

# V&V Reference Report

## L2 ASCDS Version : 8.1.1

Observation 801 - L2 Version 4  
Chandra X-Ray Center

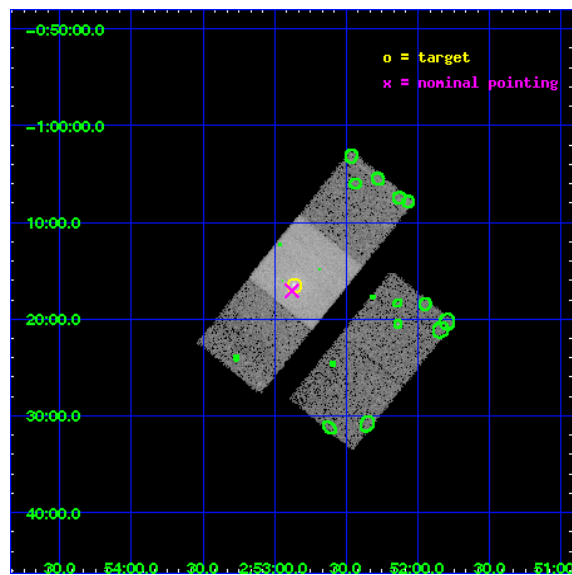
L2 Processing Date : Nov 25 2009

## 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>3</b>	<b>Point Sources</b>	<b>17</b>
<b>A</b>	<b>Summary</b>	<b>18</b>
A.1	Status . . . . .	18
A.2	Comments . . . . .	18

# 1 Front

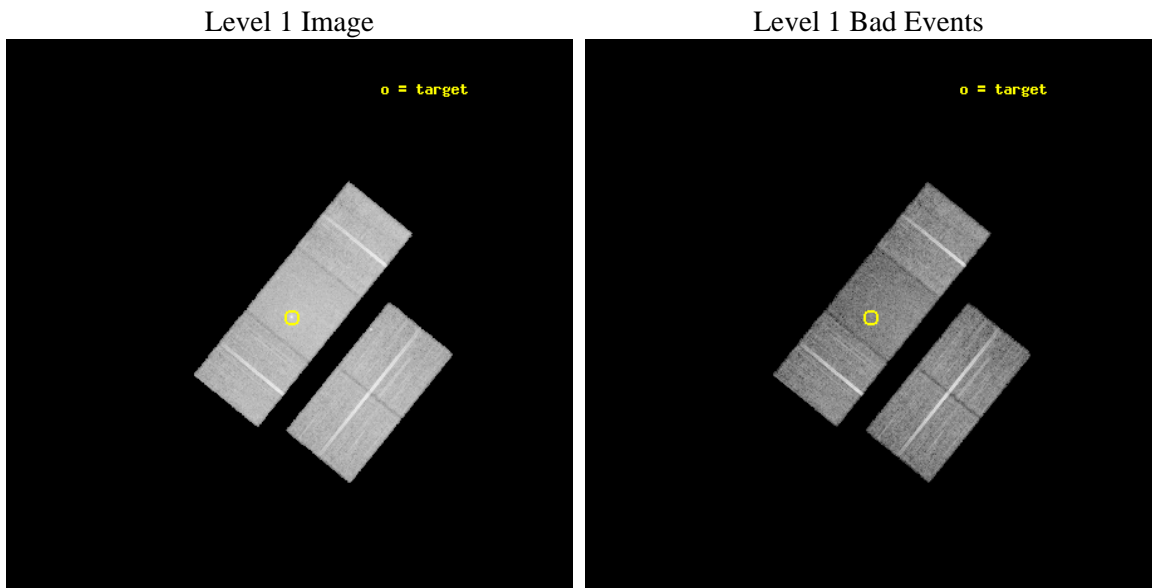
seq_num	600104	Sequence number
obs_id	801	Observation id
title	THE EVOLUTION OF ISOLATED ELLIPTICAL GALAXIES	Proposal title
observer	Prof. Ann Zabludoff	Principal investigator
object	NGC 1132	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	43.215	Observer's specified target RA
dec_targ	-1.275778	Observer's specified target Dec
ra_nom	43.219842603091	Nominal RA
dec_nom	-1.2848019725025	Nominal Dec
roll_nom	309.0024087047	Nominal Roll
revision	4	Processing version of data
ontime	14165.111420088	Sum of GTIs [s]
livetime	13985.74425008	Livetime [s]
ontime2	14165.070380084	Sum of GTIs [s]
ontime3	14164.988300085	Sum of GTIs [s]
ontime6	14165.029340088	Sum of GTIs [s]
ontime7	14165.111420088	Sum of GTIs [s]
ontime8	14161.706299871	Sum of GTIs [s]
l2events	107754	Number of level 2 events



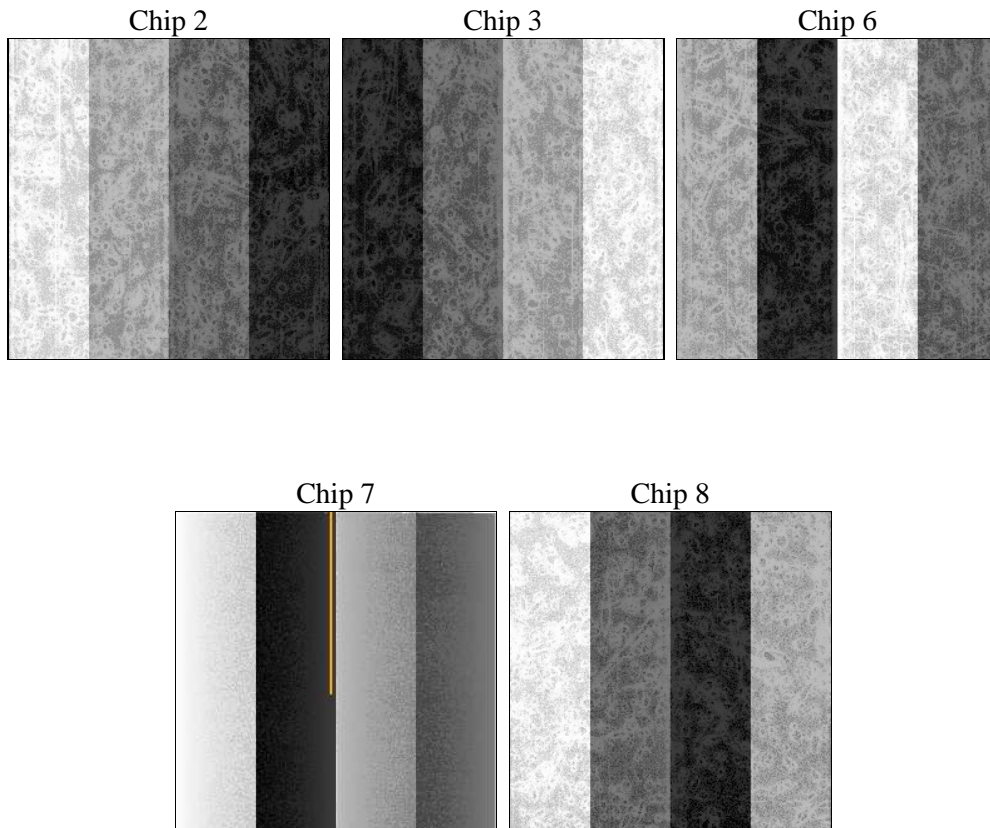
## 2 OBI

### 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	Scheduled observation exposure time
ascdsver	8.1.1	ASCDS version number	ontime	14165.111420088	Sum of GTIs [s]
caldbver	4.1.4	&#160	ontime2	14165.070380084	Sum of GTIs [s]
date	2009-11-25T13:30:50	Date and time of file creation	ontime3	14164.988300085	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	14165.029340088	Sum of GTIs [s]
			ontime7	14165.111420088	Sum of GTIs [s]
			ontime8	14161.706299871	Sum of GTIs [s]
			l1events	676219	Number of level 1 events

