

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 13796 - L2 Version 1  
Chandra X-Ray Center

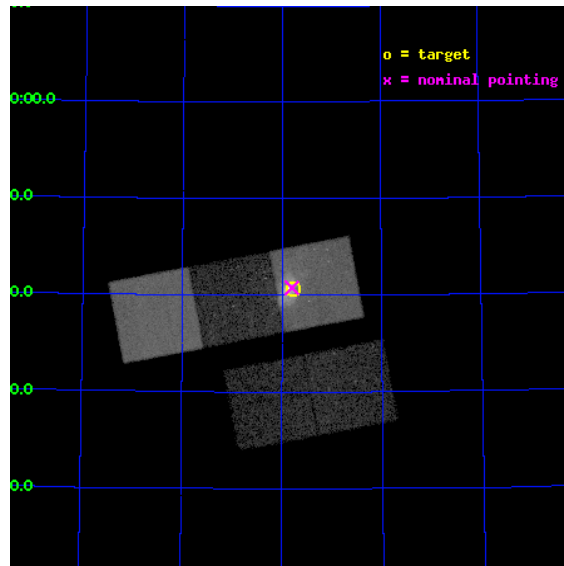
L2 Processing Date : Aug 10 2012

## 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

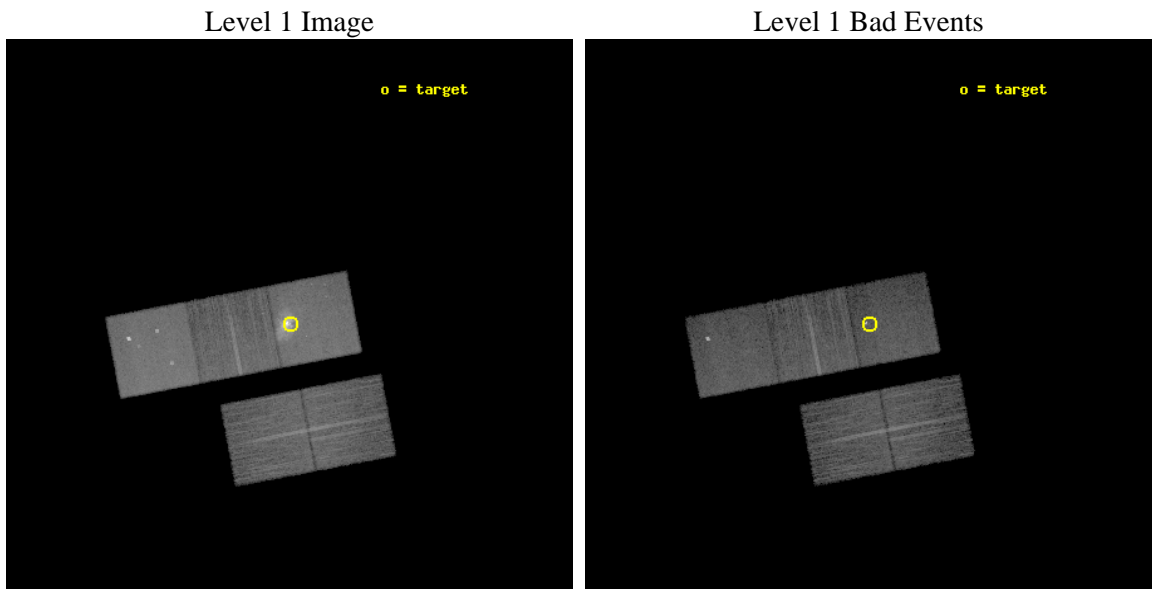
seq_num	501628	Sequence number
obs_id	13796	Observation id
title	The X-Ray Evolution of Supernova 2004am	Proposal title
observer	Mr Yi-Kuan Chiang	Principal investigator
object	SN2004am	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	148.944167	Observer's specified target RA [deg]
dec_targ	69.67725	Observer's specified target Dec [deg]
ra_nom	148.95010735393	Nominal RA [deg]
dec_nom	69.67945886397	Nominal Dec [deg]
roll_nom	349.21423444198	Nominal Roll [deg]
revision	1	Processing version of data
ontime	20069.400154352	Sum of GTIs [s]
livetime	19807.178666458	Livetime [s]
ontime2	20066.259184003	Sum of GTIs [s]
ontime3	20066.259164095	Sum of GTIs [s]
ontime5	20069.400154352	Sum of GTIs [s]
ontime6	20069.400154352	Sum of GTIs [s]
ontime7	20069.400154352	Sum of GTIs [s]
l2events	230555	Number of level 2 events



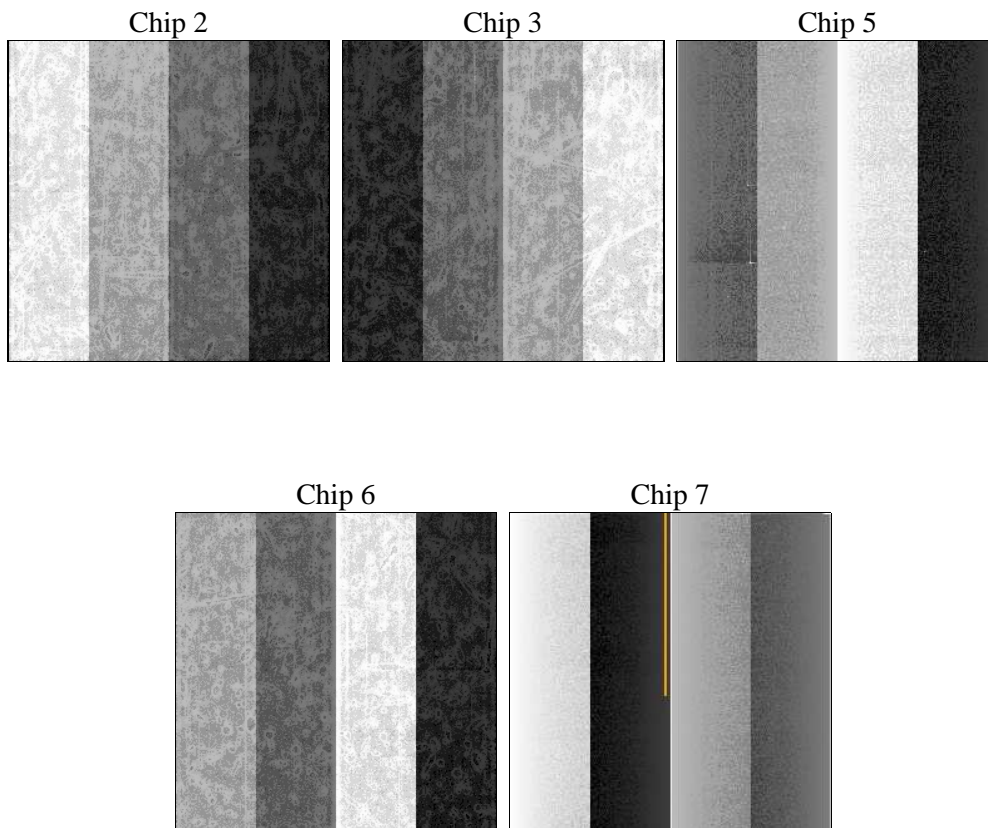
## 2 OBI

### 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	20069.400154352	Sum of GTIs [s]
caldbver	4.5.1.1	&#160	ontime2	20066.259184003	Sum of GTIs [s]
date	2012-08-10T15:22:49	Date and time of file creation	ontime3	20066.259164095	Sum of GTIs [s]
revision	1	Processing version of data	ontime5	20069.400154352	Sum of GTIs [s]
			ontime6	20069.400154352	Sum of GTIs [s]
			ontime7	20069.400154352	Sum of GTIs [s]
			l1events	676710	Number of level 1 events

