

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 4455 - L2 Version 3  
Chandra X-Ray Center

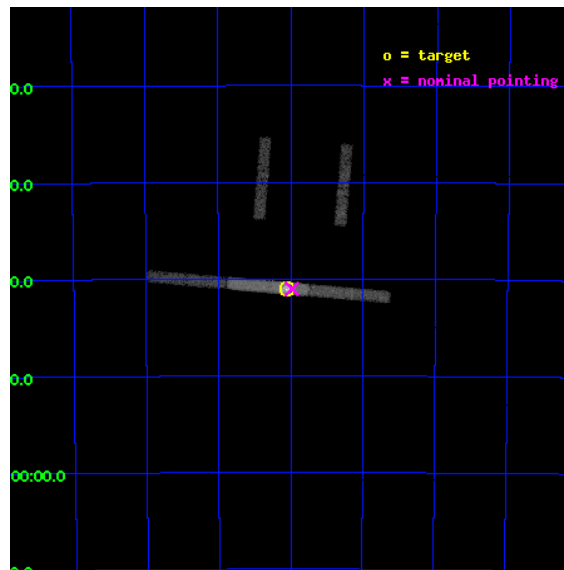
L2 Processing Date : Nov 2 2012

## 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

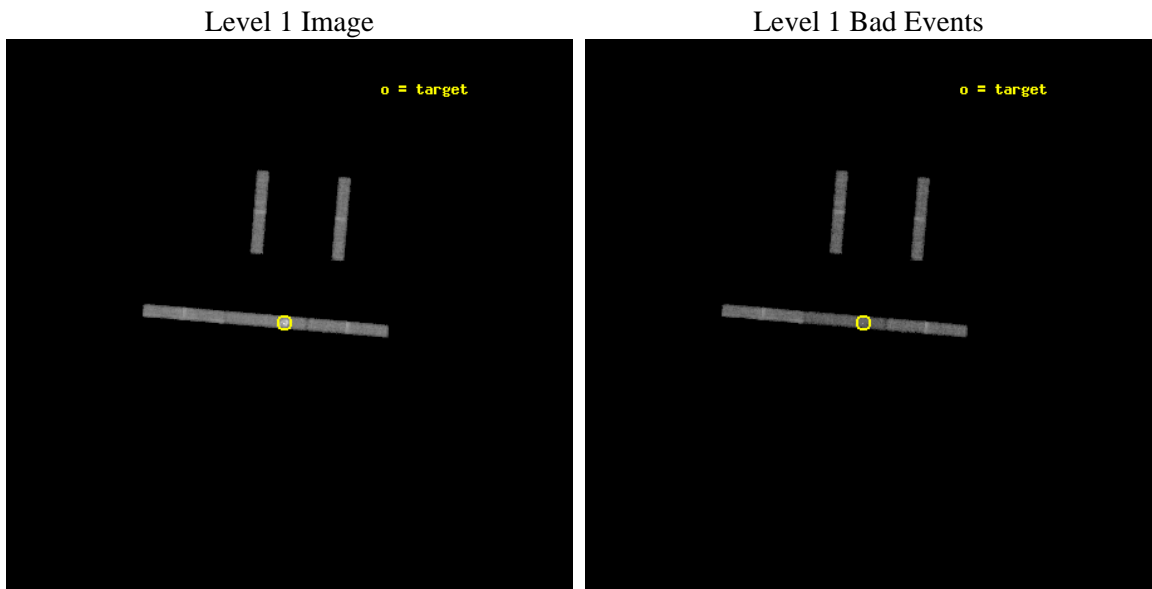
seq_num	200237	Sequence number
obs_id	4455	Observation id
title	UNVEILING ETA CAR: CHANDRA OBSERVATIONS DURING THE 2003.5 EVENT	Pr
observer	Dr Michael Corcoran	Principal investigator
object	Eta Car	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	161.265	Observer's specified target RA [deg]
dec_targ	-59.684528	Observer's specified target Dec [deg]
ra_nom	161.24590057469	Nominal RA [deg]
dec_nom	-59.683645053794	Nominal Dec [deg]
roll_nom	184.85401924336	Nominal Roll [deg]
revision	3	Processing version of data
ontime	19898.199661136	Sum of GTIs [s]
livetime	18796.205012948	Livetime [s]
ontime2	19898.199661136	Sum of GTIs [s]
ontime3	19898.199661136	Sum of GTIs [s]
ontime6	19898.199661136	Sum of GTIs [s]
ontime7	19898.199661136	Sum of GTIs [s]
ontime8	19898.199661136	Sum of GTIs [s]
l2events	43246	Number of level 2 events



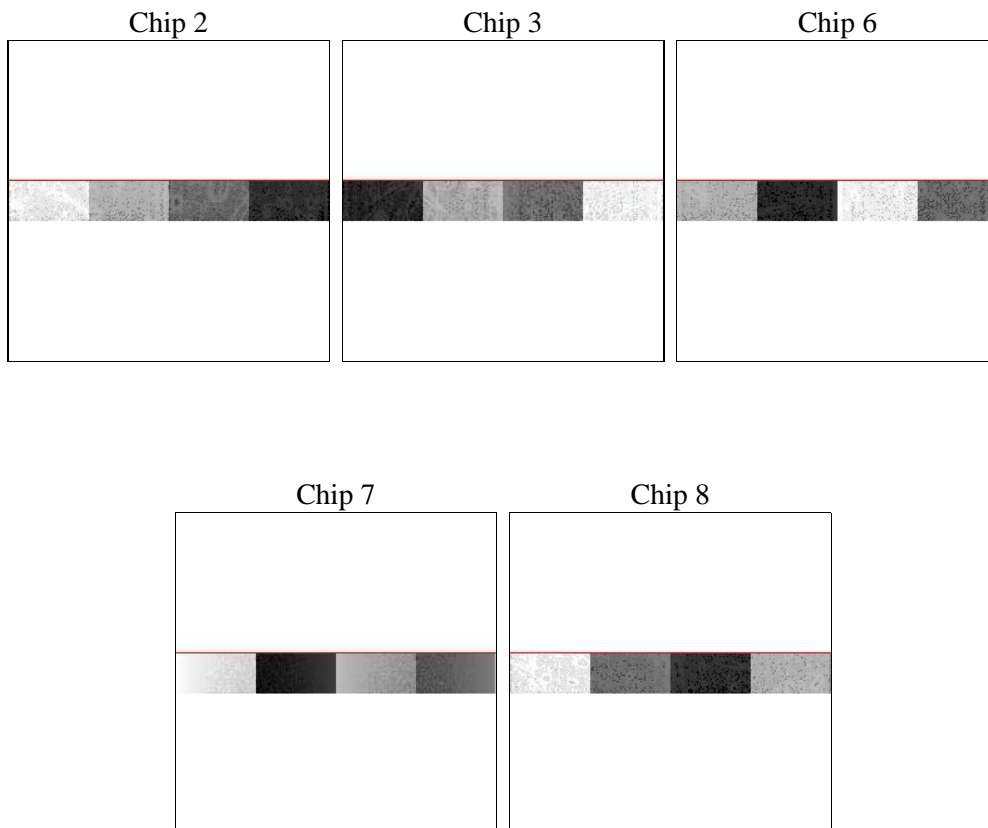
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	19746.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	19898.199661136	Sum of GTIs [s]
caldbver	4.5.2	&#160	ontime2	19898.199661136	Sum of GTIs [s]
date	2012-11-02T16:12:07	Date and time of file creation	ontime3	19898.199661136	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	19898.199661136	Sum of GTIs [s]
			ontime7	19898.199661136	Sum of GTIs [s]
			ontime8	19898.199661136	Sum of GTIs [s]
			l1events	147607	Number of level 1 events

