

# V&V Reference Report

## L2 ASCDS Version : 8.1.1

Observation 839 - L2 Version 4  
Chandra X-Ray Center

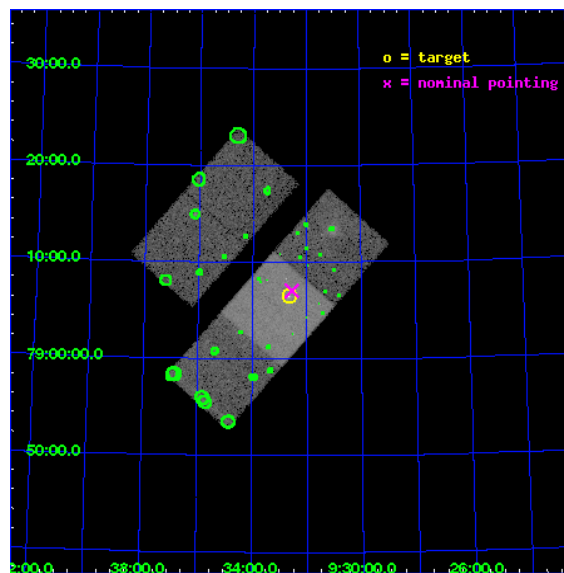
L2 Processing Date : Nov 29 2009

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# 1 Front

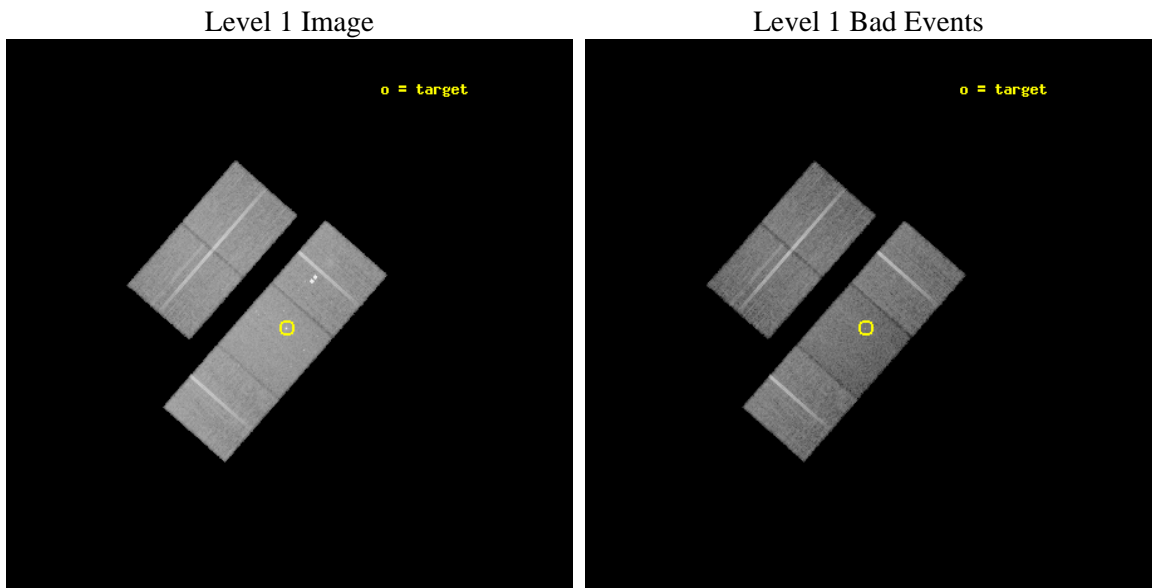
seq_num	700144	Sequence number
obs_id	839	Observation id
title	EXTENDED AND COMPACT X-RAY EMISSION IN DISTANT RADIO GALAXIES	Prop
observer	Prof Diana Worrall	Principal investigator
object	3C 220.1	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	143.165	Observer's specified target RA
dec_targ	79.10875	Observer's specified target Dec
ra_nom	143.13751178173	Nominal RA
dec_nom	79.117555521881	Nominal Dec
roll_nom	131.30140728116	Nominal Roll
revision	4	Processing version of data
ontime	19163.818786316	Sum of GTIs [s]
livetime	18921.154973777	Livetime [s]
ontime2	19163.777746312	Sum of GTIs [s]
ontime3	19163.695666313	Sum of GTIs [s]
ontime6	19163.736706316	Sum of GTIs [s]
ontime7	19163.818786316	Sum of GTIs [s]
ontime8	19163.654626317	Sum of GTIs [s]
l2events	129396	Number of level 2 events



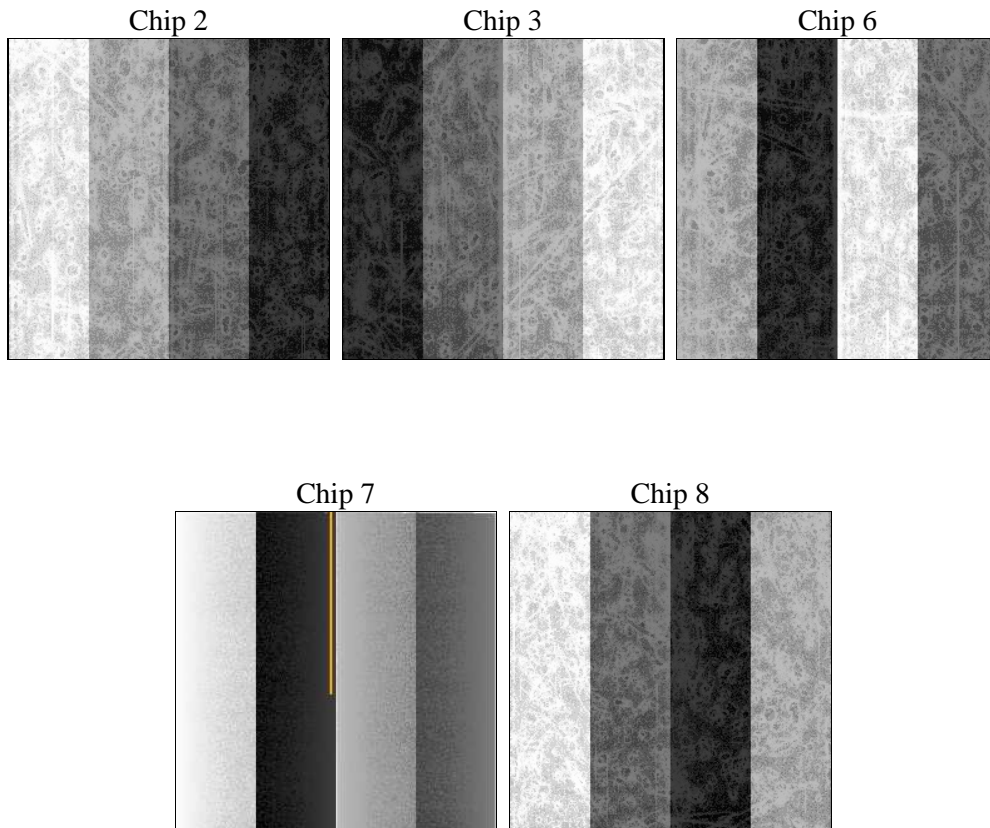
## 2 OBI

### 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	Scheduled observation exposure time
ascdsver	8.1.1	ASCDS version number	ontime	19163.818786316	Sum of GTIs [s]
caldbver	4.1.4	&#160	ontime2	19163.777746312	Sum of GTIs [s]
date	2009-11-29T21:12:15	Date and time of file creation	ontime3	19163.695666313	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	19163.736706316	Sum of GTIs [s]
			ontime7	19163.818786316	Sum of GTIs [s]
			ontime8	19163.654626317	Sum of GTIs [s]
			l1events	864393	Number of level 1 events

