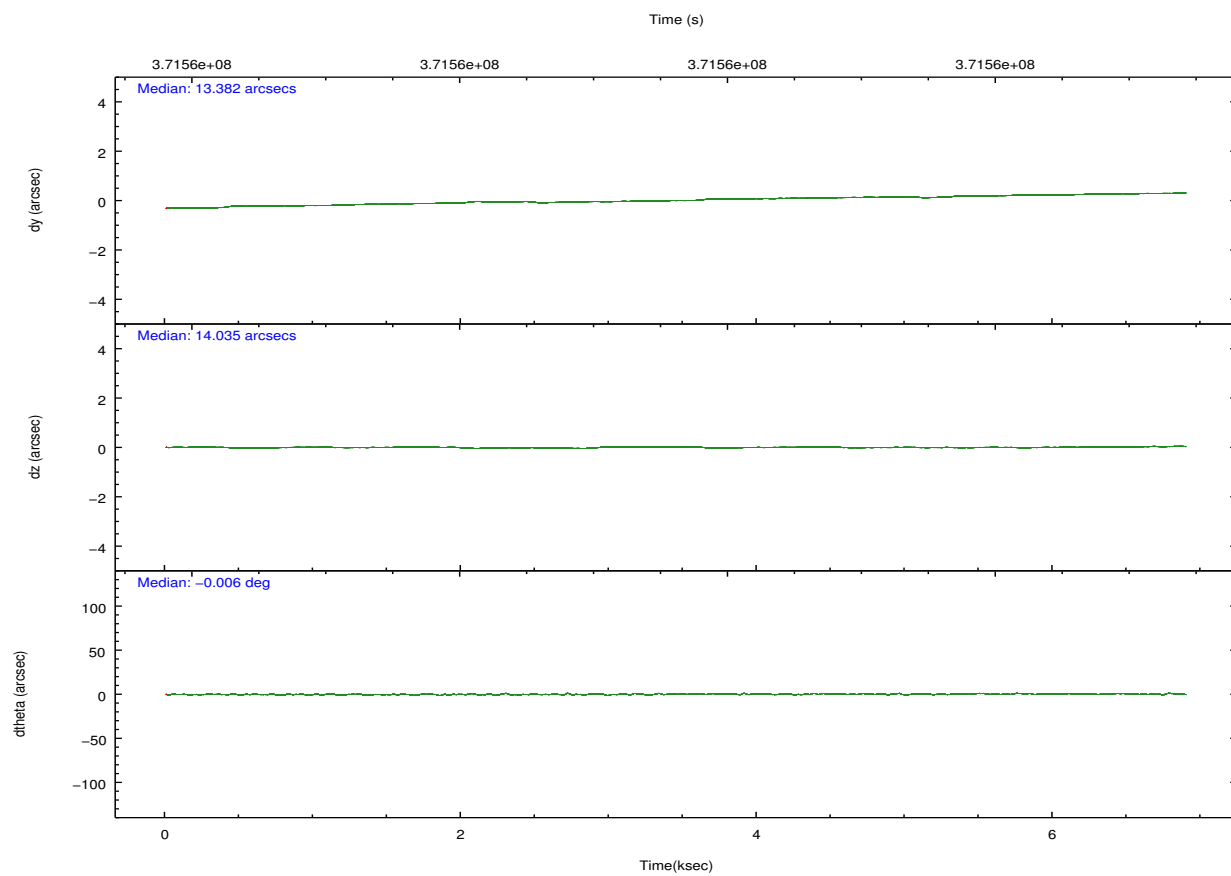
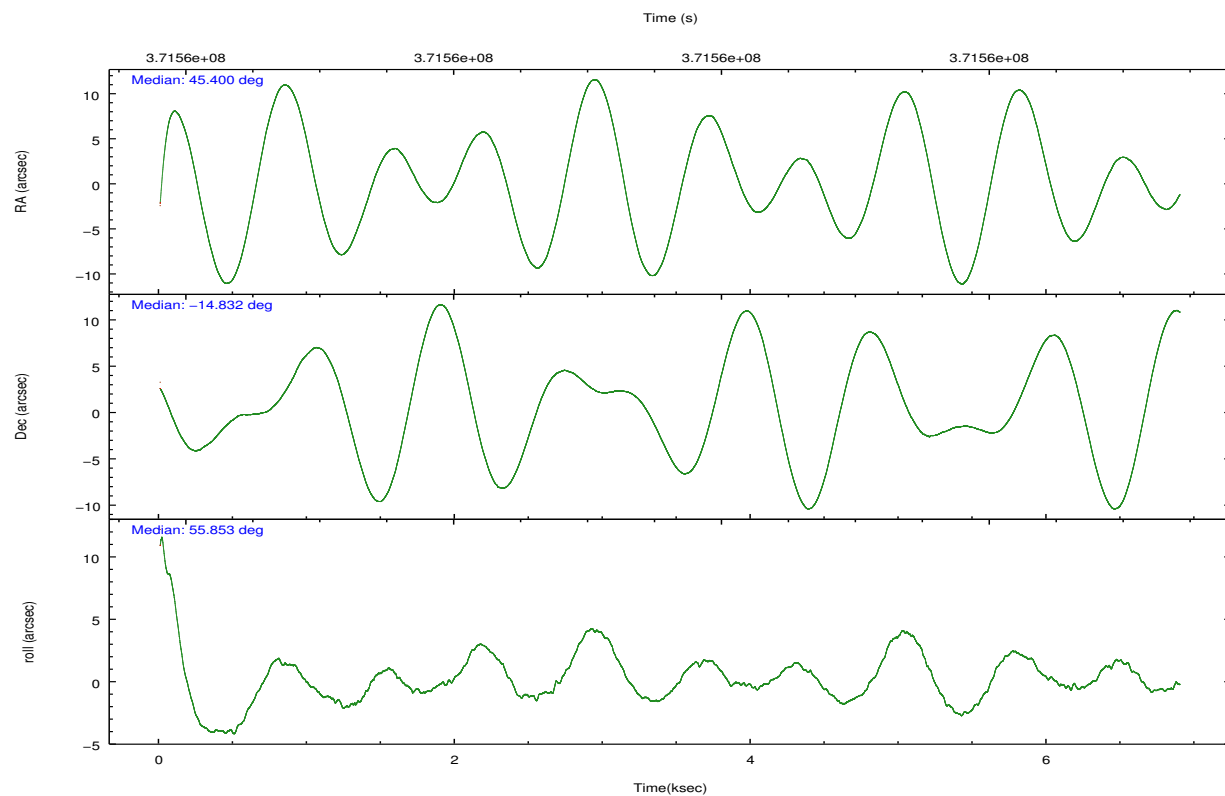


