

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 10532 - L2 Version 2  
Chandra X-Ray Center

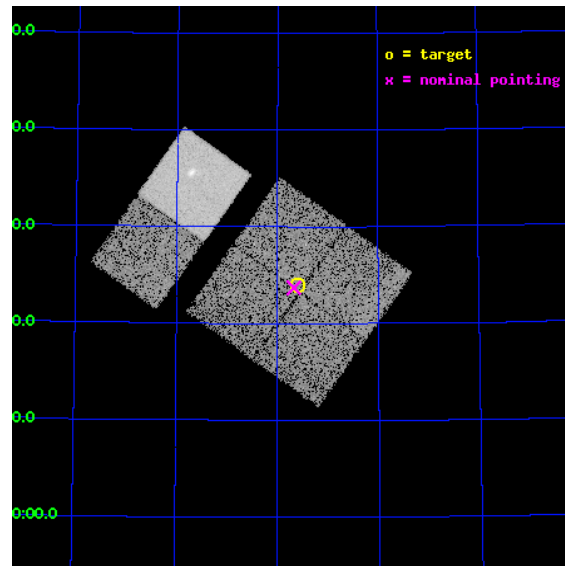
L2 Processing Date : Jun 3 2012

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# 1 Front

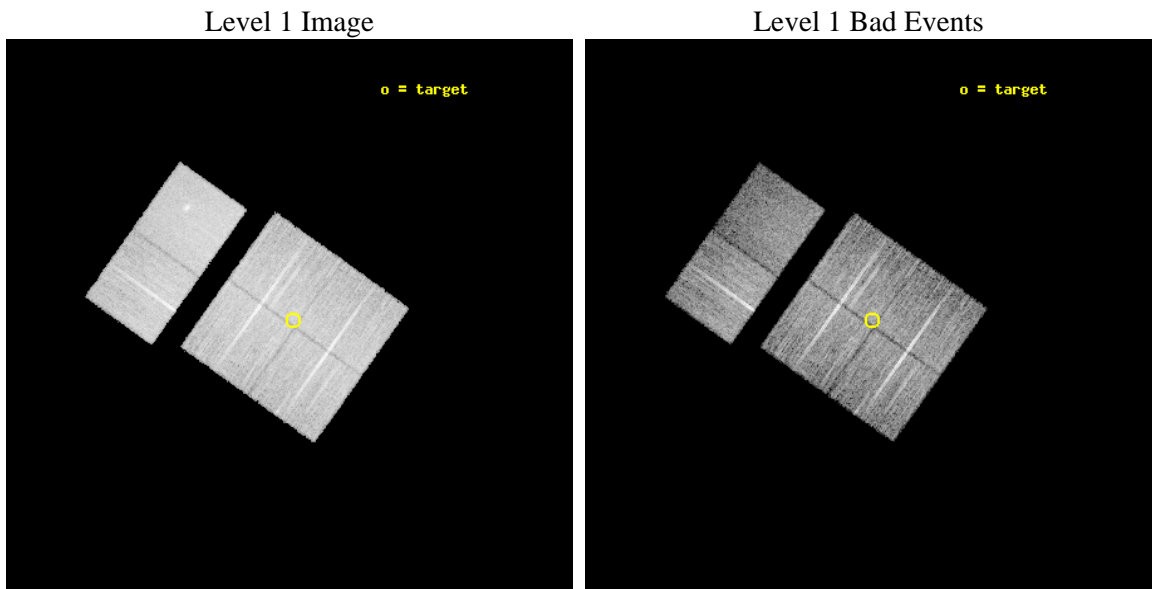
seq_num	600725	Sequence number
obs_id	10532	Observation id
title	The Baryons Content of the Most Massive Spiral Galaxy	Proposal tit
observer	Dr. Joel Bregman	Principal investigator
object	NGC 1961	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	68.4	Observer's specified target RA [deg]
dec_targ	69.4	Observer's specified target Dec [deg]
ra_nom	68.418257706392	Nominal RA [deg]
dec_nom	69.395061499699	Nominal Dec [deg]
roll_nom	305.40961615713	Nominal Roll [deg]
revision	2	Processing version of data
ontime	10137.599962294	Sum of GTIs [s]
livetime	10009.231567442	Livetime [s]
ontime0	10137.599962294	Sum of GTIs [s]
ontime1	10137.599962294	Sum of GTIs [s]
ontime2	10134.358991921	Sum of GTIs [s]
ontime3	10137.599962294	Sum of GTIs [s]
ontime6	10137.599962294	Sum of GTIs [s]
ontime7	10137.599962294	Sum of GTIs [s]
l2events	81718	Number of level 2 events



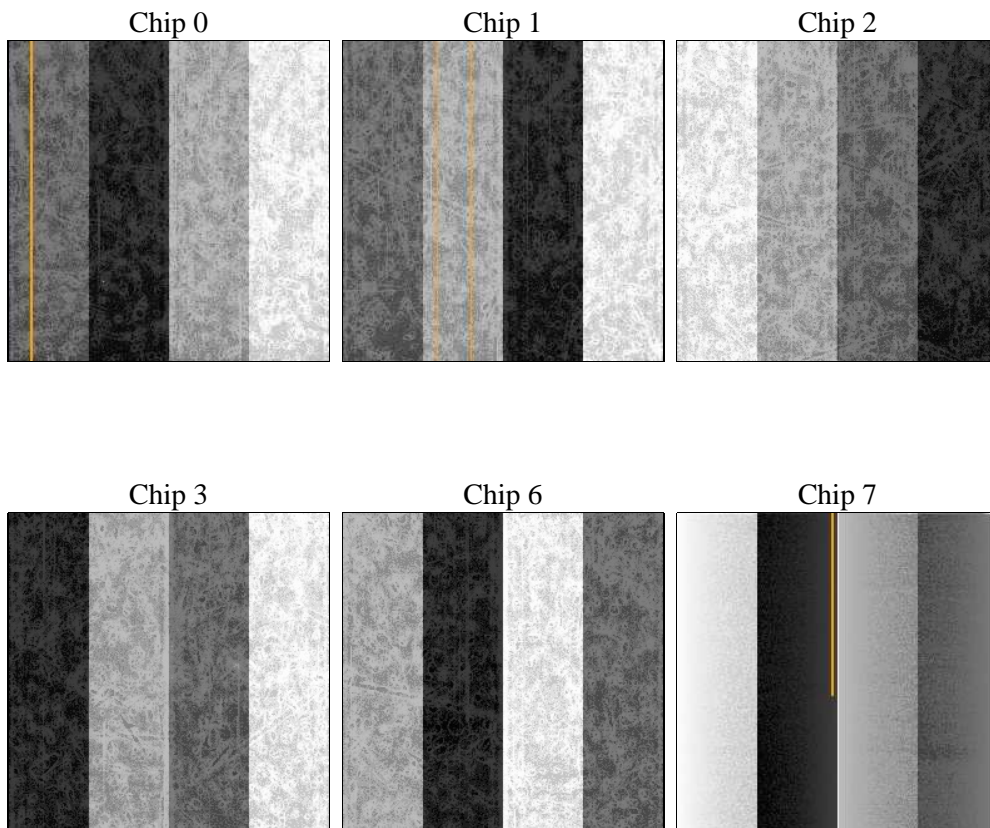
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	10137.599962294	Sum of GTIs [s]
caldsver	4.4.9	&#160	ontime0	10137.599962294	Sum of GTIs [s]
date	2012-06-03T22:23:36	Date and time of file creation	ontime1	10137.599962294	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	10134.358991921	Sum of GTIs [s]
			ontime3	10137.599962294	Sum of GTIs [s]
			ontime6	10137.599962294	Sum of GTIs [s]
			ontime7	10137.599962294	Sum of GTIs [s]
			l1events	569186	Number of level 1 events

