

This staggering of the variables, results in different control volumes for the u - and v - momentum equations and the continuity equation.

The main benefit of the staggered grid over collocated grid, is that, unlike the collocated grid, the staggered grid does not results in the decoupling of the pressure and velocity, leading to the checkerboard problem.

交替网格：madariage (1976) 提出，优点是明显提高数值模拟的计算精度和收敛速度。