

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 3985 - L2 Version 3  
Chandra X-Ray Center

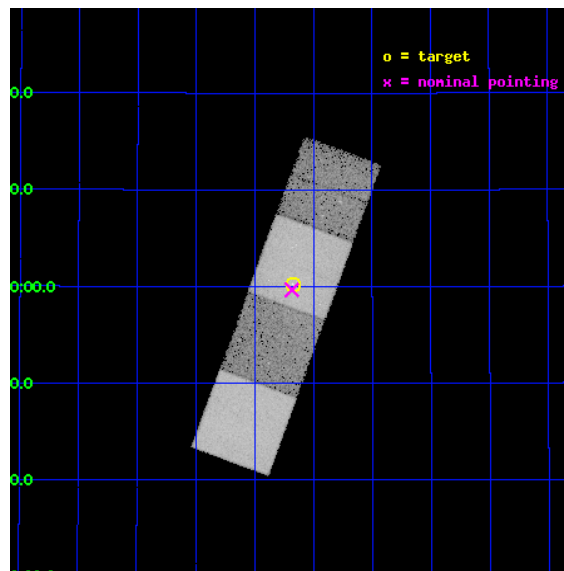
L2 Processing Date : Nov 4 2012

## 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

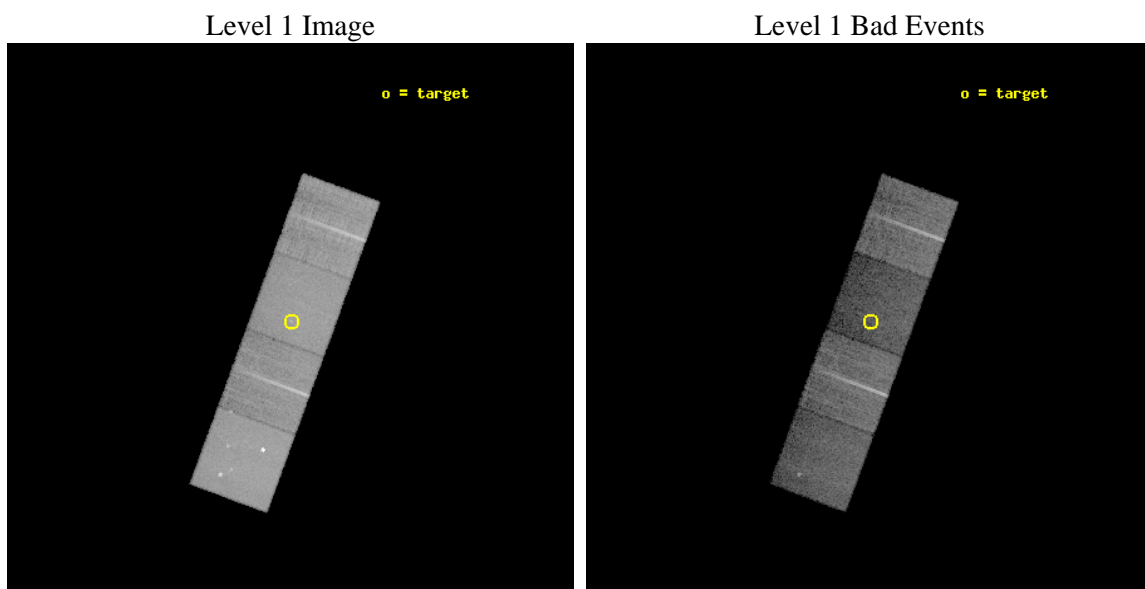
seq_num	700664	Sequence number
obs_id	3985	Observation id
title	THE X-RAY JETS, CORES, AND GAS IN FRI RADIO GALAXIES	Proposal titl
observer	Prof Diana Worrall	Principal investigator
object	B2 1615+35	Source name
dtycycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	244.41875	Observer's specified target RA [deg]
dec_targ	35.004083	Observer's specified target Dec [deg]
ra_nom	244.4208141605	Nominal RA [deg]
dec_nom	34.994580975316	Nominal Dec [deg]
roll_nom	290.17642353249	Nominal Roll [deg]
revision	3	Processing version of data
ontime	19650.859001935	Sum of GTIs [s]
livetime	19394.106062322	Livetime [s]
ontime5	19650.859001935	Sum of GTIs [s]
ontime6	19645.280698955	Sum of GTIs [s]
ontime7	19650.859001935	Sum of GTIs [s]
ontime8	19648.380629241	Sum of GTIs [s]
l2events	198228	Number of level 2 events



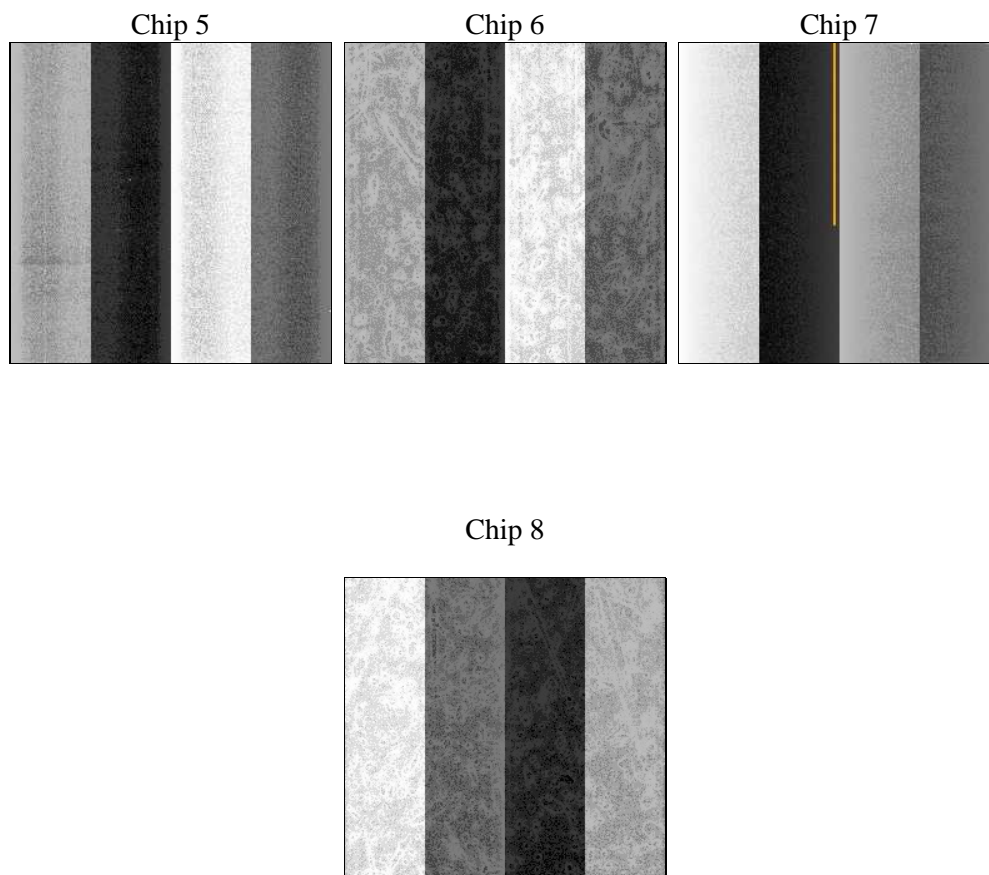
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	19499.751000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	19650.859001935	Sum of GTIs [s]
caldbver	4.5.2	&#160	ontime5	19650.859001935	Sum of GTIs [s]
date	2012-11-04T12:26:15	Date and time of file creation	ontime6	19645.280698955	Sum of GTIs [s]
revision	3	Processing version of data	ontime7	19650.859001935	Sum of GTIs [s]
			ontime8	19648.380629241	Sum of GTIs [s]
			l1events	563165	Number of level 1 events

