

# V&V Reference Report

## L2 ASCDS Version : 8.5.1

Observation 4824 - L2 Version 5  
Chandra X-Ray Center

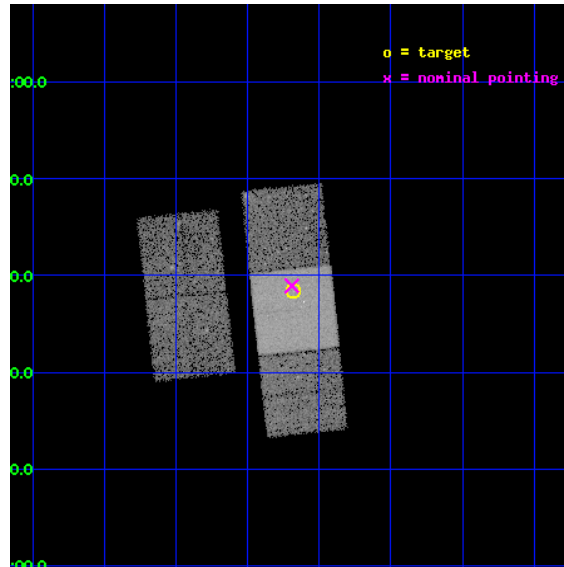
L2 Processing Date : Jan 31 2013

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# 1 Front

seq_num	700906	Sequence number
obs_id	4824	Observation id
title	Destroying Degeneracy: Spanning the Luminosity Range for Radio-Quiet Quasars at z=4	Proposal title
observer	Dr. Jill Bechtold	Principal investigator
object	SDS 1321+0038	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	200.295	Observer's specified target RA [deg]
dec_targ	0.639444	Observer's specified target Dec [deg]
ra_nom	200.29771387103	Nominal RA [deg]
dec_nom	0.64874513429414	Nominal Dec [deg]
roll_nom	83.856616369438	Nominal Roll [deg]
revision	5	Processing version of data
ontime	18035.742660284	Sum of GTIs [s]
livetime	17800.092404707	Livetime [s]
ontime2	18032.437510014	Sum of GTIs [s]
ontime3	18035.660580277	Sum of GTIs [s]
ontime6	18035.701620281	Sum of GTIs [s]
ontime7	18035.742660284	Sum of GTIs [s]
ontime8	18032.478530139	Sum of GTIs [s]
l2events	95146	Number of level 2 events

