

V&V Reference Report

L2 ASCDS Version : 7.6.10

Observation 1783 - L2 Version 5
Chandra X-Ray Center

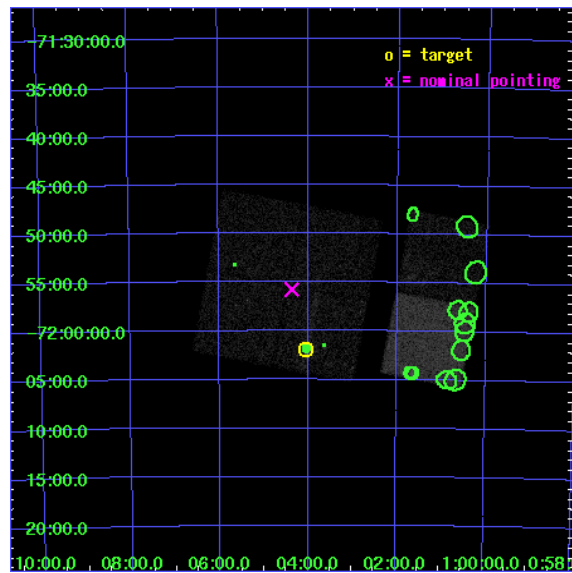
L2 Processing Date : Nov 20 2008

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
3	Point Sources	16
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

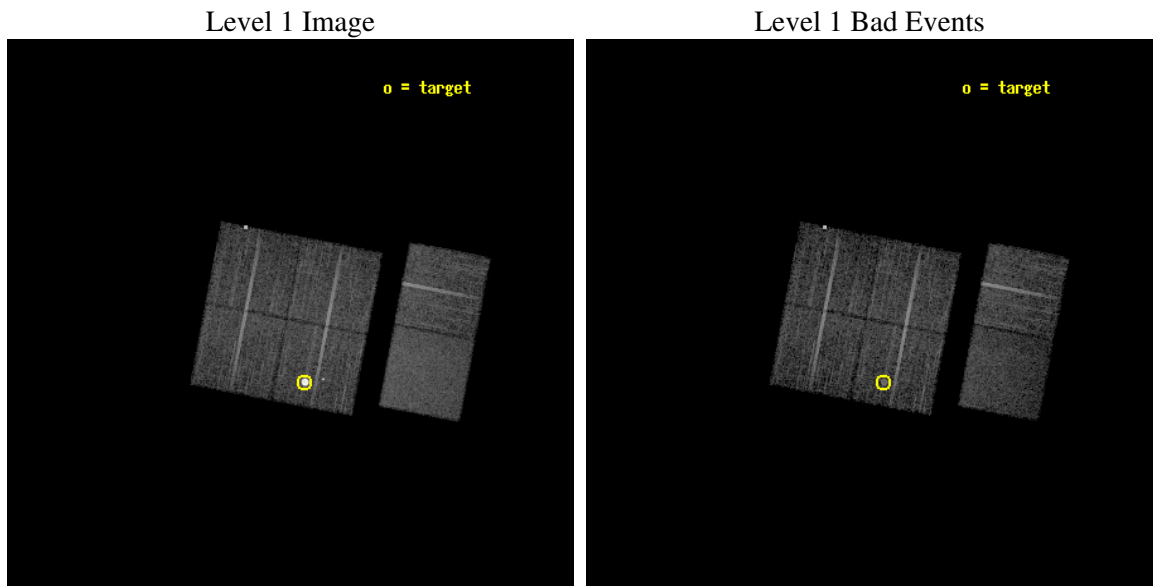
seq_num	590209
obs_id	1783
title	ACIS CHIP RESPONSE TO LINES WITH E=0.6-1.5 KEV
observer	Dr. CXC Calibration
object	E0102-72.3 [Chip I3, T=110, Offsets=-5,2,0]
dtcycle	0
cycle	P
ra_targ	16.01
dec_targ	-72.032028
ra_nom	16.091037335626
dec_nom	-71.929369044456
roll_nom	100.88552813933
revision	5
ontime	7868.8000073284
livetime	7769.1605236131
ontime0	7868.8000073284
ontime1	7868.8000073284
ontime2	7868.8000073284
ontime3	7868.8000073284
ontime6	7868.8000073284
ontime7	7868.8000073284
l2events	77138



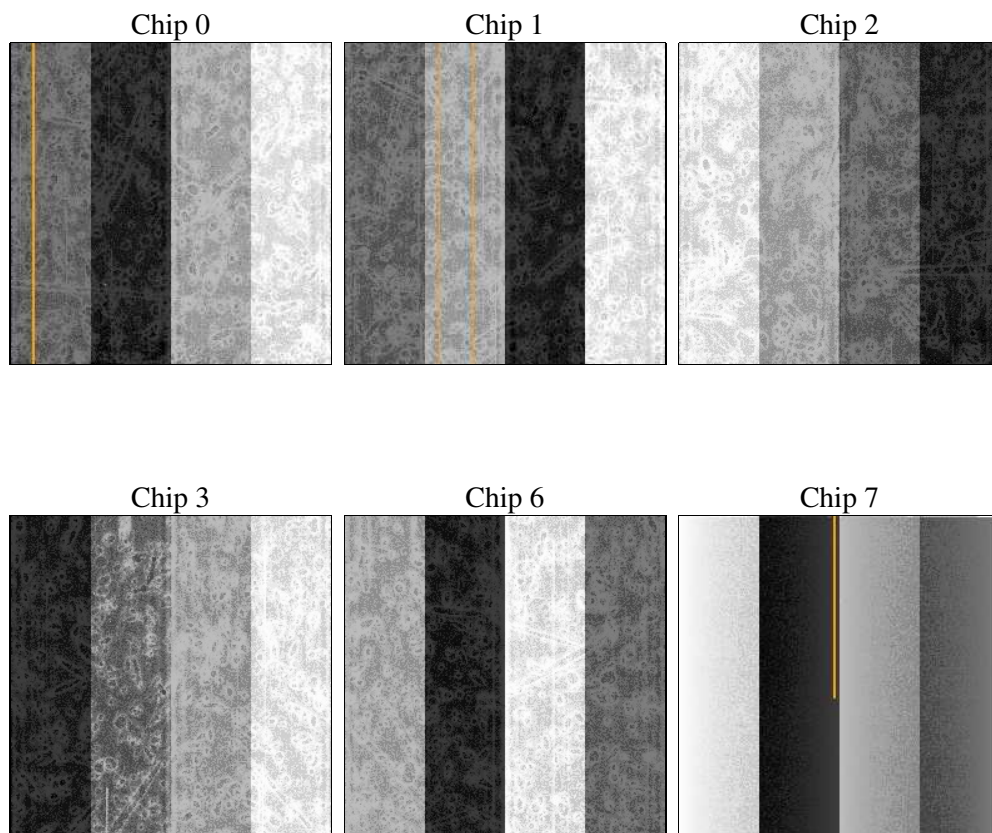
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0
ascdsver	7.6.11.9
caldsver	3.5.0
date	2008-11-20T23:01:00
revision	5