## 2.2 Compared Parameters

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	45.398751	45.40037295979978	CCD I2 on	N	N
[deg] Pointing Dec	-14.859063	-14.83178877477758	CCD I3 on	N	N
[deg] Pointing Roll	55.699408	55.85646511967418	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	-190.145094680475	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01257209746719923	CCD S4 on	Y	Y
[s] Observation start time (MET)	371556565.184000	371555455.31434	CCD S5 on	O2	Y
Observation start date	2009-10-10T10:08:19	2009-10-10T09:50:55	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	371563065.184000	371564017.13977	On-chip summing requested	N	N
Observation end date	2009-10-10T11:56:39	2009-10-10T12:13:37	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



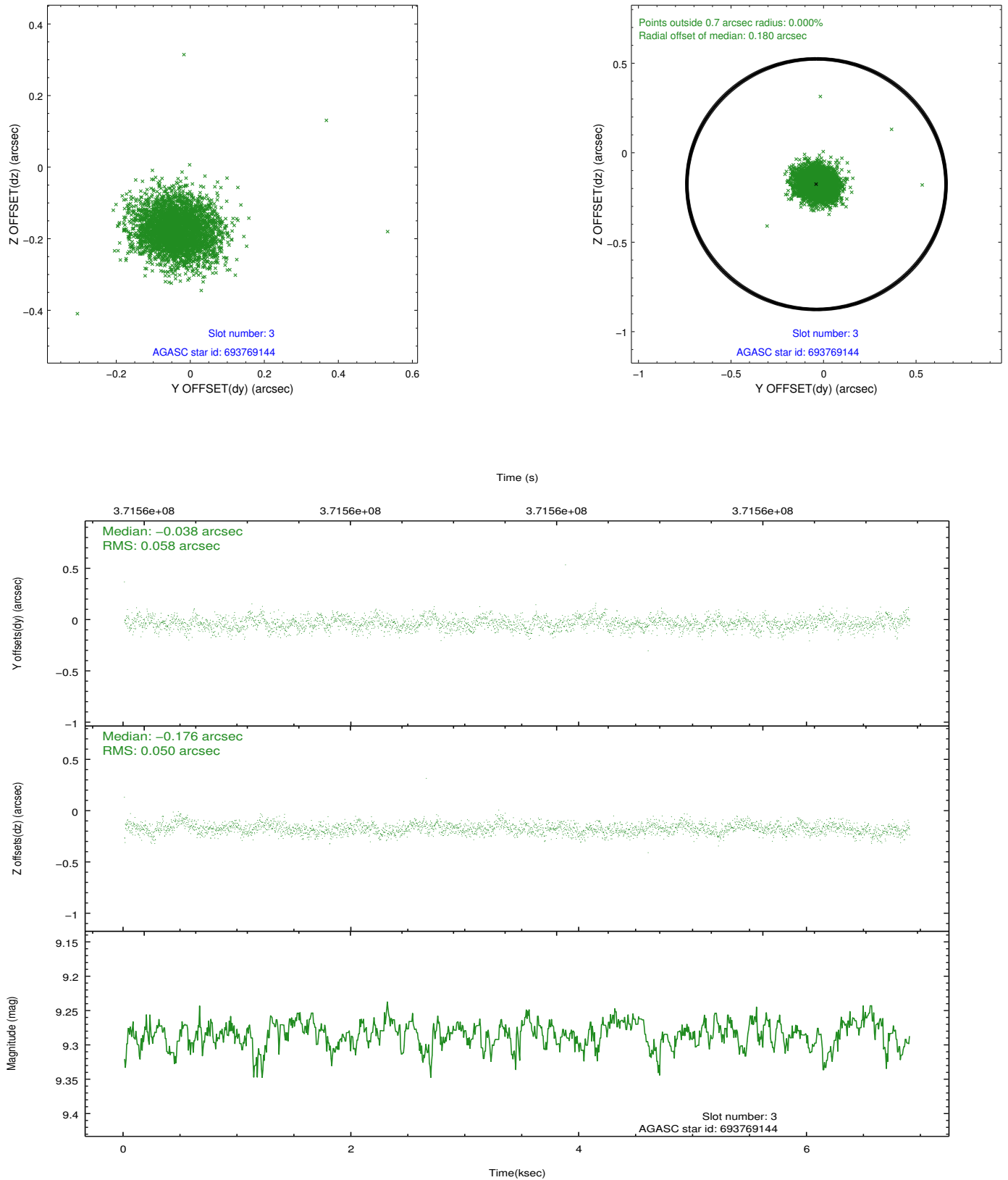


### Slot Statistics

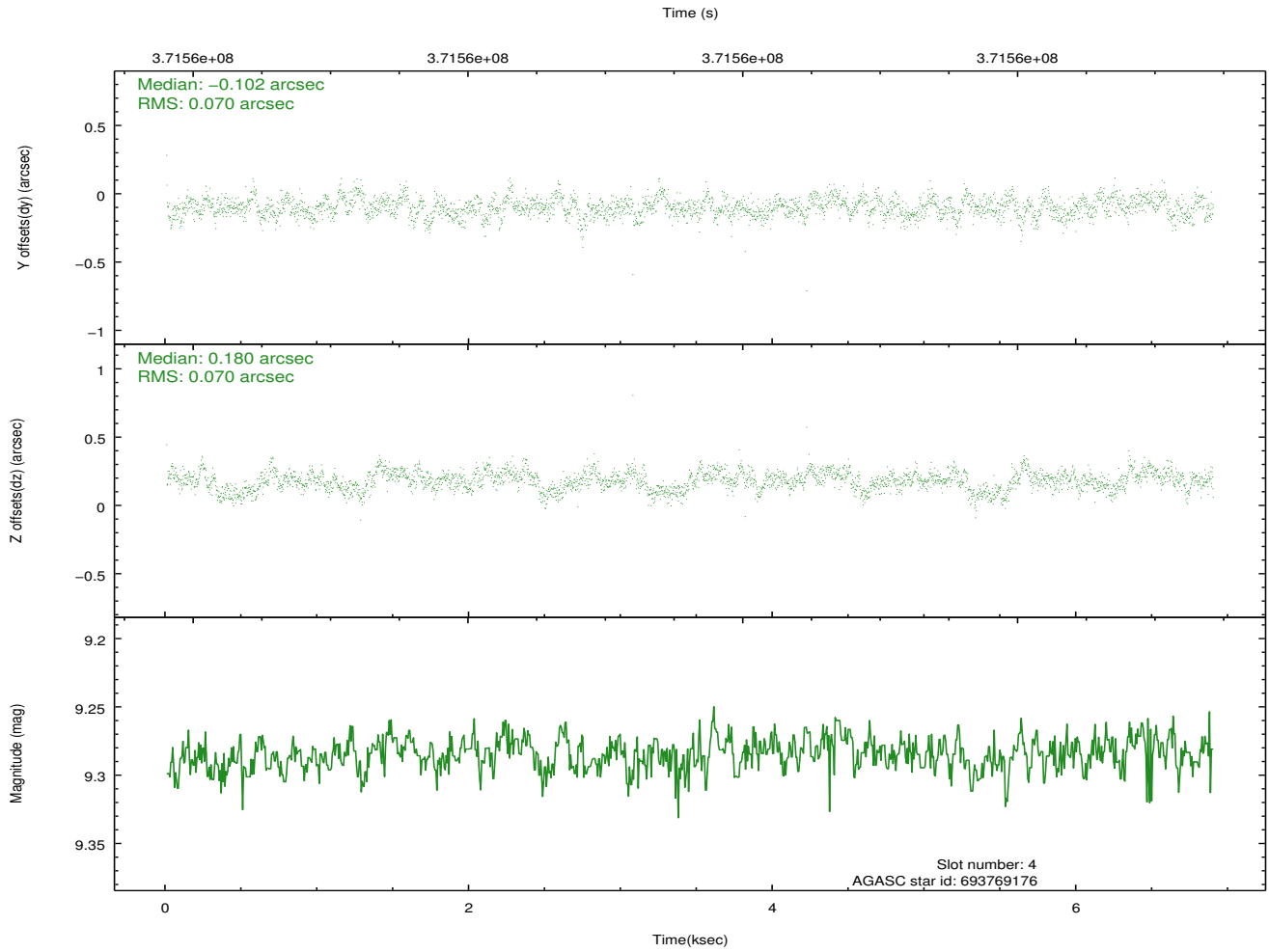
