

# V&V Reference Report

## L2 ASCDS Version : 8.4.3

Observation 13955 - L2 Version 1  
Chandra X-Ray Center

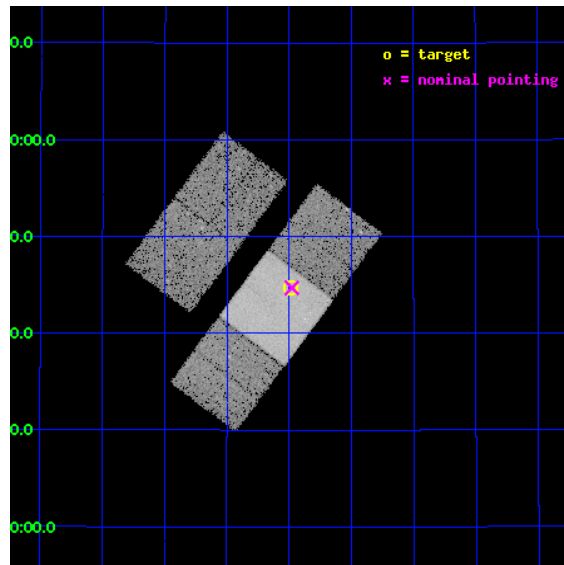
L2 Processing Date : Feb 18 2012

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# 1 Front

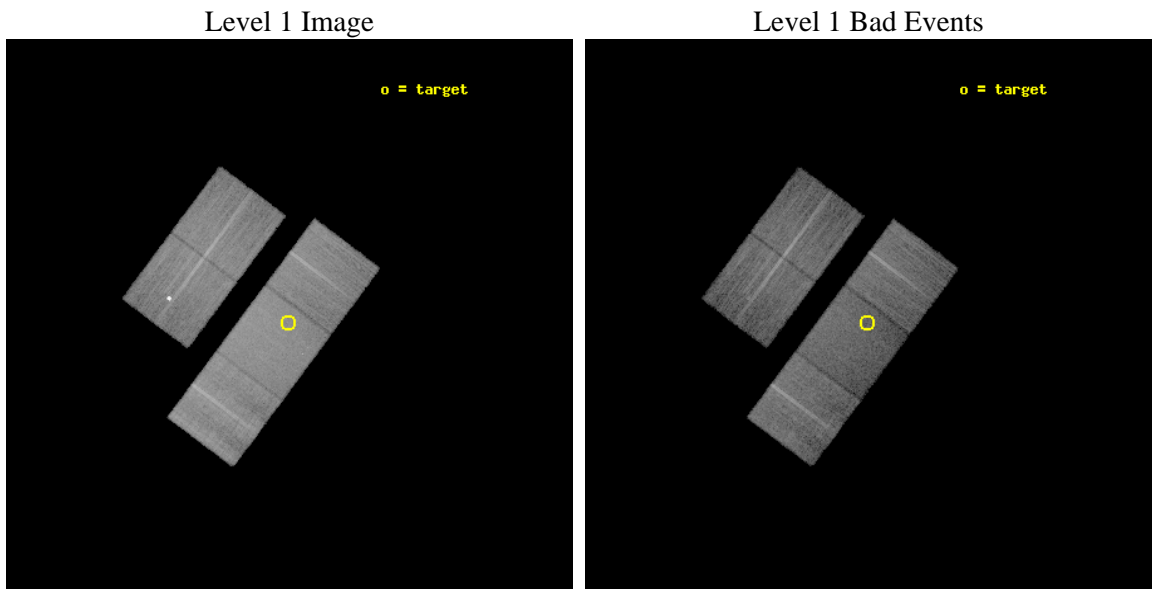
seq_num	702677	Sequence number
obs_id	13955	Observation id
title	Identifying Analogs of NGC 6240: Galaxies with Dual Supermassive Black Holes	Proposal title
observer	Dr. Julia Comerford	Principal investigator
object	SDSS J112659.54+294442.8	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	171.747917	Observer's specified target RA [deg]
dec_targ	29.745222	Observer's specified target Dec [deg]
ra_nom	171.74444017177	Nominal RA [deg]
dec_nom	29.745002612822	Nominal Dec [deg]
roll_nom	126.75877371715	Nominal Roll [deg]
revision	1	Processing version of data
ontime	20060.100154281	Sum of GTIs [s]
livetime	19798.000177734	Livetime [s]
ontime2	20056.959123969	Sum of GTIs [s]
ontime3	20060.100154281	Sum of GTIs [s]
ontime6	20060.100154281	Sum of GTIs [s]
ontime7	20060.100154281	Sum of GTIs [s]
ontime8	20059.179160297	Sum of GTIs [s]
l2events	115543	Number of level 2 events



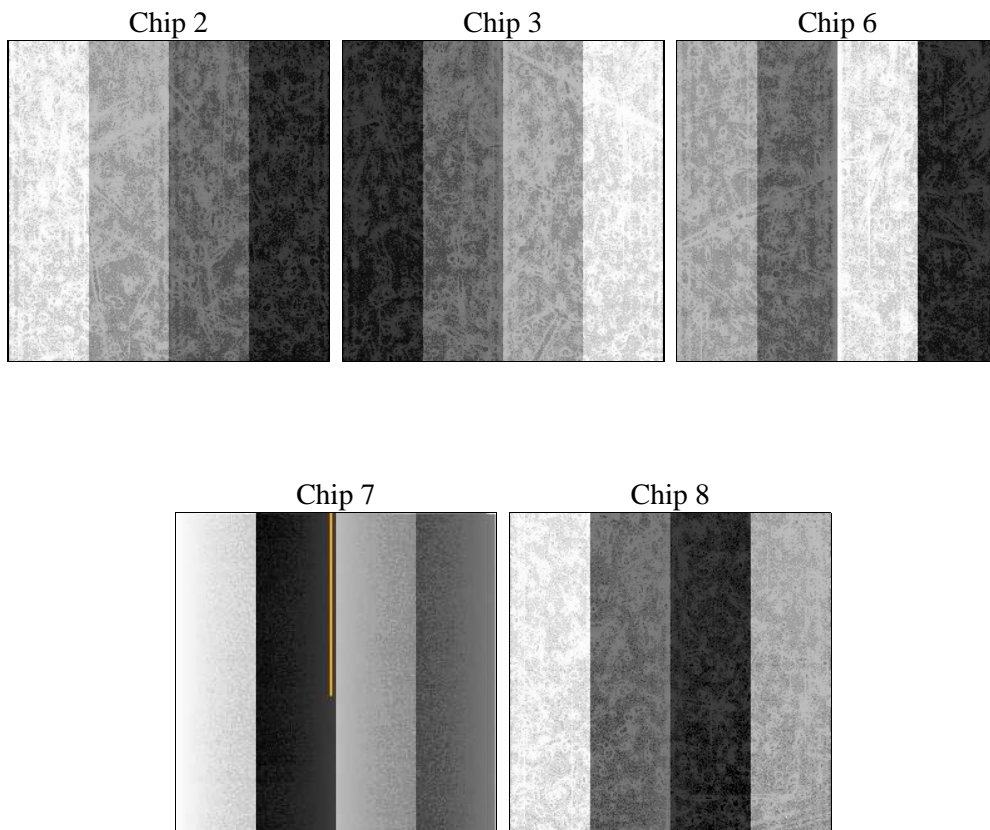
## 2 OBI

### 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	8.4.3	Processing system revision	ontime	20060.100154281	Sum of GTIs [s]
caldbver	4.4.8	&#160	ontime2	20056.959123969	Sum of GTIs [s]
date	2012-02-18T14:21:08	Date and time of file creation	ontime3	20060.100154281	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	20060.100154281	Sum of GTIs [s]
			ontime7	20060.100154281	Sum of GTIs [s]
			ontime8	20059.179160297	Sum of GTIs [s]
			l1events	692110	Number of level 1 events

