

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 10570 - L2 Version 2  
Chandra X-Ray Center

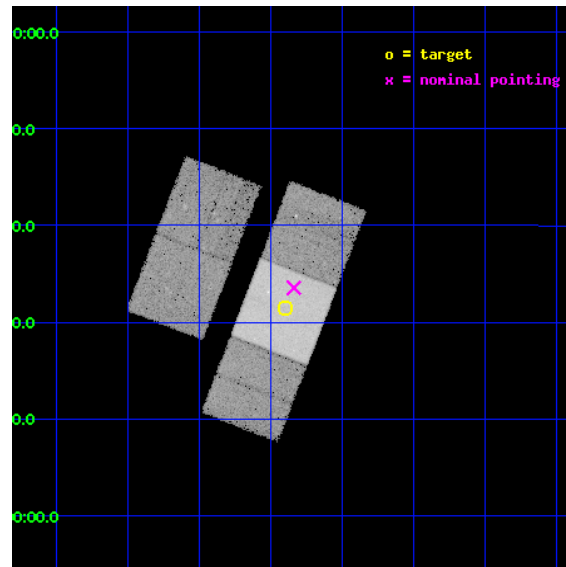
L2 Processing Date : Jun 11 2012

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# 1 Front

seq_num	600763	Sequence number
obs_id	10570	Observation id
title	The Most Luminous ULXs	Proposal title
observer	Douglas Swartz	Principal investigator
object	Arp 295	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	355.475417	Observer's specified target RA [deg]
dec_targ	-3.641389	Observer's specified target Dec [deg]
ra_nom	355.45954523332	Nominal RA [deg]
dec_nom	-3.6073343180993	Nominal Dec [deg]
roll_nom	111.19071676871	Nominal Roll [deg]
revision	2	Processing version of data
ontime	19151.800147295	Sum of GTIs [s]
livetime	18901.56777902	Livetime [s]
ontime2	19148.659147024	Sum of GTIs [s]
ontime3	19151.800147295	Sum of GTIs [s]
ontime6	19151.800147295	Sum of GTIs [s]
ontime7	19151.800147295	Sum of GTIs [s]
ontime8	19151.800147295	Sum of GTIs [s]
l2events	204583	Number of level 2 events

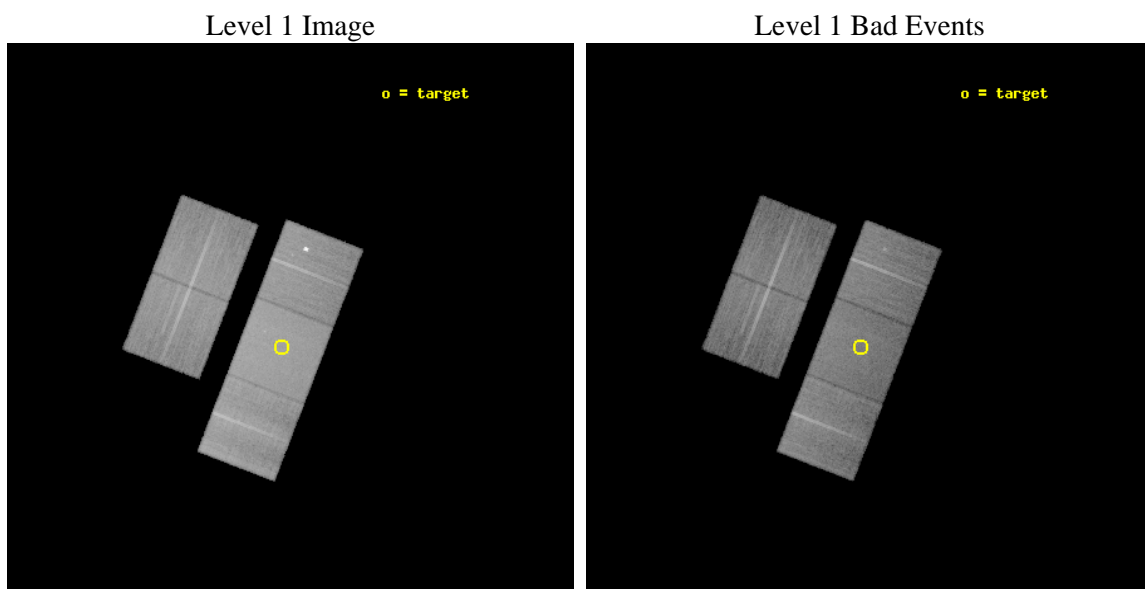




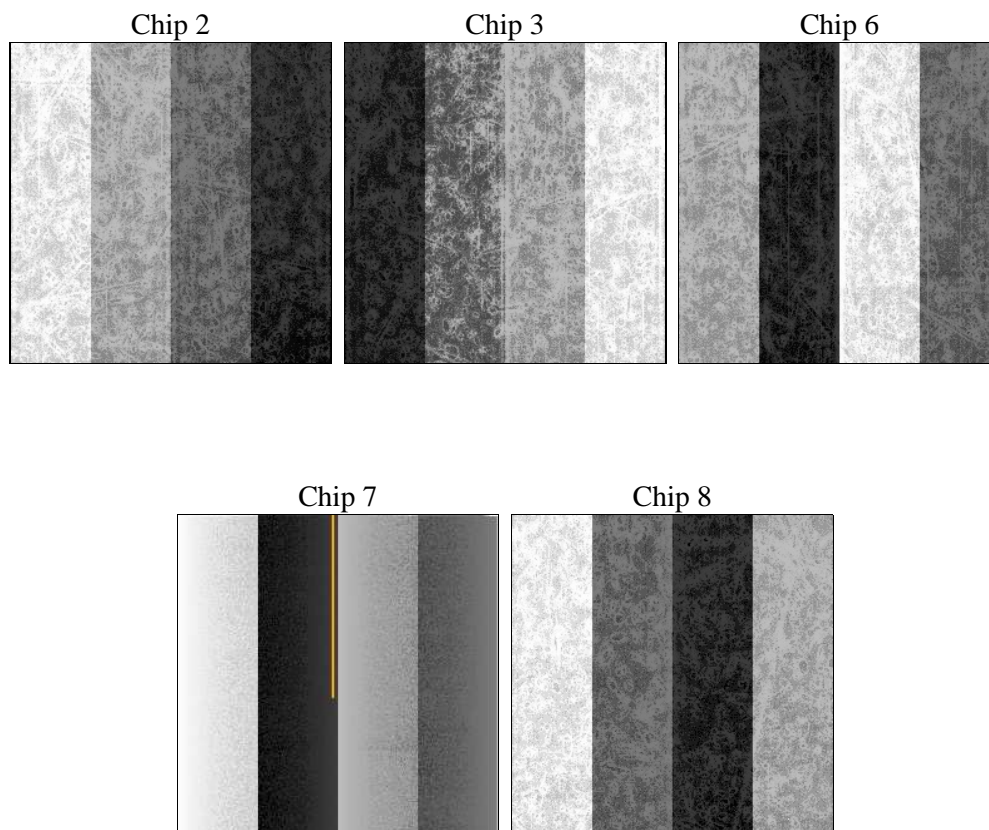
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	19000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	19151.800147295	Sum of GTIs [s]
caldbver	4.4.10	&#160	ontime2	19148.659147024	Sum of GTIs [s]
date	2012-06-11T15:41:40	Date and time of file creation	ontime3	19151.800147295	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	19151.800147295	Sum of GTIs [s]
			ontime7	19151.800147295	Sum of GTIs [s]
			ontime8	19151.800147295	Sum of GTIs [s]
			l1events	1189254	Number of level 1 events