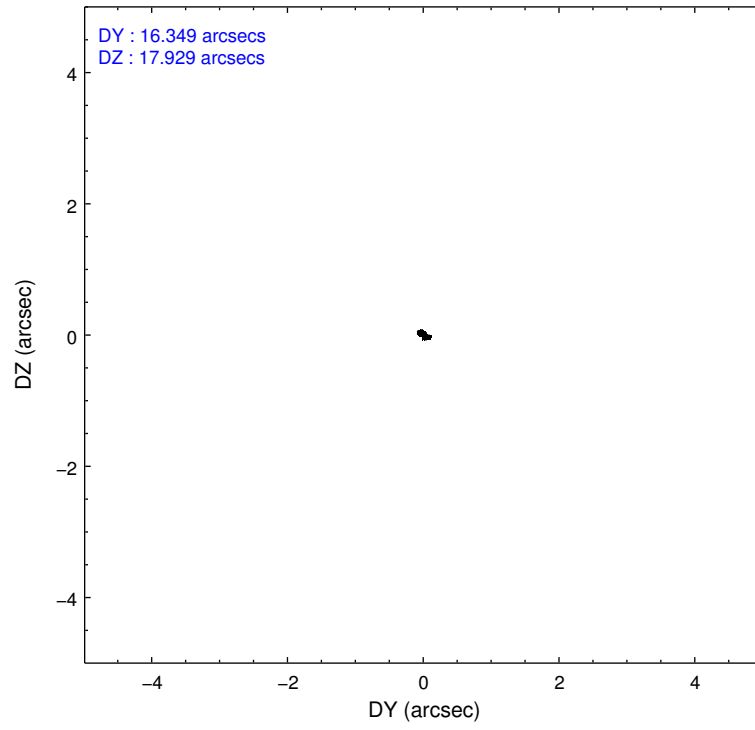
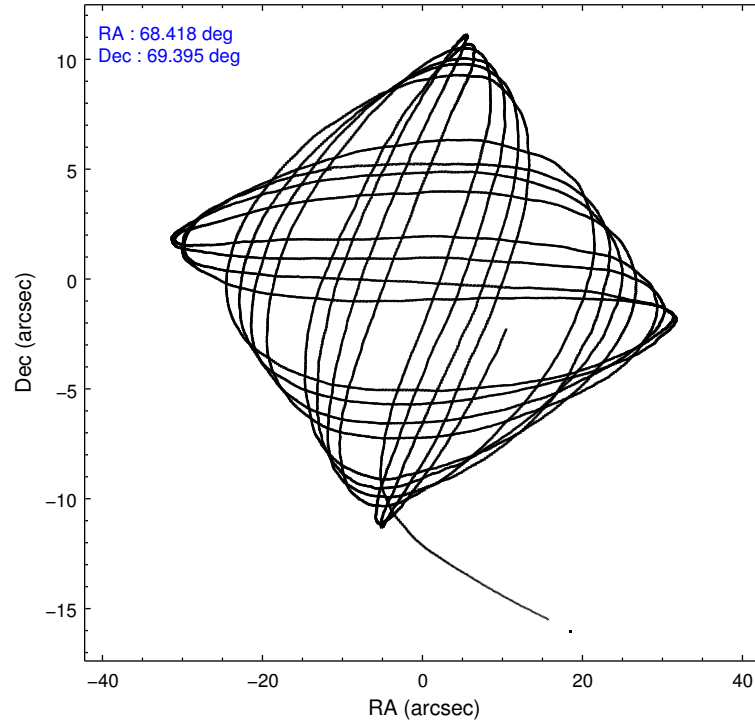
### 2.1.4 Events

