

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 3081 - L2 Version 3  
Chandra X-Ray Center

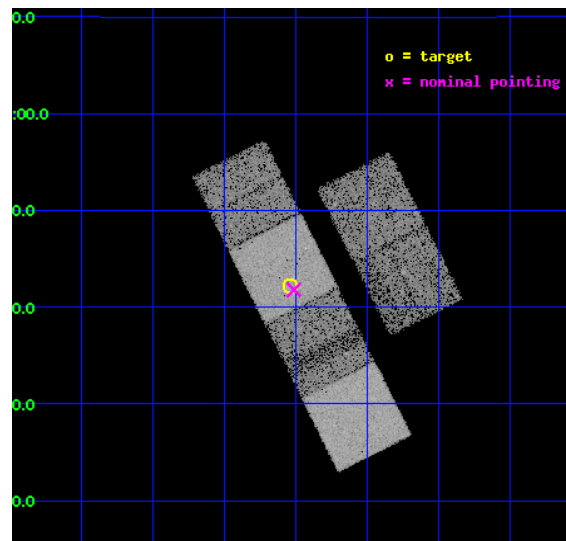
L2 Processing Date : Oct 13 2012

## 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

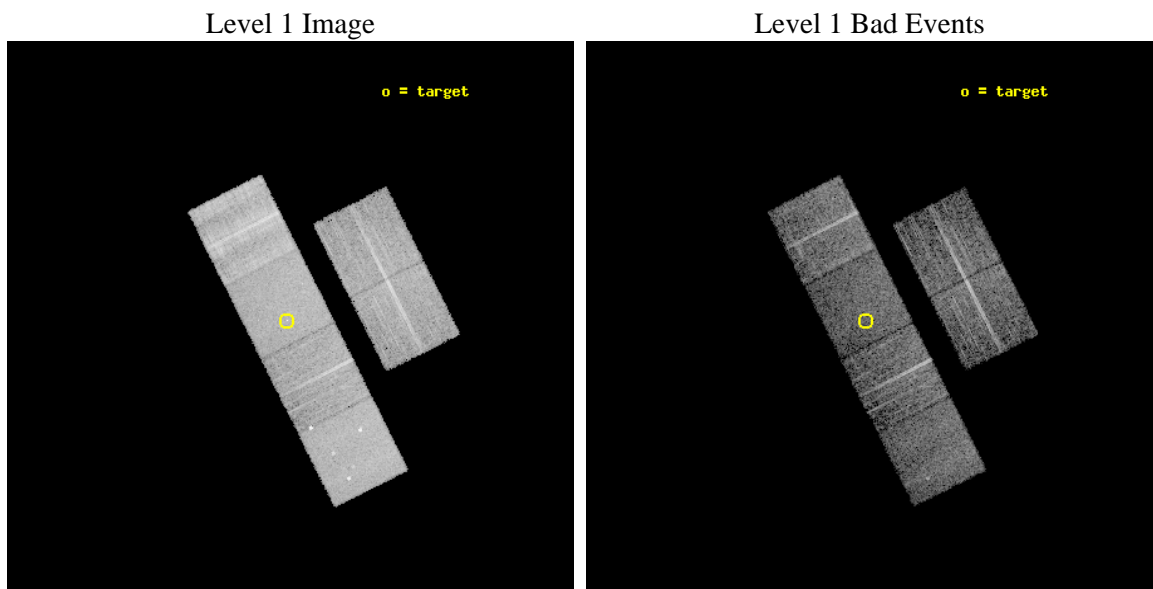
seq_num	700520	Sequence number
obs_id	3081	Observation id
title	X-RAY WEAK BROAD-LINE QUASARS: ABSORPTION OR INTRINSIC X_RAY WEAKNESS ?	Proposal title
observer	Dr Guido Risaliti	Principal investigator
object	HS 2146+0428	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	327.134167	Observer's specified target RA [deg]
dec_targ	4.704389	Observer's specified target Dec [deg]
ra_nom	327.12834898068	Nominal RA [deg]
dec_nom	4.696553166746	Nominal Dec [deg]
roll_nom	243.24574925764	Nominal Roll [deg]
revision	3	Processing version of data
ontime	7612.7999716401	Sum of GTIs [s]
livetime	7516.4021145214	Livetime [s]
ontime2	7612.7999716401	Sum of GTIs [s]
ontime3	7612.7999716401	Sum of GTIs [s]
ontime5	7612.7999716401	Sum of GTIs [s]
ontime6	7612.7999716401	Sum of GTIs [s]
ontime7	7612.7999716401	Sum of GTIs [s]
ontime8	7612.7999716401	Sum of GTIs [s]
l2events	91069	Number of level 2 events



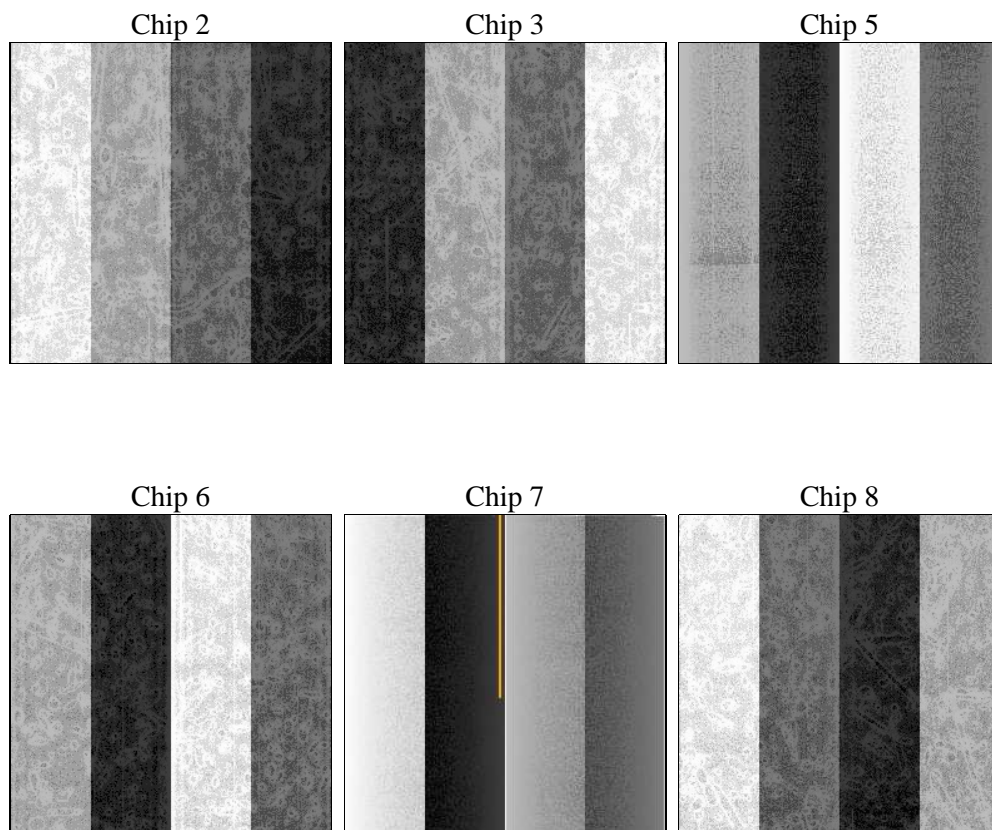
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	7600.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	7612.7999716401	Sum of GTIs [s]
caldsver	4.5.2	&#160	ontime2	7612.7999716401	Sum of GTIs [s]
date	2012-10-13T05:20:05	Date and time of file creation	ontime3	7612.7999716401	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	7612.7999716401	Sum of GTIs [s]
			ontime6	7612.7999716401	Sum of GTIs [s]
			ontime7	7612.7999716401	Sum of GTIs [s]
			ontime8	7612.7999716401	Sum of GTIs [s]
			l1events	676301	Number of level 1 events

