

# V&V Reference Report

## L2 ASCDS Version : 8.4.3.1

Observation 6971 - L2 Version 2  
Chandra X-Ray Center

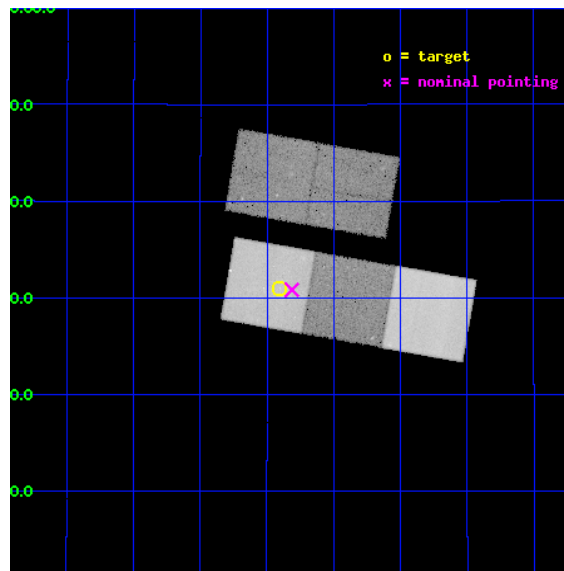
L2 Processing Date : Apr 7 2012

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# 1 Front

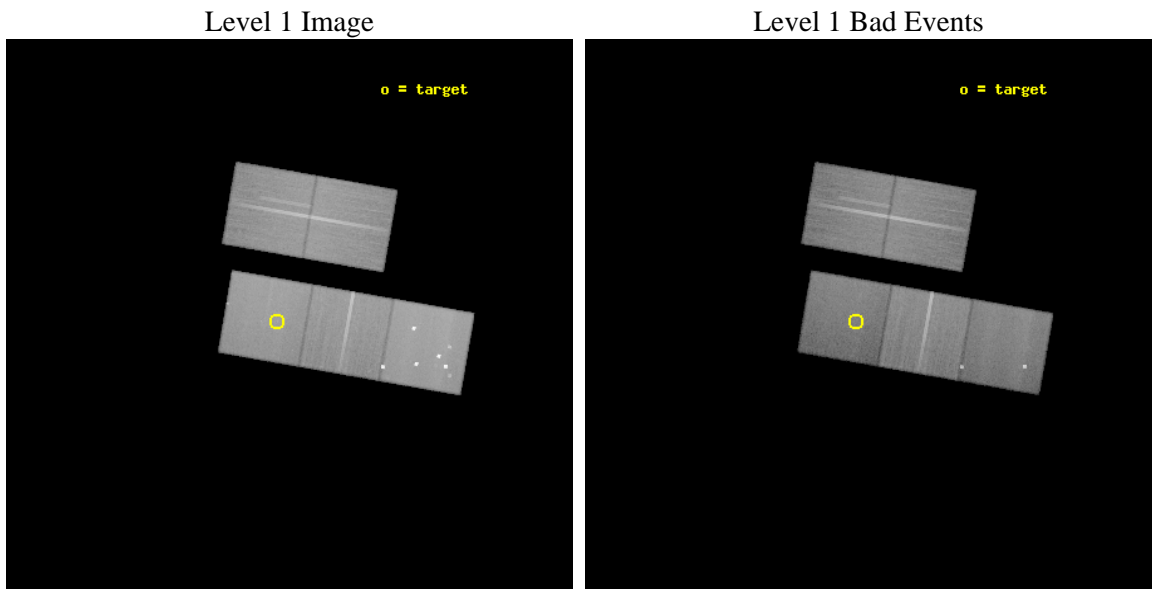
seq_num	800604	Sequence number
obs_id	6971	Observation id
title	Dark and Luminous Matter in the B2108+213 Group	Proposal title
observer	Prof. Christopher Fassnacht	Principal investigator
object	CLASS B2108+213	Source name
dtycycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	317.725417	Observer's specified target RA [deg]
dec_targ	21.516028	Observer's specified target Dec [deg]
ra_nom	317.70315969866	Nominal RA [deg]
dec_nom	21.514138368177	Nominal Dec [deg]
roll_nom	189.91467667122	Nominal Roll [deg]
revision	2	Processing version of data
ontime	46109.400354624	Sum of GTIs [s]
livetime	45506.947093744	Livetime [s]
ontime2	46106.259364307	Sum of GTIs [s]
ontime3	46109.400354624	Sum of GTIs [s]
ontime5	46109.400354624	Sum of GTIs [s]
ontime6	46109.400354624	Sum of GTIs [s]
ontime7	46109.400354624	Sum of GTIs [s]
l2events	472729	Number of level 2 events



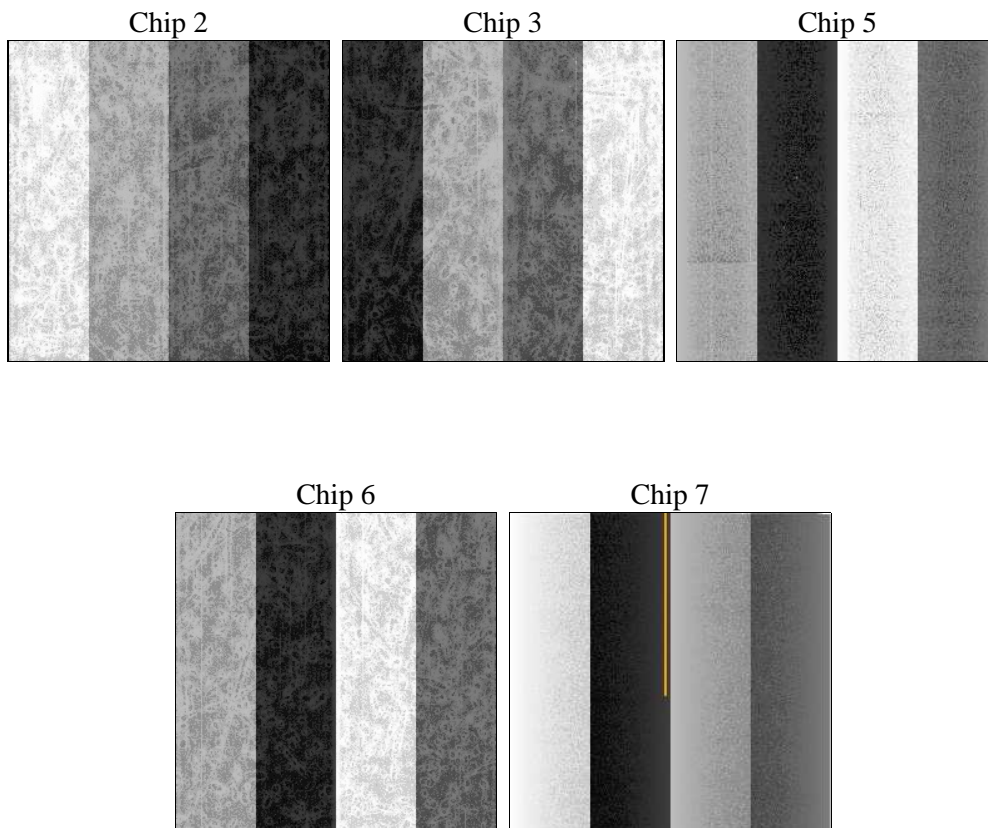
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	46000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3.1	Processing system revision	ontime	46109.400354624	Sum of GTIs [s]
caldsver	4.4.9	&#160	ontime2	46106.259364307	Sum of GTIs [s]
date	2012-04-07T11:02:45	Date and time of file creation	ontime3	46109.400354624	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	46109.400354624	Sum of GTIs [s]
			ontime6	46109.400354624	Sum of GTIs [s]
			ontime7	46109.400354624	Sum of GTIs [s]
			l1events	2021214	Number of level 1 events

