

V&V Reference Report

L2 ASCDS Version : 7.6.11.2

Observation 380 - L2 Version 5
Chandra X-Ray Center

L2 Processing Date : Nov 16 2007

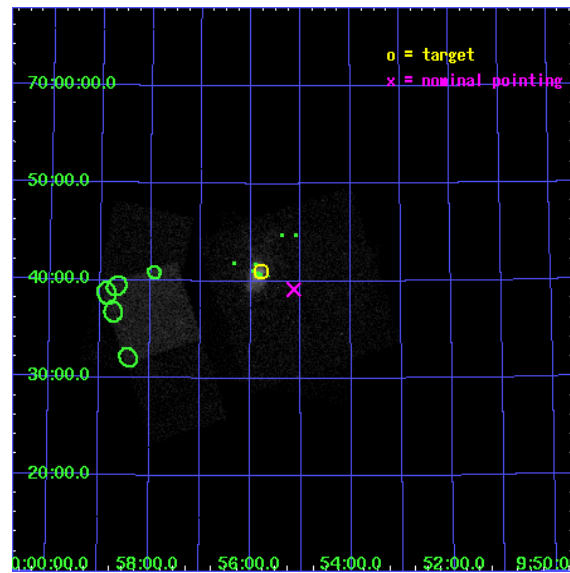
Contents

1	Front	3
2	OBI	4
2.1	OBI	4
2.1.1	Images	4
2.1.2	Bias	4
2.1.3	Parameters	5
2.1.4	Events	5
2.2	Compared Parameters	6
2.3	Aspect	7
2.4	Star Slots	10
2.4.1	Slot 3	10
2.4.2	Slot 4	11
2.4.3	Slot 5	12
2.4.4	Slot 6	13
2.4.5	Slot 7	14
2.5	FID Slots	15
2.5.1	Slot 0	15
2.5.2	Slot 1	16
2.5.3	Slot 2	17
3	OBI	18
3.1	OBI	18
3.1.1	Images	18
3.1.2	Bias	18
3.1.3	Parameters	19
3.1.4	Events	19
3.2	Compared Parameters	20
3.3	Aspect	21
3.4	Star Slots	24
3.4.1	Slot 3	24
3.4.2	Slot 4	25
3.4.3	Slot 5	26
3.4.4	Slot 6	27

3.4.5	Slot 7	28
3.5	FID Slots	29
3.5.1	Slot 0	29
3.5.2	Slot 1	30
3.5.3	Slot 2	31
4	Point Sources	32
A	Summary	33
A.1	Status	33
A.2	Comments	33

1 Front

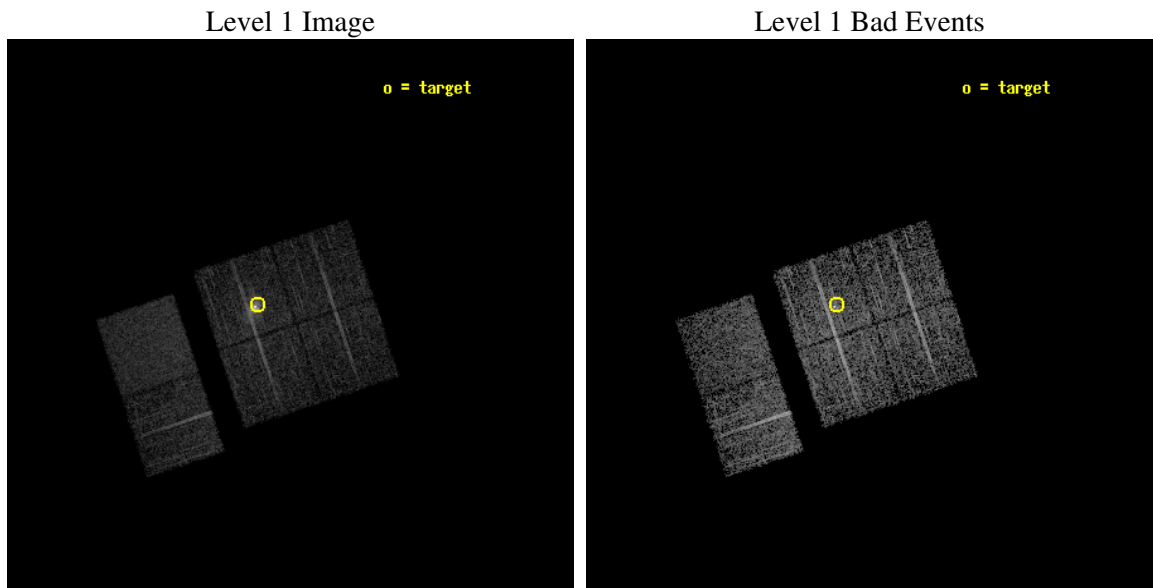
seq_num	700052
obs_id	380
title	THE ORIGIN OF HARD X-RAYS FROM M82
observer	Dr. Stephen Murray
object	M82
dtcycle	0
cycle	P
ra_targ	148.945833
dec_targ	69.682778
ra_nom	148.78438867712
dec_nom	69.65291358783
roll_nom	251.56273081347
revision	5
ontime	5062.4000047147
livetime	4998.2968476437
ontime0	5062.4000047147
ontime1	5062.4000047147
ontime2	5062.4000047147
ontime3	5062.4000047147
ontime6	5062.4000047147
ontime7	5062.4000047147
l2events	51737



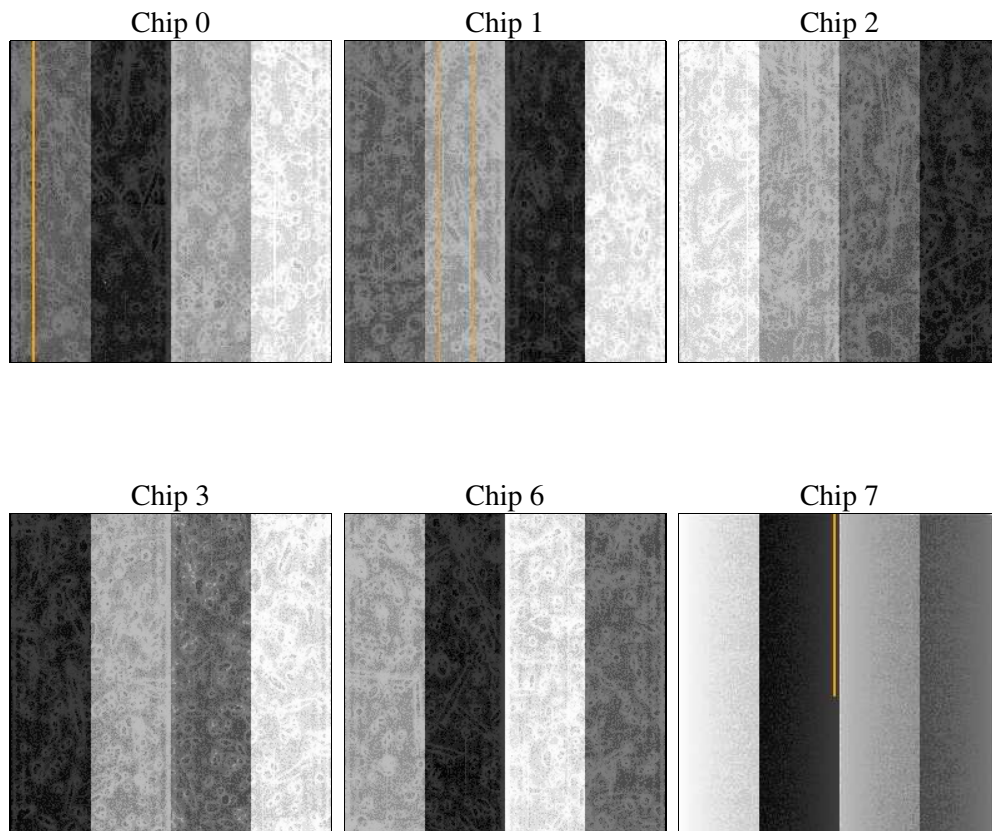
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1
ascdsver	7.6.10
caldsver	3.4.0
date	2007-06-29T20:18:23
revision	3

sched_exp_time	4000.000000
ontime	3862.4000035971
ontime0	3862.4000035971
ontime1	3862.4000035971
ontime2	3862.4000035971
ontime3	3862.4000035971
ontime6	3862.4000035971
ontime7	3862.4000035971
l1events	176380

2.1.4 Events

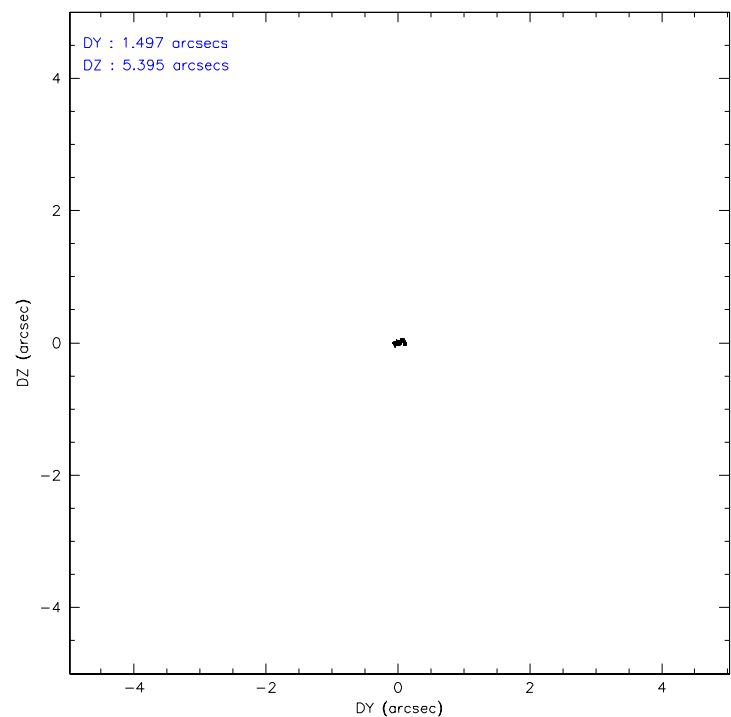
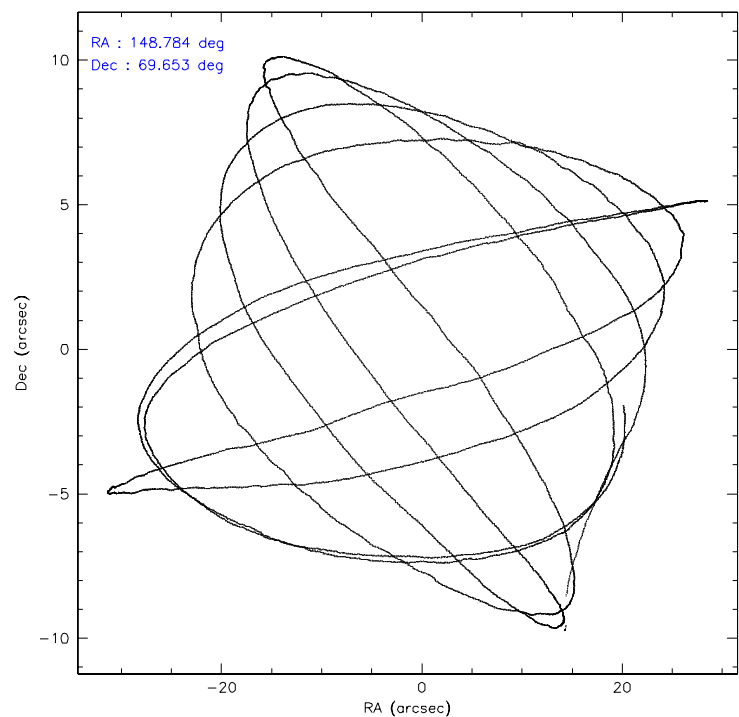
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	23863	24402	27305	41651	27906	31253
rejected events	20942	21066	24294	25843	24861	17884
rejected %	87%	86%	88%	62%	89%	57%

