

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 9693 - L2 Version 2  
Chandra X-Ray Center

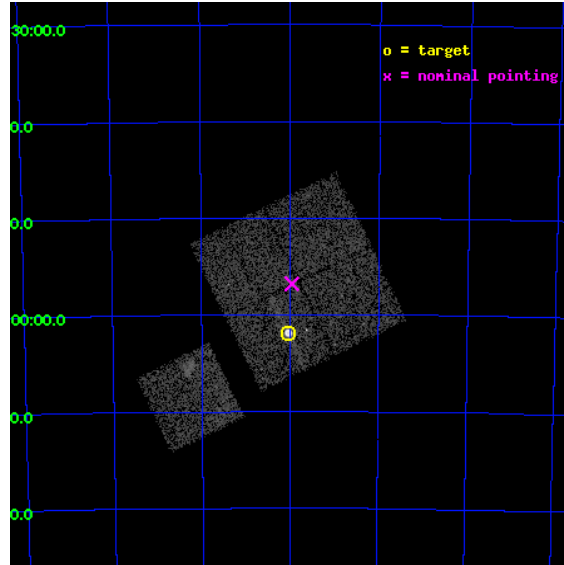
L2 Processing Date : May 9 2012

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# 1 Front

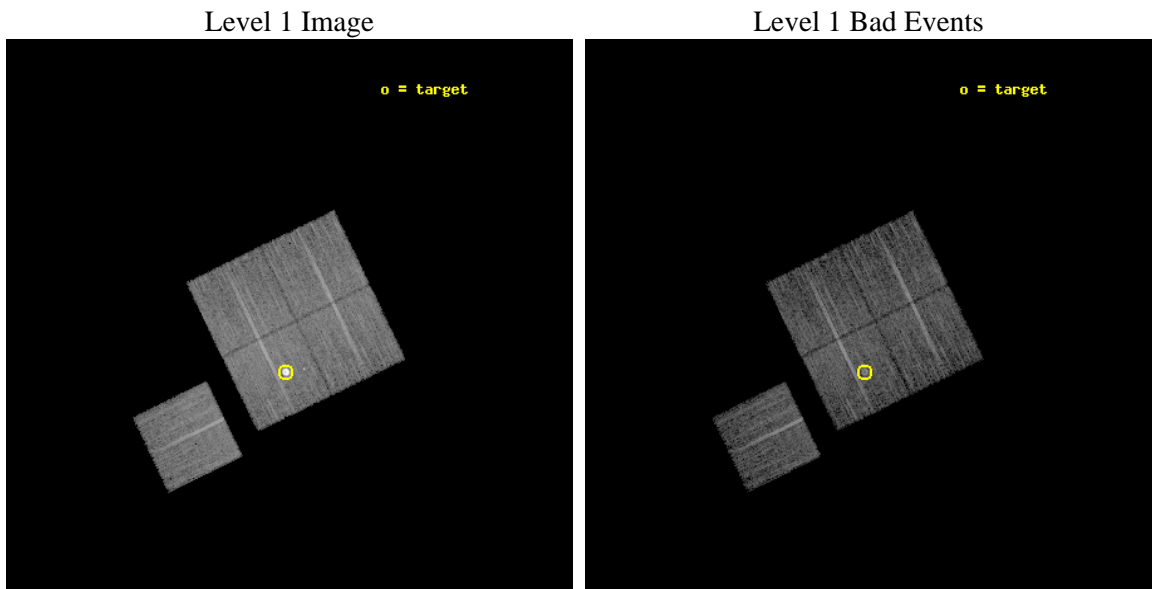
seq_num	590471	Sequence number
obs_id	9693	Observation id
title	AO9 Calibration Observations of E0102-72	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	E0102-72 I2,-120,4.7,2.5,0	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	16.01	Observer's specified target RA [deg]
dec_targ	-72.032028	Observer's specified target Dec [deg]
ra_nom	15.98919467364	Nominal RA [deg]
dec_nom	-71.946586573324	Nominal Dec [deg]
roll_nom	244.1167671462	Nominal Roll [deg]
revision	2	Processing version of data
ontime	7777.0455383658	Sum of GTIs [s]
livetime	7675.4327130295	Livetime [s]
ontime0	7773.8224880099	Sum of GTIs [s]
ontime1	7777.0044983625	Sum of GTIs [s]
ontime2	7777.0455383658	Sum of GTIs [s]
ontime3	7773.9456080794	Sum of GTIs [s]
ontime6	7776.9224183559	Sum of GTIs [s]
l2events	47141	Number of level 2 events



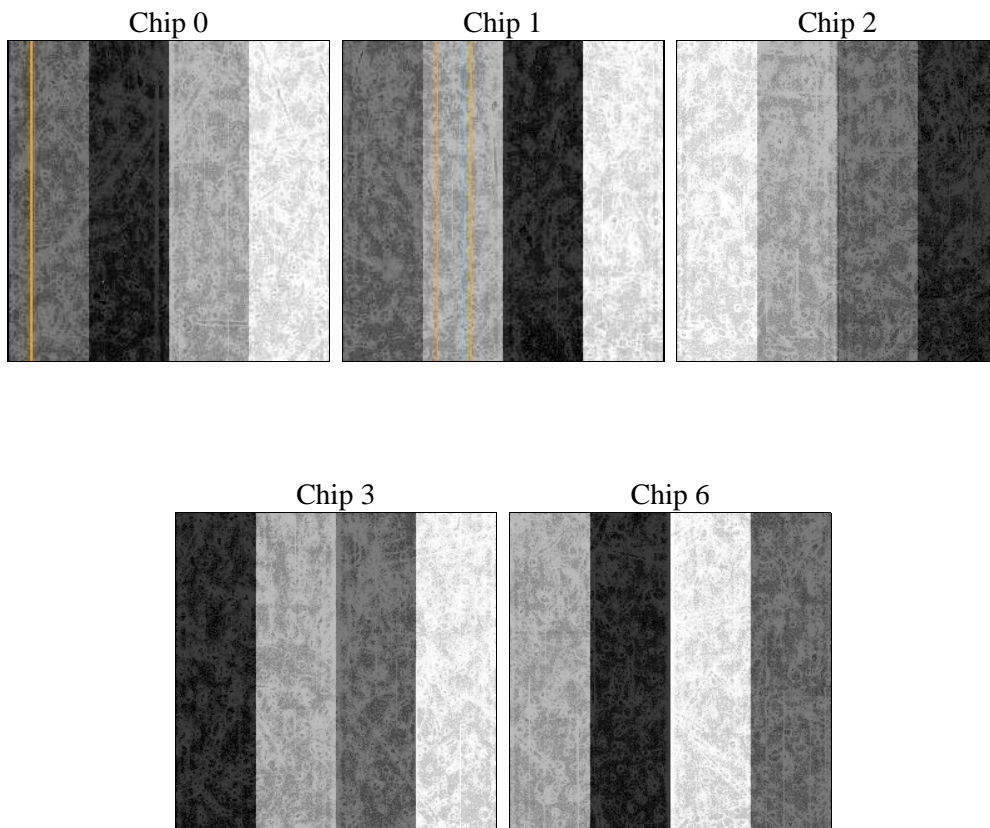
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	8000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	7777.0455383658	Sum of GTIs [s]
caldsver	4.4.9	&#160	ontime0	7773.8224880099	Sum of GTIs [s]
date	2012-05-09T03:05:20	Date and time of file creation	ontime1	7777.0044983625	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	7777.0455383658	Sum of GTIs [s]
			ontime3	7773.9456080794	Sum of GTIs [s]
			ontime6	7776.9224183559	Sum of GTIs [s]
			l1events	311081	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	56456	54574	86114	56178	57759
rejected events	50436	48662	57388	50762	51256
rejected %	89%	89%	66%	90%	88%

