

# V&V Reference Report

## L2 ASCDS Version : 7.6.10

Observation 1642 - L2 Version 001  
Chandra X-Ray Center

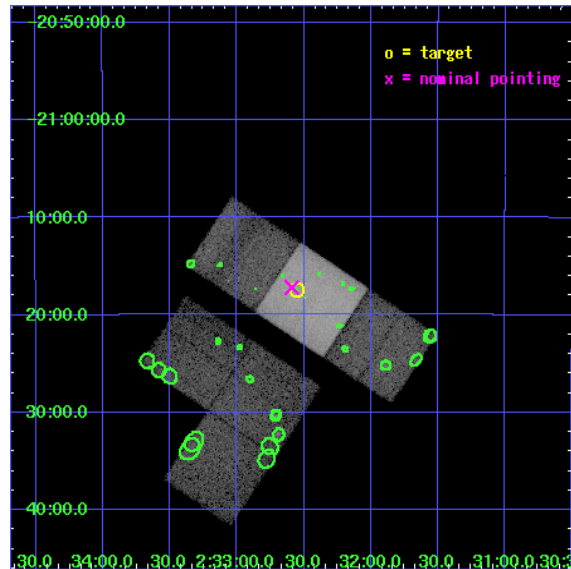
L2 Processing Date : Jun 12 2007

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# 1 Front

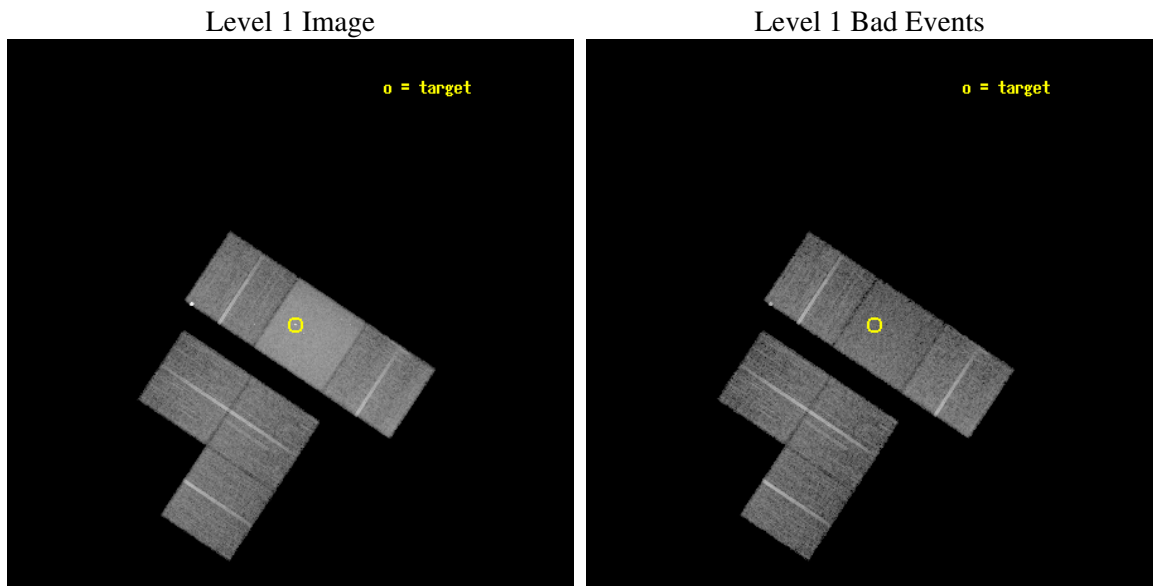
seq_num	700258
obs_id	1642
title	CHANDRA OBSERVATIONS OF GRAVITATIONALLY LENSED QUASARS WITH INTRINSIC ABSORPTION
observer	Prof. Gordon Garmire
object	HE0230-2130
dtcycle	0
cycle	P
ra_targ	38.137917
dec_targ	-21.290556
ra_nom	38.147634473929
dec_nom	-21.286704913082
roll_nom	33.56080040123
revision	2
ontime	14950.400013924
livetime	14761.089046897
ontime1	14947.159043685
ontime2	14950.400013924
ontime3	14950.400013924
ontime6	14950.400013924
ontime7	14950.400013924
ontime8	14950.400013924
l2events	203059



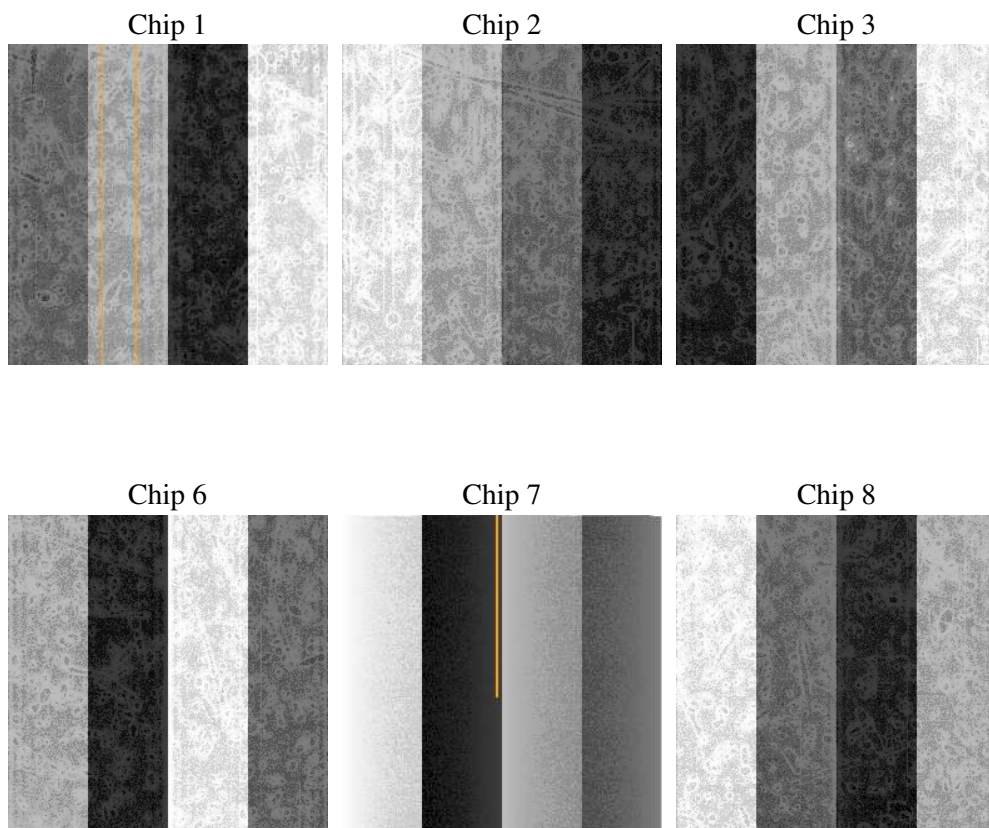
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0
ascdsver	7.6.10
caldsver	3.4.0
date	2007-06-12T08:50:15
revision	2

sched_exp_time	15000.000000
ontime	14950.400013924
ontime1	14947.159043685
ontime2	14950.400013924
ontime3	14950.400013924
ontime6	14950.400013924
ontime7	14950.400013924
ontime8	14950.400013924
l1events	702318

