

Analyse Rohdaten PRG610

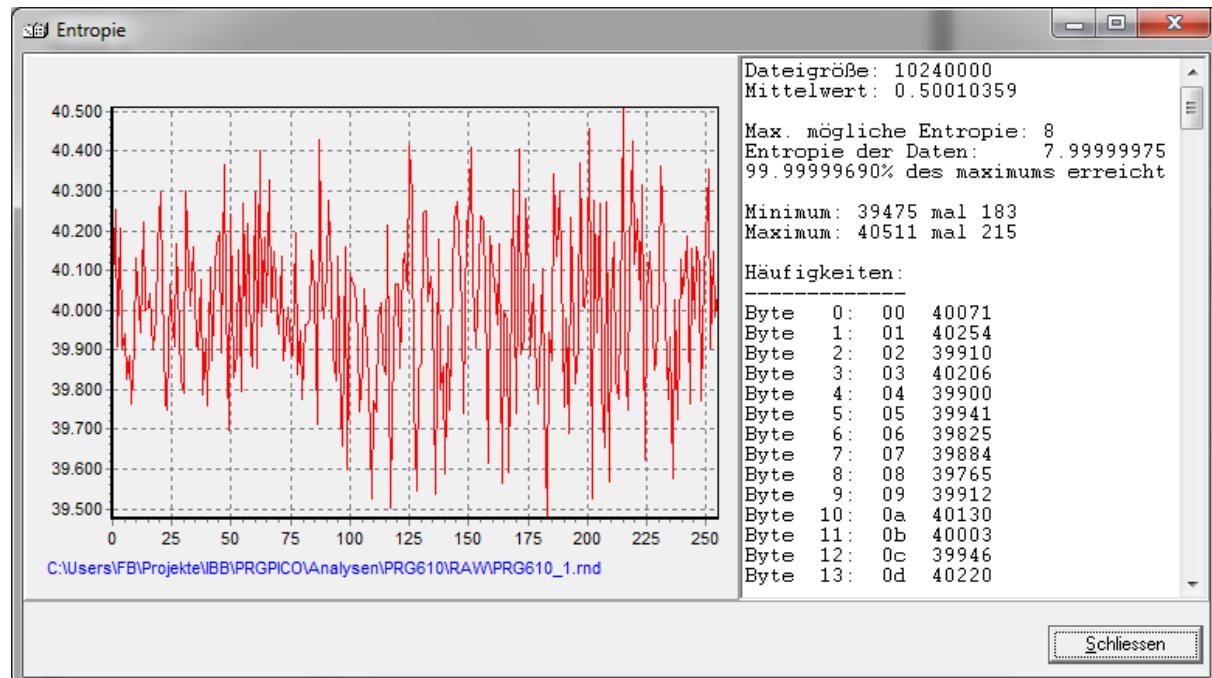
(22.01.2015)

Umgebungstemperatur 22°C

PRG610_1

Mittelwert: 0.50010359

Entropie der Daten: 7.99999975



```
*****
*          *
*      AIS31 evaluation tests      *
*          *
*****
```

date, time: 01/22/2015, 12:21:16
tested file: prg610_1.rnd
size of file: 10240000 bytes

Results of test 1 (test (P2.i)(vii.a) of AIS 31, cf. [3] and [4])

test scope: first 100000 bits
number of ones: 50168
relative frequency: 0.501680
test value: 0.00168000 < 0.025

sequence passes test 1

Results of test 2 (test (P2.i)(vii.b) of AIS 31, cf. [3] and [4])

number of 2-bit words looked up: 200277
relative frequency v(0,1): 0.498610
relative frequency v(1,0): 0.497830
test value: 0.00356000 < 0.02

sequence passes test 2

Results of test 3 (test (P2.i)(vii.c) of AIS 31, cf. [3] and [4])

number of 3-bit words looked up: 403533
test value t_1: 2.191222 <= 15.13
test value t_2: 0.633680 <= 15.13

sequence passes test 3

Results of test 4 (test (P2.i)(vii.d) of AIS 31, cf. [3] and [4])

number of 4-bit words looked up: 801736
test value t_00: 0.397620 <= 15.13
test value t_01: 2.767690 <= 15.13
test value t_10: 1.501520 <= 15.13
test value t_11: 0.141120 <= 15.13

sequence passes test 4

Results of test 5 (test (P2.i)(vii.e) of AIS 31, cf. [3] and [4])

