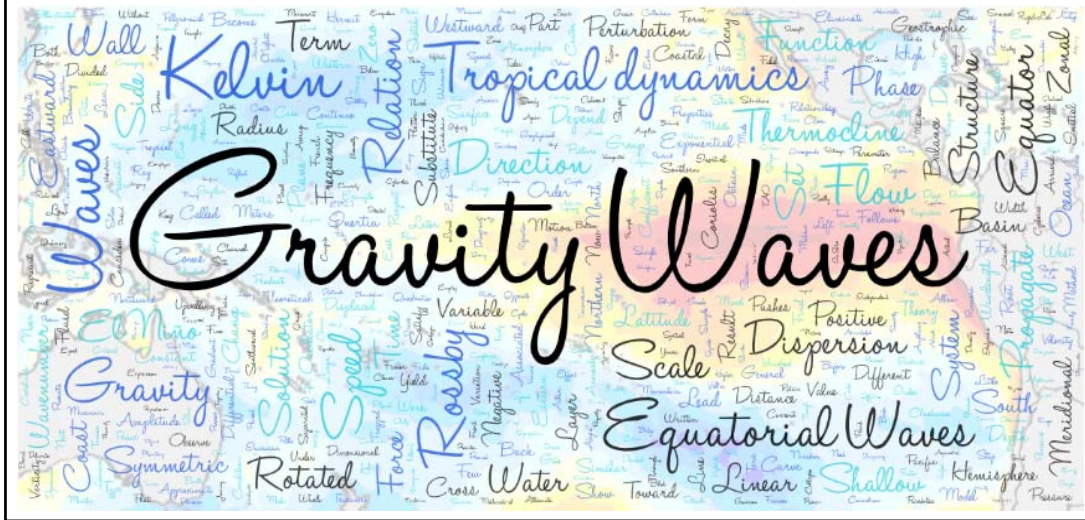


Waves properties



Waves properties and barotropic instabilities

Question 5

True or False ?

- a) Equatorial Kelvin waves propagate westwards.
- b) Equatorial wave structures that are symmetric in u are antisymmetric in v .
- c) Long equatorial Rossby waves propagate faster than equatorial Kelvin waves.
- d) Long equatorial Kelvin waves propagate faster than short equatorial Kelvin waves.
- e) Equatorial waves have wider meridional extent when the thermocline is deeper.
- f) Barotropic Rossby waves can grow exponentially if the background flow has a maximum in absolute vorticity.
- g) Barotropic Rossby waves can grow exponentially if the background flow has a minimum in absolute vorticity.
- h) Barotropic Rossby waves cannot grow exponentially if the zonal flow everywhere has the opposite sign to the meridional gradient of absolute vorticity.