

Engineering Geology (5)

- Geological maps
- -Topographic map provides information on the shape of ground surface
- -Geological map provides information both the surface and the underground rock type (such as section)

- Joints according to rock type:
 - -sheeting joint (granite)
 - -bedding joint (sedimentary rock)
 - -columnar joint (basalt)
- Joint vs microcrack

- Symbols at geological map: examples
- -dip of strata
- -location of fault, joint, fold
- -orientation of joint, fold
- -rock type

- 3D rock structure can be interpreted from geological maps using the following data:
 - -elevation
 - -depth to the each strata
 - -orientation of each strata

- Stratum contour:
- Lines drawn on a map connecting points of same height on a stratum
- -the straight line connecting two points with same values of stratum contour shows the "strike" of the planar strata
- -from two straight lines with different contour values, the dip of the strata can be calculated