

# V&V Reference Report

## L2 ASCDS Version : 7.6.10

Observation 3057 - L2 Version 001  
Chandra X-Ray Center

L2 Processing Date : Jan 11 2007

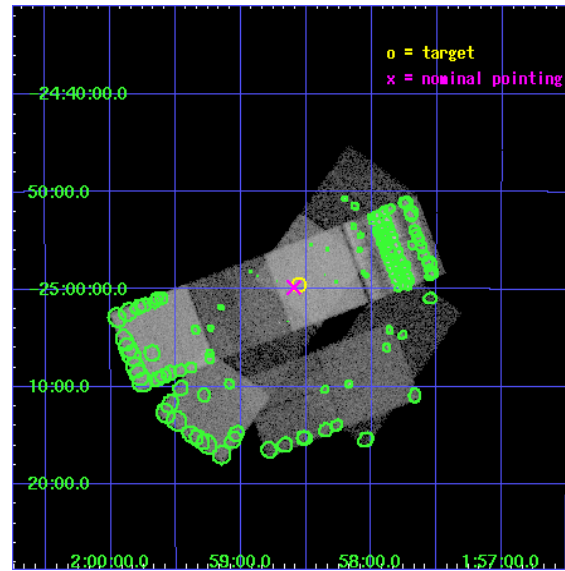
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# 1 Front

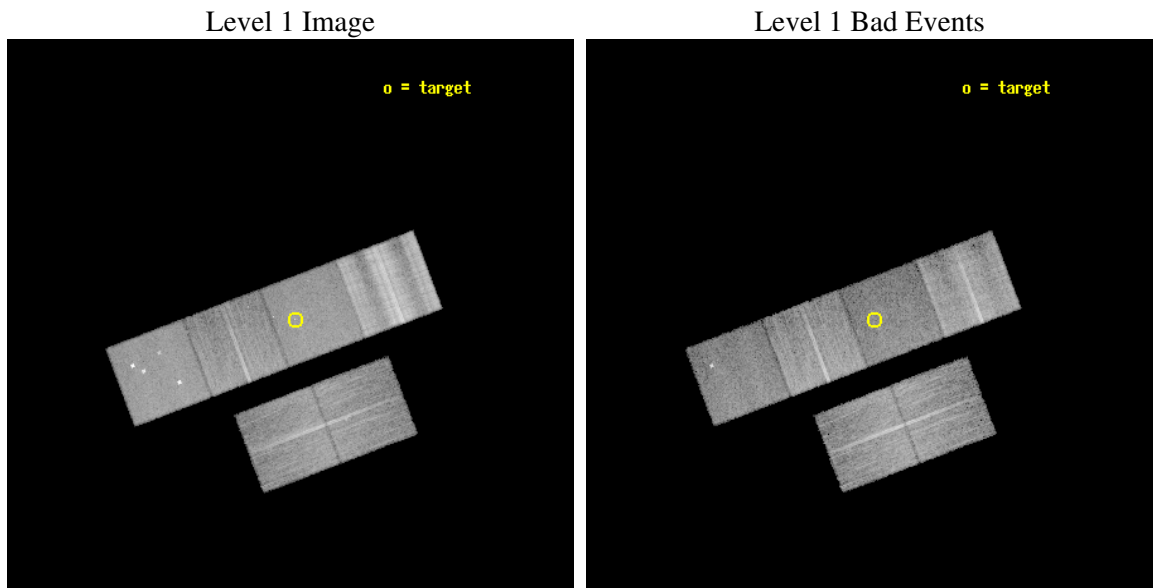
seq_num	700496
obs_id	3057
title	X-RAY STUDIES OF HIGH REDSHIFT RADIO GALAXIES
observer	Dr. Chris Carilli
object	0156-252
dtcycle	0
cycle	P
ra_targ	29.639583
dec_targ	-24.992278
ra_nom	29.648703484433
dec_nom	-24.997268734759
roll_nom	339.17807344853
revision	3
ontime	19833.599926114
livetime	19582.45494149
ontime2	19833.599926114
ontime3	19830.35895586
ontime5	19833.599926114
ontime6	19833.599926114
ontime7	19833.599926114
ontime8	19833.599926114
l2events	305133



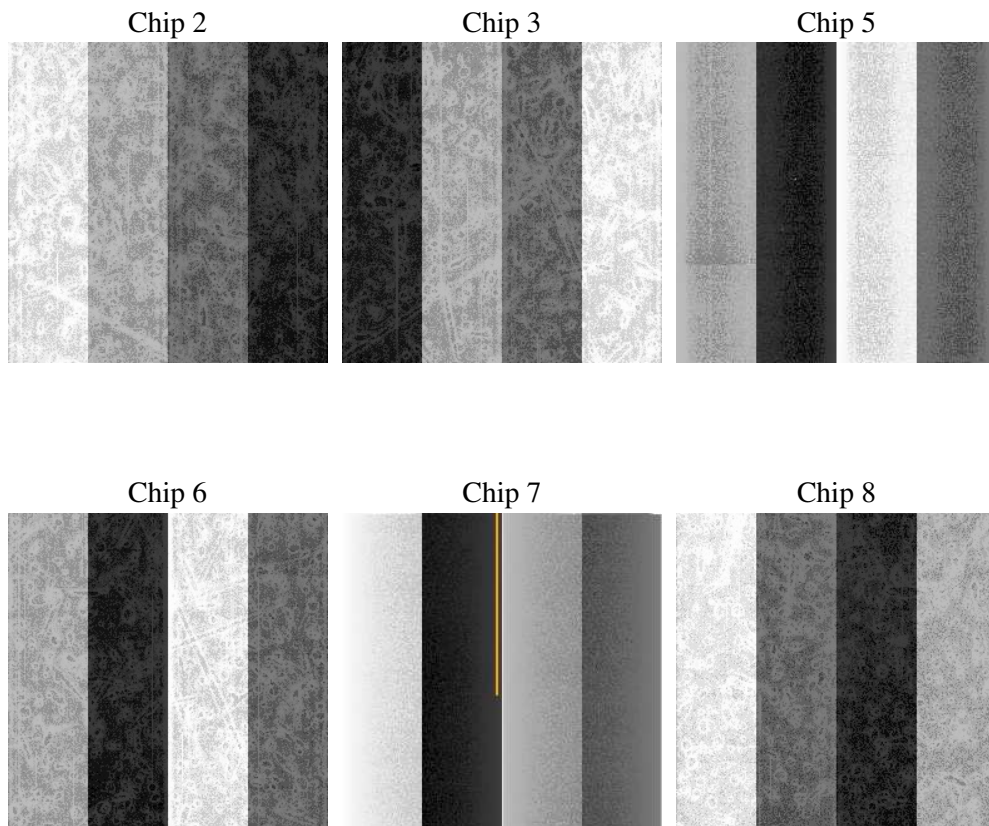
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1
ascdsver	7.6.10
caldsver	3.3.0
date	2007-01-11T21:41:46
revision	2

sched_exp_time	19847.872000
ontime	11439.999957383
ontime2	11439.999957383
ontime3	11439.999957383
ontime5	11439.999957383
ontime6	11439.999957383
ontime7	11439.999957383
ontime8	11439.999957383
l1events	828601

### 2.1.4 Events

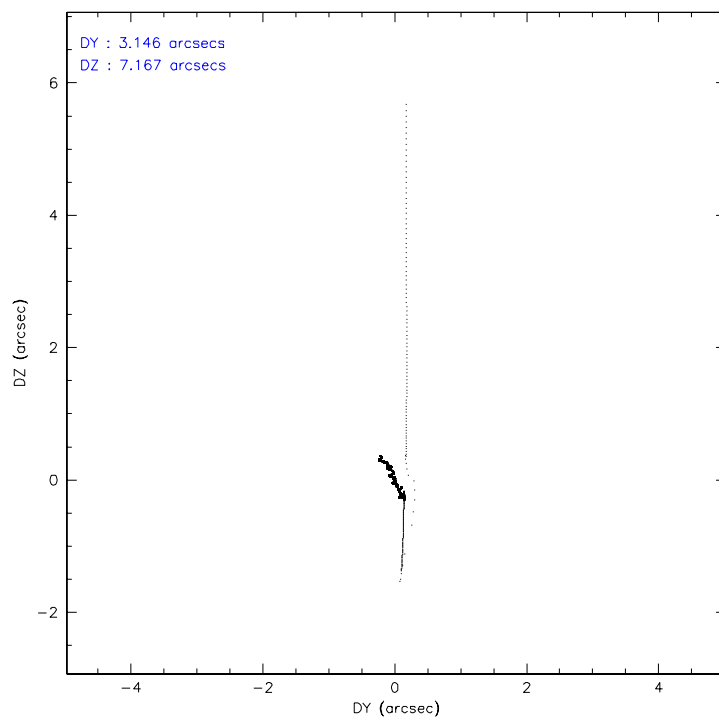
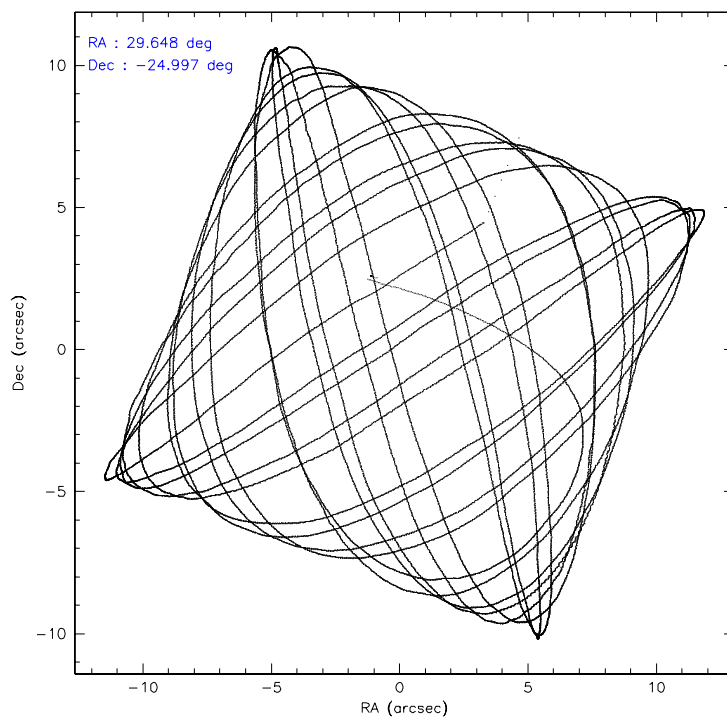
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	120255	110436	136671	119999	121909	219331
rejected events	101569	94363	65620	102266	61829	114992
rejected %	84%	85%	48%	85%	50%	52%