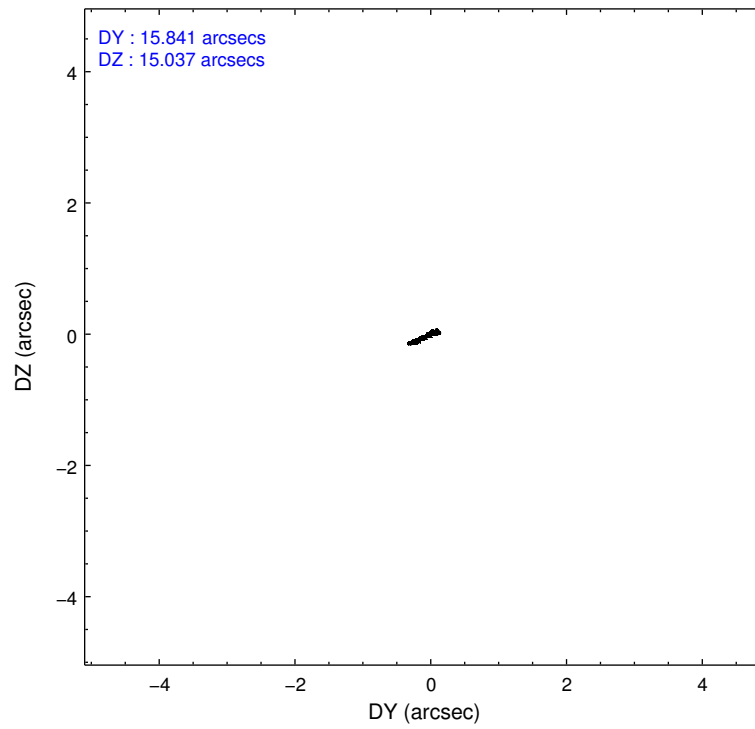
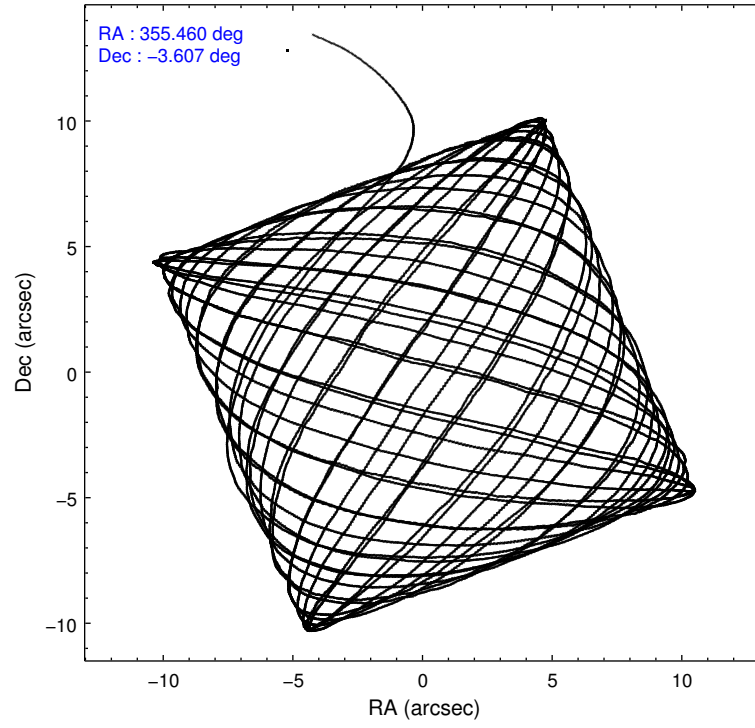
### 2.1.4 Events

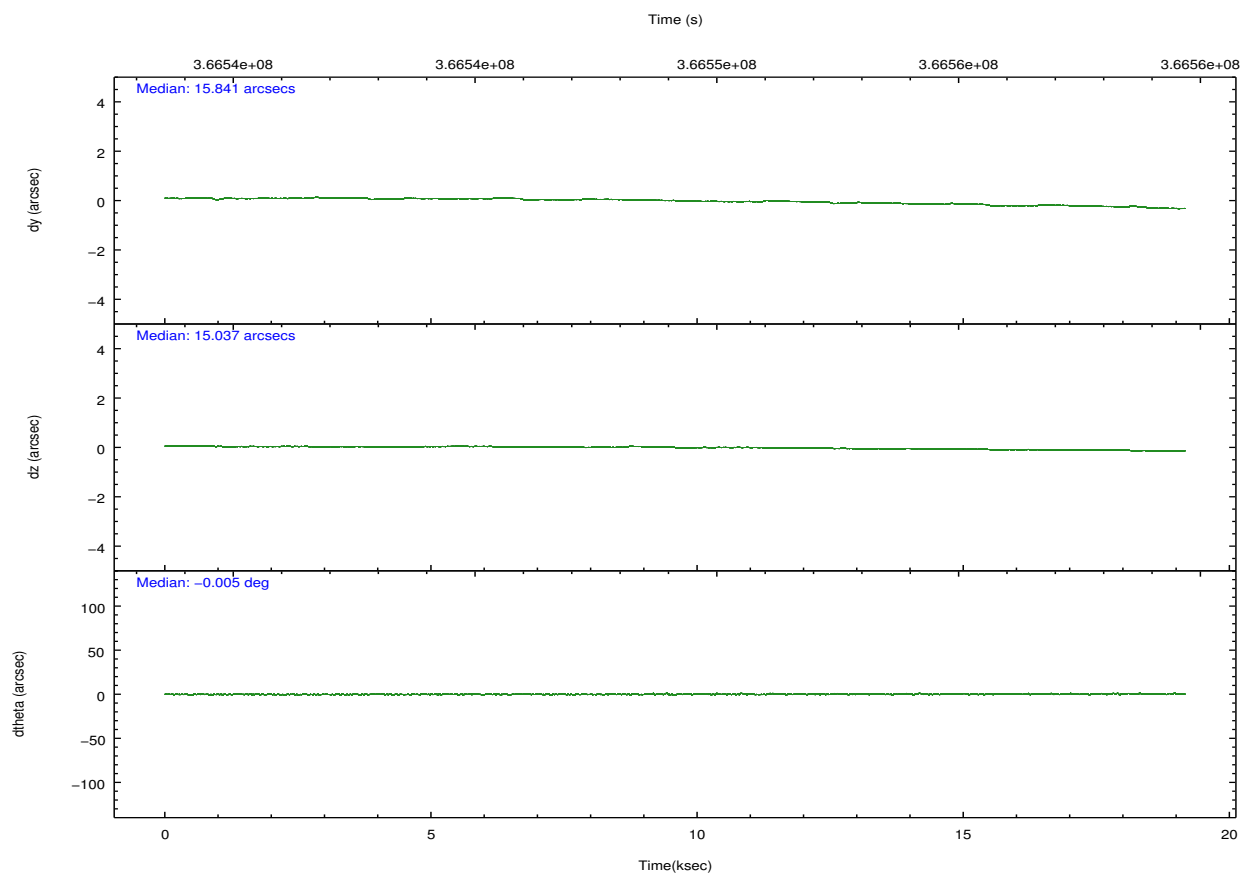
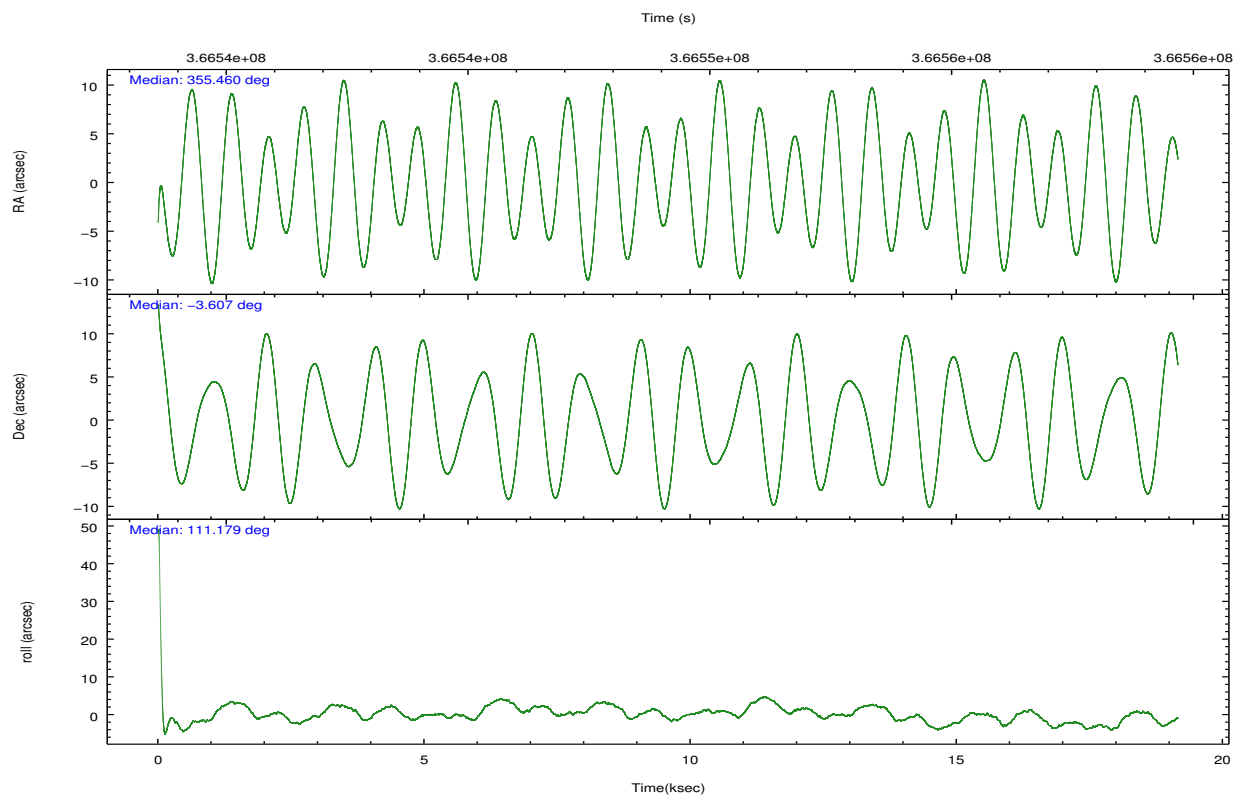
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	203537	203121	225279	291552	265765	grade 0 events	10266	10819	10057	10108	19472
rejected events	179675	178558	187880	172888	204690		5%	5%	4%	3%	7%
rejected %	88%	87%	83%	59%	77%	grade 1 events	120	155	120	330	182
							0%	0%	0%	0%	0%
						grade 2 events	5235	4967	17777	24721	14215
							2%	2%	7%	8%	5%
						grade 3 events	2261	2339	2390	9972	6547
							1%	1%	1%	3%	2%
						grade 4 events	2259	2304	2342	9784	5855
							1%	1%	1%	3%	2%
						grade 5 events	8250	9849	10356	27088	13433
							4%	4%	4%	9%	5%
						grade 6 events	4126	4421	5316	65502	15827
							2%	2%	2%	22%	5%
						grade 7 events	171020	168267	176921	144047	190234
							84%	82%	78%	49%	71%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23678	ACIS-23678	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	355.481139	355.4595452333192	CCD I2 on	O1	Y
[deg] Pointing Dec	-3.624199	-3.607334318099331	CCD I3 on	O2	Y
[deg] Pointing Roll	111.035404	111.1907167687147	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[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)	366539717.184000	366538607.4251	CCD S5 on	N	N
Observation start date	2009-08-13T08:34:11	2009-08-13T08:16:47	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	366558717.184000	366558998.77612	On-chip summing requested	N	N
Observation end date	2009-08-13T13:50:51	2009-08-13T13:56:38	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



