

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 3962 - L2 Version 3  
Chandra X-Ray Center

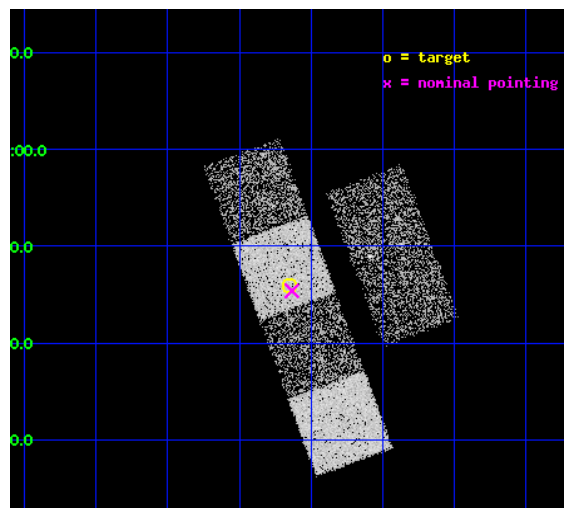
L2 Processing Date : Nov 3 2012

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# 1 Front

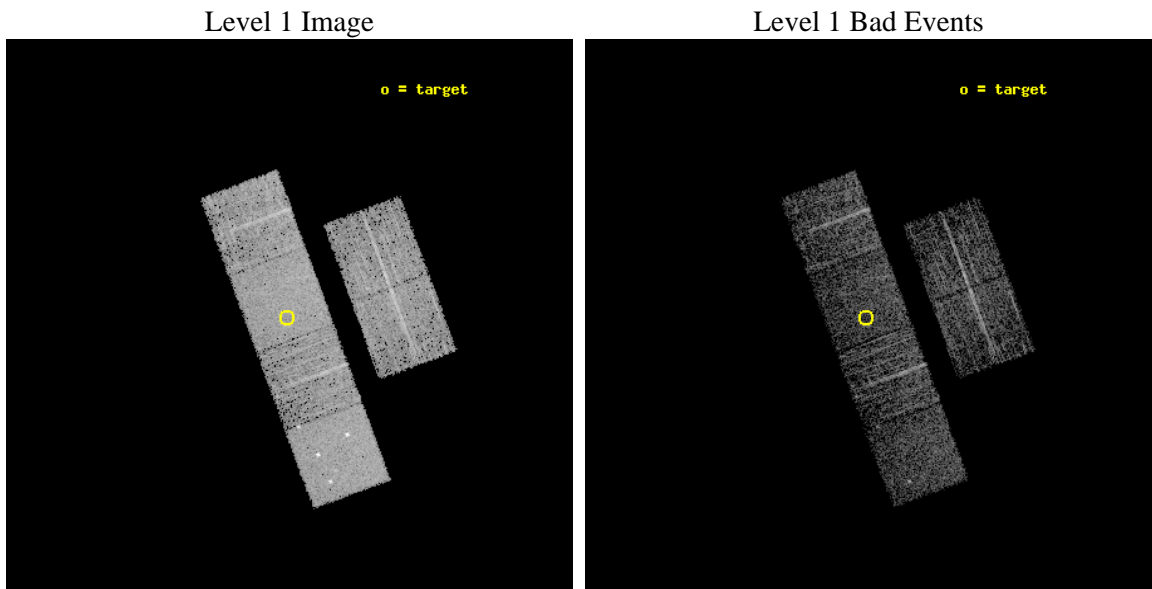
seq_num	700641	Sequence number
obs_id	3962	Observation id
title	A CHANDRA AND XMM-NEWTON STUDY OF THE MOST DISTANT QUASARS: X-RAYING THE FIRST MASSIVE BLACK HOLES	Proposal title
observer	Prof. William Brandt	Principal investigator
object	SDSS J222509-001406	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	336.288333	Observer's specified target RA [deg]
dec_targ	-0.23525	Observer's specified target Dec [deg]
ra_nom	336.28353456121	Nominal RA [deg]
dec_nom	-0.24344314908486	Nominal Dec [deg]
roll_nom	249.7254575804	Nominal Roll [deg]
revision	3	Processing version of data
ontime	3497.5999869704	Sum of GTIs [s]
livetime	3453.3112699335	Livetime [s]
ontime2	3494.3590167165	Sum of GTIs [s]
ontime3	3494.3590167165	Sum of GTIs [s]
ontime5	3497.5999869704	Sum of GTIs [s]
ontime6	3494.3590167165	Sum of GTIs [s]
ontime7	3497.5999869704	Sum of GTIs [s]
ontime8	3494.3590167165	Sum of GTIs [s]
l2events	34736	Number of level 2 events



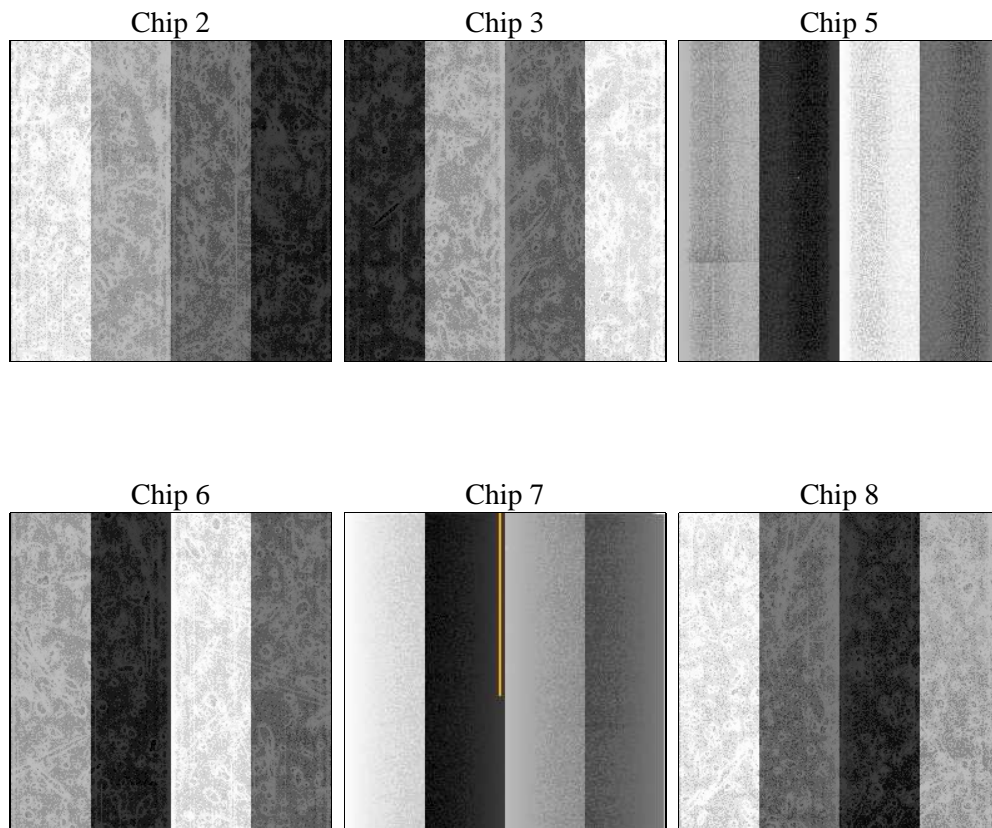
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	3368.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	3497.5999869704	Sum of GTIs [s]
caldbver	4.5.2	&#160	ontime2	3494.3590167165	Sum of GTIs [s]
date	2012-11-03T19:23:49	Date and time of file creation	ontime3	3494.3590167165	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	3497.5999869704	Sum of GTIs [s]
			ontime6	3494.3590167165	Sum of GTIs [s]
			ontime7	3497.5999869704	Sum of GTIs [s]
			ontime8	3494.3590167165	Sum of GTIs [s]
			l1events	163373	Number of level 1 events