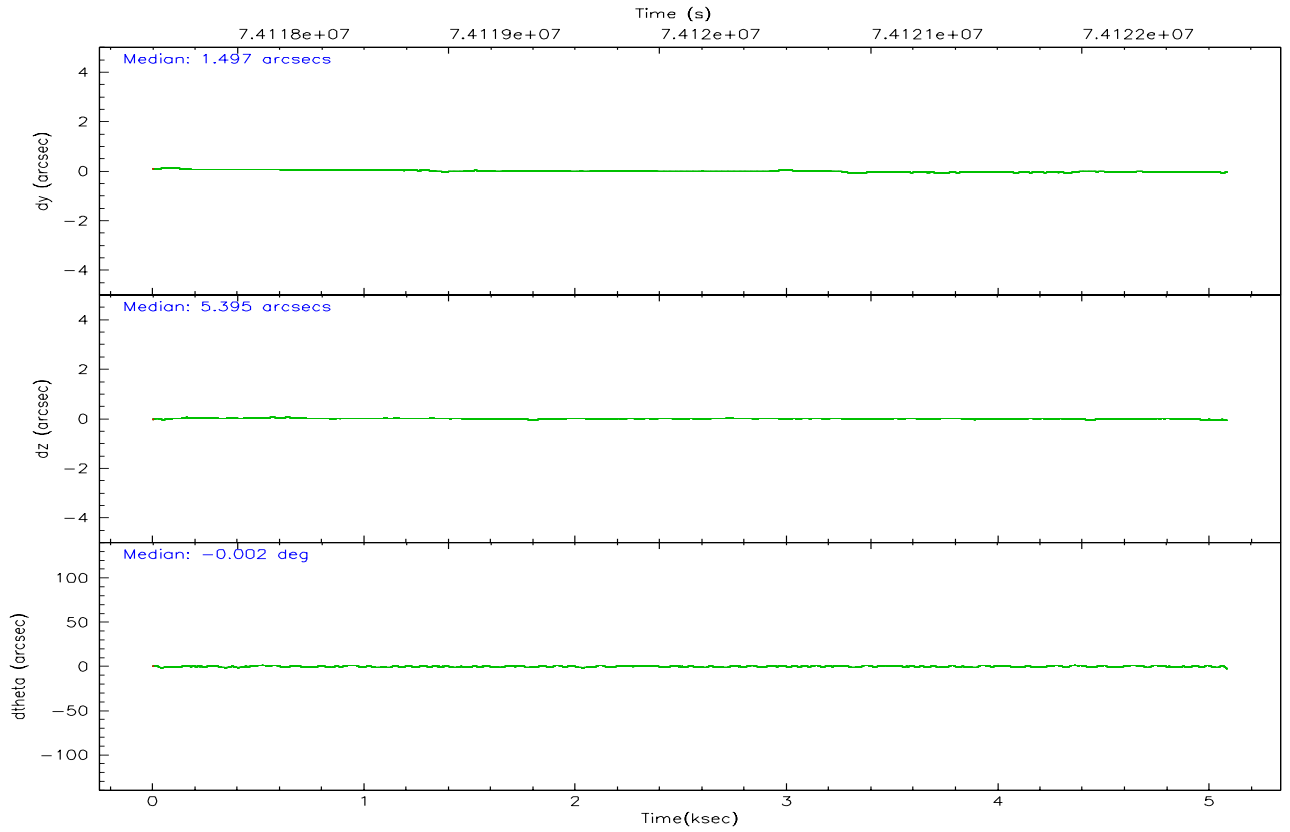
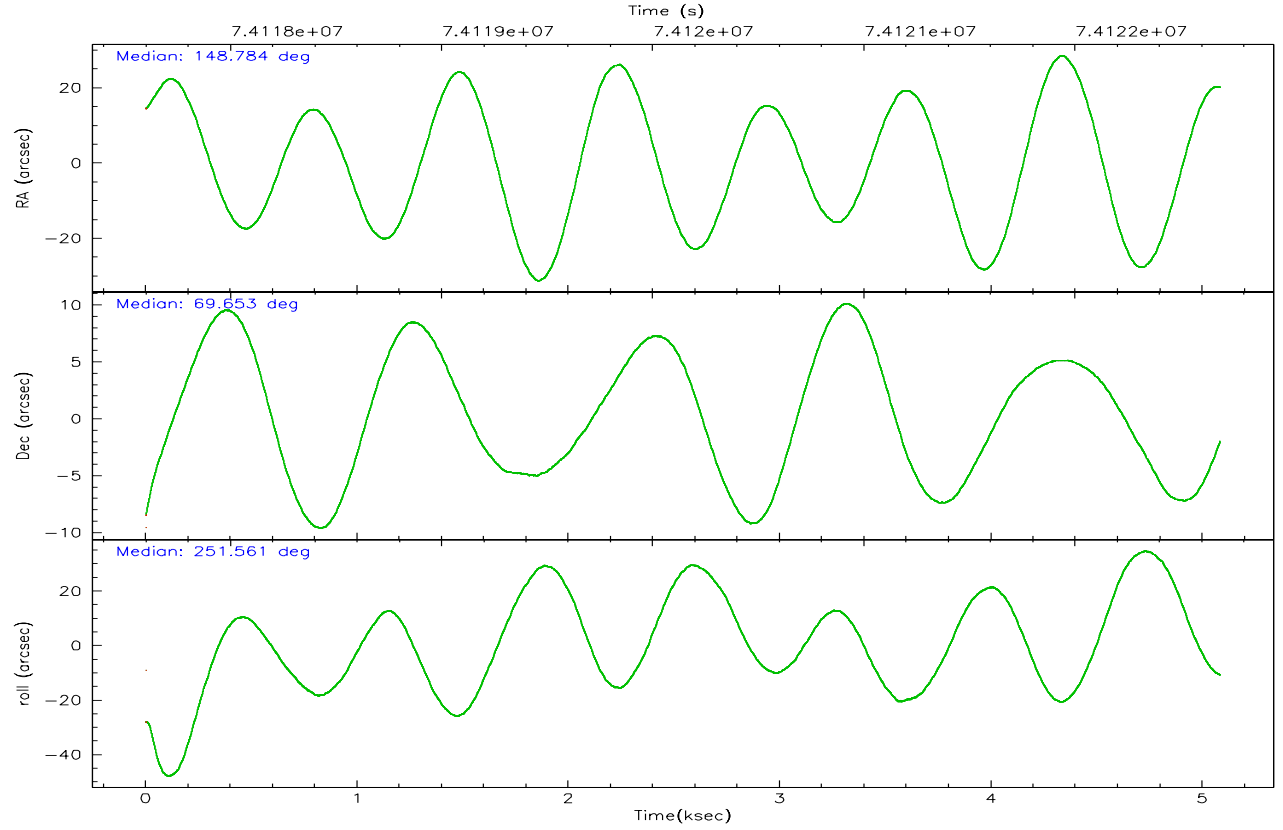
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	1237	1461	1390	11449	1271	1340
	5%	5%	5%	27%	4%	4%
grade 1 events	17	9	13	451	6	28
	0%	0%	0%	1%	0%	0%
grade 2 events	594	659	577	2003	612	2587
	2%	2%	2%	4%	2%	8%
grade 3 events	299	328	286	684	301	1223
	1%	1%	1%	1%	1%	3%
grade 4 events	279	332	274	733	295	1234
	1%	1%	1%	1%	1%	3%
grade 5 events	852	912	813	1349	987	3002
	3%	3%	2%	3%	3%	9%
grade 6 events	517	561	488	970	573	7002
	2%	2%	1%	2%	2%	22%
grade 7 events	20068	20140	23464	24012	23861	14837
	84%	82%	85%	57%	85%	47%

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	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
Pointing RA	148.768814	148.7843886771192	Subarray requested	NONE	NONE
Pointing Dec	69.680013	69.6529135878296	Alternating exposures requested	N	N
Pointing Roll	251.368621	251.5627308134716	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	74118687.184000	74117285.61753801			
Observation start date	2000-05-07T20:30:23	2000-05-07T20:08:05			
Observation end time	74122687.184000	74123990.655284			
Observation end date	2000-05-07T21:37:03	2000-05-07T21:59:50			
Read mode	TIMED	TIMED			

