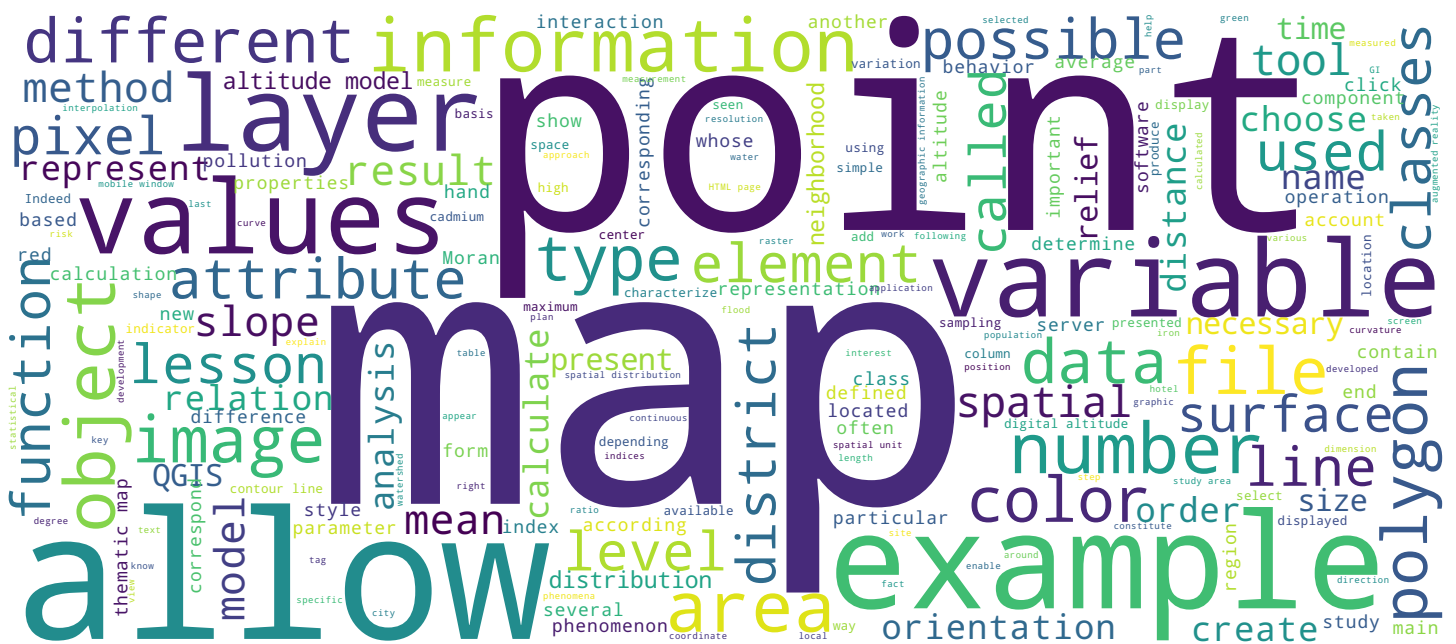


Summary

Digital Elevation Models – Derived Variables

Geographic Information Systems

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Video



Summary

- Different morphological indices to describe a surface
 - Global indices: maximum – minimum – mean elevation, hypsometric curve, roughness, etc.
 - Local indices: slope, aspect, curvature
- Different calculation methods
 - Local indices: moving windows
 - Results are influenced by the neighbourhood definition (window size)



We have come to the end of this intermediate lesson, devoted to the digital altitude model. Firstly, we reviewed the indicators which allow to characterize the relief in whole regions by means of descriptive statistics and some specific tools, such as the hypsometric curve or the roughness indicators. We then looked at the technology of mobile windows or sliding windows which allow to determine indicators of local reliefs such as the slope, the orientation or the curvature. We have also seen that the variation of the size of the mobile window allows to obtain useful effects in relief mapping, such as the smoothing of the slope or the orientation. And these generalization tools of the numerical altitude models are very useful, especially at a time when the resolution of the proposed models by the recent acquisition technologies is becoming finer and finer.

Notes

Summary



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