### 2.1.4 Events

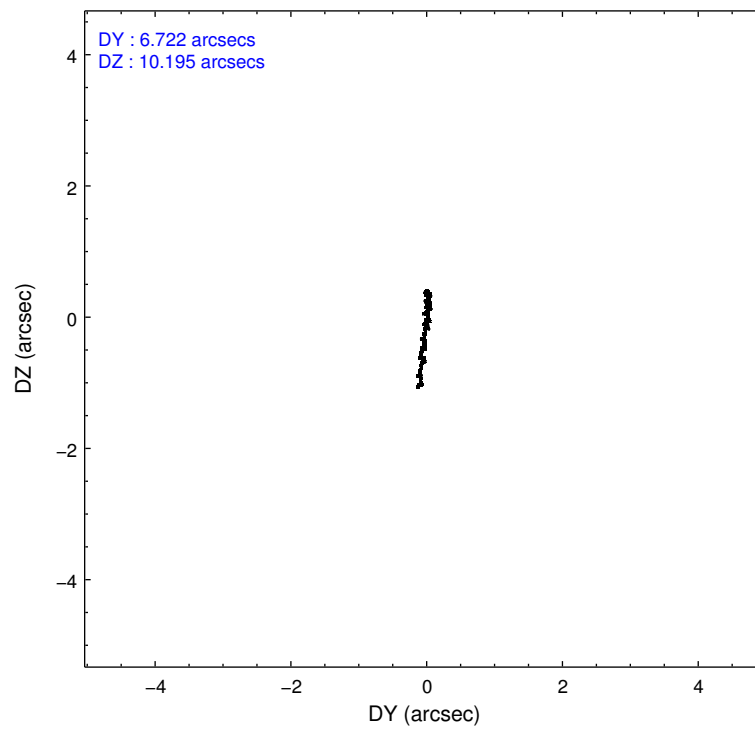
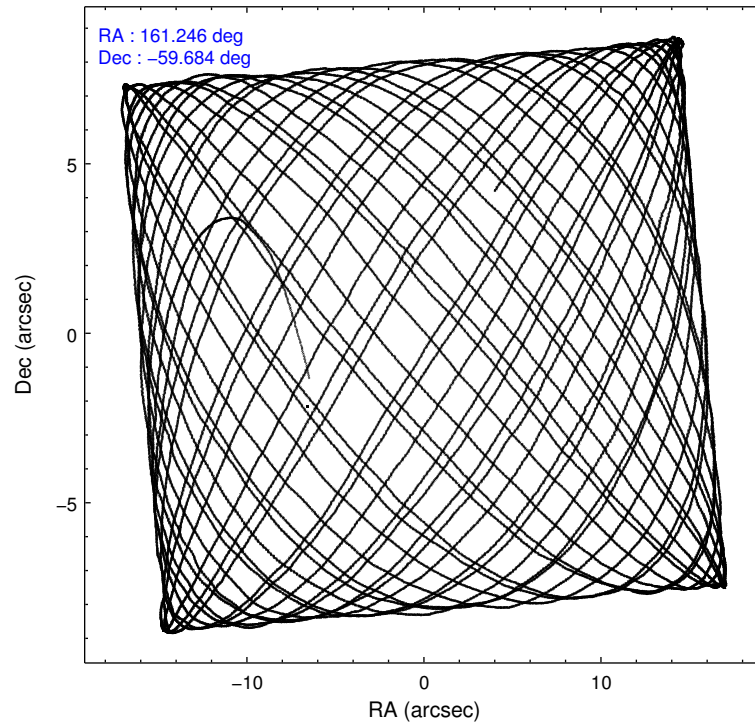
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	21379	22086	26077	46370	31695
rejected events	18145	19388	20798	14524	25865
rejected %	84%	87%	79%	31%	81%

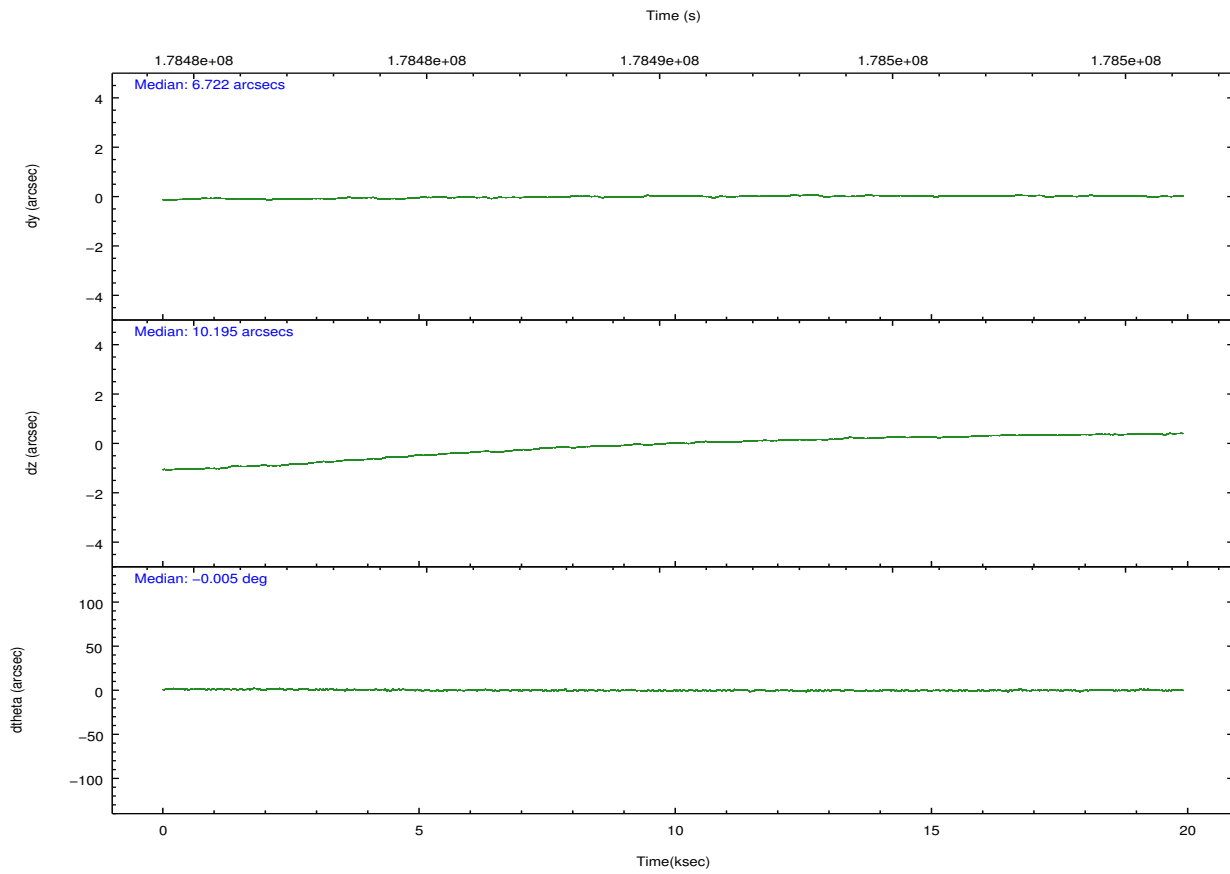
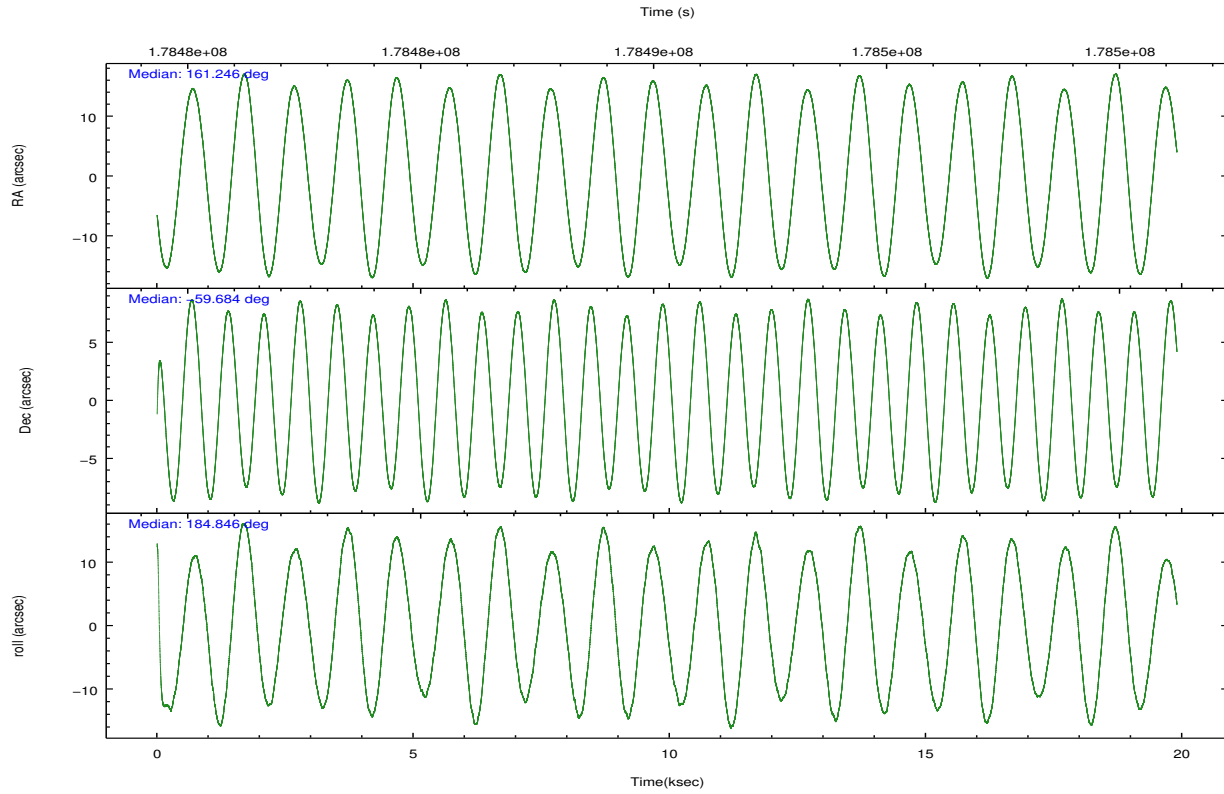
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	1675	1217	3353	8172	1978
	7%	5%	12%	17%	6%
grade 1 events	5	6	11	43	4
	0%	0%	0%	0%	0%
grade 2 events	443	426	606	7742	1103
	2%	1%	2%	16%	3%
grade 3 events	406	373	468	3856	580
	1%	1%	1%	8%	1%
grade 4 events	451	351	455	3654	610
	2%	1%	1%	7%	1%
grade 5 events	592	708	773	2424	935
	2%	3%	2%	5%	2%
grade 6 events	318	383	488	8813	1646
	1%	1%	1%	19%	5%
grade 7 events	17489	18622	19923	11666	24839
	81%	84%	76%	25%	78%