### 2.1.4 Events

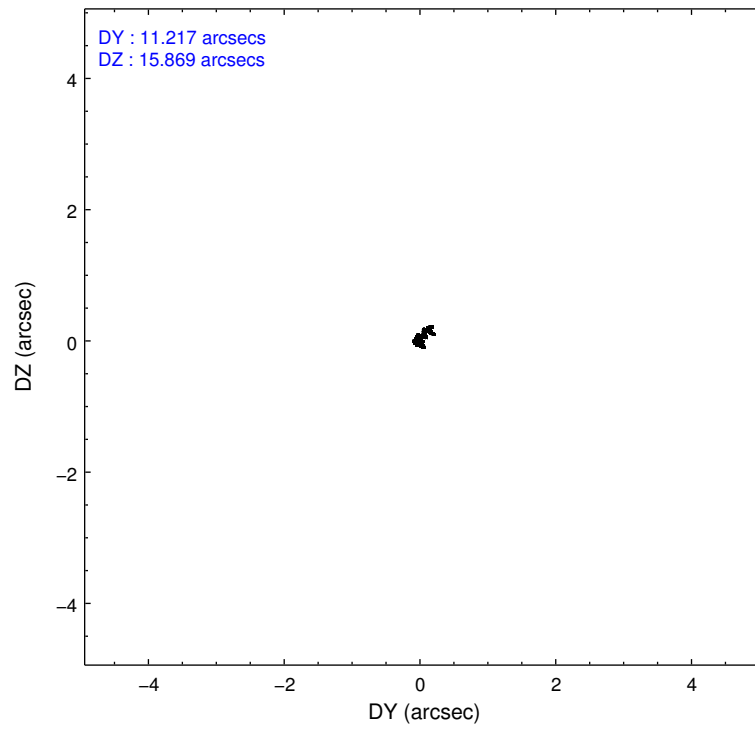
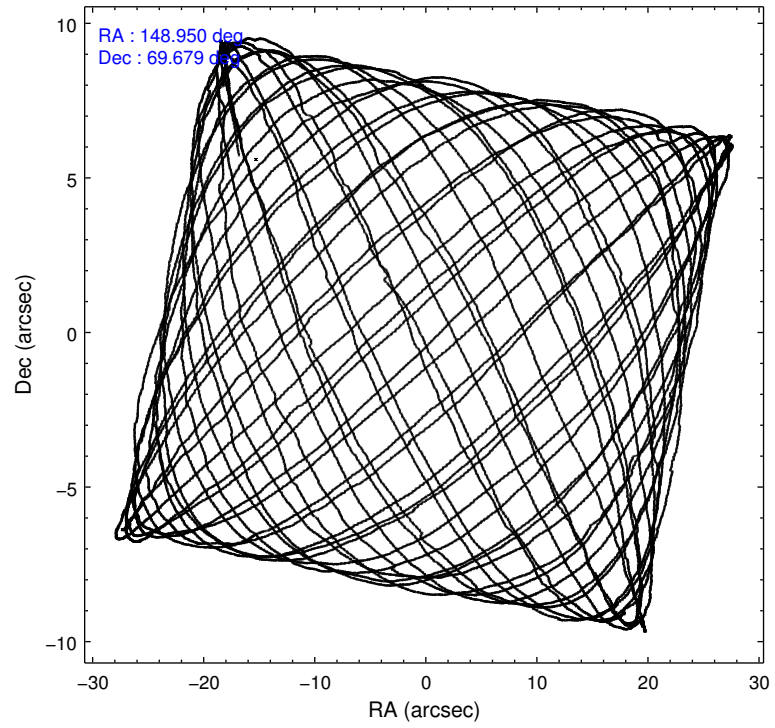
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	98018	96102	171223	107267	204100
rejected events	86628	85001	88115	92941	79417
rejected %	88%	88%	51%	86%	38%

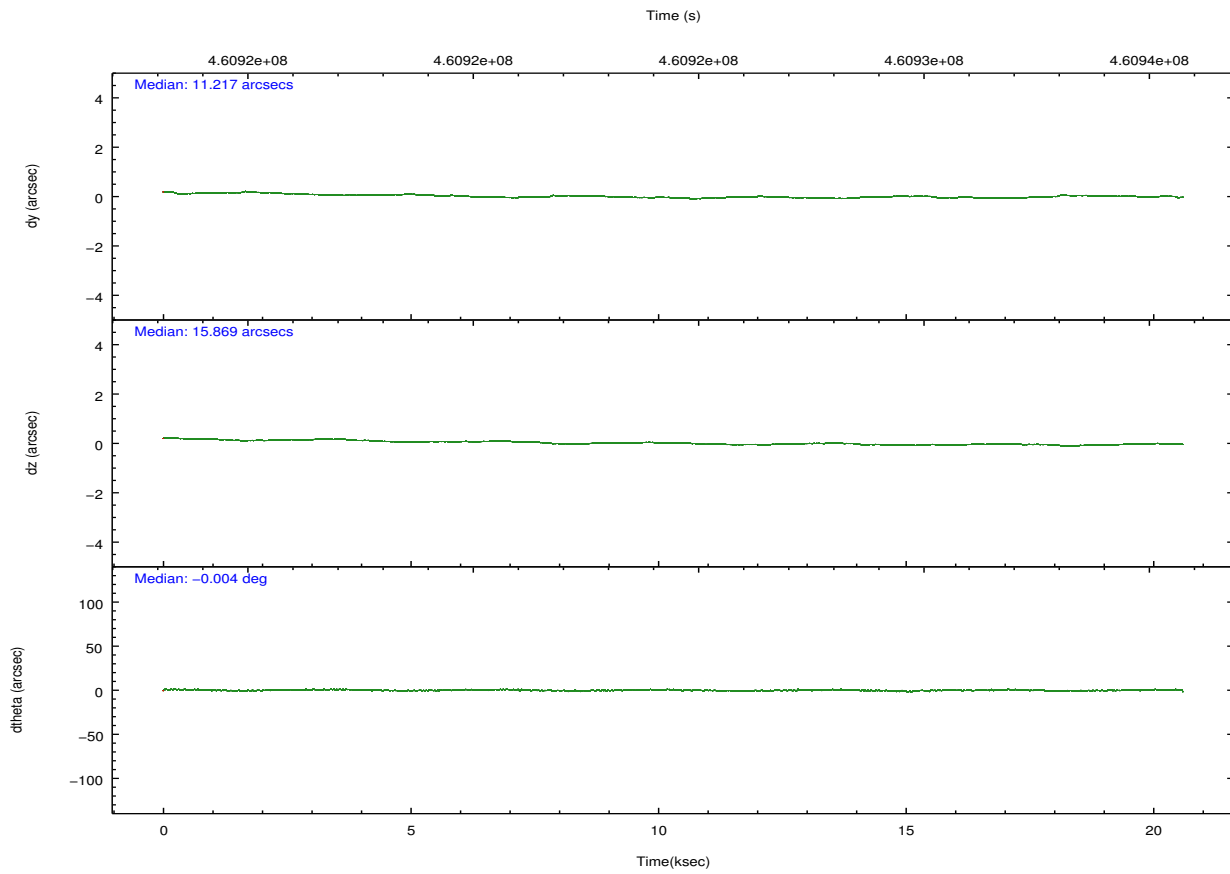
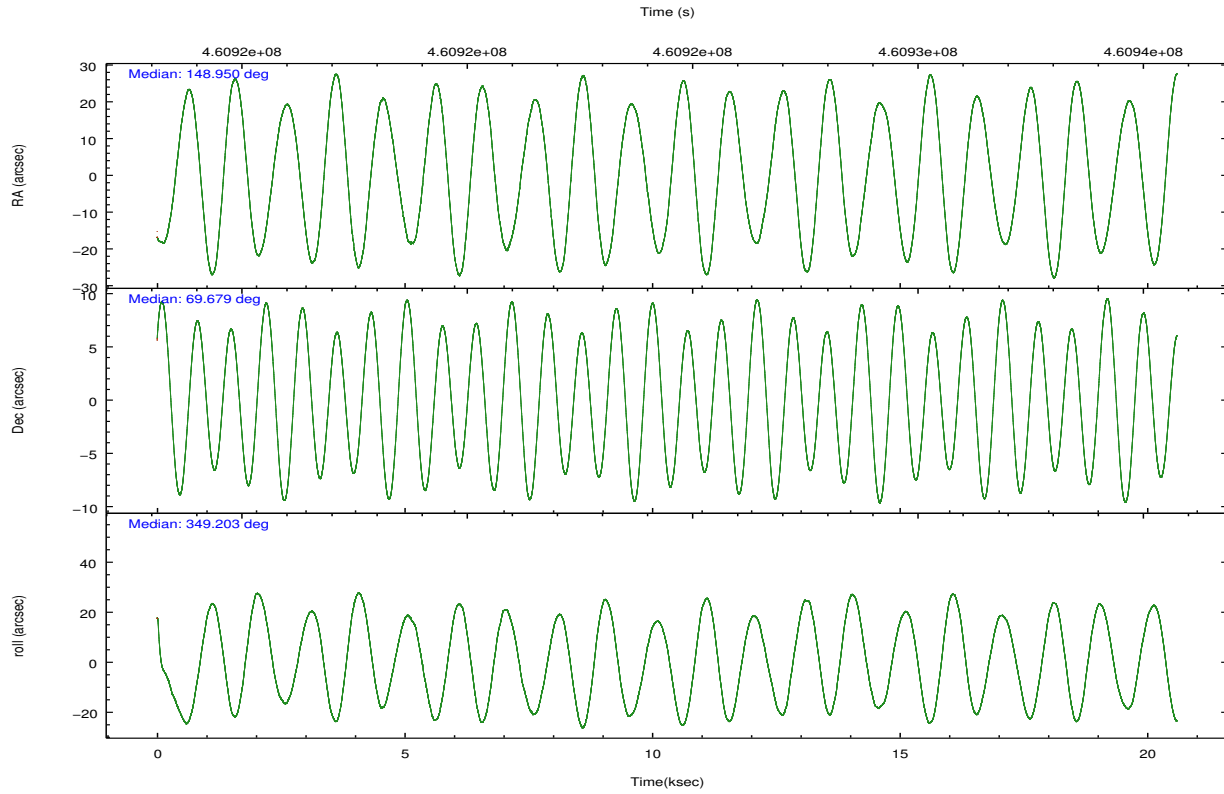
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	4027	3944	8036	5796	22251
	4%	4%	4%	5%	10%
grade 1 events	52	57	243	55	316
	0%	0%	0%	0%	0%
grade 2 events	2736	2498	26321	2997	29733
	2%	2%	15%	2%	14%
grade 3 events	1167	1201	3001	1310	12750
	1%	1%	1%	1%	6%
grade 4 events	1138	1242	2813	1361	12327
	1%	1%	1%	1%	6%
grade 5 events	4349	5090	13213	5147	15140
	4%	5%	7%	4%	7%
grade 6 events	2324	2218	42950	2864	47647
	2%	2%	25%	2%	23%
grade 7 events	82225	79852	74646	87737	63936
	83%	83%	43%	81%	31%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23567	ACIS-23567	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	148.876176	148.9501073539274	CCD I2 on	O2	Y
[deg] Pointing Dec	69.670085	69.67945886397027	CCD I3 on	O1	Y
[deg] Pointing Roll	349.126928	349.2142344419842	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	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	N	N
[s] Observation start time (MET)	460914735.184000	460913590.98417	CCD S5 on	N	N
Observation start date	2012-08-09T15:51:08	2012-08-09T15:33:10	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	460934735.184000	460935564.93534	On-chip summing requested	N	N
Observation end date	2012-08-09T21:24:28	2012-08-09T21:39:24	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



