AIS31-Test PRG260 Rohdaten (PTG.2) IBB, 14.04.2014

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


date, time:    04/14/2014,  12:19:17
tested file:   raw.rnd
size of file:  10240000 bytes


**********************************************************************
*                                                                    *
*                   Results of the frequency test                    *
*                                                                    *
**********************************************************************
test scope:     first 10240000 bytes
relative frequency of bit 1:  0.49780798

block length L =  2:  chi^2 =     4.6917,  p-value = 0.19581561
block length L =  3:  chi^2 =    14.6601,  p-value = 0.04061142
block length L =  4:  chi^2 =    19.8633,  p-value = 0.17723941


**********************************************************************
*                                                                    *
*                     Results of the serial test                     *
*                                                                    *
**********************************************************************
test scope:     first 10000000 bytes
relative frequency of bit 1:  0.49779790

block length L =  2:  chi^2 =     4.6252,  p-value = 0.09900450
block length L =  3:  chi^2 =     6.9376,  p-value = 0.13922398
block length L =  4:  chi^2 =    10.3748,  p-value = 0.23969756


**********************************************************************
*                                                                    *
*                Results of the modular monobit test                 *
*                                                                    *
**********************************************************************
test scope:     first 10240000 bytes
relative frequency of bit 1:  0.49780798

modular monobit test for block length L = 3:
bit  0:  rf = 0.49781486, chi^2 =  0.00515902, p-value = 0.94274013
bit  1:  rf = 0.49774209, chi^2 =  0.47426777, p-value = 0.49103032
bit  2:  rf = 0.49786704, chi^2 =  0.38096764, p-value = 0.53708582

modular monobit test for block length L = 4:
bit  0:  rf = 0.49783745, chi^2 =  0.07113657, p-value = 0.78968906
bit  1:  rf = 0.49768550, chi^2 =  1.22904164, p-value = 0.26759350
bit  2:  rf = 0.49785034, chi^2 =  0.14698647, p-value = 0.70143199
bit  3:  rf = 0.49785864, chi^2 =  0.21023964, p-value = 0.64657964

modular monobit test for block length L = 5:
bit  0:  rf = 0.49797552, chi^2 =  1.83964107, p-value = 0.17499302
bit  1:  rf = 0.49778949, chi^2 =  0.02241474, p-value = 0.88098906
bit  2:  rf = 0.49748969, chi^2 =  6.63983099, p-value = 0.00997234
bit  3:  rf = 0.49781653, chi^2 =  0.00478525, p-value = 0.94484993
bit  4:  rf = 0.49796869, chi^2 =  1.69258356, p-value = 0.19326075
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modular monobit test for block length L = 6:
bit  0:  rf = 0.49803802, chi^2 =  2.89014237, p-value = 0.08912305
bit  1:  rf = 0.49773663, chi^2 =  0.27803331, p-value = 0.59799316
bit  2:  rf = 0.49774615, chi^2 =  0.20877900, p-value = 0.64772610
bit  3:  rf = 0.49759169, chi^2 =  2.55508755, p-value = 0.10993972
bit  4:  rf = 0.49774755, chi^2 =  0.19948662, p-value = 0.65513555
bit  5:  rf = 0.49798793, chi^2 =  1.76840115, p-value = 0.18358007

modular monobit test for block length L = 7:
bit  0:  rf = 0.49797173, chi^2 =  1.25524702, p-value = 0.26255269
bit  1:  rf = 0.49776580, chi^2 =  0.08329189, p-value = 0.77288494
bit  2:  rf = 0.49799600, chi^2 =  1.65486538, p-value = 0.19829802
bit  3:  rf = 0.49775914, chi^2 =  0.11169313, p-value = 0.73822470
bit  4:  rf = 0.49774846, chi^2 =  0.16588121, p-value = 0.68379855
bit  5:  rf = 0.49779485, chi^2 =  0.00806869, p-value = 0.92842558
bit  6:  rf = 0.49761994, chi^2 =  1.65529612, p-value = 0.19823963

