

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 10849 - L2 Version 2  
Chandra X-Ray Center

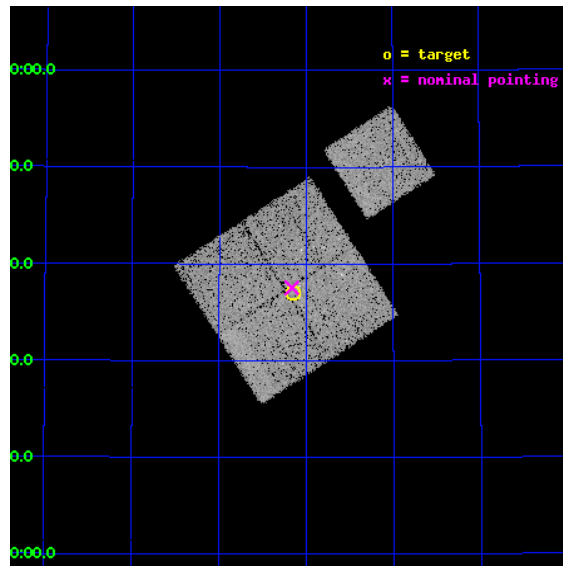
L2 Processing Date : May 28 2012

## 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

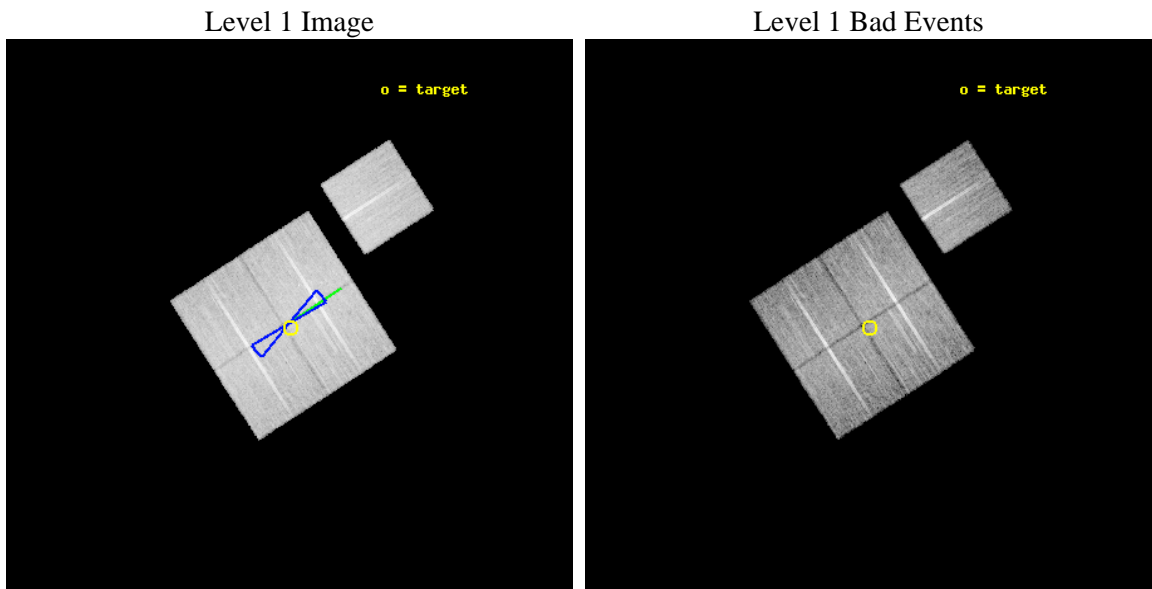
seq_num	900798	Sequence number
obs_id	10849	Observation id
title	The Evolution of Faint AGN at High Redshift	Proposal title
observer	Prof Kirpal Nandra	Principal investigator
object	AEGIS-3	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	214.5375	Observer's specified target RA [deg]
dec_targ	52.617889	Observer's specified target Dec [deg]
ra_nom	214.54105697555	Nominal RA [deg]
dec_nom	52.625700272718	Nominal Dec [deg]
roll_nom	57.205864046034	Nominal Roll [deg]
revision	2	Processing version of data
ontime	16135.500124097	Sum of GTIs [s]
livetime	15924.677936193	Livetime [s]
ontime0	16129.218143404	Sum of GTIs [s]
ontime1	16126.077172816	Sum of GTIs [s]
ontime2	16132.359123886	Sum of GTIs [s]
ontime3	16135.500124097	Sum of GTIs [s]
ontime6	16135.500124097	Sum of GTIs [s]
l2events	57218	Number of level 2 events



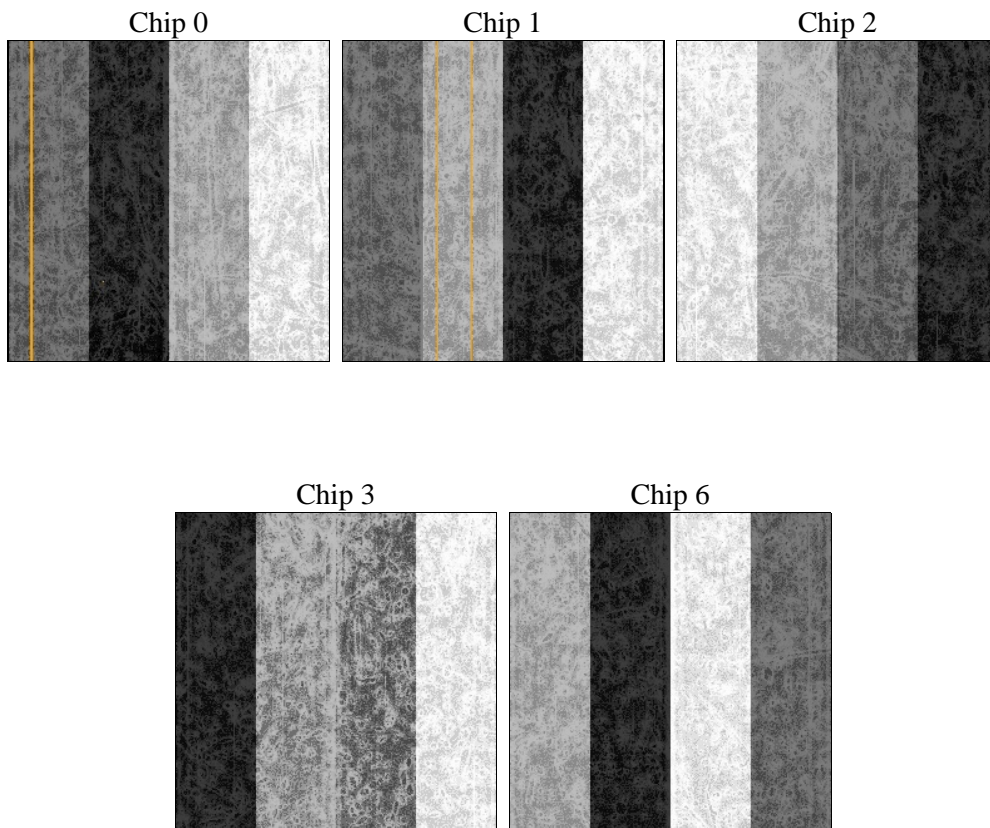
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	16000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	16135.500124097	Sum of GTIs [s]
caldbver	4.4.9	&#160	ontime0	16129.218143404	Sum of GTIs [s]
date	2012-05-28T12:05:58	Date and time of file creation	ontime1	16126.077172816	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	16132.359123886	Sum of GTIs [s]
			ontime3	16135.500124097	Sum of GTIs [s]
			ontime6	16135.500124097	Sum of GTIs [s]
			l1events	649883	Number of level 1 events