## 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	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	161.289748	161.2459005746934	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	-59.667771	-59.68364505379377	Subarray start row	449	449
[deg] Pointing Roll	184.735229	184.8540192433577	Subarray row count	128	128
[s] Window start time (MET)	177984064.184000	177984064.184000	Alternating exposures requested	N	N
[s] Window stop time (MET)	178675264.184000	178675264.184000	[s] Primary exposure time	0.000000	0.7
[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)	178480497.184000	178479488.26842			
Observation start date	2003-08-28T17:53:53	2003-08-28T17:38:08			
[s] Observation end time (MET)	178500243.184000	178501478.10686			
Observation end date	2003-08-28T23:22:59	2003-08-28T23:44:38			
Read mode	TIMED	TIMED			

## 2.3 Aspect



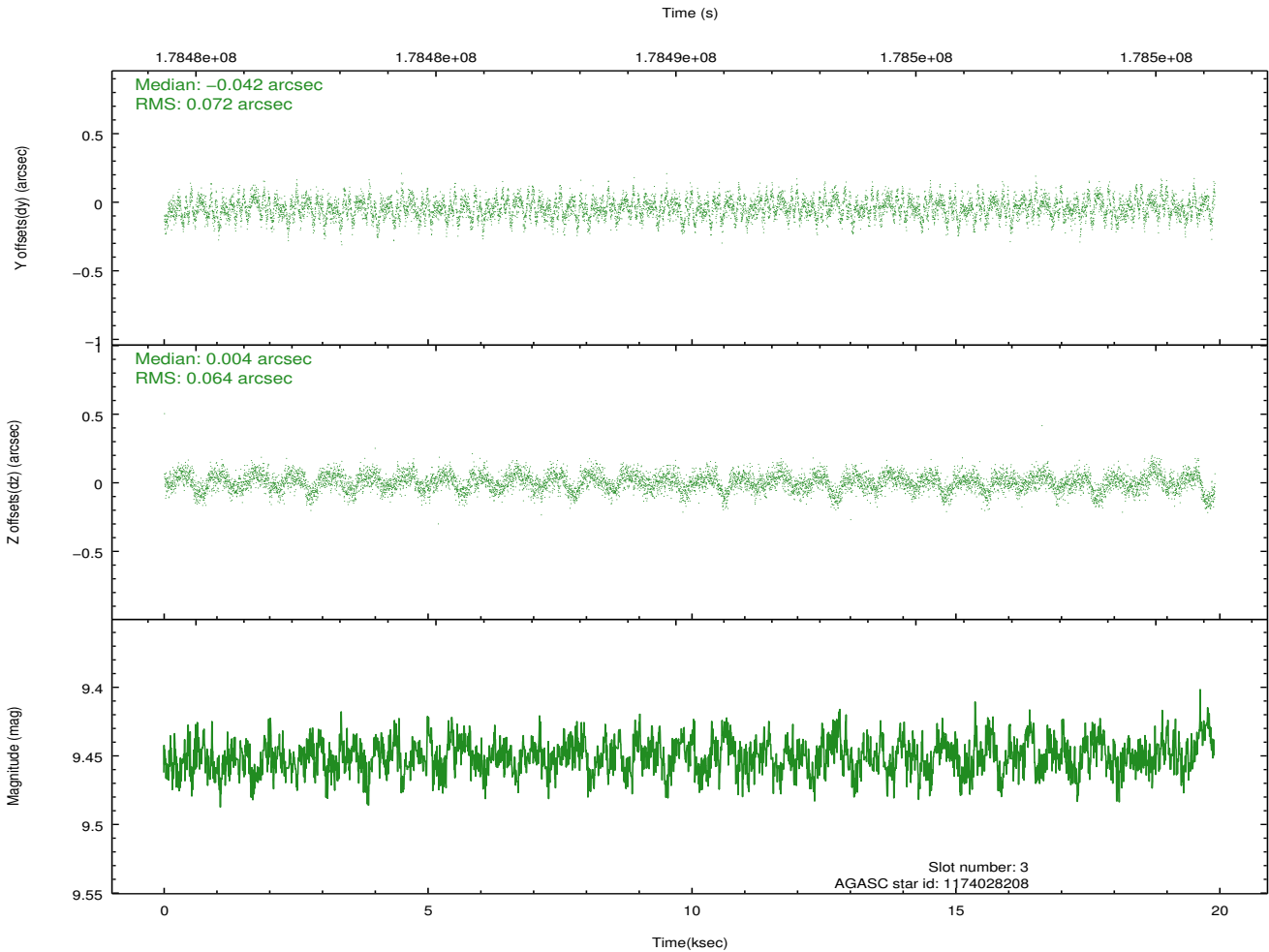
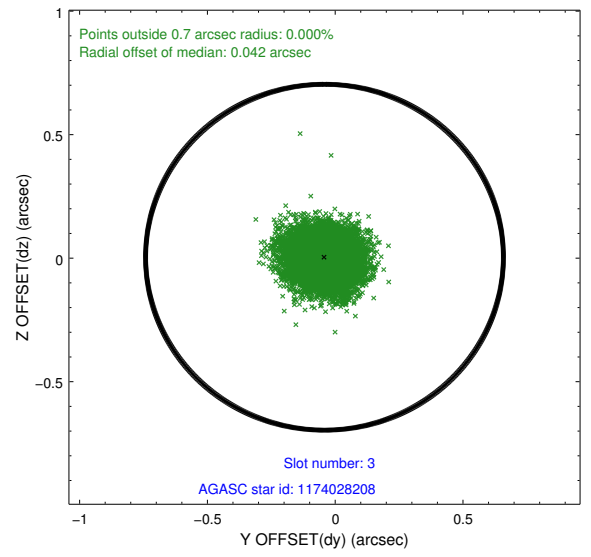
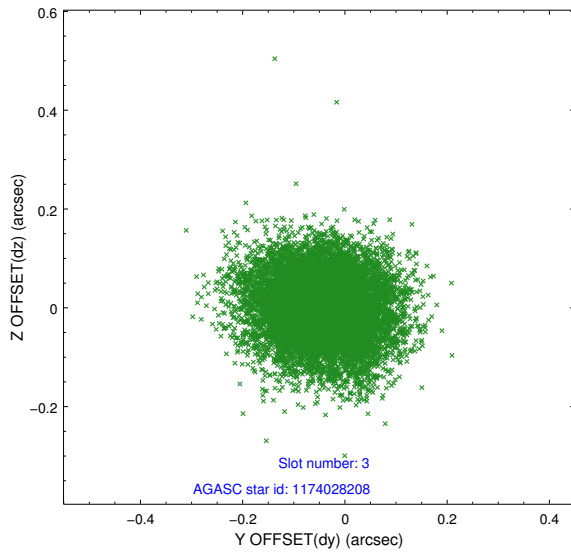


