

# V&V Reference Report

## L2 ASCDS Version : 8.4.3.1

Observation 6764 - L2 Version 2  
Chandra X-Ray Center

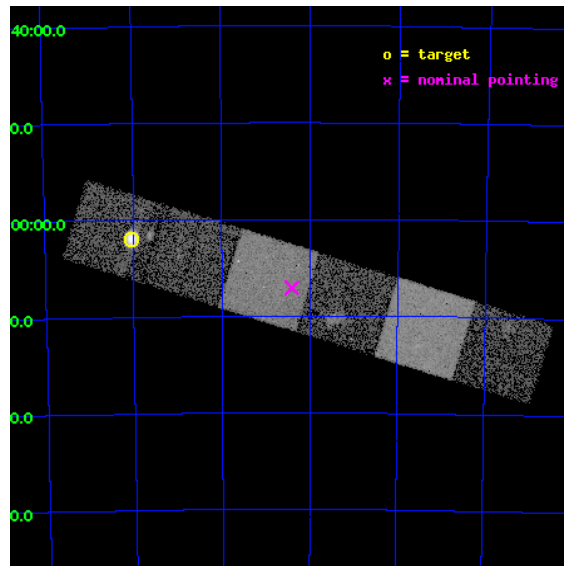
L2 Processing Date : Mar 28 2012

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# 1 Front

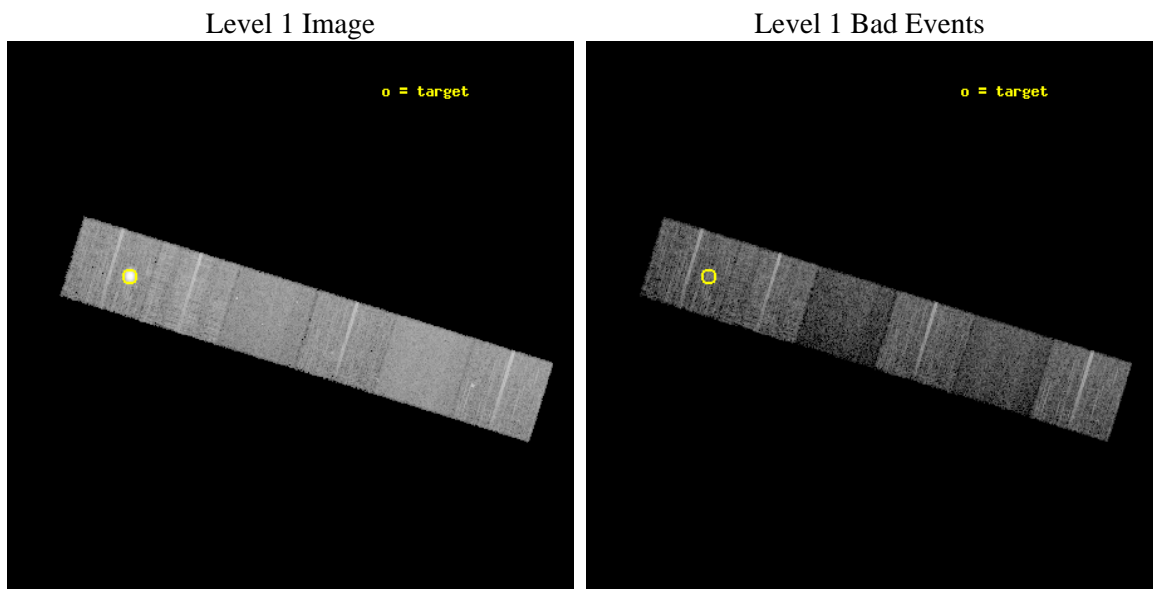
seq_num	590447	Sequence number
obs_id	6764	Observation id
title	AO7 ACIS-S Calibration Observations of E0102-72	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	E0102-72[S5,-120,-17.29,0,0]	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	16.01	Observer's specified target RA [deg]
dec_targ	-72.032028	Observer's specified target Dec [deg]
ra_nom	15.102530351697	Nominal RA [deg]
dec_nom	-72.117972393727	Nominal Dec [deg]
roll_nom	197.14480043297	Nominal Roll [deg]
revision	2	Processing version of data
ontime	7756.7999711037	Sum of GTIs [s]
livetime	7658.5786992854	Livetime [s]
ontime4	7756.7999711037	Sum of GTIs [s]
ontime5	7756.7999711037	Sum of GTIs [s]
ontime6	7756.7999711037	Sum of GTIs [s]
ontime7	7756.7999711037	Sum of GTIs [s]
ontime8	7753.5590008199	Sum of GTIs [s]
ontime9	7756.7999711037	Sum of GTIs [s]
l2events	94204	Number of level 2 events



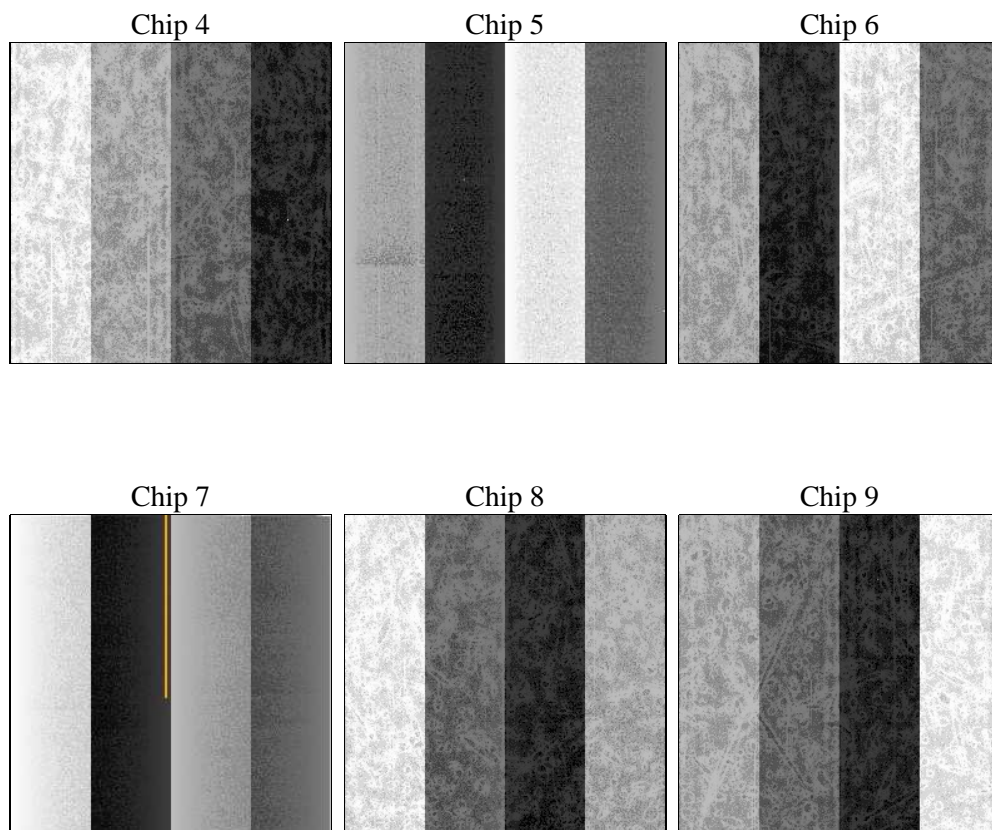
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	8000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	7756.7999711037	Sum of GTIs [s]
caldsver	4.4.8	&#160	ontime4	7756.7999711037	Sum of GTIs [s]
date	2012-03-28T05:43:04	Date and time of file creation	ontime5	7756.7999711037	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	7756.7999711037	Sum of GTIs [s]
			ontime7	7756.7999711037	Sum of GTIs [s]
			ontime8	7753.5590008199	Sum of GTIs [s]
			ontime9	7756.7999711037	Sum of GTIs [s]
			l1events	368091	Number of level 1 events