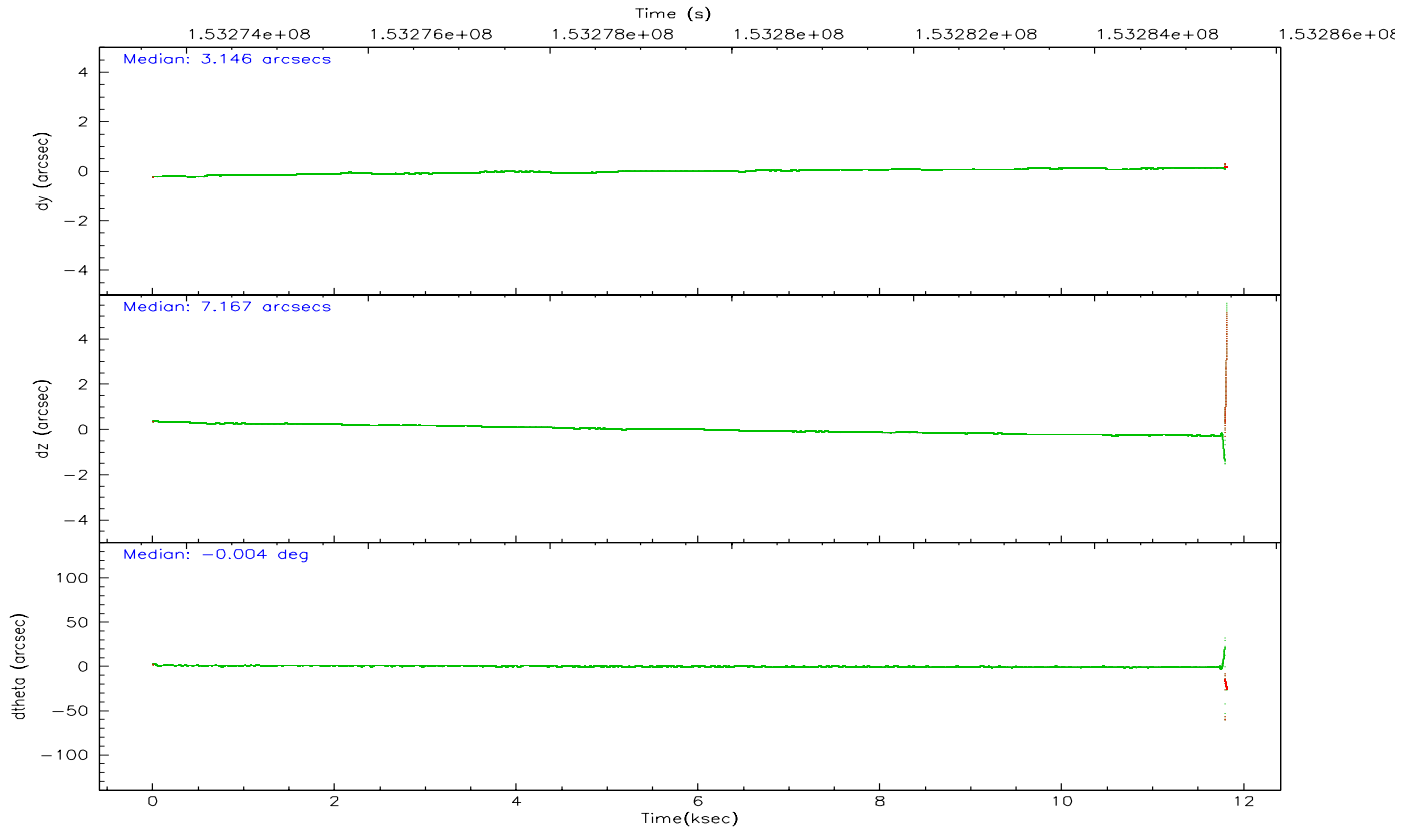
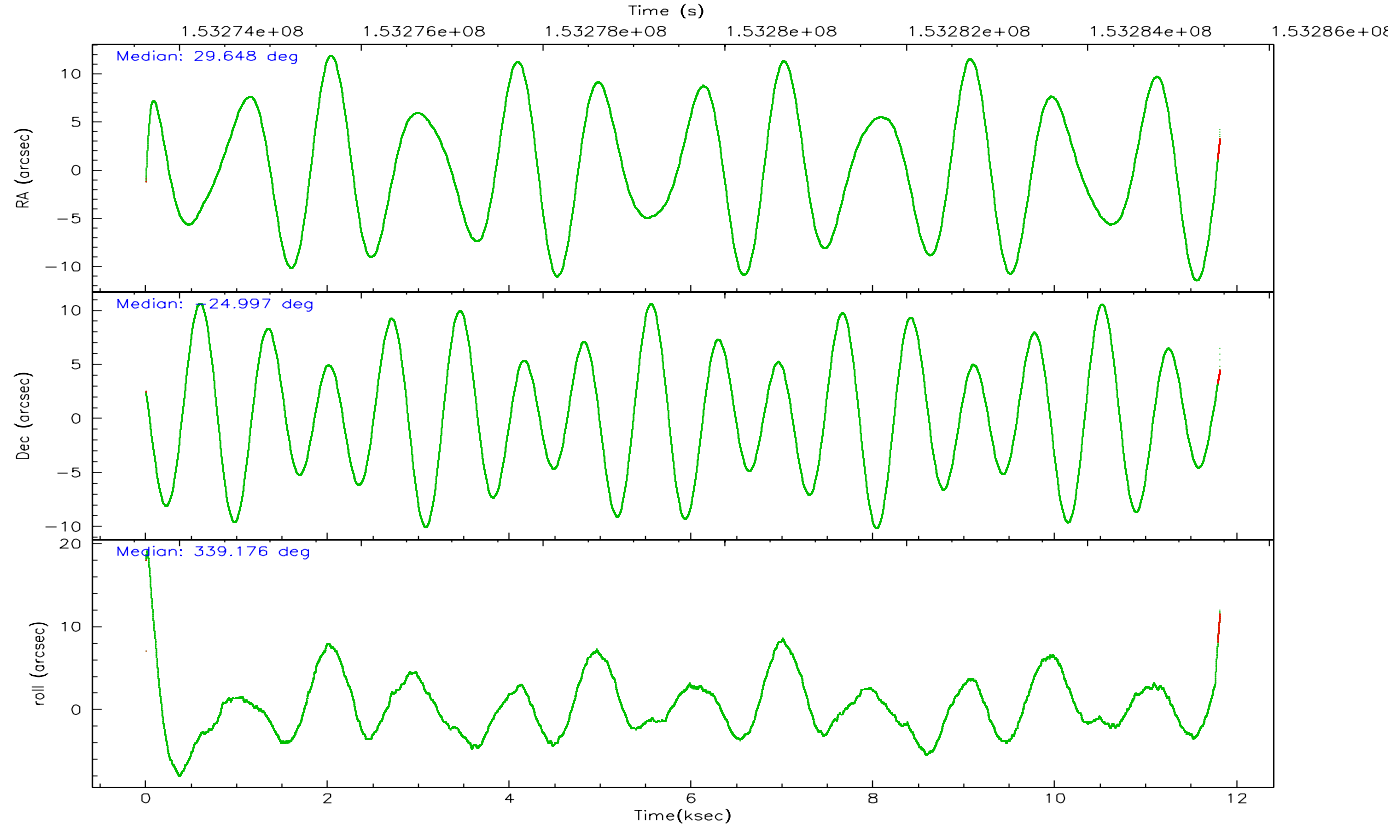
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	9568	8488	9967	8601	6979	27906
	7%	7%	7%	7%	5%	12%
grade 1 events	94	77	181	60	159	221
	0%	0%	0%	0%	0%	0%
grade 2 events	4318	2843	22421	4194	12310	18573
	3%	2%	16%	3%	10%	8%
grade 3 events	1103	1257	3080	1119	5473	15043
	0%	1%	2%	0%	4%	6%
grade 4 events	1322	1243	2980	1163	5524	13348
	1%	1%	2%	0%	4%	6%
grade 5 events	3062	3066	8988	3400	10064	5738
	2%	2%	6%	2%	8%	2%
grade 6 events	2428	2320	32894	2733	30018	29899
	2%	2%	24%	2%	24%	13%
grade 7 events	98360	91142	56160	98729	51382	108603
	81%	82%	41%	82%	42%	49%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-235678	ACIS-235678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
Pointing RA	29.619147	29.64870348443314	Subarray requested	NONE	NONE
Pointing Dec	-25.001948	-24.99726873475887	Alternating exposures requested	N	N
Pointing Roll	339.008931	339.1780734485269	Primary exposure time	0.000000	3.2
SIM focus pos (mm)	-0.684267	-0.6828225247311905			
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-190.132523	-190.1425803651734			
SIM translation stage offset (mm)	0	0.01005778216563158			
Observation start time	153273950.184000	153272926.02993			
Observation start date	2002-11-10T00:04:46	2002-11-09T23:48:46			
Observation end time	153293798.184000	153285469.46795			
Observation end date	2002-11-10T05:35:34	2002-11-10T03:17:49			
Read mode	TIMED	TIMED			

## 2.3 Aspect





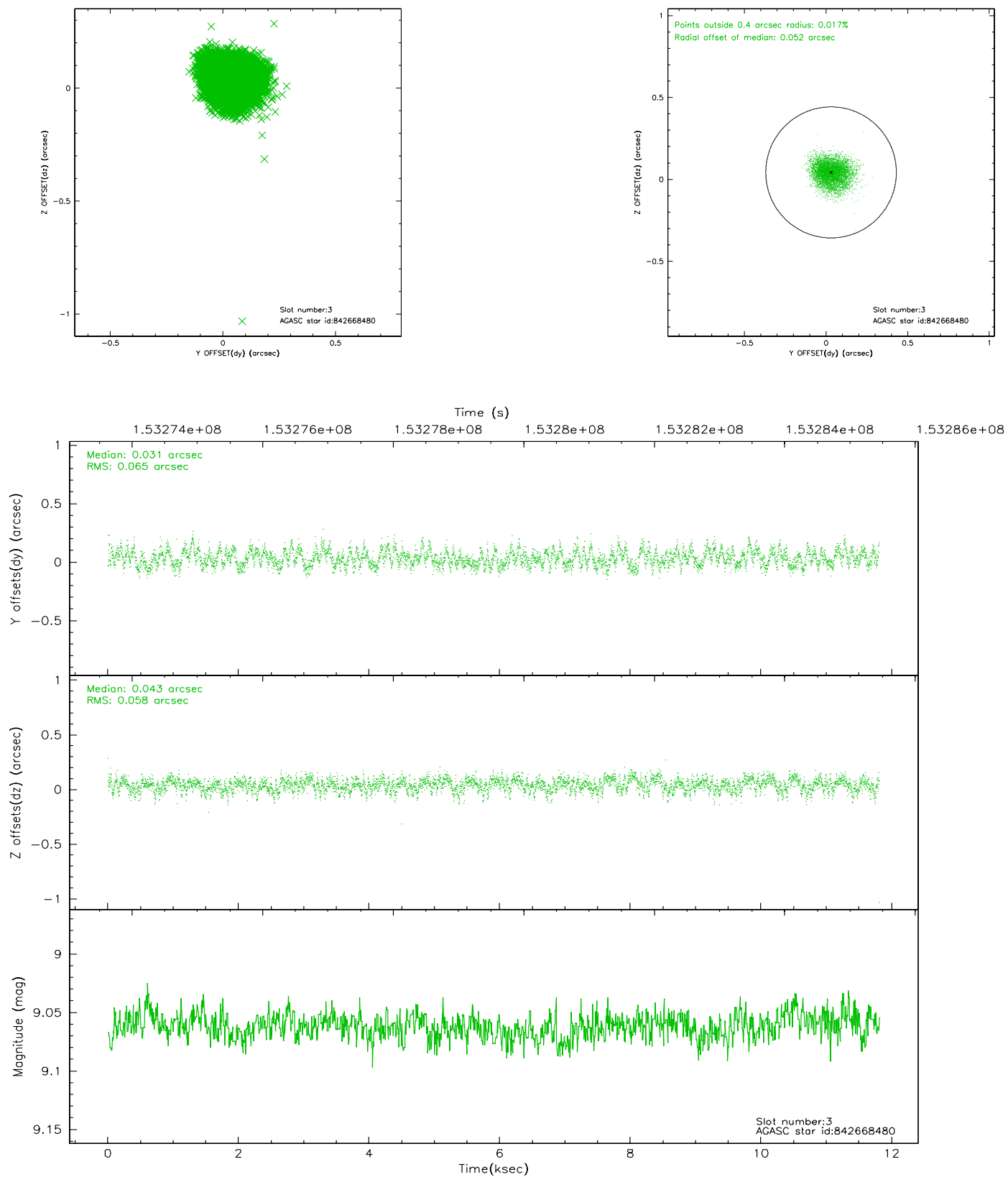


### Slot Statistics

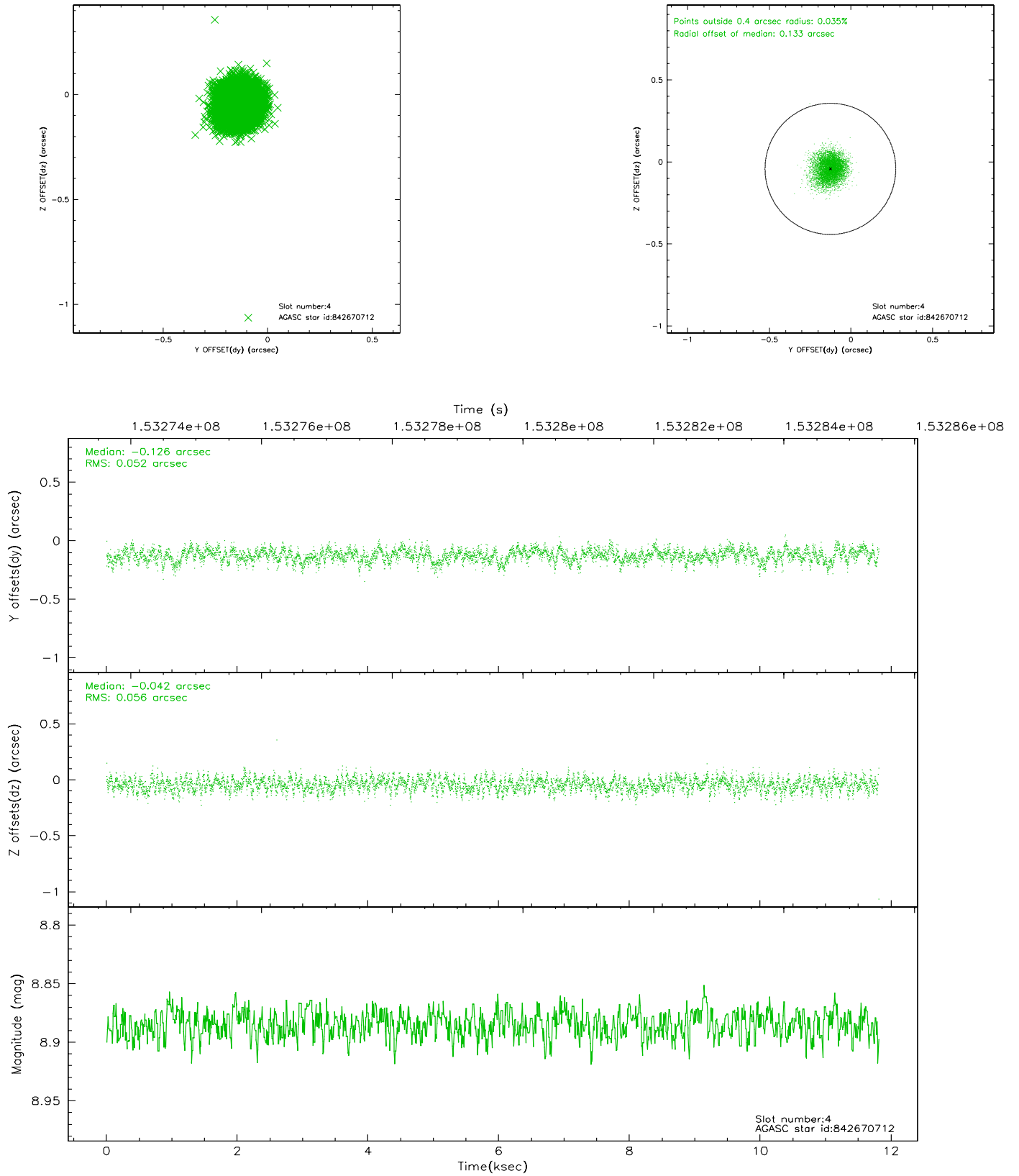
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	2873	-0.001	0.027	0.011	0.016	0.000000	0.000000	-755.78	-1728.26
1	FID	ACIS-S-4	7.20	2874	-0.052	-0.006	0.013	0.019	0.000000	0.000000	2157.25	179.75
2	FID	ACIS-S-5	7.24	2874	0.022	-0.012	0.007	0.011	0.000000	0.000000	-1808.05	173.89
3	GUIDE	842668480	9.06	5756	0.031	0.043	0.093	0.146	29.175764	-24.463880	-2048.28	1286.00
4	GUIDE	842670712	8.88	5754	-0.126	-0.042	0.081	0.129	28.813951	-25.367148	-1970.85	-2172.88
5	GUIDE	842793760	9.06	5755	0.085	0.142	0.072	0.117	30.157453	-25.316128	2042.98	-431.84
6	GUIDE	842795112	9.44	5754	0.005	-0.011	0.095	0.158	30.362801	-24.972157	2231.38	963.41
7	GUIDE	842799376	8.67	5757	0.003	-0.125	0.078	0.122	29.385201	-25.507630	-55.59	-1972.41

