

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 1783 - L2 Version 6
Chandra X-Ray Center

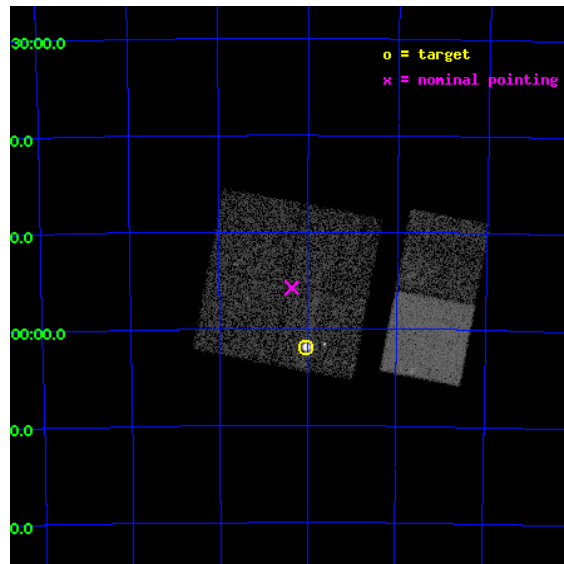
L2 Processing Date : Aug 30 2012

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1 Front

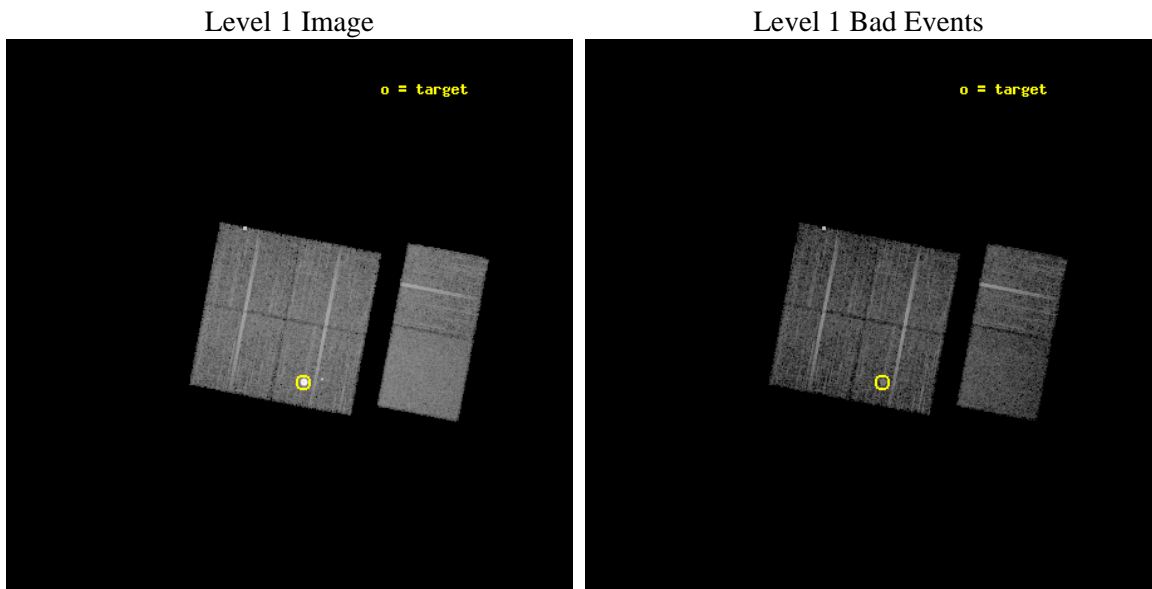
seq_num	590209	Sequence number
obs_id	1783	Observation id
title	ACIS CHIP RESPONSE TO LINES WITH E=0.6-1.5 KEV	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	E0102-72.3 [Chip I3, T=110, Offsets=-5,2,0]	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	16.01	Observer's specified target RA [deg]
dec_targ	-72.032028	Observer's specified target Dec [deg]
ra_nom	16.091037335626	Nominal RA [deg]
dec_nom	-71.929369044456	Nominal Dec [deg]
roll_nom	100.88552813933	Nominal Roll [deg]
revision	6	Processing version of data
ontime	7868.6816902608	Sum of GTIs [s]
livetime	7769.0437047474	Livetime [s]
ontime0	7868.5585702658	Sum of GTIs [s]
ontime1	7868.5996102691	Sum of GTIs [s]
ontime2	7868.6406502724	Sum of GTIs [s]
ontime3	7868.6816902608	Sum of GTIs [s]
ontime6	7868.7637702674	Sum of GTIs [s]
ontime7	7868.7227302641	Sum of GTIs [s]
l2events	75528	Number of level 2 events



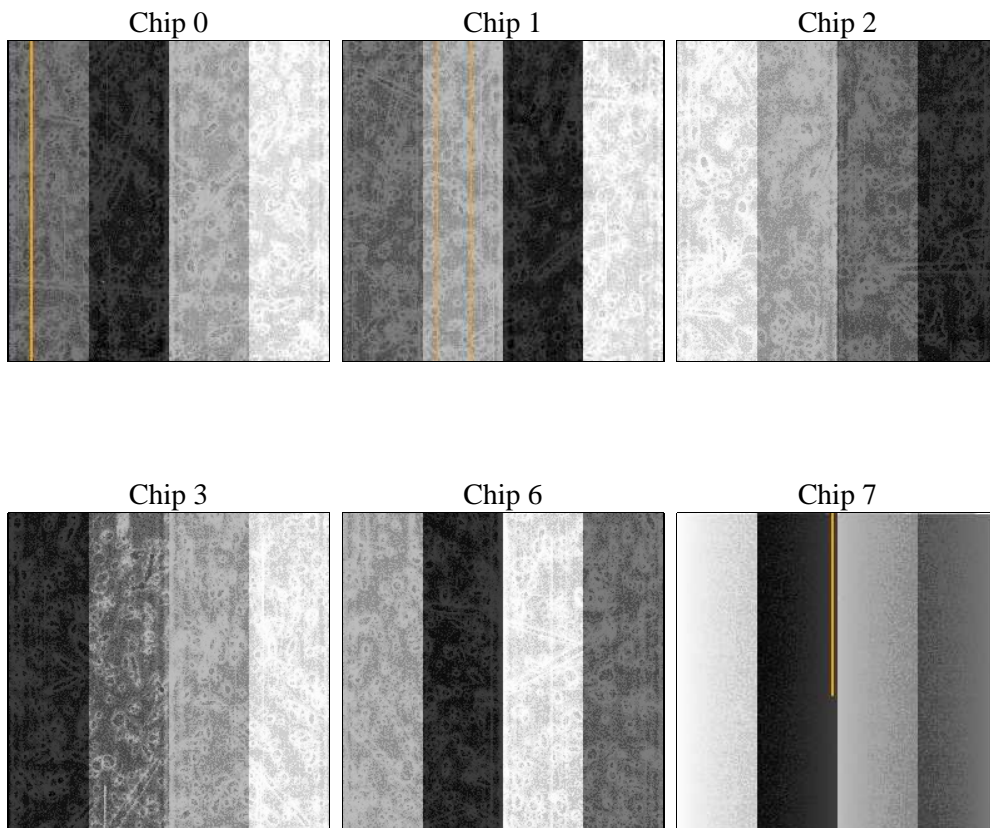
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	7920.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	7868.6816902608	Sum of GTIs [s]
caldsver	4.5.1.1	 	ontime0	7868.5585702658	Sum of GTIs [s]
date	2012-08-30T15:02:04	Date and time of file creation	ontime1	7868.5996102691	Sum of GTIs [s]
revision	6	Processing version of data	ontime2	7868.6406502724	Sum of GTIs [s]
			ontime3	7868.6816902608	Sum of GTIs [s]
			ontime6	7868.7637702674	Sum of GTIs [s]
			ontime7	7868.7227302641	Sum of GTIs [s]
			l1events	361895	Number of level 1 events

