

Calibration of weights of statistical surveys - Calif

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Statistical Office of the SR prepared in R software open source tool Calif, which is a Shiny web application for calibration of weights of statistical surveys.

Licence: GPL-3

GitHub Repository: <https://github.com/SO-SR/Calif>

Calif makes use of R packages **shiny**, **sampling**, **nleqslv** and **haven**, which are required to be installed first.

Calif can be run by these ways:

1. Open R and run
shiny::runGitHub('Calif', 'SO-SR', destdir = getwd(), launch.browser = TRUE)
You need to have installed shiny package first with this option.
2. In case of error, you could try
**shiny::runUrl('https://slovak.statistics.sk/wps/wcm/connect/7014bfd4-54a2-4080-929f-
&CVID=m7Xjumj&CVID=m7Xjumj', filetype = '.zip', destdir = getwd(), launch.browser = TRUE)**
3. Alternatively, open R, source the attached Calif 4.0.R code and enter **calif()** in the console. All required packages should be installed automatically (if proxy settings allow it).

Calif runs in your web browser, in order to guarantee a proper functioning make sure you are using the latest version of the browser. Once Calif is launched, the whole session is undertaken locally within R (in the background) and no data is sent outside your PC (a web browser just serves for displaying the GUI).

The information on Calif and its installation can be found in the Manual. For questions, comments and bug fixes visit <https://github.com/SO-SR/Calif> or contact the SO SR.

[Calif Manual](#) (pdf - 1,20 MB)

[calif v4.0.zip](#) (R - 26 kB)

The overview of Calif:



Choose strata

1
2
3
4
5
6
7
8

Show with initial weights

Method & Solver

Method

☐ Linear

☐ Rating ratio

☐ Logit

☒ Linear bounded

Solver

☒ calb

☐ relogit

Lower bound

0.5

Upper bound

2.5

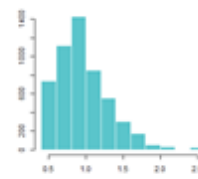
Results

Initial weights interval	275.128	675.427
Calibration weights interval	137.564	909.343
Lower bound obtained	0.500	
Upper bound obtained	2.500	
Average weight quotient	0.964	
Average difference	99.299	
Minimum realistic lower bound	0.005	

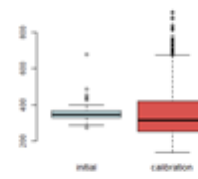
Average difference feasibility



Histogram of quotients



Boxplots of weights



Totals obtained

☐ Show obtained totals as values

Stratum	p11	p12	p13	p14	p15	p16	p21	p22	p23	p24	p25	p26
1	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
3	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
4	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
5	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
6	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
2	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
7	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
8	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Weights & Quotients

Show 20 entries

Row	Initial	Calibration	Quotients
2	275.12821	137.5641	0.5