

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 7031 - L2 Version 3  
Chandra X-Ray Center

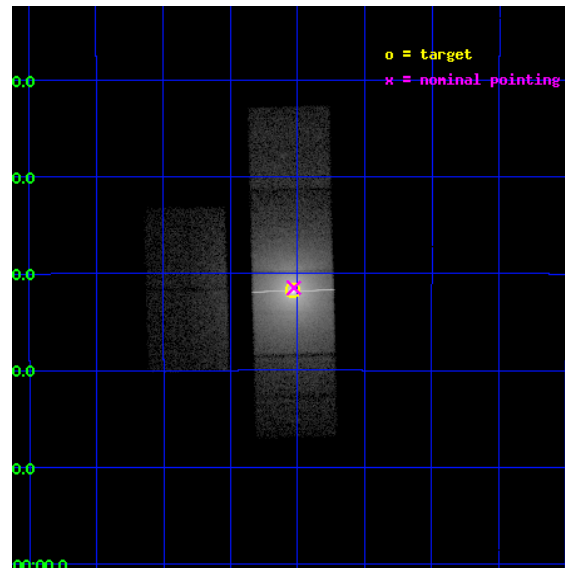
L2 Processing Date : Apr 20 2012

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# 1 Front

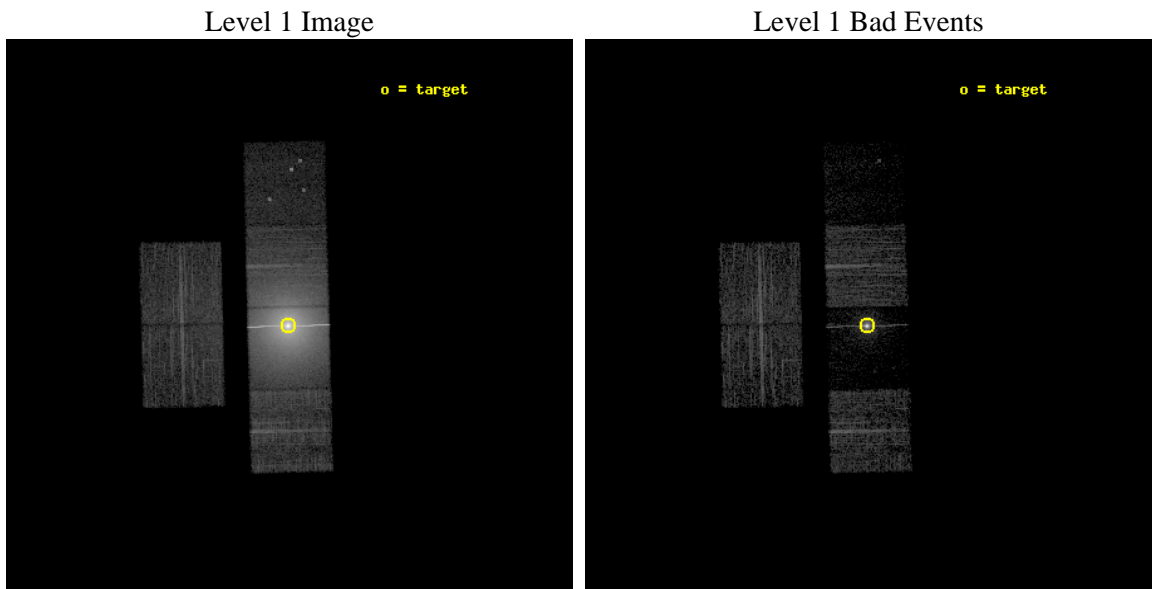
seq_num	900447	Sequence number
obs_id	7031	Observation id
title	High-Resolution X-ray Images of Dust Halos	Proposal title
observer	Dr. Randall Smith	Principal investigator
object	GX9+1	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	270.384583	Observer's specified target RA [deg]
dec_targ	-20.528889	Observer's specified target Dec [deg]
ra_nom	270.38199612508	Nominal RA [deg]
dec_nom	-20.524628787054	Nominal Dec [deg]
roll_nom	88.579802552872	Nominal Roll [deg]
revision	3	Processing version of data
ontime	4741.7621173859	Sum of GTIs [s]
livetime	4681.7190703092	Livetime [s]
ontime2	4741.8031573892	Sum of GTIs [s]
ontime3	4741.638997376	Sum of GTIs [s]
ontime5	4741.7210773826	Sum of GTIs [s]
ontime6	4741.6800373793	Sum of GTIs [s]
ontime7	4741.7621173859	Sum of GTIs [s]
ontime8	4741.5979573727	Sum of GTIs [s]
l2events	542422	Number of level 2 events



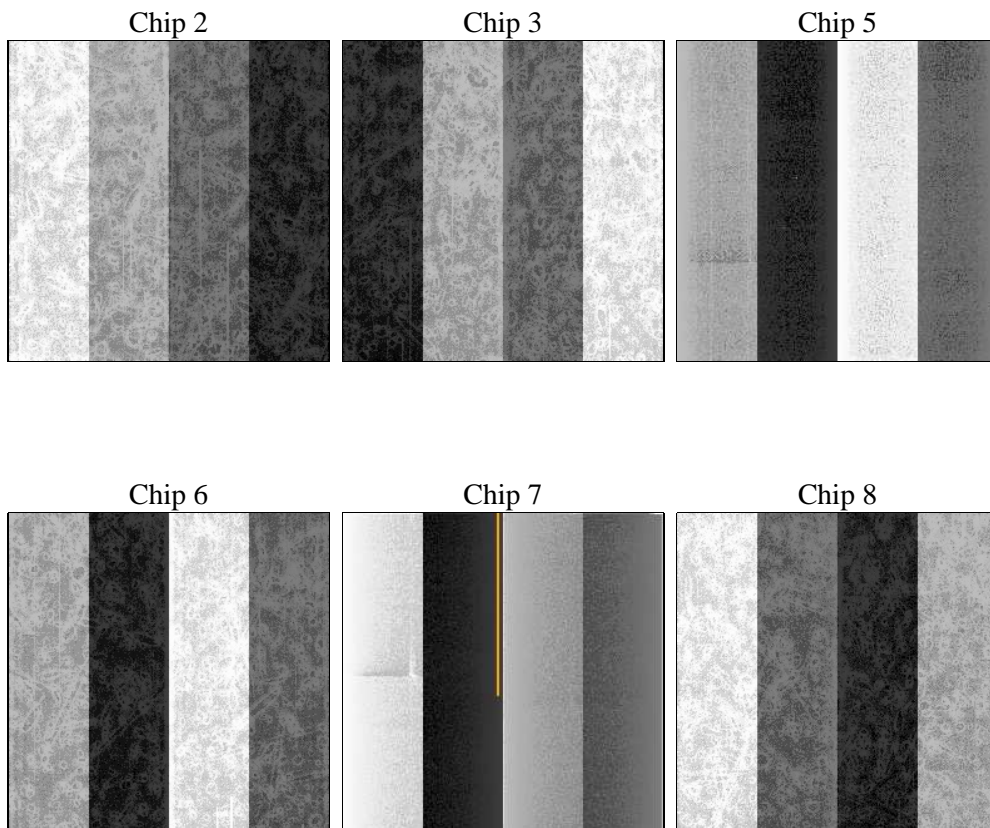
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	4700.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	4741.7621173859	Sum of GTIs [s]
caldsver	4.4.9	&#160	ontime2	4741.8031573892	Sum of GTIs [s]
date	2012-04-20T04:36:43	Date and time of file creation	ontime3	4741.638997376	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	4741.7210773826	Sum of GTIs [s]
			ontime6	4741.6800373793	Sum of GTIs [s]
			ontime7	4741.7621173859	Sum of GTIs [s]
			ontime8	4741.5979573727	Sum of GTIs [s]
			l1events	703924	Number of level 1 events

