

# V&V Reference Report

## L2 ASCDS Version : 7.6.9

Observation 1969 - L2 Version 001  
Chandra X-Ray Center

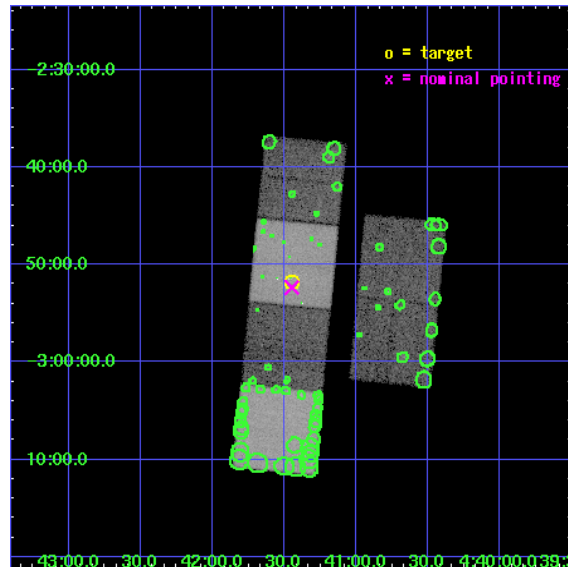
L2 Processing Date : Nov 7 2006

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# 1 Front

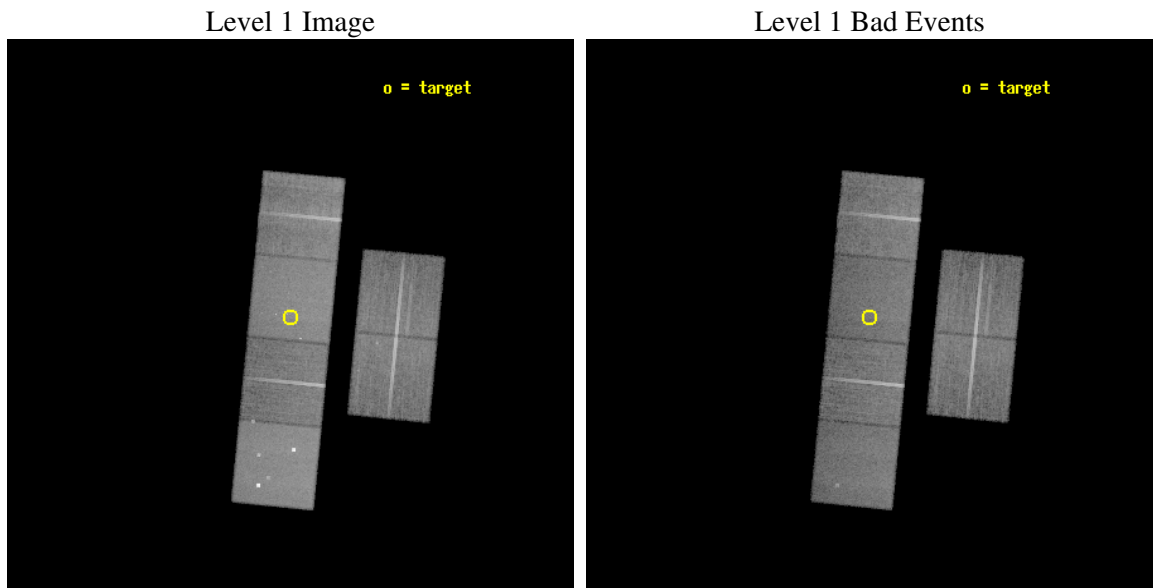
seq_num	500146
obs_id	1969
title	CONTINUING CHANDRA OBSERVATIONS OF THE X-RAY SUPERNOVAE SN 1999EM AND SN 1998S
observer	Prof. Walter Lewin
object	SN 1999EM
dtcycle	0
cycle	P
ra_targ	70.362917
dec_targ	-2.862694
ra_nom	70.362099540761
dec_nom	-2.8724776568251
roll_nom	275.5608252135
revision	2
ontime	27072.000025213
livetime	26729.198060092
ontime2	27055.795194045
ontime3	27068.759064957
ontime5	27072.000025213
ontime6	27065.518124625
ontime7	27072.000025213
ontime8	27065.518124625
l2events	272675



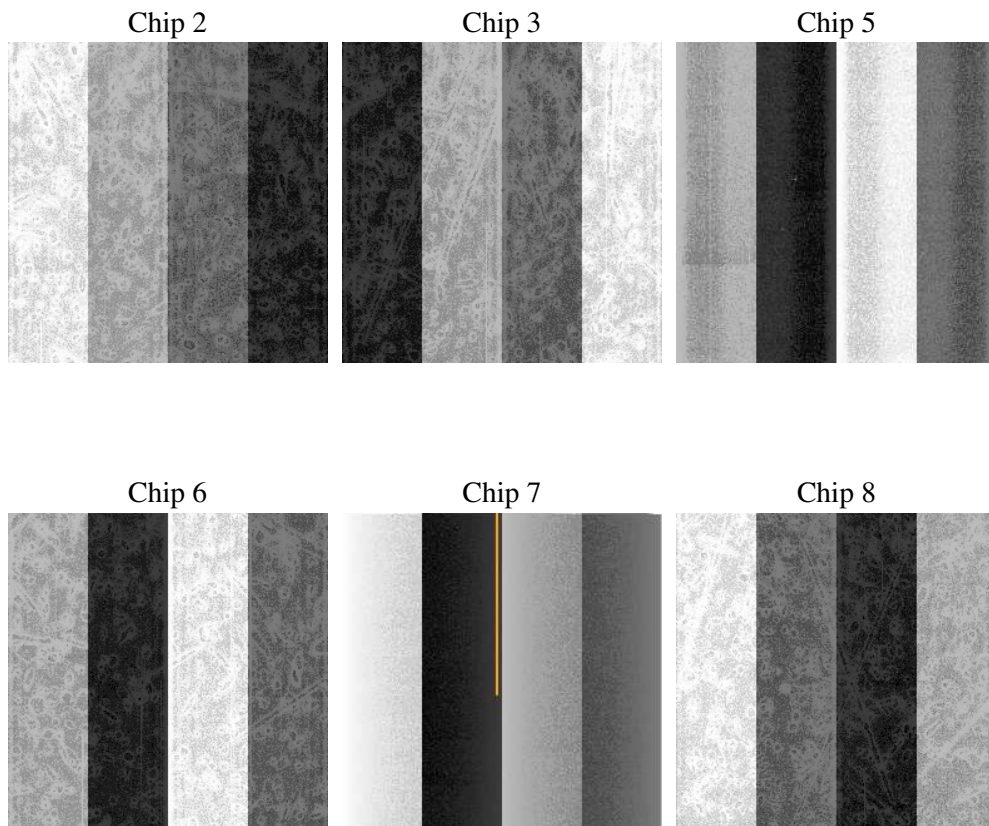
## 2 OBI

### 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	2006-11-07T21:40:50
revision	2

sched_exp_time	27000.000000
ontime	27078.535026565
ontime2	27062.330225334
ontime3	27078.535076395
ontime5	27078.535026565
ontime6	27072.053125978
ontime7	27078.535026565
ontime8	27075.294136062
l1events	1245909