### 2.1.4 Events

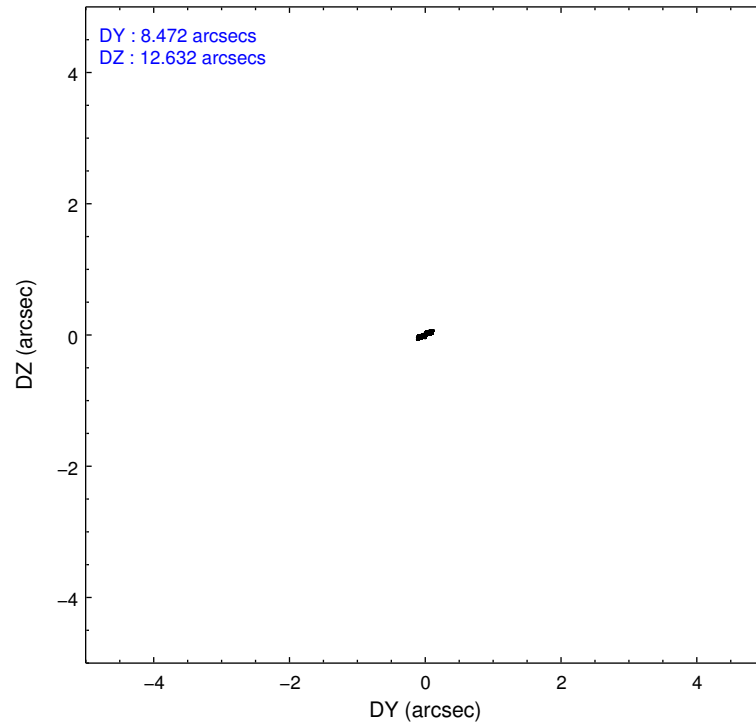
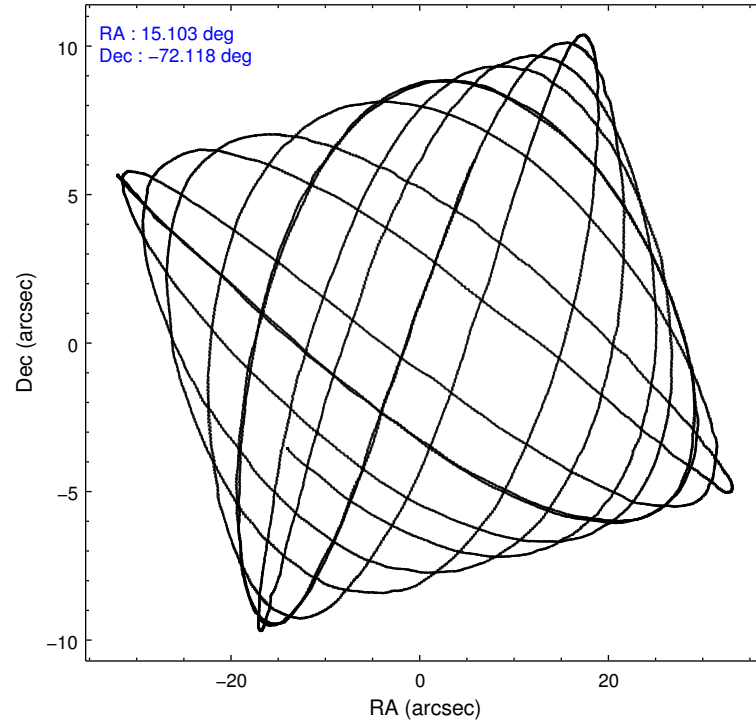
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	60557	63212	54009	50507	68872	70934	grade 0 events	2628	2396	2619	2818	4314	19118
rejected events	54504	30178	48019	25432	53274	46465		4%	3%	4%	5%	6%	26%
rejected %	90%	47%	88%	50%	77%	65%	grade 1 events	51	56	39	56	53	151
								0%	0%	0%	0%	0%	0%
							grade 2 events	1361	10172	1225	5283	3610	2375
								2%	16%	2%	10%	5%	3%
							grade 3 events	594	1574	597	2444	1703	893
								0%	2%	1%	4%	2%	1%
							grade 4 events	592	1577	553	2365	1559	873
								0%	2%	1%	4%	2%	1%
							grade 5 events	1814	5230	1695	5351	2662	2023
								2%	8%	3%	10%	3%	2%
							grade 6 events	878	17327	1000	12172	4413	1218
								1%	27%	1%	24%	6%	1%
							grade 7 events	52639	24880	46281	20018	50558	44283
								86%	39%	85%	39%	73%	62%