### 2.1.4 Events

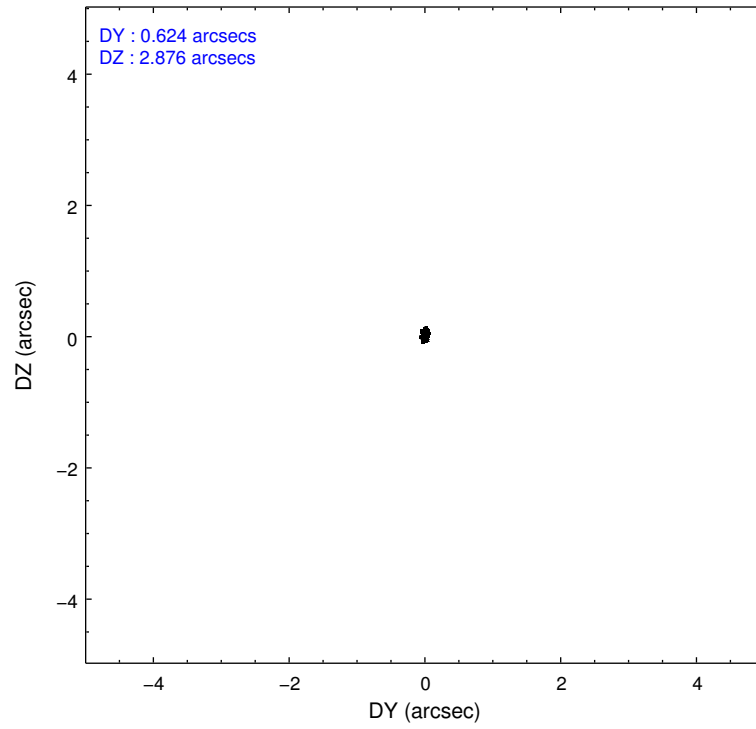
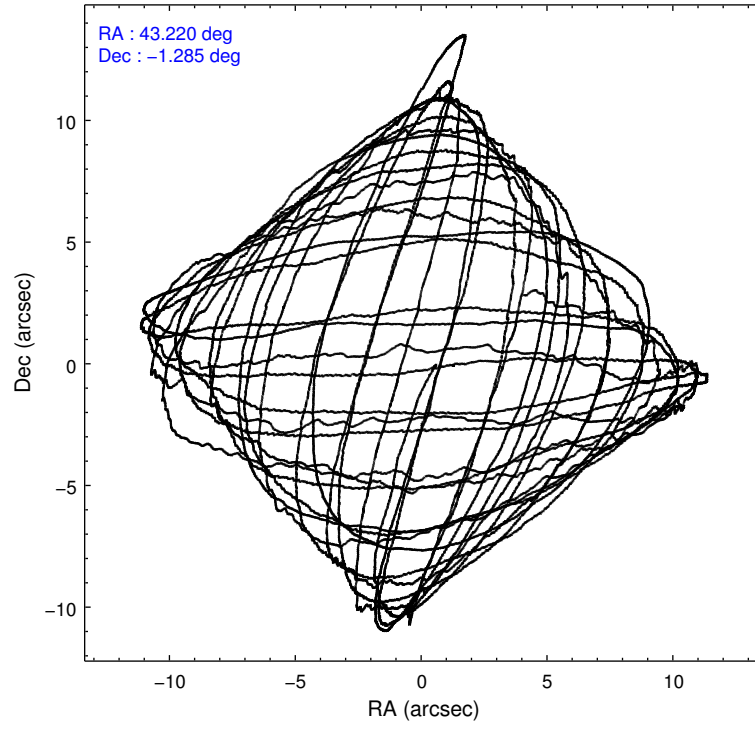
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	126188	126291	127917	145717	150106
rejected events	115025	114474	114683	82506	125211
rejected %	91%	90%	89%	56%	83%

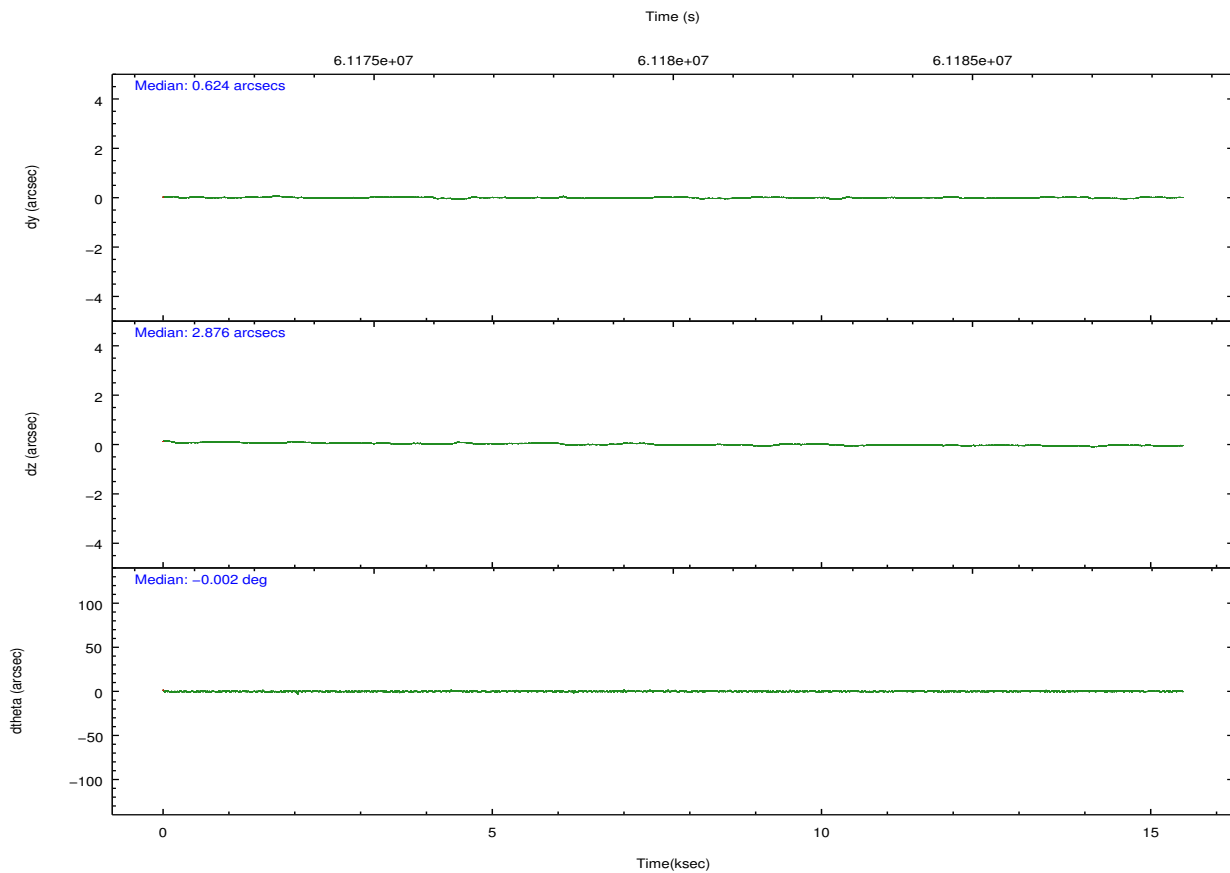
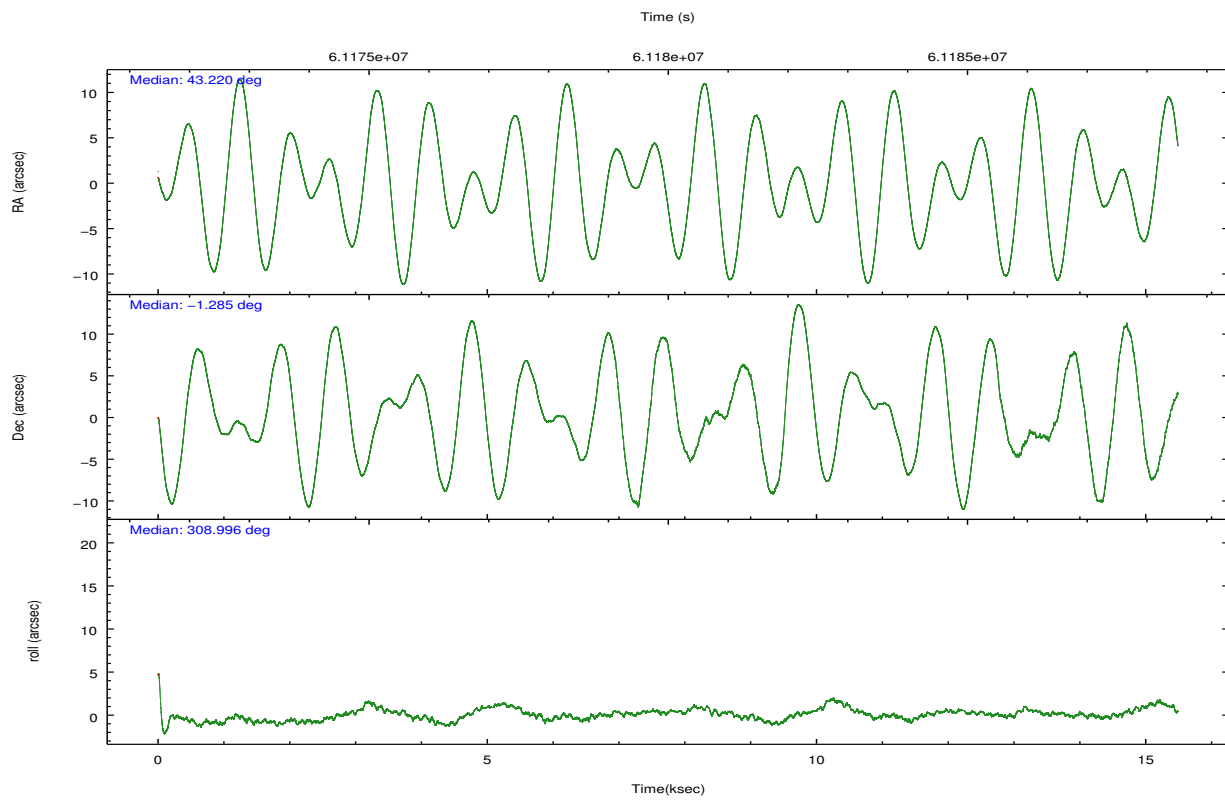
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	2414	2765	3457	6381	5796
	1%	2%	2%	4%	3%
grade 1 events	20	22	14	83	53
	0%	0%	0%	0%	0%
grade 2 events	4567	4666	4898	14049	7863
	3%	3%	3%	9%	5%
grade 3 events	741	786	806	4394	2099
	0%	0%	0%	3%	1%
grade 4 events	756	684	765	4046	1916
	0%	0%	0%	2%	1%
grade 5 events	2048	2304	2510	8132	3490
	1%	1%	1%	5%	2%
grade 6 events	2686	2916	3309	34359	7224
	2%	2%	2%	23%	4%
grade 7 events	112956	112148	112158	74273	121665
	89%	88%	87%	50%	81%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-23678	ACIS-23678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
Pointing RA	43.194116	43.21984260309065	Subarray requested	NONE	NONE
Pointing Dec	-1.274826	-1.284801972502512	Alternating exposures requested	N	N
Pointing Roll	308.845200	309.0024087047042	Primary exposure time	0.000000	3.2
SIM focus pos (mm)	-0.684267	-0.6828225247311905			
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-190.132523	-190.1425803651734			
SIM translation stage offset (mm)	0	0.01005778216563158			
Observation start time	61172742.184000	61172063.991573			
Observation start date	1999-12-10T00:24:38	1999-12-10T00:14:23			
Observation end time	61187742.184000	61188604.929672			
Observation end date	1999-12-10T04:34:38	1999-12-10T04:50:04			
Read mode	TIMED	TIMED			

