

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 11227 - L2 Version 2  
Chandra X-Ray Center

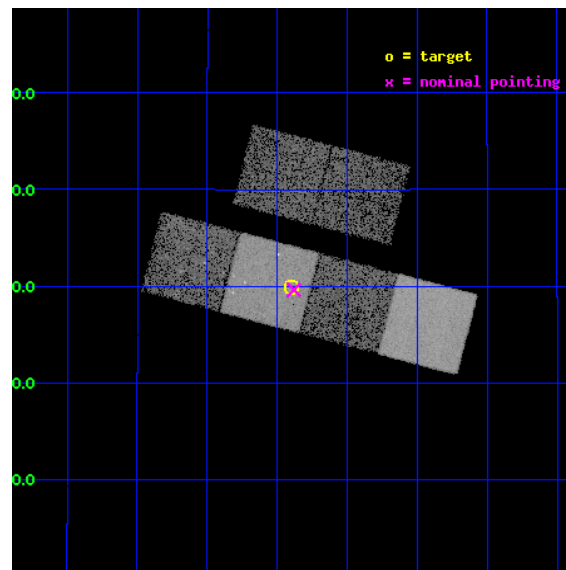
L2 Processing Date : Jun 12 2012

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# 1 Front

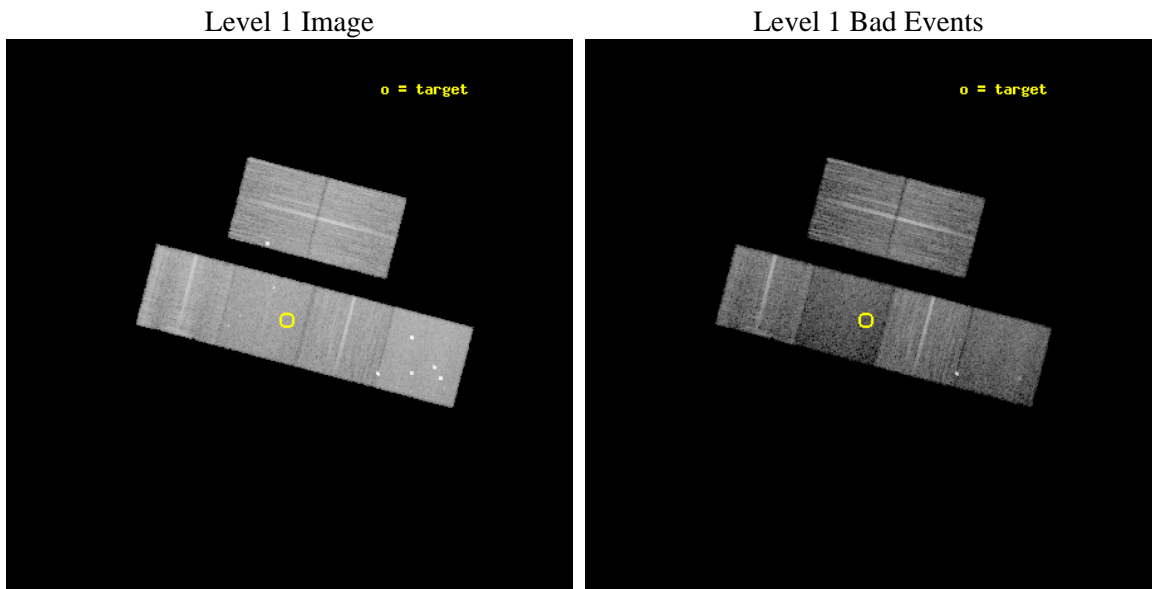
seq_num	501312	Sequence number
obs_id	11227	Observation id
title	Catching up to the Hydrogen Envelope: Late-time X-ray Observations of Type Ib/c SNe	Proposal title
observer	Prof. David Pooley	Principal investigator
object	SN 2001em	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	325.59875	Observer's specified target RA [deg]
dec_targ	12.497472	Observer's specified target Dec [deg]
ra_nom	325.59529254043	Nominal RA [deg]
dec_nom	12.493902330471	Nominal Dec [deg]
roll_nom	194.62148263598	Nominal Roll [deg]
revision	2	Processing version of data
ontime	10182.399962127	Sum of GTIs [s]
livetime	10053.464282702	Livetime [s]
ontime2	10182.399962127	Sum of GTIs [s]
ontime3	10175.917891502	Sum of GTIs [s]
ontime5	10182.399962127	Sum of GTIs [s]
ontime6	10179.158931971	Sum of GTIs [s]
ontime7	10182.399962127	Sum of GTIs [s]
ontime8	10182.399962127	Sum of GTIs [s]
l2events	119935	Number of level 2 events



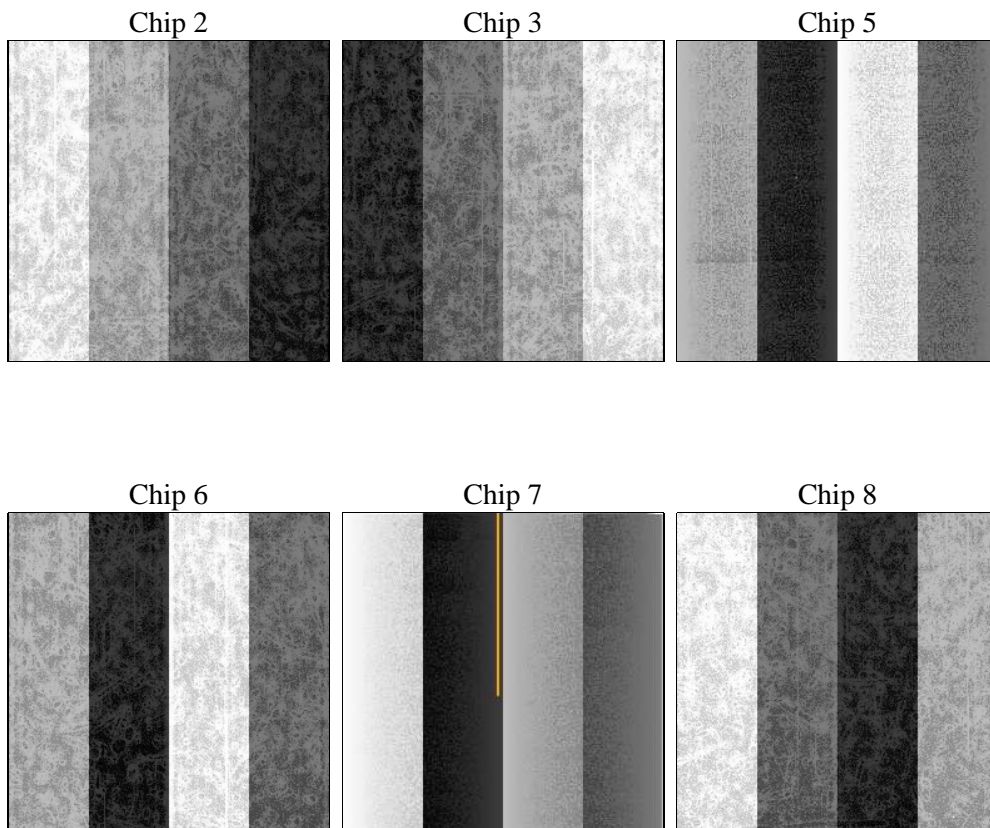
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.329000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	10182.399962127	Sum of GTIs [s]
caldsver	4.4.10	&#160	ontime2	10182.399962127	Sum of GTIs [s]
date	2012-06-12T02:42:07	Date and time of file creation	ontime3	10175.917891502	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	10182.399962127	Sum of GTIs [s]
			ontime6	10179.158931971	Sum of GTIs [s]
			ontime7	10182.399962127	Sum of GTIs [s]
			ontime8	10182.399962127	Sum of GTIs [s]
			l1events	560509	Number of level 1 events

