

# V&V Reference Report

## L2 ASCDS Version : 10.4.3.1

Observation 18075 - L2 Version 2  
Chandra X-Ray Center

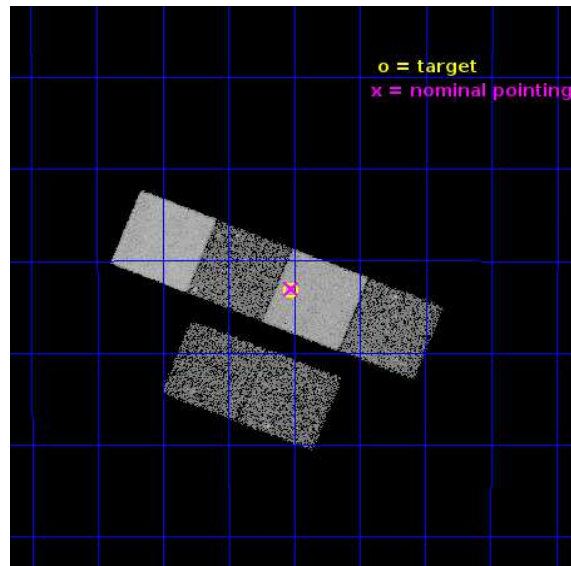
L2 Processing Date : Feb 9 2016

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# 1 Front

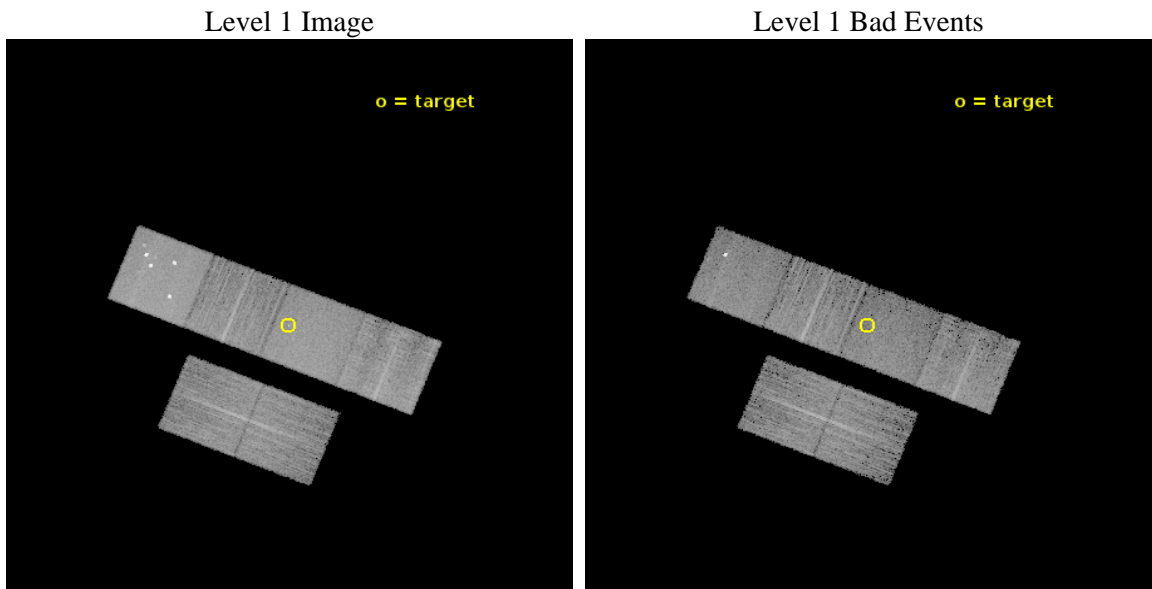
seq_num	901189	Sequence number
obs_id	18075	Observation id
title	Compton-Thick AGN: The Hunt is on	Proposal title
observer	Dr. Marco Ajello	Principal investigator
object	ESO 500-34	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	156.13125	Observer's specified target RA [deg]
dec_targ	-23.552972	Observer's specified target Dec [deg]
ra_nom	156.13043969915	Nominal RA [deg]
dec_nom	-23.550736687802	Nominal Dec [deg]
roll_nom	21.779208764282	Nominal Roll [deg]
revision	2	Processing version of data
ontime	9955.200148344	Sum of GTIs [s]
livetime	9829.1414097638	Livetime [s]
ontime2	9955.200148344	Sum of GTIs [s]
ontime3	9955.200148344	Sum of GTIs [s]
ontime5	9955.200148344	Sum of GTIs [s]
ontime6	9955.200148344	Sum of GTIs [s]
ontime7	9955.200148344	Sum of GTIs [s]
ontime8	9955.200148344	Sum of GTIs [s]
l2events	99527	Number of level 2 events



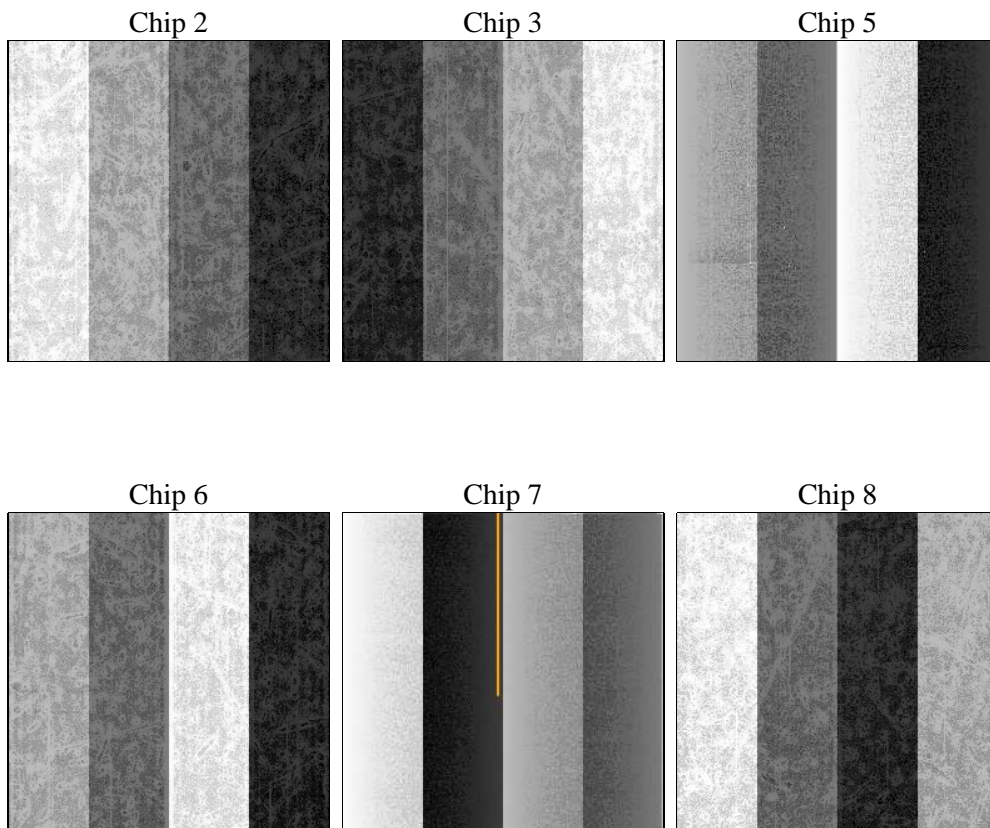
## 2 OBI

### 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	10.4.3.1	Processing system revision	ontime	9955.200148344	Sum of GTIs [s]
caldsver	4.7.0	&#160	ontime2	9955.200148344	Sum of GTIs [s]
date	2016-02-09T22:48:07	Date and time of file creation	ontime3	9955.200148344	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	9955.200148344	Sum of GTIs [s]
			ontime6	9955.200148344	Sum of GTIs [s]
			ontime7	9955.200148344	Sum of GTIs [s]
			ontime8	9955.200148344	Sum of GTIs [s]
			l1events	441789	Number of level 1 events

