

V&V Reference Report

L2 ASCDS Version : 8.1.1

Observation 1423 - L2 Version 4

Chandra X-Ray Center

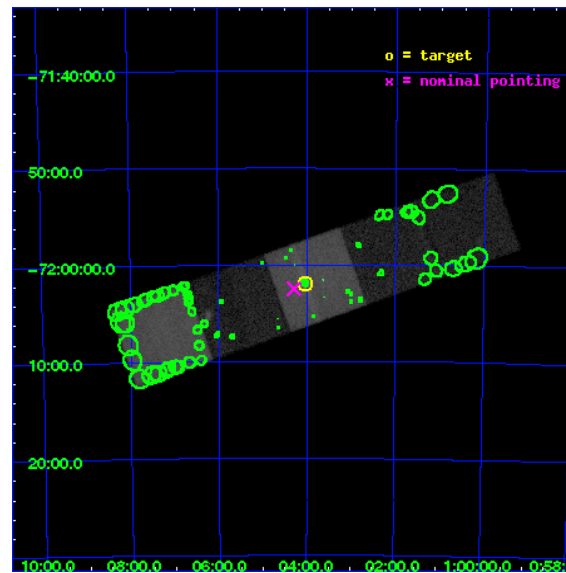
L2 Processing Date : Nov 21 2009

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1 Front

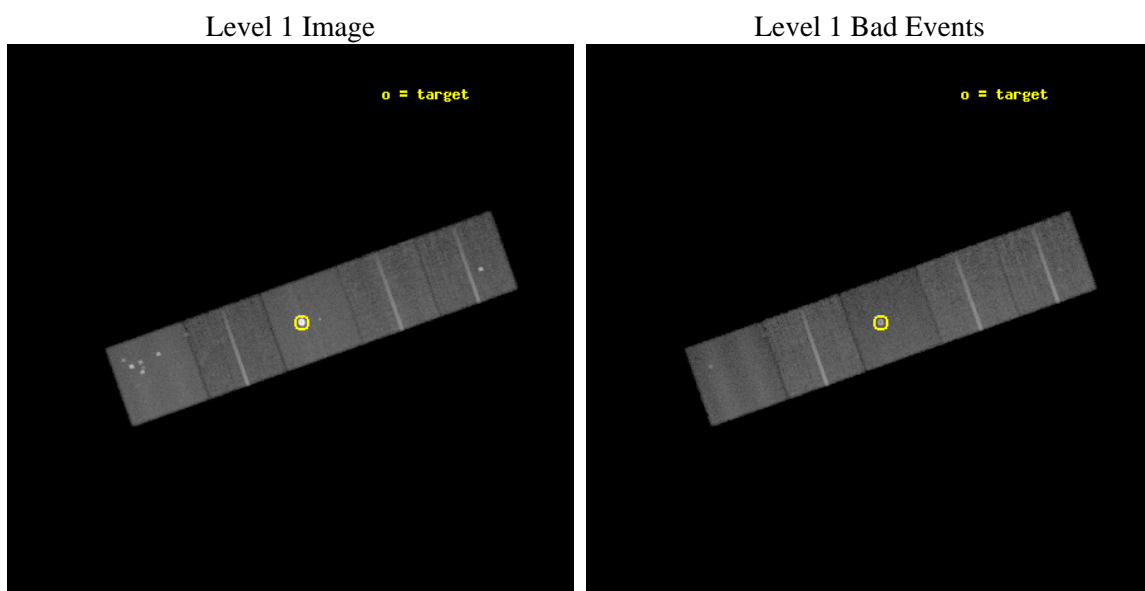
seq_num	580373	Sequence number
obs_id	1423	Observation id
title	ACIS CHIP RESPONSE TO LINES WITH E=0.6-1.5 KEV	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	E0102-72.3 [Chip S3, T=110, Offsets=-1,0,0]	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	16.01	Observer's specified target RA
dec_targ	-72.032028	Observer's specified target Dec
ra_nom	16.072644146451	Nominal RA
dec_nom	-72.041225889704	Nominal Dec
roll_nom	340.49490099979	Nominal Roll
revision	4	Processing version of data
ontime	19161.559057631	Sum of GTIs [s]
livetime	18918.923859137	Livetime [s]
ontime5	19161.559057631	Sum of GTIs [s]
ontime6	19158.318097413	Sum of GTIs [s]
ontime7	19161.559057631	Sum of GTIs [s]
ontime8	19161.559057631	Sum of GTIs [s]
ontime9	19161.559057631	Sum of GTIs [s]
l2events	434797	Number of level 2 events



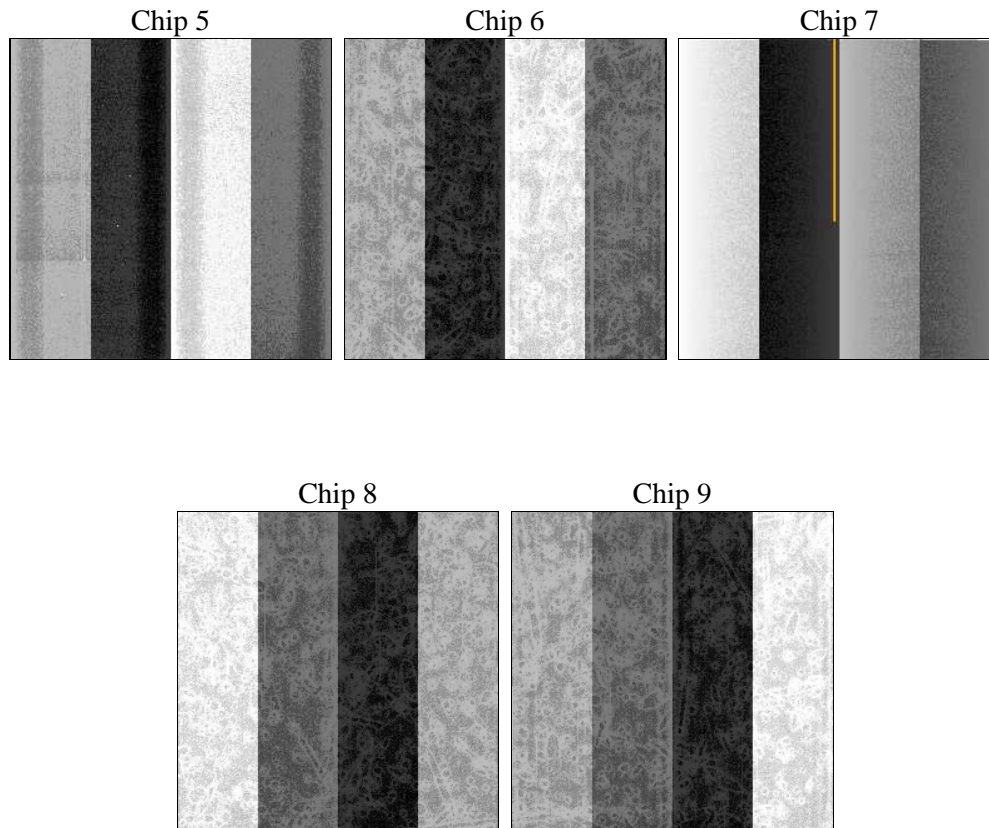
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	20000.000000	Scheduled observation exposure time
ascdsver	8.1.1	ASCDS version number	ontime	19161.559057631	Sum of GTIs [s]
caldbver	4.1.4	 	ontime5	19161.559057631	Sum of GTIs [s]
date	2009-11-21T10:45:32	Date and time of file creation	ontime6	19158.318097413	Sum of GTIs [s]
revision	3	Processing version of data	ontime7	19161.559057631	Sum of GTIs [s]
			ontime8	19161.559057631	Sum of GTIs [s]
			ontime9	19161.559057631	Sum of GTIs [s]
			l1events	1212243	Number of level 1 events

