

# V&V Reference Report

## L2 ASCDS Version : 7.6.9

Observation 3136 - L2 Version 001  
Chandra X-Ray Center

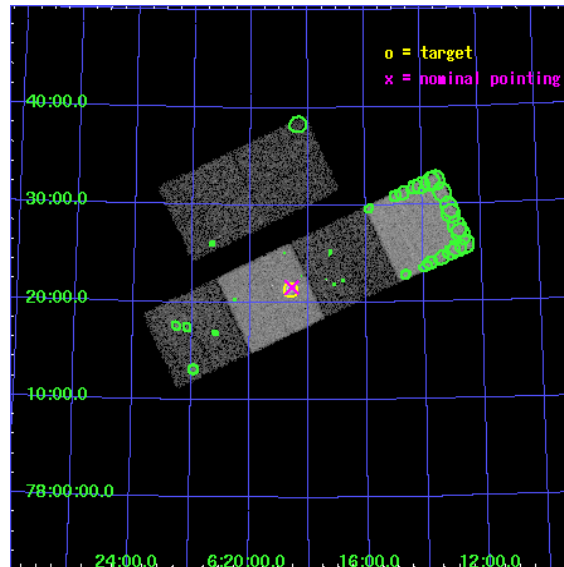
L2 Processing Date : Oct 14 2006

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# 1 Front

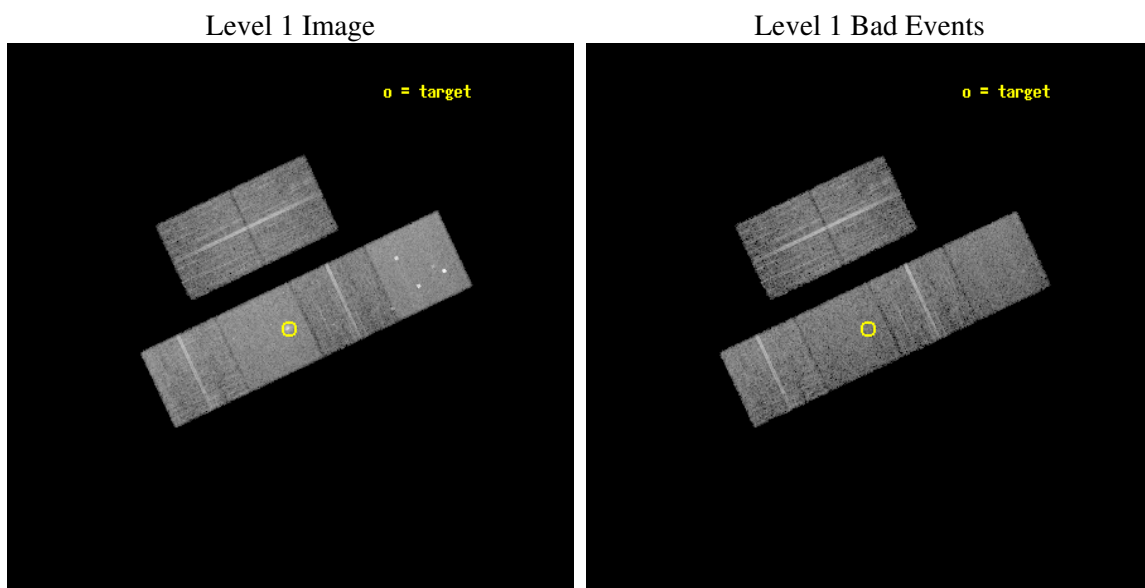
seq_num	700575
obs_id	3136
title	SEARCH FOR AN INTERMEDIATE MASS BLACK HOLE IN THE STARBURST GALAXY NGC2146
observer	Dr Hironori Matsumoto
object	NGC2146
dtcycle	0
cycle	P
ra_targ	94.655417
dec_targ	78.356556
ra_nom	94.640896927239
dec_nom	78.359819229749
roll_nom	154.71186879254
revision	2
ontime	9958.3589826226
livetime	9832.2602449808
ontime2	9961.5999628901
ontime3	9961.5999628901
ontime5	9961.5999628901
ontime6	9961.5999628901
ontime7	9958.3589826226
ontime8	9961.5999628901
l2events	100414



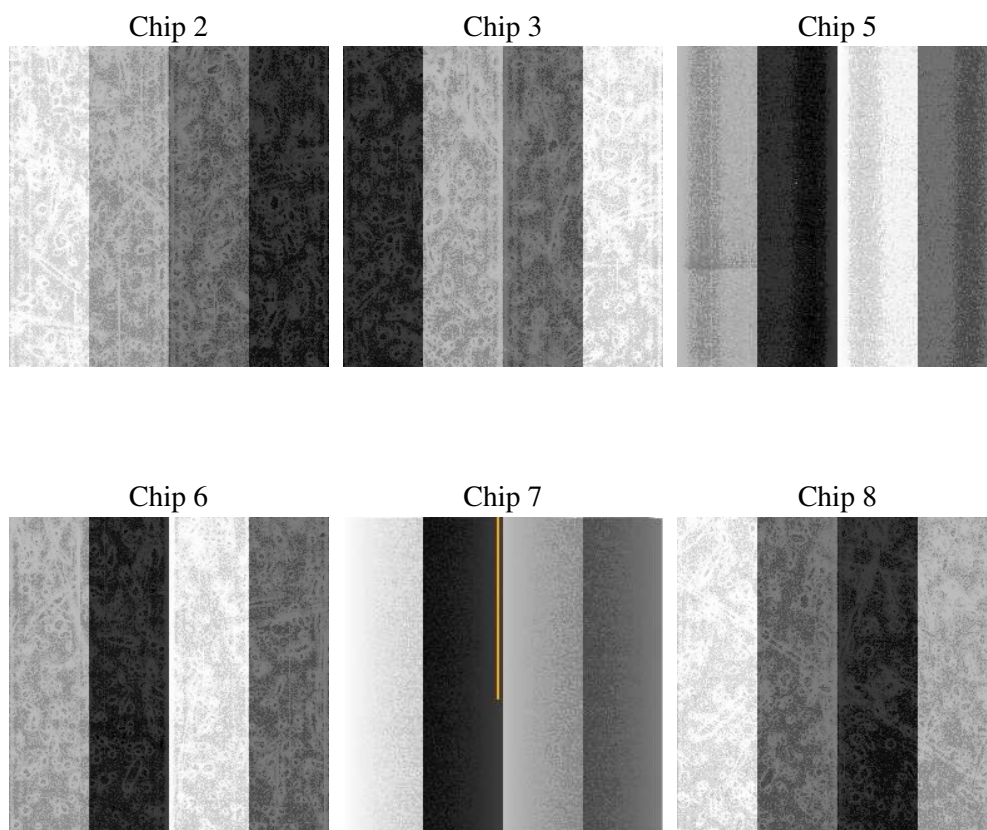
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0
ascdsver	7.6.9
caldsver	3.2.3
date	2006-10-14T20:32:40
revision	2

sched_exp_time	10000.000000
ontime	9962.859125644
ontime2	9966.1001059115
ontime3	9966.1001059115
ontime5	9966.1001059115
ontime6	9966.1001059115
ontime7	9962.859125644
ontime8	9966.1001059115
l1events	457210

