



One of the largest civil engineering in Japan.

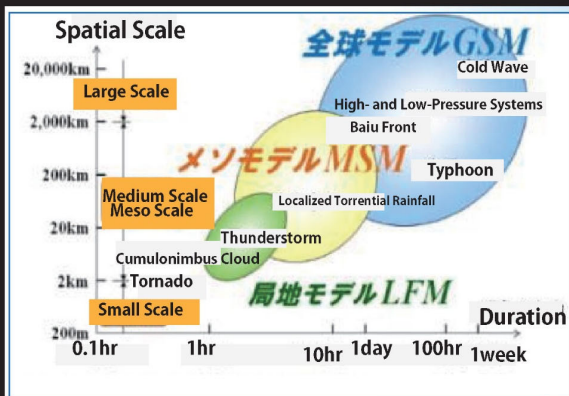
NEWJEC Inc. is an engineering and consulting firm, established in 1963 as part of the Kansai Electric Power Group. We operate in 68 countries across Southeast Asia, Africa, the Middle East, and Central and South America, leveraging our extensive experience and knowledge. Our team of professional engineers specializes in roads, dams, renewable energies, architecture, electronic facilities, and water infrastructure.

Company Name	NEWJEC Inc.
Established	21st September, 1963
Business	Civil Engineering Consultancy
Group Companies	Kansai Electric Power Group
Capital	200 million yen
Sales	18 billion (2025 result)
Employees	921 (as of the first of April, 2026)

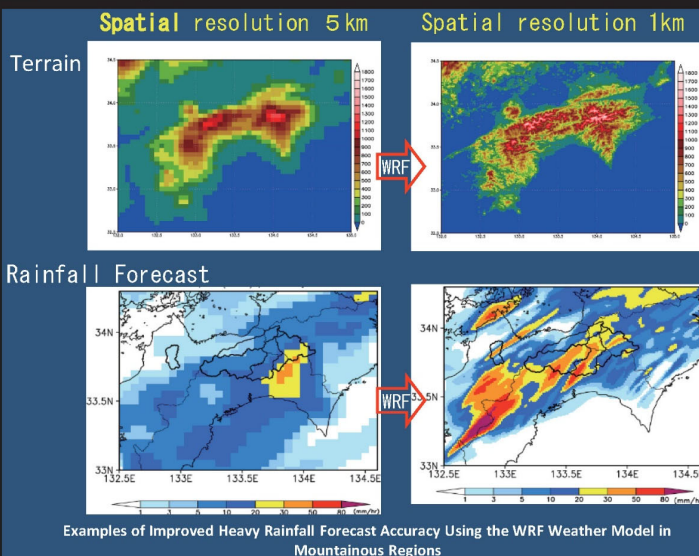
Rainfall Forecasting Using the WRF Model

◆ The Japan Meteorological Agency (JMA) provides rainfall forecast products derived from numerical weather prediction models, including the Global Spectral Model (GSM), Meso-Scale Model (MSM), and Local Forecast Model (LFM).

◆ By using the Weather Research and Forecasting (WRF) Model with a finer mesh resolution, terrain can be represented more accurately. Furthermore, by performing high-resolution reanalysis based on input meteorological data, the accuracy of rainfall forecasting can be significantly improved.



WRF (Weather Research and Forecasting Model) is a next-generation numerical weather prediction model developed through a collaborative effort led by the National Center for Atmospheric Research (NCAR), the National Centers for Environmental Prediction (NCEP), the National Oceanic and Atmospheric Administration (NOAA/FSL), and the Air Force Weather Agency (AFWA). It was designed to support both operational weather forecasting and advanced atmospheric research.



One of the defining characteristics of rainfall in mountainous regions is the occurrence of localized heavy rainfall caused by steep terrain and deep valleys. By applying the Weather Research and Forecasting (WRF) Model with a 1-km terrain resolution, the spatial distribution of intense rainfall associated with complex topography can be accurately predicted before the onset of precipitation.

◆ By using the Weather Research and Forecasting (WRF) Model, the accuracy of heavy rainfall forecasting can be improved by more accurately representing the complex terrain of mountainous sediment disaster (sabo) areas.

River Flood Immersive Experience System



◆ Provides an immersive and realistic visual experience using VR technology.

◆ Recreates real-world landscapes in a virtual environment using point cloud data acquired with LIDAR technology.

◆ Helps users clearly visualize flood damage during river flooding and better understand the associated disaster risks. Allows users to experience evacuation to designated shelters and confirm evacuation routes.

◆ Enables users to experience the difficulty of moving after inundation, reinforcing the importance of early evacuation.