### 2.1.4 Events

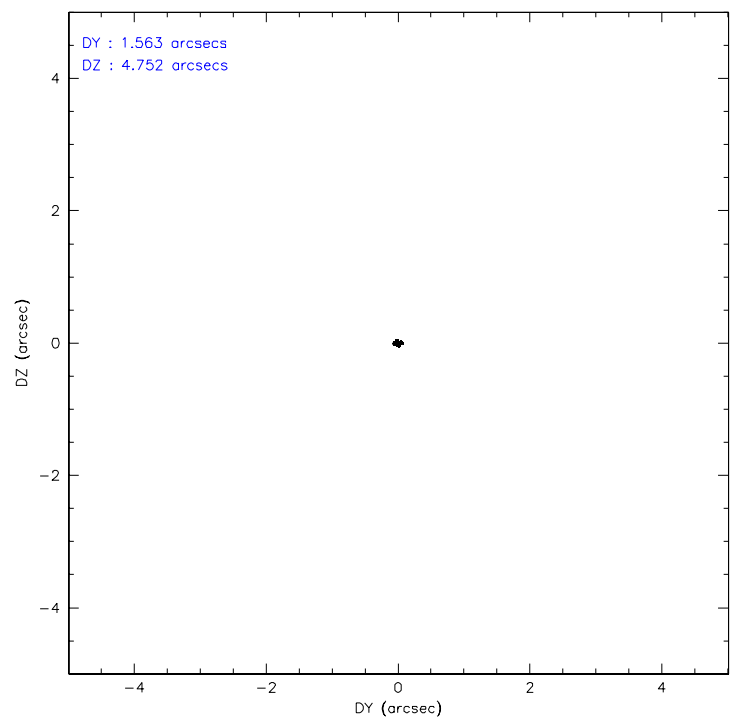
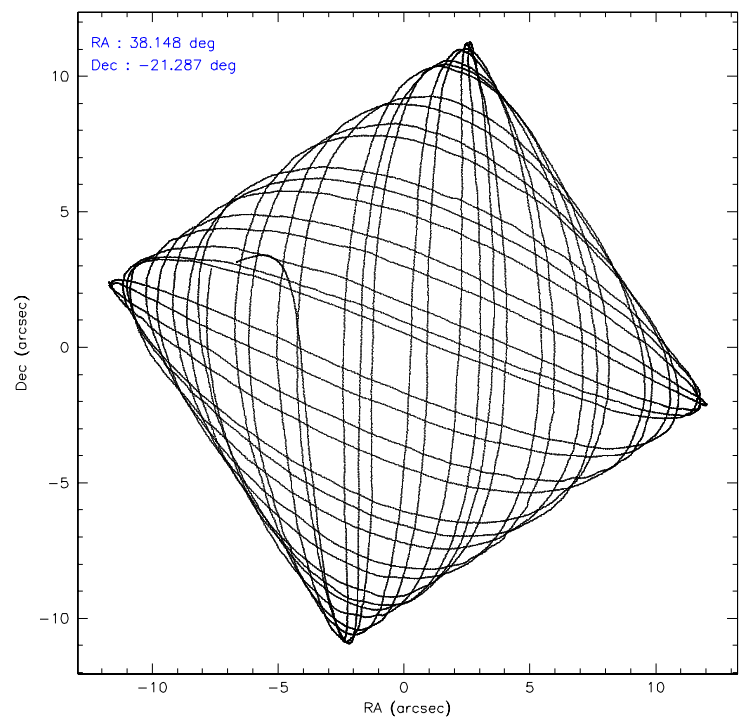
	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	89828	94012	93337	109166	191719	124256
rejected events	73246	79040	77655	83730	68059	91487
rejected %	81%	84%	83%	76%	35%	73%

