

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 1782 - L2 Version 5
Chandra X-Ray Center

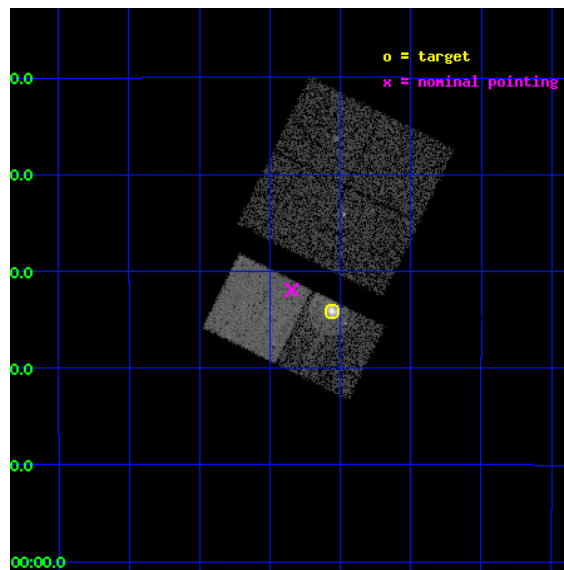
L2 Processing Date : Aug 30 2012

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 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

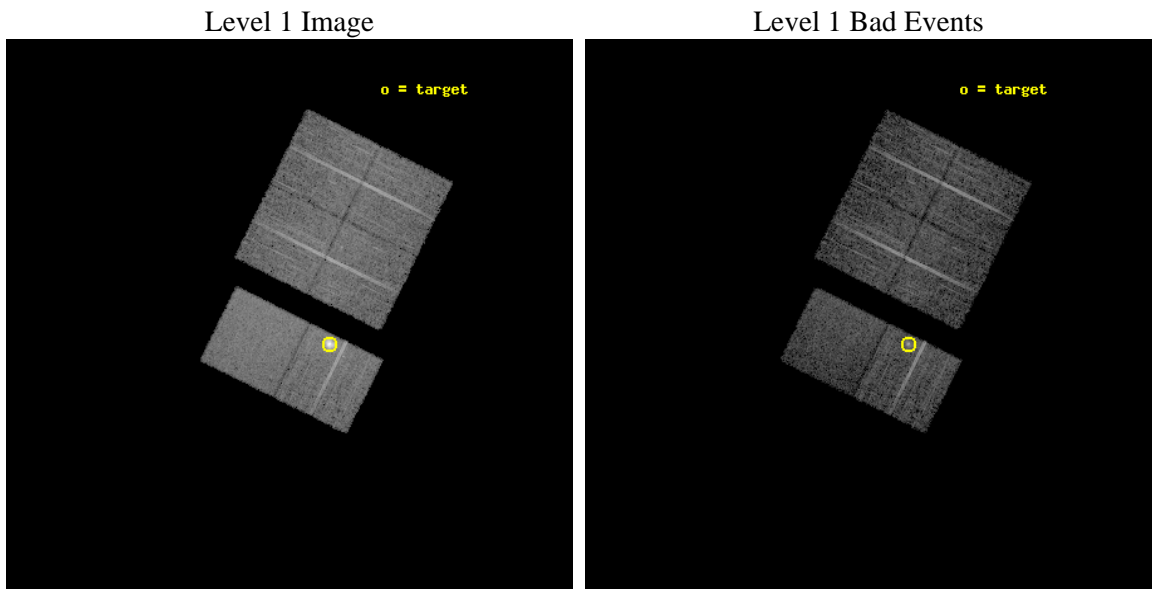
seq_num	590208	Sequence number
obs_id	1782	Observation id
title	HRC RESPONSE TO CONTINUUM SOURCE.	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	G21.5-0.9 [Chip S2, T=110, Offsets=5,0,-3]	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	278.389583	Observer's specified target RA [deg]
dec_targ	-10.568528	Observer's specified target Dec [deg]
ra_nom	278.46097714374	Nominal RA [deg]
dec_nom	-10.53199316494	Nominal Dec [deg]
roll_nom	206.37444674822	Nominal Roll [deg]
revision	5	Processing version of data
ontime	7318.4000068009	Sum of GTIs [s]
livetime	7225.7300193033	Livetime [s]
ontime0	7318.4000068009	Sum of GTIs [s]
ontime1	7318.4000068009	Sum of GTIs [s]
ontime2	7318.4000068009	Sum of GTIs [s]
ontime3	7318.4000068009	Sum of GTIs [s]
ontime6	7318.4000068009	Sum of GTIs [s]
ontime7	7318.4000068009	Sum of GTIs [s]
l2events	63402	Number of level 2 events



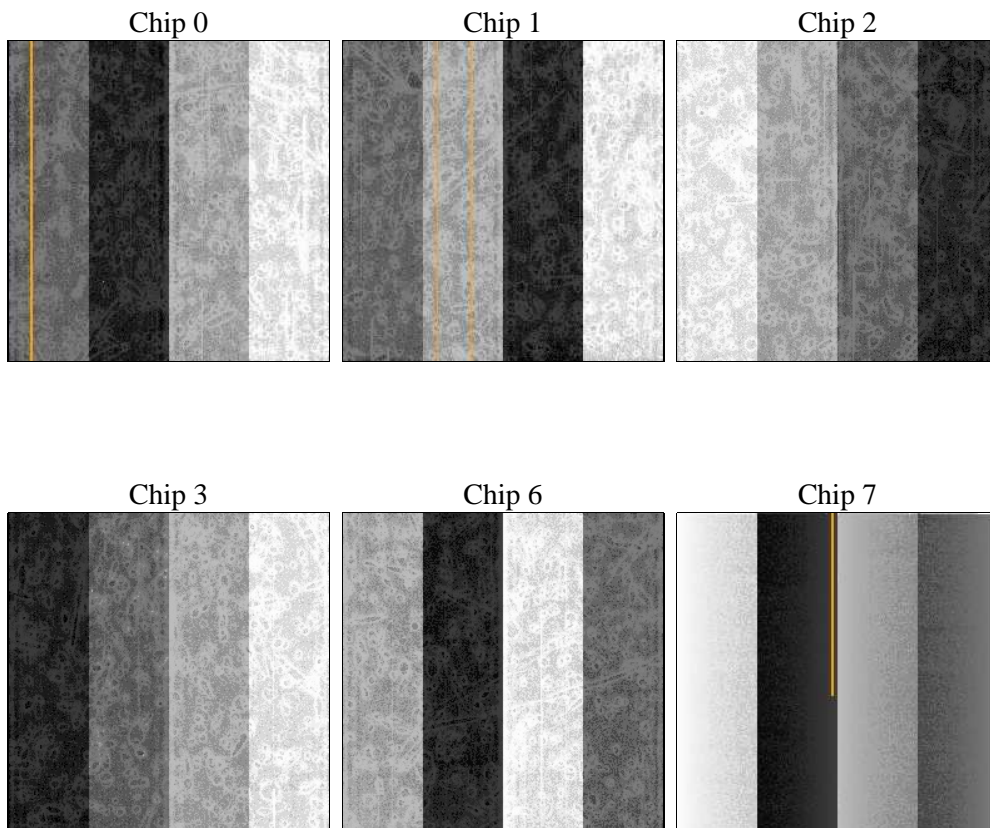
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	7560.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	7318.4000068009	Sum of GTIs [s]
caldbver	4.5.1.1	 	ontime0	7318.4000068009	Sum of GTIs [s]
date	2012-08-30T03:40:32	Date and time of file creation	ontime1	7318.4000068009	Sum of GTIs [s]
revision	5	Processing version of data	ontime2	7318.4000068009	Sum of GTIs [s]
			ontime3	7318.4000068009	Sum of GTIs [s]
			ontime6	7318.4000068009	Sum of GTIs [s]
			ontime7	7318.4000068009	Sum of GTIs [s]
			l1events	324192	Number of level 1 events

