

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 9513 - L2 Version 2  
Chandra X-Ray Center

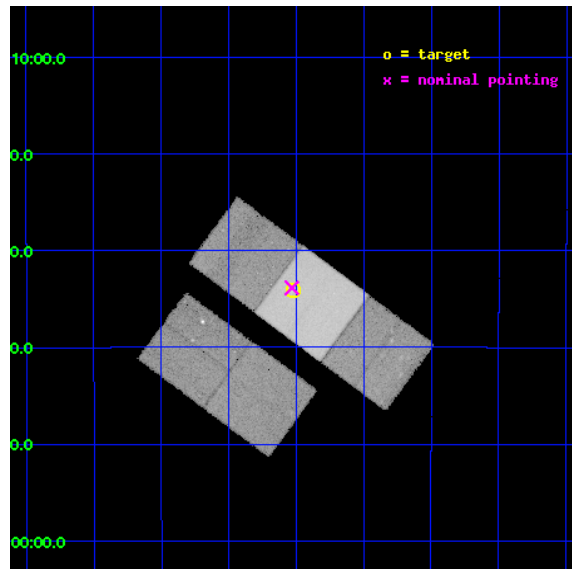
L2 Processing Date : May 10 2012

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# 1 Front

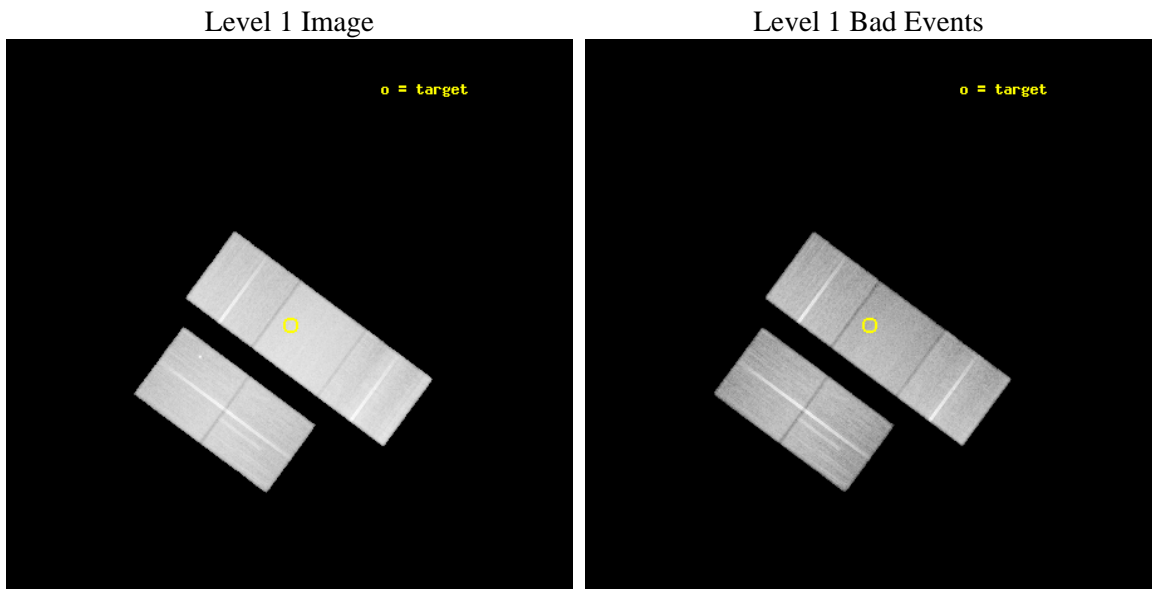
seq_num	600654	Sequence number
obs_id	9513	Observation id
title	DUST DISKS AND THE EVOLUTION OF S0 GALAXIES	Proposal title
observer	Dr. Raymond White	Principal investigator
object	NGC 3957	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	178.50625	Observer's specified target RA [deg]
dec_targ	-19.568889	Observer's specified target Dec [deg]
ra_nom	178.50816929766	Nominal RA [deg]
dec_nom	-19.564378894206	Nominal Dec [deg]
roll_nom	36.505454184341	Nominal Roll [deg]
revision	2	Processing version of data
ontime	38030.800292492	Sum of GTIs [s]
livetime	37533.899888803	Livetime [s]
ontime2	38030.800292492	Sum of GTIs [s]
ontime3	38030.800292492	Sum of GTIs [s]
ontime6	38024.518281996	Sum of GTIs [s]
ontime7	38030.800292492	Sum of GTIs [s]
ontime8	38030.800292492	Sum of GTIs [s]
l2events	367442	Number of level 2 events



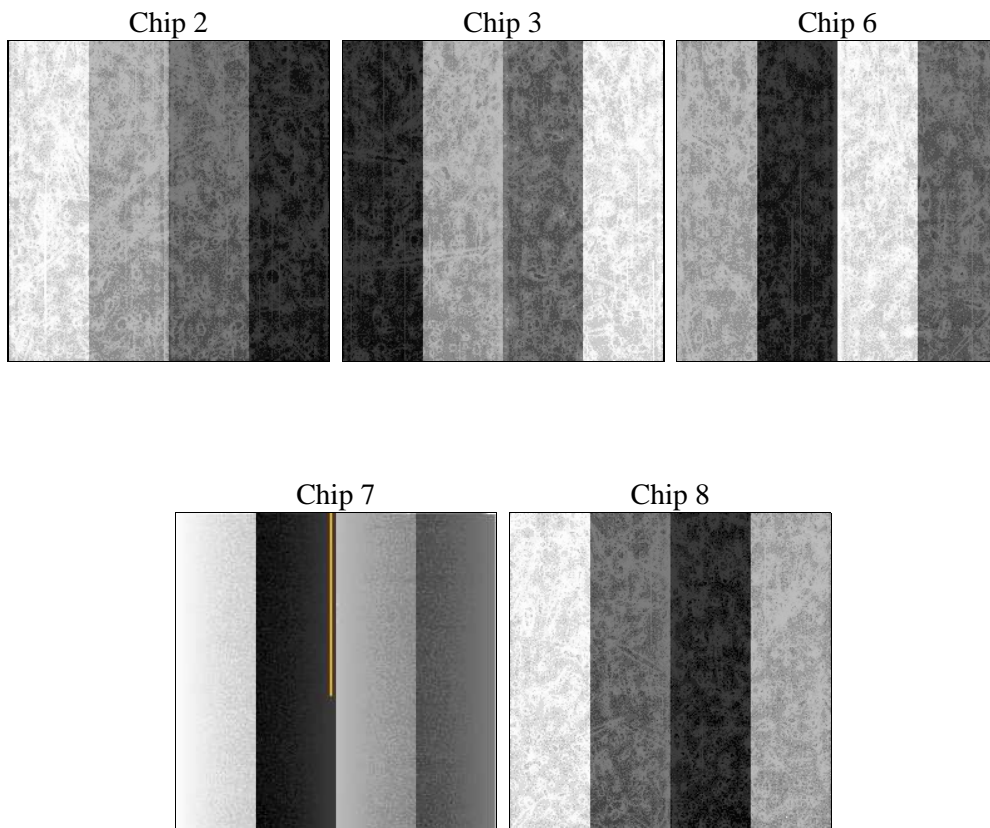
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	38000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	38030.800292492	Sum of GTIs [s]
caldbver	4.4.9	&#160	ontime2	38030.800292492	Sum of GTIs [s]
date	2012-05-10T09:29:23	Date and time of file creation	ontime3	38030.800292492	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	38024.518281996	Sum of GTIs [s]
			ontime7	38030.800292492	Sum of GTIs [s]
			ontime8	38030.800292492	Sum of GTIs [s]
			l1events	2108035	Number of level 1 events