### 2.1.4 Events

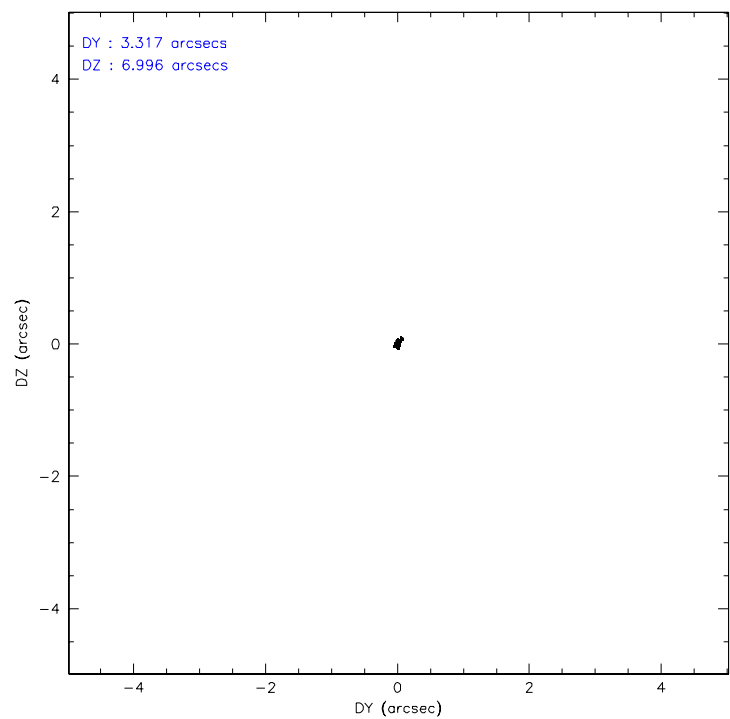
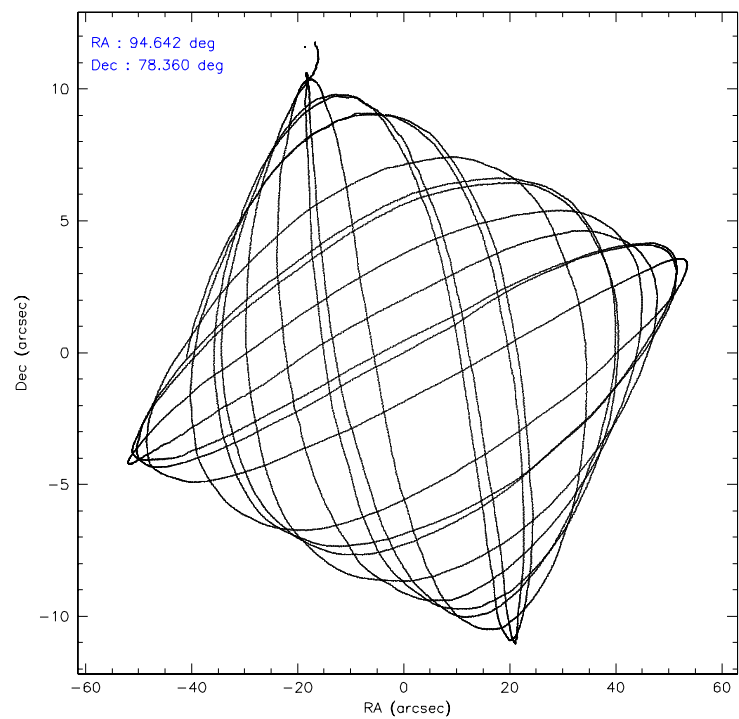
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	65860	62473	96453	64515	87999	79910
rejected events	58527	55224	51356	56824	52584	63237
rejected %	88%	88%	53%	88%	59%	79%

