

Test Results for Mesh Hydro Code

This computer

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1 Advection

1.1 Piecewise Constant

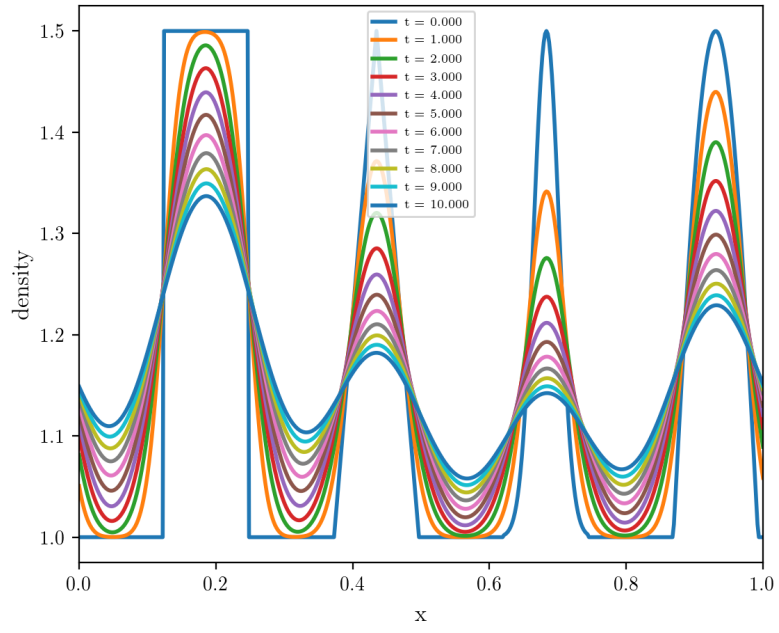


Figure 1: Expected result 1D

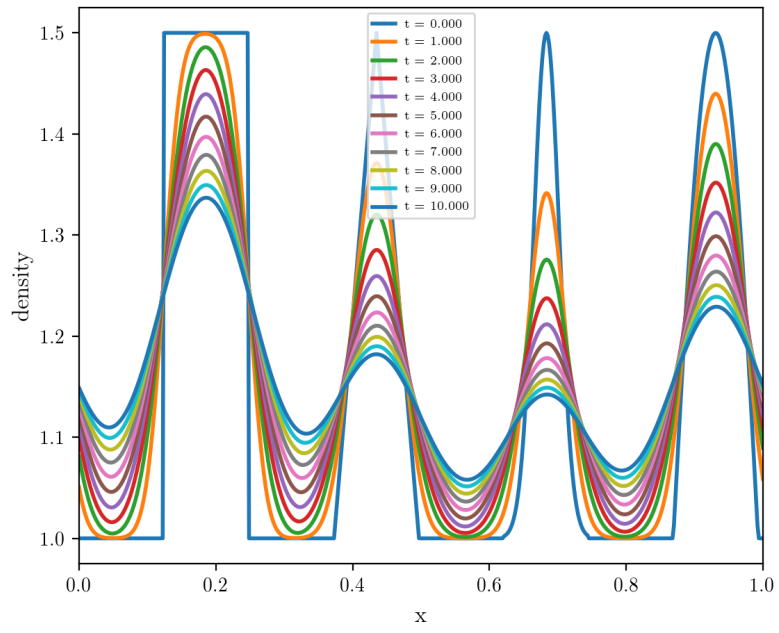


Figure 2: Obtained result 1D

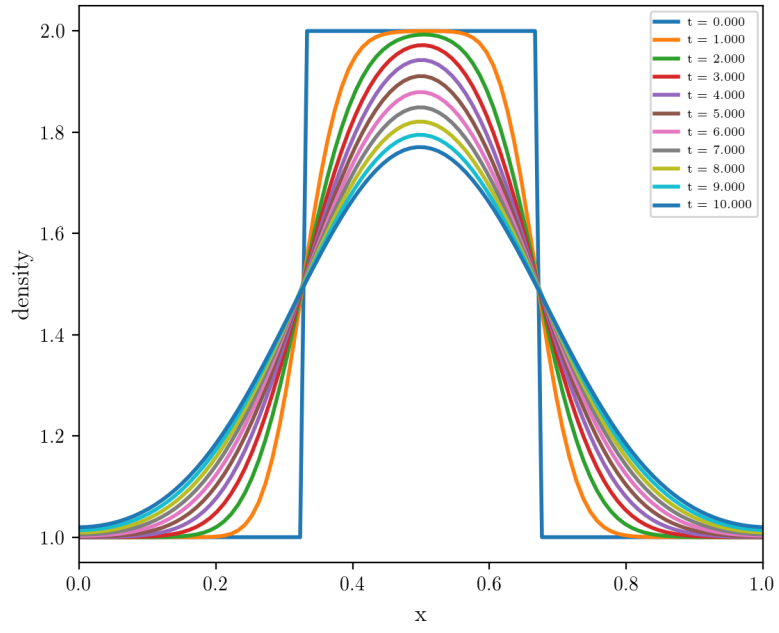


Figure 3: Expected result 1D negative velocity

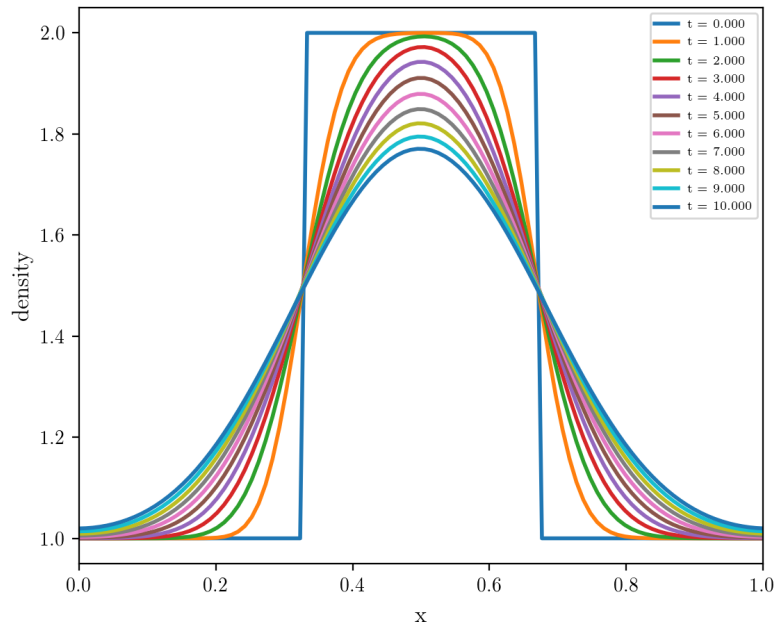


Figure 4: Obtained result 1D negative velocity

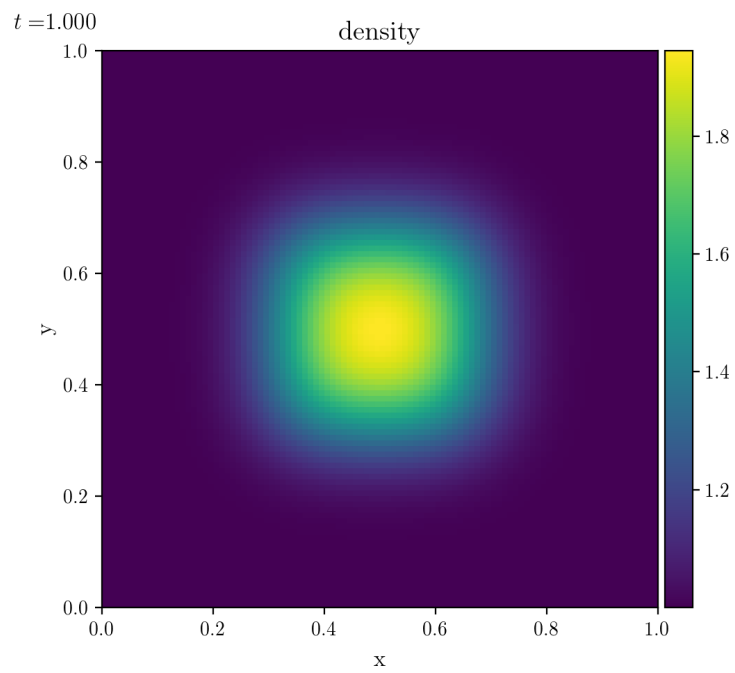


