

# V&V Reference Report

## L2 ASCDS Version : 7.6.9

Observation 1993 - L2 Version 001  
Chandra X-Ray Center

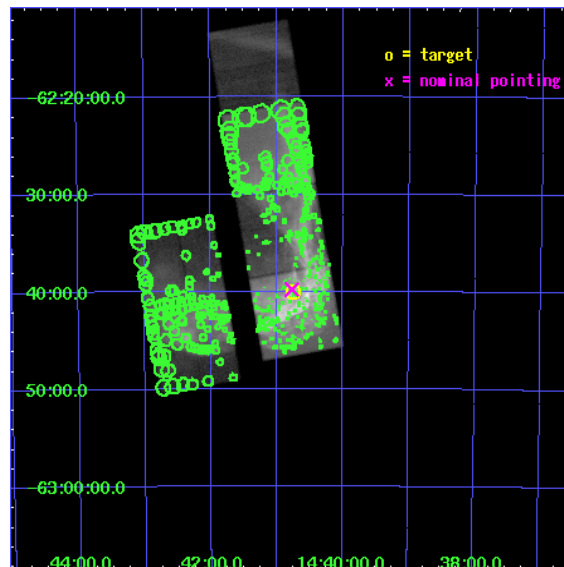
L2 Processing Date : Nov 6 2006

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# 1 Front

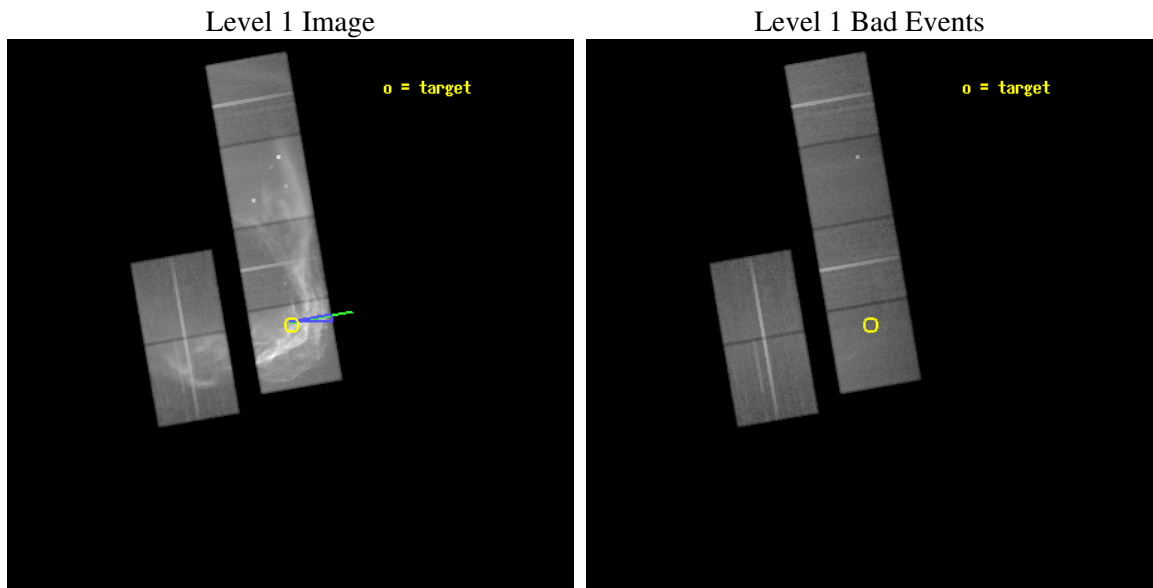
seq_num	500170
obs_id	1993
title	THERMAL AND NONTHERMAL X-RAY EMISSION IN SNR RCW 86
observer	Dr. Stephen Reynolds
object	RCW 86
dtcycle	0
cycle	P
ra_targ	220.1875
dec_targ	-62.666667
ra_nom	220.19279367045
dec_nom	-62.662871114863
roll_nom	80.161333302314
revision	2
ontime	93132.718136355
livetime	91953.415581522
ontime2	93126.236215875
ontime3	93132.71813634
ontime4	93135.959146425
ontime5	93129.477126271
ontime6	93135.959146425
ontime7	93132.718136355
l2events	4396107



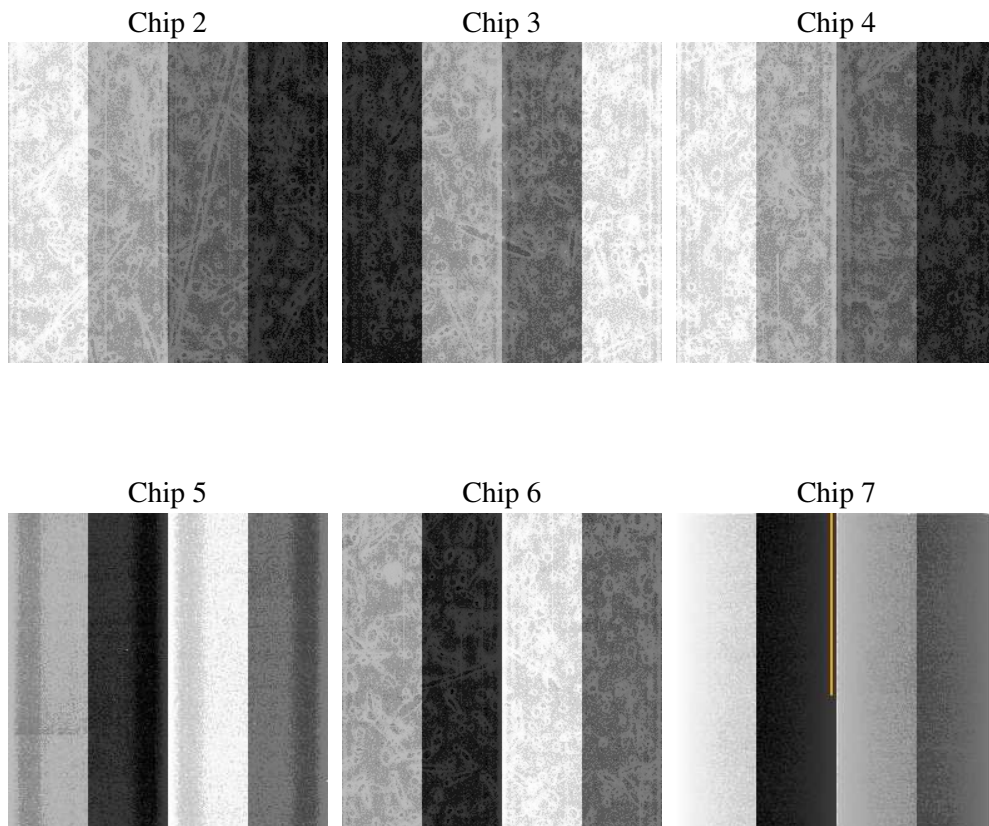
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0
ascdsver	7.6.9
caldbver	3.2.3
date	2006-11-06T16:22:14
revision	2

sched_exp_time	93000.000000
ontime	93826.892883852
ontime2	93820.410963371
ontime3	93826.892883837
ontime4	93830.133893922
ontime5	93823.651873767
ontime6	93830.133893922
ontime7	93826.892883852
l1events	7488148

