Large-Scale Surface Air Temperature Bias in Summer over the CONUS in the UFS Prototype 8

◎ 2024. 5. 2. (Thu), 16: 00~17:15

◎ Bldg.110 Rm. N101

Speaker

Nakbin Choi

Department of Atmospheric, Oceanic and Earth Sciences, George Mason University

Abstract

This study examined the sub-seasonal variability of surface air temperature bias over the Contiguous United States (CONUS) in the UFS P8. Using empirical orthogonal function (EOF) analysis, an east-west dipole surface air temperature bias pattern is separated in the summer. This bias pattern significantly correlates with the Rossby waves forced from the tropical Central Pacific. First, the bias in convective activity over the central Tropical Pacific can enhance the bias pattern. Second, the Rossby waves are not well reproduced in the UFS P8, which could be related to the biases in the subtropical jet over the North Pacific.