

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 8363 - L2 Version 3  
Chandra X-Ray Center

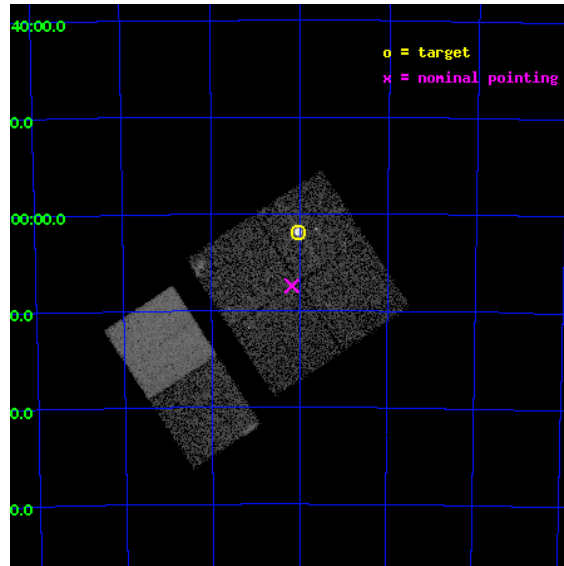
L2 Processing Date : Apr 20 2012

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# 1 Front

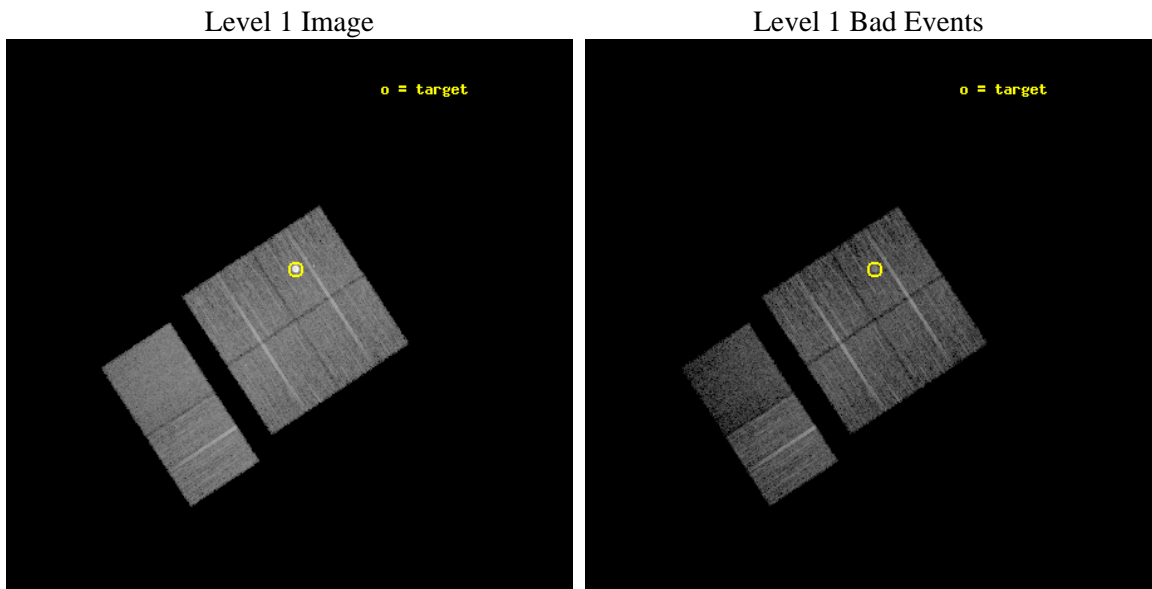
seq_num	590456	Sequence number
obs_id	8363	Observation id
title	AO8 Calibration Observations of E0102-72	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	E0102-72[I1,-120,-4.0,-3.68,0]	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	16.01	Observer's specified target RA [deg]
dec_targ	-72.032028	Observer's specified target Dec [deg]
ra_nom	16.044218836731	Nominal RA [deg]
dec_nom	-72.124128980914	Nominal Dec [deg]
roll_nom	236.77583780995	Nominal Roll [deg]
revision	3	Processing version of data
ontime	8553.415574789	Sum of GTIs [s]
livetime	8445.1070765325	Livetime [s]
ontime0	8550.1335645318	Sum of GTIs [s]
ontime1	8553.415574789	Sum of GTIs [s]
ontime2	8553.4566147923	Sum of GTIs [s]
ontime3	8553.4976547956	Sum of GTIs [s]
ontime6	8553.5797348022	Sum of GTIs [s]
ontime7	8553.5386648774	Sum of GTIs [s]
l2events	77484	Number of level 2 events



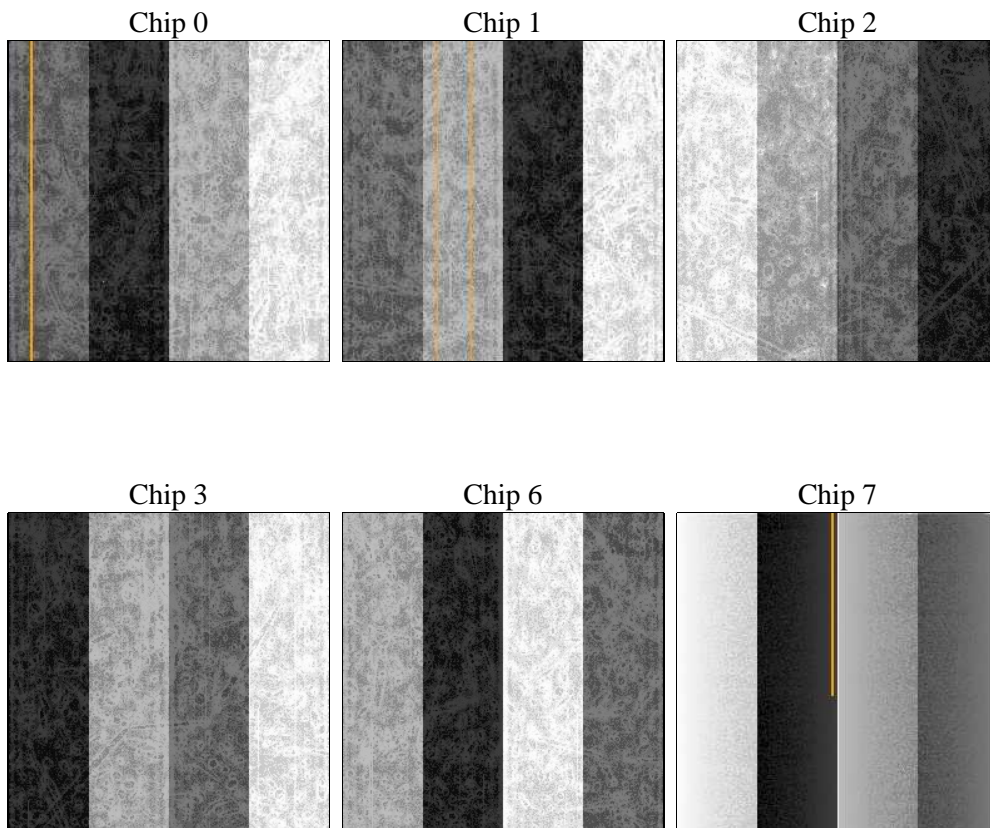
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	8800.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	8553.415574789	Sum of GTIs [s]
caldsver	4.4.9	&#160	ontime0	8550.1335645318	Sum of GTIs [s]
date	2012-04-20T03:19:59	Date and time of file creation	ontime1	8553.415574789	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	8553.4566147923	Sum of GTIs [s]
			ontime3	8553.4976547956	Sum of GTIs [s]
			ontime6	8553.5797348022	Sum of GTIs [s]
			ontime7	8553.5386648774	Sum of GTIs [s]
			l1events	389522	Number of level 1 events

