T. Mai-Han Ngo (吳梅昕)

Research Center for Environmental Changes (RCEC), Academia Sinica

No. 128, Sec. 2, Academia Rd., Nankang, Taipei, Taiwan 115

Office Tel: +886-2-2787-5859

Email: maihanngo@gate.sinica.edu.tw

EDUCATION

2016/09 – 2023/07	Ph.D. Graduate Institute of Hydrological and Oceanic Sciences, National Central University, Taiwan
2012/09 – 2015/08	M.S. Depart. of Oceanology, Meteorology, Hydrology, Faculty of Physics - Engineering Physics, Ho Chi Minh City - University of Science, Vietnam.
2007/09 – 2011/08	B.A. Depart. of Oceanology, Meteorology, Hydrology, Faculty of Physics - Engineering Physics, Ho Chi Minh City - University of Science, Vietnam.

EMPLOYMENT

2023/08 – present	Postdoctoral Research Fellows RCEC, Academia Sinica, Taiwan

RESEARCH INTEREST

Physical oceanography, Ocean model, Climate variability

RESEARCH HIGHLIGHTS

1. **Impacts of wind and current on the interannual variation of the summertime upwelling off southern Vietnam in the South China Sea:**

In this study, the Vietnamese upwelling region is separated into three sub-regions (the southern coastal region, the northern coastal region, and the offshore region) and the roles of controlling factors in each region are clarified. The variations of the upwelling intensities from 1982 to 2019 in the three sub-regions are quantified via an adaptive sea surface temperature-based upwelling index. Based on reanalysis and satellite data, impacts of wind field (including wind stress and its curl) and currents on the upwelling variation are proposed. Along the Vietnamese coastal regions, the local along-shore wind stress can produce coastal upwelling-favorable condition but is not the main factor. The enhancement of wind stress curl dipole off the southern Vietnamese coast and the southward along-shore current north of ~12°N are responsible for the

intensification of upwelling in the southern coast, but suppress the development of upwelling in the northern coast. In the offshore region, the well-developed double of oceanic gyre is the essential condition and the change of cyclonic gyre to the north of the jet plays a more important role.

PUBLICATIONS (*: corresponding author)

Ngo, M.-H., Hsin, Y.-C*. (2021). Impacts of wind and current on the interannual variation of the summertime upwelling off southern Vietnam in the South China Sea. Journal of Geophysical Research: Oceans, 126, e2020JC016892. https://doi.org/10.1029/2020JC016892