

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 10490 - L2 Version 2  
Chandra X-Ray Center

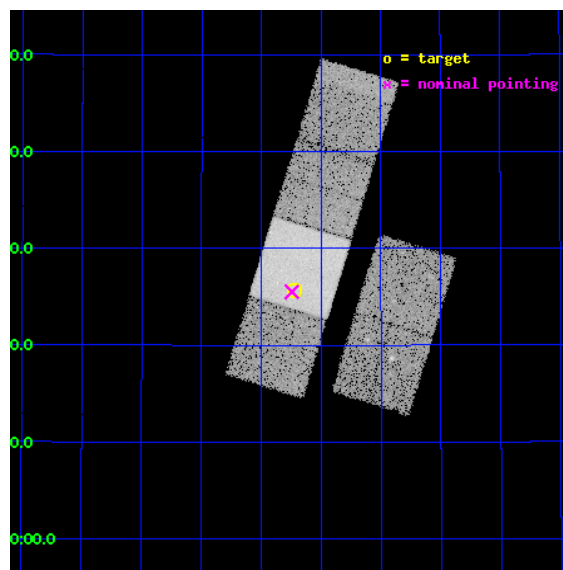
L2 Processing Date : May 29 2012

## 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

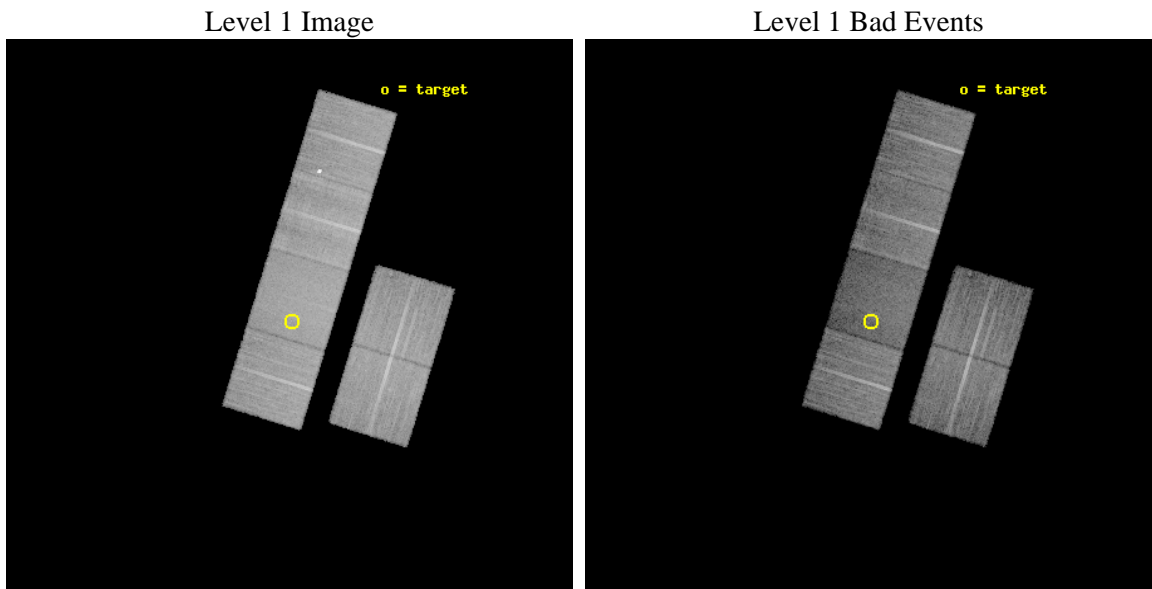
seq_num	900861	Sequence number
obs_id	10490	Observation id
title	Identifying the host galaxies for optically dark gamma-ray bursts	&#160
observer	Dr Andrew Levan	Principal investigator
object	GRB090113	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	32.056667	Observer's specified target RA [deg]
dec_targ	33.428583	Observer's specified target Dec [deg]
ra_nom	32.061022307018	Nominal RA [deg]
dec_nom	33.42540651888	Nominal Dec [deg]
roll_nom	287.08940457584	Nominal Roll [deg]
revision	2	Processing version of data
ontime	15038.822947502	Sum of GTIs [s]
liveltime	14848.392316049	Livetime [s]
ontime2	15035.4177472	Sum of GTIs [s]
ontime3	15035.499886811	Sum of GTIs [s]
ontime6	15038.781907499	Sum of GTIs [s]
ontime7	15038.822947502	Sum of GTIs [s]
ontime8	15038.699827492	Sum of GTIs [s]
ontime9	15035.622967303	Sum of GTIs [s]
l2events	120557	Number of level 2 events



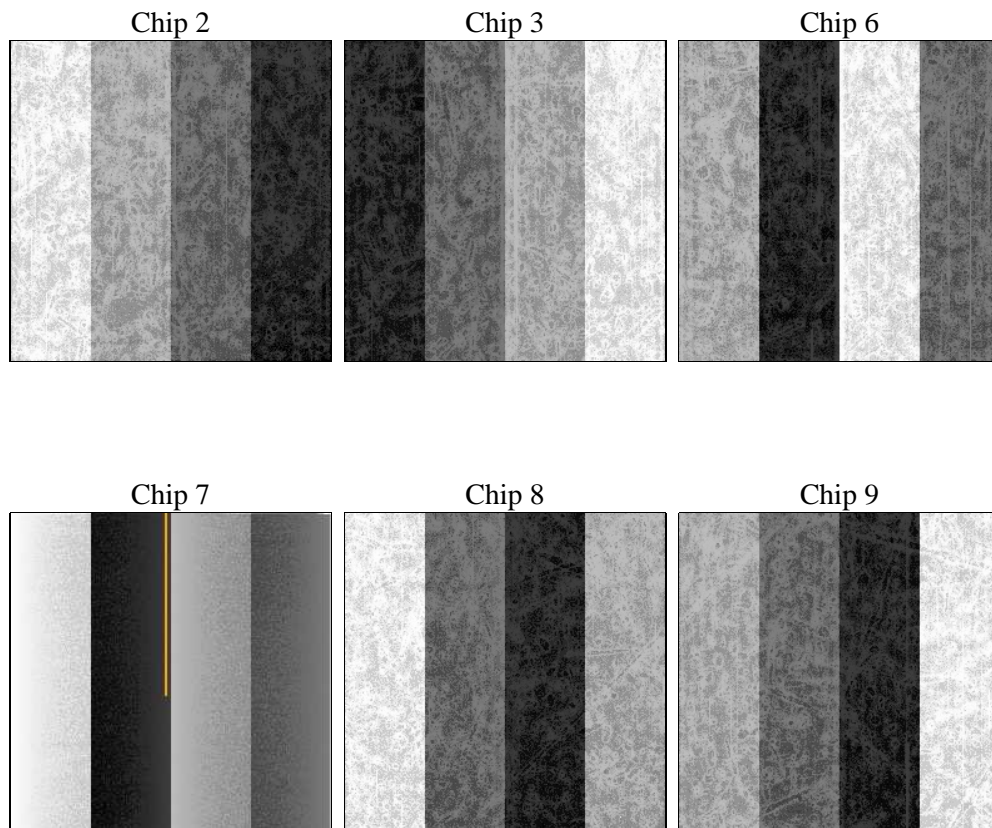
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	15000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	15038.822947502	Sum of GTIs [s]
caldbver	4.4.9	&#160	ontime2	15035.4177472	Sum of GTIs [s]
date	2012-05-29T03:02:01	Date and time of file creation	ontime3	15035.499886811	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	15038.781907499	Sum of GTIs [s]
			ontime7	15038.822947502	Sum of GTIs [s]
			ontime8	15038.699827492	Sum of GTIs [s]
			ontime9	15035.622967303	Sum of GTIs [s]
			l1events	808189	Number of level 1 events