### 2.1.4 Events

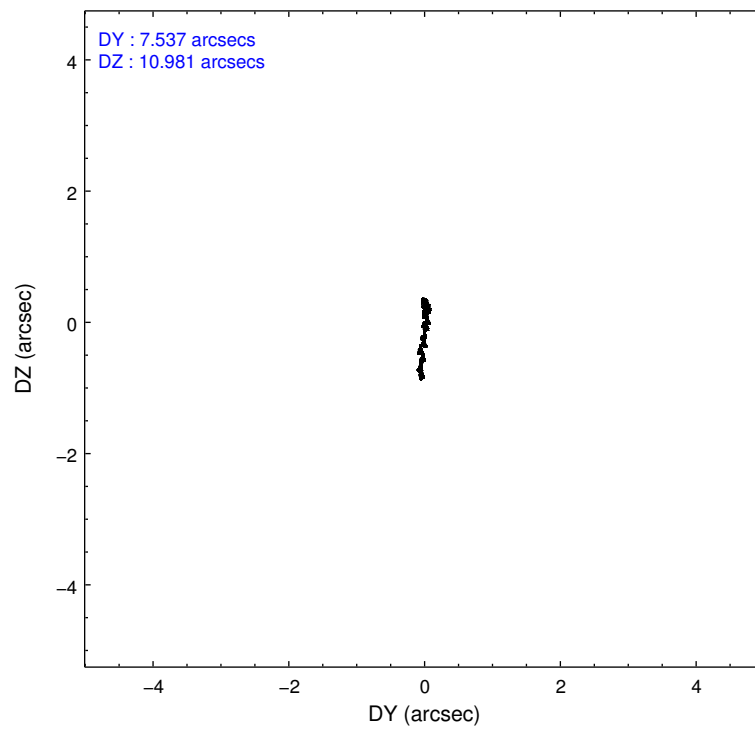
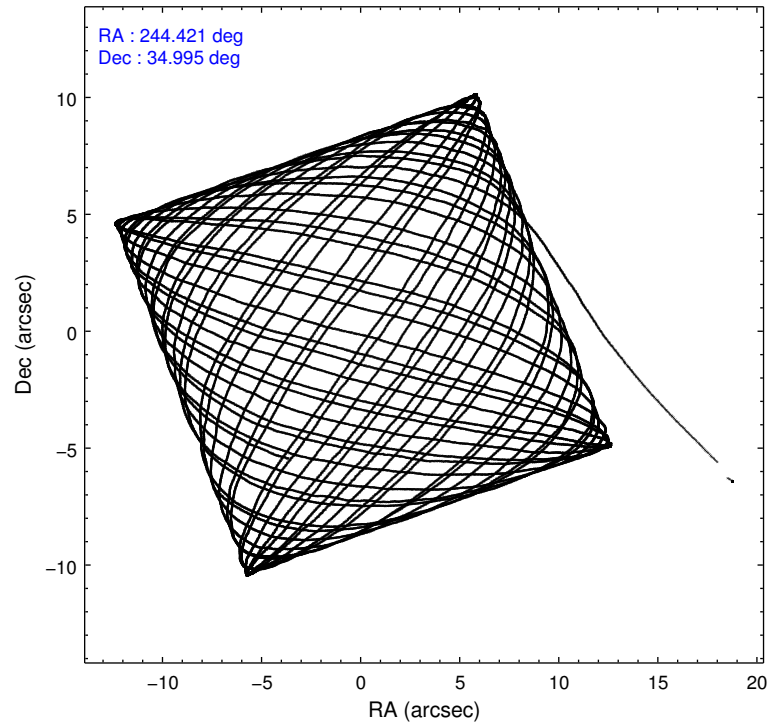
	<b>ccd 5</b>	<b>ccd 6</b>	<b>ccd 7</b>	<b>ccd 8</b>
level 1 events	167315	118857	137689	139304
rejected events	69074	100601	57386	104725
rejected %	41%	84%	41%	75%

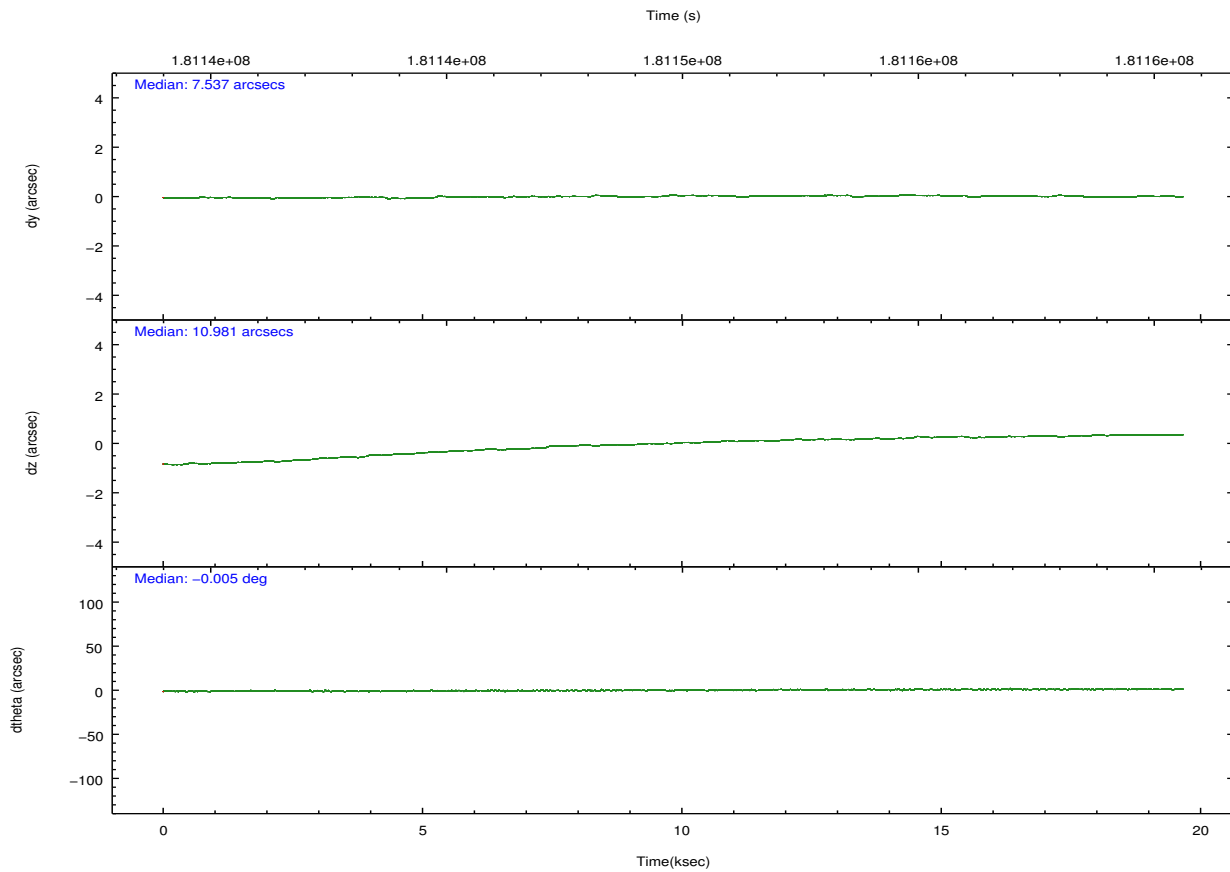
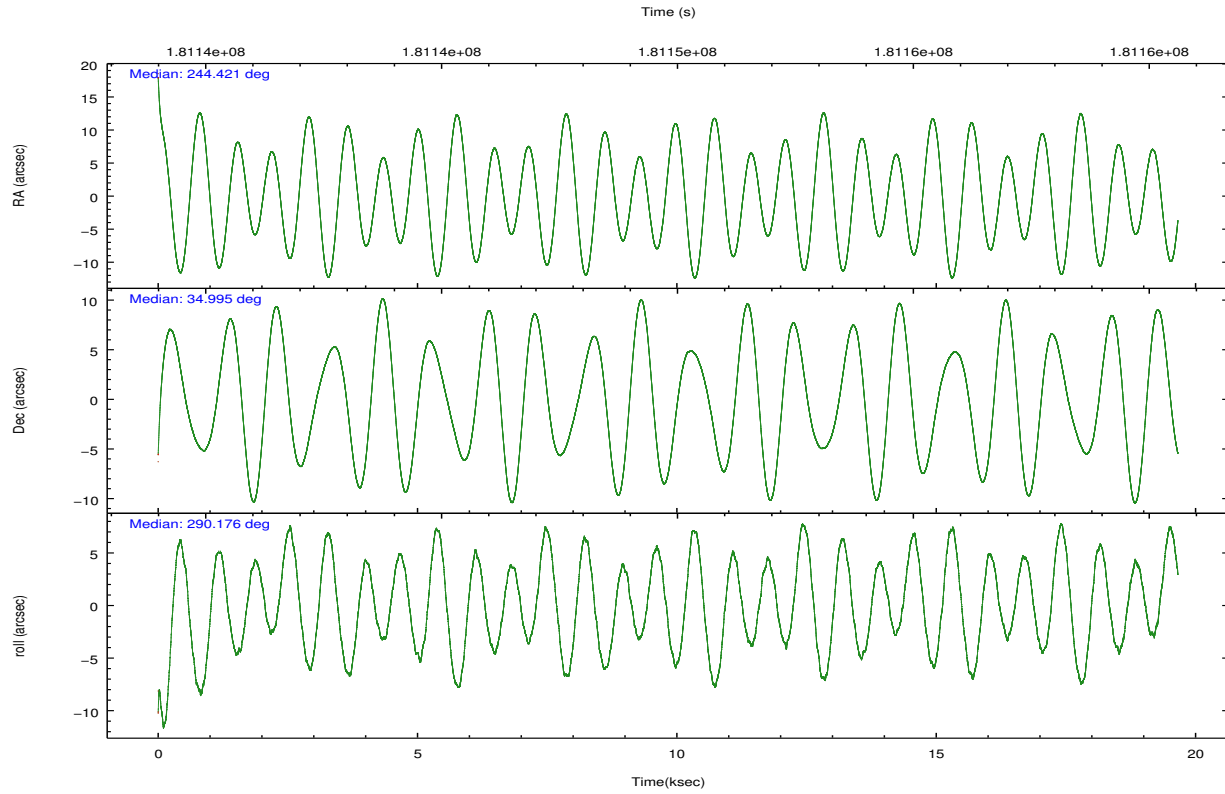
	<b>ccd 5</b>	<b>ccd 6</b>	<b>ccd 7</b>	<b>ccd 8</b>
grade 0 events	19716	13564	11676	16173
	11%	11%	8%	11%
grade 1 events	493	104	111	120
	0%	0%	0%	0%
grade 2 events	29385	4047	18131	8146
	17%	3%	13%	5%
grade 3 events	5682	1737	8227	3991
	3%	1%	5%	2%
grade 4 events	5469	1721	8327	3623
	3%	1%	6%	2%
grade 5 events	11155	3511	10769	5099
	6%	2%	7%	3%
grade 6 events	45271	3215	41099	8927
	27%	2%	29%	6%
grade 7 events	50144	90958	39349	93225
	29%	76%	28%	66%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-5678	ACIS-5678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	244.394992	244.4208141605038	Subarray requested	NONE	NONE
[deg] Pointing Dec	35.011713	34.99458097531646	Alternating exposures requested	N	N
[deg] Pointing Roll	290.034614	290.1764235324928	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	181140128.184000	181138885.73241			
Observation start date	2003-09-28T12:41:04	2003-09-28T12:21:25			
[s] Observation end time (MET)	181159627.184000	181159941.79582			
Observation end date	2003-09-28T18:06:03	2003-09-28T18:12:21			
Read mode	TIMED	TIMED			

