berlin-gelaendemodelle-downloader
Documentation

Release unknown

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Have a look at the README.md file of the repository to get more information.
1.1 berlin_gelaendemodell_downloader

1.1.1 berlin_gelaendemodell_downloader package

Submodules

berlin_gelaendemodell_downloader.cli module

berlin_gelaendemodell_downloader.constant module

berlin_gelaendemodell_downloader.download module

berlin_gelaendemodell_downloader.download.download_data(download_path: str, keep_original: bool, compress: int, file_format: tuple)

Download and compress the ground level data of Berlin.

Parameters

• **download_path** (str) – path to download directory
• **keep_original** (bool) – indicates to keep the original txt files or not
• **compress** (int) – size of square pixels for compression
• **file_format** (tuple) – file formats to save the data

Raises click.BadParameter – for invalid parameter combinations

berlin_gelaendemodell_downloader.download.download_zip(zip_url: str) -> (class 'str', class 'str')

Parameters **zip_url** (str) – URL to a zip subset of the data

Returns file name and content of the file that is included in the zip archiv
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Return type  (str, list)

Raises  HTTPError – Will be raised if the zip_url responded a not 200 code

berlin_gelaendemodelle_downloader.download.get_subset_links() → list
Get list of links for subsets of data.

Returns  list of URLs to the zipped subsets

Return type  list

berlin_gelaendemodelle_downloader.file module

berlin_gelaendemodelle_downloader.file.save_files(download_path: str, file_name: str, original_content: str, data_frame: pandas.core.frame.DataFrame, file_formats: tuple, keep_original: bool) → None
Saves all files that are downloaded or created to the proper directories.

Parameters

• download_path (str) – Path to the download directory.
• file_name (str) – file name.
• original_content (str) – Original download content.
• data_frame (DataFrame) – If data were compressed, the corresponding compressed DataFrame or GeoDataFrame.
• file_formats (tuple) – Formats to save.
• keep_original (bool) – Flag that indicates whether to save the original files.

berlin_gelaendemodelle_downloader.file.write_file_content_as_txt(download_path: str, file_name: str, file_content: list) → None

Writes the given file_content to the given path as txt file.

Parameters

• download_path (str) – directory
• file_name (str) – file name
• file_content (list) – list of lines for serialization as file

berlin_gelaendemodelle_downloader.utils module

berlin_gelaendemodelle_downloader.utils.compress_data_frame(data_frame: pandas.core.frame.DataFrame, tile_size: int) → pandas.core.frame.DataFrame
Compress the given DataFrame. Uses windows of size ‘tile size x tile size’ and calculates their mean.

Use convolution algorithm to compress the neighboring tiles. TODO: see documentation to get an intuition about the convolution implementation.
Parameters

- **data_frame** (*DataFrame*) – Original DataFrame
- **tile_size** (*int*) – window size

**Returns** The compressed pandas.DataFrame

**Return type** DataFrame


Simple helper function that creates all necessary directories.

**Parameters**

- **download_path** (str) – download path
- **keep_original** (bool) – indicates whether the original directory is necessary or not.
- **compress** (int) – compression rate
- **file_formats** (tuple) – indicates the file types to save.

**Returns** path for original files, path for compressed files

**Return type** str, str

berlin_gelaendemodelle_downloader.utils.data_frame_2_file_content(*data_frame*: pandas.core.frame.DataFrame) → list

Converts the given data_frame into a list of lines as file content

**Parameters** **data_frame** – to be serialized

**Returns** list of lines for serialization as file

**Return type** list

berlin_gelaendemodelle_downloader.utils.data_frame_2_geo_data_frame(*data_frame*: pandas.core.frame.DataFrame) → geopandas.geodataframe.GeoDataFrame

Creates a GeoDataFrame from the given DataFrame

**Parameters** **data_frame** (*DataFrame*) – DataFrame that is used to create a GeoDataFrame with geometric information.

**Returns** Created GeoDataFrame.

**Return type** GeoDataFrame

berlin_gelaendemodelle_downloader.utils.download_2_file_content(*download_content*: str) → list

Converts the download_content into proper format.

**Parameters** **download_content** (str) – content of download

**Returns** list of lines for serialization as file
Return type  list
berlin_gelaendemodelle_downloader.utils.file_content_2_data_frame(file_content: str) → pandas.core.frame.DataFrame

Create a DataFrame with the file_content

Parameters file_content (str) – content of file

Returns  Content of file as DataFrame

Return type  DataFrame

Module contents

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1.3 Contributors

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1.4 Changelog

1.4.1 Version 0.1

- Implement basic download functionality
CHAPTER 2

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