### 2.1.4 Events

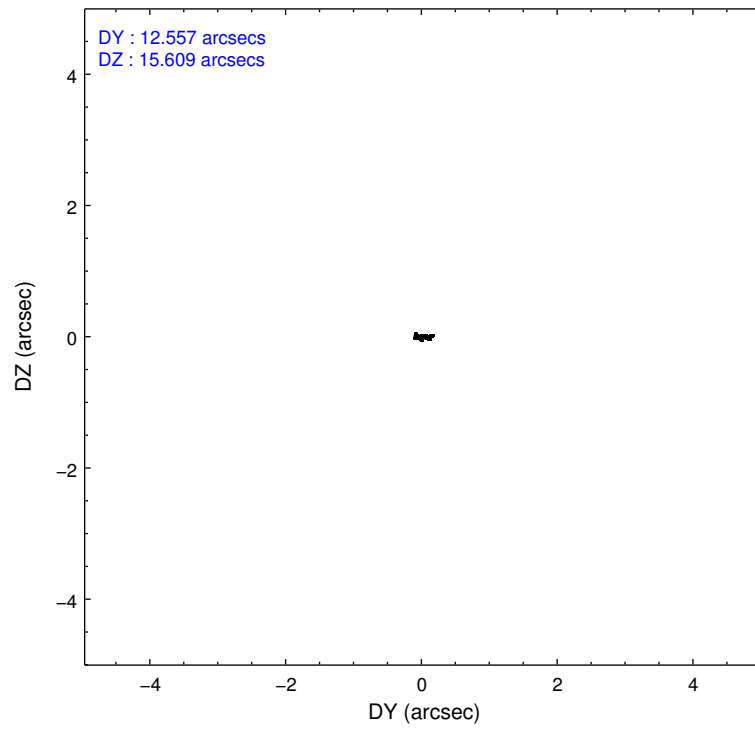
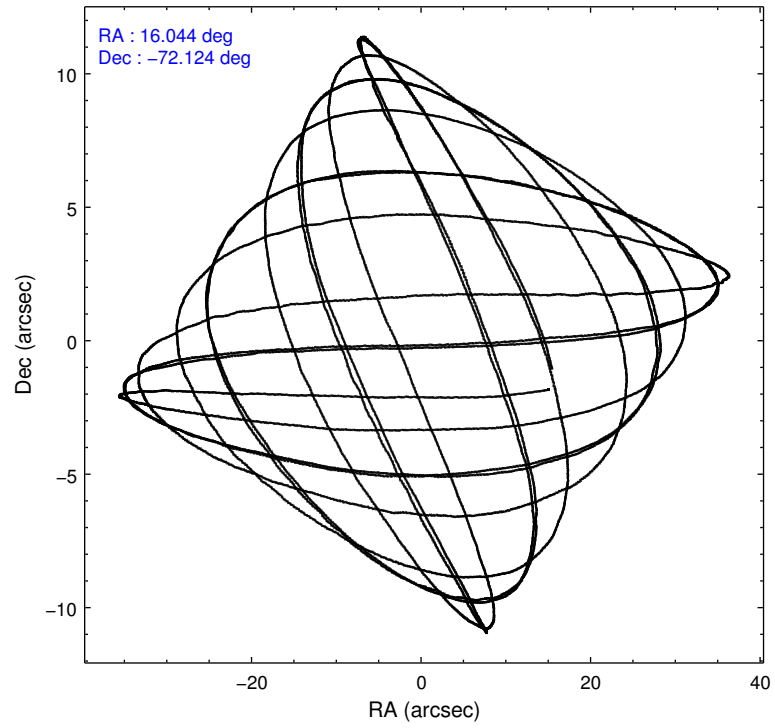
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	58649	82120	63461	61768	64839	58685	grade 0 events	2478	23771	2515	2829	2553	2949
rejected events	52417	51322	57280	55325	58287	29766		4%	28%	3%	4%	3%	5%
rejected %	89%	62%	90%	89%	89%	50%	grade 1 events	23	207	42	28	30	95
								0%	0%	0%	0%	0%	0%
							grade 2 events	1406	3208	1358	1302	1391	6244
								2%	3%	2%	2%	2%	10%
							grade 3 events	693	1183	613	636	676	2739
								1%	1%	0%	1%	1%	4%
							grade 4 events	621	1183	651	600	679	2687
								1%	1%	1%	0%	1%	4%
							grade 5 events	1790	2137	1670	2108	2182	6286
								3%	2%	2%	3%	3%	10%
							grade 6 events	1035	1472	1048	1082	1255	14320
								1%	1%	1%	1%	1%	24%
							grade 7 events	50603	48959	55564	53183	56073	23365
								86%	59%	87%	86%	86%	39%

