A new map of the European settlements by automatic classification of 2.5m resolution SPOT data

Abstract:
This paper describes the methodology and the results of a comprehensive automatic image classification task aiming to map the European settlements using 2.5m-resolution input data. The processing approach is consistent with the Global Human Settlement Layer (GHSL); certain adjustments were driven by the specific input data characteristics and the specific application needs. In the study discussed here, a total of 2,275 SPOT-5 3-band pan-sharpened images were processed. The main output is a seamless 10m-resolution raster mosaic. Each pixel value expresses the proportion of the pixel area covered by buildings. Complementary information about the open spaces between buildings and the proportion of vegetation is also produced at the same spatial resolution.

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