

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 12471 - L2 Version 2  
Chandra X-Ray Center

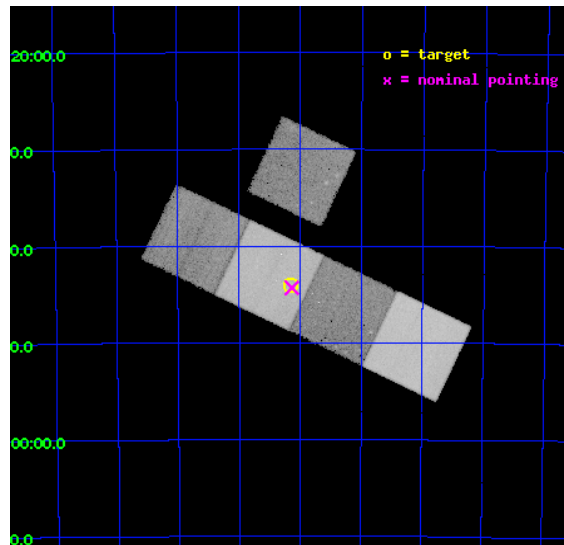
L2 Processing Date : Jul 4 2012

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# 1 Front

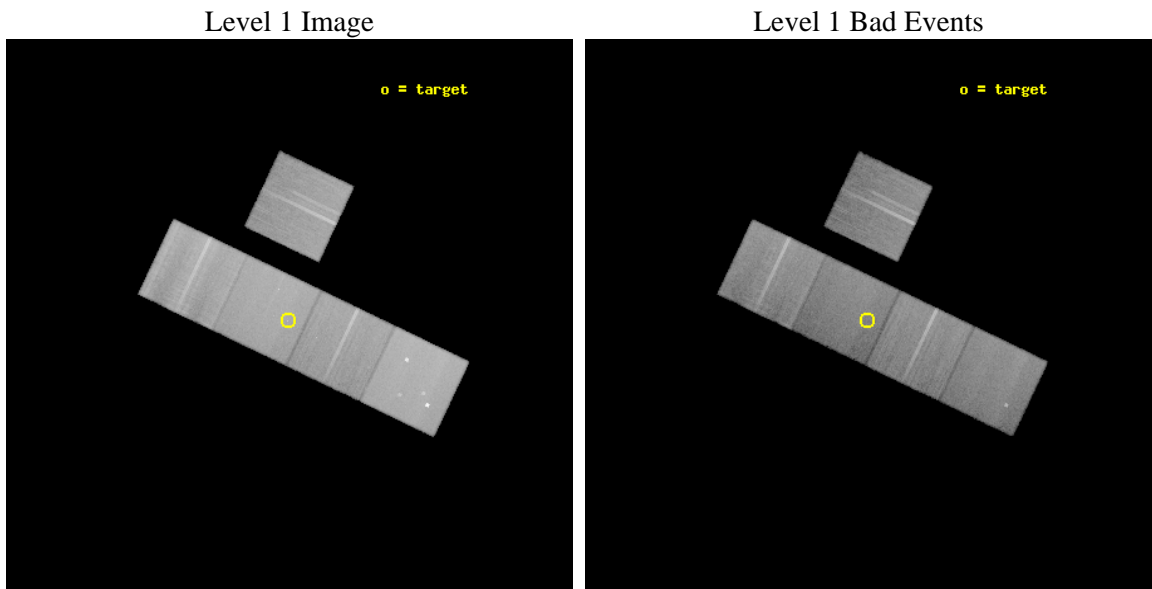
seq_num	401212	Sequence number
obs_id	12471	Observation id
title	The Quiescent X-Ray Luminosity of Stellar Mass Black Holes	Proposa
observer	Dr. Mark Reynolds	Principal investigator
object	GS 1354-64	Source name
dtycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	209.540417	Observer's specified target RA [deg]
dec_targ	-64.734778	Observer's specified target Dec [deg]
ra_nom	209.53429039656	Nominal RA [deg]
dec_nom	-64.738836698052	Nominal Dec [deg]
roll_nom	205.50031354138	Nominal Roll [deg]
revision	2	Processing version of data
ontime	40039.600307941	Sum of GTIs [s]
livetime	39516.453453193	Livetime [s]
ontime3	40036.459337652	Sum of GTIs [s]
ontime5	40039.600307941	Sum of GTIs [s]
ontime6	40033.318347335	Sum of GTIs [s]
ontime7	40039.600307941	Sum of GTIs [s]
ontime8	40039.600307941	Sum of GTIs [s]
l2events	466452	Number of level 2 events



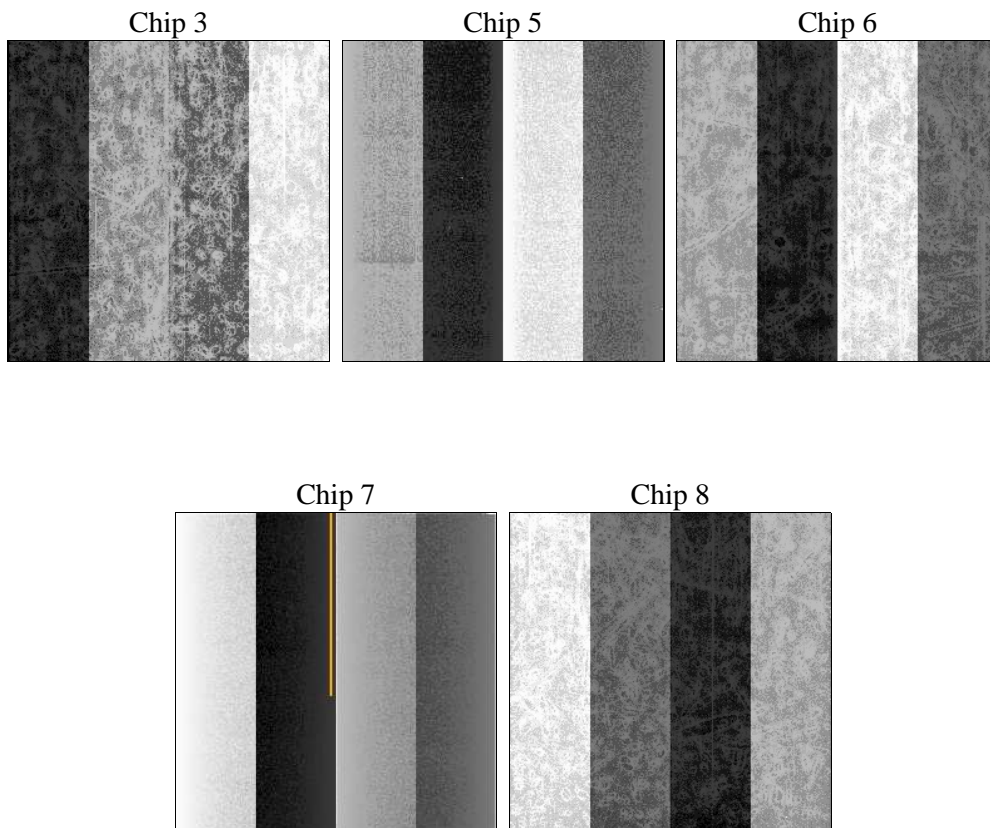
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	40000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	40039.600307941	Sum of GTIs [s]
caldbver	4.5.0	&#160	ontime3	40036.459337652	Sum of GTIs [s]
date	2012-07-04T04:29:07	Date and time of file creation	ontime5	40039.600307941	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	40033.318347335	Sum of GTIs [s]
			ontime7	40039.600307941	Sum of GTIs [s]
			ontime8	40039.600307941	Sum of GTIs [s]
			l1events	1768982	Number of level 1 events

