

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 2037 - L2 Version 3  
Chandra X-Ray Center

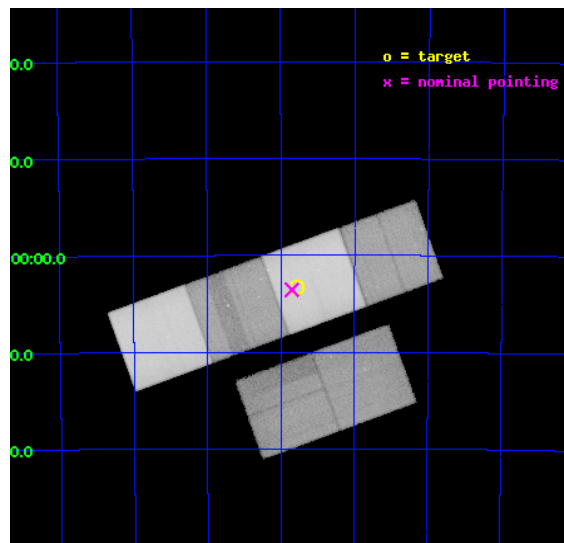
L2 Processing Date : Sep 25 2012

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# 1 Front

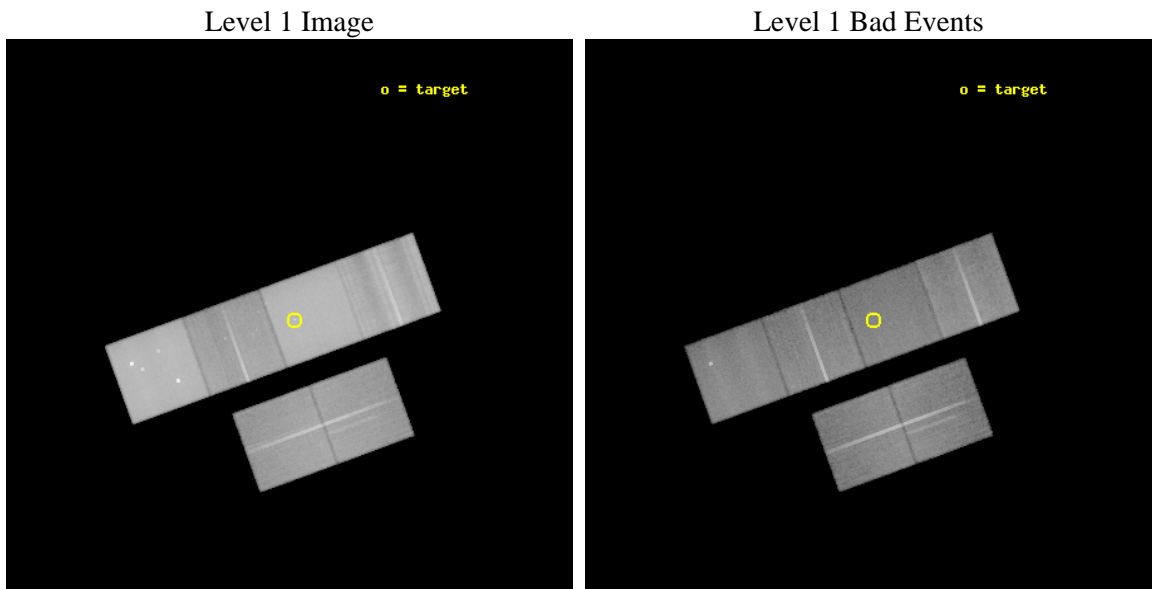
seq_num	600171	Sequence number
obs_id	2037	Observation id
title	THE X-RAY PROPERTIES OF ULTRALUMINOUS GALAXIES: COSMOLOGICAL IMPLICATIONS	Proposal title
observer	Dr. Tim Heckman	Principal investigator
object	IRAS 23128-5919	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	348.945833	Observer's specified target RA [deg]
dec_targ	-59.054694	Observer's specified target Dec [deg]
ra_nom	348.9622110117	Nominal RA [deg]
dec_nom	-59.059602152375	Nominal Dec [deg]
roll_nom	339.98382367788	Nominal Roll [deg]
revision	3	Processing version of data
ontime	49942.318115994	Sum of GTIs [s]
livetime	49309.918412356	Livetime [s]
ontime2	49942.318096071	Sum of GTIs [s]
ontime3	49945.559086248	Sum of GTIs [s]
ontime5	49945.559106156	Sum of GTIs [s]
ontime6	49945.559086248	Sum of GTIs [s]
ontime7	49942.318115994	Sum of GTIs [s]
ontime8	49942.318096057	Sum of GTIs [s]
l2events	1526511	Number of level 2 events



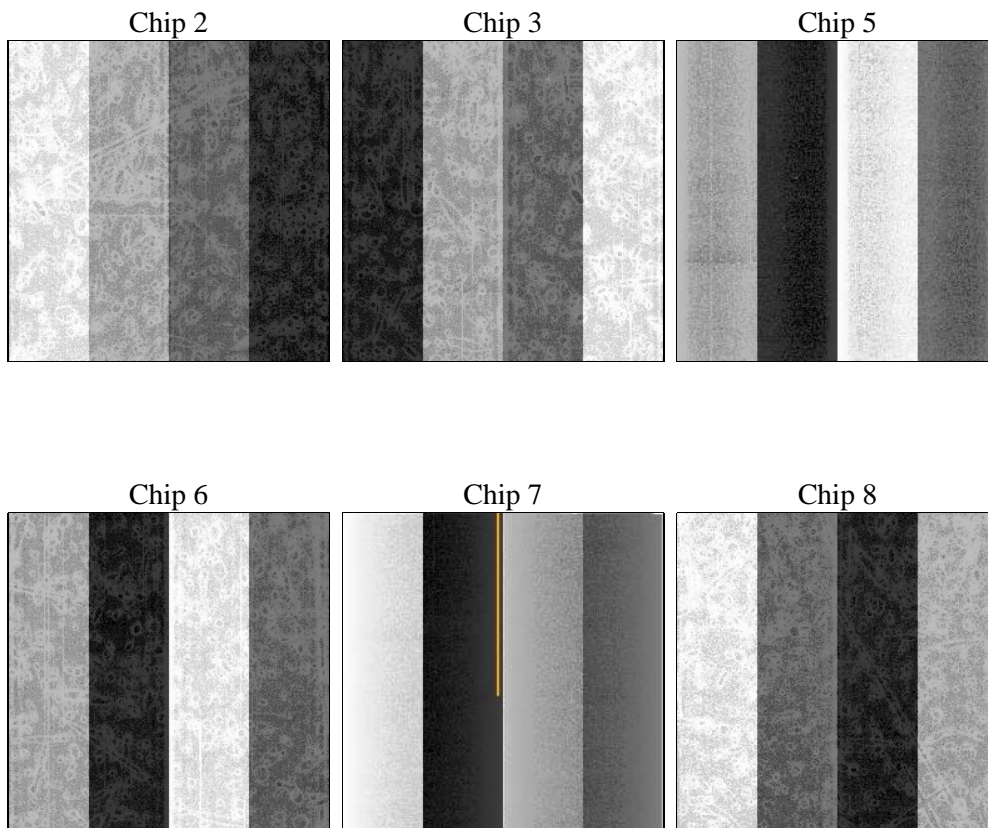
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	50000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	49942.318115994	Sum of GTIs [s]
caldbver	4.5.1.1	&#160	ontime2	49942.318096071	Sum of GTIs [s]
date	2012-09-25T03:28:20	Date and time of file creation	ontime3	49945.559086248	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	49945.559106156	Sum of GTIs [s]
			ontime6	49945.559086248	Sum of GTIs [s]
			ontime7	49942.318115994	Sum of GTIs [s]
			ontime8	49942.318096057	Sum of GTIs [s]
			l1events	3464818	Number of level 1 events