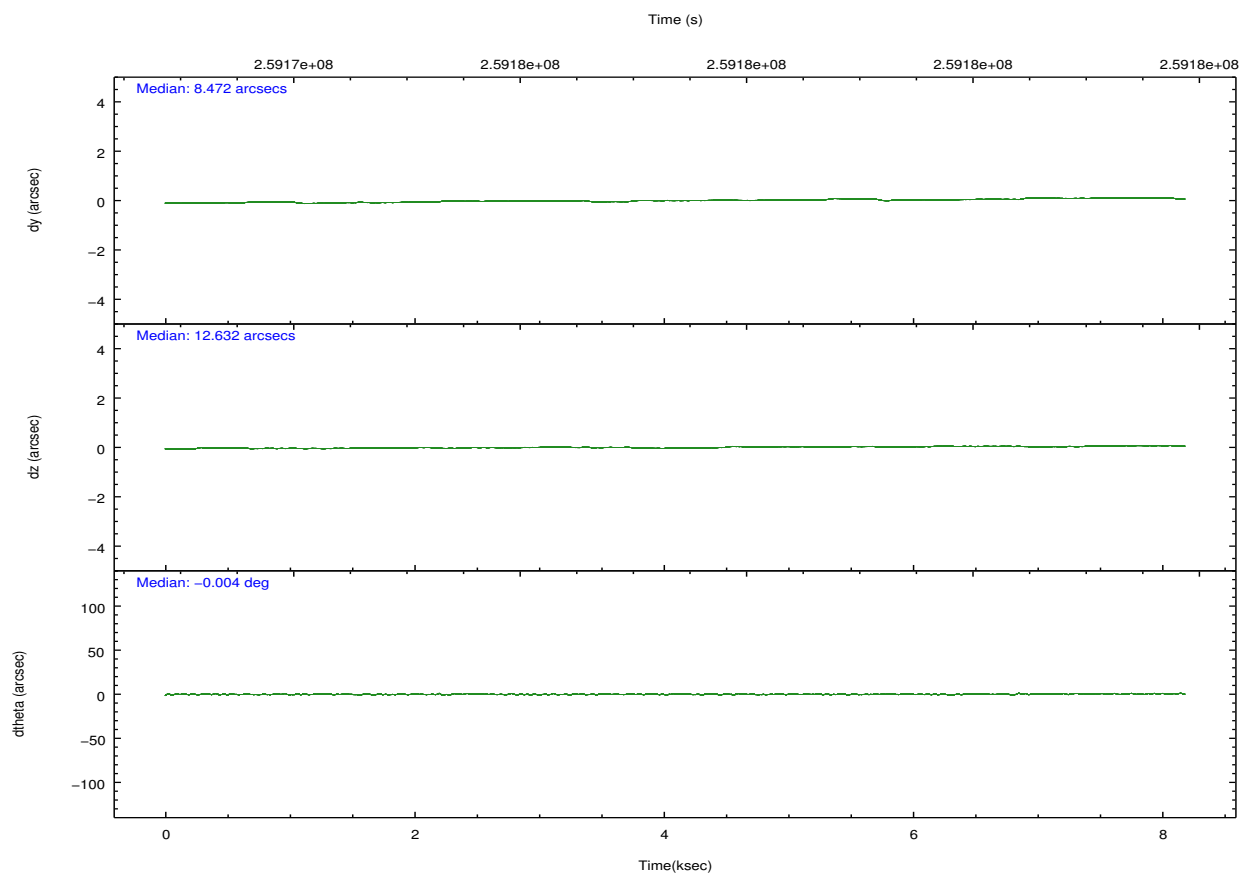
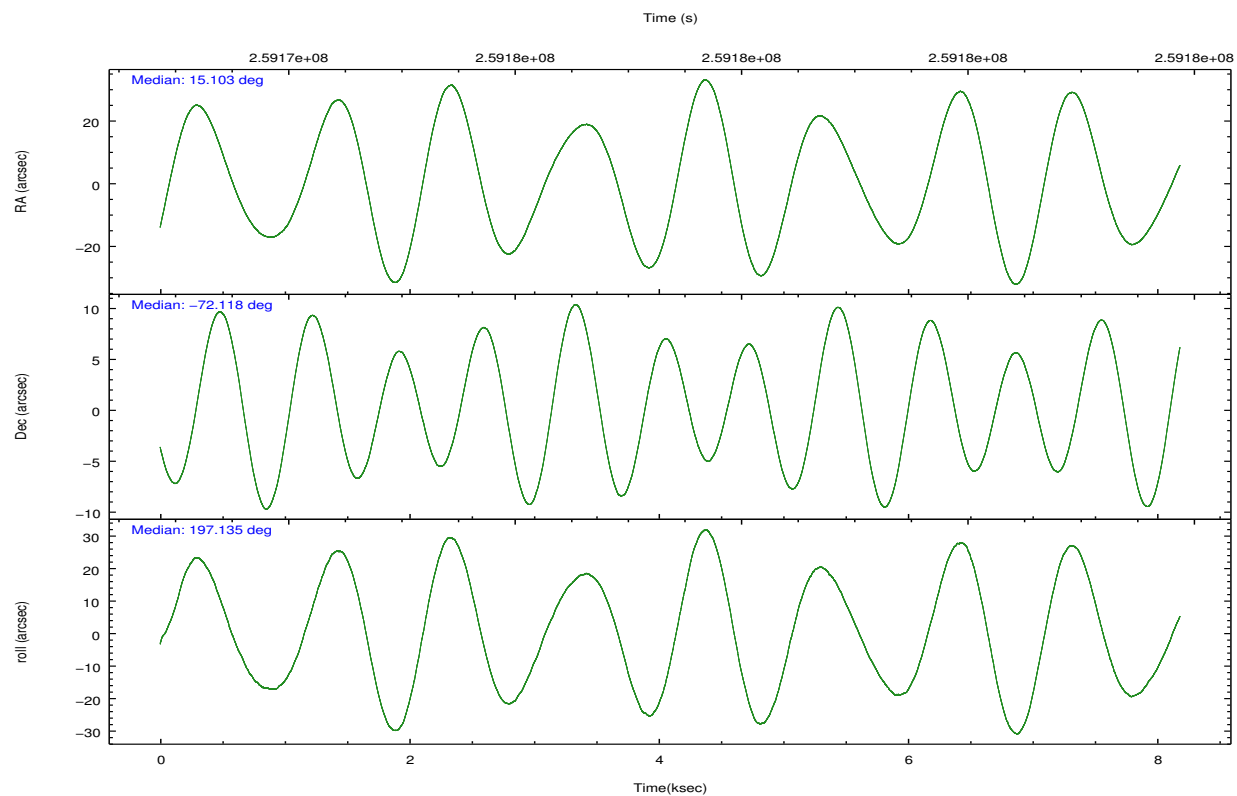


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-456789	ACIS-456789	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	15.161904	15.10253035169686	Subarray requested	NONE	NONE
[deg] Pointing Dec	-72.097694	-72.11797239372713	Alternating exposures requested	N	N
[deg] Pointing Roll	197.044674	197.144800432965	[s] Primary exposure time	0.000000	3.2
[s] Window start time (MET)	247190464.184000	247190464.184000			
[s] Window stop time (MET)	260150465.184000	260150465.184000			
[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)	259173458.184000	259173082.75253			
Observation start date	2006-03-19T16:36:33	2006-03-19T16:31:22			
[s] Observation end time (MET)	259181458.184000	259181592.30293			
Observation end date	2006-03-19T18:49:53	2006-03-19T18:53:12			
Read mode	TIMED	TIMED			

