

Refractivity Distributions over the Kanto Plain Obtained by Dual-polarization Radar

*Hiromu Seko¹, Eiichi Sato¹, Hiroshi Yamauchi²

1. Meteorological Research Institute, 2. Japan Meteorological Agency

Temperature and water vapor near the surface play crucial roles for the generation of convection cells. However, their variations just before the generations of convection cells still are not understood completely. In this study the temporal variations of refractivity index were obtained by MRI dual-polarization Doppler radar. The features of temperature and water vapor including generation period of convection cells will be shown in this presentation. On 19th August 2017, the sea breeze invaded from Kashima-Nada and the refractivity increased along the front of the sea breeze. The scattered weak echoes that appeared around the front seem to be related with the increase of refractivity. These are the features near the surface. The comparison with other data such as GNSS PWV will be also presented.

Keywords: Observation method, Doppler radar, Refractivity index