

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 11676 - L2 Version 2  
Chandra X-Ray Center

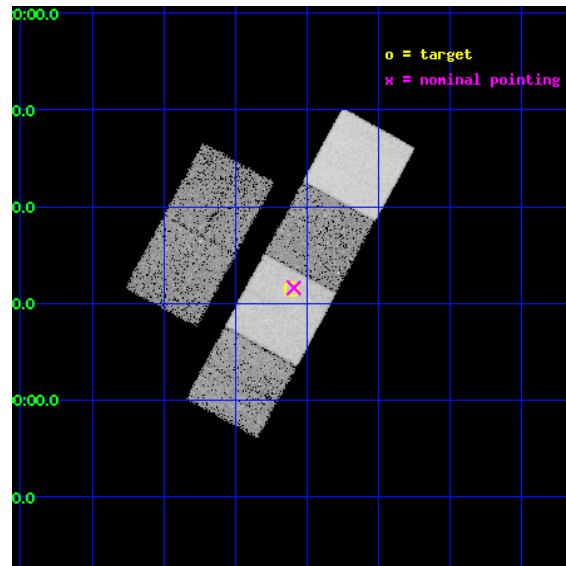
L2 Processing Date : Jun 30 2012

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# 1 Front

seq_num	702262	Sequence number
obs_id	11676	Observation id
title	Investigating the Nuclear Activity of Barred and Unbarred Spiral Galaxies	Proposal title
observer	Dr Leigh Jenkins	Principal investigator
object	NGC 1638	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	70.402125	Observer's specified target RA [deg]
dec_targ	-1.809028	Observer's specified target Dec [deg]
ra_nom	70.397929291458	Nominal RA [deg]
dec_nom	-1.8066459968997	Nominal Dec [deg]
roll_nom	118.61780276145	Nominal Roll [deg]
revision	2	Processing version of data
ontime	15046.399944007	Sum of GTIs [s]
livetime	14855.873368062	Livetime [s]
ontime2	15046.399944007	Sum of GTIs [s]
ontime3	15046.399944007	Sum of GTIs [s]
ontime5	15046.399944007	Sum of GTIs [s]
ontime6	15046.399944007	Sum of GTIs [s]
ontime7	15046.399944007	Sum of GTIs [s]
ontime8	15043.158973634	Sum of GTIs [s]
l2events	185782	Number of level 2 events

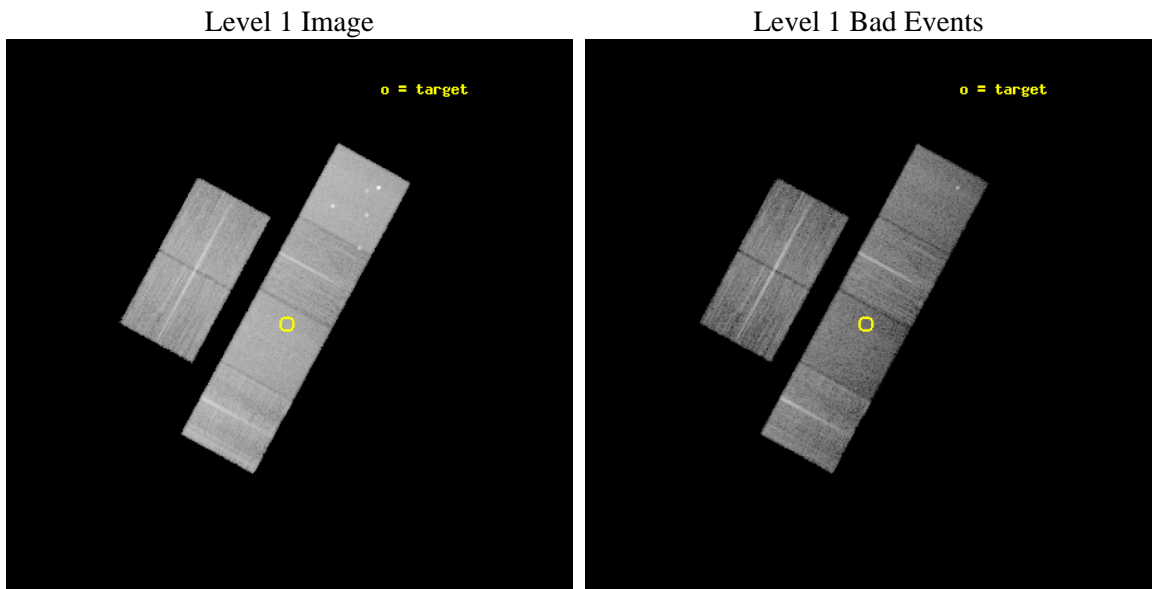




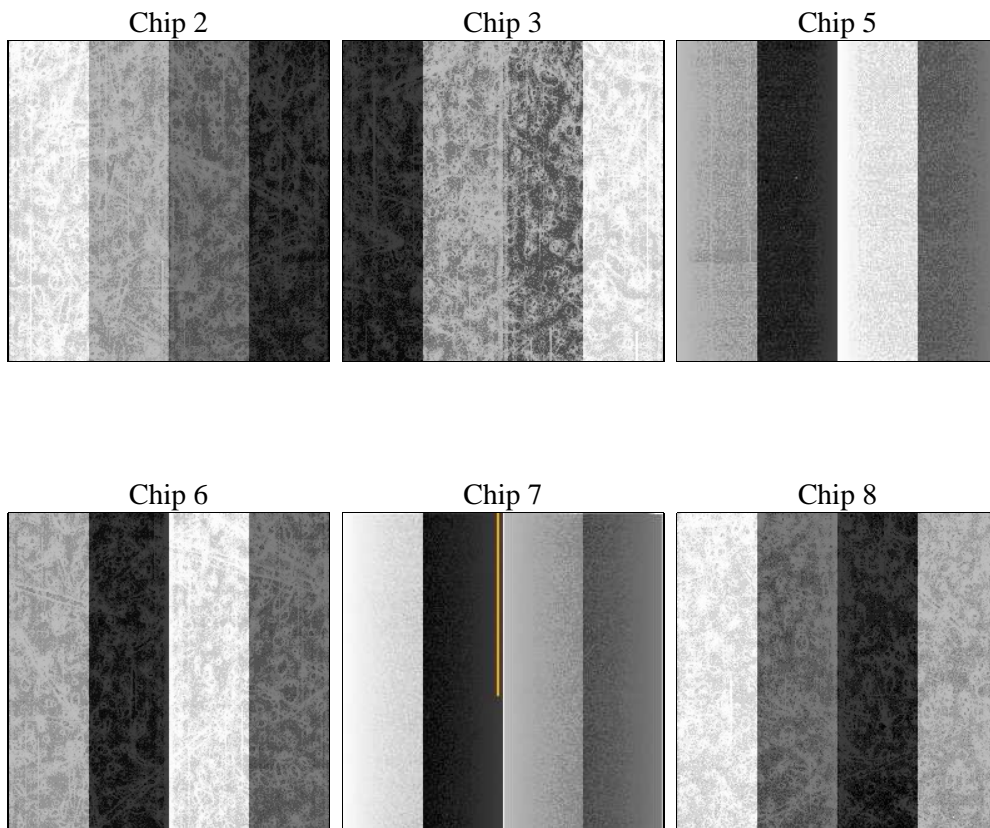
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	15000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	15046.399944007	Sum of GTIs [s]
caldsver	4.5.0	&#160	ontime2	15046.399944007	Sum of GTIs [s]
date	2012-06-30T13:15:06	Date and time of file creation	ontime3	15046.399944007	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	15046.399944007	Sum of GTIs [s]
			ontime6	15046.399944007	Sum of GTIs [s]
			ontime7	15046.399944007	Sum of GTIs [s]
			ontime8	15043.158973634	Sum of GTIs [s]
			l1events	815270	Number of level 1 events

