

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 11497 - L2 Version 2  
Chandra X-Ray Center

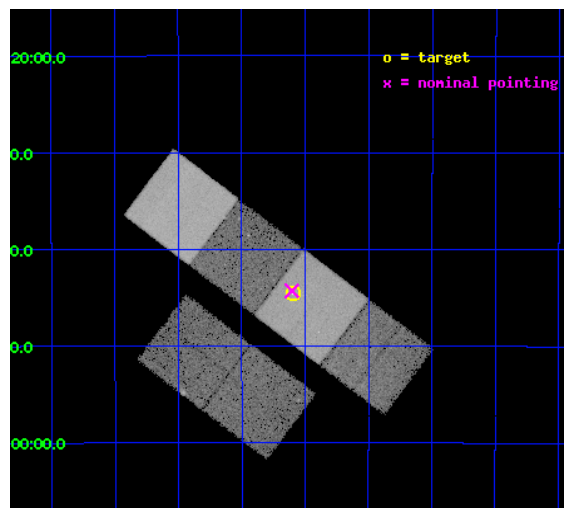
L2 Processing Date : Jun 15 2012

## 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

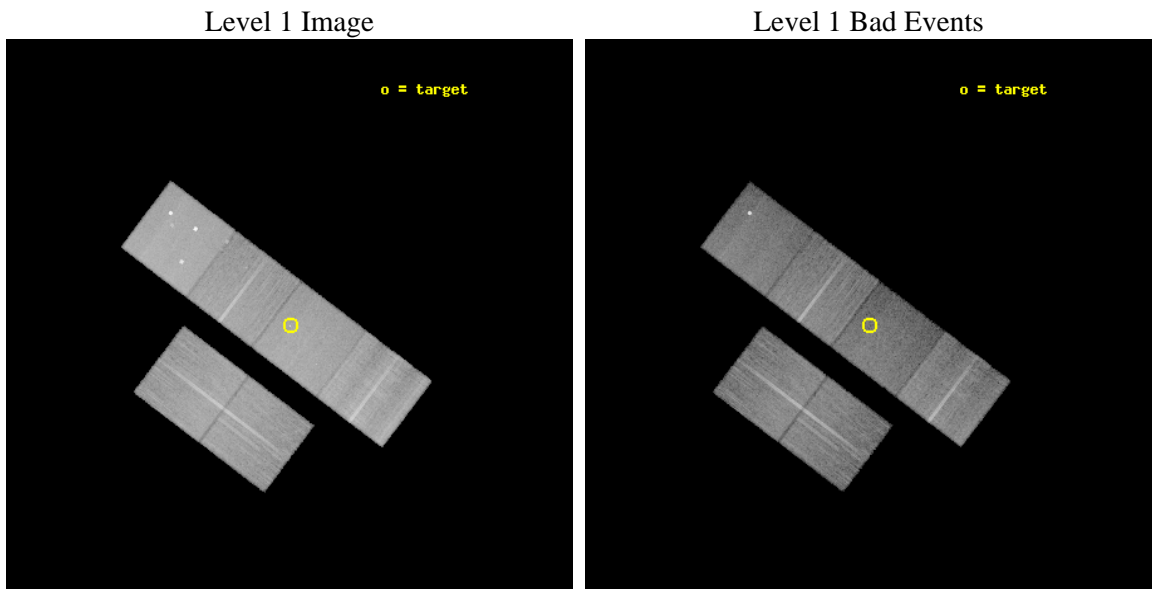
seq_num	702083	Sequence number
obs_id	11497	Observation id
title	The nature of active nuclei in radio galaxies: observations of the 2Jy sample	Proposal title
observer	Dr Martin Hardcastle	Principal investigator
object	PKS 0349-27	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	57.899167	Observer's specified target RA [deg]
dec_targ	-27.742722	Observer's specified target Dec [deg]
ra_nom	57.901135541698	Nominal RA [deg]
dec_nom	-27.738183270637	Nominal Dec [deg]
roll_nom	37.15754621049	Nominal Roll [deg]
revision	2	Processing version of data
ontime	20140.799925029	Sum of GTIs [s]
livetime	19885.764989045	Livetime [s]
ontime2	20137.558944702	Sum of GTIs [s]
ontime3	20140.799925029	Sum of GTIs [s]
ontime5	20140.799925029	Sum of GTIs [s]
ontime6	20140.799925029	Sum of GTIs [s]
ontime7	20140.799925029	Sum of GTIs [s]
ontime8	20140.799925029	Sum of GTIs [s]
l2events	264871	Number of level 2 events



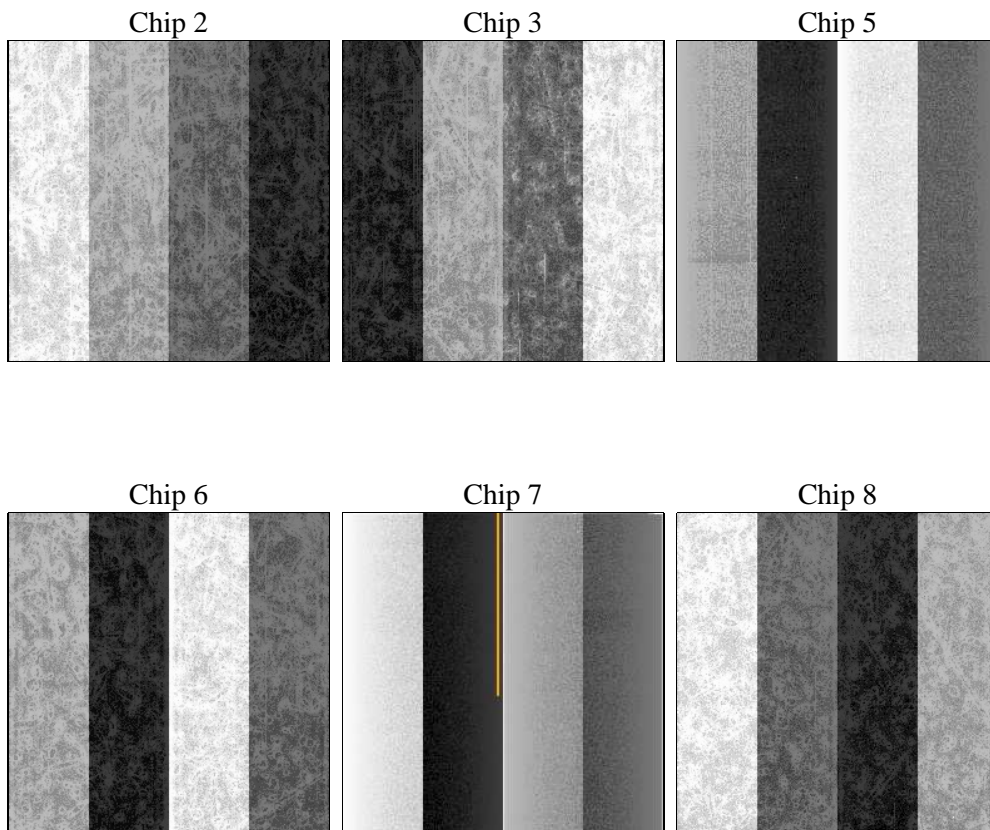
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	20000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	20140.799925029	Sum of GTIs [s]
caldbver	4.4.10	&#160	ontime2	20137.558944702	Sum of GTIs [s]
date	2012-06-15T01:15:12	Date and time of file creation	ontime3	20140.799925029	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	20140.799925029	Sum of GTIs [s]
			ontime6	20140.799925029	Sum of GTIs [s]
			ontime7	20140.799925029	Sum of GTIs [s]
			ontime8	20140.799925029	Sum of GTIs [s]
			l1events	1214442	Number of level 1 events