2.1.4 Events

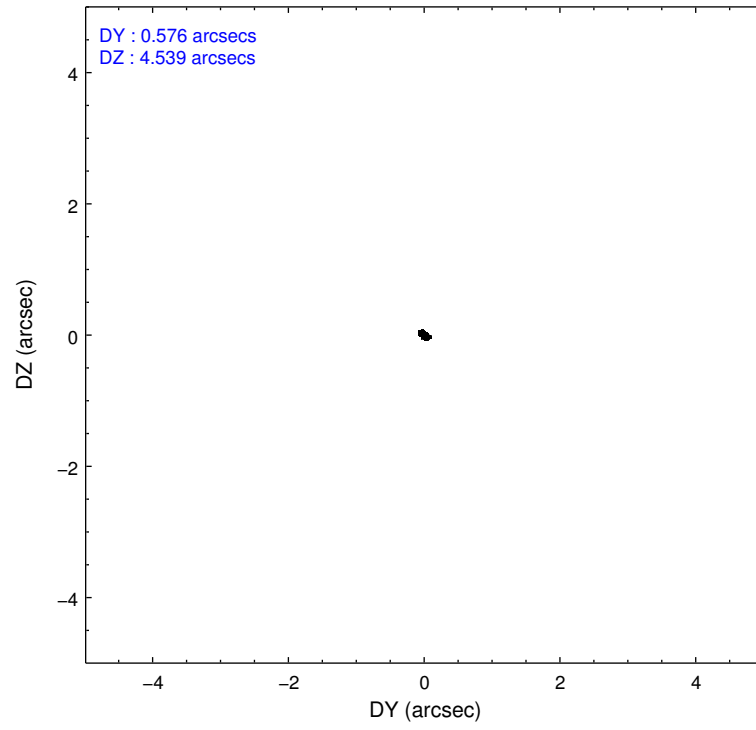
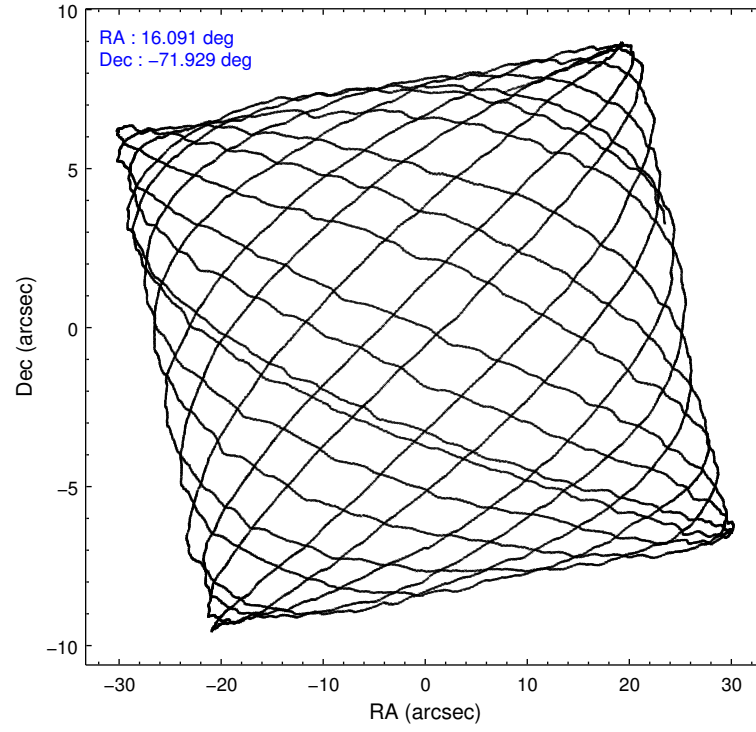
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	51216	52070	56497	83118	56940	62054	grade 0 events	1210	1465	1141	26094	1278	1710
rejected events	45786	46163	51336	49094	51049	38154		2%	2%	2%	31%	2%	2%
rejected %	89%	88%	90%	59%	89%	61%	grade 1 events	2349	18	13	202	8	32
								4%	0%	0%	0%	0%	0%
							grade 2 events	2071	2200	2041	4528	2269	5077
								4%	4%	3%	5%	3%	8%
							grade 3 events	400	427	327	894	372	1392
								0%	0%	0%	1%	0%	2%
							grade 4 events	376	407	366	834	339	1288
								0%	0%	0%	1%	0%	2%
							grade 5 events	1121	1229	950	1271	1287	3698
								2%	2%	1%	1%	2%	5%
							grade 6 events	1374	1409	1287	1684	1641	14447
								2%	2%	2%	2%	2%	23%
							grade 7 events	42315	44915	50372	47611	49746	34410
								82%	86%	89%	57%	87%	55%