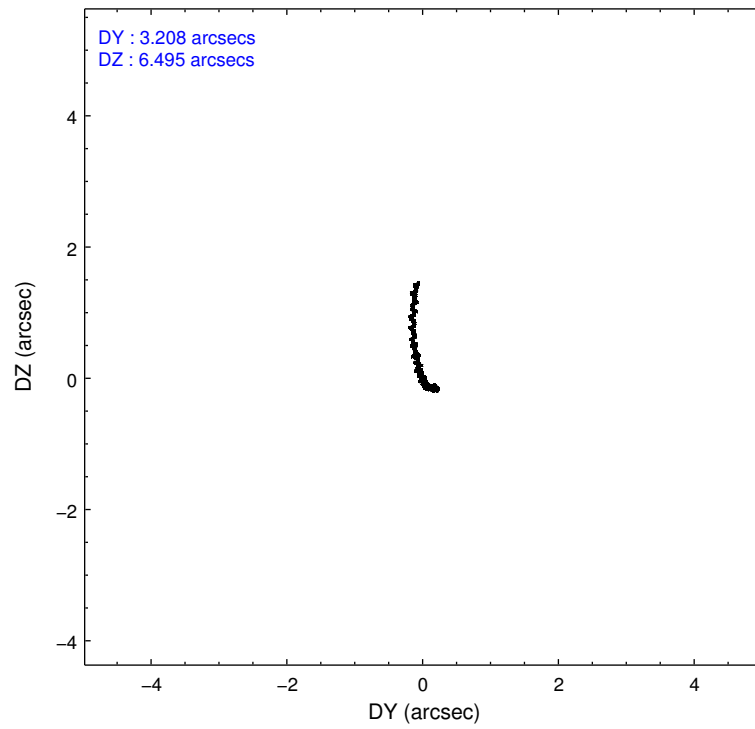
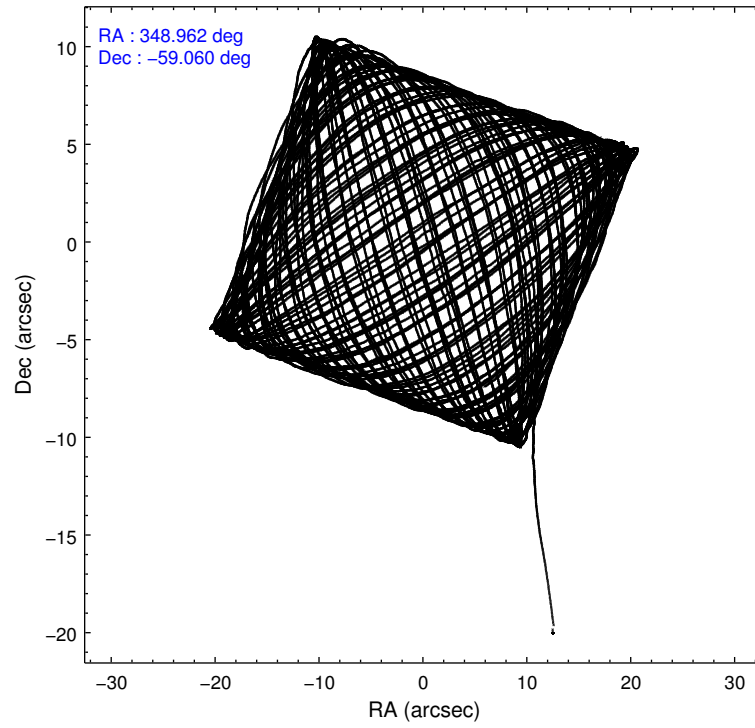
### 2.1.4 Events

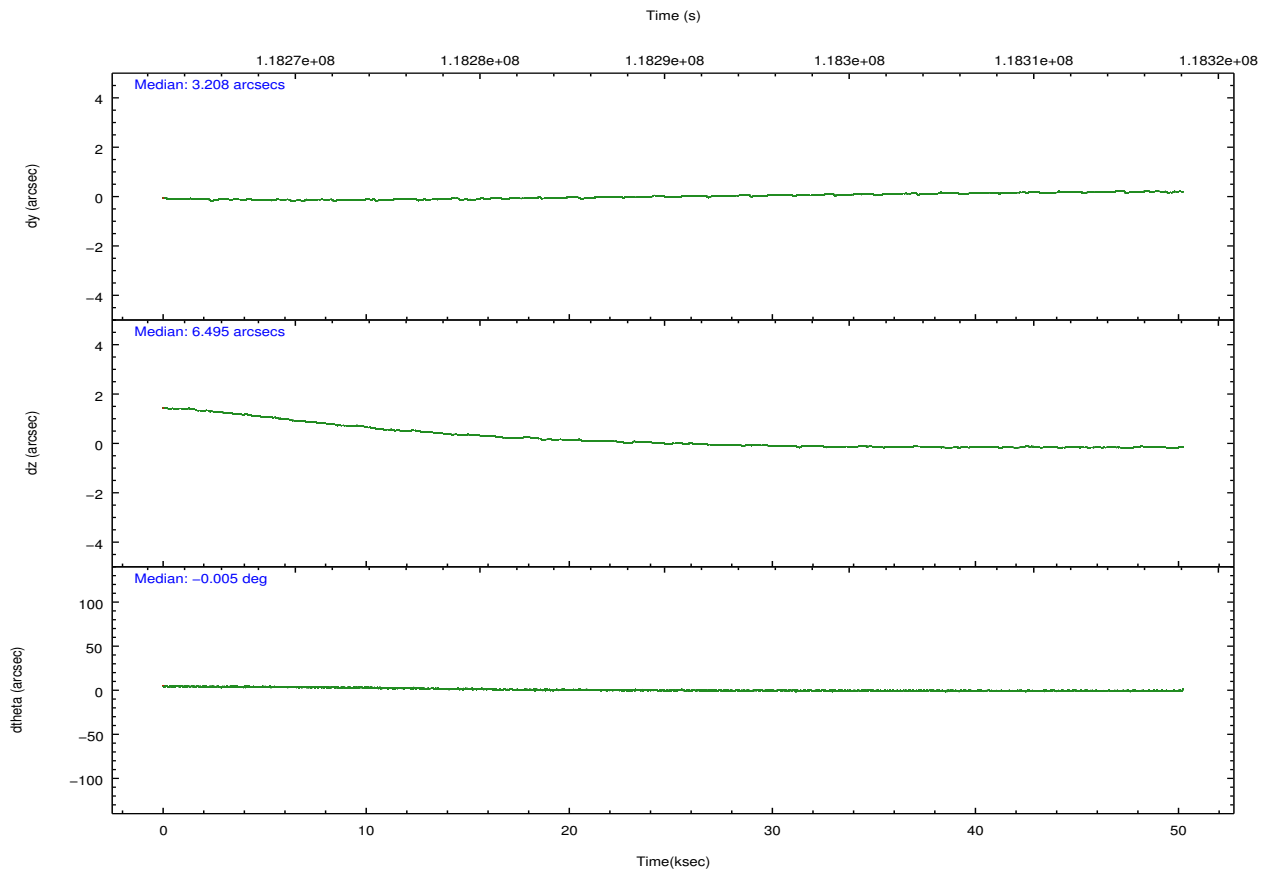
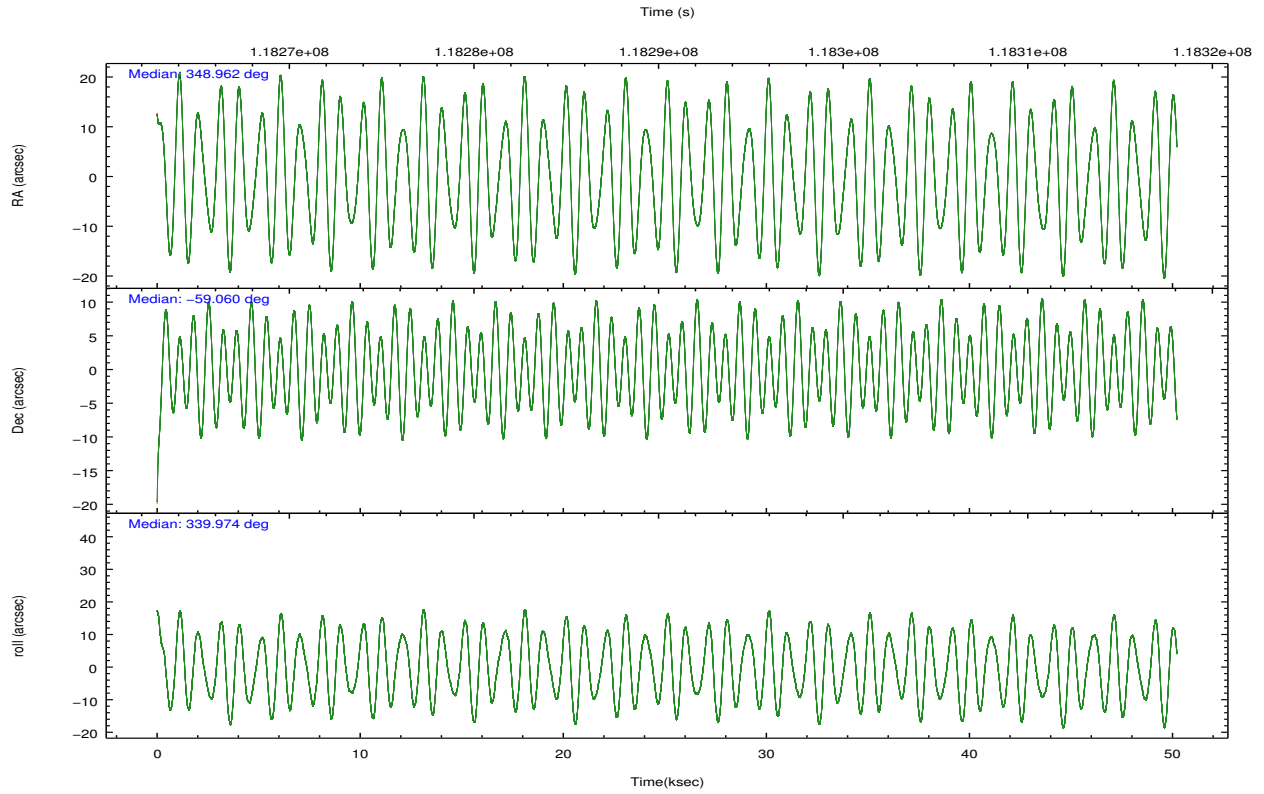
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	390133	376594	849671	421474	793344	633602	grade 0 events	55235	53665	91832	79936	60244	139967
rejected events	287712	272900	274255	286842	234421	323618		14%	14%	10%	18%	7%	22%
rejected %	73%	72%	32%	68%	29%	51%	grade 1 events	280	243	1627	346	469	919
								0%	0%	0%	0%	0%	0%
							grade 2 events	23137	26063	167103	29390	99787	49885
								5%	6%	19%	6%	12%	7%
							grade 3 events	4397	4745	31729	4975	44274	39161
								1%	1%	3%	1%	5%	6%
							grade 4 events	5212	4775	31465	5115	43477	34825
								1%	1%	3%	1%	5%	5%
							grade 5 events	10379	11099	37731	12509	38576	17176
								2%	2%	4%	2%	4%	2%
							grade 6 events	14453	14454	253400	15226	311320	46173
								3%	3%	29%	3%	39%	7%
							grade 7 events	277040	261550	234784	273977	195197	305496
								71%	69%	27%	65%	24%	48%