Figure 5: Expected result 2D

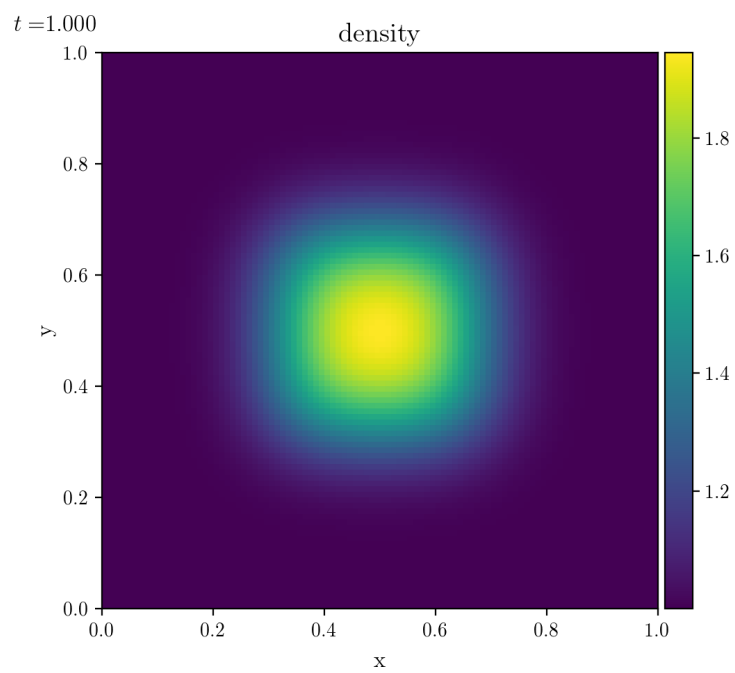


Figure 6: Obtained result 2D

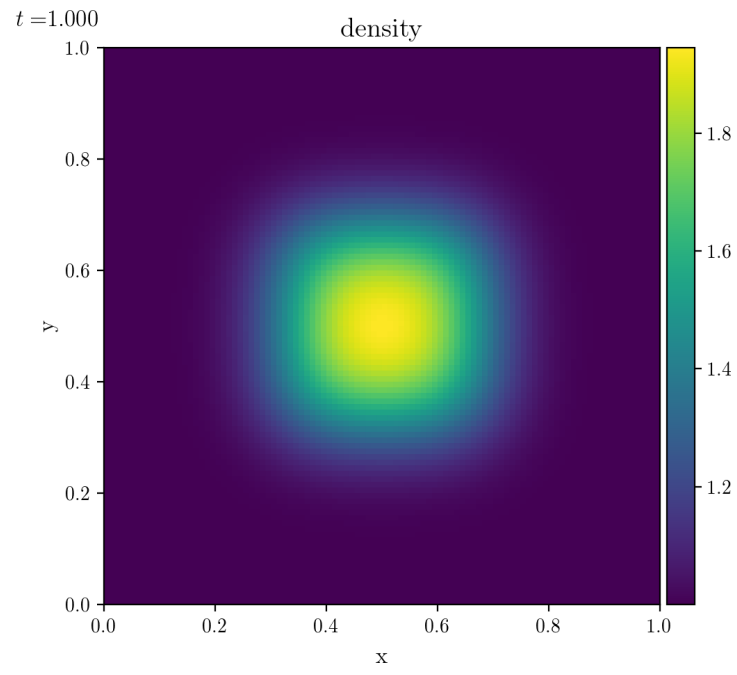


Figure 7: Expected result 2D negative velocity

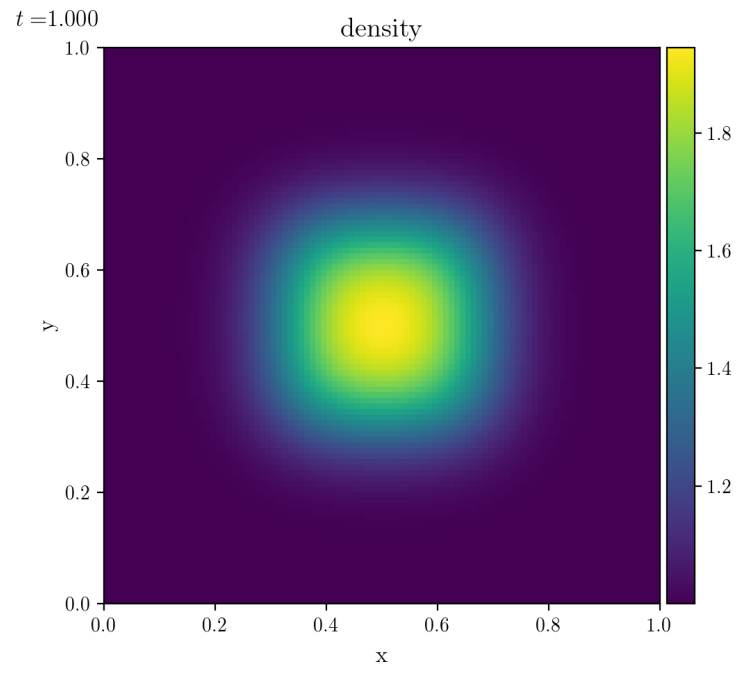


Figure 8: Obtained result 2D negative velocity

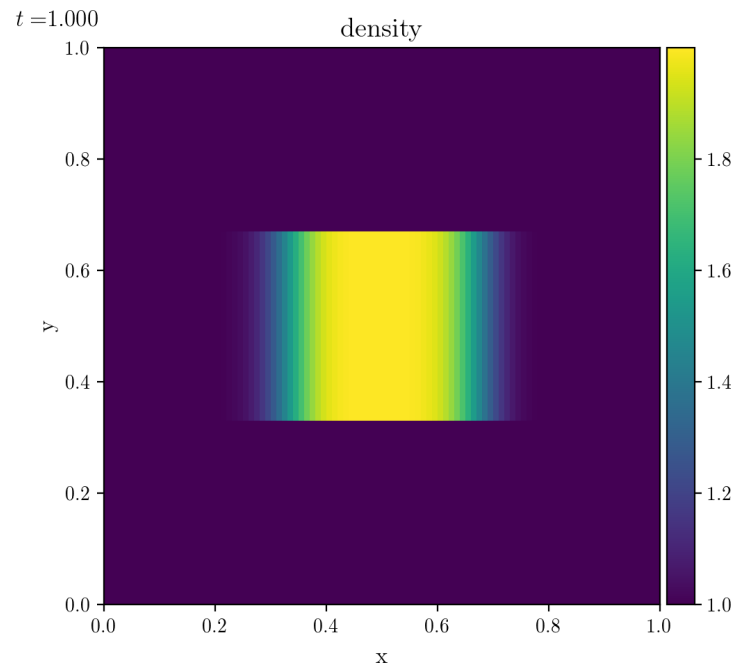


Figure 9: Expected result 2D velocity in x direction only

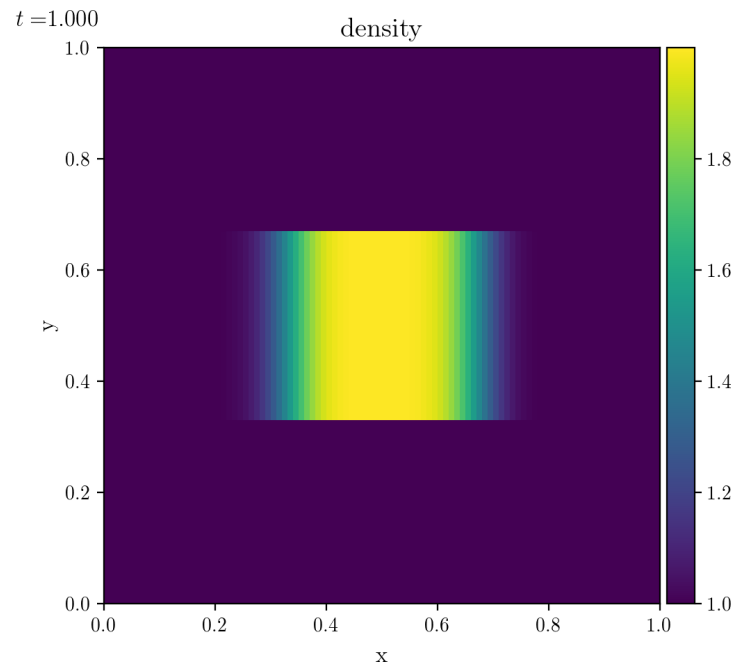


Figure 10: Obtained result 2D velocity in x direction only