### 2.1.4 Events

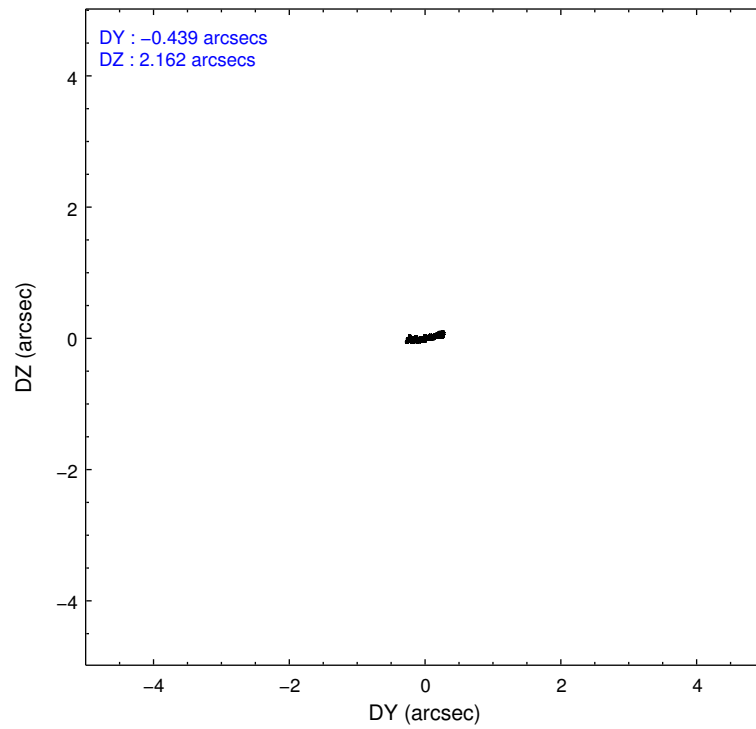
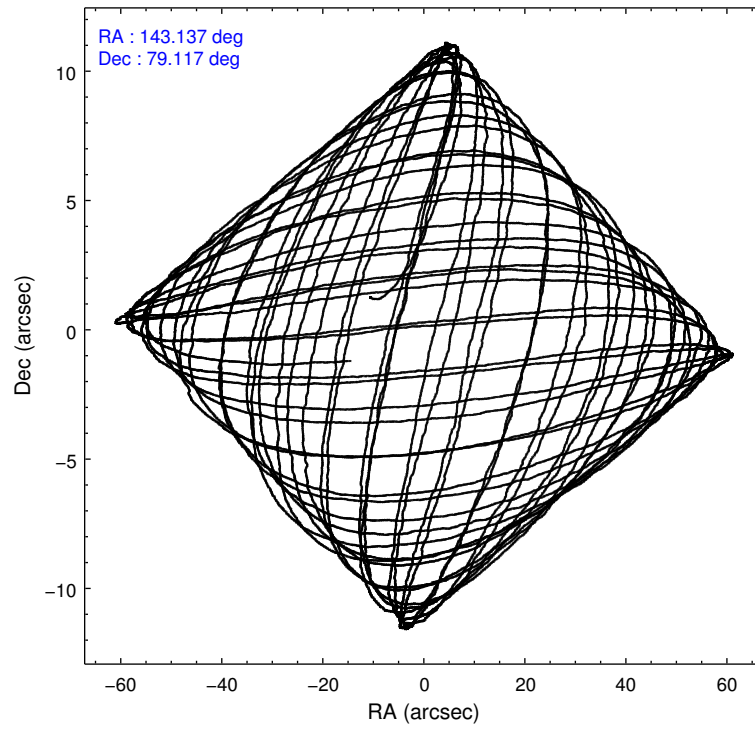
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	163672	158997	176888	176492	188344
rejected events	149076	143757	147558	106786	156499
rejected %	91%	90%	83%	60%	83%

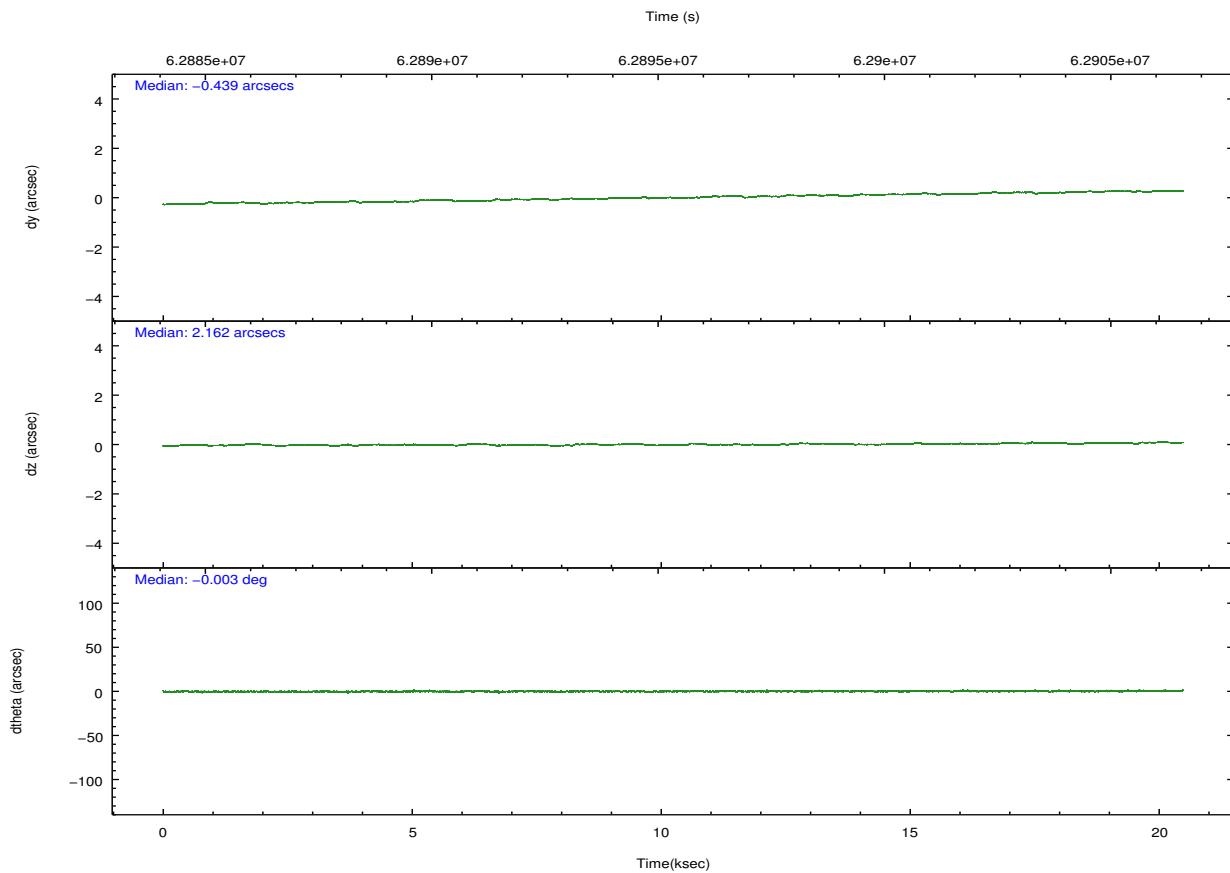
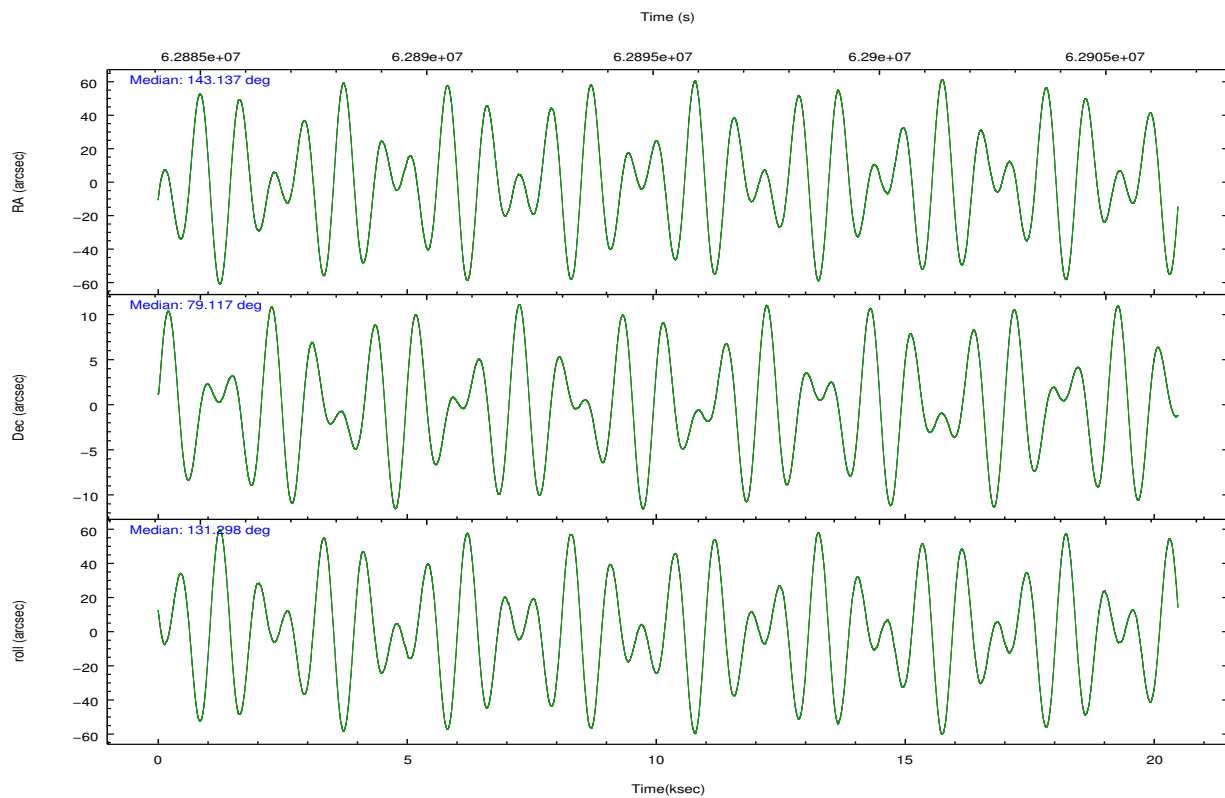
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	3286	3332	9943	5208	7675
	2%	2%	5%	2%	4%
grade 1 events	28	29	88	95	69
	0%	0%	0%	0%	0%
grade 2 events	5607	6114	7160	14806	9992
	3%	3%	4%	8%	5%
grade 3 events	973	1001	6666	4336	2574
	0%	0%	3%	2%	1%
grade 4 events	1033	1002	1026	3933	2482
	0%	0%	0%	2%	1%
grade 5 events	2965	3114	3338	9942	4591
	1%	1%	1%	5%	2%
grade 6 events	3699	3791	4538	41428	9124
	2%	2%	2%	23%	4%
grade 7 events	146081	140614	144129	96744	151837
	89%	88%	81%	54%	80%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-23678	ACIS-23678	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
Pointing RA	143.275611	143.1375117817305	Subarray requested	NONE	NONE
Pointing Dec	79.108606	79.11755552188124	Alternating exposures requested	N	N
Pointing Roll	131.009160	131.301407281162	Primary exposure time	0.000000	3.2
SIM focus pos (mm)	-0.684267	-0.6828225247311905			
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-190.132523	-190.1425803651734			
SIM translation stage offset (mm)	0	0.01005778216563158			
Observation start time	62885569.184000	62884650.453596			
Observation start date	1999-12-29T20:11:45	1999-12-29T19:57:30			
Observation end time	62905569.184000	62905909.466866			
Observation end date	1999-12-30T01:45:05	1999-12-30T01:51:49			
Read mode	TIMED	TIMED			