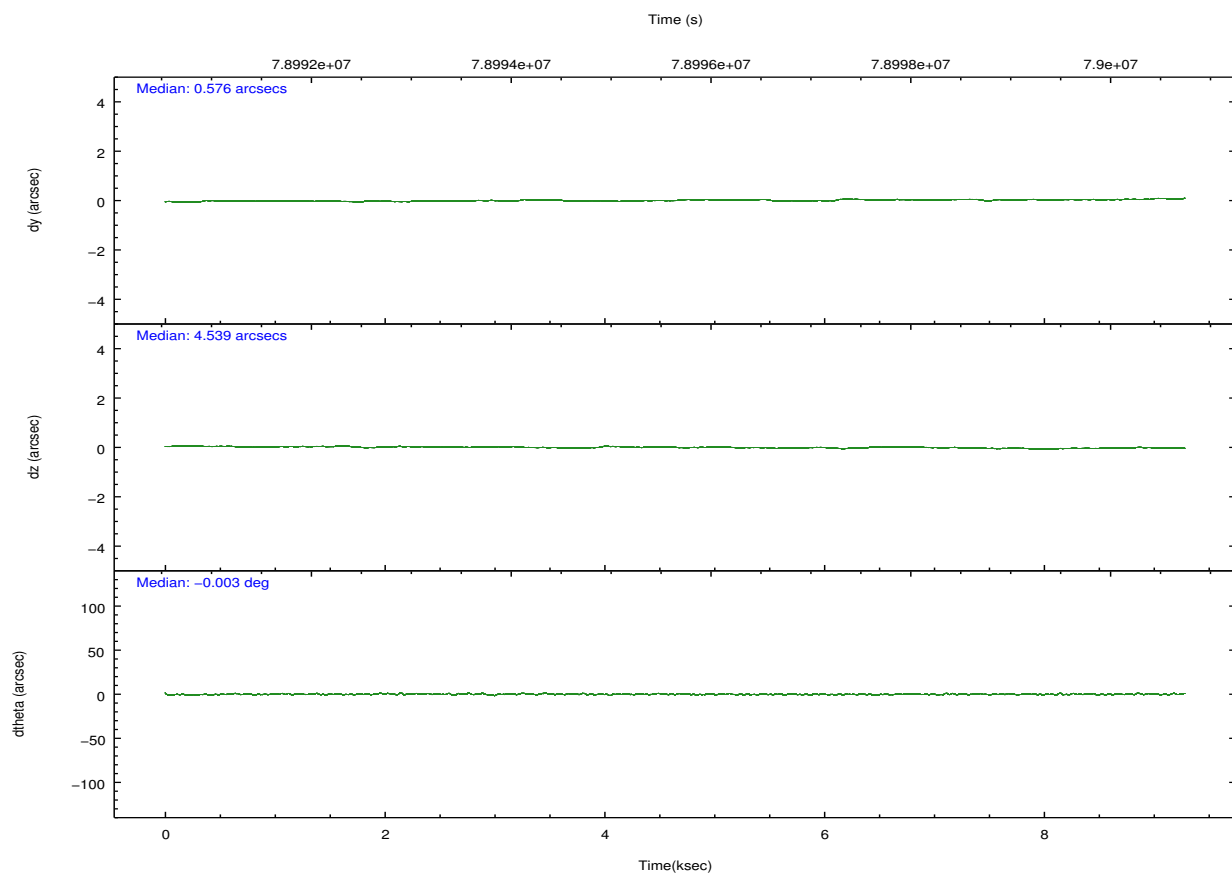
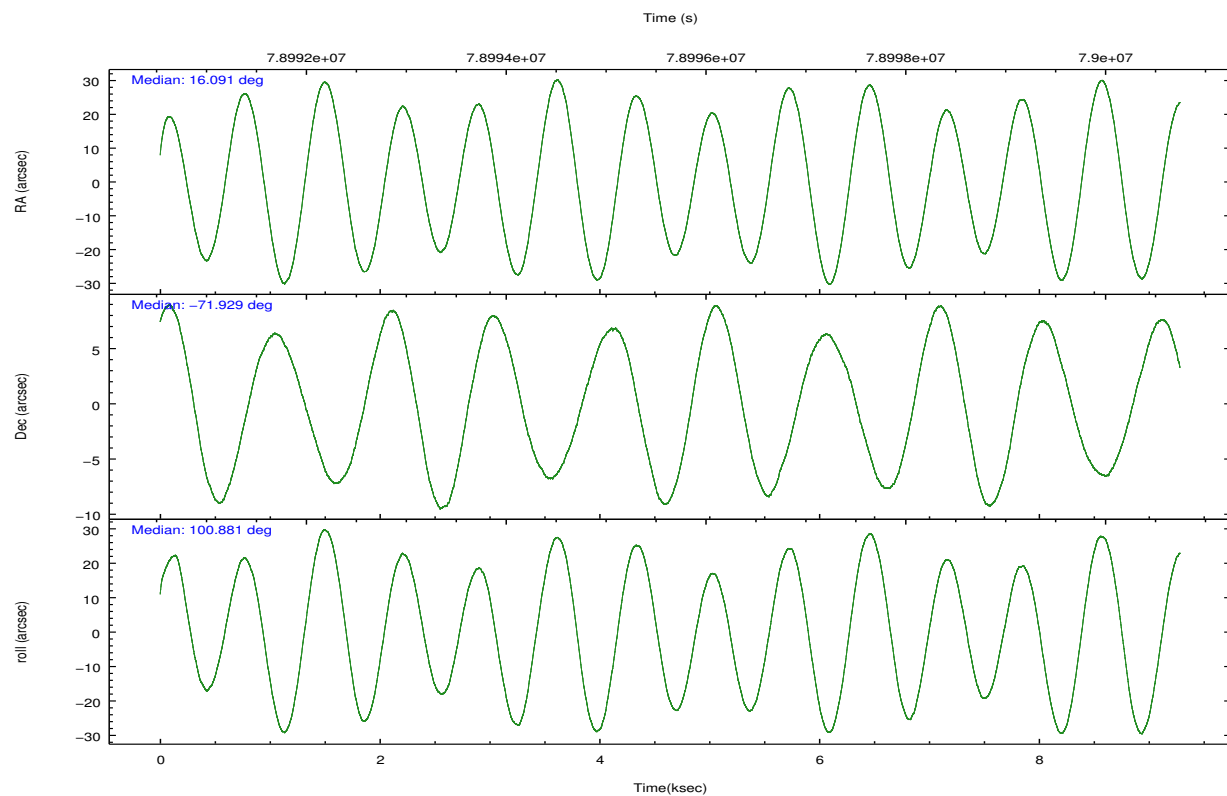
2.2 Compared Parameters

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	16.148946	16.0910373356261
[deg] Pointing Dec	-71.950323	-71.929369044456
[deg] Pointing Roll	100.731893	100.8855281393334
[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)	78992359.184000	78990812.809404
Observation start date	2000-07-03T06:18:15	2000-07-03T05:53:32
[s] Observation end time (MET)	79000279.184000	79000412.959758
Observation end date	2000-07-03T08:30:15	2000-07-03T08:33:32
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