## 2.3 Aspect



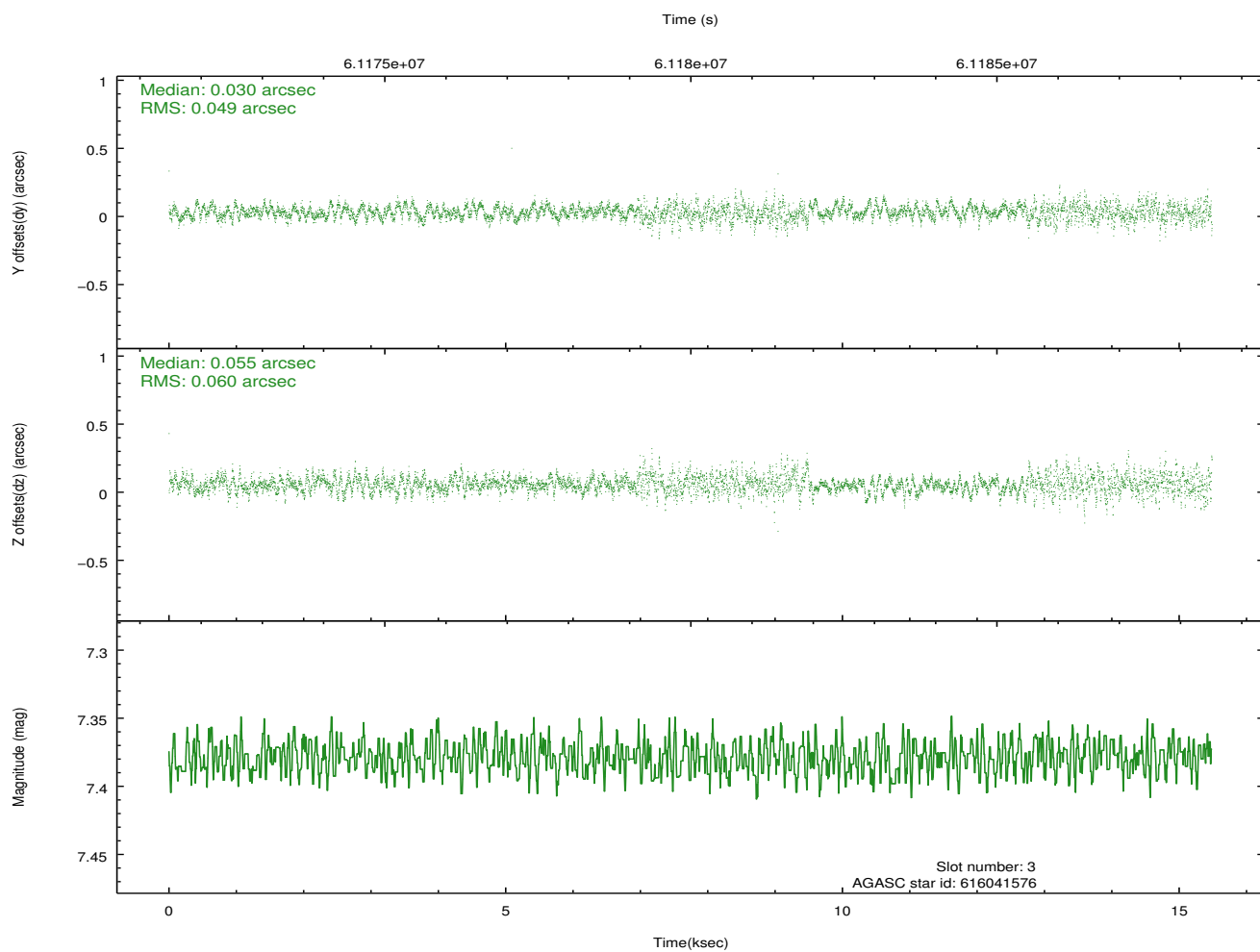
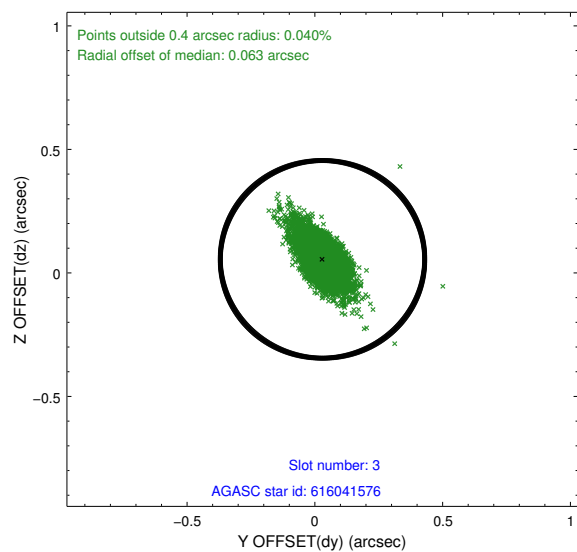
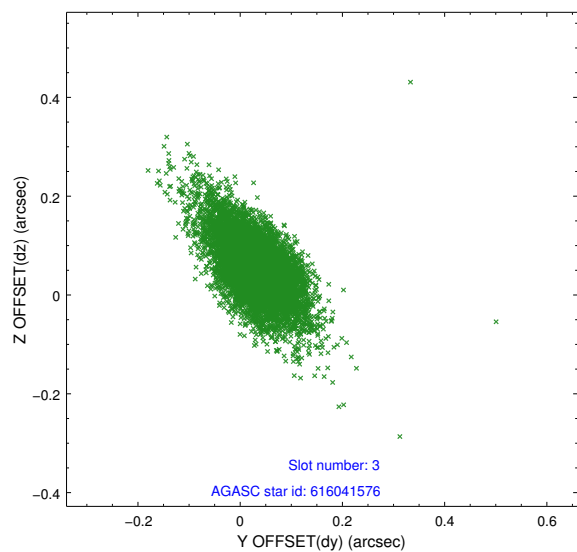