## 2.3 Aspect



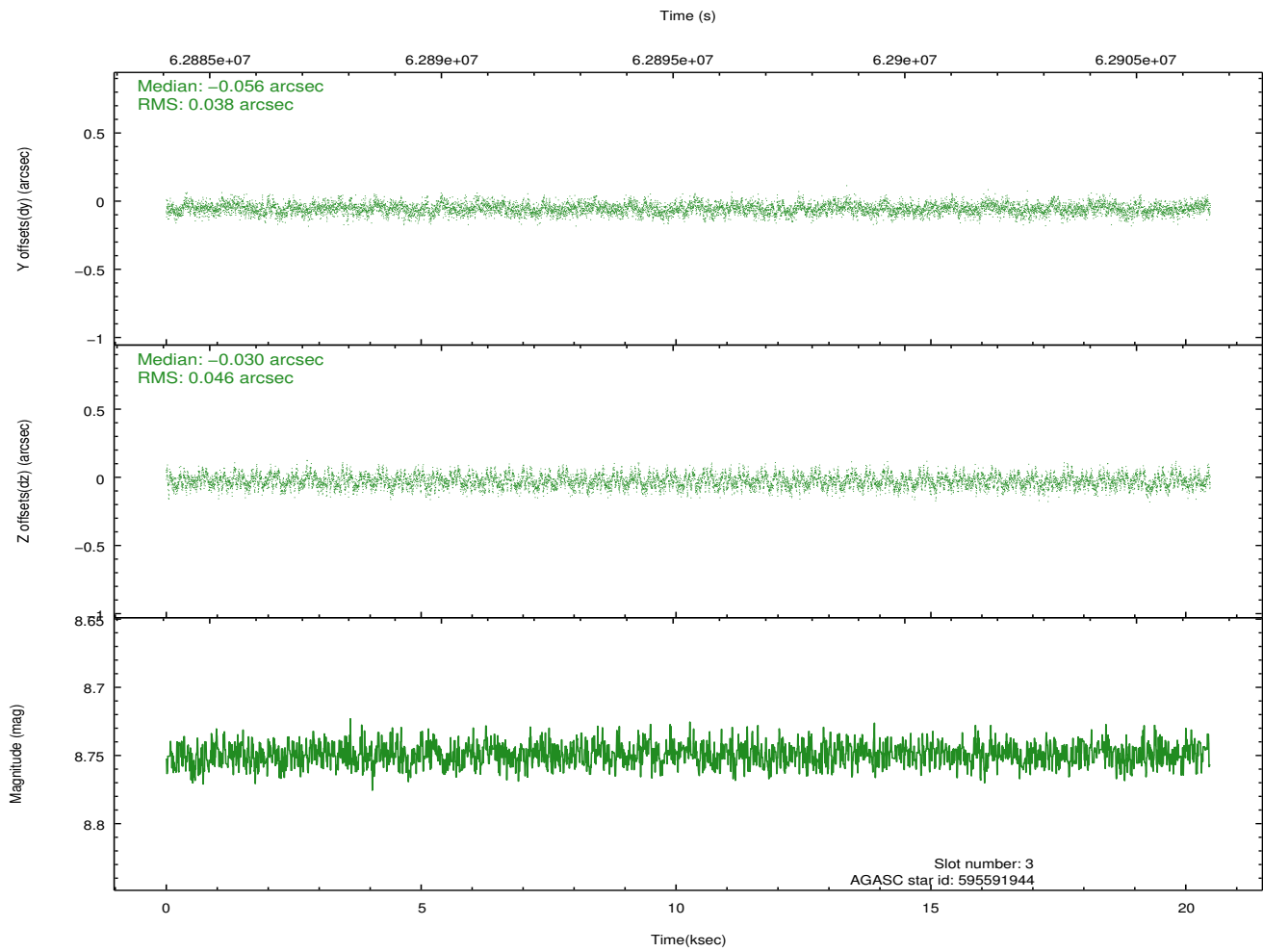
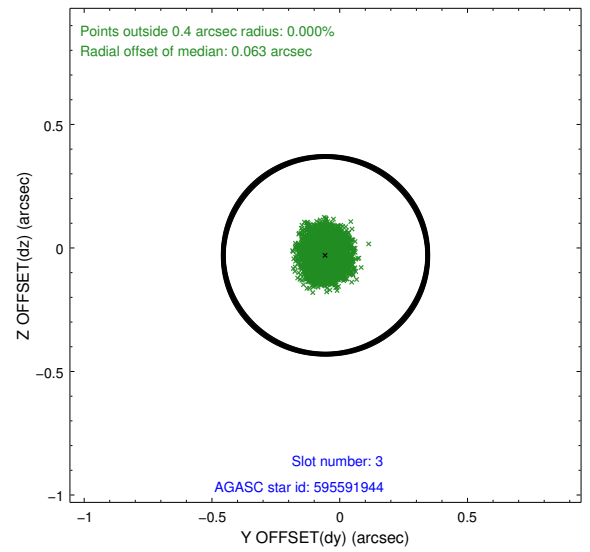
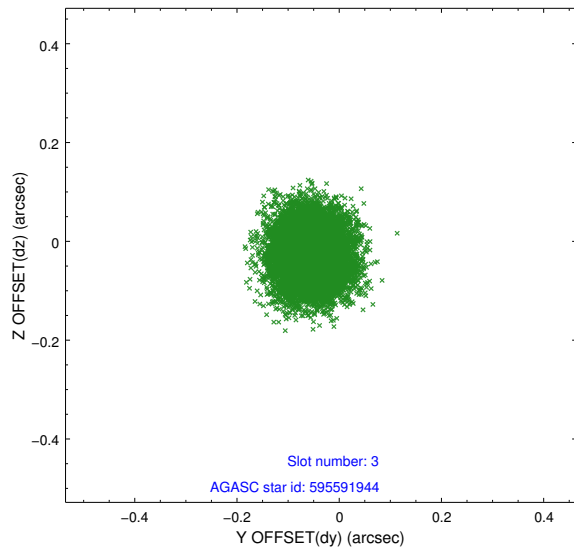