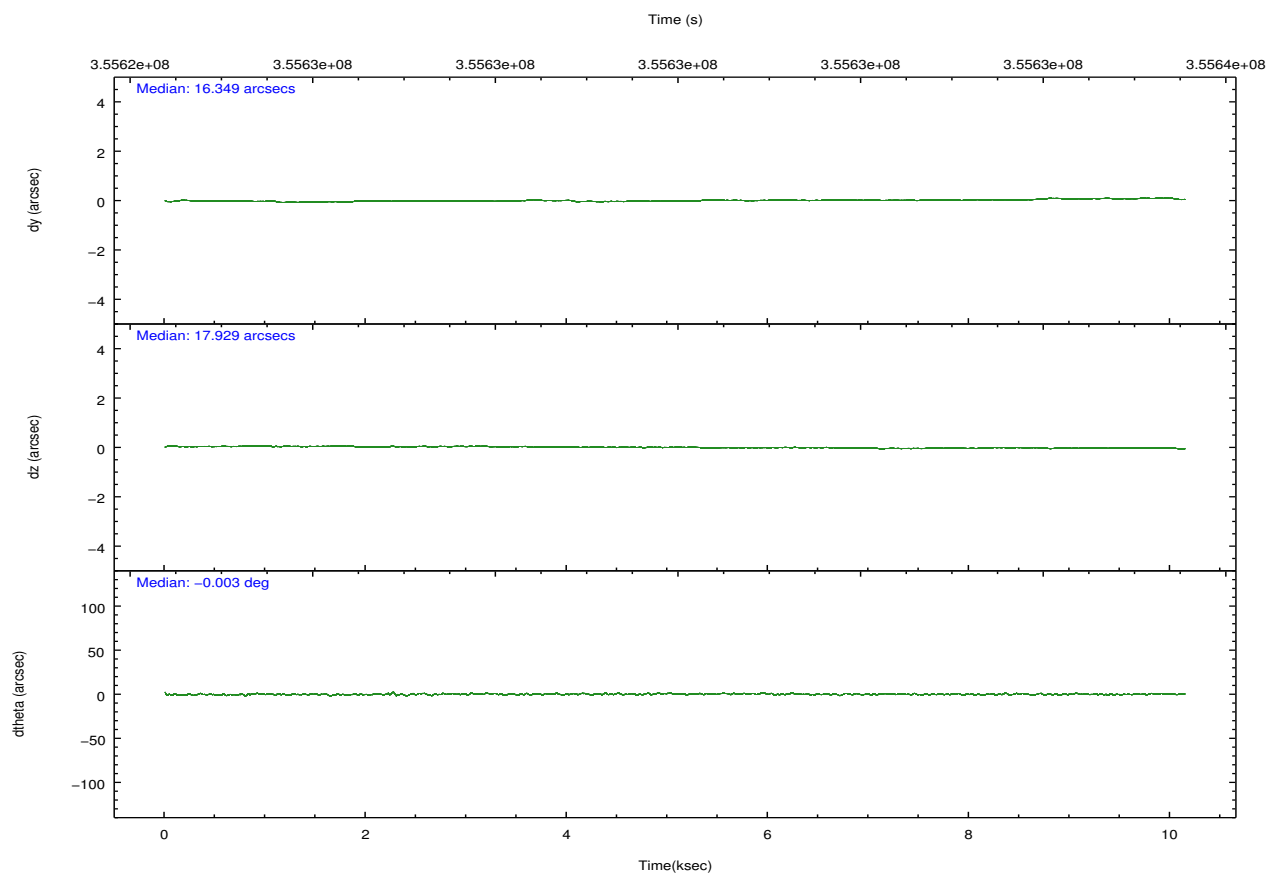
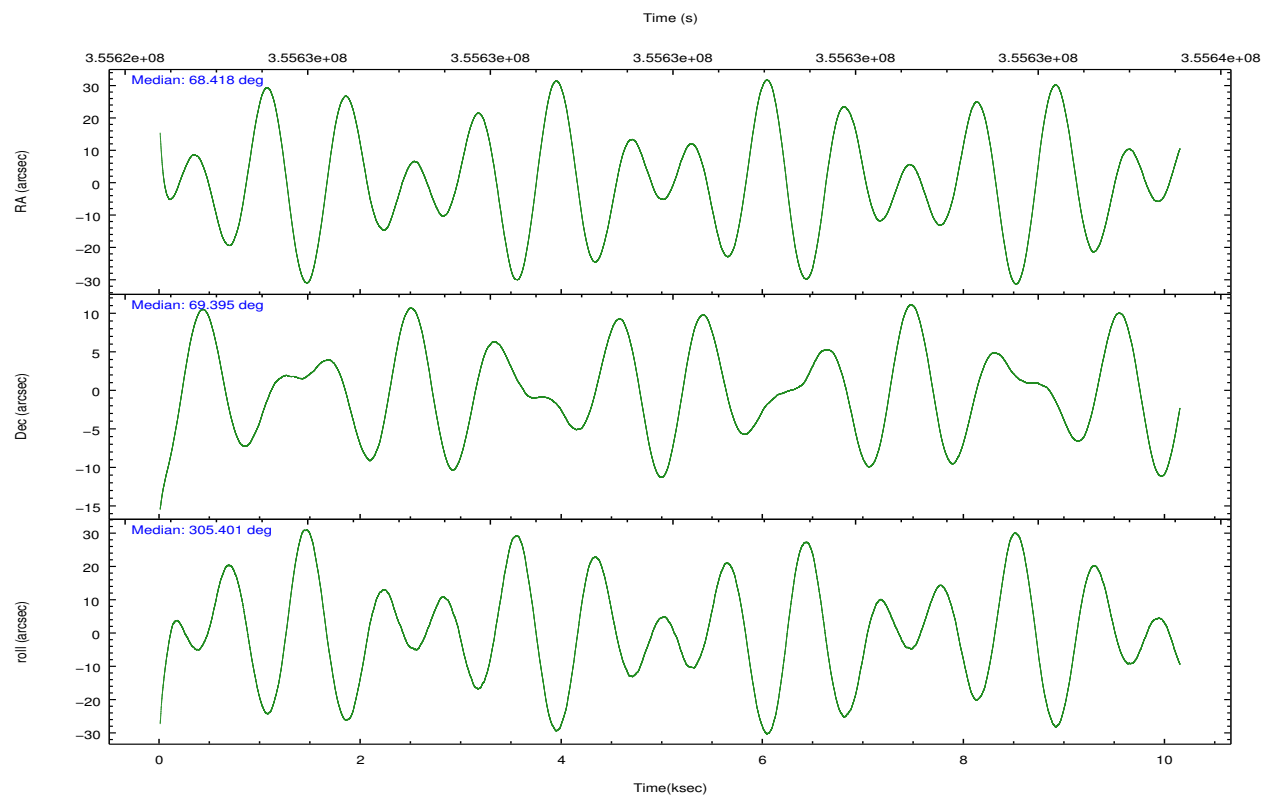
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	87479	88124	95086	93656	96250	108591	grade 0 events	3266	3766	3331	3251	3347	4814
rejected events	78656	78271	86427	85314	87135	62923		3%	4%	3%	3%	3%	4%
rejected %	89%	88%	90%	91%	90%	57%	grade 1 events	48	42	56	49	49	144
								0%	0%	0%	0%	0%	0%
							grade 2 events	2455	2418	2365	1985	2255	10071
								2%	2%	2%	2%	2%	9%
							grade 3 events	1046	1183	970	1011	1083	4473
								1%	1%	1%	1%	1%	4%
							grade 4 events	998	1131	996	970	1069	4359
								1%	1%	1%	1%	1%	4%
							grade 5 events	3350	3679	3340	3844	3987	11399
								3%	4%	3%	4%	4%	10%
							grade 6 events	1806	2180	1751	1778	2154	25759
								2%	2%	1%	1%	2%	23%
							grade 7 events	74510	73725	82277	80768	82306	47572
								85%	83%	86%	86%	85%	43%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	68.347056	68.41825770639208	CCD I2 on	Y	Y
[deg] Pointing Dec	69.406421	69.39506149969871	CCD I3 on	Y	Y
[deg] Pointing Roll	305.267587	305.4096161571334	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O1	Y
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	355625050.184000	355623587.90523	CCD S5 on	N	N
Observation start date	2009-04-09T00:43:04	2009-04-09T00:19:47	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	355635050.184000	355635896.61835	On-chip summing requested	N	N
Observation end date	2009-04-09T03:29:44	2009-04-09T03:44:56	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



