

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 1026 - L2 Version 4  
Chandra X-Ray Center

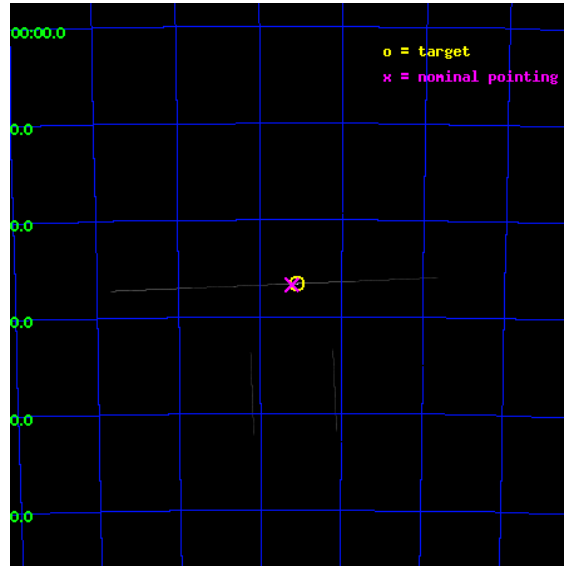
L2 Processing Date : Sep 2 2012

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# 1 Front

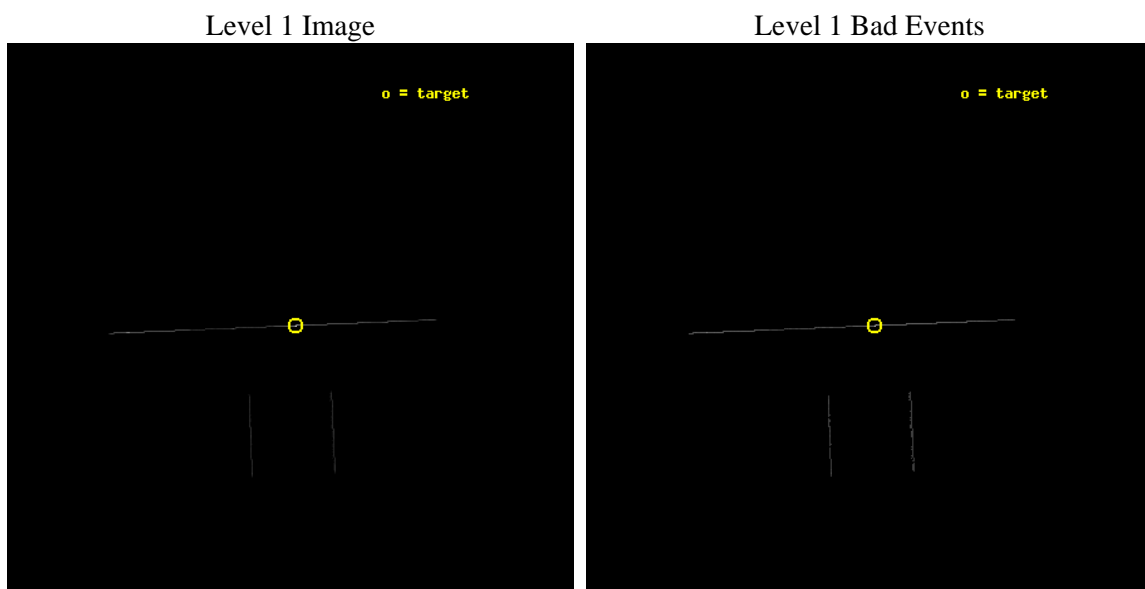
seq_num	400104	Sequence number
obs_id	1026	Observation id
title	HIGH RESOLUTION UV/X-RAY SPECTROSCOPY OF SMC X-1	Proposal title
observer	Dr. Saeqa Vrtilek	Principal investigator
object	SMC X-1	Source name
ra_targ	19.271667	Observer's specified target RA [deg]
dec_targ	-73.442944	Observer's specified target Dec [deg]
ra_nom	19.305492390557	Nominal RA [deg]
dec_nom	-73.445154163596	Nominal Dec [deg]
roll_nom	357.60334661742	Nominal Roll [deg]
revision	4	Processing version of data
ontime	6458.7078507245	Sum of GTIs [s]
livetime	6433.4785231826	Livetime [s]
ontime2	6460.1647456735	Sum of GTIs [s]
ontime3	6460.1618654579	Sum of GTIs [s]
ontime5	6461.6251160353	Sum of GTIs [s]
ontime6	6461.6251178384	Sum of GTIs [s]
ontime7	6458.7078507245	Sum of GTIs [s]
ontime8	6460.1665099263	Sum of GTIs [s]
l2events	452295	Number of level 2 events



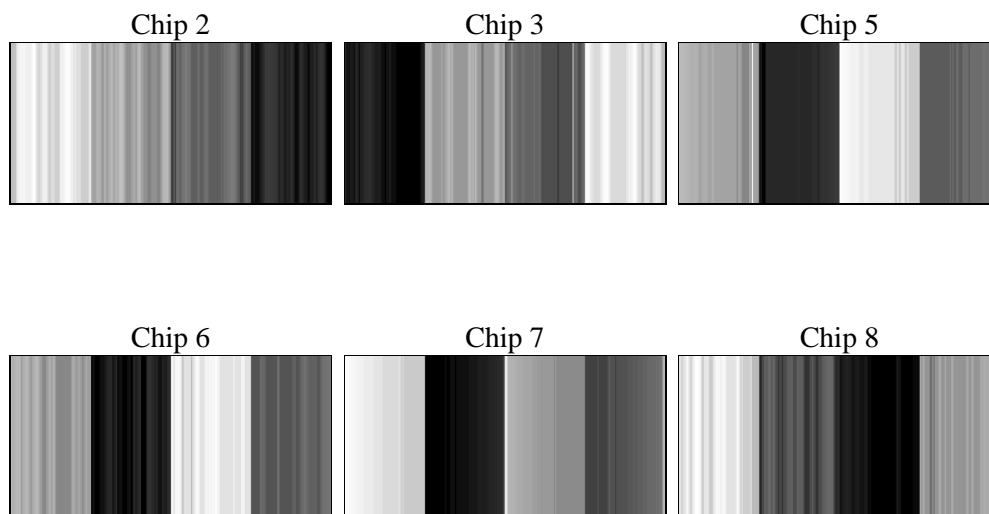
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	6000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	6458.7078507245	Sum of GTIs [s]
caldsver	4.5.1.1	&#160	ontime2	6460.1647456735	Sum of GTIs [s]
date	2012-09-02T09:36:23	Date and time of file creation	ontime3	6460.1618654579	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	6461.6251160353	Sum of GTIs [s]
			ontime6	6461.6251178384	Sum of GTIs [s]
			ontime7	6458.7078507245	Sum of GTIs [s]
			ontime8	6460.1665099263	Sum of GTIs [s]
			l1events	562577	Number of level 1 events

### 2.1.4 Events

	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	9579	10151	46455	12591	456424	27377
rejected events	2047	2190	7049	2446	62630	5692
rejected %	21%	21%	15%	19%	13%	20%

	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	1133	1127	10630	1306	91792	6296
	11%	11%	22%	10%	20%	22%
grade 1 events	36	32	64	22	11229	76
	0%	0%	0%	0%	2%	0%
grade 2 events	3155	3257	11534	5203	106990	6541
	32%	32%	24%	41%	23%	23%
grade 3 events	1234	1441	1341	1263	41610	3566
	12%	14%	2%	10%	9%	13%
grade 4 events	1186	1189	1194	1166	40193	3325
	12%	11%	2%	9%	8%	12%
grade 5 events	1366	1428	3966	1648	41640	2325
	14%	14%	8%	13%	9%	8%
grade 6 events	1469	1677	17726	1983	122970	5248
	15%	16%	38%	15%	26%	19%
grade 7 events	0	0	0	0	0	0
	0%	0%	0%	0%	0%	0%