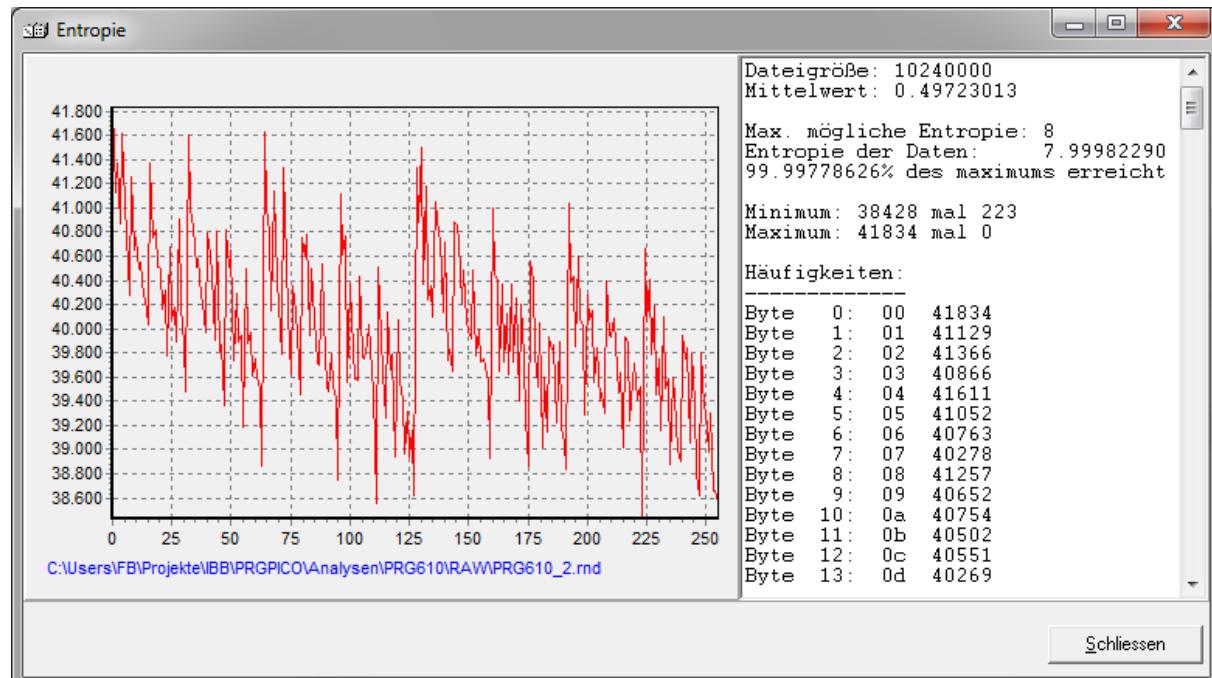
8-bit words looked up: 2560 + 256000 bytes
f-value: 8.00109772
8.00109772 > 7.976

sequence passes test 5

PRG610_2

Mittelwert: 0.49723013

Entropie der Daten: 7.99982290



```
*****  
* *  
* AIS31 evaluation tests *  
* *  
*****
```

date, time: 01/22/2015, 11:56:38

tested file: prg610_2.rnd

size of file: 10240000 bytes

Results of test 1 (test (P2.i)(vii.a) of AIS 31, cf. [3] and [4])