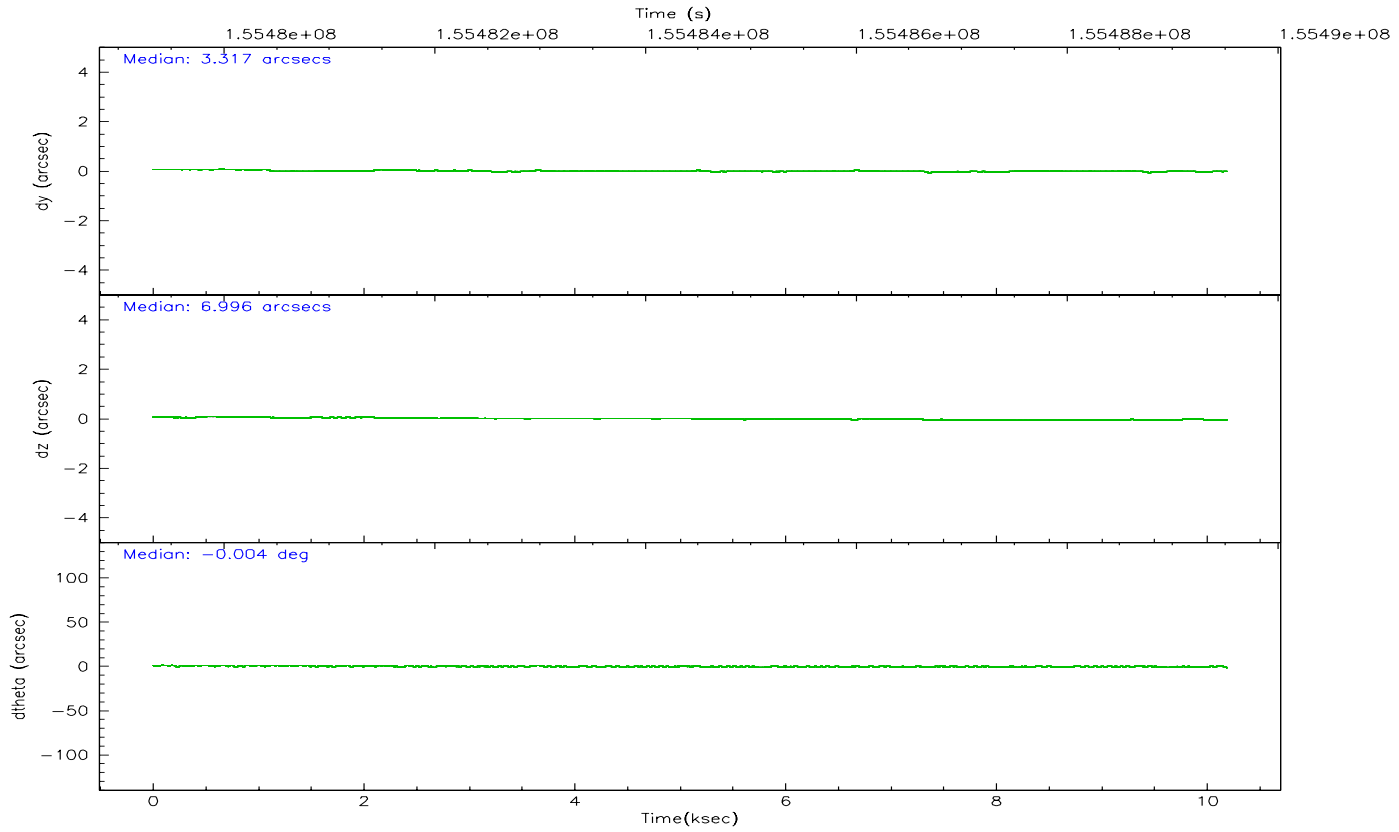
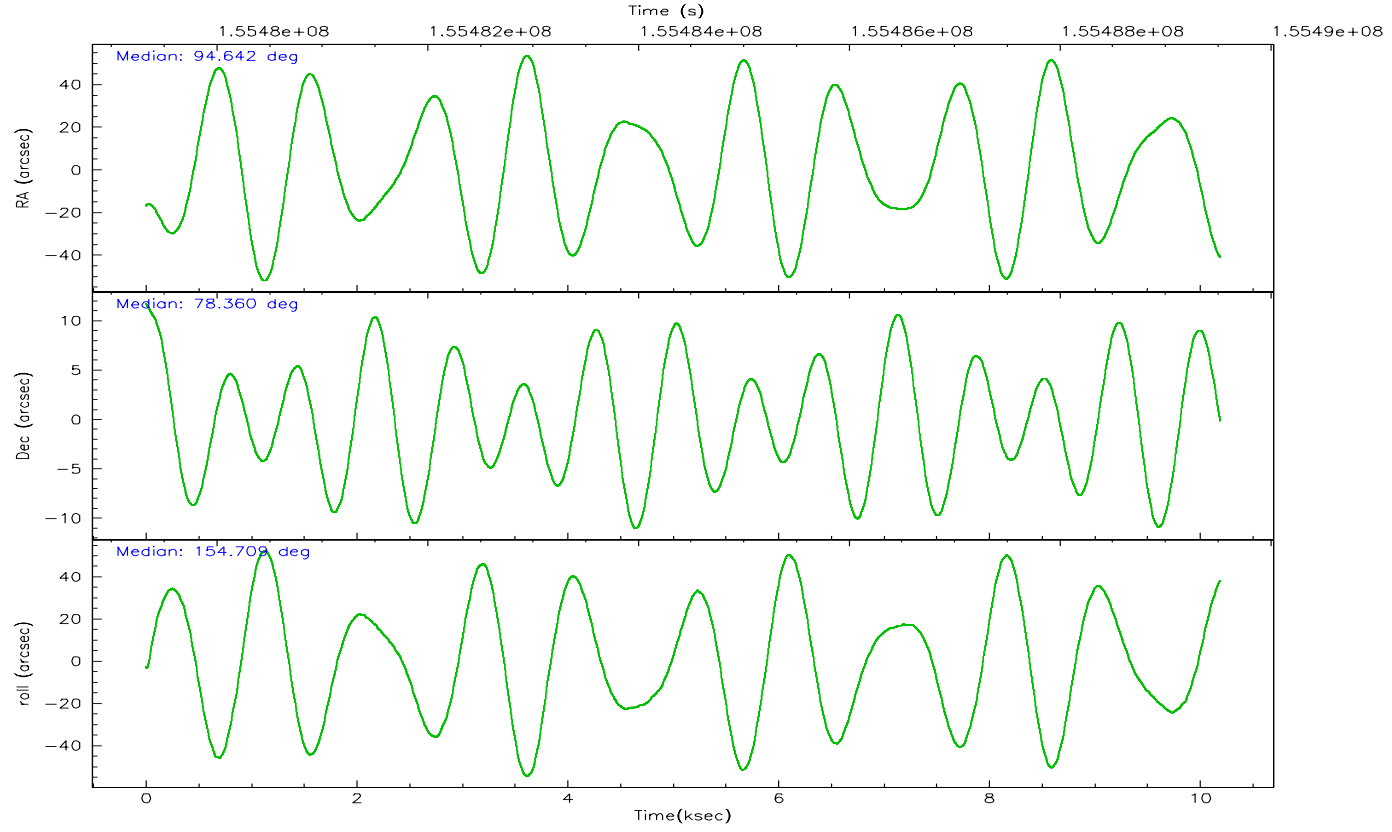
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	3273	3088	5543	3125	2706	5707
	4%	4%	5%	4%	3%	7%
grade 1 events	25	32	147	32	50	54
	0%	0%	0%	0%	0%	0%
grade 2 events	1438	1404	14313	1598	8771	3546
	2%	2%	14%	2%	9%	4%
grade 3 events	722	730	1000	747	2015	1730
	1%	1%	1%	1%	2%	2%
grade 4 events	704	709	945	764	2060	1686
	1%	1%	0%	1%	2%	2%
grade 5 events	2445	2677	4528	3014	5773	3702
	3%	4%	4%	4%	6%	4%
grade 6 events	1198	1320	23319	1464	19885	4007
	1%	2%	24%	2%	22%	5%
grade 7 events	56055	52513	46658	53771	46739	59478
	85%	84%	48%	83%	53%	74%

## 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
Observation mode	POINTING	POINTING	Number of optional ACIS chips dropped	0	0
Pointing RA	94.775346	94.64089692723921	On-chip summing requested	N	N
Pointing Dec	78.362345	78.35981922974928	Subarray requested	NONE	NONE
Pointing Roll	154.423572	154.7118687925372	Alternating exposures requested	N	N
SIM focus pos (mm)	-0.684267	-0.6828225247311905	Primary exposure time	0.000000	3.2
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	155479517.184000	155478550.33428			
Observation start date	2002-12-05T12:44:13	2002-12-05T12:29:10			
Observation end time	155489517.184000	155490338.34727			
Observation end date	2002-12-05T15:30:53	2002-12-05T15:45:38			
Read mode	TIMED	TIMED			