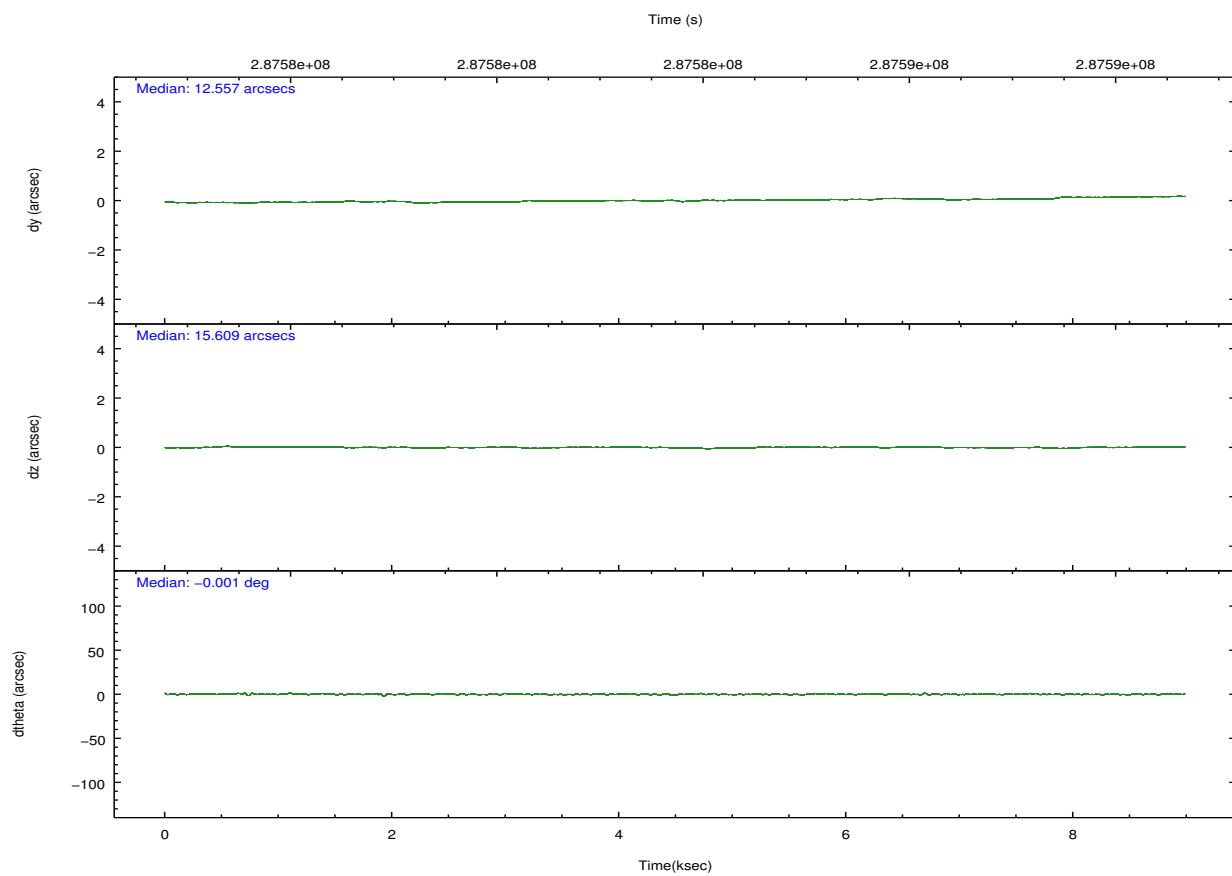
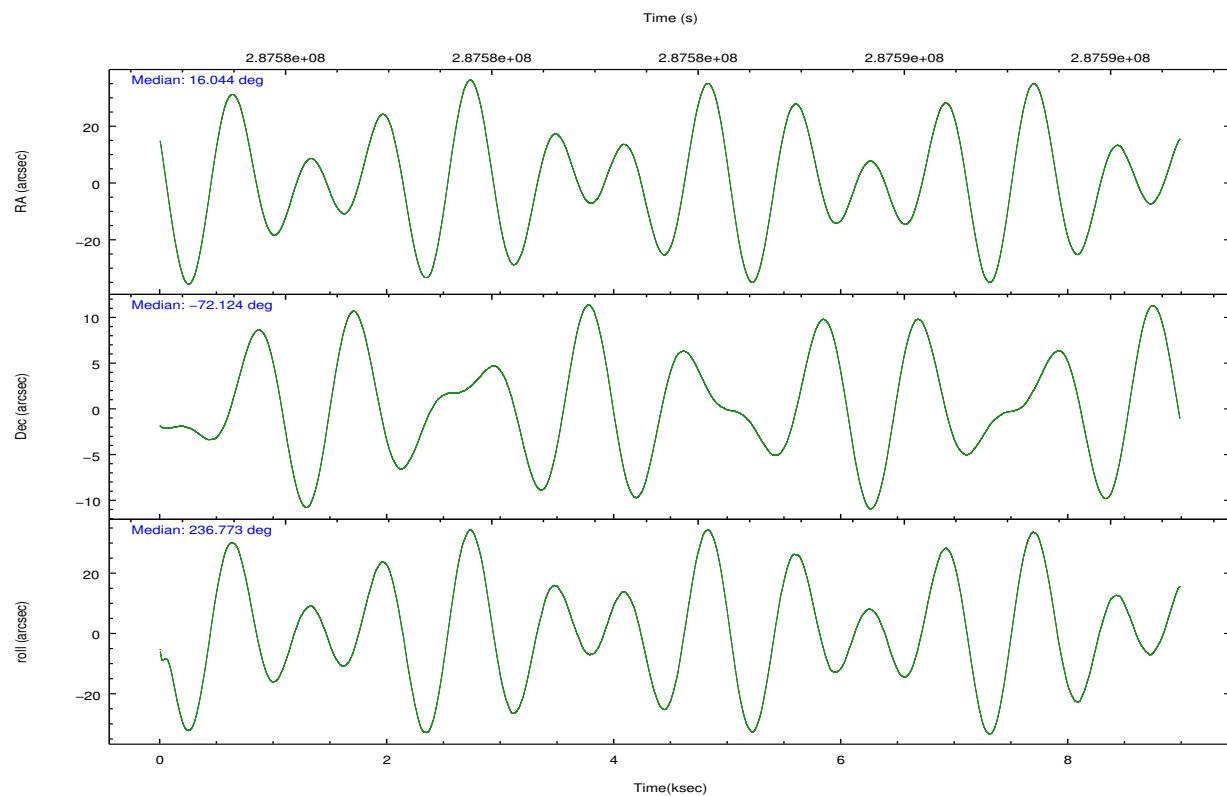


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	16.049016	16.04421883673053	CCD I2 on	Y	Y
[deg] Pointing Dec	-72.096690	-72.12412898091425	CCD I3 on	Y	Y
[deg] Pointing Roll	236.571721	236.7758378099505	CCD S0 on	N	N
[s] Window start time (MET)	281318465.184000	281318465.184000	CCD S1 on	N	N
[s] Window stop time (MET)	294278465.184000	294278465.184000	CCD S2 on	O1	Y
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S3 on	Y	Y
[mm] SIM defocus	0	0.001439871863259334	CCD S4 on	N	N
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S5 on	N	N
[mm] SIM translation stage offset	0	-0.005018542100998502	Number of optional ACIS chips dropped	0	0
[s] Observation start time (MET)	287579421.184000	287579045.41243	On-chip summing requested	N	N
Observation start date	2007-02-11T11:09:16	2007-02-11T11:04:05	Subarray requested	NONE	NONE
[s] Observation end time (MET)	287588221.184000	287588355.48787	Alternating exposures requested	N	N
Observation end date	2007-02-11T13:35:56	2007-02-11T13:39:15	[s] Primary exposure time	0.000000	3.2
Read mode	TIMED	TIMED			