## 2.3 Aspect



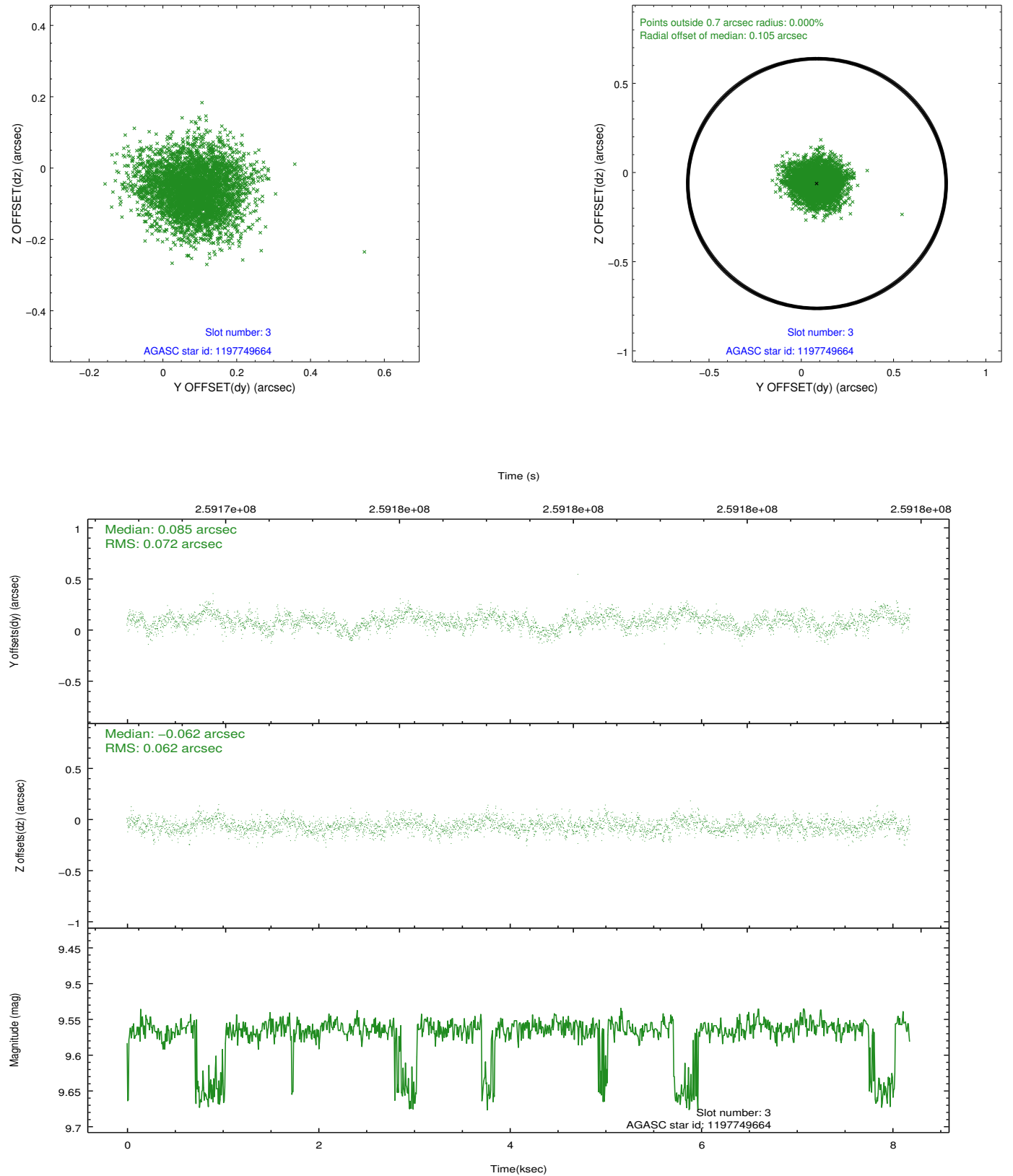


### Slot Statistics

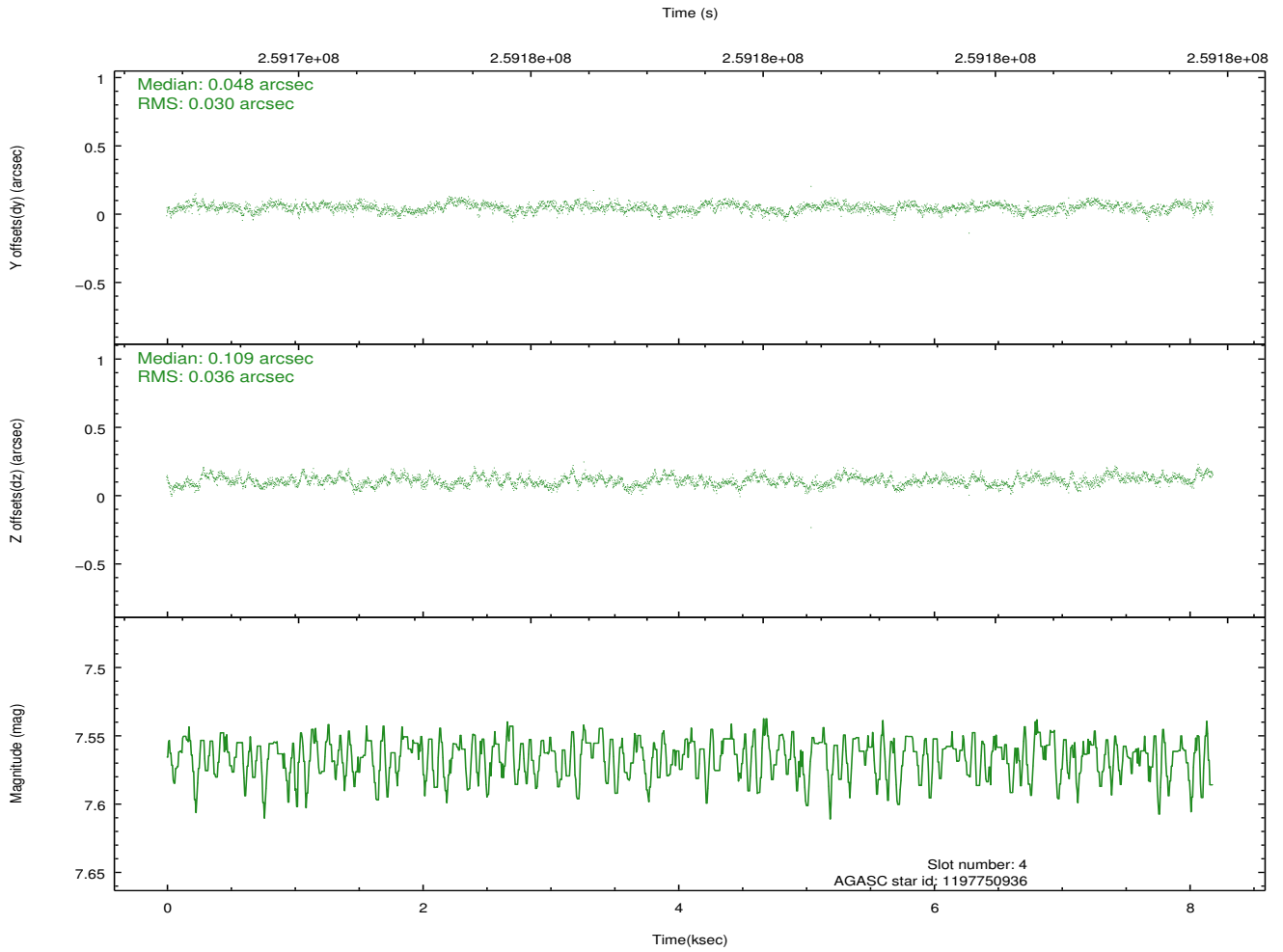
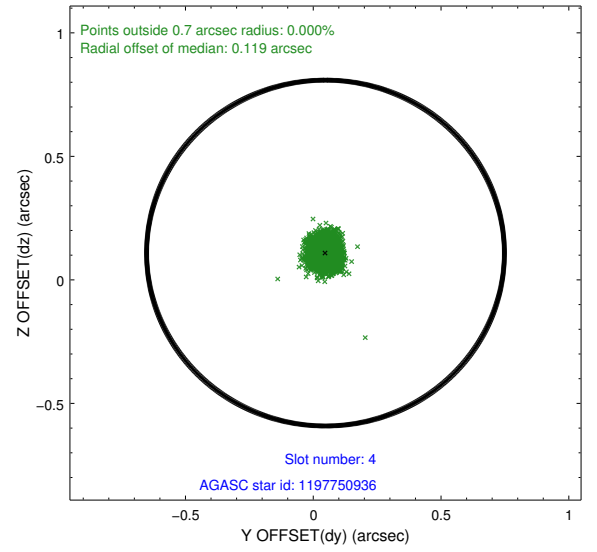
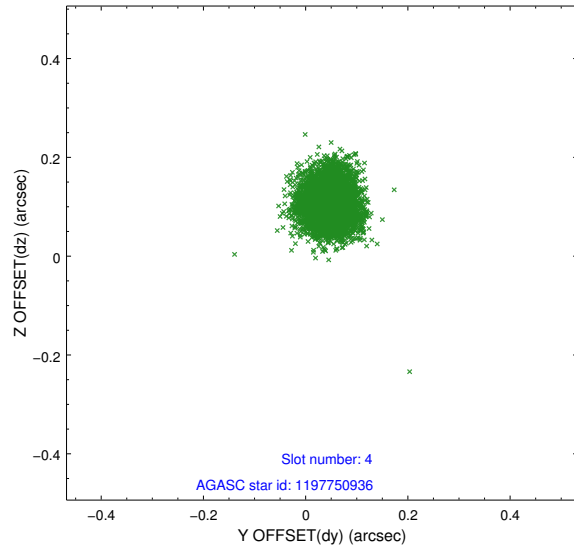
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.19	1996	0.060	-0.059	0.008	0.018	0.000000	0.000000	934.78	-1729.66
1	FID	ACIS-S-4	7.20	1996	0.086	0.016	0.008	0.015	0.000000	0.000000	2152.64	173.83
2	FID	ACIS-S-5	7.23	1996	-0.173	0.055	0.008	0.018	0.000000	0.000000	-1813.39	168.33
3	GUIDE	1197749664	9.57	3970	0.085	-0.062	0.100	0.165	15.809015	-72.366369	-390.03	1135.23
4	GUIDE	1197750936	7.56	3991	0.048	0.109	0.050	0.079	15.387940	-71.549550	-824.00	-1810.03
5	GUIDE	1197884712	8.30	3993	0.001	-0.007	0.070	0.114	16.087398	-72.252690	-805.21	838.21
6	GUIDE	1197885328	7.23	3993	0.037	0.133	0.052	0.083	16.283090	-71.733943	-1590.32	-869.81
7	GUIDE	1198189696	7.36	3992	-0.163	-0.172	0.056	0.090	15.223750	-72.697522	568.94	2083.93

