

# V&V Reference Report

## L2 ASCDS Version : 8.5

Observation 6147 - L2 Version 4  
Chandra X-Ray Center

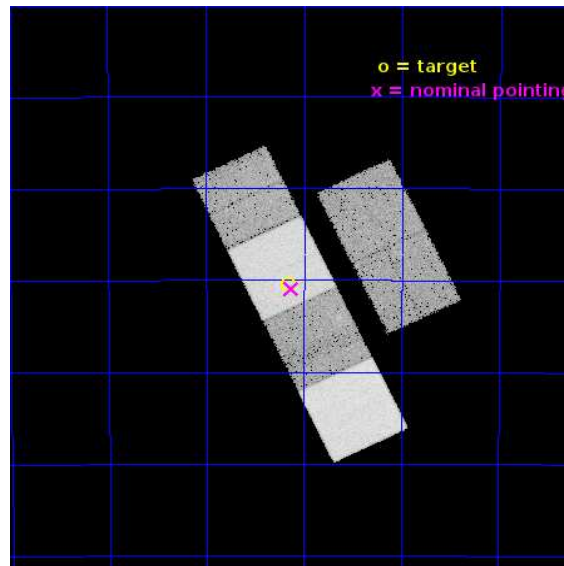
L2 Processing Date : Jul 9 2015

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# 1 Front

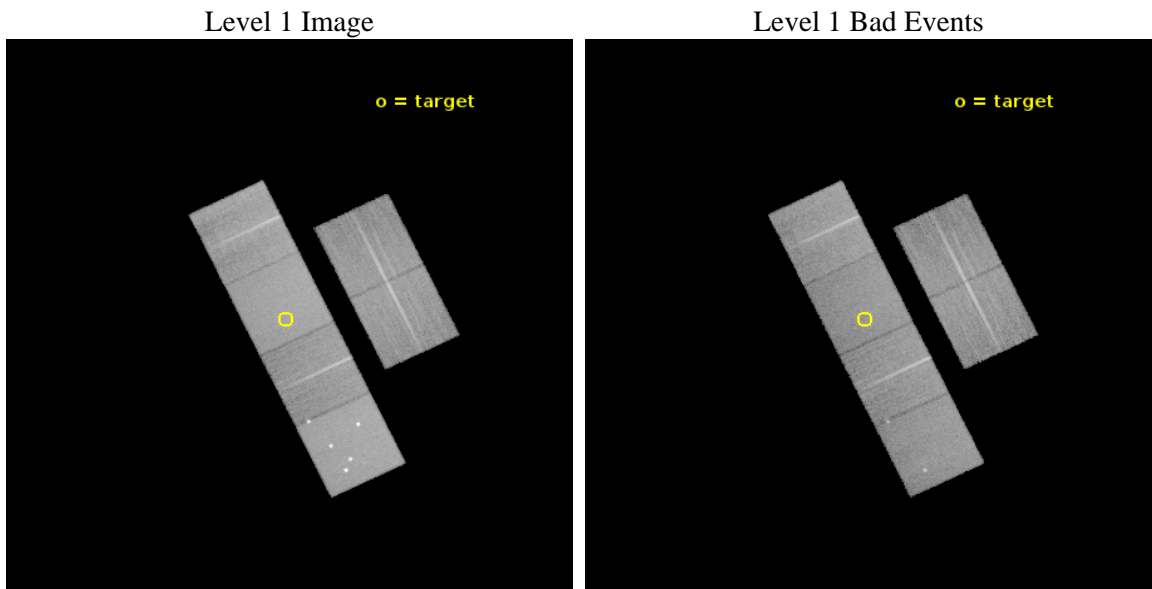
seq_num	200277	Sequence number
obs_id	6147	Observation id
title	Wind-Wind Interactions and Stellar Magnetic Fields in Pre-Planetary Nebulae	Proposal title
observer	Dr. Raghvendra Sahai	Principal investigator
object	IRAS16594-4656	Source name
dtycycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	255.790417	Observer's specified target RA [deg]
dec_targ	-47.007778	Observer's specified target Dec [deg]
ra_nom	255.78207040586	Nominal RA [deg]
dec_nom	-47.015597505008	Nominal Dec [deg]
roll_nom	244.15051279245	Nominal Roll [deg]
revision	4	Processing version of data
ontime	20178.956113607	Sum of GTIs [s]
livetime	19923.438020988	Livetime [s]
ontime2	20178.956113607	Sum of GTIs [s]
ontime3	20178.956113607	Sum of GTIs [s]
ontime5	20178.956113607	Sum of GTIs [s]
ontime6	20178.956113607	Sum of GTIs [s]
ontime7	20178.956113607	Sum of GTIs [s]
ontime8	20178.956113607	Sum of GTIs [s]
l2events	259249	Number of level 2 events



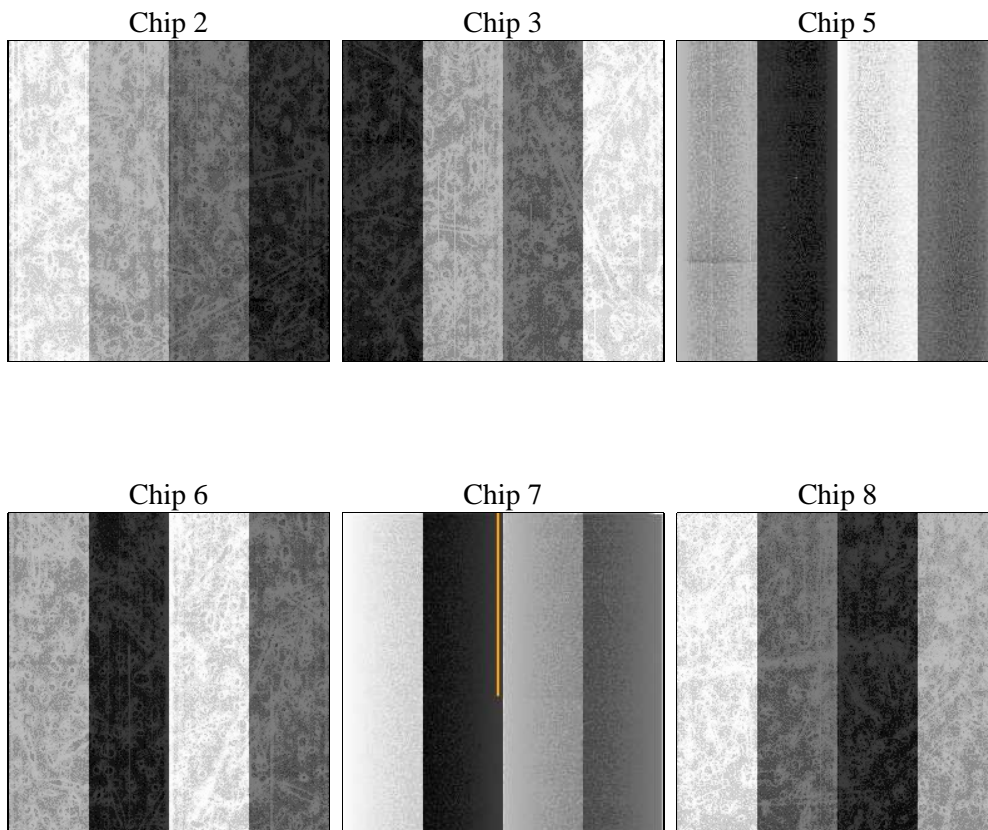
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	20040.000000	[s] Scheduled observation exposure time
ascdsver	10.4.1	Processing system revision	ontime	20178.956113607	Sum of GTIs [s]
caldbver	4.6.8	&#160	ontime2	20178.956113607	Sum of GTIs [s]
date	2015-07-09T19:56:18	Date and time of file creation	ontime3	20178.956113607	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	20178.956113607	Sum of GTIs [s]
			ontime6	20178.956113607	Sum of GTIs [s]
			ontime7	20178.956113607	Sum of GTIs [s]
			ontime8	20178.956113607	Sum of GTIs [s]
			l1events	1199028	Number of level 1 events

