

Only form in the Tropics, high temperatures are needed

Only form over oceans, the input of moisture is needed

Sea surface temperatures must be at least 27 degrees C to fuel the system

A thick layer of warm sea water is needed, around 60 m, to hold enough heat to fuel the system

Only form in late summer / early autumn, the Hurricane season, when sea surface temperatures are at their highest

CONDITIONS NEEDED FOR THE FORMATION OF A HURRICANE / TROPICAL CYCLONE / TYPHOON

Will not form between 5 degrees north or south of the equator where the Coriolis Force approaches zero. The Coriolis Force is needed to aid the cyclonic circulation of air

Form from a pre-existing system, a tropical low or easterly wave. The low aids the inflow of air at low level

Needs a high pressure system aloft to aid the outflow of air above the hurricane

They only intensify at the western ends of oceans where the atmosphere is more unstable and rapid uplift can occur

Need little or no vertical wind shear which would disrupt the vertical organisation and structure