AIS31-Test PRG310 Rohdaten (PTG.2) IBB, 14.04.2014

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########################################################################
#                                                                      #
#                         Results of RawTest                           #
#                                                                      #
########################################################################


date, time:    01/10/2013,  15:18:28
tested file:   traw1.rnd
size of file:  10240000 bytes



**********************************************************************
*                                                                    *
*                   Results of the frequency test                    *
*                                                                    *
**********************************************************************


test scope:     first 10240000 bytes
relative frequency of bit 1:  0.50342629

block length L =  2:  chi^2 =     1.7831,  p-value = 0.61861099
block length L =  3:  chi^2 =     6.3564,  p-value = 0.49880673
block length L =  4:  chi^2 =    14.2160,  p-value = 0.50921075
block length L =  5:  chi^2 =    19.3991,  p-value = 0.94782638
block length L =  6:  chi^2 =    65.5216,  p-value = 0.38937228
block length L =  7:  chi^2 =   127.2250,  p-value = 0.47769163
block length L =  8:  chi^2 =   222.6991,  p-value = 0.92864162
block length L =  9:  chi^2 =   509.7485,  p-value = 0.50730855
block length L = 10:  chi^2 =  1021.7512,  p-value = 0.50513793



**********************************************************************
*                                                                    *
*                     Results of the serial test                     *
*                                                                    *
**********************************************************************


test scope:     first 10000000 bytes
relative frequency of bit 1:  0.50343176

block length L =  2:  chi^2 =     0.0994,  p-value = 0.95149105
block length L =  3:  chi^2 =     1.6838,  p-value = 0.79366591
block length L =  4:  chi^2 =     6.0222,  p-value = 0.64474933
block length L =  5:  chi^2 =    10.2122,  p-value = 0.85531233
block length L =  6:  chi^2 =    23.8973,  p-value = 0.84810778
block length L =  7:  chi^2 =    47.1663,  p-value = 0.94324236
block length L =  8:  chi^2 =   106.1468,  p-value = 0.92073685
block length L =  9:  chi^2 =   250.6793,  p-value = 0.58210207
block length L = 10:  chi^2 =   485.6528,  p-value = 0.79303238



**********************************************************************
*                                                                    *
*                 Results of the modular monobit test                *
*                                                                    *
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test scope:     first 10240000 bytes
relative frequency of bit 1:  0.50342629

modular monobit test for block length L = 3:
bit  0:  rf = 0.50347827, chi^2 =  0.29510863, p-value = 0.58696525
bit  1:  rf = 0.50341602, chi^2 =  0.01153948, p-value = 0.91445422
bit  2:  rf = 0.50338459, chi^2 =  0.18993420, p-value = 0.66297139

modular monobit test for block length L = 4:
bit  0:  rf = 0.50344360, chi^2 =  0.02454612, p-value = 0.87550334
bit  1:  rf = 0.50336104, chi^2 =  0.34888987, p-value = 0.55474222
bit  2:  rf = 0.50334355, chi^2 =  0.56083303, p-value = 0.45392480
bit  3:  rf = 0.50355698, chi^2 =  1.39921653, p-value = 0.23685479

modular monobit test for block length L = 5:
bit  0:  rf = 0.50324359, chi^2 =  2.18771102, p-value = 0.13911592
bit  1:  rf = 0.50358502, chi^2 =  1.65122997, p-value = 0.19879161
bit  2:  rf = 0.50342267, chi^2 =  0.00086146, p-value = 0.97658499
bit  3:  rf = 0.50339862, chi^2 =  0.05019073, p-value = 0.82273173
bit  4:  rf = 0.50348157, chi^2 =  0.20023190, p-value = 0.65453373

modular monobit test for block length L = 6:
bit  0:  rf = 0.50348995, chi^2 =  0.22133443, p-value = 0.63802503
bit  1:  rf = 0.50352211, chi^2 =  0.50138186, p-value = 0.47889357
bit  2:  rf = 0.50338082, chi^2 =  0.11292502, p-value = 0.73683831
bit  3:  rf = 0.50346659, chi^2 =  0.08868130, p-value = 0.76586035
bit  4:  rf = 0.50330992, chi^2 =  0.73960147, p-value = 0.38978857
bit  5:  rf = 0.50338837, chi^2 =  0.07856331, p-value = 0.77925389