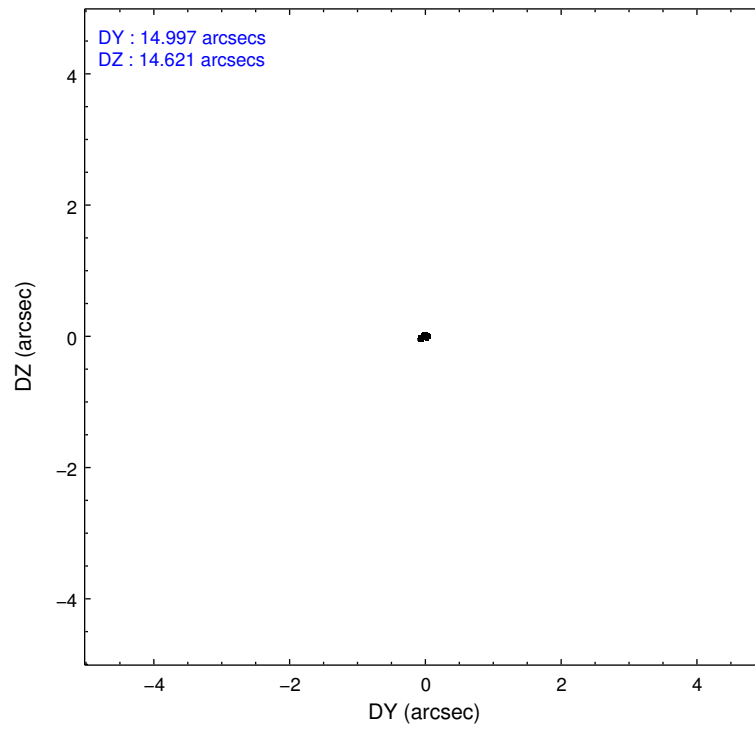
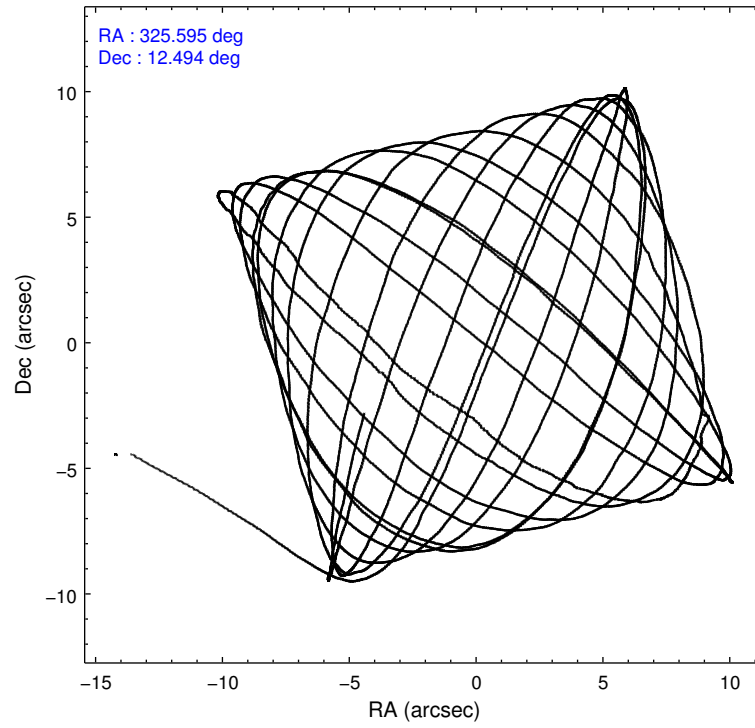
### 2.1.4 Events

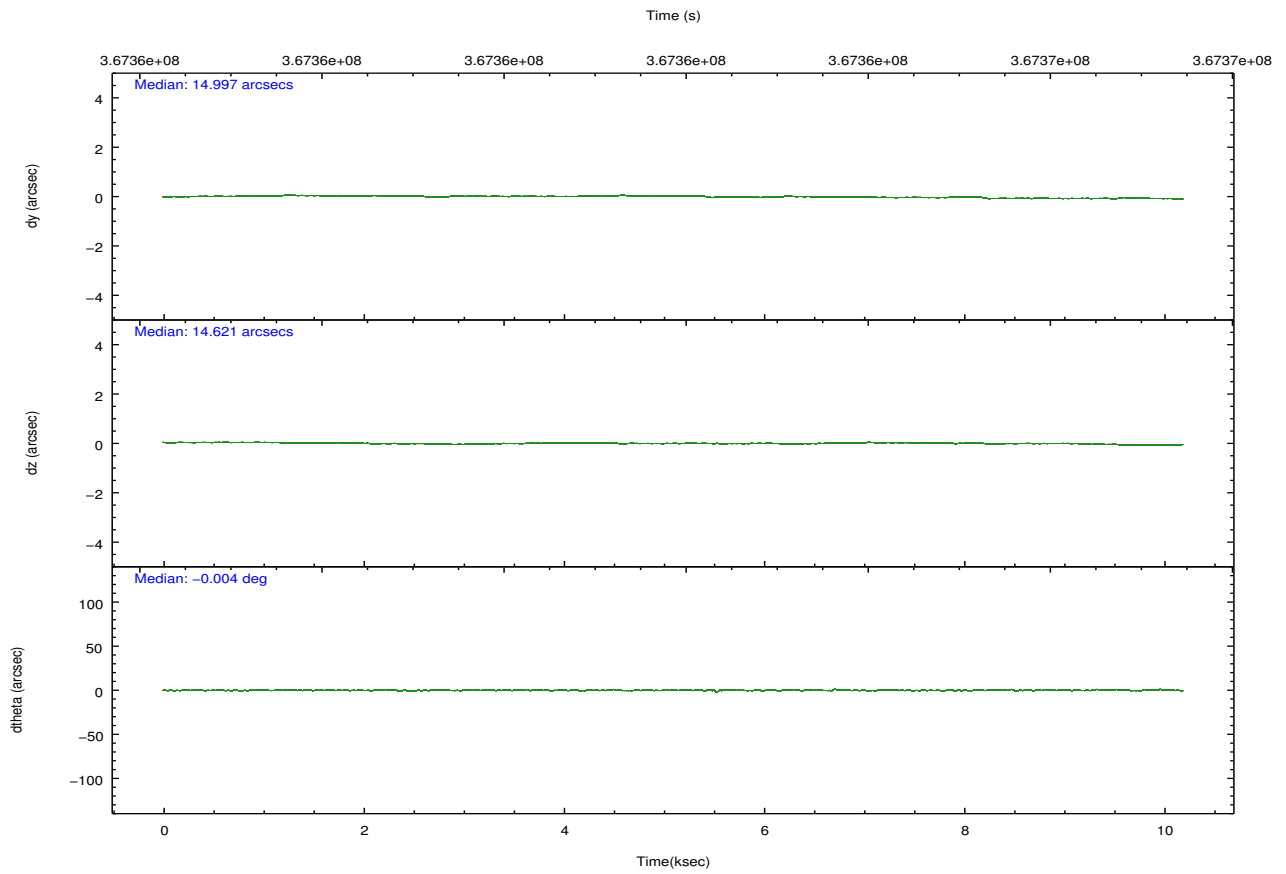
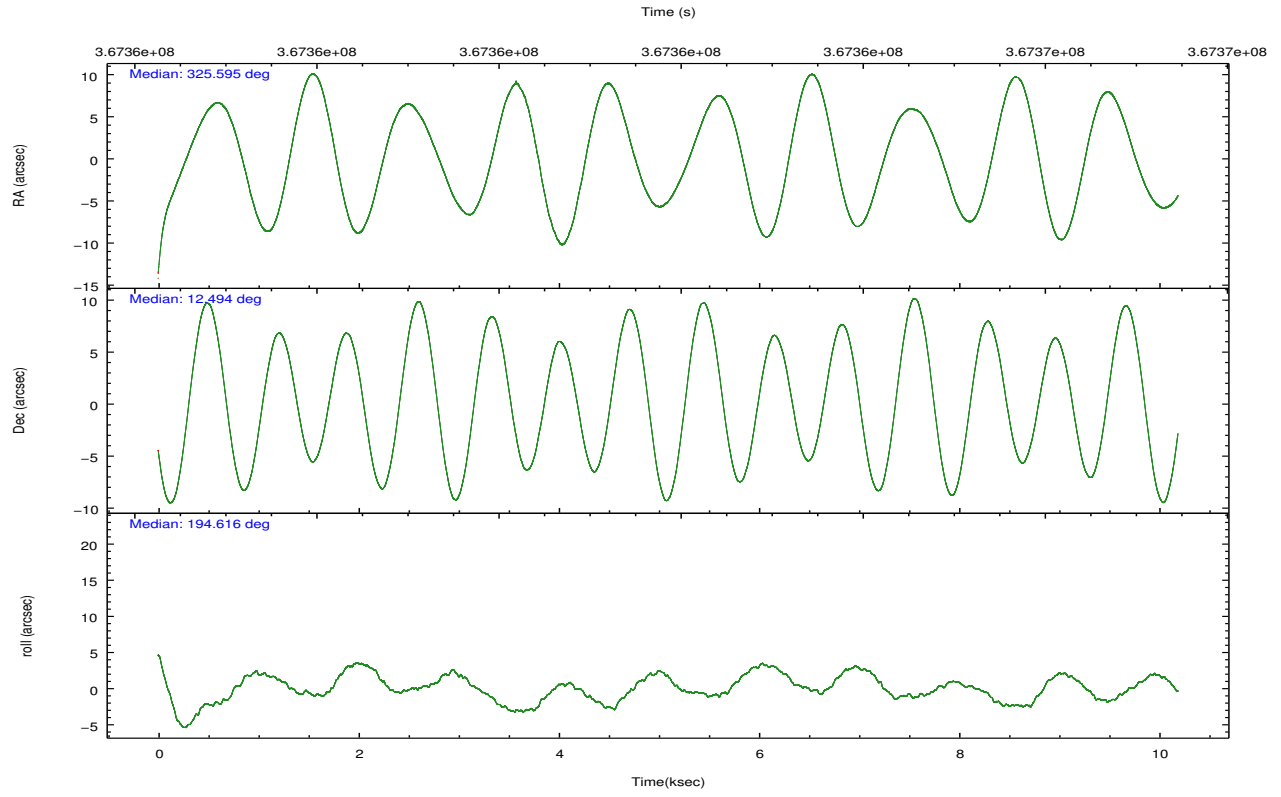
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	90136	82140	118184	84607	83061	102381	grade 0 events	2978	5454	13570	3140	4328	7748
rejected events	82355	72064	52475	76253	42374	75819		3%	6%	11%	3%	5%	7%
rejected %	91%	87%	44%	90%	51%	74%	grade 1 events	56	83	730	52	137	99
								0%	0%	0%	0%	0%	0%
							grade 2 events	1884	1584	18520	1836	9013	6535
								2%	1%	15%	2%	10%	6%
							grade 3 events	851	907	2460	876	3871	2808
								0%	1%	2%	1%	4%	2%
							grade 4 events	837	798	2547	860	3868	2578
								0%	0%	2%	1%	4%	2%
							grade 5 events	2322	2923	9320	2848	8673	4568
								2%	3%	7%	3%	10%	4%
							grade 6 events	1367	1488	29578	1772	20303	7380
								1%	1%	25%	2%	24%	7%
							grade 7 events	79841	68903	41459	73223	32868	70665
								88%	83%	35%	86%	39%	69%

