

V&V Reference Report

L2 ASCDS Version : 8.1.2

Observation 62556 - L2 Version 4

Chandra X-Ray Center

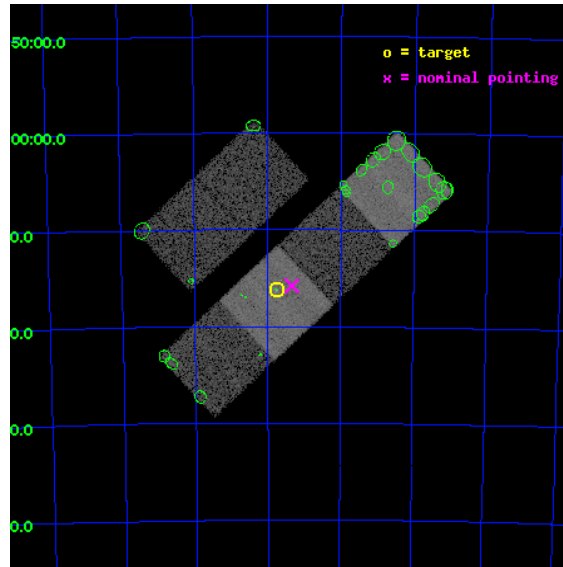
L2 Processing Date : Jul 10 2010

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 2	14
3	Point Sources	15
A	Summary	16
A.1	Status	16
A.2	Comments	16

1 Front

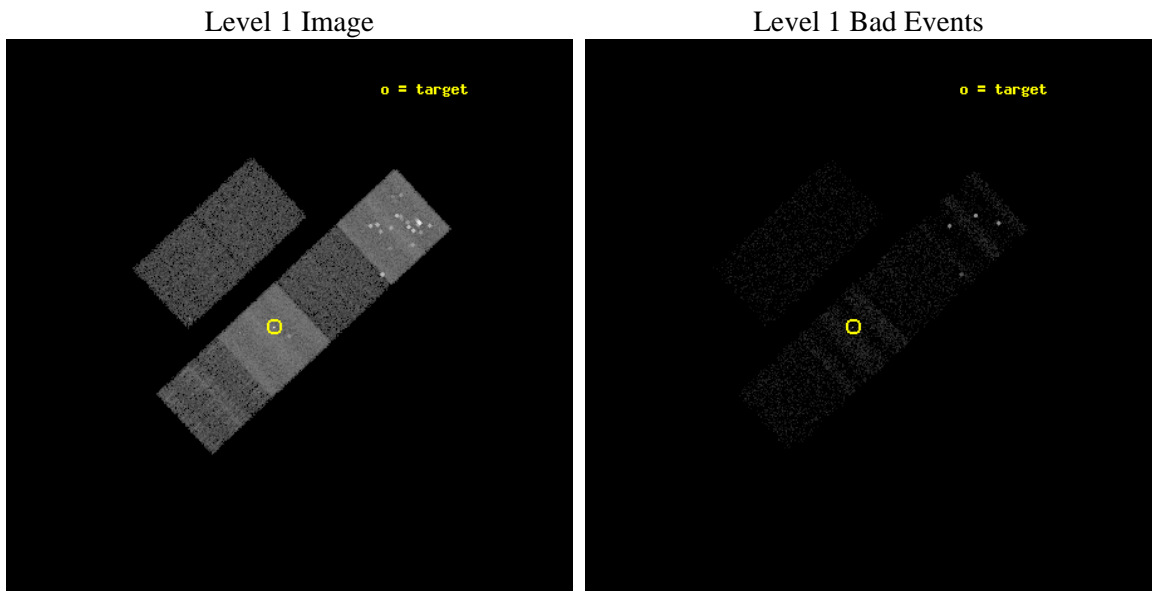
seq_num	780213	Sequence number
obs_id	62556	Observation id
title	ACIS Focus Test	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	PKS0637-752	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	98.94	Observer's specified target RA
dec_targ	-75.27	Observer's specified target Dec
ra_nom	98.834695568467	Nominal RA
dec_nom	-75.263294424181	Nominal Dec
roll_nom	136.94964945372	Nominal Roll
revision	4	Processing version of data
ontime	4904.8017775118	Sum of GTIs [s]
livetime	4842.6942240879	Livetime [s]
ontime2	4904.7196975127	Sum of GTIs [s]
ontime3	4904.6786575094	Sum of GTIs [s]
ontime5	4904.7607375085	Sum of GTIs [s]
ontime6	4904.5965775102	Sum of GTIs [s]
ontime7	4904.8017775118	Sum of GTIs [s]
ontime8	4904.6376175135	Sum of GTIs [s]
l2events	111652	Number of level 2 events



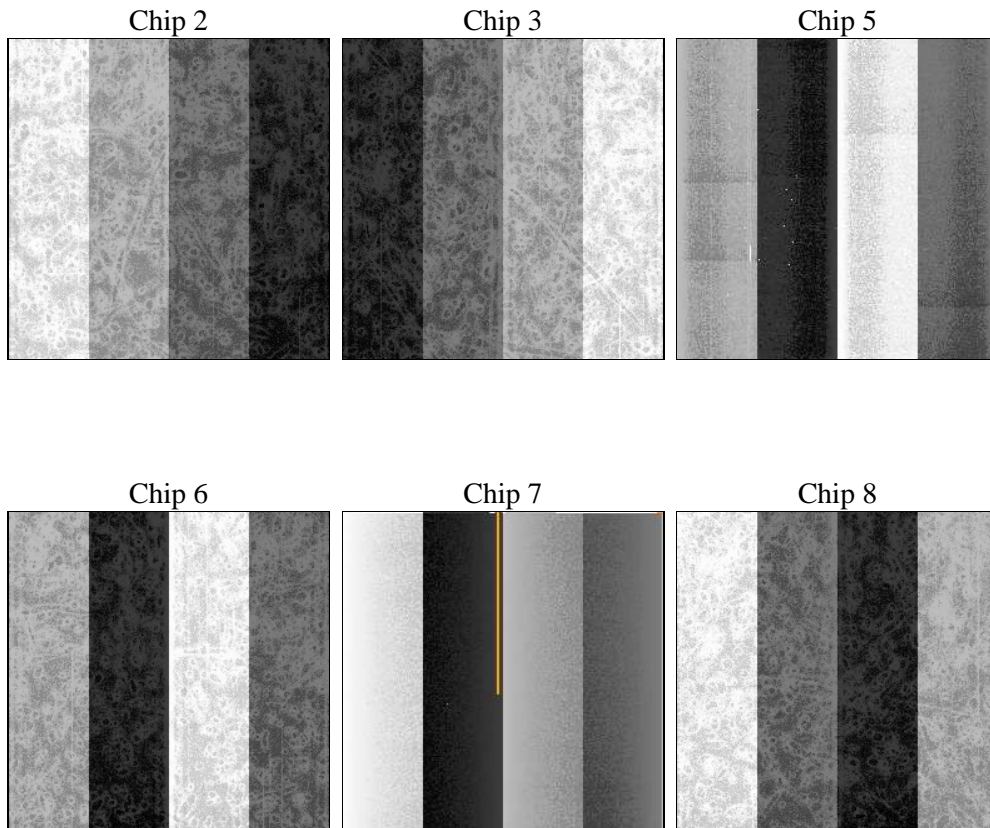
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	5000.000000	Scheduled observation exposure time
ascdsver	8.1.2	ASCDS version number	ontime	4904.8017775118	Sum of GTIs [s]
caldsver	4.1.4	 	ontime2	4904.7196975127	Sum of GTIs [s]
date	2009-12-14T05:43:35	Date and time of file creation	ontime3	4904.6786575094	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	4904.7607375085	Sum of GTIs [s]
			ontime6	4904.5965775102	Sum of GTIs [s]
			ontime7	4904.8017775118	Sum of GTIs [s]
			ontime8	4904.6376175135	Sum of GTIs [s]
			l1events	166240	Number of level 1 events

