

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 1861 - L2 Version 4
Chandra X-Ray Center

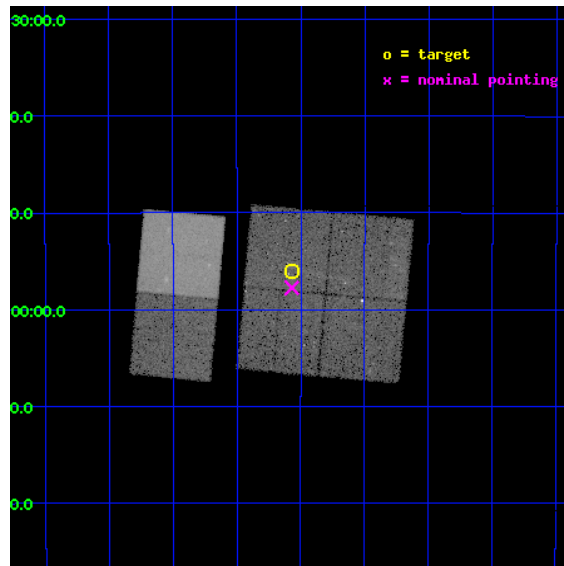
L2 Processing Date : Sep 20 2012

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 2	9
2.4.2	Slot 3	10
2.4.3	Slot 4	11
2.4.4	Slot 5	12
2.4.5	Slot 6	13
2.4.6	Slot 7	14
2.5	FID Slots	15
2.5.1	Slot 0	15
2.5.2	Slot 1	16
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

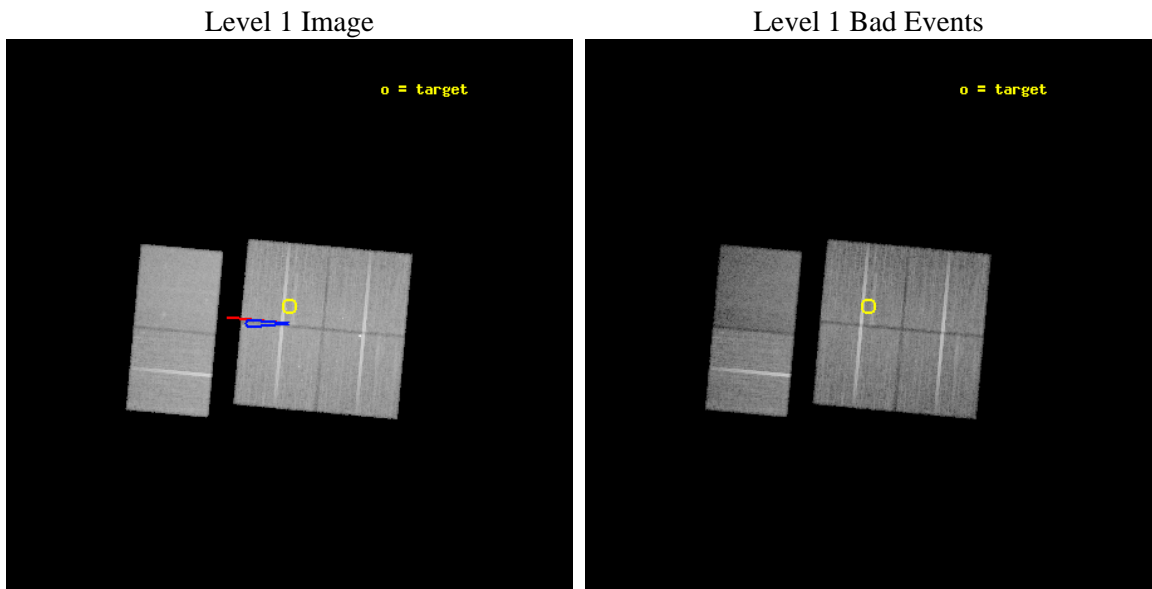
seq_num	100019	Sequence number
obs_id	1861	Observation id
title	MARS - A PLANETARY ANALOG TO A COMET	Proposal title
observer	Dr. Konrad Dennerl	Principal investigator
object	MARS	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	255.141454	Observer's specified target RA [deg]
dec_targ	-26.93337	Observer's specified target Dec [deg]
ra_nom	255.14228025715	Nominal RA [deg]
dec_nom	-26.962798043356	Nominal Dec [deg]
roll_nom	275.20807310248	Nominal Roll [deg]
revision	4	Processing version of data
ontime	33164.718090385	Sum of GTIs [s]
livetime	32744.766460529	Livetime [s]
ontime0	33171.200030878	Sum of GTIs [s]
ontime1	33161.477110118	Sum of GTIs [s]
ontime2	33164.718070447	Sum of GTIs [s]
ontime3	33164.718090385	Sum of GTIs [s]
ontime6	33171.200030878	Sum of GTIs [s]
ontime7	33167.959060639	Sum of GTIs [s]
l2events	177561	Number of level 2 events



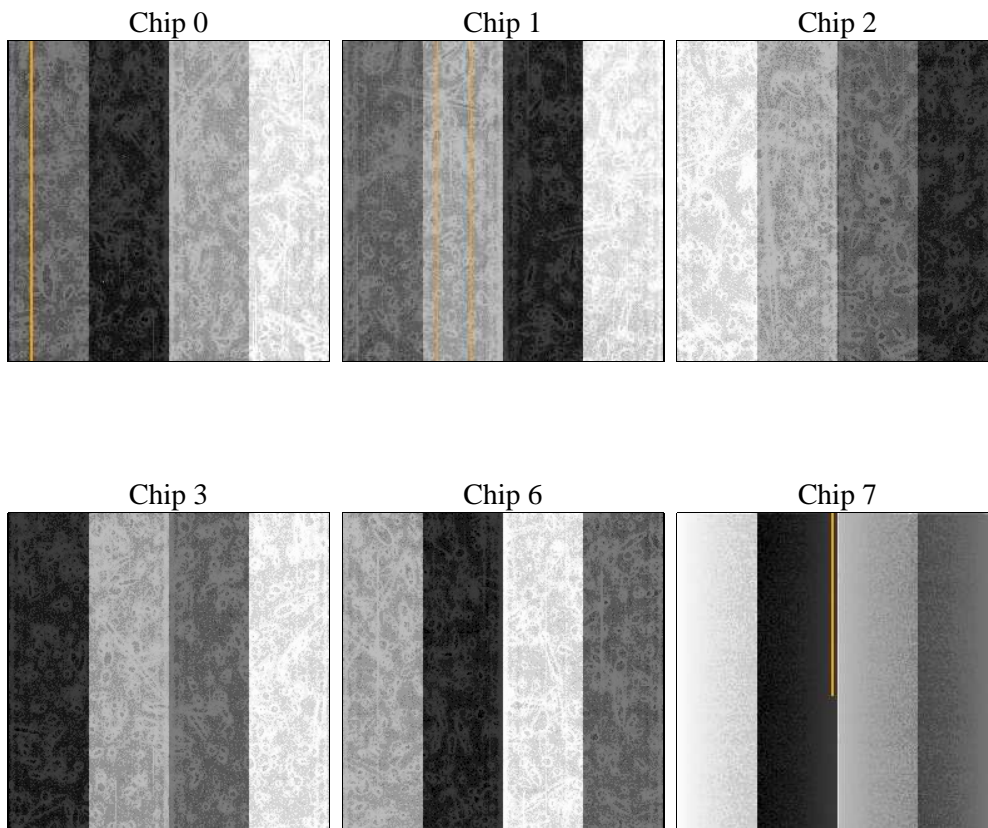
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	33000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	33164.718090385	Sum of GTIs [s]
caldbver	4.5.1.1	 	ontime0	33171.200030878	Sum of GTIs [s]
date	2012-09-20T13:30:57	Date and time of file creation	ontime1	33161.477110118	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	33164.718070447	Sum of GTIs [s]
			ontime3	33164.718090385	Sum of GTIs [s]
			ontime6	33171.200030878	Sum of GTIs [s]
			ontime7	33167.959060639	Sum of GTIs [s]
			l1events	1105963	Number of level 1 events

