

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 2950 - L2 Version 3  
Chandra X-Ray Center

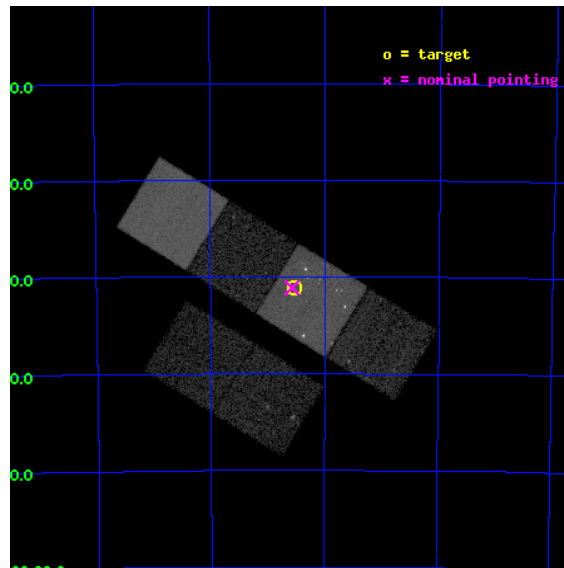
L2 Processing Date : Oct 15 2012

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# 1 Front

seq_num	600287	Sequence number
obs_id	2950	Observation id
title	AN X-RAY STUDY OF NGC 1313	Proposal title
observer	Dr. Stephen Murray	Principal investigator
object	NGC 1313	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	49.633333	Observer's specified target RA [deg]
dec_targ	-66.519444	Observer's specified target Dec [deg]
ra_nom	49.644109198564	Nominal RA [deg]
dec_nom	-66.518760212256	Nominal Dec [deg]
roll_nom	31.574032559499	Nominal Roll [deg]
revision	3	Processing version of data
ontime	20156.79992491	Sum of GTIs [s]
livetime	19901.562387293	Livetime [s]
ontime2	20153.558954656	Sum of GTIs [s]
ontime3	20156.79992491	Sum of GTIs [s]
ontime5	20156.79992491	Sum of GTIs [s]
ontime6	20156.79992491	Sum of GTIs [s]
ontime7	20156.79992491	Sum of GTIs [s]
ontime8	20156.79992491	Sum of GTIs [s]
l2events	180320	Number of level 2 events

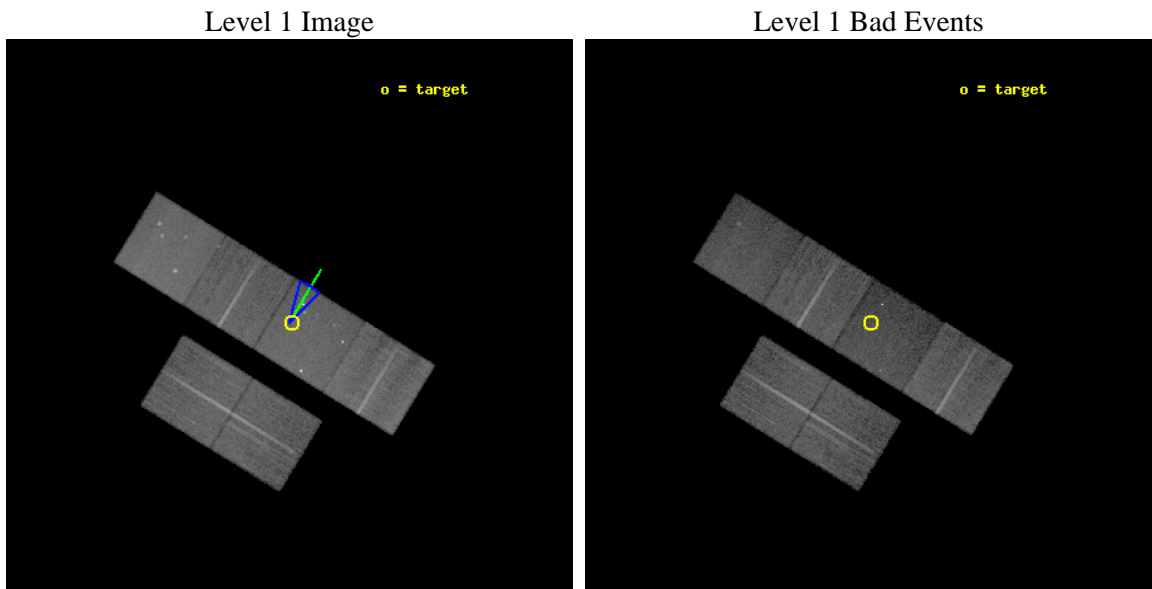




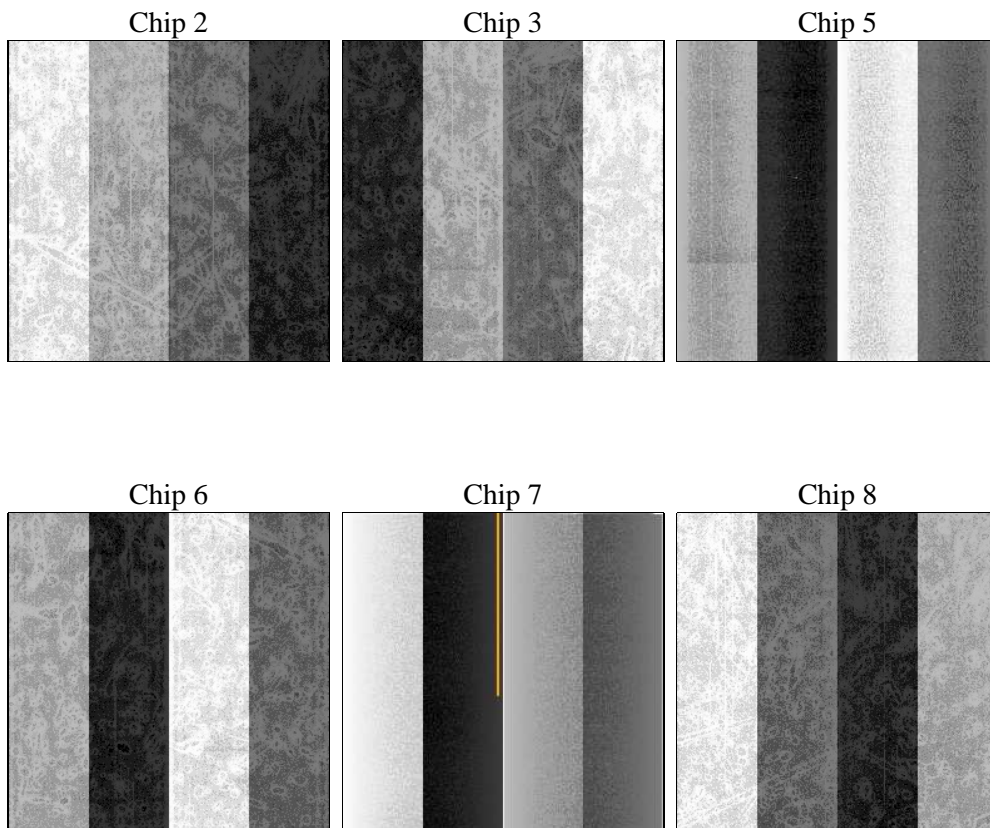
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	20000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	20156.79992491	Sum of GTIs [s]
caldsver	4.5.2	&#160	ontime2	20153.558954656	Sum of GTIs [s]
date	2012-10-15T13:26:45	Date and time of file creation	ontime3	20156.79992491	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	20156.79992491	Sum of GTIs [s]
			ontime6	20156.79992491	Sum of GTIs [s]
			ontime7	20156.79992491	Sum of GTIs [s]
			ontime8	20156.79992491	Sum of GTIs [s]
			l1events	775905	Number of level 1 events