### 2.1.4 Events

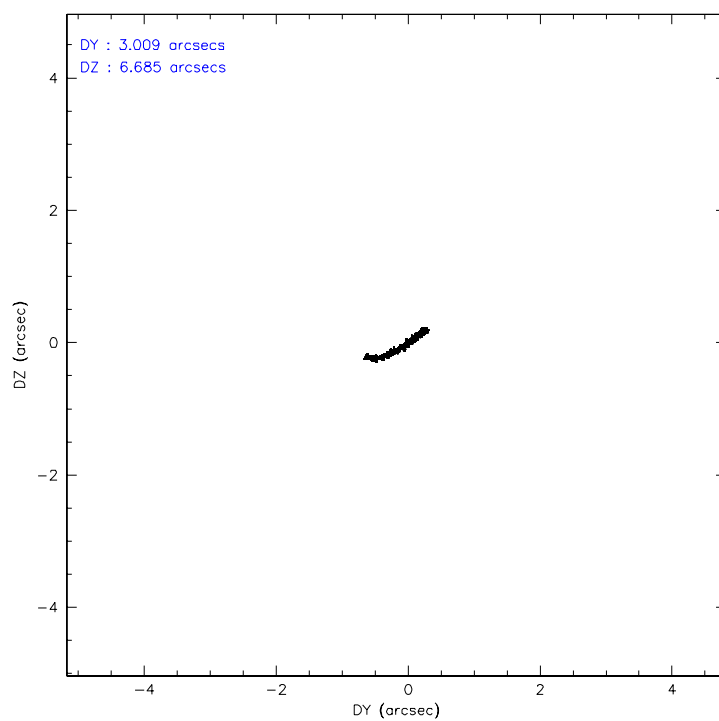
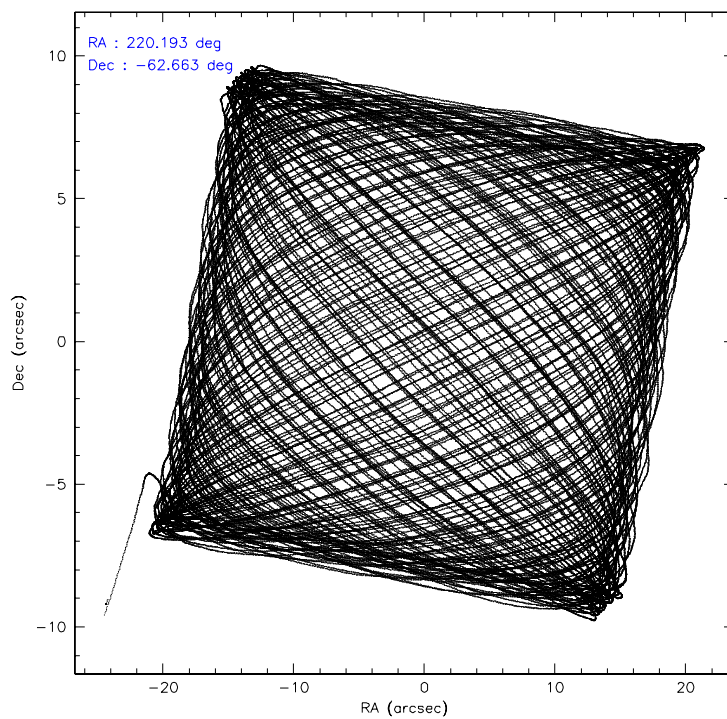
	ccd 2	ccd 3	ccd 4	ccd 5	ccd 6	ccd 7
level 1 events	658478	951048	679850	1315305	1204038	2679429
rejected events	477567	492261	544090	441767	500909	456945
rejected %	72%	51%	80%	33%	41%	17%