### 2.1.4 Events

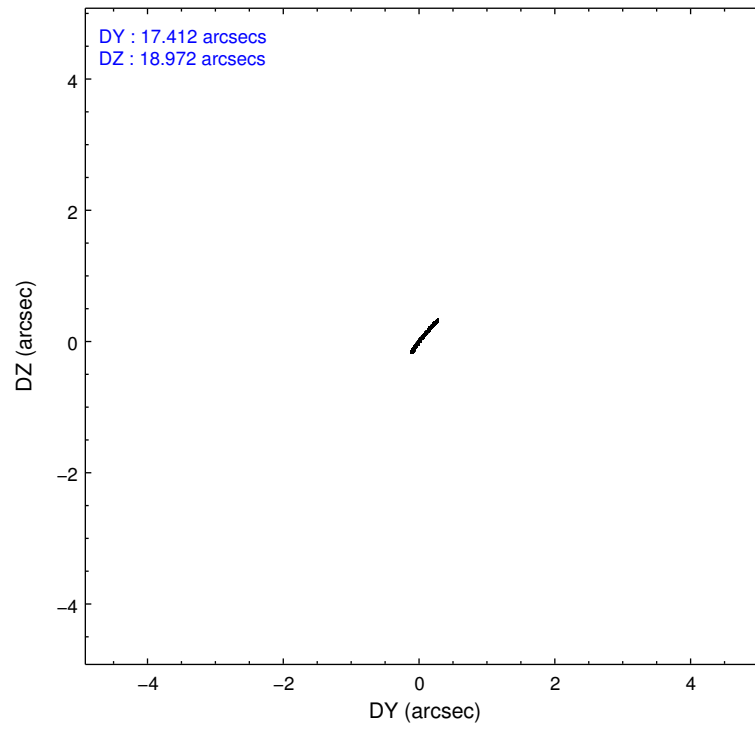
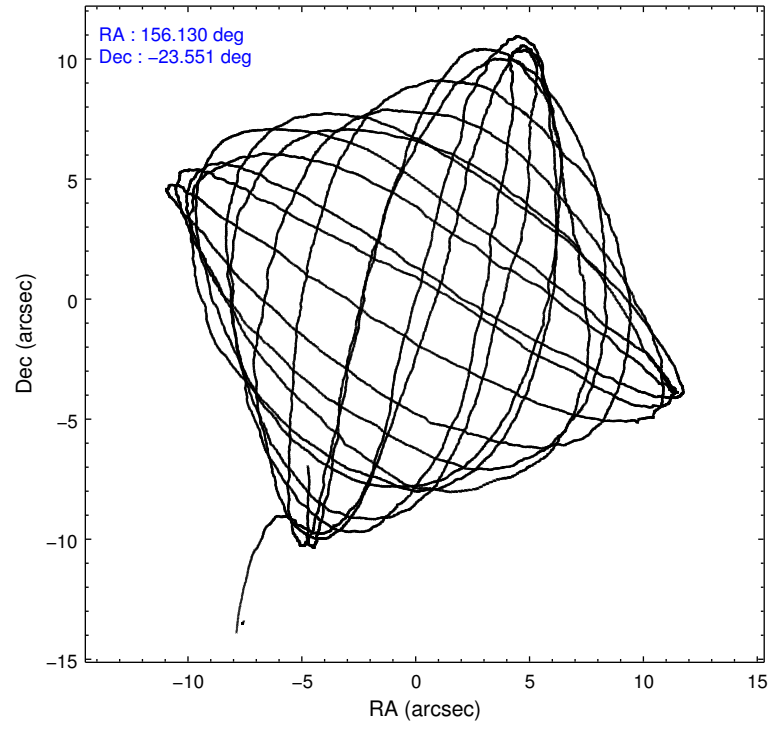
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	60133	57475	107290	62605	78657	75629	grade 0 events	2221	2138	11520	2311	2763	5309
rejected events	53805	51279	53026	55604	44750	56396		3%	3%	10%	3%	3%	7%
rejected %	89%	89%	49%	88%	56%	74%	grade 1 events	54	34	191	18	104	67
								0%	0%	0%	0%	0%	0%
							grade 2 events	1528	1330	14615	1665	7191	4819
								2%	2%	13%	2%	9%	6%
							grade 3 events	640	710	1372	654	2586	1855
								1%	1%	1%	1%	3%	2%
							grade 4 events	653	658	1302	681	2677	1843
								1%	1%	1%	1%	3%	2%
							grade 5 events	2349	2971	6394	2766	7640	4339
								3%	5%	5%	4%	9%	5%
							grade 6 events	1289	1362	25478	1691	18697	5433
								2%	2%	23%	2%	23%	7%
							grade 7 events	51399	48272	46418	52819	36999	51964
								85%	83%	43%	84%	47%	68%

