

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 4828 - L2 Version 3  
Chandra X-Ray Center

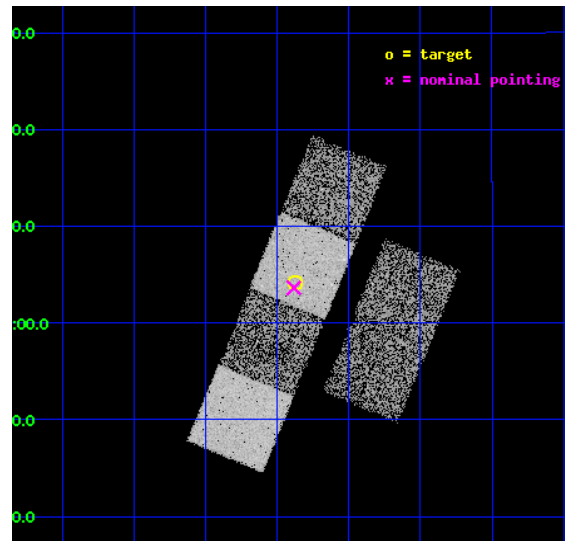
L2 Processing Date : Nov 7 2012

## 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

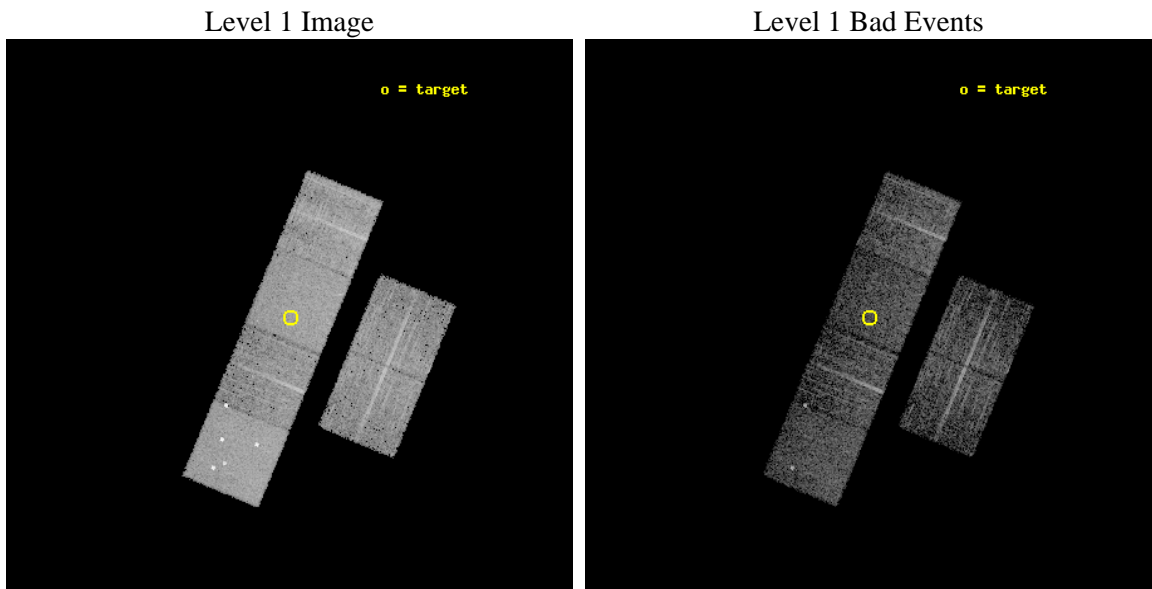
seq_num	700910	Sequence number
obs_id	4828	Observation id
title	Constraining the Hard-X-ray Through Submm SEDs of a Complete Sample of Broad Absorption Line Quasars	Proposal title
observer	Dr. Sarah Gallagher	Principal investigator
object	LBQS 0004+0147	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	1.84375	Observer's specified target RA [deg]
dec_targ	2.069944	Observer's specified target Dec [deg]
ra_nom	1.8458077401087	Nominal RA [deg]
dec_nom	2.0604934898885	Nominal Dec [deg]
roll_nom	292.41689998654	Nominal Roll [deg]
revision	3	Processing version of data
ontime	5606.1301554143	Sum of GTIs [s]
livetime	5535.1419597802	Livetime [s]
ontime2	5606.1711954176	Sum of GTIs [s]
ontime3	5606.0070552826	Sum of GTIs [s]
ontime5	5606.0891352892	Sum of GTIs [s]
ontime6	5606.0480952859	Sum of GTIs [s]
ontime7	5606.1301554143	Sum of GTIs [s]
ontime8	5599.4840149581	Sum of GTIs [s]
l2events	55688	Number of level 2 events



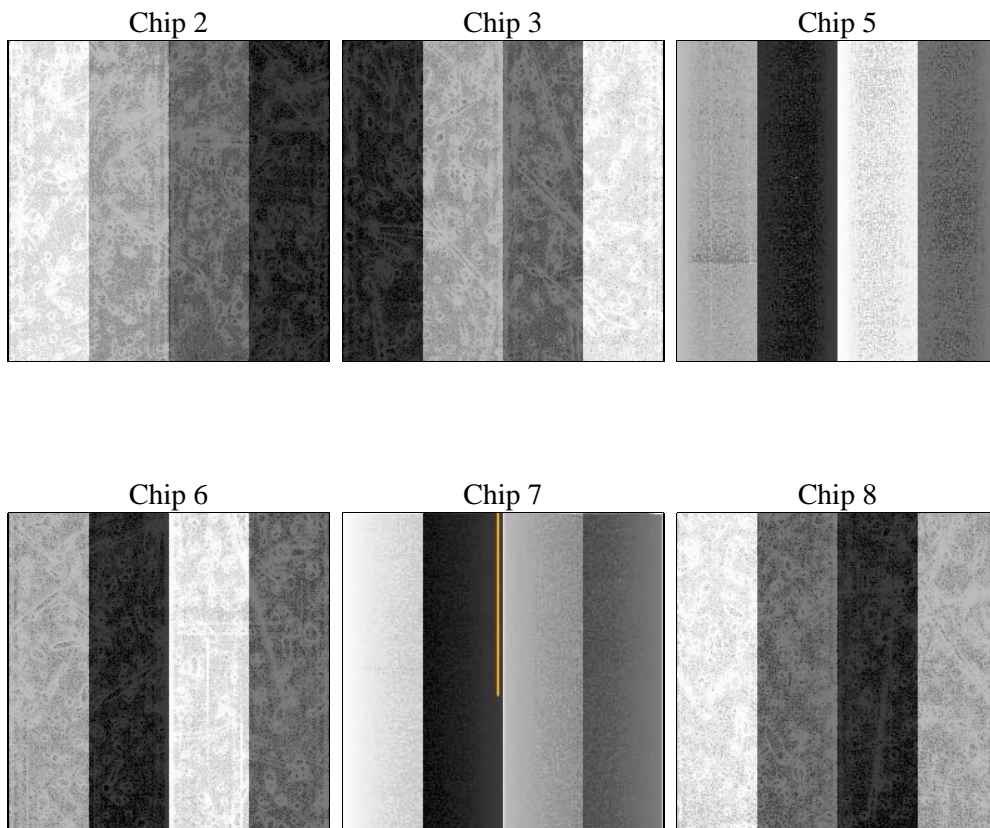
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	5850.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	5606.1301554143	Sum of GTIs [s]
caldsver	4.5.2	&#160	ontime2	5606.1711954176	Sum of GTIs [s]
date	2012-11-07T12:48:48	Date and time of file creation	ontime3	5606.0070552826	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	5606.0891352892	Sum of GTIs [s]
			ontime6	5606.0480952859	Sum of GTIs [s]
			ontime7	5606.1301554143	Sum of GTIs [s]
			ontime8	5599.4840149581	Sum of GTIs [s]
			l1events	236029	Number of level 1 events