### Slot Statistics

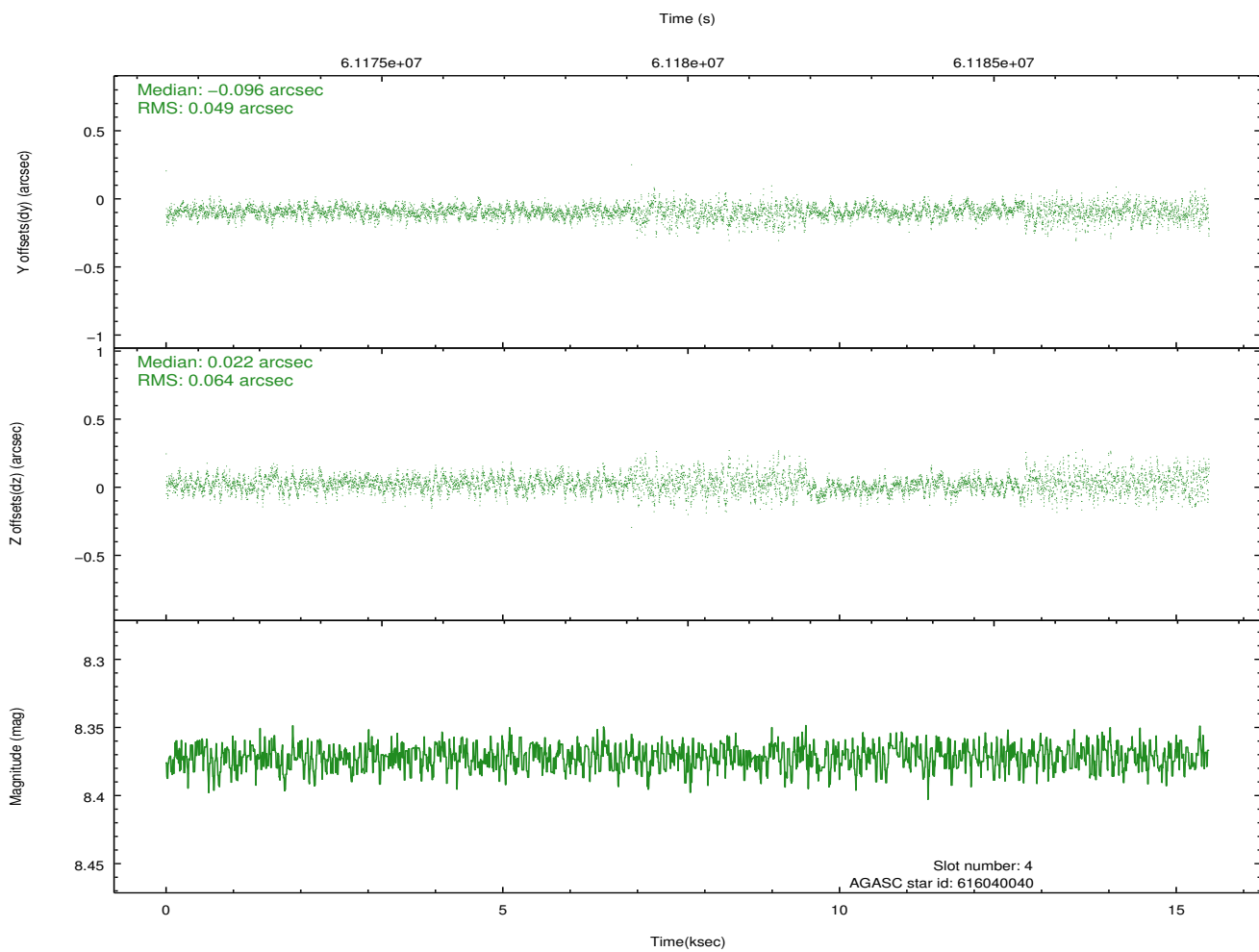
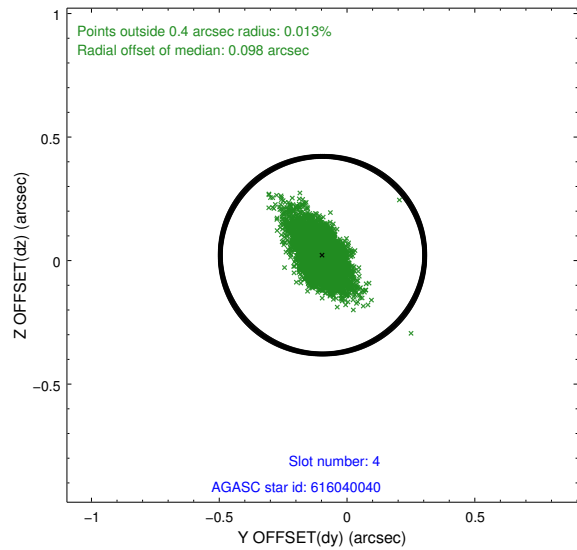
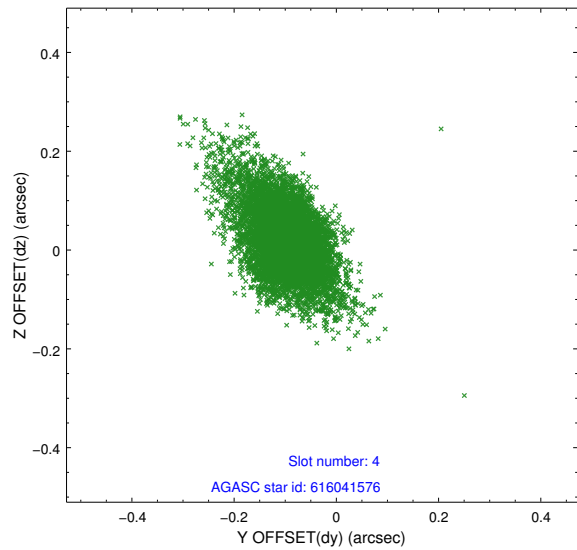
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.12	7556	-0.006	-0.011	0.006	0.010	0.000000	0.000000	-753.26	-1723.87
1	FID	ACIS-S-4	7.22	7556	0.006	-0.013	0.006	0.010	0.000000	0.000000	2160.06	184.44
2	FID	ACIS-S-6	7.37	7556	-0.028	0.031	0.007	0.011	0.000000	0.000000	408.87	822.02
3	GUIDE	616041576	7.38	7556	0.030	0.055	0.074	0.144	43.396487	-1.641039	1484.12	-259.33
4	GUIDE	616040040	8.37	7554	-0.096	0.022	0.079	0.154	42.858309	-1.164902	-1065.61	-693.12
5	GUIDE	616042480	9.13	7553	-0.057	0.008	0.114	0.187	43.380562	-0.568882	-1558.37	2116.75
6	GUIDE	616041728	9.95	7543	-0.029	-0.059	0.104	0.183	42.893788	-1.311771	-574.00	-924.95
7	GUIDE	616039592	9.45	7553	0.154	-0.033	0.089	0.161	43.519617	-1.479205	1308.34	451.01

