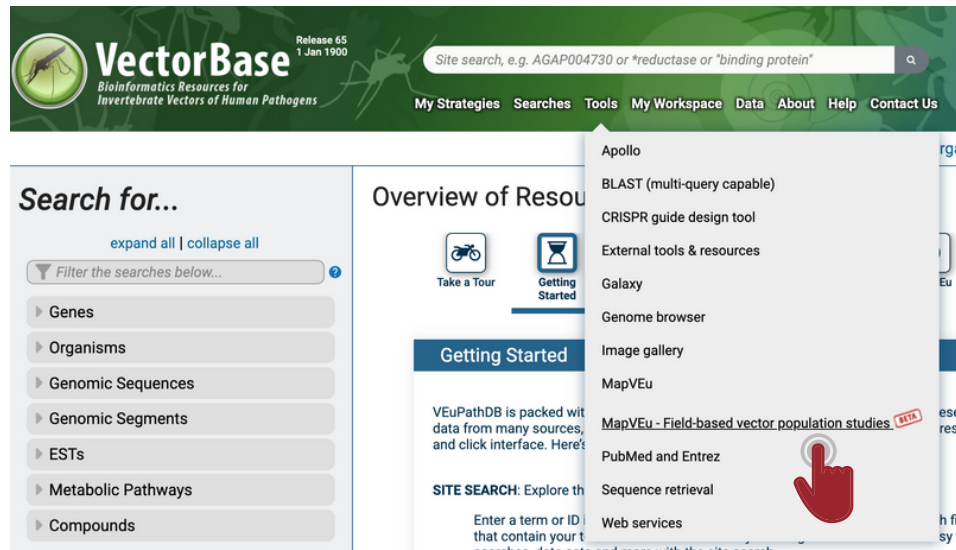


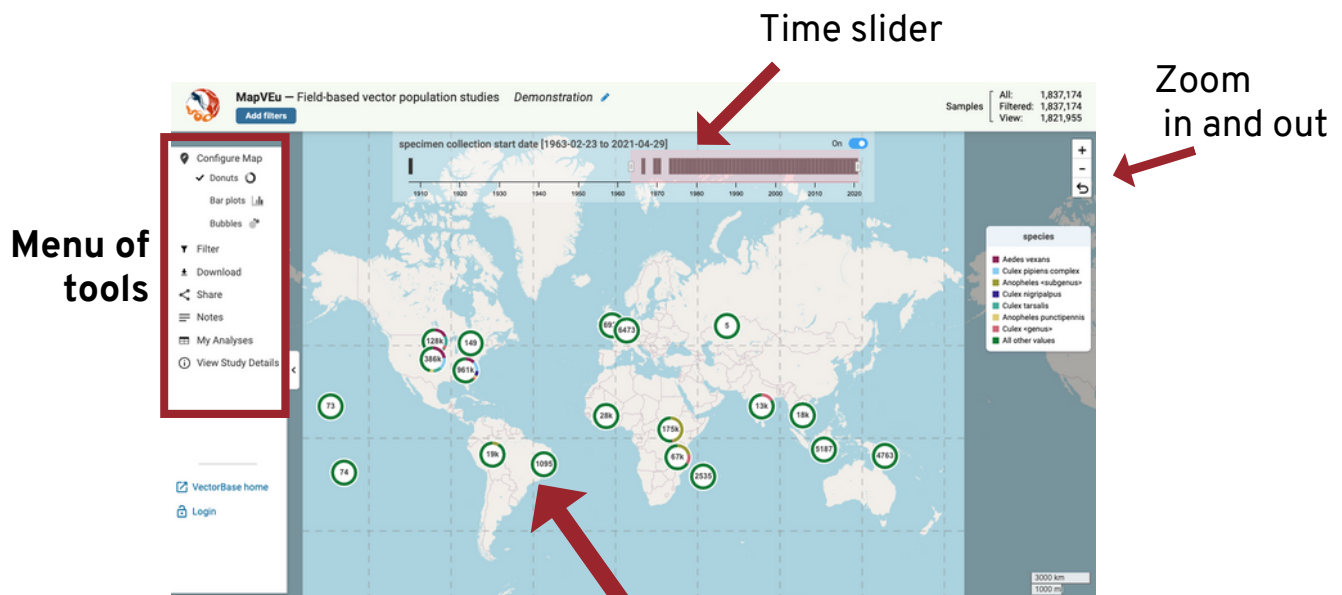
The MapVEu EDA Platform

Introduction

The **MapVEu** web application and exploratory data analysis (EDA) platform facilitates access to and exploration of geospatial data, and is currently available on the **VectorBase.org** platform as a beta version. To get