### 2.1.4 Events

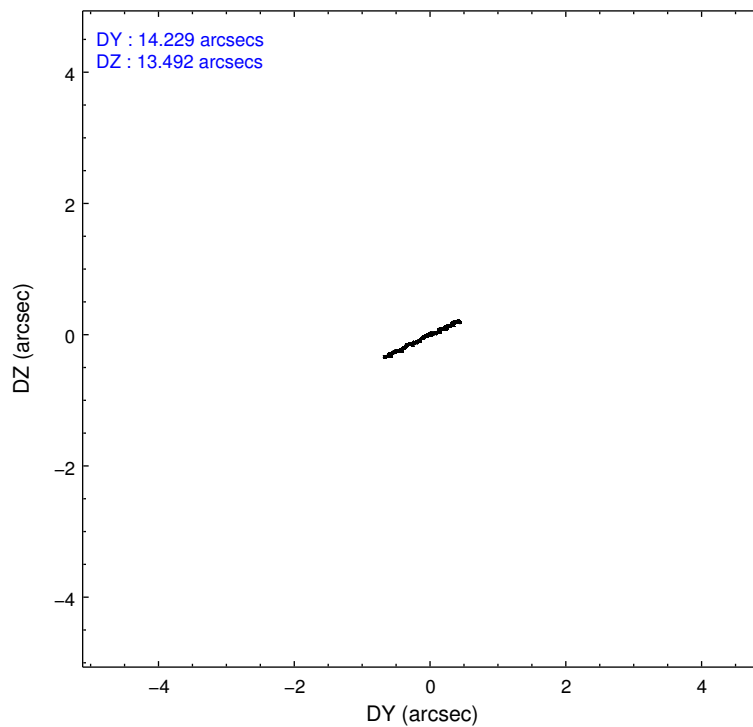
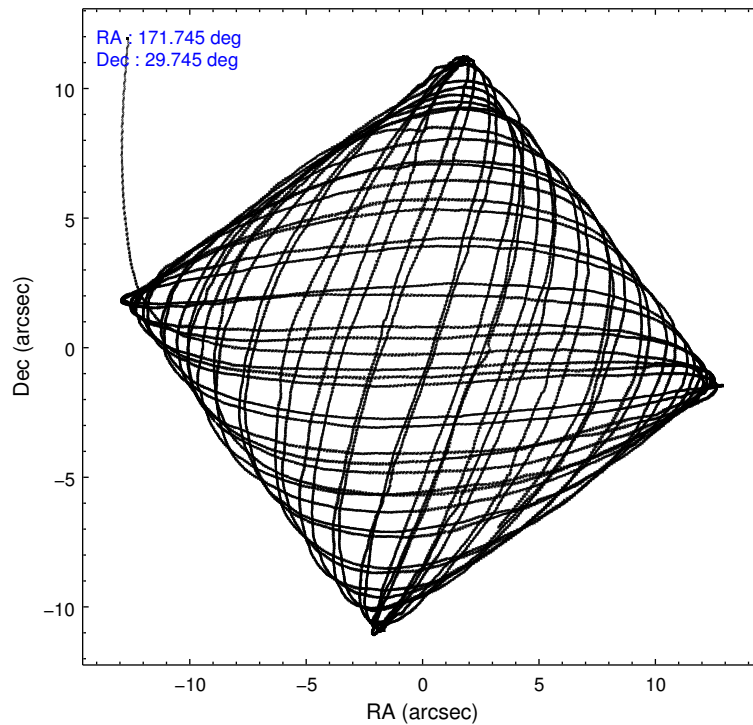
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	120515	128152	124797	157671	160975
rejected events	107232	103781	110699	88746	119256
rejected %	88%	80%	88%	56%	74%

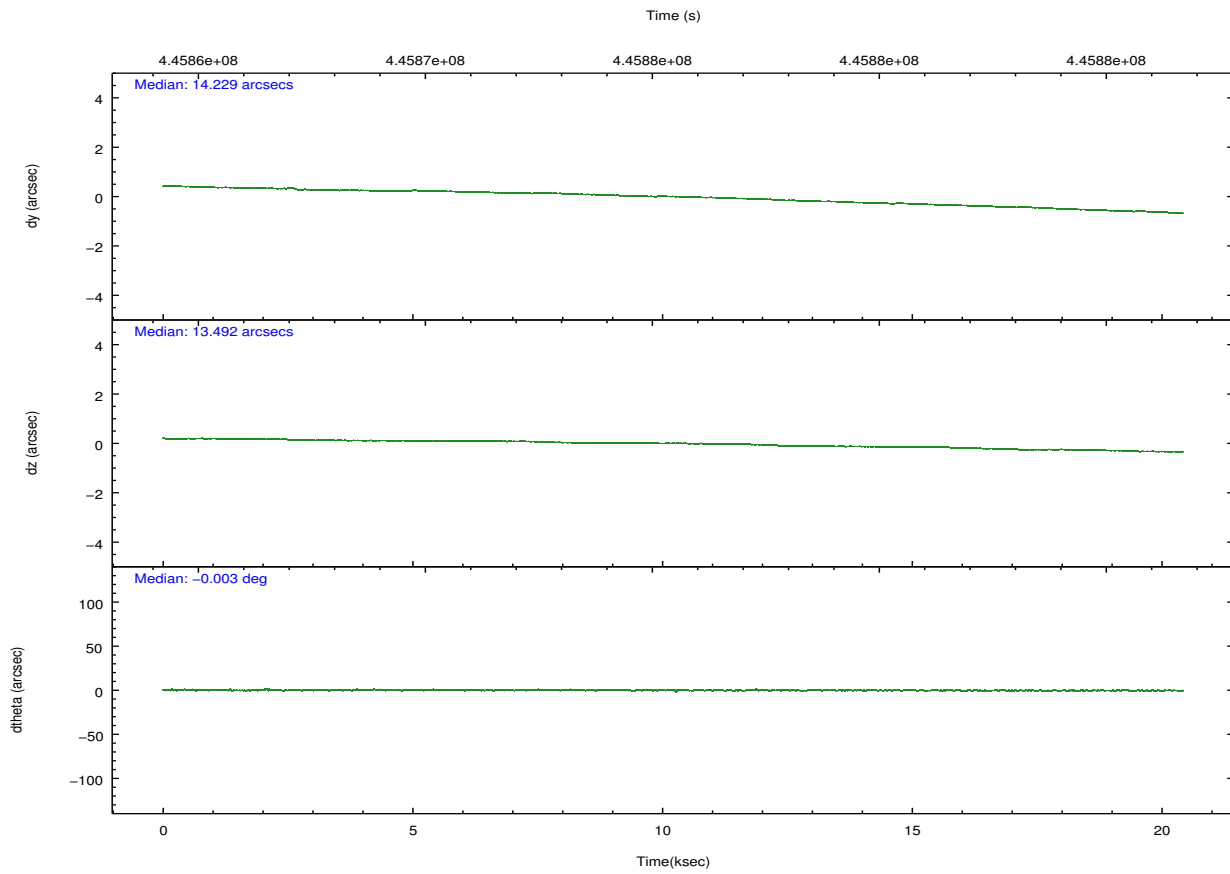
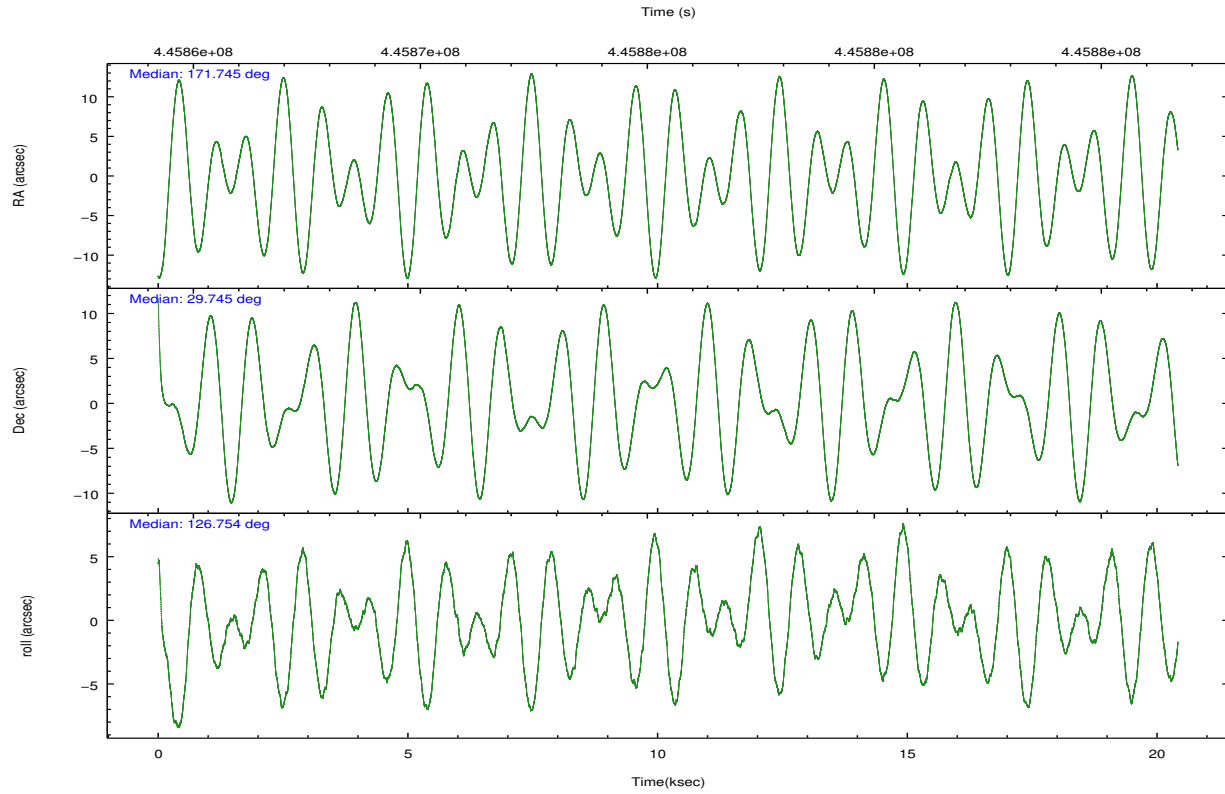
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	4625	16125	4789	6098	11353
	3%	12%	3%	3%	7%
grade 1 events	60	112	66	207	124
	0%	0%	0%	0%	0%
grade 2 events	3193	2925	3174	14128	9960
	2%	2%	2%	8%	6%
grade 3 events	1430	1359	1464	6026	4443
	1%	1%	1%	3%	2%
grade 4 events	1445	1338	1438	5900	4267
	1%	1%	1%	3%	2%
grade 5 events	5094	5983	5940	16151	8534
	4%	4%	4%	10%	5%
grade 6 events	2597	2630	3240	36795	11701
	2%	2%	2%	23%	7%
grade 7 events	102071	97680	104686	72366	110593
	84%	76%	83%	45%	68%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23678	ACIS-23678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	171.773536	171.7444401717671	CCD I2 on	O2	Y
[deg] Pointing Dec	29.734546	29.7450026128224	CCD I3 on	O1	Y
[deg] Pointing Roll	126.587709	126.7587737171507	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	O3	Y
[s] Observation start time (MET)	445865666.184000	445864609.37526	CCD S5 on	N	N
Observation start date	2012-02-17T11:33:20	2012-02-17T11:16:49	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	445885666.184000	445886290.68891	On-chip summing requested	N	N
Observation end date	2012-02-17T17:06:40	2012-02-17T17:18:10	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