## 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	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	325.614983	325.5952925404323	CCD I2 on	O2	Y
[deg] Pointing Dec	12.513437	12.49390233047108	CCD I3 on	O3	Y
[deg] Pointing Roll	194.460589	194.6214826359841	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O1	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	Y	Y
[s] Observation start time (MET)	367356947.184000	367355785.64103	CCD S5 on	N	N
Observation start date	2009-08-22T19:34:41	2009-08-22T19:16:25	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	367366947.184000	367367170.8291	On-chip summing requested	N	N
Observation end date	2009-08-22T22:21:21	2009-08-22T22:26:10	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



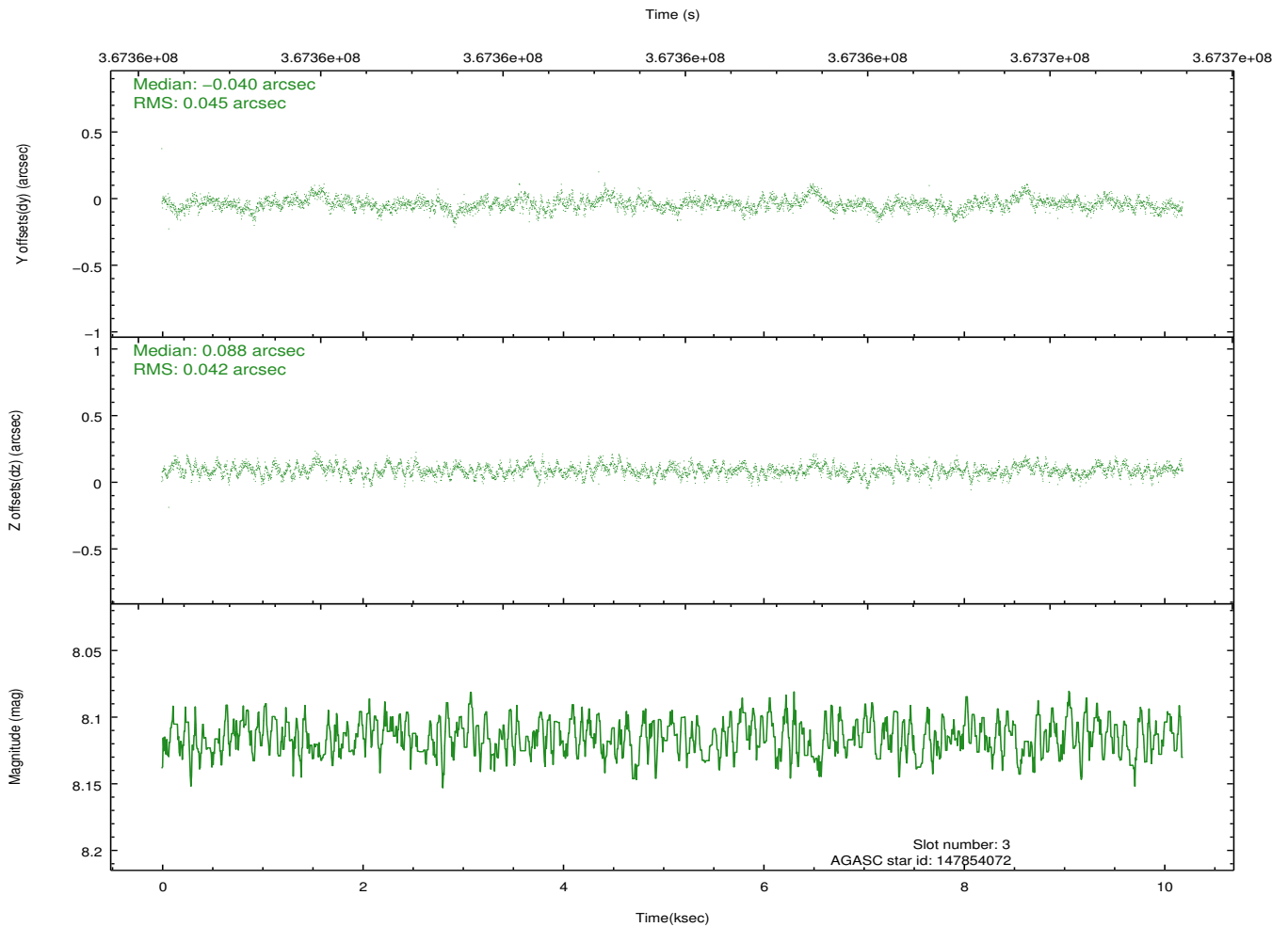
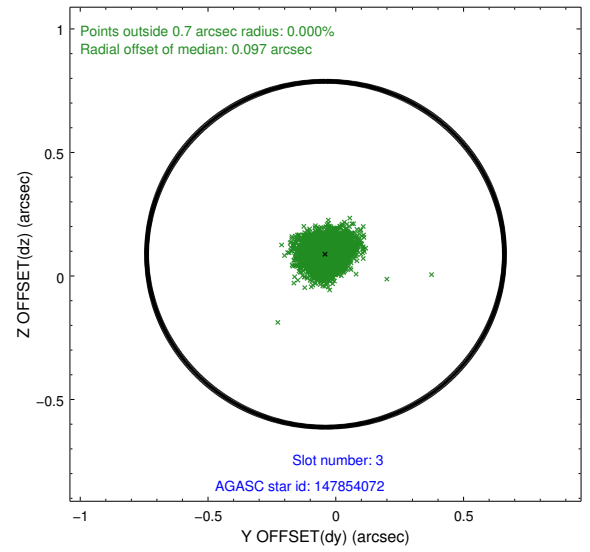
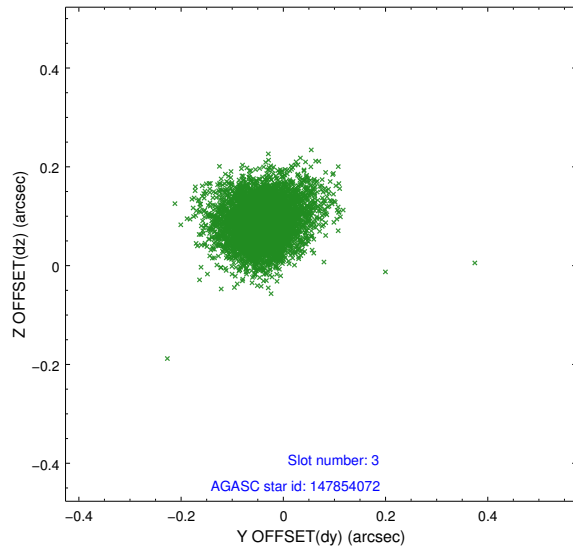