test scope: first 100000 bits

number of ones: 50053

relative frequency: 0.500530

test value: 0.00053000 < 0.025

Results of test 2 (test (P2.i)(vii.b) of AIS 31, cf. [3] and [4])

number of 2-bit words looked up: 200087
relative frequency v(0,1): 0.498800
relative frequency v(1,0): 0.501640
test value: 0.00044000 < 0.02

sequence passes test 2

Results of test 3 (test (P2.i)(vii.c) of AIS 31, cf. [3] and [4])

number of 3-bit words looked up: 404197
test value t_1: 0.038721 <= 15.13
test value t_2: 1.260057 <= 15.13

sequence passes test 3

Results of test 4 (test (P2.i)(vii.d) of AIS 31, cf. [3] and [4])

number of 4-bit words looked up: 810134
test value t_00: 6.821304 <= 15.13
test value t_01: 0.092483 <= 15.13
test value t_10: 0.699383 <= 15.13
test value t_11: 0.032000 <= 15.13

sequence passes test 4

Results of test 5 (test (P2.i)(vii.e) of AIS 31, cf. [3] and [4])

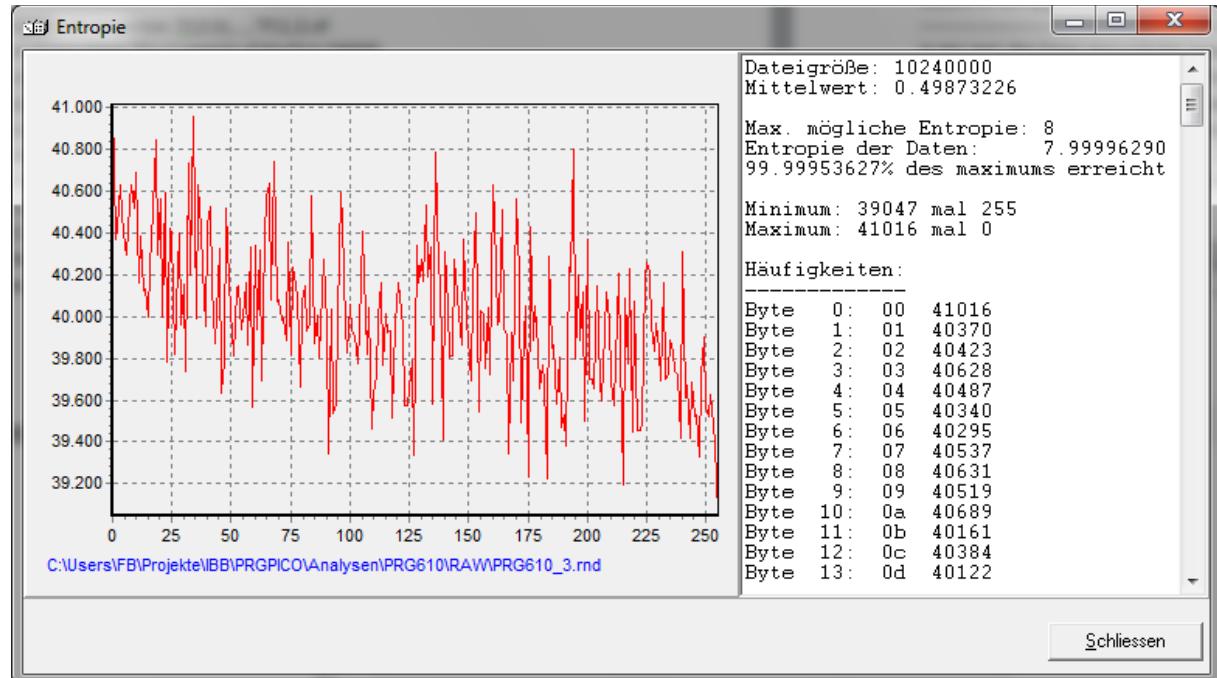
8-bit words looked up: 2560 + 256000 bytes
f-value: 7.99794386
7.99794386 > 7.976

sequence passes test 5

PRG610_3

Mittelwert: 0.49873226

Entropie der Daten: 7.99996290



```
*****
*          AIS31 evaluation tests          *
*****
date, time: 01/22/2015, 13:02:35
tested file: prg610_3.rnd
size of file: 10240000 bytes
```