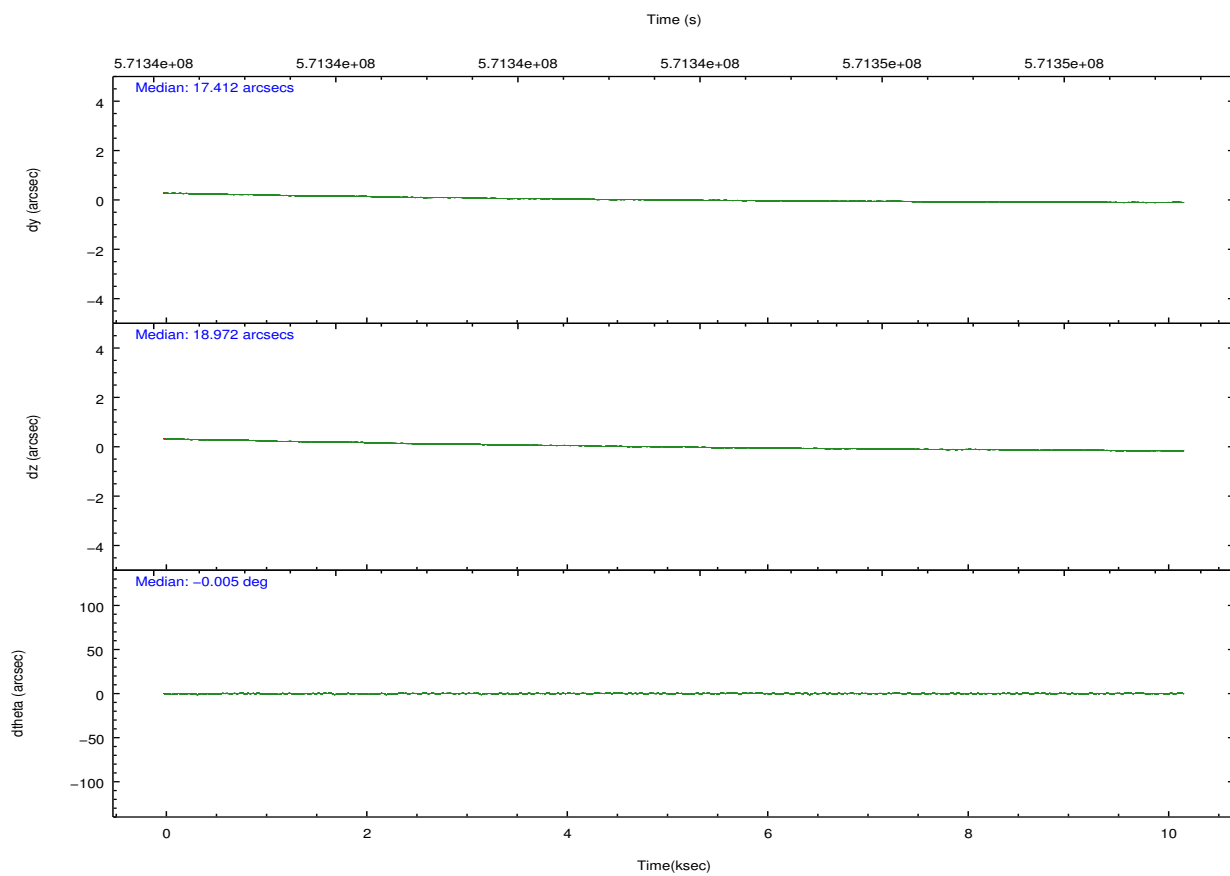
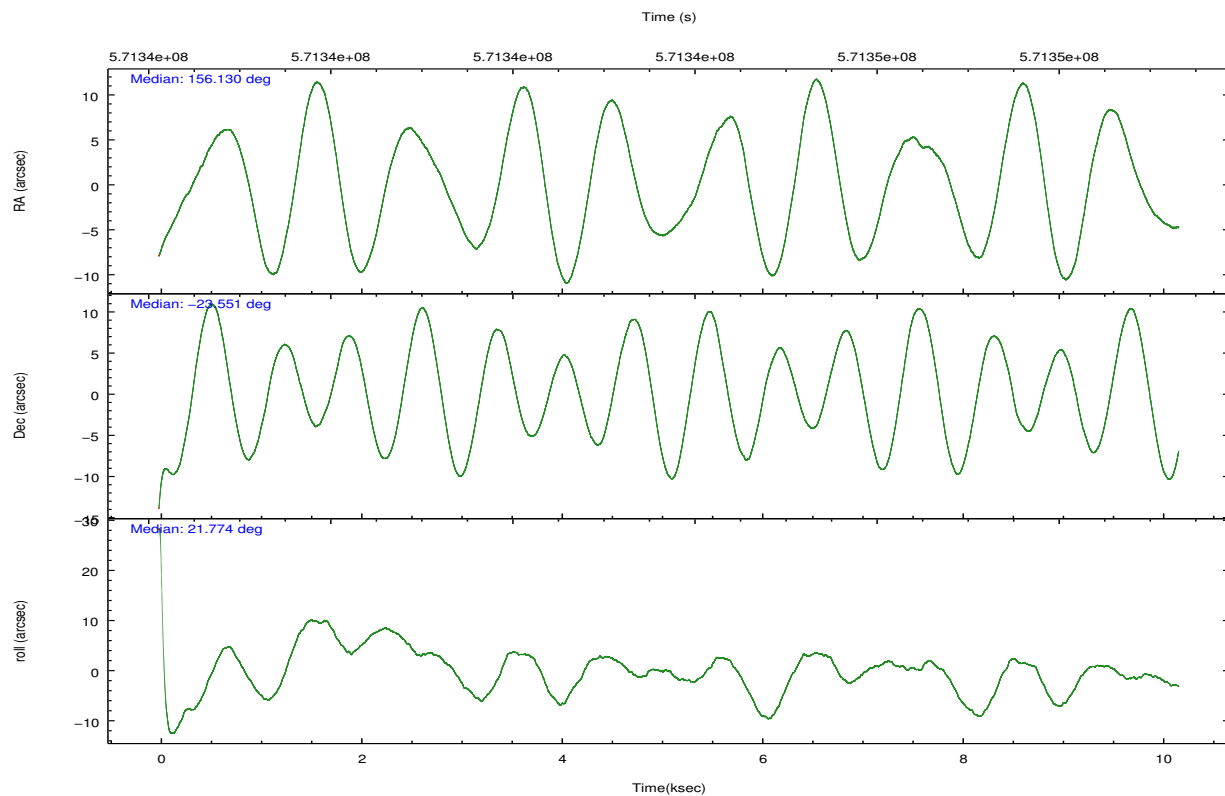


## 2.2 Compared Parameters

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	156.112252	156.1304396991519	CCD I2 on	O4	Y
[deg] Pointing Dec	-23.572466	-23.55073668780187	CCD I3 on	O3	Y
[deg] Pointing Roll	21.615251	21.77920876428164	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O2	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	O1	Y
[s] Observation start time (MET)	571338774.184000	571337708.3548	CCD S5 on	N	N
Observation start date	2016-02-08T17:11:46	2016-02-08T16:55:08	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	571348774.184000	571349237.04295	On-chip summing requested	N	N
Observation end date	2016-02-08T19:58:26	2016-02-08T20:07:17	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