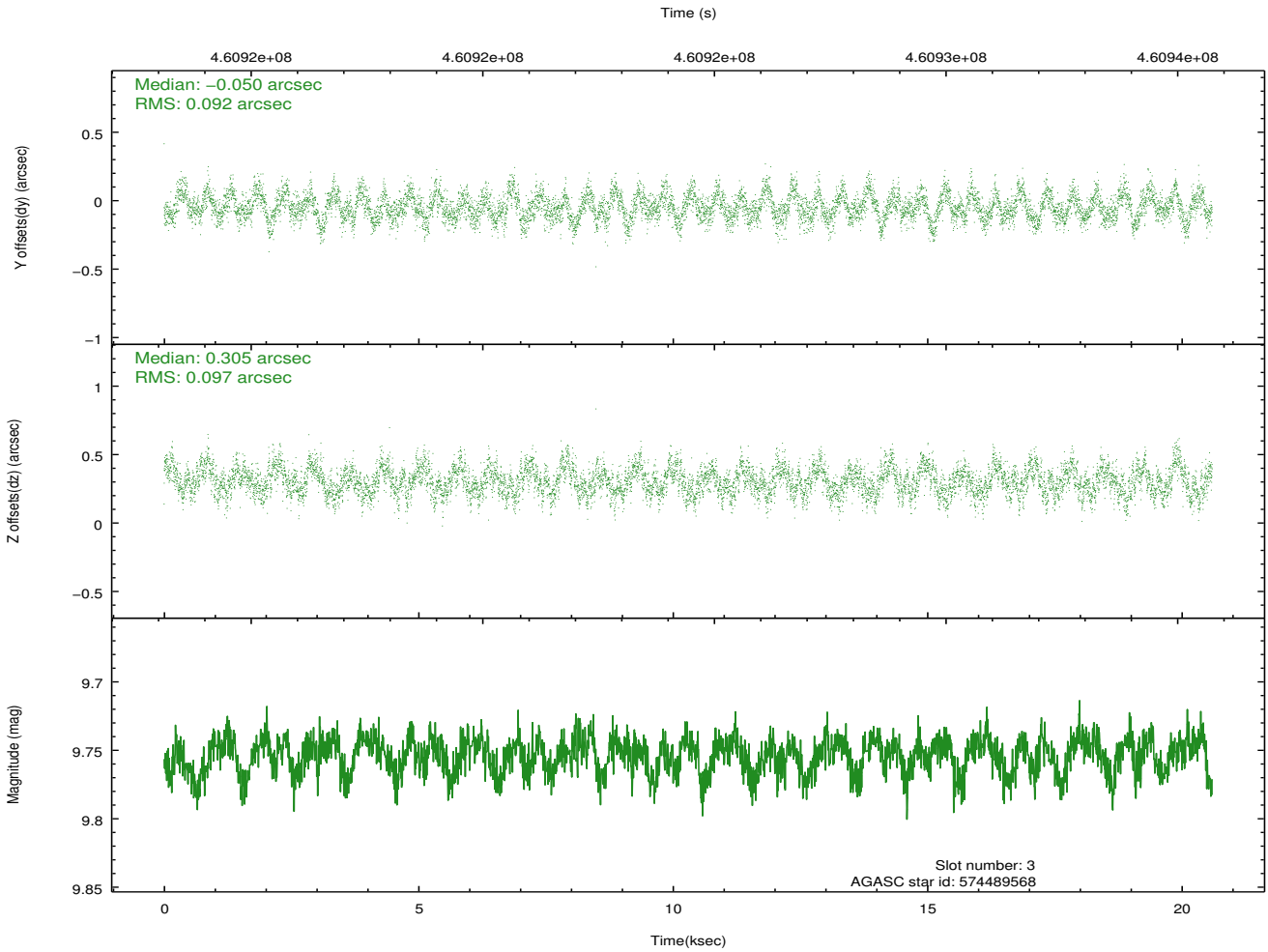
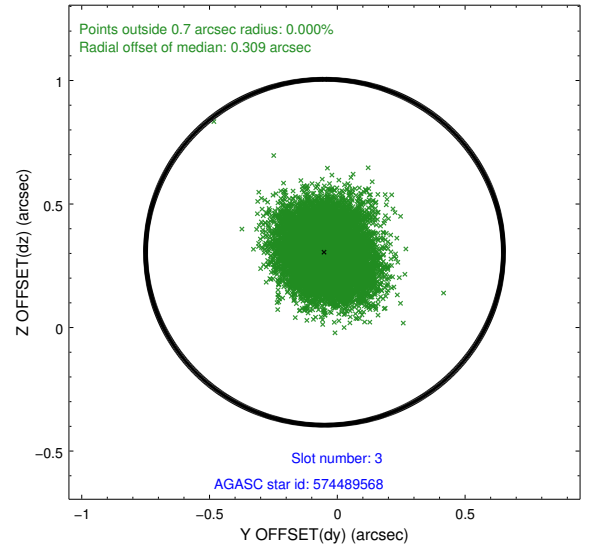
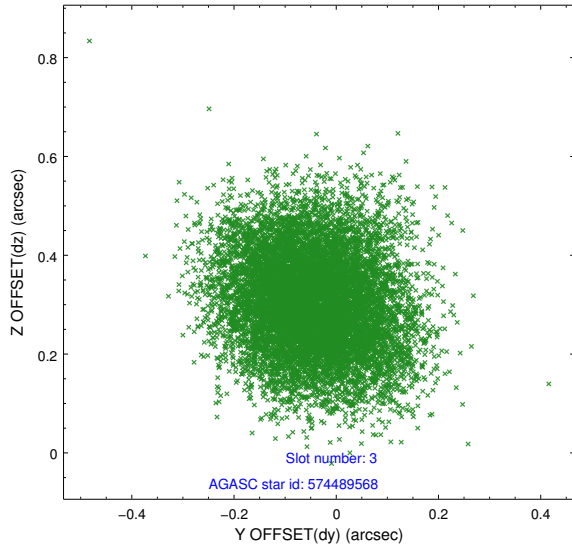