### 2.1.4 Events

	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	31268	30874	53403	31180	43283	46021	grade 0 events	2044	1914	5709	1948	1885	4103
rejected events	26863	26593	26196	26661	24306	34040		6%	6%	10%	6%	4%	8%
rejected %	85%	86%	49%	85%	56%	73%	grade 1 events	22	22	110	14	36	41
								0%	0%	0%	0%	0%	0%
							grade 2 events	869	819	7273	937	3898	2260
								2%	2%	13%	3%	9%	4%
							grade 3 events	382	392	1019	404	1679	1465
								1%	1%	1%	1%	3%	3%
							grade 4 events	365	409	1263	359	1674	1338
								1%	1%	2%	1%	3%	2%
							grade 5 events	1195	1371	3780	1323	3946	1897
								3%	4%	7%	4%	9%	4%
							grade 6 events	747	748	11955	874	9854	2830
								2%	2%	22%	2%	22%	6%
							grade 7 events	25644	25199	22294	25321	20311	32087
								82%	81%	41%	81%	46%	69%

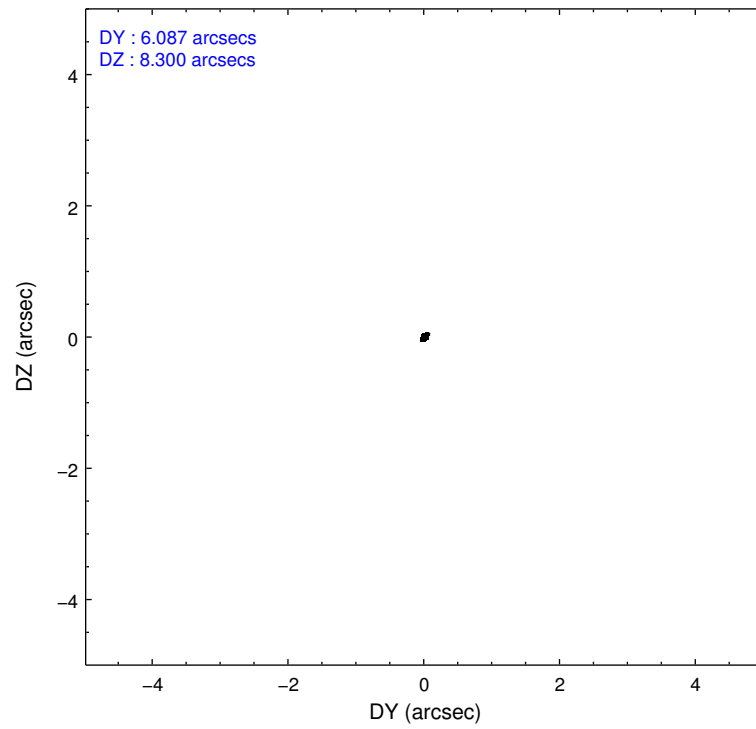
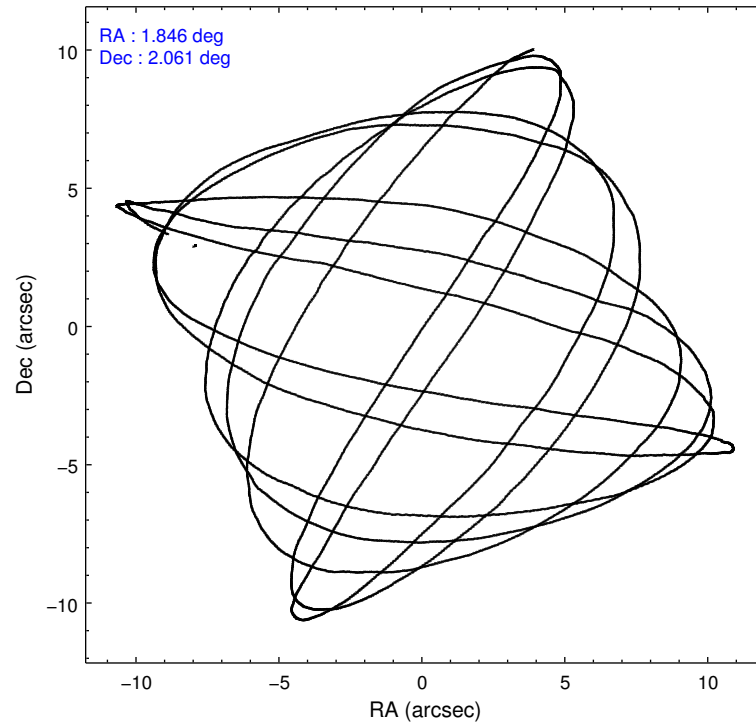