2.1.4 Events

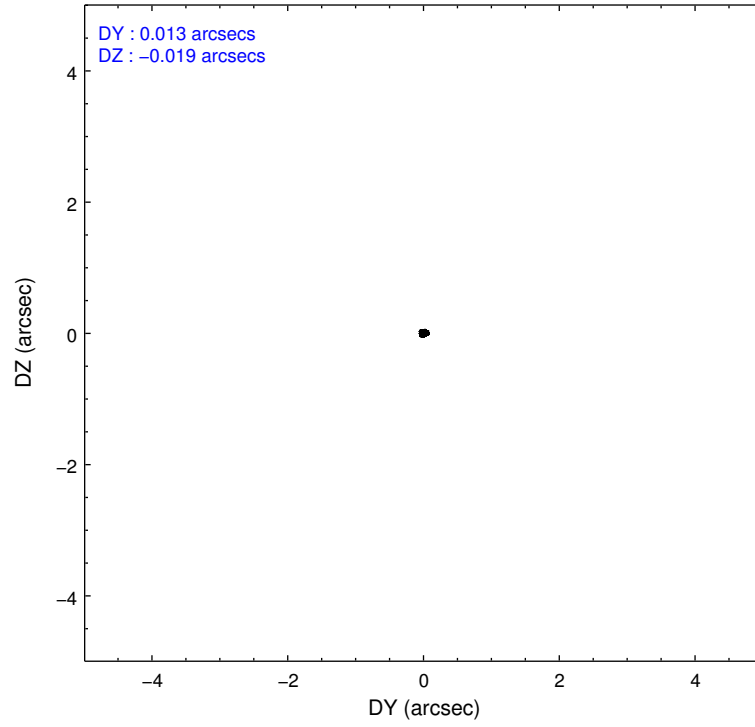
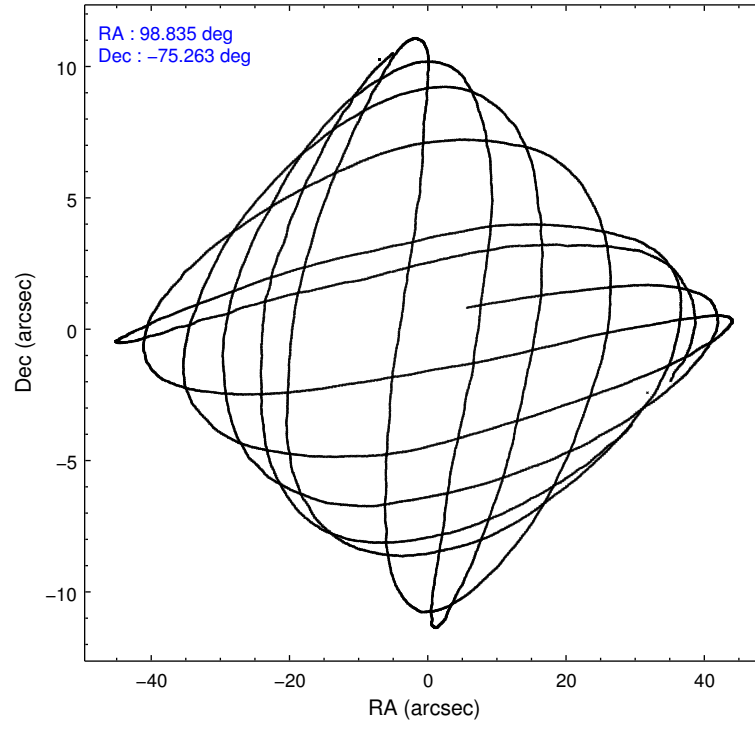
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	12069	11995	64547	13564	45892	18173
rejected events	3244	3378	6103	4038	6863	4121
rejected %	26%	28%	9%	29%	14%	22%