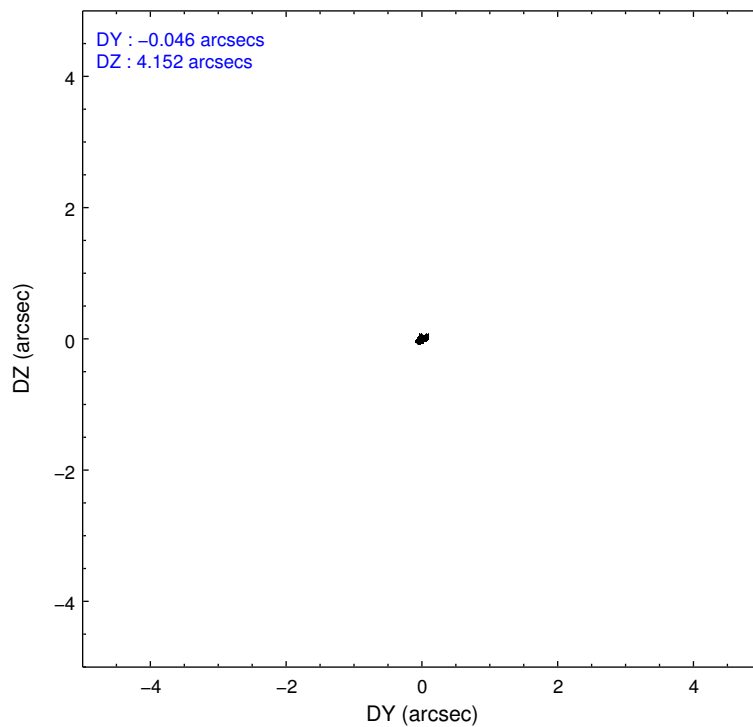
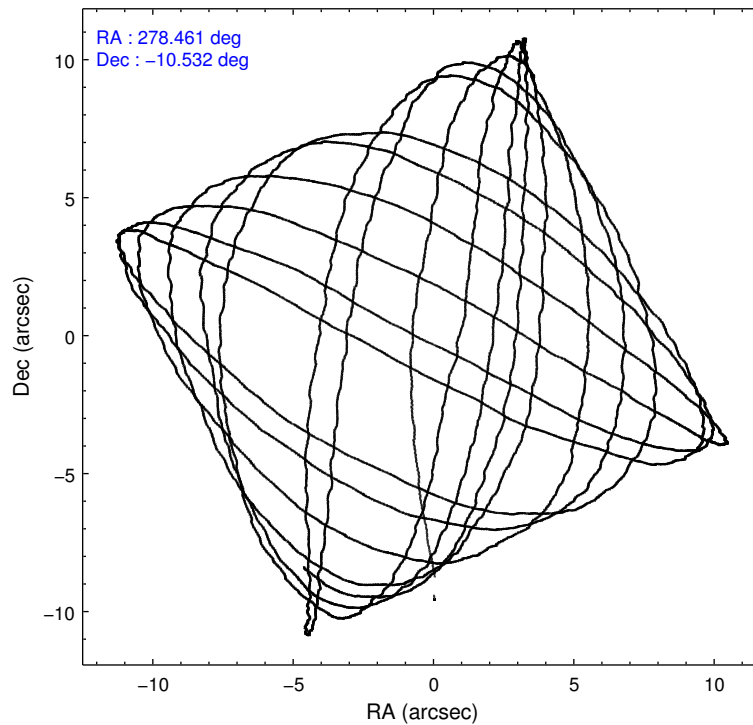
2.1.4 Events

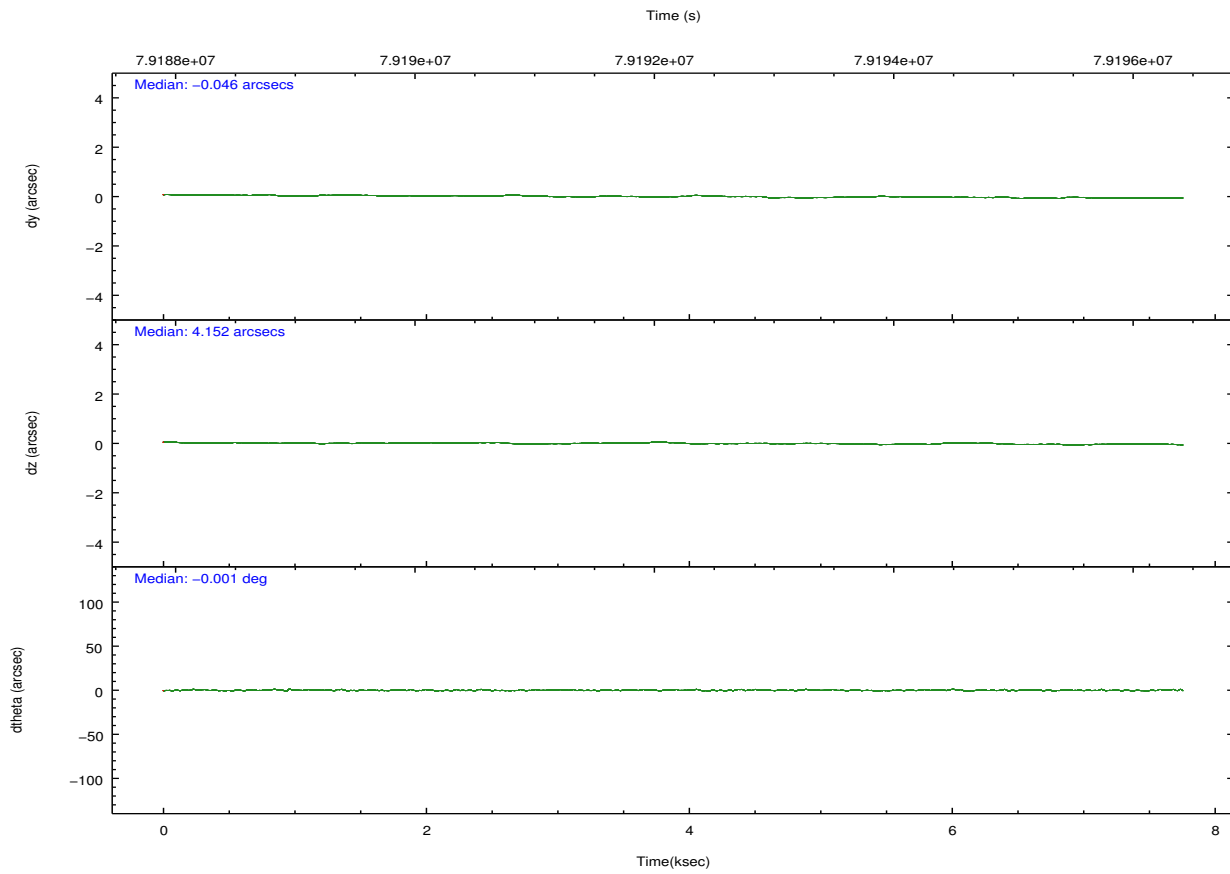
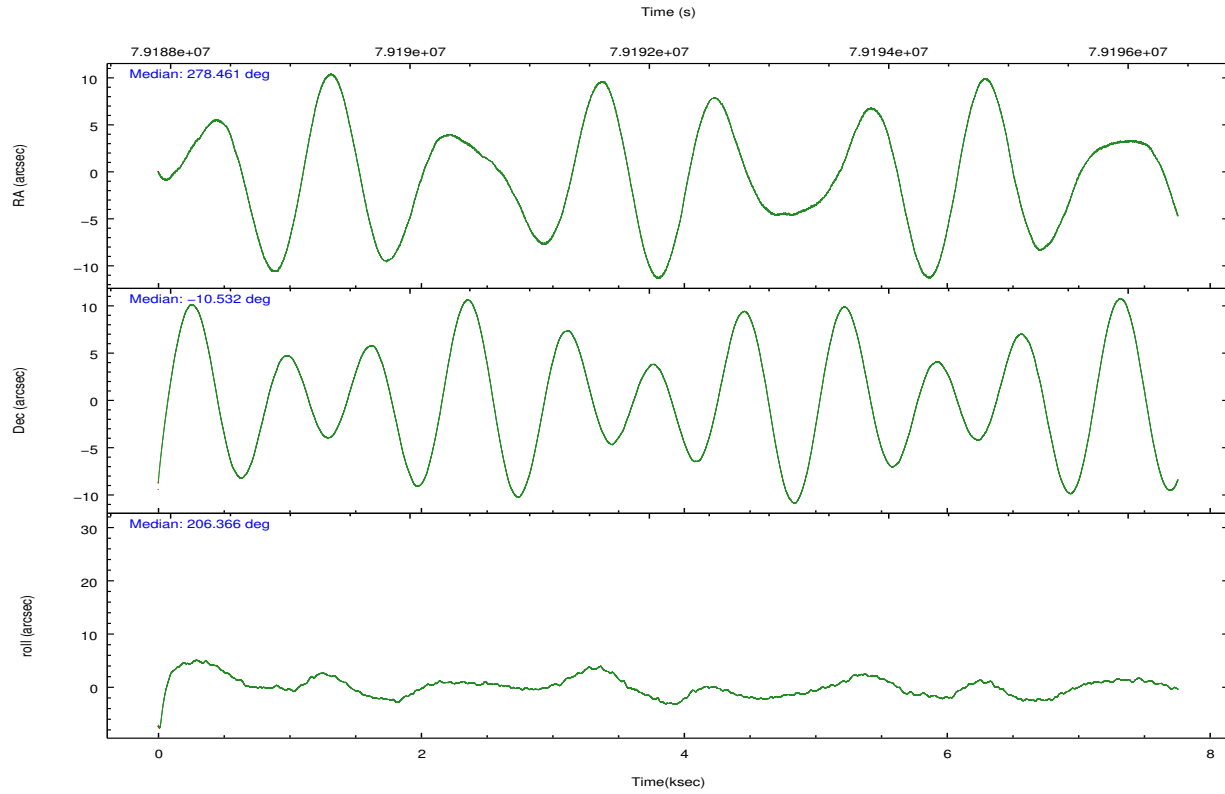
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	48151	47186	49569	48997	72826	57463	grade 0 events	1336	1309	1338	1190	3800	1356
rejected events	42722	41608	44050	43787	47510	35491		2%	2%	2%	2%	5%	2%
rejected %	88%	88%	88%	89%	65%	61%	grade 1 events	14	10	10	7	27	32
								0%	0%	0%	0%	0%	0%
							grade 2 events	2039	2067	2305	2060	17220	4751
								4%	4%	4%	4%	23%	8%
							grade 3 events	395	445	326	348	488	1307
								0%	0%	0%	0%	0%	2%
							grade 4 events	384	416	336	316	417	1147
								0%	0%	0%	0%	0%	1%
							grade 5 events	1042	1056	893	1005	1339	3533
								2%	2%	1%	2%	1%	6%
							grade 6 events	1278	1347	1220	1303	3408	13433
								2%	2%	2%	2%	4%	23%
							grade 7 events	41663	40536	43141	42768	46127	31904
								86%	85%	87%	87%	63%	55%

