

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 2989 - L2 Version 3  
Chandra X-Ray Center

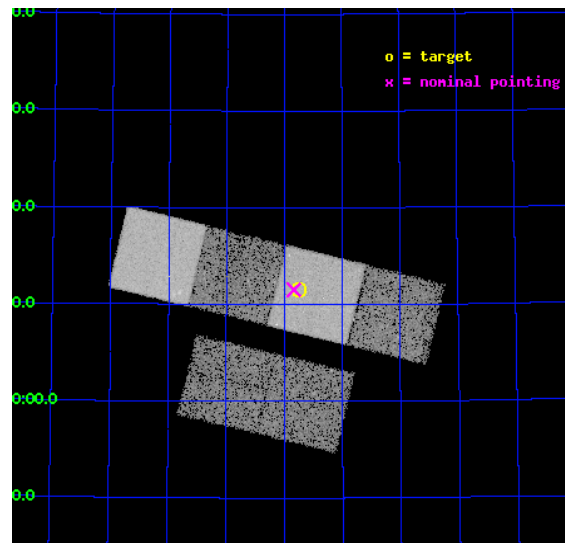
L2 Processing Date : Oct 13 2012

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# 1 Front

seq_num	700428	Sequence number
obs_id	2989	Observation id
title	CHANDRA OBSERVATIONS OF A POPULATION OF TYPE 2 QUASARS DISCOVERED IN THE DPOSS	Proposal title
observer	PROF. S. DJORGOVSKI	Principal investigator
object	PSS 0946+6611	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	146.684583	Observer's specified target RA [deg]
dec_targ	66.191667	Observer's specified target Dec [deg]
ra_nom	146.70850949251	Nominal RA [deg]
dec_nom	66.192214068097	Nominal Dec [deg]
roll_nom	13.607121182653	Nominal Roll [deg]
revision	3	Processing version of data
ontime	14550.399945796	Sum of GTIs [s]
livetime	14366.154020483	Livetime [s]
ontime2	14550.399945796	Sum of GTIs [s]
ontime3	14547.158985496	Sum of GTIs [s]
ontime5	14550.399945796	Sum of GTIs [s]
ontime6	14550.399945796	Sum of GTIs [s]
ontime7	14550.399945796	Sum of GTIs [s]
ontime8	14550.399945796	Sum of GTIs [s]
l2events	134531	Number of level 2 events

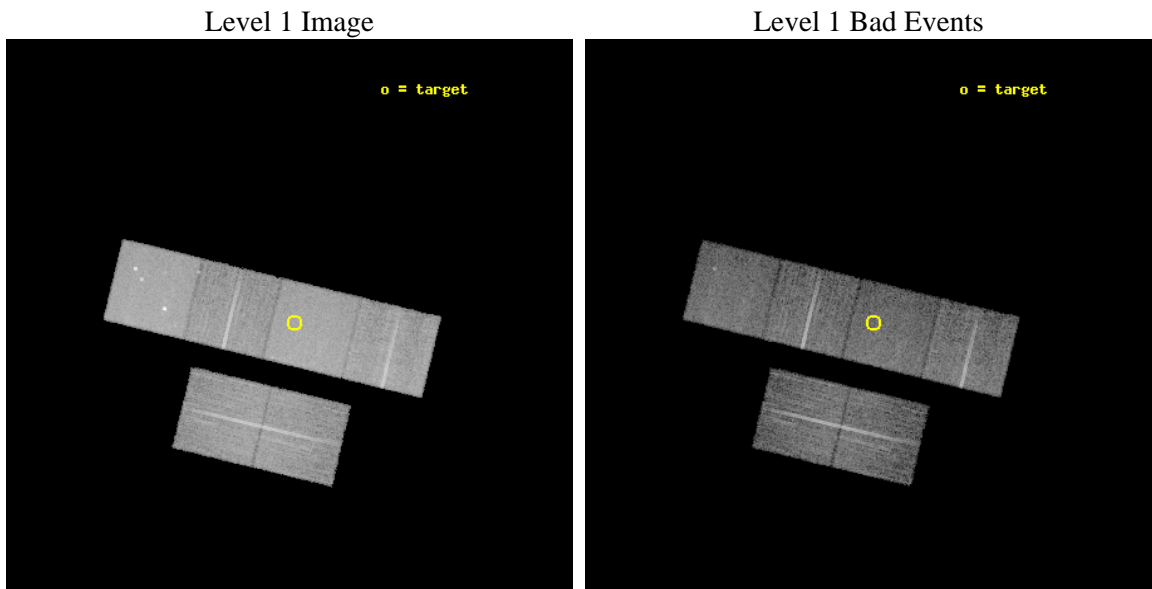




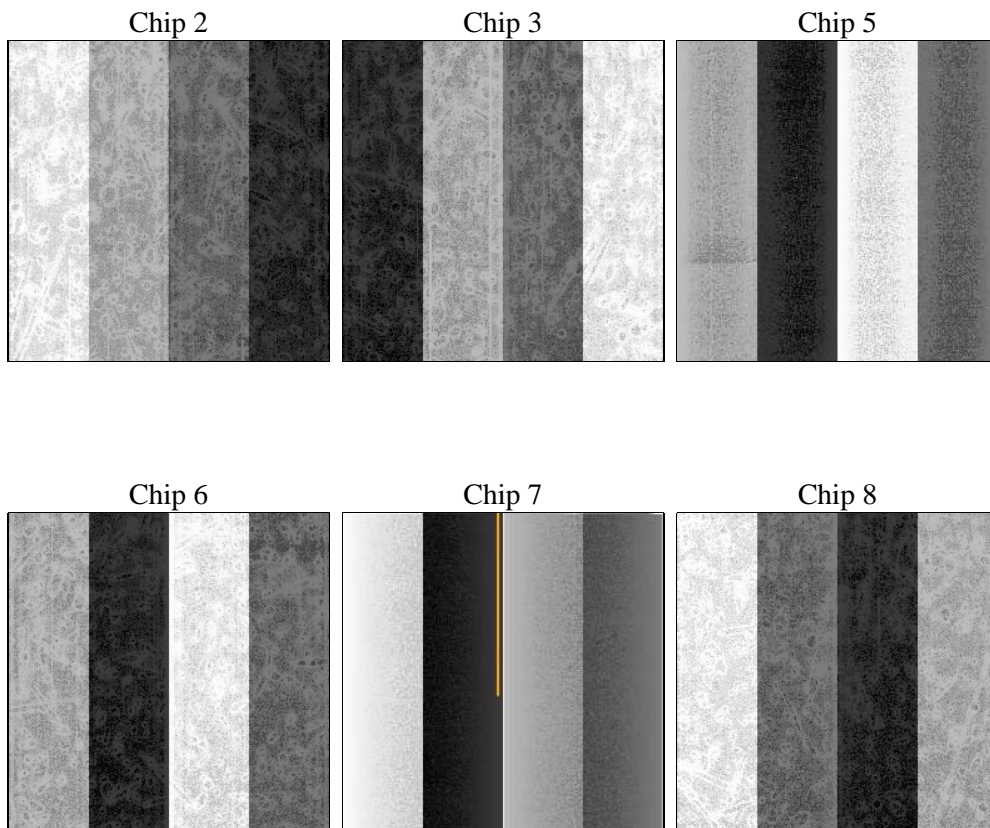
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	14400.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	14550.399945796	Sum of GTIs [s]
caldsver	4.5.2	&#160	ontime2	14550.399945796	Sum of GTIs [s]
date	2012-10-13T05:19:31	Date and time of file creation	ontime3	14547.158985496	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	14550.399945796	Sum of GTIs [s]
			ontime6	14550.399945796	Sum of GTIs [s]
			ontime7	14550.399945796	Sum of GTIs [s]
			ontime8	14550.399945796	Sum of GTIs [s]
			l1events	661337	Number of level 1 events