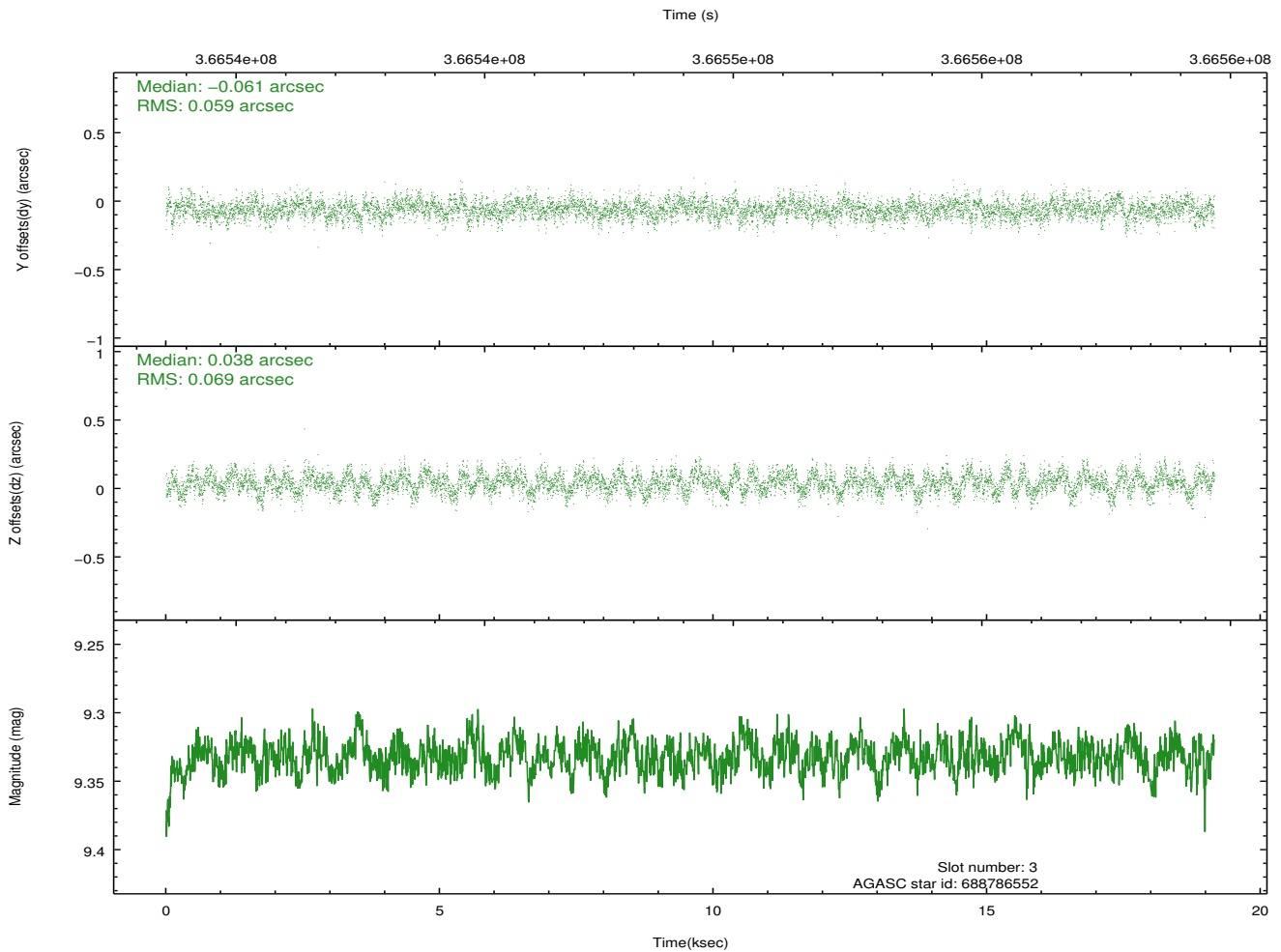
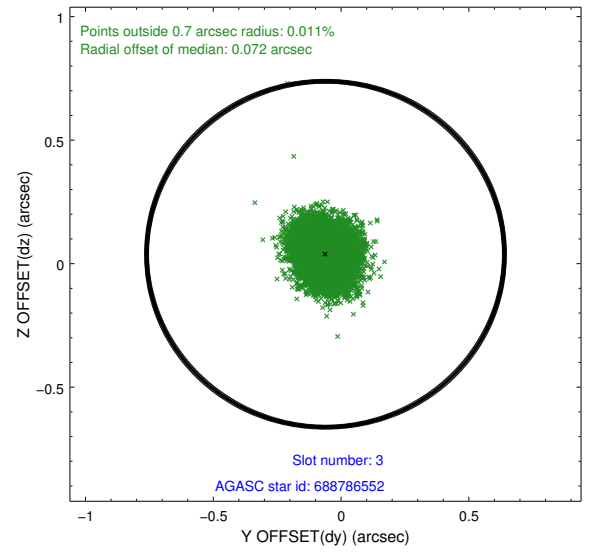
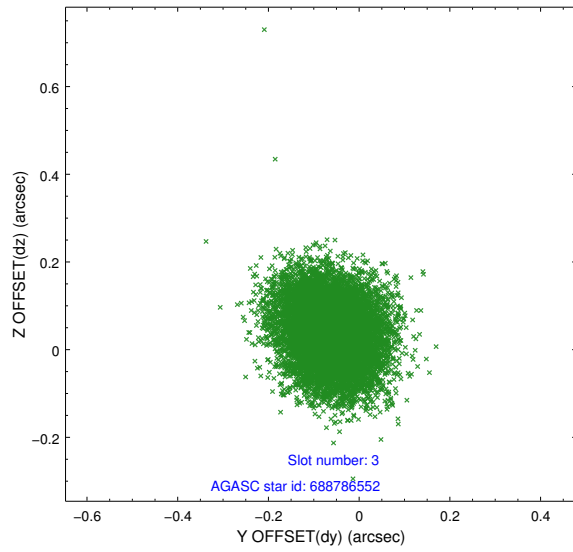


