

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 9304 - L2 Version 2  
Chandra X-Ray Center

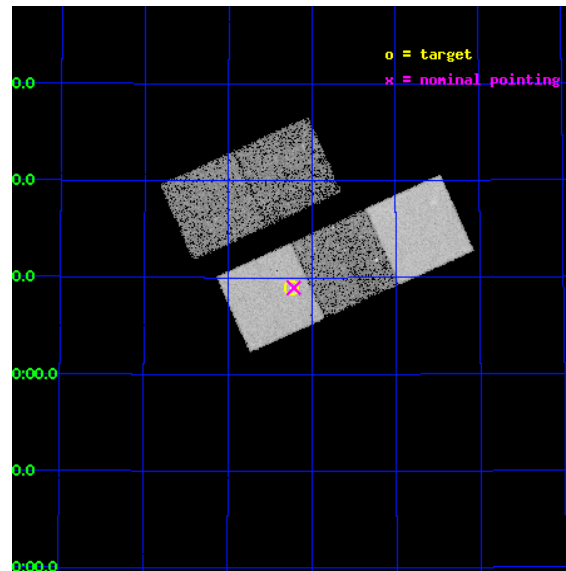
L2 Processing Date : May 6 2012

## 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

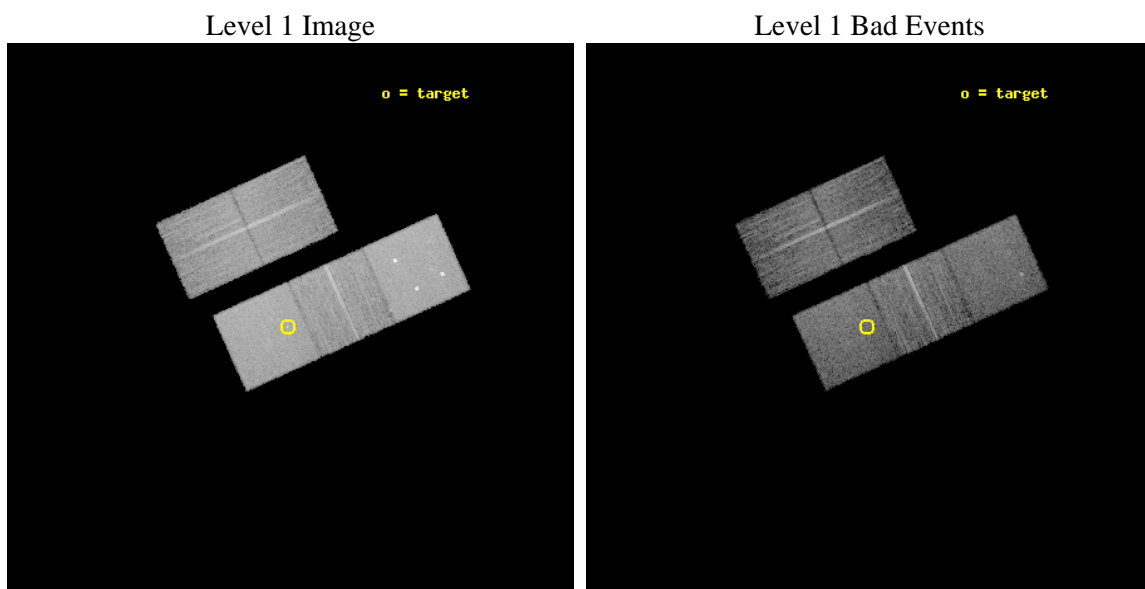
seq_num	701744	Sequence number
obs_id	9304	Observation id
title	Towards a Complete Sample: 3CR Extragalactic Radio Sources with $z < 0.3$	Proposal title
observer	Dr. Daniel Harris	Principal investigator
object	3C171	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	103.812083	Observer's specified target RA [deg]
dec_targ	54.149833	Observer's specified target Dec [deg]
ra_nom	103.80384554834	Nominal RA [deg]
dec_nom	54.149228397121	Nominal Dec [deg]
roll_nom	155.72208369987	Nominal Roll [deg]
revision	2	Processing version of data
ontime	8034.7831386328	Sum of GTIs [s]
livetime	7929.8027818052	Livetime [s]
ontime2	8031.4779683948	Sum of GTIs [s]
ontime3	8034.6600186229	Sum of GTIs [s]
ontime5	8034.7420986295	Sum of GTIs [s]
ontime6	8034.7010586262	Sum of GTIs [s]
ontime7	8034.7831386328	Sum of GTIs [s]
l2events	118966	Number of level 2 events



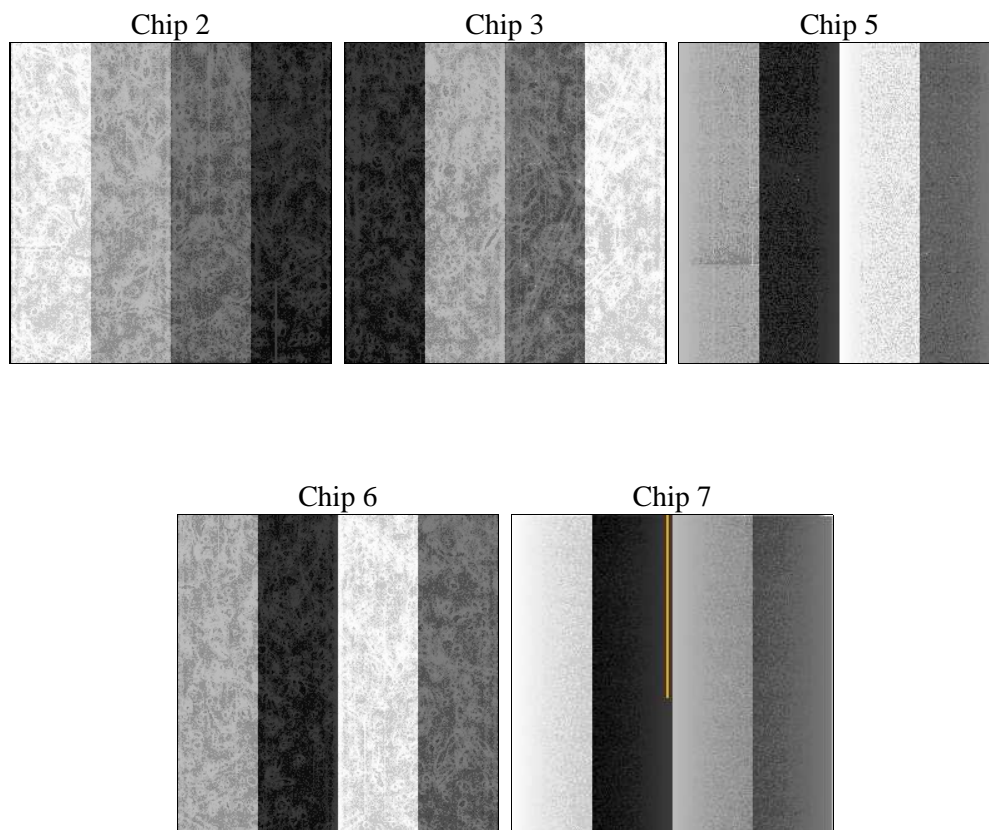
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	8000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	8034.7831386328	Sum of GTIs [s]
caldsver	4.4.9	&#160	ontime2	8031.4779683948	Sum of GTIs [s]
date	2012-05-06T14:22:21	Date and time of file creation	ontime3	8034.6600186229	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	8034.7420986295	Sum of GTIs [s]
			ontime6	8034.7010586262	Sum of GTIs [s]
			ontime7	8034.7831386328	Sum of GTIs [s]
			l1events	457649	Number of level 1 events

