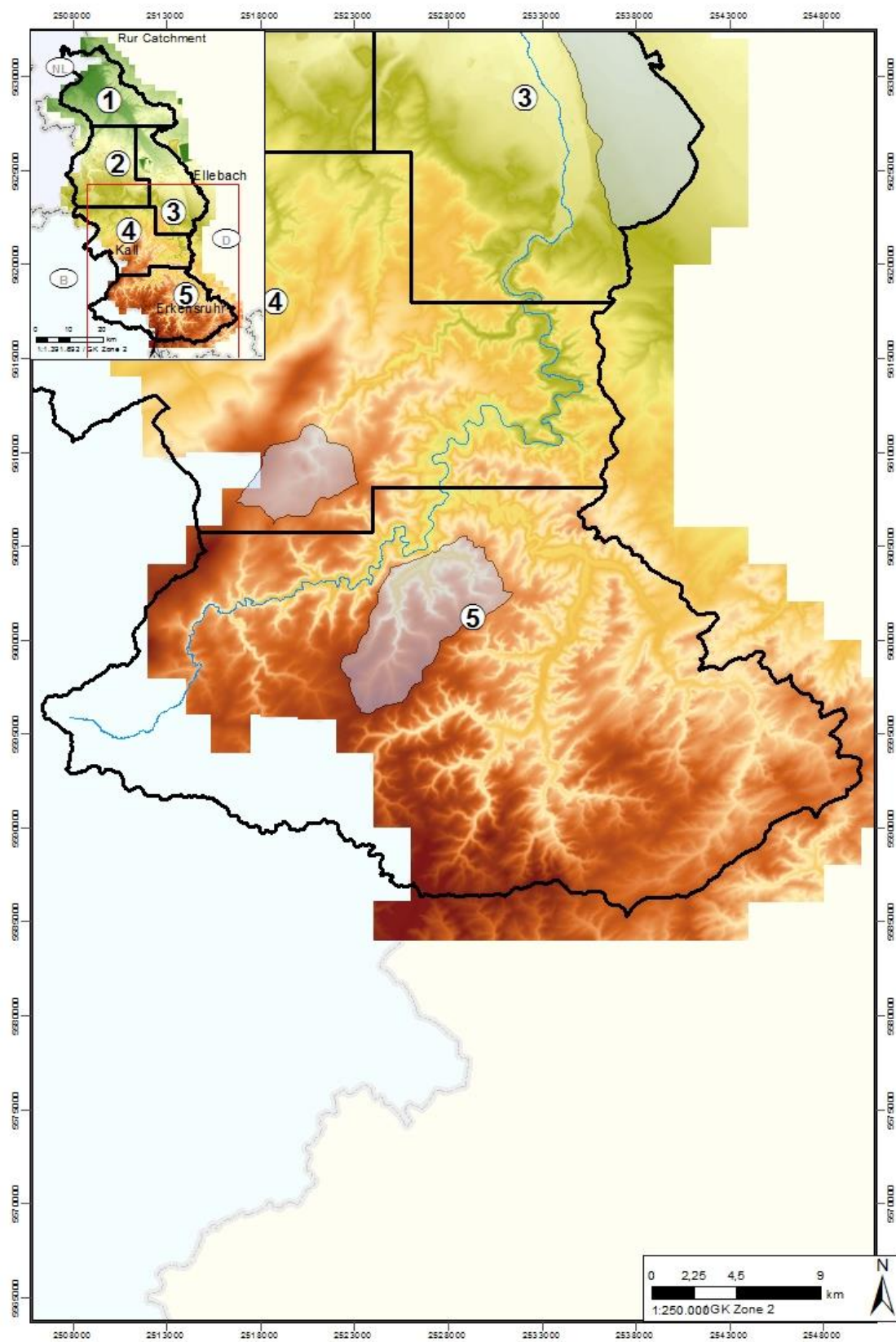


Documentation – DEM_Sciland 1m single tiles, Section 5

Content	
files:	<p>data</p> <p>DEM_Sciland_1m_single_tiles_Section_5</p> <p>.zip file containing various TIFF datasets</p> <p>documentation</p> <p>this file</p> <p>DEM_Sciland_1m_single_tiles_section_5.jpg</p> <p>Dokumentation_DGM1_DGM10_scilands.pdf</p>
data size:	data folder: 2,49 GB
extend:	Rur Catchment section 5 as seen in the overview map
provider:	scilands GmbH based on data from the Bezirksregierung Köln
language:	German
date of publication:	2012
date of purchase:	2008
Description	Digital Elevation Model (DEM) of German parts of Rur-catchment.
description:	<p>For certain analyses or algorithms that intend to map surface processes it is imperative to model in a high resolution. The measuring point density of the original data of the Rur catchment justifies the generation of a DGM with 1 m spatial resolution. The density of measurement points located between 0.3 measurements/m² and 1.7 measurements/m². First of all, data gaps were closed by using the SAGA-module 'Close Gaps' and noise was removed by using a modified, variable Lee-filter. Removing the noise also unveiled hidden geomorphological information. For the analysis of current geomorphological processes anthropogenic landforms like embankments, sunken roads or railways, dikes, open cast mining areas etc. are important. When classifying certain relief areas a DGM without anthropogenic landforms is needed. Therefore two datasets have been created. A resampling method developed by the scilands GmbH using local minima and maxima preserved the anthropogenic features which could then be detected and removed. Therefore, a filter (SAGA-module) was improved and enabled to identify nearly all artificial dikes in the landscape. A manual correction took place afterwards. Finally, the SAGA-module 'Close Gaps' and the Lee-filter were used again to fill in the missing values. Finally, all datasets were combined whilst trying to produce a fluent passage from one dataset to the other.</p>
abbreviations used in data:	not necessary

Example



Author

Jonas Brands
brandsj@smail.uni-koeln.de
Albertus-Magnus-Platz
50923 Köln