

plotly

# Usage of Plotly package with SPSS Modeler

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# Contents

<b>1</b>	<b>Requirements</b>	<b>2</b>
<b>2</b>	<b>Installation</b>	<b>3</b>
<b>3</b>	<b>Output</b>	<b>4</b>
3.0.1	Bar Chart . . . . .	4
3.0.2	Histogram Chart . . . . .	6
3.0.3	Scatter Plot Chart . . . . .	8
3.0.4	Plotly bar . . . . .	10
<b>4</b>	<b>Contact</b>	<b>11</b>

# Chapter 1

## Requirements

*SPSS Modeler 17.1* with *IBM SPSS Modeler - Essentials for R* or higher is needed and. R installation is needed in version 3.1.3 for Modeler 17.1 / version 3.2.2 for Modeler 18.

# Chapter 2

## Installation

Close SPSS Modeler. Save the *.cfe* files in the CDB folder of the IBM SPSS Modeler. The default location of the CDB folder on Windows 7 is "*C:\ProgramData\IBM\SPSS\Modeler\17\CDB*". If the *ProgramData* folder is hidden type the path manually.

All needed R packages are downloaded and installed automatically when SPSS stream is launched.

# Chapter 3

## Output

### 3.0.1 Bar Chart



#### Dialog Option:

- *Ploted column* - Ploted column. Must be categorical.
- *Overlay column* - Overlay column. Must be categorical. (OPTIONAL)
- *Display statistics for columns* - Display statistics of selected columns over each bar. Must be continuous. (OPTIONAL)
- *Label for x-axis* - Type label for x axis.
- *Label for y-axis* - Type label for y axis.