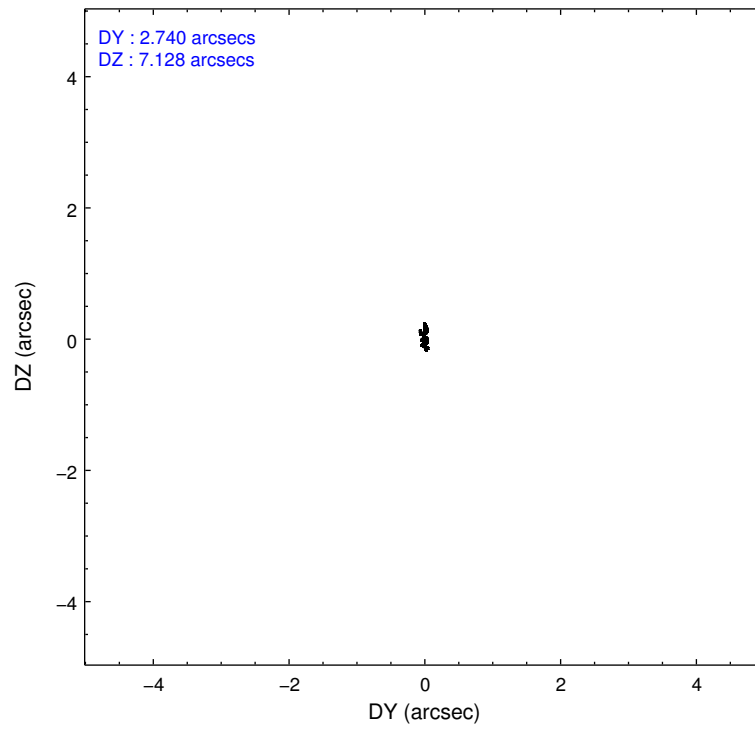
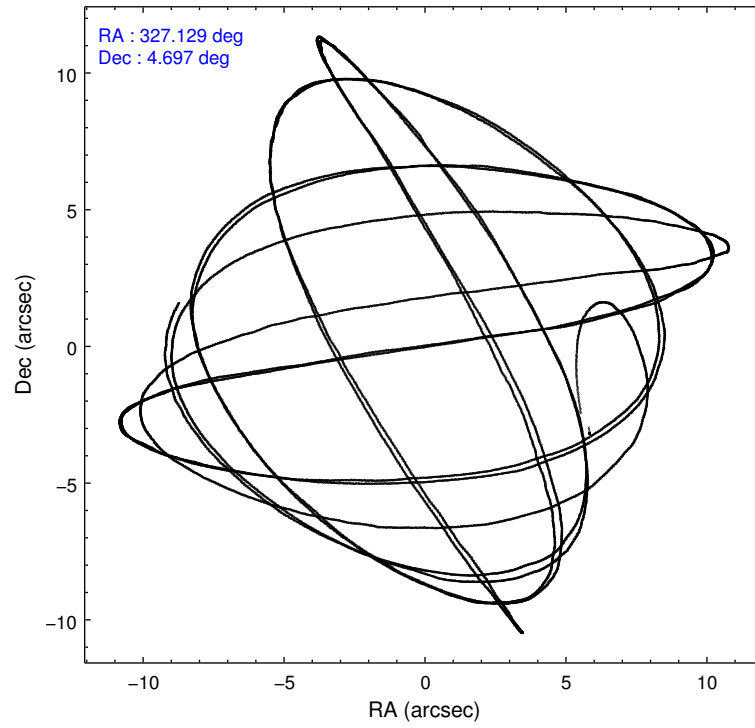
### 2.1.4 Events