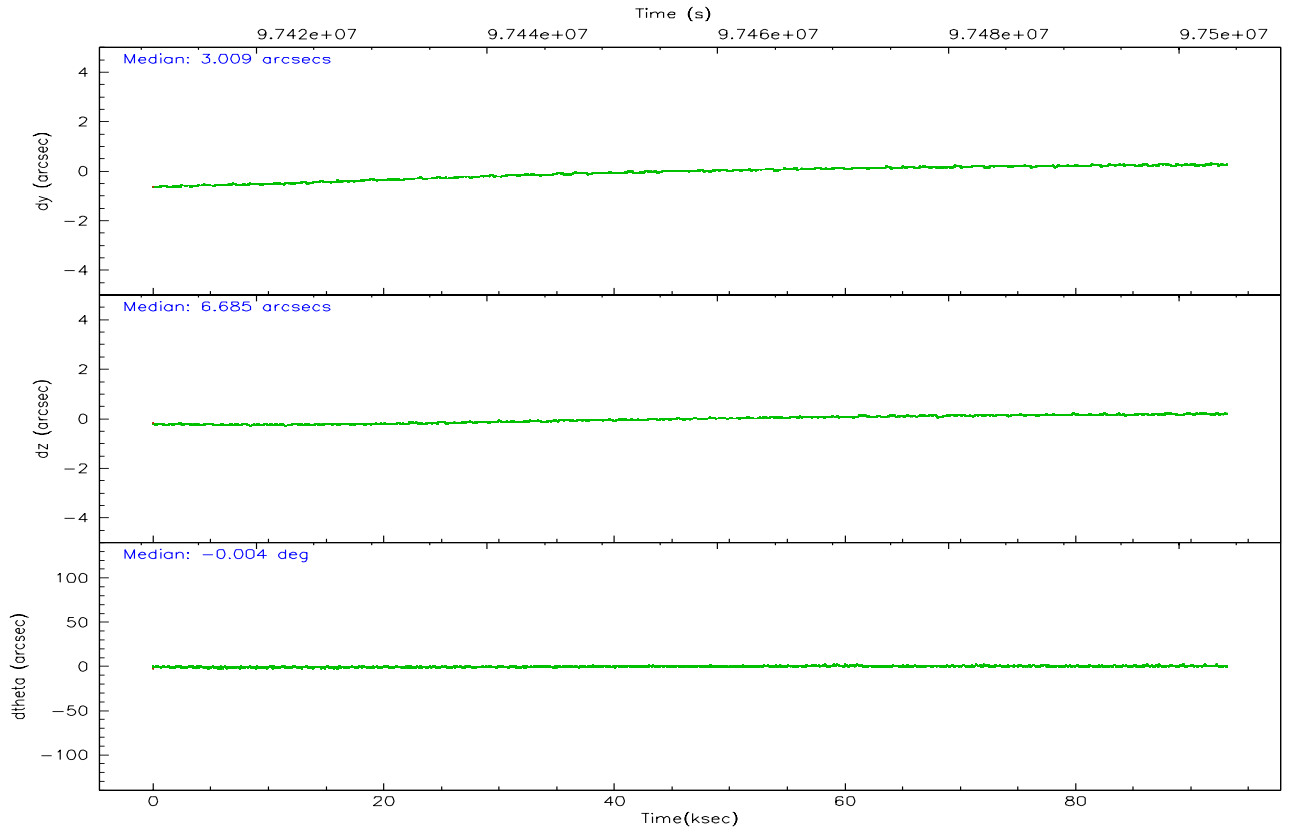
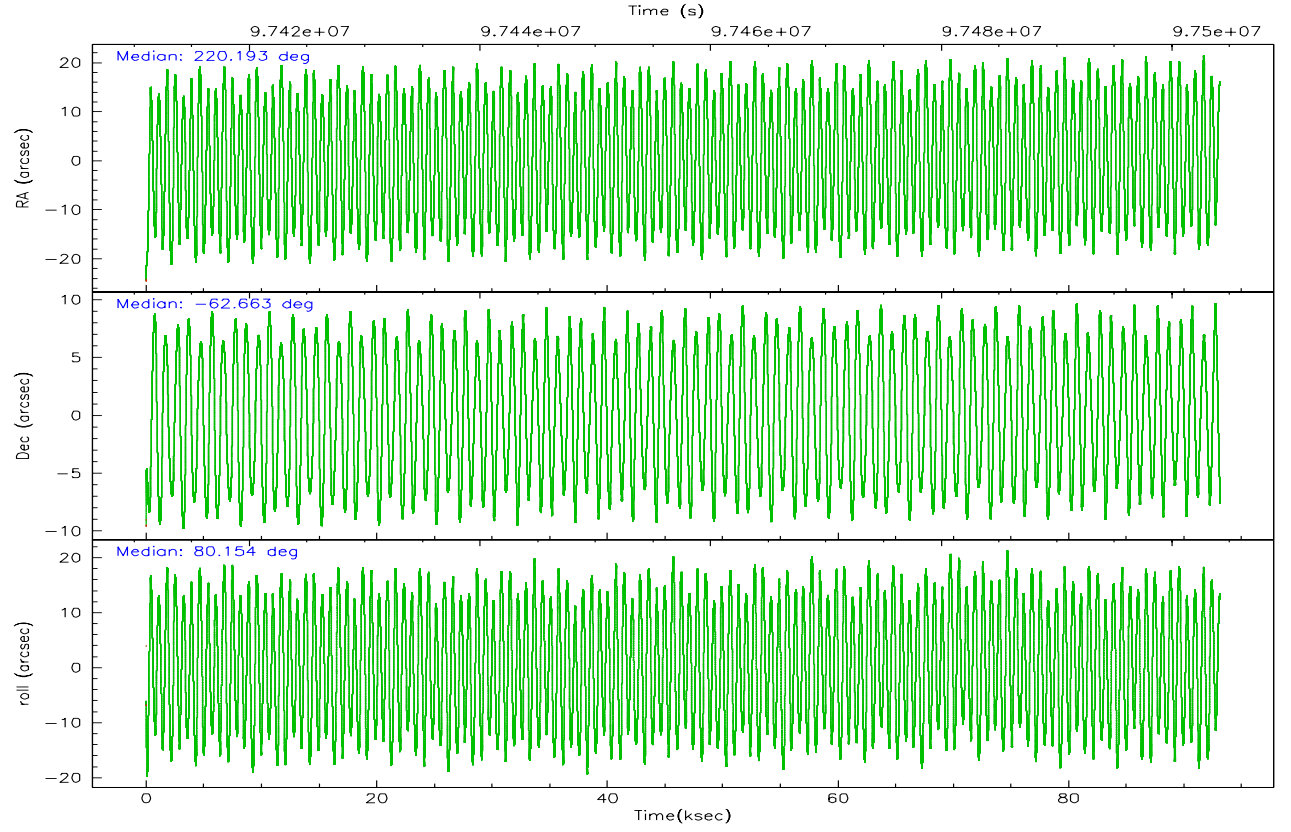
	ccd 2	ccd 3	ccd 4	ccd 5	ccd 6	ccd 7
grade 0 events	126932	370066	86468	263459	597055	639560
	19%	38%	12%	20%	49%	23%
grade 1 events	595	1473	501	4824	1933	867
	0%	0%	0%	0%	0%	0%
grade 2 events	24587	45784	22836	258677	57511	629309
	3%	4%	3%	19%	4%	23%
grade 3 events	8565	13995	7407	54957	16616	241442
	1%	1%	1%	4%	1%	9%
grade 4 events	8807	14166	6956	53950	16599	237553
	1%	1%	1%	4%	1%	8%
grade 5 events	18649	21900	19565	41200	24417	61196
	2%	2%	2%	3%	2%	2%
grade 6 events	12949	16211	12914	246520	17342	481076
	1%	1%	1%	18%	1%	17%
grade 7 events	457394	467453	523203	391718	472565	388426
	69%	49%	76%	29%	39%	14%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-234567	ACIS-234567	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	220.213797	220.1927936704456	Subarray requested	NONE	NONE
Pointing Dec	-62.688420	-62.66287111486281	Alternating exposures requested	N	N
Pointing Roll	80.023364	80.16133330231376	Primary exposure time	0.000000	3.2
Roll angle	85.000000	85.000000			
Roll tolerance	5.000000	5.000000			
Roll constraint allows 180D rotation	N	N			
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	97411188.184000	97409782.65557501			
Observation start date	2001-02-01T10:38:44	2001-02-01T10:16:22			
Observation end time	97504188.184000	97504907.78423899			
Observation end date	2001-02-02T12:28:44	2001-02-02T12:41:47			
Read mode	TIMED	TIMED			

