

# V&V Reference Report

## L2 ASCDS Version : 10.4.3.1

Observation 18765 - L2 Version 1  
Chandra X-Ray Center

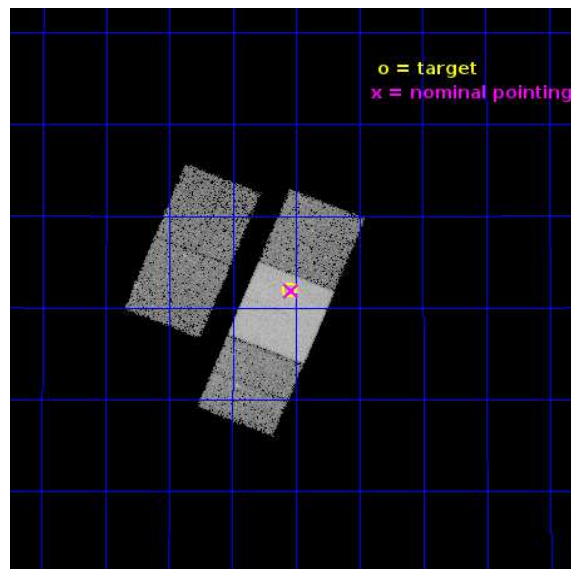
L2 Processing Date : Feb 14 2016

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# 1 Front

seq_num	502478	Sequence number
obs_id	18765	Observation id
title	The Burst of the Century	Proposal title
observer	Dr. Andrew Fruchter	Principal investigator
object	GRB 130427A	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	173.136667	Observer's specified target RA [deg]
dec_targ	27.698944	Observer's specified target Dec [deg]
ra_nom	173.13408830275	Nominal RA [deg]
dec_nom	27.698190809954	Nominal Dec [deg]
roll_nom	112.15787471044	Nominal Roll [deg]
revision	1	Processing version of data
ontime	20062.104455471	Sum of GTIs [s]
livetime	19799.978291254	Livetime [s]
ontime2	20055.658265233	Sum of GTIs [s]
ontime3	20062.022375464	Sum of GTIs [s]
ontime6	20062.063415527	Sum of GTIs [s]
ontime7	20062.104455471	Sum of GTIs [s]
ontime8	20058.840325475	Sum of GTIs [s]
l2events	115859	Number of level 2 events

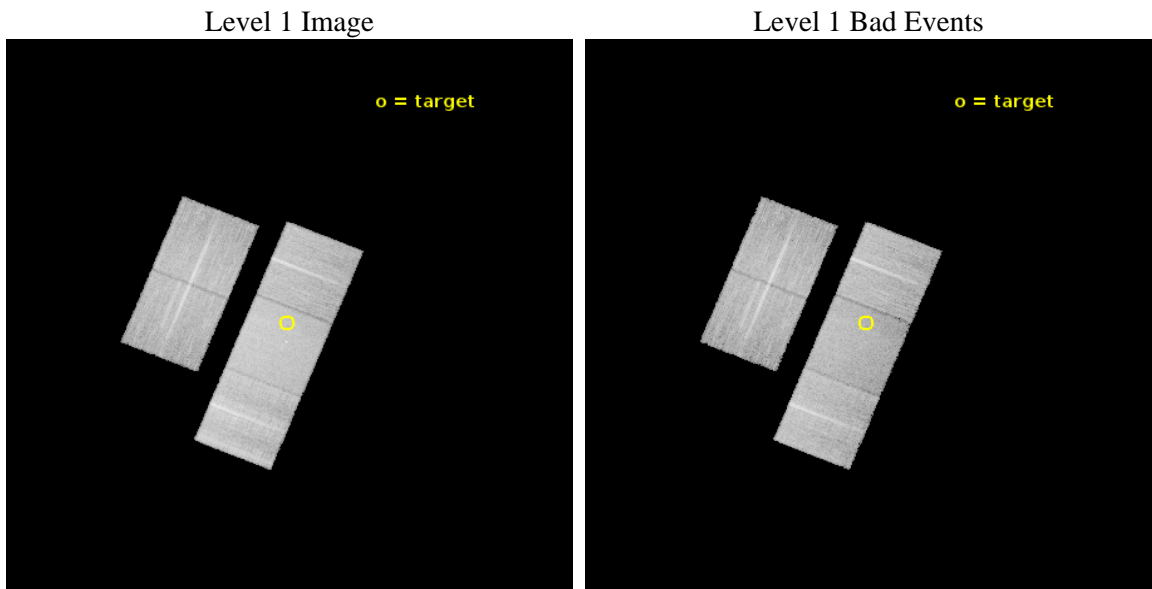




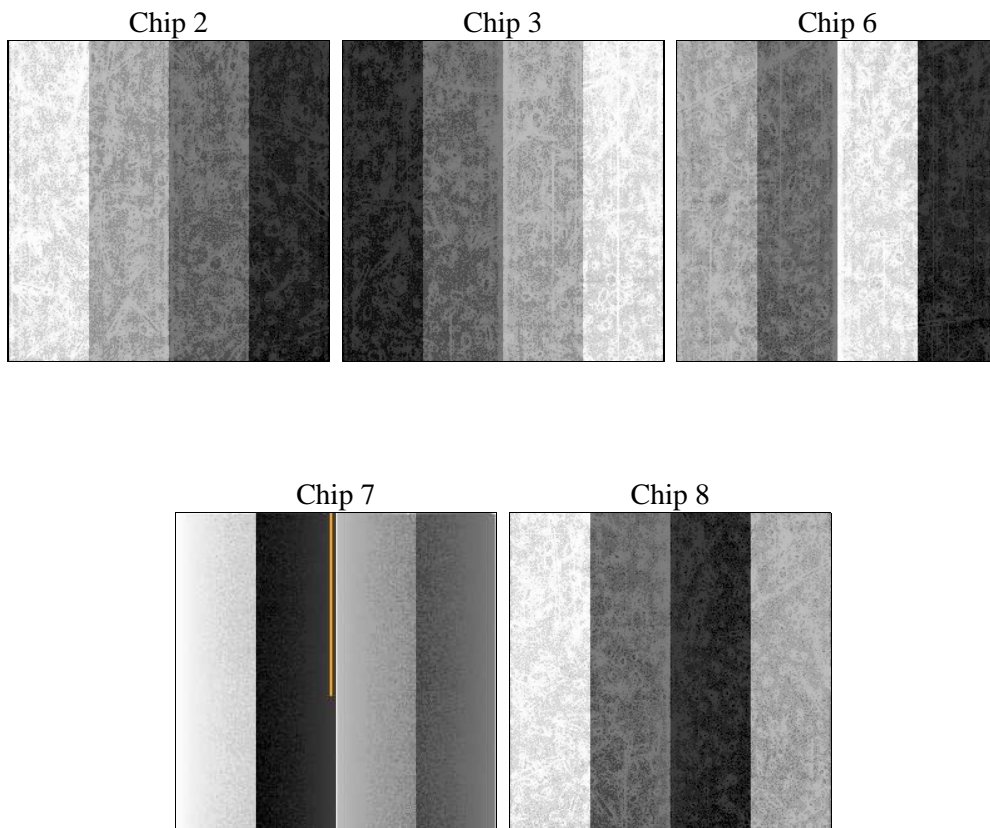
## 2 OBI

### 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	10.4.3.1	Processing system revision	ontime	20062.104455471	Sum of GTIs [s]
caldsver	4.7.0	&#160	ontime2	20055.658265233	Sum of GTIs [s]
date	2016-02-14T23:56:49	Date and time of file creation	ontime3	20062.022375464	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	20062.063415527	Sum of GTIs [s]
			ontime7	20062.104455471	Sum of GTIs [s]
			ontime8	20058.840325475	Sum of GTIs [s]
			l1events	675311	Number of level 1 events