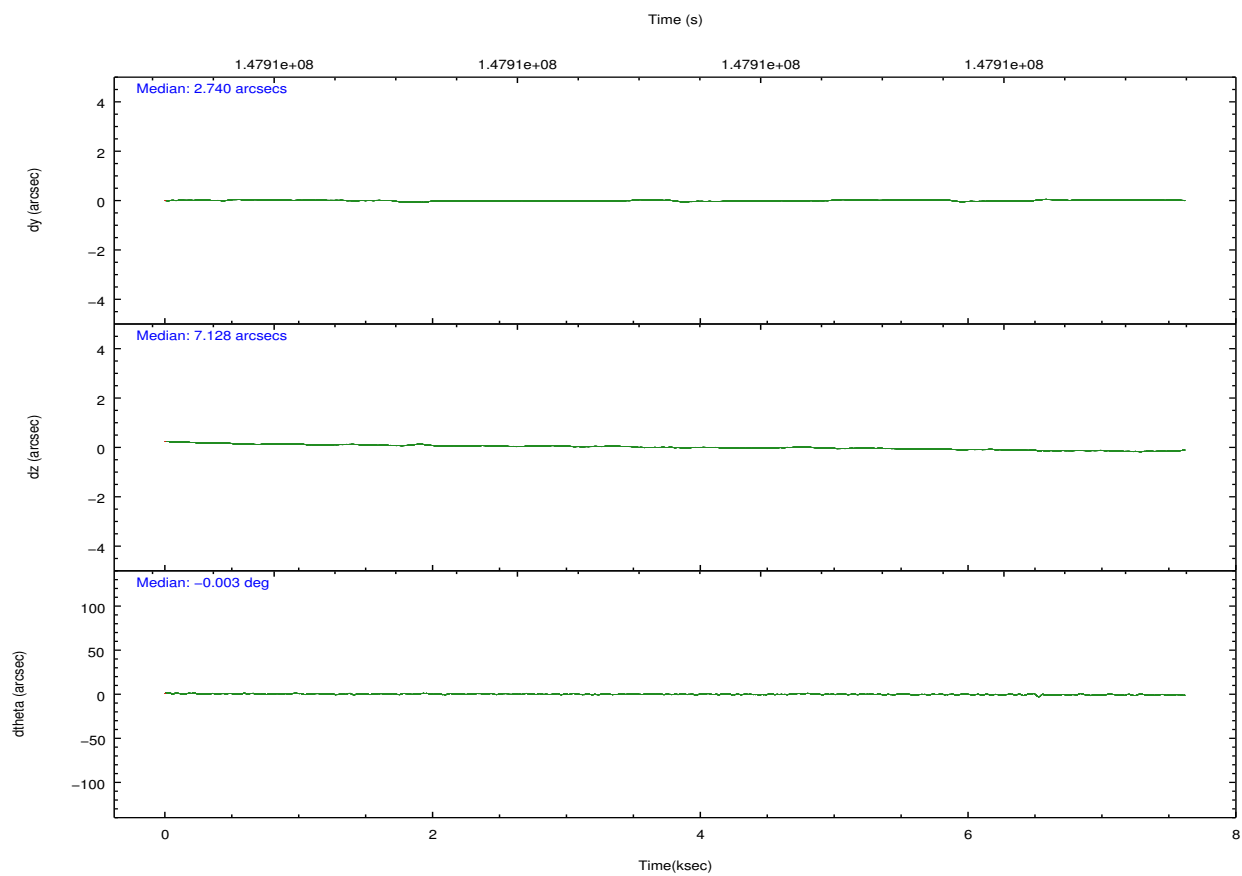
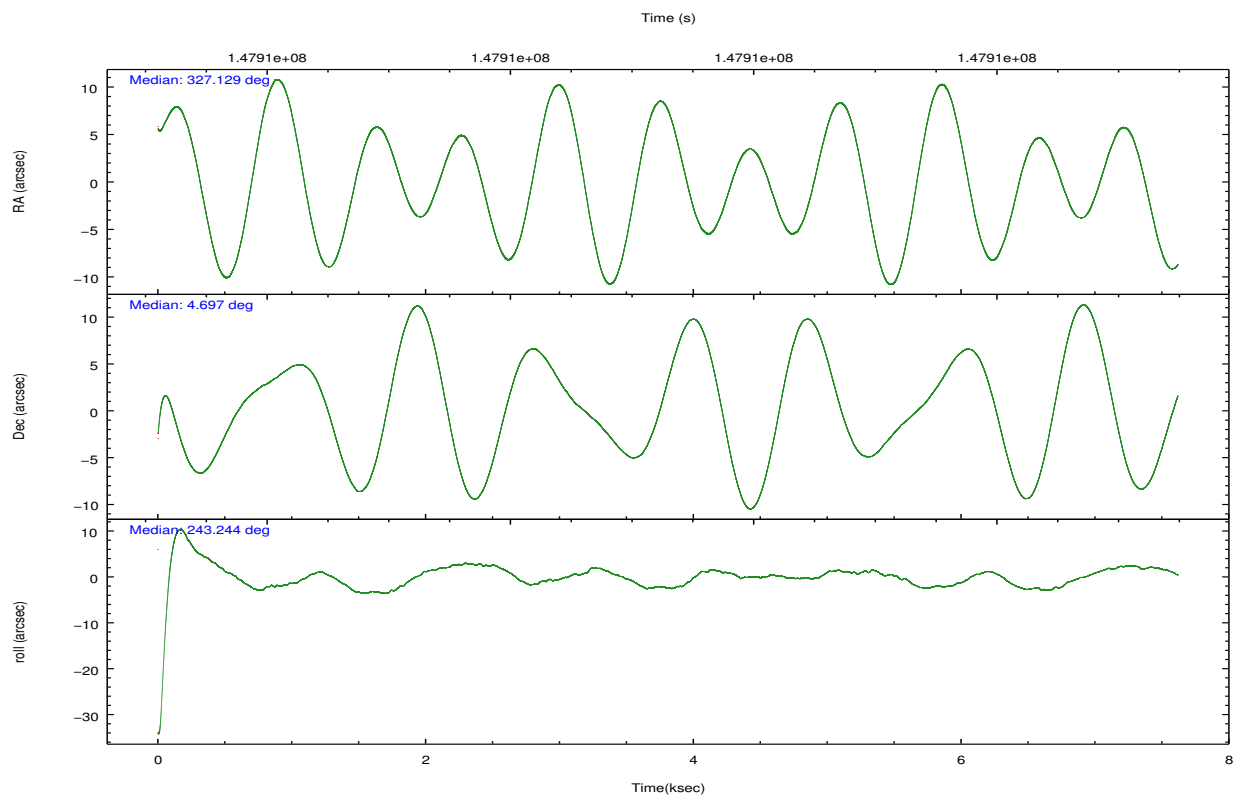
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	86404	85121	146005	89706	142223	126842	grade 0 events	19499	19827	19017	20688	19602	31907
rejected events	77617	76212	111593	80391	114372	89685		22%	23%	13%	23%	13%	25%
rejected %	89%	89%	76%	89%	80%	70%	grade 1 events	117	111	237	114	111	215
								0%	0%	0%	0%	0%	0%
							grade 2 events	6576	7157	31811	7803	20663	10963
								7%	8%	21%	8%	14%	8%
							grade 3 events	2296	2439	5747	2549	9496	8402
								2%	2%	3%	2%	6%	6%
							grade 4 events	2444	2528	5449	2380	9461	7799
								2%	2%	3%	2%	6%	6%
							grade 5 events	2112	2308	7141	2495	7618	3387
								2%	2%	4%	2%	5%	2%
							grade 6 events	5430	5614	34251	6470	37659	10729
								6%	6%	23%	7%	26%	8%
							grade 7 events	47930	45137	42352	47207	37613	53440
								55%	53%	29%	52%	26%	42%

## 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	327.126429	327.1283489806809	Subarray requested	NONE	NONE
[deg] Pointing Dec	4.723810	4.696553166746028	Alternating exposures requested	N	N
[deg] Pointing Roll	243.089346	243.2457492576417	[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)	147907509.184000	147905623.49493			
Observation start date	2002-09-08T21:24:05	2002-09-08T20:53:43			
[s] Observation end time (MET)	147915109.184000	147915886.30785			
Observation end date	2002-09-08T23:30:45	2002-09-08T23:44:46			
Read mode	TIMED	TIMED			

