

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 13382 - L2 Version 1  
Chandra X-Ray Center

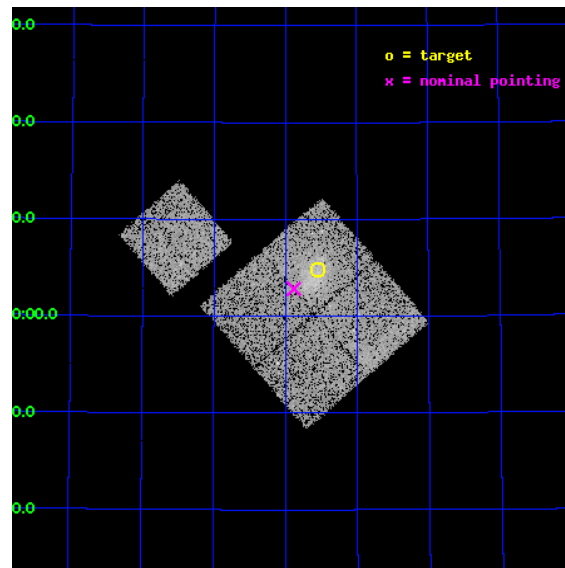
L2 Processing Date : Sep 1 2012

## Contents

<b>1</b>	<b>Front</b>	<b>2</b>
<b>2</b>	<b>OBI</b>	<b>3</b>
2.1	OBI . . . . .	3
2.1.1	Images . . . . .	3
2.1.2	Bias . . . . .	3
2.1.3	Parameters . . . . .	4
2.1.4	Events . . . . .	4
2.2	Compared Parameters . . . . .	5
2.3	Aspect . . . . .	6
2.4	Star Slots . . . . .	9
2.4.1	Slot 3 . . . . .	9
2.4.2	Slot 4 . . . . .	10
2.4.3	Slot 5 . . . . .	11
2.4.4	Slot 6 . . . . .	12
2.4.5	Slot 7 . . . . .	13
2.5	FID Slots . . . . .	14
2.5.1	Slot 0 . . . . .	14
2.5.2	Slot 1 . . . . .	15
2.5.3	Slot 2 . . . . .	16
<b>A</b>	<b>Summary</b>	<b>17</b>
A.1	Status . . . . .	17
A.2	Comments . . . . .	17

# 1 Front

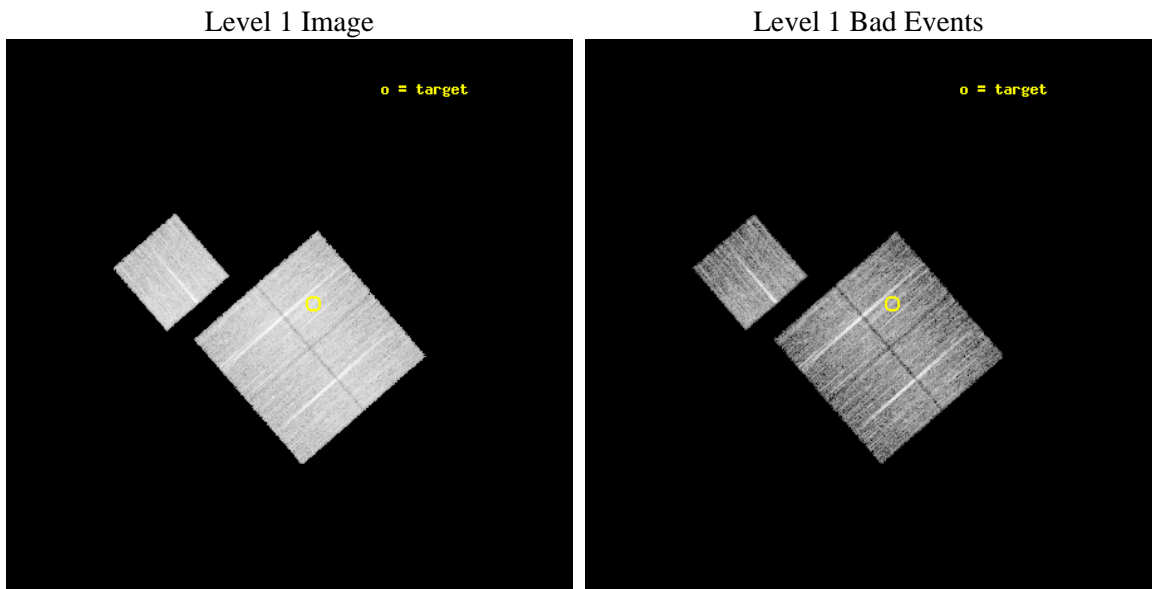
seq_num	801069	Sequence number
obs_id	13382	Observation id
title	Characterizing the Most Massive Clusters in the Local Universe	Pro
observer	Dr. Stephen Murray	Principal investigator
object	G121.11+57.01	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	194.885	Observer's specified target RA [deg]
dec_targ	60.0813	Observer's specified target Dec [deg]
ra_nom	194.97020423866	Nominal RA [deg]
dec_nom	60.047279140813	Nominal Dec [deg]
roll_nom	318.94948338241	Nominal Roll [deg]
revision	1	Processing version of data
ontime	13773.300105929	Sum of GTIs [s]
livetime	13593.341800289	Livetime [s]
ontime0	13770.159145594	Sum of GTIs [s]
ontime1	13773.300105929	Sum of GTIs [s]
ontime2	13773.300105929	Sum of GTIs [s]
ontime3	13773.300105929	Sum of GTIs [s]
ontime6	13773.300105929	Sum of GTIs [s]
l2events	39582	Number of level 2 events



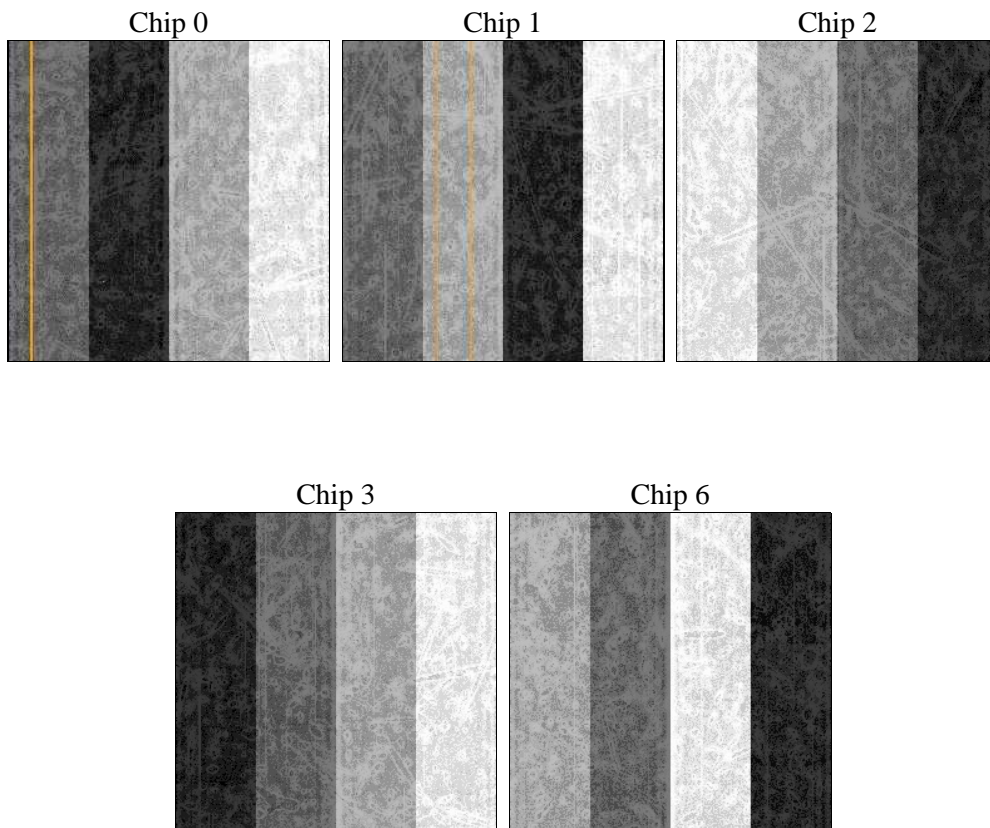
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	14000.825000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	13773.300105929	Sum of GTIs [s]
caldsver	4.5.1.1	&#160	ontime0	13770.159145594	Sum of GTIs [s]
date	2012-09-01T18:24:00	Date and time of file creation	ontime1	13773.300105929	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	13773.300105929	Sum of GTIs [s]
			ontime3	13773.300105929	Sum of GTIs [s]
			ontime6	13773.300105929	Sum of GTIs [s]
			l1events	355230	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	66384	68490	73958	73823	72575
rejected events	57606	58697	65592	63213	63659
rejected %	86%	85%	88%	85%	87%