modular monobit test for block length L = 8:
bit  0:  rf = 0.49781445, chi^2 =  0.00171451, p-value = 0.96697171
bit  1:  rf = 0.49748437, chi^2 =  4.28951176, p-value = 0.03834818
bit  2:  rf = 0.49784180, chi^2 =  0.04683257, p-value = 0.82866947
bit  3:  rf = 0.49789844, chi^2 =  0.33513889, p-value = 0.56264868
bit  4:  rf = 0.49786045, chi^2 =  0.11275121, p-value = 0.73703340
bit  5:  rf = 0.49788662, chi^2 =  0.25329688, p-value = 0.61476315
bit  6:  rf = 0.49785889, chi^2 =  0.10613546, p-value = 0.74458750
bit  7:  rf = 0.49781885, chi^2 =  0.00483469, p-value = 0.94456623

modular monobit test for block length L = 9:
bit  0:  rf = 0.49783767, chi^2 =  0.03208939, p-value = 0.85783161
bit  1:  rf = 0.49763706, chi^2 =  1.06369303, p-value = 0.30237440
bit  2:  rf = 0.49784756, chi^2 =  0.05702440, p-value = 0.81126235
bit  3:  rf = 0.49751599, chi^2 =  3.10426227, p-value = 0.07808760
bit  4:  rf = 0.49781075, chi^2 =  0.00027956, p-value = 0.98666002
bit  5:  rf = 0.49784272, chi^2 =  0.04394448, p-value = 0.83395694
bit  6:  rf = 0.49809091, chi^2 =  2.91440681, p-value = 0.08779169
bit  7:  rf = 0.49777845, chi^2 =  0.03174748, p-value = 0.85858302
bit  8:  rf = 0.49791084, chi^2 =  0.38519297, p-value = 0.53483707

modular monobit test for block length L = 10:
bit  0:  rf = 0.49802722, chi^2 =  1.57503808, p-value = 0.20947687
bit  1:  rf = 0.49756287, chi^2 =  1.96881909, p-value = 0.16057326
bit  2:  rf = 0.49725037, chi^2 = 10.18897708, p-value = 0.00141283
bit  3:  rf = 0.49778857, chi^2 =  0.01234448, p-value = 0.91153253
bit  4:  rf = 0.49808130, chi^2 =  2.44786004, p-value = 0.11768521
bit  5:  rf = 0.49792383, chi^2 =  0.43975503, p-value = 0.50724071
bit  6:  rf = 0.49801611, chi^2 =  1.41947308, p-value = 0.23349015
bit  7:  rf = 0.49772900, chi^2 =  0.20440285, p-value = 0.65119022
bit  8:  rf = 0.49784448, chi^2 =  0.04365367, p-value = 0.83449929
bit  9:  rf = 0.49785608, chi^2 =  0.07580028, p-value = 0.78307154


*********************************************************************
*                                                                   *
*               Results of the autocorrelation test                 *
*                                                                   *
*********************************************************************
test scope:     first 10000000 bytes
relative frequency of bit 1:  0.49779790

bit shift d =  1:  chi^2 =  4.62469909,  p-value = 0.03151479
bit shift d =  2:  chi^2 =  1.84035114,  p-value = 0.17490980
bit shift d =  3:  chi^2 =  1.49844137,  p-value = 0.22091134
bit shift d =  4:  chi^2 =  0.05461389,  p-value = 0.81522088
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**********************************************************************
*                                                                    *
*                   Results of the dependency test                   *
*                                                                    *
**********************************************************************
test scope:     first 10240000 bytes
relative frequency of bit 1:  0.49780798

dependency test for block length L = 3:

bit place 1 if bit 0 = 0:
rf = 0.49785361, chi^2 =  0.11417347, p-value = 0.73544183
bit place 1 if bit 0 = 1:
rf = 0.49762963, chi^2 =  1.72966847, p-value = 0.18845324
bit place 2 if bit 1 = 0:
rf = 0.49817149, chi^2 =  7.24915031, p-value = 0.00709346
bit place 2 if bit 1 = 1:
rf = 0.49755987, chi^2 =  3.34697471, p-value = 0.06732865
bit place 3 if bit 2 = 0:
rf = 0.49775336, chi^2 =  0.16365980, p-value = 0.68580914
bit place 3 if bit 2 = 1:
rf = 0.49787684, chi^2 =  0.25786190, p-value = 0.61159288

dependency test for block length L = 4:

