
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_gelaendemodelle_downloader

1.1.1 berlin_gelaendemodelle_downloader package

Submodules

berlin_gelaendemodelle_downloader.cli module

berlin_gelaendemodelle_downloader.constant module

berlin_gelaendemodelle_downloader.download module

`berlin_gelaendemodelle_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_gelaendemodelle_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

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`: `pan-`
`das.core.frame.DataFrame`,
`tile_size`:
`int`) → `pan-`
`das.core.frame.DataFrame`

Compress the given `DataFrame`. Uses windows of size '`tile size × 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

```
berlin_gelaendemodelle_downloader.utils.create_directories(download_path:
                                                             str, keep_original:
                                                             bool, compress: int,
                                                             file_formats: tuple) ->
                                                             (<class 'str'>, <class
                                                             'str'>)
```

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:
                                                                    pan-
                                                                    das.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:
                                                                        pan-
                                                                        das.core.frame.DataFrame)
                                                                        →
                                                                        geopan-
                                                                        das.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*) → `pan-das.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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Version 2.0, January 2004

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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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