### 2.1.4 Events

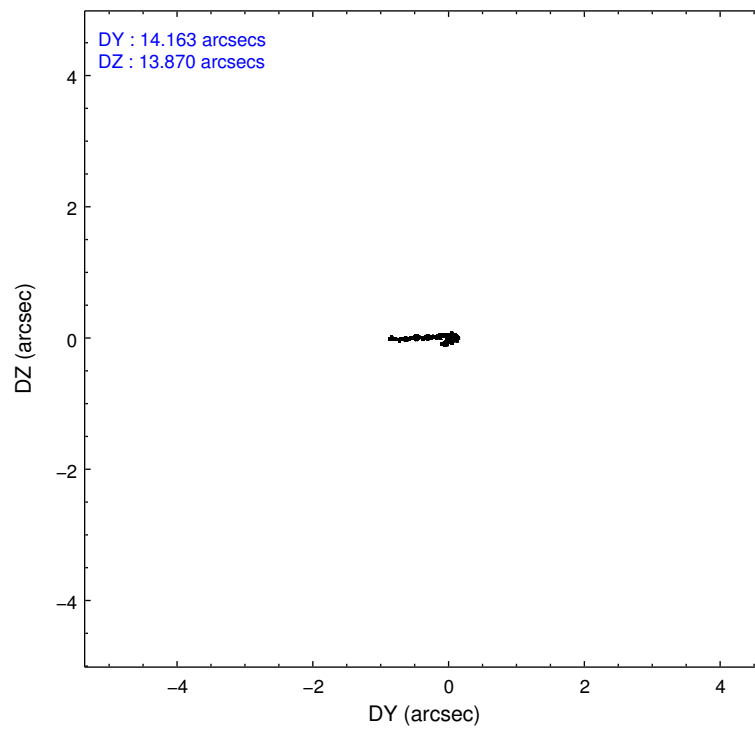
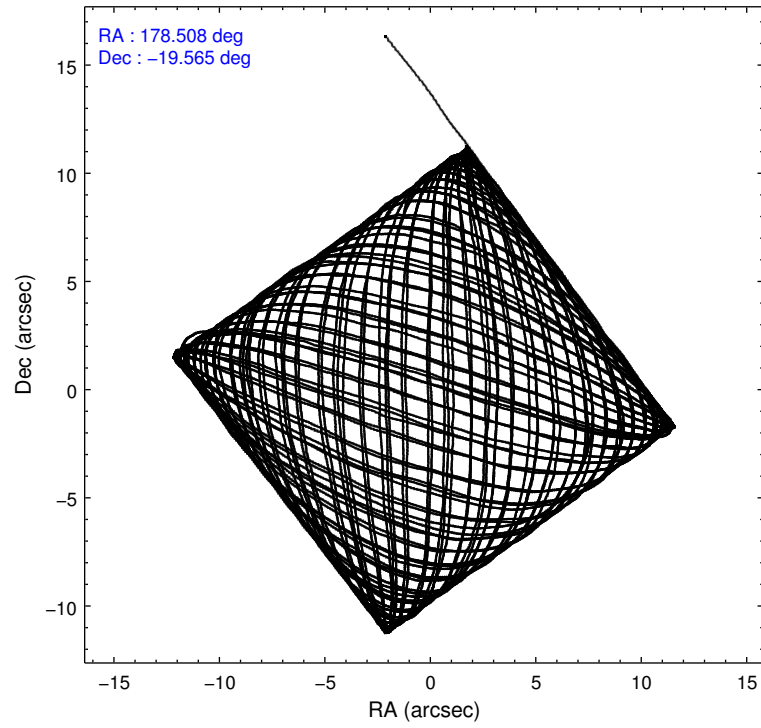
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	368285	364311	378921	513648	482870
rejected events	324281	320671	334138	301568	373039
rejected %	88%	88%	88%	58%	77%

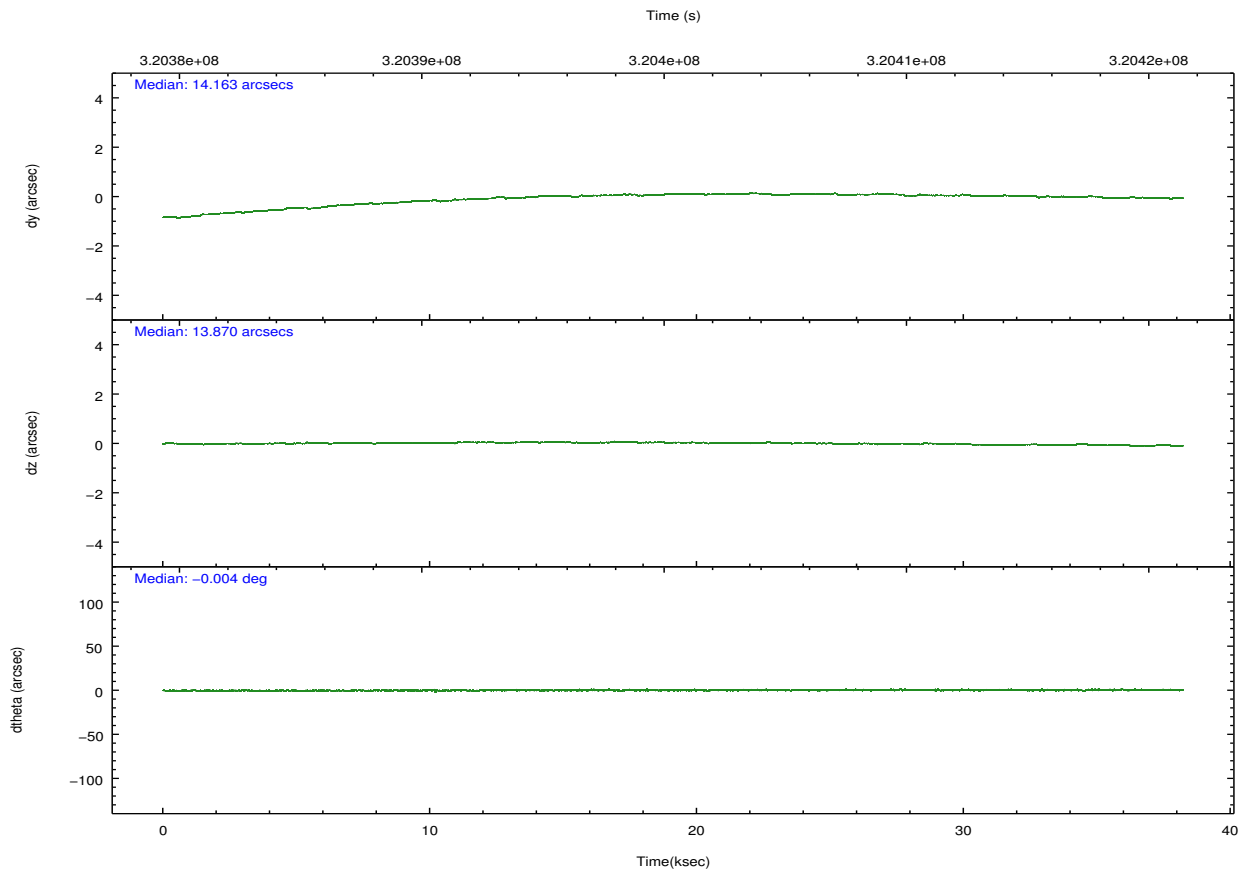
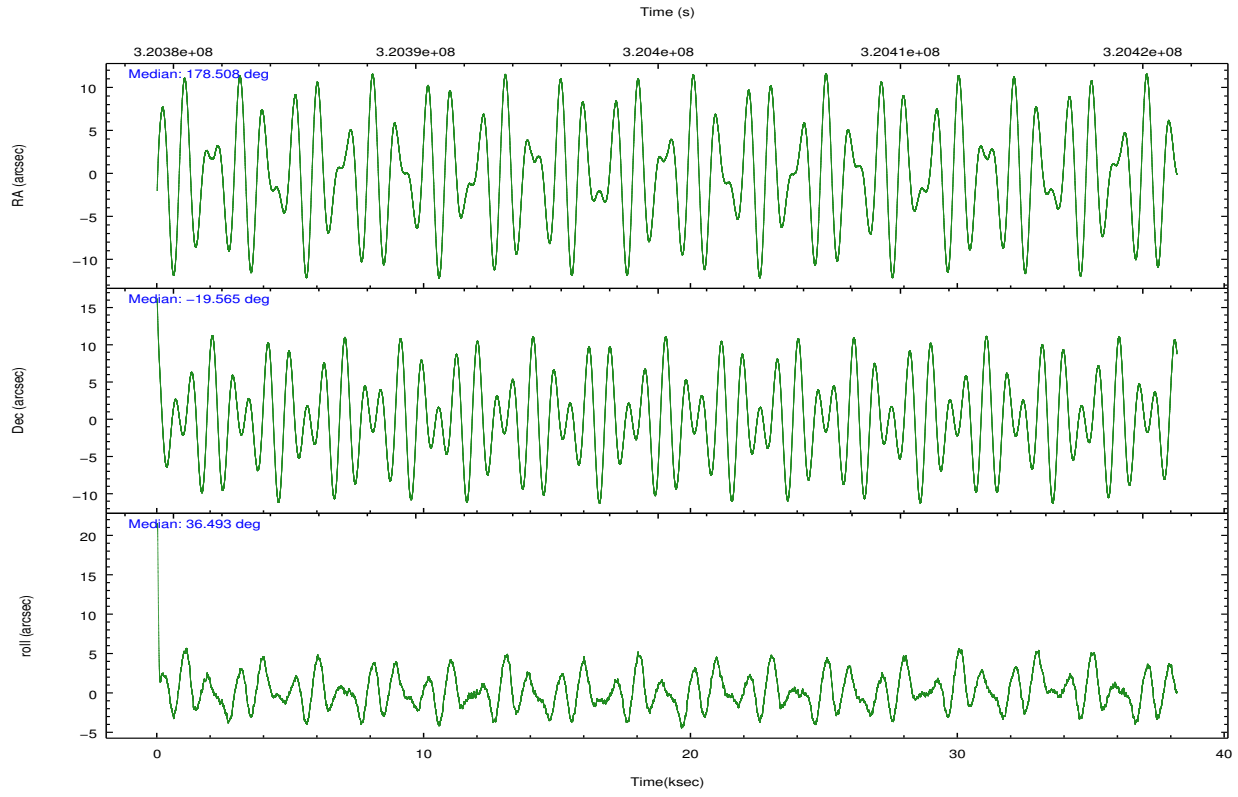
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	19304	18873	17179	18012	34503
	5%	5%	4%	3%	7%
grade 1 events	198	267	200	512	393
	0%	0%	0%	0%	0%
grade 2 events	9237	8809	9964	43287	24673
	2%	2%	2%	8%	5%
grade 3 events	4043	4125	4310	17940	11297
	1%	1%	1%	3%	2%
grade 4 events	4120	4065	4181	17802	10433
	1%	1%	1%	3%	2%
grade 5 events	14645	17155	17677	47984	23557
	3%	4%	4%	9%	4%
grade 6 events	7316	7771	9159	115070	28942
	1%	2%	2%	22%	5%
grade 7 events	309422	303246	316251	253041	349072
	84%	83%	83%	49%	72%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23678	ACIS-23678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	178.496957	178.5081692976583	CCD I2 on	O1	Y
[deg] Pointing Dec	-19.589608	-19.56437889420609	CCD I3 on	O2	Y
[deg] Pointing Roll	36.345067	36.50545418434093	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	O4	Y
[mm] SIM translation stage pos	-190.132523	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	O3	Y
[s] Observation start time (MET)	320381480.184000	320380532.21297	CCD S5 on	N	N
Observation start date	2008-02-26T02:50:15	2008-02-26T02:35:32	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	320419480.184000	320419886.57738	On-chip summing requested	N	N
Observation end date	2008-02-26T13:23:35	2008-02-26T13:31:26	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