## 2.4 Star Slots

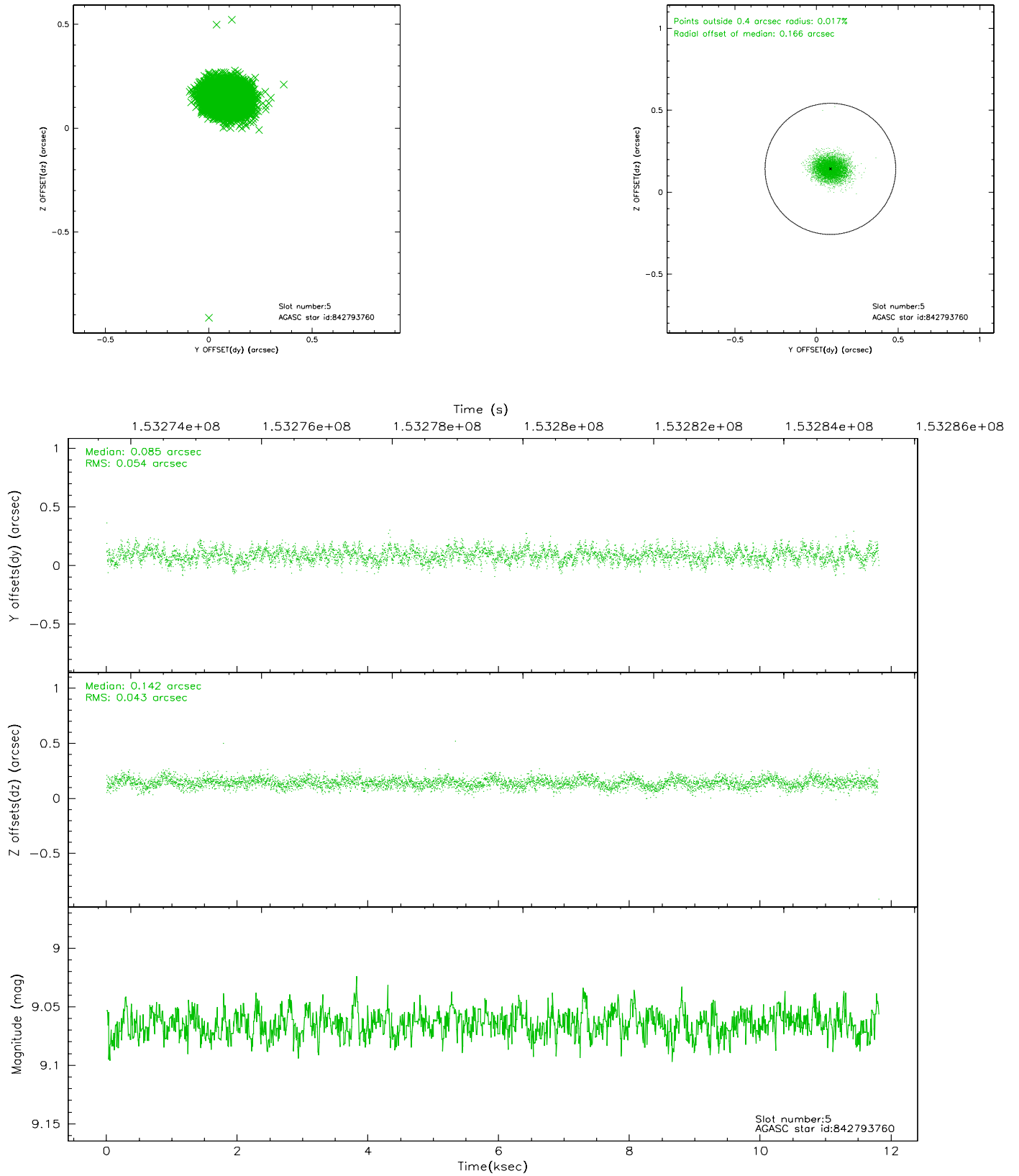
### 2.4.1 Slot 3



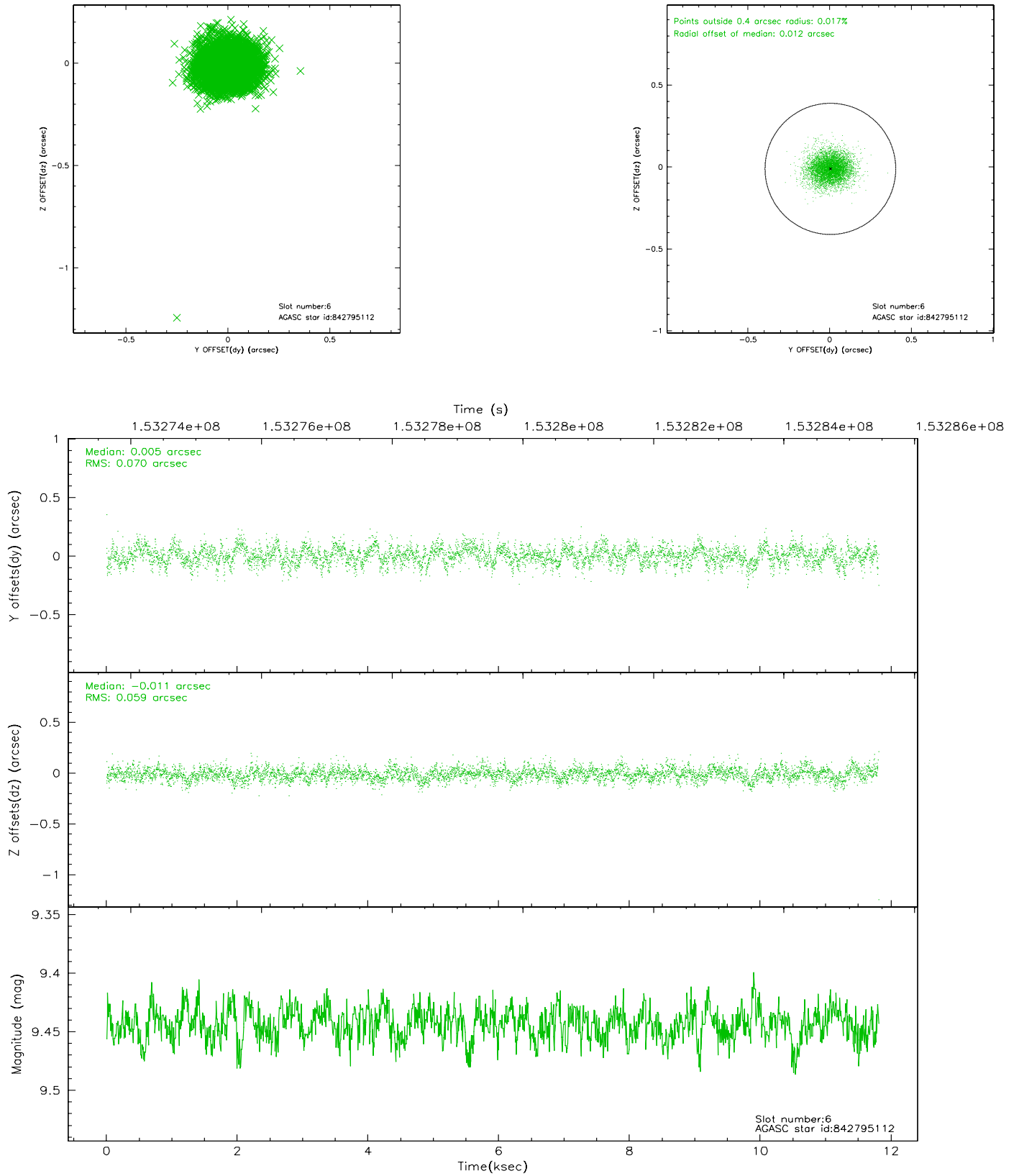
## 2.4.2 Slot 4



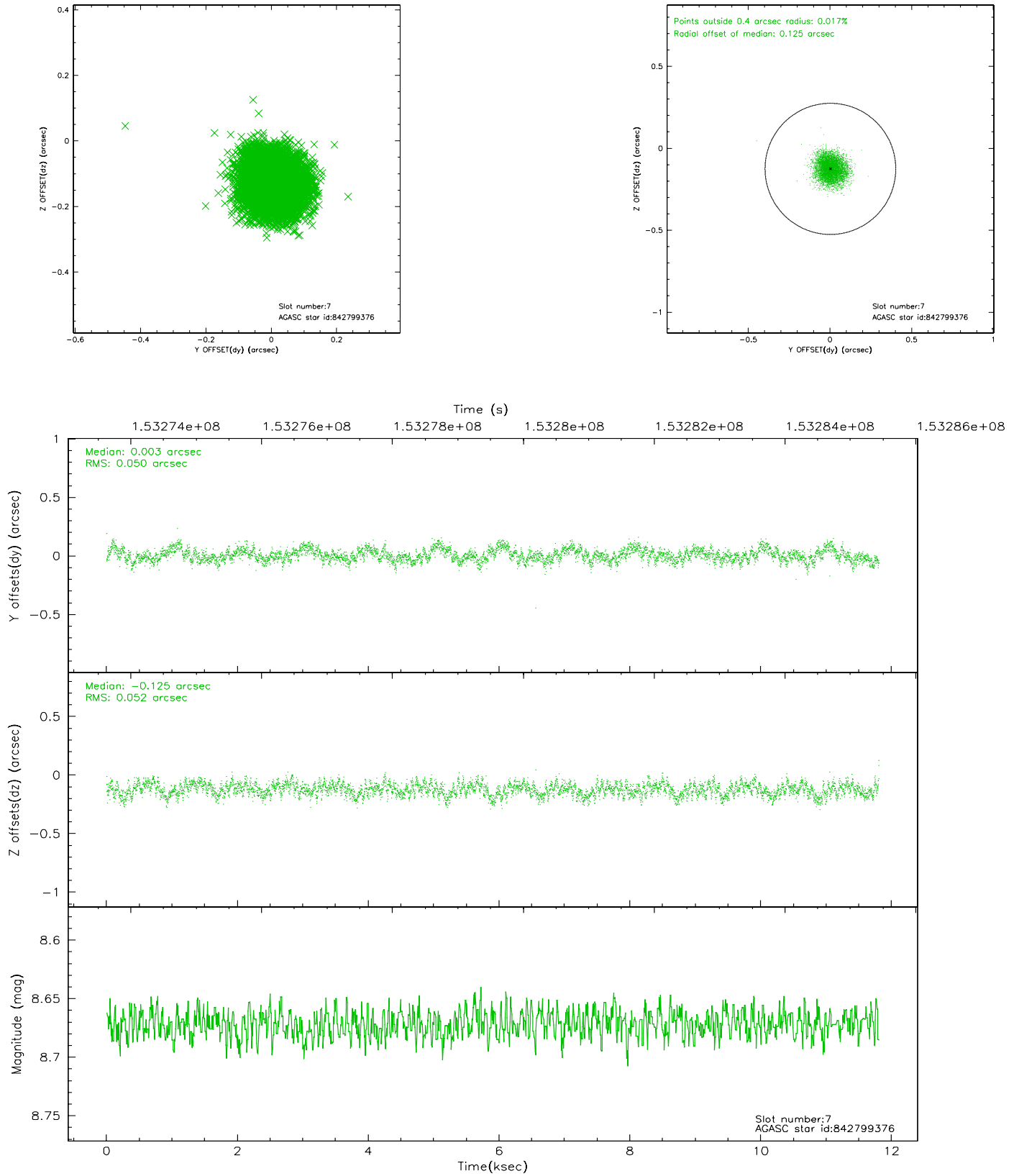
### 2.4.3 Slot 5



## 2.4.4 Slot 6

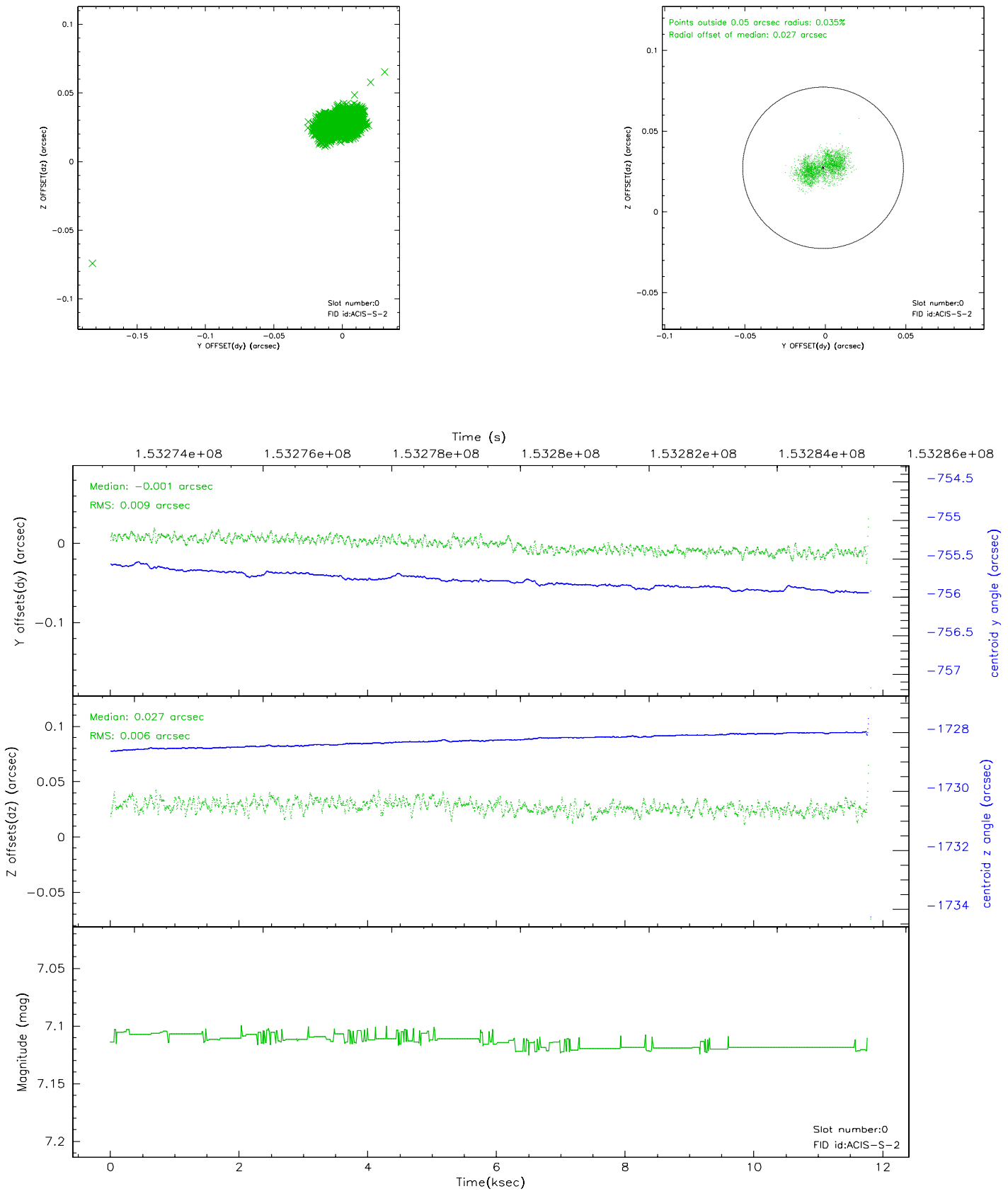


## 2.4.5 Slot 7

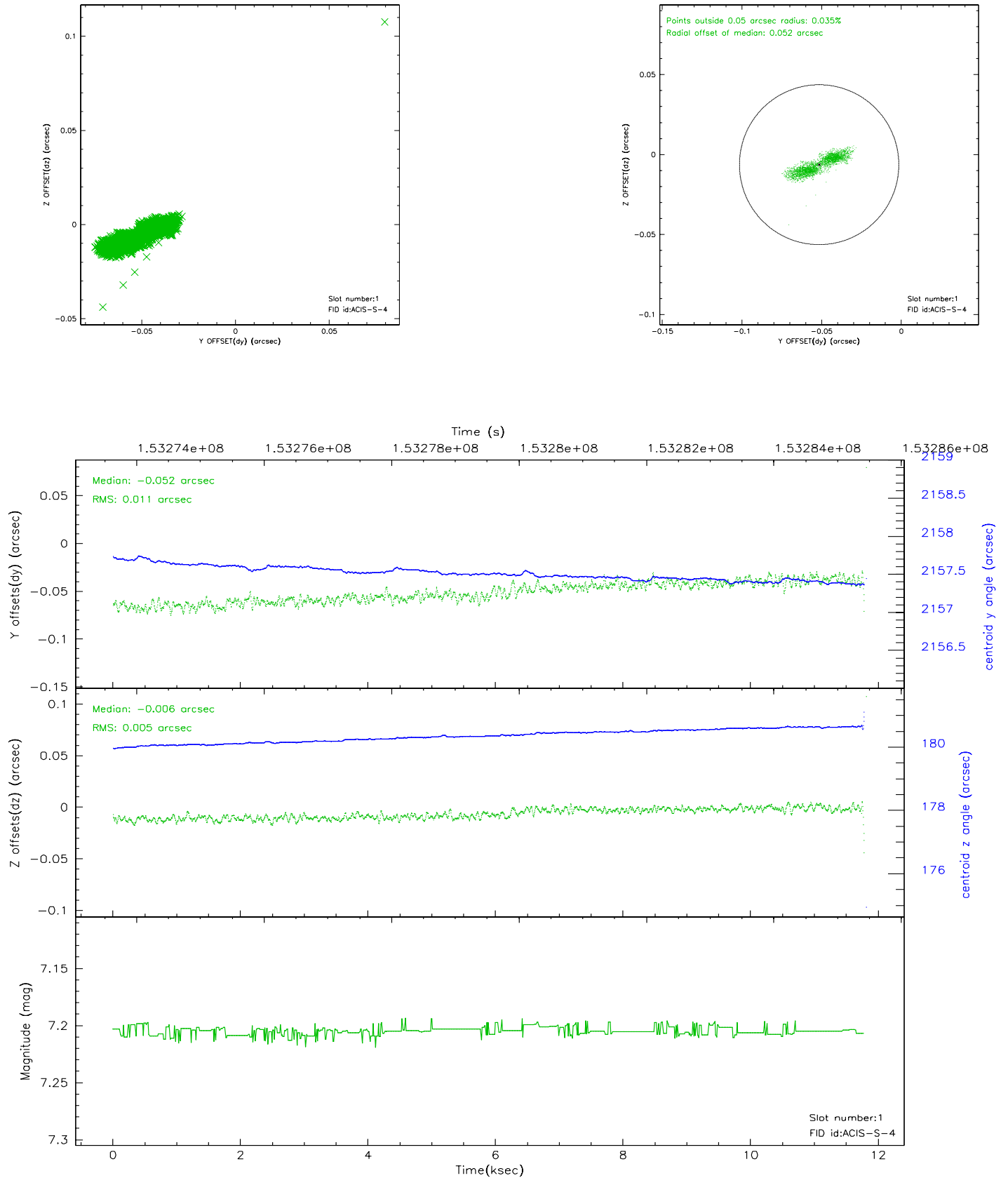


## 2.5 FID Slots

### 2.5.1 Slot 0

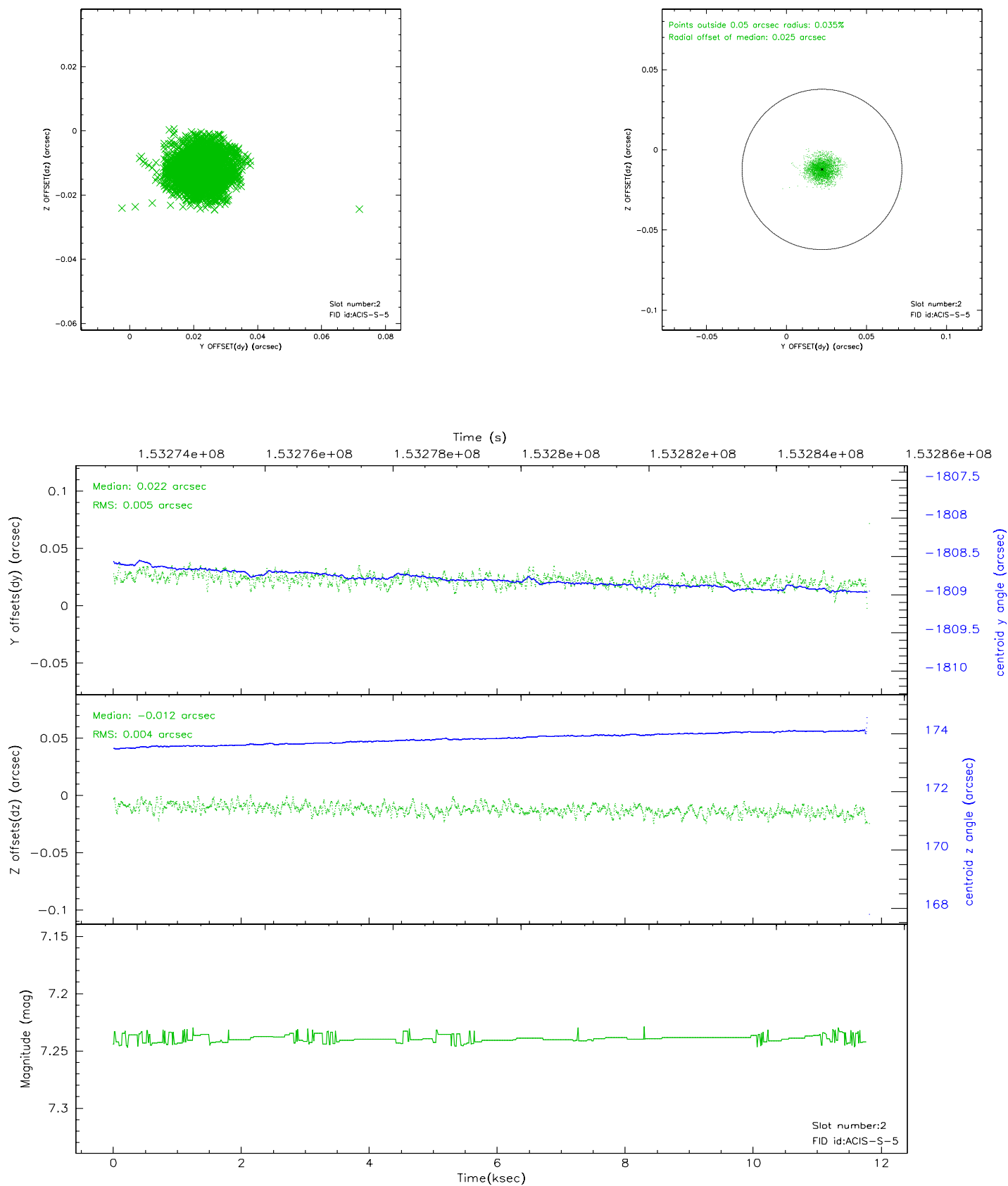


## 2.5.2 Slot 1





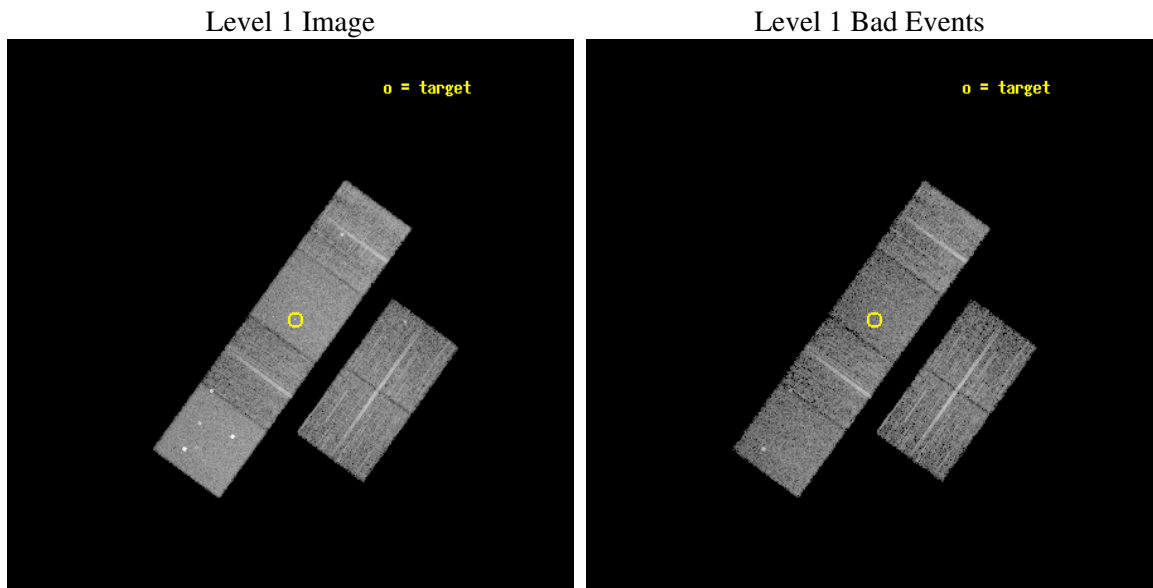
## 2.5.3 Slot 2



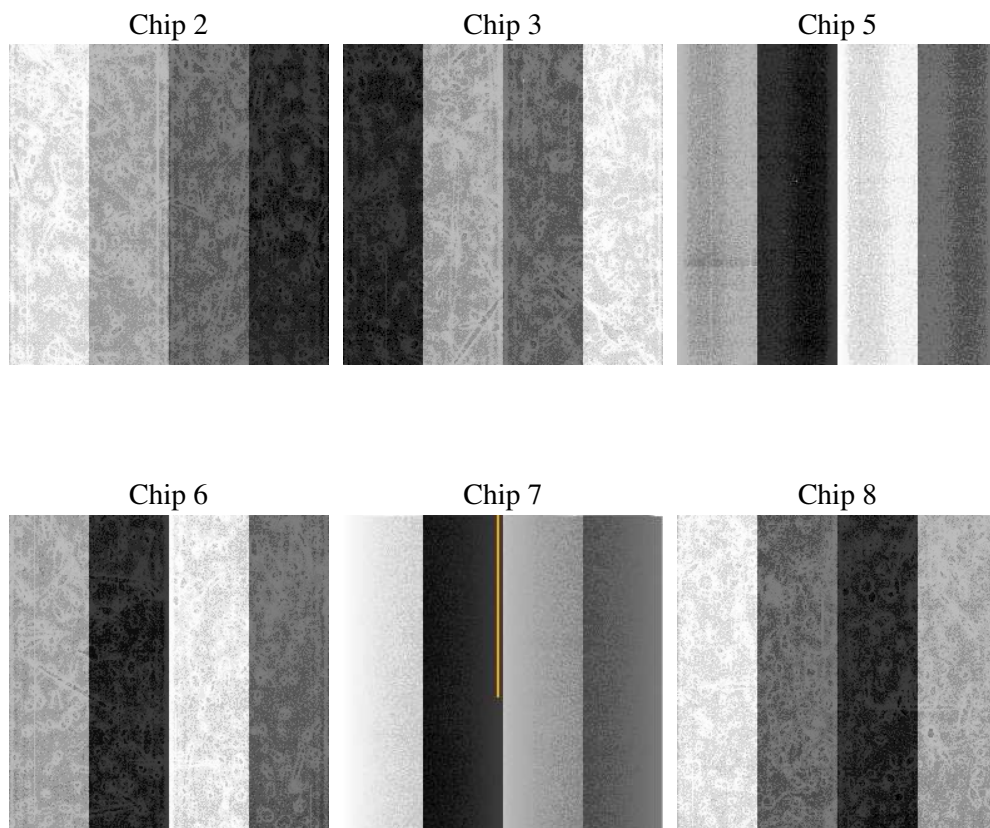
## 3 OBI

### 3.1 OBI

#### 3.1.1 Images



#### 3.1.2 Bias



### 3.1.3 Parameters

obi_num	2
