

# V&V Reference Report

## L2 ASCDS Version : 7.6.9

Observation 1971 - L2 Version 001  
Chandra X-Ray Center

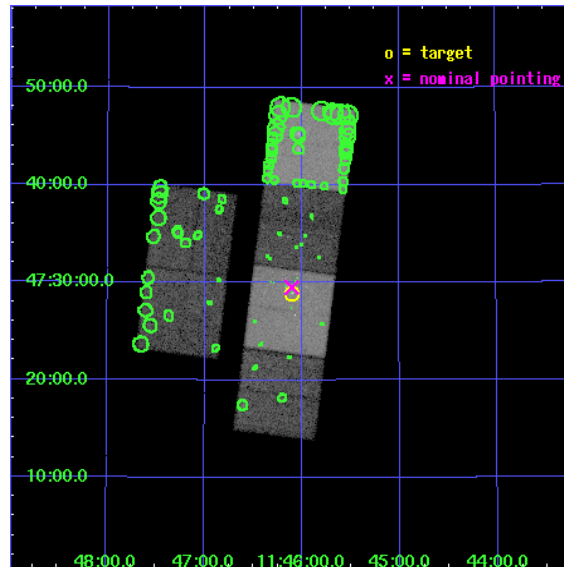
L2 Processing Date : Nov 2 2006

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# 1 Front

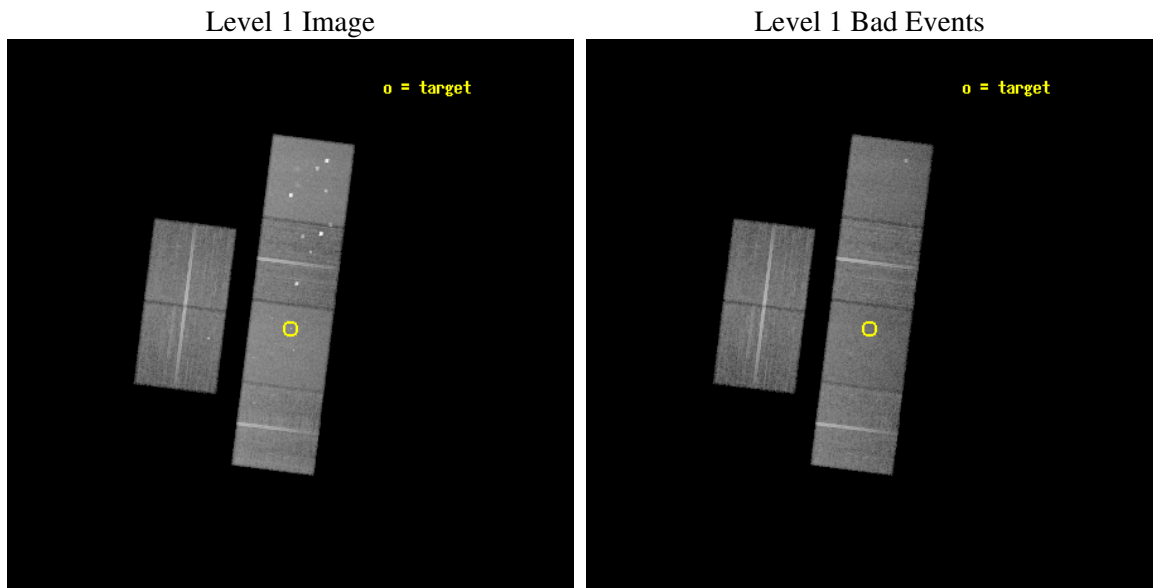
seq_num	500148
obs_id	1971
title	CONTINUING CHANDRA OBSERVATIONS OF THE X-RAY SUPERNOVAE SN 1999EM AND SN 1998S
observer	Prof. Walter Lewin
object	SN 1998S
dtcycle	0
cycle	P
ra_targ	176.525417
dec_targ	47.482167
ra_nom	176.52622207743
dec_nom	47.491972863401
roll_nom	97.20859793569
revision	2
ontime	29552.000027522
livetime	29177.794809096
ontime2	29552.000027522
ontime3	29552.000027522
ontime5	29552.000027522
ontime6	29552.000027522
ontime7	29552.000027522
ontime8	29552.000027522
l2events	280735



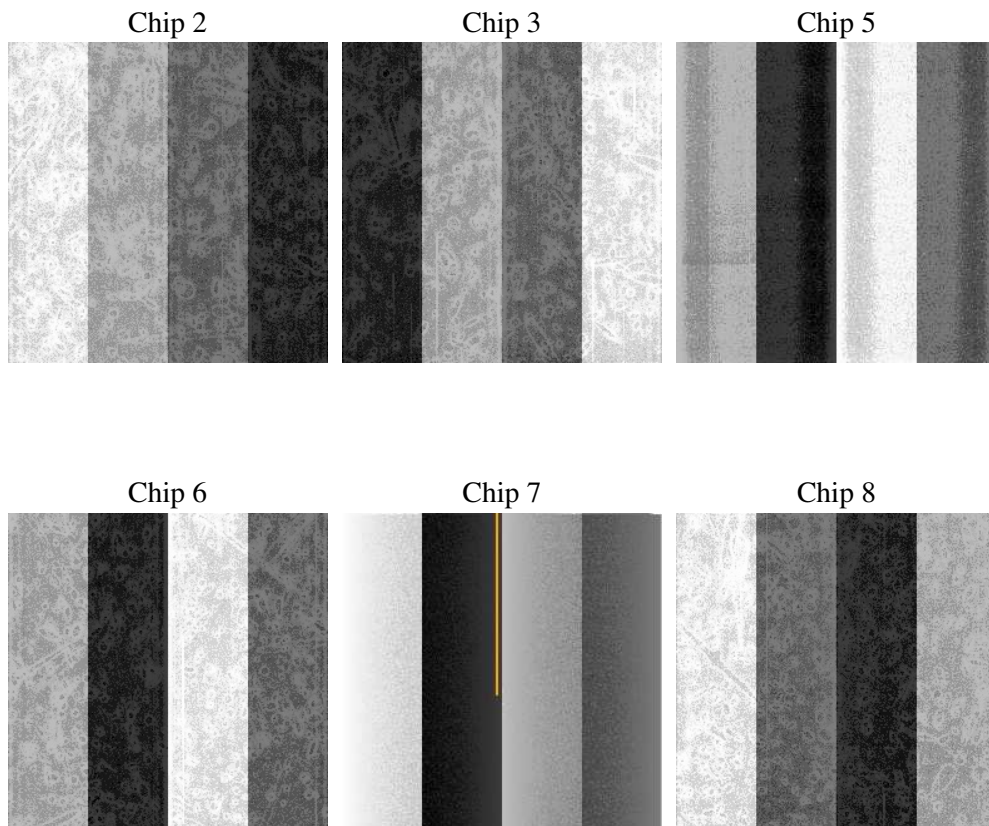
## 2 OBI

### 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	2006-11-02T22:15:49
revision	2

sched_exp_time	29600.000000
ontime	29557.925875276
ontime2	29557.925875276
ontime3	29557.925875276
ontime5	29557.925875276
ontime6	29557.925875276
ontime7	29557.925875276
ontime8	29557.925875276
l1events	1282323