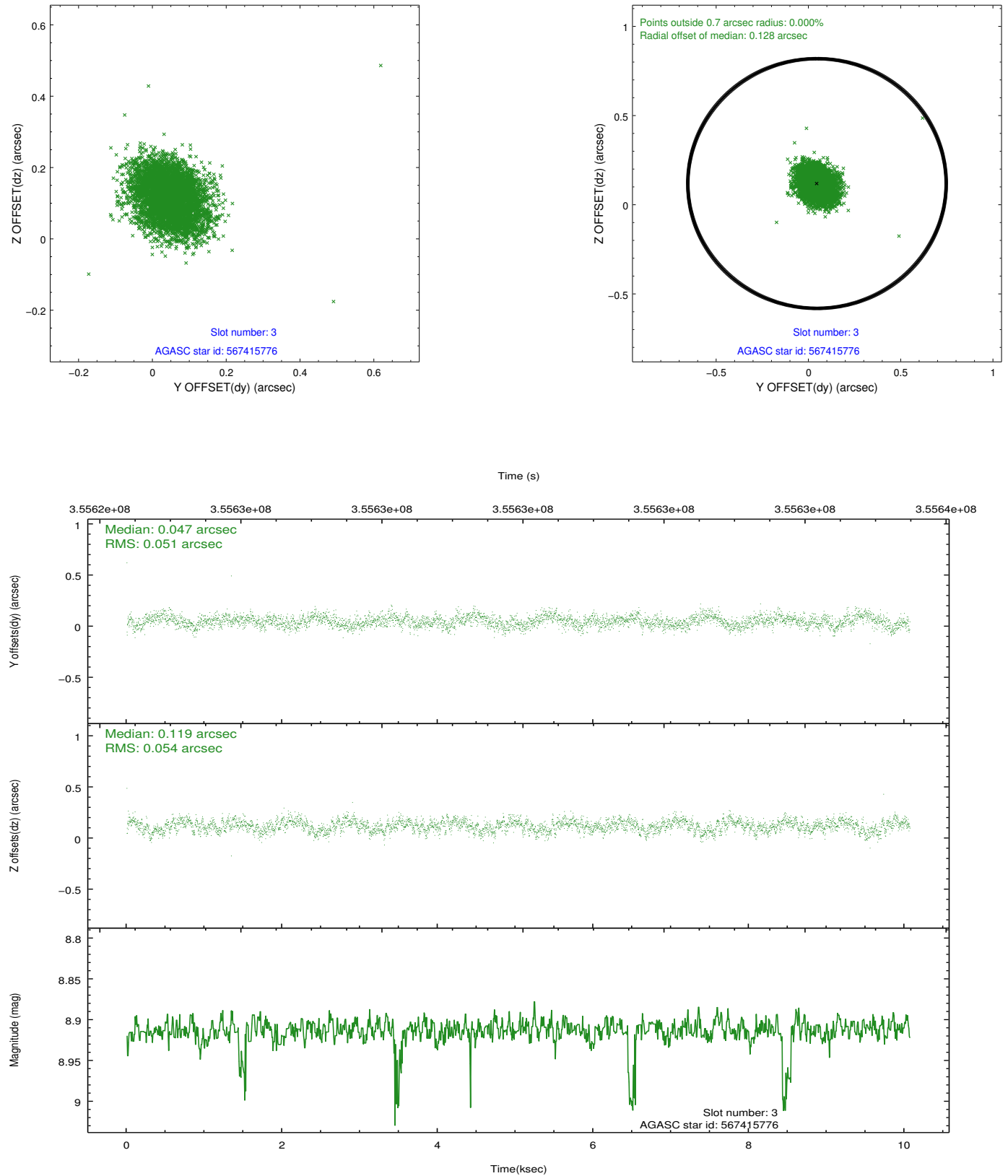


### Slot Statistics

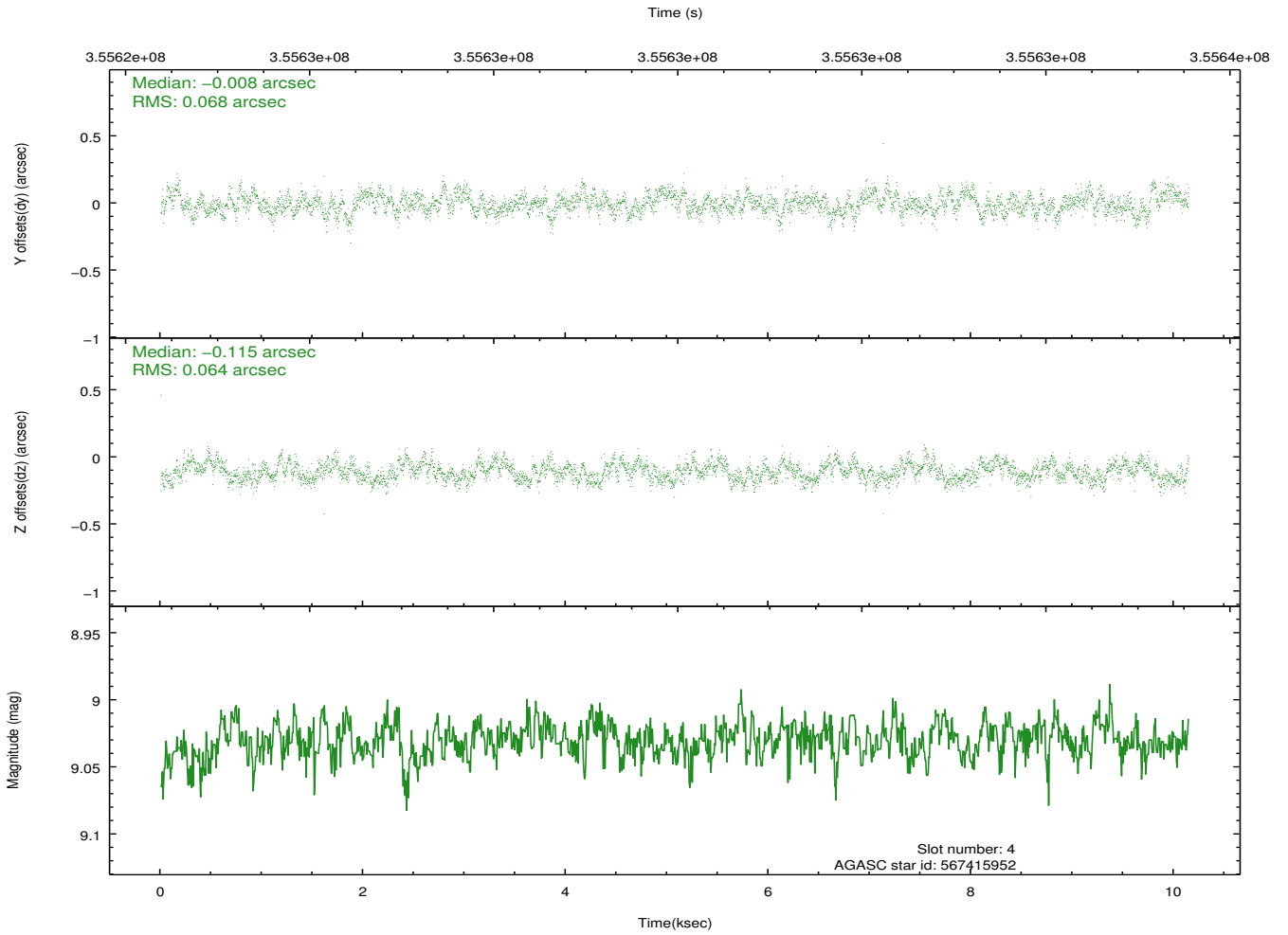
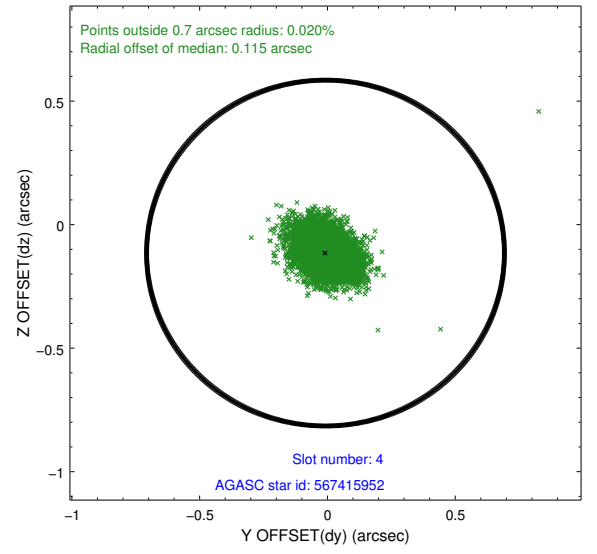
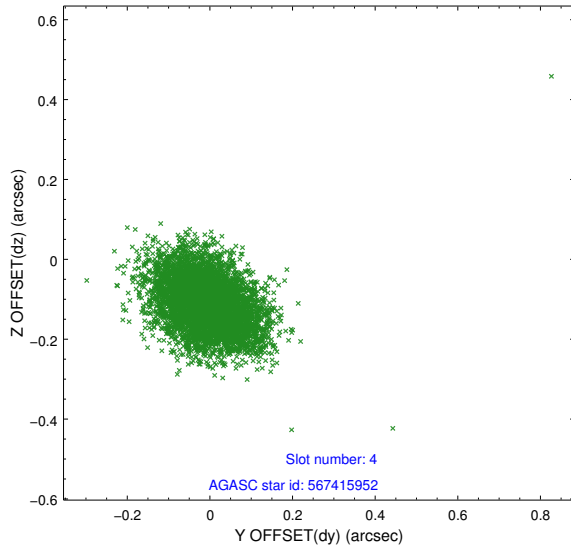
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	6.93	2474	-0.065	-0.083	0.009	0.016	0.000000	0.000000	-771.16	-848.06
1	FID	ACIS-I-4	6.96	2474	0.193	0.065	0.006	0.011	0.000000	0.000000	2142.90	1058.02
2	FID	ACIS-I-5	7.00	2474	-0.230	0.088	0.009	0.016	0.000000	0.000000	-1824.50	1056.45
3	GUIDE	567415776	8.91	4900	0.047	0.119	0.079	0.127	68.555025	69.183720	808.32	-245.07
4	GUIDE	567415952	9.03	4942	-0.008	-0.115	0.098	0.158	68.342238	68.724471	2002.50	-1423.25
5	GUIDE	567419296	9.21	4943	-0.127	-0.137	0.116	0.178	67.568405	69.144442	189.50	-1355.94
6	GUIDE	567421744	9.05	4945	0.126	0.008	0.115	0.178	67.702912	69.253764	-28.43	-985.62
7	GUIDE	567935024	9.48	4946	-0.037	0.113	0.106	0.174	70.049487	69.398677	1243.36	1761.92