## 2.3 Aspect



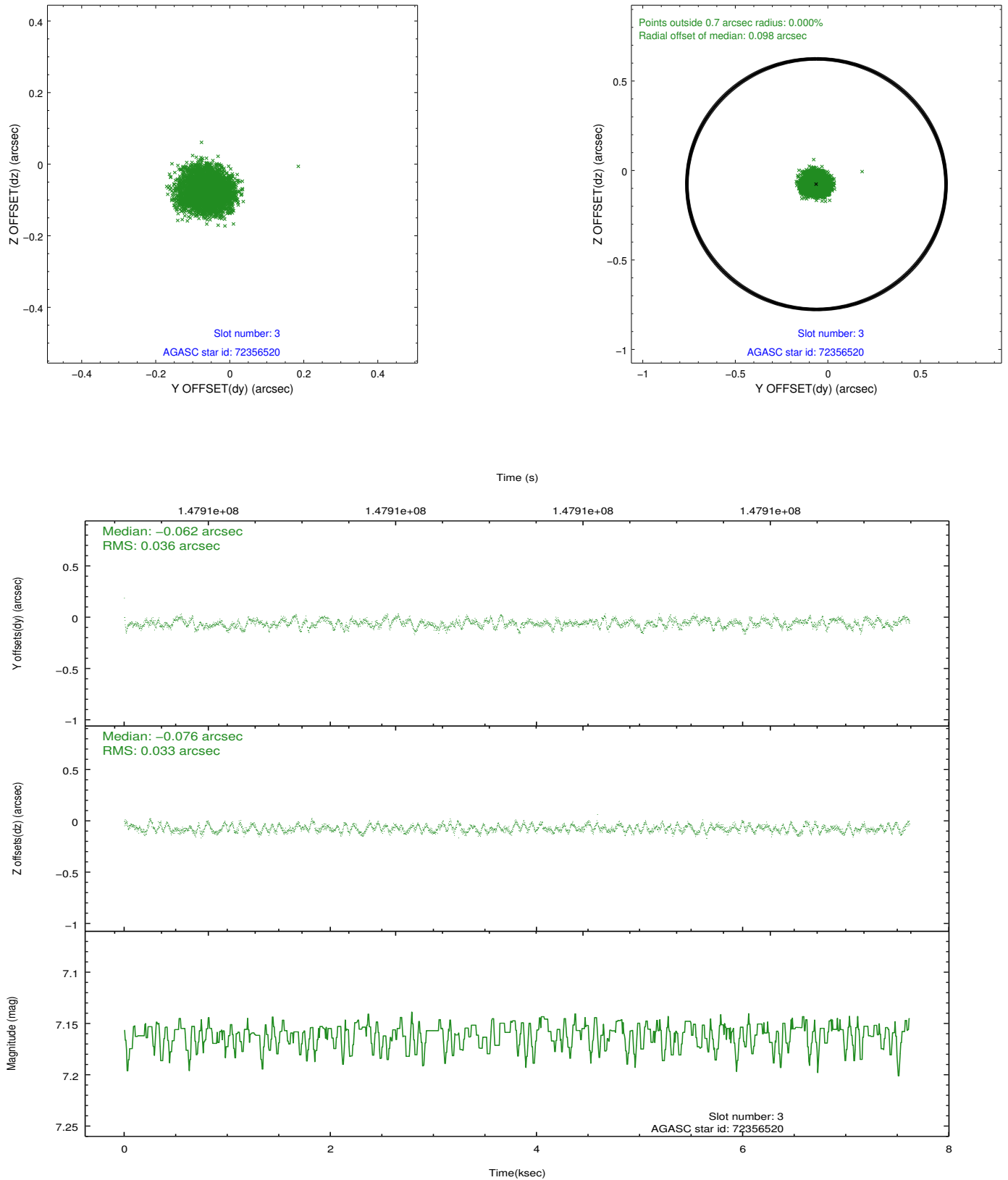


Slot Statistics

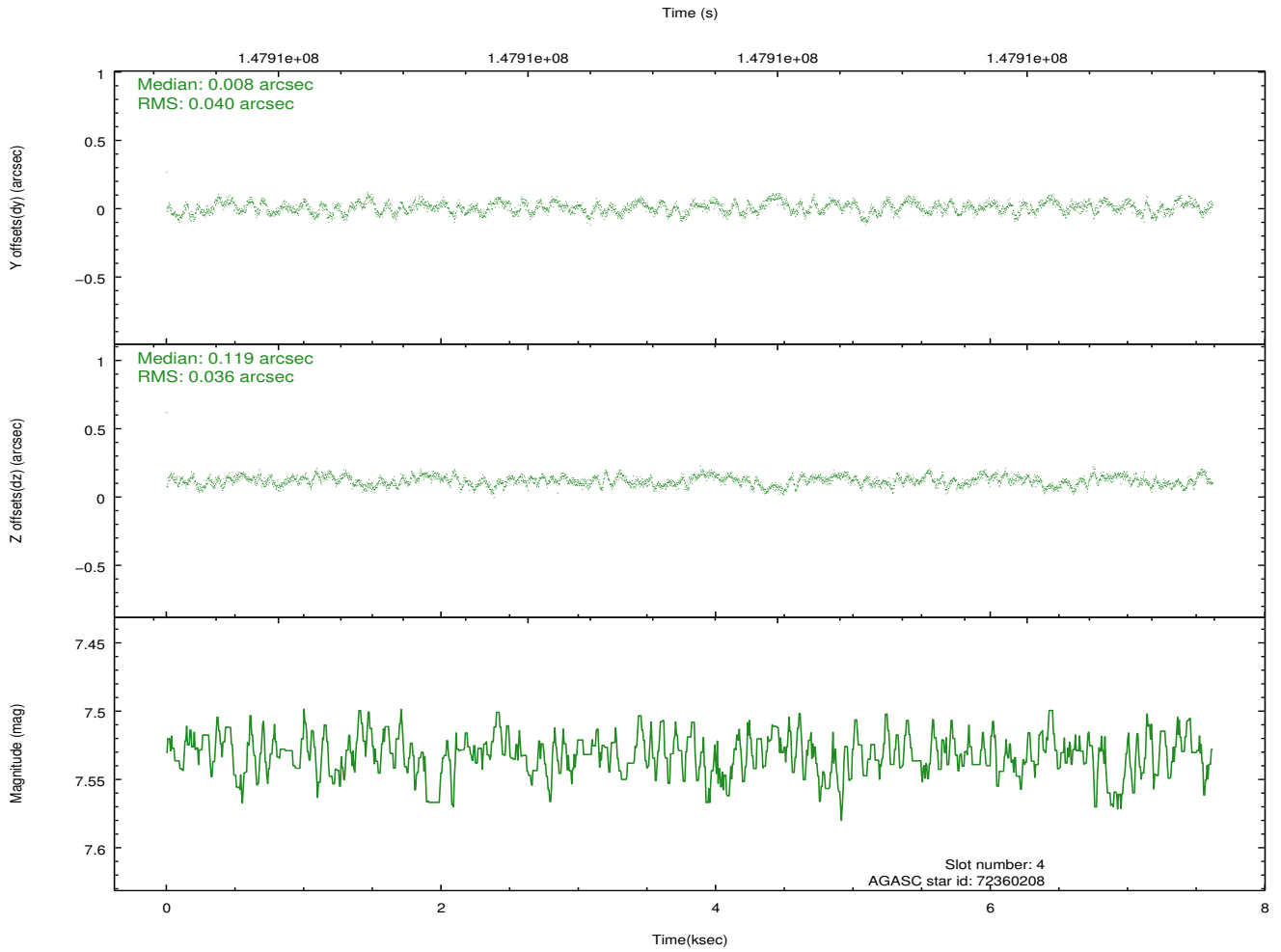
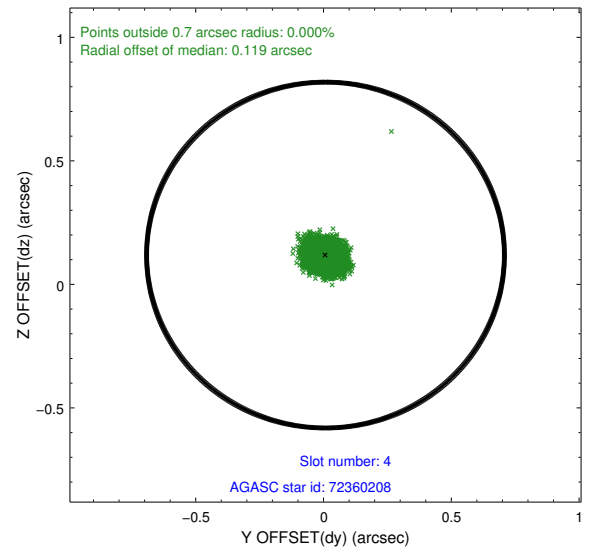
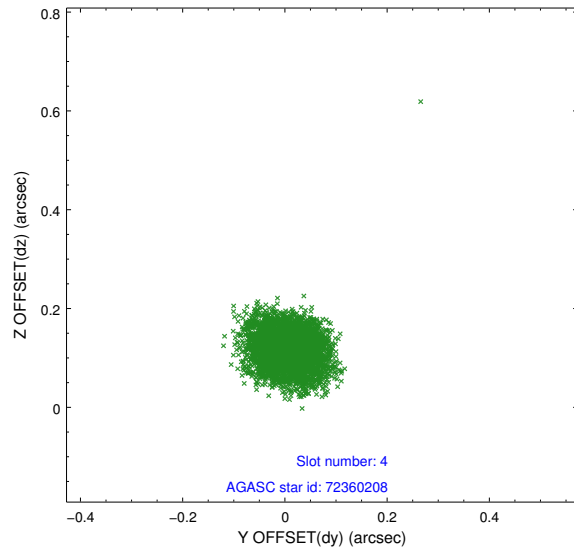
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-3	7.35	1858	-0.091	-0.068	0.008	0.013	0.000000	0.000000	57.71	-1857.44
1	FID	ACIS-S-4	7.20	1858	0.017	0.080	0.006	0.011	0.000000	0.000000	2158.02	179.39
2	FID	ACIS-S-5	7.24	1858	0.045	-0.002	0.007	0.012	0.000000	0.000000	-1807.21	173.96
3	GUIDE	72356520	7.16	3716	-0.062	-0.076	0.053	0.080	327.463585	5.212996	-2117.57	280.06
4	GUIDE	72360208	7.53	3715	0.008	0.119	0.058	0.090	326.793072	4.402962	1571.06	-544.56
5	GUIDE	72356496	8.89	3713	0.075	-0.142	0.060	0.097	327.114769	4.395959	1072.18	496.12
6	GUIDE	72358272	8.97	3716	0.033	0.060	0.080	0.124	327.447324	4.178563	1229.23	1915.44
7	GUIDE	72356680	9.29	3714	-0.055	0.042	0.082	0.133	327.043792	5.459679	-2227.66	-1463.16