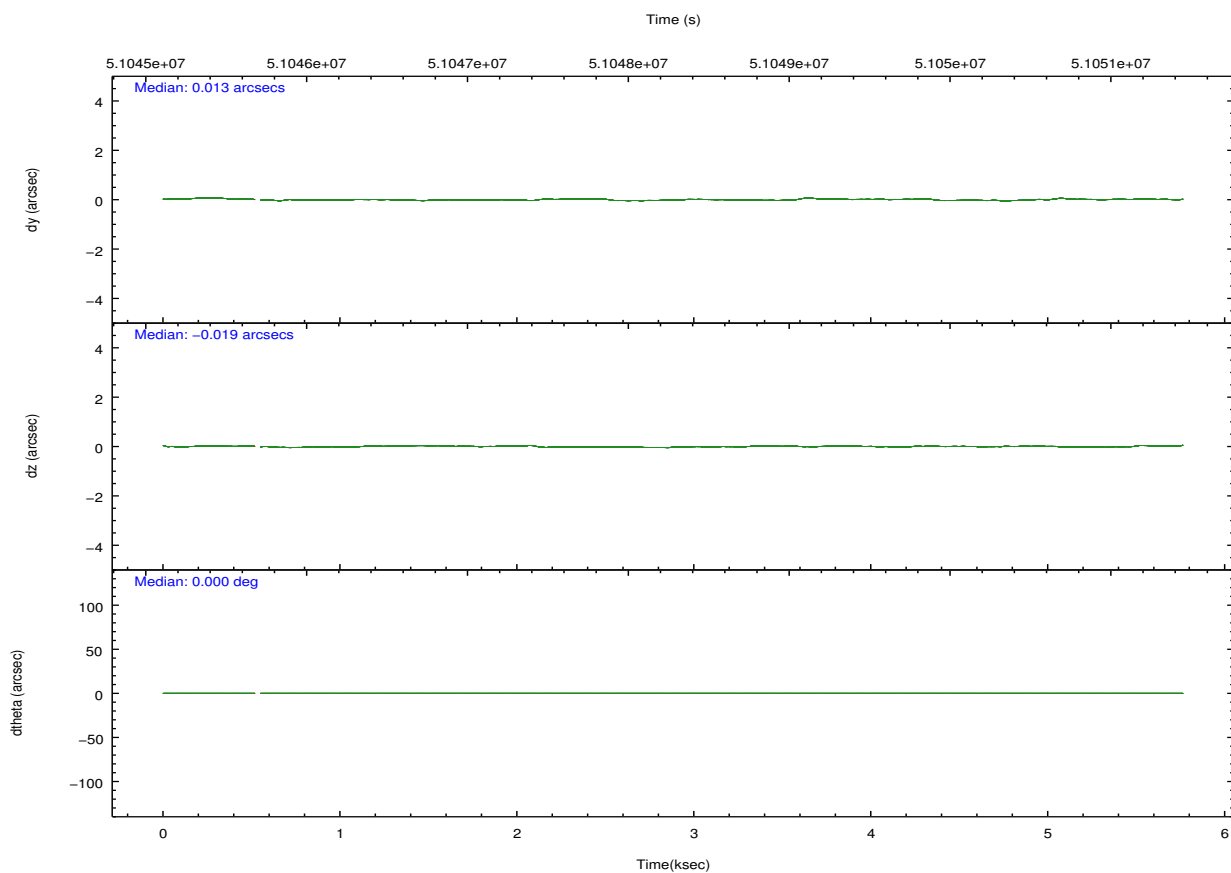
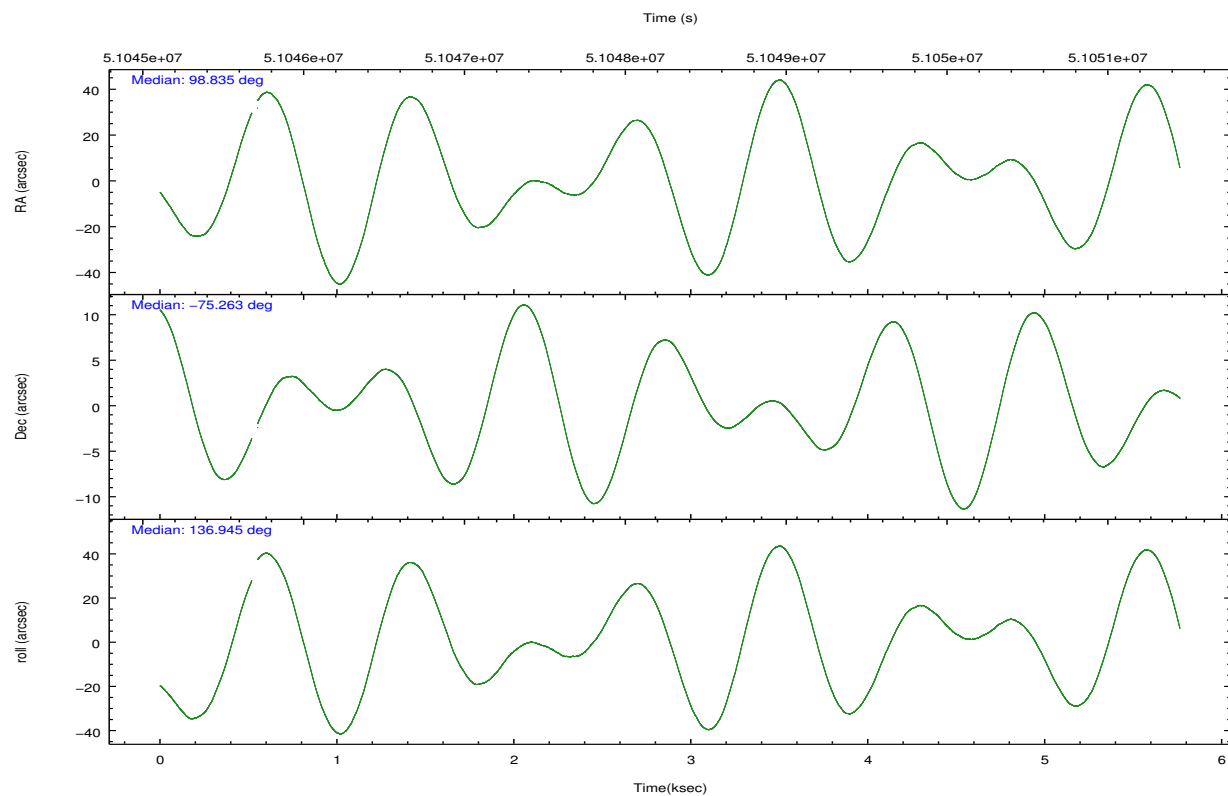
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	2230	2239	15616	2353	2295	3491
	18%	18%	24%	17%	5%	19%
grade 1 events	18	21	1443	28	99	38
	0%	0%	2%	0%	0%	0%
grade 2 events	1873	1728	8720	1840	4848	3472
	15%	14%	13%	13%	10%	19%
grade 3 events	871	787	2803	930	2968	1203
	7%	6%	4%	6%	6%	6%
grade 4 events	696	731	2327	830	2411	1088
	5%	6%	3%	6%	5%	5%
grade 5 events	3212	3343	4582	3996	6719	4068
	26%	27%	7%	29%	14%	22%
grade 6 events	3169	3146	29056	3587	26552	4813
	26%	26%	45%	26%	57%	26%
grade 7 events	0	0	0	0	0	0
	0%	0%	0%	0%	0%	0%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-235678	ACIS-235678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Observation mode	POINTING	POINTING	Number of optional ACIS chips dropped	0	0
Pointing RA	98.939985	98.83469556846744	On-chip summing requested	N	N
Pointing Dec	-75.269985	-75.2632944241807	Subarray requested	NONE	NONE
Pointing Roll	136.708345	136.9496494537166	Alternating exposures requested	N	N
SIM focus pos (mm)	-0.784267	0.1556949422941131	Primary exposure time	0.000000	3.2
SIM defocus (mm)	-0.1	0.8399624035940093			
SIM translation stage pos (mm)	-190.132523	-190.1325231039672			
SIM translation stage offset (mm)	0	5.209593894051068e-07			
Observation start time	51040864.184000	51045396.28797			
Observation start date	1999-08-14T18:00:00	1999-08-14T19:16:36			
Observation end time	51045864.184000	51051160.888174			
Observation end date	1999-08-14T19:23:20	1999-08-14T20:52:40			
Read mode	TIMED	TIMED			