## 2.3 Aspect



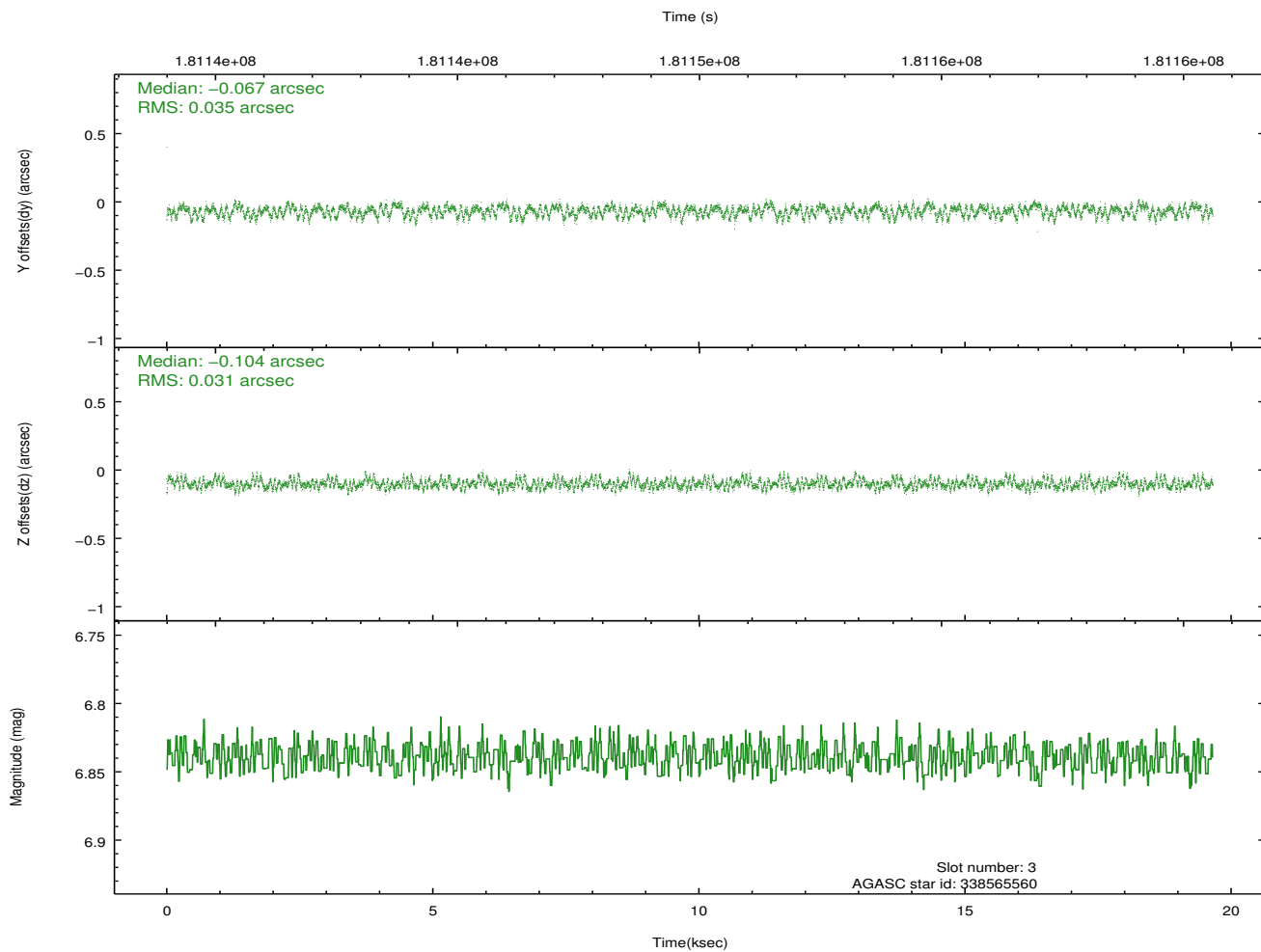
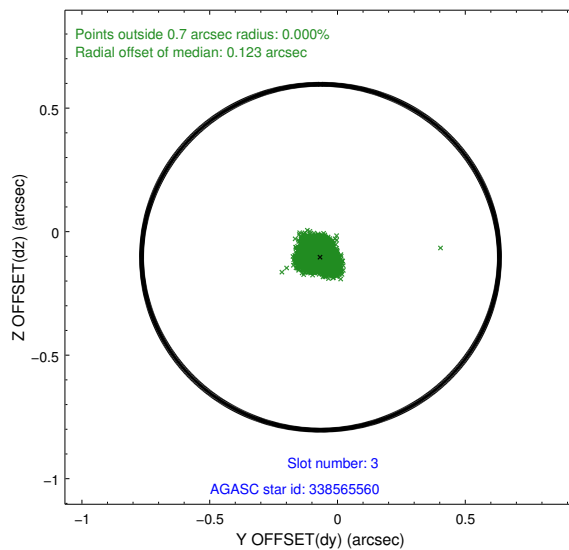
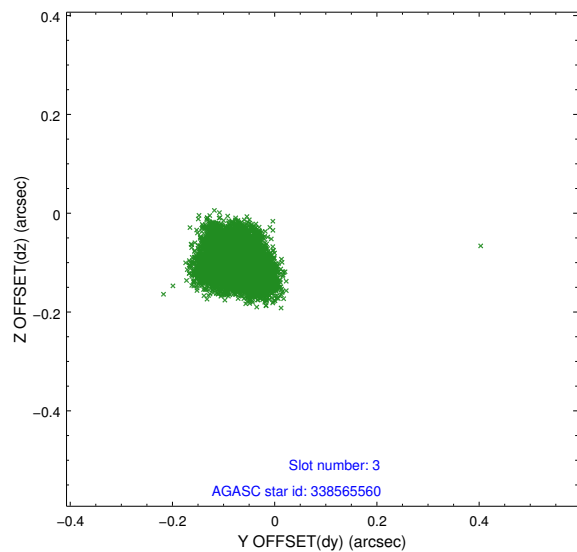