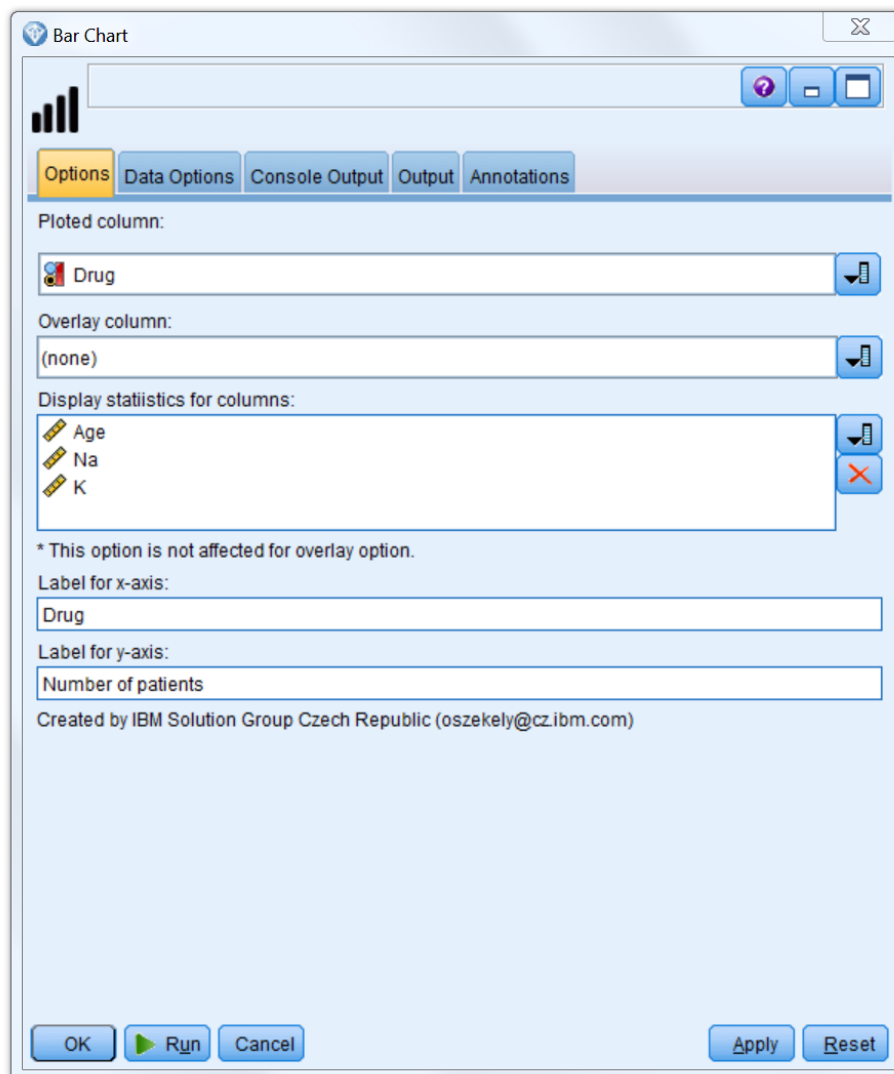


Figure 3.1: Dialog option of Bar Chart.

Lets see an example of Bar Chart output.

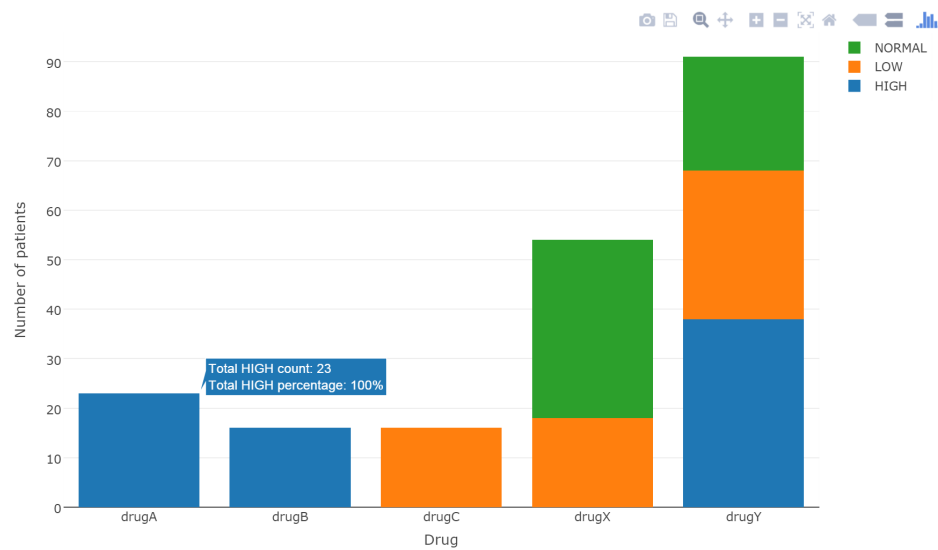
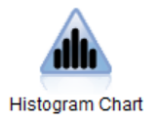


Figure 3.2: Bar Chart generated by Plotly.