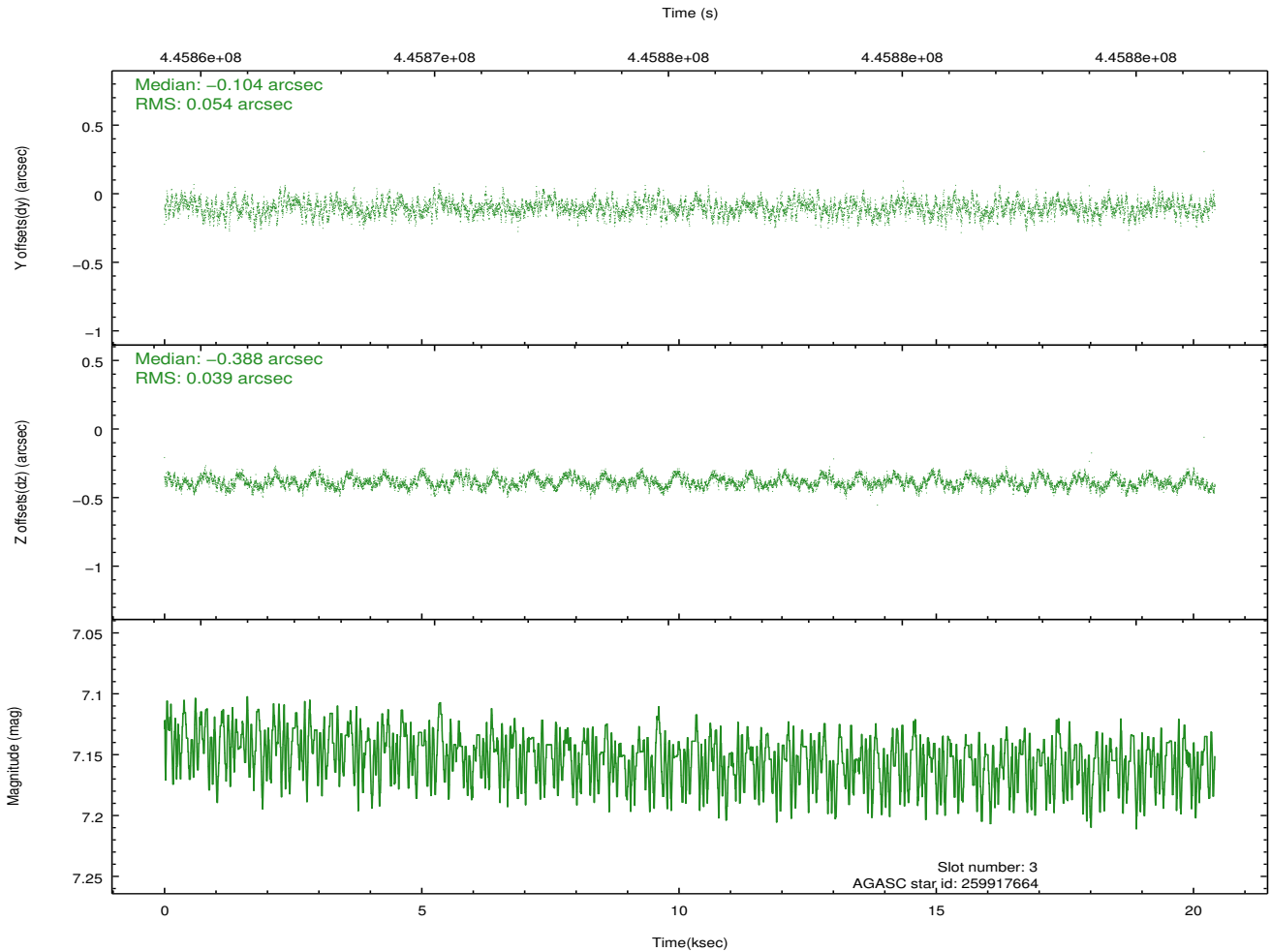
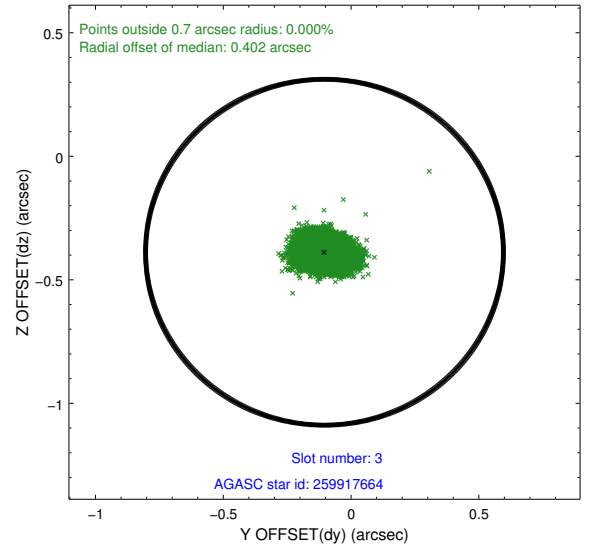
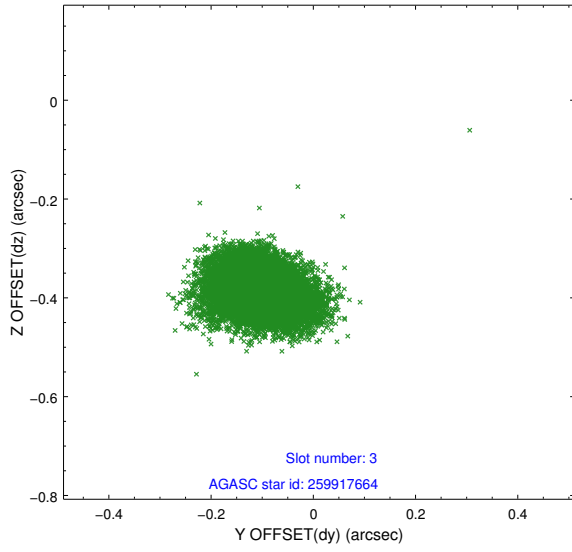


