

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 1787 - L2 Version 5
Chandra X-Ray Center

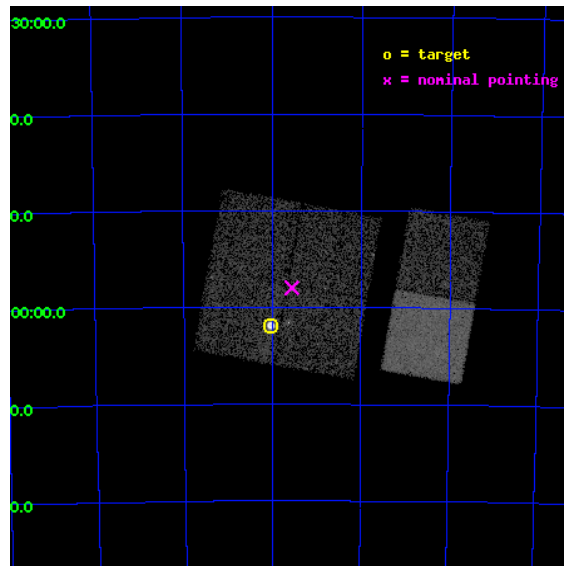
L2 Processing Date : Aug 29 2012

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1 Front

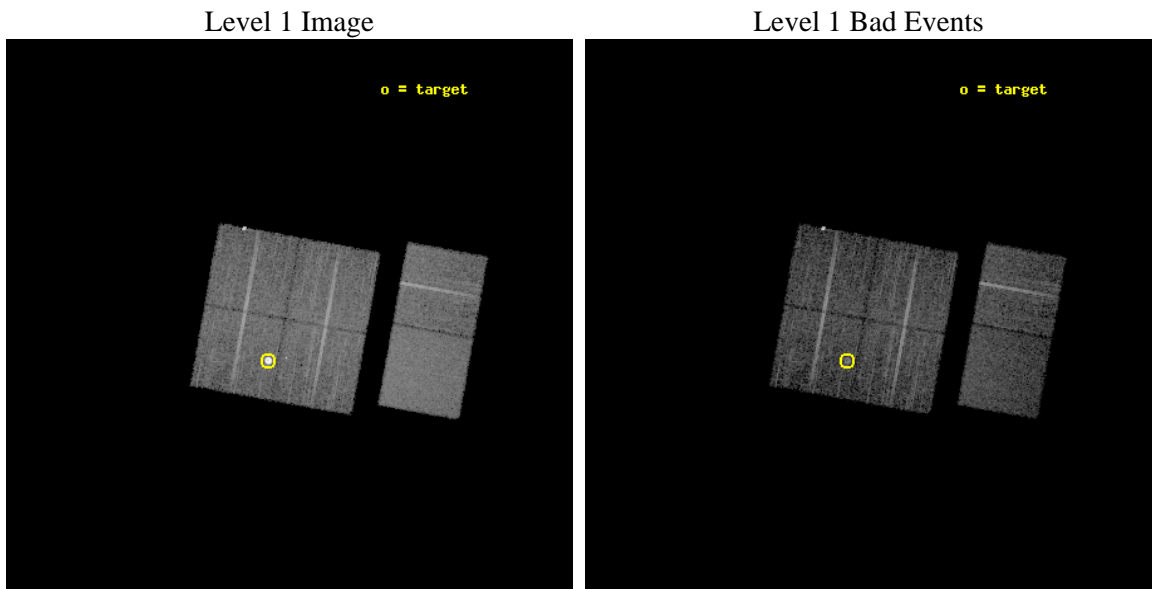
seq_num	590213	Sequence number
obs_id	1787	Observation id
title	ACIS CHIP RESPONSE TO LINES WITH E=0.6-1.5 KEV	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	E0102-72.3 [Chip I1, T=110, Offsets=-4,-1,0]	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	16.01	Observer's specified target RA [deg]
dec_targ	-72.032028	Observer's specified target Dec [deg]
ra_nom	15.890377400349	Nominal RA [deg]
dec_nom	-71.966273308188	Nominal Dec [deg]
roll_nom	100.28396043459	Nominal Roll [deg]
revision	5	Processing version of data
ontime	7689.6000071466	Sum of GTIs [s]
livetime	7592.2296617349	Livetime [s]
ontime0	7686.359046936	Sum of GTIs [s]
ontime1	7689.6000071466	Sum of GTIs [s]
ontime2	7689.6000071466	Sum of GTIs [s]
ontime3	7689.6000071466	Sum of GTIs [s]
ontime6	7689.6000071466	Sum of GTIs [s]
ontime7	7689.6000071466	Sum of GTIs [s]
l2events	74854	Number of level 2 events



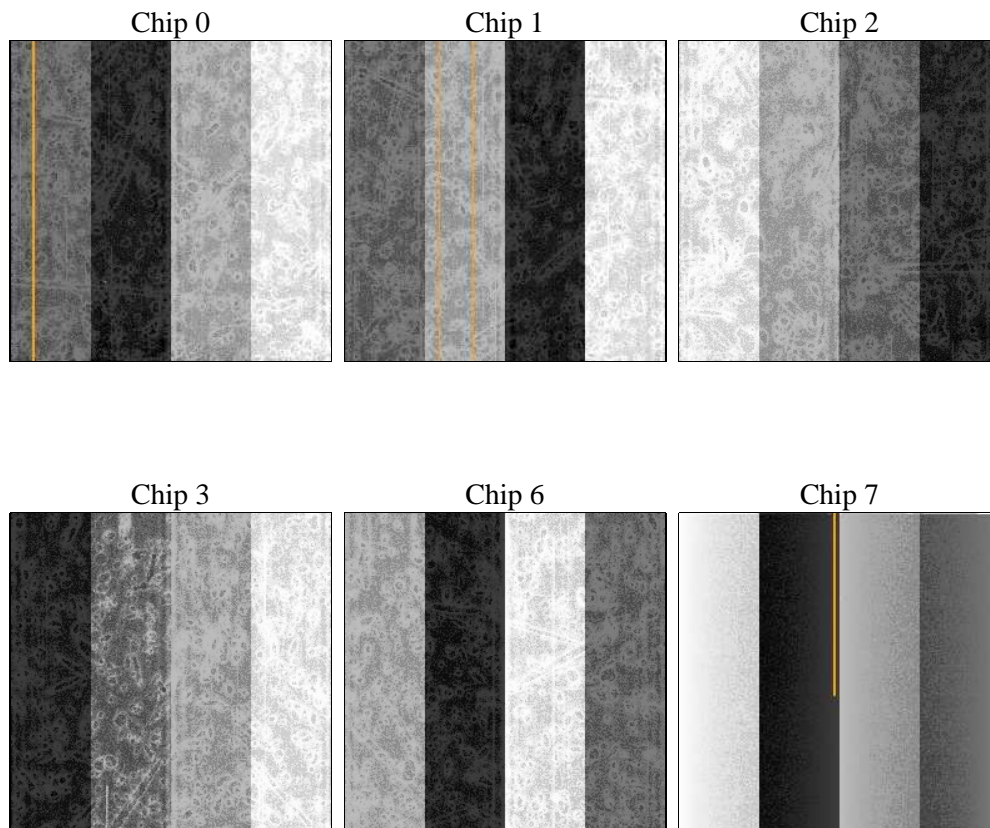
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	7930.065000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	7689.6000071466	Sum of GTIs [s]
caldbver	4.5.1.1	 	ontime0	7686.359046936	Sum of GTIs [s]
date	2012-08-30T01:17:20	Date and time of file creation	ontime1	7689.6000071466	Sum of GTIs [s]
revision	5	Processing version of data	ontime2	7689.6000071466	Sum of GTIs [s]
			ontime3	7689.6000071466	Sum of GTIs [s]
			ontime6	7689.6000071466	Sum of GTIs [s]
			ontime7	7689.6000071466	Sum of GTIs [s]
			l1events	354156	Number of level 1 events