### Slot Statistics

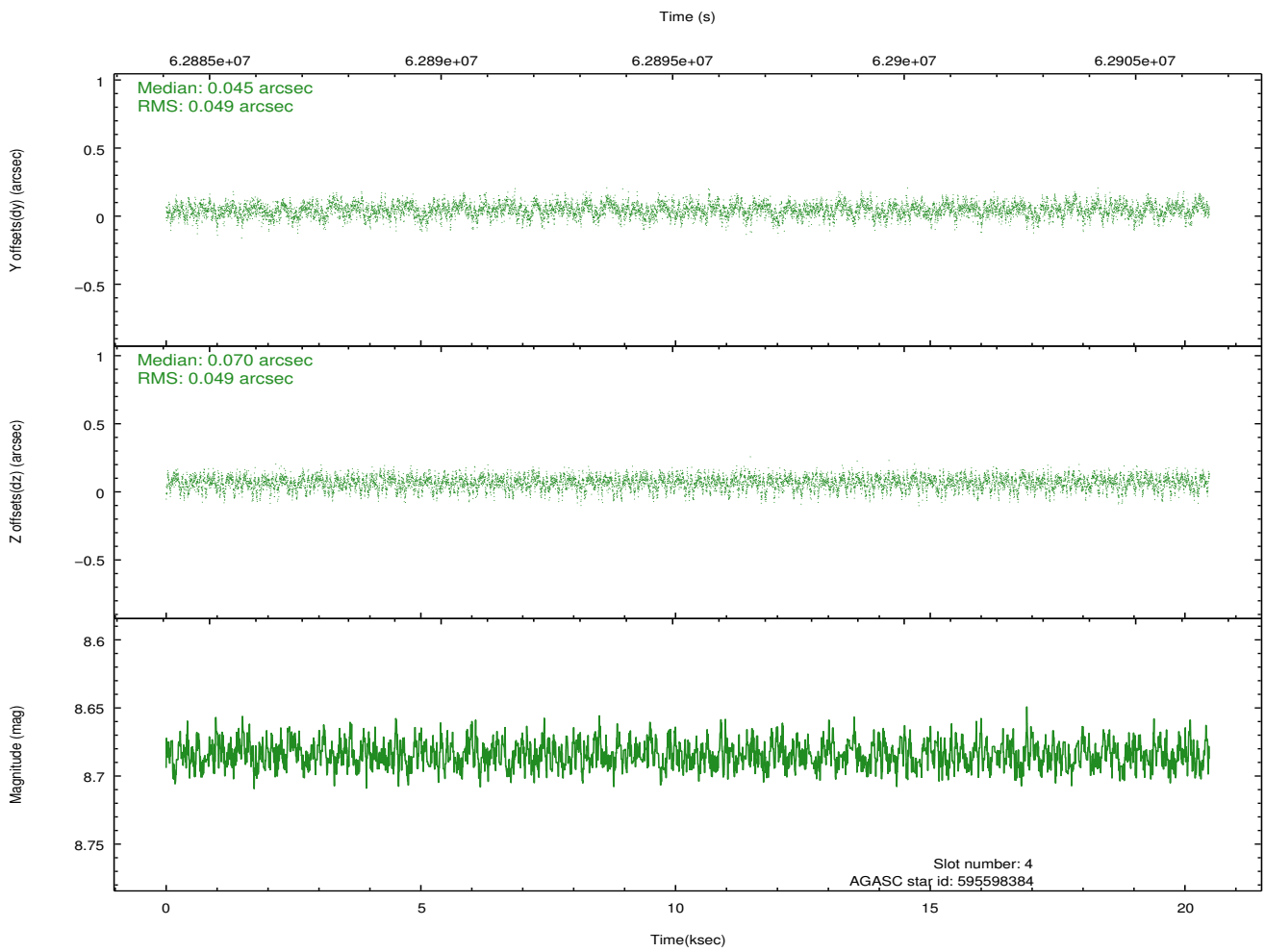
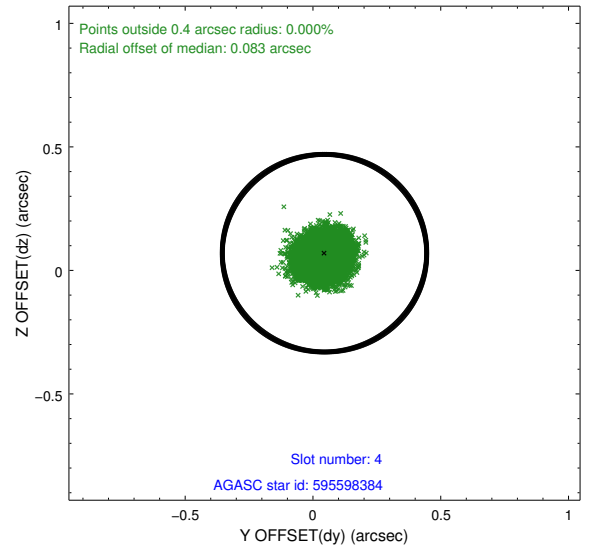
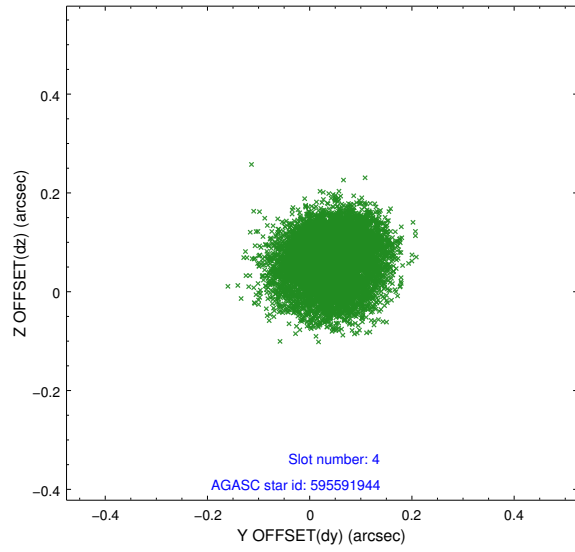
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.12	9988	0.001	-0.000	0.007	0.012	0.000000	0.000000	-752.14	-1723.14
1	FID	ACIS-S-4	7.21	9988	0.038	-0.000	0.007	0.013	0.000000	0.000000	2161.20	185.29
2	FID	ACIS-S-5	7.24	9989	-0.070	0.009	0.007	0.011	0.000000	0.000000	-1805.01	179.04
3	GUIDE	595591944	8.75	9987	-0.056	-0.030	0.064	0.102	145.127953	79.110595	-805.34	-969.06
4	GUIDE	595598384	8.68	9990	0.045	0.070	0.074	0.120	139.300210	79.281102	2282.84	1539.56
5	GUIDE	595598704	8.93	9987	-0.080	0.049	0.069	0.111	144.734699	79.568538	635.35	-1812.34
6	GUIDE	595611520	8.94	9988	0.078	-0.056	0.068	0.109	144.478462	78.547663	-2080.56	669.47
7	GUIDE	595612968	9.80	9974	0.012	-0.032	0.098	0.163	142.925886	78.899060	-409.22	676.76

