

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 8362 - L2 Version 3  
Chandra X-Ray Center

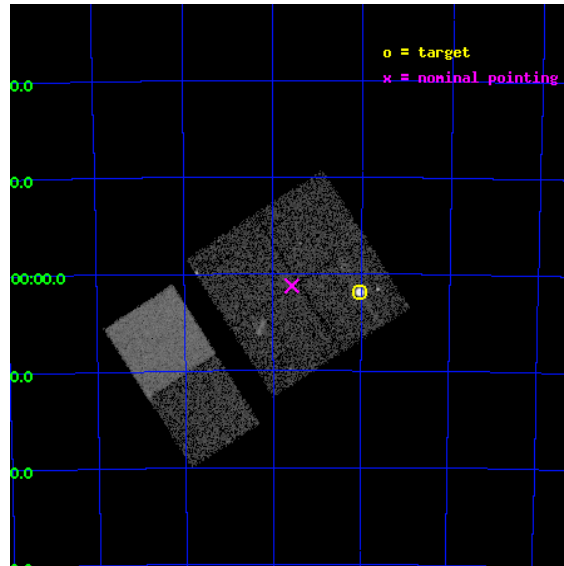
L2 Processing Date : Apr 20 2012

## Contents

<b>1</b>	<b>Front</b>	<b>2</b>
<b>2</b>	<b>OBI</b>	<b>3</b>
2.1	OBI . . . . .	3
2.1.1	Images . . . . .	3
2.1.2	Bias . . . . .	3
2.1.3	Parameters . . . . .	4
2.1.4	Events . . . . .	4
2.2	Compared Parameters . . . . .	5
2.3	Aspect . . . . .	6
2.4	Star Slots . . . . .	9
2.4.1	Slot 3 . . . . .	9
2.4.2	Slot 4 . . . . .	10
2.4.3	Slot 5 . . . . .	11
2.4.4	Slot 6 . . . . .	12
2.4.5	Slot 7 . . . . .	13
2.5	FID Slots . . . . .	14
2.5.1	Slot 0 . . . . .	14
2.5.2	Slot 1 . . . . .	15
2.5.3	Slot 2 . . . . .	16
<b>A</b>	<b>Summary</b>	<b>17</b>
A.1	Status . . . . .	17
A.2	Comments . . . . .	17

# 1 Front

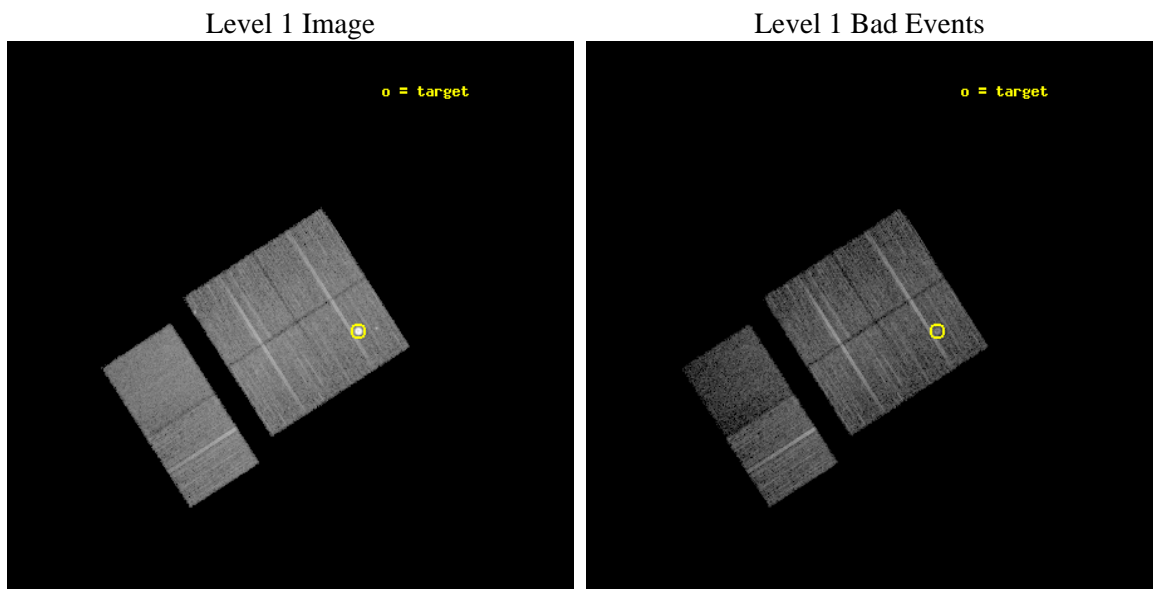
seq_num	590455	Sequence number
obs_id	8362	Observation id
title	AO8 Calibration Observations of E0102-72	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	E0102-72[I0,-120,4.7,-5.68,0]	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	16.01	Observer's specified target RA [deg]
dec_targ	-72.032028	Observer's specified target Dec [deg]
ra_nom	16.393095381161	Nominal RA [deg]
dec_nom	-72.020759013541	Nominal Dec [deg]
roll_nom	237.31580166953	Nominal Roll [deg]
revision	3	Processing version of data
ontime	8956.7999666929	Sum of GTIs [s]
livetime	8843.3835723772	Livetime [s]
ontime0	8956.7999666929	Sum of GTIs [s]
ontime1	8953.5589764714	Sum of GTIs [s]
ontime2	8956.7999666929	Sum of GTIs [s]
ontime3	8953.5590263009	Sum of GTIs [s]
ontime6	8953.559006393	Sum of GTIs [s]
ontime7	8956.7999666929	Sum of GTIs [s]
l2events	79860	Number of level 2 events



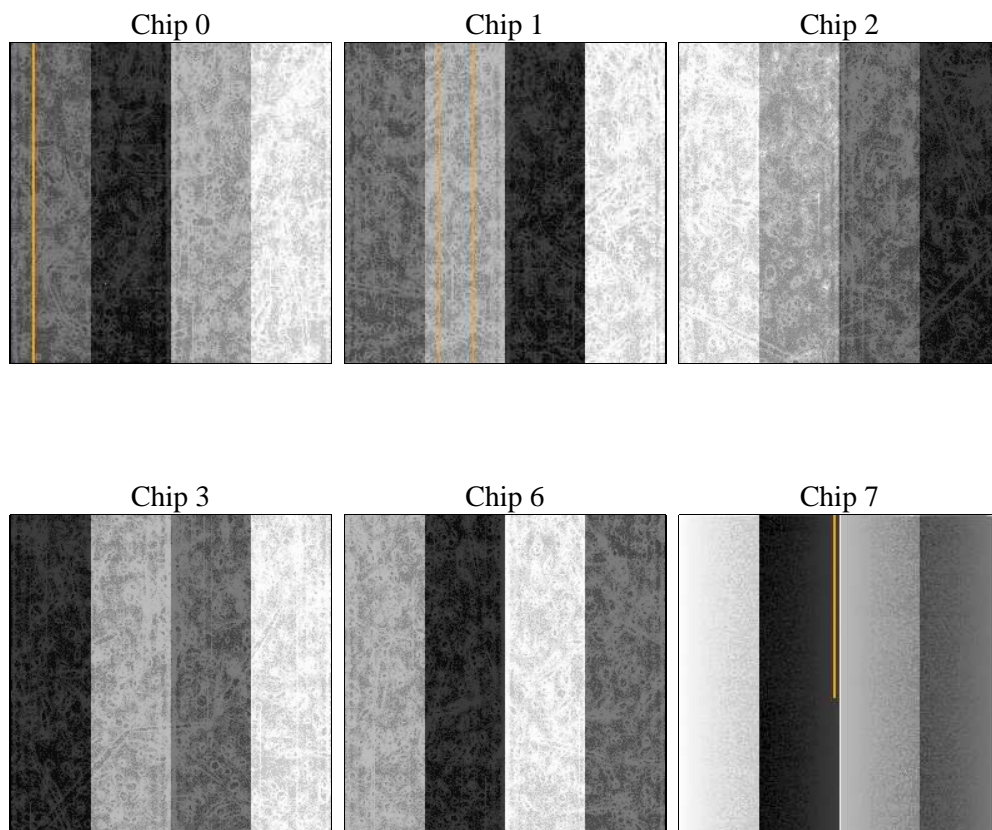
## 2 OBI

### 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	8956.7999666929	Sum of GTIs [s]
caldsver	4.4.9	&#160	ontime0	8956.7999666929	Sum of GTIs [s]
date	2012-04-20T03:19:50	Date and time of file creation	ontime1	8953.5589764714	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	8956.7999666929	Sum of GTIs [s]
			ontime3	8953.5590263009	Sum of GTIs [s]
			ontime6	8953.559006393	Sum of GTIs [s]
			ontime7	8956.7999666929	Sum of GTIs [s]
			l1events	412336	Number of level 1 events