Results of test 1 (test (P2.i)(vii.a) of AIS 31, cf. [3] and [4])

test scope: first 100000 bits
number of ones: 50109
relative frequency: 0.501090
test value: 0.00109000 < 0.025

sequence passes test 1

Results of test 2 (test (P2.i)(vii.b) of AIS 31, cf. [3] and [4])

number of 2-bit words looked up: 200163
relative frequency v(0,1): 0.499780
relative frequency v(1,0): 0.503650
test value: 0.00343000 < 0.02

sequence passes test 2

Results of test 3 (test (P2.i)(vii.c) of AIS 31, cf. [3] and [4])

number of 3-bit words looked up: 401600
test value t_1: 2.138635 <= 15.13
test value t_2: 0.001280 <= 15.13

sequence passes test 3

Results of test 4 (test (P2.i)(vii.d) of AIS 31, cf. [3] and [4])

number of 4-bit words looked up: 803859
test value t_00: 0.480513 <= 15.13
test value t_01: 1.320980 <= 15.13
test value t_10: 1.321009 <= 15.13
test value t_11: 0.840502 <= 15.13

sequence passes test 4

Results of test 5 (test (P2.i)(vii.e) of AIS 31, cf. [3] and [4])

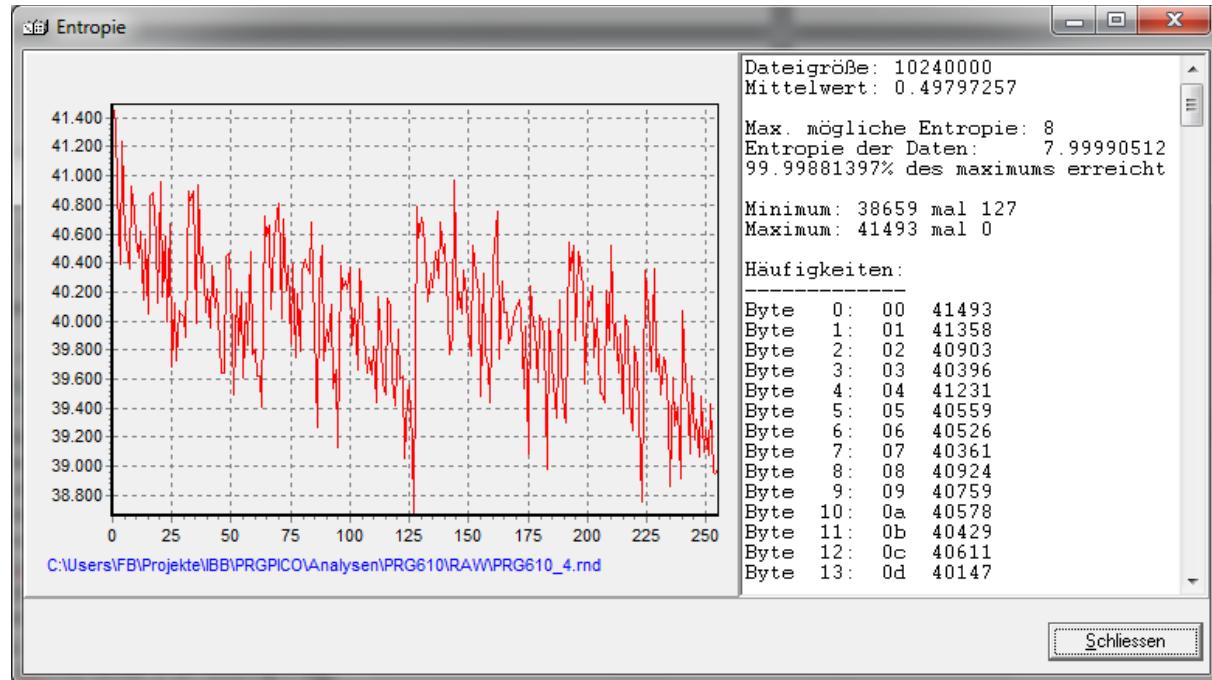
8-bit words looked up: 2560 + 256000 bytes
f-value: 8.00303162
8.00303162 > 7.976