## 2.4 Star Slots

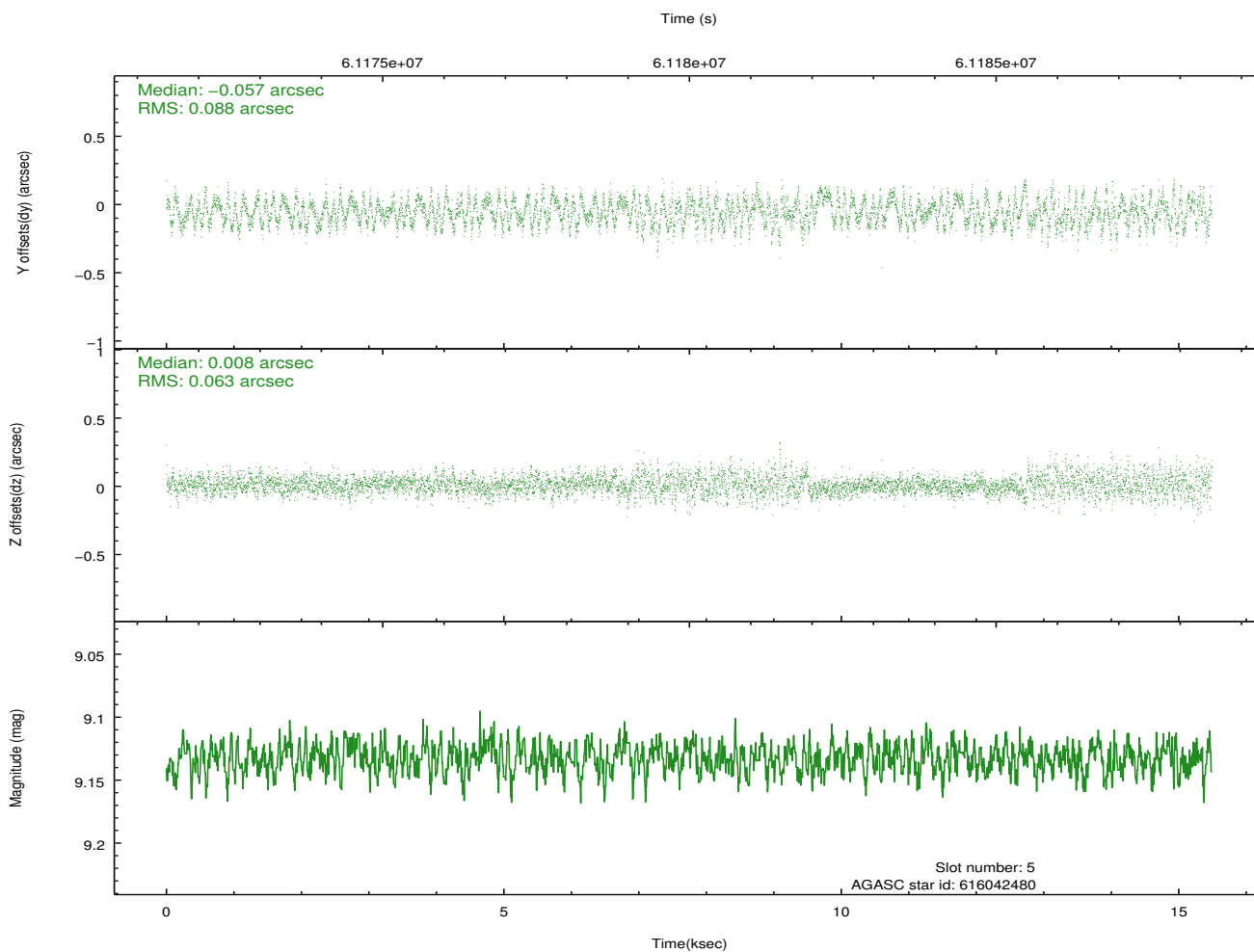
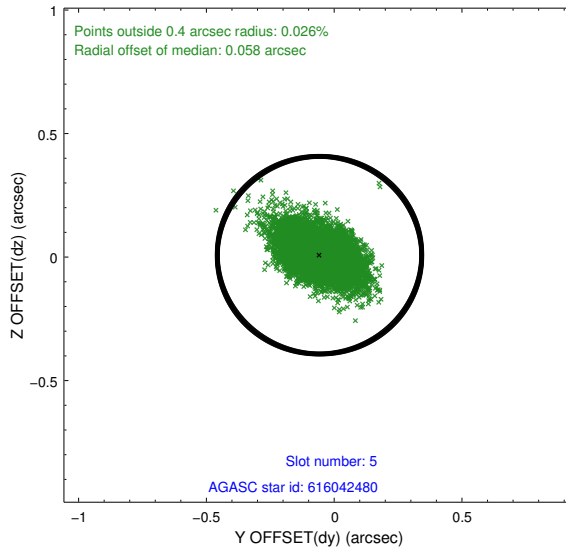
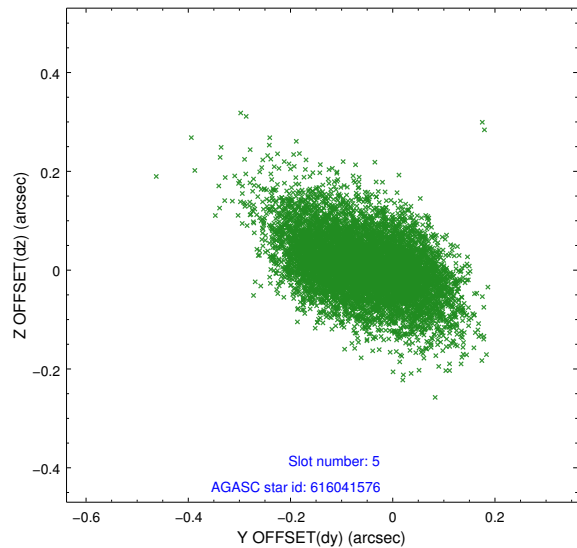
### 2.4.1 Slot 3



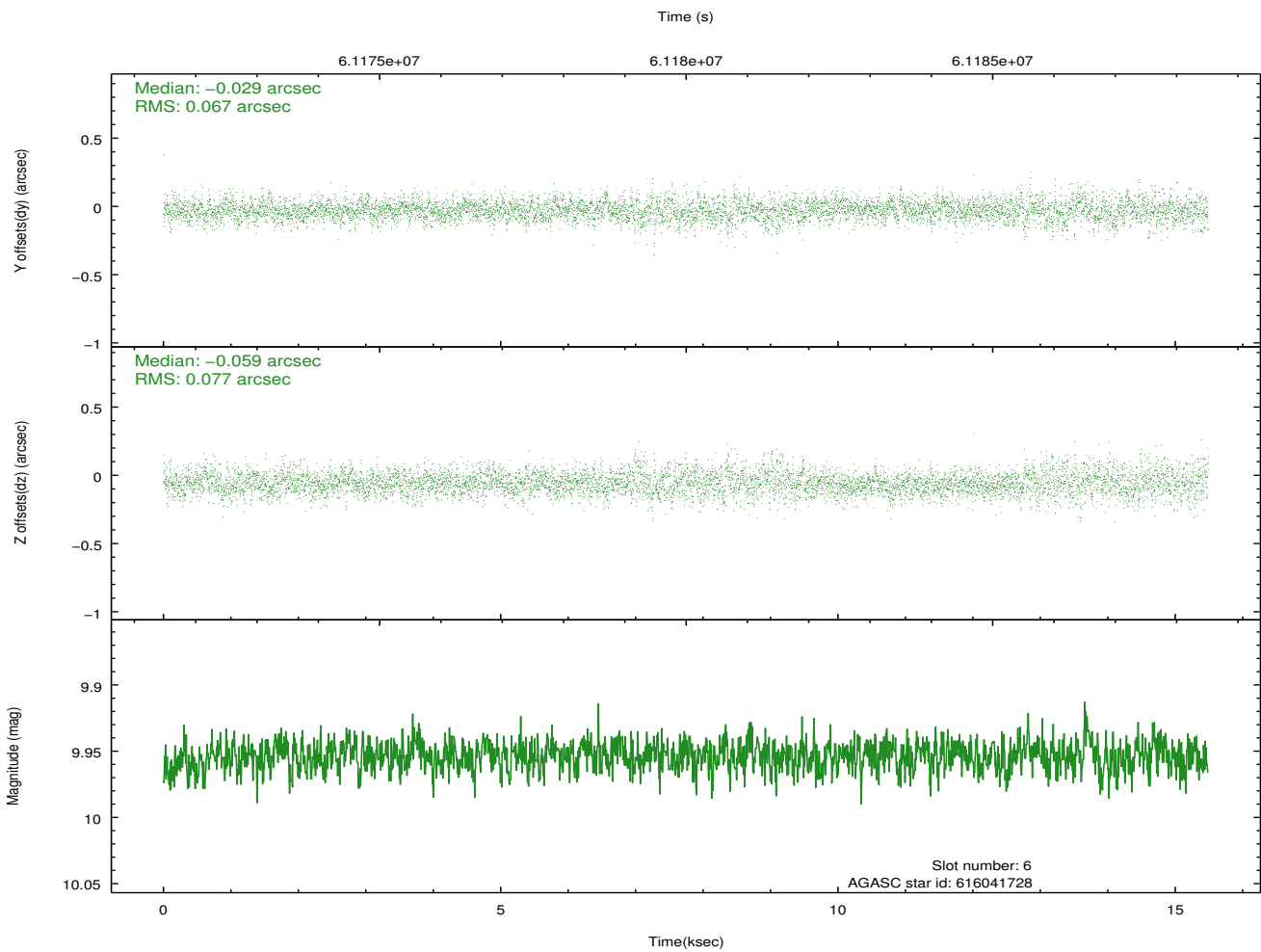
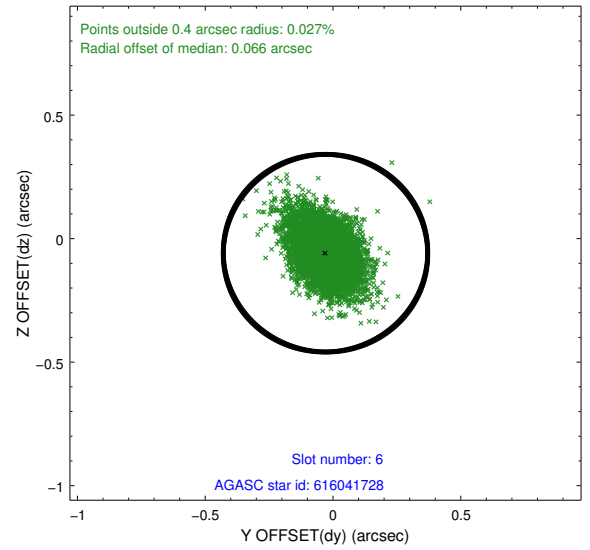
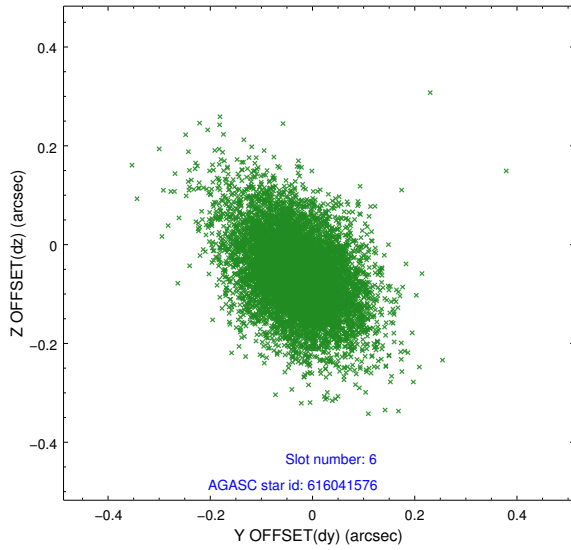
## 2.4.2 Slot 4