### 2.1.4 Events

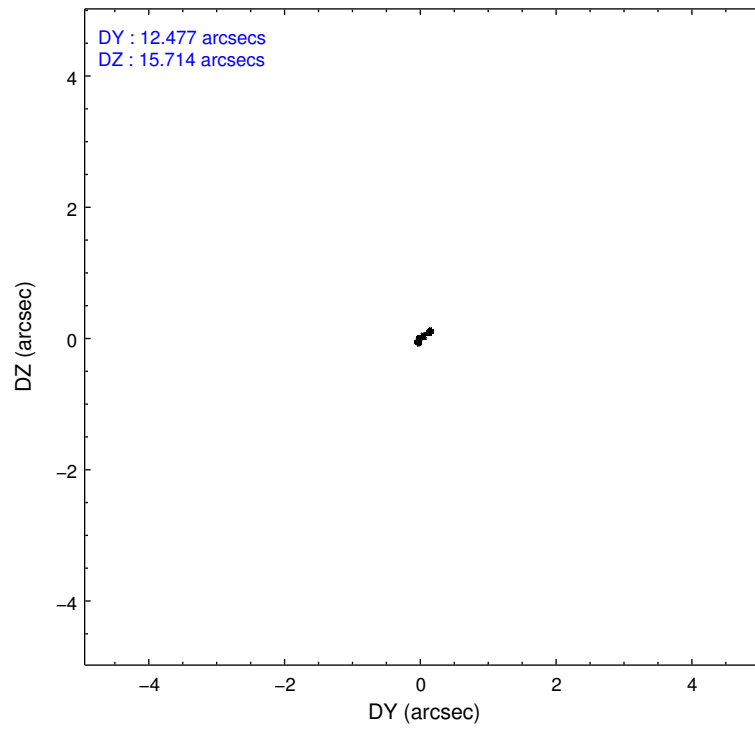
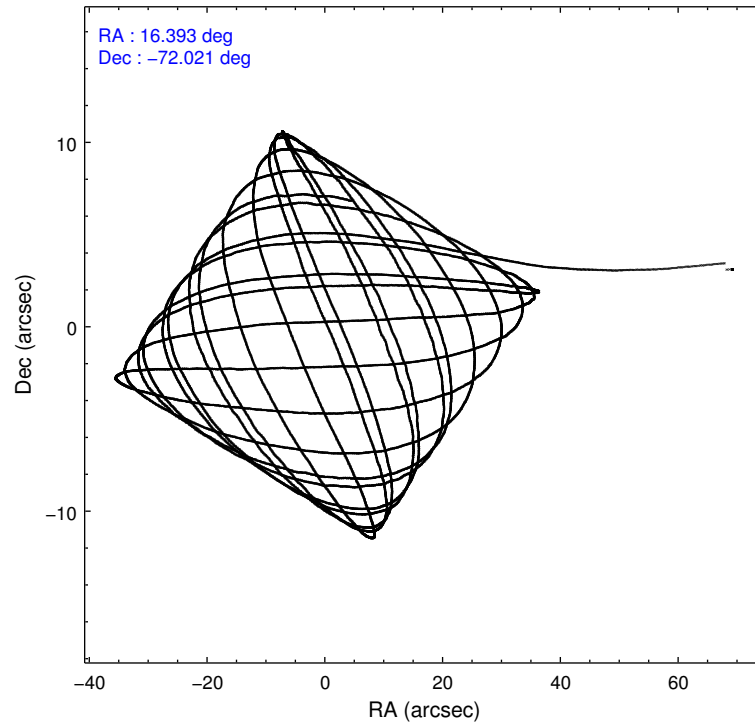
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	87326	59485	70069	65884	68110	61462	grade 0 events	23936	2396	3069	2375	2438	3191
rejected events	57014	52818	63009	59836	61389	31386		27%	4%	4%	3%	3%	5%
rejected %	65%	88%	89%	90%	90%	51%	grade 1 events	229	37	48	34	35	95
								0%	0%	0%	0%	0%	0%
							grade 2 events	3279	1506	1561	1294	1489	6453
								3%	2%	2%	1%	2%	10%
							grade 3 events	1096	789	681	674	732	2778
								1%	1%	0%	1%	1%	4%
							grade 4 events	1024	750	734	608	737	2849
								1%	1%	1%	0%	1%	4%
							grade 5 events	1911	2067	1764	2215	2289	6547
								2%	3%	2%	3%	3%	10%
							grade 6 events	1389	1321	1119	1179	1406	15258
								1%	2%	1%	1%	2%	24%
							grade 7 events	54462	50619	61093	57505	58984	24291
								62%	85%	87%	87%	86%	39%