### Slot Statistics

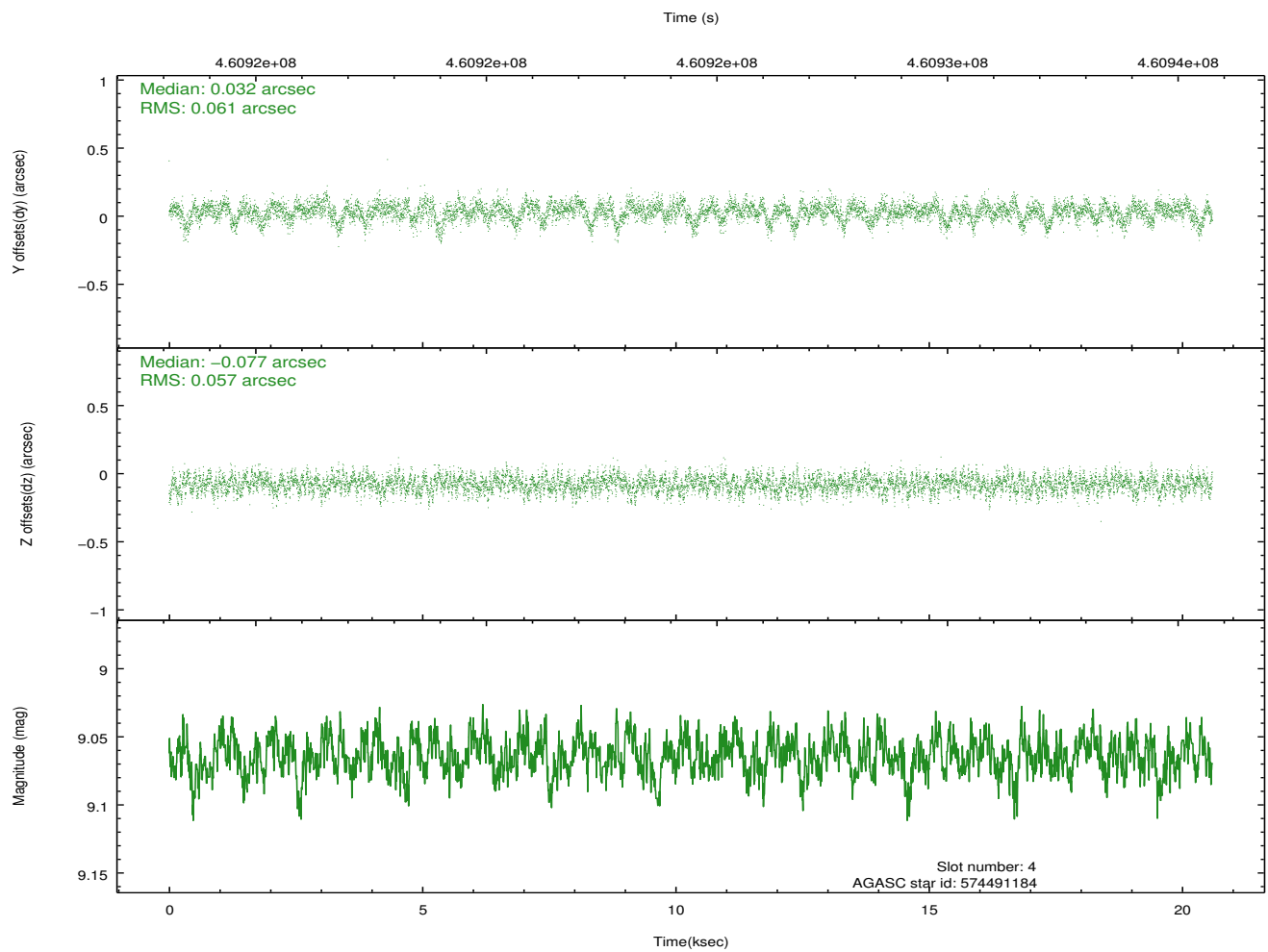
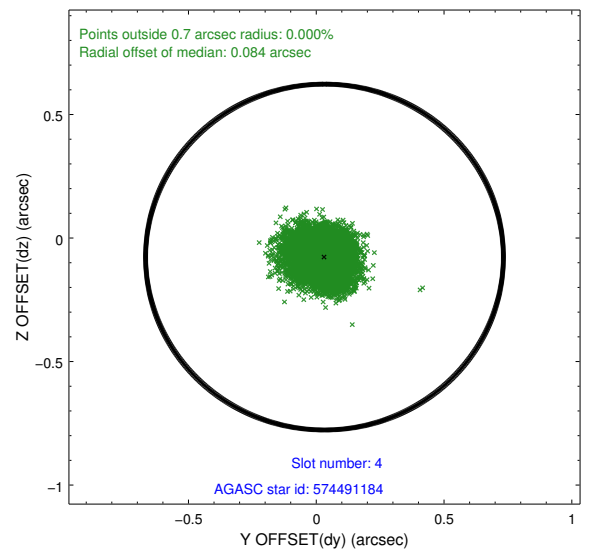
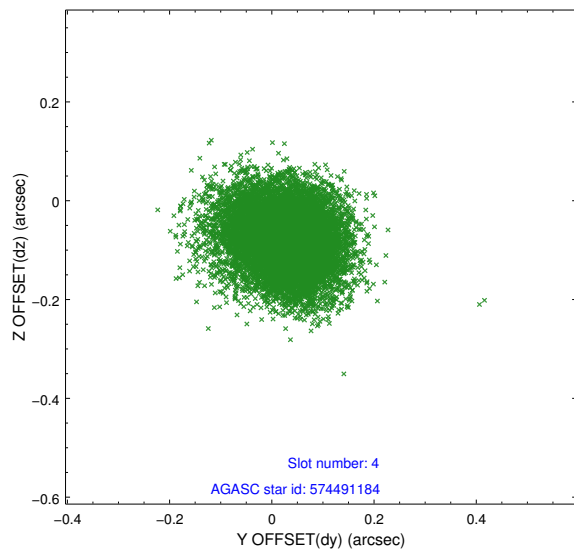
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.90	5024	-0.060	0.001	0.007	0.014	0.000000	0.000000	-764.16	-1737.25
1	FID	ACIS-S-4	6.99	5024	0.161	0.029	0.006	0.016	0.000000	0.000000	2149.25	171.08
2	FID	ACIS-S-5	7.02	5024	-0.131	-0.021	0.007	0.013	0.000000	0.000000	-1816.85	164.90
3	GUIDE	574489568	9.75	10035	-0.050	0.305	0.144	0.228	147.223974	69.438157	-1898.53	-1185.95
4	GUIDE	574491184	9.06	10042	0.032	-0.077	0.088	0.146	148.582453	69.768699	-426.04	280.64
5	GUIDE	574491280	9.34	10015	0.113	0.030	0.146	0.230	148.611567	69.450135	-179.81	-841.08
6	GUIDE	574886496	8.50	10046	-0.067	-0.048	0.082	0.130	148.945563	70.041136	-168.34	1328.40
7	GUIDE	574885216	8.50	10046	-0.022	-0.216	0.081	0.130	147.834547	70.411352	-1740.19	2394.07