## 2.4 Star Slots

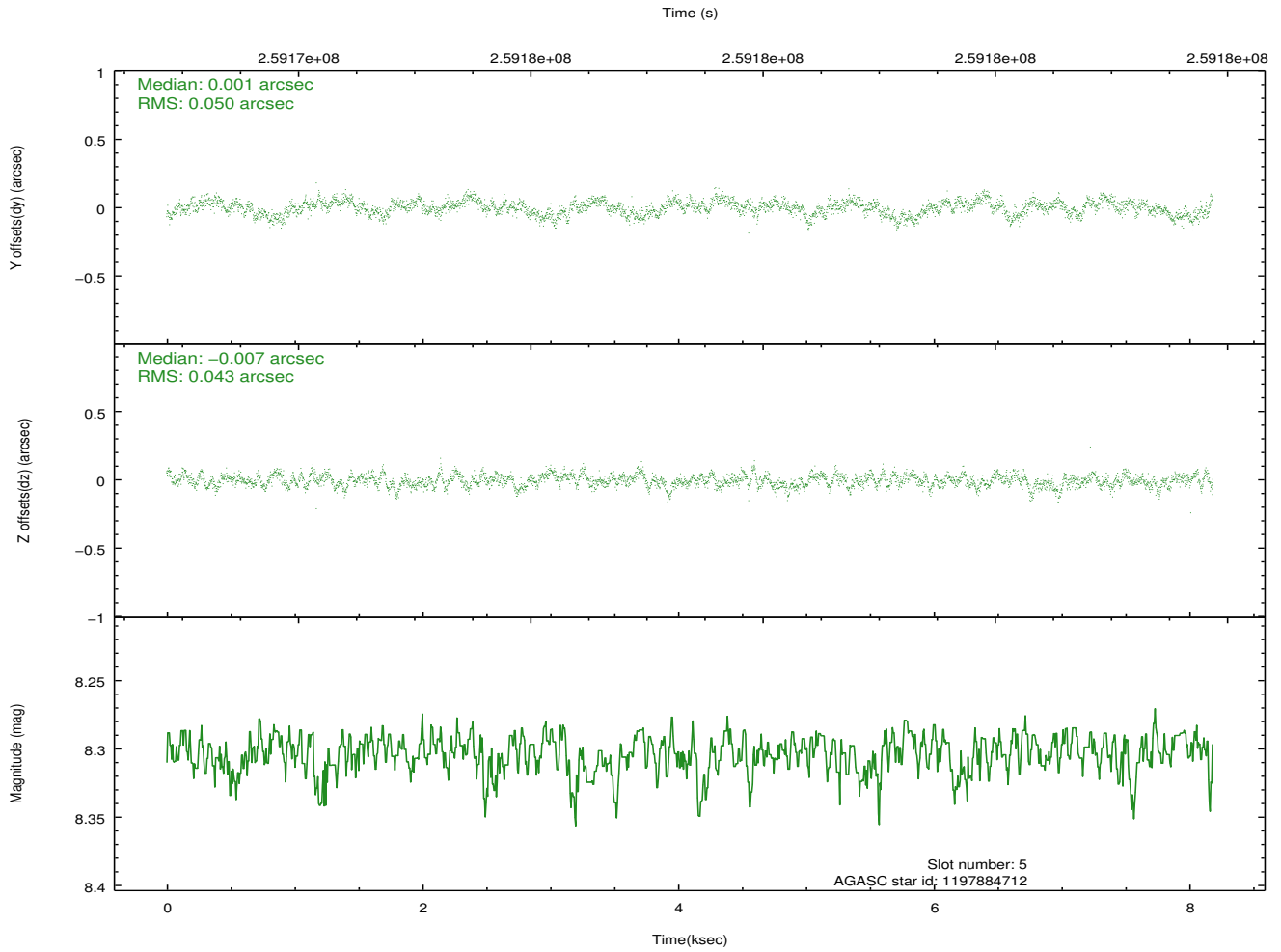
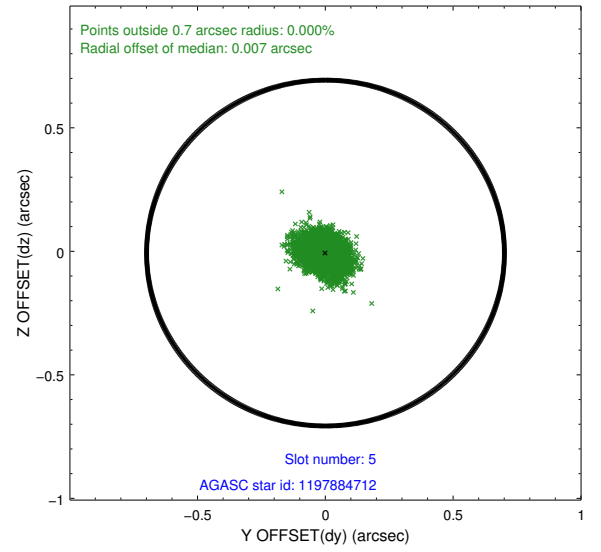
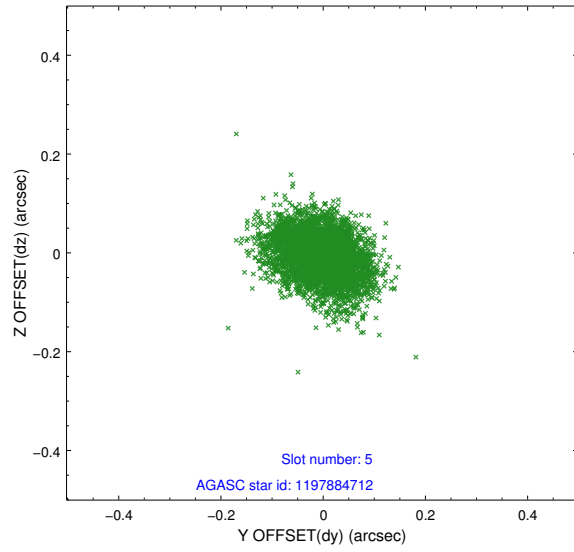
### 2.4.1 Slot 3