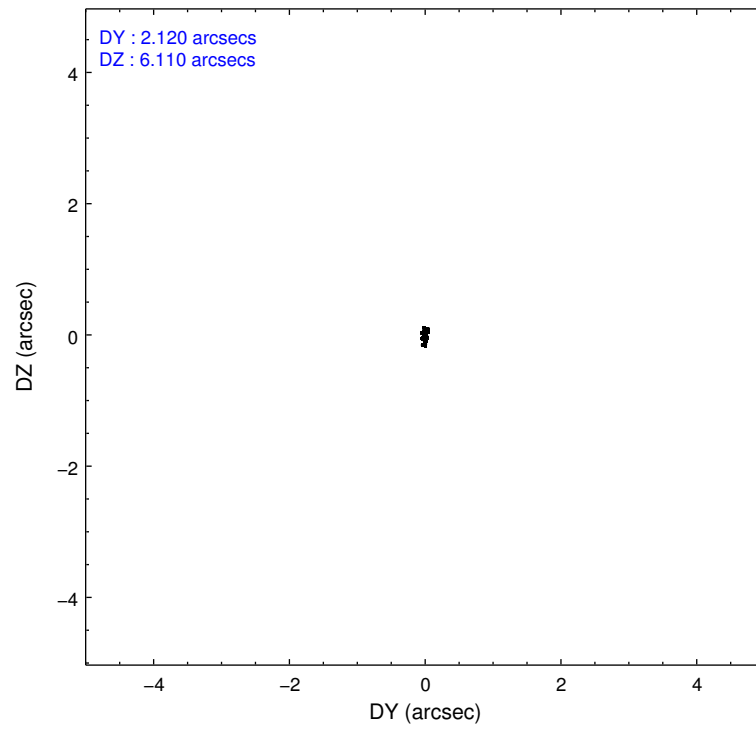
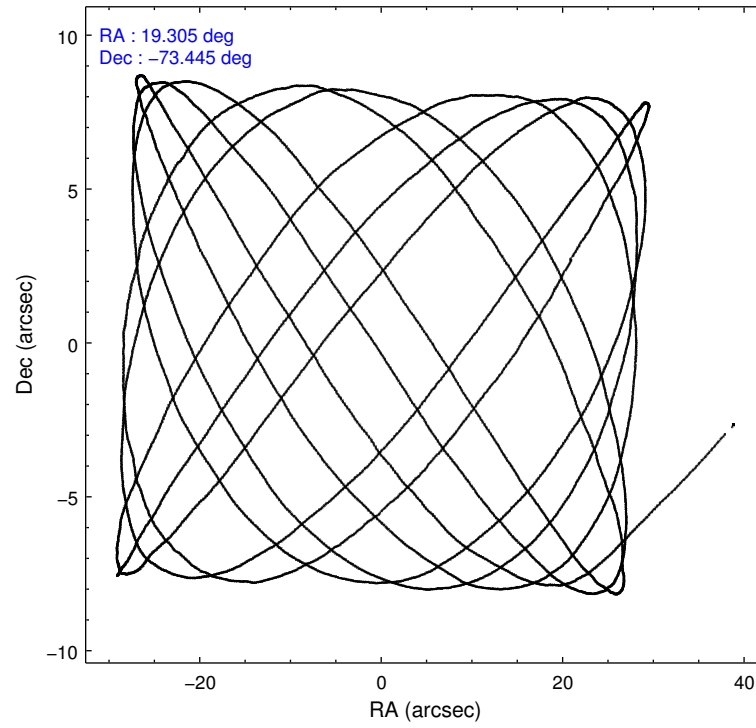