## 2.4 Star Slots

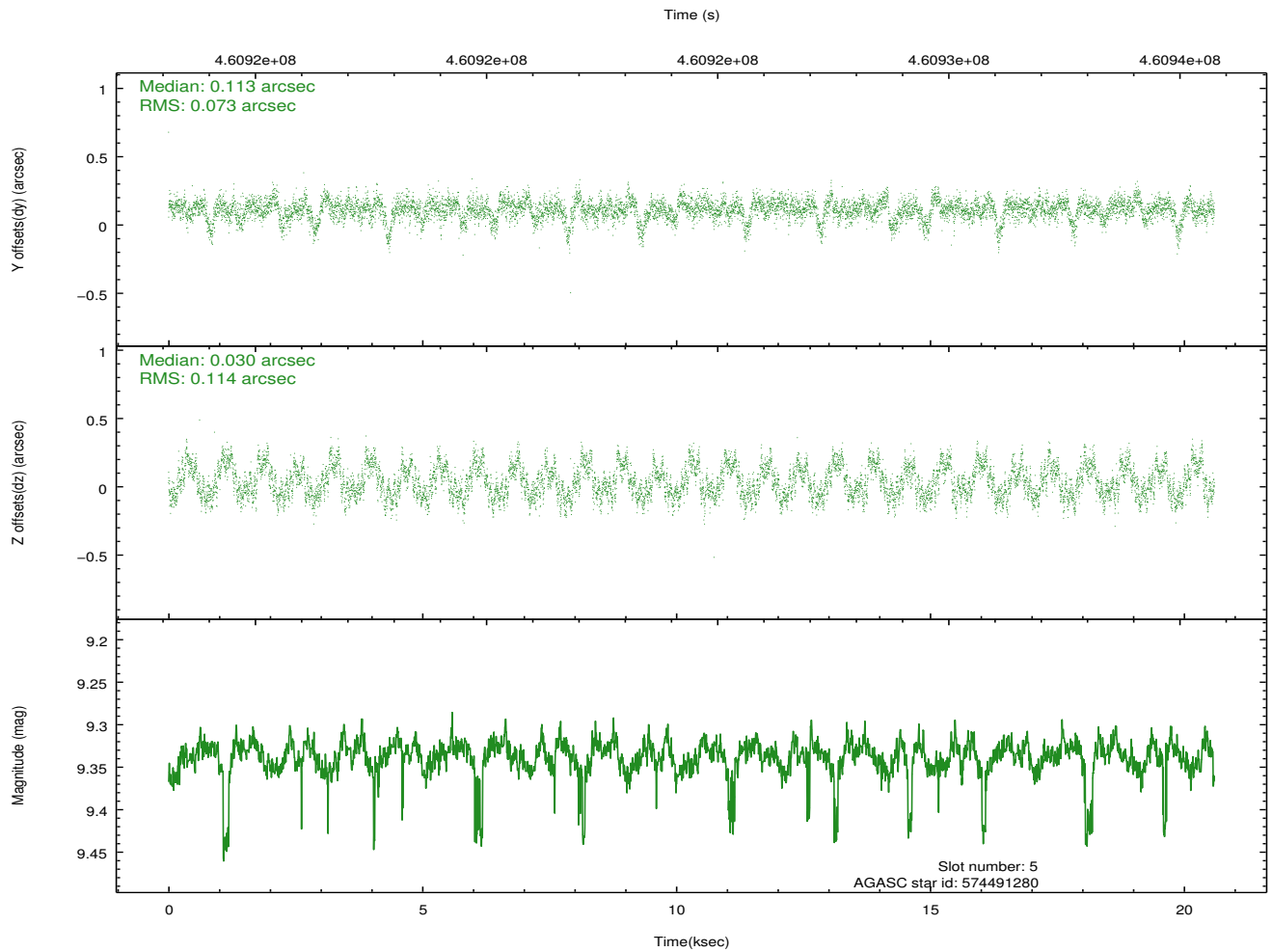
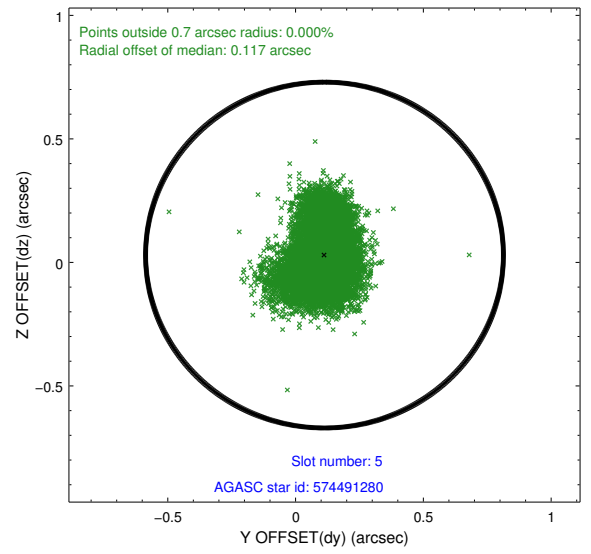
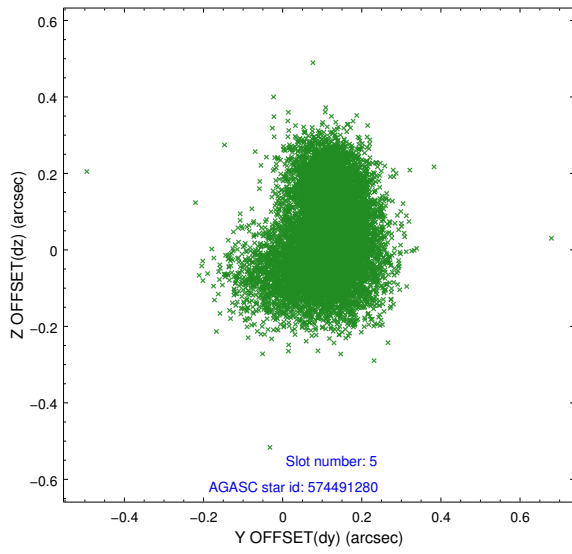
### 2.4.1 Slot 3