### 2.1.4 Events

	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	37865	34664	19499	85773	480921	45202
rejected events	28991	26026	4955	27964	26586	26040
rejected %	76%	75%	25%	32%	5%	57%

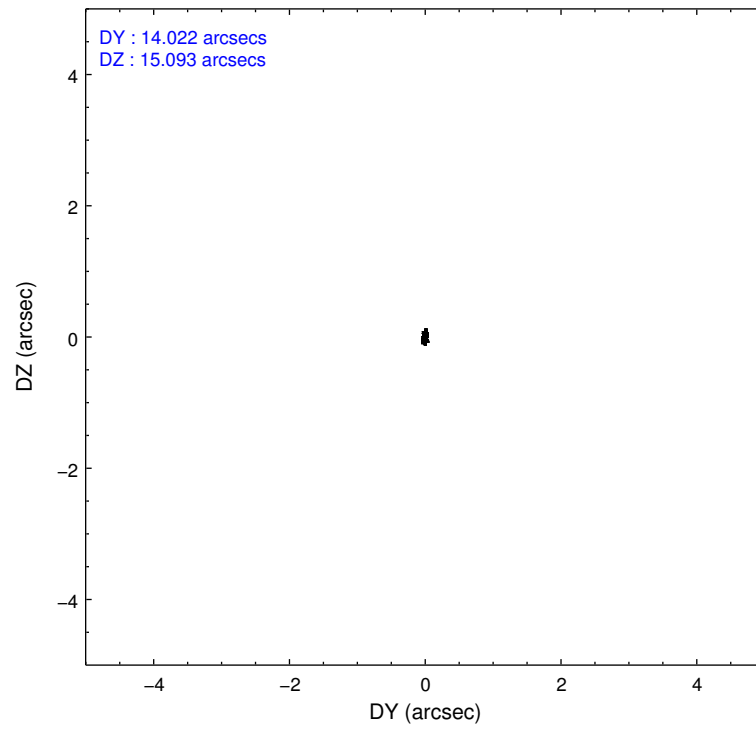
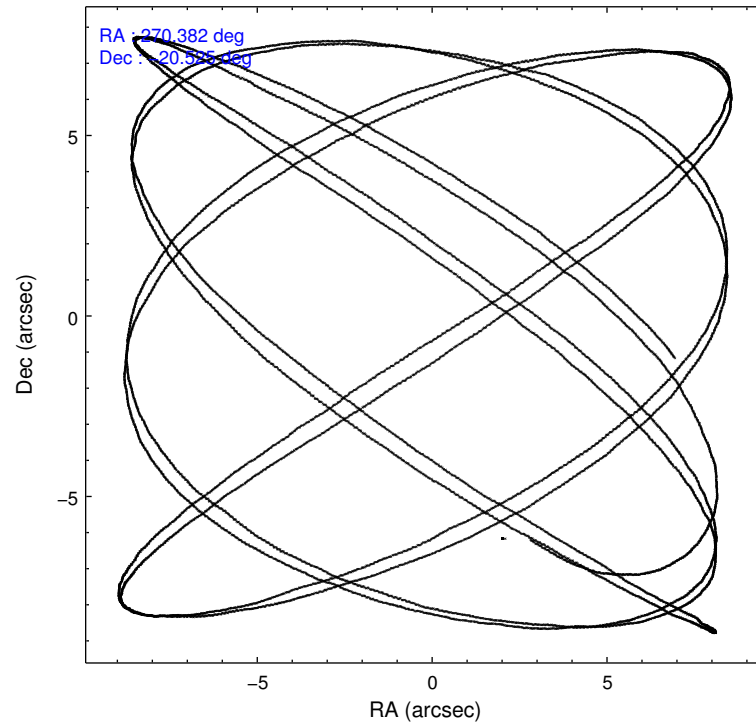
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	6100	6149	3868	43709	93029	10291
	16%	17%	19%	50%	19%	22%
grade 1 events	49	57	47	238	1802	68
	0%	0%	0%	0%	0%	0%
grade 2 events	1311	1101	4606	7002	113726	3450
	3%	3%	23%	8%	23%	7%
grade 3 events	471	449	974	2373	50355	1495
	1%	1%	4%	2%	10%	3%
grade 4 events	529	493	975	2262	49229	1309
	1%	1%	5%	2%	10%	2%
grade 5 events	232	297	1134	494	7661	534
	0%	0%	5%	0%	1%	1%
grade 6 events	475	463	4145	2524	148583	2660
	1%	1%	21%	2%	30%	5%
grade 7 events	28698	25655	3750	27171	16536	25395
	75%	74%	19%	31%	3%	56%