### 2.1.4 Events

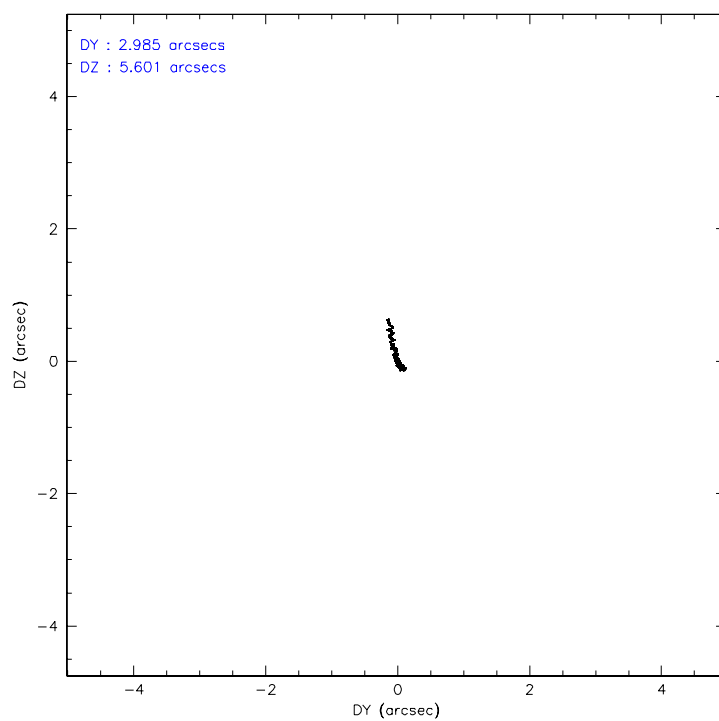
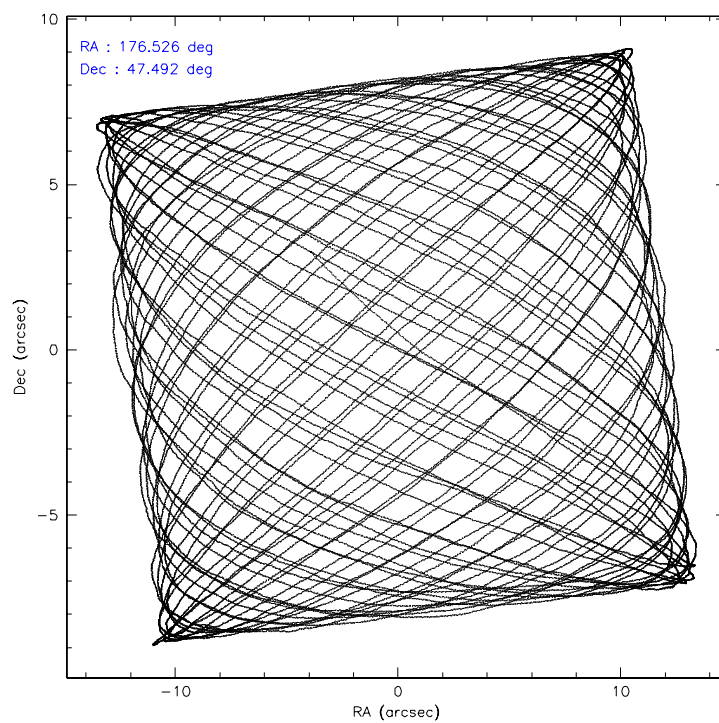
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	184100	173990	266441	197410	234197	226185
rejected events	162113	151673	140215	161241	141080	177817
rejected %	88%	87%	52%	81%	60%	78%