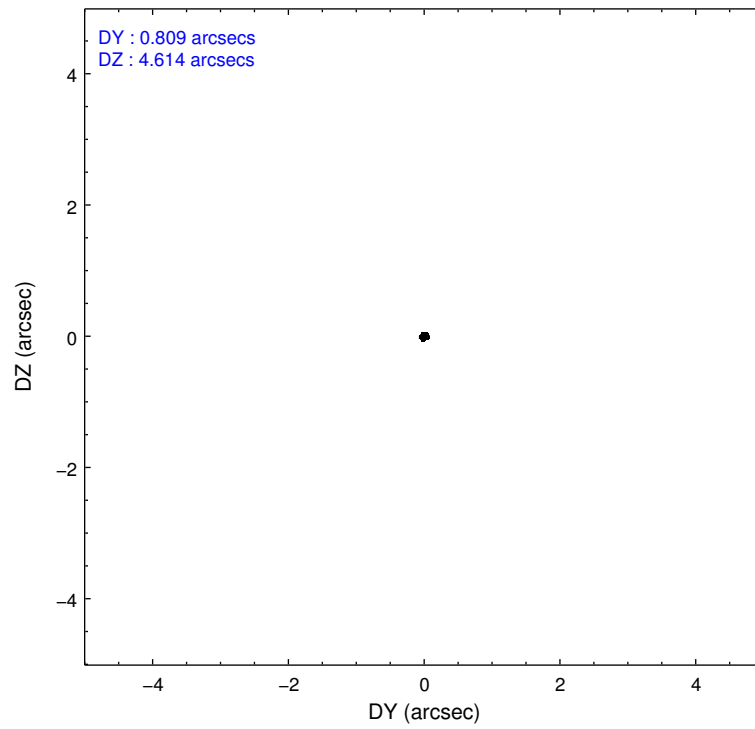
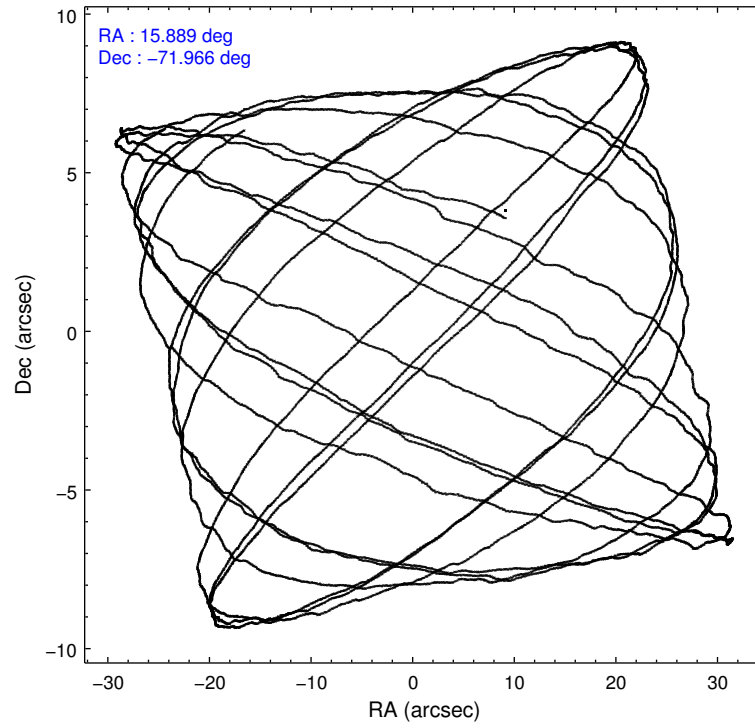
2.1.4 Events

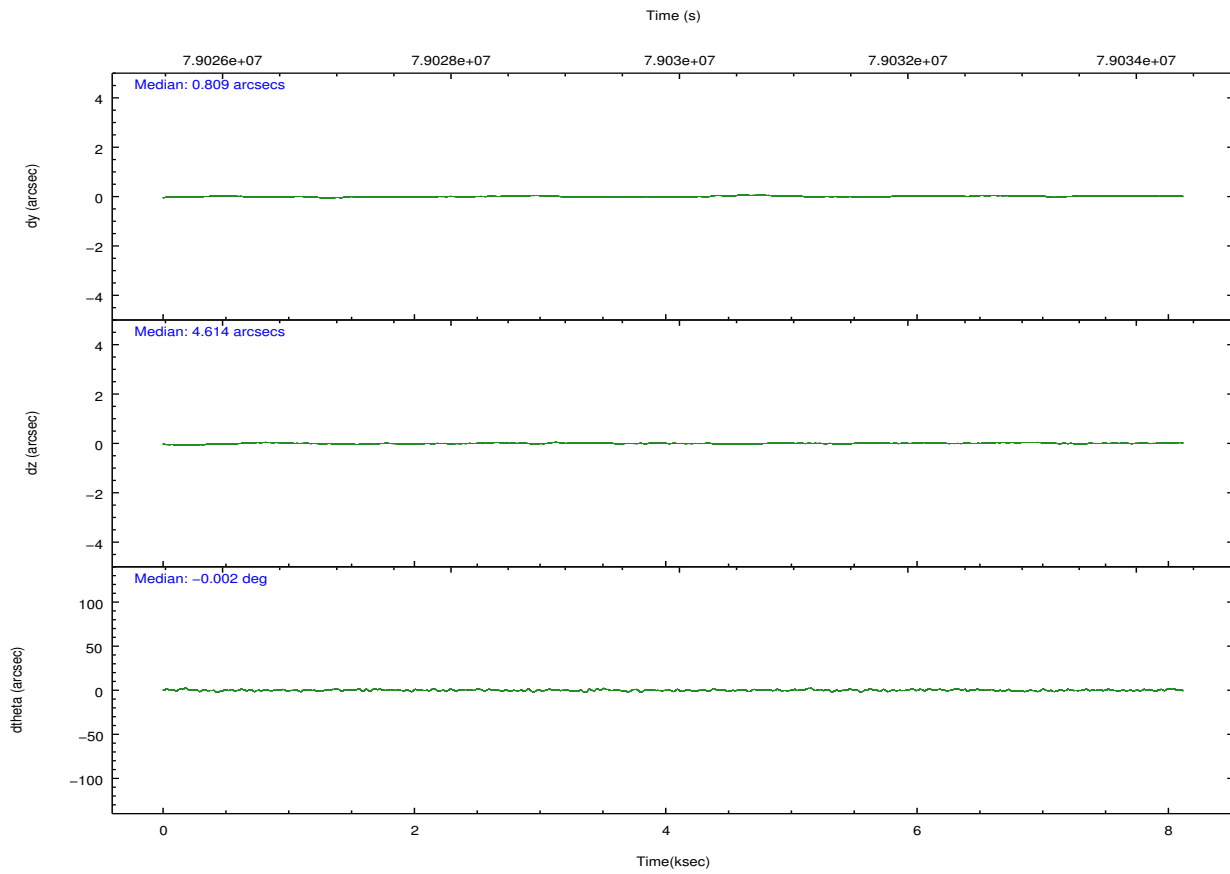
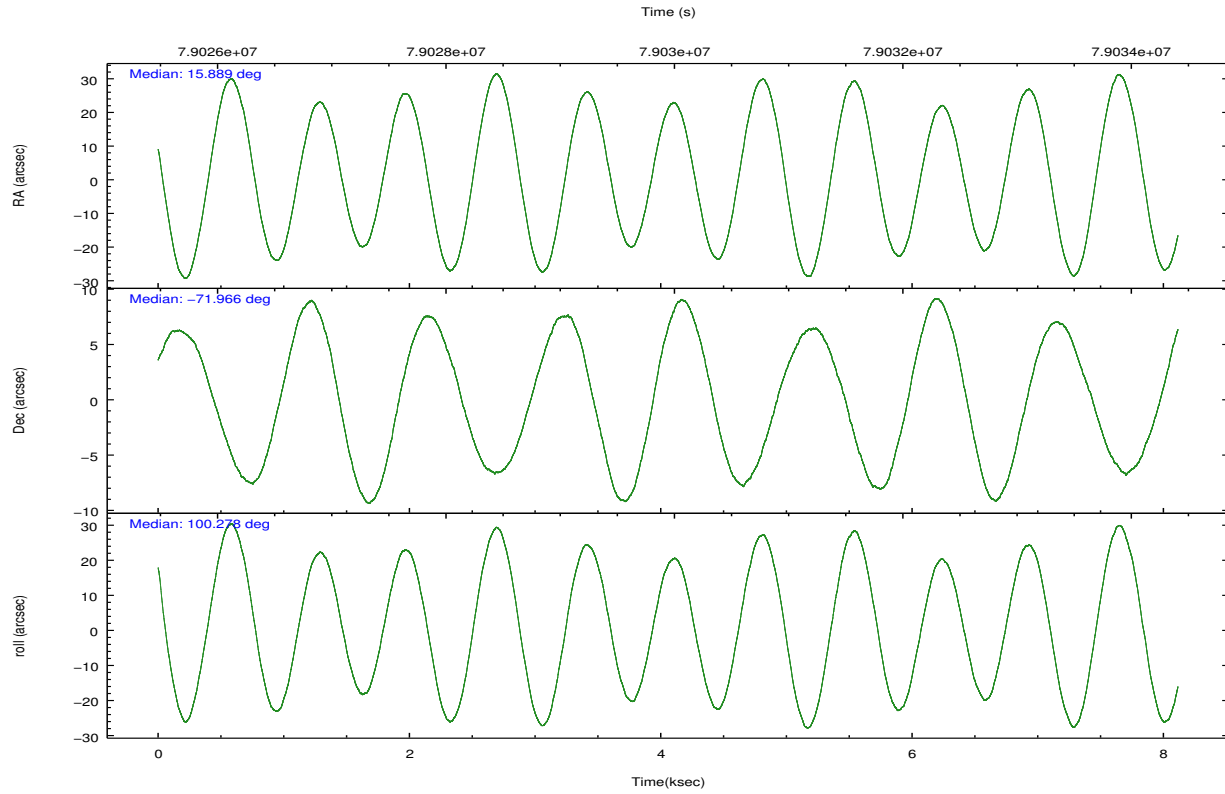
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	50585	78341	55569	54375	53318	61968	grade 0 events	1251	26498	1339	1659	1174	1901
rejected events	45193	43779	50255	48128	47753	37318		2%	33%	2%	3%	2%	3%
rejected %	89%	55%	90%	88%	89%	60%	grade 1 events	2307	216	14	19	12	33
								4%	0%	0%	0%	0%	0%
							grade 2 events	2134	4632	2026	2437	2119	5221
								4%	5%	3%	4%	3%	8%
							grade 3 events	400	866	328	357	331	1451
								0%	1%	0%	0%	0%	2%
							grade 4 events	348	900	347	339	329	1376
								0%	1%	0%	0%	0%	2%
							grade 5 events	1023	1200	973	1103	1254	3656
								2%	1%	1%	2%	2%	5%
							grade 6 events	1261	1677	1275	1459	1612	14716
								2%	2%	2%	2%	3%	23%
							grade 7 events	41861	42352	49267	47002	46487	33614
								82%	54%	88%	86%	87%	54%