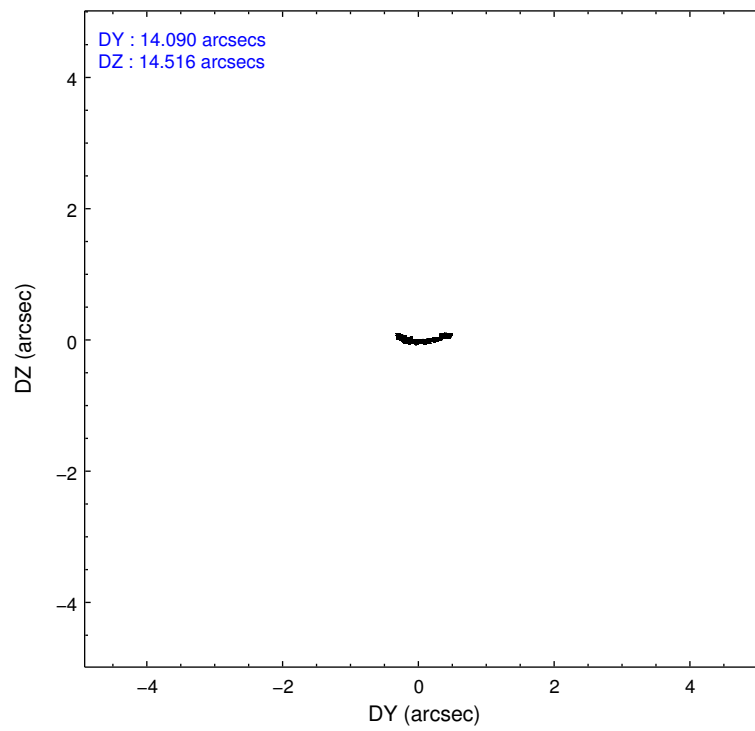
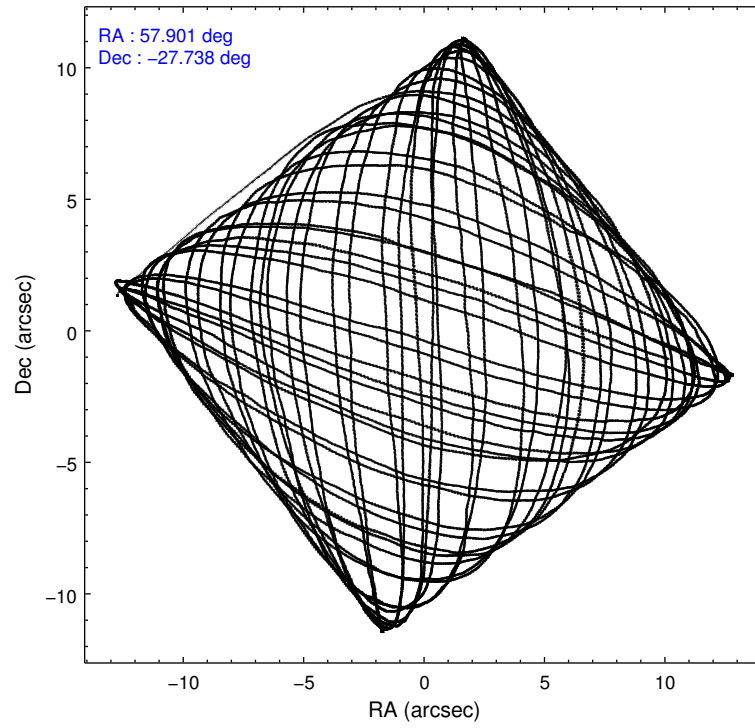
### 2.1.4 Events

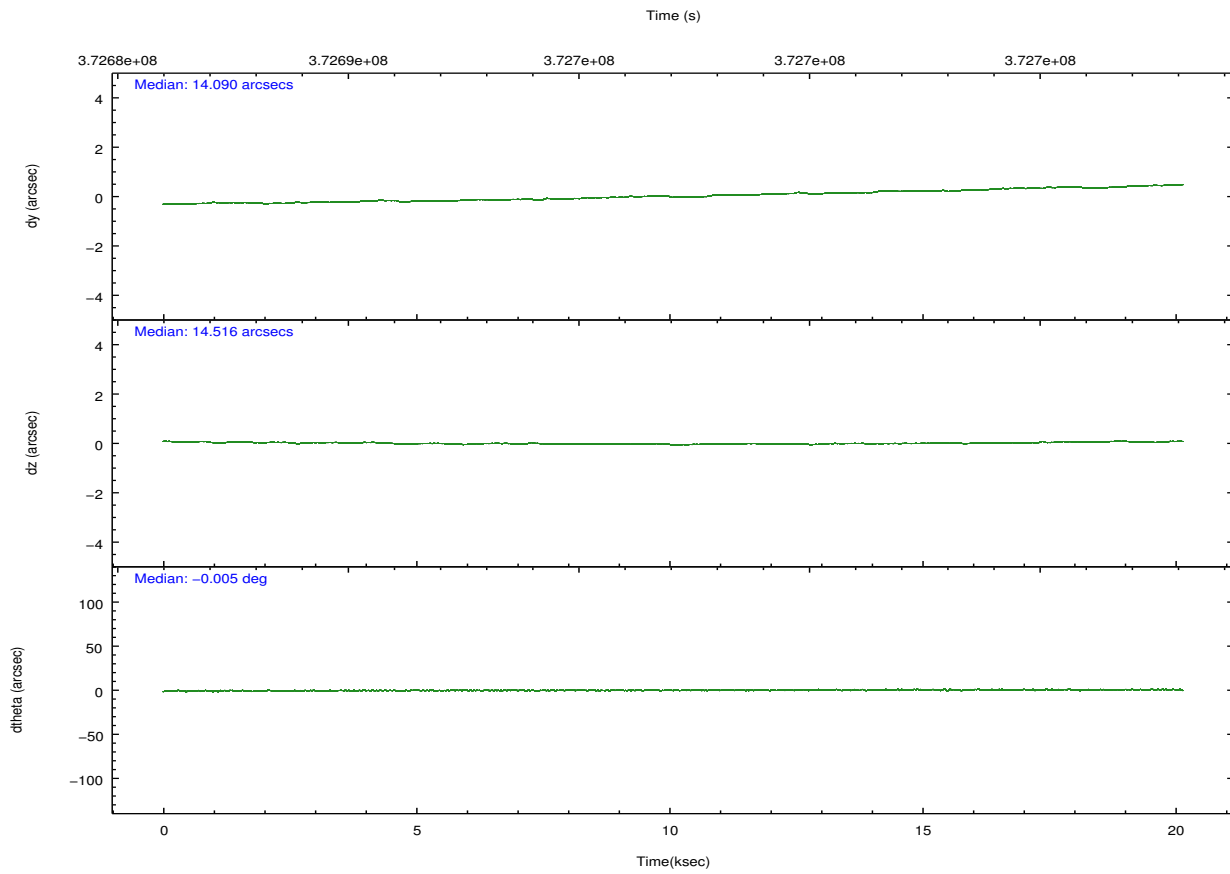
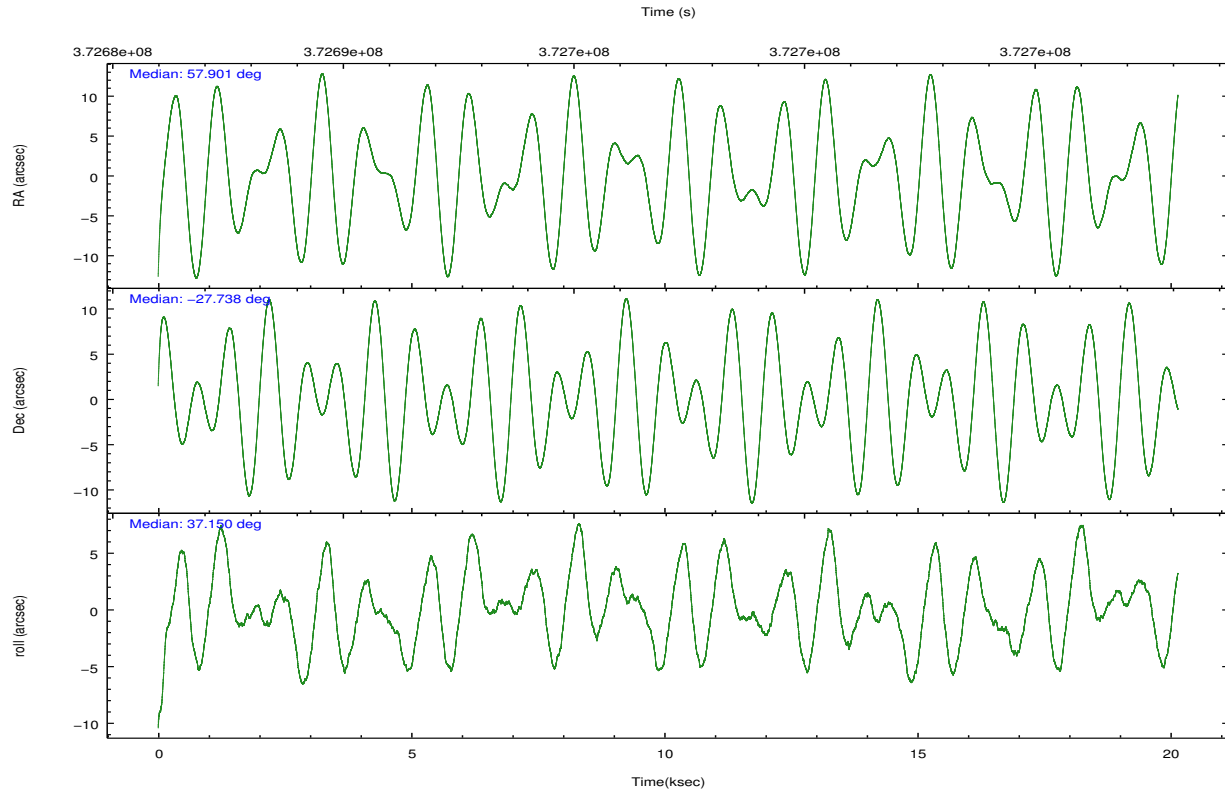
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	189332	170239	257937	176869	198595	221470	grade 0 events	6242	5610	17958	6799	8592	16240
rejected events	171835	154219	129321	158185	108418	165855		3%	3%	6%	3%	4%	7%
rejected %	90%	90%	50%	89%	54%	74%	grade 1 events	97	102	501	92	281	175
								0%	0%	0%	0%	0%	0%
							grade 2 events	4457	3764	37050	4205	18937	13206
								2%	2%	14%	2%	9%	5%
							grade 3 events	1832	1821	6356	2007	8176	6017
								0%	1%	2%	1%	4%	2%
							grade 4 events	1859	1794	4706	1941	8159	5593
								0%	1%	1%	1%	4%	2%
							grade 5 events	5969	7100	22217	7114	20642	10550
								3%	4%	8%	4%	10%	4%
							grade 6 events	3342	3242	64365	3990	47518	15316
								1%	1%	24%	2%	23%	6%
							grade 7 events	165534	146806	104784	150721	86290	154373
								87%	86%	40%	85%	43%	69%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	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	57.889546	57.9011355416978	CCD I2 on	O1	Y
[deg] Pointing Dec	-27.763541	-27.73818327063679	CCD I3 on	O2	Y
[deg] Pointing Roll	36.995524	37.15754621049004	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O3	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)	372687110.184000	372685920.18374	CCD S5 on	N	N
Observation start date	2009-10-23T12:10:44	2009-10-23T11:52:00	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	372707110.184000	372708200.60986	On-chip summing requested	N	N
Observation end date	2009-10-23T17:44:04	2009-10-23T18:03:20	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