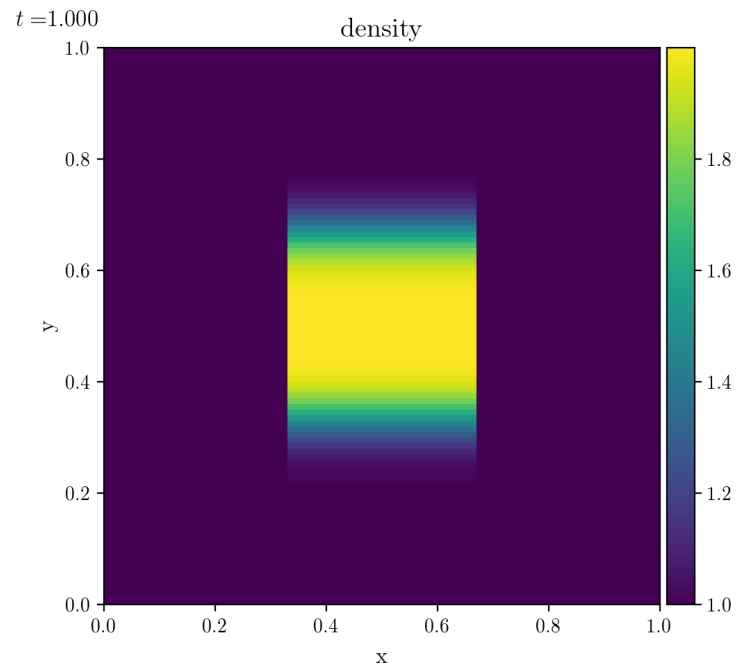


Figure 11: Expected result 2D velocity in y direction only

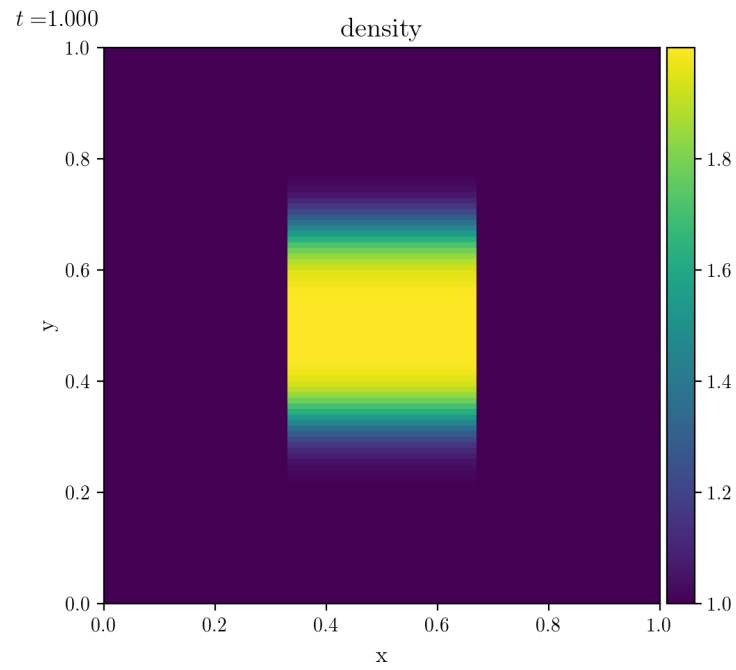


Figure 12: Obtained result 2D velocity in y direction only

1.2 Piecewise Linear

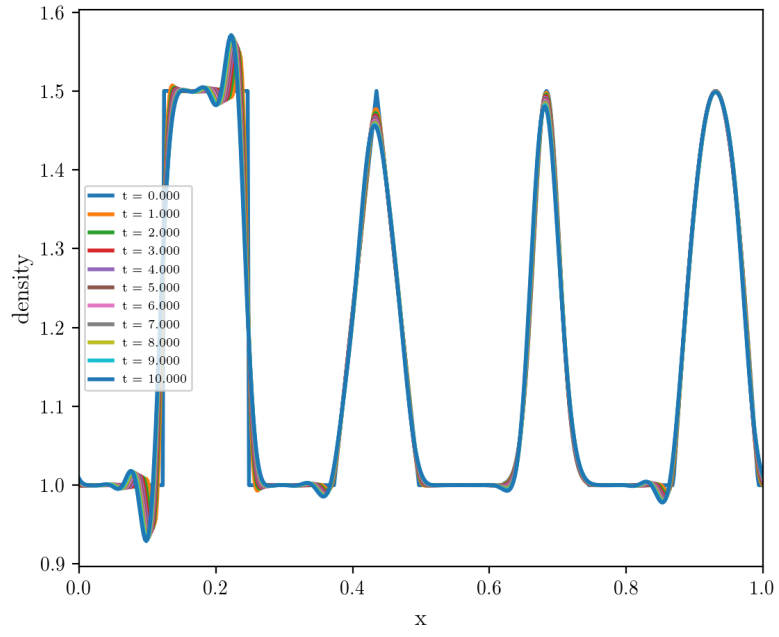


Figure 13: Expected result 1D

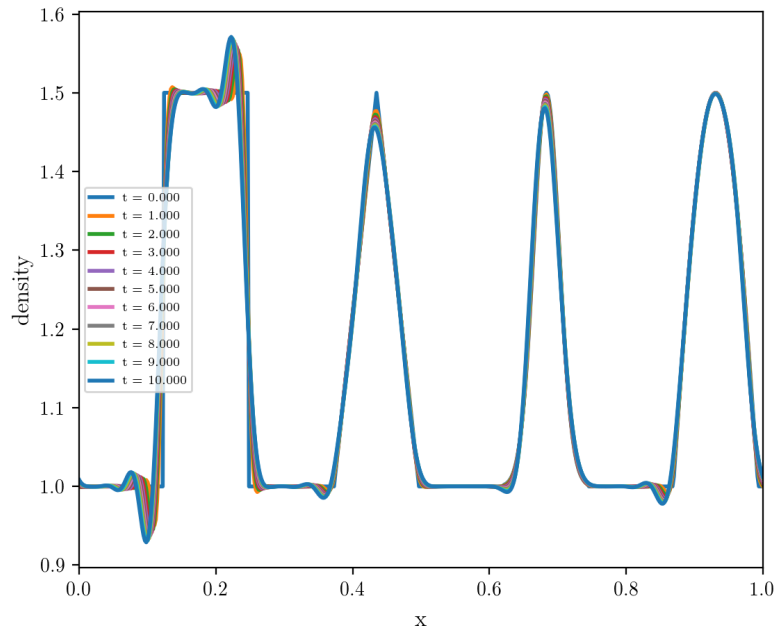


Figure 14: Obtained result 1D

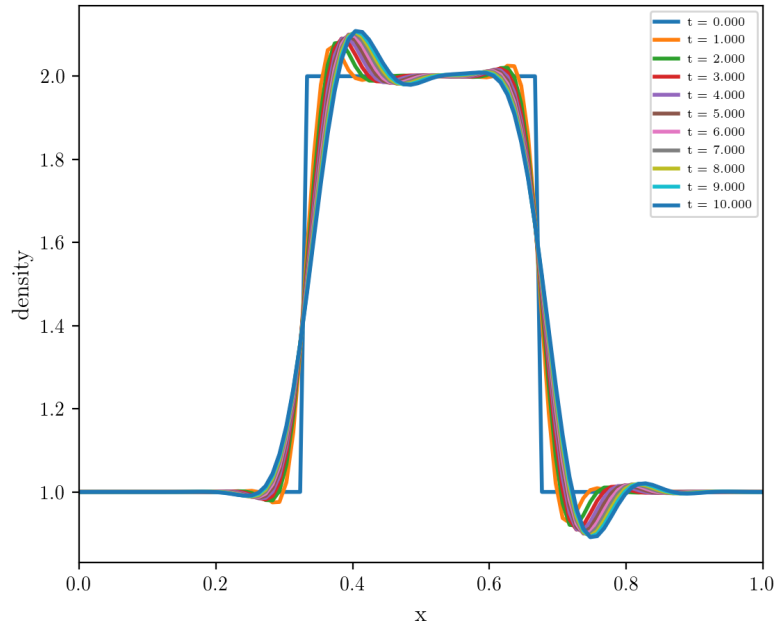


Figure 15: Expected result 1D negative velocity