sched_exp_time	7920.000000
ontime	7868.8000073284
ontime0	7868.8000073284
ontime1	7868.8000073284
ontime2	7868.8000073284
ontime3	7868.8000073284
ontime6	7868.8000073284
ontime7	7868.8000073284
l1events	361895

2.1.4 Events

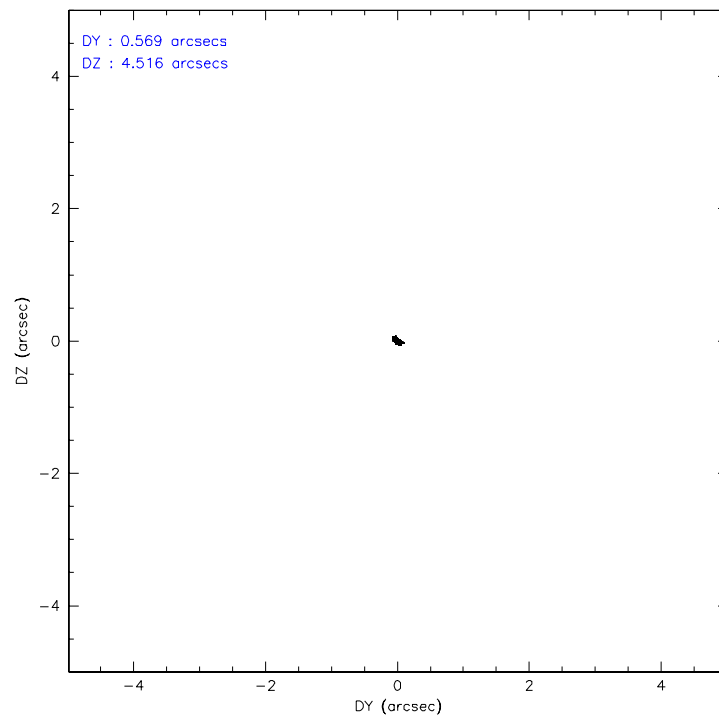
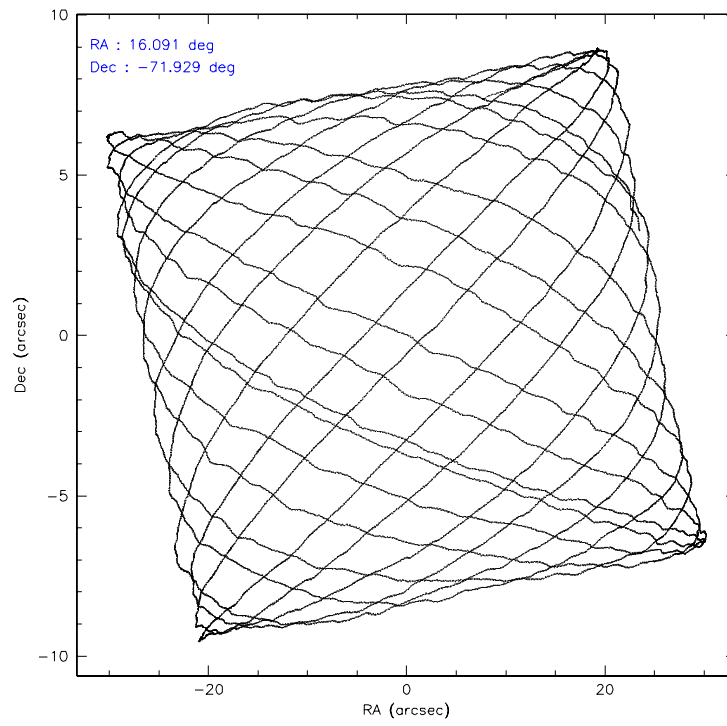
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	51216	52070	56497	83118	56940	62054
rejected events	45786	46163	51336	49094	51049	38154
rejected %	89%	88%	90%	59%	89%	61%

