

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 1772 - L2 Version 7
Chandra X-Ray Center

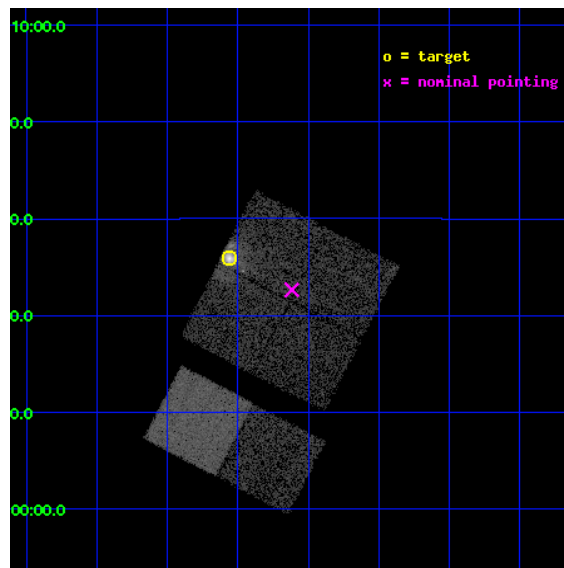
L2 Processing Date : Sep 5 2012

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1 Front

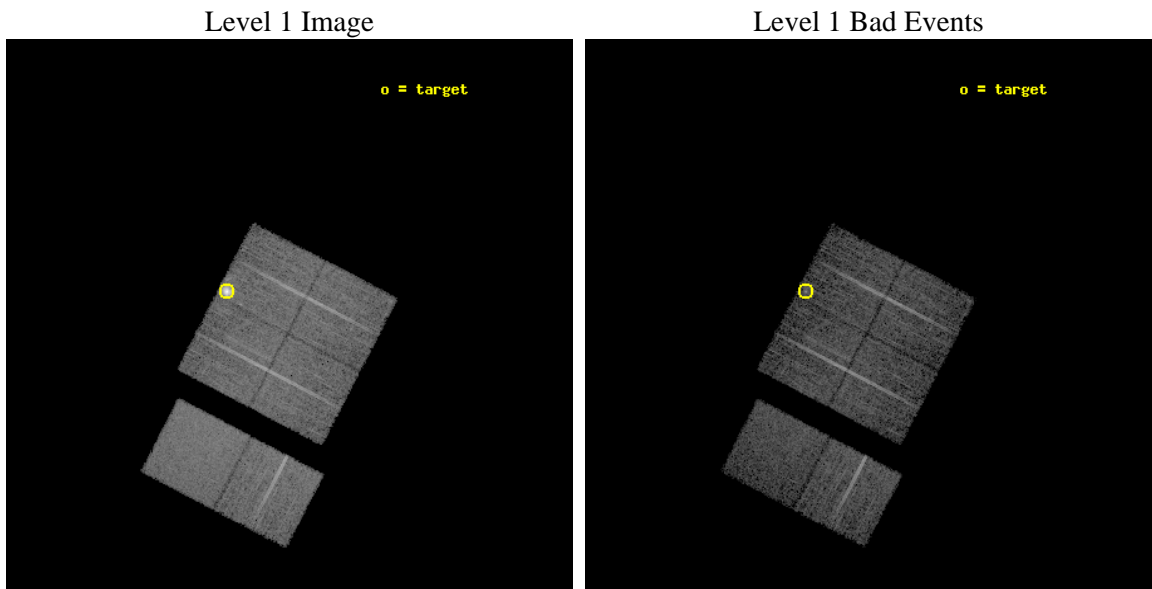
seq_num	590198	Sequence number
obs_id	1772	Observation id
title	HRC RESPONSE TO CONTINUUM SOURCE.	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	G21.5-0.9 [Chip I1, T=110, Offsets=-7,0,-1]	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	278.389583	Observer's specified target RA [deg]
dec_targ	-10.568528	Observer's specified target Dec [deg]
ra_nom	278.27920664508	Nominal RA [deg]
dec_nom	-10.622598373756	Nominal Dec [deg]
roll_nom	207.56930029058	Nominal Roll [deg]
revision	7	Processing version of data
ontime	7506.589440763	Sum of GTIs [s]
livetime	7411.5364853385	Livetime [s]
ontime0	7506.5484007597	Sum of GTIs [s]
ontime1	7506.589440763	Sum of GTIs [s]
ontime2	7506.6304807663	Sum of GTIs [s]
ontime3	7506.6715207547	Sum of GTIs [s]
ontime6	7506.7536007613	Sum of GTIs [s]
ontime7	7506.712560758	Sum of GTIs [s]
l2events	63778	Number of level 2 events



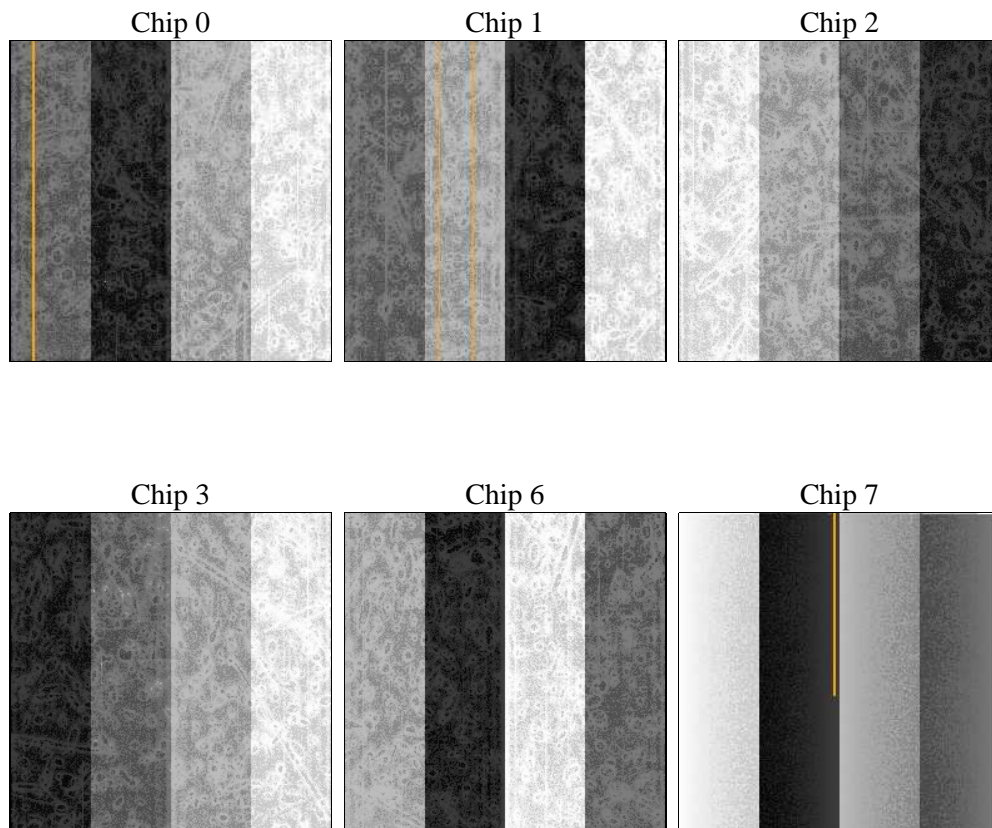
2 OBI

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	7506.589440763	Sum of GTIs [s]
caldsver	4.5.1.1	 	ontime0	7506.5484007597	Sum of GTIs [s]
date	2012-09-05T20:05:32	Date and time of file creation	ontime1	7506.589440763	Sum of GTIs [s]
revision	7	Processing version of data	ontime2	7506.6304807663	Sum of GTIs [s]
			ontime3	7506.6715207547	Sum of GTIs [s]
			ontime6	7506.7536007613	Sum of GTIs [s]
			ontime7	7506.712560758	Sum of GTIs [s]
			l1events	335256	Number of level 1 events

