

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 2419 - L2 Version 3  
Chandra X-Ray Center

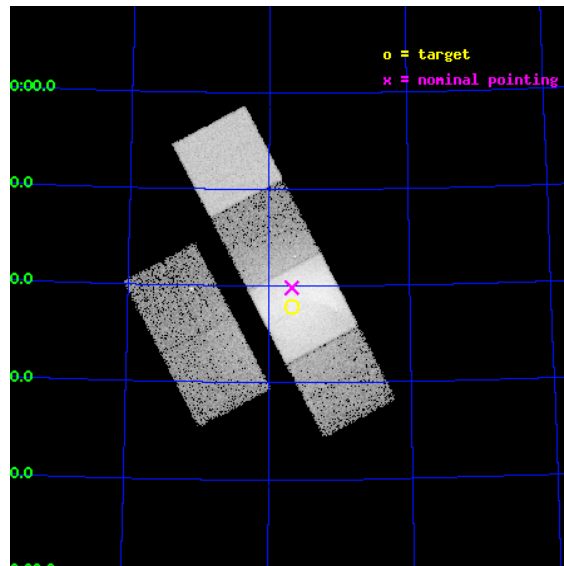
L2 Processing Date : Sep 16 2012

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# 1 Front

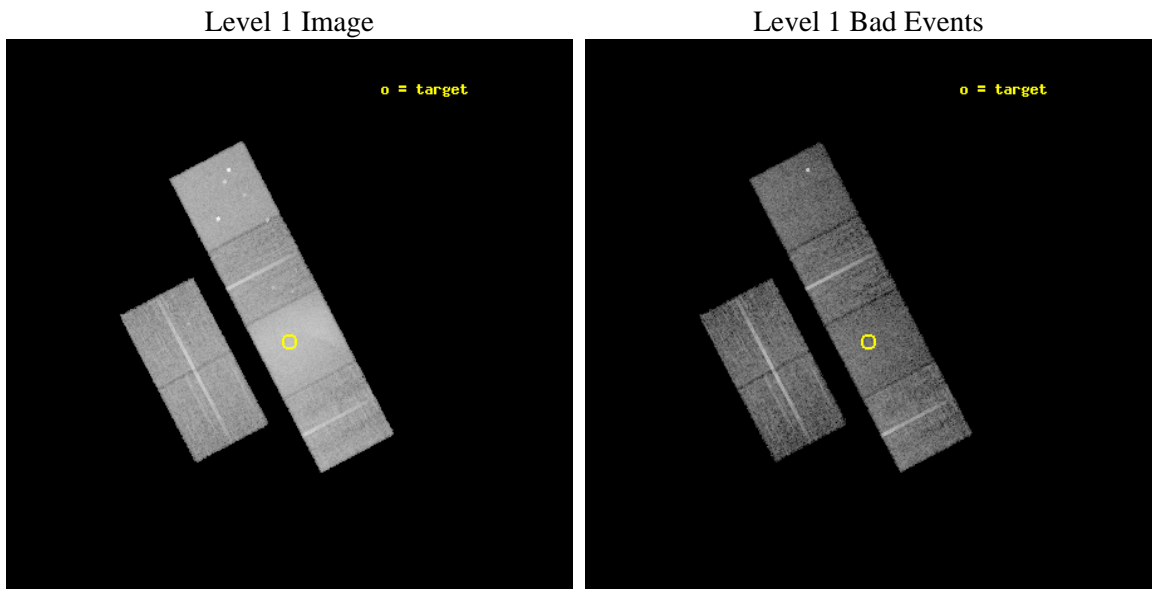
seq_num	800108	Sequence number
obs_id	2419	Observation id
title	MASS DISTRIBUTIONS OF RELAXED CLUSTERS	Proposal title
observer	Dr. Stephen Murray	Principal investigator
object	A2256	Source name
dtycycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	256.04479	Observer's specified target RA [deg]
dec_targ	78.631	Observer's specified target Dec [deg]
ra_nom	256.04655492146	Nominal RA [deg]
dec_nom	78.663787672251	Nominal Dec [deg]
roll_nom	62.38397129903	Nominal Roll [deg]
revision	3	Processing version of data
ontime	12021.038489729	Sum of GTIs [s]
livetime	11868.820862172	Livetime [s]
ontime2	12021.079529732	Sum of GTIs [s]
ontime3	12020.915369734	Sum of GTIs [s]
ontime5	12020.997449726	Sum of GTIs [s]
ontime6	12020.956409737	Sum of GTIs [s]
ontime7	12021.038489729	Sum of GTIs [s]
ontime8	12020.874329731	Sum of GTIs [s]
l2events	227638	Number of level 2 events



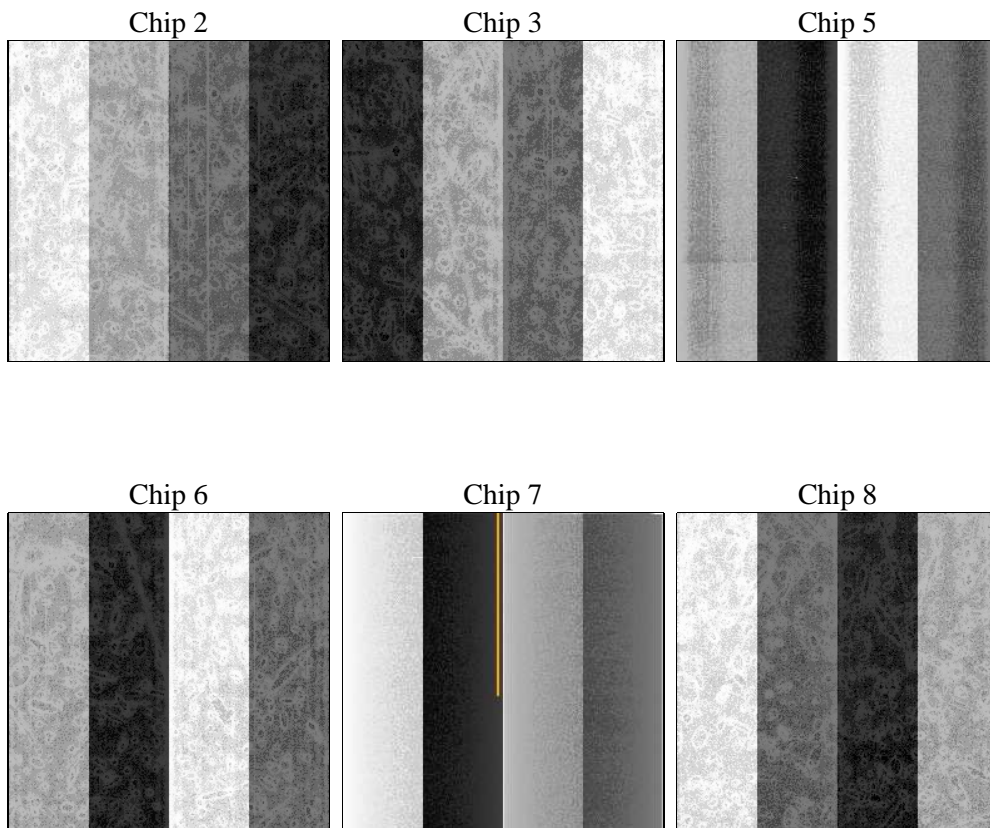
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	12100.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	12021.038489729	Sum of GTIs [s]
caldbver	4.5.1.1	&#160	ontime2	12021.079529732	Sum of GTIs [s]
date	2012-09-16T03:01:49	Date and time of file creation	ontime3	12020.915369734	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	12020.997449726	Sum of GTIs [s]
			ontime6	12020.956409737	Sum of GTIs [s]
			ontime7	12021.038489729	Sum of GTIs [s]
			ontime8	12020.874329731	Sum of GTIs [s]
			l1events	636210	Number of level 1 events