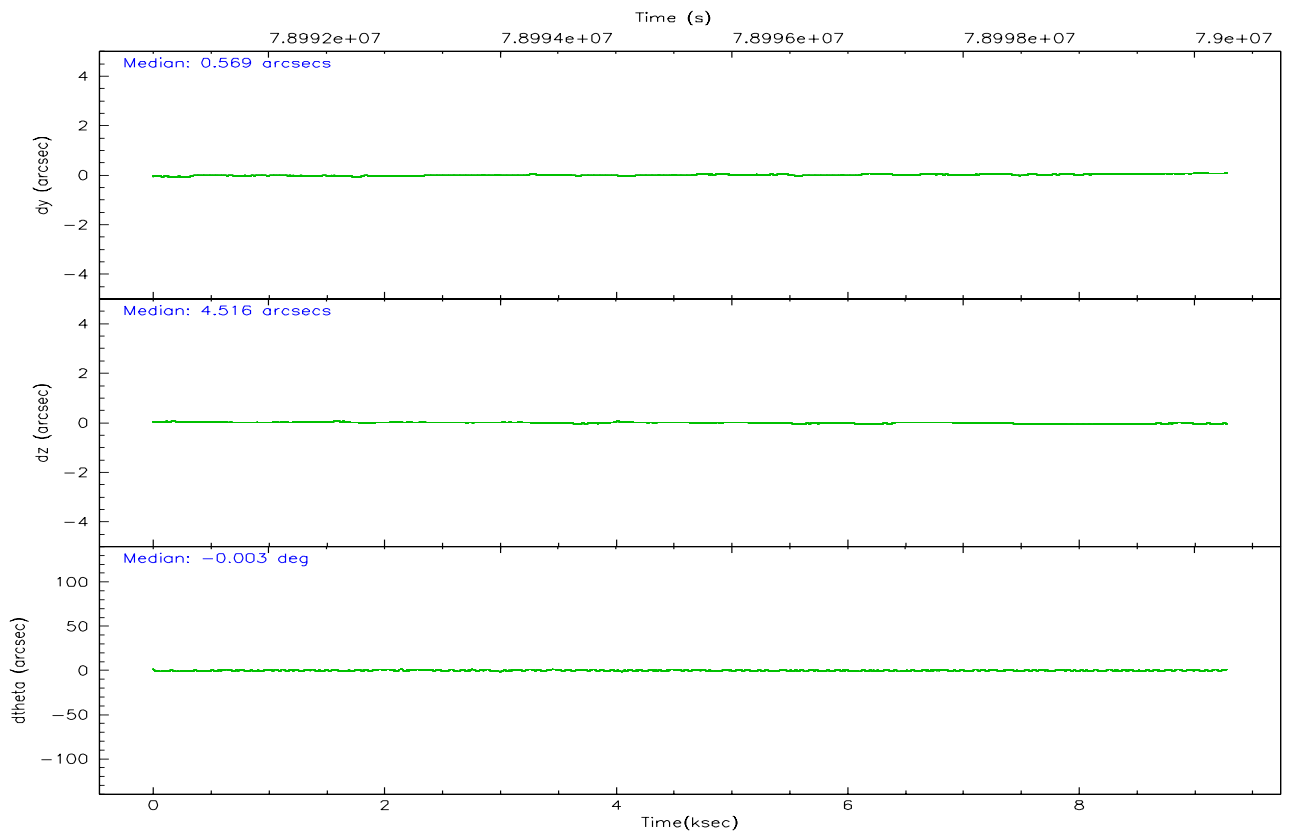
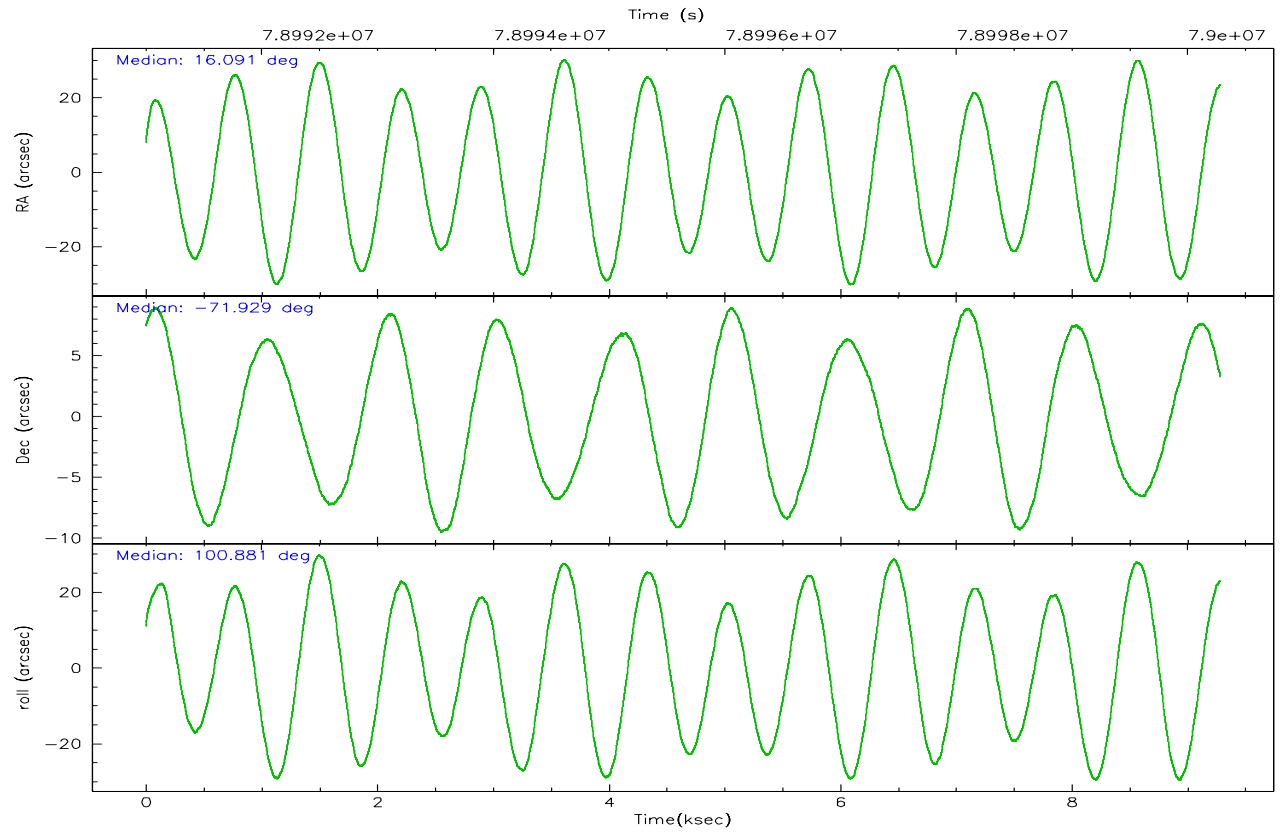
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	1210	1465	1141	26094	1278	1710
	2%	2%	2%	31%	2%	2%
grade 1 events	2349	18	13	202	8	32
	4%	0%	0%	0%	0%	0%
grade 2 events	2071	2200	2041	4528	2269	5077
	4%	4%	3%	5%	3%	8%
grade 3 events	400	427	327	894	372	1392
	0%	0%	0%	1%	0%	2%
grade 4 events	376	407	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	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
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
Pointing RA	16.148946	16.09103733562613	Subarray requested	NONE	NONE
Pointing Dec	-71.950323	-71.92936904445598	Alternating exposures requested	N	N
Pointing Roll	100.731893	100.8855281393334	Primary exposure time	3.200000	3.2
SIM focus pos (mm)	-0.782348	-0.7809083437167272			
SIM defocus (mm)	0	0.001439871863259334			
SIM translation stage pos (mm)	-233.592463	-233.5874344608287			
SIM translation stage offset (mm)	0	-0.005018542100998502			
Observation start time	78992359.184000	78990812.809404			
Observation start date	2000-07-03T06:18:15	2000-07-03T05:53:32			
Observation end time	79000279.184000	79000412.959758			
Observation end date	2000-07-03T08:30:15	2000-07-03T08:33:32			
Read mode	TIMED	TIMED			