### Slot Statistics

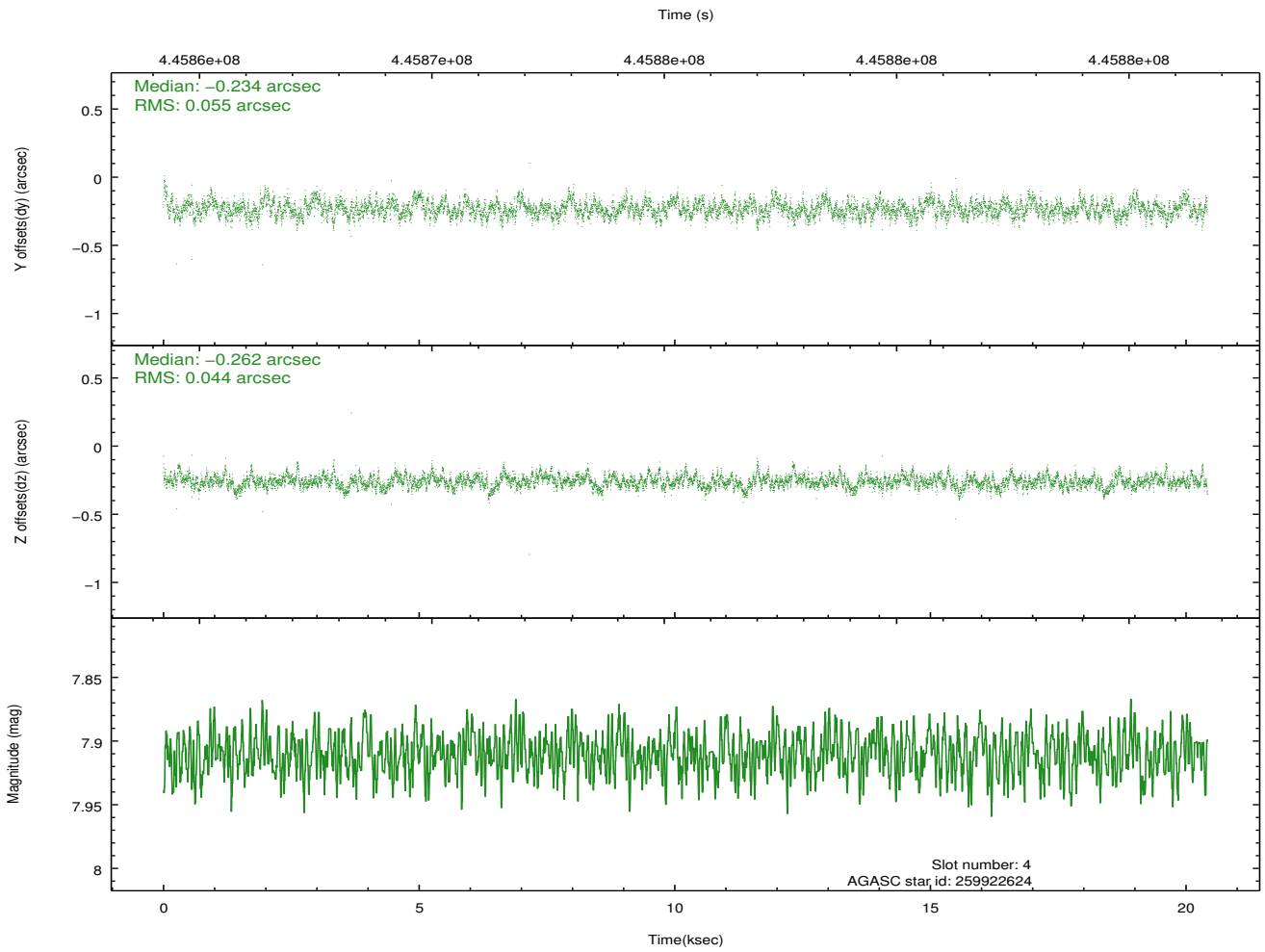
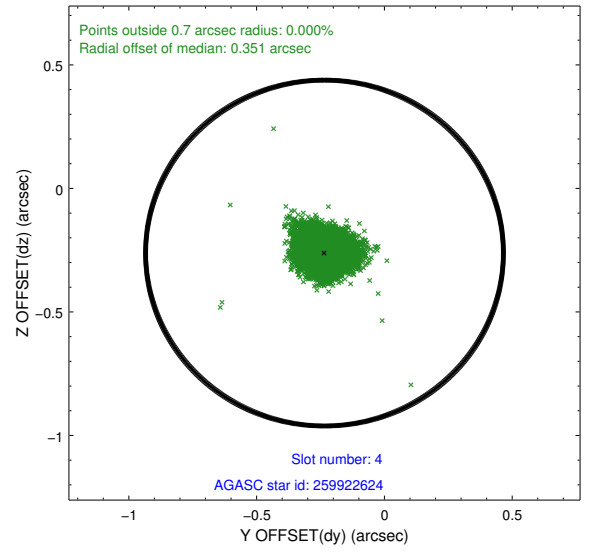
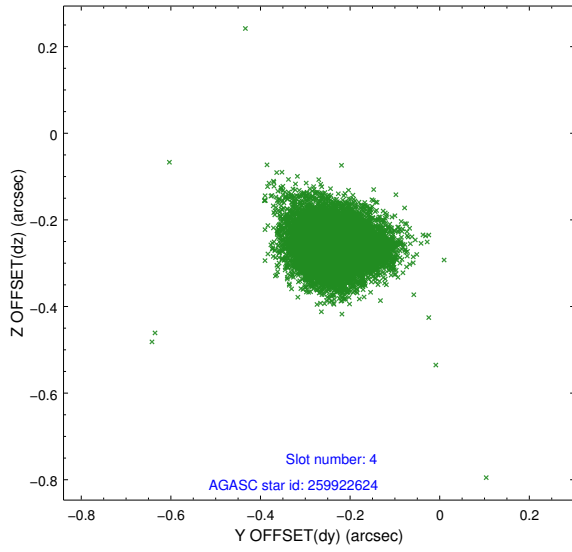
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.00	4981	-0.077	-0.054	0.019	0.031	0.000000	0.000000	-767.23	-1734.84
1	FID	ACIS-S-4	7.09	4981	0.233	0.052	0.019	0.038	0.000000	0.000000	2146.30	173.51
2	FID	ACIS-S-5	7.13	4981	-0.185	0.012	0.008	0.012	0.000000	0.000000	-1819.92	167.42
3	GUIDE	259917664	7.15	9961	-0.104	-0.388	0.071	0.114	171.409212	29.987338	1409.88	369.00
4	GUIDE	259922624	7.91	9959	-0.234	-0.262	0.073	0.120	171.319309	29.758640	917.36	1086.42
5	GUIDE	260047752	7.19	9961	-0.013	0.064	0.068	0.113	172.517988	29.964628	-713.60	-2359.83
6	GUIDE	260050808	9.01	9951	0.027	0.168	0.098	0.158	172.602321	29.884278	-1101.64	-2404.07
7	GUIDE	330697144	9.10	9891	0.325	0.411	0.093	0.151	171.228624	30.119896	2129.02	533.82

