

Select a Target Station

Calculate Correlation Coefficients

Correlation coefficients are calculated between the data of the target and the neighboring stations for all the climatological variables.

$j = 1$

Loop A

Loop over all climatological variables (Nvar). Variables for which there is too few data are ignored.

$i = 1$

Loop B

Loop over all missing value for the  $j$ th climatological variable.

Select Neighboring Stations

Stations are selected in descending order of their correlation coefficient, up to the number maximal defined in the method parameters. Stations not respecting the distance and cutoff criteria are ignored.

Check if there is neighboring stations with data for the day corresponding to the  $i$ th missing value in the time series of the  $j$ th climatological variable

Stations with data > 0 ?

Do Nothing.  
(a "nan" value is kept)

YES

Load MLR Model Coefficients from Memory

First time this station sequence is encountered?

YES

Calculate MLR Model Coefficients

Estimate Missing Value for that day

NO

$i = i + 1$

YES

NO

$j = j + 1$

$j = Nvar^{**}$

YES

Save the Gapless Dataset