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	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	15.947893	15.89037740034898	Subarray requested	NONE	NONE
[deg] Pointing Dec	-71.987371	-71.96627330818829	Alternating exposures requested	N	N
[deg] Pointing Roll	100.129966	100.2839604345866	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	79026079.184000	79025702.78568999			
Observation start date	2000-07-03T15:40:15	2000-07-03T15:35:02			
[s] Observation end time (MET)	79034009.184000	79034318.93600801			
Observation end date	2000-07-03T17:52:25	2000-07-03T17:58:38			
Read mode	TIMED	TIMED			

2.3 Aspect



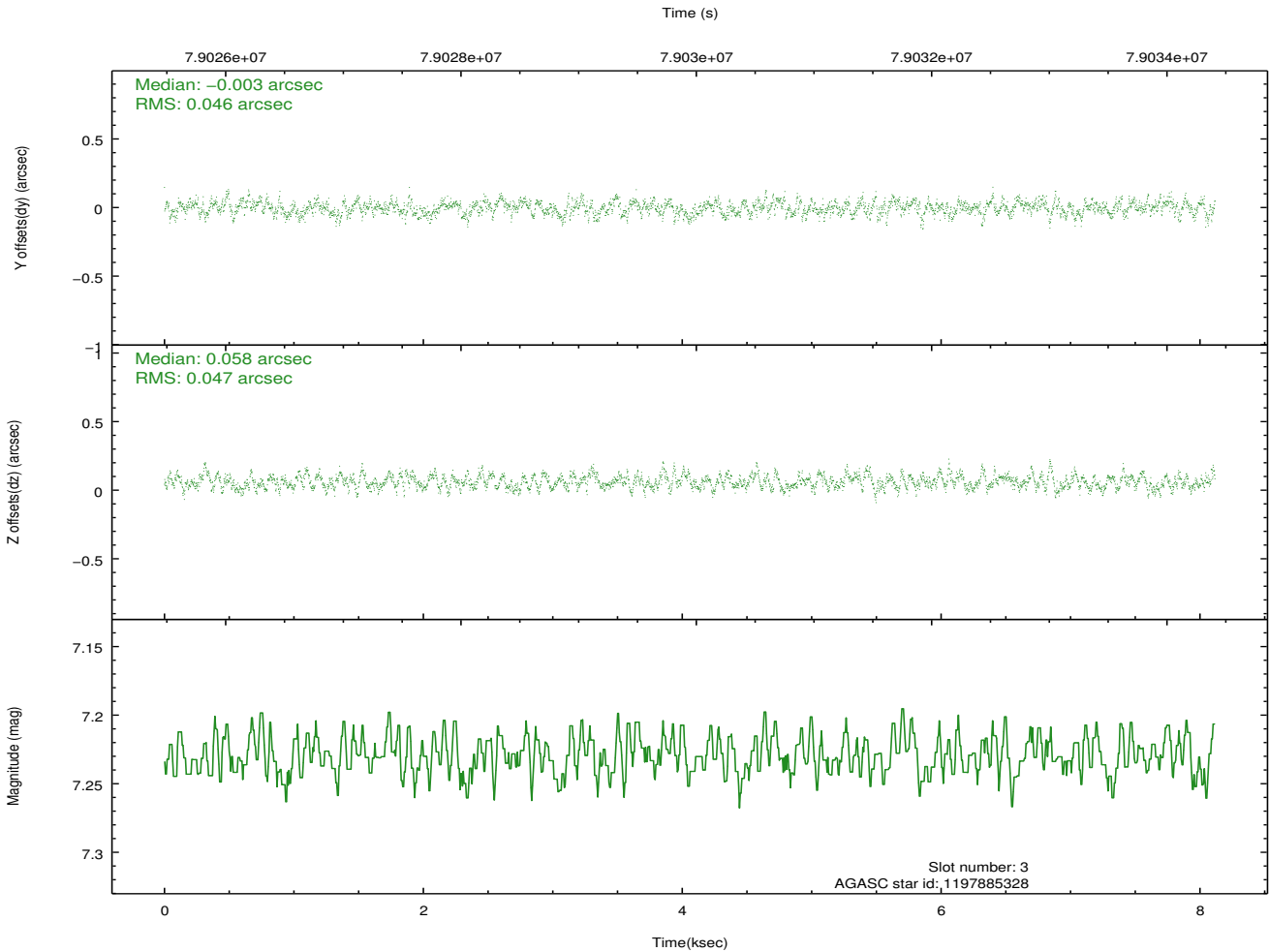
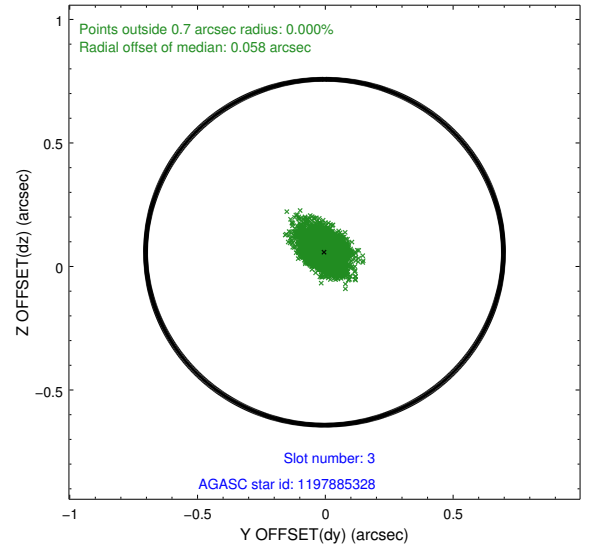
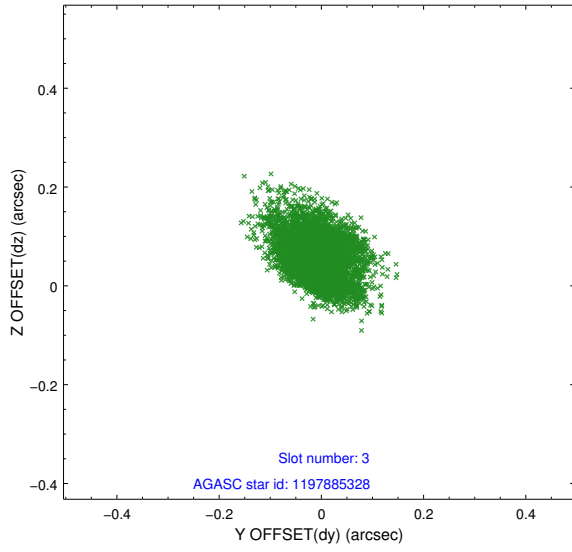