### 2.1.4 Events

	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	72995	73280	123270	80577	107527
rejected events	64053	64300	64815	71119	63147
rejected %	87%	87%	52%	88%	58%

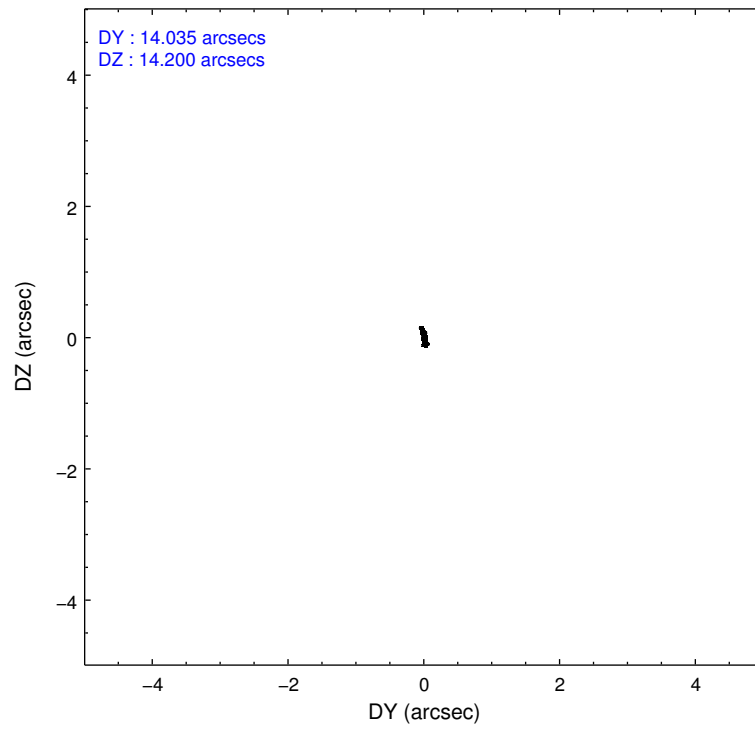
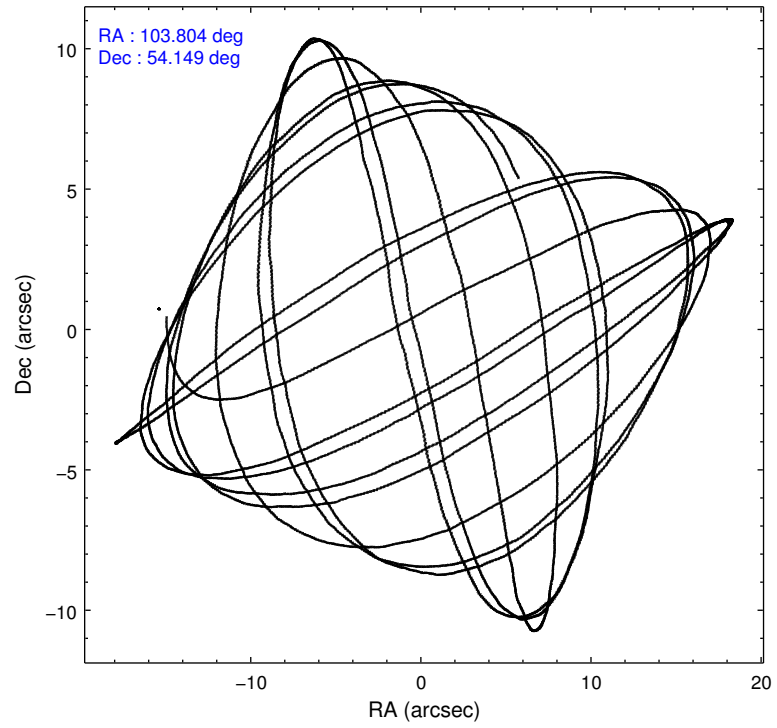
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	3774	3862	7953	3727	3923
	5%	5%	6%	4%	3%
grade 1 events	42	46	501	38	111
	0%	0%	0%	0%	0%
grade 2 events	1976	1701	17526	2075	9164
	2%	2%	14%	2%	8%
grade 3 events	824	889	2011	846	3785
	1%	1%	1%	1%	3%
grade 4 events	854	903	2016	836	3596
	1%	1%	1%	1%	3%
grade 5 events	2998	3493	8404	3811	10000
	4%	4%	6%	4%	9%
grade 6 events	1524	1629	28992	1983	23954
	2%	2%	23%	2%	22%
grade 7 events	61003	60757	55867	67261	52994
	83%	82%	45%	83%	49%