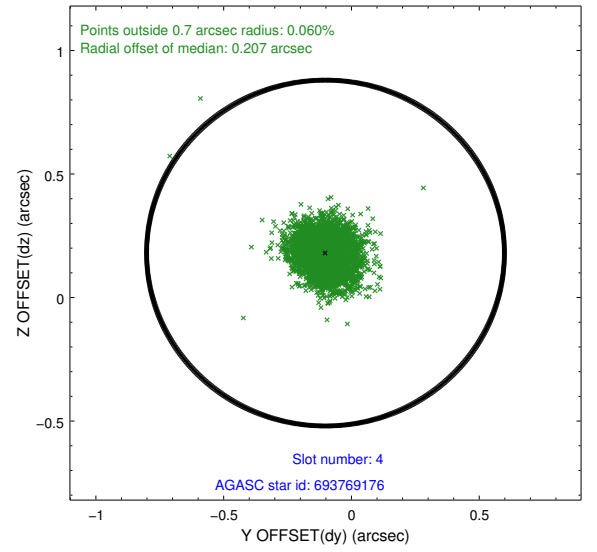
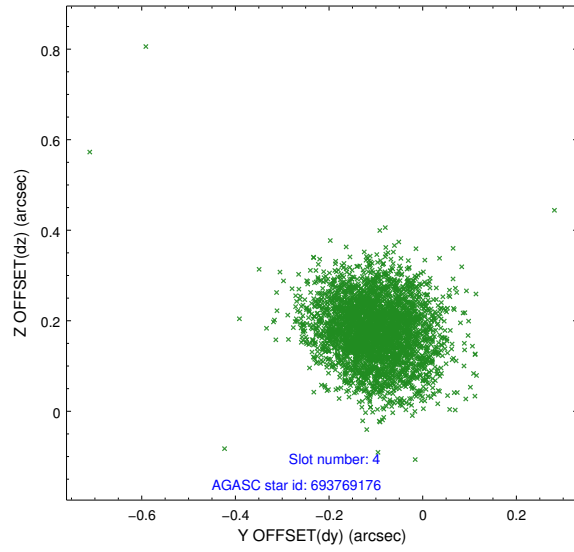
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	6.96	1682	0.067	-0.011	0.006	0.012	0.000000	0.000000	929.80	-1730.92
1	FID	ACIS-S-5	7.00	1682	-0.138	0.048	0.008	0.015	0.000000	0.000000	-1818.95	165.81
2	FID	ACIS-S-6	7.10	1681	0.049	-0.025	0.010	0.016	0.000000	0.000000	394.40	810.66
3	GUIDE	693769144	9.28	3354	-0.038	-0.176	0.080	0.130	45.707244	-14.396182	1984.23	49.34
4	GUIDE	693769176	9.28	3359	-0.102	0.180	0.103	0.165	45.949839	-14.555395	1984.17	-972.01
5	GUIDE	693770048	9.85	3348	0.030	0.022	0.123	0.209	45.593954	-14.253175	2186.50	666.19
6	GUIDE	768611896	8.85	3362	0.072	-0.100	0.085	0.137	44.774957	-15.041797	-1767.43	1419.18
7	GUIDE	768745832	8.40	3362	0.026	0.077	0.083	0.128	45.636187	-15.272610	-764.53	-1520.44