## 2.3 Aspect



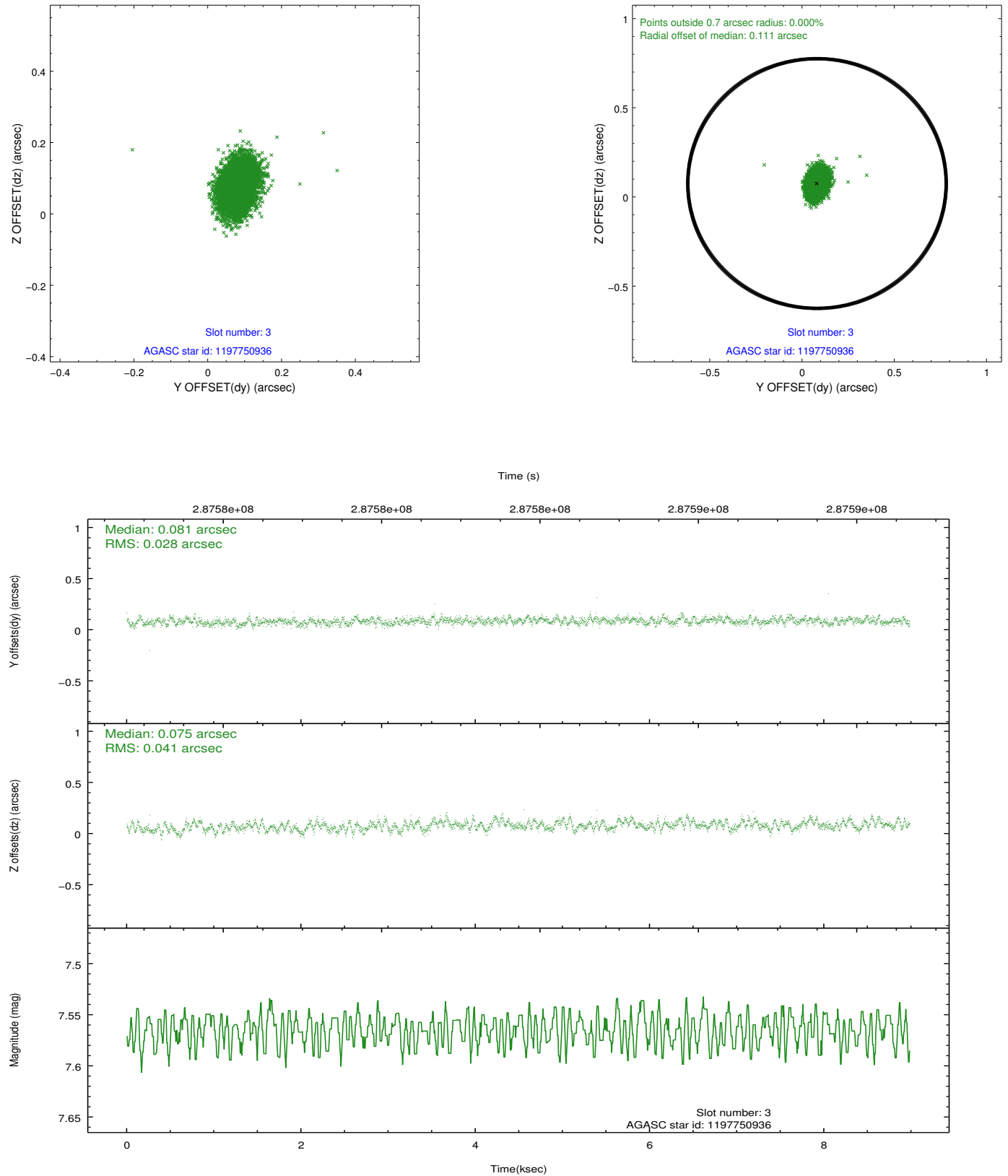


### Slot Statistics

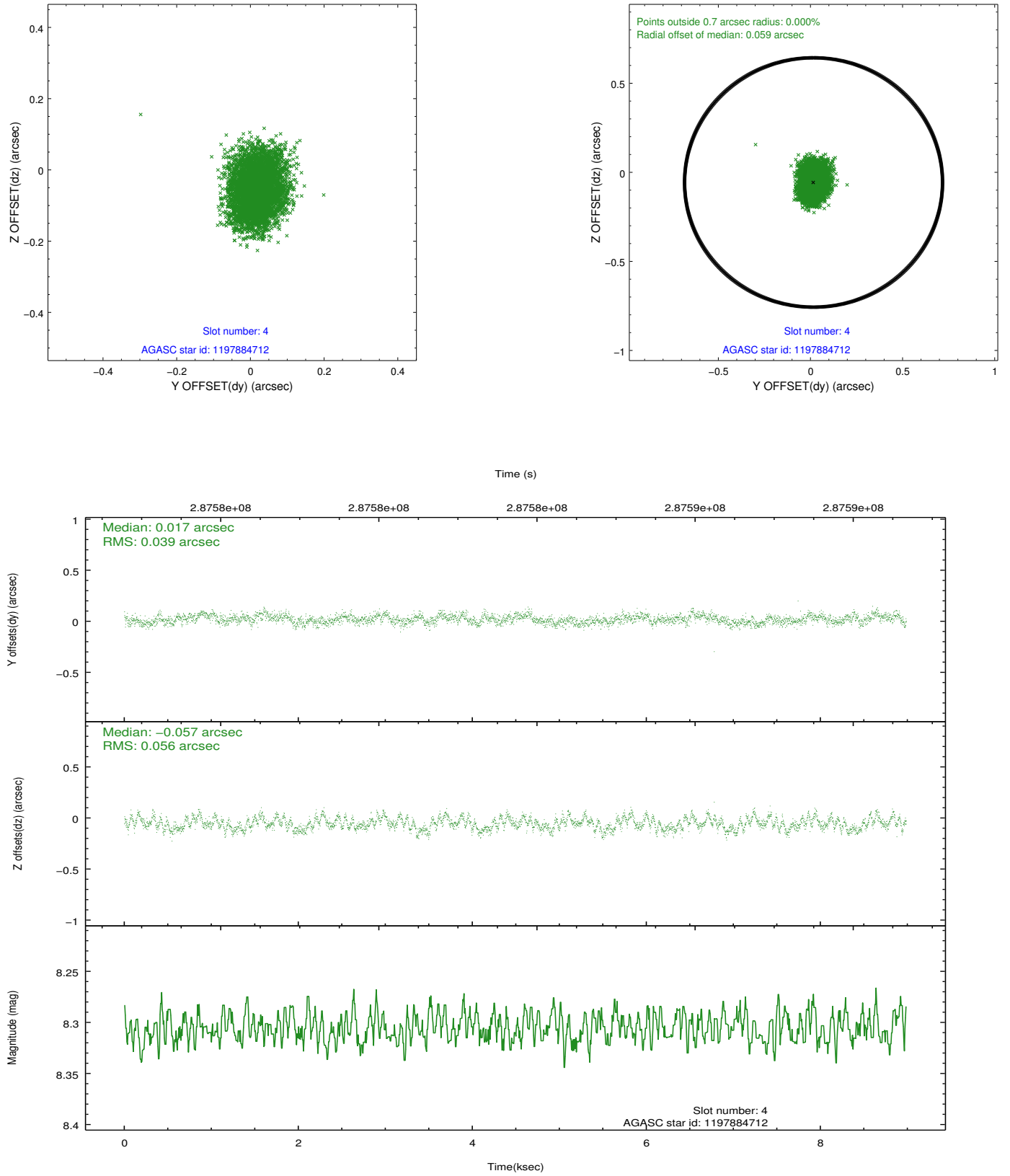
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.23	2192	0.046	-0.042	0.011	0.019	0.000000	0.000000	927.00	-839.28
1	FID	ACIS-I-5	7.22	2192	-0.197	0.048	0.009	0.016	0.000000	0.000000	-1821.00	1058.03
2	FID	ACIS-I-6	7.24	2192	0.060	0.065	0.009	0.016	0.000000	0.000000	391.92	1703.21
3	GUIDE	1197750936	7.57	4384	0.081	0.075	0.052	0.086	15.387940	-71.549550	-1224.94	-1710.76
4	GUIDE	1197884712	8.31	4384	0.017	-0.057	0.073	0.117	16.087398	-72.252690	445.46	344.59
5	GUIDE	1197885104	9.34	4378	0.108	0.017	0.119	0.183	17.845067	-72.189368	-785.42	1850.86
6	GUIDE	1198189696	7.38	4384	-0.160	0.010	0.052	0.087	15.223750	-72.697522	2296.87	458.62
7	GUIDE	1197884536	8.50	4380	-0.045	-0.049	0.071	0.115	17.160729	-71.835289	-1462.40	529.57