## 2.4 Star Slots

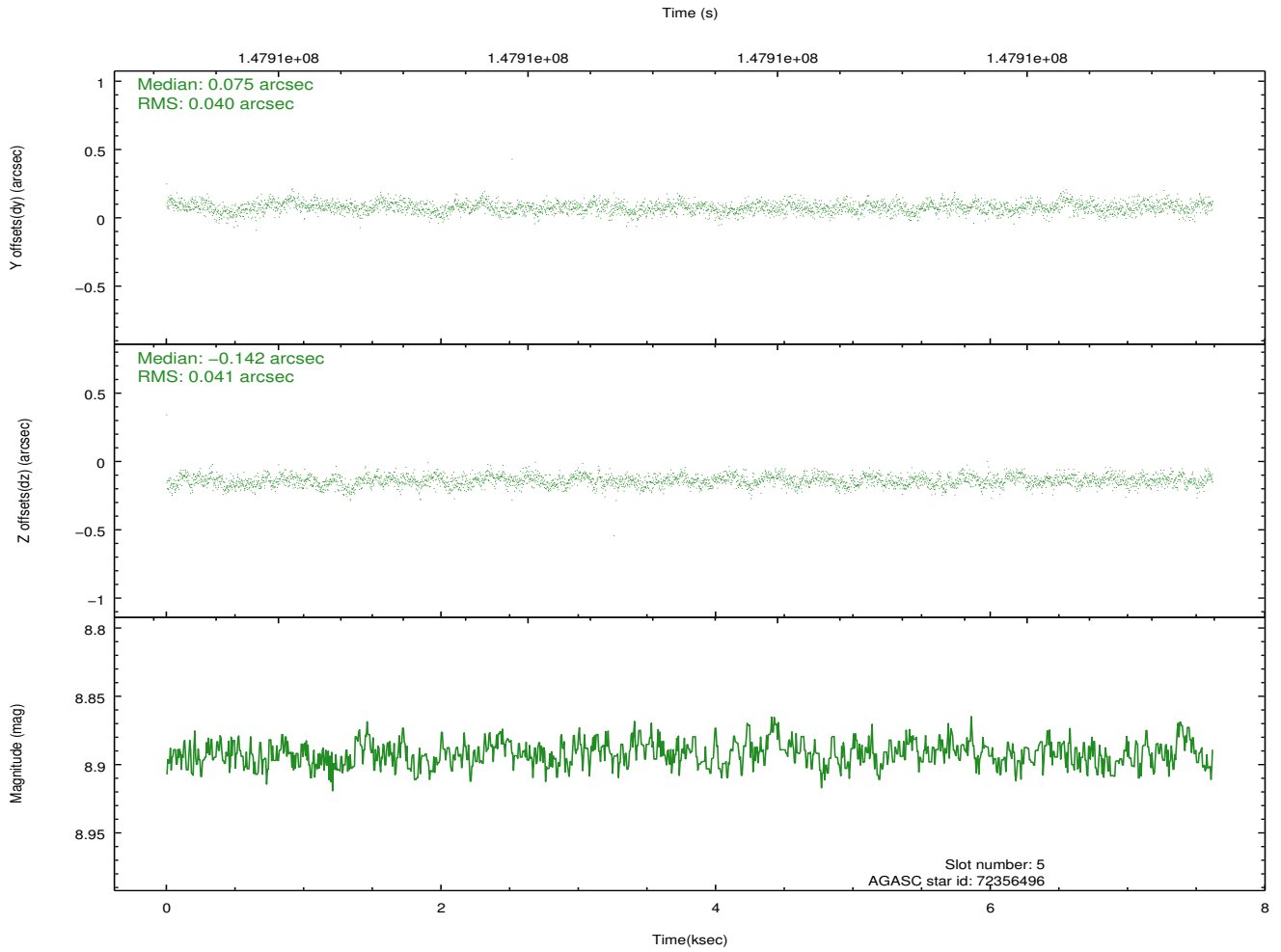
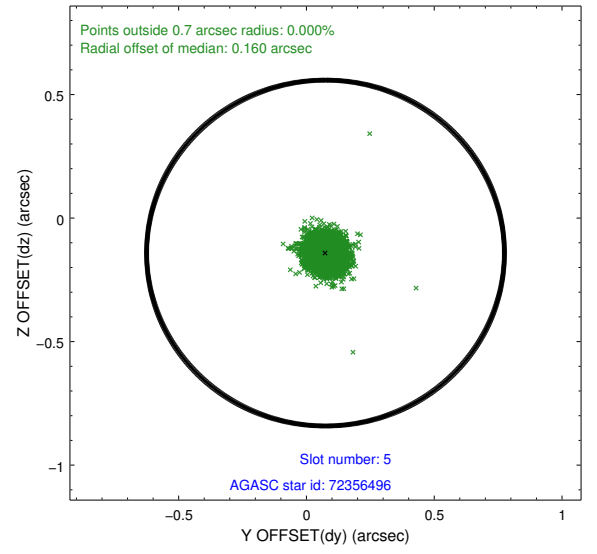
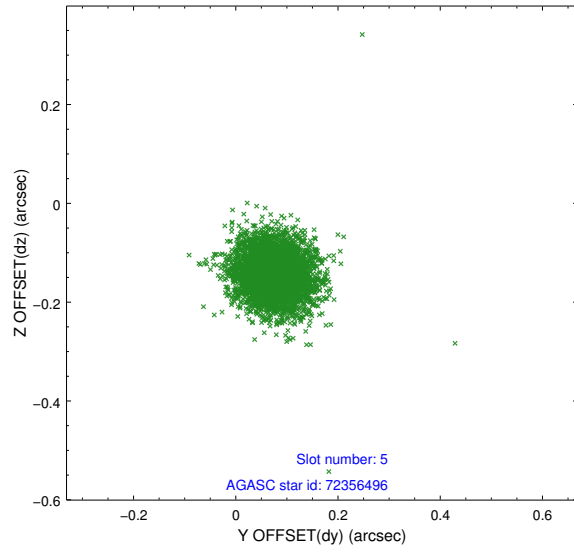
### 2.4.1 Slot 3