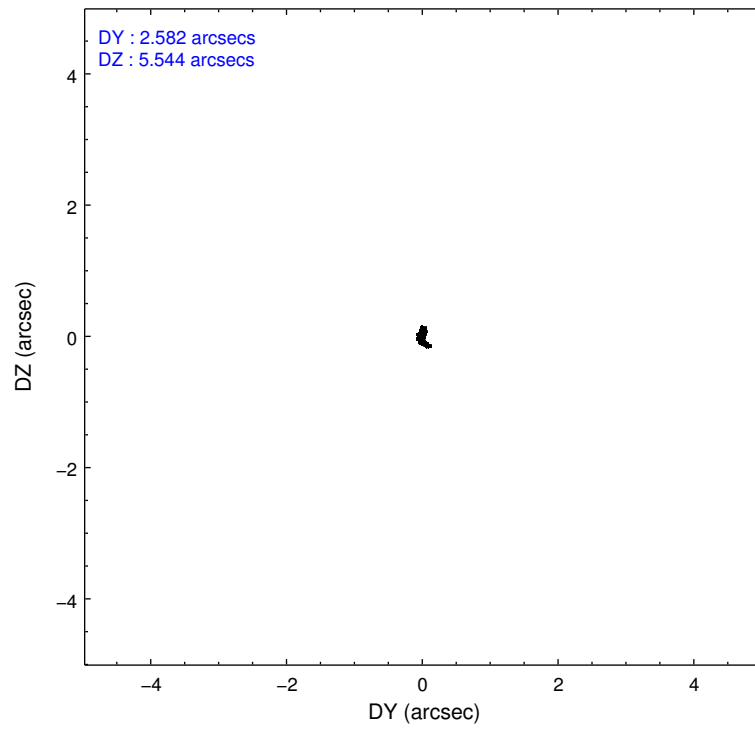
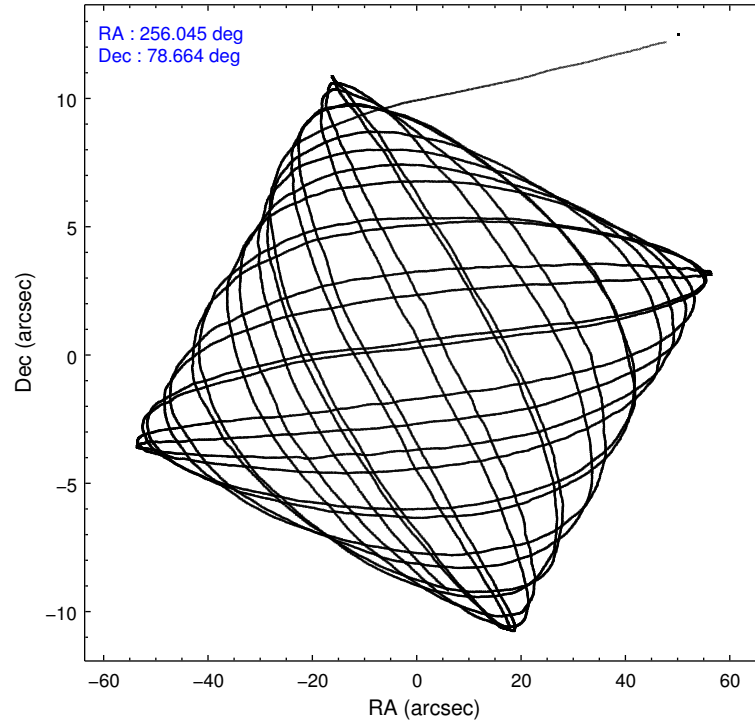
### 2.1.4 Events

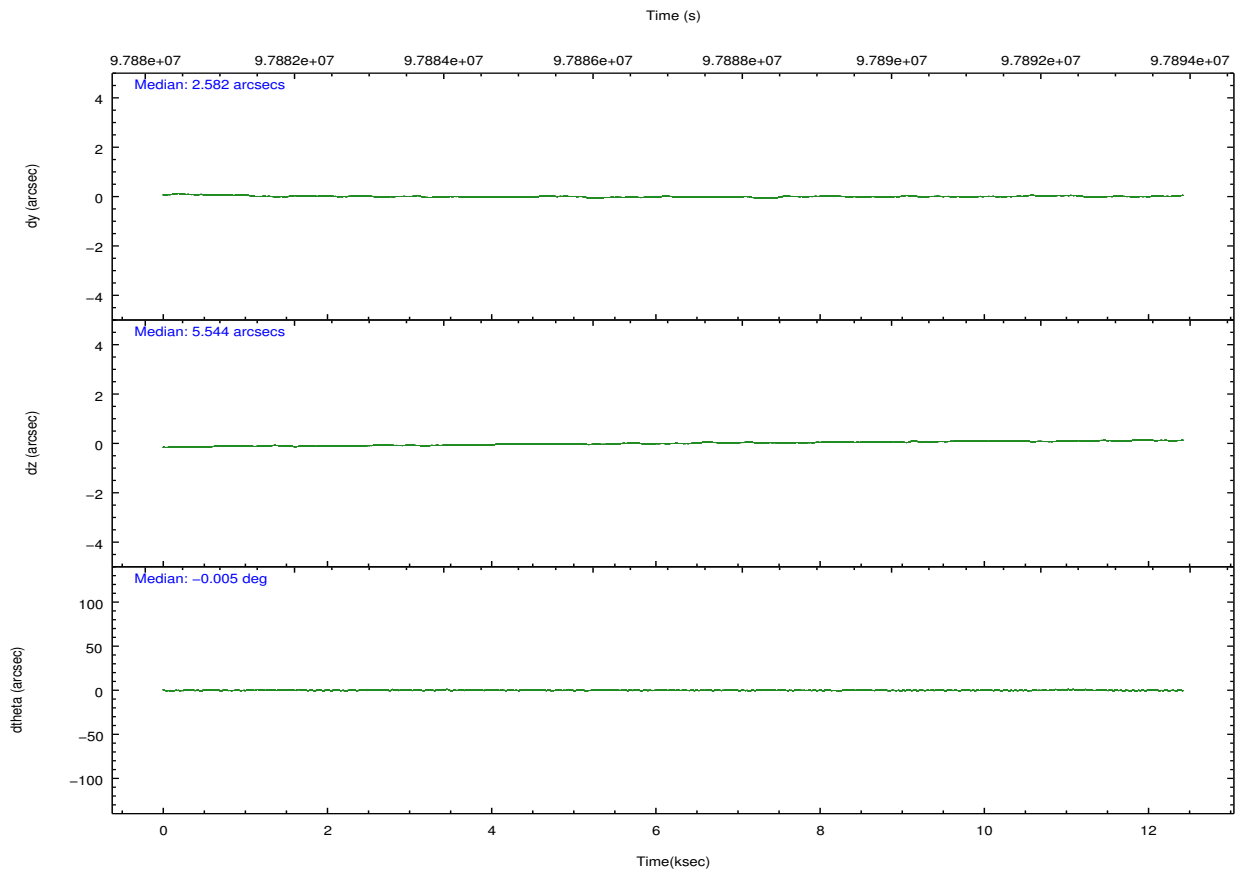
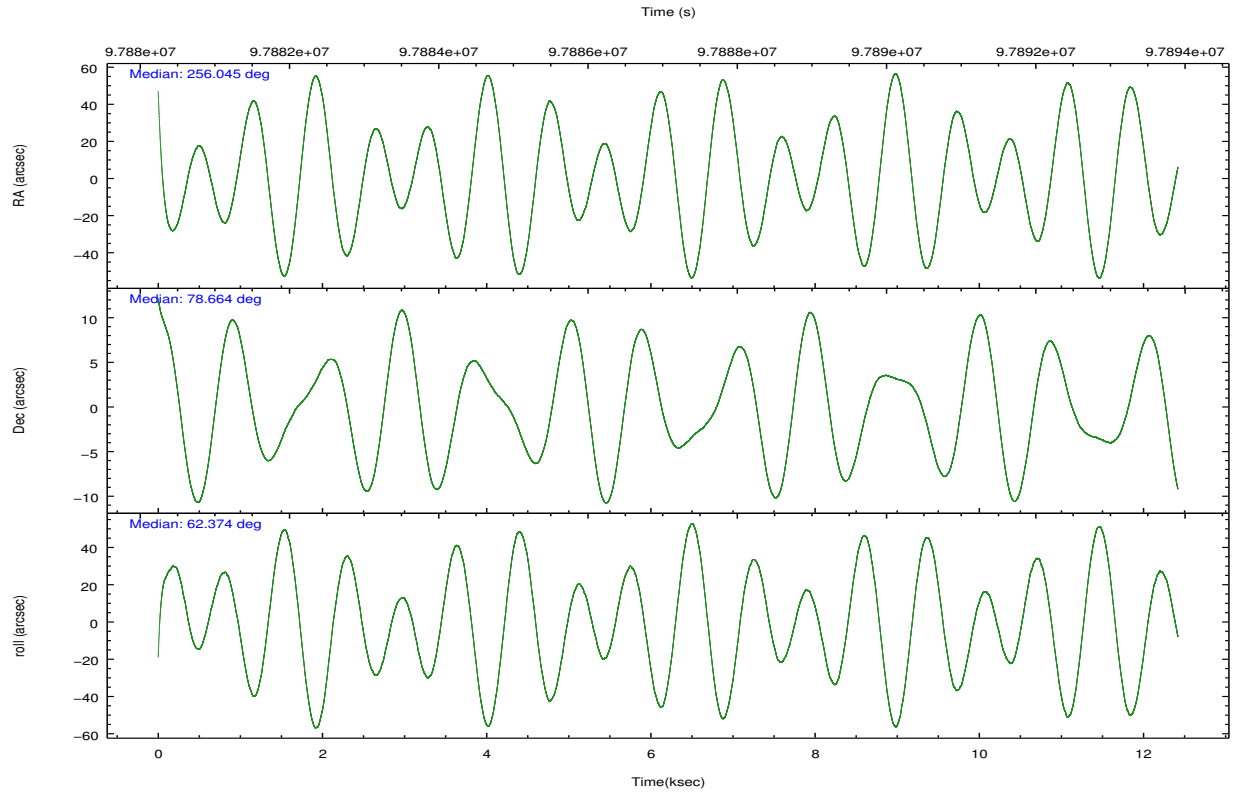
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	79878	75922	115170	84569	182031	98640	grade 0 events	5800	7858	8818	11287	29002	10634
rejected events	68627	62436	57702	66549	55677	74679		7%	10%	7%	13%	15%	10%
rejected %	85%	82%	50%	78%	30%	75%	grade 1 events	50	57	135	65	105	71
								0%	0%	0%	0%	0%	0%
							grade 2 events	2178	2066	16140	2611	29705	4351
								2%	2%	14%	3%	16%	4%
							grade 3 events	872	950	2647	1150	13629	2239
								1%	1%	2%	1%	7%	2%
							grade 4 events	865	1000	2513	1114	13426	2034
								1%	1%	2%	1%	7%	2%
							grade 5 events	2484	2867	8302	3051	9465	3988
								3%	3%	7%	3%	5%	4%
							grade 6 events	1543	1618	27377	1873	40648	4711
								1%	2%	23%	2%	22%	4%
							grade 7 events	66086	59506	49238	63418	46051	70612
								82%	78%	42%	74%	25%	71%