2.3 Aspect



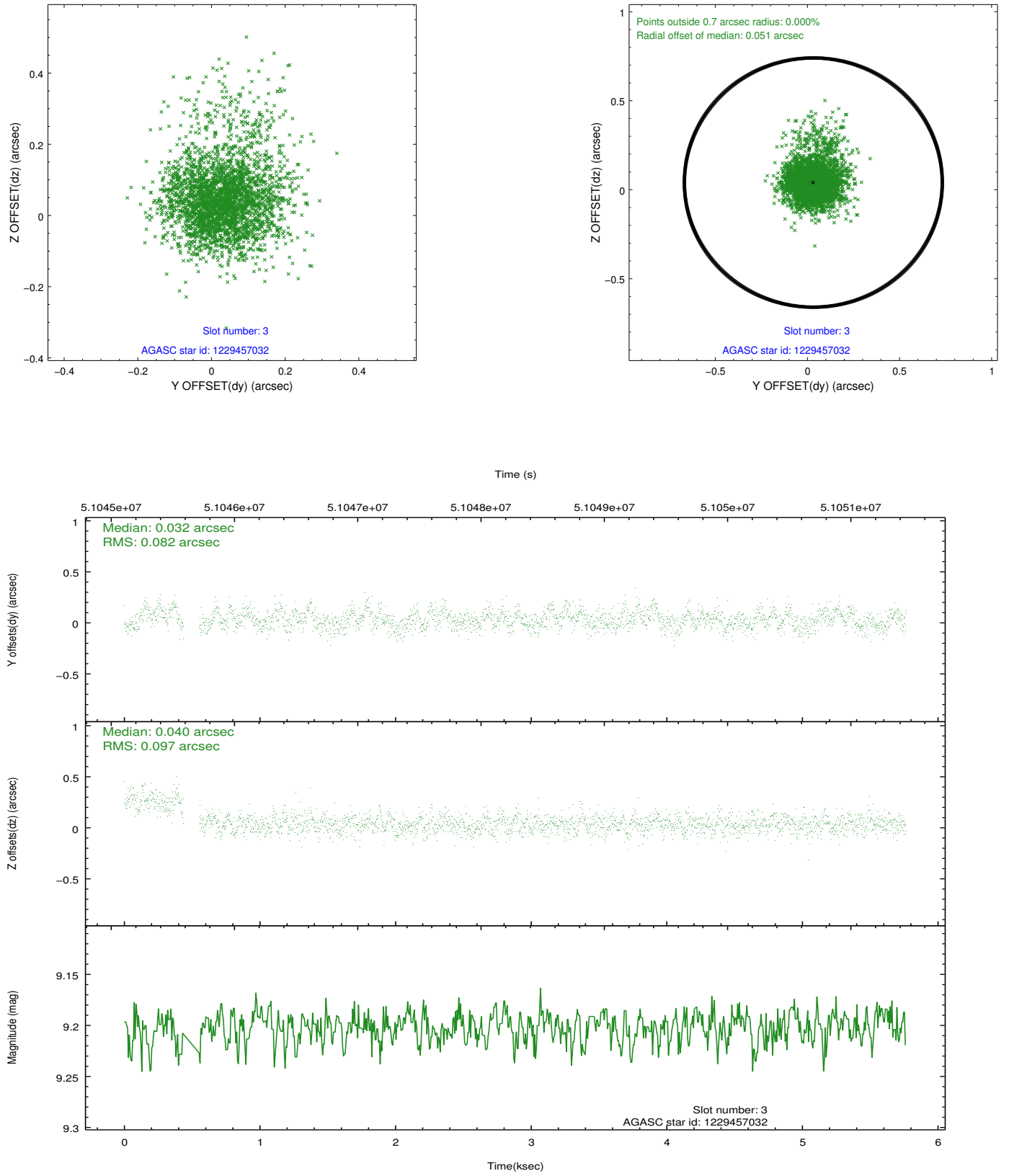


Slot Statistics

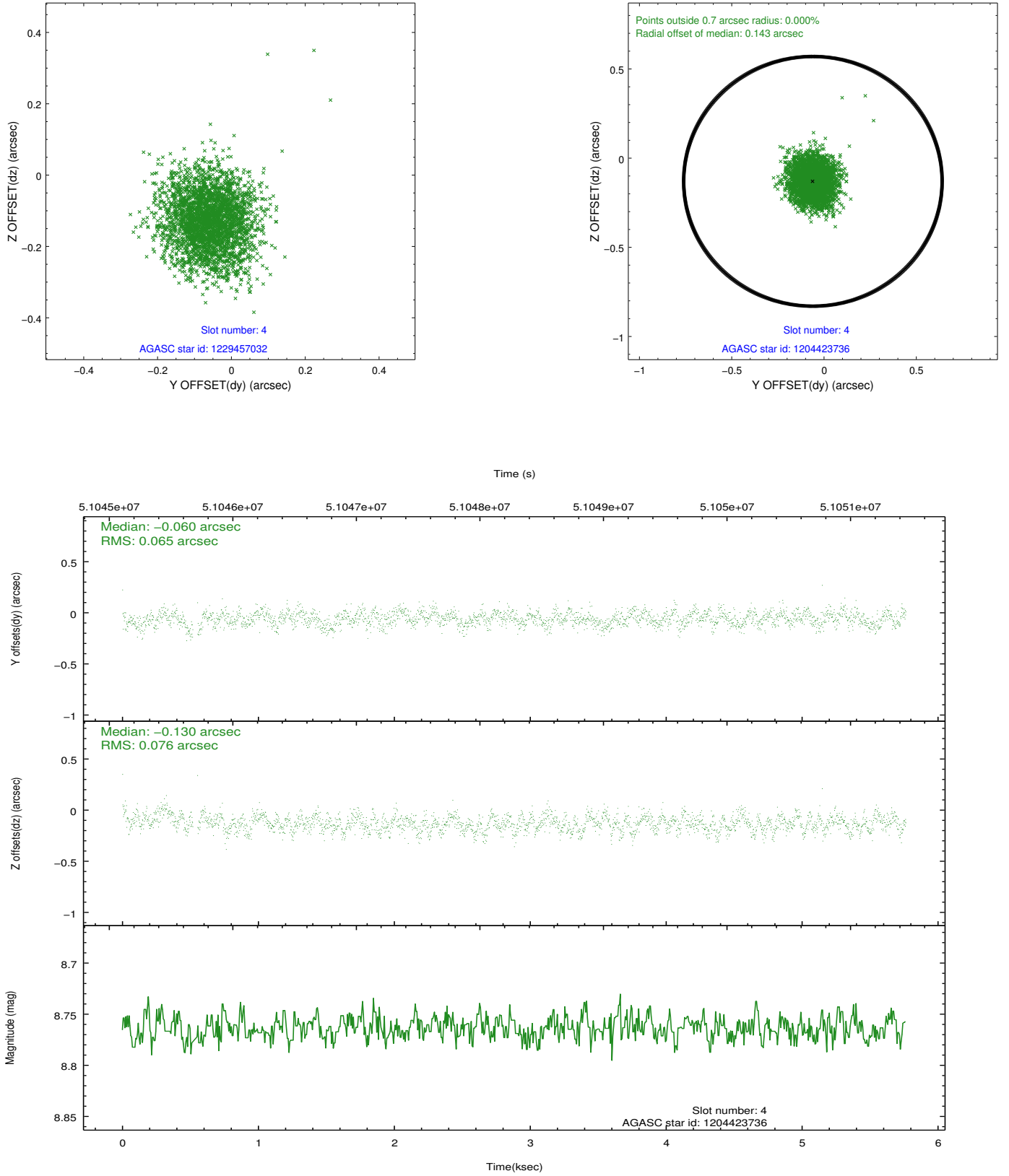
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	UNUSED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
1	UNUSED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
2	FID	ACIS-S-6	7.37	2796	-0.010	-0.004	0.000	0.008	0.000000	0.000000	409.29	824.79
3	GUIDE	1229457032	9.20	2754	0.032	0.040	0.125	0.238	100.958417	-75.581890	-2108.63	-393.36
4	GUIDE	1204423736	8.76	2795	-0.060	-0.130	0.106	0.167	99.272017	-74.796122	936.07	-1458.62
5	GUIDE	1229331616	9.91	2712	0.068	-0.147	0.161	0.268	96.182998	-75.347362	1602.67	1961.13
6	GUIDE	1204427552	9.96	2792	-0.060	0.331	0.167	0.273	98.426081	-74.700454	1757.16	-1160.01
7	GUIDE	1229333040	9.79	2731	0.045	-0.072	0.167	0.274	99.562583	-75.788185	-1677.27	987.94