### Slot Statistics

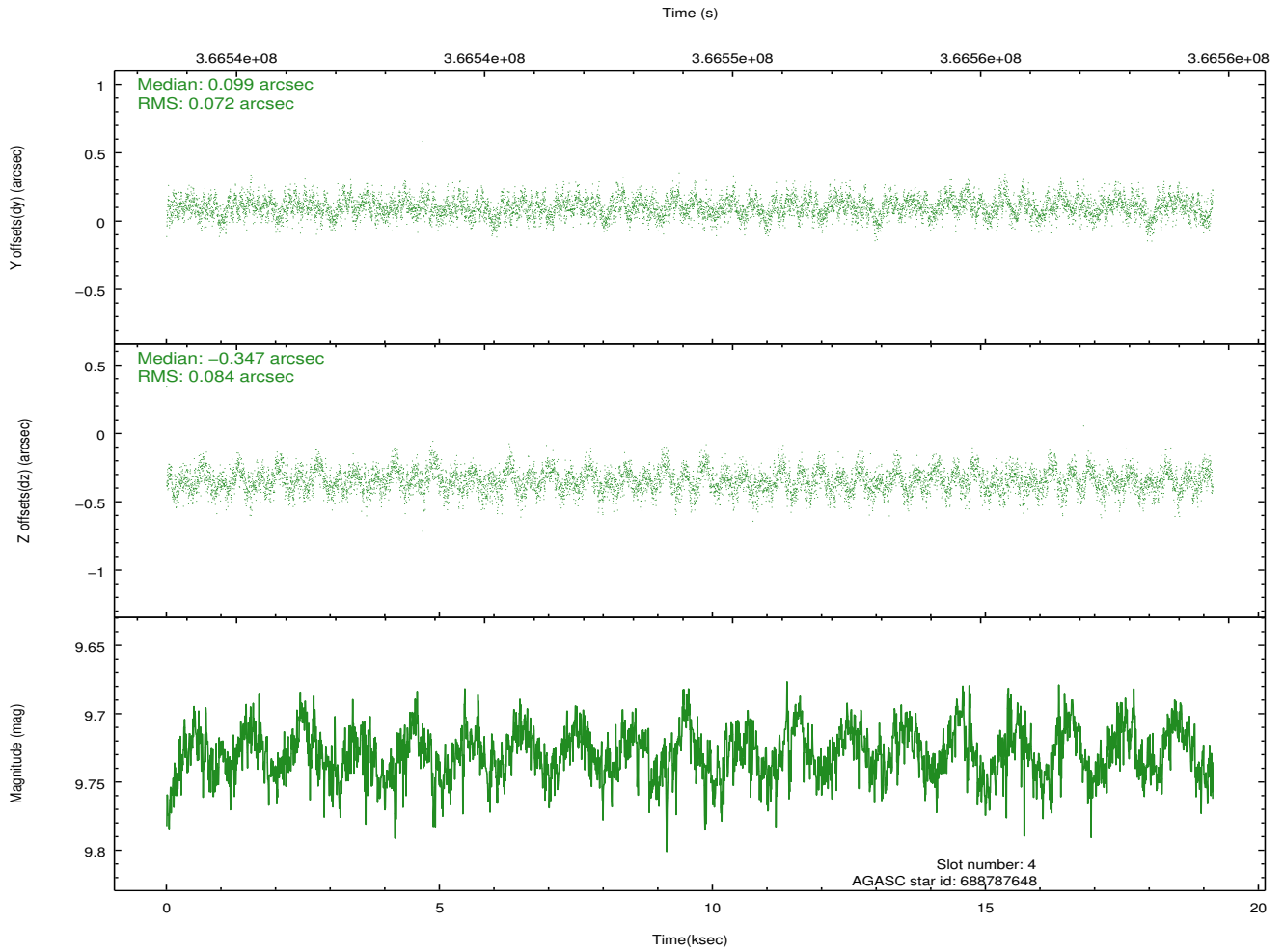
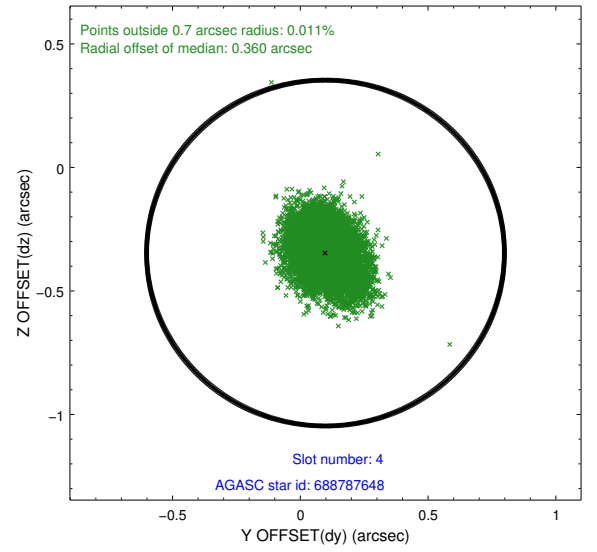
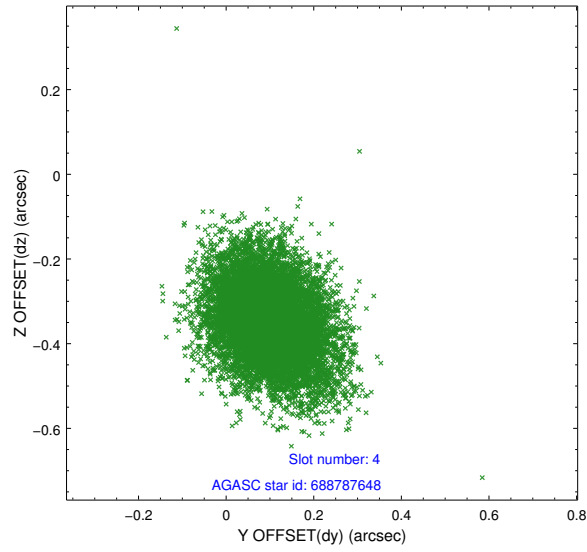
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.95	4673	-0.102	-0.026	0.006	0.011	0.000000	0.000000	-768.88	-1736.38
1	FID	ACIS-S-4	7.04	4673	0.195	0.056	0.006	0.011	0.000000	0.000000	2144.58	172.00
2	FID	ACIS-S-5	7.07	4673	-0.124	-0.022	0.007	0.012	0.000000	0.000000	-1821.50	165.79
3	GUIDE	688786552	9.33	9336	-0.061	0.038	0.096	0.155	355.651452	-3.141462	1402.60	-1194.49
4	GUIDE	688787648	9.73	9337	0.099	-0.347	0.117	0.192	355.015119	-4.141208	-1137.20	2229.86
5	GUIDE	688790344	9.50	9334	0.112	0.107	0.120	0.190	355.766444	-3.572897	-195.67	-1022.27
6	GUIDE	688791312	8.91	9333	-0.168	0.110	0.081	0.132	355.901021	-3.313101	503.24	-1810.54
7	GUIDE	688785824	9.14	9342	0.016	0.096	0.071	0.115	355.555201	-3.603833	-26.74	-274.57