2.3 Aspect



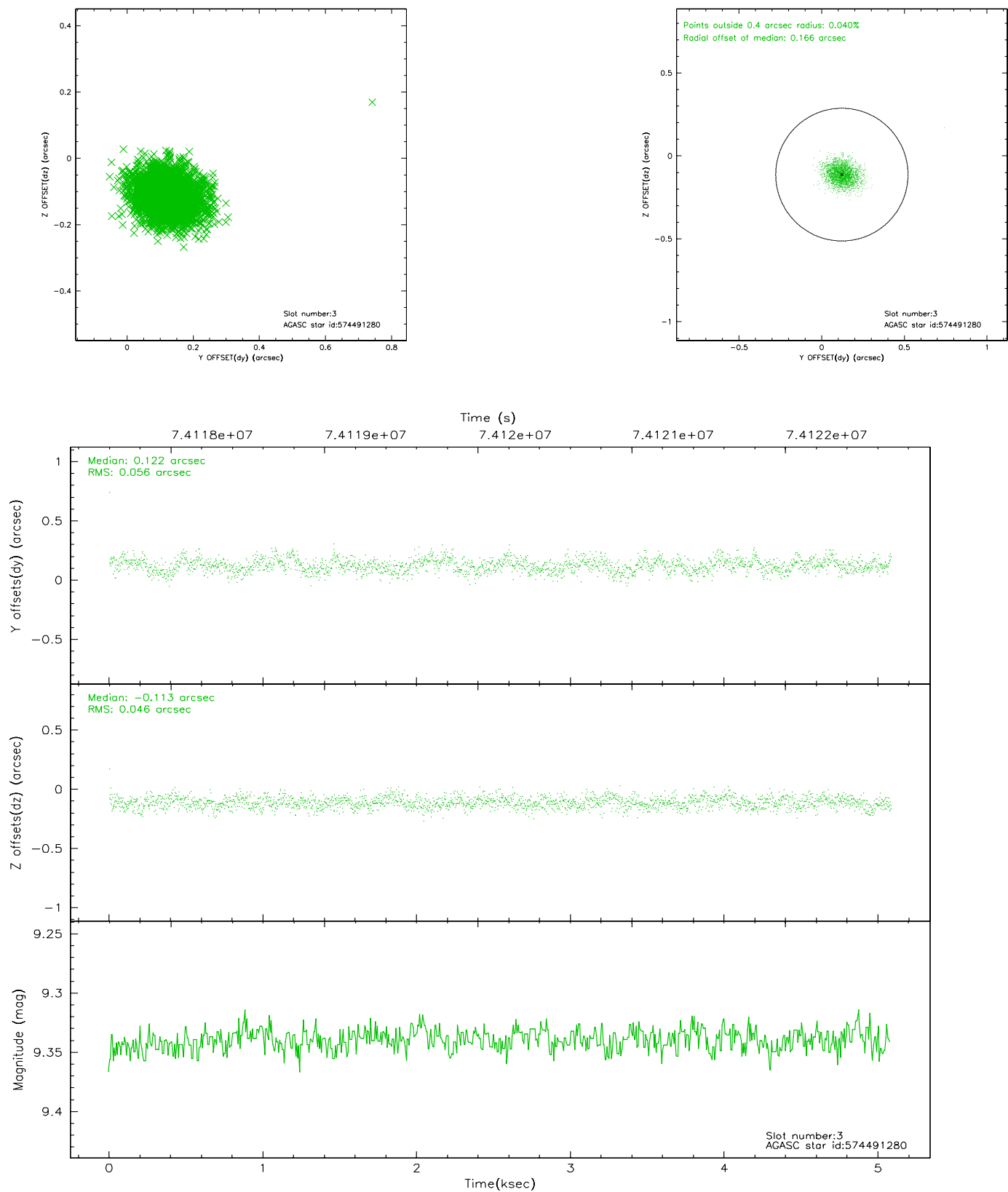


Slot Statistics

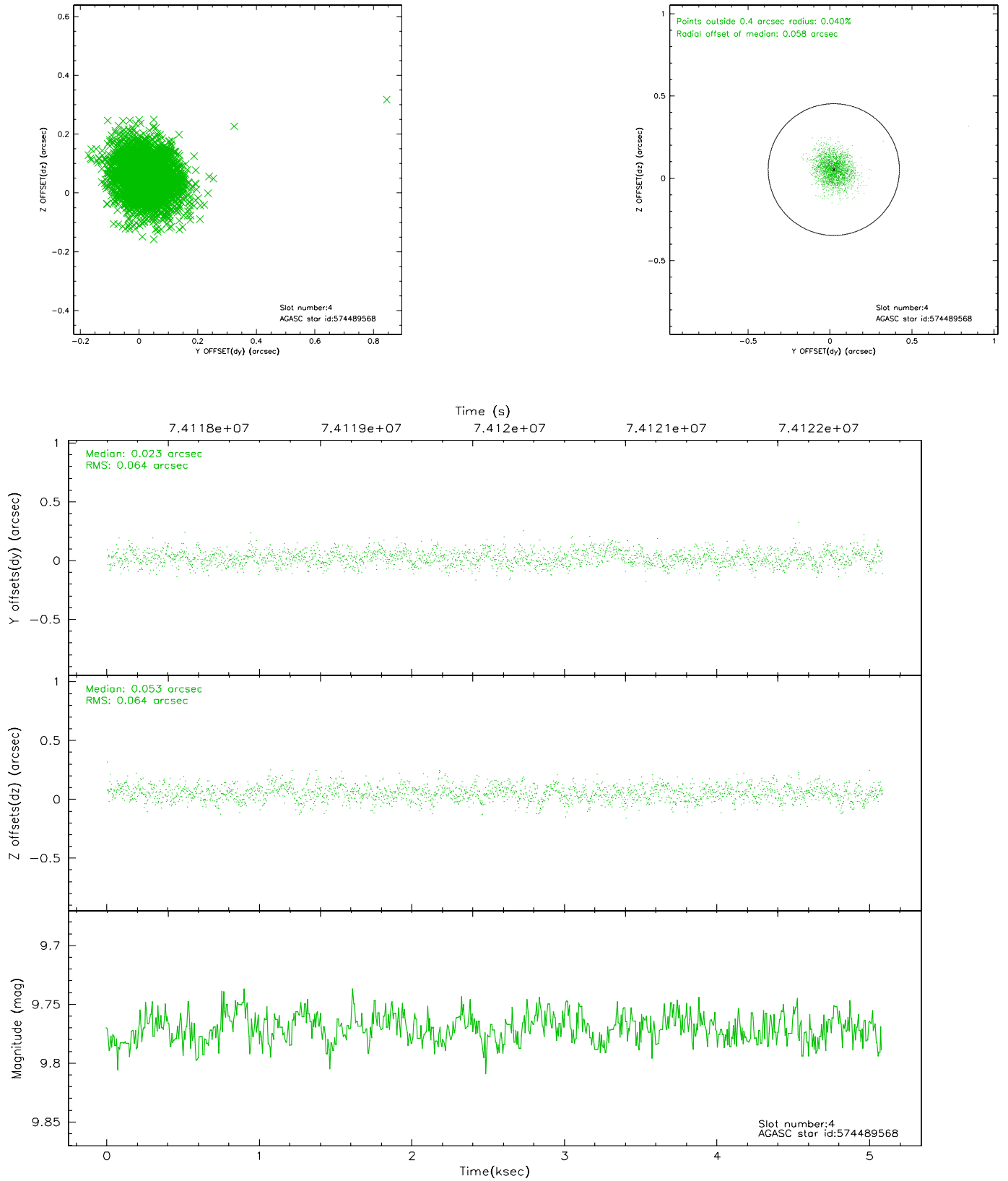
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.16	1241	-0.015	-0.015	0.008	0.013	0.000000	0.000000	-755.85	-835.13
1	FID	ACIS-I-4	7.19	1241	-0.087	0.023	0.005	0.009	0.000000	0.000000	2157.60	1070.48
2	FID	ACIS-I-5	7.23	1241	0.001	0.062	0.008	0.013	0.000000	0.000000	-1808.12	1069.74
3	GUIDE	574491280	9.34	2481	0.122	-0.113	0.076	0.125	148.611567	69.450135	847.26	75.69
4	GUIDE	574489568	9.77	2479	0.023	0.053	0.095	0.152	147.223974	69.438157	1425.74	-1580.54
5	GUIDE	574886464	9.80	2481	-0.143	0.022	0.105	0.177	149.898674	70.203982	-2239.53	697.74
6	GUIDE	574886288	9.83	2480	-0.034	0.057	0.106	0.172	149.952718	70.139627	-2045.06	839.01
7	GUIDE	574491712	9.91	2479	0.030	-0.022	0.099	0.165	147.262590	69.570889	953.72	-1675.12