2.4 Star Slots

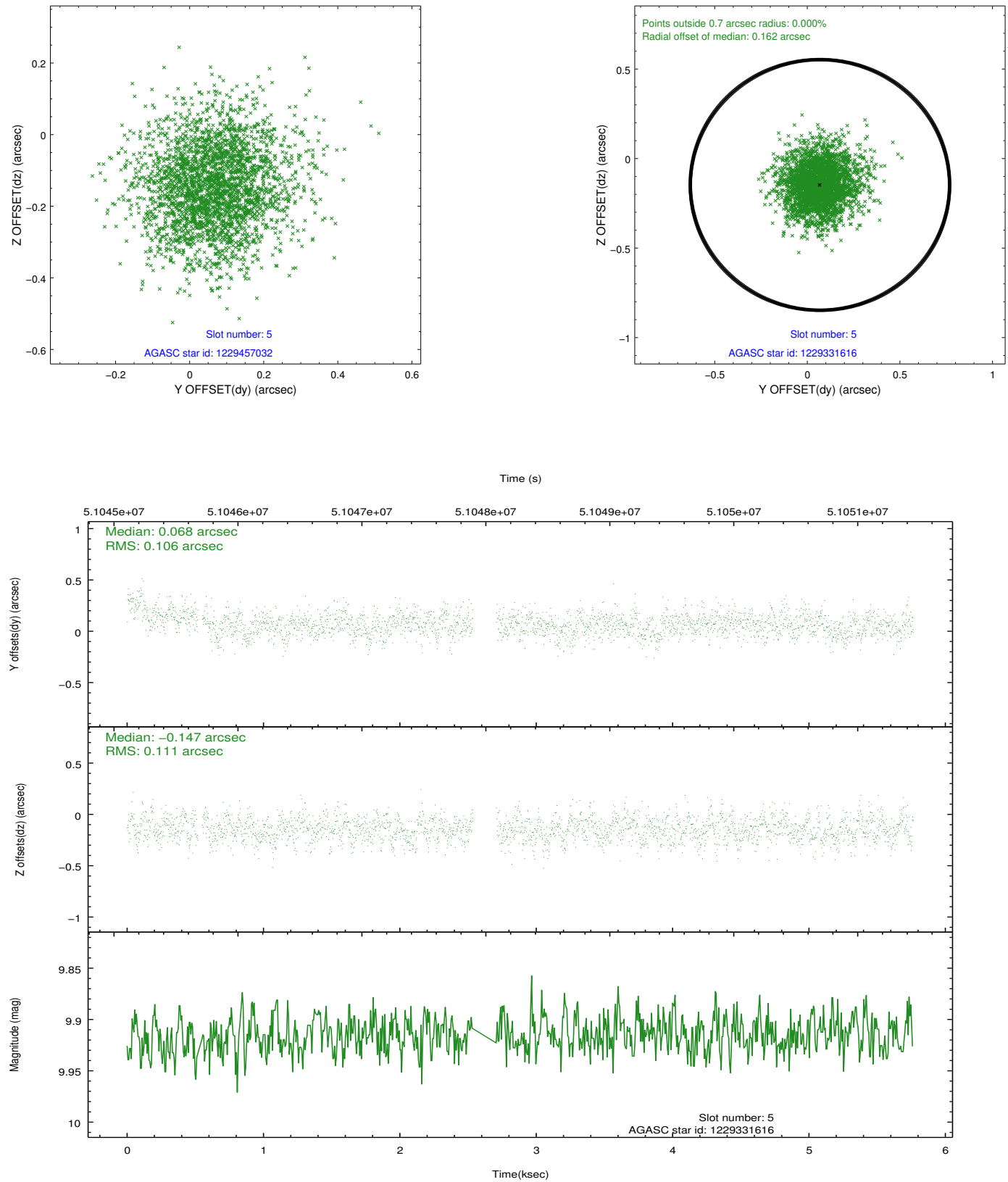
2.4.1 Slot 3



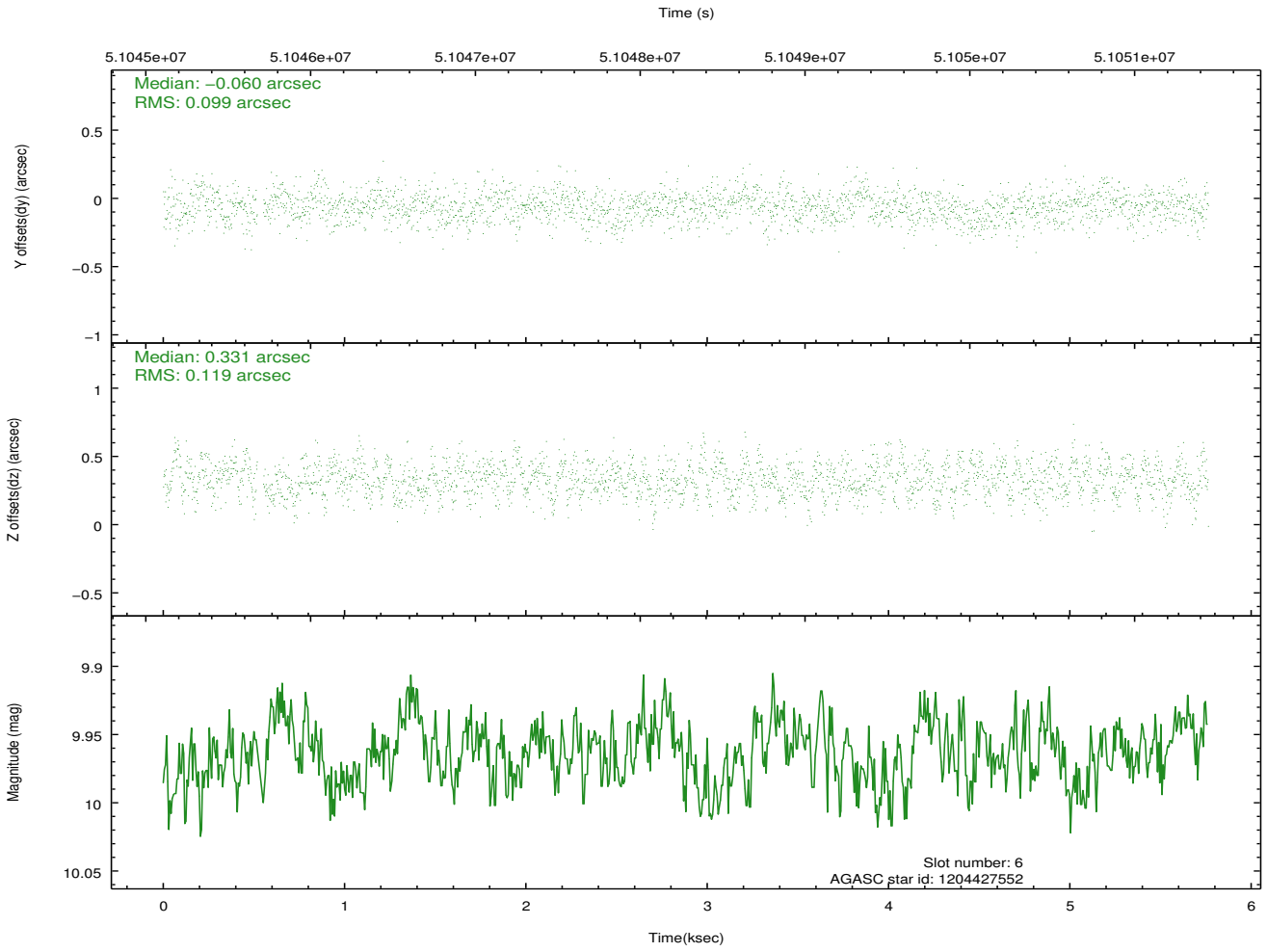