## 2.4 Star Slots

### 2.4.1 Slot 3

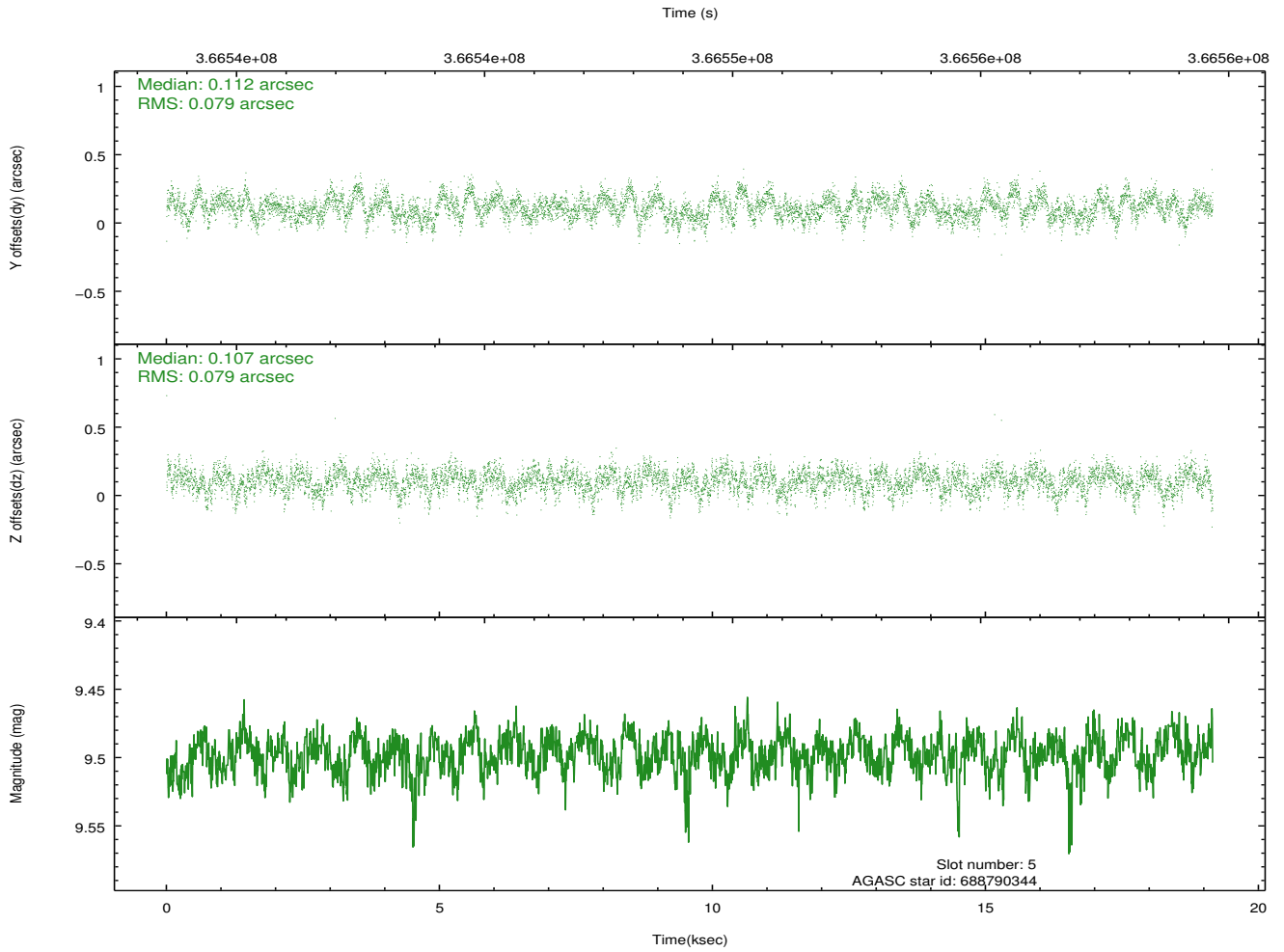
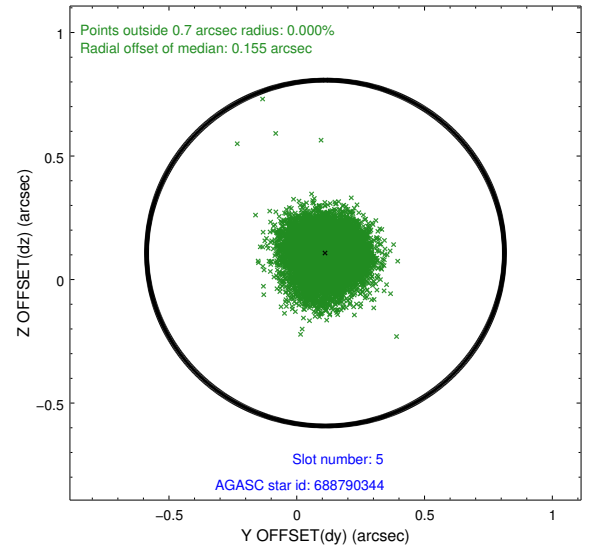
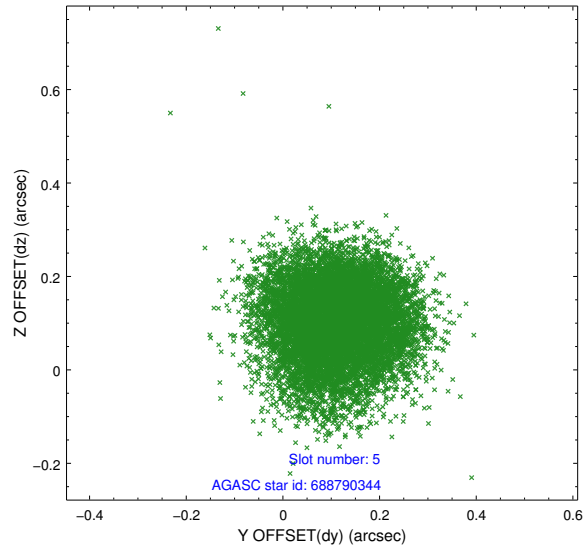