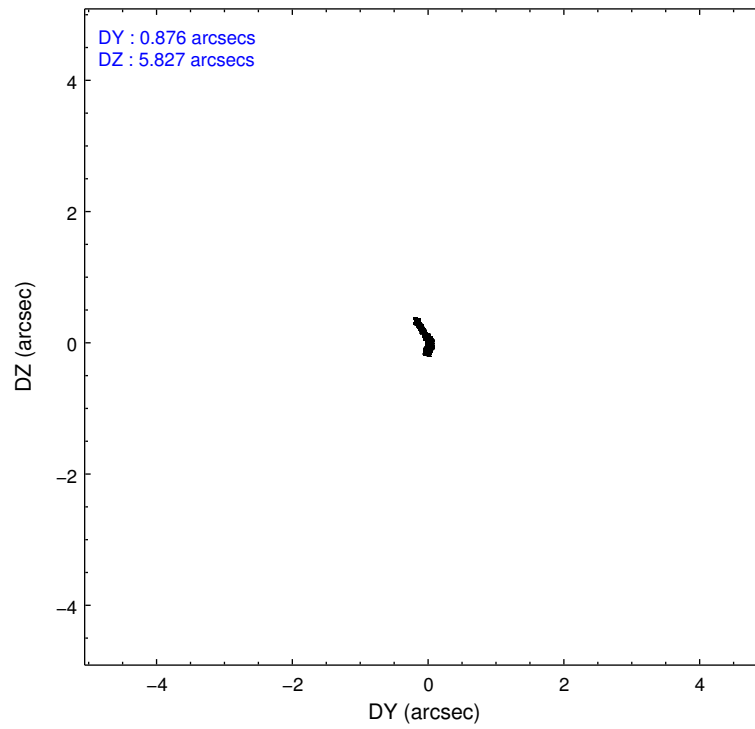
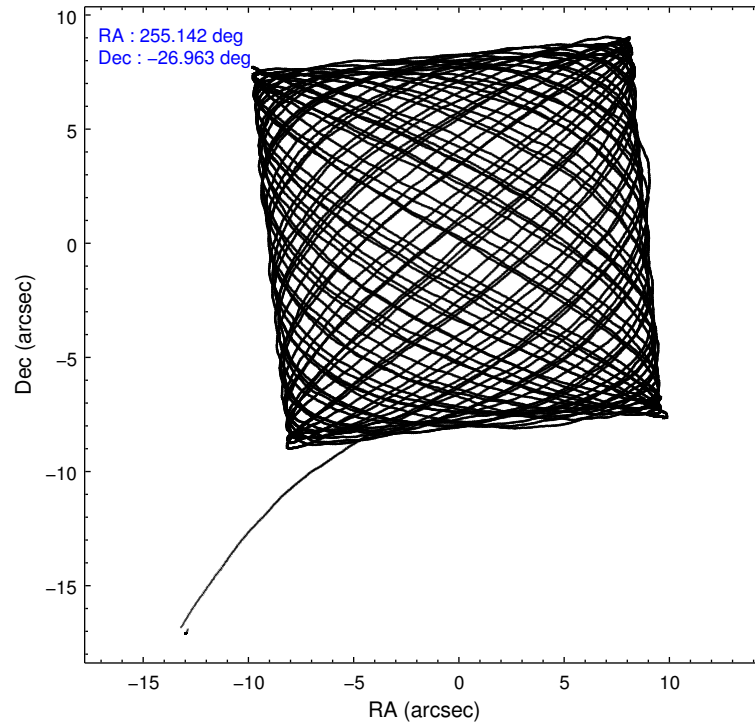
2.1.4 Events

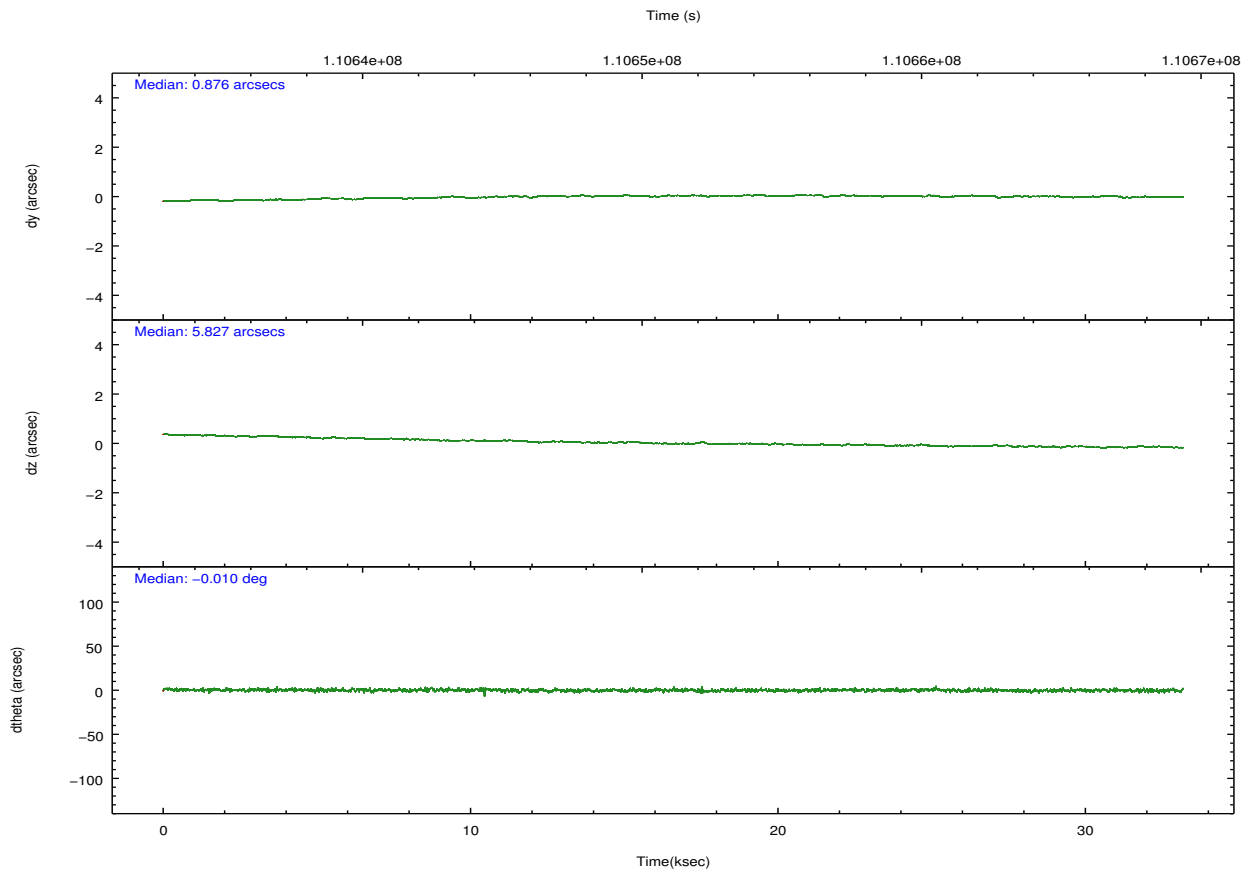
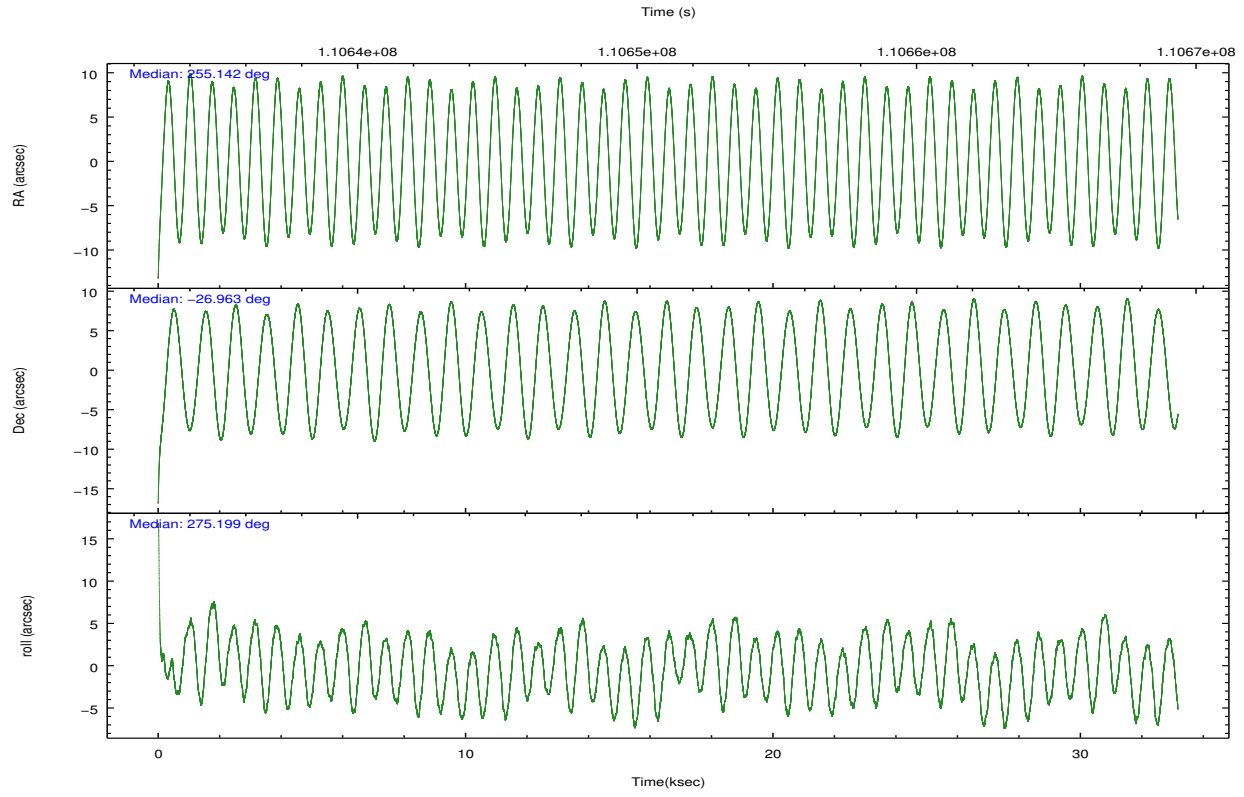
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	171700	174206	190098	185743	190144	194072	grade 0 events	9824	9516	9266	9046	9053	10728
rejected events	150391	152394	169533	166023	169052	101800		5%	5%	4%	4%	4%	5%
rejected %	87%	87%	89%	89%	88%	52%	grade 1 events	111	65	70	79	84	183
								0%	0%	0%	0%	0%	0%
							grade 2 events	4168	4084	4158	3672	3962	18993
								2%	2%	2%	1%	2%	9%
							grade 3 events	2127	2285	1974	1989	2223	9130
								1%	1%	1%	1%	1%	4%
							grade 4 events	1908	2225	1992	1864	2085	9021
								1%	1%	1%	1%	1%	4%
							grade 5 events	5593	6067	5460	6065	6669	19708
								3%	3%	2%	3%	3%	10%
							grade 6 events	3304	3720	3193	3165	3789	44498
								1%	2%	1%	1%	1%	22%
							grade 7 events	144665	146244	163985	159863	162279	81811
								84%	83%	86%	86%	85%	42%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	255.124502	255.1422802571505	Subarray requested	NONE	NONE
[deg] Pointing Dec	-26.940375	-26.96279804335566	Alternating exposures requested	N	N
[deg] Pointing Roll	274.991321	275.2080731024803	[s] Primary exposure time	0.000000	3.2
[deg] Roll angle	270.000000	270.000000			
[deg] Roll tolerance	5.000000	5.000000			
Roll constraint allows 180D rotation	N	N			
[s] Window start time (MET)	110592064.184000	110592064.184000			
[s] Window stop time (MET)	110851264.184000	110851264.184000			
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-224.802463	-224.7973881665749			
[mm] SIM translation stage offset	-8.789999999999999	-8.795064836354754			
[s] Observation start time (MET)	110634694.184000	110633613.61842			
Observation start date	2001-07-04T11:50:30	2001-07-04T11:33:33			
[s] Observation end time (MET)	110667694.184000	110668934.6073			
Observation end date	2001-07-04T21:00:30	2001-07-04T21:22:14			
Read mode	TIMED	TIMED			