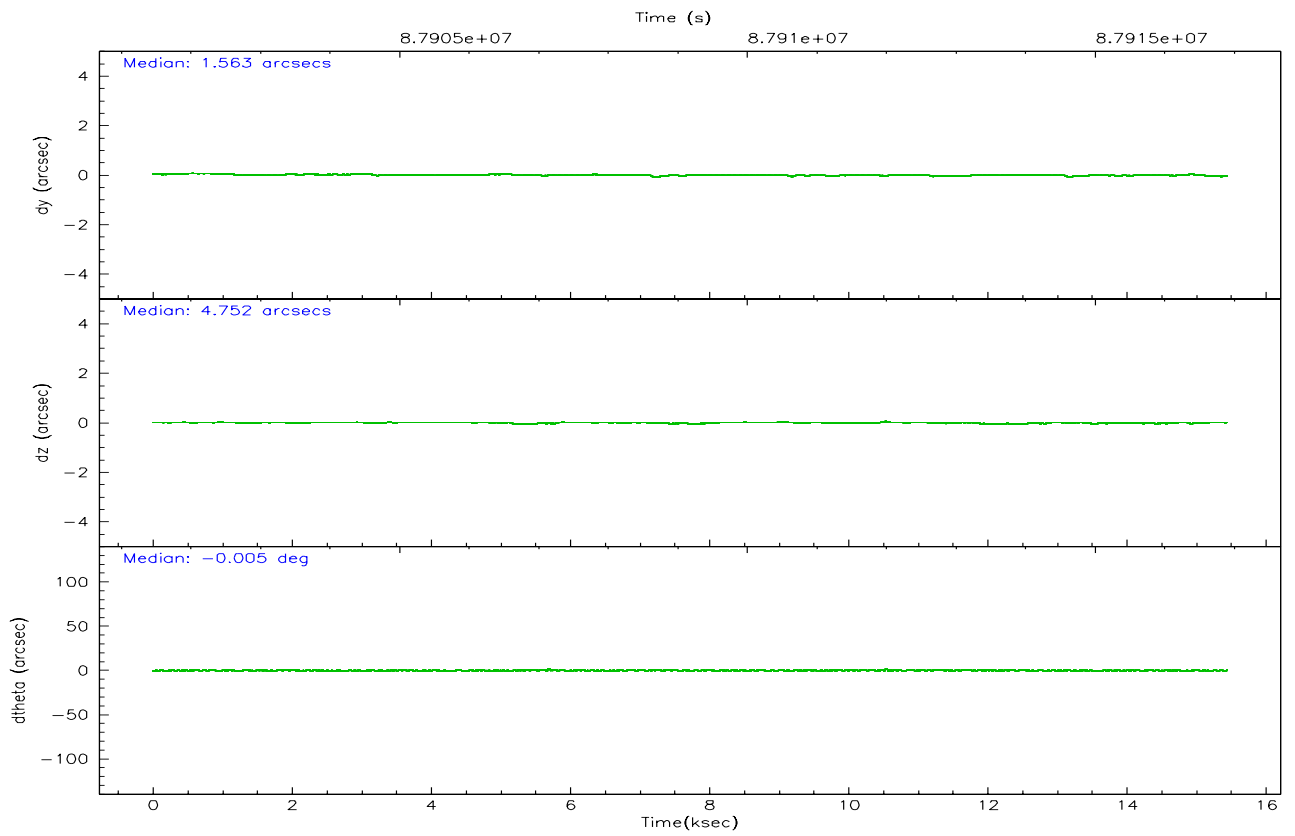
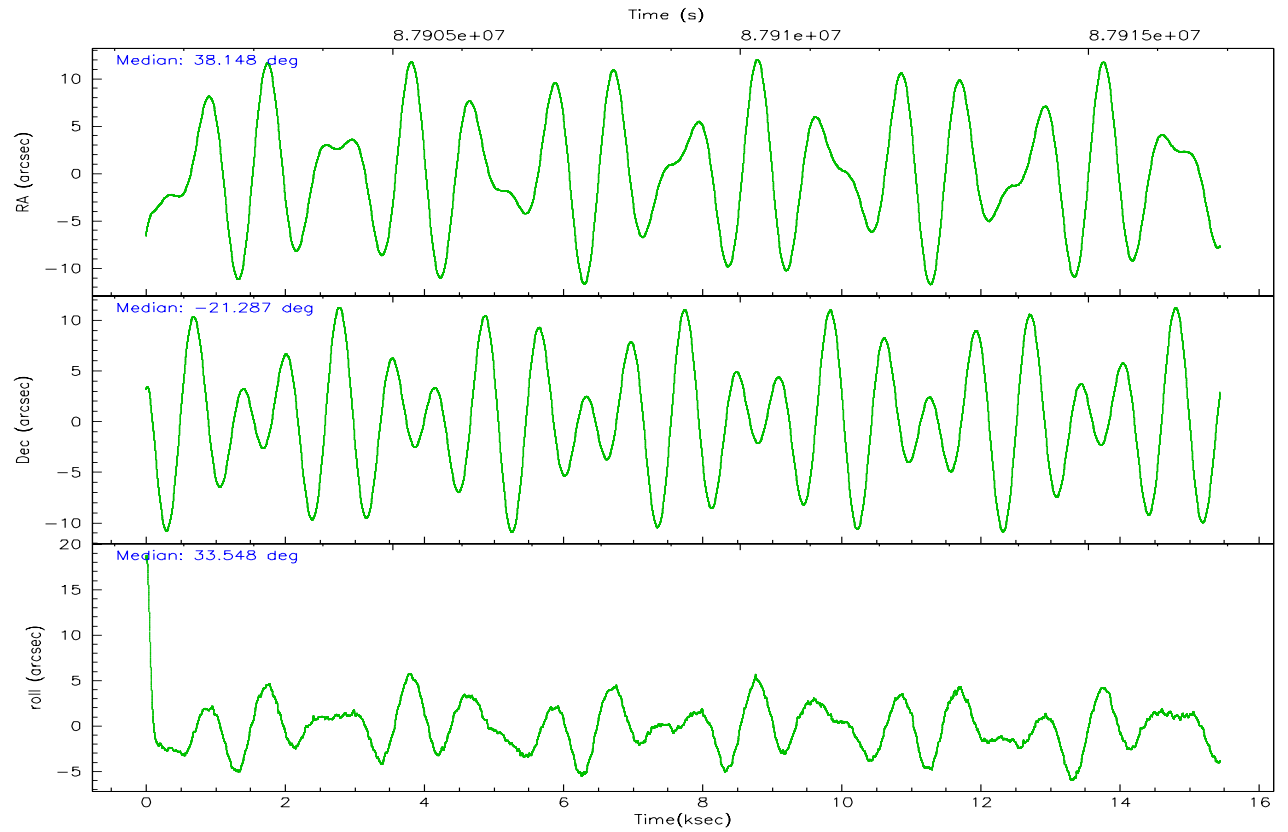
	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	8772	8240	8723	13273	13737	15858
	9%	8%	9%	12%	7%	12%
grade 1 events	54	53	37	112	93	76
	0%	0%	0%	0%	0%	0%
grade 2 events	3292	3035	3111	7465	22370	6275
	3%	3%	3%	6%	11%	5%
grade 3 events	1160	990	1011	1157	10011	2505
	1%	1%	1%	1%	5%	2%
grade 4 events	1151	945	972	1257	9942	2365
	1%	1%	1%	1%	5%	1%
grade 5 events	3451	2871	3352	4260	11388	4698
	3%	3%	3%	3%	5%	3%
grade 6 events	2213	1770	1868	2293	67631	5809
	2%	1%	2%	2%	35%	4%
grade 7 events	69735	76108	74263	79349	56547	86670
	77%	80%	79%	72%	29%	69%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-123678	ACIS-123678	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	38.134776	38.14763447392926	Subarray requested	NONE	NONE
Pointing Dec	-21.311257	-21.28670491308192	Alternating exposures requested	N	N
Pointing Roll	33.399485	33.5608004012304	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	87901894.184000	87900810.65518001			
Observation start date	2000-10-14T09:10:30	2000-10-14T08:53:30			
Observation end time	87916894.184000	87917789.780821			
Observation end date	2000-10-14T13:20:30	2000-10-14T13:36:29			
Read mode	TIMED	TIMED			

