

# Validation Report

## corr (Version 0.0.1)

Ryo Nakaya

04DEC2025

### General Information

Corr package provides macros for computing association measures between continuous, nominal, and ordinal variables. Supports Pearson and Spearman correlations, Cramer's V, Somers' D, and eta coefficients. Outputs both long-format association tables and wide matrix-style datasets for further analysis. Includes a heatmap macro to visualize the strength and type of associations in a single plot.

### Validation Environment

OS: WIN

SAS: 9.04.01M7P080520

Required Packages: -

Execution Datetime: 04DEC2025:20:25:28

### Authors

Ryo Nakaya (nakaya.ryou@gmail.com)

### Requirements

- %association\_matrix :

To generate association matrix dataset (long, wide). Association matrix consists of correlation coefficients for continuous/ordinal x continuous/ordinal, Cramer's V for nominal x nominal, Somer's D for nominal x ordinal, Eta coefficients for nominal x continuous.

- %heatmap :

To generate heatmap based on association matrix dataset created by %association\_matrix within heatmap macro.

- %scatter\_matrix :

To generate scatter matrix plot (Kernel, Bar, Scatter, Mosaic, Cross Table, Box)

### Validation Records

Test Description	Result	Comments
(%association_matrix)[test01] Compare expected and test datasets of association matrix	PASS	MP_ASSERTDATASET: proc compare base=expected compare=test
(%heatmap)[test01] Creating a heatmap with test data	CHECK	MP_ASSERTGRAPH: An output graph to be visually reviewed. See appendix.
(%scatter_matrix)[test01] Creating a scatter_matrix plot with test data	CHECK	MP_ASSERTGRAPH: An output graph to be visually reviewed. See appendix.

