

## 8. Geomorphology

*Geomorphology* = science about the Earth's relief. It studies the formation, evolution and character of relief and its forms.

*Relief (Georelief)* = complex of shapes of the Earth's surface. Also it is a landmark between solid lithosphere + pedosphere and liquid hydrosphere + gaseous atmosphere

Geomorphological processes create relief of the Earth => many forms of georelief

- e.g. slopes, valley, mountains, basins, lowlands, plateaux, plains, etc.

*Relief influences other parts of the Earth intensively.*

- e.g. flora, fauna, climate, construction of buildings, agriculture, etc.

Many forms of relief can be a *disaster for people*.

- e.g. landslides, avalanches, earthquakes, volcanoes, soil erosion, etc.

*Contours* = lines which join places of the same altitude.

Besides the most basic feature of the relief – altitude – there are many others:

- *descend (slope) line* – a line perpendicular to countours (contour lines)
- *aspect* – orientation to points of the compass (cardinal points)
  - e.g. southern aspect receives more insolation
- *crest line* – line joining places of a crest, places of the highest altitude upon a crest
- *valley line* – line joining places of a valley, places of the lowest altitude within a valley

Vertical segmentation of relief = vertical difference (meters) between the highest and the smallest point of certain area.

Horizontal segmentation of relief = the number of valley lines

### **Hierarchy of relief forms**

Smaller areas are parts of larger ones =>

*riverbed* → *flat* → *valley* → *mountain range* → *continent*

### **Keywords**

geomorphology, forms of (geo)relief, disaster, landslide, avalanche, earthquake, volcano, soil erosion, contour, altitude, descend/crest/valley line, aspect