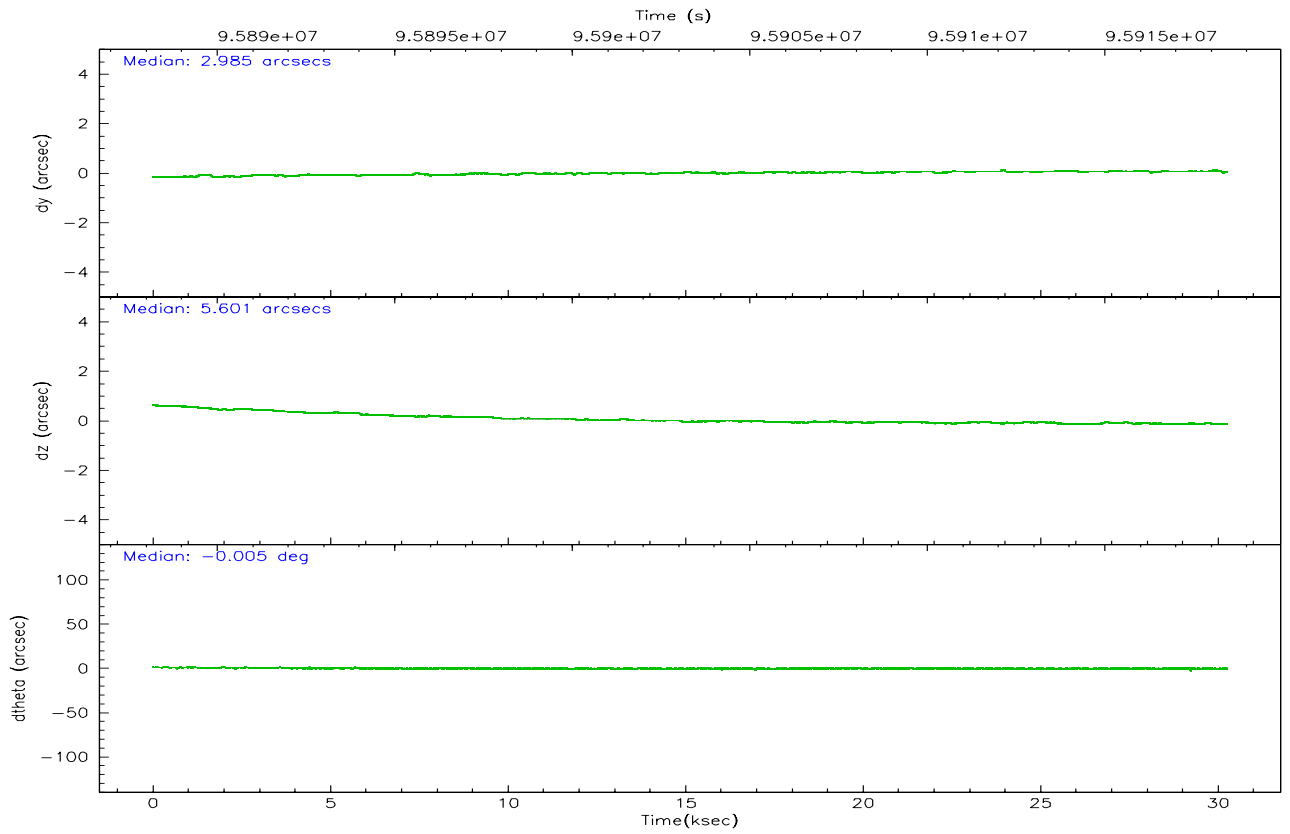
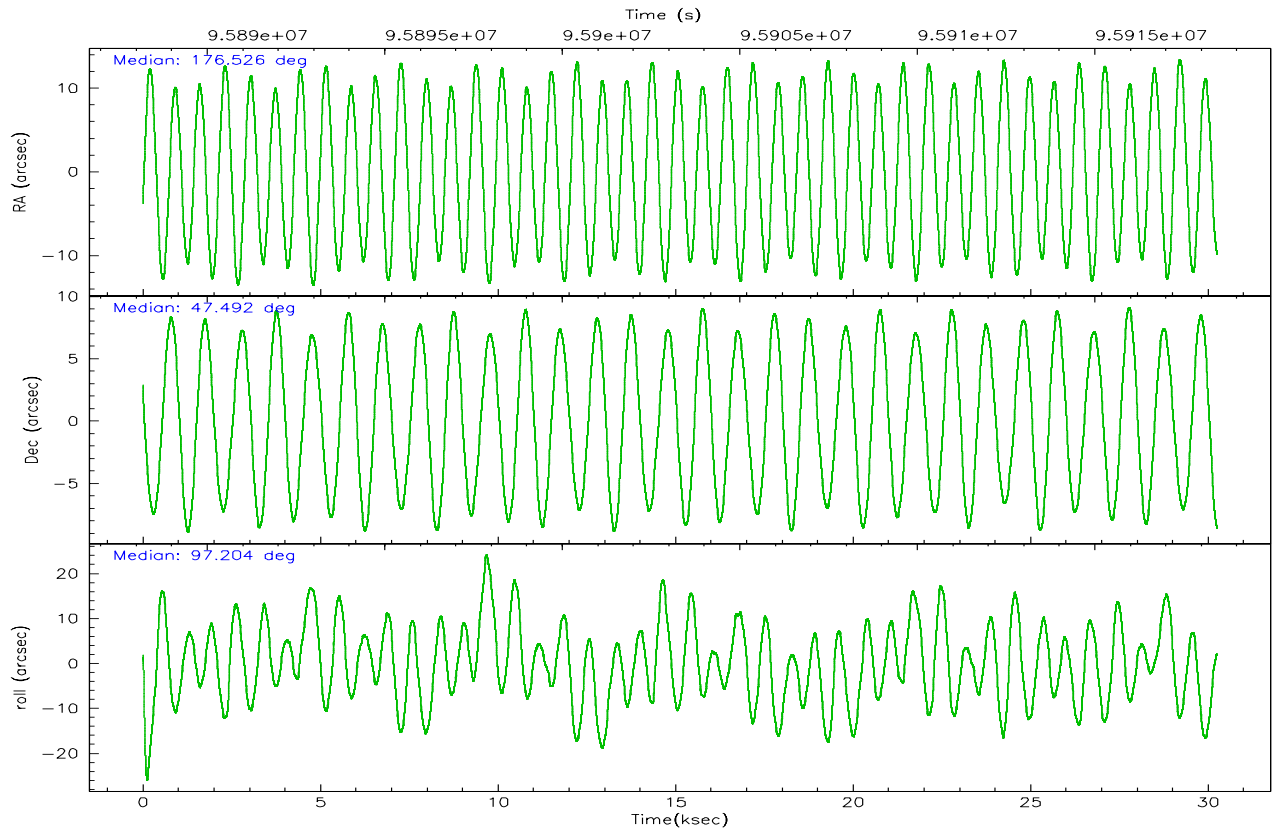
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	9271	9912	17589	22543	6360	16339
	5%	5%	6%	11%	2%	7%
grade 1 events	90	94	863	143	159	138
	0%	0%	0%	0%	0%	0%
grade 2 events	4946	4600	36804	4927	22596	10297
	2%	2%	13%	2%	9%	4%
grade 3 events	1890	1934	2938	2180	5072	5056
	1%	1%	1%	1%	2%	2%
grade 4 events	1926	2059	5153	2160	4988	4722
	1%	1%	1%	1%	2%	2%
grade 5 events	6194	6632	12448	7569	15609	9418
	3%	3%	4%	3%	6%	4%
grade 6 events	3955	3815	63765	4364	54111	11959
	2%	2%	23%	2%	23%	5%
grade 7 events	155828	144944	126881	153524	125302	168256
	84%	83%	47%	77%	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
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
Pointing RA	176.550926	176.5262220774327	Subarray requested	NONE	NONE
Pointing Dec	47.470368	47.49197286340146	Alternating exposures requested	N	N
Pointing Roll	97.033753	97.20859793569009	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	95888847.184000	95887655.034537			
Observation start date	2001-01-14T19:46:23	2001-01-14T19:27:35			
Observation end time	95918447.184000	95919119.46074601			
Observation end date	2001-01-15T03:59:43	2001-01-15T04:11:59			
Read mode	TIMED	TIMED			