### Slot Statistics

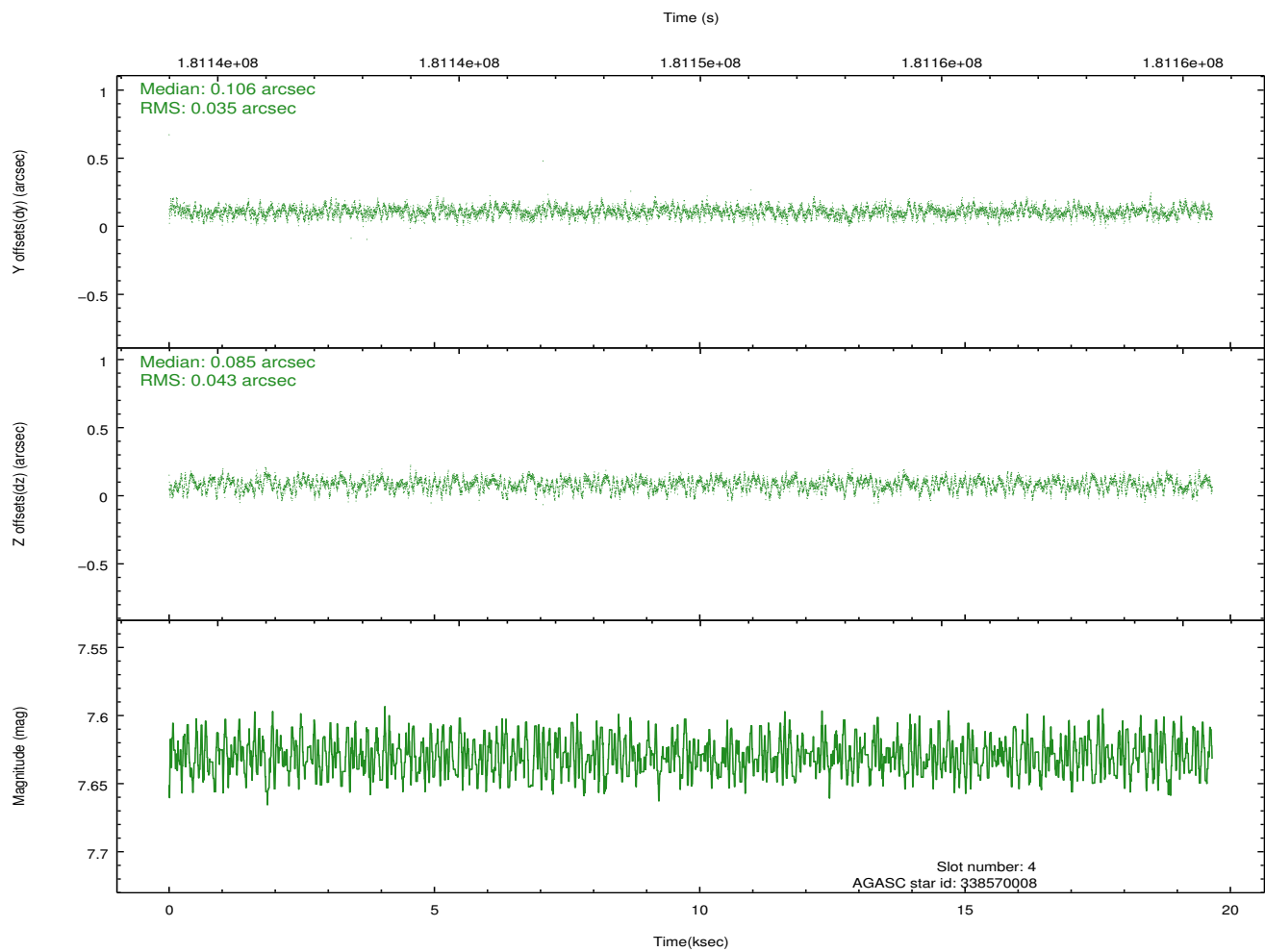
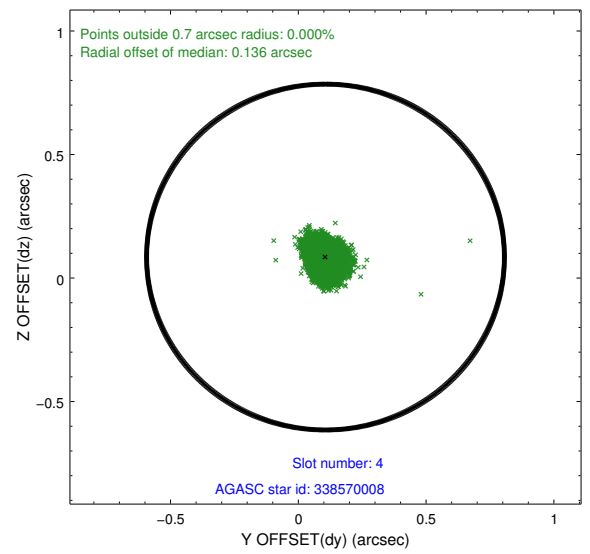
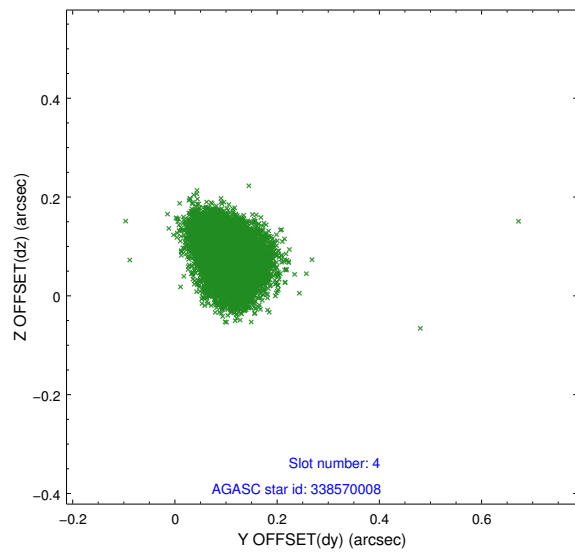
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	4793	-0.033	-0.003	0.010	0.015	0.000000	0.000000	-760.30	-1732.16
1	FID	ACIS-S-4	7.20	4792	0.058	0.017	0.009	0.015	0.000000	0.000000	2152.95	176.18
2	FID	ACIS-S-5	7.23	4793	-0.056	-0.005	0.007	0.012	0.000000	0.000000	-1812.95	169.99
3	GUIDE	338565560	6.84	9588	-0.067	-0.104	0.050	0.079	245.145714	34.627796	2052.86	1618.88
4	GUIDE	338570008	7.63	9589	0.106	0.085	0.059	0.093	244.524487	34.482759	1921.32	-291.02
5	GUIDE	338954984	8.74	9584	-0.102	-0.007	0.062	0.101	243.868741	35.485553	-2134.36	-863.50
6	GUIDE	338966736	7.86	9589	-0.083	0.069	0.057	0.096	244.463523	35.699581	-2257.83	1036.85
7	GUIDE	338576768	8.44	9587	0.143	-0.041	0.071	0.111	244.364081	34.281242	2439.40	-986.97