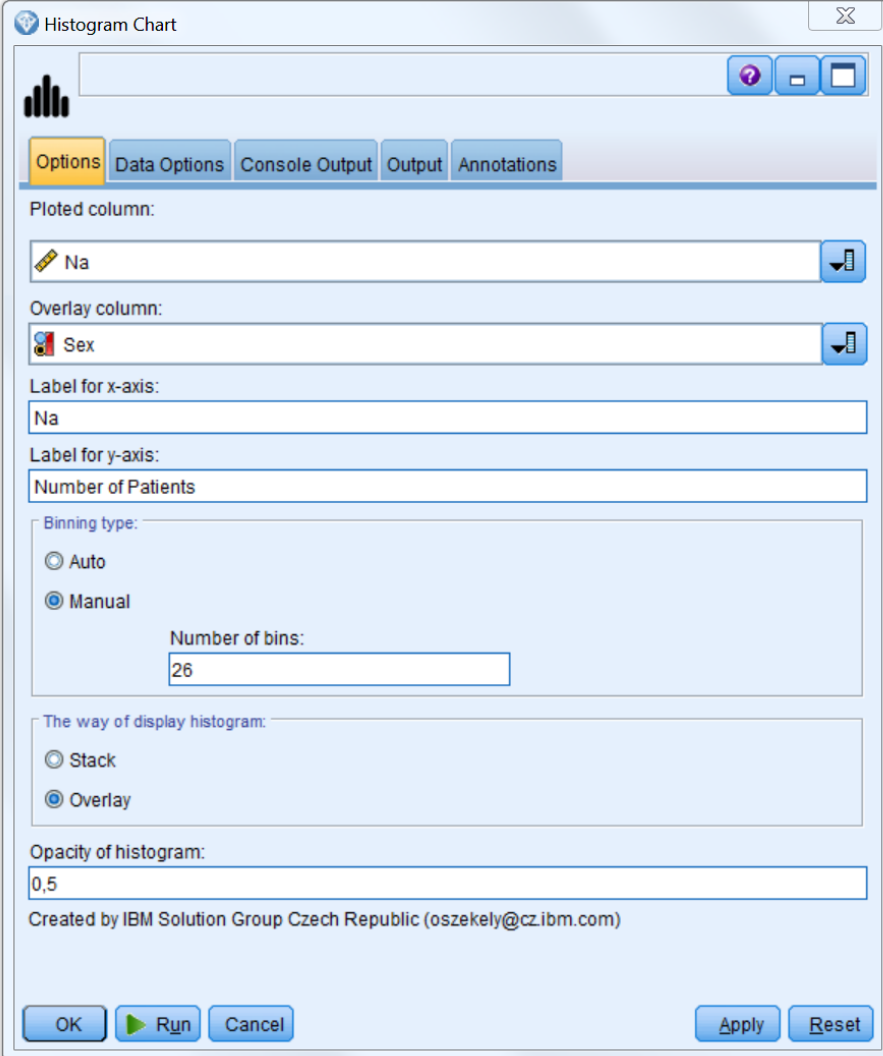
### 3.0.2 Histogram Chart



#### Dialog Option:

- *Ploted column* - Ploted column. Must be continuous.
- *Overlay column* - Overlay column. Must be categorical. (OPTIONAL)
- *Label for x-axis* - Type label for x axis.
- *Label for y-axis* - Type label for y axis.
- *Binning type* - For *Auto* option algorithm automatically selects optimal number of bins. For option *Manual* must be set *Number of bins*.
- *The way of display histogram* - This option is used only when *Overlay column* is set. Two visualizations are available - *Stack* and *Overlay*.
- *Opacity of histogram* - Sets opacity of histogram. Can be from 0 to 1.





**Histogram Chart**

Options | Data Options | Console Output | Output | Annotations

Ploted column: Na

Overlay column: Sex

Label for x-axis: Na

Label for y-axis: Number of Patients

Binning type:

- ☐ Auto
- ☒ Manual

Number of bins: 26

The way of display histogram:

- ☐ Stack
- ☒ Overlay

Opacity of histogram: 0,5

Created by IBM Solution Group Czech Republic (oszekely@cz.ibm.com)

OK Run Cancel Apply Reset

Figure 3.3: Dialog option of Histogram Chart.

Lets see an example of Histogram Chart output.