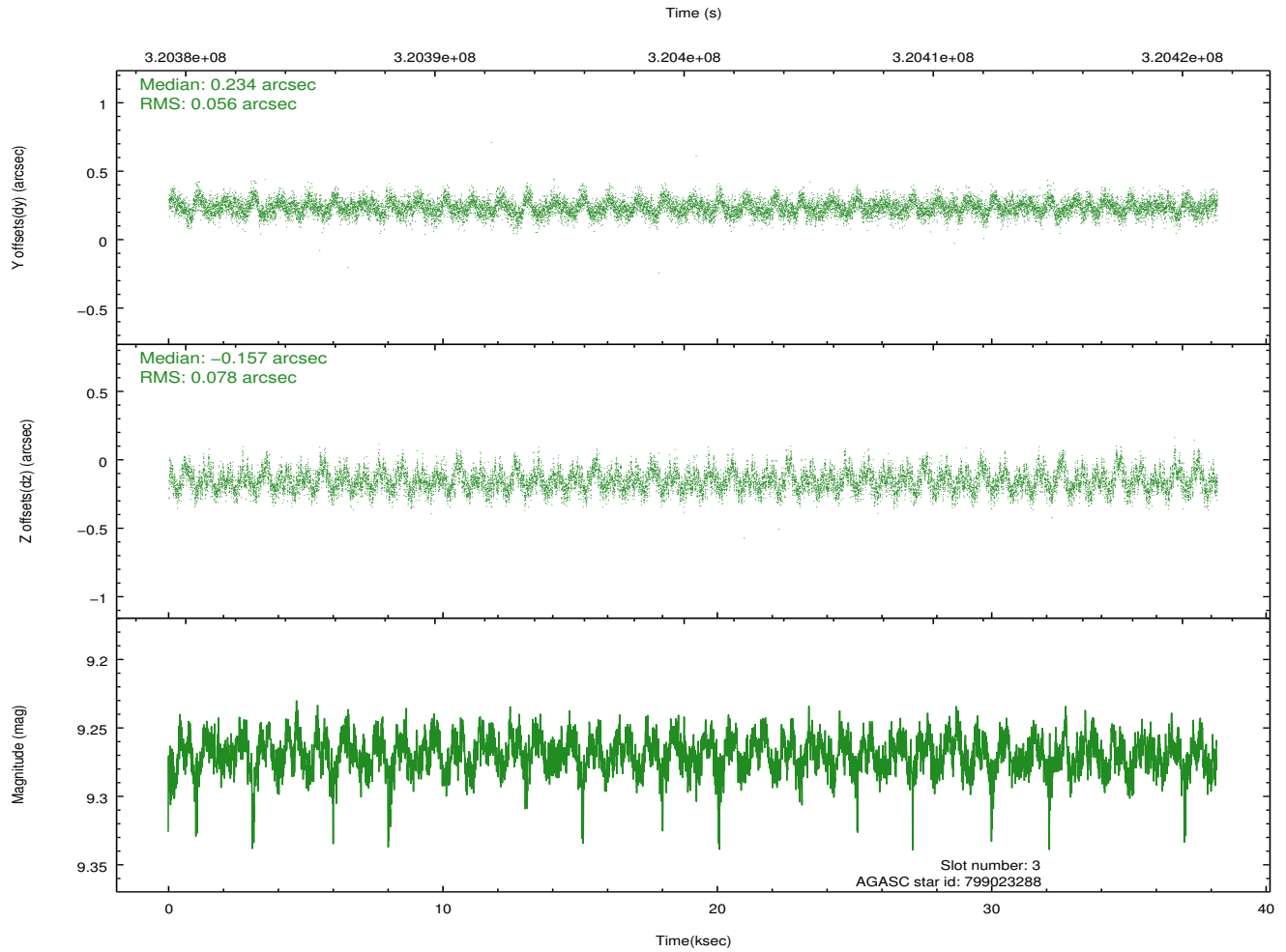
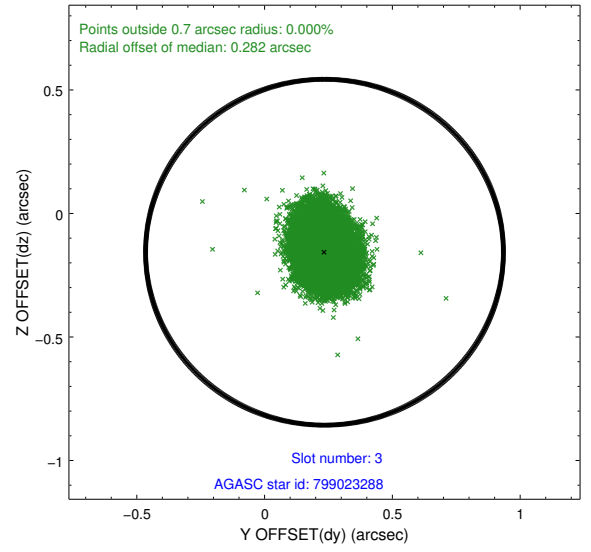
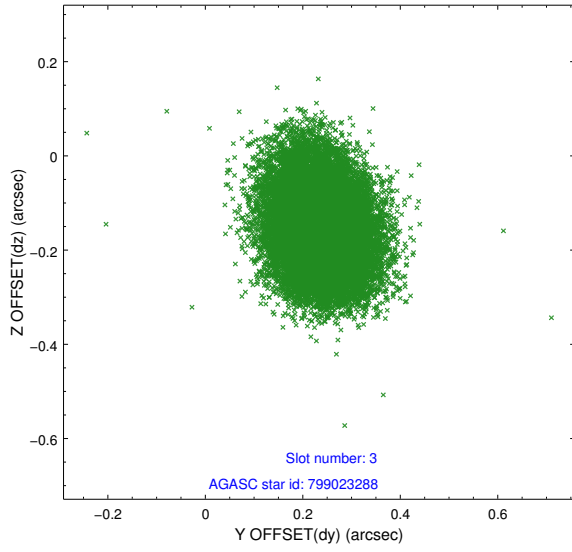