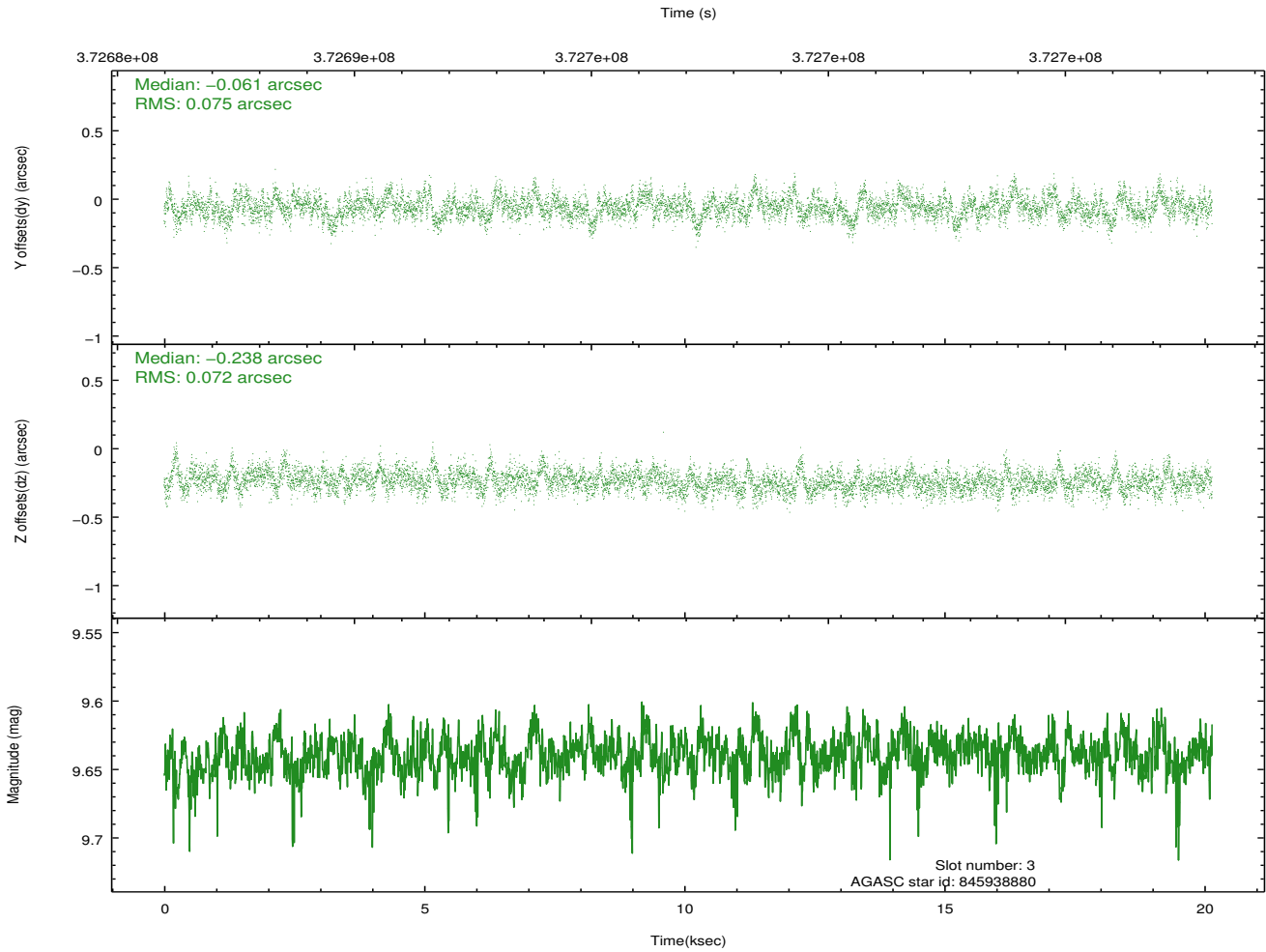
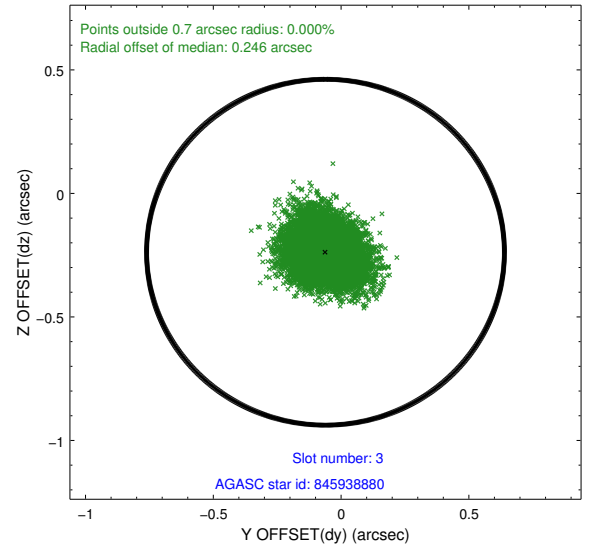
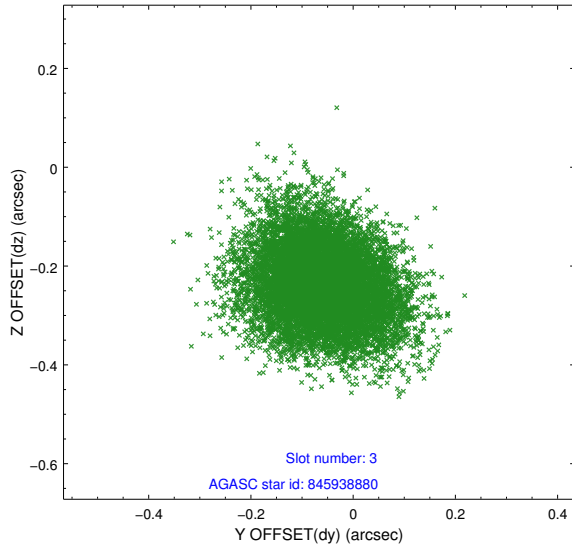