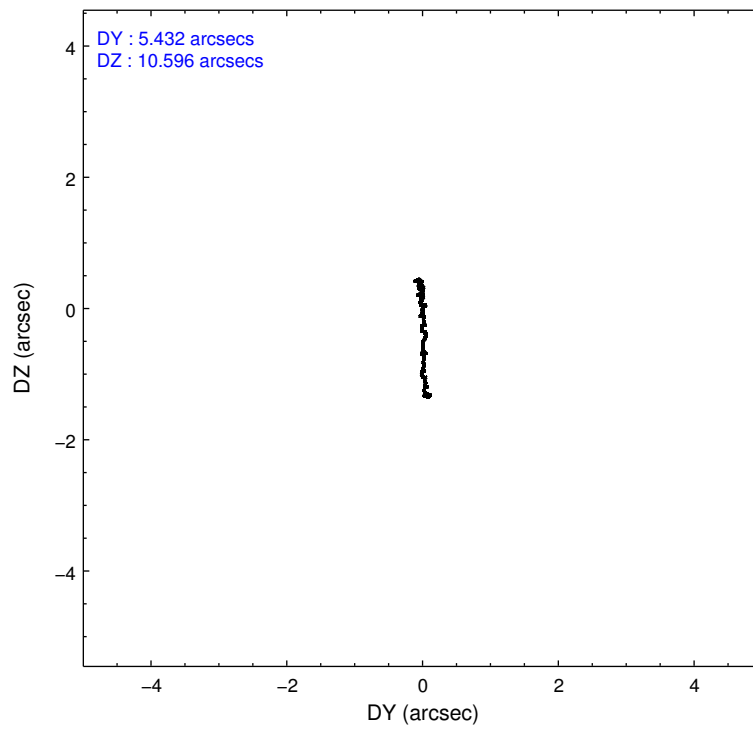
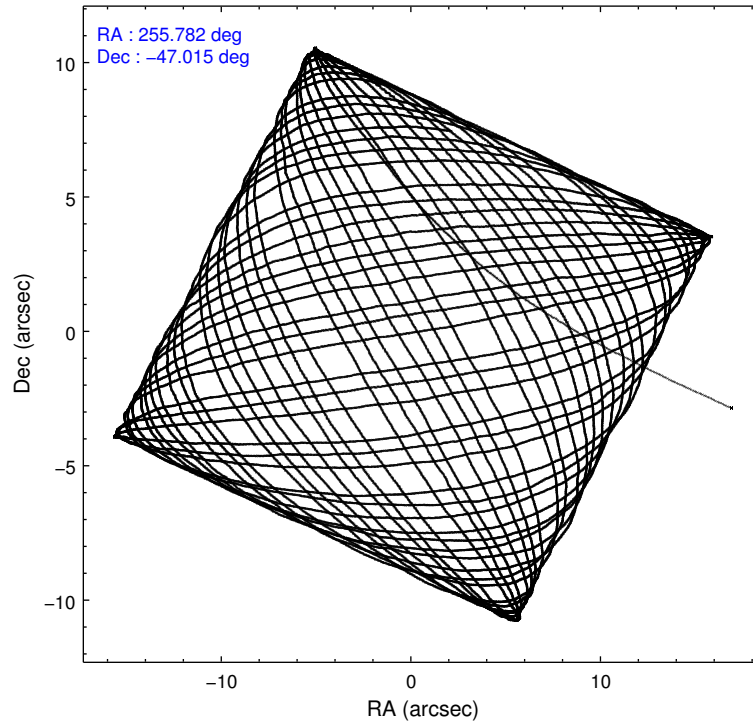
### 2.1.4 Events

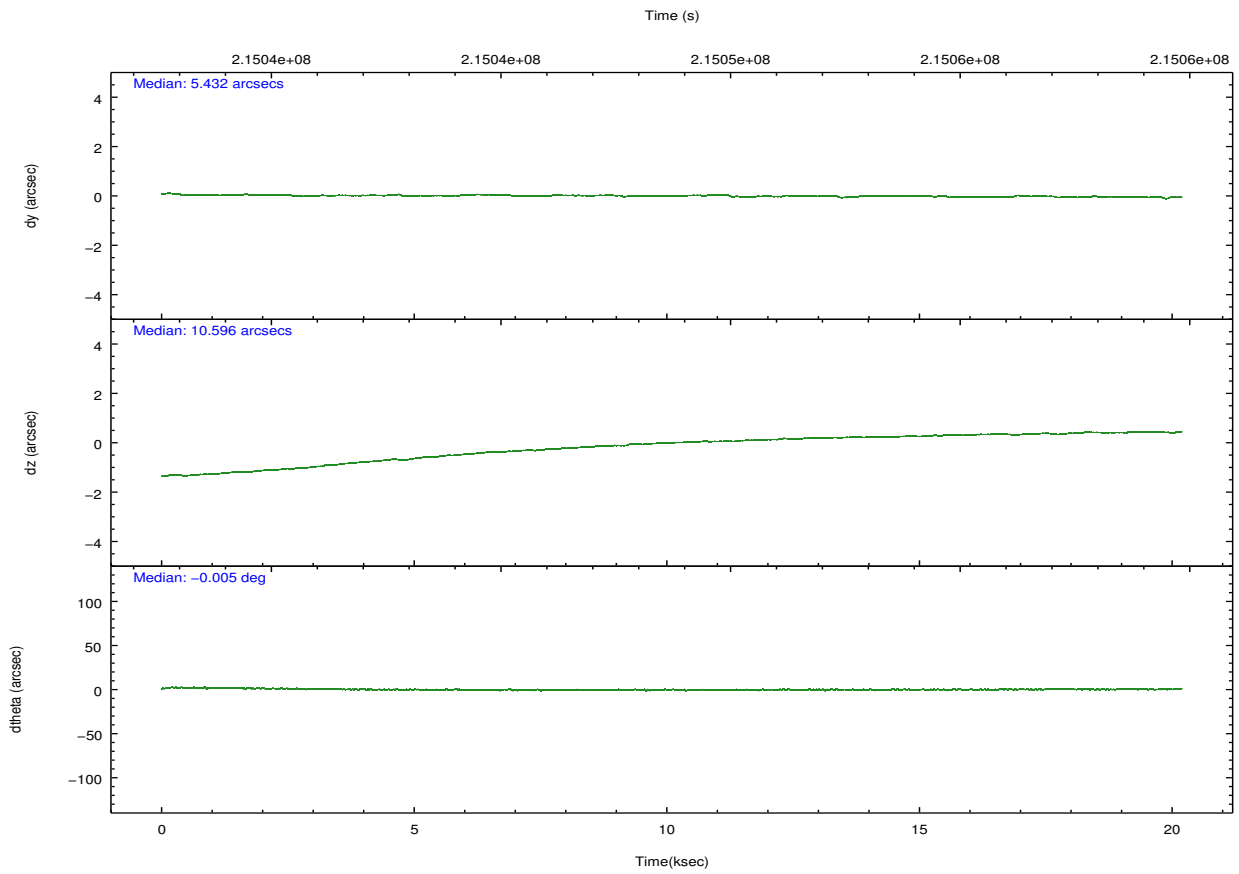
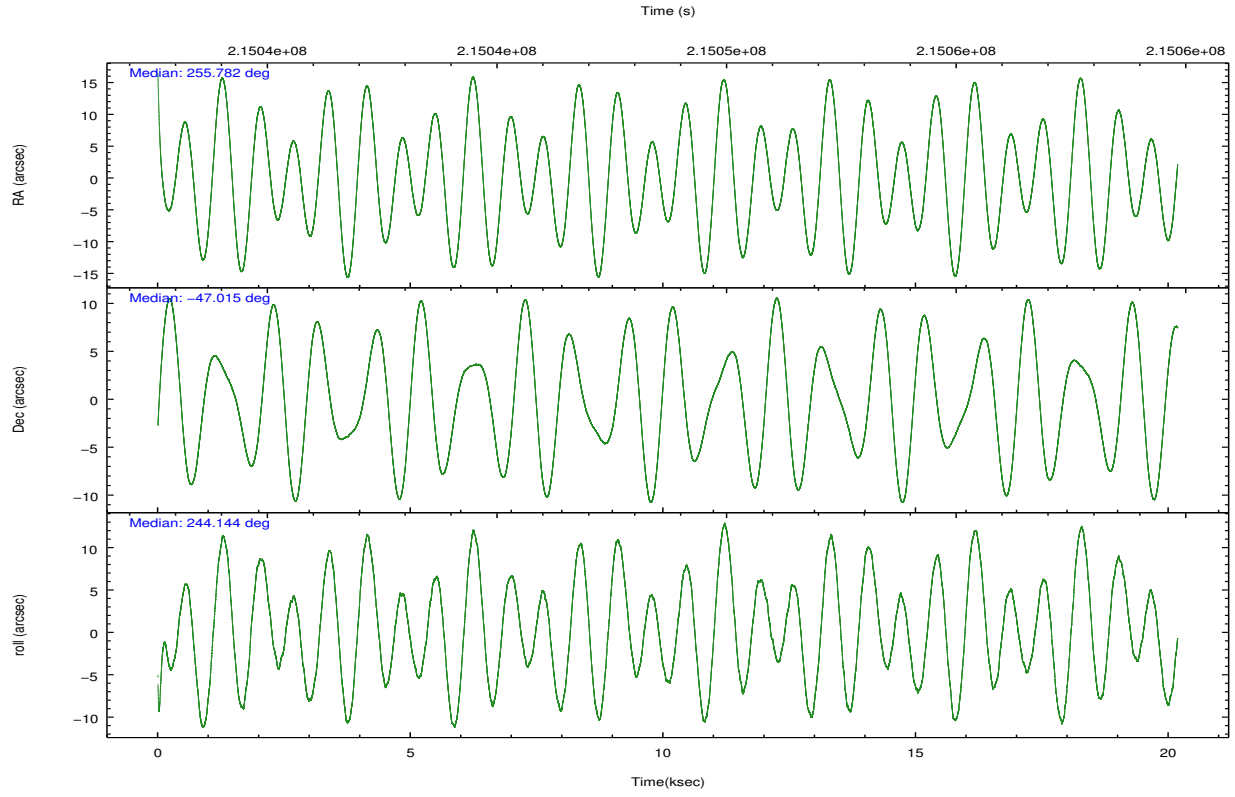
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	172574	158850	265906	166509	224533	210656	grade 0 events	9173	8580	24021	8437	8375	14707
rejected events	153369	140616	139124	147081	134397	167476		5%	5%	9%	5%	3%	6%
rejected %	88%	88%	52%	88%	59%	79%	grade 1 events	122	101	1795	78	205	157
								0%	0%	0%	0%	0%	0%
							grade 2 events	4087	3610	38310	4095	18514	9934
								2%	2%	14%	2%	8%	4%
							grade 3 events	1849	1824	4488	2003	8222	4571
								1%	1%	1%	1%	3%	2%
							grade 4 events	1888	1841	4325	2018	8317	4487
								1%	1%	1%	1%	3%	2%
							grade 5 events	6532	7119	17910	7549	21316	10129
								3%	4%	6%	4%	9%	4%
							grade 6 events	3347	3394	60240	3982	50555	11344
								1%	2%	22%	2%	22%	5%
							grade 7 events	145576	132381	114817	138347	109029	155327
								84%	83%	43%	83%	48%	73%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	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	255.778665	255.7820704058604	Subarray requested	NONE	NONE
[deg] Pointing Dec	-46.988471	-47.01559750500775	Alternating exposures requested	N	N
[deg] Pointing Roll	243.991412	244.1505127924453	[s] Primary exposure time	0.000000	3.2
[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)	215038773.184000	215037395.60996			
Observation start date	2004-10-24T20:58:29	2004-10-24T20:36:35			
[s] Observation end time (MET)	215058813.184000	215059070.26093			
Observation end date	2004-10-25T02:32:29	2004-10-25T02:37:50			
Read mode	TIMED	TIMED			