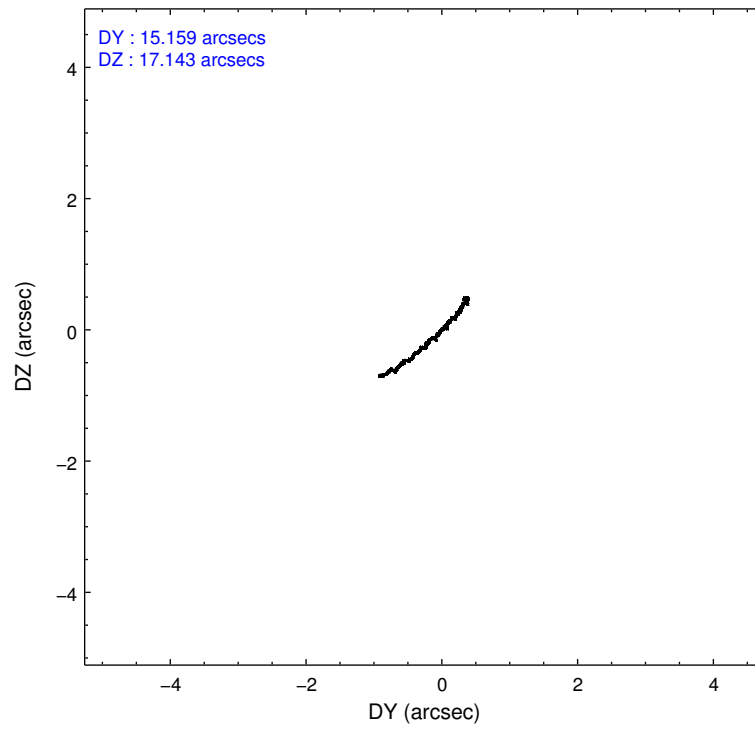
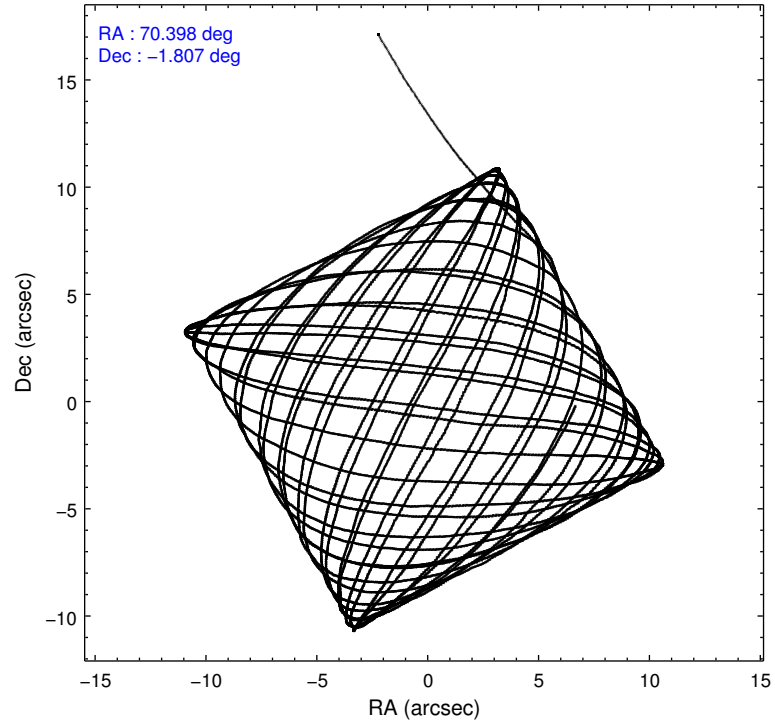
### 2.1.4 Events