2.3 Aspect



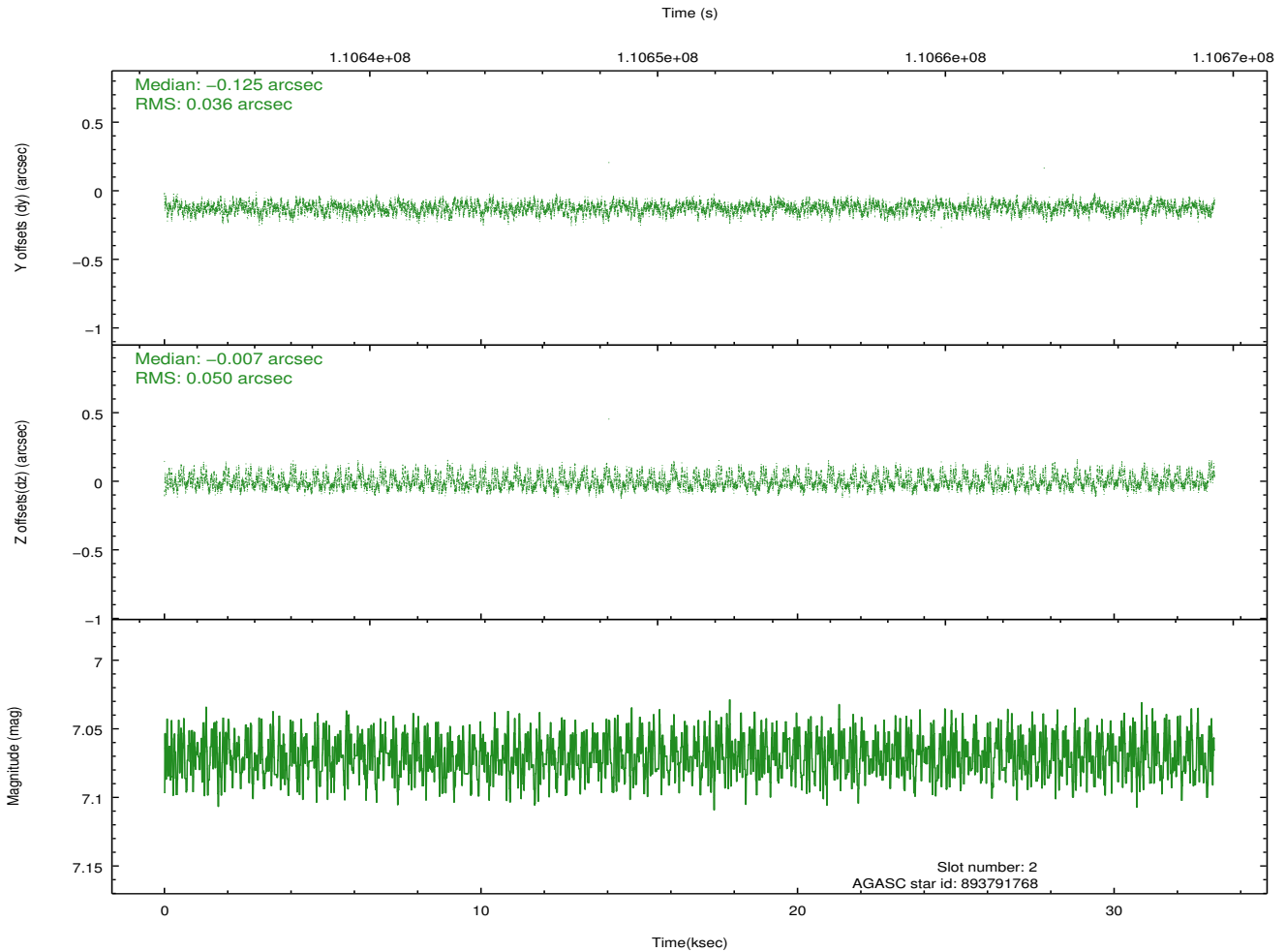
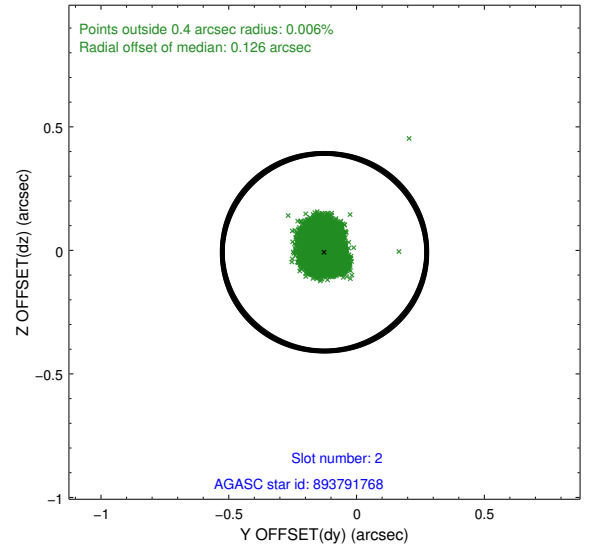
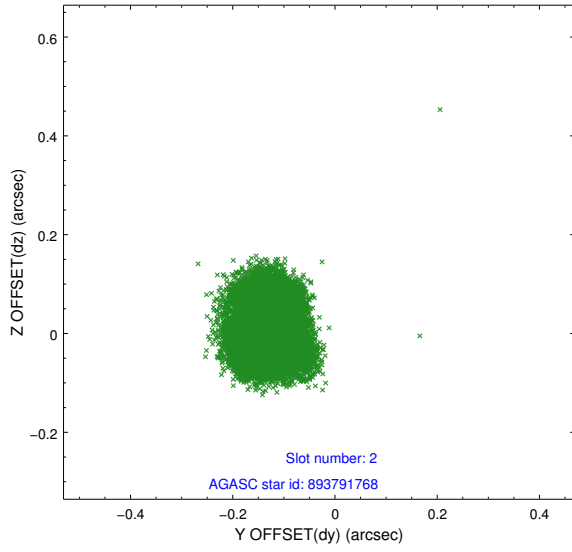