### 2.1.4 Events

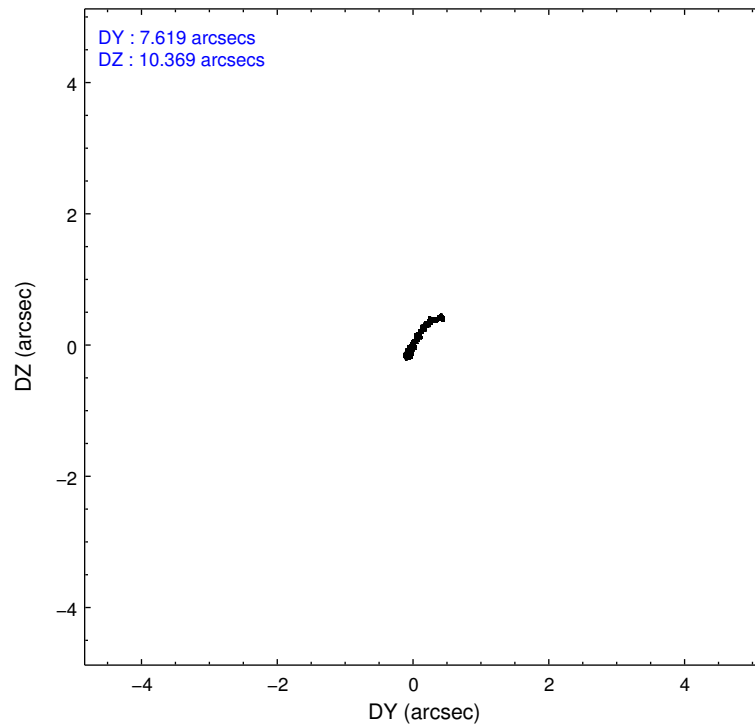
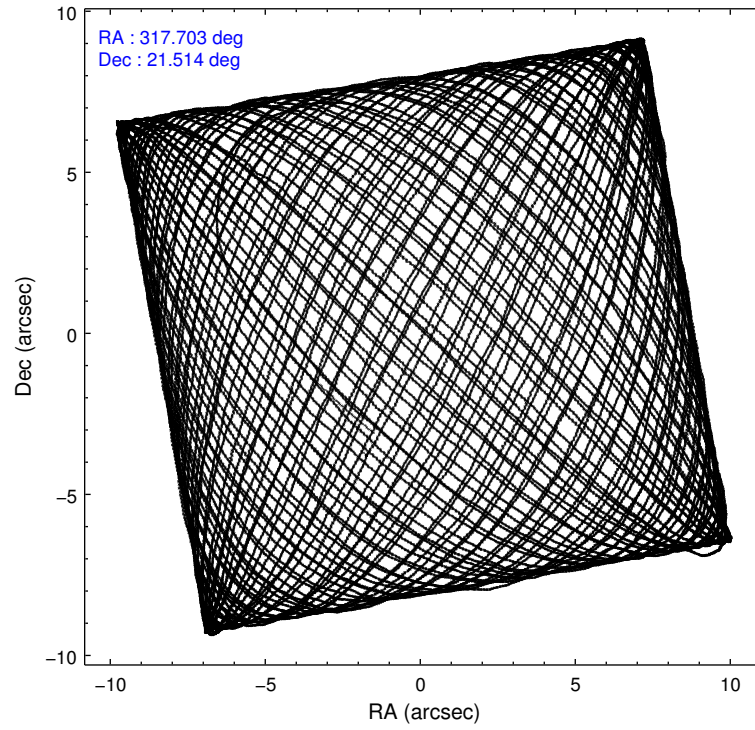
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	372655	352018	542637	365354	388550
rejected events	339965	320214	251376	330037	213497
rejected %	91%	90%	46%	90%	54%

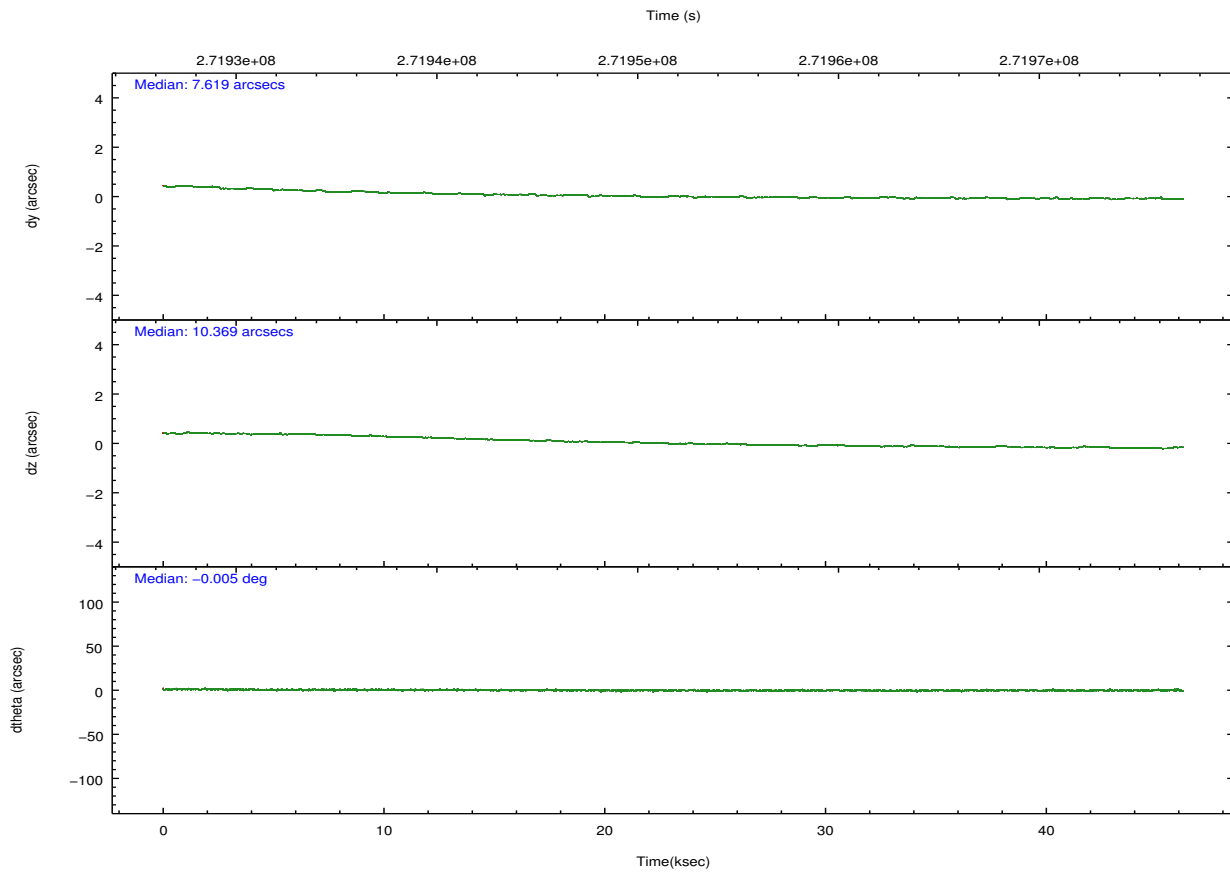
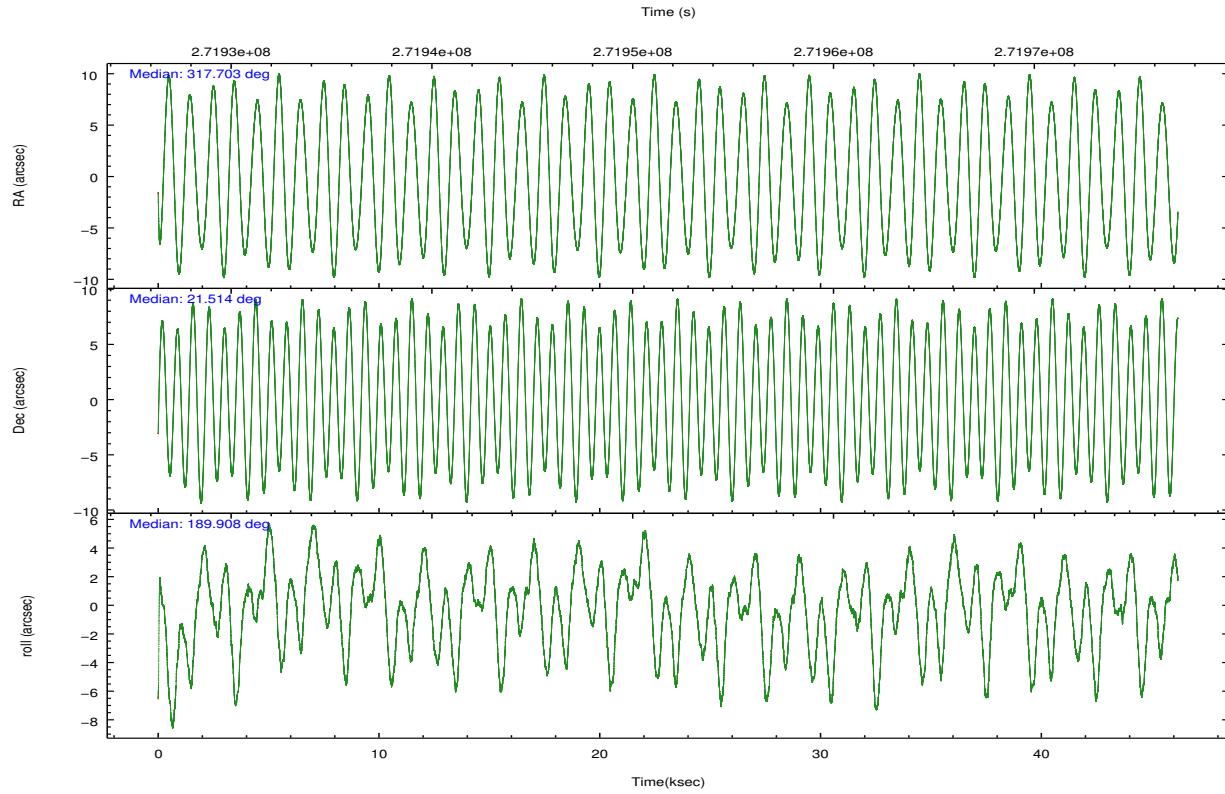
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	11505	11232	58480	12033	15220
	3%	3%	10%	3%	3%
grade 1 events	176	182	853	158	340
	0%	0%	0%	0%	0%
grade 2 events	7582	6646	78391	7797	34805
	2%	1%	14%	2%	8%
grade 3 events	3677	3815	11609	3898	16202
	0%	1%	2%	1%	4%
grade 4 events	3764	3723	9319	3830	16079
	1%	1%	1%	1%	4%
grade 5 events	10980	13626	38422	13844	40699
	2%	3%	7%	3%	10%
grade 6 events	6166	6393	133501	7765	92773
	1%	1%	24%	2%	23%
grade 7 events	328805	306401	212062	316029	172432
	88%	87%	39%	86%	44%