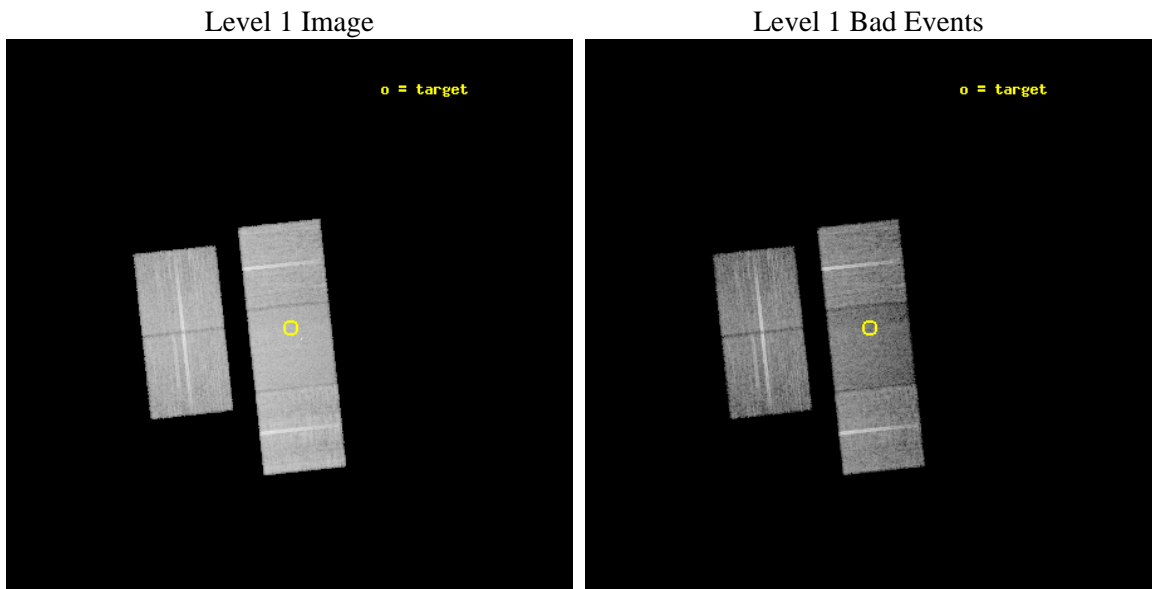




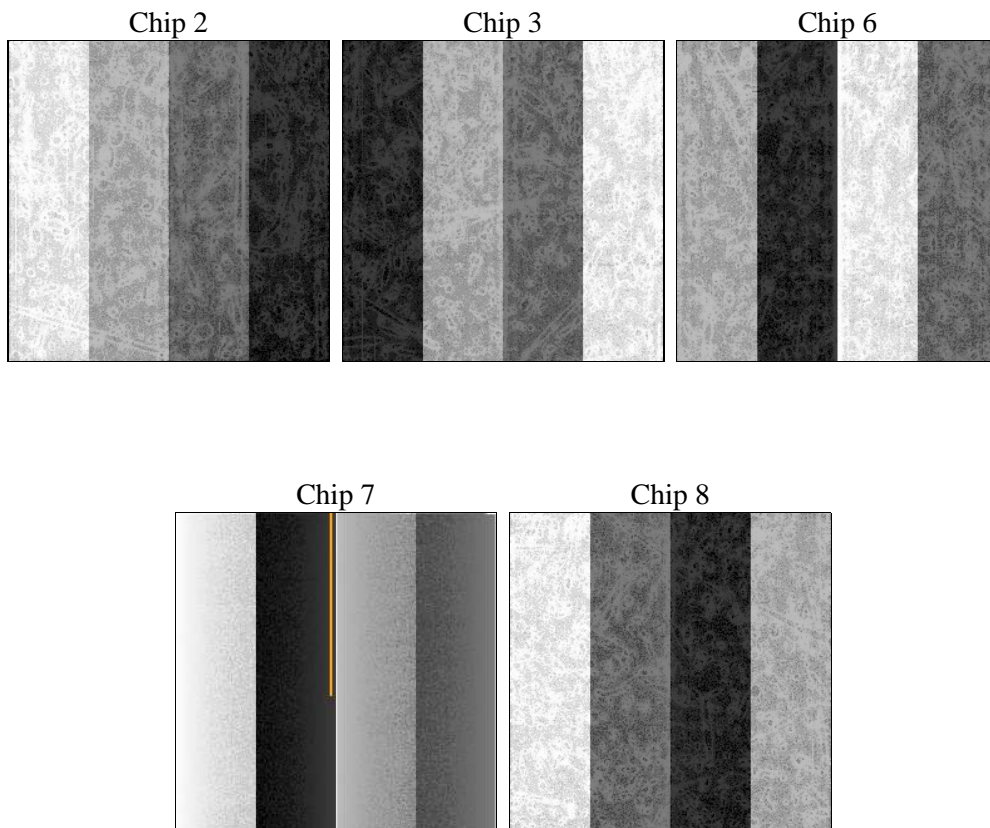
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	18000.000000	[s] Scheduled observation exposure time
ascdsver	8.5.1.1	Processing system revision	ontime	18035.742660284	Sum of GTIs [s]
caldsver	4.5.5	&#160	ontime2	18032.437510014	Sum of GTIs [s]
date	2013-02-01T00:40:36	Date and time of file creation	ontime3	18035.660580277	Sum of GTIs [s]