## 2.3 Aspect



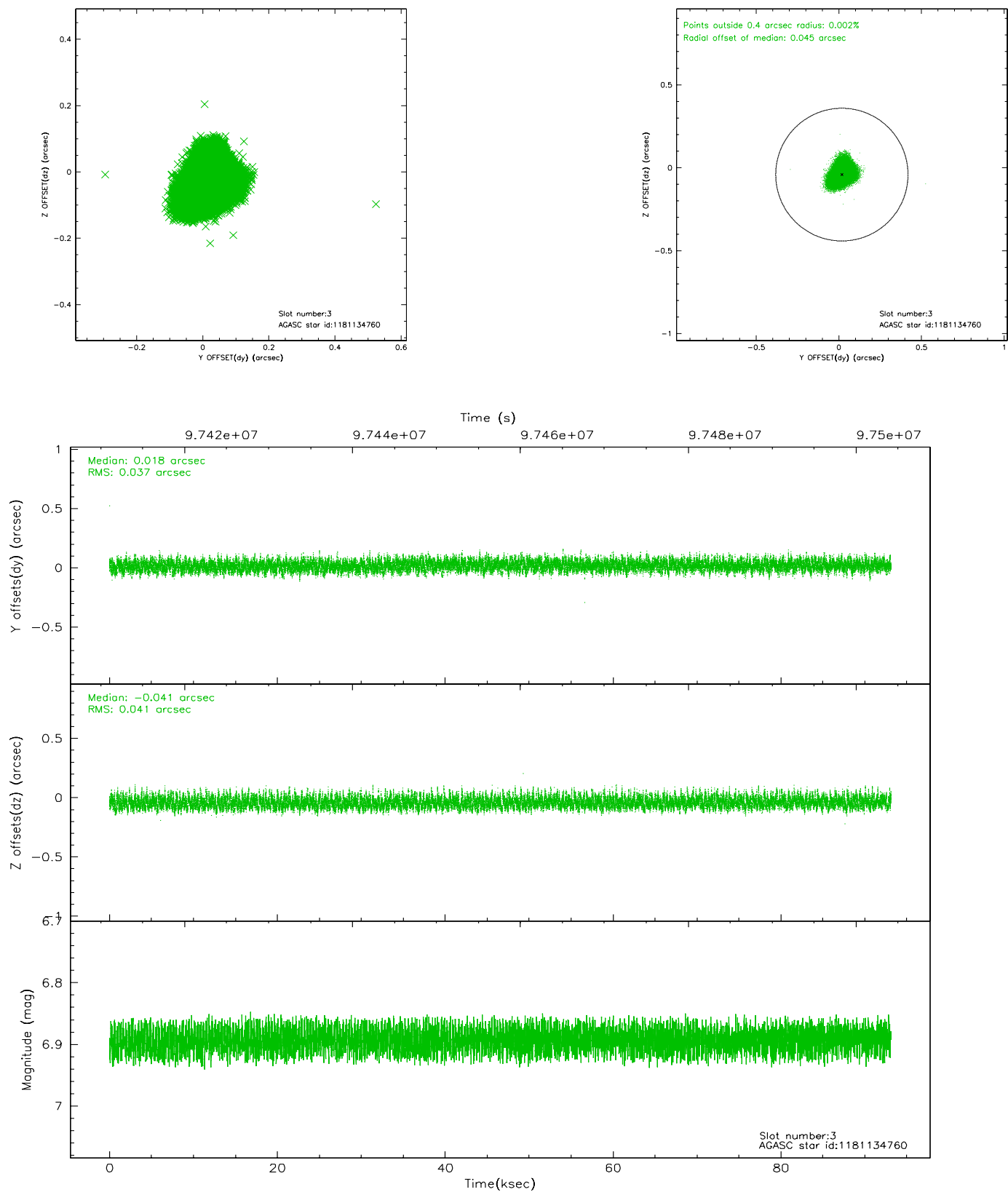


### Slot Statistics

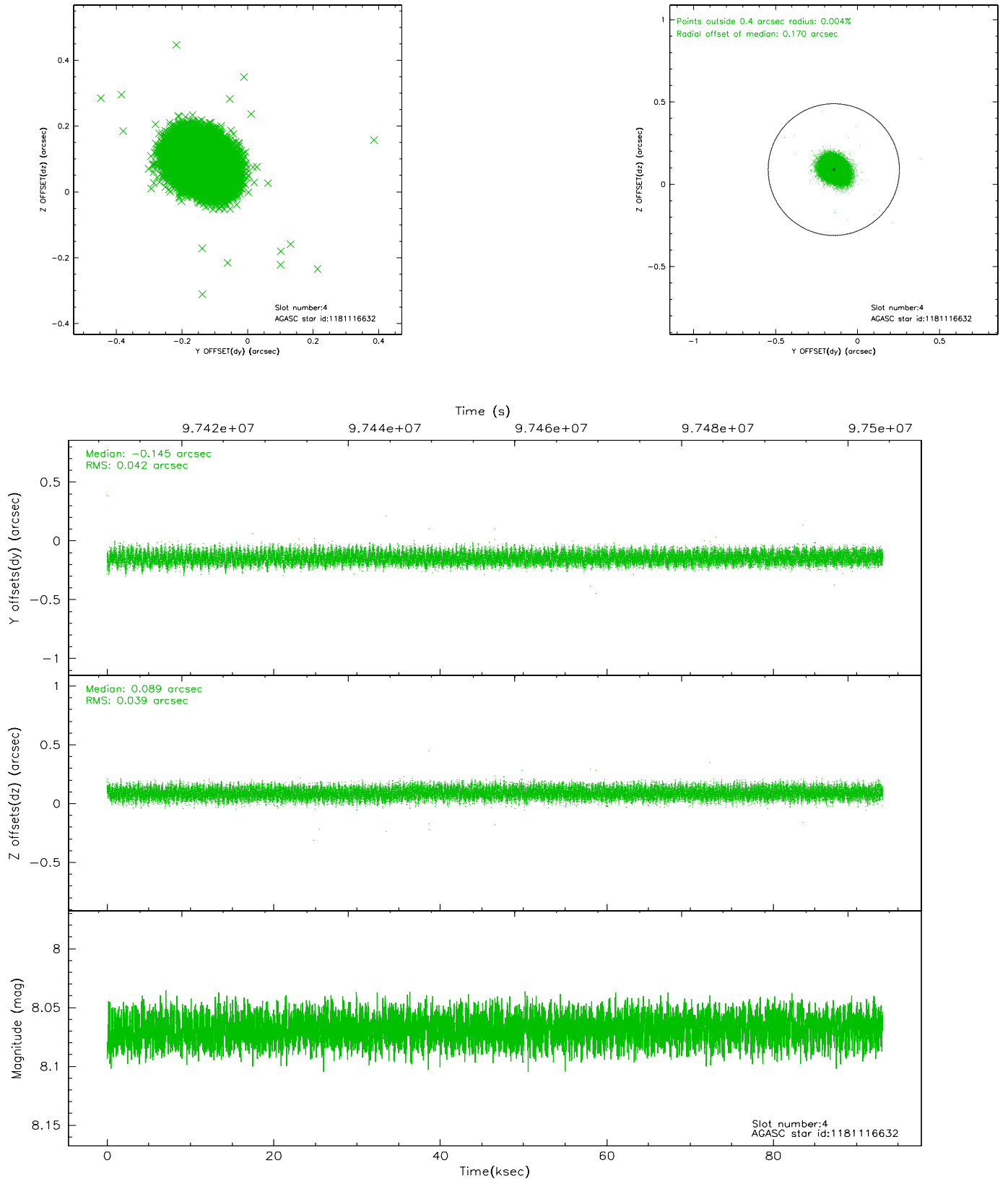
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.12	22712	0.034	0.026	0.014	0.025	0.000000	0.000000	-755.53	-1727.75
1	FID	ACIS-S-4	7.20	22716	-0.058	-0.022	0.013	0.021	0.000000	0.000000	2157.68	180.79
2	FID	ACIS-S-6	7.35	22713	-0.002	0.005	0.011	0.017	0.000000	0.000000	406.29	818.11
3	GUIDE	1181134760	6.89	45433	0.018	-0.041	0.060	0.094	220.867249	-62.966666	-806.44	-1227.75
4	GUIDE	1181116632	8.07	45431	-0.145	0.089	0.062	0.098	221.515173	-62.535667	894.62	-2036.36
5	GUIDE	1181107448	9.23	45241	0.042	-0.197	0.072	0.118	219.084809	-62.741785	-527.89	1796.72
6	GUIDE	1181102080	9.43	45403	-0.130	0.083	0.105	0.170	221.186808	-62.201757	1996.47	-1307.22
7	GUIDE	1181103784	9.44	45414	0.212	0.067	0.081	0.134	220.741193	-63.171682	-1568.02	-1146.22

