

# V&V Reference Report

## L2 ASCDS Version : 10.3

Observation 17550 - L2 Version 1  
Chandra X-Ray Center

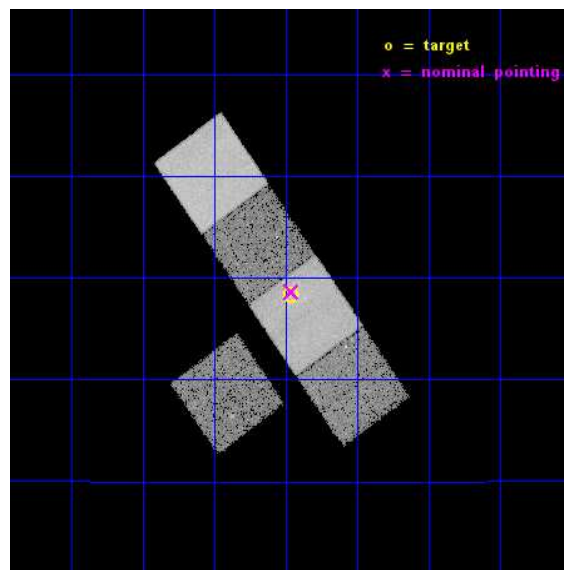
L2 Processing Date : Nov 17 2014

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# 1 Front

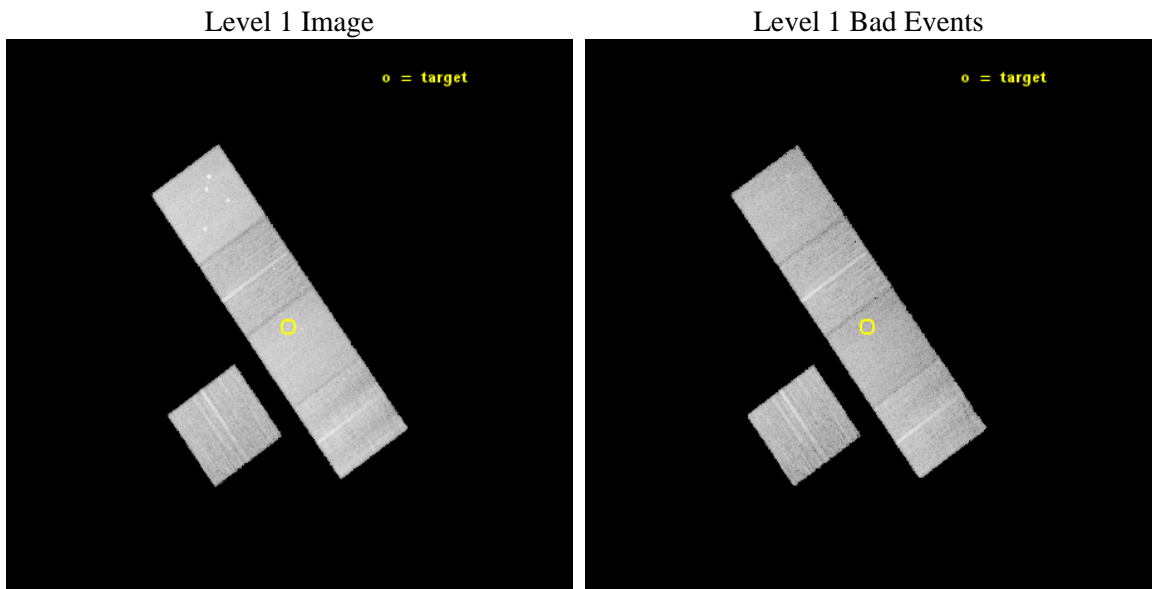
seq_num	502485	Sequence number
obs_id	17550	Observation id
title	Deep Chandra observations to put the deepest limits to the density of the environment around a Type Iax SN	Proposal title
observer	Dr Raffaella Margutti	Principal investigator
object	PSN J12215757+0428185	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	185.49	Observer's specified target RA [deg]
dec_targ	4.471806	Observer's specified target Dec [deg]
ra_nom	185.48964509526	Nominal RA [deg]
dec_nom	4.4772496632886	Nominal Dec [deg]
roll_nom	54.656684866832	Nominal Roll [deg]
revision	1	Processing version of data
ontime	20058.751021326	Sum of GTIs [s]
livetime	19796.668672194	Livetime [s]
ontime3	20055.48694092	Sum of GTIs [s]
ontime5	20058.709981322	Sum of GTIs [s]
ontime6	20058.668941319	Sum of GTIs [s]
ontime7	20058.751021326	Sum of GTIs [s]
ontime8	20055.446020424	Sum of GTIs [s]
l2events	174046	Number of level 2 events



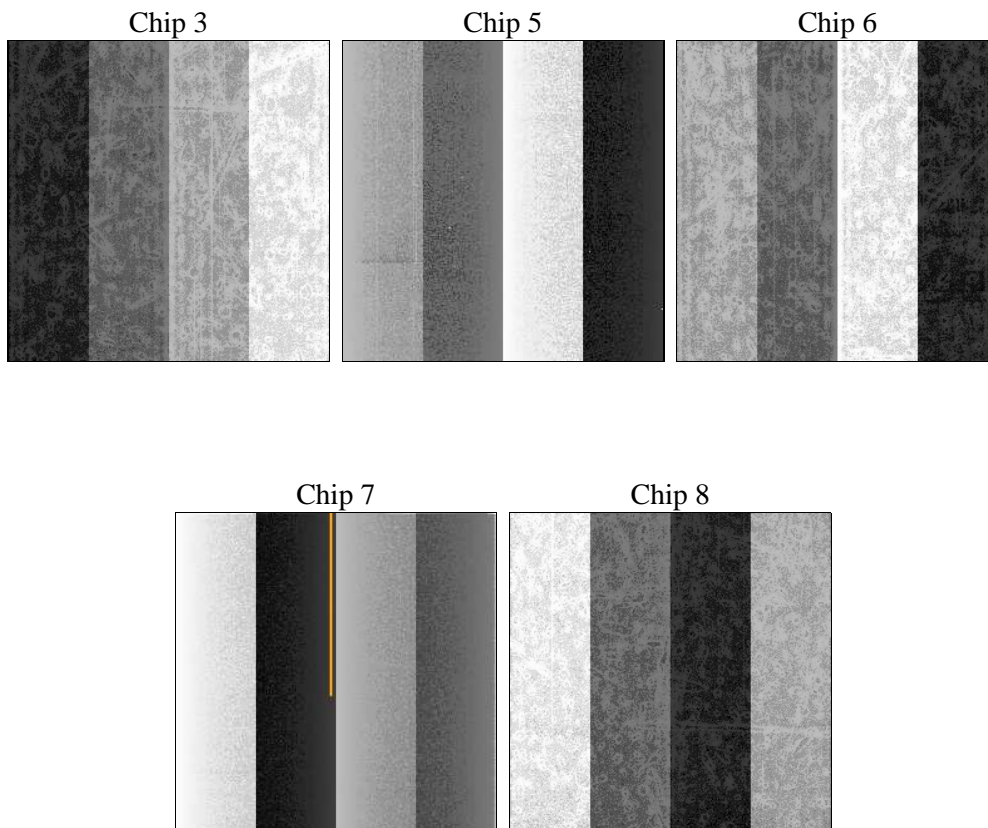
## 2 OBI

### 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	10.3	Processing system revision	ontime	20058.751021326	Sum of GTIs [s]
caldbver	4.6.4	&#160	ontime3	20055.48694092	Sum of GTIs [s]
date	2014-11-17T15:41:16	Date and time of file creation	ontime5	20058.709981322	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	20058.668941319	Sum of GTIs [s]
			ontime7	20058.751021326	Sum of GTIs [s]
			ontime8	20055.446020424	Sum of GTIs [s]
			l1events	659269	Number of level 1 events