### 2.1.4 Events

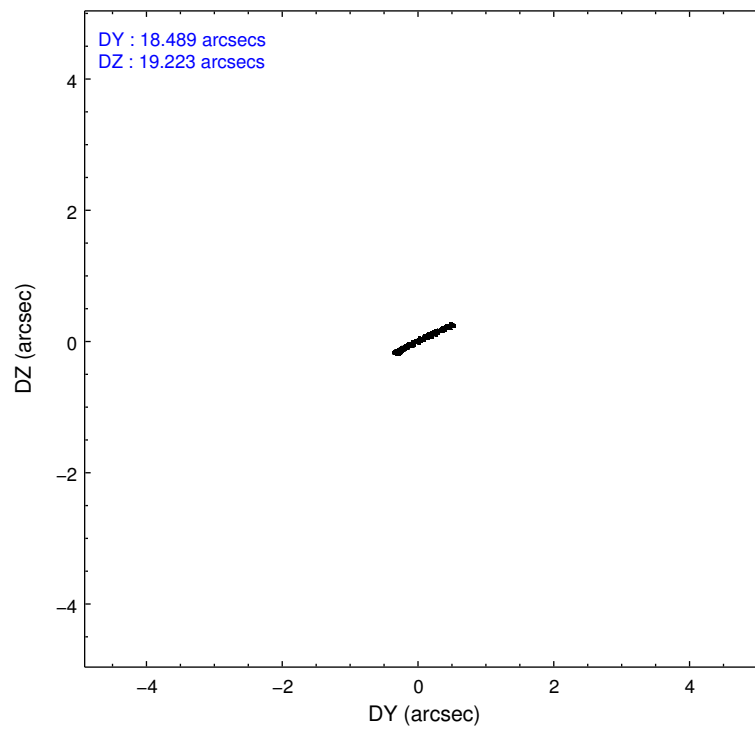
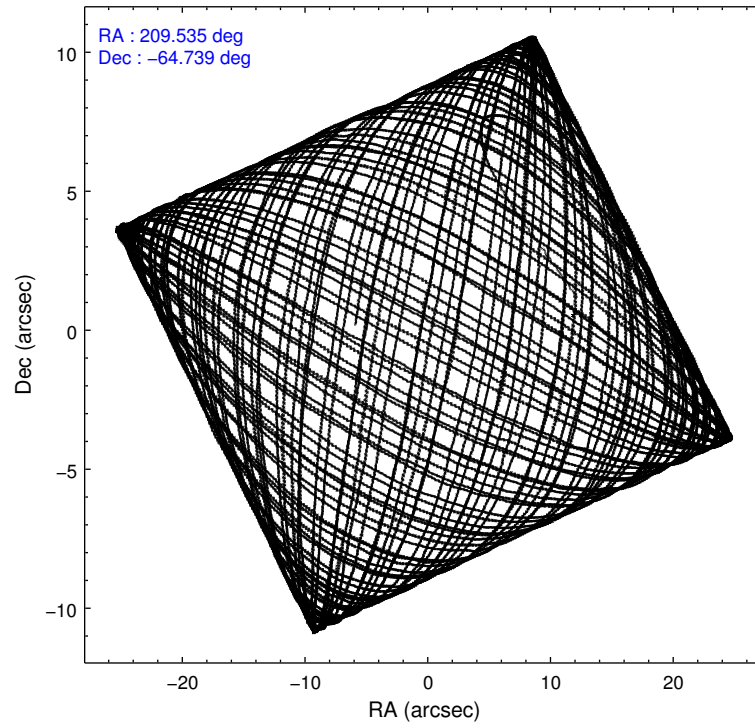
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	278433	451714	292960	361618	384257
rejected events	244390	223359	256445	197128	282009
rejected %	87%	49%	87%	54%	73%

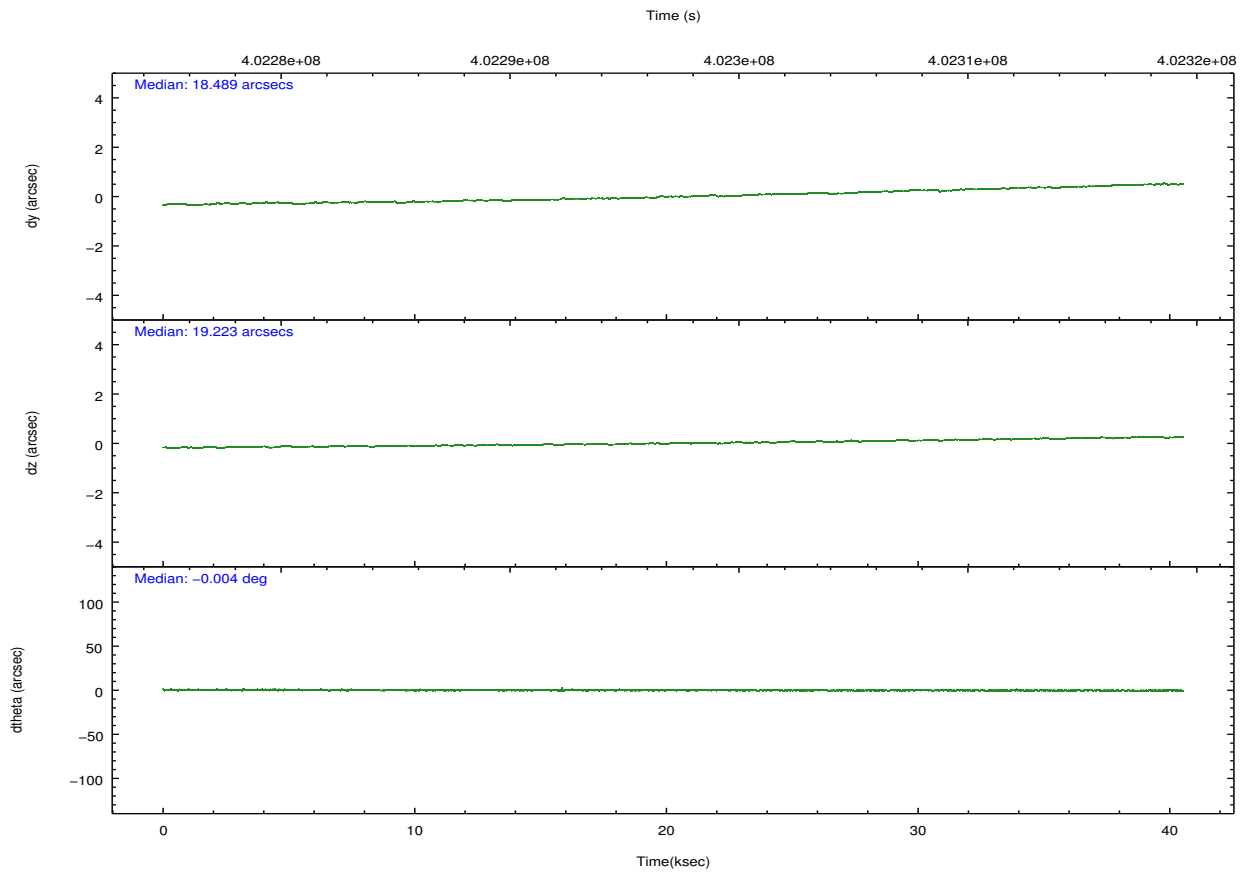
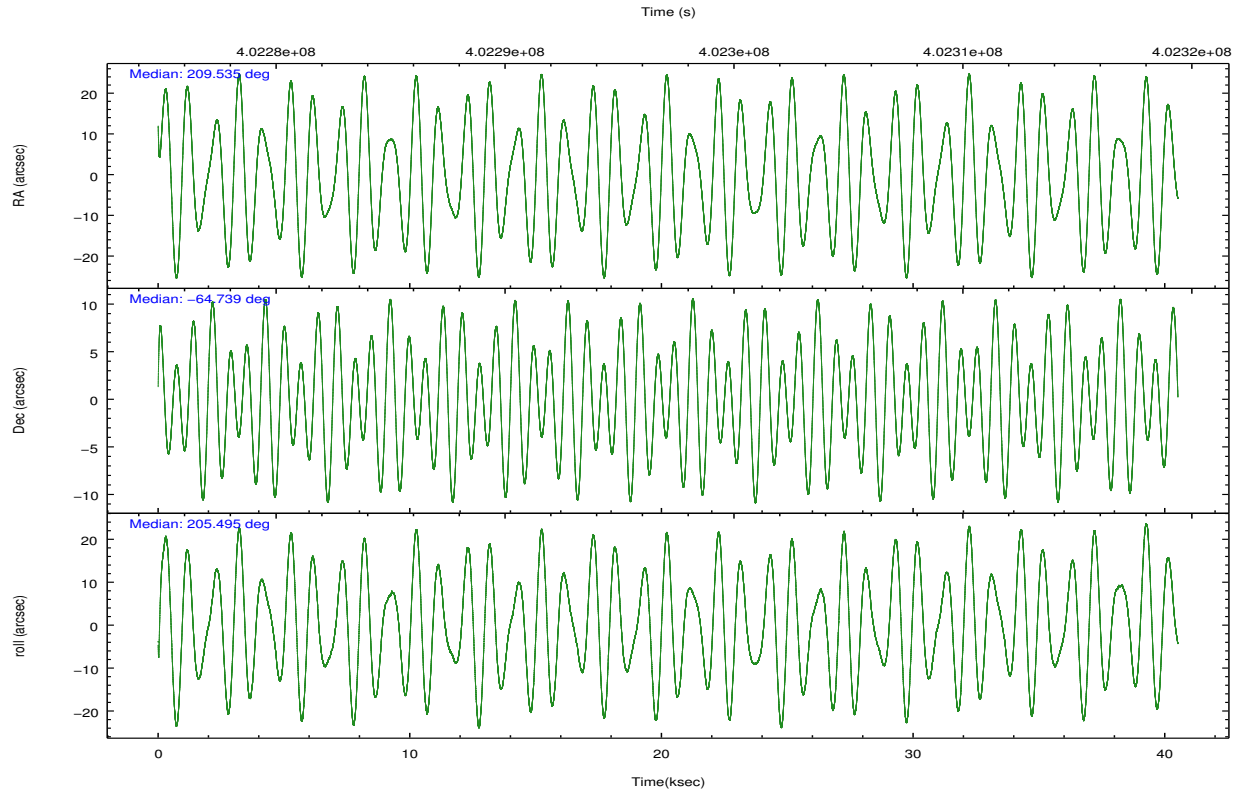
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	13989	27740	14482	15679	32169
	5%	6%	4%	4%	8%
grade 1 events	187	1845	174	462	328
	0%	0%	0%	0%	0%
grade 2 events	6979	68735	7840	33978	23214
	2%	15%	2%	9%	6%
grade 3 events	3477	8940	3543	14977	10552
	1%	1%	1%	4%	2%
grade 4 events	3349	8714	3403	14398	9907
	1%	1%	1%	3%	2%
grade 5 events	12961	34243	13321	37319	19254
	4%	7%	4%	10%	5%
grade 6 events	6254	114252	7255	85486	26431
	2%	25%	2%	23%	6%
grade 7 events	231237	187245	242942	159319	262402
	83%	41%	82%	44%	68%