## 2.4 Star Slots

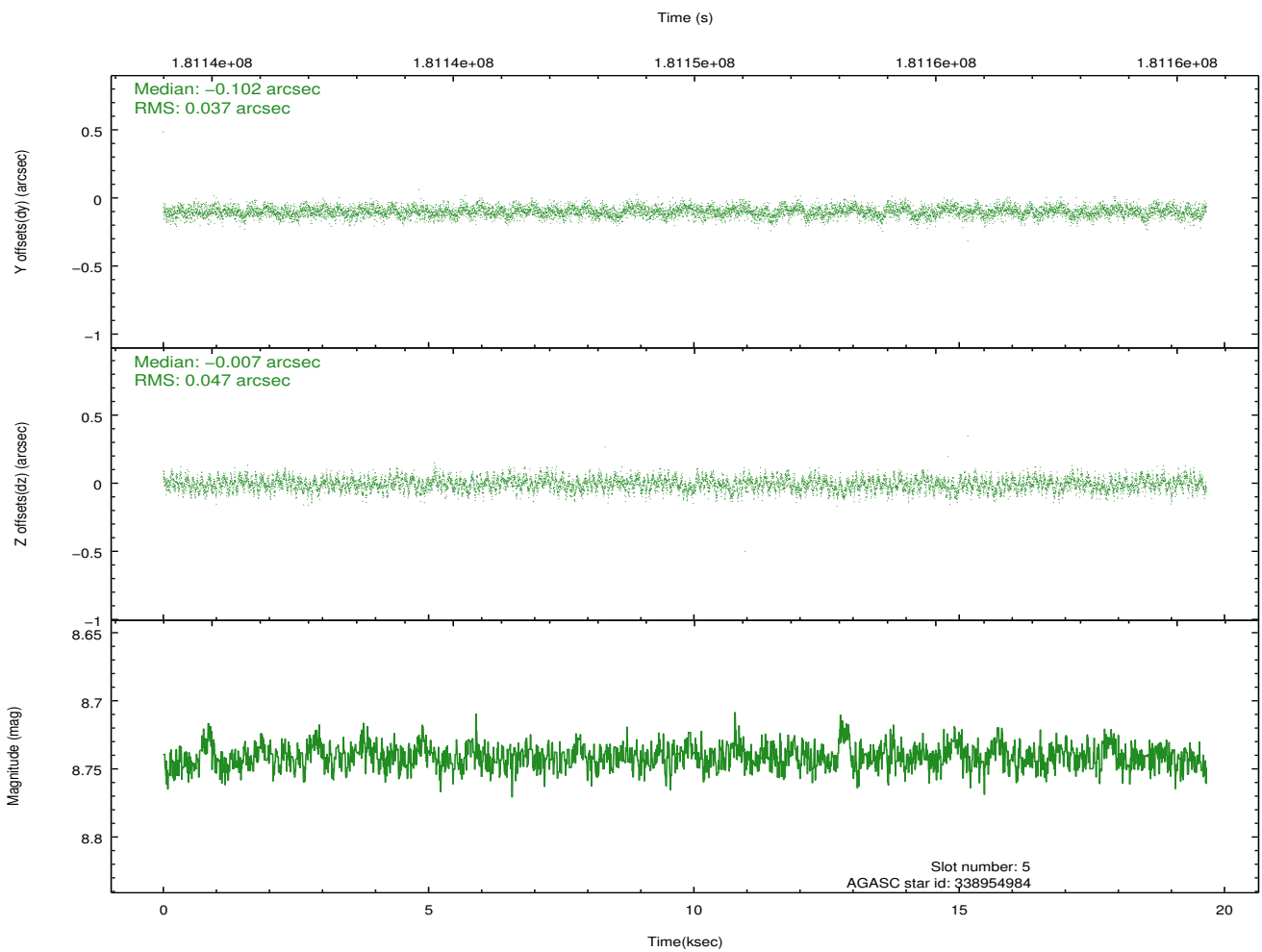
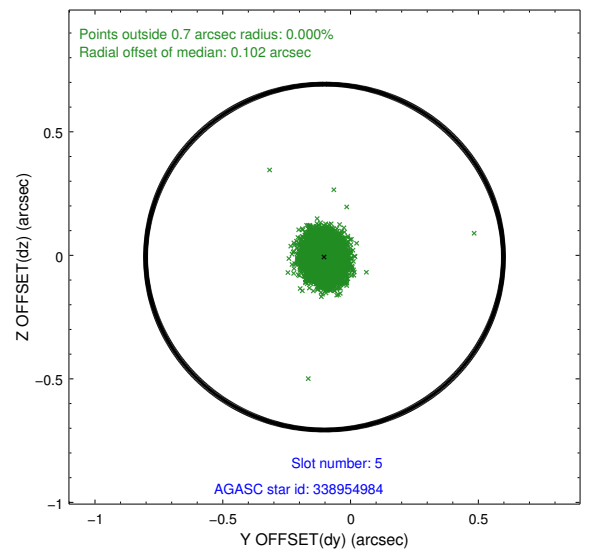
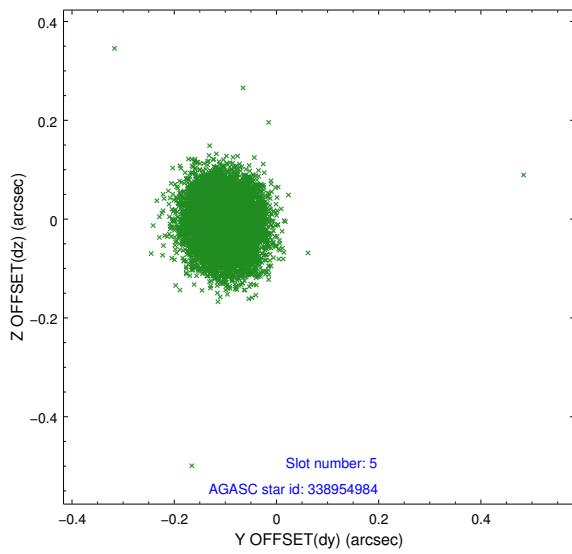
### 2.4.1 Slot 3



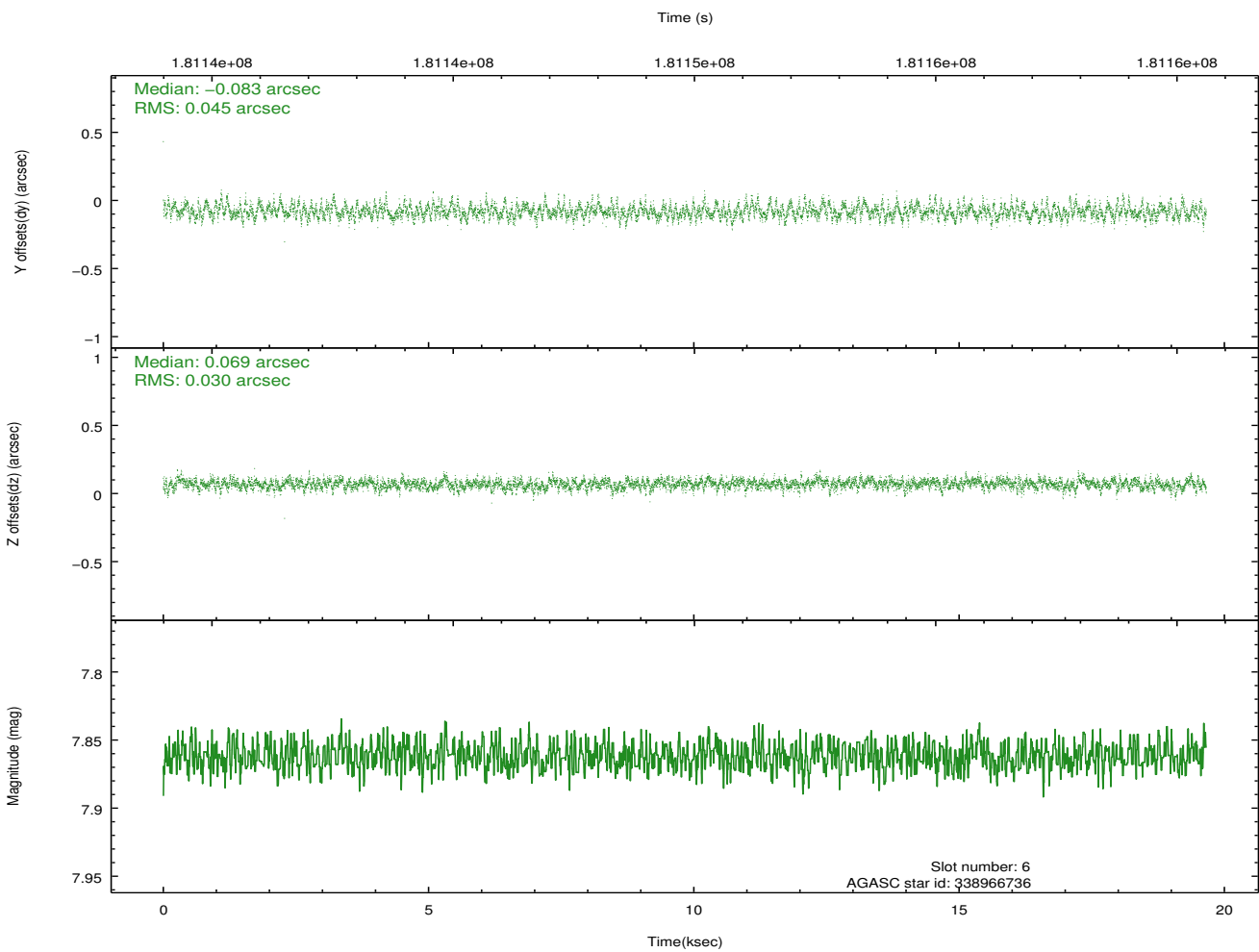
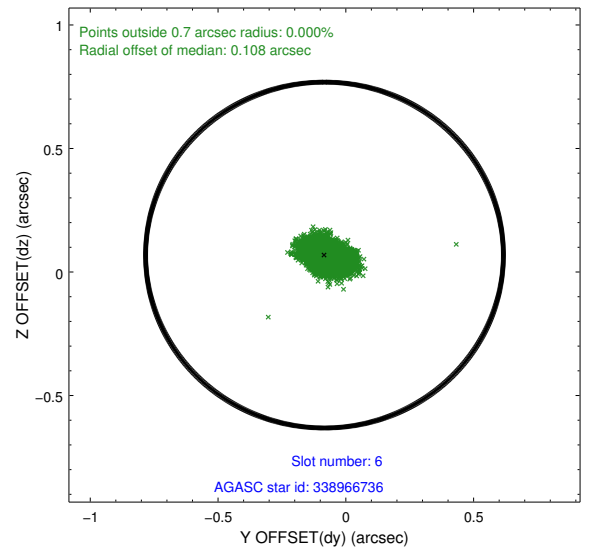
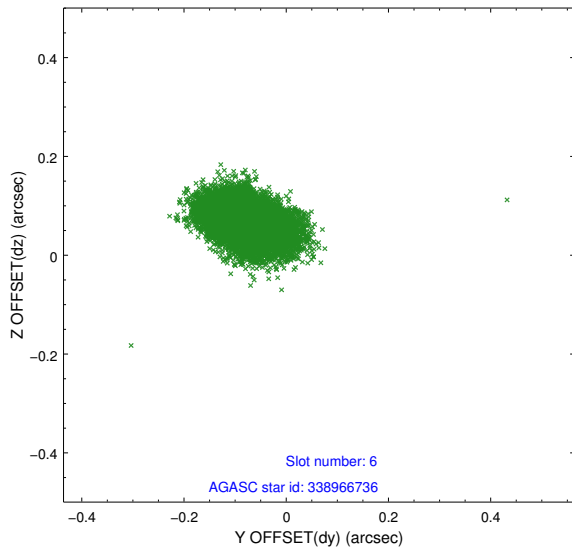
## 2.4.2 Slot 4