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	278.476235	278.4609771437363	Subarray requested	NONE	NONE
[deg] Pointing Dec	-10.509125	-10.53199316493973	Alternating exposures requested	N	N
[deg] Pointing Roll	206.220612	206.3744467482215	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-199.707123	-199.7145787182124			
[mm] SIM translation stage offset	9.5746	9.582056135204567			
[s] Observation start time (MET)	79188476.184000	79188099.69167601			
Observation start date	2000-07-05T12:46:52	2000-07-05T12:41:39			
[s] Observation end time (MET)	79196036.184000	79196181.816974			
Observation end date	2000-07-05T14:52:52	2000-07-05T14:56:21			
Read mode	TIMED	TIMED			

2.3 Aspect



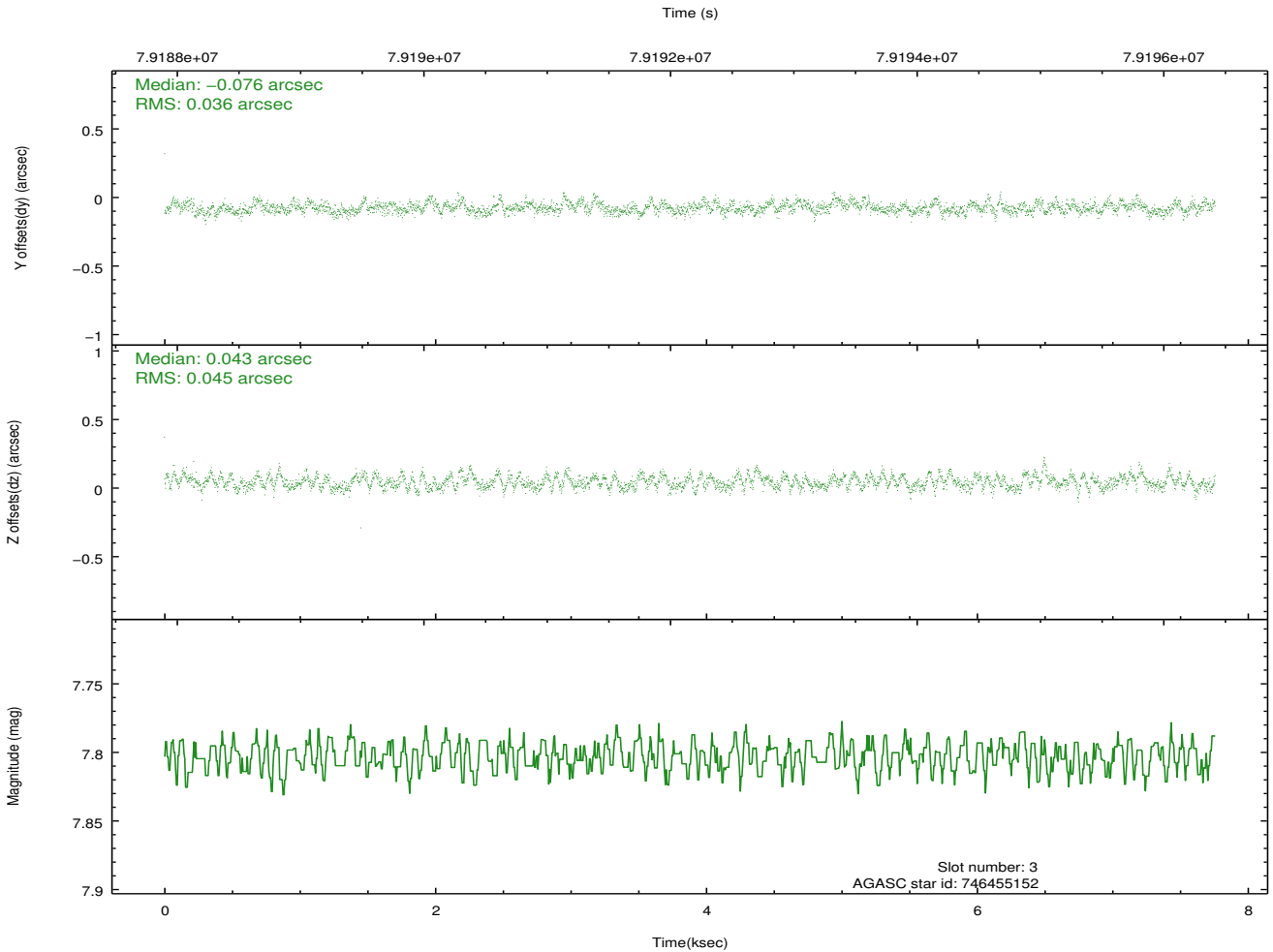
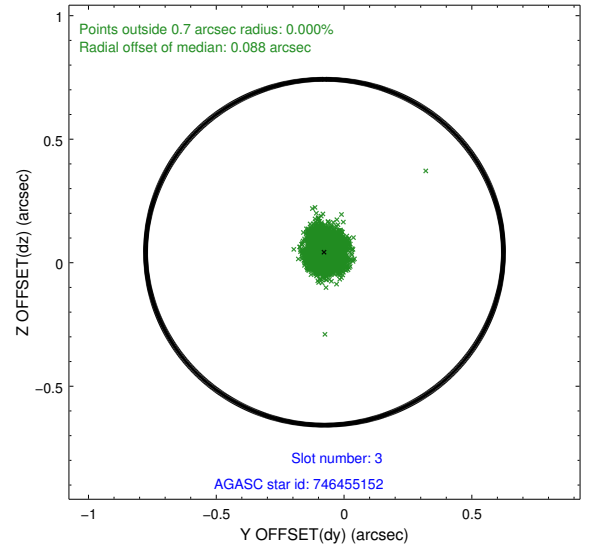
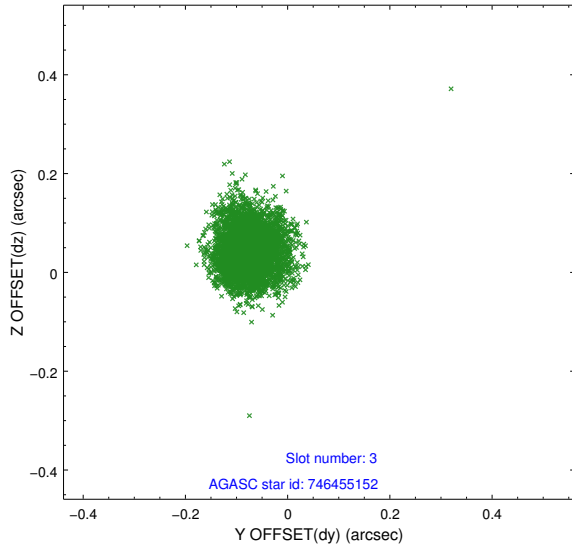