sequence passes test 5

PRG610_4

Mittelwert: 0.49797257

Entropie der Daten: 7.99990512



* *
* AIS31 evaluation tests *
* *

date, time: 01/22/2015, 13:37:43
tested file: prg610_4.rnd
size of file: 10240000 bytes

Results of test 1 (test (P2.i)(vii.a) of AIS 31, cf. [3] and [4])

test scope: first 100000 bits
number of ones: 49699
relative frequency: 0.496990
test value: 0.00301000 < 0.025

sequence passes test 1

Results of test 2 (test (P2.i)(vii.b) of AIS 31, cf. [3] and [4])

number of 2-bit words looked up: 200099
relative frequency v(0,1): 0.498210
relative frequency v(1,0): 0.501100
test value: 0.00069000 < 0.02

sequence passes test 2

Results of test 3 (test (P2.i)(vii.c) of AIS 31, cf. [3] and [4])

number of 3-bit words looked up: 402526
test value t_1: 0.824180 <= 15.13
test value t_2: 0.420503 <= 15.13

sequence passes test 3

Results of test 4 (test (P2.i)(vii.d) of AIS 31, cf. [3] and [4])

number of 4-bit words looked up: 802546
test value t_00: 0.808021 <= 15.13
test value t_01: 3.152181 <= 15.13
test value t_10: 1.021529 <= 15.13
test value t_11: 0.216326 <= 15.13

sequence passes test 4

Results of test 5 (test (P2.i)(vii.e) of AIS 31, cf. [3] and [4])

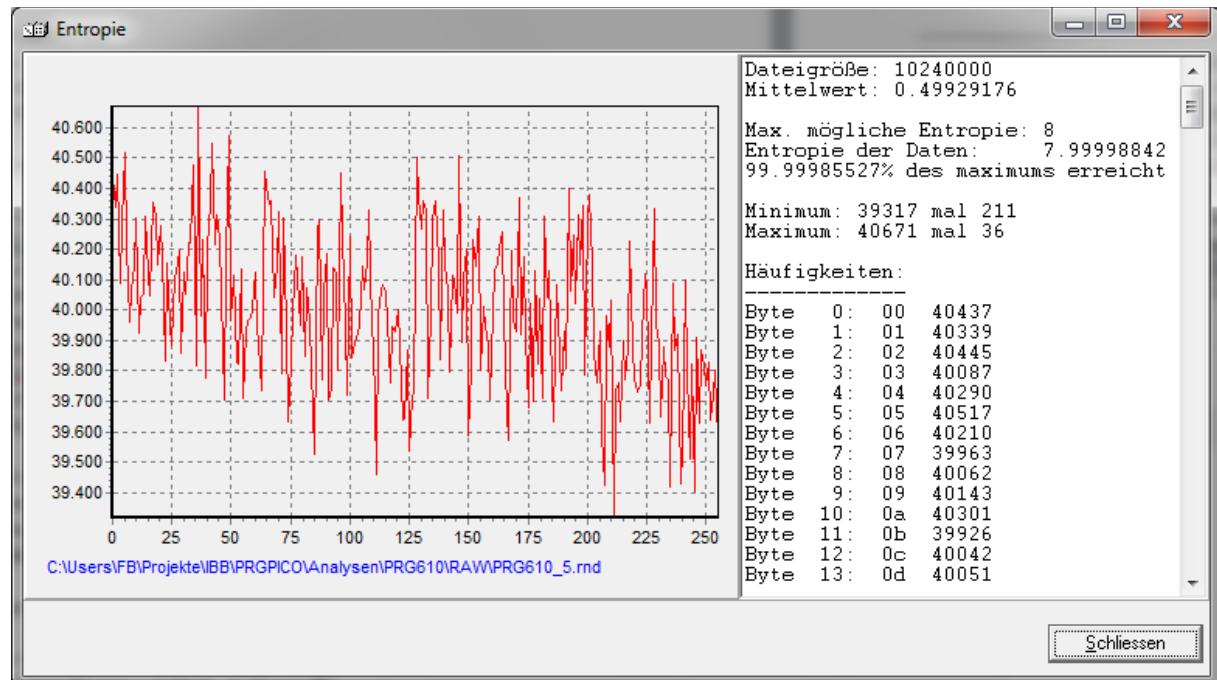
8-bit words looked up: 2560 + 256000 bytes
f-value: 8.00013422
8.00013422 > 7.976