### 2.1.4 Events

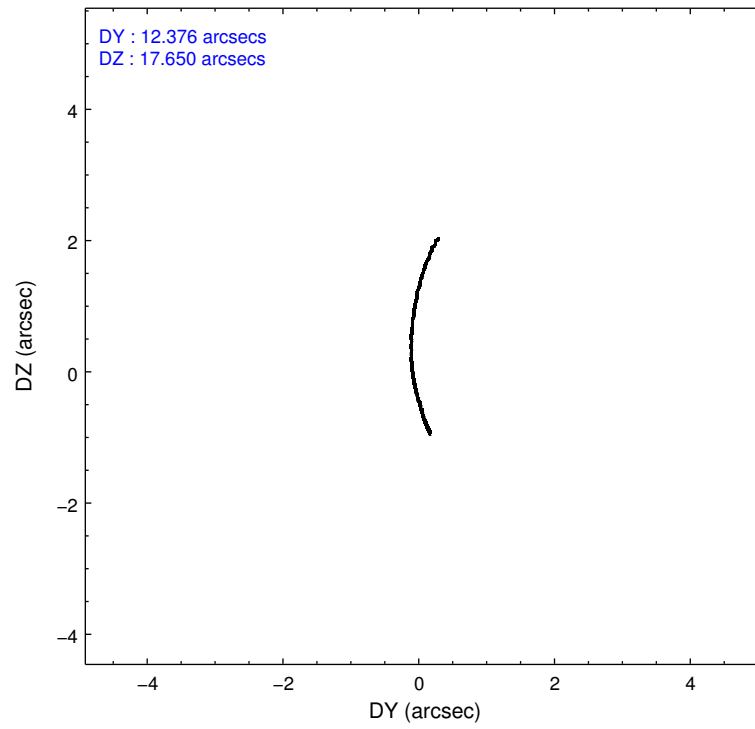
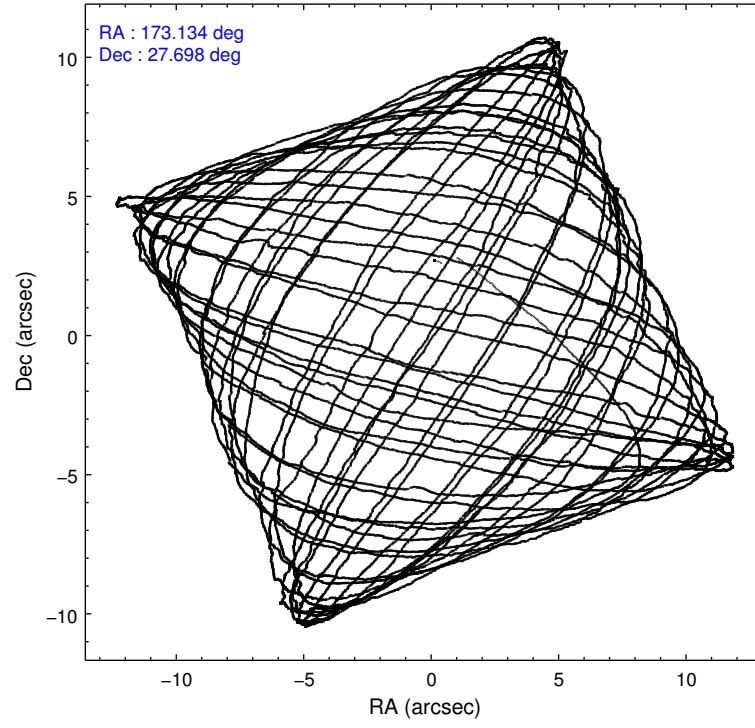
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	117683	113011	122744	159512	162361
rejected events	104696	100292	108705	90669	119485
rejected %	88%	88%	88%	56%	73%

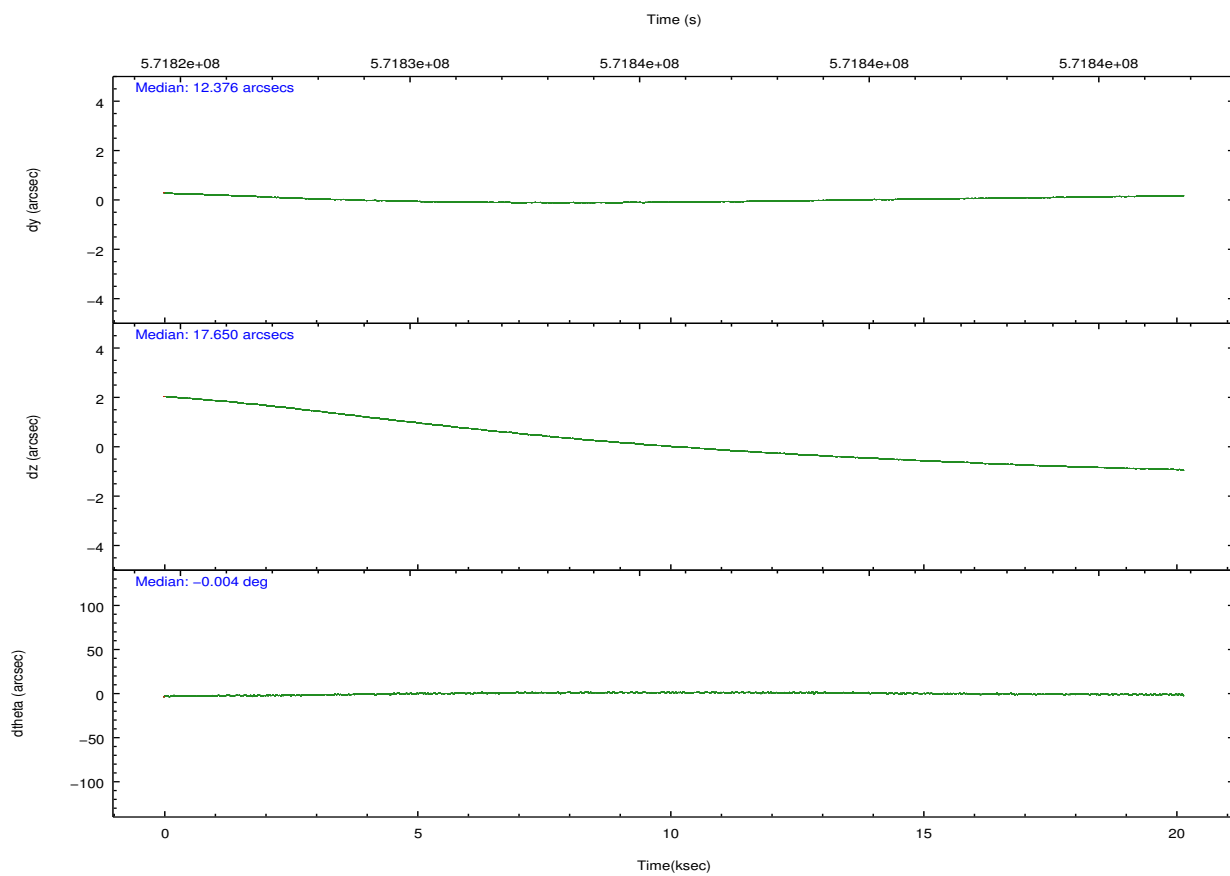
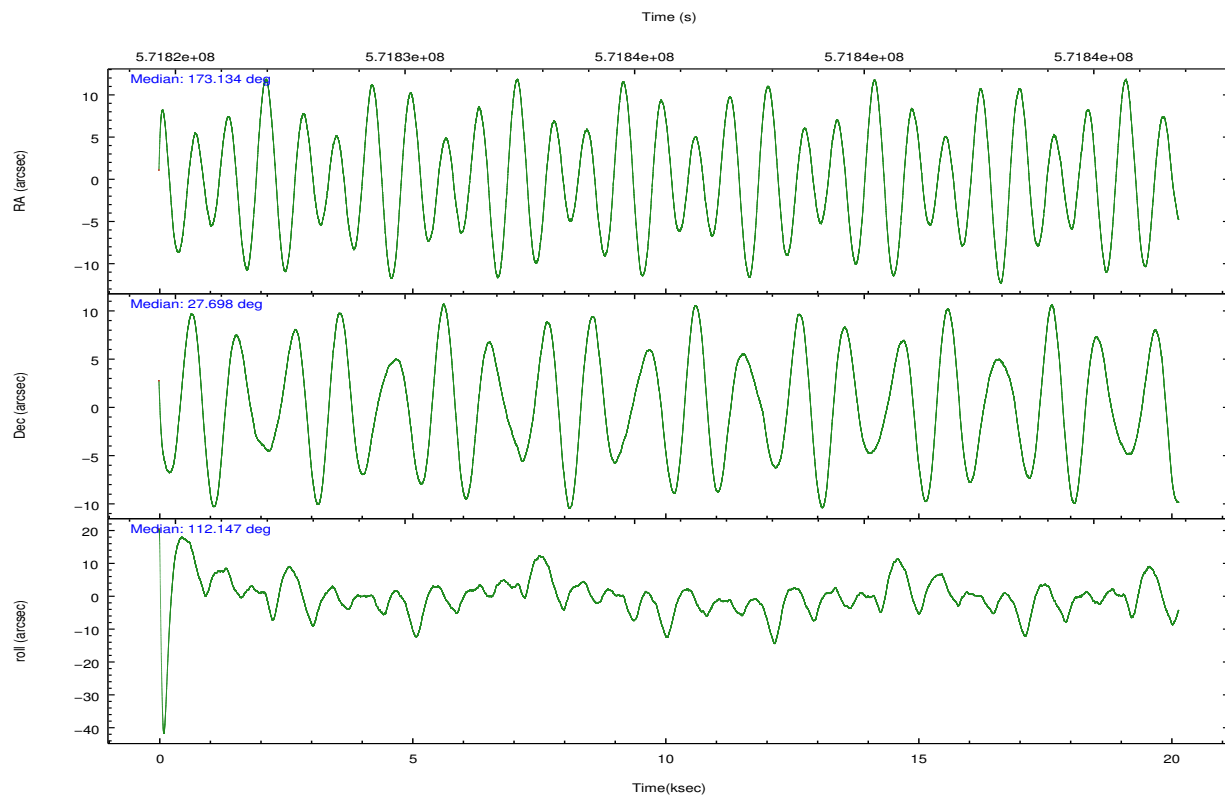
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	4530	4447	4644	5953	12048
	3%	3%	3%	3%	7%
grade 1 events	67	55	51	224	125
	0%	0%	0%	0%	0%
grade 2 events	3223	2816	3215	14392	10546
	2%	2%	2%	9%	6%
grade 3 events	1342	1376	1432	5761	4430
	1%	1%	1%	3%	2%
grade 4 events	1344	1356	1424	5576	4173
	1%	1%	1%	3%	2%
grade 5 events	4880	6046	5998	16186	9008
	4%	5%	4%	10%	5%
grade 6 events	2553	2729	3331	37182	11705
	2%	2%	2%	23%	7%
grade 7 events	99744	94186	102649	74238	110326
	84%	83%	83%	46%	67%