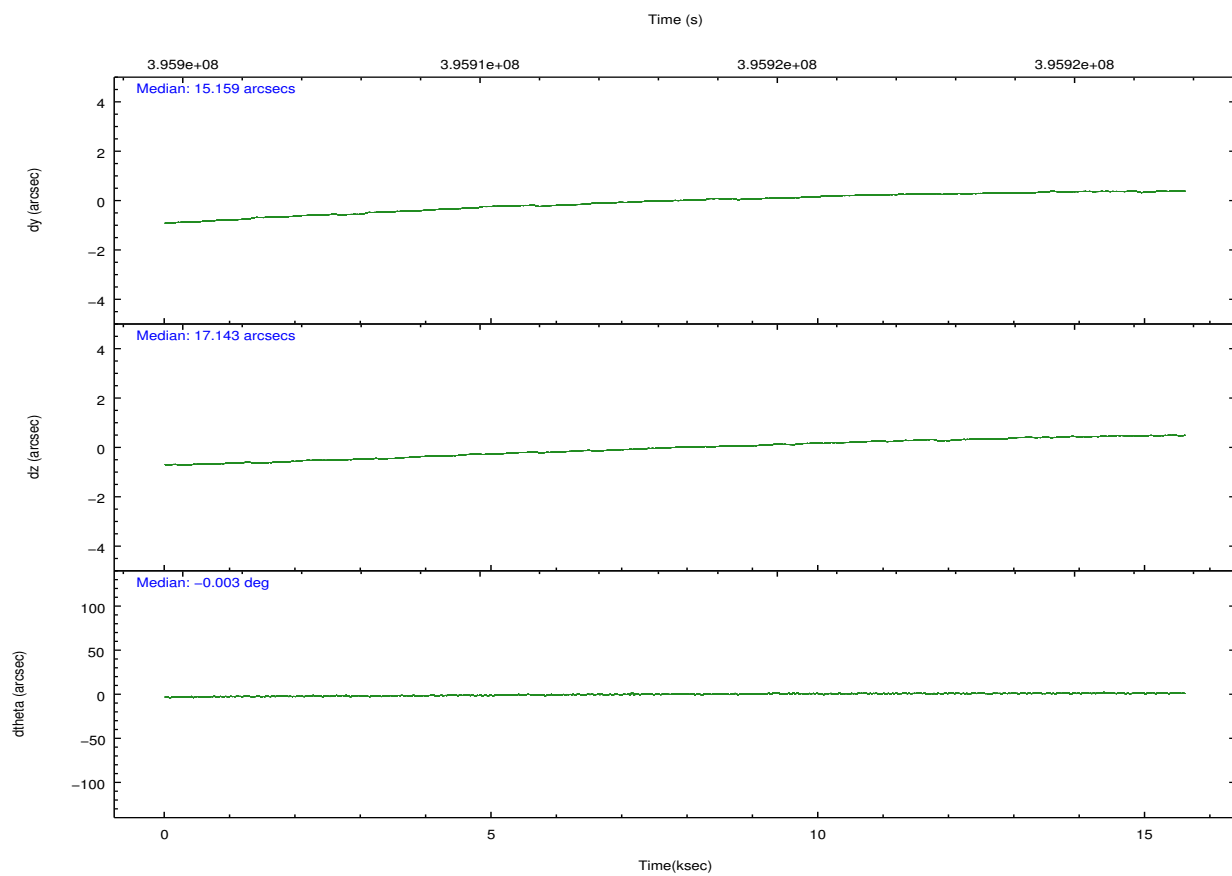
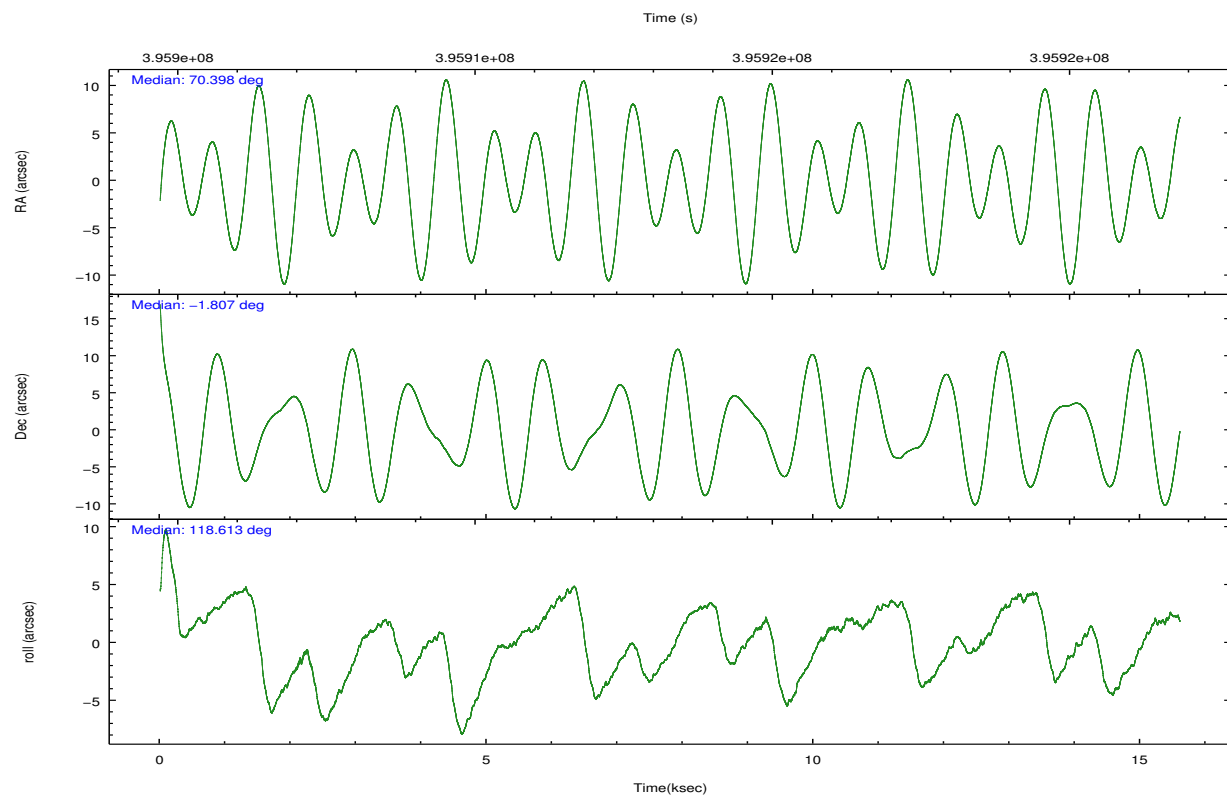
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	120406	111660	175273	116283	140044	151604	grade 0 events	4457	4171	10761	4691	5786	11846
rejected events	108030	100064	87125	103200	77107	112185		3%	3%	6%	4%	4%	7%
rejected %	89%	89%	49%	88%	55%	73%	grade 1 events	72	76	330	66	187	125
								0%	0%	0%	0%	0%	0%
							grade 2 events	3044	2534	26348	2904	12793	9170
								2%	2%	15%	2%	9%	6%
							grade 3 events	1280	1255	3279	1384	5693	4115
								1%	1%	1%	1%	4%	2%
							grade 4 events	1281	1287	3028	1334	5433	3800
								1%	1%	1%	1%	3%	2%
							grade 5 events	4232	5059	12996	5127	14542	7345
								3%	4%	7%	4%	10%	4%
							grade 6 events	2314	2354	44749	2775	33256	10493
								1%	2%	25%	2%	23%	6%
							grade 7 events	103726	94924	73782	98002	62354	104710
								86%	85%	42%	84%	44%	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	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	70.421464	70.39792929145798	CCD I2 on	O1	Y
[deg] Pointing Dec	-1.820541	-1.806645996899665	CCD I3 on	O2	Y
[deg] Pointing Roll	118.461928	118.6178027614464	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	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	Y	Y
[s] Observation start time (MET)	395906091.184000	395904868.13656	CCD S5 on	N	N
Observation start date	2010-07-19T05:53:45	2010-07-19T05:34:28	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	395921091.184000	395922462.26246	On-chip summing requested	N	N
Observation end date	2010-07-19T10:03:45	2010-07-19T10:27:42	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