## 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	256.053730	256.0465549214645	Subarray requested	NONE	NONE
[deg] Pointing Dec	78.636484	78.66378767225136	Alternating exposures requested	N	N
[deg] Pointing Roll	62.220277	62.38397129903015	[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)	97881184.184000	97880158.248698			
Observation start date	2001-02-06T21:12:00	2001-02-06T20:55:58			
[s] Observation end time (MET)	97893284.184000	97894040.849233			
Observation end date	2001-02-07T00:33:40	2001-02-07T00:47:20			
Read mode	TIMED	TIMED			

## 2.3 Aspect



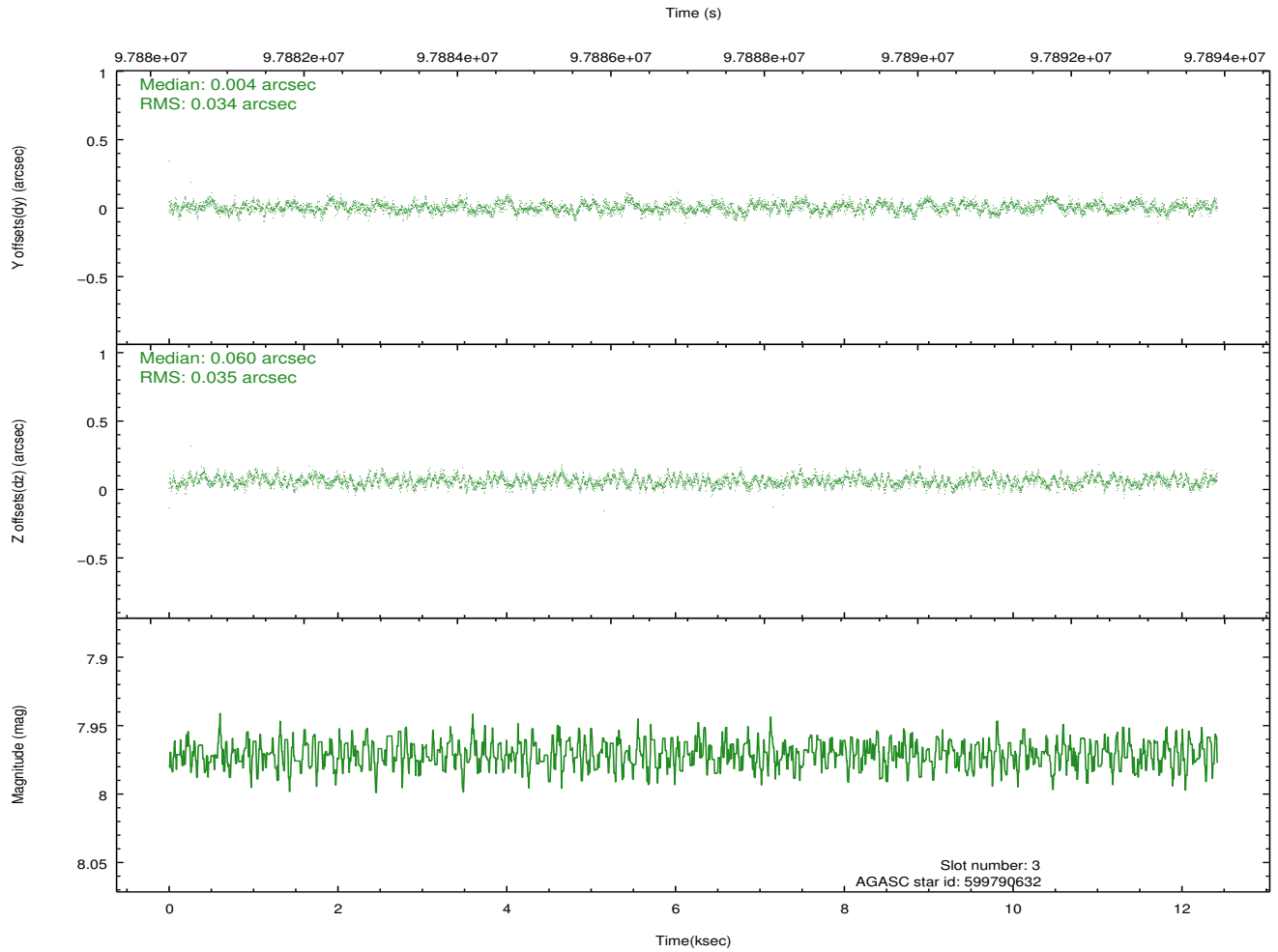
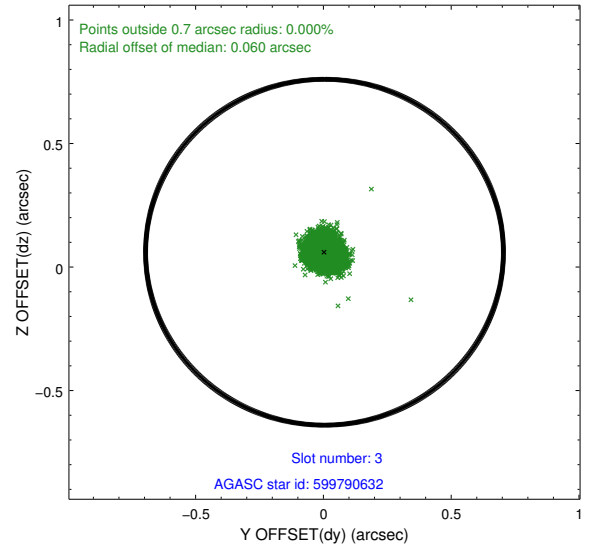
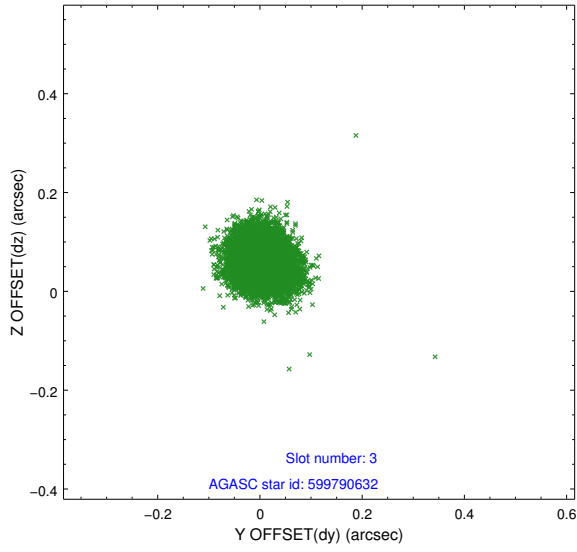