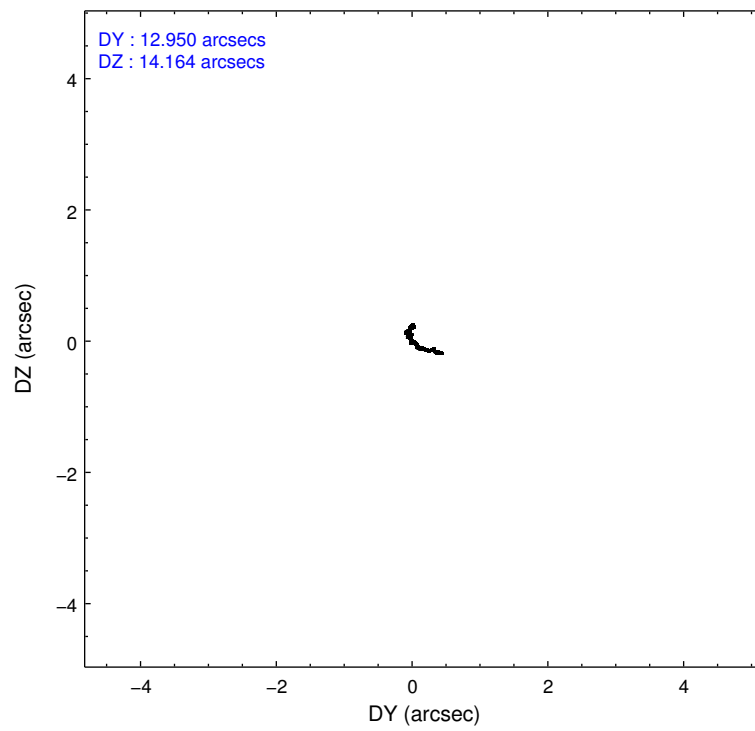
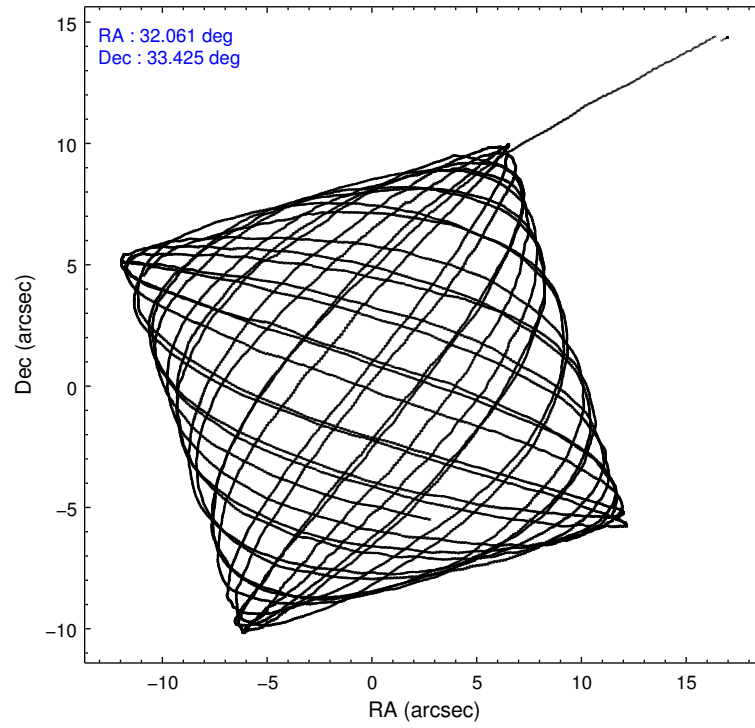
### 2.1.4 Events

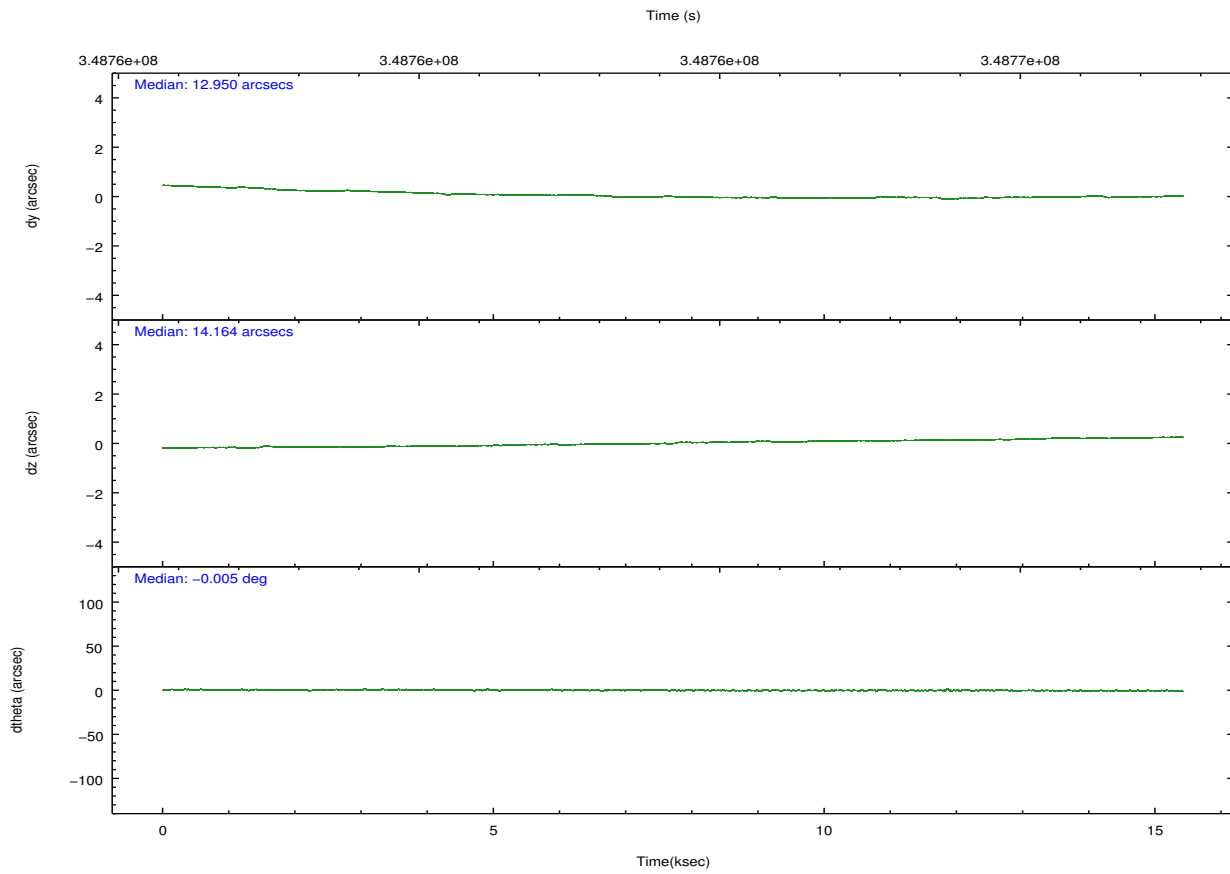
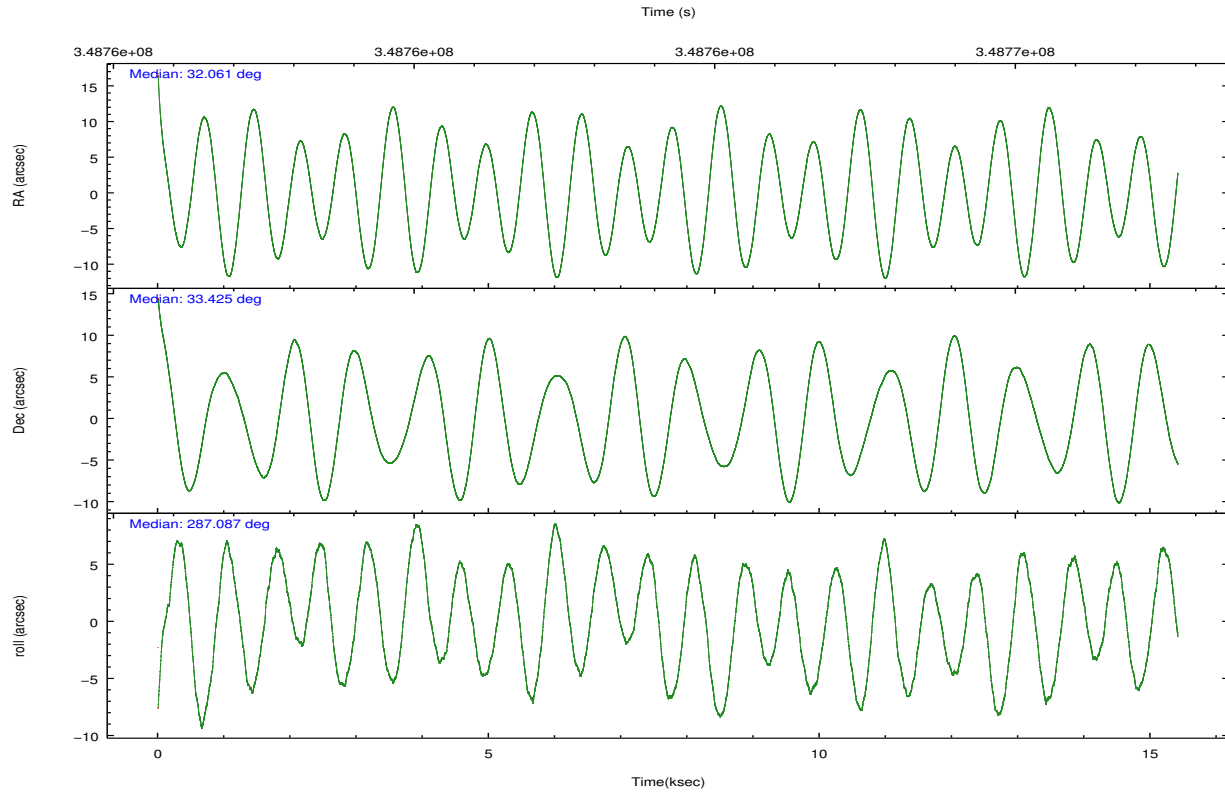
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8	ccd 9		ccd 2	ccd 3	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	125288	118096	130507	142772	155884	135642	grade 0 events	4558	4176	4436	6094	11396	9613
rejected events	112891	106381	117421	77962	116728	116975		3%	3%	3%	4%	7%	7%
rejected %	90%	90%	89%	54%	74%	86%	grade 1 events	76	71	67	168	130	95
								0%	0%	0%	0%	0%	0%
							grade 2 events	2938	2470	2951	13057	9255	3071
								2%	2%	2%	9%	5%	2%
							grade 3 events	1300	1327	1388	5994	4377	1477
								1%	1%	1%	4%	2%	1%
							grade 4 events	1328	1319	1425	5870	3966	1522
								1%	1%	1%	4%	2%	1%
							grade 5 events	4200	5152	5274	15077	7394	6062
								3%	4%	4%	10%	4%	4%
							grade 6 events	2281	2428	2894	33821	10179	2992
								1%	2%	2%	23%	6%	2%
							grade 7 events	108607	101153	112072	62691	109187	110810
								86%	85%	85%	43%	70%	81%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-236789	ACIS-236789	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	32.036726	32.06102230701802	CCD I2 on	O3	Y
[deg] Pointing Dec	33.443726	33.42540651888021	CCD I3 on	O2	Y
[deg] Pointing Roll	286.946165	287.0894045758449	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	Y	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	Y	Y
[s] Observation start time (MET)	348756936.184000	348755758.02685	CCD S5 on	O1	Y
Observation start date	2009-01-19T12:54:30	2009-01-19T12:35:58	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	348771936.184000	348772639.77768	On-chip summing requested	N	N
Observation end date	2009-01-19T17:04:30	2009-01-19T17:17:19	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