## 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	209.569809	209.53429039656	CCD I2 on	N	N
[deg] Pointing Dec	-64.716112	-64.73883669805159	CCD I3 on	O1	Y
[deg] Pointing Roll	205.375817	205.5003135413812	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	O3	Y
[s] Observation start time (MET)	402277388.184000	402276139.31299	CCD S5 on	N	N
Observation start date	2010-09-30T23:42:02	2010-09-30T23:22:19	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	402317388.184000	402318607.11517	On-chip summing requested	N	N
Observation end date	2010-10-01T10:48:42	2010-10-01T11:10:07	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



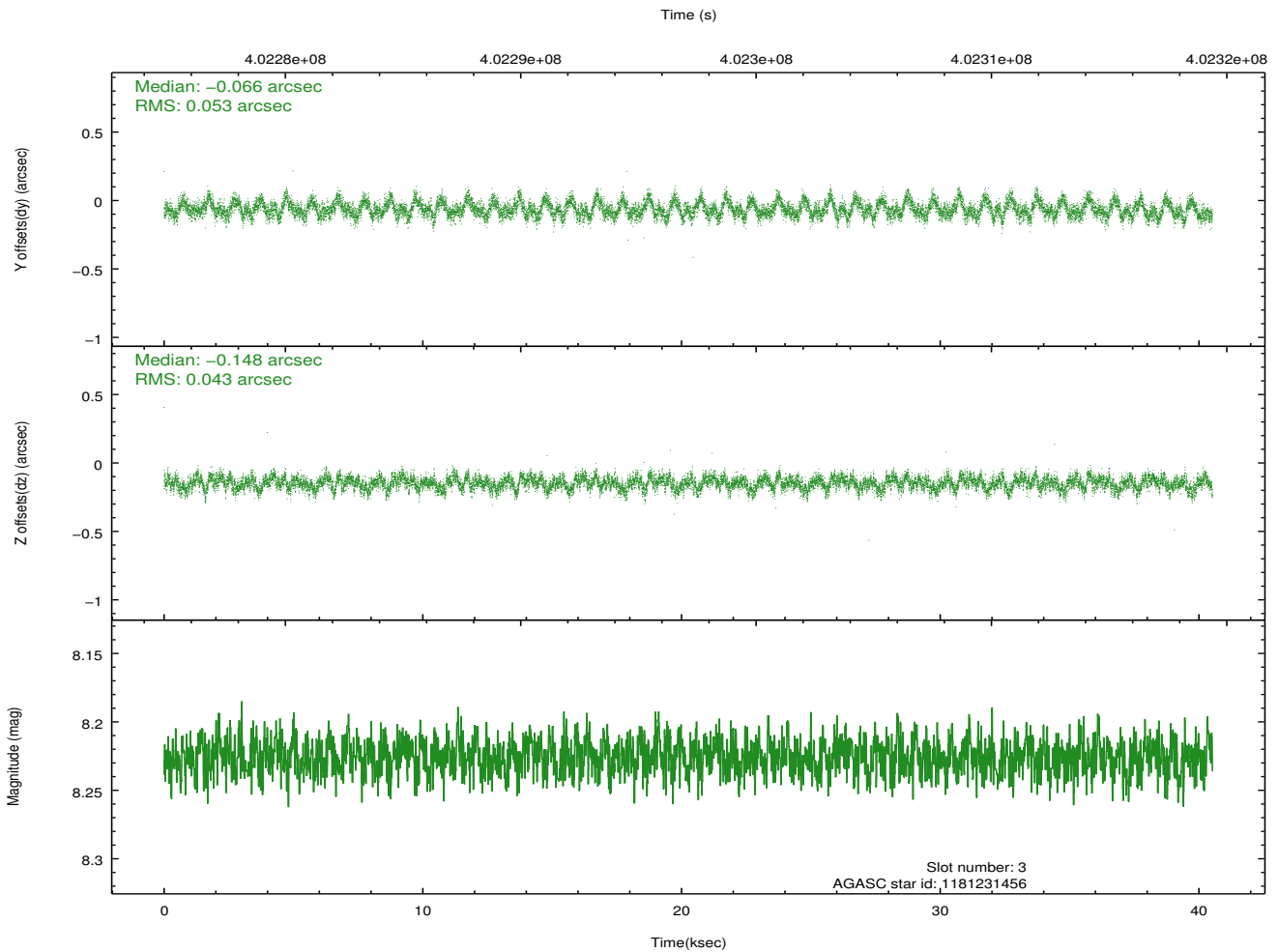
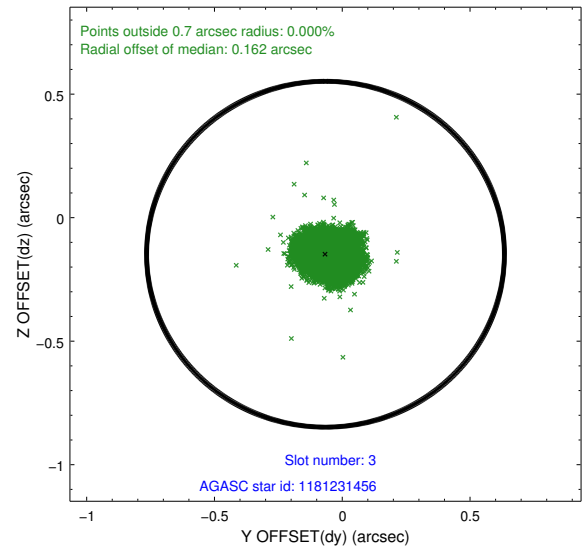
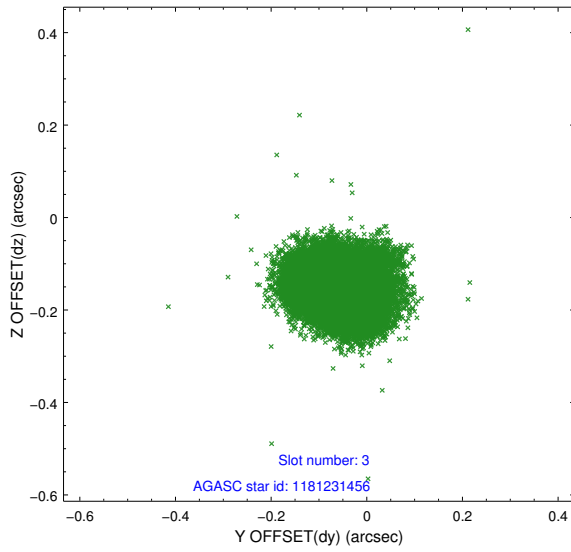