### Slot Statistics

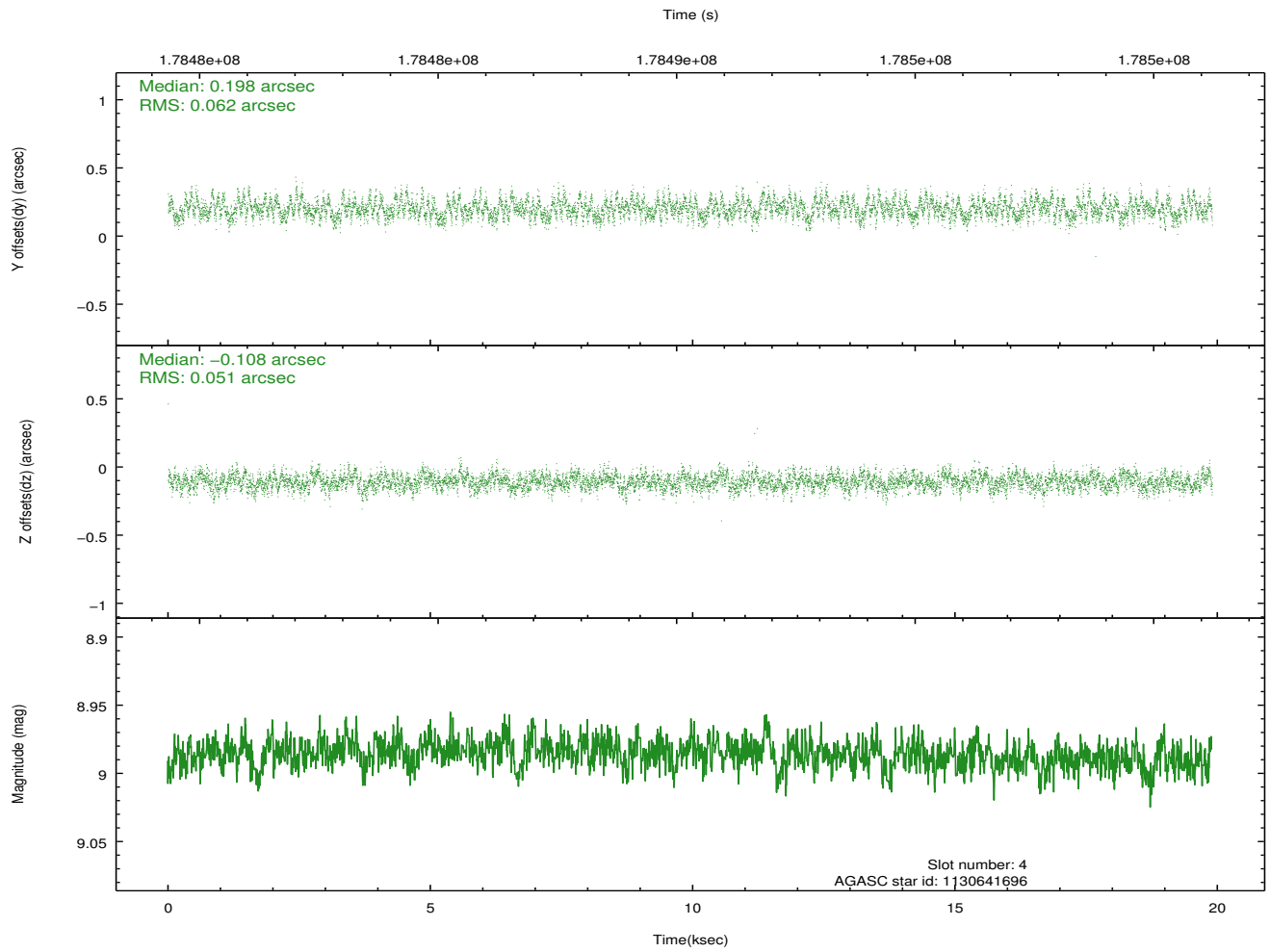
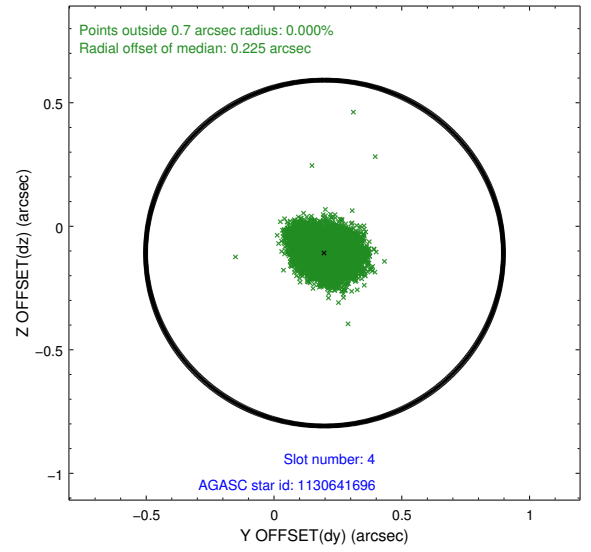
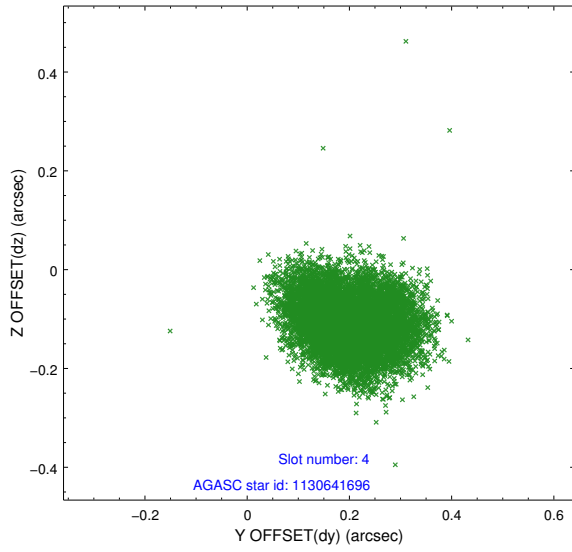
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	4855	-0.064	-0.042	0.007	0.013	0.000000	0.000000	-759.49	-1731.35
1	FID	ACIS-S-4	7.20	4854	0.059	0.032	0.009	0.014	0.000000	0.000000	2153.80	177.05
2	FID	ACIS-S-6	7.34	4855	-0.023	0.018	0.011	0.020	0.000000	0.000000	402.74	814.62
3	GUIDE	1174028208	9.45	9704	-0.042	0.004	0.103	0.166	162.376261	-60.088788	-1817.47	1687.46
4	GUIDE	1130641696	8.99	9702	0.198	-0.108	0.085	0.136	160.302677	-59.152466	1664.27	-1985.20
5	GUIDE	1130644032	8.85	9707	-0.064	-0.031	0.072	0.116	160.377001	-59.073783	1508.02	-2258.74
6	GUIDE	1130645296	9.06	9703	-0.063	0.062	0.082	0.132	162.541185	-59.548371	-2308.77	-218.72
7	GUIDE	1174027824	9.15	9702	-0.032	0.077	0.097	0.155	161.465908	-60.192420	-158.52	1908.95