modular monobit test for block length L = 7:
bit  0:  rf = 0.50342681, chi^2 =  0.00001260, p-value = 0.99716757
bit  1:  rf = 0.50322985, chi^2 =  1.80650537, p-value = 0.17892801
bit  2:  rf = 0.50336162, chi^2 =  0.19583834, p-value = 0.65810120
bit  3:  rf = 0.50345381, chi^2 =  0.03545636, p-value = 0.85064258
bit  4:  rf = 0.50348936, chi^2 =  0.18620265, p-value = 0.66609609
bit  5:  rf = 0.50359105, chi^2 =  1.27067635, p-value = 0.25963984
bit  6:  rf = 0.50343160, chi^2 =  0.00131698, p-value = 0.97105096

modular monobit test for block length L = 8:
bit  0:  rf = 0.50342295, chi^2 =  0.00045825, p-value = 0.98292119
bit  1:  rf = 0.50336660, chi^2 =  0.14595473, p-value = 0.70243153
bit  2:  rf = 0.50335381, chi^2 =  0.21521912, p-value = 0.64270711
bit  3:  rf = 0.50341865, chi^2 =  0.00239193, p-value = 0.96099309
bit  4:  rf = 0.50346426, chi^2 =  0.05903659, p-value = 0.80802519
bit  5:  rf = 0.50335547, chi^2 =  0.20547354, p-value = 0.65033857
bit  6:  rf = 0.50333330, chi^2 =  0.35422760, p-value = 0.55172969
bit  7:  rf = 0.50369531, chi^2 =  2.96445466, p-value = 0.08511315

modular monobit test for block length L = 9:
bit  0:  rf = 0.50375974, chi^2 =  4.04839024, p-value = 0.04421349
bit  1:  rf = 0.50342488, chi^2 =  0.00007300, p-value = 0.99318303
bit  2:  rf = 0.50351035, chi^2 =  0.25726627, p-value = 0.61200452
bit  3:  rf = 0.50334523, chi^2 =  0.23928419, p-value = 0.62472359
bit  4:  rf = 0.50337017, chi^2 =  0.11470559, p-value = 0.73484920
bit  5:  rf = 0.50318219, chi^2 =  2.16958834, p-value = 0.14076391
bit  6:  rf = 0.50332985, chi^2 =  0.33869697, p-value = 0.56058232
bit  7:  rf = 0.50345300, chi^2 =  0.02597439, p-value = 0.87196289
bit  8:  rf = 0.50346124, chi^2 =  0.04447262, p-value = 0.83297676

modular monobit test for block length L = 10:
bit  0:  rf = 0.50308203, chi^2 =  3.88374099, p-value = 0.04875581
bit  1:  rf = 0.50349182, chi^2 =  0.14070692, p-value = 0.70757925
bit  2:  rf = 0.50334509, chi^2 =  0.21607022, p-value = 0.64205066
bit  3:  rf = 0.50335803, chi^2 =  0.15269498, p-value = 0.69597313
bit  4:  rf = 0.50342334, chi^2 =  0.00028597, p-value = 0.98650789
bit  5:  rf = 0.50340515, chi^2 =  0.01464827, p-value = 0.90366726
bit  6:  rf = 0.50367822, chi^2 =  2.07981956, p-value = 0.14925782
bit  7:  rf = 0.50350024, chi^2 =  0.17920453, p-value = 0.67205775
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bit  8:  rf = 0.50343921, chi^2 =  0.00546590, p-value = 0.94106471
bit  9:  rf = 0.50353979, chi^2 =  0.42215266, p-value = 0.51586486


*********************************************************************
*                                                                   *
*                Results of the autocorrelation test                *
*                                                                   *
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test scope:     first 10000000 bytes
relative frequency of bit 1:  0.50343176

bit shift d =  1:  chi^2 =  0.09937948,  p-value = 0.75257556
bit shift d =  2:  chi^2 =  1.20181410,  p-value = 0.27295940
bit shift d =  3:  chi^2 =  3.13855313,  p-value = 0.07646161
bit shift d =  4:  chi^2 =  0.96039472,  p-value = 0.32708745
bit shift d =  5:  chi^2 =  0.01927081,  p-value = 0.88959292
bit shift d =  6:  chi^2 =  0.10006614,  p-value = 0.75175028
bit shift d =  7:  chi^2 =  0.47838852,  p-value = 0.48915316
bit shift d =  8:  chi^2 =  1.71131169,  p-value = 0.19081527
bit shift d =  9:  chi^2 =  0.64195945,  p-value = 0.42300214
bit shift d = 10:  chi^2 =  3.37786049,  p-value = 0.06607778