### Slot Statistics

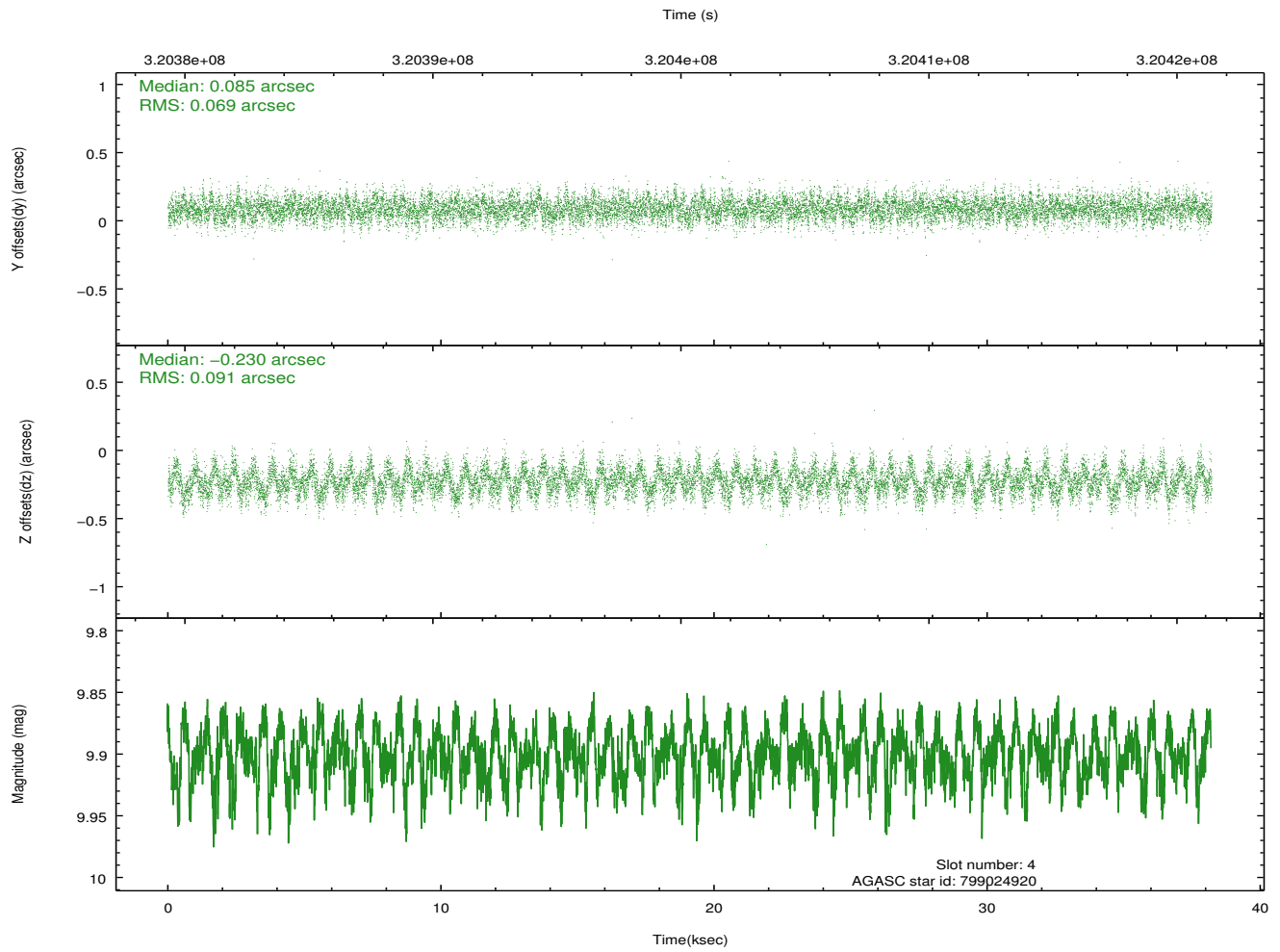
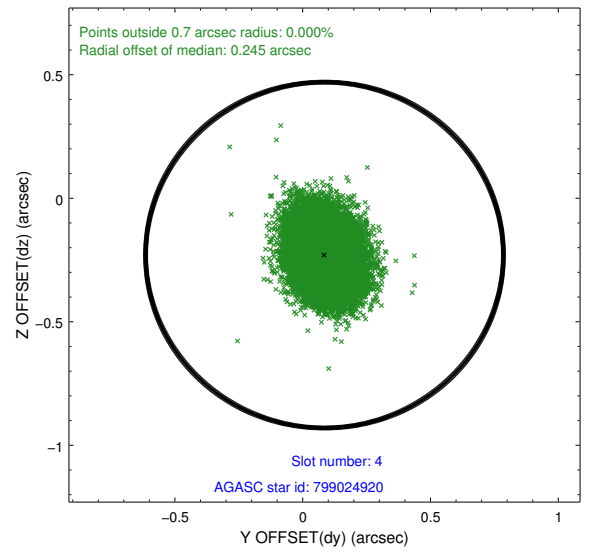
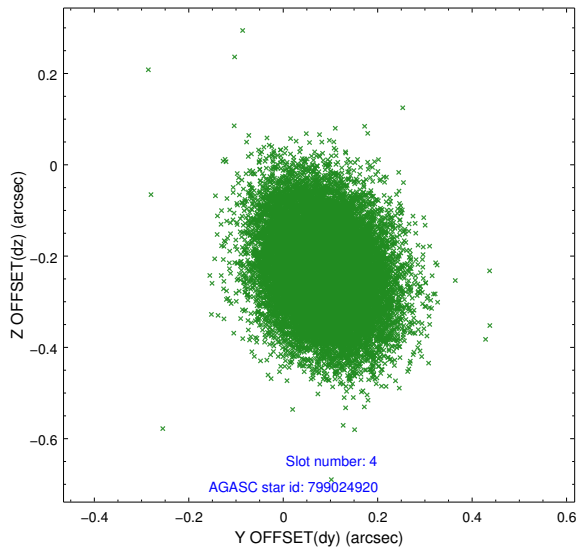
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	9320	-0.061	-0.059	0.011	0.027	0.000000	0.000000	-767.06	-1735.22
1	FID	ACIS-S-4	7.19	9321	0.187	0.046	0.012	0.037	0.000000	0.000000	2146.46	173.33
2	FID	ACIS-S-5	7.22	9320	-0.156	0.023	0.008	0.013	0.000000	0.000000	-1819.96	167.02
3	GUIDE	799023288	9.27	18630	0.234	-0.157	0.102	0.165	178.230286	-19.704075	-972.24	202.87
4	GUIDE	799024920	9.90	18616	0.085	-0.230	0.121	0.197	178.162761	-19.273276	-240.77	1589.61
5	GUIDE	799026904	7.72	18640	-0.263	0.053	0.067	0.108	178.050822	-19.206191	-405.46	2009.57
6	GUIDE	799153600	8.56	18637	-0.142	0.058	0.070	0.111	179.169341	-19.787663	1409.63	-1926.89
7	GUIDE	799423000	9.35	18603	0.085	0.270	0.090	0.144	178.408924	-20.353322	-1868.26	-2038.09

