# **Air Quality Toolkit Documentation**

Release 1

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#### **CHAPTER**

## **ONE**

## **STITCHER**

Stitcher. **Stitcher** (*filepath\_list*, *filename*, *scale*, *headers\_list*, *output\_filename*)

This function sums multiple dataframes together and outputs a csv of the result.

#### **Parameters**

- **filepath\_list** (*list[str]*) This should be a list of filepaths to assosciated filename list.
- **filename** (list[str]) This should be a list of filenames to assosciated filepath (filepath\_list) list.
- **scale** (list[float]) This should be a list of scalars to scale assosicated filename dataframe by.
- headers\_list (list[int]) This should be a list of numbers to exclude number of columns from dataframes.
- output\_filename (str.) Output filename.

**CHAPTER** 

**TWO** 

## **CSV FORMATTER**

CSVFormatter.csvformatter(filename, olm\_state, output\_filename)

This function formats dataset outputs from air quality modelling software to CSV format.

#### **Parameters**

- **filename** (*str.*) This should be a string of the filename to convert to CSV.
- olm\_state (bool.) This should be a boolean value specifying if the file is OLM format (x and y information header).
- output\_filename (str.) Output filename.

**CHAPTER** 

#### THREE

### **FACTORIZER**

#### Factorizer.calcrow(row)

This function is used for multiplying entire pandas dataframe single row by scalar value located in the last column of the dataframe.

**Parameters** row(float.) – This should be the slice from the pandas dataframe.

Returns pd. Series – The row multiplied by the scalar in the last column of the row

Factorizer.factorizer(dataset\_filename, factor\_filename, output\_filename)

This function mutiplies air quality datasets with vectors given.

#### **Parameters**

- dataset\_filename (str.) This should be a string of the filename containing the dataset.
- **factor\_filename** (str.) This should be a string of the filename containing the vector dataset to mutiply with.
- output\_filename (str.) Output filename.

# **PYTHON MODULE INDEX**

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