## 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	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	317.725366	317.7031596986594	Subarray requested	NONE	NONE
[deg] Pointing Dec	21.531893	21.51413836817658	Alternating exposures requested	N	N
[deg] Pointing Roll	189.749901	189.9146766712186	[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	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	271928859.184000	271927892.24849			
Observation start date	2006-08-14T07:46:34	2006-08-14T07:31:32			
[s] Observation end time (MET)	271974859.184000	271975780.25074			
Observation end date	2006-08-14T20:33:14	2006-08-14T20:49:40			
Read mode	TIMED	TIMED			

## 2.3 Aspect



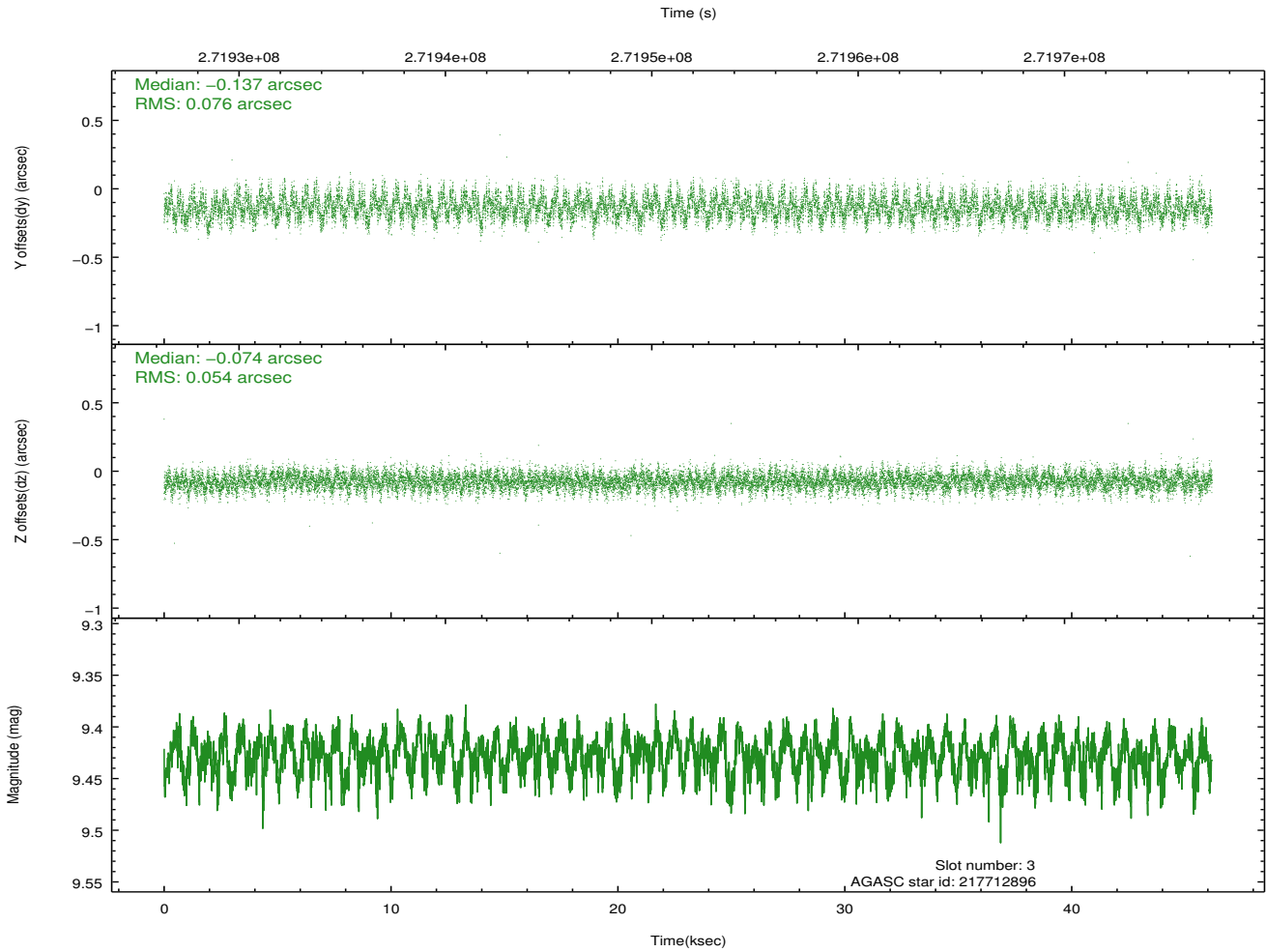
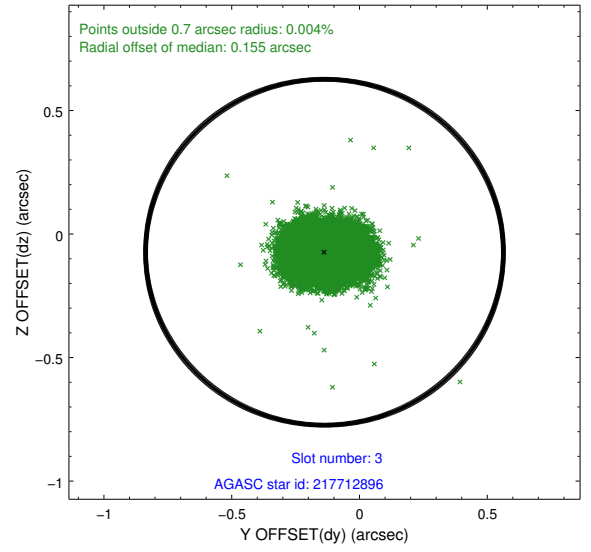
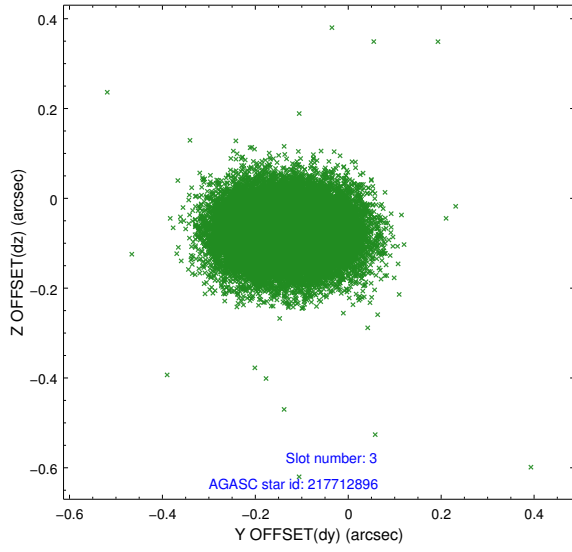