## 2.4 Star Slots

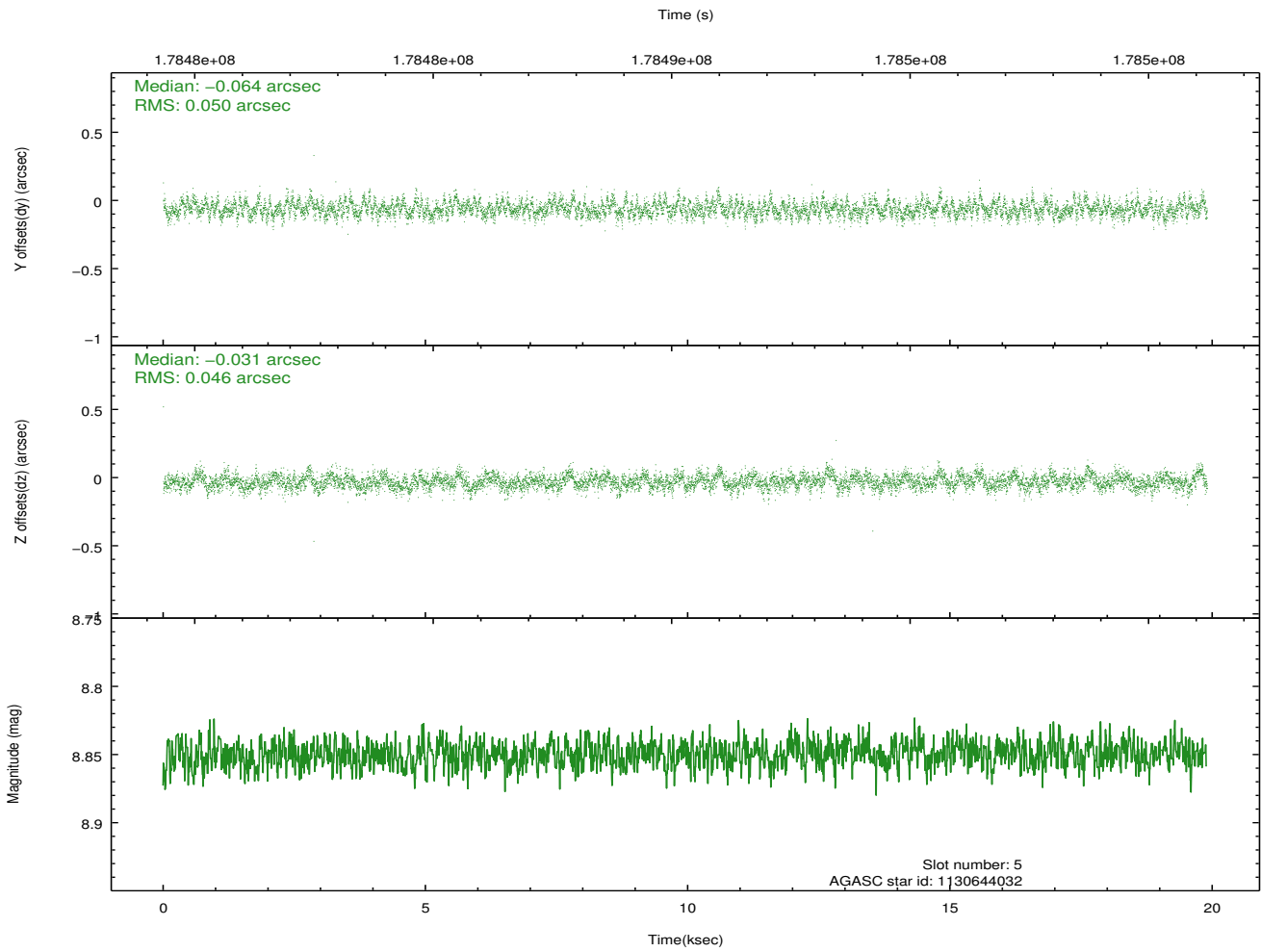
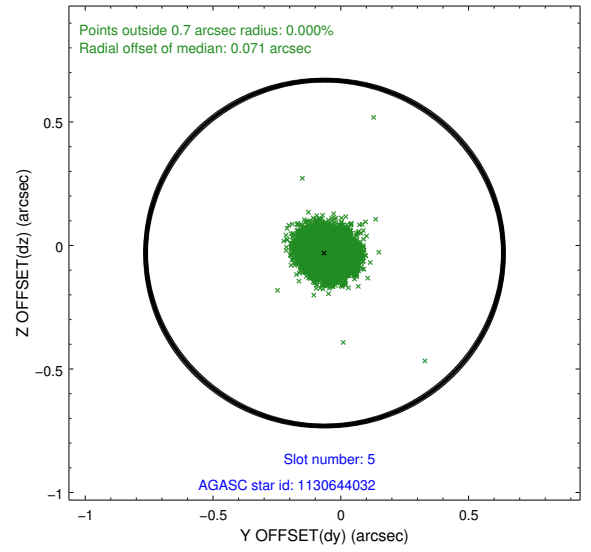
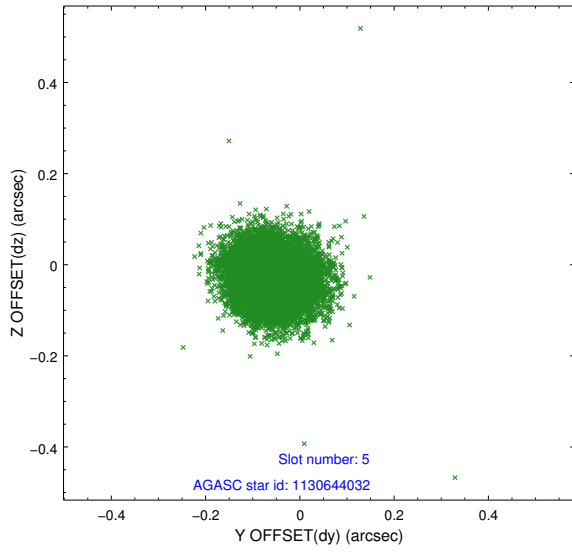
### 2.4.1 Slot 3