### Slot Statistics

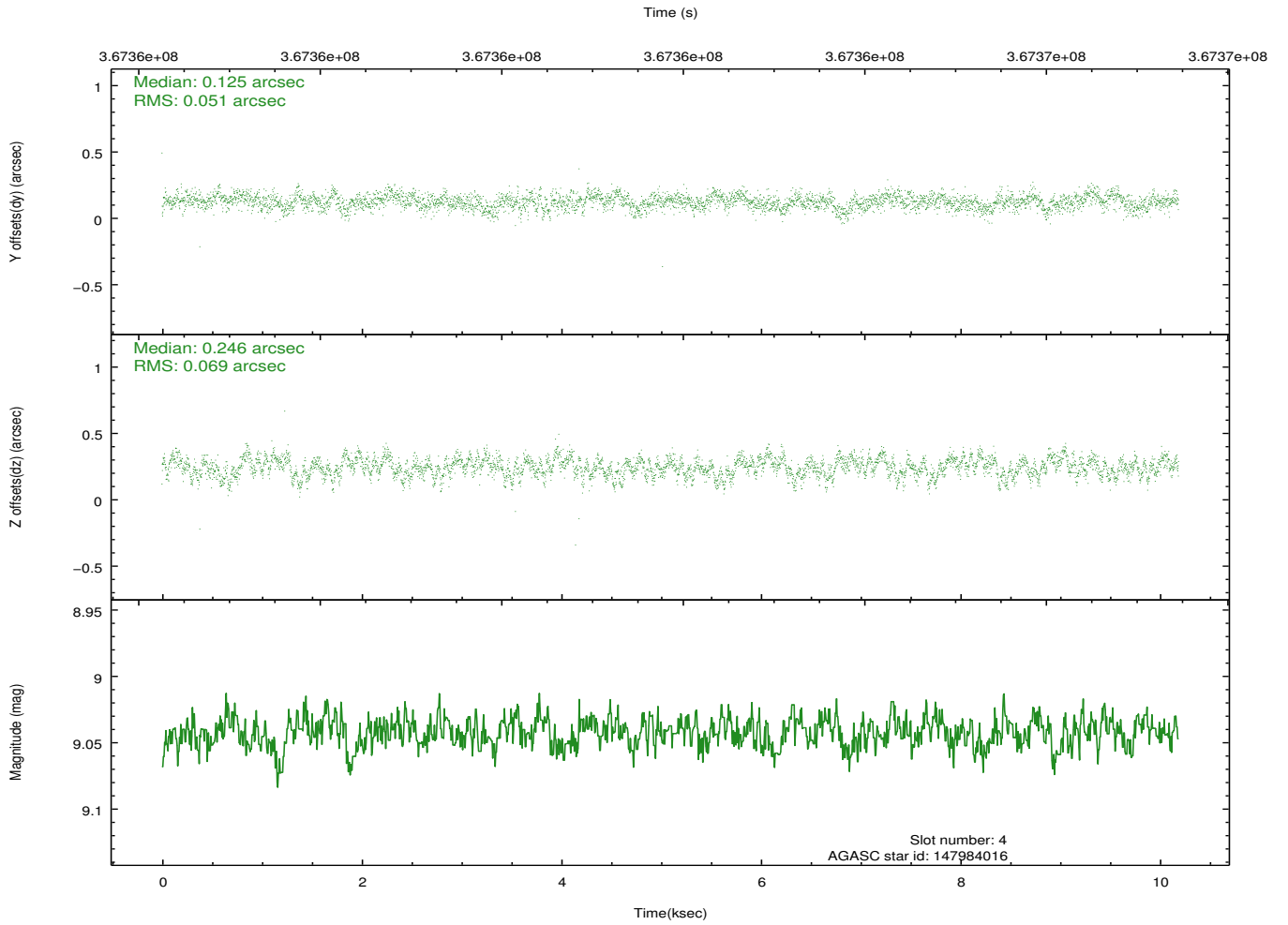
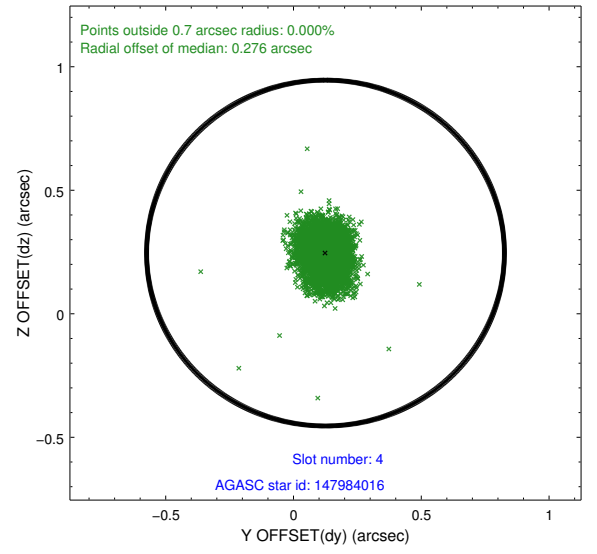
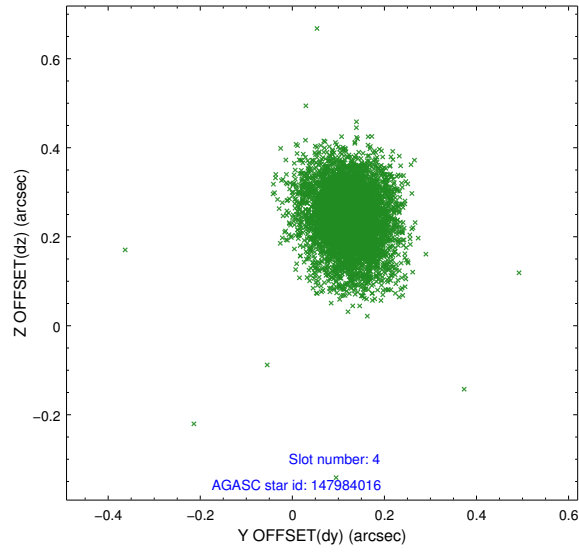
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.96	2485	-0.104	-0.059	0.007	0.011	0.000000	0.000000	-768.05	-1736.05
1	FID	ACIS-S-4	7.05	2486	0.240	0.066	0.006	0.010	0.000000	0.000000	2145.33	172.04
2	FID	ACIS-S-5	7.08	2484	-0.167	0.001	0.007	0.011	0.000000	0.000000	-1820.30	166.20
3	GUIDE	147854072	8.11	4969	-0.040	0.088	0.064	0.108	325.349490	12.755754	685.17	-1077.68
4	GUIDE	147984016	9.04	4968	0.125	0.246	0.089	0.147	325.841848	12.688697	-928.54	-412.27
5	GUIDE	147991784	7.94	4966	0.043	-0.078	0.068	0.109	325.826731	12.518355	-725.56	169.01
6	GUIDE	147864216	9.17	4966	0.017	-0.020	0.091	0.146	325.021145	12.092394	2402.37	943.87
7	GUIDE	147995656	8.71	4966	-0.148	-0.234	0.095	0.147	325.586526	11.818453	722.31	2397.78