### Slot Statistics

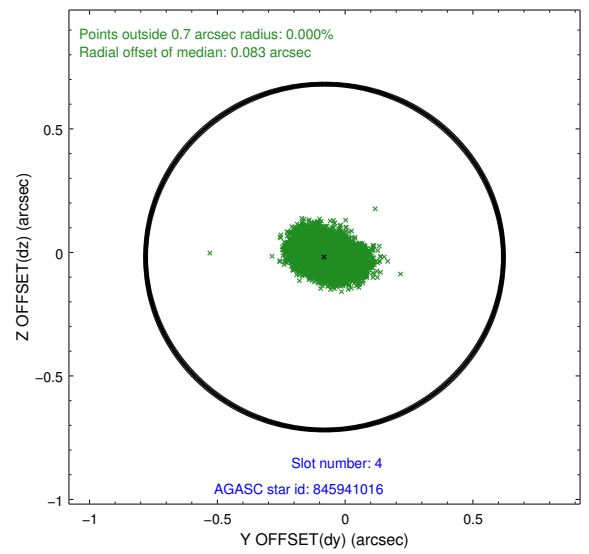
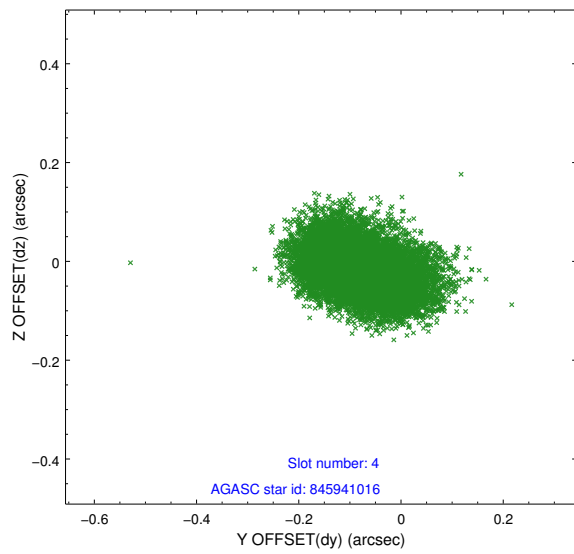
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.89	4914	-0.073	-0.047	0.010	0.015	0.000000	0.000000	-767.13	-1735.89
1	FID	ACIS-S-4	6.98	4914	0.217	0.048	0.008	0.015	0.000000	0.000000	2146.34	172.52
2	FID	ACIS-S-5	7.00	4914	-0.172	0.007	0.012	0.019	0.000000	0.000000	-1819.85	166.32
3	GUIDE	845938880	9.64	9812	-0.061	-0.238	0.111	0.180	57.312258	-27.554345	-1021.44	1706.39
4	GUIDE	845941016	7.39	9827	-0.081	-0.019	0.089	0.140	58.572230	-27.668843	1940.77	-1041.76
5	GUIDE	845941600	10.08	9811	0.174	0.110	0.228	0.346	57.790347	-28.357525	-1536.92	-1518.95
6	GUIDE	845941920	10.06	9817	-0.069	0.118	0.234	0.357	57.611838	-28.468787	-2229.78	-1499.95
7	GUIDE	845942368	10.03	9806	0.021	0.027	0.148	0.241	58.027023	-28.067705	-309.98	-1137.58