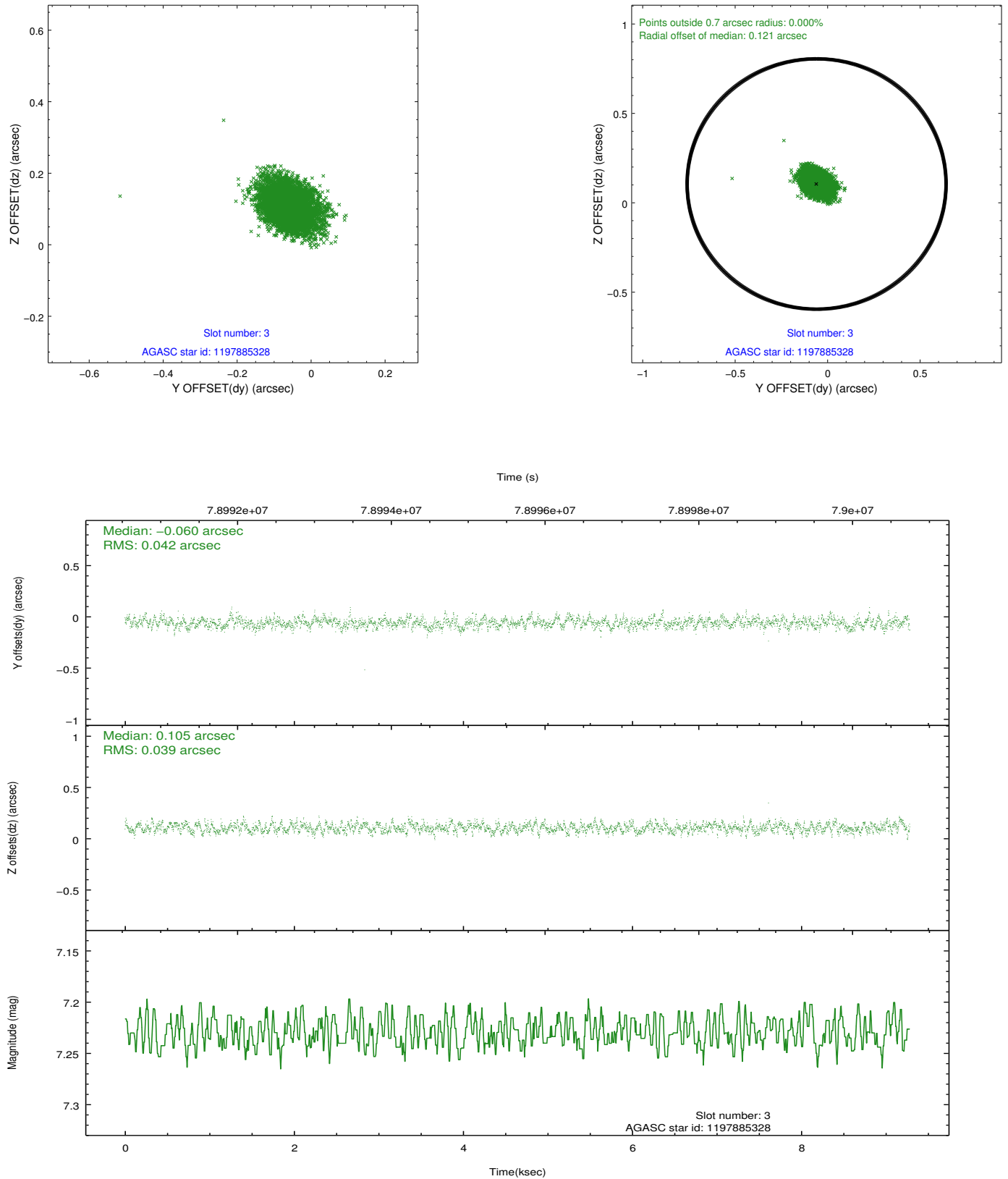


Slot Statistics

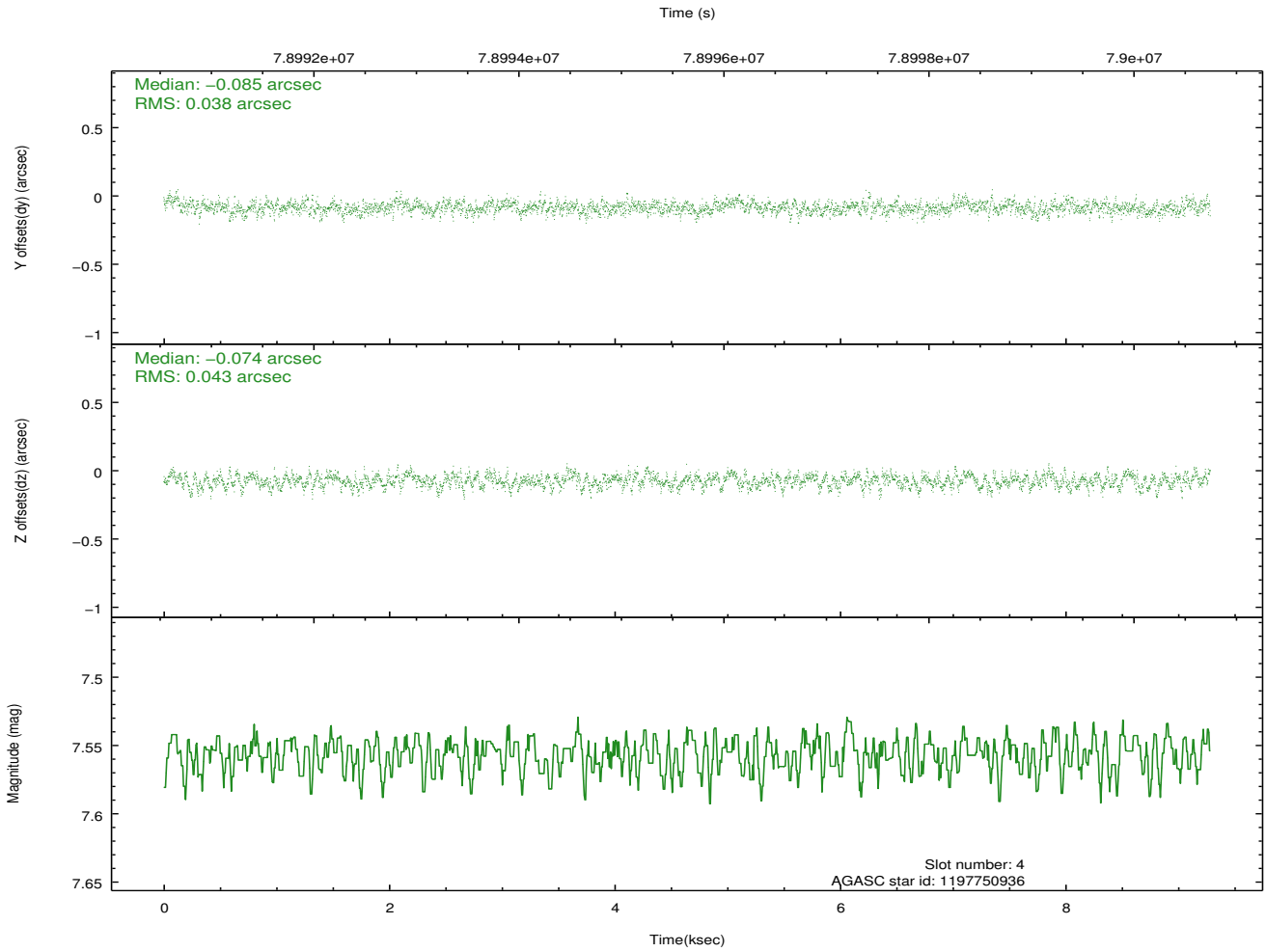
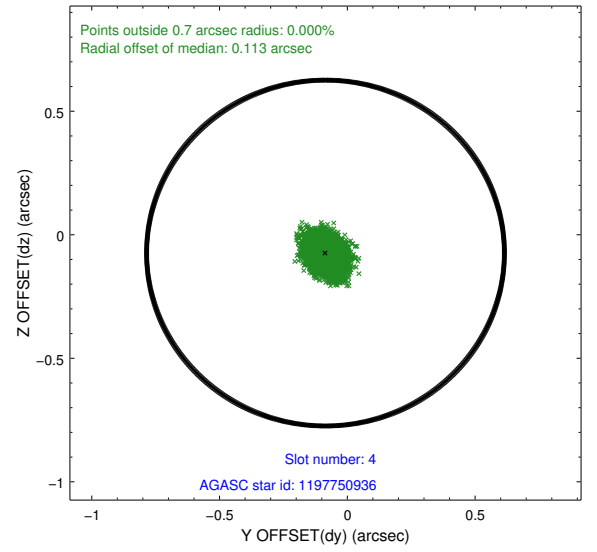
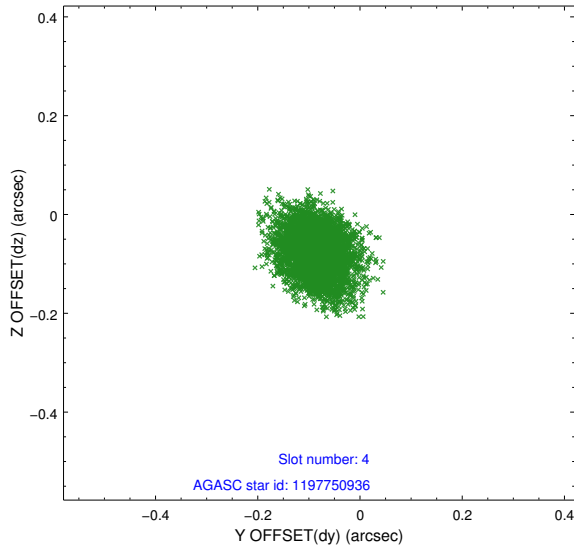
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.25	2264	-0.031	0.025	0.004	0.008	0.000000	0.000000	939.26	-827.82
1	FID	ACIS-I-5	7.23	2264	-0.030	0.025	0.004	0.008	0.000000	0.000000	-1808.55	1069.32
2	OMITTED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
3	GUIDE	1197885328	7.23	4529	-0.060	0.105	0.060	0.098	16.283090	-71.733943	737.14	-294.02
4	GUIDE	1197750936	7.56	4529	-0.085	-0.074	0.061	0.099	15.387940	-71.549550	1573.81	583.82
5	GUIDE	1197884536	8.49	4528	0.011	0.037	0.063	0.108	17.160729	-71.835289	186.70	-1191.16
6	GUIDE	1197884712	8.30	4528	0.009	-0.049	0.066	0.111	16.087398	-72.252690	-1056.74	268.28
7	GUIDE	1197750640	9.74	4524	0.126	-0.017	0.097	0.160	15.758835	-72.088048	-408.05	516.59