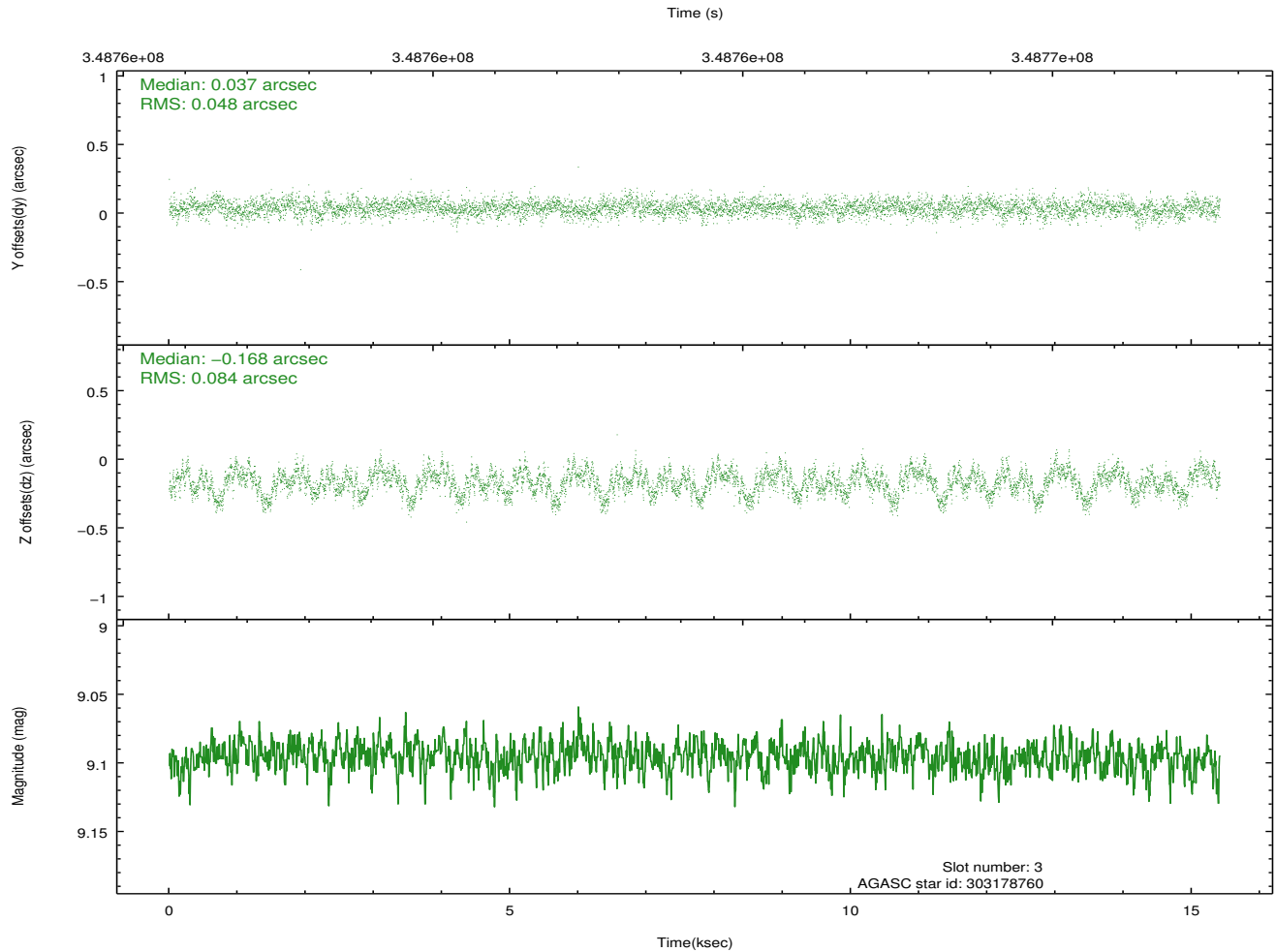
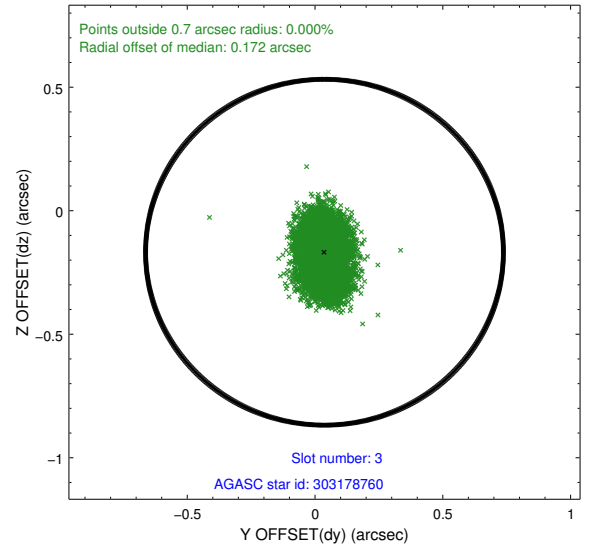
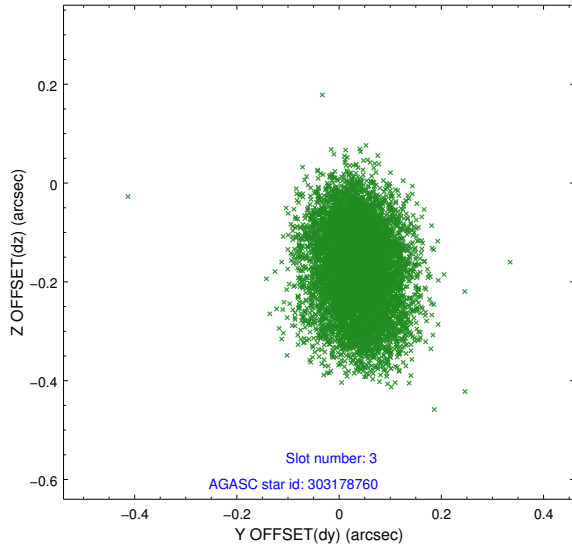