## 2.4 Star Slots

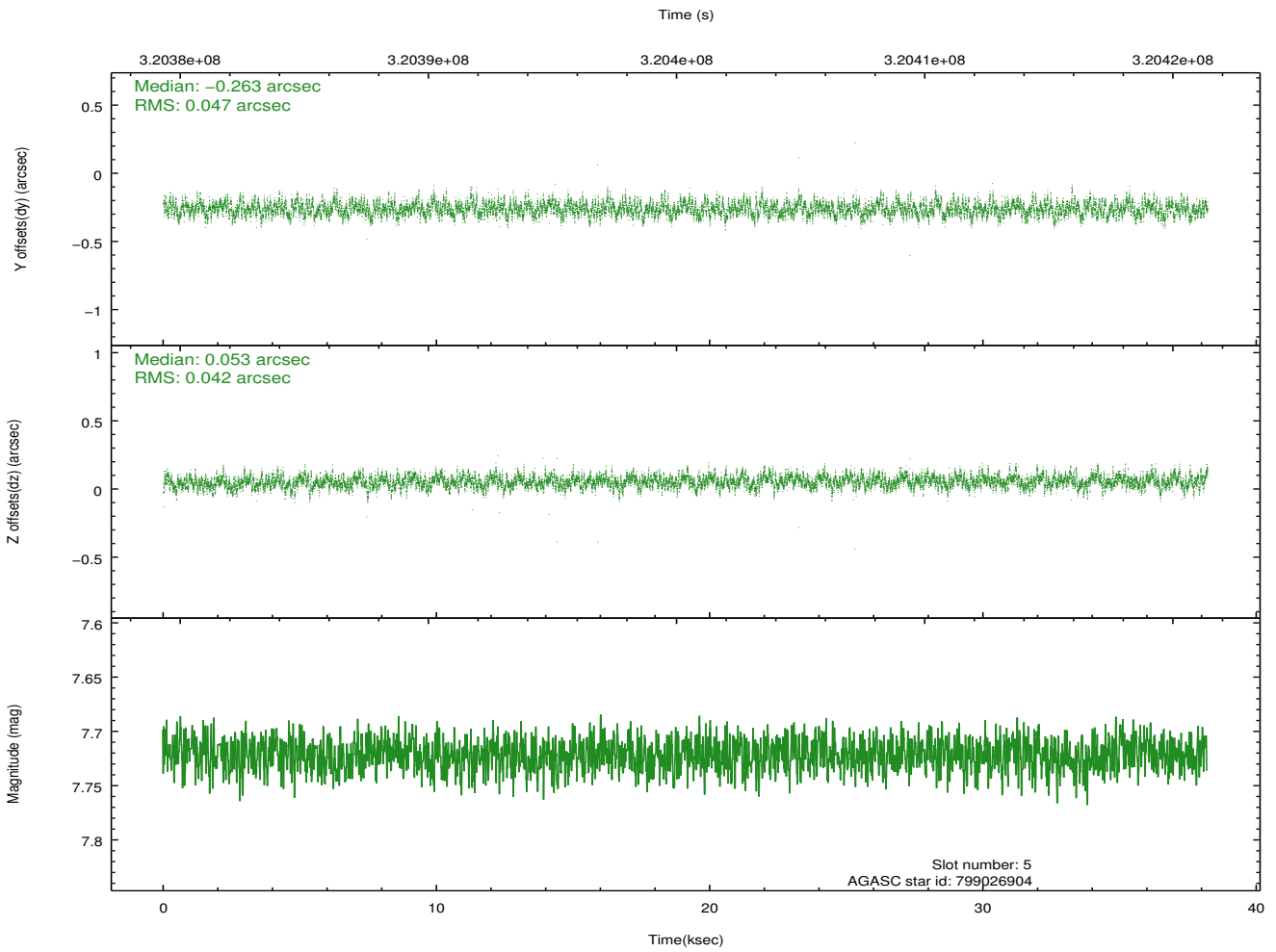
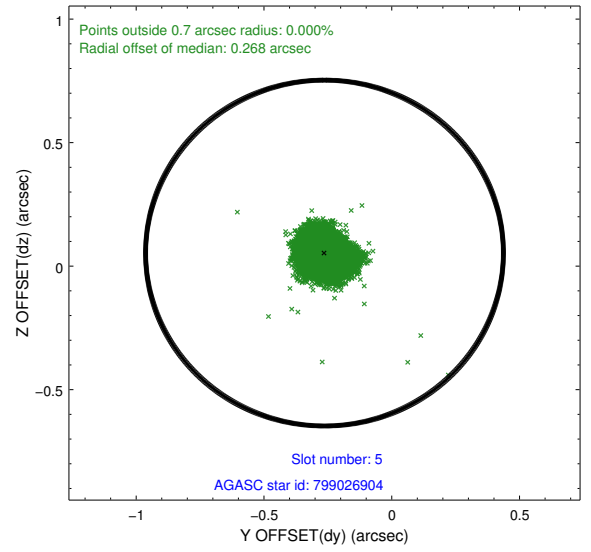
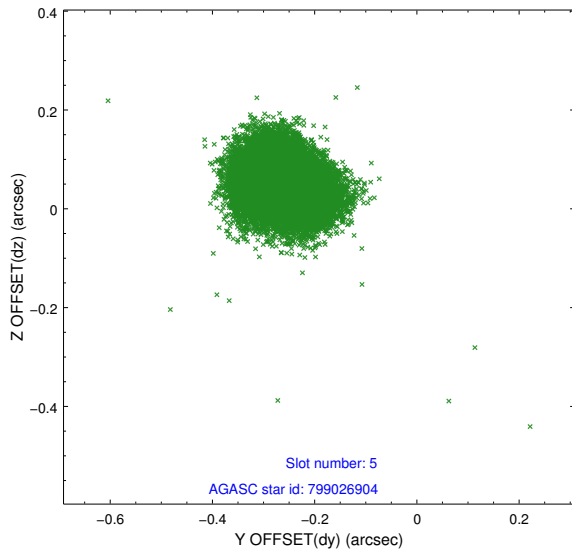
### 2.4.1 Slot 3