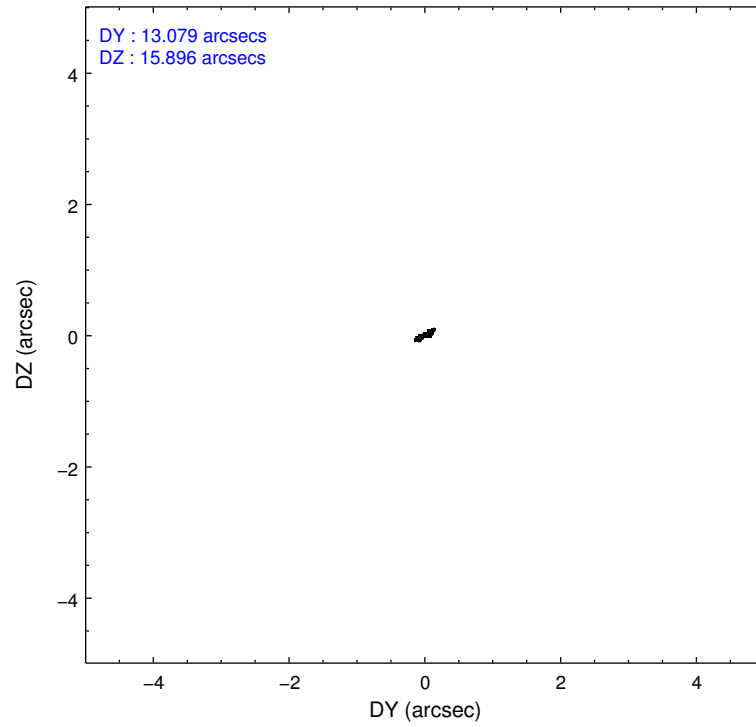
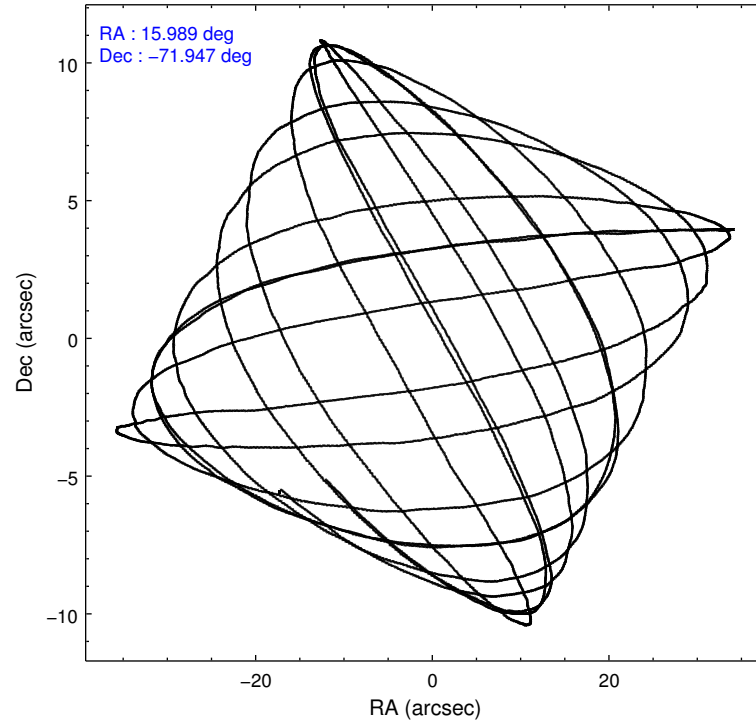
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	2251	1982	22284	1992	2615
	3%	3%	25%	3%	4%
grade 1 events	32	49	253	37	29
	0%	0%	0%	0%	0%
grade 2 events	1489	1330	3178	1136	1341
	2%	2%	3%	2%	2%
grade 3 events	625	695	1073	653	663
	1%	1%	1%	1%	1%
grade 4 events	613	674	1010	570	667
	1%	1%	1%	1%	1%
grade 5 events	1777	1887	1793	2009	1983
	3%	3%	2%	3%	3%
grade 6 events	1044	1233	1194	1067	1219
	1%	2%	1%	1%	2%
grade 7 events	48625	46724	55329	48714	49242
	86%	85%	64%	86%	85%