Slot Statistics

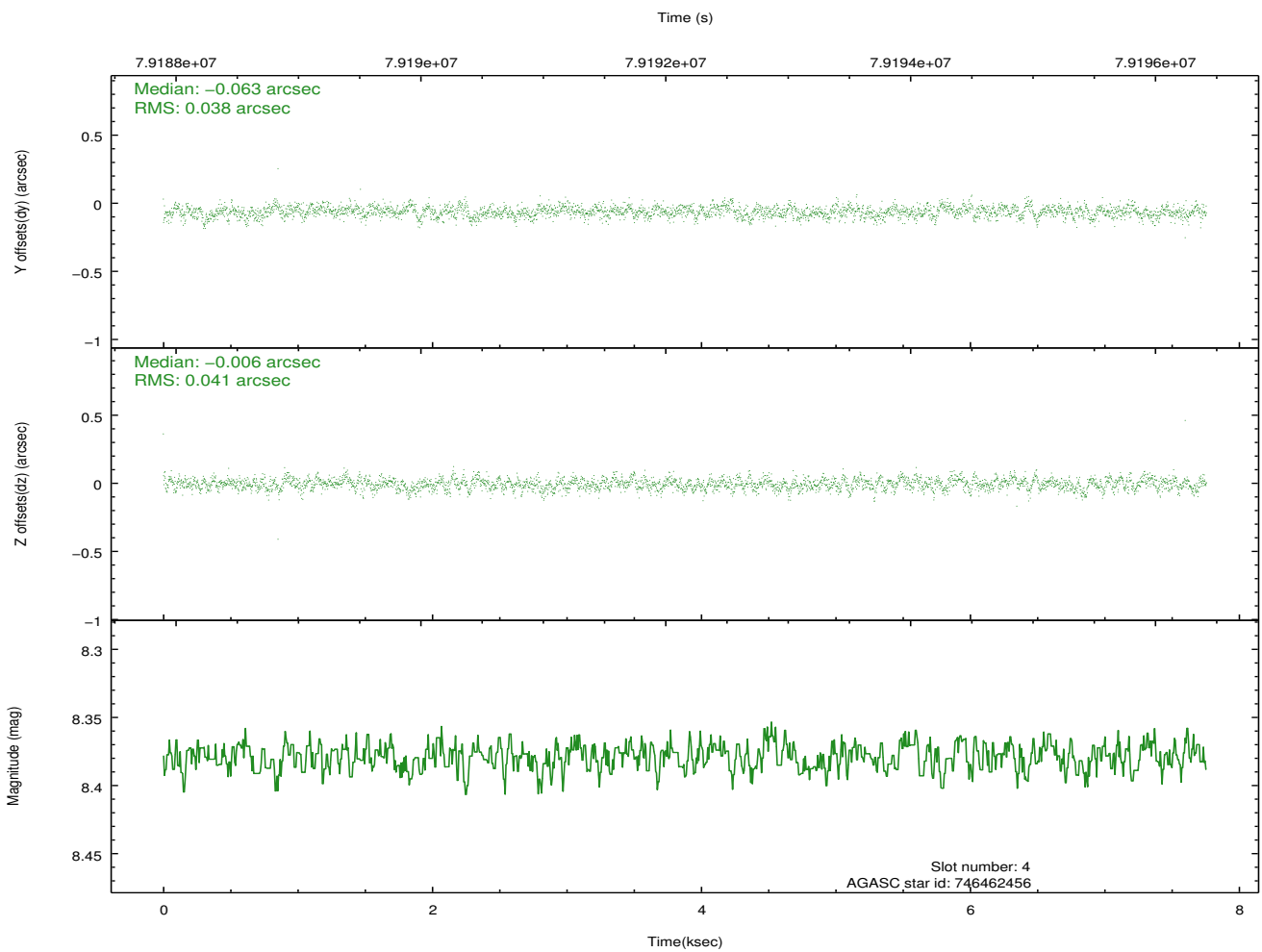
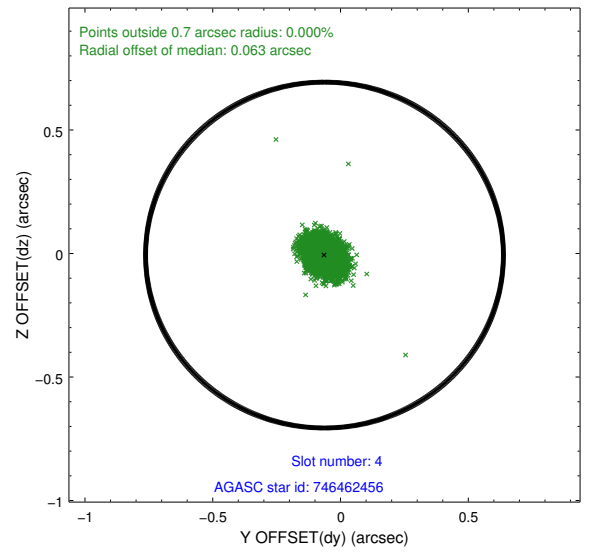
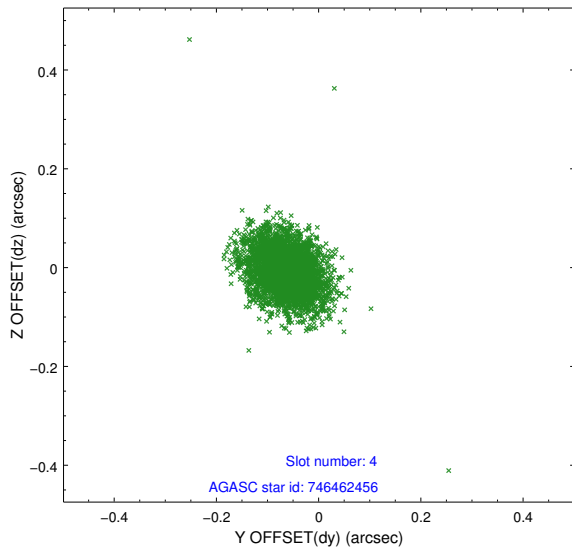
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.15	1893	0.049	0.109	0.007	0.011	0.000000	0.000000	-753.12	-1527.59
1	FID	ACIS-S-4	7.24	1892	-0.029	-0.053	0.006	0.011	0.000000	0.000000	2159.85	379.96
2	FID	ACIS-S-5	7.23	1892	-0.051	-0.046	0.007	0.012	0.000000	0.000000	-1805.03	374.66
3	GUIDE	746455152	7.80	3784	-0.076	0.043	0.060	0.096	278.447893	-9.976732	-756.39	-1763.22
4	GUIDE	746462456	8.38	3784	-0.063	-0.006	0.057	0.096	278.652171	-10.530173	-525.26	343.42
5	GUIDE	746462392	8.55	3784	-0.090	-0.082	0.072	0.117	279.038421	-10.890715	-1175.67	2112.70
6	GUIDE	746455112	8.93	3782	0.214	-0.025	0.063	0.109	278.266531	-10.703234	974.27	300.69
7	GUIDE	746460328	9.80	3780	0.018	0.074	0.091	0.150	278.603974	-9.898096	-1377.62	-1772.51

