



The two nested domains, namely domain d01 (9 km × 9 km) and domain d02 (1.8 km × 1.8 km) for WRF model simulations are shown with black rectangular boxes

Parameter	Description
Initial and boundary data	ERA5 reanalysis
Temporal interval of boundary data	6 h
Grid size	Domain 1: (146*151) * 50 Domain 2: (226*231) * 50
Horizontal resolution	Domain 1: 9 km Domain 2: 1.8 km
Nesting	One way
Vertical levels	50
Time step	15 s
Land Use and Land Cover	USGS data updates using AWiFS
Topographic data	GMTED2010
Microphysics	Thompson scheme
PBL scheme	YSU scheme
Cumulus parameterization	Kain-Fritsch scheme
Shortwave radiation	Dudhia scheme
Longwave radiation	RRTM scheme
Land surface model	Noah-MP land surface model
Surface-layer	Revised MM5 scheme