2.1.4 Events

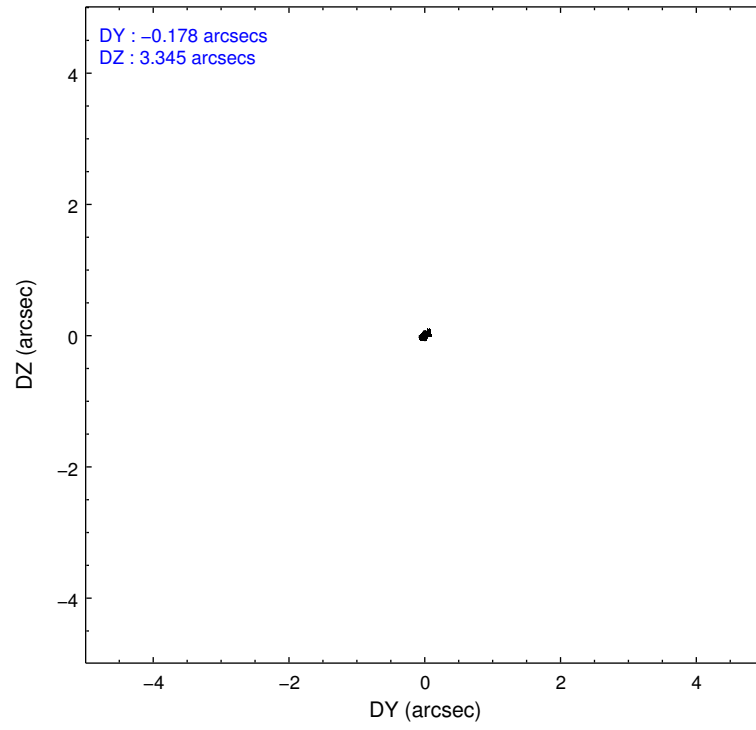
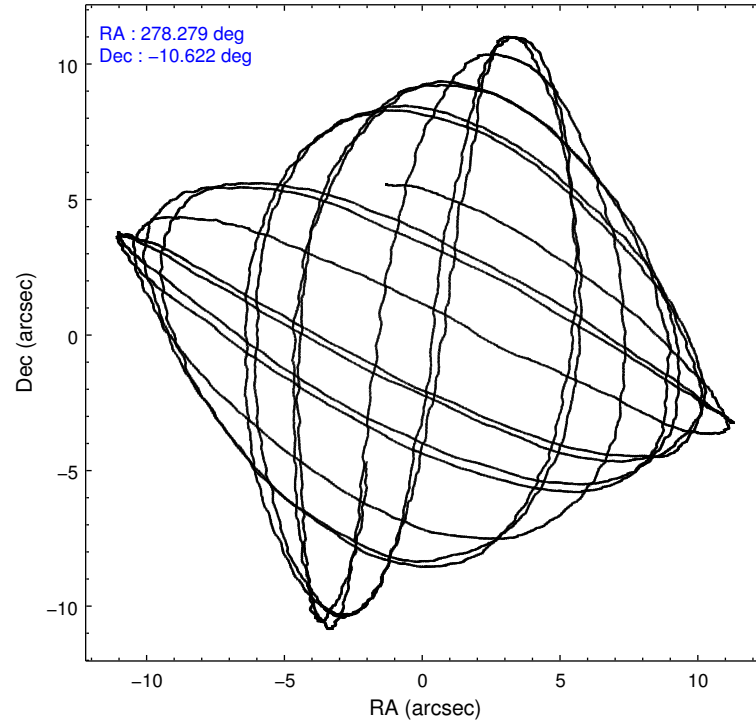
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	49589	69276	50878	51914	55177	58422	grade 0 events	1544	15445	1168	1811	1093	1231
rejected events	43815	43903	45823	45800	49662	36554		3%	22%	2%	3%	1%	2%
rejected %	88%	63%	90%	88%	90%	62%	grade 1 events	14	117	10	13	12	29
								0%	0%	0%	0%	0%	0%
							grade 2 events	2166	4715	2011	2188	2178	4648
								4%	6%	3%	4%	3%	7%
							grade 3 events	400	1358	319	355	335	1268
								0%	1%	0%	0%	0%	2%
							grade 4 events	389	1290	321	373	337	1137
								0%	1%	0%	0%	0%	1%
							grade 5 events	1106	1272	982	1118	1191	3514
								2%	1%	1%	2%	2%	6%
							grade 6 events	1281	2594	1244	1389	1576	13606
								2%	3%	2%	2%	2%	23%
							grade 7 events	42689	42485	44823	44667	48455	32989
								86%	61%	88%	86%	87%	56%

