


Westward Phase Propagation

 $u_{\text{north}} = -\frac{g}{f(y+\delta y)} \frac{\partial \eta}{\partial y} < u_{\text{south}}$

Convergence of fluid

$$\therefore \frac{\partial h}{\partial t} > 0$$

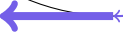
Divergence of fluid

$$\therefore \frac{\partial h}{\partial t} < 0$$

High η

Medium η

Low η

 $u_{\text{south}} = -\frac{g}{f(y)} \frac{\partial \eta}{\partial y} > u_{\text{north}}$