### Slot Statistics

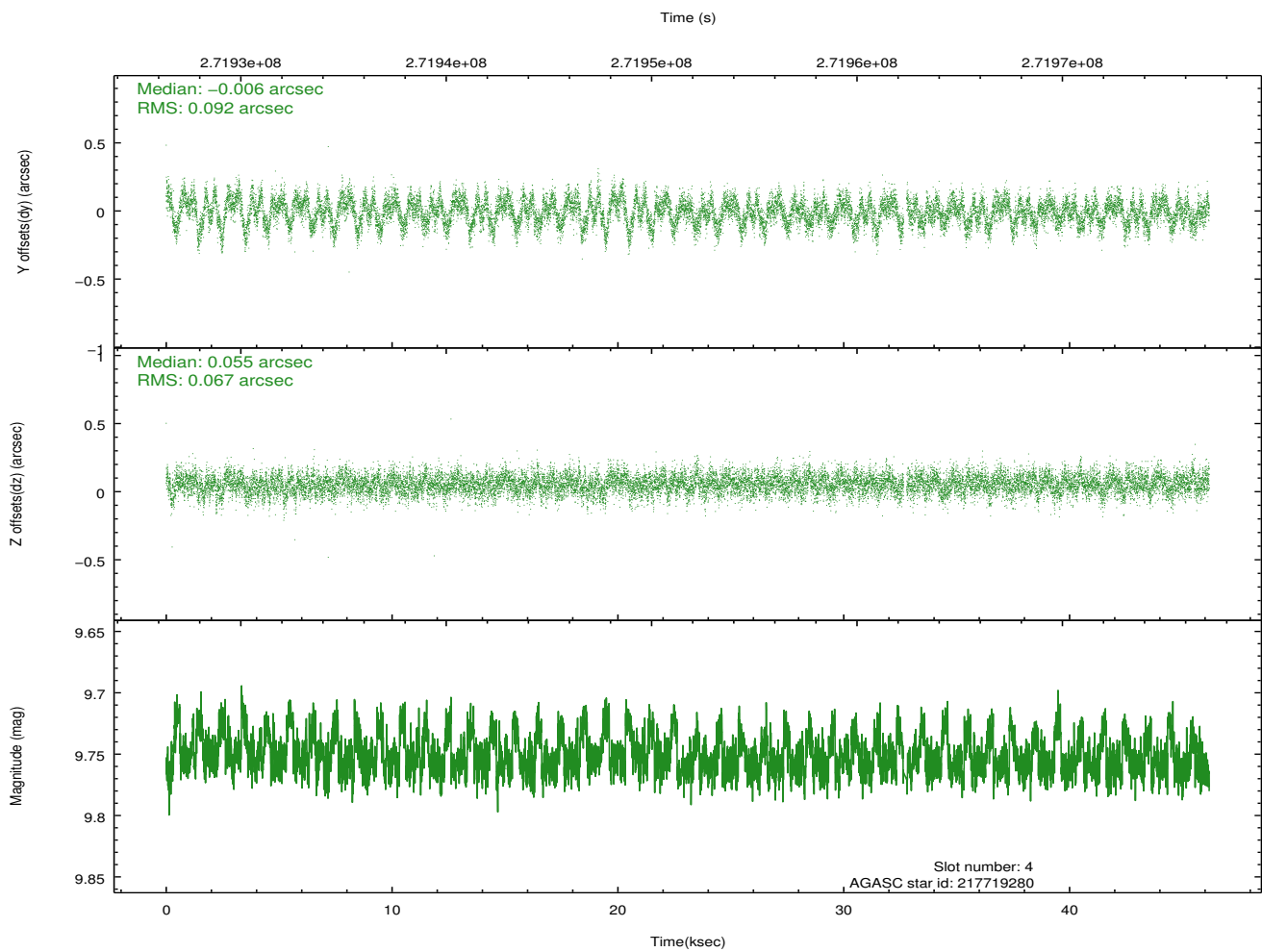
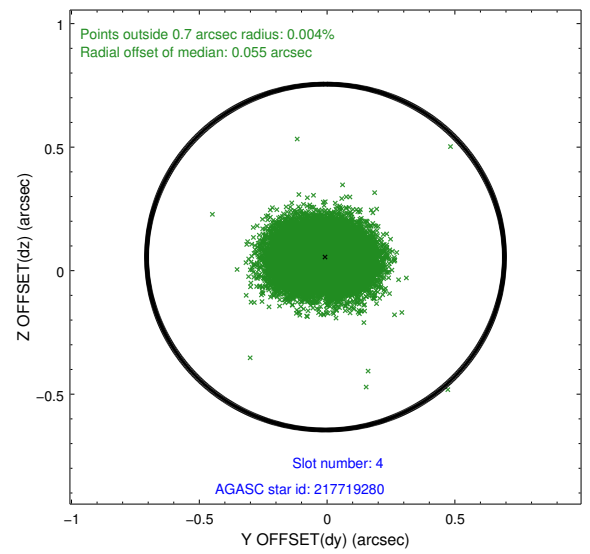
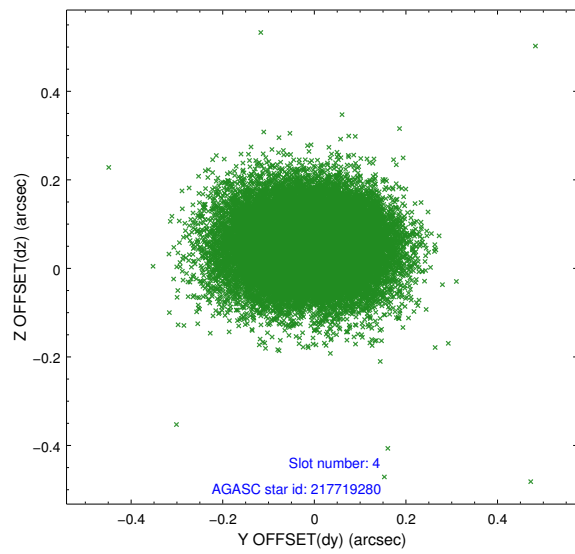
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	11266	-0.082	-0.062	0.007	0.016	0.000000	0.000000	-760.49	-1731.76
1	FID	ACIS-S-4	7.21	11266	0.088	0.033	0.007	0.013	0.000000	0.000000	2152.92	176.87
2	FID	ACIS-S-6	7.35	11265	-0.034	0.036	0.008	0.013	0.000000	0.000000	401.48	814.23
3	GUIDE	217712896	9.43	22510	-0.137	-0.074	0.099	0.159	317.265071	20.877580	1924.30	2057.61
4	GUIDE	217719280	9.75	22447	-0.006	0.055	0.120	0.195	317.456462	21.641256	820.33	-540.63
5	GUIDE	217726712	9.51	22503	-0.012	0.014	0.129	0.204	317.090069	22.058368	1767.91	-2230.71
6	GUIDE	217846920	9.63	22513	0.109	0.022	0.117	0.187	318.267529	21.292593	-1646.90	1153.91
7	GUIDE	217843496	9.42	22512	0.056	-0.017	0.105	0.179	318.422001	21.421538	-2234.77	781.86