## 2.4 Star Slots

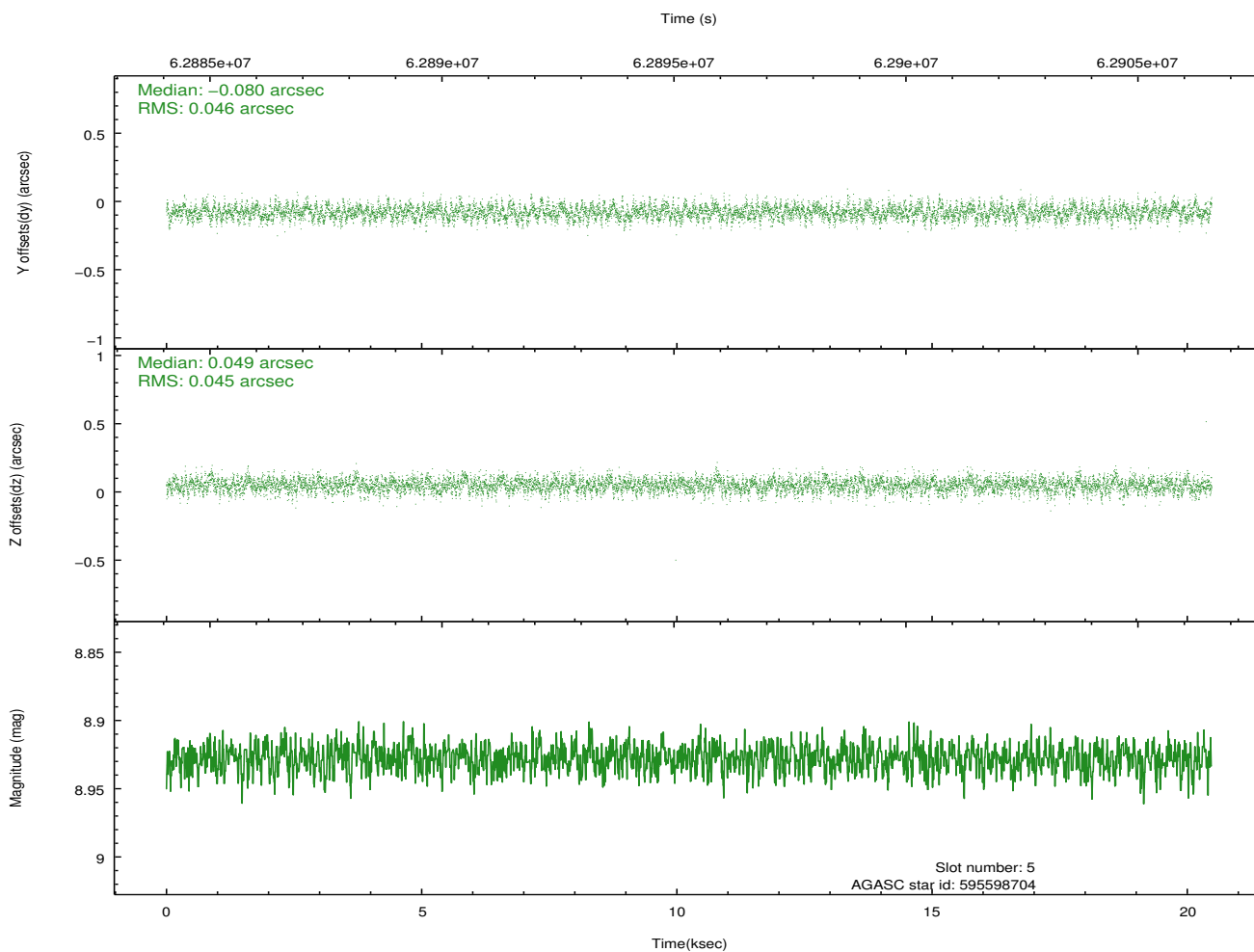
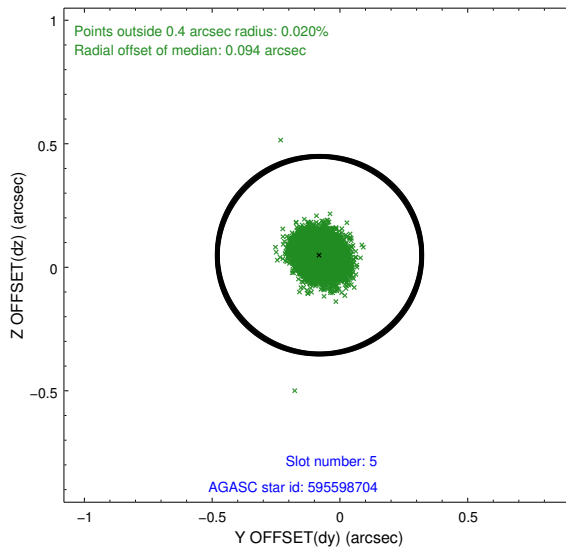
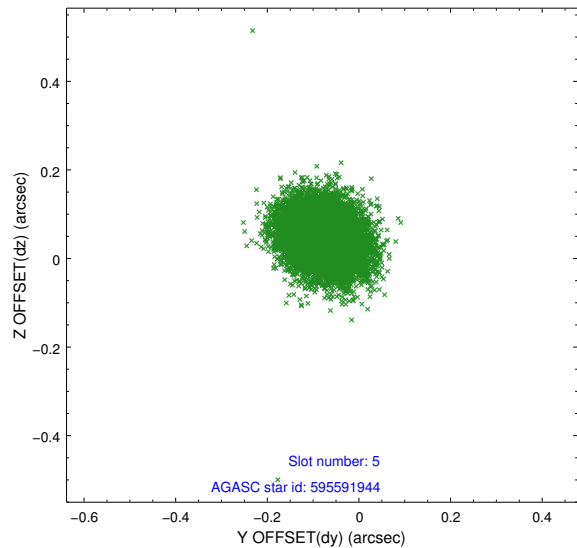
### 2.4.1 Slot 3



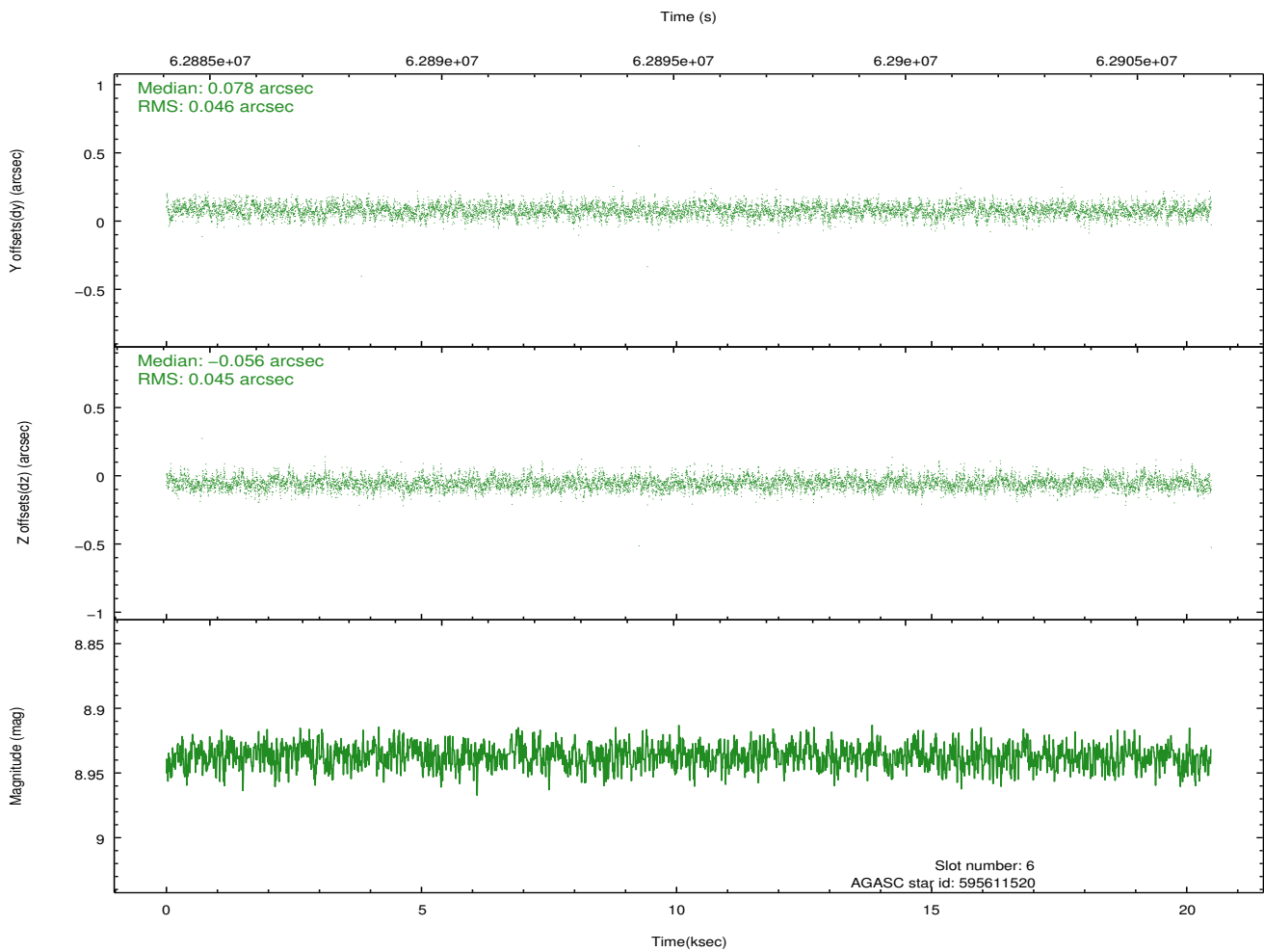
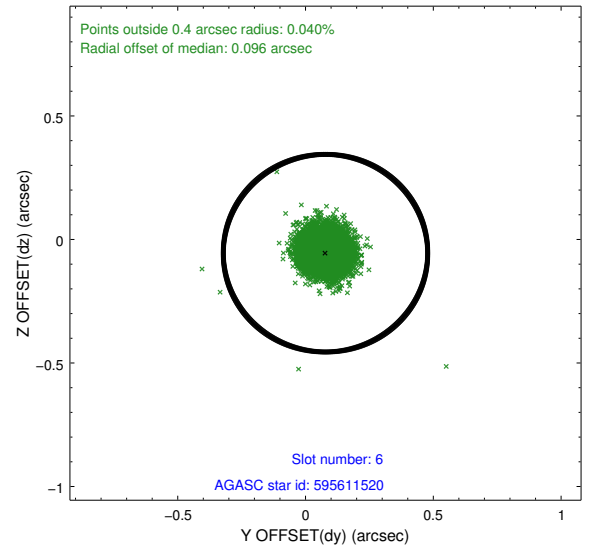
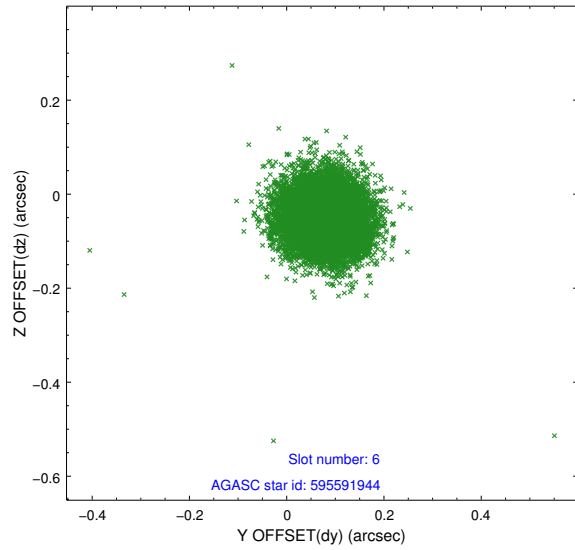
## 2.4.2 Slot 4