### 2.1.4 Events

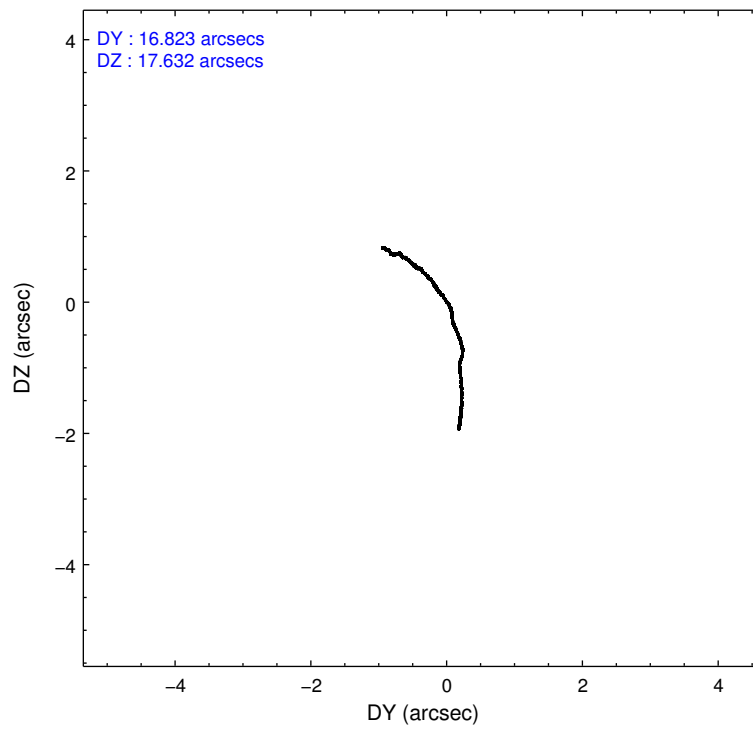
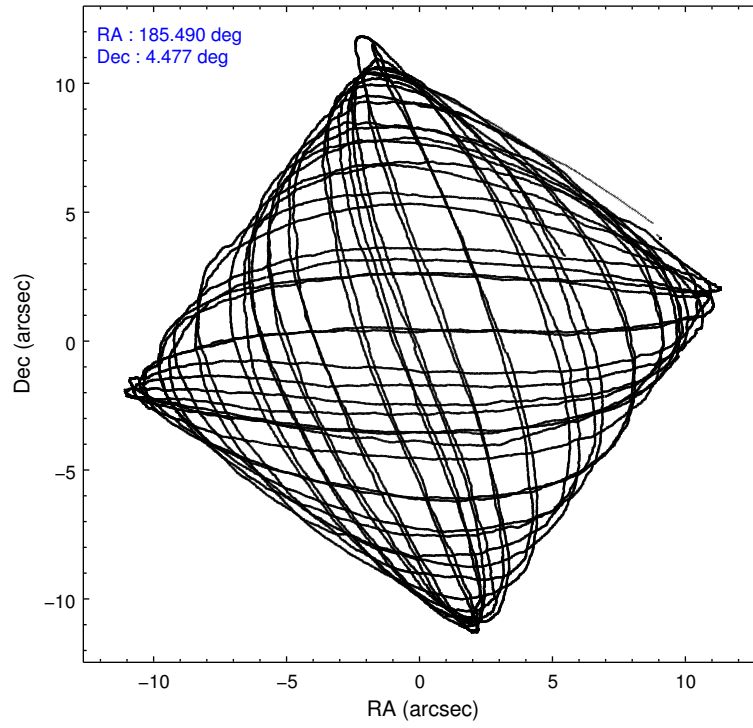
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	102707	171015	107168	141337	137042
rejected events	90712	89051	94002	79091	100330
rejected %	88%	52%	87%	55%	73%

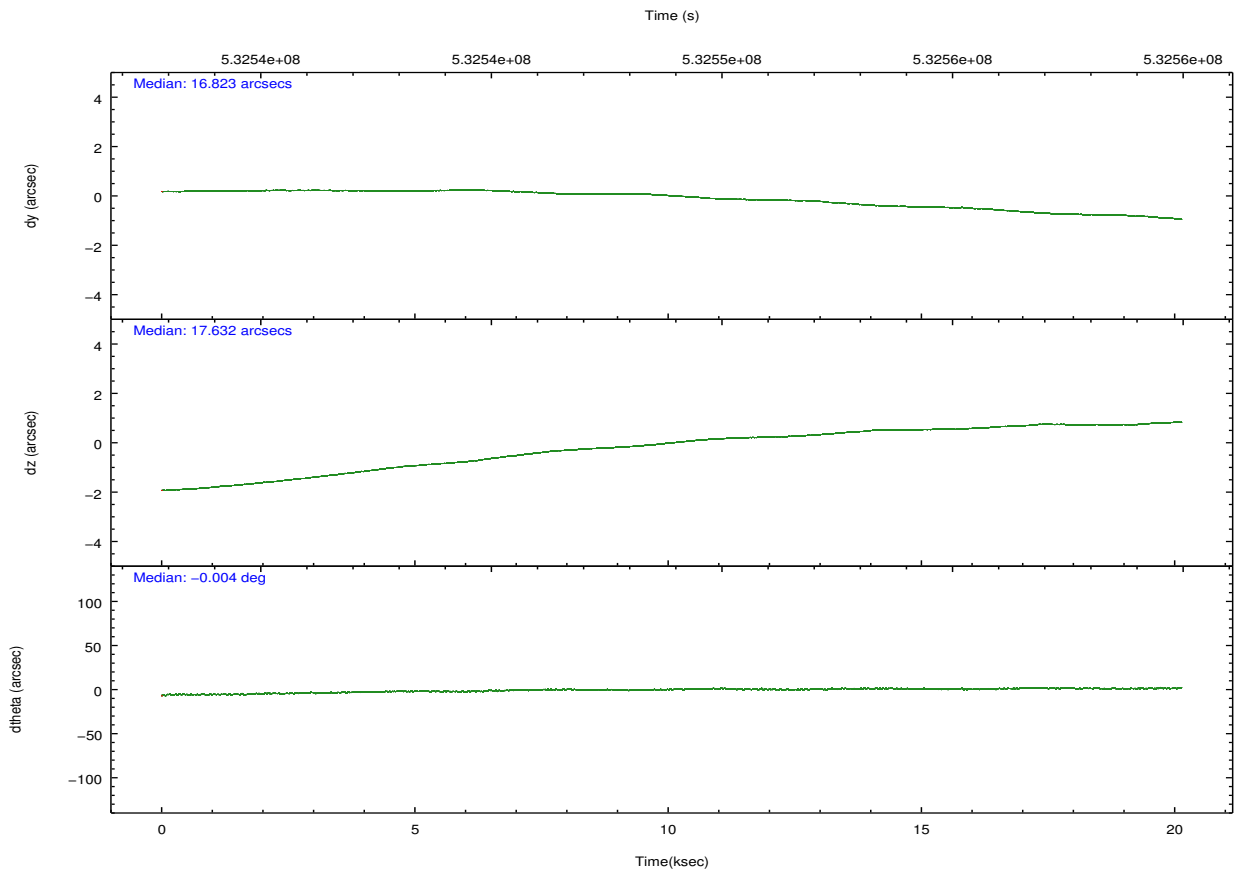
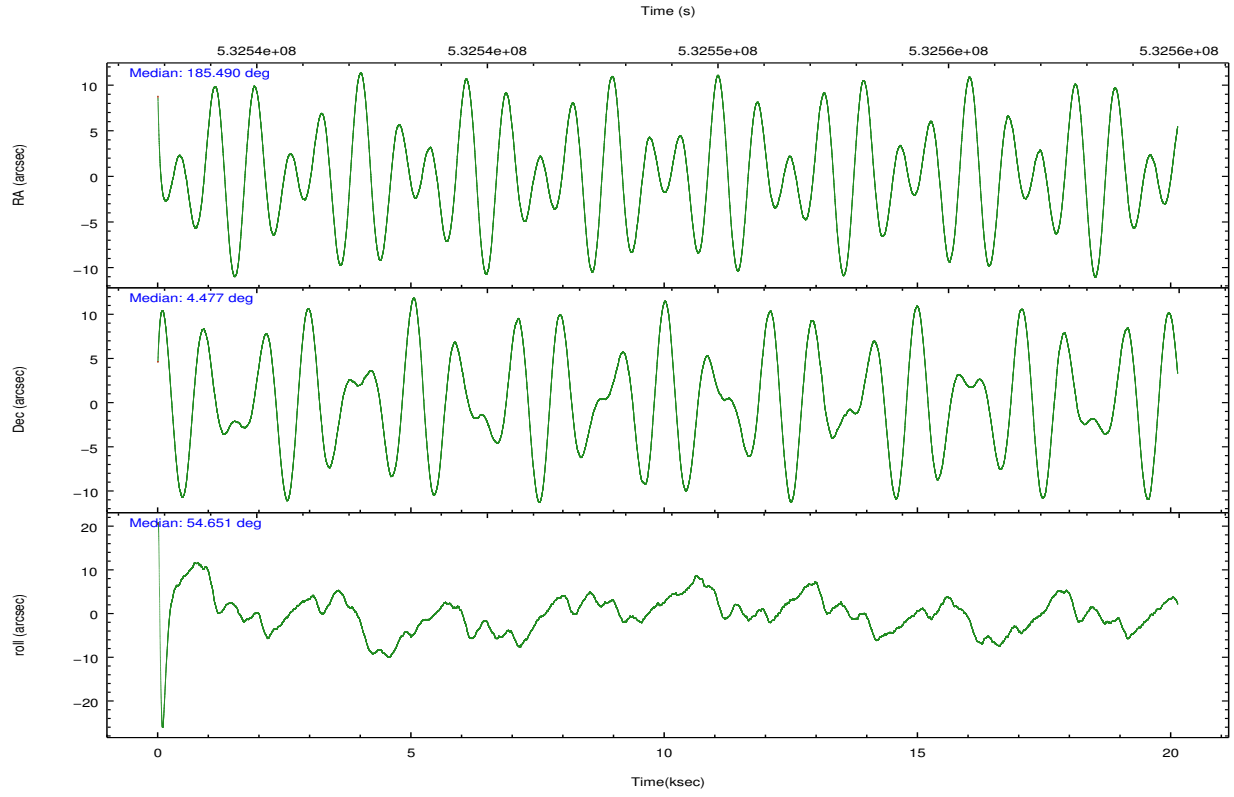
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	4281	7030	4373	5908	10546
	4%	4%	4%	4%	7%
grade 1 events	56	447	58	140	97
	0%	0%	0%	0%	0%
grade 2 events	2538	24842	3018	12992	8728
	2%	14%	2%	9%	6%
grade 3 events	1326	2484	1273	4983	3754
	1%	1%	1%	3%	2%
grade 4 events	1296	2433	1304	5158	3514
	1%	1%	1%	3%	2%
grade 5 events	5431	11734	5415	14247	7701
	5%	6%	5%	10%	5%
grade 6 events	2555	45193	3204	33226	10178
	2%	26%	2%	23%	7%
grade 7 events	85224	76852	88523	64683	92524
	82%	44%	82%	45%	67%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-35678	ACIS-35678	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	185.487449	185.4896450952612	CCD I2 on	N	N
[deg] Pointing Dec	4.449877	4.477249663288593	CCD I3 on	O1	Y
[deg] Pointing Roll	54.500199	54.6566848668322	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	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	Y	Y
[s] Observation start time (MET)	532538988.184000	532537693.63354	CCD S5 on	N	N
Observation start date	2014-11-16T15:28:41	2014-11-16T15:08:13	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	532558988.184000	532559462.58476	On-chip summing requested	N	N
Observation end date	2014-11-16T21:02:01	2014-11-16T21:11:02	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect