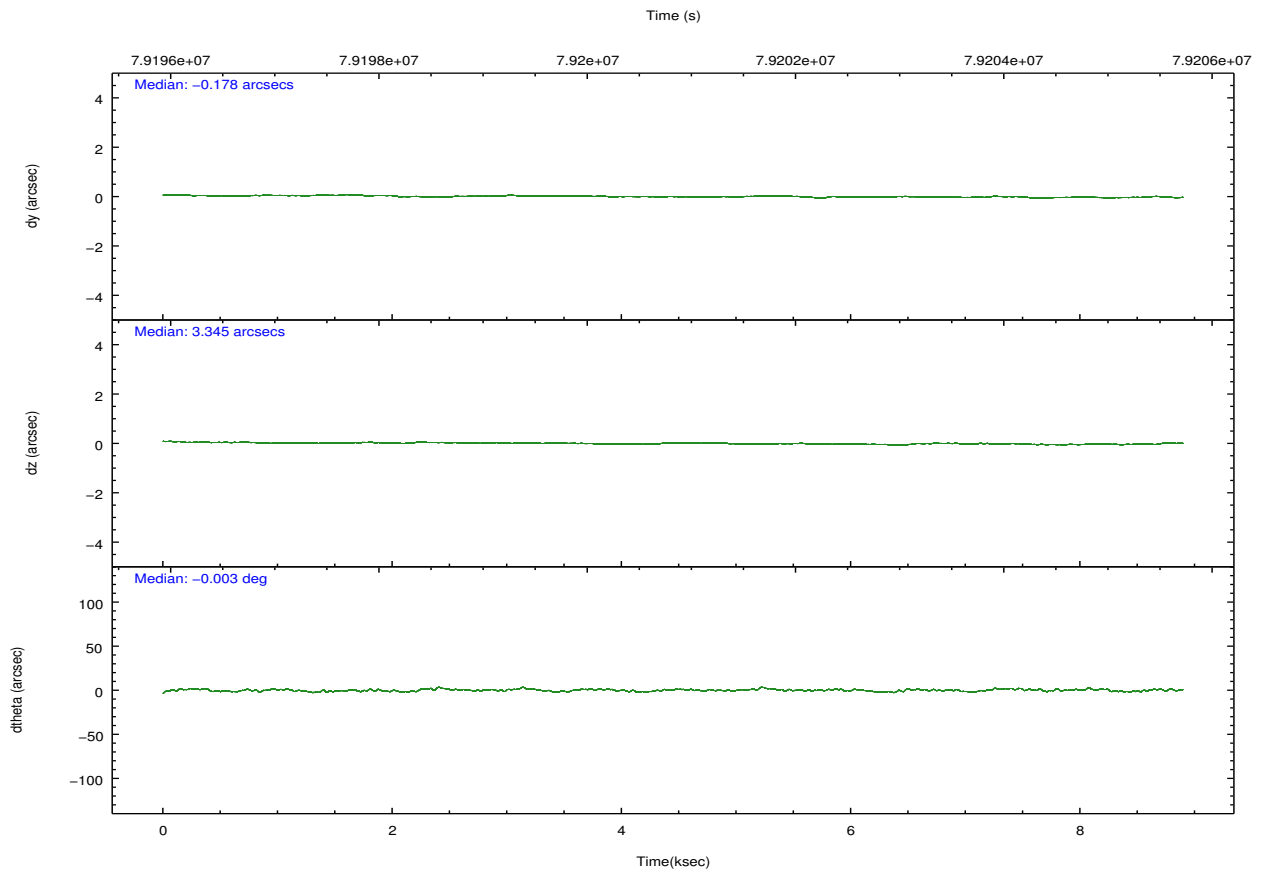
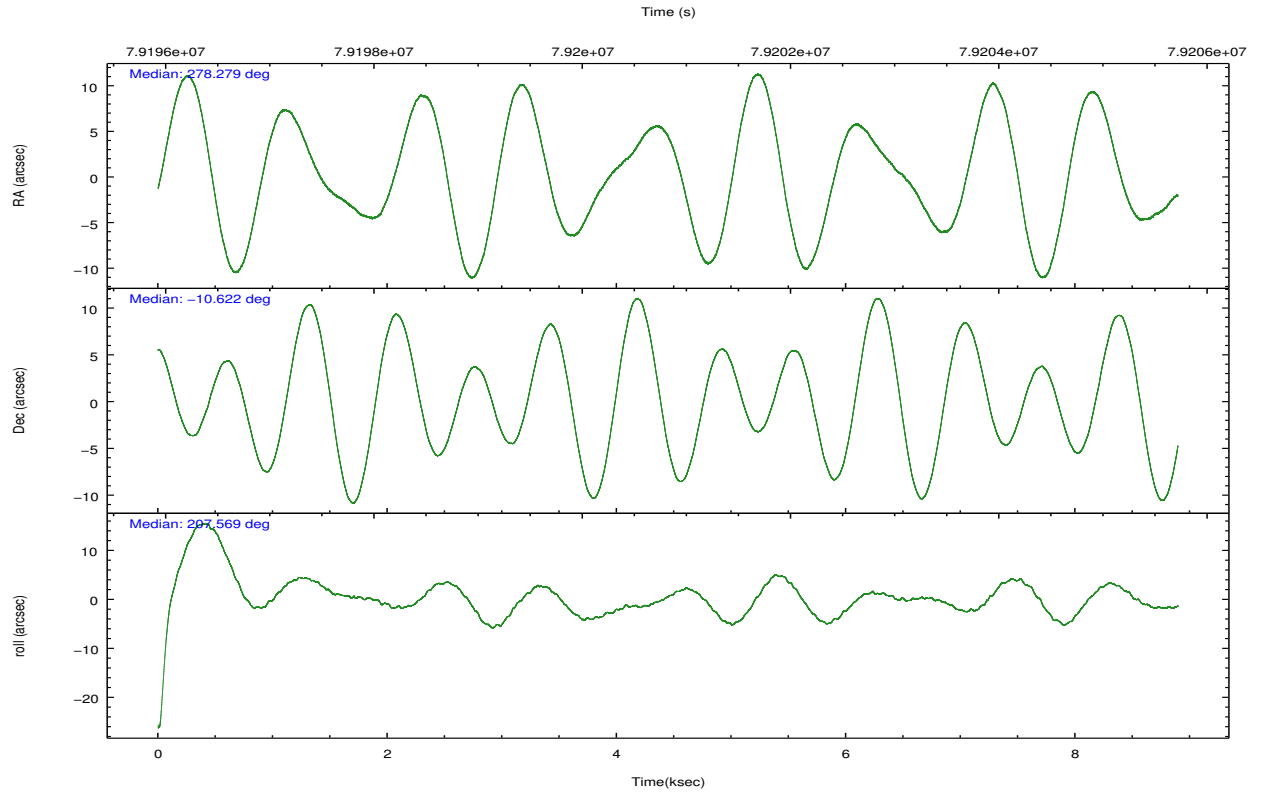
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-012367	ACIS-012367
Grating	NONE	NONE
Data mode	FAINT	FAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	278.294324	278.2792066450842
[deg] Pointing Dec	-10.599366	-10.62259837375553
[deg] Pointing Roll	207.363395	207.5693002905757
[mm] SIM focus pos	-0.782348	-0.7809083437167272
[mm] SIM defocus	0	0.001439871863259334
[mm] SIM translation stage pos	-238.277263	-238.2741181829365
[mm] SIM translation stage offset	4.6848	4.681665180006831
[s] Observation start time (MET)	79197716.184000	79196181.816974
Observation start date	2000-07-05T15:20:52	2000-07-05T14:56:21
[s] Observation end time (MET)	79205276.184000	79205409.892314
Observation end date	2000-07-05T17:26:52	2000-07-05T17:30:09
Read mode	TIMED	TIMED