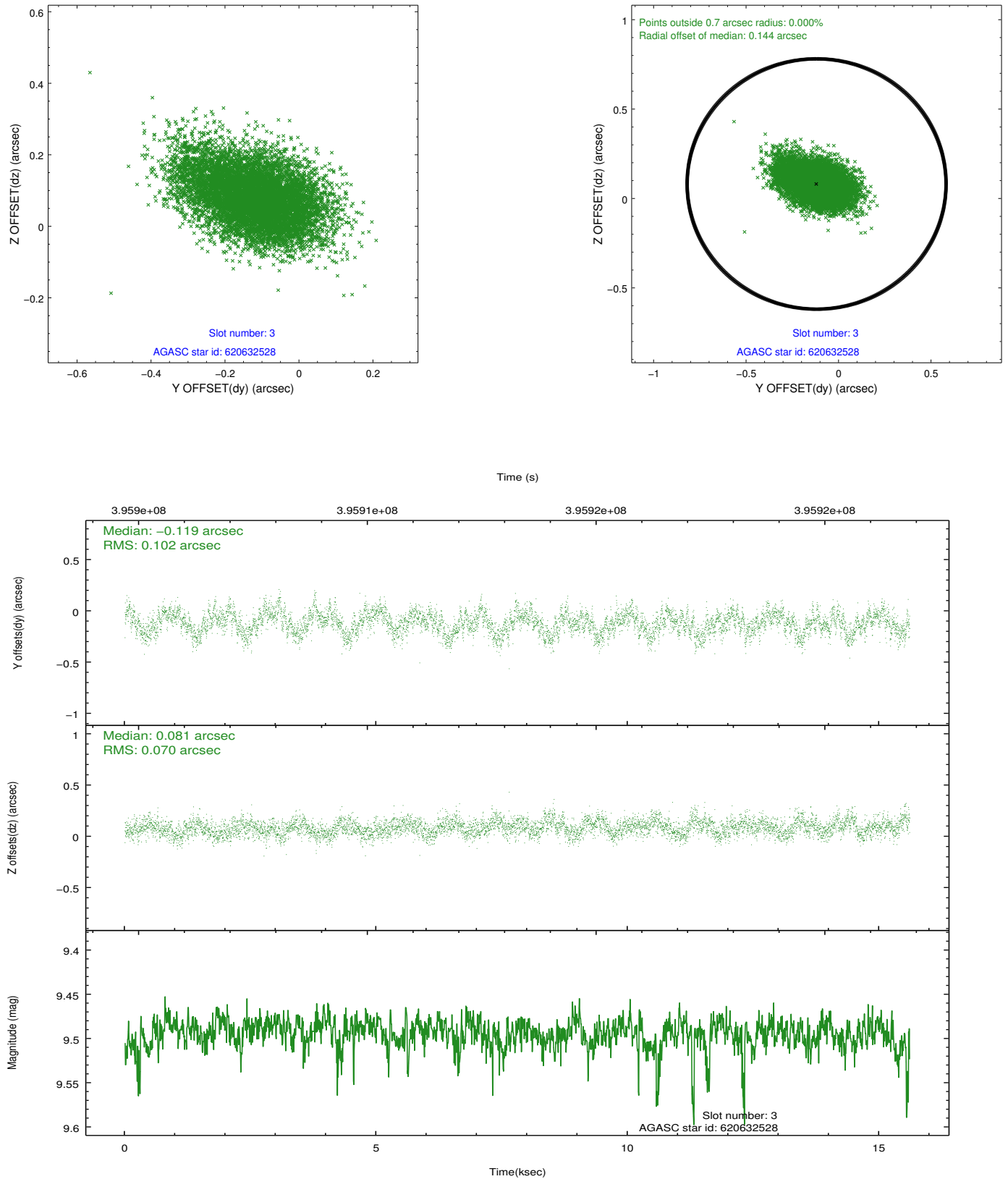


### Slot Statistics

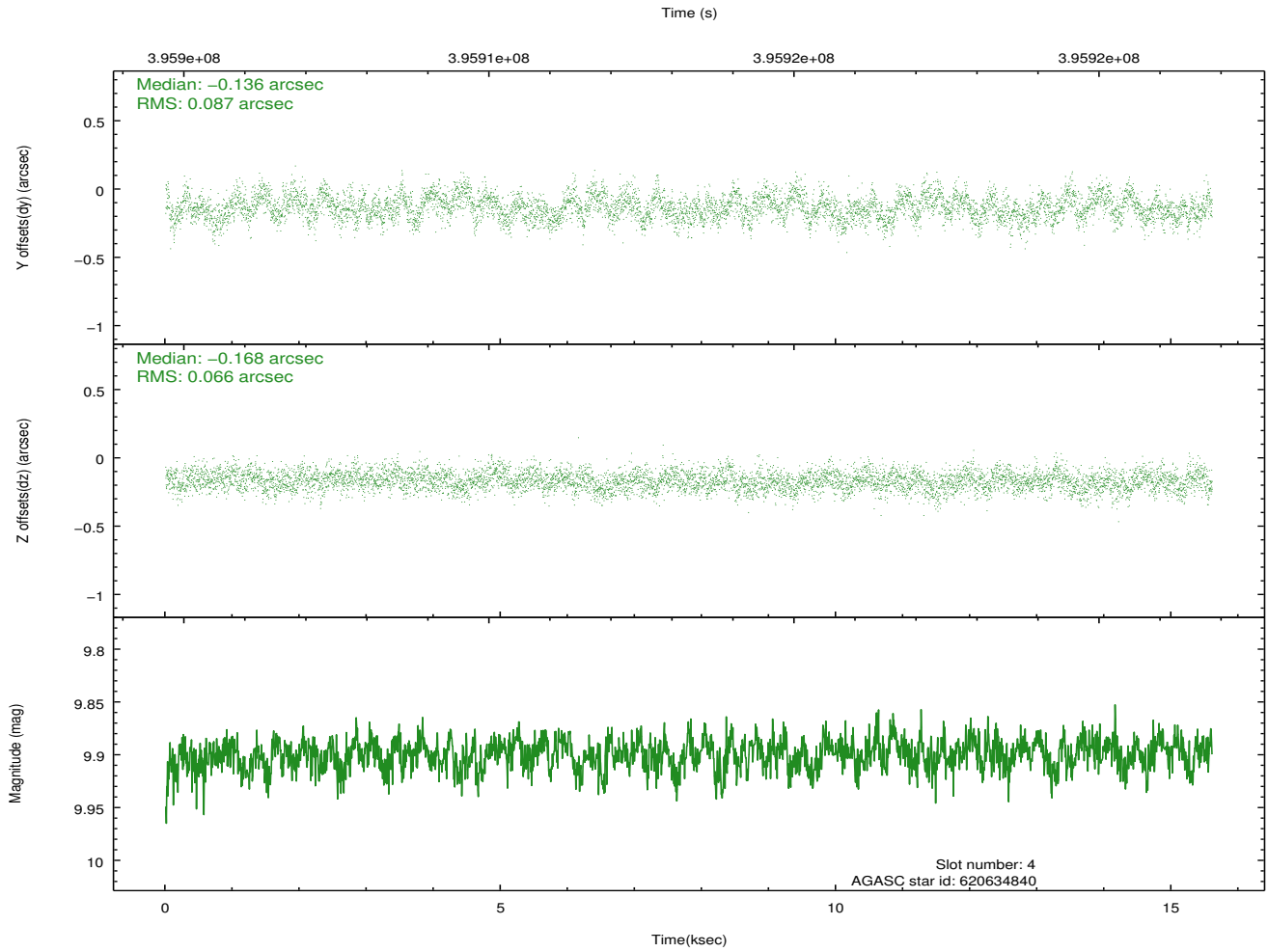
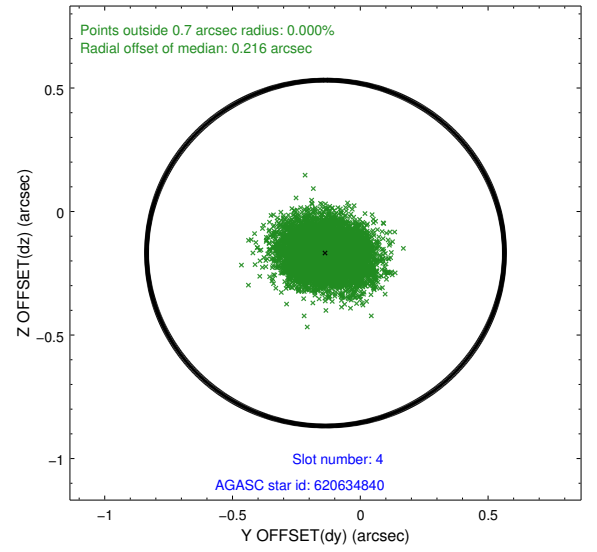
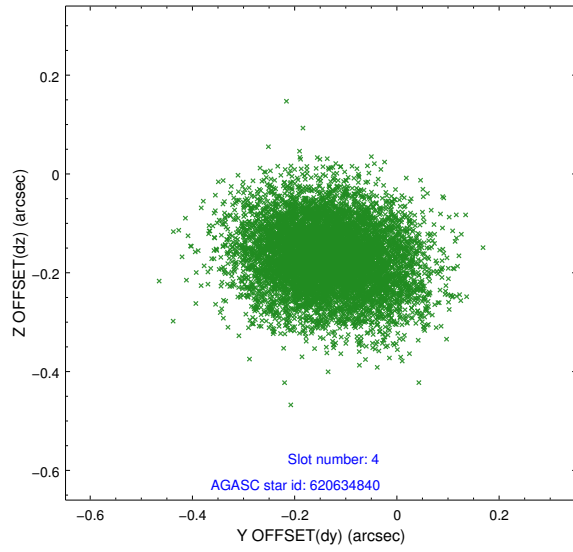
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.89	3806	-0.067	-0.032	0.012	0.020	0.000000	0.000000	-768.14	-1738.49
1	FID	ACIS-S-4	6.96	3803	0.171	0.041	0.014	0.021	0.000000	0.000000	2145.28	169.70
2	FID	ACIS-S-5	7.00	3804	-0.134	-0.000	0.016	0.028	0.000000	0.000000	-1820.65	163.75
3	GUIDE	620632528	9.49	7591	-0.119	0.081	0.129	0.220	70.573597	-1.016236	2284.82	-1860.90
4	GUIDE	620634840	9.90	7597	-0.136	-0.168	0.116	0.190	70.068280	-1.456025	1759.74	492.12
5	GUIDE	620636208	9.20	7601	0.040	0.117	0.125	0.189	70.536222	-1.664967	295.96	-629.54
6	GUIDE	621154624	8.97	7602	0.039	-0.059	0.089	0.142	70.402746	-2.451192	-1963.57	1141.20
7	GUIDE	621157448	9.57	7605	0.179	0.031	0.129	0.199	70.924996	-2.116740	-1800.69	-1083.93