ascdsver	7.6.10
caldsver	3.3.0
date	2007-01-11T21:46:09
revision	2

sched_exp_time	8431.000000
ontime	8393.5999687314
ontime2	8393.5999687314
ontime3	8390.3589984775
ontime5	8393.5999687314
ontime6	8393.5999687314
ontime7	8393.5999687314
ontime8	8393.5999687314
l1events	365524

### 3.1.4 Events

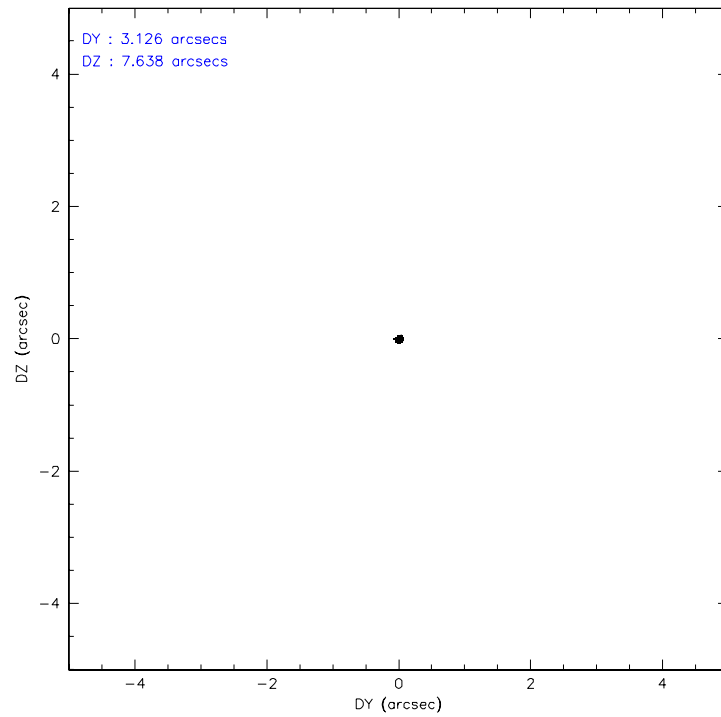
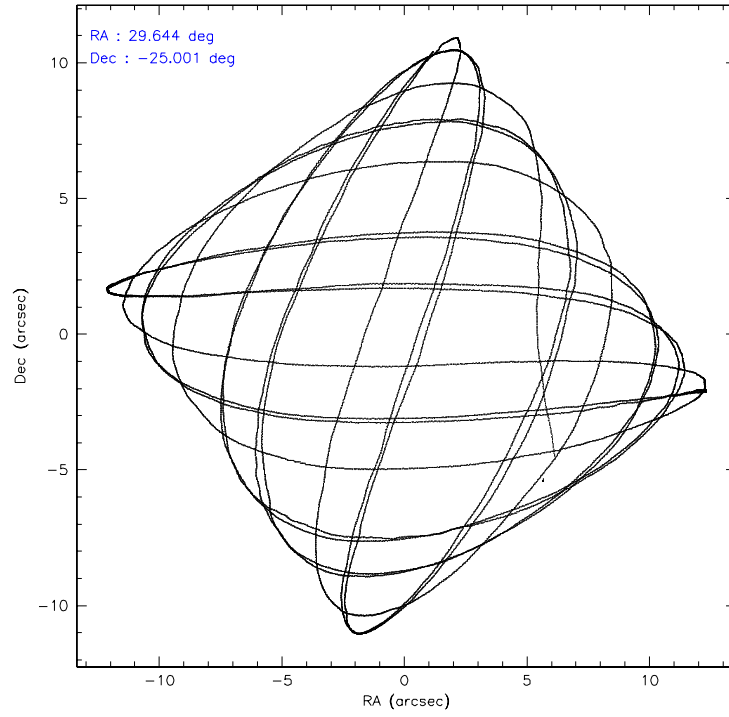
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	52316	49960	76358	51219	66065	69606
rejected events	45681	43100	40247	44344	38453	51851
rejected %	87%	86%	52%	86%	58%	74%

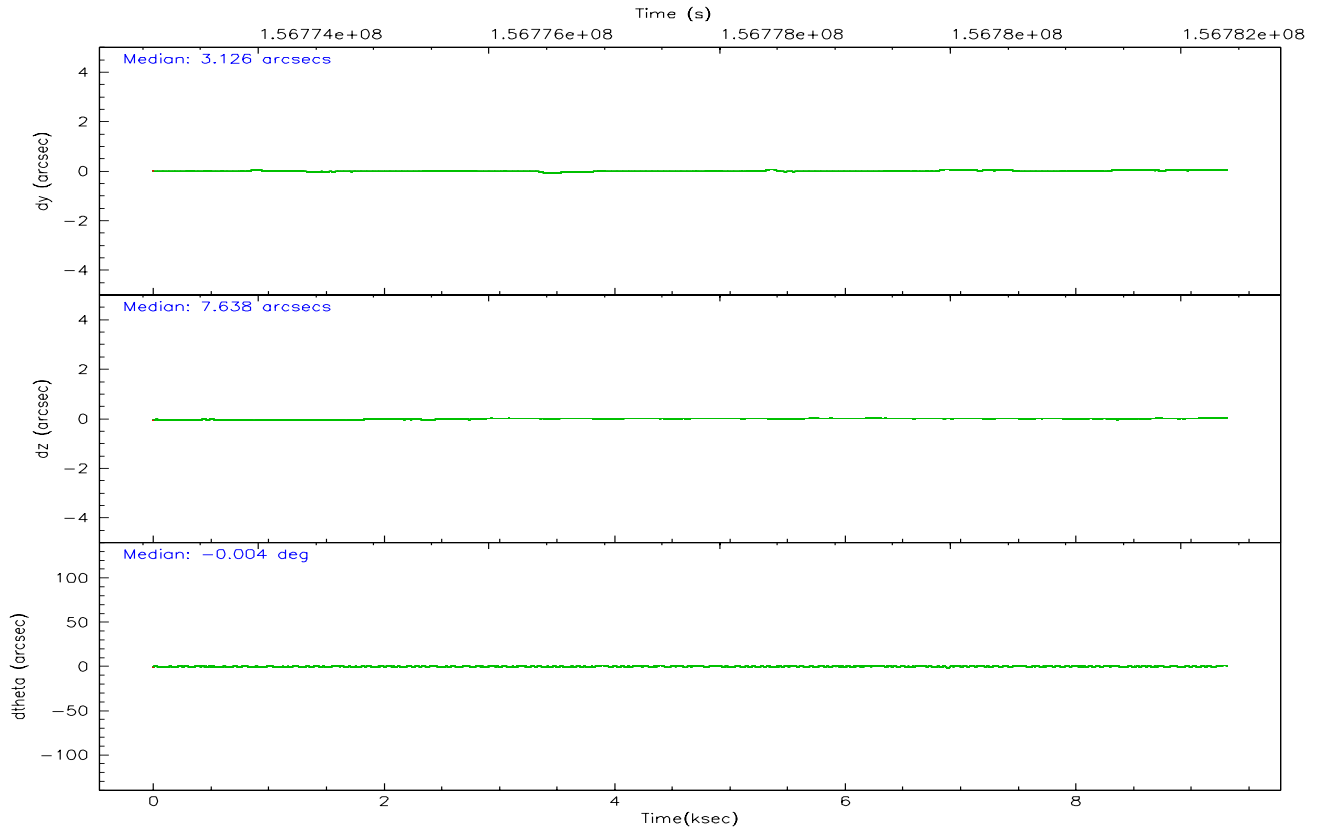
