The Comparison of Typhoon Track Forecast

using Dynamical Initialization Scheme-installed WRF

# HYEONJIN SHIN, WOOJEONG LEE, KIRYONG KANG,AND WON-TAE YUN

*National Typhoon Center (NTC) / Korea Meteorological Administration (KMA)*

The National Typhoon Center of Korea Meteorological Administration has operated the Weather and Research Forecast model for typhoon forecast (called TWRF) which includes the Geophysical Fluid Dynamics Laboratory scheme since 2009. To improve typhoon track forecast of TWRF, the impact of Dynamical Initialization(DI) scheme on the track of landed typhoons was investigated. The effect of DI scheme was analyzed by a comparison with forecasted track by these modified models. The typhoon cases selected for this study were Khanun (1207), Tembin (1214) and Sanba (1216). Tembin (1214) accompanied fujiwhara effect and Sanba (1216) left huge property damage to Korea Peninsula. Tembin (1214) and Sanba (1216) ranked 4th and 7th, respectively in damage rank. Track forecasting of landing typhoon is more important because it is directly related to disaster prevention and damage. Typhoon tracks were evaluated by using along- and cross track error. Track error by intensity change before and after landfall and relationship between intensity errors and track errors will be examined too. And difference in these characteristics will be analyzed.