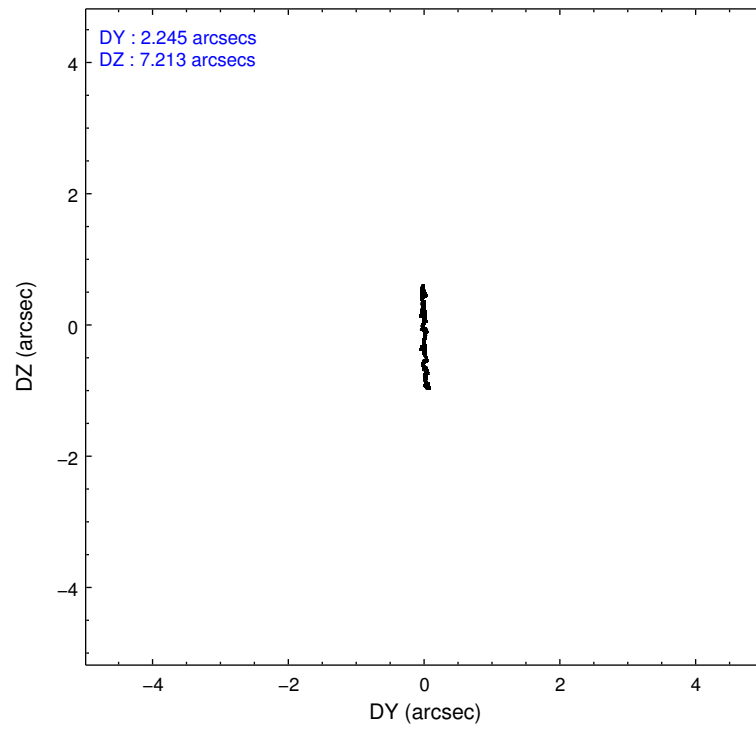
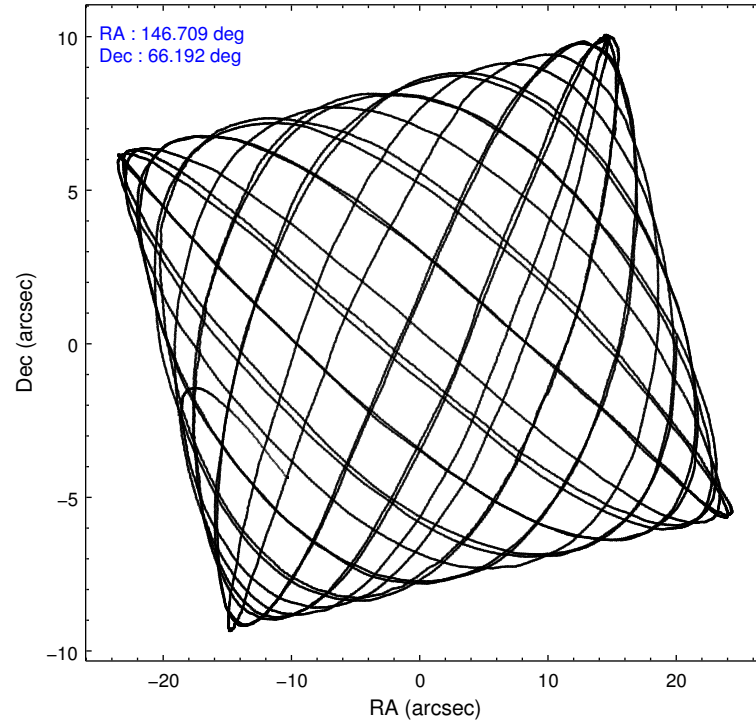
### 2.1.4 Events