revision	5	Processing version of data	ontime6	18035.701620281	Sum of GTIs [s]
			ontime7	18035.742660284	Sum of GTIs [s]
			ontime8	18032.478530139	Sum of GTIs [s]
			l1events	604469	Number of level 1 events

### 2.1.4 Events

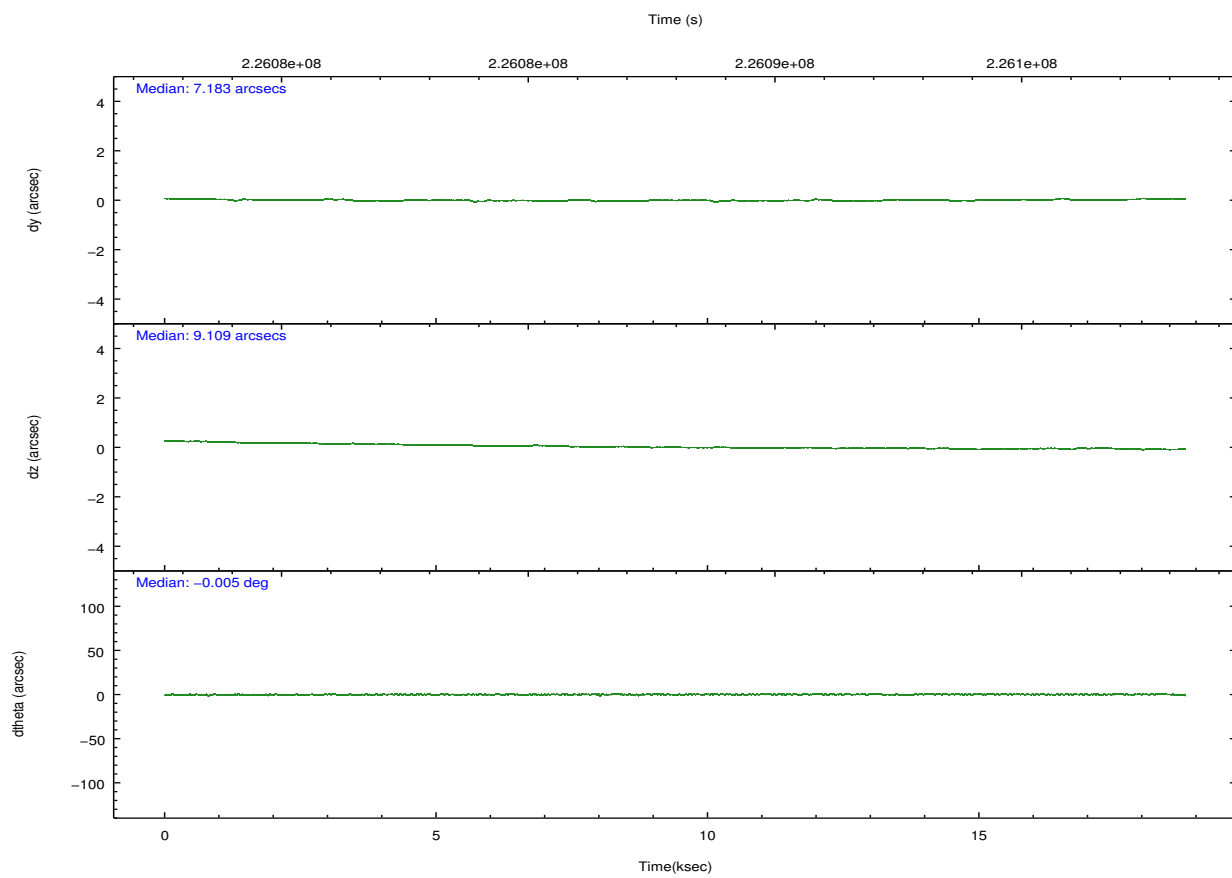
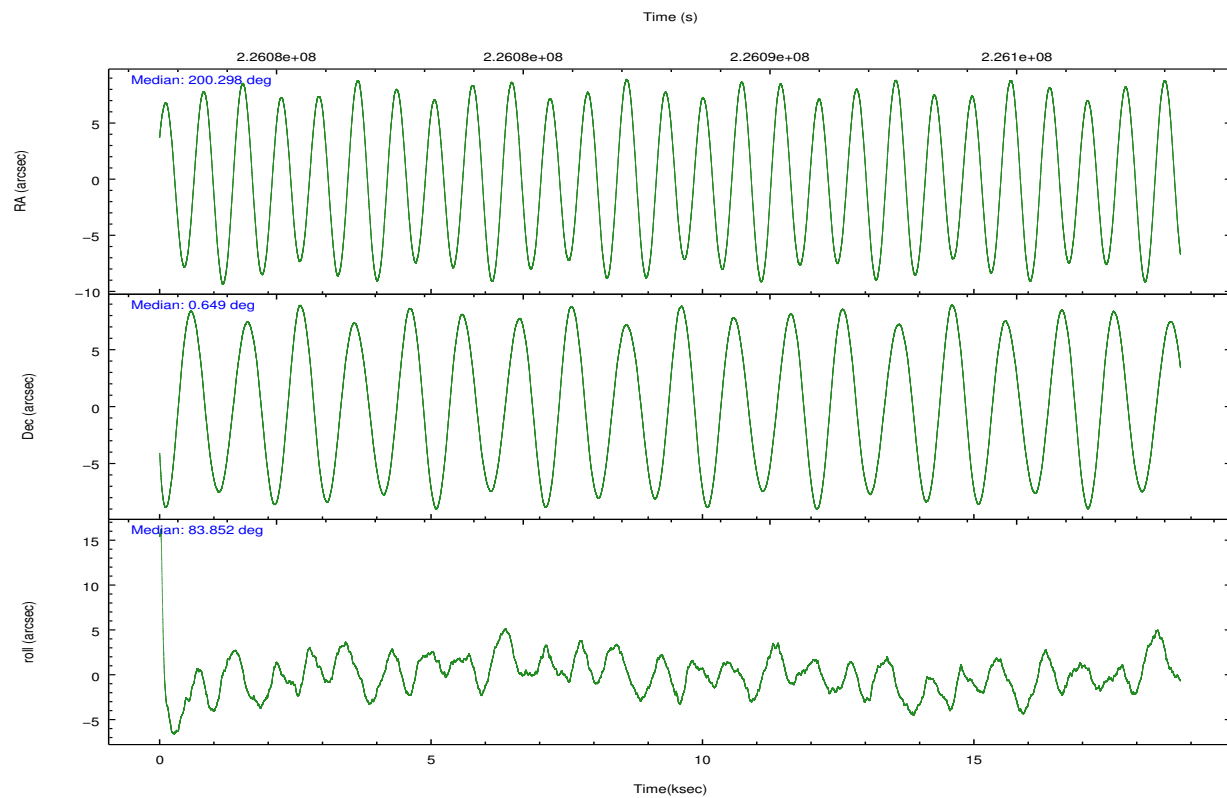
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	112180	110666	114015	124993	142615
rejected events	101298	100338	102298	68609	108389
rejected %	90%	90%	89%	54%	76%