## 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	348.910064	348.9622110116987	Subarray requested	NONE	NONE
[deg] Pointing Dec	-59.064619	-59.05960215237548	Alternating exposures requested	N	N
[deg] Pointing Roll	339.782473	339.9838236778758	[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)	118265569.184000	118264600.54403			
Observation start date	2001-09-30T19:31:45	2001-09-30T19:16:40			
[s] Observation end time (MET)	118315569.184000	118316394.82109			
Observation end date	2001-10-01T09:25:05	2001-10-01T09:39:54			
Read mode	TIMED	TIMED			

## 2.3 Aspect



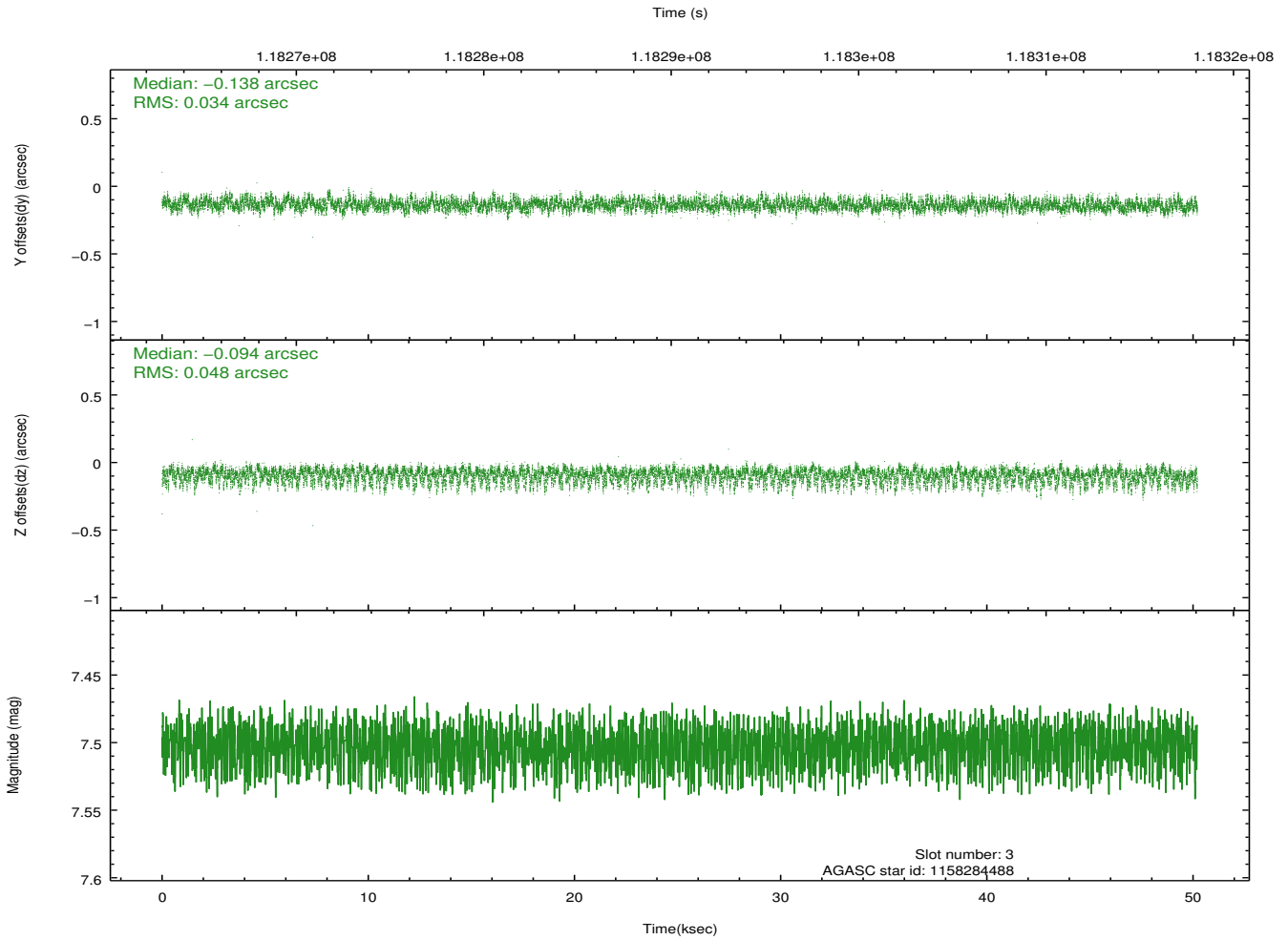
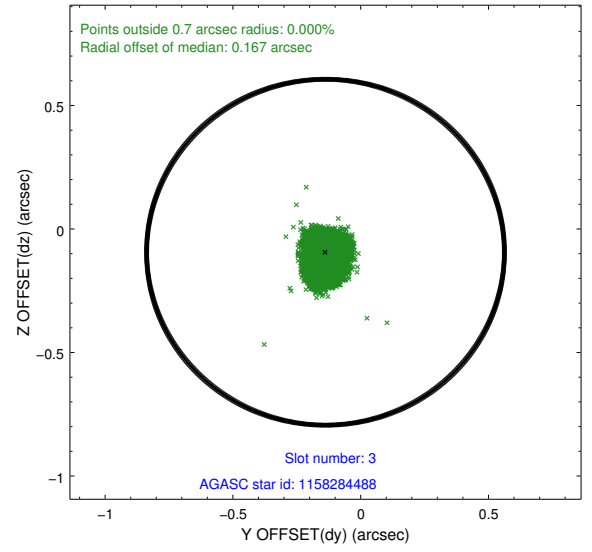
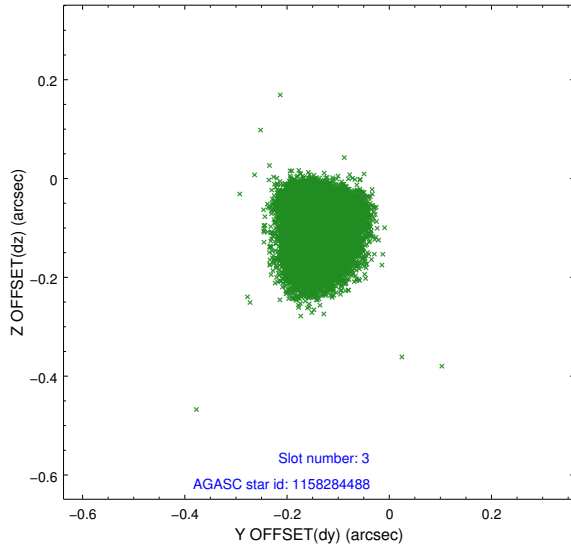