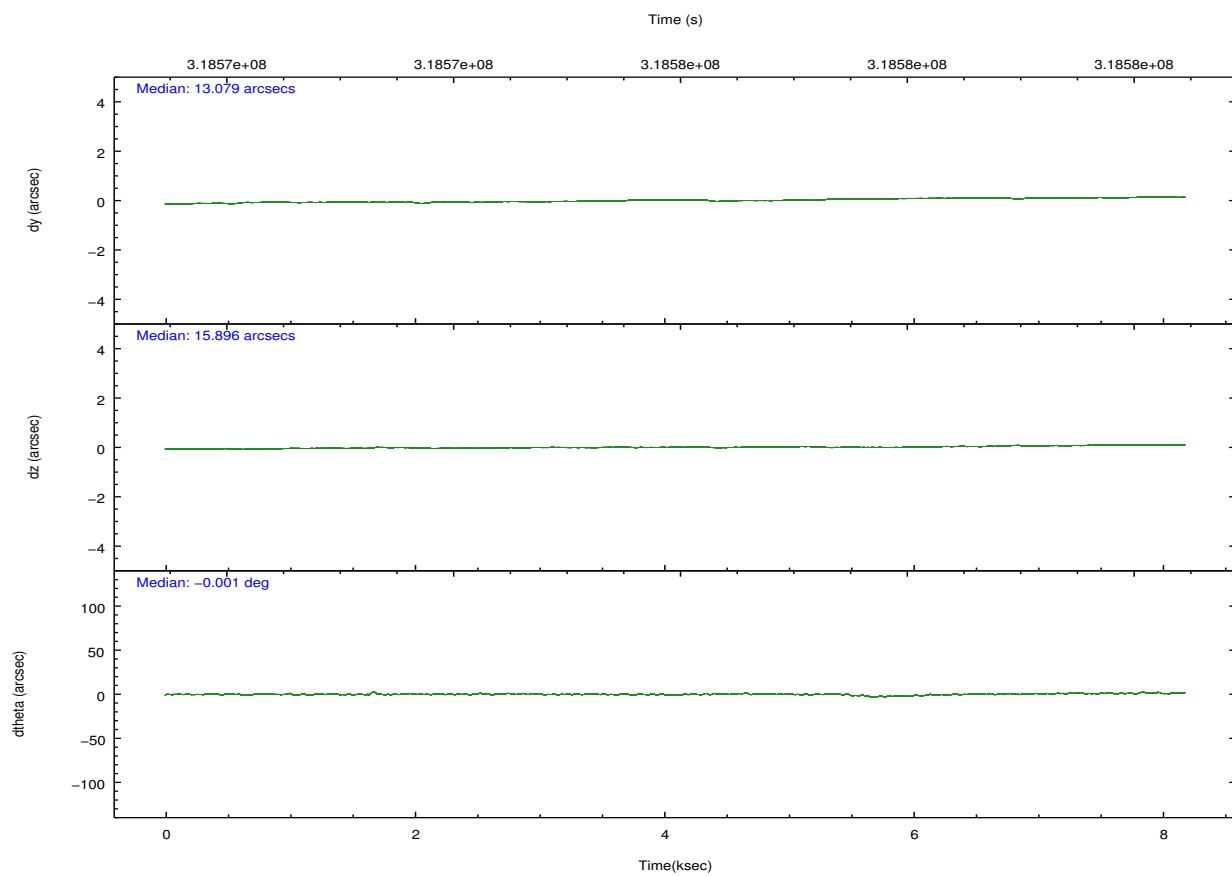
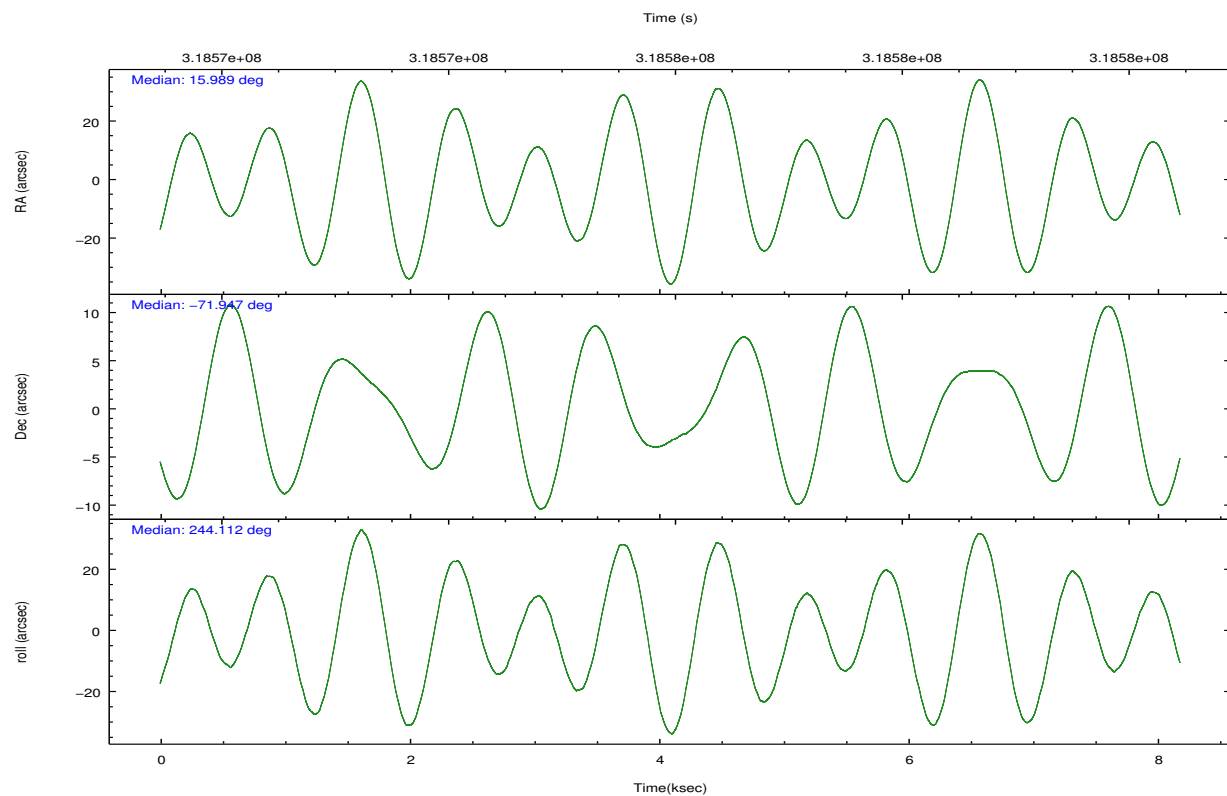


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	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	15.982374	15.98919467364004	CCD I2 on	Y	Y
[deg] Pointing Dec	-71.919102	-71.94658657332423	CCD I3 on	Y	Y
[deg] Pointing Roll	243.901610	244.1167671461982	CCD S0 on	N	N
[s] Window start time (MET)	312854465.184000	312854465.184000	CCD S1 on	N	N
[s] Window stop time (MET)	325900865.184000	325900865.184000	CCD S2 on	O1	Y
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S3 on	N	N
[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)	318572044.184000	318571667.47517	On-chip summing requested	N	N
Observation start date	2008-02-05T04:12:59	2008-02-05T04:07:47	Subarray requested	NONE	NONE
[s] Observation end time (MET)	318580044.184000	318580983.70062	Alternating exposures requested	N	N
Observation end date	2008-02-05T06:26:19	2008-02-05T06:43:03	[s] Primary exposure time	0.000000	3.1
Read mode	TIMED	TIMED			