## 2.4.2 Slot 4

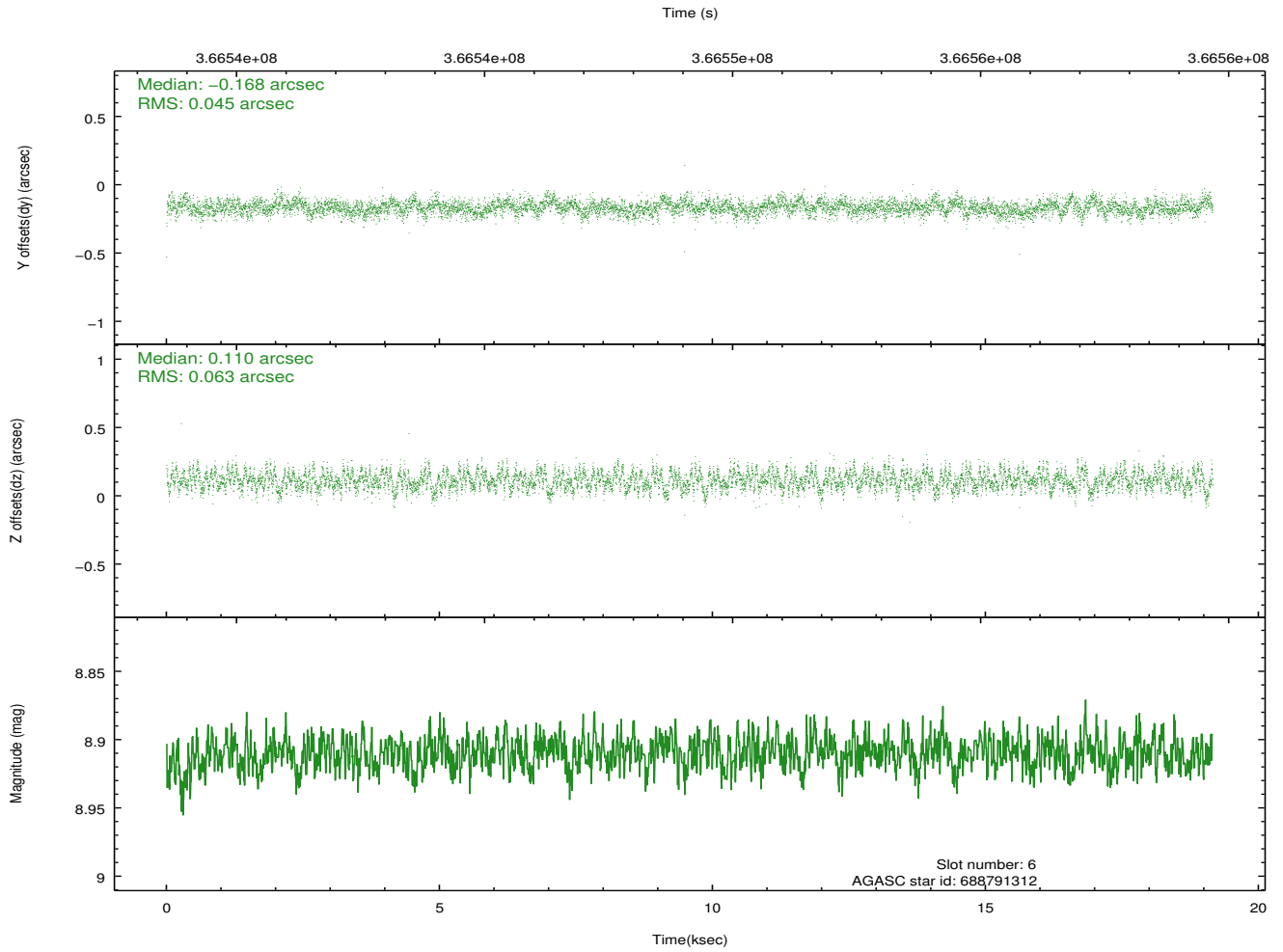
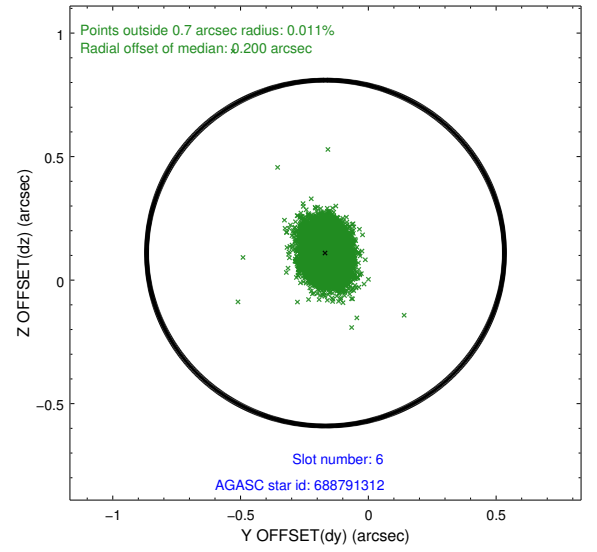
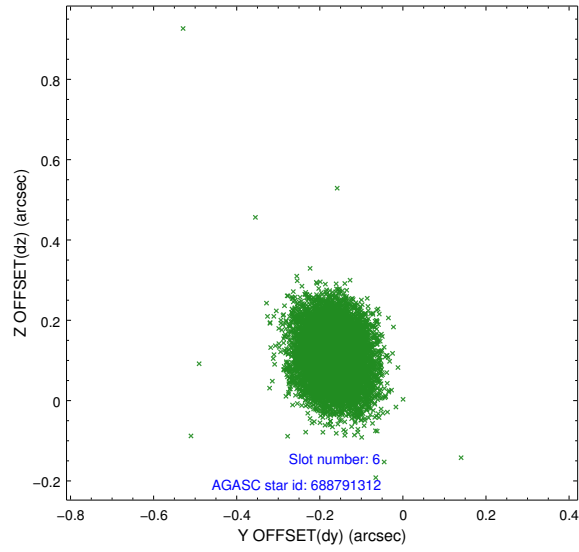




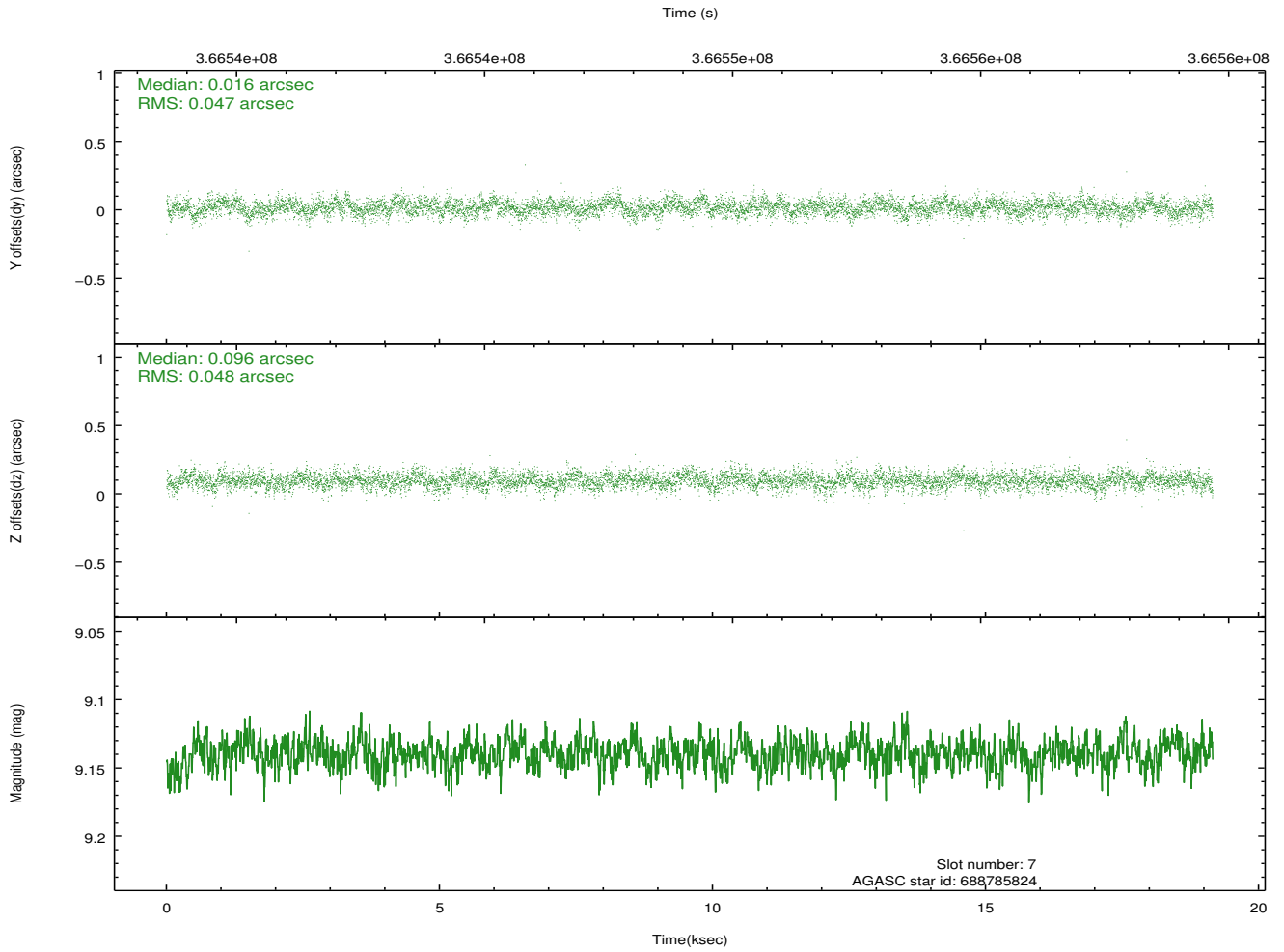
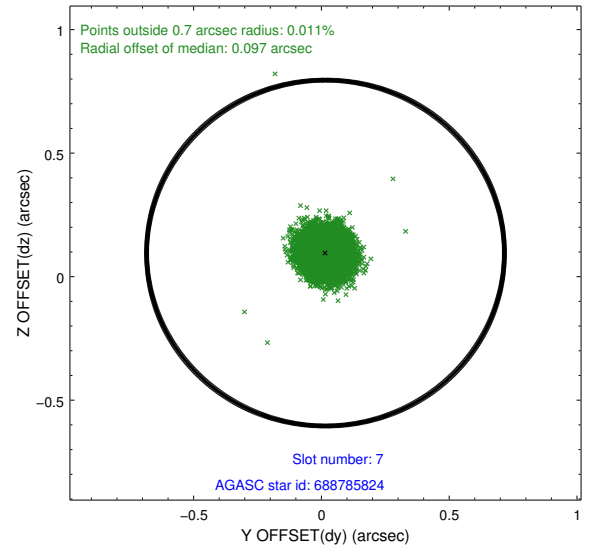
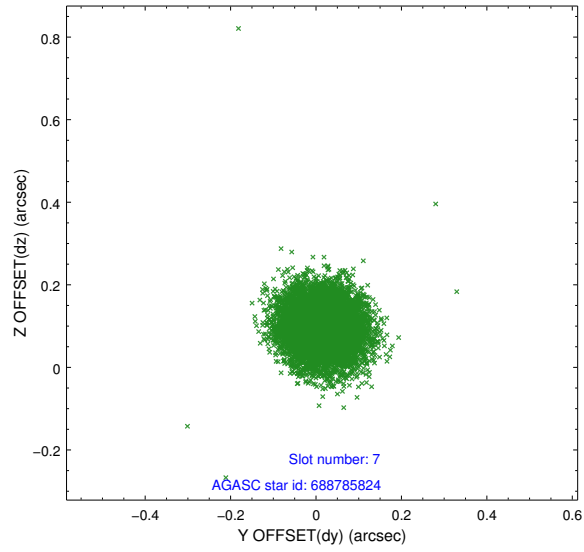
### 2.4.3 Slot 5