### Slot Statistics

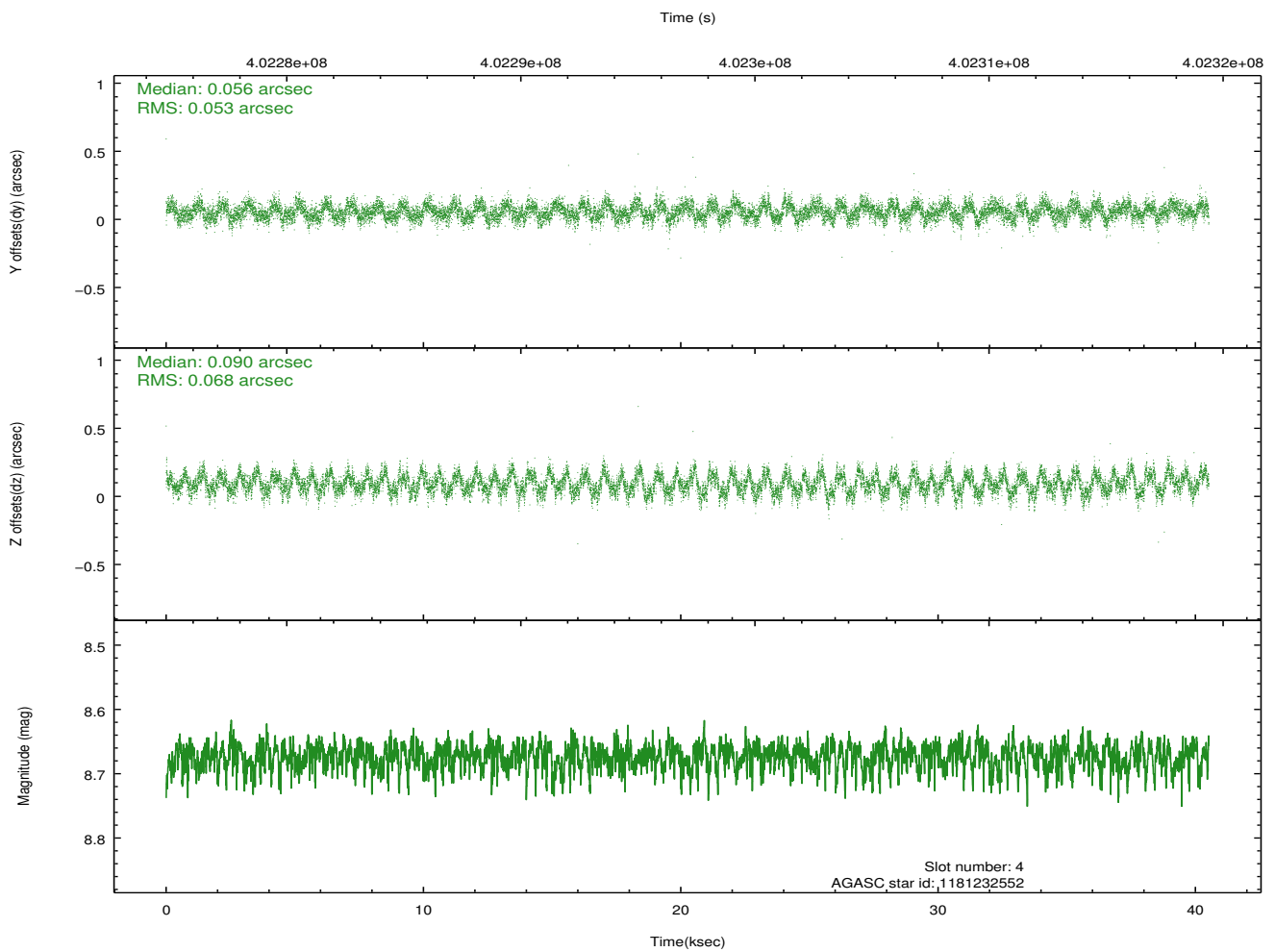
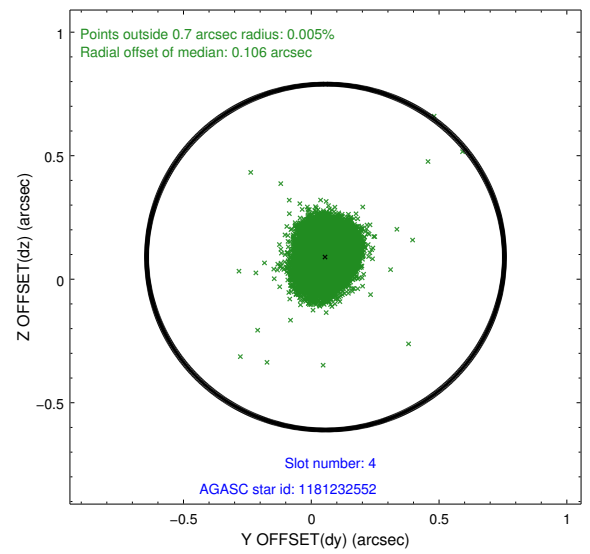
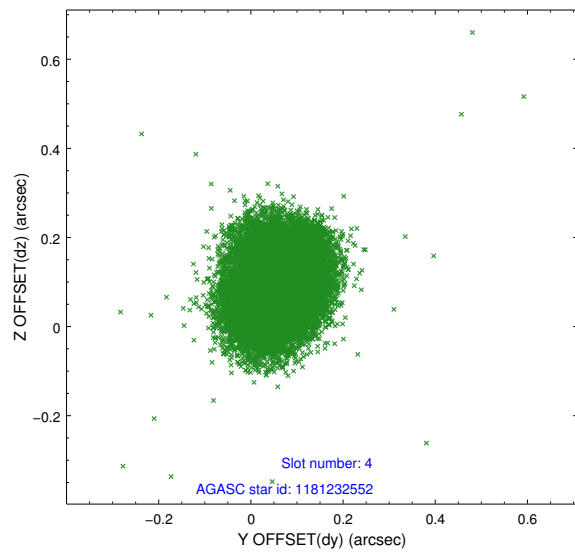
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.89	9884	-0.086	-0.043	0.010	0.017	0.000000	0.000000	-771.68	-1740.72
1	FID	ACIS-S-4	6.96	9884	0.220	0.053	0.011	0.019	0.000000	0.000000	2141.91	167.83
2	FID	ACIS-S-5	7.00	9884	-0.164	-0.002	0.009	0.017	0.000000	0.000000	-1824.57	161.48
3	GUIDE	1181231456	8.23	19764	-0.066	-0.148	0.073	0.117	208.536615	-64.944484	1781.33	79.51
4	GUIDE	1181232552	8.67	19684	0.056	0.090	0.092	0.143	208.565497	-64.494630	1070.85	-1376.16
5	GUIDE	1181358584	7.95	19765	-0.128	0.128	0.069	0.107	210.584509	-64.925285	-1070.46	1355.06
6	GUIDE	1181224928	8.82	19748	-0.136	-0.006	0.081	0.133	208.204332	-65.077831	2439.25	309.47
7	GUIDE	1181355864	9.21	19744	0.272	-0.067	0.133	0.201	210.027242	-64.648026	-740.22	82.98