## 2.4 Star Slots

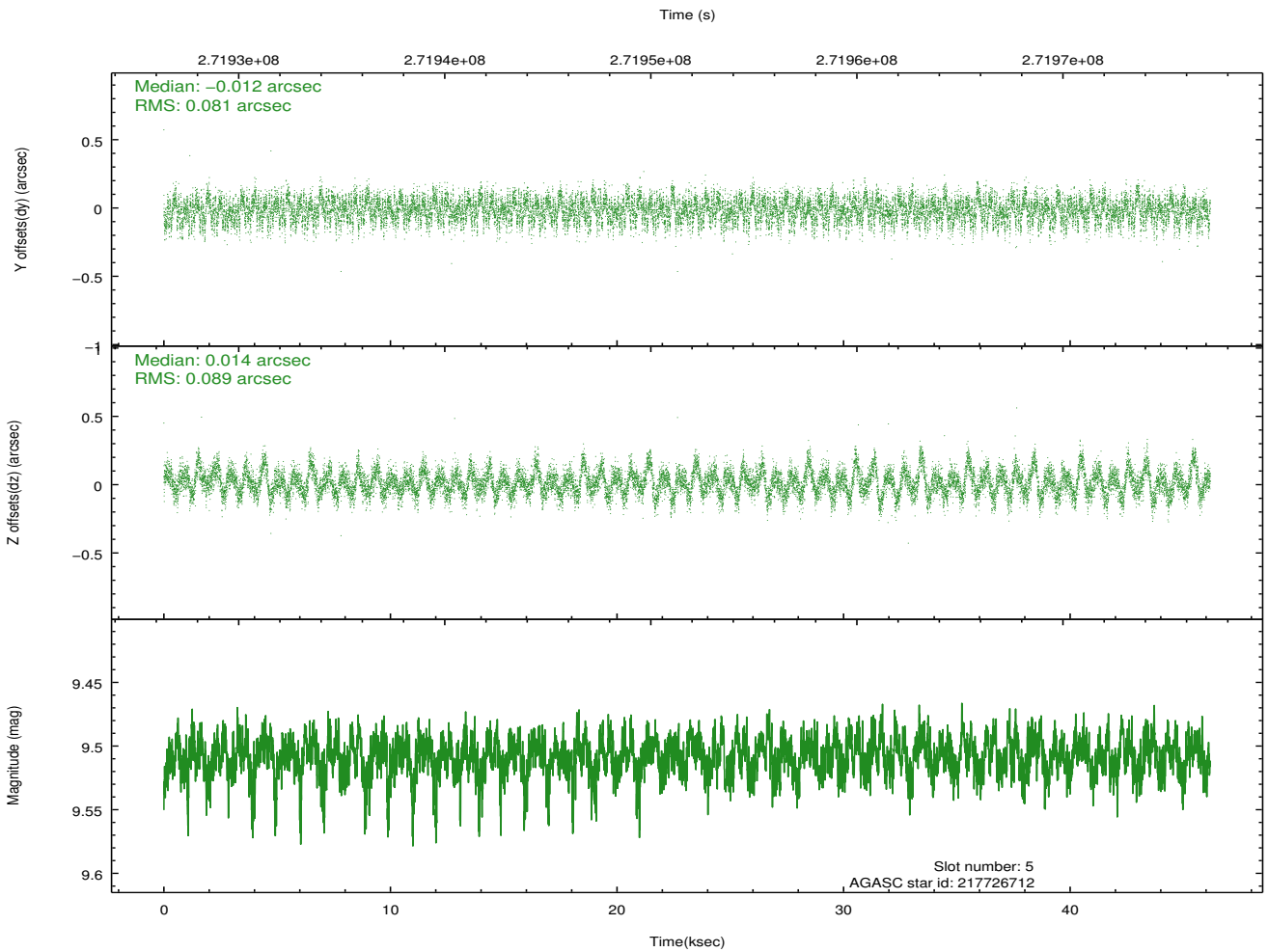
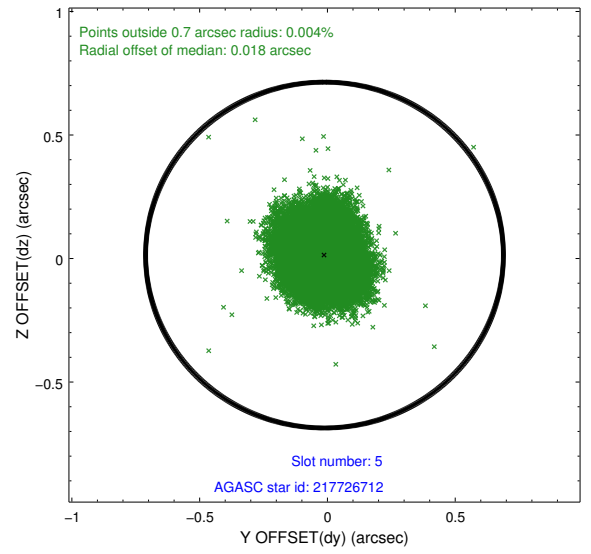
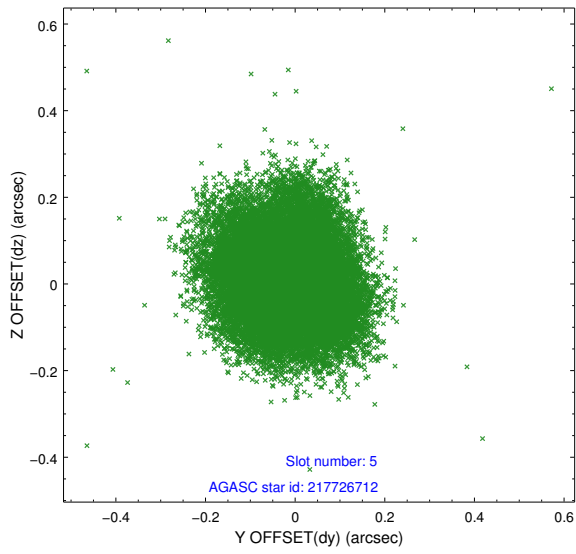
### 2.4.1 Slot 3