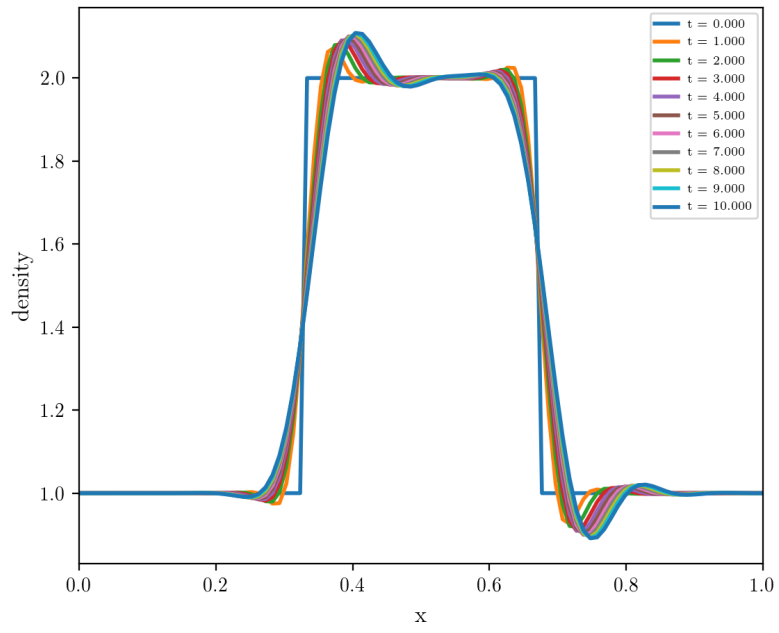


Figure 16: Obtained result 1D negative velocity

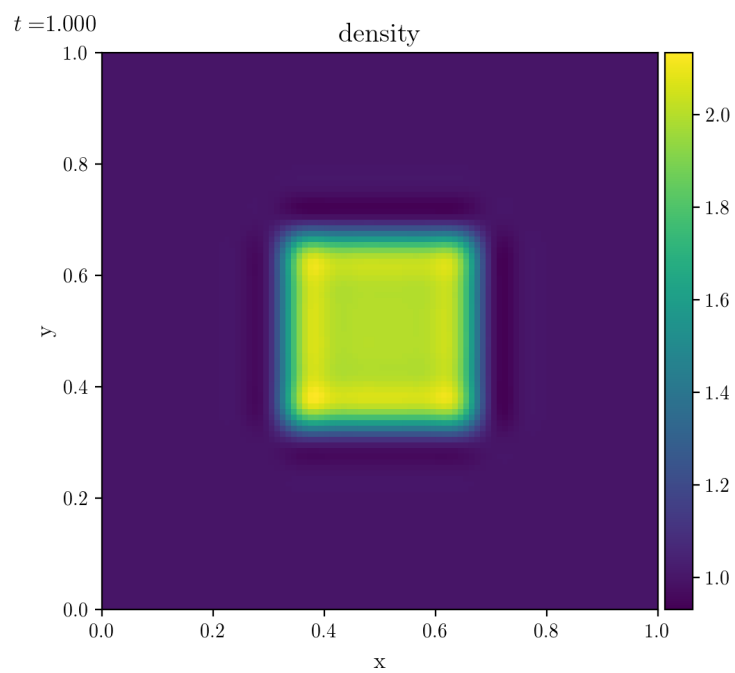


Figure 17: Expected result 2D

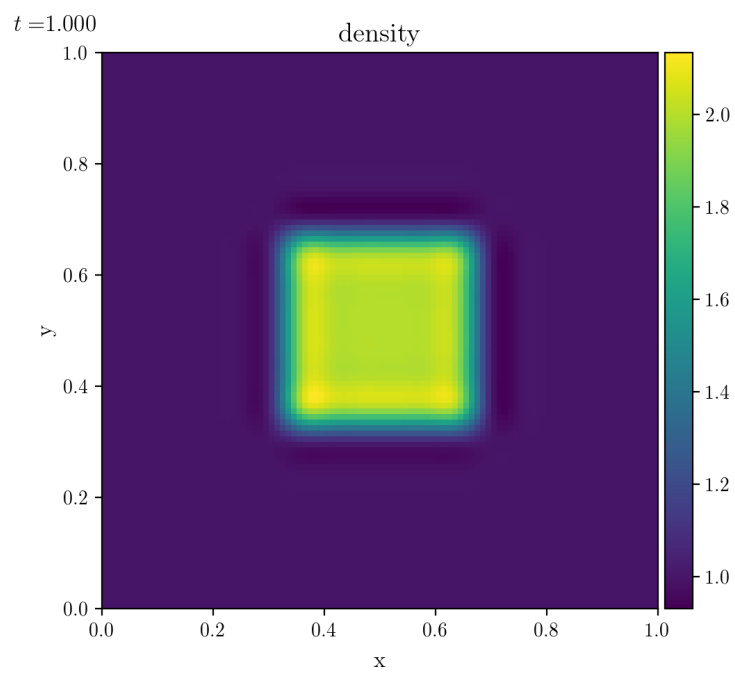


Figure 18: Obtained result 2D

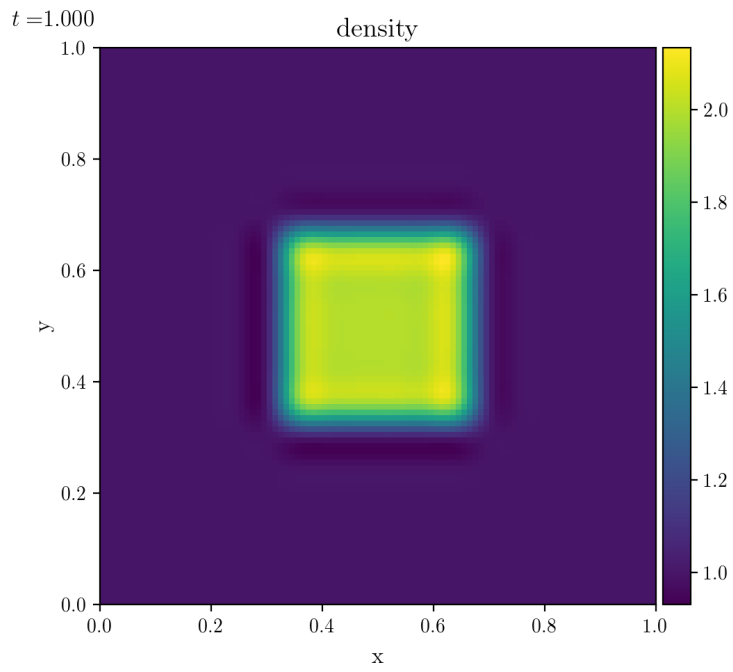


Figure 19: Expected result 2D negative velocity

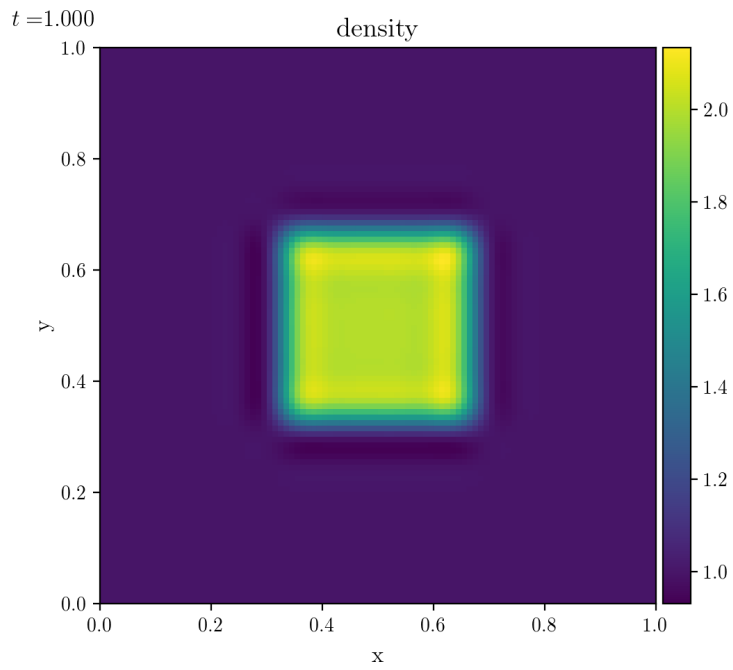


Figure 20: Obtained result 2D negative velocity

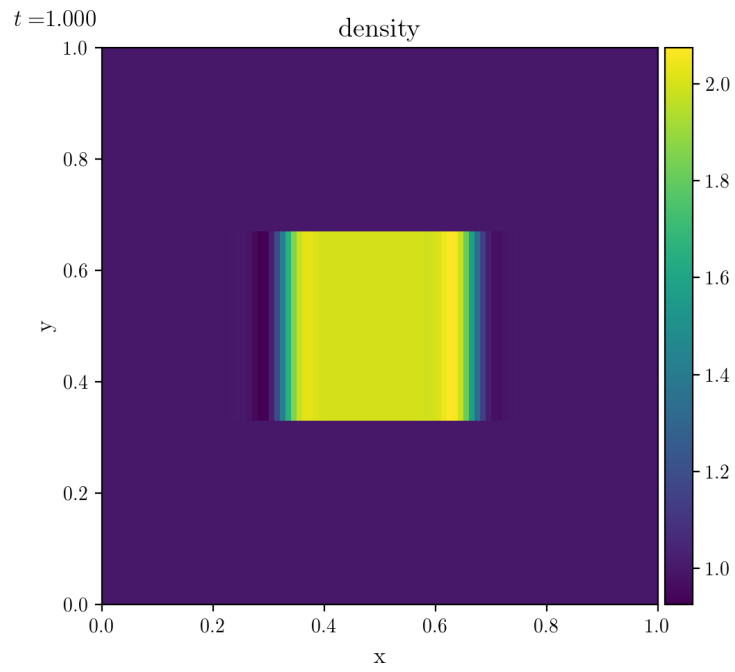


Figure 21: Expected result 2D velocity in x direction only