## 2.4 Star Slots

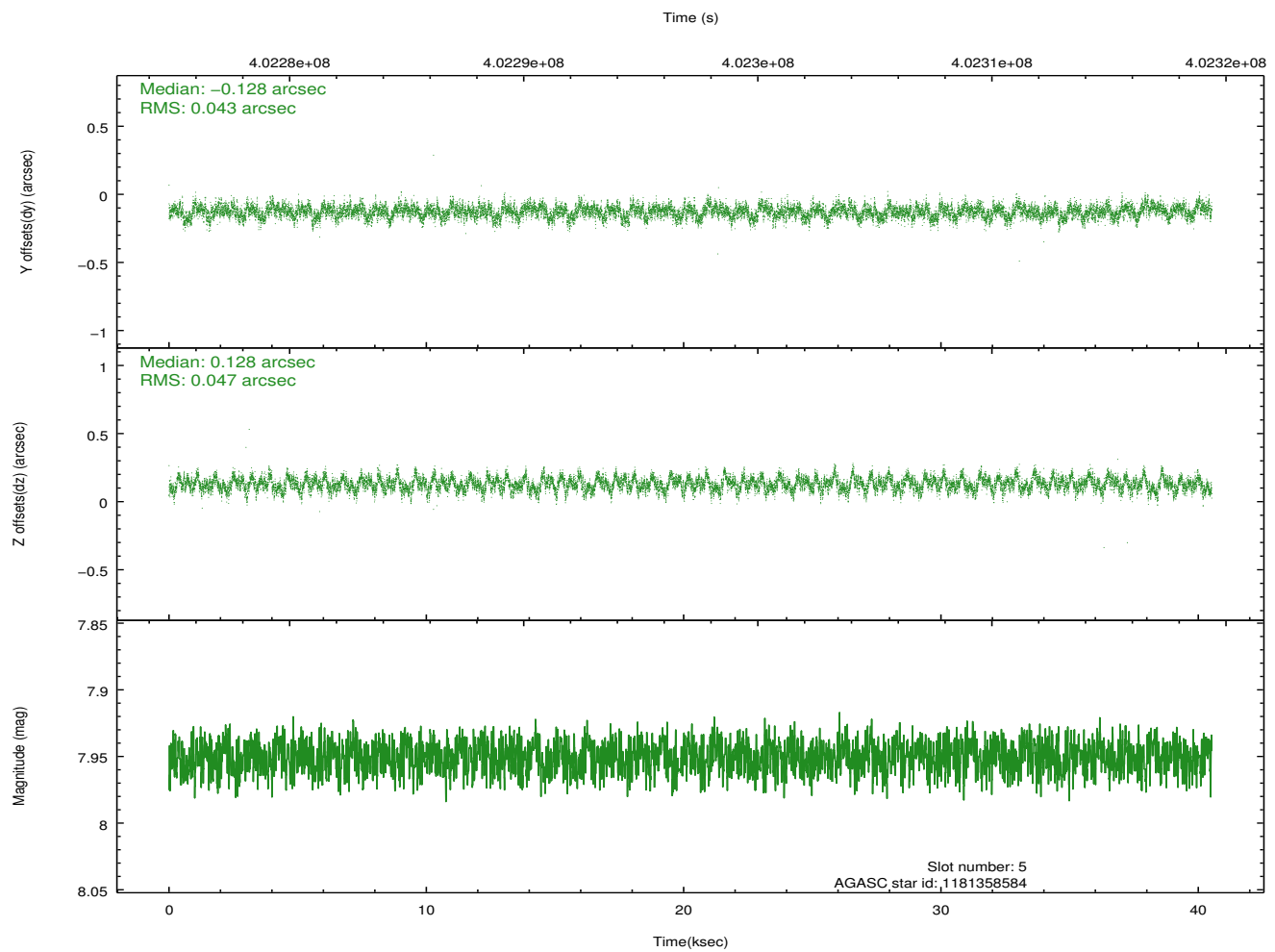
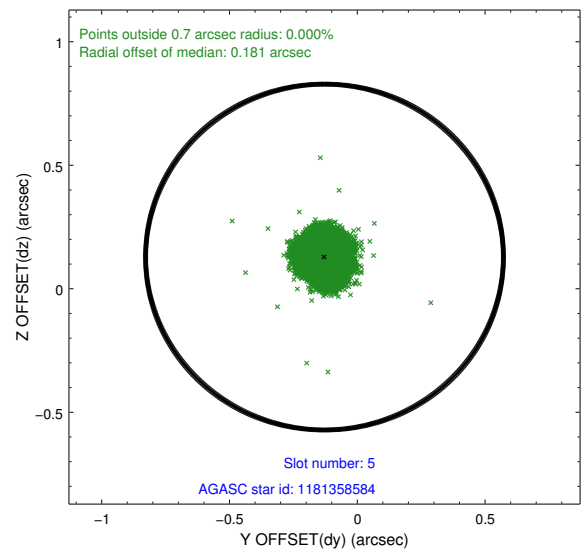
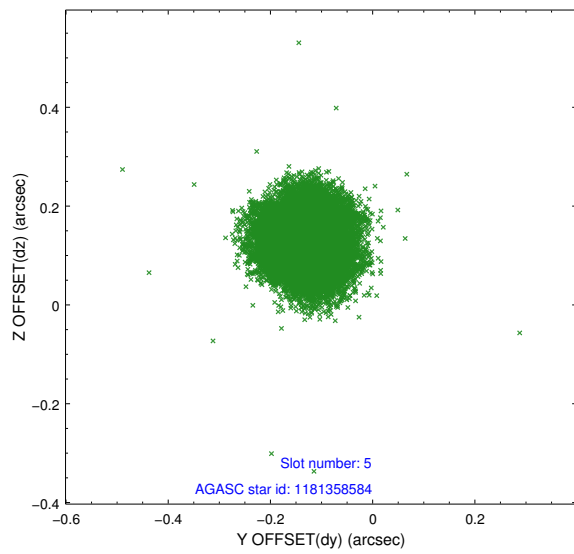
### 2.4.1 Slot 3