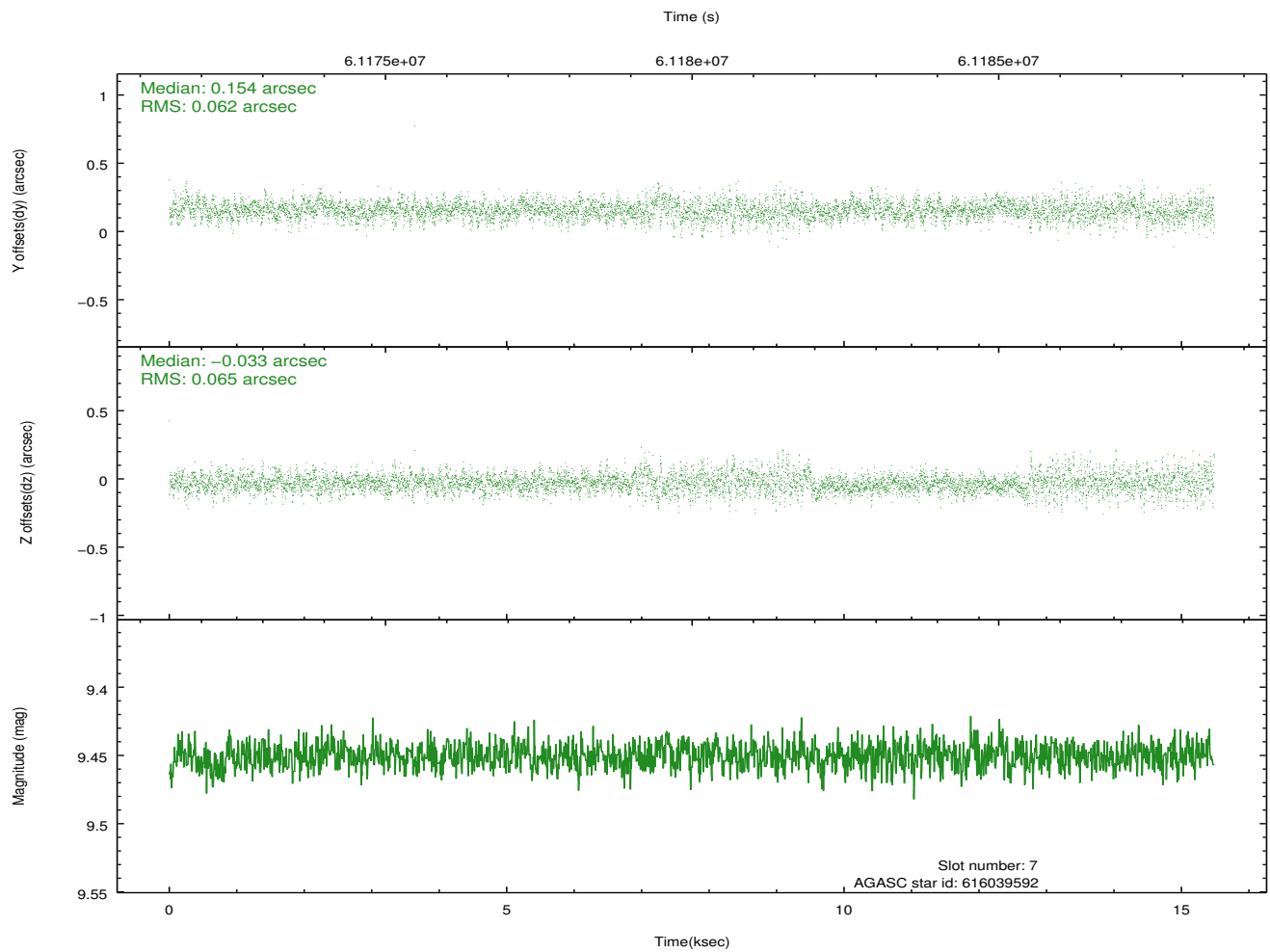
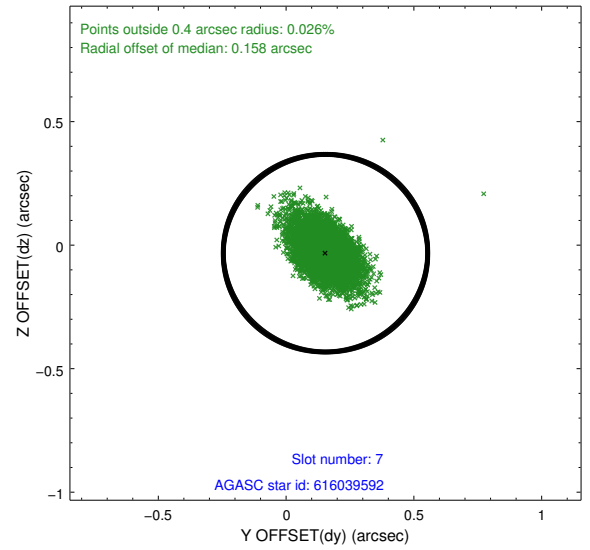
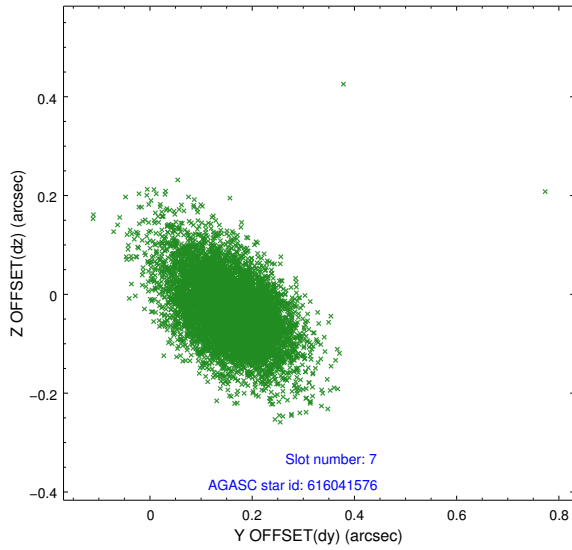
### 2.4.3 Slot 5