2.4 Star Slots

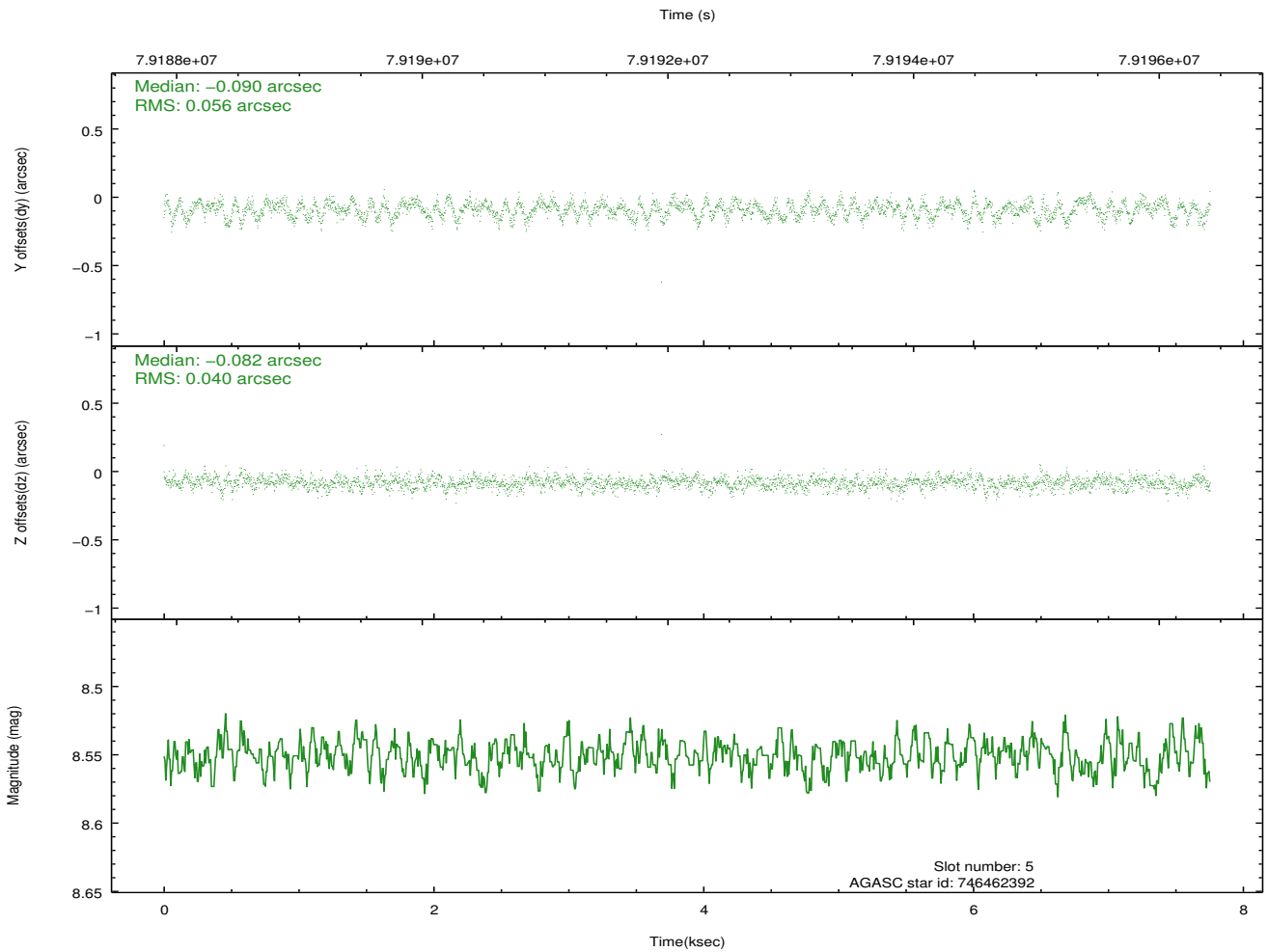
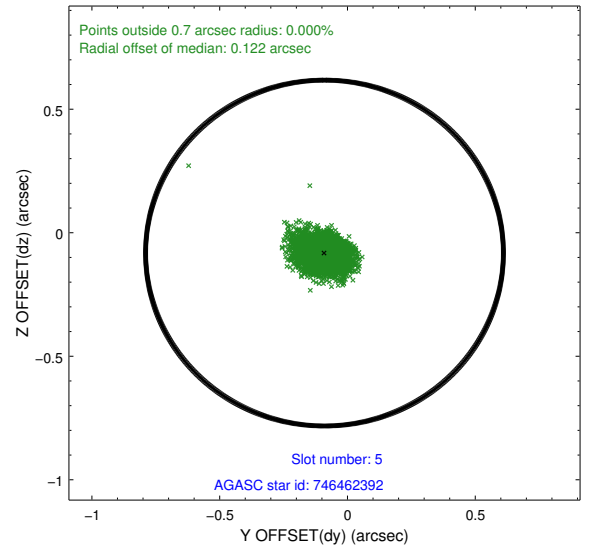
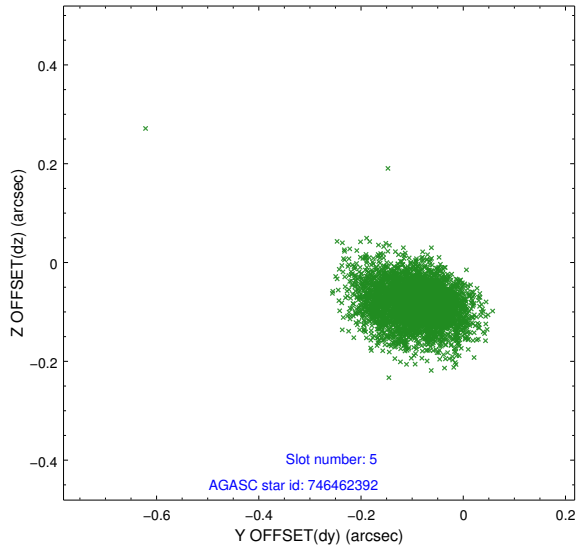
2.4.1 Slot 3



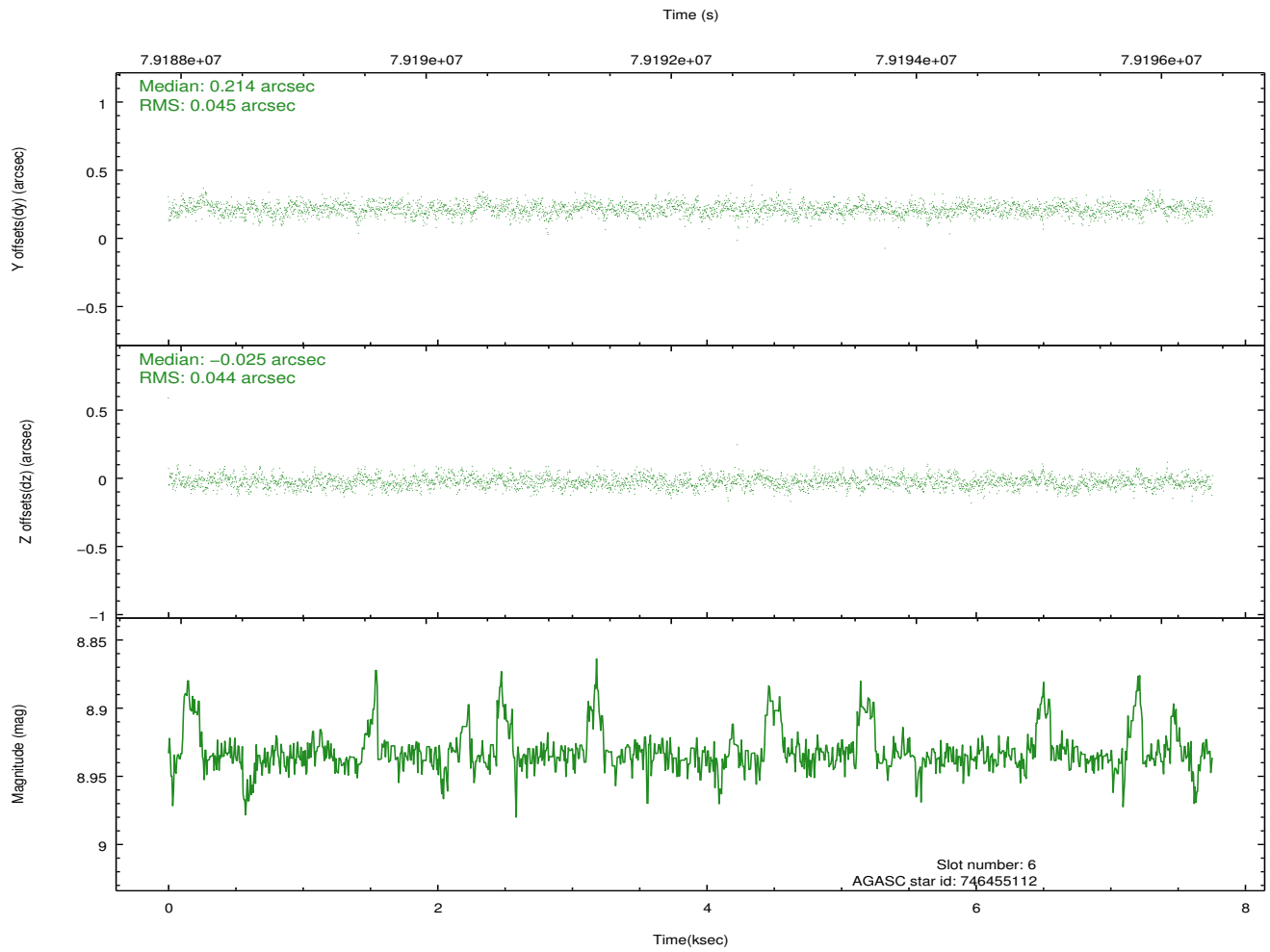
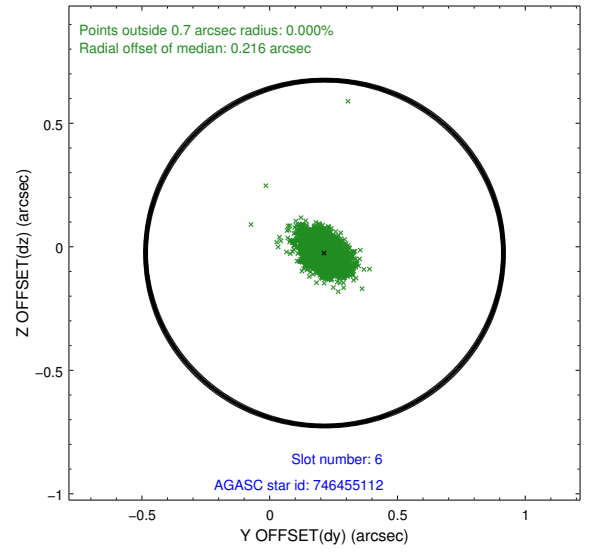
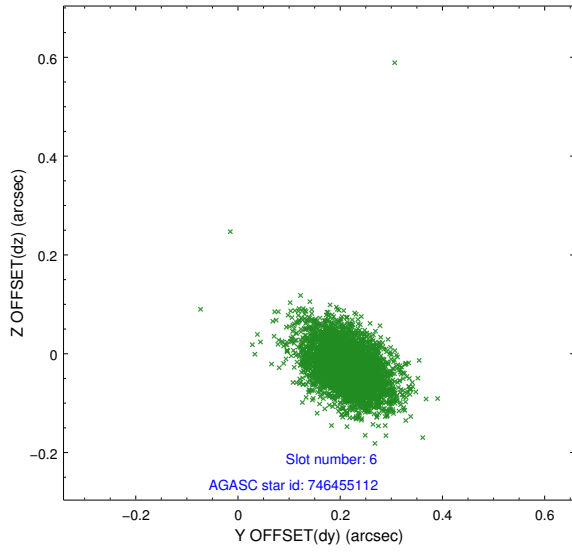
2.4.2 Slot 4