## 2.3 Aspect



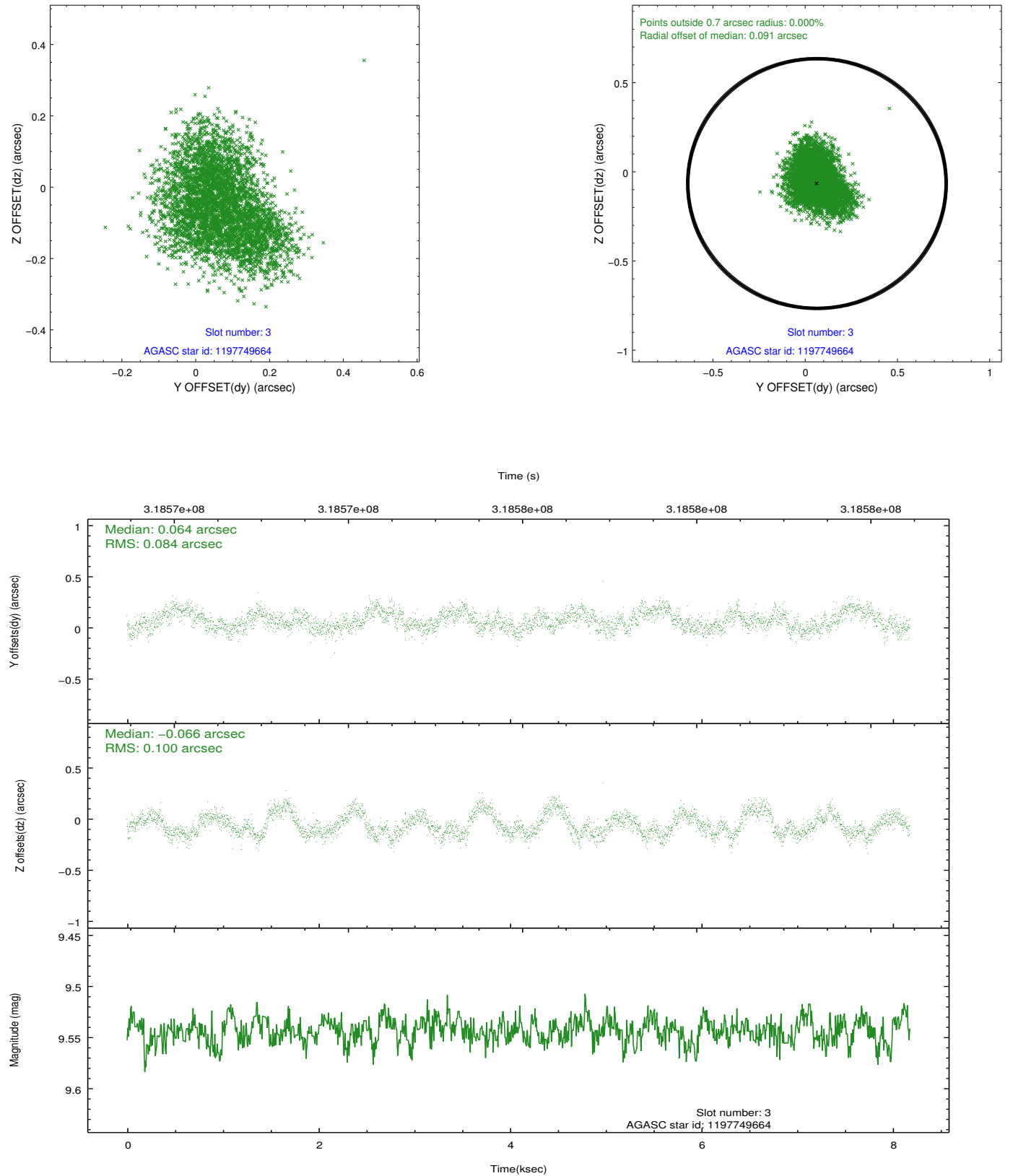


### Slot Statistics

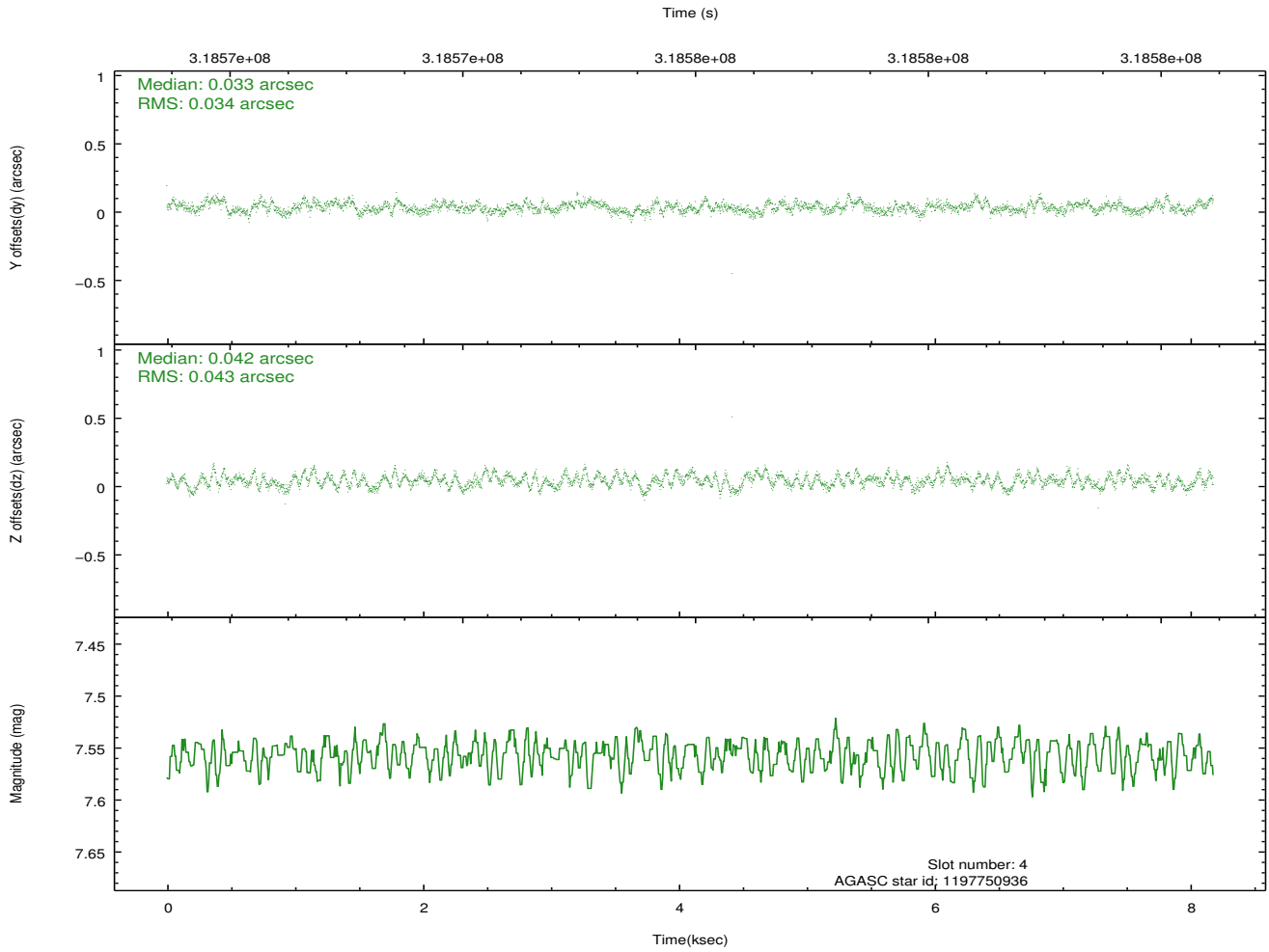
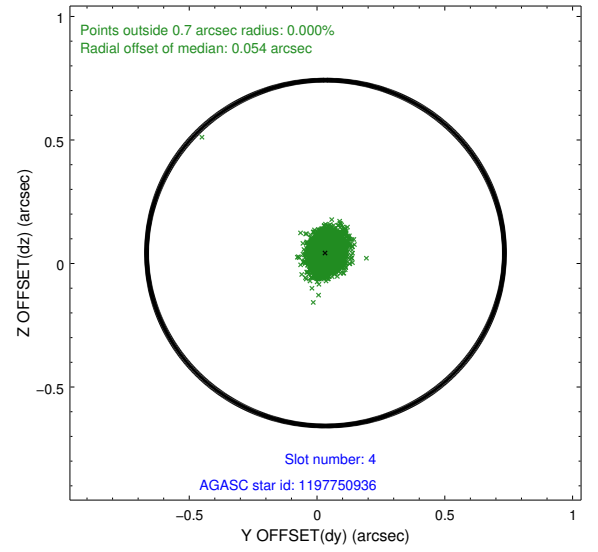
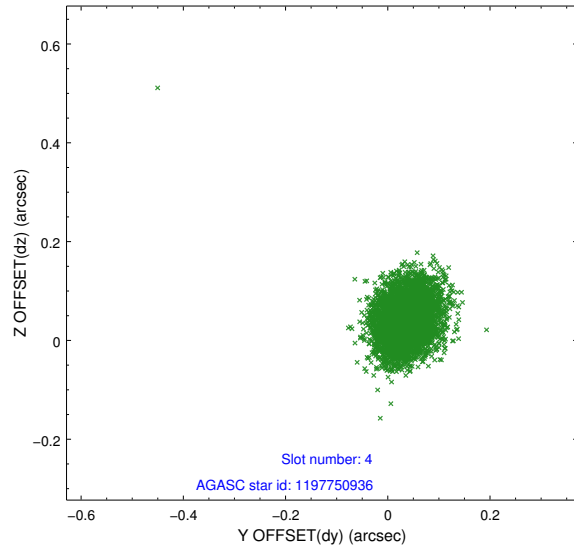
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	6.99	1996	0.030	-0.012	0.009	0.039	0.000000	0.000000	926.44	-839.55
1	FID	ACIS-I-5	6.98	1996	-0.170	0.046	0.008	0.026	0.000000	0.000000	-1821.46	1057.69
2	FID	ACIS-I-6	6.99	1996	0.048	0.036	0.008	0.034	0.000000	0.000000	391.30	1702.93
3	GUIDE	1197749664	9.54	3990	0.064	-0.066	0.140	0.221	15.809015	-72.366369	1529.41	538.76
4	GUIDE	1197750936	7.56	3992	0.033	0.042	0.058	0.093	15.387940	-71.549550	-892.93	-1191.77
5	GUIDE	1197884536	8.49	3992	-0.065	0.052	0.066	0.108	17.160729	-71.835289	-841.39	1060.09
6	GUIDE	1197884712	8.29	3992	0.034	-0.019	0.088	0.142	16.087398	-72.252690	1027.75	632.15
7	GUIDE	1198283128	7.84	3989	-0.077	-0.022	0.074	0.112	17.272580	-72.642428	1742.40	2396.65