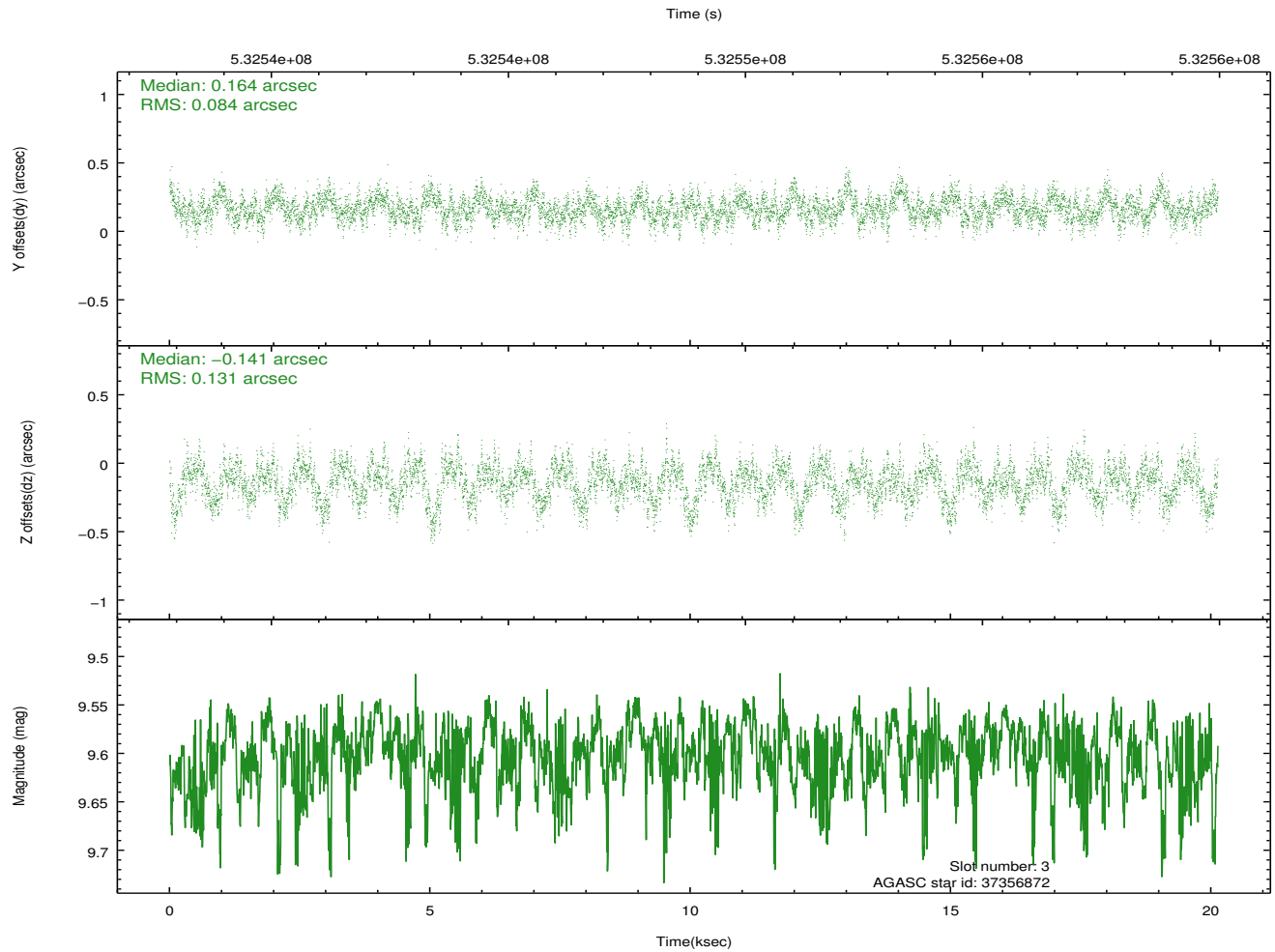
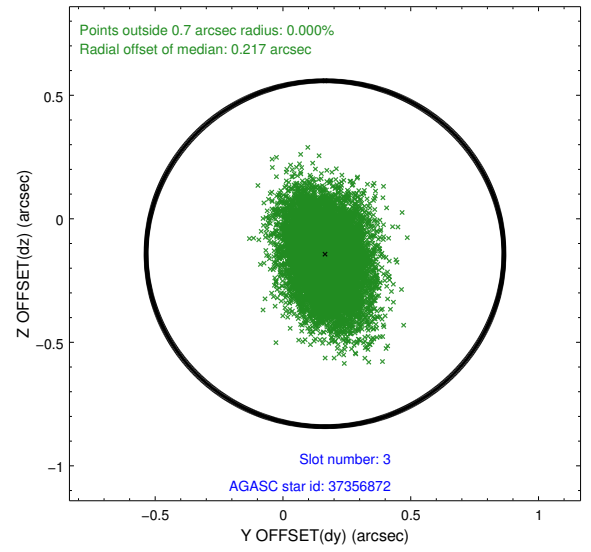
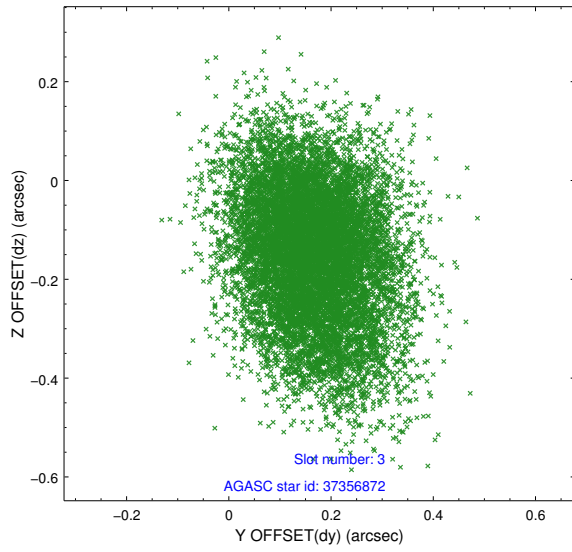
### Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.09	4911	-0.094	-0.058	0.016	0.049	0.000000	0.000000	-769.80	-1738.89
1	FID		ACIS-S-4	7.17	4911	0.231	0.058	0.009	0.016	0.000000	0.000000	2143.73	169.49
2	FID		ACIS-S-5	7.21	4911	-0.169	0.007	0.013	0.042	0.000000	0.000000	-1822.47	163.33
3	GUIDE	used	37356872	9.60	9813	0.164	-0.141	0.164	0.271	185.016974	4.742354	-123.21	1987.41
4	GUIDE	used	37357856	5.96	9822	-0.408	-0.199	0.077	0.117	185.562598	4.854937	1343.44	627.40
5	GUIDE	used	37360448	7.99	9821	0.200	-0.017	0.069	0.112	185.250831	4.537778	-235.17	874.35
6	GUIDE	used	37360744	9.06	9819	0.114	0.509	0.112	0.181	185.839549	4.671352	1383.20	-565.04
7	GUIDE	used	37750480	9.51	9815	-0.074	-0.138	0.125	0.206	185.717050	5.052431	2244.23	589.49