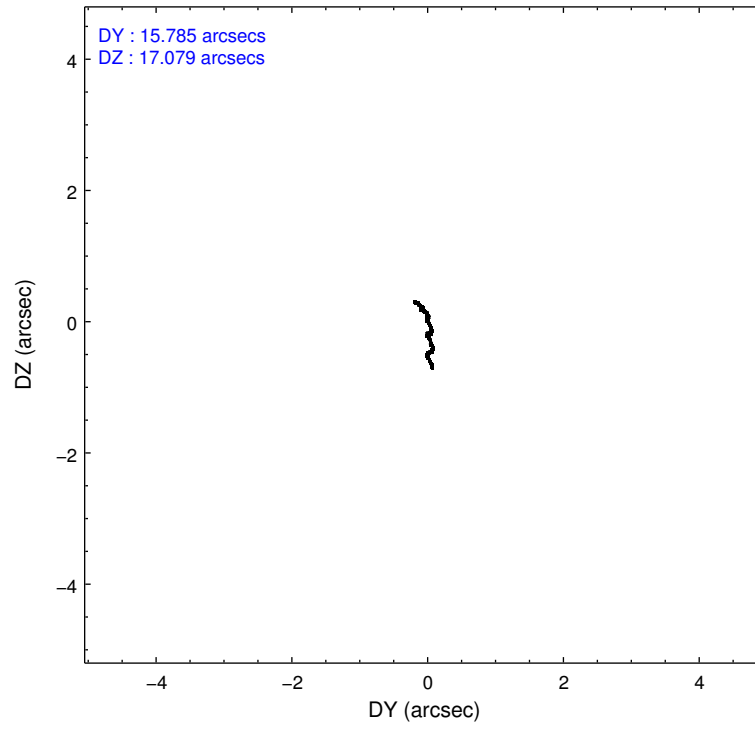
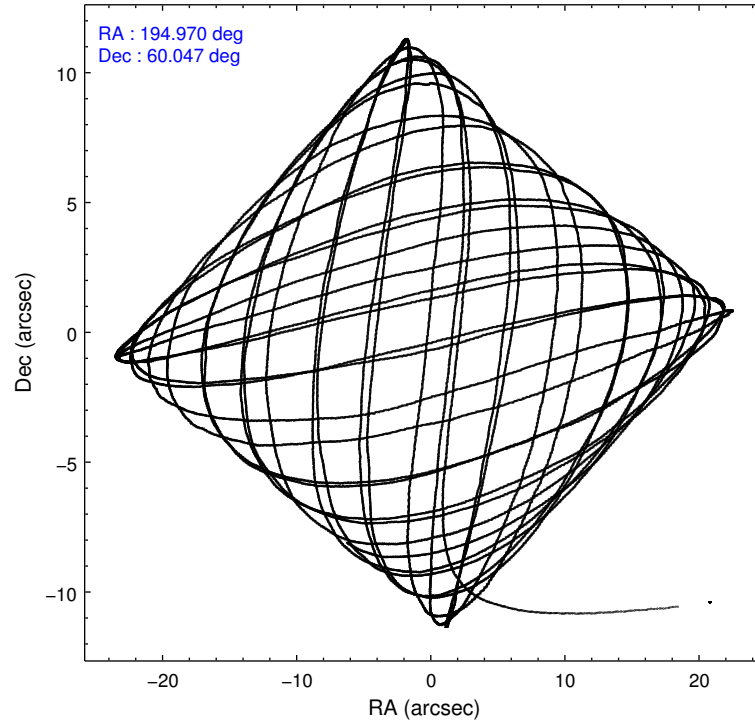
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	3098	3417	3028	4819	3117
	4%	4%	4%	6%	4%
grade 1 events	37	35	32	57	37
	0%	0%	0%	0%	0%
grade 2 events	2219	2439	2020	2130	1955
	3%	3%	2%	2%	2%
grade 3 events	945	947	817	939	928
	1%	1%	1%	1%	1%
grade 4 events	790	889	897	890	929
	1%	1%	1%	1%	1%
grade 5 events	3238	3617	3294	3816	3671
	4%	5%	4%	5%	5%
grade 6 events	1728	2106	1610	1837	1992
	2%	3%	2%	2%	2%
grade 7 events	54329	55040	62260	59335	59946
	81%	80%	84%	80%	82%