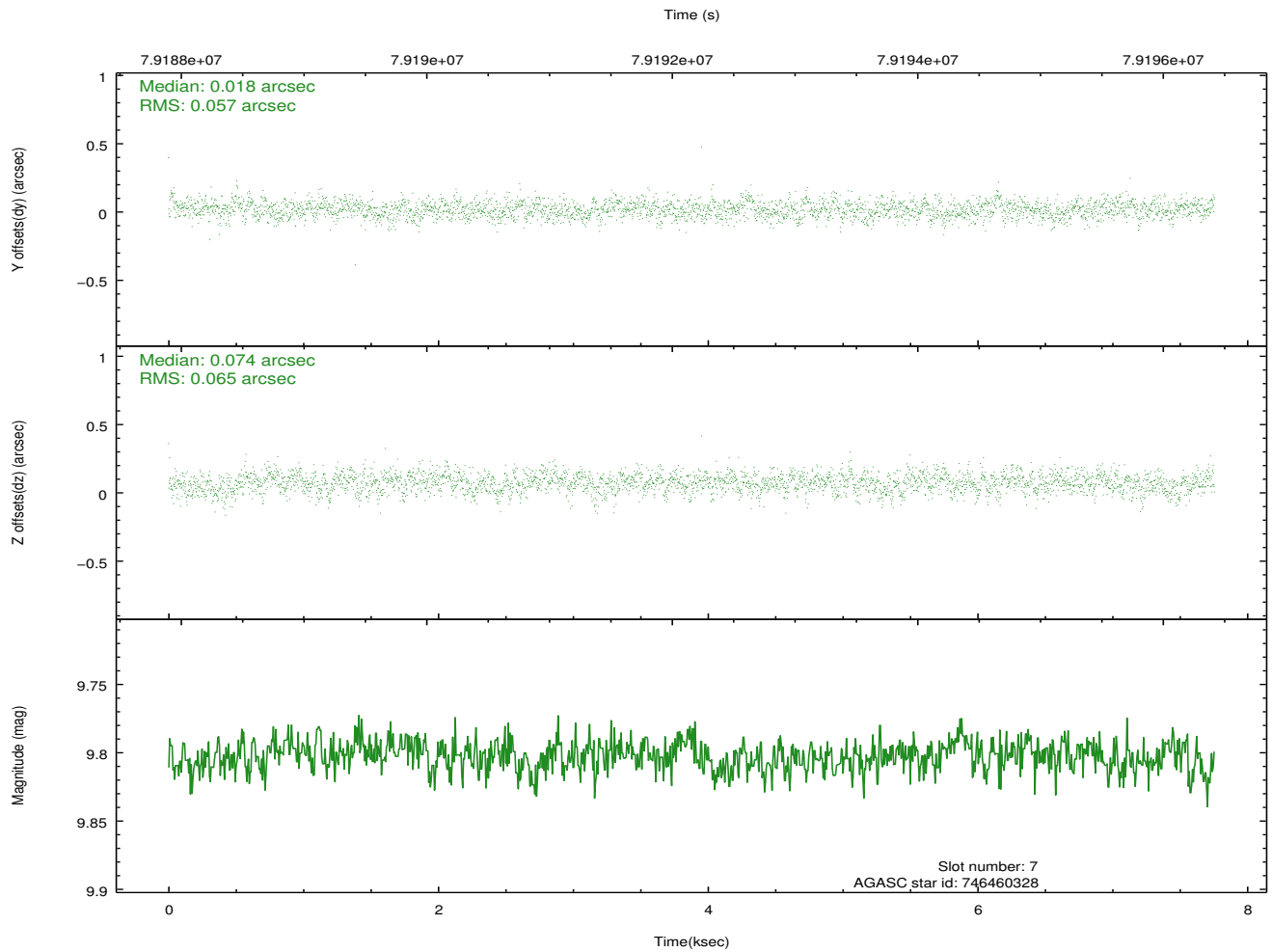
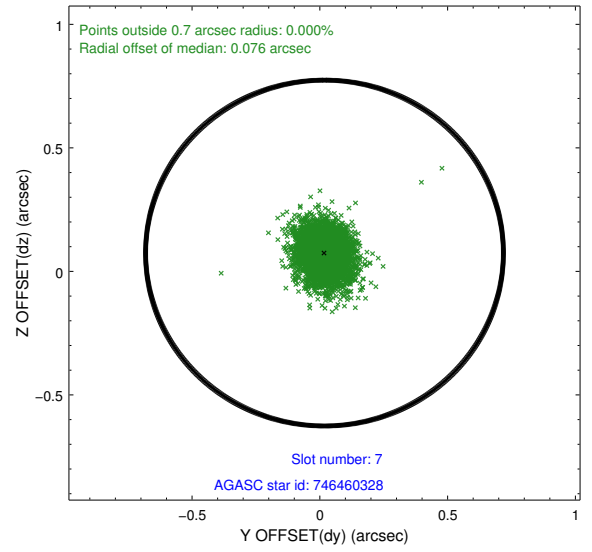
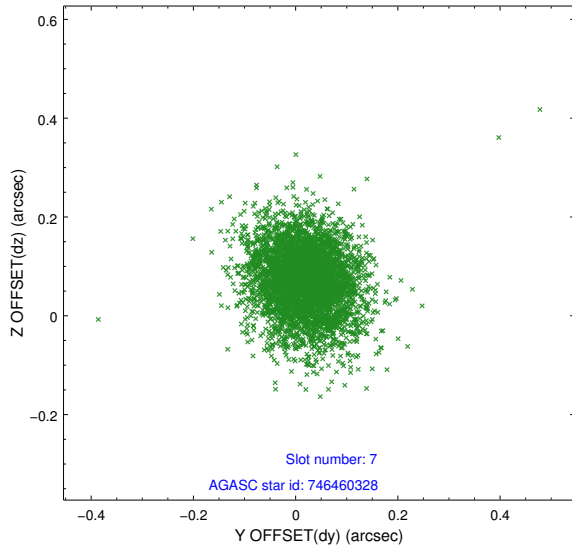
2.4.3 Slot 5