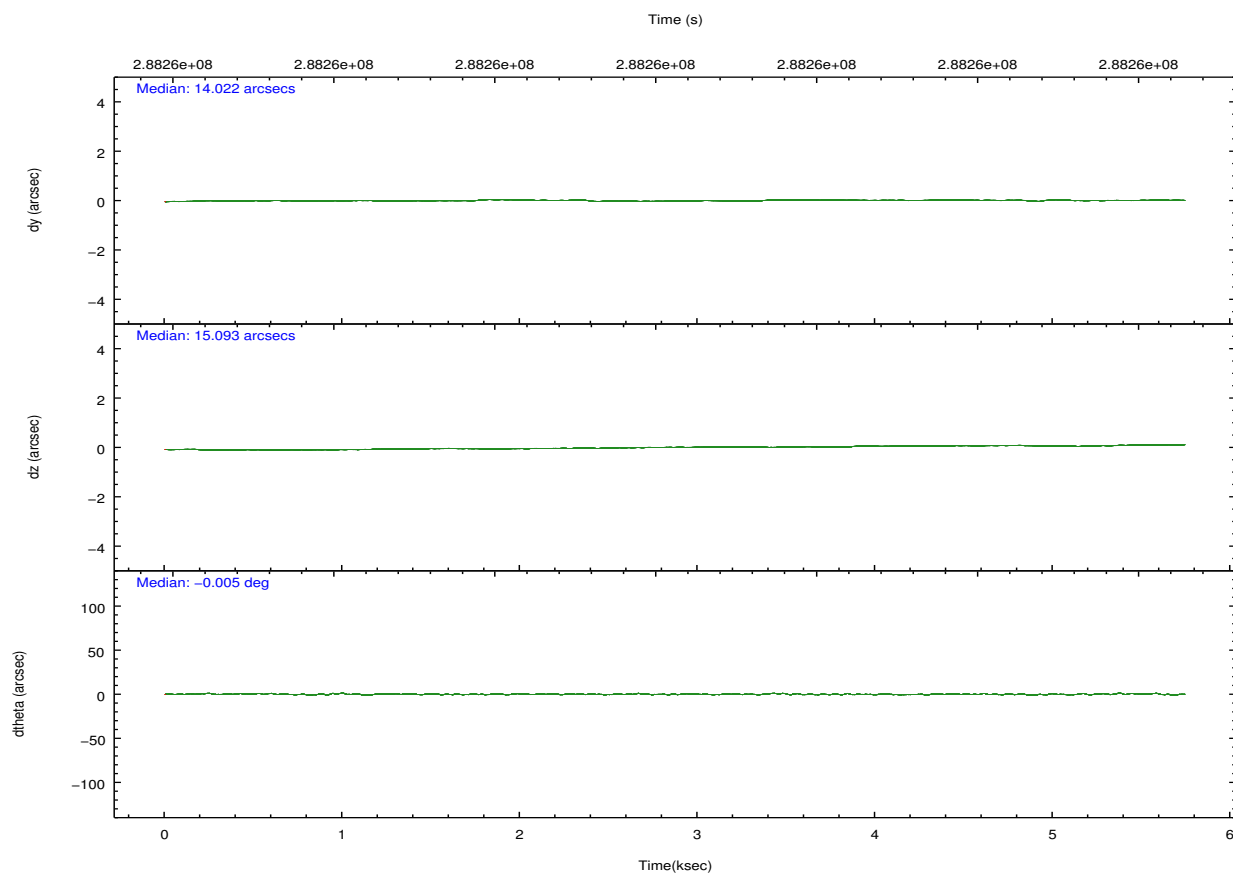
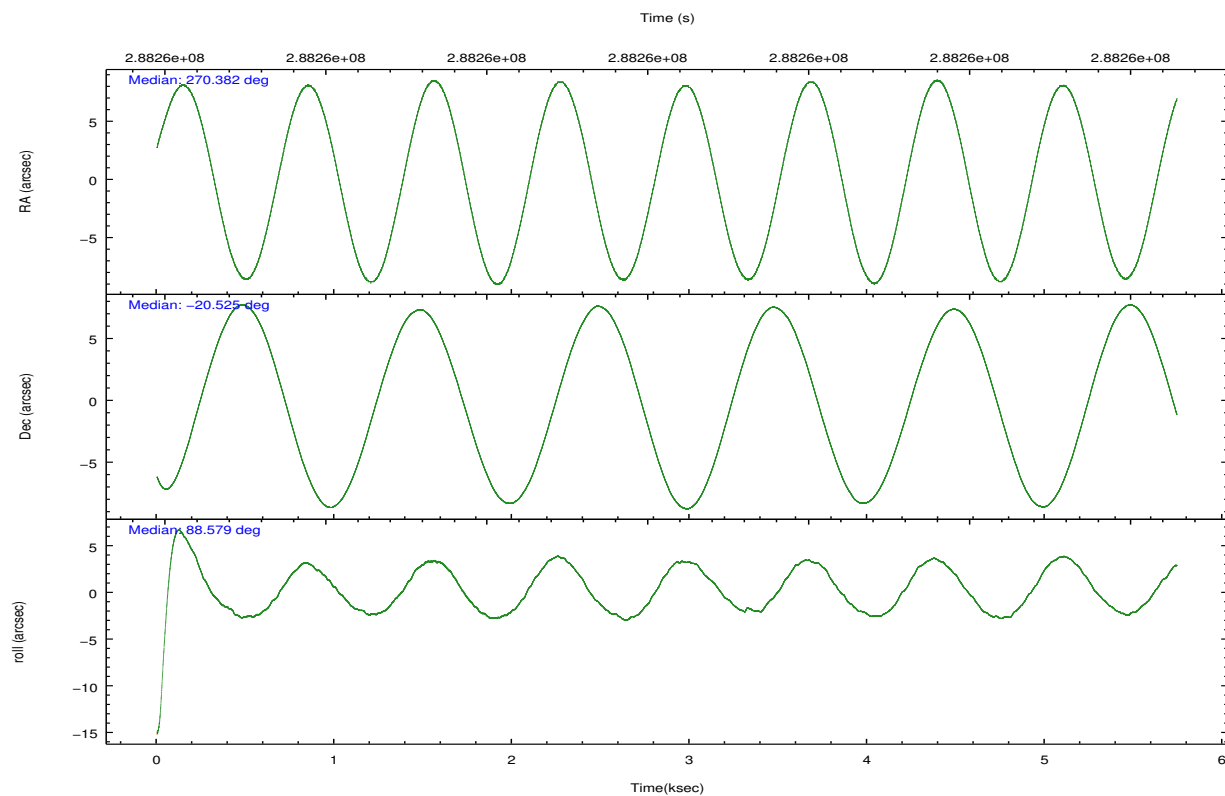


## 2.2 Compared Parameters

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	270.396291	270.3819961250815	CCD I2 on	Y	Y
[deg] Pointing Dec	-20.548529	-20.52462878705364	CCD I3 on	Y	Y
[deg] Pointing Roll	88.428236	88.57980255287244	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O1	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	Y	Y
[s] Observation start time (MET)	288259287.184000	288257853.74468	CCD S5 on	N	N
Observation start date	2007-02-19T08:00:22	2007-02-19T07:37:33	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	288263987.184000	288264472.6825	On-chip summing requested	N	N
Observation end date	2007-02-19T09:18:42	2007-02-19T09:27:52	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