### Slot Statistics

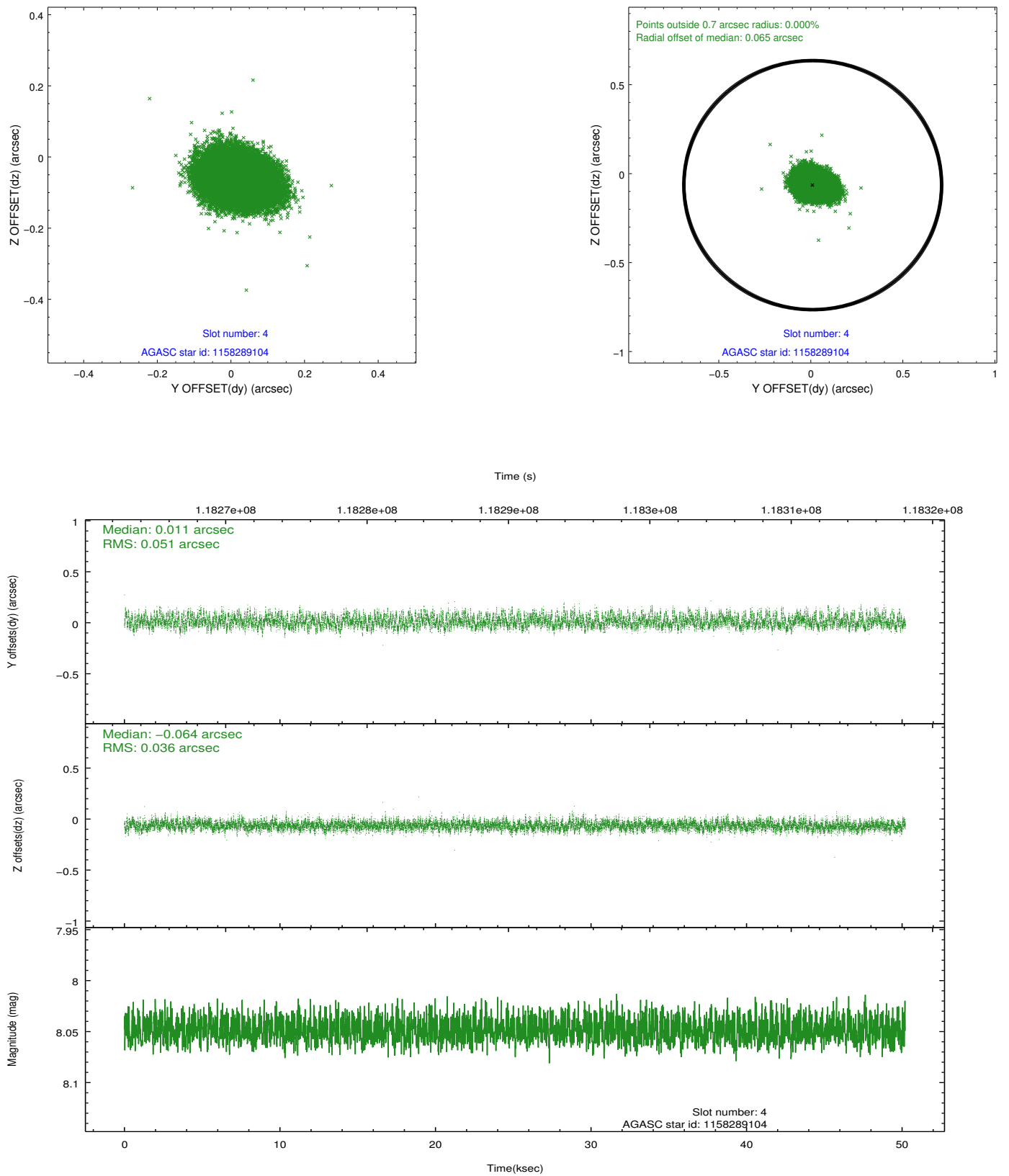
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	12244	-0.014	0.008	0.012	0.025	0.000000	0.000000	-755.85	-1727.88
1	FID	ACIS-S-4	7.20	12243	-0.036	0.004	0.017	0.026	0.000000	0.000000	2157.38	180.66
2	FID	ACIS-S-5	7.24	12244	0.018	-0.004	0.010	0.019	0.000000	0.000000	-1808.72	174.25
3	GUIDE	1158284488	7.50	24488	-0.138	-0.094	0.062	0.102	347.565532	-59.369633	-1925.22	-1906.14
4	GUIDE	1158289104	8.05	24488	0.011	-0.064	0.067	0.108	349.042349	-59.780717	1116.72	-2336.32
5	GUIDE	1158289080	8.54	24483	-0.095	-0.014	0.081	0.124	349.709964	-58.631481	871.06	1973.11
6	GUIDE	1158283552	8.83	24489	0.002	0.031	0.086	0.136	348.601588	-58.521149	-1219.54	1634.46
7	GUIDE	1158289992	10.34	24475	0.216	0.141	0.152	0.254	350.393328	-58.836217	2319.72	1698.60