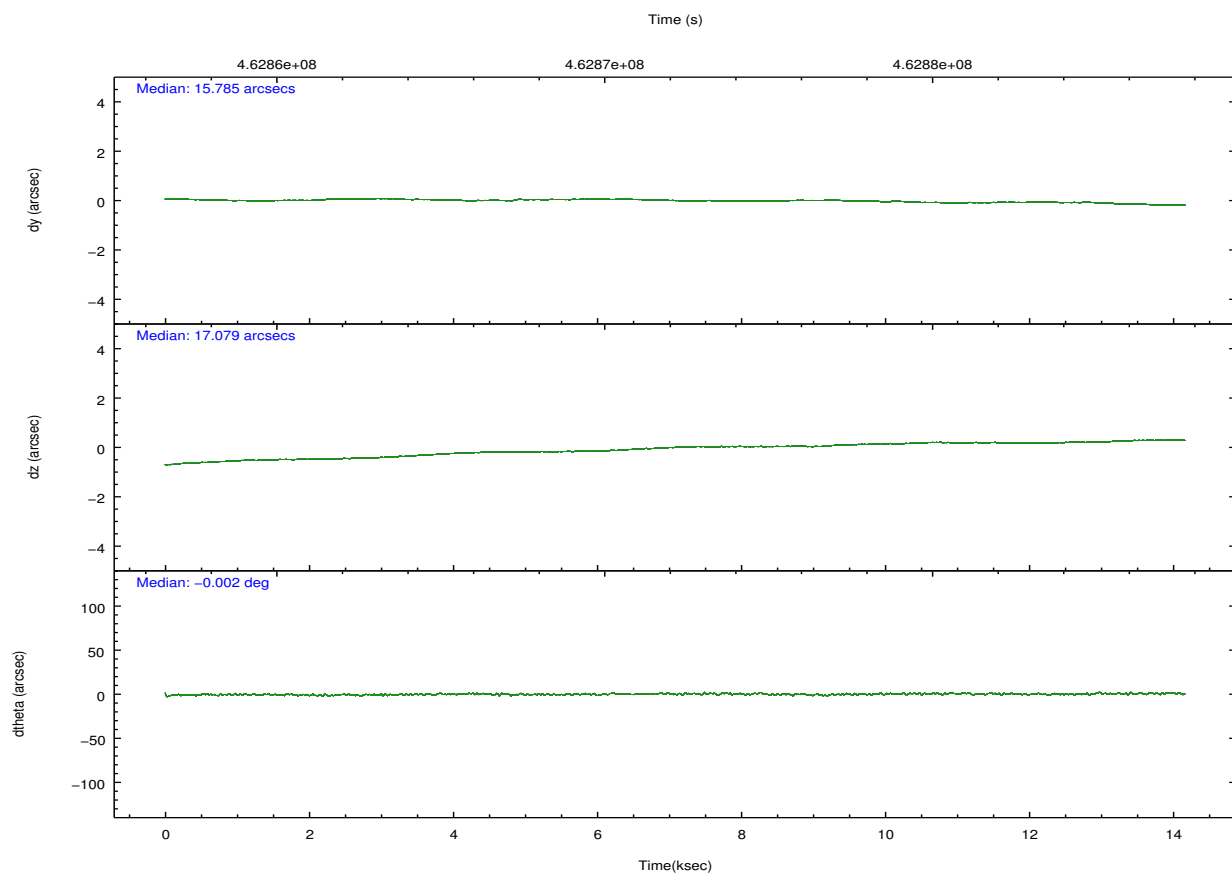
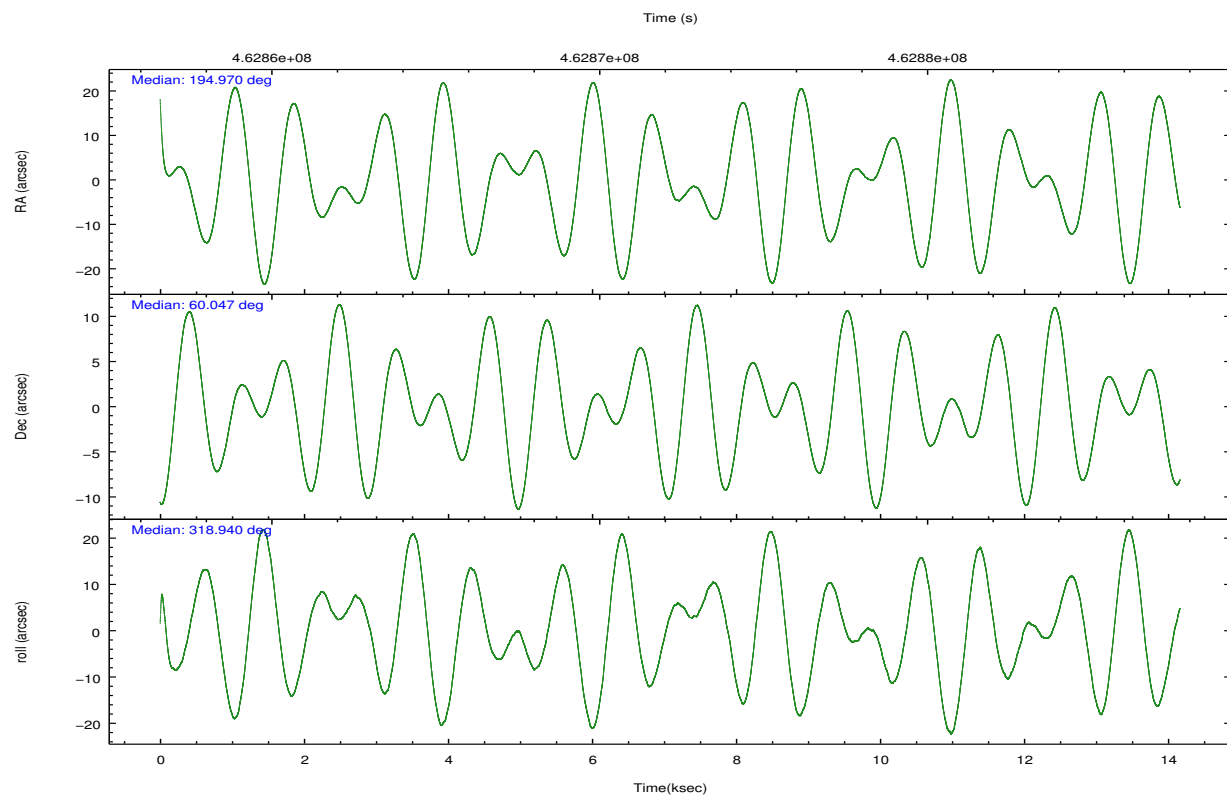


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	194.916063	194.9702042386551	CCD I2 on	Y	Y
[deg] Pointing Dec	60.052449	60.04727914081324	CCD I3 on	Y	Y
[deg] Pointing Roll	318.787690	318.9494833824144	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O1	Y
[mm] SIM translation stage pos	-225.892463	-225.8860866921504	CCD S3 on	N	N
[mm] SIM translation stage offset	-7.7	-7.706366310779288	CCD S4 on	N	N
[s] Observation start time (MET)	462864158.184000	462863170.30099	CCD S5 on	N	N
Observation start date	2012-09-01T05:21:31	2012-09-01T05:06:10	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	462878159.184000	462878393.0893	On-chip summing requested	N	N
Observation end date	2012-09-01T09:14:52	2012-09-01T09:19:53	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