2.3 Aspect



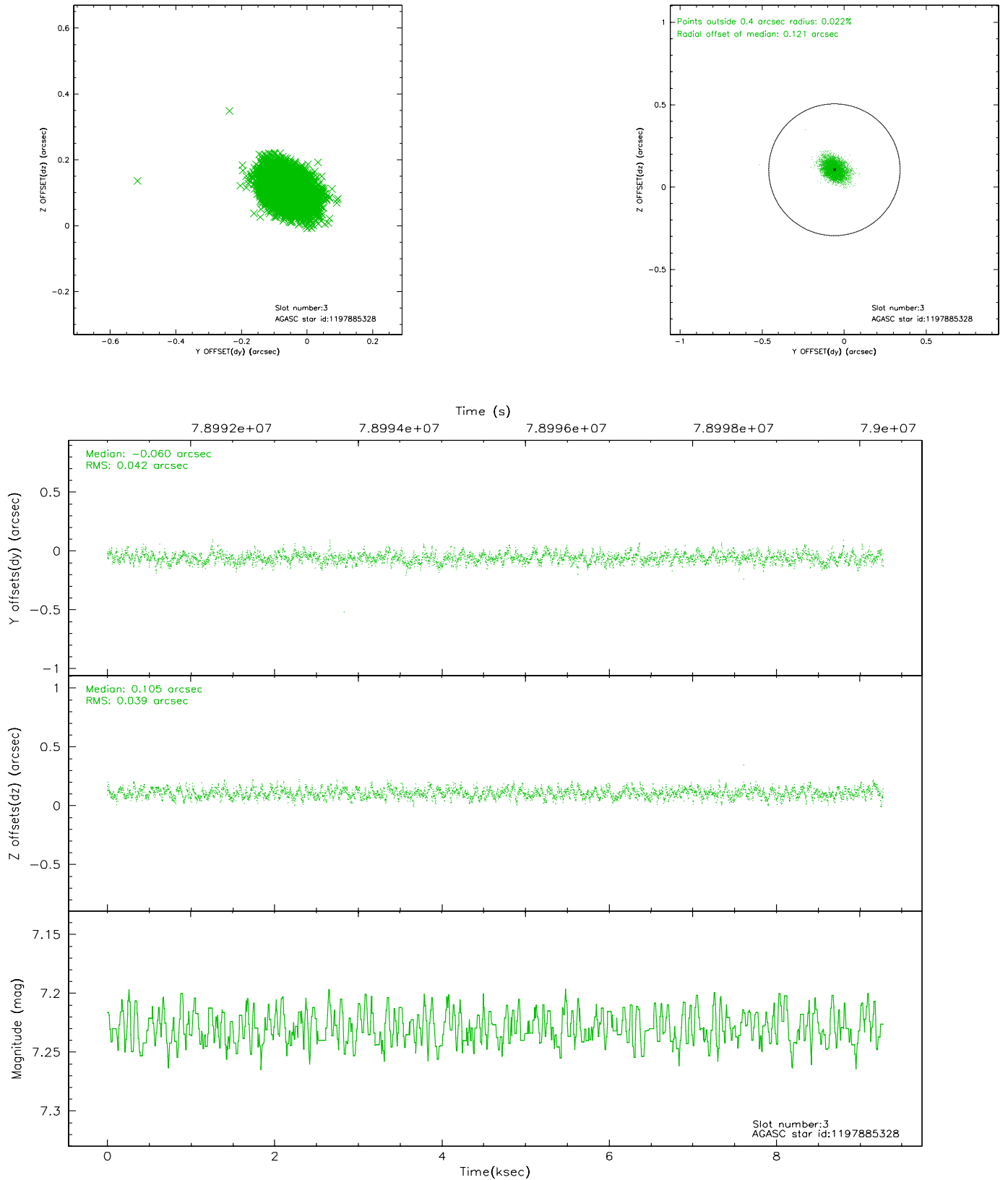


Slot Statistics

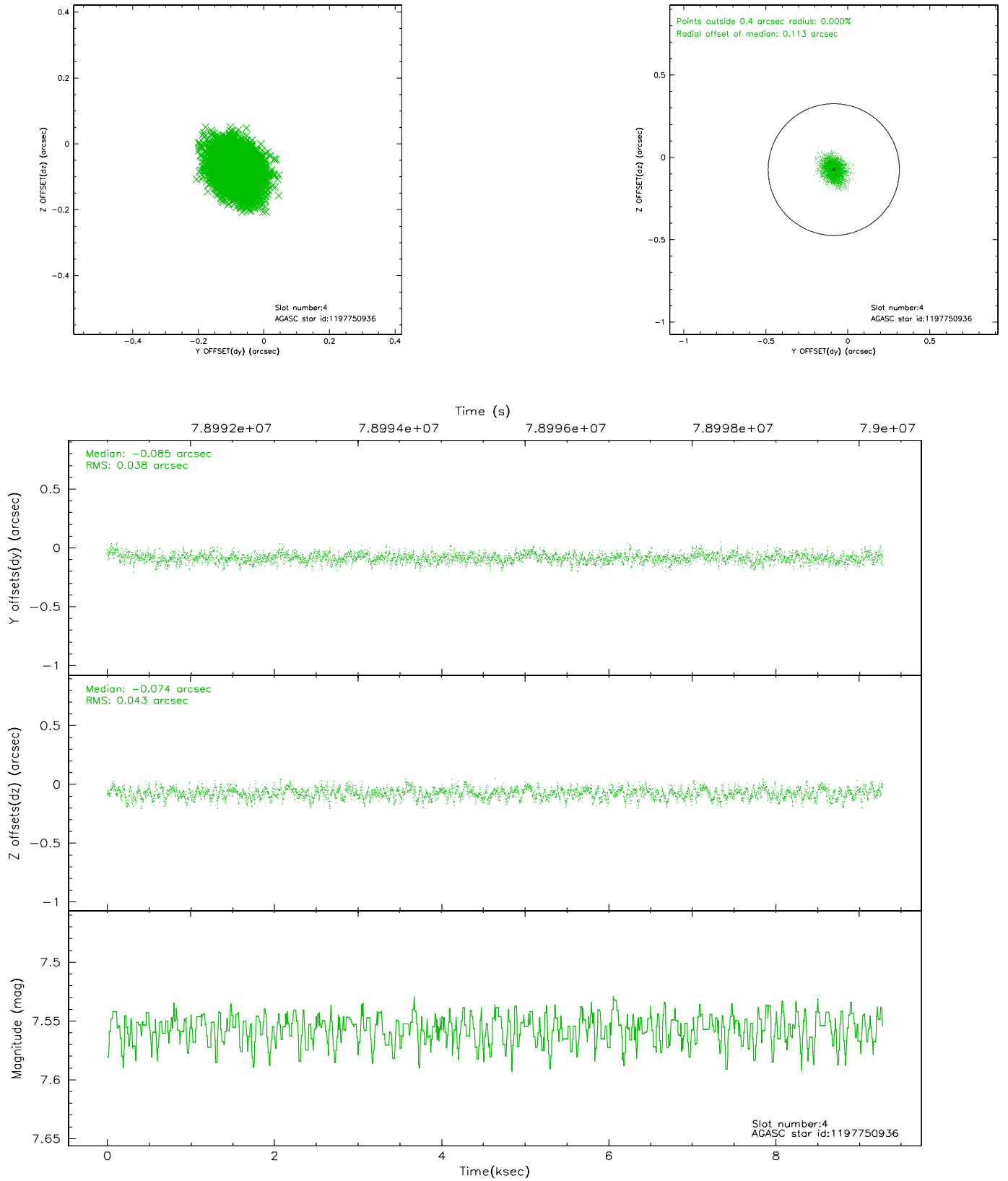
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.25	2264	-0.056	0.043	0.004	0.008	0.000000	0.000000	939.24	-827.78
1	FID	ACIS-I-5	7.23	2264	-0.005	0.007	0.004	0.008	0.000000	0.000000	-1808.52	1069.33
2	OMITTED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	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