### Slot Statistics

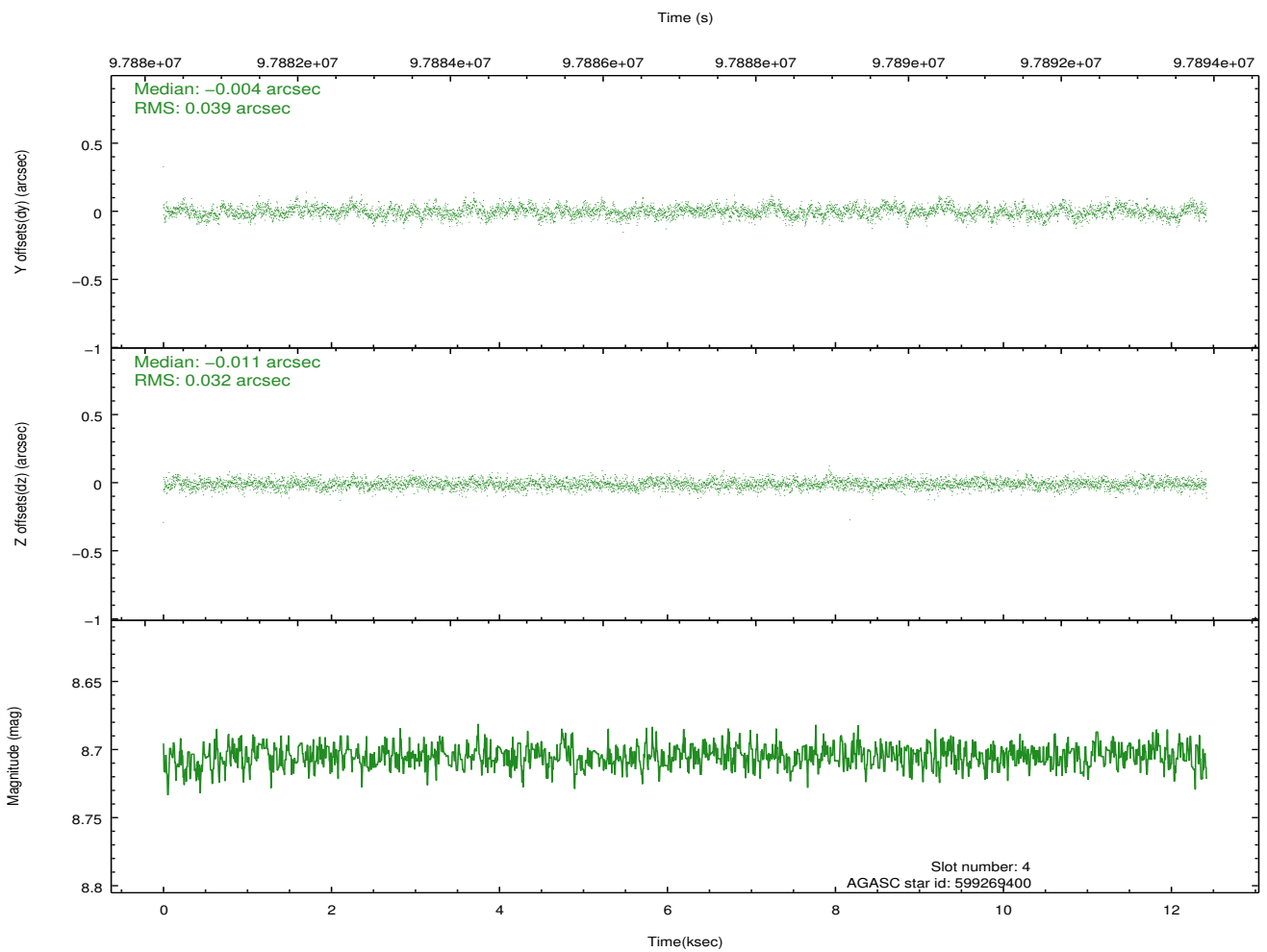
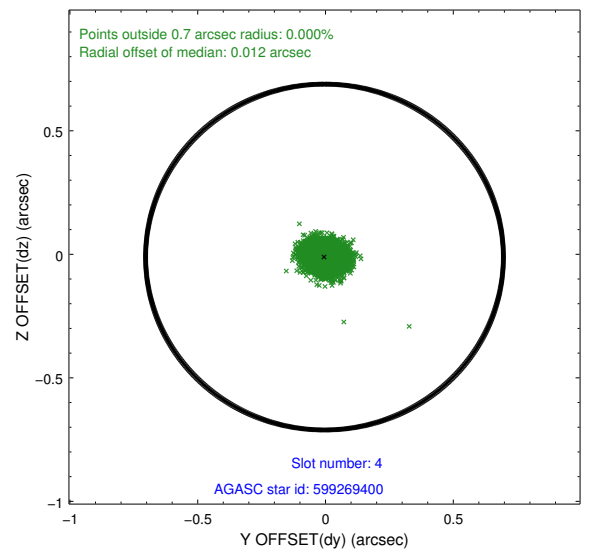
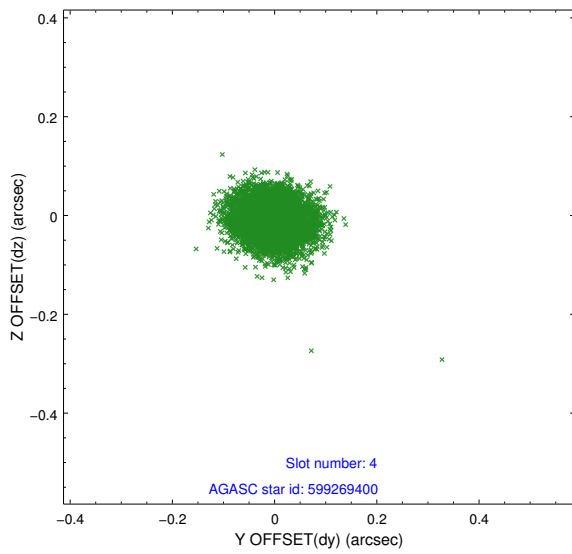
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.12	3028	-0.031	0.008	0.007	0.011	0.000000	0.000000	-755.21	-1726.67
1	FID	ACIS-S-4	7.20	3029	-0.038	0.013	0.006	0.012	0.000000	0.000000	2157.84	181.46
2	FID	ACIS-S-5	7.24	3030	0.038	-0.012	0.007	0.012	0.000000	0.000000	-1807.51	175.48
3	GUIDE	599790632	7.97	6060	0.004	0.060	0.052	0.082	257.096793	78.828804	957.76	-318.46
4	GUIDE	599269400	8.71	6059	-0.004	-0.011	0.052	0.087	254.398050	78.499006	-976.48	827.44
5	GUIDE	599789480	8.84	6059	-0.022	-0.027	0.071	0.113	253.845424	78.947438	305.56	1882.66
6	GUIDE	599785600	9.23	6057	0.034	-0.060	0.087	0.146	259.639486	78.927525	2149.87	-1668.38
7	GUIDE	599263768	9.70	6057	-0.013	0.037	0.098	0.161	258.248120	78.312570	-258.40	-1946.10

