

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 10488 - L2 Version 2  
Chandra X-Ray Center

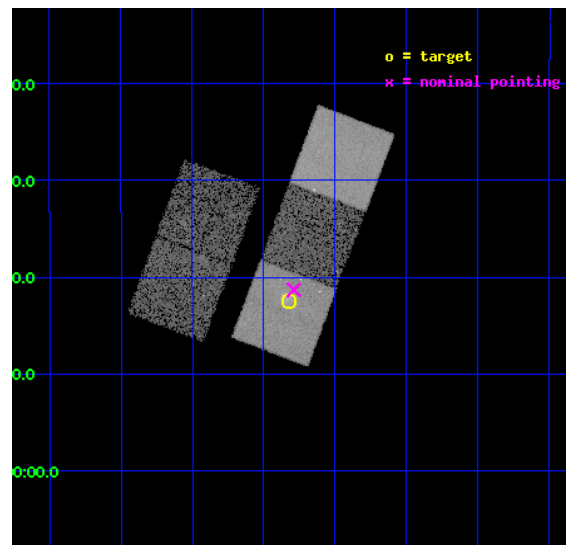
L2 Processing Date : Jun 7 2012

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# 1 Front

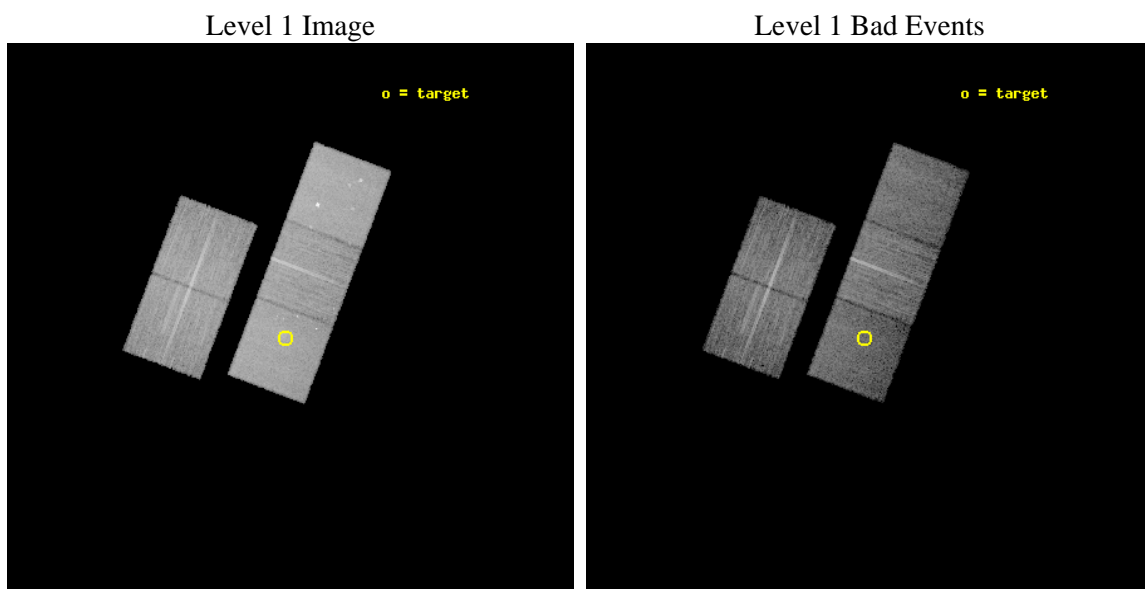
seq_num	800843	Sequence number
obs_id	10488	Observation id
title	Deciphering Cluster Observables: Tracing the Baryons in Clusters of Galaxies	Proposal title
observer	Dr. Amalia Hicks	Principal investigator
object	RCS2150-0442	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	327.582083	Observer's specified target RA [deg]
dec_targ	-4.707056	Observer's specified target Dec [deg]
ra_nom	327.57234520273	Nominal RA [deg]
dec_nom	-4.6884508000343	Nominal Dec [deg]
roll_nom	110.67706947243	Nominal Roll [deg]
revision	2	Processing version of data
ontime	10645.400081873	Sum of GTIs [s]
livetime	10506.310092774	Livetime [s]
ontime2	10645.400081873	Sum of GTIs [s]
ontime3	10645.400081873	Sum of GTIs [s]
ontime5	10645.400081873	Sum of GTIs [s]
ontime6	10642.259111464	Sum of GTIs [s]
ontime7	10645.400081873	Sum of GTIs [s]
l2events	133849	Number of level 2 events



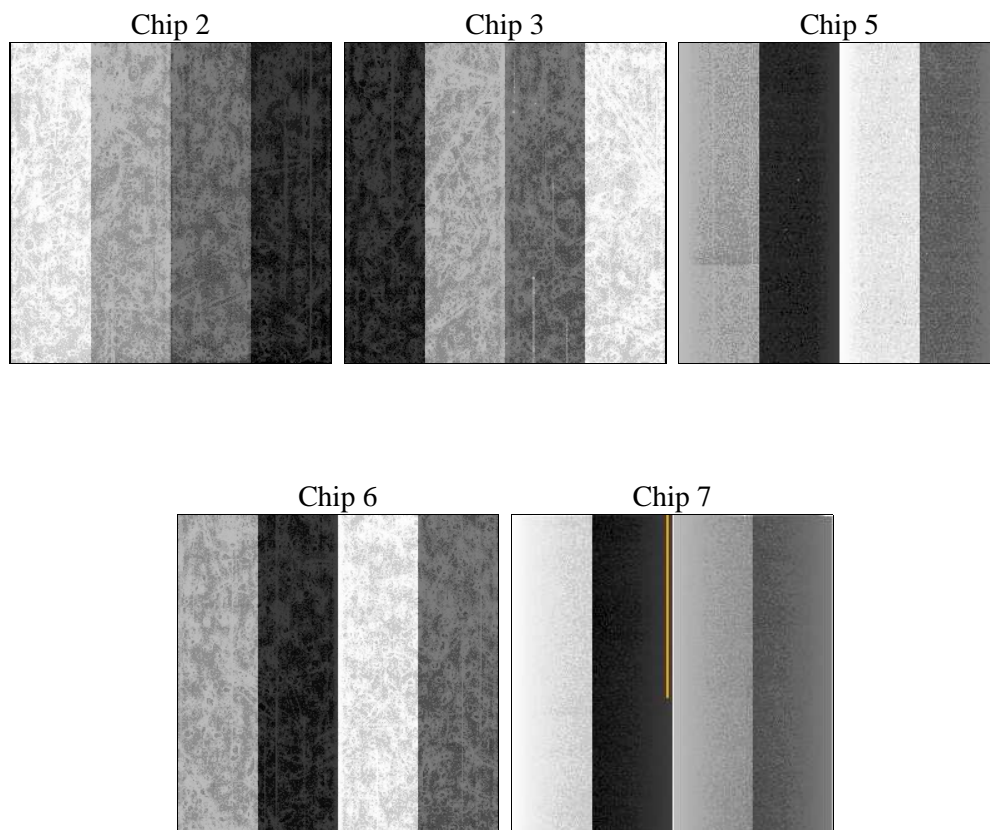
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10500.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	10645.400081873	Sum of GTIs [s]
caldsver	4.4.10	&#160	ontime2	10645.400081873	Sum of GTIs [s]
date	2012-06-07T16:53:40	Date and time of file creation	ontime3	10645.400081873	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	10645.400081873	Sum of GTIs [s]
			ontime6	10642.259111464	Sum of GTIs [s]
			ontime7	10645.400081873	Sum of GTIs [s]
			l1events	538246	Number of level 1 events