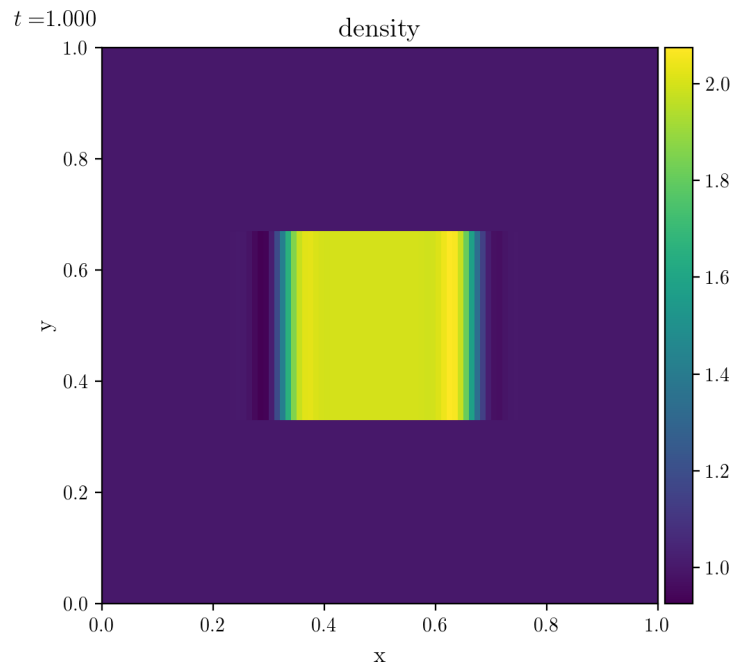


Figure 22: Obtained result 2D velocity in x direction only

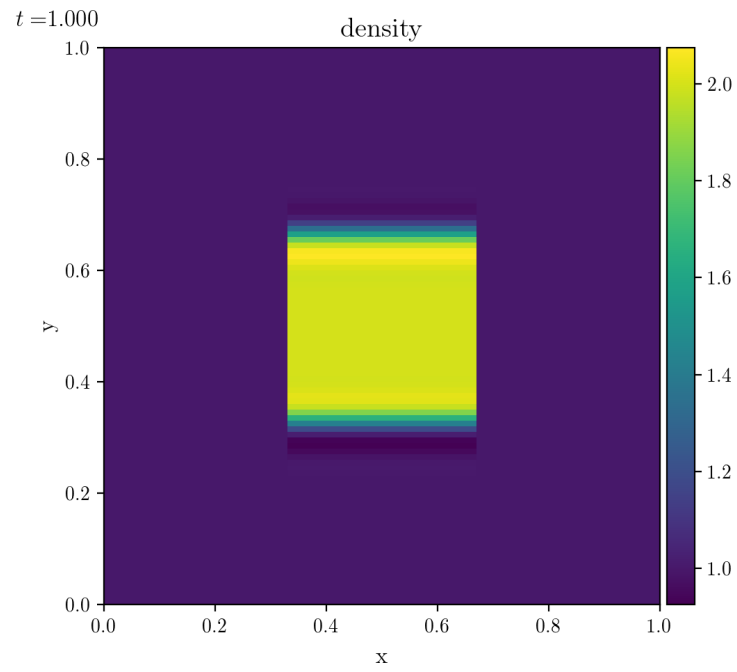


Figure 23: Expected result 2D velocity in y direction only

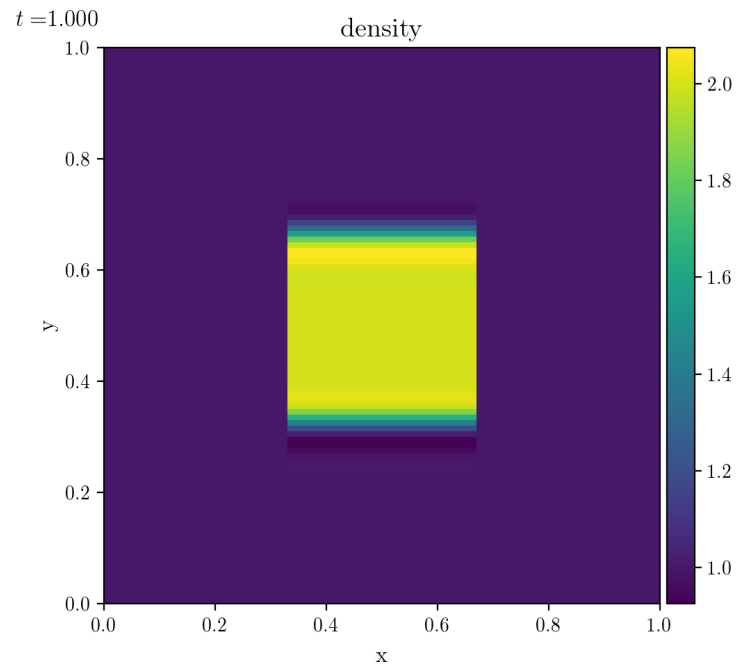


Figure 24: Obtained result 2D velocity in y direction only

1.3 Piecewise Linear with Slope Limiters

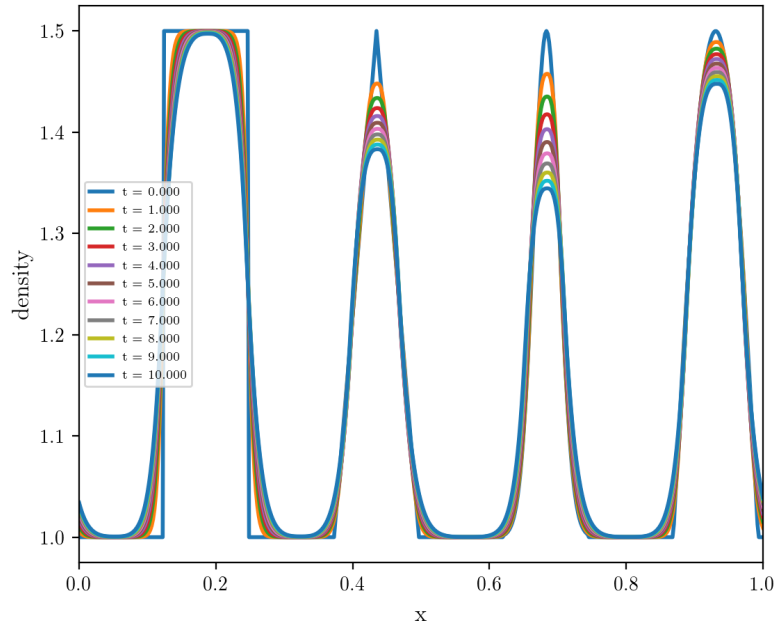


Figure 25: Minmod Slope Limiter. Expected result 1D

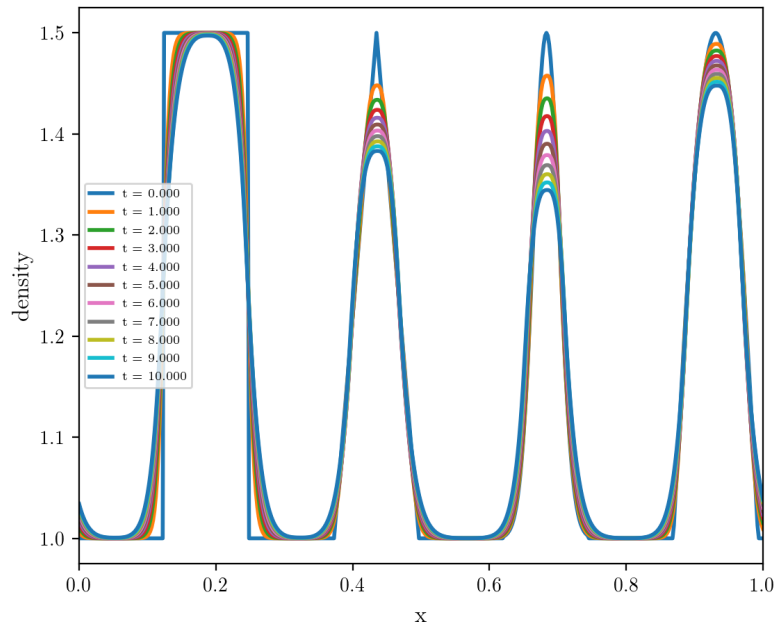


