Domino Antimagic Squares and Rectangles

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A domino antimagic square of order n is an $n \times n$ array formed from a subset of the standard set of 28 dominoes such that the sums of the rows, columns, and two main diagonals form a set of 2n + 2 distinct, consecutive integers while an $m \times n$ domino antimagic rectangle is an $m \times n$ rectangular array formed from a subset of the standard set of 28 dominoes such that the sums of the rows and columns form a set of m + n distinct, consecutive integers. This paper outlines what the possible dimensions are for $m \times n$ domino antimagic rectangles and provides many examples of both domino antimagic rectangles and squares. Many open questions are given at the end of the paper for future exploration

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