2.4 Star Slots

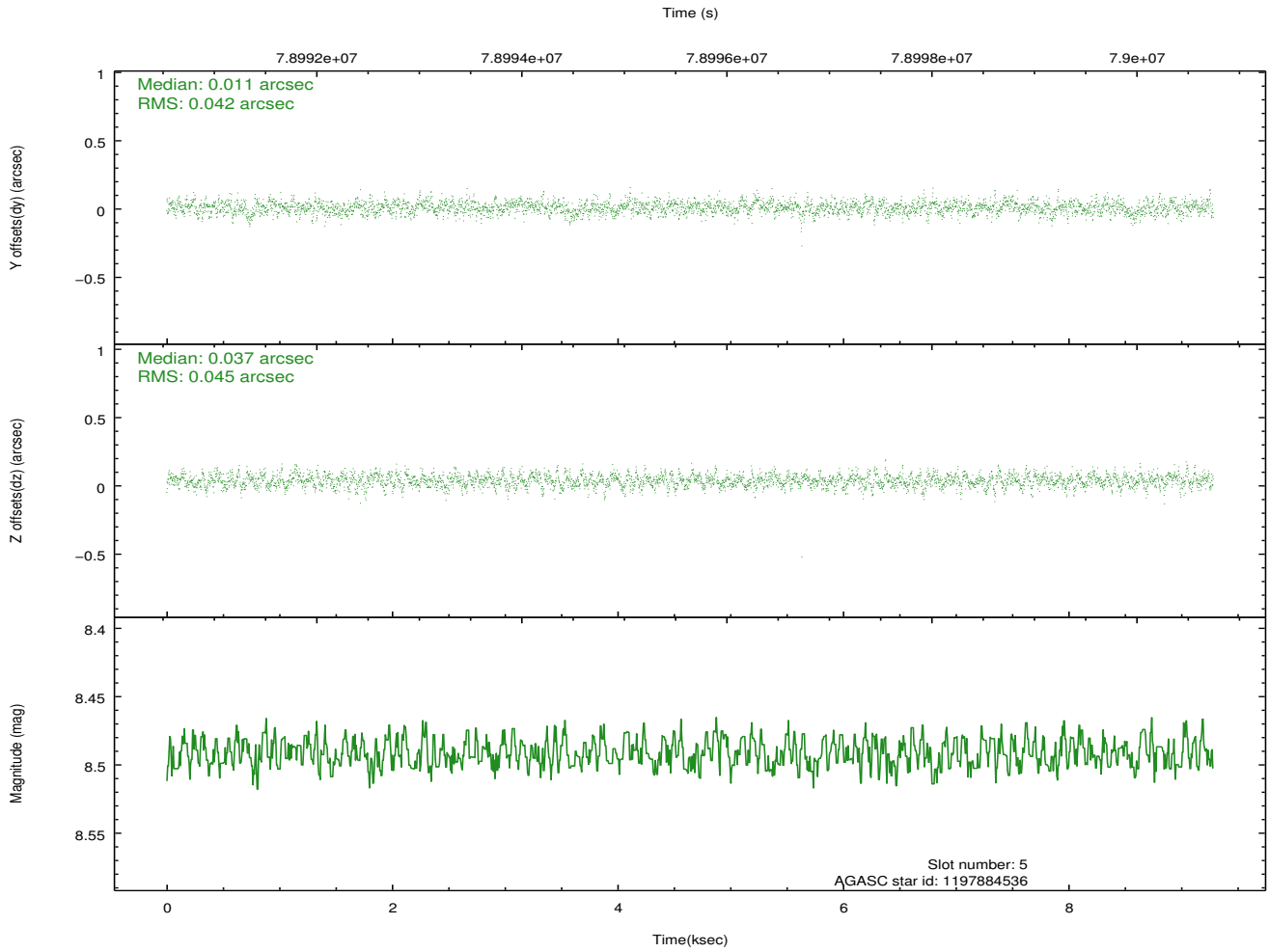
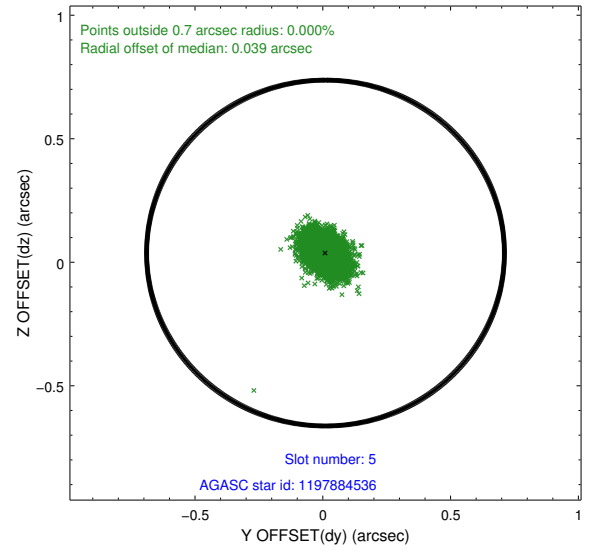
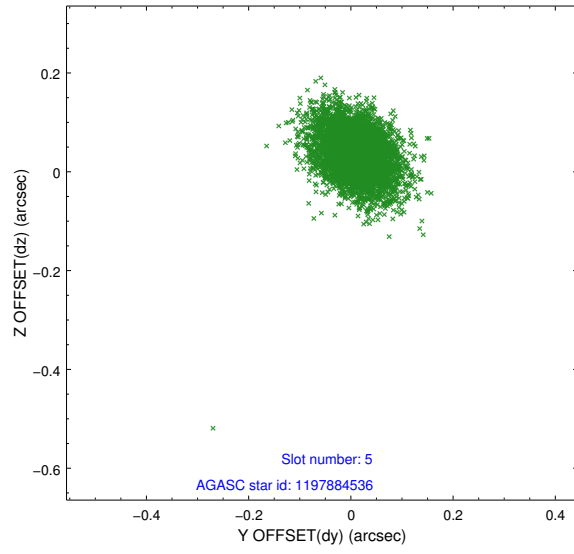
2.4.1 Slot 3