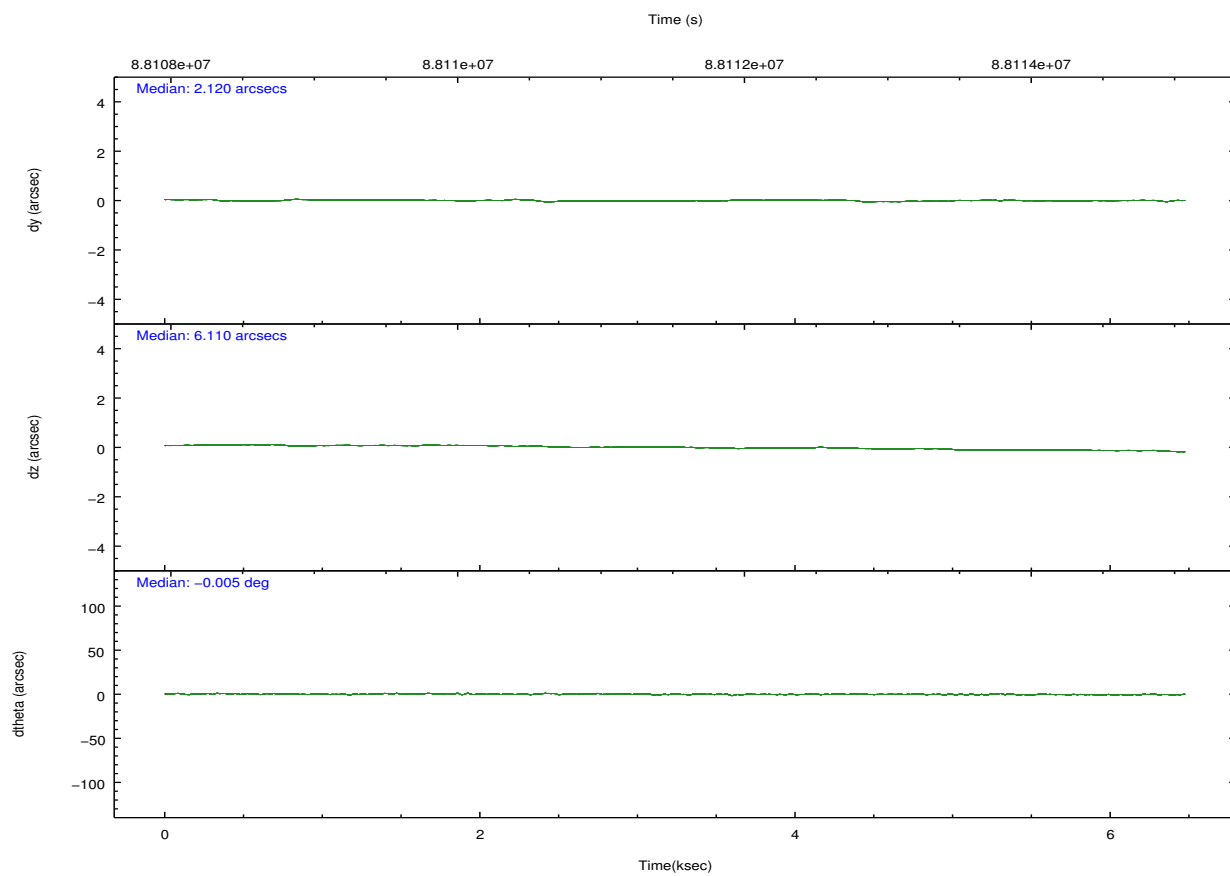
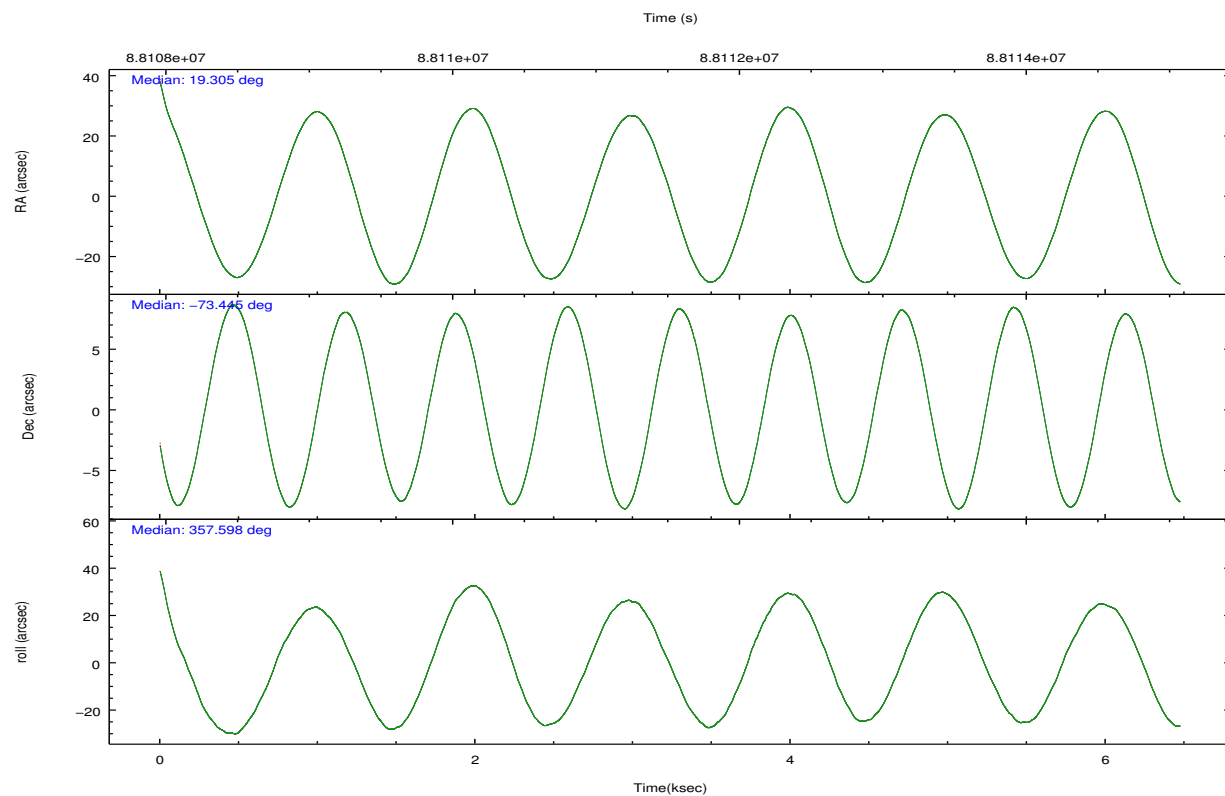
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-235678	ACIS-235678
Grating	NONE	NONE
Data mode	CC33_FAINT	CC33_FAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	19.220656	19.30549239055734
[deg] Pointing Dec	-73.457978	-73.44515416359604
[deg] Pointing Roll	357.365396	357.6033466174169
[s] Window start time (MET)	88107724.184000	88107724.184000
[s] Window stop time (MET)	88114924.184000	88114924.184000
[mm] SIM focus pos	-0.684267	-0.6828225247311905
[mm] SIM defocus	0	0.001444936568705701
[mm] SIM translation stage pos	-190.132523	-190.1425803651734
[mm] SIM translation stage offset	0	0.01005778216563158
Phase constraints	Y	Y
[d] Phase period	3.892000	3.892000
[d] Phase epoch (MJD)	50141.466800	50141.466800
Phase start	0.000000	0.000000
Phase end	0.800000	0.800000
Phase start error	0.050000	0.050000
Phase end error	0.050000	0.050000
[s] Observation start time (MET)	88108755.184000	88107659.25048999
Observation start date	2000-10-16T18:38:11	2000-10-16T18:20:59
[s] Observation end time (MET)	88114755.184000	88115222.725776