## 2.3 Aspect





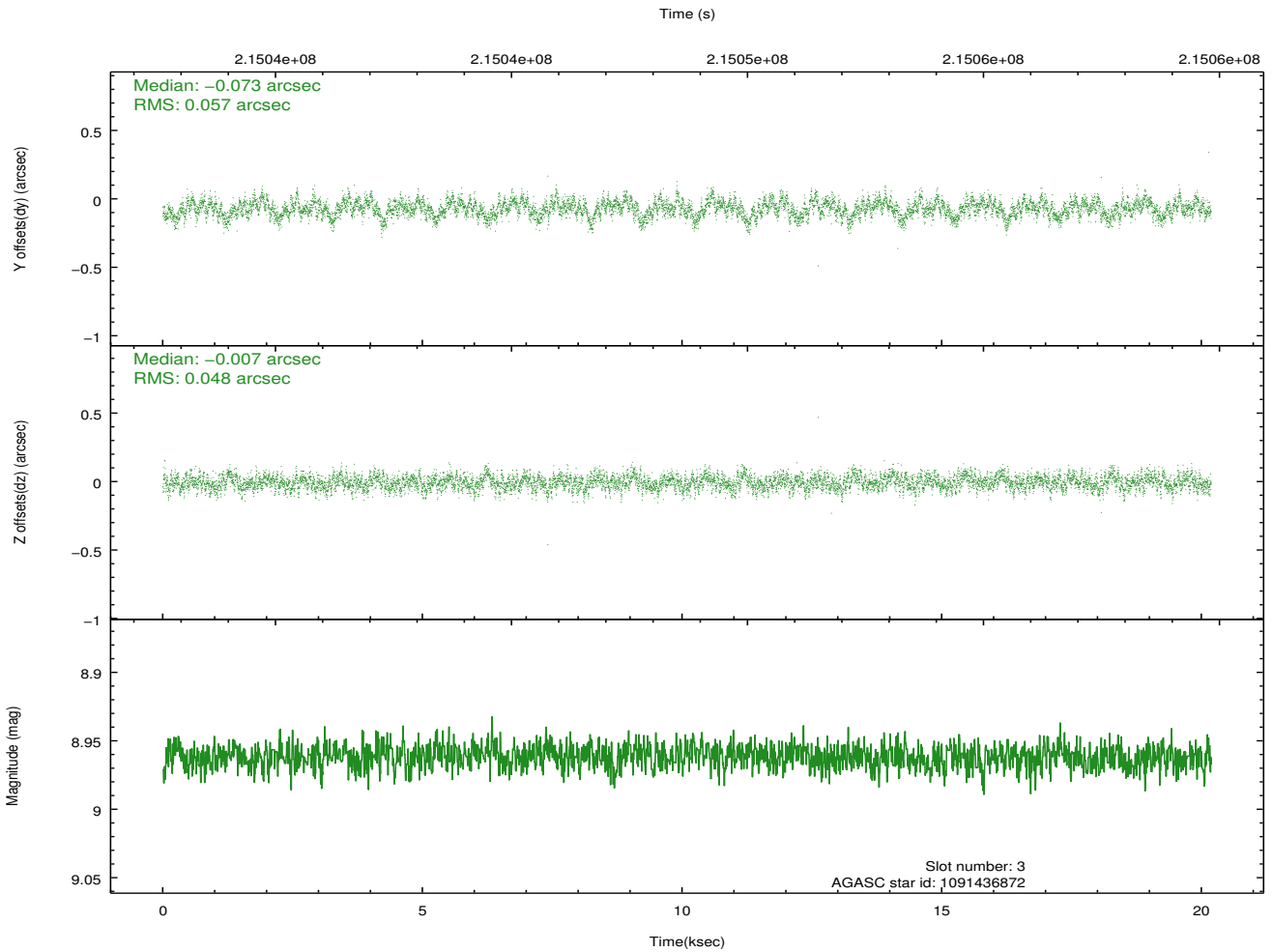
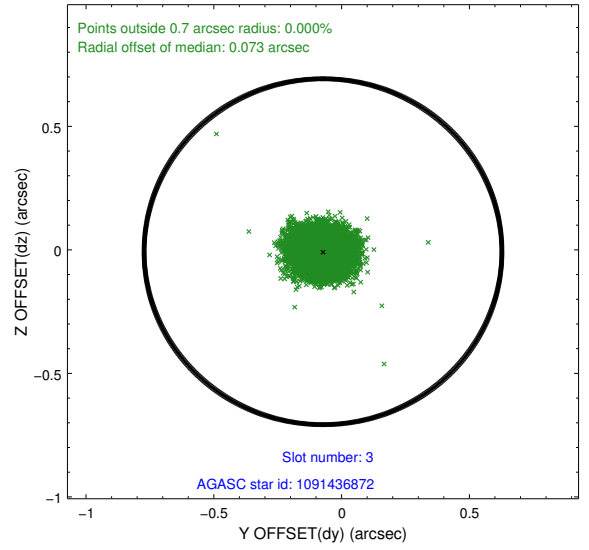
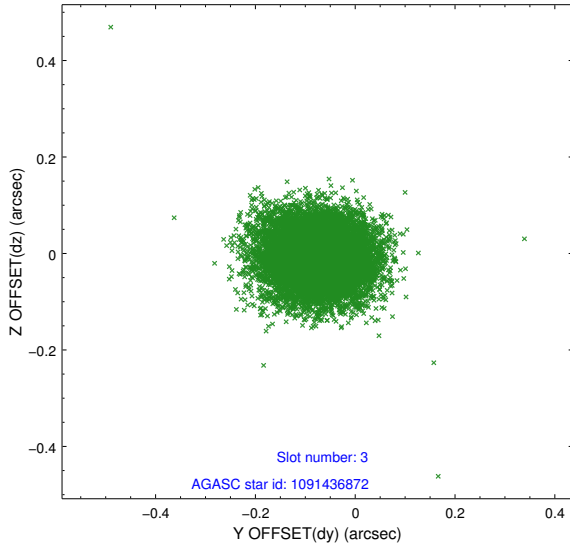
### Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.10	4923	-0.071	-0.024	0.013	0.023	0.000000	0.000000	-758.19	-1731.69
1	FID		ACIS-S-4	7.21	4923	0.111	0.042	0.011	0.020	0.000000	0.000000	2155.16	176.71
2	FID		ACIS-S-5	7.23	4921	-0.069	-0.008	0.010	0.023	0.000000	0.000000	-1810.81	170.49
3	GUIDE	used	1091436872	8.96	9842	-0.073	-0.007	0.079	0.128	255.728542	-46.511740	-1487.73	-863.96
4	GUIDE	used	1091578616	7.19	9847	-0.174	0.132	0.073	0.111	256.896475	-46.679685	-2192.29	2002.14
5	GUIDE	used	1091962048	9.34	9834	0.119	-0.026	0.085	0.138	255.249687	-47.258259	1443.73	-733.02
6	GUIDE	used	1091963760	8.82	9842	0.224	-0.233	0.107	0.169	254.534918	-47.241344	2173.71	-2321.82
7	GUIDE	used	1091568688	9.20	9843	-0.097	0.137	0.094	0.154	257.031467	-46.735947	-2150.12	2390.22