Figure 26: Minmod Slope Limiter. Obtained result 1D

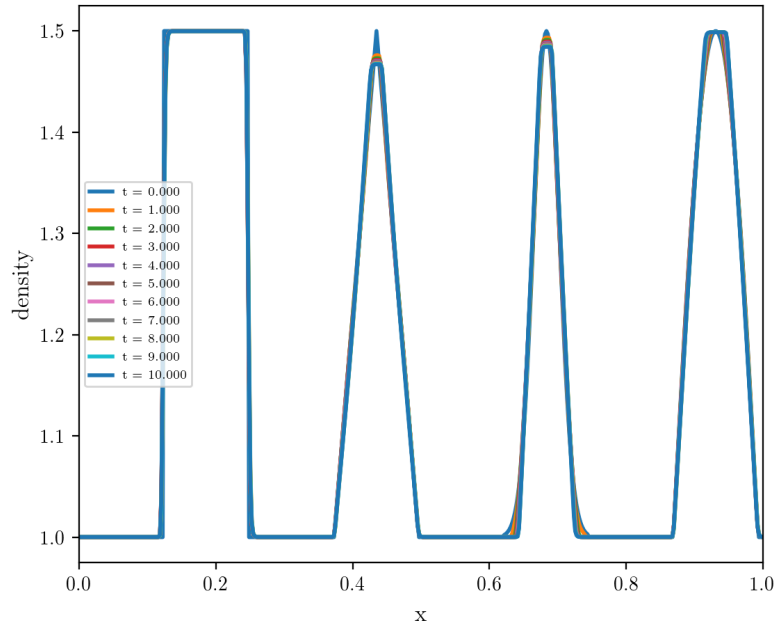


Figure 27: Superbee slope limiter. Expected result 1D negative velocity

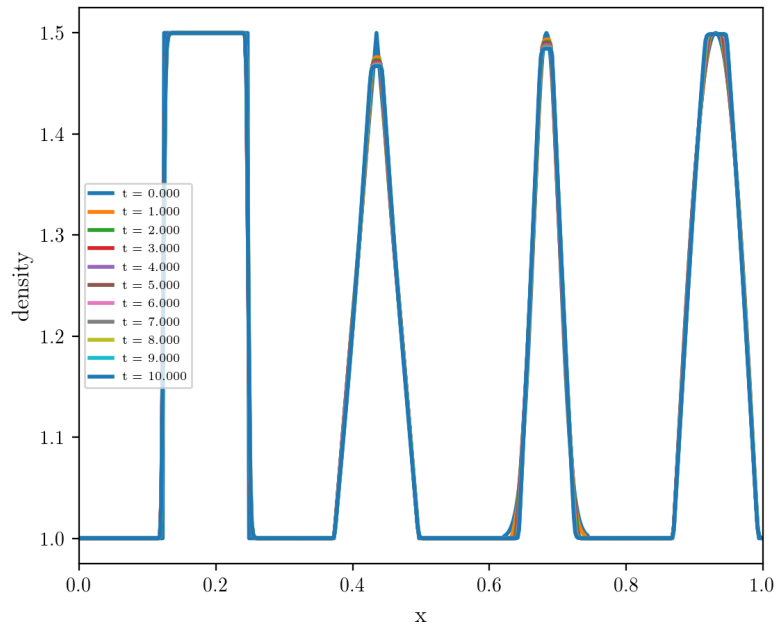


Figure 28: Superbee slope limiter. Obtained result 1D negative velocity

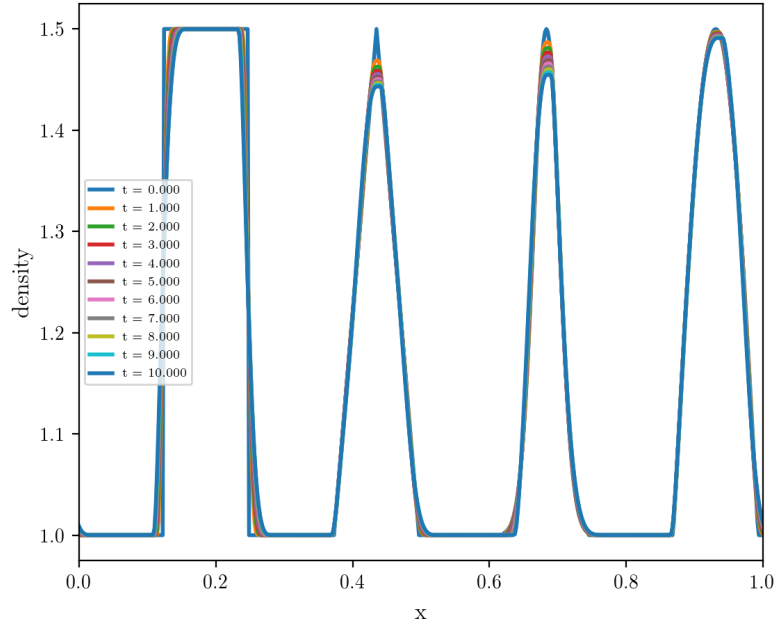


Figure 29: Monotonized central limiter. Expected result 1D

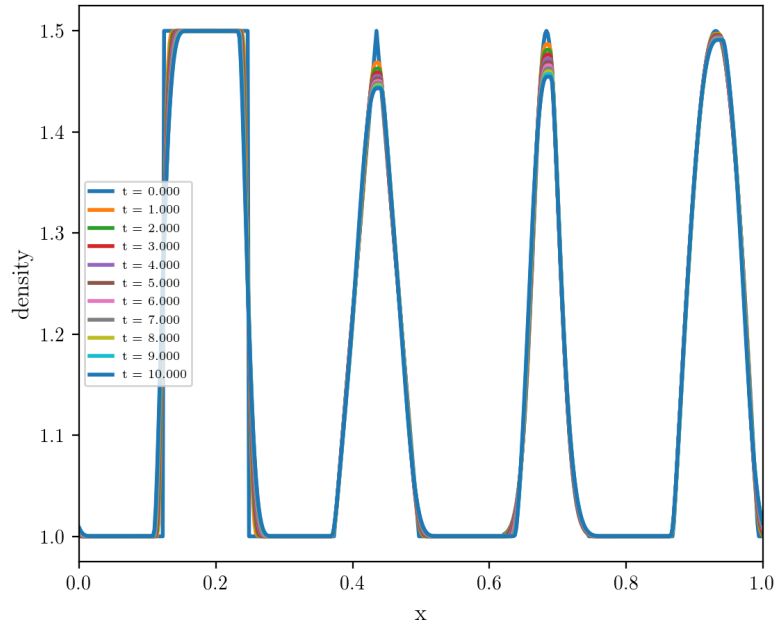


Figure 30: Monotonized central limiter. Obtained result 1D