### Slot Statistics

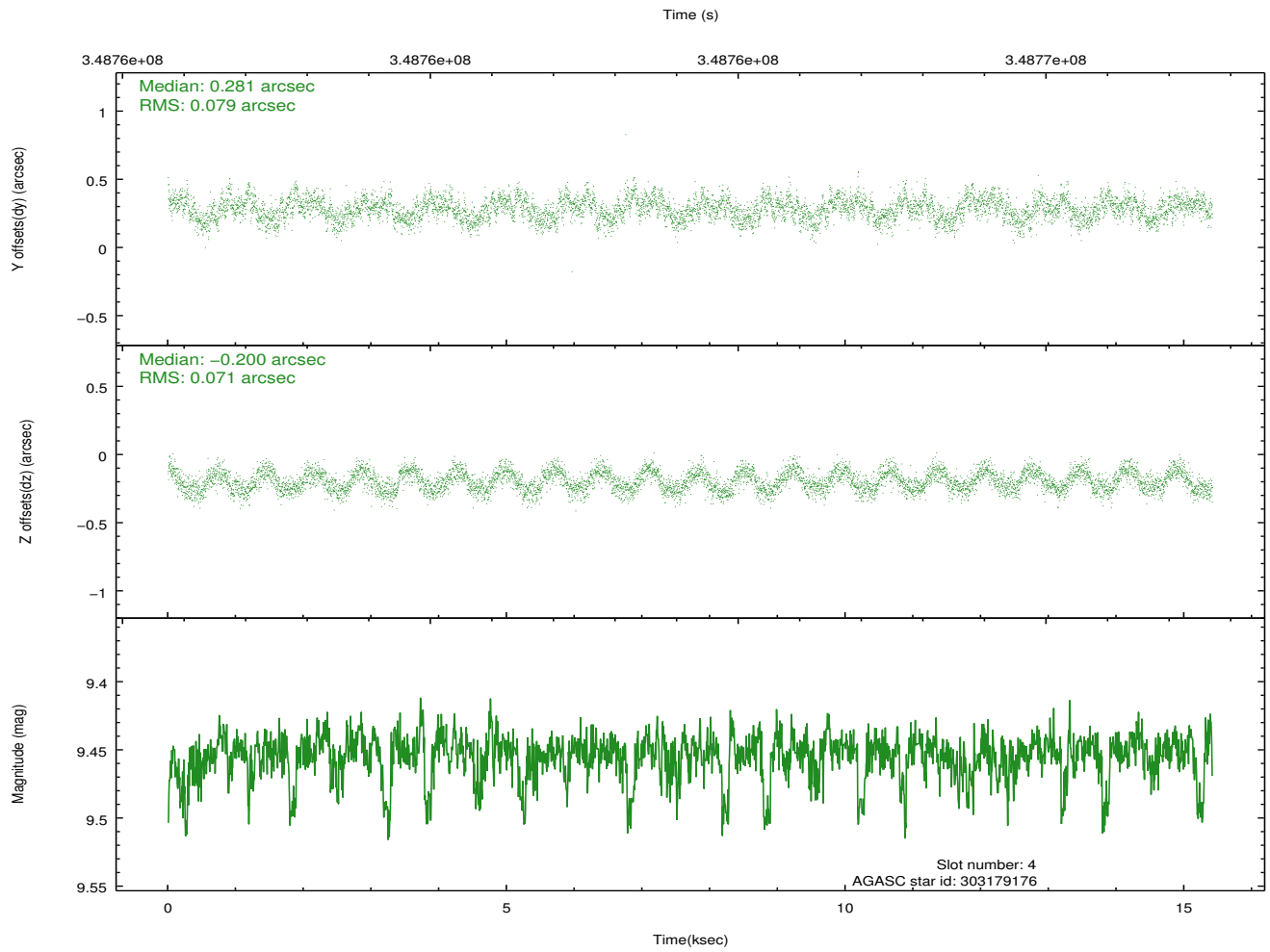
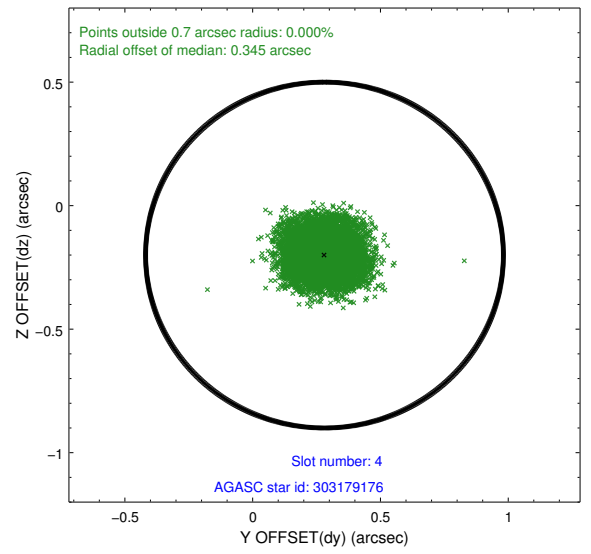
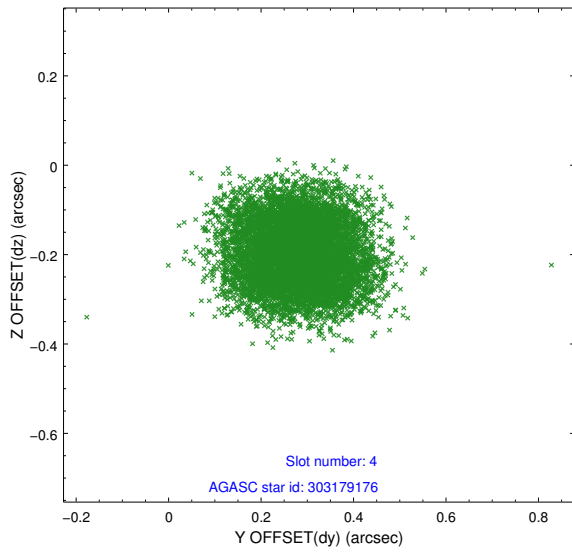
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.97	3760	-0.037	-0.038	0.007	0.012	0.000000	0.000000	-765.95	-1735.58
1	FID	ACIS-S-4	7.05	3760	0.156	0.028	0.007	0.013	0.000000	0.000000	2147.36	172.70
2	FID	ACIS-S-5	7.09	3759	-0.150	0.018	0.007	0.013	0.000000	0.000000	-1818.56	166.65
3	GUIDE	303178760	9.10	7512	0.037	-0.168	0.103	0.171	32.128728	33.340102	437.92	155.81
4	GUIDE	303179176	9.45	7510	0.281	-0.200	0.114	0.176	32.234794	32.966158	1819.21	71.49
5	GUIDE	303698216	9.26	7516	-0.150	0.117	0.091	0.152	32.334295	33.939500	-1448.94	1370.71
6	GUIDE	303704624	9.17	7514	-0.083	0.016	0.087	0.140	31.588061	33.900264	-1965.65	-802.41
7	GUIDE	303177688	9.75	7493	-0.081	0.241	0.151	0.238	32.828452	33.210762	1488.50	2039.69