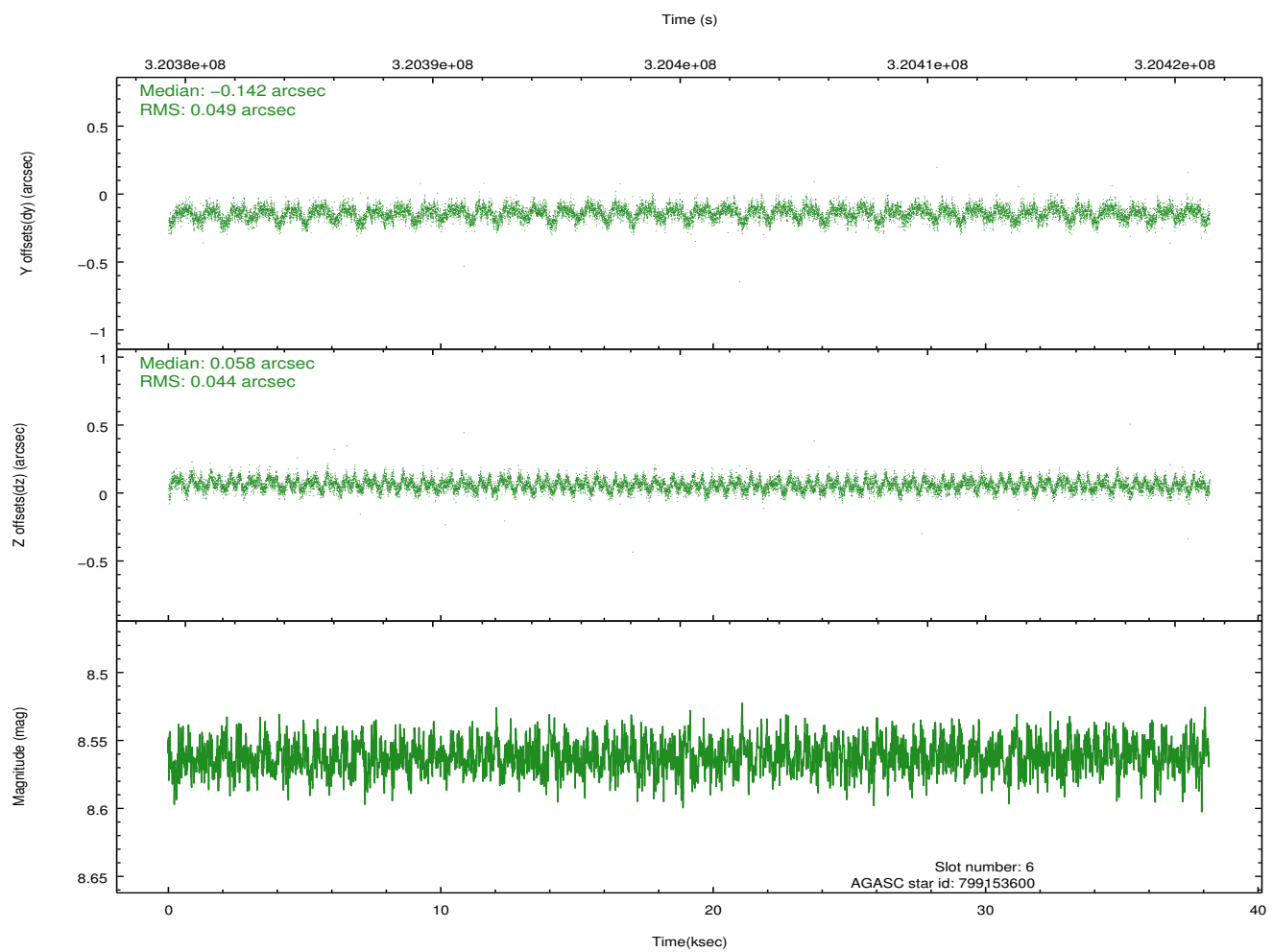
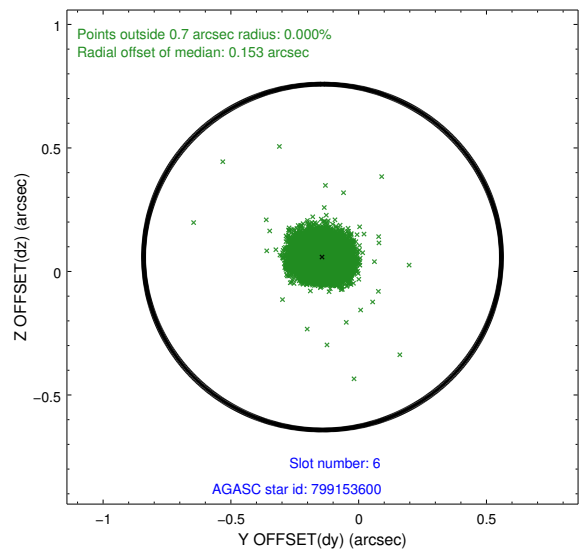
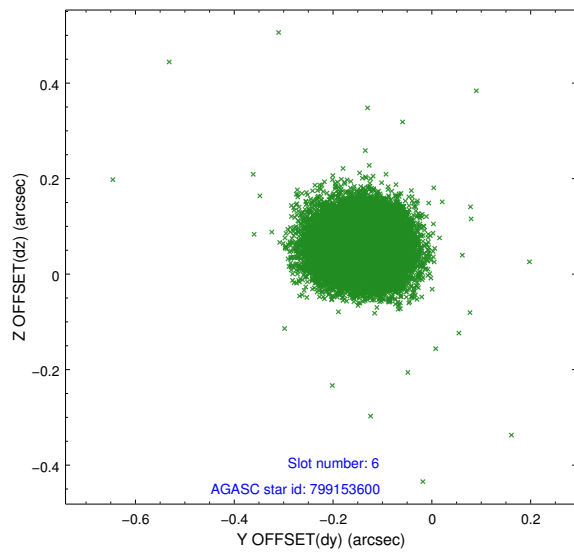
### 2.4.2 Slot 4



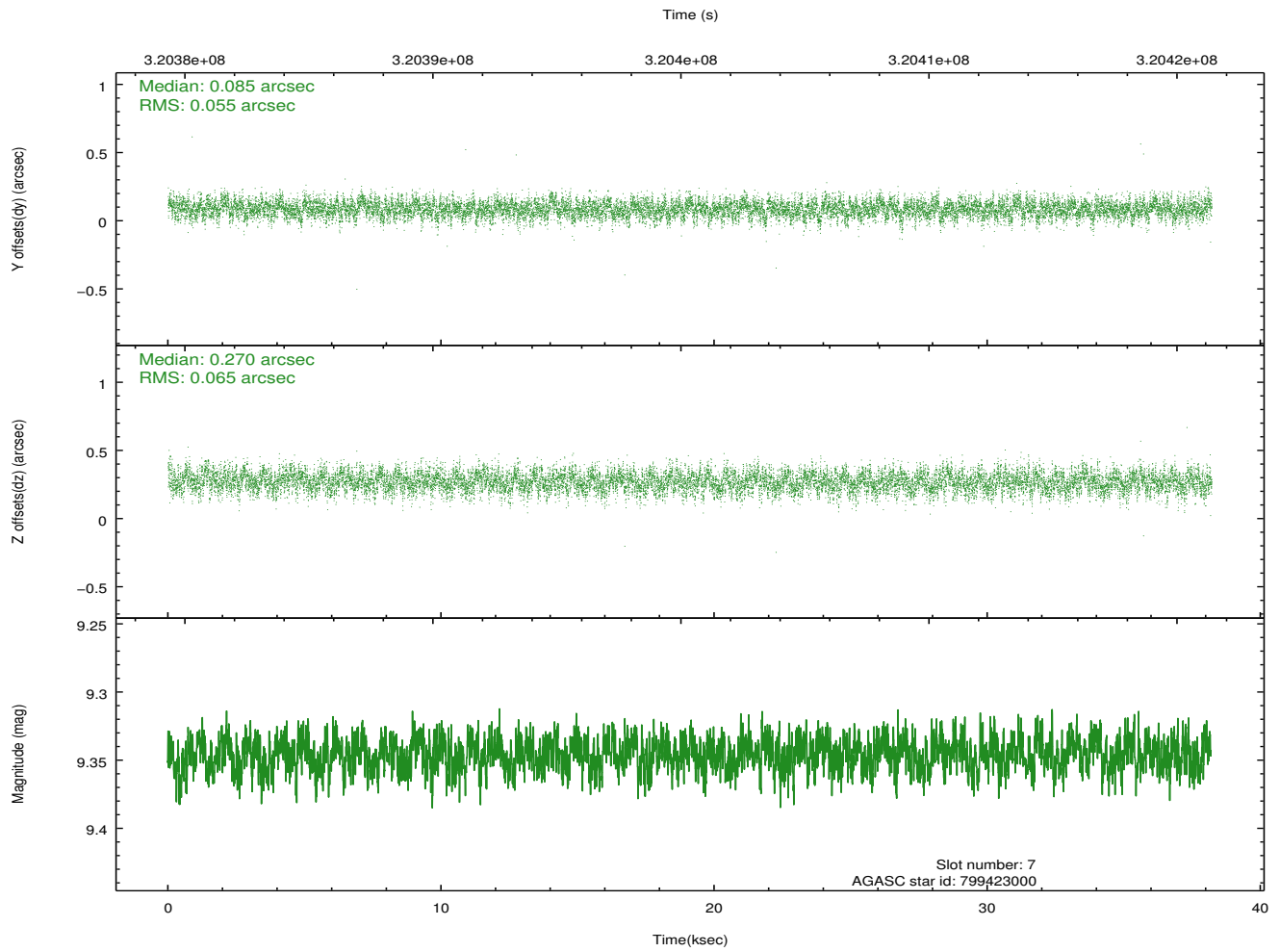
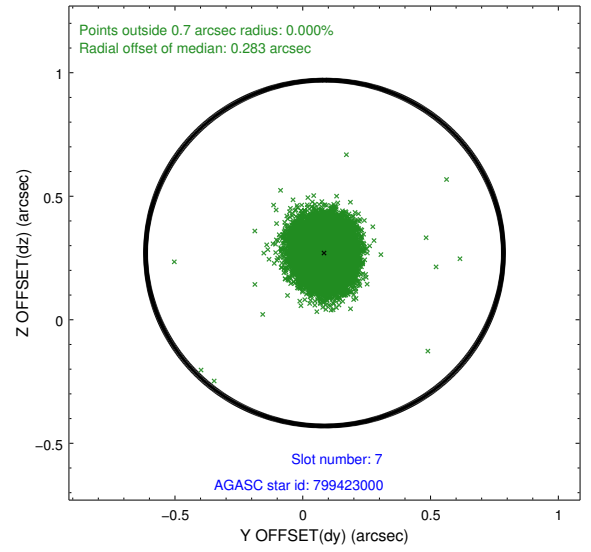
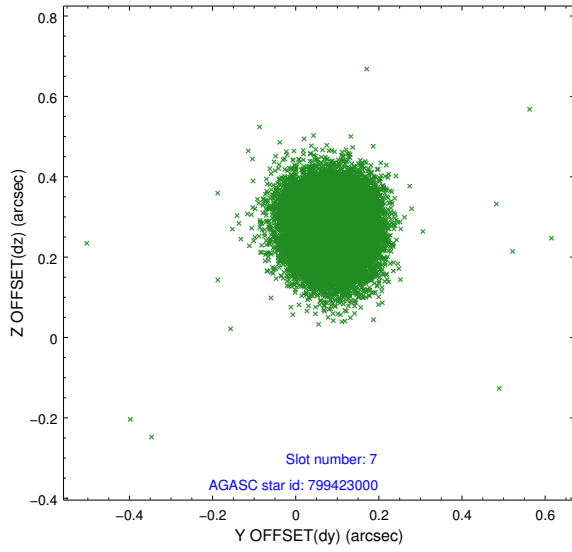
### 2.4.3 Slot 5