## 2.4 Star Slots

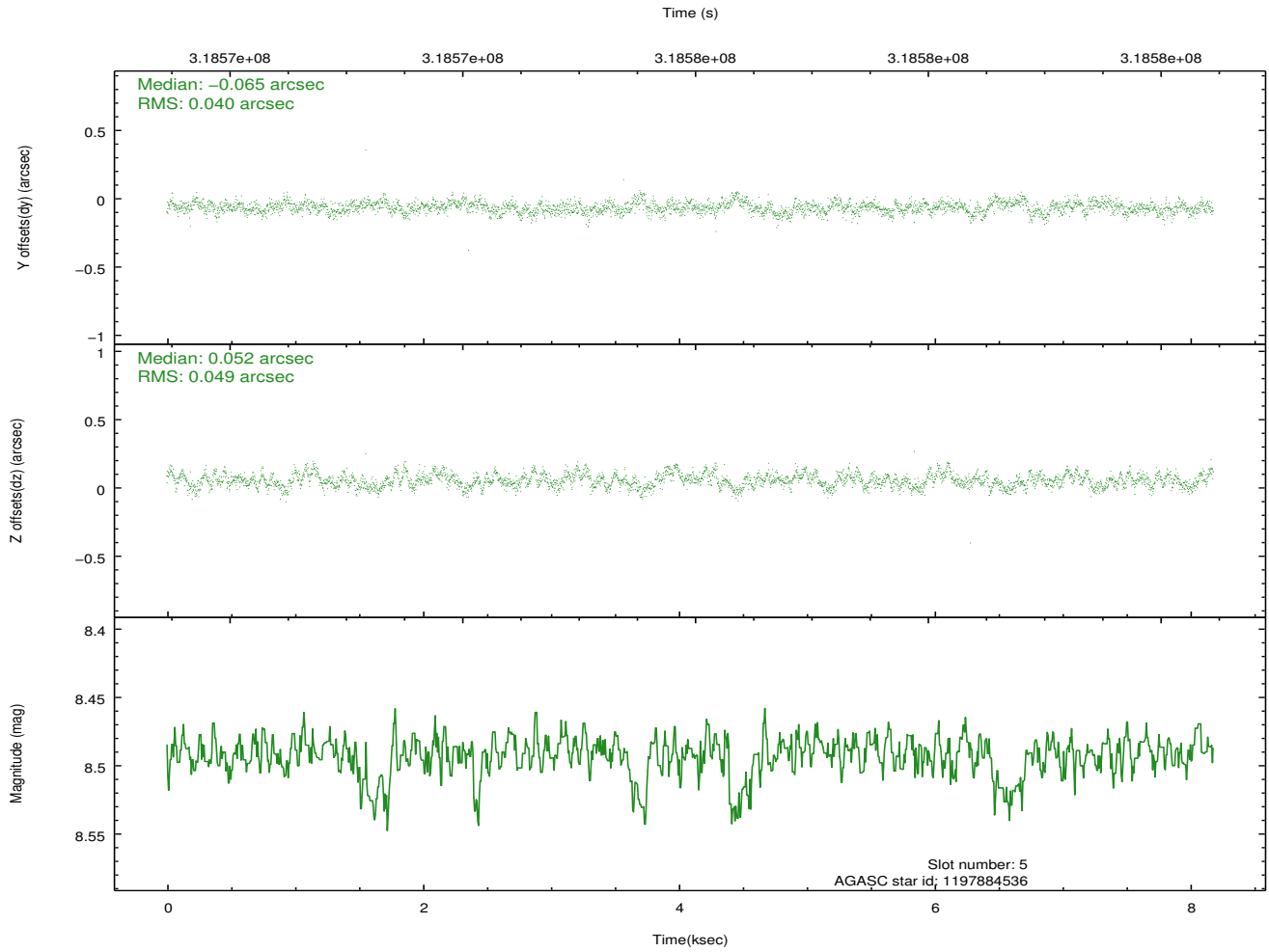
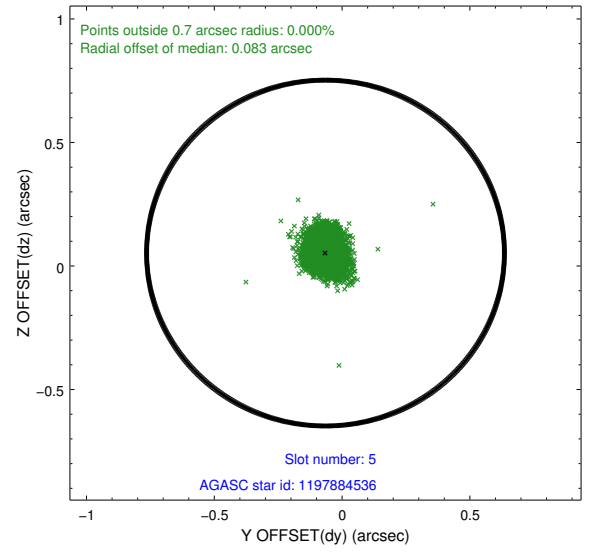
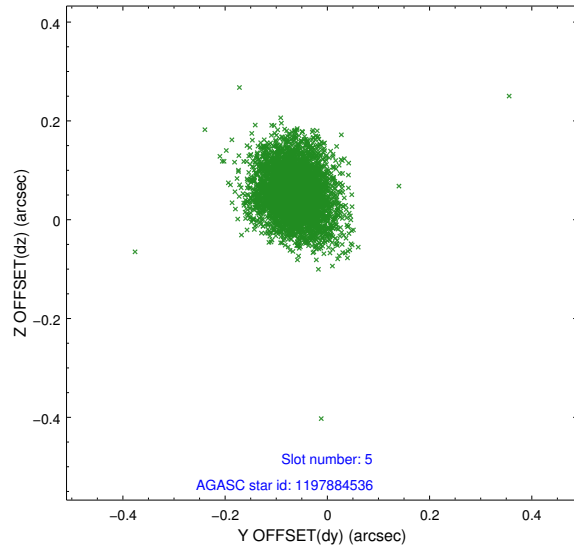
### 2.4.1 Slot 3