## 2.4 Star Slots

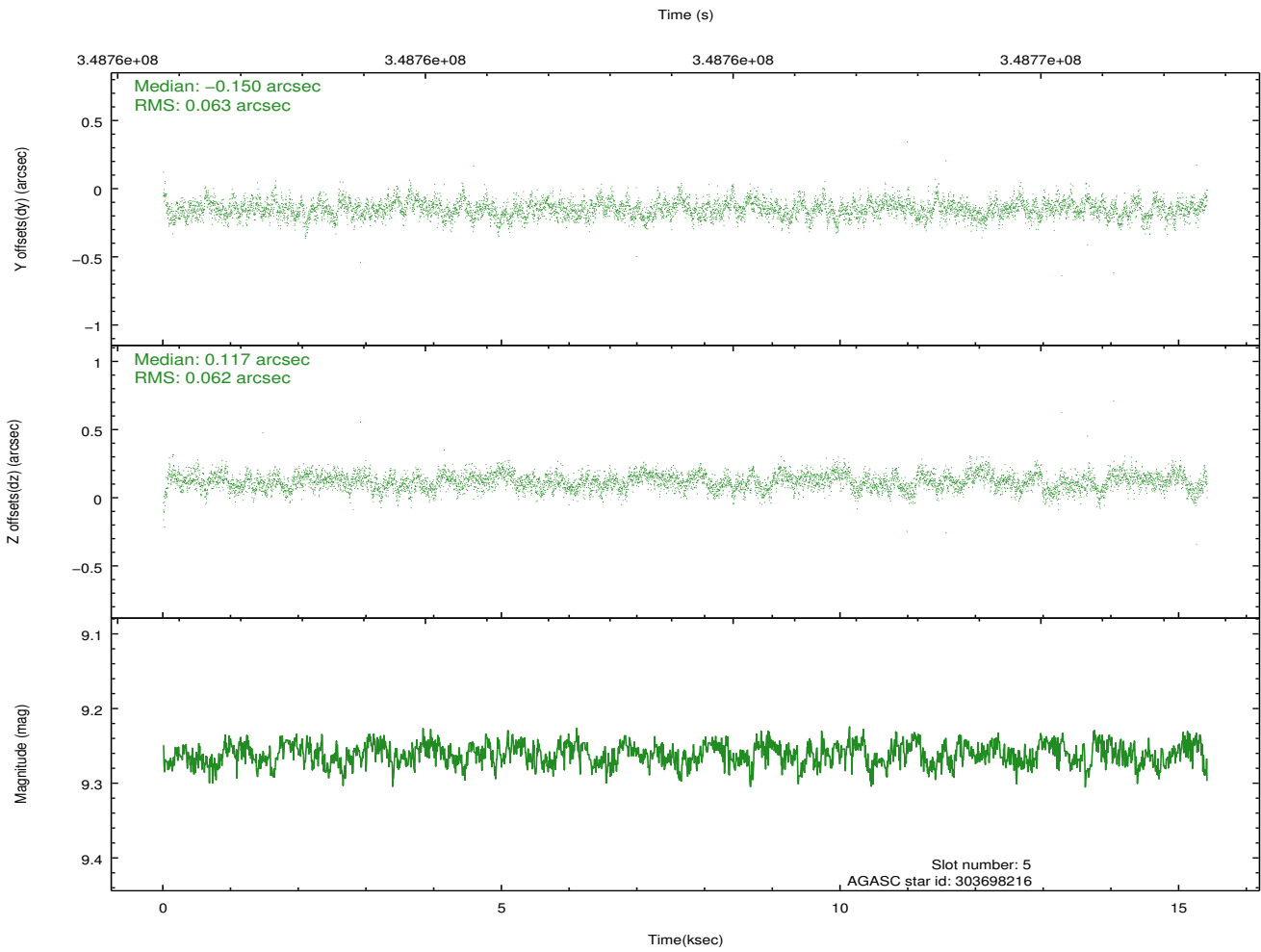
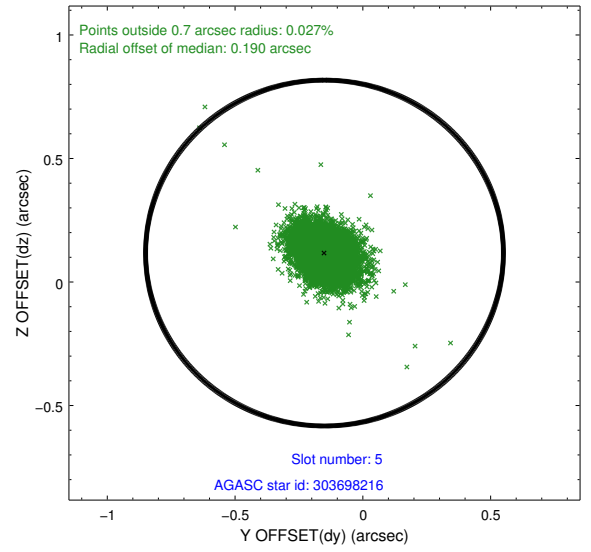
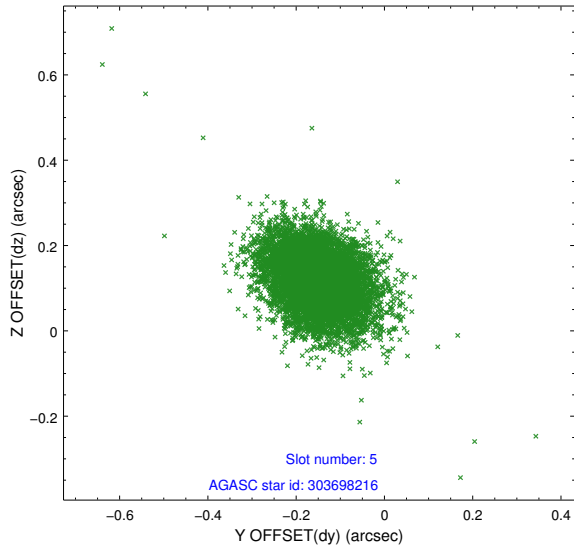
### 2.4.1 Slot 3



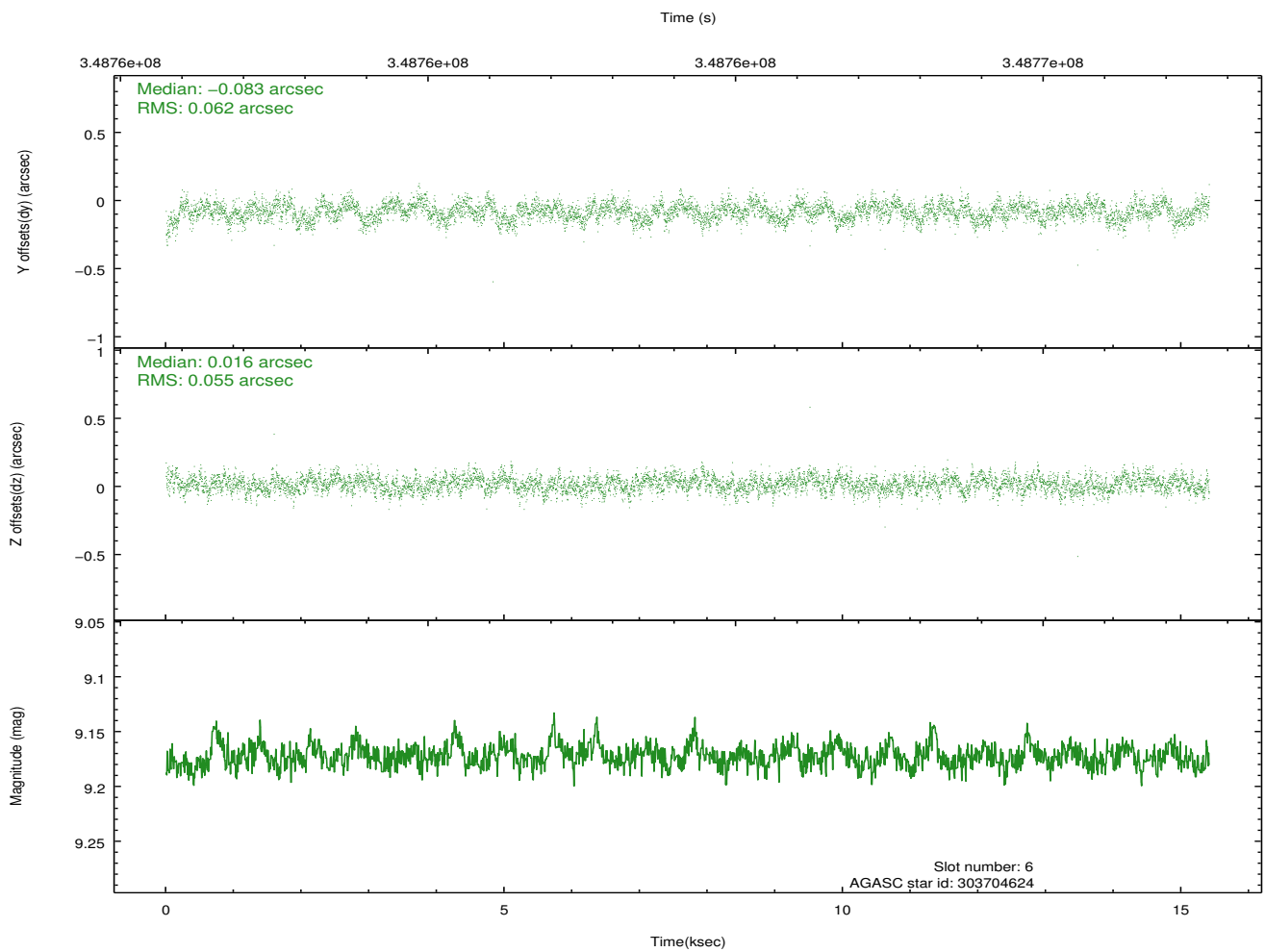
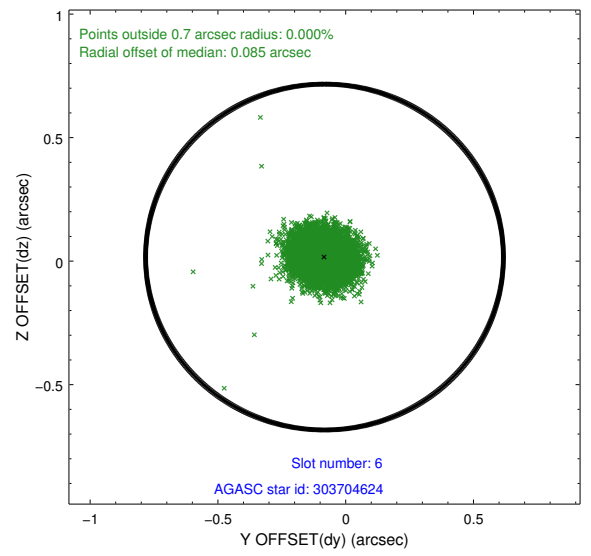
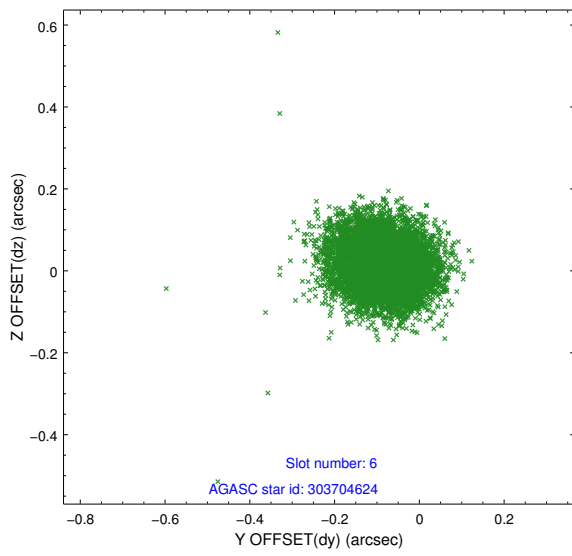
### 2.4.2 Slot 4