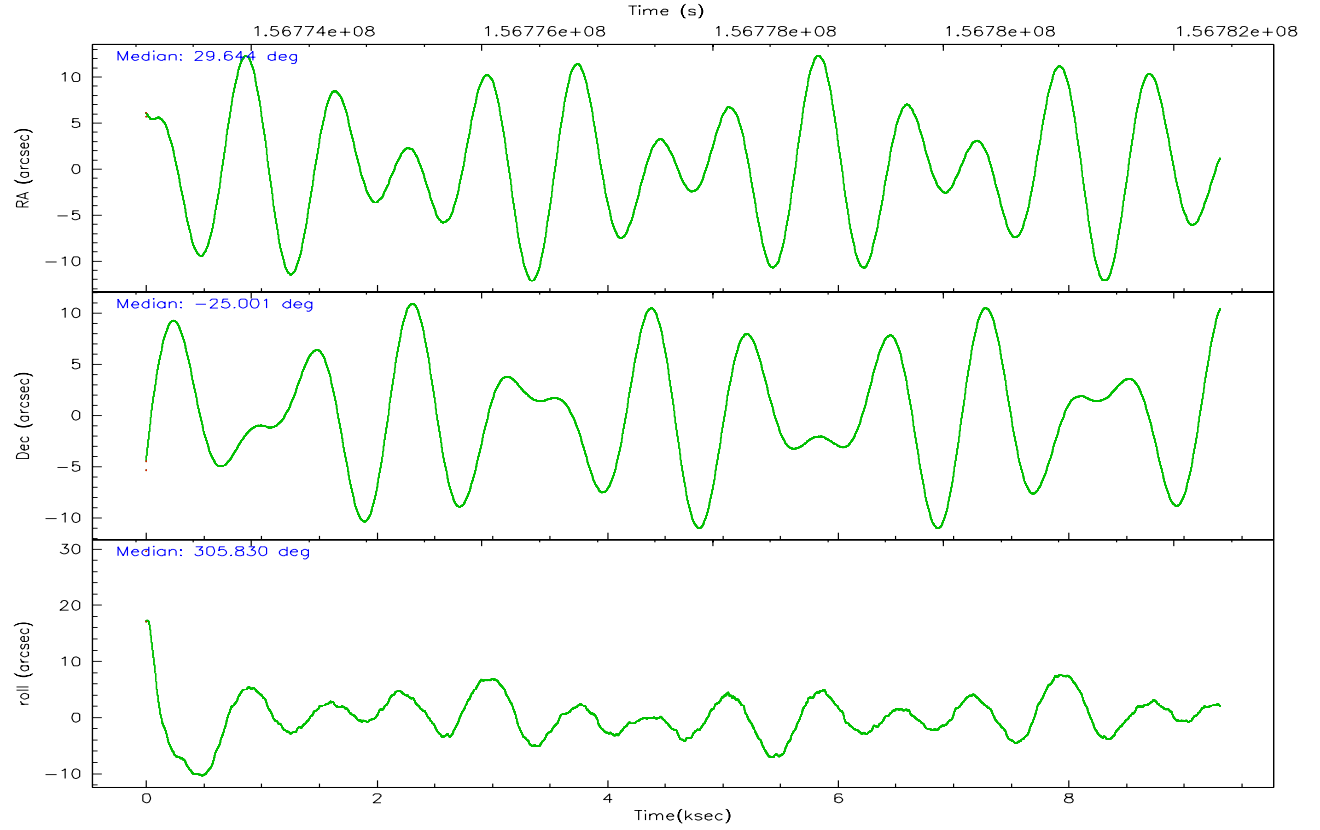
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	2940	3072	6305	2746	2646	6134
	5%	6%	8%	5%	4%	8%
grade 1 events	26	34	539	10	76	64
	0%	0%	0%	0%	0%	0%
grade 2 events	1388	1351	9839	1506	5426	3512
	2%	2%	12%	2%	8%	5%
grade 3 events	557	614	1511	599	2419	2076
	1%	1%	1%	1%	3%	2%
grade 4 events	612	621	1402	616	2494	1897
	1%	1%	1%	1%	3%	2%
grade 5 events	1866	2077	5578	2214	6419	2884
	3%	4%	7%	4%	9%	4%
grade 6 events	1140	1209	17070	1412	14639	4157
	2%	2%	22%	2%	22%	5%
grade 7 events	43787	40982	34114	42116	31946	48882
	83%	82%	44%	82%	48%	70%