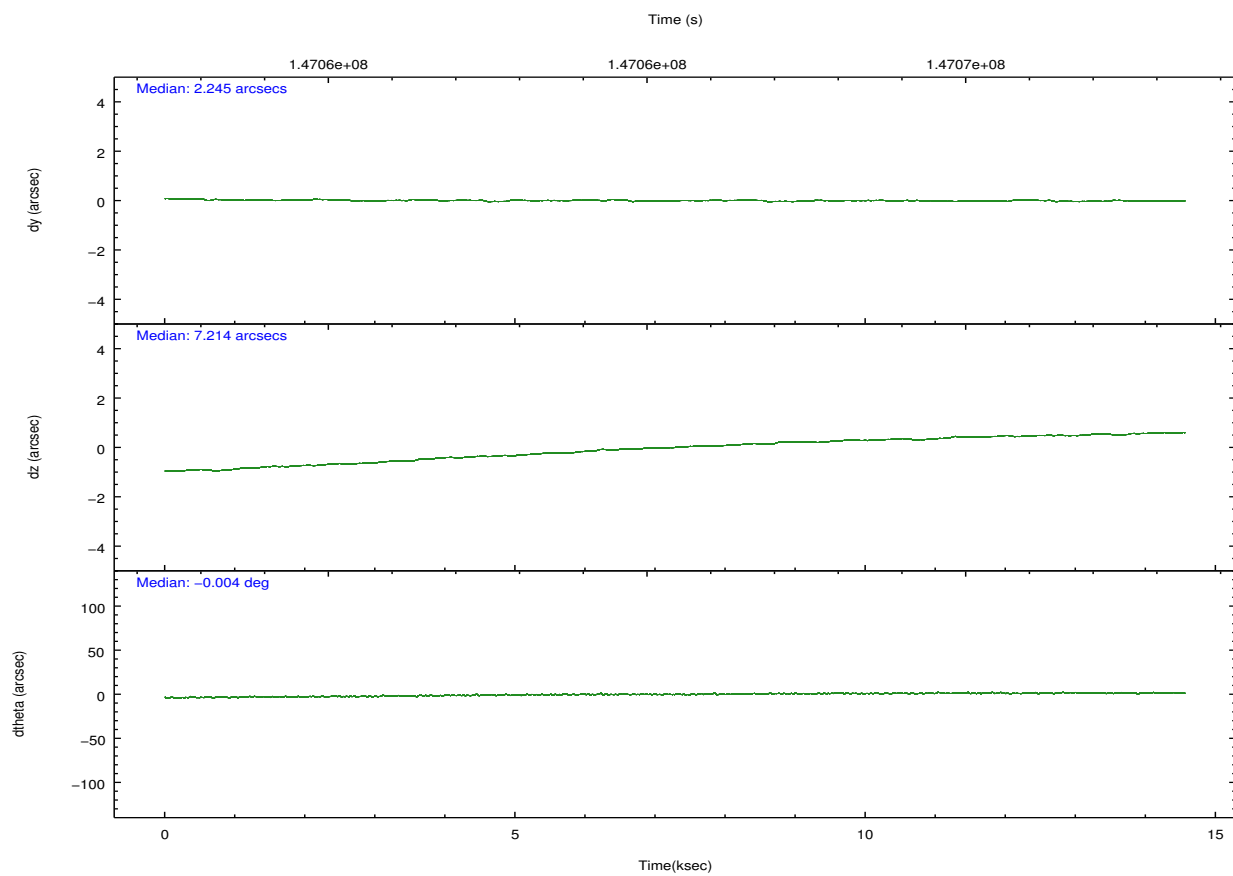
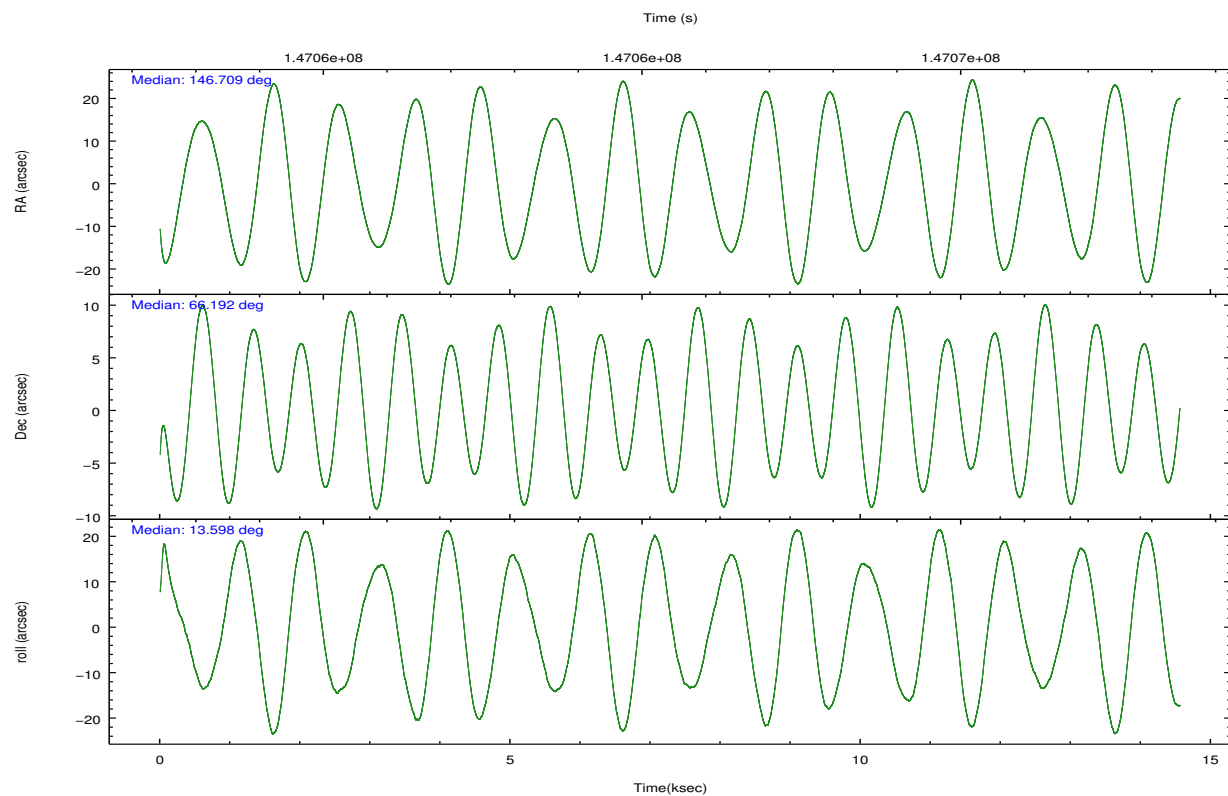
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	94731	90577	140015	94584	125106	116324	grade 0 events	4838	4672	8489	4549	4952	7764
rejected events	84735	80896	81057	84454	77821	94352		5%	5%	6%	4%	3%	6%
rejected %	89%	89%	57%	89%	62%	81%	grade 1 events	55	47	174	46	110	68
								0%	0%	0%	0%	0%	0%
							grade 2 events	2138	1995	19061	2225	10128	5412
								2%	2%	13%	2%	8%	4%
							grade 3 events	1054	1100	2648	1088	4759	2652
								1%	1%	1%	1%	3%	2%
							grade 4 events	1088	1048	2527	1086	4669	2467
								1%	1%	1%	1%	3%	2%
							grade 5 events	3606	3932	10298	4094	11791	5260
								3%	4%	7%	4%	9%	4%
							grade 6 events	1876	1900	32645	2191	27636	6095
								1%	2%	23%	2%	22%	5%
							grade 7 events	80076	75883	64173	79305	61061	86606
								84%	83%	45%	83%	48%	74%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
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
[deg] Pointing RA	146.660316	146.7085094925106	Subarray requested	NONE	NONE
[deg] Pointing Dec	66.173204	66.19221406809726	Alternating exposures requested	N	N
[deg] Pointing Roll	13.494583	13.60712118265333	[s] Primary exposure time	0.000000	3.2
[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)	147058325.184000	147056521.14738			
Observation start date	2002-08-30T01:31:01	2002-08-30T01:02:01			
[s] Observation end time (MET)	147072725.184000	147073160.48556			
Observation end date	2002-08-30T05:31:01	2002-08-30T05:39:20			
Read mode	TIMED	TIMED			