started, click on the **Tools** drop-down menu and then click on **MapVEu**.



This opens a full-screen map with tools to facilitate exploratory data analysis.

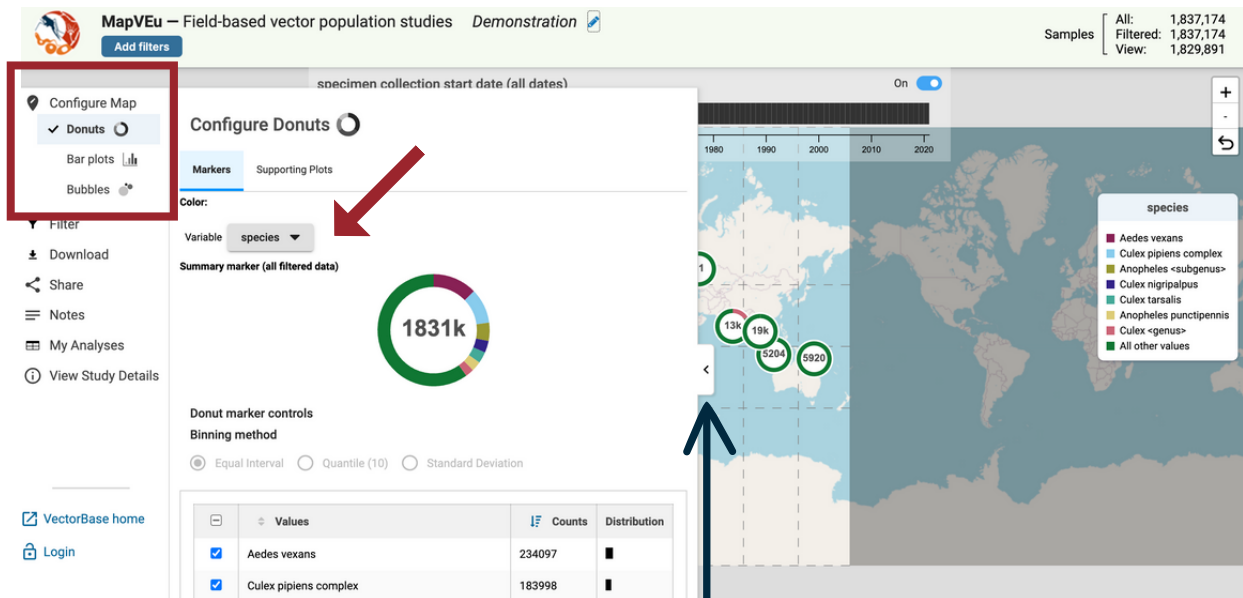


Semantic zooming

Markers will never overlap or cluster. Click on a marker to zoom in and split or disaggregate the markers out further.