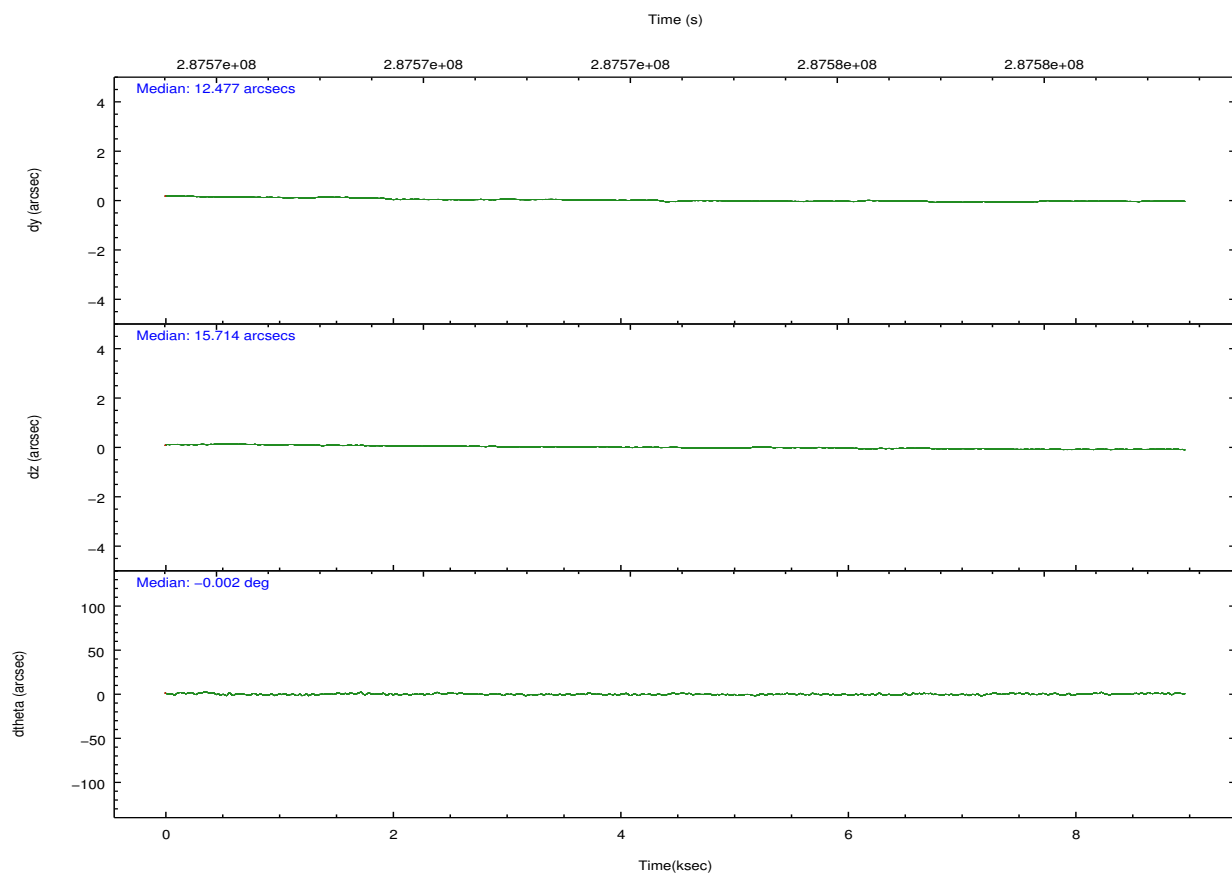
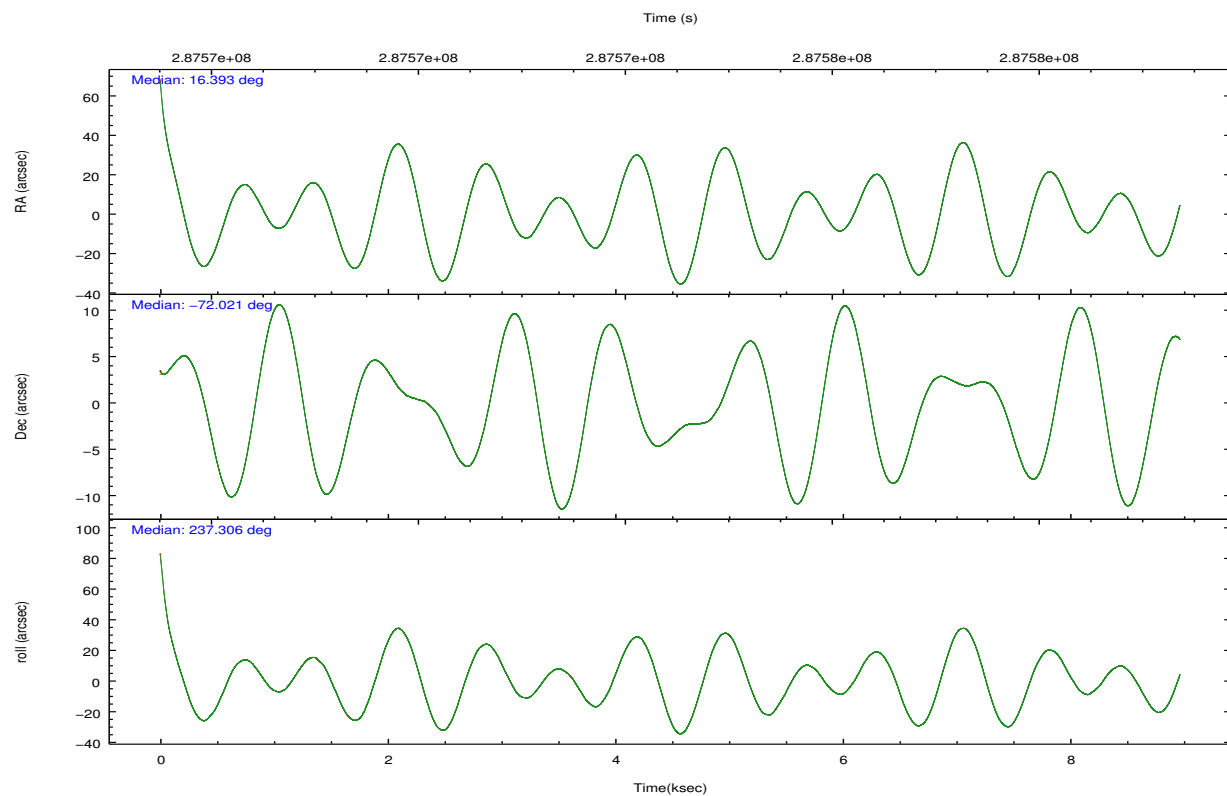


## 2.2 Compared Parameters

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	16.396973	16.39309538116083	CCD I2 on	Y	Y
[deg] Pointing Dec	-71.993300	-72.02075901354112	CCD I3 on	Y	Y
[deg] Pointing Roll	237.110785	237.3158016695335	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)	287570111.184000	287568990.16195	On-chip summing requested	N	N
Observation start date	2007-02-11T08:34:06	2007-02-11T08:16:30	Subarray requested	NONE	NONE
[s] Observation end time (MET)	287578911.184000	287579045.41243	Alternating exposures requested	N	N
Observation end date	2007-02-11T11:00:46	2007-02-11T11:04:05	[s] Primary exposure time	0.000000	3.2
Read mode	TIMED	TIMED			