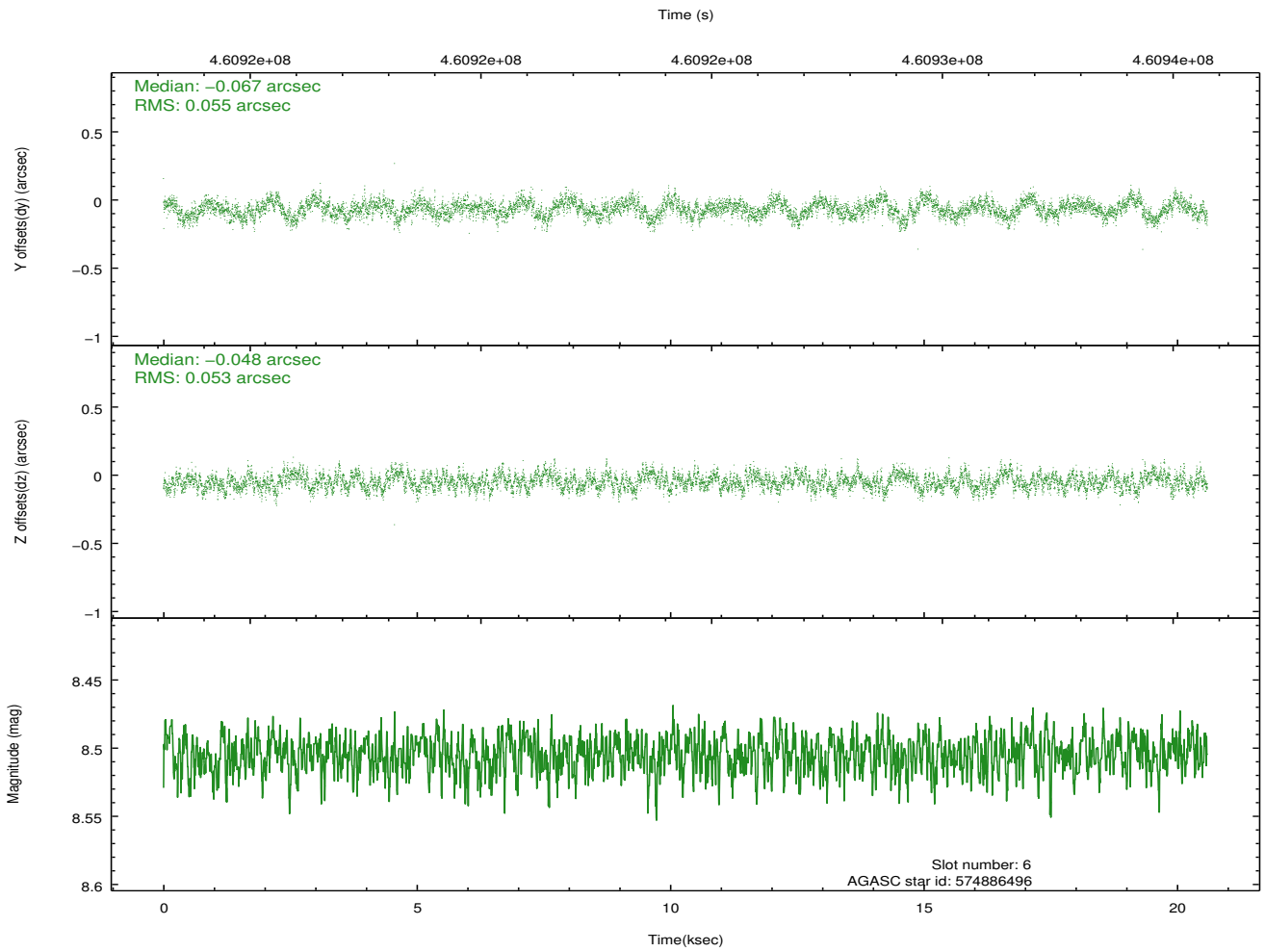
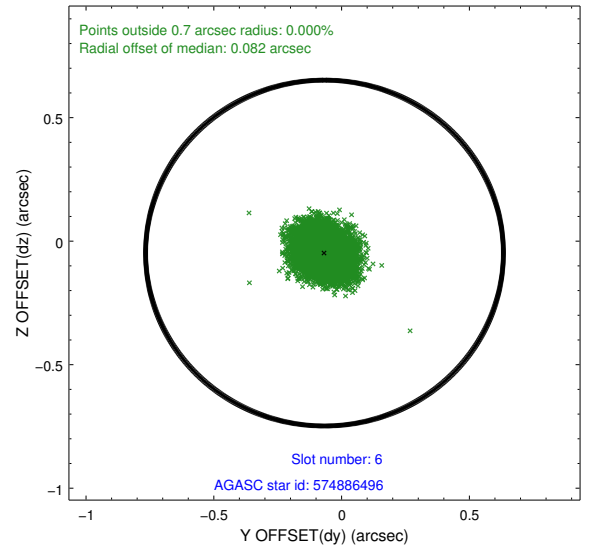
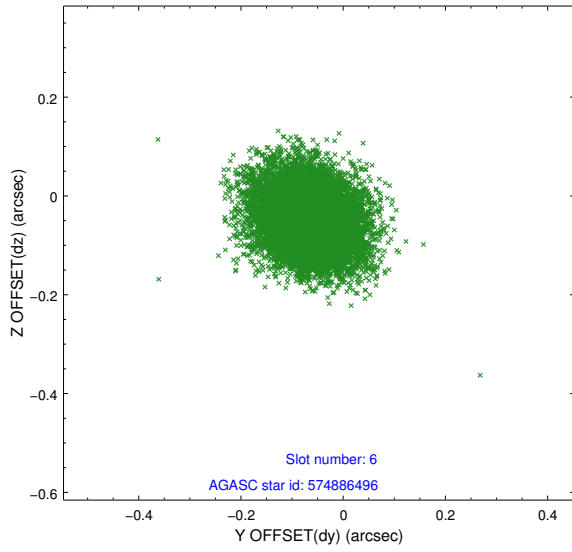
## 2.4.2 Slot 4



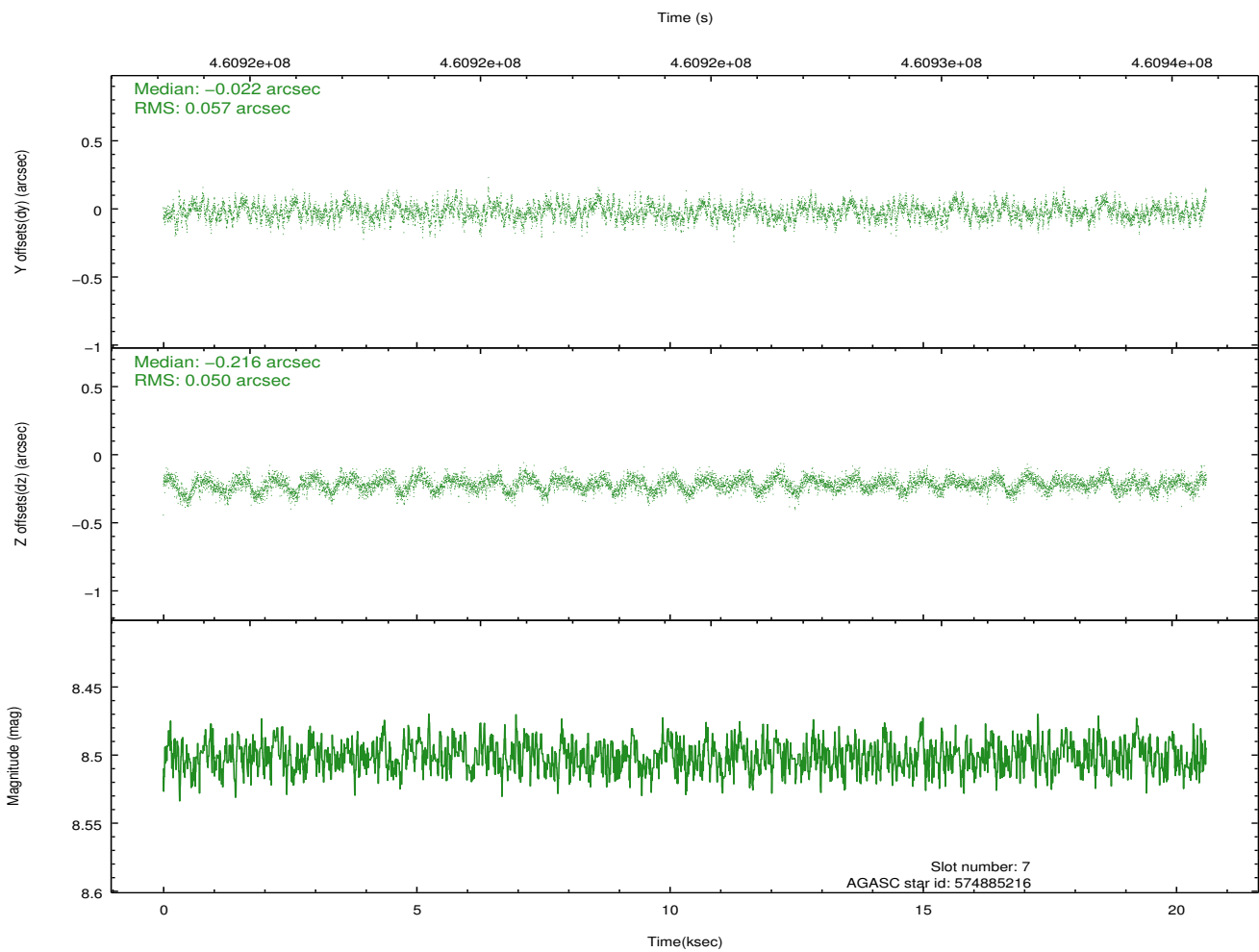
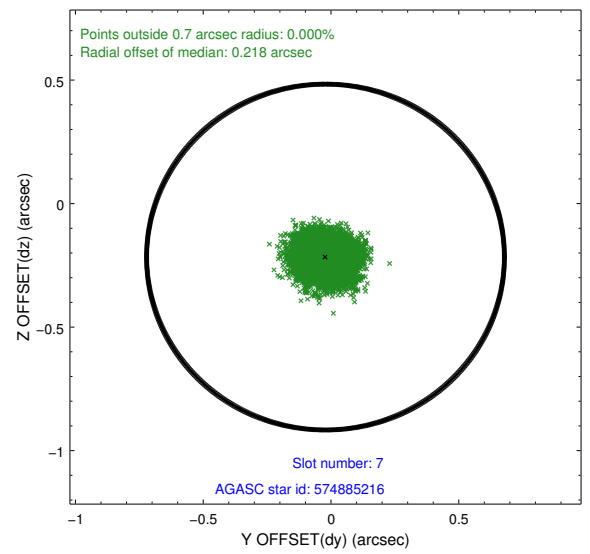
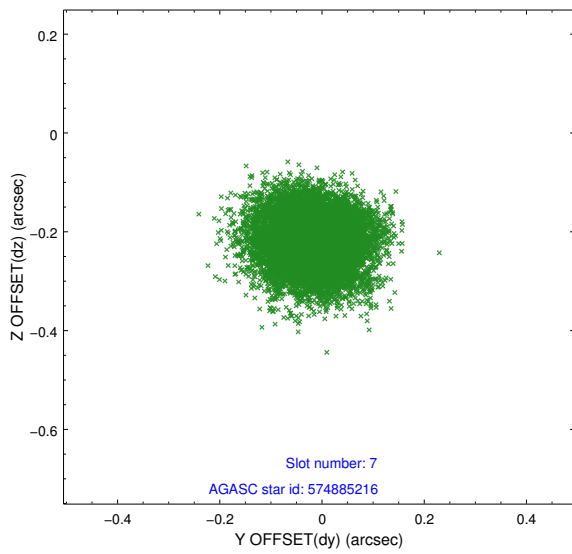
### 2.4.3 Slot 5



