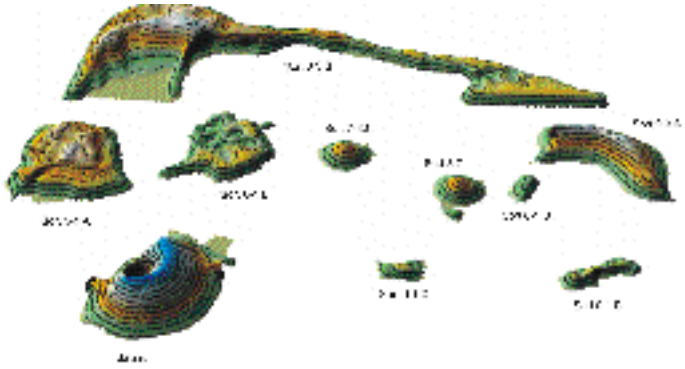
3D volumetric monitoring

The volumetric monitoring concept aroused from the necessity of an accurate knowledge of the time schedule for the stored materials in order to use them as efficiently as possible.



A few possible applications:

- **Predictive modeling for the determination of the remaining volumes from the quarries or ballast-holes**
- **3D modeling for the actual relief and the prediction of the relief after the excavations**
- **Tracking and updating the stored volumes database**
- **Periodic tracking of the excavated volumes in quarries or in ballast-holes**
- **Bathymetric maps for ballast-holes in rivers or lakes**
- **Oriented profiles for interest zones**

According to the specificity of the beneficiary's activity, the dates (info) can be collected both digitaly through vectorization, and by direct measurements using total stations, GPS or bathymetric measurements.
For the calculation of the volumes we use 3D simulations, a method which allows a better evaluation of the resources than the classical methods.