## 2.4 Star Slots

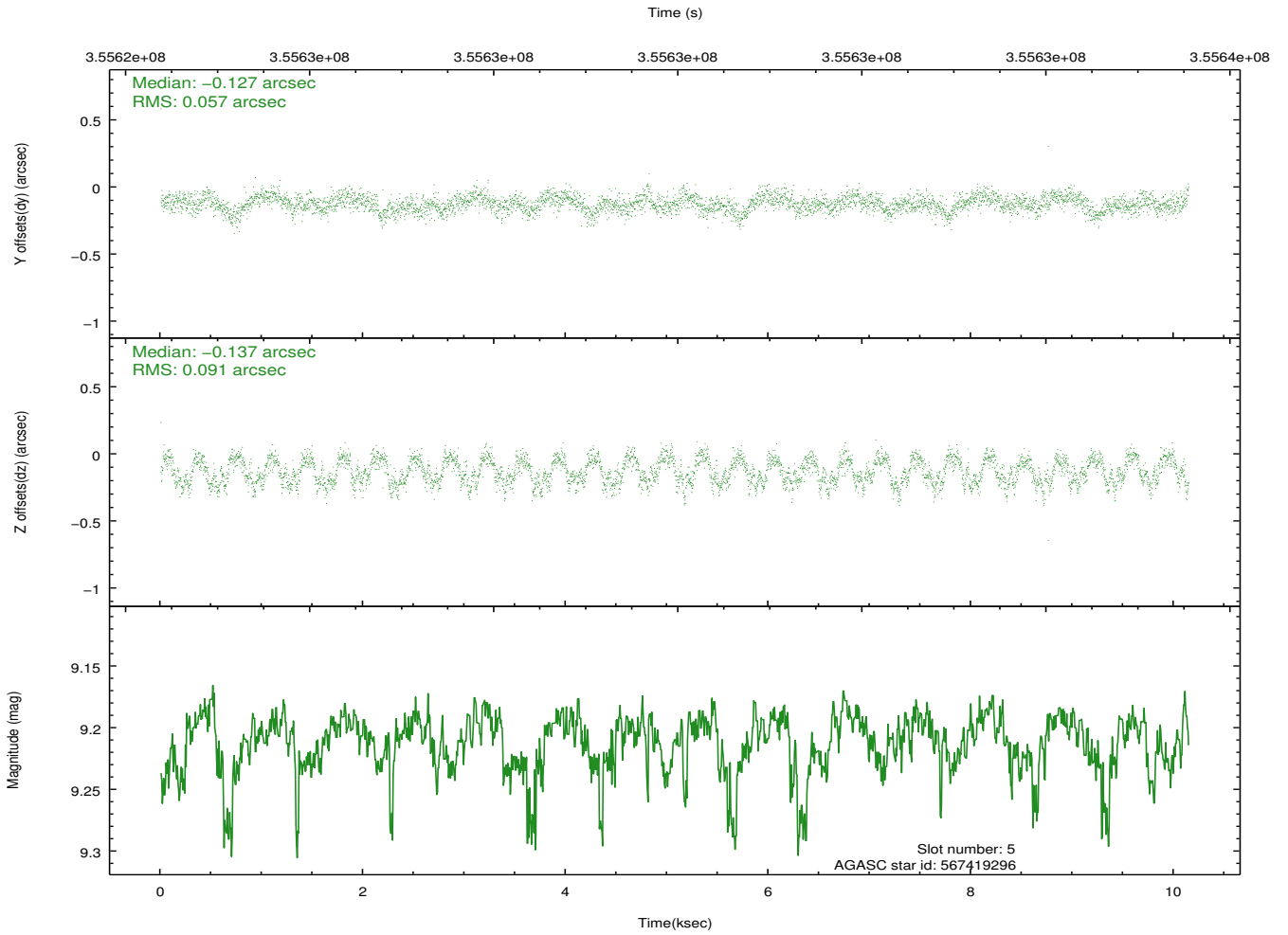
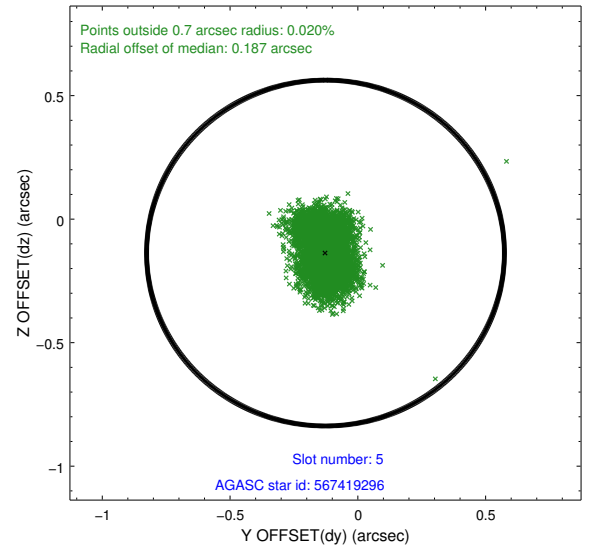
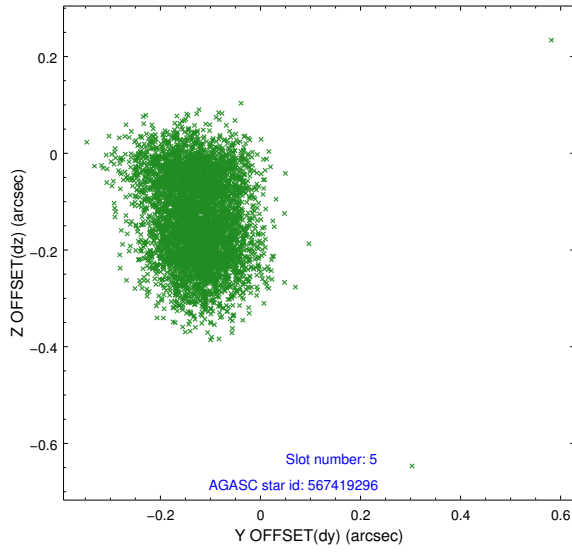
### 2.4.1 Slot 3