## 2.4 Star Slots

### 2.4.1 Slot 3

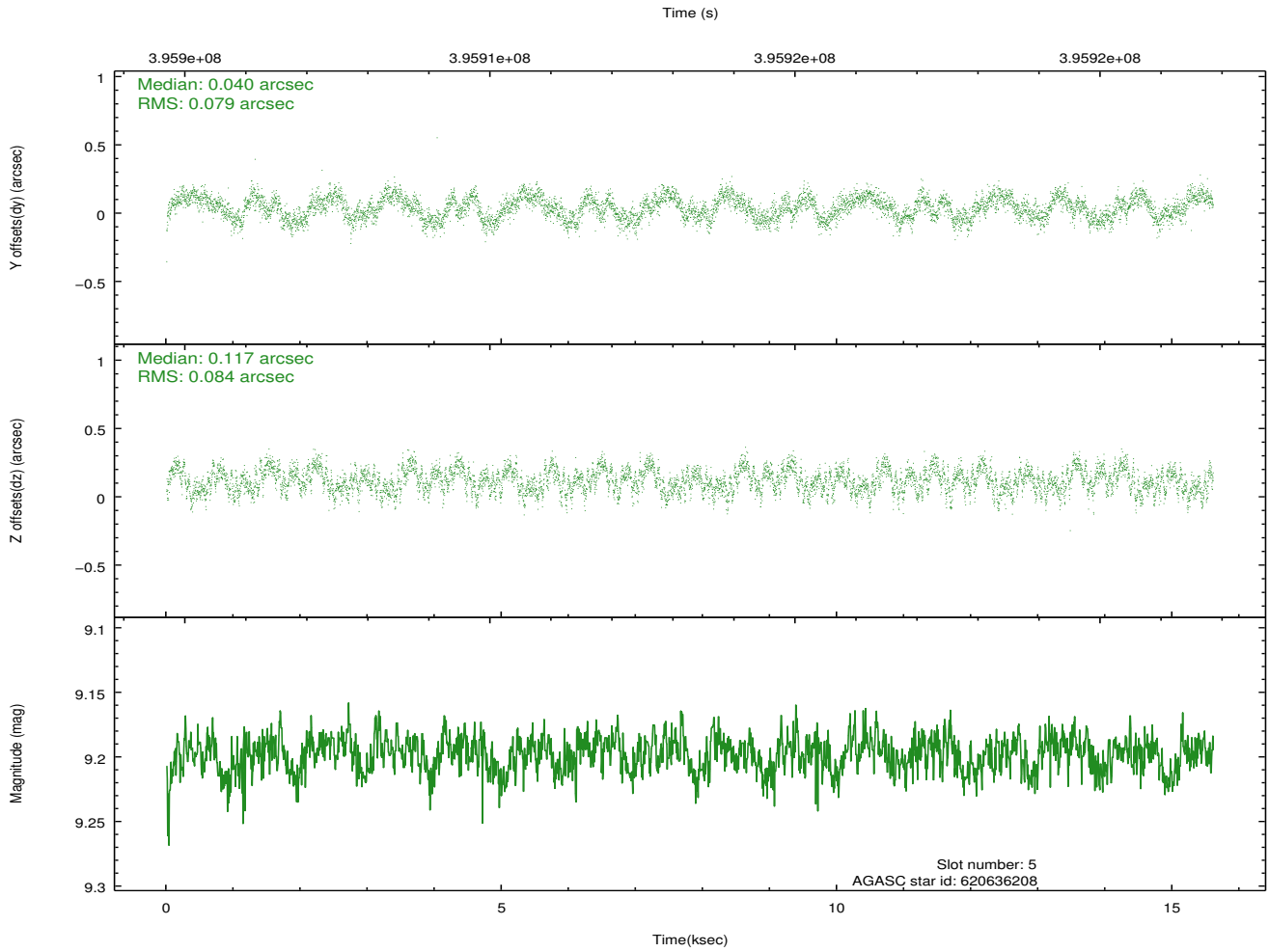
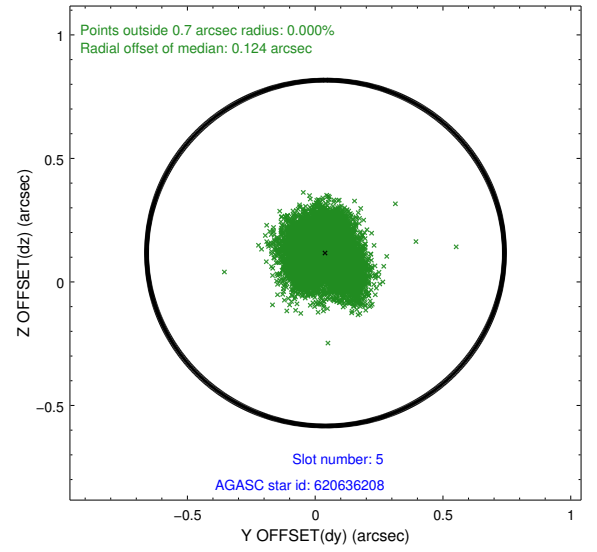
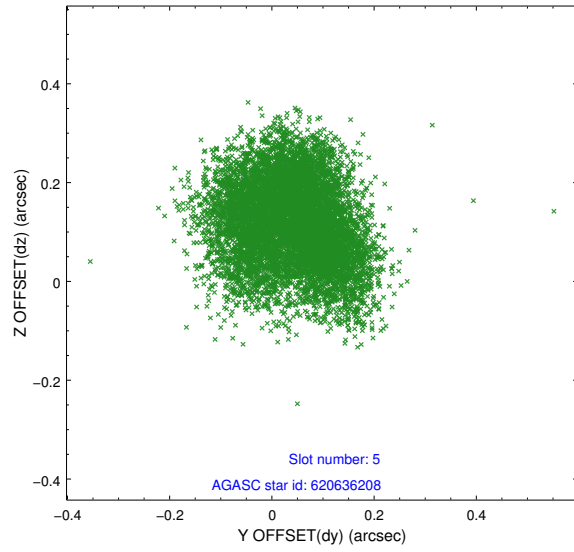