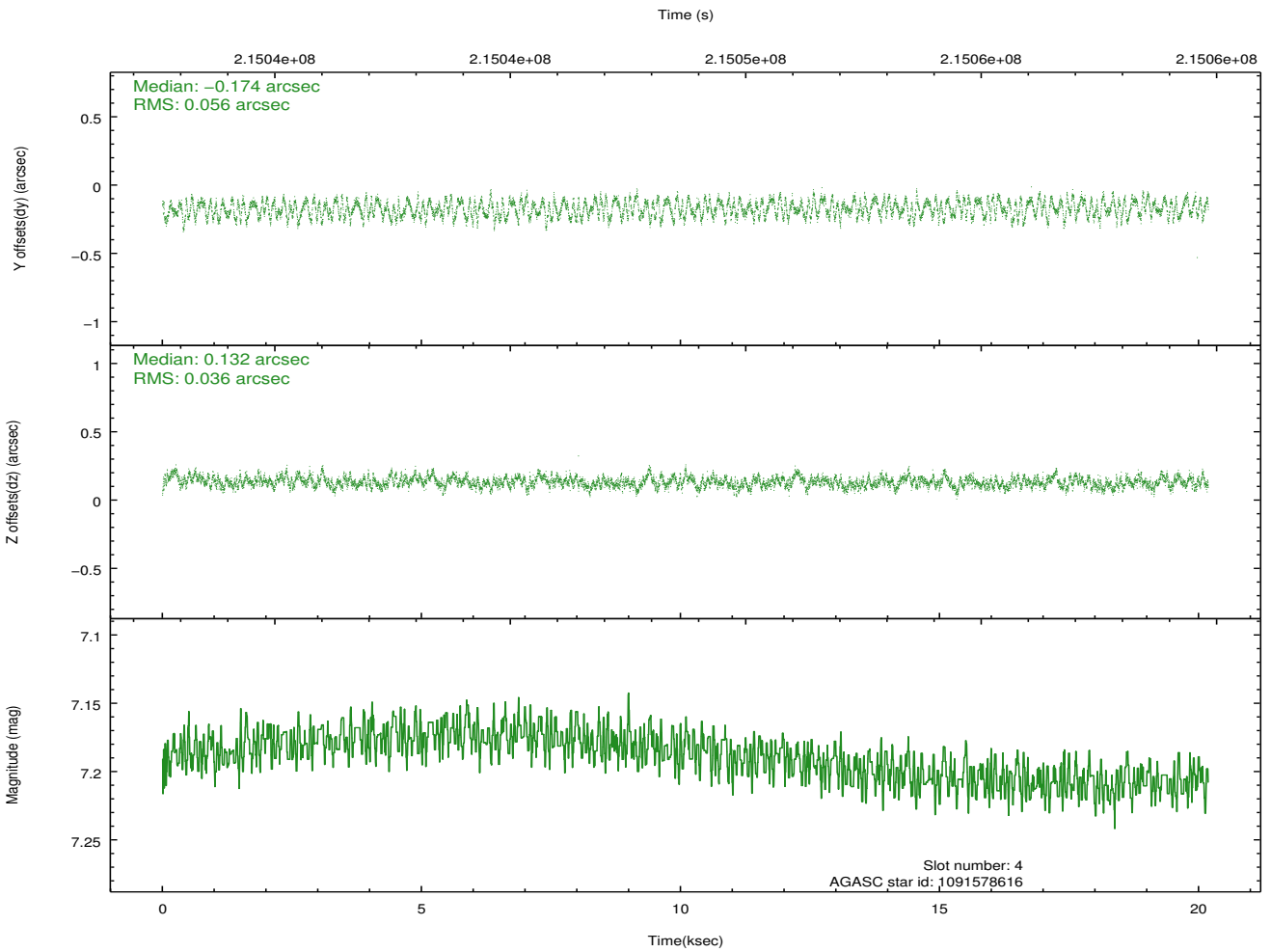
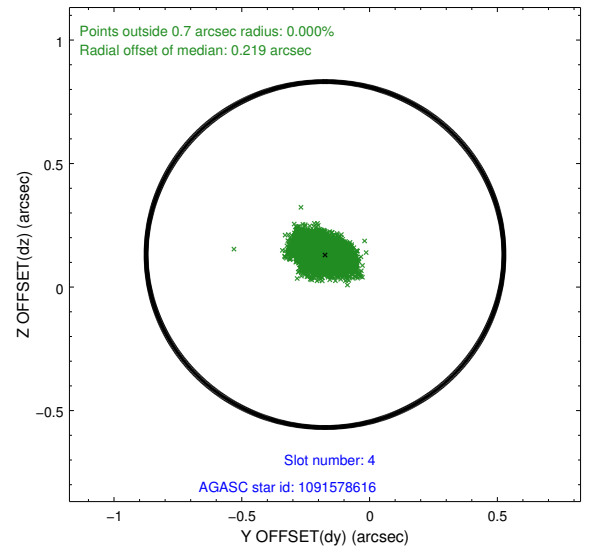
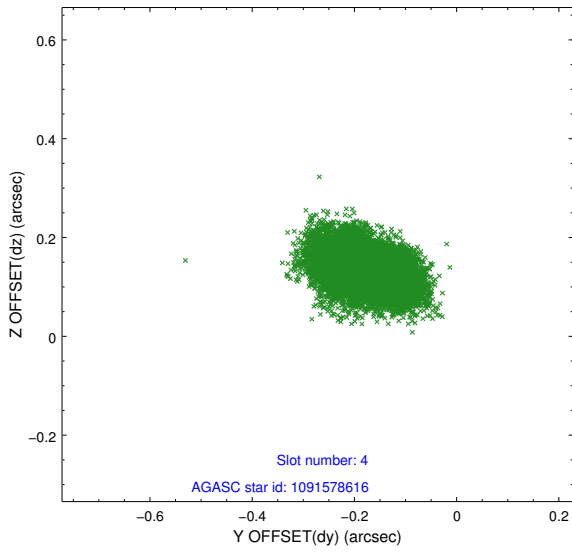
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## 2.4 Star Slots