### 2.1.4 Events

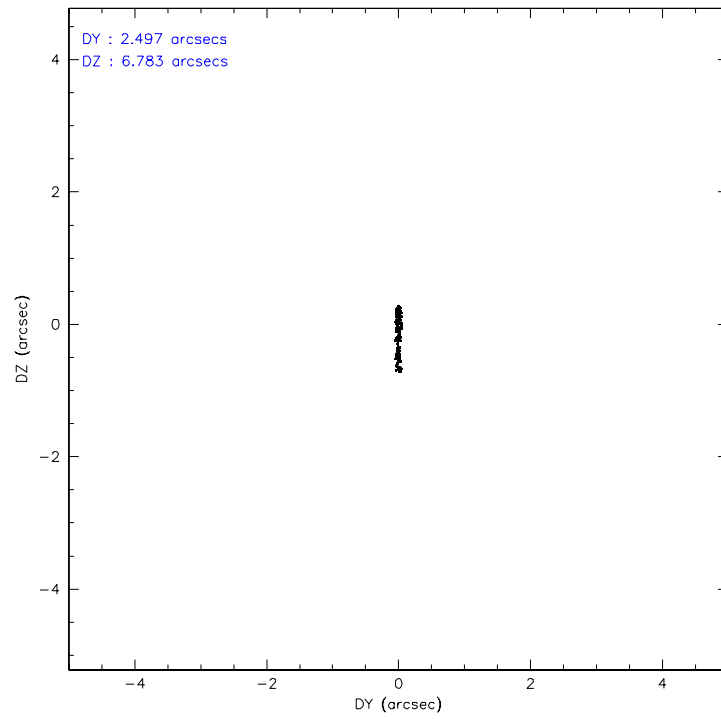
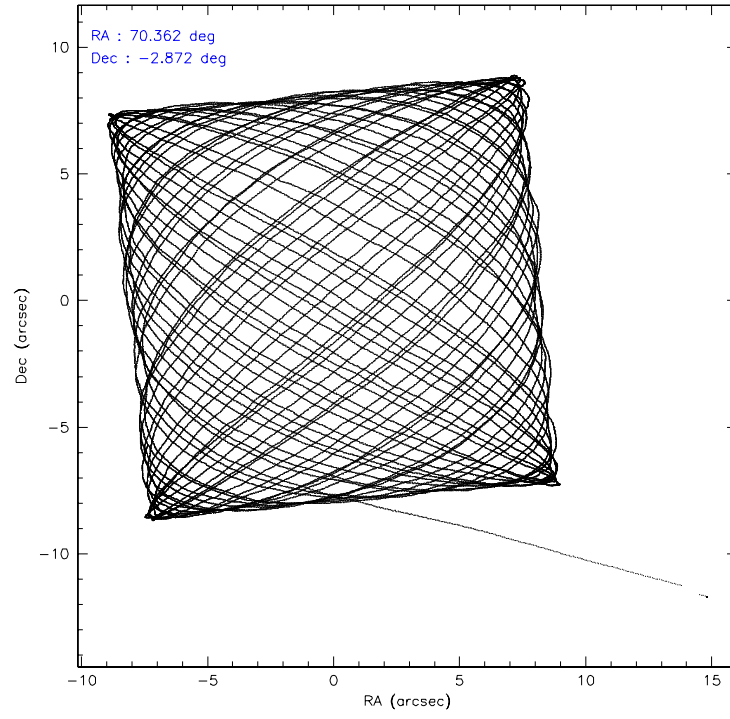
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	181612	174021	263786	174295	233032	219163
rejected events	161568	154772	136953	154290	137941	176185
rejected %	88%	88%	51%	88%	59%	80%

