

Limes v2.0 – User guide

Limes : version 2.0 – 07 March 2021

document : 10 March 2021

auteur : J. Ducasse

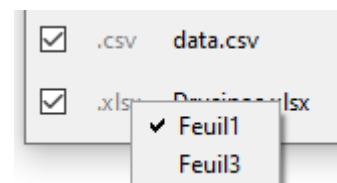
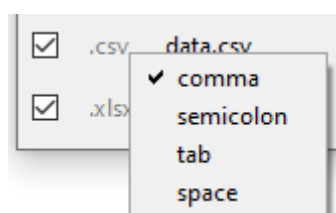
1. Load the files.

The screenshot shows the Limes v2.0 application window. The interface includes a menu bar (Language, Help), a toolbar with 'Browse', 'Load', and 'Remove' buttons, and a settings panel with 'Partitions' (All samples checked), 'Indices' (Strict checked), and 'Export' buttons. The main area displays a list of loaded files with columns for 'Type', 'Methods', and 'Samples'. Callouts provide the following information:

- 1. Find your files:** Points to the 'Browse' button.
- 2. Load the selected files:** Points to the 'Load' button.
- 3. Remove the selected files from Limes (not hard disk!):** Points to the 'Remove' button.
- Actual type of loaded file:** Points to the 'Type' column.
- Extension of not yet loaded file:** Points to the file extension in the list.
- Load failed : bad format:** Points to a file with a red extension.
- Number of methods:** Points to the 'Methods' column.
- Open/close methods list:** Points to the expand/collapse icon in the 'Methods' column.
- Number of samples in the file:** Points to the 'Samples' column.
- Open methods list:** Points to the expanded methods list for a CSV file.
- Number of samples in the method:** Points to the sample count for a specific method.
- Name of the method:** Points to the method name in the expanded list.

Type	File Name	Methods	Samples
<input checked="" type="checkbox"/> spart	bPTP_1614872130_PTPSupportPartition.spart	1	7
<input type="checkbox"/> .spart	bPTP_1614872130_PTPMLPartition.spart		
<input checked="" type="checkbox"/> csv	data.csv	2	45
<input checked="" type="checkbox"/> 45 m1 <input checked="" type="checkbox"/> 45 m2			
<input checked="" type="checkbox"/> excel	Drusinae.xlsx	37	29
<input checked="" type="checkbox"/> PTP	ptp.txt	1	6
<input checked="" type="checkbox"/> .spart	1614257035partition.spart		

For CSV files, clic on the extension before loading to chose the separator character (default to comma). Similarly, for Excel files, clic on the extension to choose the sheet (the first one if not specified) :



2. Use the files.

There are currently 3 operations available:

- Partitions : show the methods / samples table, with species codes. Allow selection of methods and display the species limits.
- Indices : compute and display indices (Ctax, Mratio, and so on).
- Export : export the merged methods to Spart (or CSV) file.

Note that Partitions and Indices are inherited from Limes v.1.3.

The operations acts on the currently selected methods, which are merged from one or several files:

- if a file is selected, all methods in it are selected
- if a file is unselected, no methods in it are selected
- a file can be partially selected, with selected and unselected methods

The screenshot shows the Limes v.2.0 interface with three main windows:

- Partitions Window:** Displays a table of methods and samples. The table has columns for Method, Sample, and Species. The table is filtered to show only the methods selected in the main window.
- Indices Window:** Displays a table of indices (Ctax, Mratio, etc.) for the selected methods. The table has columns for Method, Index, and Value.
- Export Window:** Displays a table of methods and samples. The table has columns for Method, Sample, and Species. The table is filtered to show only the methods selected in the main window.

The main window shows the following table:

Type	File	Methods	Samples
<input checked="" type="checkbox"/>	spart bPTP_1614872130_PTPSupportPartition.spart	1	v 7
<input type="checkbox"/>	.spart bPTP_1614872130_PTPMLPartition.spart		
<input checked="" type="checkbox"/>	csv data.csv	2	^ 45
<input checked="" type="checkbox"/> 45 m1 <input checked="" type="checkbox"/> 45 m2			
<input checked="" type="checkbox"/>	excel Drusinae.xlsx	37	v 29
<input checked="" type="checkbox"/>	PTP ptp.txt	1	v 6
<input checked="" type="checkbox"/>	.spart 1614257035partition.spart		

Annotations:

- If selected, use all the samples in all selected methods.
- If unselected, use only the samples common to all the selected methods.
- Note : for Indices, unselected mode implicitly forced.
- If selected, use the samples names as is.
- If unselected, sample names are normalised before methods merging : all lower case, special characters sequences changed in underscore (may be useful with non-Spart input files).

Dialog box for saving the output:

Limes v.2.0

spart mon nouvel enregistrement

csv comma

Save Quit

3. Command line mode.

Synopsis :

```
% limes -I -m -n file...
% limes -O -n -c [-s sep] fmt [titre] file...
% limes -C file
% limes
```

In the first form (-I), load all the files *file* and display the indices calculated on all the methods.

In the second form (-O), load all the files *file* and product the merged file in *fmt* format. *fmt* has one of the following values:

- spart* Spart format. In this case, the first argument *titre* is the title which will be stored in the Project_name block.
- csv* CSV format.

In the third form (-C), just check the file *file*, and displays an error message if the file is invalid.

Without argument (fourth form), launches the graphical interface.

By default, if none of the -IOC options are supplied and arguments are present, the -C option is taken into account.

In all cases, the type of the file is identified by the extension:

- .spart* Spart format
- .xls, .xlsx* Excel format
- .csv* CSV format
- other* Limes tries to identify one of the single-partition format ABGD, GMYC or PTP.

In the case of CSV and Excel files, the extension can be followed by a complement after a colon « : »:

- For a CSV file, this is the separator. Example: « myfile.csv; ». The default separator is the comma « , ».
- For an Excel file, this is the name or number (from 1) of the sheet. Example: « myfile.xls:sheet2 » or « myfile.xls:2 ». By default, the first sheet is taken into account.

Options:

- I Calculate the indices (see text).
- O Merge the files and produce a file in the specified format (see text).
- C Simply perform the syntax check of the file (see text).
- m Calculates and displays match ratios rather than cTax (with -I only).
- n Standardizes the names of the samples before merging.
- c Only takes into account the samples common to all the methods (possibly after normalization if the -n option is supplied). Option forced implicitly with -I.
- s Specify the separator *sep*. Only if *fmt* is *csv*. Comma by default.