## 2.4 Star Slots

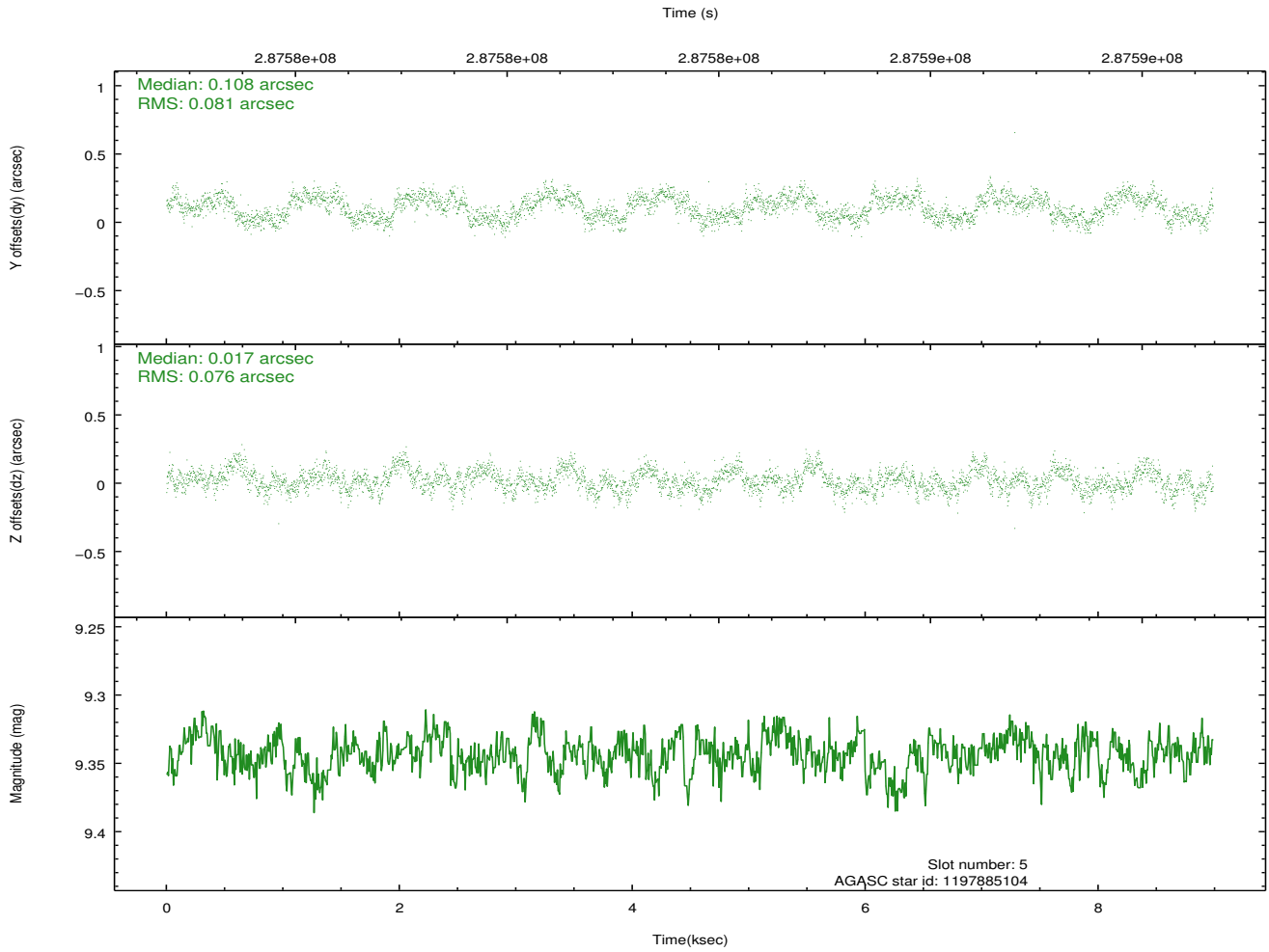
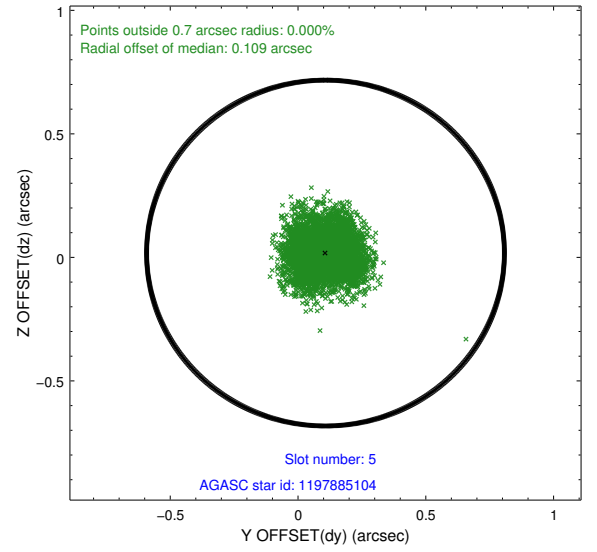
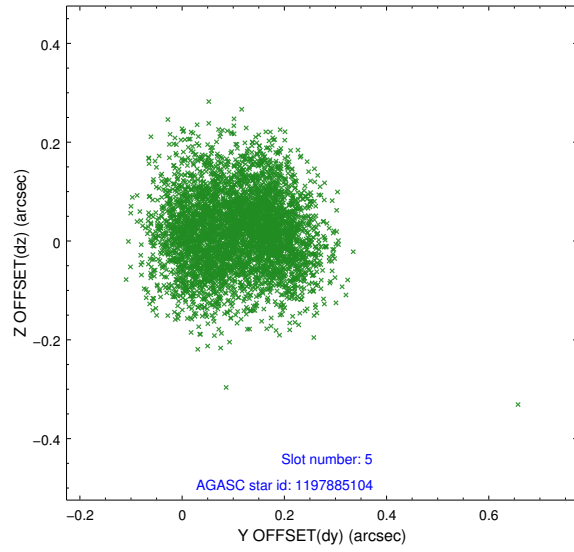
### 2.4.1 Slot 3



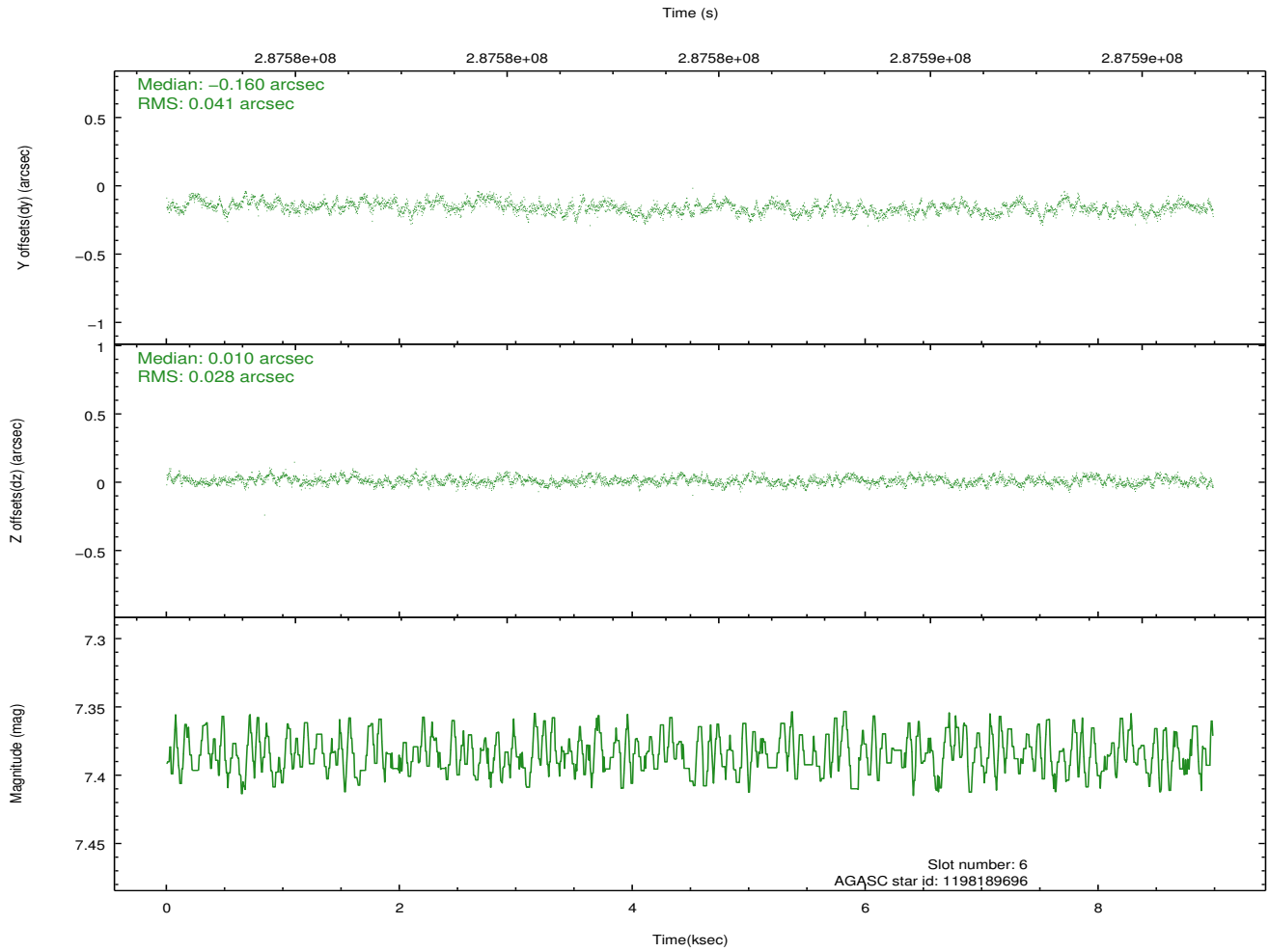
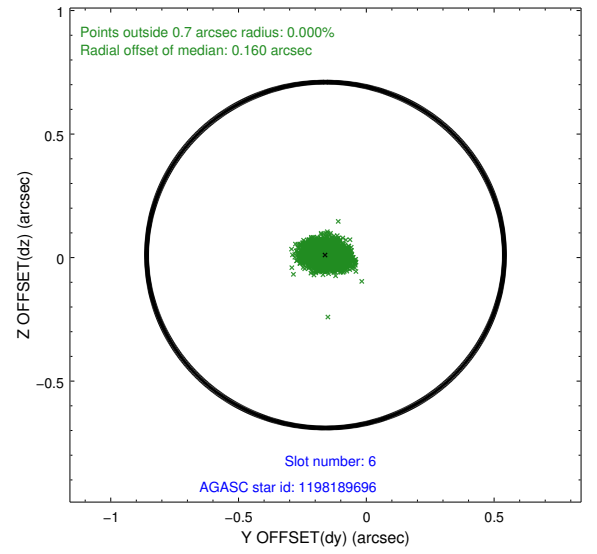
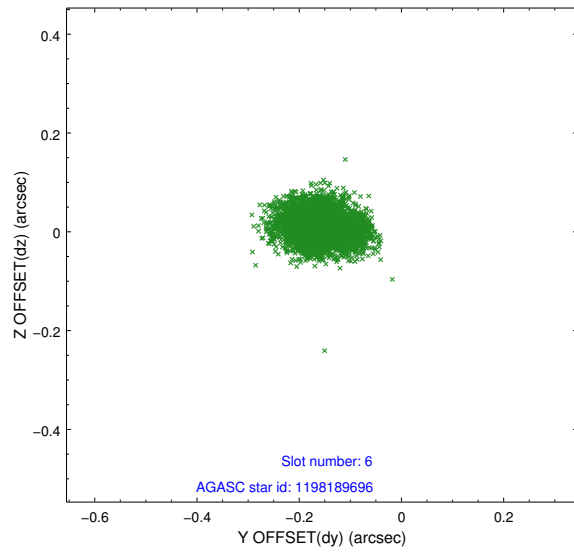
## 2.4.2 Slot 4



