

read-and-plot-mzML

May 25, 2023

1 Install required packages; uncomment, as needed

```
[1]: # using Pkg
      # Pkg.add("Libz")
      # Pkg.add("Plots")
```

2 Load required standard libraries

```
[2]: using Libz
```

3 Load mzML library

```
[3]: code_dir = "../libs"
      include( joinpath( code_dir, "mzML.jl" ) )
      include( joinpath( code_dir, "Decode64.jl" ) )
```

```
[3]: Decode64 (generic function with 1 method)
```

4 Read mzML file

```
[4]: data_dir = "../data"
      scans    = LoadOffsets( joinpath( data_dir, "T9_A1.mzML" ) )
```

```
[4]: 5400×11 Matrix{Float64}:
      50.0833  40.2885    69.1025    ...  68.3326    101.933
      50.1667  28.9036    51.6578      33.8538    52.8949
      50.25    13.1308    26.8057      12.6443    19.601
      50.3333   3.90369    9.53174      4.19141    4.91003
      50.4167   1.36491    2.28089      3.04477    0.828349
      50.5      1.16388    0.747264    ...  2.24064    0.472568
      50.5833   0.866801    0.893883      1.64869    1.55693
      50.6667   2.82705    1.3538       3.95479    2.97528
      50.75     8.68731    1.72877      8.56874    3.25451
      50.8333  16.8596     4.9956      16.9041    5.39249
      50.9167  36.1128    10.1362     ...  37.9639    16.3351
```

51.0	45.7042	14.5534	37.5916	22.9399
51.0833	31.8882	22.4308	24.4394	17.0846
499.083	0.0	7.83351e-6	0.0	5.48011e-24
499.167	0.0	2.30037e-6	0.0	6.56758e-25
499.25	2.45801e-19	0.0220139	...	0.0
499.333	5.00624e-19	0.452638	0.0	0.0
499.417	2.09792e-19	0.351341	0.0	0.0
499.5	4.99488e-20	0.120388	4.81478e-19	0.401559
499.583	3.70034e-21	0.0228323	2.77408e-19	0.530012
499.667	0.0	0.0	...	8.41725e-20
499.75	0.174771	0.0	1.24137e-20	0.0456754
499.833	2.18745	0.0	0.0	0.00184512
499.917	1.43771	0.0	0.0	0.0
500.0	0.459268	0.0	0.0	0.0

5 Plot first spectrum

```
[5]: using Plots
```

```
plot(scans[:,1], scans[:,2])
```

```
[5]:
```