## 2.4.2 Slot 4

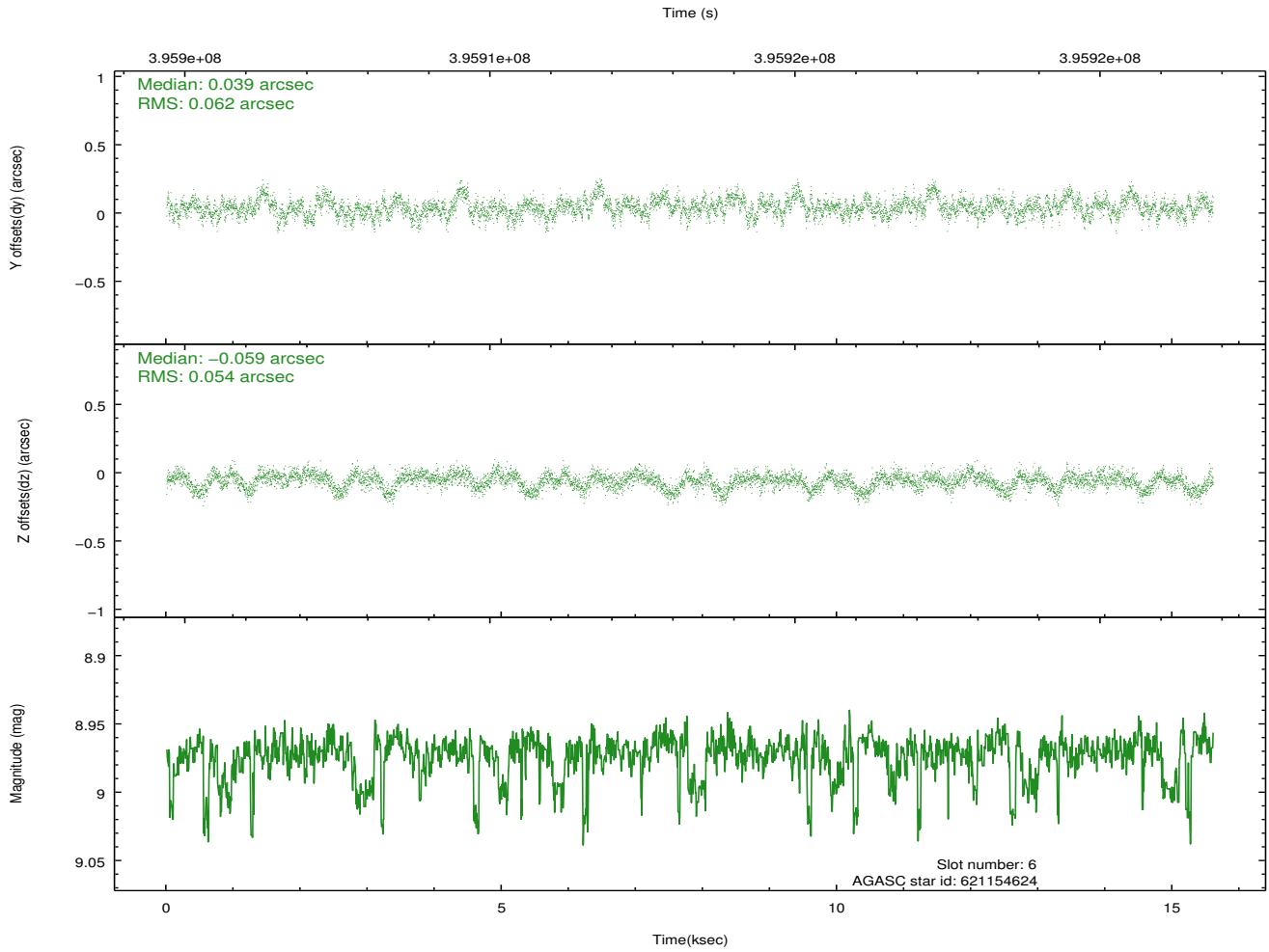
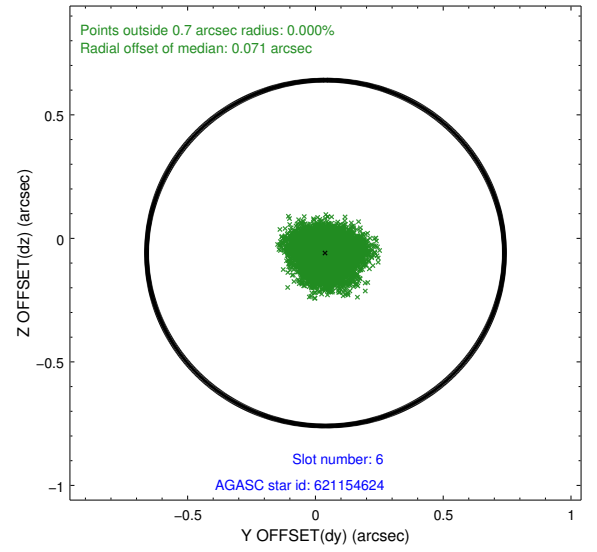
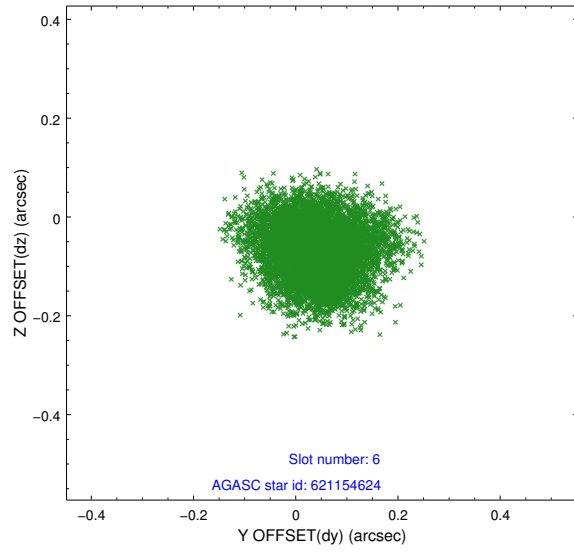