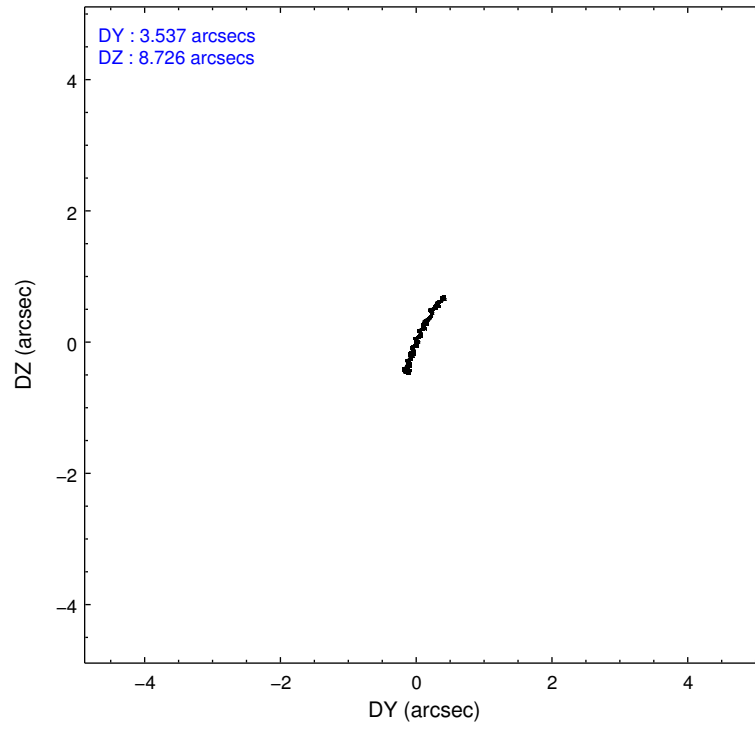
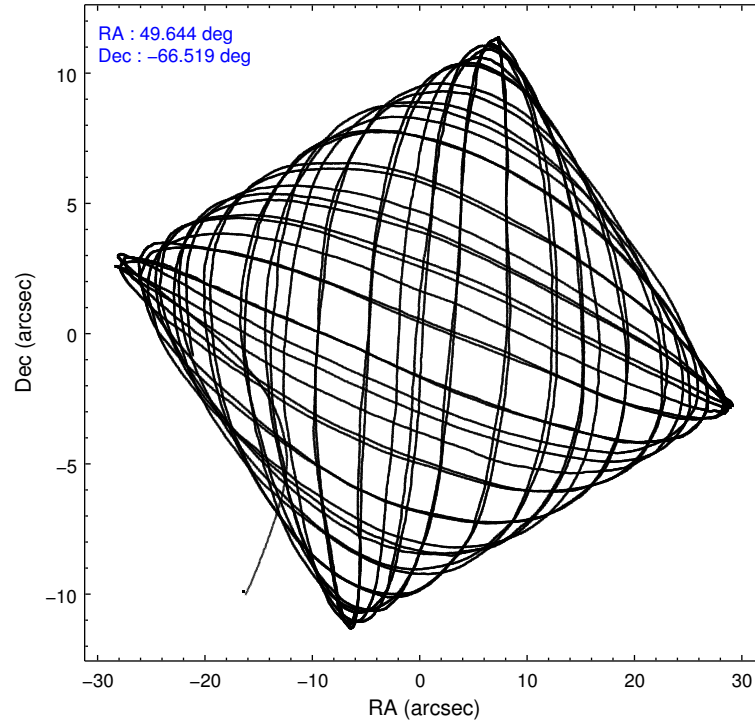
### 2.1.4 Events