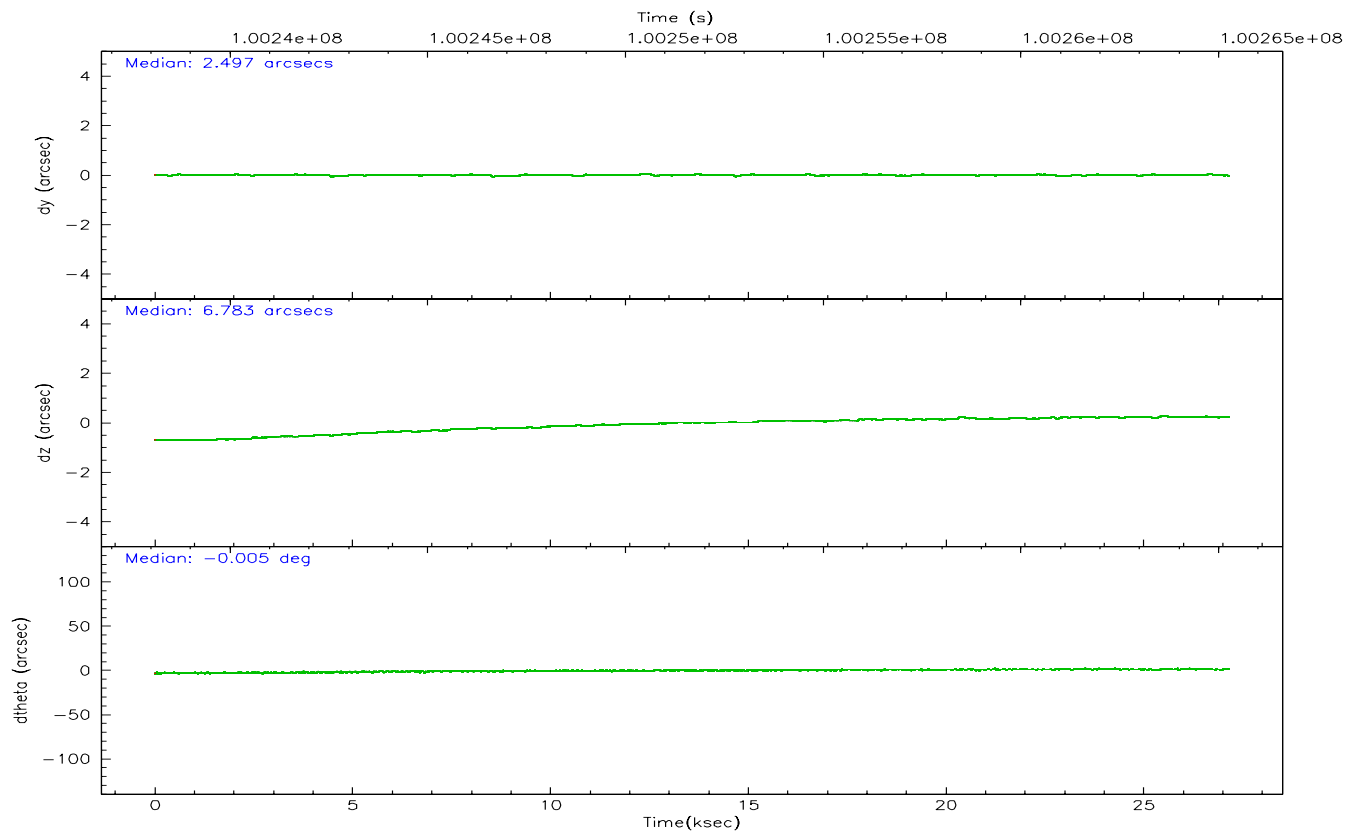
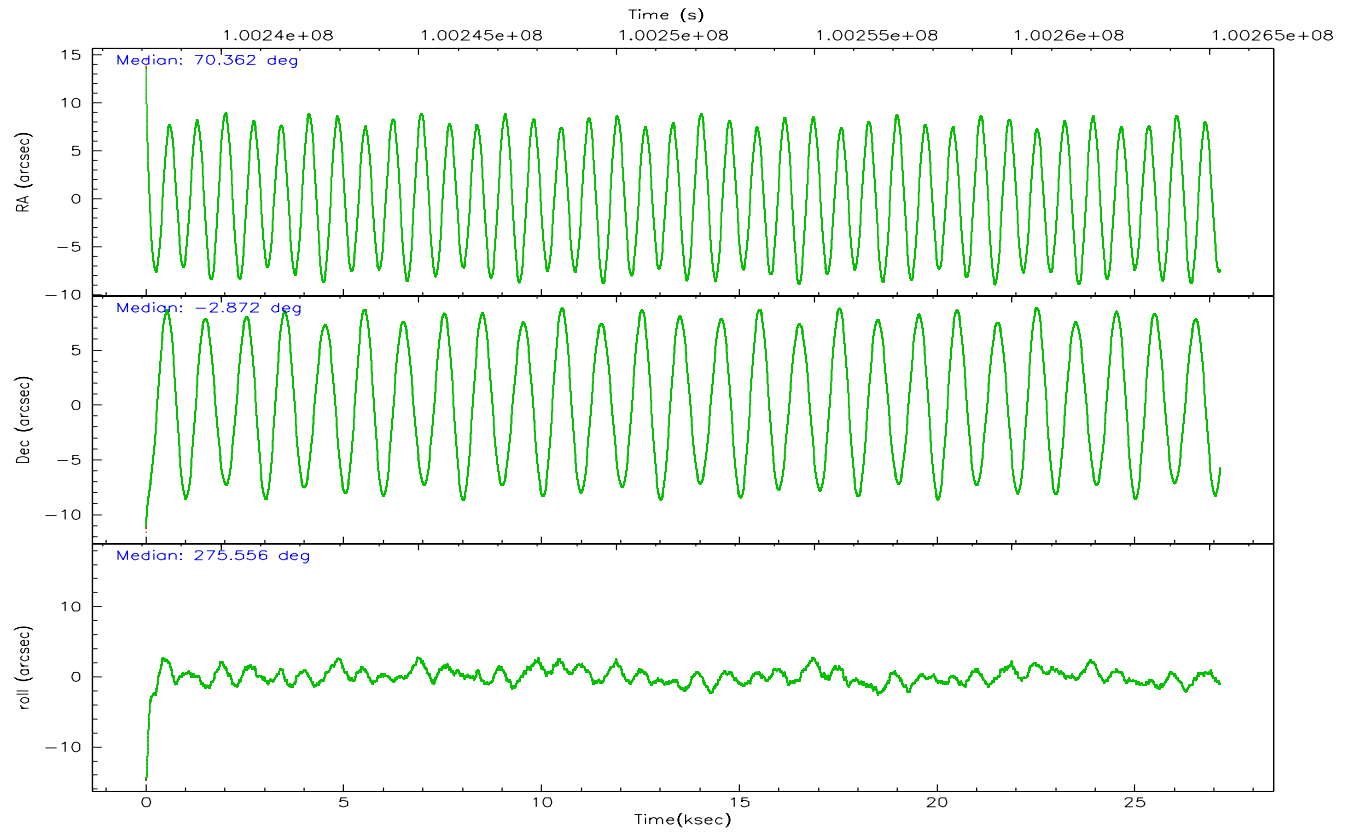
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	8577	8112	17004	8218	7106	13715
	4%	4%	6%	4%	3%	6%
grade 1 events	79	83	431	82	137	126
	0%	0%	0%	0%	0%	0%
grade 2 events	4288	3756	39822	3971	22519	9222
	2%	2%	15%	2%	9%	4%
grade 3 events	1907	1922	3120	1931	5409	4644
	1%	1%	1%	1%	2%	2%
grade 4 events	1812	1825	2878	1920	5299	4323
	0%	1%	1%	1%	2%	1%
grade 5 events	6170	6863	11830	7303	15453	9229
	3%	3%	4%	4%	6%	4%
grade 6 events	3470	3638	64047	3969	54784	11088
	1%	2%	24%	2%	23%	5%
grade 7 events	155309	147822	124654	146901	122325	166816
	85%	84%	47%	84%	52%	76%

## 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	70.345999	70.36209954076115	Subarray requested	NONE	NONE
Pointing Dec	-2.850395	-2.87247765682513	Alternating exposures requested	N	N
Pointing Roll	275.403398	275.5608252134993	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	100238265.184000	100237219.12711			
Observation start date	2001-03-06T03:56:41	2001-03-06T03:40:19			
Observation end time	100265265.184000	100266116.44073			
Observation end date	2001-03-06T11:26:41	2001-03-06T11:41:56			
Read mode	TIMED	TIMED			