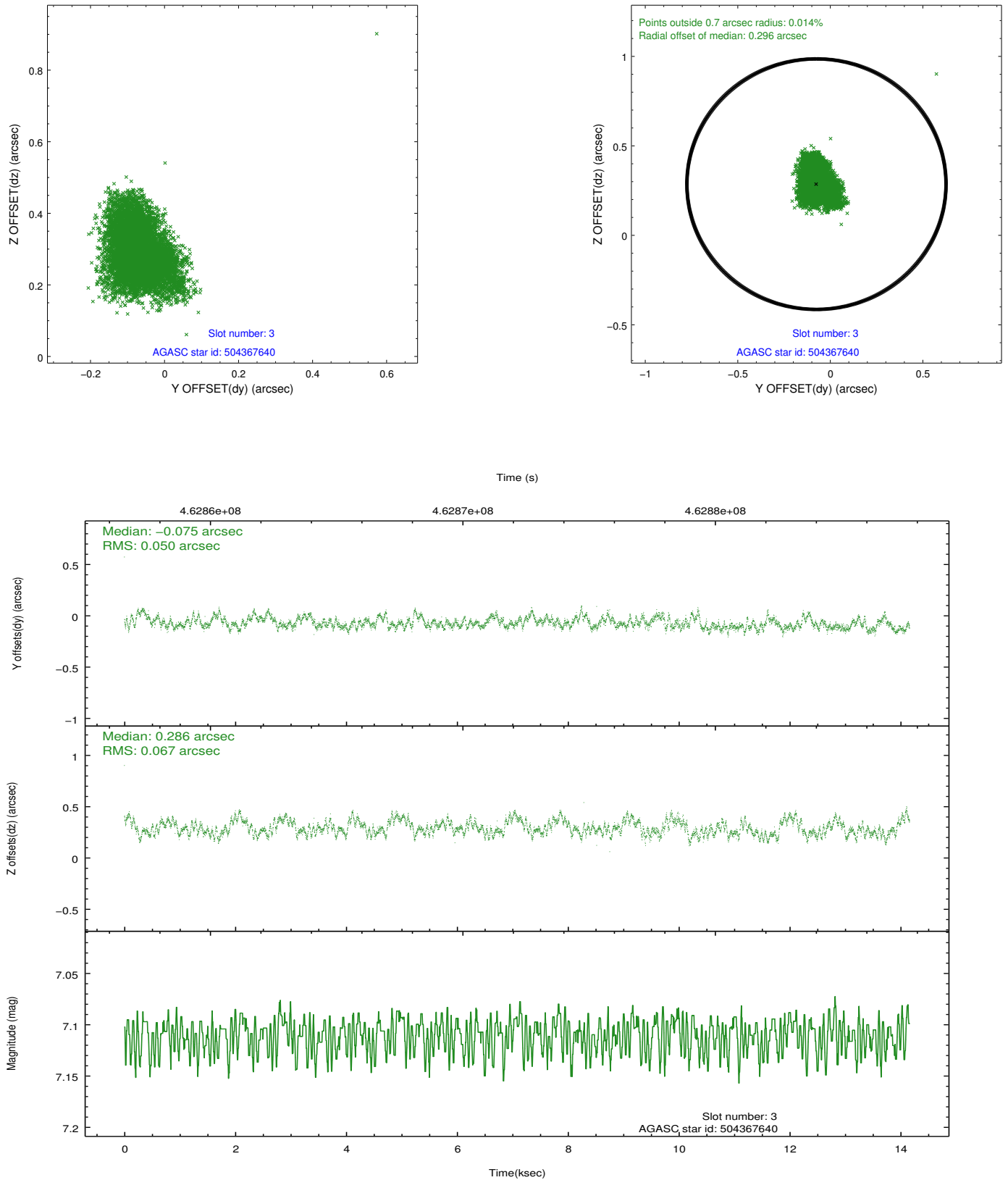


### Slot Statistics

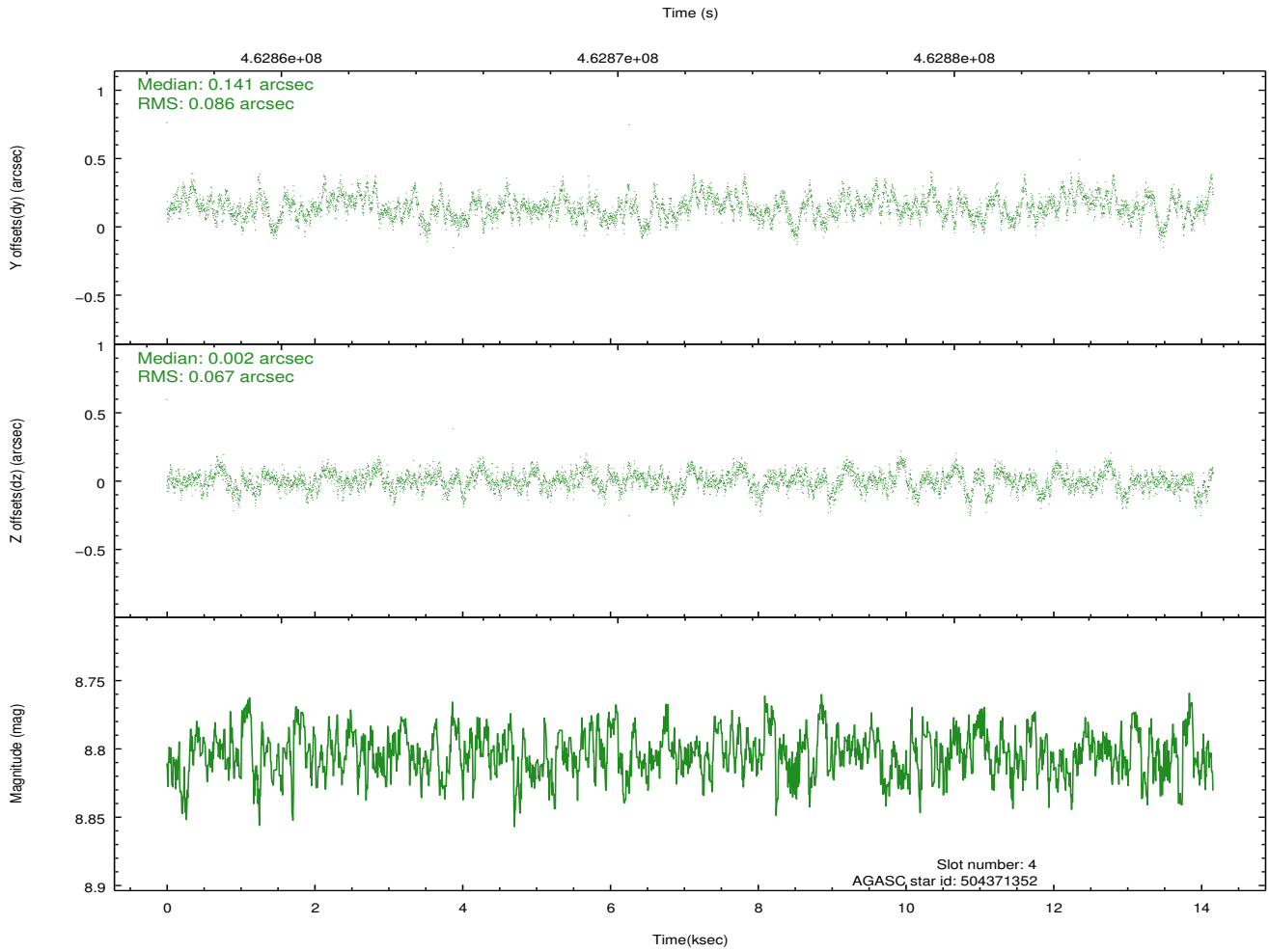
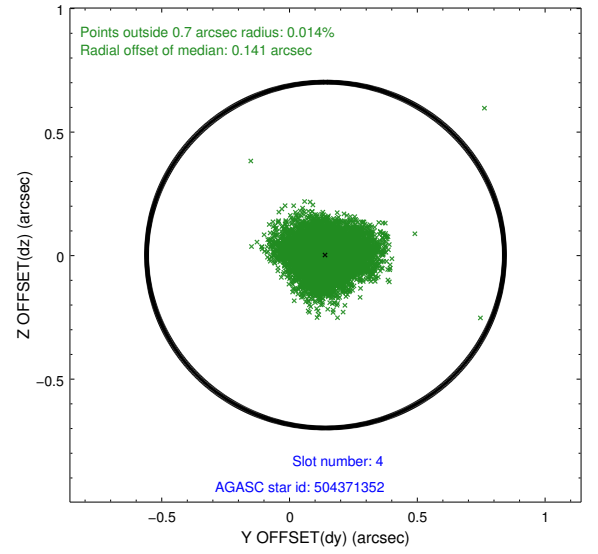
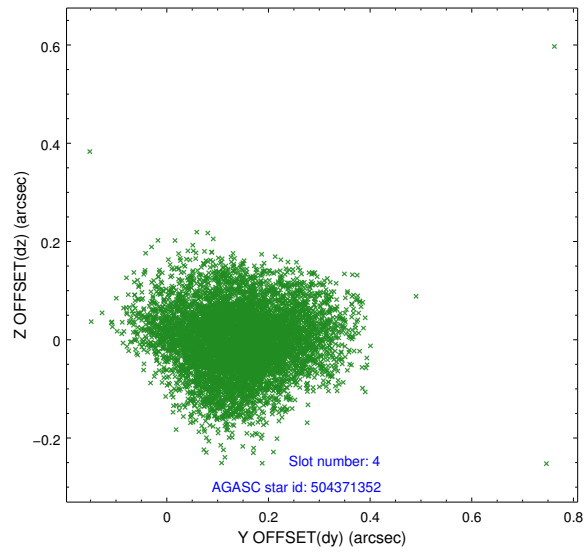
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.04	3455	-0.125	-0.065	0.011	0.021	0.000000	0.000000	-771.18	-1004.24
1	FID	ACIS-I-4	6.99	3455	0.205	0.089	0.009	0.016	0.000000	0.000000	2143.02	901.82
2	FID	ACIS-I-5	7.08	3455	-0.182	0.045	0.011	0.018	0.000000	0.000000	-1824.24	899.02
3	GUIDE	504367640	7.11	6910	-0.075	0.286	0.089	0.144	193.297727	59.952182	-1979.52	-2166.53
4	GUIDE	504371352	8.80	6907	0.141	0.002	0.118	0.186	194.978456	59.407300	1616.61	-1671.81
5	GUIDE	545654864	8.90	6887	-0.067	-0.191	0.180	0.270	194.690652	60.293493	-874.31	387.86
6	GUIDE	545661376	7.94	6848	-0.074	-0.091	0.097	0.145	195.537275	60.436982	-85.60	1772.35
7	GUIDE	504367080	9.77	6857	0.102	0.006	0.332	0.469	194.938940	59.410237	1555.47	-1711.61

