

Kevin Christopher B. Cordoviz
2008-00006
MS Meteorology

Gerry Bagtasa, PhD
Thesis Adviser
Associate Professor

**ON THE LONG-TERM CHANGES OF THE WEST PACIFIC SUBTROPICAL HIGH AND ITS IMPACT
ON LAND FALLING TROPICAL CYCLONES IN THE PHILIPPINES DURING NORTHEAST
MONSOON SEASON.**

ABSTRACT

The Western Pacific Subtropical High (WPSH) is a major component to the climate of East and Southeast Asia. Various studies have shown that WPSH variability is tied to the climate variability in the region. In particular, the WPSH influences the variability of tropical cyclones (TC) making landfall in the region. Studies have linked the WPSH to atmospheric, and oceanographic drivers for its variability, such as sea surface temperature, as a means to improve rainfall, and TC track prediction. While many studies focused on the influence of the WPSH on the East Asian climate, none have made studies on how WPSH influences the Philippine climate. In the Philippine context, there have been observed changes to the climatological trends of TC tracks passing through the Philippine Area of Responsibility (PAR), particularly the increasing frequency of TCs making landfall in Visayas and Mindanao during the Northeast Monsoon (Amihan) period. This proposed study aims to determine the impacts of WPSH variability and long-term changes on TC track variability affecting the Philippines. It is the goal of this study to aid in the improvement of TC track forecasting in the PAR during Amihan season.

Keywords: West Pacific Subtropical High, tropical cyclone tracks, northeast monsoon, amihan