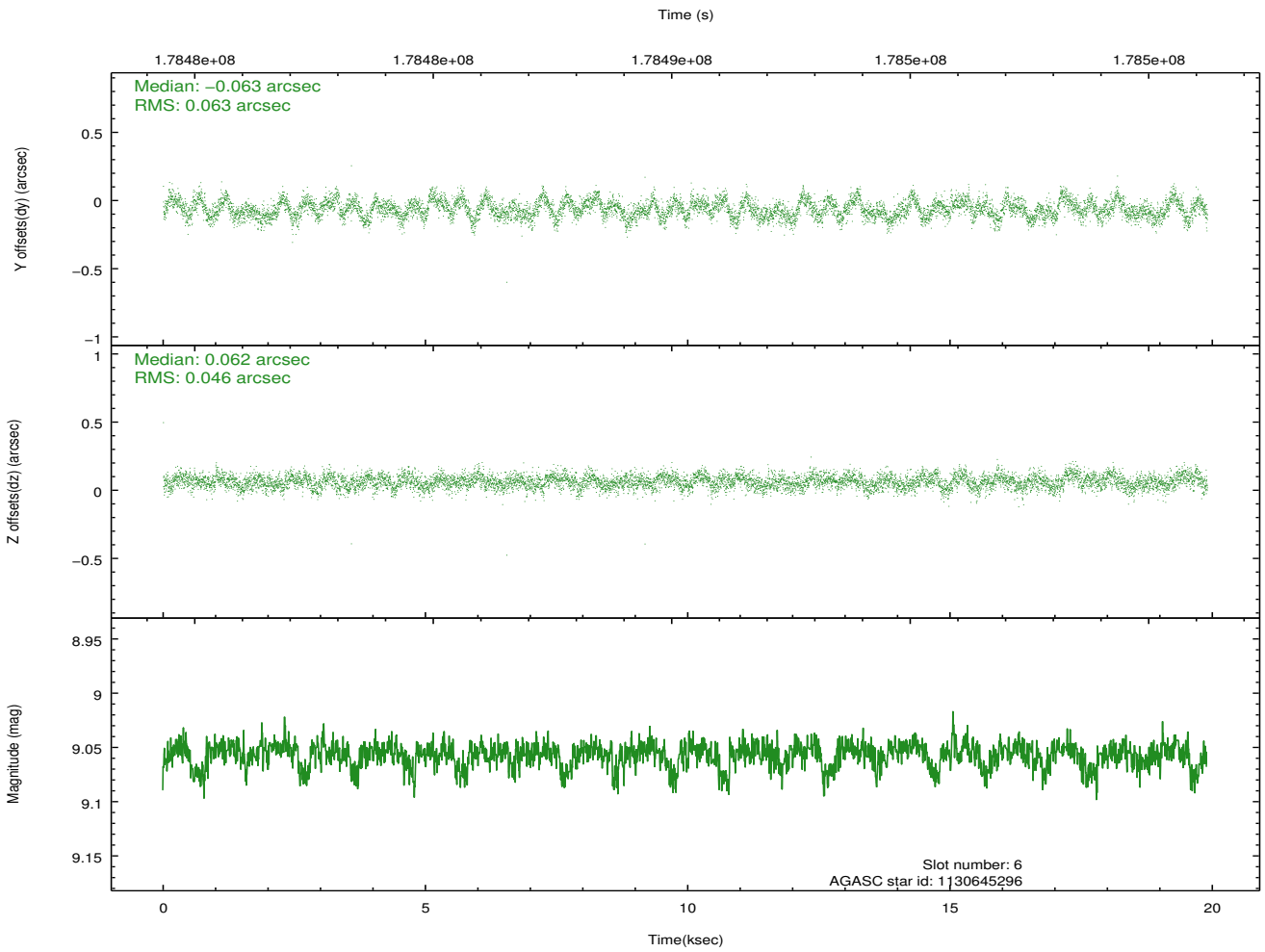
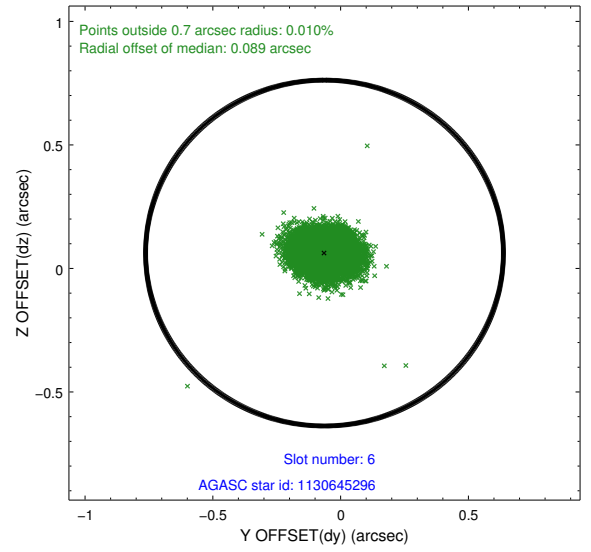
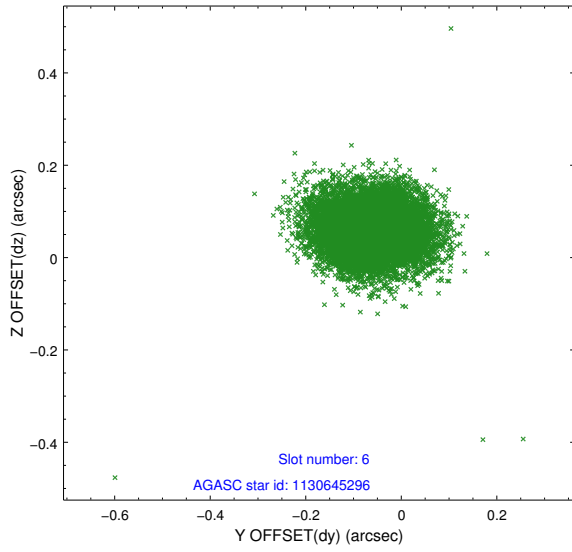
## 2.4.2 Slot 4



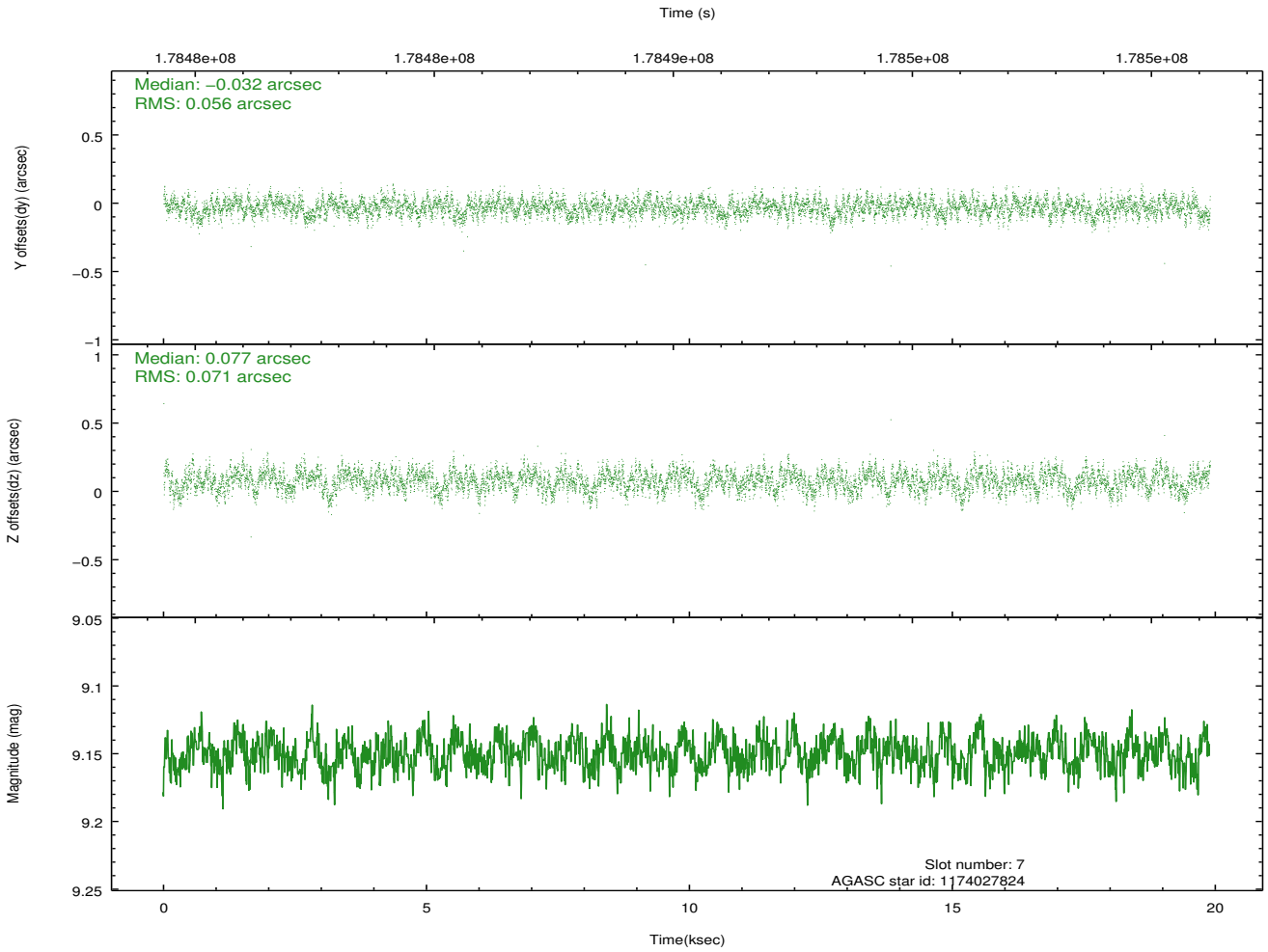
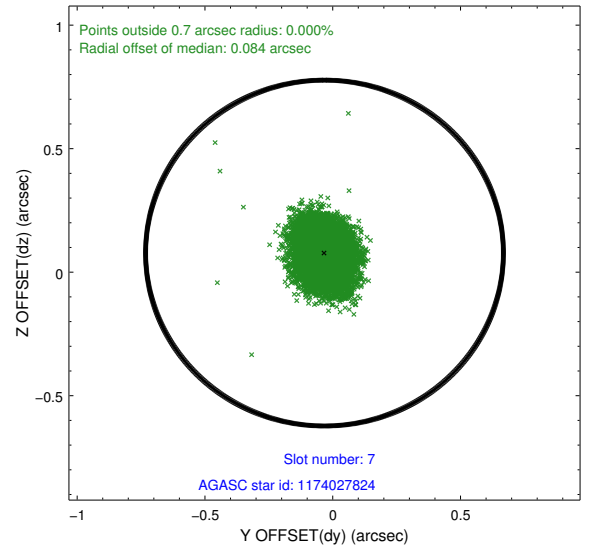
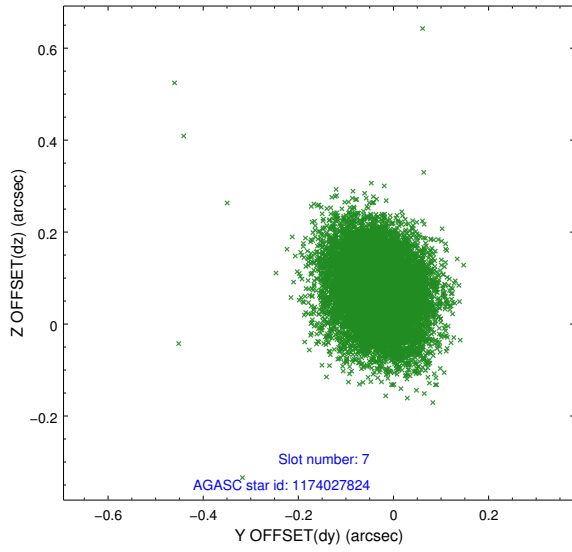
### 2.4.3 Slot 5