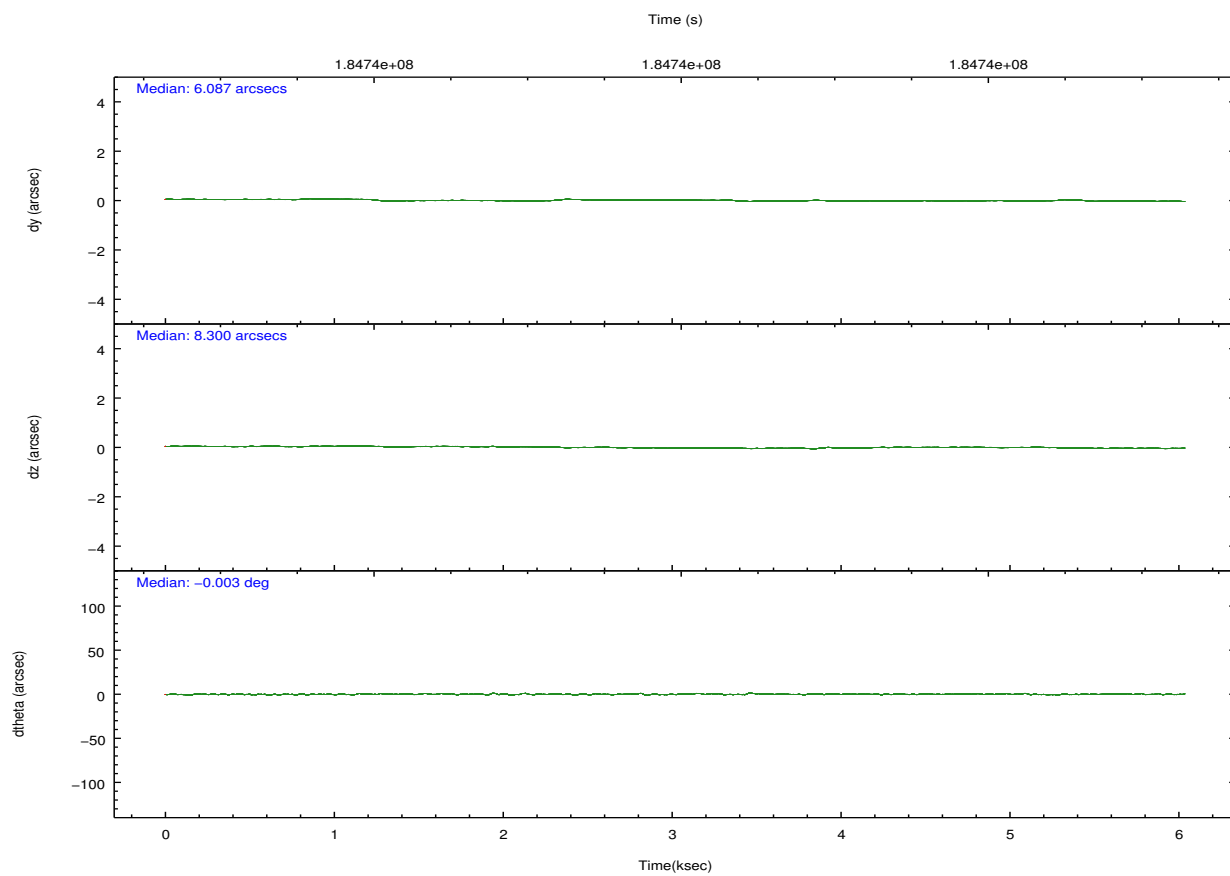
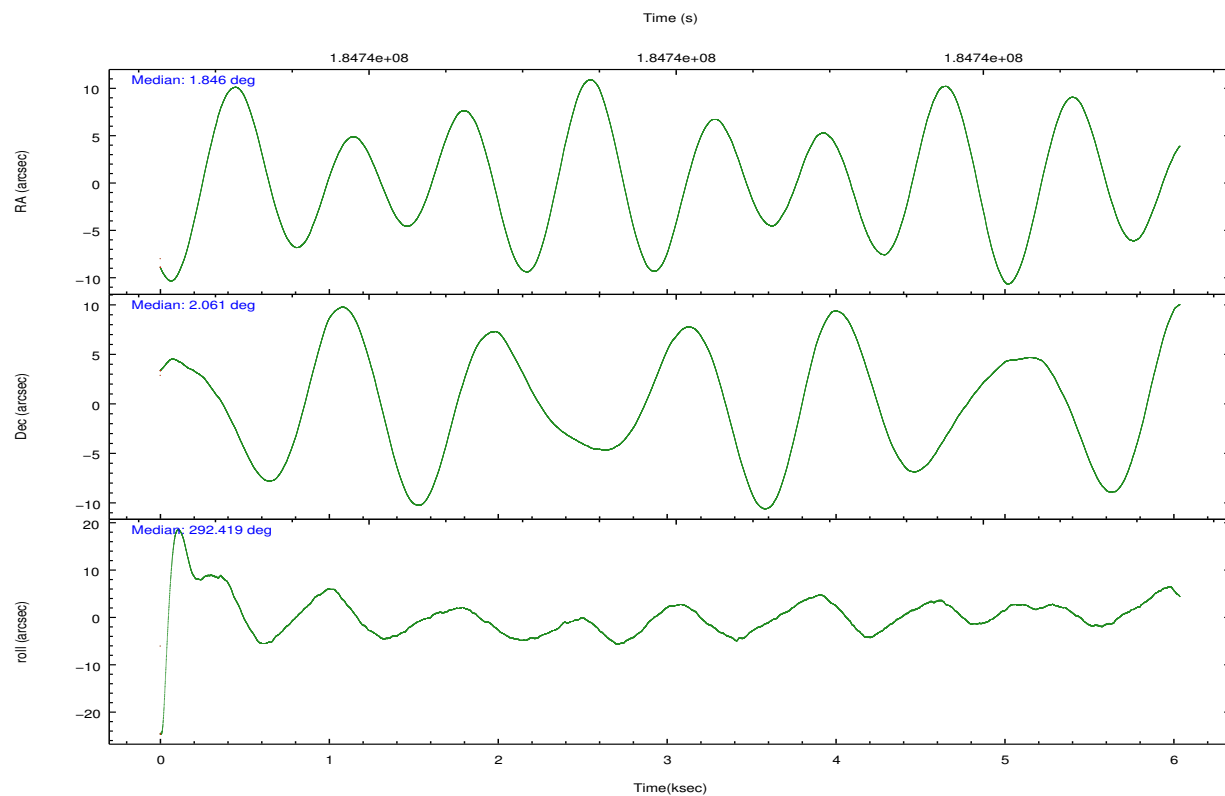
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-235678	ACIS-235678
Grating	NONE	NONE
Data mode	FAINT	FAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	1.823991	1.845807740108698
[deg] Pointing Dec	2.076811	2.060493489888547
[deg] Pointing Roll	292.261163	292.4168999865443
[mm] SIM focus pos	-0.684267	-0.6828225247311905
[mm] SIM defocus	0	0.001444936568705701
[mm] SIM translation stage pos	-190.132523	-190.1400660498719
[mm] SIM translation stage offset	0	0.00754346686406393
[s] Observation start time (MET)	184735130.184000	184734718.62474
Observation start date	2003-11-09T03:17:46	2003-11-09T03:11:58
[s] Observation end time (MET)	184740980.184000	184741973.06256
Observation end date	2003-11-09T04:55:16	2003-11-09T05:12:53
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