Slot Statistics

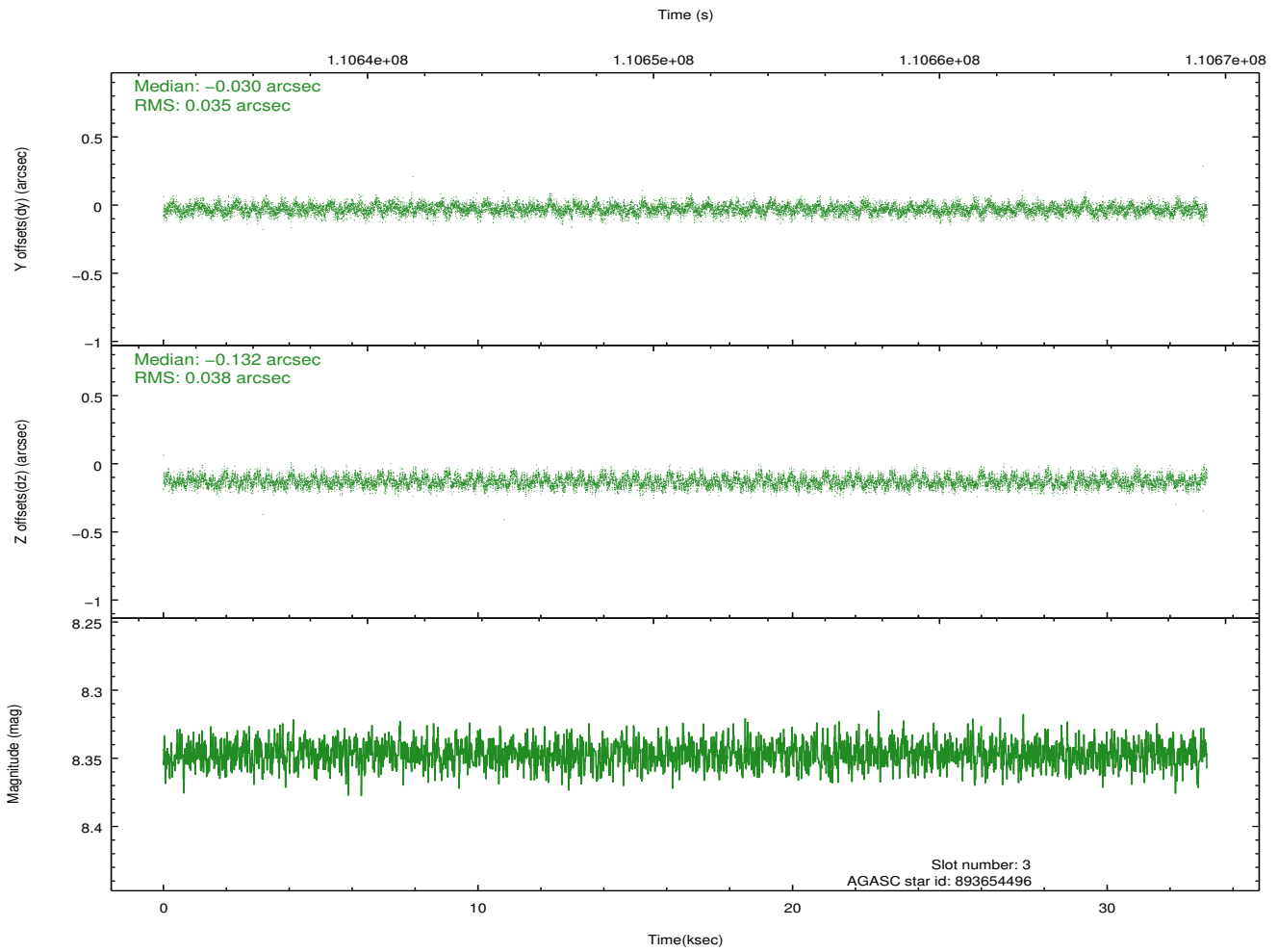
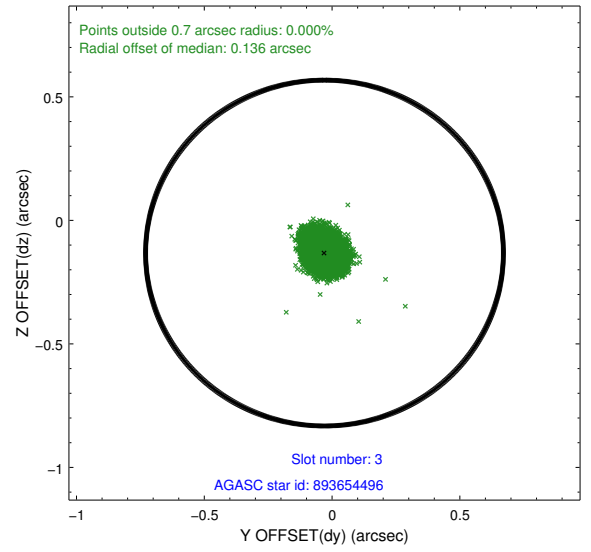
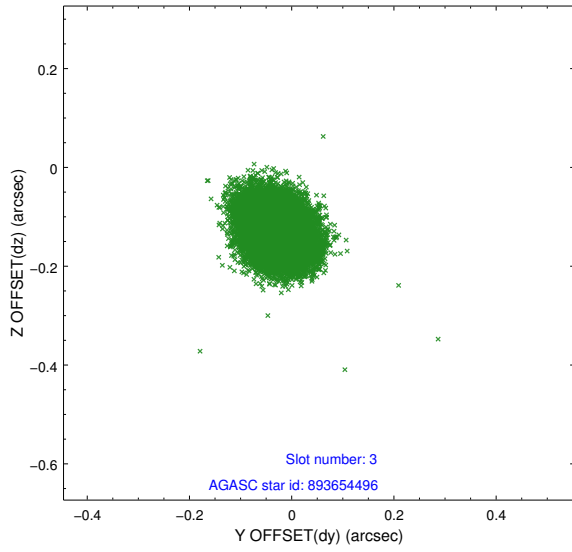
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	6.99	8090	-0.064	-0.030	0.005	0.009	0.000000	0.000000	938.93	-1009.70
1	FID	ACIS-I-4	7.14	8090	-0.002	0.076	0.005	0.009	0.000000	0.000000	2158.29	891.45
2	GUIDE	893791768	7.07	16182	-0.125	-0.007	0.066	0.106	255.768732	-27.097762	748.62	2007.69
3	GUIDE	893654496	8.35	16178	-0.030	-0.132	0.055	0.089	255.228631	-27.239289	1100.84	239.07
4	GUIDE	893804536	9.22	16169	0.070	0.075	0.089	0.148	255.779404	-27.304772	1494.21	1973.30
5	GUIDE	893656784	10.33	16101	0.073	-0.052	0.144	0.229	254.785882	-27.507558	1941.58	-1254.07
6	GUIDE	893782112	9.90	16170	0.102	0.009	0.108	0.176	255.398794	-27.339087	1507.01	749.56
7	GUIDE	893788152	8.24	16180	-0.081	0.099	0.065	0.105	255.351096	-26.643807	-999.90	819.63