Slot Statistics

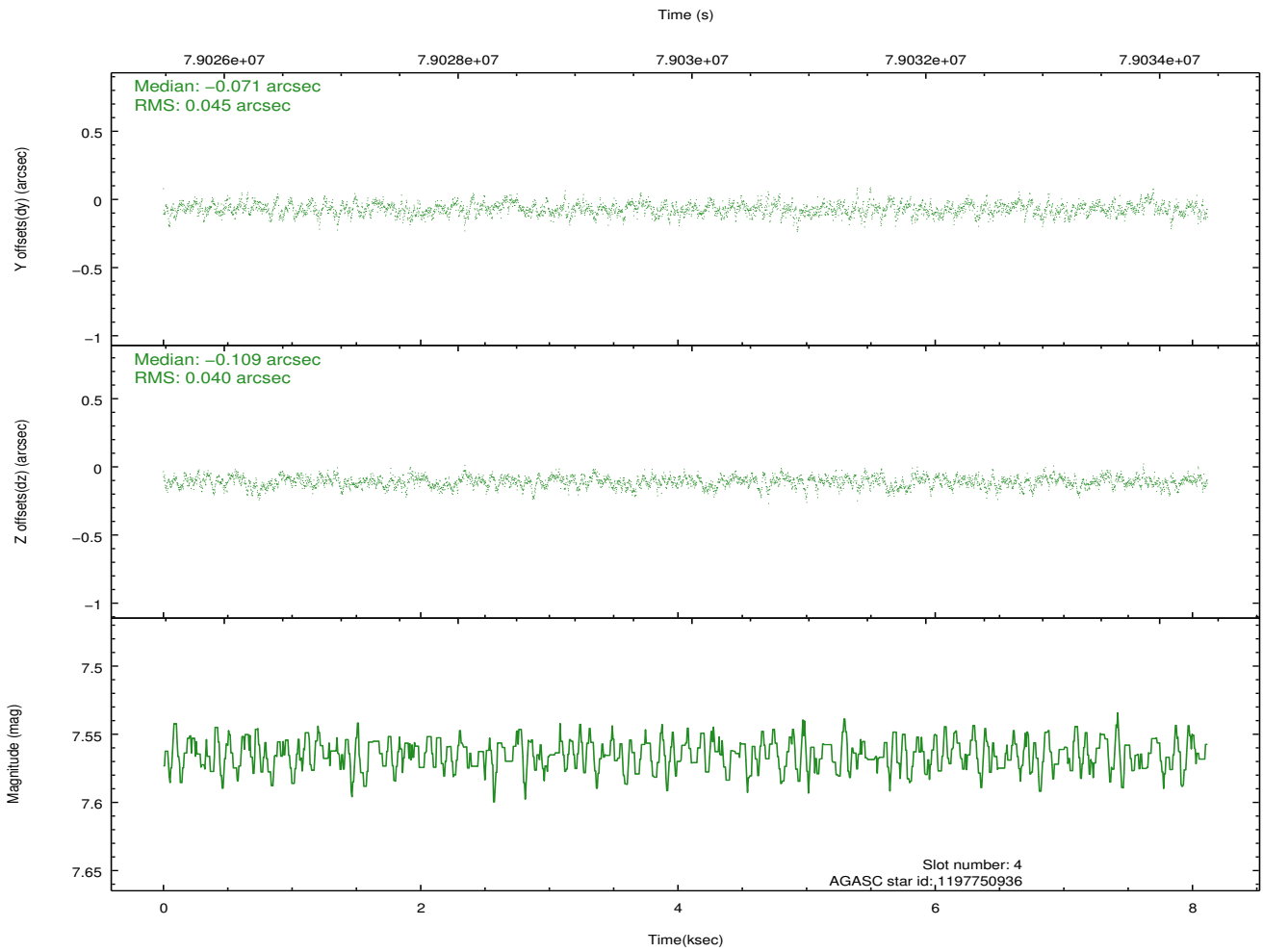
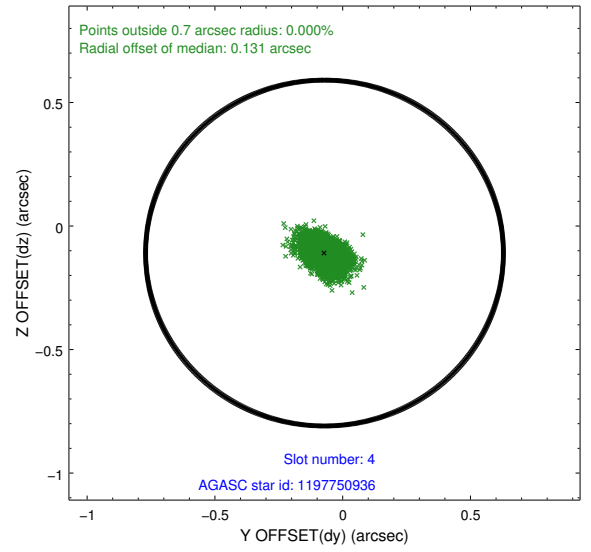
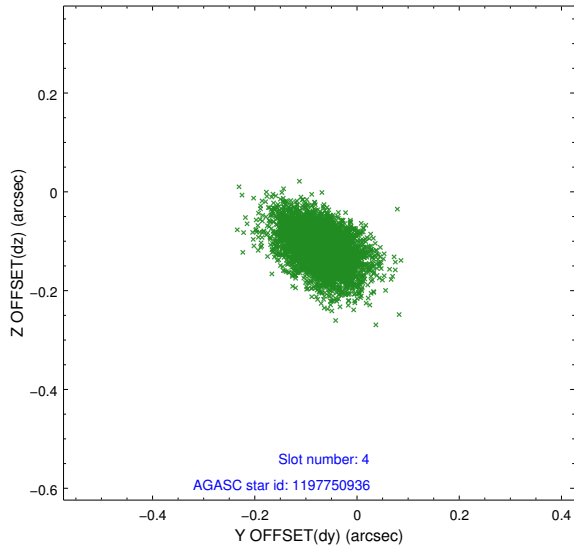
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.15	1980	-0.054	-0.006	0.006	0.011	0.000000	0.000000	-755.18	-834.32
1	FID	ACIS-I-4	7.19	1980	-0.045	0.037	0.007	0.012	0.000000	0.000000	2158.57	1071.57
2	FID	ACIS-I-6	7.27	1980	-0.000	0.032	0.009	0.015	0.000000	0.000000	405.83	1714.53
3	GUIDE	1197885328	7.23	3960	-0.003	0.058	0.068	0.114	16.283090	-71.733943	830.74	-533.84
4	GUIDE	1197750936	7.56	3960	-0.071	-0.109	0.062	0.106	15.387940	-71.549550	1661.09	349.92
5	GUIDE	1197884536	8.49	3957	0.003	0.036	0.067	0.118	17.160729	-71.835289	286.76	-1434.91
6	GUIDE	1197750640	9.74	3958	0.094	-0.044	0.098	0.161	15.758835	-72.088048	-320.02	268.13
7	GUIDE	1197878768	9.62	3956	-0.022	0.061	0.121	0.196	16.656786	-71.304581	2271.29	-1237.81

