

$$u = u - \Delta t \text{diag} \left\{ \frac{1}{\rho} \right\}_x \mathbf{G}_x \mathbf{p}; \quad v = v - \Delta t \text{diag} \left\{ \frac{1}{\rho} \right\}_y \mathbf{G}_y \mathbf{p}; \quad w = w - \Delta t \text{diag} \left\{ \frac{1}{\rho} \right\}_z \mathbf{G}_z \mathbf{p}$$