# **MSDataFilter**

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#### 1. Overview

This application read MS spectra, apply filters and generate new file.

#### Note:

By now, it filters only msp/sptxt spectra with only one available filter JPLIntensityAttenuator.

#### 2. Algorithm

```
BEGIN

1. parse the file with spectra lib

2. compute MS1/MS2 peaks distributions over all spectra (here is an example for precursor charge +3)

[2 types of more local distributions through mz precursor intervals]

2.1 mz distributions of all mzs (example[1])

2.2 mz distributions at precursors neighborhood (from 1 to z) (example[1])

END

[1] these histograms are rendered (with R) with option -r (see command line below).
```

#### 3. Usage

```
[-t
      <arg>] [-v]
-b,--bin-width <arg>
                           set the width of interval in histograms
                           by default: 1.0.
   --bp <arg>
                           set base peak intensity for normalization
                           process.
-e,--export-ratios <arg>
                           export ratios in filename
                          by default: null.
-g,--group-number <arg>
                           set the number of peak list partitions by
                           precursor charge
                           by default: 10.
-h,--help
                           print this message.
-i,--setting-file <arg>
                          give a property file with all input
                           settings.
                           disable base peak intensity normalization.
   --no-norm
                           set the output filename
-o,--output <arg>
                           by default: null.
-p,--precision <arg>
                           define the decimal precision for any
                           mass-to-charge ratio
                           by default: 6.
```

```
-q,--quiet
-r,--render

-s,--sliding-window <arg>
-t,--threshold-ratio <arg>
-t,--version

quiet mode (verbose off).
export and render MS histograms in /tmp/hist
by default: false.
set the sliding window value to compute
baseline histogram
by default: 20.
set the ratio threshold for the attenuator
filter
by default: 2.0.
print the version info.
```

### 4. Example

#### 5. Releases

The latest version is v0.2 - <u>Download app</u> with <u>java sources</u>.