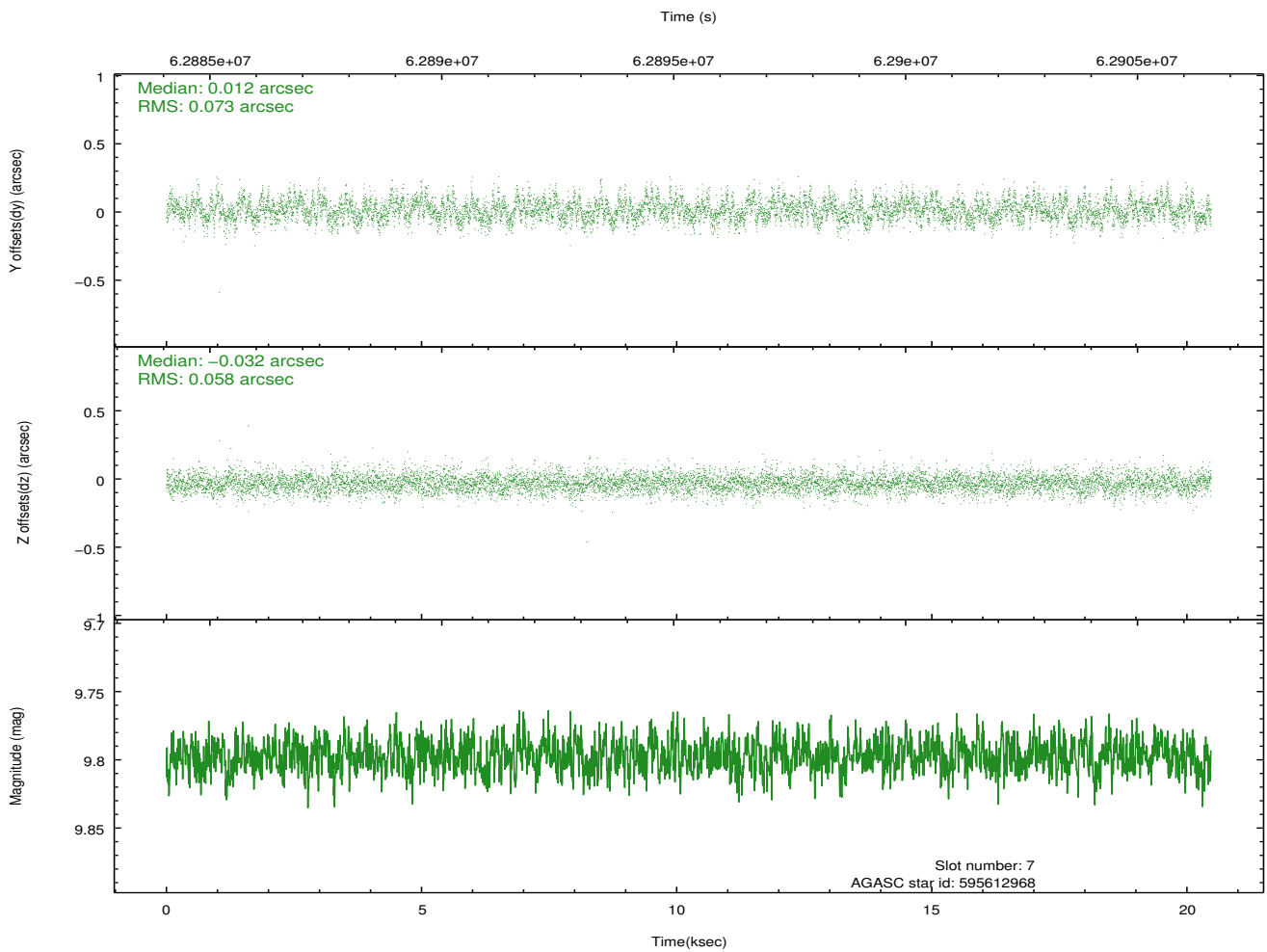
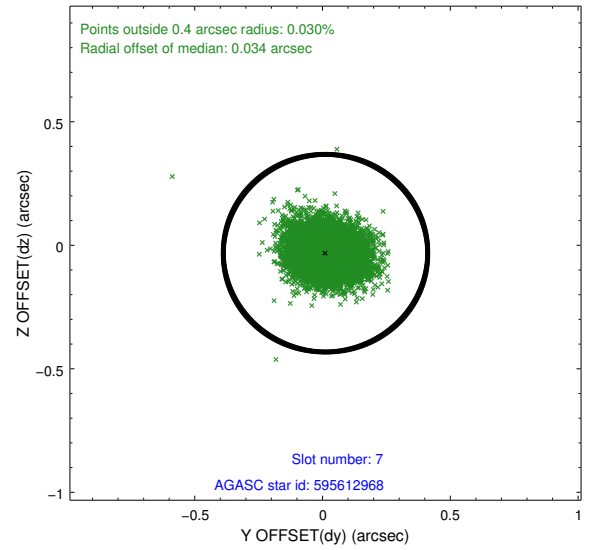
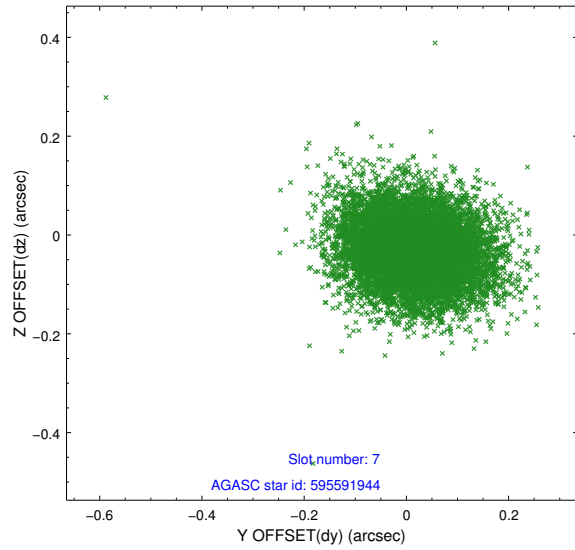
### 2.4.3 Slot 5