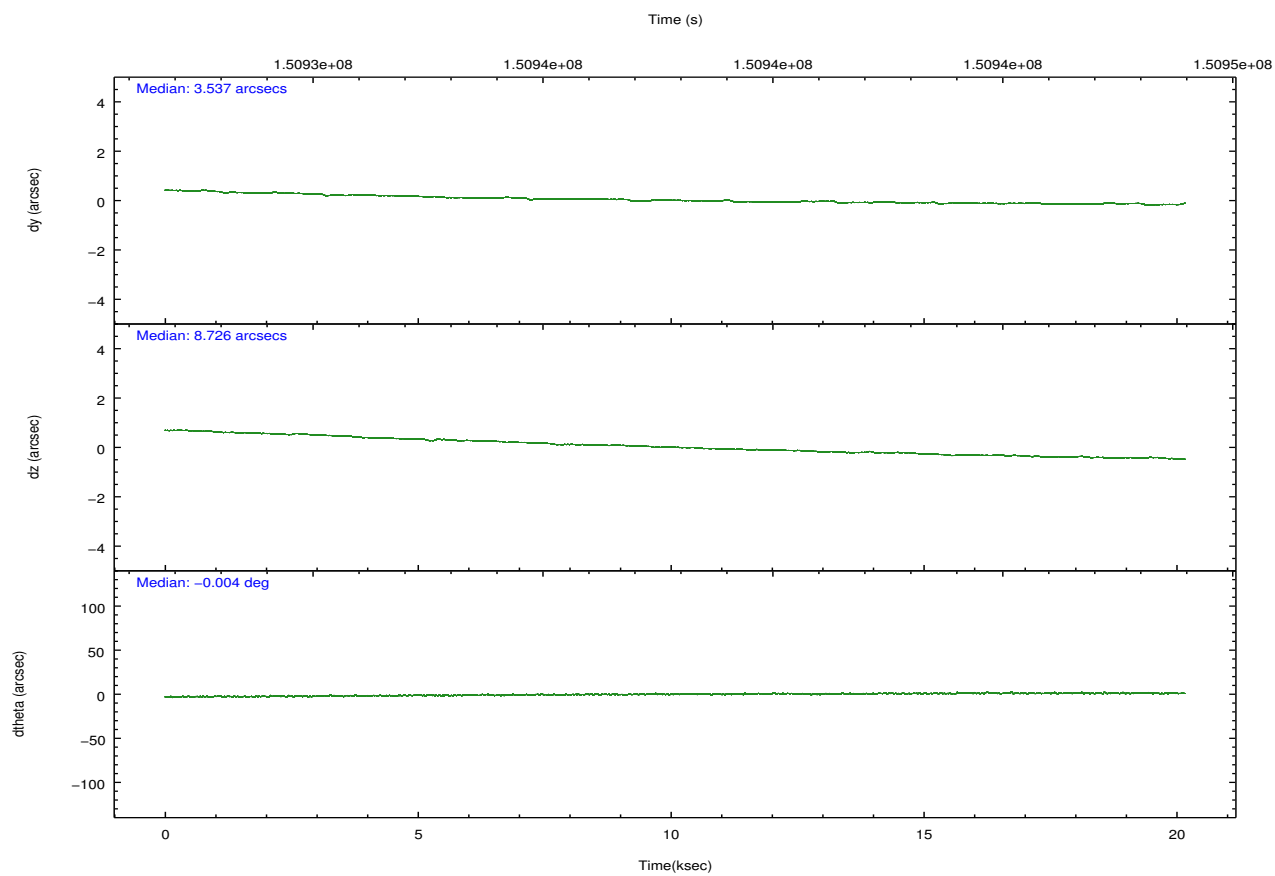
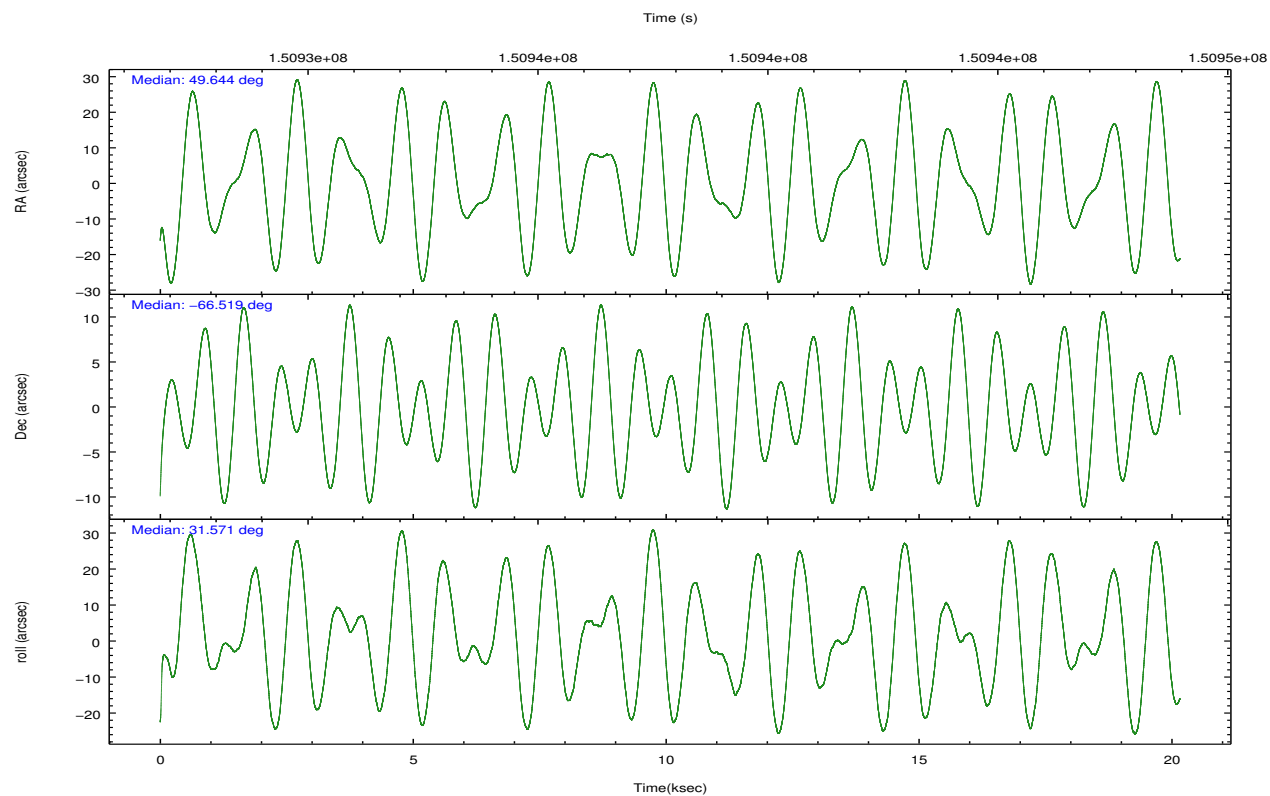
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	119427	109598	146876	113214	143884	142906	grade 0 events	4070	3976	8598	4311	10425	9611
rejected events	108433	99072	74273	101571	68689	111996		3%	3%	5%	3%	7%	6%
rejected %	90%	90%	50%	89%	47%	78%	grade 1 events	42	53	214	41	369	86
								0%	0%	0%	0%	0%	0%
							grade 2 events	2562	2107	20707	2435	16374	6866
								2%	1%	14%	2%	11%	4%
							grade 3 events	1248	1264	3503	1329	7687	3430
								1%	1%	2%	1%	5%	2%
							grade 4 events	1219	1207	3274	1304	7521	3131
								1%	1%	2%	1%	5%	2%
							grade 5 events	3587	4030	12218	4290	13840	6007
								3%	3%	8%	3%	9%	4%
							grade 6 events	1983	2077	37260	2424	33914	8251
								1%	1%	25%	2%	23%	5%
							grade 7 events	104716	94884	61102	97080	53754	105524
								87%	86%	41%	85%	37%	73%

## 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	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	49.612386	49.64410919856397	Subarray requested	NONE	NONE
[deg] Pointing Dec	-66.542888	-66.51876021225604	Alternating exposures requested	N	N
[deg] Pointing Roll	31.388318	31.57403255949857	[s] Primary exposure time	0.000000	3.2
[deg] Roll angle	30.000000	30.000000			
[deg] Roll tolerance	15.000000	15.000000			
Roll constraint allows 180D rotation	N	N			
[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)	150927949.184000	150926795.23246			
Observation start date	2002-10-13T20:24:45	2002-10-13T20:06:35			
[s] Observation end time (MET)	150947949.184000	150948562.13336			
Observation end date	2002-10-14T01:58:05	2002-10-14T02:09:22			
Read mode	TIMED	TIMED			