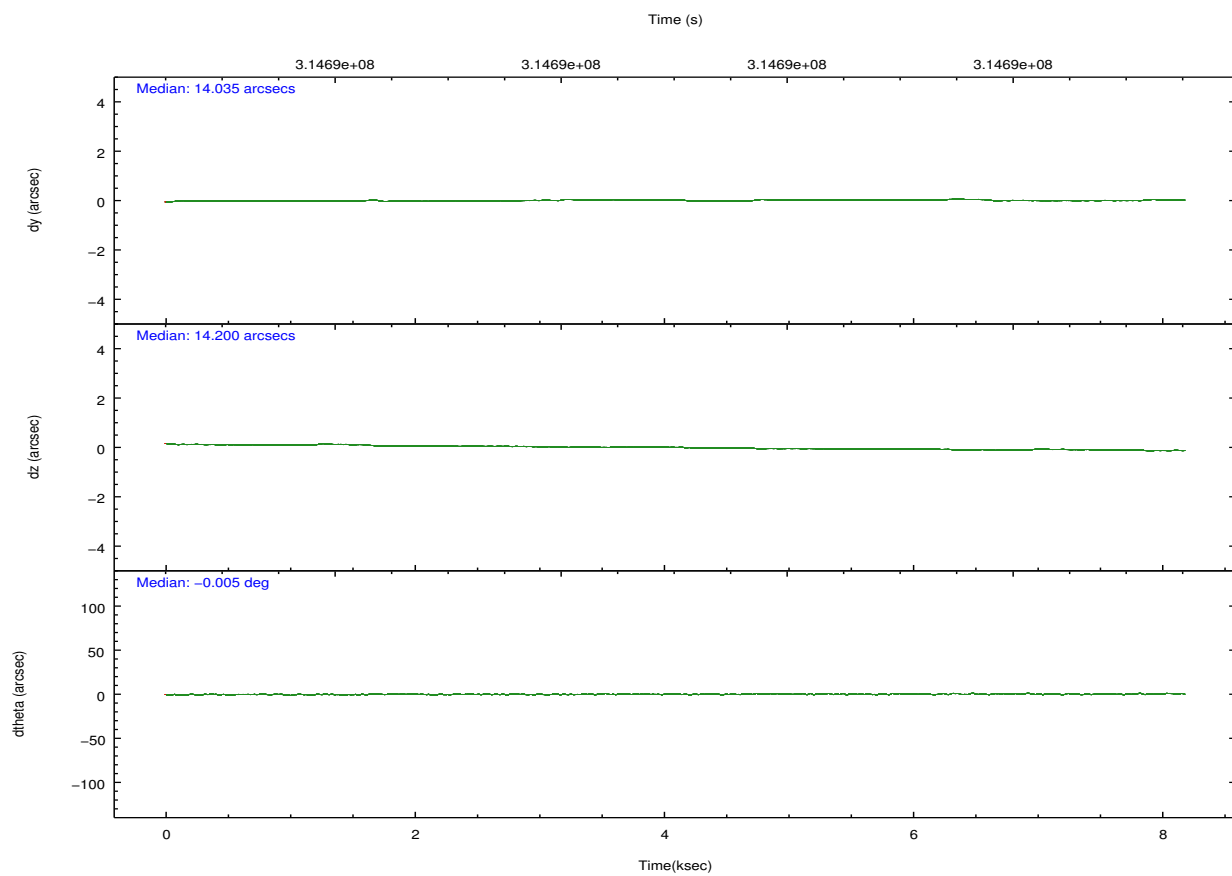
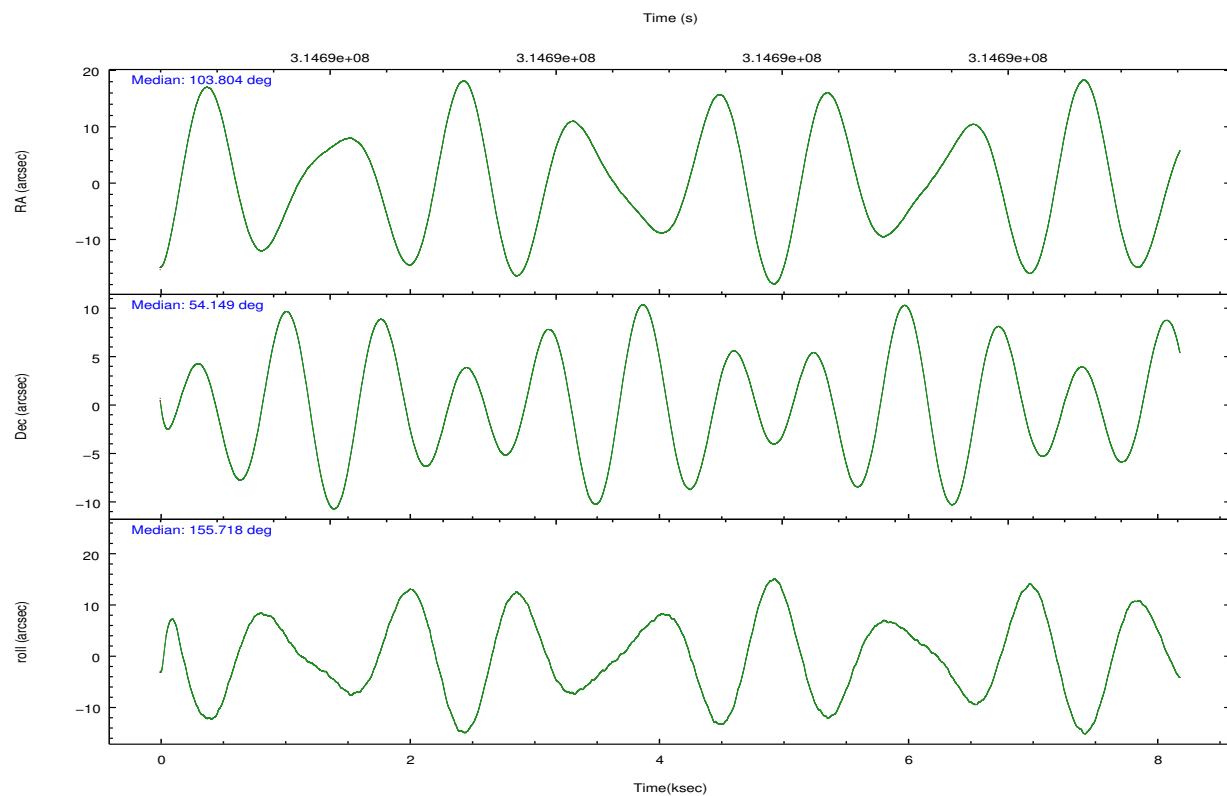


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23567	ACIS-23567	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	103.850273	103.8038455483354	CCD I2 on	Y	Y
[deg] Pointing Dec	54.152294	54.1492283971209	CCD I3 on	Y	Y
[deg] Pointing Roll	155.527841	155.7220836998656	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O1	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	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	N	N
[s] Observation start time (MET)	314687090.184000	314686161.34942	CCD S5 on	N	N
Observation start date	2007-12-22T05:03:45	2007-12-22T04:49:21	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	314695090.184000	314695918.83739	On-chip summing requested	N	N
Observation end date	2007-12-22T07:17:05	2007-12-22T07:31:58	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