sequence passes test 5

PRG610_5

Mittelwert: 0.49929176

Entropie der Daten: 7.99998842



```
*****
*          AIS31 evaluation tests          *
******
*****
```

date, time: 01/22/2015, 14:25:35
tested file: prg610_5.rnd
size of file: 10240000 bytes

Results of test 1 (test (P2.i)(vii.a) of AIS 31, cf. [3] and [4])

test scope: first 100000 bits
number of ones: 50252
relative frequency: 0.502520
test value: 0.00252000 < 0.025

sequence passes test 1

Results of test 2 (test (P2.i)(vii.b) of AIS 31, cf. [3] and [4])

number of 2-bit words looked up: 200099
relative frequency v(0,1): 0.500170
relative frequency v(1,0): 0.501590
test value: 0.00176000 < 0.02

sequence passes test 2

Results of test 3 (test (P2.i)(vii.c) of AIS 31, cf. [3] and [4])

number of 3-bit words looked up: 400687
test value t_1: 0.968048 <= 15.13
test value t_2: 0.288001 <= 15.13

sequence passes test 3

Results of test 4 (test (P2.i)(vii.d) of AIS 31, cf. [3] and [4])

number of 4-bit words looked up: 801604
test value t_00: 0.131220 <= 15.13
test value t_01: 0.950486 <= 15.13
test value t_10: 3.329298 <= 15.13
test value t_11: 1.310725 <= 15.13

sequence passes test 4

Results of test 5 (test (P2.i)(vii.e) of AIS 31, cf. [3] and [4])

8-bit words looked up: 2560 + 256000 bytes
f-value: 8.00117140
8.00117140 > 7.976