## 2.4 Star Slots

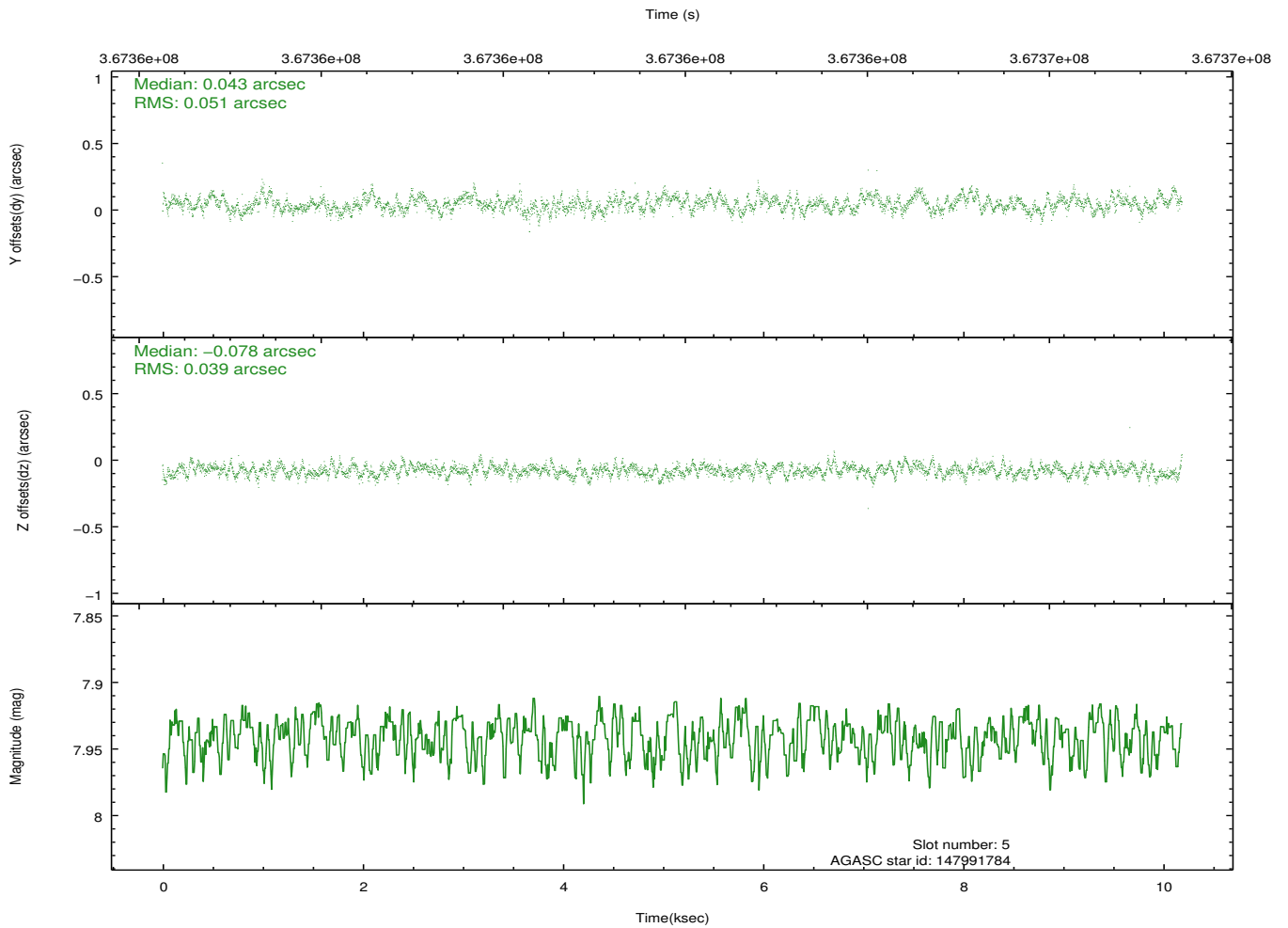
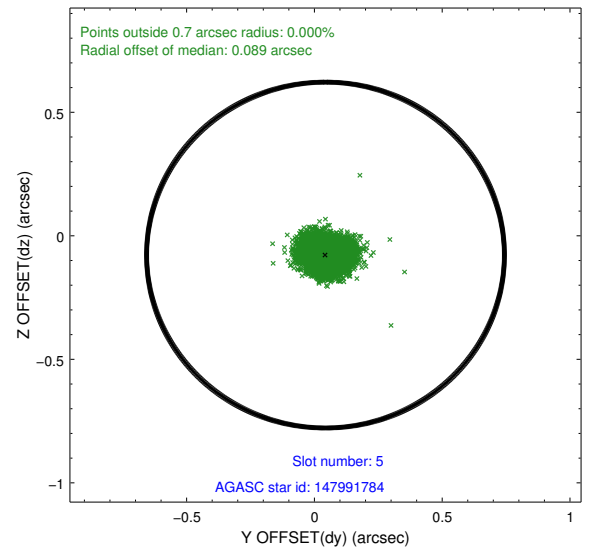
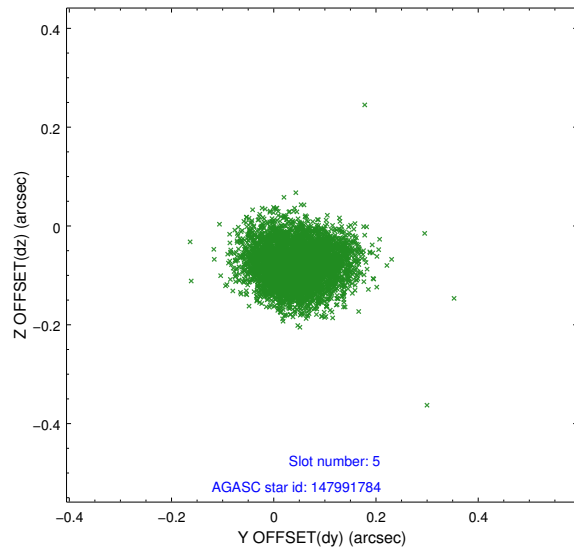
### 2.4.1 Slot 3