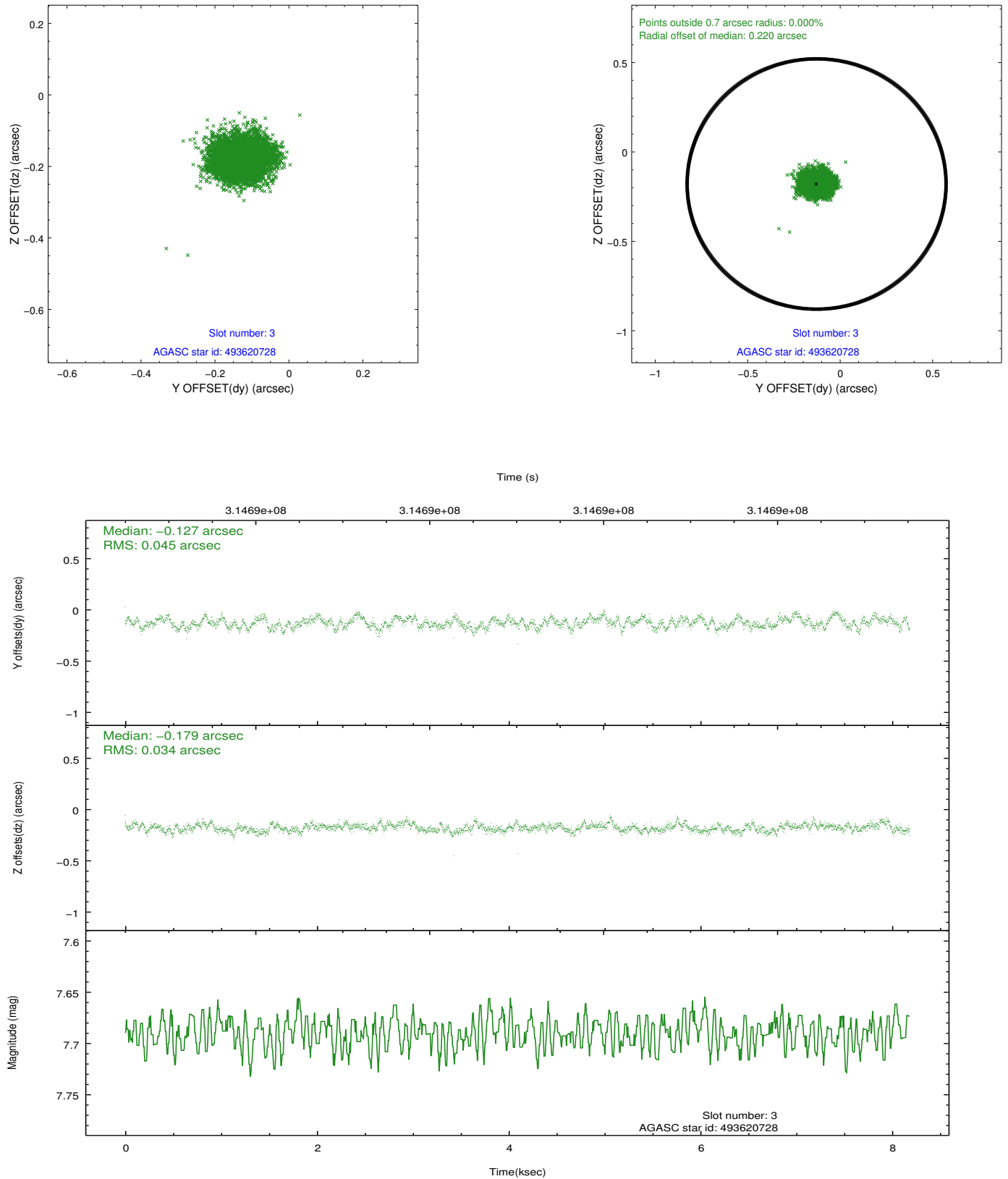


### Slot Statistics

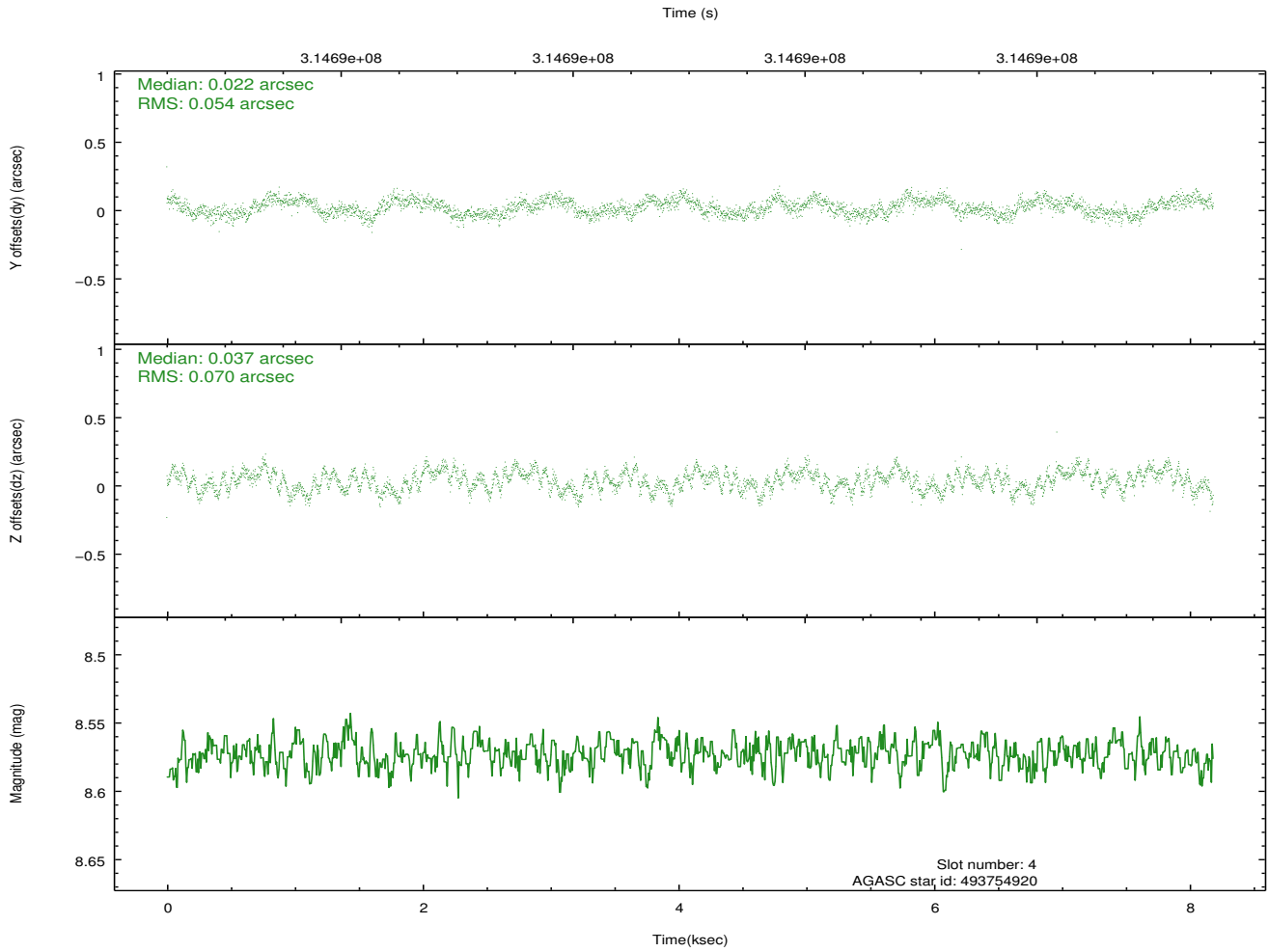
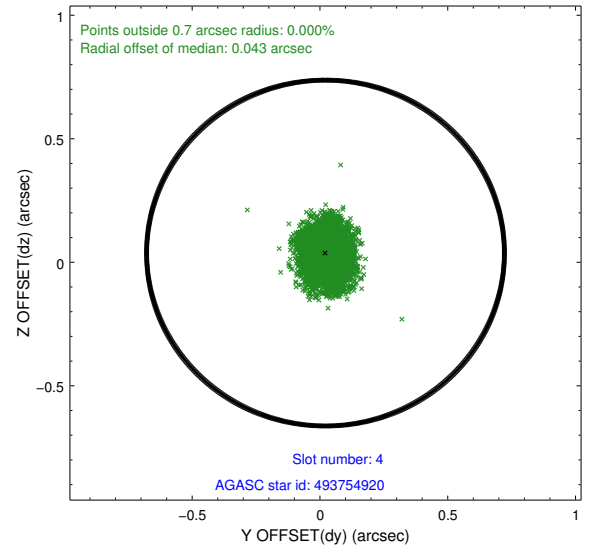
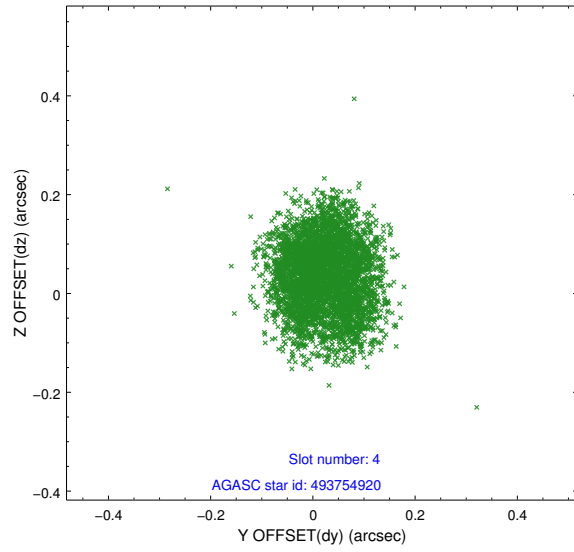
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.18	1997	0.040	-0.010	0.007	0.011	0.000000	0.000000	929.09	-1731.14
1	FID	ACIS-S-4	7.19	1997	0.138	-0.008	0.006	0.011	0.000000	0.000000	2146.97	172.31
2	FID	ACIS-S-5	7.22	1997	-0.206	0.031	0.006	0.010	0.000000	0.000000	-1819.16	166.71
3	GUIDE	493620728	7.69	3992	-0.127	-0.179	0.060	0.095	103.123368	54.042880	1238.84	988.34
4	GUIDE	493754920	8.57	3993	0.022	0.037	0.095	0.148	104.820198	54.104716	-1927.91	-704.42
5	GUIDE	494278432	8.99	3989	0.077	0.023	0.165	0.244	104.567139	54.514208	-820.82	-1813.15
6	GUIDE	494280584	7.91	3994	-0.052	0.048	0.077	0.124	103.403837	54.895937	1951.61	-2056.23
7	GUIDE	494278264	9.40	3989	0.088	0.066	0.122	0.205	105.109293	54.463283	-1923.15	-2131.90