	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	3951	3648	4237	5224	10380
	3%	3%	3%	4%	7%
grade 1 events	74	55	48	106	94
	0%	0%	0%	0%	0%
grade 2 events	2513	2200	2440	11446	7258
	2%	1%	2%	9%	5%
grade 3 events	1267	1202	1260	5396	4028
	1%	1%	1%	4%	2%
grade 4 events	1185	1161	1231	5263	3643
	1%	1%	1%	4%	2%
grade 5 events	3649	4369	4506	13328	6374
	3%	3%	3%	10%	4%
grade 6 events	1971	2120	2554	29069	8921
	1%	1%	2%	23%	6%
grade 7 events	97570	95911	97739	55161	101917
	86%	86%	85%	44%	71%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23678	ACIS-23678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	200.309051	200.2977138710266	Subarray requested	NONE	NONE
[deg] Pointing Dec	0.623977	0.6487451342941428	Alternating exposures requested	N	N
[deg] Pointing Roll	83.699849	83.85661636943786	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	226079382.184000	226078144.14484			
Observation start date	2005-03-01T15:48:38	2005-03-01T15:29:04			
[s] Observation end time (MET)	226097382.184000	226097828.24573			
Observation end date	2005-03-01T20:48:38	2005-03-01T20:57:08			
Read mode	TIMED	TIMED			