## 2.4.4 Slot 6

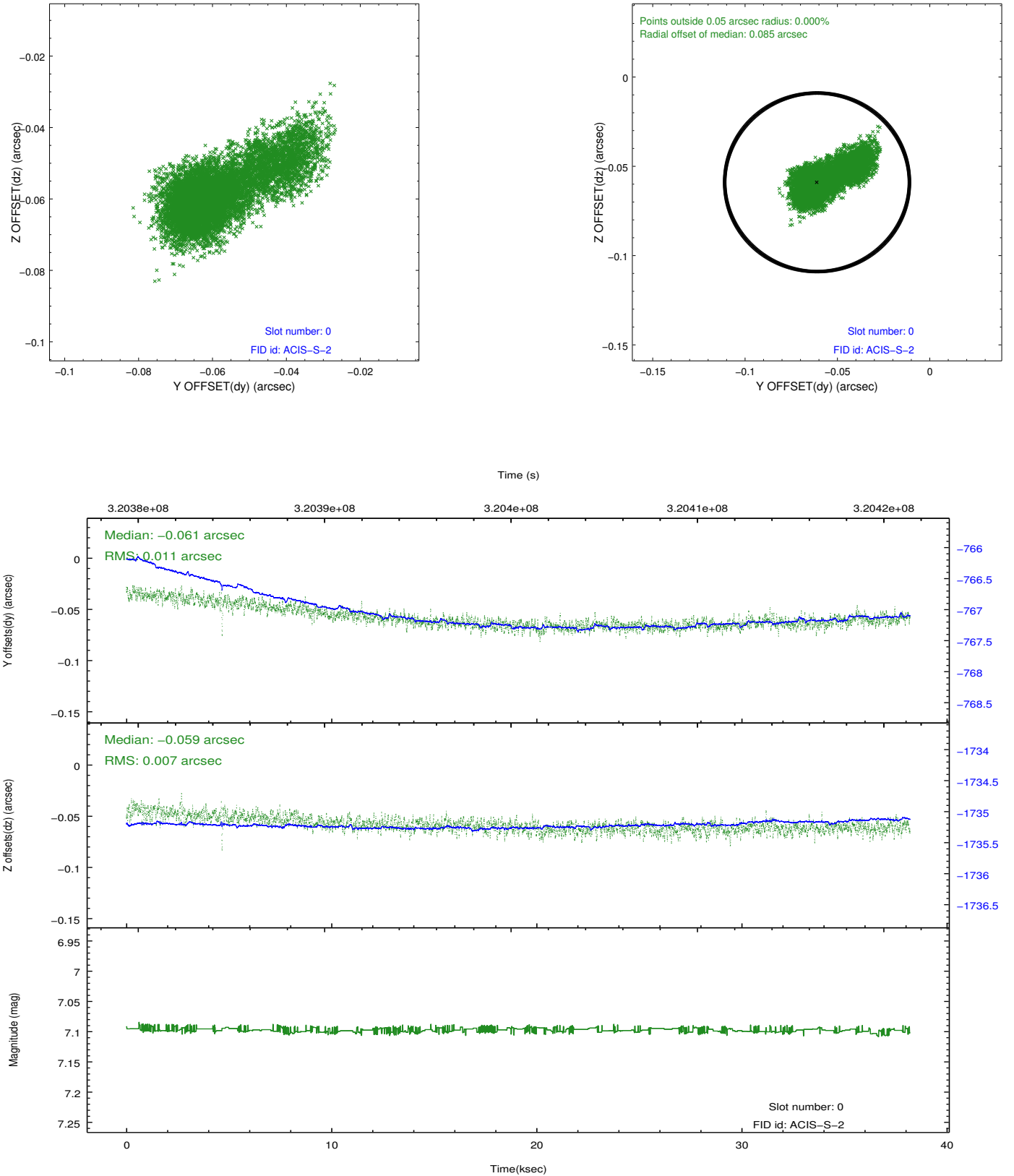


### 2.4.5 Slot 7

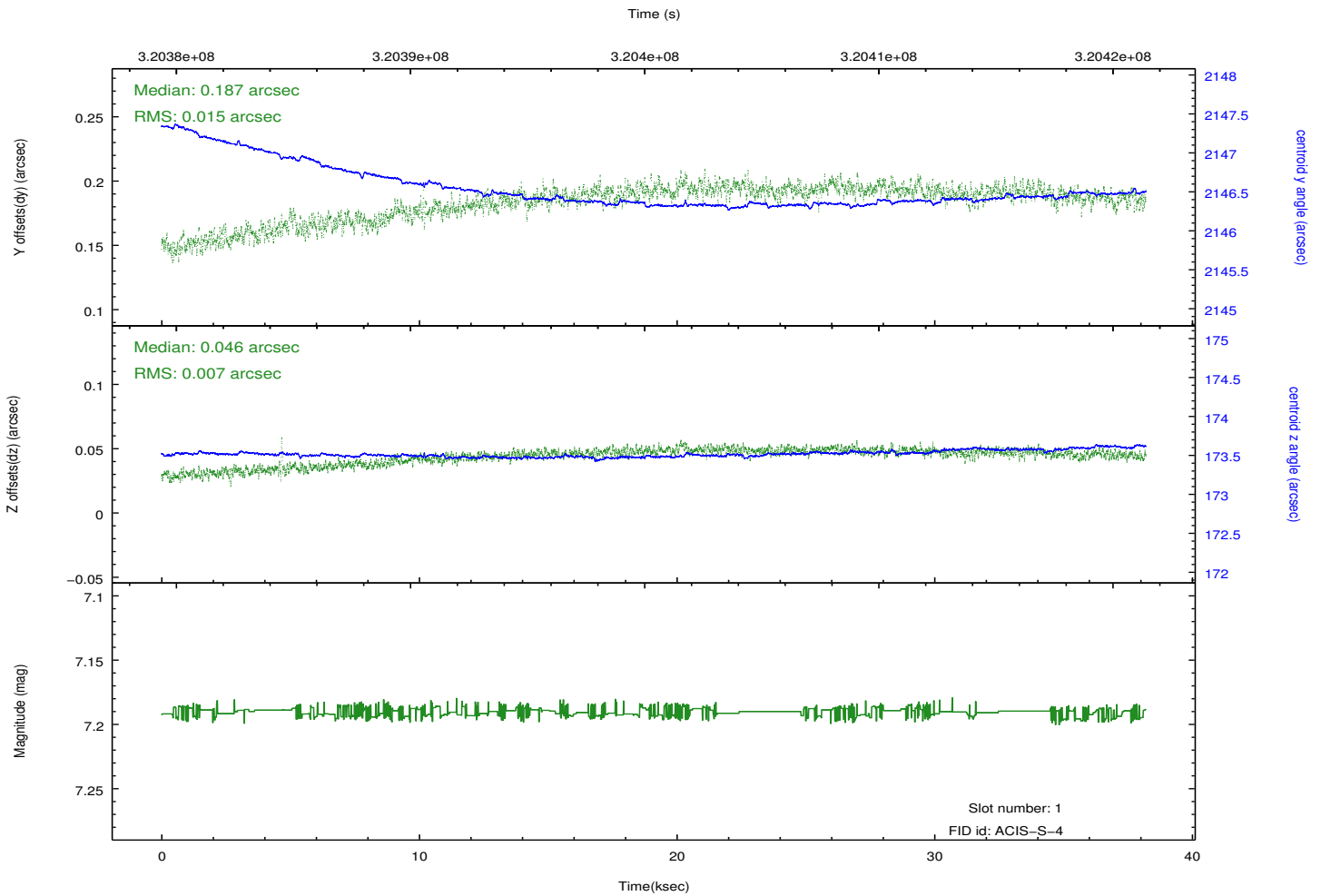
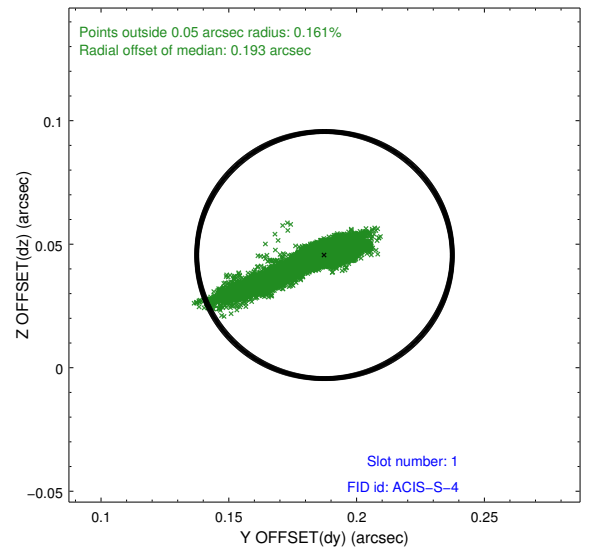
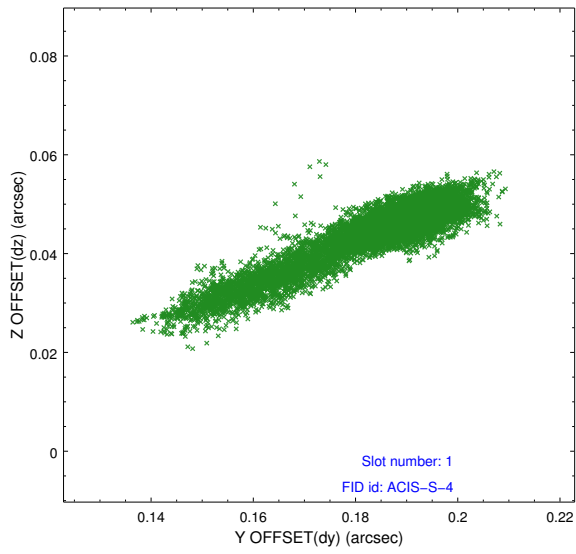