### 2.1.4 Events

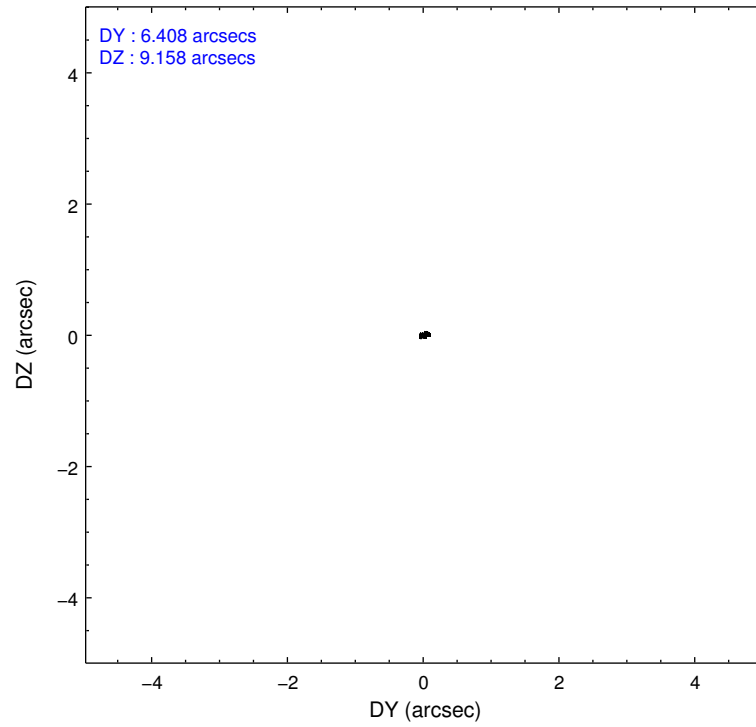
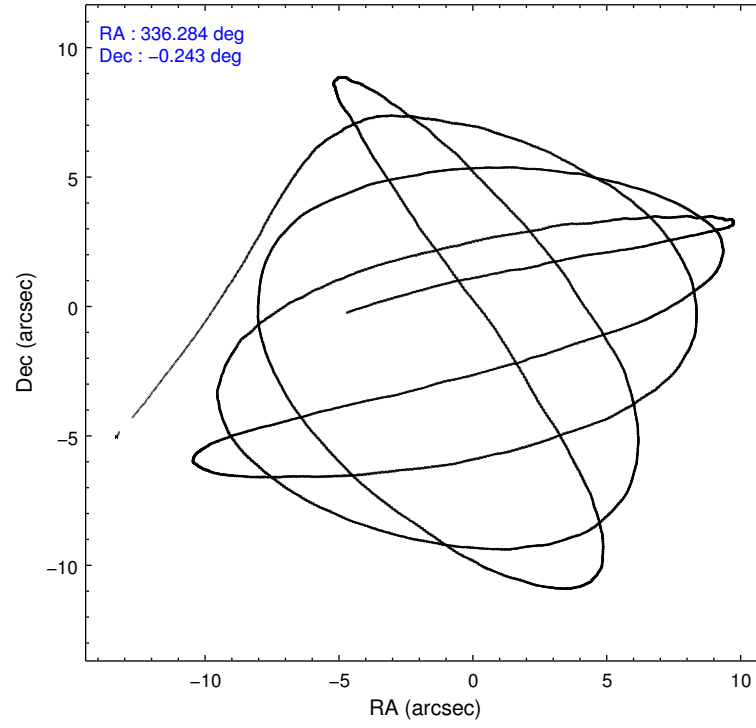
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	23383	22722	35042	23538	30874	27814	grade 0 events	1185	1232	3104	1194	1151	1661
rejected events	20816	20106	18849	20854	18700	22426		5%	5%	8%	5%	3%	5%
rejected %	89%	88%	53%	88%	60%	80%	grade 1 events	15	18	62	17	19	23
								0%	0%	0%	0%	0%	0%
							grade 2 events	551	479	4581	565	2535	1322
								2%	2%	13%	2%	8%	4%
							grade 3 events	236	258	624	264	1088	524
								1%	1%	1%	1%	3%	1%
							grade 4 events	256	260	643	251	1157	505
								1%	1%	1%	1%	3%	1%
							grade 5 events	875	961	2591	993	3009	1265
								3%	4%	7%	4%	9%	4%
							grade 6 events	432	492	7861	527	6734	1603
								1%	2%	22%	2%	21%	5%
							grade 7 events	19833	19022	15576	19727	15181	20911
								84%	83%	44%	83%	49%	75%