2.4 Star Slots

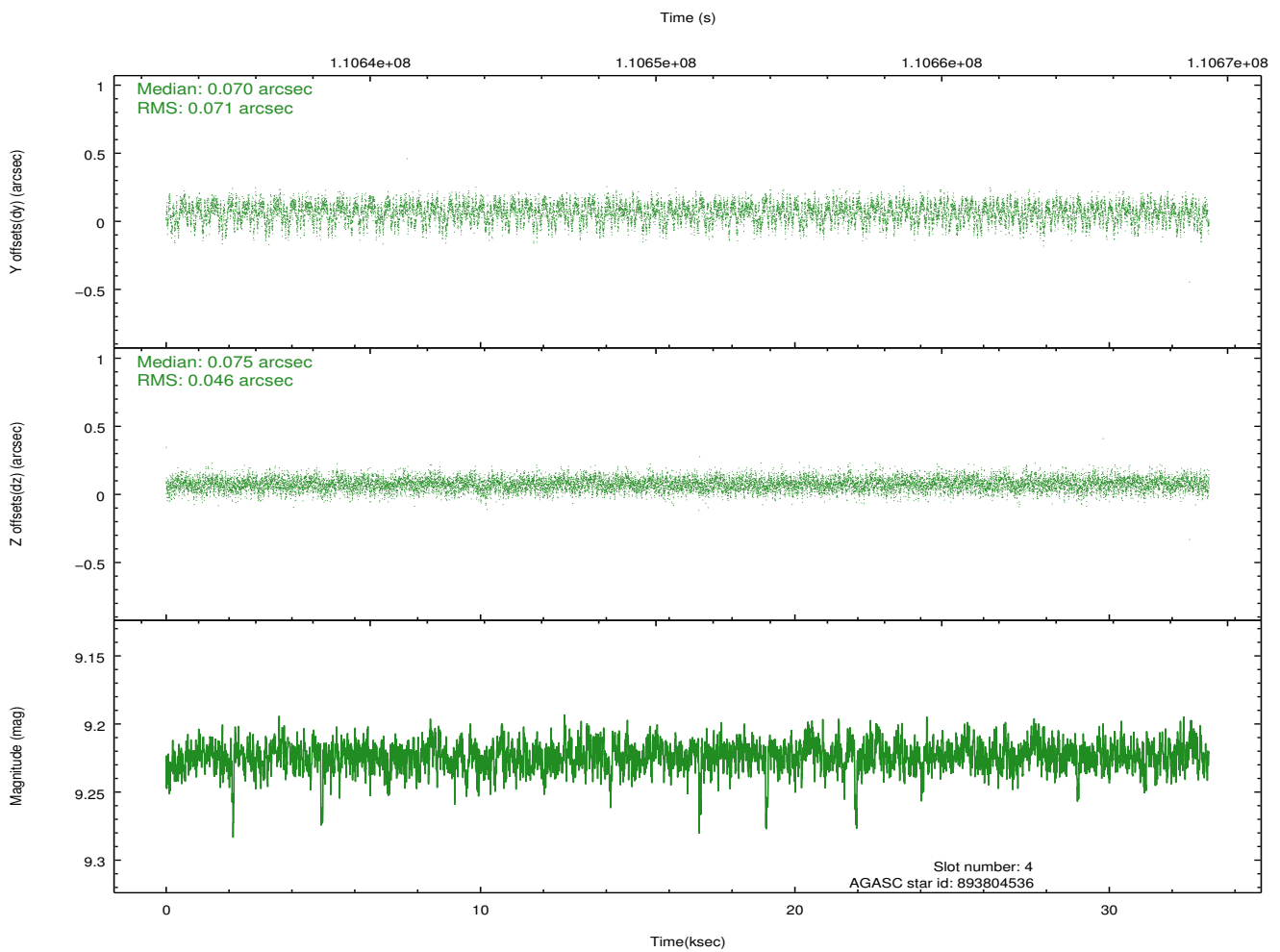
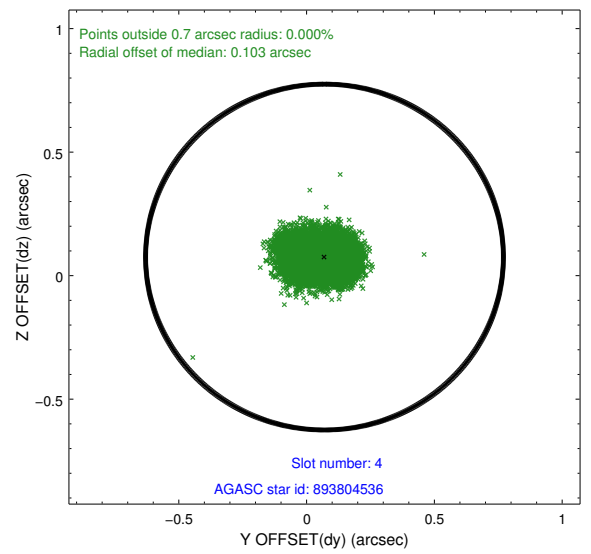
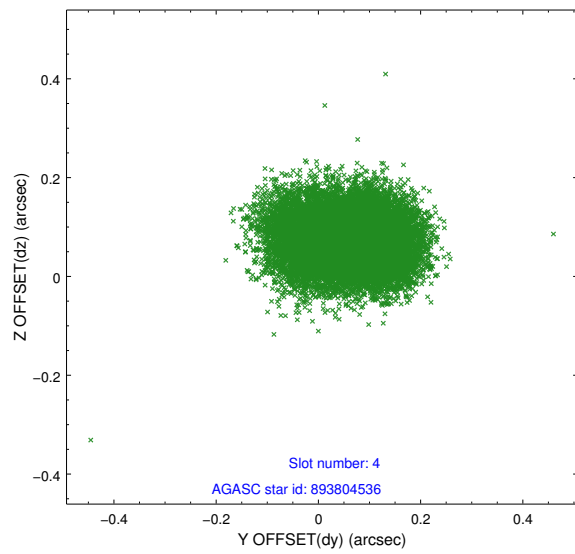
2.4.1 Slot 2