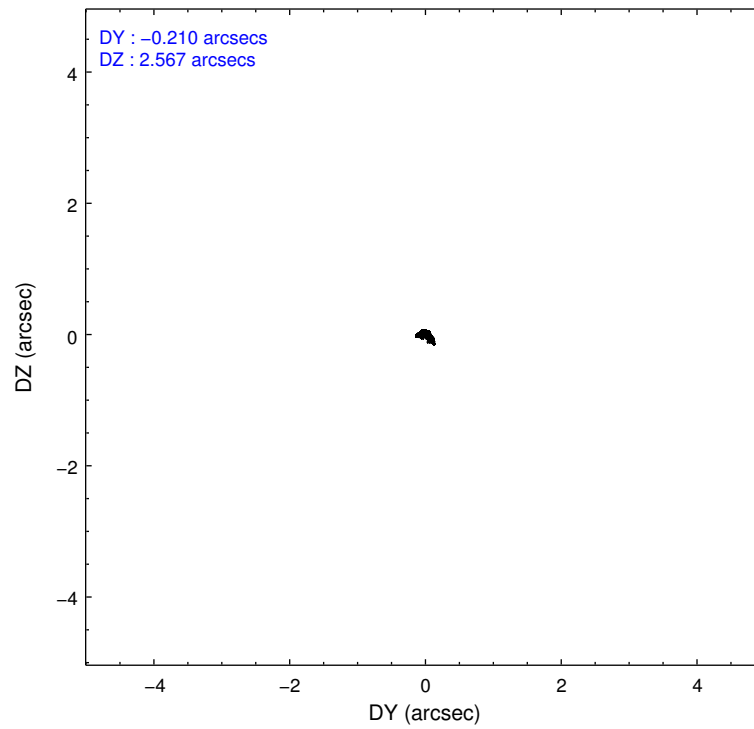
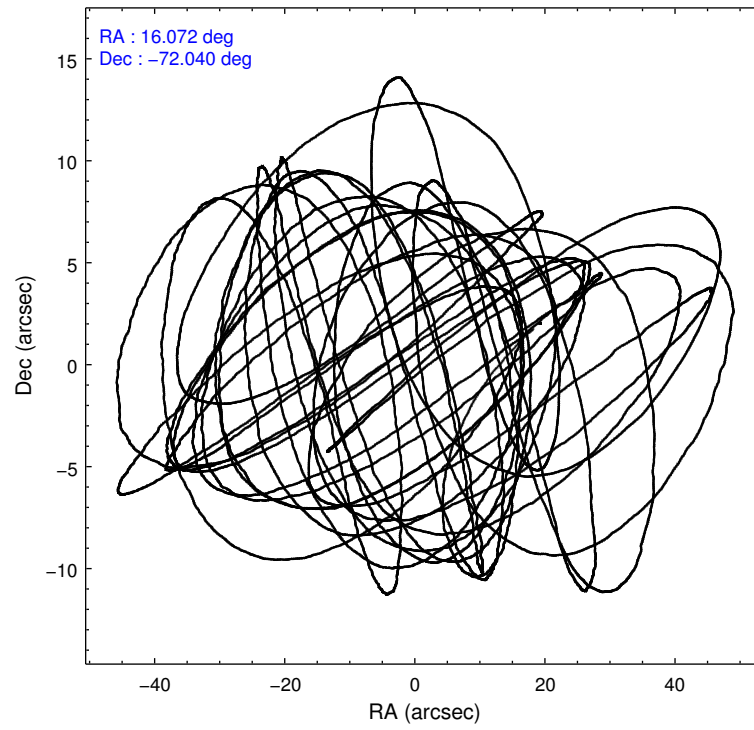
2.1.4 Events

