



Welcome Address EuroSDR Workshop “3D Digital Landscape Models”

From 2D Cartographic to 3D Topographic Data

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3D Digital Landscape Models – High Quality Photogrammetric Products?



Primary Data Collection + Product Workflows

(1) Airborne photogrammetry: images → AT, DTM, orthos, FEX → landscape

(2) HR satellite RS: images → AT, DTM, orthos, FEX → landscape

(3) LiDAR (Airborne, Static, Mobile): Digital Surface Models (DSM) →

(4) Airborne IfSAR: Digital Surface Model (DSM) →

(5) Satellite IfSAR (e.g. SRTM mission): Worldwide DSM →

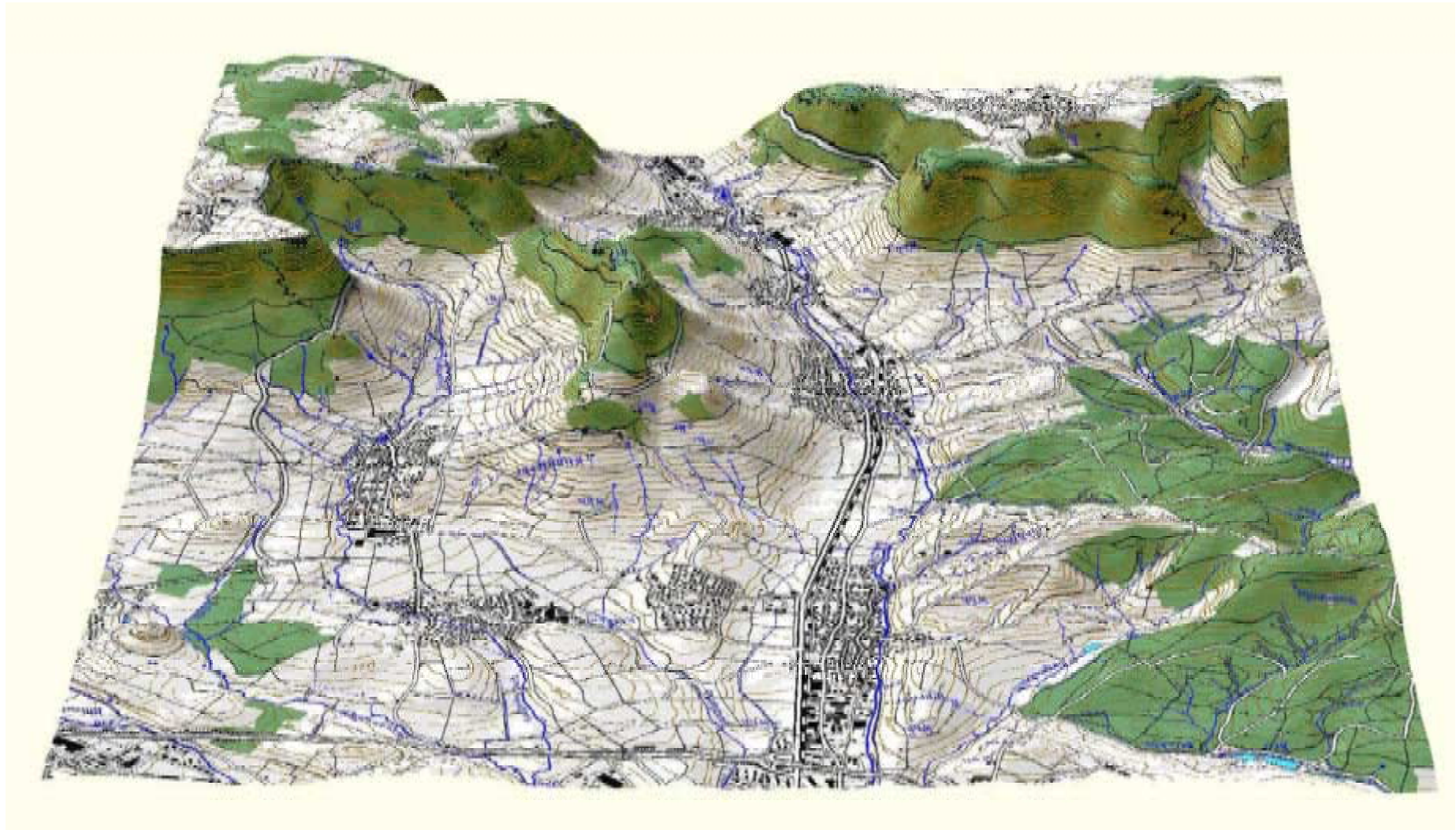
(6) Tacheometry : local DSM →

(7) Cartometry (digitizing existing maps): local DSM →

(3) -(6) needs texture for VR landscape modeling + visualization

Note: optical imagery is needed for VR landscape modeling + visualization

3D Digital Landscape Models ... DTM and Topographic Map Overlay



3D Digital Landscape Models



- Virtual Landscape Models represent information about geometry and textures of
 - Landscapes
 - Buildings
 - Single Objects
- Efficient data collections require appropriate tools
- Use of photogrammetric technologies depends on
 - Platforms
 - Satellites
 - Airborne
 - Terrestrial
 - and sensors
 - Imagery
 - LiDAR
 - IfSAR



3D Digital Landscape Models

... From 2D to 3D: What about Community-based Mapping/Modelling



- Wikipedia, City Wikis, Geonames, OpenStreetMap, DBpedia, Twitter, Blogs...
 - Defined questions (2D maps...) or „rank growth“ (Twitter...)
 - Mashups (integration of several communities)
 - Example OpenStreetMap
 - 2D street maps, Points of Interest
 - Partly a high level of detail
 - For many apps sufficient
 - Good coverage
- ➔ Community needs new challenges



EuroSDR Workshop

“3D Digital Landscape Models”

Dublin, March 11-12, 2010



- **European** dimension
- Knowledge transfer through **active participation** of member and non-member organisations
 - Experience is shared amongst the participants
 - Most of the countries involved
 - Workshop is a first event in the EuroSDR chain
 - Hopefully a EuroSDR project might be started
 - Publication of results in official EuroSDR series
- **Long term** approach, series should be continued – 3D Landscape models represent the new maps generation!

Thanks to the organizers – I wish a stimulating atmosphere and a successful workshop!