## 2.3 Aspect



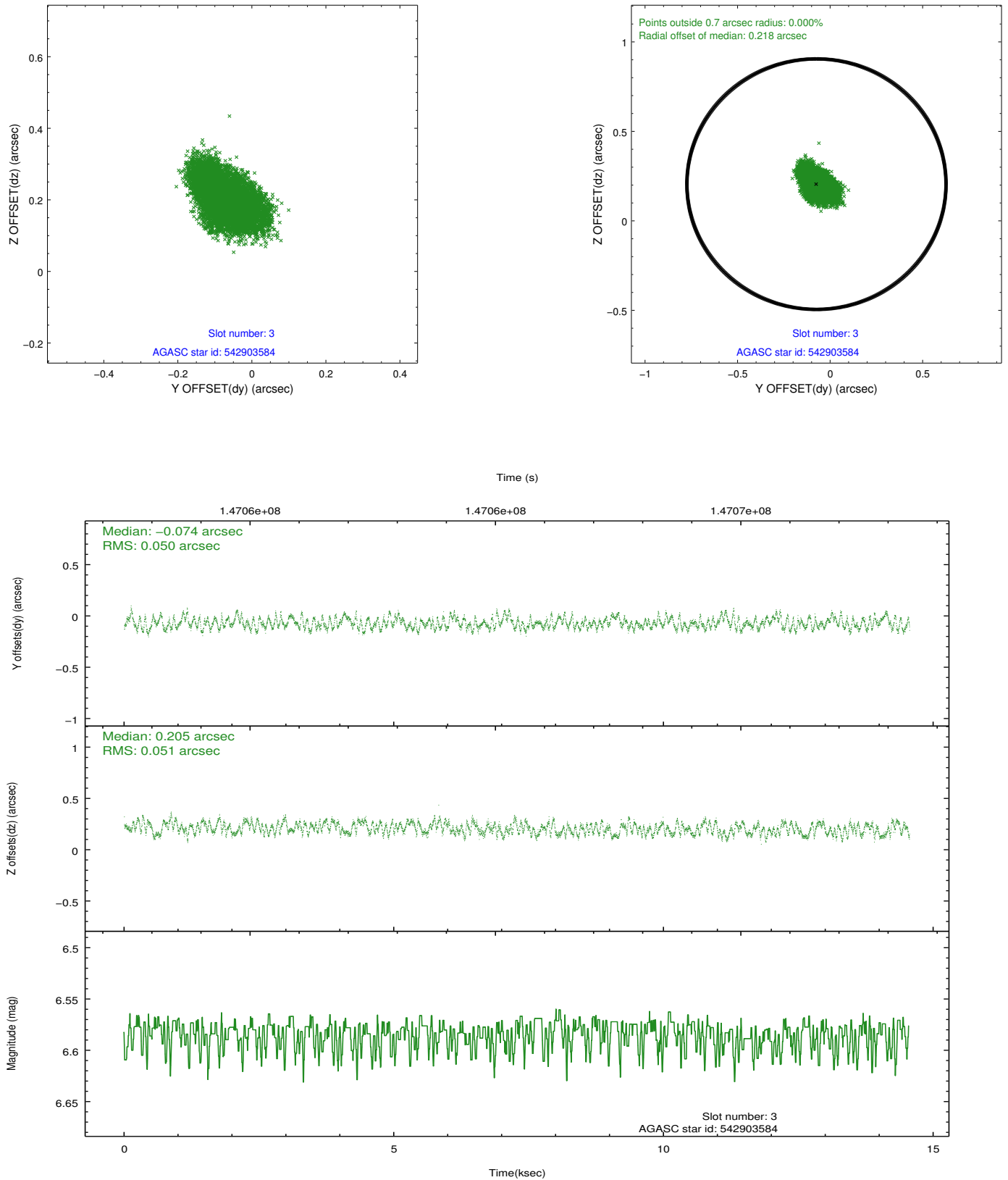


### Slot Statistics

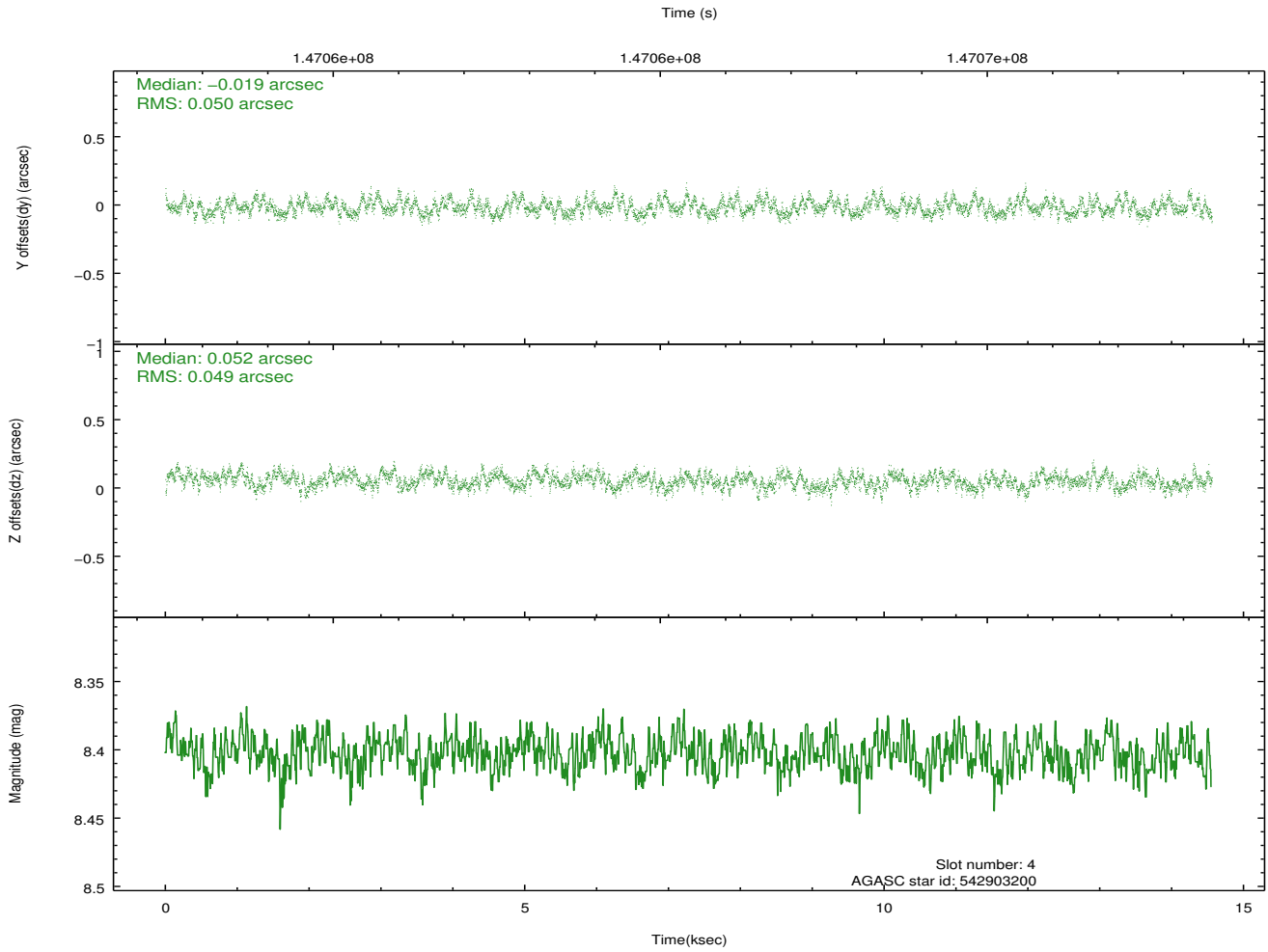
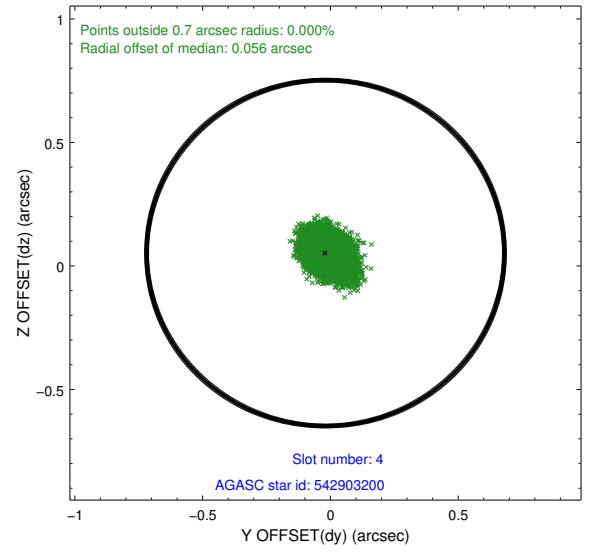
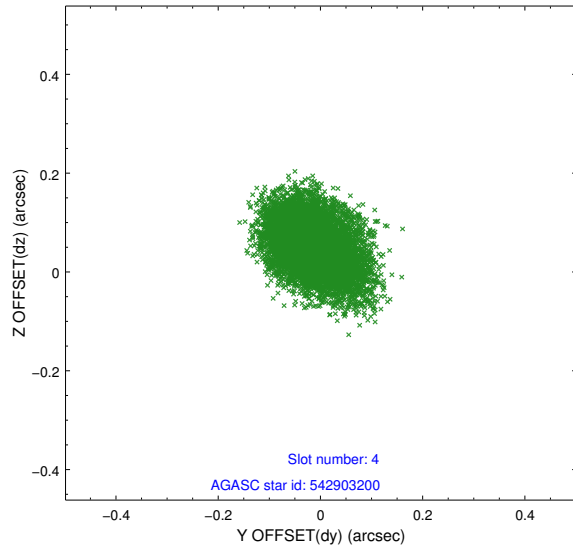
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	3551	-0.029	-0.006	0.017	0.026	0.000000	0.000000	-754.90	-1728.31
1	FID	ACIS-S-4	7.20	3551	-0.014	0.015	0.013	0.023	0.000000	0.000000	2158.25	179.86
2	FID	ACIS-S-5	7.24	3551	0.011	-0.002	0.021	0.031	0.000000	0.000000	-1807.29	173.88
3	GUIDE	542903584	6.58	7102	-0.074	0.205	0.076	0.120	147.598266	65.593223	872.18	-2345.08
4	GUIDE	542903200	8.40	7102	-0.019	0.052	0.074	0.119	147.196149	65.805328	460.92	-1468.84
5	GUIDE	542909424	8.73	7101	-0.056	-0.147	0.075	0.116	146.551805	66.702432	294.16	1888.85
6	GUIDE	542908856	8.67	7100	-0.048	-0.082	0.066	0.105	147.570649	66.819465	1799.35	1971.20
7	GUIDE	542908504	9.43	7098	0.192	-0.020	0.122	0.186	145.261172	66.148012	-1995.87	409.45