## 2.4 Star Slots

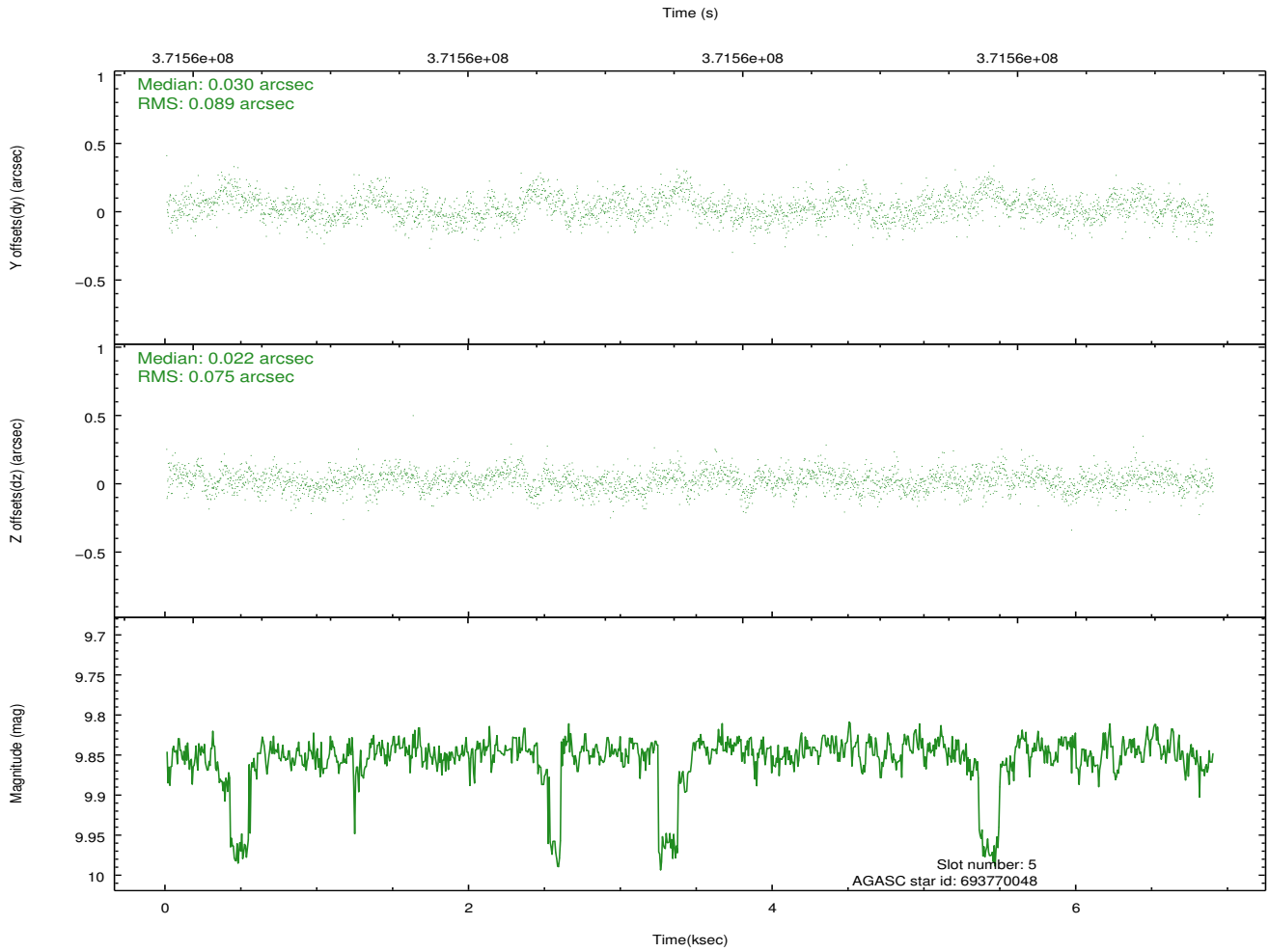
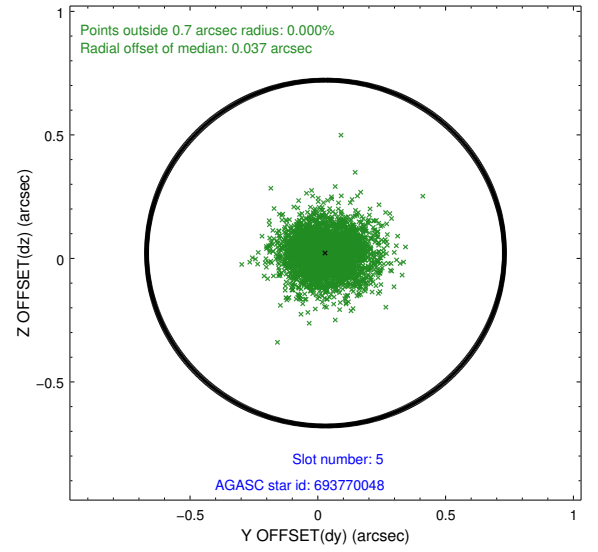
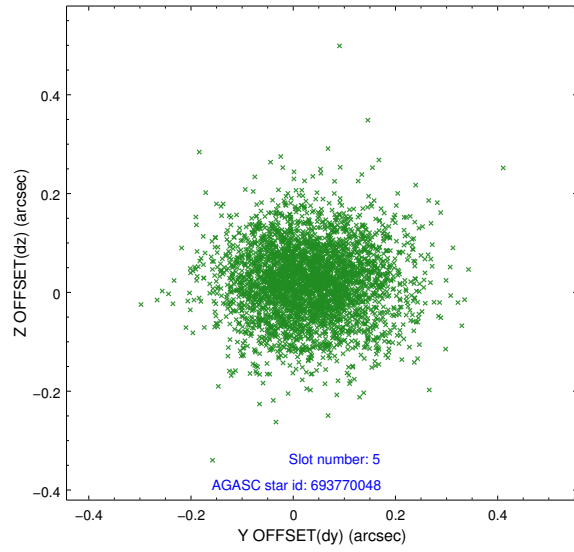
### 2.4.1 Slot 3