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	3.2

2.3 Aspect



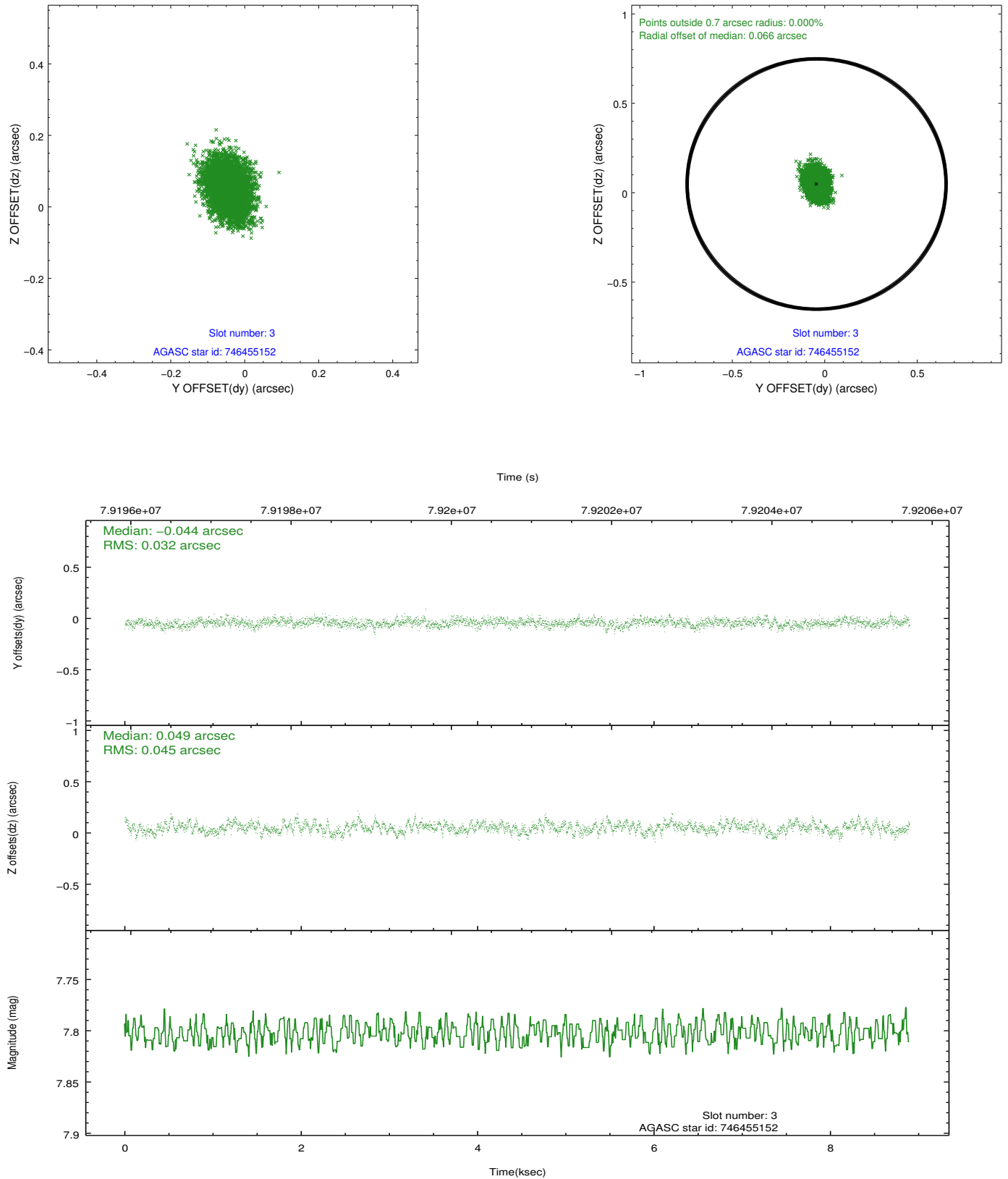


Slot Statistics

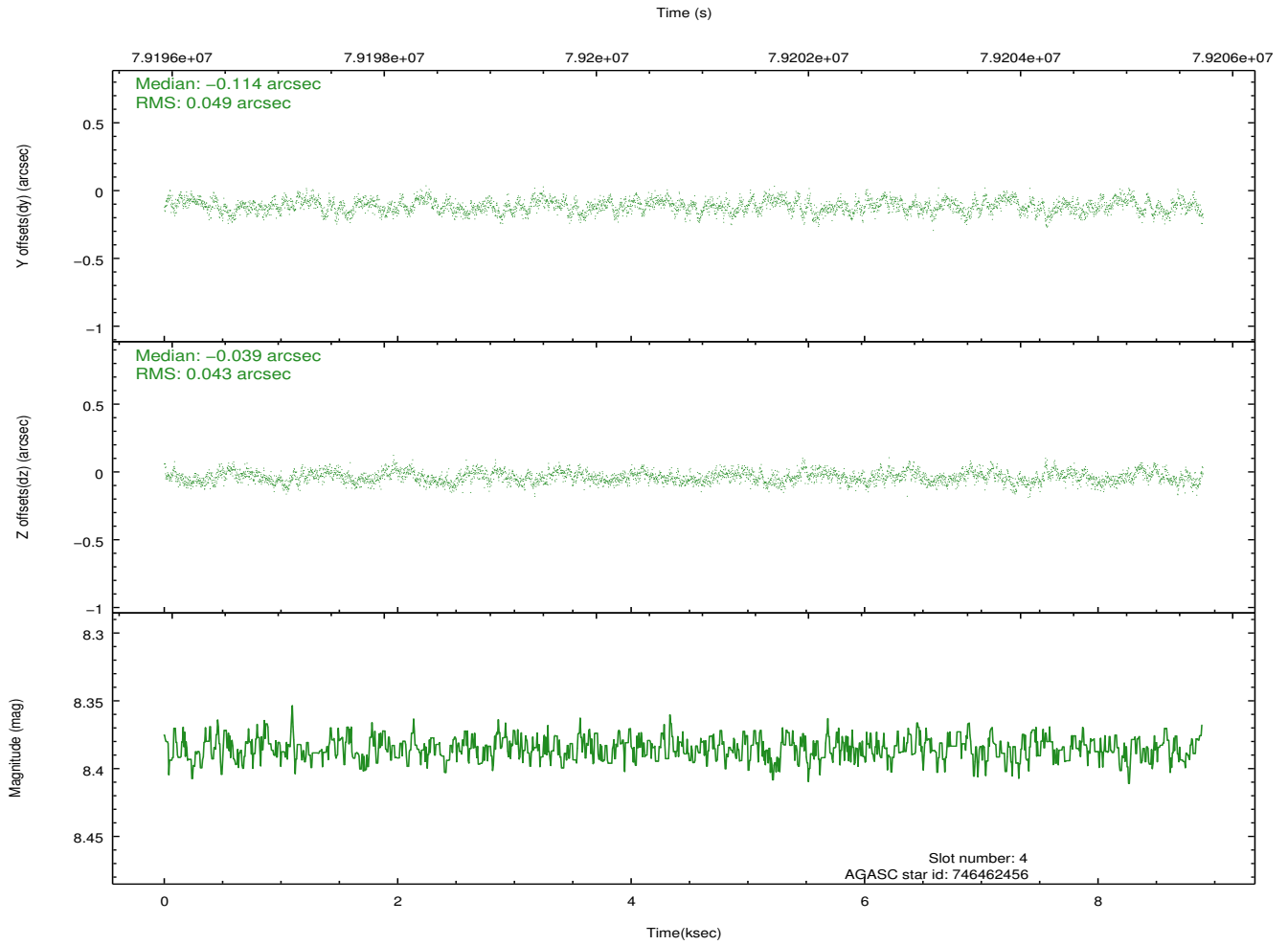
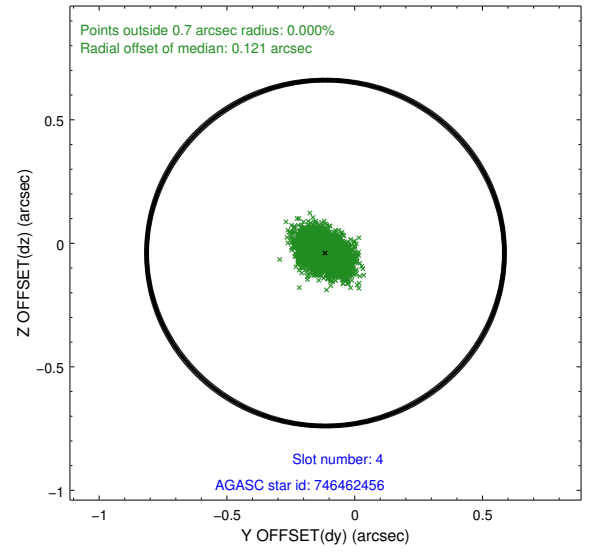
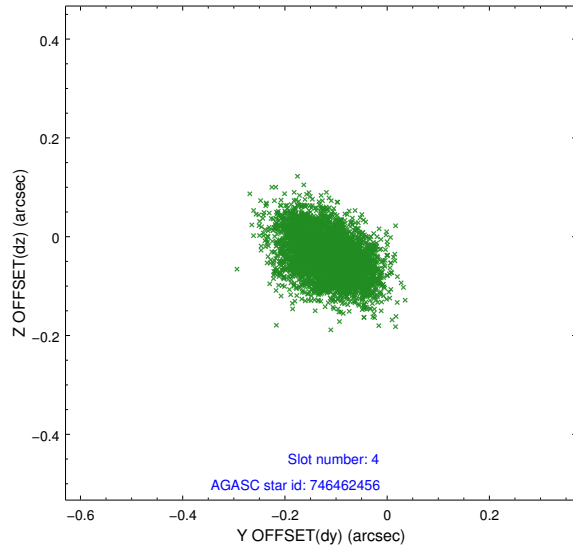
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.16	2170	-0.070	-0.081	0.011	0.019	0.000000	0.000000	-753.83	-737.45
1	FID	ACIS-I-4	7.19	2169	-0.018	0.066	0.010	0.015	0.000000	0.000000	2159.98	1168.70
2	FID	ACIS-I-5	7.23	2170	-0.014	0.084	0.011	0.017	0.000000	0.000000	-1807.10	1167.77