### 2.1.4 Events

	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	96621	91528	137643	100322	112132
rejected events	87795	82653	71564	90645	61278
rejected %	90%	90%	51%	90%	54%

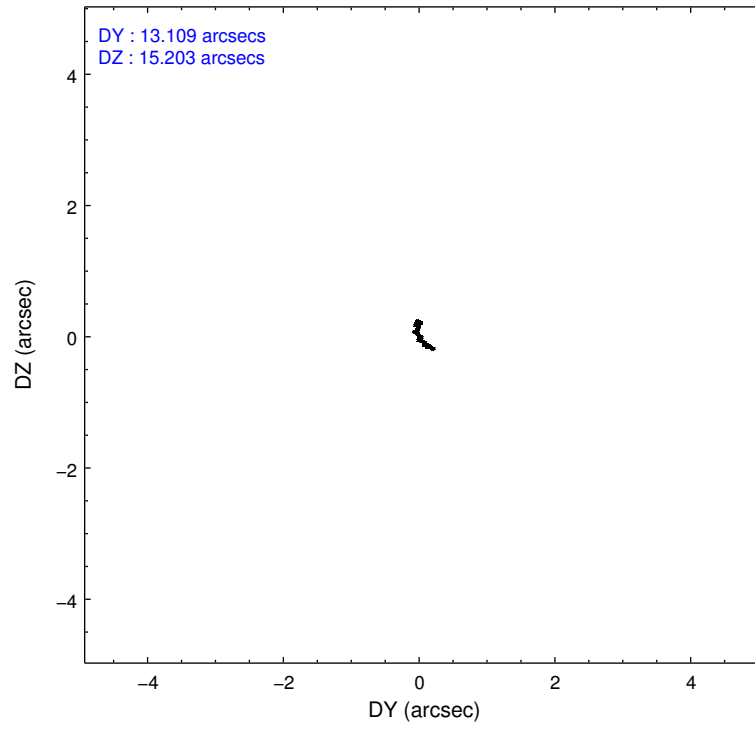
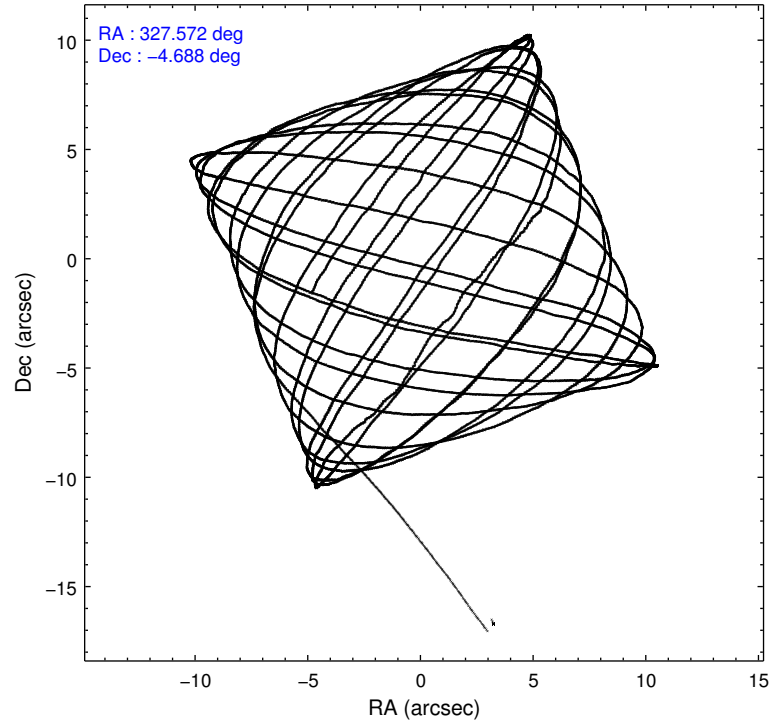
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	3340	3240	7798	3480	5555
	3%	3%	5%	3%	4%
grade 1 events	59	53	263	64	151
	0%	0%	0%	0%	0%
grade 2 events	2173	2027	20405	2249	11014
	2%	2%	14%	2%	9%
grade 3 events	973	1022	2691	1115	4864
	1%	1%	1%	1%	4%
grade 4 events	1071	981	2492	1023	4873
	1%	1%	1%	1%	4%
grade 5 events	3023	3933	10472	4026	11551
	3%	4%	7%	4%	10%
grade 6 events	1605	1869	35097	2145	26331
	1%	2%	25%	2%	23%
grade 7 events	84377	78403	58425	86220	47793
	87%	85%	42%	85%	42%