## 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	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	173.158818	173.13408830275	Subarray requested	NONE	NONE
[deg] Pointing Dec	27.681663	27.69819080995448	Alternating exposures requested	N	N
[deg] Pointing Roll	111.989706	112.1578747104393	[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	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	571825799.184000	571824494.71992			
Observation start date	2016-02-14T08:28:51	2016-02-14T08:08:14			
[s] Observation end time (MET)	571845799.184000	571846617.29617			
Observation end date	2016-02-14T14:02:11	2016-02-14T14:16:57			
Read mode	TIMED	TIMED			

## 2.3 Aspect



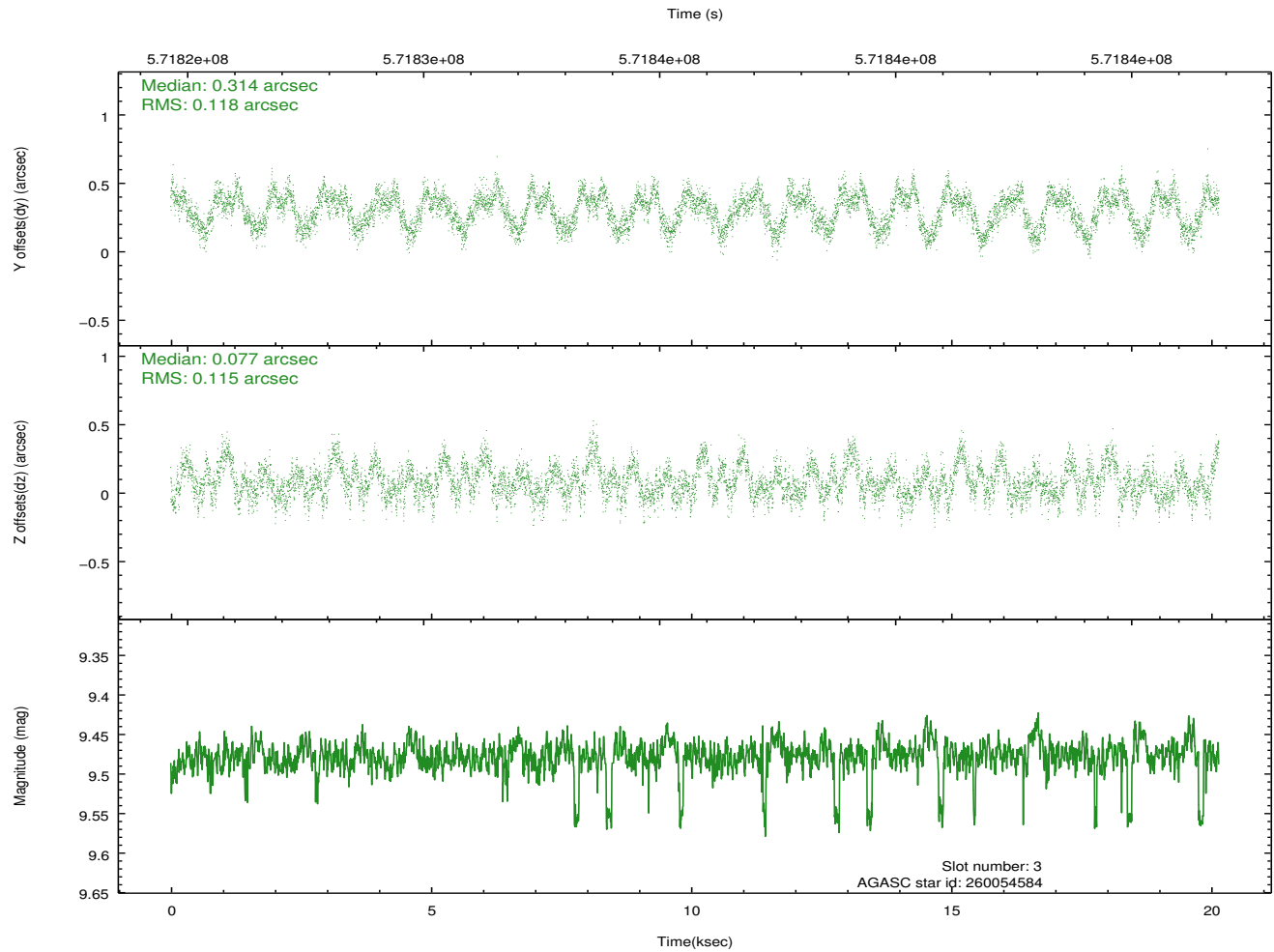
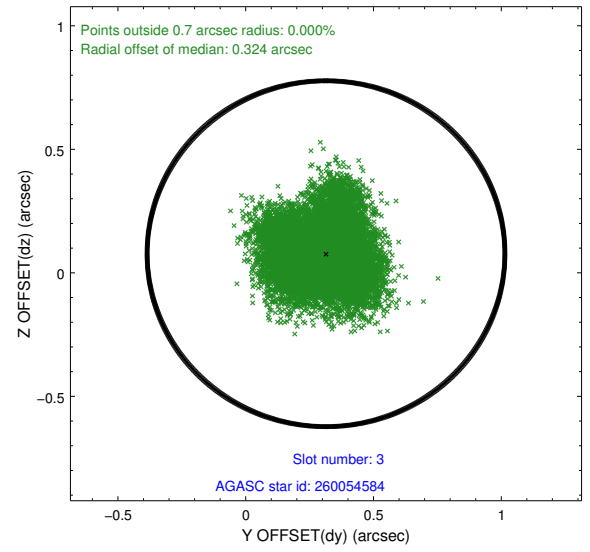
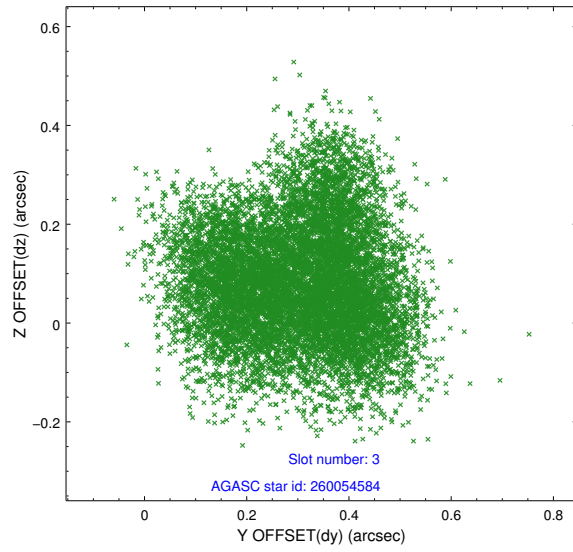