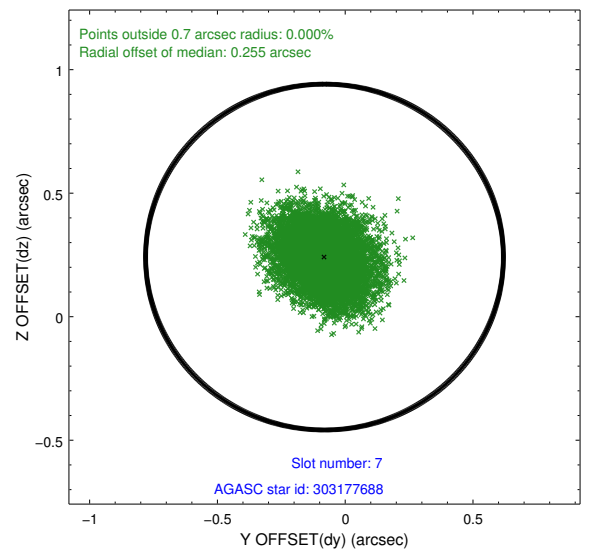
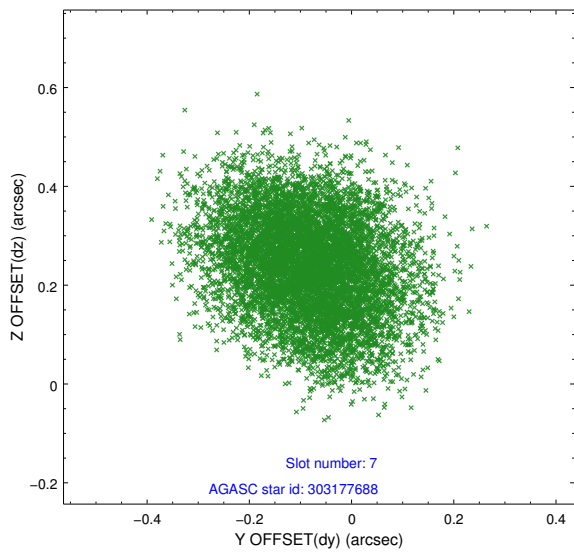
### 2.4.3 Slot 5