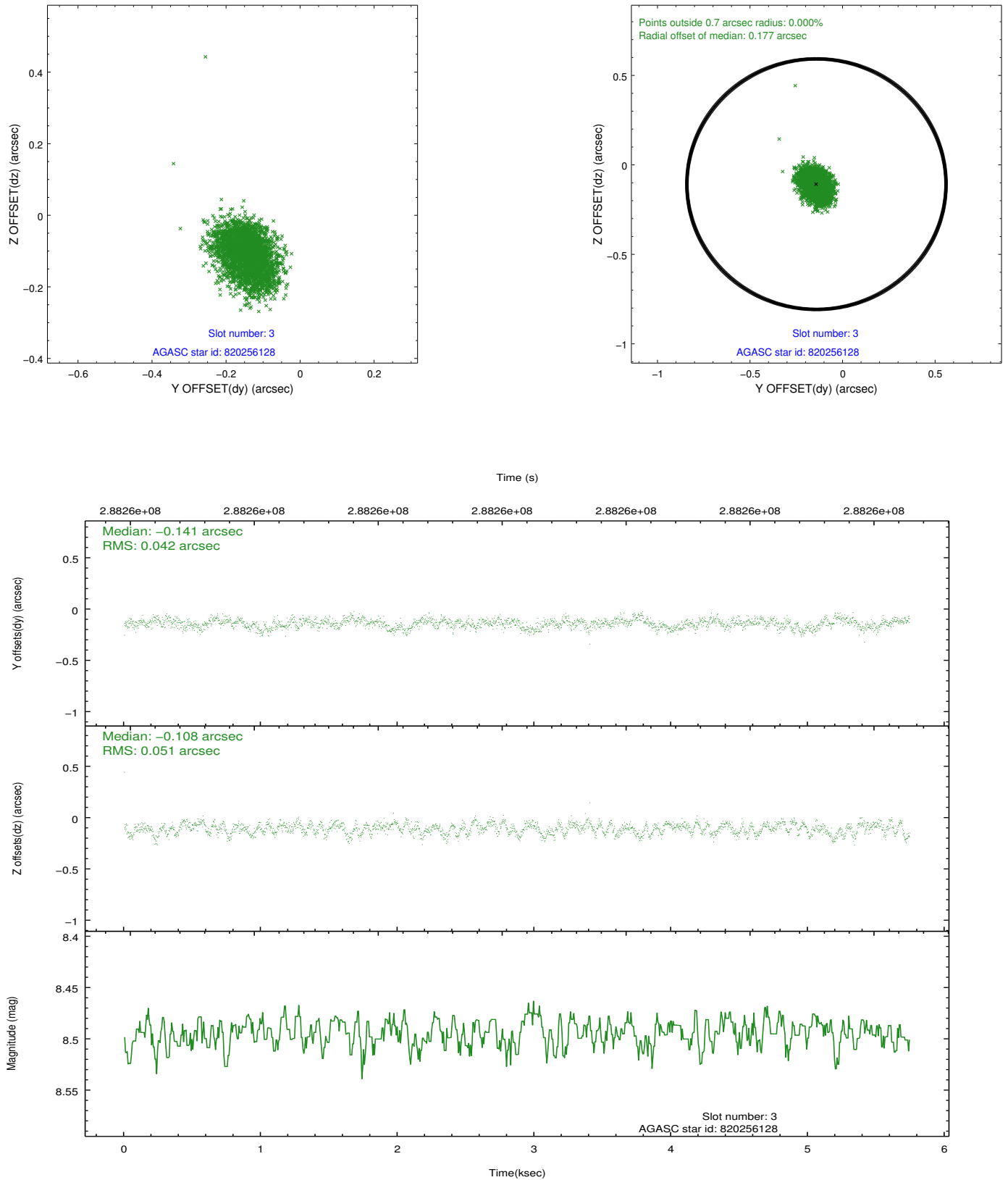


### Slot Statistics

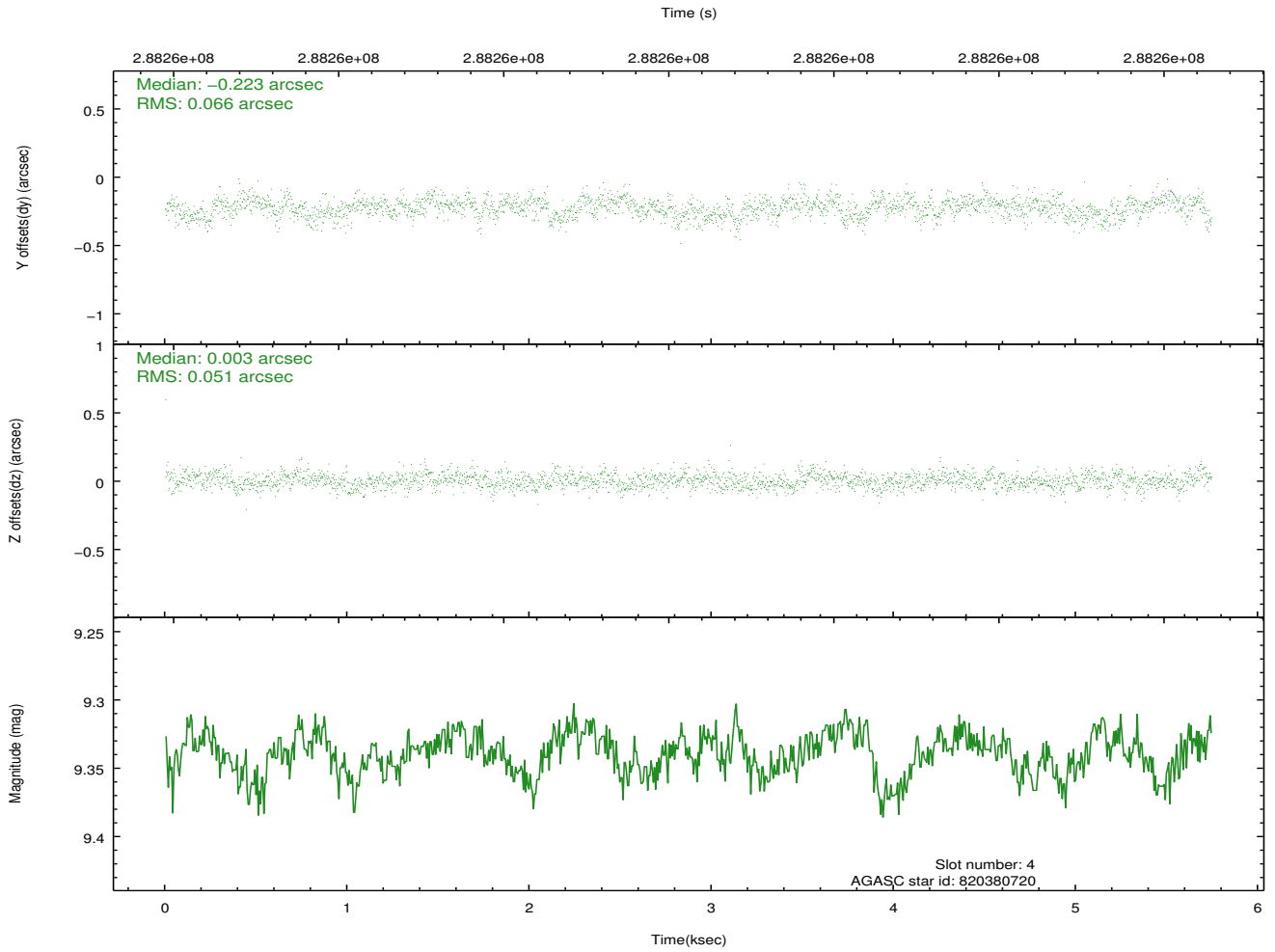
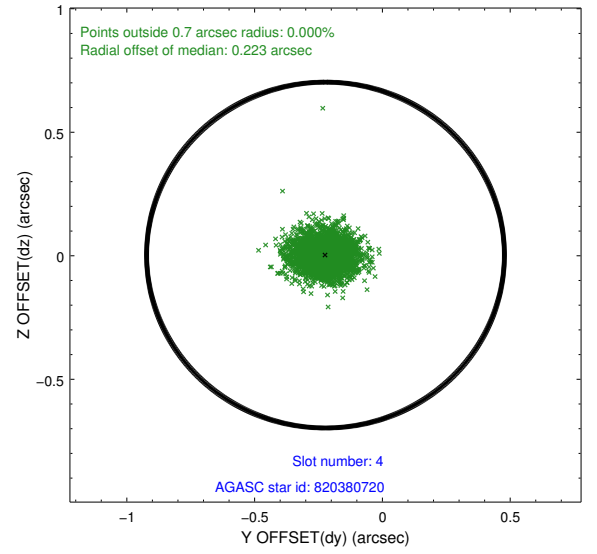
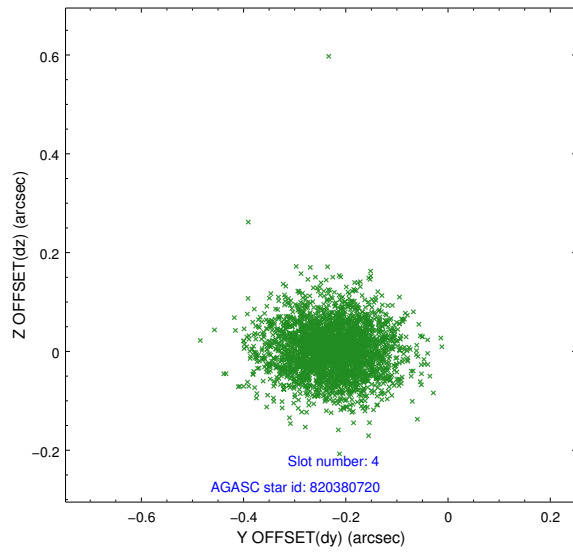
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.09	1401	-0.074	-0.048	0.007	0.012	0.000000	0.000000	-767.02	-1736.47
1	FID	ACIS-S-4	7.19	1401	0.220	0.048	0.006	0.010	0.000000	0.000000	2146.05	171.06
2	FID	ACIS-S-5	7.22	1401	-0.177	0.008	0.006	0.011	0.000000	0.000000	-1818.65	165.83
3	GUIDE	820256128	8.50	2802	-0.141	-0.108	0.071	0.111	269.765287	-20.062383	1686.44	2181.04
4	GUIDE	820380720	9.34	2799	-0.223	0.003	0.088	0.145	270.209065	-19.908428	2285.84	697.75
5	GUIDE	820776344	7.33	2802	0.194	-0.053	0.056	0.088	269.882096	-21.045657	-1838.51	1678.16
6	GUIDE	820904528	8.77	2802	0.076	0.008	0.070	0.112	270.240063	-20.988108	-1597.42	482.27
7	GUIDE	820927824	7.15	2801	0.094	0.150	0.070	0.113	270.655496	-20.737630	-658.00	-890.55