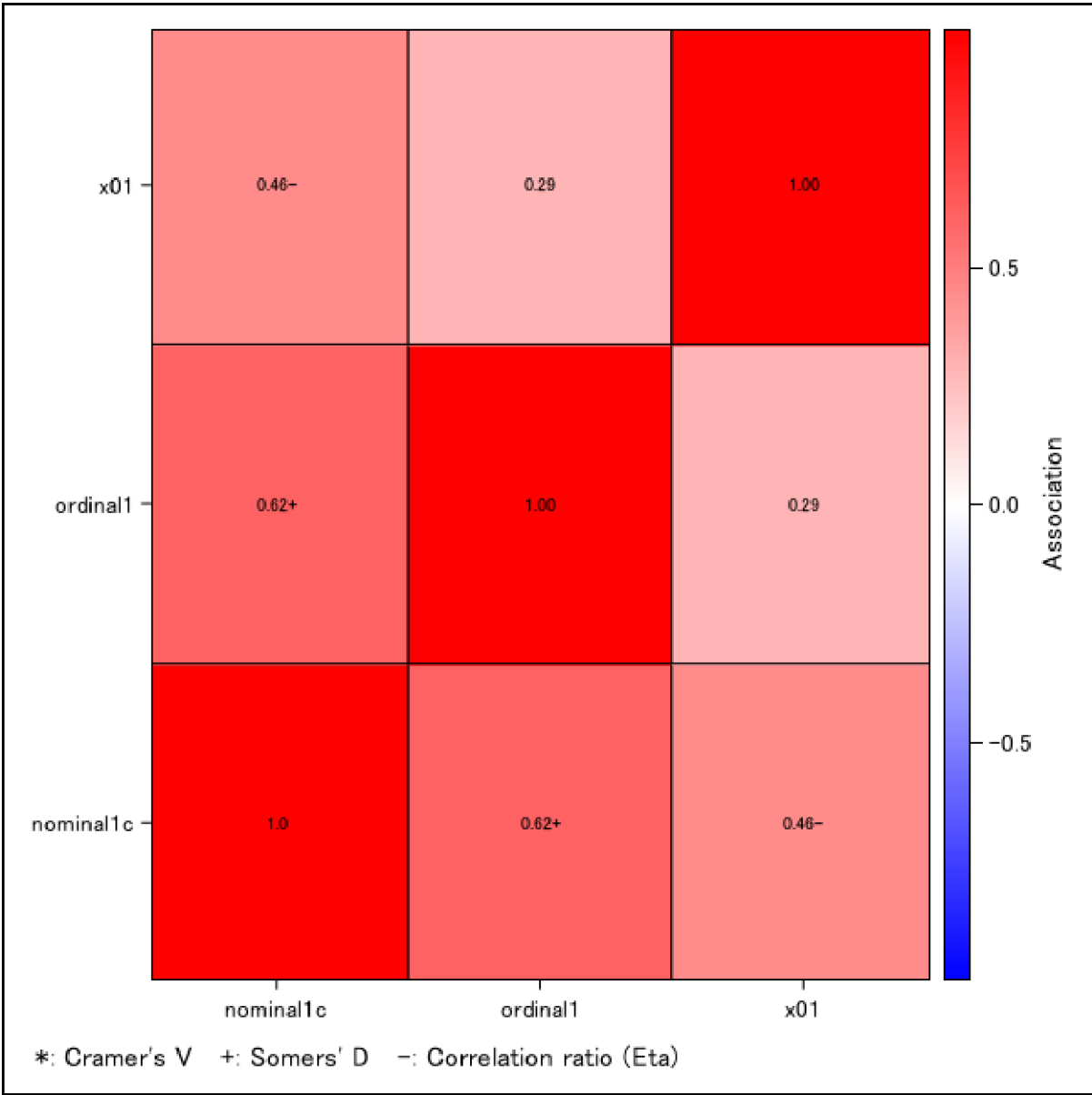
### Additional comments

NA

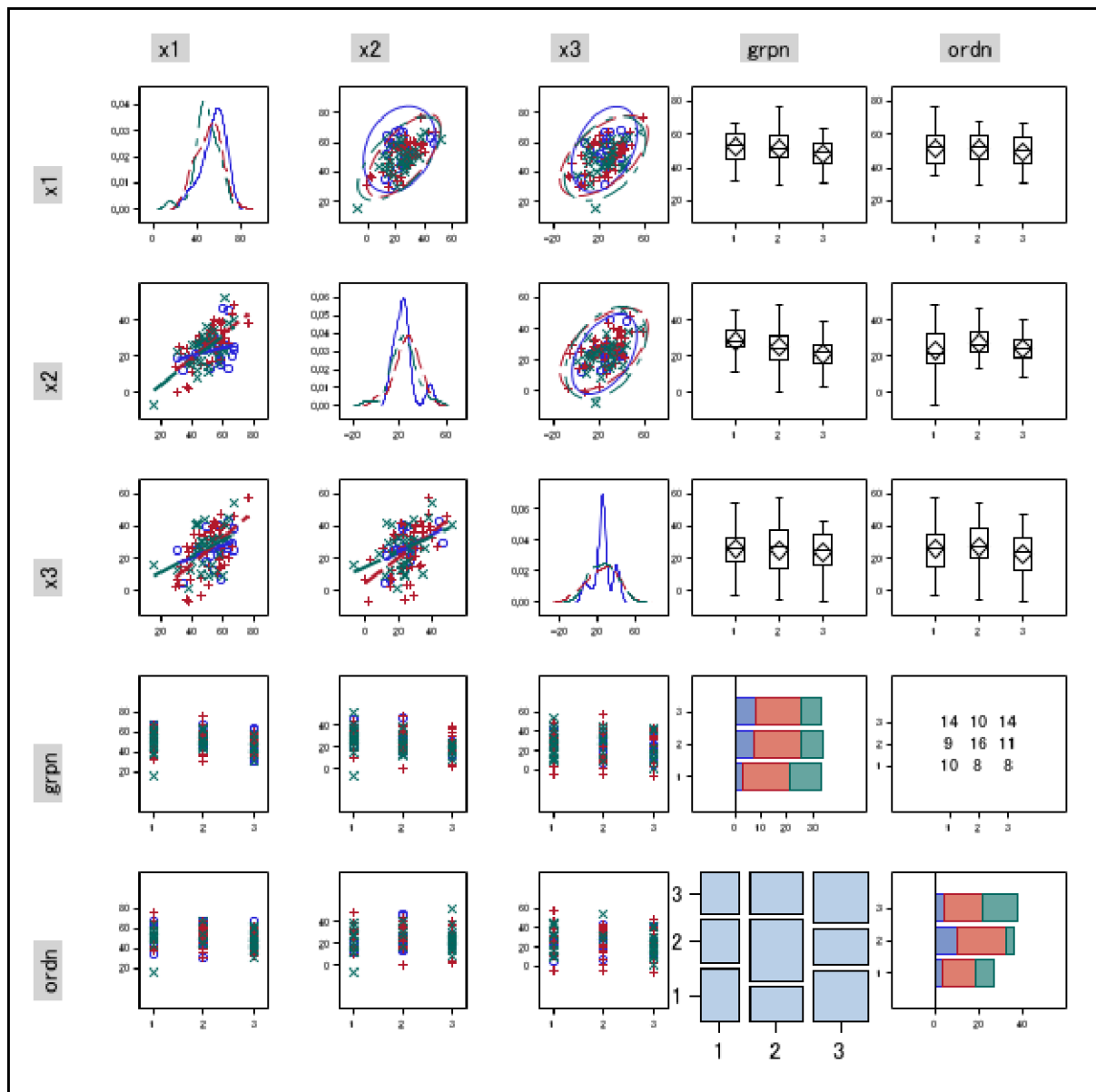
### References

<https://github.com/Nakaya-Ryo/corr>

Appendix



(%heatmap) [test01] Current



(%scatter\_matrix) [test01] Current