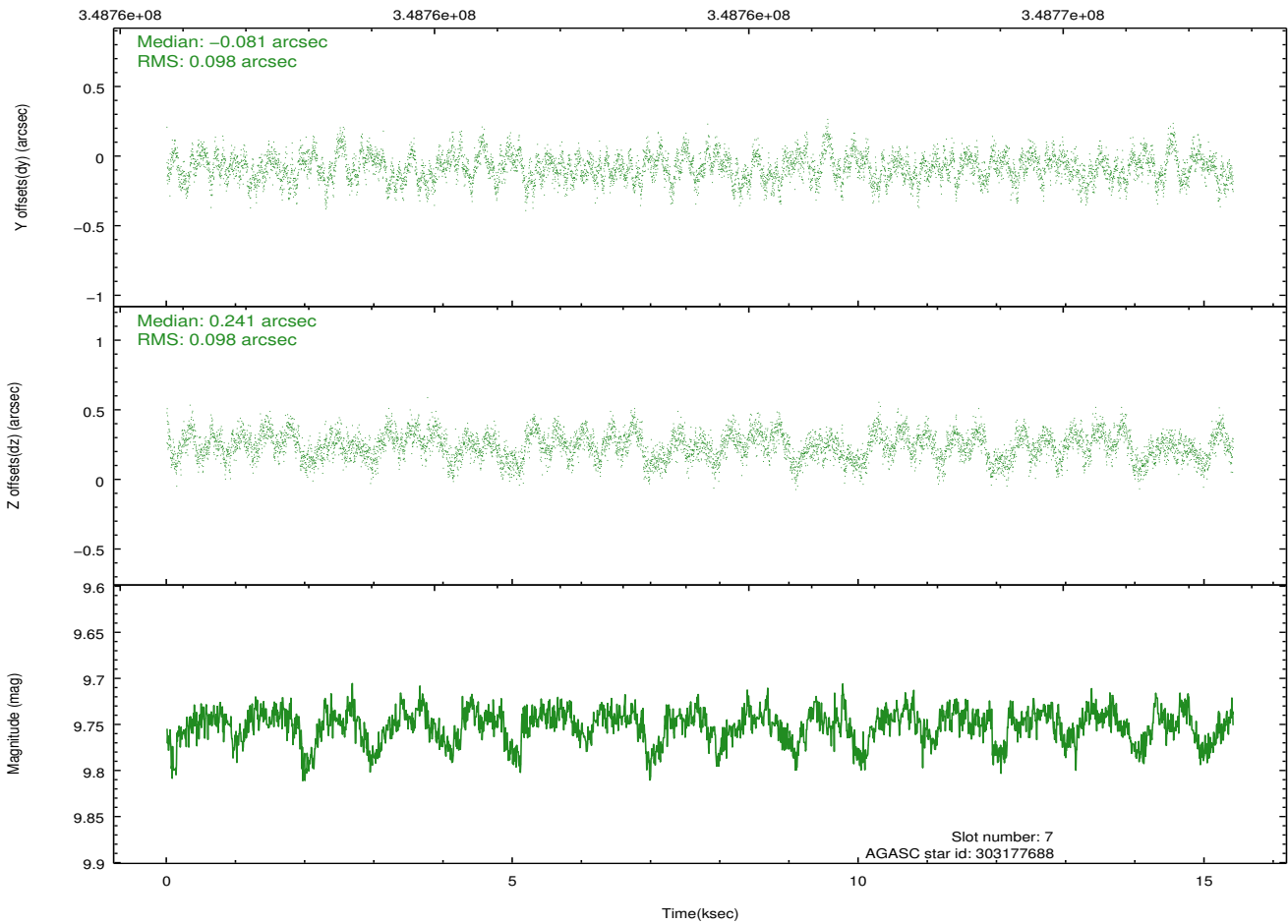
## 2.4.4 Slot 6



### 2.4.5 Slot 7

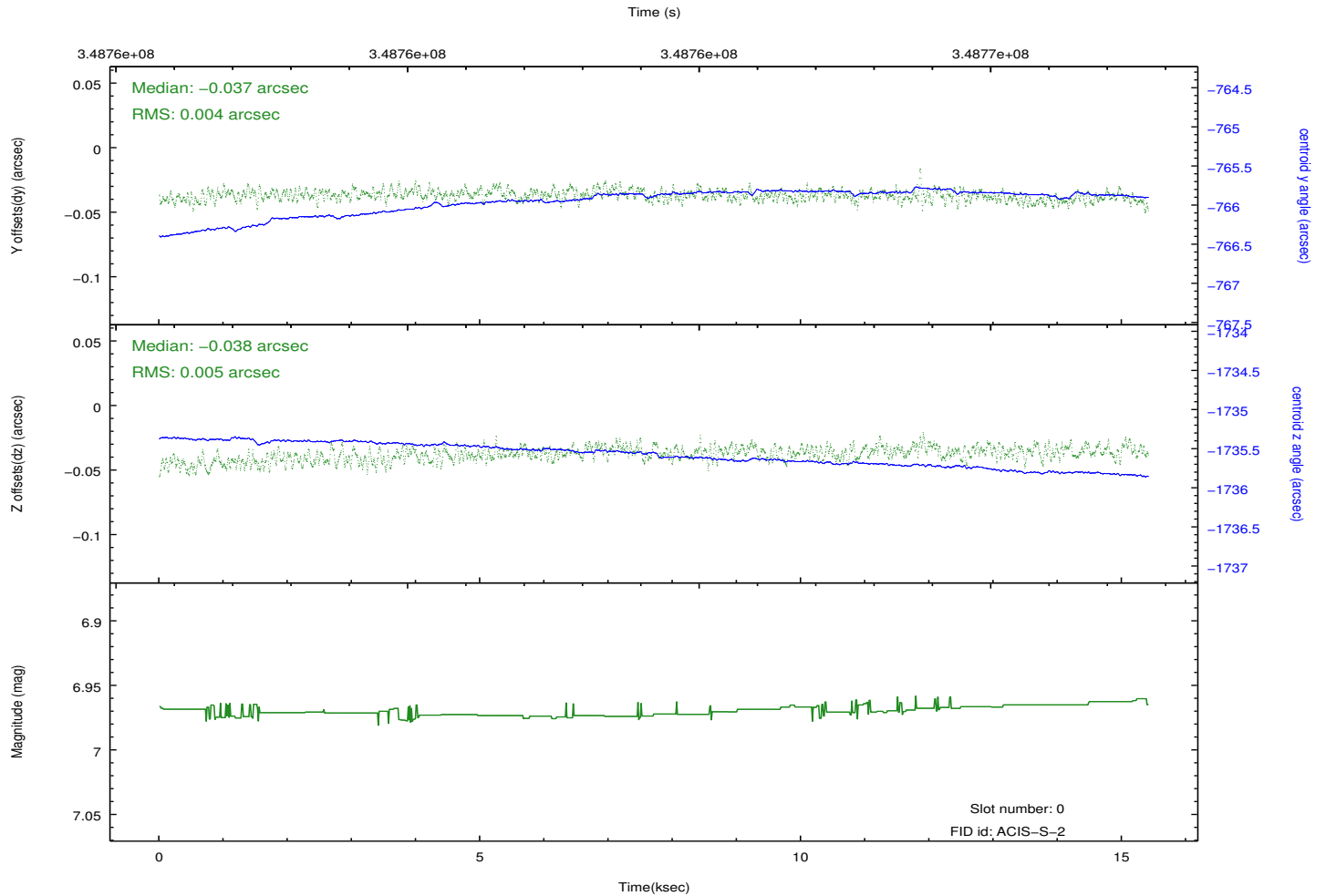
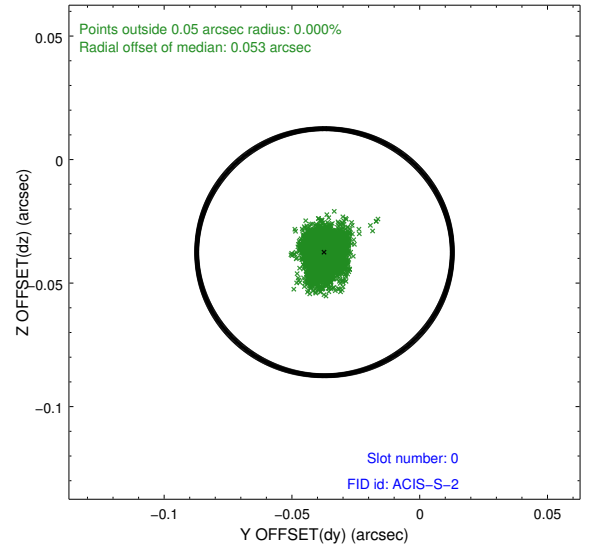
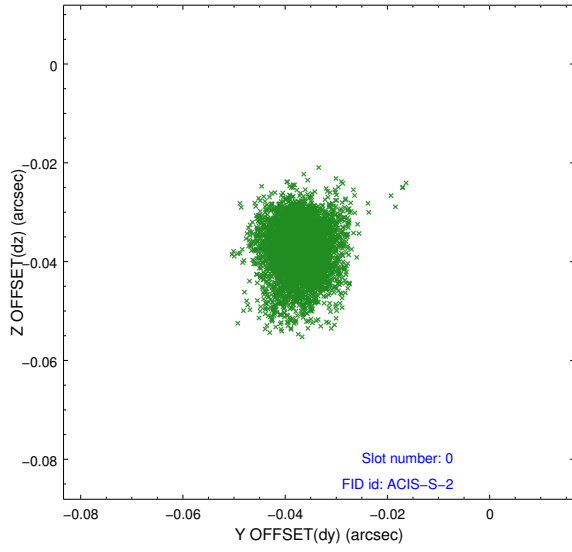


Time (s)

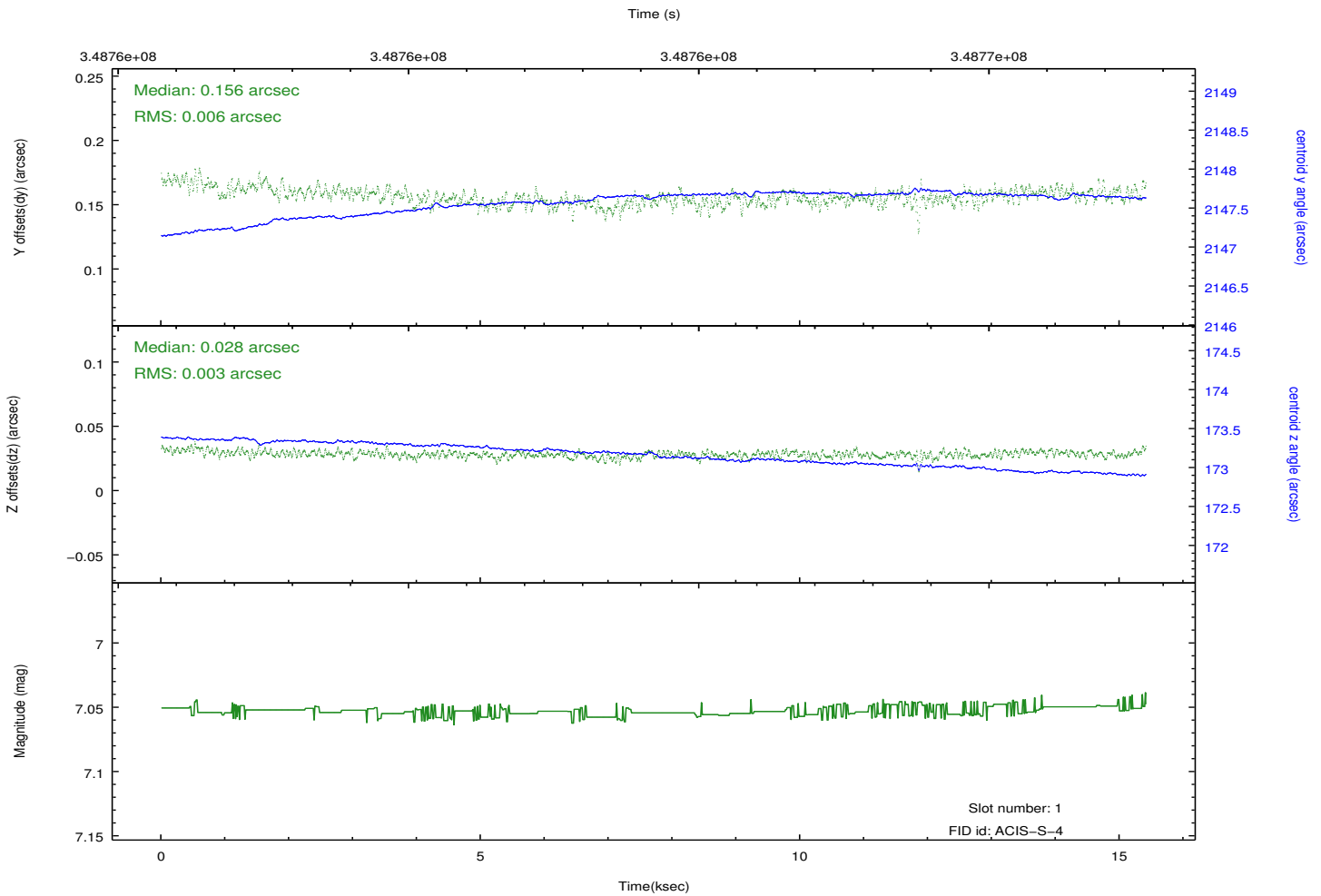
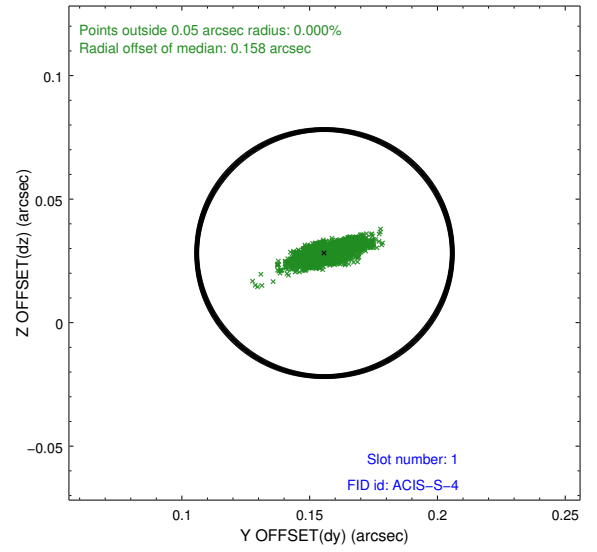
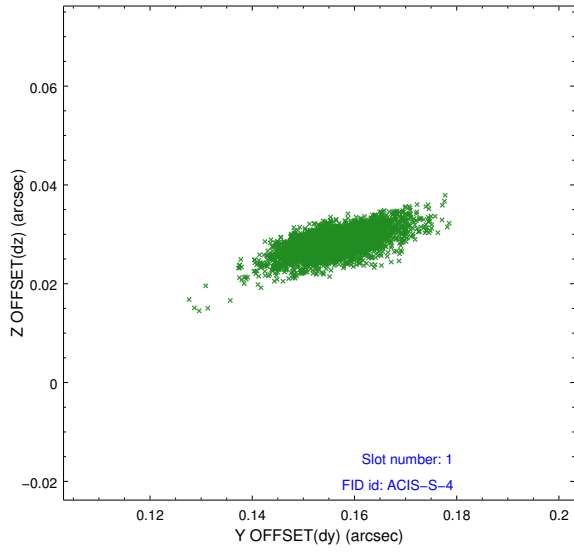