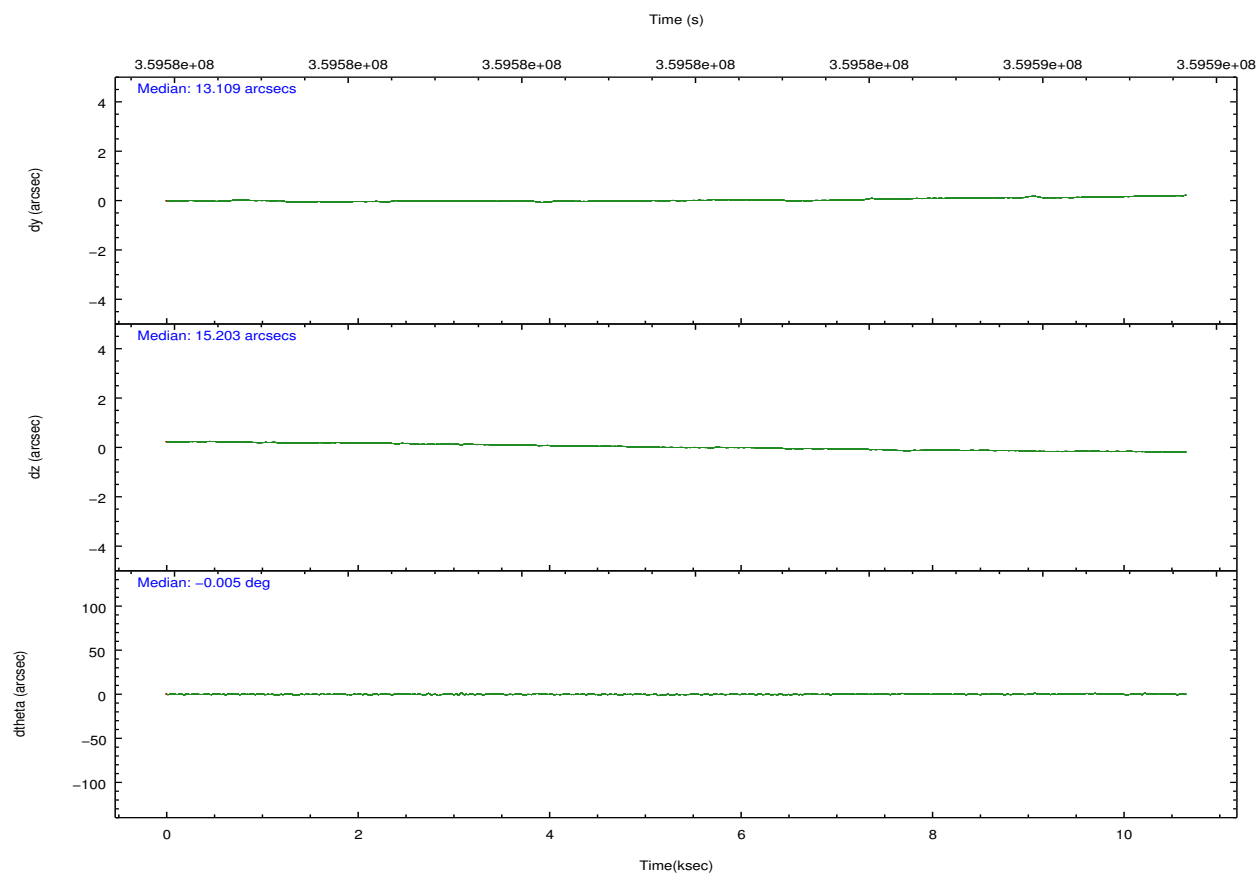
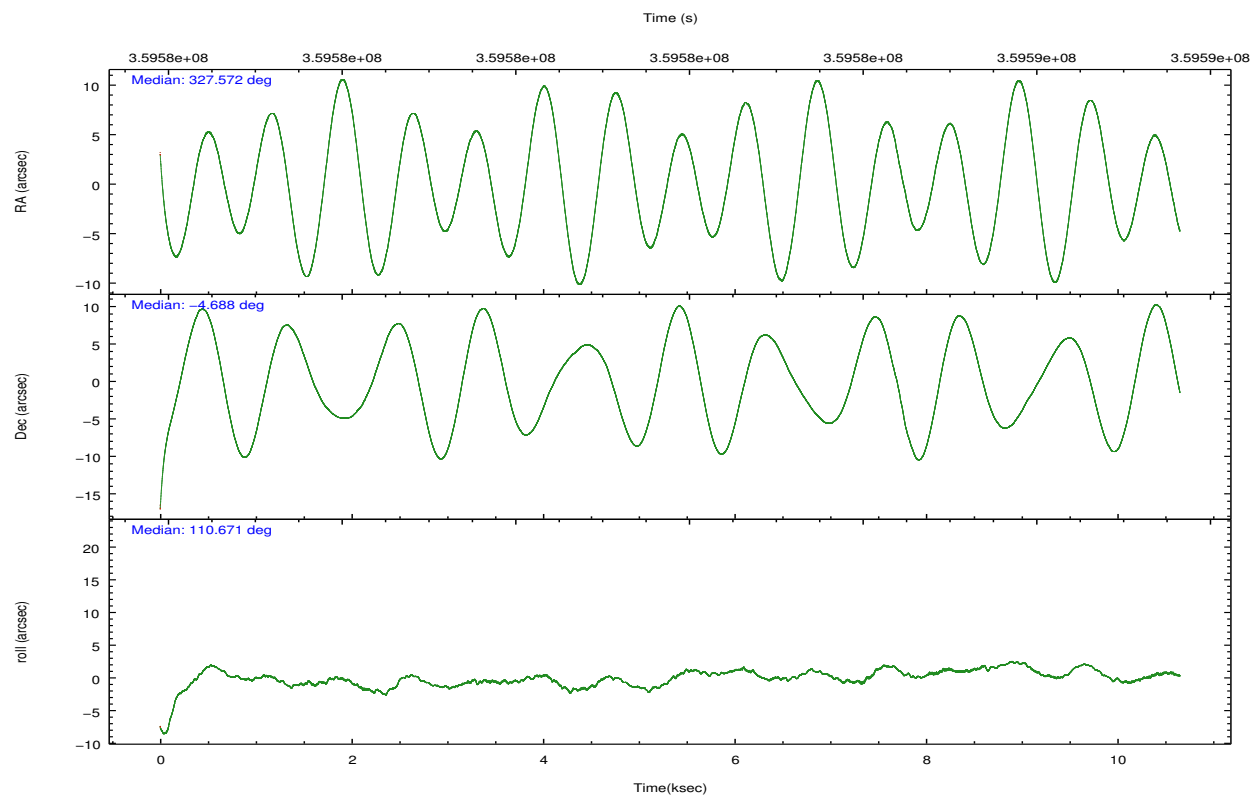


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23567	ACIS-23567	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	327.593830	327.5723452027312	CCD I2 on	O1	Y
[deg] Pointing Dec	-4.705519	-4.688450800034297	CCD I3 on	O2	Y
[deg] Pointing Roll	110.522209	110.67706947243	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O4	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	O3	Y
[mm] SIM translation stage pos	-190.132523	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	N	N
[s] Observation start time (MET)	359576595.184000	359575424.86455	CCD S5 on	N	N
Observation start date	2009-05-24T18:22:09	2009-05-24T18:03:44	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	359587095.184000	359587831.97767	On-chip summing requested	N	N
Observation end date	2009-05-24T21:17:09	2009-05-24T21:30:31	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