## 2.3 Aspect





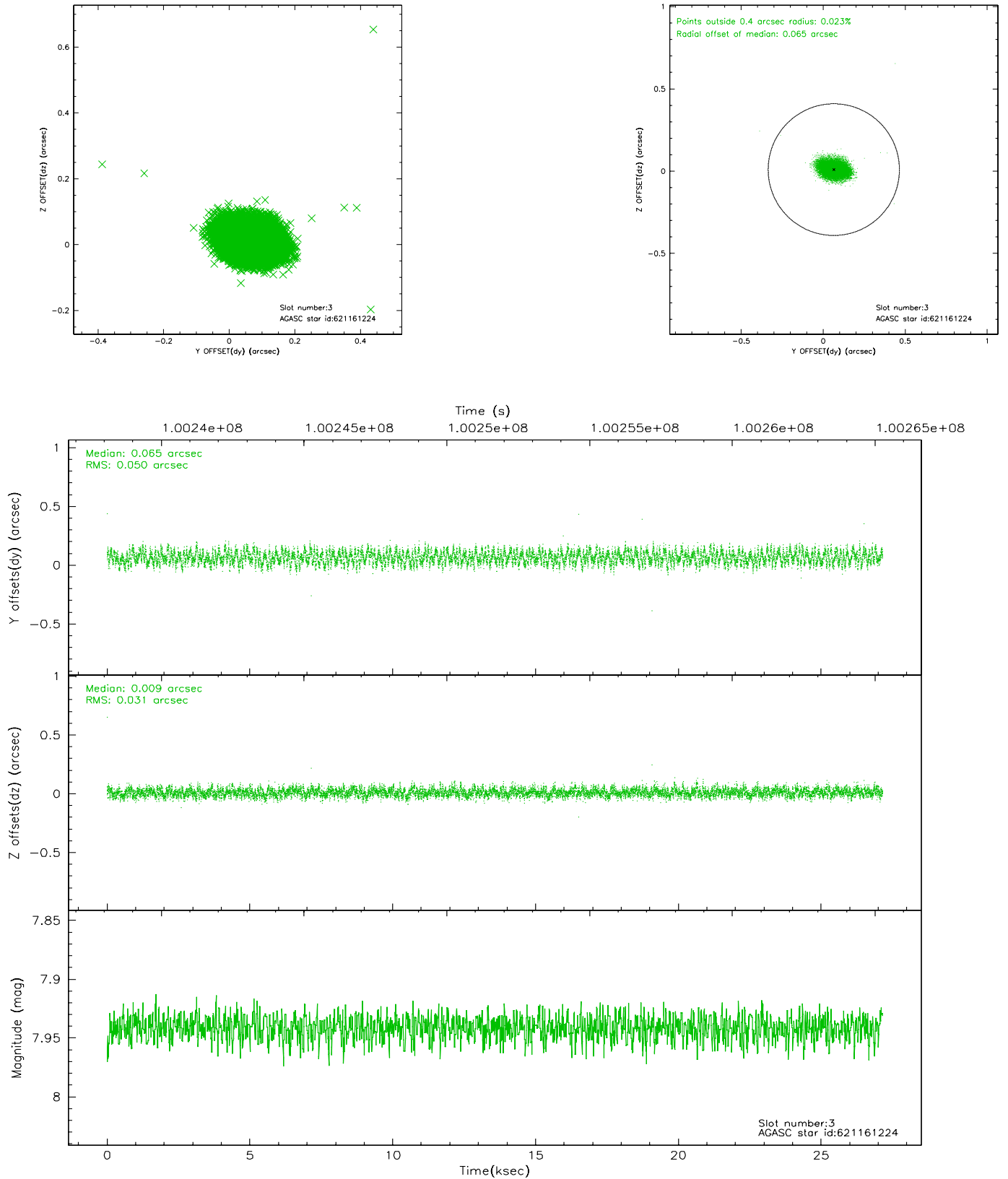
### Slot Statistics

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	6624	-0.011	0.021	0.010	0.016	0.000000	0.000000	-755.12	-1727.83
1	FID	ACIS-S-4	7.20	6621	-0.076	0.000	0.008	0.014	0.000000	0.000000	2158.03	180.56
2	FID	ACIS-S-5	7.23	6620	0.057	-0.012	0.008	0.013	0.000000	0.000000	-1807.79	174.29
3	GUIDE	621161224	7.94	13241	0.065	0.009	0.062	0.099	70.234546	-3.517454	2353.72	-624.60
4	GUIDE	621159792	7.80	13248	0.032	0.080	0.059	0.091	71.027177	-3.166580	1365.15	2330.61
5	GUIDE	621154624	8.98	13242	-0.147	0.012	0.062	0.105	70.402746	-2.451192	-1411.04	338.67
6	GUIDE	621154496	8.63	13245	-0.103	0.155	0.068	0.108	70.732100	-2.663664	-538.03	1445.81
7	GUIDE	621159736	9.43	13235	0.152	-0.257	0.082	0.135	69.932347	-3.381643	1765.13	-1660.07