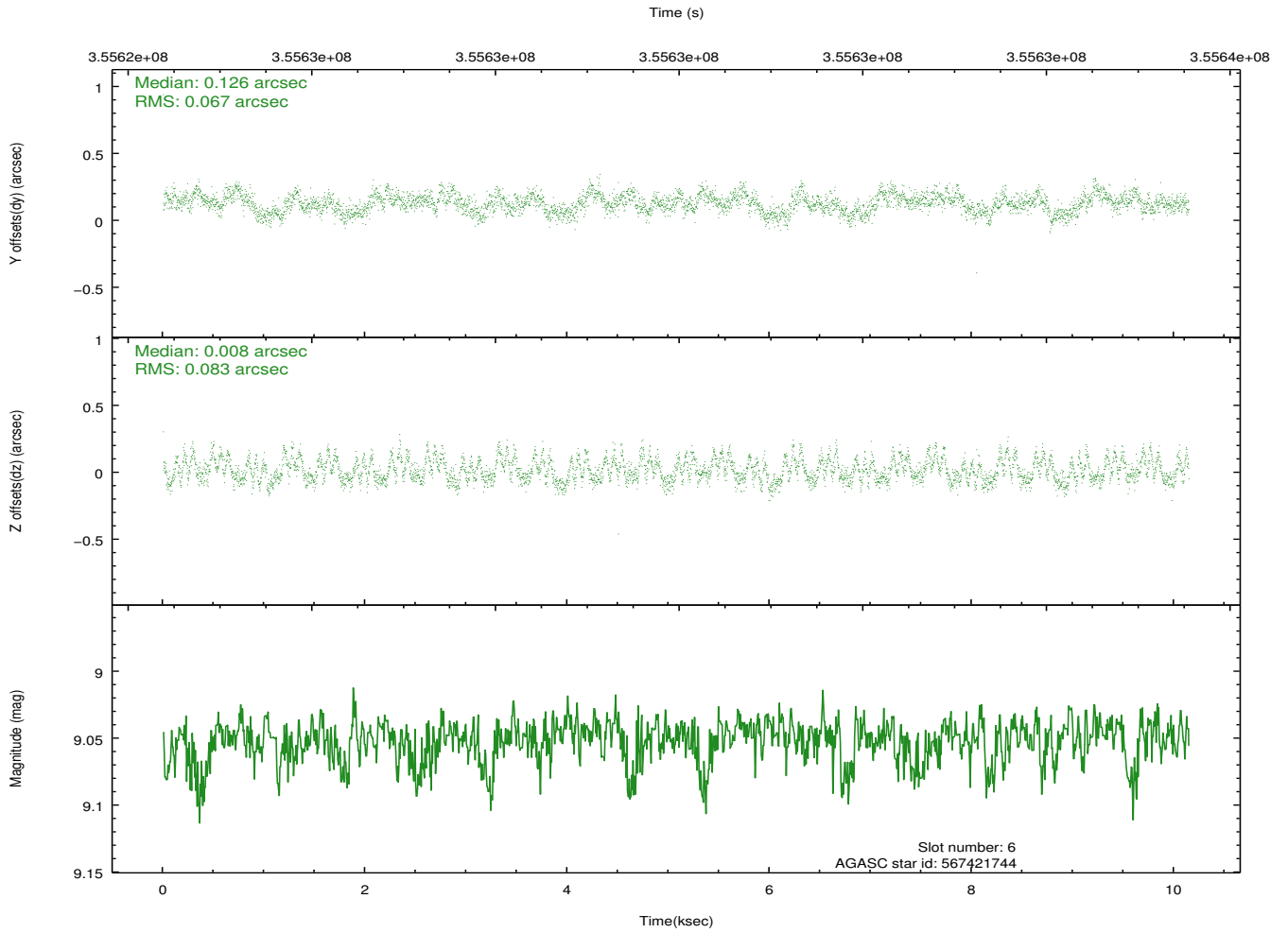
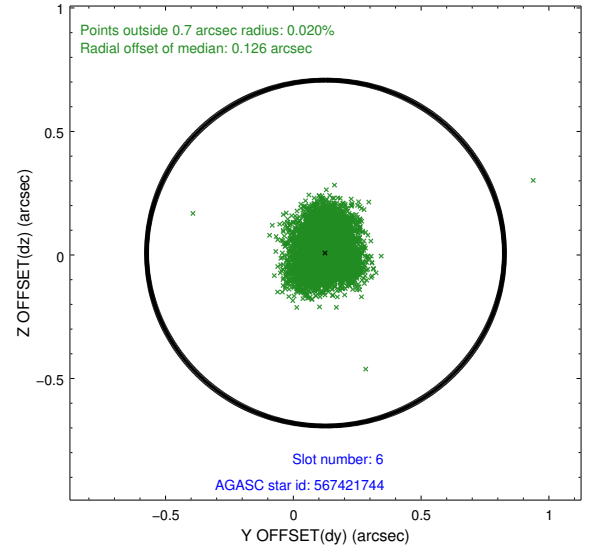
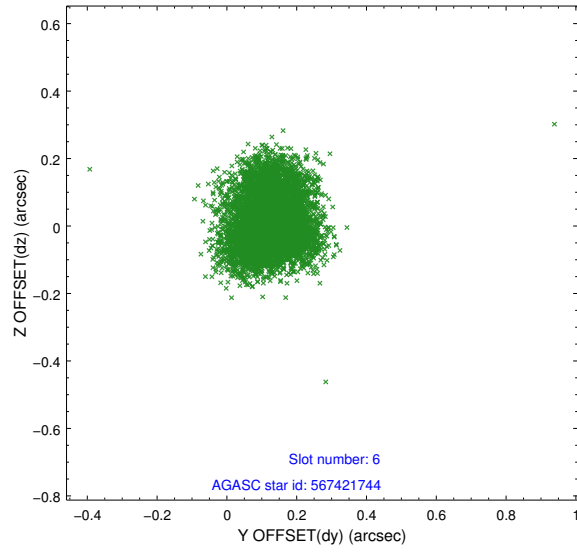
## 2.4.2 Slot 4