## 2.4 Star Slots

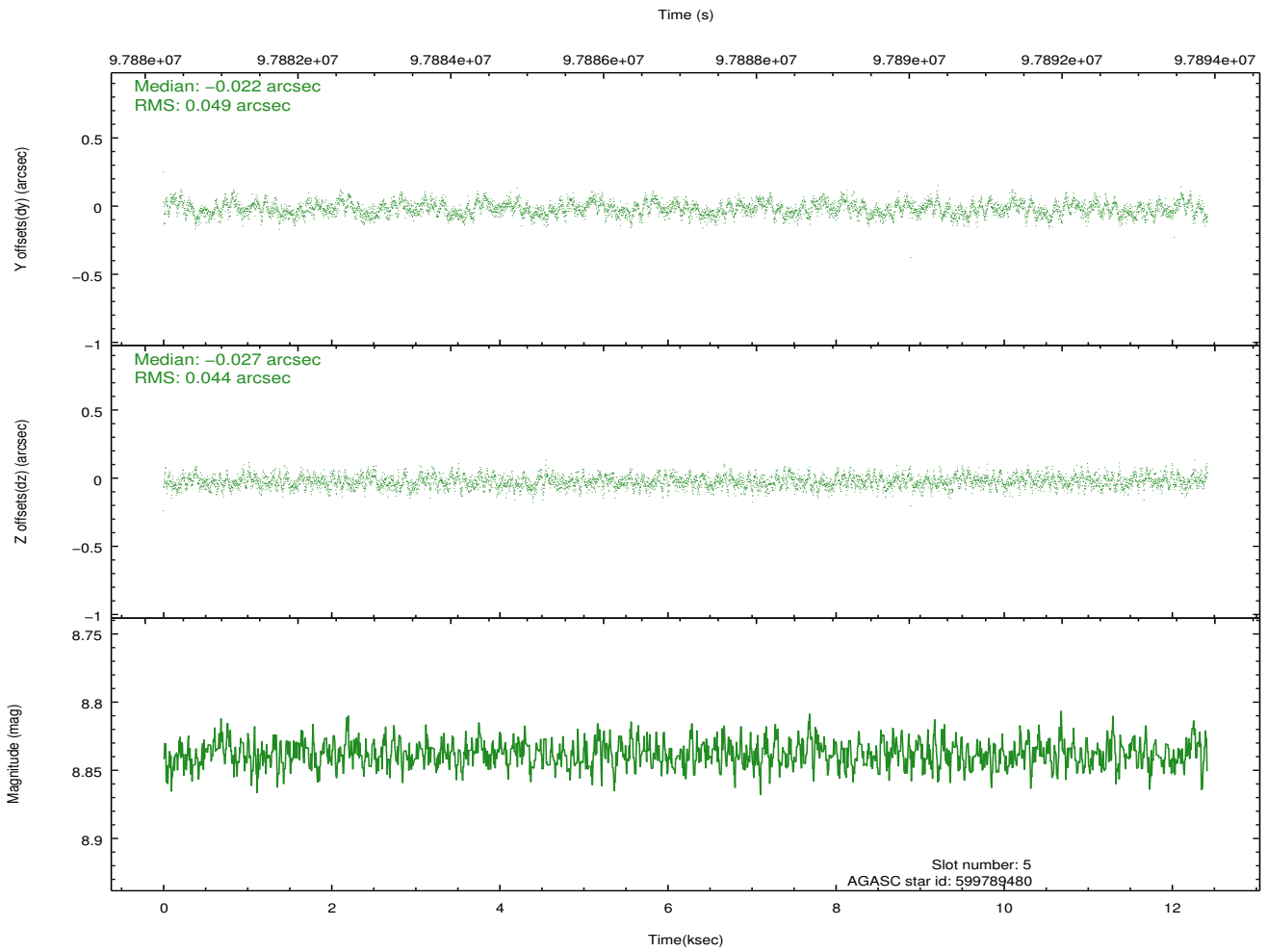
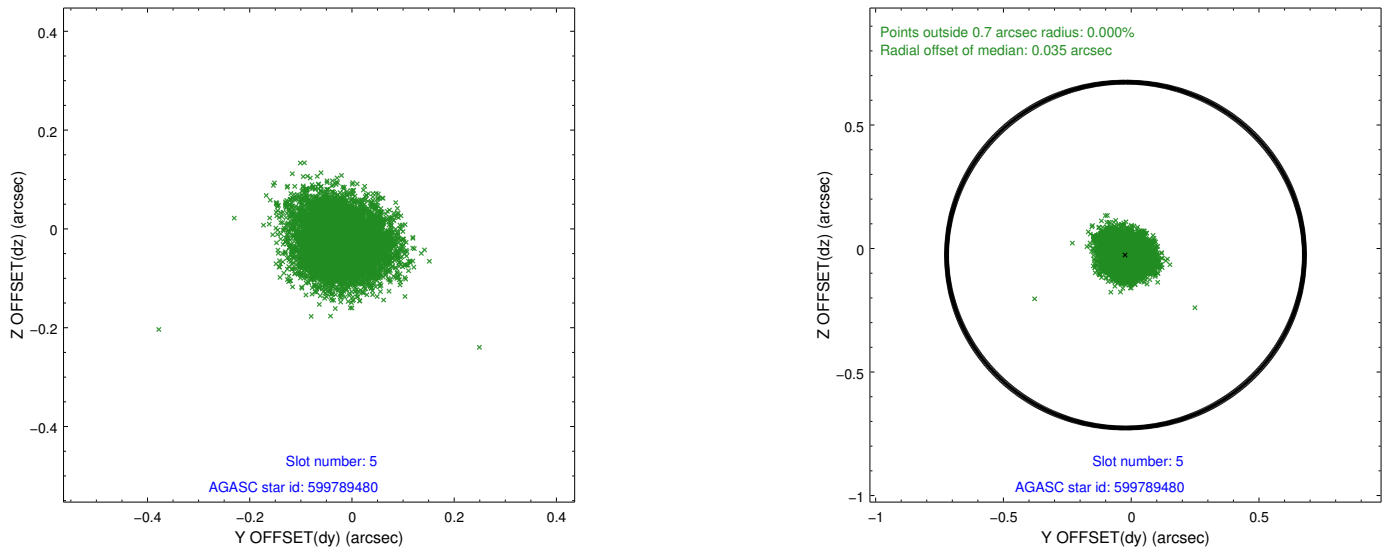
### 2.4.1 Slot 3



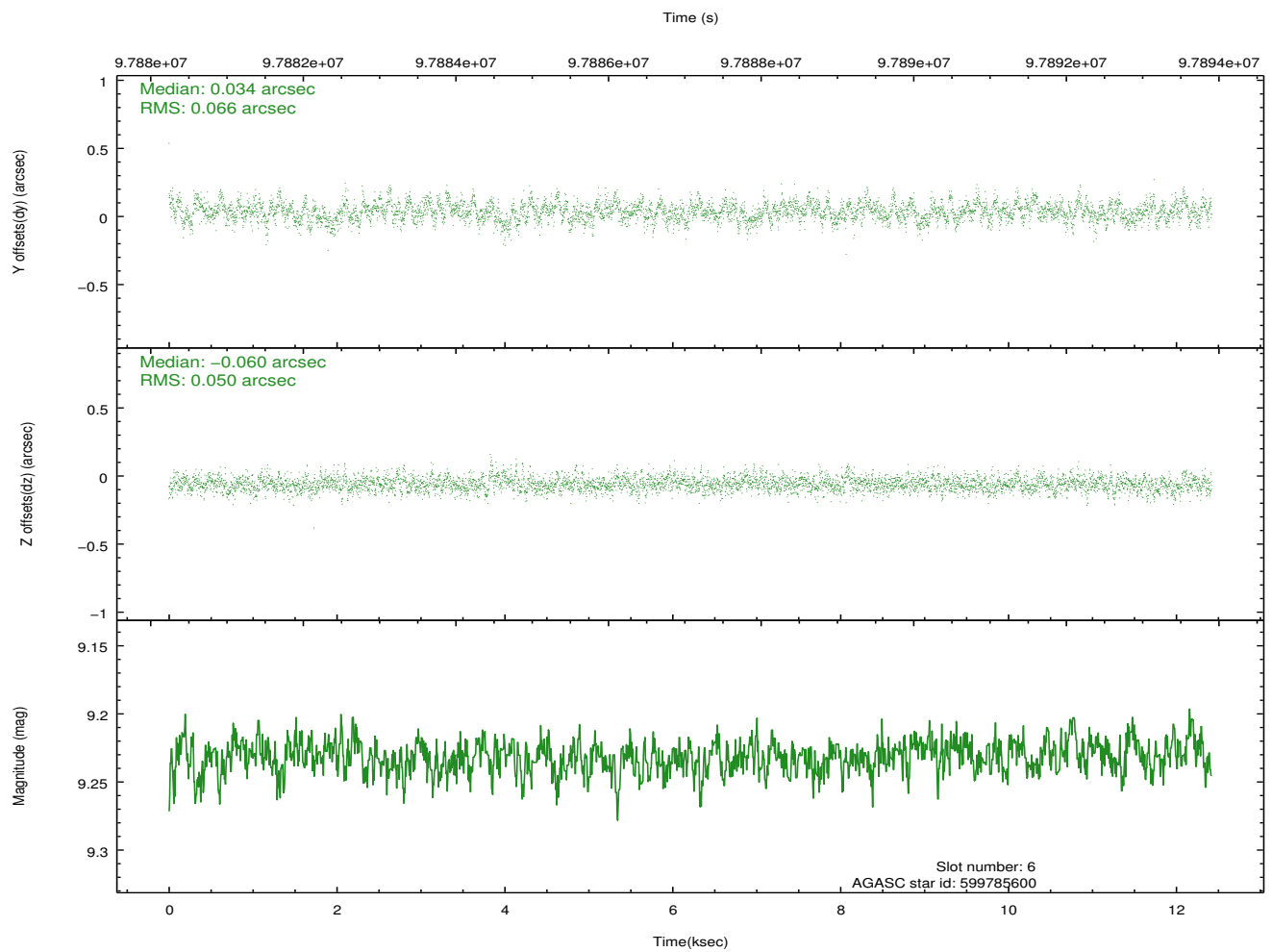
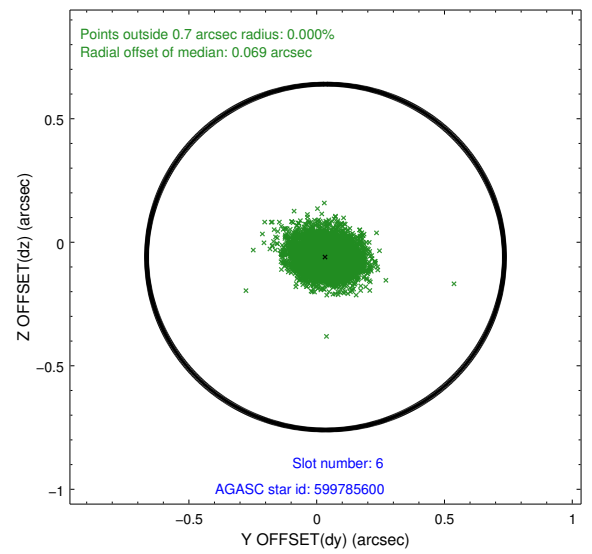
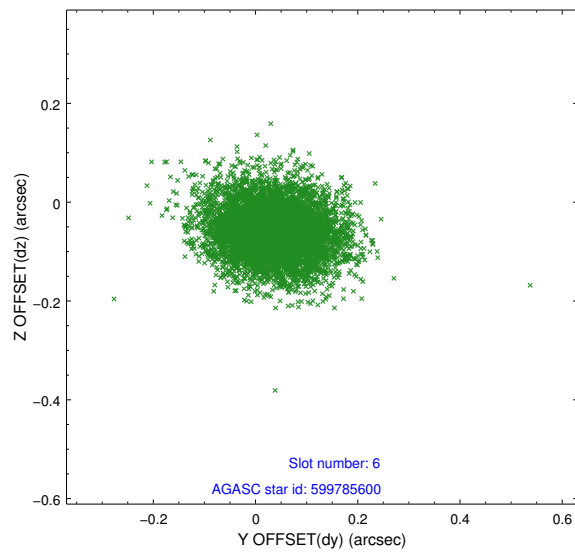
## 2.4.2 Slot 4