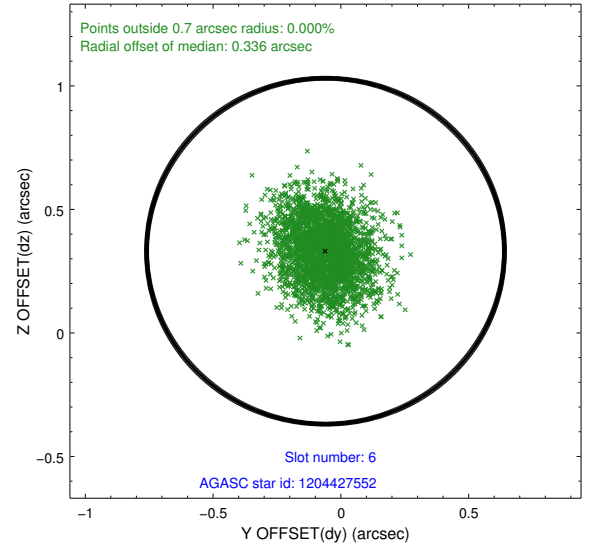
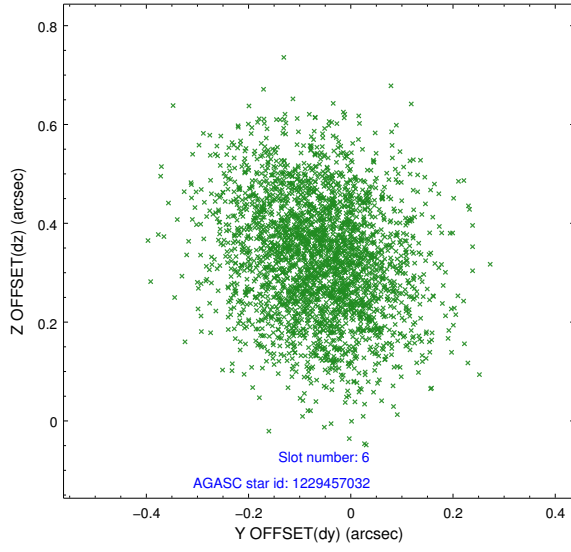
2.4.2 Slot 4