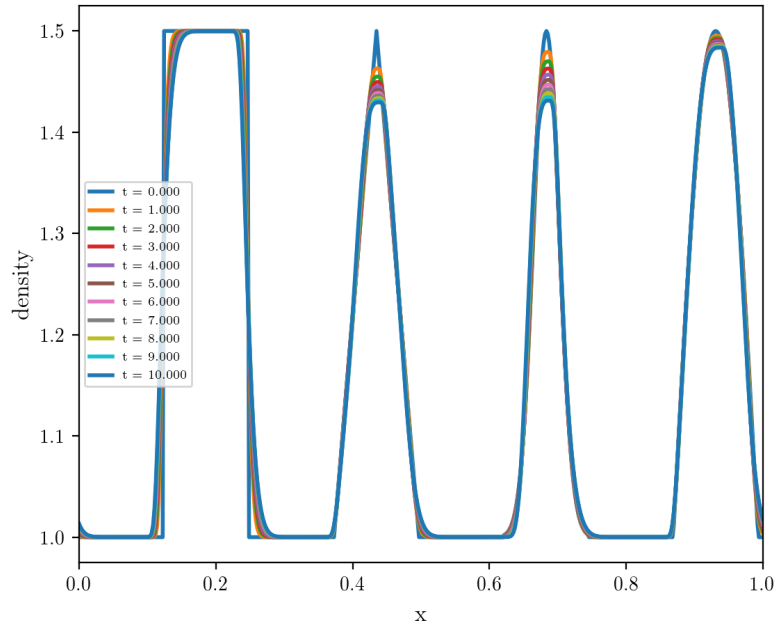


Figure 31: Van Leer Limiter. Expected result 1D

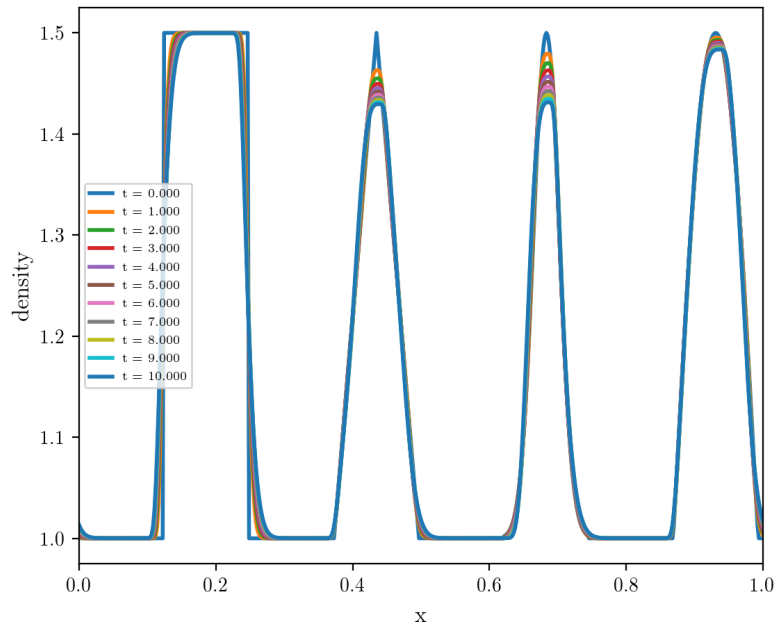


Figure 32: Van Leer Limiter. Obtained result 1D

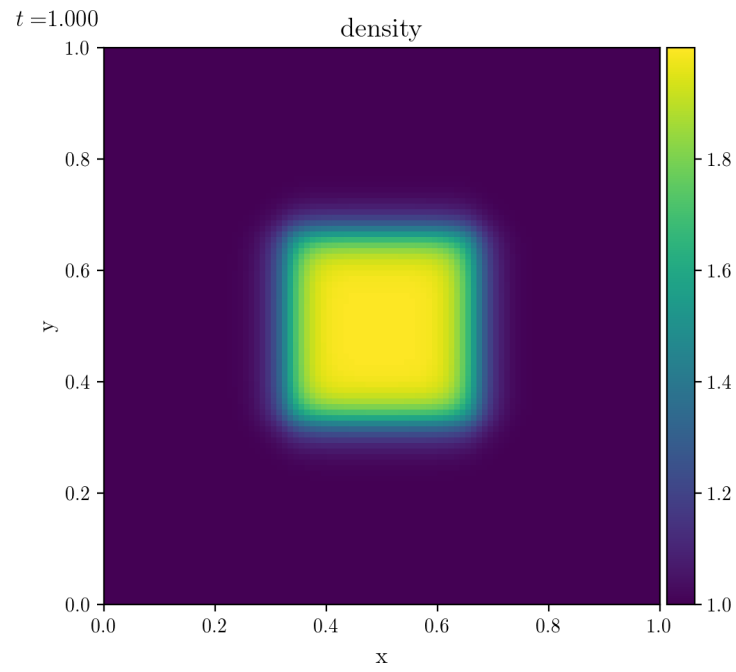


Figure 33: Minmod Slope Limiter. Expected result 2D

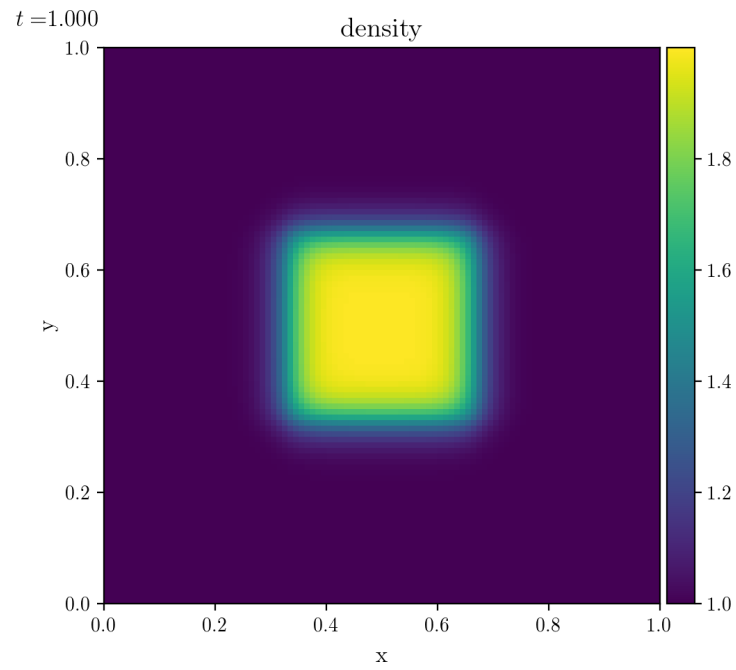


Figure 34: Minmod Slope Limiter. Obtained result 2D

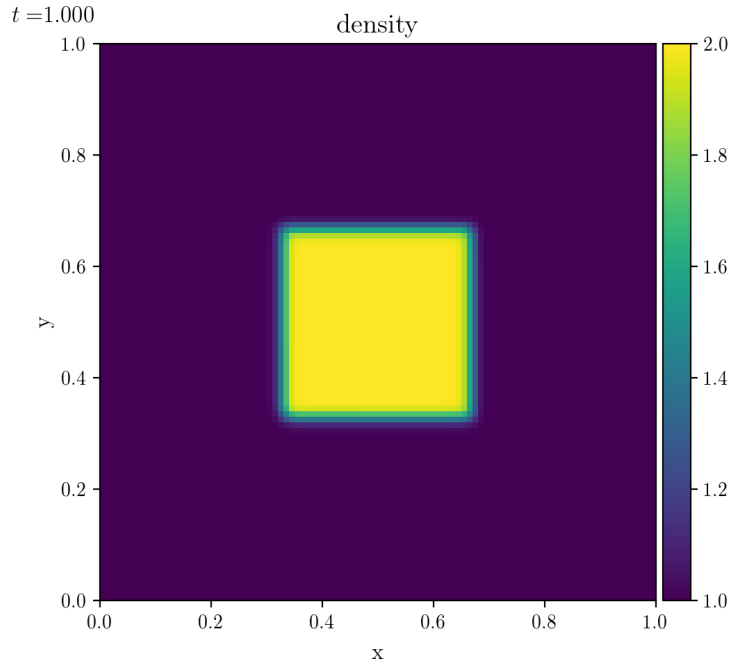


Figure 35: Superbee slope limiter. Expected result 2D negative velocity

