

Generalized translate operator, B-maximal operator, B-Riesz potential operator, Commutators, Generalized weighted B-Morrey space

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Abstract

In this study, we investigate the boundedness of B-Riesz potential and its commutators on generalized weighted B-Morrey spaces. The primary aim of this study is to investigate the boundedness of Riesz potential and its commutators generated by generalized translate operator on generalized weighted B-Morrey spaces. In particular, B-Riesz potential, its commutators and B-Morrey spaces are related to generalized translate operators that is associated with Laplace Bessel differential operator. Then, two-weighted inequality for these operators and its commutators on generalized weighted B-Morrey spaces is also provided. As a corollary, the boundedness of B-Riesz potential and its commutators on generalized weighted B-Morrey spaces is proved.

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