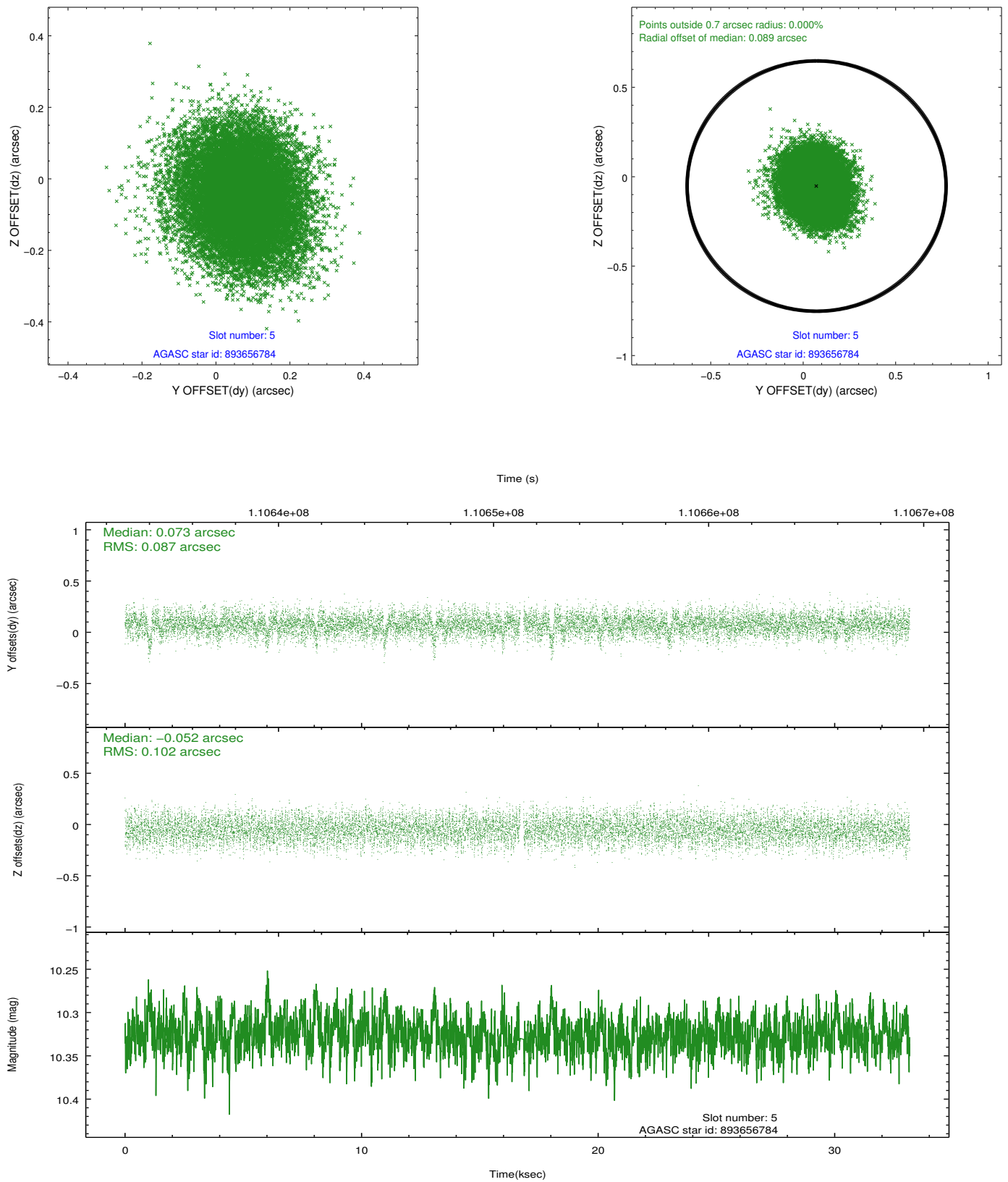
2.4.2 Slot 3



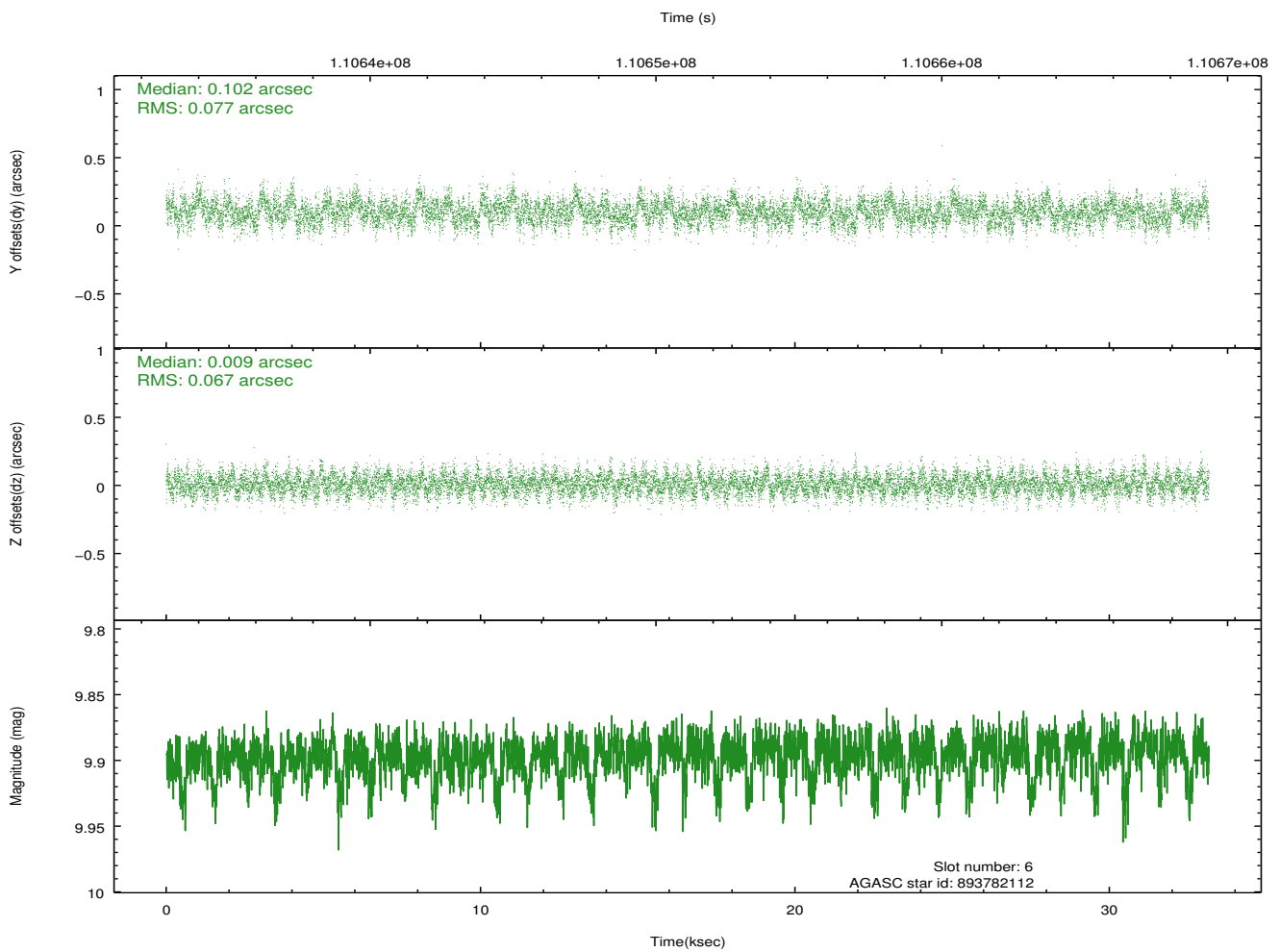
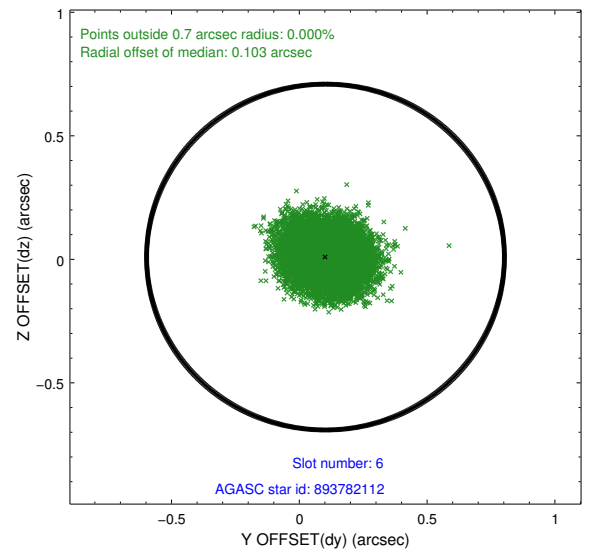
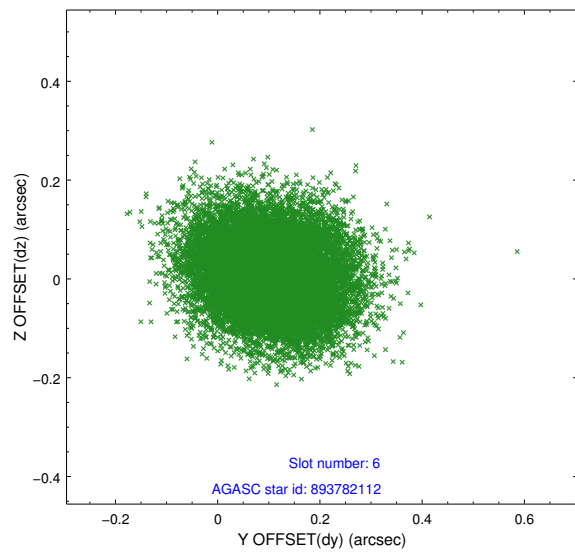
2.4.3 Slot 4