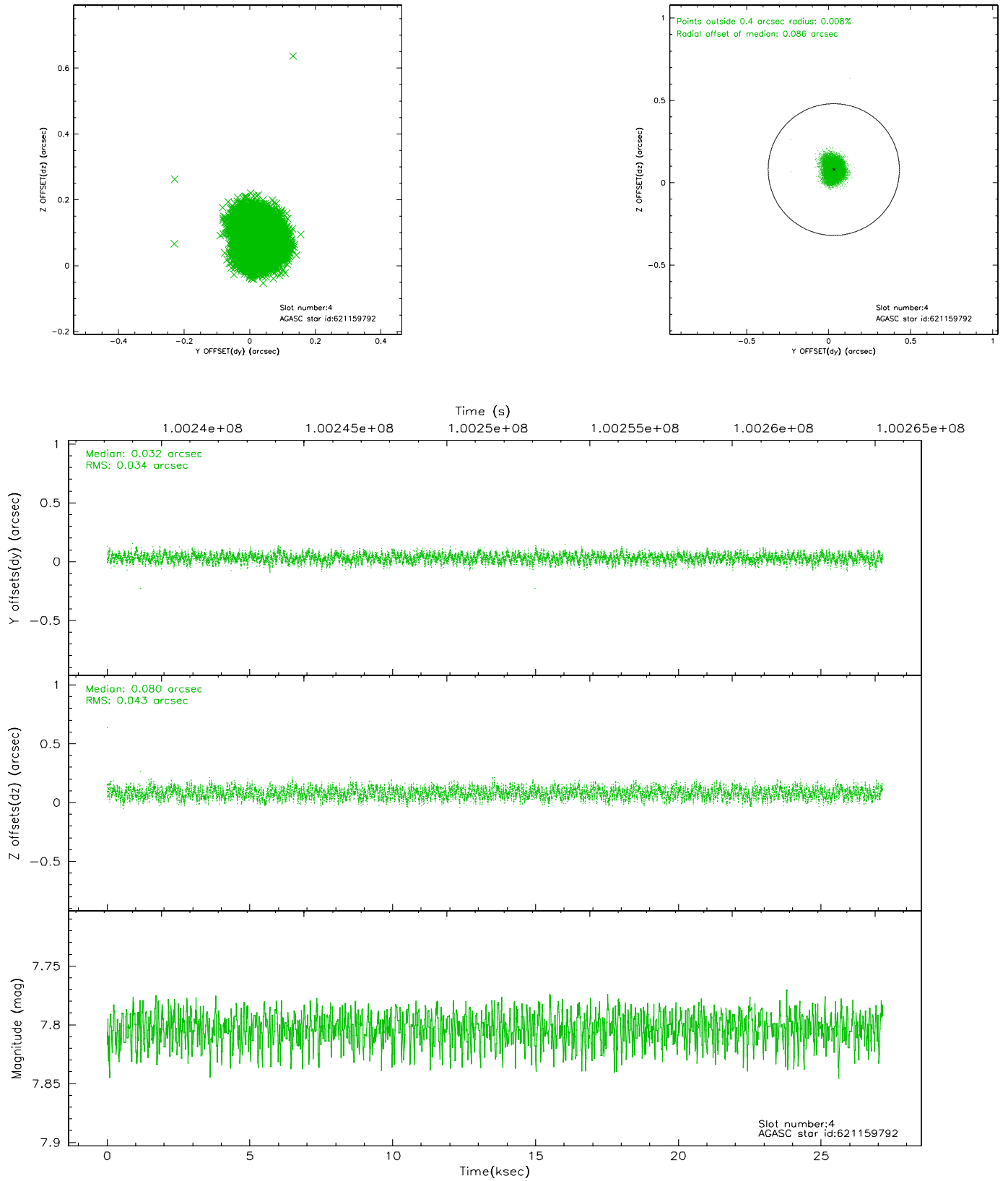


## 2.4 Star Slots

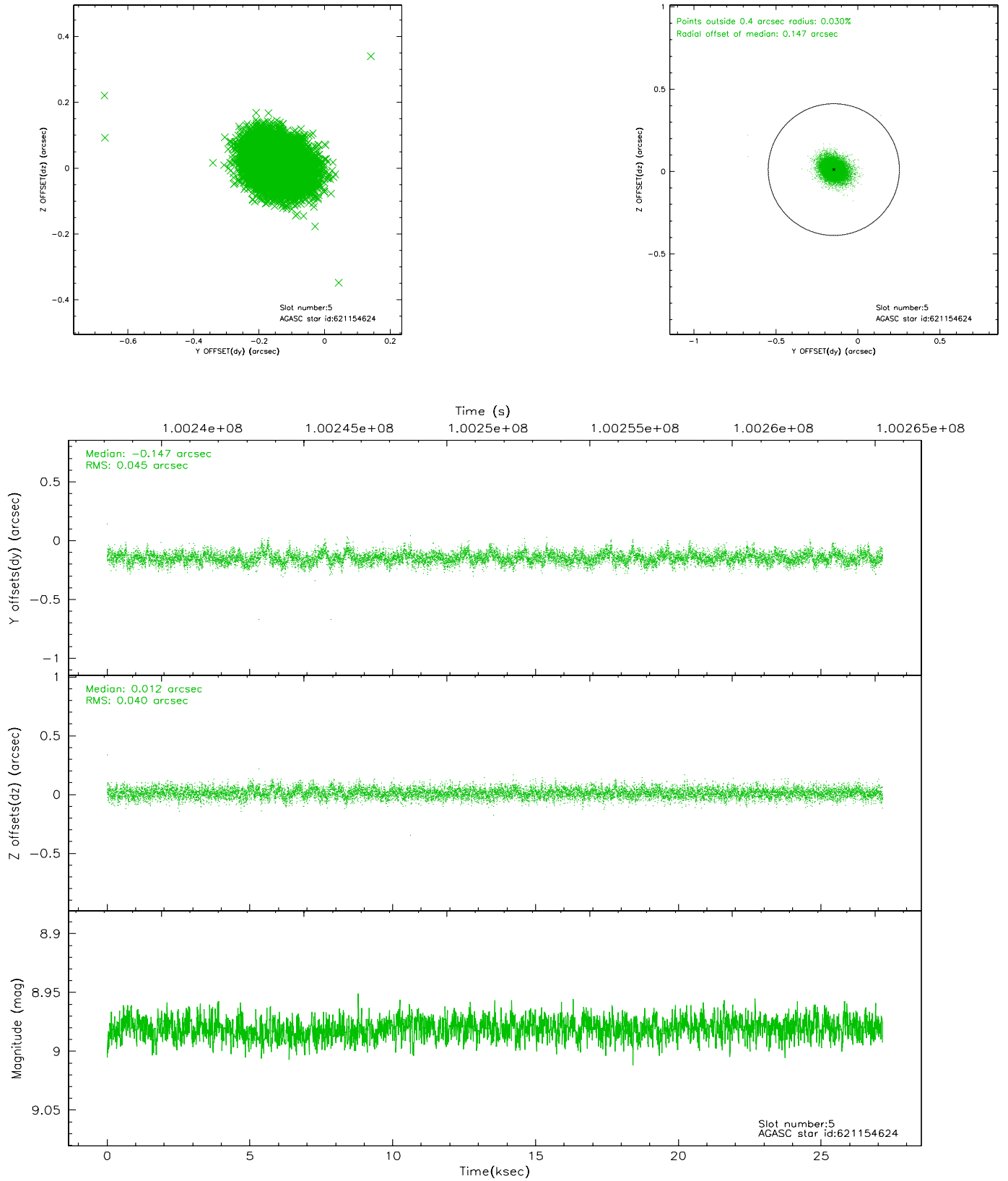
### 2.4.1 Slot 3



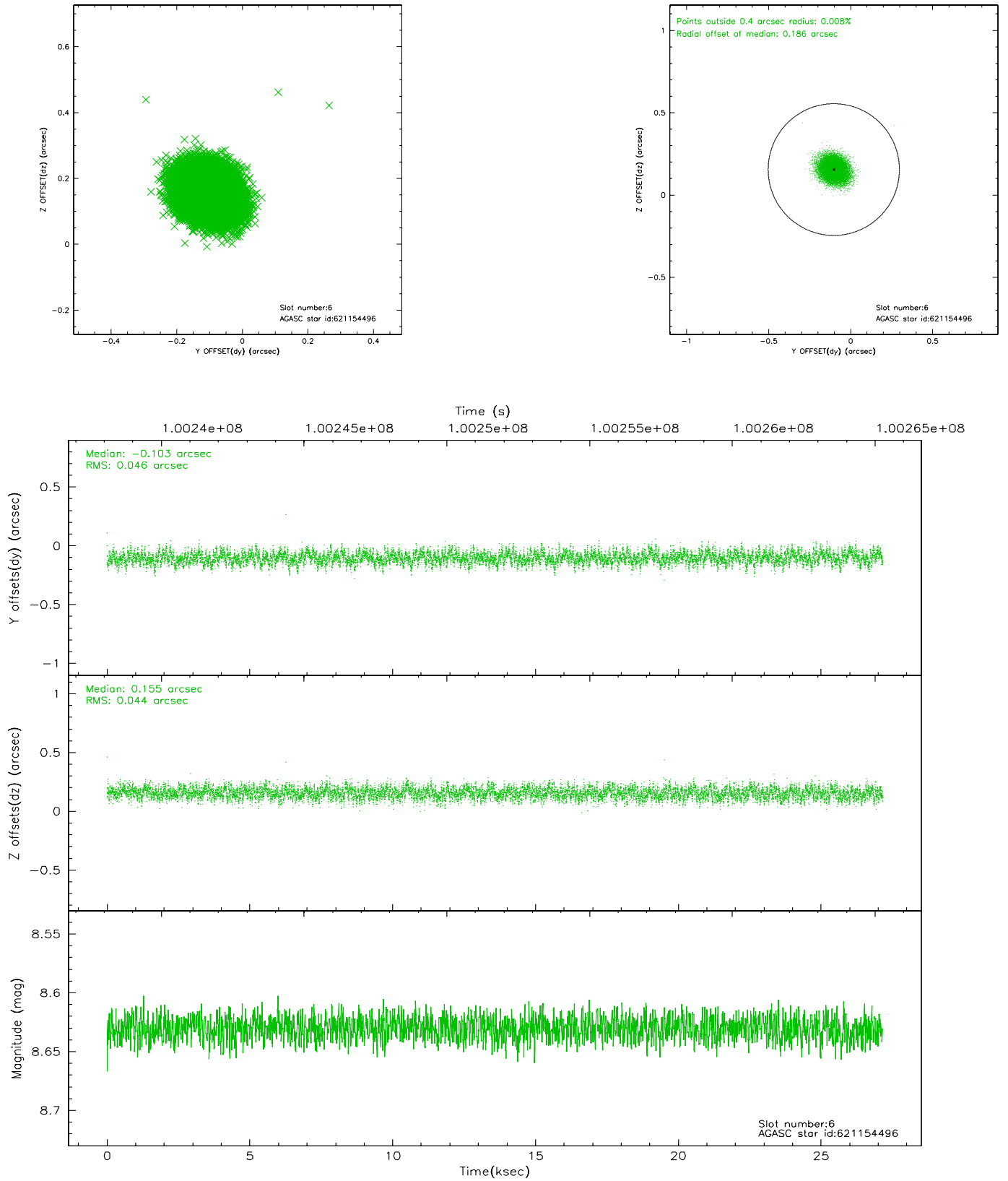
## 2.4.2 Slot 4



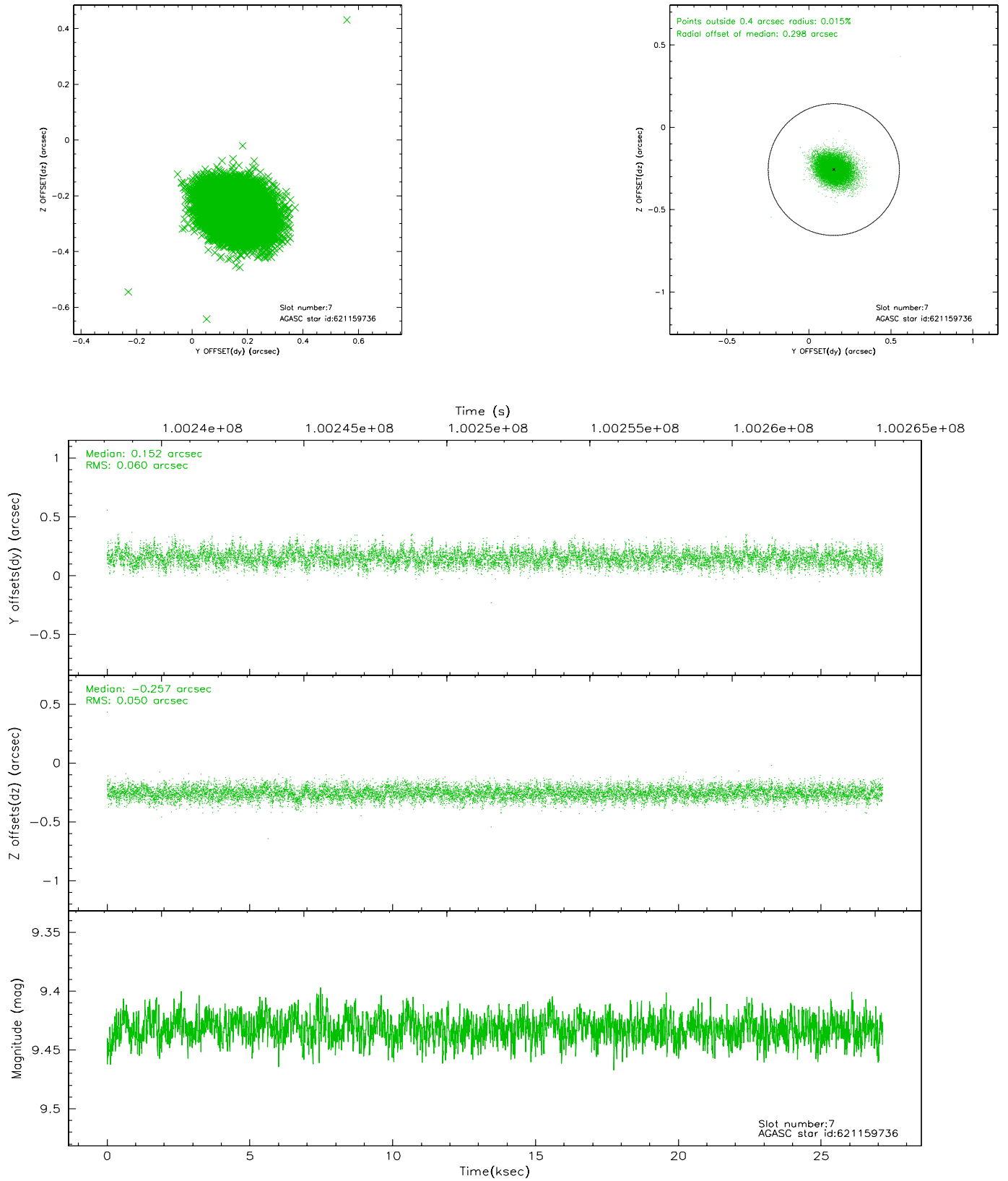