*********************************************************************
*                                                                   *
*                  Results of the dependency test                   *
*                                                                   *
*********************************************************************


test scope:     first 10240000 bytes
relative frequency of bit 1:  0.50342629

dependency test for block length L = 3:

bit place 1 if bit 0 = 0:
rf = 0.50348114, chi^2 =  0.16313568, p-value = 0.68628583
bit place 1 if bit 0 = 1:
rf = 0.50335176, chi^2 =  0.30554401, p-value = 0.58042752
bit place 2 if bit 1 = 0:
rf = 0.50347952, chi^2 =  0.15368082, p-value = 0.69504236
bit place 2 if bit 1 = 1:
rf = 0.50329099, chi^2 =  1.00665239, p-value = 0.31570616
bit place 3 if bit 2 = 0:
rf = 0.50337094, chi^2 =  0.16621971, p-value = 0.68349356
bit place 3 if bit 2 = 1:
rf = 0.50358412, chi^2 =  1.36972141, p-value = 0.24185976

dependency test for block length L = 4:

bit place 1 if bit 0 = 0:
rf = 0.50356906, chi^2 =  0.82918017, p-value = 0.36250970
bit place 1 if bit 0 = 1:
rf = 0.50315590, chi^2 =  3.01543281, p-value = 0.08247544
bit place 2 if bit 1 = 0:
rf = 0.50332140, chi^2 =  0.44766998, p-value = 0.50344352
bit place 2 if bit 1 = 1:
rf = 0.50336537, chi^2 =  0.15308133, p-value = 0.69560795
bit place 3 if bit 2 = 0:
rf = 0.50353723, chi^2 =  0.50072189, p-value = 0.47918310
bit place 3 if bit 2 = 1:
rf = 0.50357652, chi^2 =  0.93064454, p-value = 0.33469550
bit place 4 if bit 3 = 0:
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rf = 0.50334774, chi^2 =  0.25095481, p-value = 0.61640357
bit place 4 if bit 3 = 1:
rf = 0.50353806, chi^2 =  0.51534766, p-value = 0.47283301

dependency test for block length L = 5:

bit place 1 if bit 0 = 0:
rf = 0.50362895, chi^2 =  1.33708889, p-value = 0.24754800
bit place 1 if bit 0 = 1:
rf = 0.50354160, chi^2 =  0.43851798, p-value = 0.50783863
bit place 2 if bit 1 = 0:
rf = 0.50339230, chi^2 =  0.03758790, p-value = 0.84627299
bit place 2 if bit 1 = 1:
rf = 0.50345266, chi^2 =  0.02294662, p-value = 0.87959598
bit place 3 if bit 2 = 0:
rf = 0.50335586, chi^2 =  0.16146345, p-value = 0.68781271
bit place 3 if bit 2 = 1:
rf = 0.50344074, chi^2 =  0.00688677, p-value = 0.93386221
bit place 4 if bit 3 = 0:
rf = 0.50364028, chi^2 =  1.49036668, p-value = 0.22215958
bit place 4 if bit 3 = 1:
rf = 0.50332506, chi^2 =  0.33814552, p-value = 0.56090162
bit place 5 if bit 4 = 0:
rf = 0.50320180, chi^2 =  1.64001358, p-value = 0.20032361
bit place 5 if bit 4 = 1:
rf = 0.50328475, chi^2 =  0.66114509, p-value = 0.41615597

dependency test for block length L = 6:

bit place 1 if bit 0 = 0:
rf = 0.50377038, chi^2 =  3.21064567, p-value = 0.07316061
bit place 1 if bit 0 = 1:
rf = 0.50327734, chi^2 =  0.61007929, p-value = 0.43475796
bit place 2 if bit 1 = 0:
rf = 0.50343442, chi^2 =  0.00179179, p-value = 0.96623600
bit place 2 if bit 1 = 1:
rf = 0.50332790, chi^2 =  0.26623842, p-value = 0.60586631
bit place 3 if bit 2 = 0:
rf = 0.50336457, chi^2 =  0.10333086, p-value = 0.74786850
bit place 3 if bit 2 = 1:
rf = 0.50356716, chi^2 =  0.54558007, p-value = 0.46012932
bit place 4 if bit 3 = 0:
rf = 0.50319191, chi^2 =  1.48984081, p-value = 0.22224116
bit place 4 if bit 3 = 1:
rf = 0.50342625, chi^2 =  0.00000006, p-value = 0.99979861
bit place 5 if bit 4 = 0:
rf = 0.50352453, chi^2 =  0.26177648, p-value = 0.60890231
bit place 5 if bit 4 = 1:
rf = 0.50325407, chi^2 =  0.81535040, p-value = 0.36654312
bit place 6 if bit 5 = 0:
rf = 0.50337731, chi^2 =  0.06508834, p-value = 0.79862720
bit place 6 if bit 5 = 1:
rf = 0.50360101, chi^2 =  0.83926277, p-value = 0.35960771