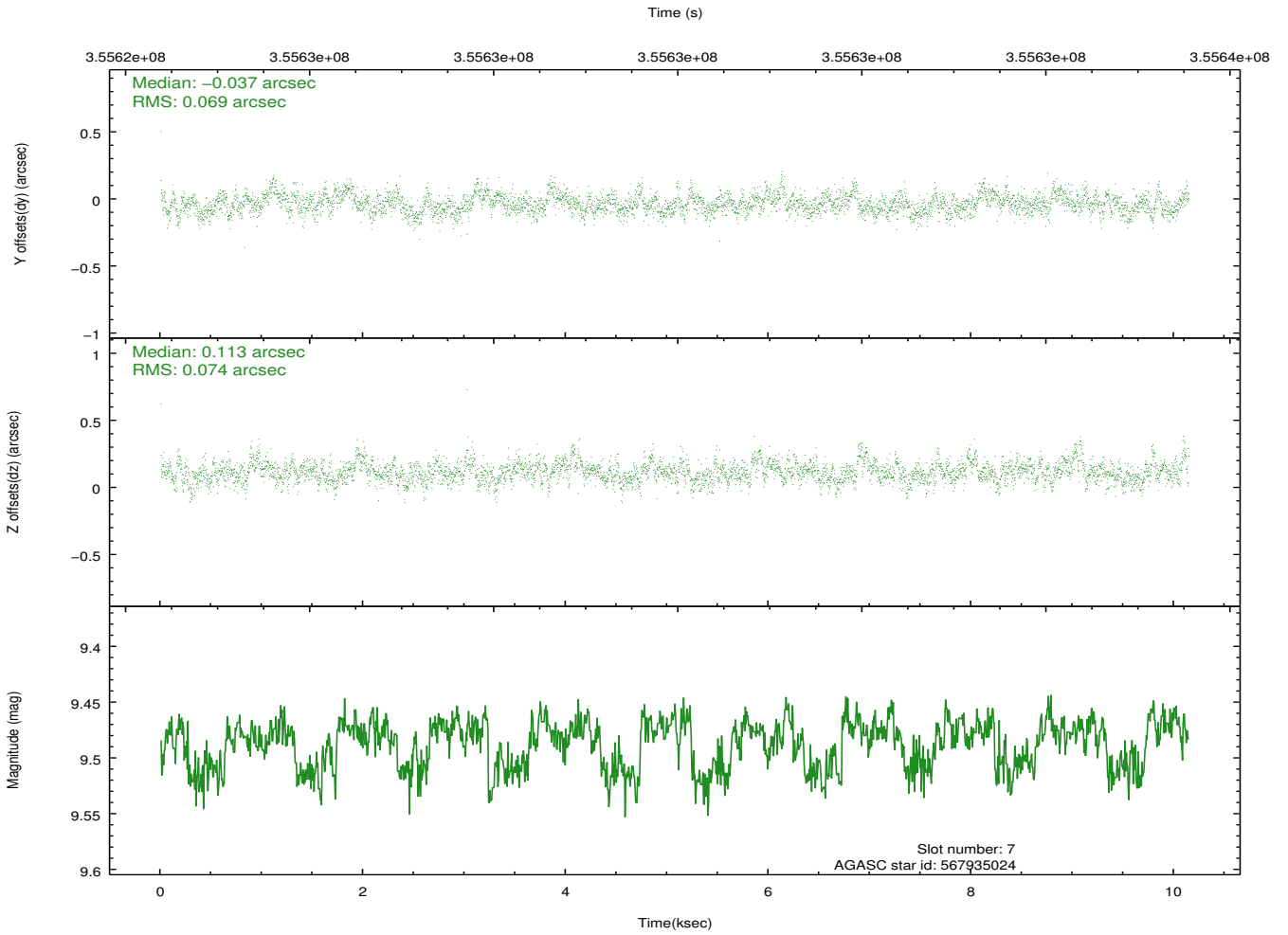
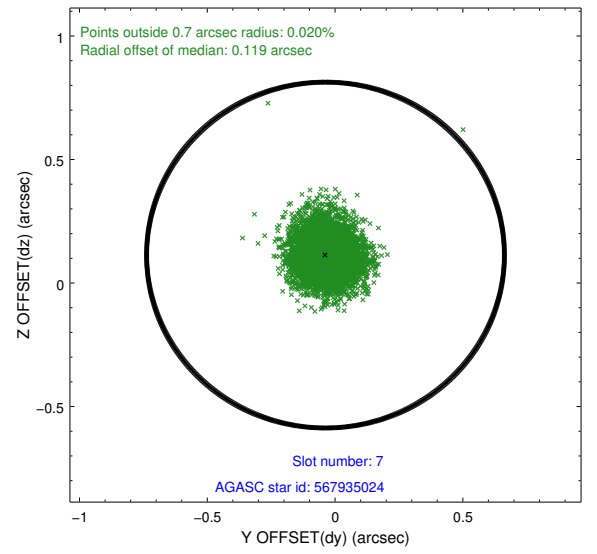
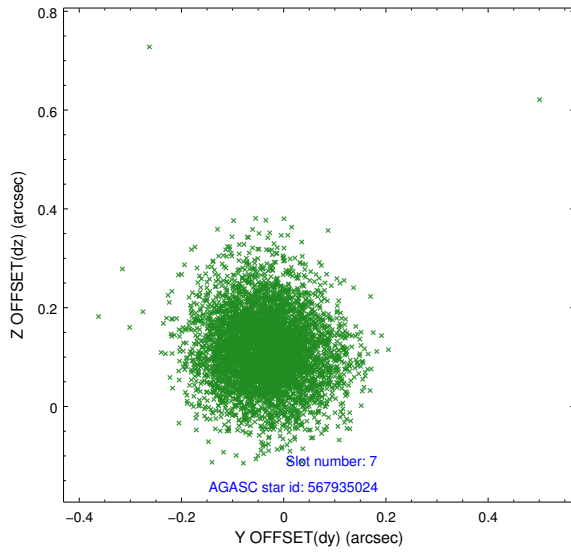
### 2.4.3 Slot 5