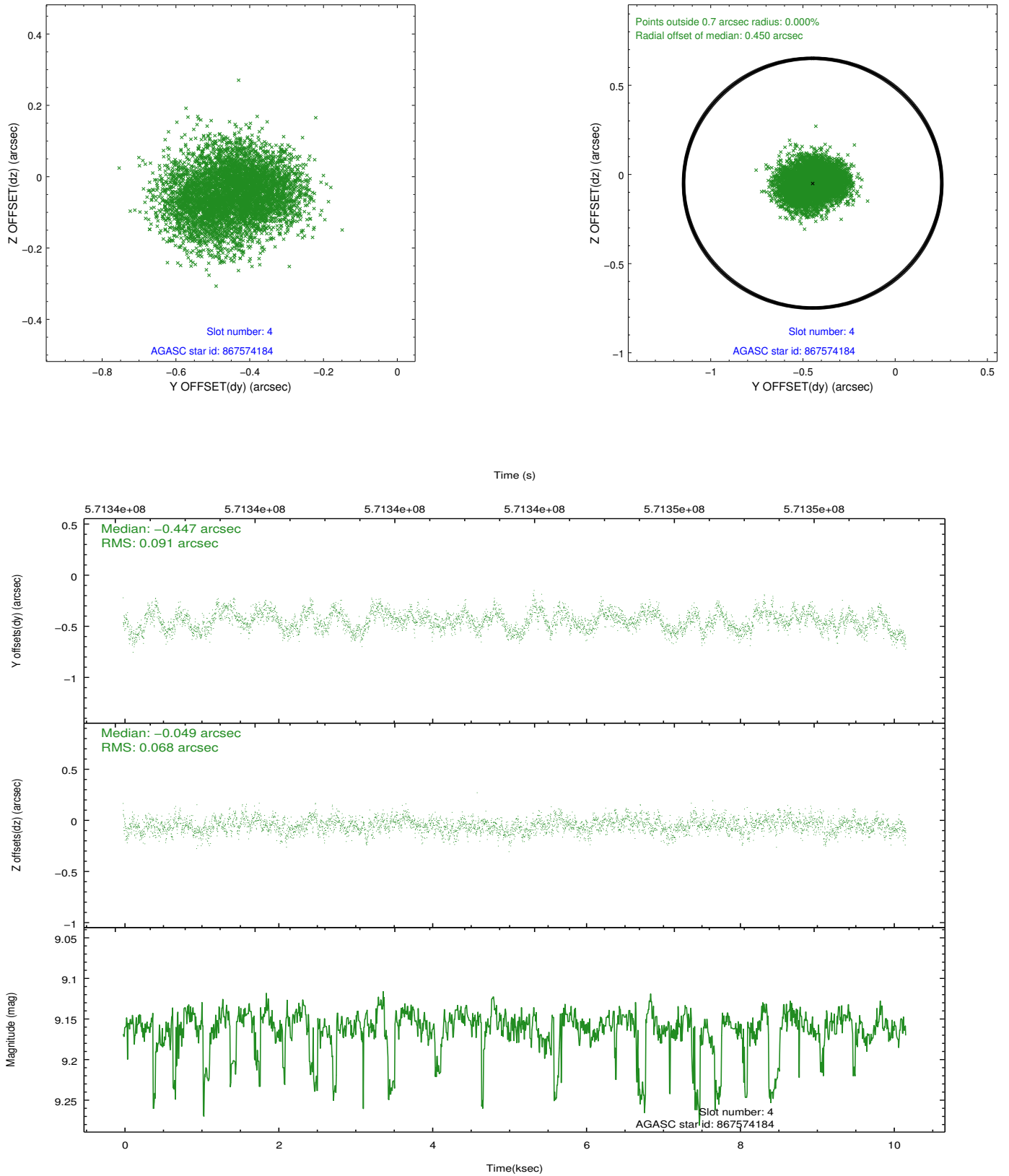


### Slot Statistics

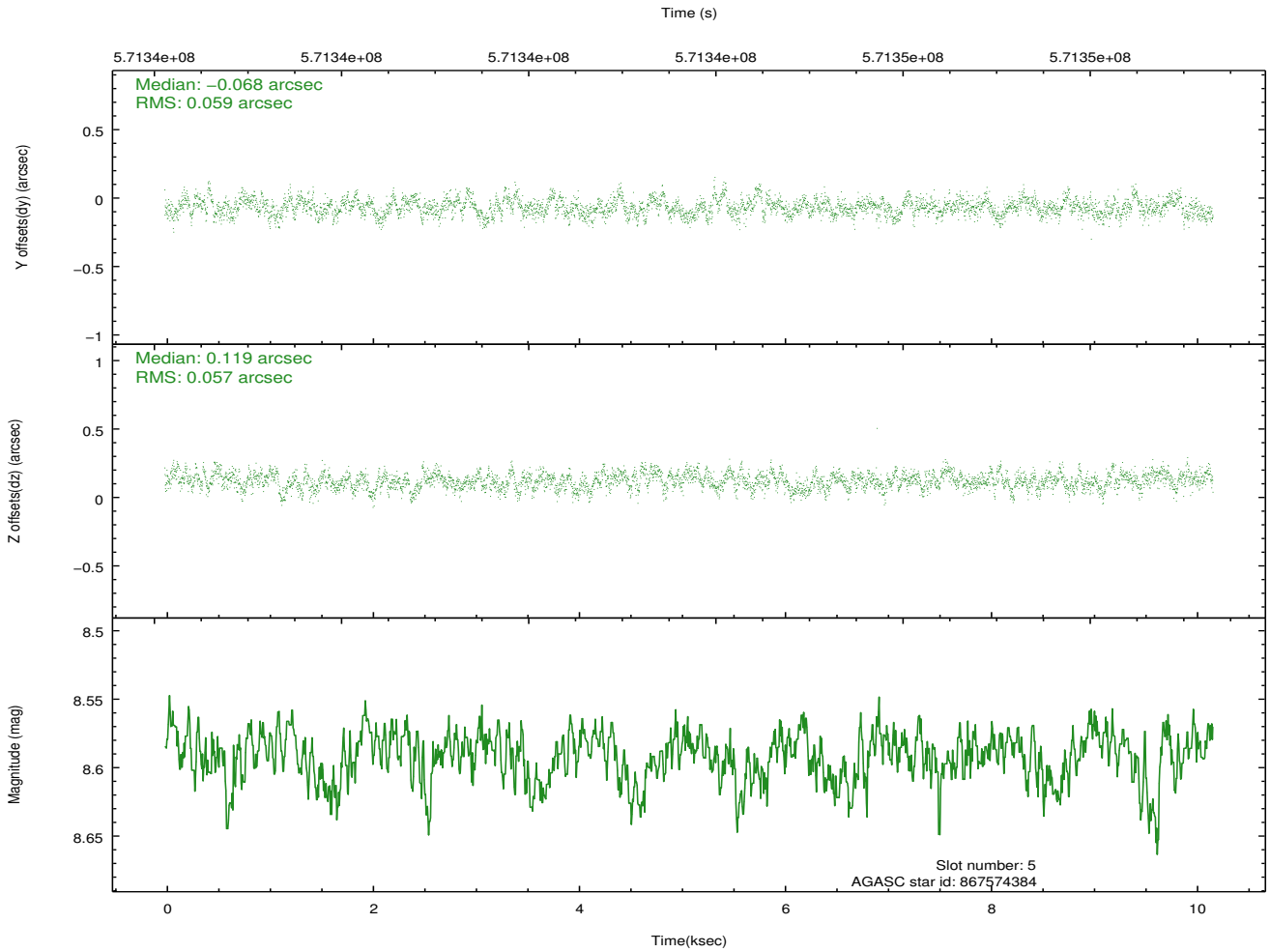
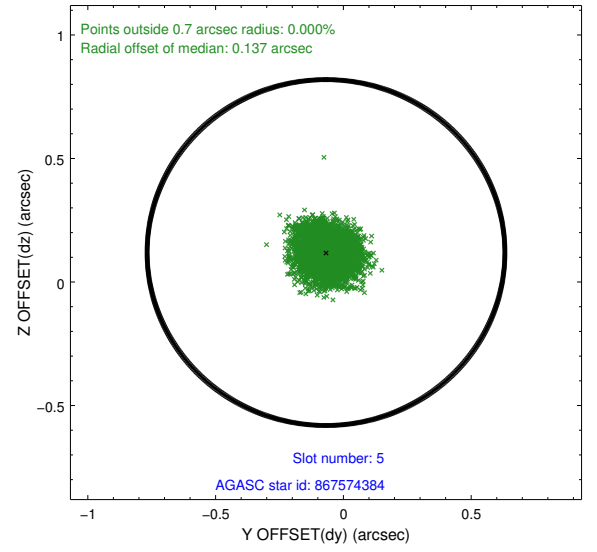
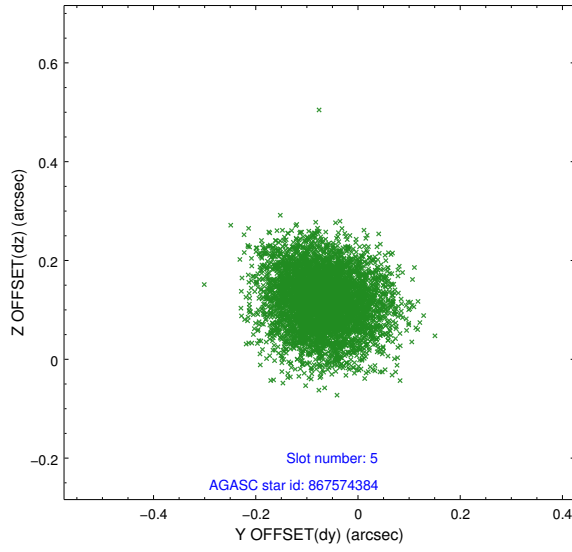
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.13	2482	-0.165	-0.129	0.009	0.014	0.000000	0.000000	-770.62	-1740.56
1	FID		ACIS-S-4	7.22	2482	0.422	0.114	0.007	0.012	0.000000	0.000000	2142.99	167.65
2	FID		ACIS-S-5	7.24	2482	-0.288	0.023	0.009	0.013	0.000000	0.000000	-1822.94	161.78
3	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
4	GUIDE	used	867574184	9.16	4961	-0.447	-0.049	0.124	0.190	155.511283	-23.338025	-1537.51	1512.71
5	GUIDE	used	867574384	8.59	4964	-0.068	0.119	0.088	0.141	156.320084	-23.537693	683.39	-135.68
6	GUIDE	used	867575952	7.31	4962	0.372	0.402	0.117	0.177	155.746937	-24.333681	-2122.80	-2107.74
7	GUIDE	used	867567080	9.21	4955	0.138	-0.475	0.181	0.303	156.964040	-23.872608	2206.27	-2045.71