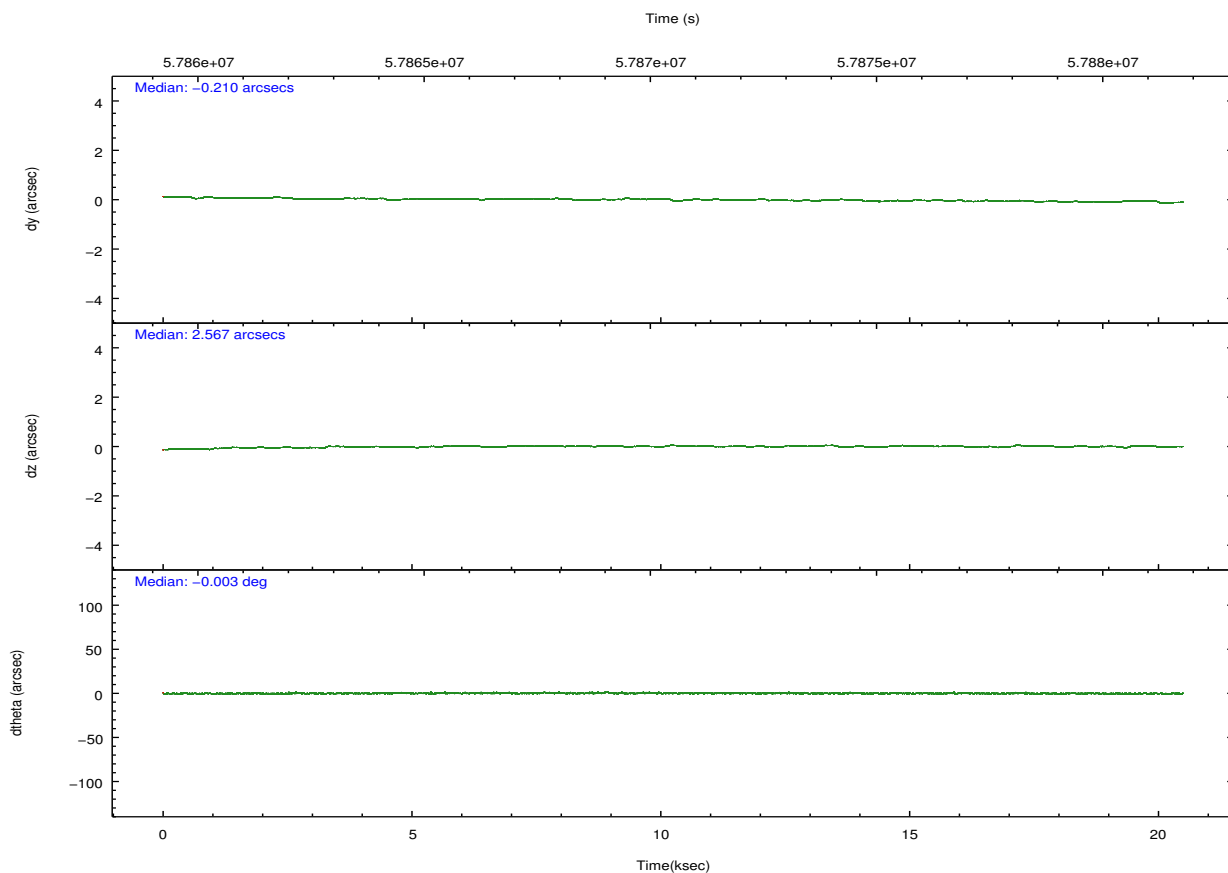
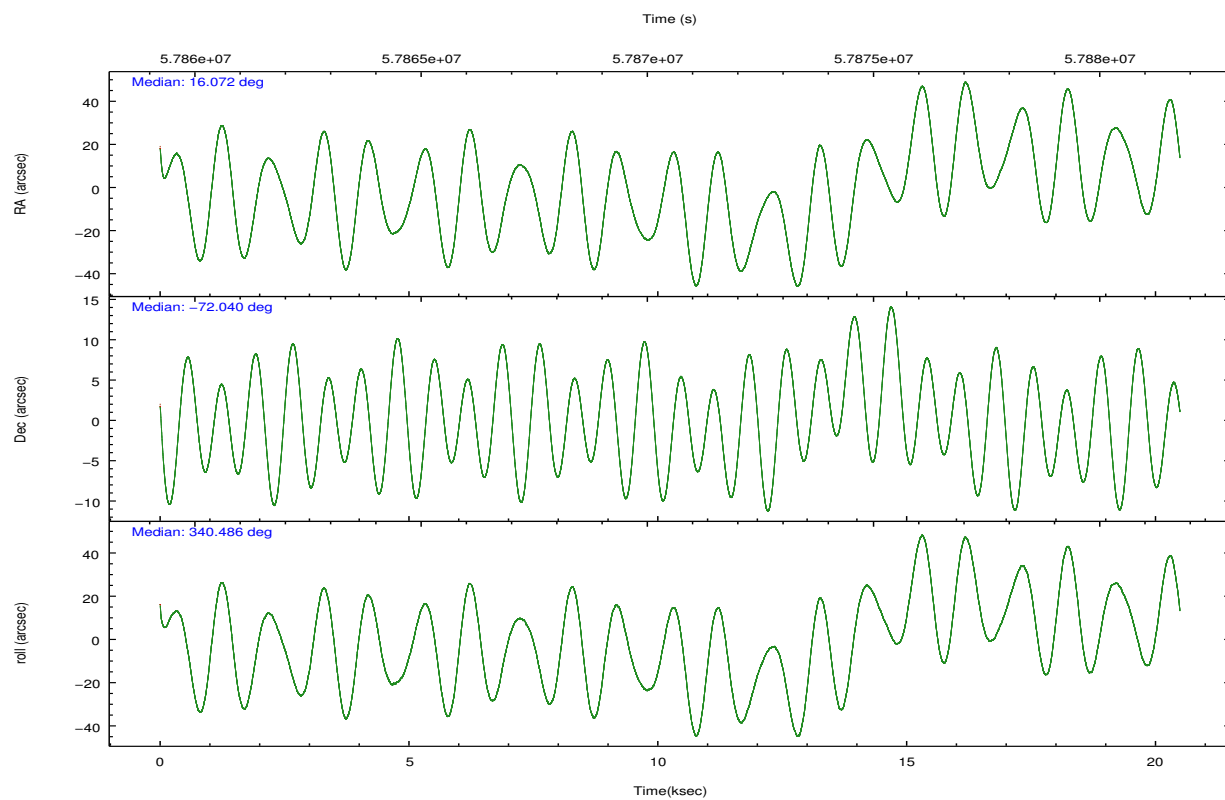
	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	247017	178344	407191	202245	177446	grade 0 events	24730	5823	76144	9009	9700
rejected events	124602	158256	121869	167075	153618		10%	3%	18%	4%	5%
rejected %	50%	88%	29%	82%	86%	grade 1 events	513	29	1818	69	49
							0%	0%	0%	0%	0%
						grade 2 events	27957	7435	70414	11190	7409
							11%	4%	17%	5%	4%
						grade 3 events	4018	1103	30111	2768	1067
							1%	0%	7%	1%	0%
						grade 4 events	3756	1109	27487	2592	1113
							1%	0%	6%	1%	0%
						grade 5 events	8429	3654	15735	4889	3708
							3%	2%	3%	2%	2%
						grade 6 events	61984	4625	81247	9617	4546
							25%	2%	19%	4%	2%
						grade 7 events	115630	154566	104235	162111	149854
							46%	86%	25%	80%	84%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-56789	ACIS-56789	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
Pointing RA	15.984725	16.07264414645137	Subarray requested	NONE	NONE
Pointing Dec	-72.045896	-72.04122588970415	Alternating exposures requested	N	N
Pointing Roll	340.254625	340.4949009997915	Primary exposure time	0.000000	3.2
SIM focus pos (mm)	-0.684267	-0.6828225247311905			
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-190.132523	-190.1400660498719			
SIM translation stage offset (mm)	0	0.00754346686406393			
Observation start time	57860747.184000	57859755.871873			
Observation start date	1999-11-01T16:24:43	1999-11-01T16:09:15			
Observation end time	57880747.184000	57881658.072663			
Observation end date	1999-11-01T21:58:03	1999-11-01T22:14:18			
Read mode	TIMED	TIMED			

