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On a measure of non-compactness for some classical operators

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摘要

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Abstract The measure of non-compactness is estimated from below for various operators, including the Hardy--Littlewood maximal operator, the fractional maximal operator and the Hilbert transform, all acting between weighted Lebesgue spaces. The identity operator acting between weighted Lebesgue spaces and also between the counterparts of these spaces with variable exponents is similarly analysed. These results enable the lack of compactness of such operators to be quantified.

Key words [measure of non-compactness](#) [maximal functions](#) [singular integrals](#) [embeddings](#) [weight](#)

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