## 2.4.4 Slot 6

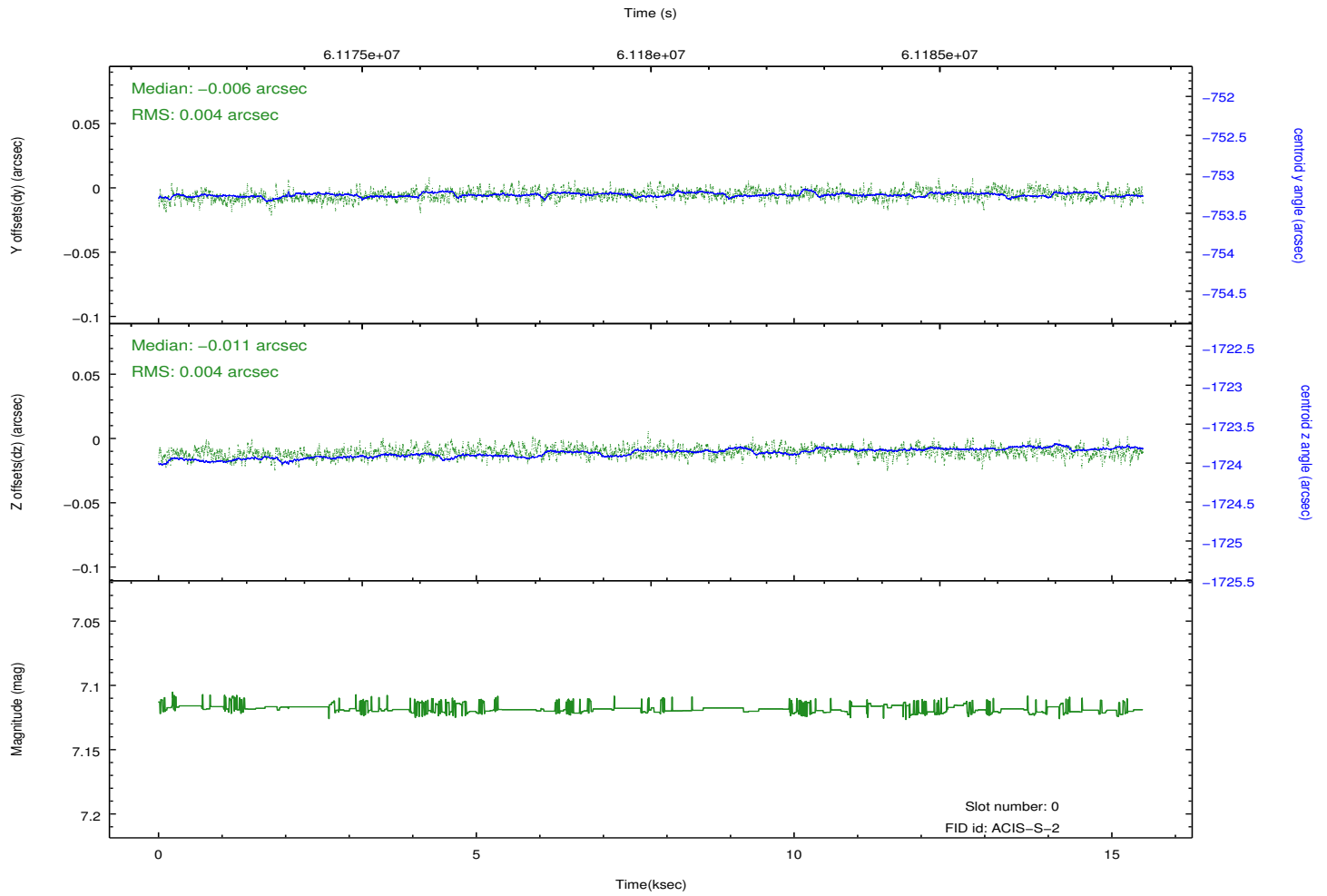
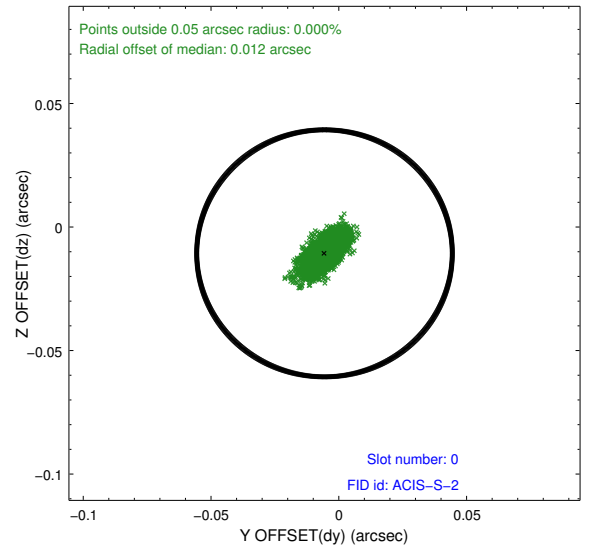
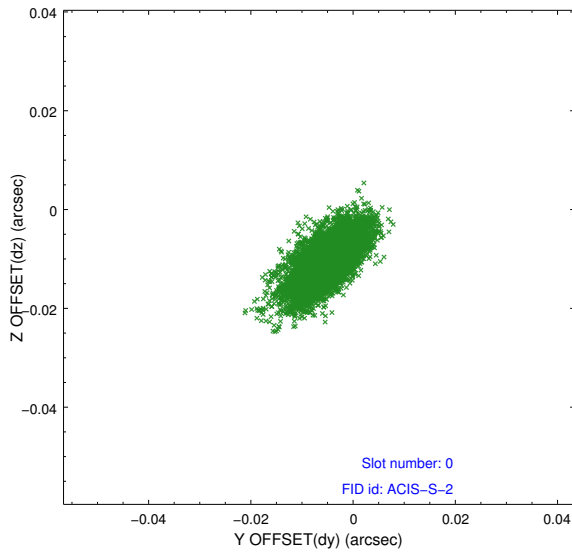


## 2.4.5 Slot 7

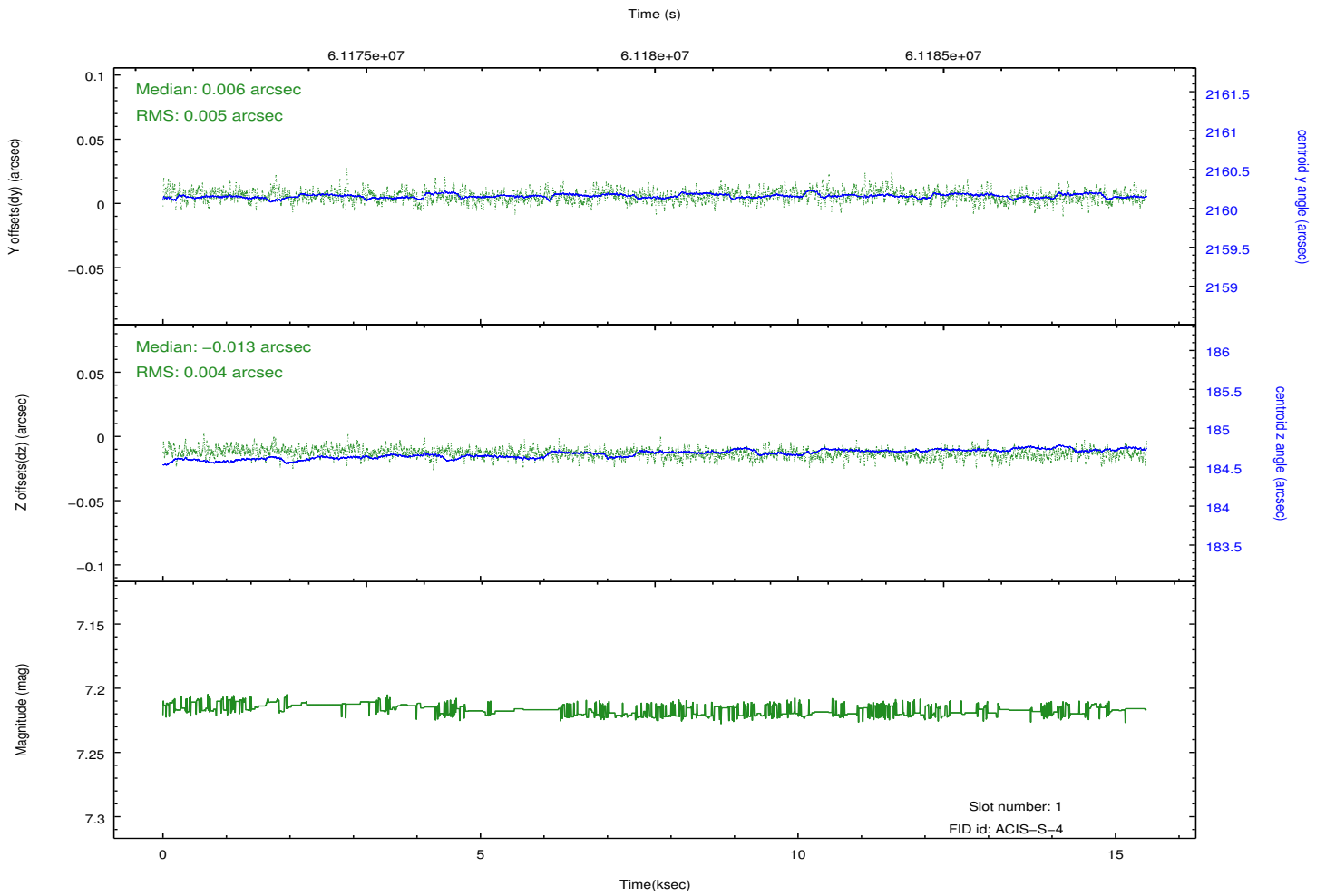
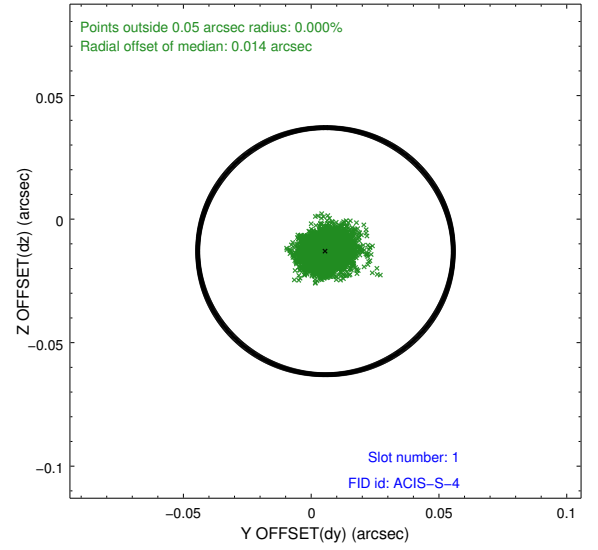
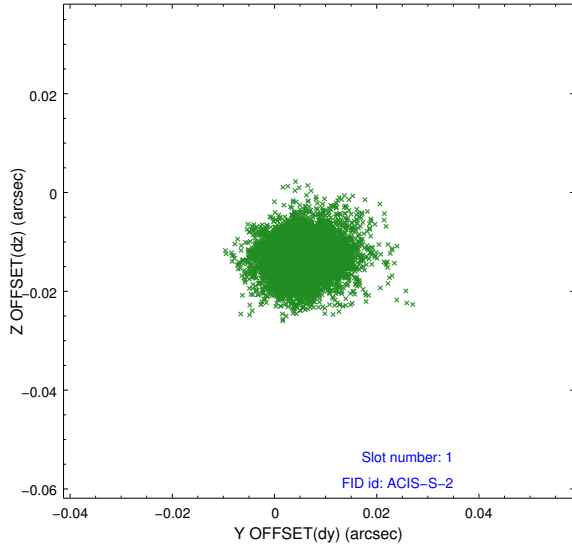