2.4 Star Slots

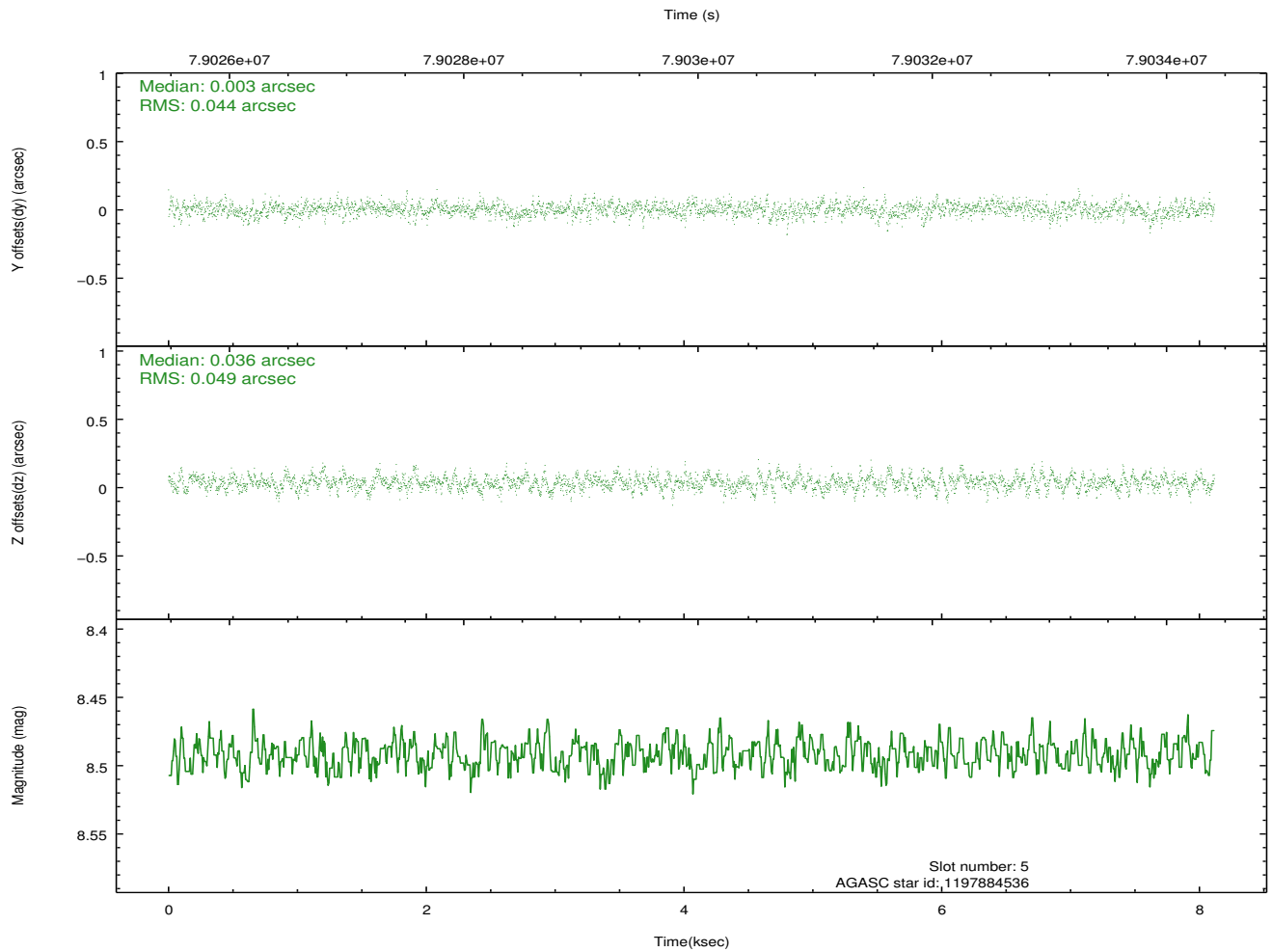
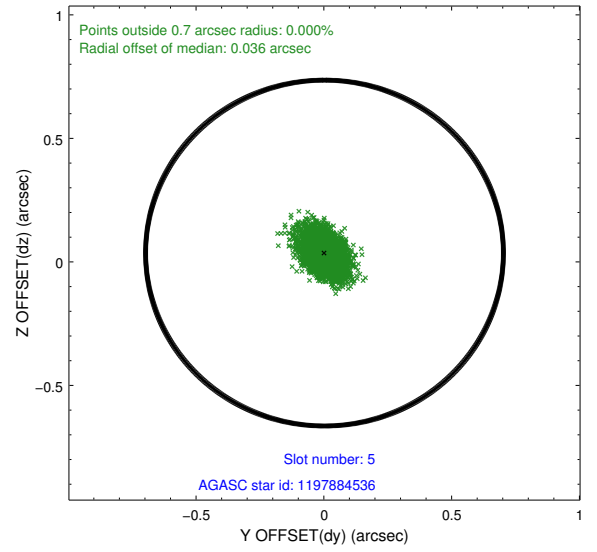
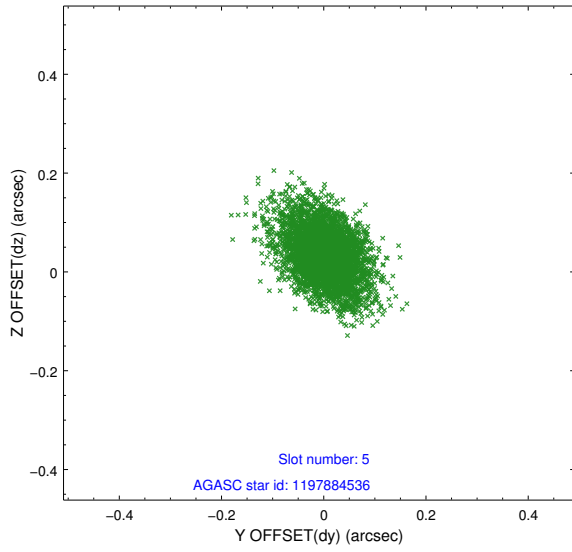
2.4.1 Slot 3



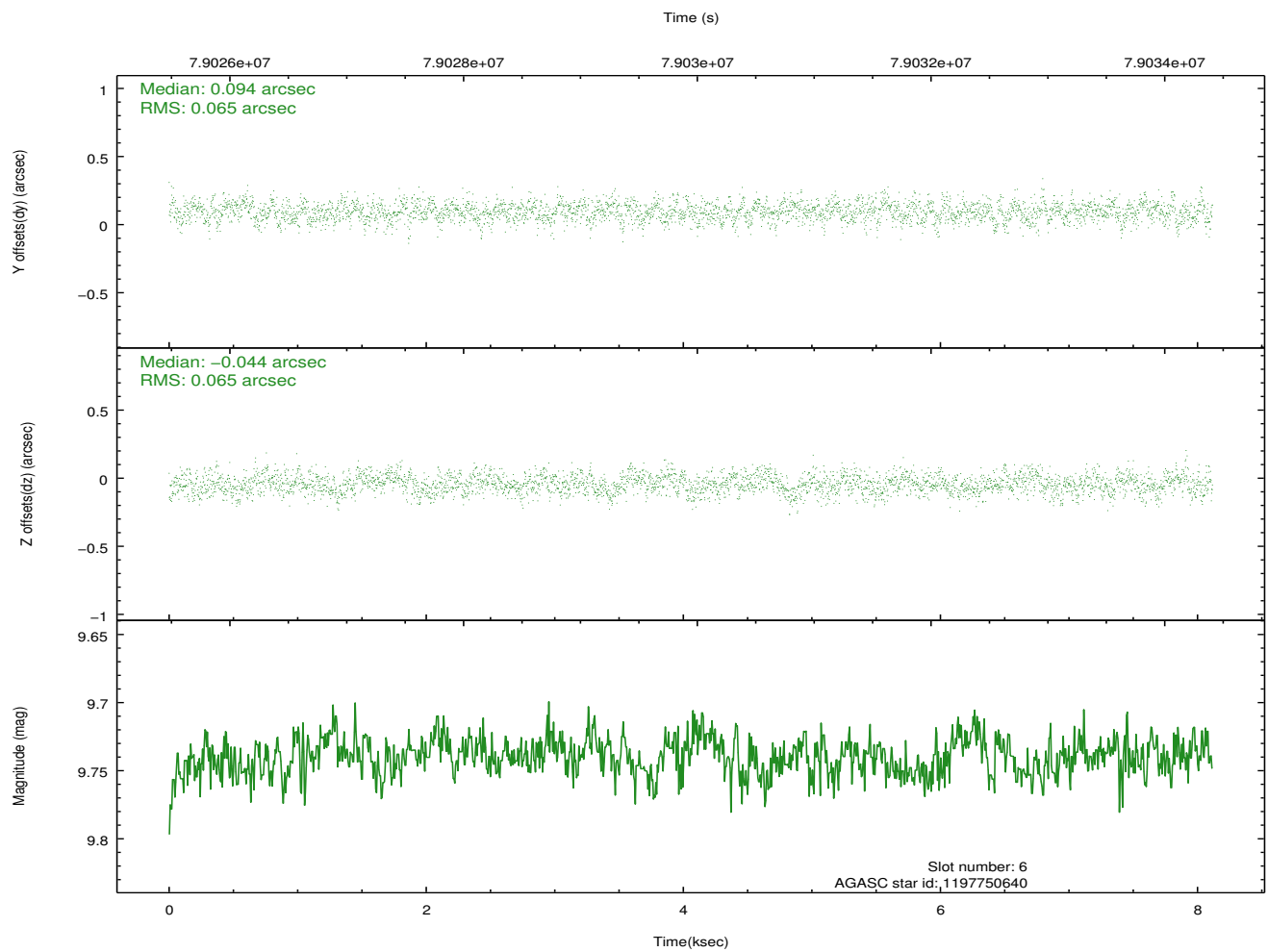
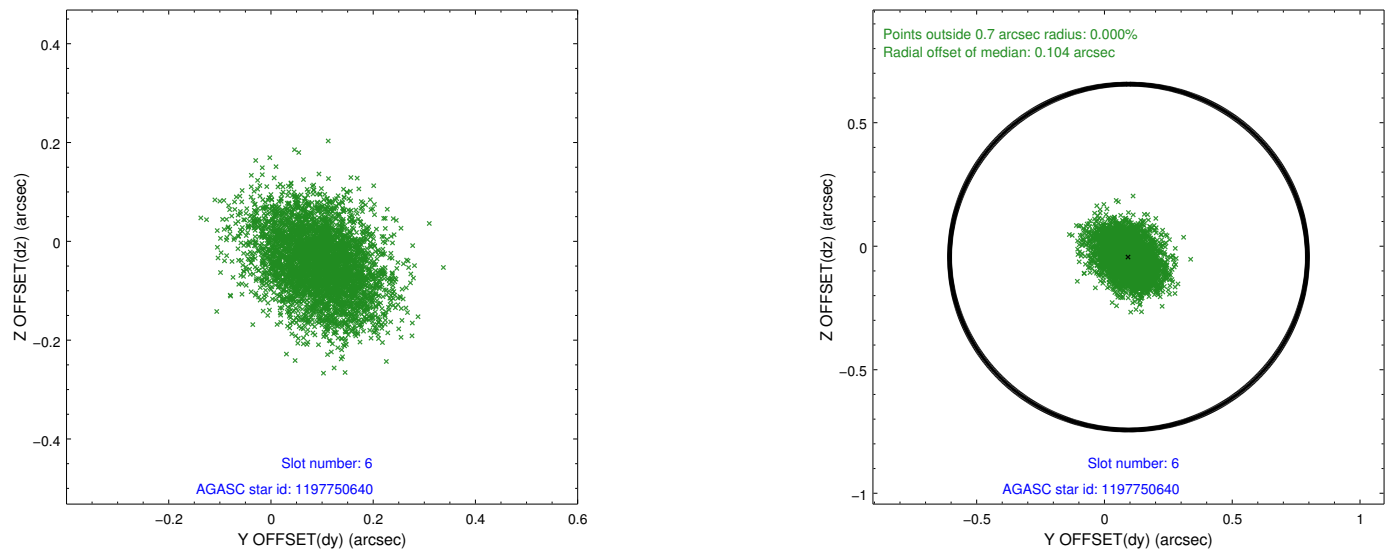
2.4.2 Slot 4