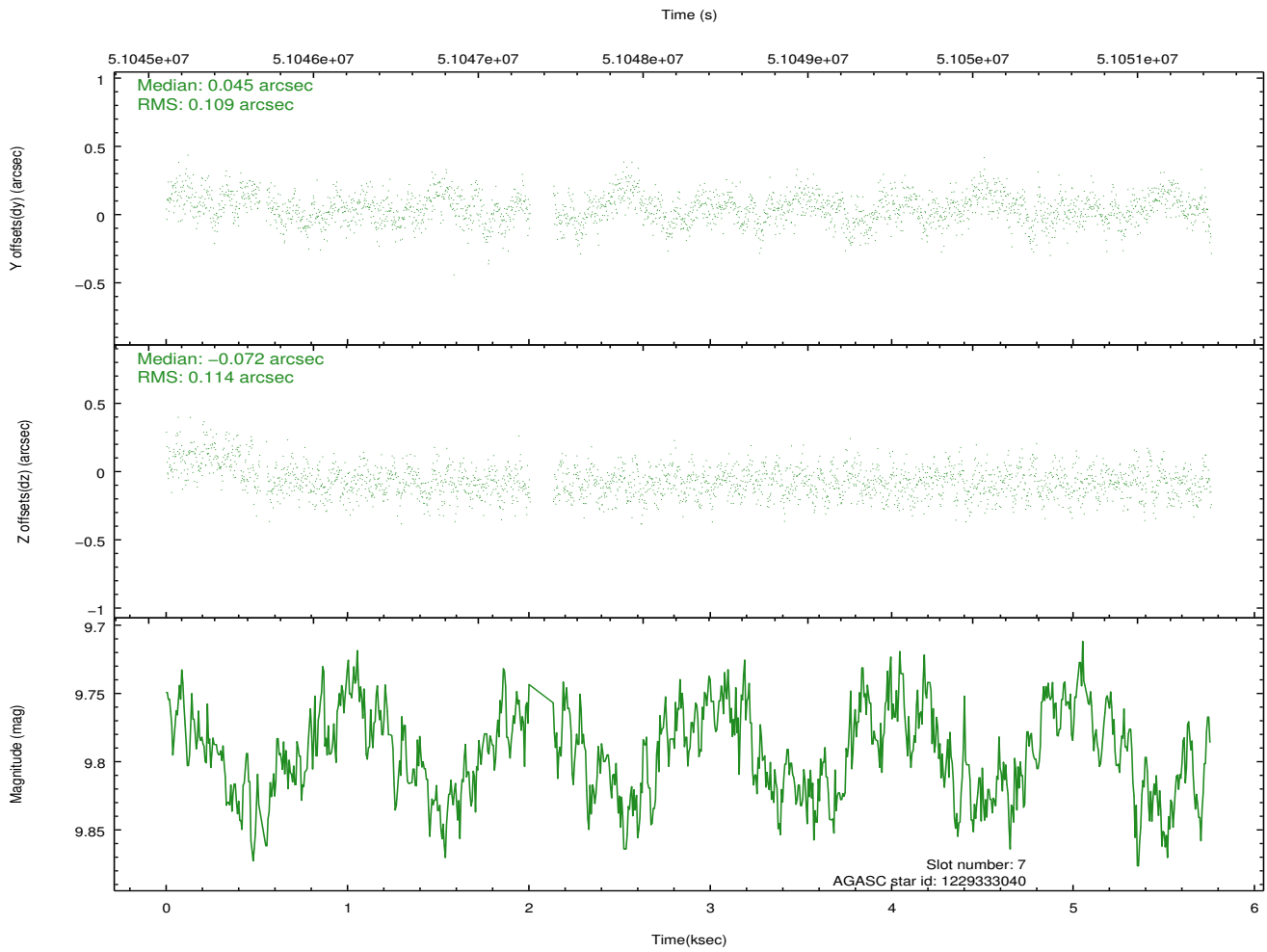
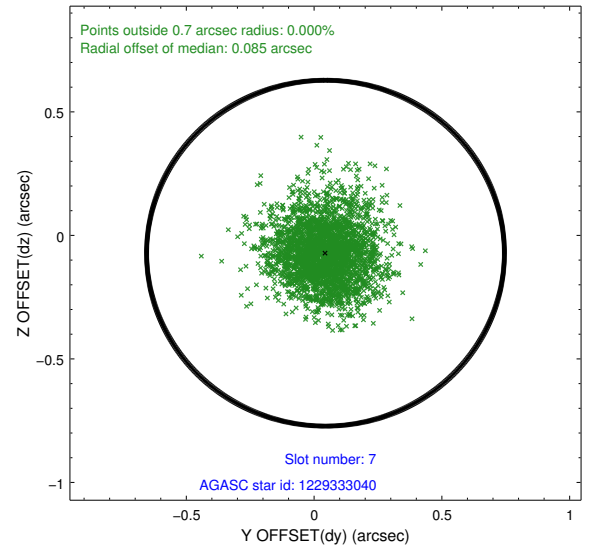
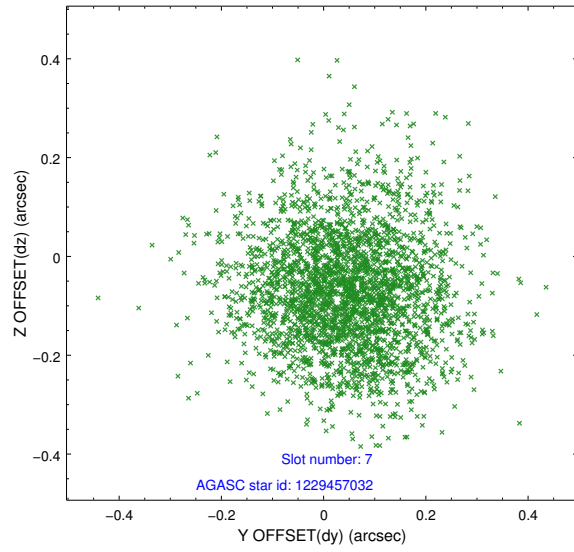
2.4.3 Slot 5