## 2.3 Aspect





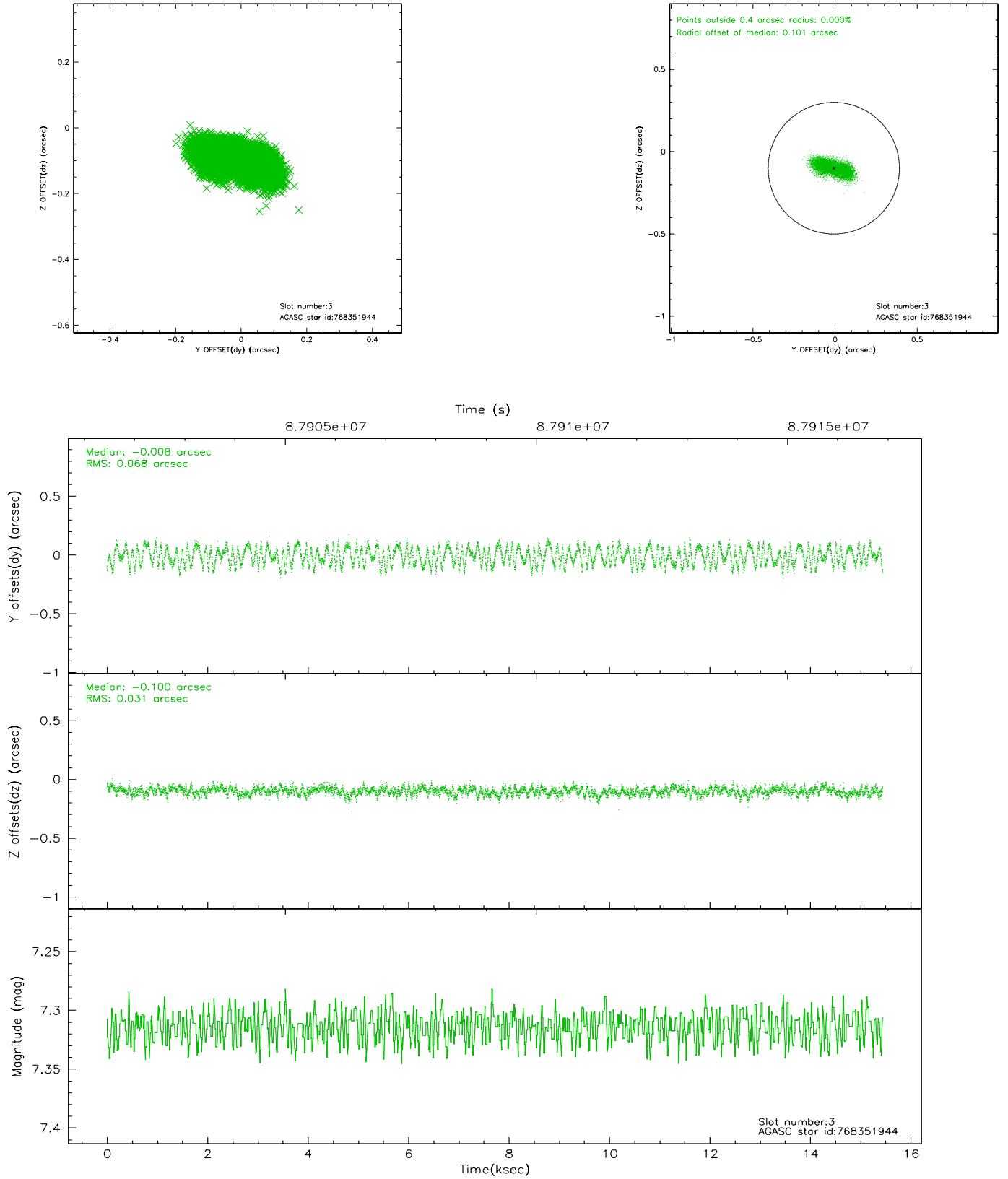
### Slot Statistics

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	3764	-0.030	0.016	0.006	0.010	0.000000	0.000000	-754.18	-1725.85
1	FID	ACIS-S-4	7.21	3765	-0.052	0.010	0.005	0.008	0.000000	0.000000	2158.93	182.36
2	FID	ACIS-S-5	7.24	3766	0.050	-0.017	0.006	0.010	0.000000	0.000000	-1806.59	176.30
3	GUIDE	768351944	7.31	7531	-0.008	-0.100	0.083	0.126	37.329285	-21.037997	-1721.91	2304.89
4	GUIDE	768354976	8.73	7530	0.004	-0.230	0.085	0.131	37.513900	-20.888334	-907.99	2417.16
5	GUIDE	768355096	9.18	7529	-0.014	0.154	0.075	0.120	38.076127	-21.497720	-533.21	-451.93
6	GUIDE	768345224	9.79	7528	-0.013	0.115	0.092	0.151	37.901776	-22.074104	-2160.42	-1865.72
7	GUIDE	768347504	9.85	7527	0.033	0.062	0.100	0.164	38.056622	-21.778205	-1143.18	-1260.02