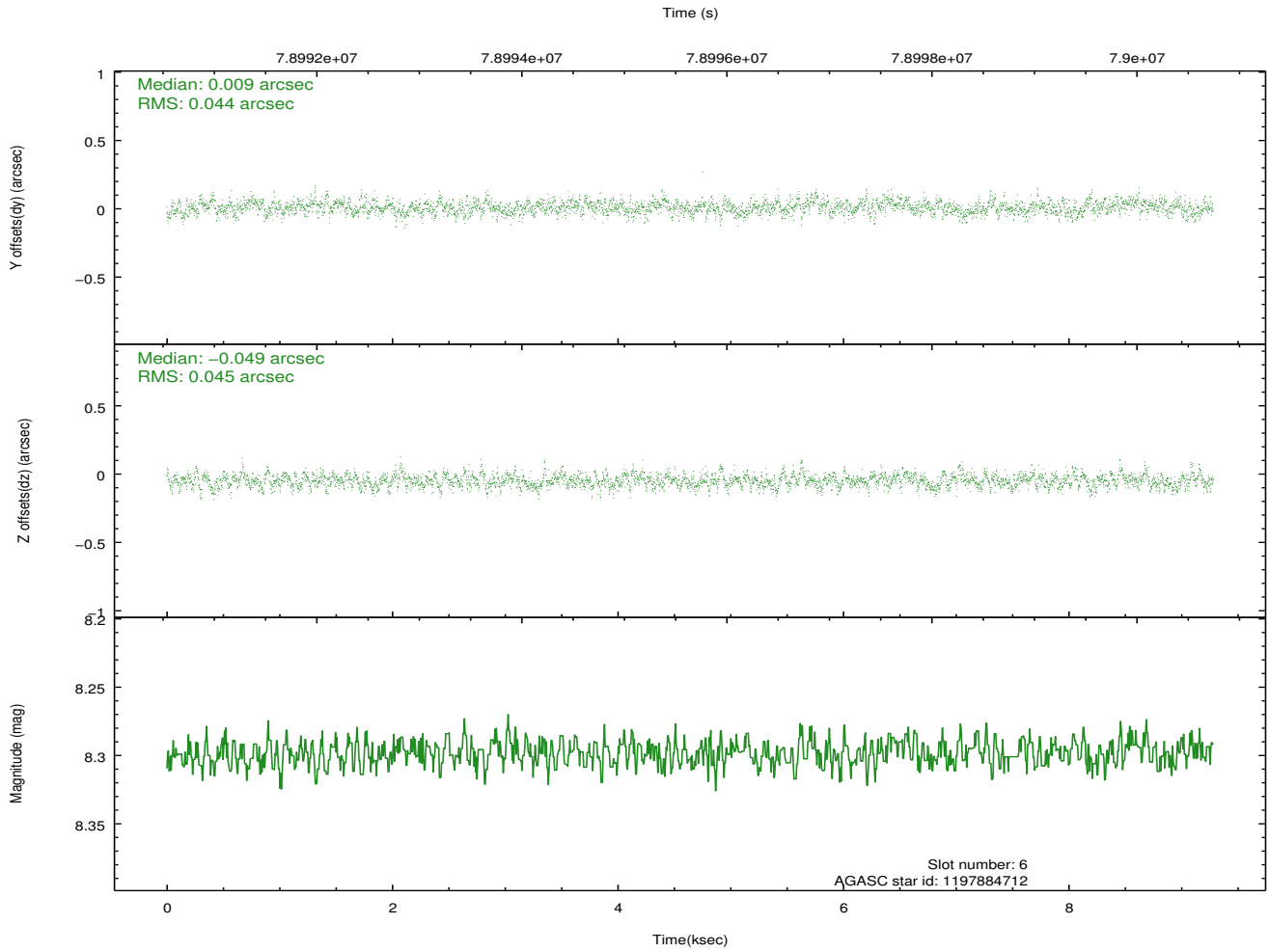
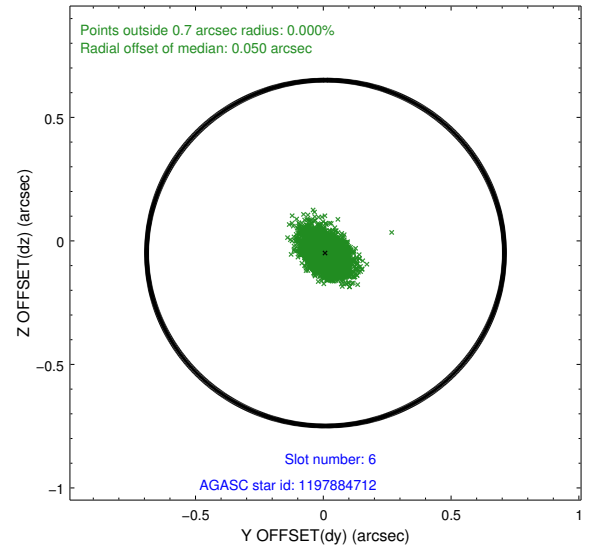
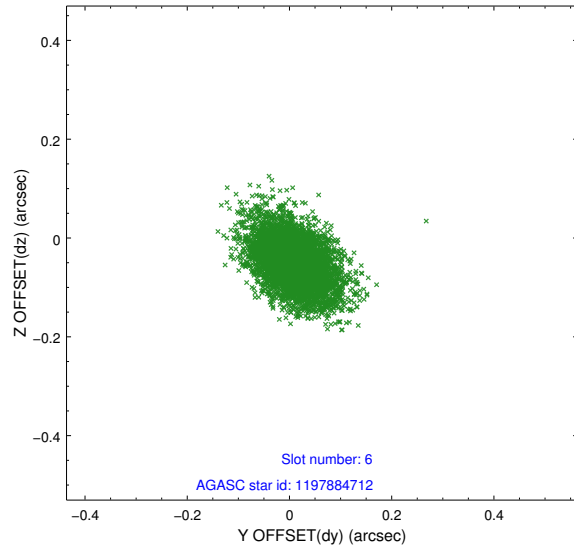
2.4.2 Slot 4