### Slot Statistics

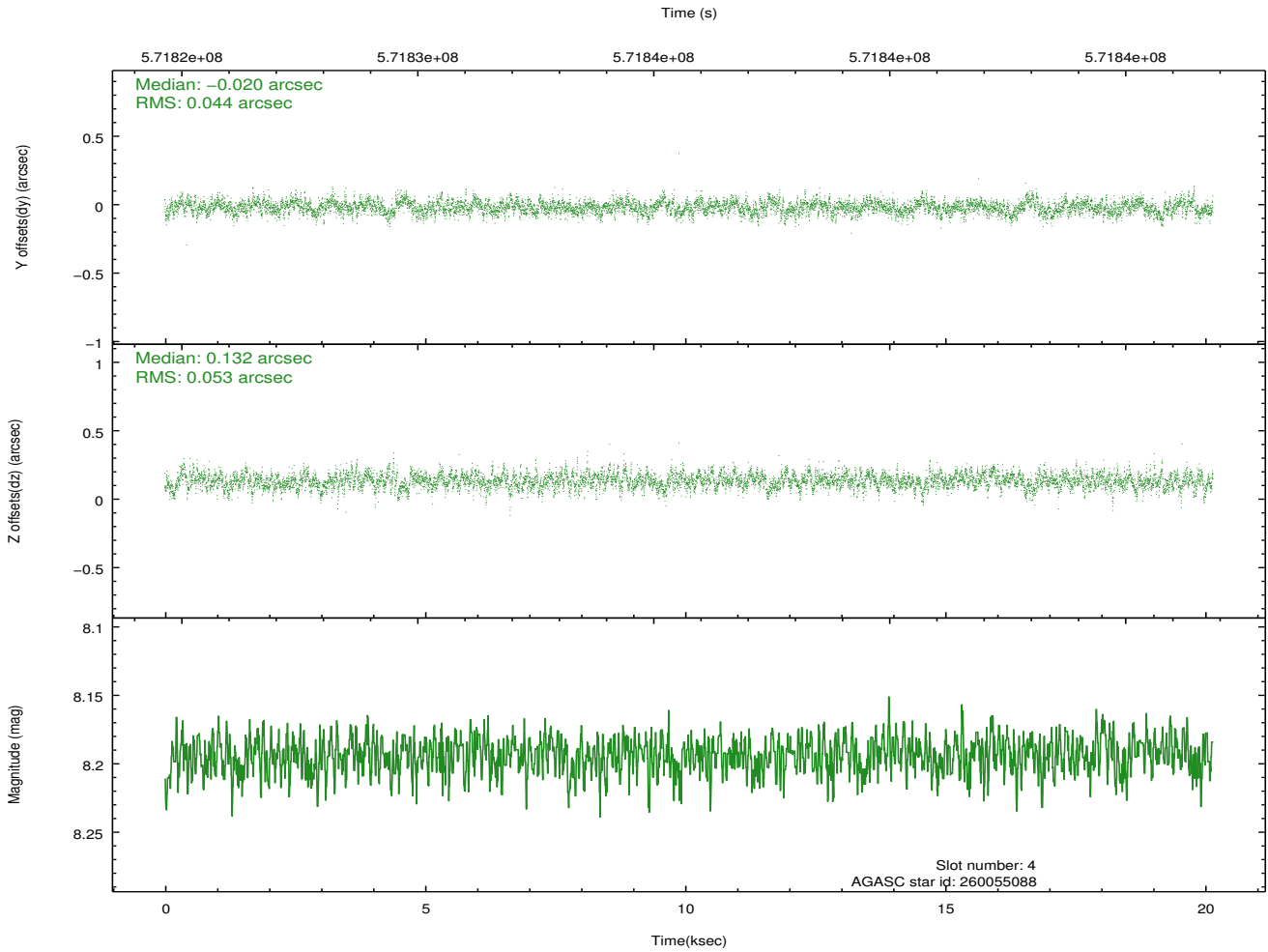
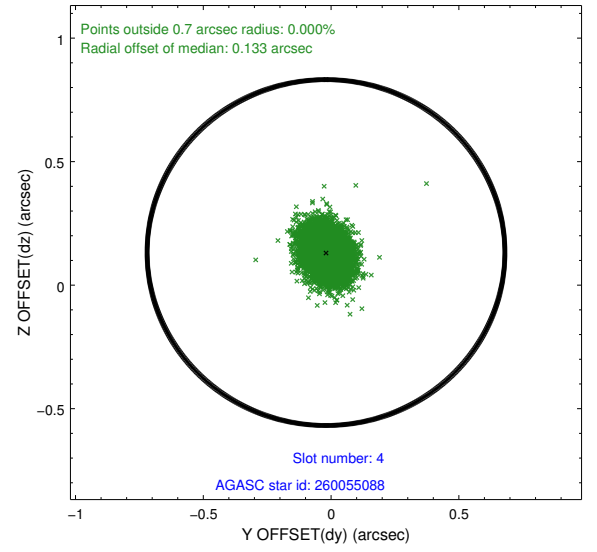
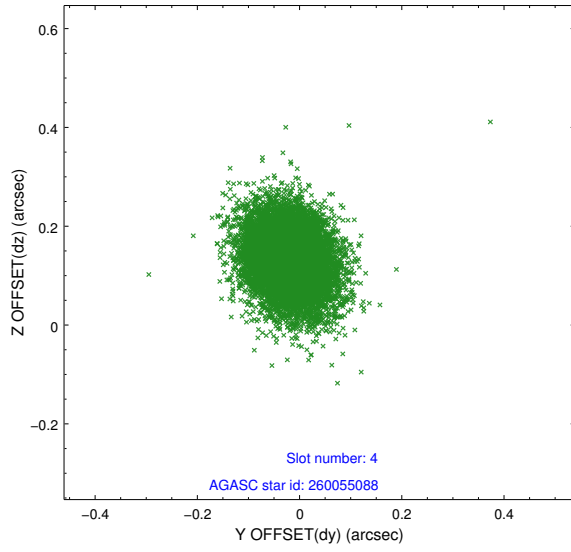
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.11	4916	-0.093	-0.073	0.015	0.032	0.000000	0.000000	-765.38	-1739.36
1	FID		ACIS-S-4	7.22	4914	0.306	0.065	0.011	0.023	0.000000	0.000000	2148.21	169.08
2	FID		ACIS-S-5	7.24	4915	-0.242	0.017	0.013	0.027	0.000000	0.000000	-1818.14	162.89
3	GUIDE	used	260054584	9.48	9817	0.314	0.077	0.180	0.271	173.745505	27.752896	-456.98	-1830.25
4	GUIDE	used	260055088	8.19	9827	-0.020	0.132	0.072	0.121	173.495126	27.260186	-1808.14	-430.37
5	GUIDE	used	260055768	8.99	9823	0.027	0.084	0.131	0.212	172.801335	27.536211	-56.64	1253.81
6	GUIDE	used	260060264	7.77	9829	-0.587	-0.489	0.091	0.145	172.398353	28.089889	2273.62	1687.22
7	GUIDE	used	260050336	9.67	9746	0.285	0.200	0.203	0.334	173.719338	27.205891	-2254.93	-1023.77