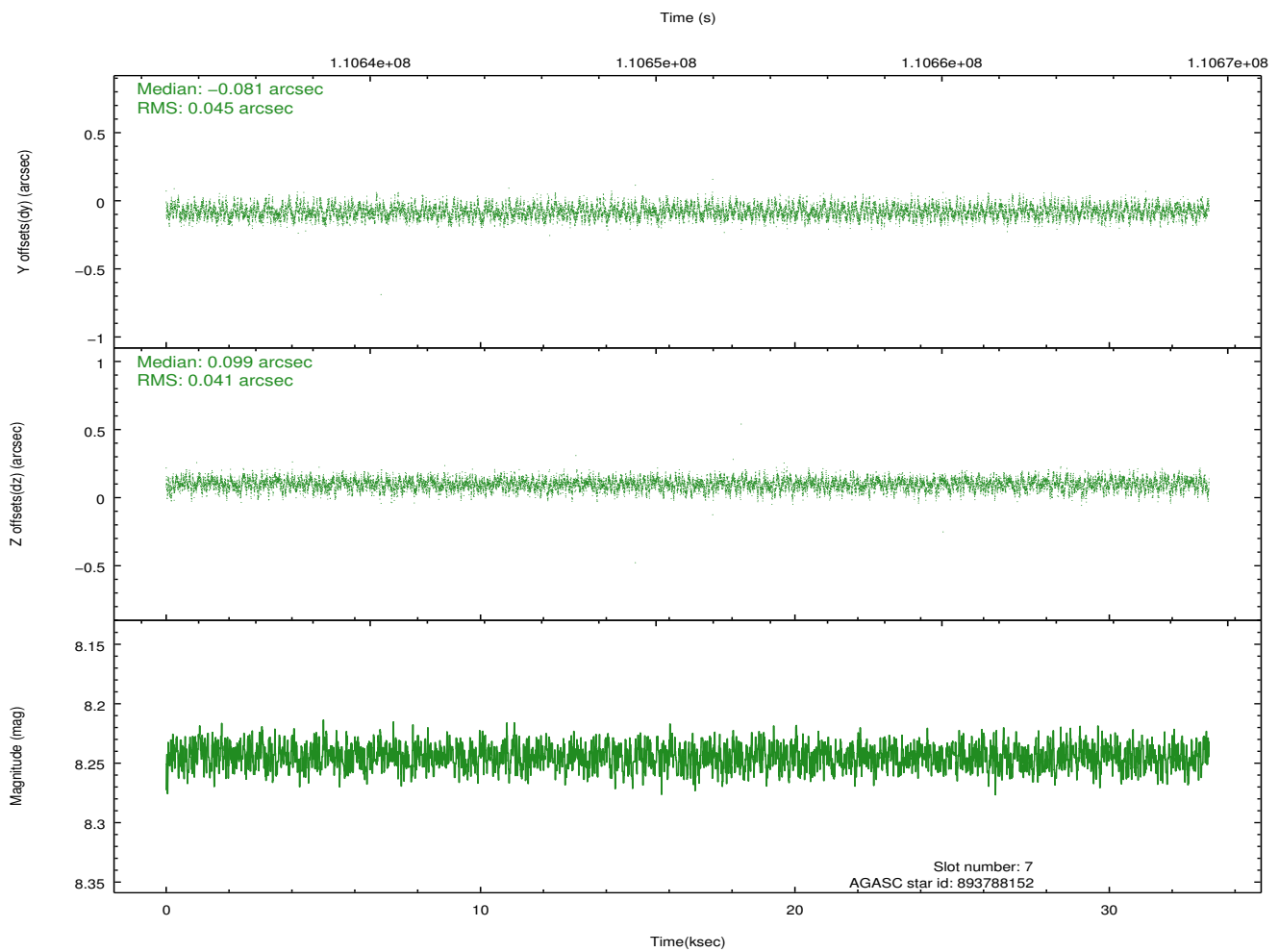
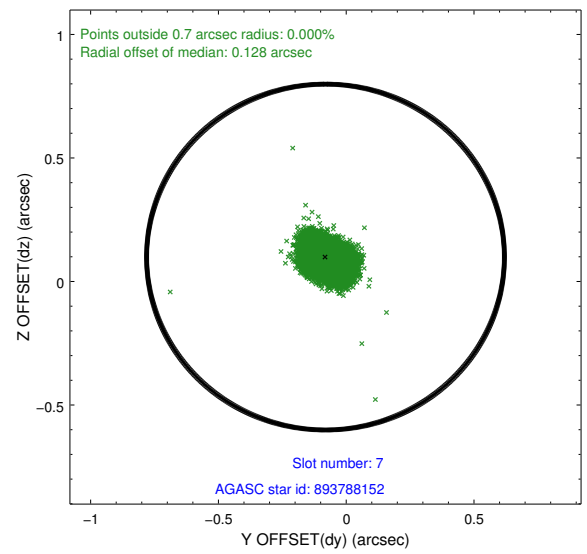
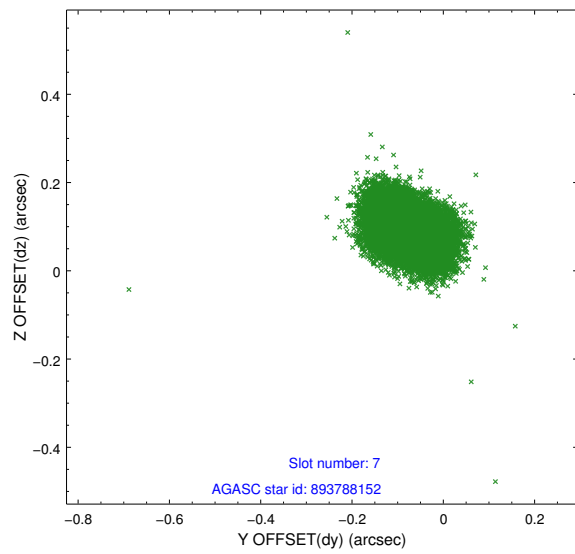
2.4.4 Slot 5



2.4.5 Slot 6

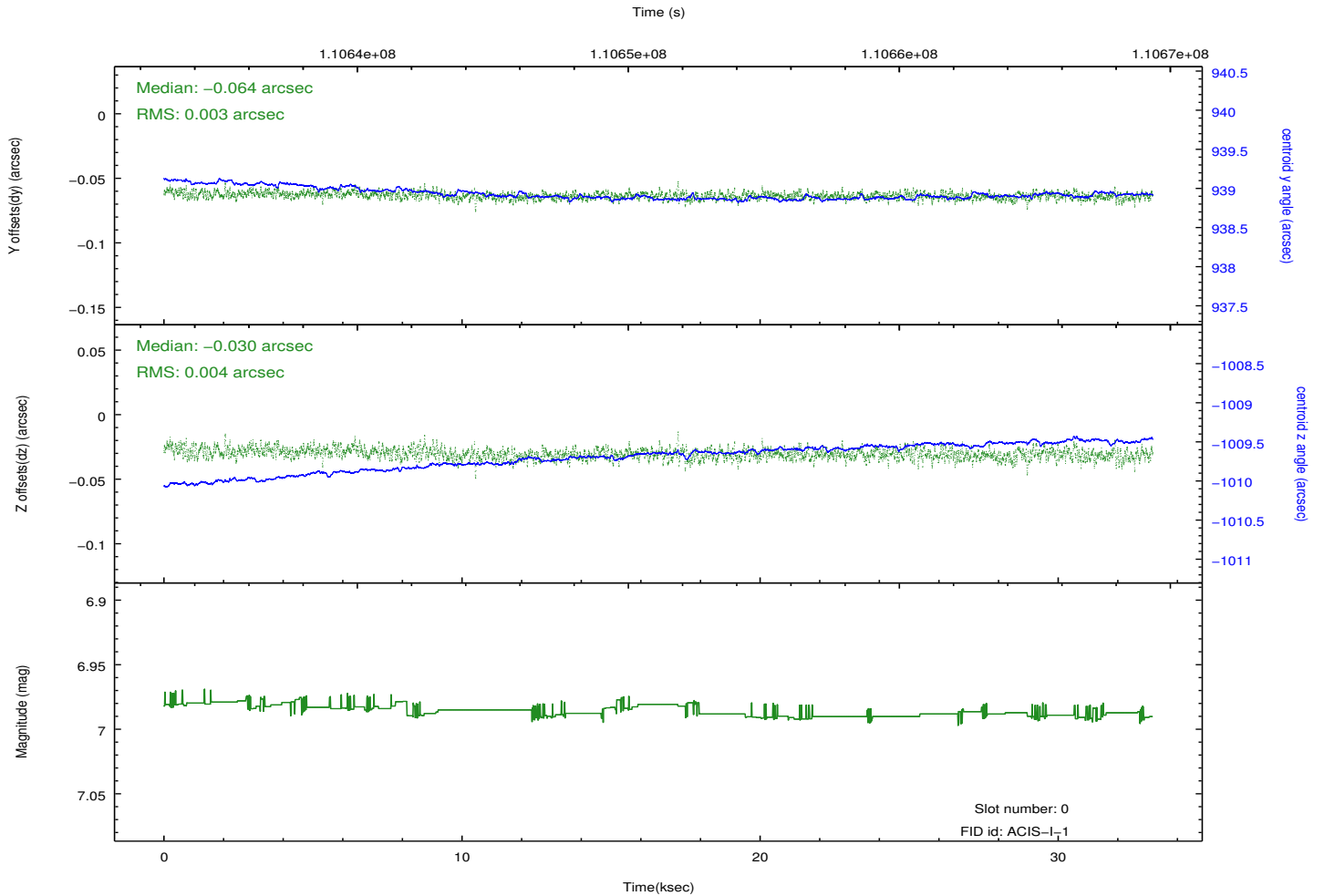
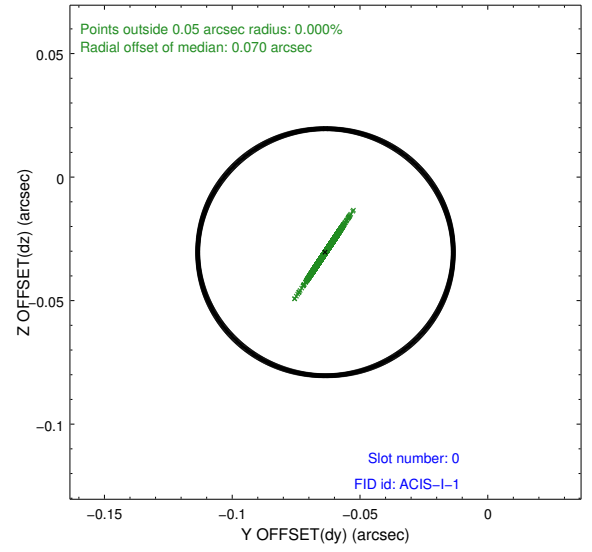
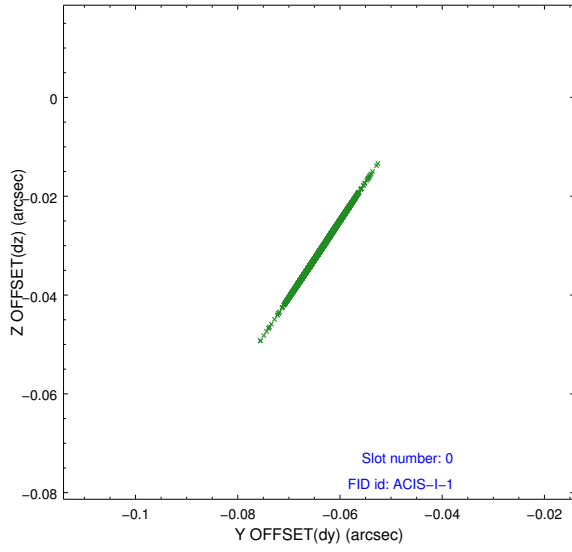