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	0

## 2.3 Aspect



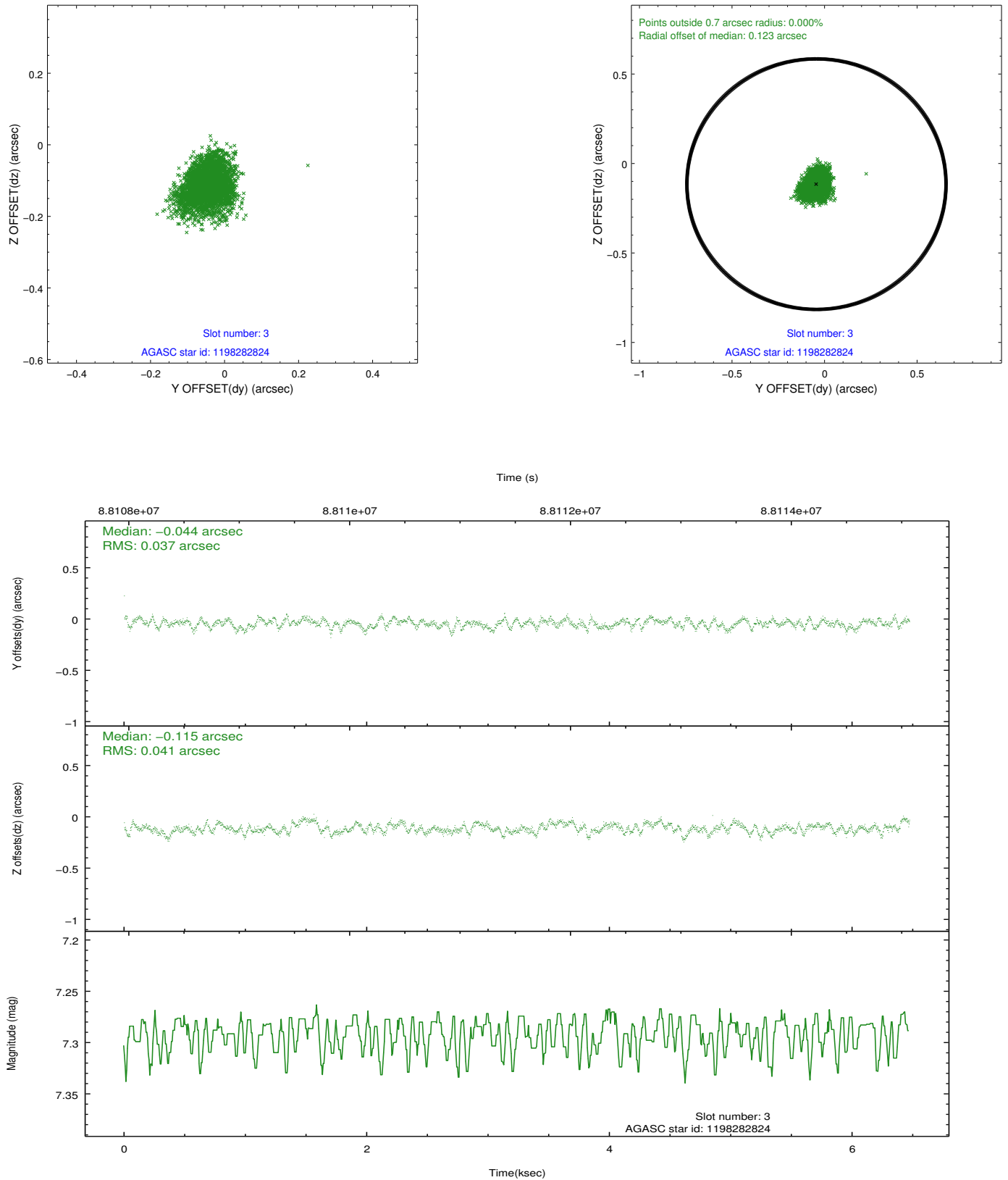


### Slot Statistics

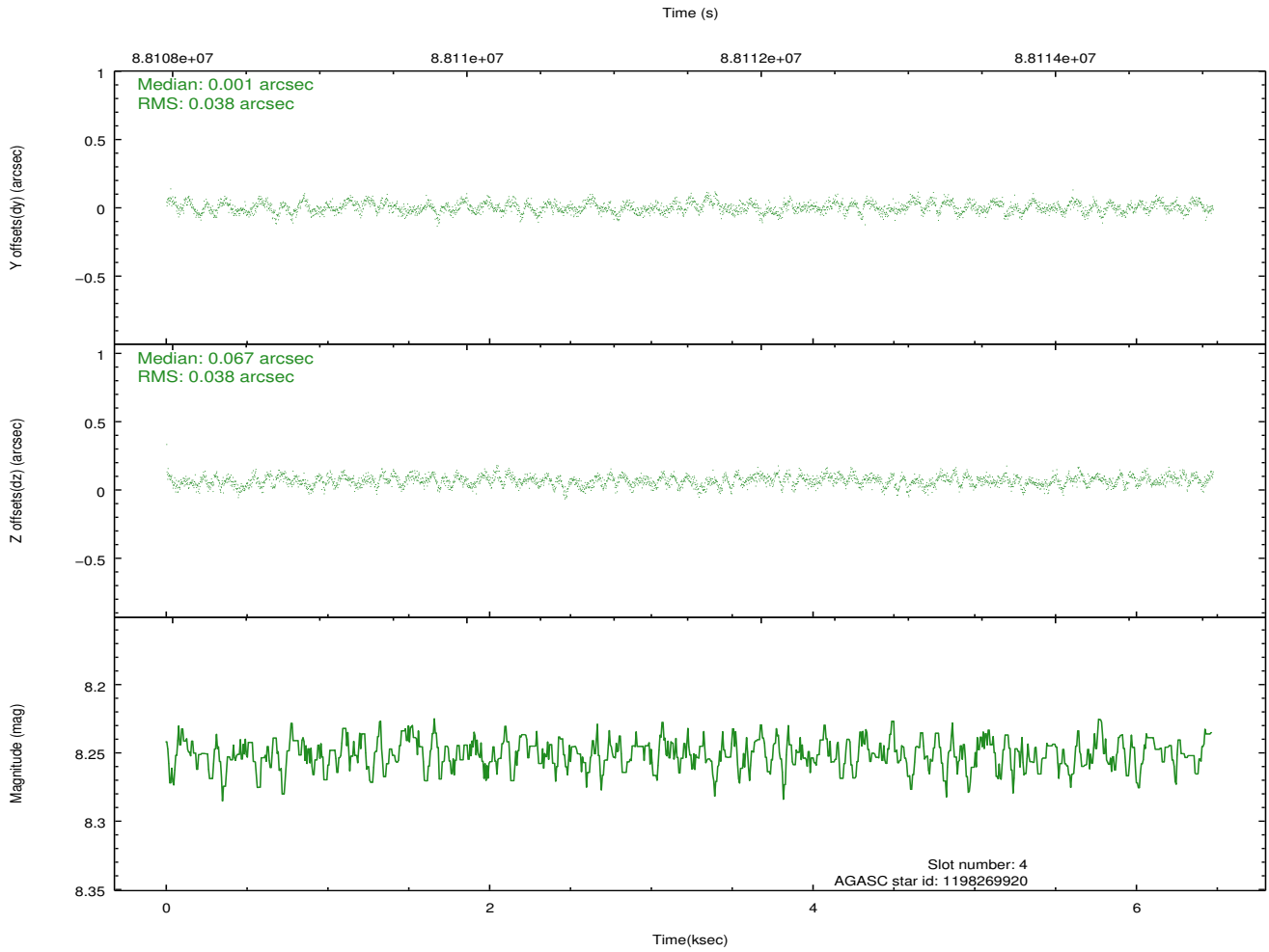
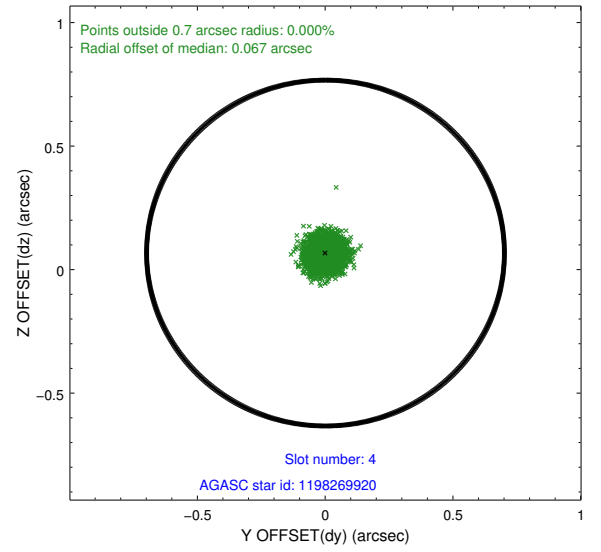
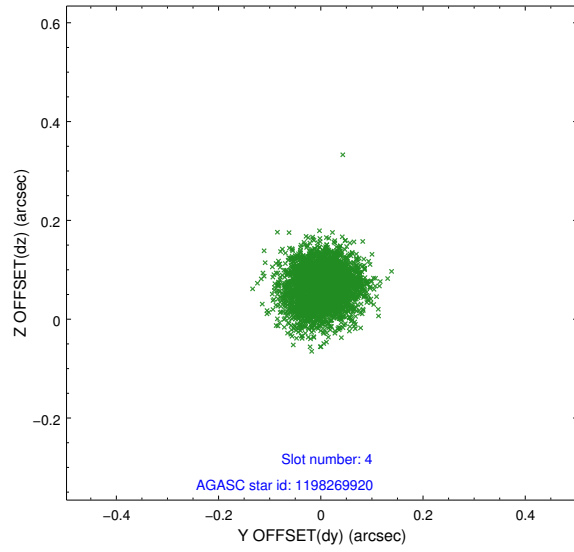
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	1577	-0.043	0.003	0.007	0.011	0.000000	0.000000	-754.76	-1727.20
1	FID	ACIS-S-4	7.20	1577	-0.012	0.020	0.006	0.010	0.000000	0.000000	2158.12	180.40
2	FID	ACIS-S-5	7.24	1577	0.024	-0.014	0.006	0.011	0.000000	0.000000	-1806.39	175.02
3	GUIDE	1198282824	7.29	3153	-0.044	-0.115	0.059	0.095	18.044095	-73.907062	-1097.53	-1680.38
4	GUIDE	1198269920	8.25	3155	0.001	0.067	0.058	0.091	20.316466	-73.033728	1079.99	1568.05
5	GUIDE	1198275224	9.64	3154	-0.085	-0.010	0.105	0.169	16.880121	-73.921864	-2250.98	-1820.56
6	GUIDE	1198272400	9.16	3155	0.073	-0.014	0.067	0.108	20.411923	-73.620598	1235.14	-541.42
7	GUIDE	1198264832	9.53	3149	0.056	0.074	0.084	0.138	20.353668	-72.974637	1114.10	1782.16