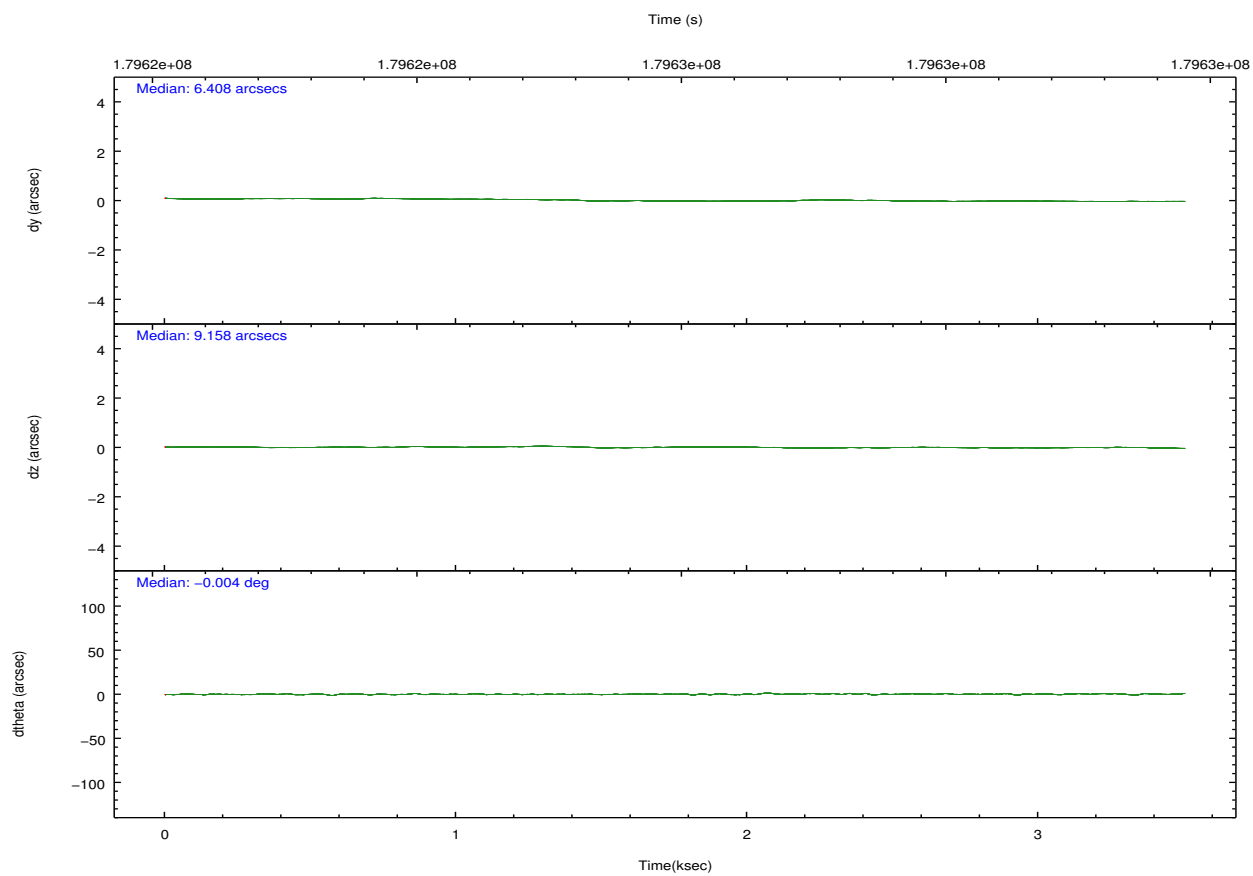
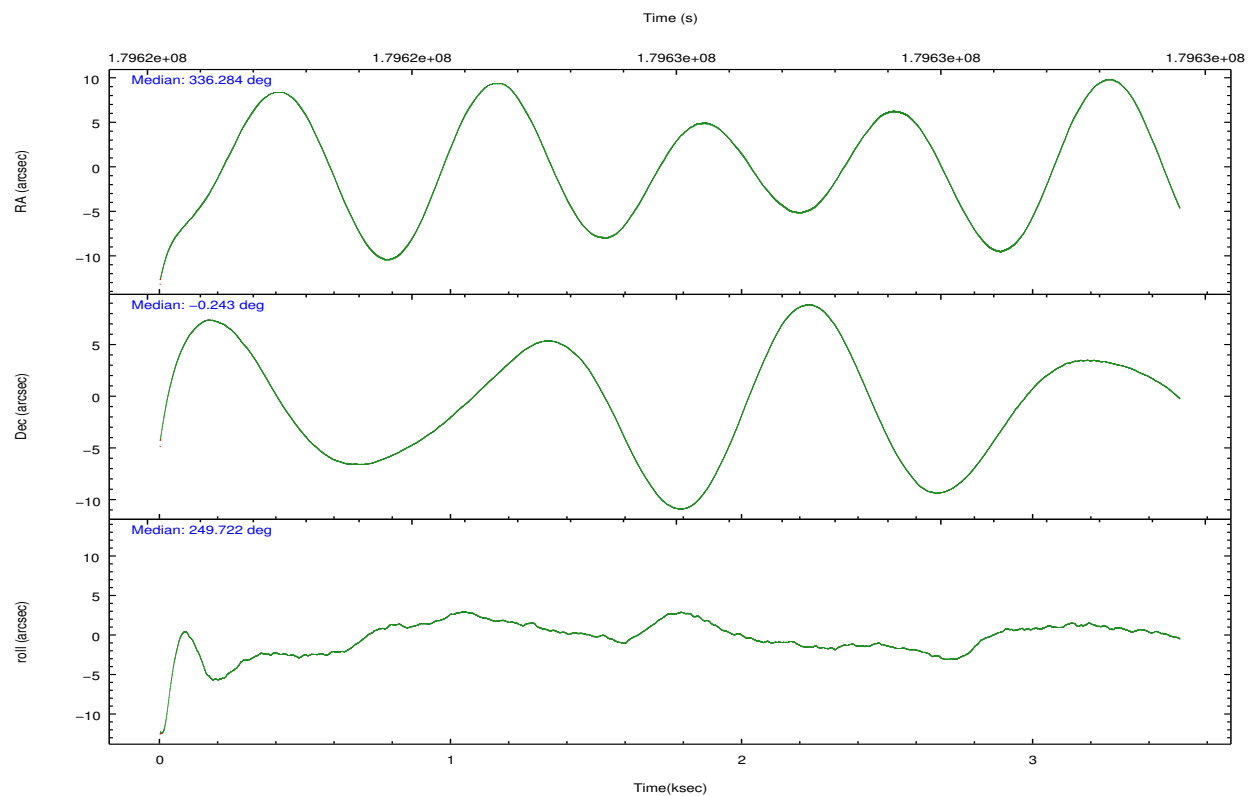


## 2.2 Compared Parameters

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	336.278485	336.2835345612095	Subarray requested	NONE	NONE
[deg] Pointing Dec	-0.216818	-0.2434431490848557	Alternating exposures requested	N	N
[deg] Pointing Roll	249.568843	249.725457580401	[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)	179624361.184000	179623248.9174			
Observation start date	2003-09-10T23:38:17	2003-09-10T23:20:48			
[s] Observation end time (MET)	179627729.184000	179628290.89262			
Observation end date	2003-09-11T00:34:25	2003-09-11T00:44:50			
Read mode	TIMED	TIMED			