## 2.4 Star Slots

### 2.4.1 Slot 3

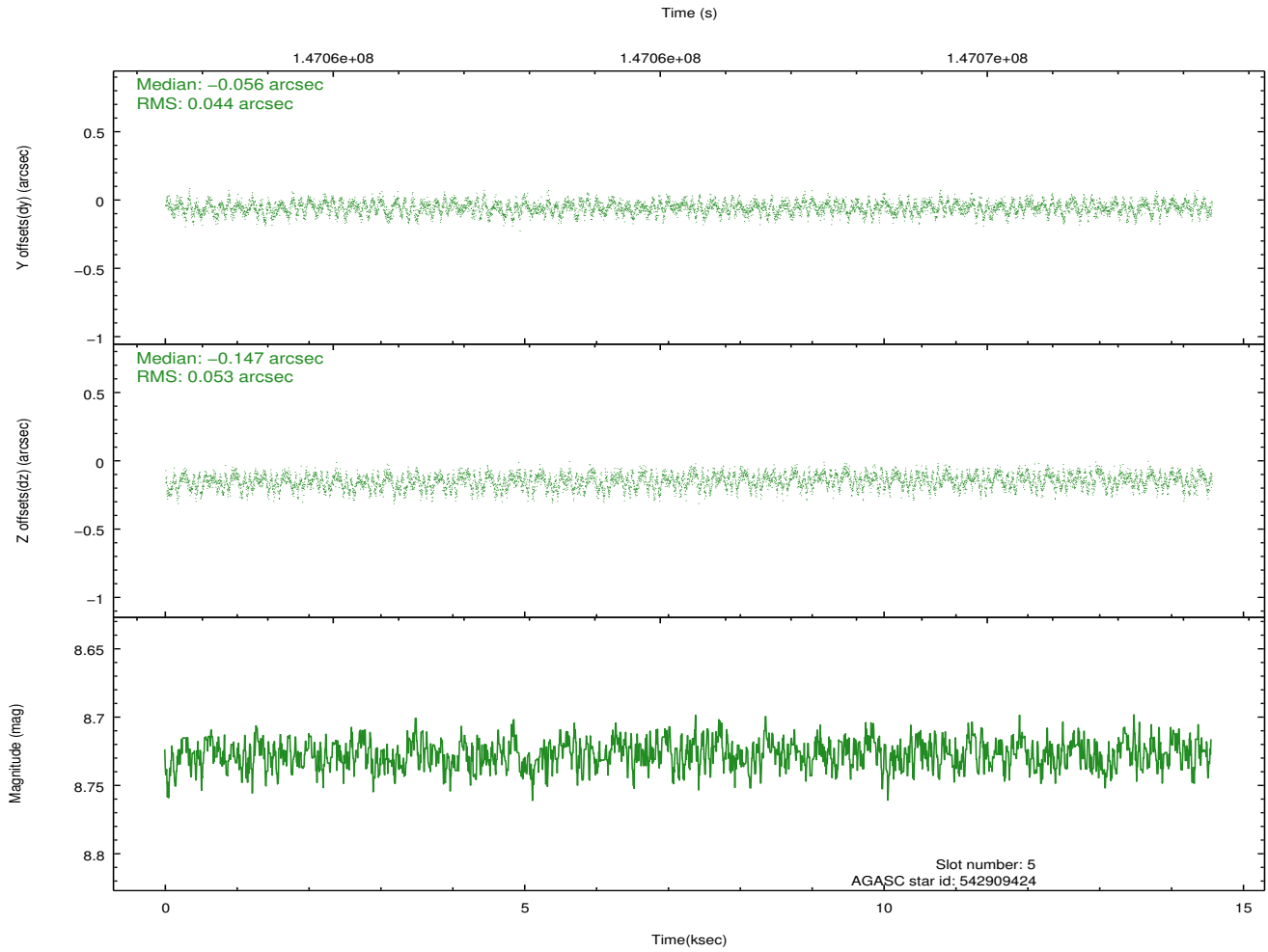
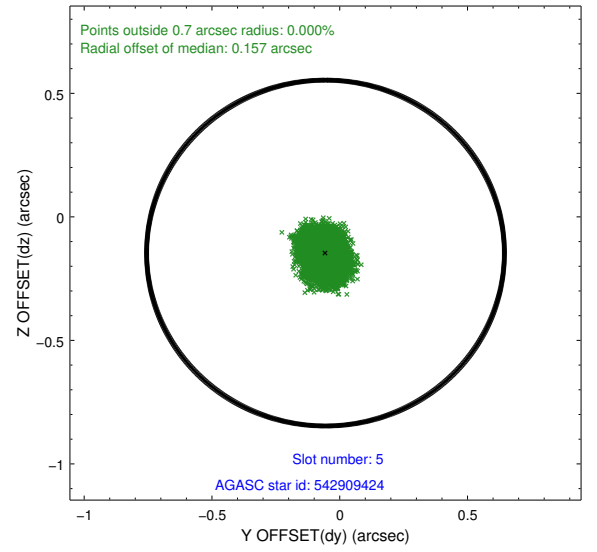
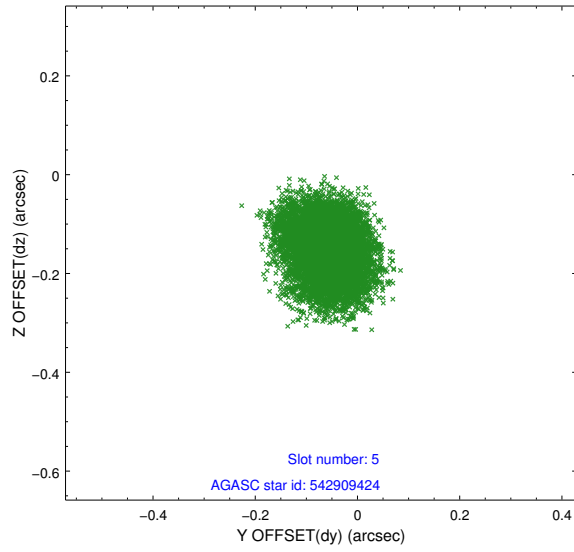