### 2.4.4 Slot 6

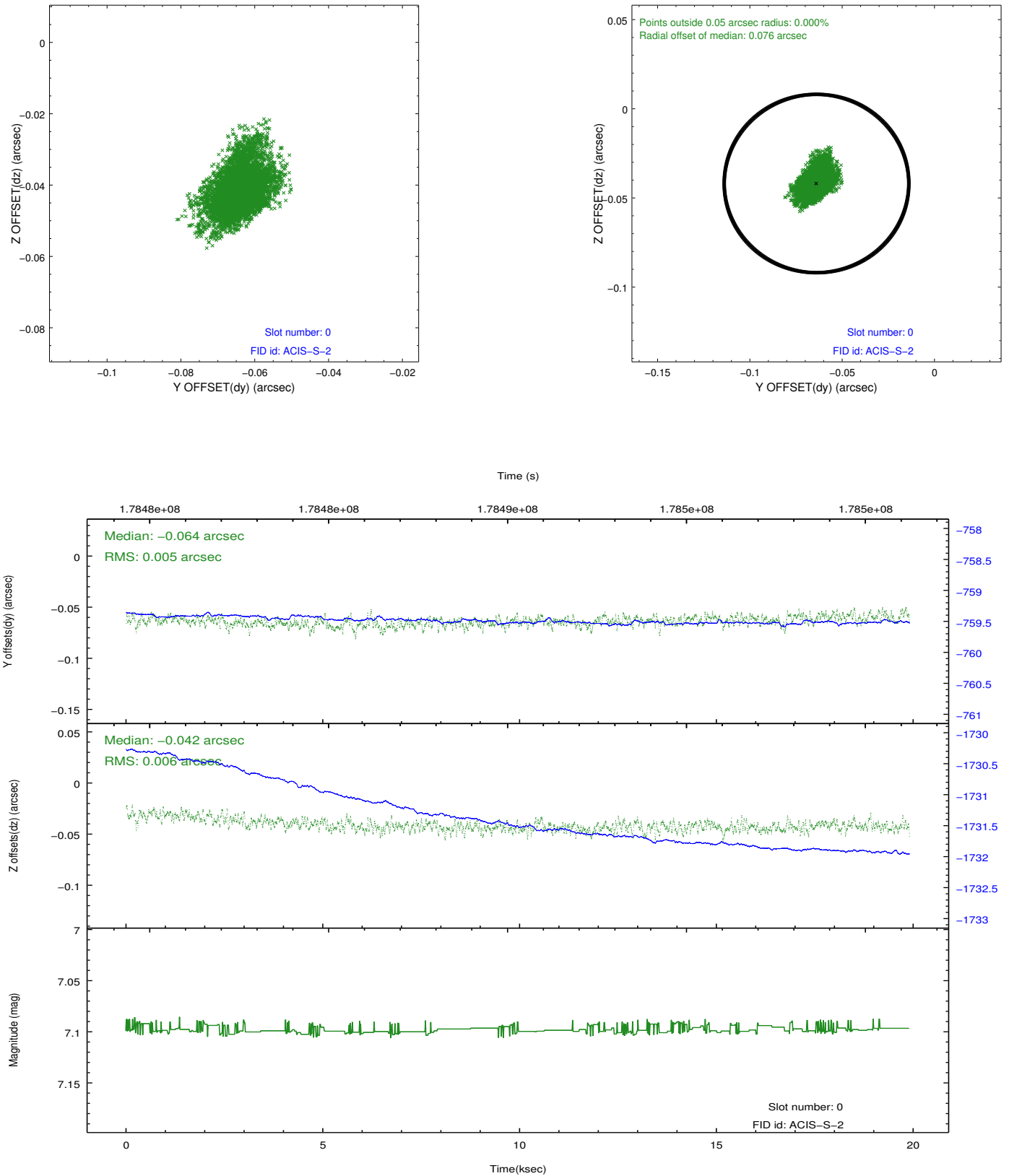


### 2.4.5 Slot 7

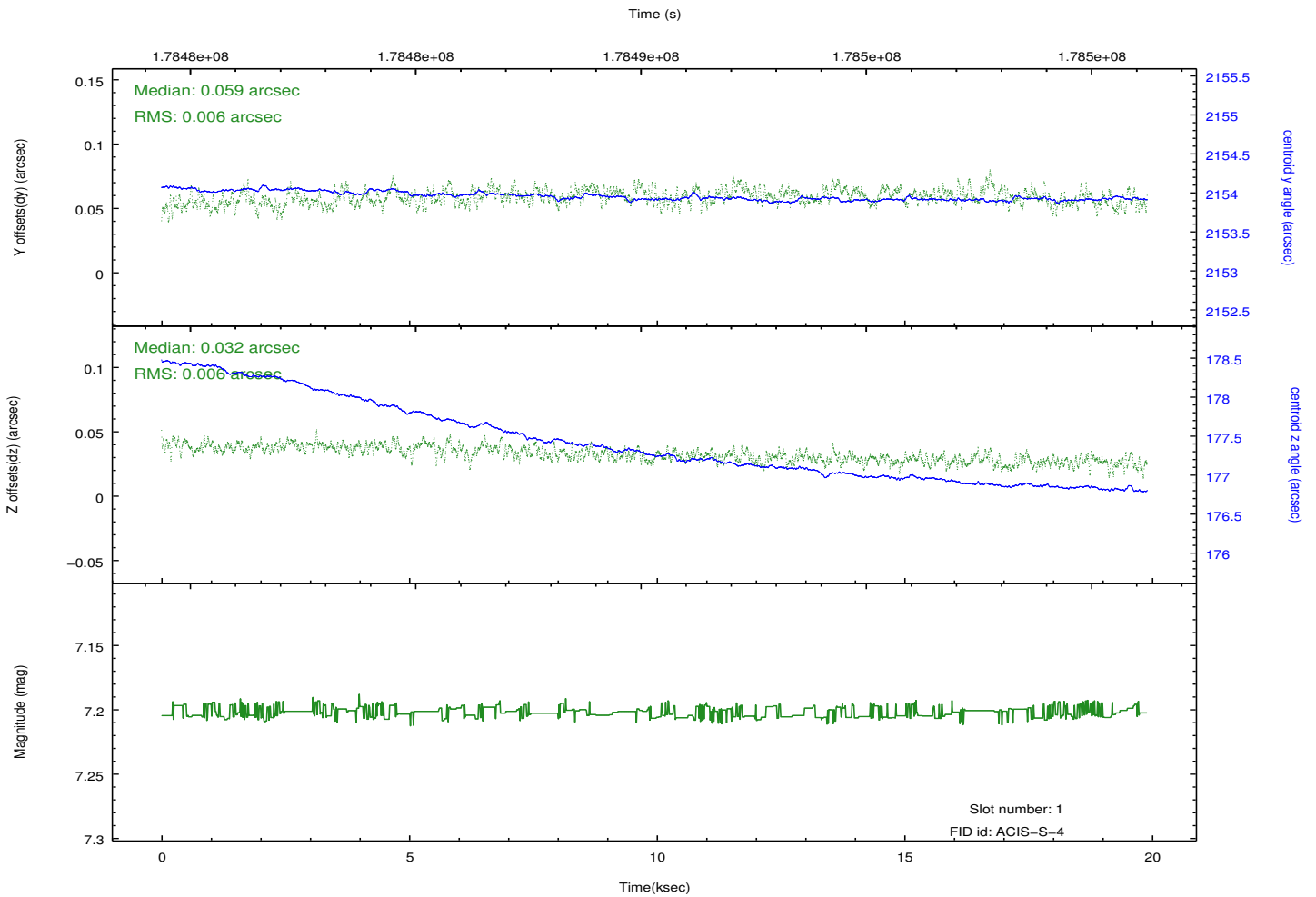
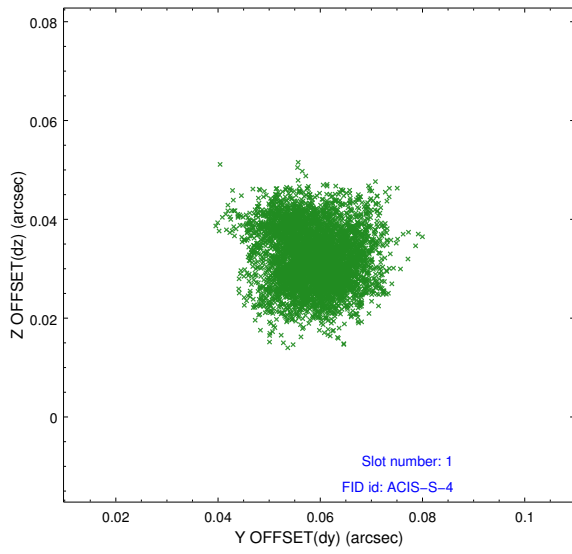