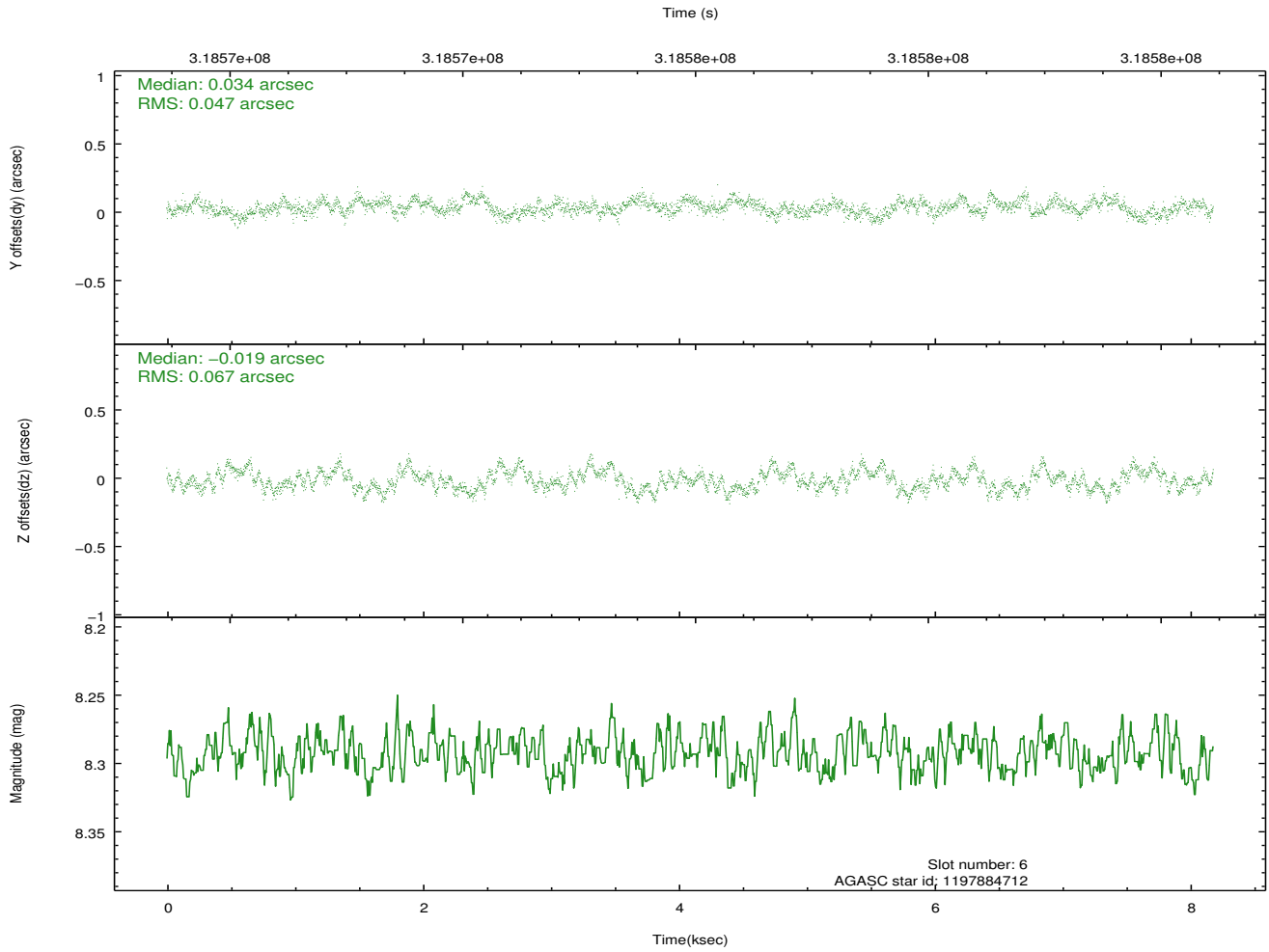
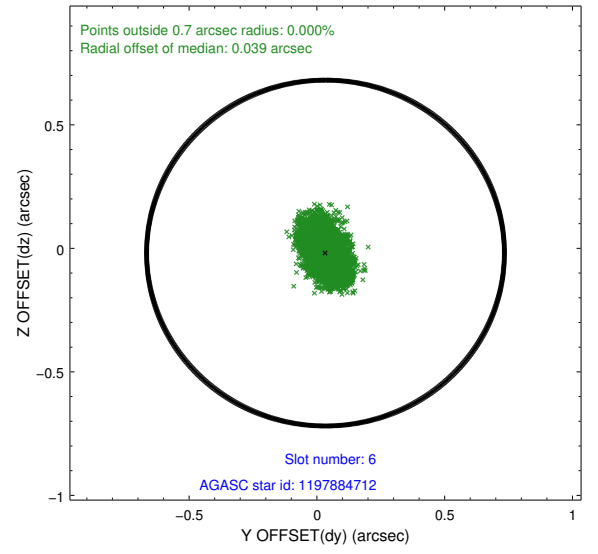
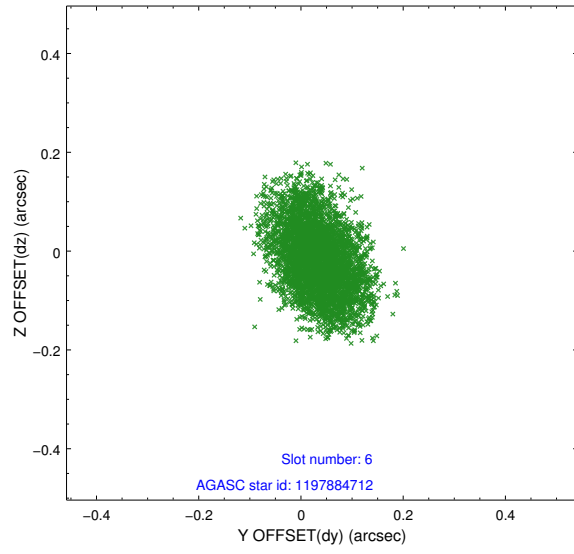
## 2.4.2 Slot 4