## 2.4 Star Slots

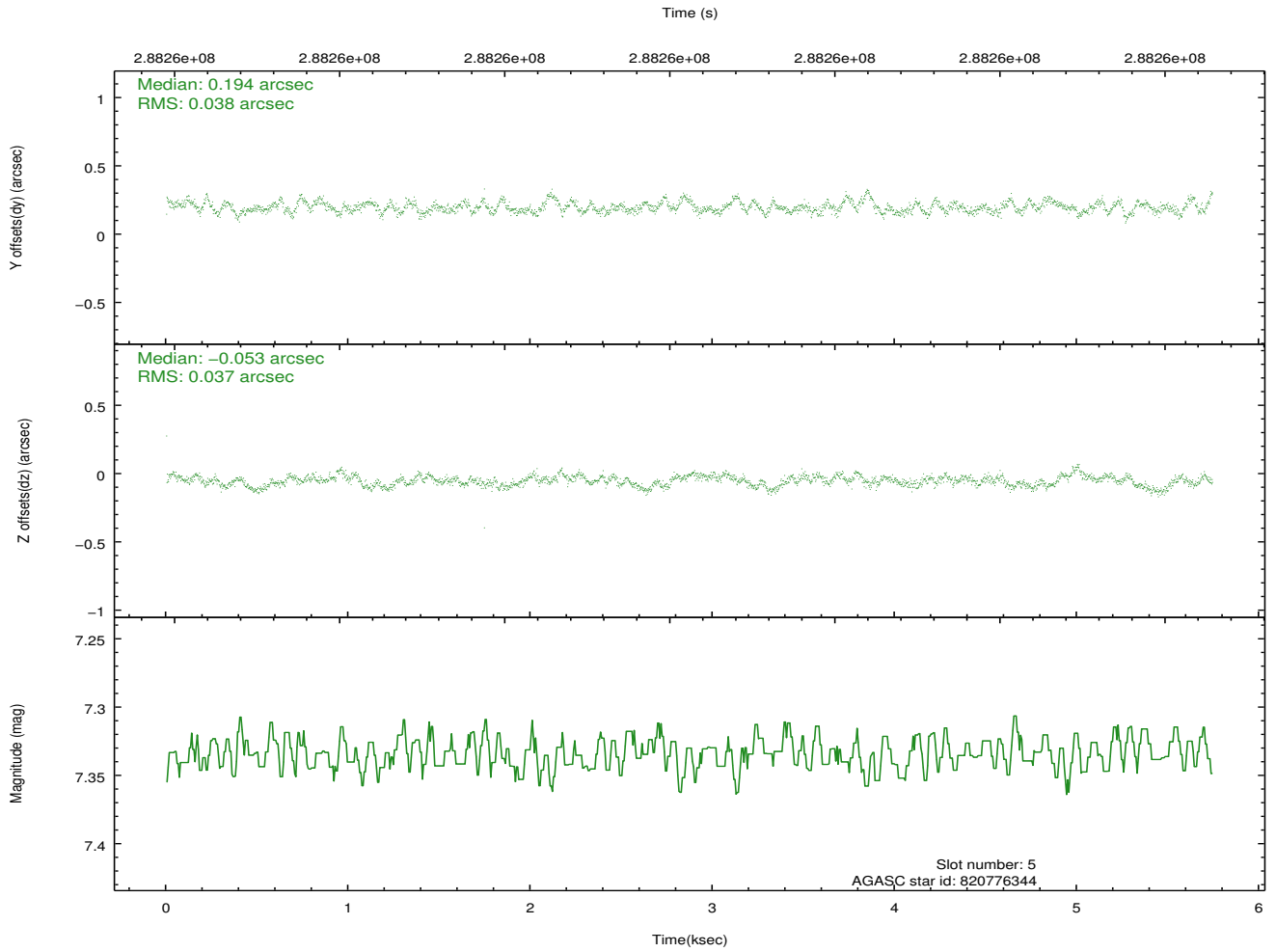
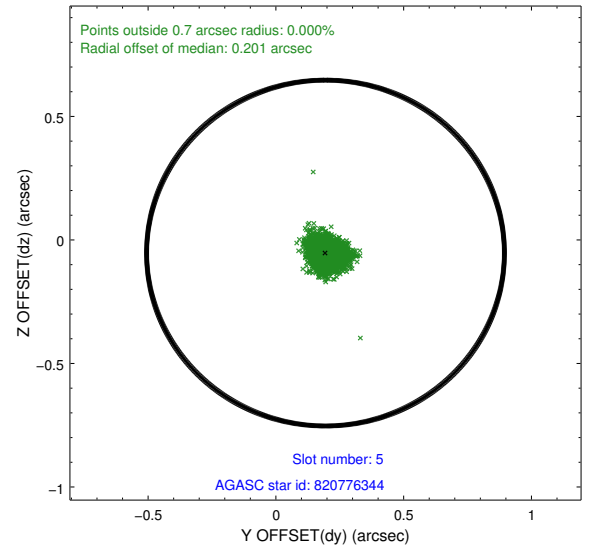
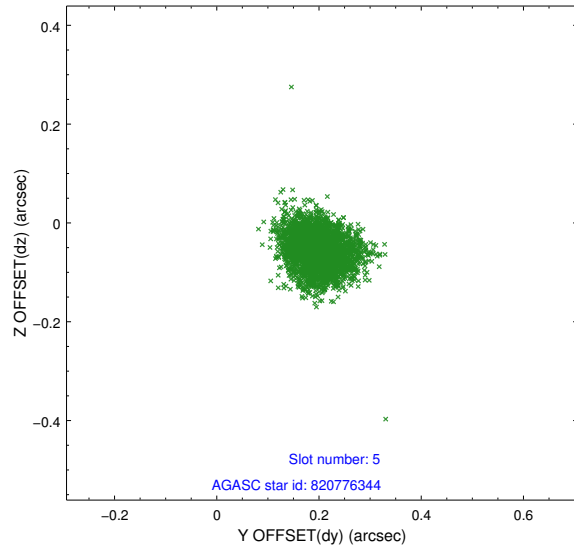
### 2.4.1 Slot 3