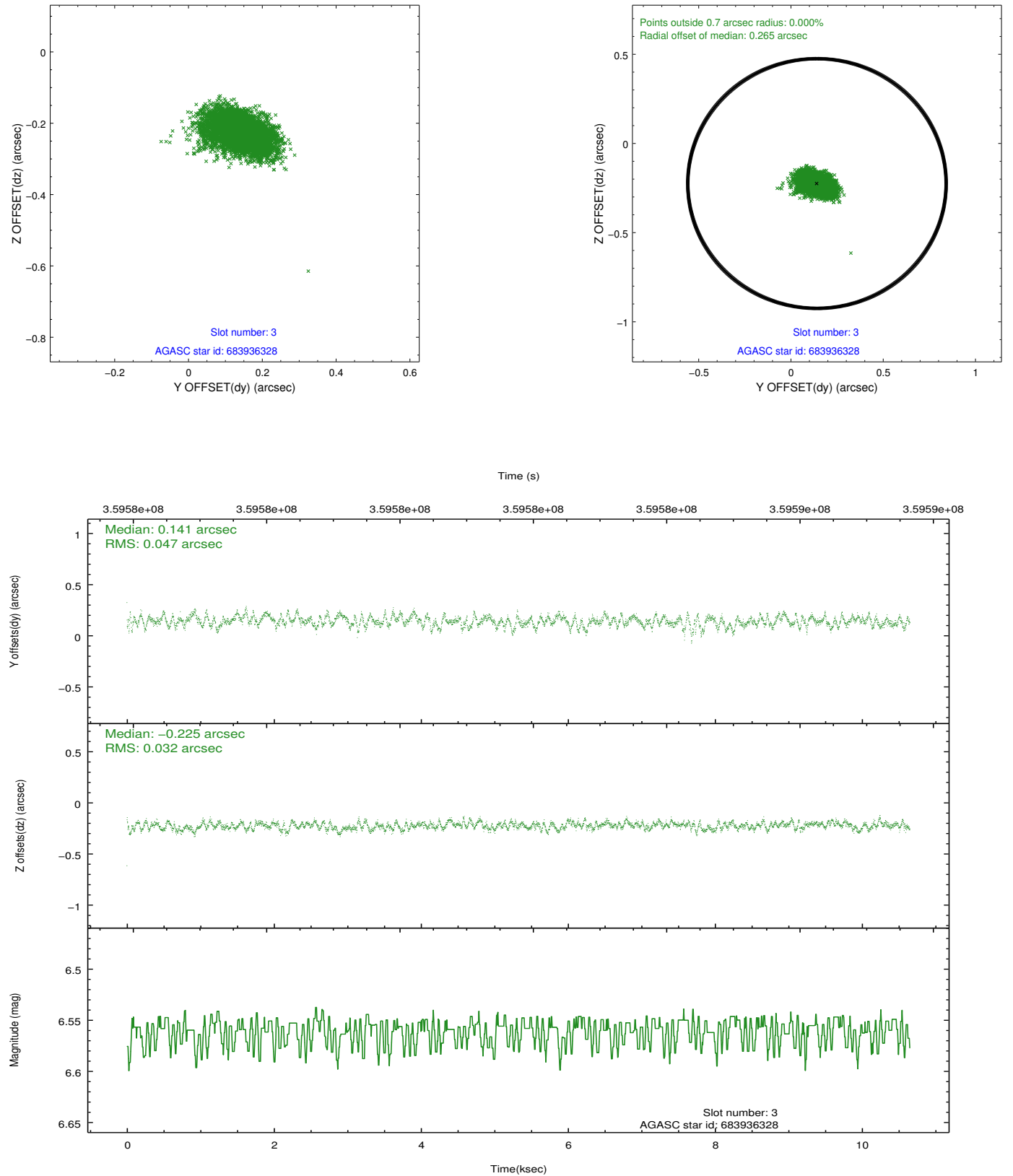


### Slot Statistics

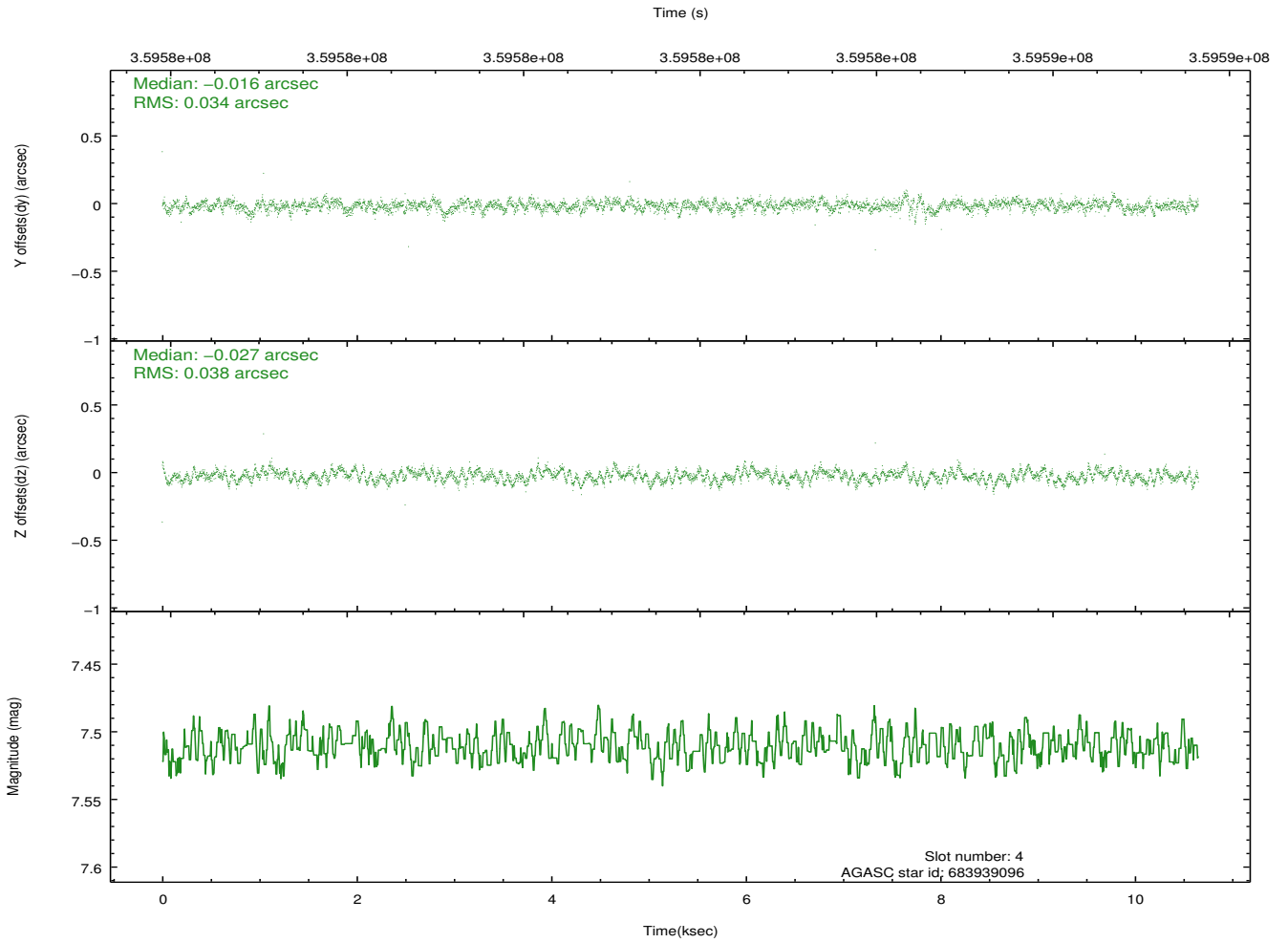
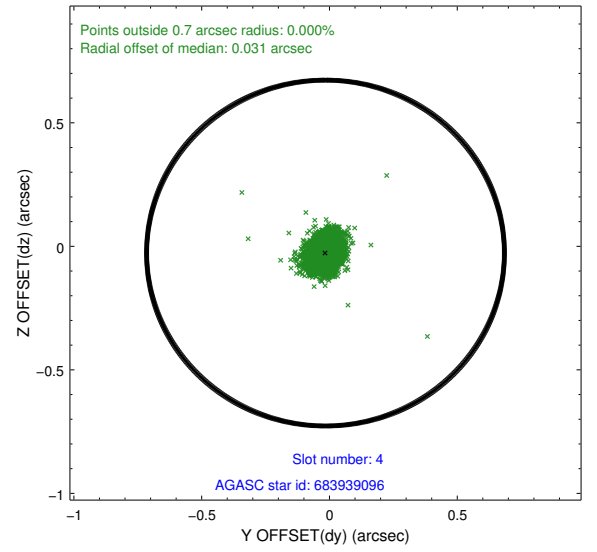
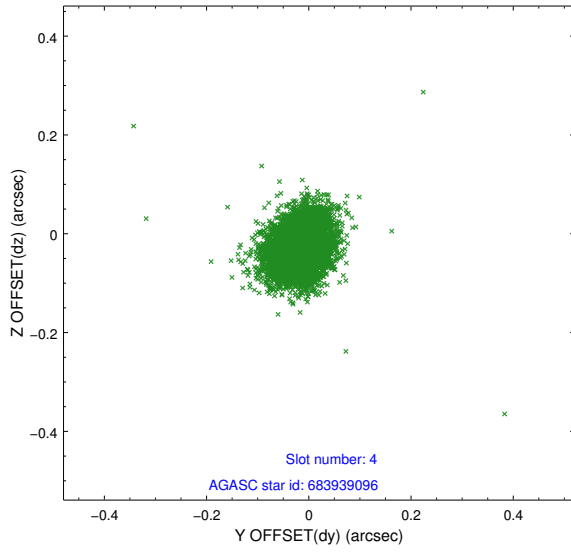
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.91	2598	-0.047	-0.010	0.008	0.013	0.000000	0.000000	-766.07	-1736.58
1	FID	ACIS-S-4	7.00	2599	0.151	0.025	0.007	0.013	0.000000	0.000000	2147.14	171.49
2	FID	ACIS-S-5	7.03	2599	-0.136	-0.007	0.007	0.012	0.000000	0.000000	-1818.41	165.61
3	GUIDE	683936328	6.56	5196	0.141	-0.225	0.059	0.101	327.257911	-5.403748	-1932.72	2009.25
4	GUIDE	683939096	7.51	5193	-0.016	-0.027	0.053	0.086	327.685625	-5.118073	-1506.83	212.78
5	GUIDE	683943912	8.90	5191	-0.060	0.238	0.072	0.121	327.667115	-4.649356	96.51	-317.06
6	GUIDE	684067952	8.99	5193	0.043	0.379	0.096	0.159	328.216063	-4.546204	-246.38	-2291.54
7	GUIDE	683944888	7.28	5196	-0.107	-0.354	0.073	0.122	326.853381	-4.608646	1256.12	2365.86