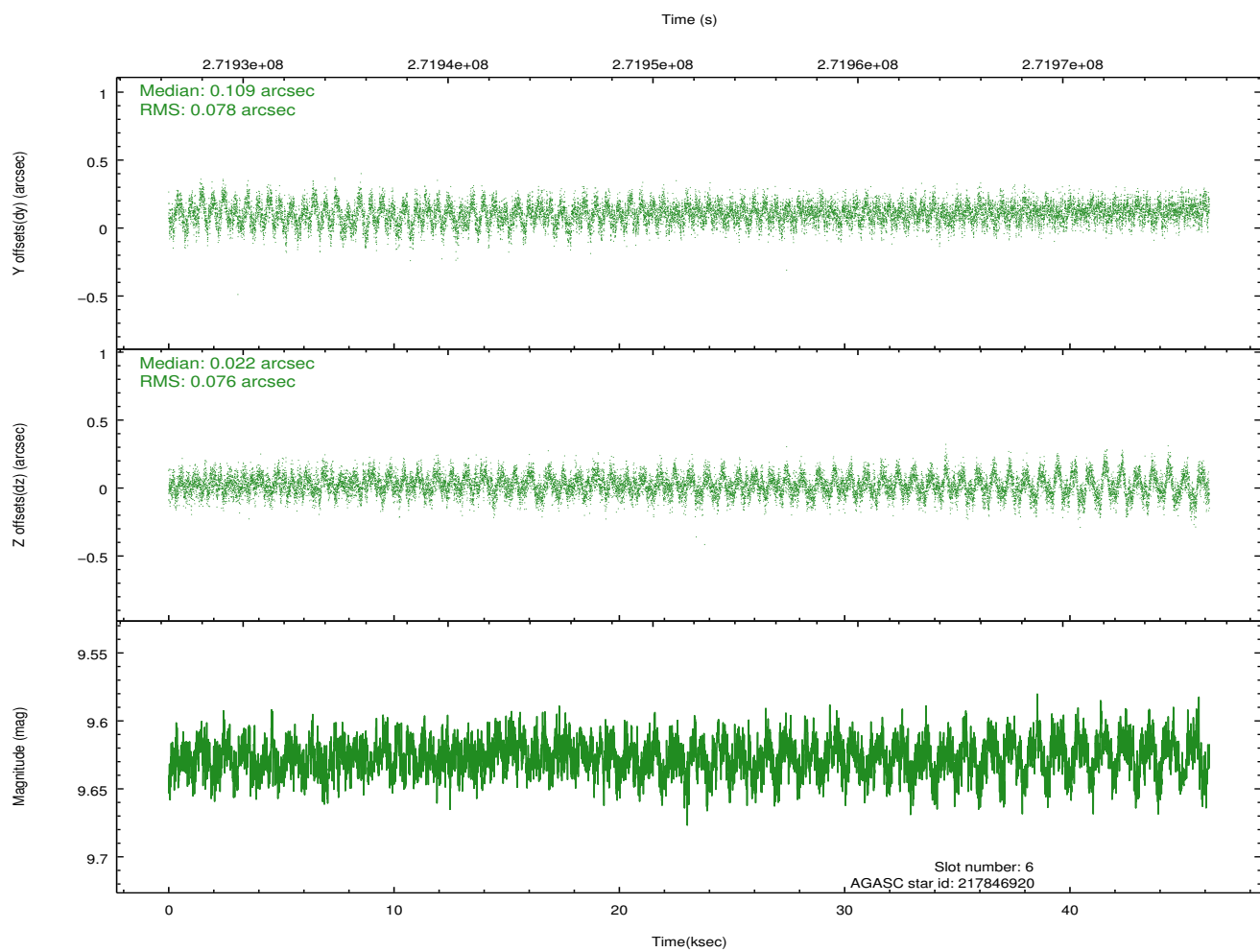
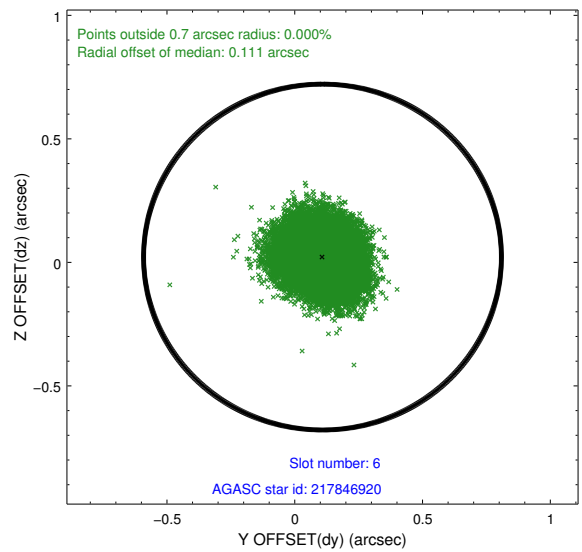
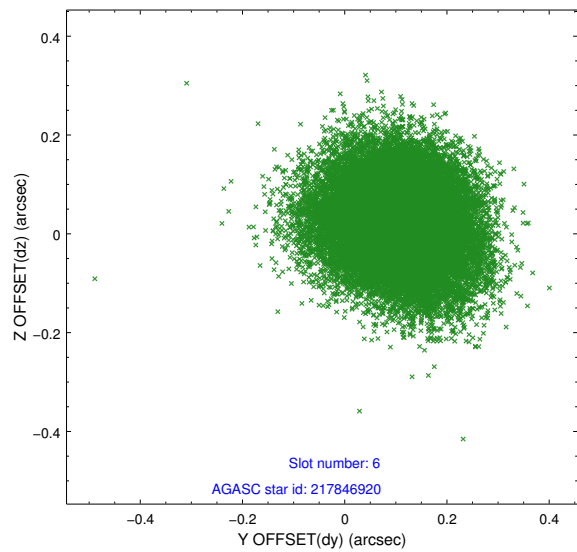
## 2.4.2 Slot 4



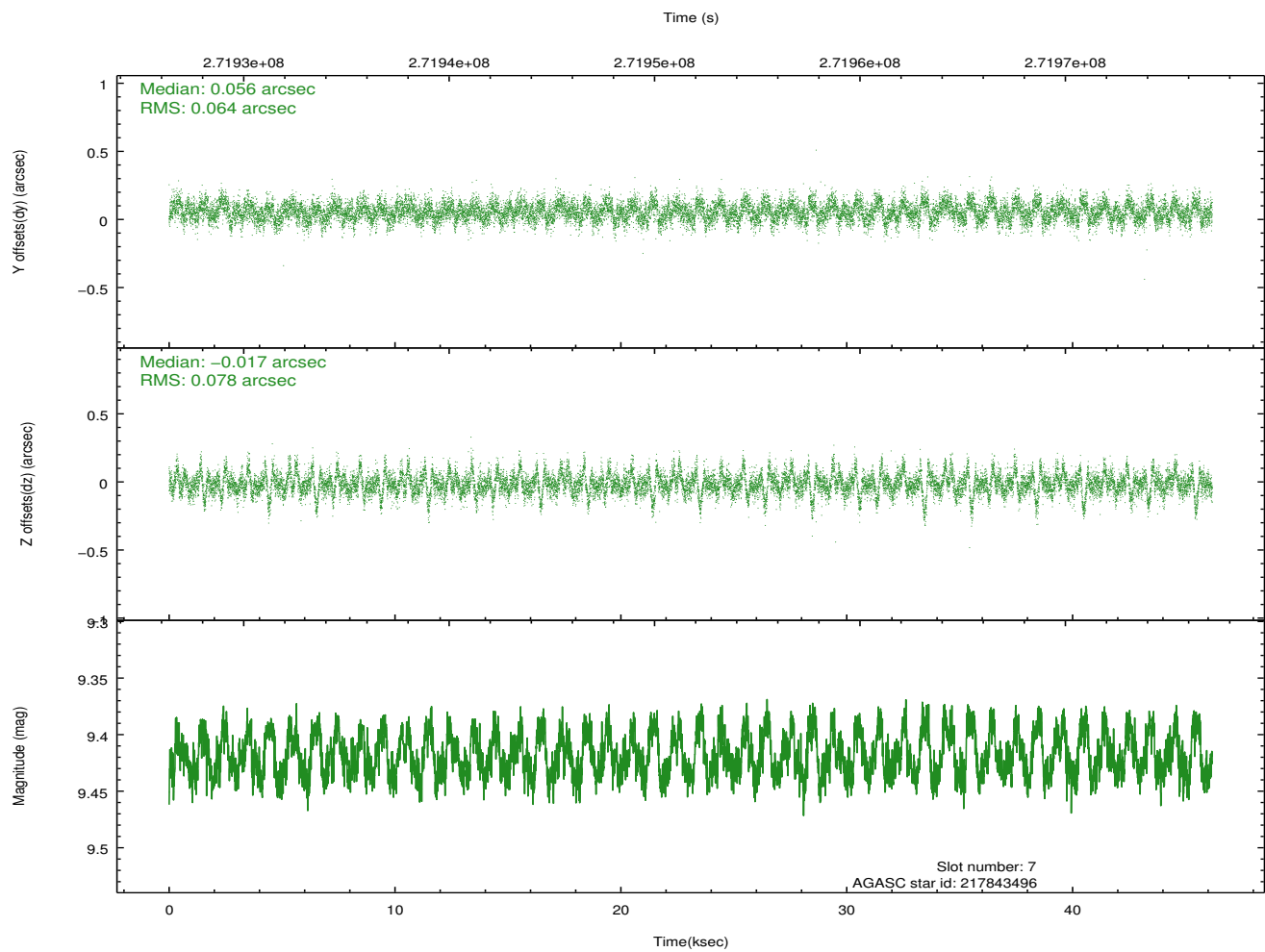
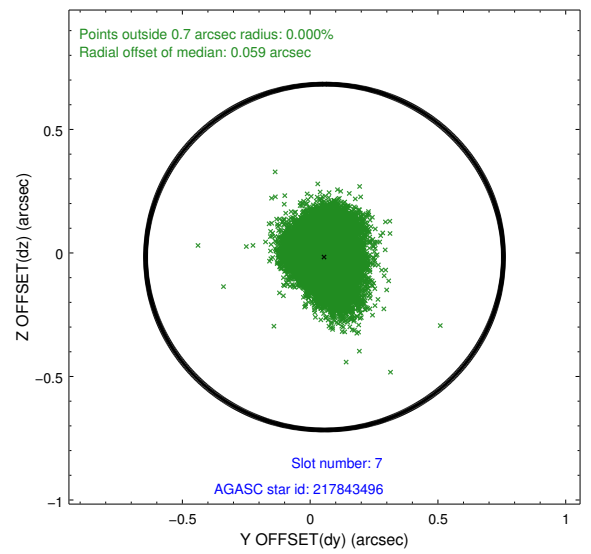
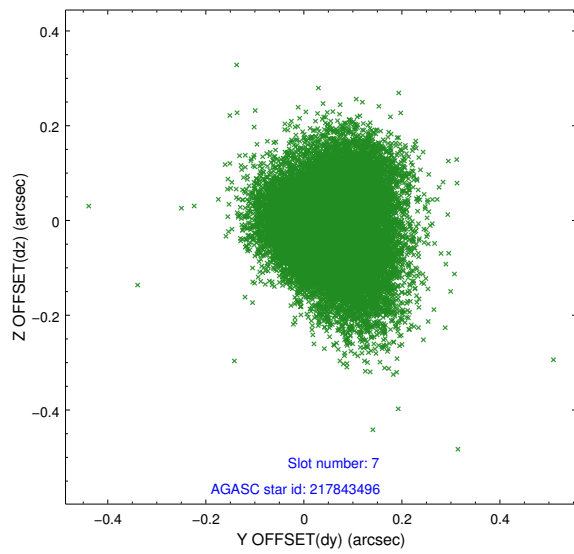
### 2.4.3 Slot 5