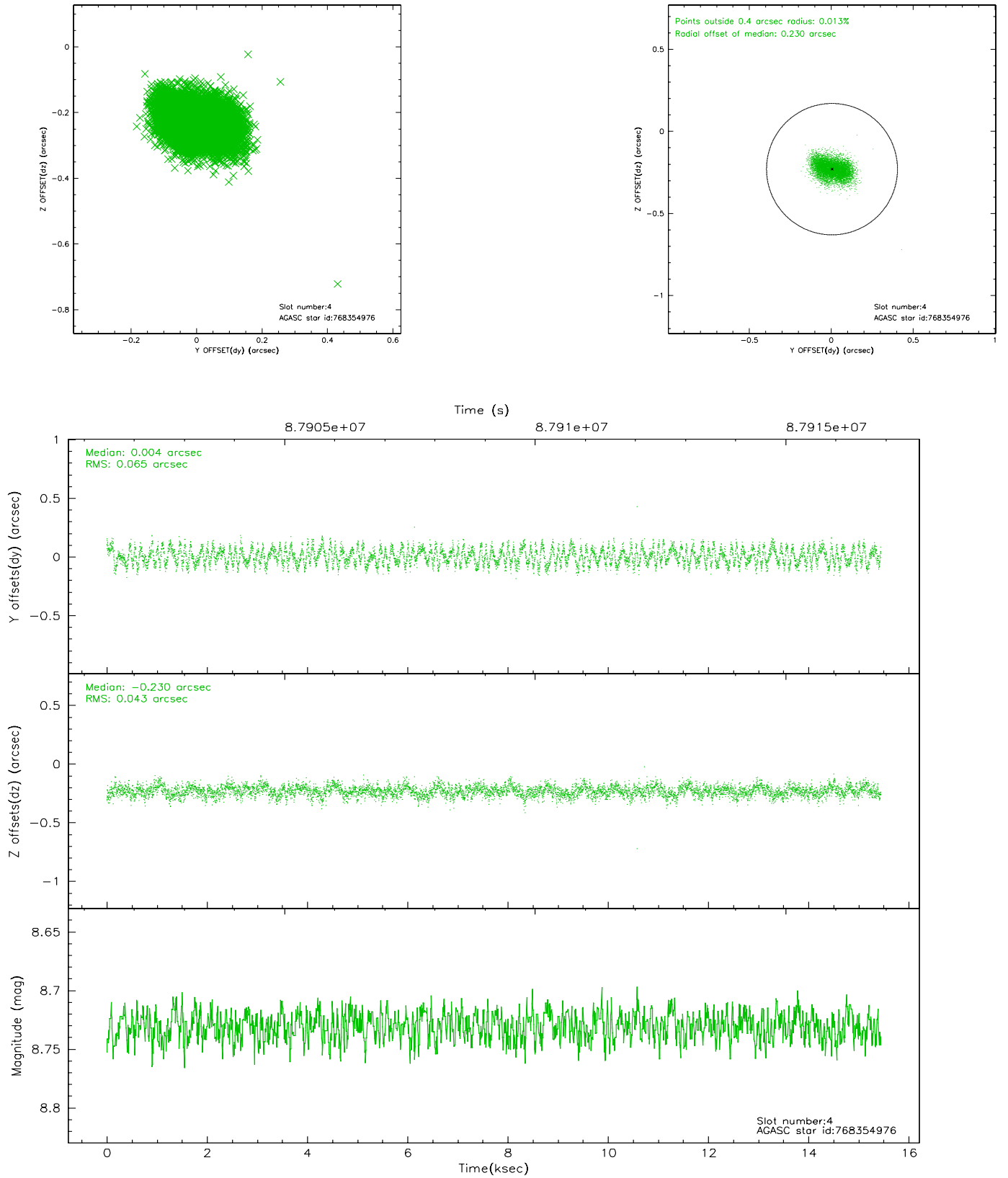


## 2.4 Star Slots

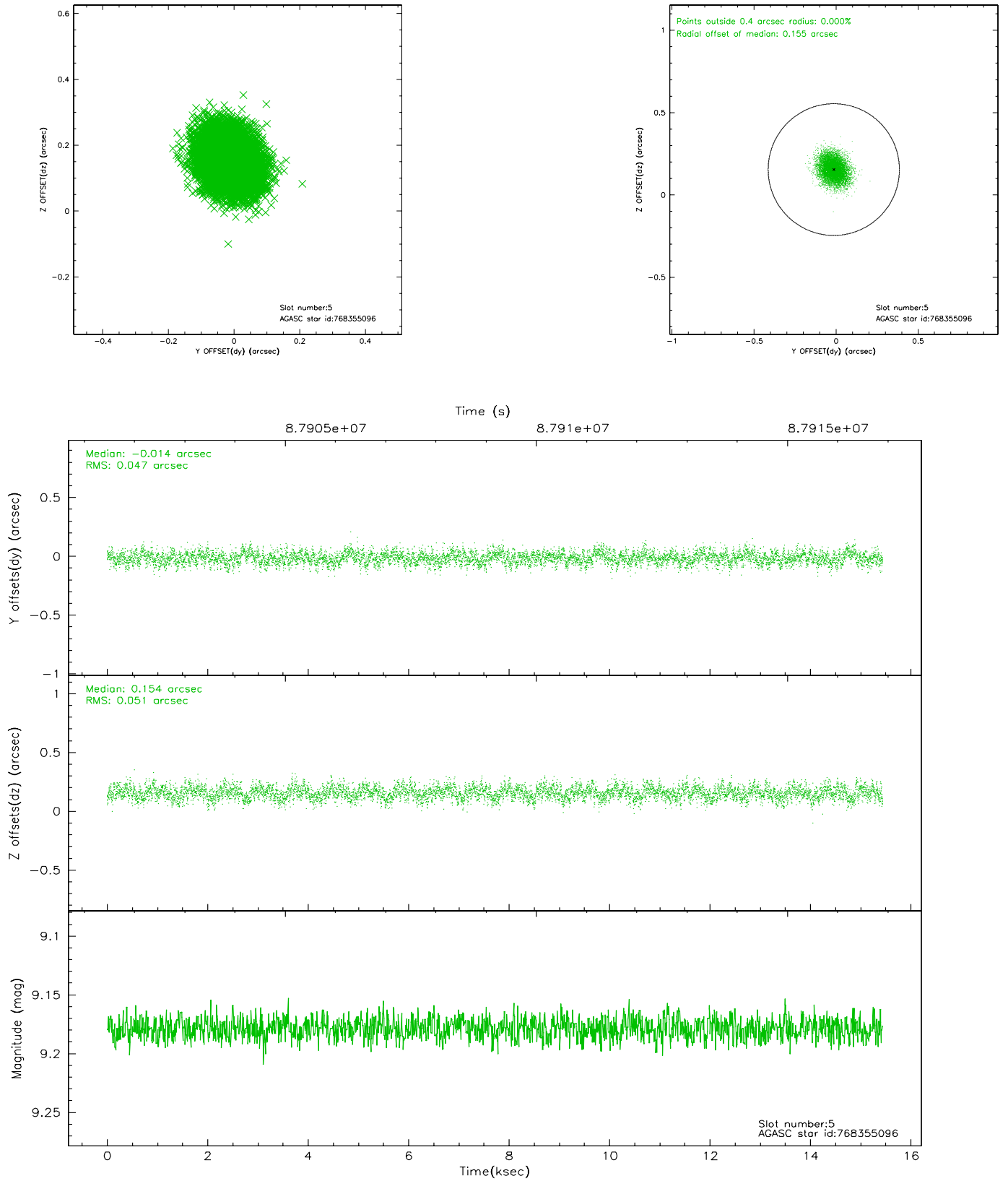
### 2.4.1 Slot 3



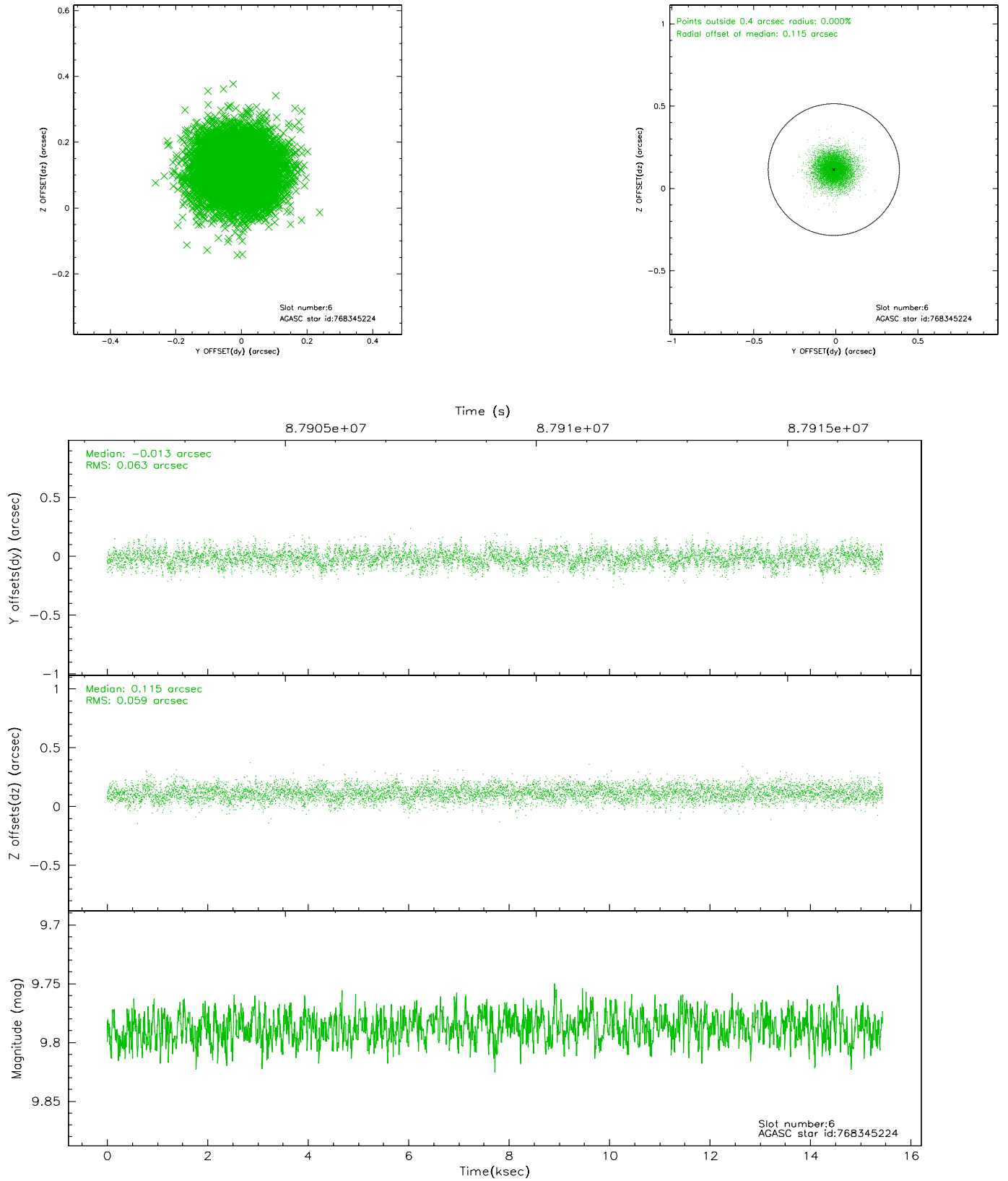
## 2.4.2 Slot 4



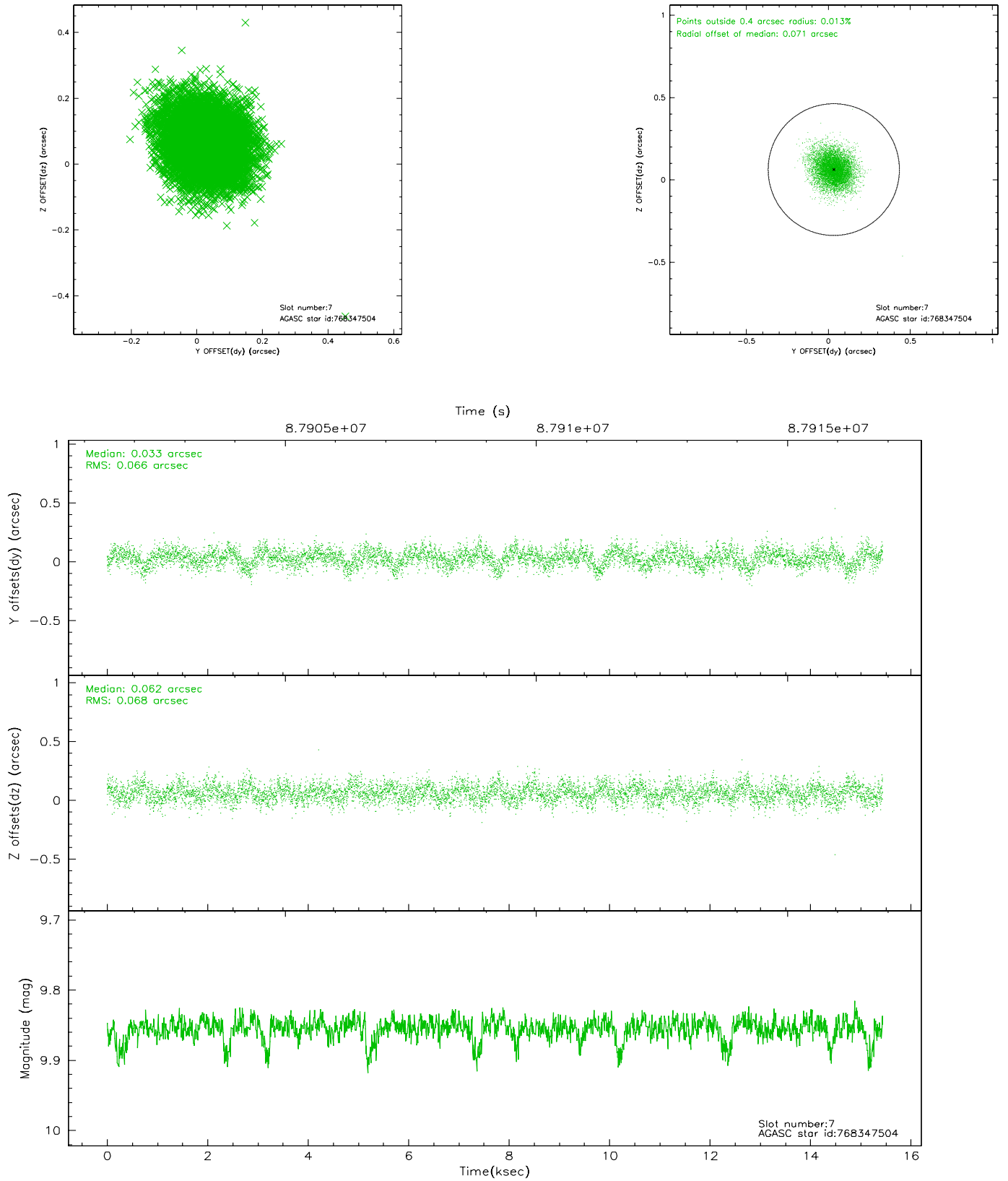