## 2.4 Star Slots

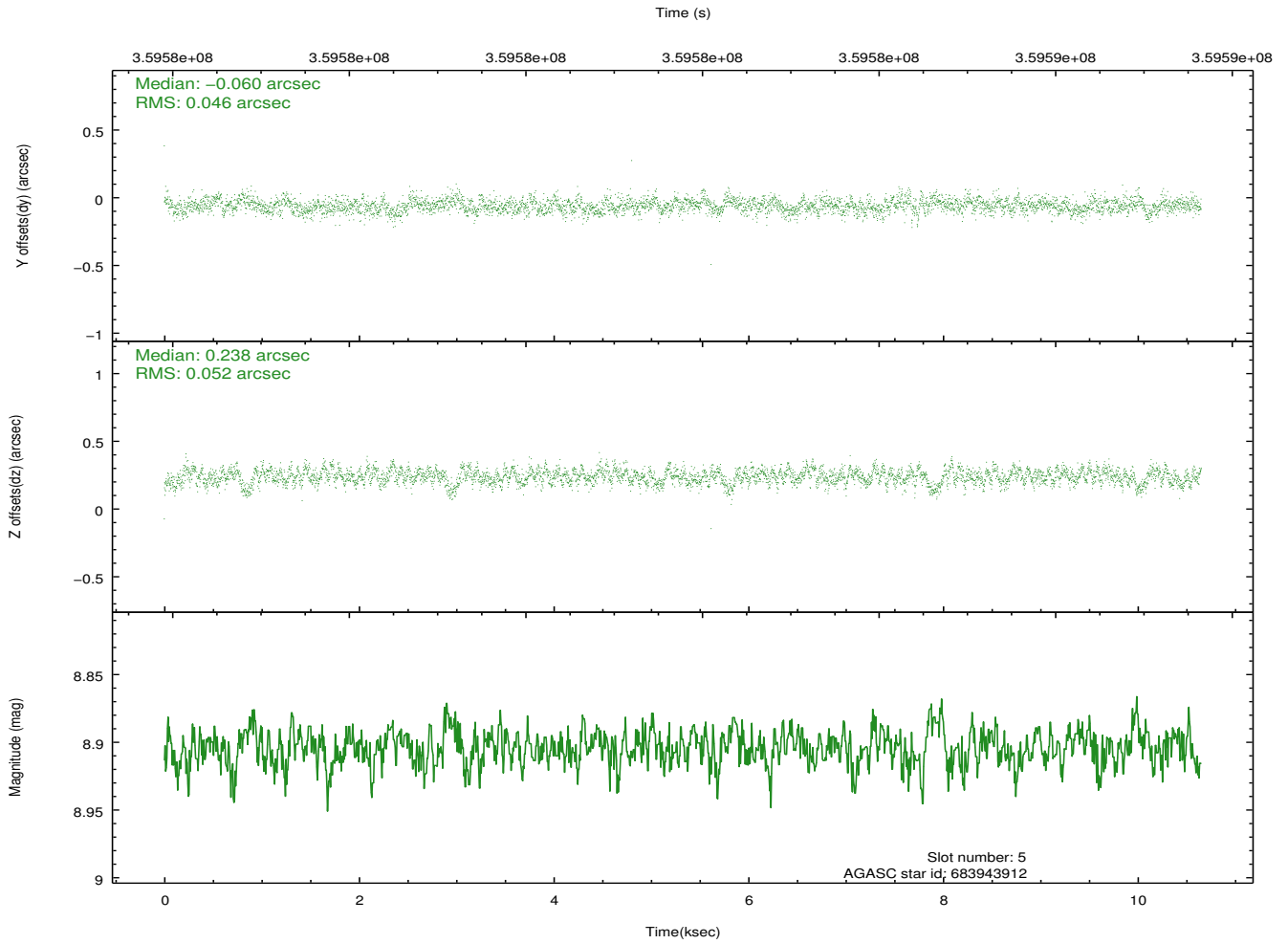
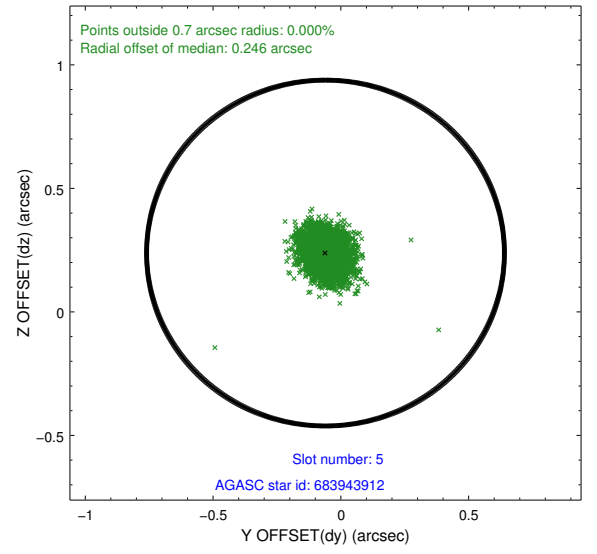
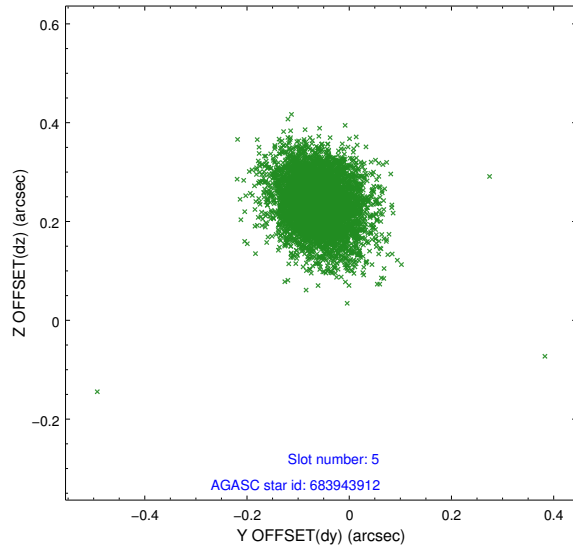
### 2.4.1 Slot 3