## 2.4 Star Slots

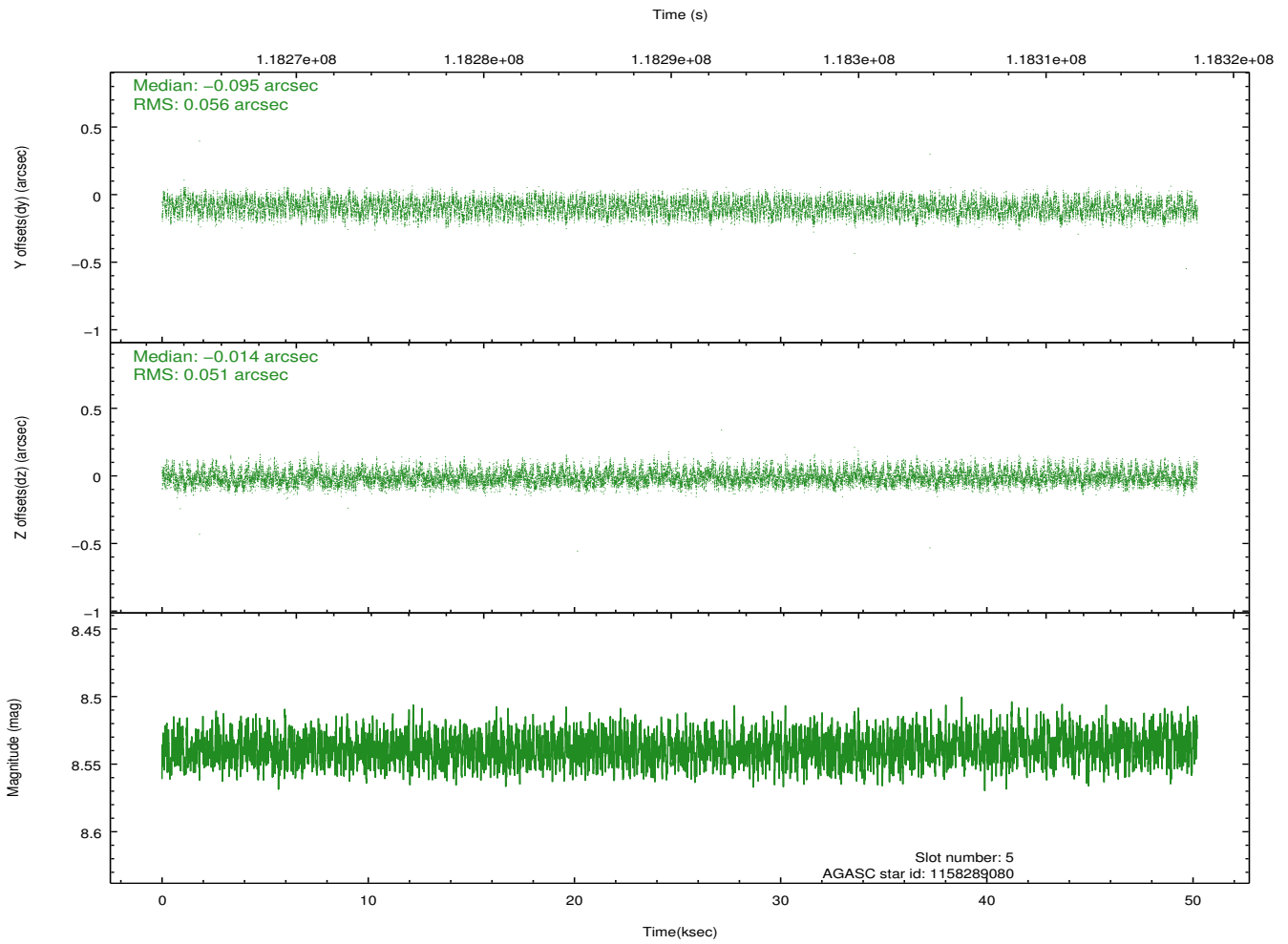
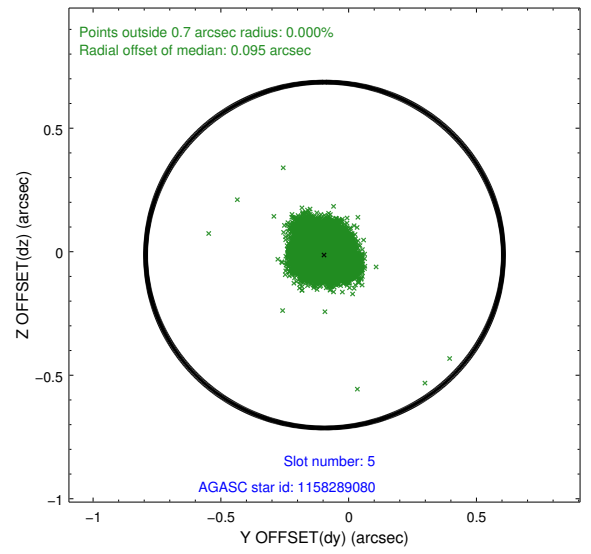
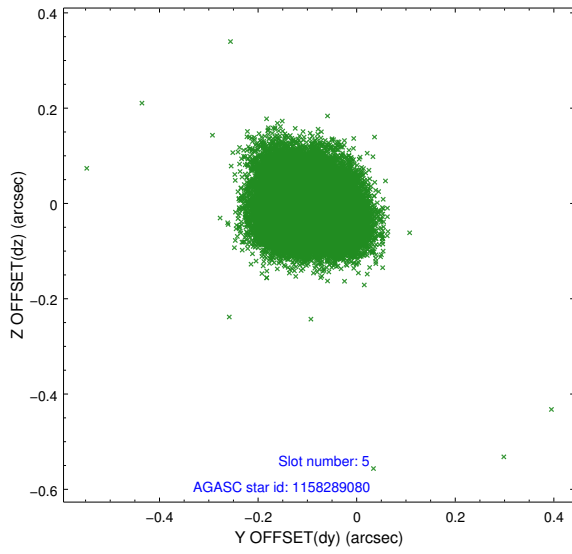
### 2.4.1 Slot 3



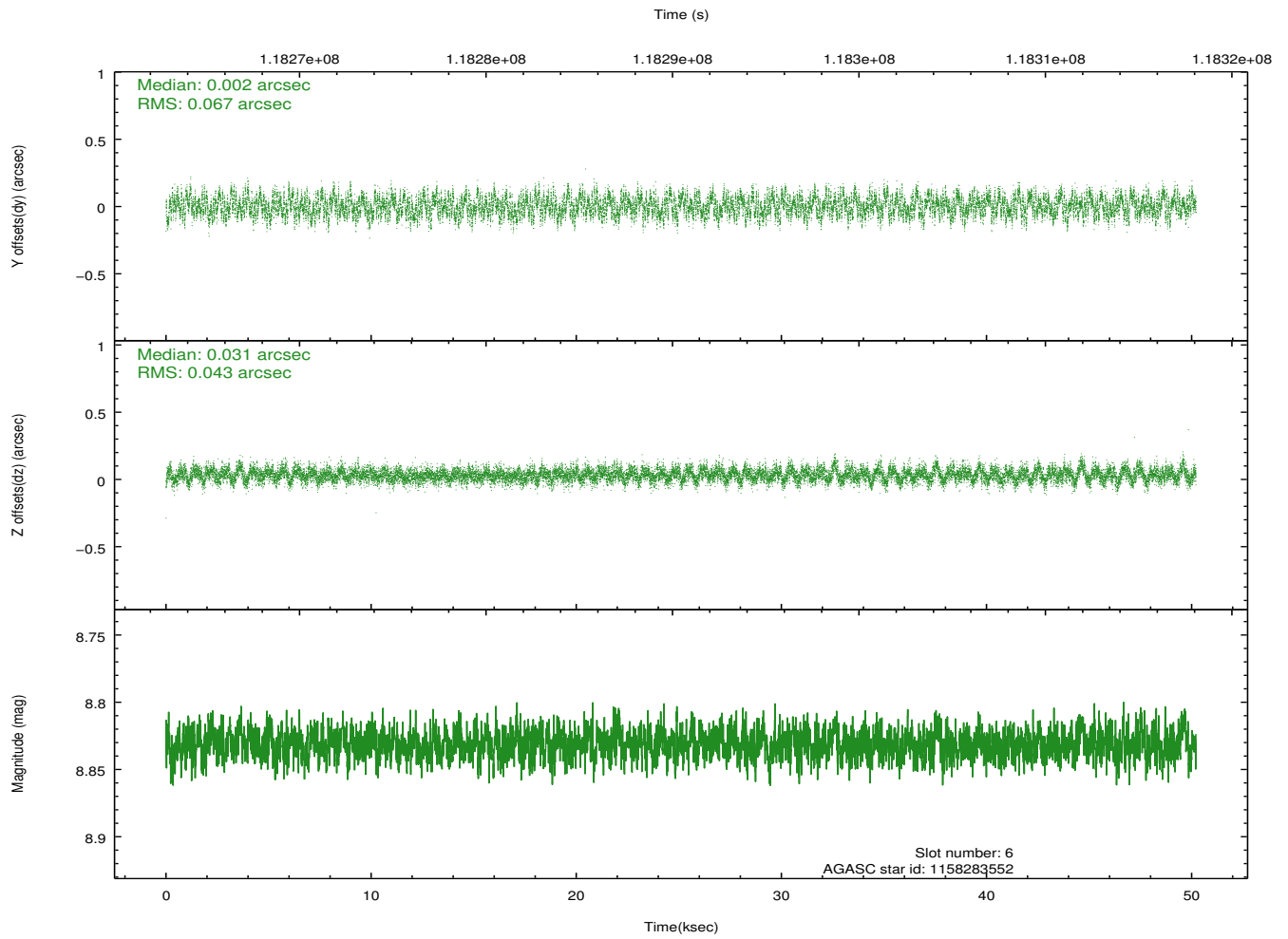
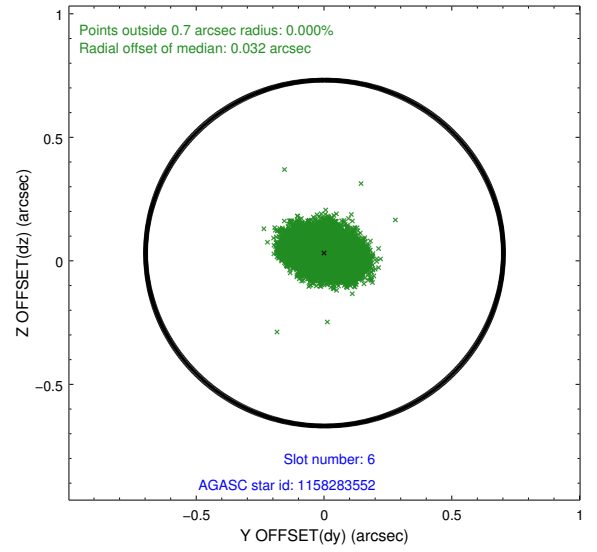
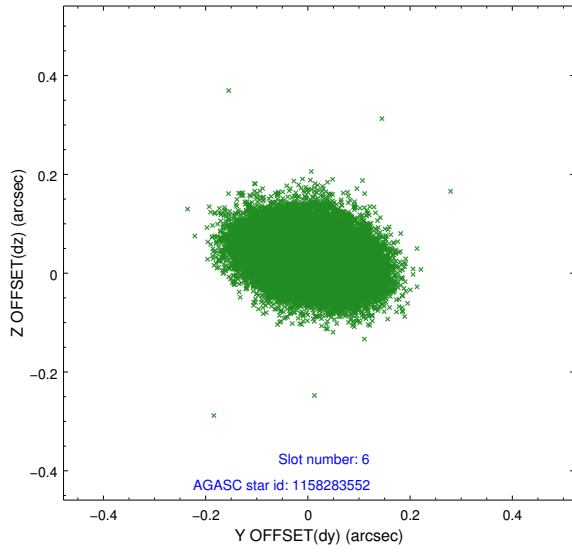
## 2.4.2 Slot 4