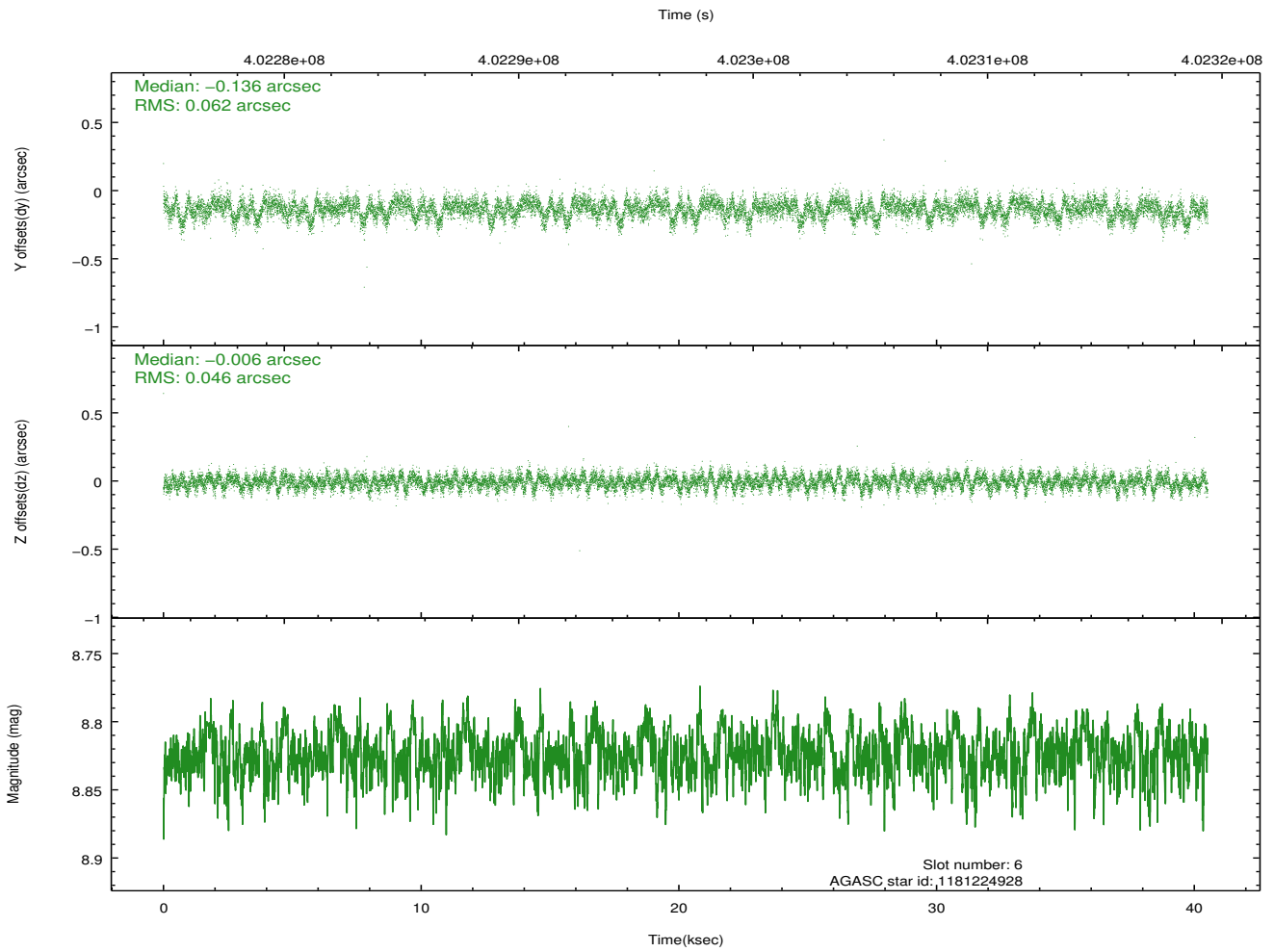
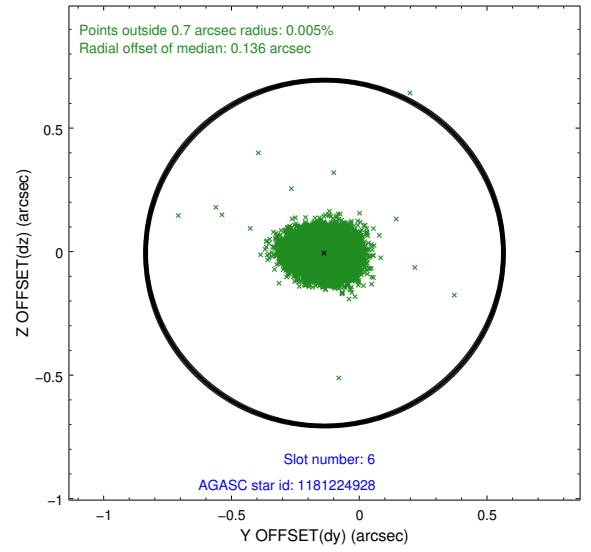
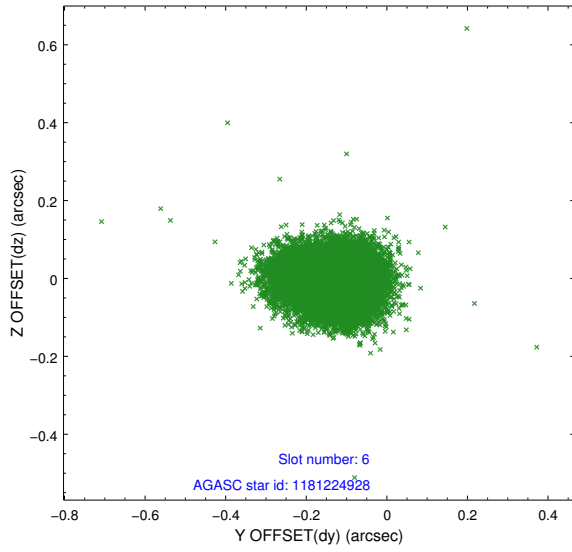
## 2.4.2 Slot 4



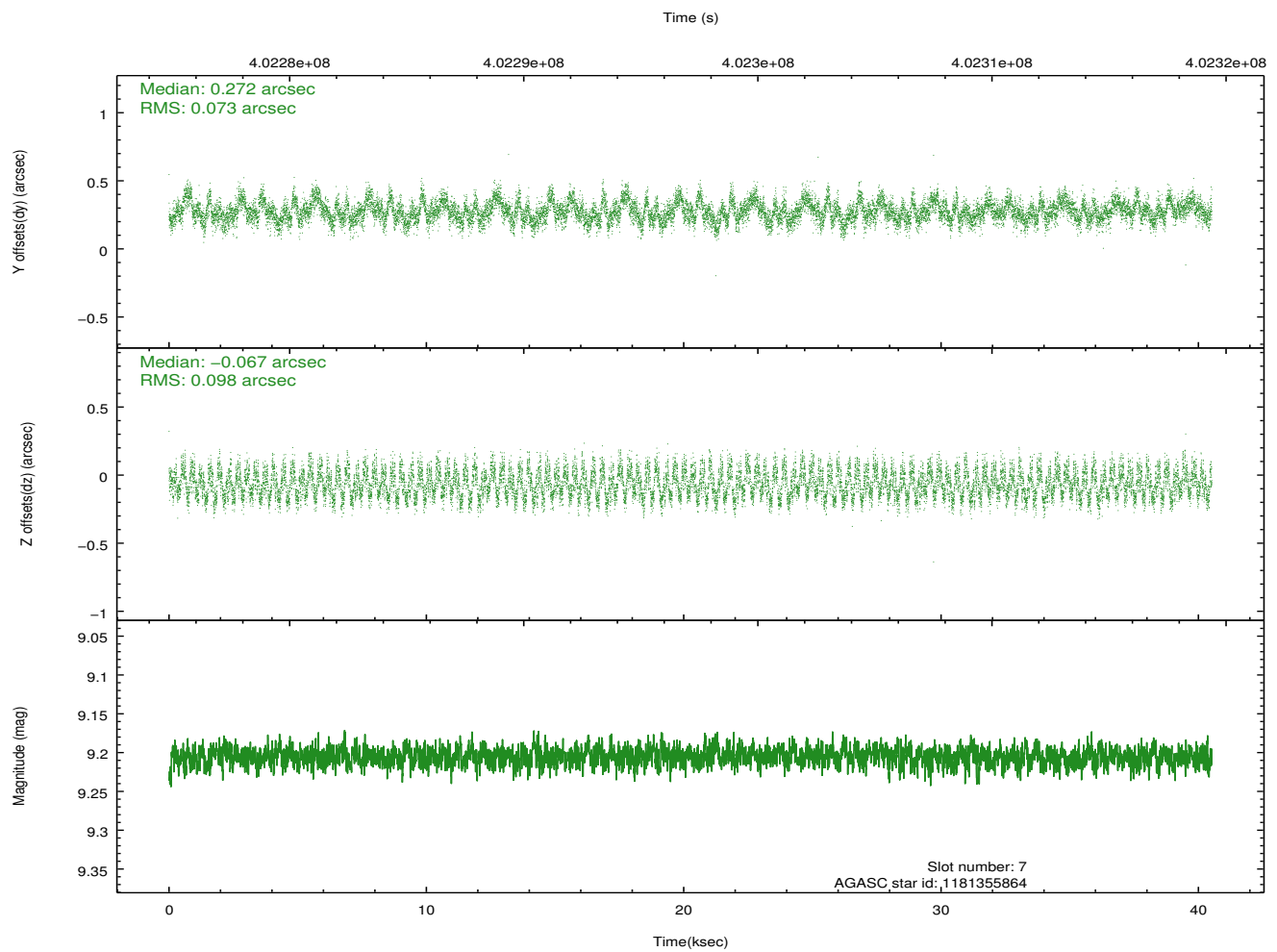
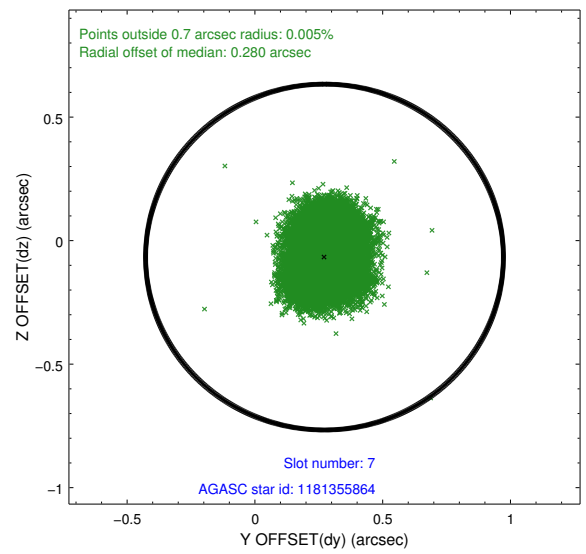
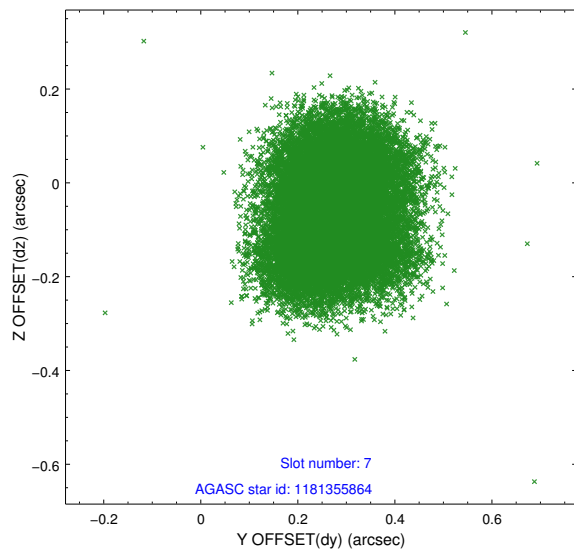
### 2.4.3 Slot 5