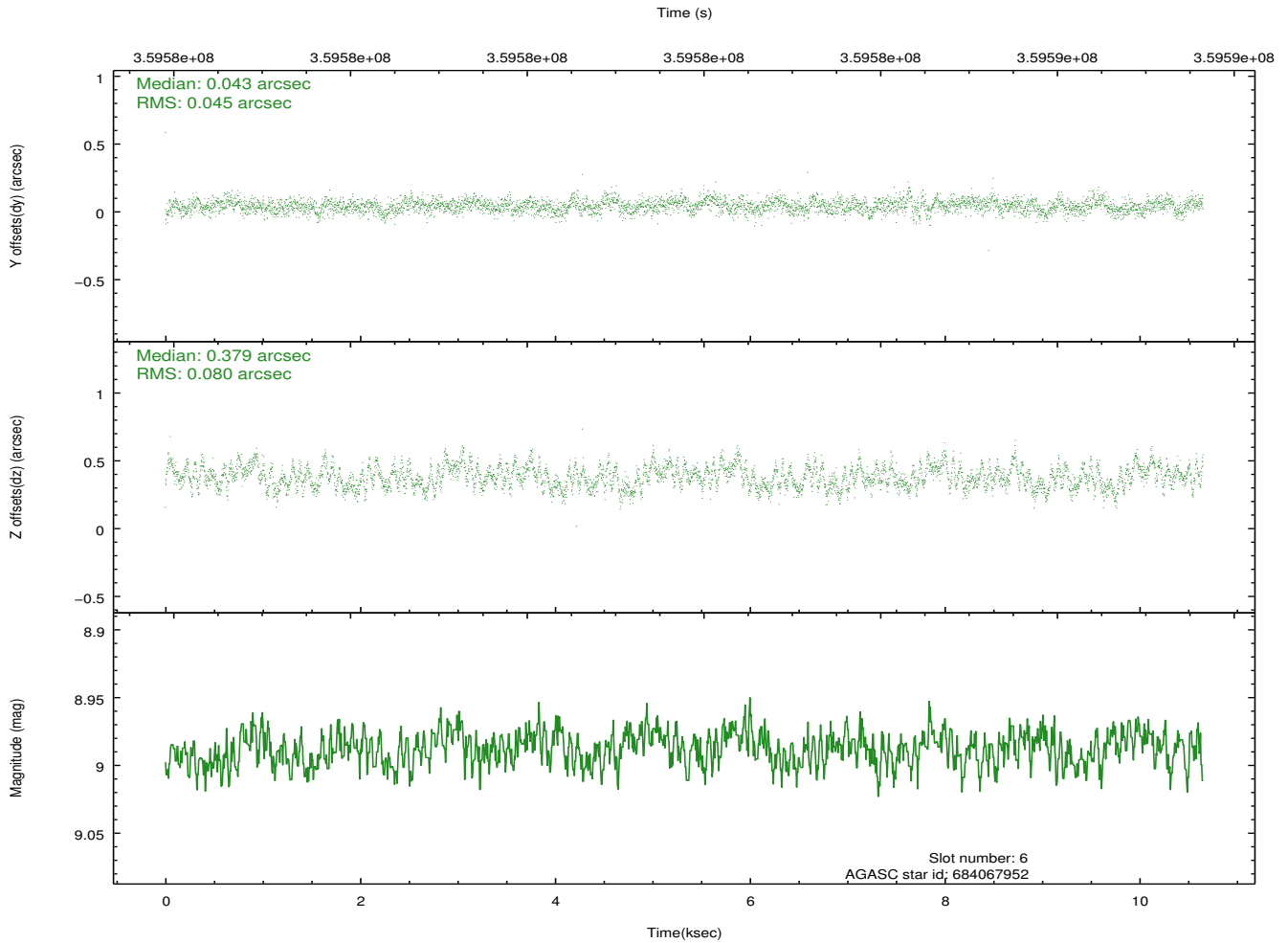
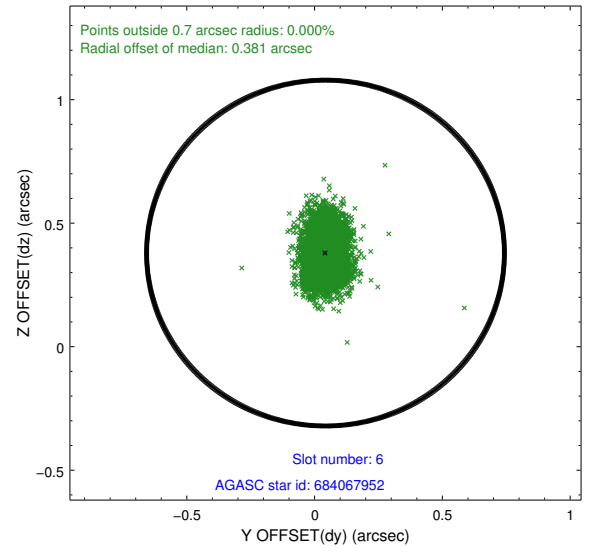
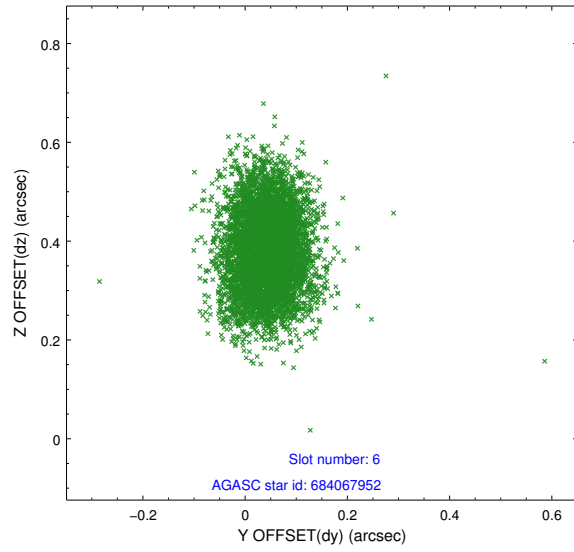
## 2.4.2 Slot 4