3	GUIDE	746455152	7.80	4341	-0.044	0.049	0.058	0.096	278.447893	-9.976732	-1513.76	-1739.93
4	GUIDE	746462456	8.39	4341	-0.114	-0.039	0.069	0.114	278.652171	-10.530173	-1239.35	361.55
5	GUIDE	746455112	8.92	4336	0.111	-0.003	0.092	0.150	278.266531	-10.703234	259.07	287.32
6	GUIDE	746460328	9.81	4271	0.048	-0.006	0.098	0.163	278.603974	-9.898096	-2135.26	-1736.60
7	OMITTED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00

2.4 Star Slots

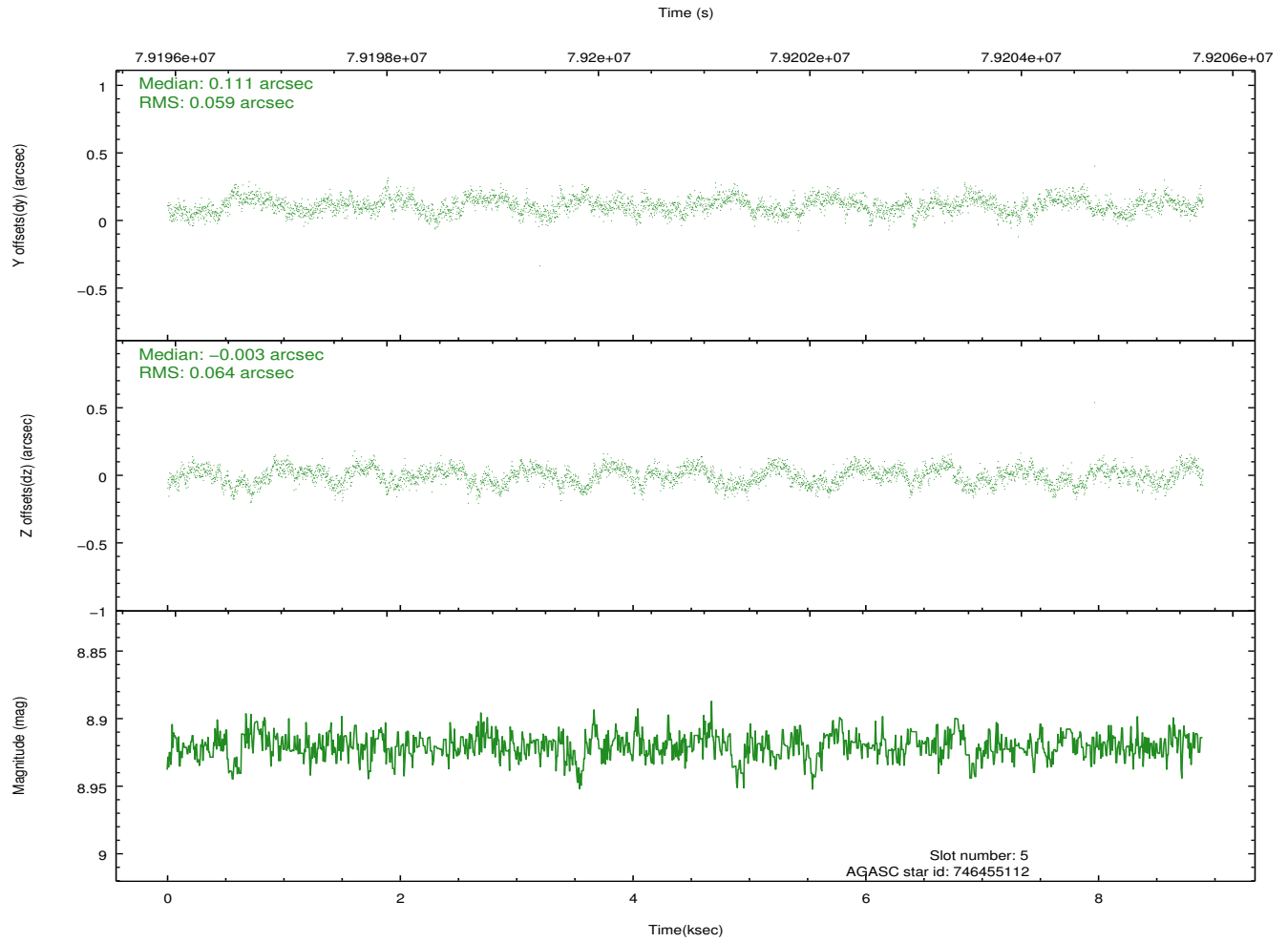
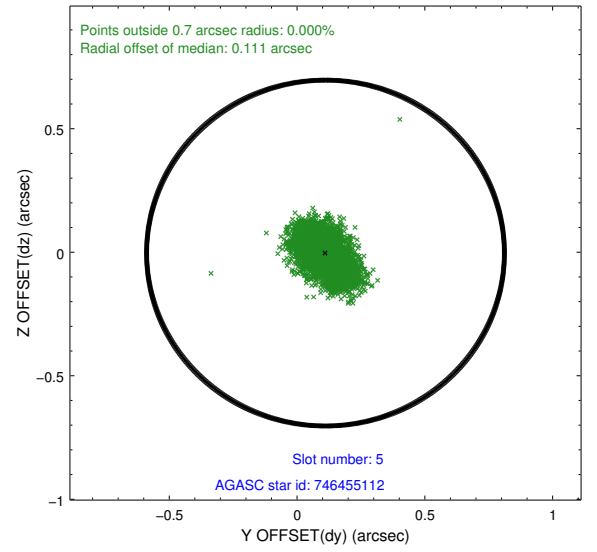
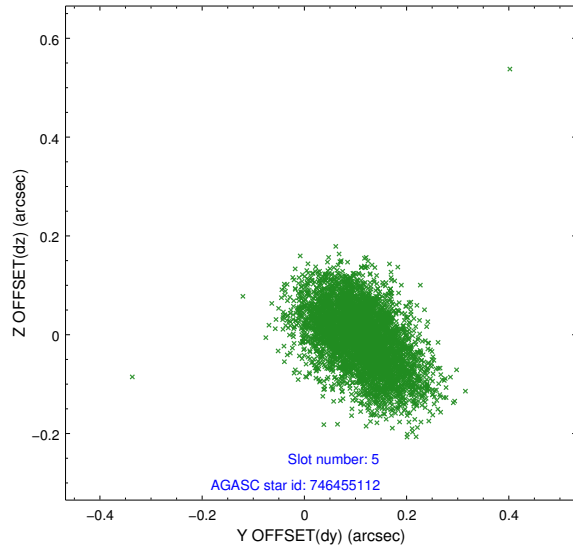
2.4.1 Slot 3