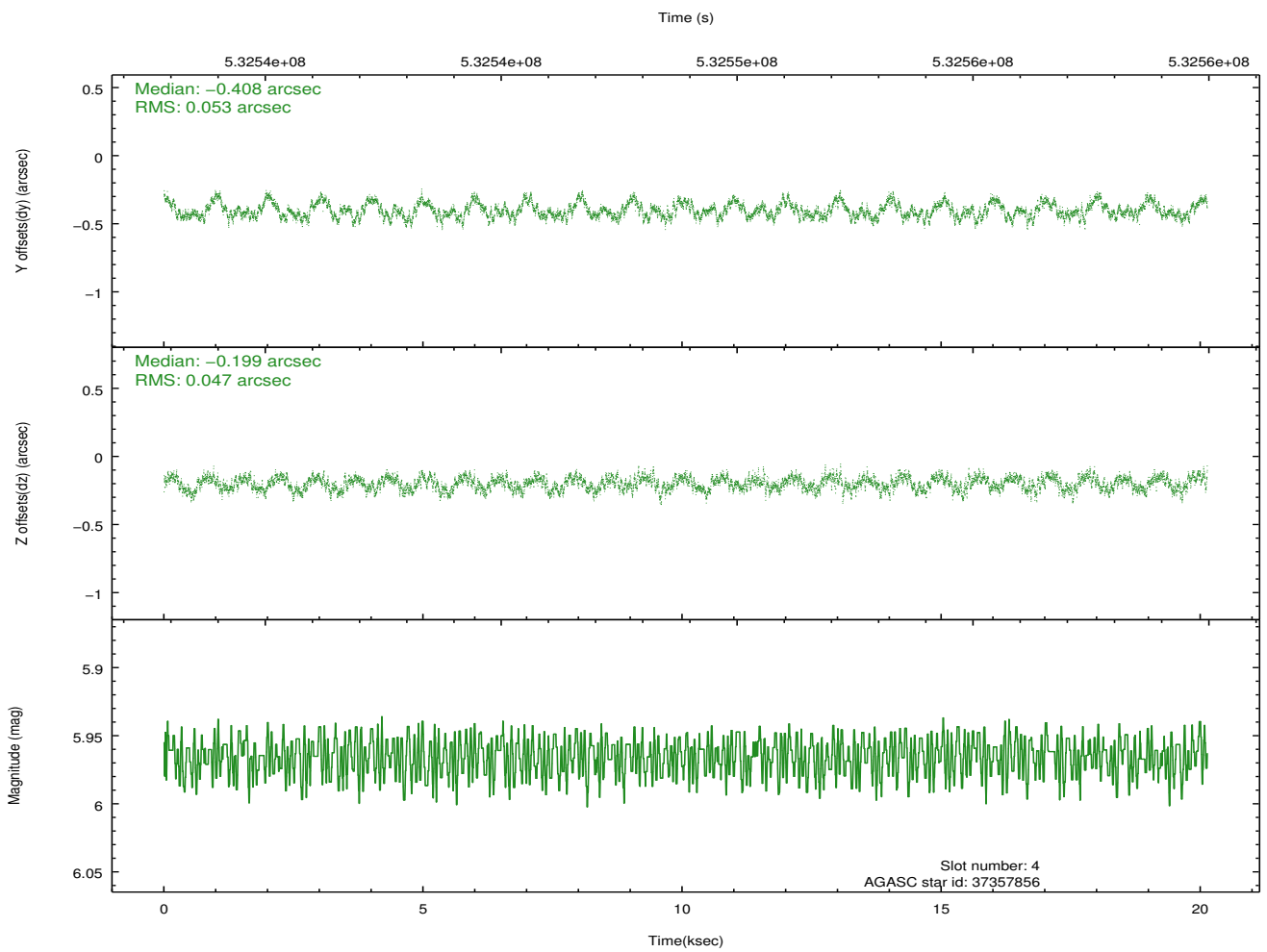
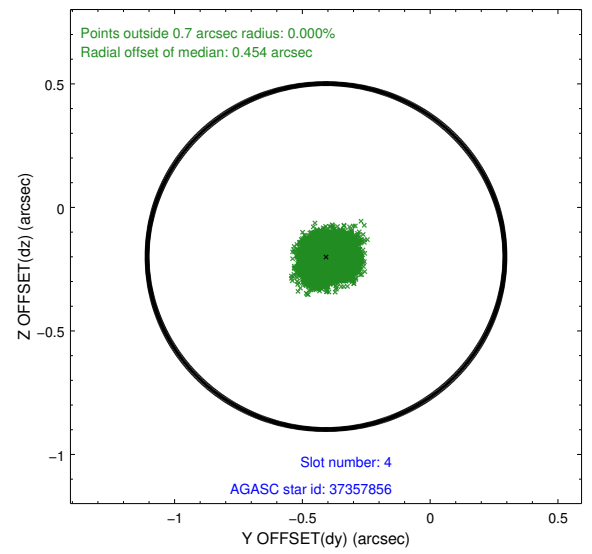
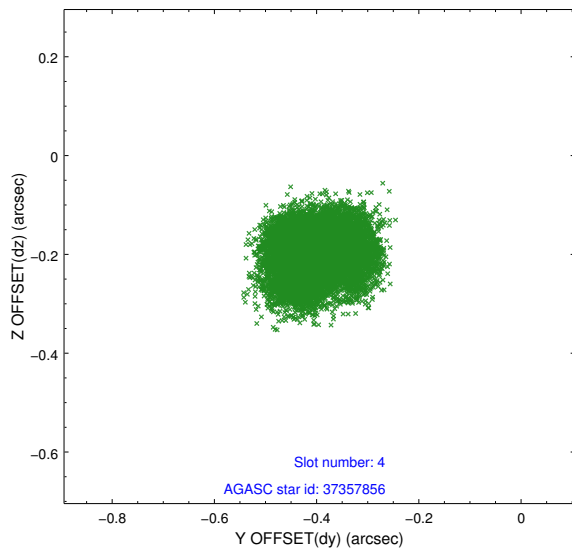
∞