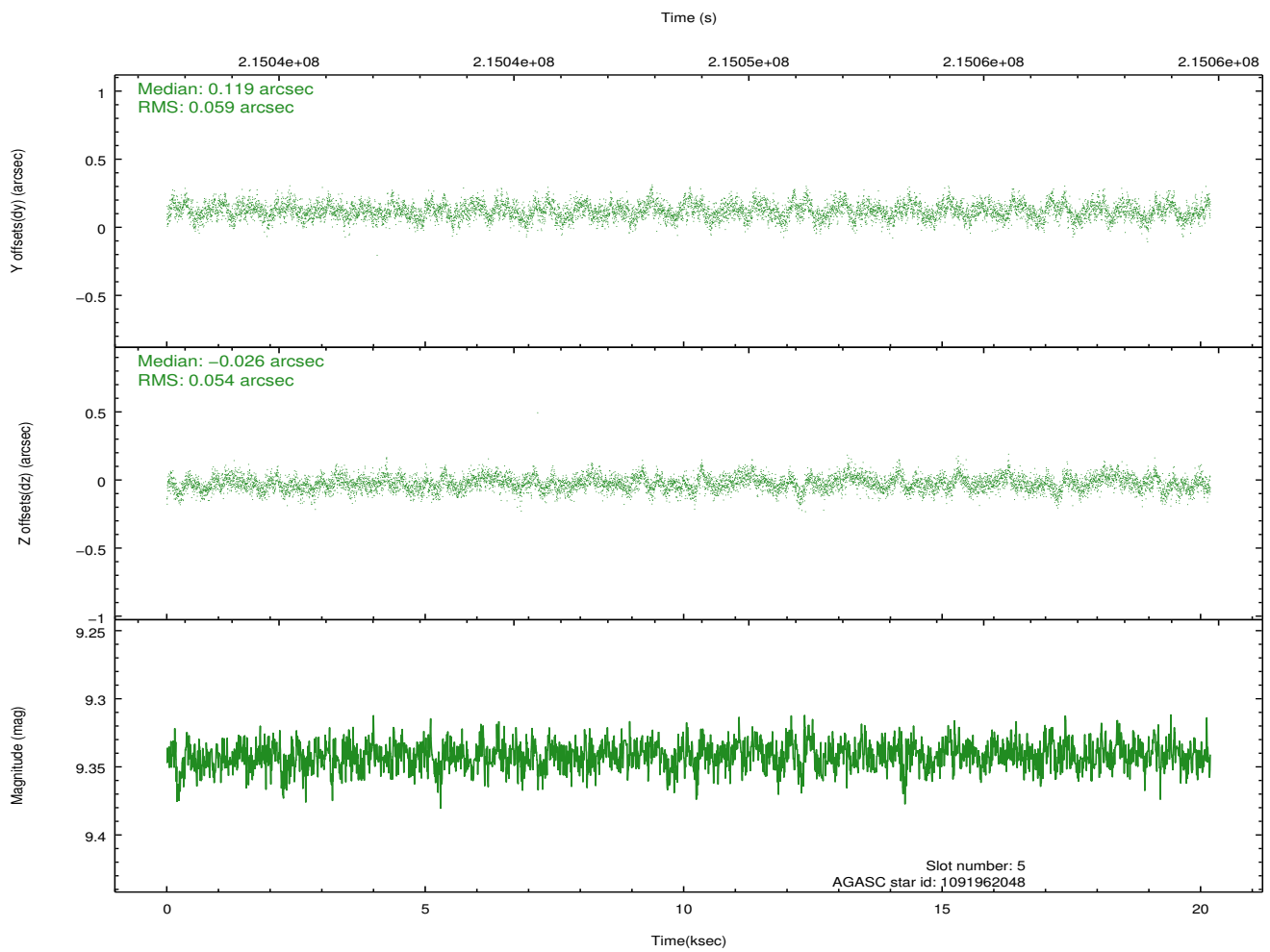
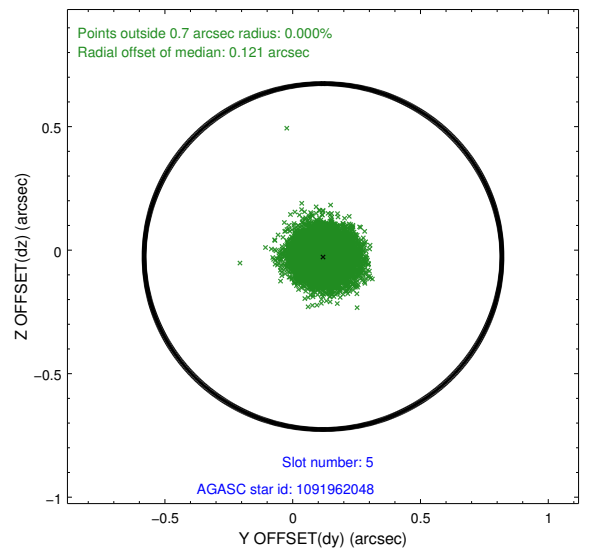
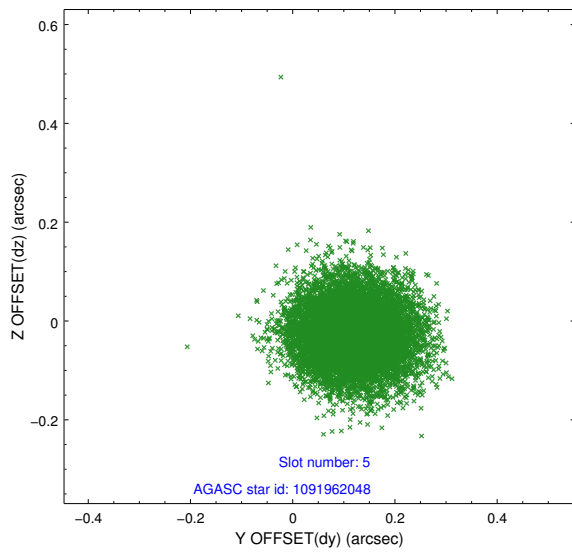
### 2.4.1 Slot 3



