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A note on Dislocation hyperbolic augmented Lagrangian algorithm for nonconvex optimization*

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Abstract

About the published article "Mallma Ramirez L., Maculan N., Xavier A.E., Xavier V.L.: Dislocation hyperbolic augmented Lagrangian algorithm for nonconvex optimization. RAIRO-Oper. Res., Volume 57, Number 5, 2941–2950, (2023). DOI: https://doi.org/10.1051/ro/2023153; we clarify information that was assumed in our work but is not written explicitly.

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DOI: https://doi.org/10.1051/ro/2023153", we clarify an information that was assumed in our work, but is not written explicitly.

In our work, in all the analyses it was considered that the sequence $\{\tau^k\}$ is bounded, and therefore there will exist a subsequence that will converge to a strictly positive point. But for that to happen, it is necessary to make the assumption the whole sequence is convergent, i.e.,

$$\lim_{k \to \infty} \tau^k = \tilde{\tau} > 0. \tag{1}$$

We assume that expression (1) is true throughout our work. In this way, we avoid the indeterminate case of $\frac{0}{0}$ in our analyses.

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