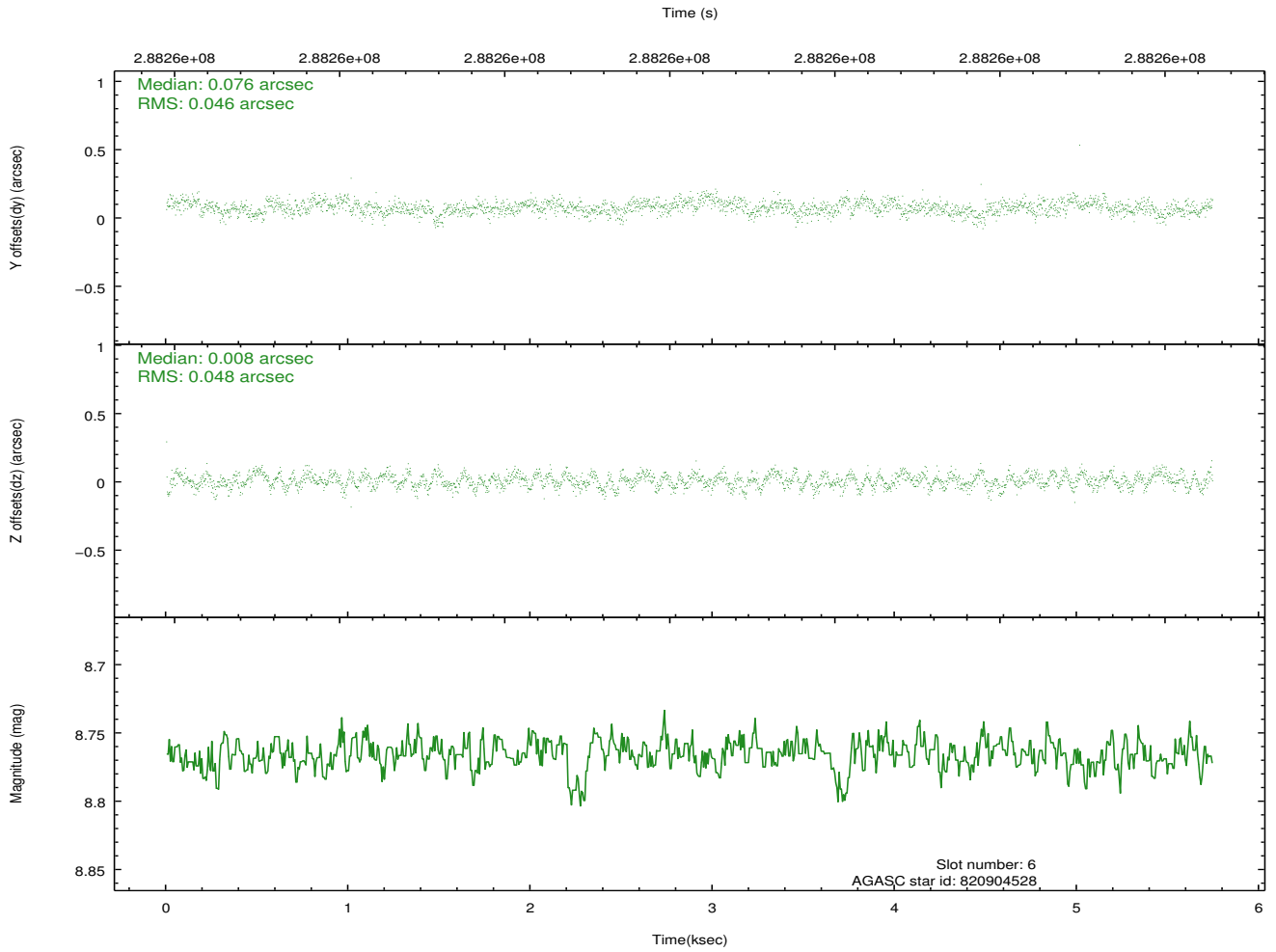
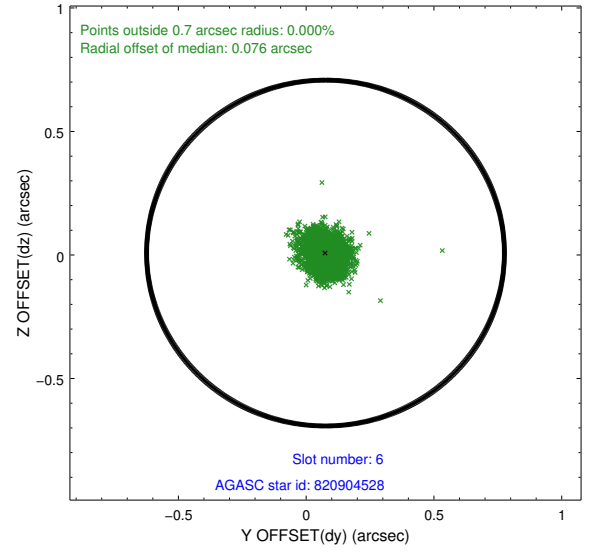
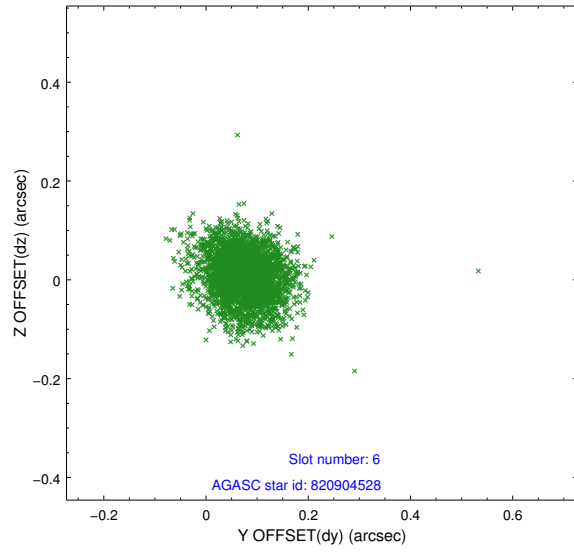
## 2.4.2 Slot 4