## 2.3 Aspect





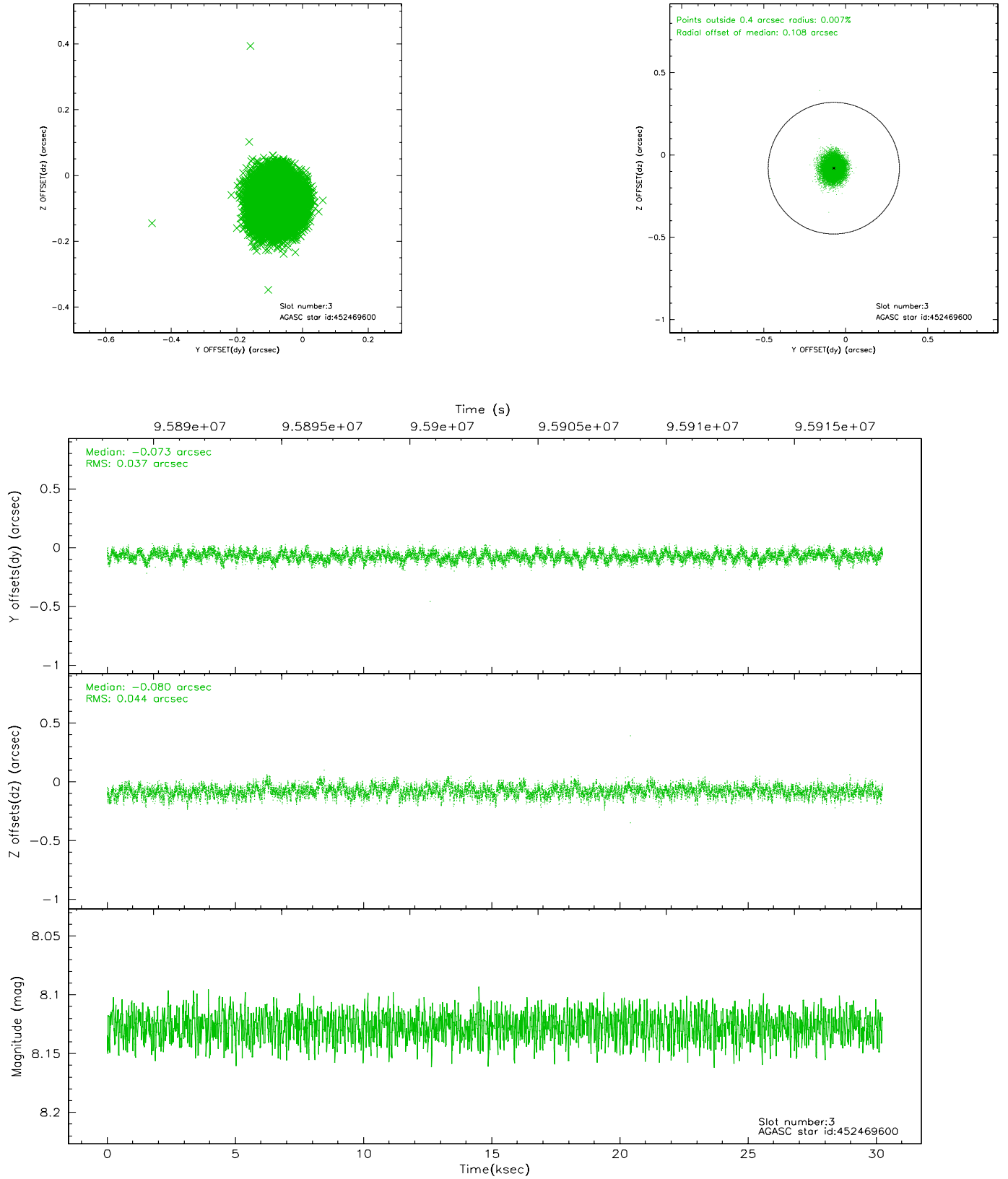
### Slot Statistics

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	7378	-0.016	0.035	0.009	0.015	0.000000	0.000000	-755.61	-1726.74
1	FID	ACIS-S-4	7.21	7376	-0.058	-0.002	0.009	0.017	0.000000	0.000000	2157.56	181.68
2	FID	ACIS-S-5	7.24	7377	0.043	-0.024	0.007	0.013	0.000000	0.000000	-1808.33	175.35
3	GUIDE	452469600	8.13	14755	-0.073	-0.080	0.062	0.098	176.377116	47.666878	754.00	332.68
4	GUIDE	452470432	9.87	14749	-0.039	0.098	0.101	0.161	176.712094	47.890435	1453.76	-570.51
5	GUIDE	452466128	10.22	14707	0.120	0.223	0.110	0.178	177.327482	47.076111	-1631.98	-1716.40
6	GUIDE	452469288	9.96	14745	0.091	-0.066	0.137	0.220	176.480832	47.547282	295.81	135.68
7	GUIDE	452474496	9.79	14721	-0.115	-0.161	0.166	0.298	175.552399	47.604662	791.97	2344.72