## 2.4 Star Slots

### 2.4.1 Slot 3

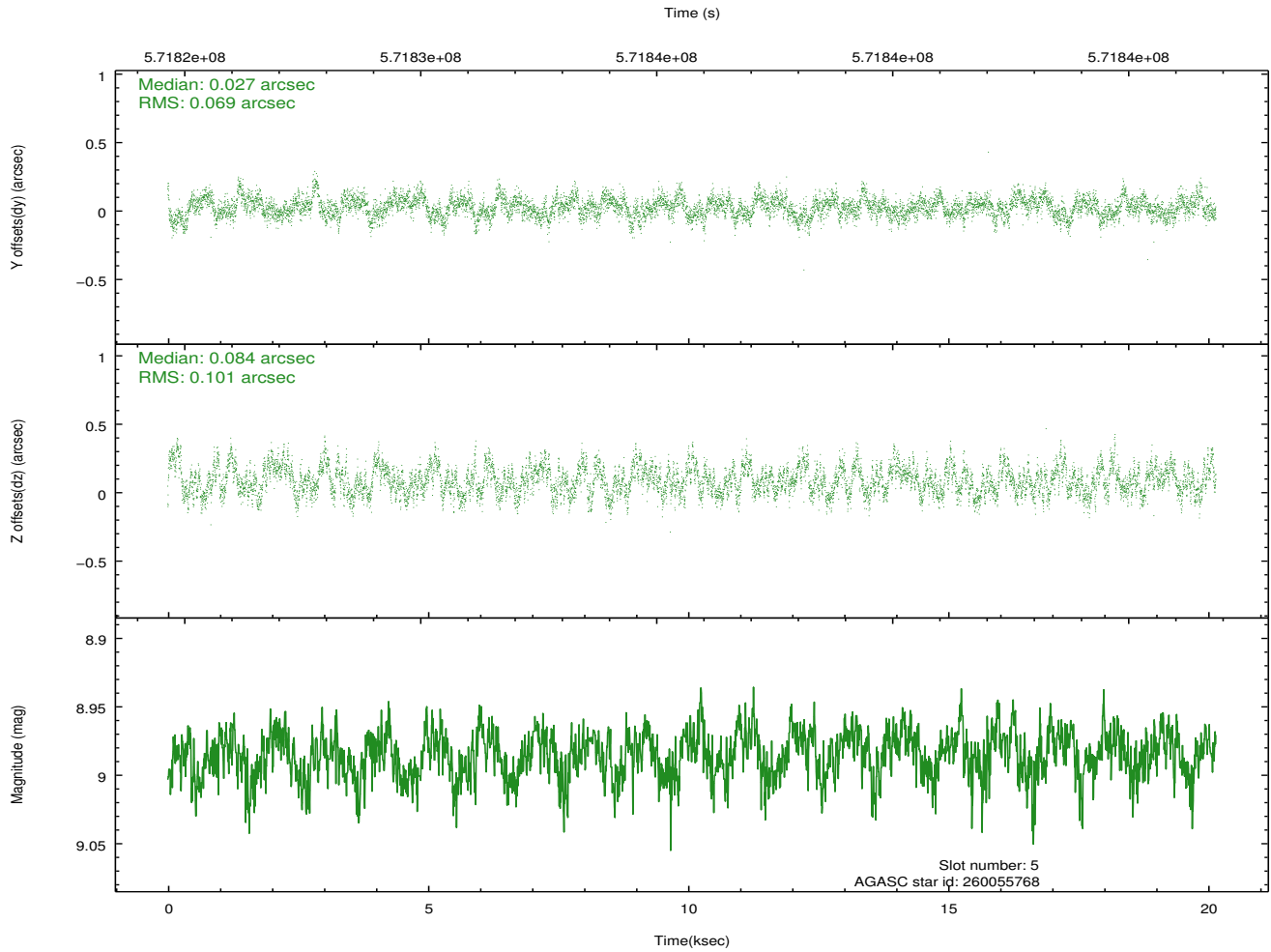
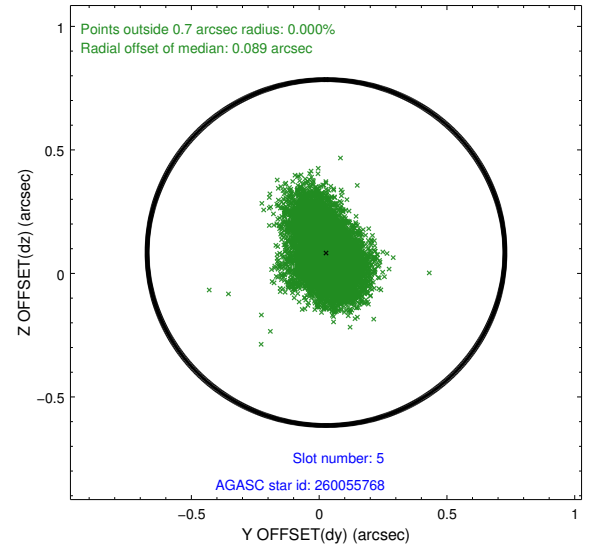
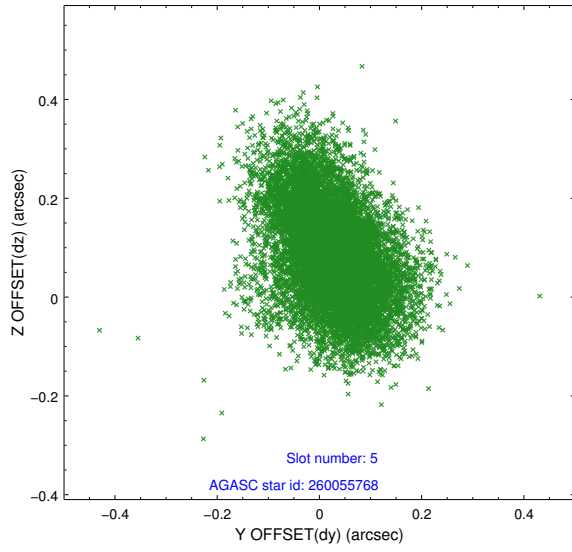