## 2.4 Star Slots

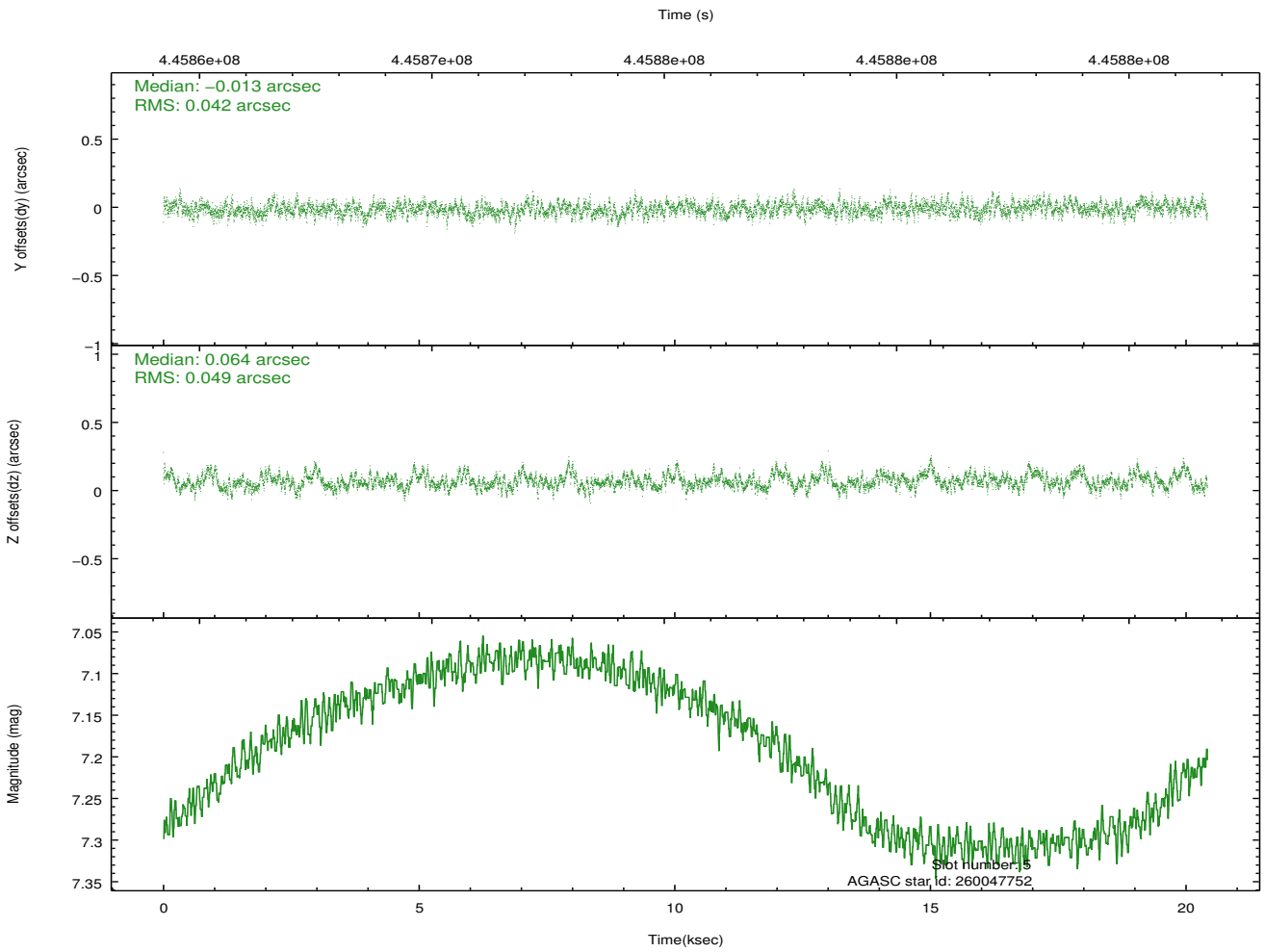
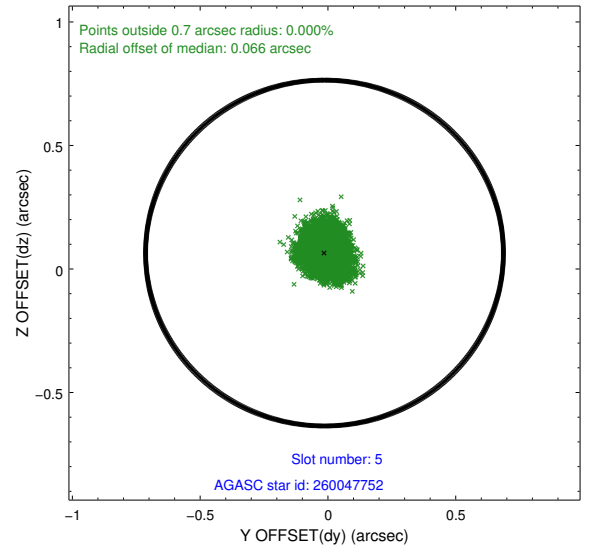
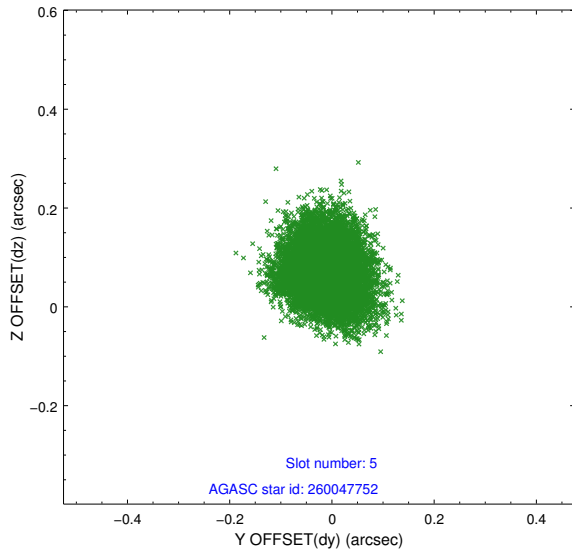
### 2.4.1 Slot 3