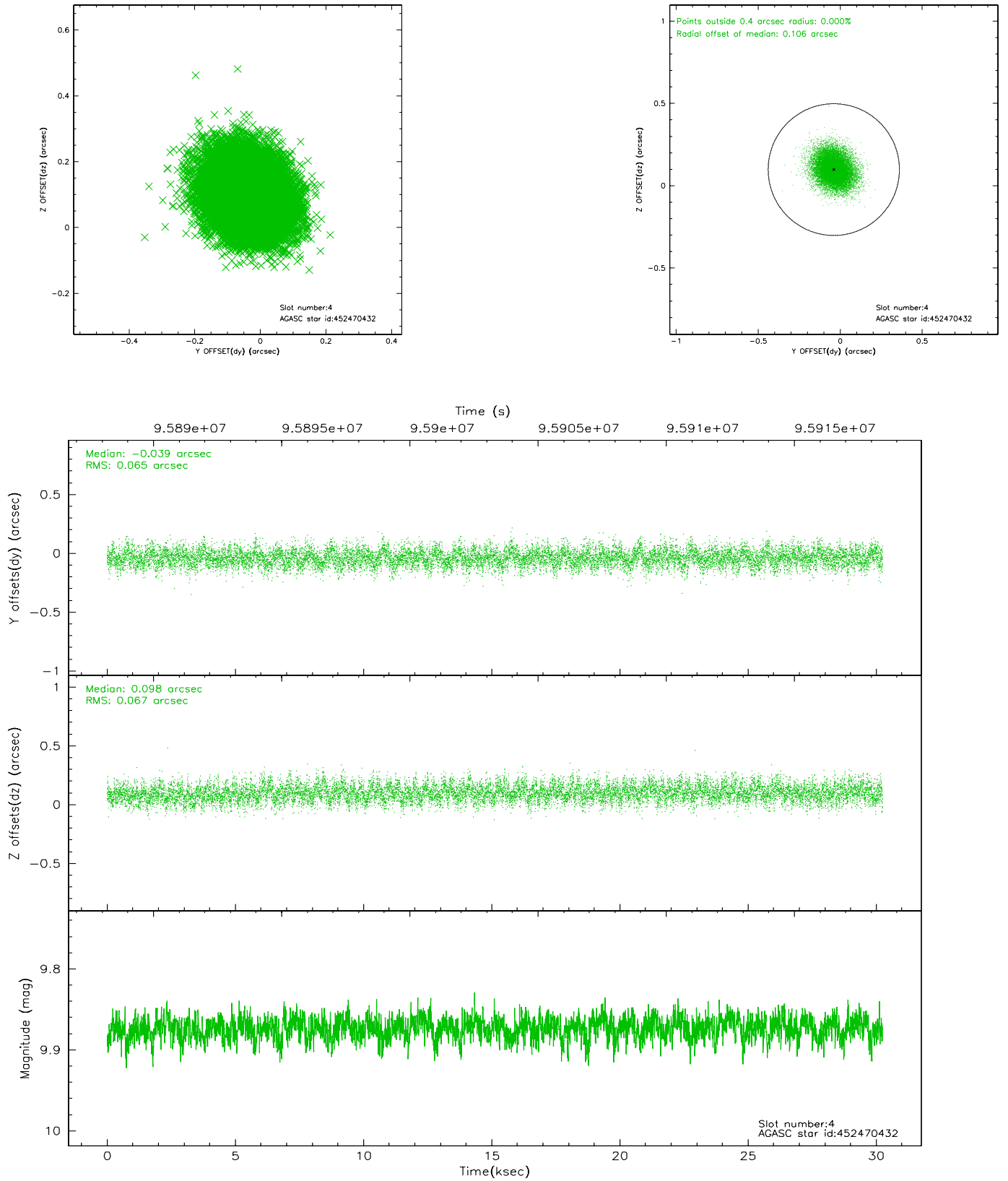


## 2.4 Star Slots

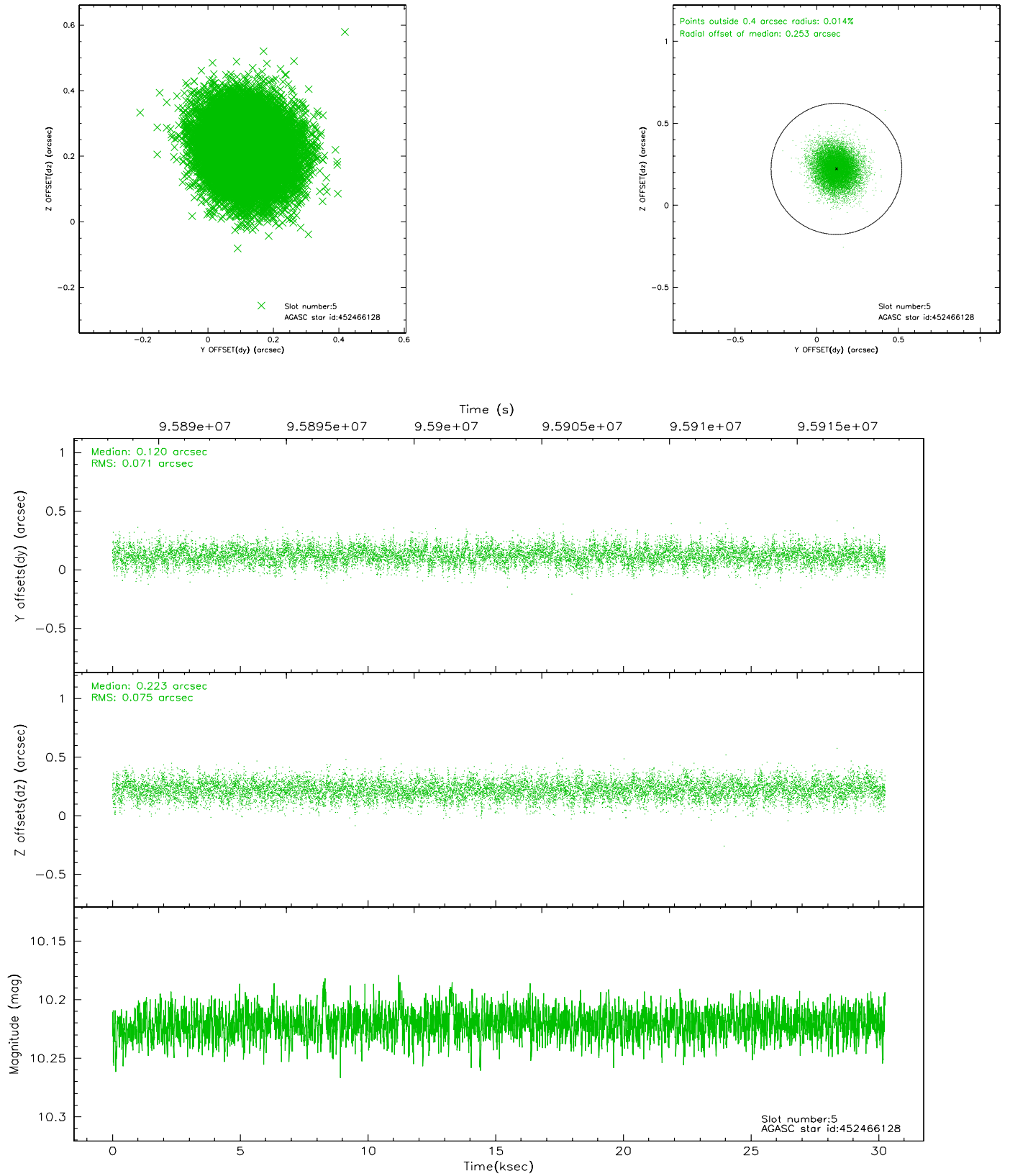
### 2.4.1 Slot 3