2.4 Star Slots

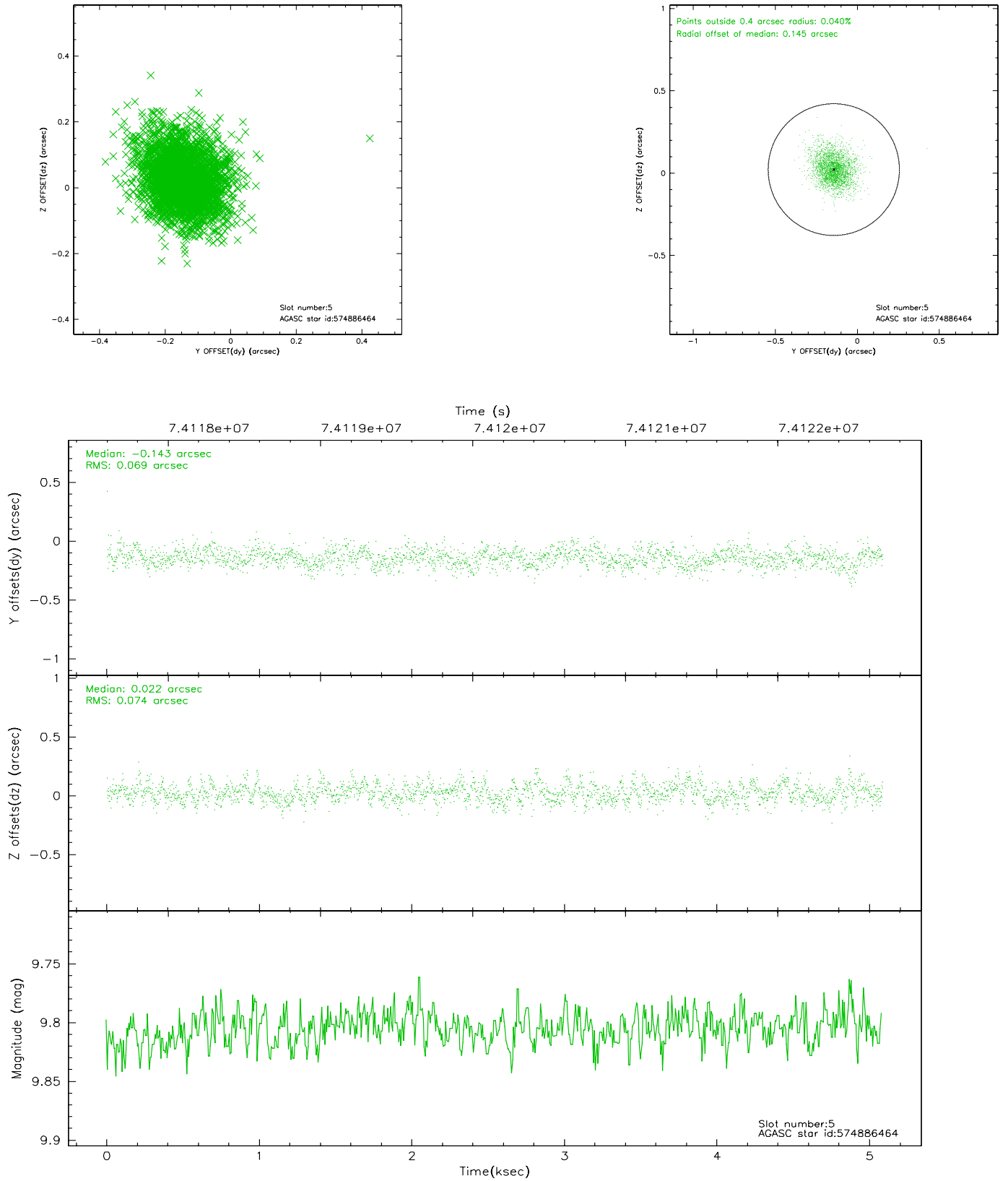
2.4.1 Slot 3



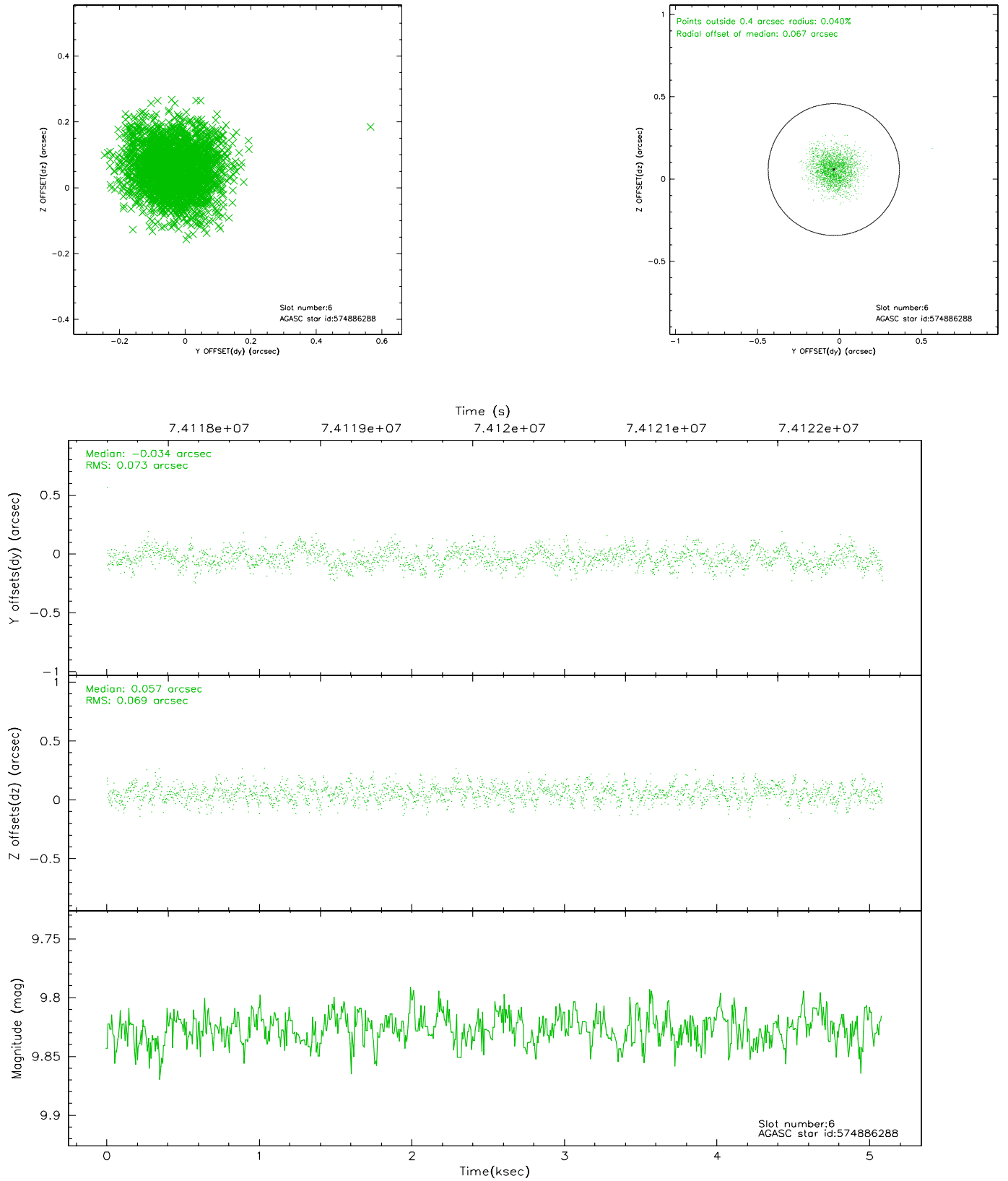
2.4.2 Slot 4



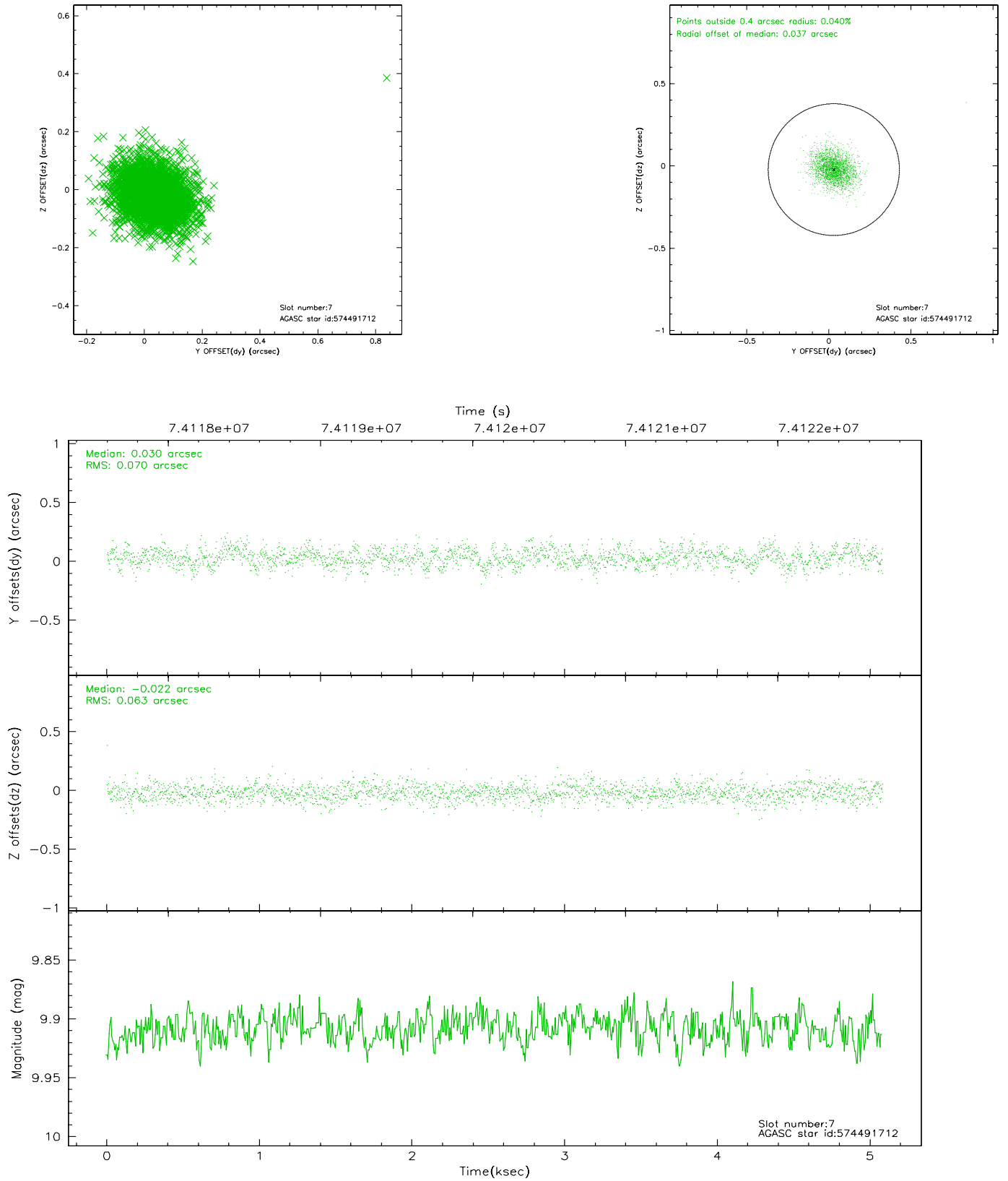
2.4.3 Slot 5



2.4.4 Slot 6

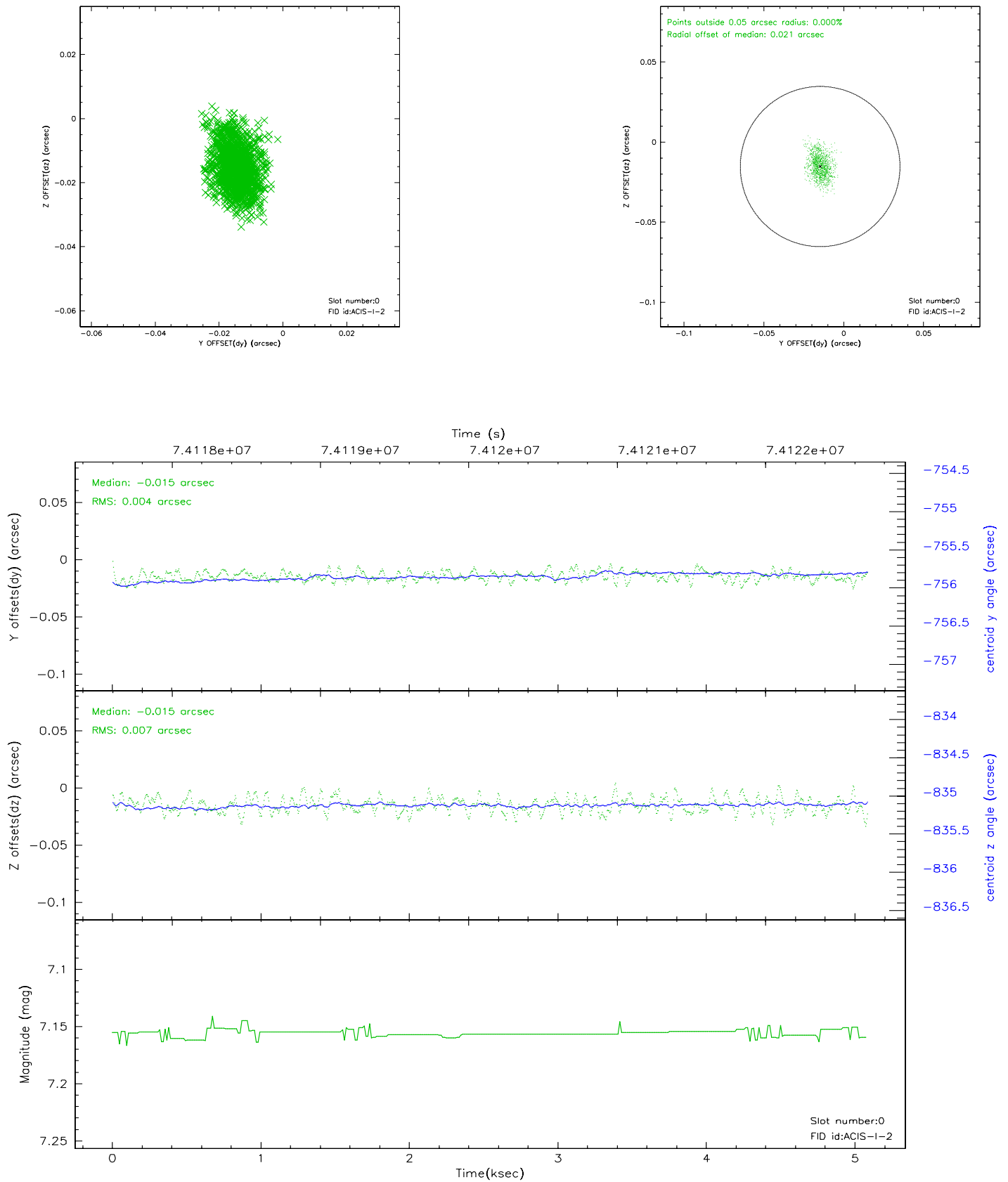