## 2.4 Star Slots

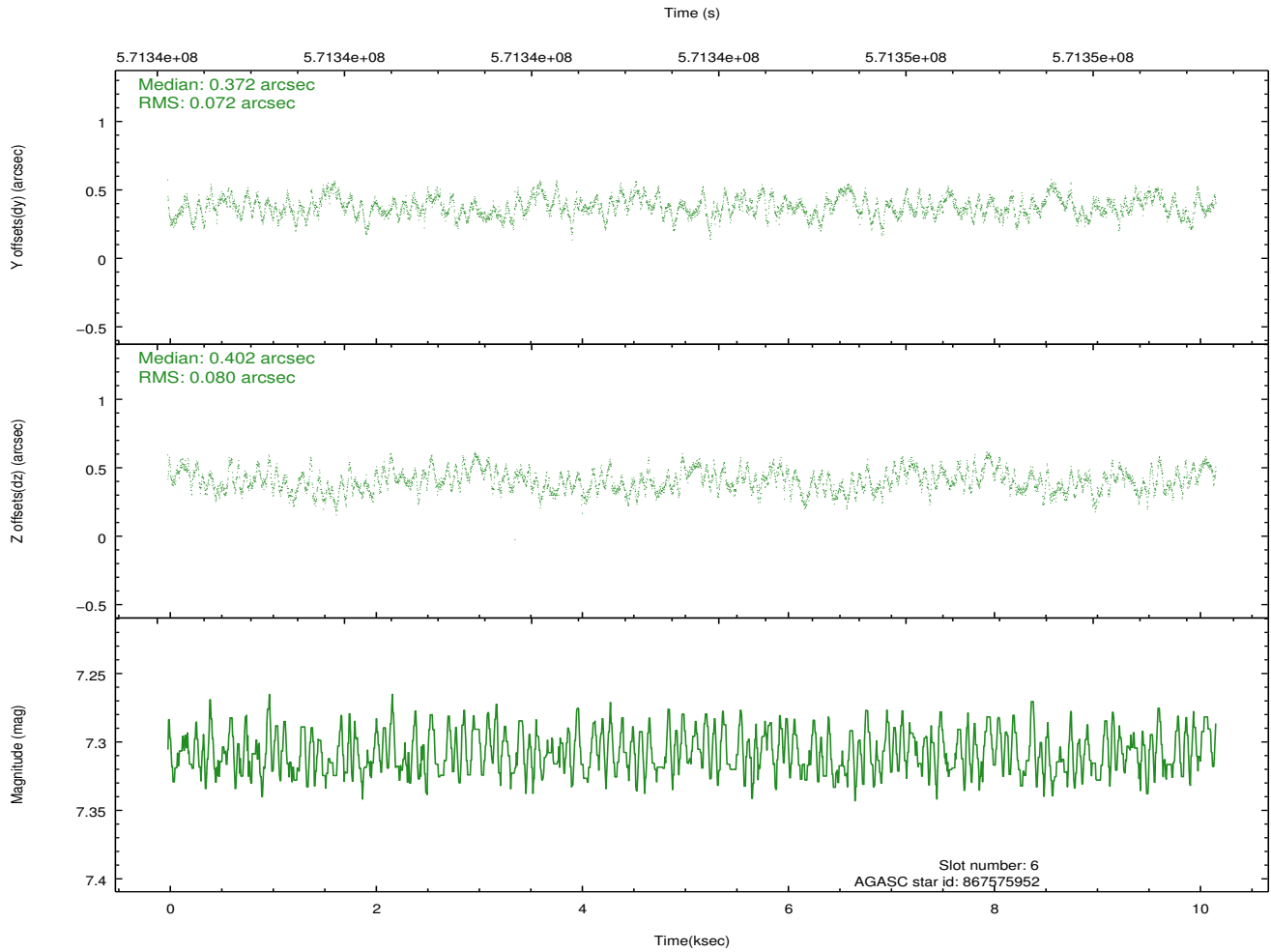
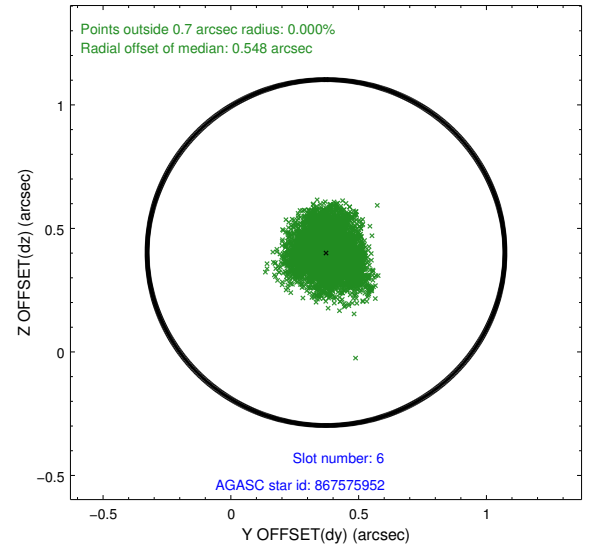
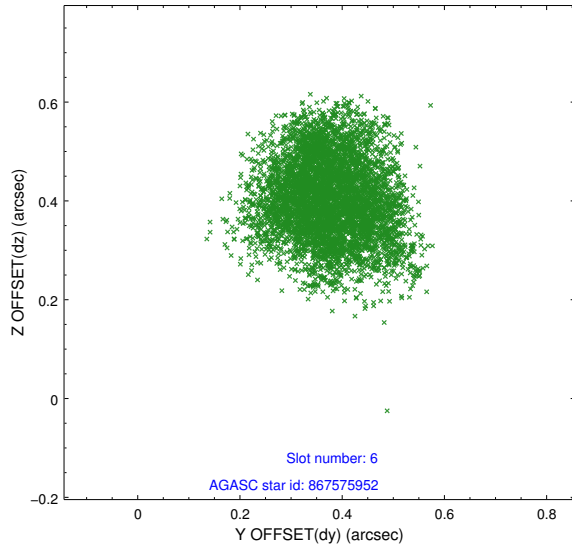
### 2.4.1 Slot 4