## 2.3 Aspect

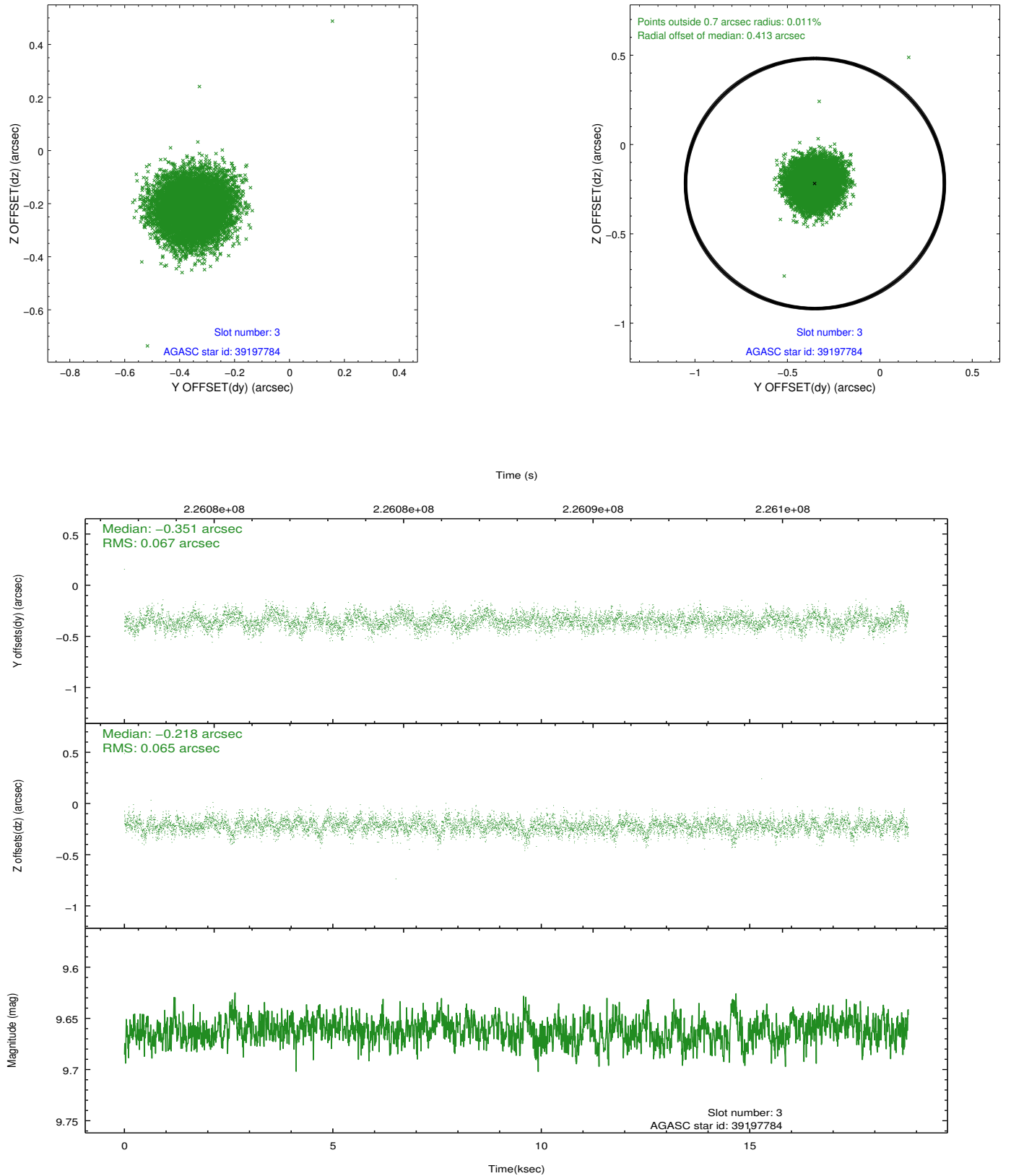


### Slot Statistics

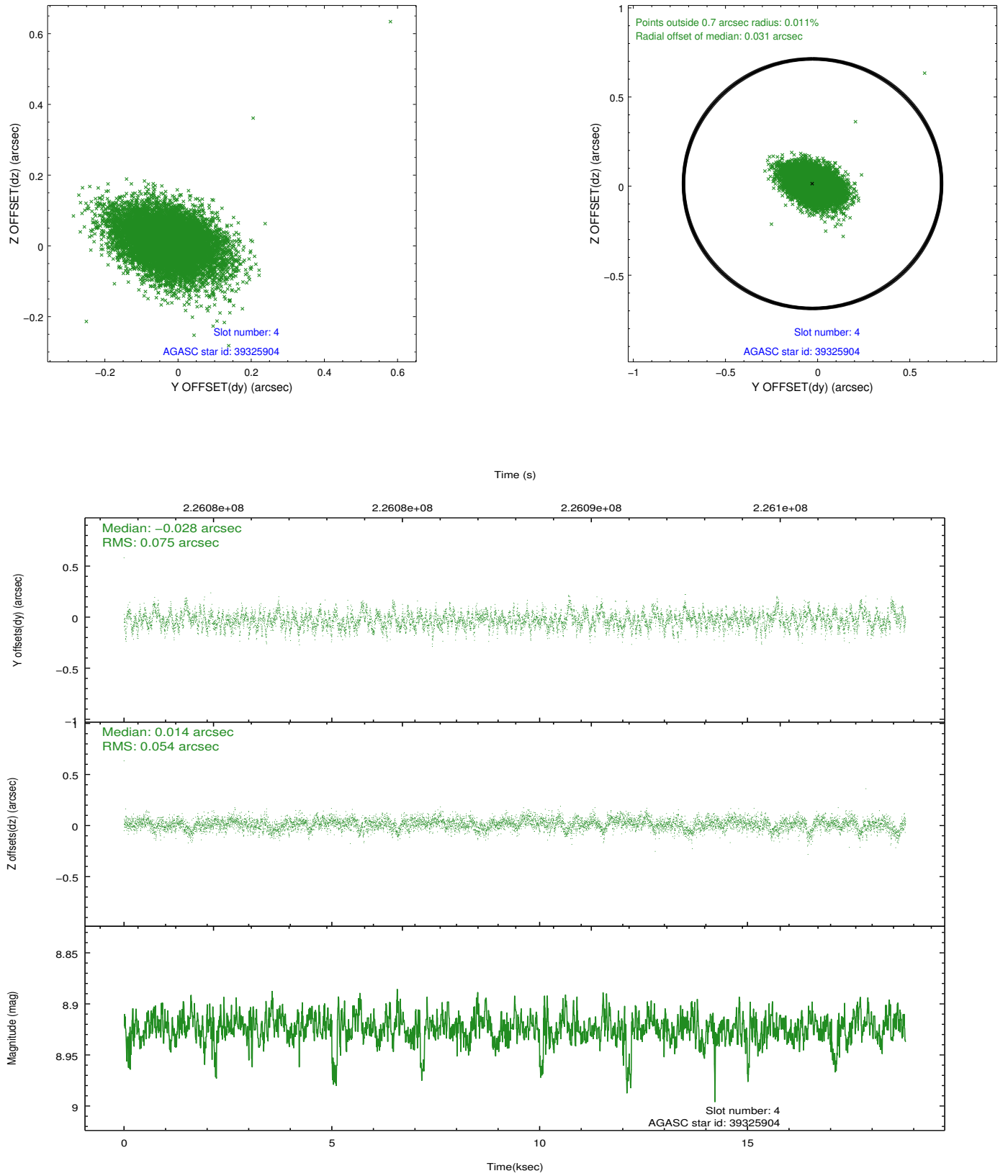
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	4587	-0.041	-0.048	0.007	0.012	0.000000	0.000000	-759.96	-1730.42
1	FID	ACIS-S-4	7.21	4587	0.094	0.032	0.006	0.012	0.000000	0.000000	2153.33	177.96
2	FID	ACIS-S-5	7.23	4587	-0.085	0.024	0.007	0.012	0.000000	0.000000	-1812.60	171.81
3	GUIDE	39197784	9.66	9163	-0.351	-0.218	0.099	0.162	199.911028	1.264167	2133.70	1677.18
4	GUIDE	39325904	8.92	9166	-0.028	0.014	0.095	0.162	201.024165	1.205349	2363.82	-2328.21
5	GUIDE	39326016	10.02	9161	0.298	0.003	0.119	0.205	200.101287	0.633158	-48.28	746.95
6	GUIDE	39327968	9.36	9167	0.077	0.204	0.108	0.169	200.905774	0.519018	-139.22	-2176.06
7	OMITTED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00