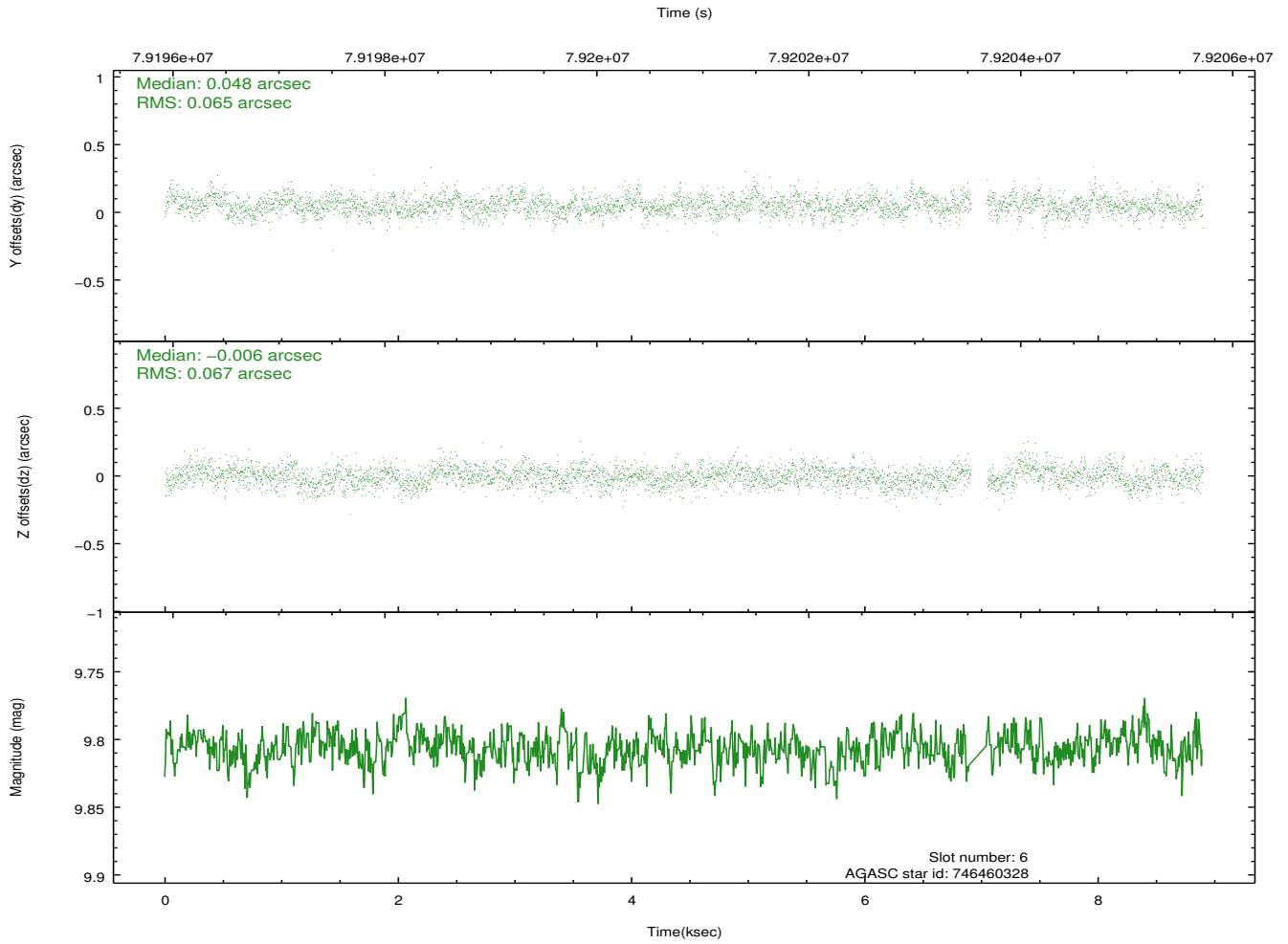
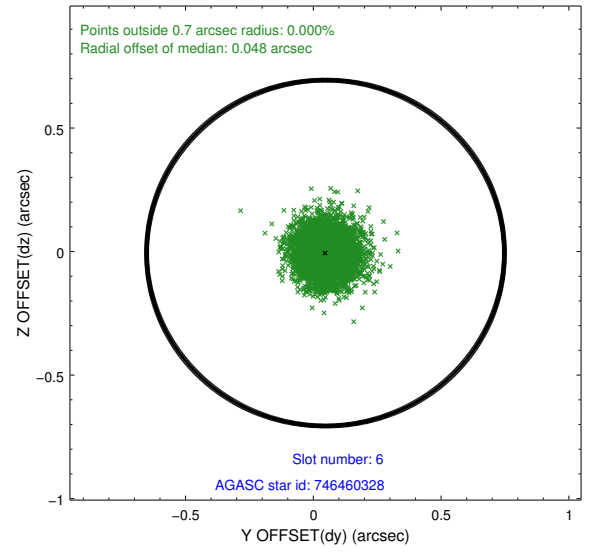
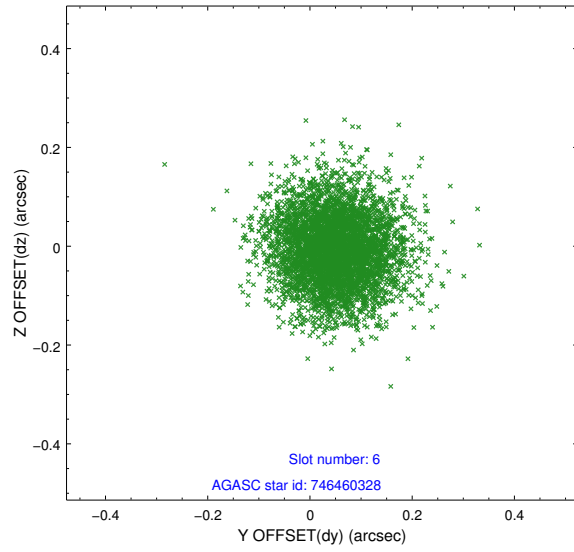
2.4.2 Slot 4