## 2.3 Aspect



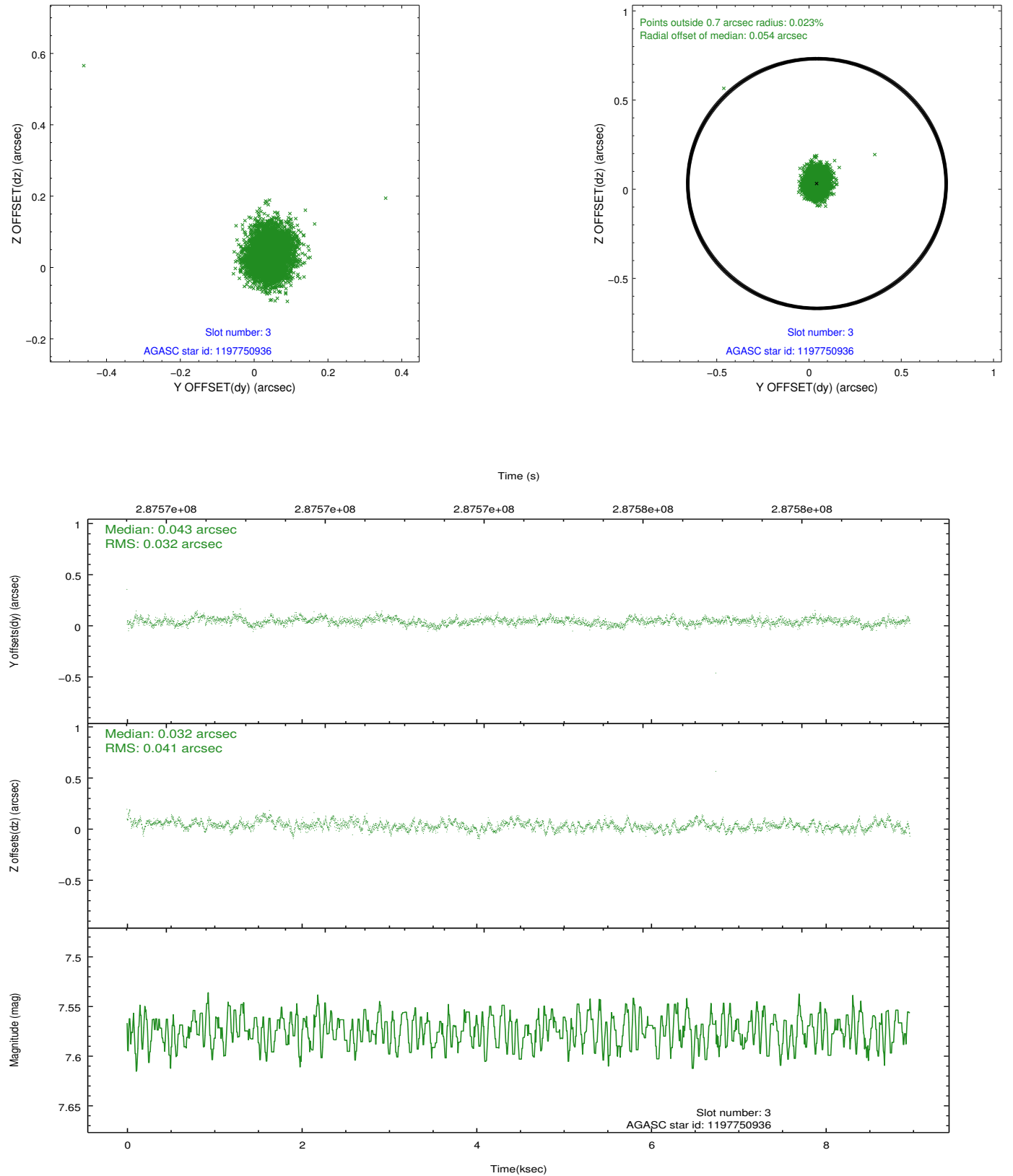


### Slot Statistics

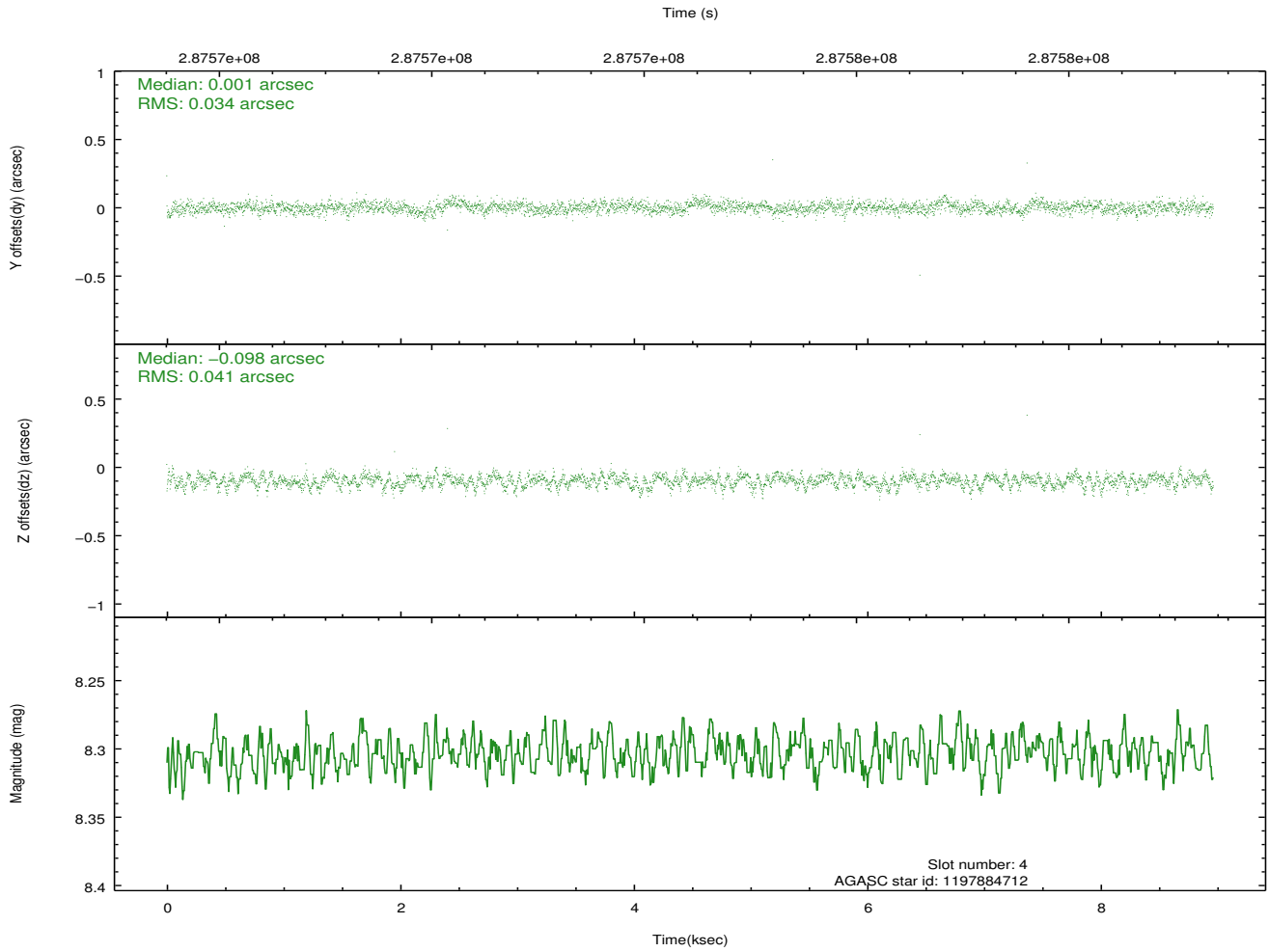
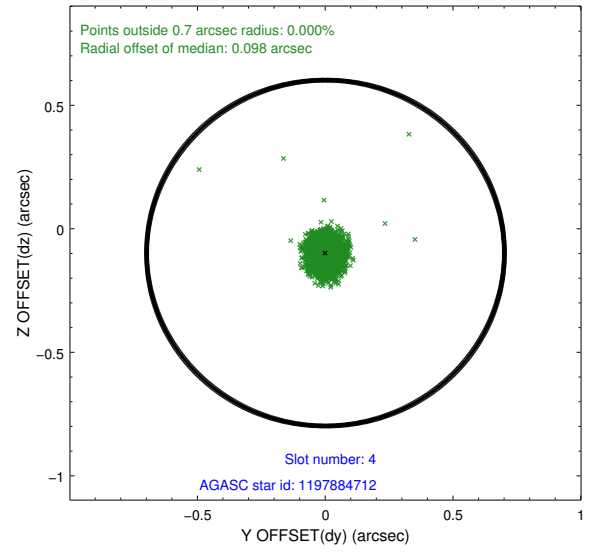
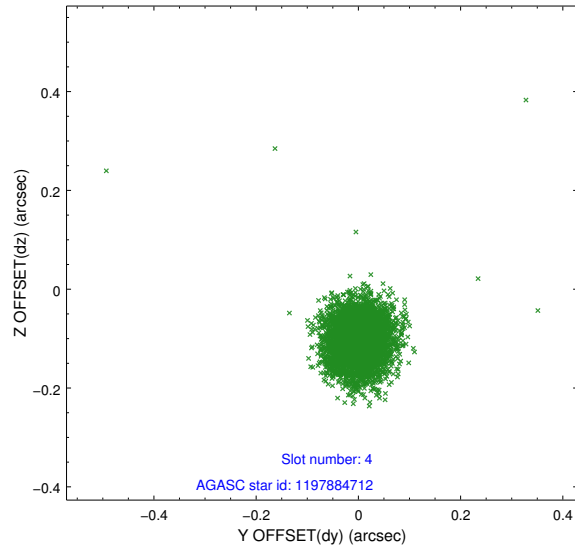
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.15	2187	-0.079	-0.097	0.014	0.023	0.000000	0.000000	-767.23	-845.80
1	FID	ACIS-I-4	7.17	2187	0.208	0.075	0.010	0.020	0.000000	0.000000	2146.85	1060.22
2	FID	ACIS-I-5	7.22	2187	-0.229	0.090	0.013	0.021	0.000000	0.000000	-1820.41	1058.80
3	GUIDE	1197750936	7.57	4374	0.043	0.032	0.055	0.089	15.387940	-71.549550	-708.29	-1827.21
4	GUIDE	1197884712	8.30	4373	0.001	-0.098	0.054	0.089	16.087398	-72.252690	969.48	222.20
5	GUIDE	1197885104	9.35	4370	0.086	0.039	0.095	0.156	17.845067	-72.189368	-256.10	1732.84
6	GUIDE	1198283128	7.78	4374	-0.178	-0.086	0.063	0.106	17.272580	-72.642428	1457.21	2063.15
7	GUIDE	1197885328	7.24	4372	0.047	0.109	0.061	0.095	16.283090	-71.733943	-714.05	-613.72