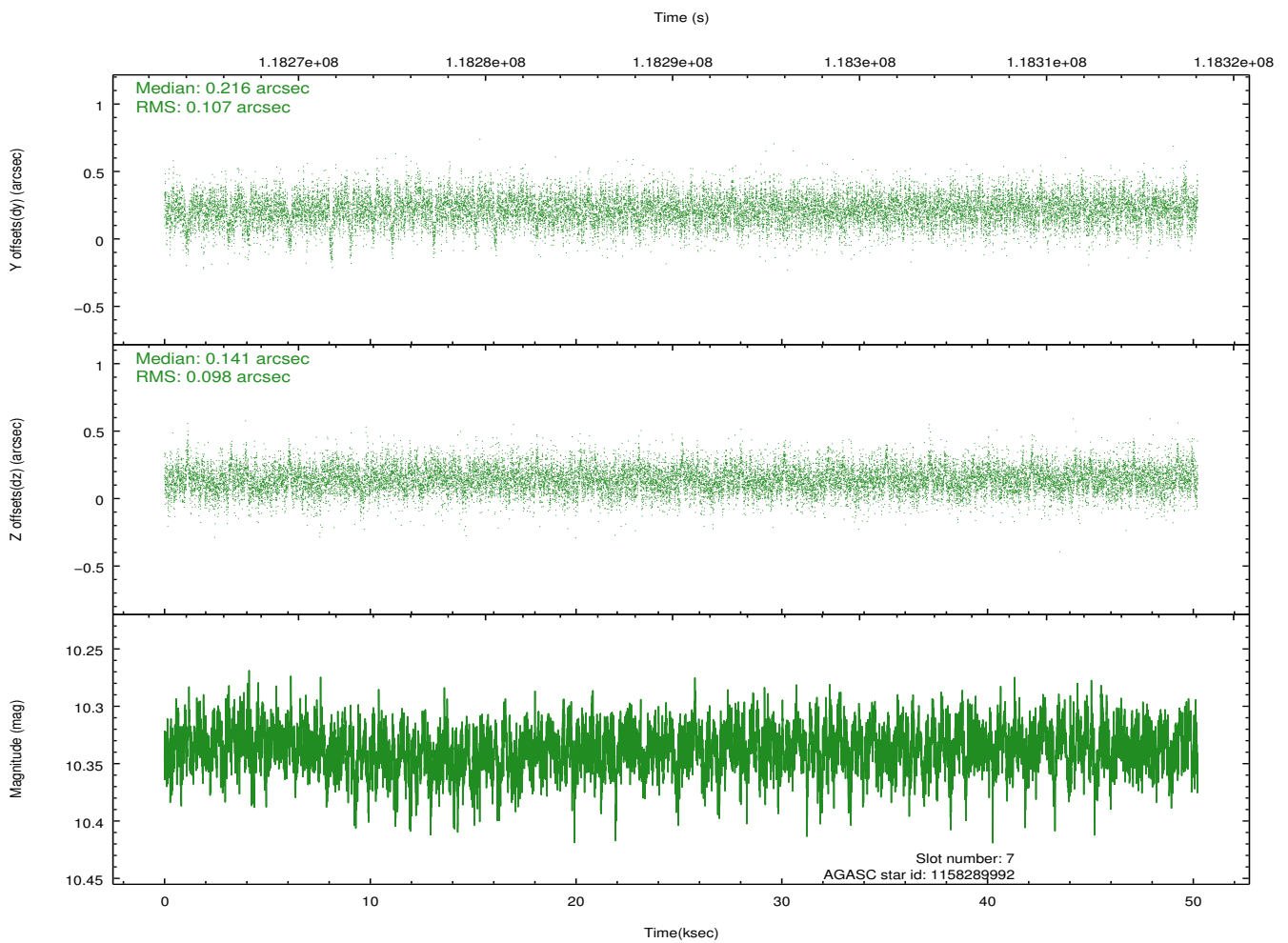
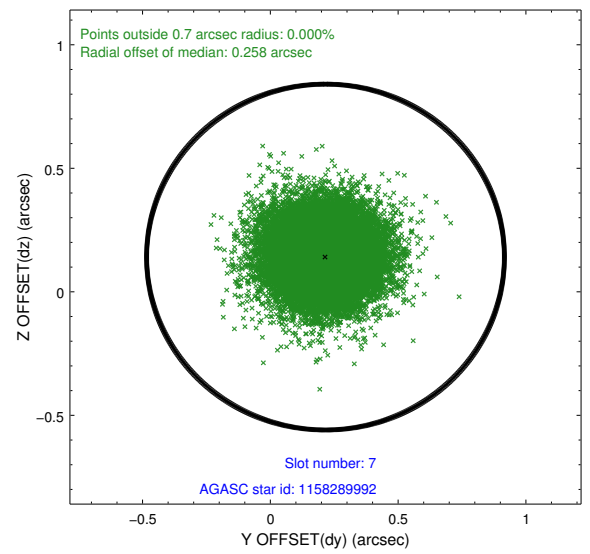
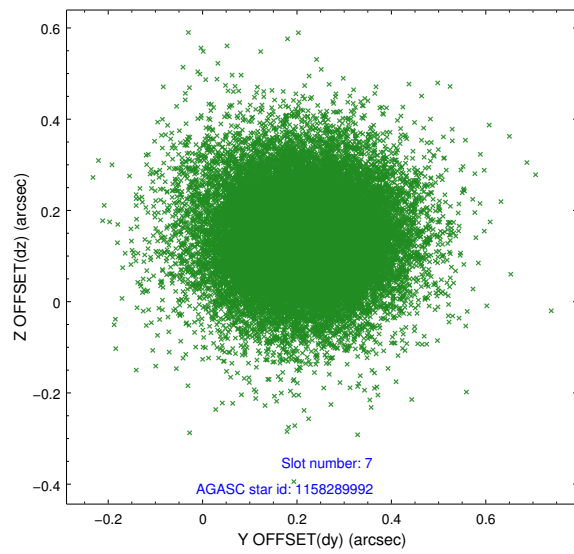
### 2.4.3 Slot 5