## 2.4.4 Slot 6

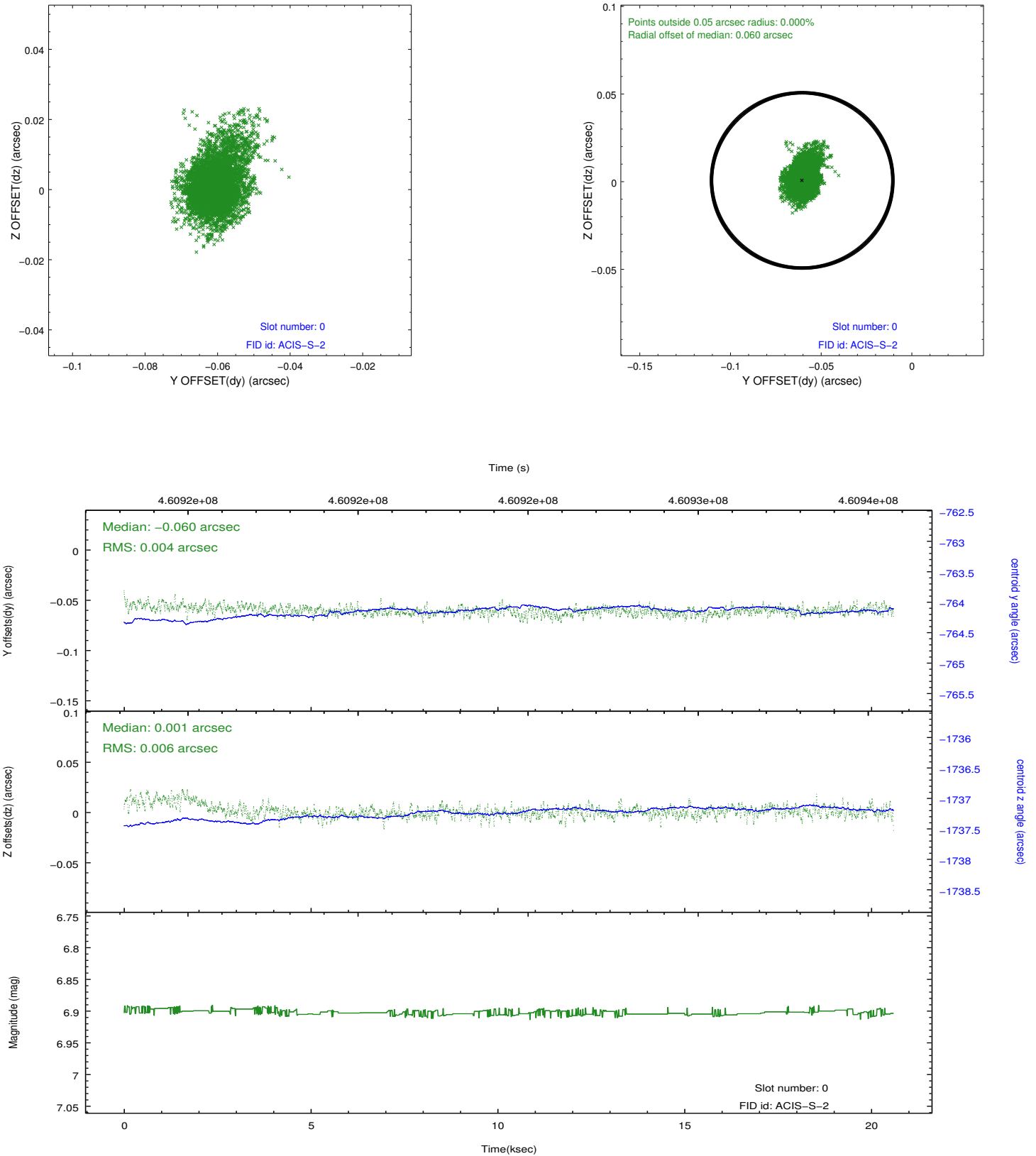


## 2.4.5 Slot 7

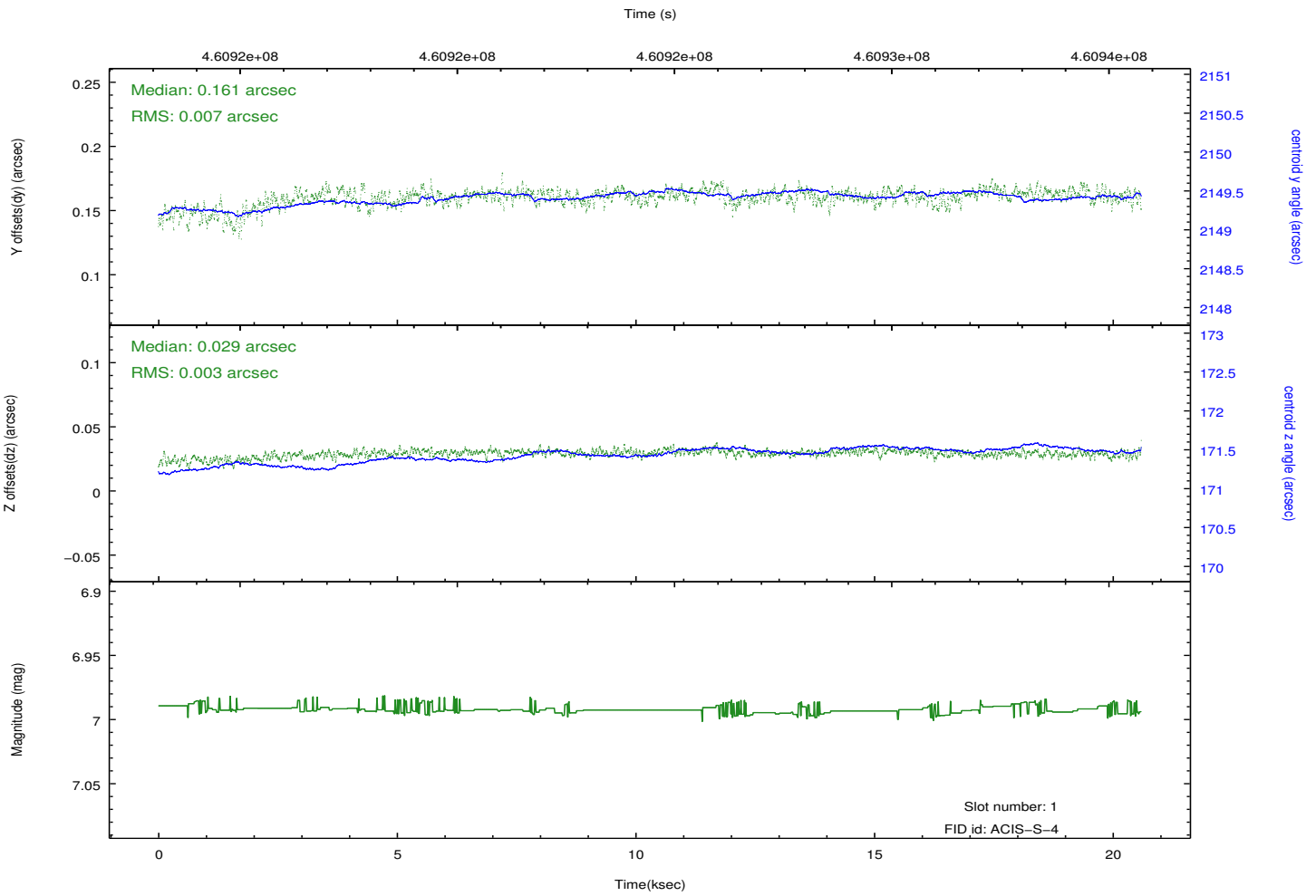
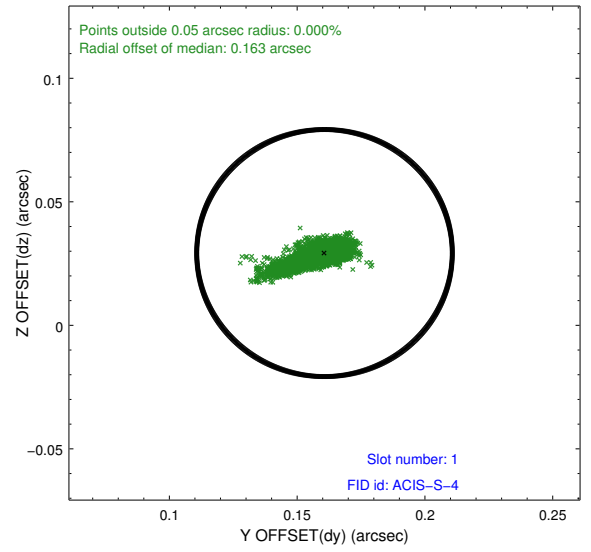
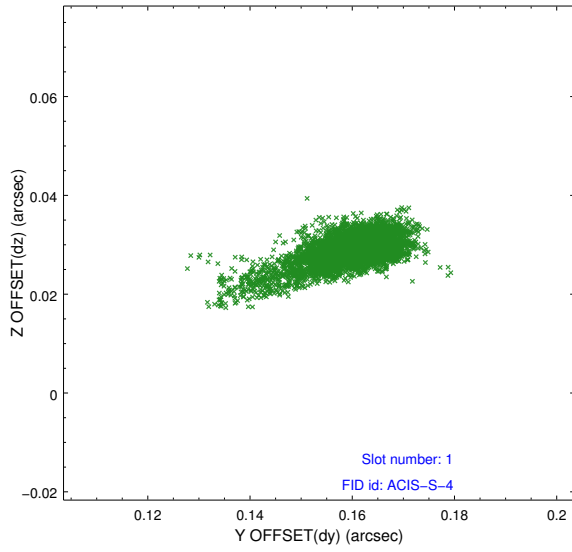