## 2.4.4 Slot 6

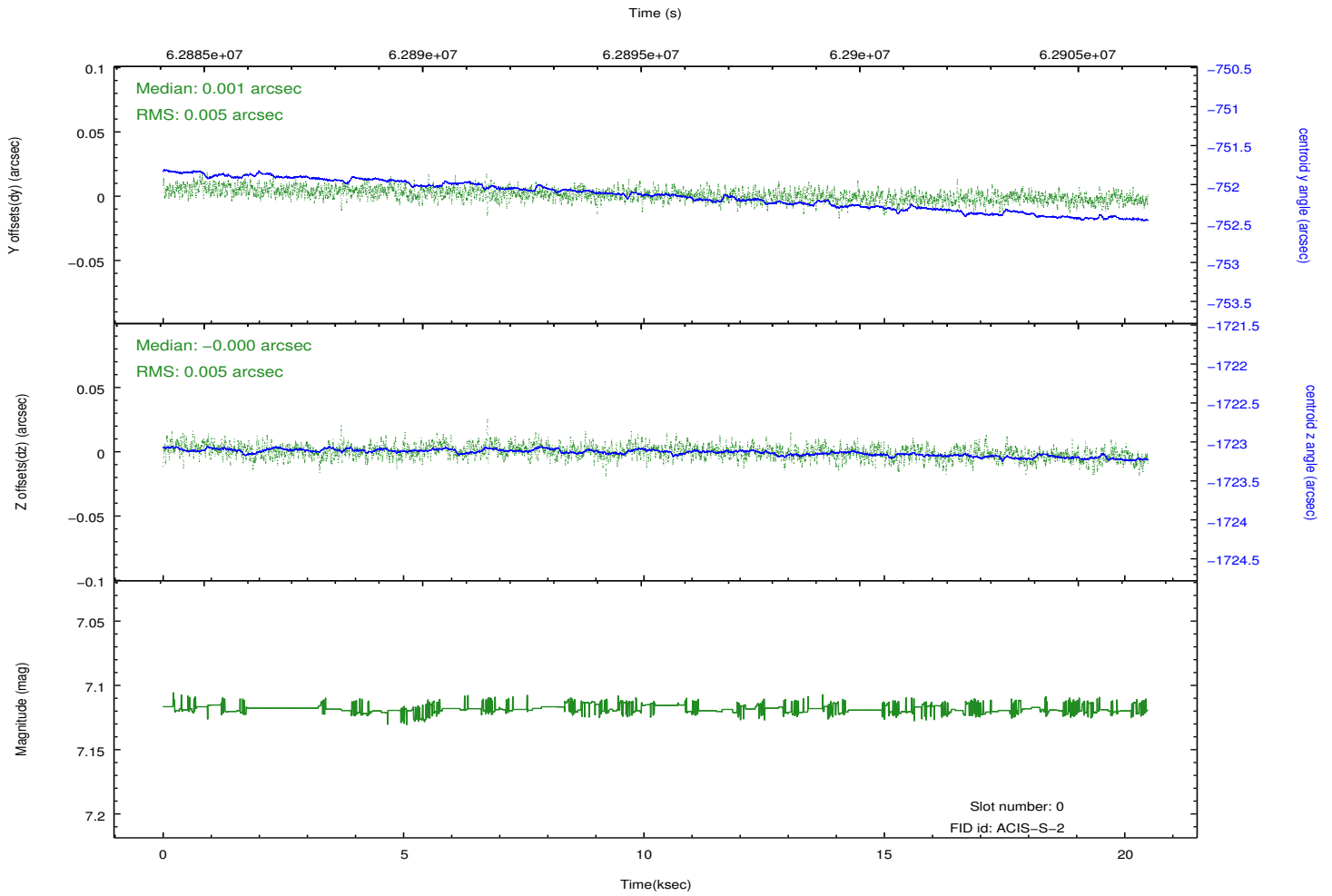
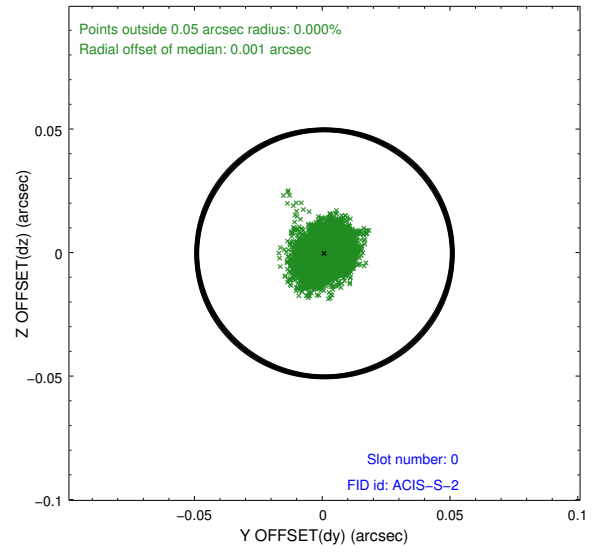
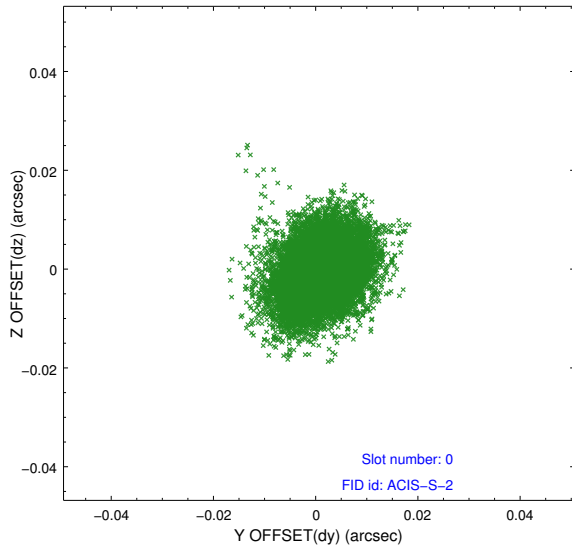


