557_Project_2BS

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```
 [1] "seismic"        "seismoacoustic" "shift"          "genergy"
 [5] "gpuls"          "gdenergy"       "gdpuls"         "ghazard"
 [9] "nbumps"         "nbumps2"        "nbumps3"        "nbumps4"
[13] "nbumps5"        "nbumps6"        "nbumps7"        "nbumps89"
[17] "energy"         "maxenergy"      "class"


 seismic  seismoacoustic shift       genergy             gpuls
 a:1682   a:1580         N: 921   Min.   :    100   Min.   :    2.0
 b: 902   b: 956         W:1663   1st Qu.:  11660   1st Qu.: 190.0
          c:  48                  Median :  25485   Median : 379.0
                                  Mean   :  90242   Mean   : 538.6
                                  3rd Qu.:  52832   3rd Qu.: 669.0
                                  Max.   :2595650   Max.   :4518.0
    gdenergy           gdpuls          ghazard       nbumps
 Min.   : -96.00   Min.   :-96.000   a:2342   Min.   :0.0000
 1st Qu.: -37.00   1st Qu.:-36.000   b: 212   1st Qu.:0.0000
 Median :  -6.00   Median : -6.000   c:  30   Median :0.0000
 Mean   :  12.38   Mean   :  4.509            Mean   :0.8595
 3rd Qu.:  38.00   3rd Qu.: 30.250            3rd Qu.:1.0000
 Max.   :1245.00   Max.   :838.000            Max.   :9.0000
    nbumps2           nbumps3           nbumps4            nbumps5
 Min.   :0.0000   Min.   :0.0000   Min.   :0.00000   Min.   :0.000000
 1st Qu.:0.0000   1st Qu.:0.0000   1st Qu.:0.00000   1st Qu.:0.000000
 Median :0.0000   Median :0.0000   Median :0.00000   Median :0.000000
 Mean   :0.3936   Mean   :0.3928   Mean   :0.06772   Mean   :0.004644
 3rd Qu.:1.0000   3rd Qu.:1.0000   3rd Qu.:0.00000   3rd Qu.:0.000000
 Max.   :8.0000   Max.   :7.0000   Max.   :3.00000   Max.   :1.000000
    nbumps6      nbumps7      nbumps89     energy         maxenergy
 Min.   :0    Min.   :0    Min.   :0    Min.   :     0   Min.   :     0
 1st Qu.:0    1st Qu.:0    1st Qu.:0    1st Qu.:     0   1st Qu.:     0
 Median :0    Median :0    Median :0    Median :     0   Median :     0
 Mean   :0    Mean   :0    Mean   :0    Mean   :  4975   Mean   :  4279
 3rd Qu.:0    3rd Qu.:0    3rd Qu.:0    3rd Qu.:  2600   3rd Qu.:  2000
 Max.   :0    Max.   :0    Max.   :0    Max.   :402000   Max.   :400000
     class
 Min.   :0.00000
 1st Qu.:0.00000
 Median :0.00000
 Mean   :0.06579
 3rd Qu.:0.00000
 Max.   :1.00000
```
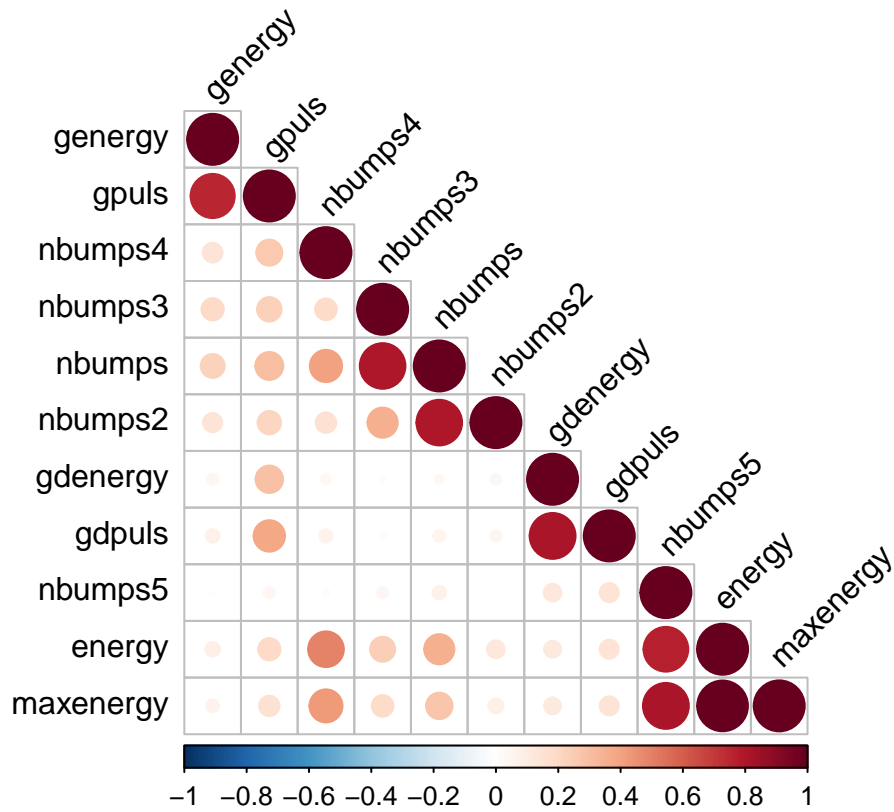
```
$r
          genergy gpuls nbumps4 nbumps3 nbumps nbumps2 gdenergy gdpuls
genergy         1
gpuls        0.75      1
nbumps4      0.15   0.26        1
nbumps3      0.19   0.23     0.18       1
nbumps       0.22    0.3      0.4      0.8      1
nbumps2      0.14   0.21     0.16     0.35    0.8       1
gdenergy    0.049   0.29    0.037   -0.012   0.03   0.041        1
gdpuls      0.072   0.38    0.066    0.015  0.058   0.051     0.81      1
nbumps5   -0.0099  0.049   -0.017    0.046   0.07 -0.0053     0.12   0.14
energy      0.081   0.19     0.49     0.24   0.35    0.12     0.11   0.14
maxenergy   0.064   0.16     0.42     0.18   0.27   0.085     0.11   0.14
          nbumps5 energy maxenergy
genergy
gpuls
nbumps4
nbumps3
nbumps
nbumps2
gdenergy
gdpuls
nbumps5         1
energy       0.77      1
maxenergy    0.81   0.99          1