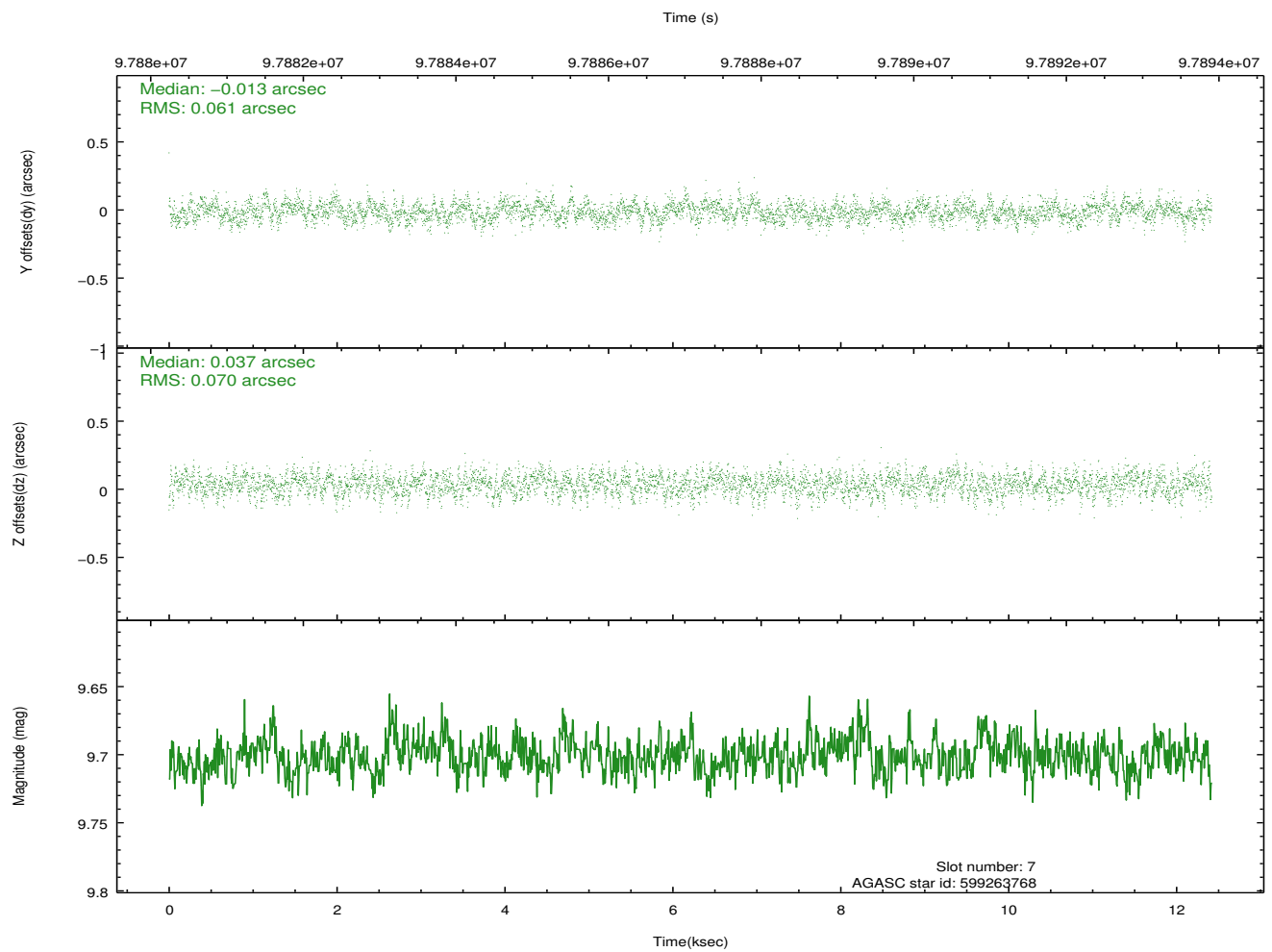
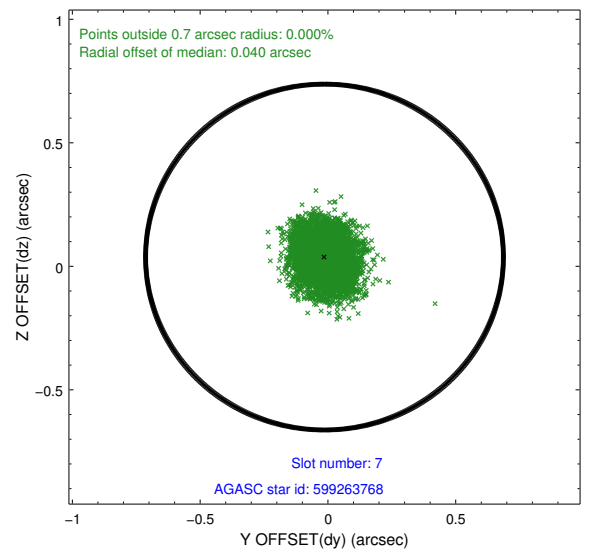
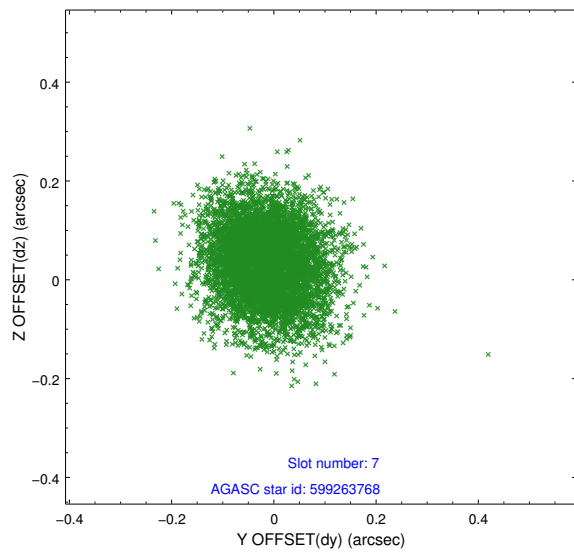
### 2.4.3 Slot 5