## 2.4.2 Slot 4

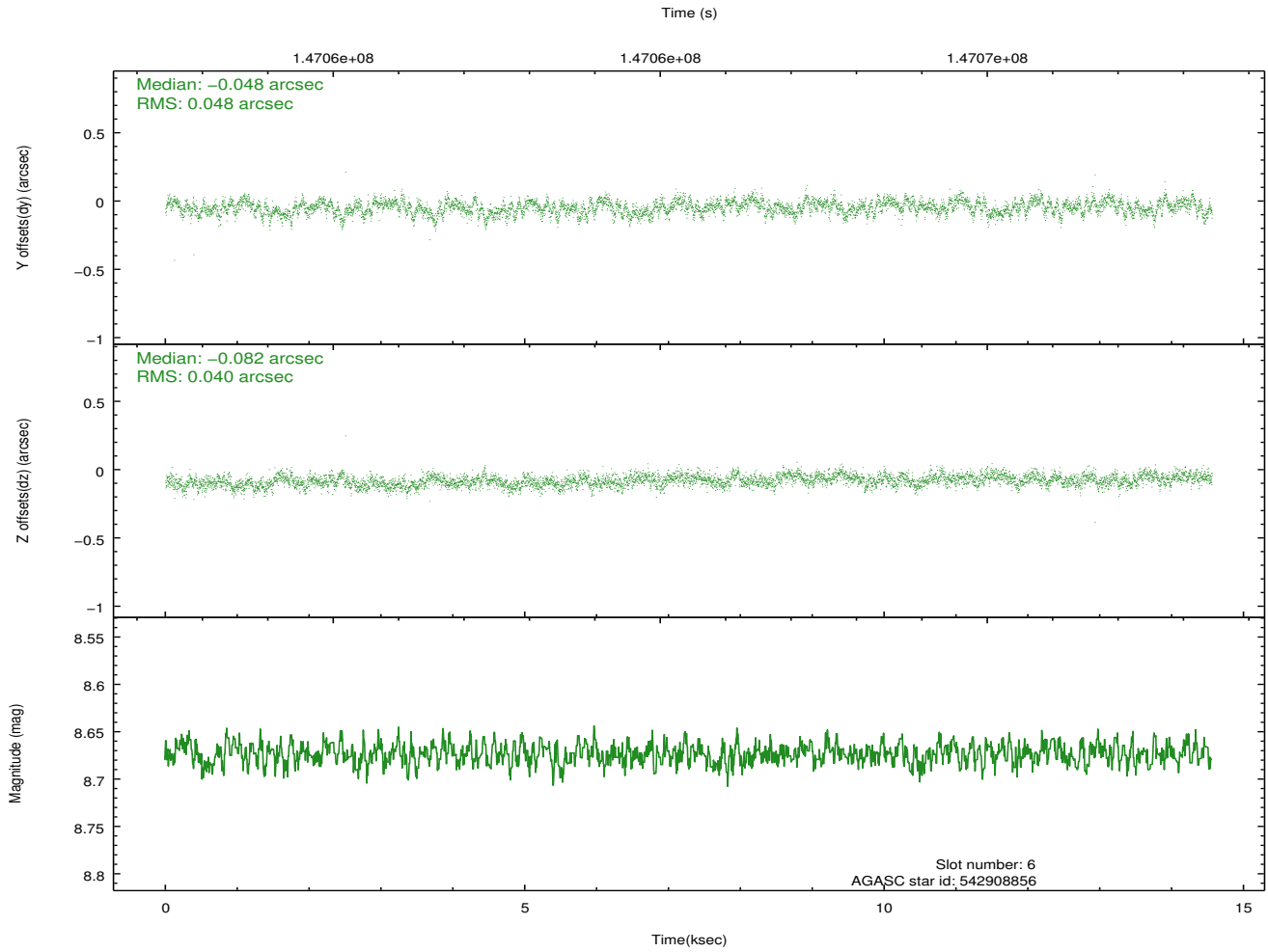
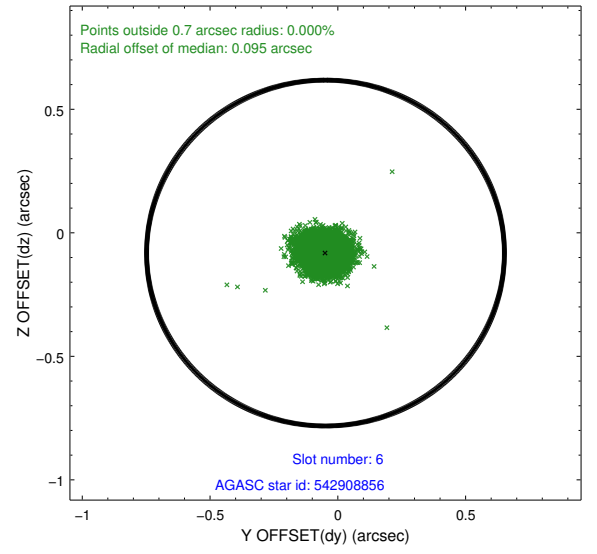
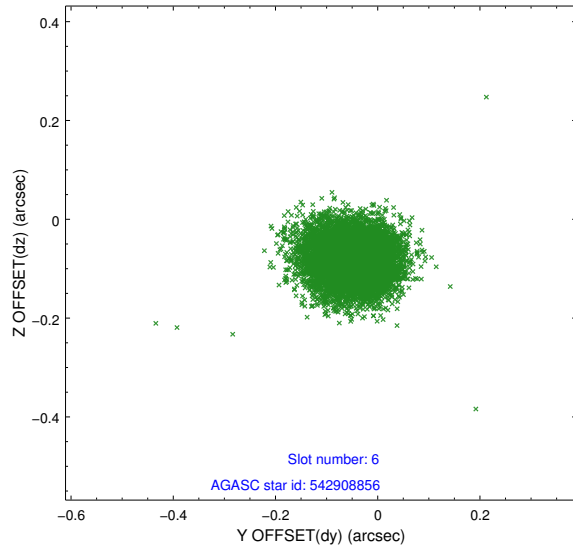