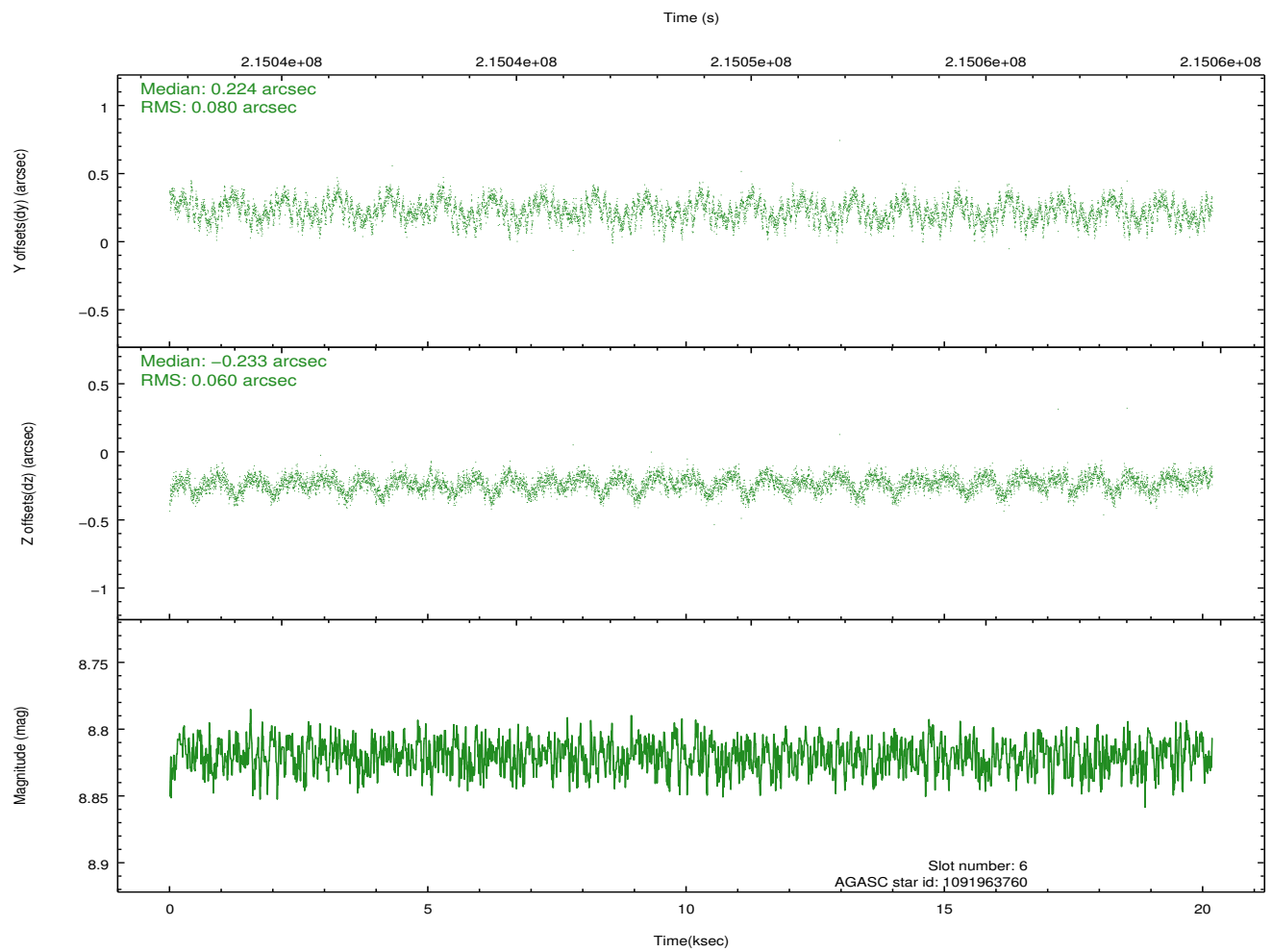
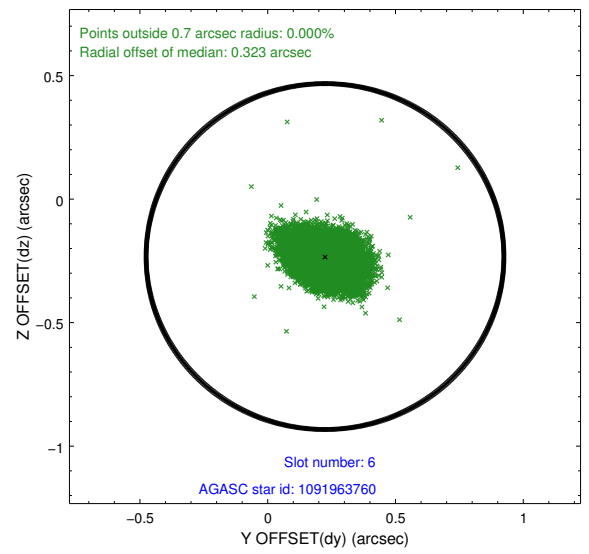
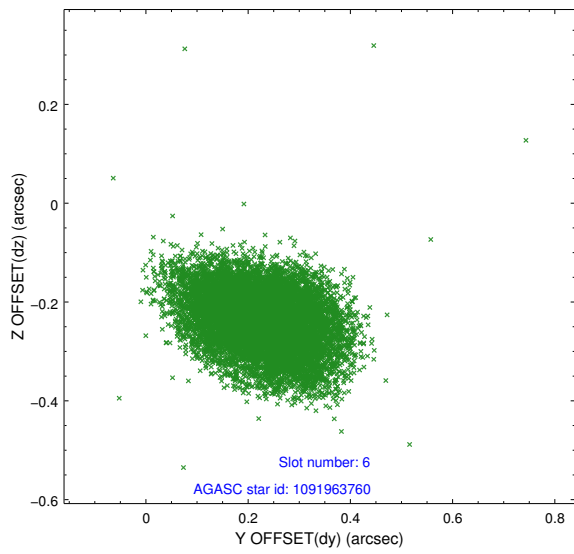
## 2.4.2 Slot 4



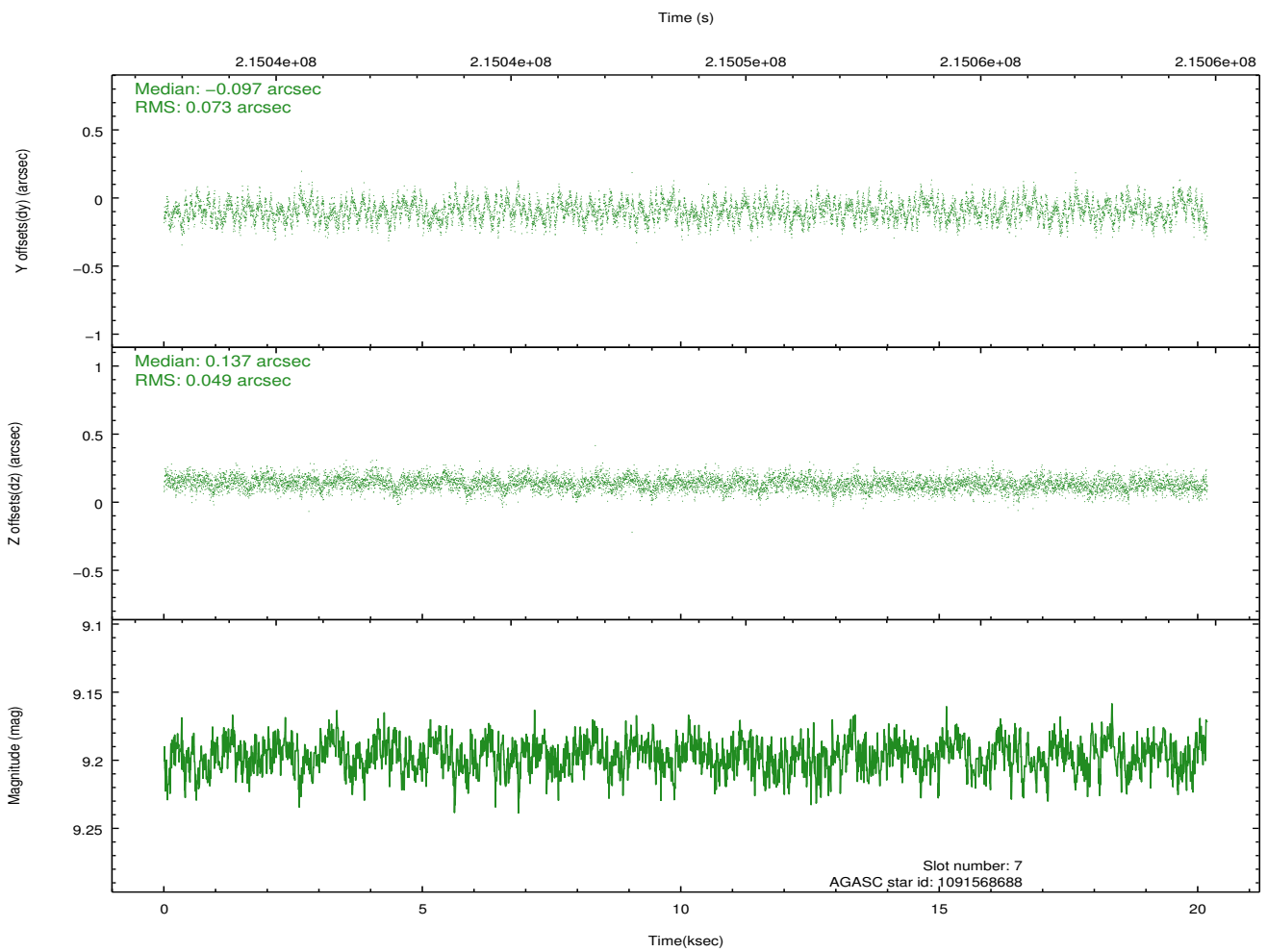
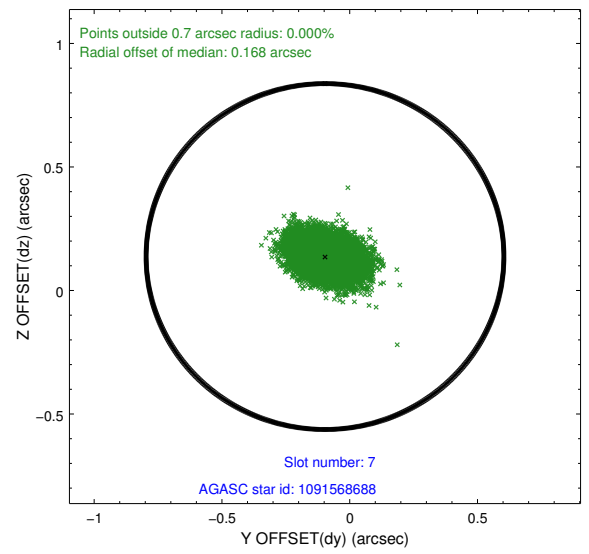
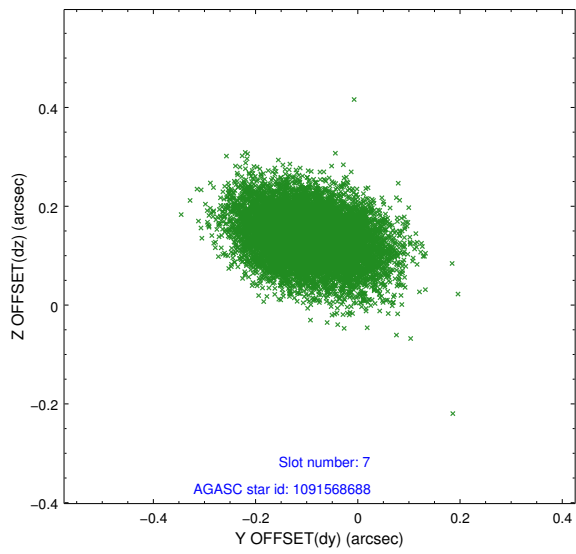
### 2.4.3 Slot 5