## 2.4 Star Slots

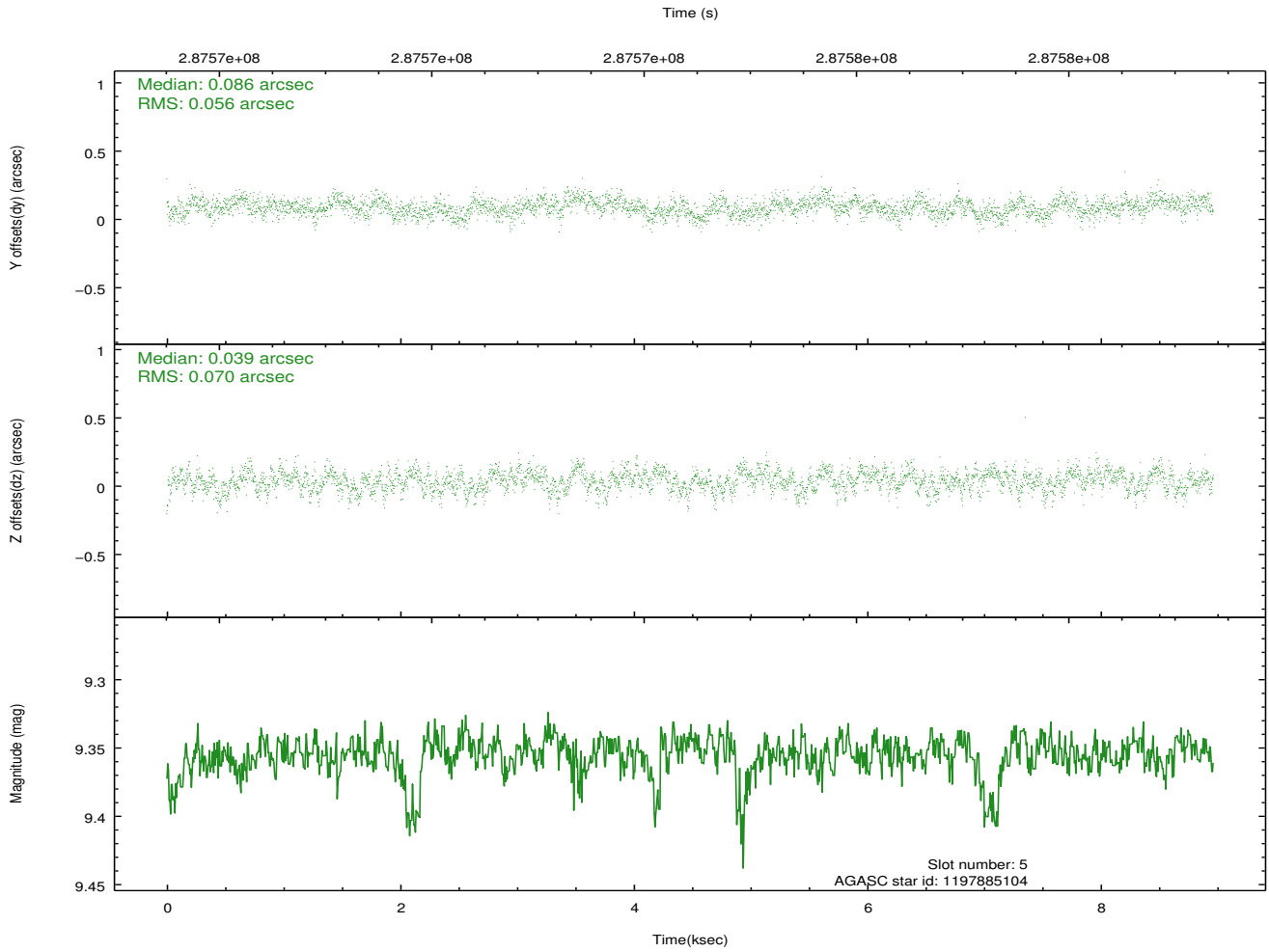
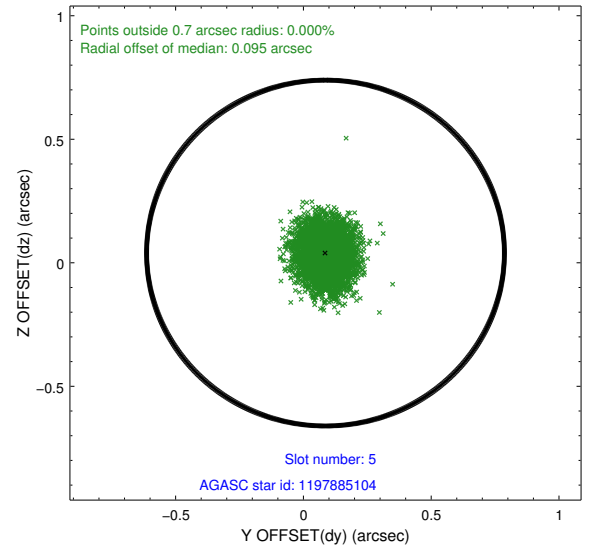
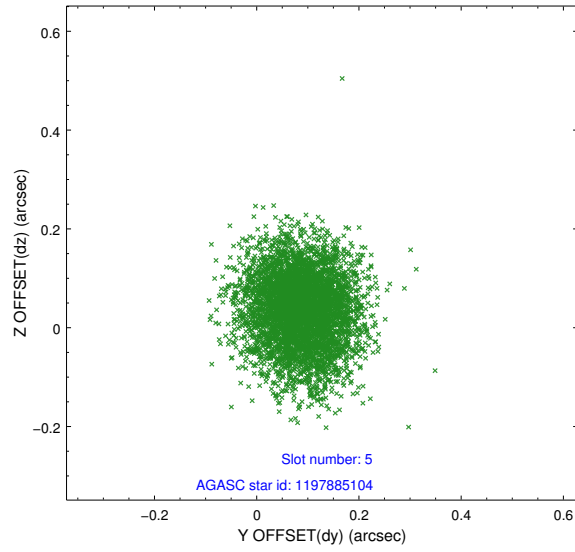
### 2.4.1 Slot 3