## 2.4 Star Slots

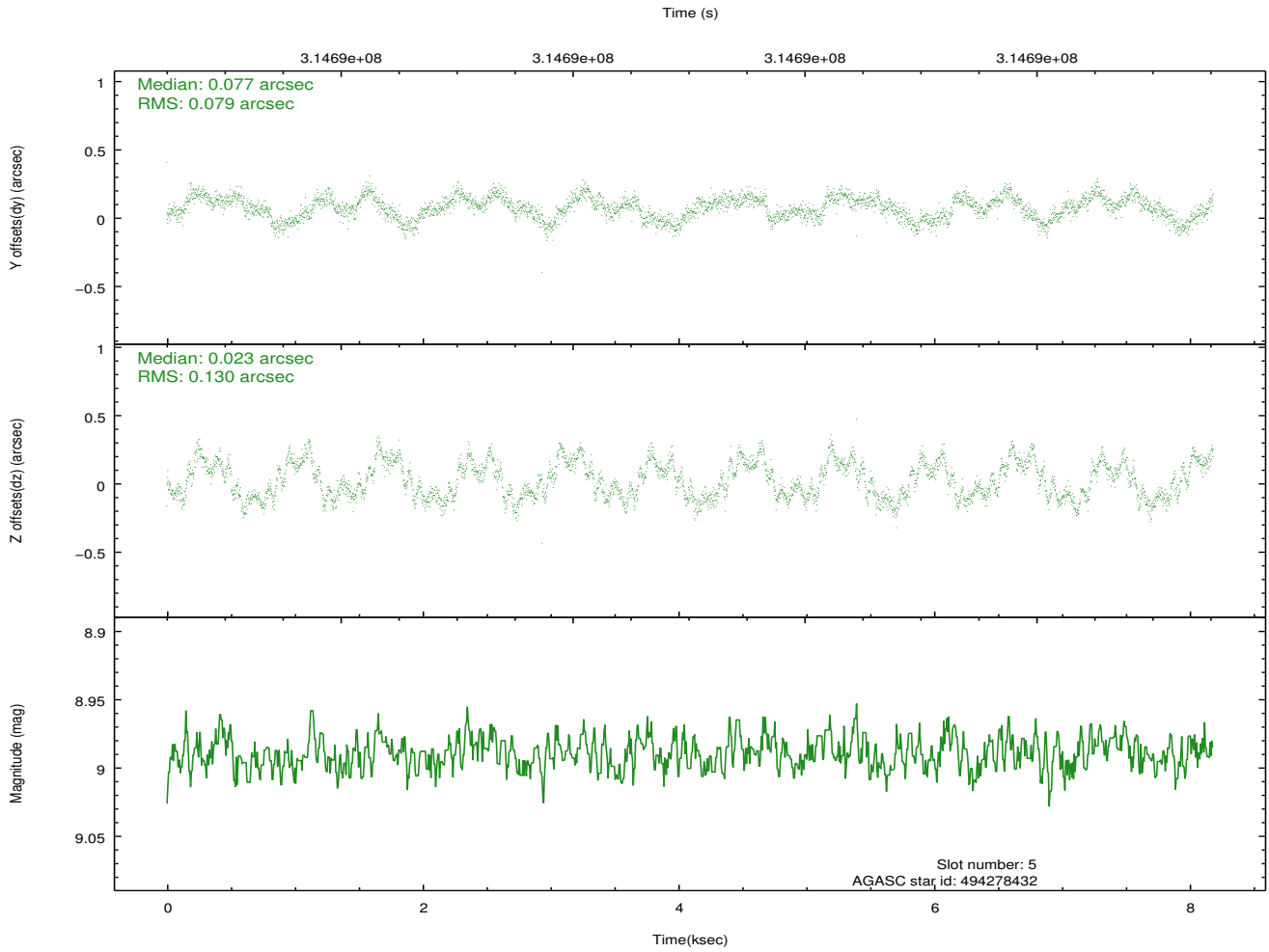
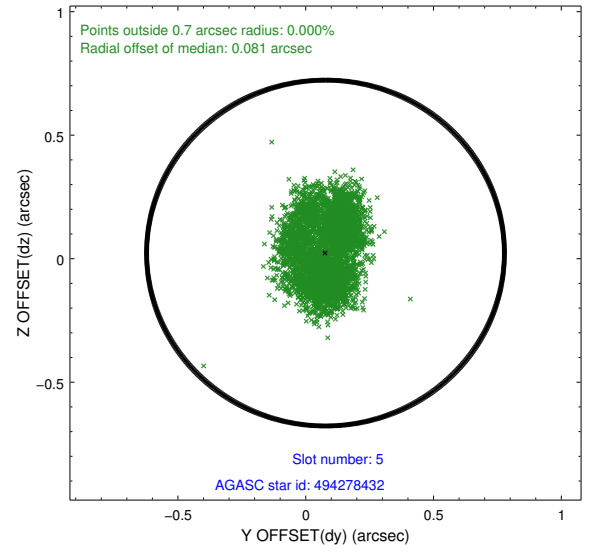
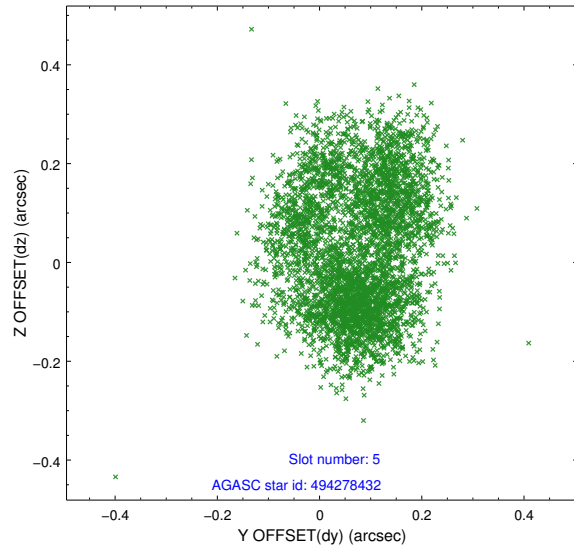
### 2.4.1 Slot 3