### 2.4.3 Slot 5

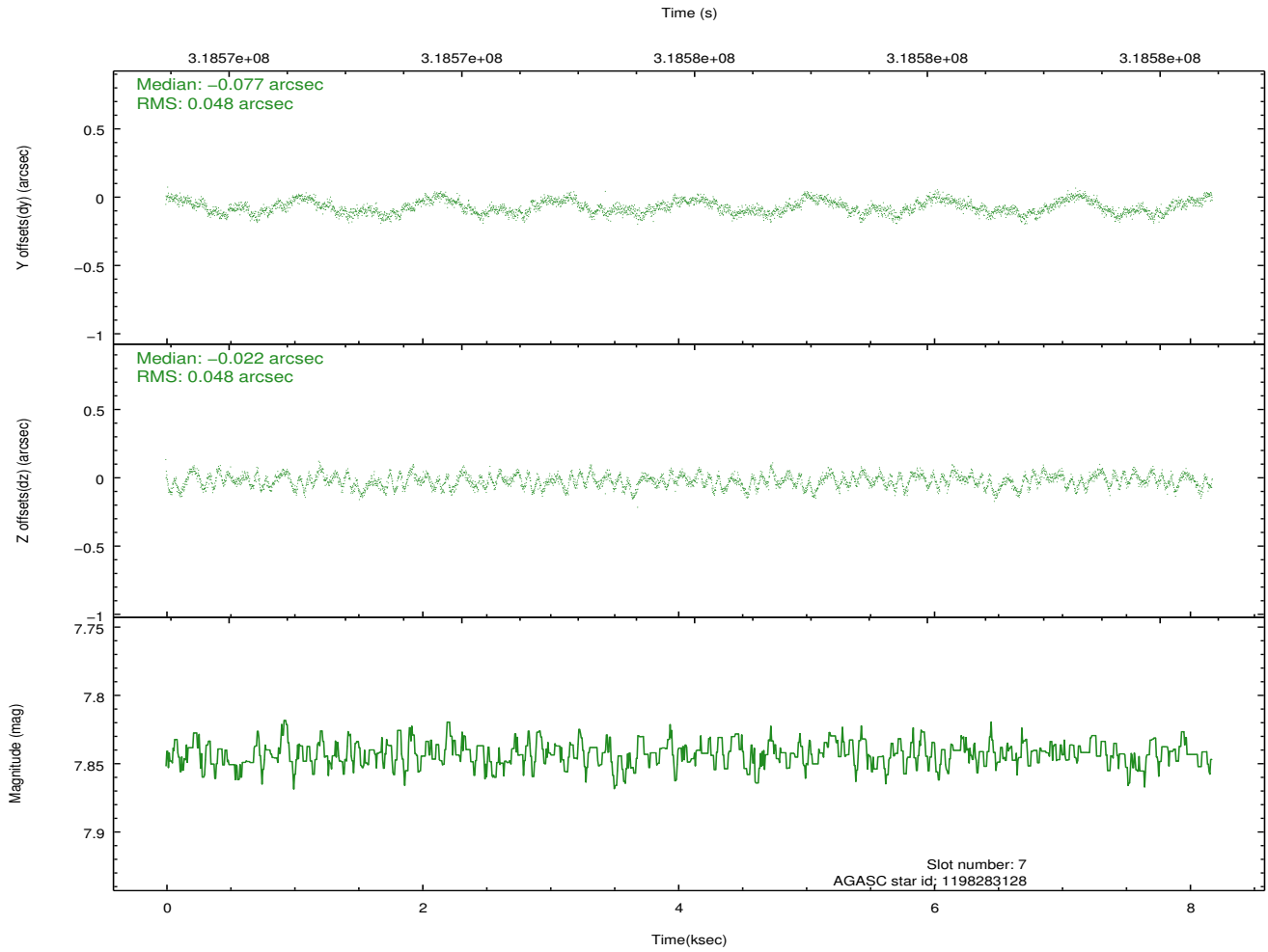
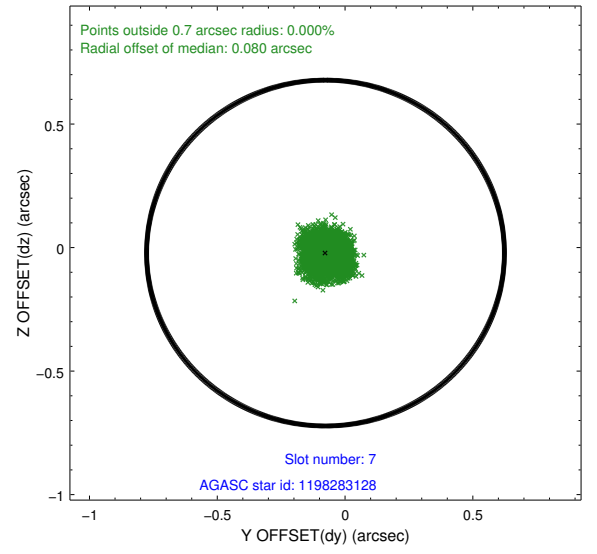
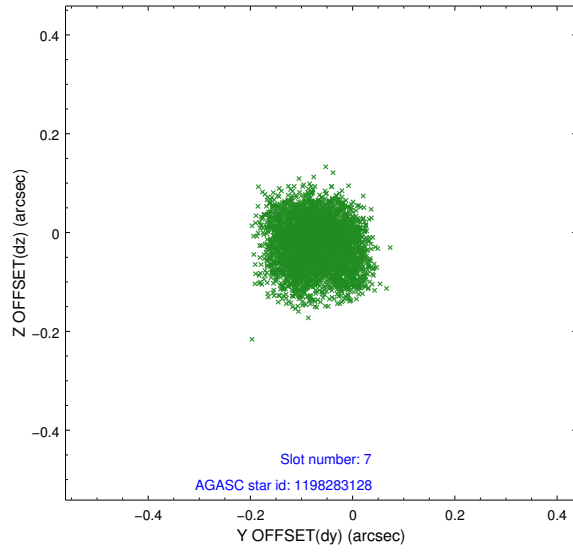