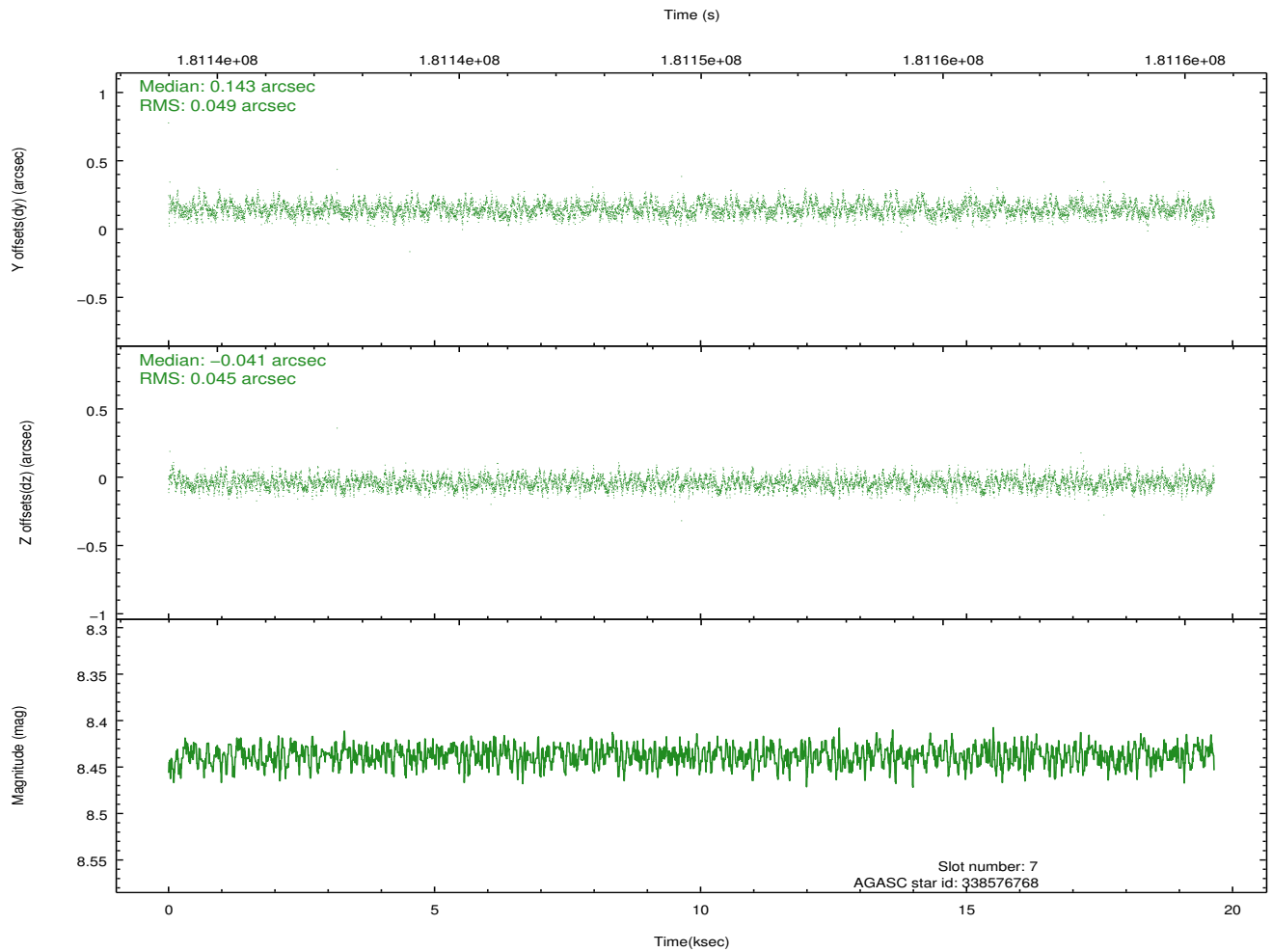
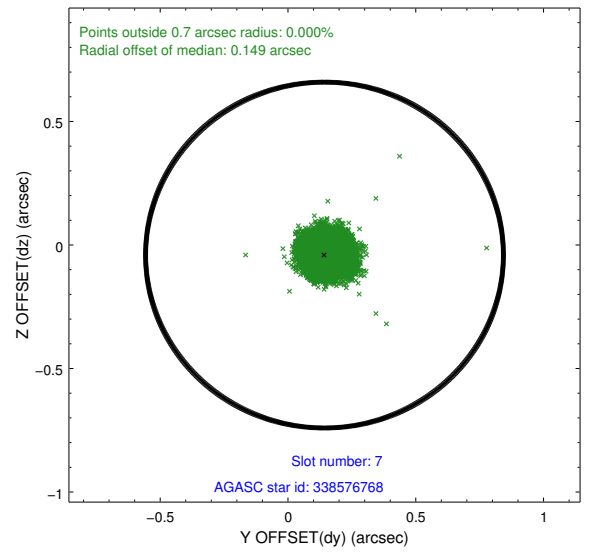
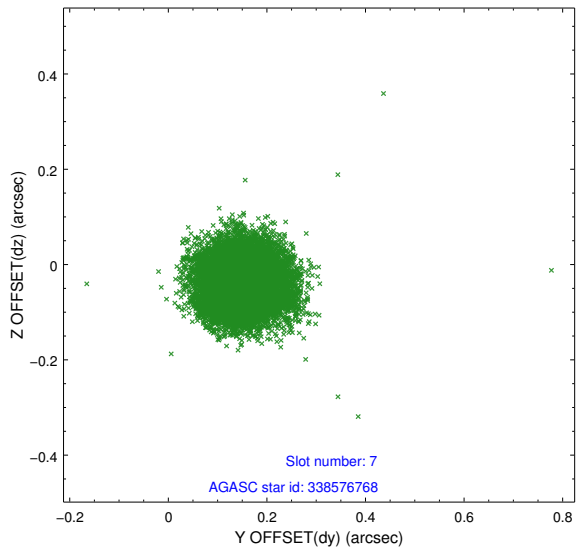
### 2.4.3 Slot 5