## 2.4 Star Slots

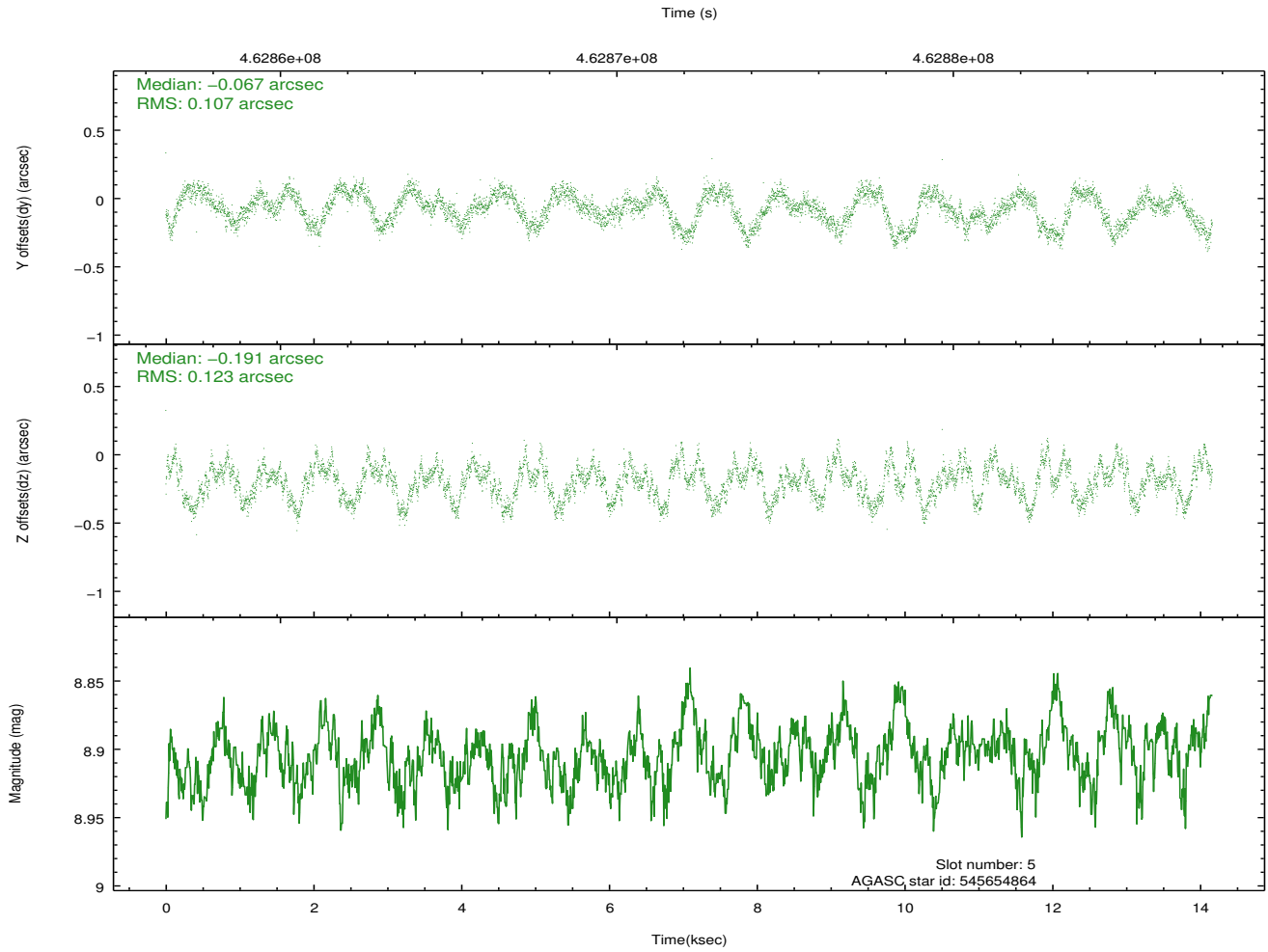
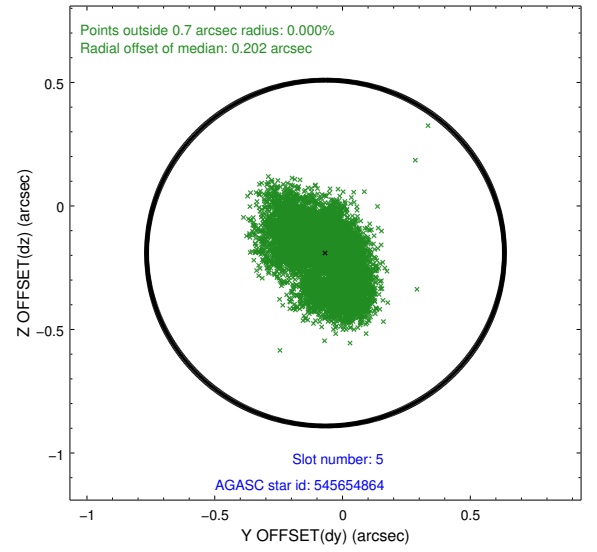
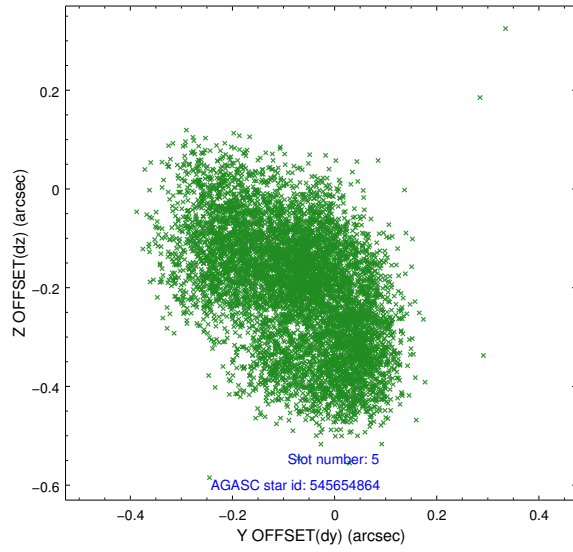
### 2.4.1 Slot 3