## 2.4.4 Slot 6

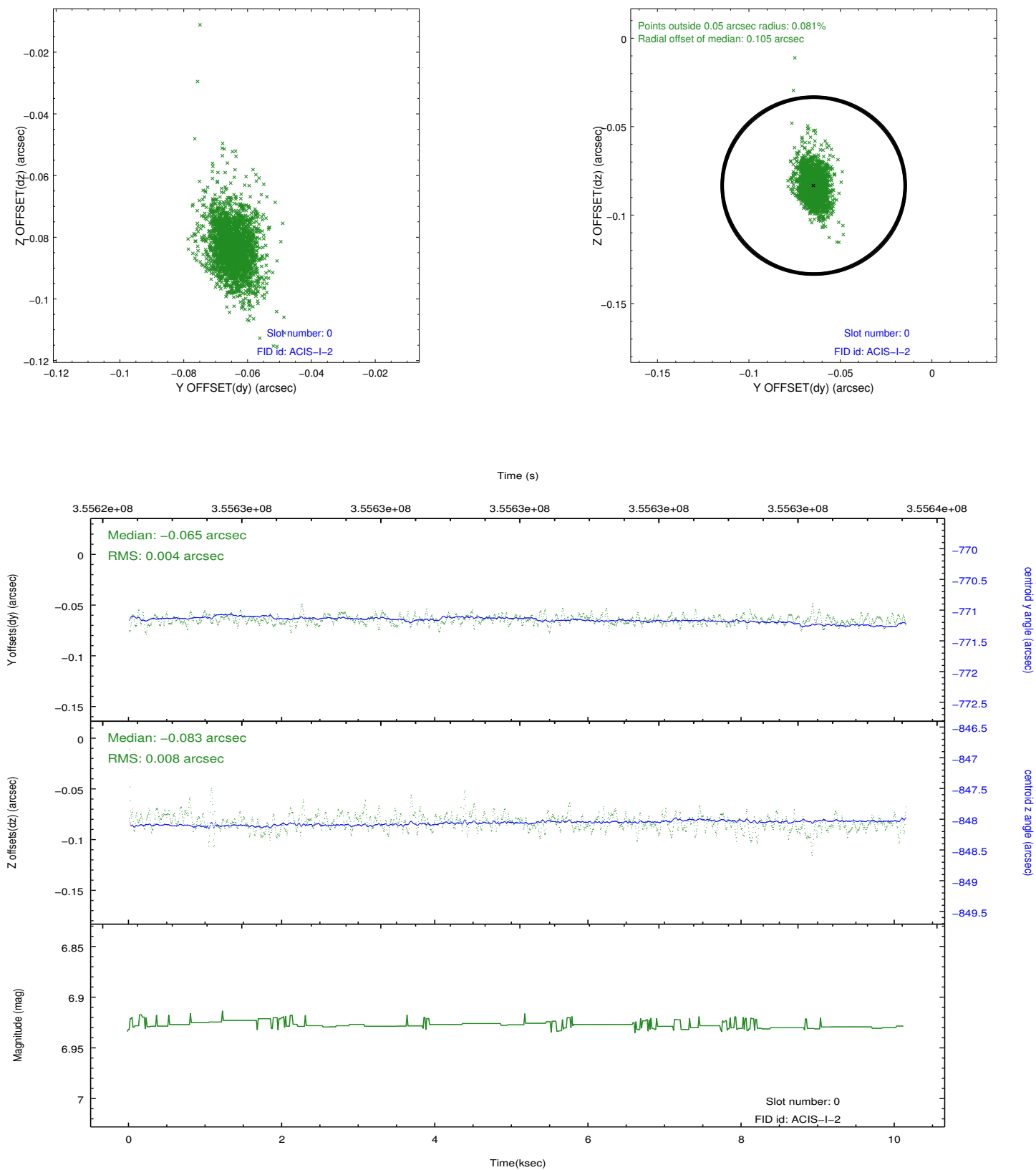


## 2.4.5 Slot 7

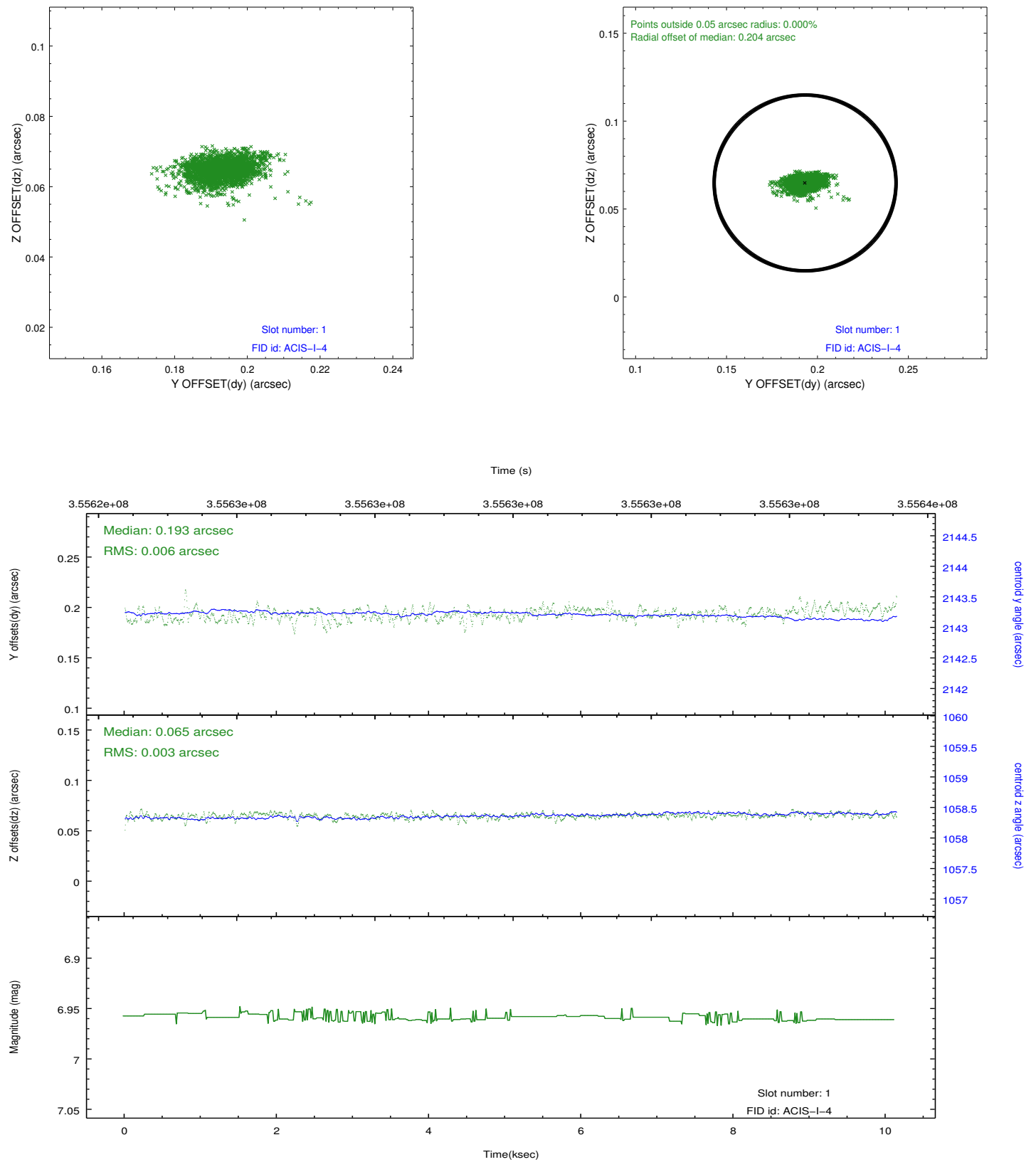


## 2.5 FID Slots

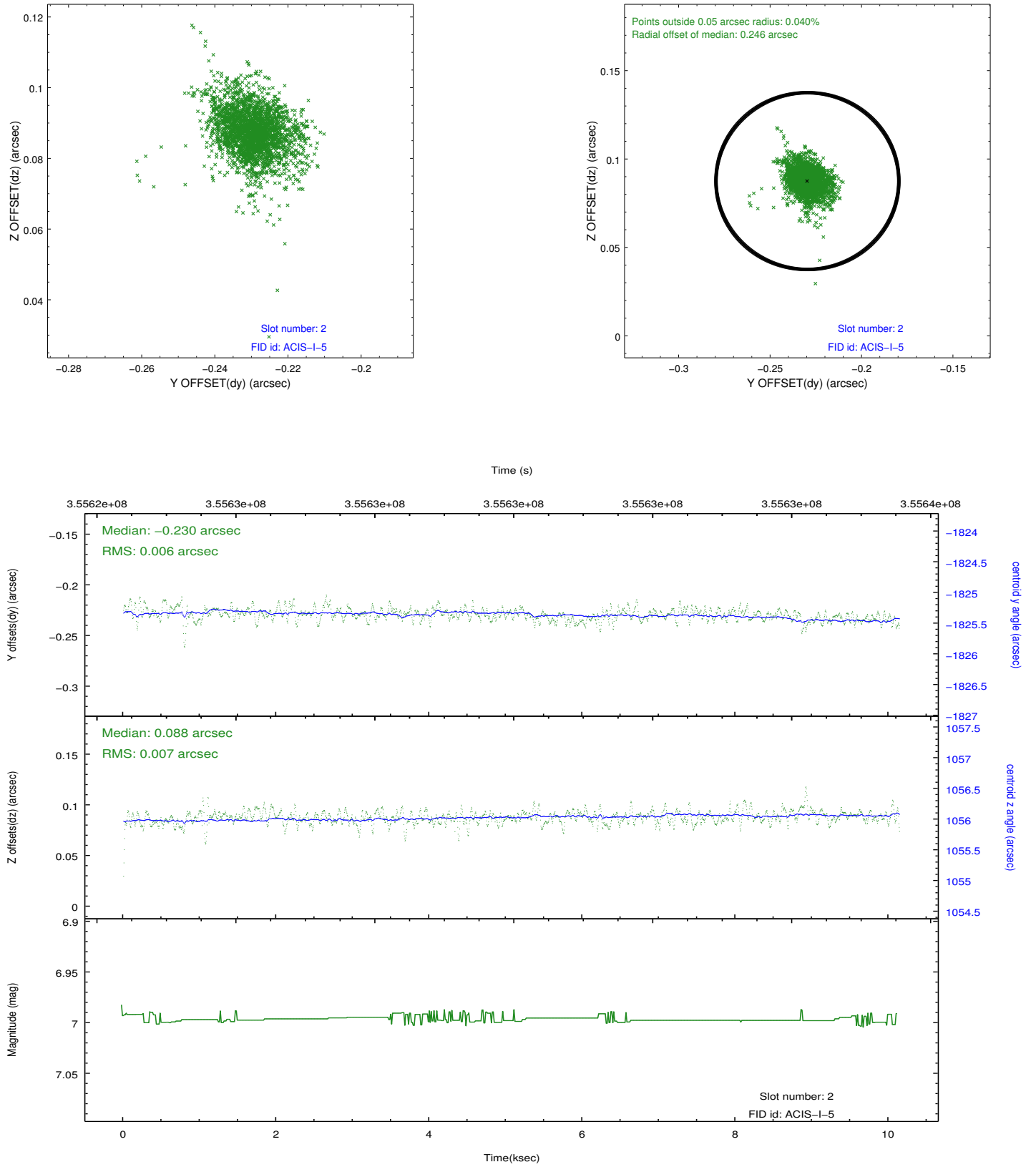
### 2.5.1 Slot 0



## 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)	2012.06.07
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.1375999

### A.2 Comments