2.4.5 Slot 7

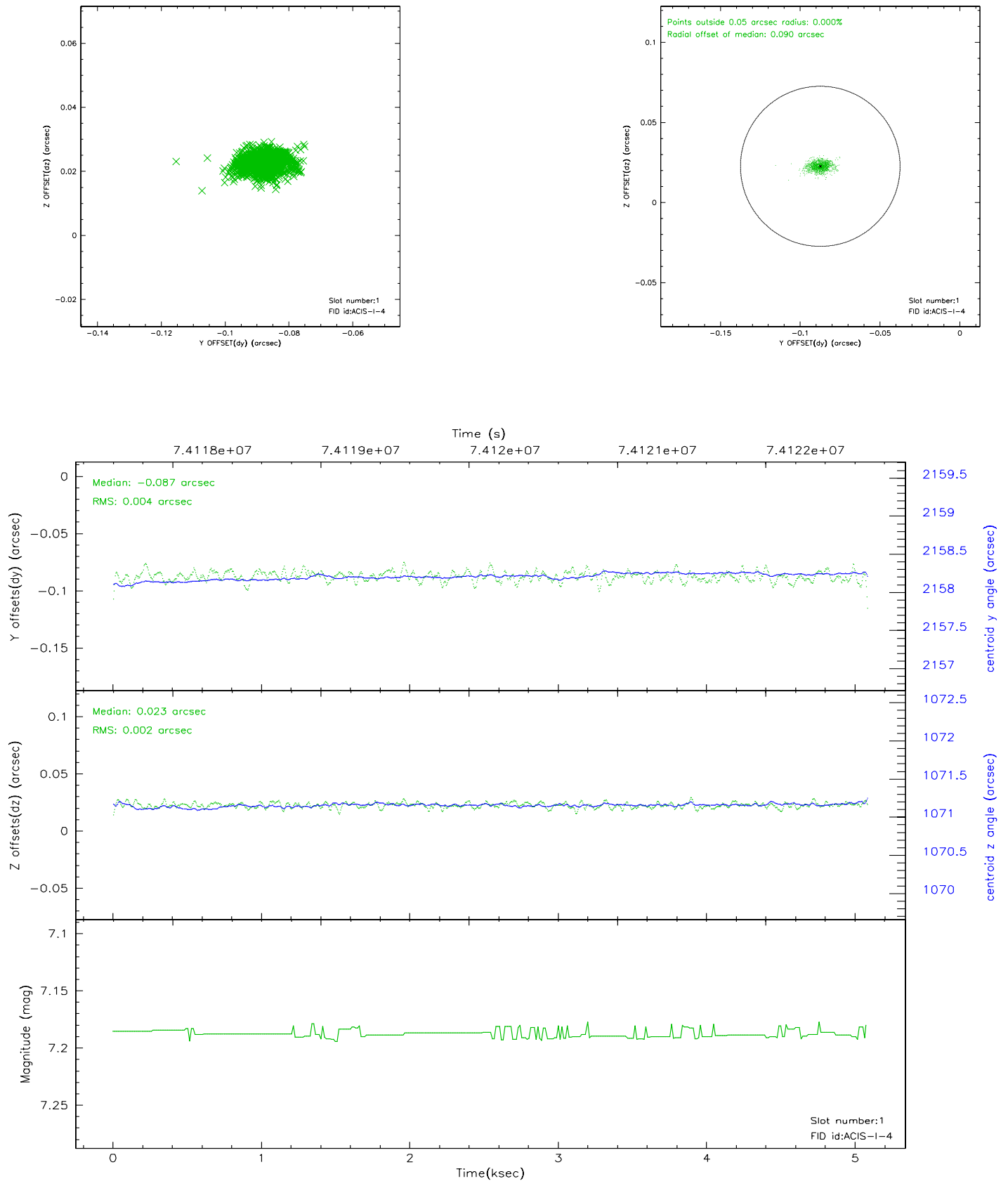


2.5 FID Slots

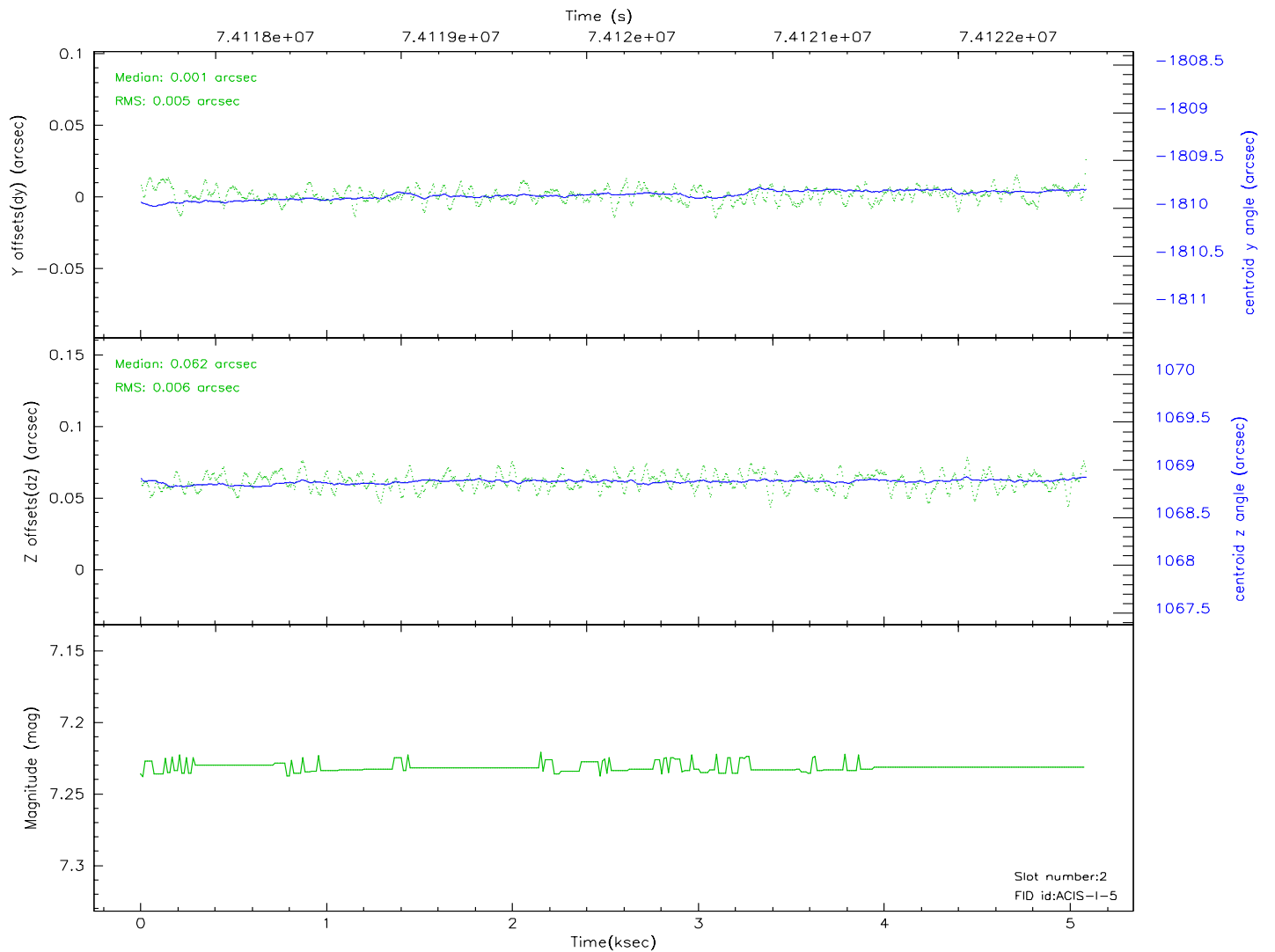
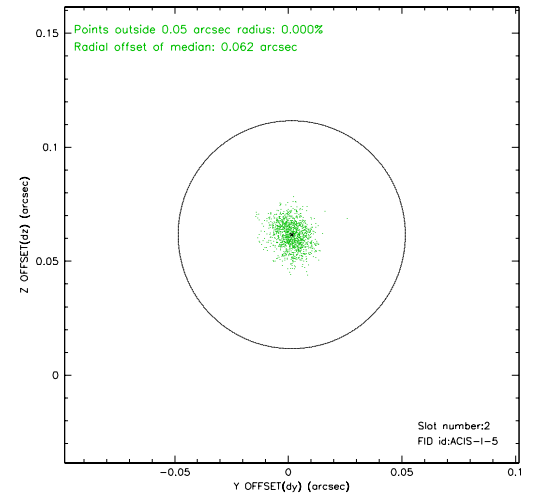
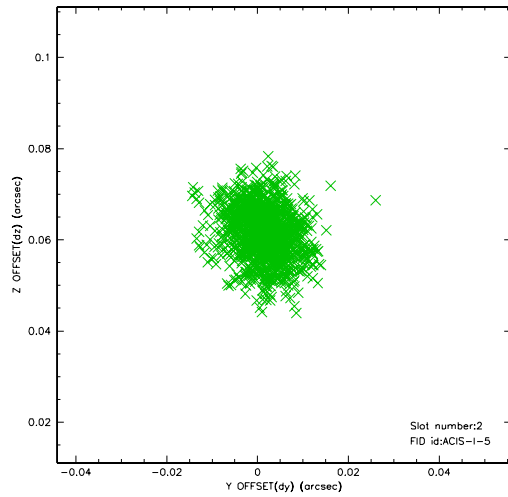
2.5.1 Slot 0