## 2.4.4 Slot 6

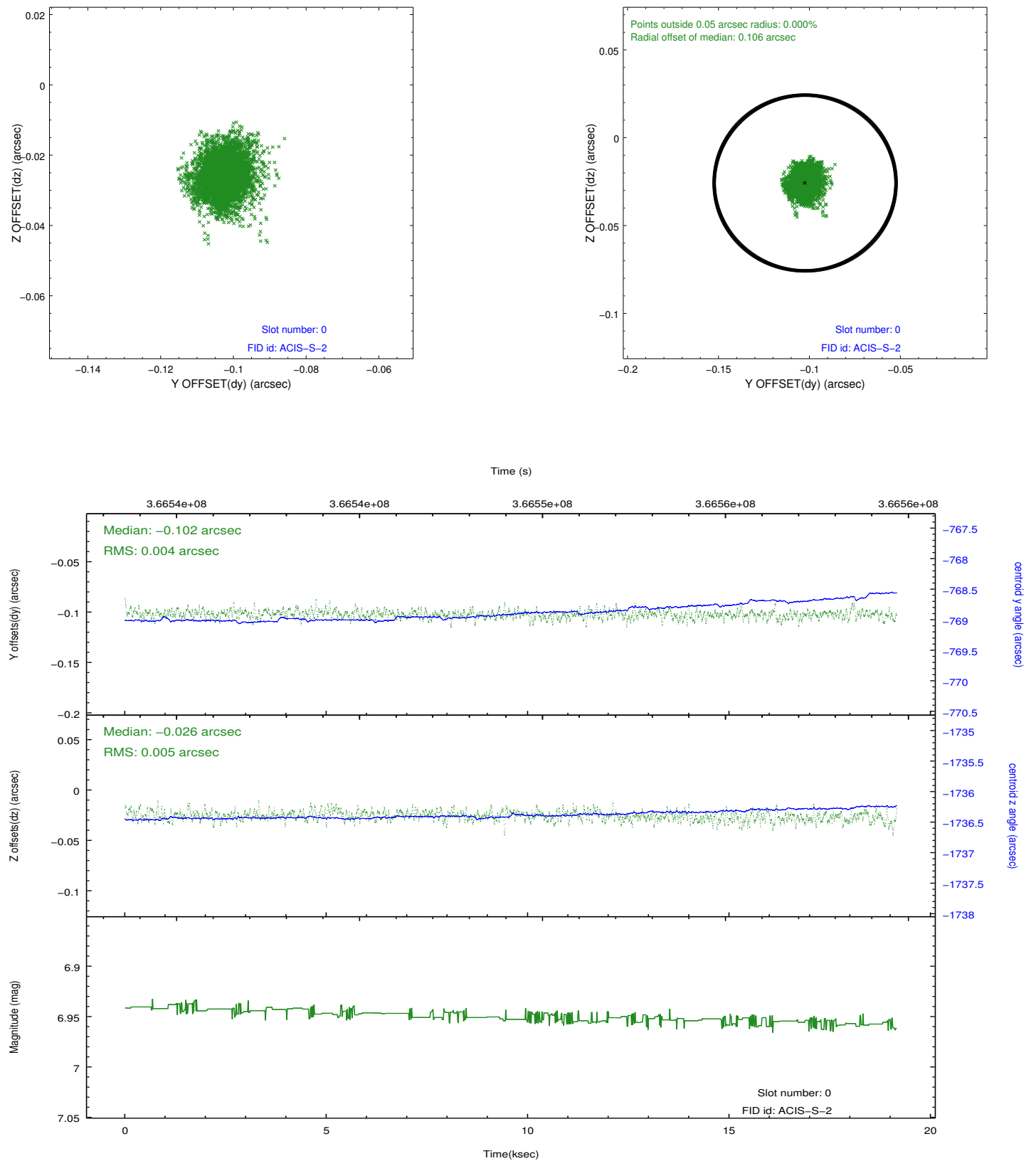


## 2.4.5 Slot 7

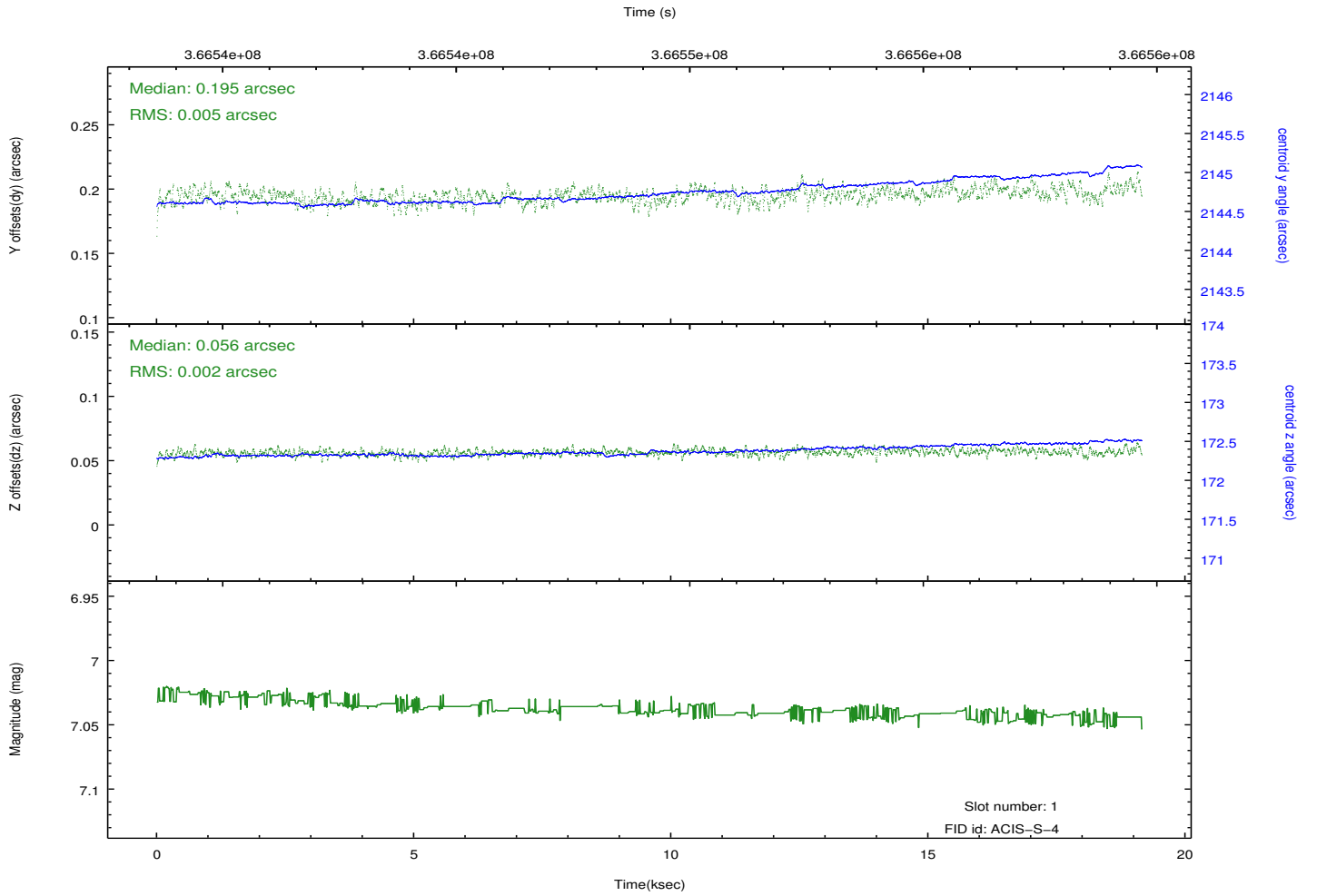
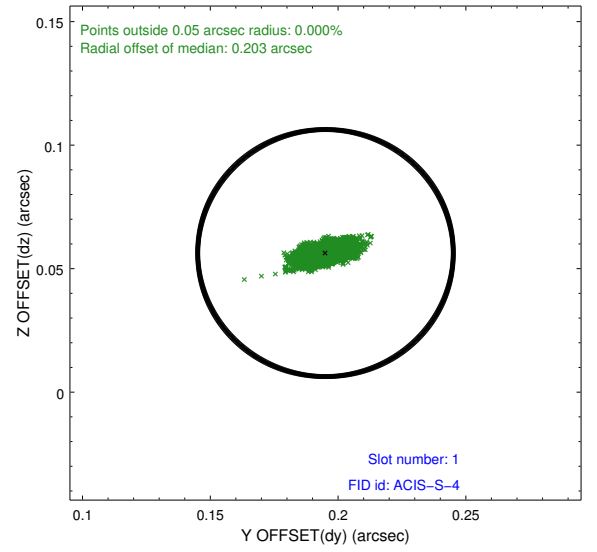
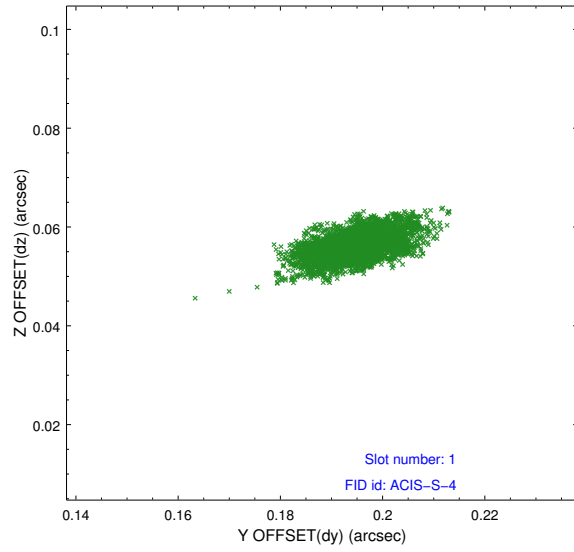


