Documentation – DEM_Sciland 1m mosaic tiles, Section 5

Content	
files:	data
	BDGM_Sciland_1m_section 5
	.zip file containing various TIFF datasets
	documentation
	this file
	BDGM_Sciland_1m_section_5.jpg
	Dokumentation_DGM1_DGM10_scilands.pdf
data size:	data folder: 3,37 GB
	entire folder: 3,37 GB
extend:	Rur Catchment section 5 as seen in the overview map
provider:	scilands GmbH based on data from the Bezirgsregierung Köln
language:	German
date of publication:	2013
date of purchase:	2008
Description	
description:	Digital Elevation Model (DEM) of German parts of Rur-catchment.
	For certain analyses or algorithms that intend to map surface processes
	The measuring point density of the original date 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/m ² and 1.7 measurements $/m^2$
	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
	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
	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.
In Addition to the DGM_Sciland_1m data sets the tiles were combined
to bigger Groups, to reduce the amount of individual data sets.
Furthermore section 5 contains additional tiles in the south.
not necessary

Example



Author

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