## 2.4 Star Slots

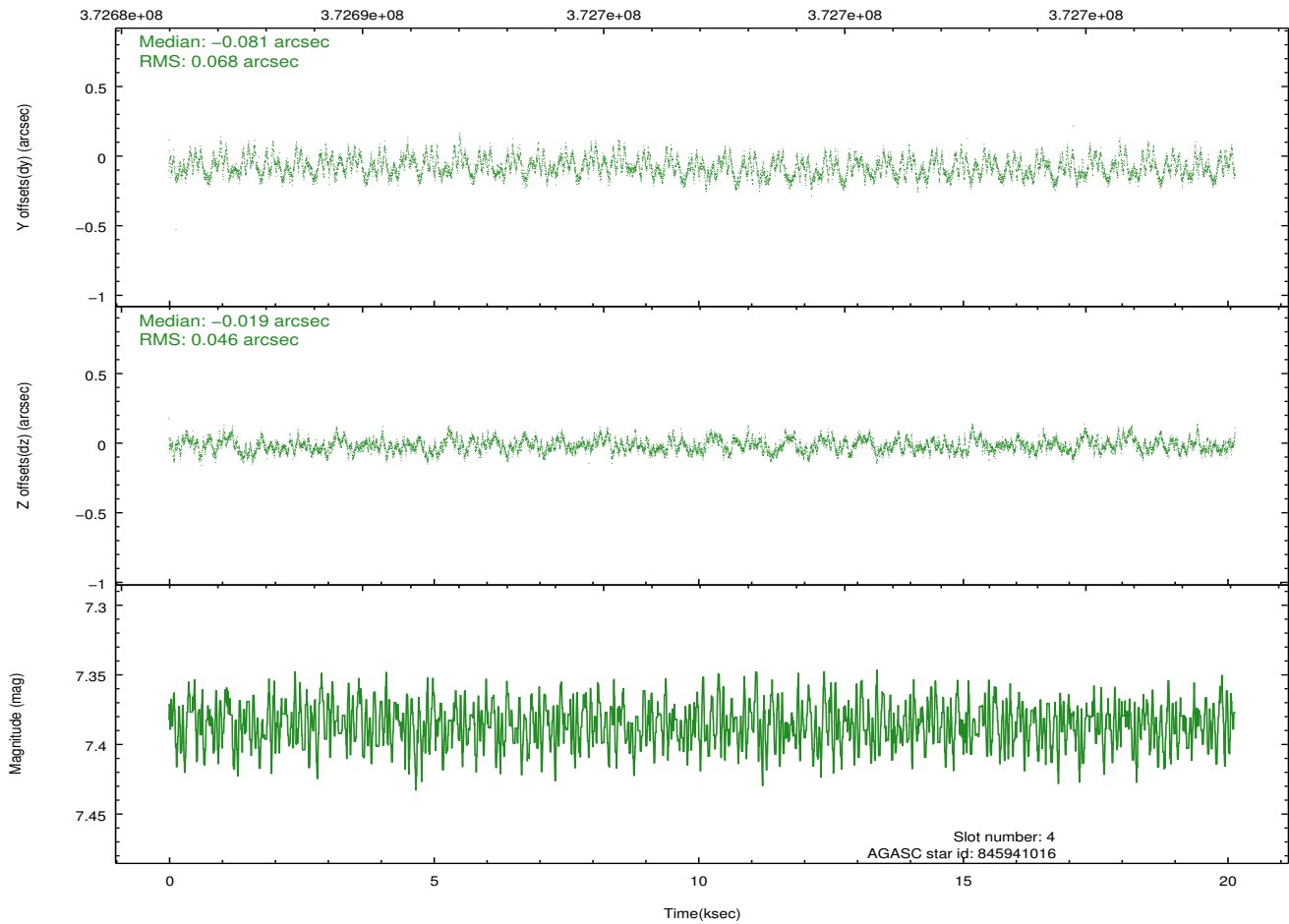
### 2.4.1 Slot 3



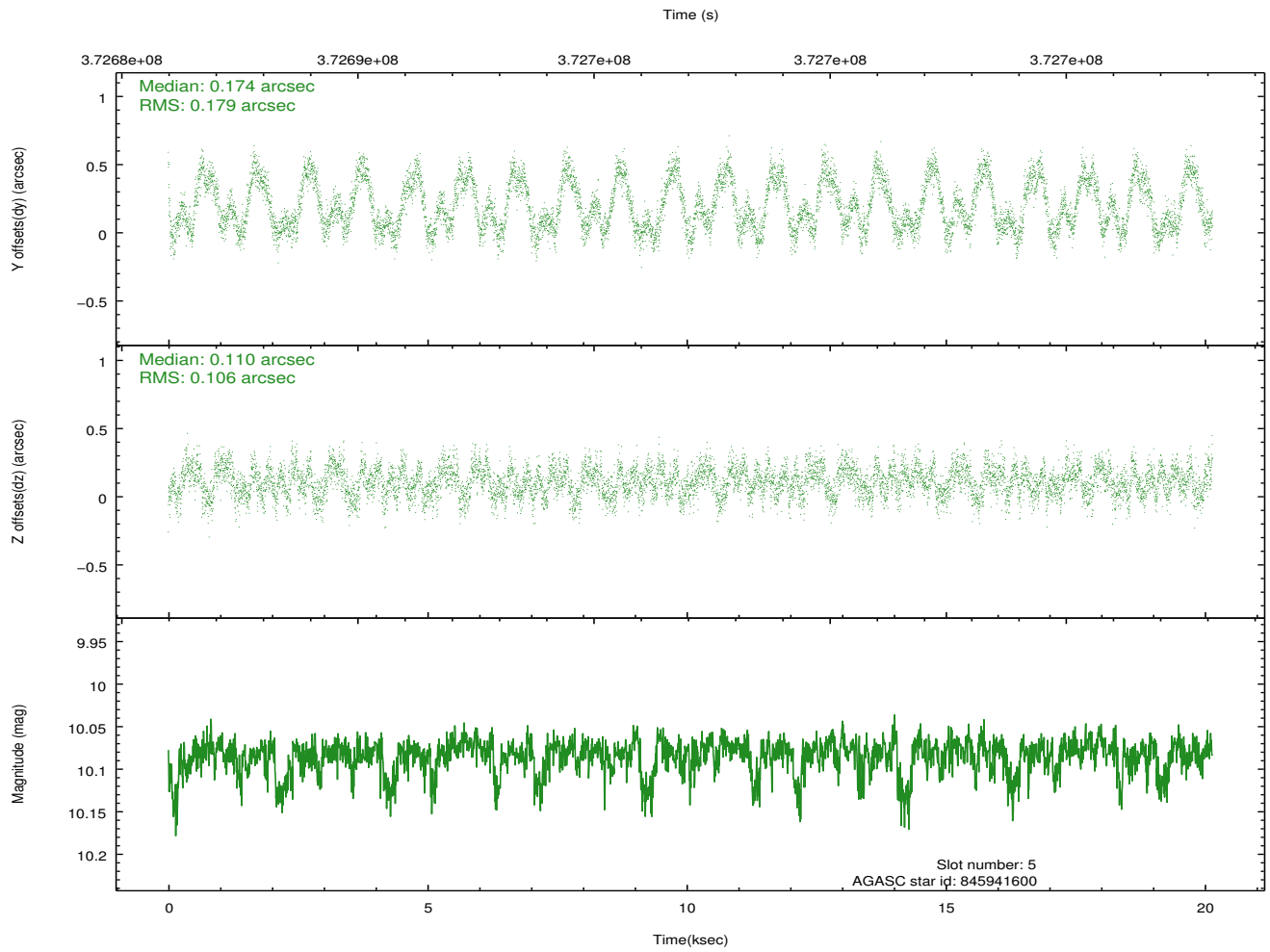
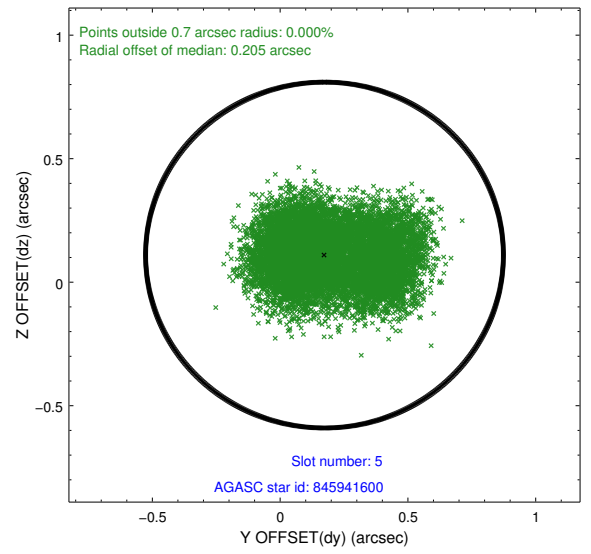
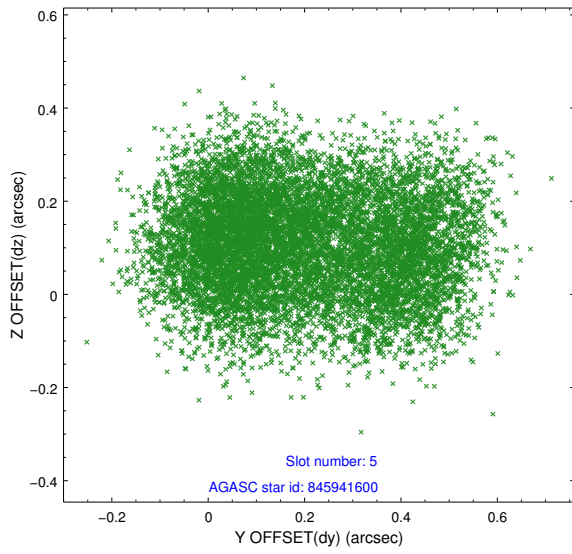
## 2.4.2 Slot 4



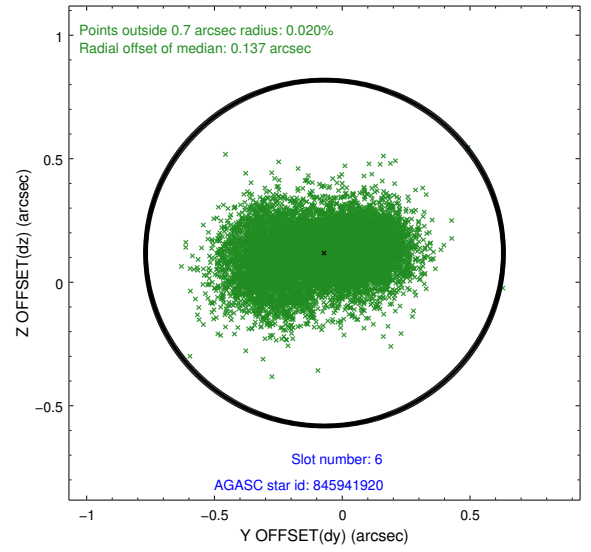
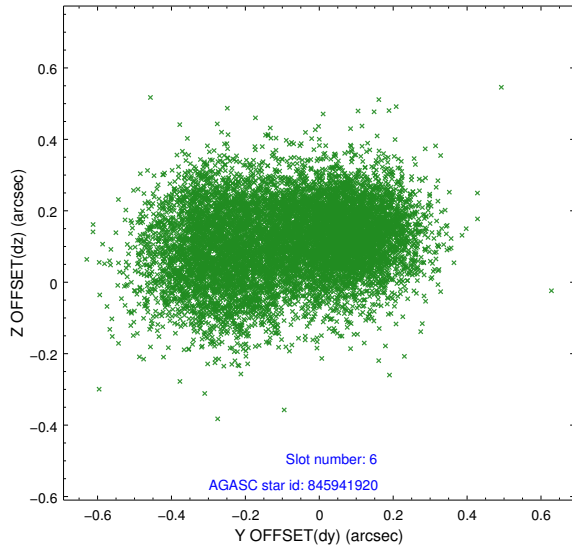
Time (s)