## 2.3 Aspect



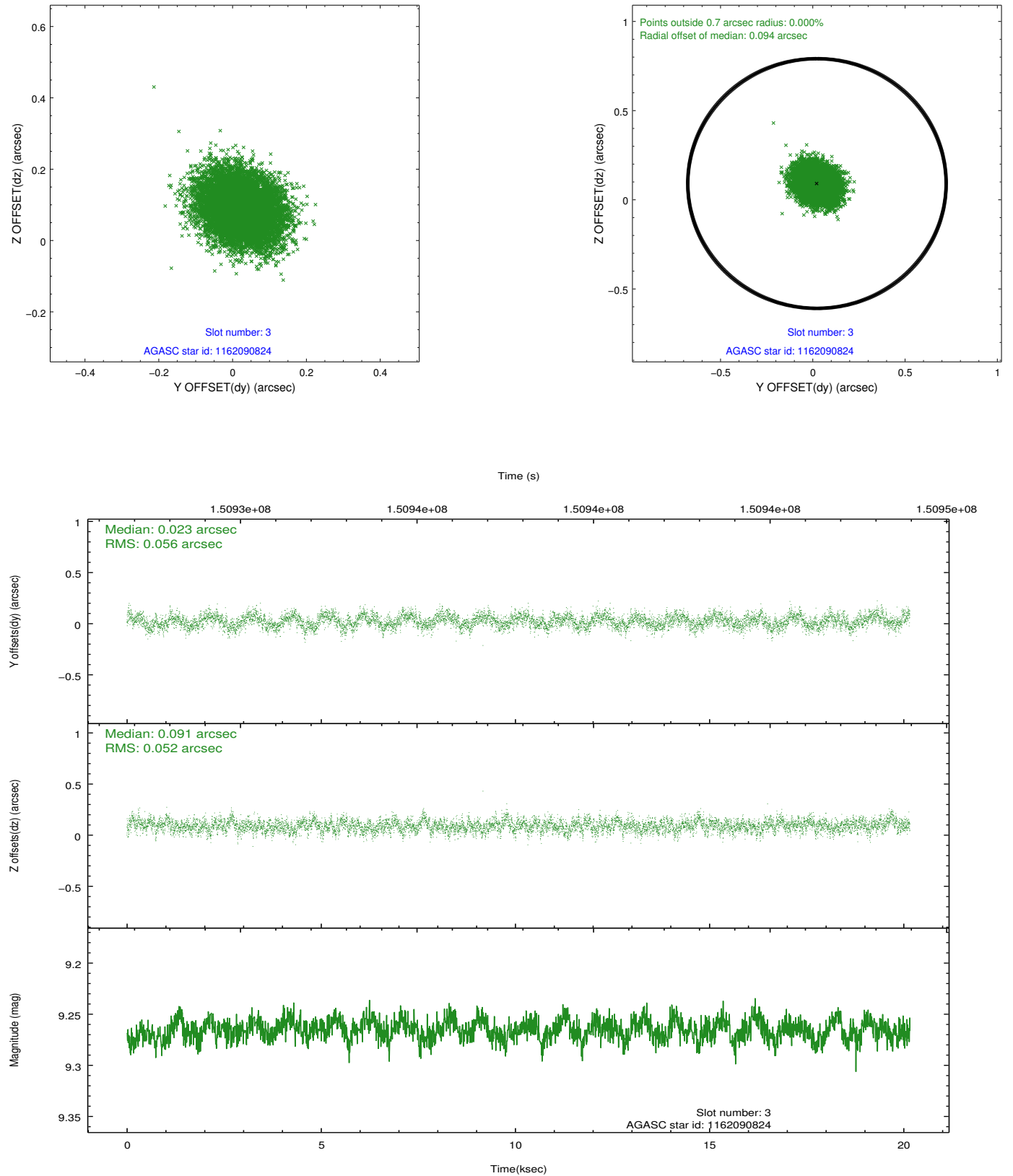


### Slot Statistics

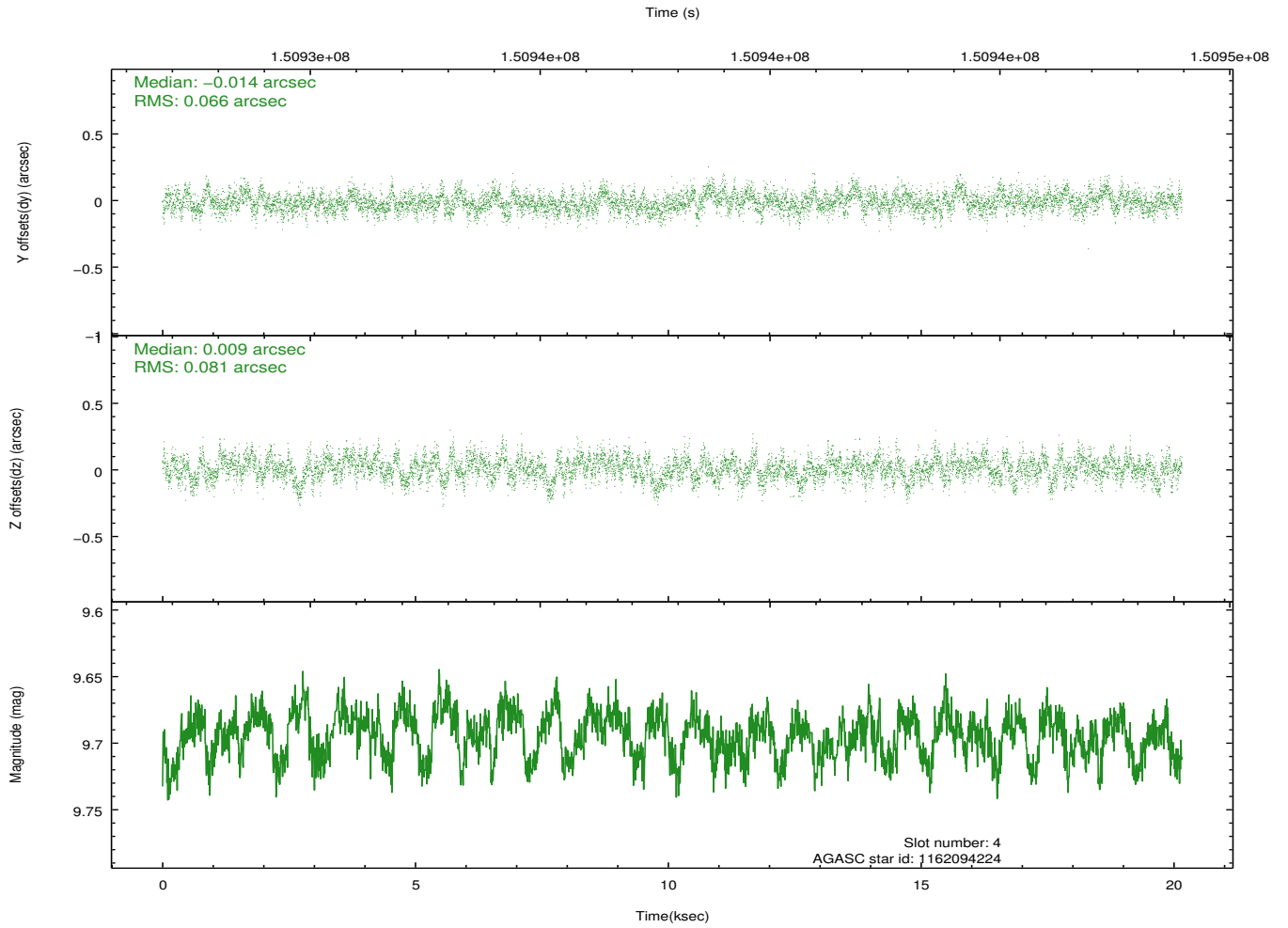
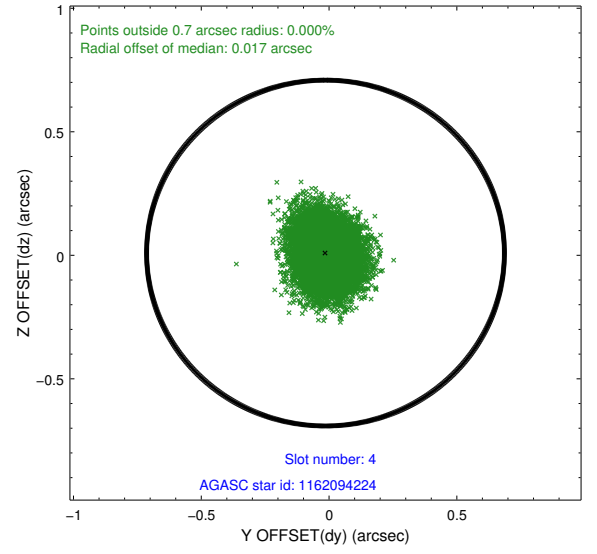
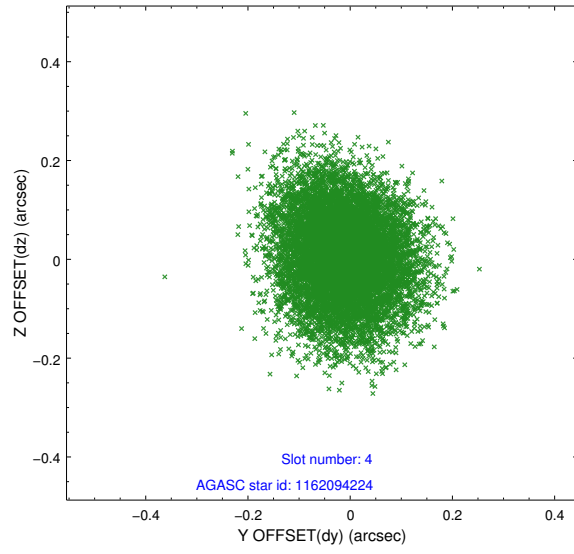
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	4918	-0.023	-0.019	0.011	0.019	0.000000	0.000000	-756.27	-1730.00
1	FID	ACIS-S-4	7.20	4918	0.026	0.017	0.011	0.023	0.000000	0.000000	2156.98	178.33
2	FID	ACIS-S-5	7.24	4918	-0.034	0.011	0.008	0.014	0.000000	0.000000	-1808.88	172.20
3	GUIDE	1162090824	9.27	9832	0.023	0.091	0.082	0.133	48.677982	-66.885202	-1774.42	-372.49
4	GUIDE	1162094224	9.69	9827	-0.014	0.009	0.112	0.181	49.638584	-66.701903	-266.68	-507.98
5	GUIDE	1162087800	9.60	9789	-0.106	0.002	0.112	0.183	47.475790	-66.376389	-2346.47	2071.84
6	GUIDE	1162090640	10.09	9829	0.072	-0.123	0.135	0.224	49.256309	-66.538337	-428.03	278.81
7	GUIDE	1162092192	9.19	9831	0.016	0.017	0.102	0.164	47.622538	-66.499529	-2381.06	1582.12