## 2.4 Star Slots

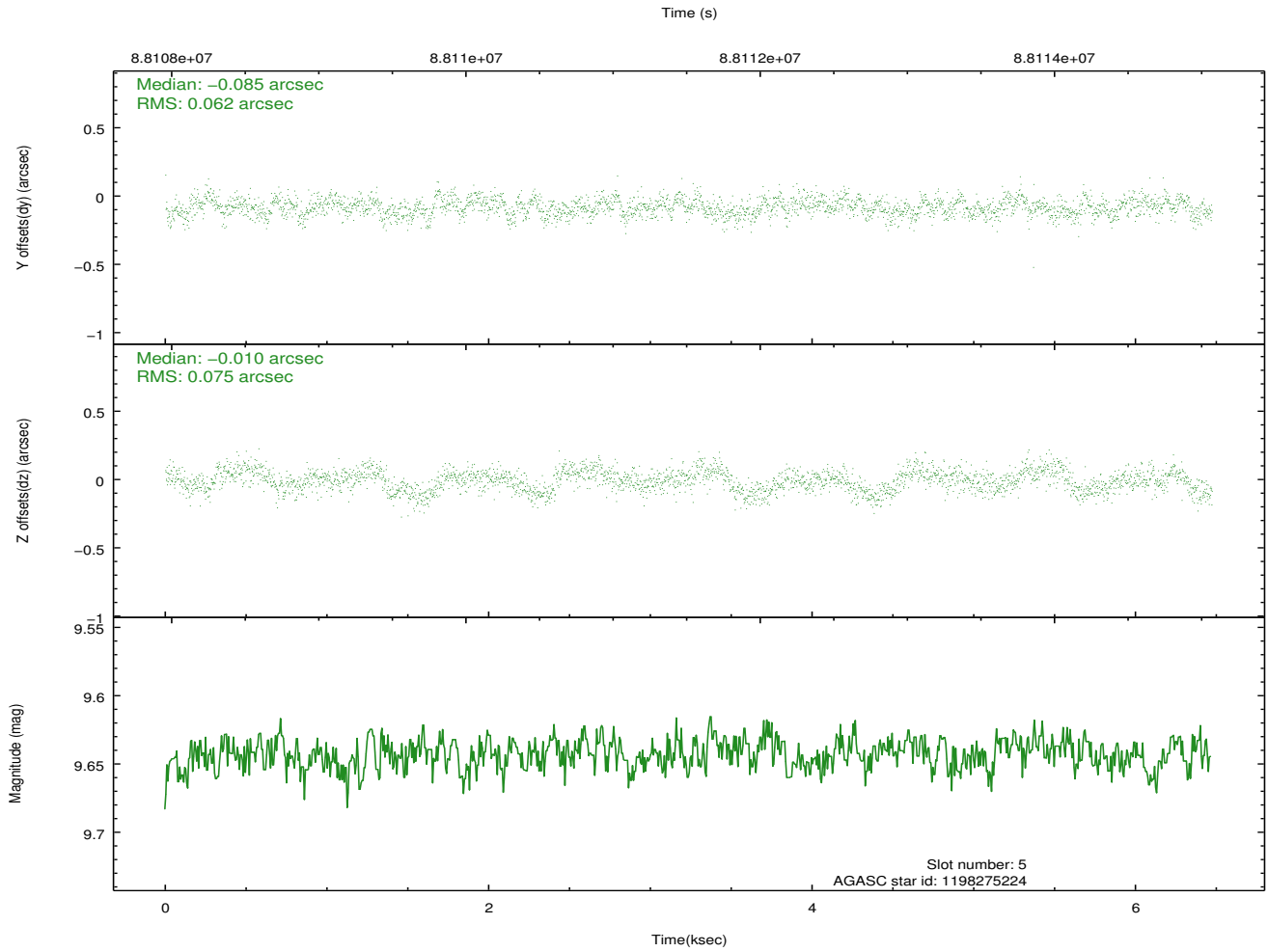
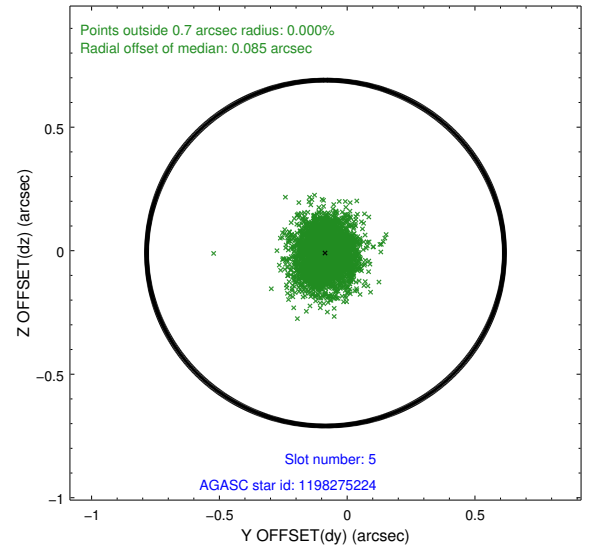
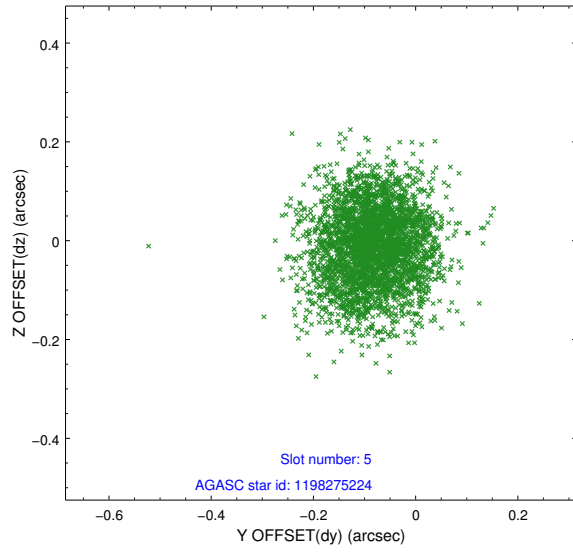
### 2.4.1 Slot 3