## 2.3 Aspect





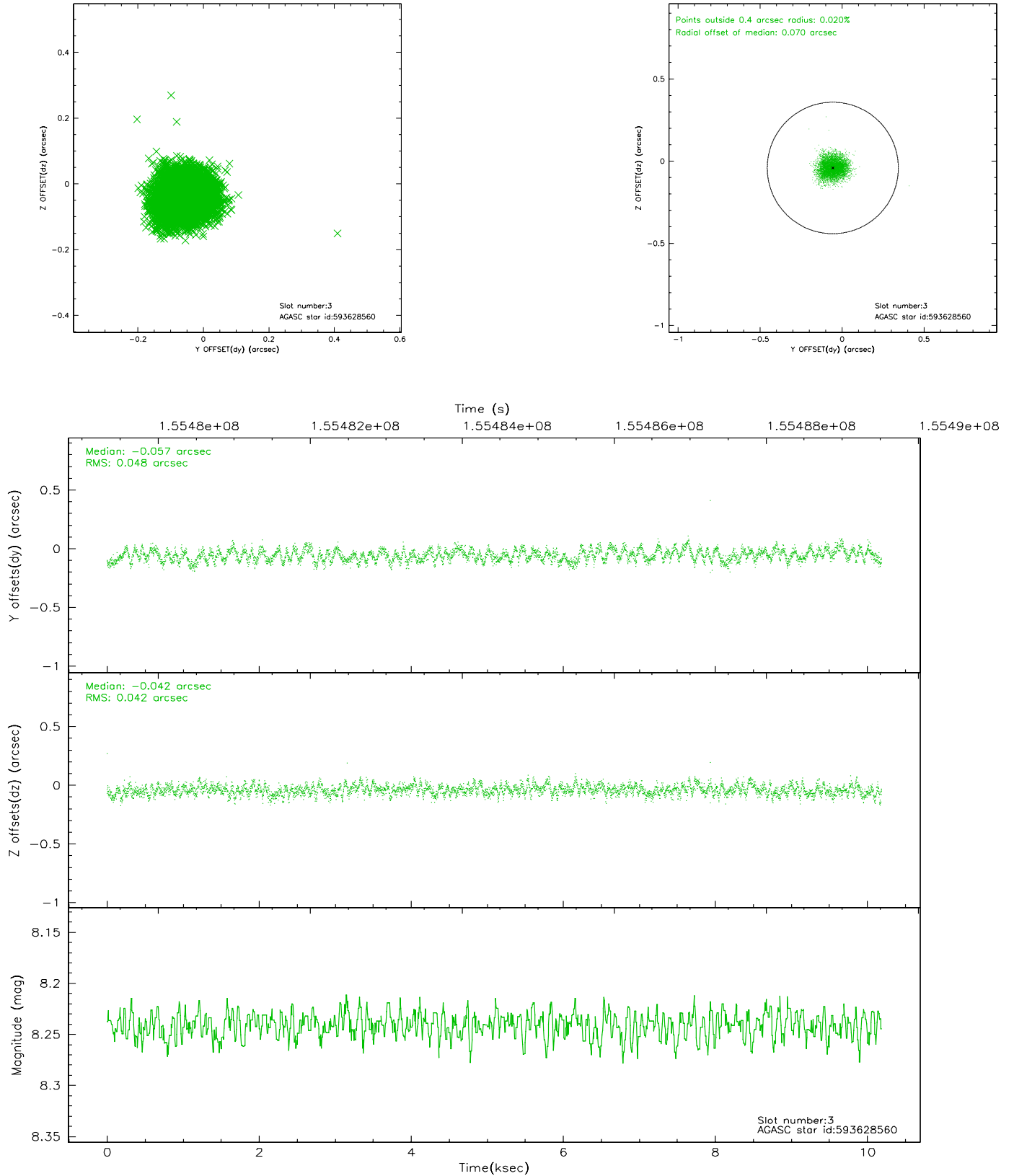
### Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.12	2486	-0.009	0.022	0.009	0.018	0.000000	0.000000	-755.97	-1728.14
1	FID	ACIS-S-4	7.20	2486	-0.027	-0.001	0.009	0.026	0.000000	0.000000	2157.04	179.79
2	FID	ACIS-S-5	7.24	2487	0.005	-0.012	0.008	0.016	0.000000	0.000000	-1808.14	174.03
3	GUIDE	593628560	8.24	4968	-0.057	-0.042	0.068	0.107	92.260818	78.027017	1190.06	1863.29
4	GUIDE	594150736	9.62	4962	-0.000	-0.011	0.129	0.206	92.798234	78.971982	2186.09	-1411.98
5	GUIDE	593630824	7.87	4971	0.031	0.172	0.068	0.105	97.139560	77.959365	-2210.93	510.05
6	GUIDE	593631272	8.35	4972	0.105	-0.279	0.067	0.109	97.229274	77.907214	-2359.48	644.35
7	GUIDE	594154400	9.13	4971	-0.077	0.163	0.108	0.167	96.629306	78.815756	-453.98	-2049.08