## 2.4 Star Slots

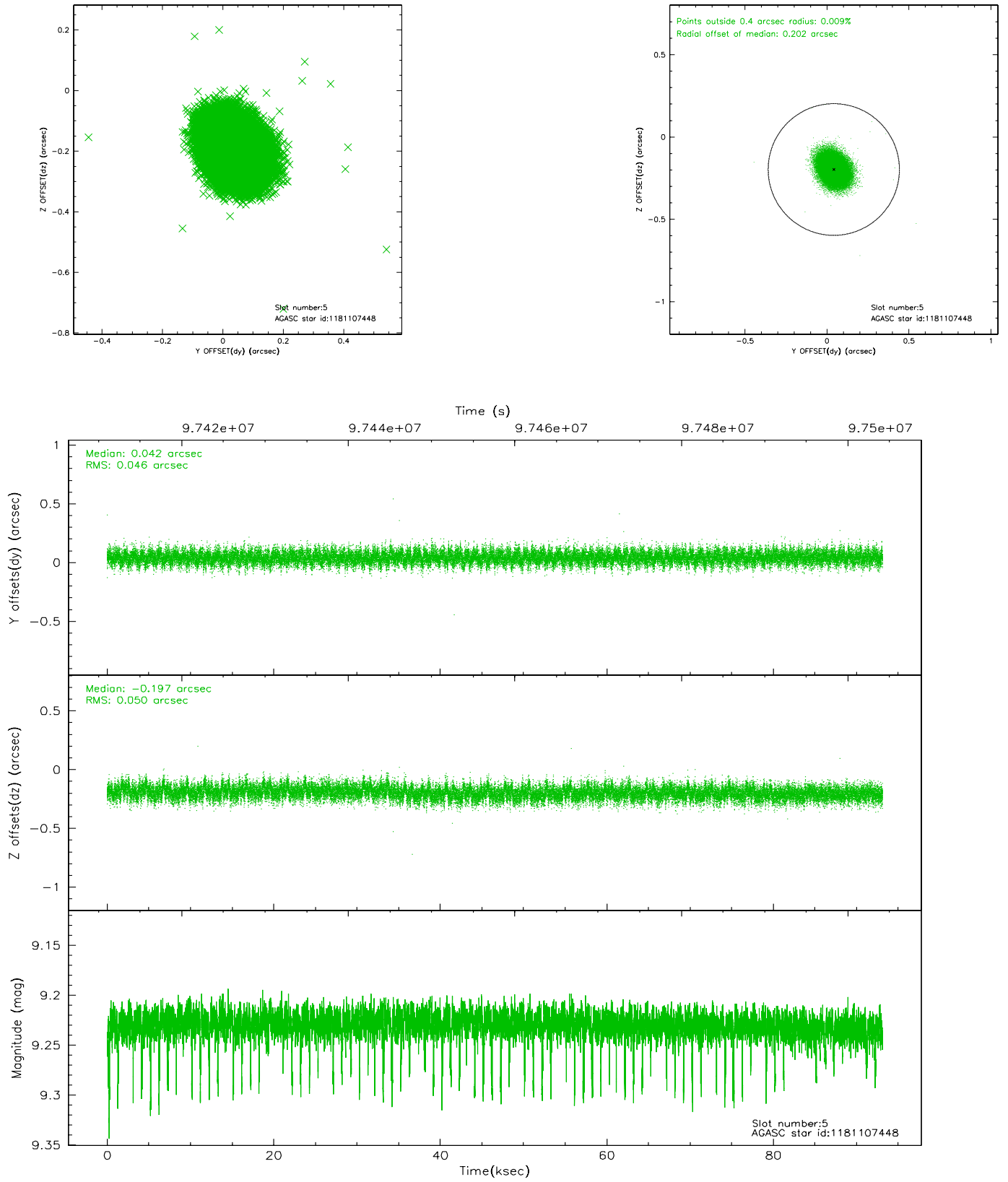
### 2.4.1 Slot 3



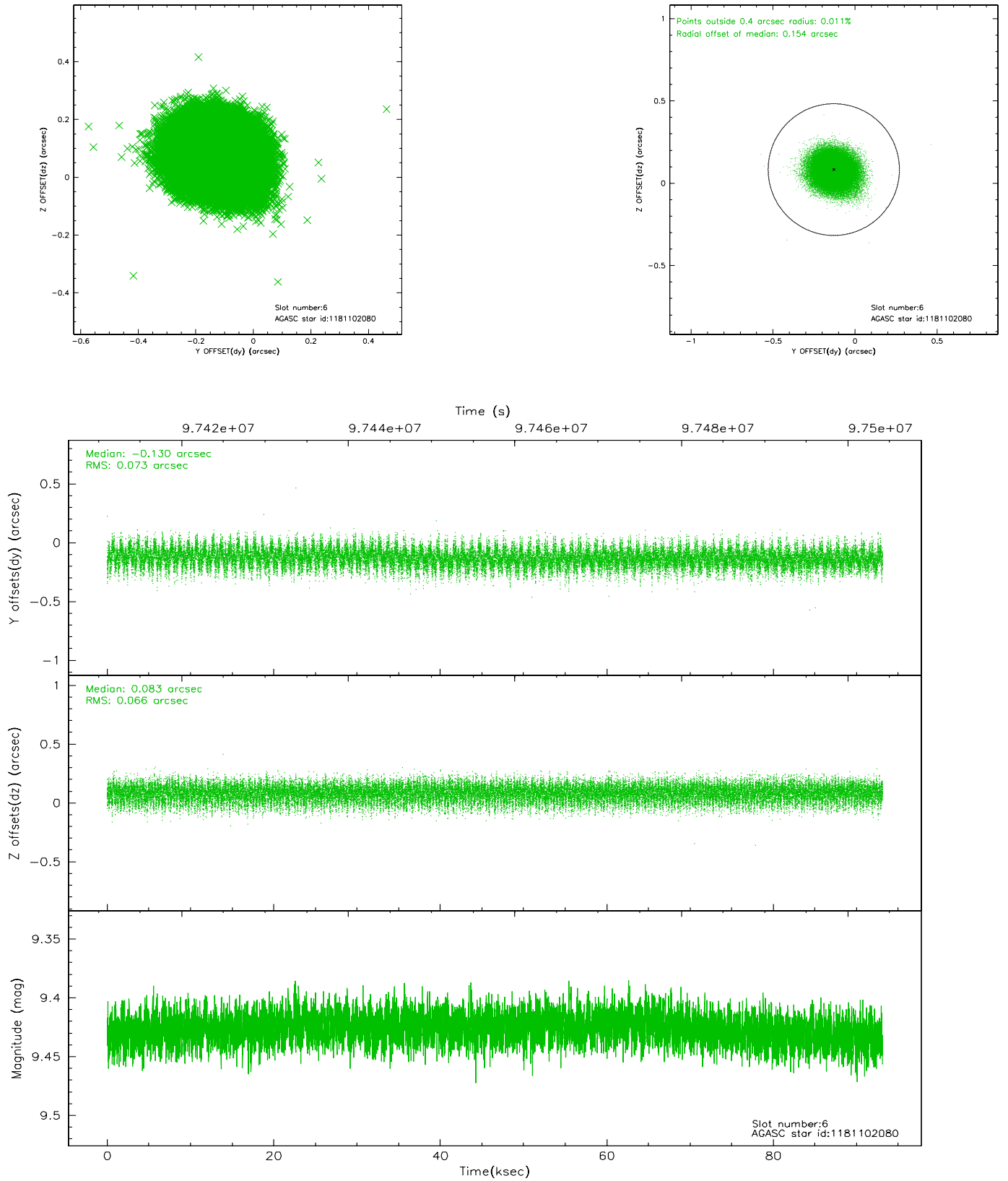
## 2.4.2 Slot 4



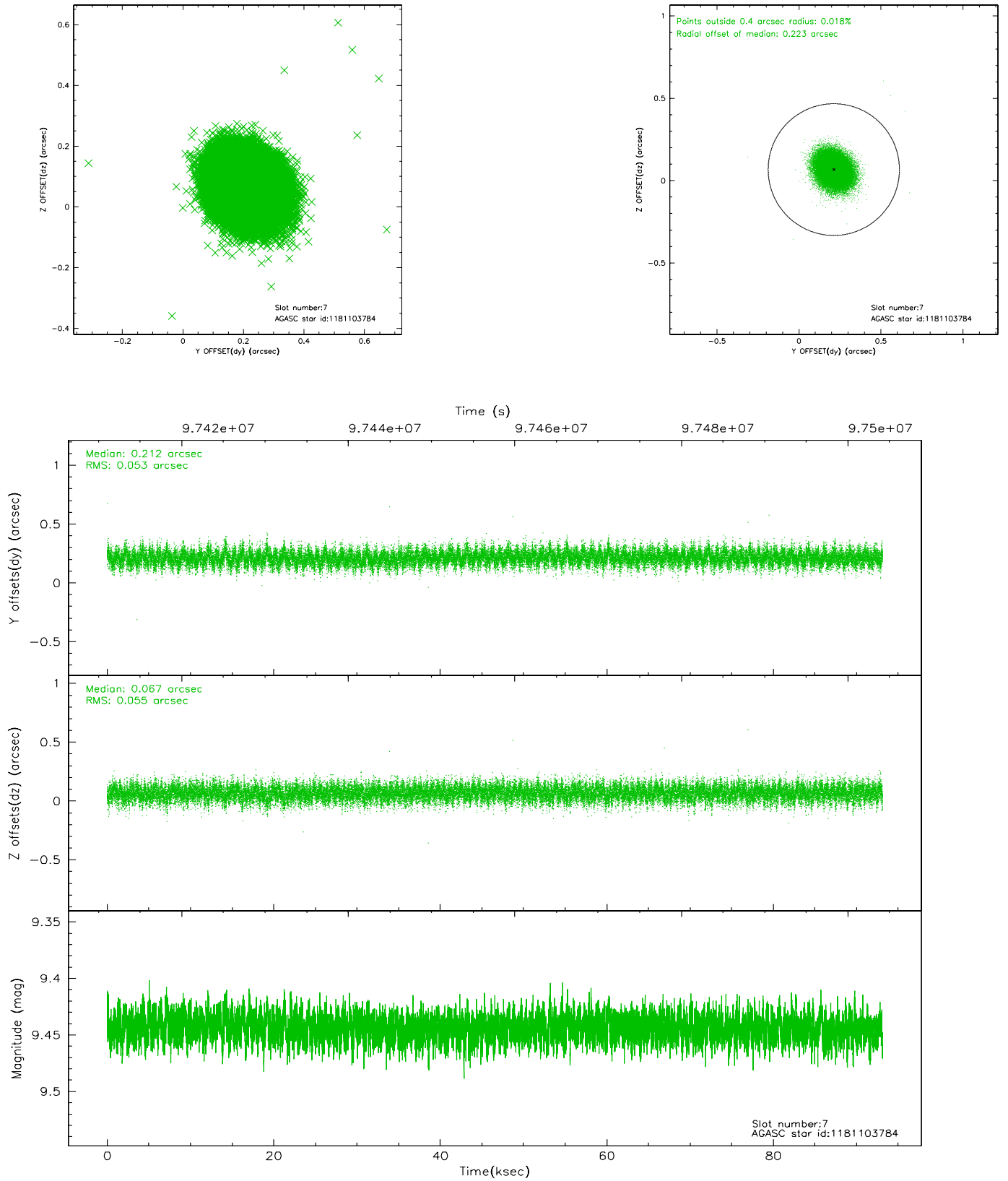