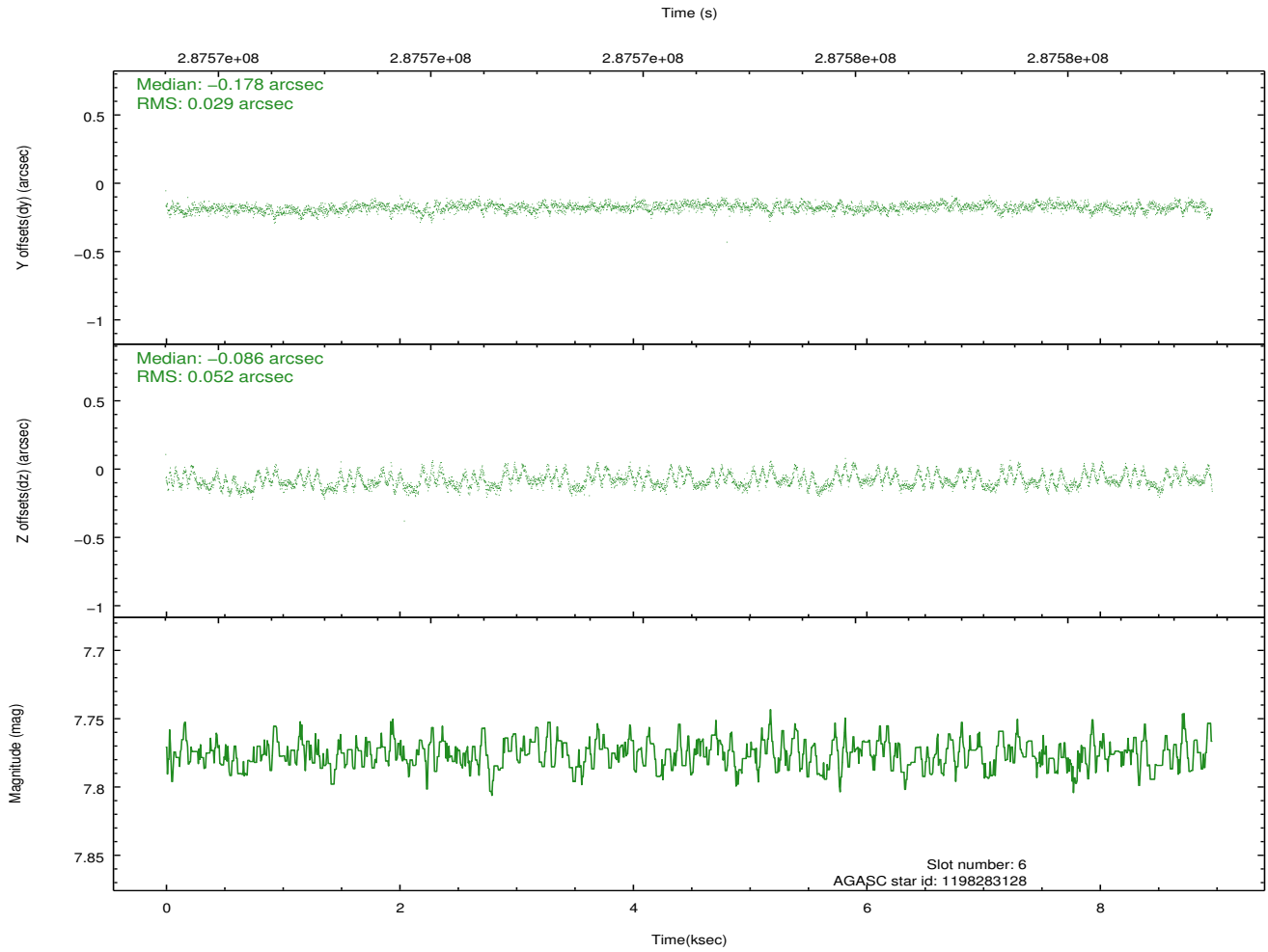
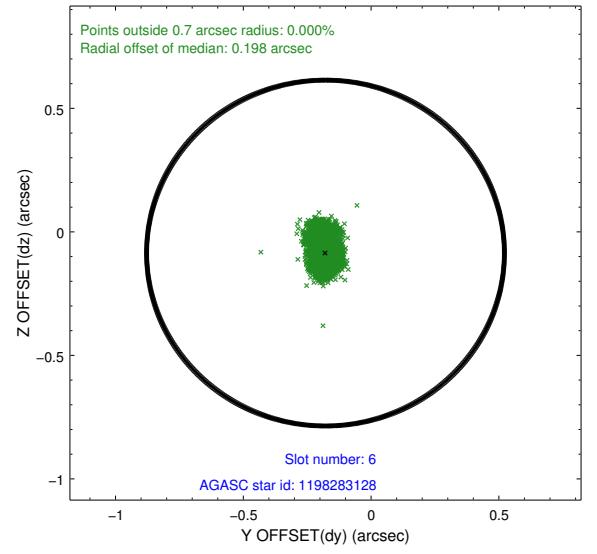
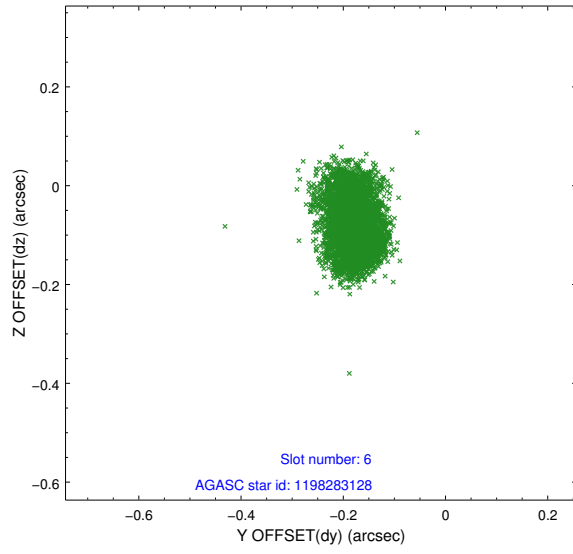
## 2.4.2 Slot 4