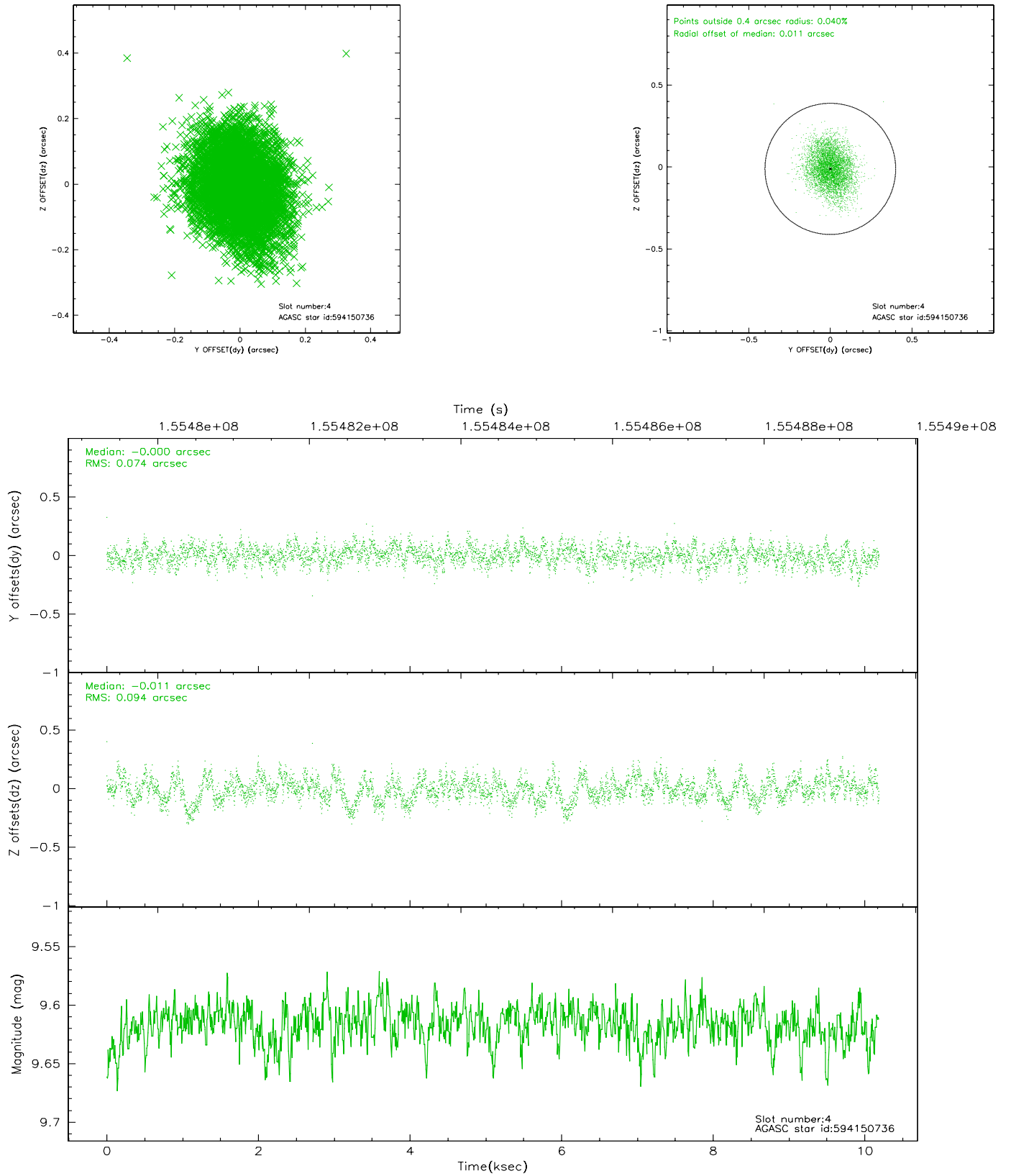


## 2.4 Star Slots

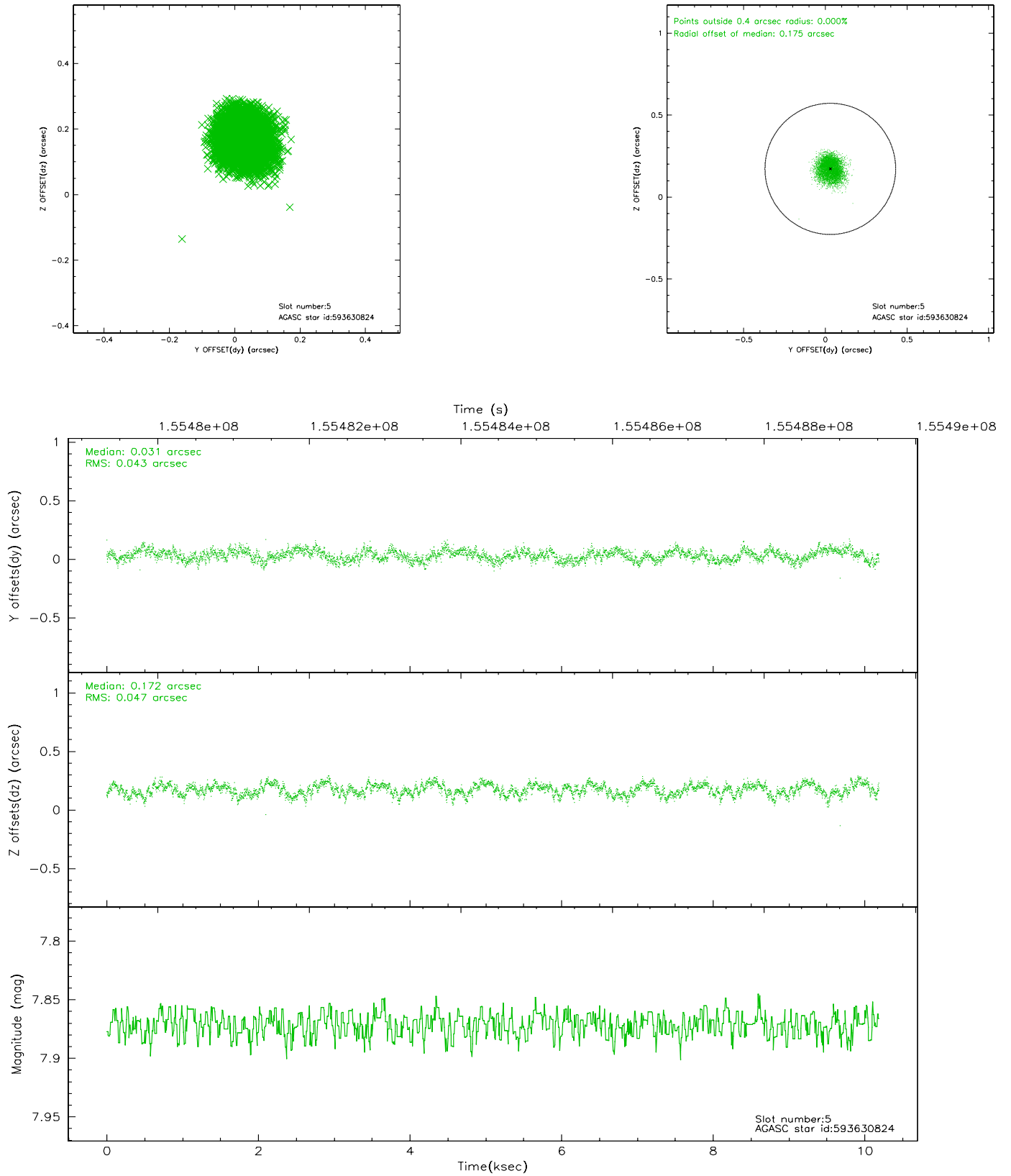
### 2.4.1 Slot 3



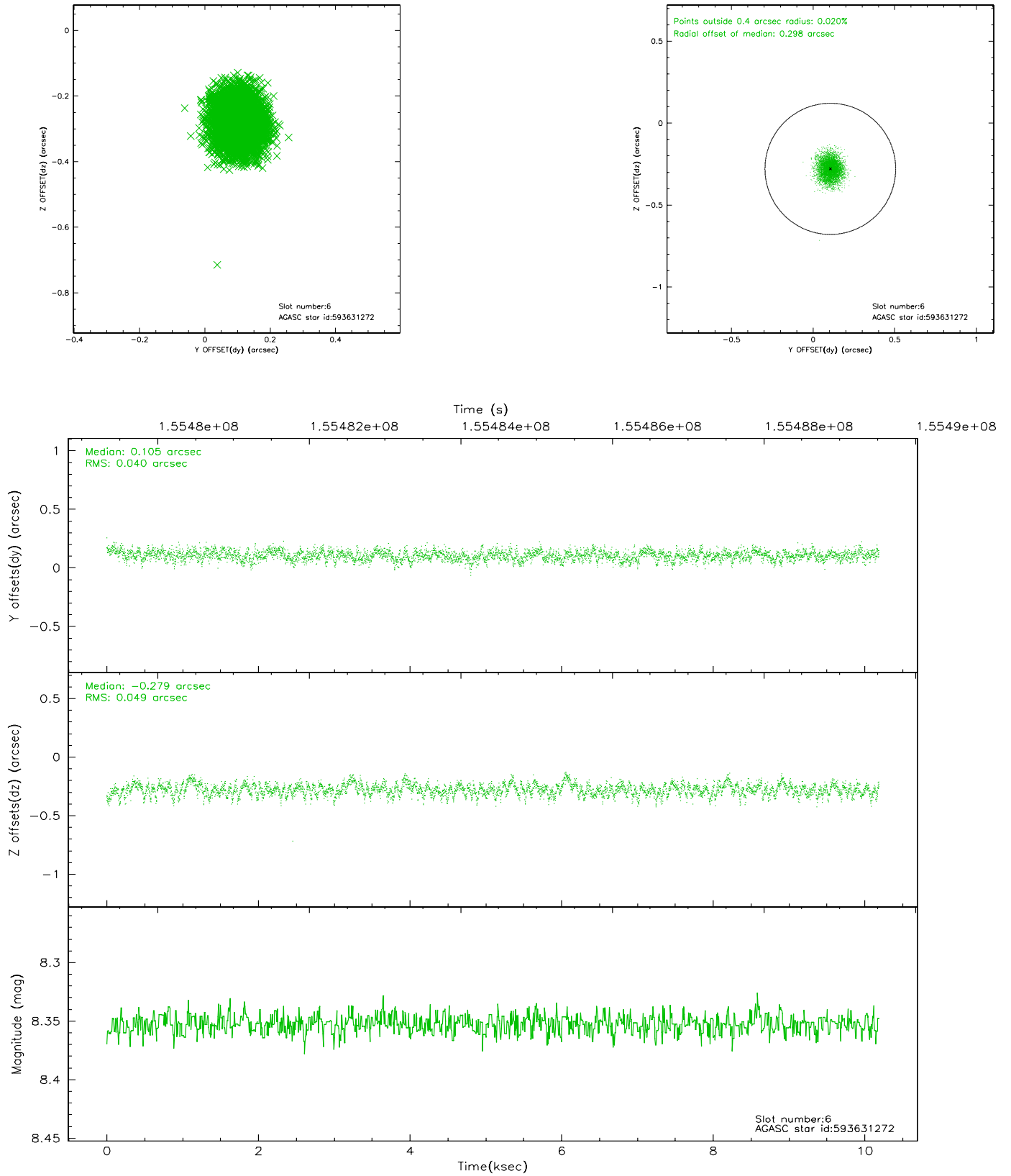
