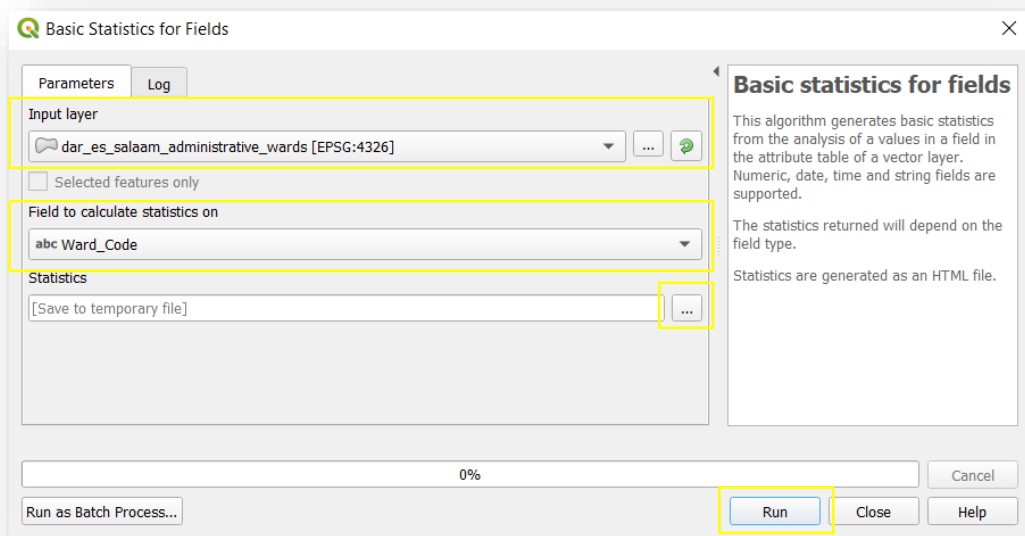# Basic Statistics for Fields, QGIS

Basic Statistics for Fields tool is a handy tool for generating basic statistics of a vector dataset. The tool calculates minimum and maximum values, count of filled and empty cells, and some mean, median and standard deviation statistics for numerical fields. The results are generated to a results window inside the tool itself, and to a HTML file.

1. Open your vector layer in QGIS.
2. Open toolbox. *Processing → Toolbox* or by using keyboard command CRTL + ALT + T.
3. Open Basic Statistics for Fields. Search from the toolbox *Vector analysis → Basic Statistics for Fields*.
4. Choose the desired *Input layer* and *Field to calculate statistics on* from the drop-down menus. You can calculate statistics for all fields and not depending on the format (numerical or text), but remember that not all statistics are always relevant for string type fields, such as minimum or maximum values.
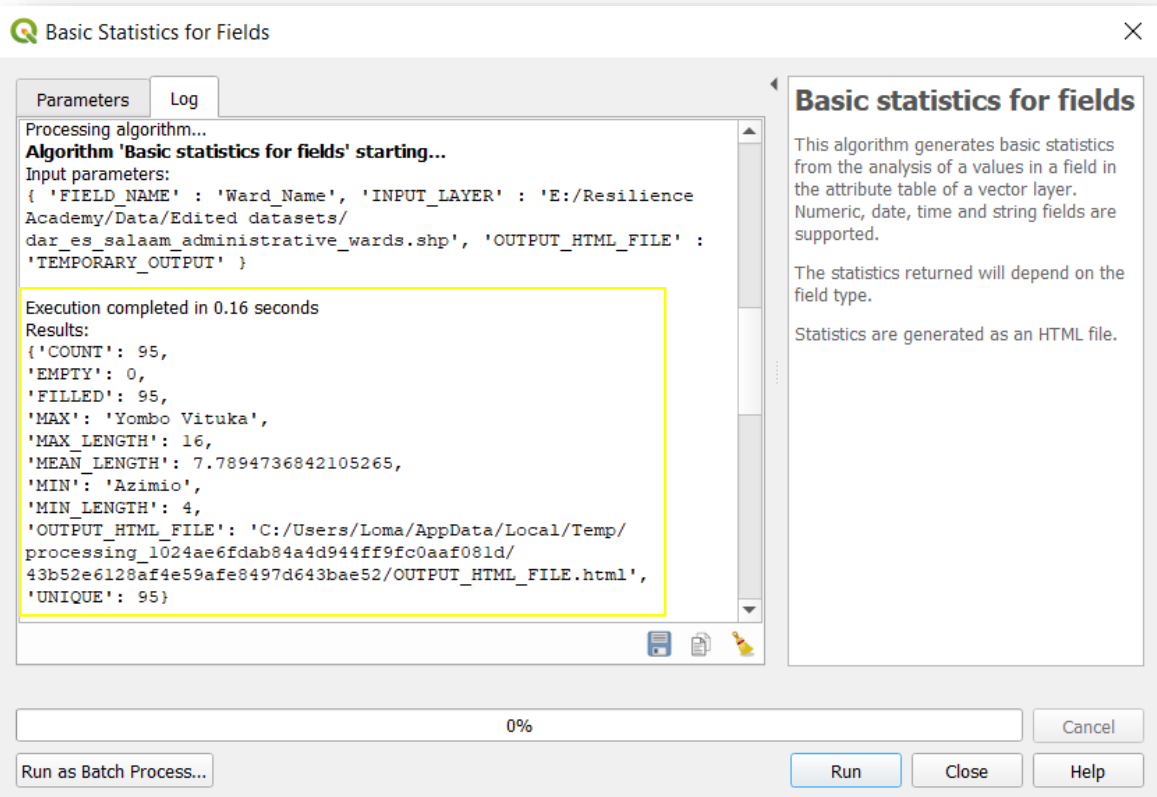

5. Click *Run*.
6. When the algorithm is done, the *Log* tab opens up, and you can see the results right away in the log window.
7. The tool also produces a temporal HTML file. If you want a permanent file, save the output to the desired destination by clicking [...] of the *Statistics* section in the *Parameters* tab of the tool. You find the temporal HTML file from the QGIS *Results Viewer* which should open automatically to the background. If not, you can open the *Results Viewer* by navigating *Processing → Results Viewer* or by keyboard command CRTL + ALT + R.

8. Explore the results.

In this example, a field with text values is scrutinized. As you can see, the MAX and MIN are based on alphabets, and no numerical statistics are available.

However, the most interesting indicators here are the COUNT, EMPTY, FILLED and UNIQUE. Based on these, we instantly see if the field has any empty cells, and if the values of the field are all unique. In this case, all 95 cells (COUNT = 95) have different values (UNIQUE = 95).

These same statistics can also be generated with the tool *Show statistical summary* from the top-panel of QGIS. Familiarize yourself with this tool as well, and decide which of these do you prefer!