2.4.4 Slot 6

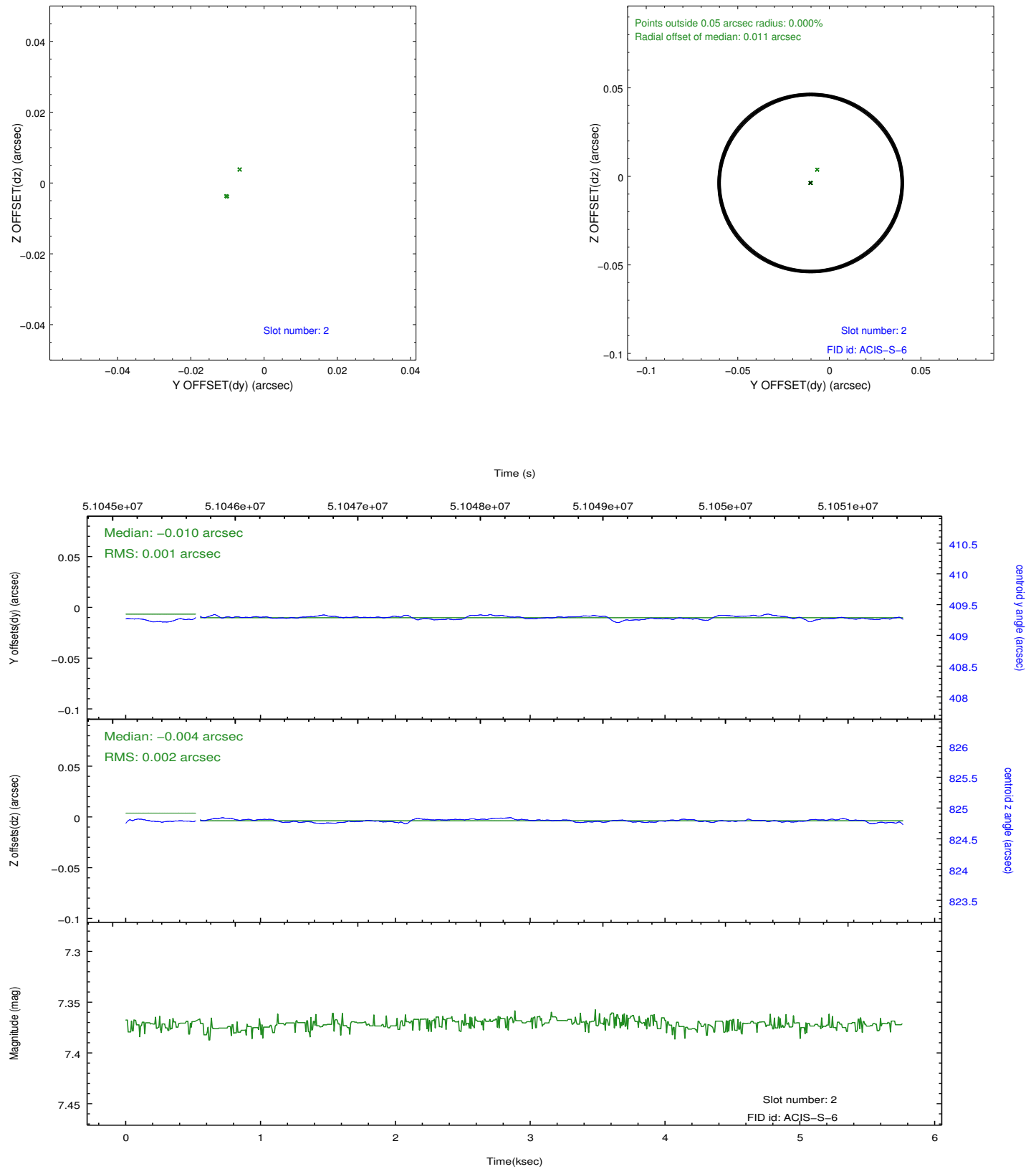


2.4.5 Slot 7

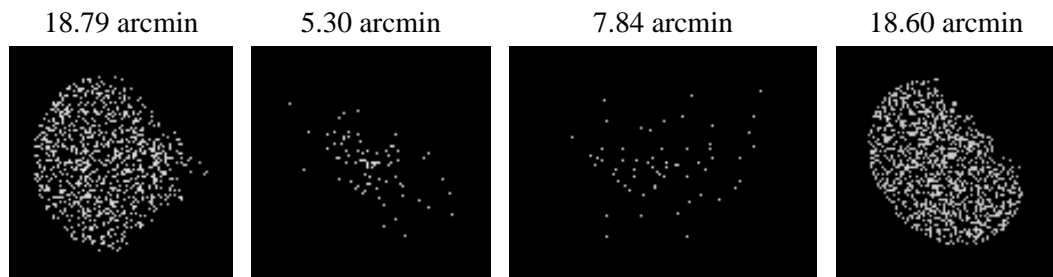


2.5 FID Slots

2.5.1 Slot 2



3 Point Sources



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2010.08.16
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.905

A.2 Comments

ACIS focus and plate scale test. Moved ISIM FOCUS to -0.100mm at 226:1925 (172 steps to 105 steps).

===

Only 1 of 3 fid lights was acquired for this observation due to operational issues.

===

The focal plane temperature is approximately -100 C during this observation. This reprocessing of the data applies no CTI correction because none is available for this temperature at present.

The ACIS CTI correction has not been calibrated at this temperature, because it was early in the mission, and ACIS had not yet been lowered to the standard -119.7 C. Both front and back illuminated chips are affected. However a T_GAIN correction has been applied to the BI chips (ACIS-5 and ACIS-7) data included here.

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.