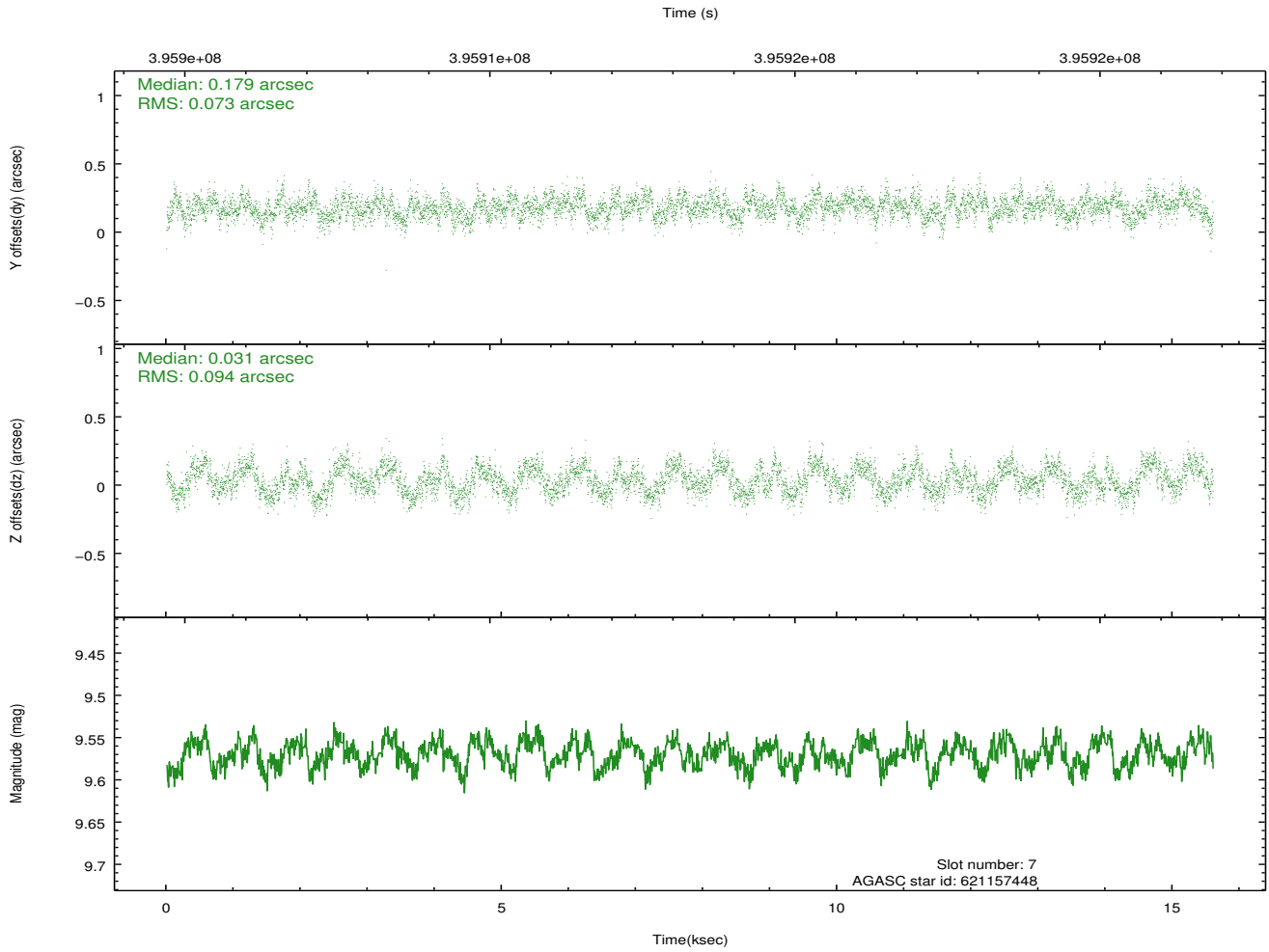
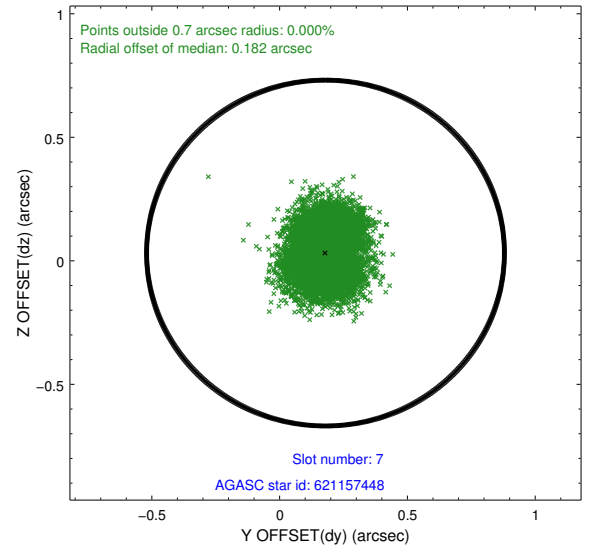
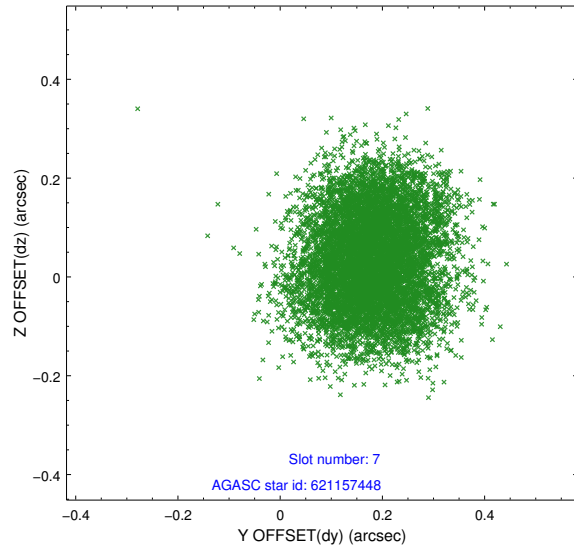
### 2.4.3 Slot 5