### 3.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-235678	ACIS-235678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
Pointing RA	29.616646	29.64421443386946	Subarray requested	NONE	NONE
Pointing Dec	-24.990173	-25.00093519920859	Alternating exposures requested	N	N
Pointing Roll	305.669707	305.8379935835287	Primary exposure time	0.000000	3.2
SIM focus pos (mm)	-0.684267	-0.6828225247311905			
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-190.132523	-190.1400660498719			
SIM translation stage offset (mm)	0	0.00754346686406393			
Observation start time	156773969.184000	156772661.06327			
Observation start date	2002-12-20T12:18:25	2002-12-20T11:57:41			
Observation end time	156782400.184000	156783062.7637			
Observation end date	2002-12-20T14:38:56	2002-12-20T14:51:02			
Read mode	TIMED	TIMED			

### 3.3 Aspect



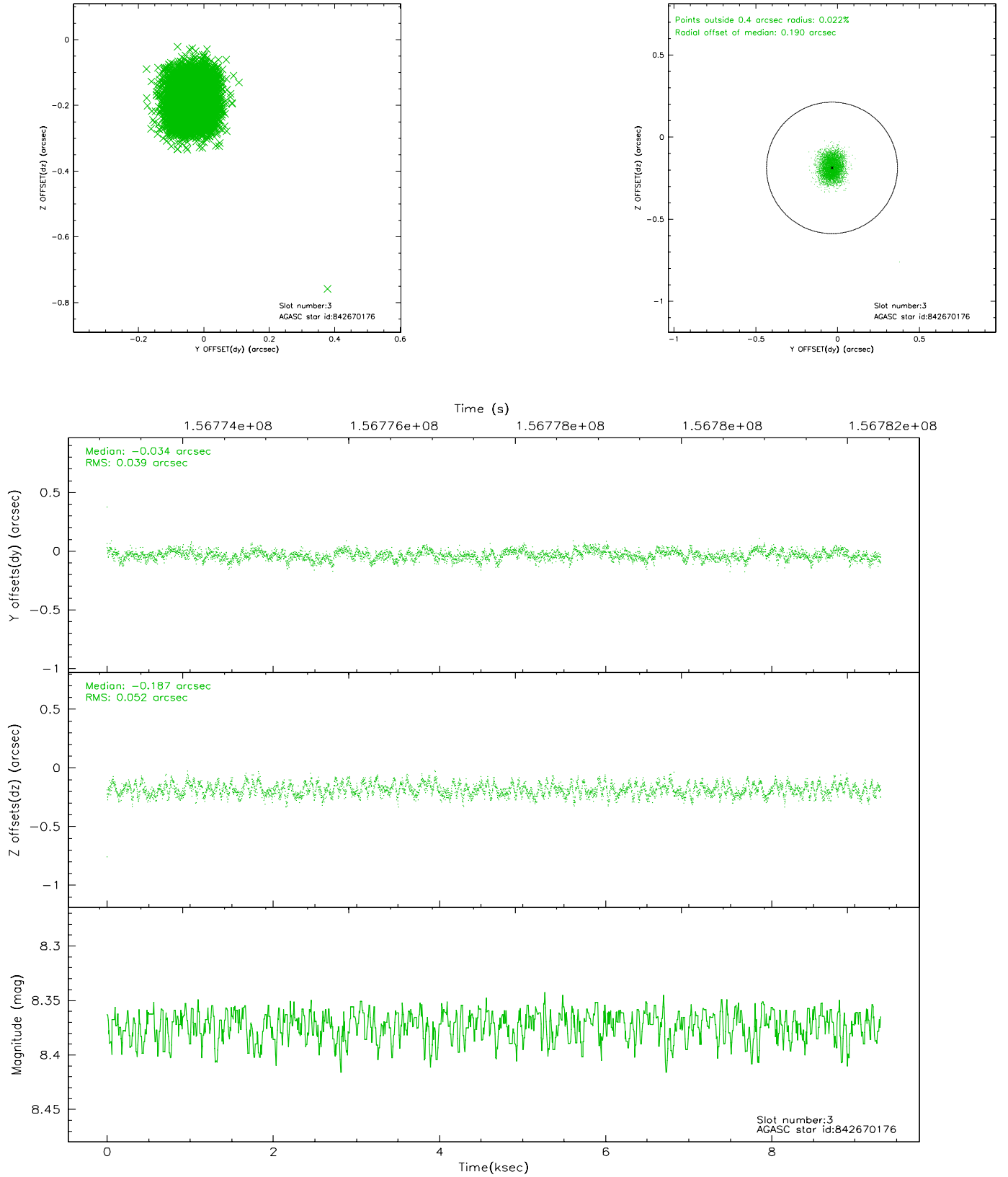


### Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	2873	-0.001	0.027	0.011	0.016	0.000000	0.000000	-755.78	-1728.26
1	FID	ACIS-S-4	7.20	2874	-0.052	-0.006	0.013	0.019	0.000000	0.000000	2157.25	179.75
2	FID	ACIS-S-5	7.24	2874	0.022	-0.012	0.007	0.011	0.000000	0.000000	-1808.05	173.89
3	GUIDE	842668480	9.06	5756	0.031	0.043	0.093	0.146	29.175764	-24.463880	-2048.28	1286.00
4	GUIDE	842670712	8.88	5754	-0.126	-0.042	0.081	0.129	28.813951	-25.367148	-1970.85	-2172.88
5	GUIDE	842793760	9.06	5755	0.085	0.142	0.072	0.117	30.157453	-25.316128	2042.98	-431.84
6	GUIDE	842795112	9.44	5754	0.005	-0.011	0.095	0.158	30.362801	-24.972157	2231.38	963.41
7	GUIDE	842799376	8.67	5757	0.003	-0.125	0.078	0.122	29.385201	-25.507630	-55.59	-1972.41