## 2.3 Aspect



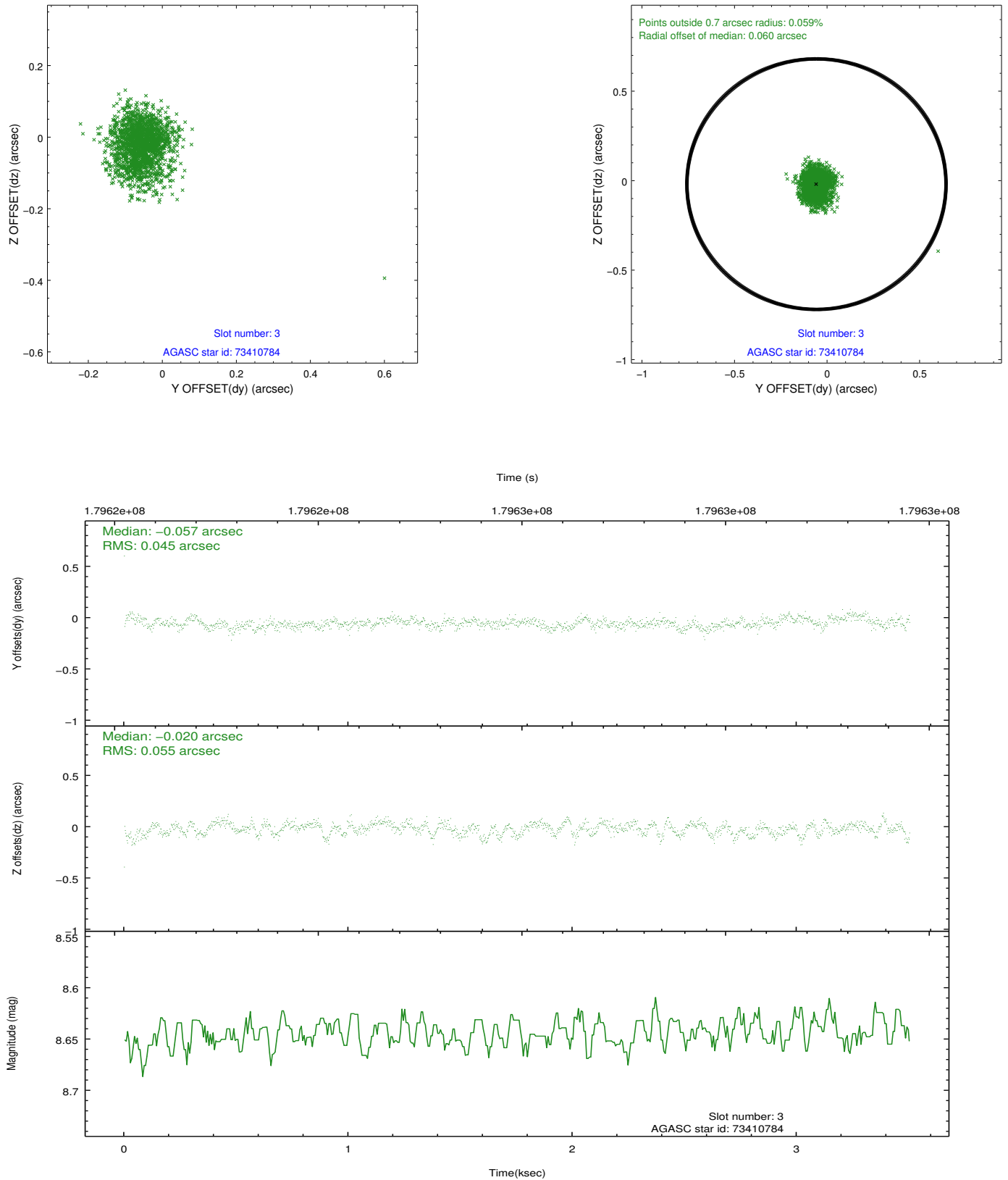


### Slot Statistics

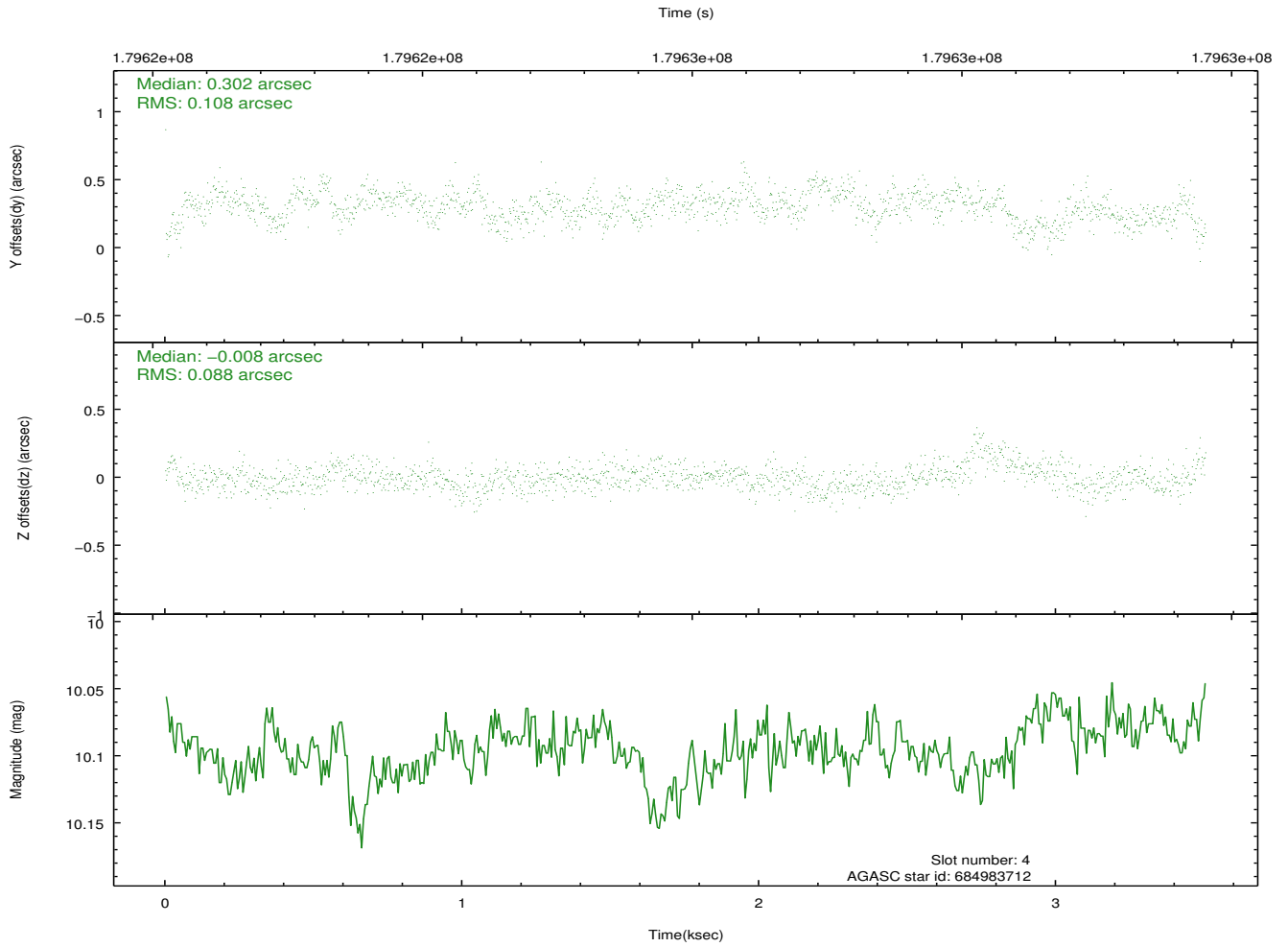
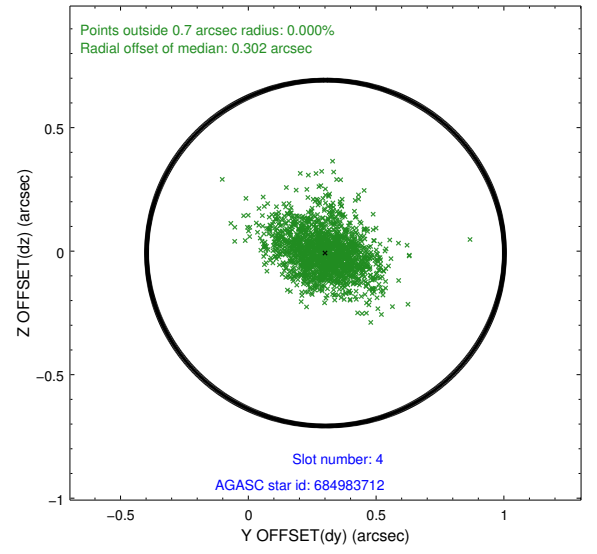
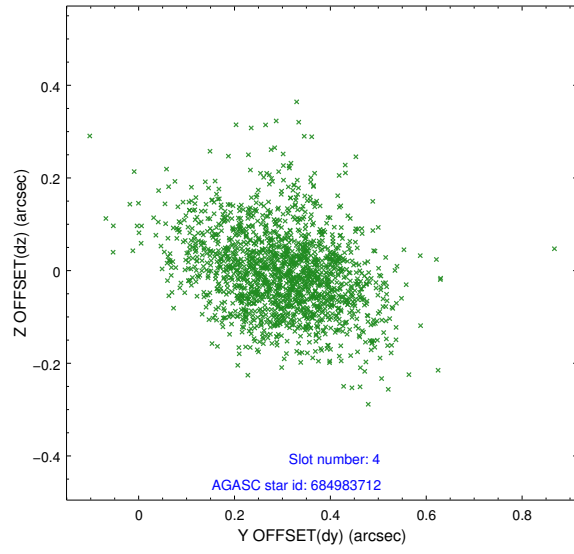
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.09	855	-0.048	-0.035	0.007	0.011	0.000000	0.000000	-759.20	-1730.42
1	FID	ACIS-S-4	7.20	854	0.071	0.032	0.006	0.011	0.000000	0.000000	2153.37	176.27
2	FID	ACIS-S-5	7.23	854	-0.053	0.011	0.007	0.012	0.000000	0.000000	-1809.73	171.97
3	GUIDE	73410784	8.64	1709	-0.057	-0.020	0.073	0.117	335.931486	0.557459	-2175.08	-2143.82
4	GUIDE	684983712	10.10	1709	0.302	-0.008	0.142	0.244	335.463409	-0.535506	2099.71	-2350.20
5	GUIDE	684983936	8.74	1708	0.081	0.055	0.071	0.110	336.772396	-0.318235	-276.46	1792.29
6	GUIDE	73410896	7.31	1709	-0.301	-0.108	0.067	0.109	335.865043	0.608622	-2264.57	-2431.47
7	GUIDE	684982496	8.95	1707	-0.024	0.082	0.091	0.134	336.798464	-0.312186	-332.07	1872.72