## 2.4.4 Slot 6

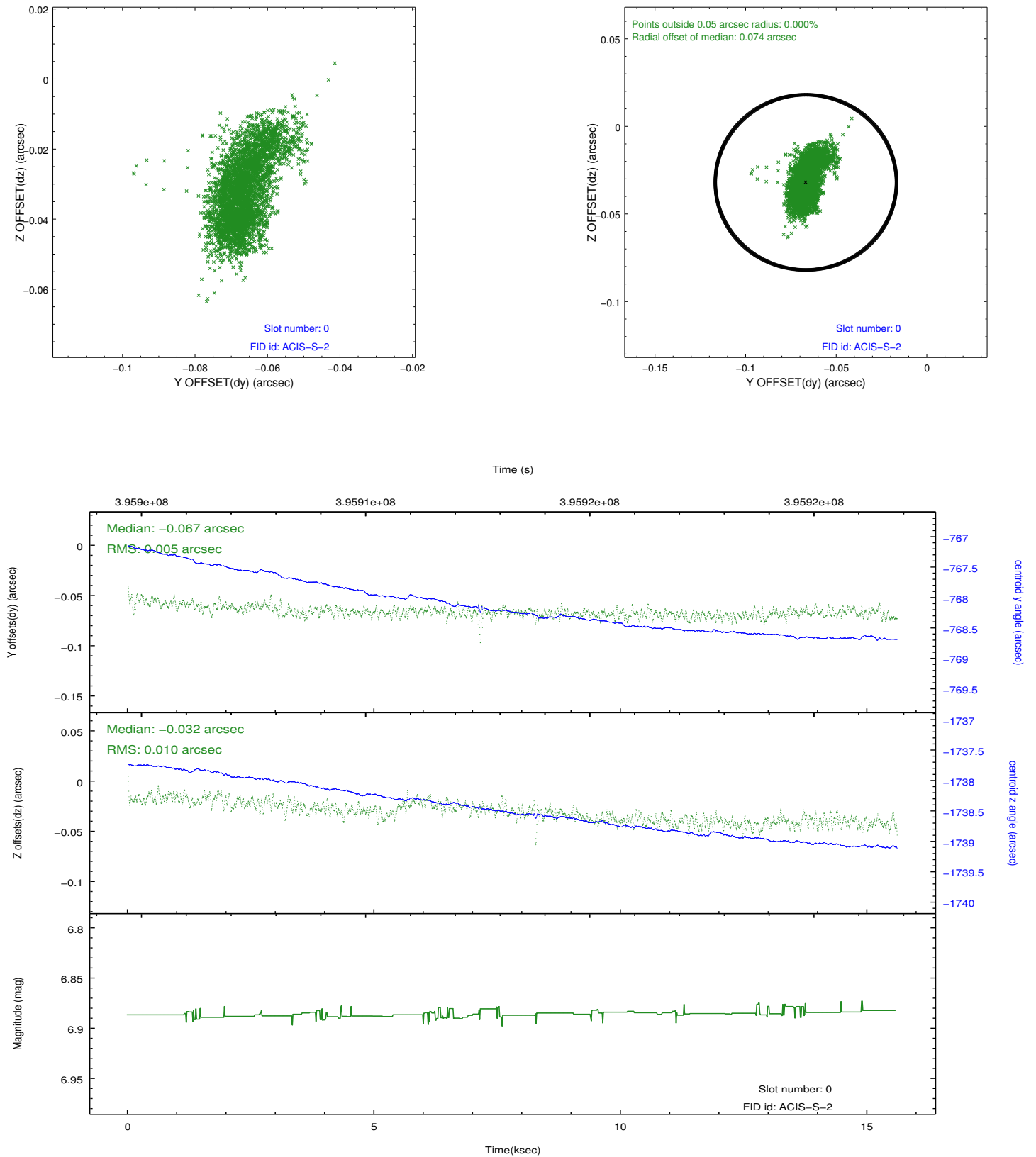


## 2.4.5 Slot 7

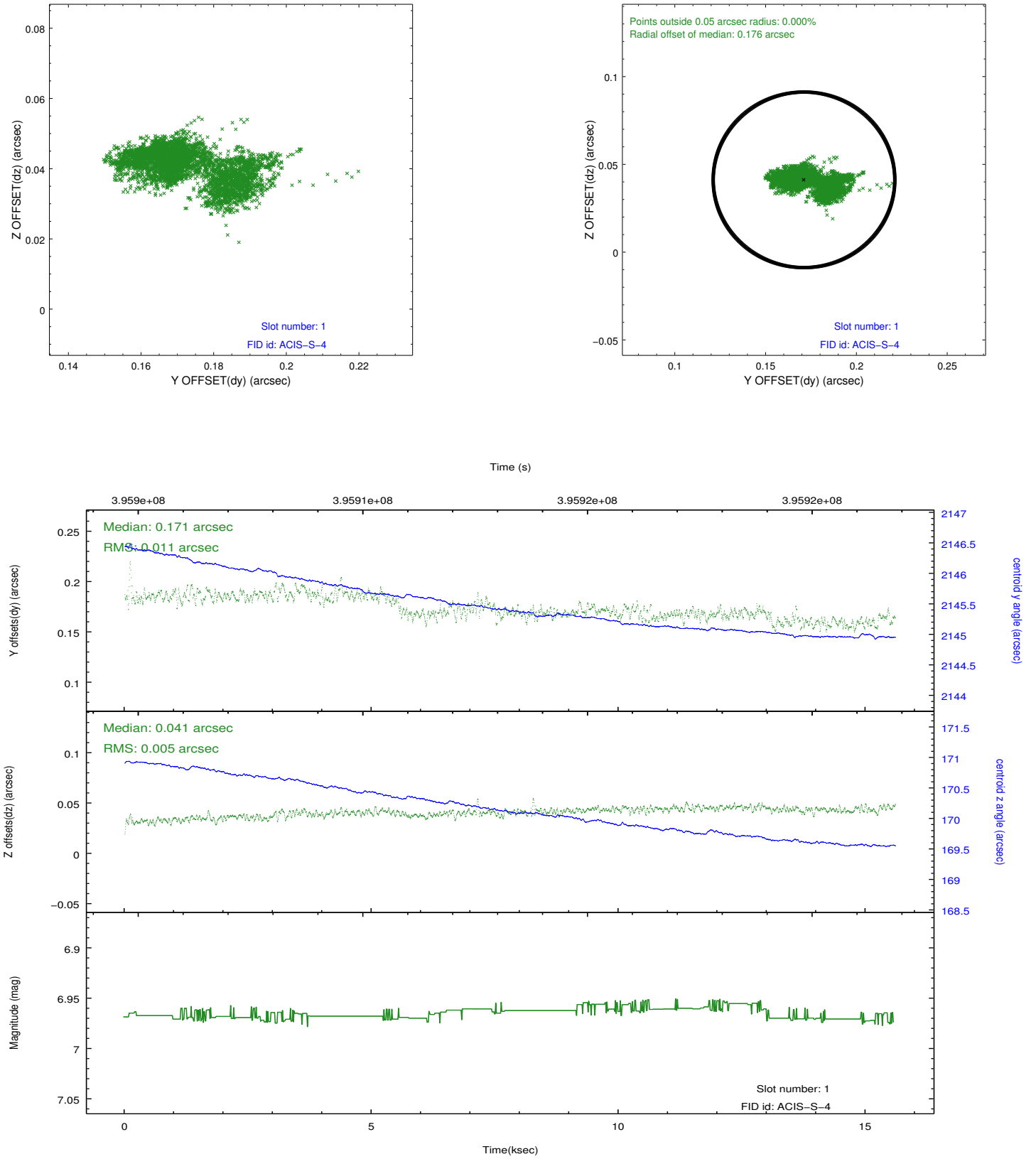


## 2.5 FID Slots

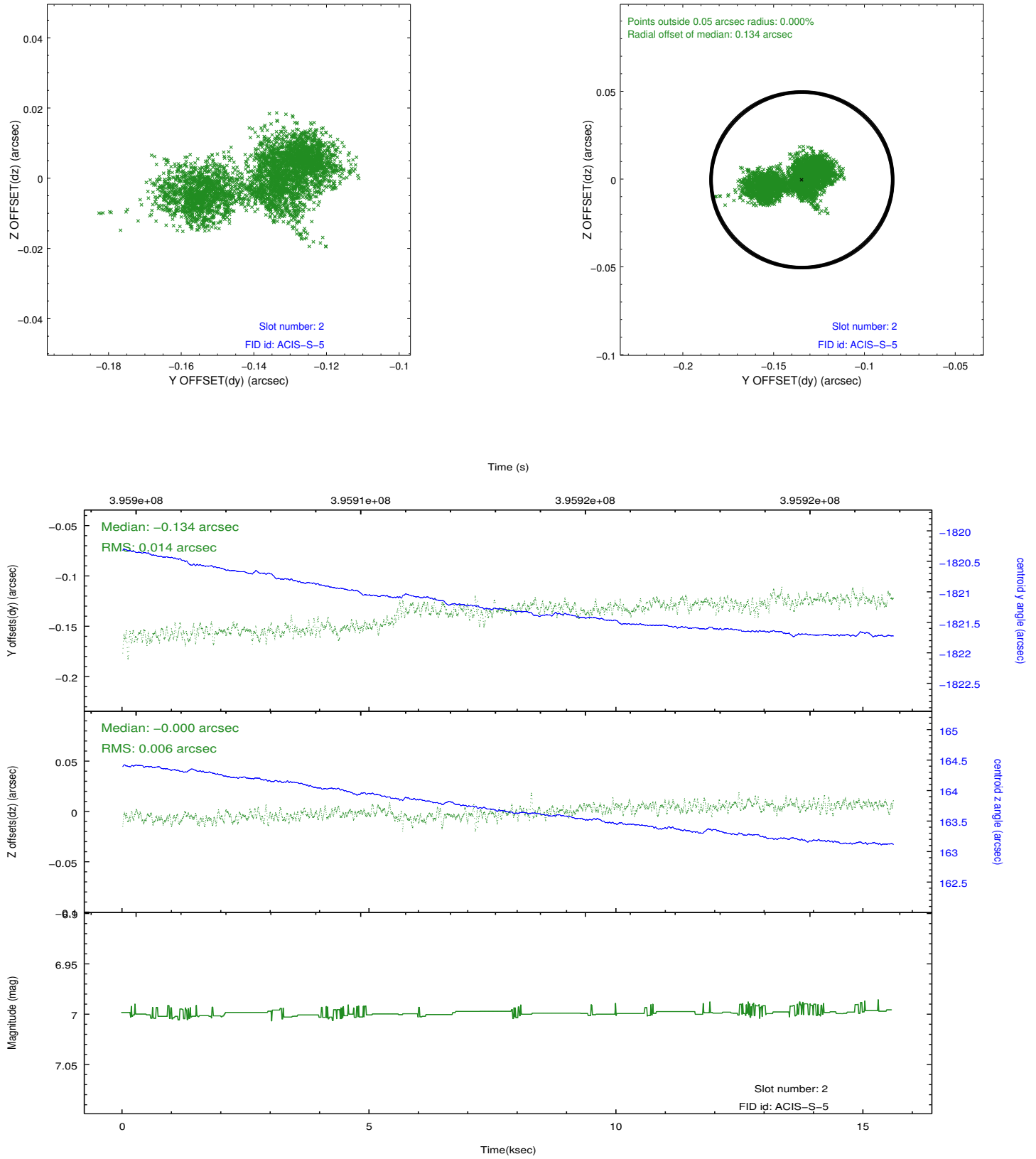
### 2.5.1 Slot 0



## 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)	2012.07.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	15.046399944007

### **A.2 Comments**