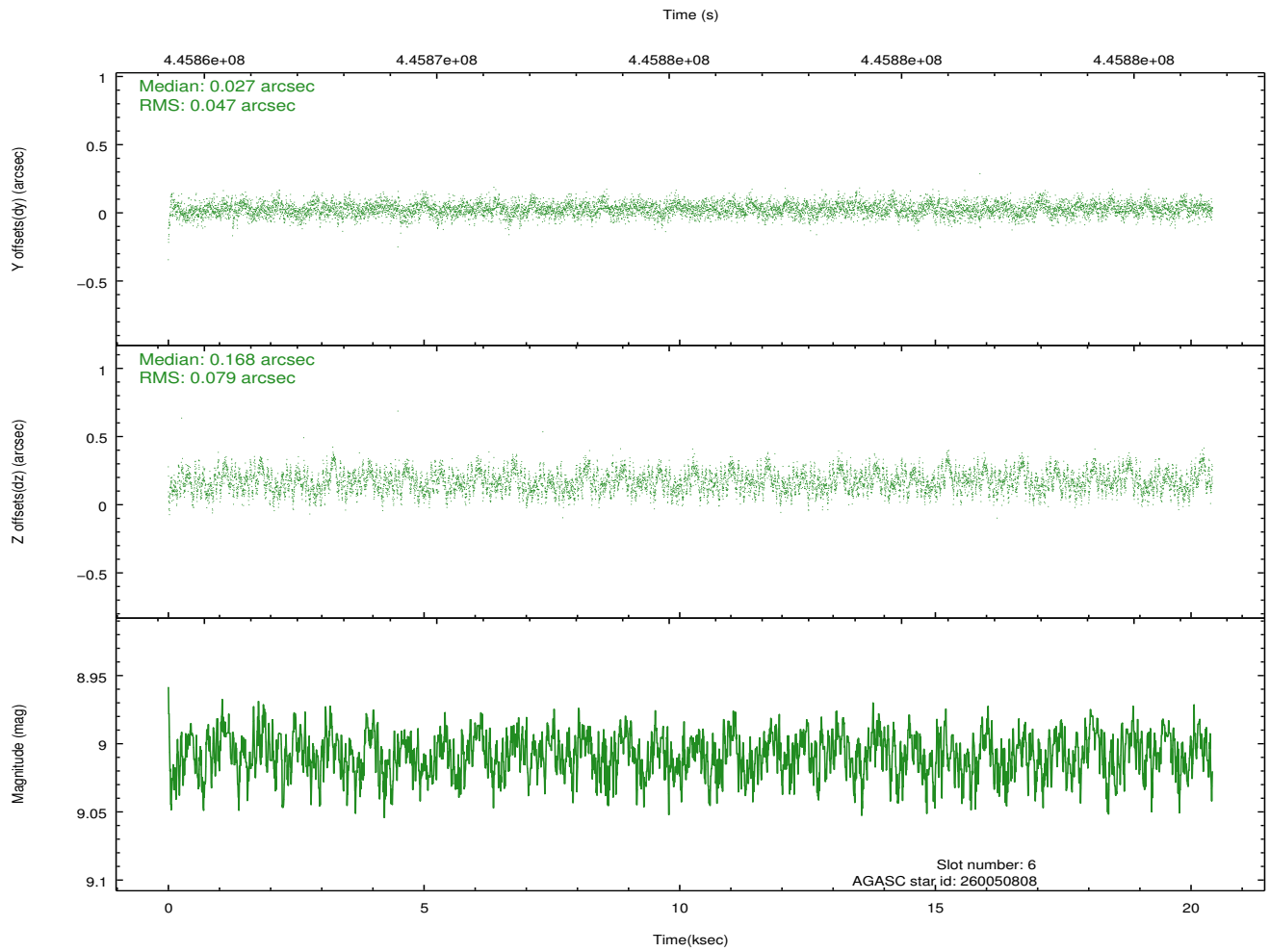
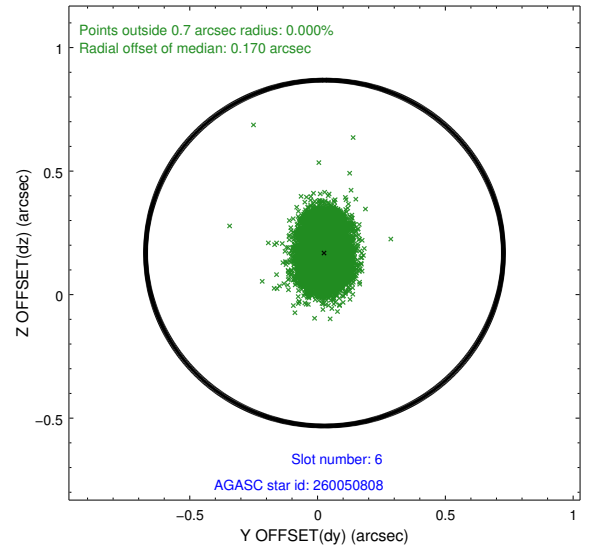
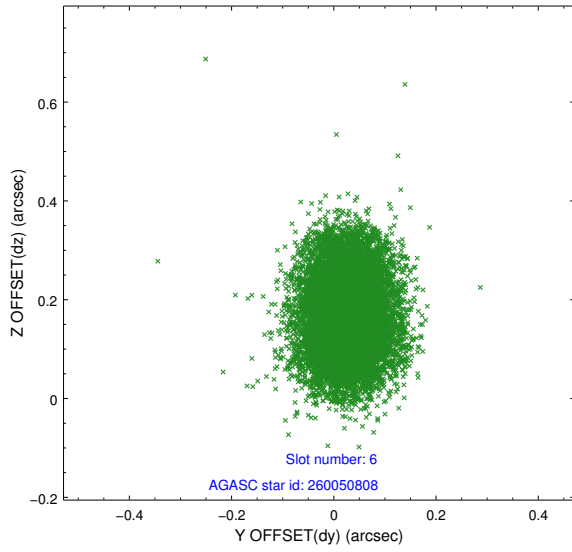
### 2.4.2 Slot 4



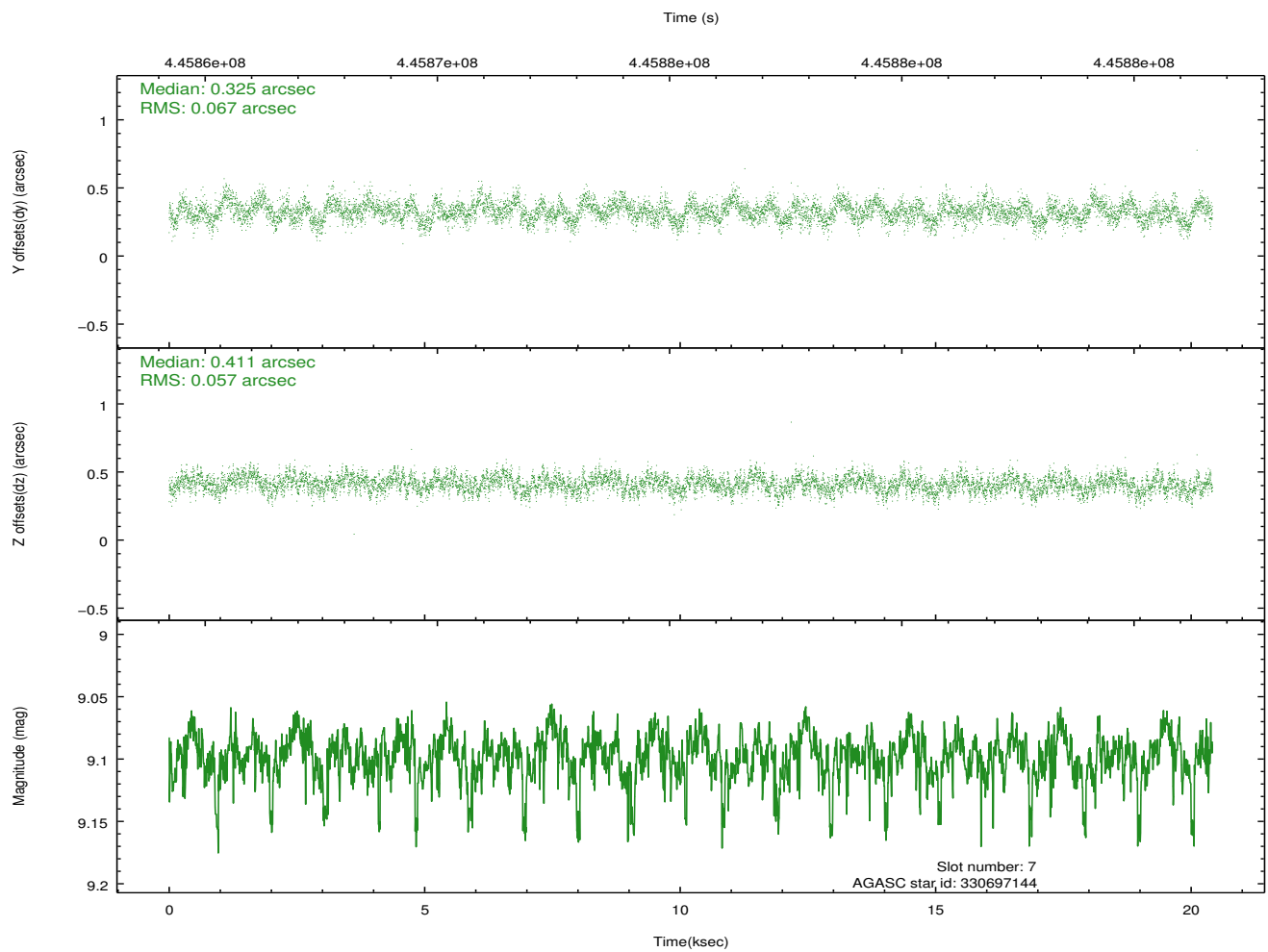
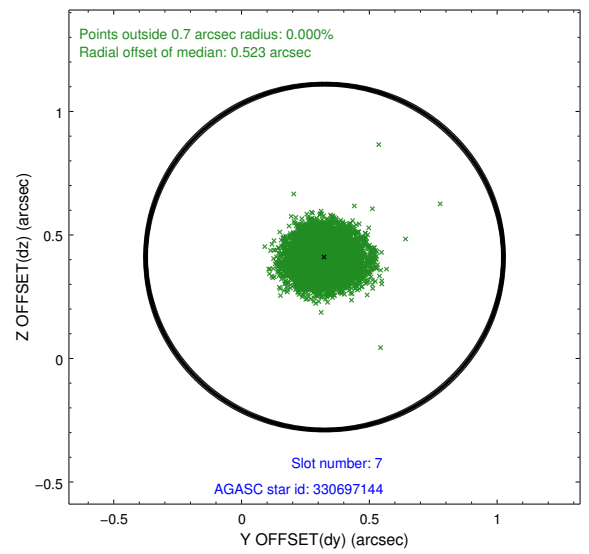
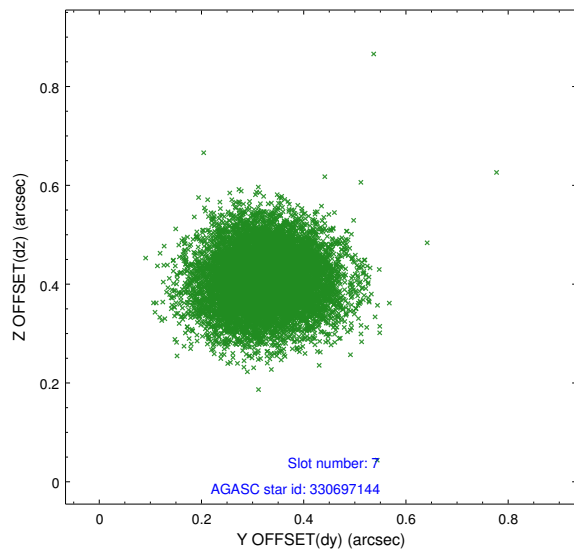
### 2.4.3 Slot 5