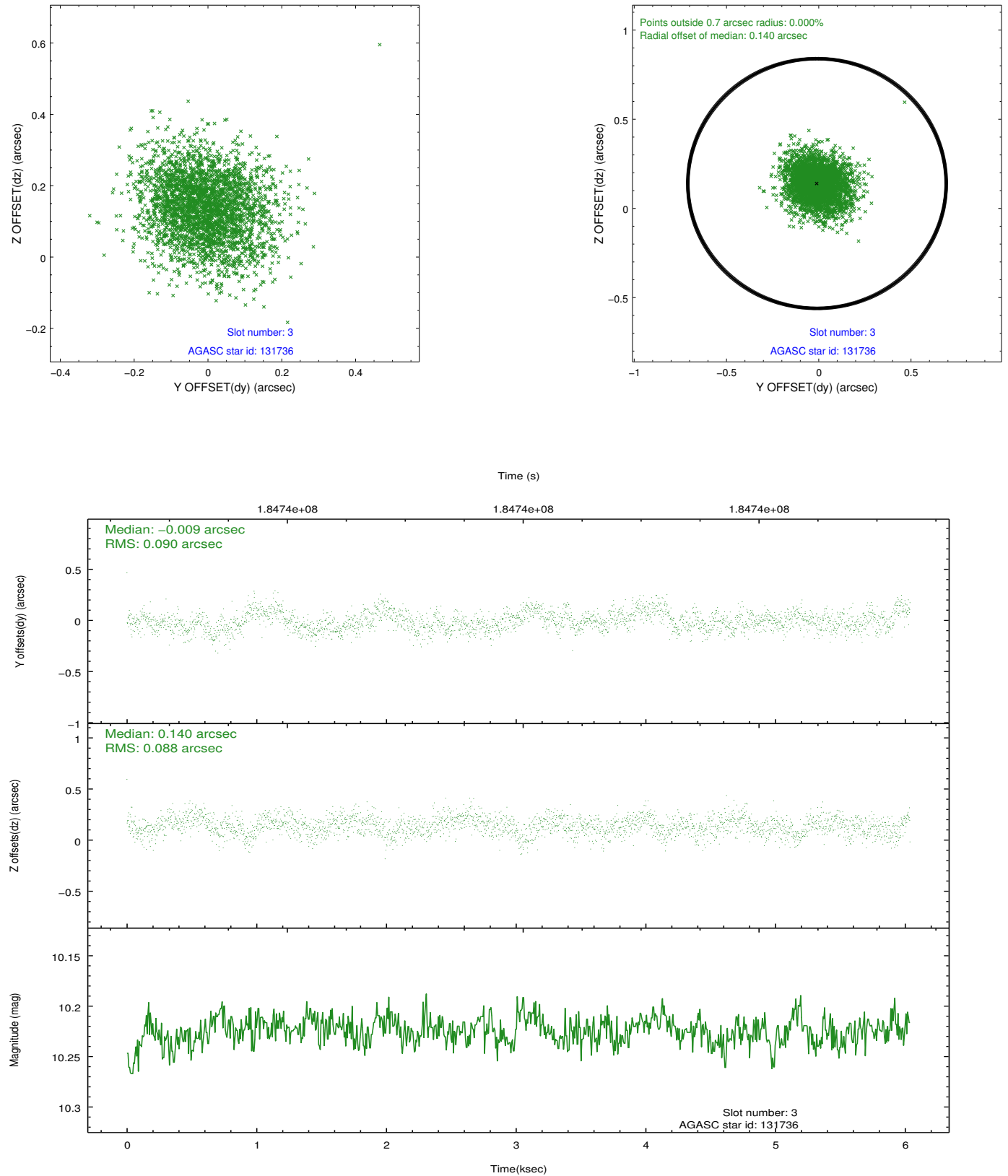


### Slot Statistics

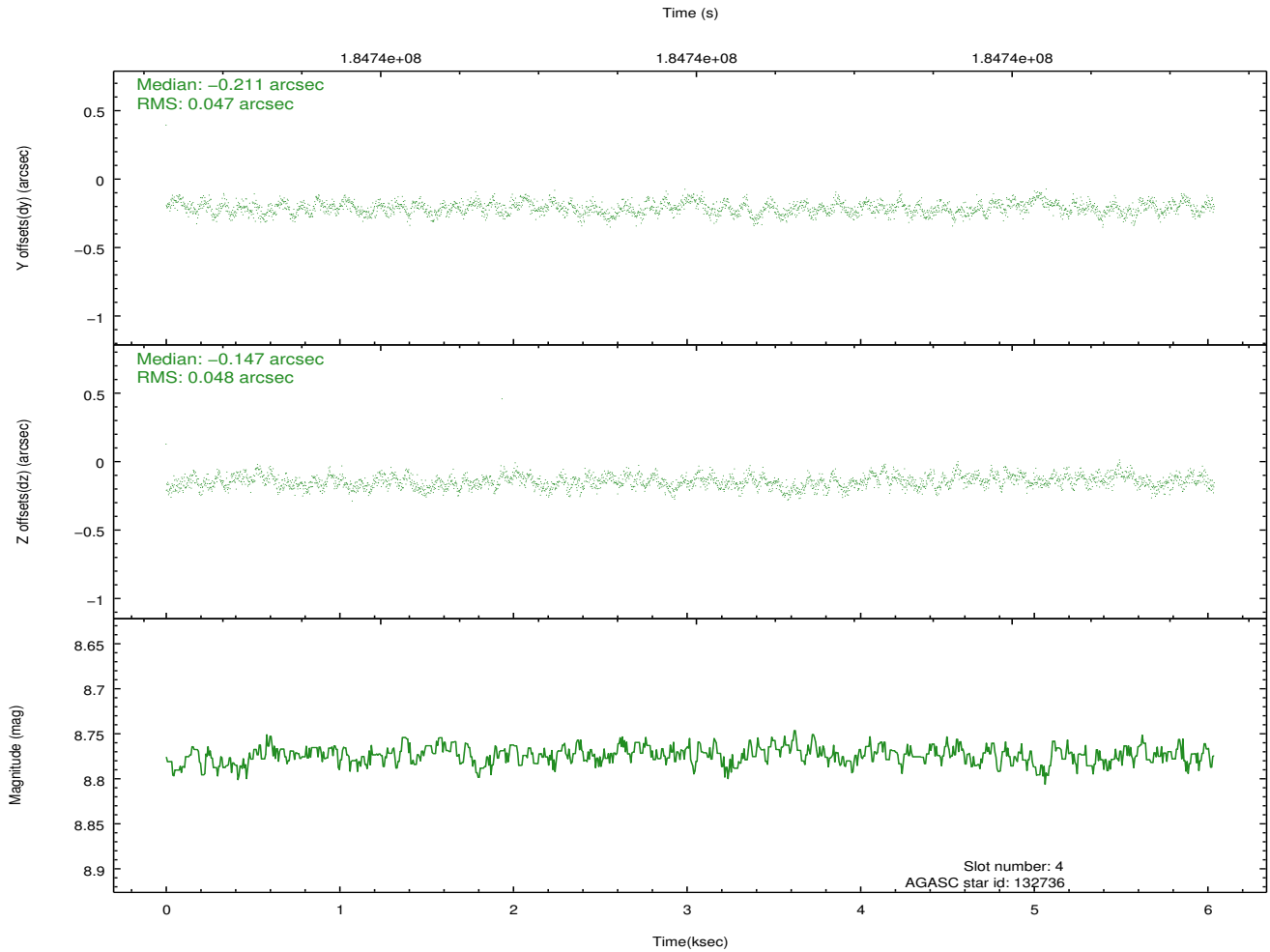
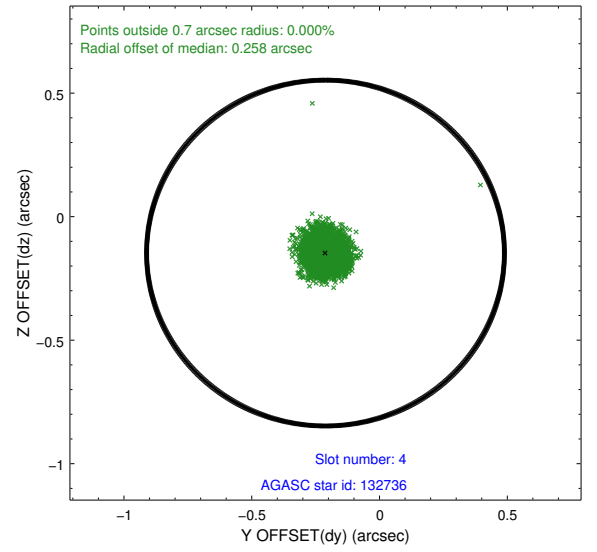
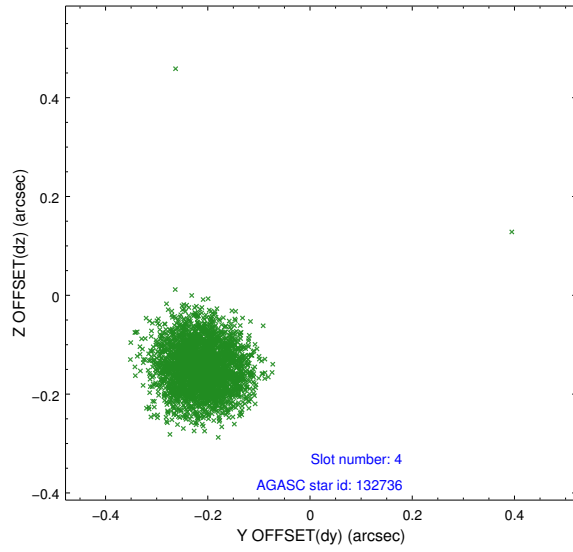
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	1473	-0.036	-0.041	0.007	0.011	0.000000	0.000000	-758.88	-1729.53
1	FID	ACIS-S-4	7.21	1473	0.067	0.029	0.006	0.012	0.000000	0.000000	2154.08	177.97
2	FID	ACIS-S-5	7.23	1473	-0.062	0.021	0.006	0.012	0.000000	0.000000	-1810.46	172.80
3	GUIDE	131736	10.22	2933	-0.009	0.140	0.134	0.218	1.667746	2.105323	-307.21	-480.97
4	GUIDE	132736	8.77	2946	-0.211	-0.147	0.071	0.109	1.292421	2.397203	-1791.55	-1332.43
5	GUIDE	136104	9.85	2945	0.079	-0.117	0.109	0.181	2.035477	1.747318	1386.37	254.35
6	GUIDE	137336	9.11	2946	0.047	0.007	0.083	0.132	1.718151	1.861024	575.90	-646.27
7	GUIDE	141784	9.00	2920	0.095	0.117	0.084	0.142	1.831012	1.665078	1382.19	-538.40