## 2.4 Star Slots

### 2.4.1 Slot 3

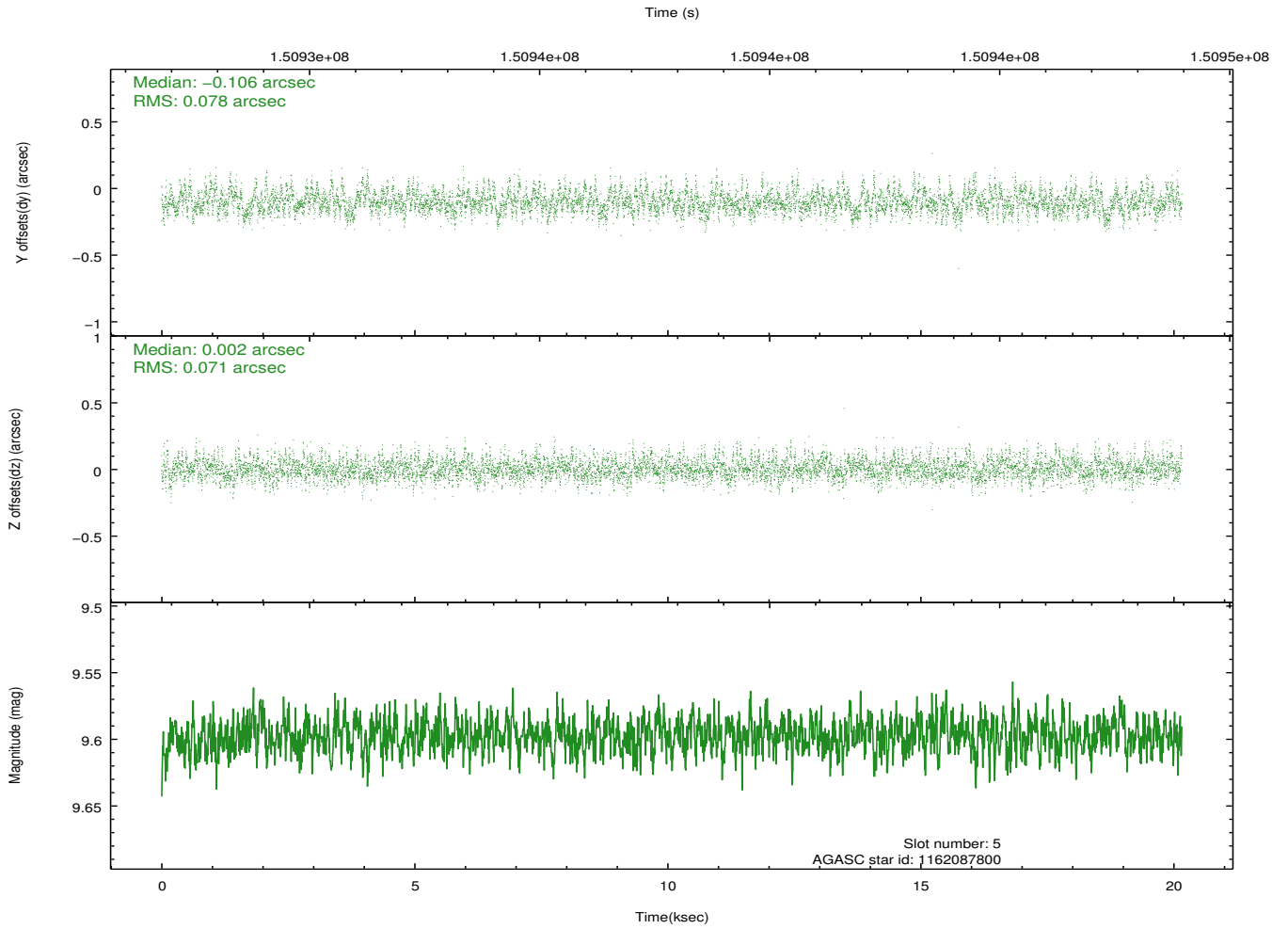
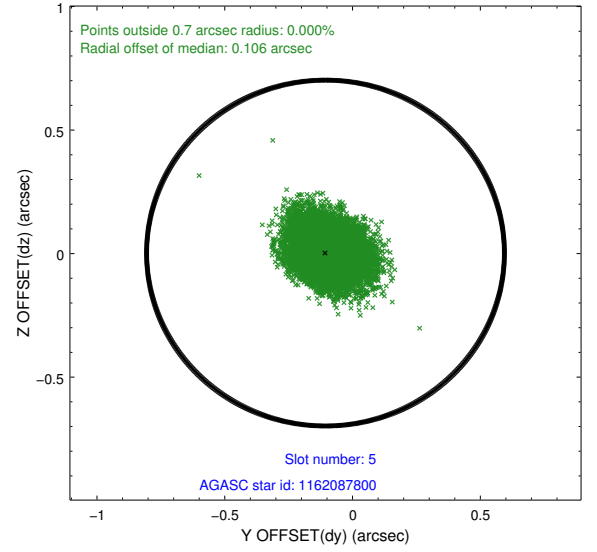
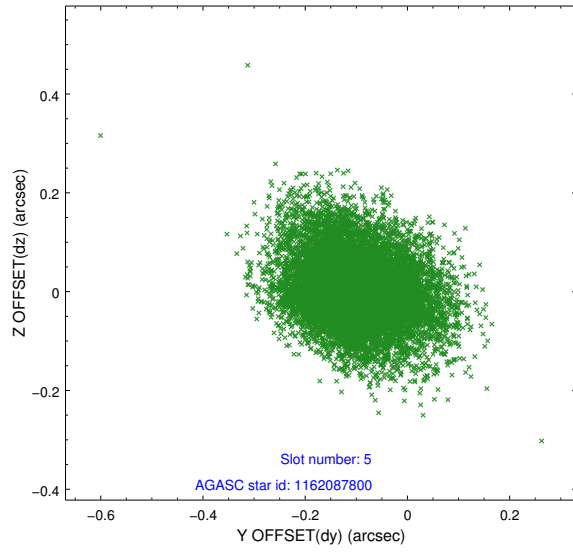