## 2.4.4 Slot 6

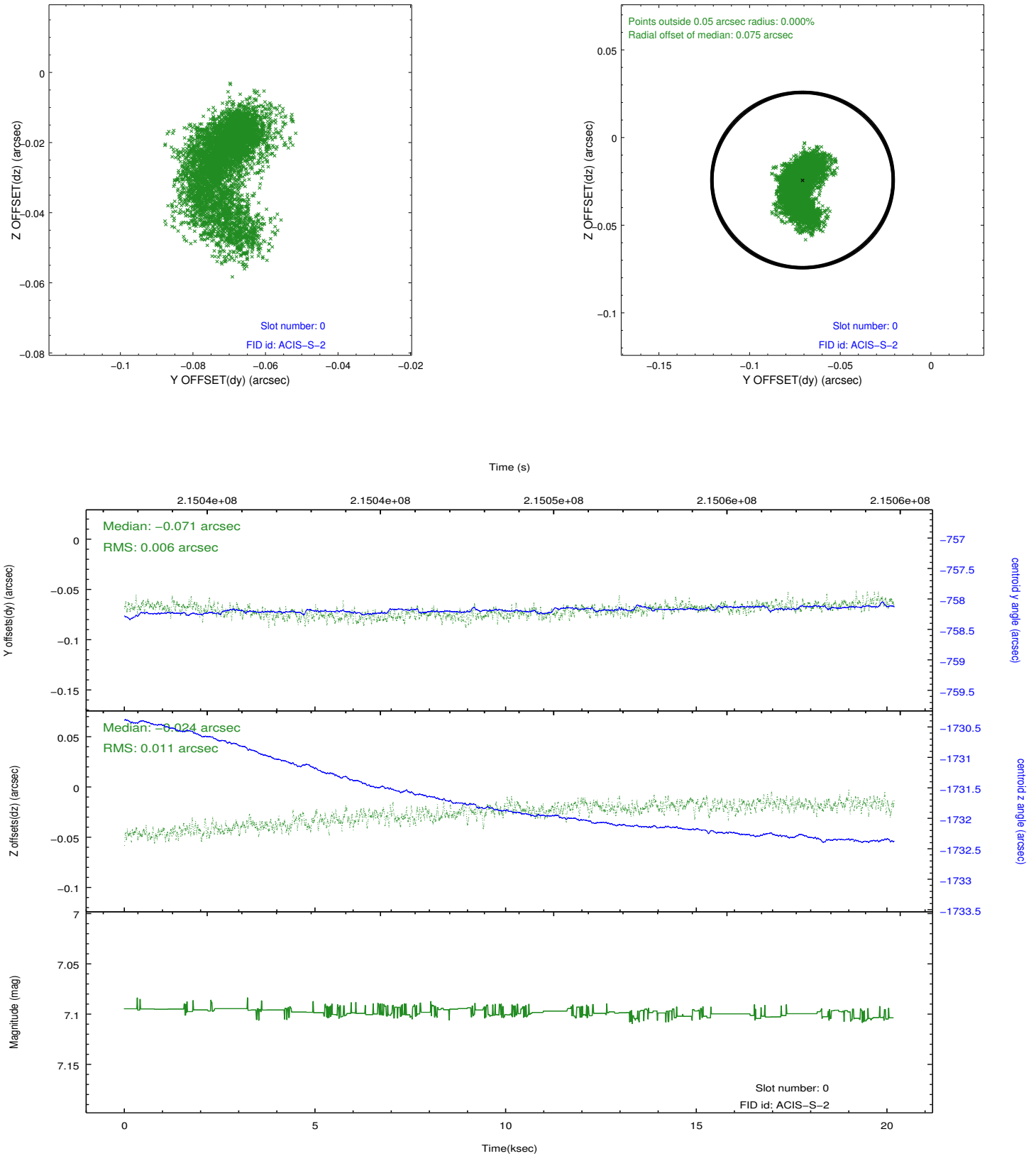


## 2.4.5 Slot 7

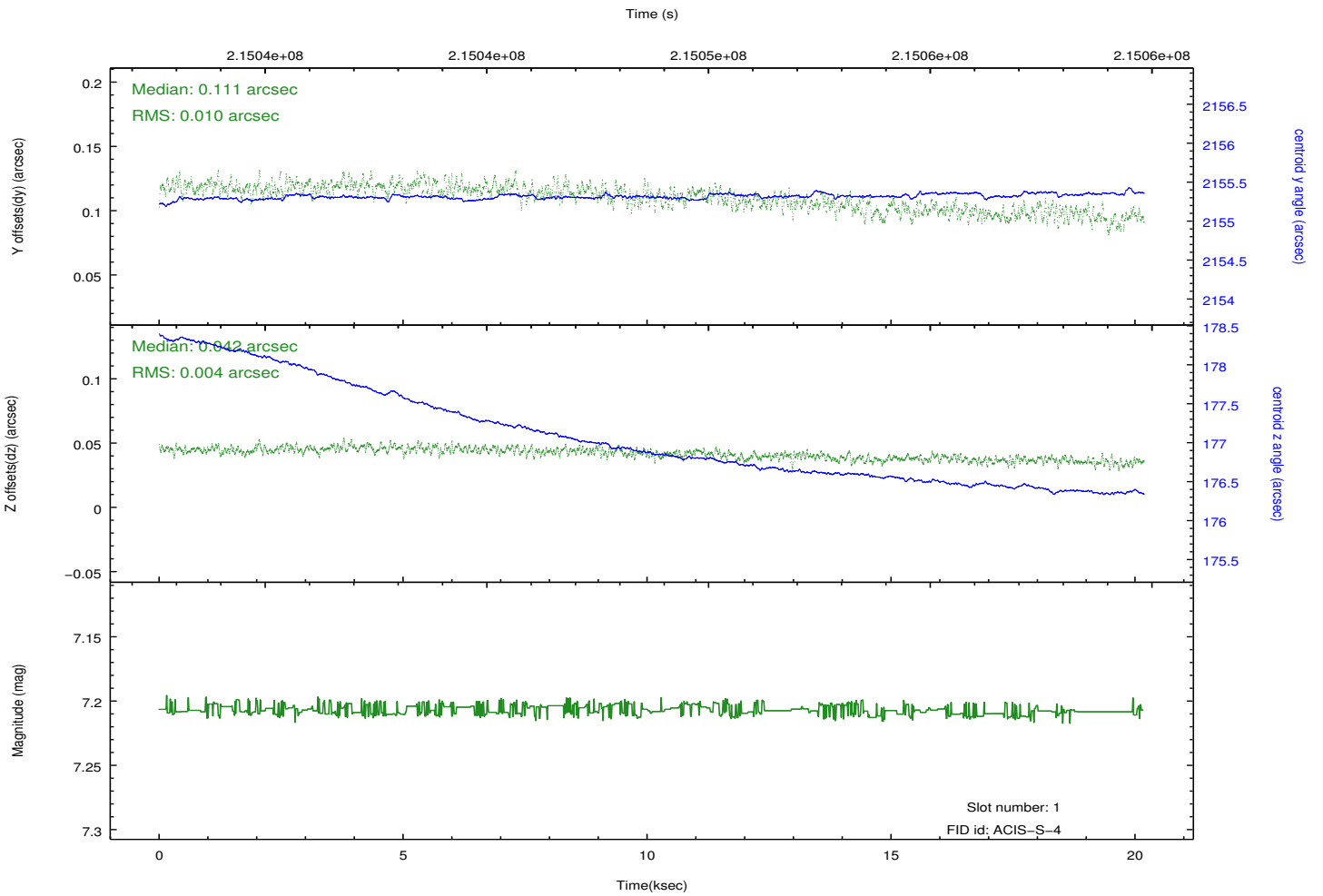
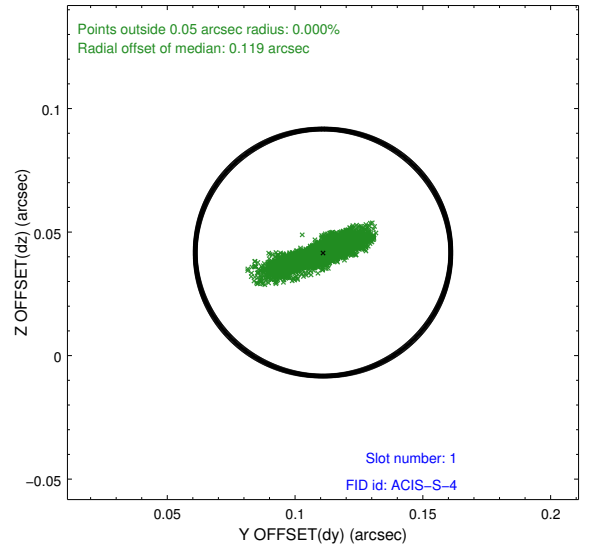
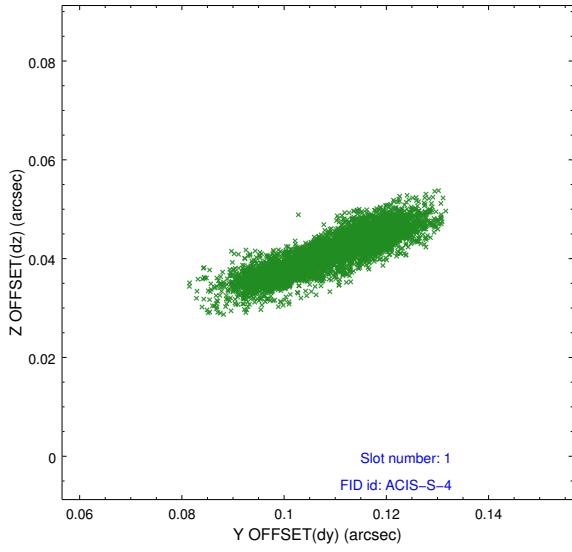