## 2.4 Star Slots

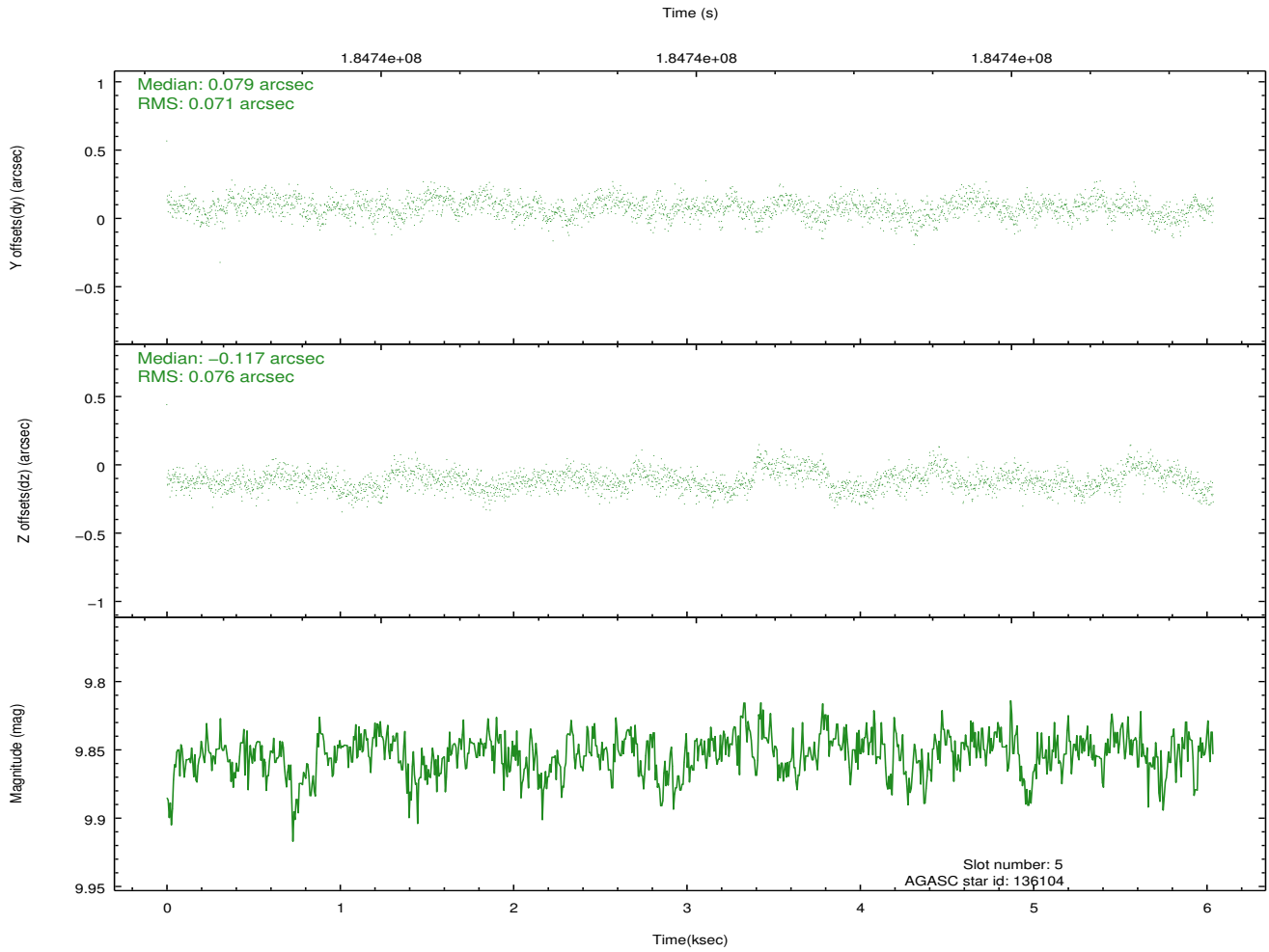
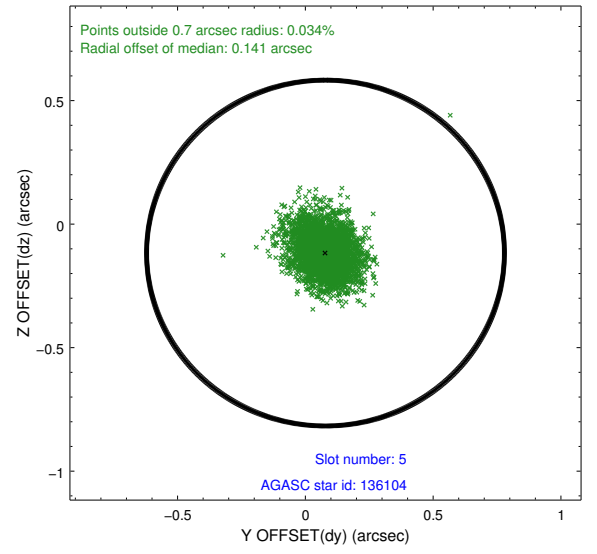
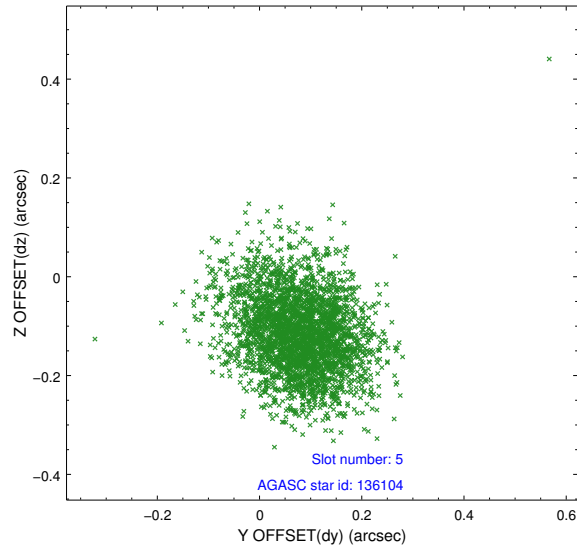
### 2.4.1 Slot 3