### 2.1.4 Events

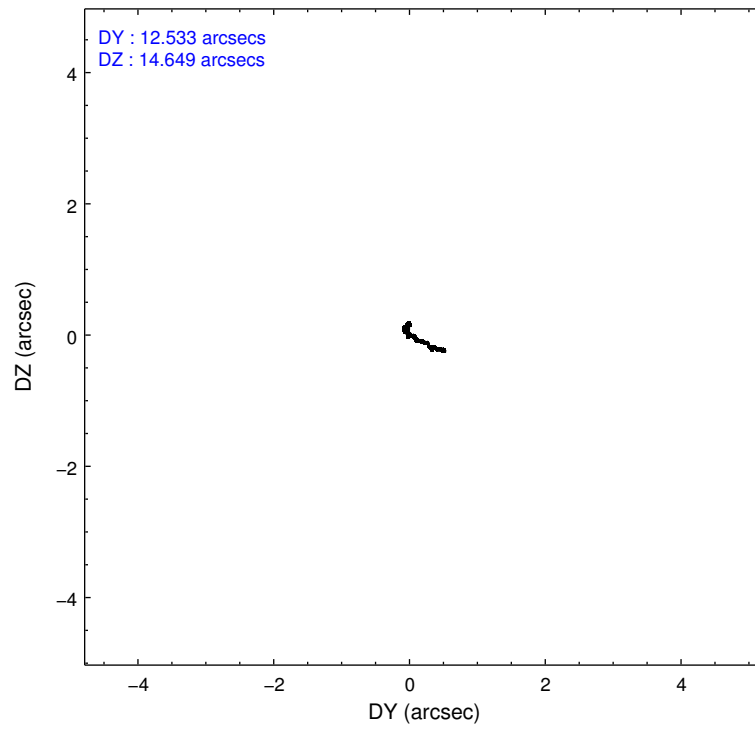
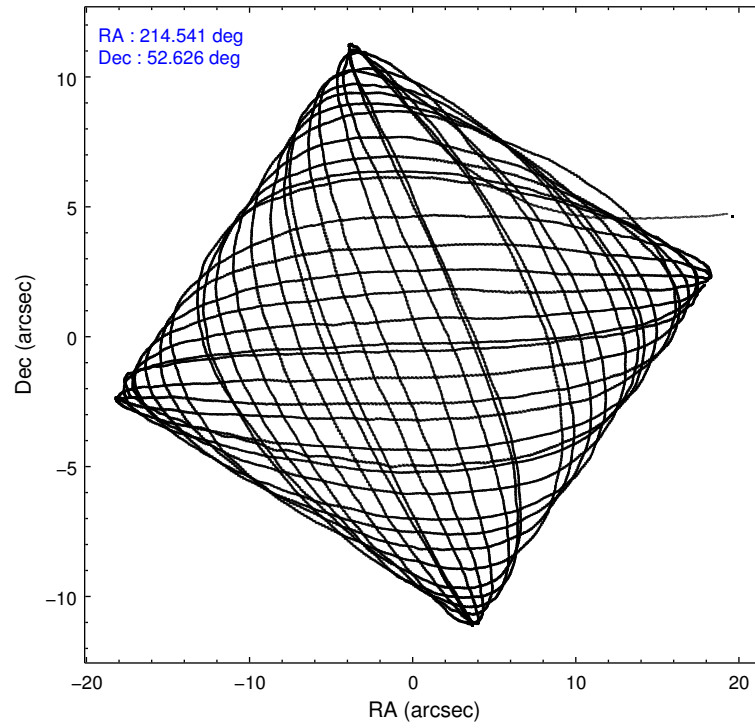
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	124148	121050	138884	132598	133203
rejected events	110695	106035	125336	119562	119432
rejected %	89%	87%	90%	90%	89%

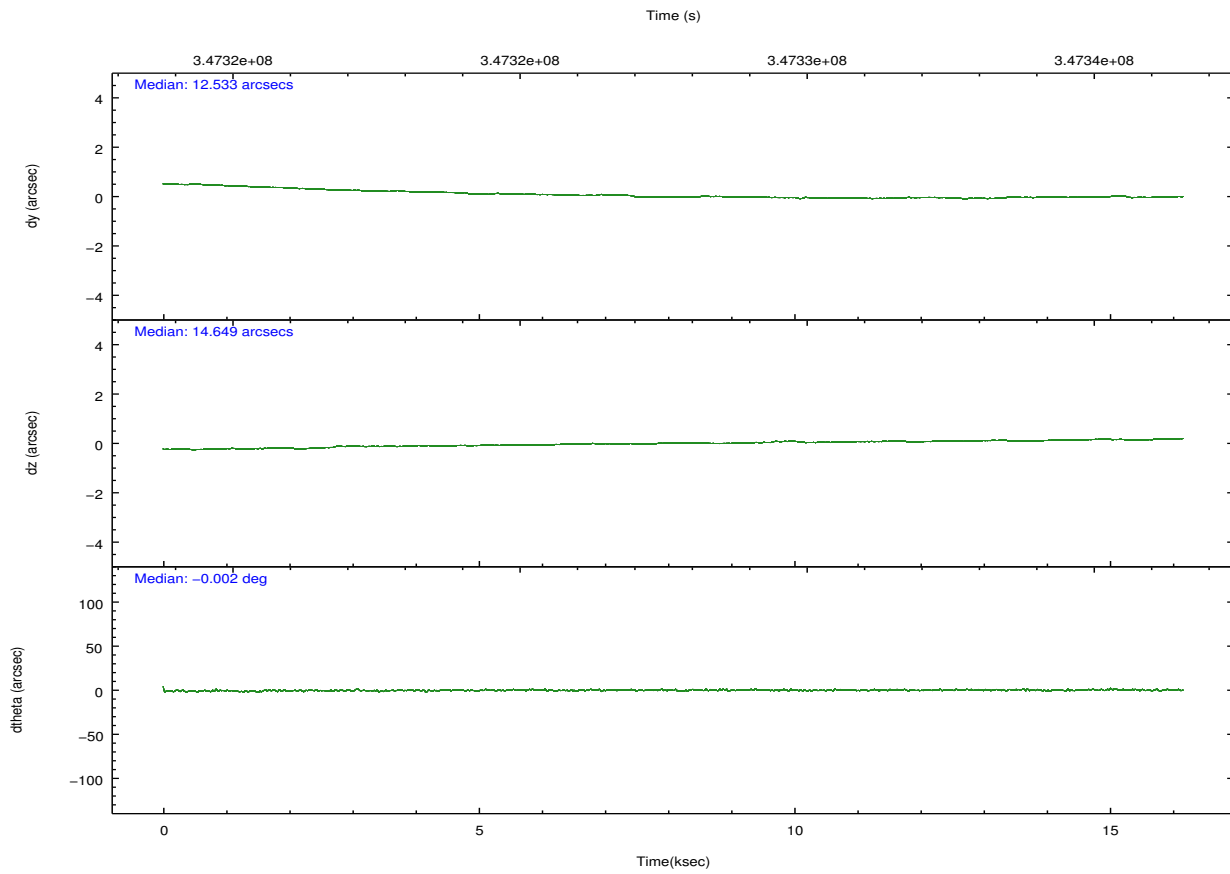
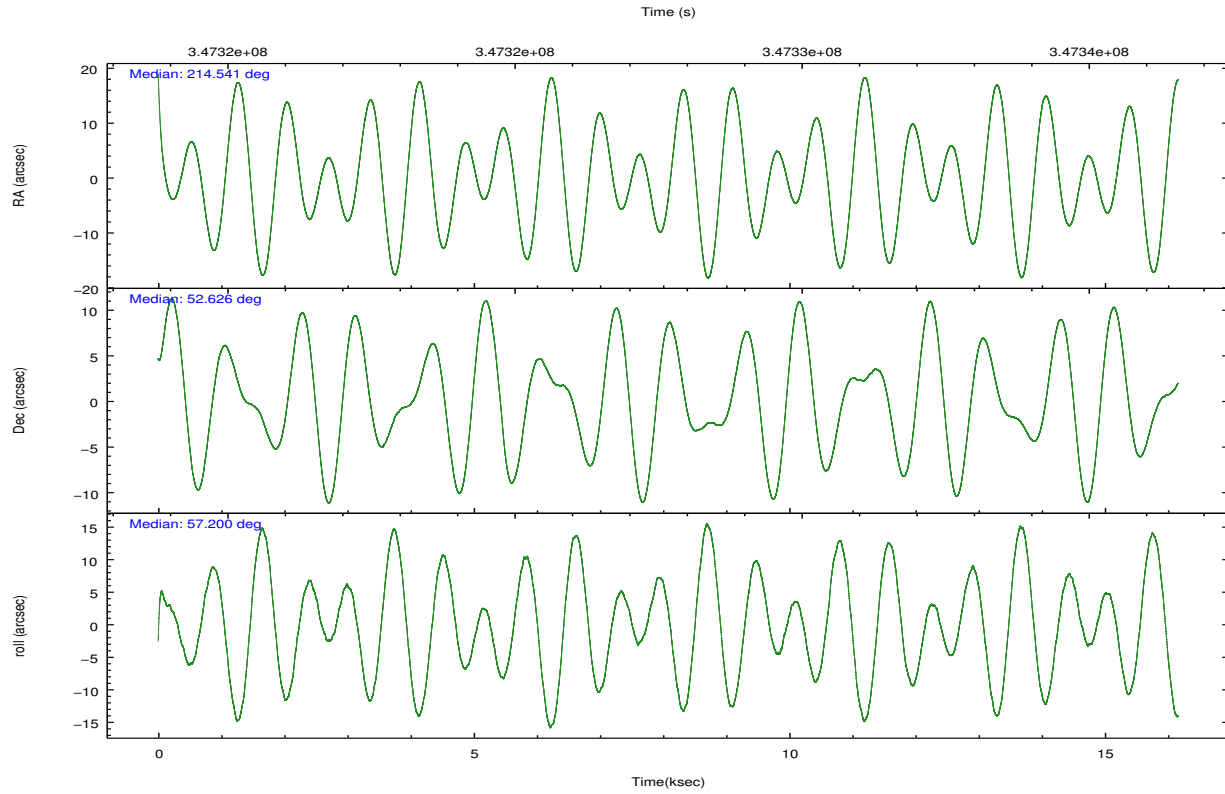
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	4500	5303	4914	4638	4762
	3%	4%	3%	3%	3%
grade 1 events	74	65	68	67	60
	0%	0%	0%	0%	0%
grade 2 events	3360	3430	3203	2803	3035
	2%	2%	2%	2%	2%
grade 3 events	1577	1630	1395	1515	1456
	1%	1%	1%	1%	1%
grade 4 events	1400	1598	1449	1409	1500
	1%	1%	1%	1%	1%
grade 5 events	4854	5313	4822	5535	5443
	3%	4%	3%	4%	4%
grade 6 events	2622	3057	2589	2673	3029
	2%	2%	1%	2%	2%
grade 7 events	105761	100654	120444	113958	113918
	85%	83%	86%	85%	85%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	214.539034	214.5410569755535	CCD I2 on	Y	Y
[deg] Pointing Dec	52.598195	52.62570027271772	CCD I3 on	Y	Y
[deg] Pointing Roll	56.998783	57.20586404603375	CCD S0 on	N	N
[deg] Roll angle	50.000000	50.000000	CCD S1 on	N	N
[deg] Roll tolerance	10.000000	10.000000	CCD S2 on	O1	Y
Roll constraint allows 180D rotation	Y	Y	CCD S3 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S4 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S5 on	N	N
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	Number of optional ACIS chips dropped	0	0
[mm] SIM translation stage offset	0	-0.005018542100998502	On-chip summing requested	N	N
[s] Observation start time (MET)	347319733.184000	347318757.15577	Subarray requested	NONE	NONE
Observation start date	2009-01-02T21:41:07	2009-01-02T21:25:57	Alternating exposures requested	N	N
[s] Observation end time (MET)	347335733.184000	347336464.54415	[s] Primary exposure time	0.000000	3.1
Observation end date	2009-01-03T02:07:47	2009-01-03T02:21:04			
Read mode	TIMED	TIMED			