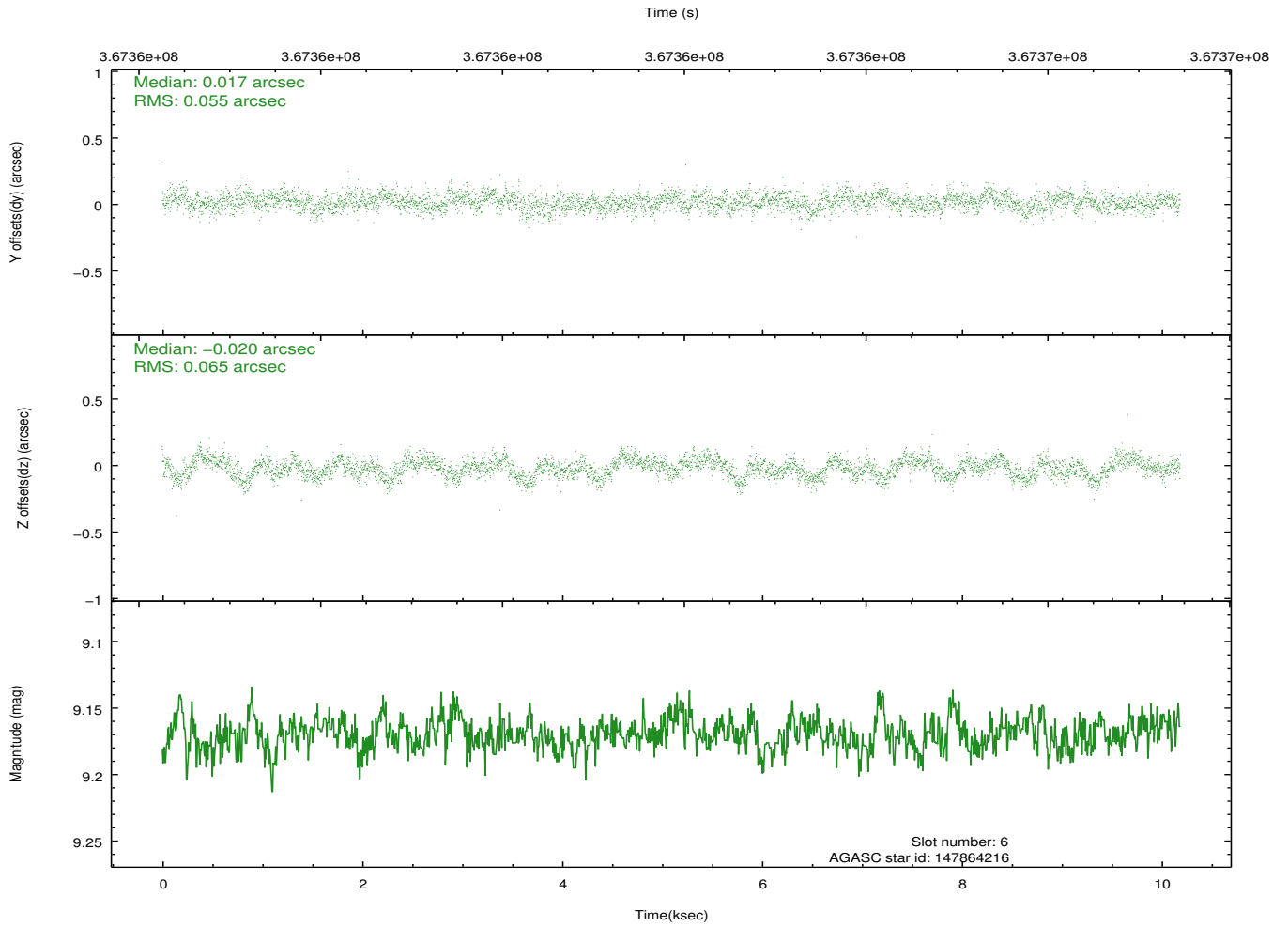
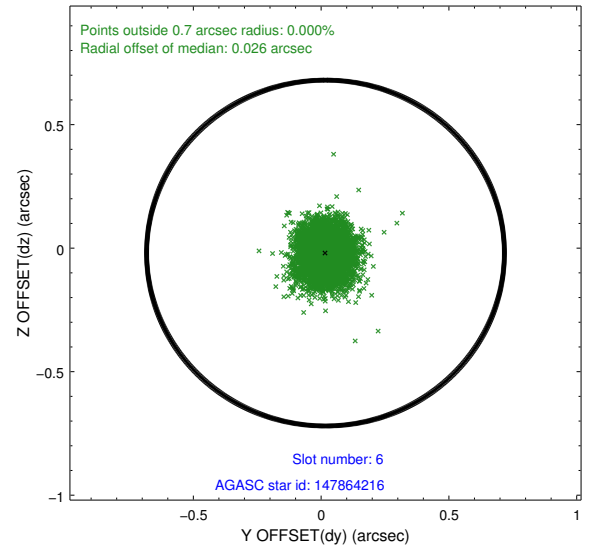
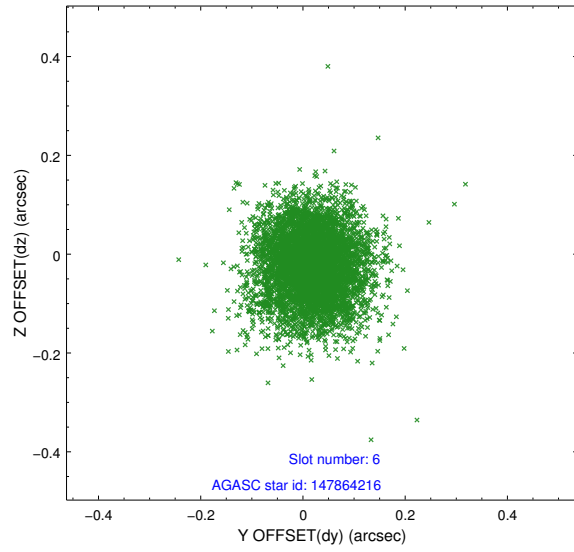
## 2.4.2 Slot 4



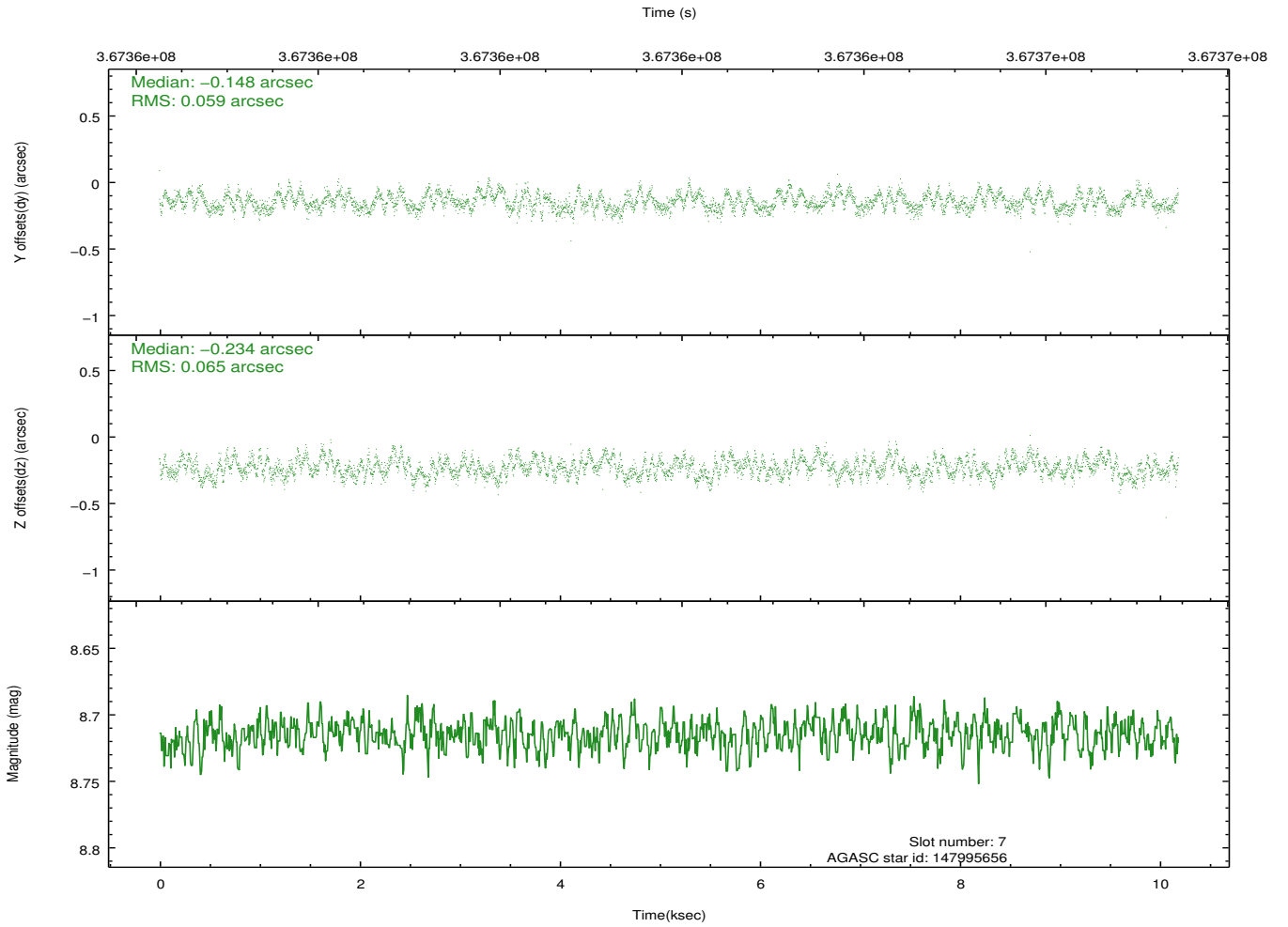
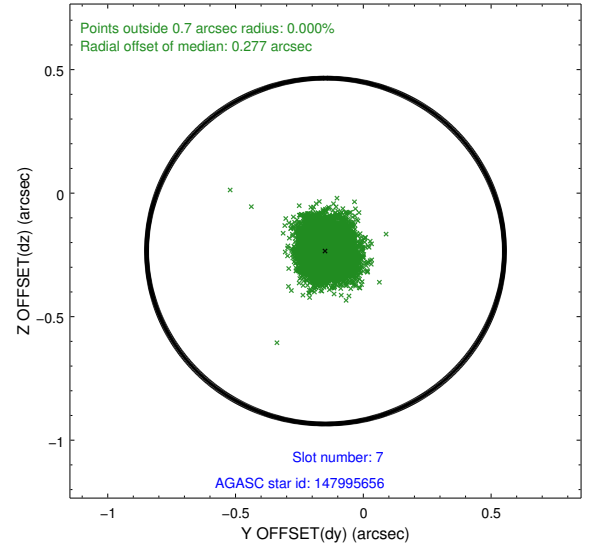
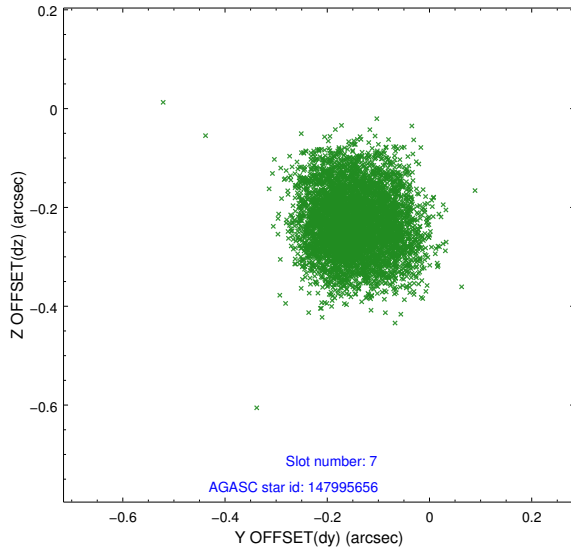
### 2.4.3 Slot 5