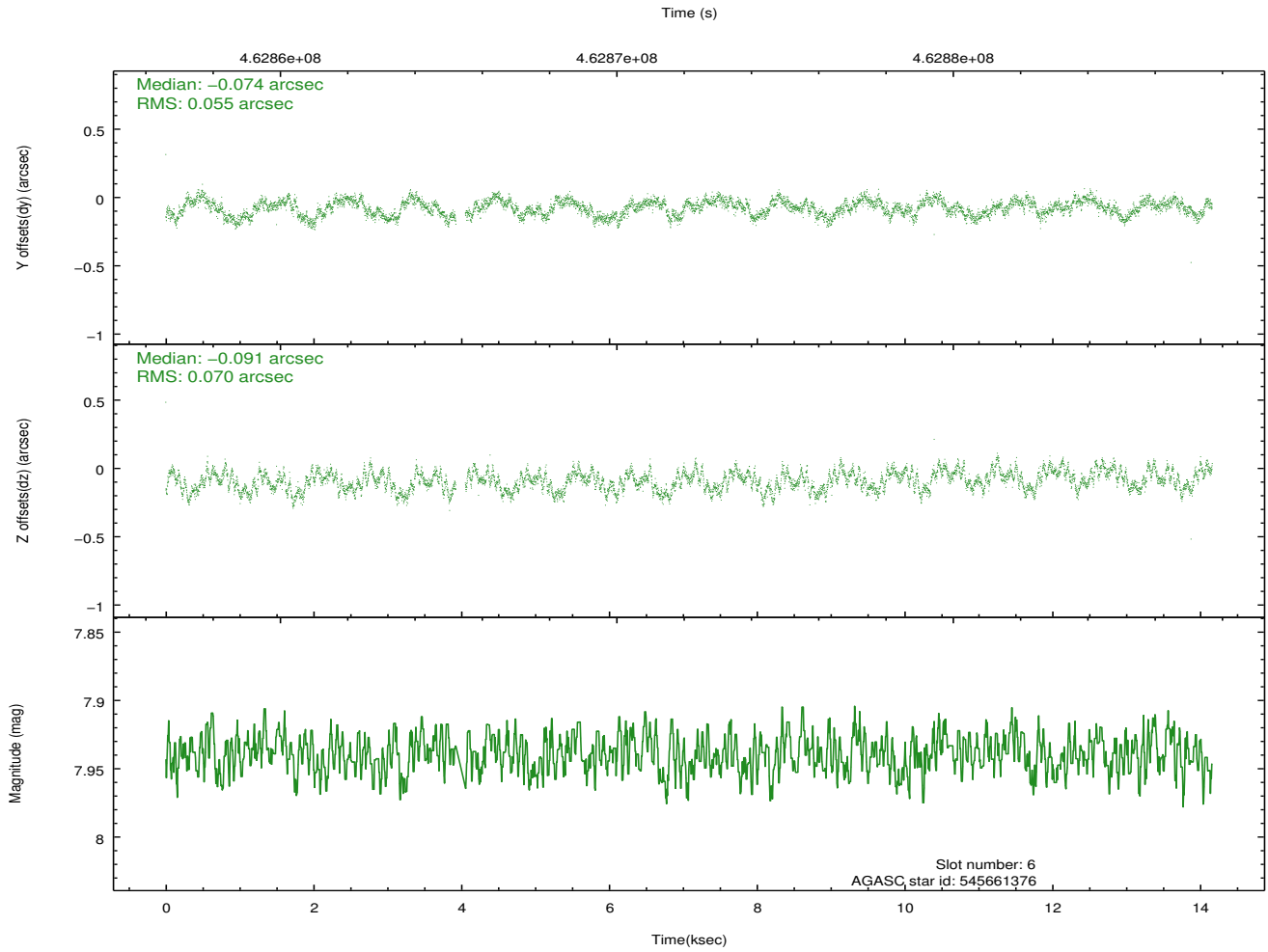
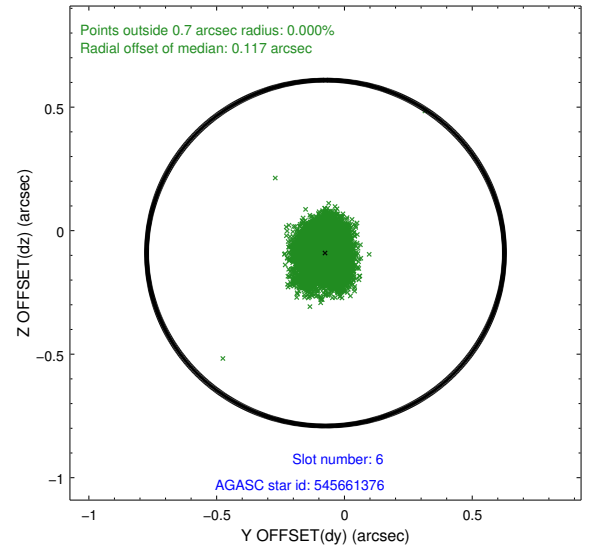
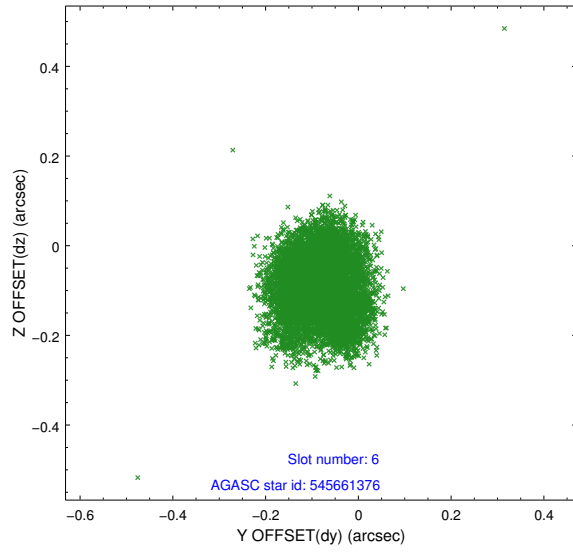
## 2.4.2 Slot 4