## 2.4.4 Slot 6

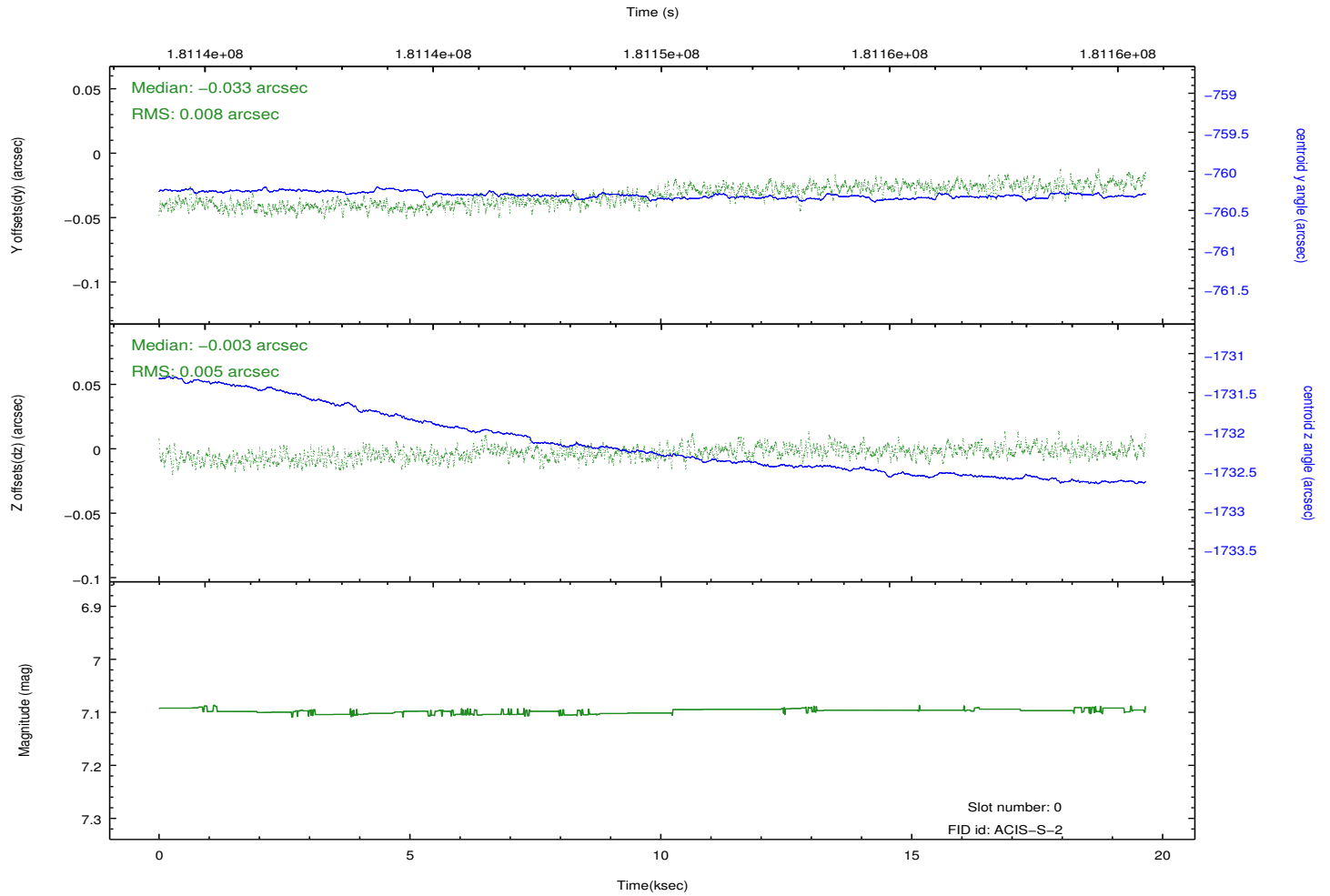
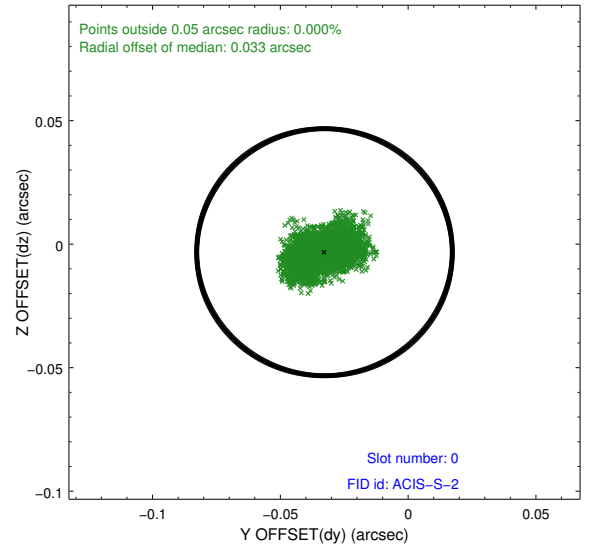
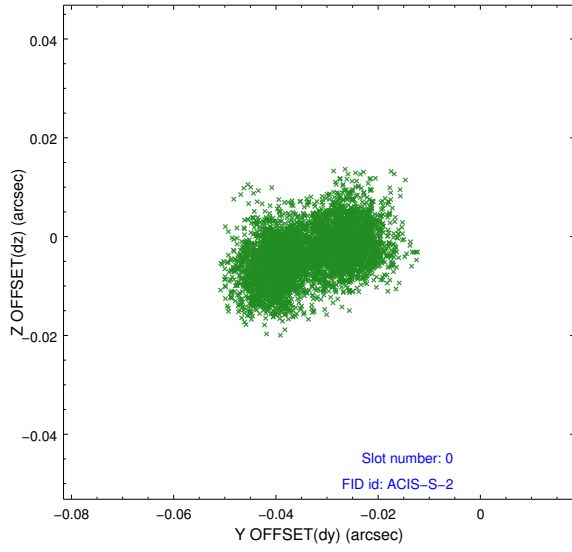


### 2.4.5 Slot 7

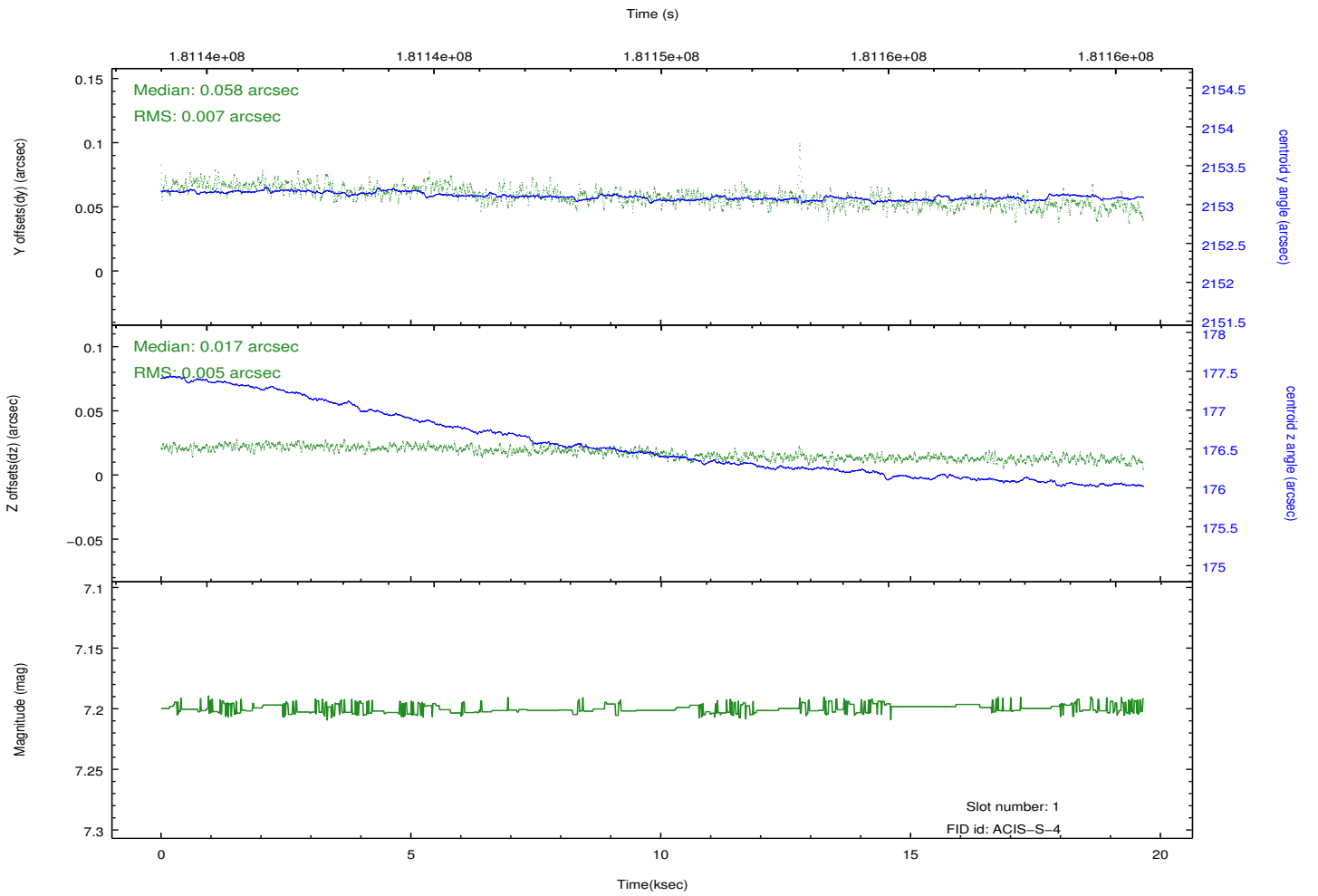
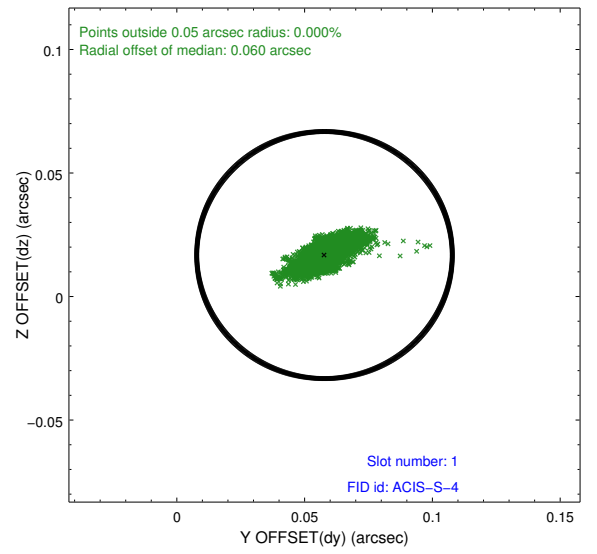
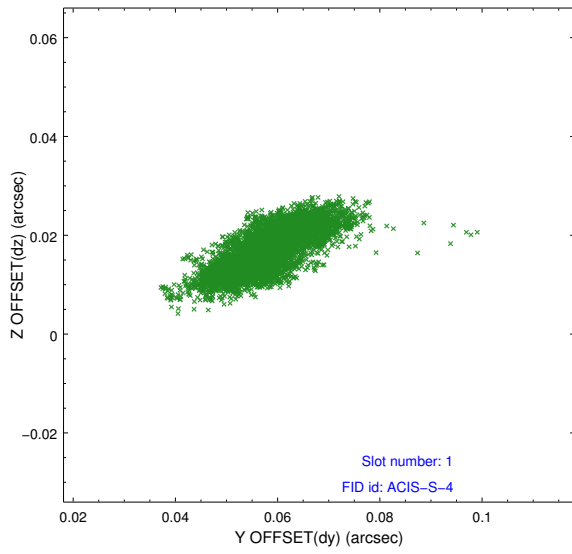