### 2.4.3 Slot 5

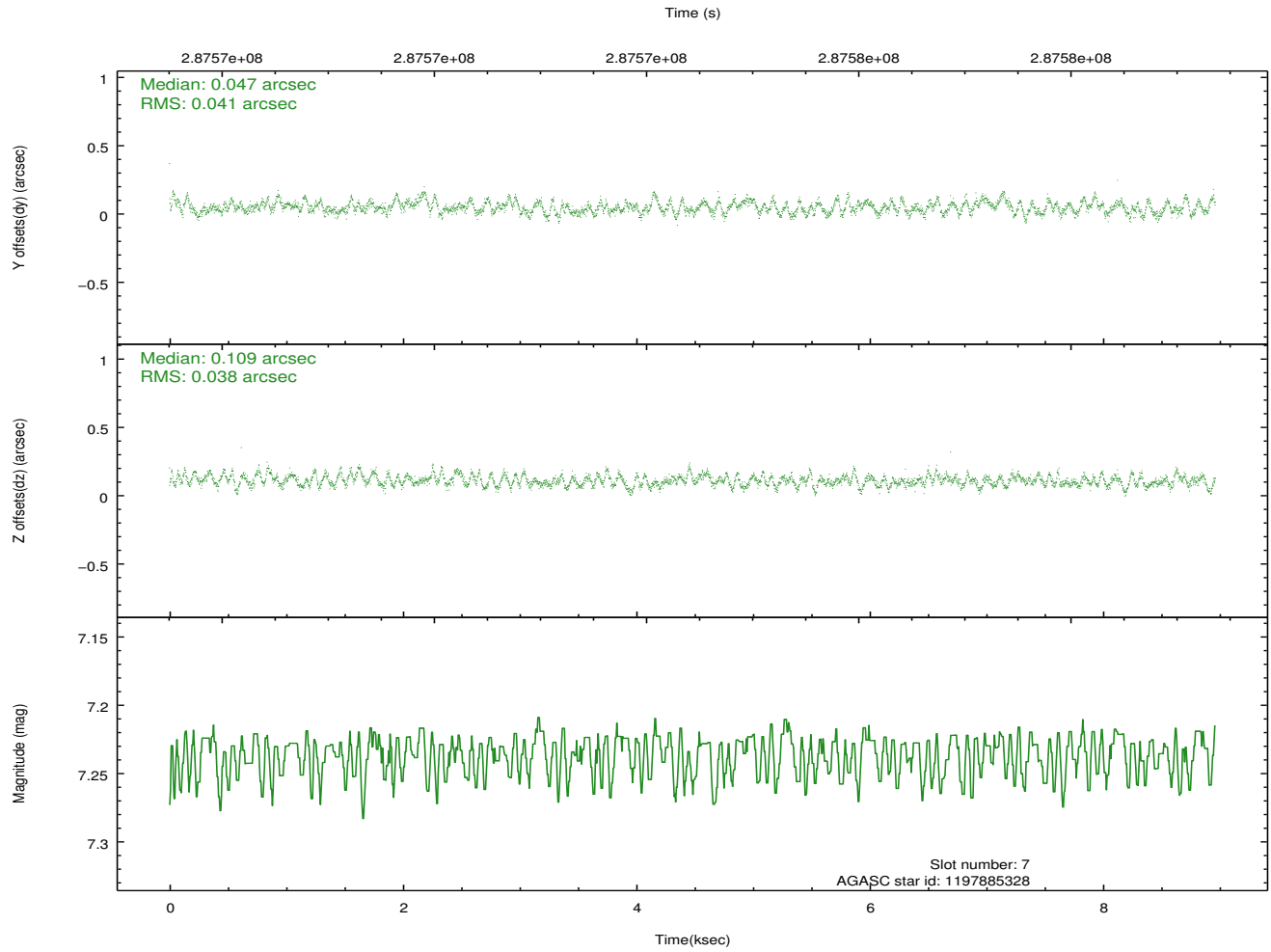
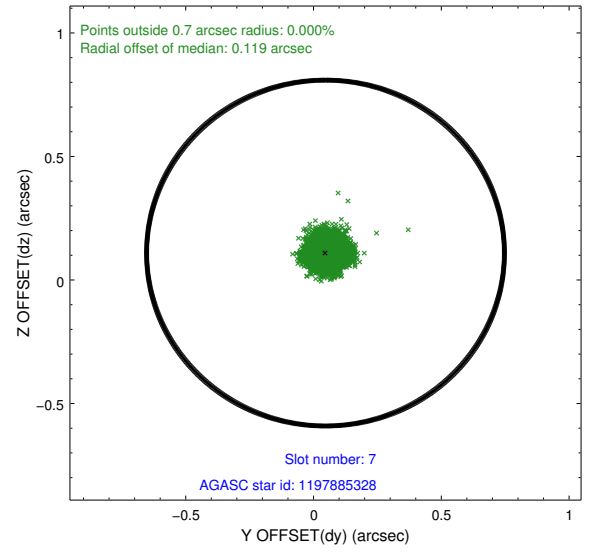
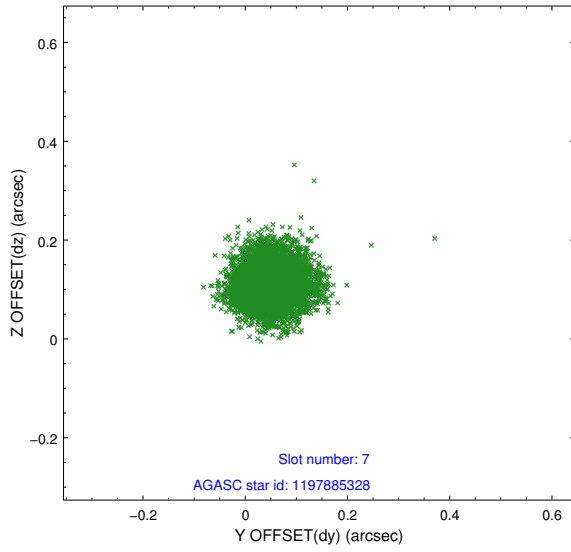