2.3 Aspect



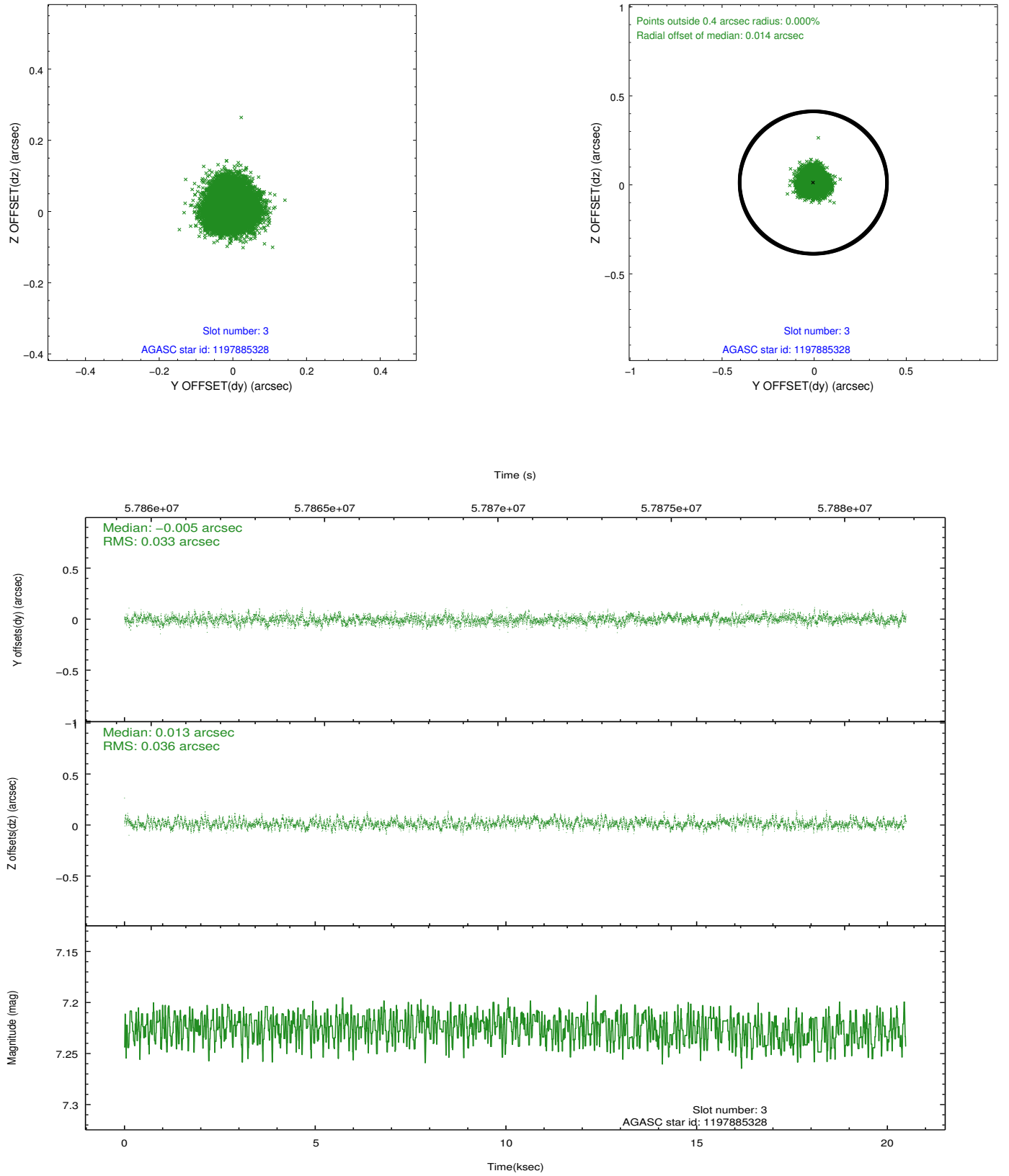


Slot Statistics

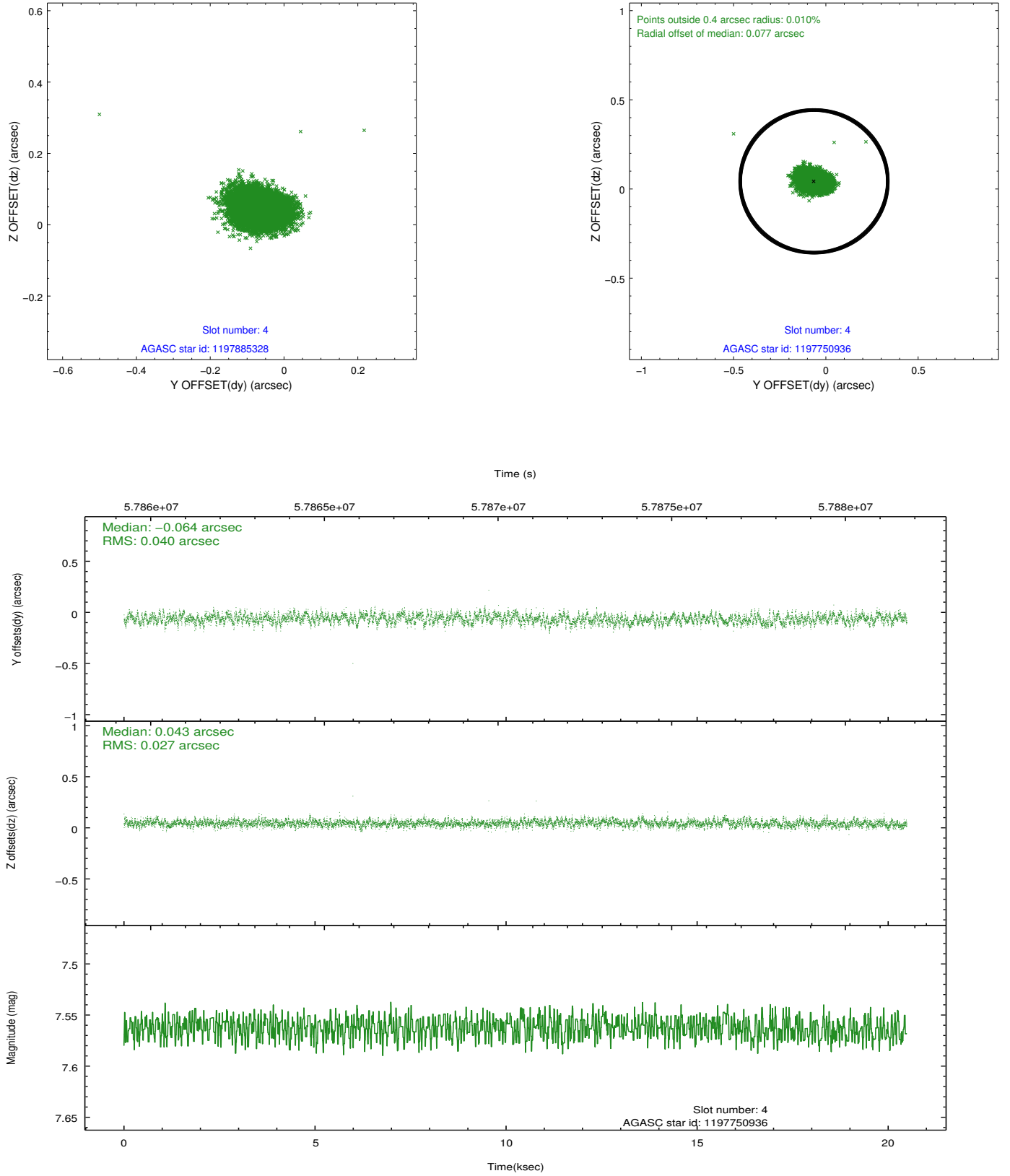
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.20	9994	0.041	-0.058	0.007	0.011	0.000000	0.000000	943.66	-1719.33
1	FID	ACIS-S-5	7.25	9993	-0.079	0.023	0.006	0.011	0.000000	0.000000	-1805.37	178.41
2	FID	ACIS-S-6	7.36	9993	0.017	0.047	0.007	0.012	0.000000	0.000000	409.29	822.31
3	GUIDE	1197885328	7.22	9993	-0.005	0.013	0.053	0.082	16.283090	-71.733943	-60.87	1168.49
4	GUIDE	1197750936	7.56	9993	-0.064	0.043	0.052	0.084	15.387940	-71.549550	-1241.22	1447.45
5	GUIDE	1197884712	8.30	9989	0.107	-0.023	0.053	0.086	16.087398	-72.252690	359.25	-663.99
6	GUIDE	1198283128	7.70	9988	-0.119	-0.002	0.054	0.090	17.272580	-72.642428	2034.06	-1569.19
7	GUIDE	1197749664	9.56	9982	0.081	-0.033	0.085	0.139	15.809015	-72.366369	211.55	-1152.49