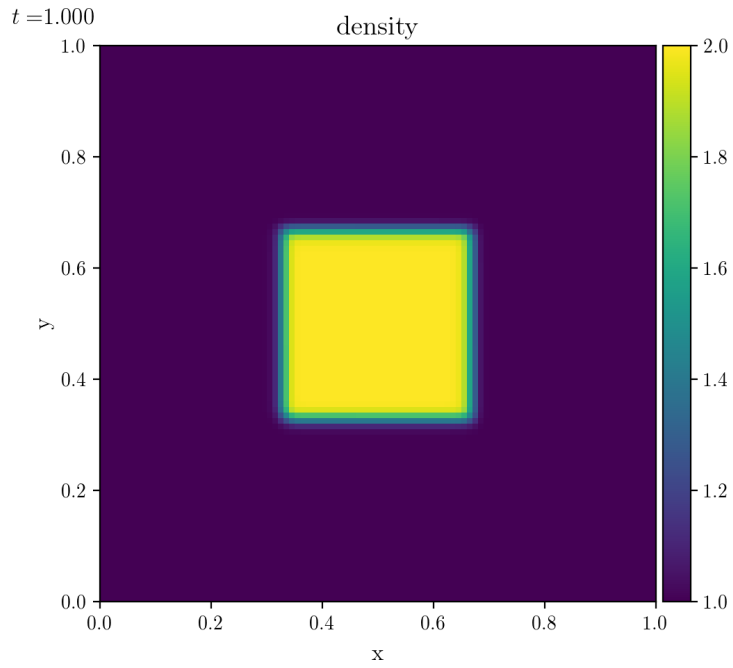


Figure 36: Superbee slope limiter. Obtained result 2D negative velocity

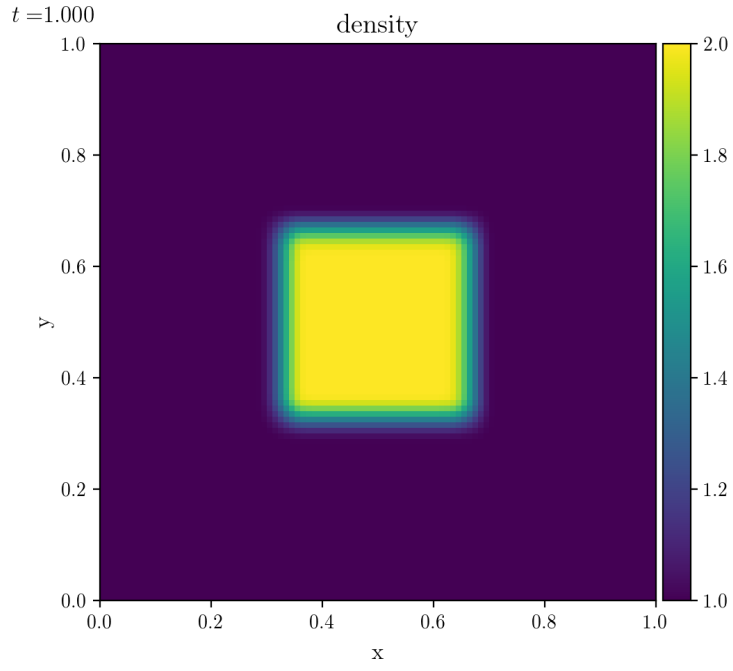


Figure 37: Monotonized central limiter. Expected result 2D

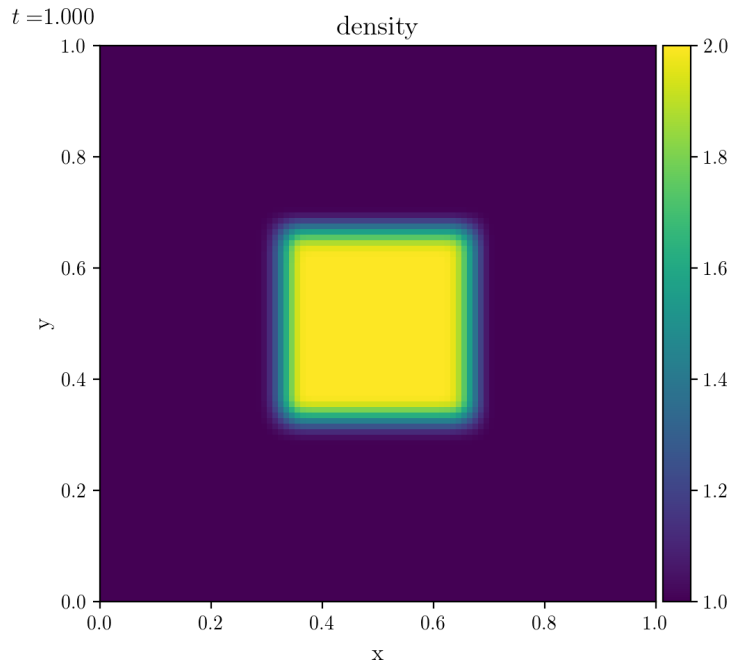


Figure 38: Monotonized central limiter. Obtained result 2D

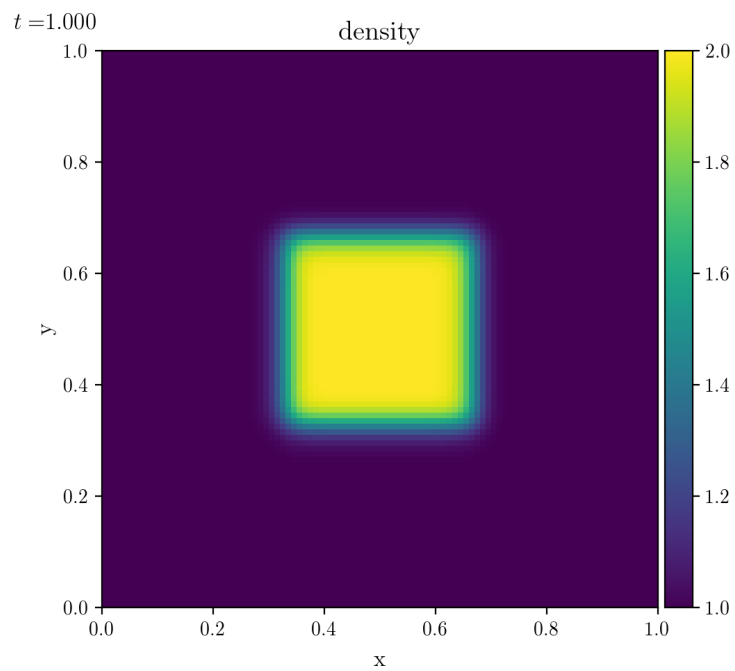


Figure 39: Van Leer Limiter. Expected result 2D

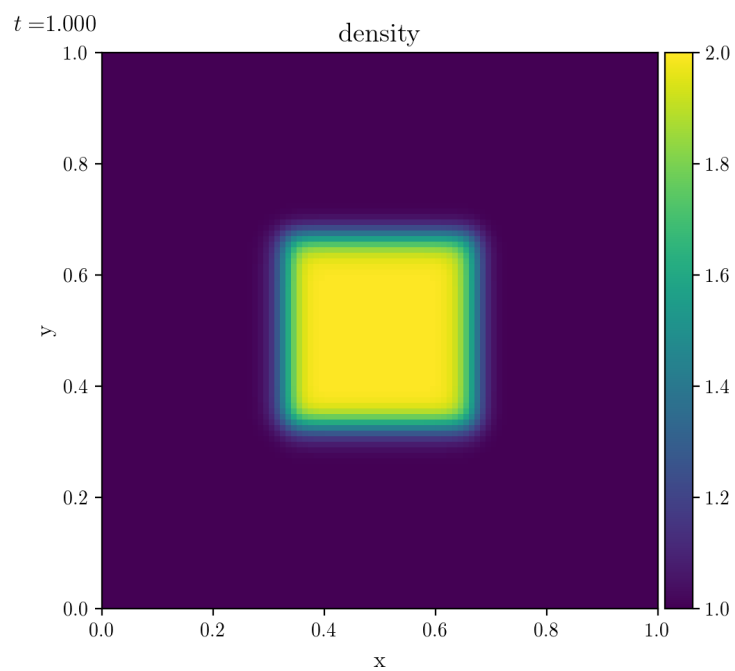


Figure 40: Van Leer Limiter. Obtained result 2D