## 2.4.2 Slot 4

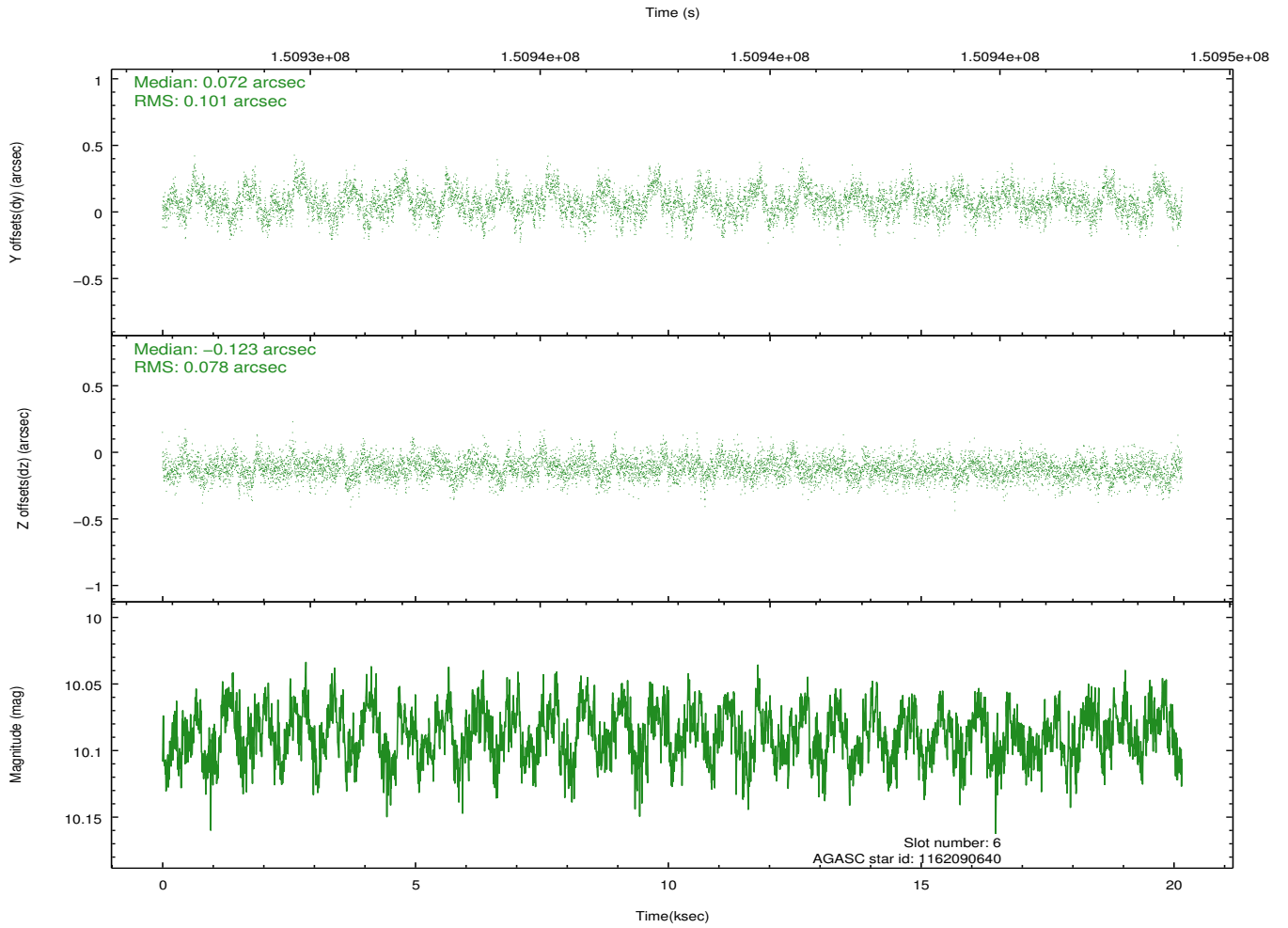
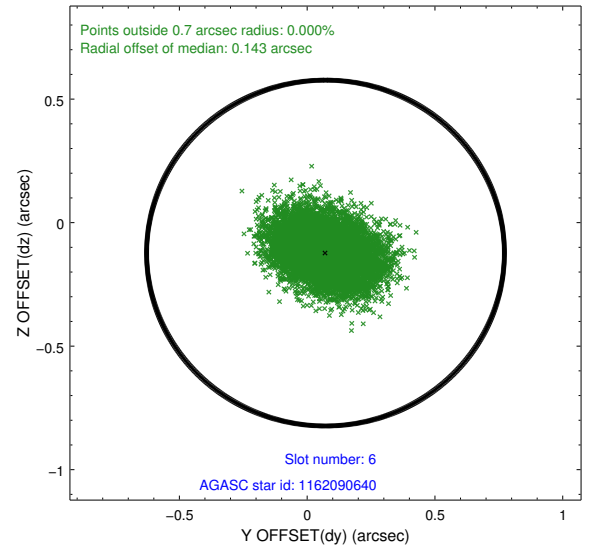
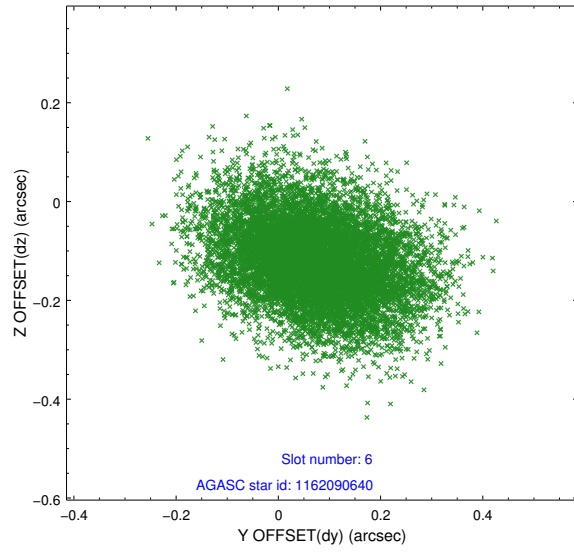