## 2.4.5 Slot 7

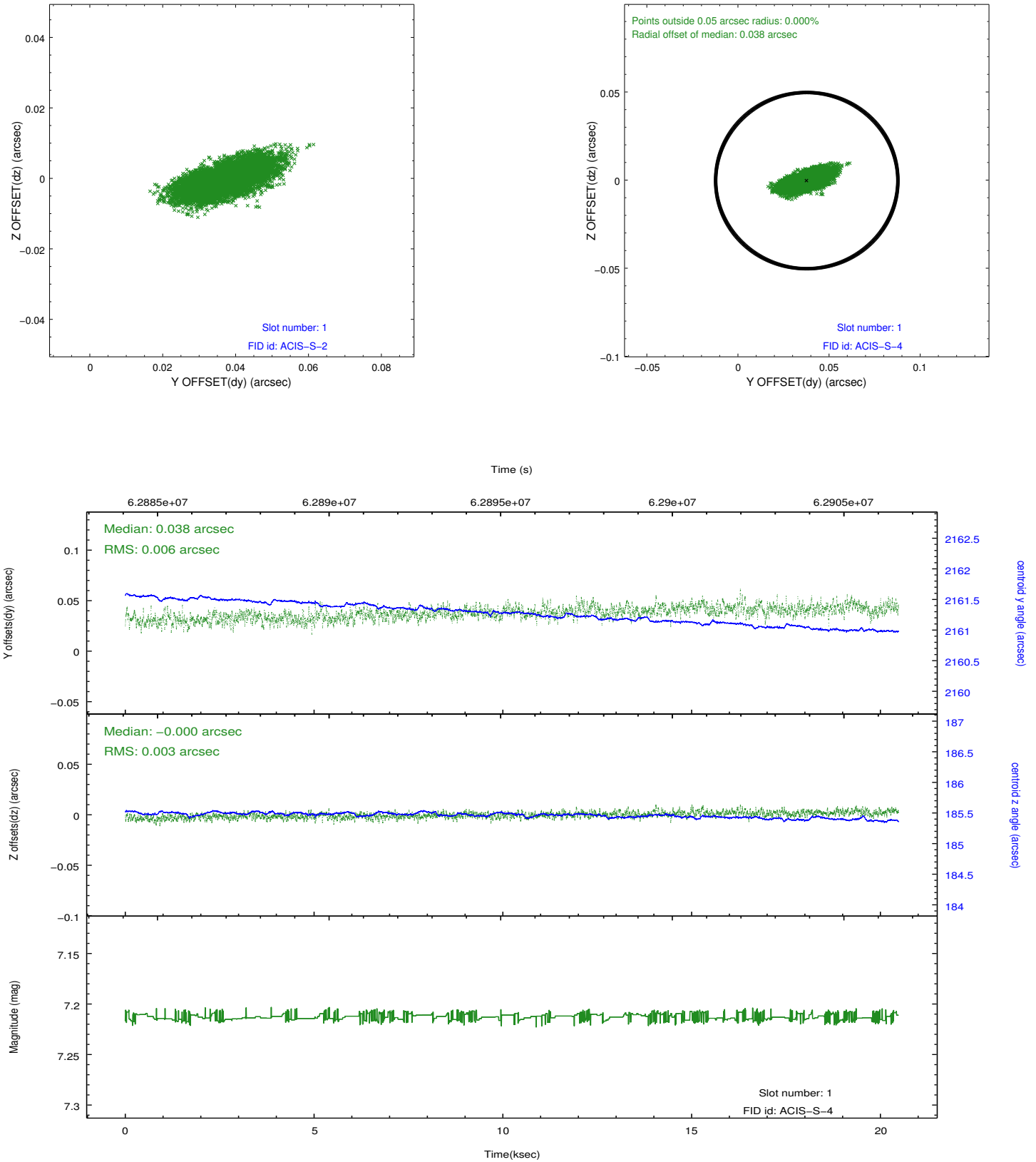


## 2.5 FID Slots

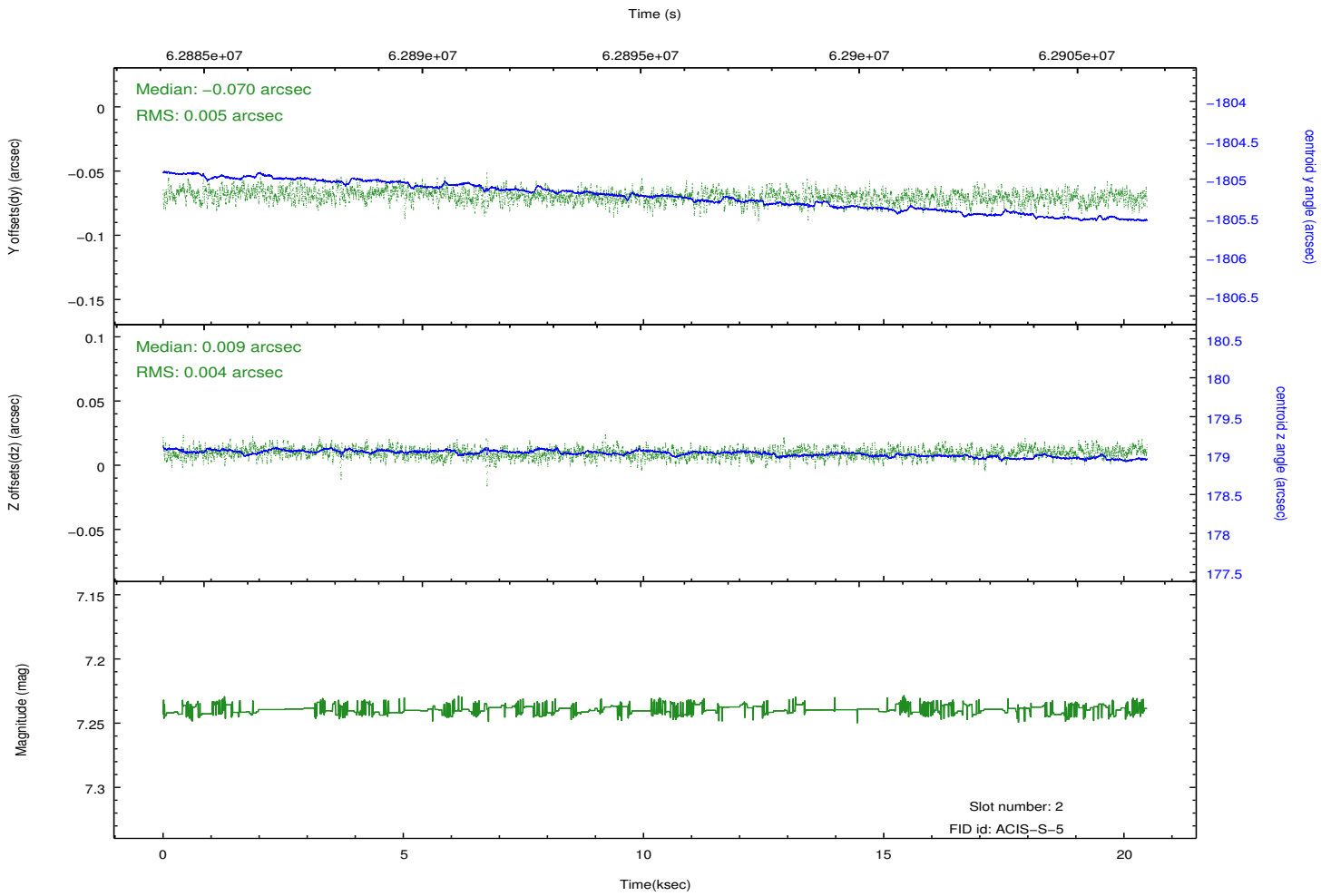
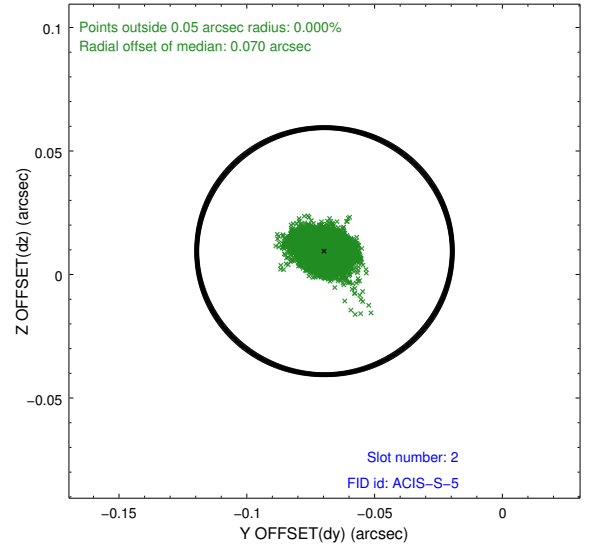
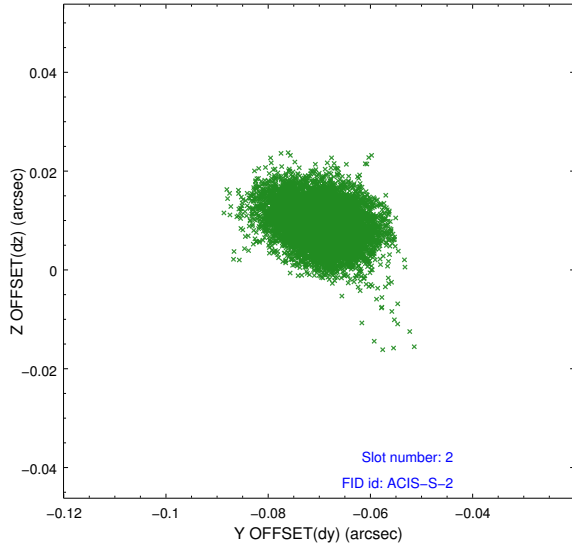
### 2.5.1 Slot 0



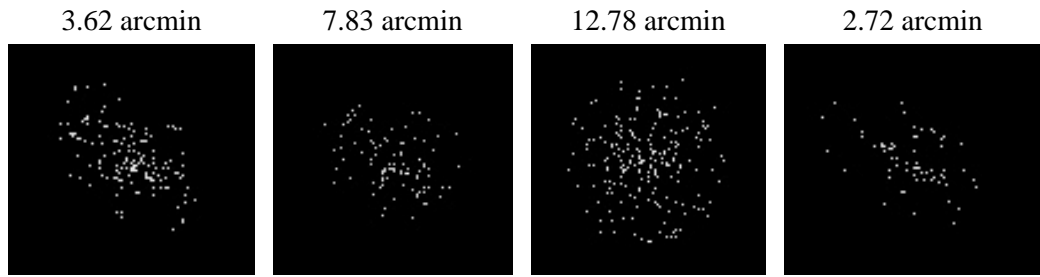
## 2.5.2 Slot 1



### 2.5.3 Slot 2



### 3 Point Sources



# A Summary

## A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2009.11.30
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	19.164

## A.2 Comments

This observation was acquired with the focal plane temperature raised from -120C to -110C, for attempted recalibration of ACIS for the 1999-09-16 through 2000-01-28 period. This reprocessing of the data applies no CTI correction because none is available for that temperature.