## 2.4.2 Slot 4



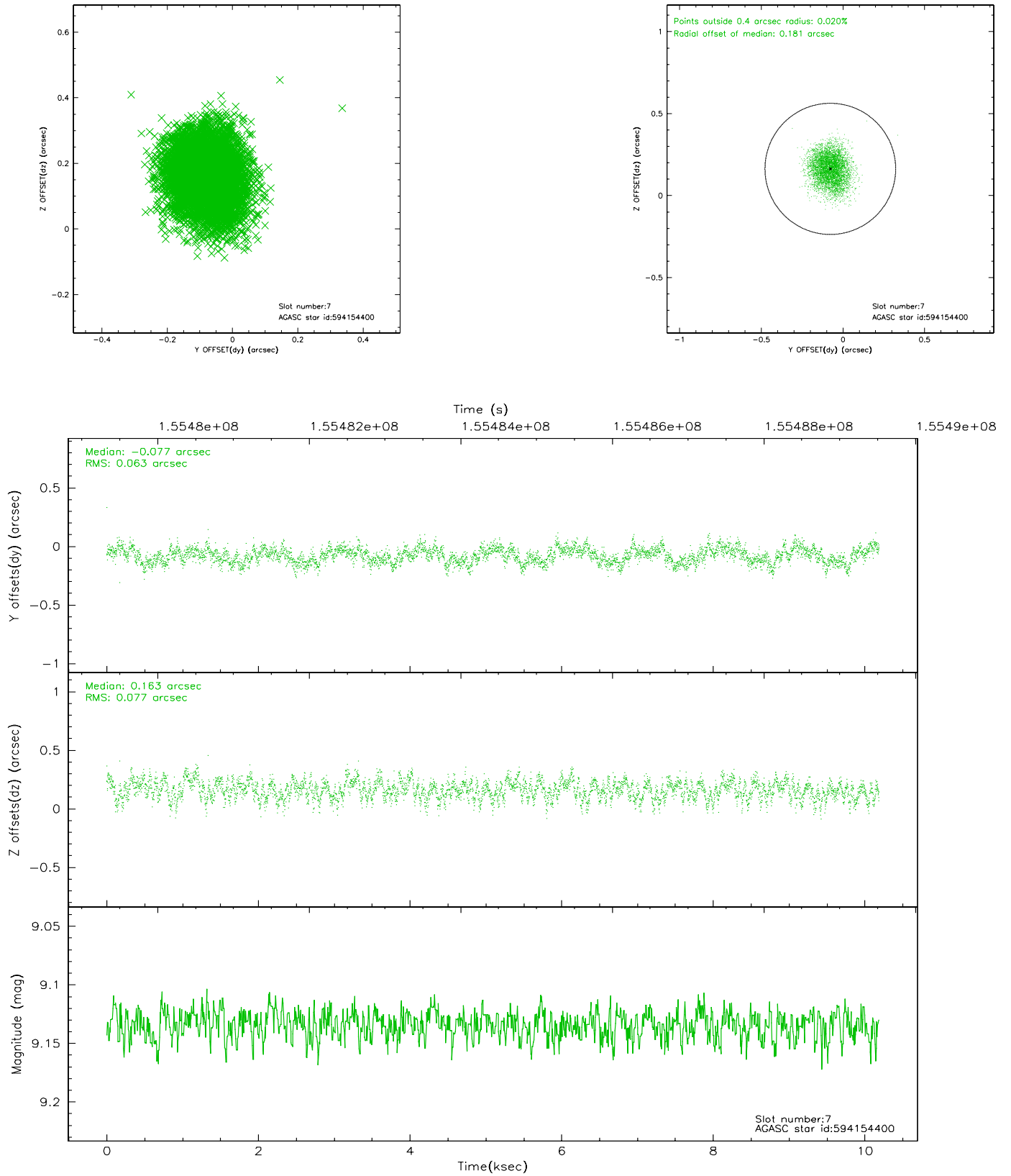
### 2.4.3 Slot 5



## 2.4.4 Slot 6

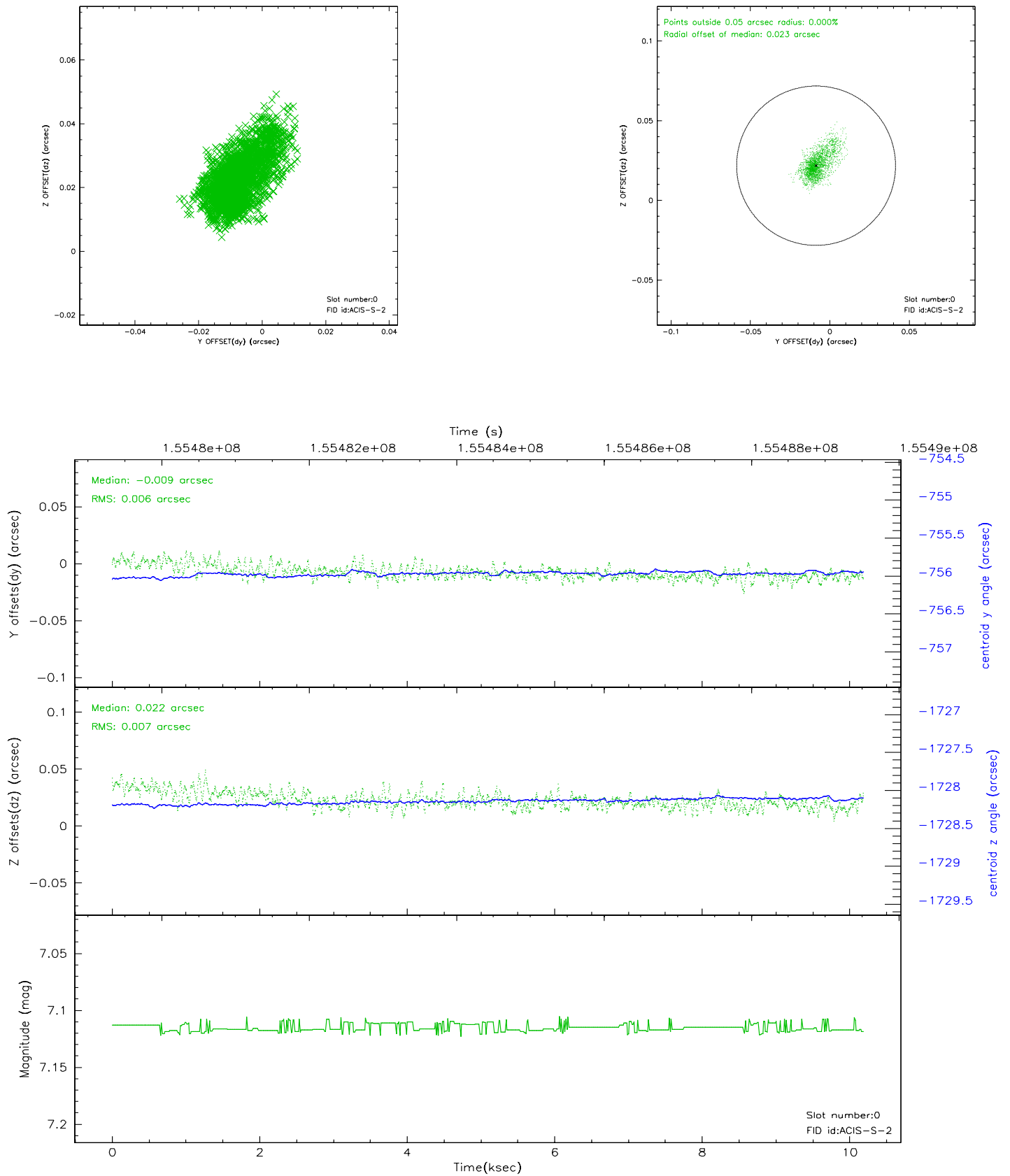


## 2.4.5 Slot 7

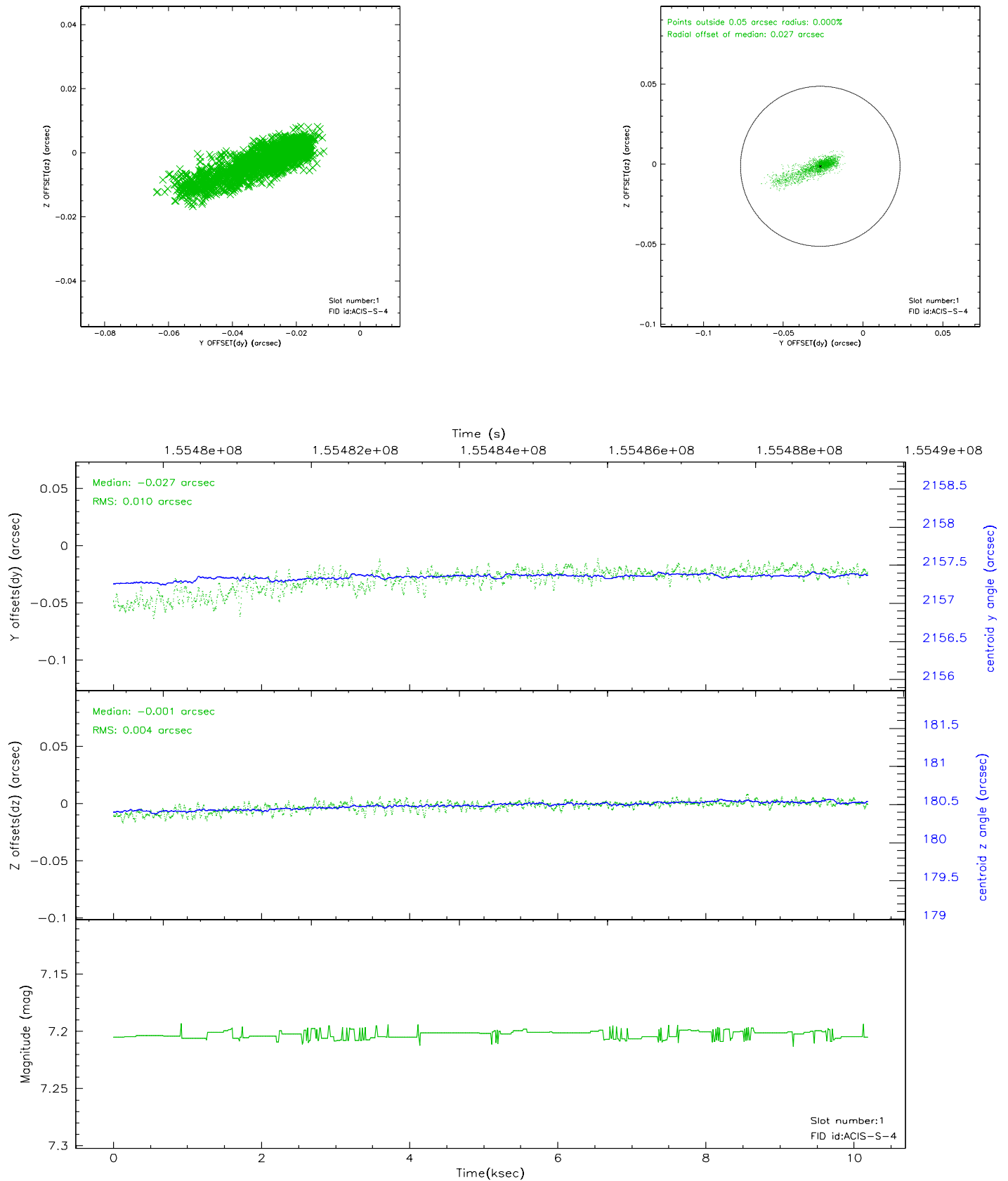