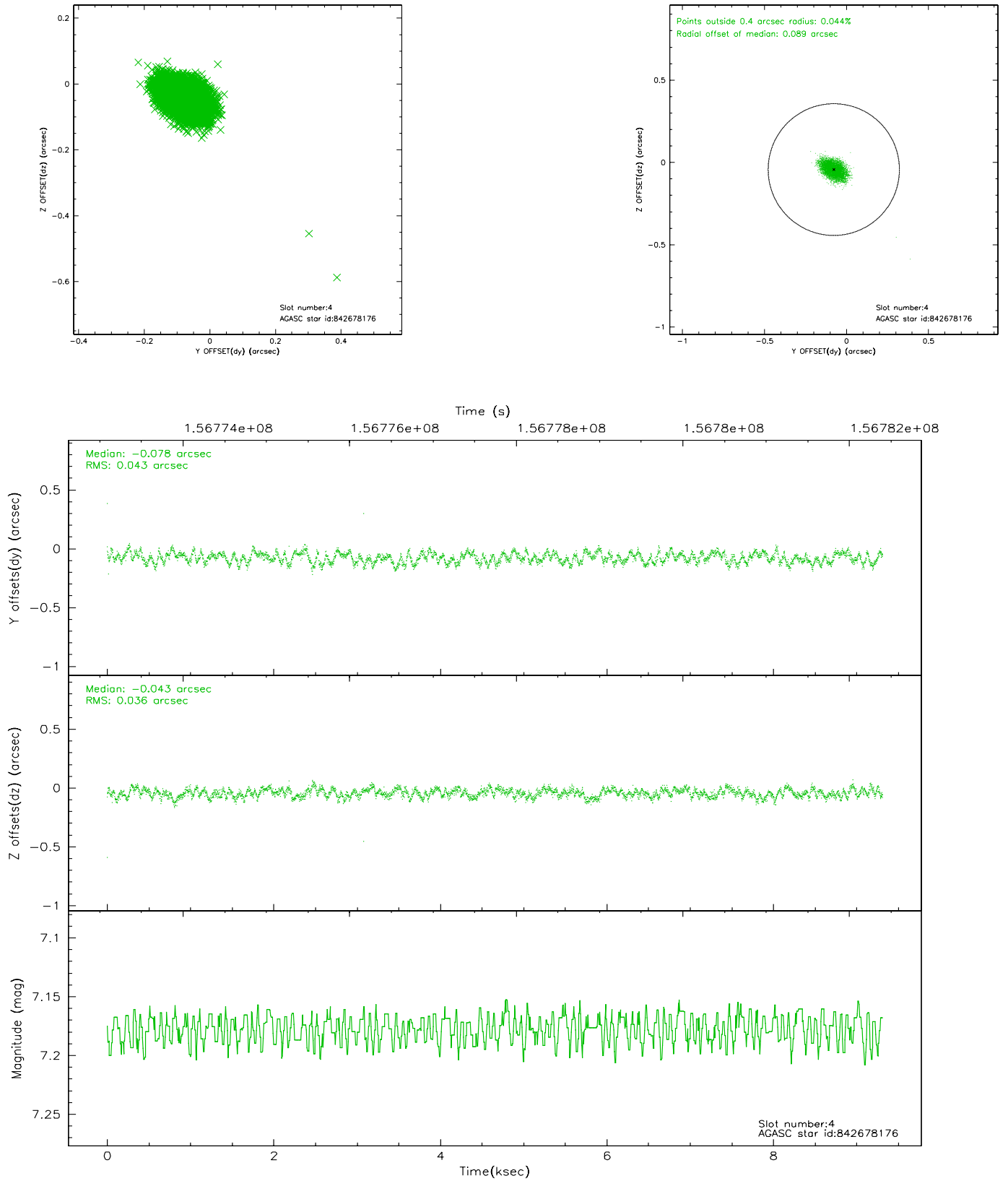
## 3.4 Star Slots

### 3.4.1 Slot 3

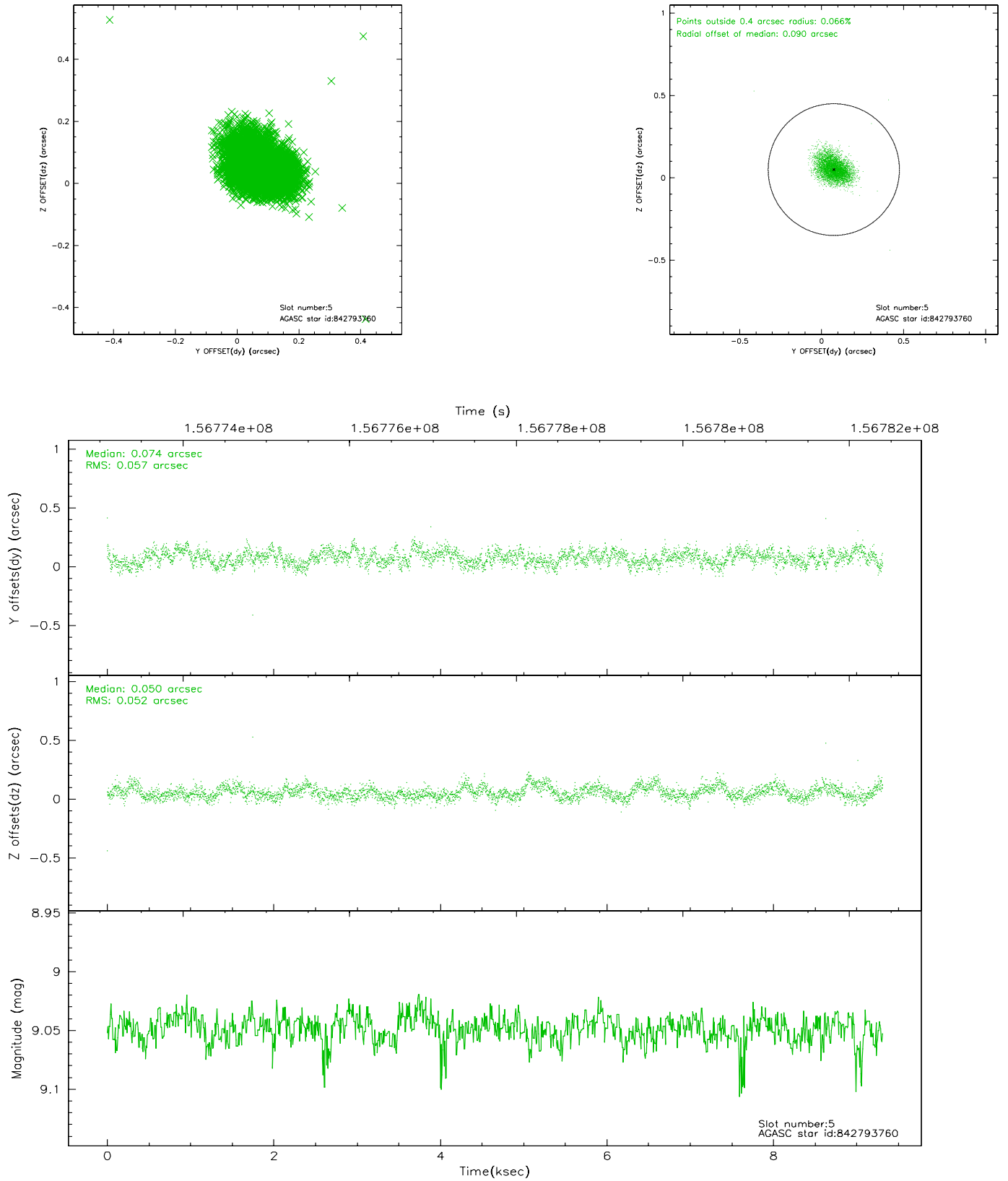




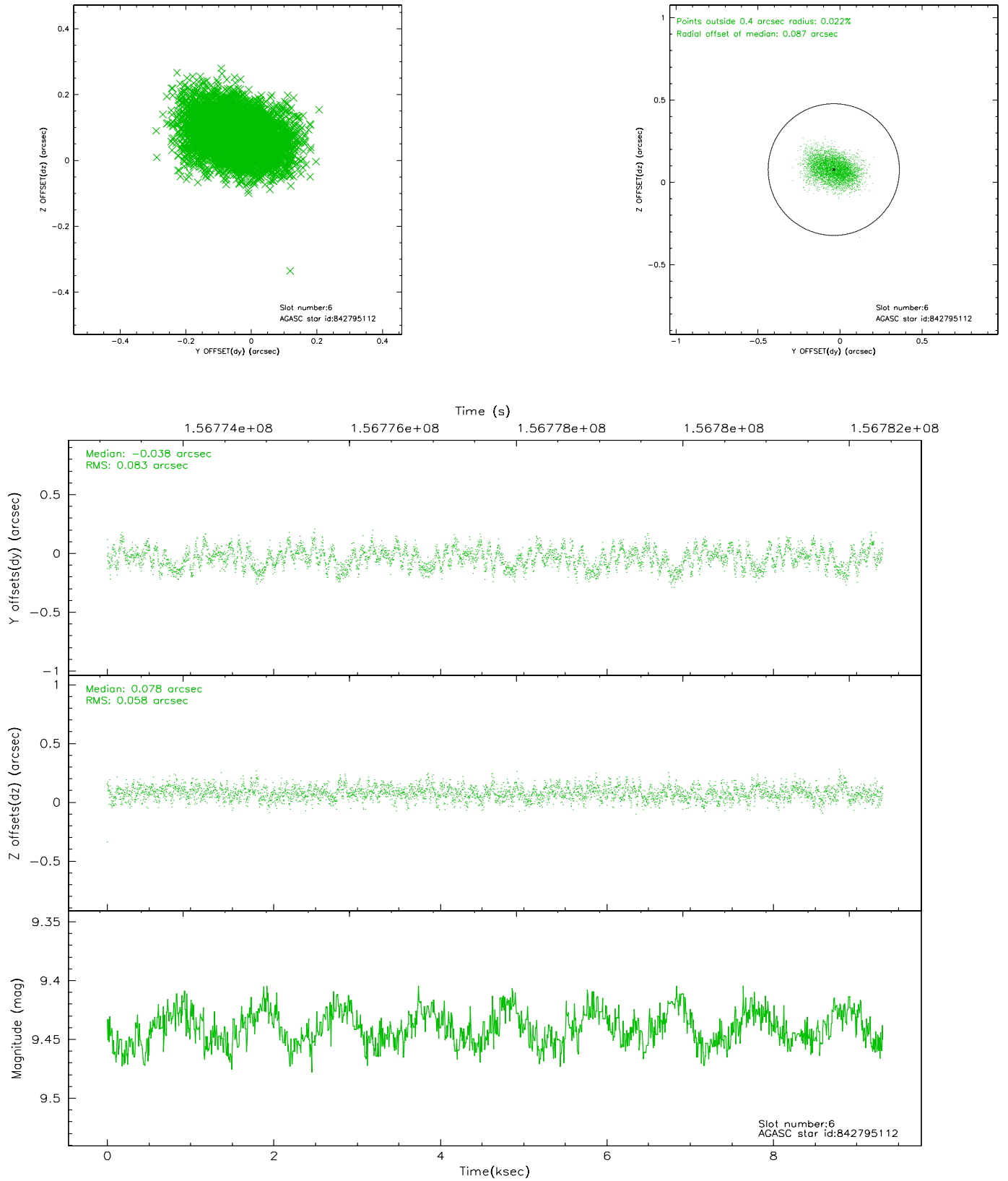
### 3.4.2 Slot 4



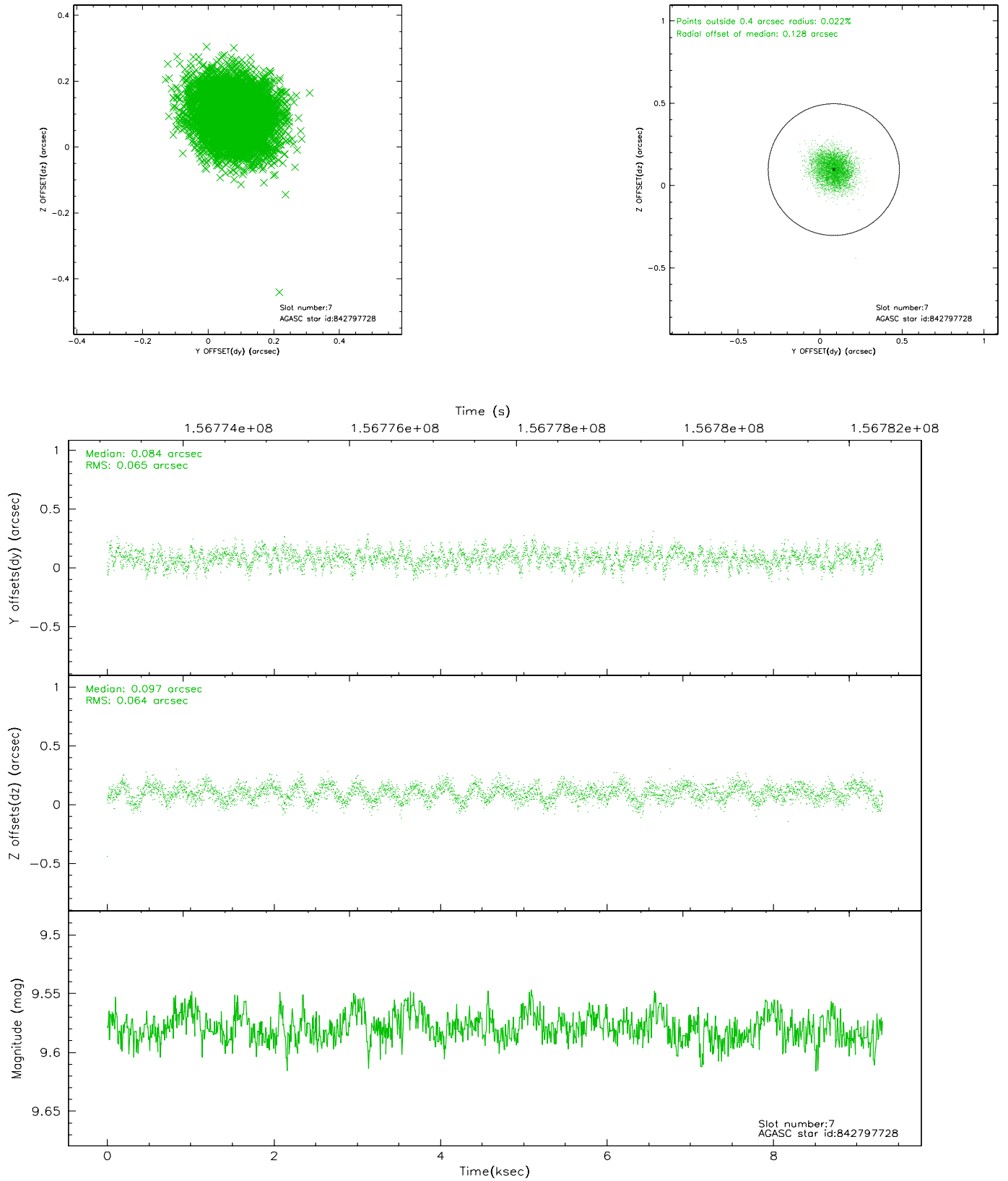
### 3.4.3 Slot 5



### 3.4.4 Slot 6

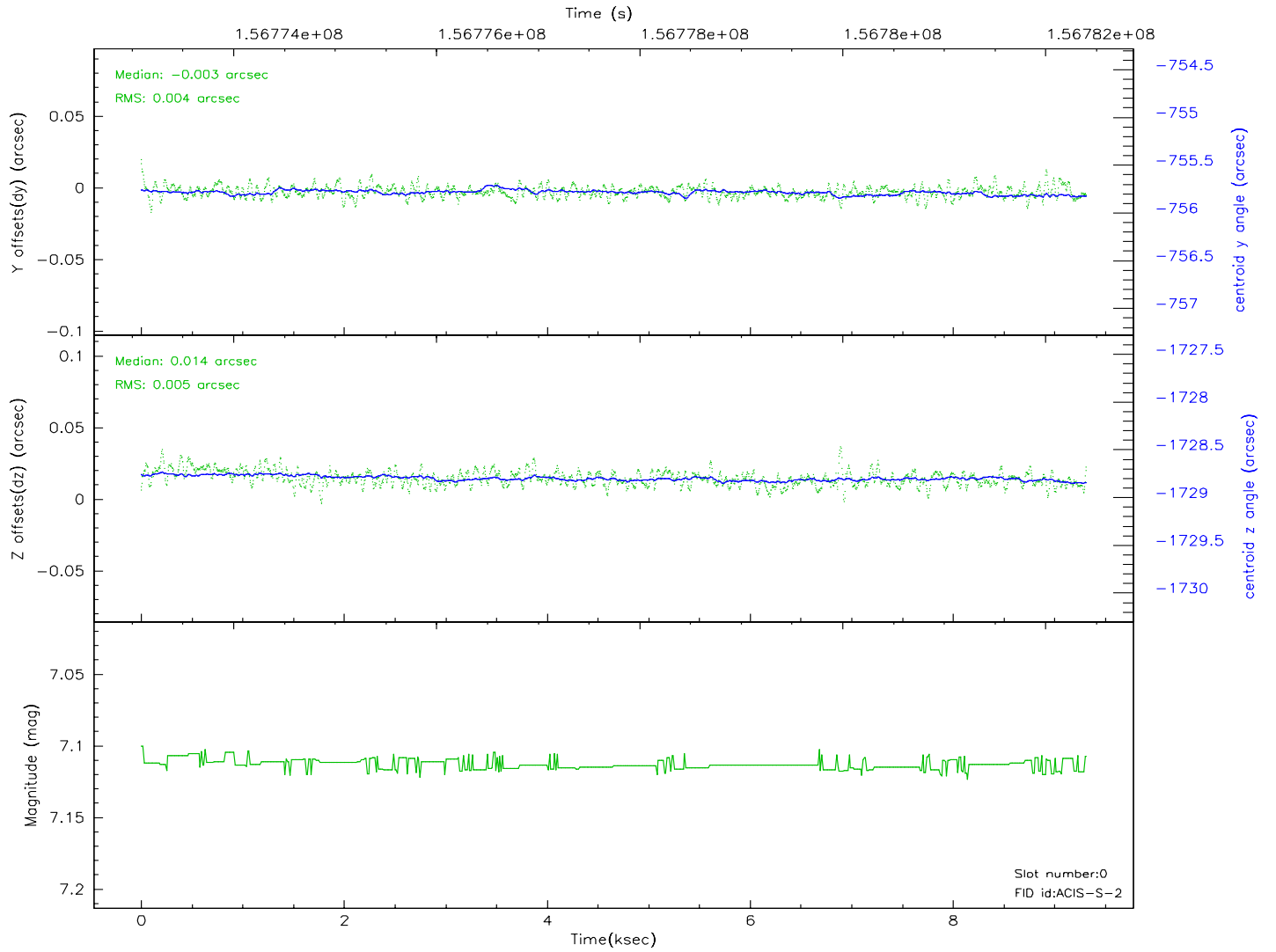
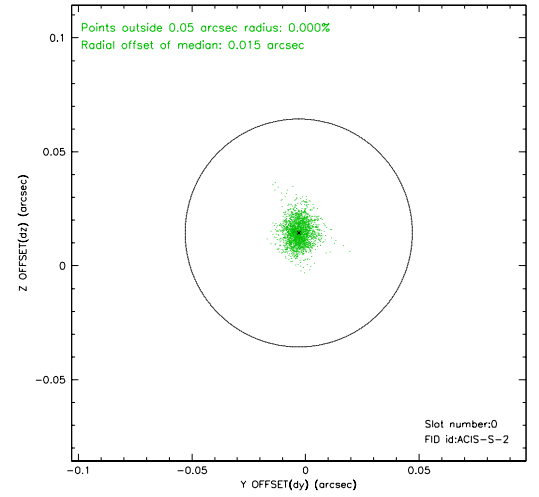
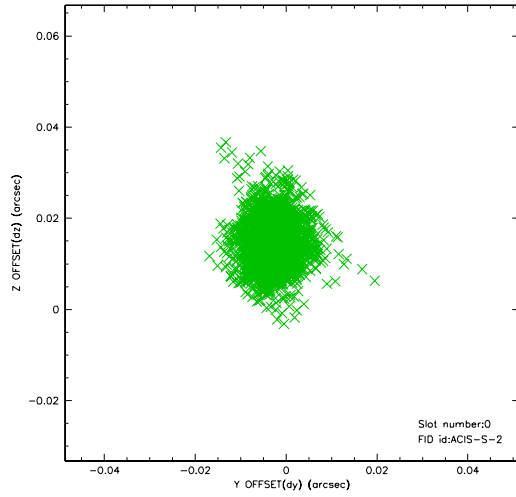


### 3.4.5 Slot 7

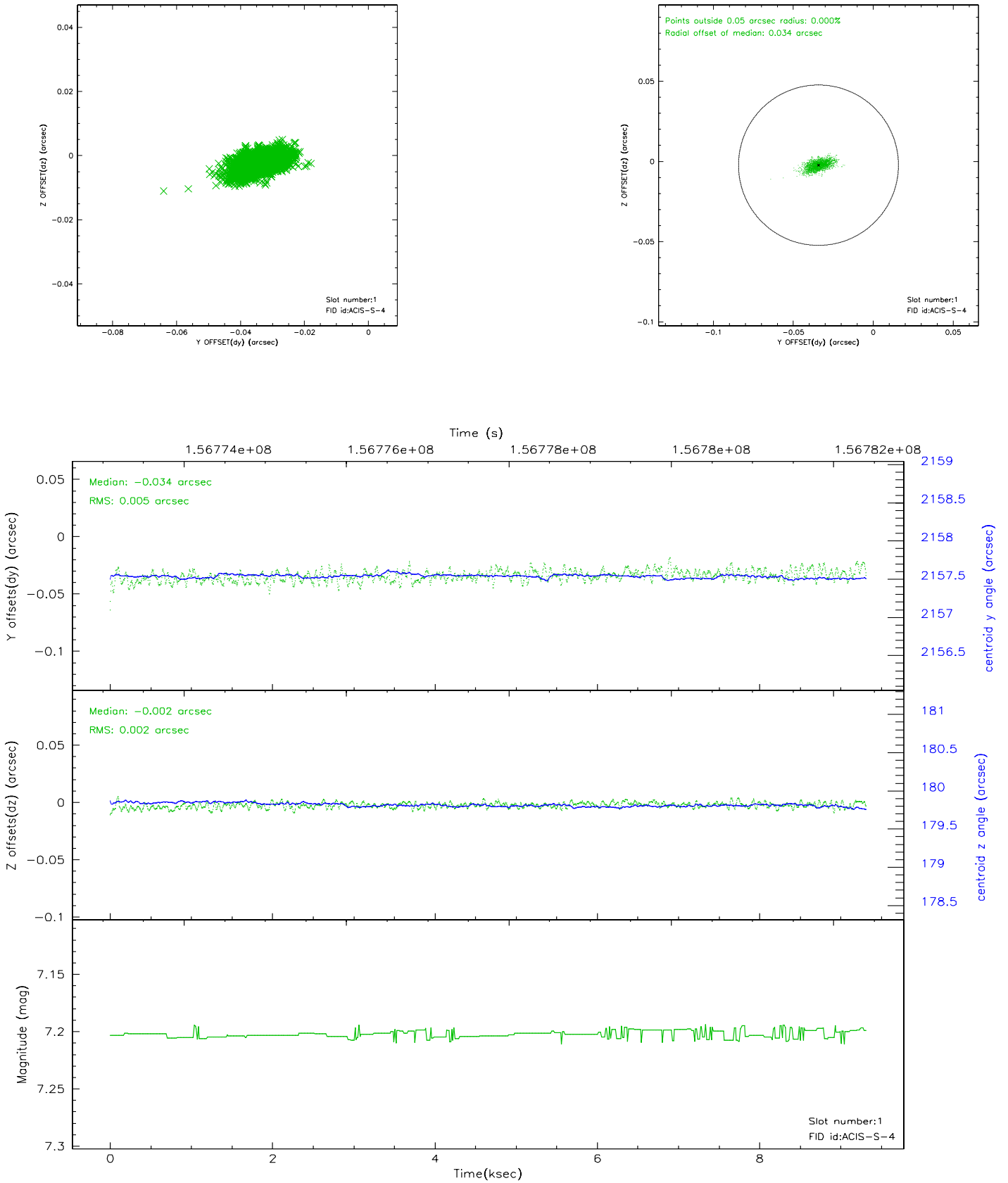