2.4 Star Slots

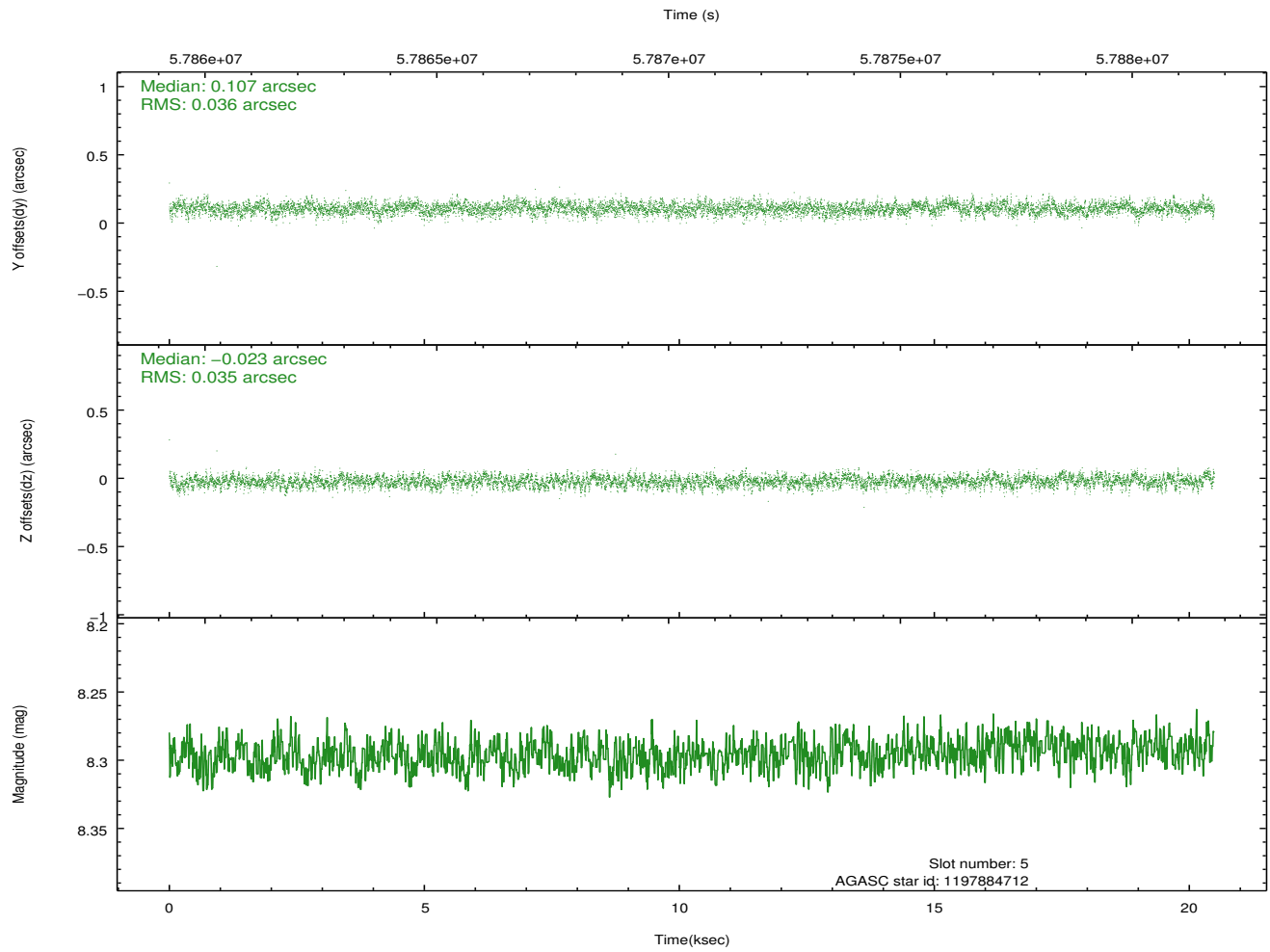
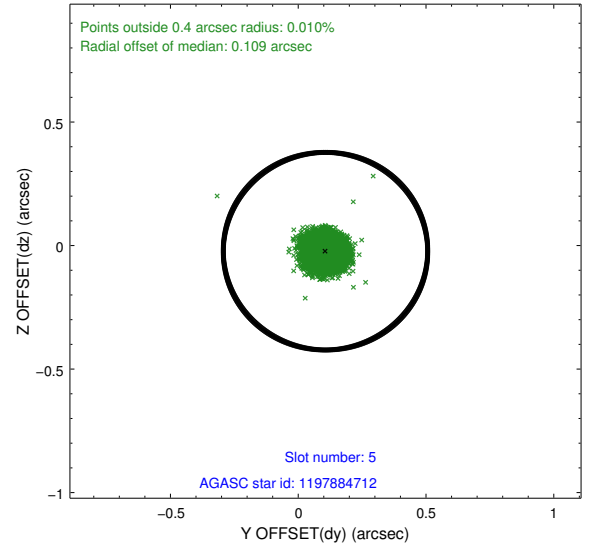
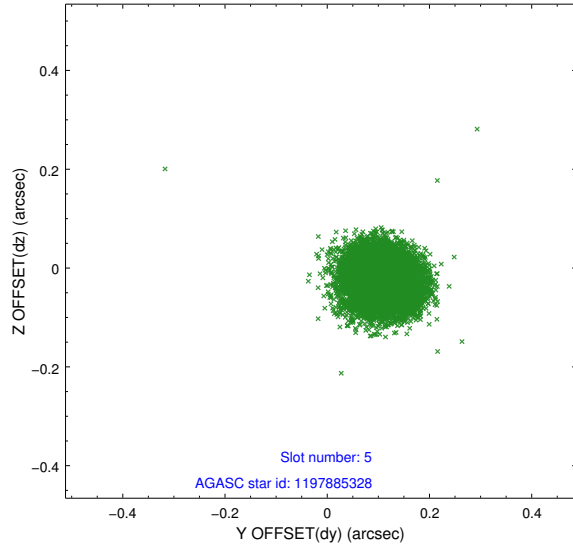
2.4.1 Slot 3