## 2.4.4 Slot 6

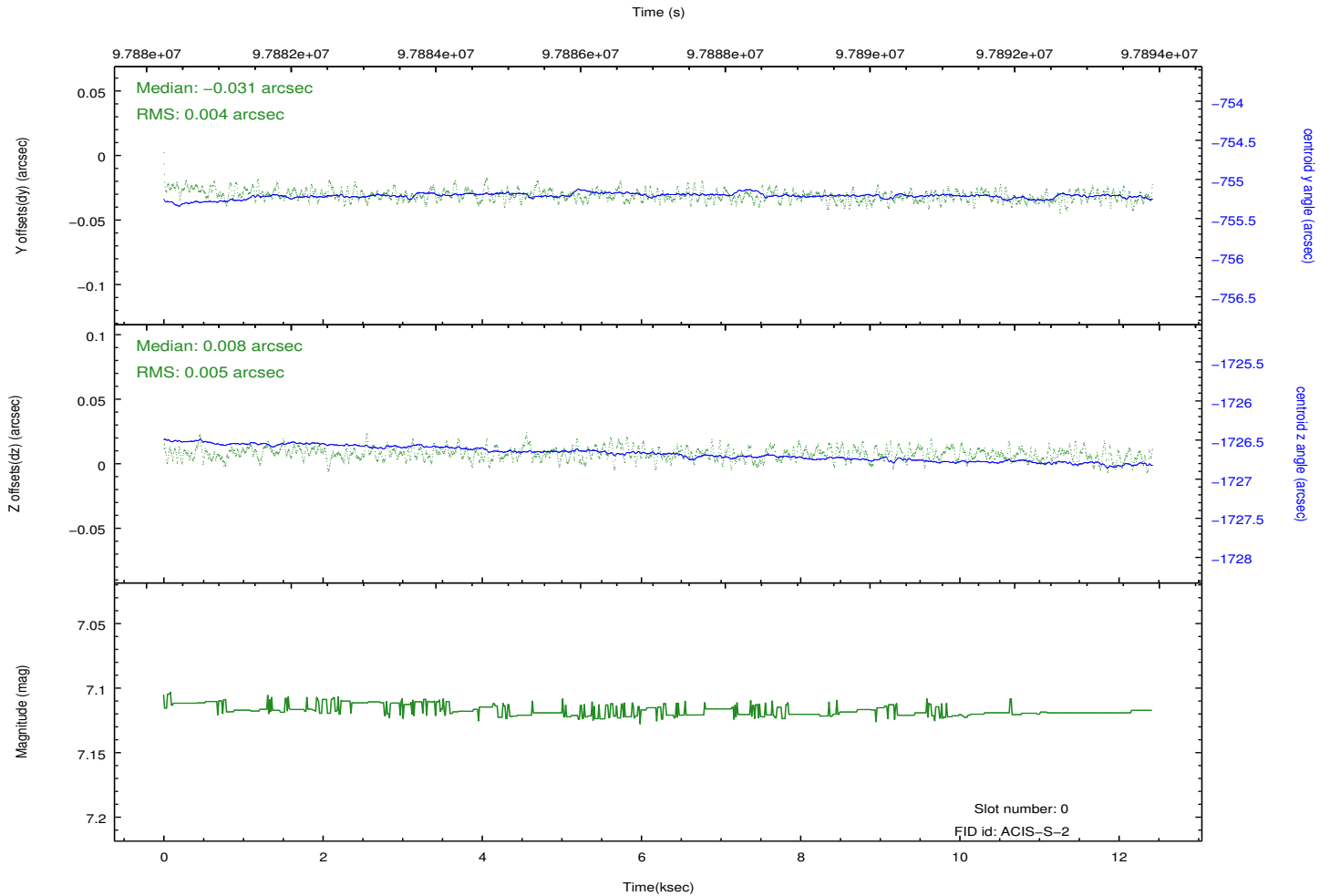
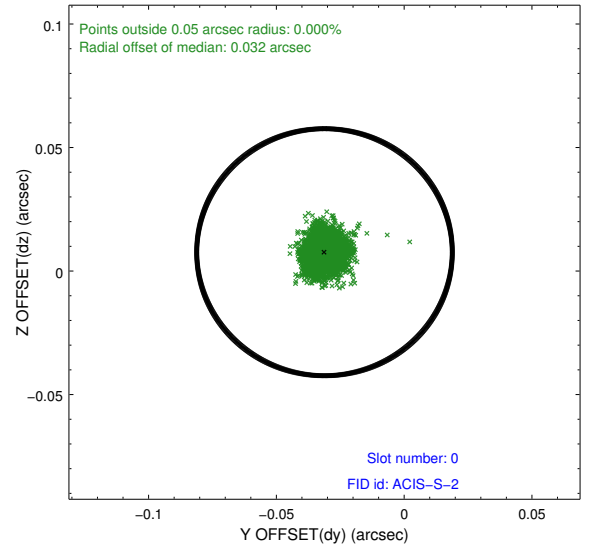
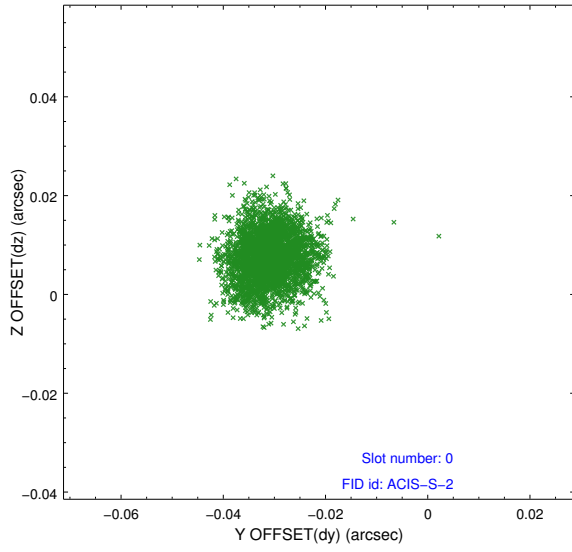


## 2.4.5 Slot 7

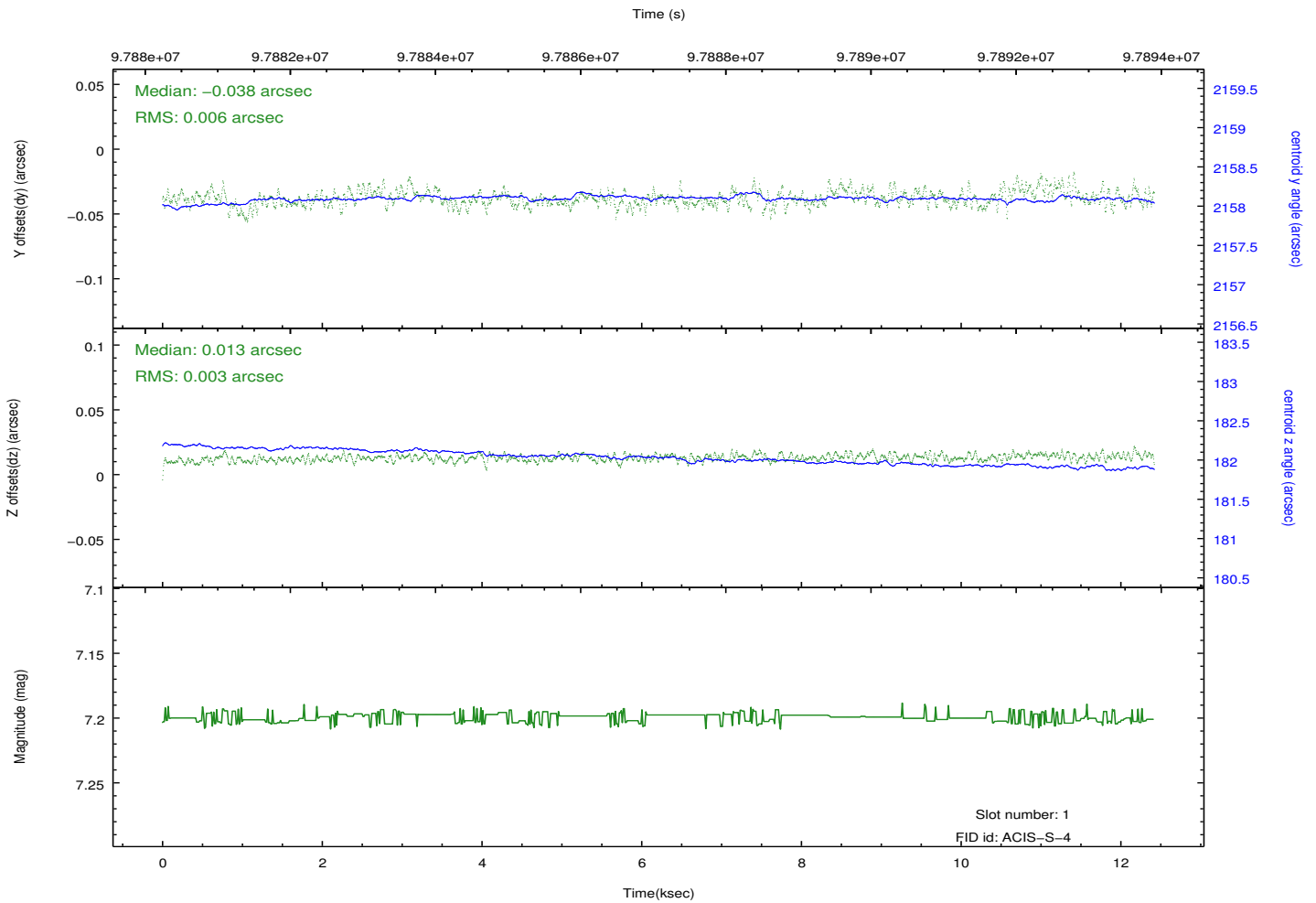
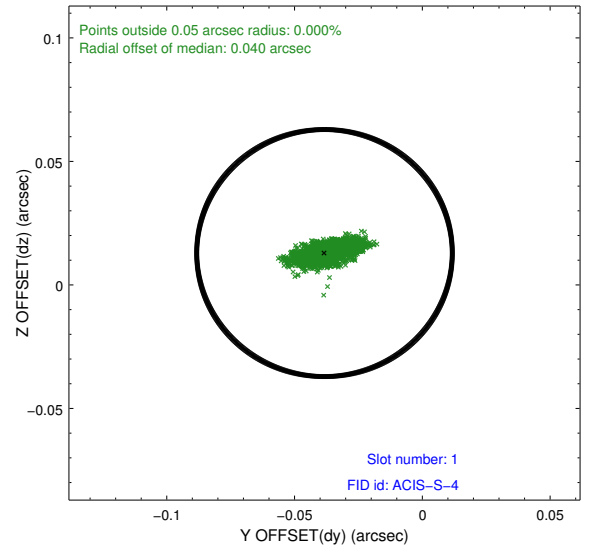
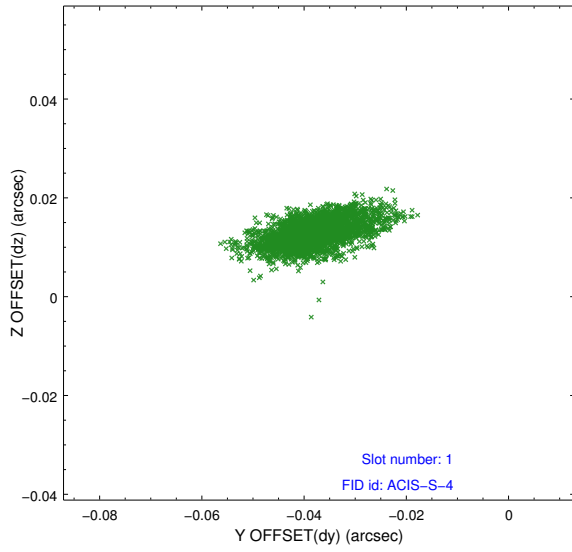