## 2.5 FID Slots

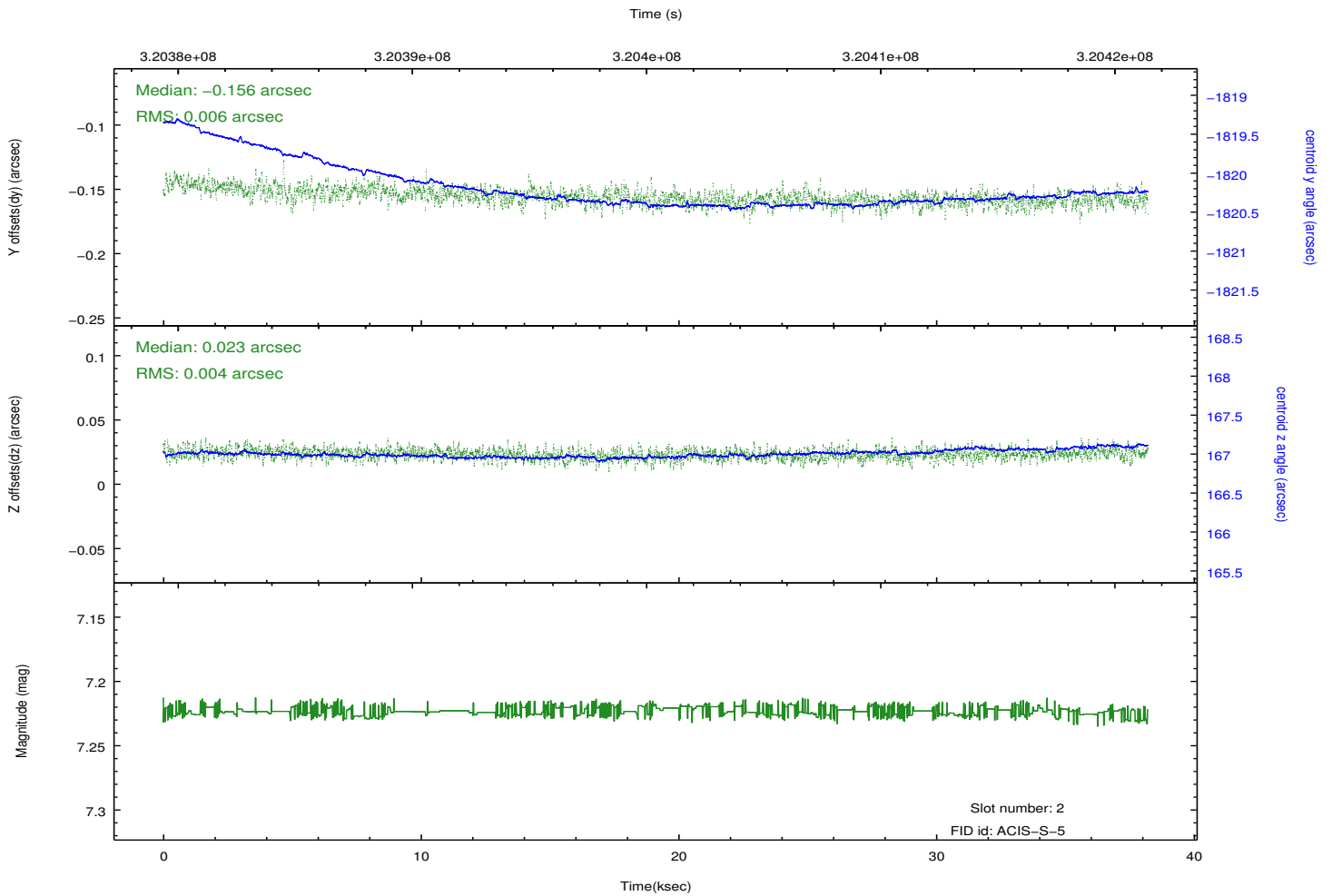
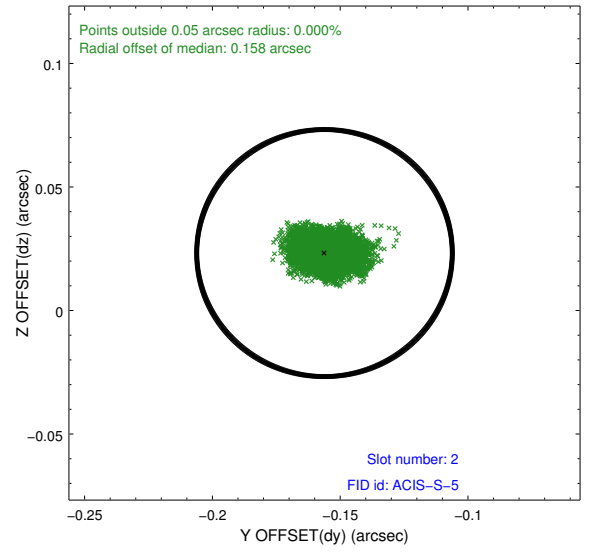
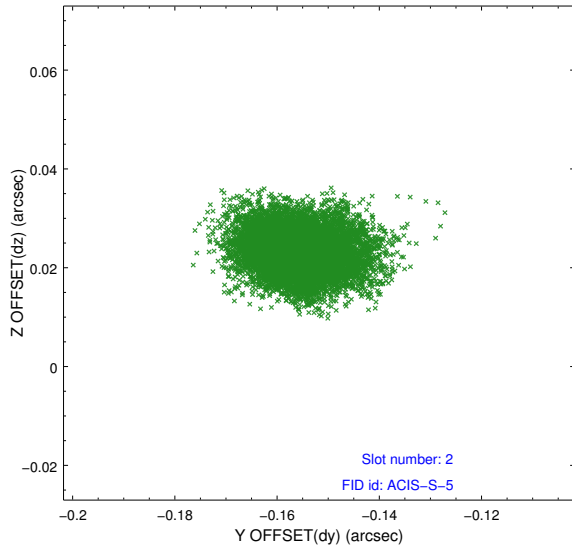
### 2.5.1 Slot 0



## 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)	2012.05.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	38.0308002

## A.2 Comments