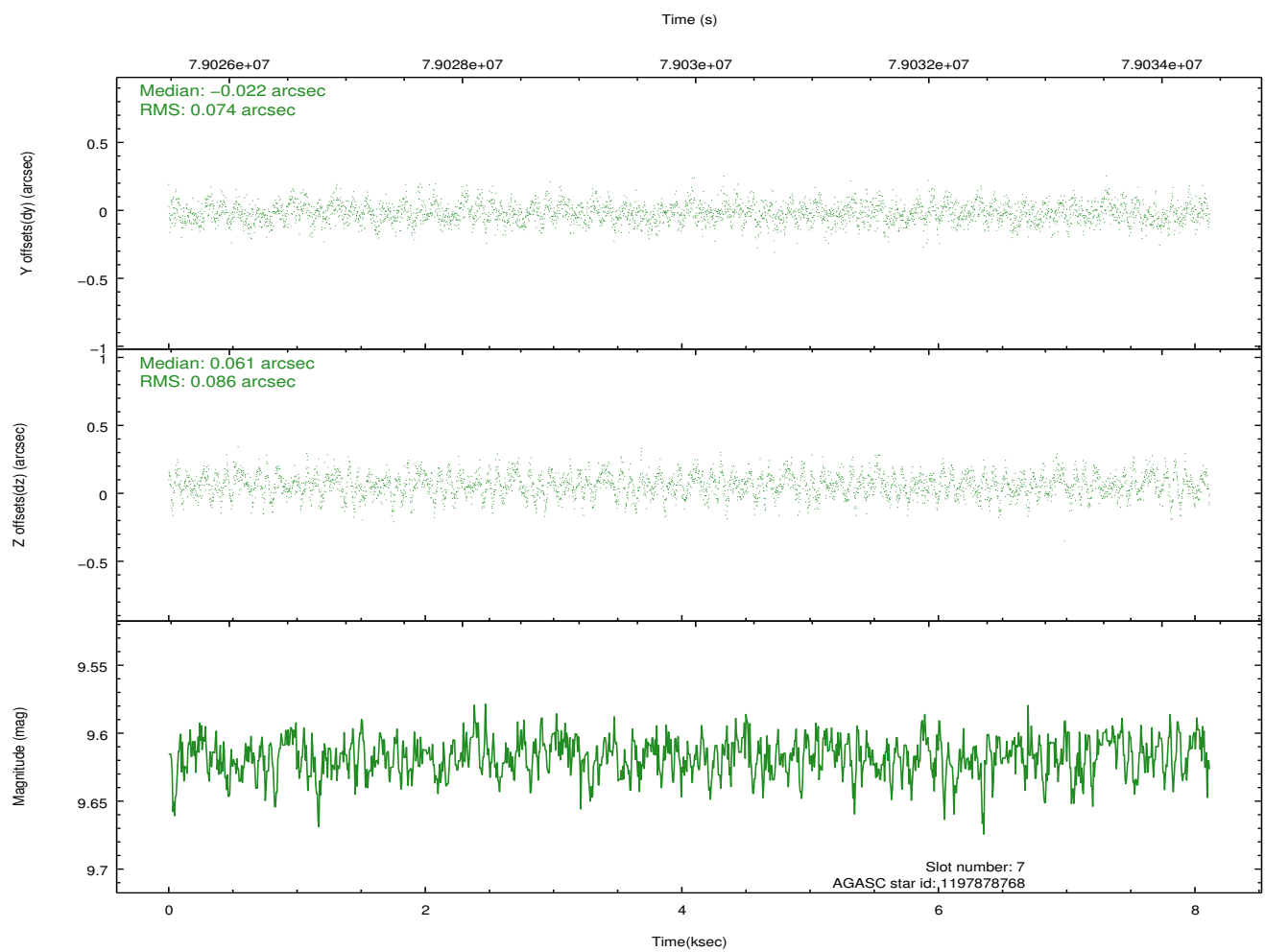
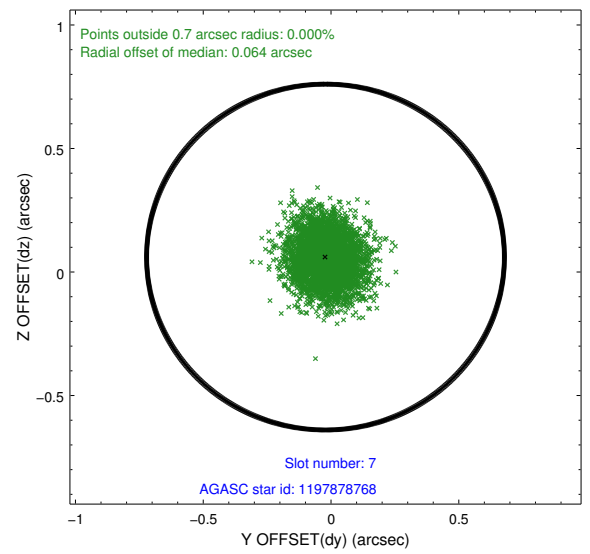
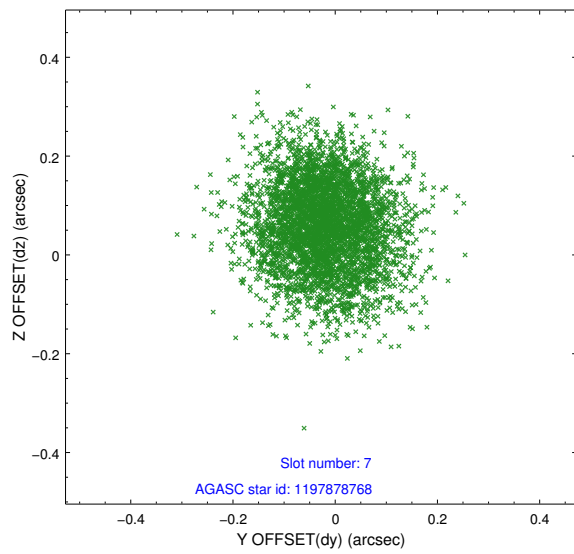
2.4.3 Slot 5



