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REFINING SOME INEQUALITIES ON 2×2 BLOCK ACCRETIVE MATRICES

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Abstract. We obtain some matrix inequalities on the off-diagonal blocks of 2×2 block accretive matrices and the geometric mean of its diagonal blocks. They improve some results of Liu et al. [Operators and Matrices, **15**, 2(2021), 581–587] and refine an inequality of Yang et al. [Journal of Inequalities and Applications (2020) 2020:90].

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