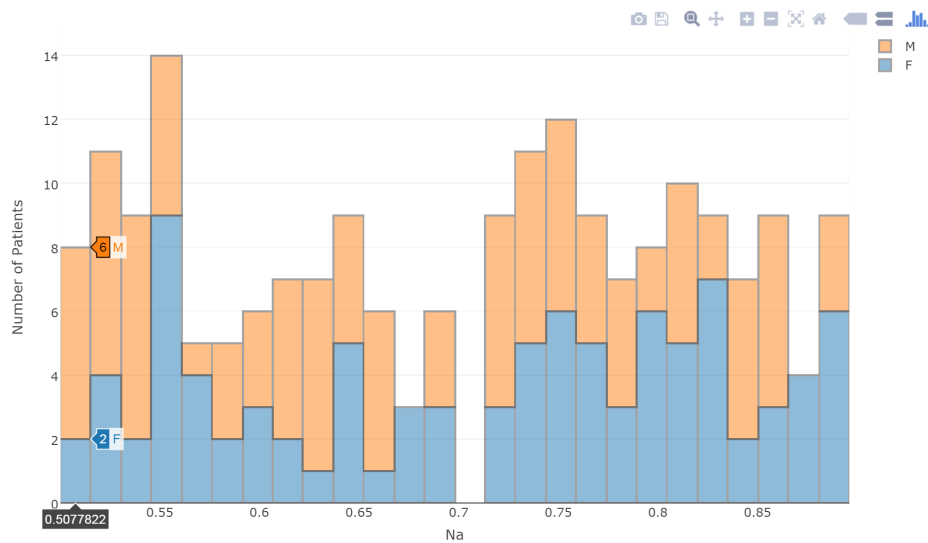


Figure 3.4: Bar Chart generated by Plotly.

### 3.0.3 Scatter Plot Chart



#### Dialog Option:

- *Define plotted column on x-axis* - Ploted column on x axis. Can be continuous or categorical.
- *Define plotted column on y-axis* - Ploted column on y axis. Can be continuous or categorical.
- *Overlay column* - Overlay column. Must be categorical. (OPTIONAL)
- *Printed attributes* - Select fields that will be displayed for each plotted point. (OPTIONAL)
- *Size of marks* - Select field which values will describe size of points . (OPTIONAL)
- *Label for x-axis* - Type label for x axis.
- *Label for y-axis* - Type label for y axis.



Figure 3.5: Dialog option of Scatter Plot Chart.

Lets see an example of Scatter Plot Chart output.

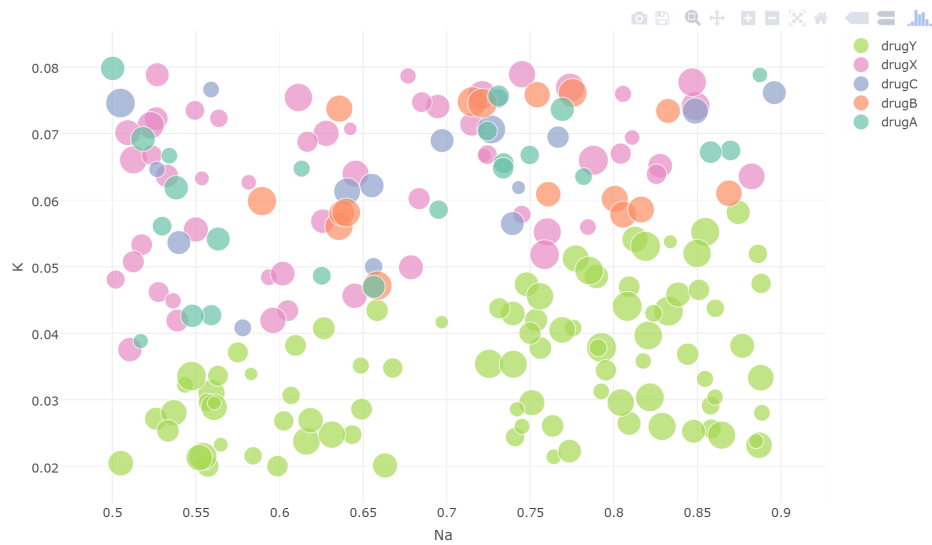


Figure 3.6: Scatter Plot Chart generated by Plotly.

### 3.0.4 Plotly bar

Each plot generated by **Plotly** has a special bar.



Figure 3.7: Plotly bar.

This bar allows us to save chart as PNG, zooming, move in chart, specify display option.

# Chapter 4

## Contact

If there are any problems, or do you have any more questions please contact Ondrej Szekely at *oszekely@cz.ibm.com*