

[Aitchison, J.](#); [Barceló-Vidal, C.](#); [Martín-Fernández, J. A.](#); [Pawlowsky-Glahn, V.](#)  
**Logratio analysis and compositional distance.** (English) [Zbl 1101.86309](#)  
[Math. Geol.](#) 32, No. 3, 271-275 (2000).

Summary: The concept of distance between two compositions is important in the statistical analysis of compositional data, particularly in such activities as cluster analysis and multidimensional scaling. This paper exposes the fallacies in a recent criticism of logratio-based distance measures – in particular, the misstatements that logratio methods destroy distance structures and are denominator dependent. Emphasis is on ensuring that compositional data analysis involving distance concepts satisfies certain logically necessary invariance conditions. Logratio analysis and its associated distance measures satisfy these conditions.

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