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A connection between two generalized Minkowski problems

We consider the logarithmic Minkowski inequality which is equivalent to several problems in convex geometric analysis and is still an open problem in dimension greater than two. Among the problems equivalent to the logarithmic Minkowski inequality is the uniqueness of solutions to the logarithmic Minkowski problem. We present yet a new connection to a uniqueness of a Minkowski problem, namely if a given centro-affine Minkowski problem has unique solution (up to special linear group of transformations), then the corresponding logarithmic Minkowski inequality holds.