## 2.3 Aspect



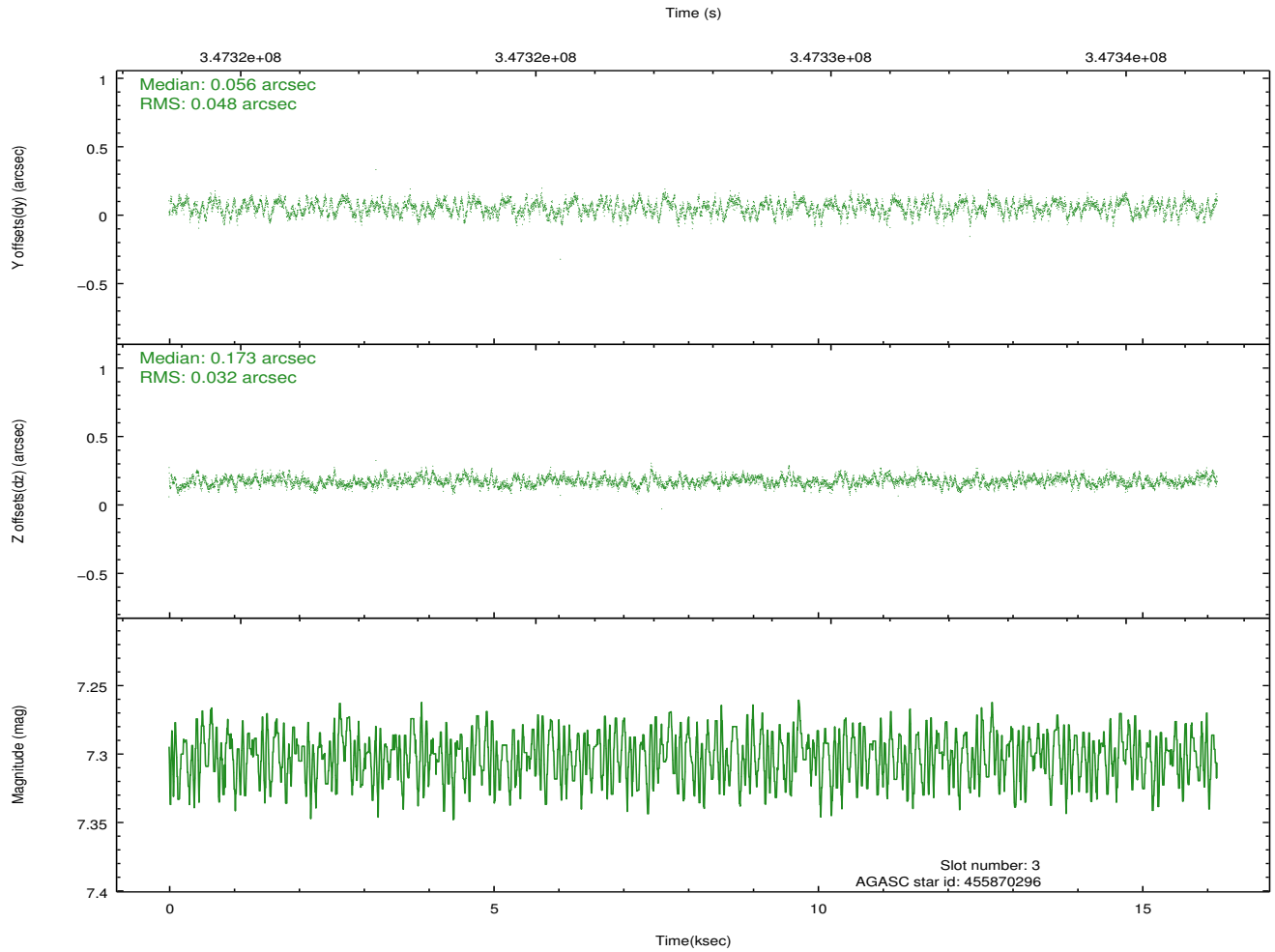
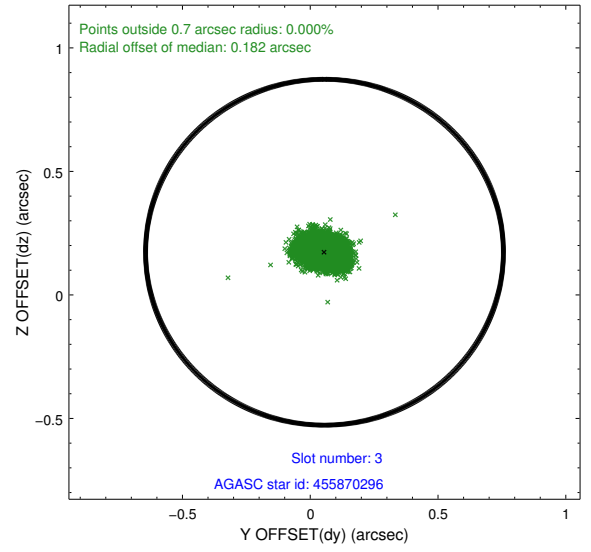
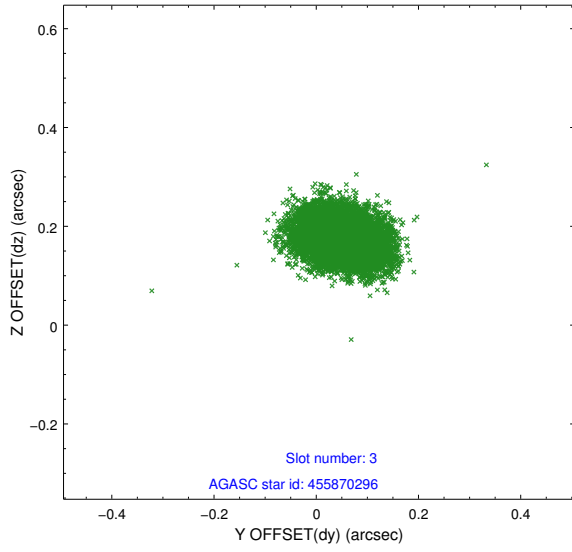