## 2.4.4 Slot 6

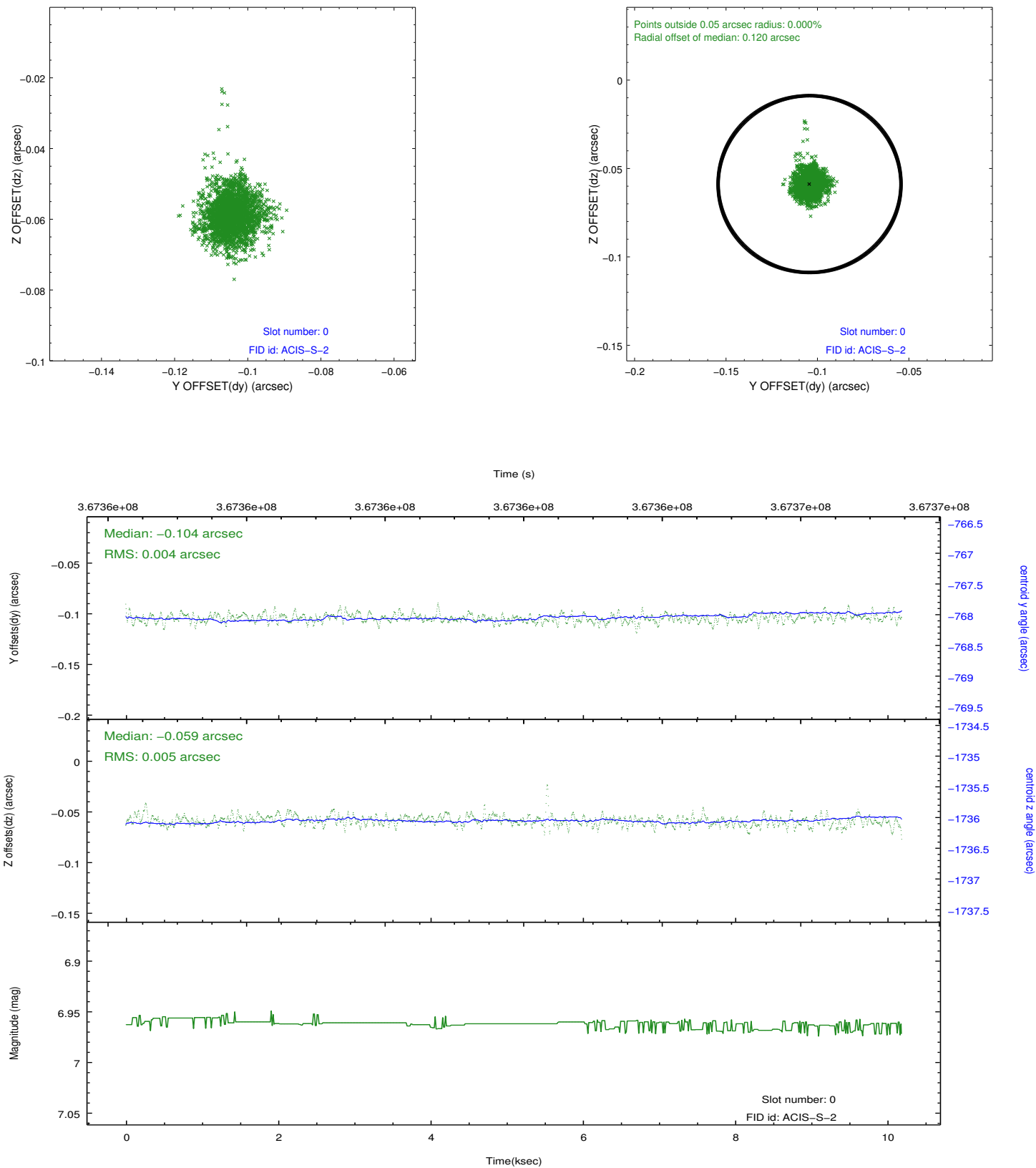


## 2.4.5 Slot 7

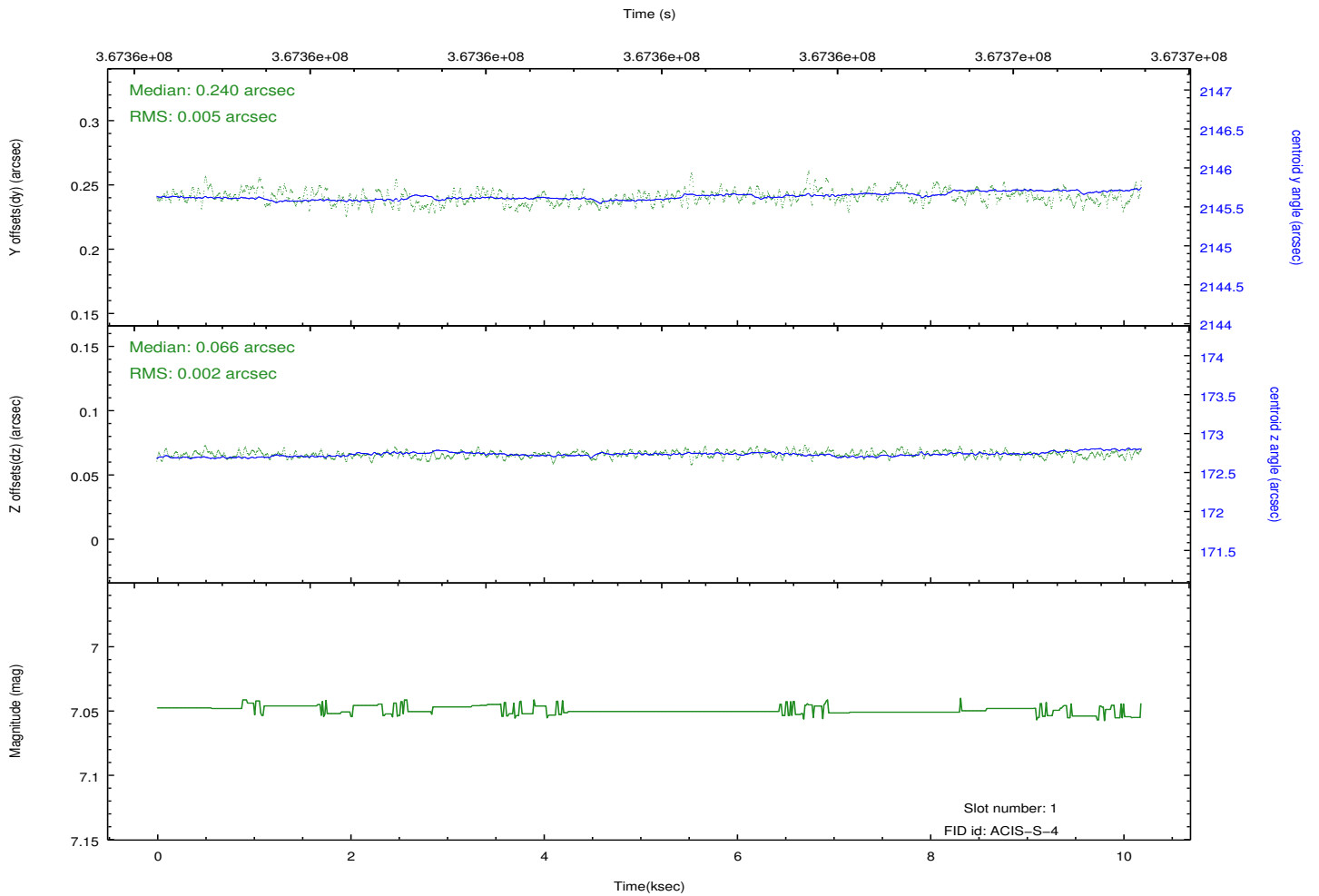
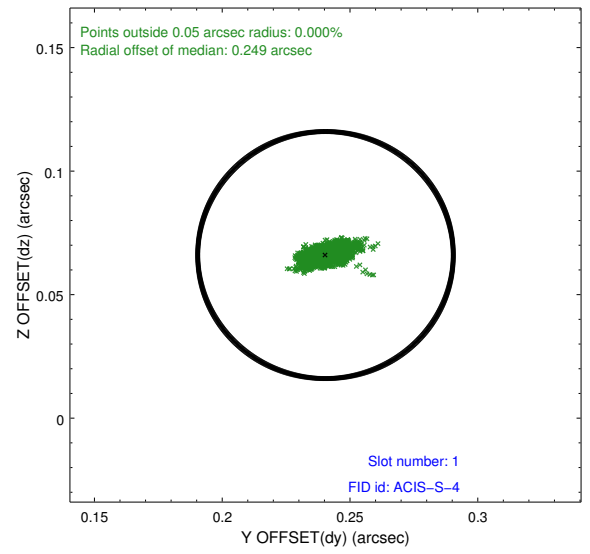
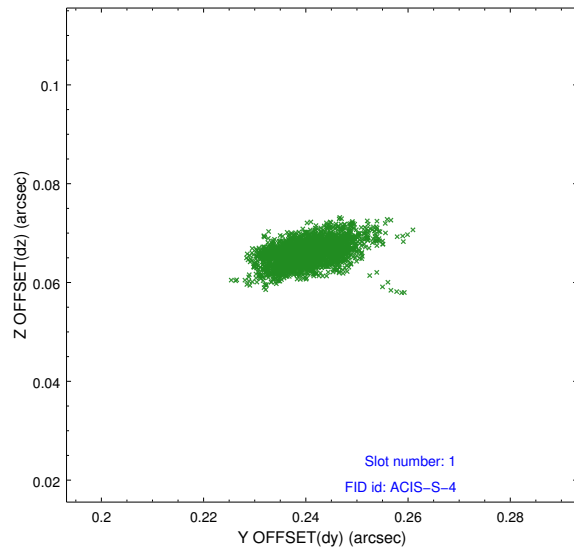