## 2.4.4 Slot 6

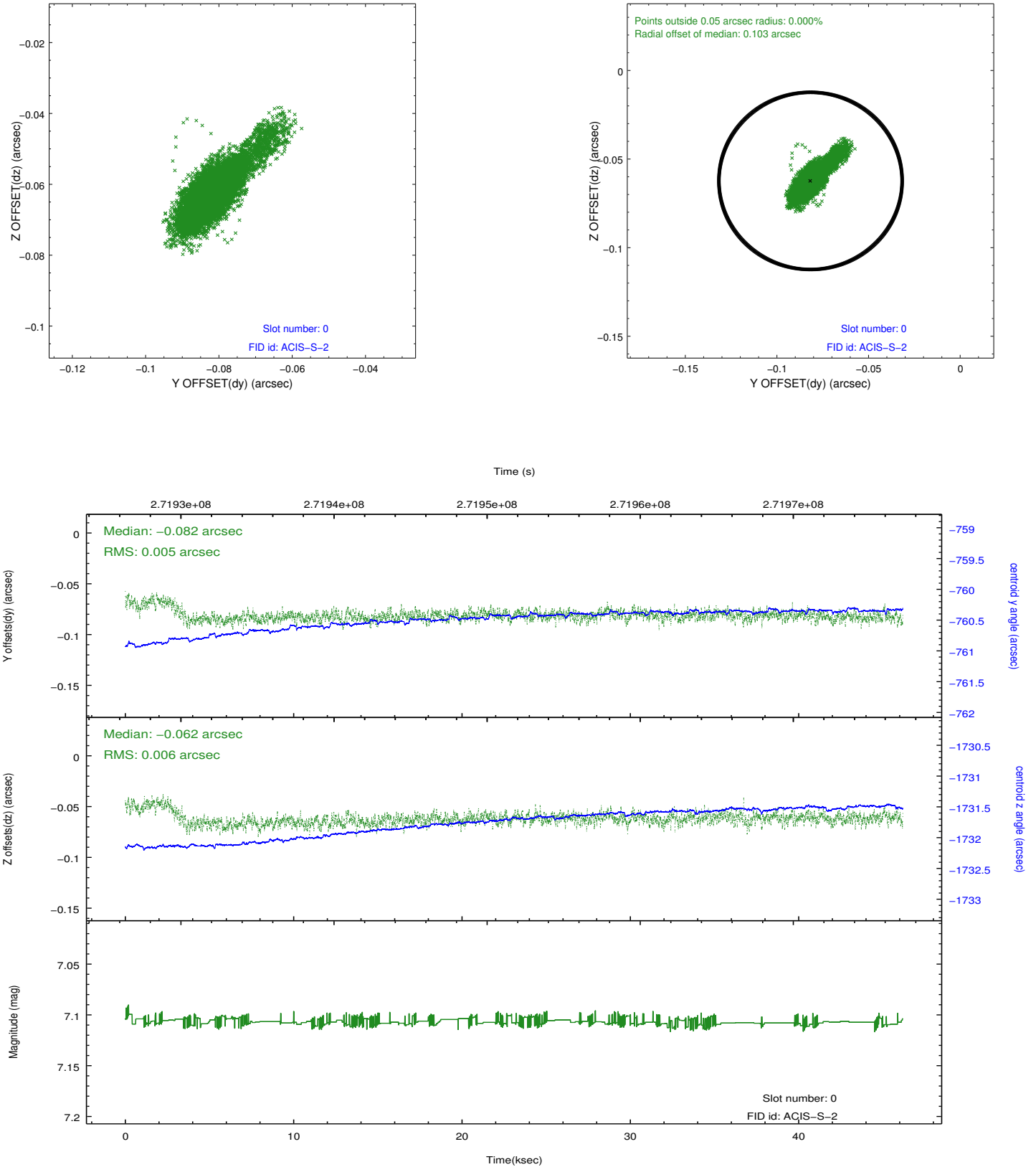


## 2.4.5 Slot 7

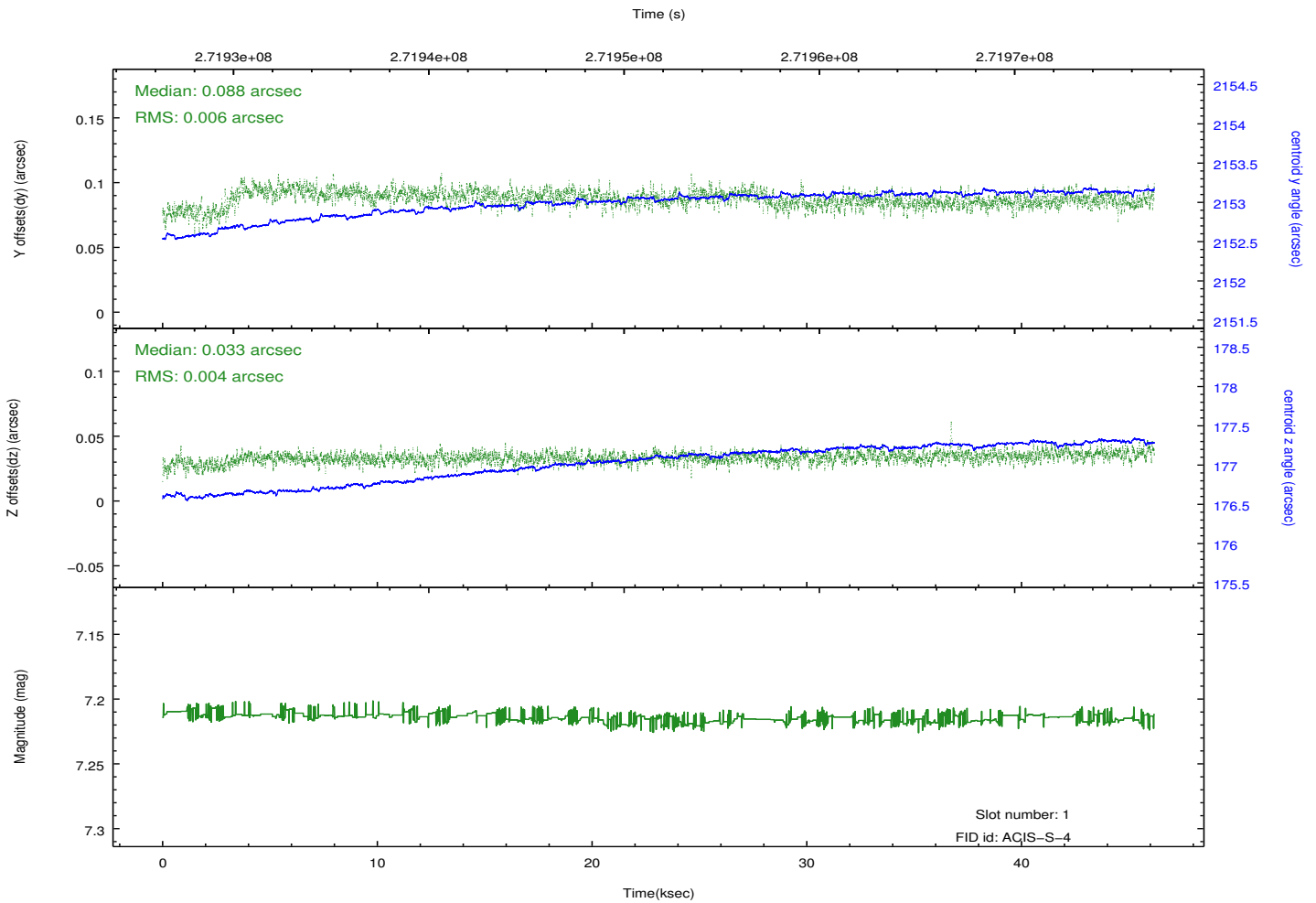
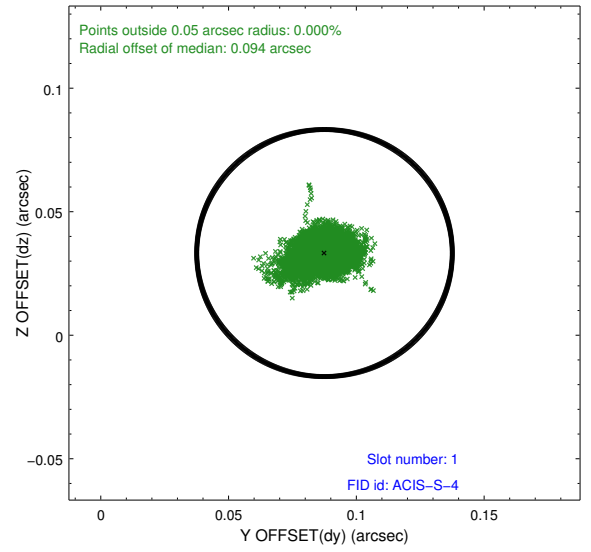
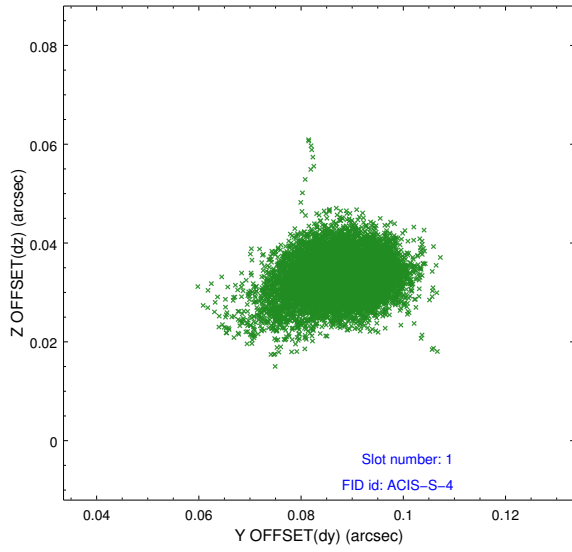