### Slot Statistics

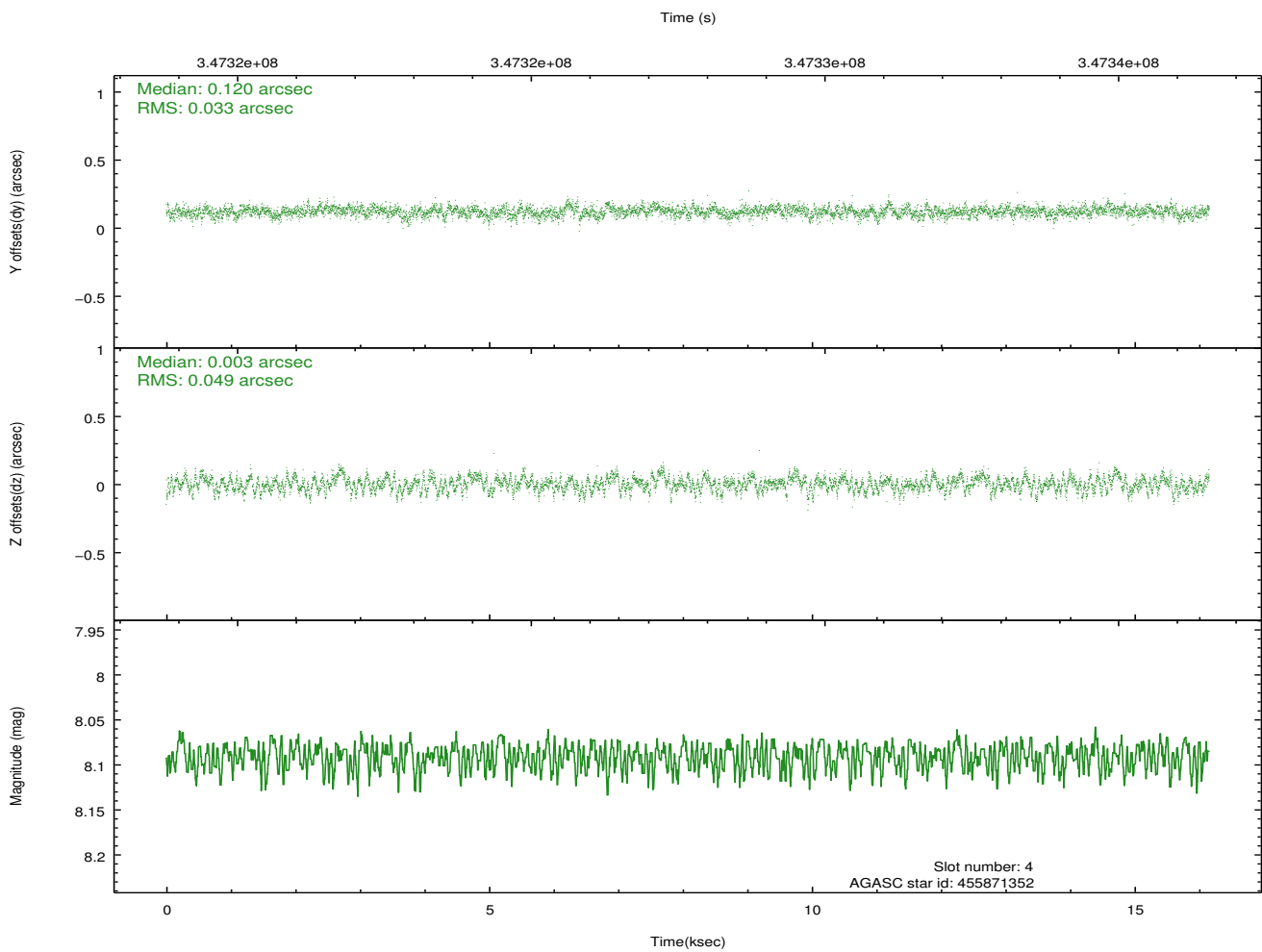
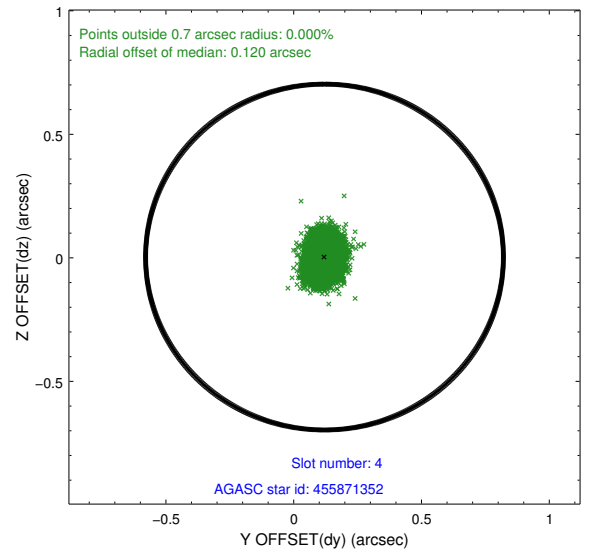
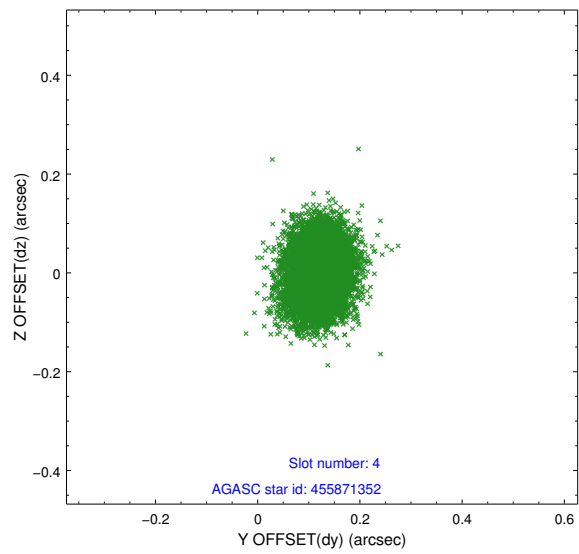
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.04	3941	-0.028	0.023	0.008	0.014	0.000000	0.000000	926.88	-838.20
1	FID	ACIS-I-4	6.96	3941	0.170	0.021	0.010	0.017	0.000000	0.000000	2147.26	1061.47
2	FID	ACIS-I-5	7.02	3939	-0.240	0.027	0.011	0.021	0.000000	0.000000	-1820.99	1059.63
3	GUIDE	455870296	7.30	7882	0.056	0.173	0.062	0.098	214.629779	52.033323	-1595.68	-1276.01
4	GUIDE	455871352	8.09	7874	0.120	0.003	0.062	0.103	215.099961	52.172669	-606.06	-1870.51
5	GUIDE	505806936	7.00	7883	0.038	-0.005	0.076	0.141	213.820815	52.535927	-1038.16	1200.86
6	GUIDE	505812376	7.53	7883	-0.234	0.039	0.049	0.078	214.039537	52.937930	438.10	1577.39
7	GUIDE	505812088	8.14	7881	0.011	-0.207	0.054	0.087	214.186617	53.263562	1597.02	1942.36