## 2.5 FID Slots

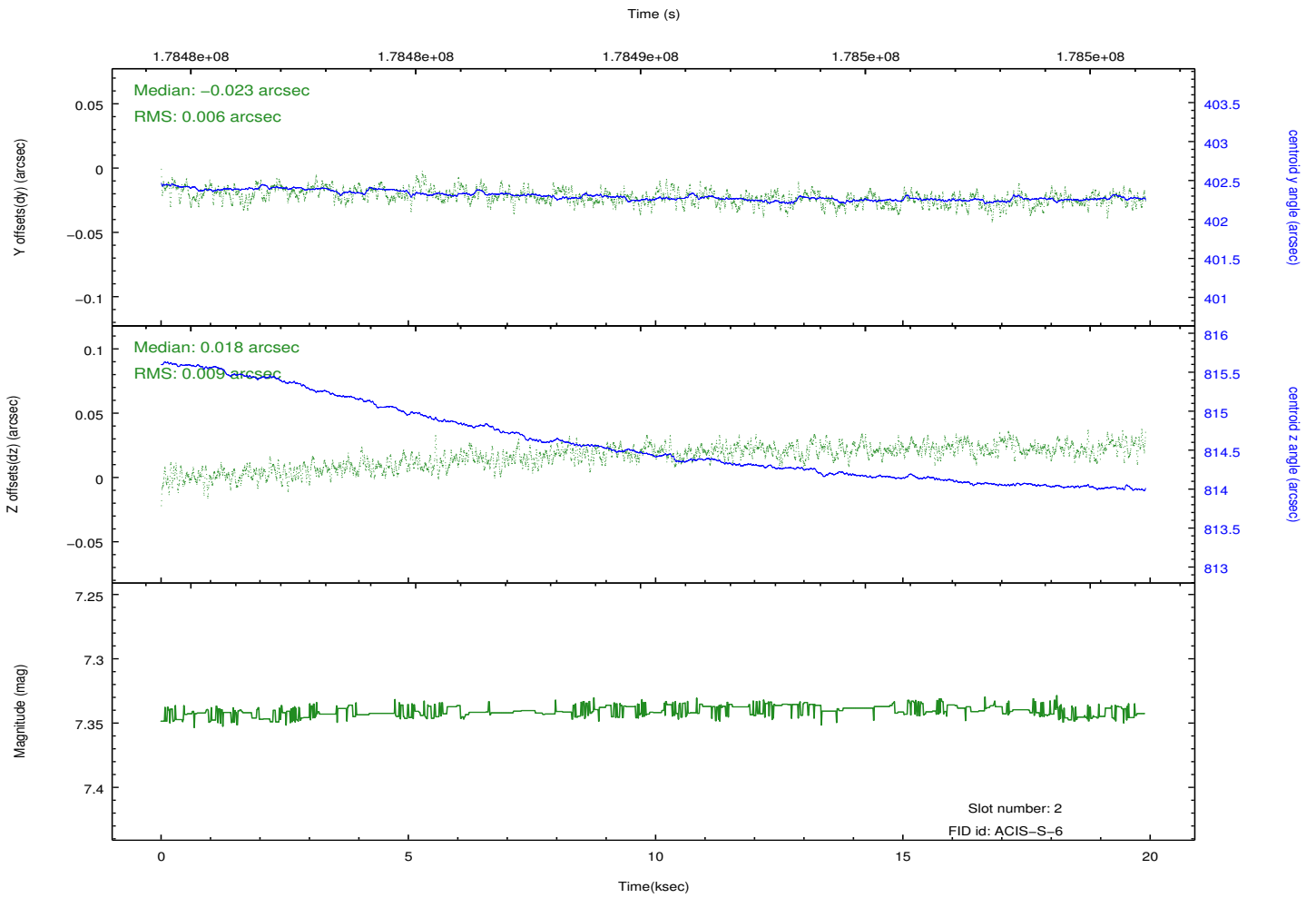
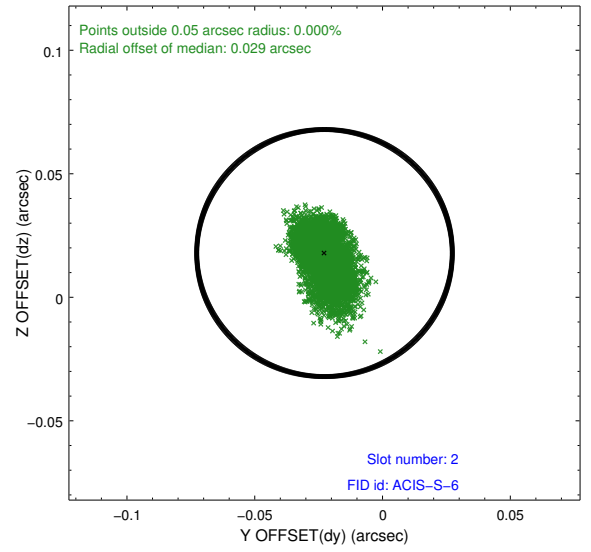
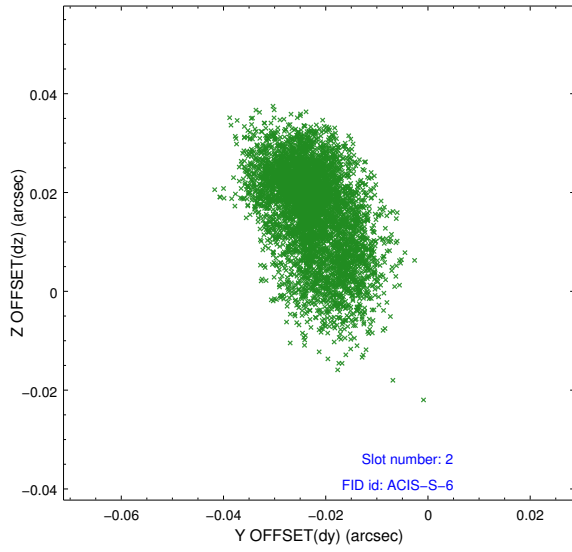
### 2.5.1 Slot 0



## 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)	2012.11.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	19.898

## A.2 Comments

Window constraint met.