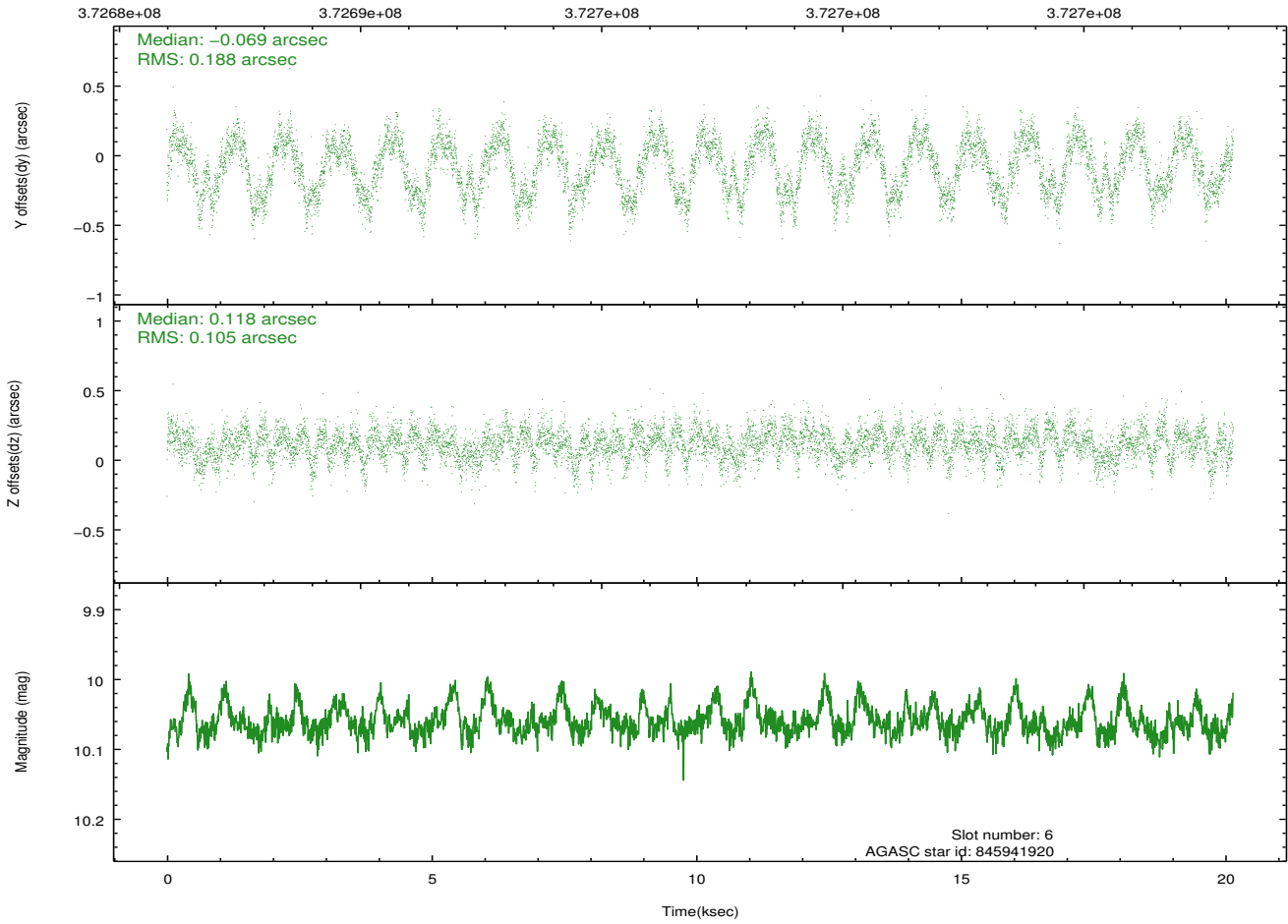
### 2.4.3 Slot 5



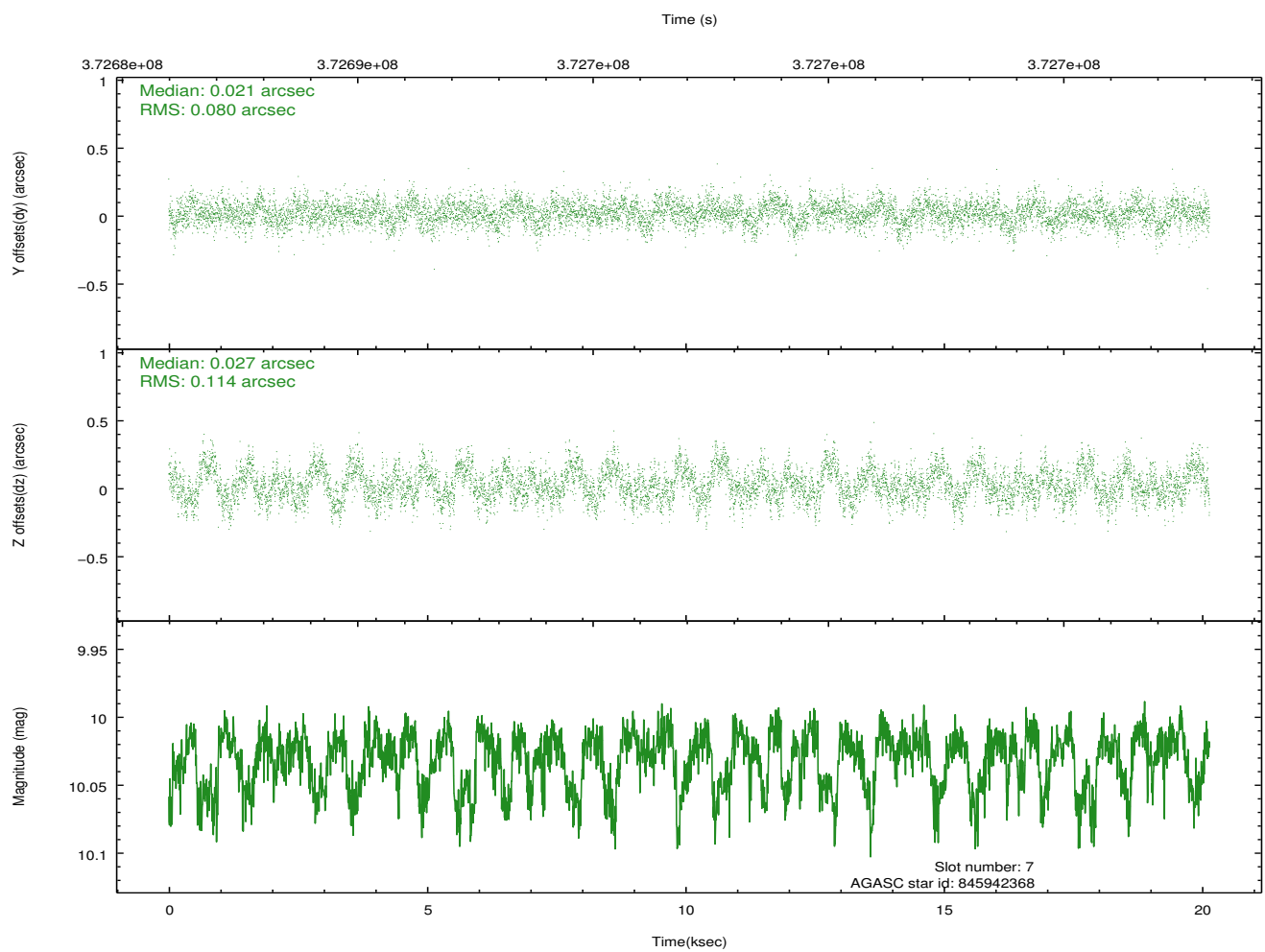
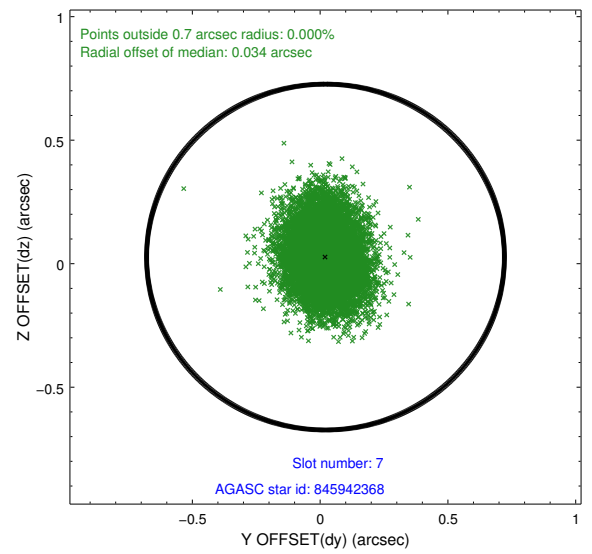
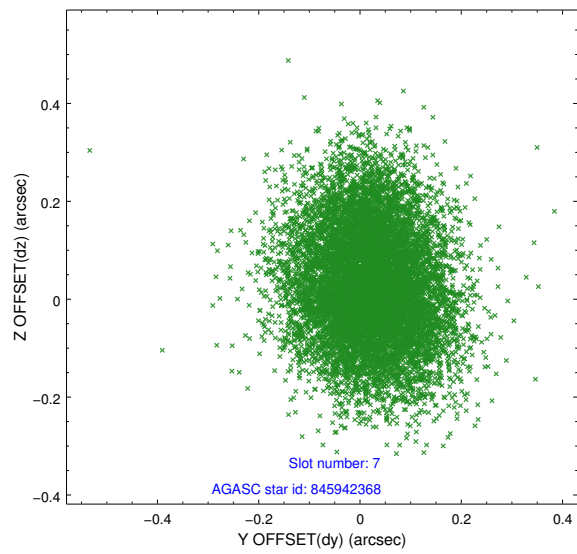
## 2.4.4 Slot 6