## 2.4 Star Slots

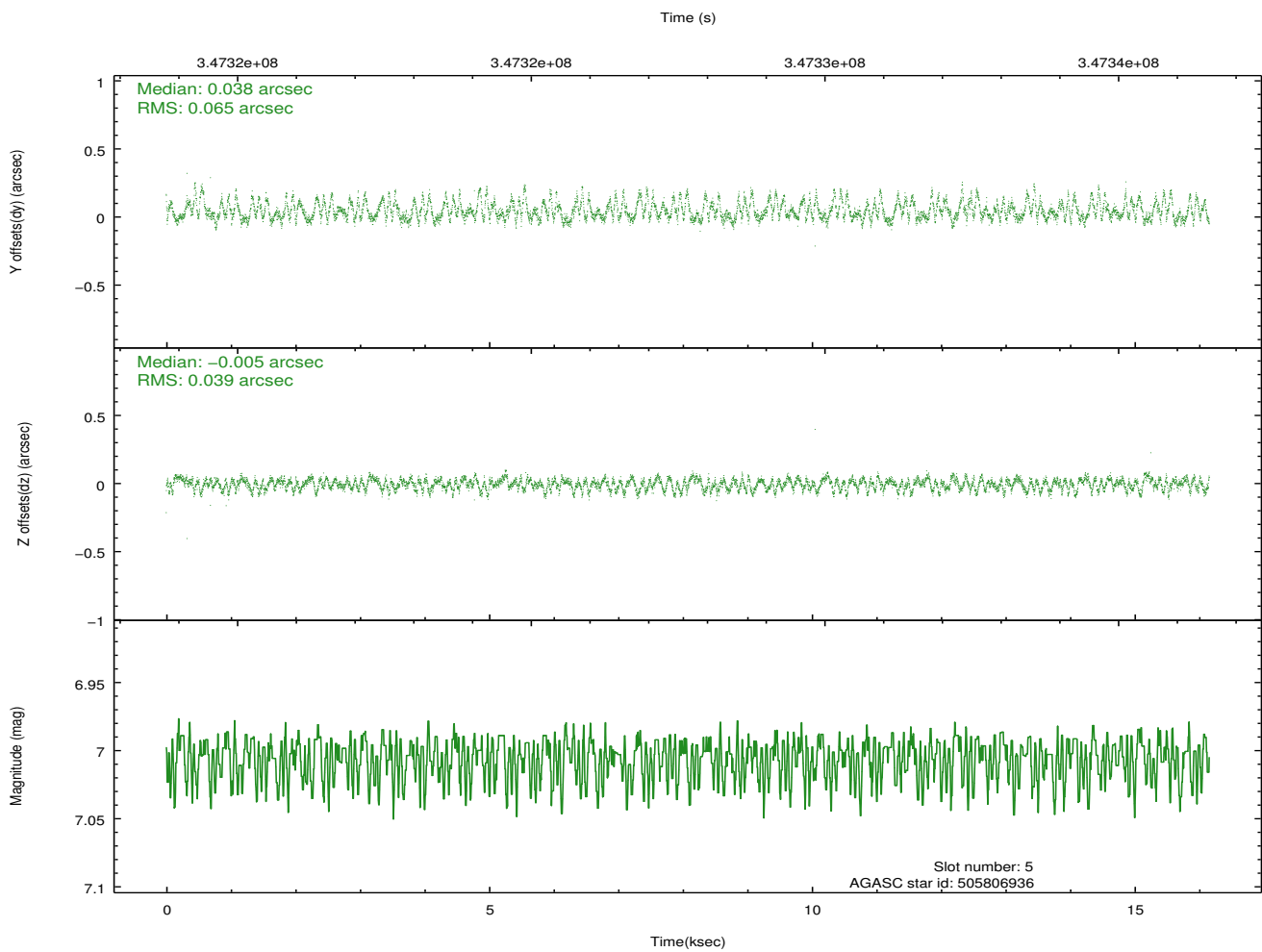
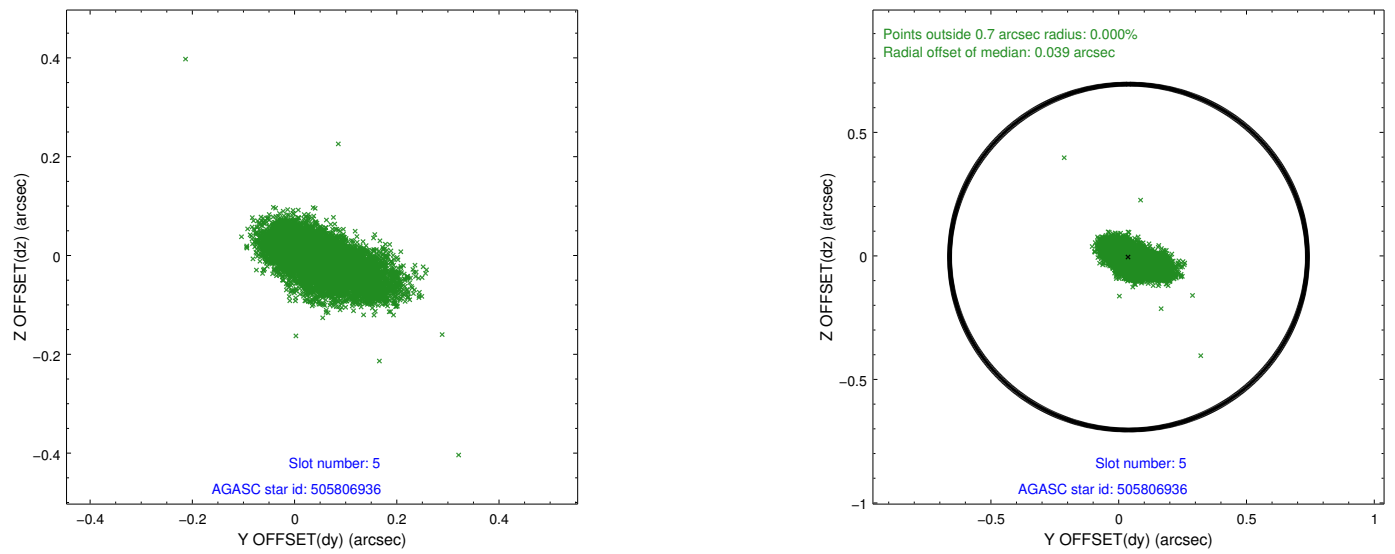
### 2.4.1 Slot 3