### 2.4.3 Slot 5

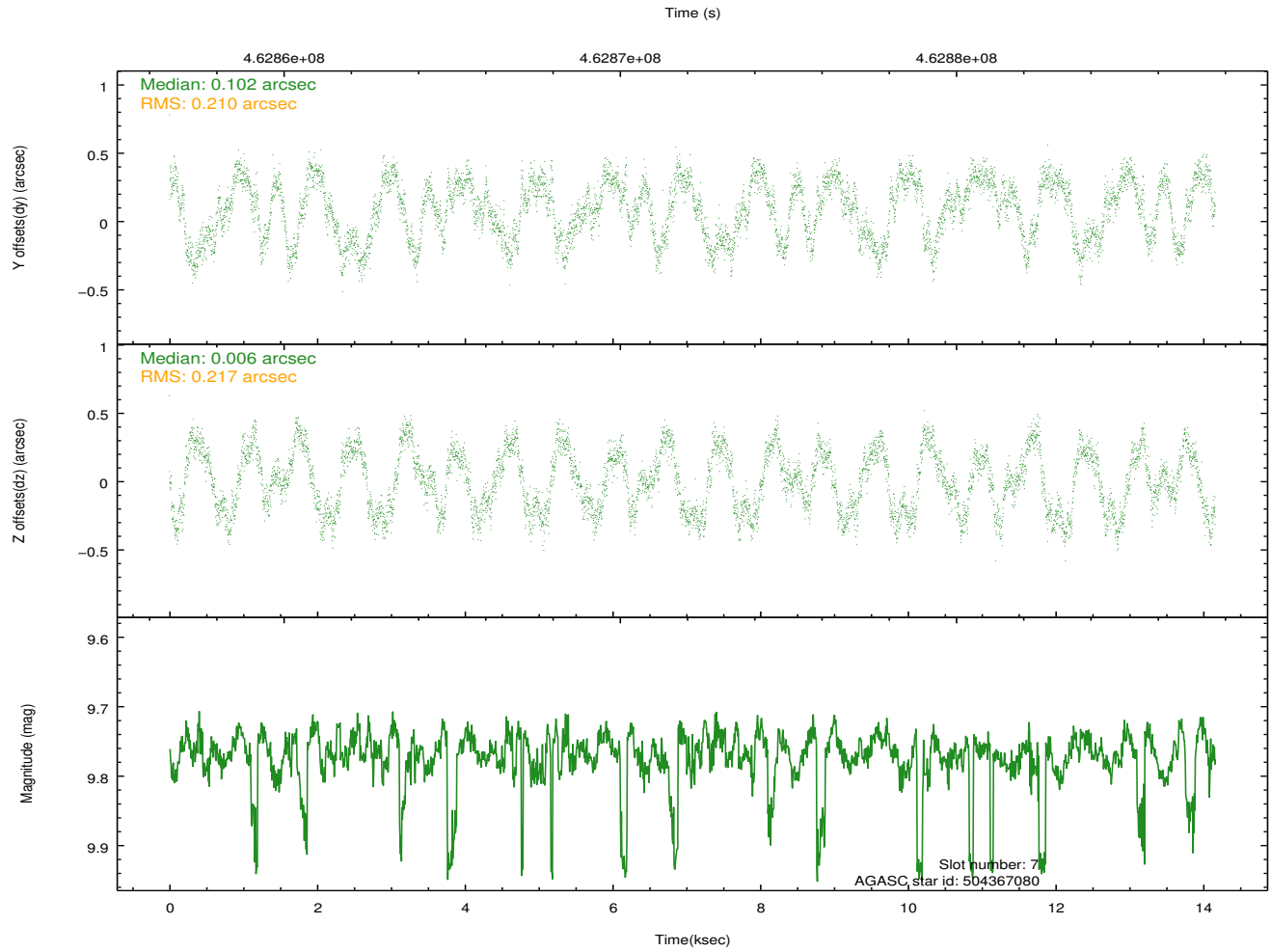
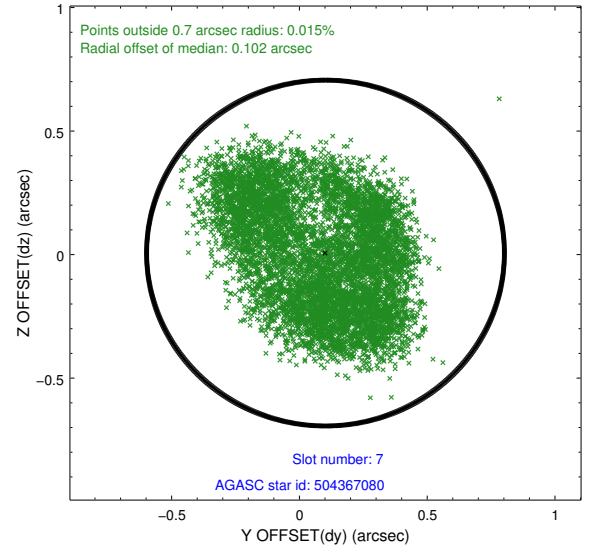
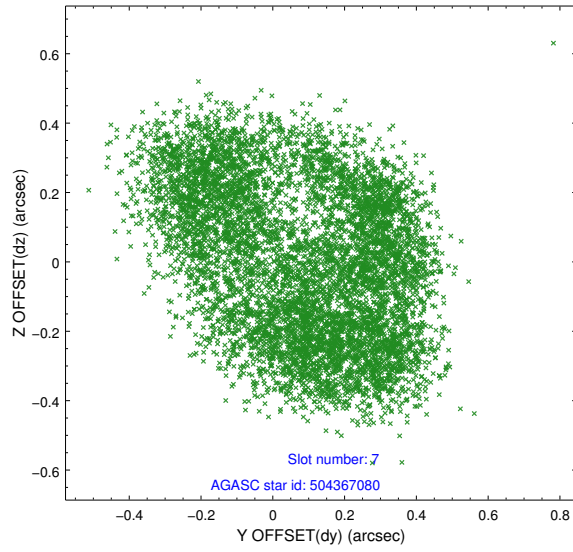