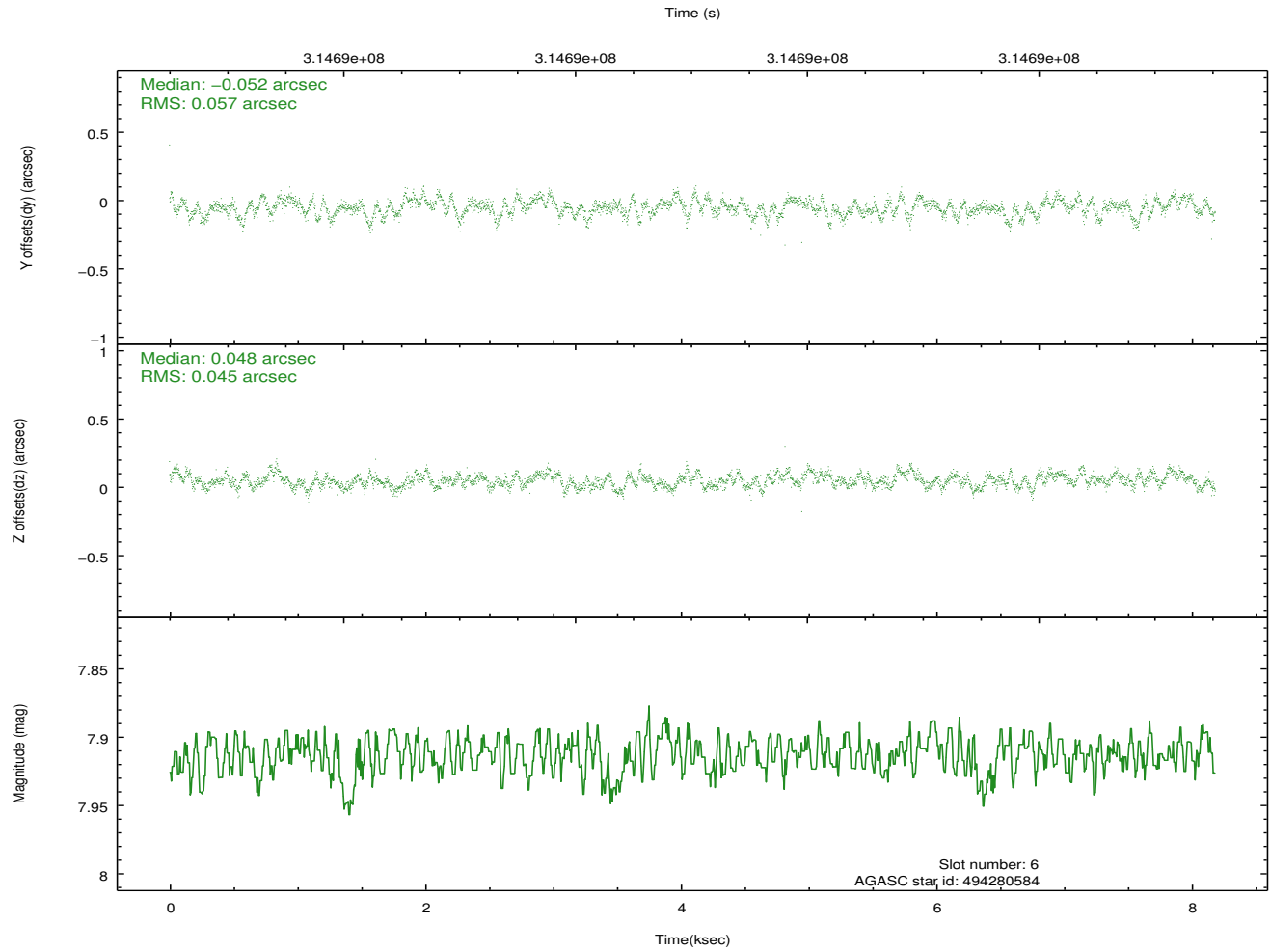
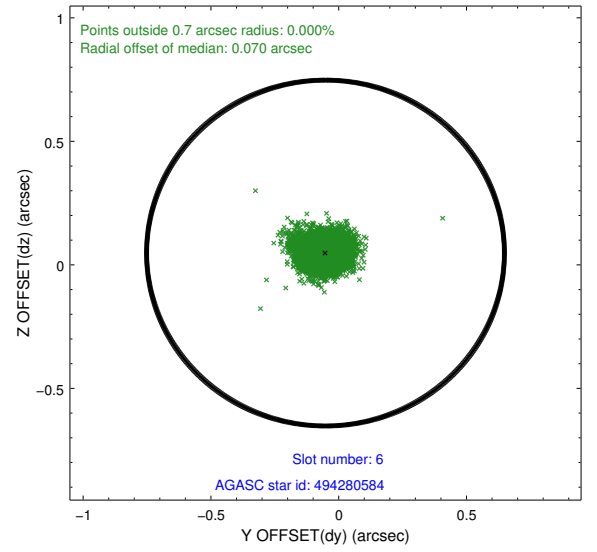
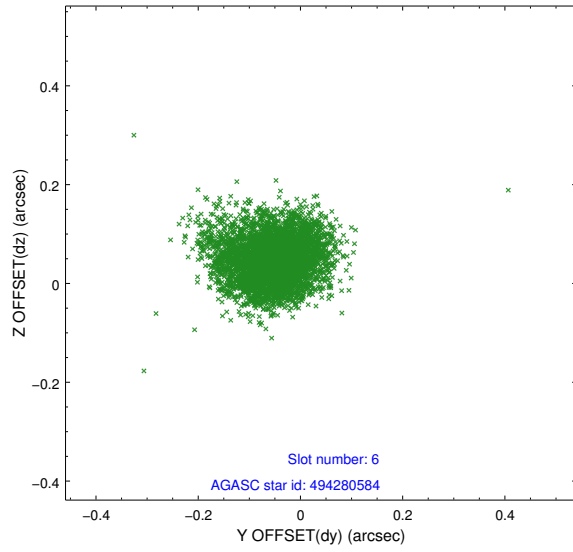
## 2.4.2 Slot 4