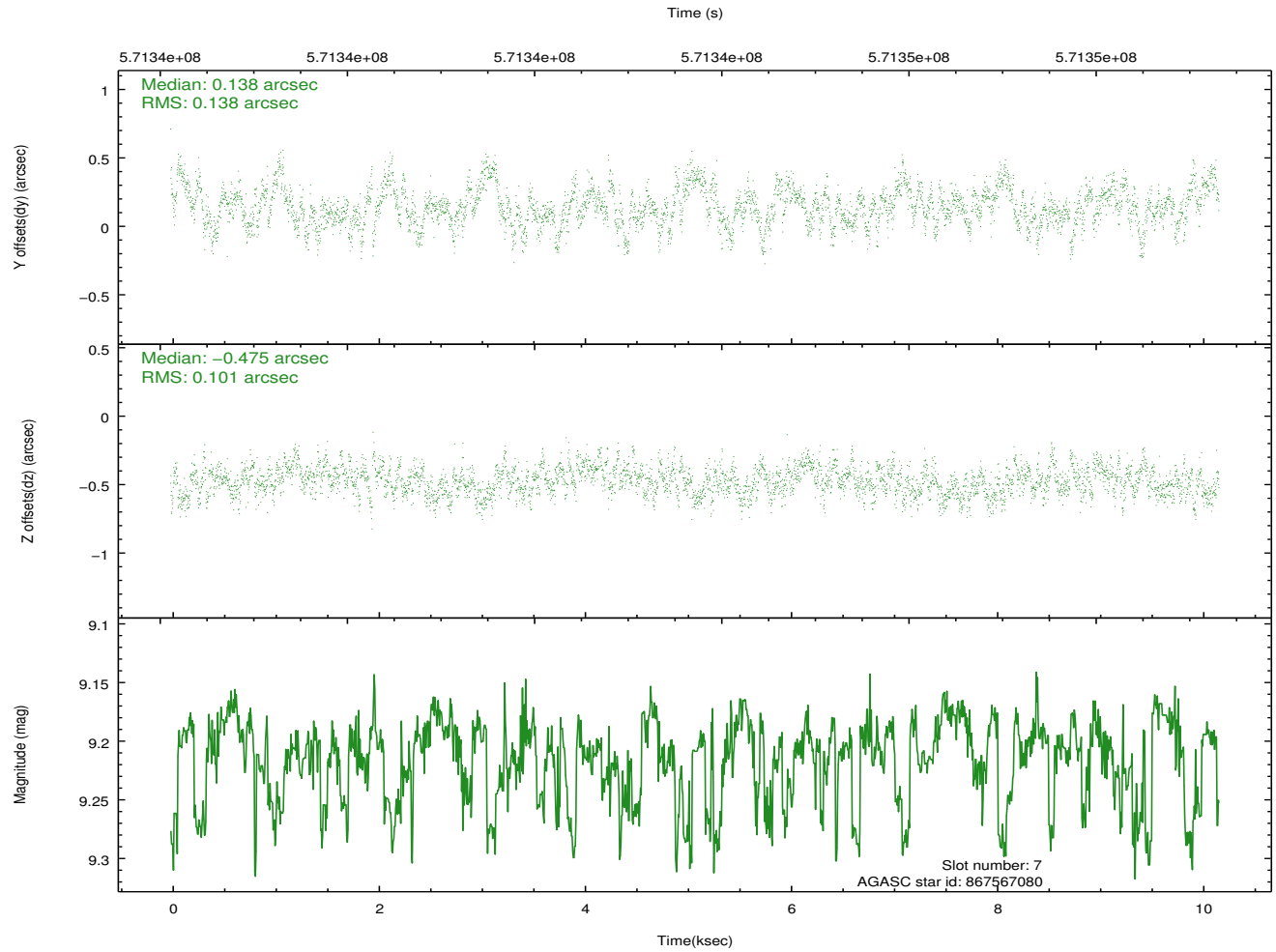
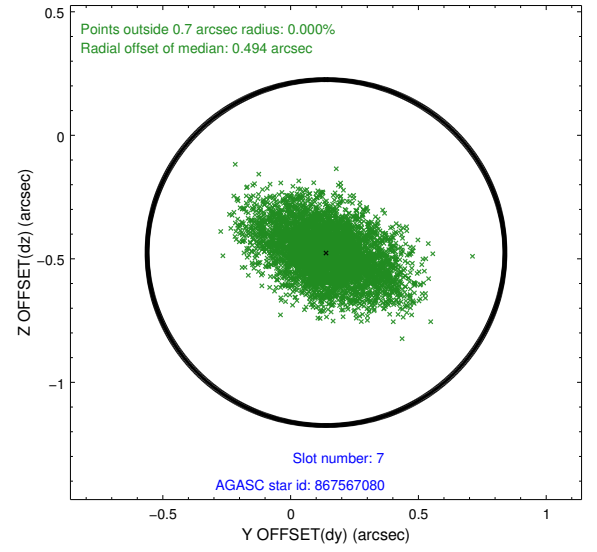
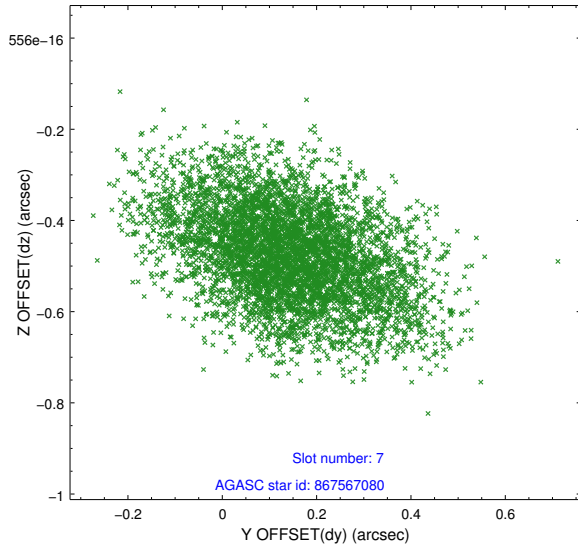
## 2.4.2 Slot 5