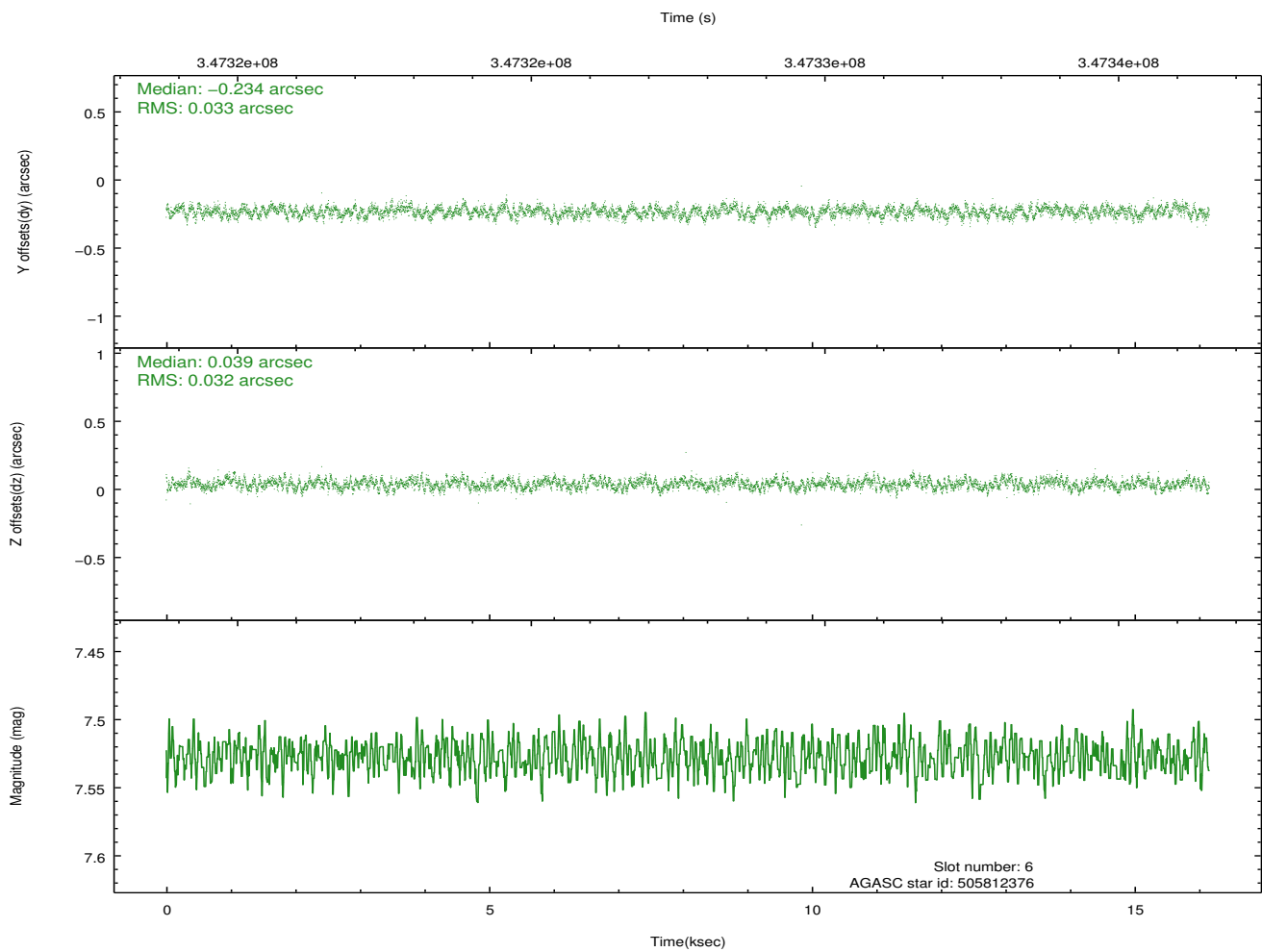
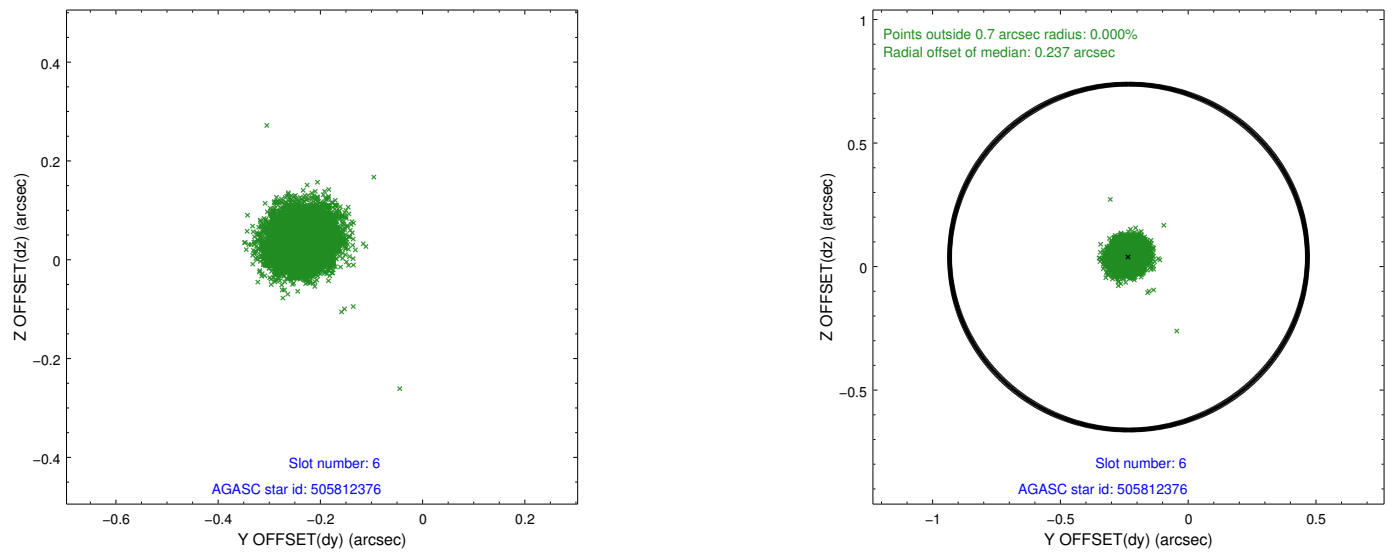
## 2.4.2 Slot 4



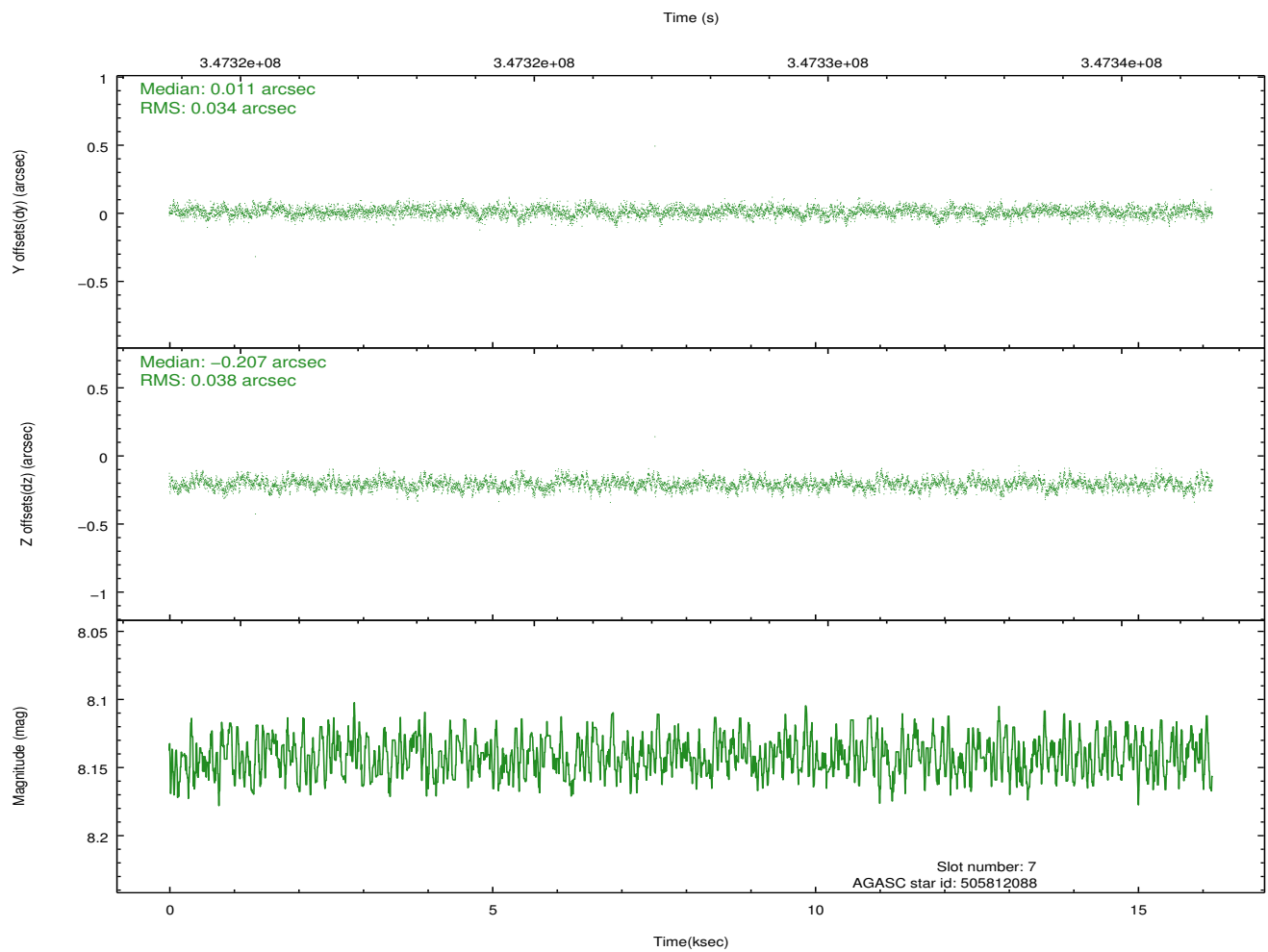
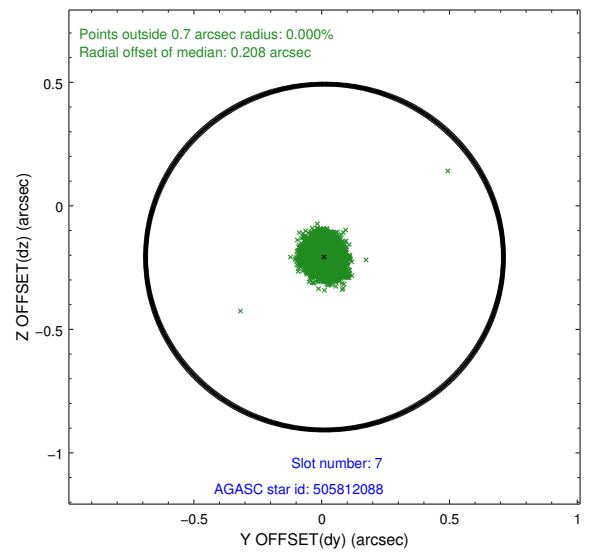
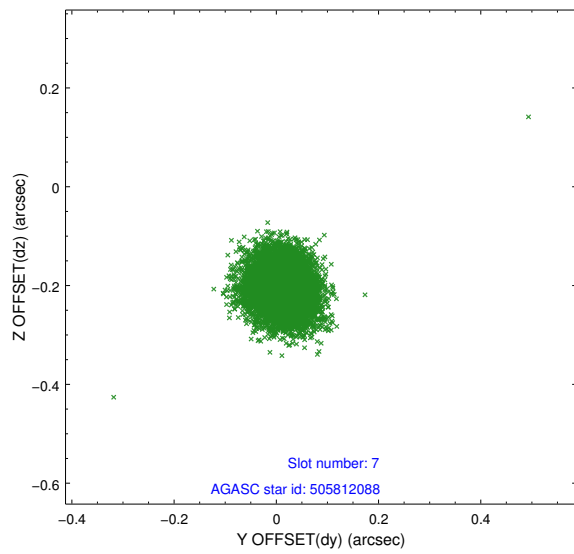
### 2.4.3 Slot 5