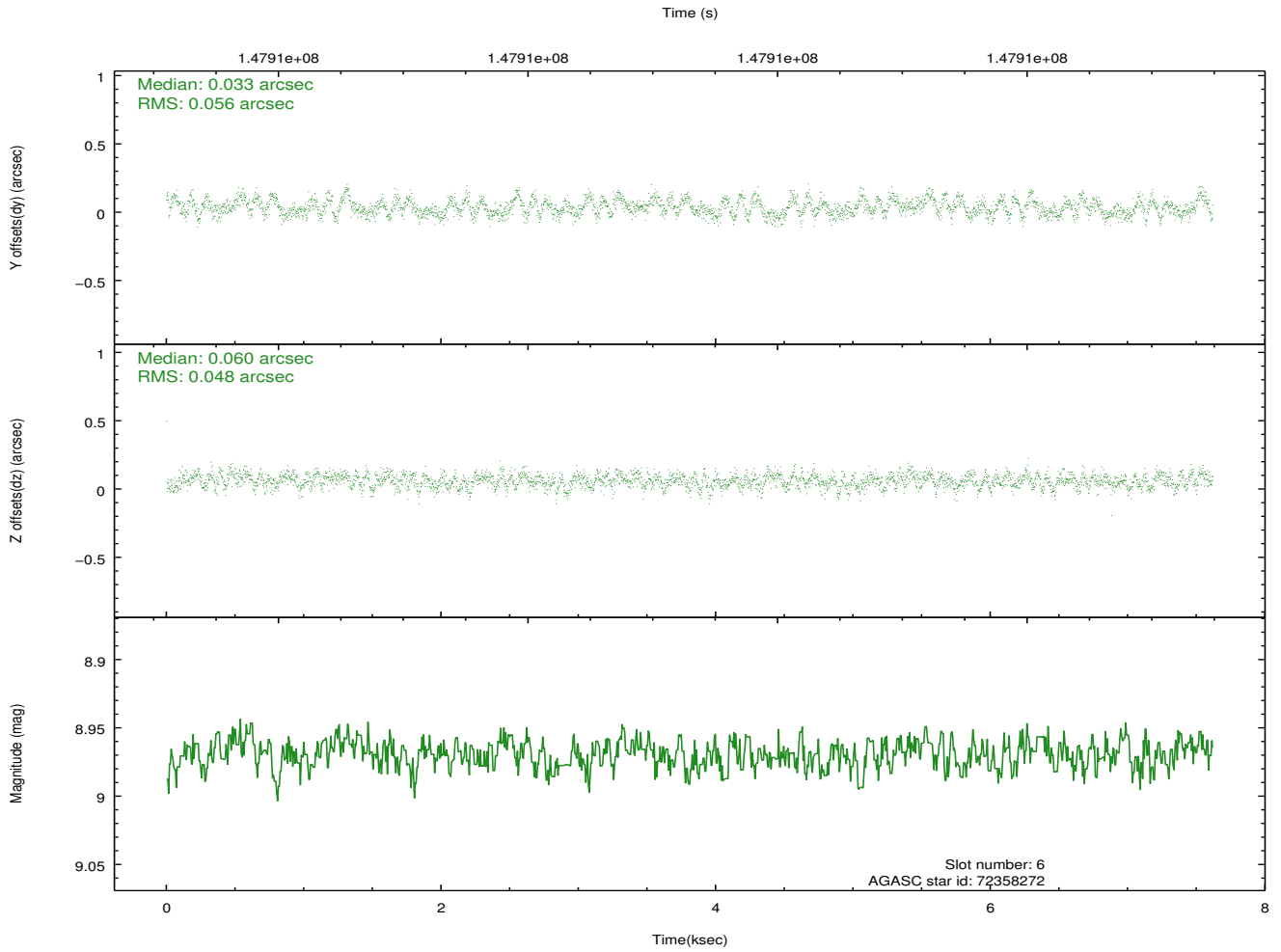
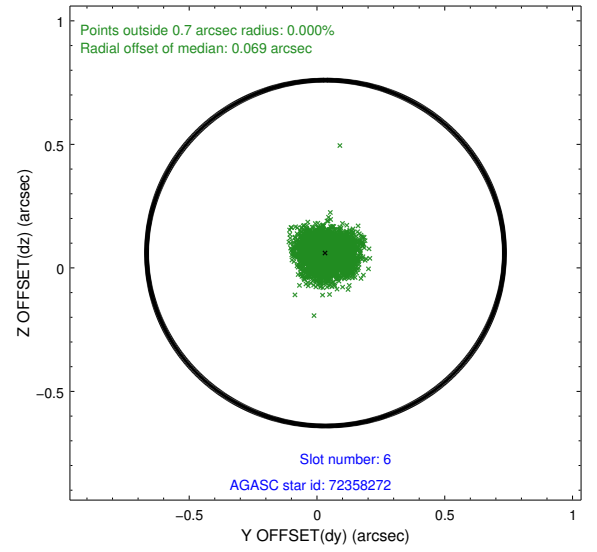
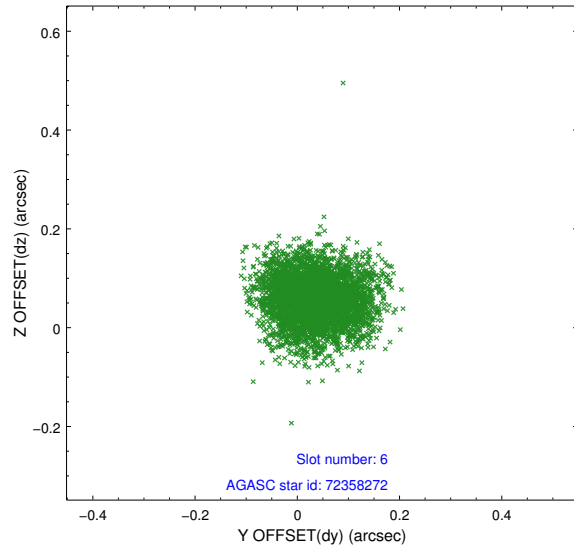
## 2.4.2 Slot 4