### 2.4.3 Slot 5



## 2.4.4 Slot 6

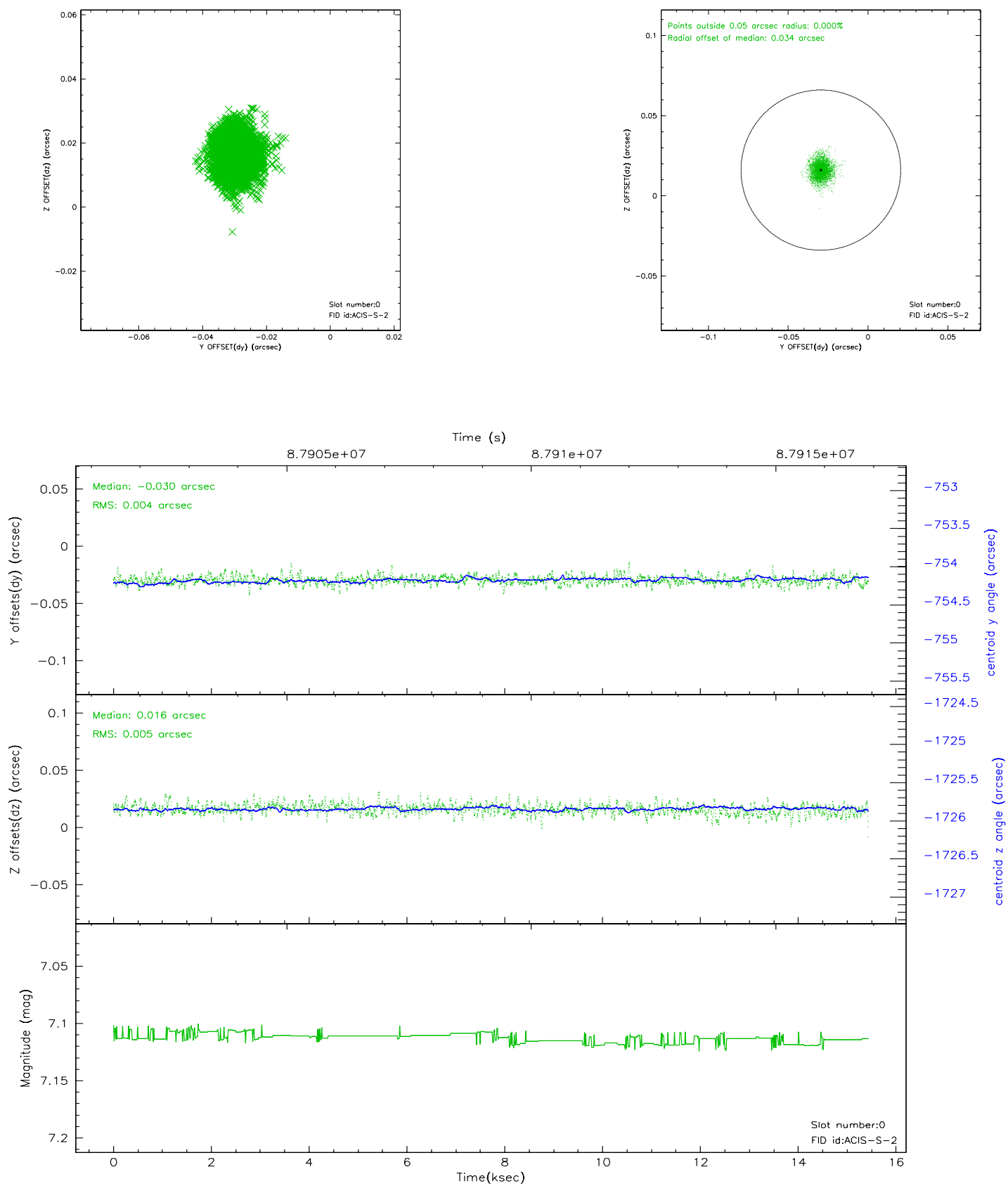


## 2.4.5 Slot 7

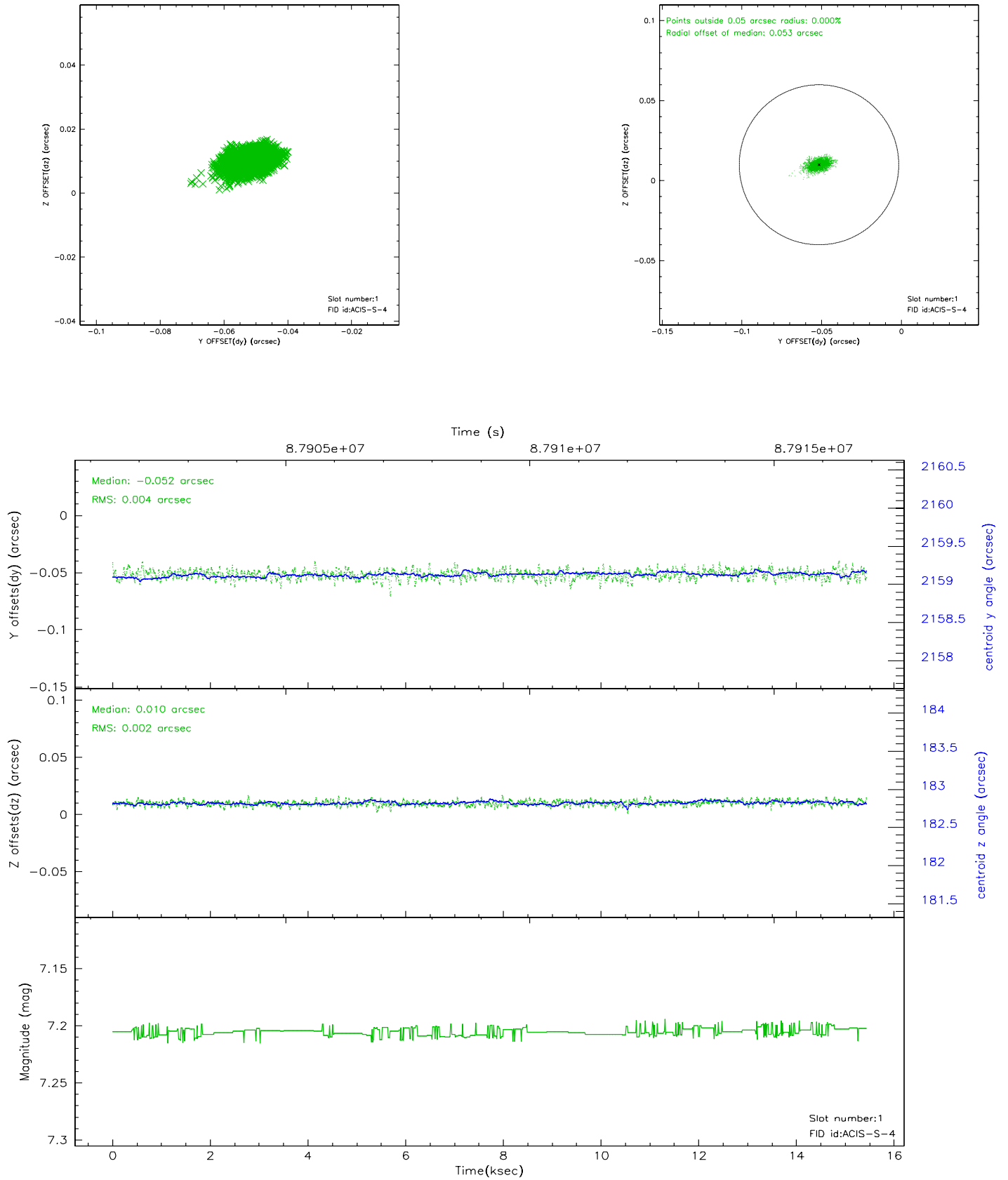


## 2.5 FID Slots

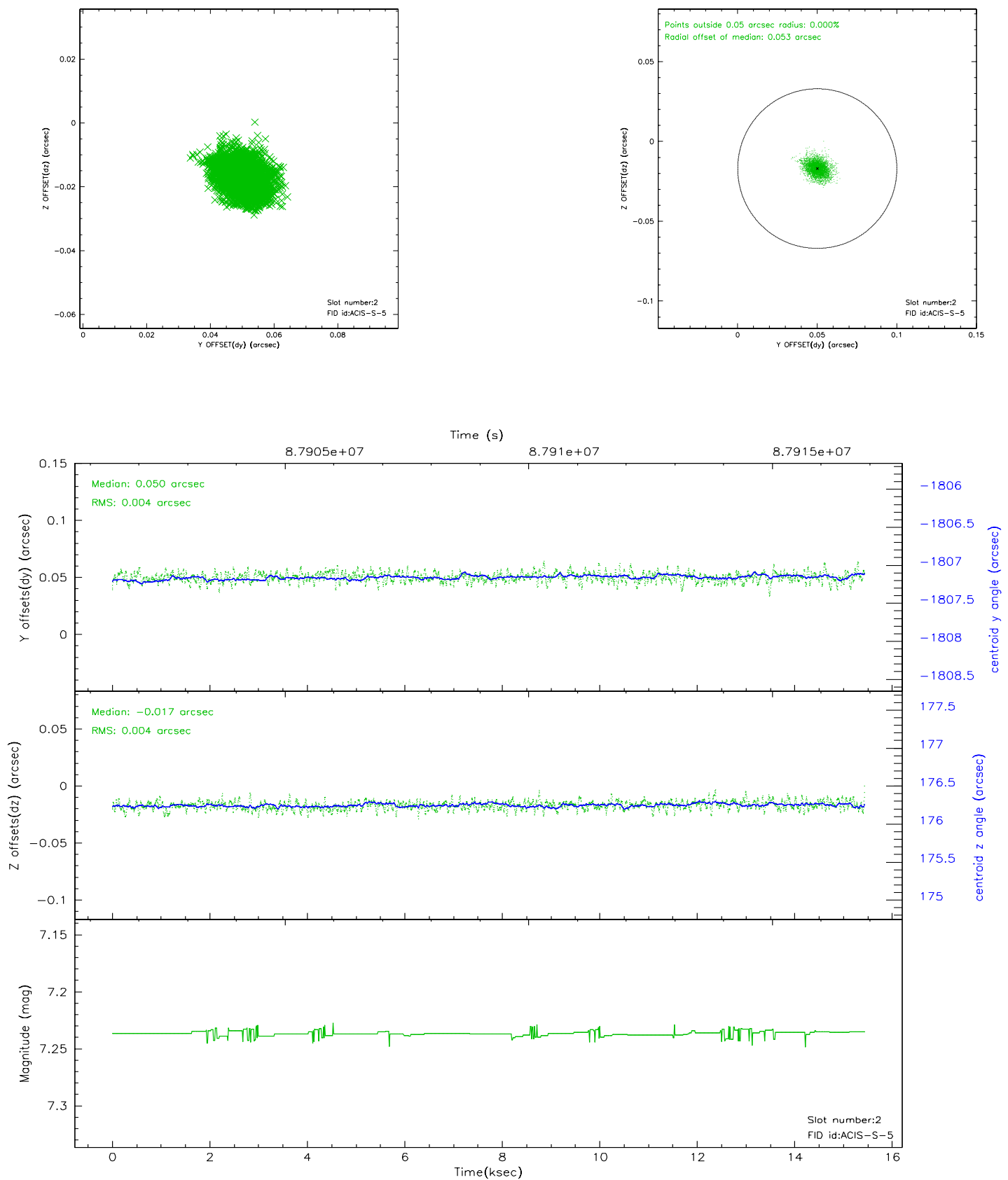
### 2.5.1 Slot 0



## 2.5.2 Slot 1

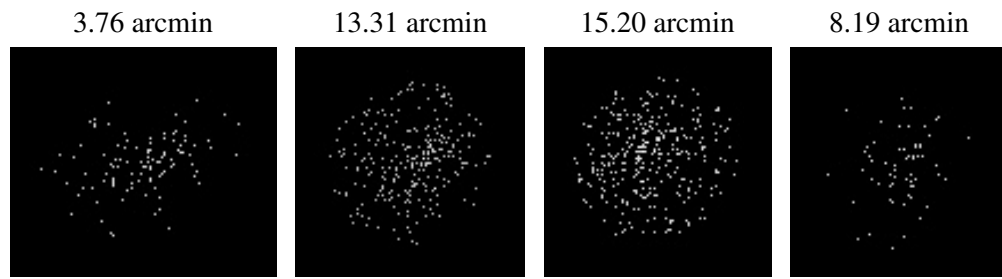


### 2.5.3 Slot 2





### 3 Point Sources



# A Summary

## A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2007.06.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	14.953

## A.2 Comments

Spike in count rate from about 10 counts per second to about 40 counts per second between 1 and 2 ksec and 10 and 12 ksec into the observation.