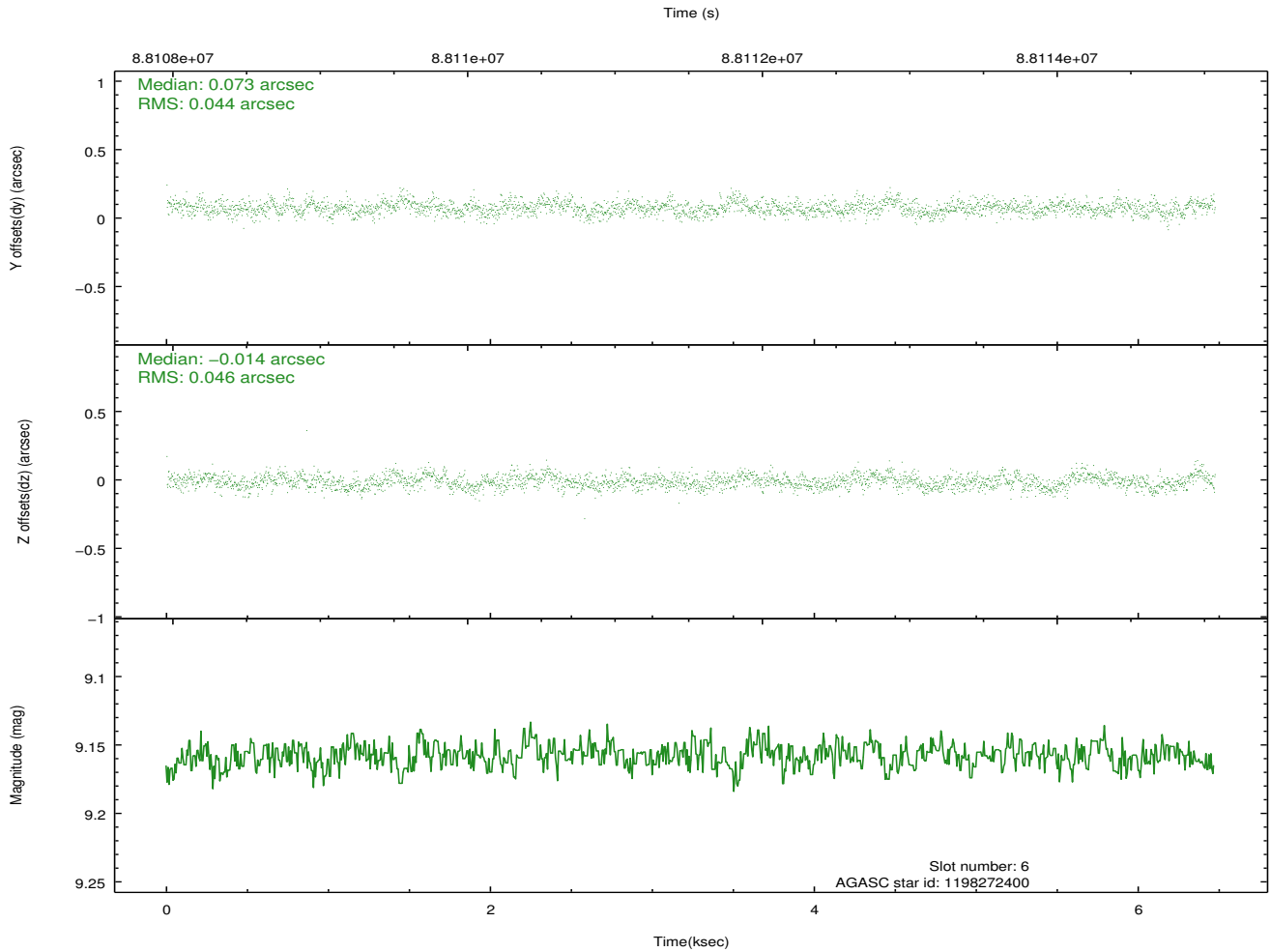
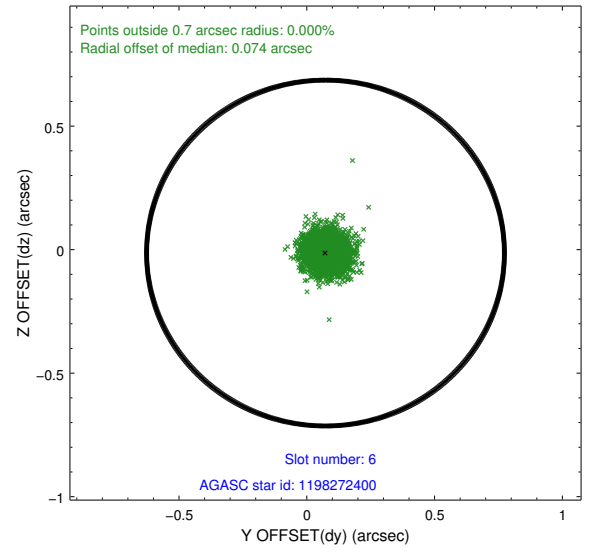
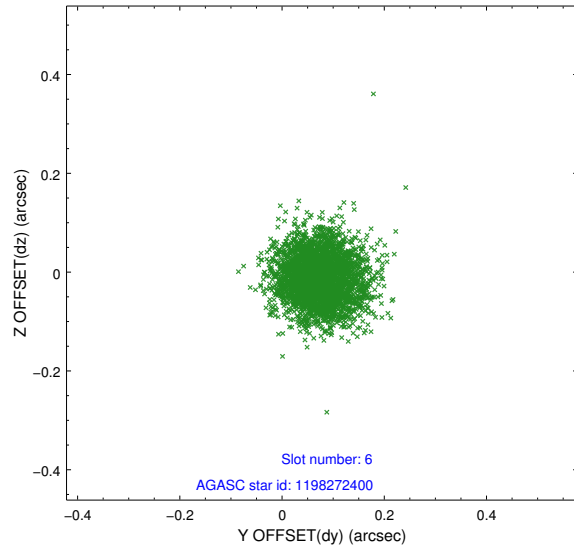
## 2.4.2 Slot 4