Time (s)

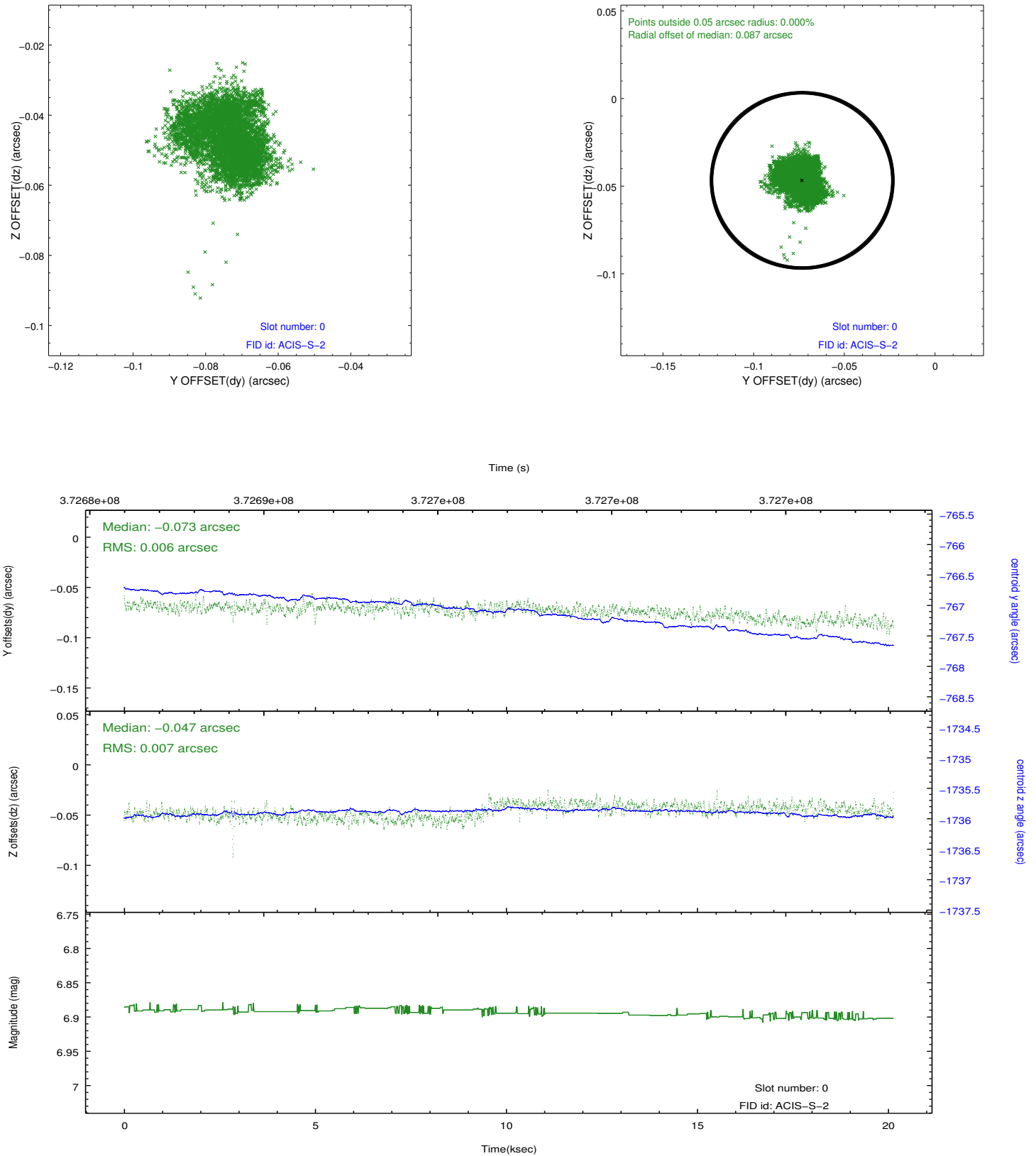


## 2.4.5 Slot 7

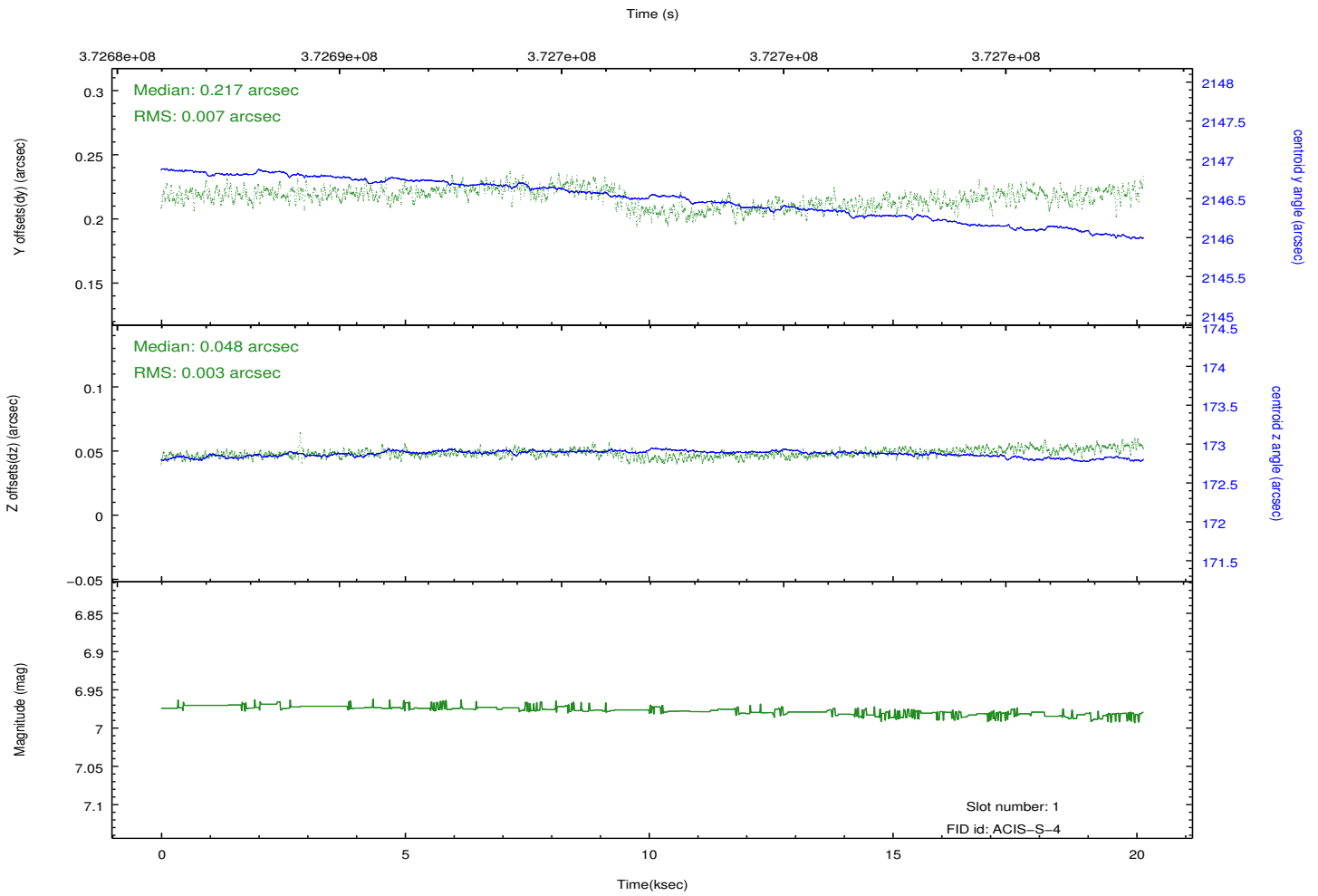
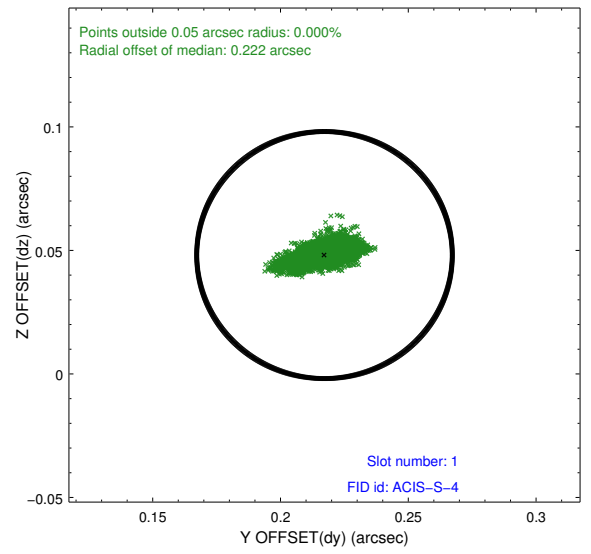
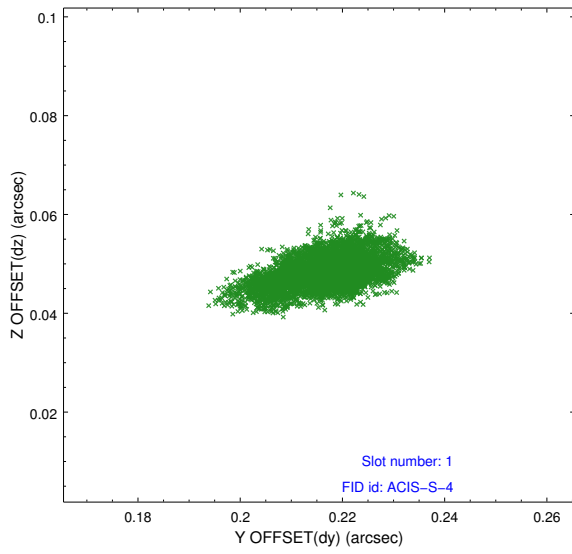