### 2.4.3 Slot 5

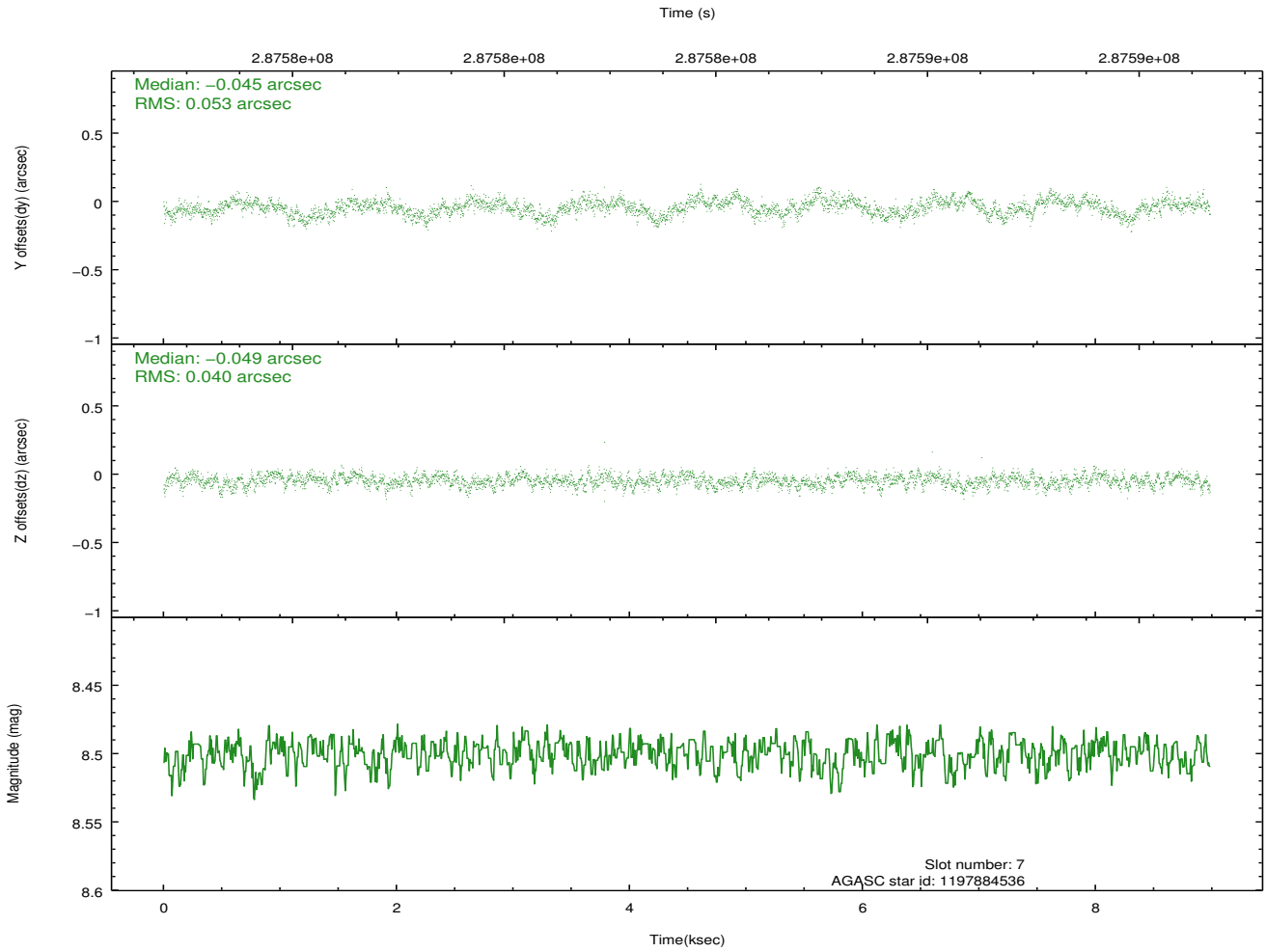
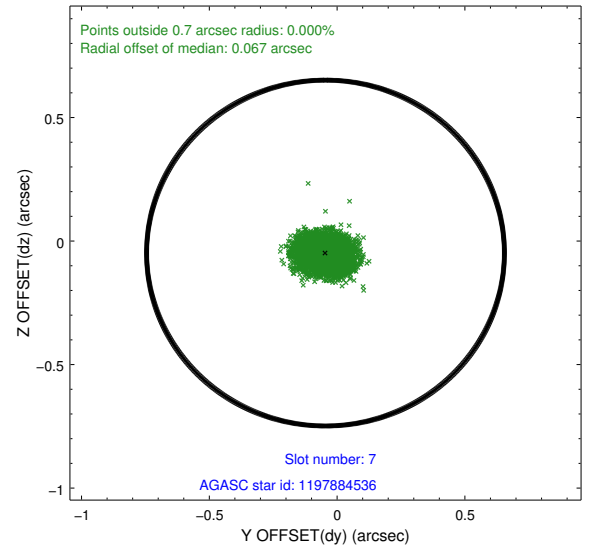
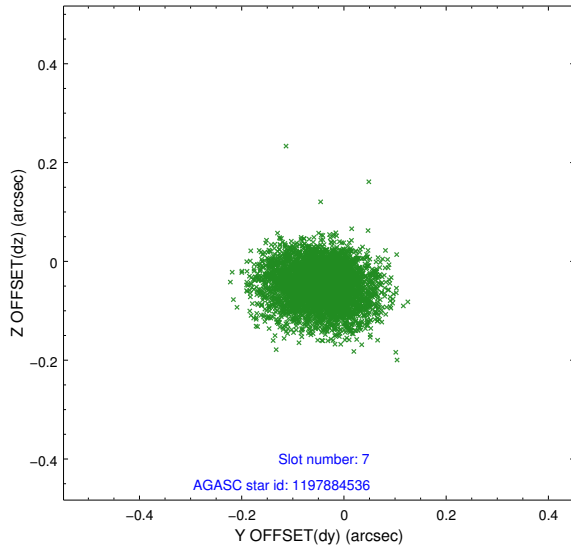


