

Choosing The Number of Clusters in Monothetic Clustering

Tan Tran

Mark C. Greenwood

References

- [1] Anderson, M. J. (2001). A new method for non-parametric multivariate analysis of variance. *Austral Ecology*, 26(1), 32–46.
- [2] Breiman, L., Friedman, J., Stone, C. J., & Olshen, R. A. (1984). *Classification and Regression Trees* (1st ed.). Chapman and Hall/CRC.
- [3] Caliński, T., & Harabasz, J. (1974). A dendrite method for cluster analysis. *Communications in Statistics*, 3(1), 1–27.
- [4] Charrad, M., Ghazzali, N., Boiteau, V., & Niknafs, A. (2014). NbClust : An R Package for Determining the Relevant Number of Clusters in a Data Set. *Journal of Statistical Software*, 61(6).
- [5] Chavent, M. (1998). A monothetic clustering method. *Pattern Recognition Letters*, 19(11), 989–996.
- [6] Hastie, T., Tibshirani, R., & Friedman, J. (2009). *The Elements of Statistical Learning* (2nd ed.). Springer.
- [7] Hothorn, T., Hornik, K., & Zeileis, A. (2006). Unbiased Recursive Partitioning: A Conditional Inference Framework. *Journal of Computational and Graphical Statistics*, 15(3), 651–674.
- [8] James, G., Witten, D., Hastie, T., & Tibshirani, R. (2013). *An Introduction to Statistical Learning: with Applications in R* (1st ed.). Springer.
- [9] Milligan, G. W., & Cooper, M. C. (1985). An examination of procedures for determining the number of clusters in a data set. *Psychometrika*, 50(2), 159–179.
- [10] Oksanen, J., Blanchet, G., Kindt, R., Legendre, P., Minchin, P., O’Hara, R., Simpson, G., Solymos, P., Stevens, M., & Wagner, H. (2015). vegan: Community Ecology Package. R package version 2.3-0.
- [11] Rousseeuw, P. J. (1987). Silhouettes: A graphical aid to the interpretation and validation of cluster analysis. *Journal of Computational and Applied Mathematics*, 20, 53–65.
- [12] Ruspini, E. H. (1970). Numerical methods for fuzzy clustering. *Information Sciences*, 2(3), 319–350.
- [13] Suzuki, R., & Shimodaira, H. (2006). Pvcust: an R package for assessing the uncertainty in hierarchical clustering. *Bioinformatics*, 22(12), 1540–2.
- [14] Tibshirani, R., Walther, G., & Hastie, T. (2001). Estimating the number of clusters in a data set via the gap statistic. *Journal of the Royal Statistical Society: Series B (Statistical Methodology)*, 63(2), 411–423.

Contact Info:

Mark Greenwood
Montana State University
Department of Mathematical Sciences
greenwood@math.montana.edu