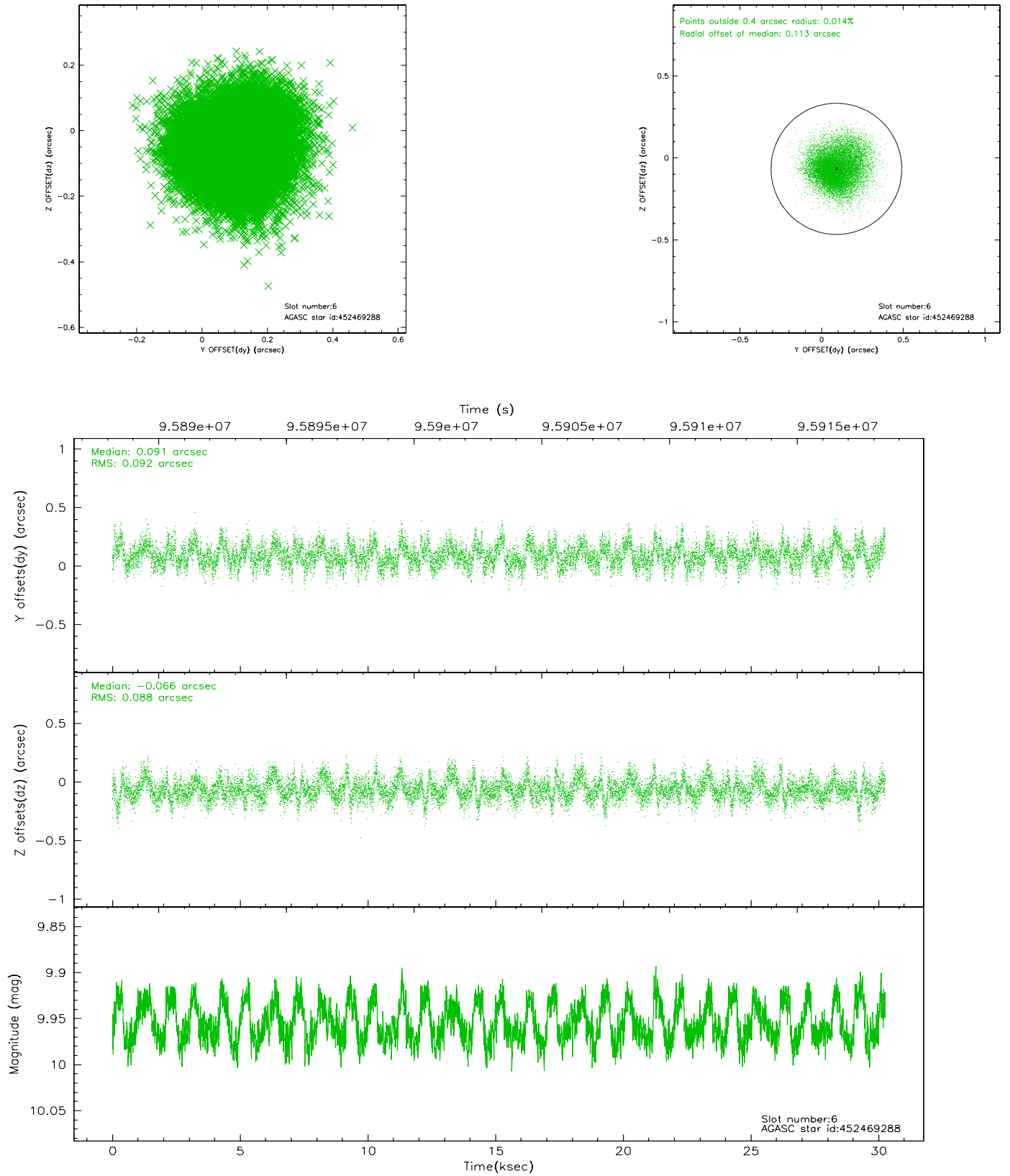
## 2.4.2 Slot 4



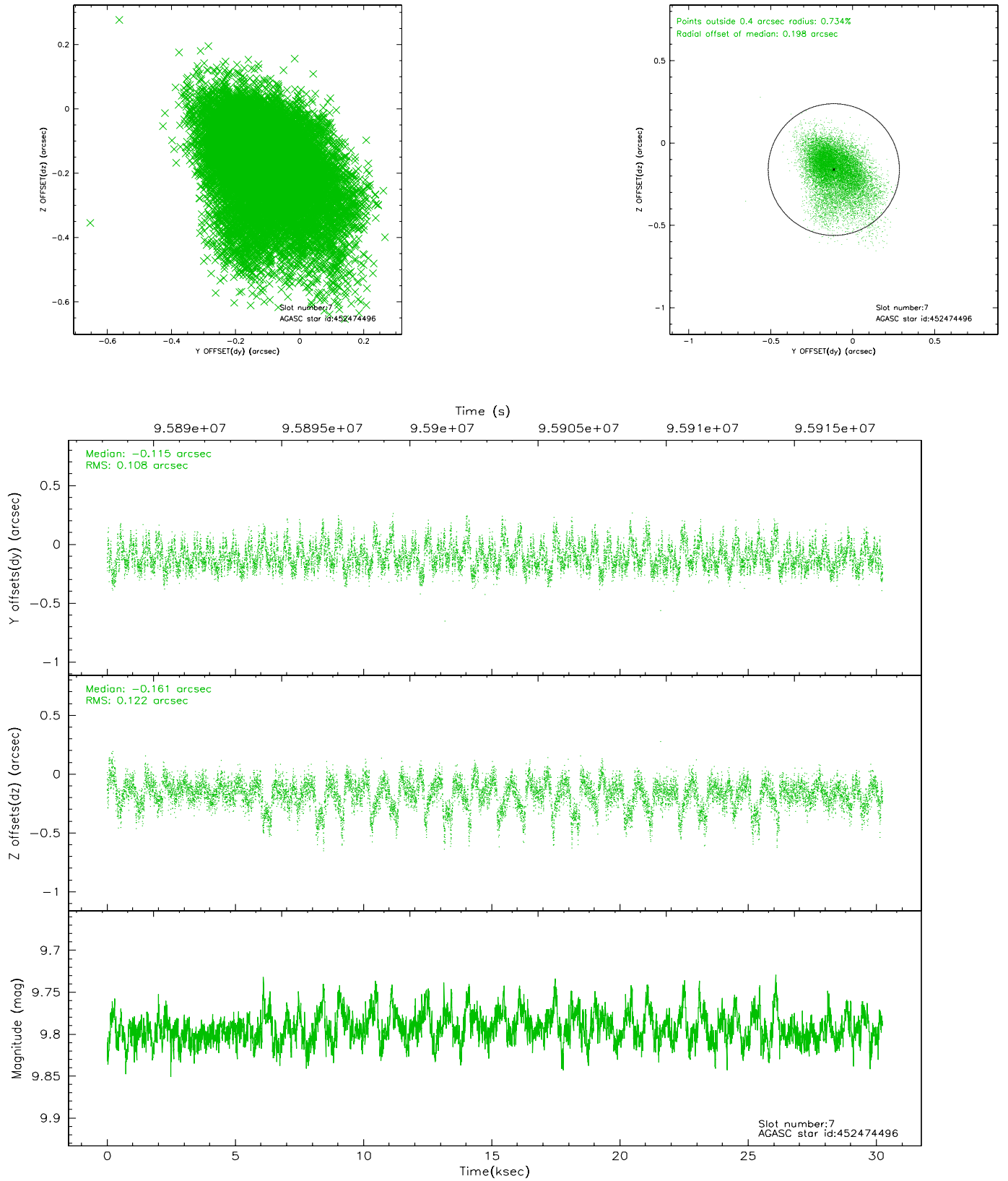
### 2.4.3 Slot 5



## 2.4.4 Slot 