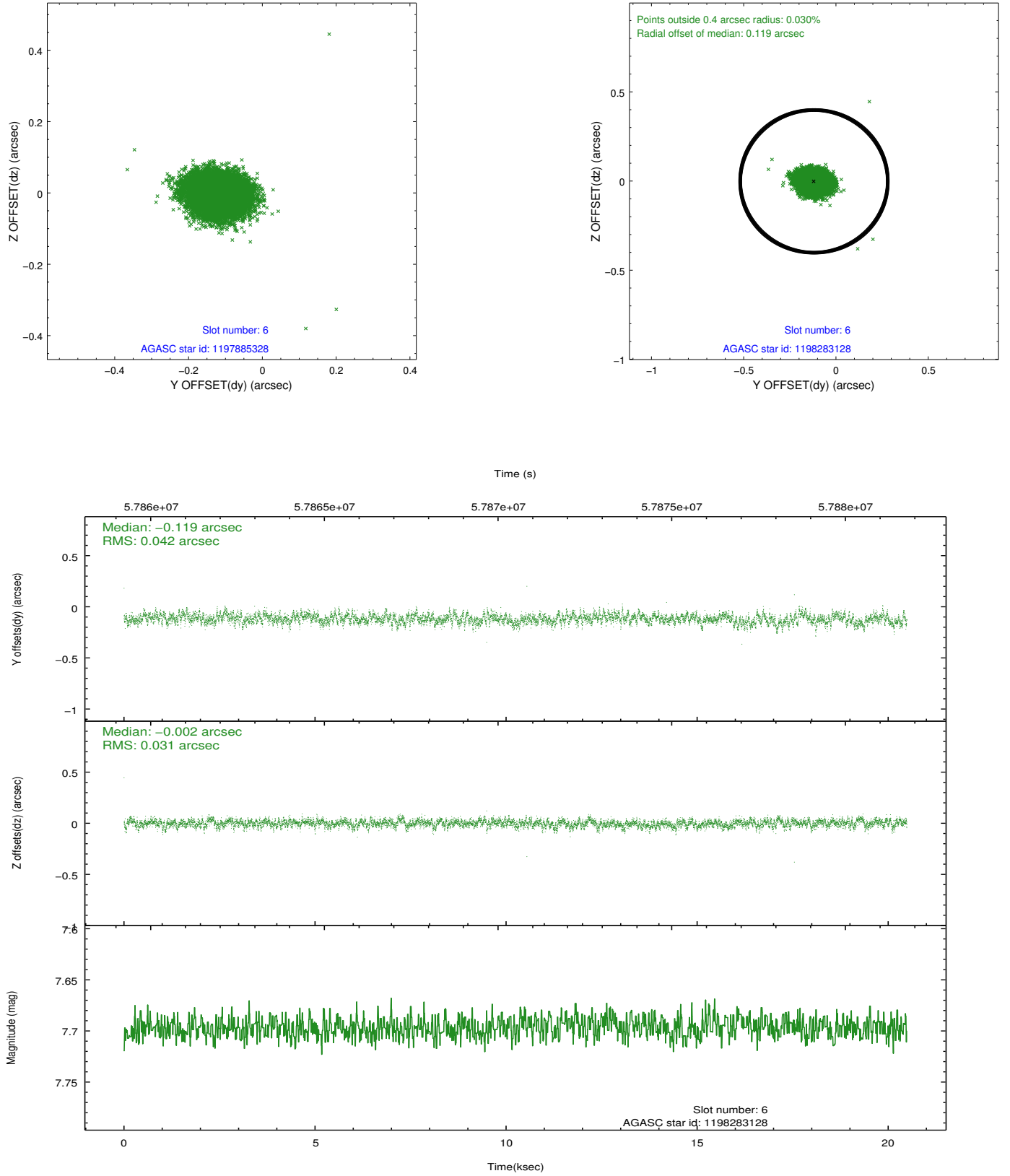
2.4.2 Slot 4



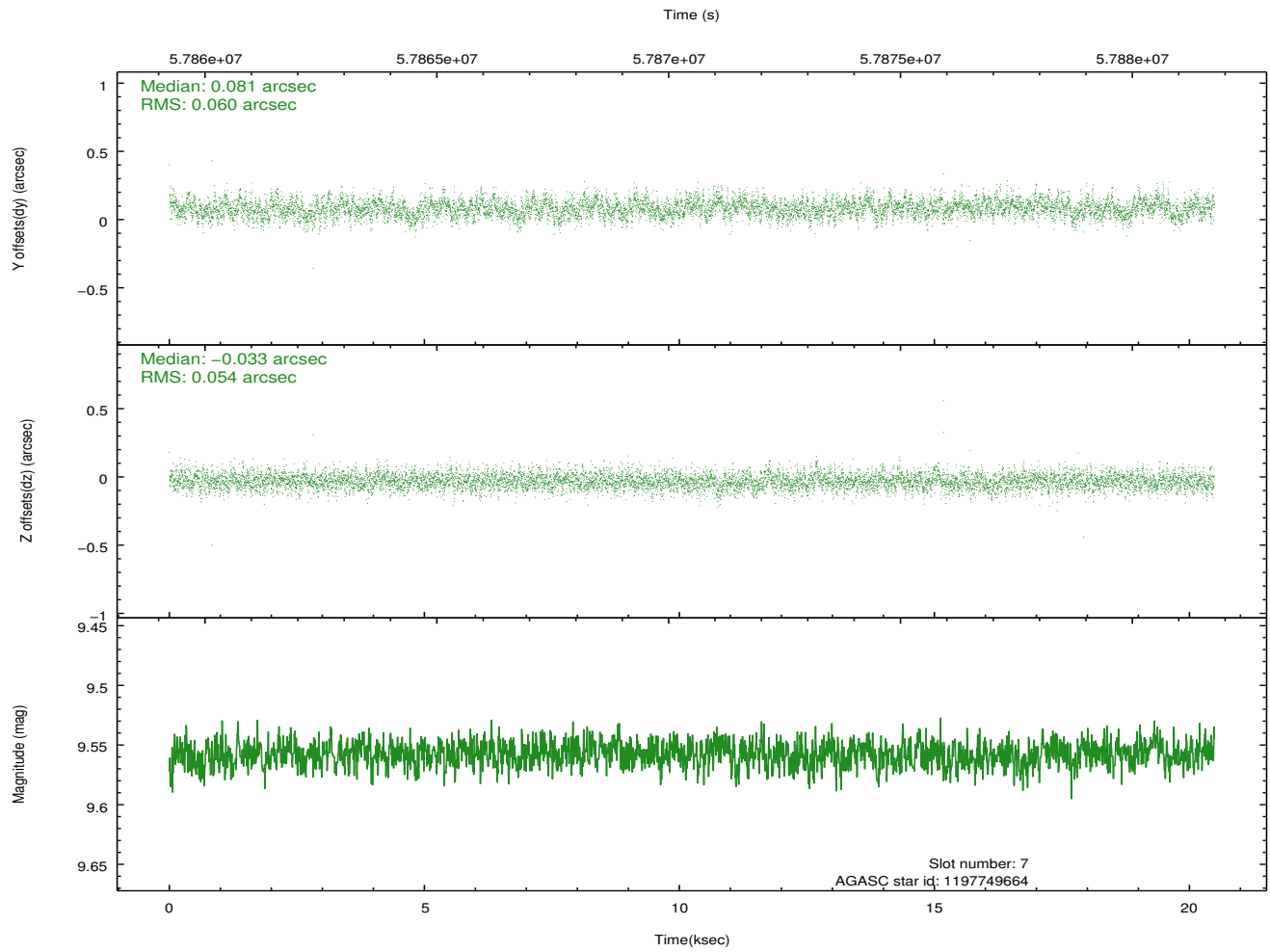
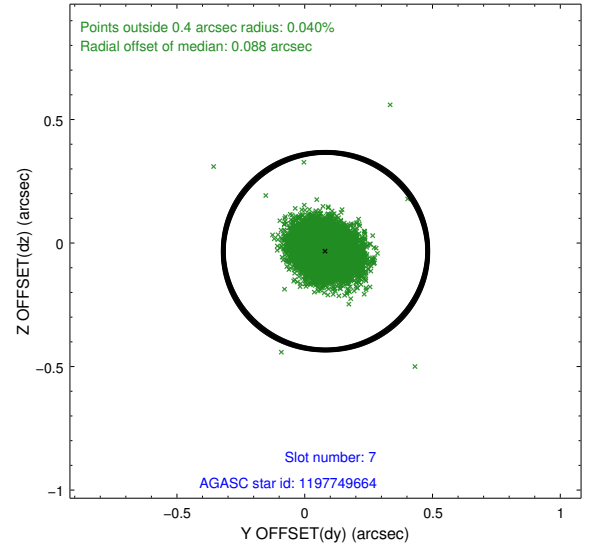
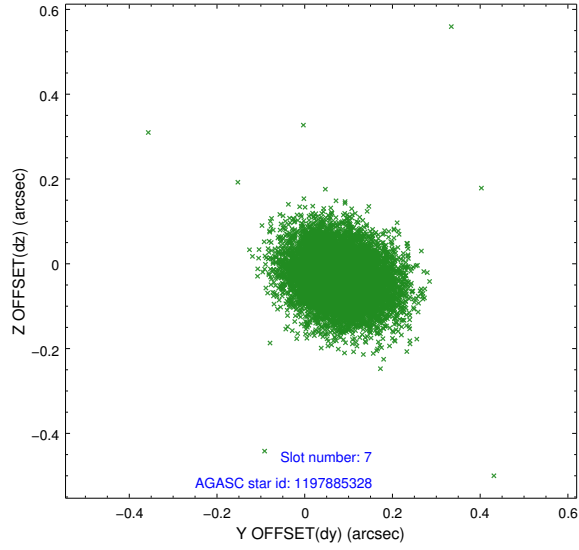
2.4.3 Slot 5