### 2.4.3 Slot 5

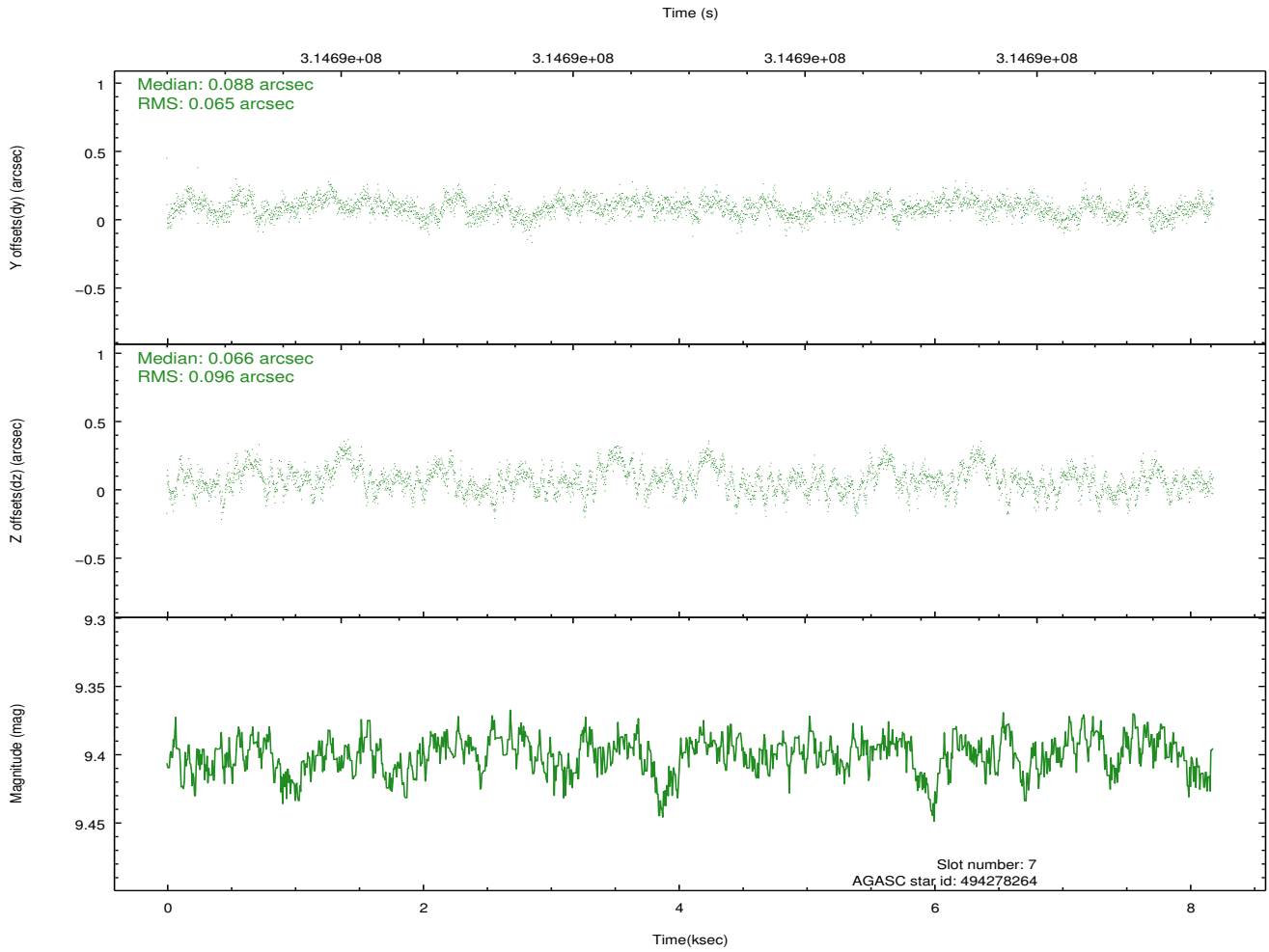
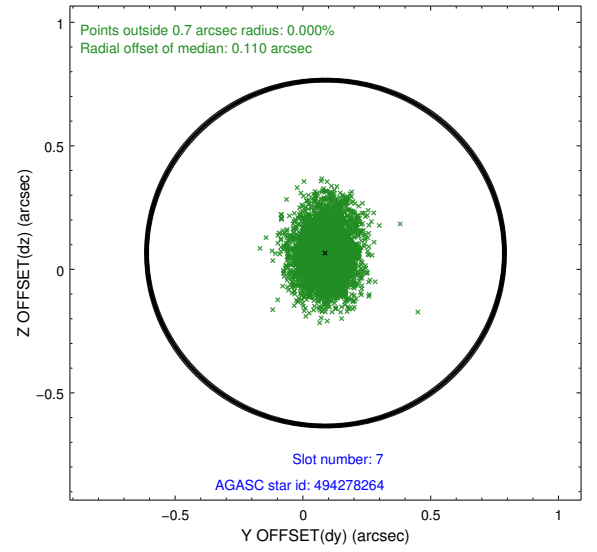
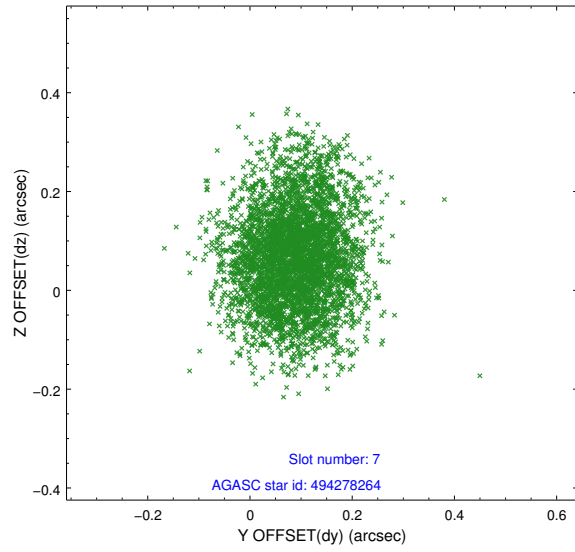