dependency test for block length L = 7:

bit place 1 if bit 0 = 0:
rf = 0.50341222, chi^2 =  0.00460673, p-value = 0.94588679
bit place 1 if bit 0 = 1:
rf = 0.50305006, chi^2 =  3.33605756, p-value = 0.06777682
bit place 2 if bit 1 = 0:
rf = 0.50336597, chi^2 =  0.08462704, p-value = 0.77112224
bit place 2 if bit 1 = 1:
rf = 0.50335723, chi^2 =  0.11236192, p-value = 0.73747098
bit place 3 if bit 2 = 0:
rf = 0.50347070, chi^2 =  0.04584061, p-value = 0.83046579
bit place 3 if bit 2 = 1:
rf = 0.50343707, chi^2 =  0.00273791, p-value = 0.95826973
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bit place 4 if bit 3 = 0:
rf = 0.50355558, chi^2 =  0.38853198, p-value = 0.53307207
bit place 4 if bit 3 = 1:
rf = 0.50342397, chi^2 =  0.00012742, p-value = 0.99099349
bit place 5 if bit 4 = 0:
rf = 0.50338941, chi^2 =  0.03161569, p-value = 0.85887375
bit place 5 if bit 4 = 1:
rf = 0.50378997, chi^2 =  3.11739563, p-value = 0.07746050
bit place 6 if bit 5 = 0:
rf = 0.50332977, chi^2 =  0.21649075, p-value = 0.64172690
bit place 6 if bit 5 = 1:
rf = 0.50353188, chi^2 =  0.26284641, p-value = 0.60817134
bit place 7 if bit 6 = 0:
rf = 0.50358330, chi^2 =  0.57301360, p-value = 0.44906387
bit place 7 if bit 6 = 1:
rf = 0.50327238, chi^2 =  0.55831540, p-value = 0.45493979

dependency test for block length L = 8:

bit place 1 if bit 0 = 0:
rf = 0.50344399, chi^2 =  0.00636780, p-value = 0.93639751
bit place 1 if bit 0 = 1:
rf = 0.50329037, chi^2 =  0.38100644, p-value = 0.53706510
bit place 2 if bit 1 = 0:
rf = 0.50344792, chi^2 =  0.00951705, p-value = 0.92228538
bit place 2 if bit 1 = 1:
rf = 0.50326086, chi^2 =  0.56432906, p-value = 0.45252124
bit place 3 if bit 2 = 0:
rf = 0.50328640, chi^2 =  0.39813389, p-value = 0.52805457
bit place 3 if bit 2 = 1:
rf = 0.50354905, chi^2 =  0.31068156, p-value = 0.57726226
bit place 4 if bit 3 = 0:
rf = 0.50339656, chi^2 =  0.01797972, p-value = 0.89333261
bit place 4 if bit 3 = 1:
rf = 0.50353094, chi^2 =  0.22580216, p-value = 0.63465409
bit place 5 if bit 4 = 0:
rf = 0.50369415, chi^2 =  1.45926006, p-value = 0.22704789
bit place 5 if bit 4 = 1:
rf = 0.50302155, chi^2 =  3.37845172, p-value = 0.06605408
bit place 6 if bit 5 = 0:
rf = 0.50319478, chi^2 =  1.09038176, p-value = 0.29638664
bit place 6 if bit 5 = 1:
rf = 0.50346988, chi^2 =  0.03916598, p-value = 0.84312021
bit place 7 if bit 6 = 0:
rf = 0.50378805, chi^2 =  2.66236915, p-value = 0.10274759
bit place 7 if bit 6 = 1:
rf = 0.50360390, chi^2 =  0.65039011, p-value = 0.41997324
bit place 8 if bit 7 = 0:
rf = 0.50329889, chi^2 =  0.32996833, p-value = 0.56567774
bit place 8 if bit 7 = 1:
rf = 0.50354509, chi^2 =  0.29116714, p-value = 0.58947357

dependency test for block length L = 9:

bit place 1 if bit 0 = 0:
rf = 0.50344529, chi^2 =  0.00652165, p-value = 0.93563543
bit place 1 if bit 0 = 1:
rf = 0.50340466, chi^2 =  0.00858463, p-value = 0.92617903
bit place 2 if bit 1 = 0:
rf = 0.50332715, chi^2 =  0.17773028, p-value = 0.67333110
bit place 2 if bit 1 = 1:
rf = 0.50369095, chi^2 =  1.28392475, p-value = 0.25717057
bit place 3 if bit 2 = 0:
rf = 0.50327063, chi^2 =  0.43803657, p-value = 0.50807164
bit place 3 if bit 2 = 1:
rf = 0.50341868, chi^2 =  0.00106417, p-value = 0.97397627
bit place 4 if bit 3 = 0:
rf = 0.50336035, chi^2 =  0.07864142, p-value = 0.77914702
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bit place 4 if bit 3 = 1:
rf = 0.50337996, chi^2 =  0.03934011, p-value = 0.84277638
bit place 5 if bit 4 = 0:
rf = 0.50336140, chi^2 =  0.07614299, p-value = 0.78259400
bit place 5 if bit 4 = 1:
rf = 0.50300527, chi^2 =  3.24886776, p-value = 0.07147281
bit place 6 if bit 5 = 0:
rf = 0.50326770, chi^2 =  0.45500706, p-value = 0.49996672
bit place 6 if bit 5 = 1:
rf = 0.50339110, chi^2 =  0.02269068, p-value = 0.88026423
bit place 7 if bit 6 = 0:
rf = 0.50363763, chi^2 =  0.80767853, p-value = 0.36880749
bit place 7 if bit 6 = 1:
rf = 0.50327071, chi^2 =  0.44361003, p-value = 0.50538518
bit place 8 if bit 7 = 0:
rf = 0.50374993, chi^2 =  1.89369252, p-value = 0.16878603
bit place 8 if bit 7 = 1:
rf = 0.50317662, chi^2 =  1.14267875, p-value = 0.28508701
bit place 9 if bit 8 = 0:
rf = 0.50357454, chi^2 =  0.39731565, p-value = 0.52847883
bit place 9 if bit 8 = 1:
rf = 0.50394229, chi^2 =  4.88074550, p-value = 0.02715789

dependency test for block length L = 10:

bit place 1 if bit 0 = 0:
rf = 0.50356052, chi^2 =  0.29338531, p-value = 0.58805927
bit place 1 if bit 0 = 1:
rf = 0.50342384, chi^2 =  0.00009908, p-value = 0.99205787
bit place 2 if bit 1 = 0:
rf = 0.50312940, chi^2 =  1.43418003, p-value = 0.23108347
bit place 2 if bit 1 = 1:
rf = 0.50355767, chi^2 =  0.28479166, p-value = 0.59357765
bit place 3 if bit 2 = 0:
rf = 0.50333665, chi^2 =  0.13077638, p-value = 0.71762842
bit place 3 if bit 2 = 1:
rf = 0.50337925, chi^2 =  0.03650660, p-value = 0.84847311
bit place 4 if bit 3 = 0:
rf = 0.50359765, chi^2 =  0.47786888, p-value = 0.48938922
bit place 4 if bit 3 = 1:
rf = 0.50325124, chi^2 =  0.50548943, p-value = 0.47709799
bit place 5 if bit 4 = 0:
rf = 0.50353052, chi^2 =  0.17677026, p-value = 0.67416365
bit place 5 if bit 4 = 1:
rf = 0.50328137, chi^2 =  0.34649727, p-value = 0.55610267
bit place 6 if bit 5 = 0:
rf = 0.50369742, chi^2 =  1.19624663, p-value = 0.27407315
bit place 6 if bit 5 = 1:
rf = 0.50365916, chi^2 =  0.89456341, p-value = 0.34424366
bit place 7 if bit 6 = 0:
rf = 0.50365531, chi^2 =  0.85301780, p-value = 0.35570002
bit place 7 if bit 6 = 1:
rf = 0.50334757, chi^2 =  0.10229870, p-value = 0.74908835
bit place 8 if bit 7 = 0:
rf = 0.50337507, chi^2 =  0.04269360, p-value = 0.83630328
bit place 8 if bit 7 = 1:
rf = 0.50350234, chi^2 =  0.09540995, p-value = 0.75740900
bit place 9 if bit 8 = 0:
rf = 0.50368280, chi^2 =  1.07064787, p-value = 0.30079915
bit place 9 if bit 8 = 1:
rf = 0.50339886, chi^2 =  0.01241341, p-value = 0.91128687
bit place 10 if bit 9 = 0:
rf = 0.50287300, chi^2 =  4.98039898, p-value = 0.02563607
bit place 10 if bit 9 = 1:
rf = 0.50328800, chi^2 =  0.31557344, p-value = 0.57428007
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