## 2.4.4 Slot 6



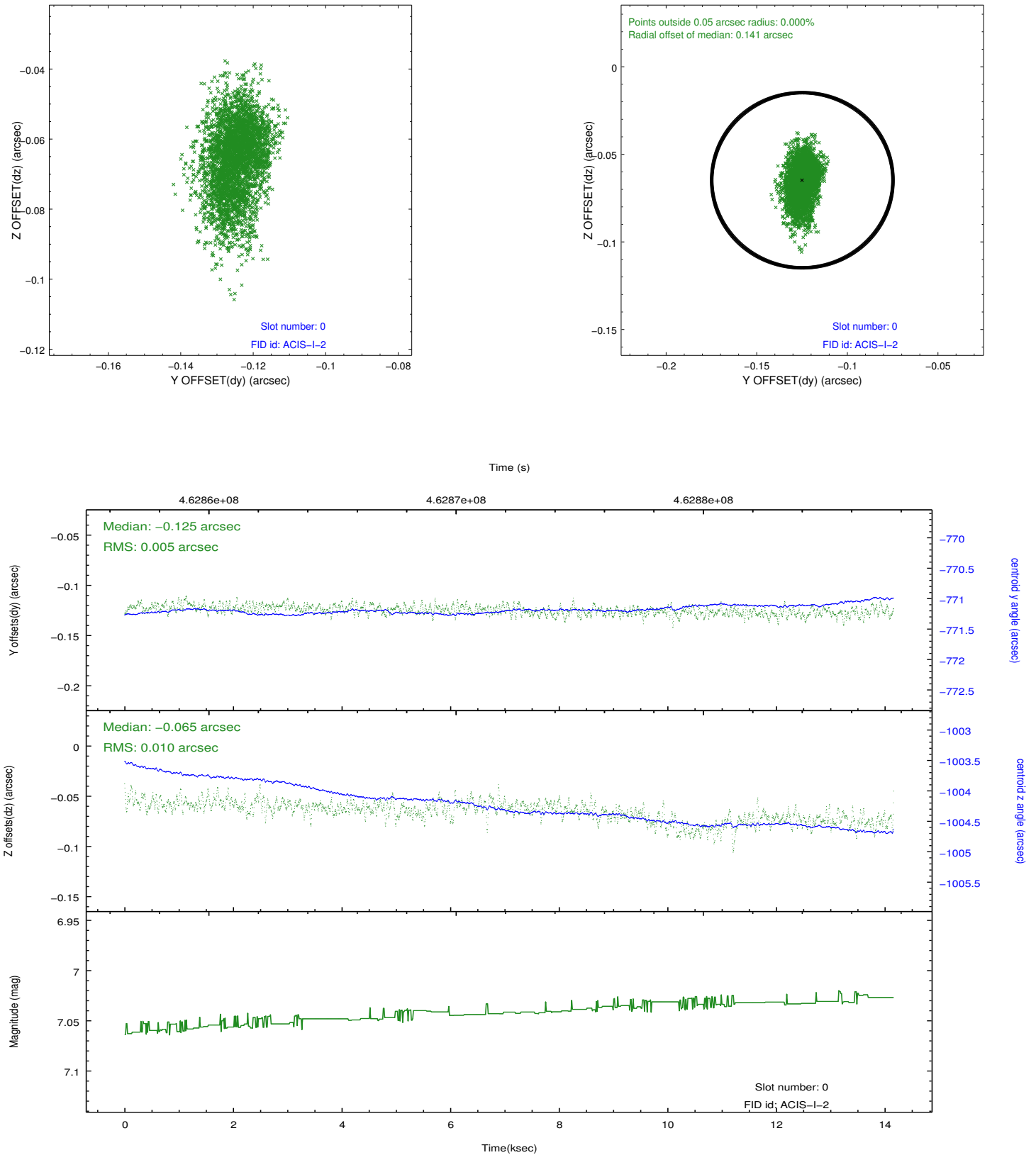


## 2.4.5 Slot 7

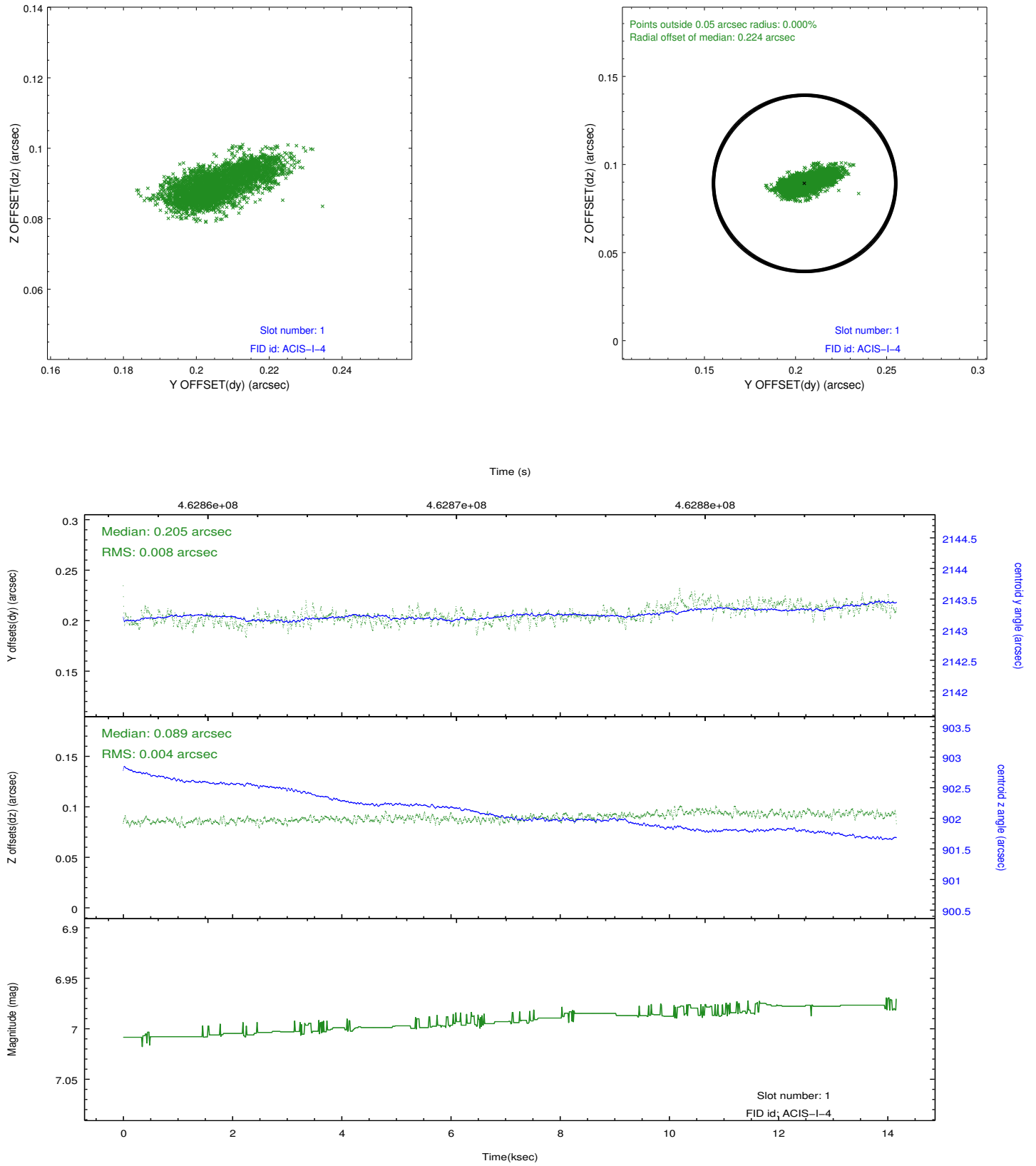


## 2.5 FID Slots

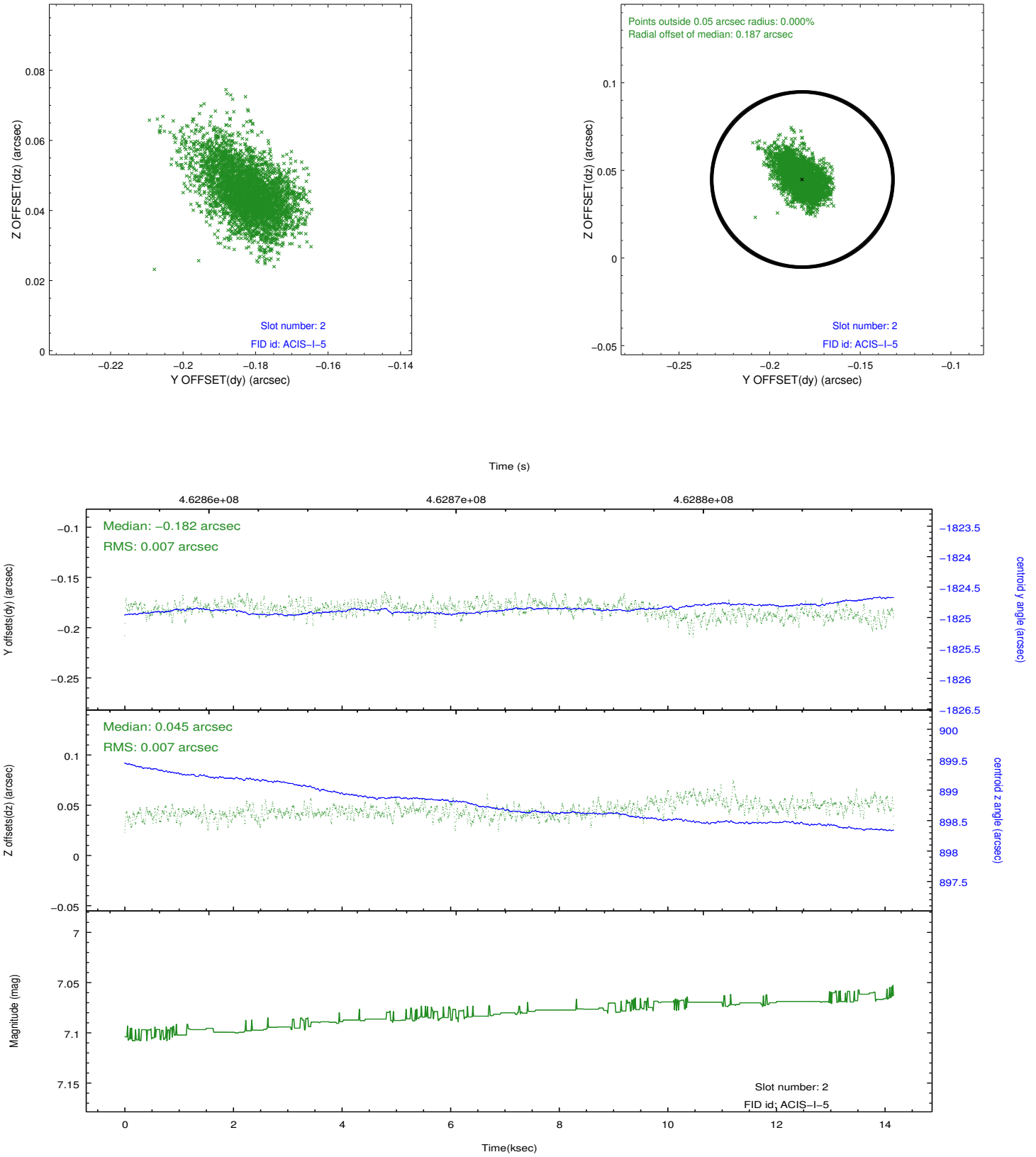
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.09.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	13.773300105929

### A.2 Comments