## 2.4 Star Slots

### 2.4.1 Slot 3

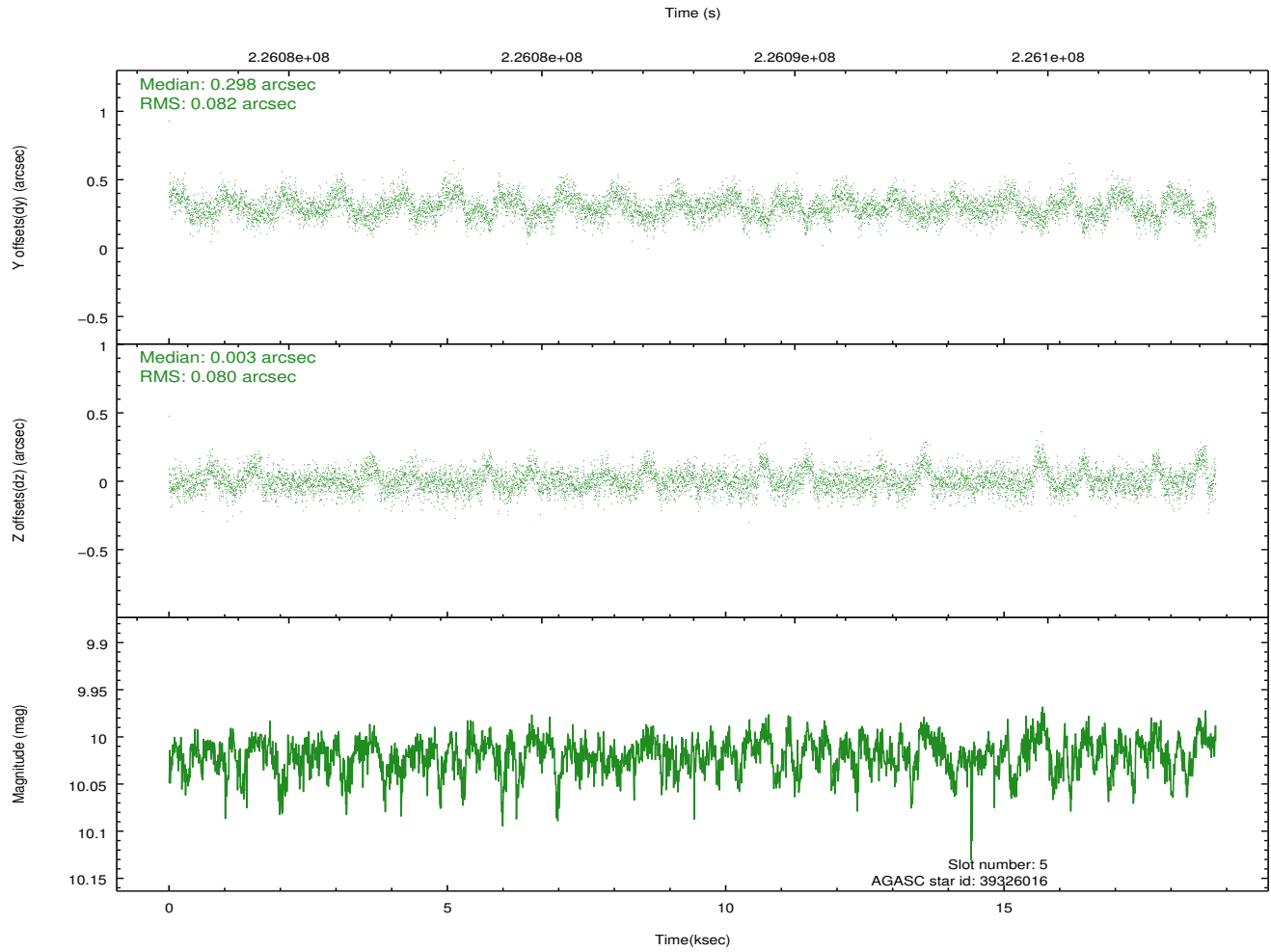
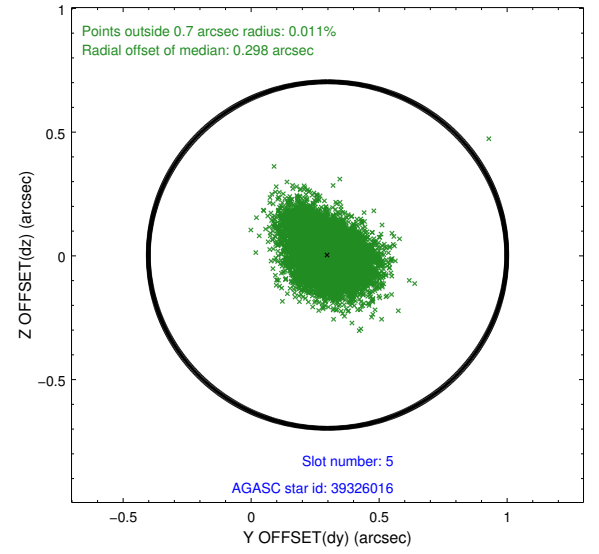
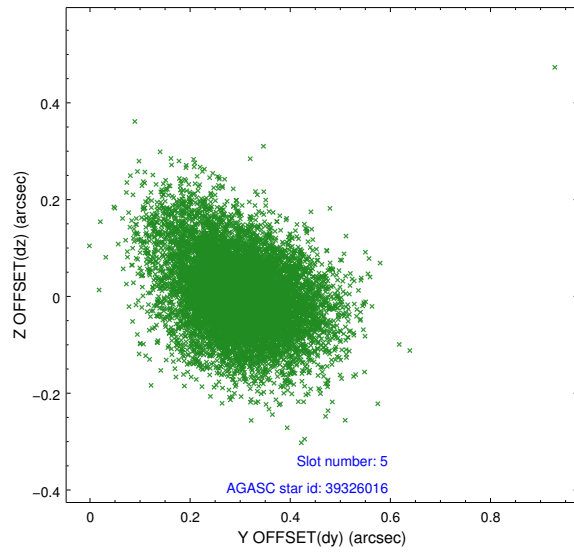


