

# GSO

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## GSO - Ground surface contition

Kategoricka velicina o stave zemi. Zakodovana ako:

- 00 = Surface of ground dry (no appreciable amount of dust or loose sand)
- 01 = Surface of ground dry (without cracks and no appreciable amount of dust or loose sand and without snow or measurable ice cover)
- 02 = Extremely dry with cracks (without snow or measurable ice cover)
- 03 = Loose dry dust or sand not covering ground completely (without snow or measurable ice cover)
- 04 = Loose dry dust or sand covering more than one-half of ground (but not completely)
- 05 = Loose dry dust or sand covering ground completely
- 06 = Thin cover of loose dry dust or sand covering ground completely (without snow or measurable ice cover)
- 07 = Moderate or thick cover of loose dry dust or sand covering ground completely (without snow or measurable ice cover)
- 08 = Surface of ground moist
- 09 = Surface of ground moist (without snow or measurable ice cover)
- 10 = Surface of ground wet (standing water in small or large pools on surface)
- 11 = Surface of ground wet (standing water in small or large pools on surface without snow or measurable ice cover)
- 12 = Flooded (without snow or measurable ice cover)
- 13 = Surface of ground frozen
- 14 = Surface of ground frozen (without snow or measurable ice cover)
- 15 = Glaze or ice on ground, but no snow or melting snow
- 16 = Glaze on ground (without snow or measurable ice cover)
- 17 = Ground predominantly covered by ice
- 18 = Snow or melting snow (with or without ice) covering less than one-half of the ground
- 19 = Snow or melting snow (with or without ice) covering more than one-half of the ground but ground not completely covered
- 20 = Snow or melting snow (with or without ice) covering ground completely
- 21 = Loose dry snow covering less than one-half of the ground
- 22 = Loose dry snow covering at least one half of the ground (but not completely)
- 23 = Even layer of loose dry snow covering ground completely

24 = Uneven layer of loose dry snow covering ground completely  
 25 = Compact or wet snow (with or without ice) covering less than one-half of the ground  
 26 = Compact or wet snow (with or without ice) covering at least one-half of the ground but ground not completely covered  
 27 = Even layer of compact or wet snow covering ground completely  
 28 = Uneven layer of compact or wet snow covering ground completely  
 29 = Snow covering ground completely; deep drifts 30 = Loose dry dust or sand covering one-half of the ground (but not completely)  
 31 = Loose dry snow, dust or sand covering ground completely  
 99 = Missing

```
all_data <- read.csv(file= "../data/all.csv")
```

### Centralna poloha dat

Modus - najčastejšia hodnota je 9.

```
unique(all_data$GS0)
```

```
## [1] NA 23 14 27 25 11 30 1 9 24 21 28 6 26 13 20 18 31 19 10 8 0 16 15 29
## [26] 12 22 17 7 3 2
```

```
counts <- table(all_data$GS0)
counts / sum(counts)
```

```
##
##          0          1          2          3          6          7
## 6.210303e-02 2.018990e-01 1.924681e-04 6.415603e-05 2.566241e-04 1.283121e-04
##          8          9         10         11         12         13
## 4.920767e-02 2.231988e-01 3.002502e-02 7.069994e-02 2.117149e-03 1.777122e-02
##         14         15         16         17         18         19
## 7.159813e-02 1.283121e-04 8.981844e-04 2.566241e-04 8.596908e-03 4.105986e-03
##         20         21         22         23         24         25
## 2.200552e-02 4.555078e-03 1.668057e-03 5.793289e-02 3.015333e-03 2.656060e-02
##         26         27         28         29         30         31
## 8.532752e-03 1.086162e-01 9.110156e-03 1.924681e-04 2.694553e-03 1.186887e-02
```

```
getmode(na.omit(all_data$GS0)) %>%
  print(cat("Modus: " ))
```

```
## Modus: [1] 9
```

### Barplot

```
df <- all_data %>%
  dplyr::mutate(
    GS0 = map_chr(.$GS0, as.character)
  ) %>%
  dplyr::filter(!is.na(GS0))

ggplot(df, aes(x = GS0)) +
  geom_bar(fill = "orange", width = 0.7) +
```

```
xlab("Stav zemi") +
ylab("Pocet zaznamenani")
```