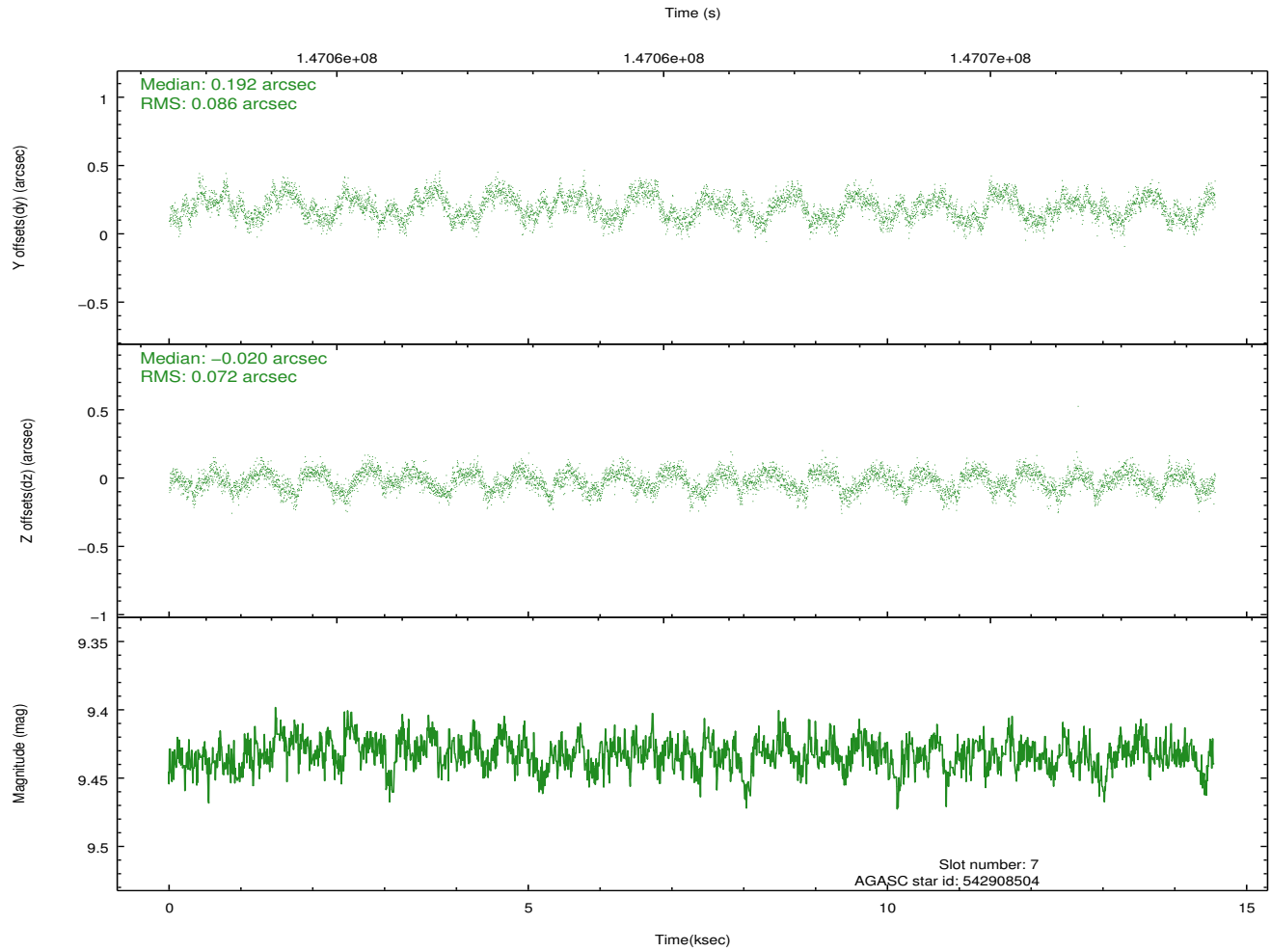
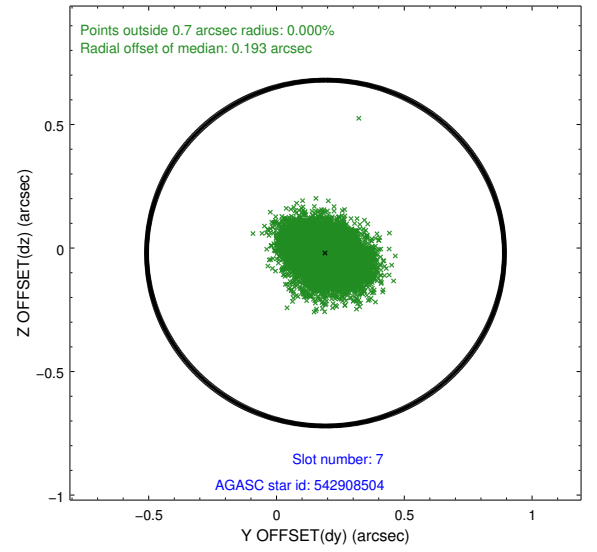
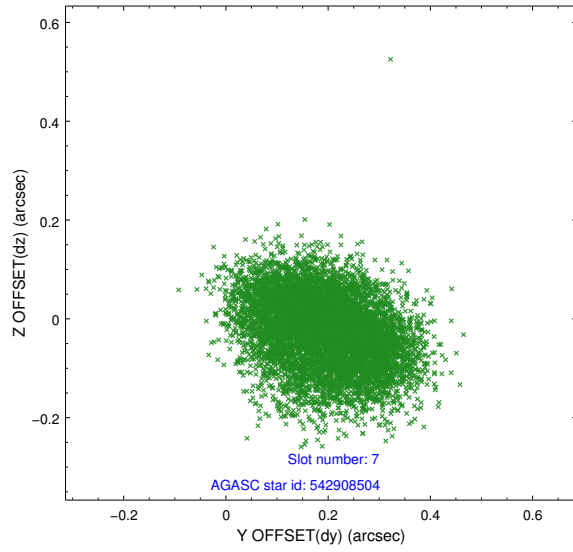
### 2.4.3 Slot 5