## 2.4.4 Slot 6



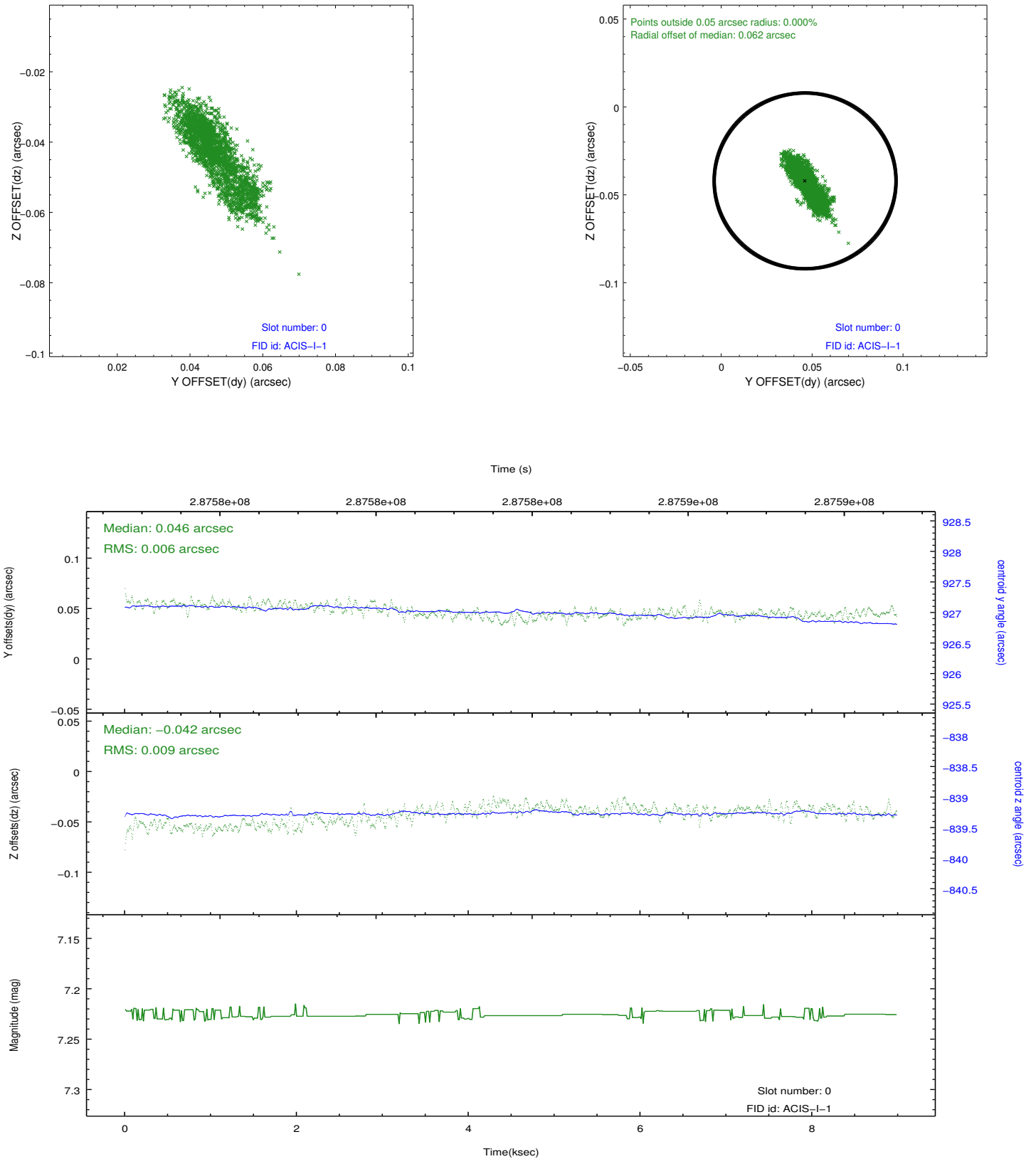


## 2.4.5 Slot 7

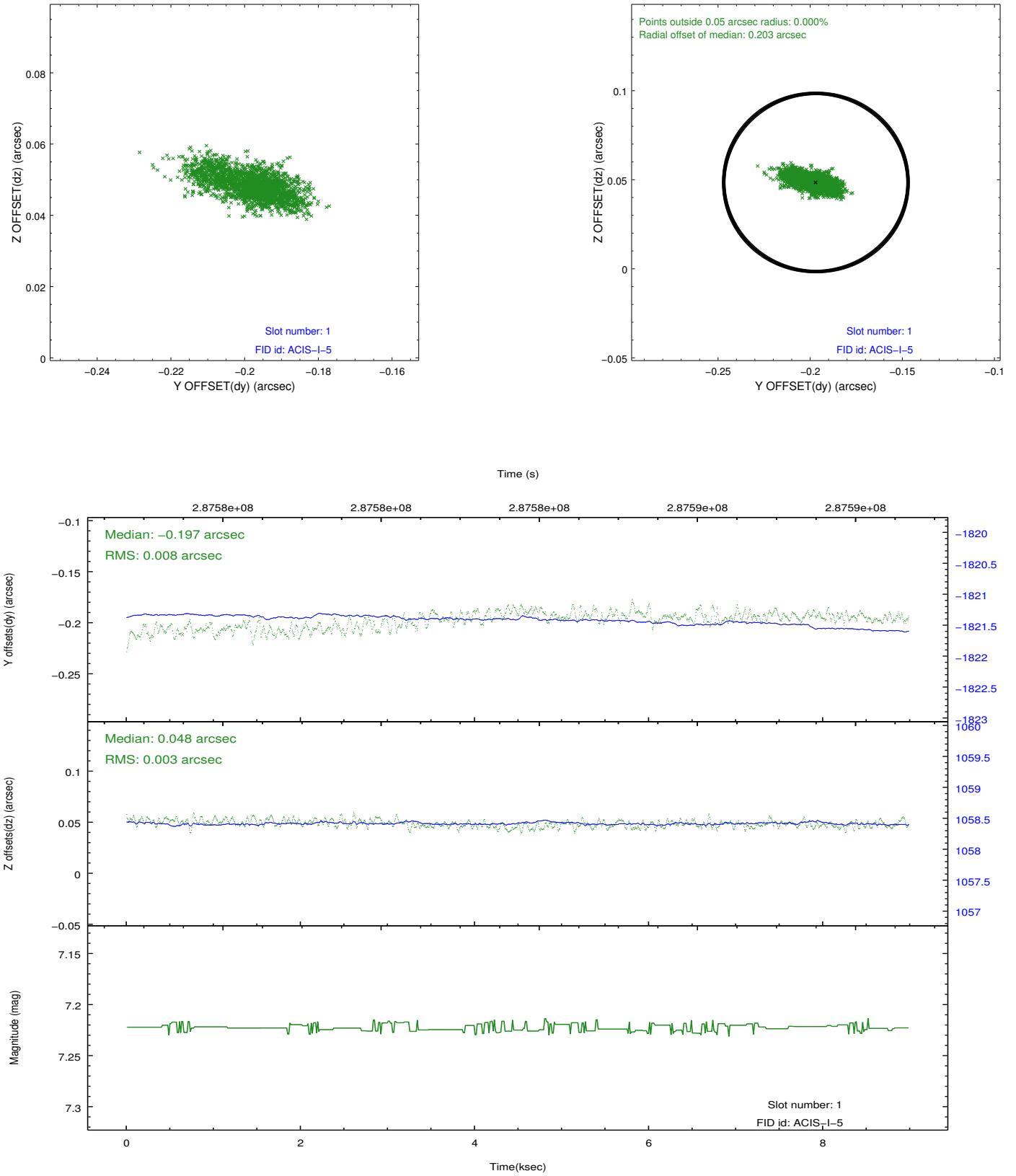


## 2.5 FID Slots

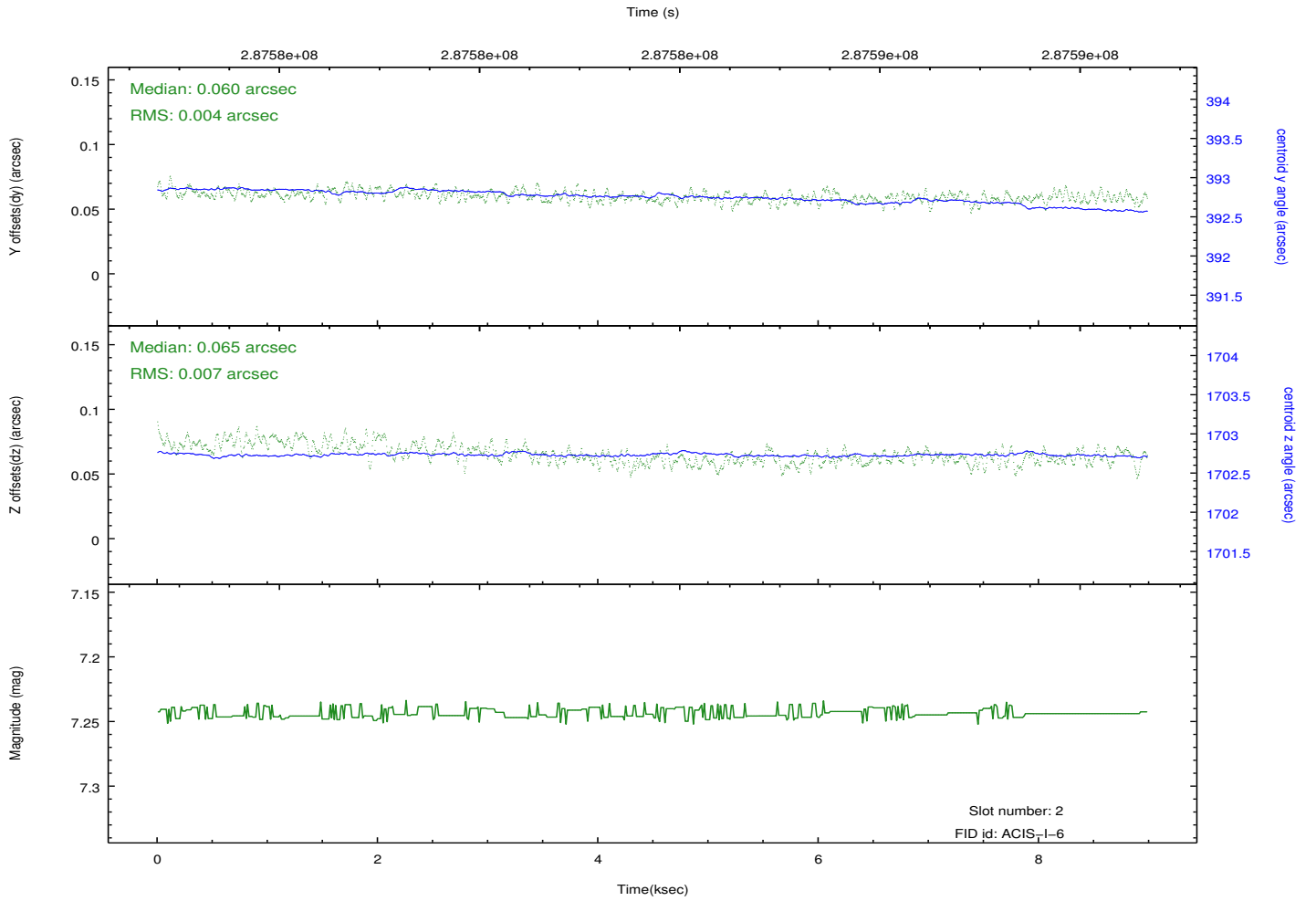
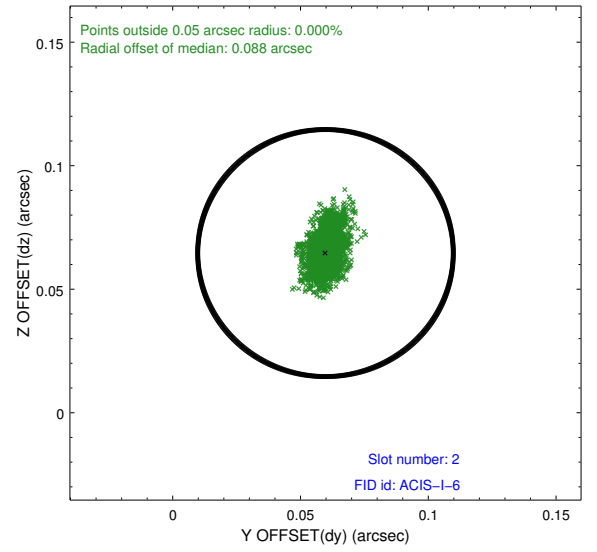
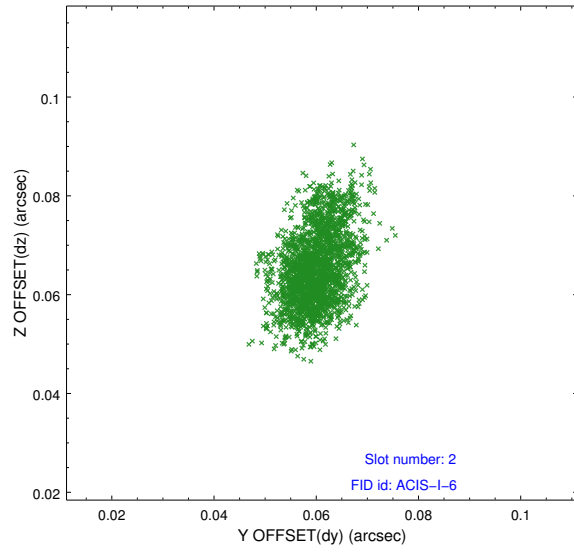
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2012.04.22
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.55359996

### A.2 Comments

Window preference met.