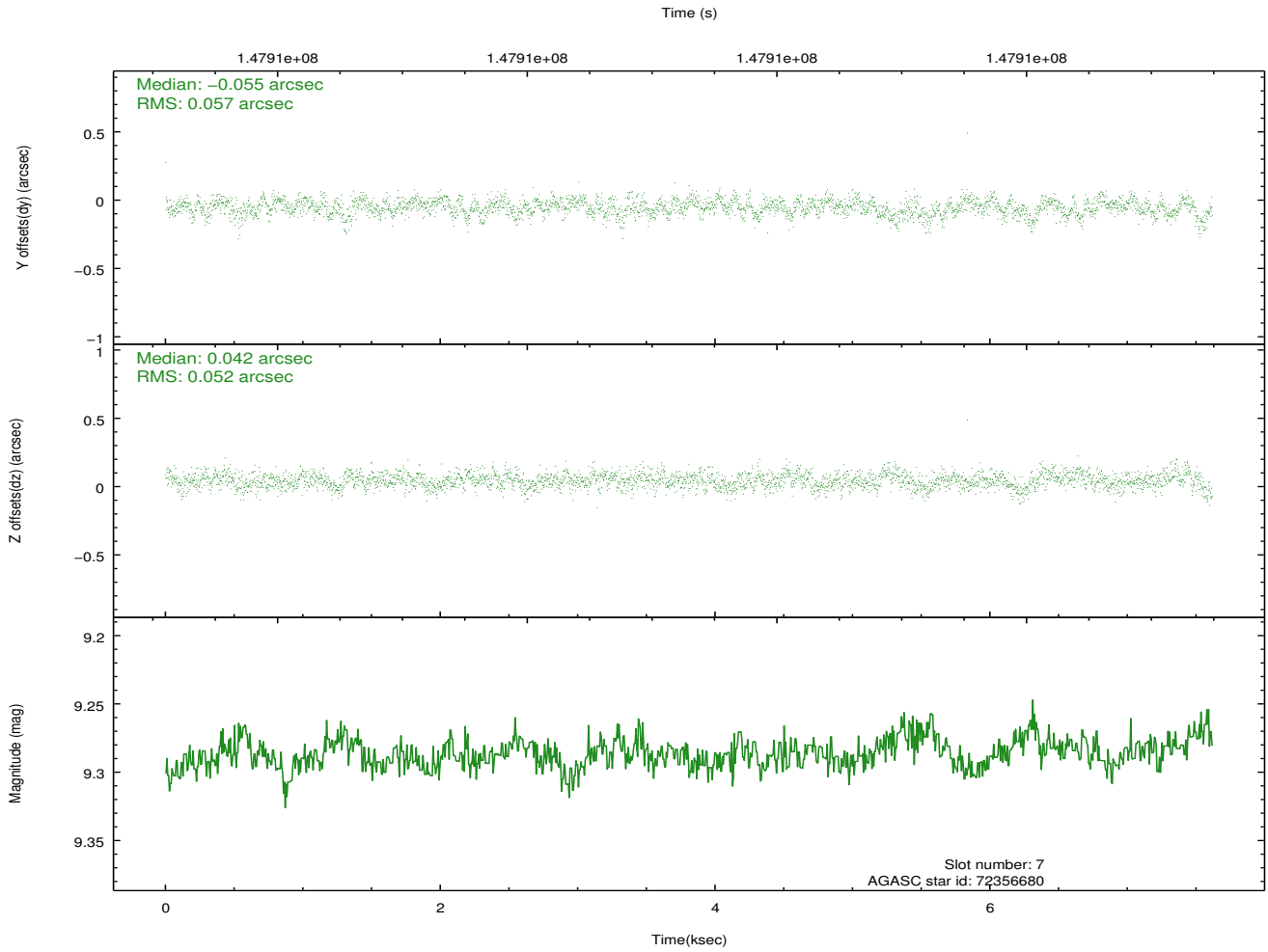
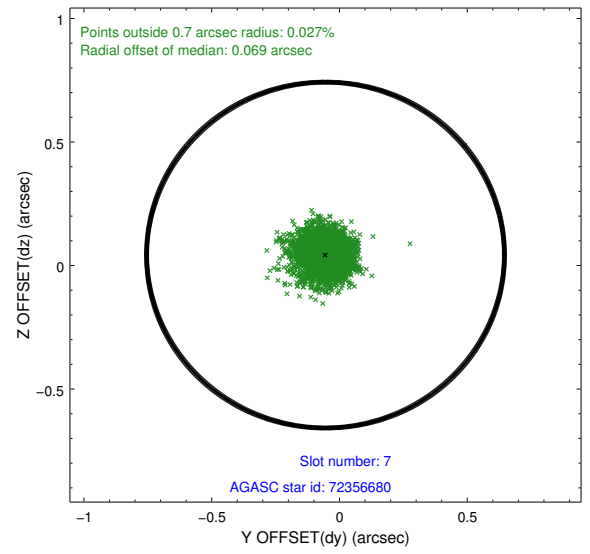
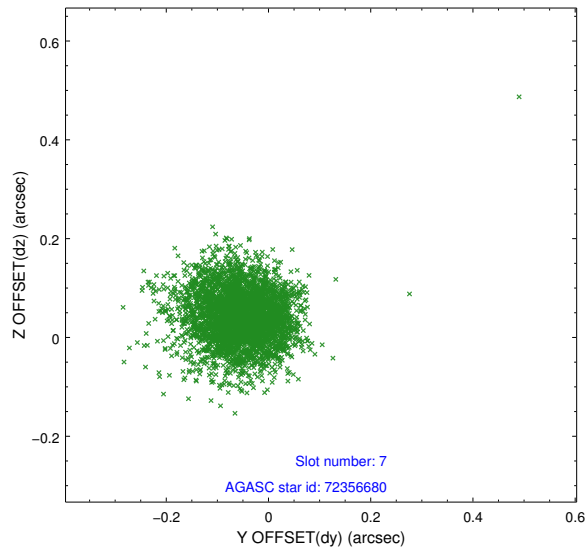
### 2.4.3 Slot 5