### 2.4.4 Slot 6

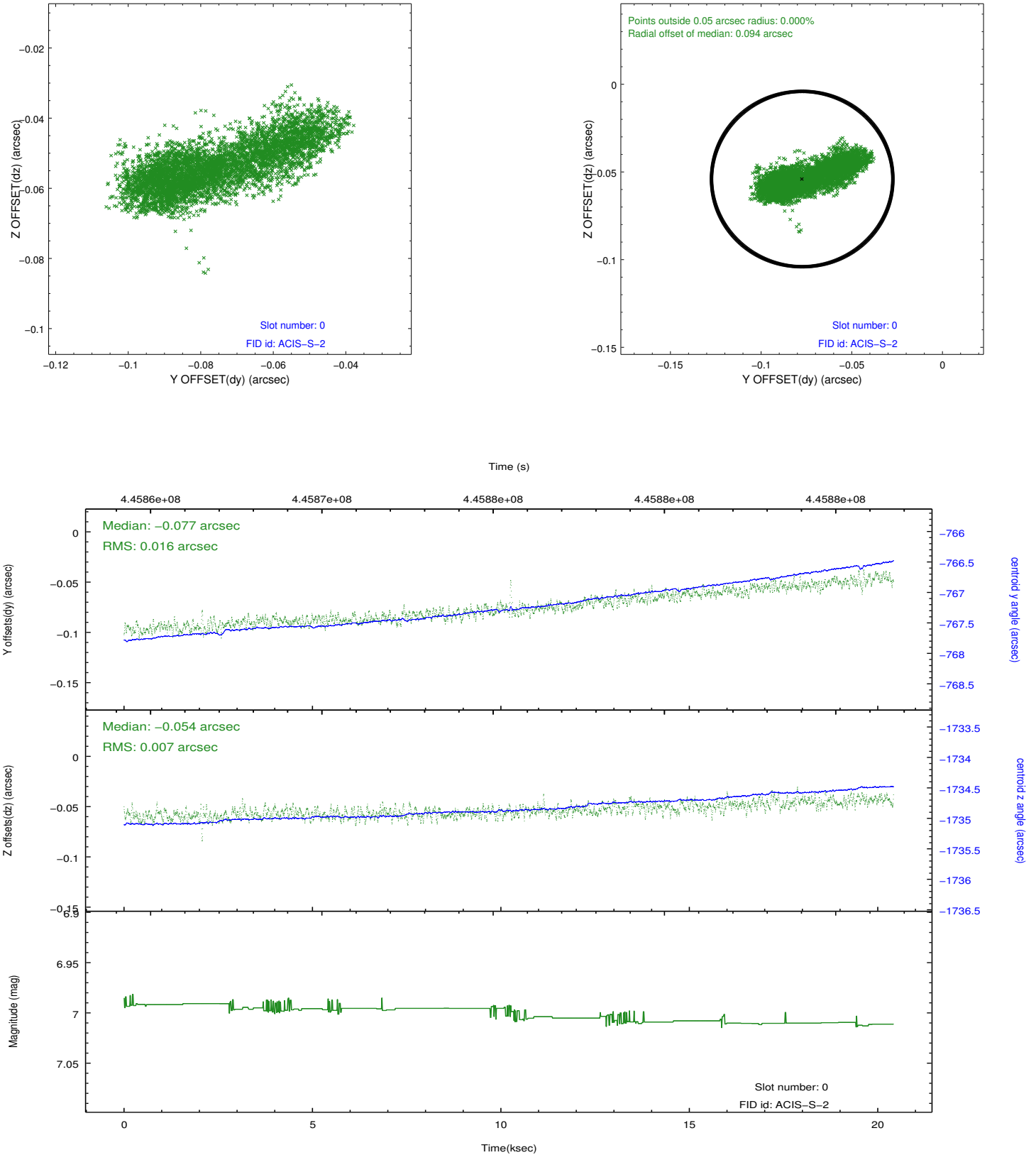


## 2.4.5 Slot 7

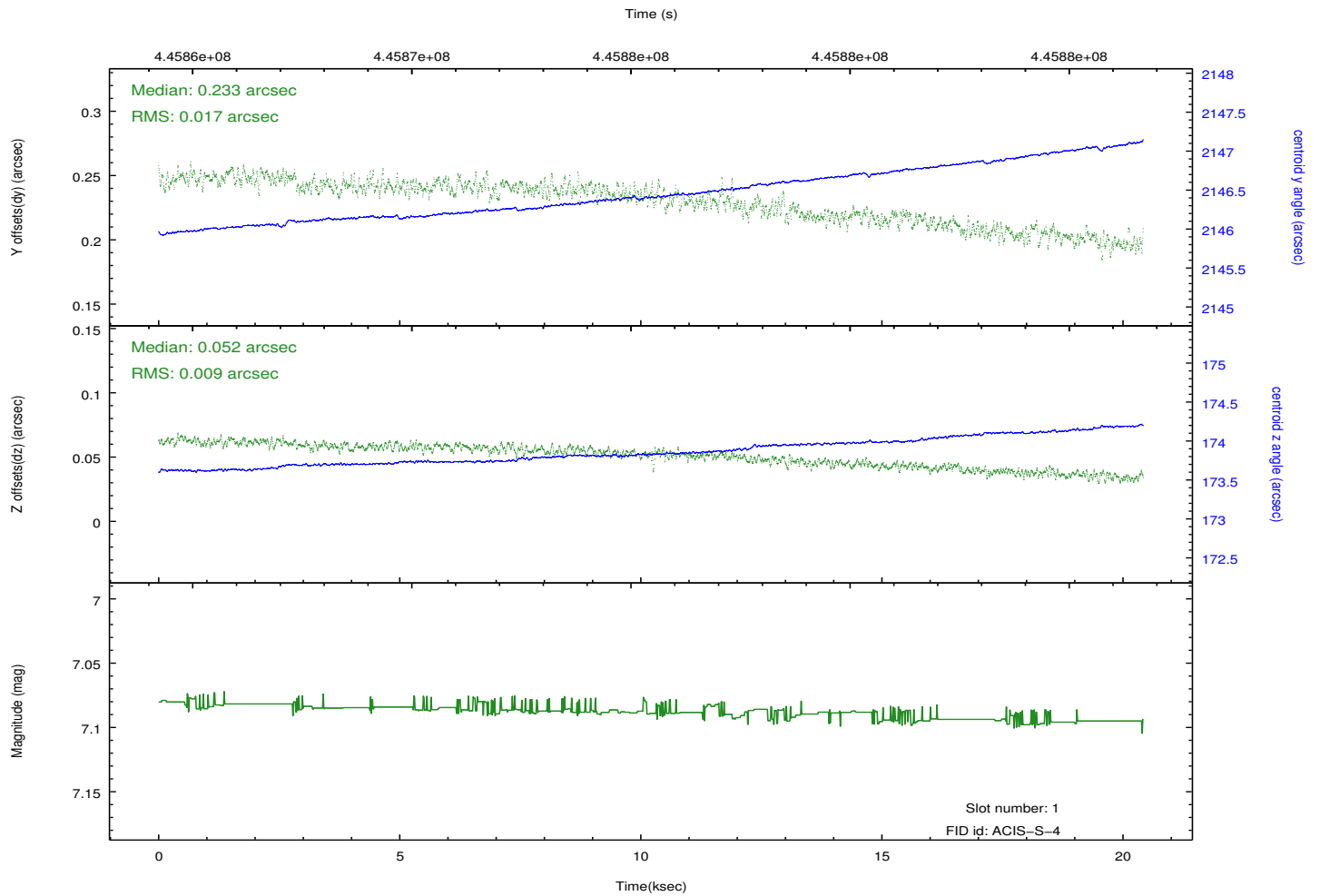
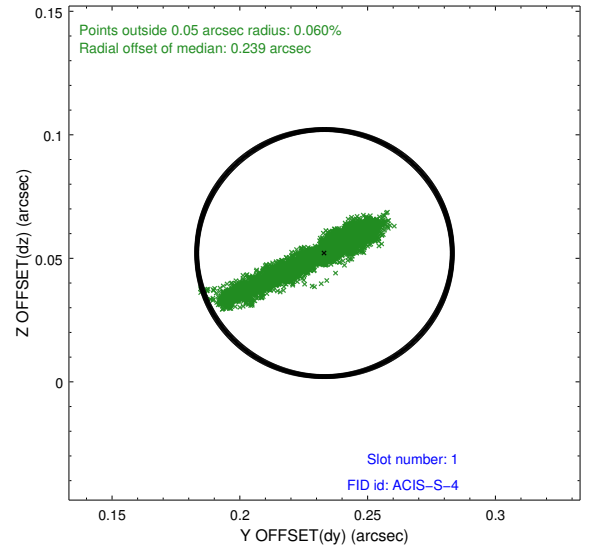
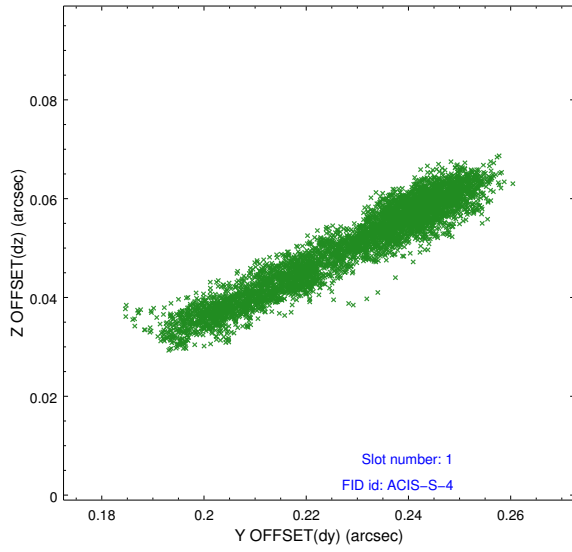