## 2.5 FID Slots

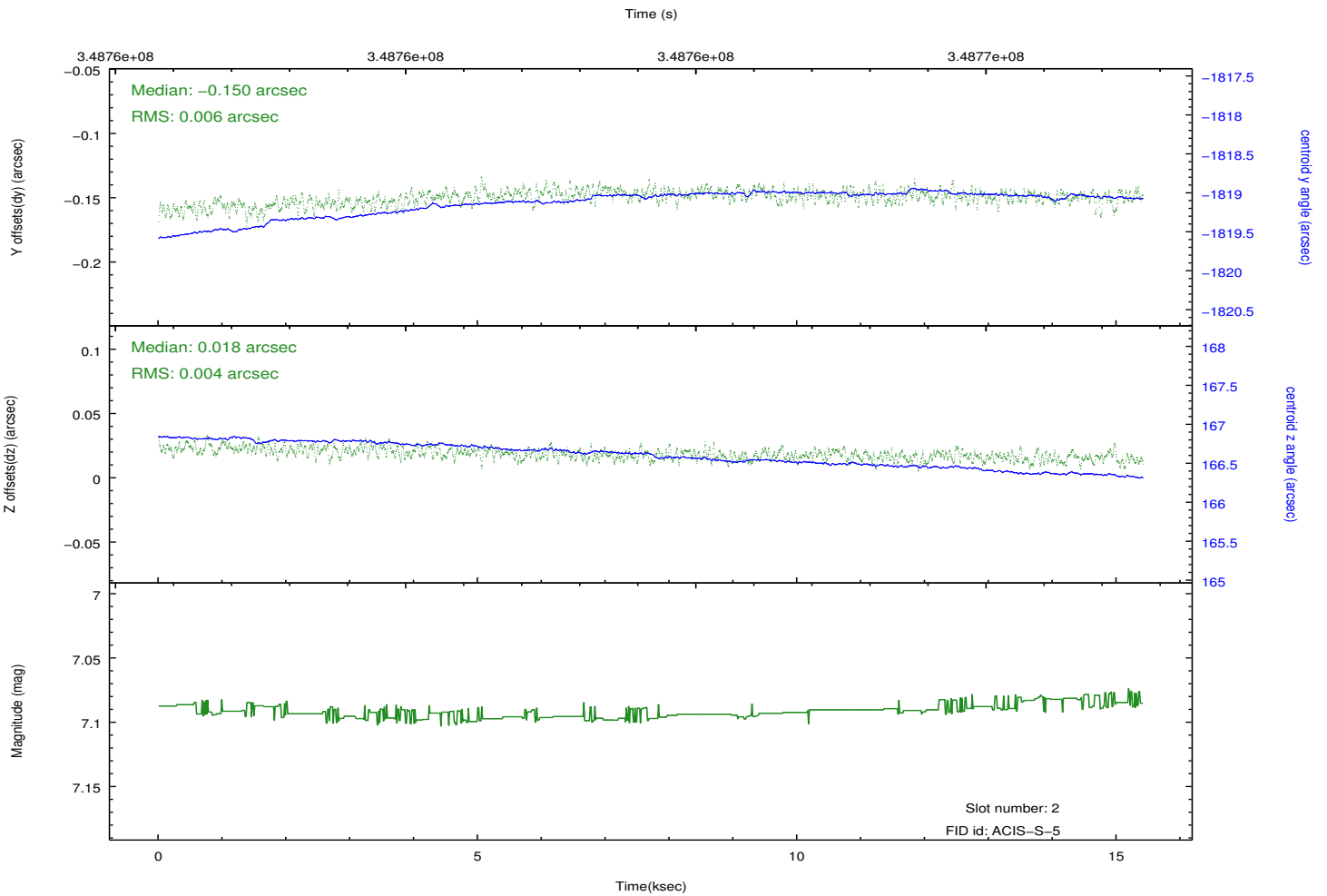
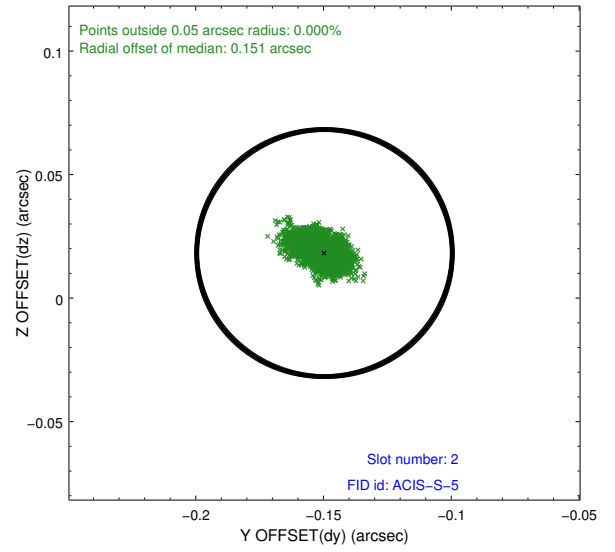
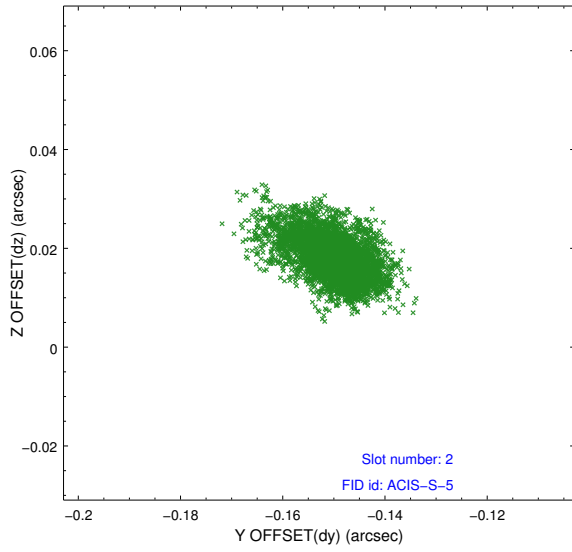
### 2.5.1 Slot 0



## 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)	2012.06.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	15.0399999

## A.2 Comments

Joint proposal with HST.