2.5.2 Slot 1



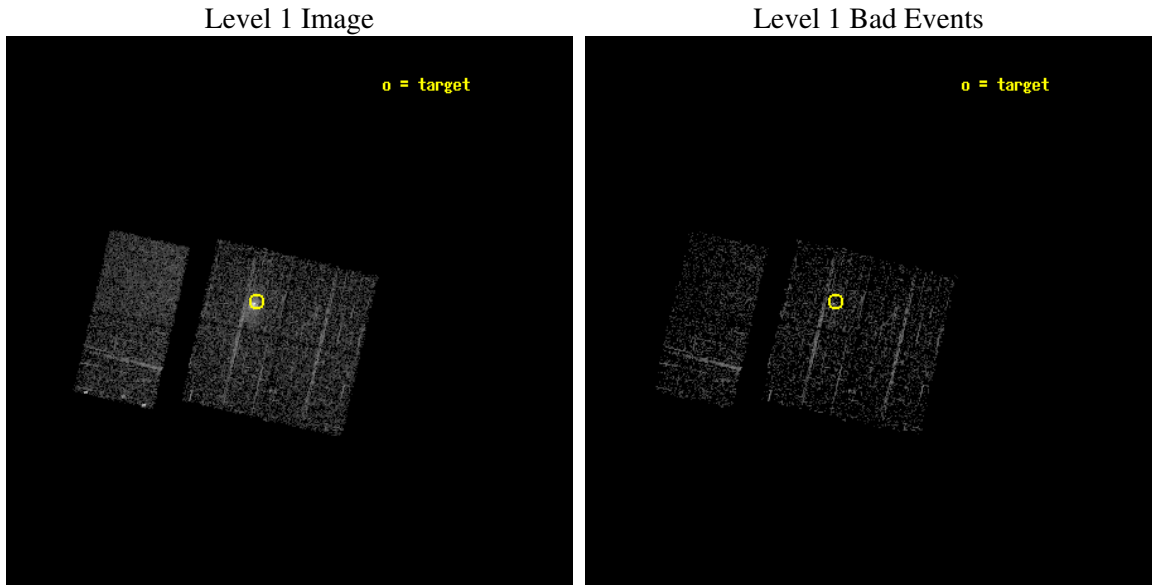
2.5.3 Slot 2



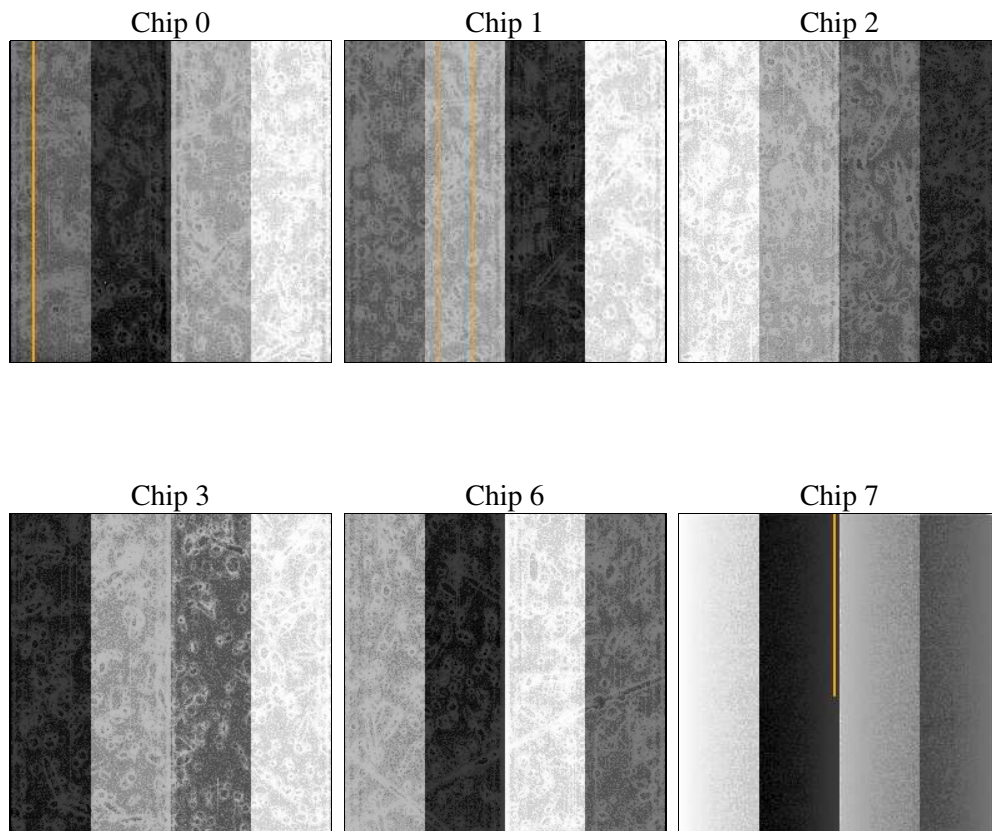
3 OBI

3.1 OBI

3.1.1 Images



3.1.2 Bias



3.1.3 Parameters

obi_num	2
ascdsver	7.6.11.2
caldsver	3.4.1
date	2007-11-16T19:54:30
revision	4

sched_exp_time	1241.721000
ontime	1200.0000011176
ontime0	1200.0000011176
ontime1	1200.0000011176
ontime2	1200.0000011176
ontime3	1200.0000011176
ontime6	1200.0000011176
ontime7	1200.0000011176
l1events	52908

3.1.4 Events

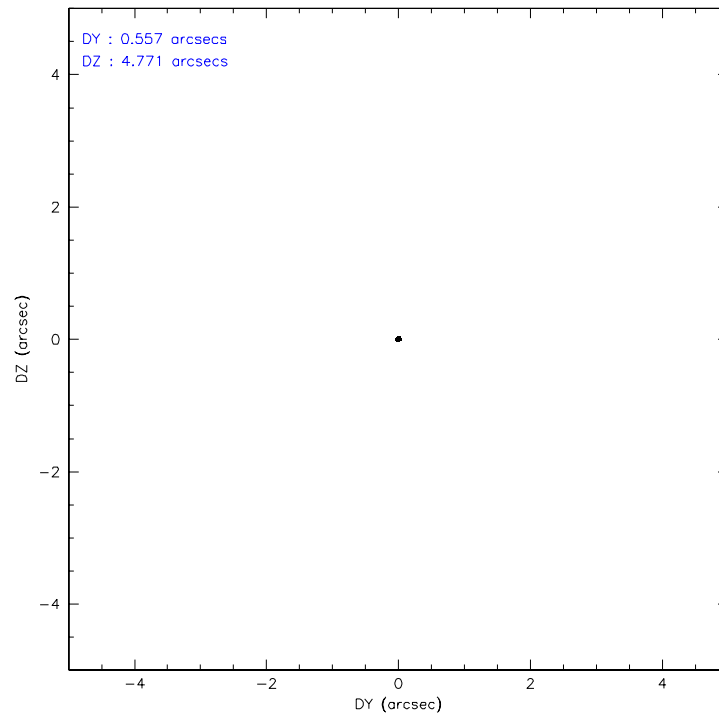
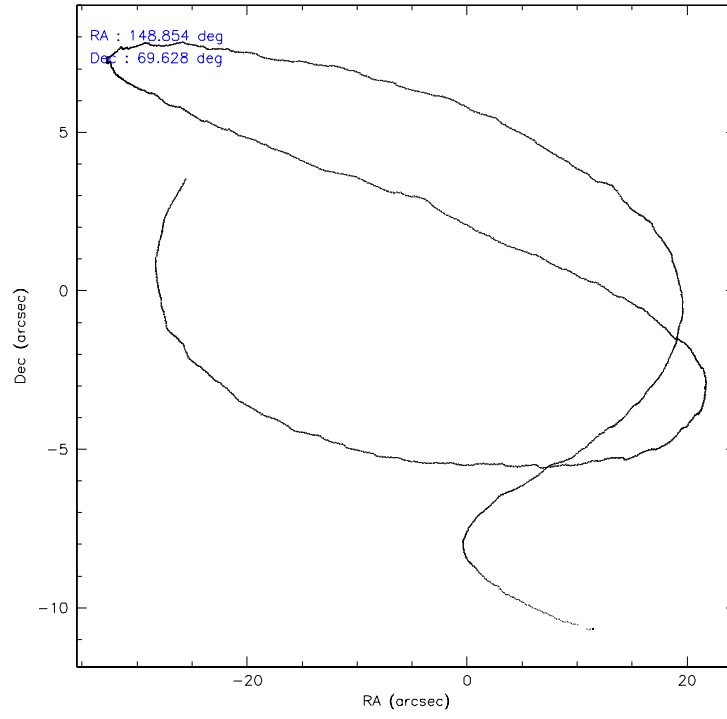
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	7203	7604	7937	11984	9048	9132
rejected events	5797	6158	6572	7048	6871	5144
rejected %	80%	80%	82%	58%	75%	56%