### 2.4.3 Slot 5

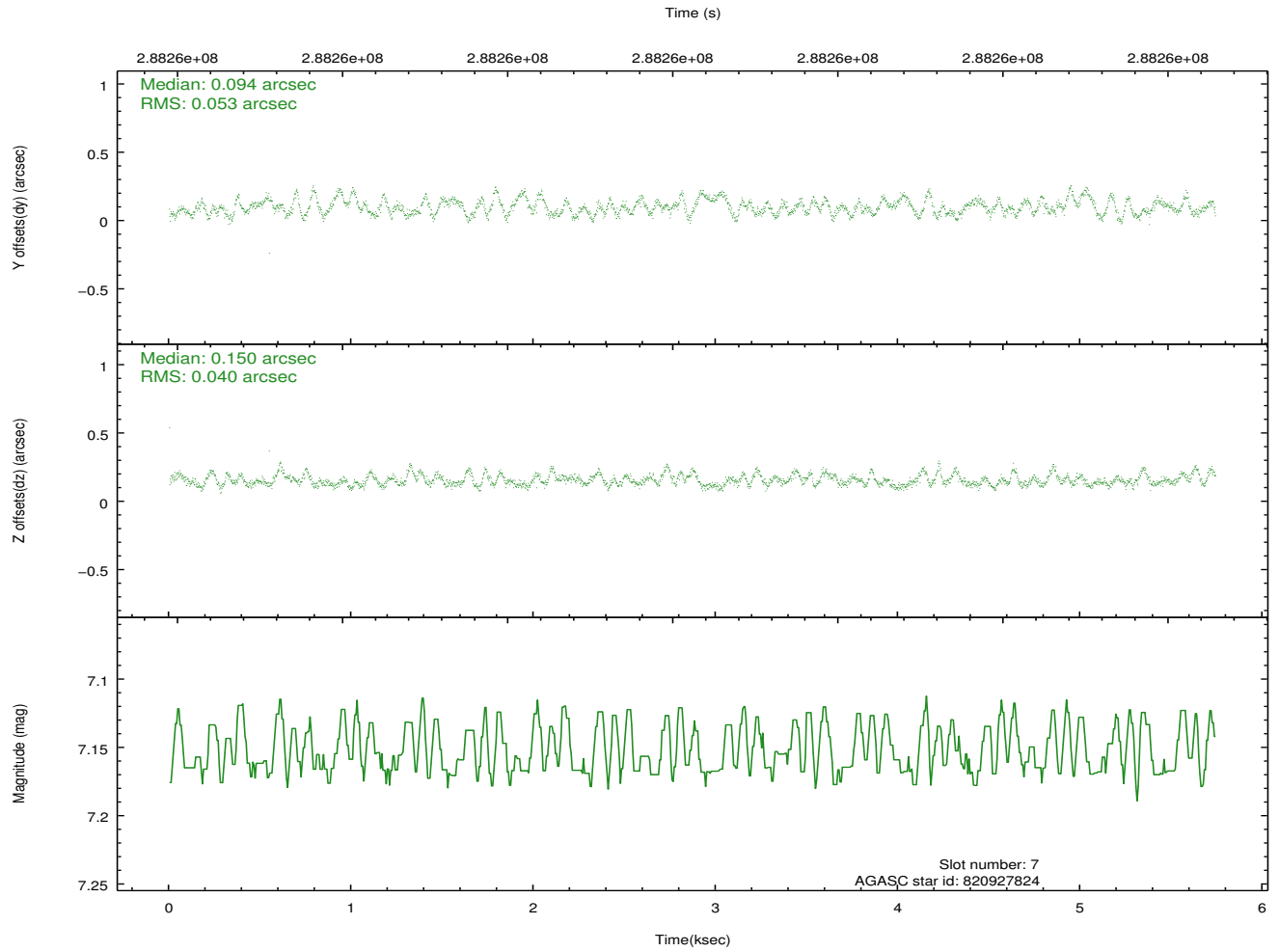
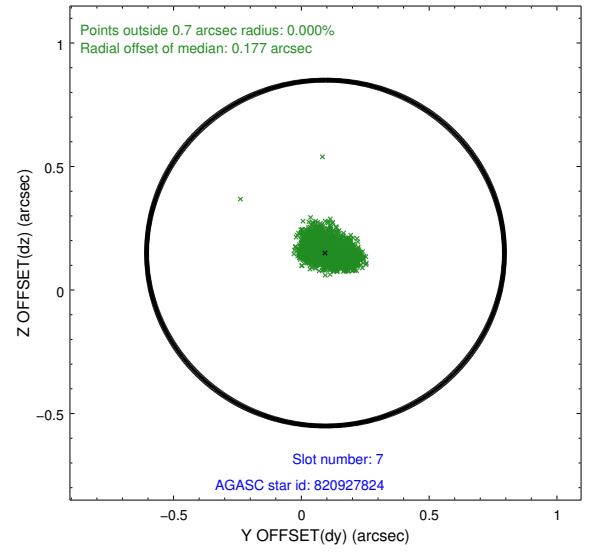
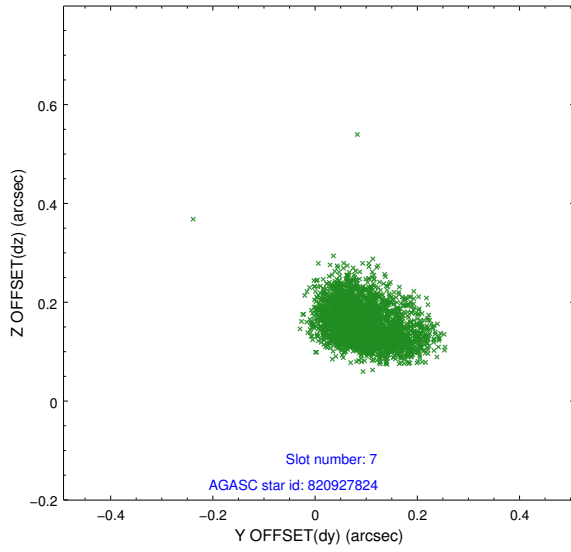