bit place 1 if bit 0 = 0:
rf = 0.49796748, chi^2 =  1.04654180, p-value = 0.30630489
bit place 1 if bit 0 = 1:
rf = 0.49740111, chi^2 =  6.75146284, p-value = 0.00936709
bit place 2 if bit 1 = 0:
rf = 0.49783522, chi^2 =  0.03051750, p-value = 0.86132120
bit place 2 if bit 1 = 1:
rf = 0.49786566, chi^2 =  0.13561598, p-value = 0.71267882
bit place 3 if bit 2 = 0:
rf = 0.49789820, chi^2 =  0.33478688, p-value = 0.56285390
bit place 3 if bit 2 = 1:
rf = 0.49781880, chi^2 =  0.00476836, p-value = 0.94494719
bit place 4 if bit 3 = 0:
rf = 0.49800376, chi^2 =  1.57675194, p-value = 0.20922917
bit place 4 if bit 3 = 1:
rf = 0.49766966, chi^2 =  0.78037826, p-value = 0.37702548

dependency test for block length L = 5:

bit place 1 if bit 0 = 0:
rf = 0.49800551, chi^2 =  1.28372646, p-value = 0.25720731
bit place 1 if bit 0 = 1:
rf = 0.49757177, chi^2 =  1.82094626, p-value = 0.17720068
bit place 2 if bit 1 = 0:
rf = 0.49744404, chi^2 =  4.35957682, p-value = 0.03680145
bit place 2 if bit 1 = 1:
rf = 0.49753580, chi^2 =  2.41693465, p-value = 0.12002960
bit place 3 if bit 2 = 0:
rf = 0.49800501, chi^2 =  1.27846027, p-value = 0.25818552
bit place 3 if bit 2 = 1:
rf = 0.49762620, chi^2 =  1.07735483, p-value = 0.29929005
bit place 4 if bit 3 = 0:
rf = 0.49810368, chi^2 =  2.87766287, p-value = 0.08981629
bit place 4 if bit 3 = 1:
rf = 0.49783258, chi^2 =  0.01973179, p-value = 0.88828874
bit place 5 if bit 4 = 0:
rf = 0.49807265, chi^2 =  2.30470148, p-value = 0.12898306
bit place 5 if bit 4 = 1:
rf = 0.49787755, chi^2 =  0.15792496, p-value = 0.69107418

dependency test for block length L = 6:

bit place 1 if bit 0 = 0:
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rf = 0.49786589, chi^2 =  0.09193653, p-value = 0.76172955
bit place 1 if bit 0 = 1:
rf = 0.49760643, chi^2 =  1.10499385, p-value = 0.29317277
bit place 2 if bit 1 = 0:
rf = 0.49802335, chi^2 =  1.27233684, p-value = 0.25932875
bit place 2 if bit 1 = 1:
rf = 0.49746651, chi^2 =  3.16971584, p-value = 0.07501550
bit place 3 if bit 2 = 0:
rf = 0.49761296, chi^2 =  1.04331977, p-value = 0.30705064
bit place 3 if bit 2 = 1:
rf = 0.49757030, chi^2 =  1.53575318, p-value = 0.21525104
bit place 4 if bit 3 = 0:
rf = 0.49784133, chi^2 =  0.03051129, p-value = 0.86133516
bit place 4 if bit 3 = 1:
rf = 0.49765293, chi^2 =  0.65335891, p-value = 0.41891433
bit place 5 if bit 4 = 0:
rf = 0.49831970, chi^2 =  7.18279171, p-value = 0.00736061
bit place 5 if bit 4 = 1:
rf = 0.49765322, chi^2 =  0.65109171, p-value = 0.41972263
bit place 6 if bit 5 = 0:
rf = 0.49789390, chi^2 =  0.20238217, p-value = 0.65280486
bit place 6 if bit 5 = 1:
rf = 0.49818324, chi^2 =  3.82987318, p-value = 0.05034674

dependency test for block length L = 7:

bit place 1 if bit 0 = 0:
rf = 0.49796133, chi^2 =  0.55266064, p-value = 0.45723259
bit place 1 if bit 0 = 1:
rf = 0.49756876, chi^2 =  1.33402058, p-value = 0.24809121
bit place 2 if bit 1 = 0:
rf = 0.49799441, chi^2 =  0.81711860, p-value = 0.36602397
bit place 2 if bit 1 = 1:
rf = 0.49799769, chi^2 =  0.83862193, p-value = 0.35979120
bit place 3 if bit 2 = 0:
rf = 0.49777442, chi^2 =  0.02646862, p-value = 0.87076112
bit place 3 if bit 2 = 1:
rf = 0.49774381, chi^2 =  0.09599464, p-value = 0.75669022
bit place 4 if bit 3 = 0:
rf = 0.49802336, chi^2 =  1.09061296, p-value = 0.29633544
bit place 4 if bit 3 = 1:
rf = 0.49747116, chi^2 =  2.64350449, p-value = 0.10397396
bit place 5 if bit 4 = 0:
rf = 0.49803012, chi^2 =  1.16019745, p-value = 0.28142460
bit place 5 if bit 4 = 1:
rf = 0.49755754, chi^2 =  1.46142309, p-value = 0.22670383
bit place 6 if bit 5 = 0:
rf = 0.49761793, chi^2 =  0.84919217, p-value = 0.35678097
bit place 6 if bit 5 = 1:
rf = 0.49762206, chi^2 =  0.80555485, p-value = 0.36943773
bit place 7 if bit 6 = 0:
rf = 0.49808165, chi^2 =  1.76135239, p-value = 0.18445592
bit place 7 if bit 6 = 1:
rf = 0.49786068, chi^2 =  0.06468391, p-value = 0.79924038

dependency test for block length L = 8:

bit place 1 if bit 0 = 0:
rf = 0.49790389, chi^2 =  0.18919915, p-value = 0.66358399
bit place 1 if bit 0 = 1:
rf = 0.49706128, chi^2 = 11.36940384, p-value = 0.00074664
bit place 2 if bit 1 = 0:
rf = 0.49781830, chi^2 =  0.00219094, p-value = 0.96266667
bit place 2 if bit 1 = 1:
rf = 0.49786563, chi^2 =  0.06771339, p-value = 0.79469565
bit place 3 if bit 2 = 0:
rf = 0.49786614, chi^2 =  0.06957658, p-value = 0.79195428
bit place 3 if bit 2 = 1:
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rf = 0.49793111, chi^2 =  0.30914028, p-value = 0.57820823
bit place 4 if bit 3 = 0:
rf = 0.49807343, chi^2 =  1.44914466, p-value = 0.22866525
bit place 4 if bit 3 = 1:
rf = 0.49764577, chi^2 =  0.53664638, p-value = 0.46382591
bit place 5 if bit 4 = 0:
rf = 0.49803108, chi^2 =  1.02372360, p-value = 0.31163739
bit place 5 if bit 4 = 1:
rf = 0.49774102, chi^2 =  0.09145080, p-value = 0.76234080
bit place 6 if bit 5 = 0:
rf = 0.49785224, chi^2 =  0.04028649, p-value = 0.84092147
bit place 6 if bit 5 = 1:
rf = 0.49786569, chi^2 =  0.06790262, p-value = 0.79441540
bit place 7 if bit 6 = 0:
rf = 0.49793035, chi^2 =  0.30796143, p-value = 0.57893383
bit place 7 if bit 6 = 1:
rf = 0.49770649, chi^2 =  0.21007466, p-value = 0.64670890
bit place 8 if bit 7 = 0:
rf = 0.49793421, chi^2 =  0.32772270, p-value = 0.56700313
bit place 8 if bit 7 = 1:
rf = 0.49769355, chi^2 =  0.26701224, p-value = 0.60534307

dependency test for block length L = 9:

bit place 1 if bit 0 = 0:
rf = 0.49769110, chi^2 =  0.24978084, p-value = 0.61722944
bit place 1 if bit 0 = 1:
rf = 0.49758266, chi^2 =  0.92026768, p-value = 0.33740470
bit place 2 if bit 1 = 0:
rf = 0.49828566, chi^2 =  4.17359134, p-value = 0.04105868
bit place 2 if bit 1 = 1:
rf = 0.49740518, chi^2 =  2.93976496, p-value = 0.08642331
bit place 3 if bit 2 = 0:
rf = 0.49717057, chi^2 =  7.42845387, p-value = 0.00642005
bit place 3 if bit 2 = 1:
rf = 0.49786429, chi^2 =  0.05747235, p-value = 0.81053654
bit place 4 if bit 3 = 0:
rf = 0.49796151, chi^2 =  0.43120733, p-value = 0.51139712
bit place 4 if bit 3 = 1:
rf = 0.49765861, chi^2 =  0.40419319, p-value = 0.52493163
bit place 5 if bit 4 = 0:
rf = 0.49814429, chi^2 =  2.06806715, p-value = 0.15041204
bit place 5 if bit 4 = 1:
rf = 0.49753861, chi^2 =  1.31516920, p-value = 0.25146087
bit place 6 if bit 5 = 0:
rf = 0.49806990, chi^2 =  1.25423582, p-value = 0.26274500
bit place 6 if bit 5 = 1:
rf = 0.49811220, chi^2 =  1.67758837, p-value = 0.19524521
bit place 7 if bit 6 = 0:
rf = 0.49790817, chi^2 =  0.18342416, p-value = 0.66844694
bit place 7 if bit 6 = 1:
rf = 0.49764785, chi^2 =  0.46500903, p-value = 0.49529226
bit place 8 if bit 7 = 0:
rf = 0.49808447, chi^2 =  1.39789348, p-value = 0.23707659
bit place 8 if bit 7 = 1:
rf = 0.49773576, chi^2 =  0.09452535, p-value = 0.75850106
bit place 9 if bit 8 = 0:
rf = 0.49801975, chi^2 =  0.81979313, p-value = 0.36524066
bit place 9 if bit 8 = 1:
rf = 0.49765395, chi^2 =  0.43010097, p-value = 0.51193941

dependency test for block length L = 10:

bit place 1 if bit 0 = 0:
rf = 0.49770948, chi^2 =  0.15961494, p-value = 0.68951128
bit place 1 if bit 0 = 1:
rf = 0.49741497, chi^2 =  2.52070900, p-value = 0.11236006
bit place 2 if bit 1 = 0:
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rf = 0.49725058, chi^2 =  5.11532219, p-value = 0.02371546
bit place 2 if bit 1 = 1:
rf = 0.49725002, chi^2 =  5.07589913, p-value = 0.02426069
bit place 3 if bit 2 = 0:
rf = 0.49808997, chi^2 =  1.31000124, p-value = 0.25239443
bit place 3 if bit 2 = 1:
rf = 0.49748397, chi^2 =  1.71068699, p-value = 0.19089626
bit place 4 if bit 3 = 0:
rf = 0.49798632, chi^2 =  0.52340621, p-value = 0.46939230
bit place 4 if bit 3 = 1:
rf = 0.49817724, chi^2 =  2.22413917, p-value = 0.13586837
bit place 5 if bit 4 = 0:
rf = 0.49800558, chi^2 =  0.64215588, p-value = 0.42293120
bit place 5 if bit 4 = 1:
rf = 0.49784157, chi^2 =  0.01841239, p-value = 0.89206457
bit place 6 if bit 5 = 0:
rf = 0.49830136, chi^2 =  4.00490925, p-value = 0.04536794
bit place 6 if bit 5 = 1:
rf = 0.49772861, chi^2 =  0.10280646, p-value = 0.74848742
bit place 7 if bit 6 = 0:
rf = 0.49763767, chi^2 =  0.47714804, p-value = 0.48971699
bit place 7 if bit 6 = 1:
rf = 0.49782119, chi^2 =  0.00284587, p-value = 0.95745567
bit place 8 if bit 7 = 0:
rf = 0.49791997, chi^2 =  0.20640681, p-value = 0.64959840
bit place 8 if bit 7 = 1:
rf = 0.49776843, chi^2 =  0.02551808, p-value = 0.87308290
bit place 9 if bit 8 = 0:
rf = 0.49822117, chi^2 =  2.80922858, p-value = 0.09372343
bit place 9 if bit 8 = 1:
rf = 0.49748795, chi^2 =  1.67087222, p-value = 0.19614175
bit place 10 if bit 9 = 0:
rf = 0.49813981, chi^2 =  1.81181217, p-value = 0.17829100
bit place 10 if bit 9 = 1:
rf = 0.49791354, chi^2 =  0.18177081, p-value = 0.66985583
```