2.4.4 Slot 6

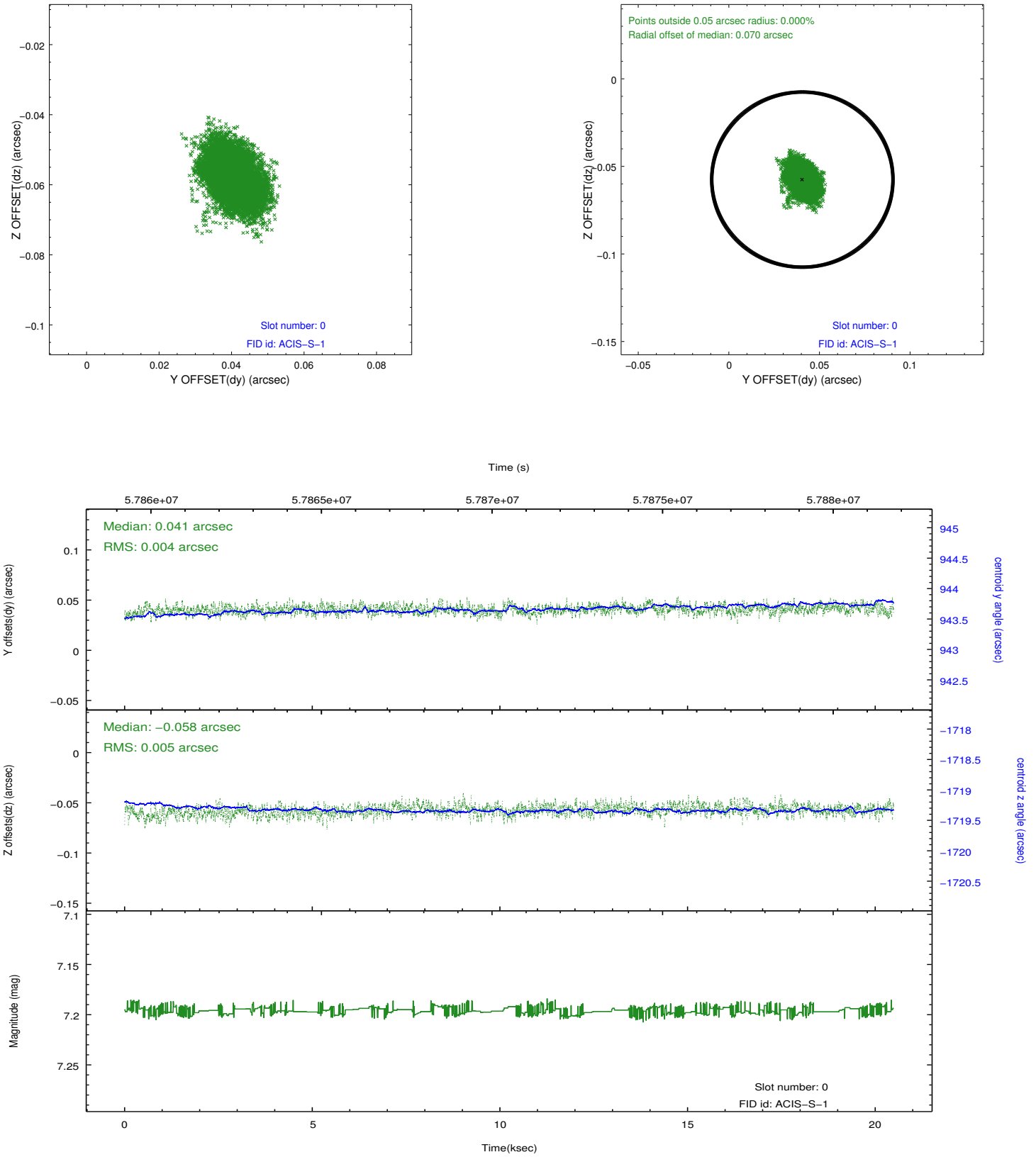


2.4.5 Slot 7

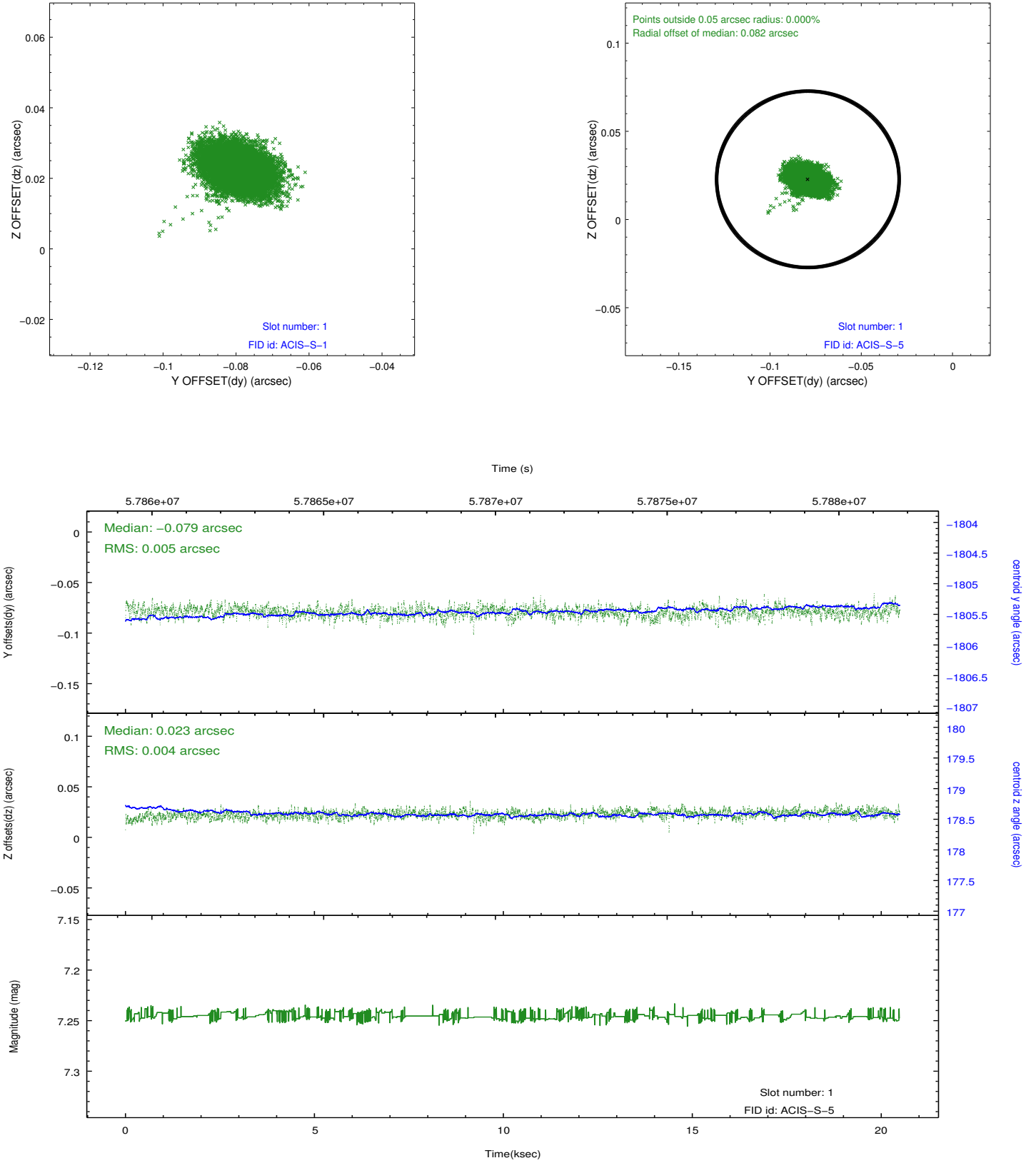


2.5 FID Slots

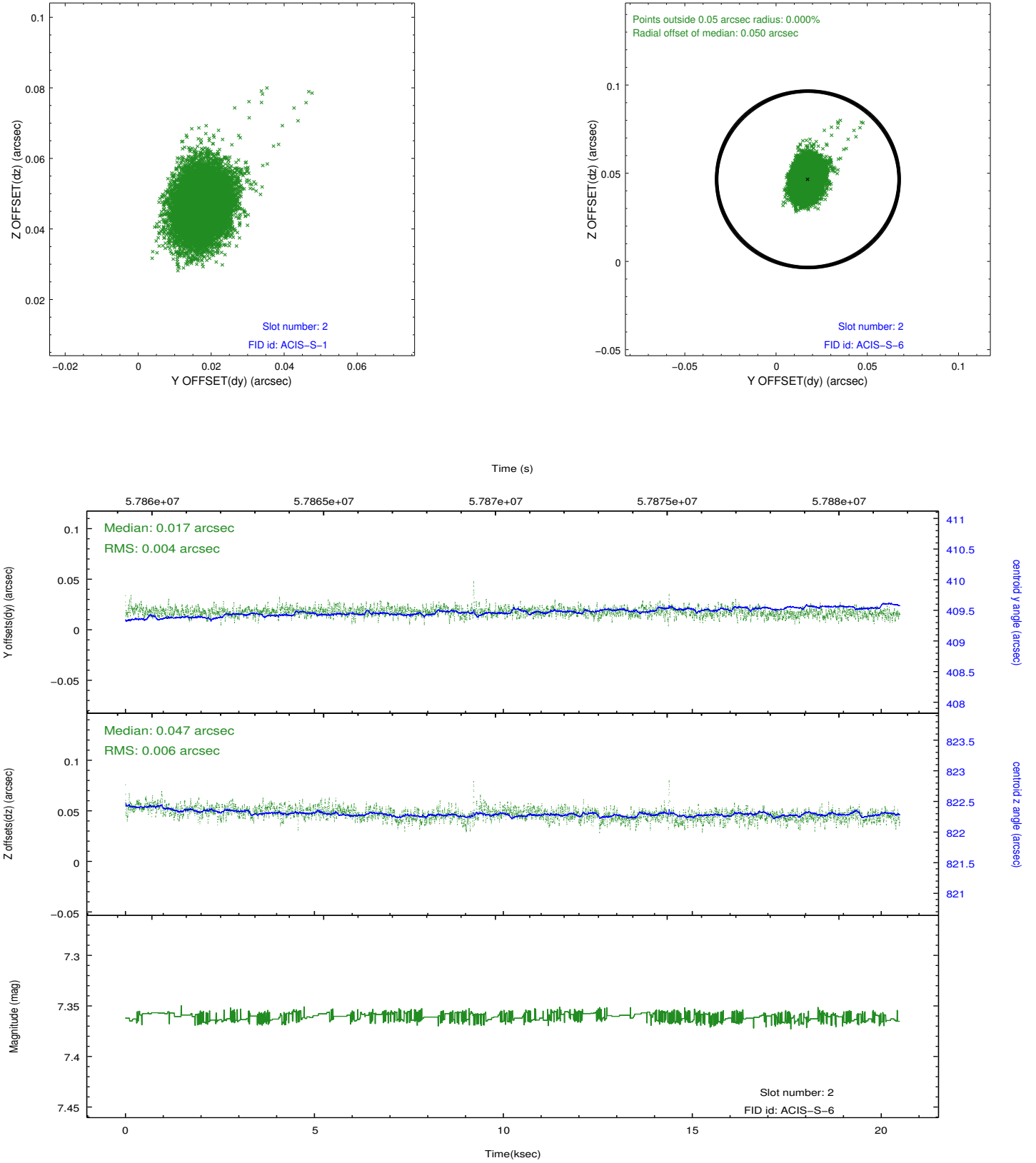
2.5.1 Slot 0



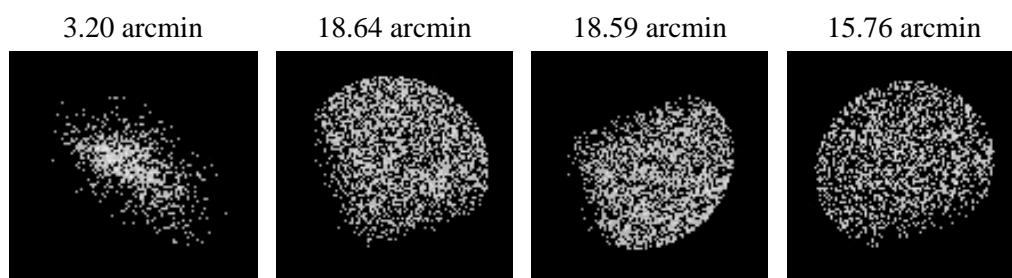
2.5.2 Slot 1



2.5.3 Slot 2



3 Point Sources



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2010.08.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	19.164

A.2 Comments

ACIS response to line source on S3.

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Enhanced count rate 3-5 ksec and 10-11.5 ksec into the observation due to a slightly high radiation environment.

===

The focal plane temperature is approximately -110 C during this observation. This reprocessing of the data applies no CTI correction because none is available for this temperature at present.

The ACIS CTI correction has not been calibrated at this temperature, because it was early in the mission, and ACIS had not yet been lowered to the standard -119.7 C. Both front and back illuminated chips are affected. However a T_GAIN correction has been applied to the BI chips (ACIS-5 and ACIS-7) data included here.

The ACIS spectral response calibration is less accurate at these warmer temperatures than it is at -119.7 C. Users whose science objectives depend on the most accurate spectral response (ie: fitting line-rich spectra) may notice an effect. Users whose science objectives do not depend on the most accurate spectral response should not notice an effect.

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