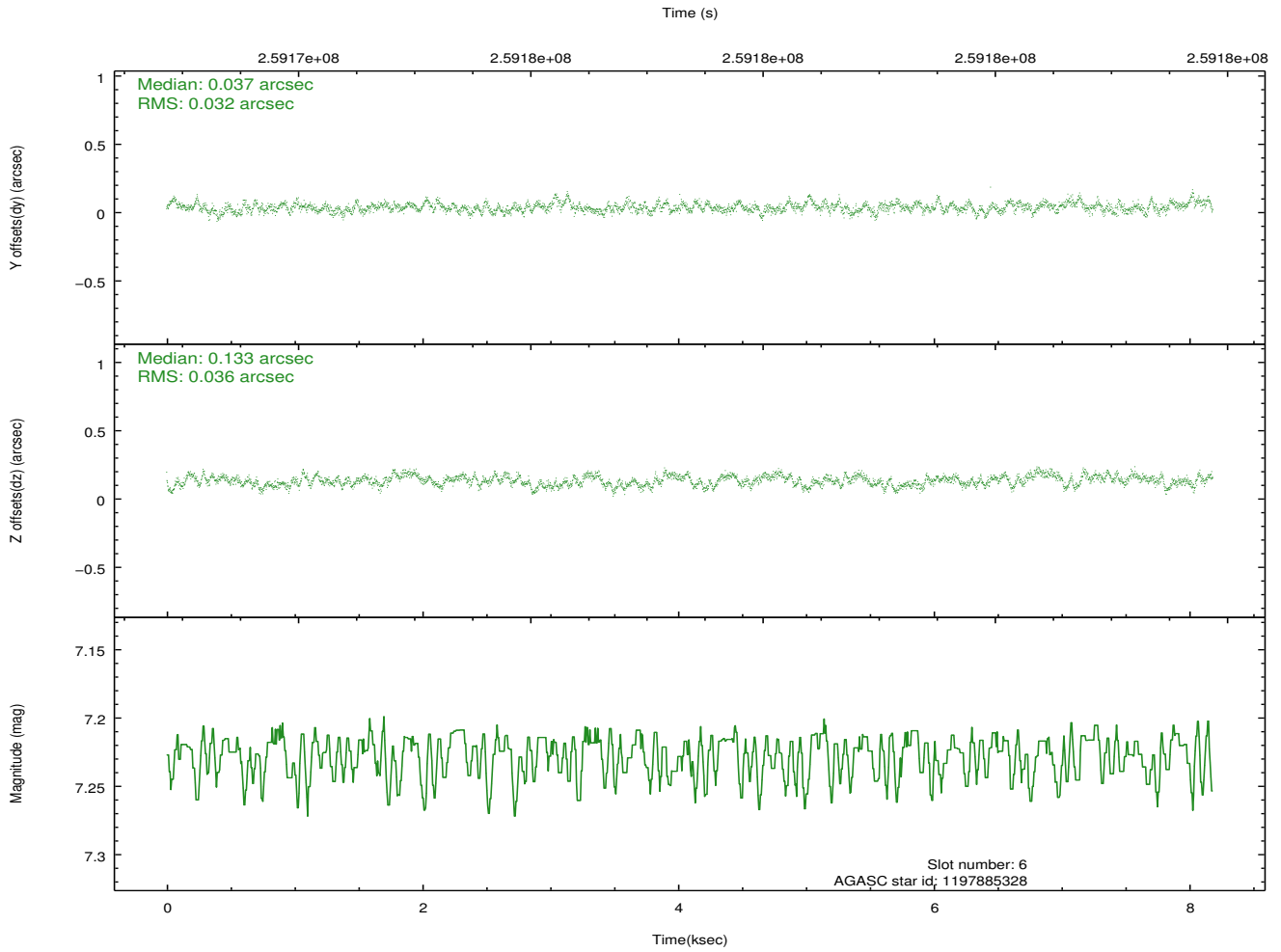
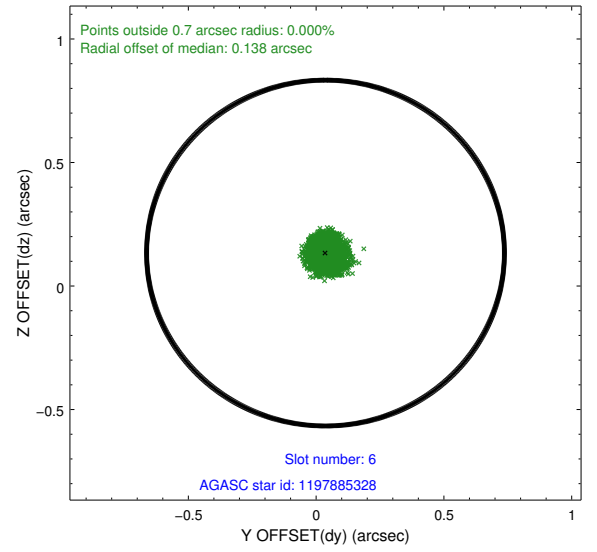
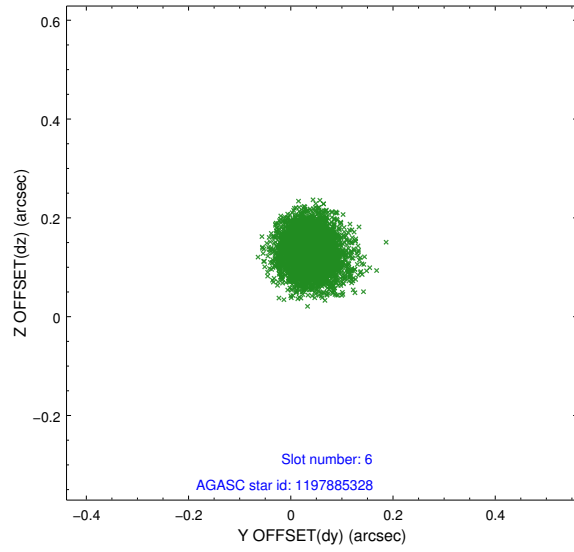
## 2.4.2 Slot 4