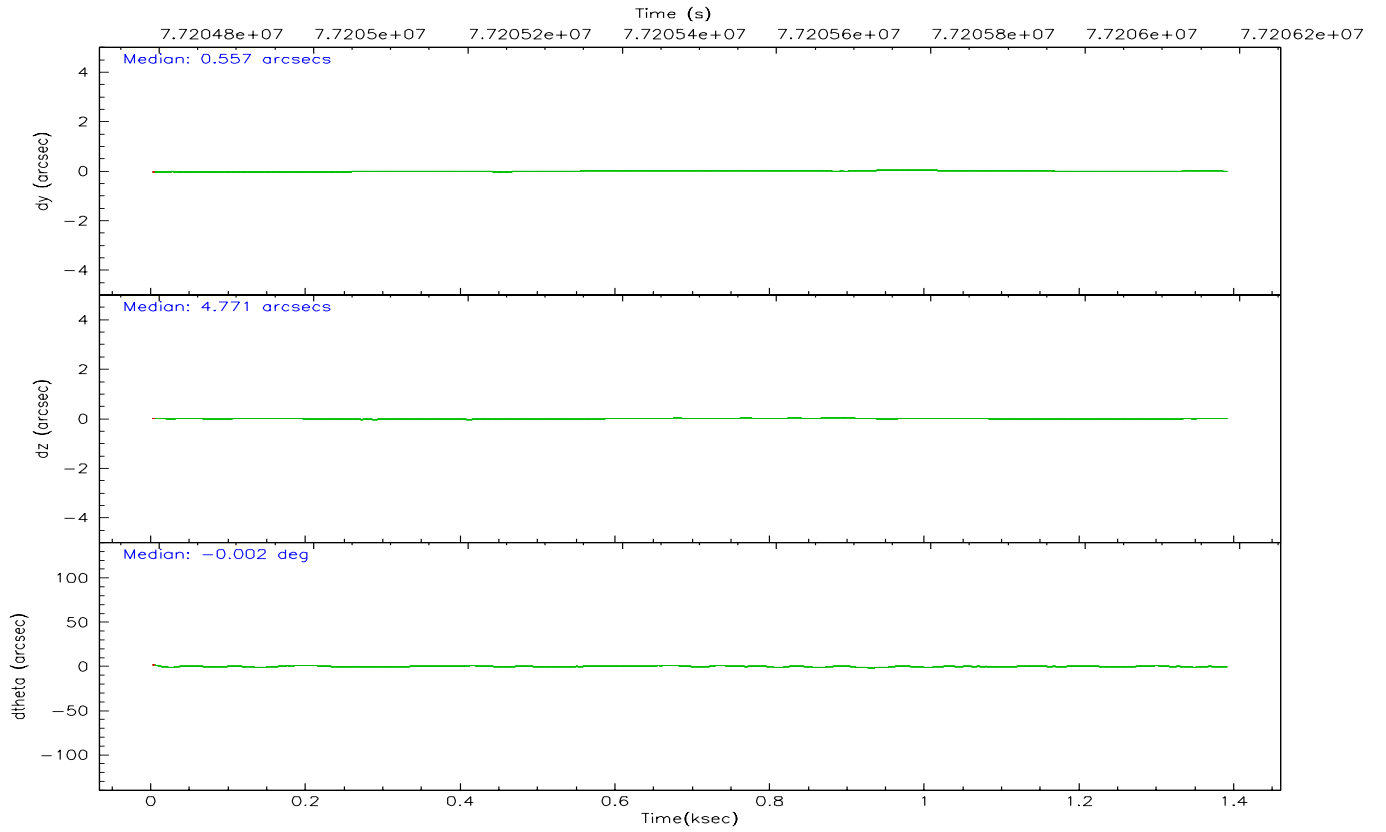
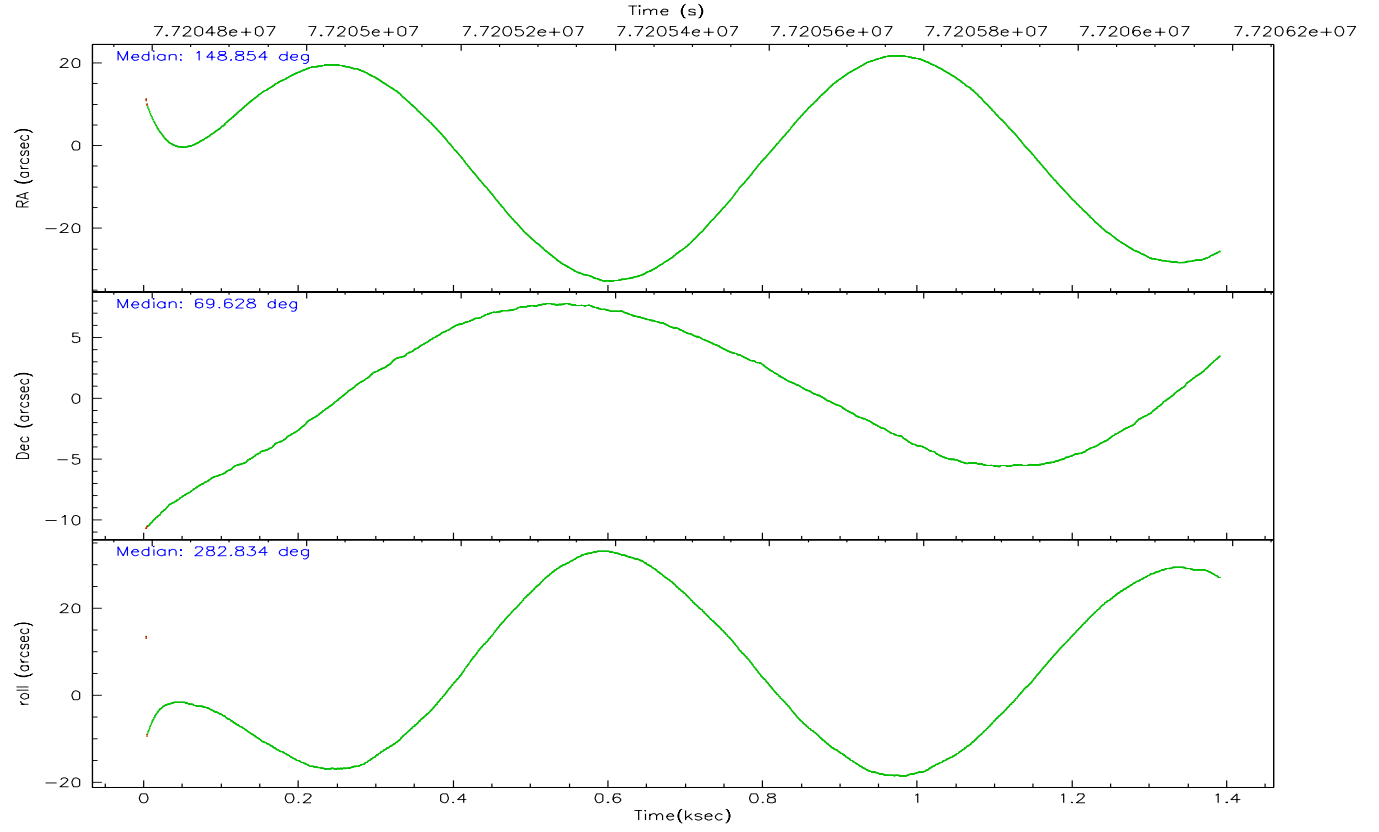
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	636	603	622	3530	1069	390
	8%	7%	7%	29%	11%	4%
grade 1 events	2	2	3	55	14	7
	0%	0%	0%	0%	0%	0%
grade 2 events	347	399	327	741	709	808
	4%	5%	4%	6%	7%	8%
grade 3 events	86	95	85	177	86	345
	1%	1%	1%	1%	0%	3%
grade 4 events	91	109	93	171	93	357
	1%	1%	1%	1%	1%	3%
grade 5 events	214	249	227	298	310	822
	2%	3%	2%	2%	3%	9%
grade 6 events	252	241	244	335	226	2095
	3%	3%	3%	2%	2%	22%
grade 7 events	5575	5906	6336	6677	6541	4308
	77%	77%	79%	55%	72%	47%

3.2 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
Observation mode	POINTING	POINTING	Number of optional ACIS chips dropped	0	0
Pointing RA	148.798859	148.8529666755527	On-chip summing requested	N	N
Pointing Dec	69.648471	69.62779964623884	Subarray requested	NONE	NONE
Pointing Roll	282.684132	282.8420707836268	Alternating exposures requested	N	N
SIM focus pos (mm)	-0.782348	-0.7809083437167272	Primary exposure time	3.200000	3.2
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	77204947.184000	77203909.743536			
Observation start date	2000-06-12T13:48:03	2000-06-12T13:31:49			
Observation end time	77206189.184000	77206498.38113099			
Observation end date	2000-06-12T14:08:45	2000-06-12T14:14:58			
Read mode	TIMED	TIMED			

3.3 Aspect



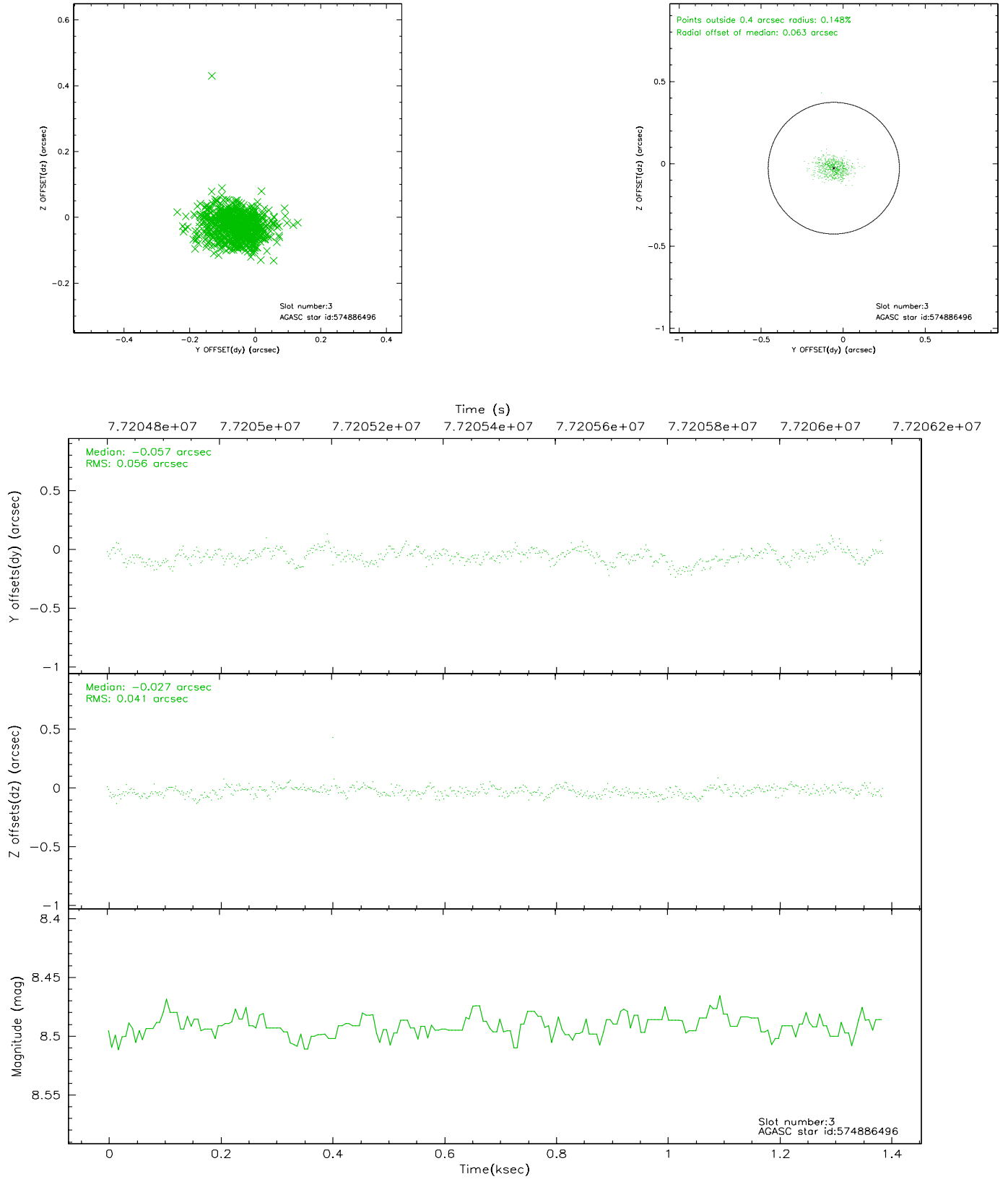


Slot Statistics

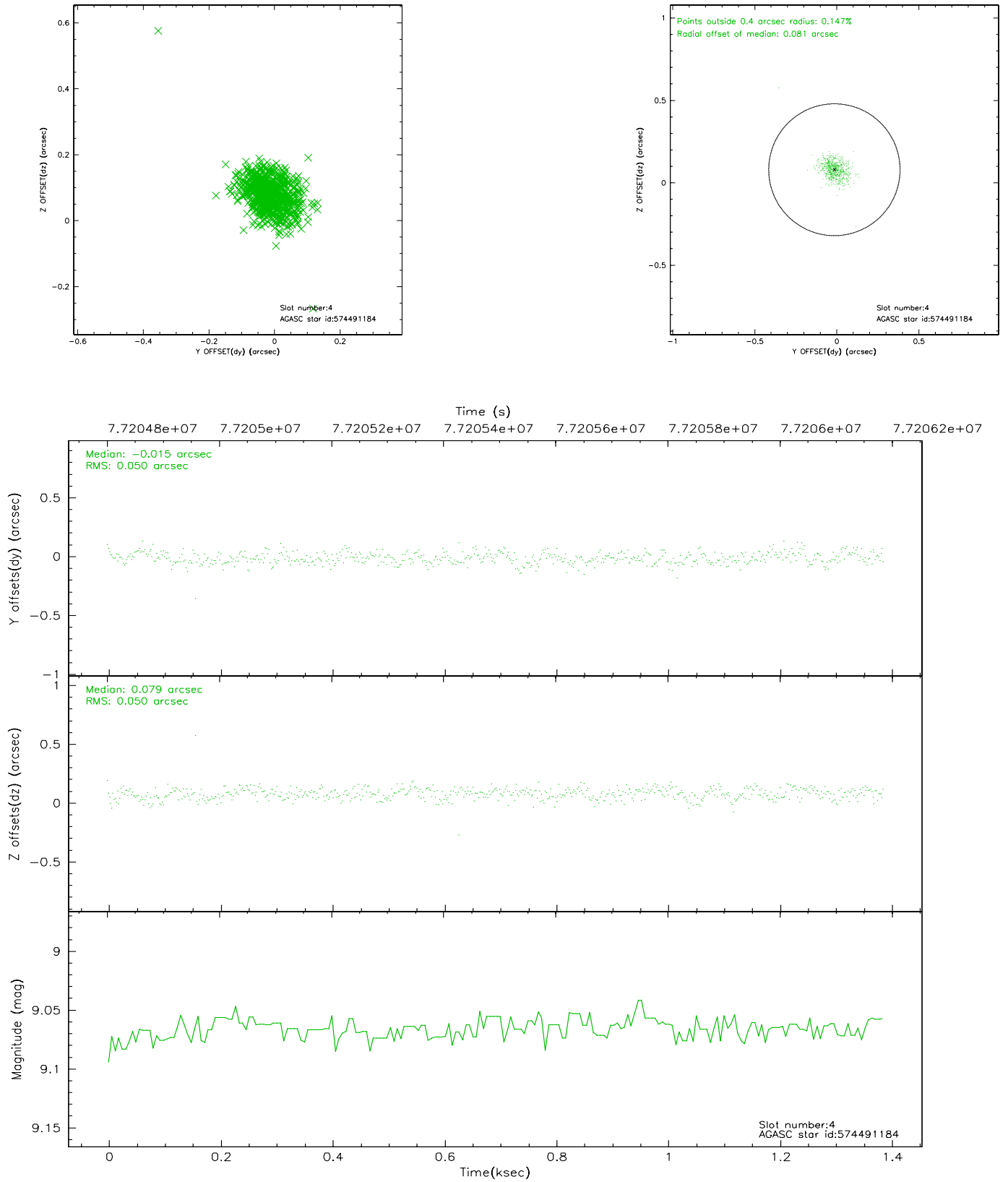
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.16	1241	-0.015	-0.015	0.008	0.013	0.000000	0.000000	-755.85	-835.13
1	FID	ACIS-I-4	7.19	1241	-0.087	0.023	0.005	0.009	0.000000	0.000000	2157.60	1070.48
2	FID	ACIS-I-5	7.23	1241	0.001	0.062	0.008	0.013	0.000000	0.000000	-1808.12	1069.74
3	GUIDE	574491280	9.34	2481	0.122	-0.113	0.076	0.125	148.611567	69.450135	847.26	75.69
4	GUIDE	574489568	9.77	2479	0.023	0.053	0.095	0.152	147.223974	69.438157	1425.74	-1580.54
5	GUIDE	574886464	9.80	2481	-0.143	0.022	0.105	0.177	149.898674	70.203982	-2239.53	697.74
6	GUIDE	574886288	9.83	2480	-0.034	0.057	0.106	0.172	149.952718	70.139627	-2045.06	839.01
7	GUIDE	574491712	9.91	2479	0.030	-0.022	0.099	0.165	147.262590	69.570889	953.72	-1675.12