2.4.4 Slot 6

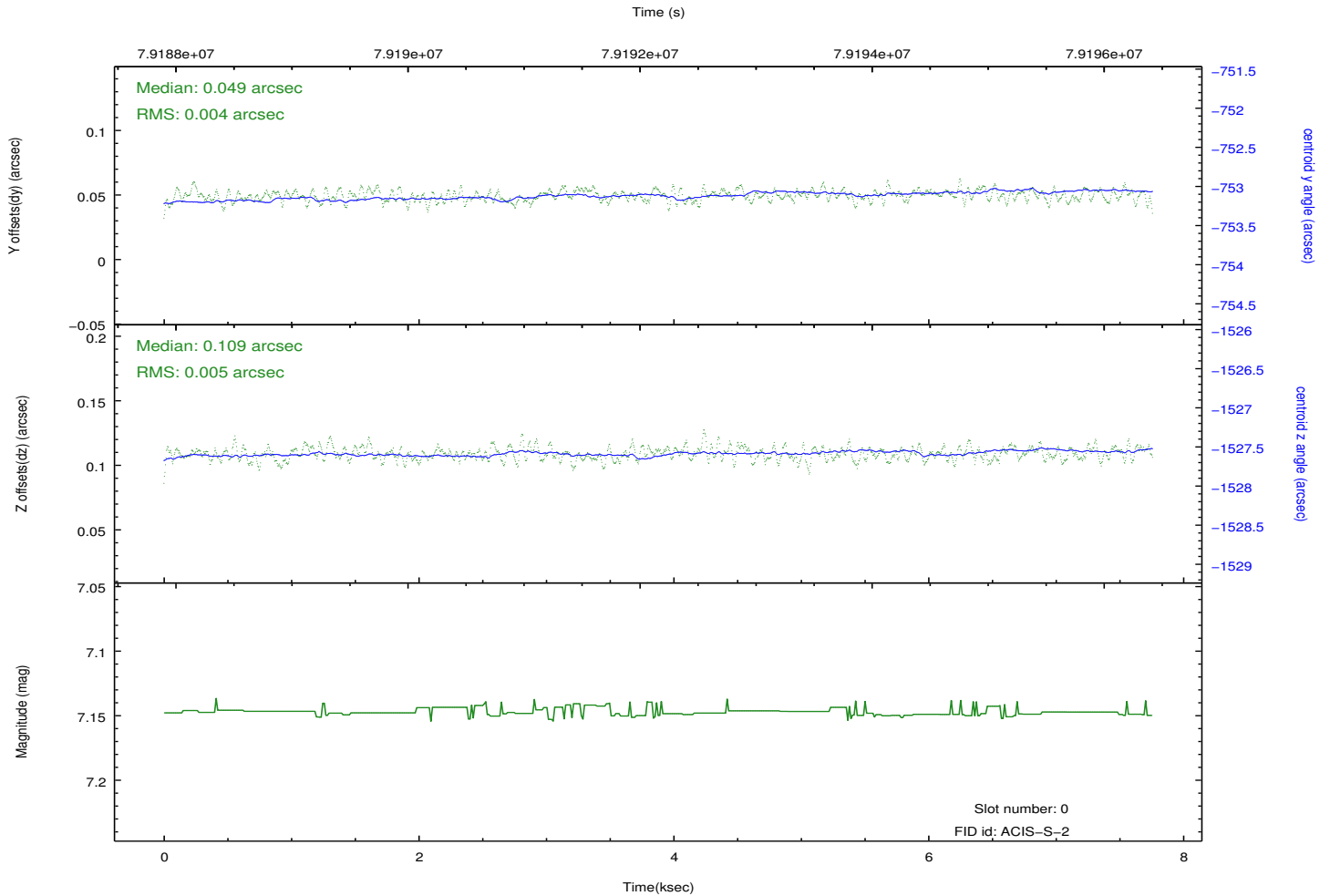
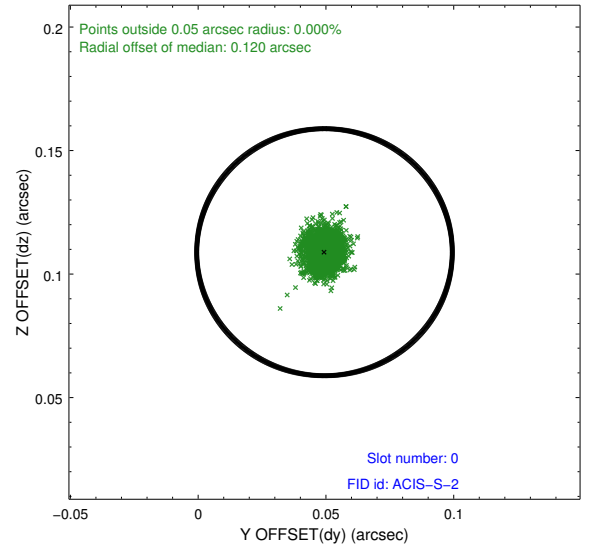
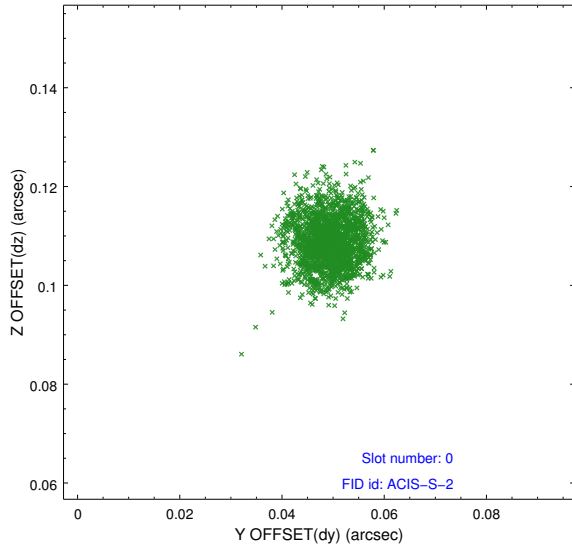


2.4.5 Slot 7

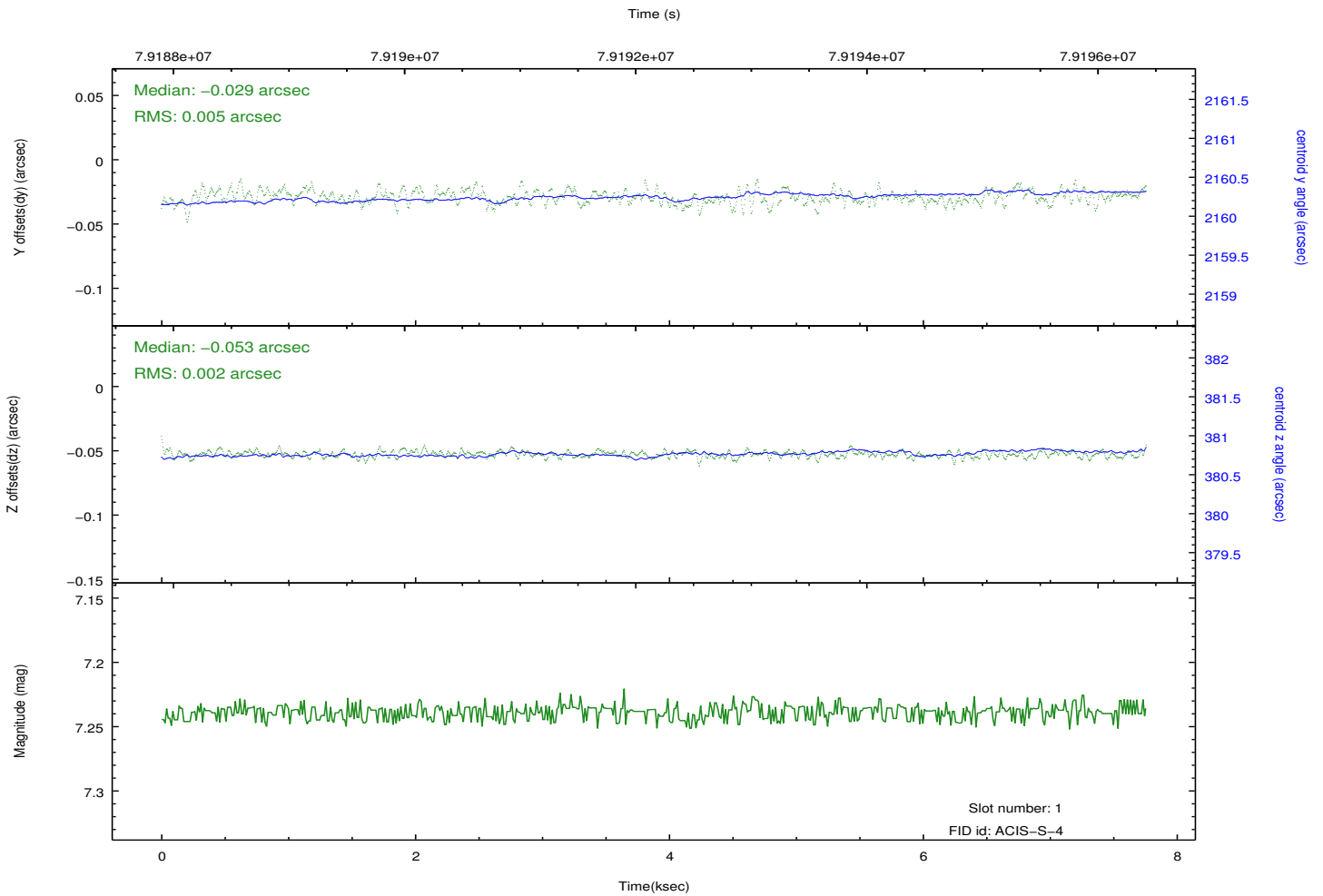
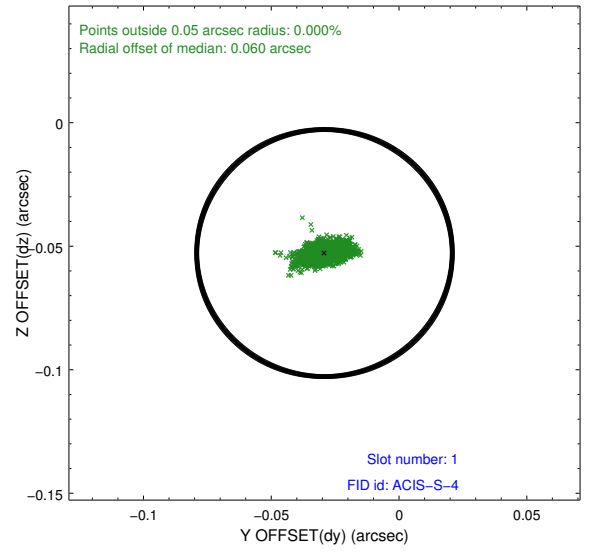
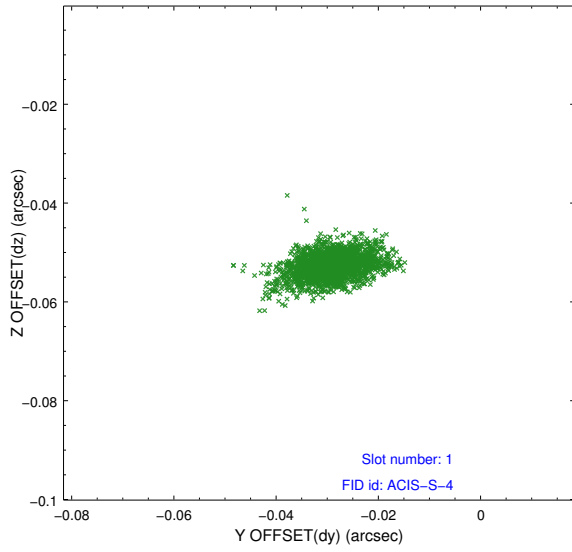