## 2.5 FID Slots

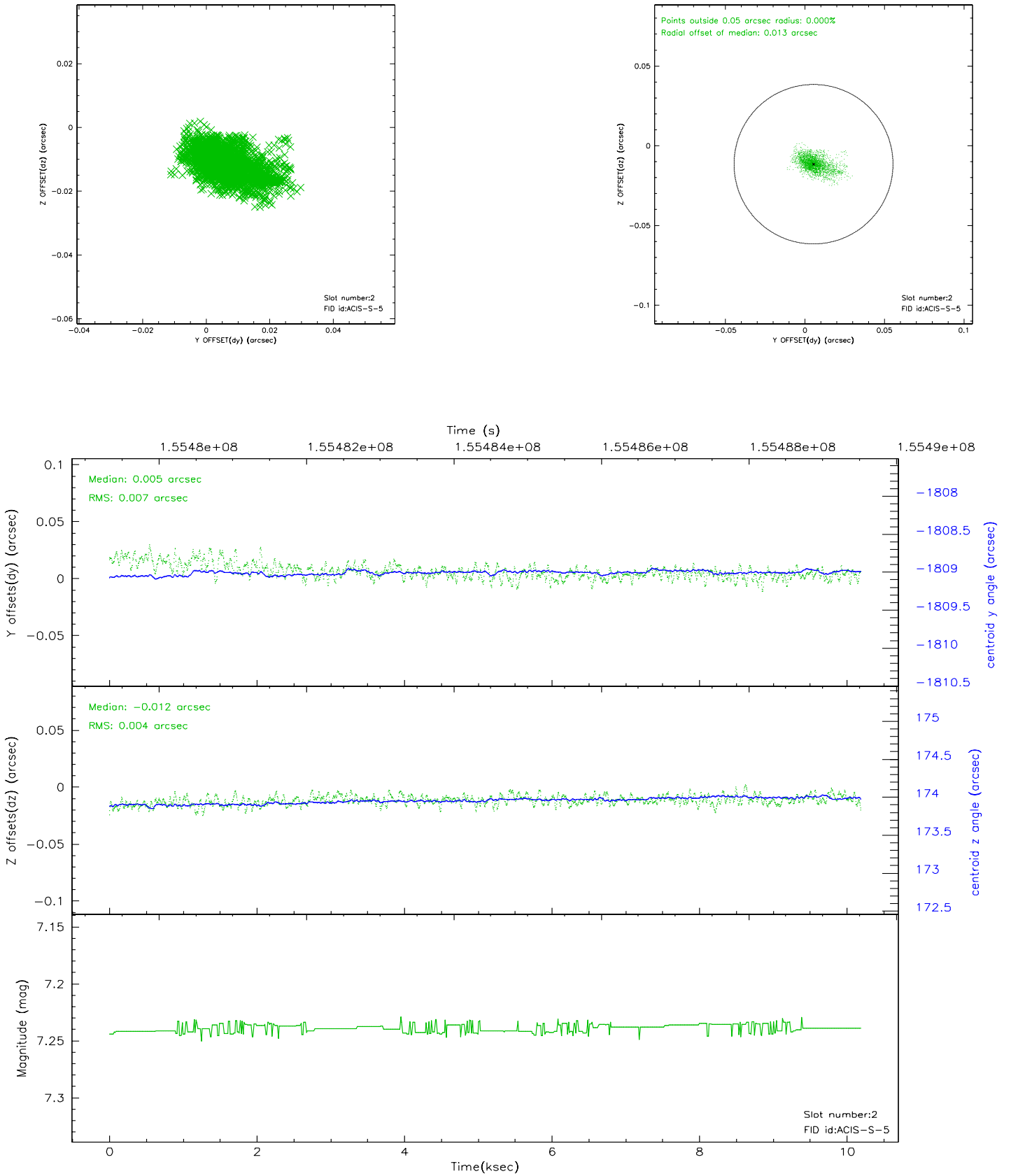
### 2.5.1 Slot 0



## 2.5.2 Slot 1

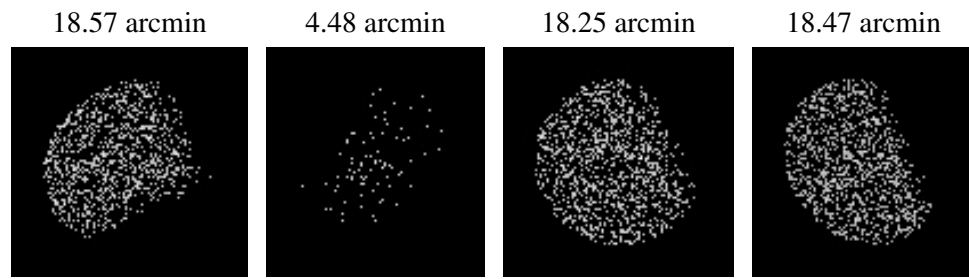


### 2.5.3 Slot 2





### 3 Point Sources



## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2006.10.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.961

### A.2 Comments