## 2.4.2 Slot 4

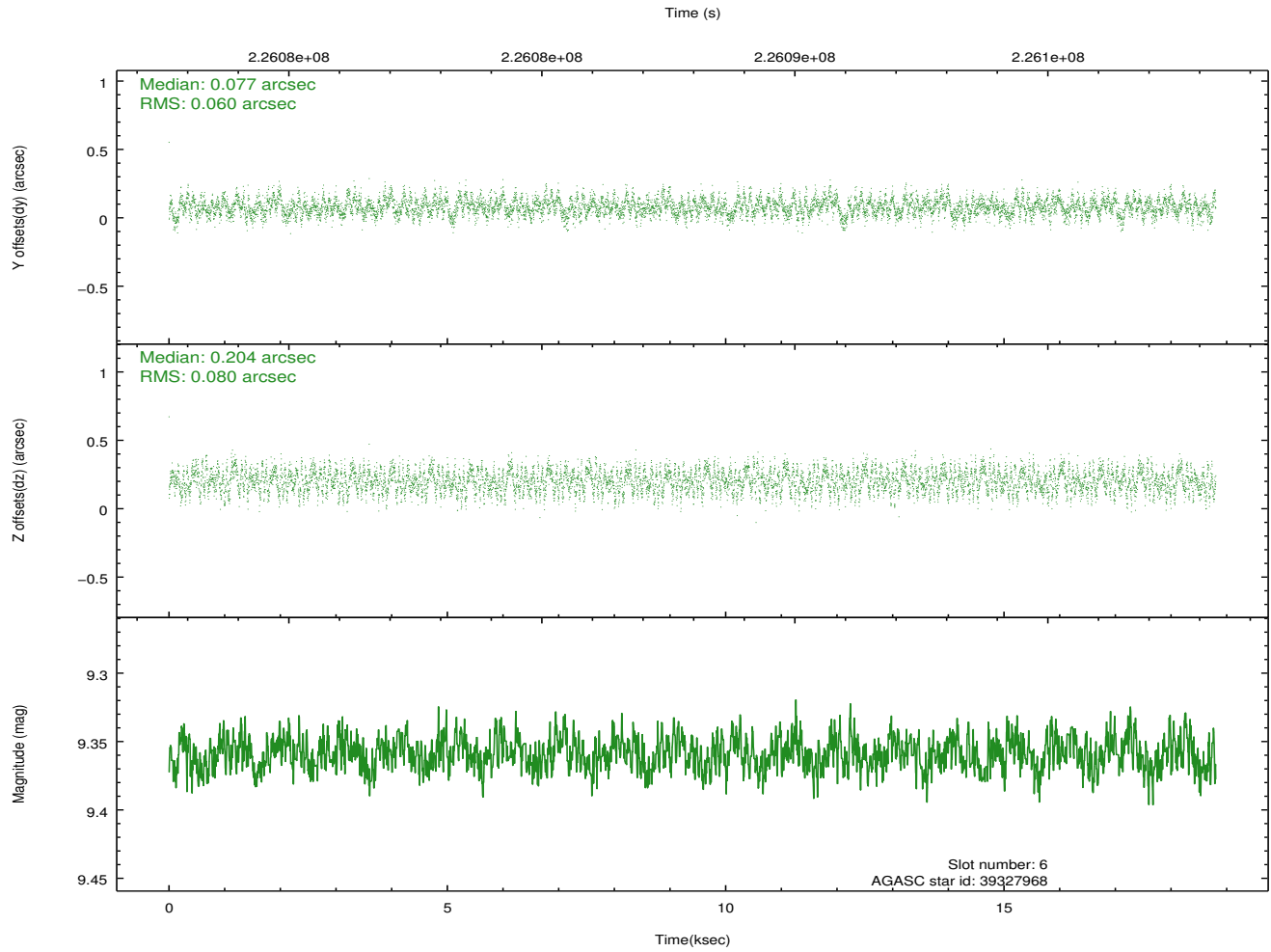
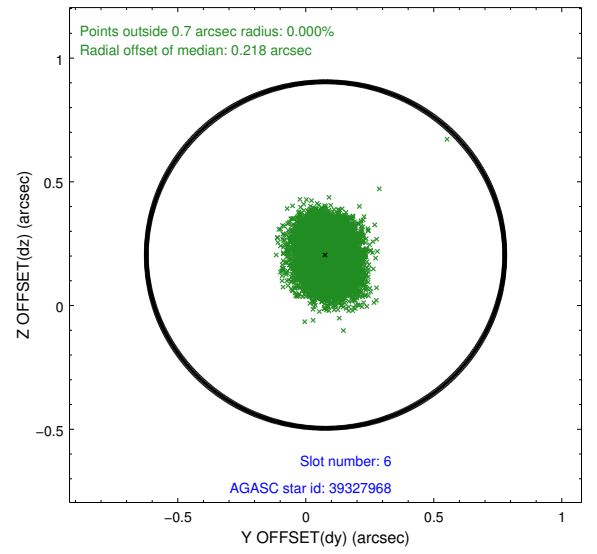
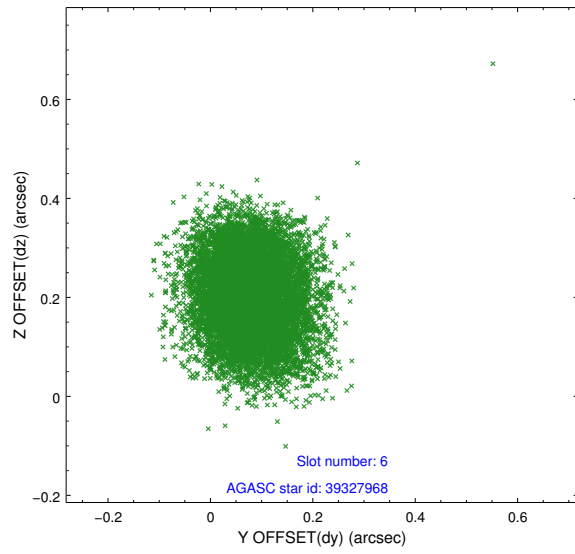