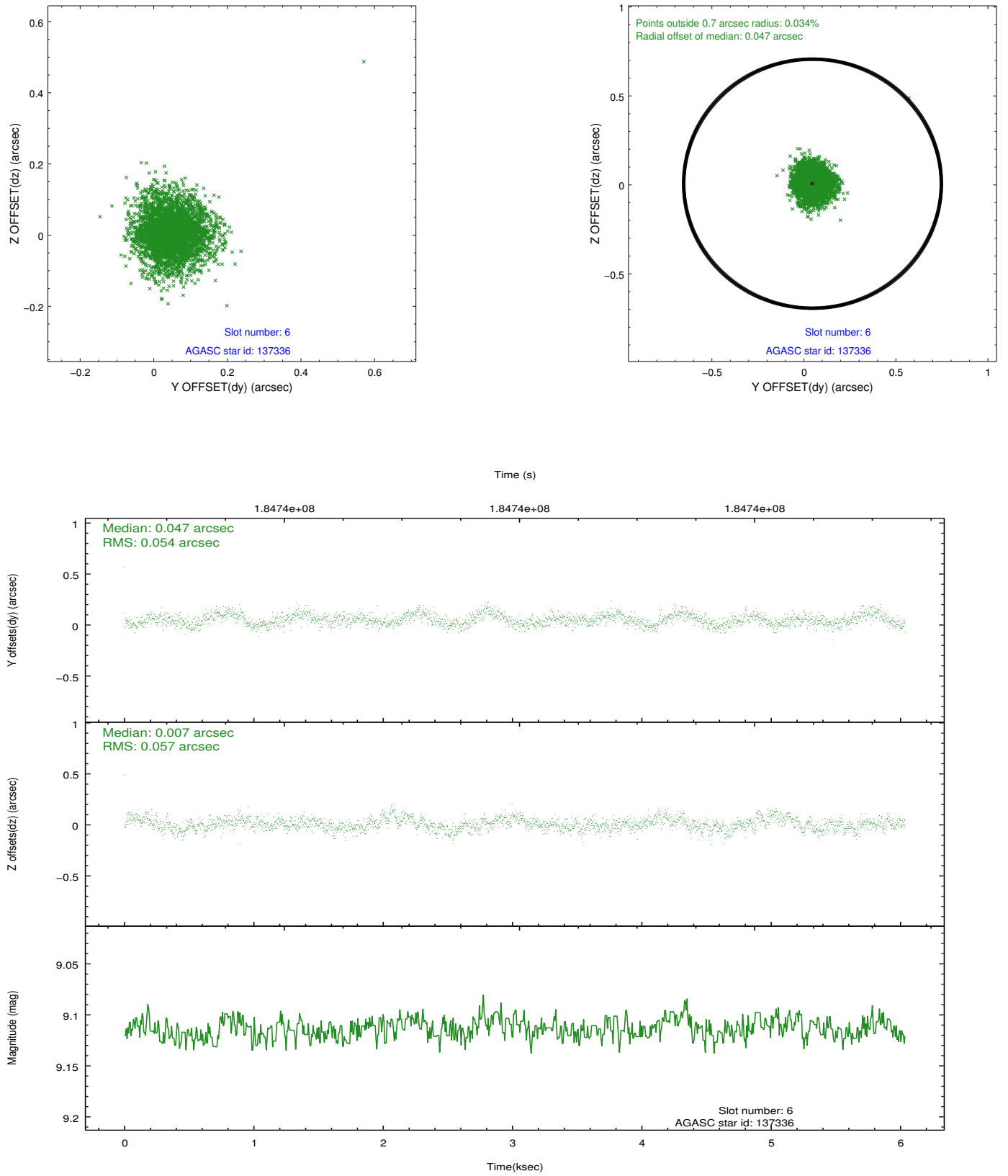
## 2.4.2 Slot 4



### 2.4.3 Slot 5

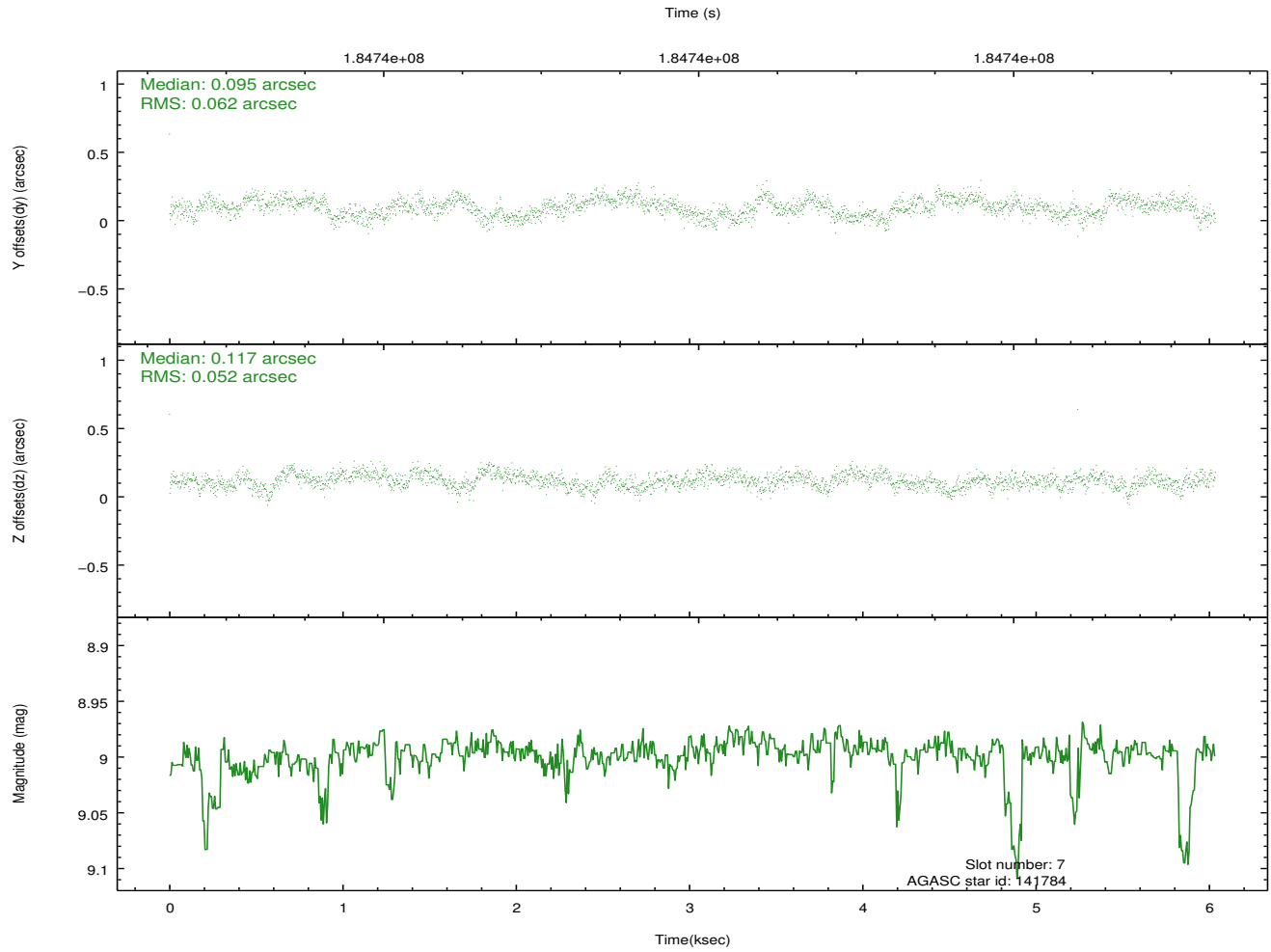
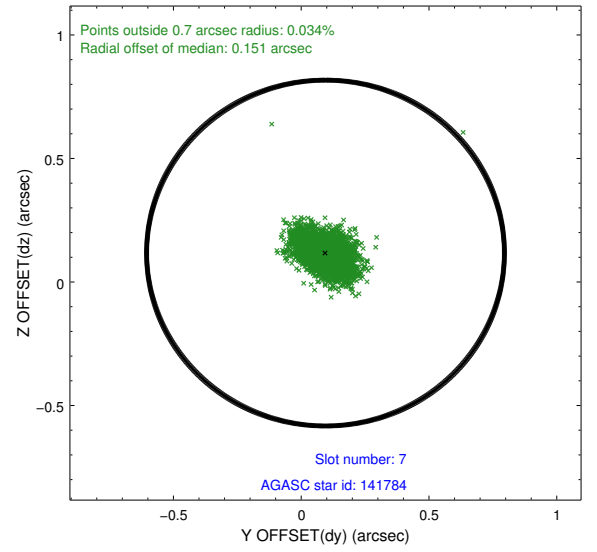
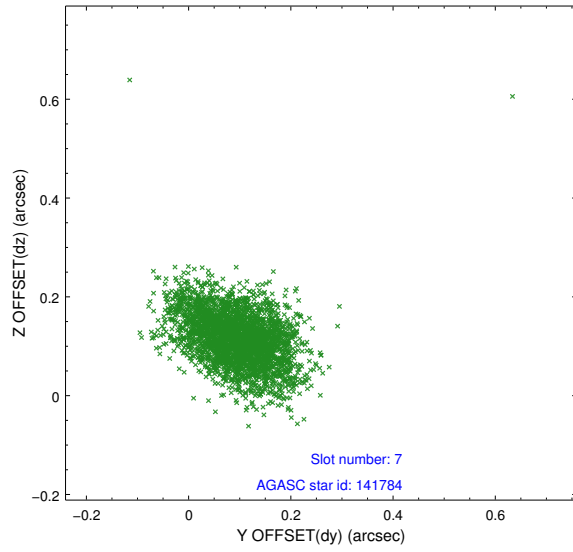