### 2.4.3 Slot 5



## 2.4.4 Slot 6

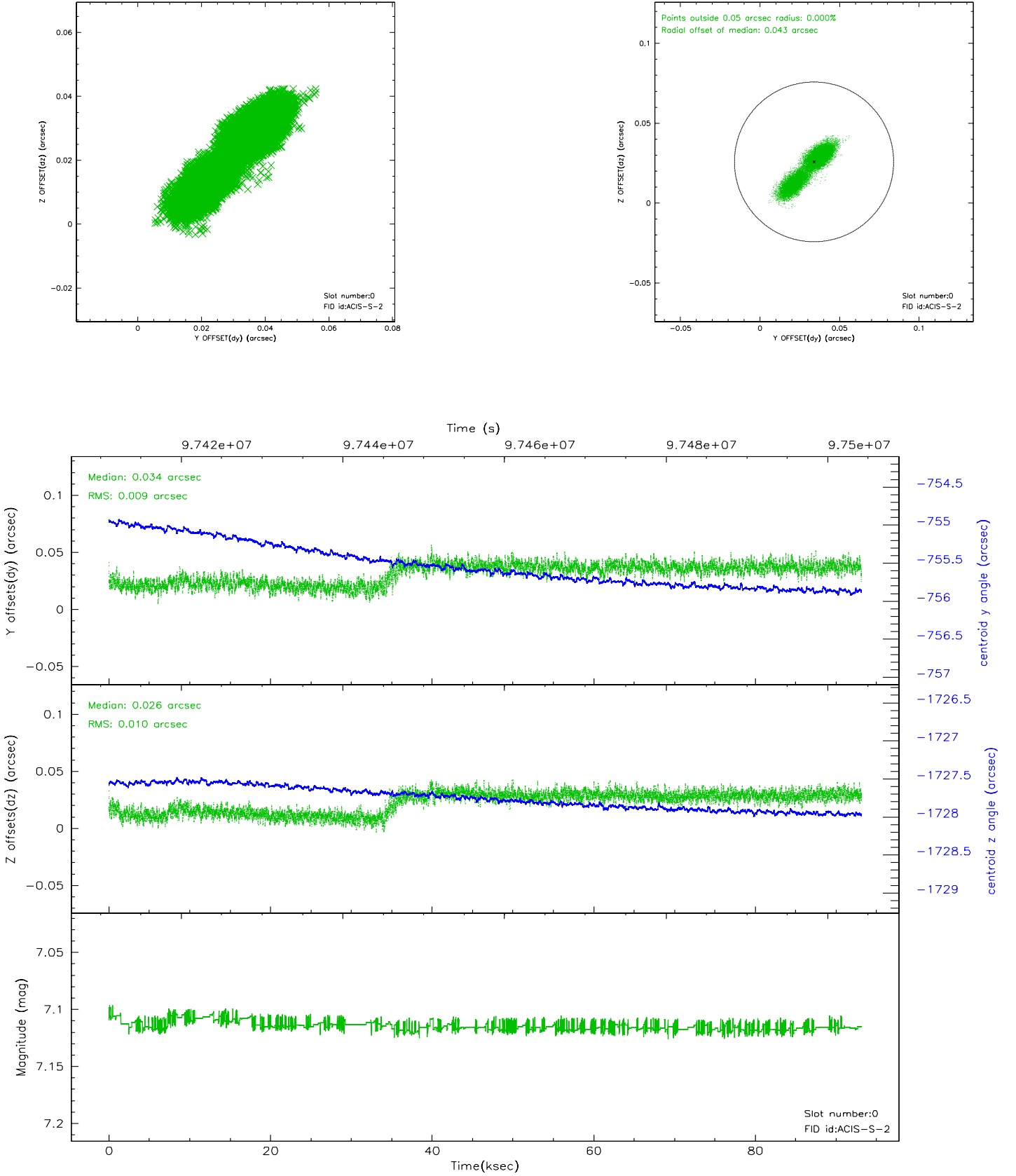


## 2.4.5 Slot 7

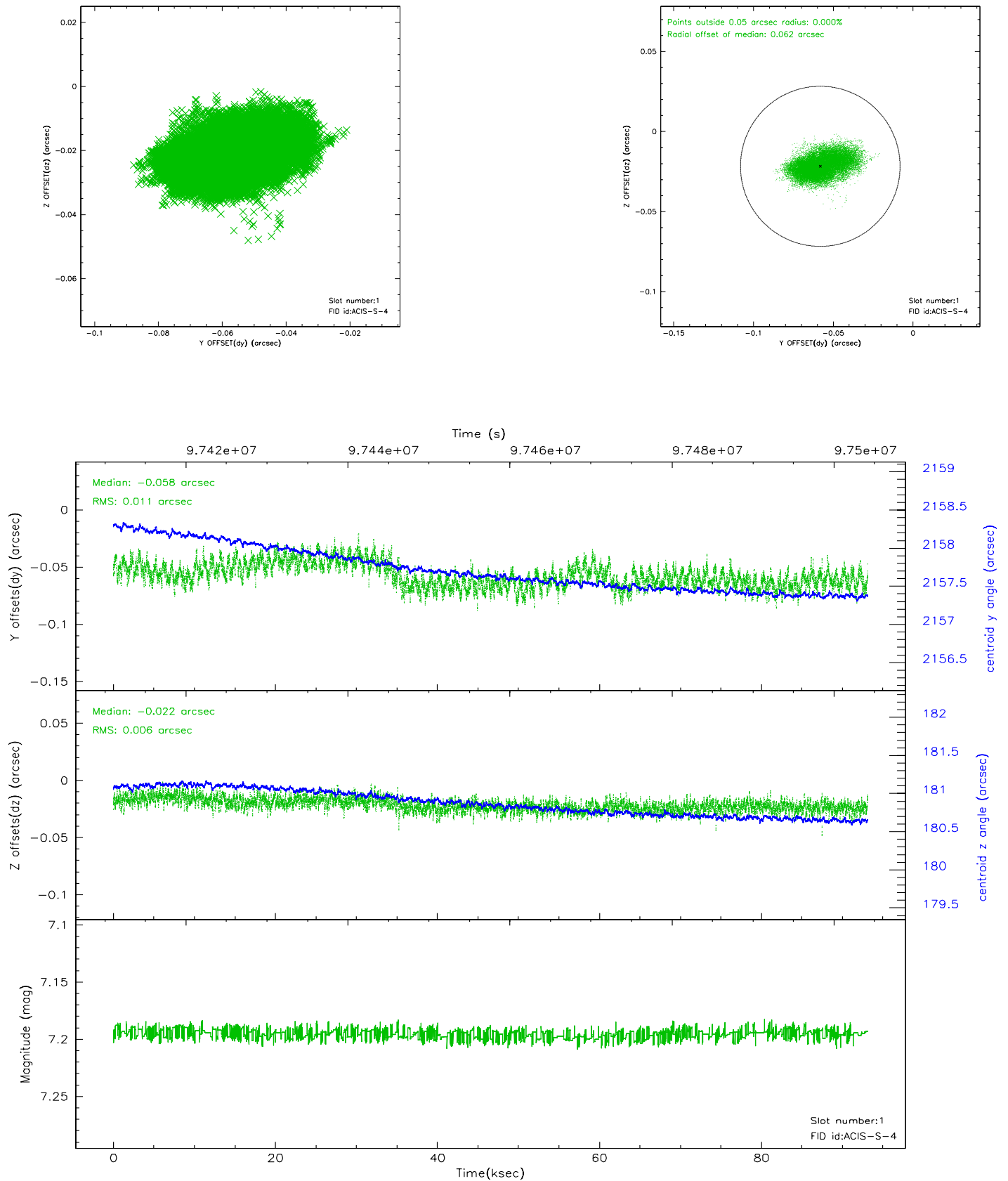