### 2.4.3 Slot 5

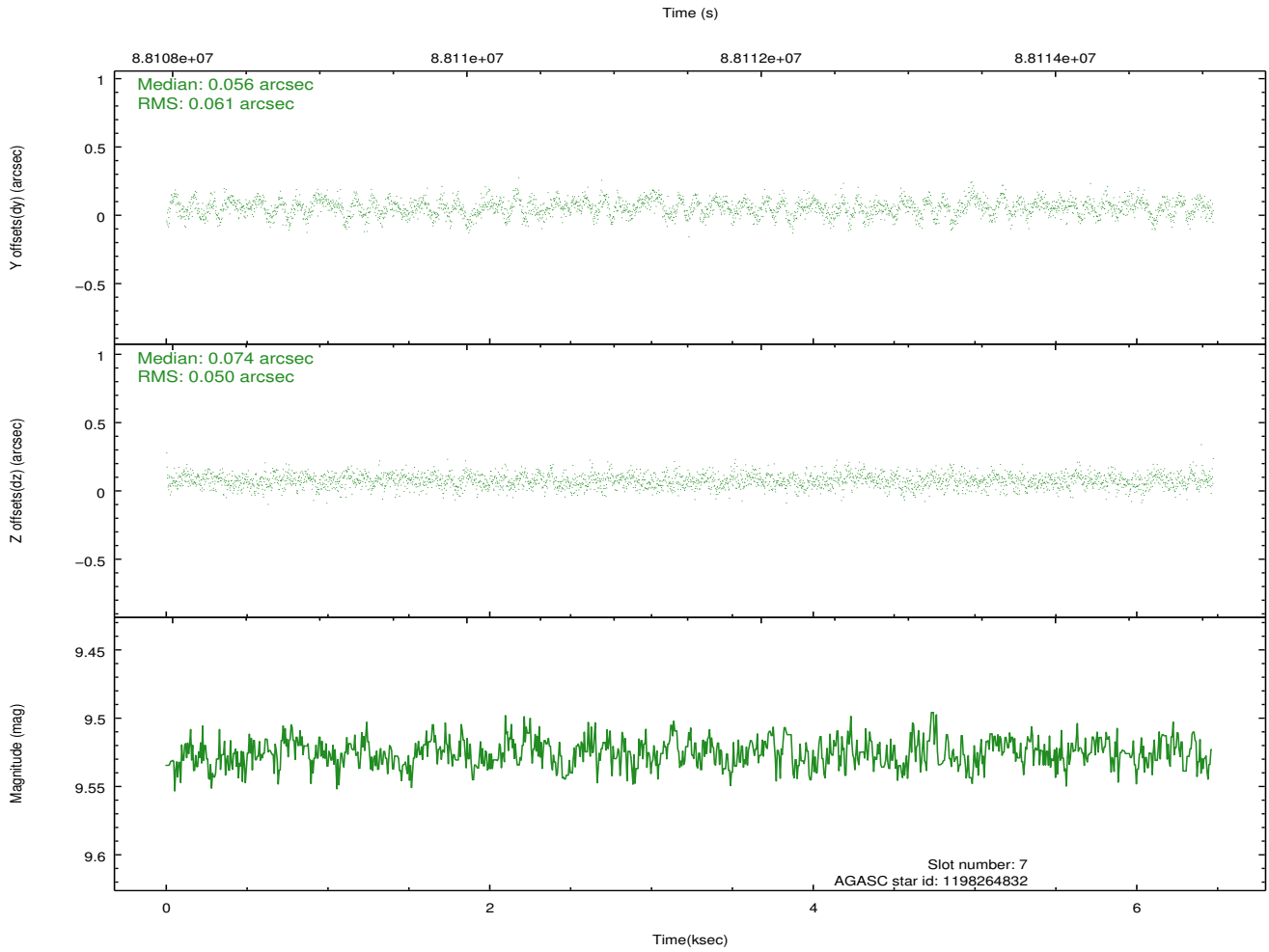
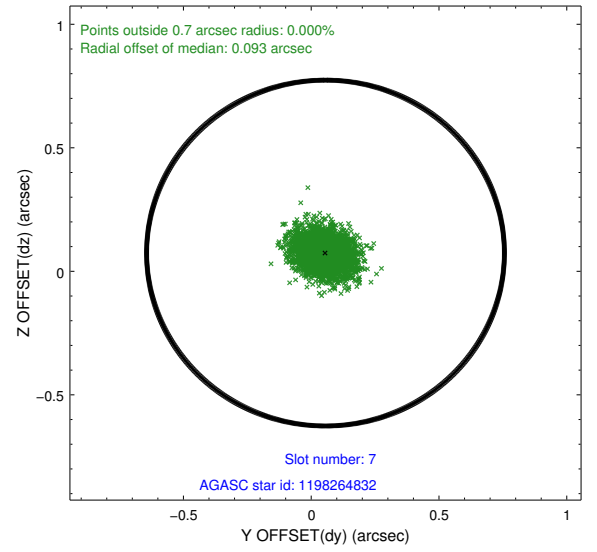
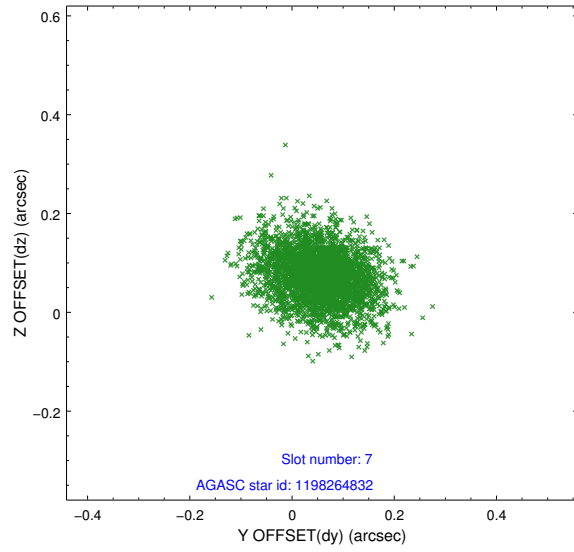