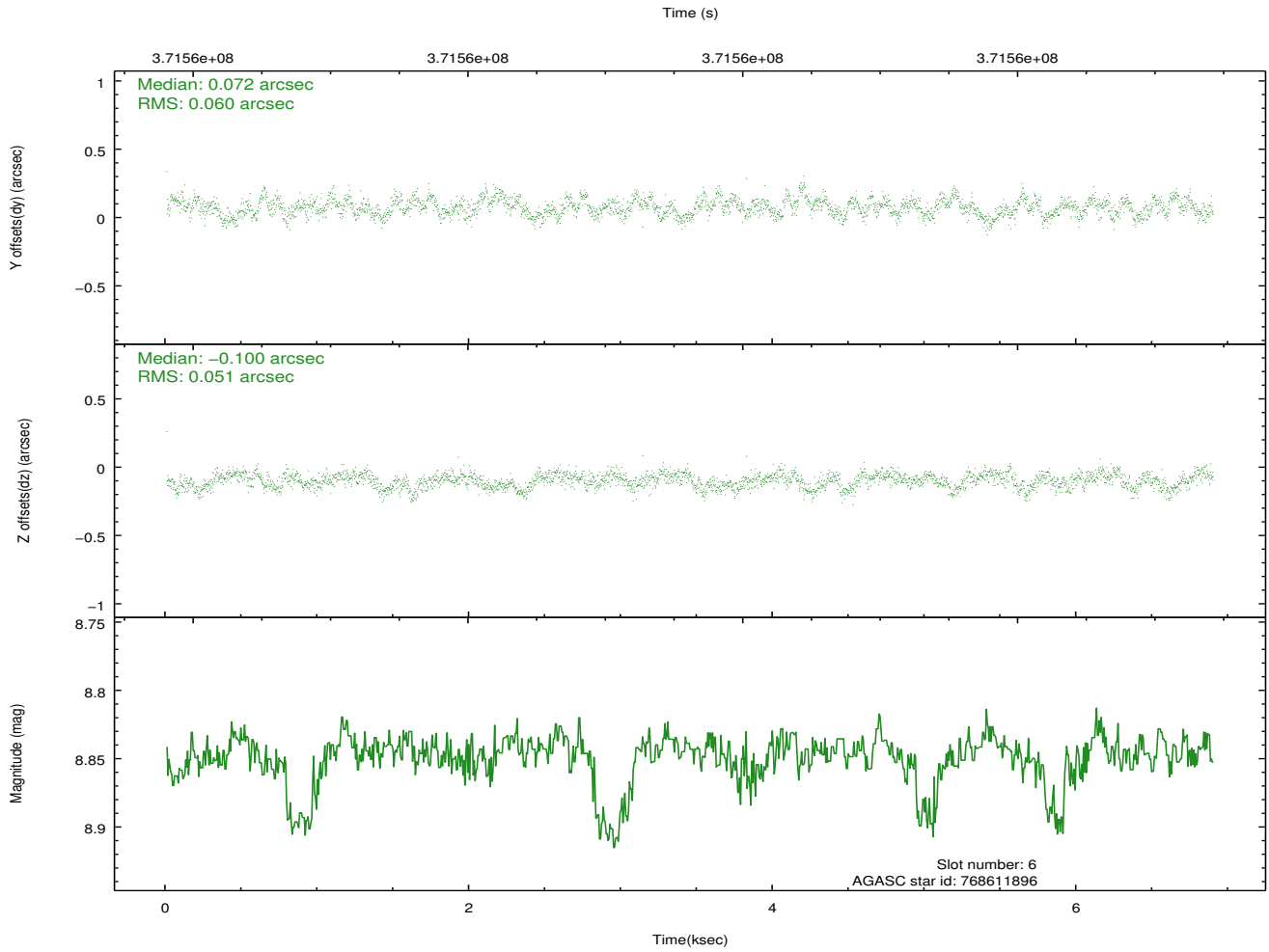
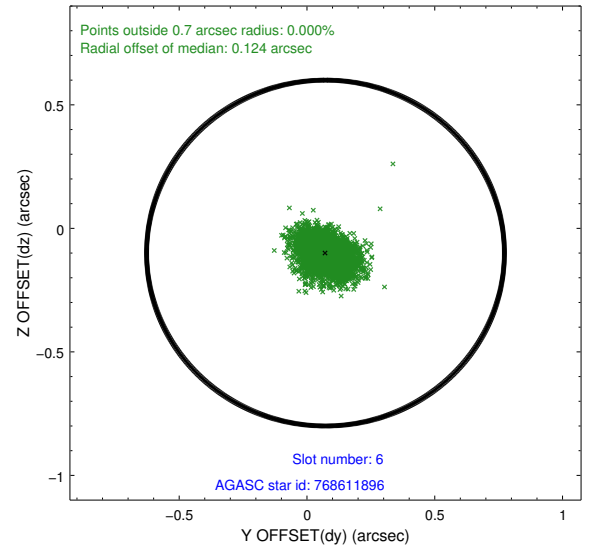
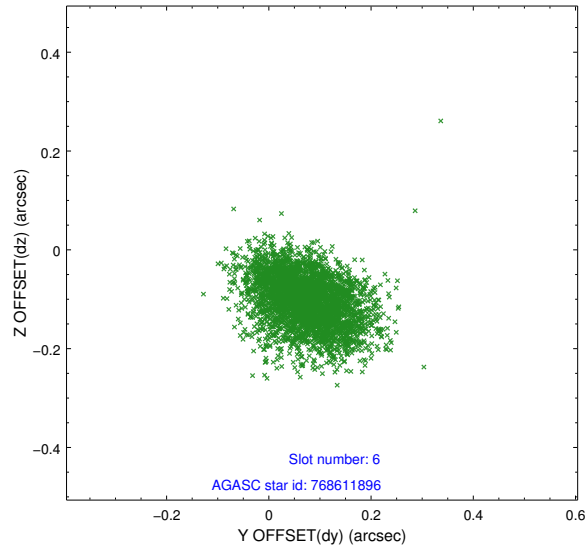
## 2.4.2 Slot 4