### 2.4.3 Slot 5

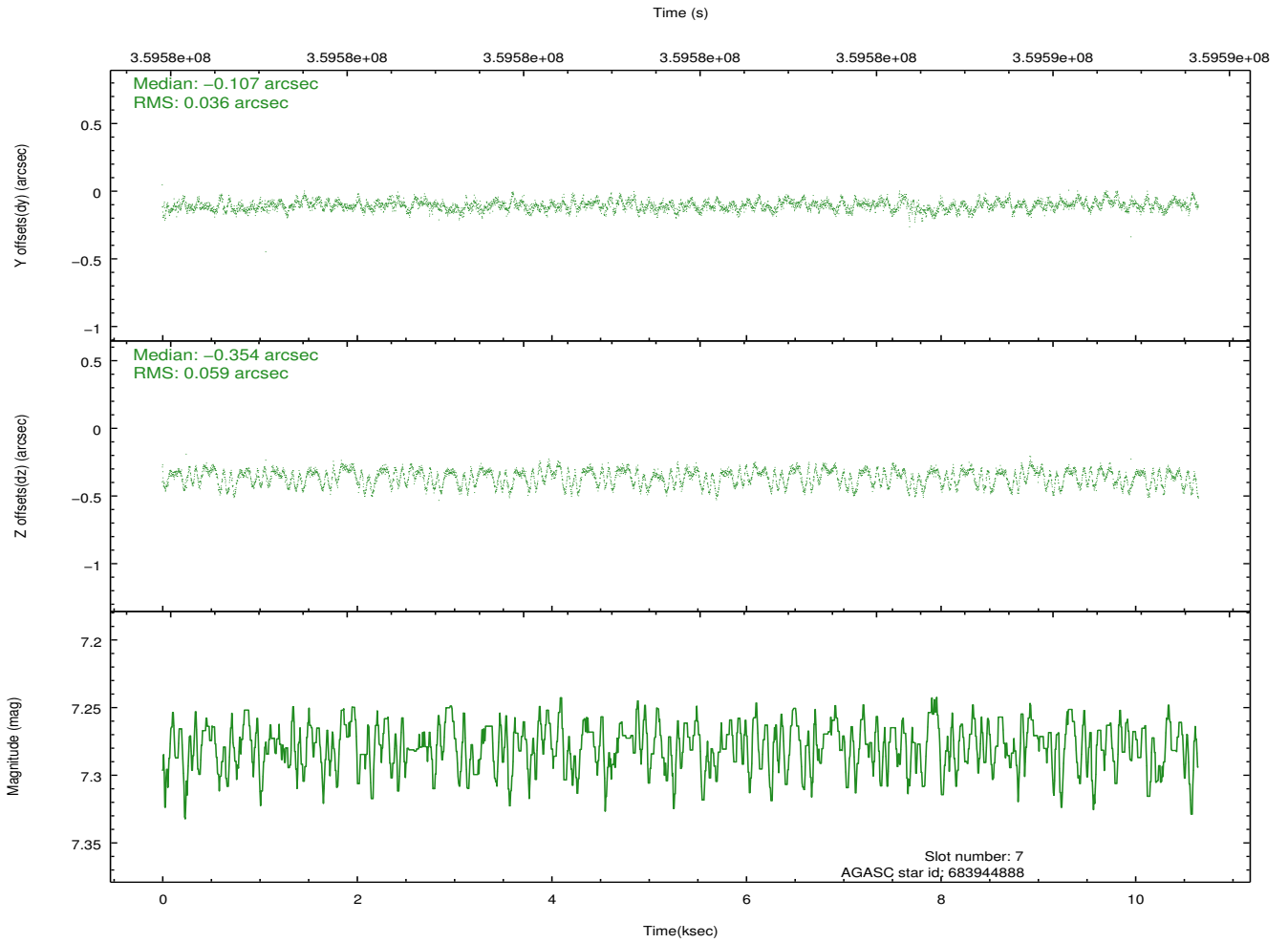
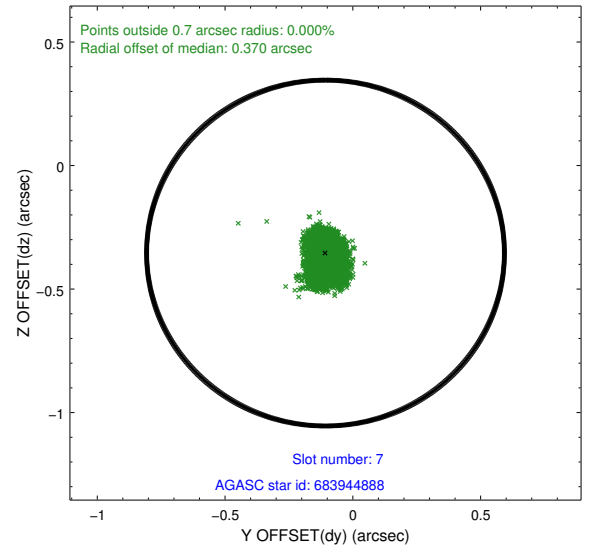
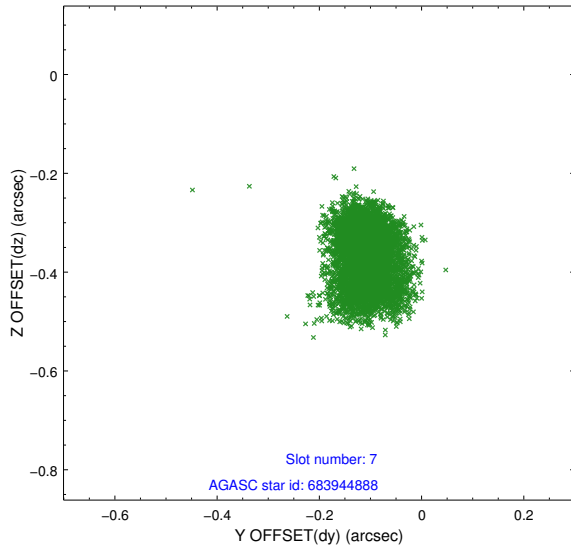