3.4 Star Slots

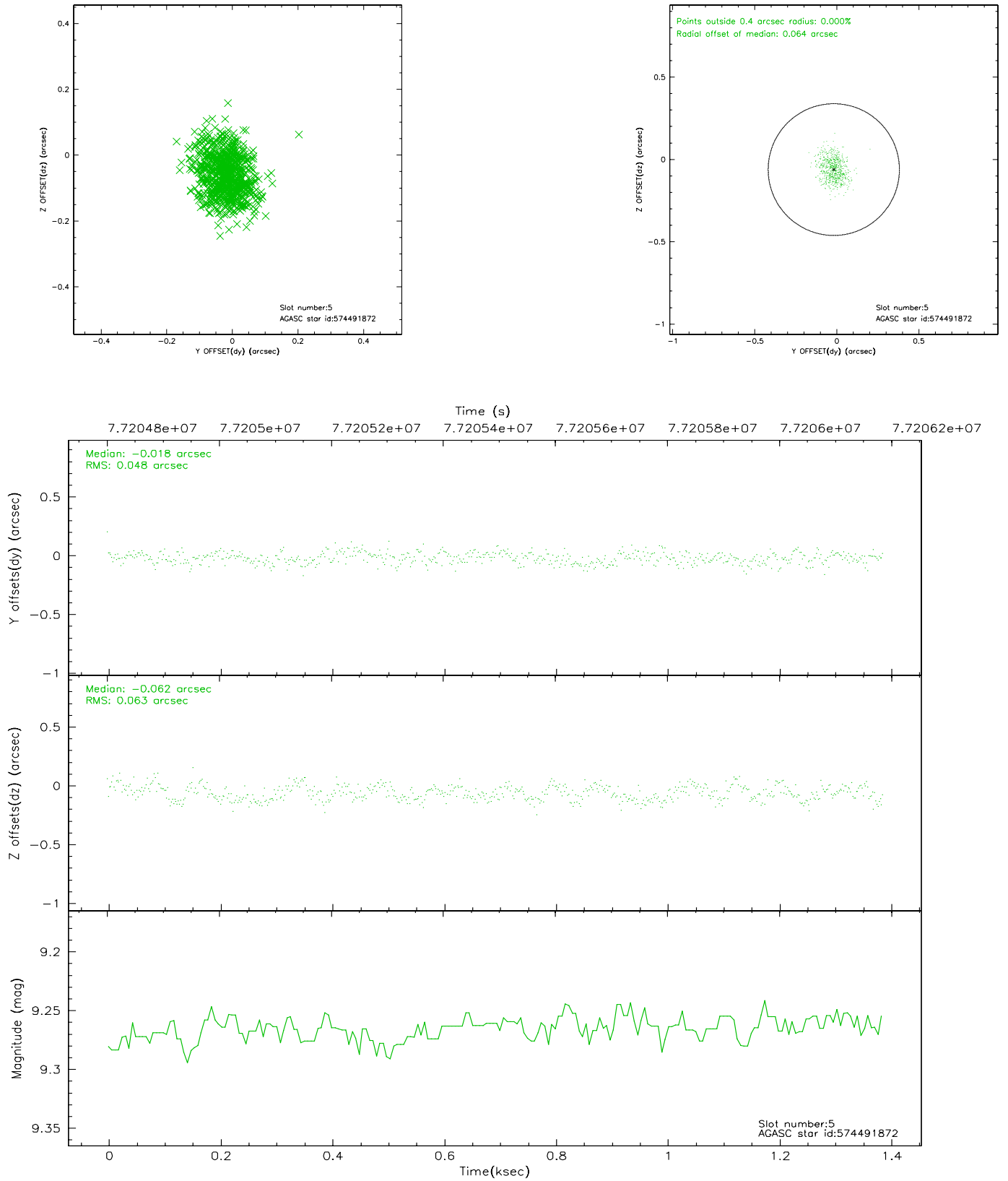
3.4.1 Slot 3



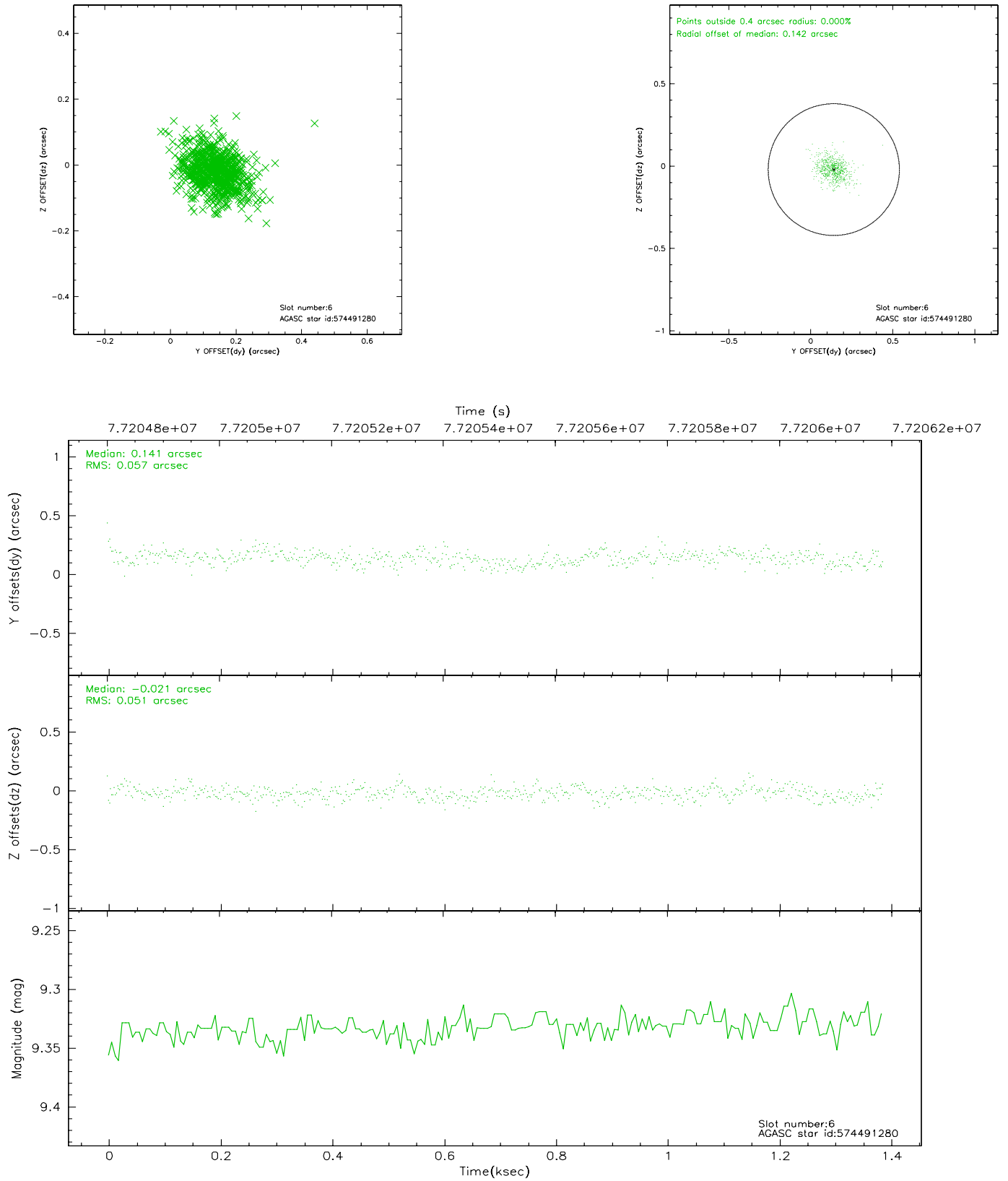
3.4.2 Slot 4



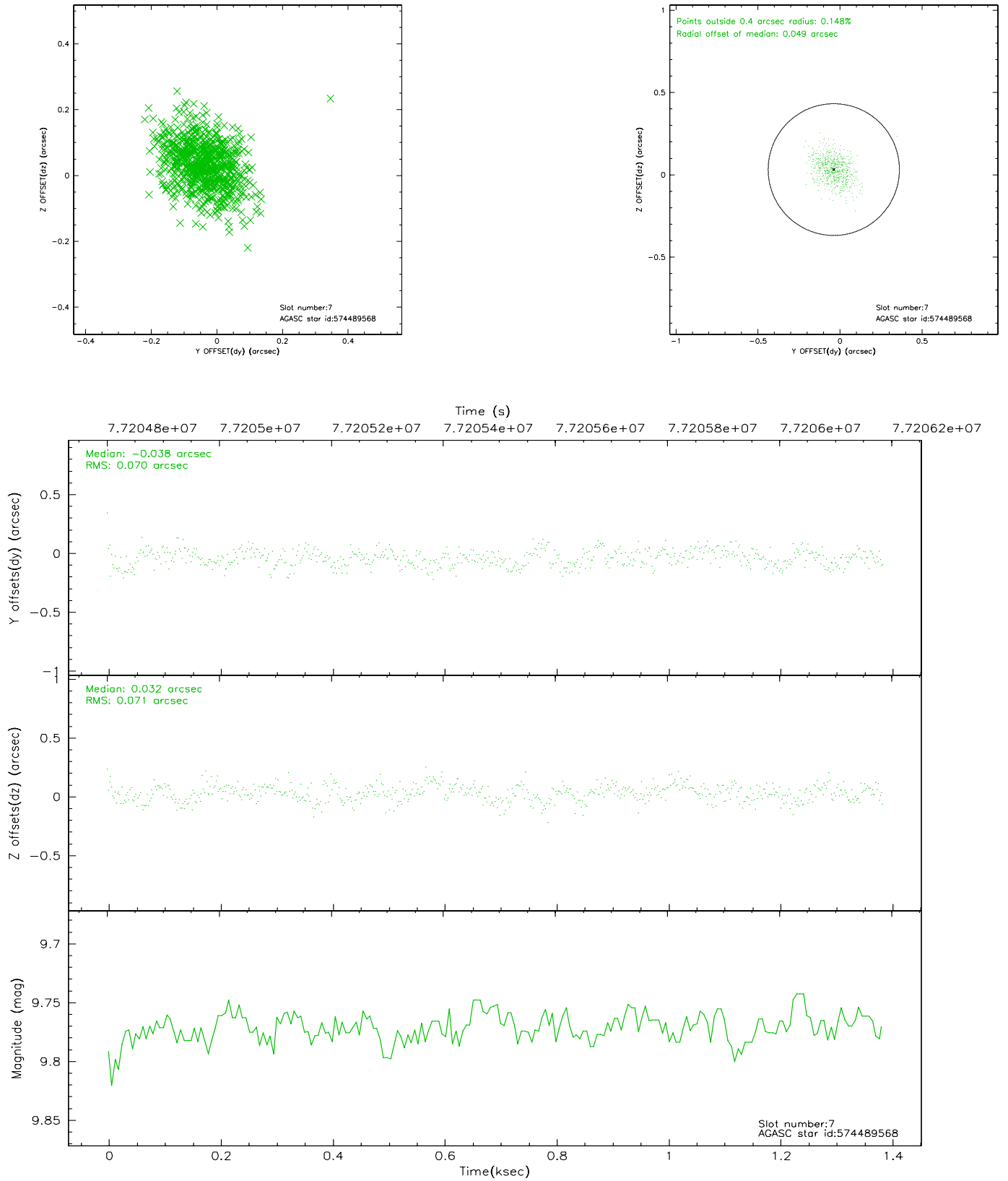
3.4.3 Slot 5



3.4.4 Slot 6

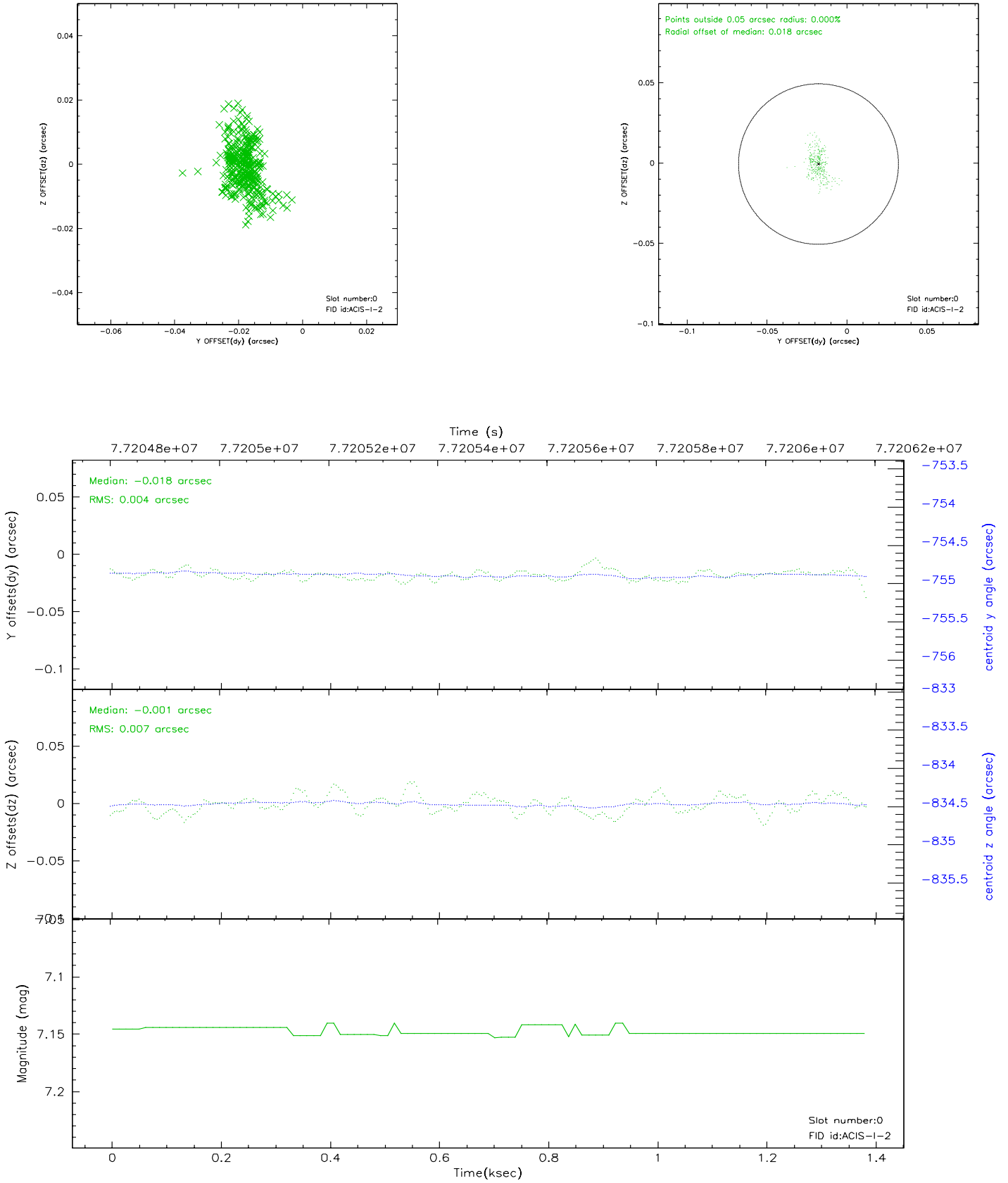


3.4.5 Slot 7

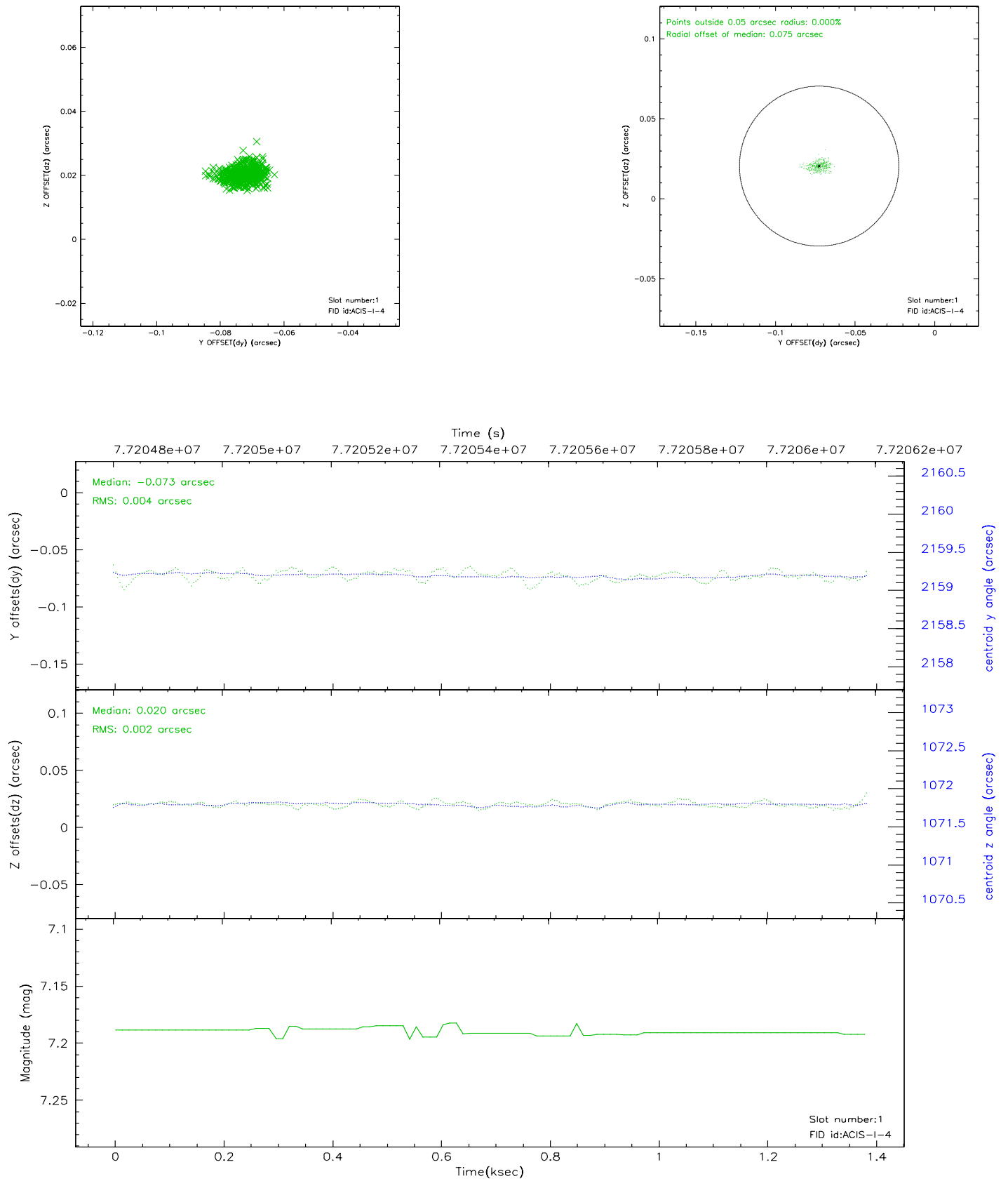


3.5 FID Slots

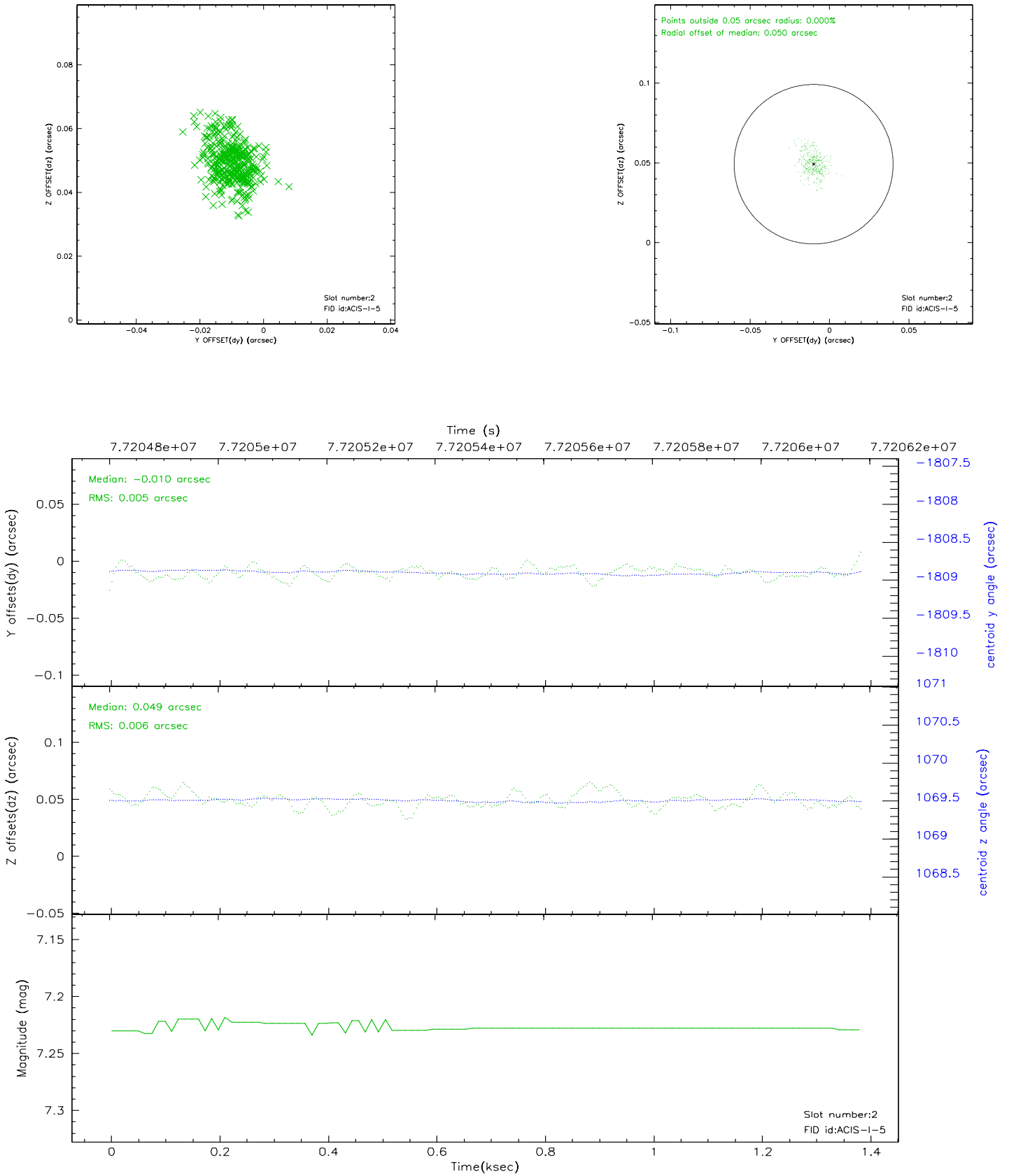
3.5.1 Slot 0



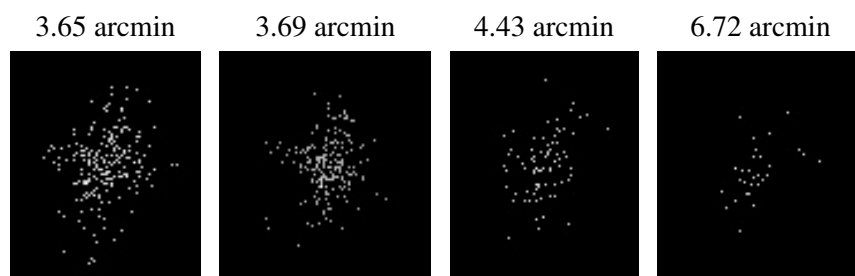
3.5.2 Slot 1



3.5.3 Slot 2



4 Point Sources



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2007.12.06
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.065

A.2 Comments