## 2.4.4 Slot 6

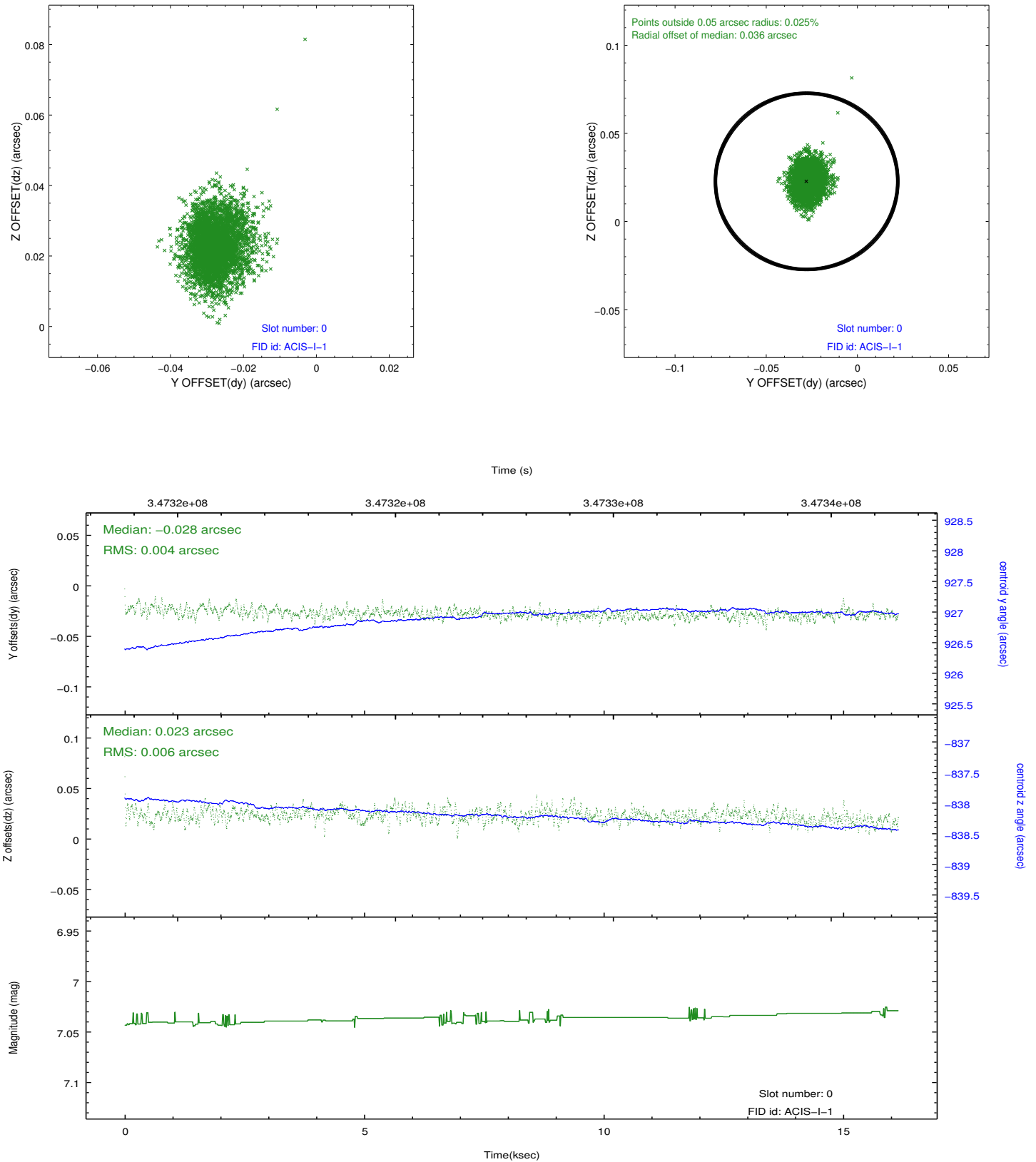


### 2.4.5 Slot 7

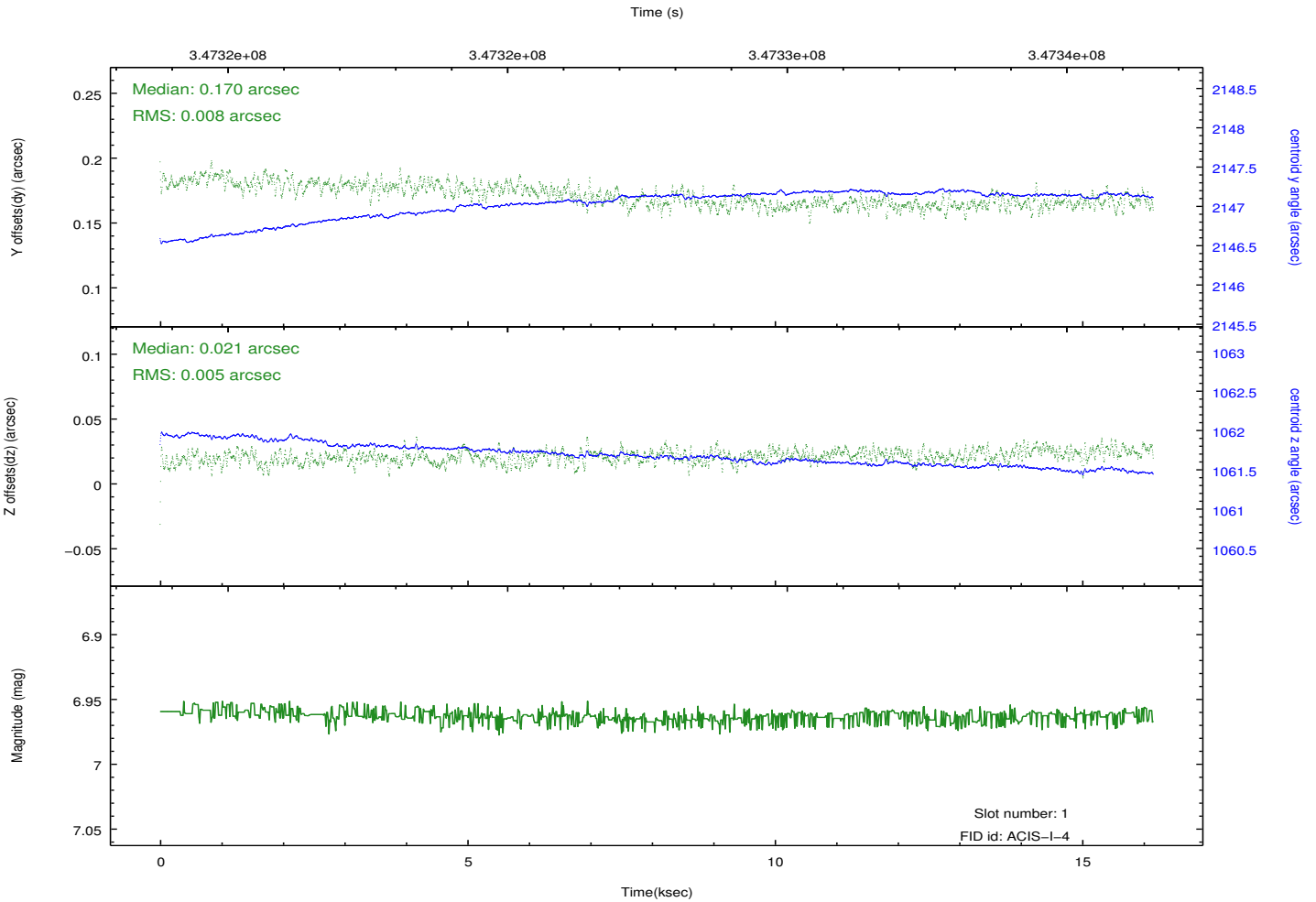
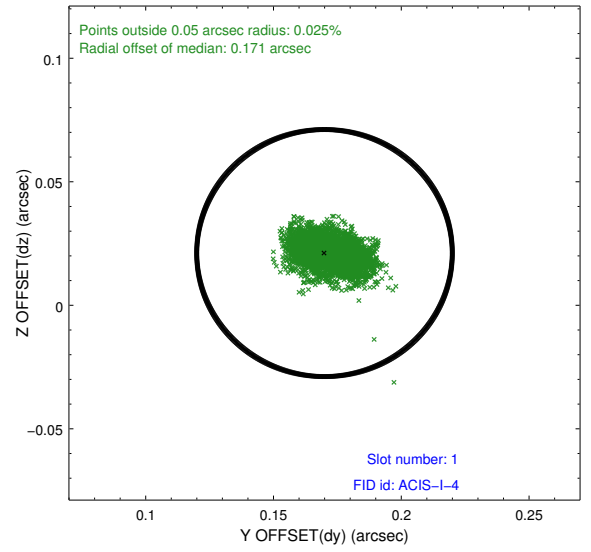
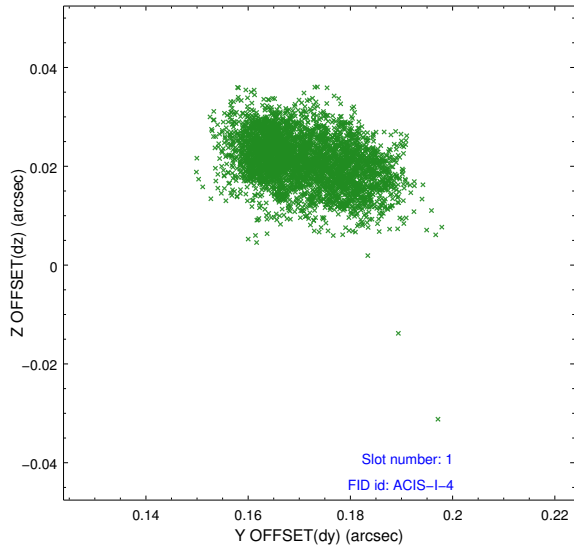