## 2.4 Star Slots

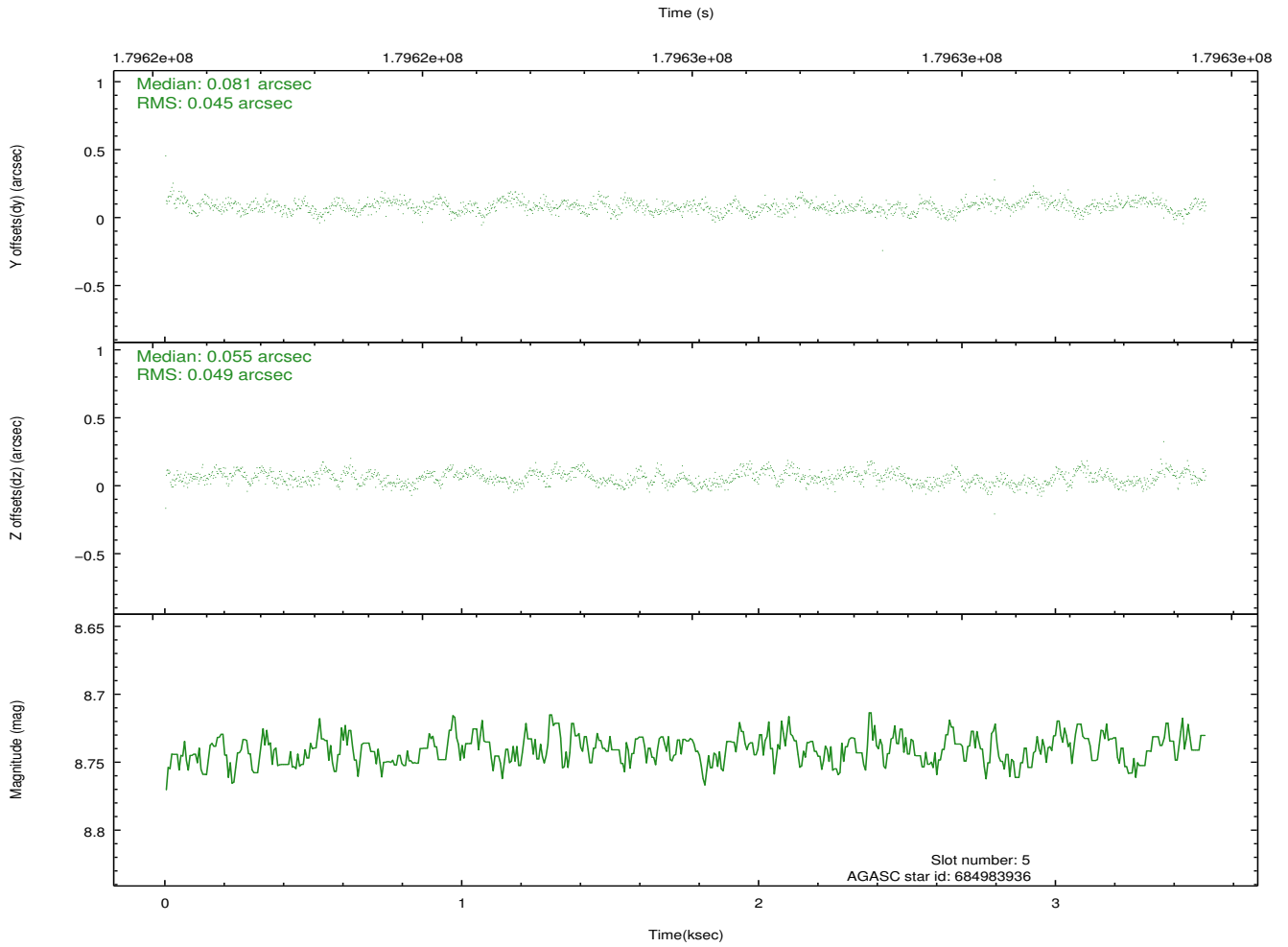
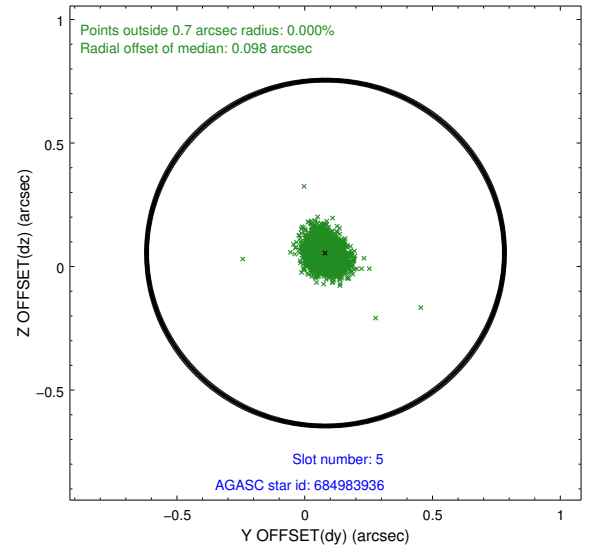
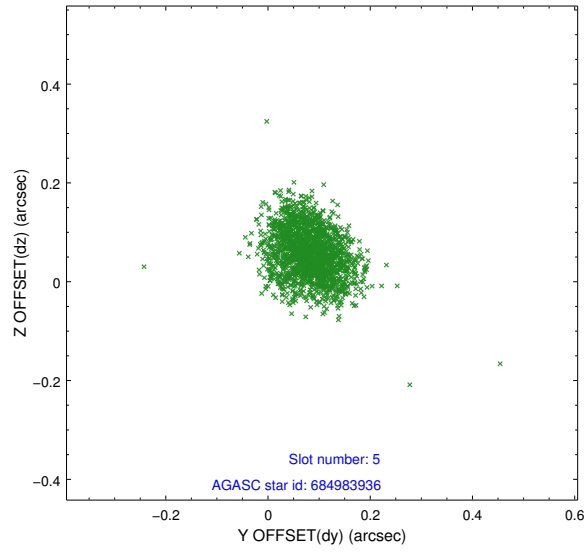
### 2.4.1 Slot 3