### 2.4.4 Slot 6

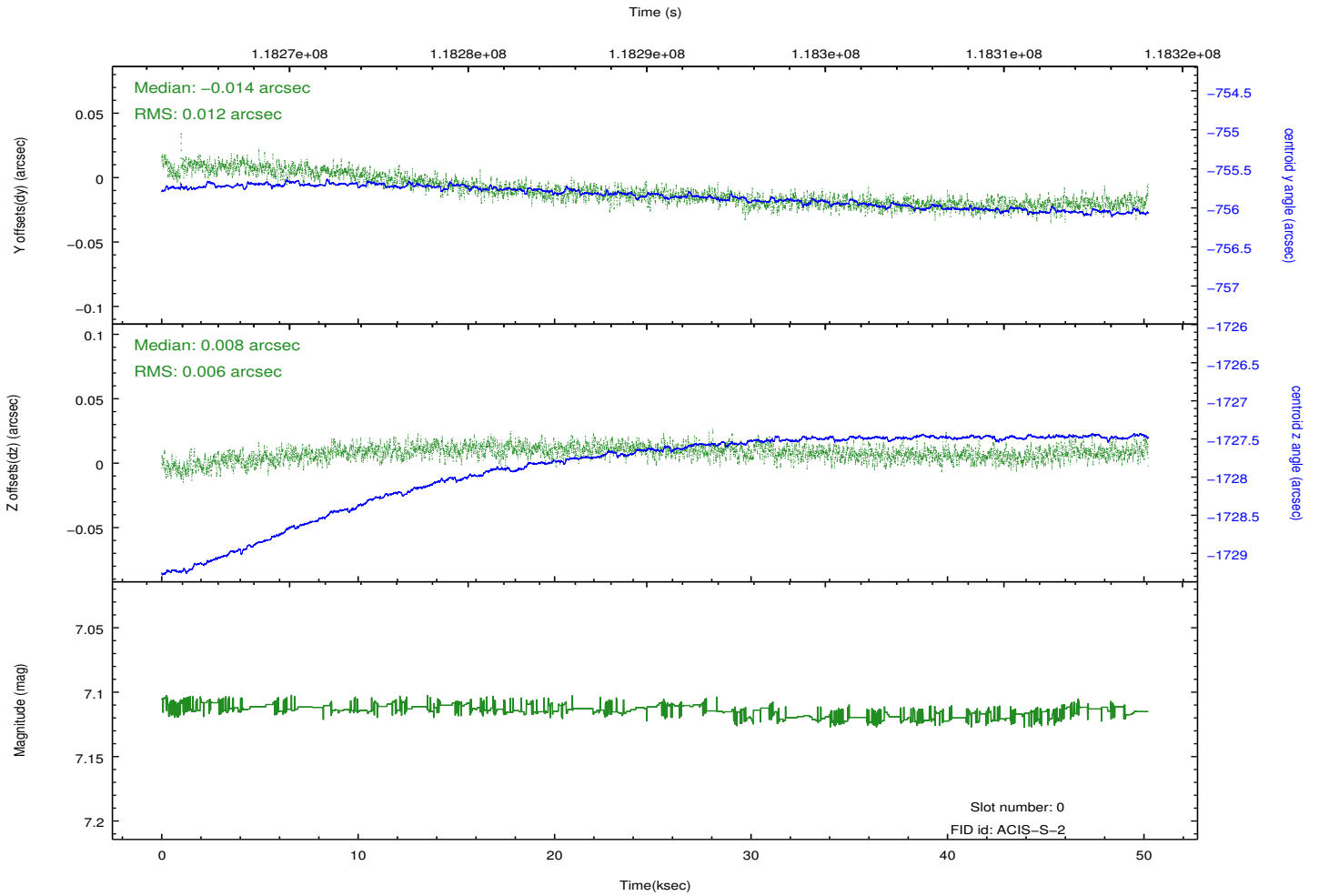
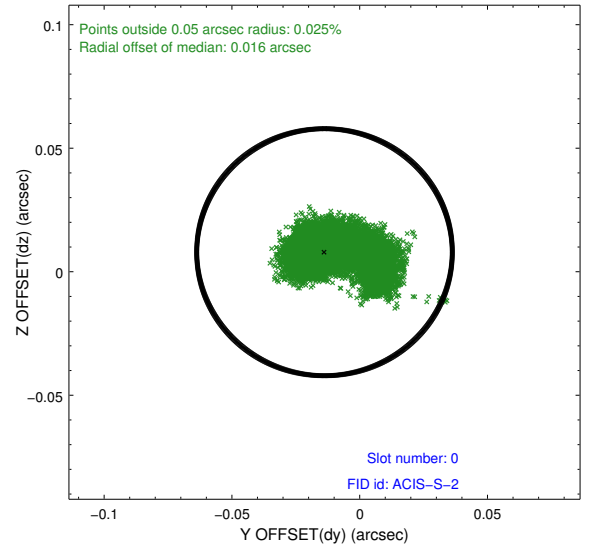
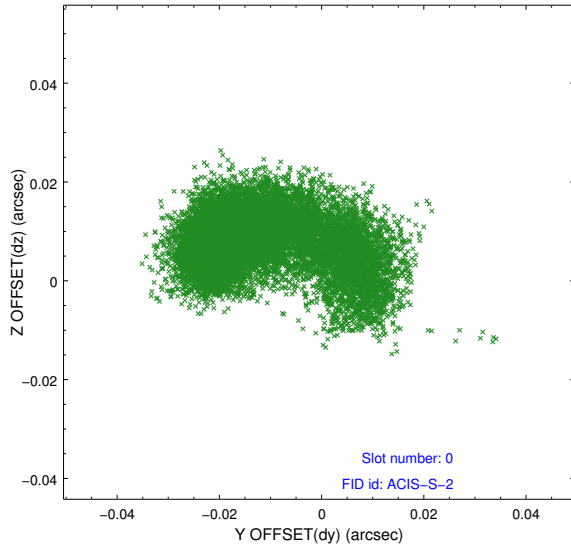


## 2.4.5 Slot 7

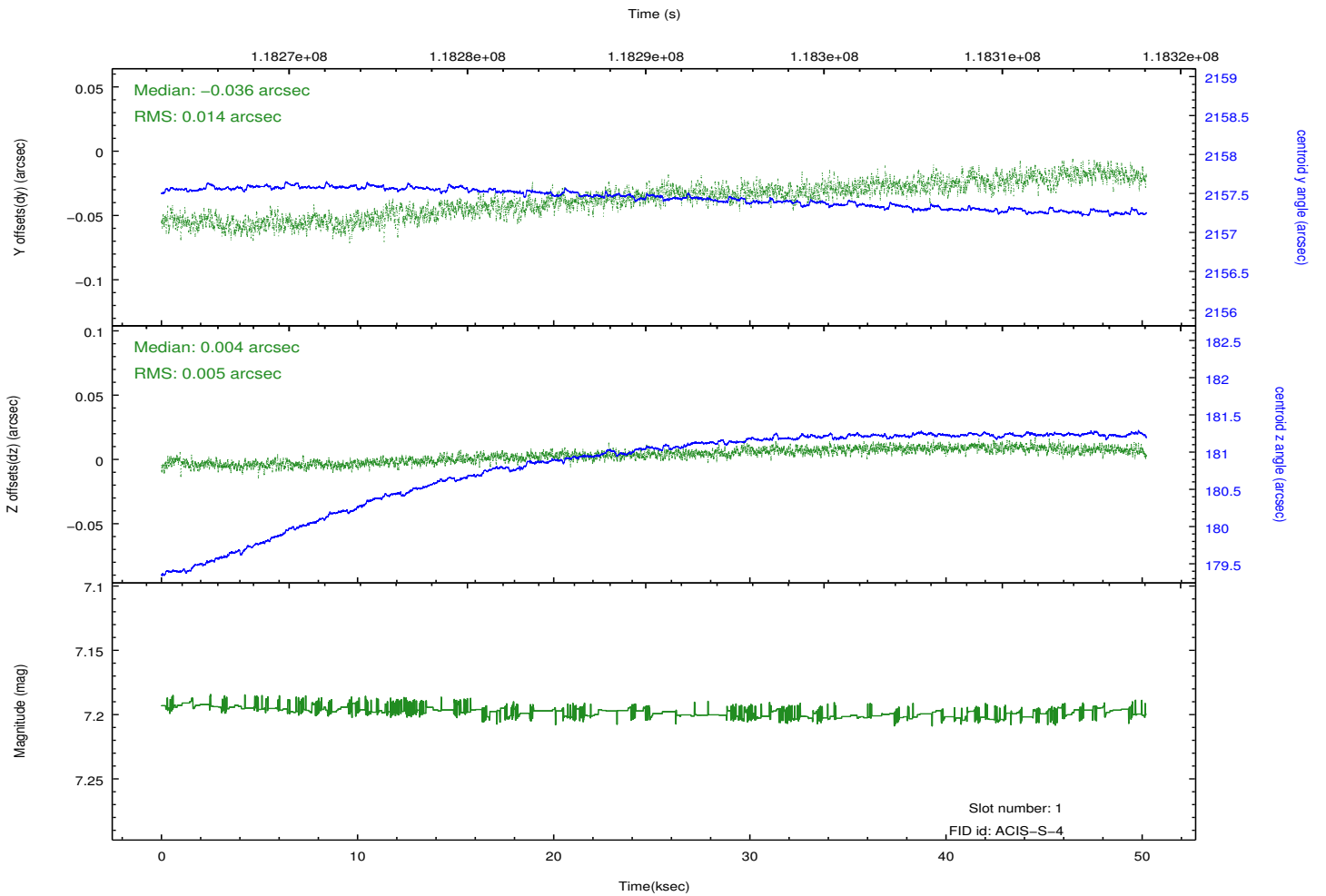
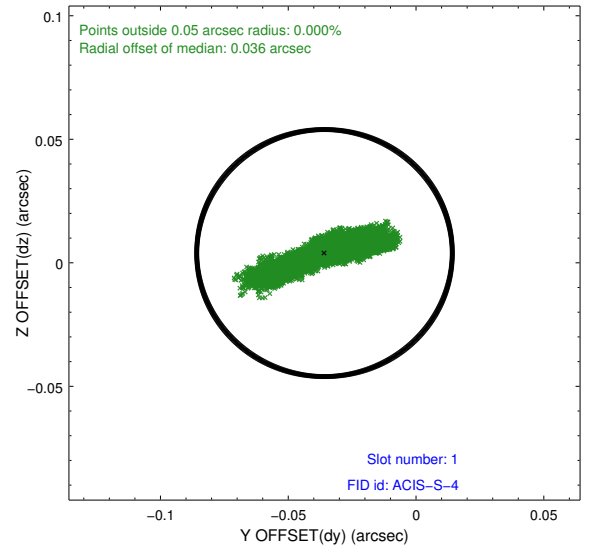
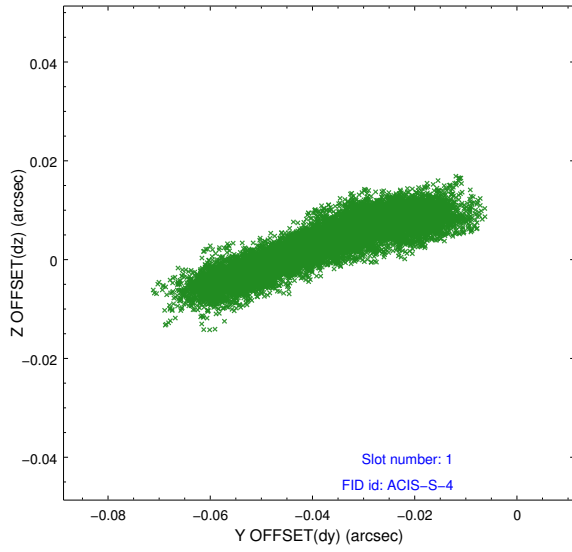