### 2.4.3 Slot 6



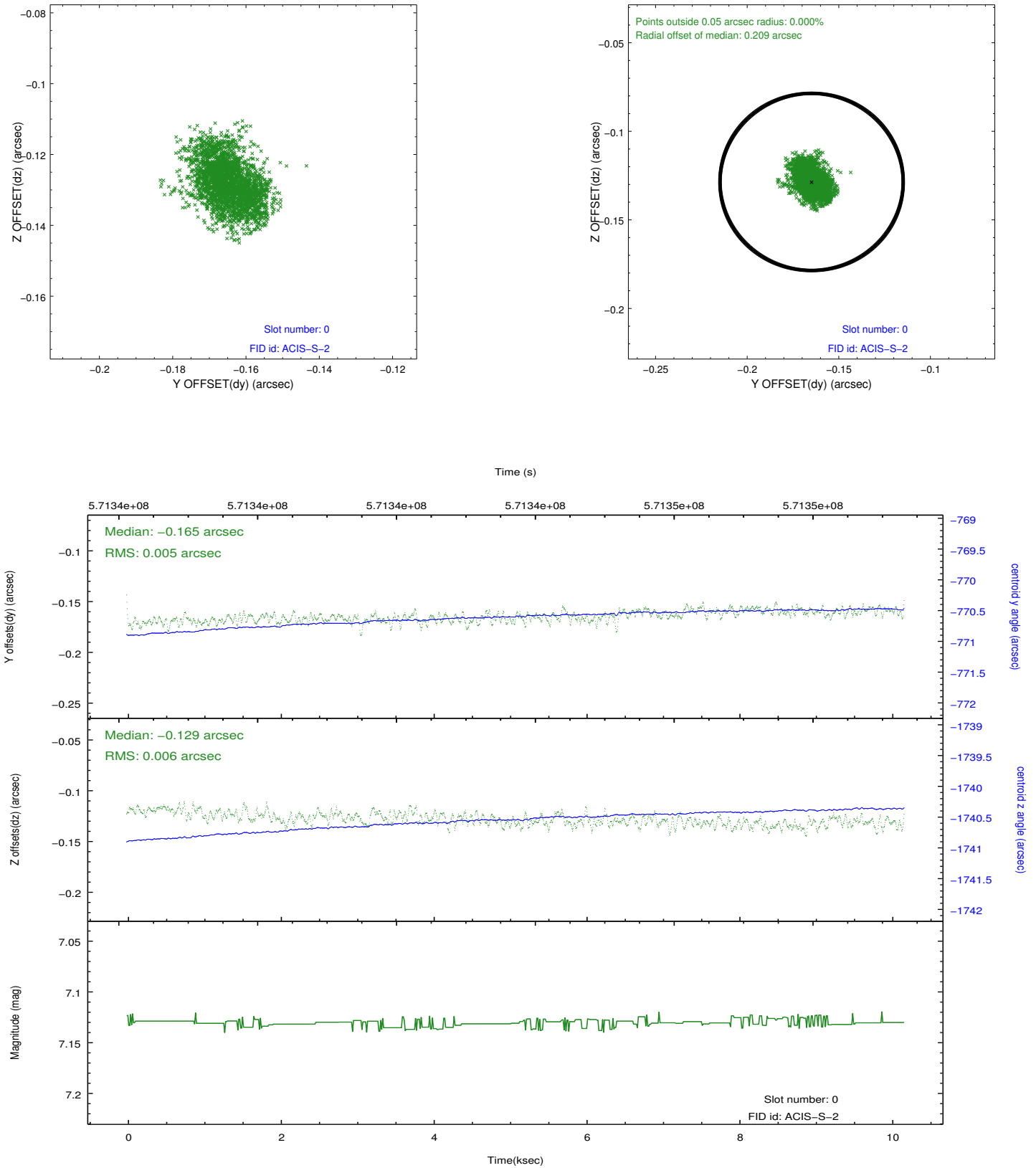
## 2.4.4 Slot 7



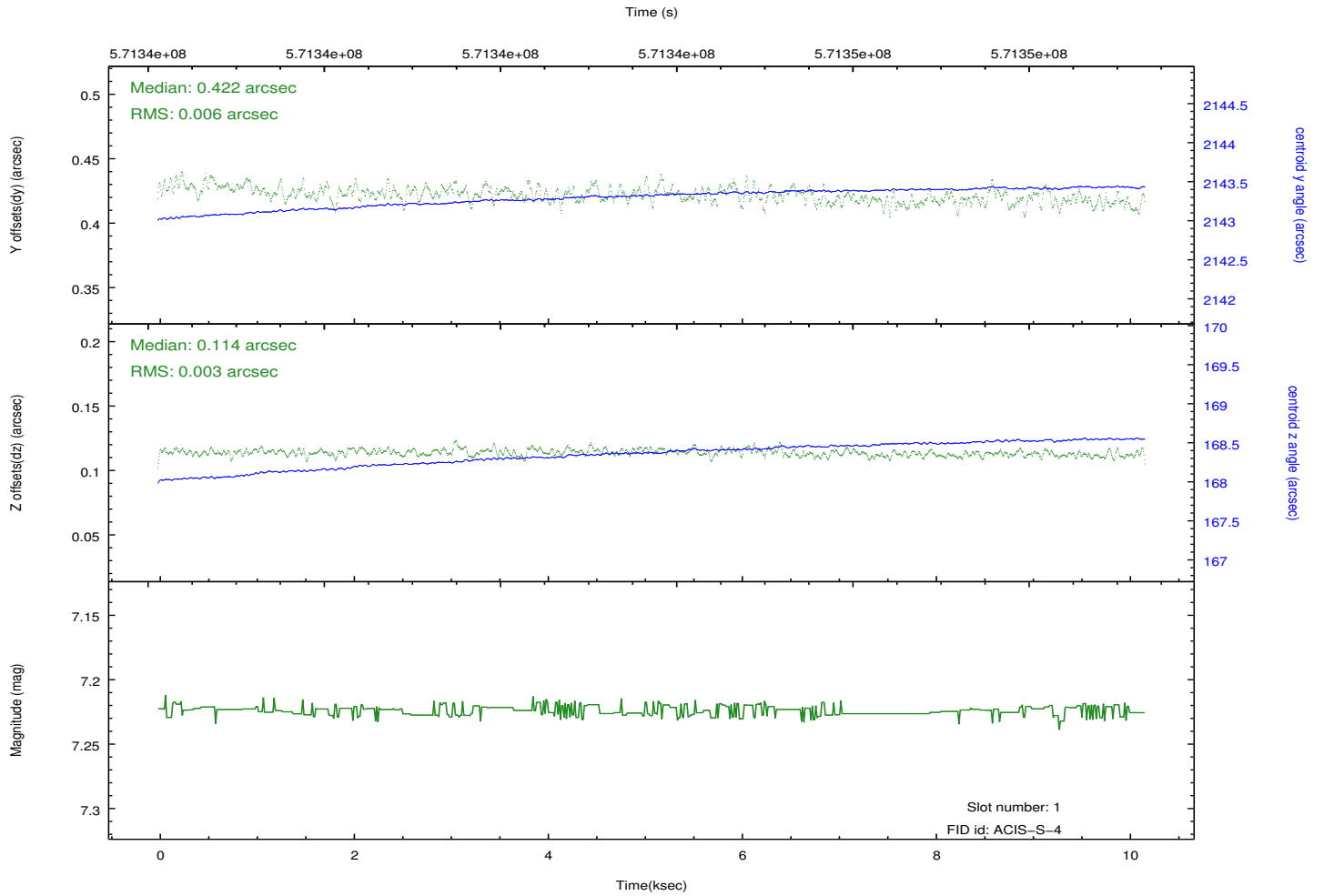
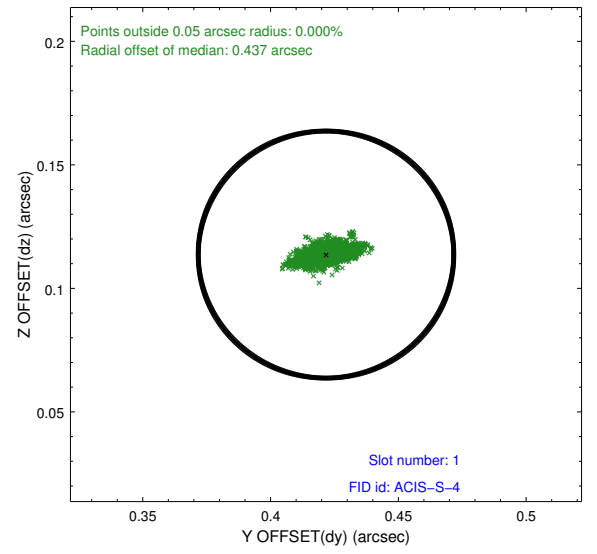
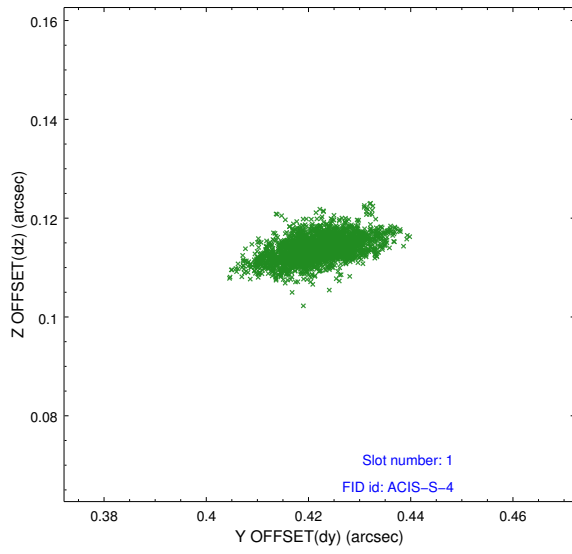