### 2.4.3 Slot 5

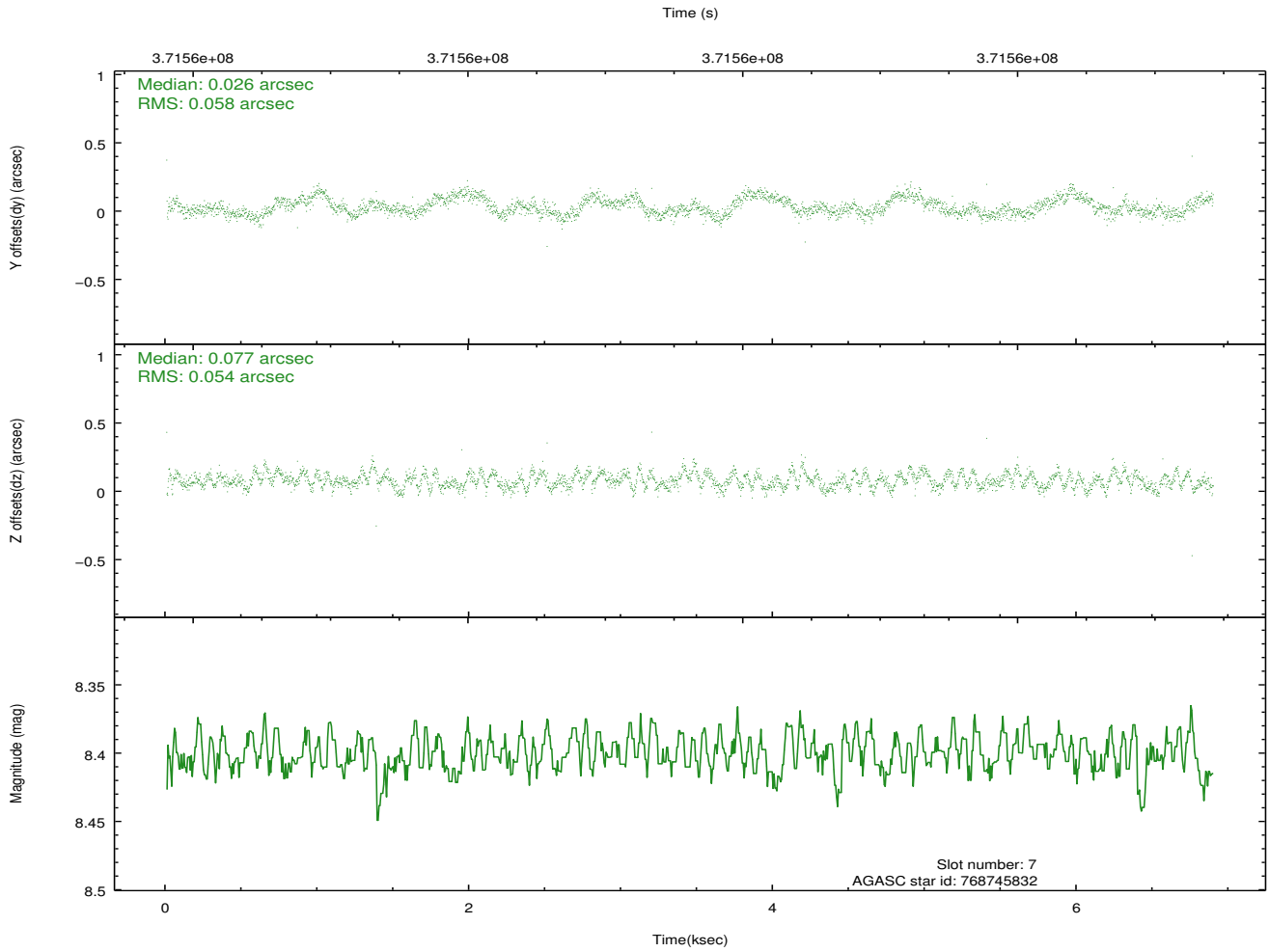
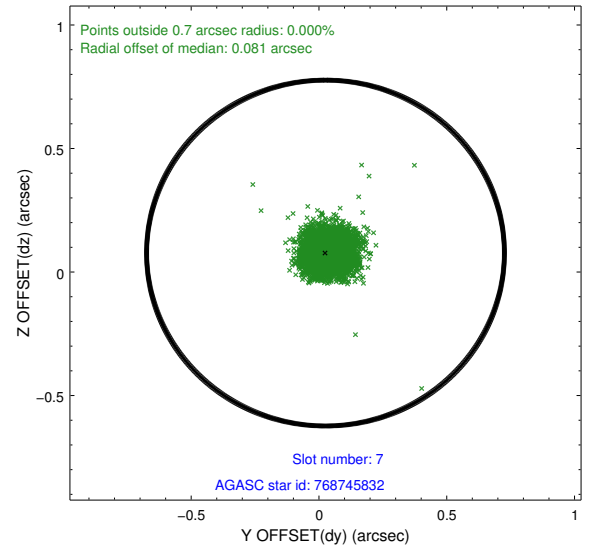
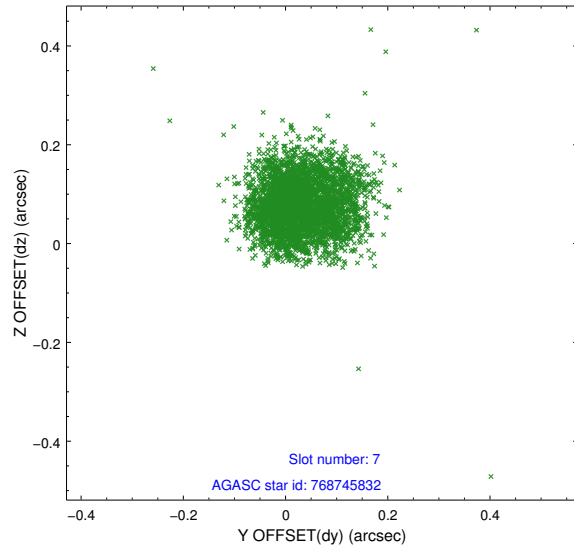