## 2.5 FID Slots

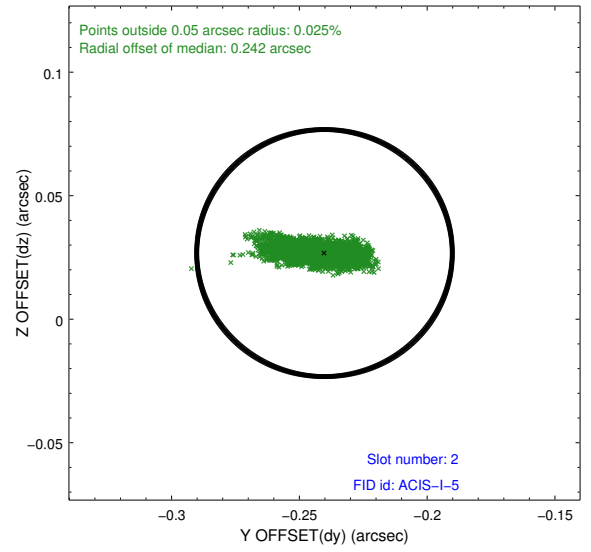
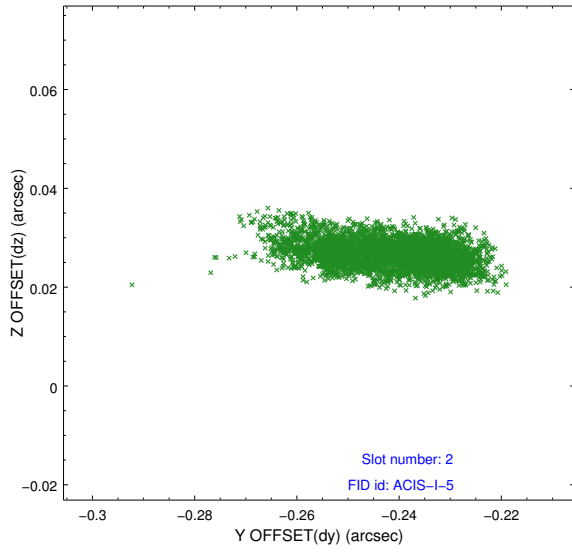
### 2.5.1 Slot 0



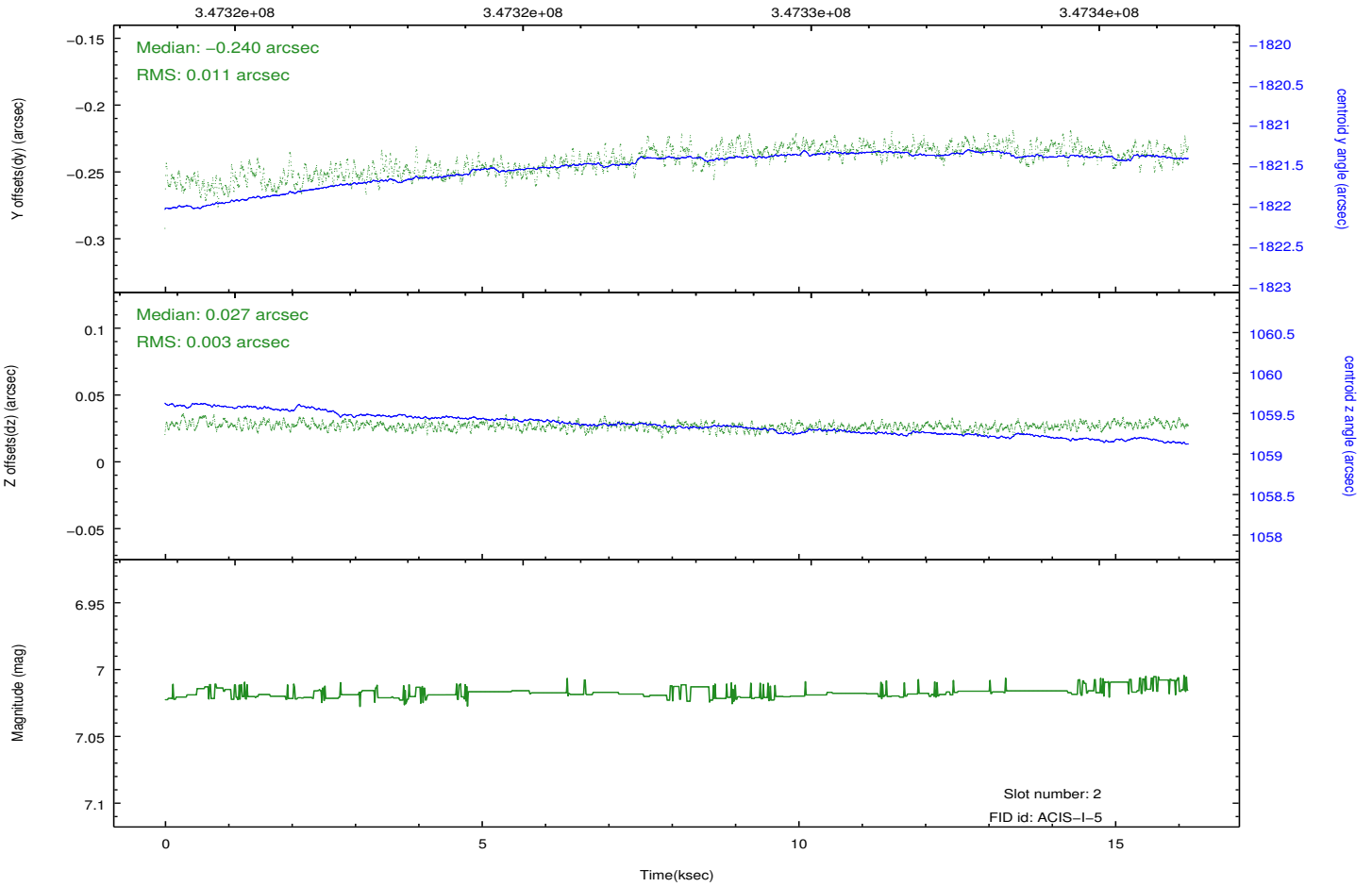
## 2.5.2 Slot 1



### 2.5.3 Slot 2



Time (s)



# 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	16.1355001

## A.2 Comments

Joint Proposal: Spitzer. Roll constraint met.