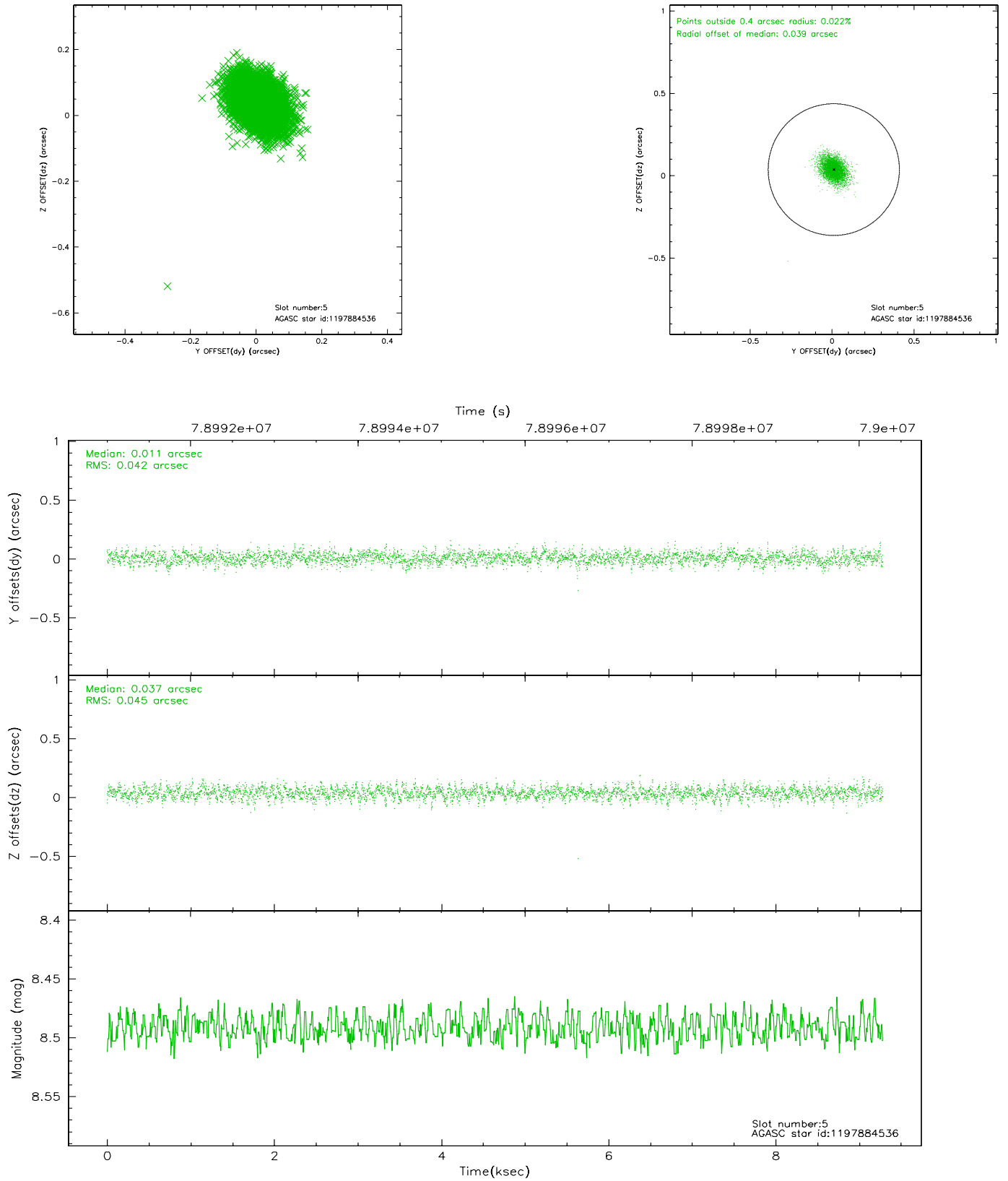
2.4.1 Slot 3



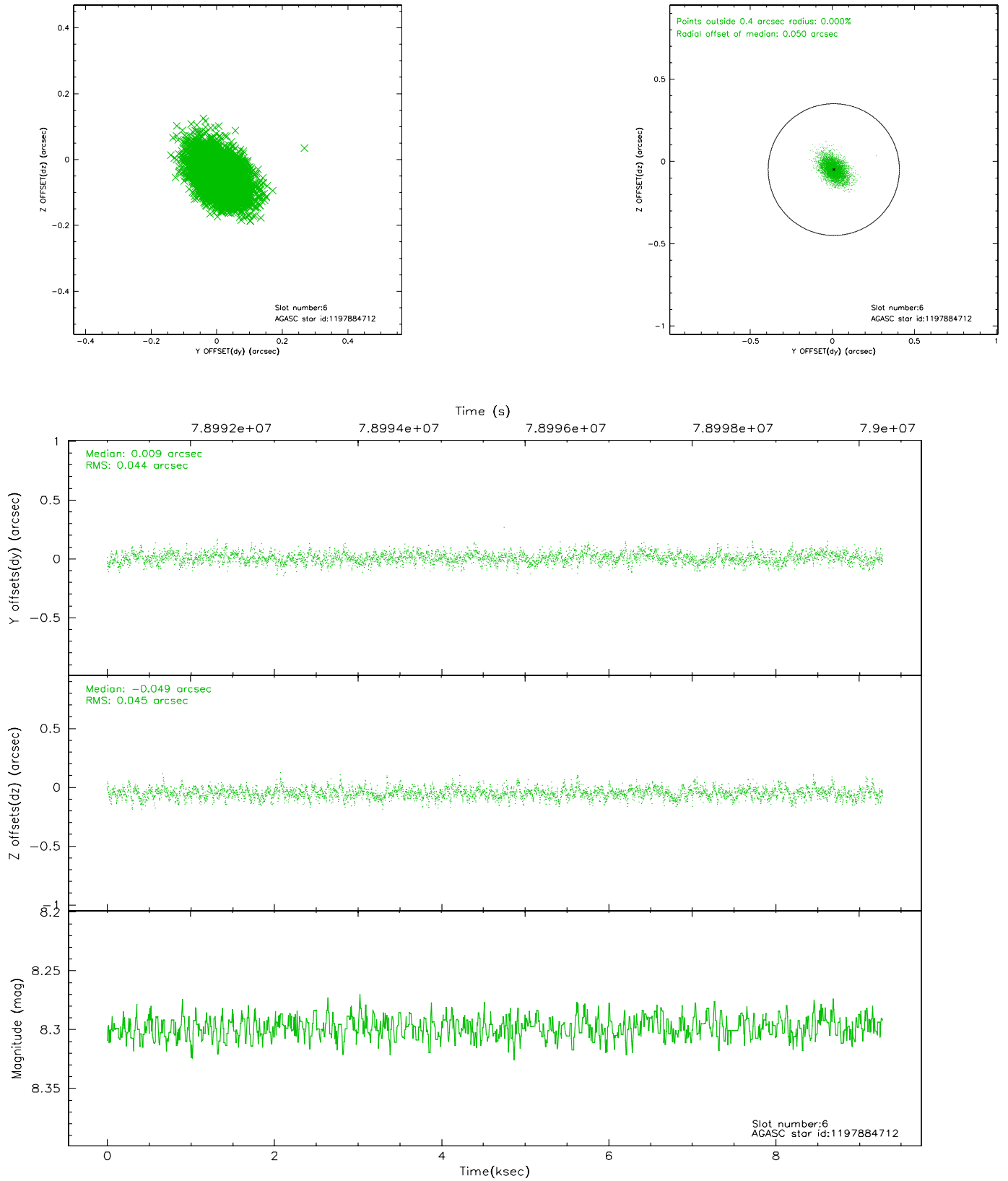