2.4.4 Slot 6

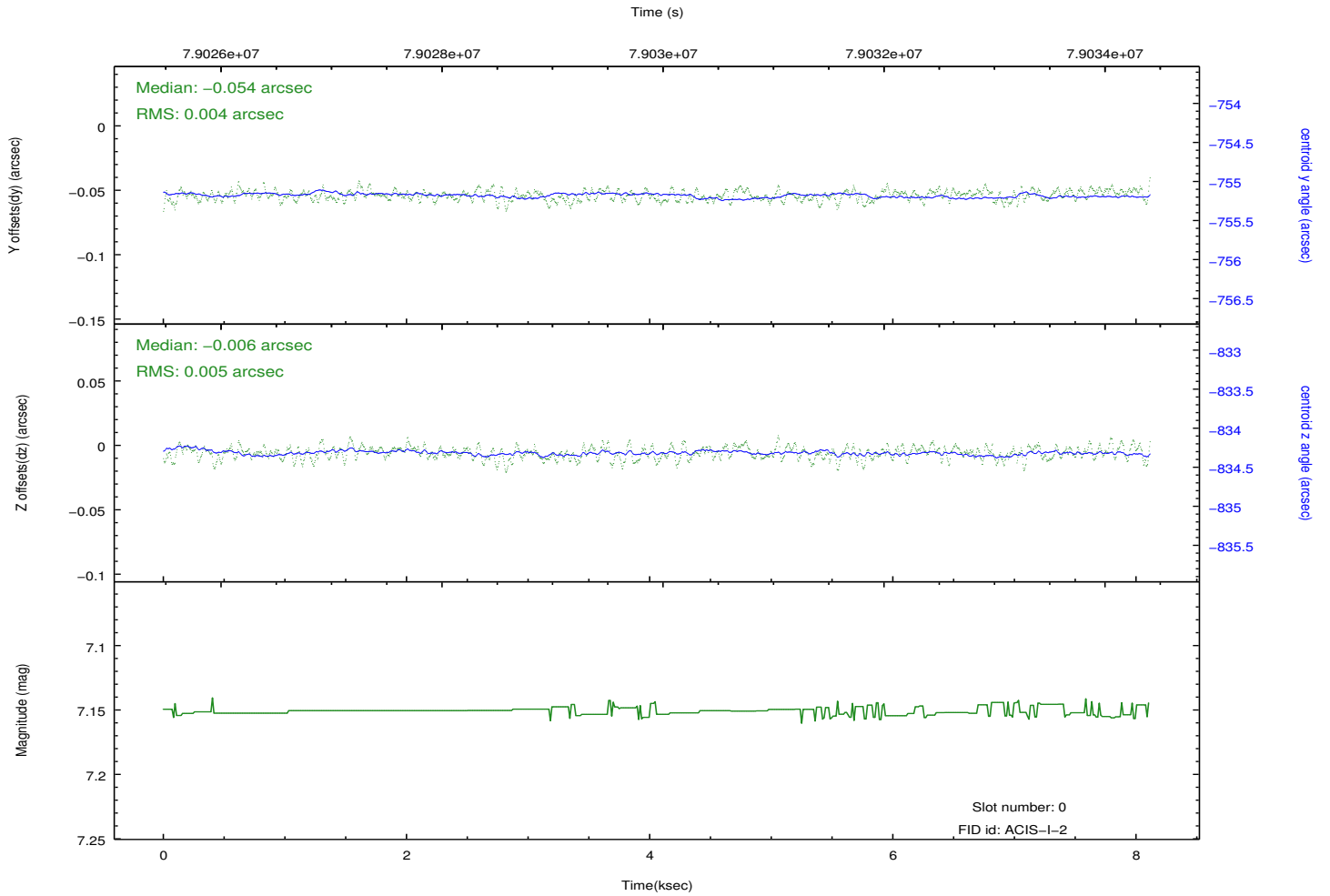
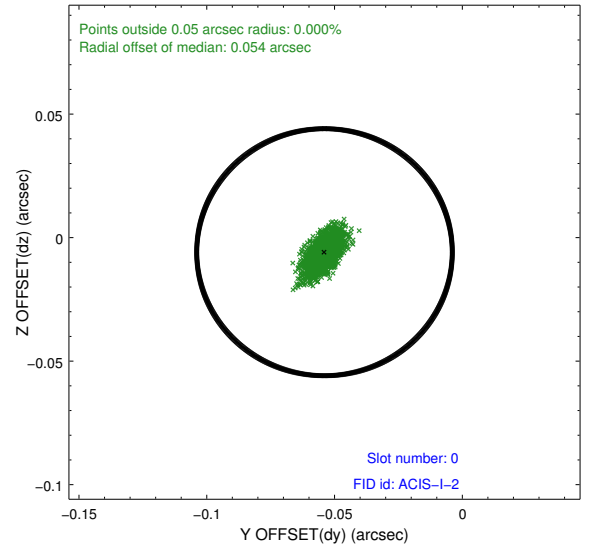
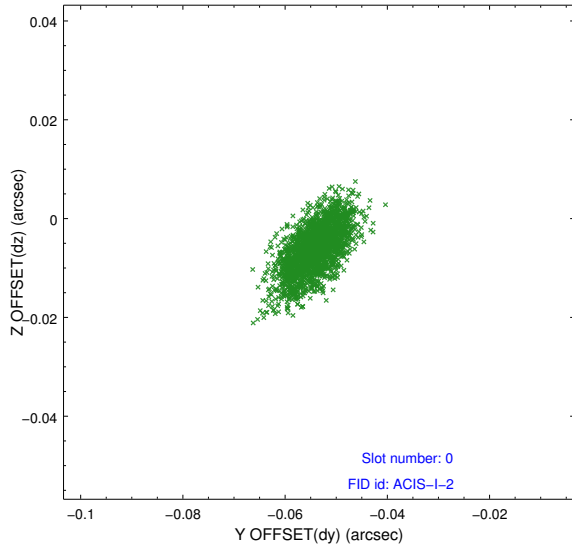


2.4.5 Slot 7

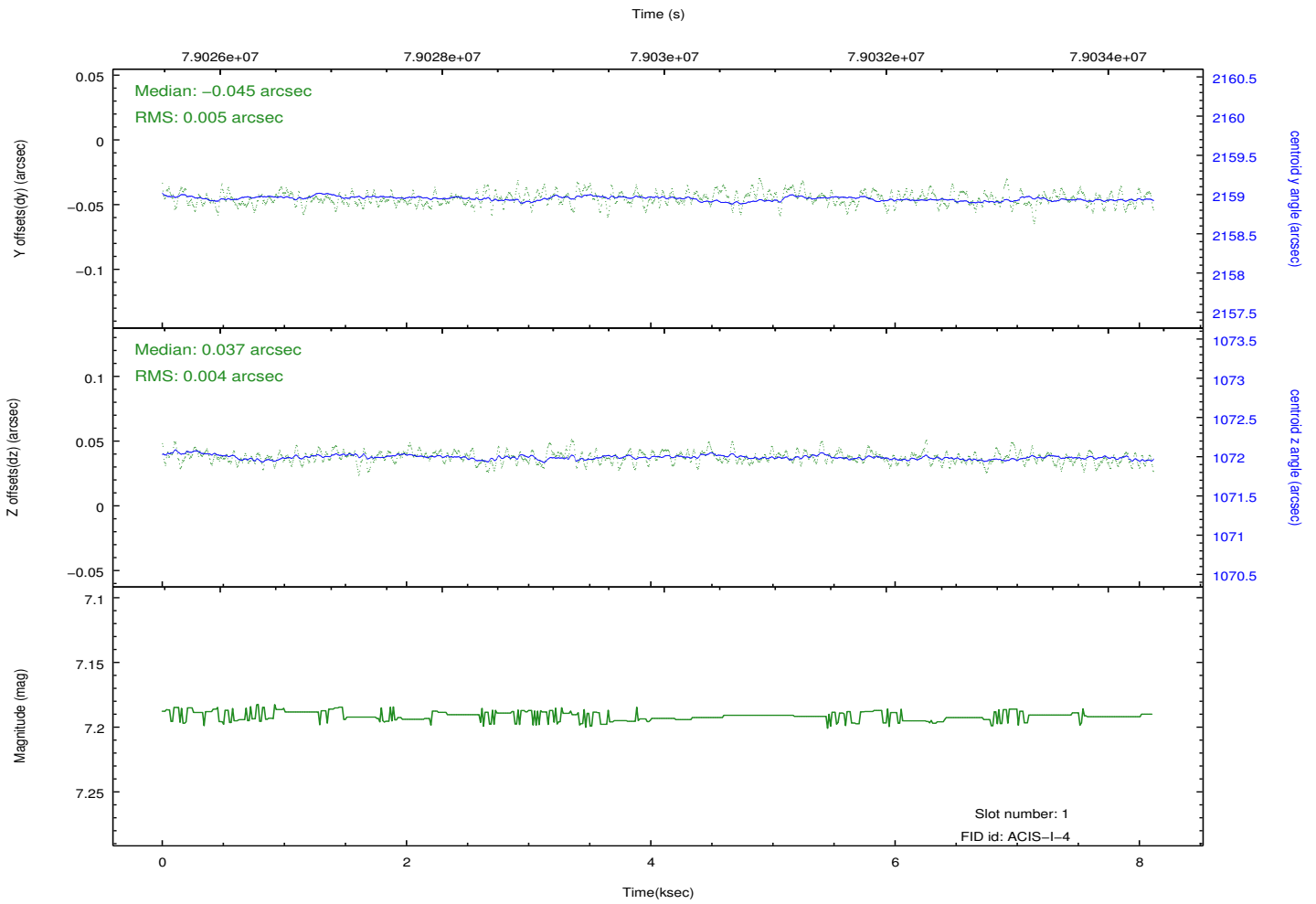
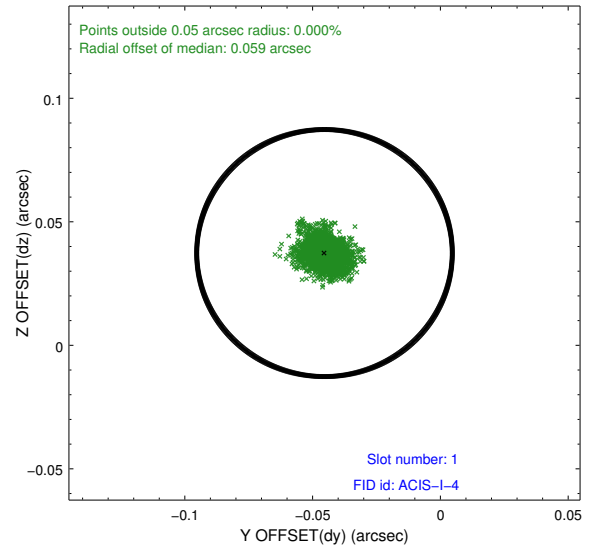
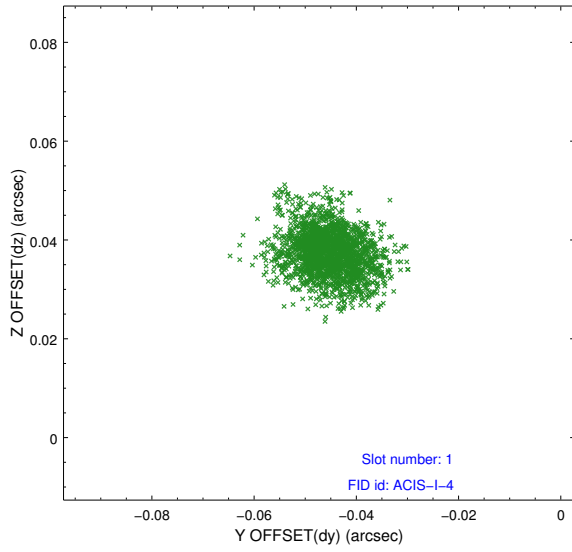