## 2.4 Star Slots

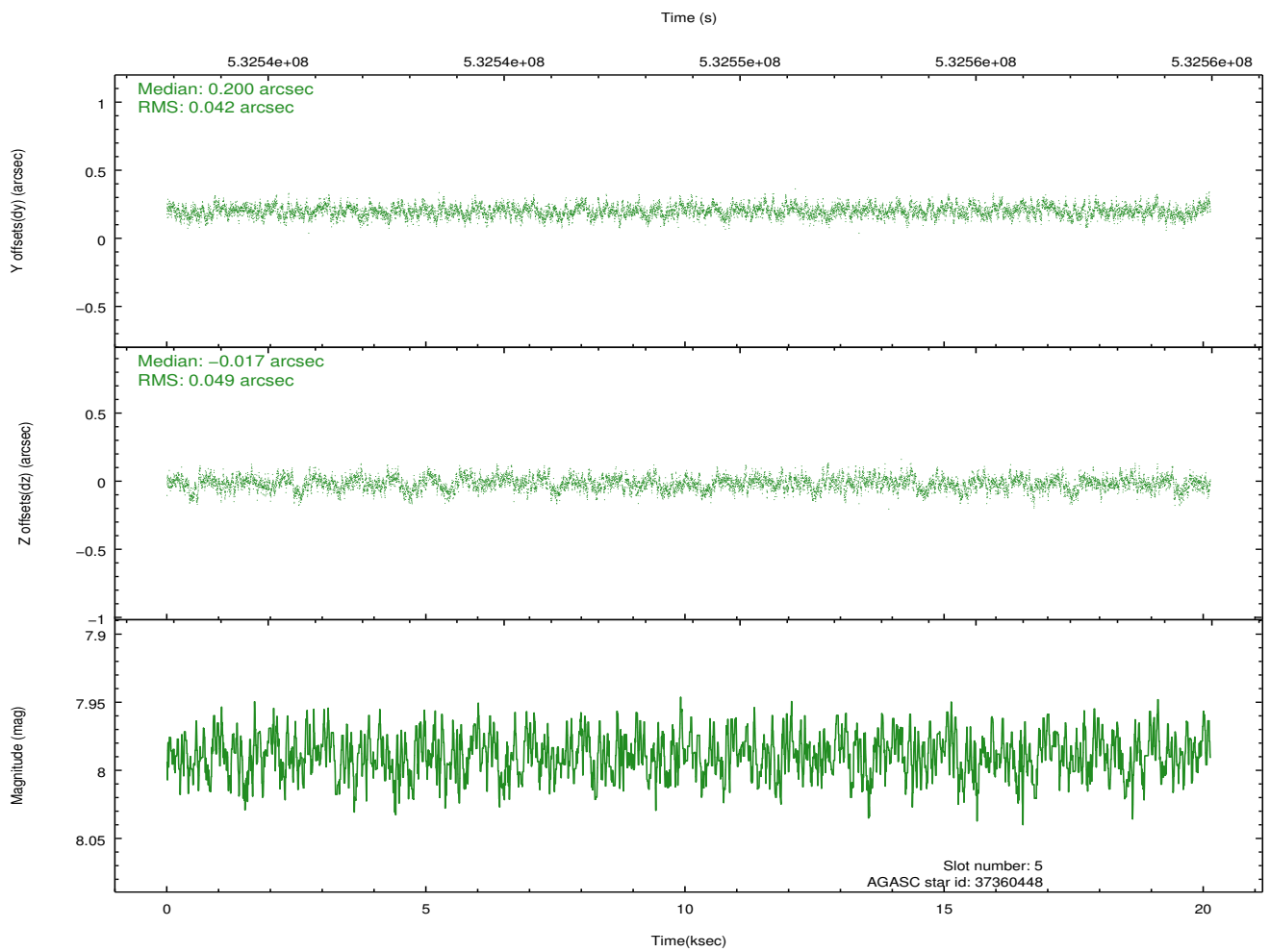
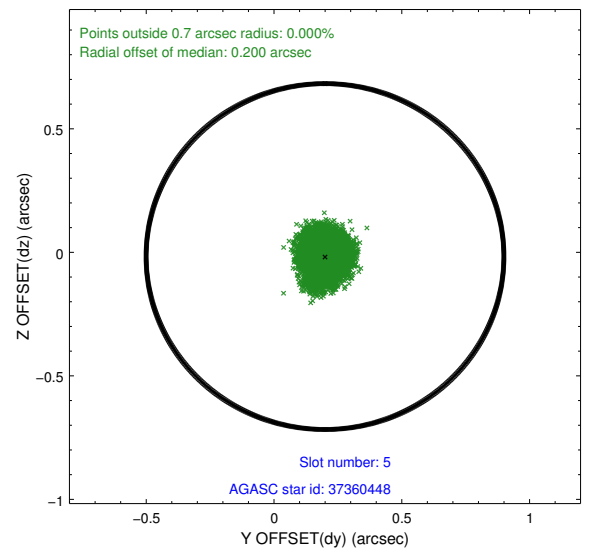
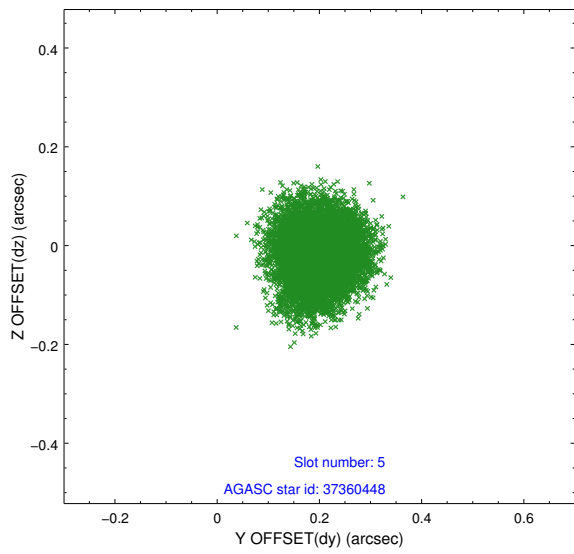
### 2.4.1 Slot 3