6

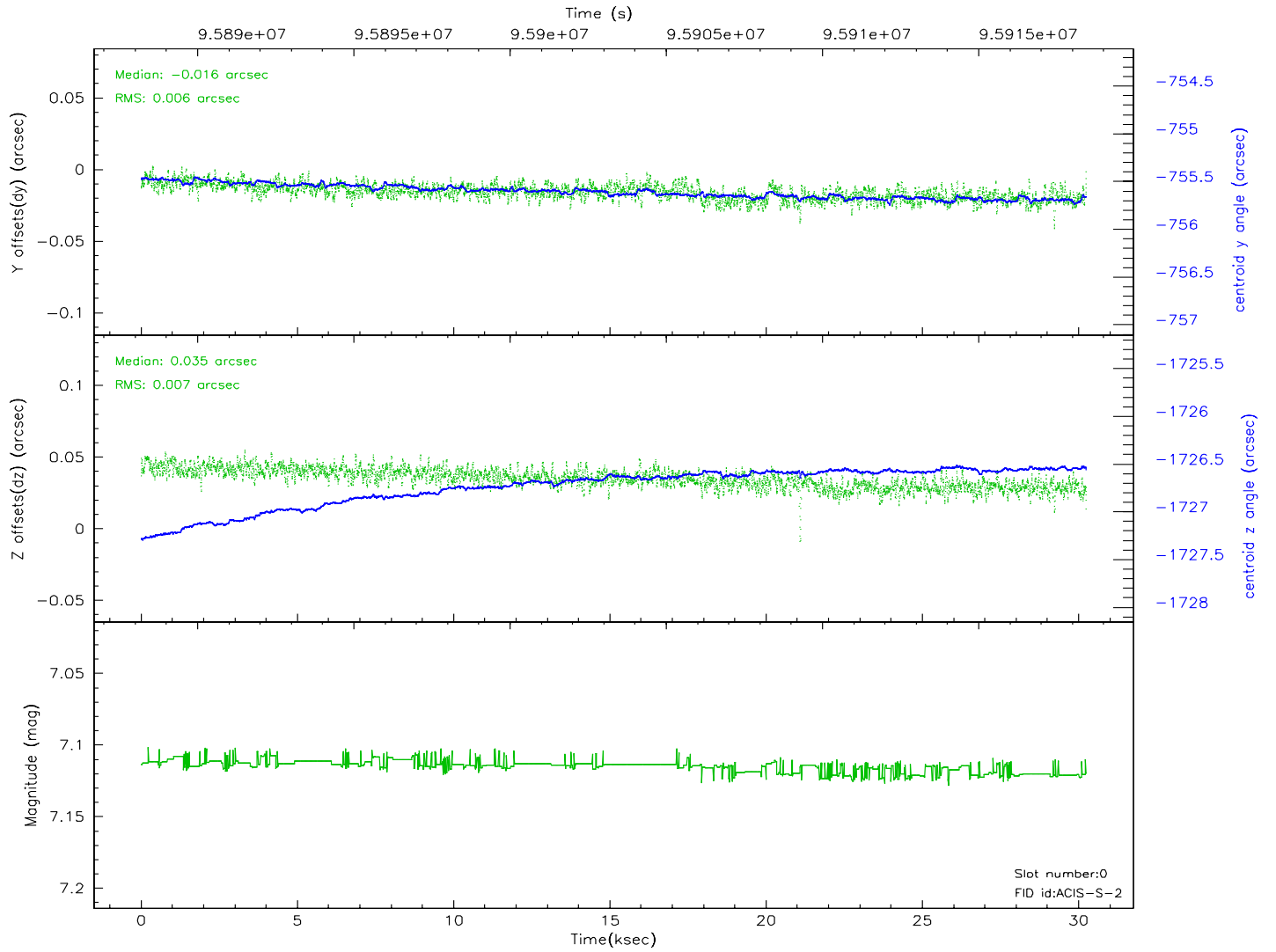
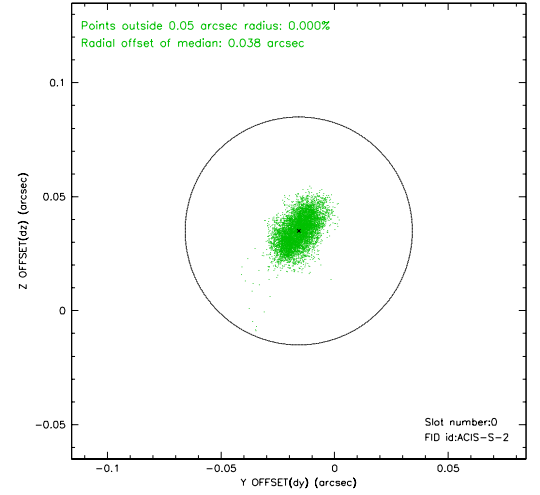
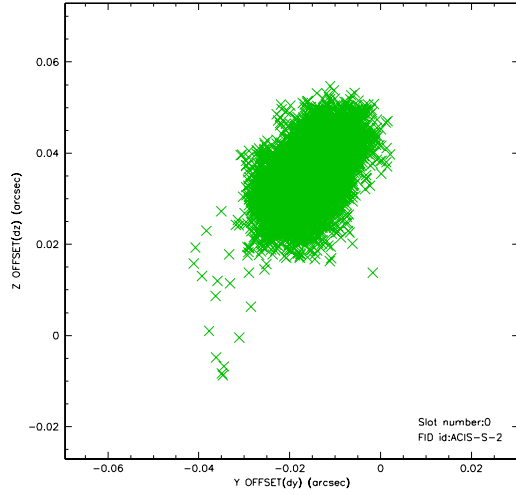