## 2.5 FID Slots

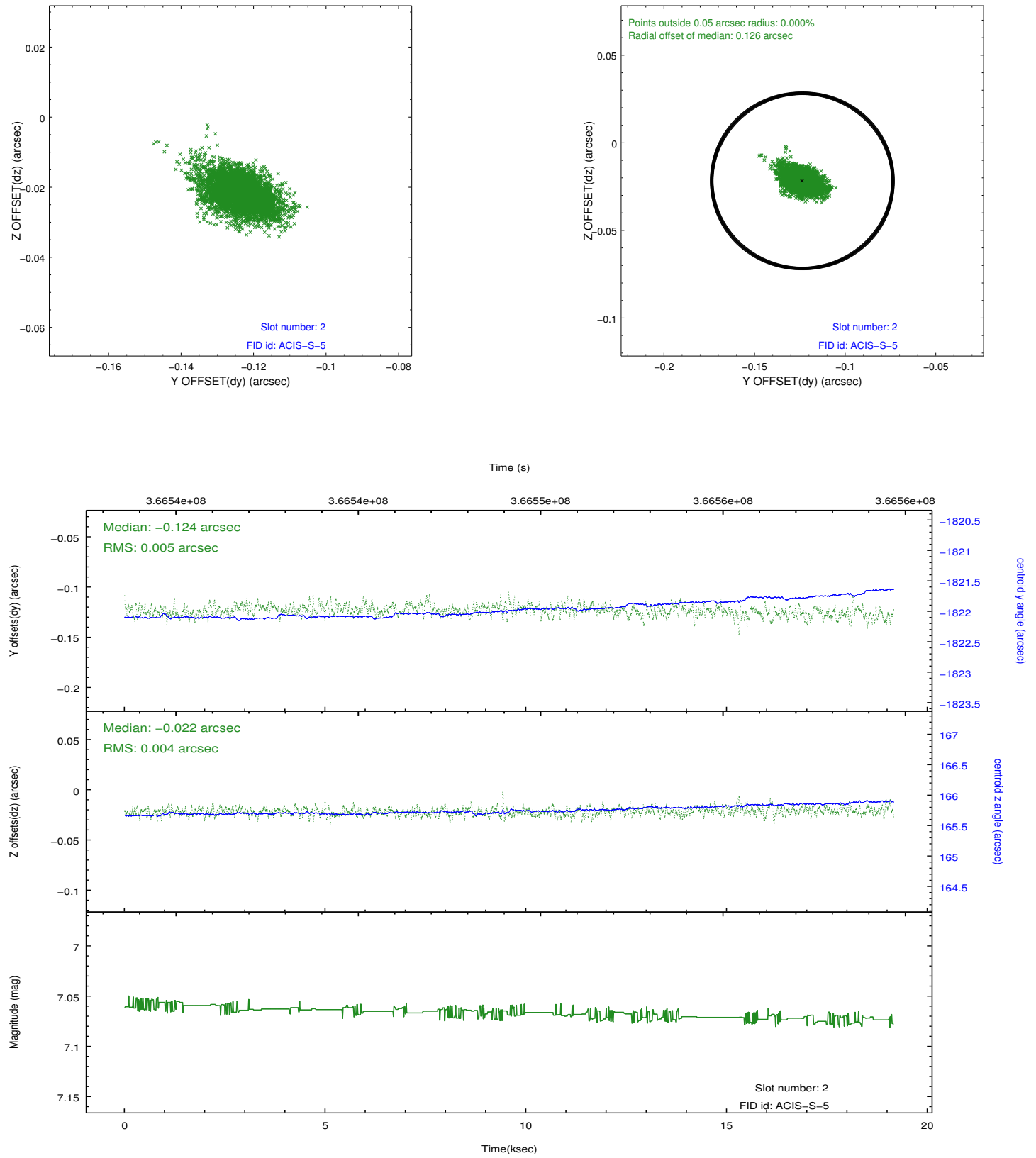
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2012.06.14
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	19.151800147295

### A.2 Comments