## 2.4.4 Slot 6



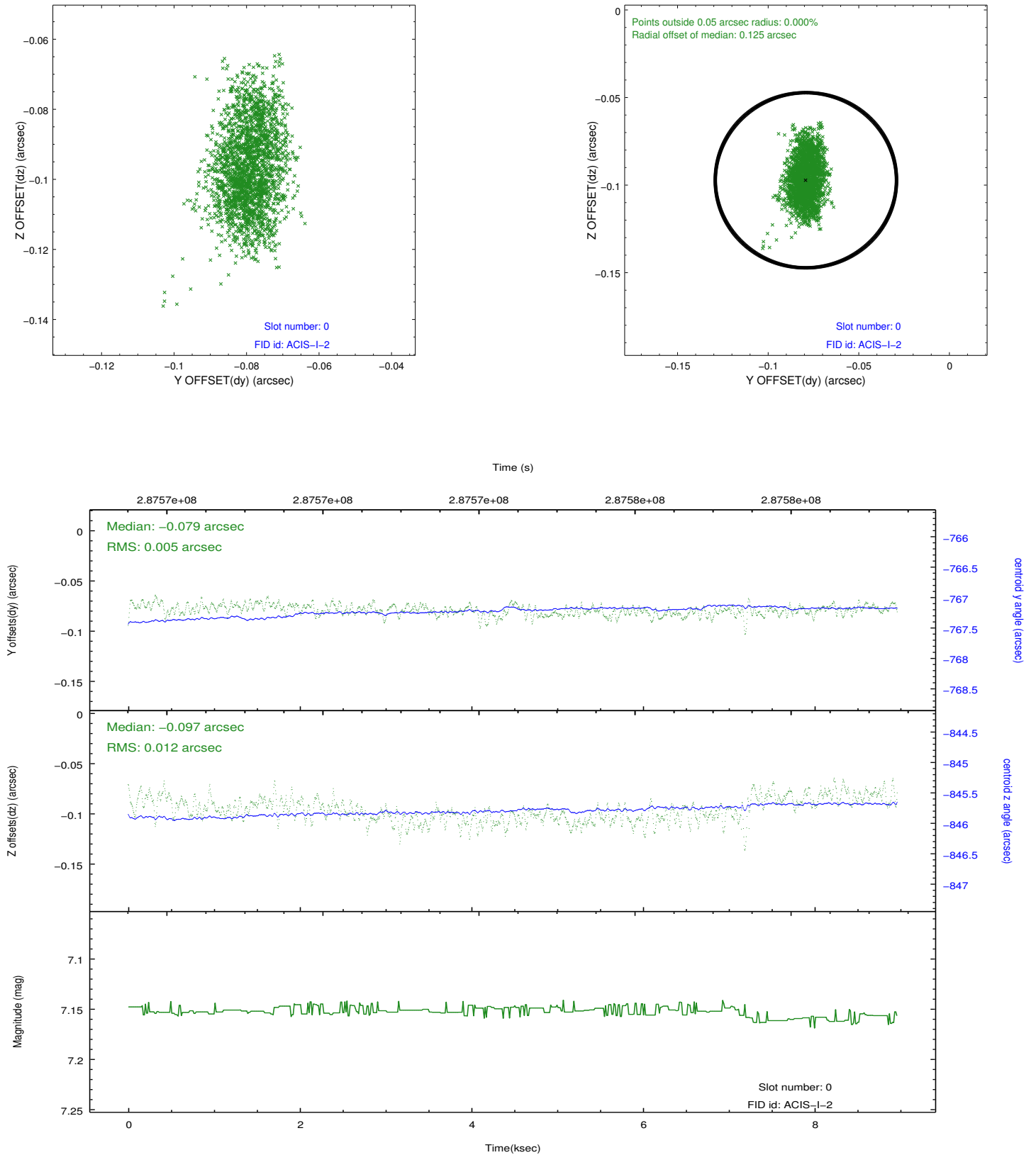


## 2.4.5 Slot 7

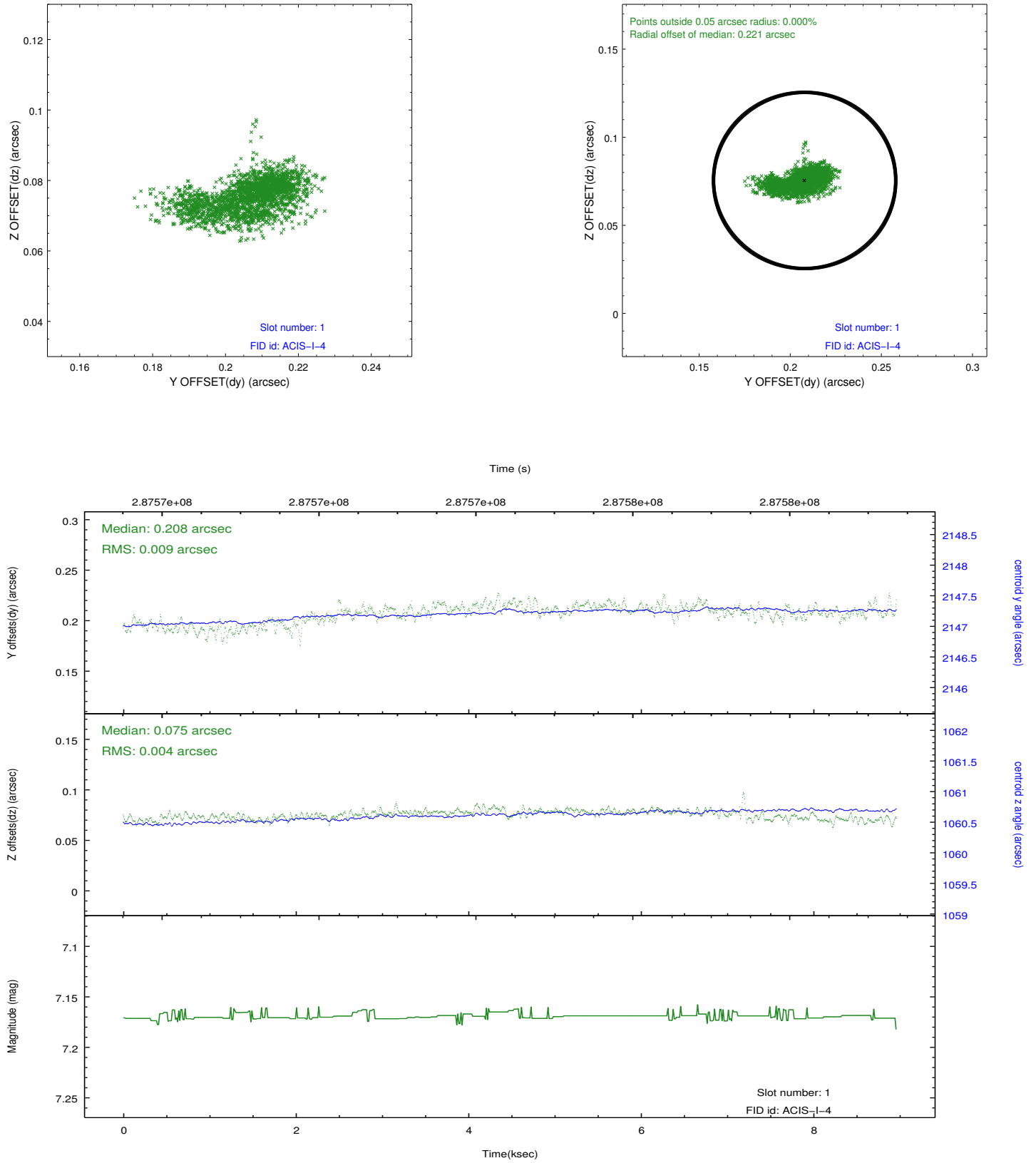


## 2.5 FID Slots

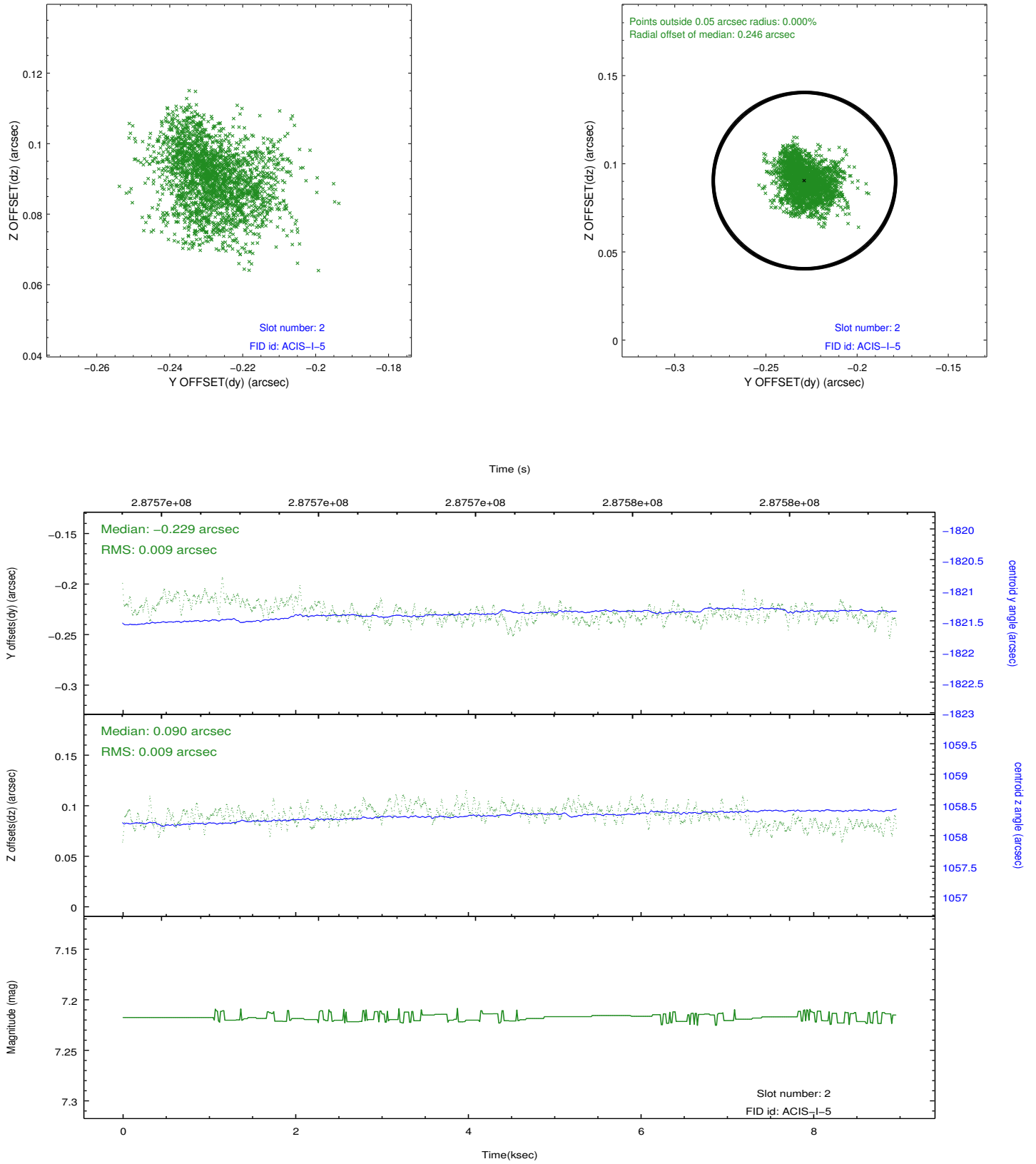
### 2.5.1 Slot 0



## 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	8.95679996

### A.2 Comments

Window constraint met.