## 2.5 FID Slots

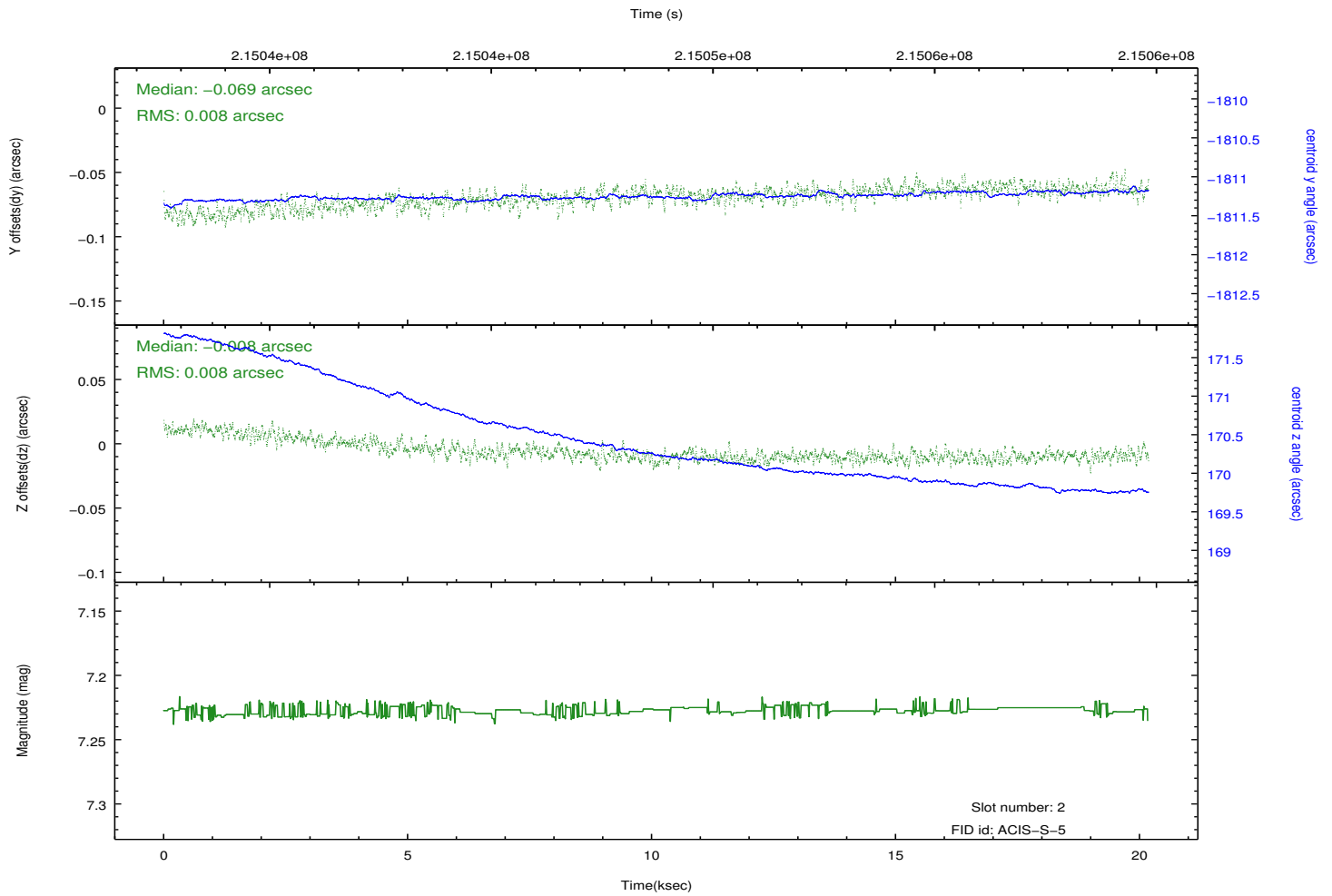
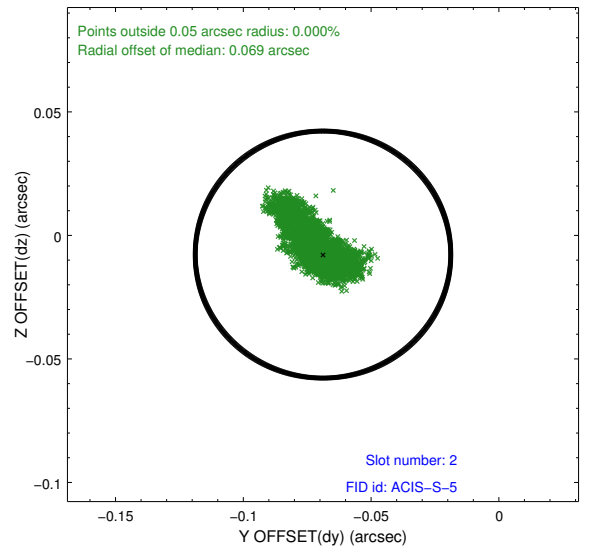
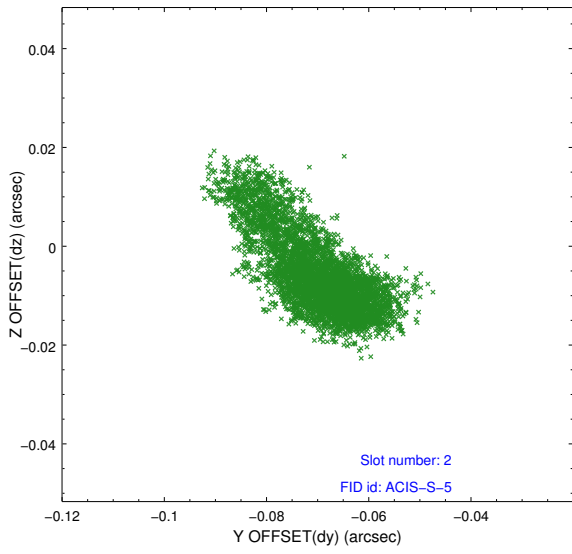
### 2.5.1 Slot 0



## 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)	2015.07.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.179

## A.2 Comments

Because an aspect solution is determined in a finite time interval, a small number of events registered within the delta time before the first aspect solution do not have proper sky coordinates. We apply a manual workaround to exclude those events with incorrect sky positions until the complete s/w resolution is obtained.