## 2.4.4 Slot 6

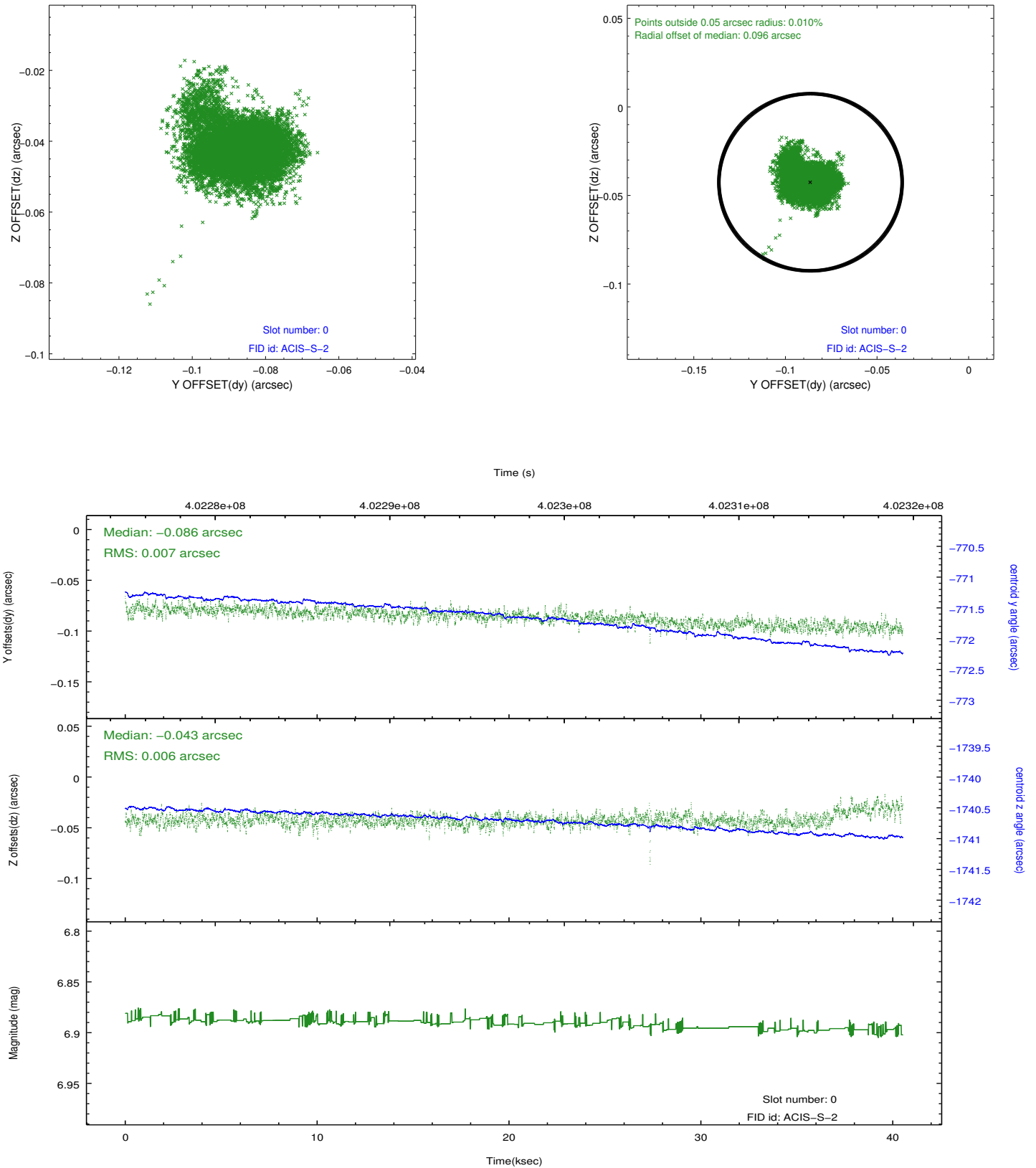


## 2.4.5 Slot 7

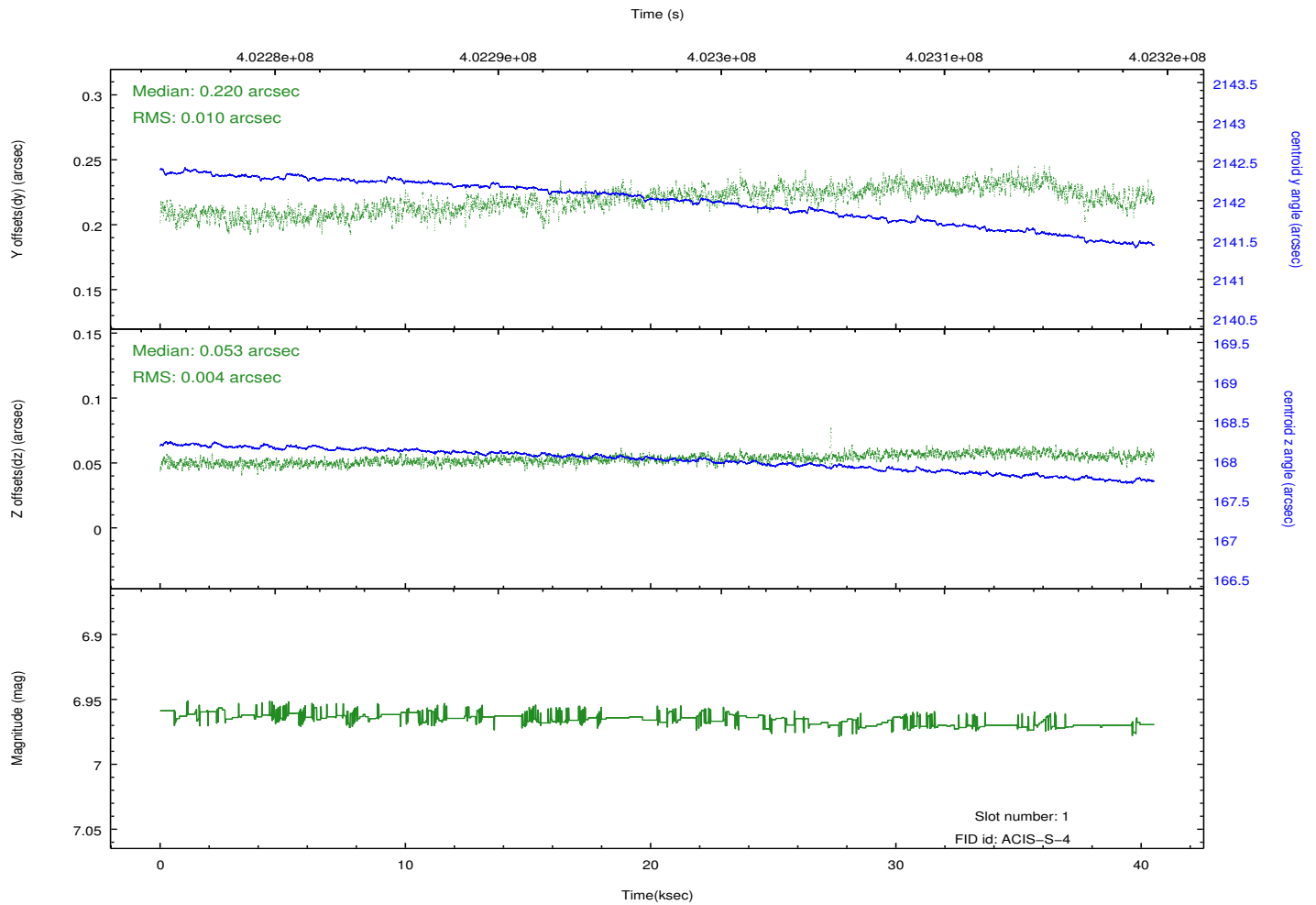
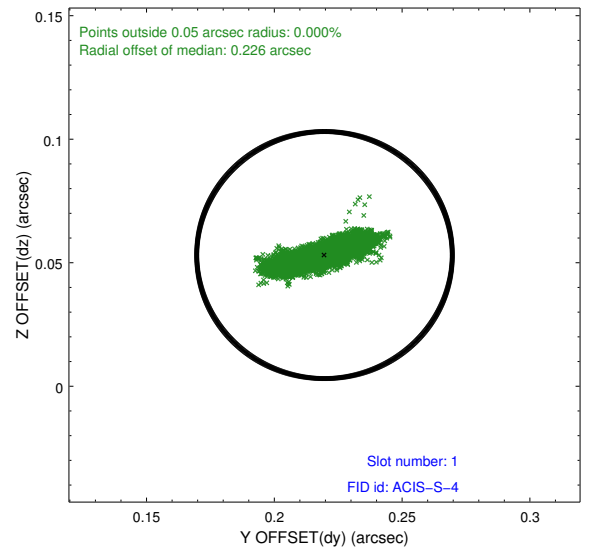
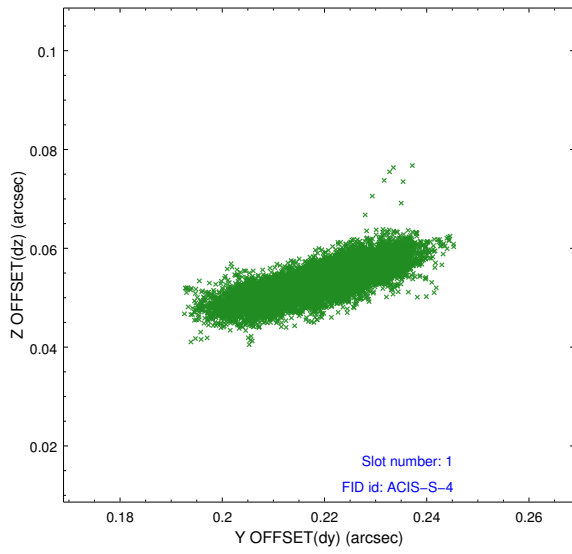