2.4.2 Slot 4



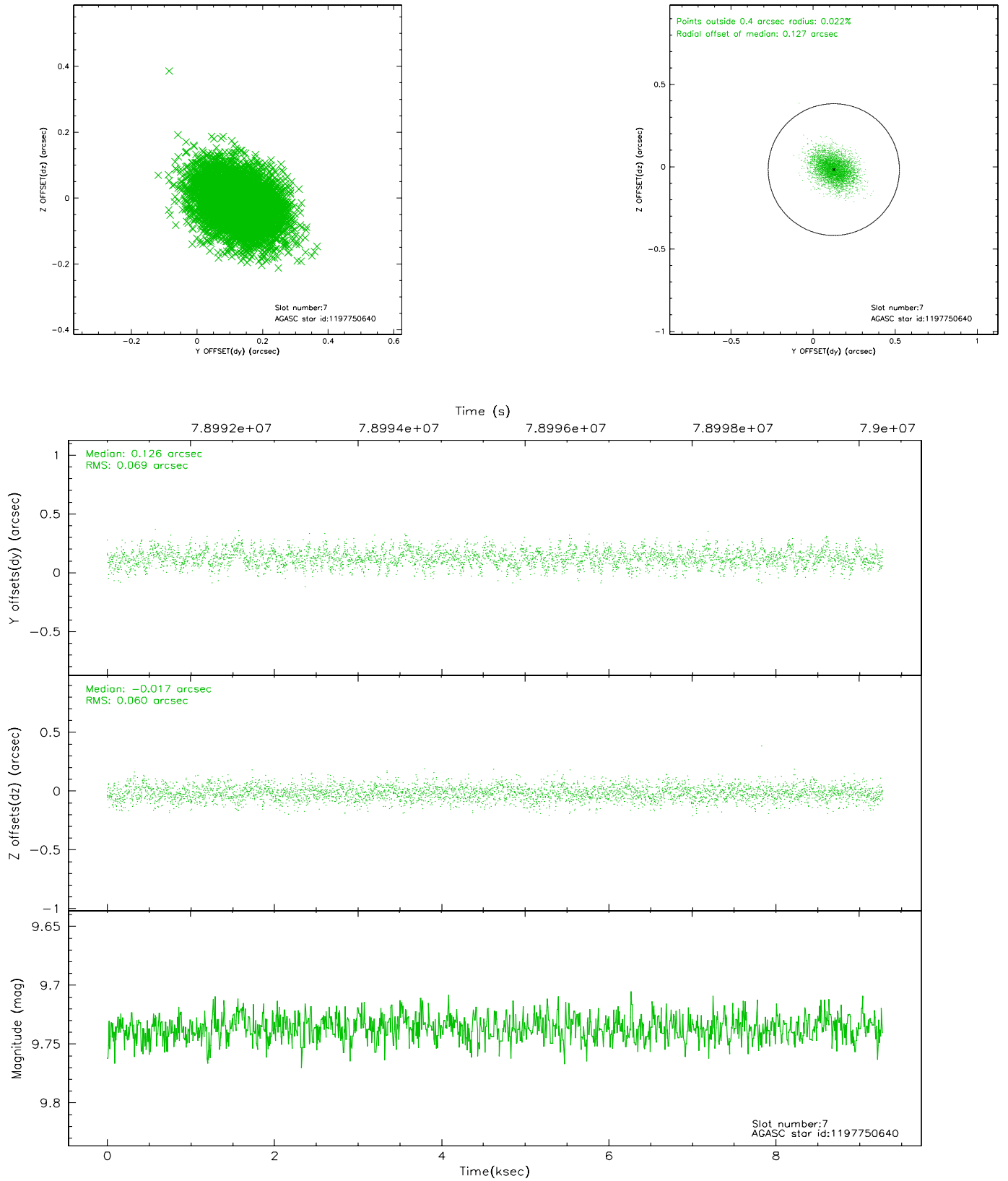
2.4.3 Slot 5



2.4.4 Slot 6

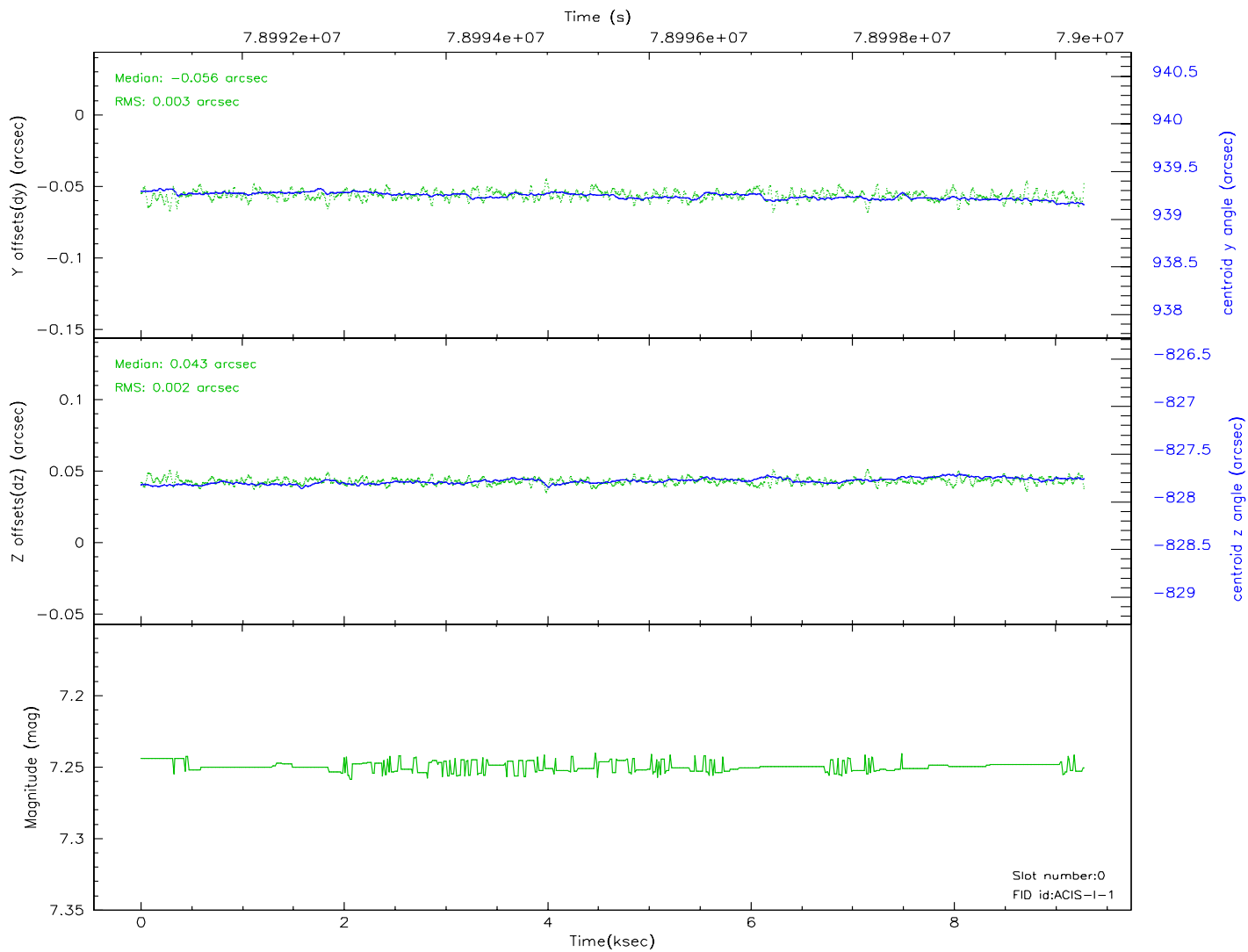