2.4.3 Slot 5

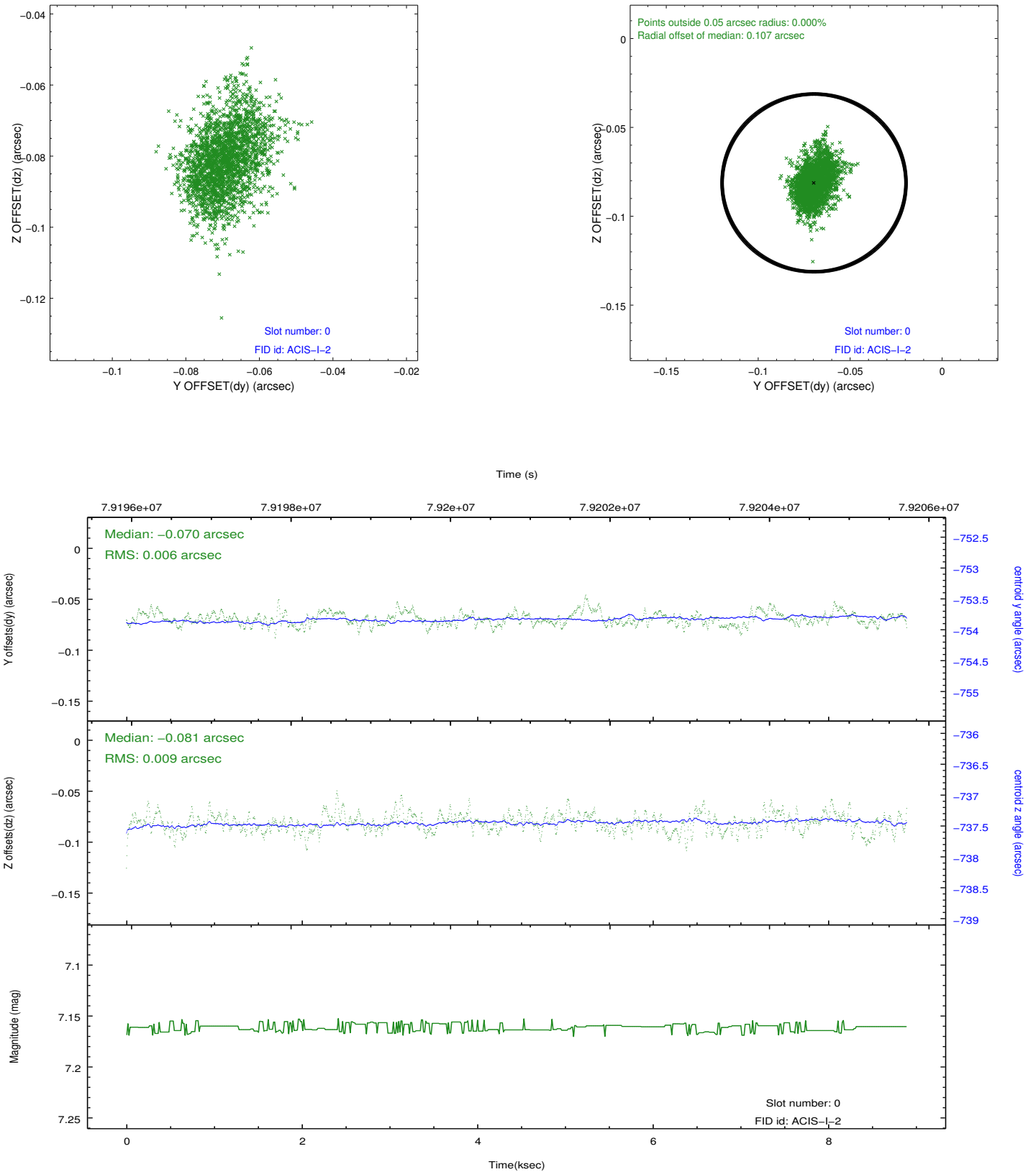


2.4.4 Slot 6

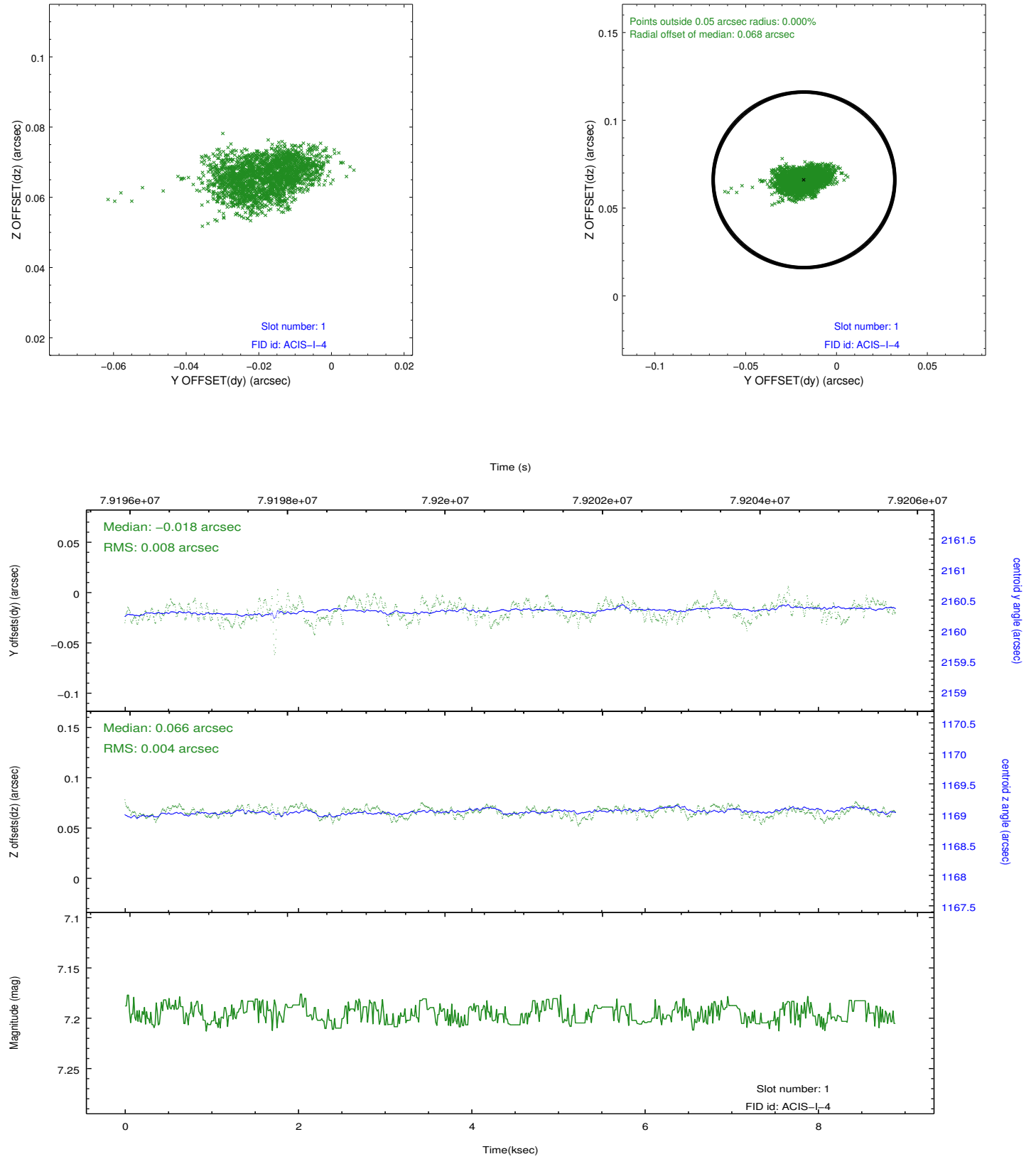


2.5 FID Slots

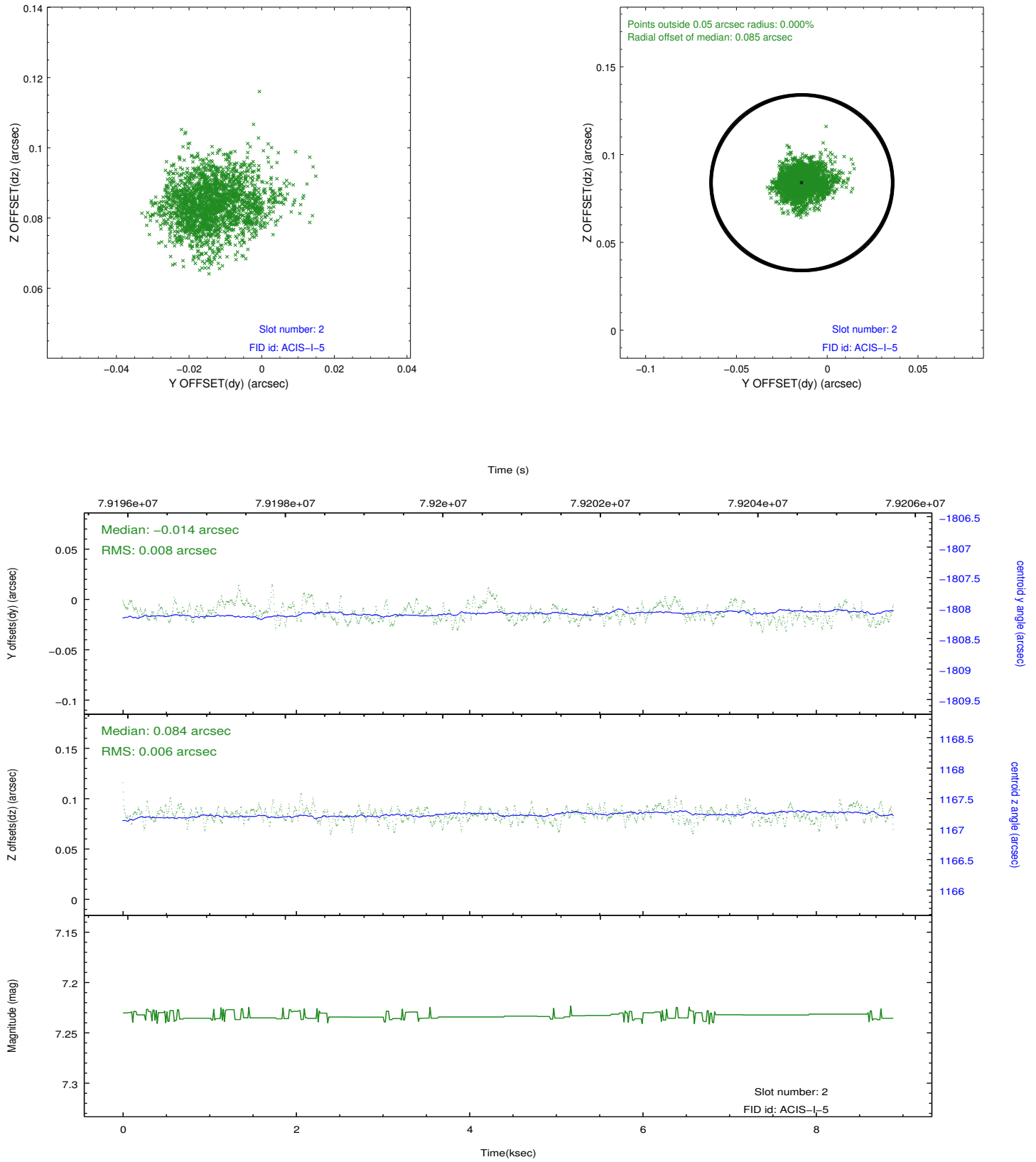
2.5.1 Slot 0



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)	2012.09.06
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	7.507

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.

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The guide star in slot 7 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this guide star from the solution.