## 2.5 FID Slots

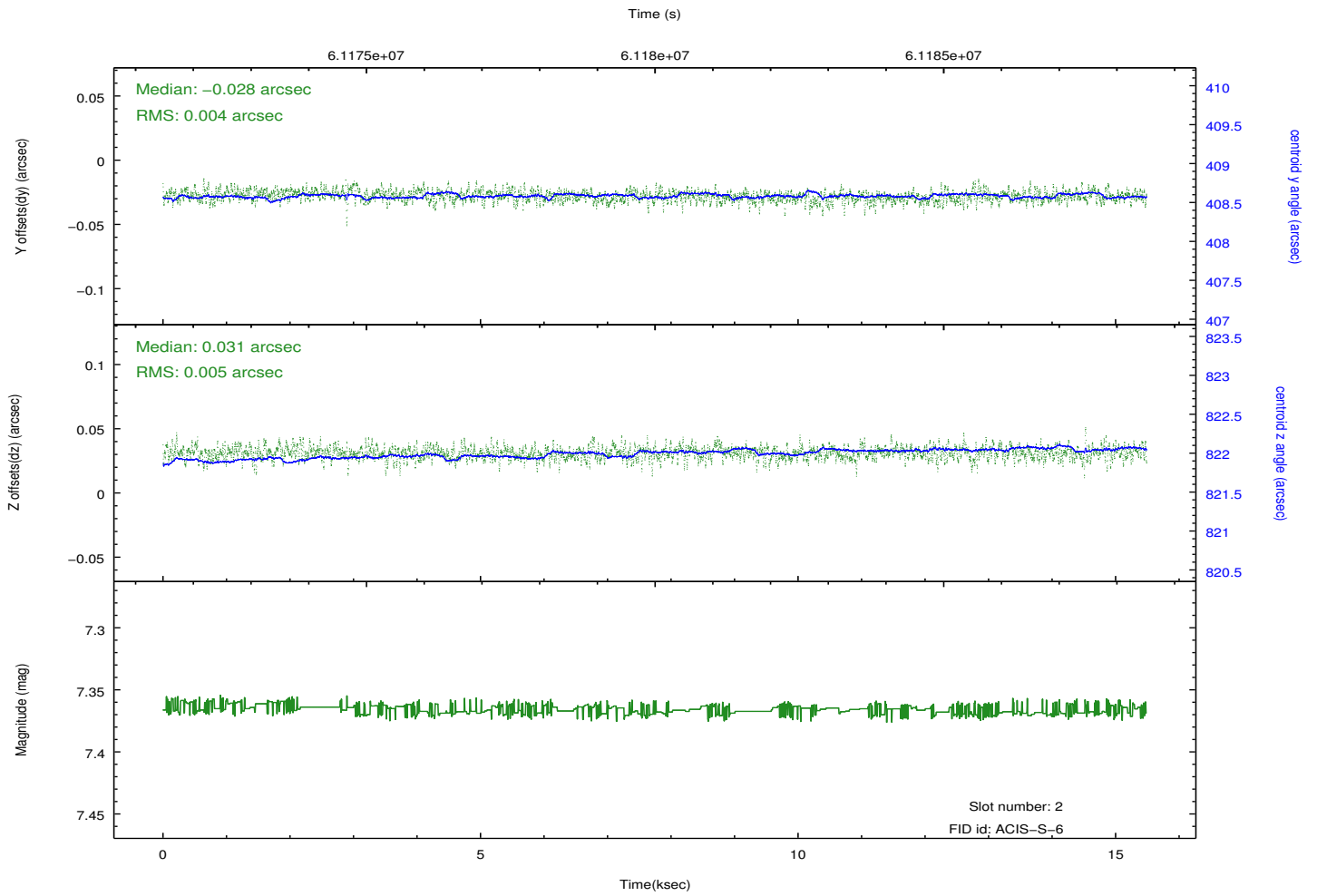
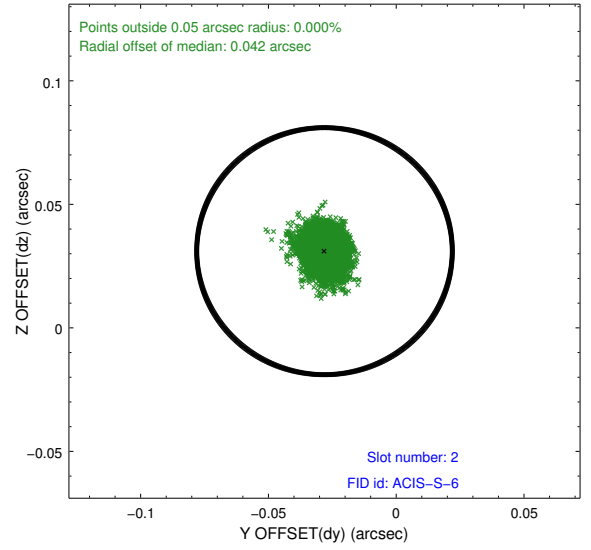
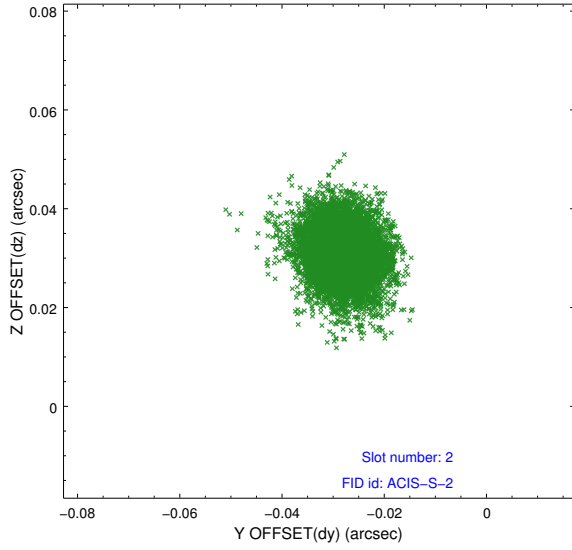
### 2.5.1 Slot 0



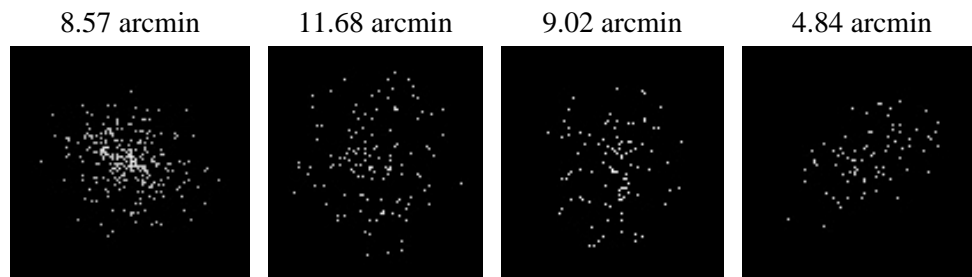
## 2.5.2 Slot 1



### 2.5.3 Slot 2



### 3 Point Sources



# A Summary

## A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2009.12.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	14.166

## A.2 Comments

Focal plane temperature is warmer than -118.7 C degrees during the entire observation. This temperature is the upper limit of the verified ACIS calibration for the front-illuminated chips. The focal plane temperature is also warmer than -116.7 degrees C for the entire observation. This temperature is the upper limit of the verified ACIS calibration for the back-illuminated chips. The ACIS spectral response calibration is less accurate at these warmer temperatures than it is at -119.7 C. Users whose science objectives depend on the most accurate spectral response (ie: fitting line-rich spectra) may notice an effect. Users whose science objectives do not depend on the most accurate spectral response should not notice an effect.