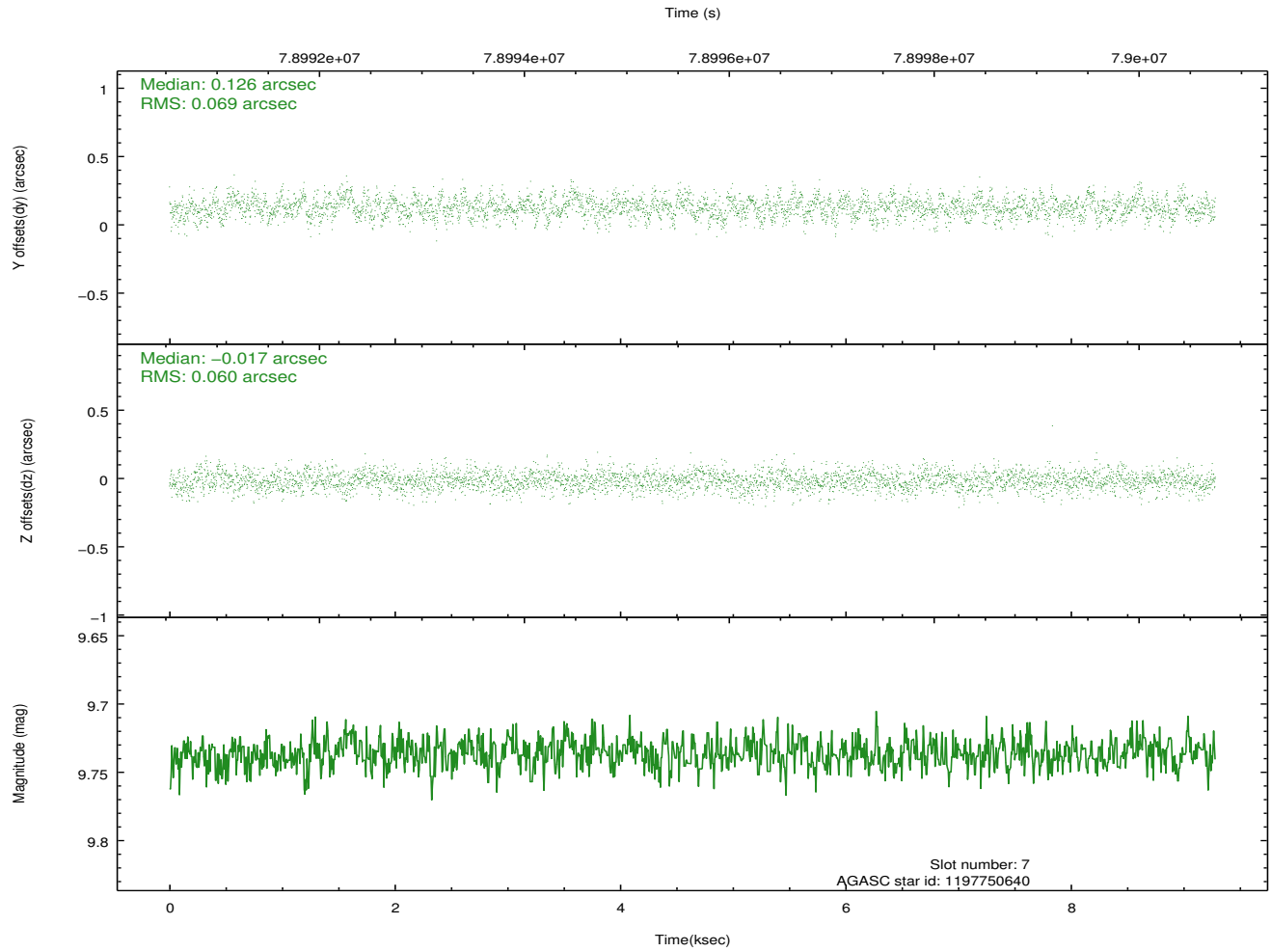
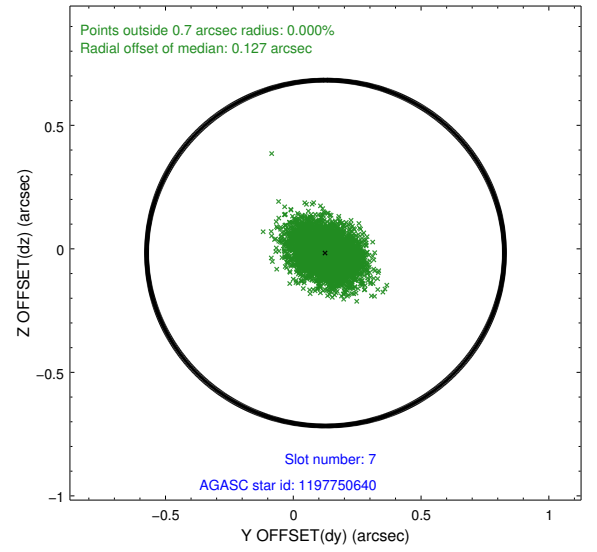
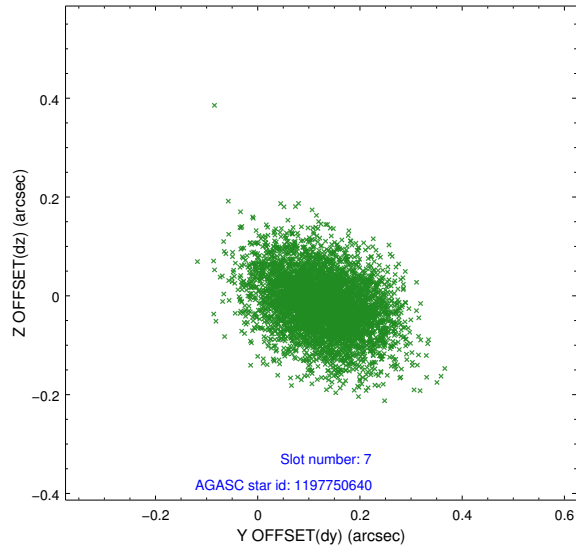
2.4.3 Slot 5