## 2.5 FID Slots

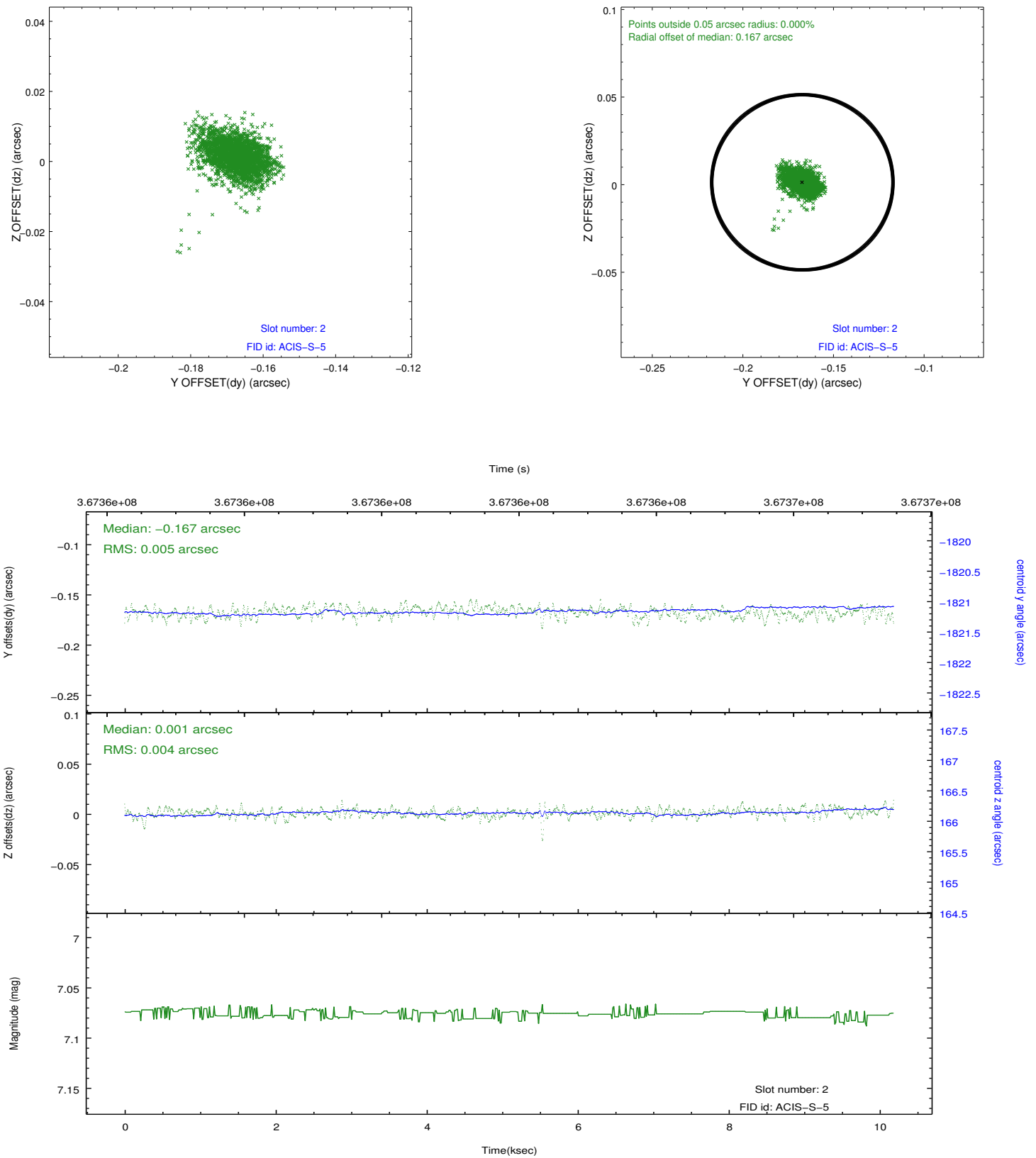
### 2.5.1 Slot 0



## 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)	2012.06.14
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.182399962127

### **A.2 Comments**