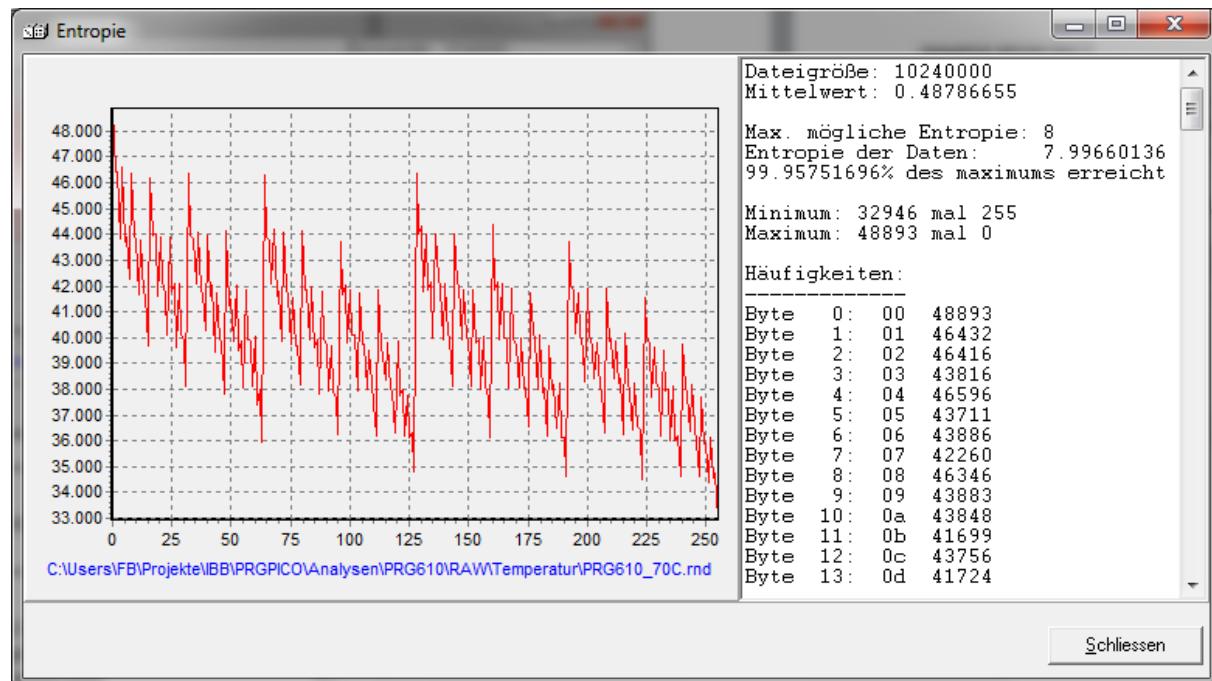
sequence passes test 5

Temperaturtest Rohdaten

Umgebungstemperatur +70°C

Mittelwert: 0.48786655

Entropie der Daten: 7.99660136



```
*****
*          AIS31 evaluation tests      *
*****
*****
```

date, time: 01/23/2015, 15:09:32

tested file: PRG610_70C.rnd

size of file: 10240000 bytes

Results of test 1 (test (P2.i)(vii.a) of AIS 31, cf. [3] and [4])

test scope: first 100000 bits

number of ones: 50043

relative frequency: 0.500430

test value: 0.00043000 < 0.025

sequence passes test 1

Results of test 2 (test (P2.i)(vii.b) of AIS 31, cf. [3] and [4])

number of 2-bit words looked up: 200426
relative frequency v(0,1): 0.497250
relative frequency v(1,0): 0.500860
test value: 0.00189000 < 0.02

sequence passes test 2

Results of test 3 (test (P2.i)(vii.c) of AIS 31, cf. [3] and [4])

number of 3-bit words looked up: 401219
test value t_1: 1.705308 <= 15.13
test value t_2: 0.950491 <= 15.13

sequence passes test 3

Results of test 4 (test (P2.i)(vii.d) of AIS 31, cf. [3] and [4])

number of 4-bit words looked up: 816273
test value t_00: 0.426330 <= 15.13
test value t_01: 0.278483 <= 15.13
test value t_10: 0.288003 <= 15.13
test value t_11: 0.000320 <= 15.13

sequence passes test 4

Results of test 5 (test (P2.i)(vii.e) of AIS 31, cf. [3] and [4])