## 2.5 FID Slots

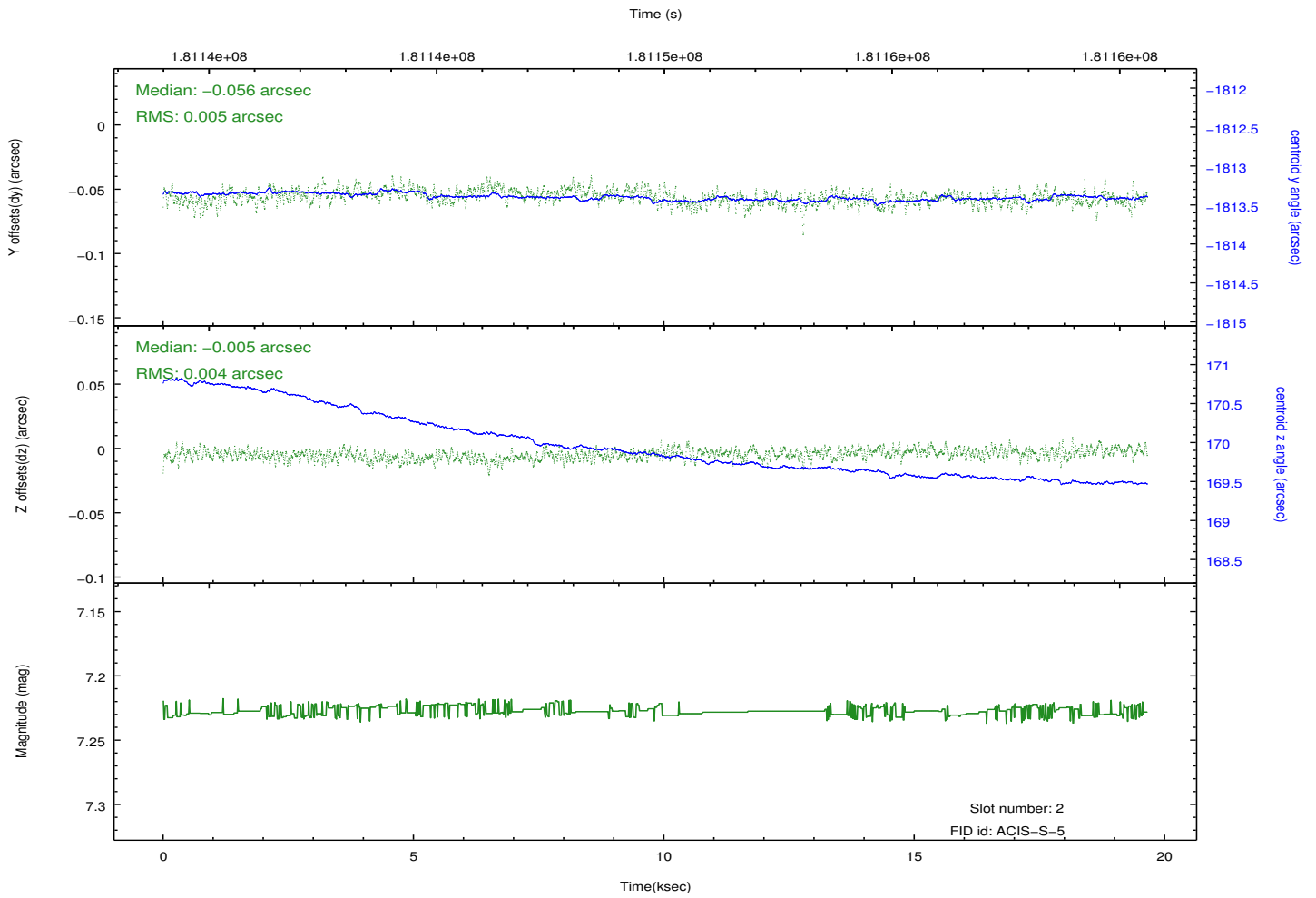
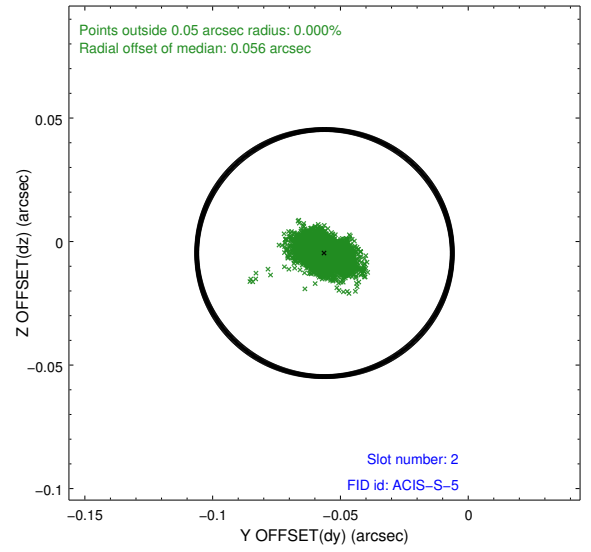
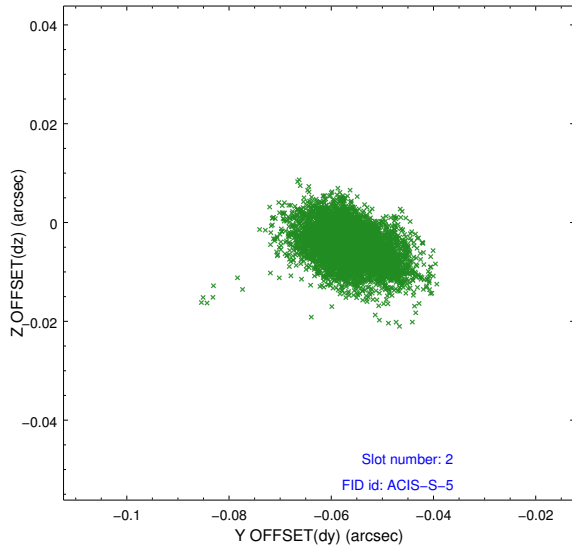
### 2.5.1 Slot 0



## 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)	2012.11.26
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	19.65

## A.2 Comments