## 2.5 FID Slots

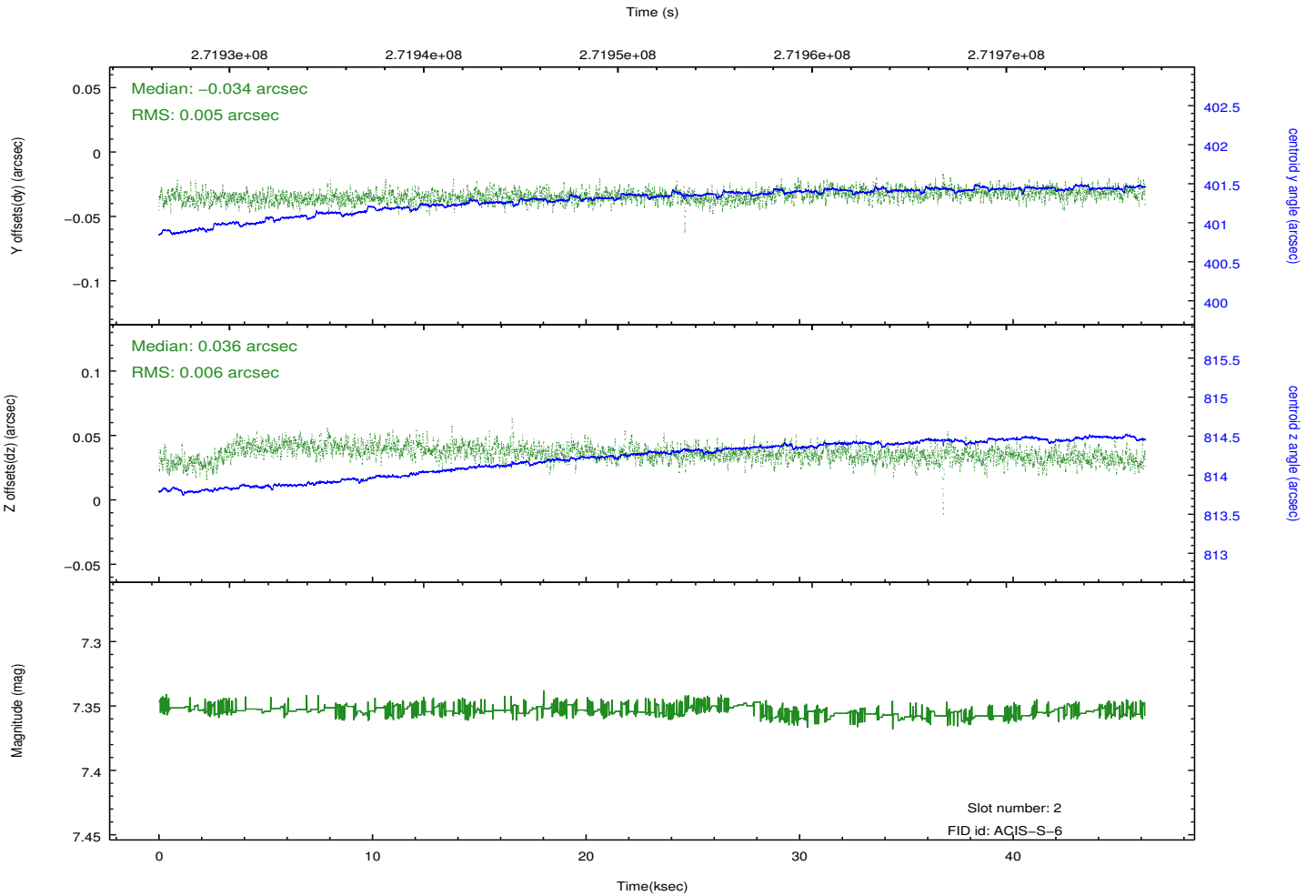
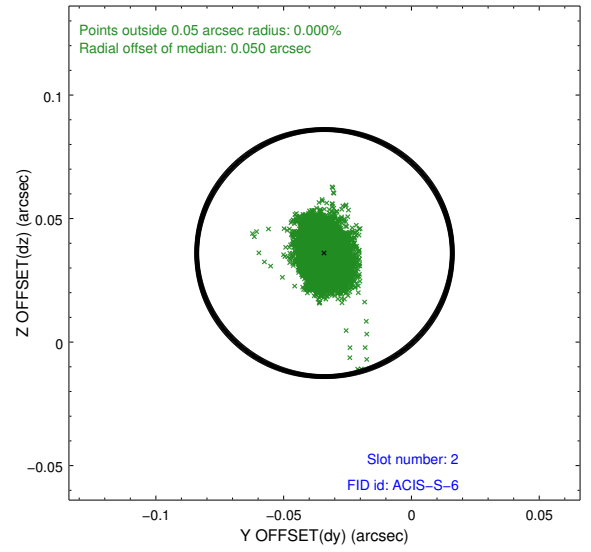
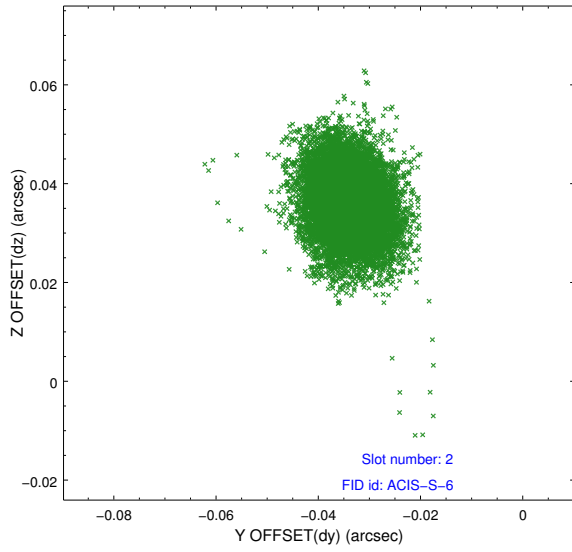
### 2.5.1 Slot 0



## 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)	2012.04.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	46.1094003

## A.2 Comments