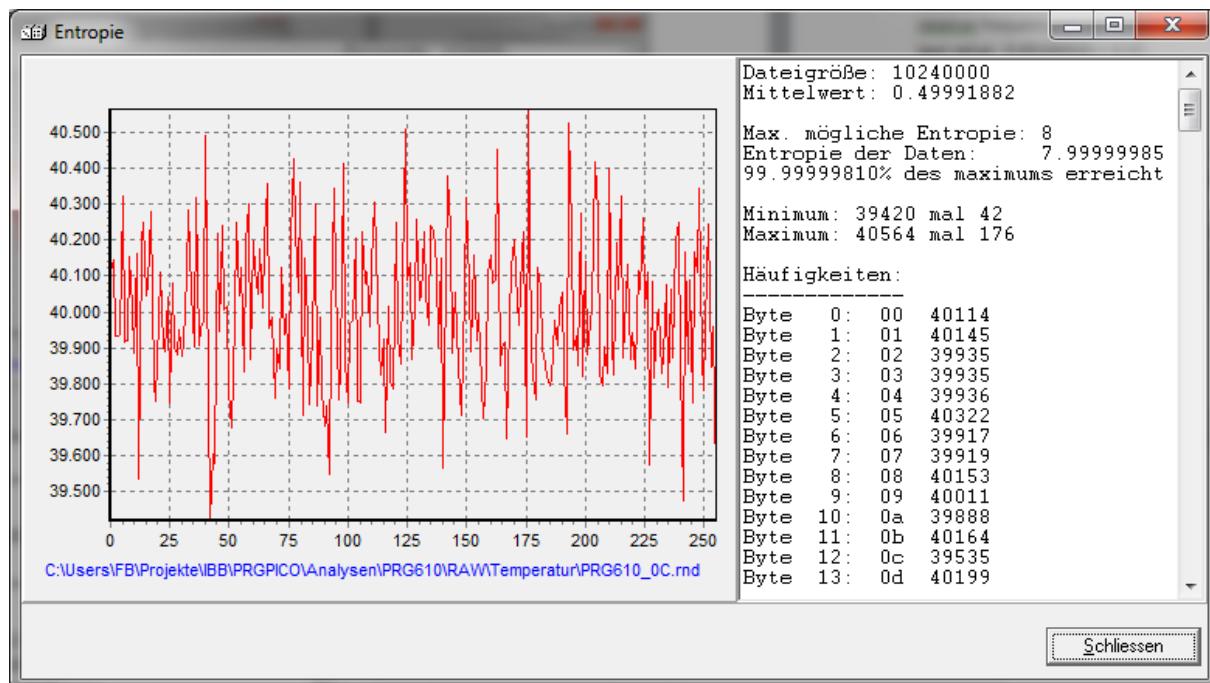
8-bit words looked up: 2560 + 256000 bytes
f-value: 8.00060091
8.00060091 > 7.976

sequence passes test 5

Umgebungstemperatur 0°C

Mittelwert: 0.49991882

Entropie der Daten: 7.99999985



```
*****
*          AIS31 evaluation tests          *
******
date, time: 01/23/2015, 15:39:17
tested file: prg610_0c.rnd
size of file: 10240000 bytes
```

Results of test 1 (test (P2.i)(vii.a) of AIS 31, cf. [3] and [4])

test scope: first 100000 bits
number of ones: 50009
relative frequency: 0.500090
test value: 0.00009000 < 0.025

sequence passes test 1

Results of test 2 (test (P2.i)(vii.b) of AIS 31, cf. [3] and [4])

number of 2-bit words looked up: 200217

relative frequency v(0,1): 0.500820

relative frequency v(1,0): 0.500510

test value: 0.00133000 < 0.02

sequence passes test 2

Results of test 3 (test (P2.i)(vii.c) of AIS 31, cf. [3] and [4])

number of 3-bit words looked up: 401037

test value t_1: 0.027380 <= 15.13

test value t_2: 0.162000 <= 15.13

sequence passes test 3

Results of test 4 (test (P2.i)(vii.d) of AIS 31, cf. [3] and [4])

number of 4-bit words looked up: 802995

test value t_00: 0.343223 <= 15.13

test value t_01: 1.635924 <= 15.13

test value t_10: 2.217781 <= 15.13

test value t_11: 1.740506 <= 15.13

sequence passes test 4

Results of test 5 (test (P2.i)(vii.e) of AIS 31, cf. [3] and [4])

8-bit words looked up: 2560 + 256000 bytes

f-value: 8.00305043

8.00305043 > 7.976

sequence passes test 5