## 2.5 FID Slots

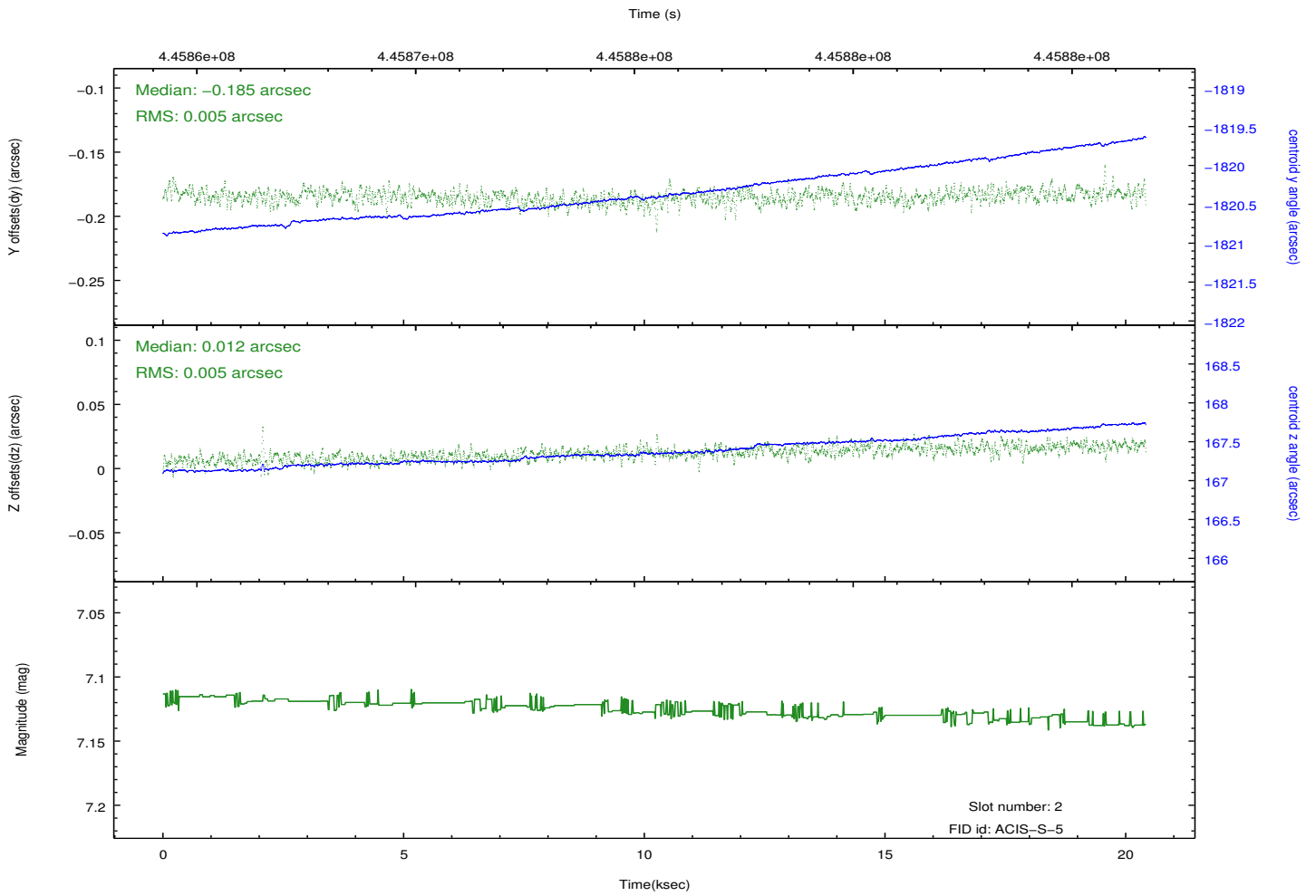
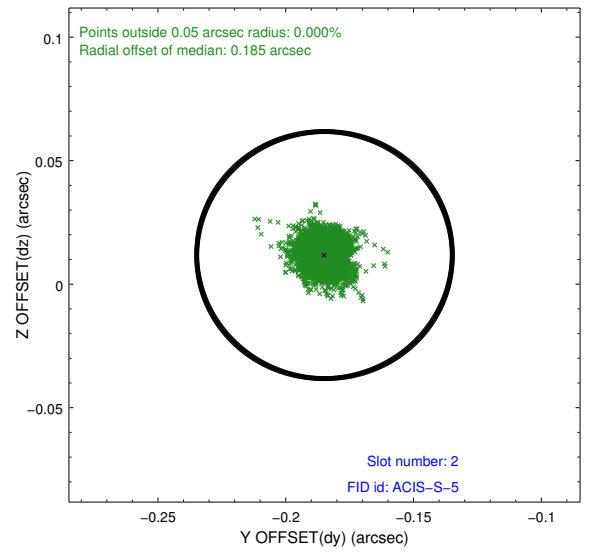
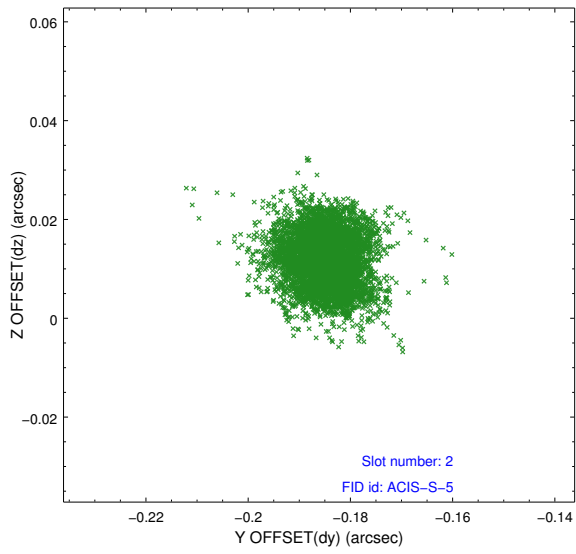
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



# A Summary

## A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.02.21
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.060100154281

## A.2 Comments

Joint Proposal: HST