2.4.4 Slot 6

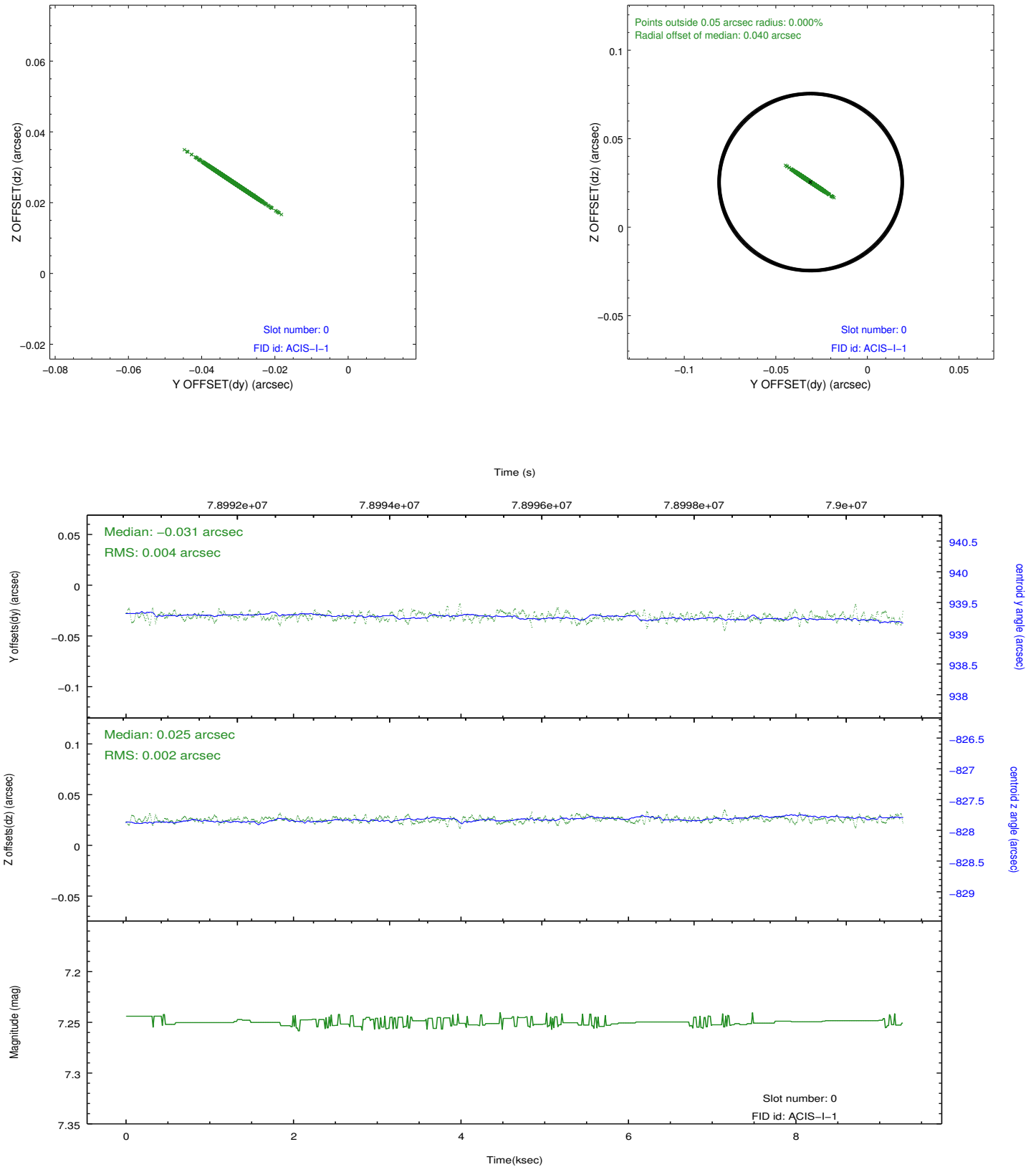


2.4.5 Slot 7

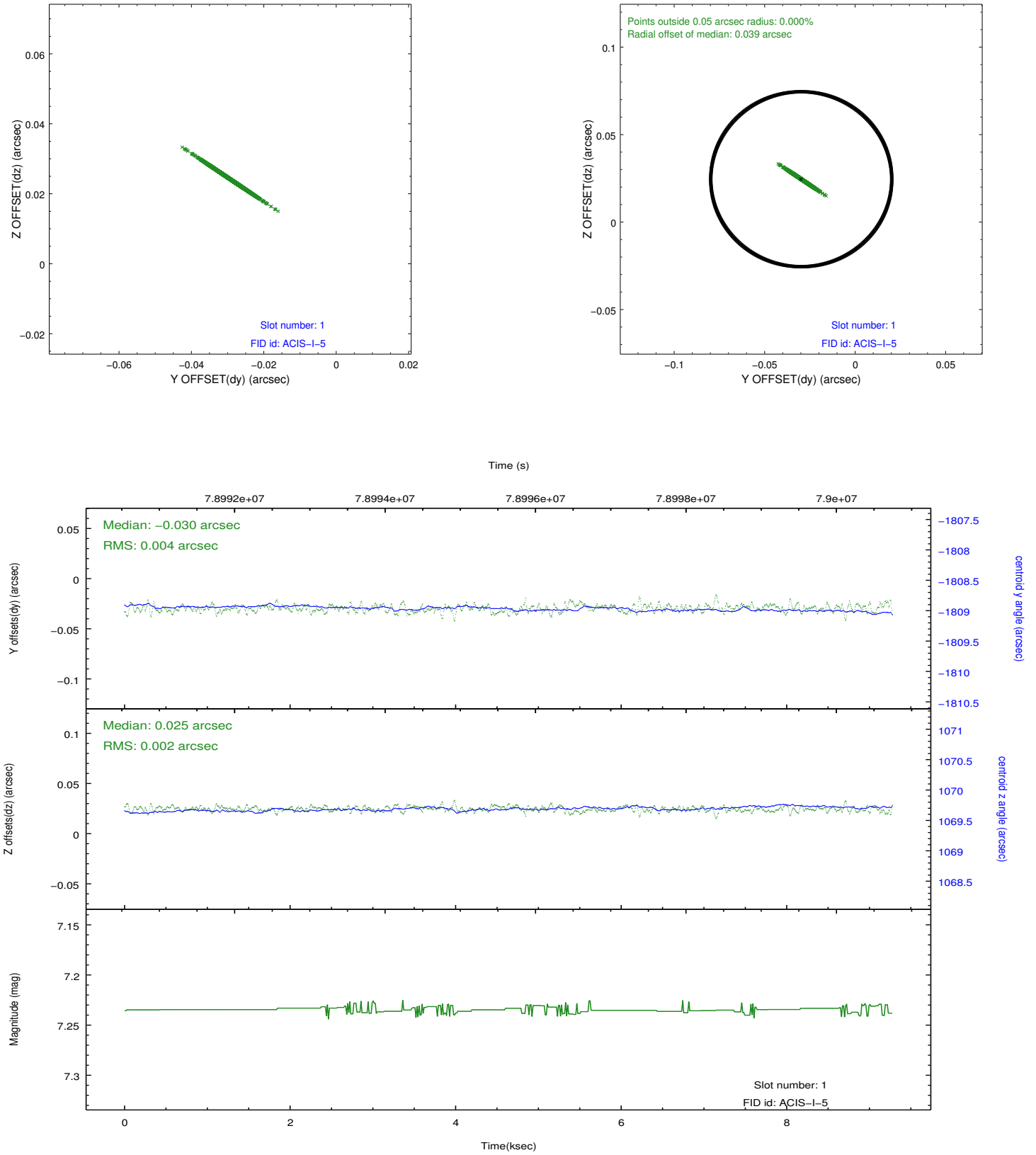


2.5 FID Slots

2.5.1 Slot 0



2.5.2 Slot 1



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	7.868

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 fid light in slot 2 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this fid light from the solution.