

index.G1(clusterSim)

Caliński-Harabasz pseudo F-Statistic

(for metric data only)

$$G1(u) = \frac{\text{trace}(\mathbf{B})/(u-1)}{\text{trace}(\mathbf{W})/(n-u)},$$

where: \mathbf{B} – between-group dispersion matrix,
 \mathbf{W} – within-group dispersion matrix,
 u – number of clusters ($u = 2, \dots, n-1$),
 n – number of objects.

The value of u , which maximizes $G1(u)$, is regarded as specifying the number of clusters.

References

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