$p
          genergy gpuls nbumps4 nbumps3 nbumps nbumps2 gdenergy   gdpuls
```

```
genergy        0
gpuls          0      0
nbumps4   1.4e-14     0         0
nbumps3        0      0         0        0
nbumps         0      0         0        0       0
nbumps2   2.2e-13     0         0        0       0        0
gdenergy   0.014      0     0.061     0.54    0.13    0.036        0
gdpuls   0.00027      0   0.00076     0.45  0.0032   0.0094        0        0
nbumps5     0.62  0.012       0.4    0.018   4e-04     0.79  3.3e-10  5.9e-13
energy   3.9e-05      0         0        0       0     2e-10  6.7e-08  2.5e-13
maxenergy 0.0011      0         0        0       0   1.5e-05  3.2e-08  2.2e-13
          nbumps5 energy maxenergy
genergy
gpuls
nbumps4
nbumps3
nbumps
nbumps2
gdenergy
gdpuls
nbumps5         0
energy          0       0
maxenergy       0       0           0


$sym
        genergy gpuls nbumps4 nbumps3 nbumps nbumps2 gdenergy gdpuls
genergy   1
gpuls     ,         1
nbumps4             1
nbumps3                     1
nbumps                .           ,         1
nbumps2               .           ,               1
gdenergy                                                1
gdpuls        .                                         +          1
nbumps5
energy                .                   .
maxenergy             .
        nbumps5 energy maxenergy
genergy
gpuls
nbumps4
nbumps3
nbumps
nbumps2
gdenergy
gdpuls
nbumps5   1
energy    ,         1
maxenergy +         B         1
attr(,"legend")
[1] 0 ' ' 0.3 '.' 0.6 ',' 0.8 '+' 0.9 '*' 0.95 'B' 1
```