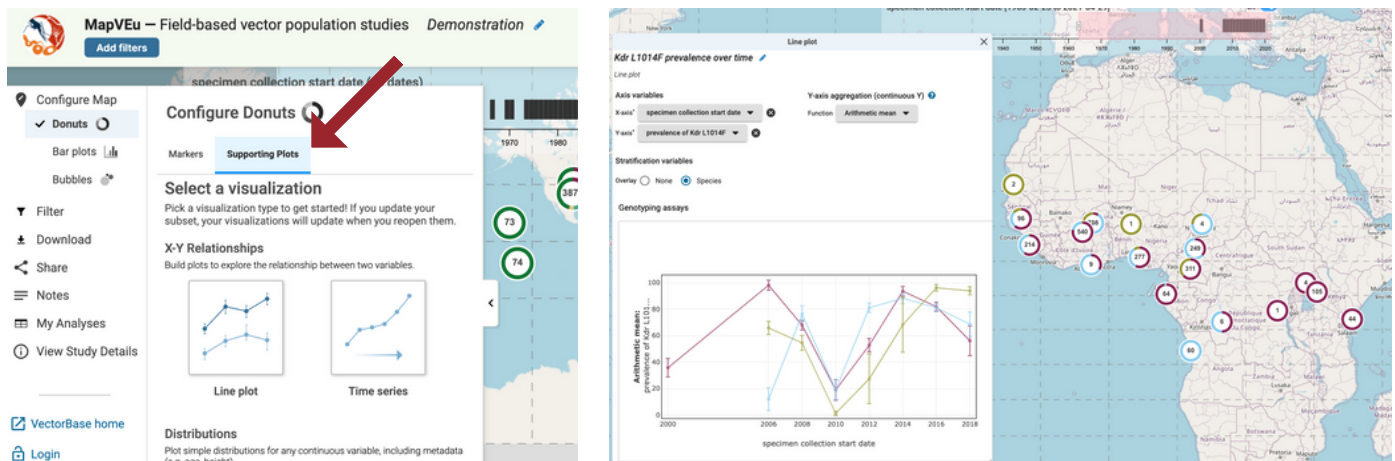
Configure Map: This tool allows you to

- Choose the **marker** you want to display on the map- Donuts, Bar plots, or Bubbles (red box)
- Choose the **variable** whose data you want to display using the drop-down menu (red arrow)
- Make supporting plots



Click this tab to close the menu and view the map, and open it to access the menu

Supporting plots (red arrow below) greatly expand the analysis capabilities with visualizations of variable in the data set, including X-Y relationships (scatter plot, line plot, time series), distributions (histogram, box plot), and counts and proportions (bar plot, contingency table). Simply click on the plot icon and choose your parameters. Supporting plots receive data from the map and, upon zoom or scroll of the map, will update to reflect data from that area. An example of a line plot is shown below.



Filter data (red arrow)

Filtering will be reflected in the **data diagram** at the top of the page. Notice that the pink bars reflect data in the subset

The screenshot shows the MapVEu interface. On the left, a sidebar contains a 'Filter' button (indicated by a red arrow). The main area displays a 'data diagram' at the top with boxes for 'Collection sites' (9,838 of 40,790), 'Collections' (227,748 of 518,190), and 'Samples' (514,625 of 1,837,174). Below this, the 'species' section shows a table of species data. A search bar is present above the table, and a 'Filter variables' section allows selecting a subset of data by checking boxes for categorical variables.

species	Subset of Samples	All Samples	Distribution	%
<input checked="" type="checkbox"/> Aedes vexans	234,097 (13%)	234,097 (13%)		(100%)
<input checked="" type="checkbox"/> Culex pipiens complex	183,998 (10%)	183,998 (10%)		(100%)
<input checked="" type="checkbox"/> Anopheles	96,530 (5%)	96,530 (5%)		(100%)
<input type="checkbox"/> Culex nigripalpus	62,366 (3%)	62,366 (3%)		(100%)
<input type="checkbox"/> Culex tarsalis	59,959 (3%)	59,959 (3%)		(100%)

Search for variables

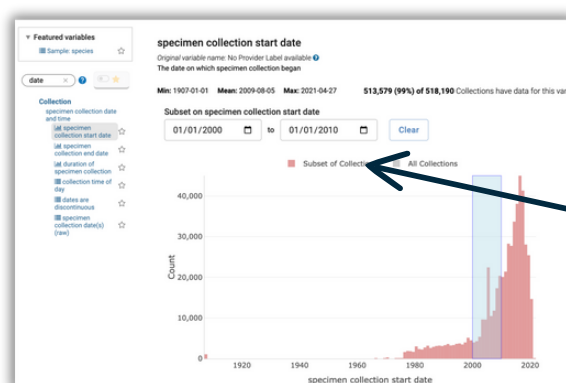
Filter variables to choose a subset of the data by checking boxes for categorical variables