## 2.5 FID Slots

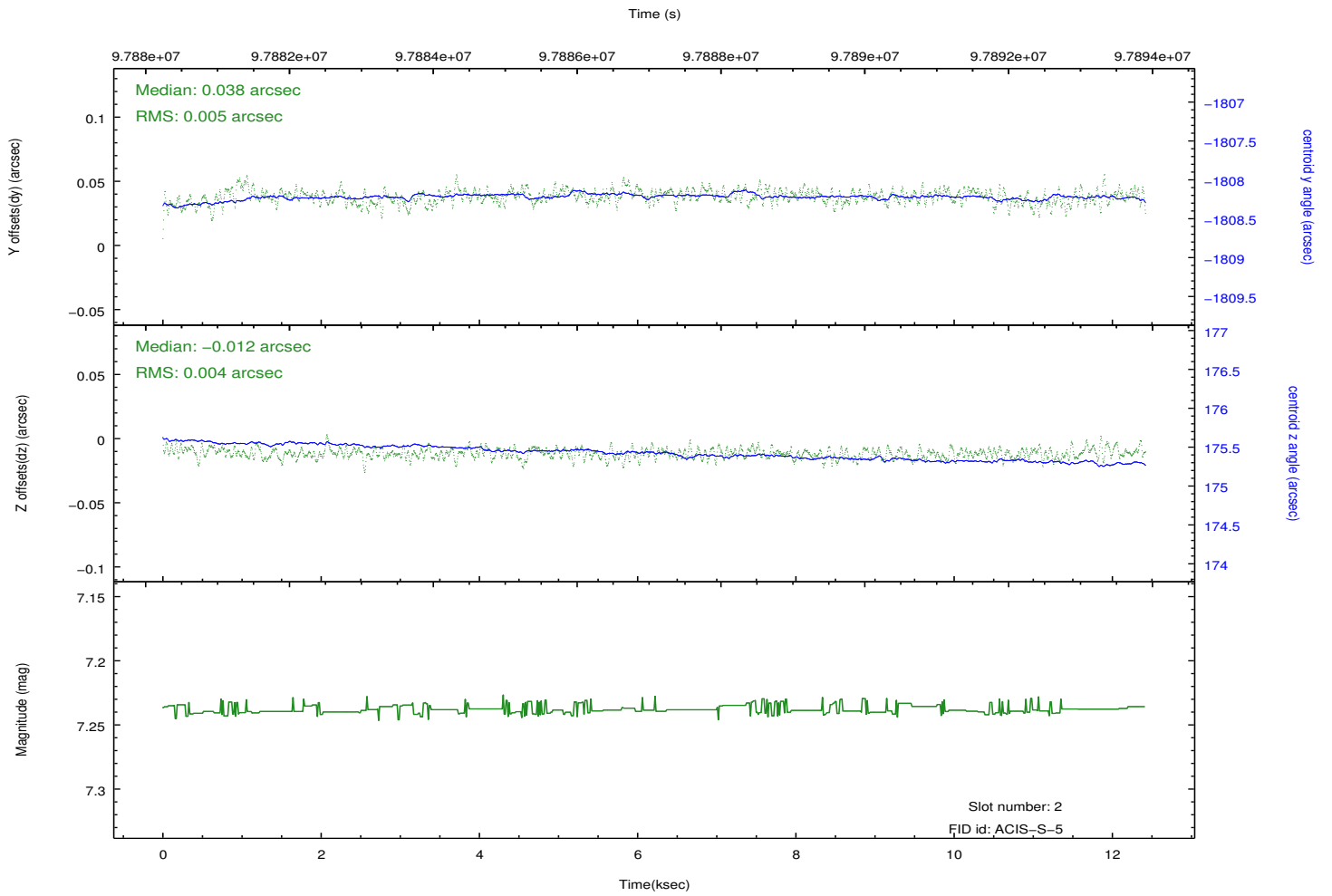
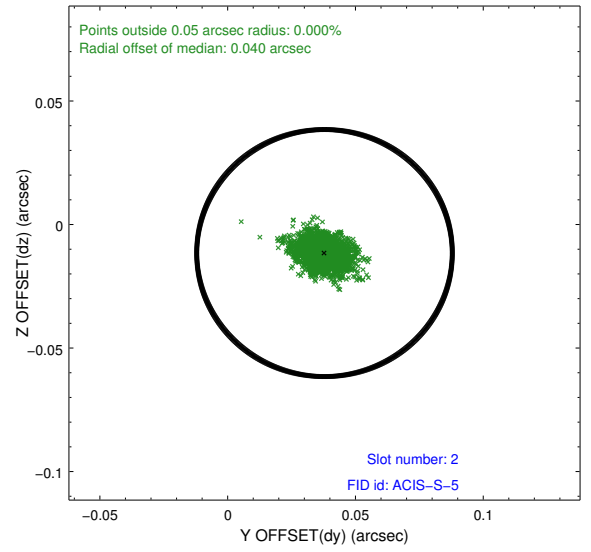
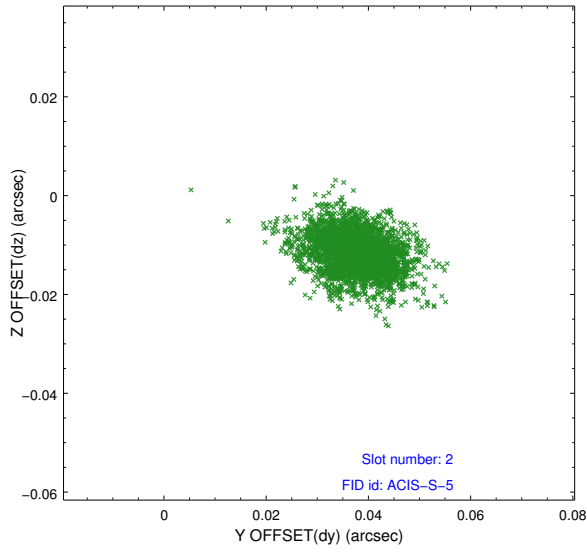
### 2.5.1 Slot 0



## 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)	2012.09.19
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	12.022

## A.2 Comments