## 2.5 FID Slots

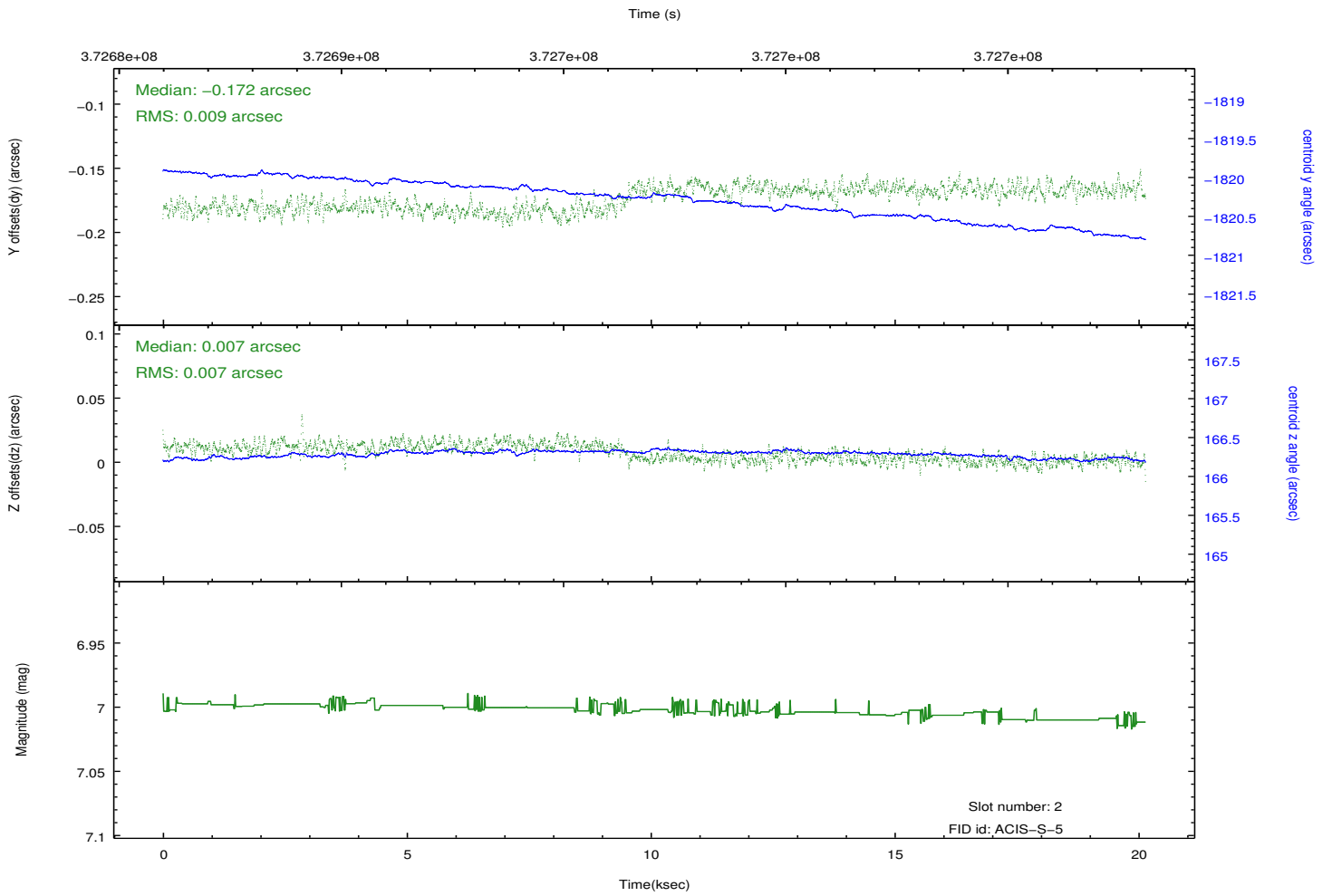
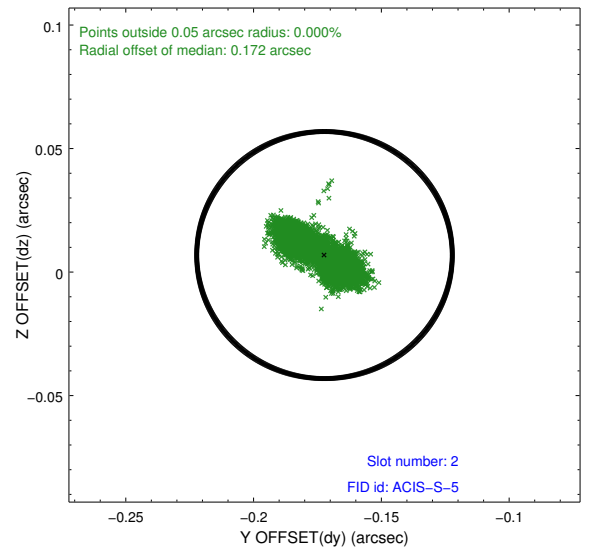
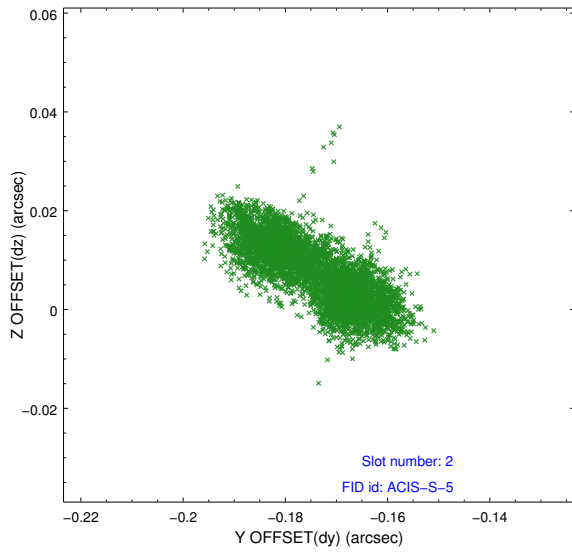
### 2.5.1 Slot 0



## 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)	2012.06.19
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.140799925029

## A.2 Comments