Browse all the variables in the data in the variable tree

- Variables are listed in categories in a hierarchical display
- Expand the categories to examine the list of variables

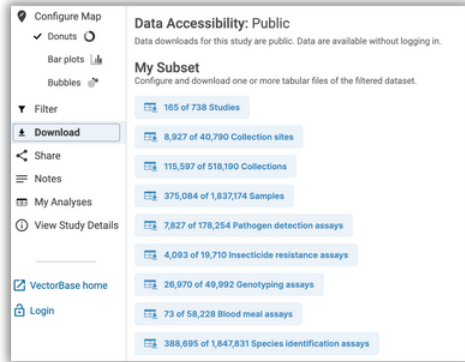
Click on any variable to see its **univariate distribution**

- Histogram for continuous variables (see below)
- Frequency table for categorical variables (as in this example)



Filter variables to choose a subset of the data by specifying your subset for continuous data

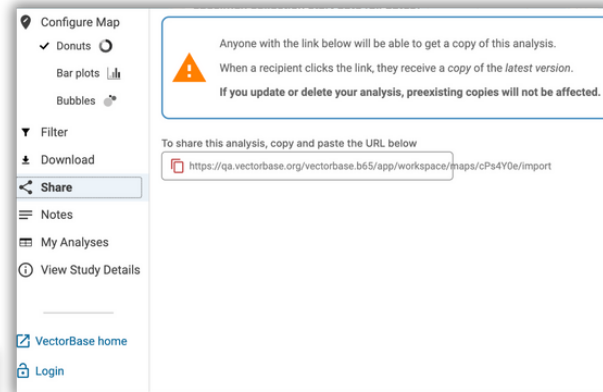
Other useful features in the MapVEu menu



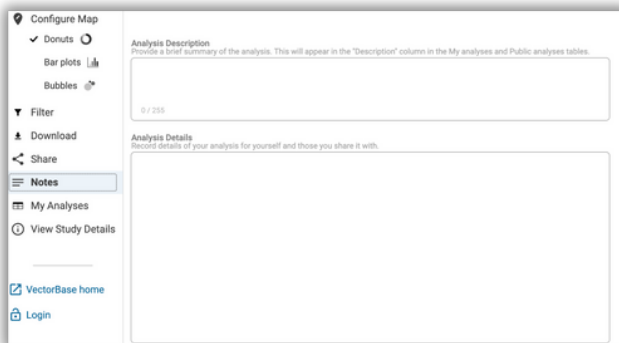
Download your subset of interest or the entire dataset as flat files to analyze on your own



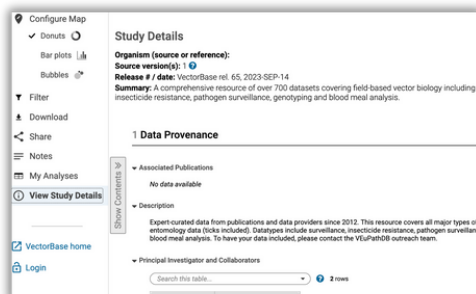
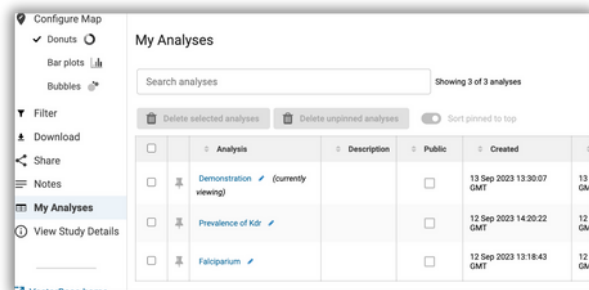
Share your analysis using a link



Write notes- these are saved along with your analysis



My analyses- your analyses will be saved in this section so you can go back to them



Study details- Read this for more information on the dataset



Questions? Comments? Write to us at help@VEuPathDB.org

We welcome your feedback on the MapVEu exploratory data analysis platform!