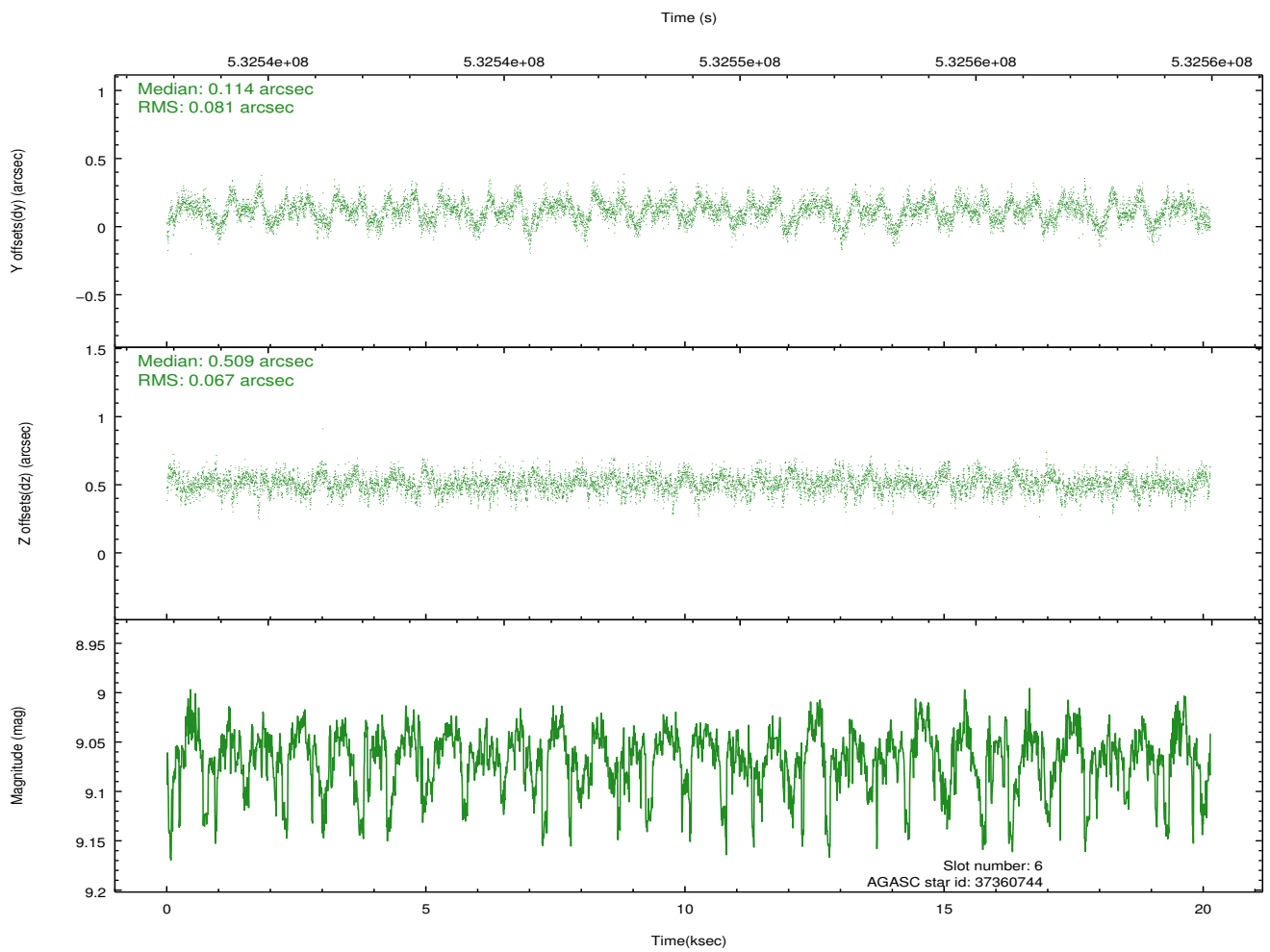
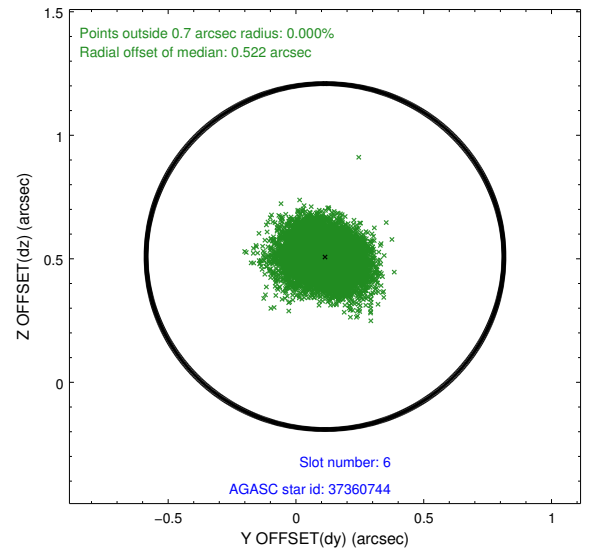
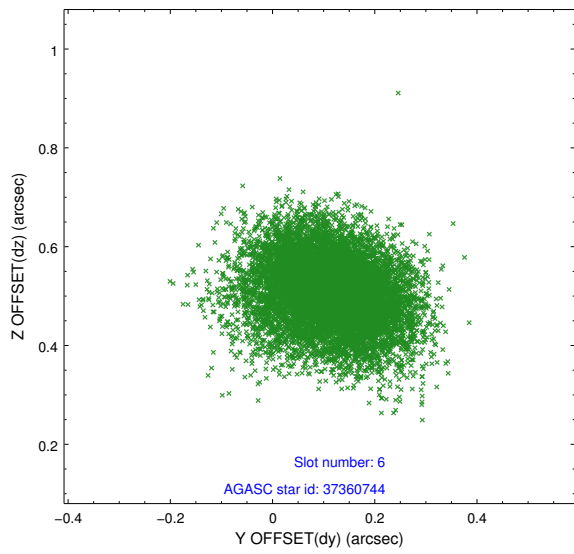
## 2.4.2 Slot 4



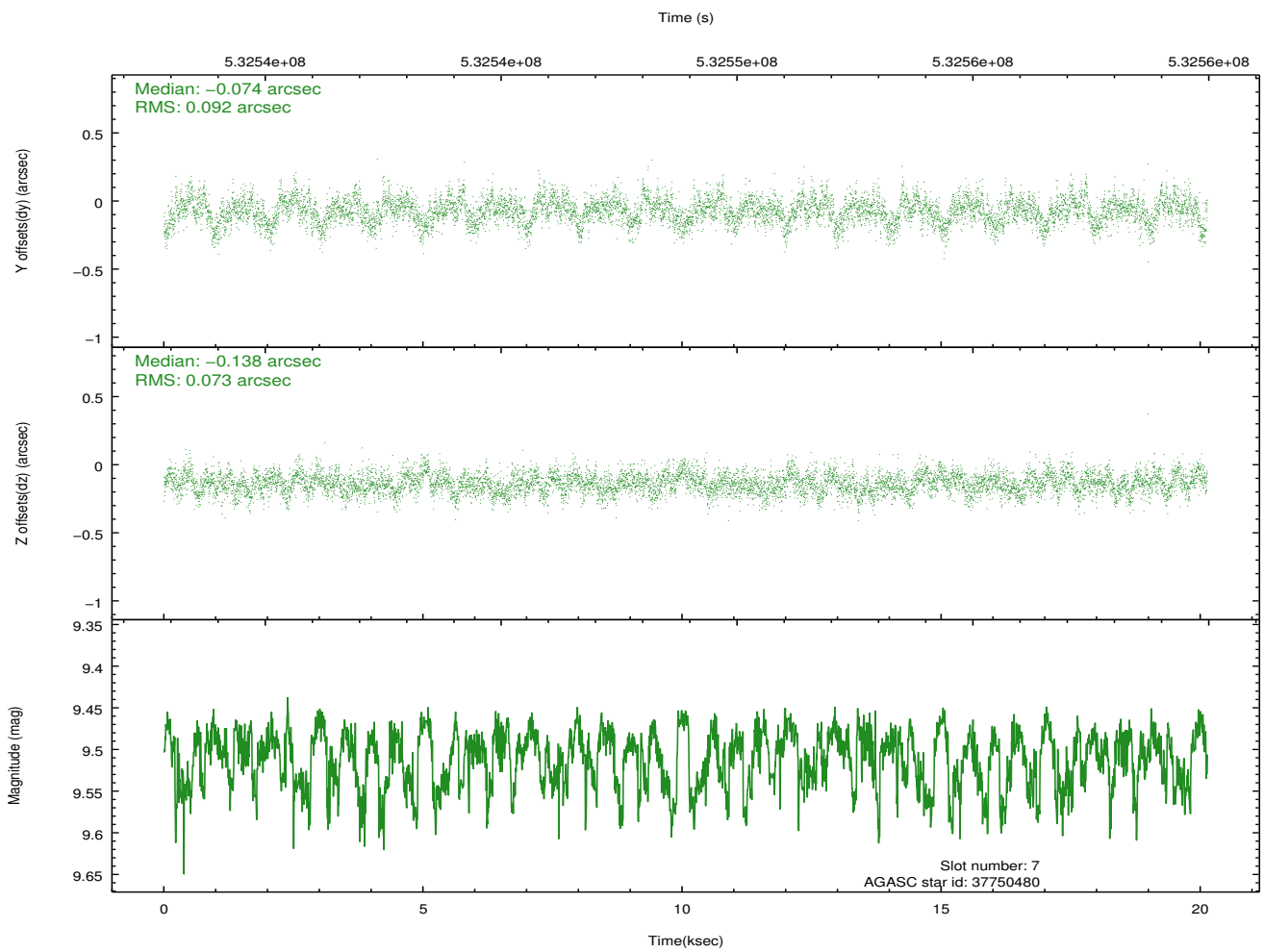
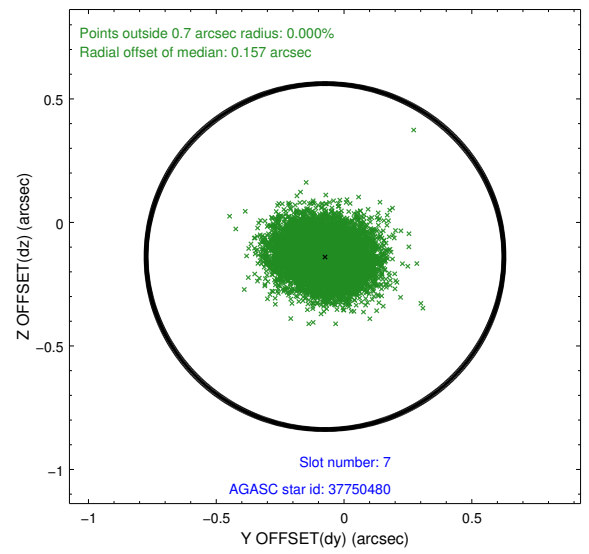
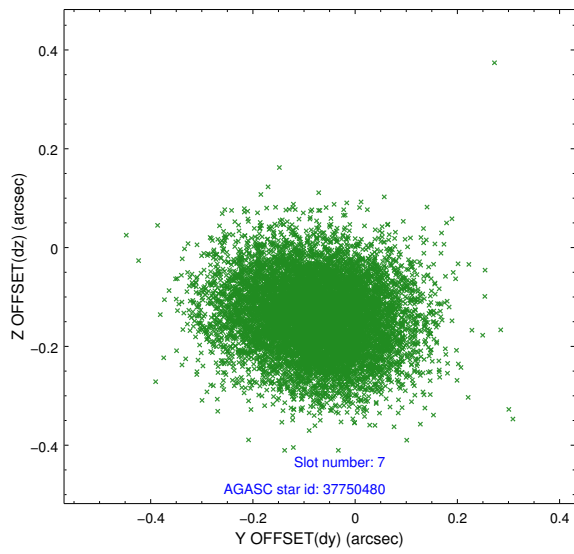
### 2.4.3 Slot 5



