

ADVANCED TECHNIQUES TO UPDATE TOPOGRAPHIC MAPS.

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Topographic maps are the basis for all civil and military planning. It is essential that these base documents are up to date. In case of urgent military planning, it takes too long to update a topographic map in a vector environment. Besides, especially in less developed regions or countries, there is often no digital (vector) database available at all. In this paper a workflow will be presented to update topographic maps in a full raster environment. In this method we can continuously update a map using satellite based information.

The out-of-date topographic map is scanned, producing several thousands of colour shades. These "fuzzy" colour shades are clustered into the 10 main colours of the map and separated in 10 binary raster files. These binary files are interactively updated in an integrated binary raster environment. Both the binary raster used for the topographic map as the multi-tone raster used for the satellite images can be combined, modified and processed. After updating, the binary raster files are processed to a digital colour proof (WYSIWYG) for control purpose. Finally they are processed to 6 plot-files for a film-recorder that produces the 6 high quality film separates. The film separates are then used to (offset)print the new updated topographic map.