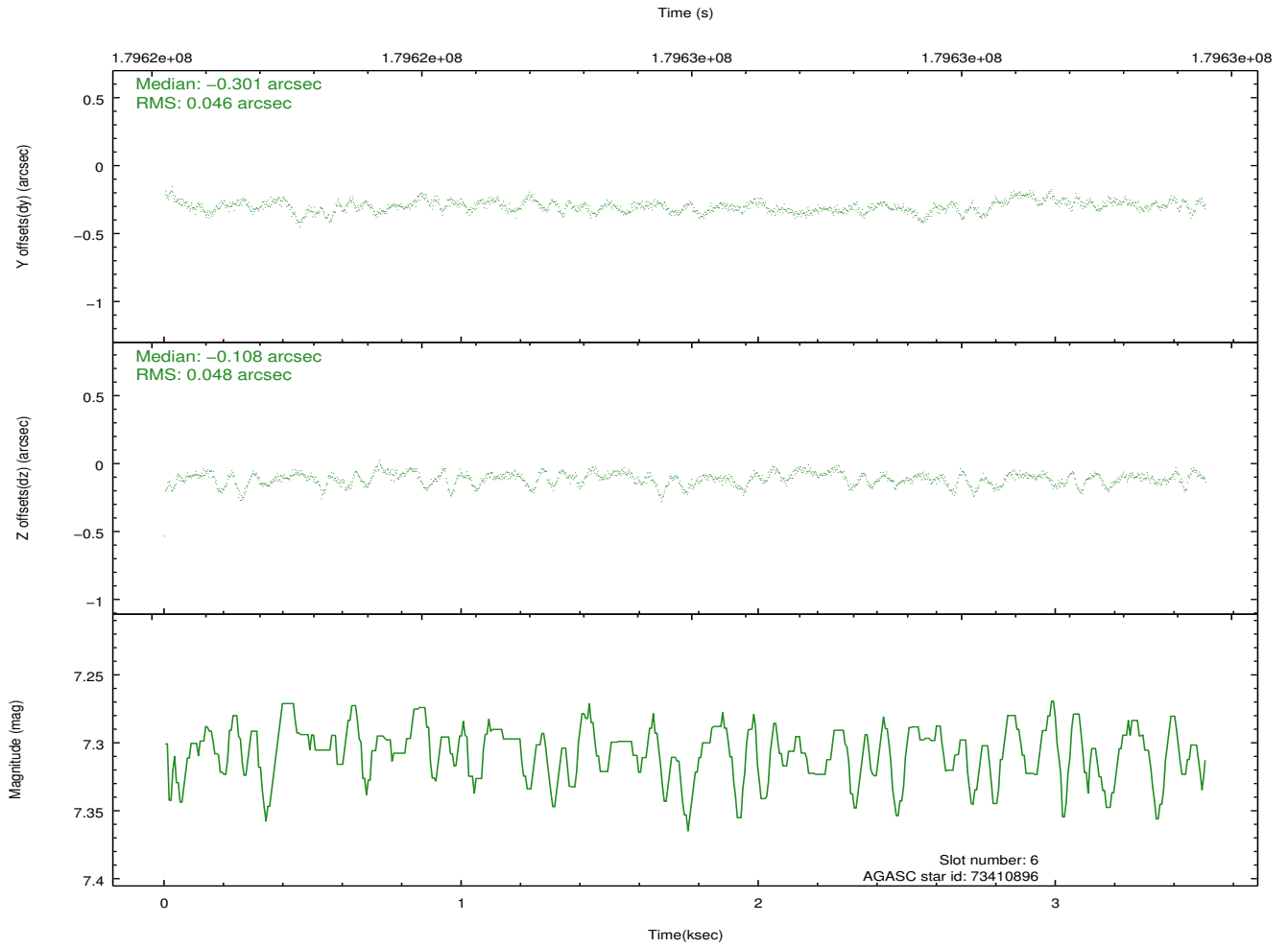
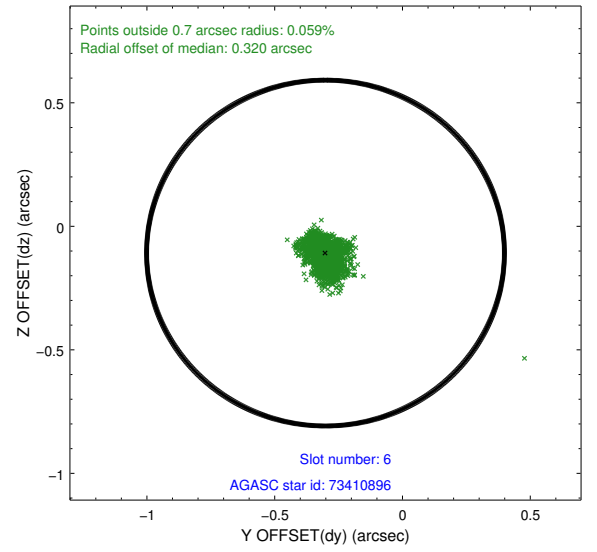
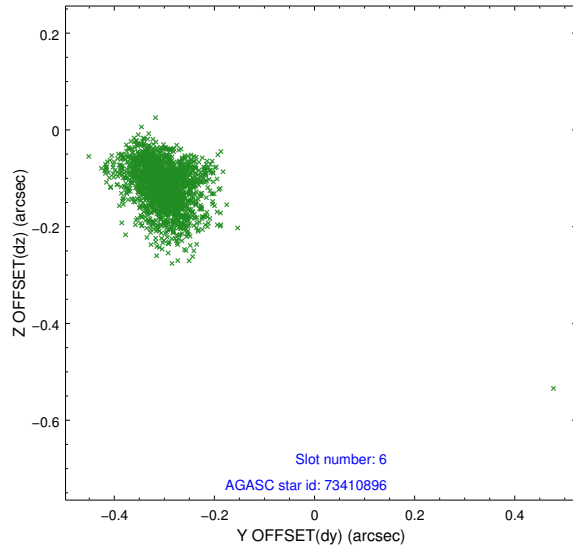
## 2.4.2 Slot 4



### 2.4.3 Slot 5

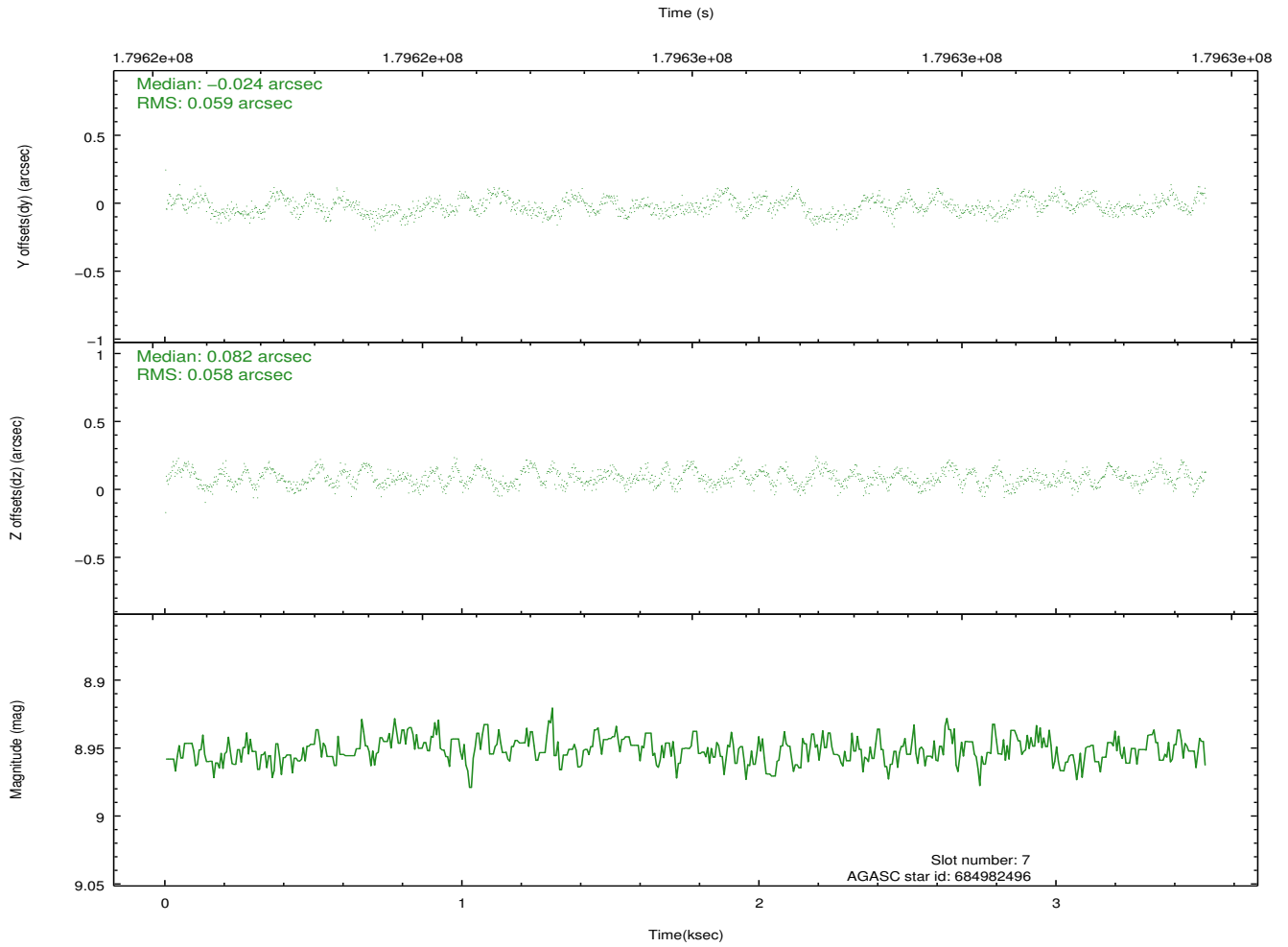
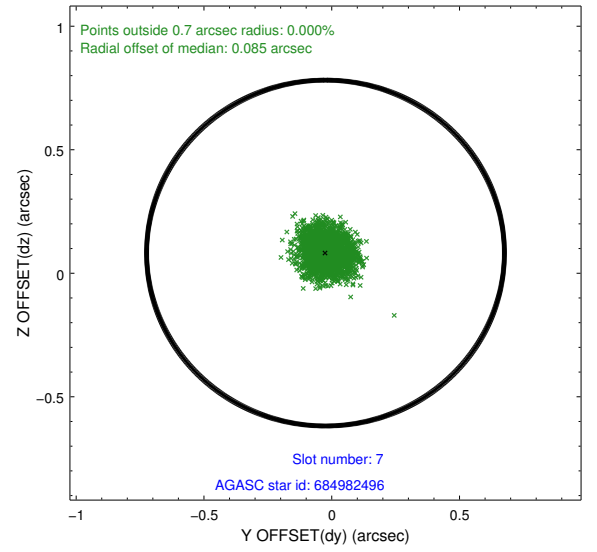
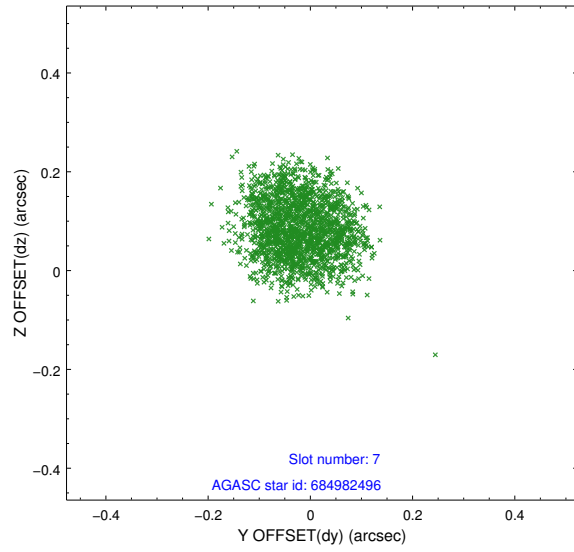