2.5 FID Slots

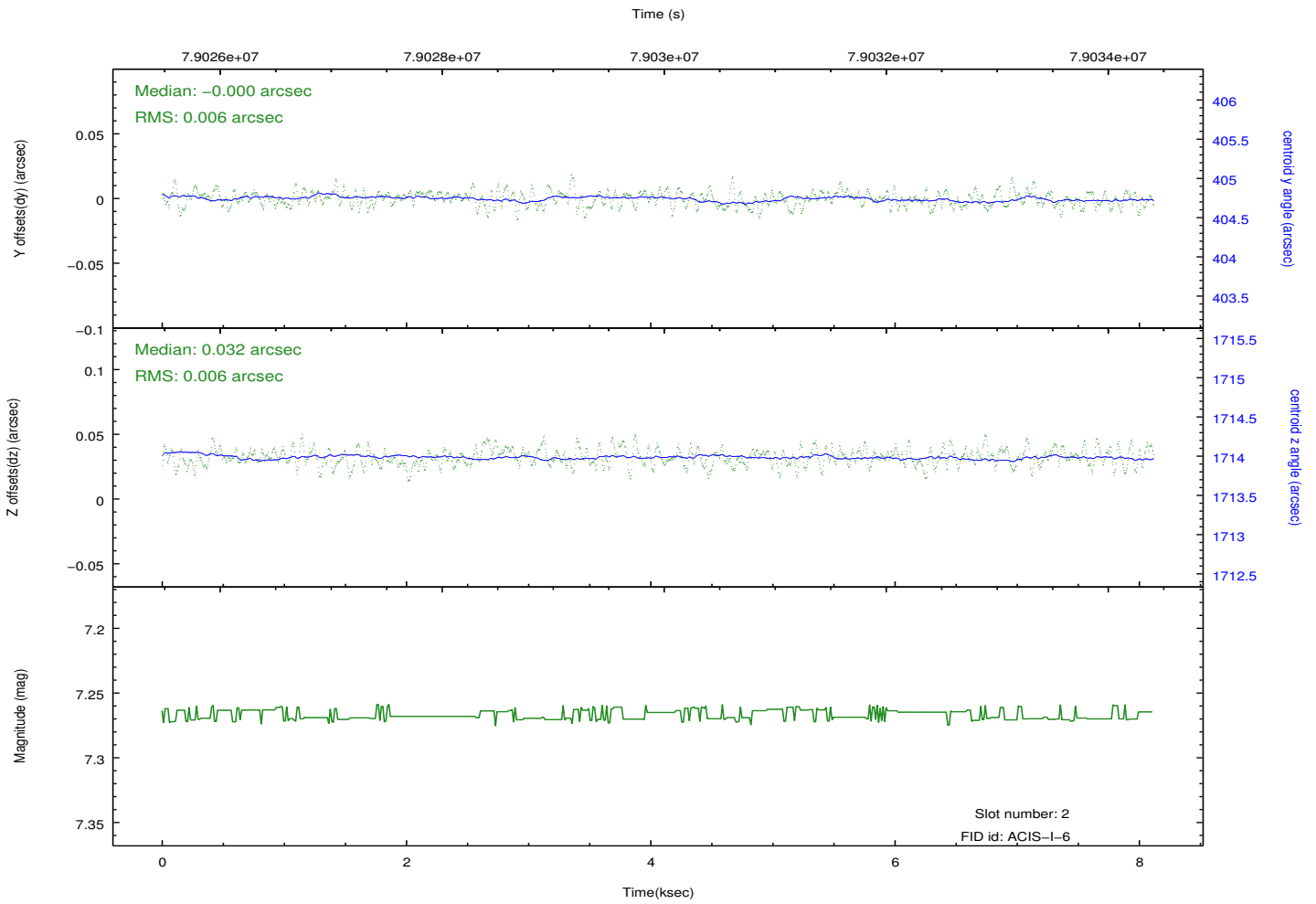
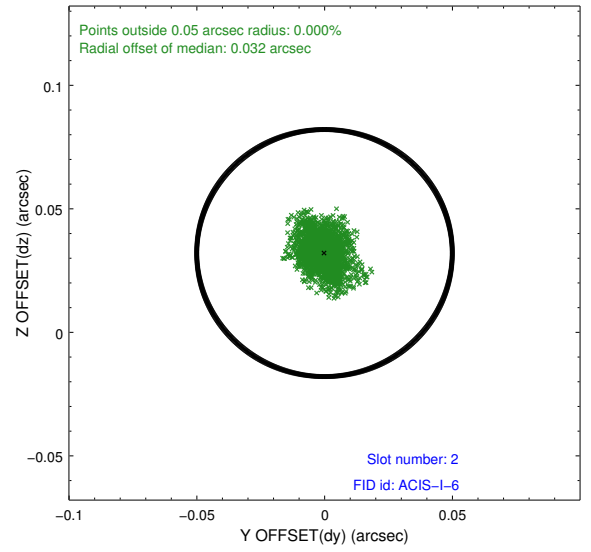
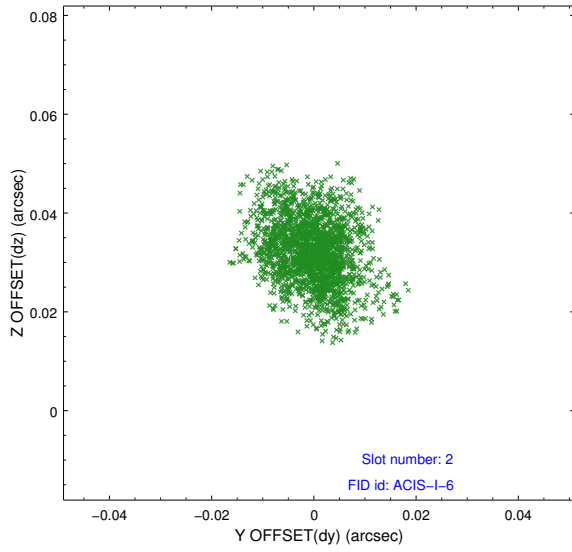
2.5.1 Slot 0



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)	2012.09.05
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	7.692

A.2 Comments

The focal-plane temperature was set to a temperature of about -109.2 C during this observation and others in the interval from September 17, 1999 to January 29, 2000. The current reprocessing of the data applies no charge-transfer inefficiency (CTI) adjustment to the data because the ACIS CTI adjustment has not been calibrated at this temperature. The CTI adjustment is calibrated for data taken from January 30, 2000 to the present, when the focal-plane temperature is set to -119.7 C. However, if the observation includes one or both back-illuminated CCDs ACIS-S1 and ACIS-S3, then a time-dependent gain adjustment is applied to the data for these CCDs. The ACIS spectral response calibration is less accurate at temperatures of about -109.2 C than it is at -119.7 C. Users whose science objectives depend on the most accurate spectral response (i.e. fitting line-rich spectra) may notice an effect. Users whose science objectives do not depend on the most accurate spectral response (e.g. those interested in imaging or timing analyses) should not notice an effect.