

Long-term changes of typhoon-related ocean condition: South China Sea vs. tropical northwest Pacific Ocean

*Tzu-Ling Chiang¹

1. National Taiwan Normal University

The ocean condition has been proposed to play a key role in the activity of typhoon. Effect of global warming on ocean variability differs from place to place. Via the air-sea interaction, the climate-related oceanic changes can in turn affect the formation and development of typhoon. The ocean characteristics on both sides of the Luzon Strait are quite different. By analyzing the underlying ocean properties relevant to typhoon's evolution (e.g. sea surface temperature and tropical cyclone heat content), this study discusses the variation of surface and subsurface oceanic condition for typhoon in the South China Sea versus tropical Northwest Pacific Ocean.

Keywords: Typhoon, Global Warming, Tropical Cyclone Heat Content