## 2.4.2 Slot 4

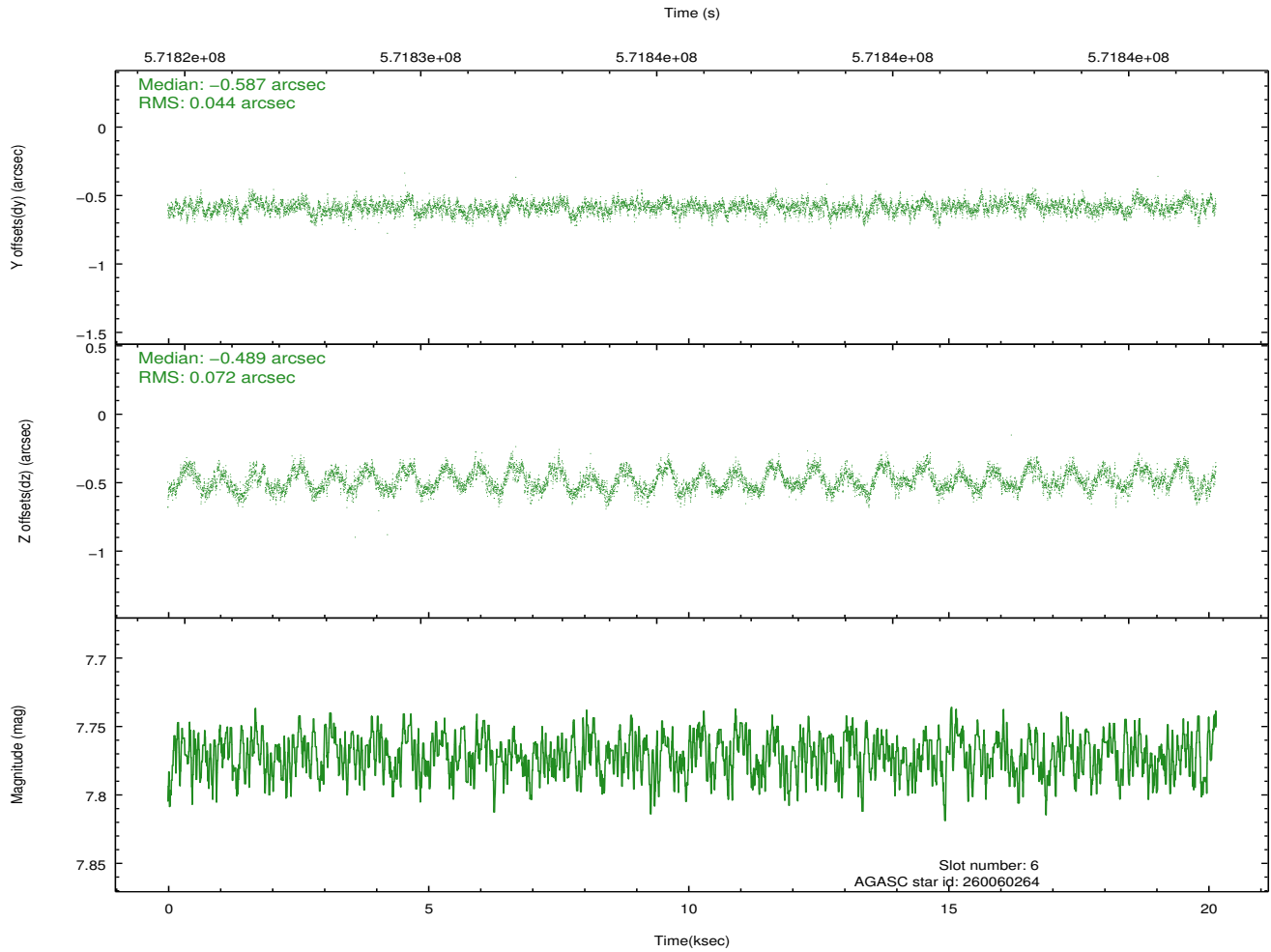
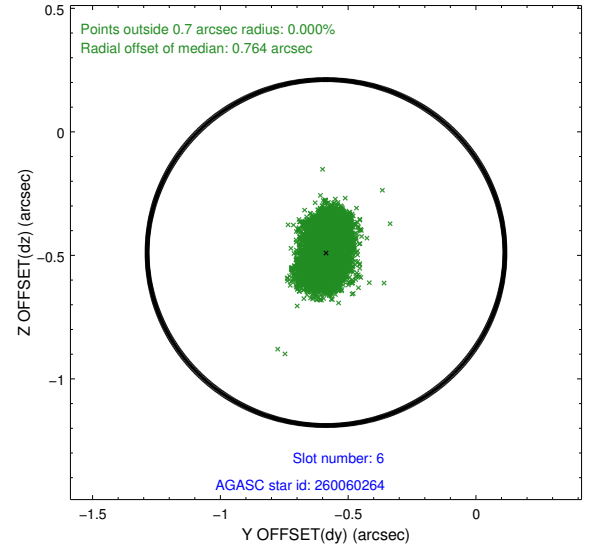
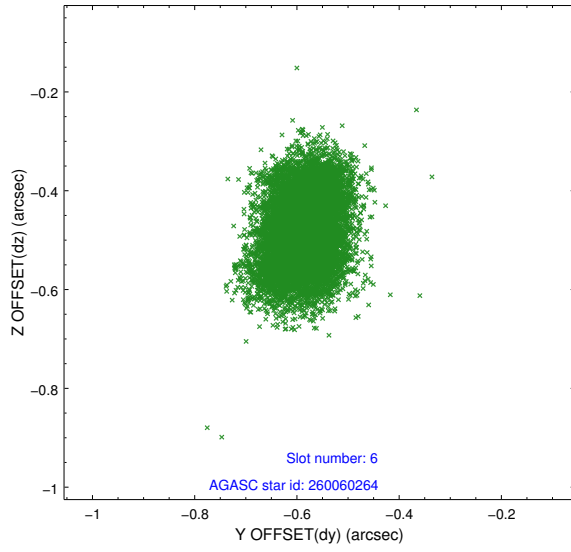




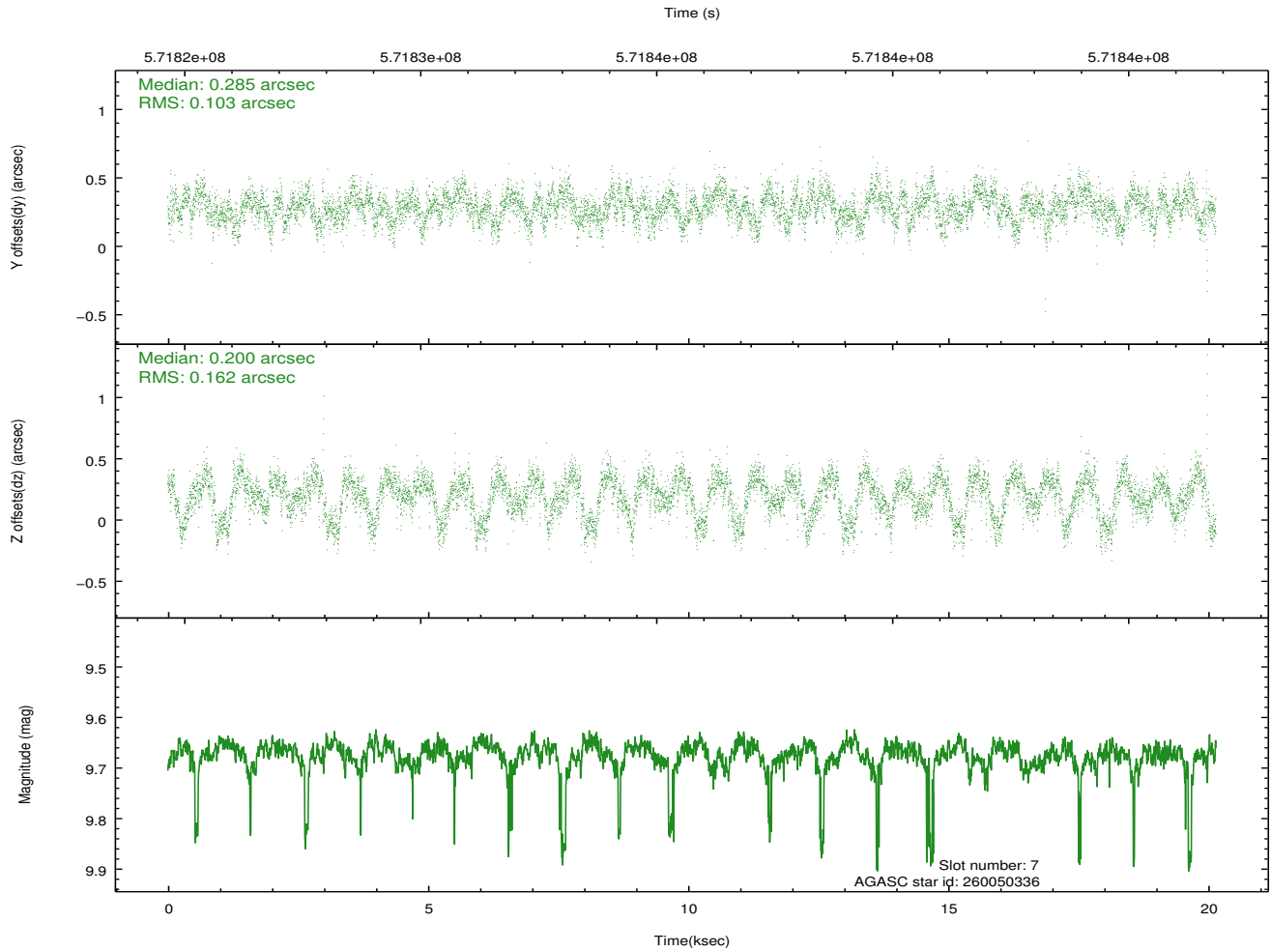
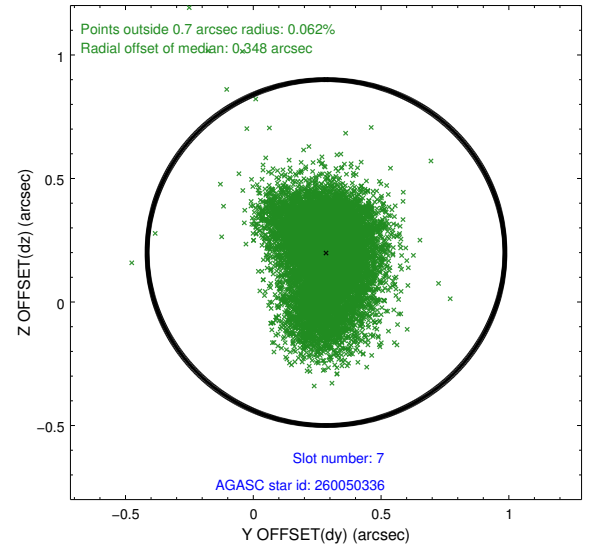
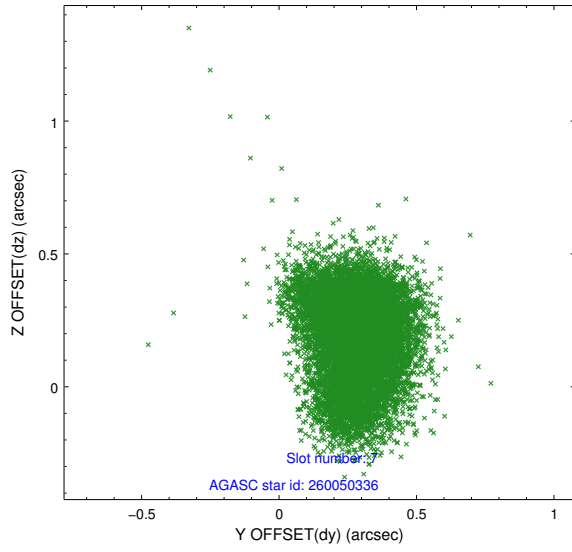
### 2.4.3 Slot 5



