The maps are constructed in two stages.

1. **Frequency analysis**

In the first stage, an extreme value distribution is fitted to the measured annual maximum wind speeds from each station. This fitted model is used to estimate the return values of interest (2-year, 5-year, 10-year, 20-year, 50-year and 100-year). The extreme value distribution model used is the Generalized Extreme Value (GEV) distribution.

For storm rainfall analyses, Gumbel extreme value distribution model is used for various durations (5-min, 10-min, 15-min, 30-min, 1-hr, 3-hr, 6-hr, 12-hr, 18-hr and 24-hr).

1. **Spatial interpolation**

Kriging interpolation technique is applied in this work.

Kriging is a geostatistical procedure to estimate the value of a variable of interest at an unobserved location from observations of its value at nearby locations.

**Storm rainfall (Intensity-Duration-Frequency analysis) output file naming nomenclature:**

RR\_***dur***T***rp***.tif

***dur*** is the duration (5min, 10min, 15min, 30min, 1hr, 3hr, 6hr, 12hr, 18hr, 24hr)

***rp*** is the return period in years (2, 5, 10, 20, 50, 100)