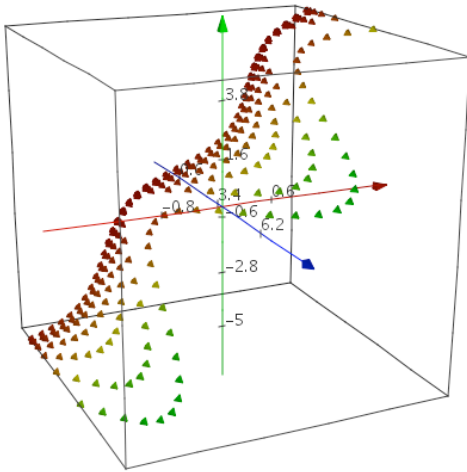


Giessen 5D Plot

Filtering multi-column data and plotting in 5 dimensions

About Giessen 5D Plot



Giessen5DPlot is a visualization and filtering tool for large multi-column data files, for instance from spread-sheet programs. Data for three columns can be visualized along the axes X,Y,Z, two more columns can be visualized by color and size of data symbol. The graph can be rotated and zoomed. Data in all columns can be filtered by value. Giessen5DPlot provides a simple and quick way to analyse large multi-dimensional data. Selected data can be exported as a spread-sheet or picture.

	Gr_Coffe	Inst_Coffe	Tea	Sweetener	Biscuits	Pa_Soup
Germany	90	49	88	19	57	51
Italy	82	10	60	2	55	41
France	88	42	63	4	76	53
Holland	96	62	98	32	62	67
Belgium	94	38	48	11	74	37
Luxembou	97	61	86	28	79	73
England	27	86	99	22	91	55
Portugal	72	26	77	2	22	34
Austria	55	31	61	15	29	33
Switzerl	73	72	85	25	31	69
Sweden	97	13	93	31	0	43
Denmark	96	17	92	35	66	32
Norway	92	17	83	13	62	51
Finland	98	12	84	20	64	27
Spain	70	40	40	0	62	43
Ireland	30	52	99	11	80	75

Input data file format

Import tab-separated data files with or without header row and first title column. If header strings are in the first row and title strings in the first column, the first data cell (top left) should be empty. Header row and title column are allowed, but not required. All cells apart from first row and column should contain numeric values. An arbitrary number of columns and rows is allowed.

X: Sweetner

Y: Inst_Coffe

Z: Tea

Color: Sweetner

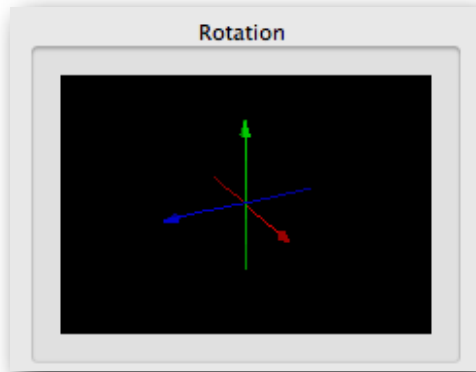
Size: Ti_Soup

Data display

Click “load data”, select a data file. Then decide which columns are used for display along the x,y,z axes and which columns are visualized by color and data point size. Visual resolution of the latter two columns is limited, thus color and size are best used for coarse-grained data distributions.

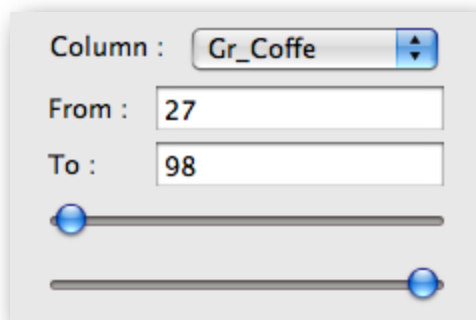
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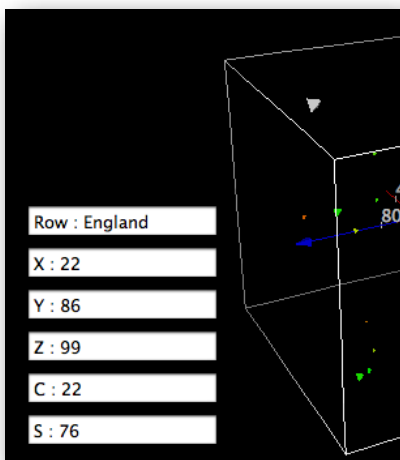
Rotating and zooming

The plot in the large 5D-window can be rotated using the left mouse button and zoomed using the right mouse button. Sometimes it is easier to rotate by using the small rotation window on the lower left.



Filtering

Select a column to be filtered. The range of values to be selected can be typed into the “From” and “To” fields or by moving the sliders. Data points filtered away are instantaneously removed from display in the 5D-plot window. Active filtered columns are marked with an asterisk in the “Column:” tab.



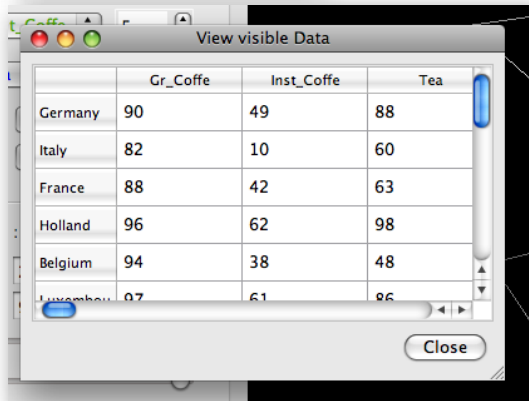
“Move over” data display

By moving the mouse over data points in the 5D-plot window, its values are displayed.

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View Visible Data



The screenshot shows a window titled "View visible Data" with a table containing the following data:

	Gr_Coffe	Inst_Coffe	Tea
Germany	90	49	88
Italy	82	10	60
France	88	42	63
Holland	96	62	98
Belgium	94	38	48
Luxembourg	97	61	86

Export visible data

By clicking the “View visible data” button selected values are displayed in tabular form in an extra window.

These data can be exported as data table by clicking “Save visible data” or as picture by clicking “Export diagram”.

Pictures can be saved with white background.

Display options

The position of the “light source” can be toggled.

By clicking “**Scale to cube**” data display is stretched such that the outmost data point contacts the border of the cube. Rotating many data points on weak machines is faster using “**Tiny data symbols**”.

Rotation can be easier by selecting “**Keep Y-axis upright**”. Cube, axes and axis marks can be hidden by clicking “**Hide coordinates**”.

Camera Light

- ☐ Scale to cube
- ☐ Tiny data symbols
- ☒ Keep Y-axis upright
- ☐ Hide coordinates