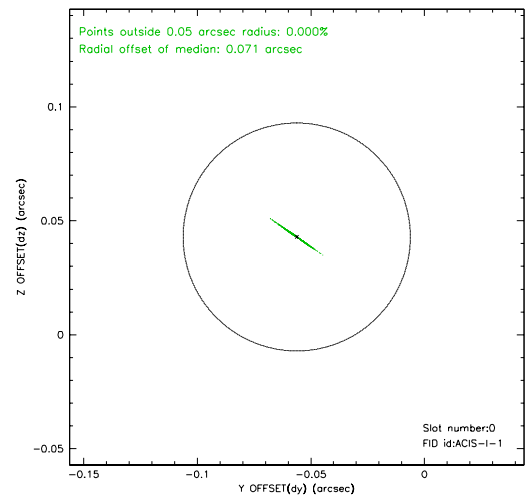
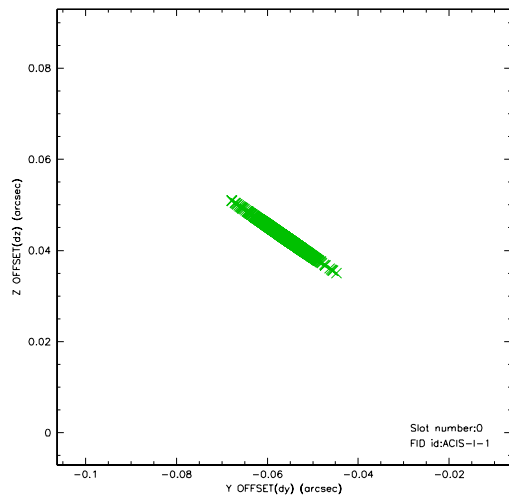