## 2.5 FID Slots

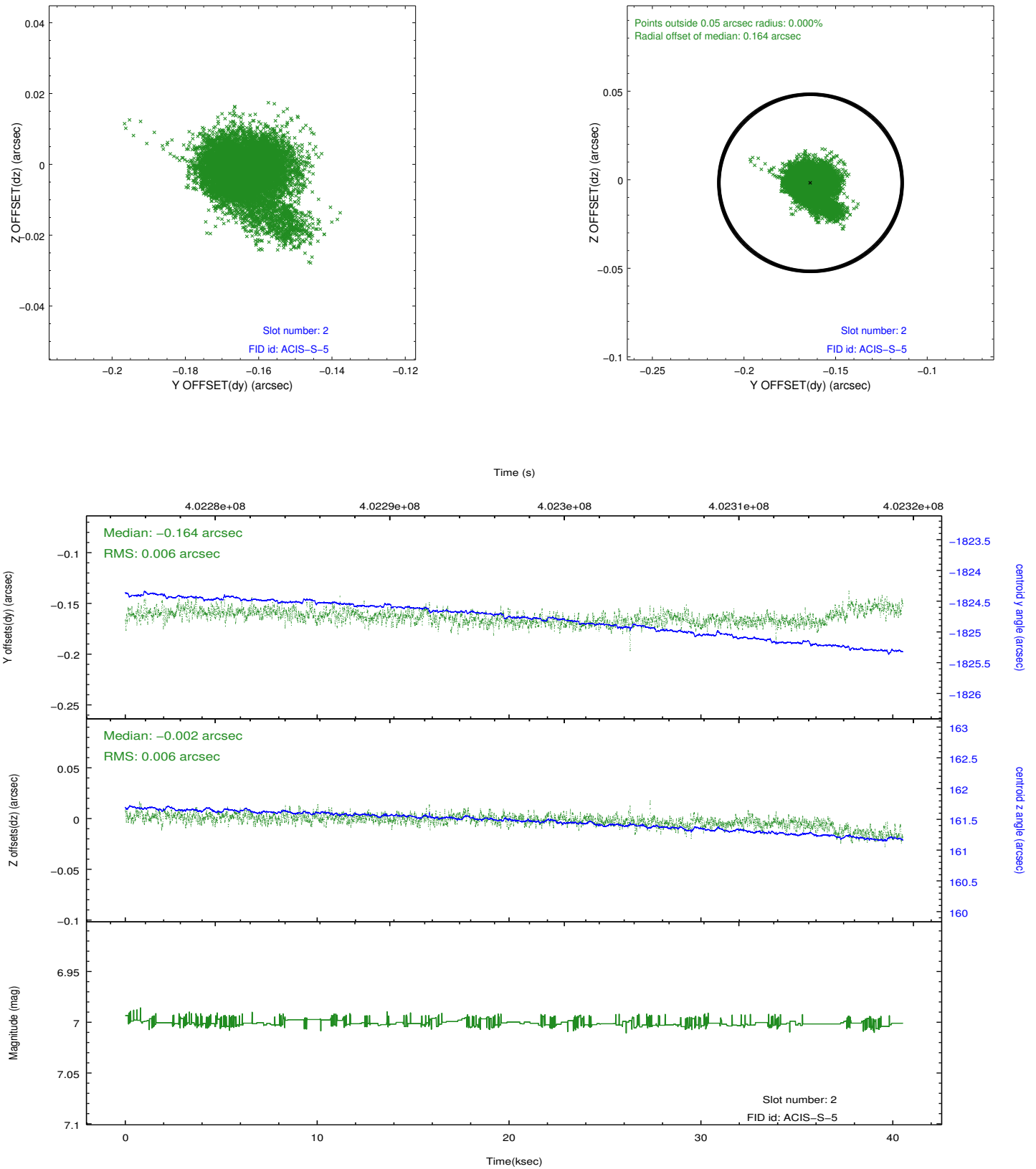
### 2.5.1 Slot 0



## 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)	2012.07.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	40.039600307941

## A.2 Comments