## 2.5 FID Slots

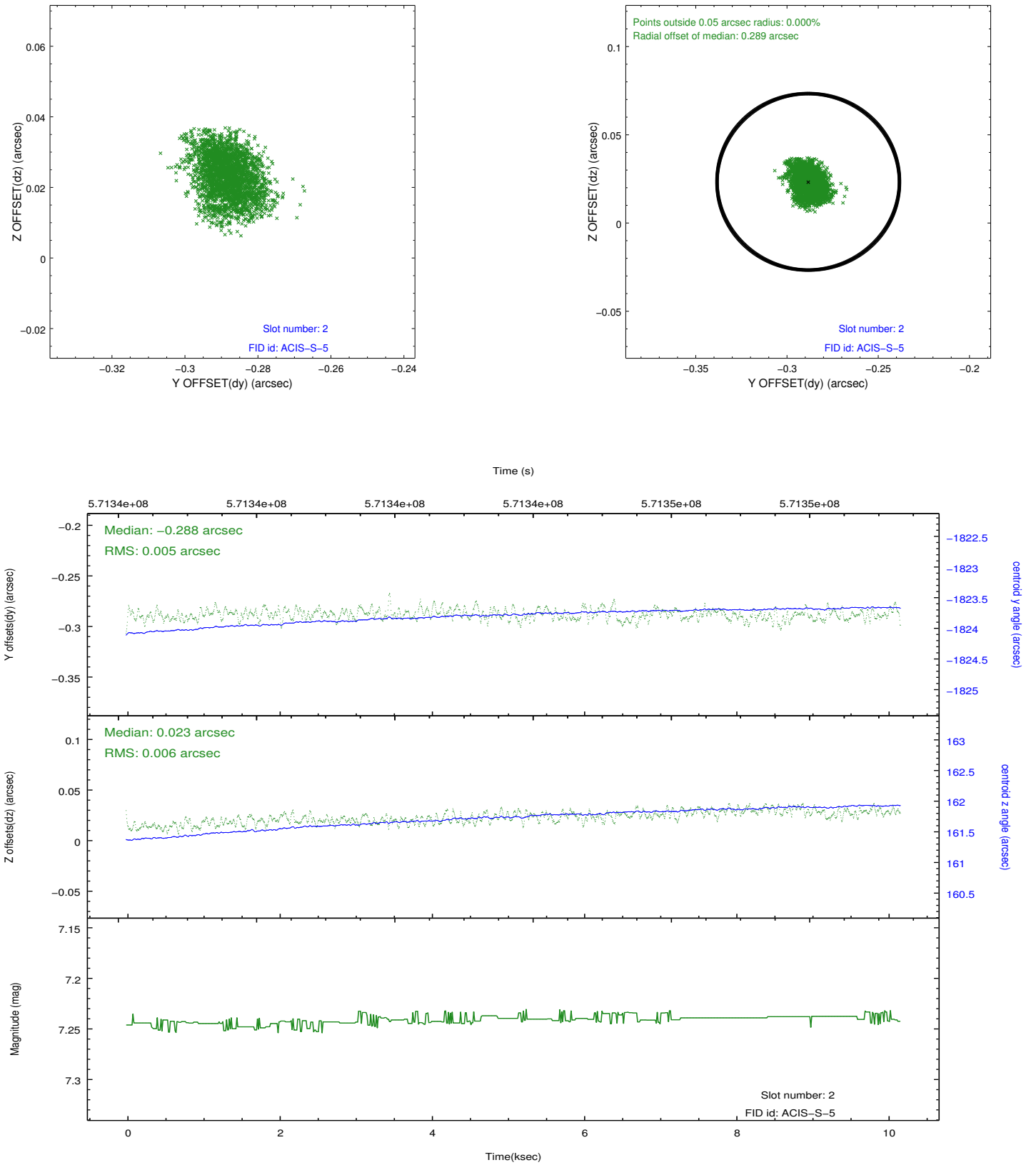
### 2.5.1 Slot 0



## 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)	2016.02.19
V&V Edition	2
V&V Disposition and Status	OK
V&V Charge Time	9.955200148344

## A.2 Comments

To the user: the log file has been corrected, and now states that slot 3 was removed.

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The guide star in slot 3 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this guide star from the solution.