## 2.4.4 Slot 6



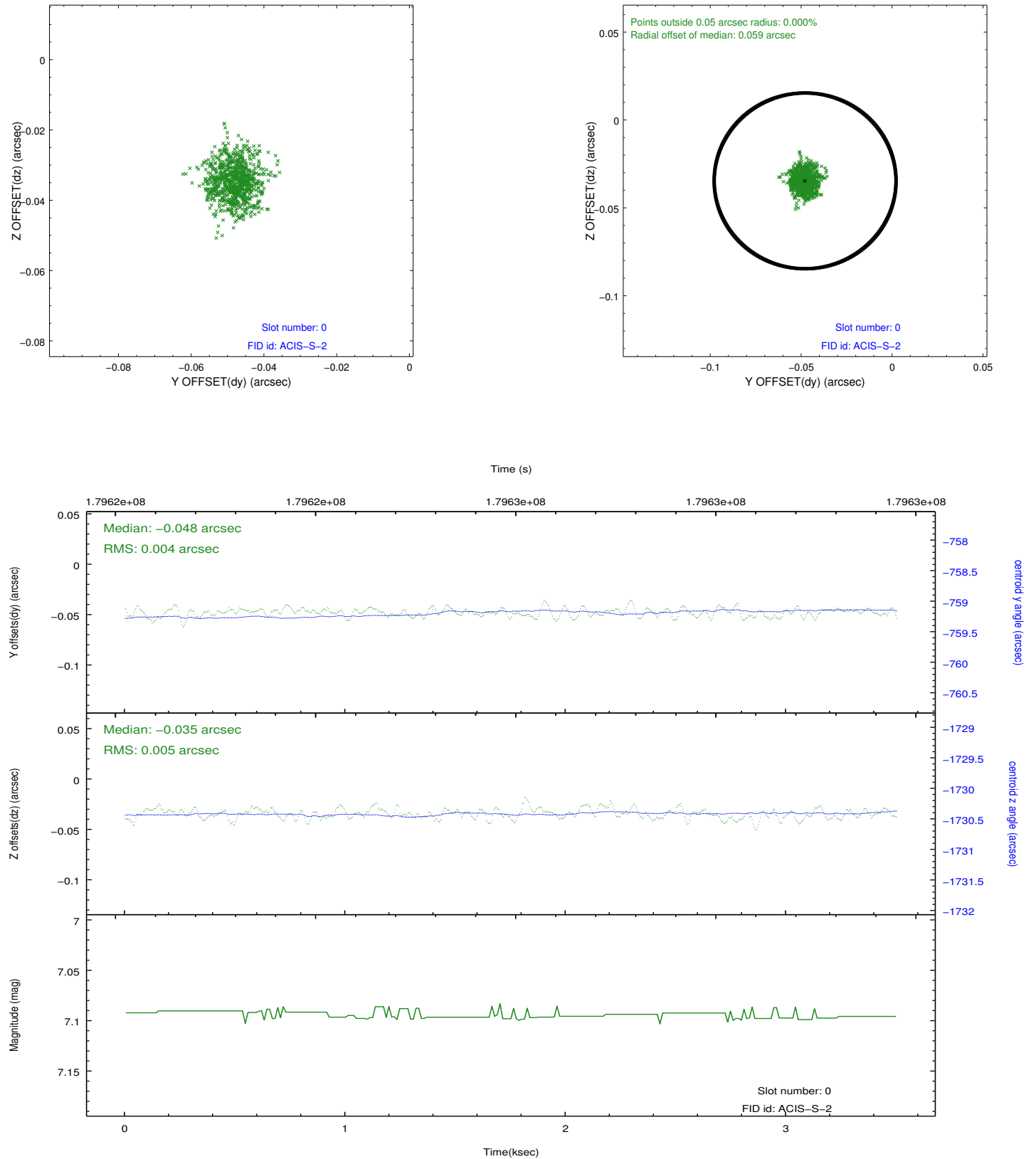


## 2.4.5 Slot 7

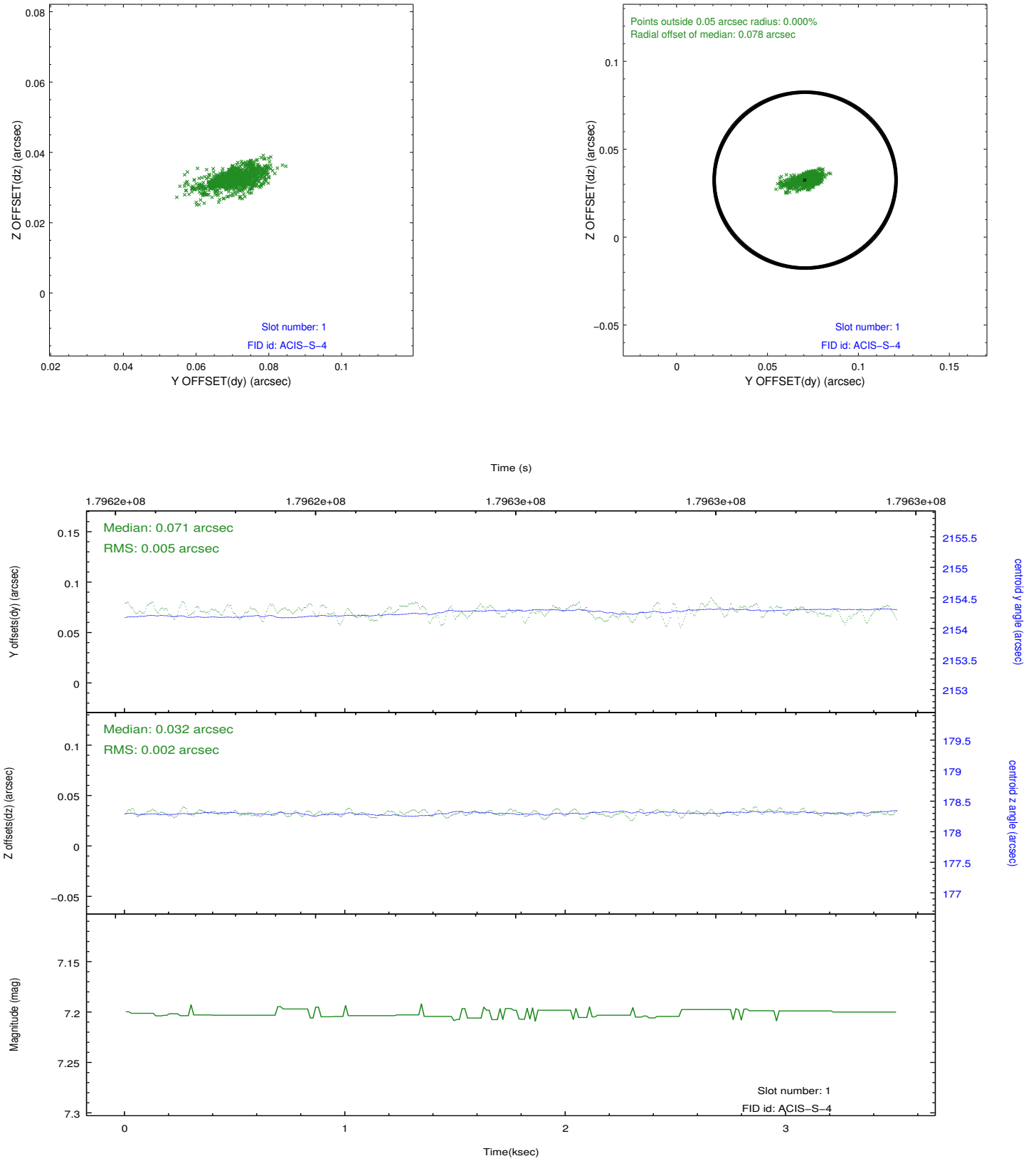


## 2.5 FID Slots

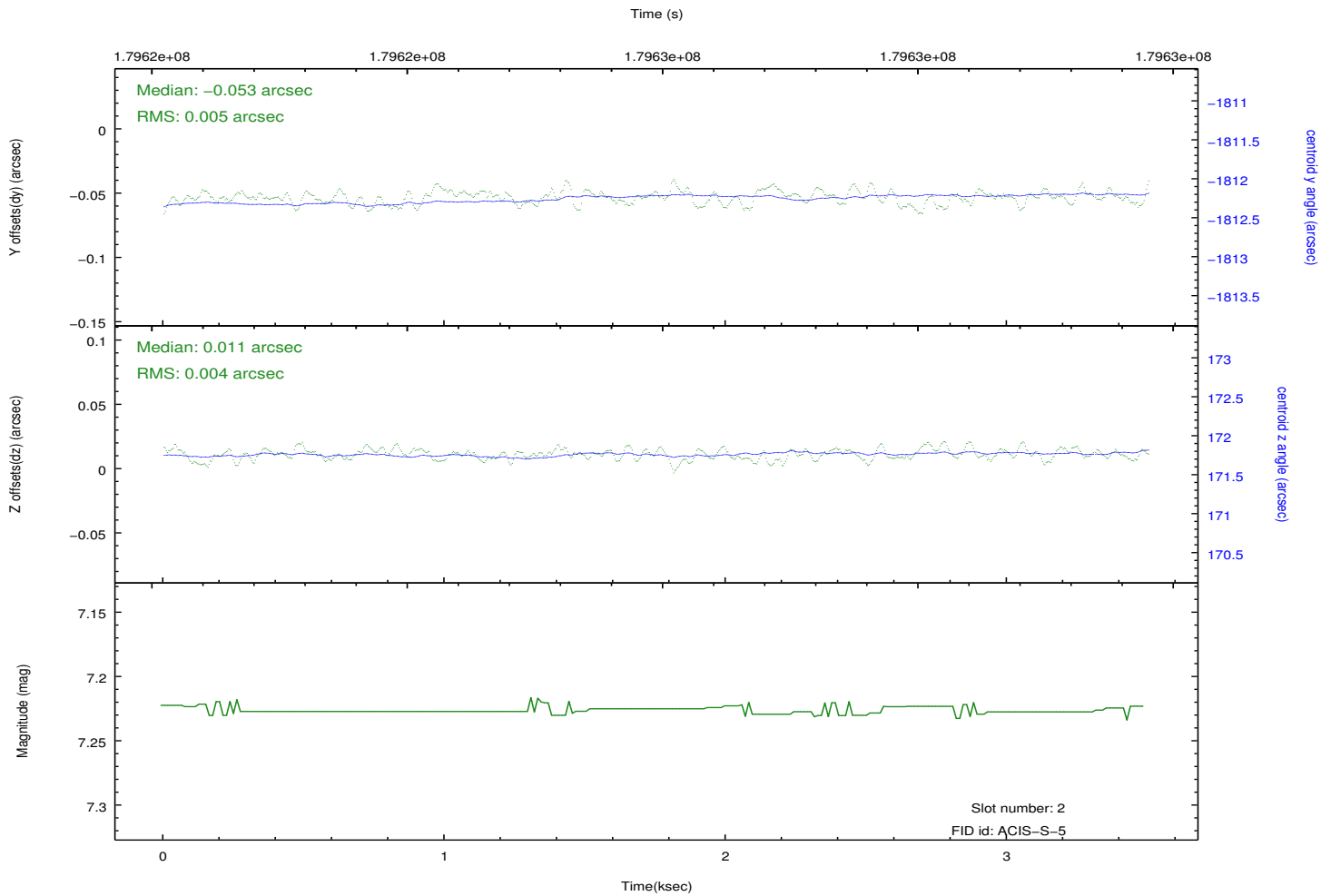
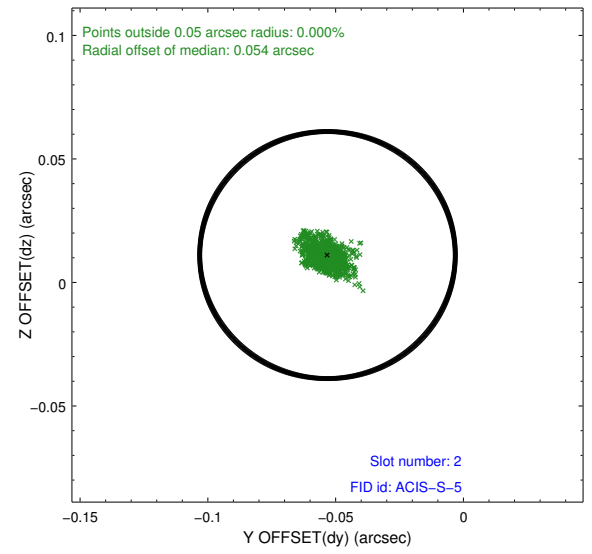
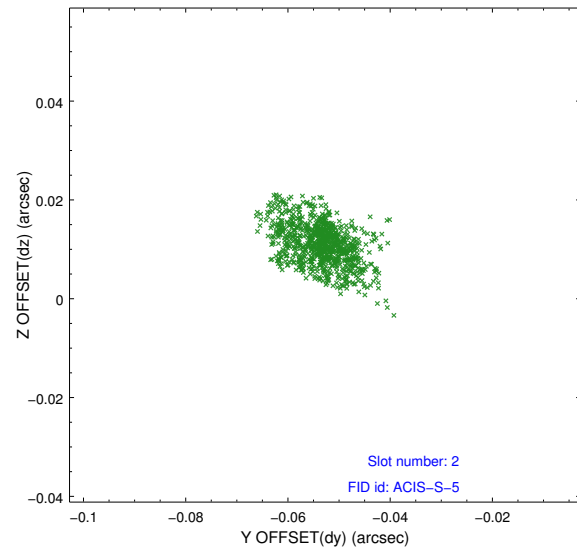
### 2.5.1 Slot 0



## 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)	2012.11.20
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	3.497

### A.2 Comments