## 2.4.4 Slot 6



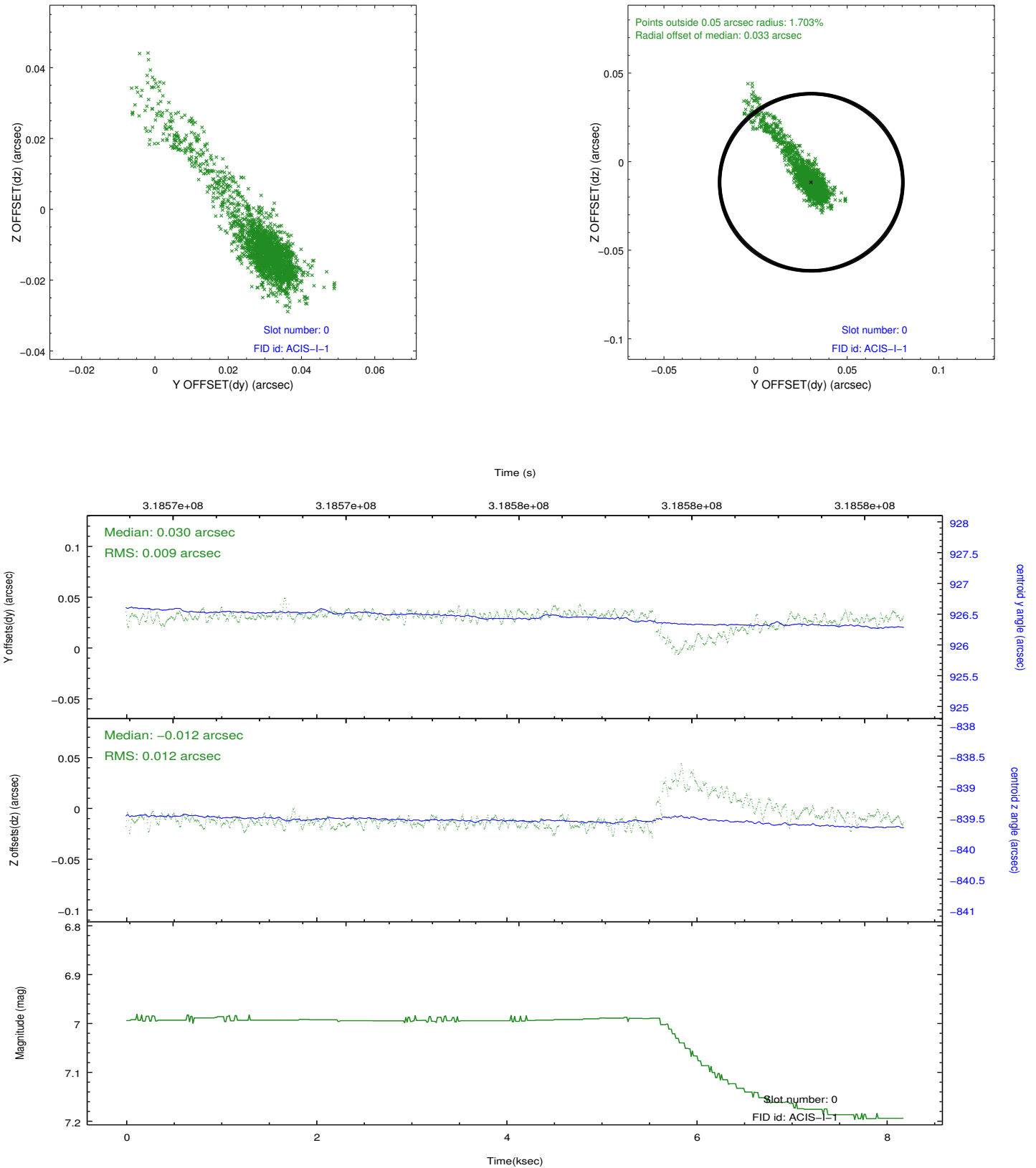


## 2.4.5 Slot 7

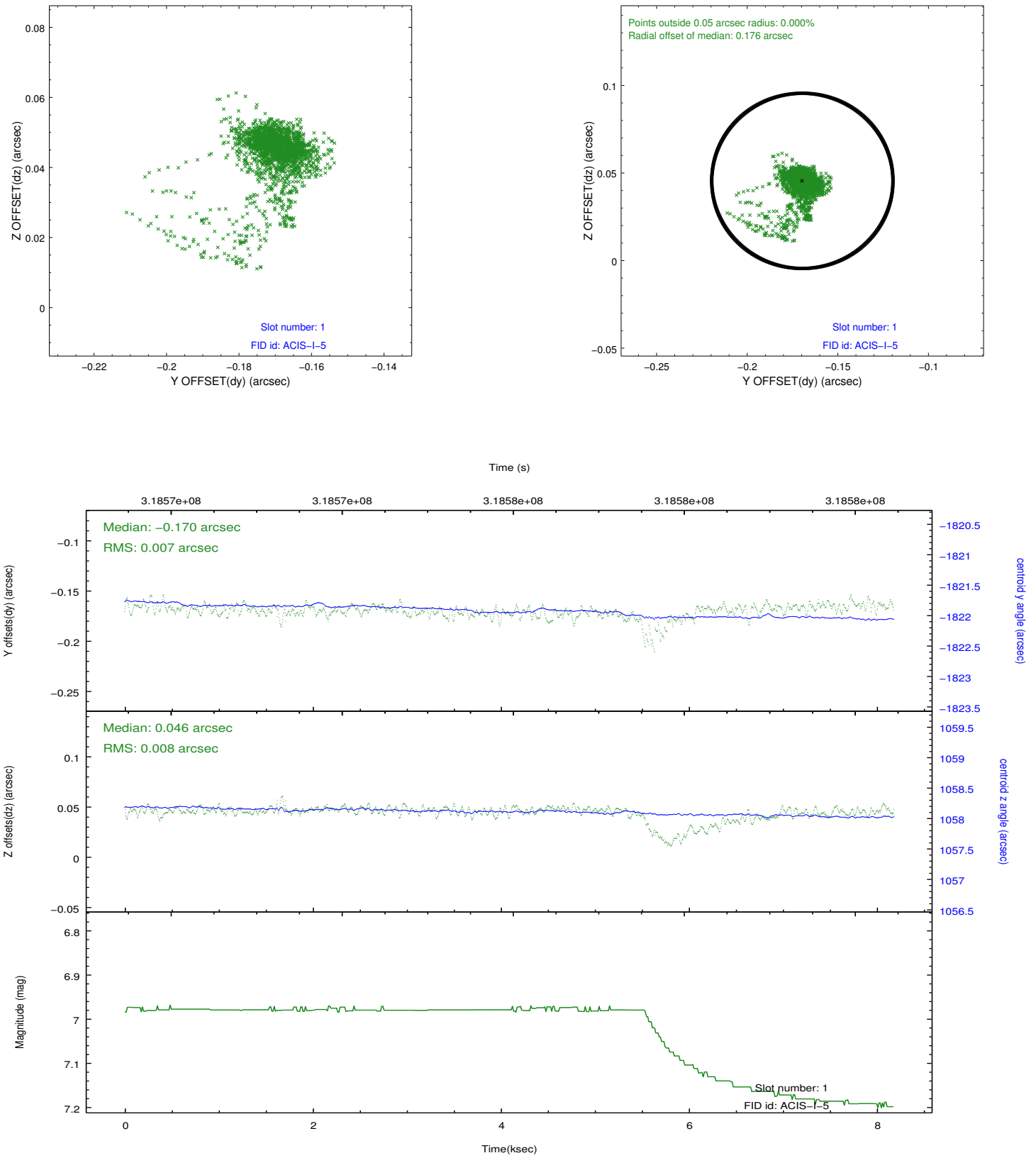


## 2.5 FID Slots

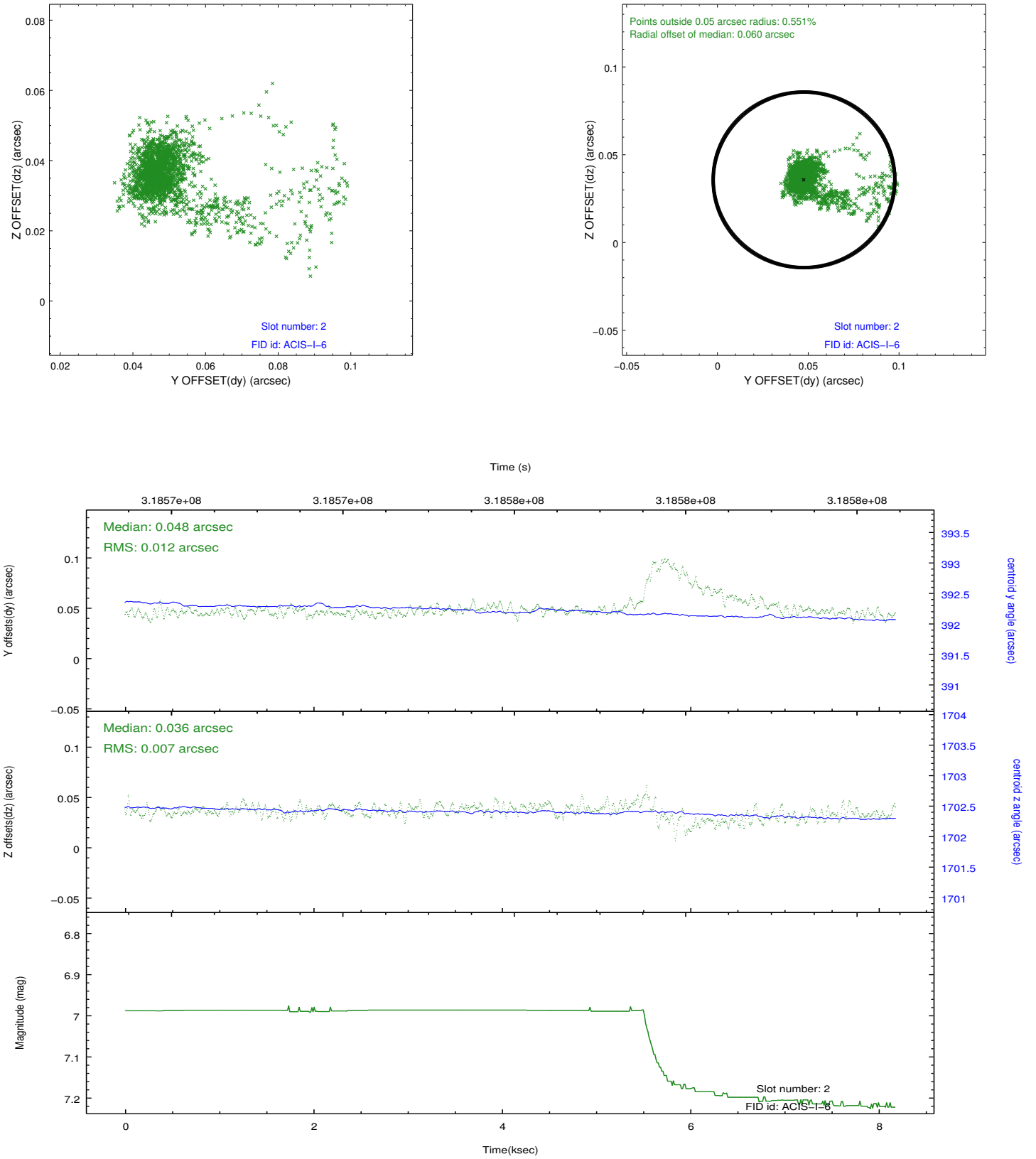
### 2.5.1 Slot 0



## 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)	2012.05.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	7.77790005

### A.2 Comments

Window preference met.