2.4.6 Slot 7

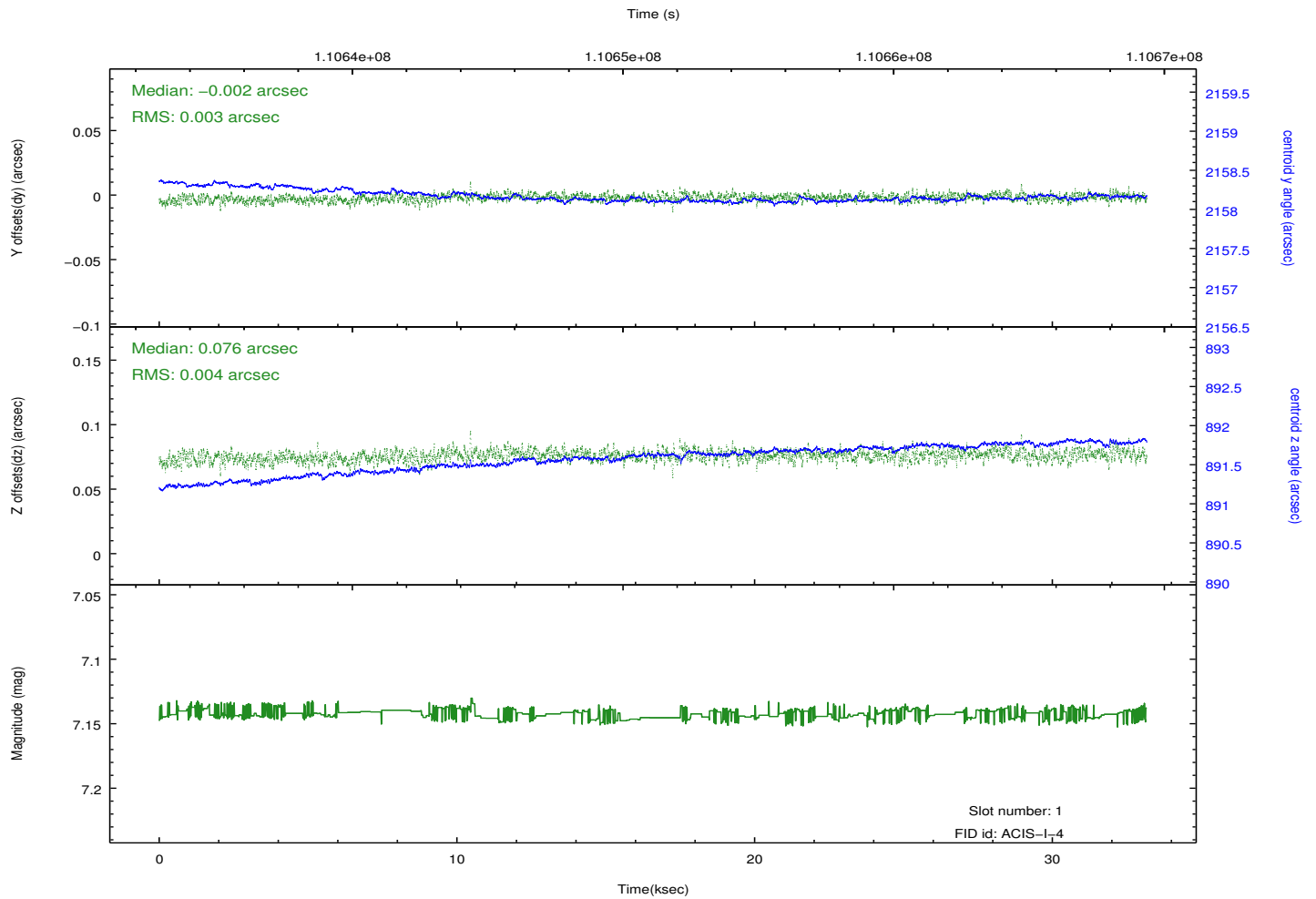
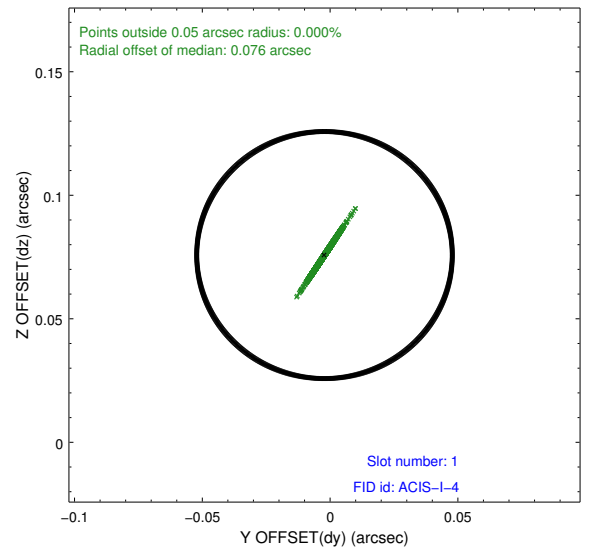
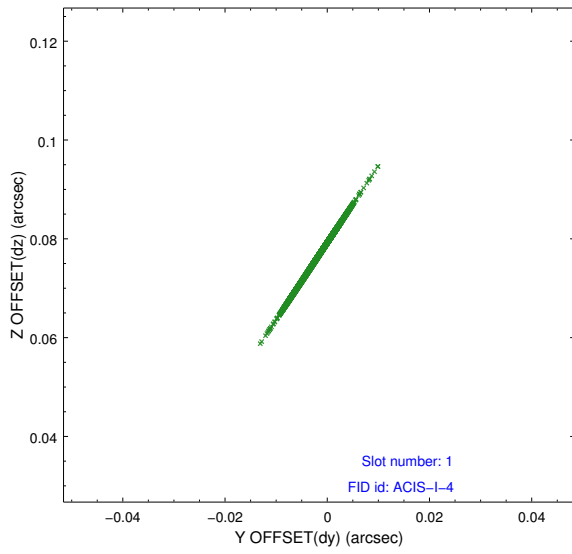


2.5 FID Slots

2.5.1 Slot 0



2.5.2 Slot 1



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.09.24
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	33.165

A.2 Comments

Roll constraint not satisfied. Window constraint OK. Slot 2 contains a guide star instead of a fid light.