## 2.4.4 Slot 6

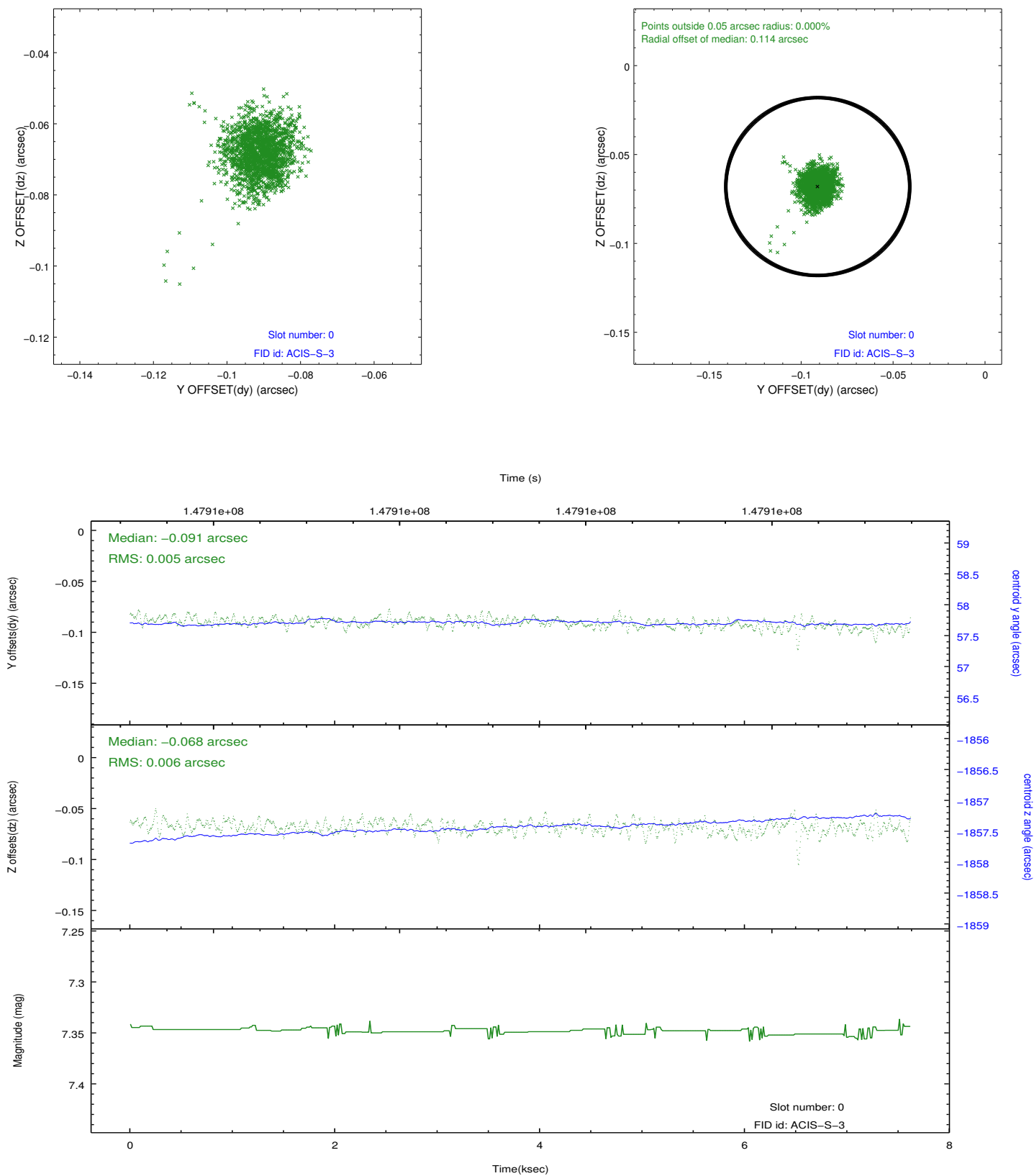


## 2.4.5 Slot 7

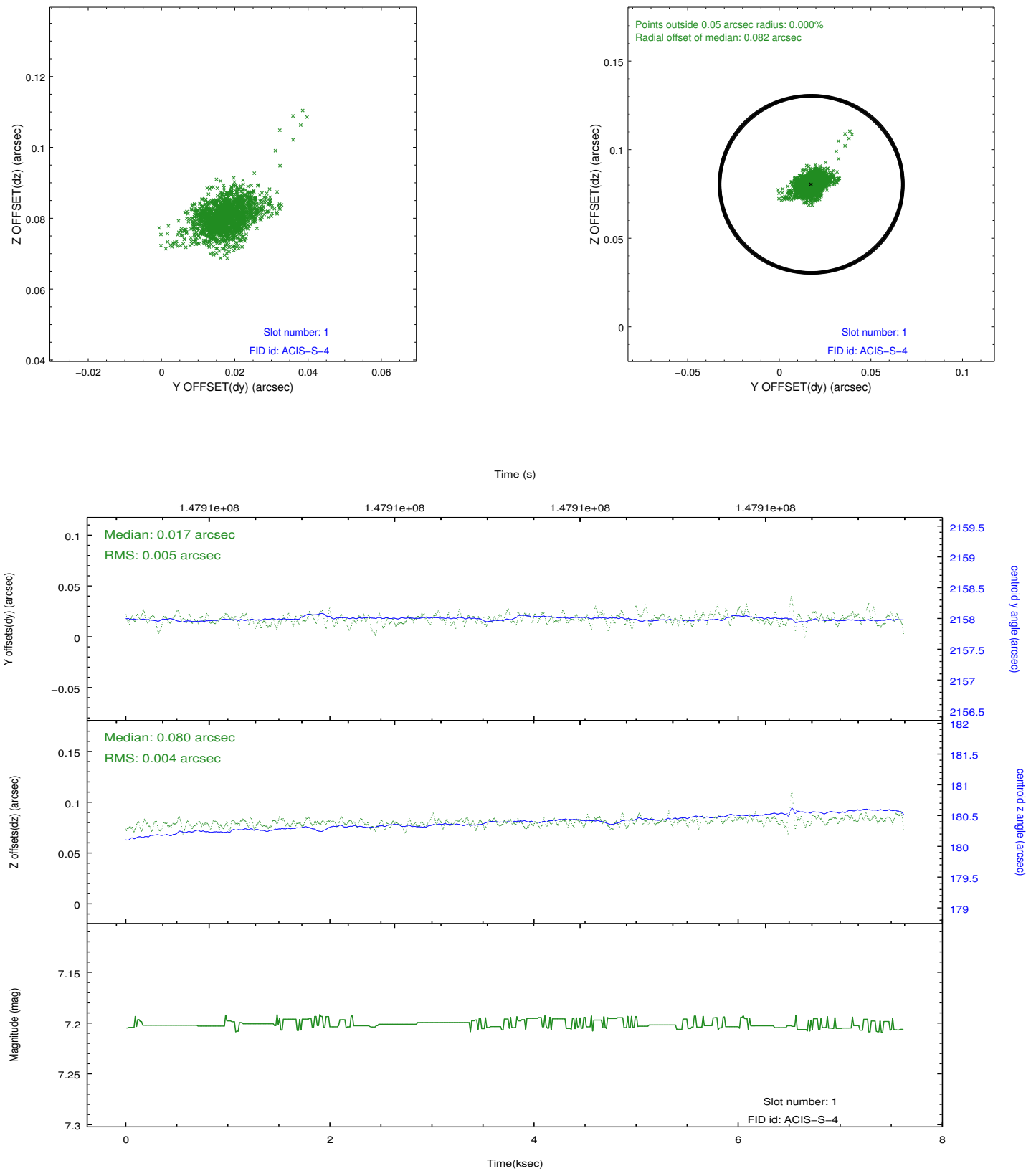


## 2.5 FID Slots

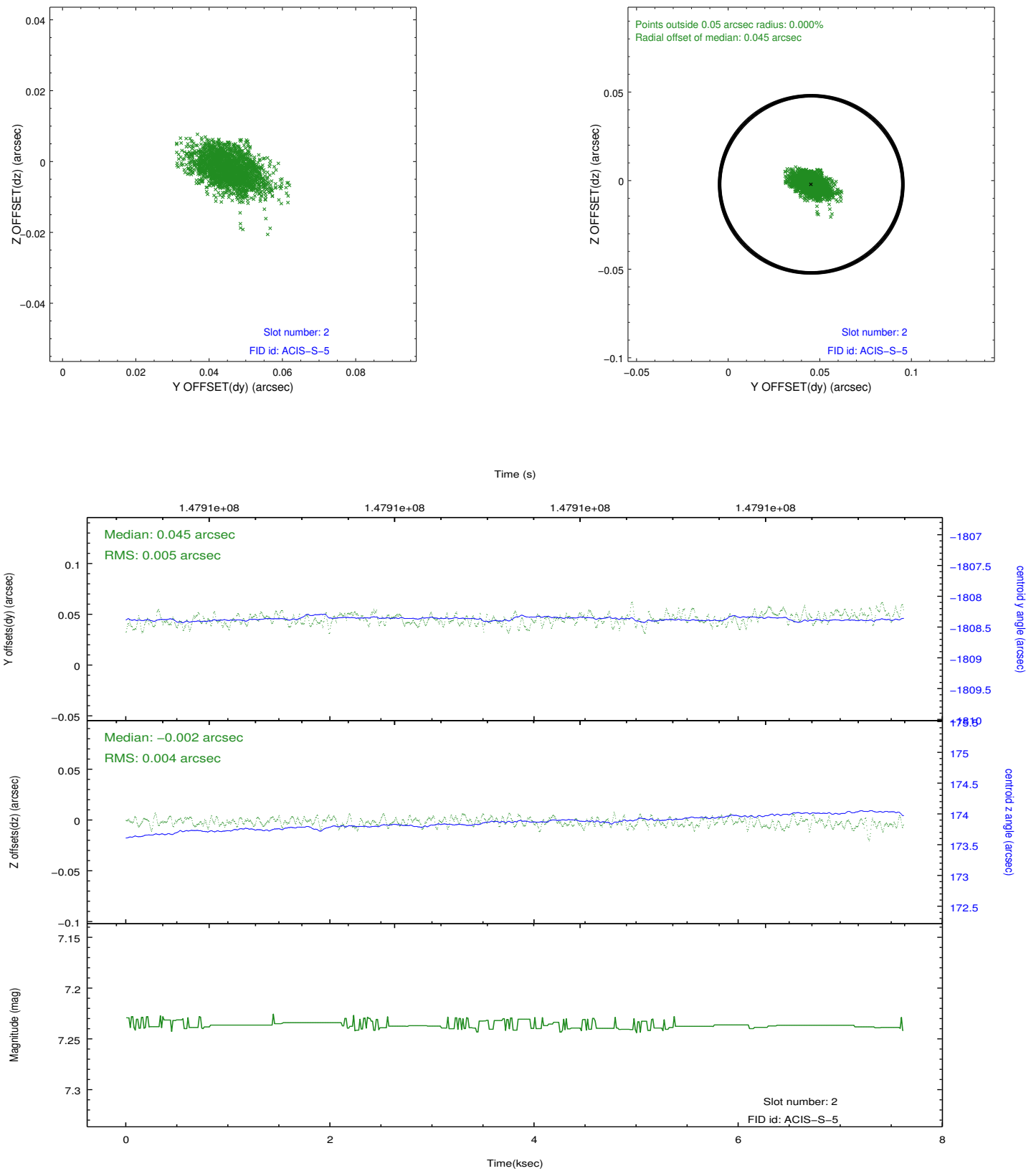
### 2.5.1 Slot 0



## 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)	2012.10.22
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	7.612

### A.2 Comments