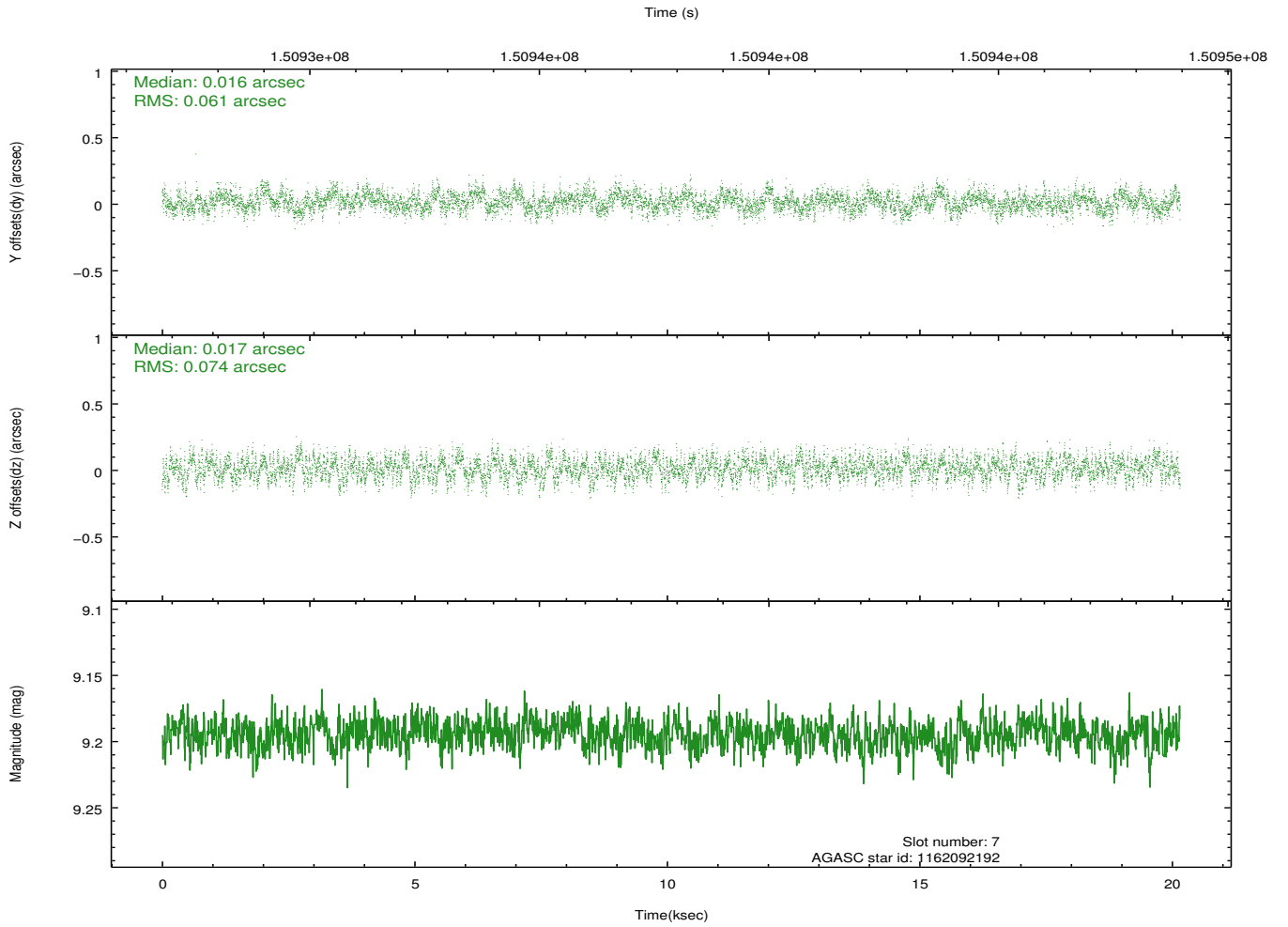
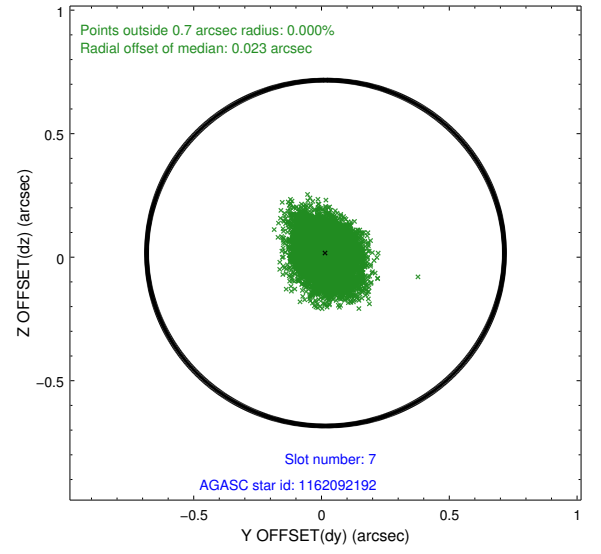
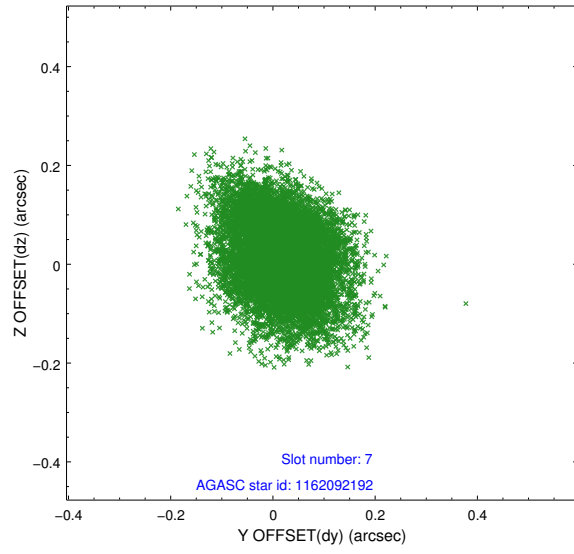
### 2.4.3 Slot 5