## 2.5 FID Slots

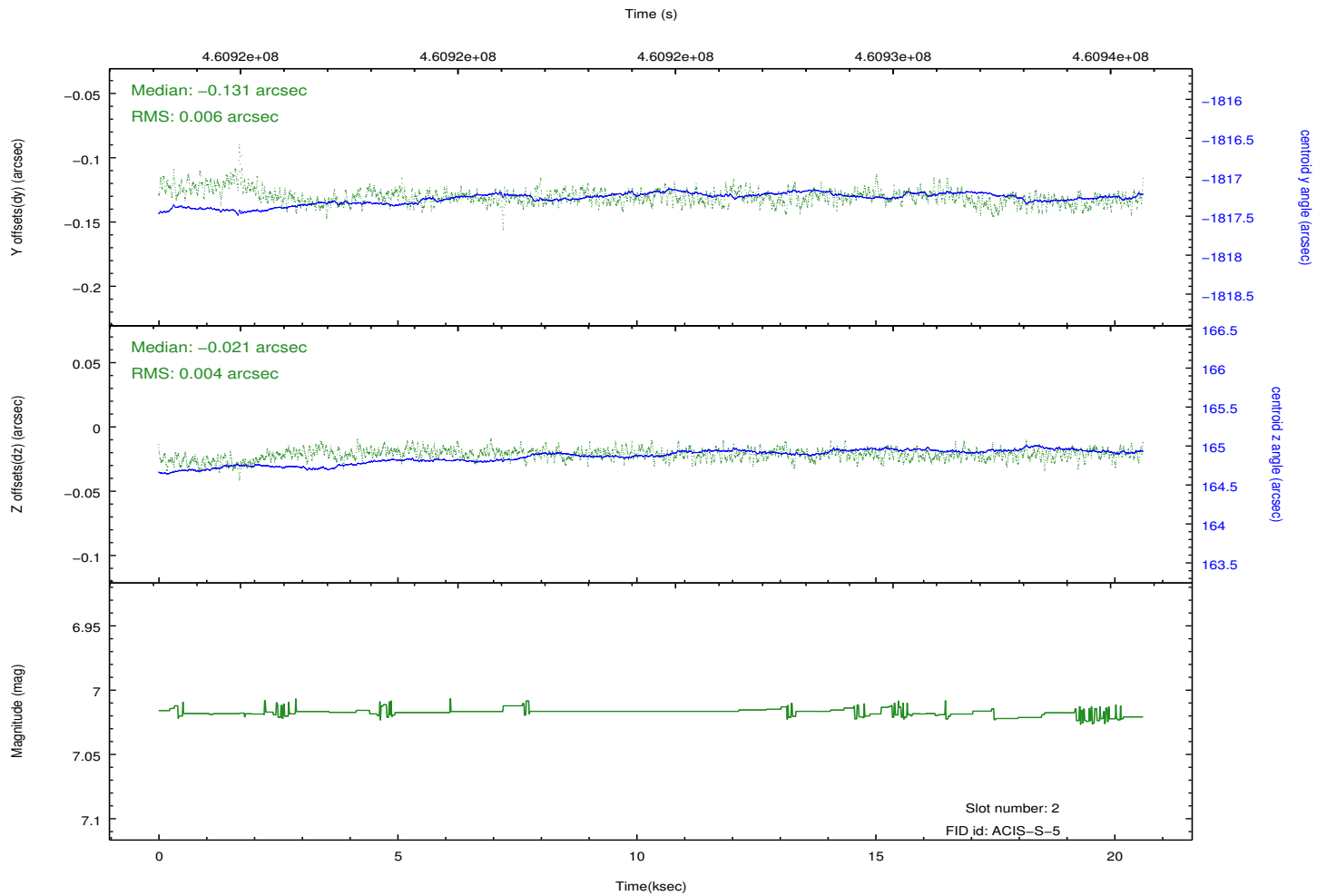
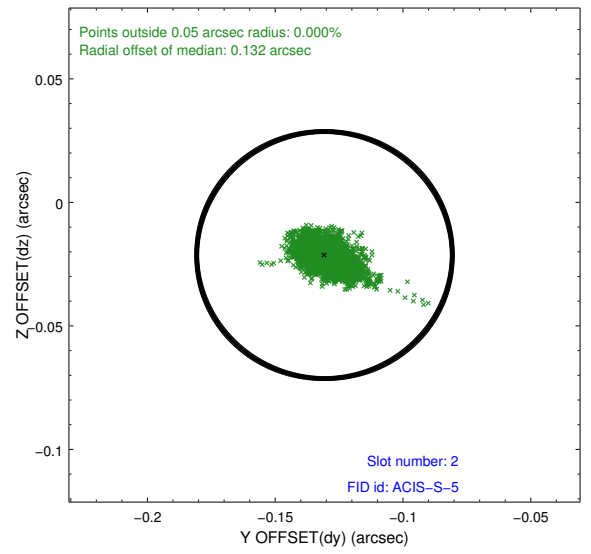
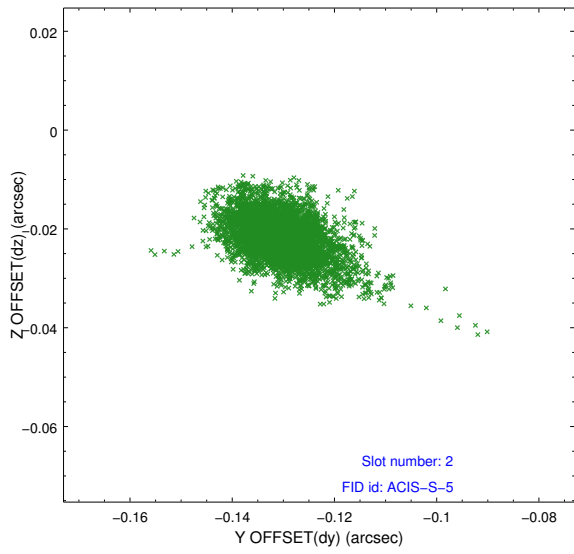
### 2.5.1 Slot 0



## 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)	2012.08.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.069400154352

### **A.2 Comments**