## 2.4.4 Slot 6

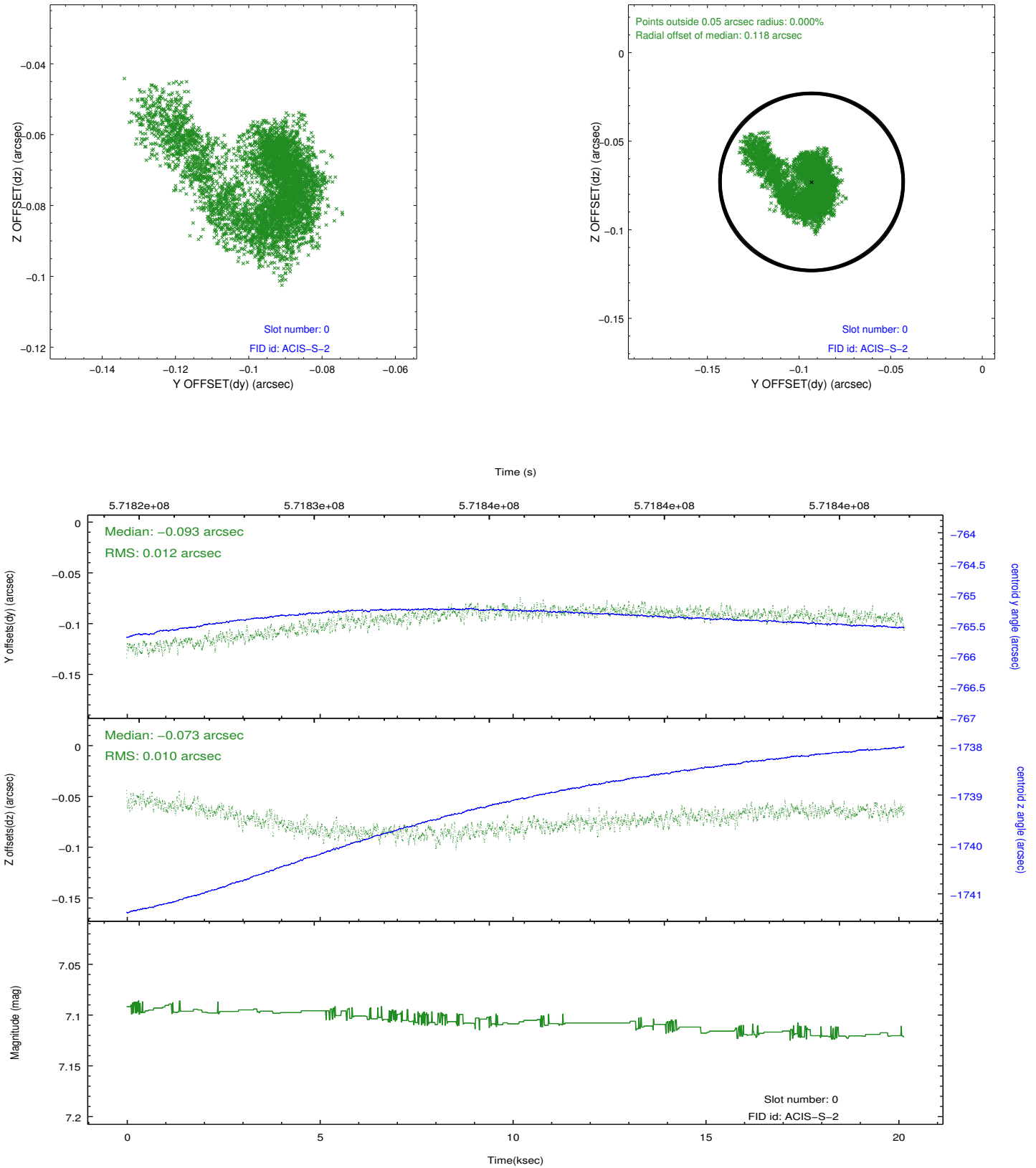


## 2.4.5 Slot 7

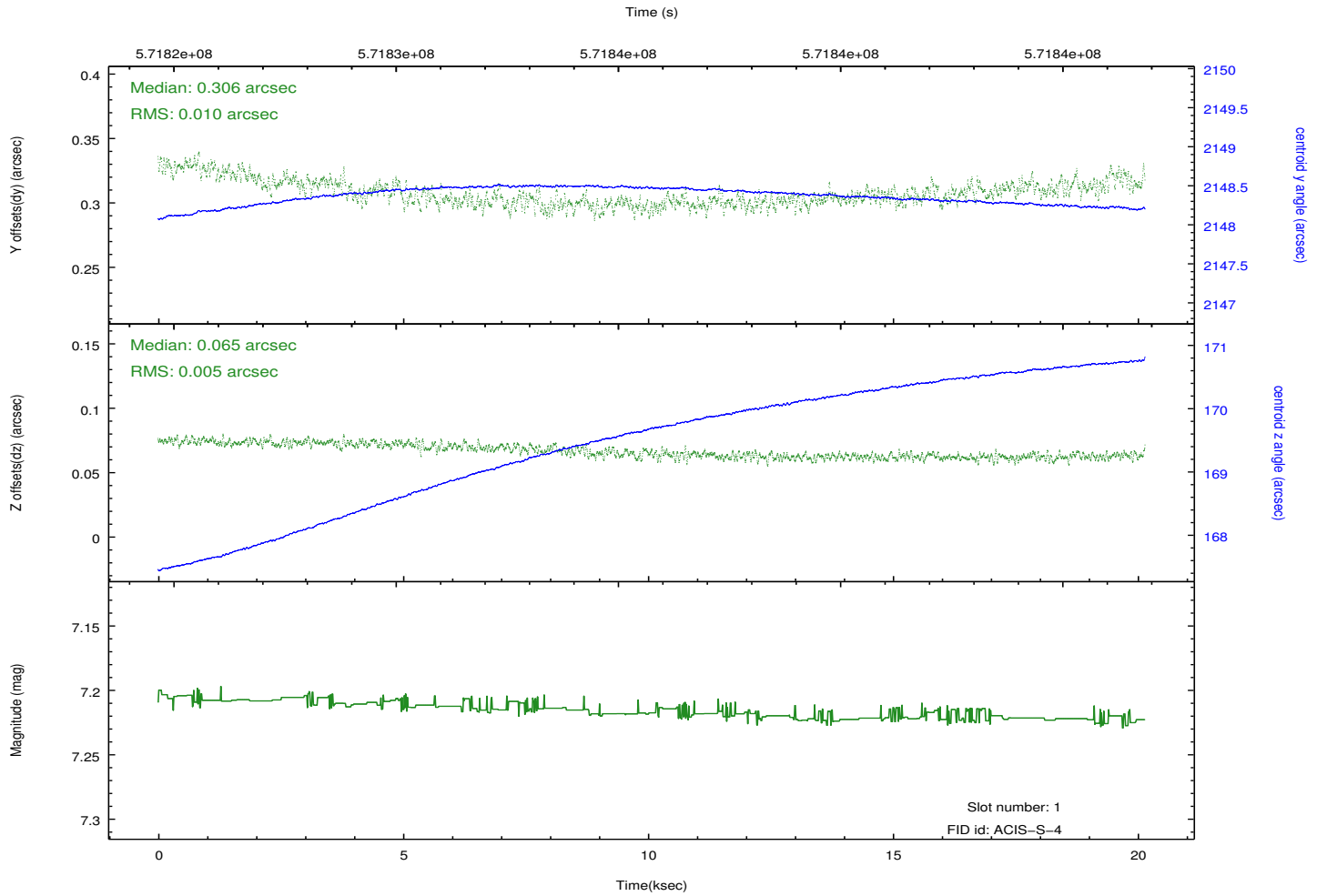
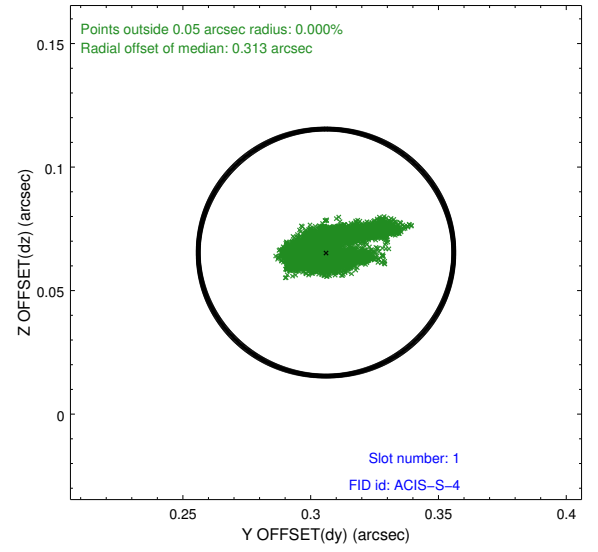
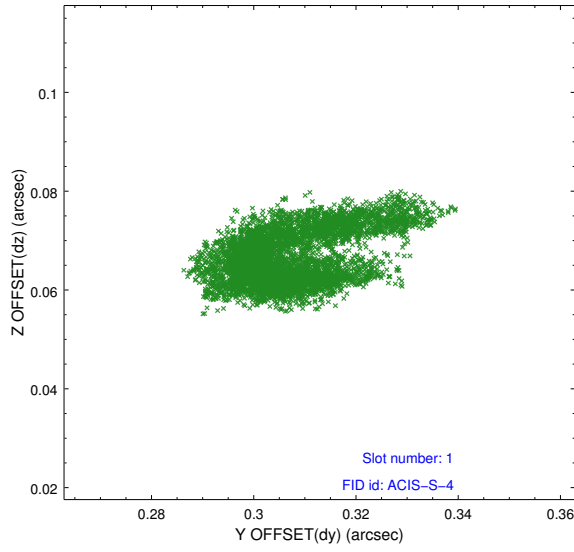


## 2.5 FID Slots

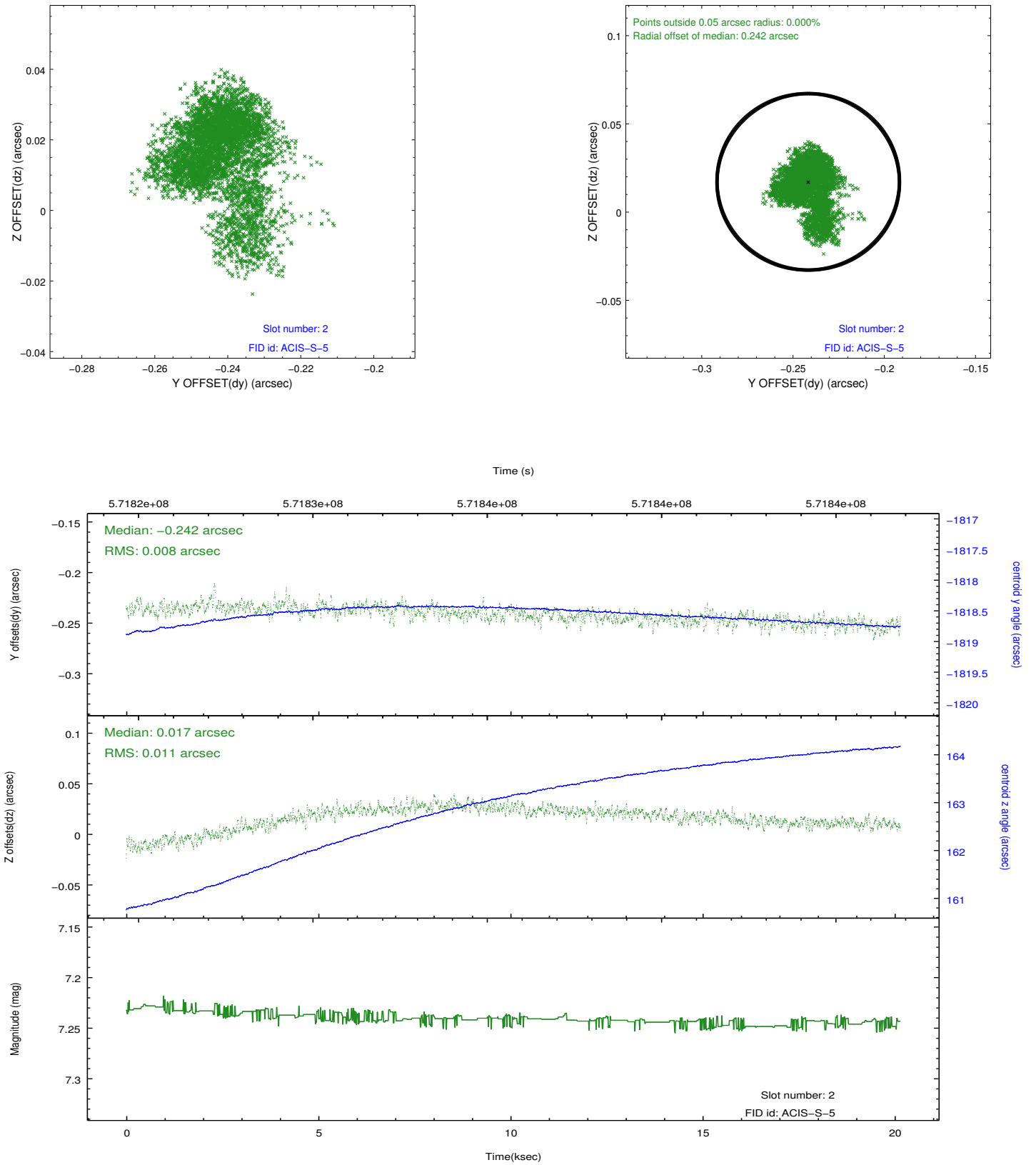
### 2.5.1 Slot 0



## 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)	2016.02.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.062104455471

## A.2 Comments

Joint proposal with HST and NRAO.