## 2.4.4 Slot 6



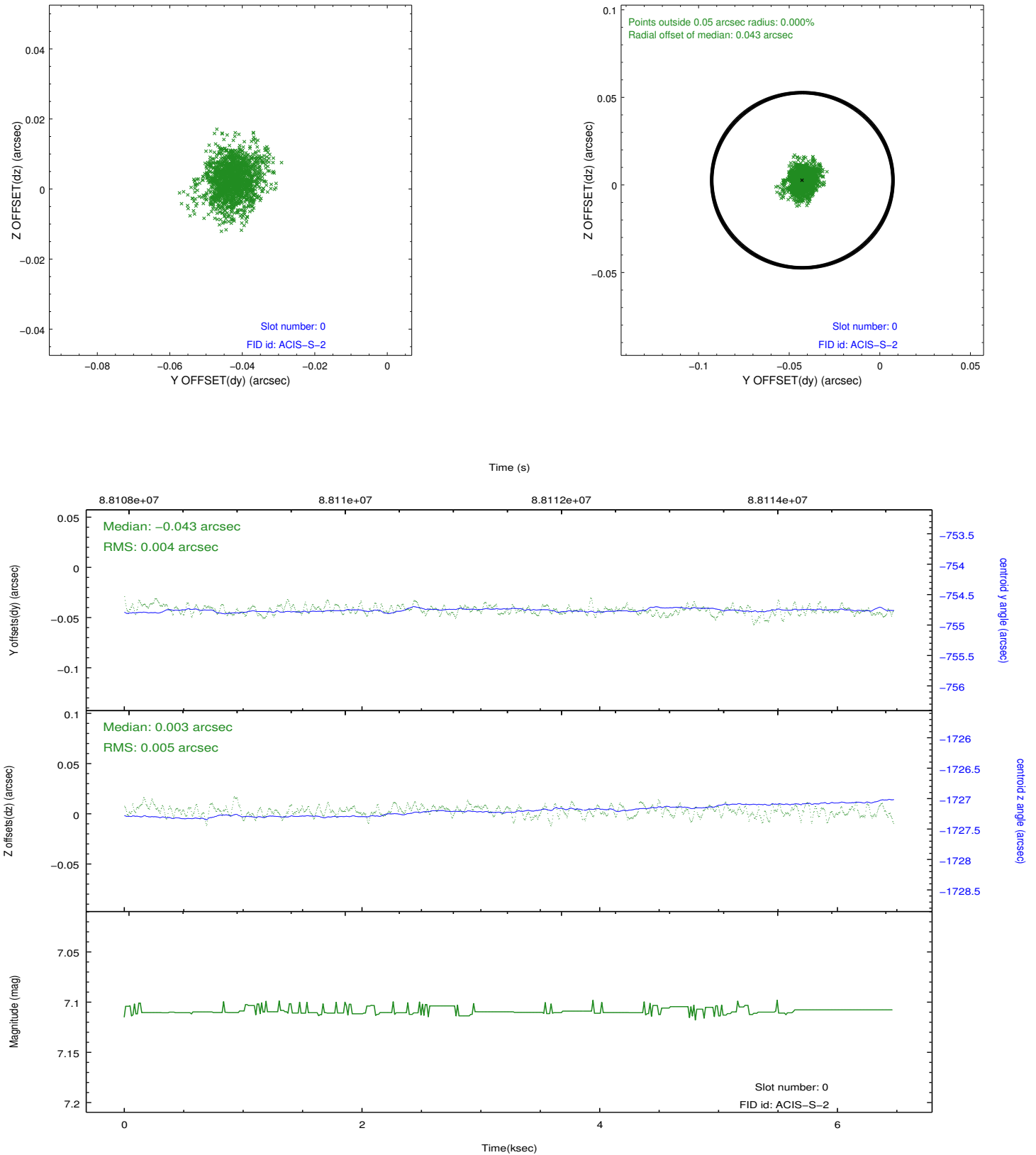


## 2.4.5 Slot 7

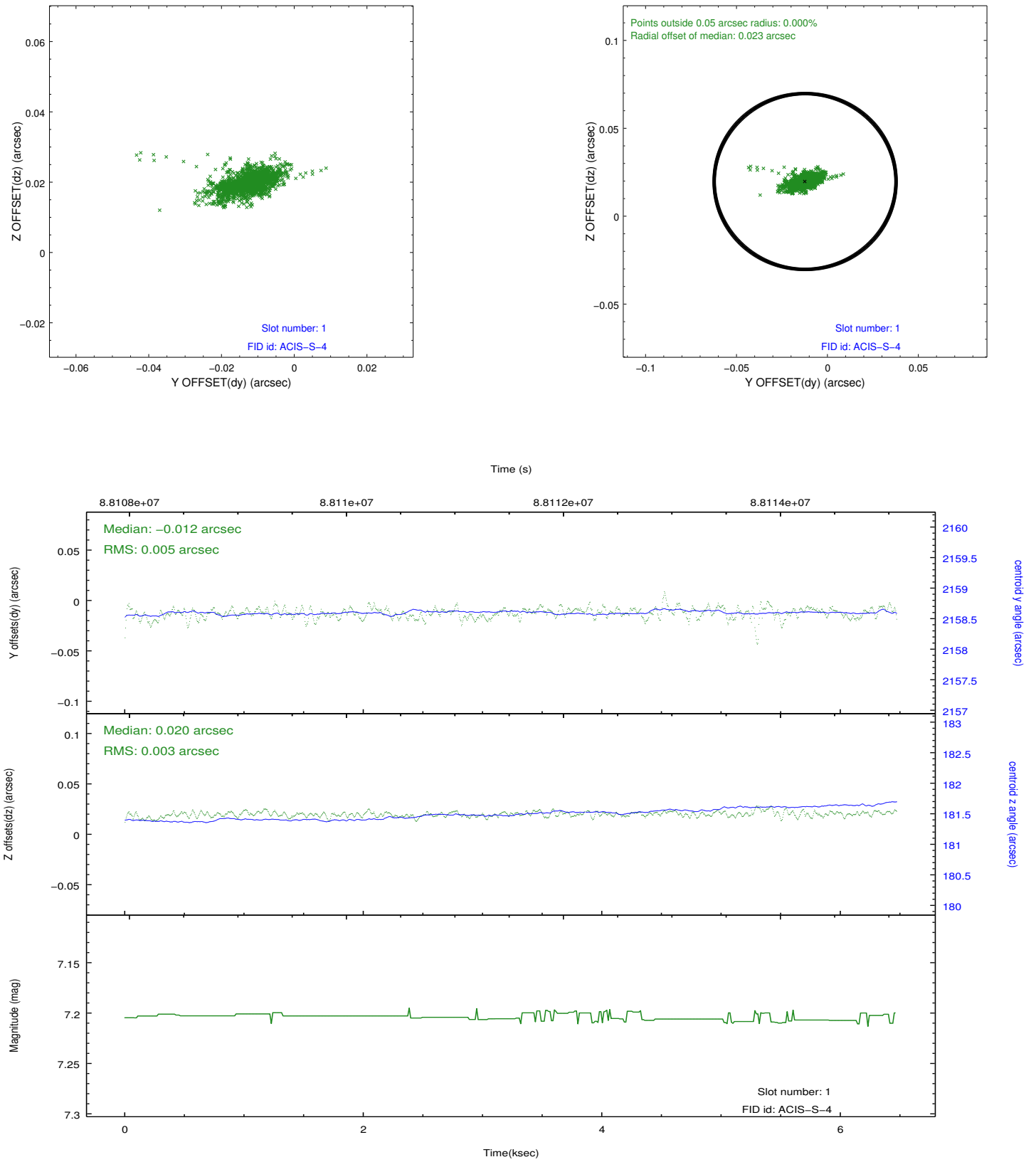


## 2.5 FID Slots

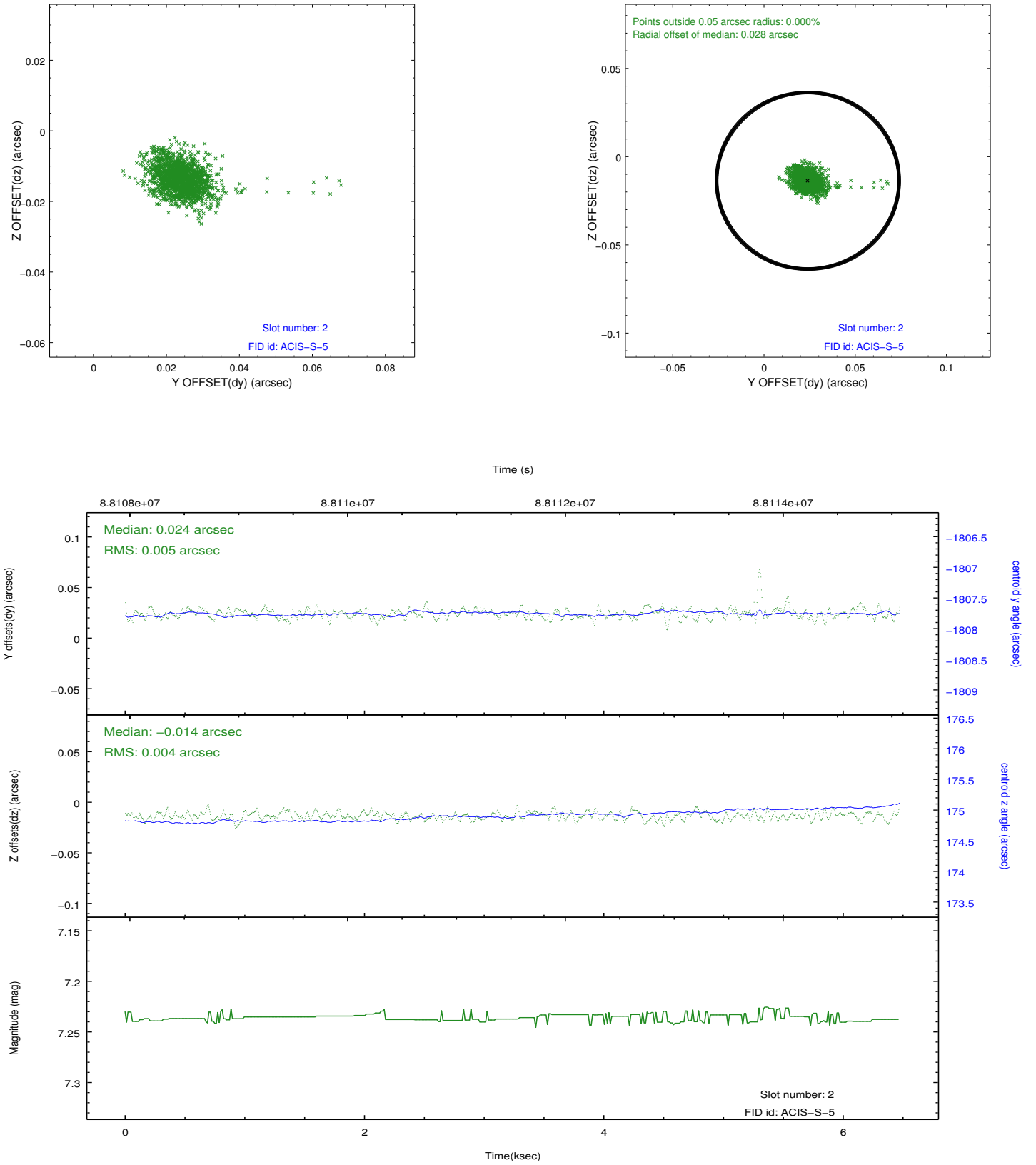
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.09.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	6.462

### A.2 Comments