2.5 FID Slots

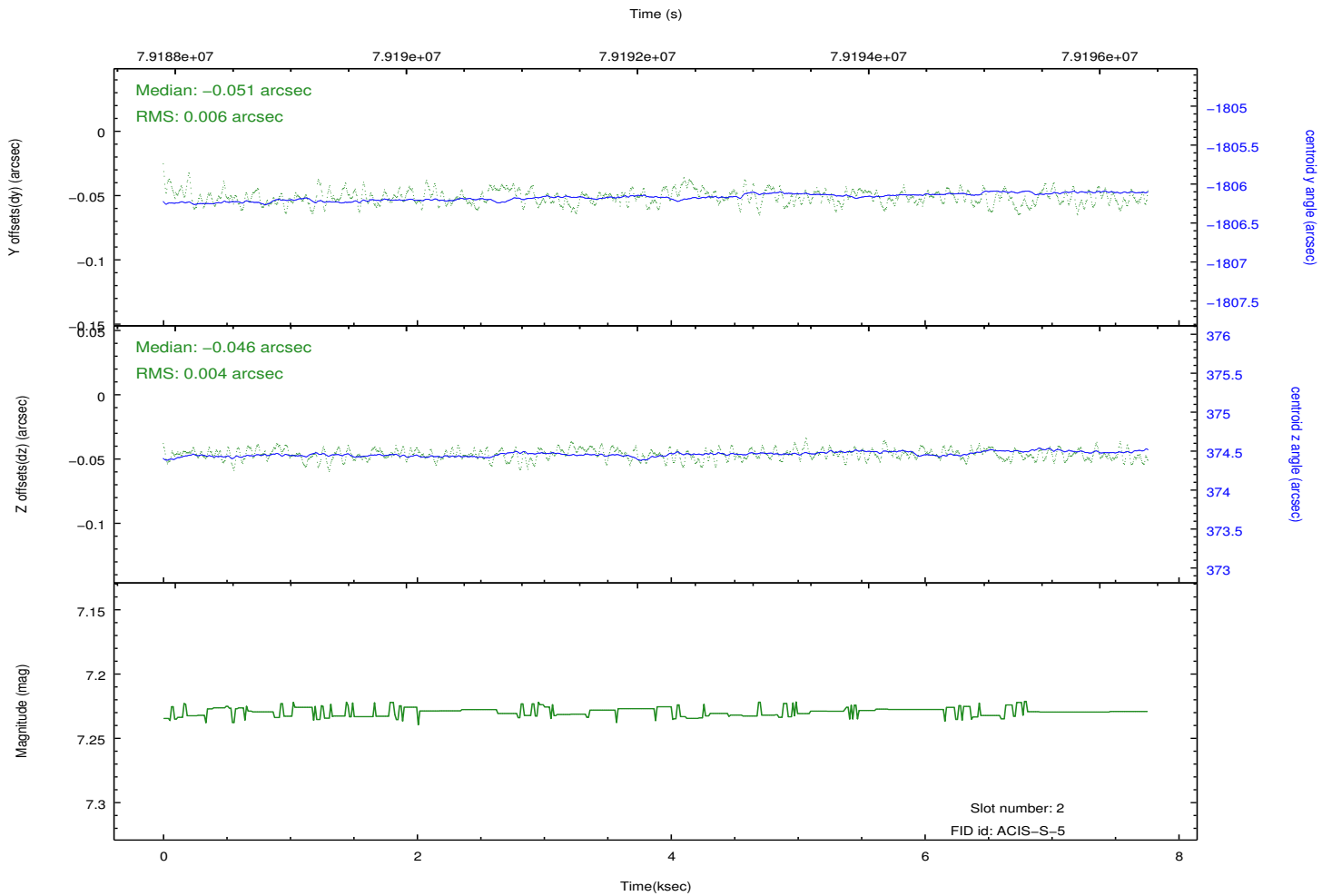
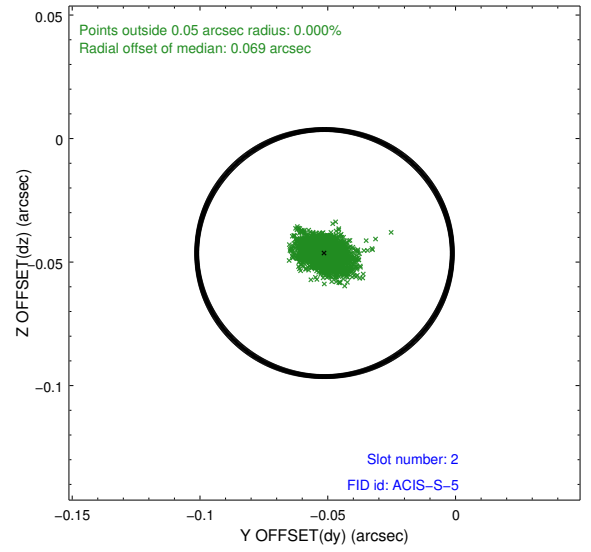
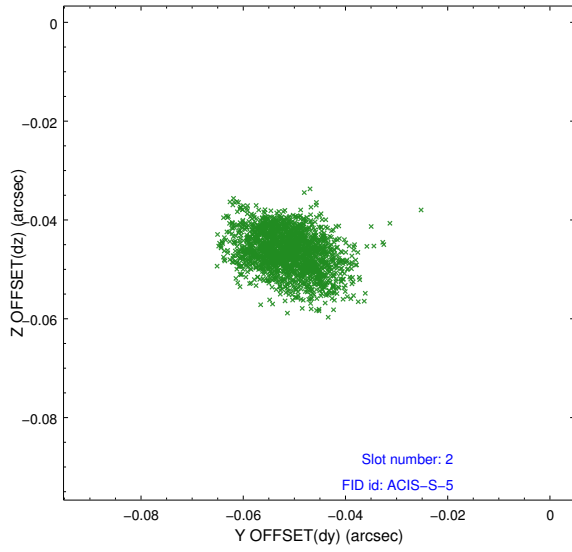
2.5.1 Slot 0



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	7.321

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.