## 3.5 FID Slots

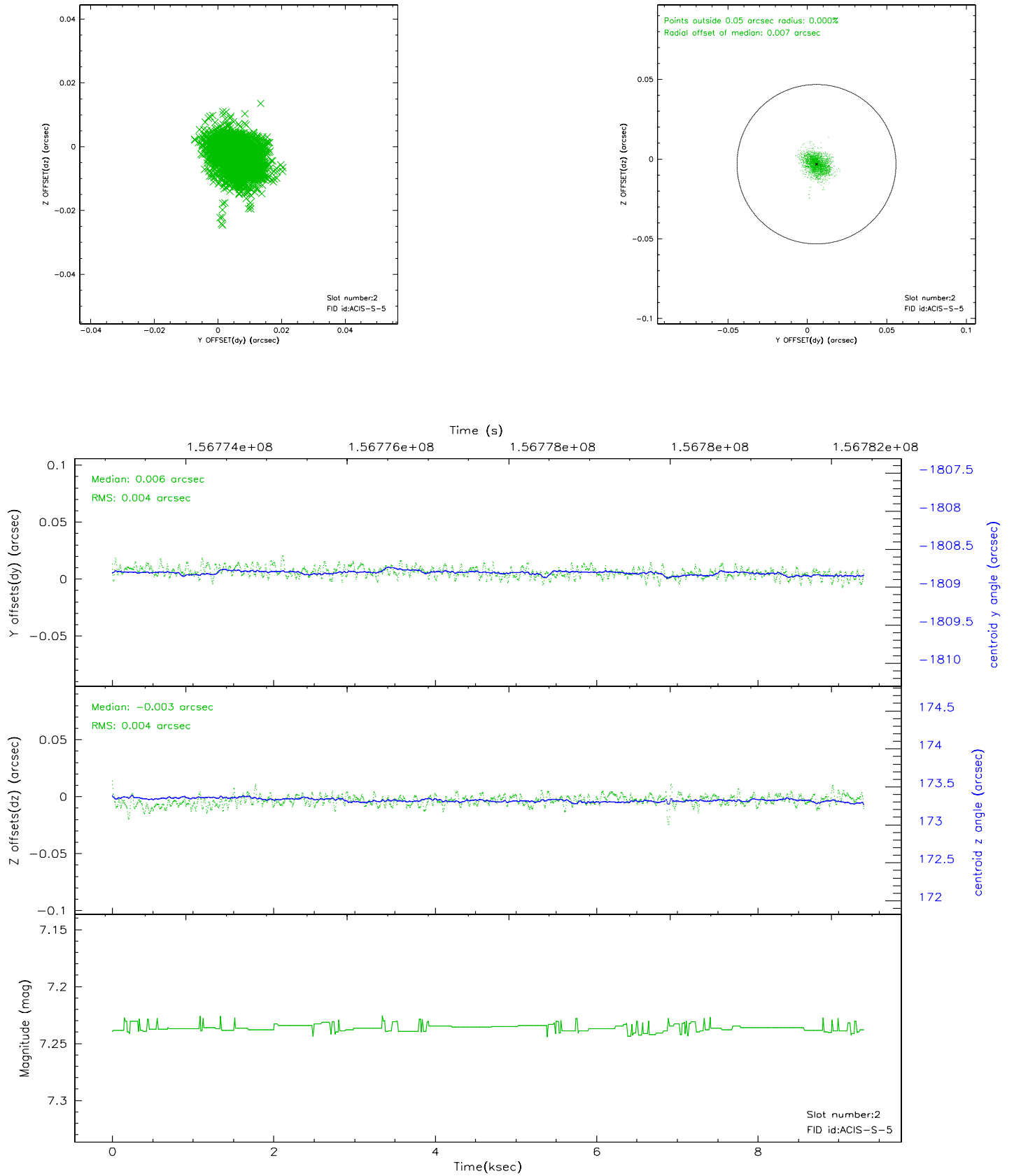
### 3.5.1 Slot 0



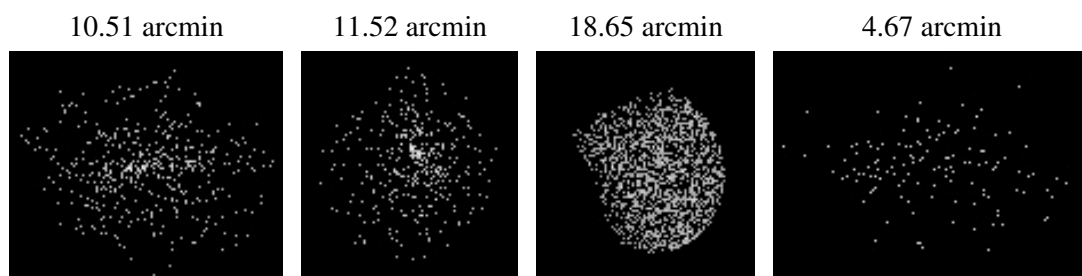
### 3.5.2 Slot 1



### 3.5.3 Slot 2



## 4 Point Sources





## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2007.01.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	19.837

### A.2 Comments

OBI 1 was interrupted by safing of the science instruments onboard Chandra due to high solar radiation environment. The observation was interrupted at 2002-11-10 03:20 GMT.