## 2.4.4 Slot 6



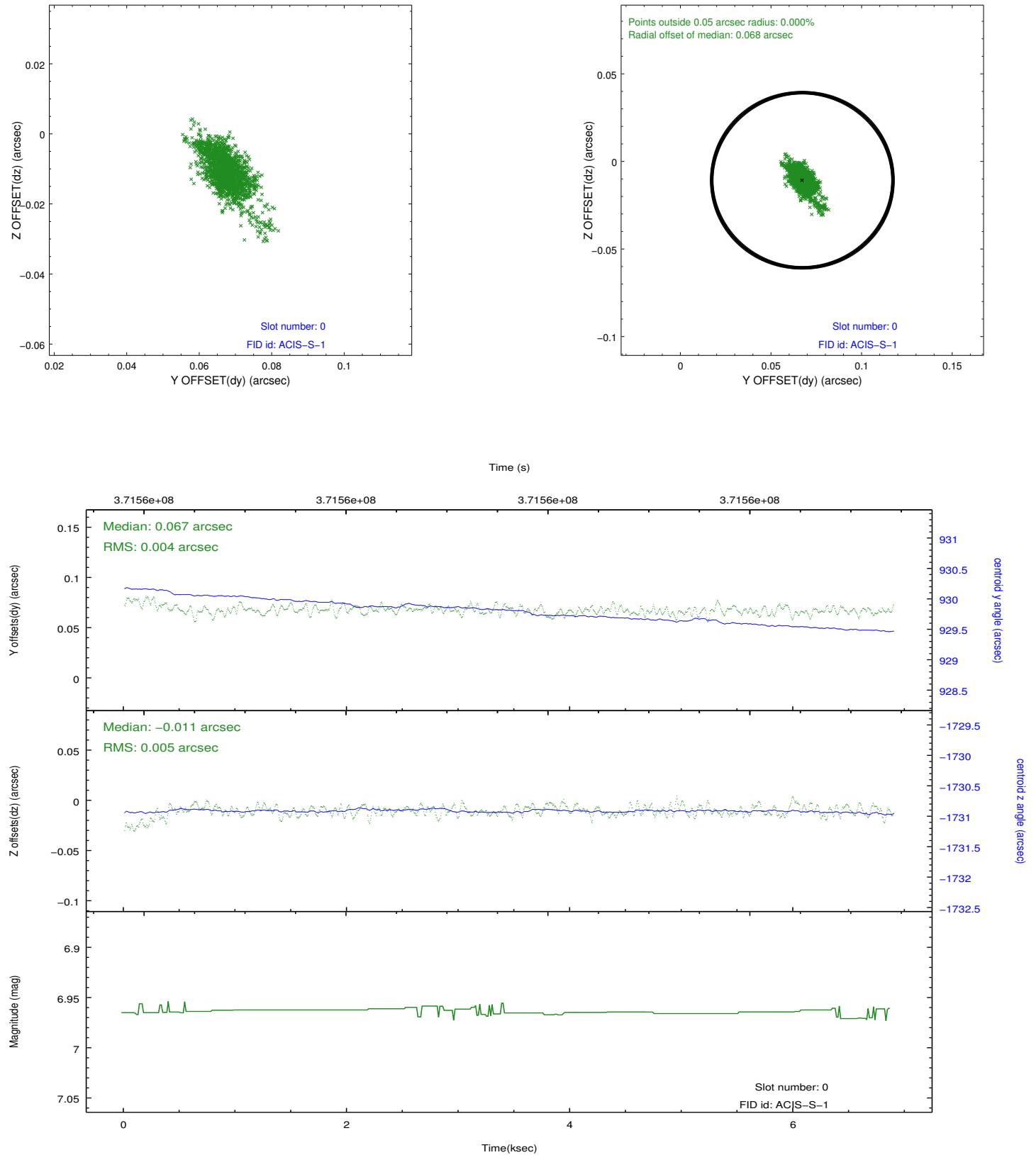


## 2.4.5 Slot 7

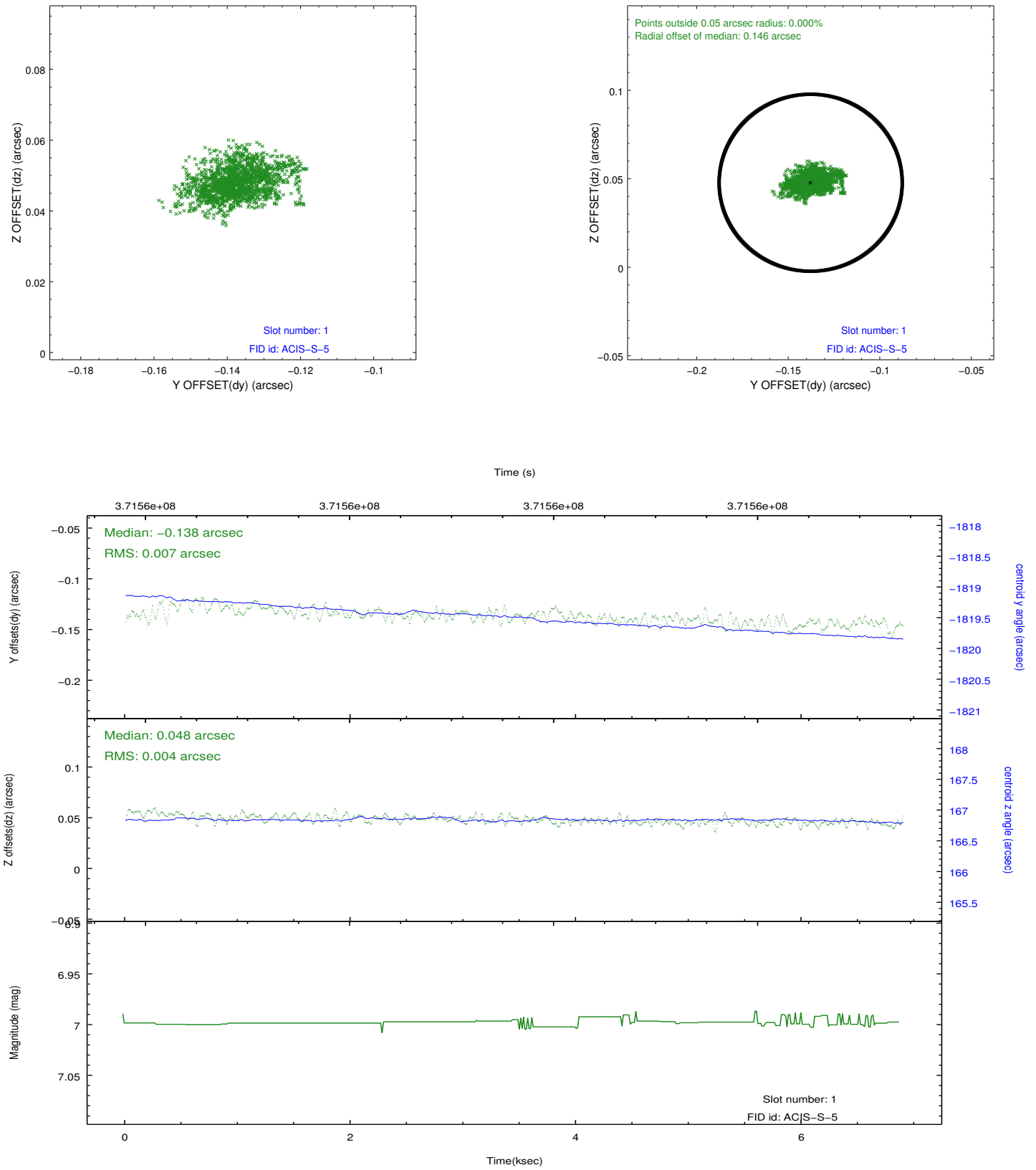


## 2.5 FID Slots

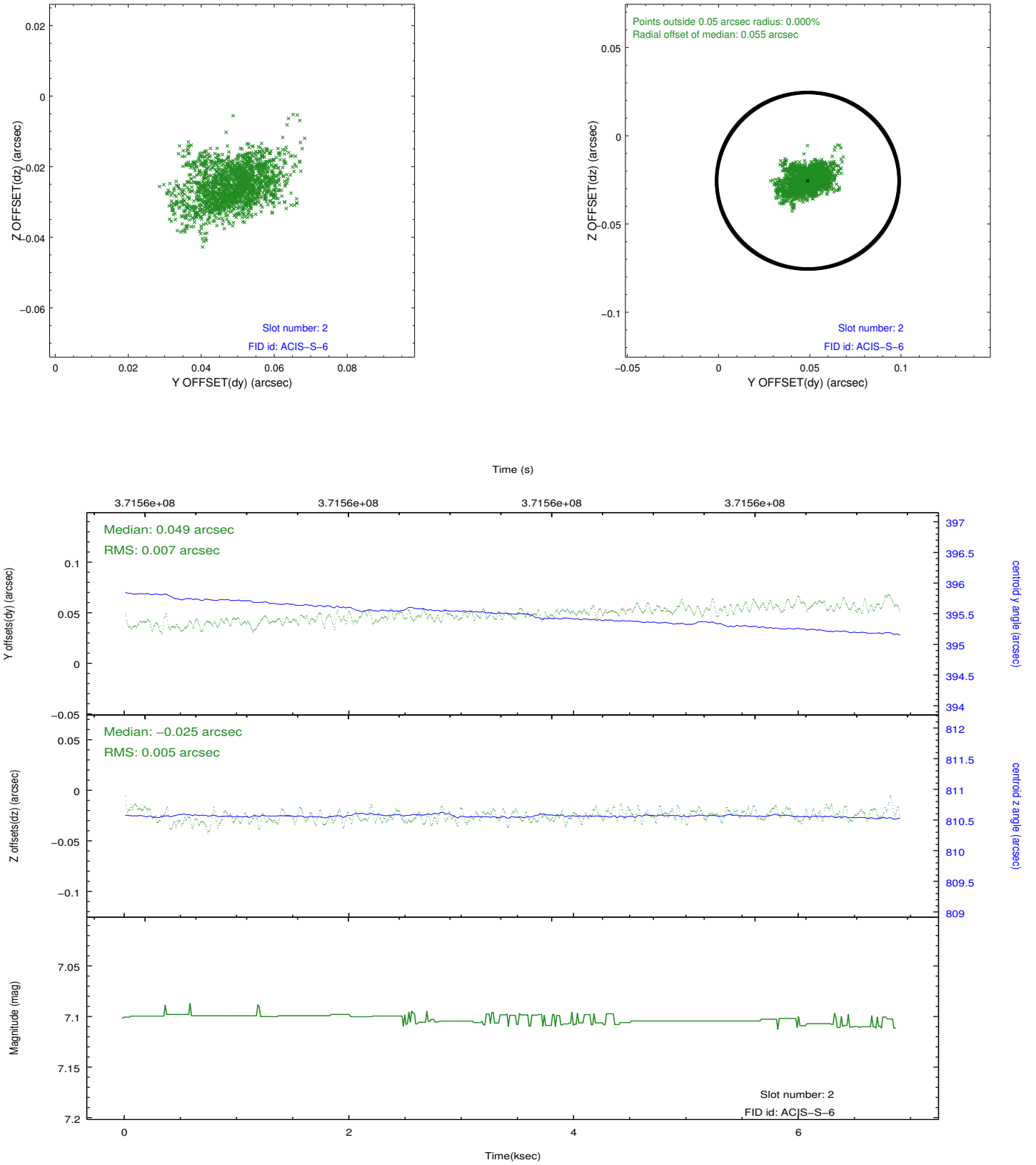
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2012.06.19
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	6.5375999757051

### A.2 Comments