### 2.4.3 Slot 5

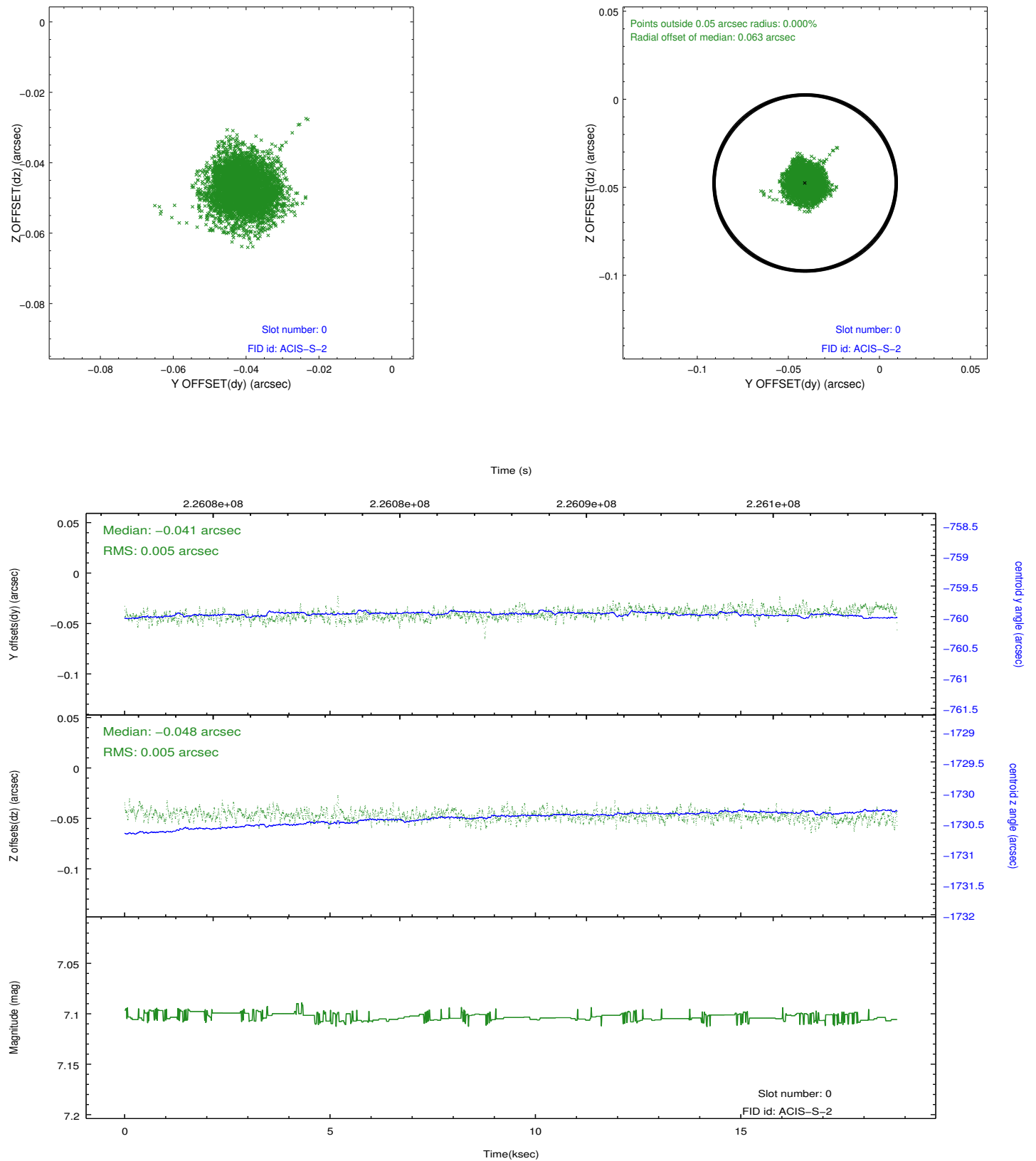


## 2.4.4 Slot 6

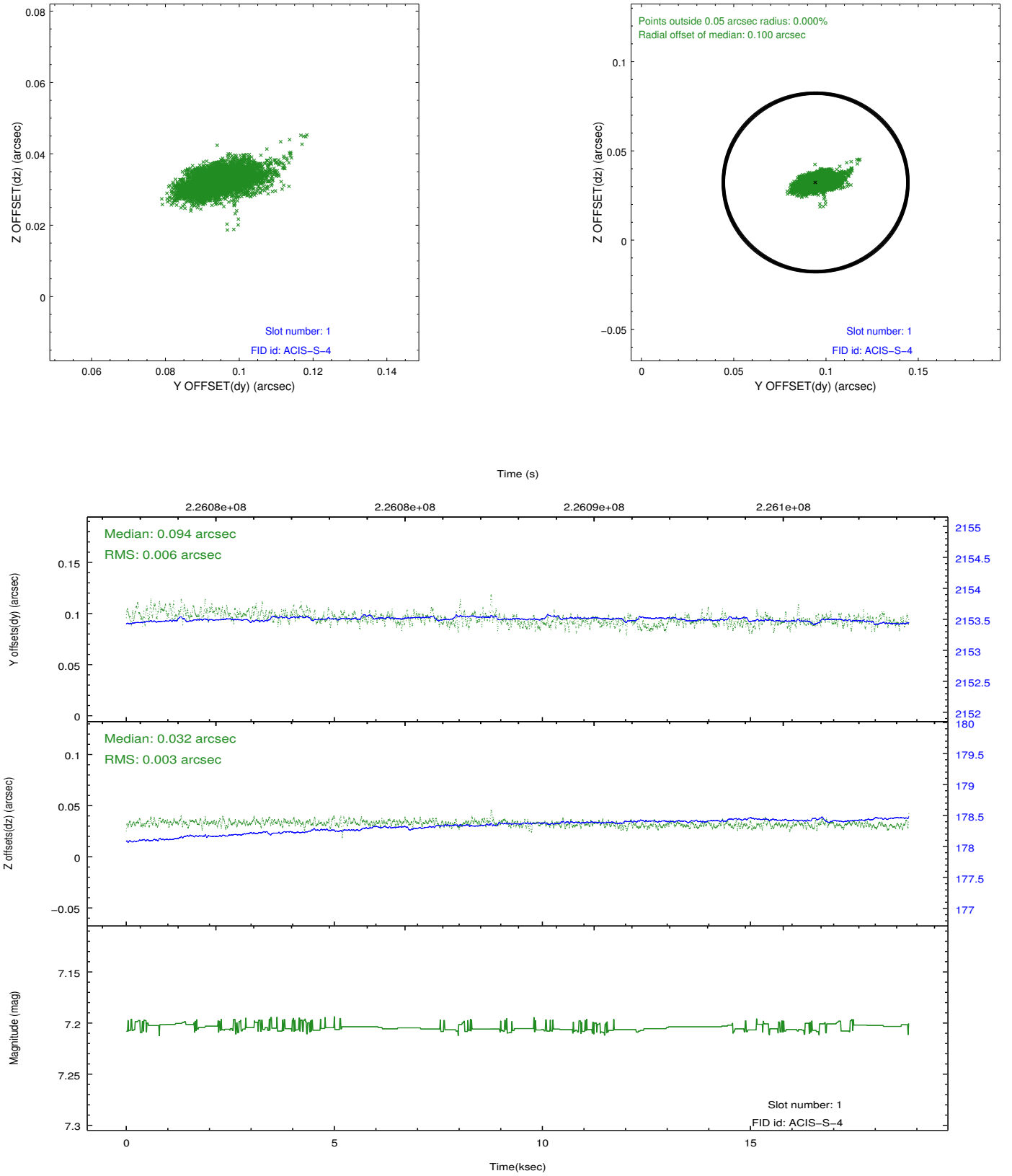


## 2.5 FID Slots

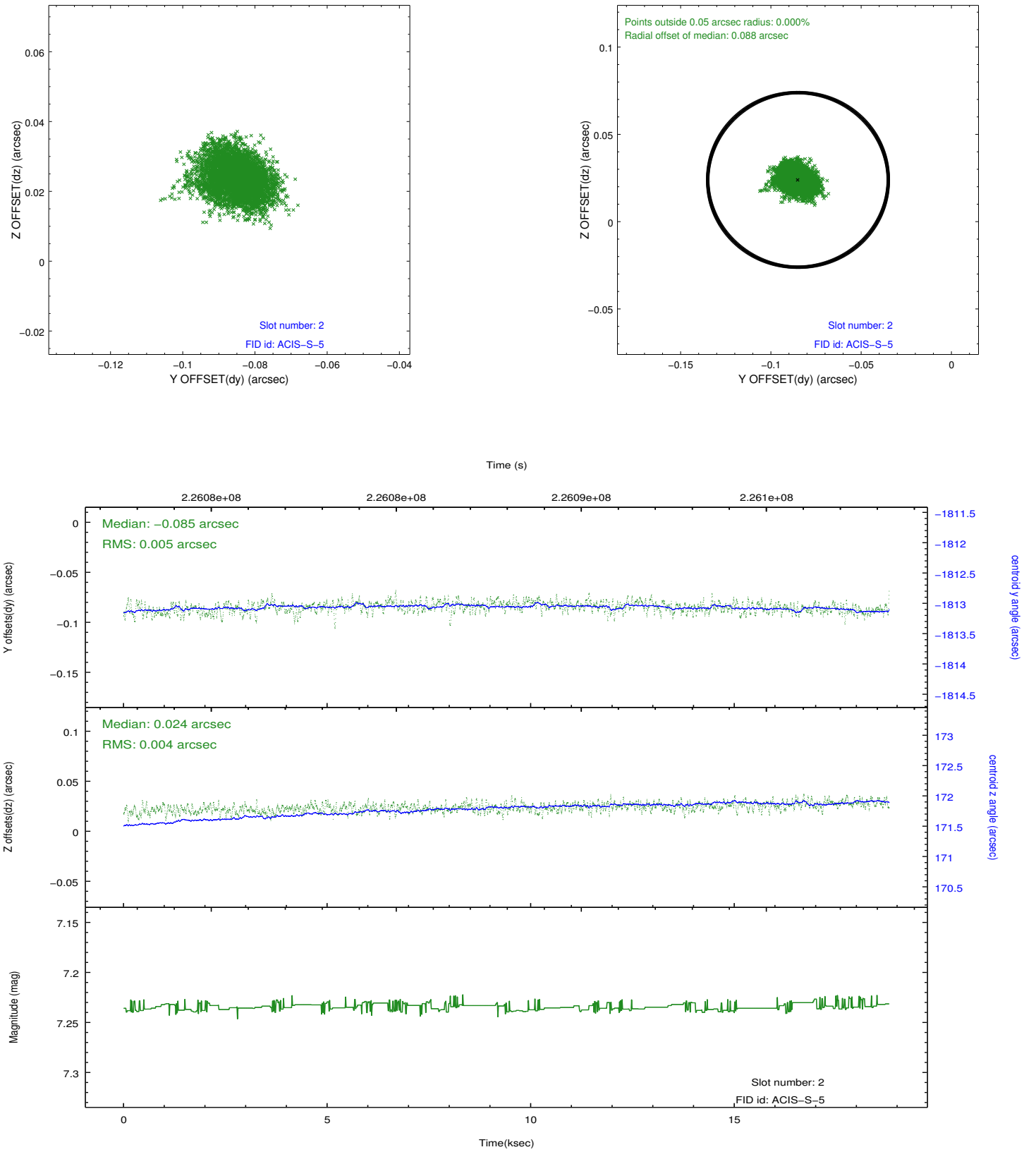
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



# A Summary

## A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2013.02.01
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	18.03579

## A.2 Comments

The guide star in slot 7 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this guide star from the solution.