## 2.5 FID Slots

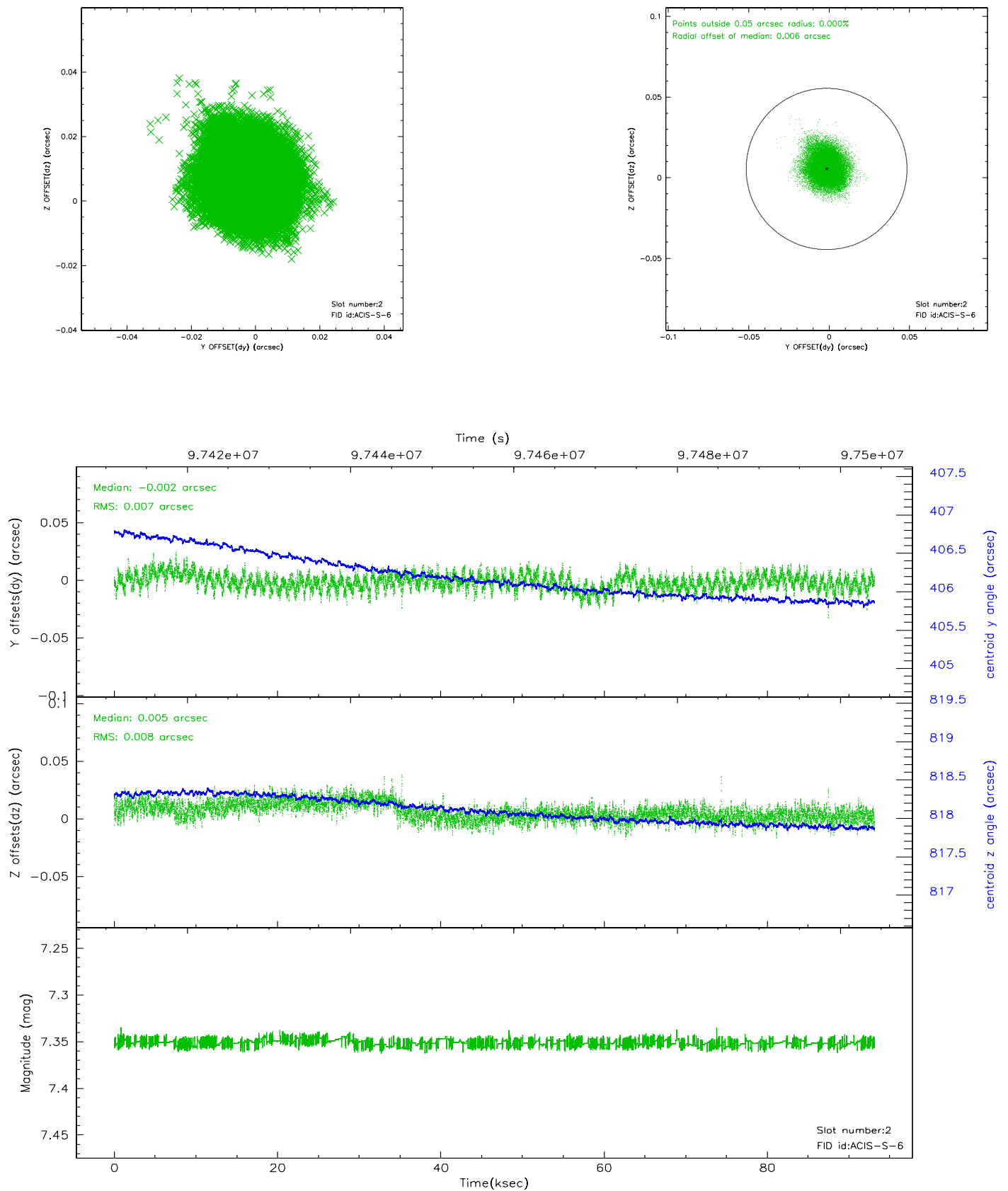
### 2.5.1 Slot 0



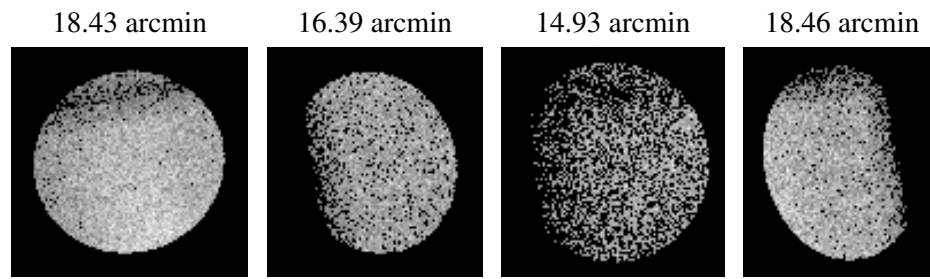
## 2.5.2 Slot 1



### 2.5.3 Slot 2



### 3 Point Sources



# A Summary

## A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2006.11.07
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	93.132

## A.2 Comments

Roll constraint met.