### 2.4.3 Slot 5

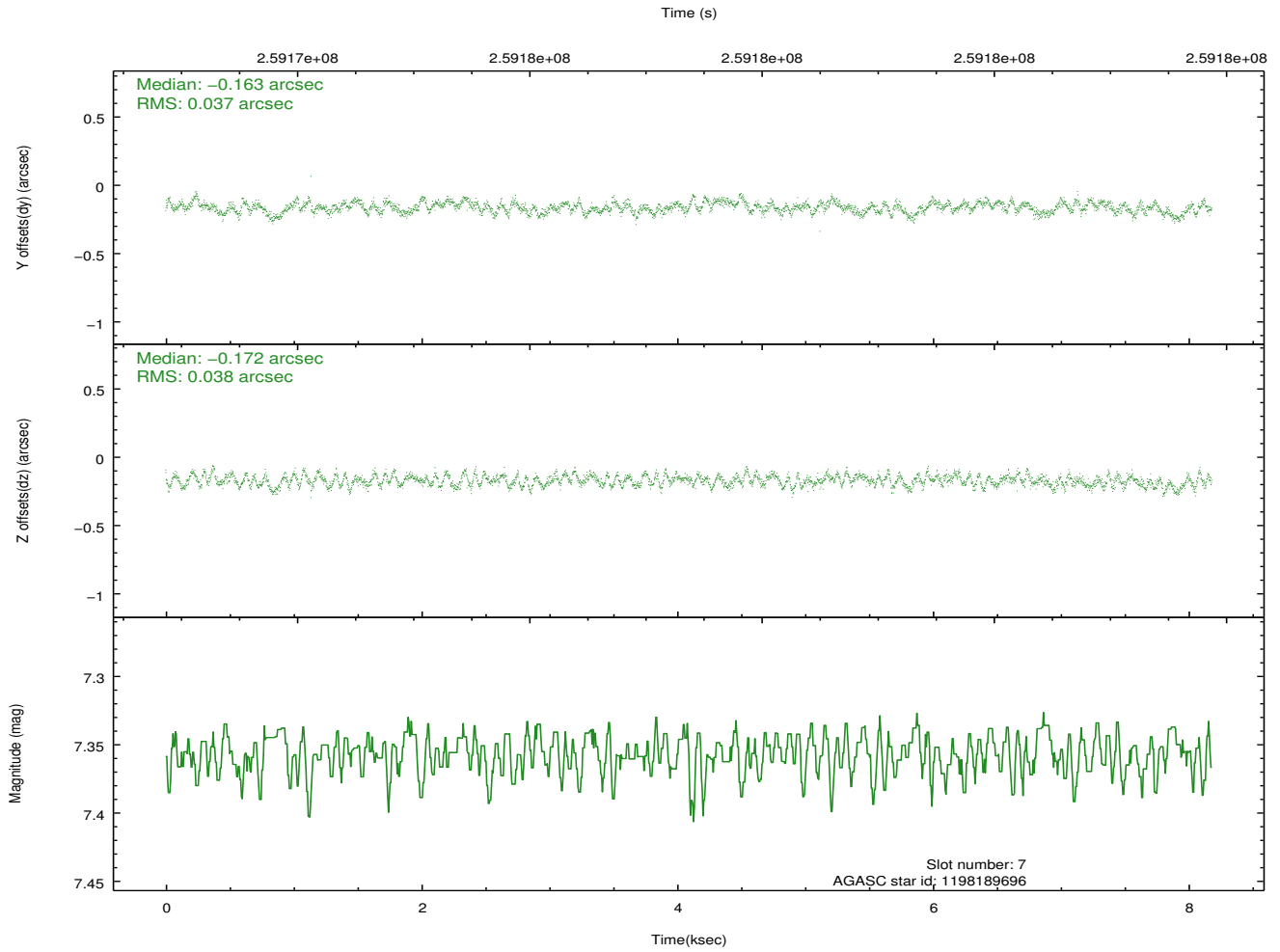
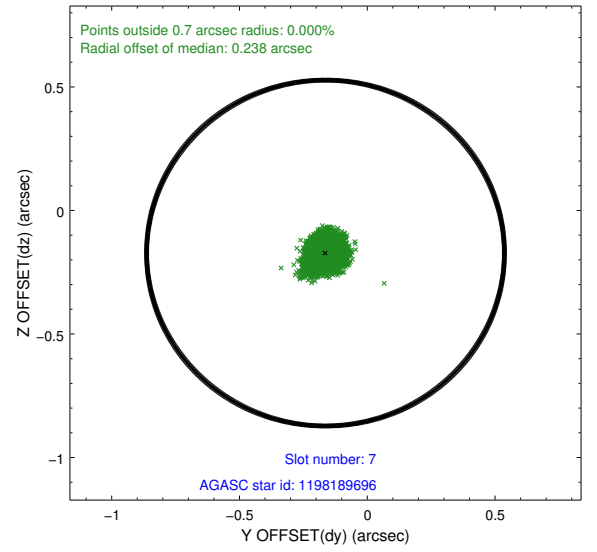
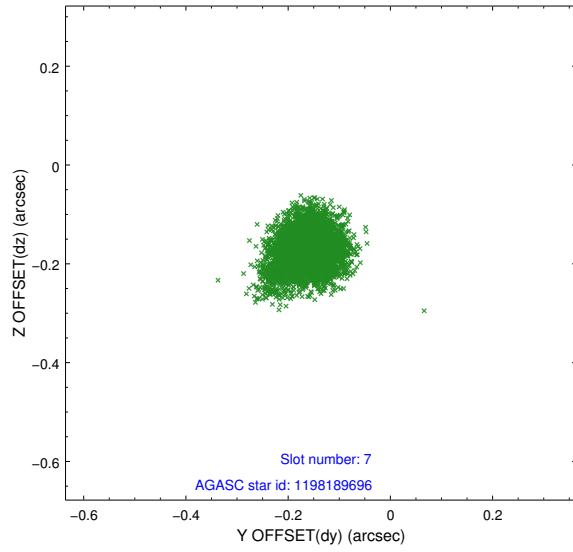