2.4.5 Slot 7

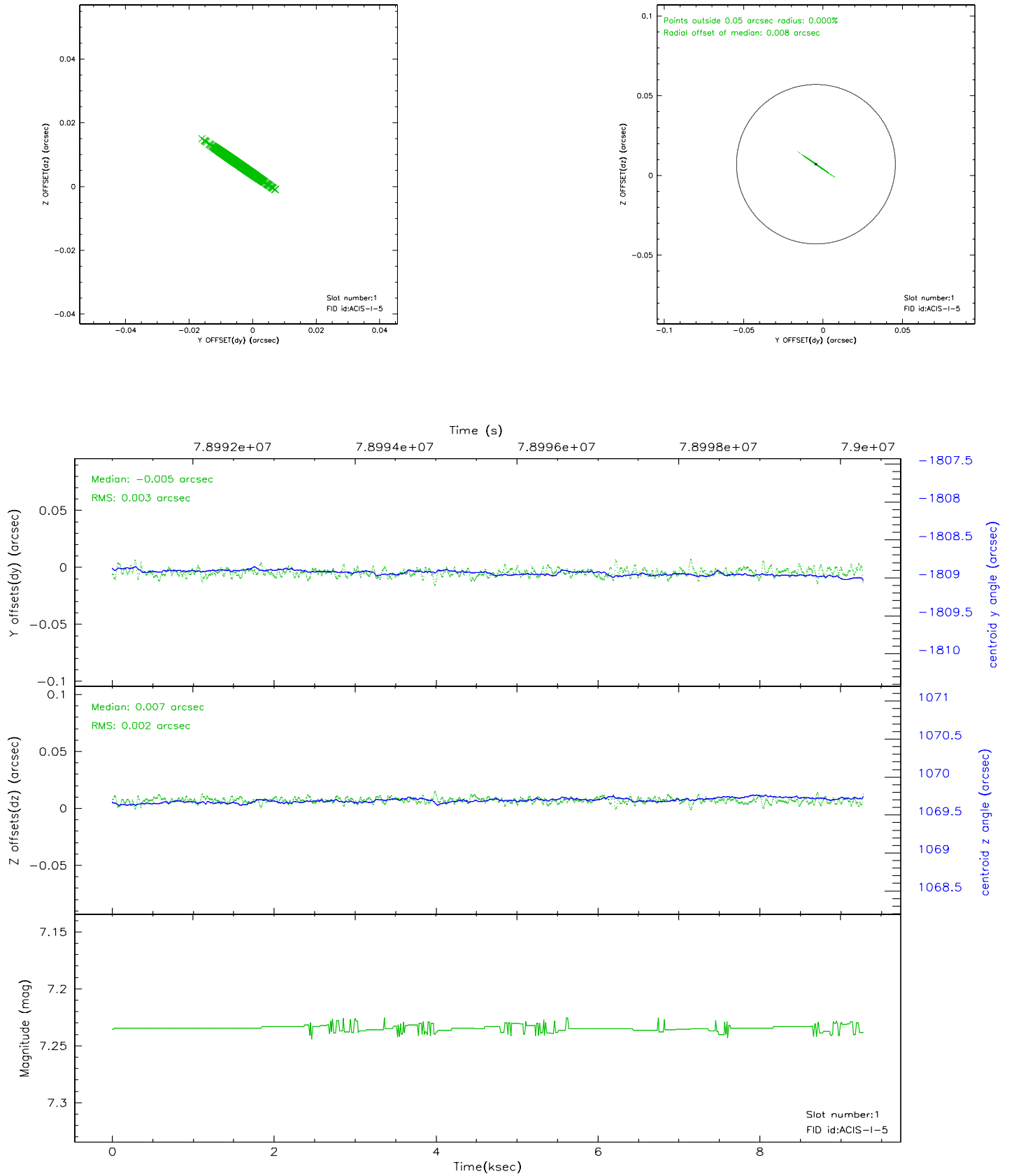


2.5 FID Slots

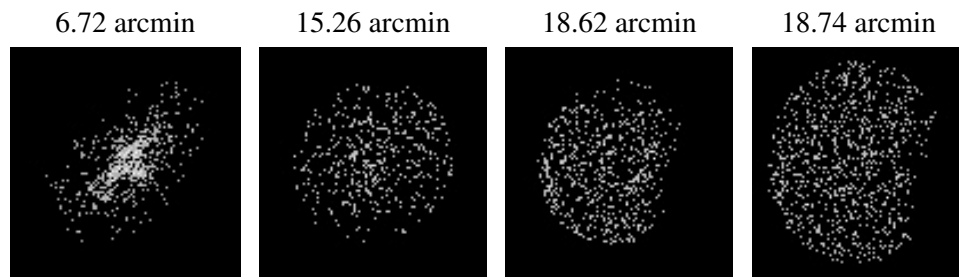
2.5.1 Slot 0



2.5.2 Slot 1



3 Point Sources



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2008.11.21
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	7.868

A.2 Comments

The fid light in slot 2 was removed from the aspect solution due to poor data quality. The aspect solution is not expected to be degraded by removing one fid light from the solution.

=====

This calibration observation was acquired with the focal plane temperature raised from -120C to -110C, for attempted recalibration of ACIS for the 1999-09-16 through 2000-01-28 period.

=====

This reprocessing of the data applies no CTI correction because none is available for that temperature.

=====

Focal plane temperature is warmer than -118.7 C degrees during the entire observation. This temperature is the upper limit of the verified ACIS calibration for the front-illuminated chips. The focal plane temperature is warmer than -116.7 degrees C for approximately the entire observation.

This temperature is the upper limit of the verified ACIS calibration for the back-illuminated chips. The ACIS spectral response calibration is less accurate at these warmer temperatures than it is at -119.7 C. Users whose science objectives depend on the most accurate spectral response (ie: fitting line-rich spectra) may notice an effect. Users whose science objectives do not depend on the most accurate spectral response should not notice an effect.