## 2.4.5 Slot 7

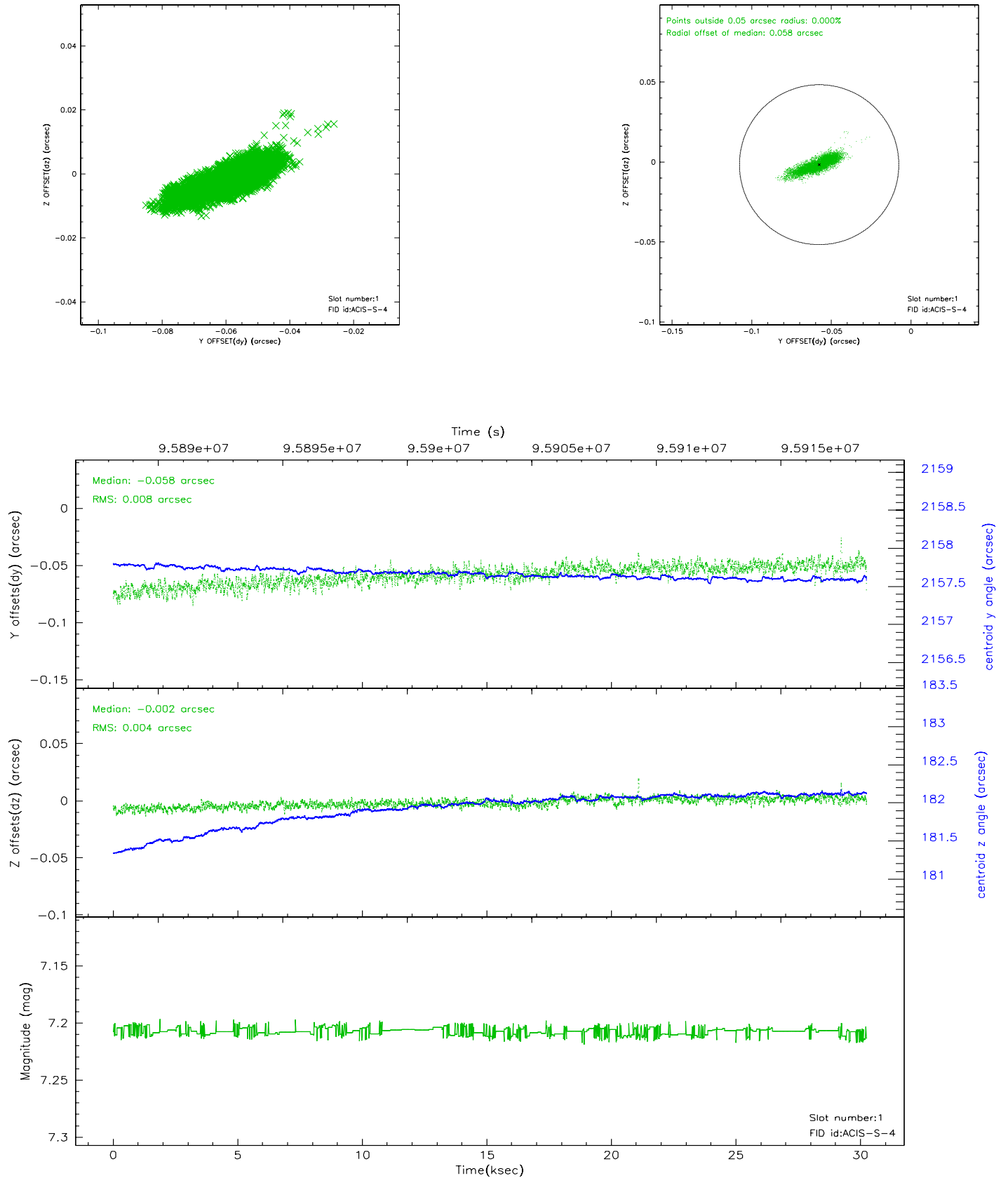


## 2.5 FID Slots

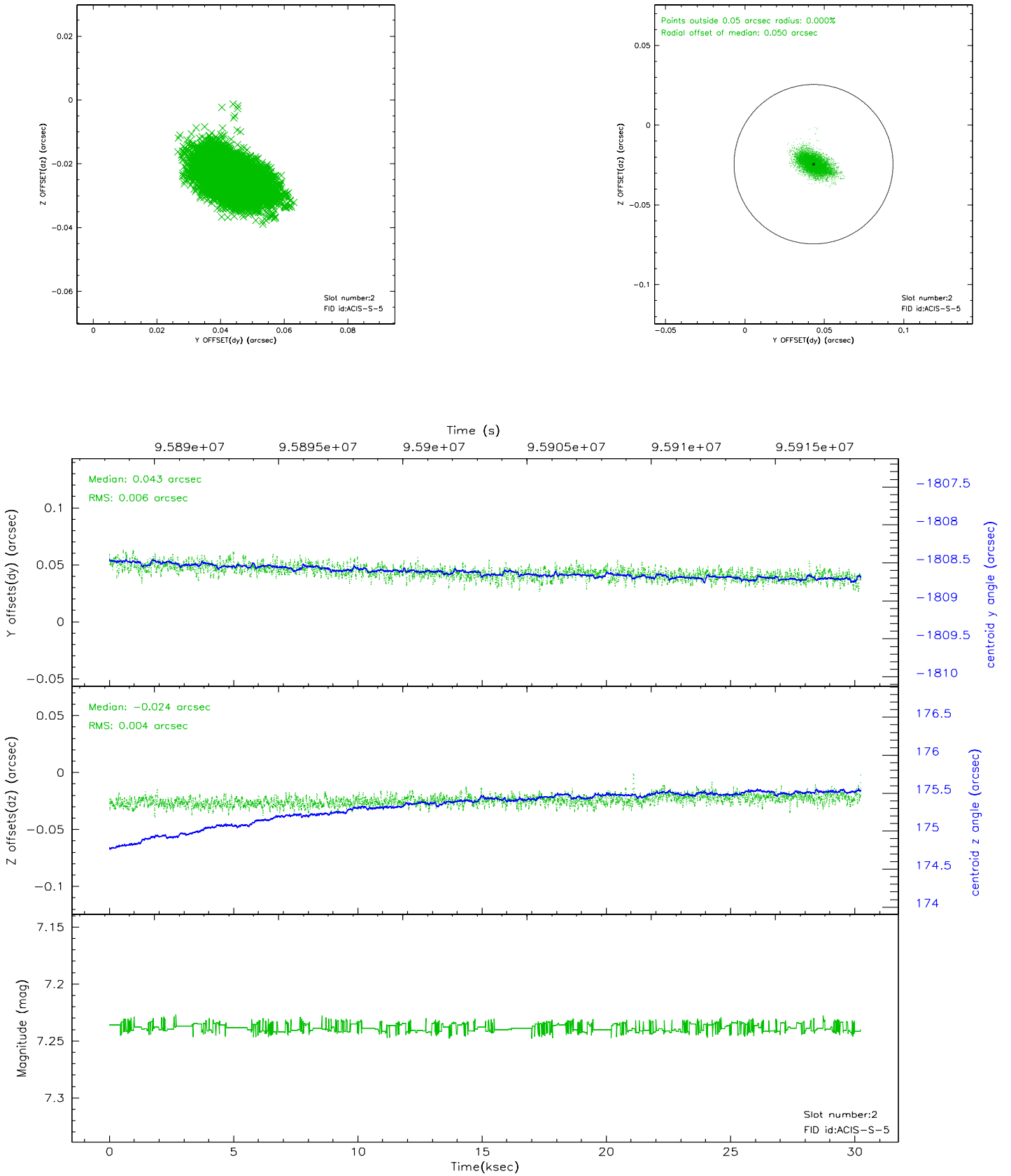
### 2.5.1 Slot 0



## 2.5.2 Slot 1

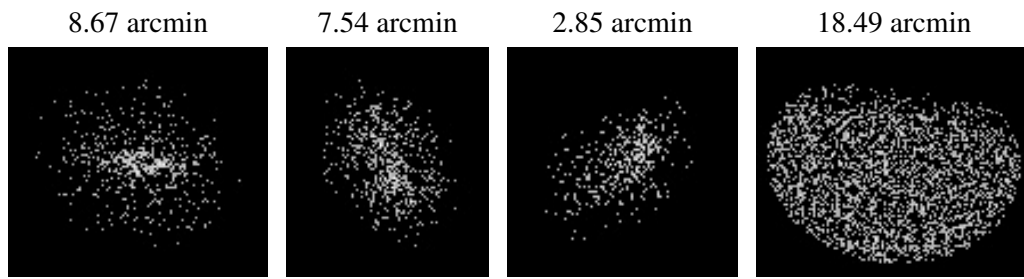


### 2.5.3 Slot 2





### 3 Point Sources



## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2006.11.06
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	29.552

### A.2 Comments