## 2.4.4 Slot 6



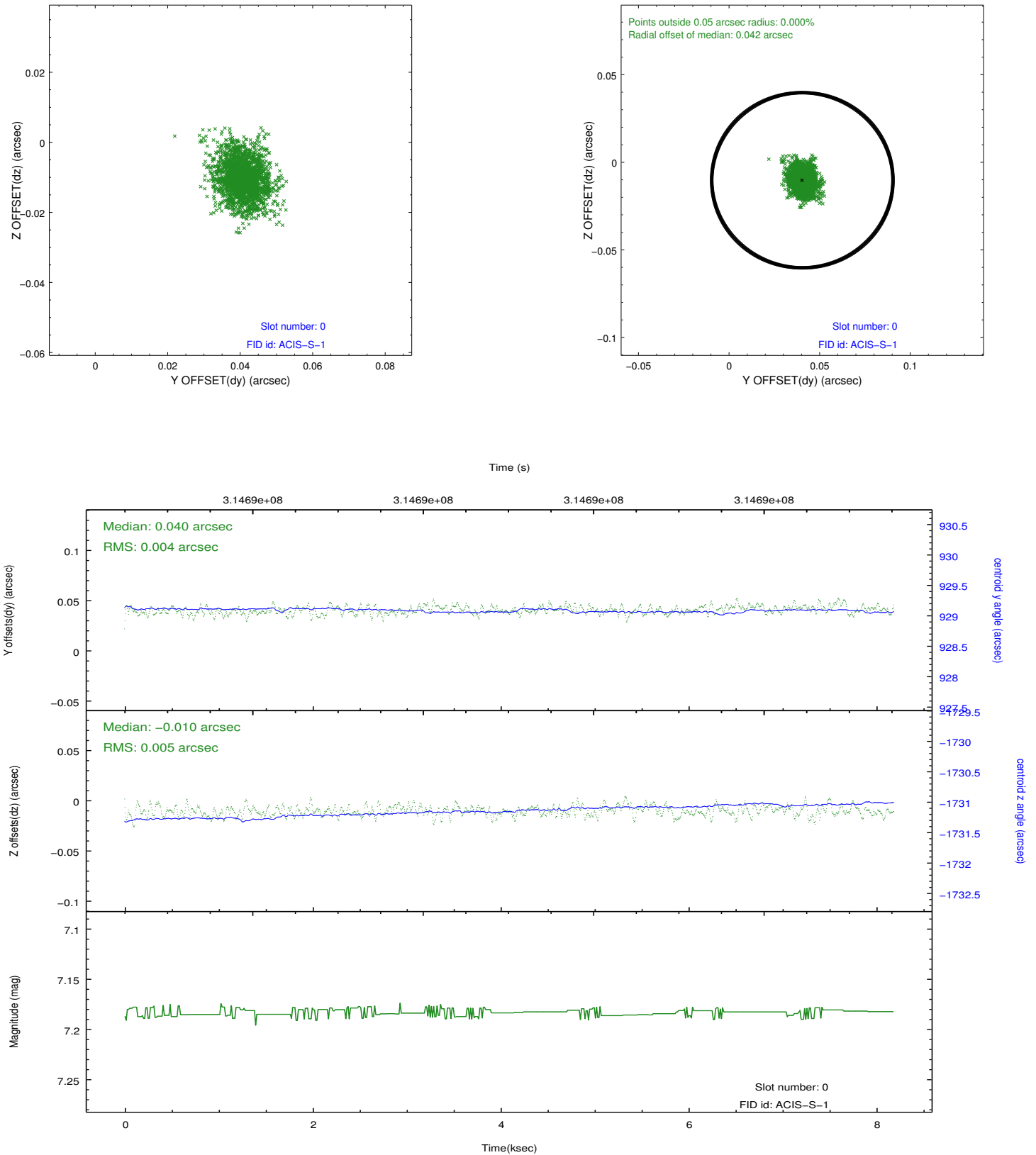


## 2.4.5 Slot 7

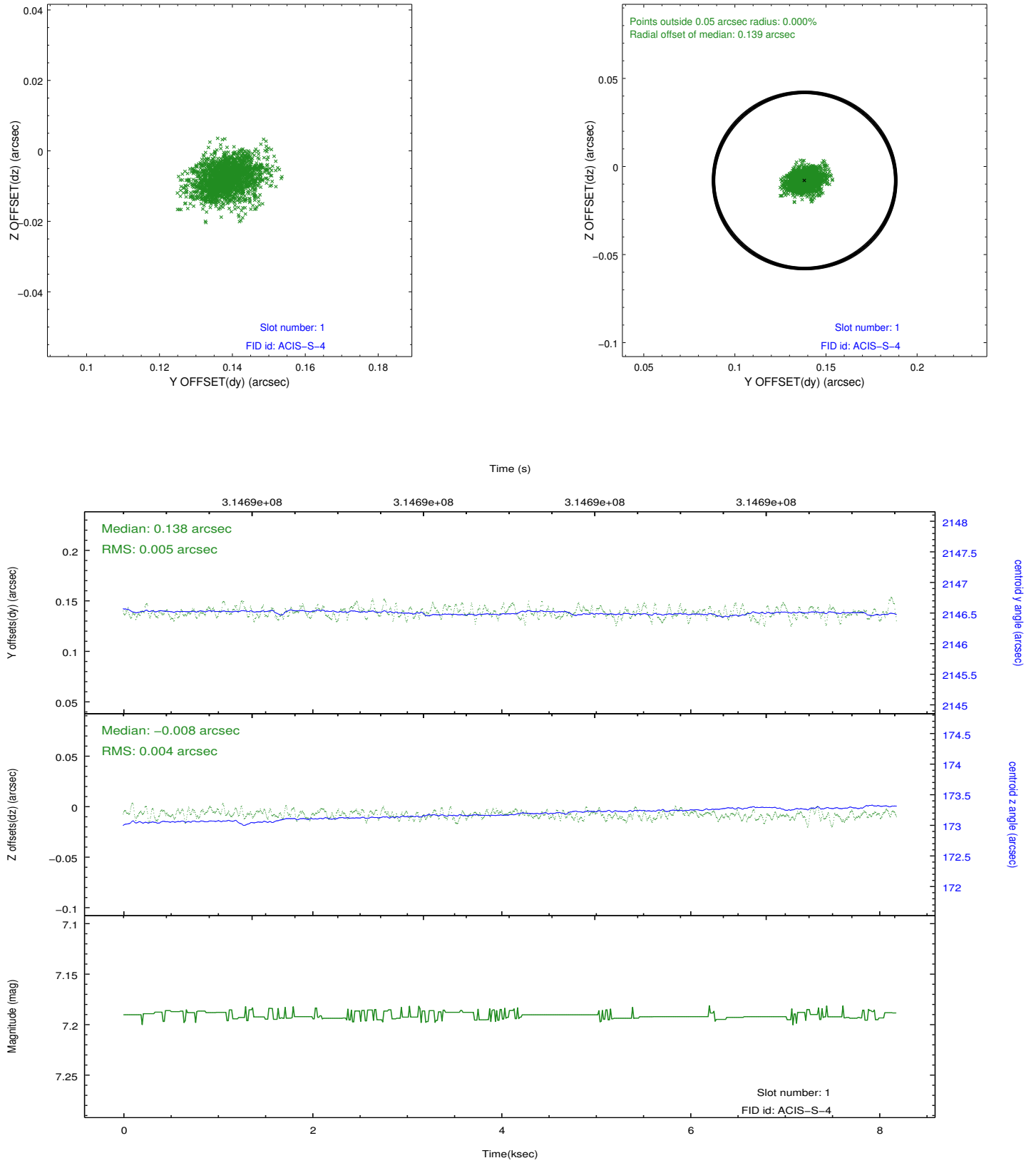


## 2.5 FID Slots

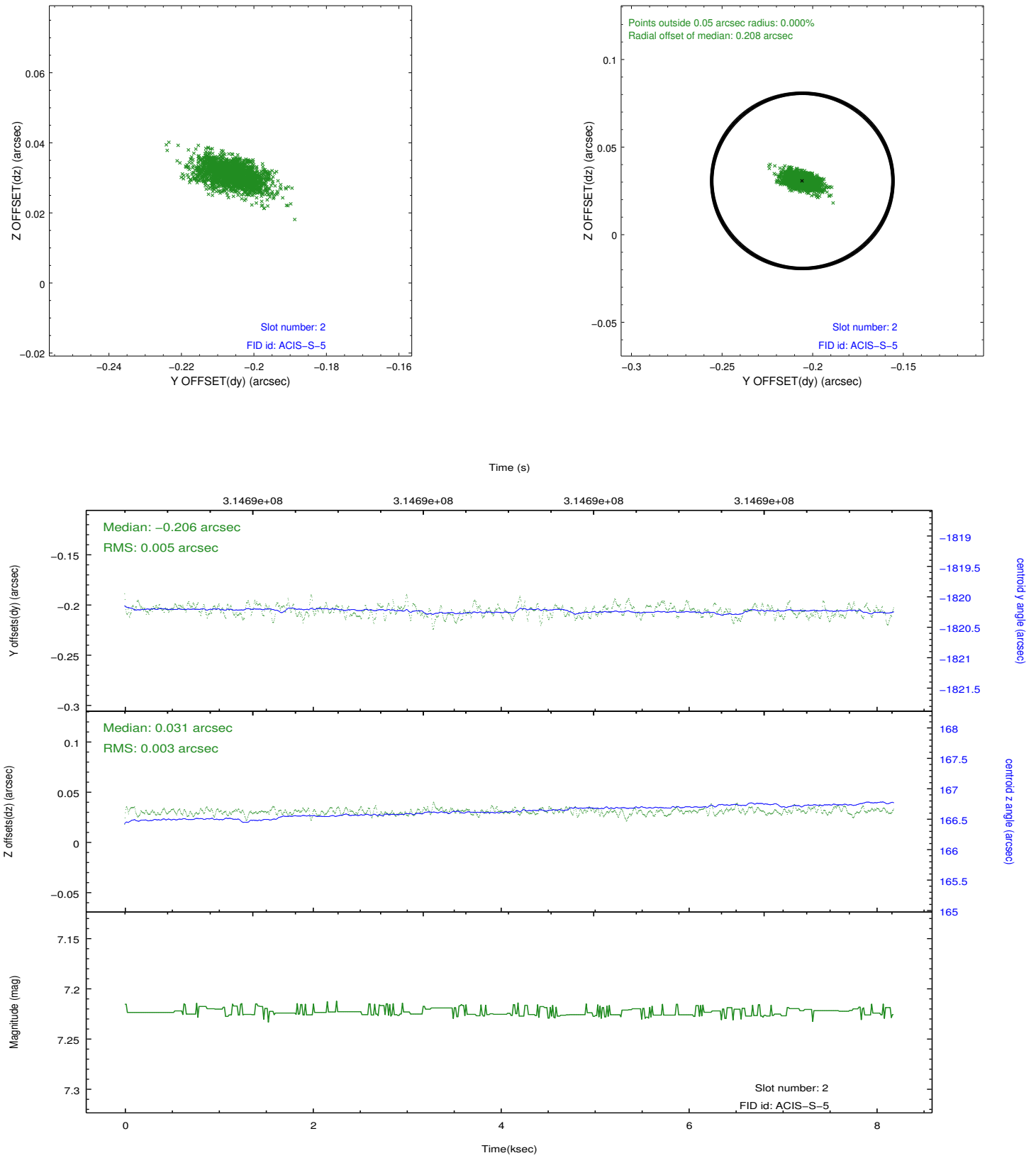
### 2.5.1 Slot 0



## 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)	2012.05.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.03520006

### A.2 Comments