## 2.4.4 Slot 6



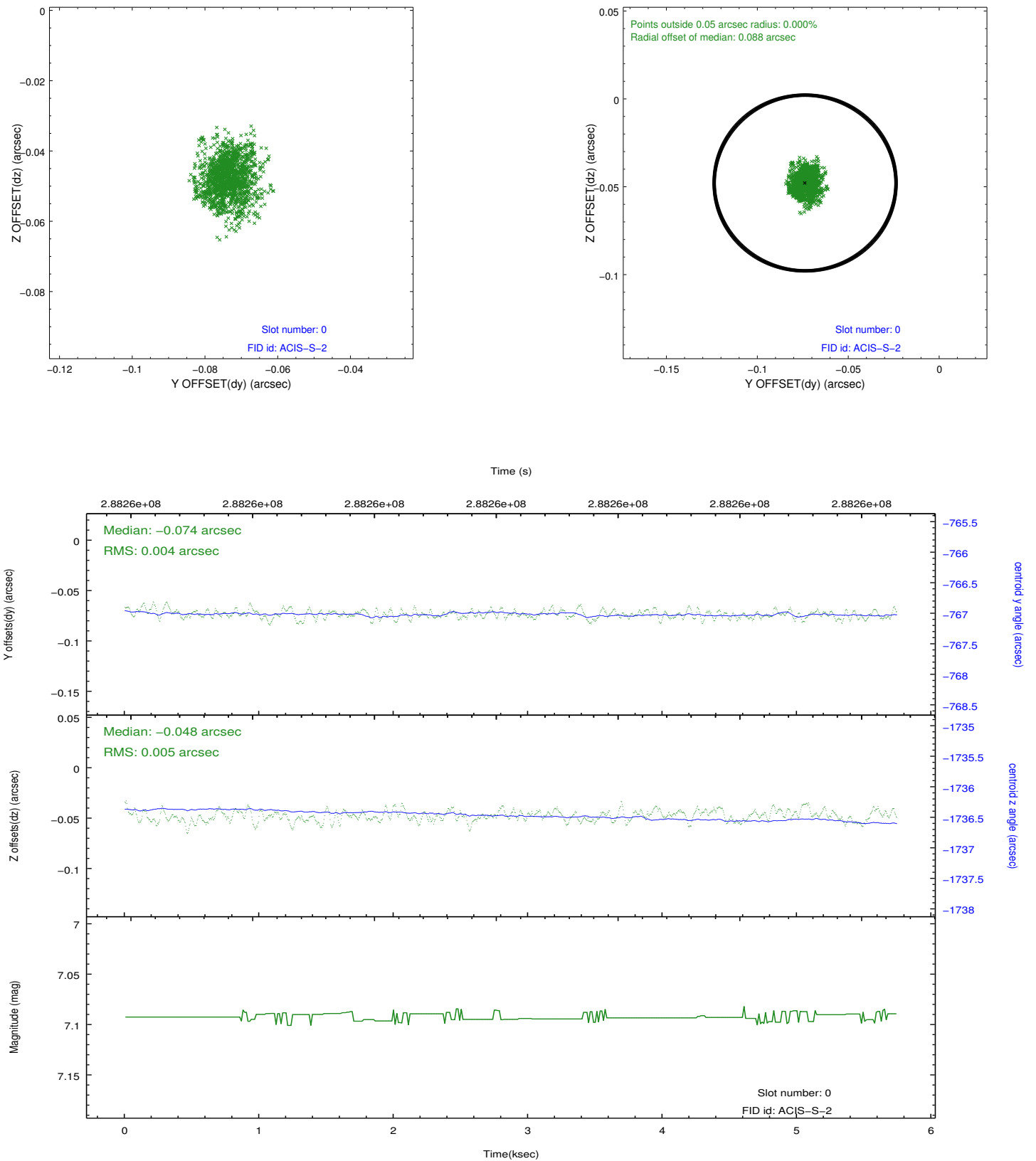


## 2.4.5 Slot 7

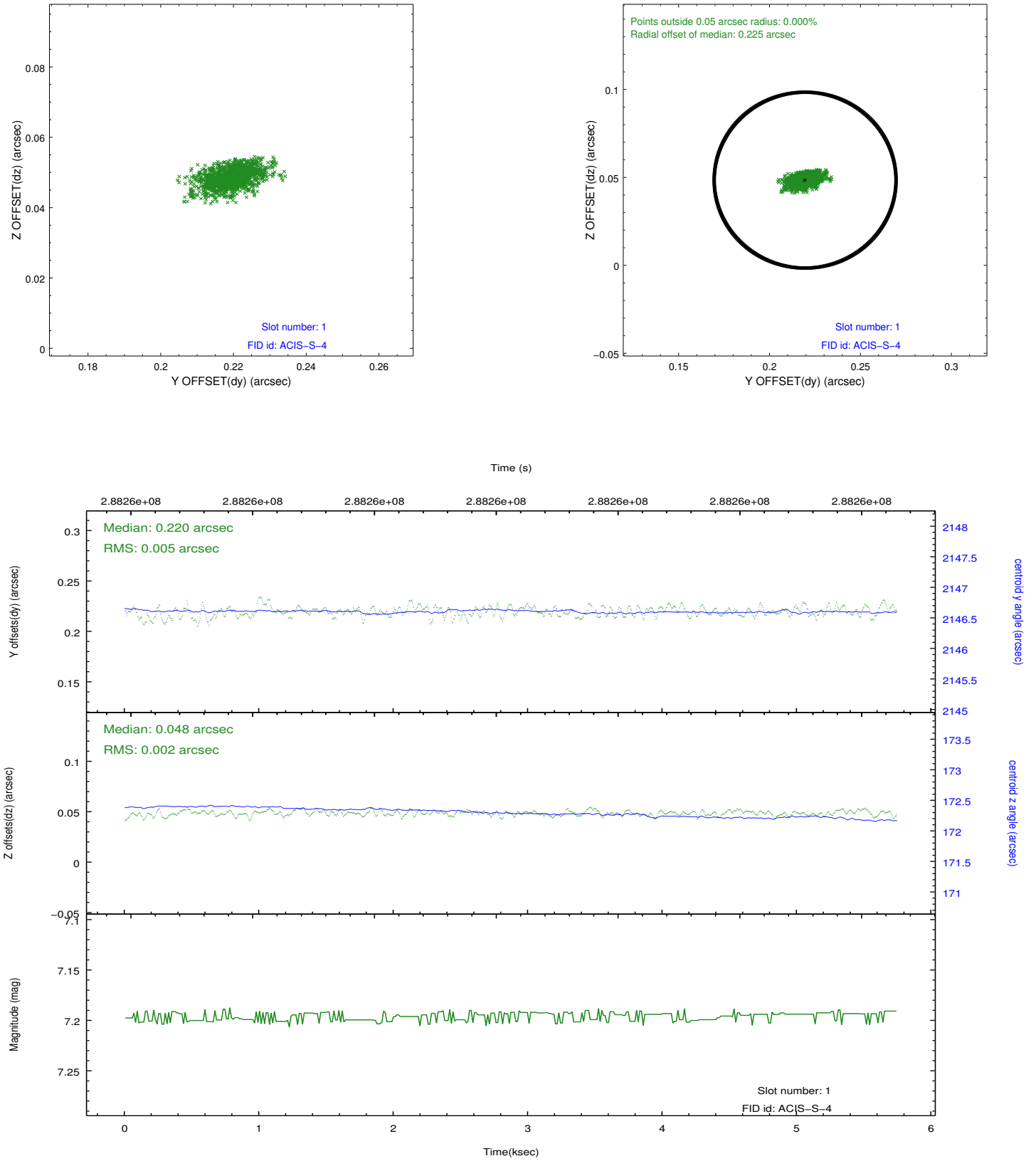


## 2.5 FID Slots

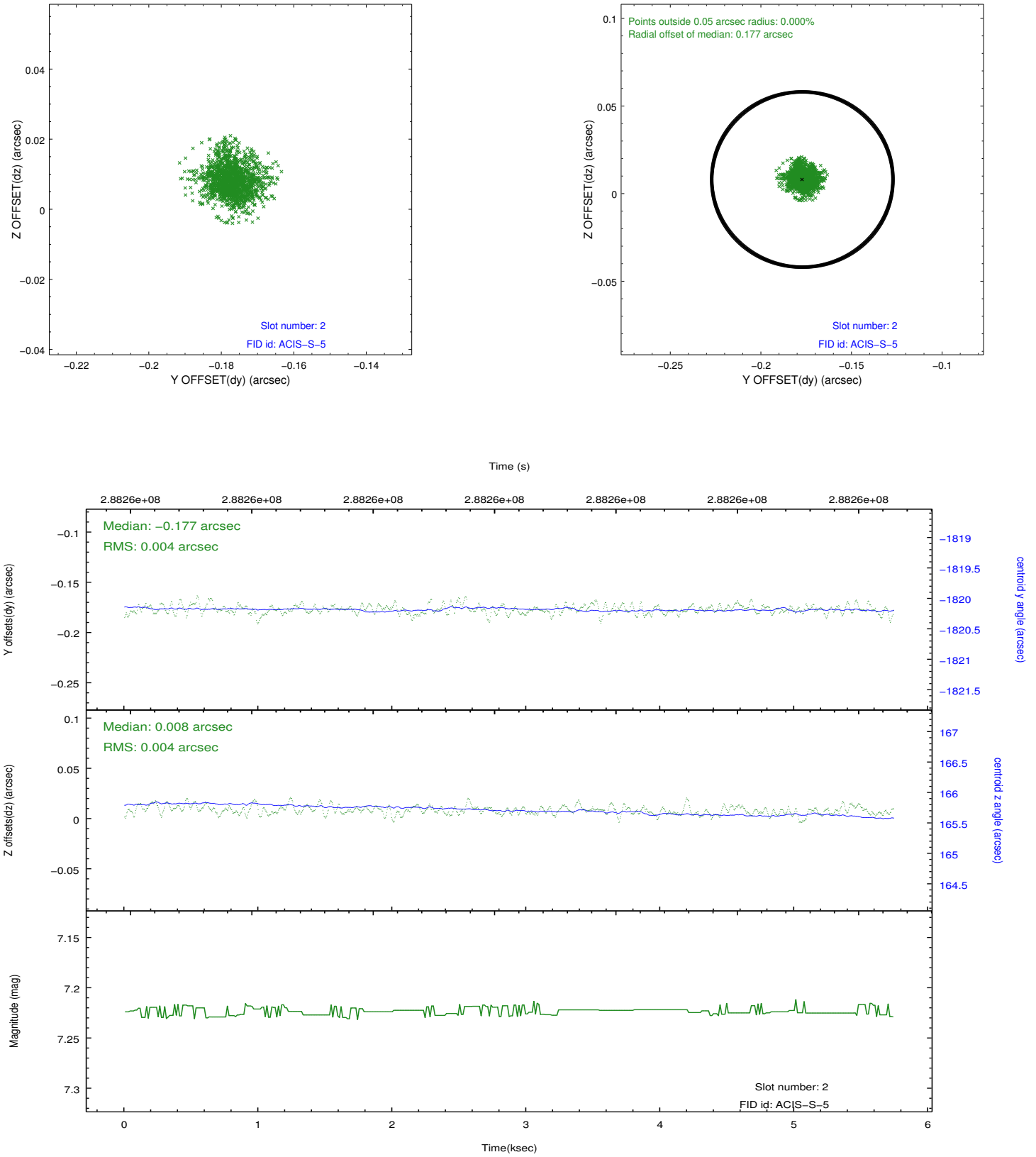
### 2.5.1 Slot 0



## 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)	2012.04.22
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.74239998

### A.2 Comments