## 2.4.4 Slot 6

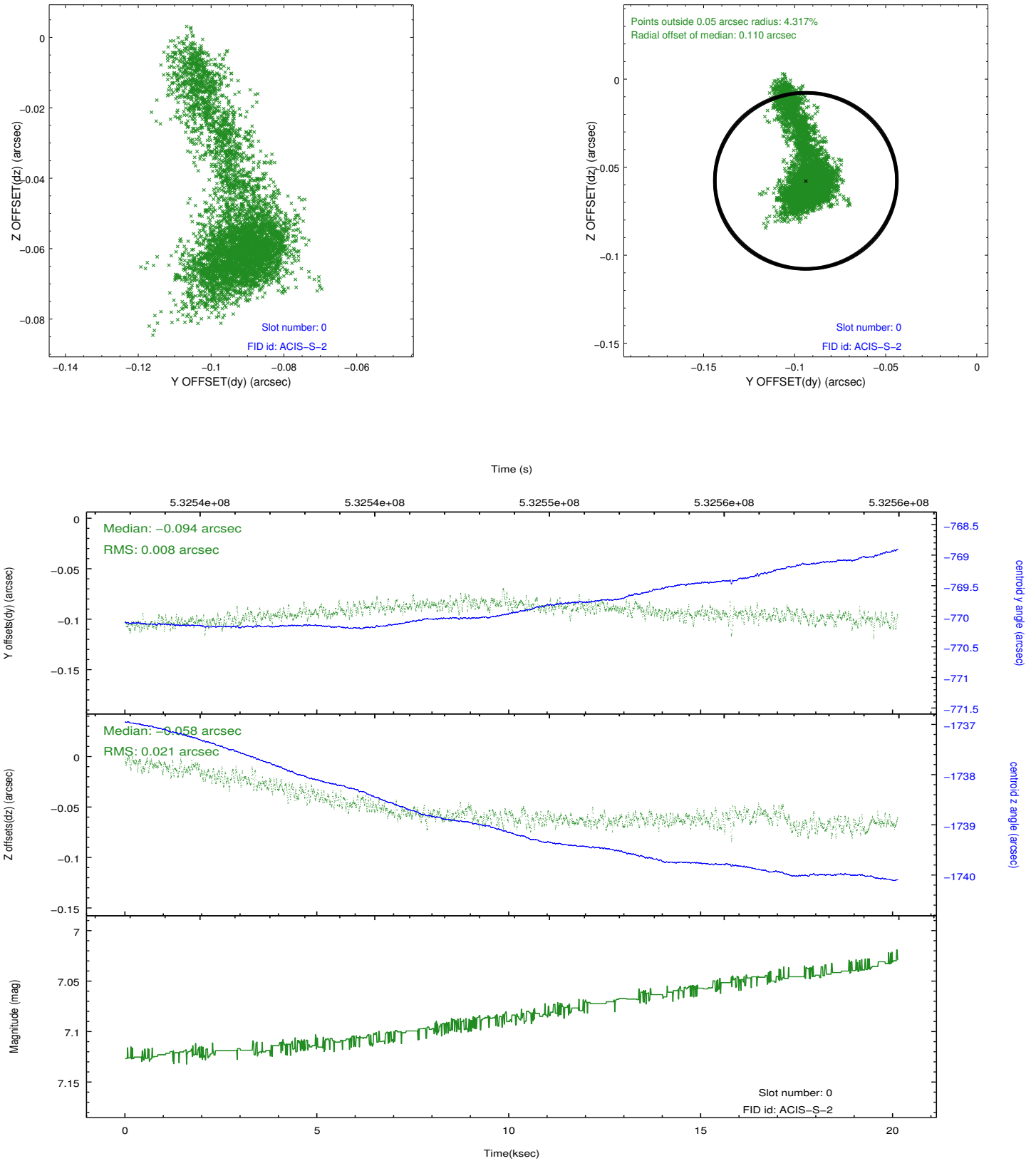


## 2.4.5 Slot 7

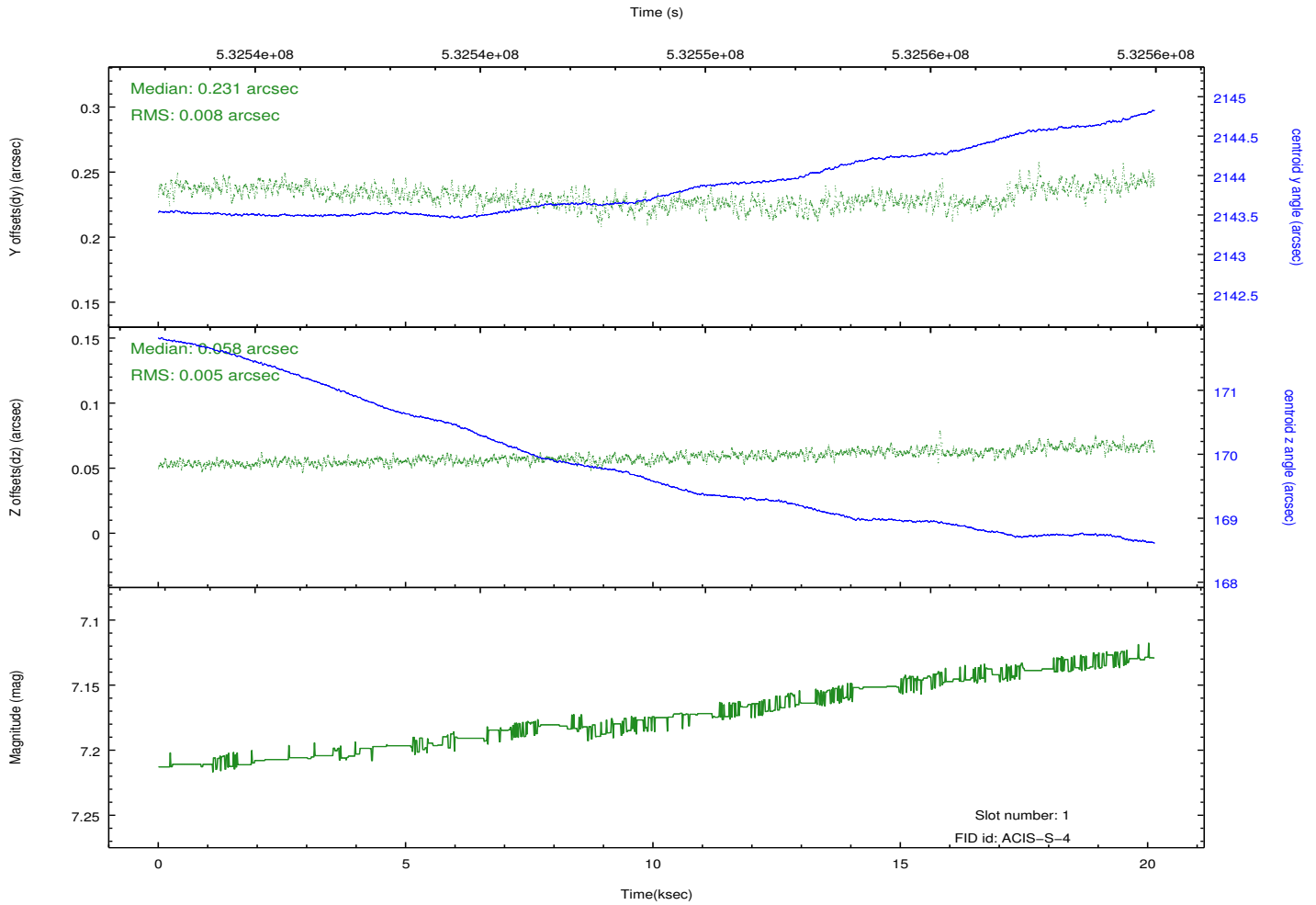
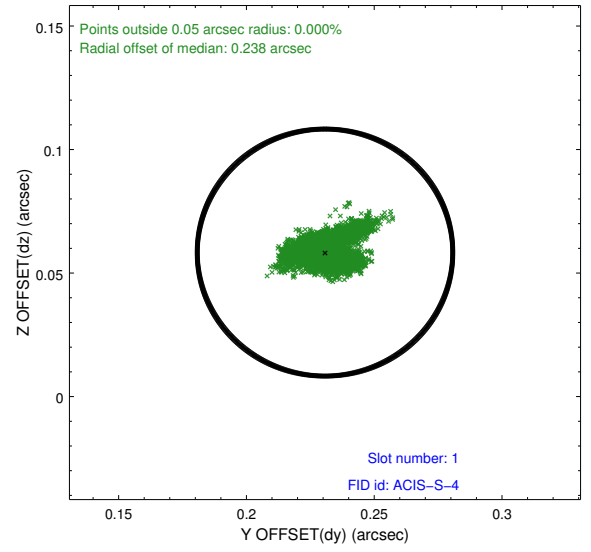
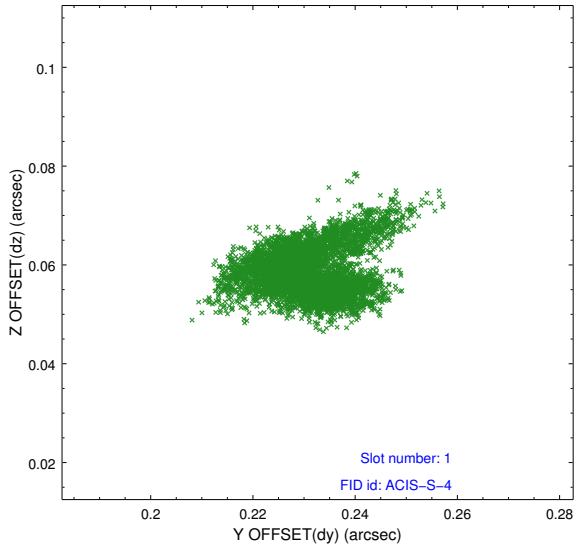