### 2.4.3 Slot 5



## 2.4.4 Slot 6

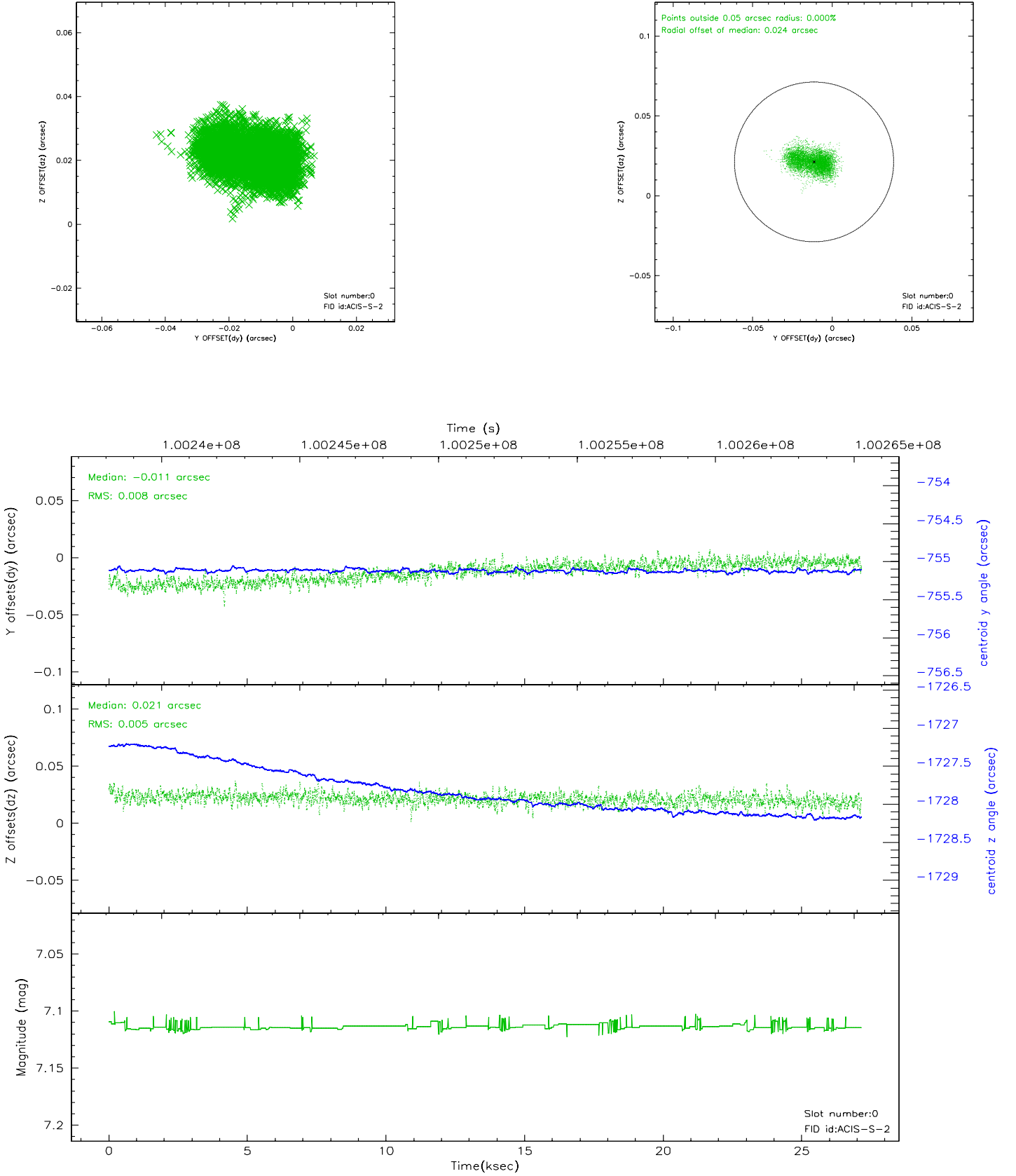


## 2.4.5 Slot 7

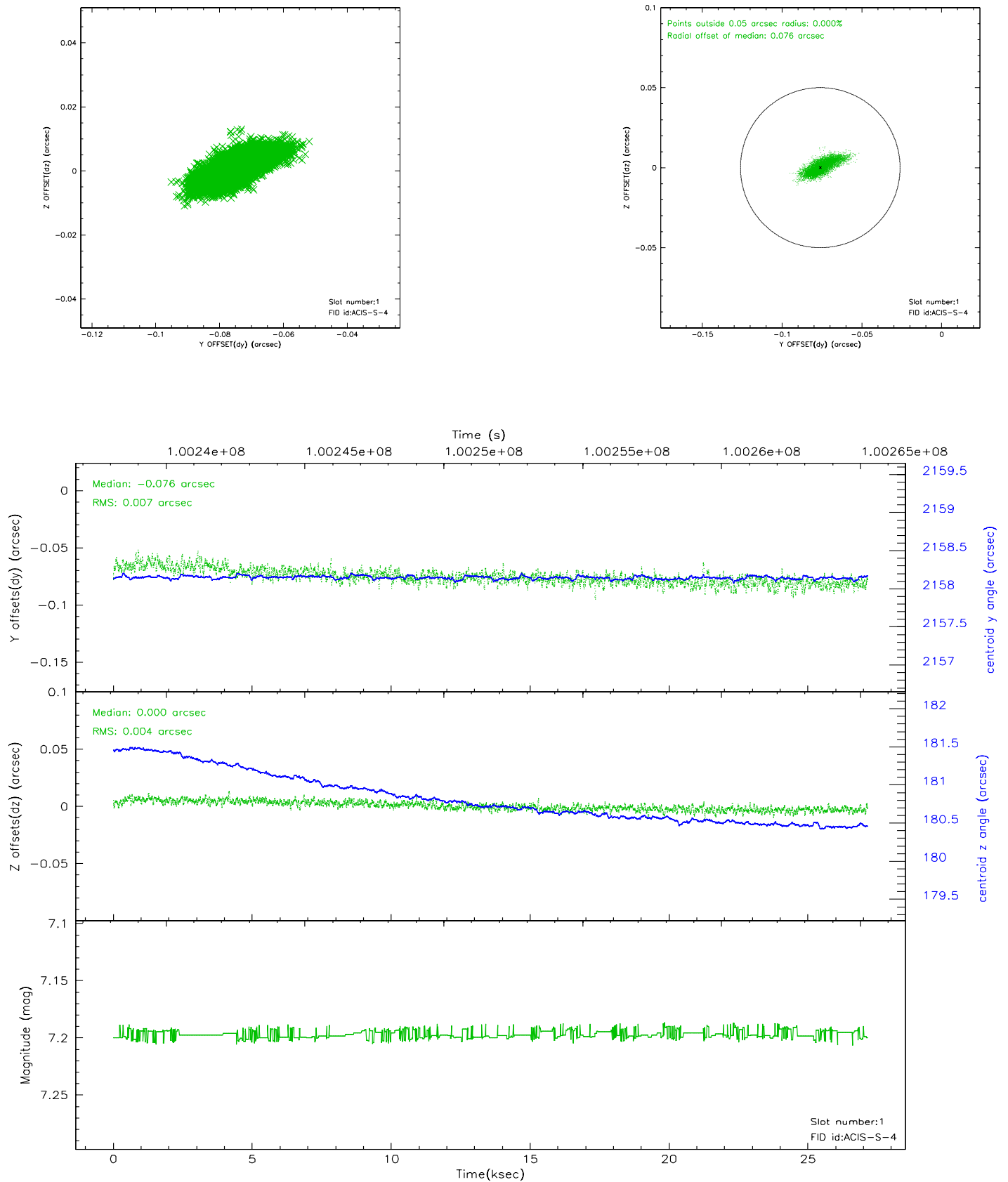


## 2.5 FID Slots

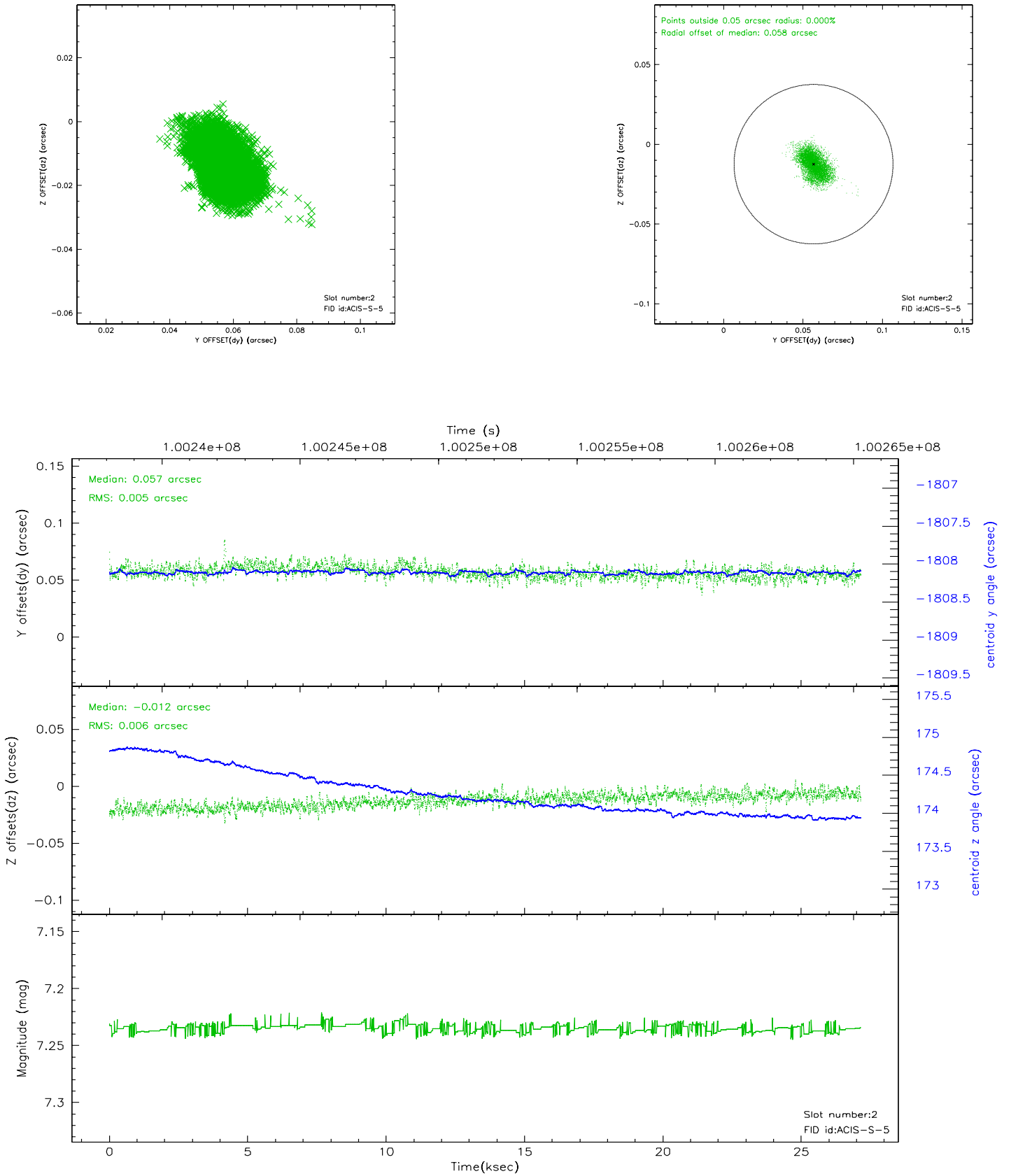
### 2.5.1 Slot 0



## 2.5.2 Slot 1

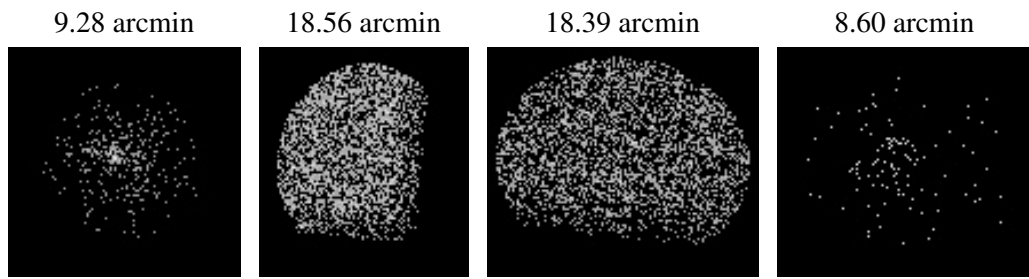


### 2.5.3 Slot 2





### 3 Point Sources



## A Summary

### A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2006.11.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	27.075

### A.2 Comments

Monitor constraint not met: follows obs1968 by 128 days instead of 115 - 125 days.