## 2.4.4 Slot 6



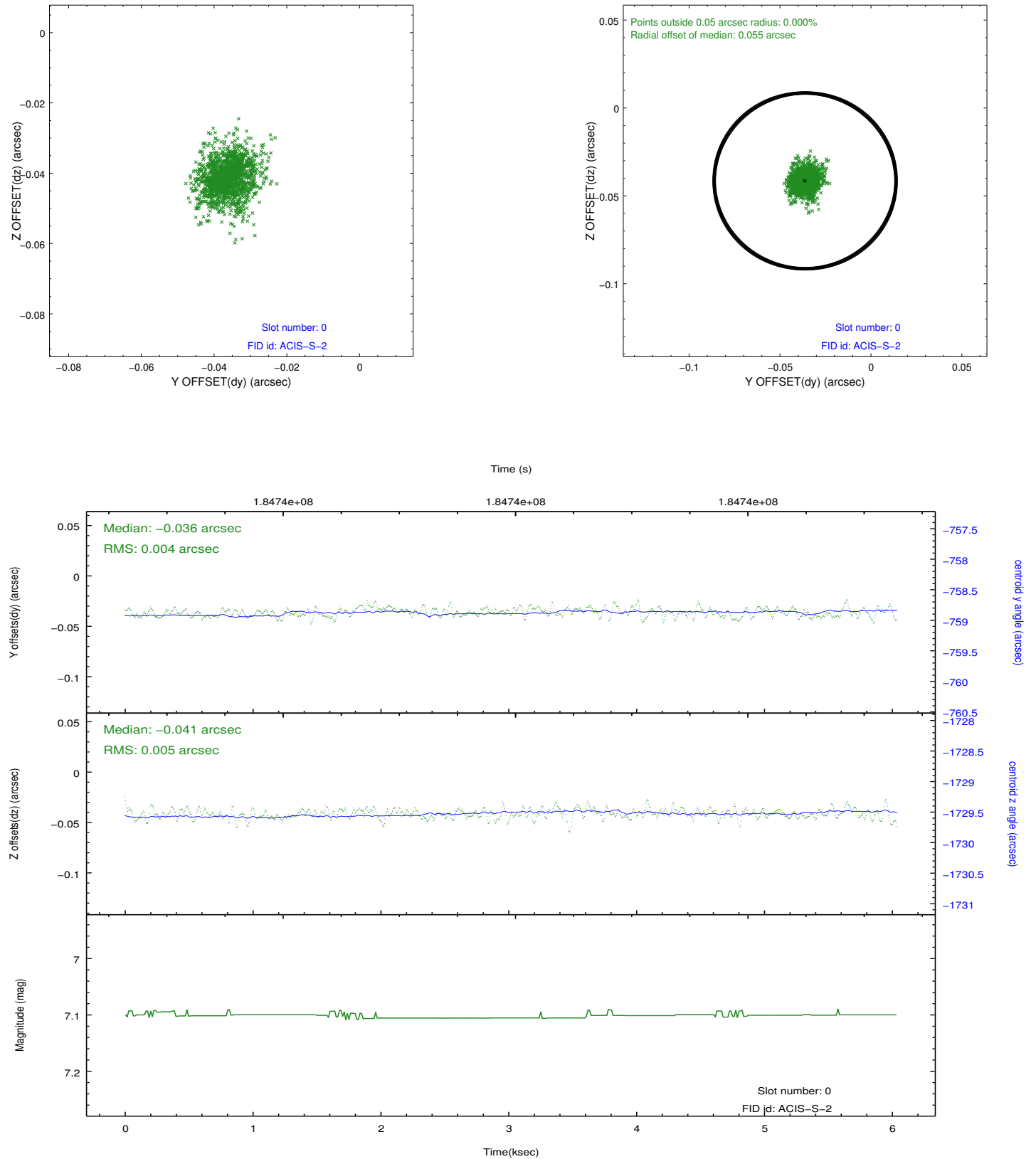


## 2.4.5 Slot 7

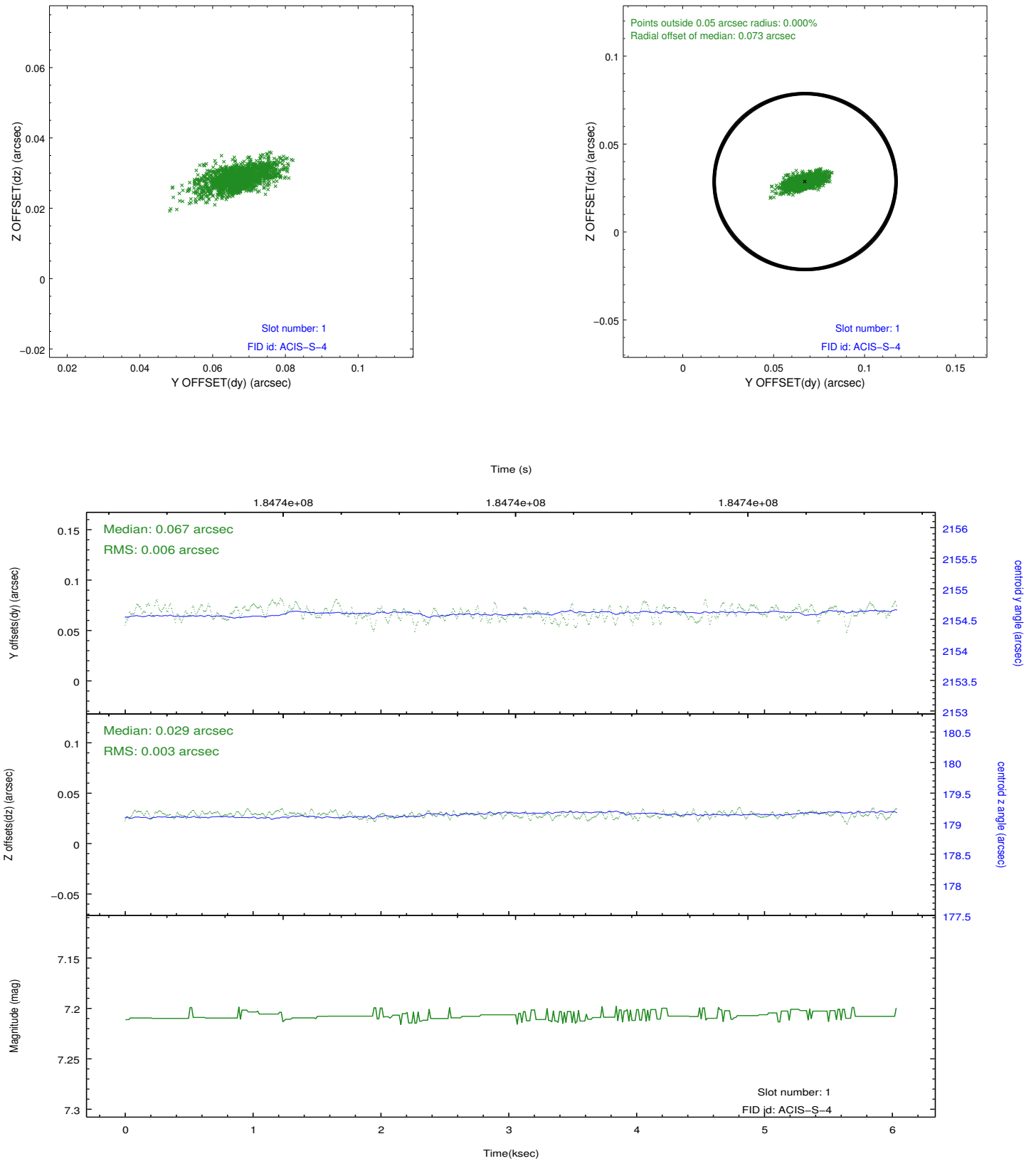


## 2.5 FID Slots

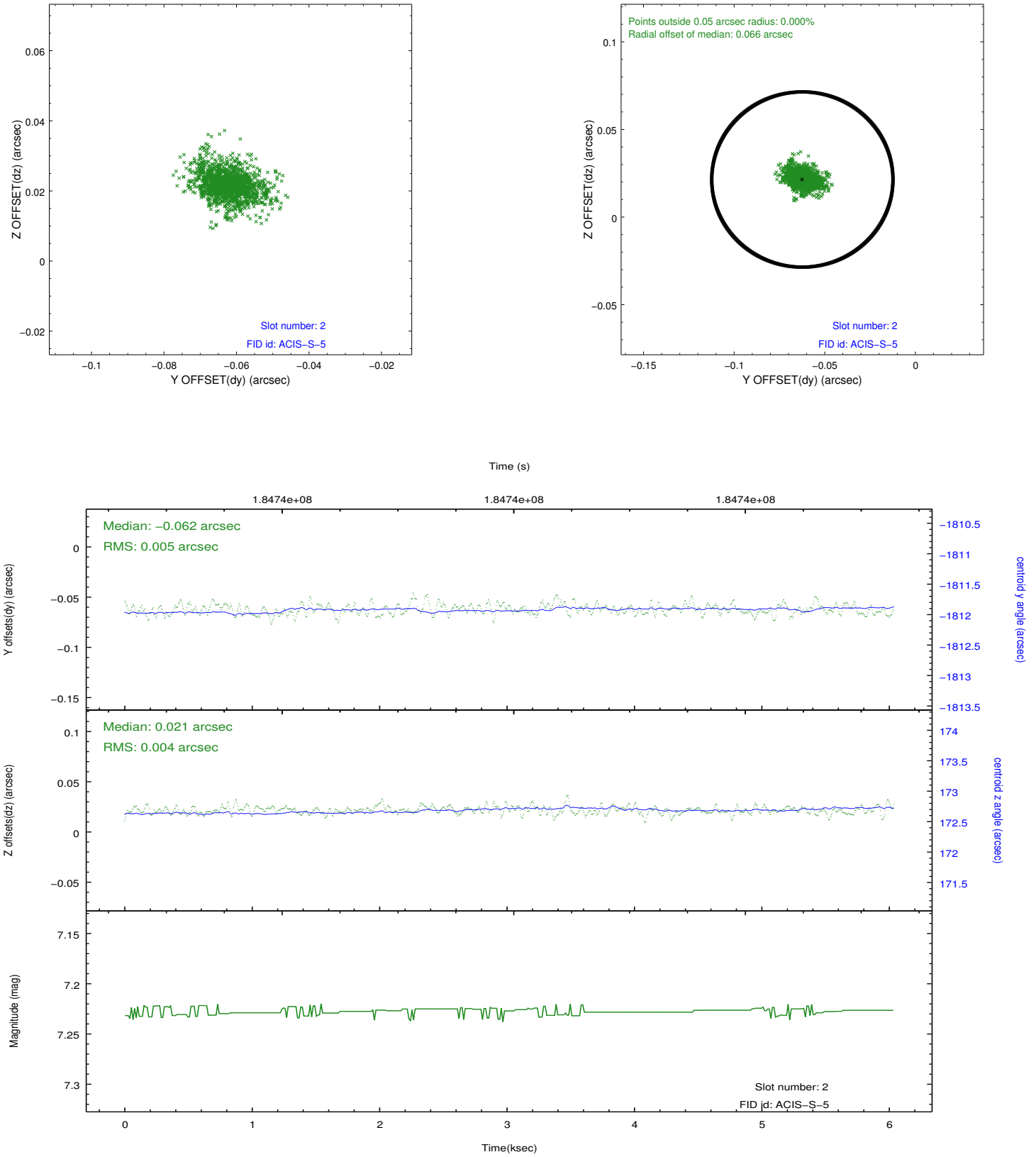
### 2.5.1 Slot 0



## 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)	2012.11.19
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.606

### A.2 Comments