## 2.4.4 Slot 6

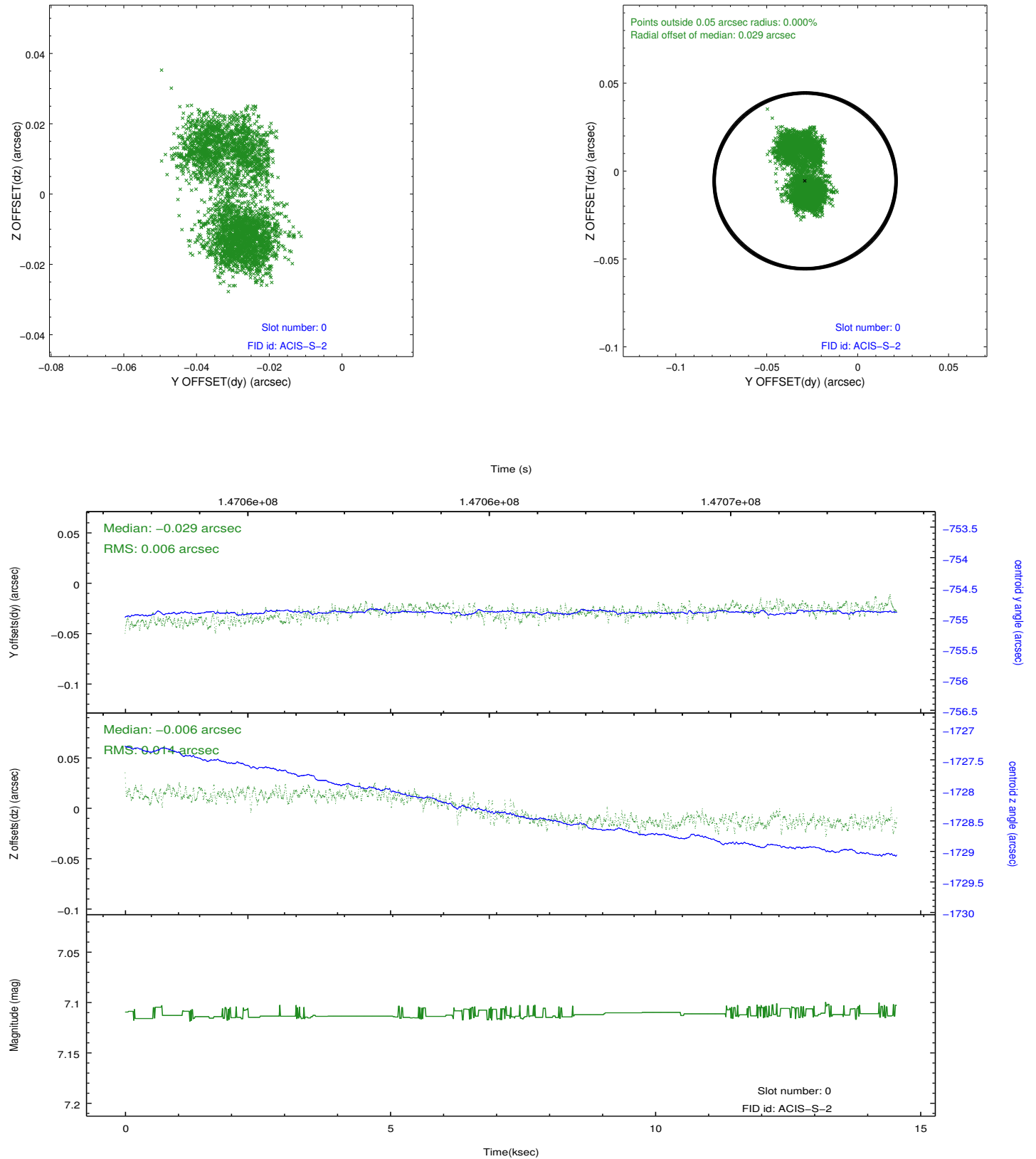


## 2.4.5 Slot 7

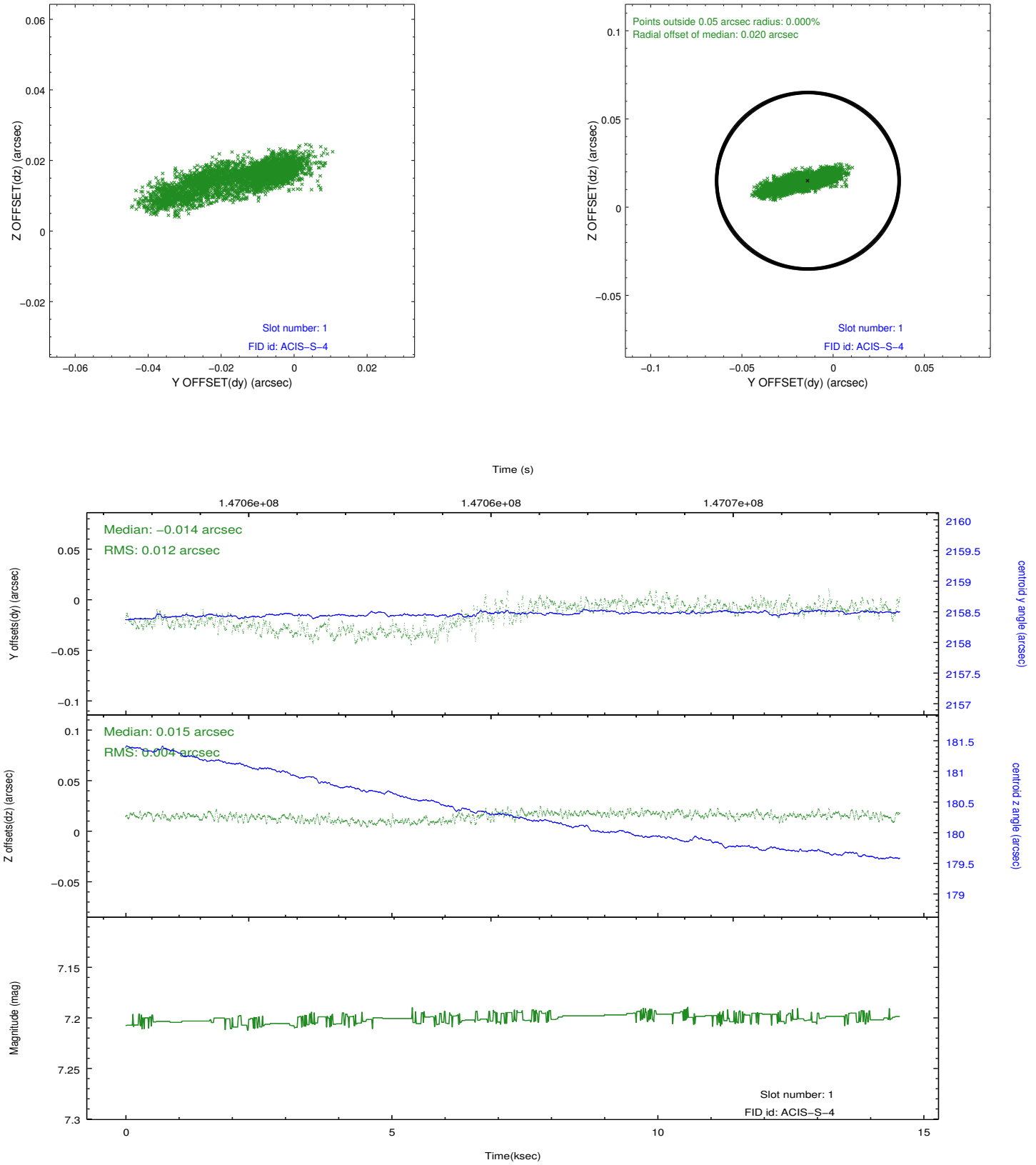


## 2.5 FID Slots

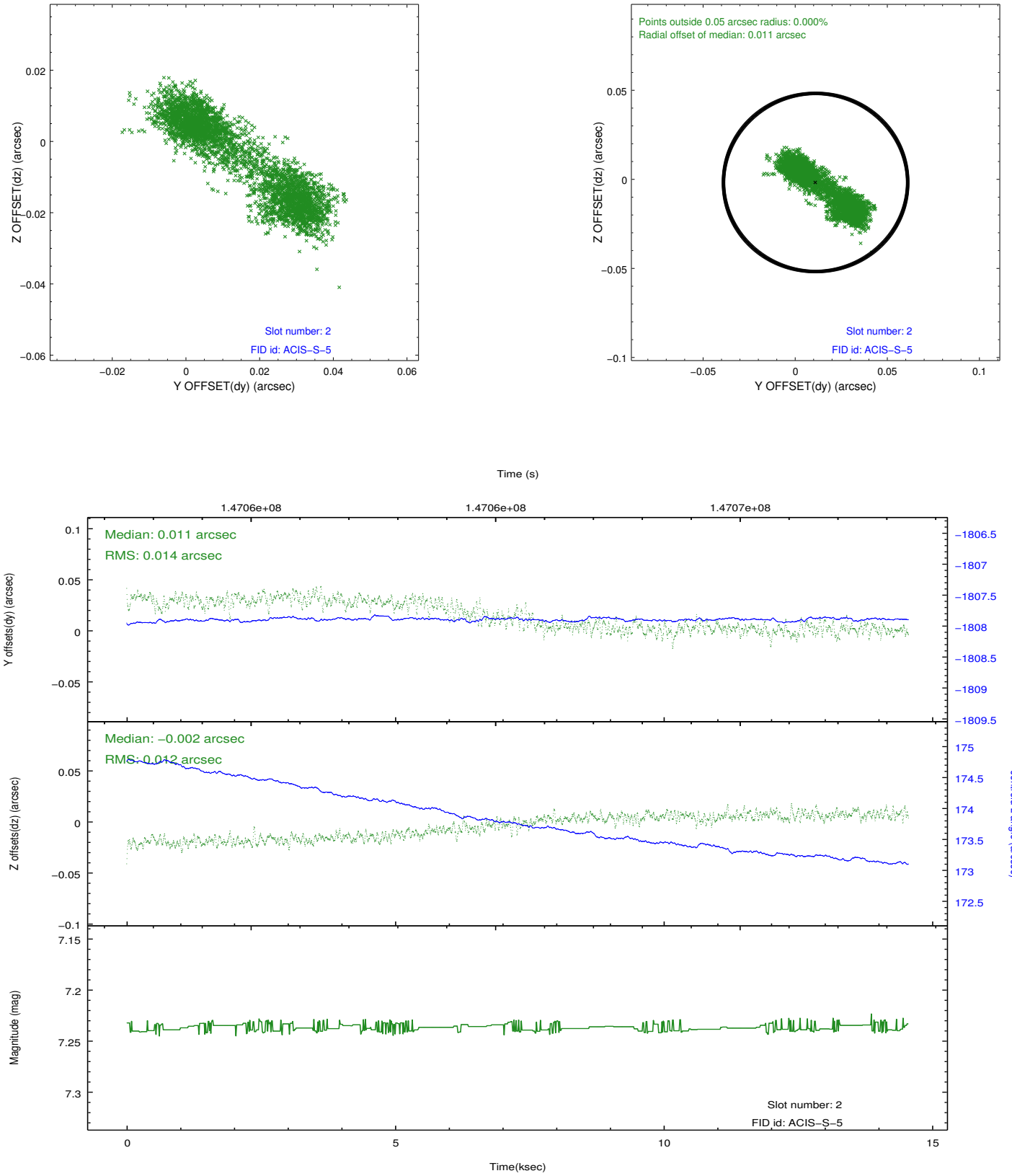
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2012.10.23
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	14.55

### A.2 Comments