## 2.4.4 Slot 6

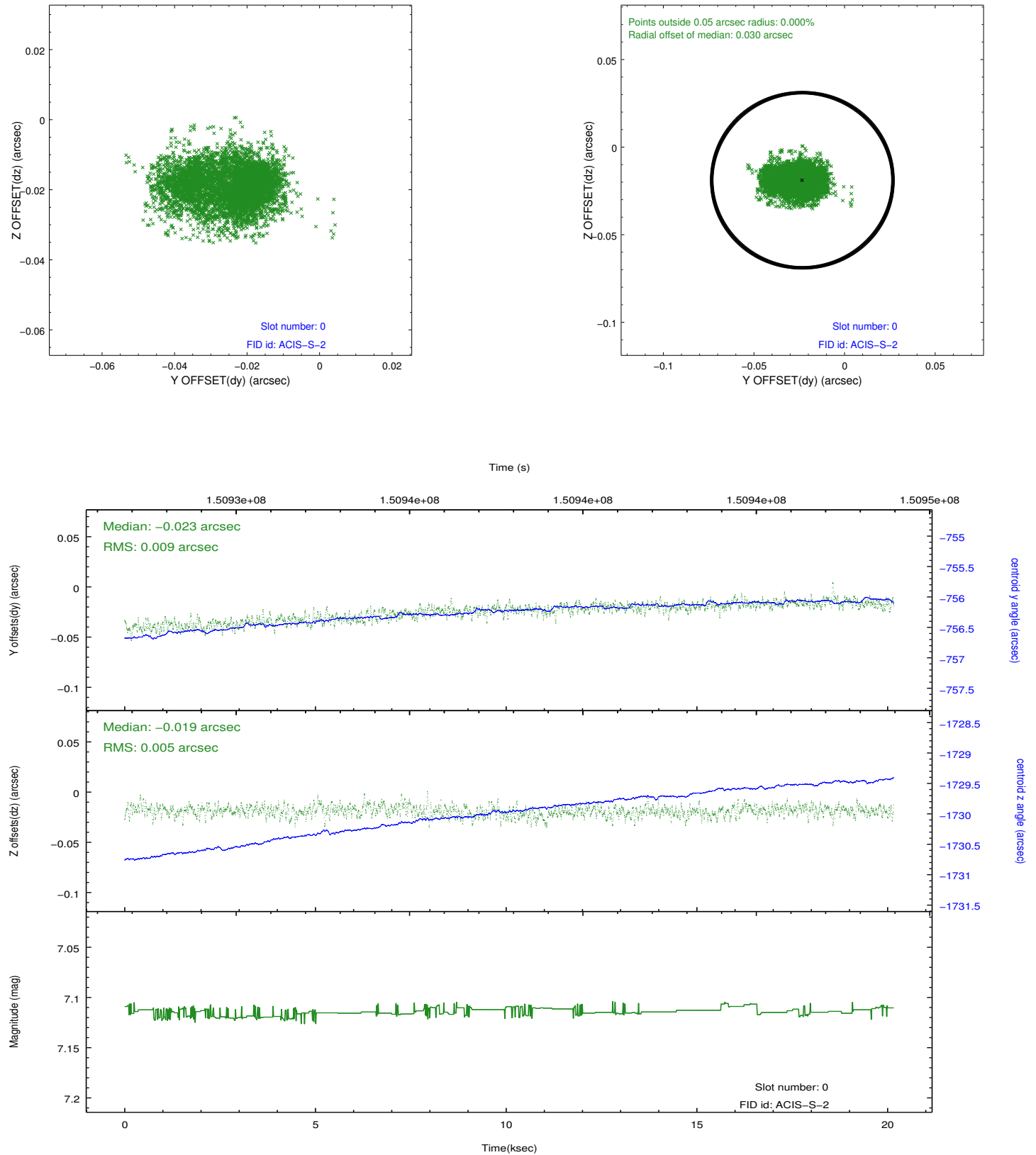


## 2.4.5 Slot 7

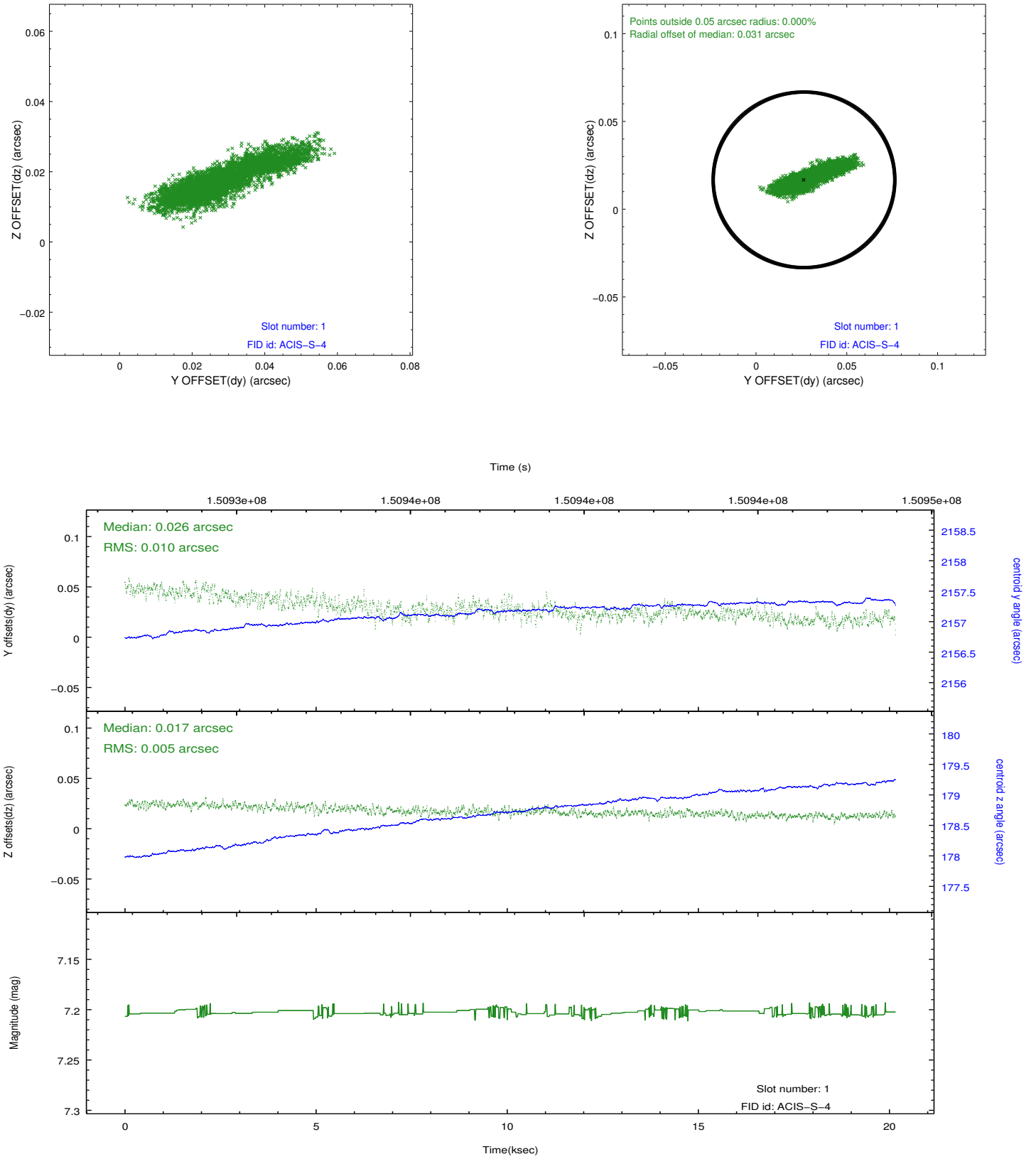


## 2.5 FID Slots

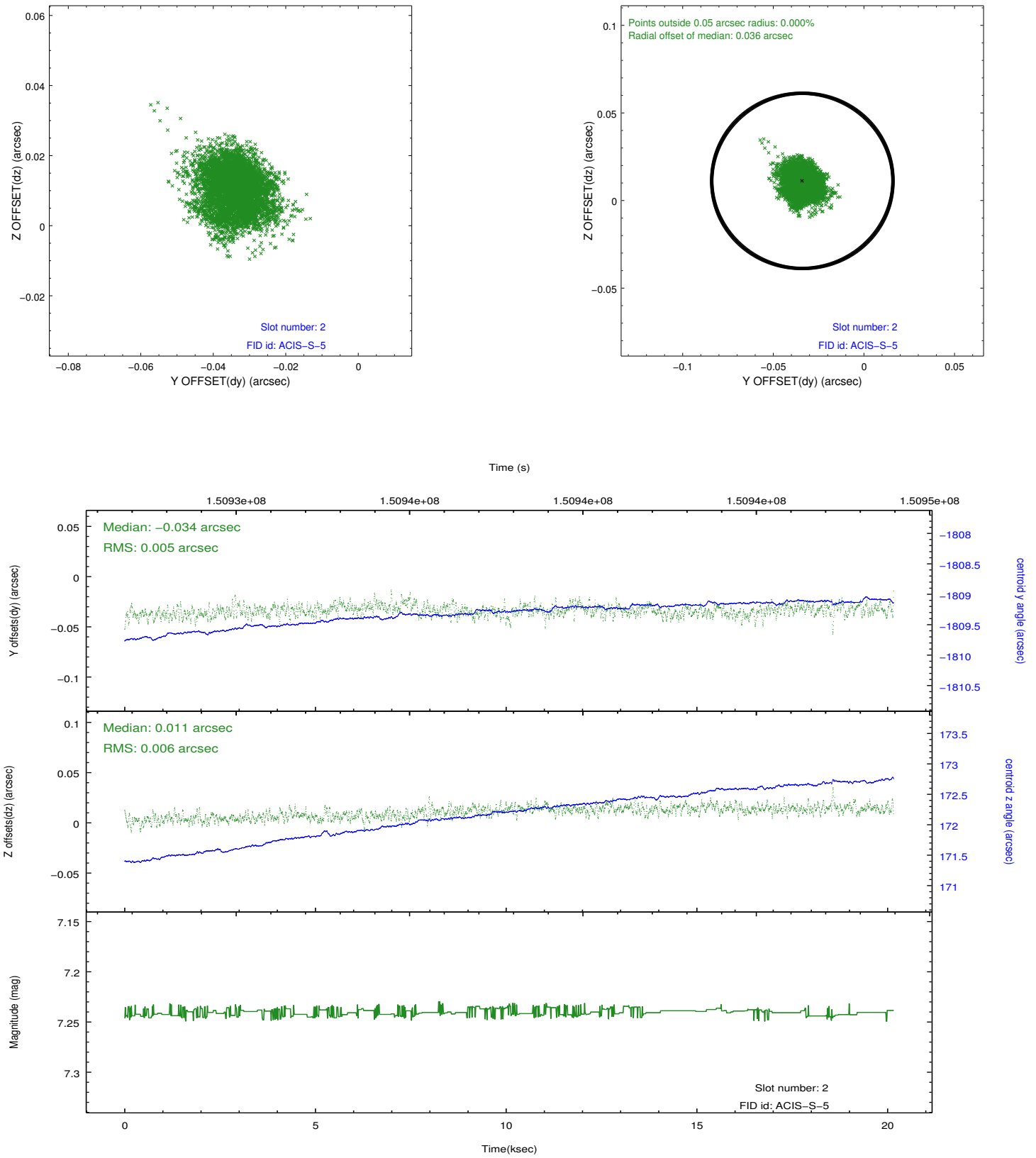
### 2.5.1 Slot 0



## 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)	2012.10.25
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.156

### A.2 Comments

Roll constraint met.