## 2.5 FID Slots

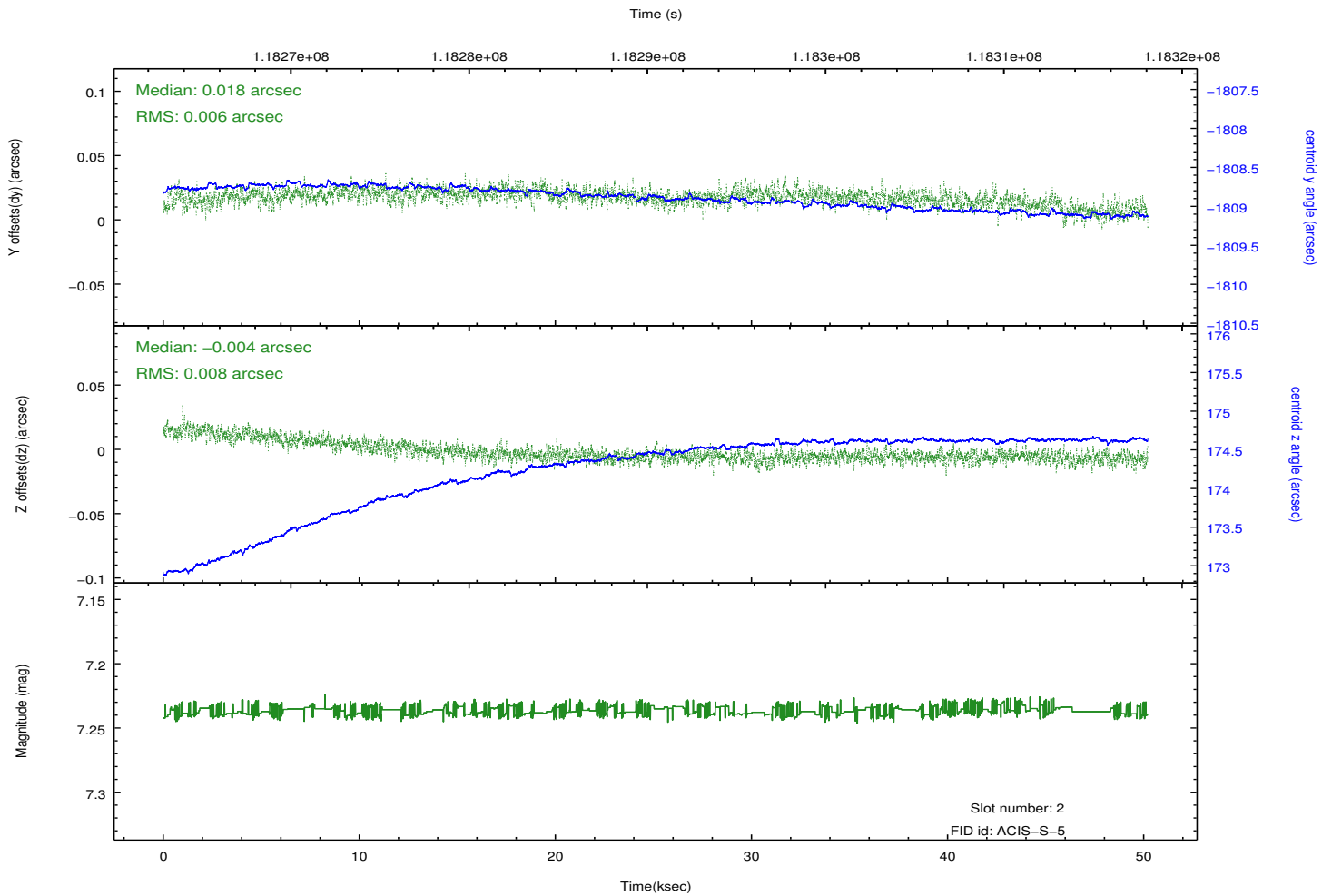
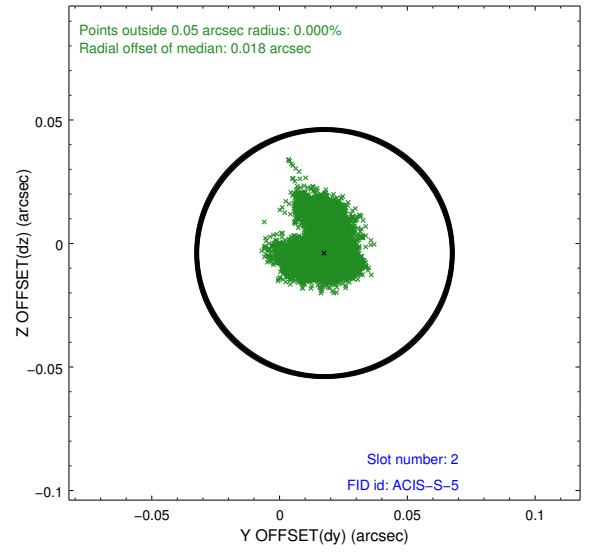
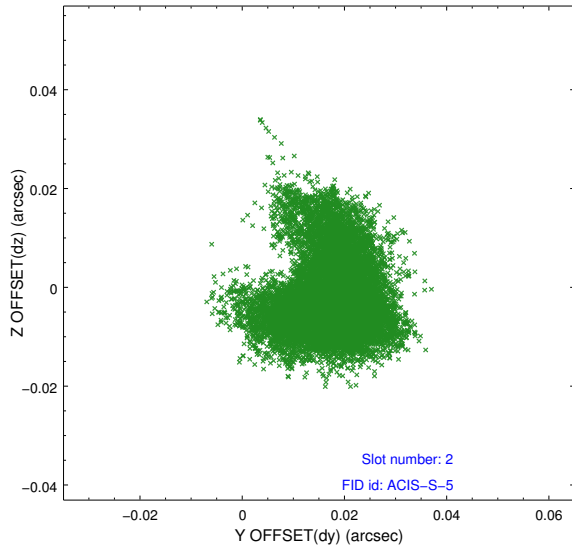
### 2.5.1 Slot 0



## 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)	2012.09.27
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	49.945

### A.2 Comments