## 2.4.4 Slot 6



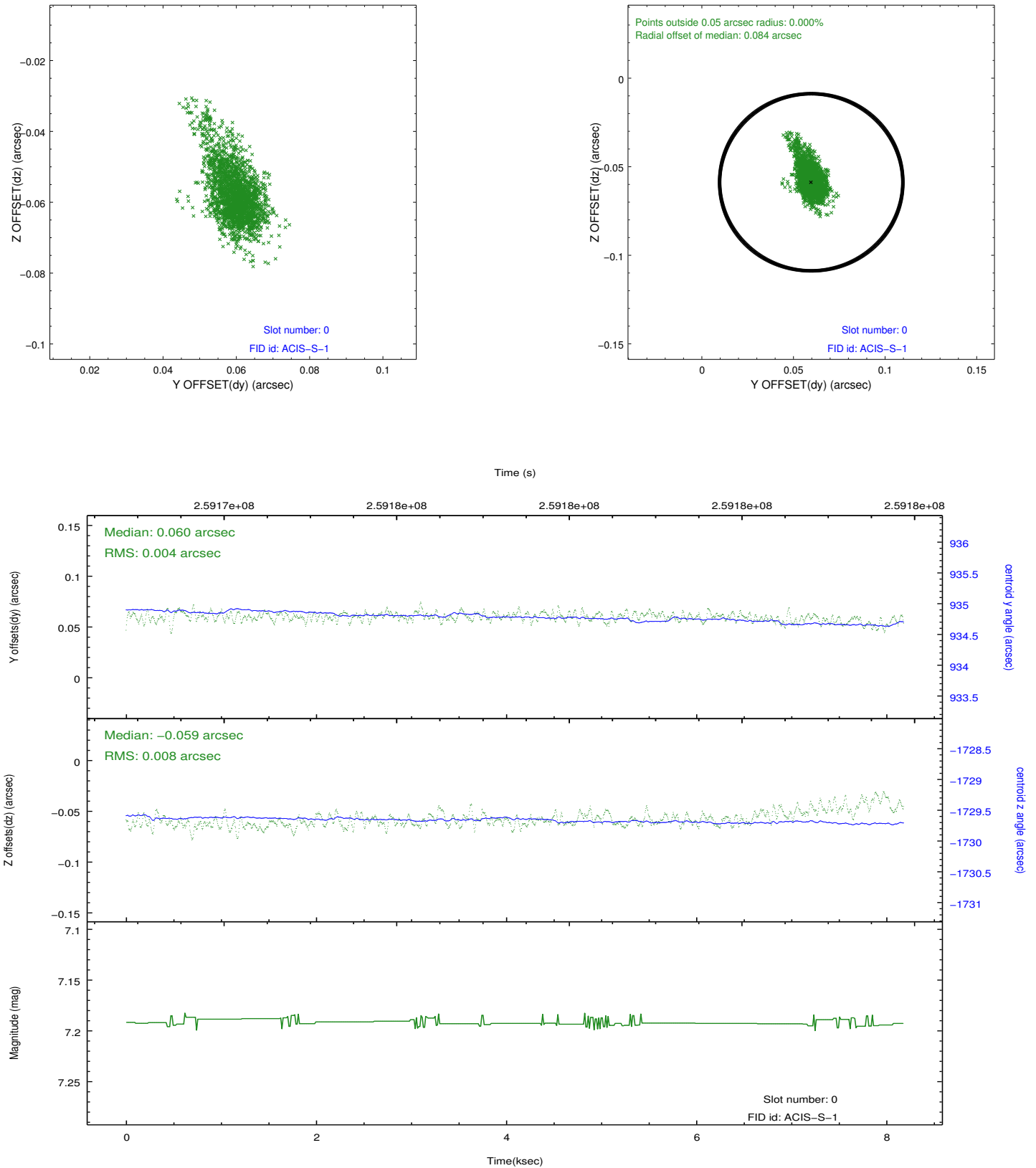


## 2.4.5 Slot 7

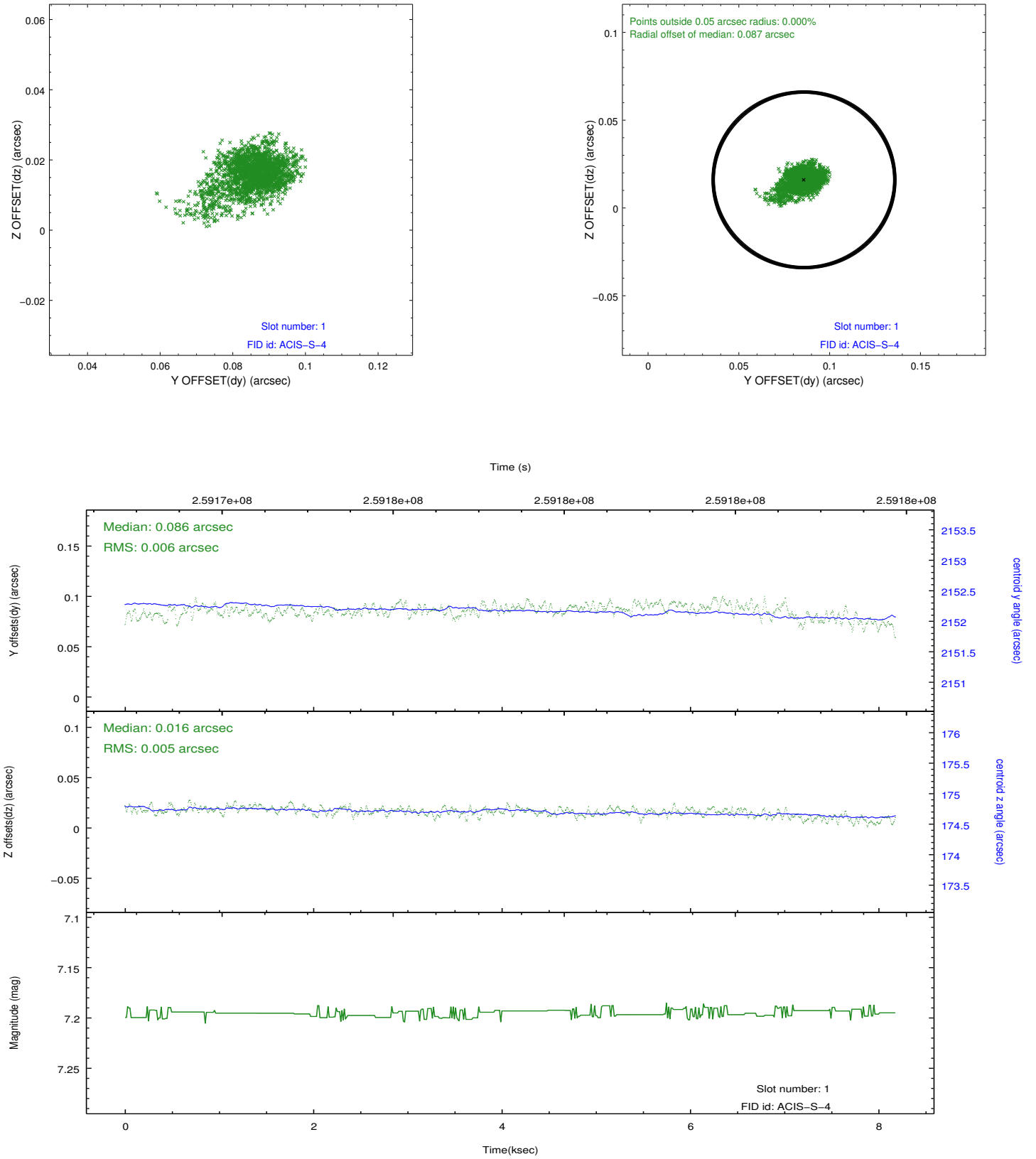


## 2.5 FID Slots

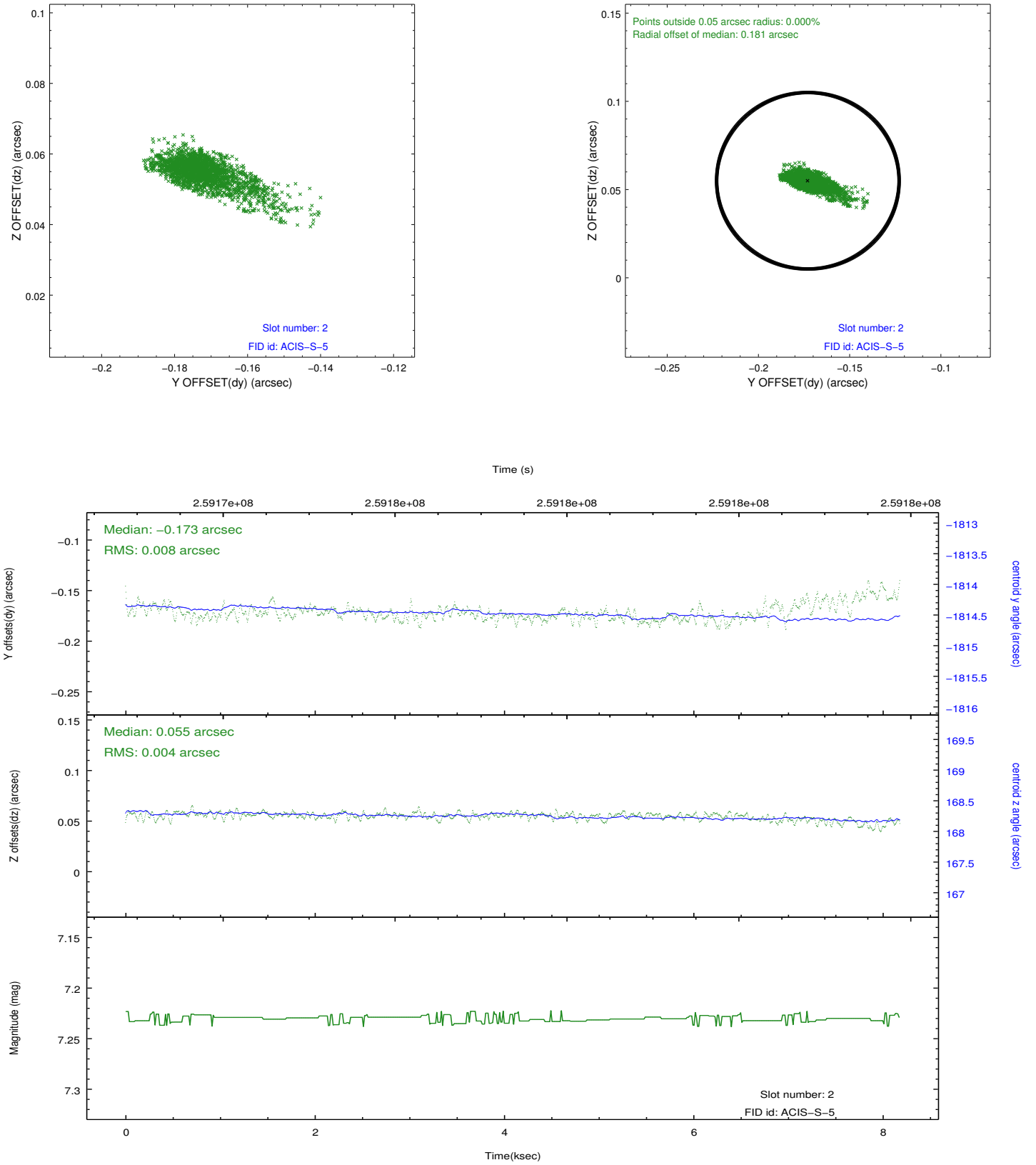
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.03.29
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	7.75679997

### A.2 Comments

Window constraint met.