## 2.4.4 Slot 6



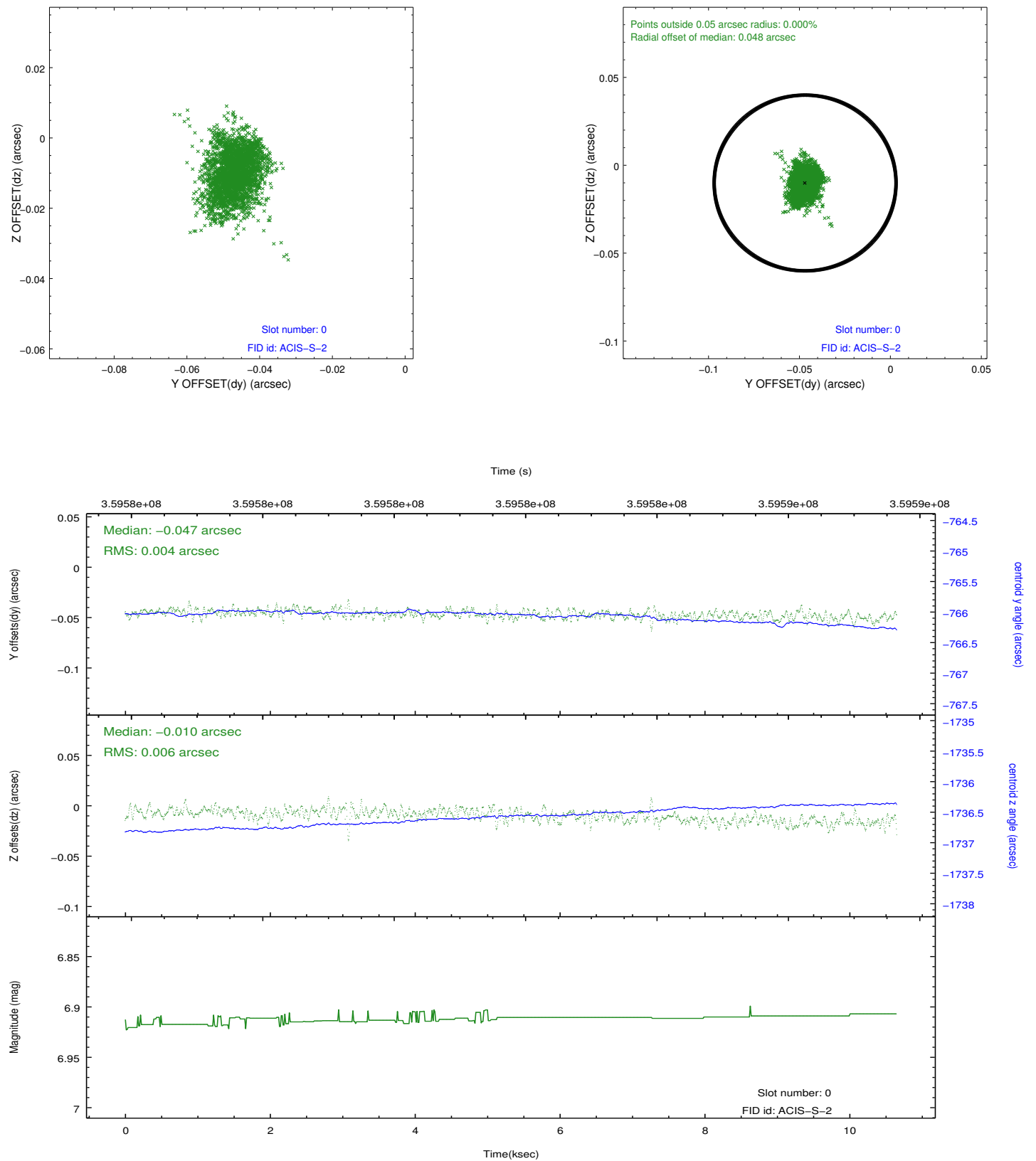


## 2.4.5 Slot 7

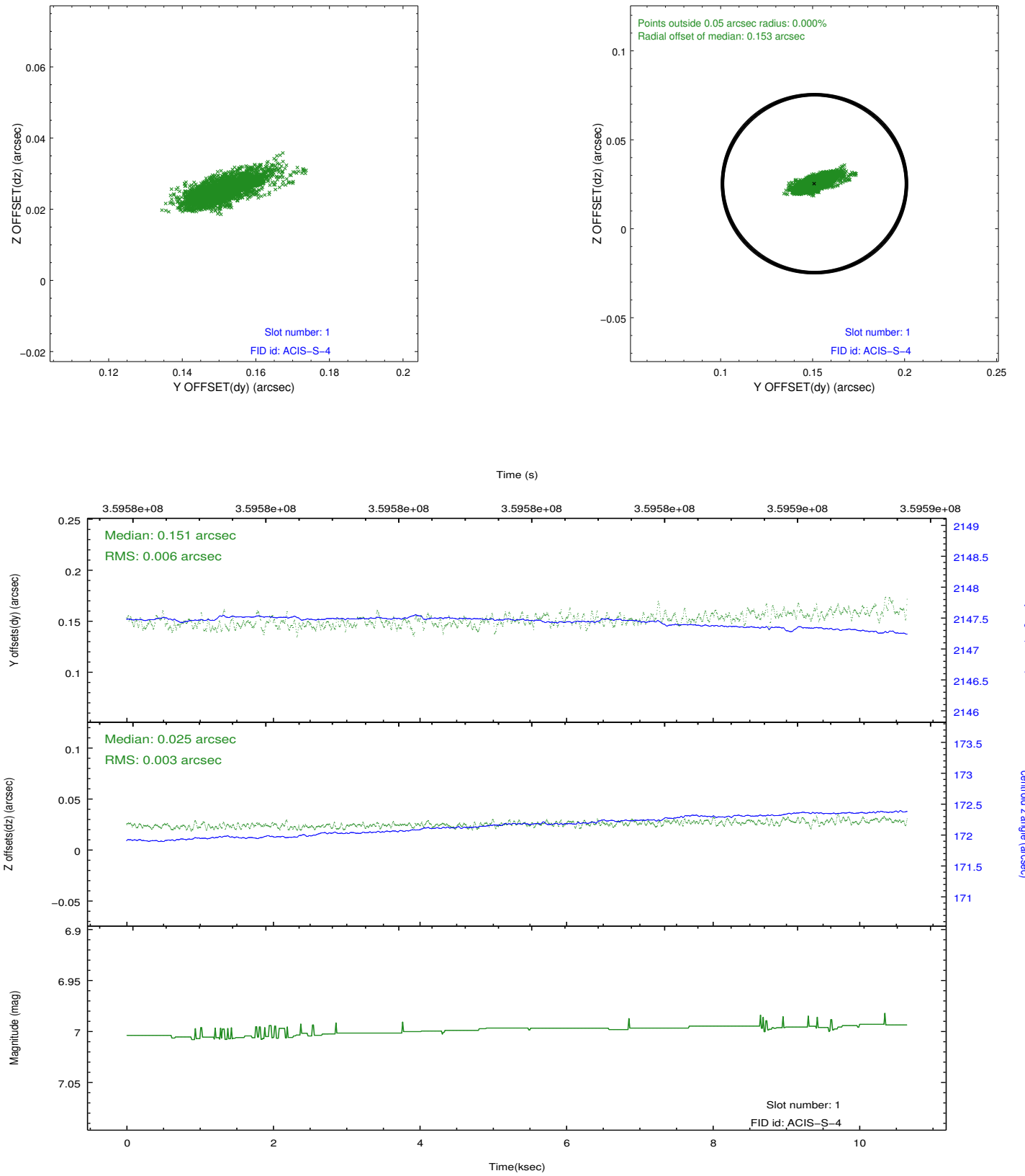


## 2.5 FID Slots

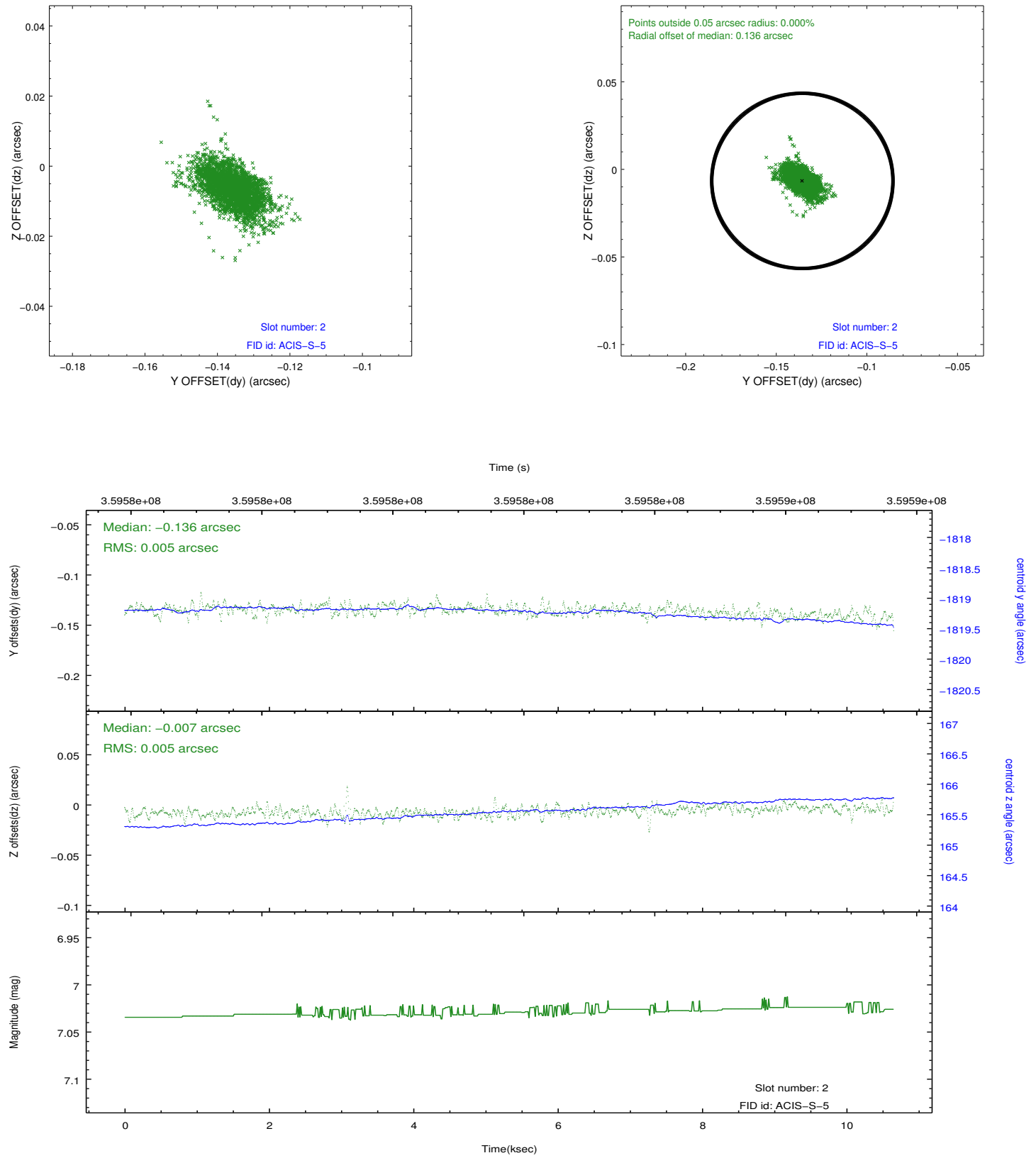
### 2.5.1 Slot 0



## 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)	2012.06.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.6454

### A.2 Comments