## 2.5 FID Slots

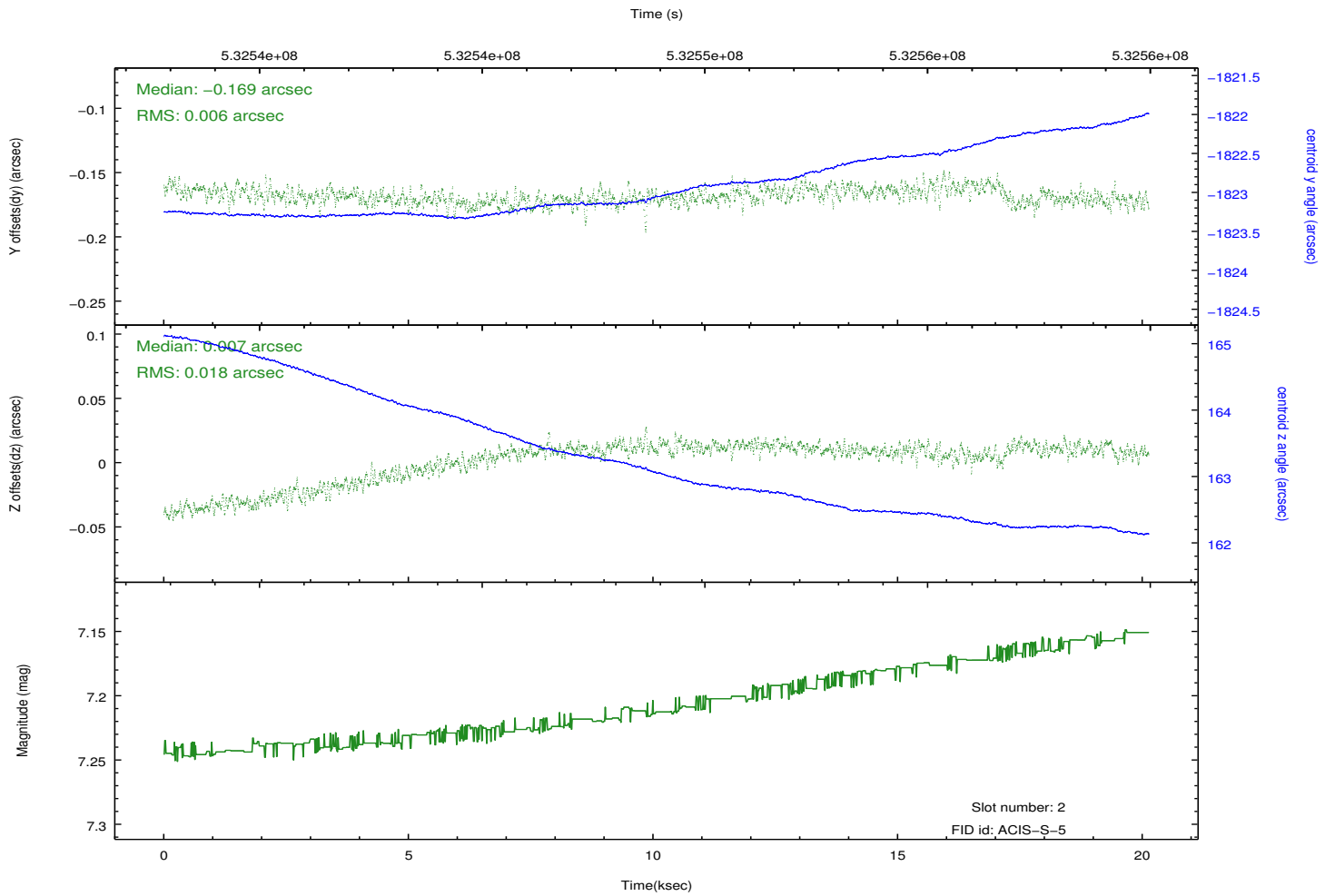
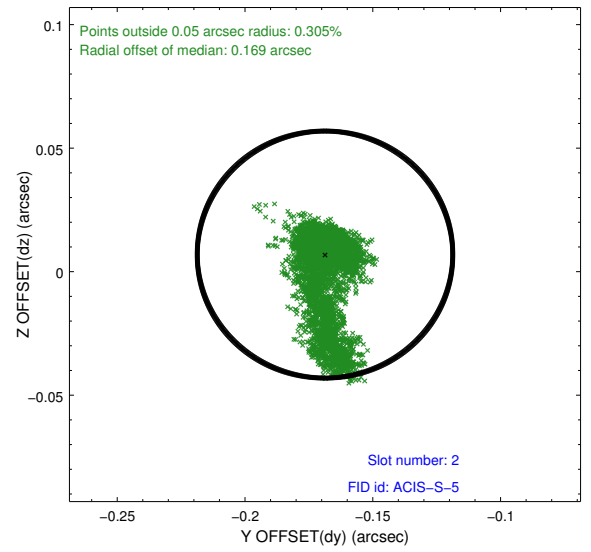
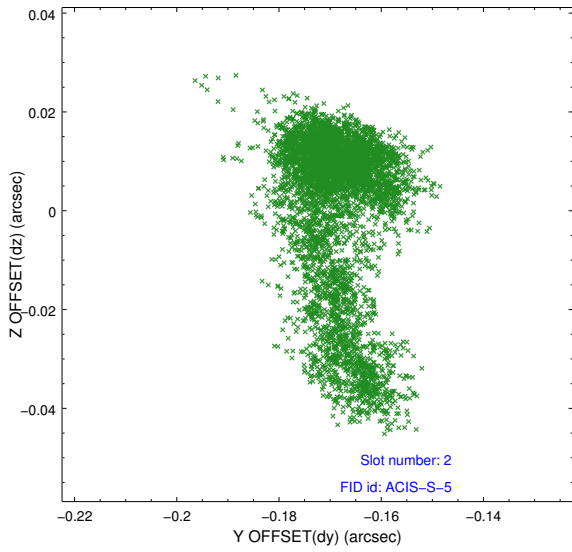
### 2.5.1 Slot 0



## 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)	2014.11.17
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.058751021326

## A.2 Comments