## Weather services

In this section we can chose a location and get different weather related values from our software. It contains following steps:

- 1. Selecting a location
- 2.Enabling weather services
- 3. Selecting the proper station

We need to select a loction of which we want to pull the weather datas. If the location is not present in the drop down selection list we can create a new location and then select the newly created location. To create new location select "add new location" and then give country name, state name(if not present leave blank), city name, street name and then zip code then the program will automatically evaluate latitude(lat), longitude(long.) and elevation(elev.) and then press ok to add the values. After you add the location will appear in the the drop down list box select the location then enable service.

To enable weather services click on the enable button before this make sure you are connected to internet .It will automatically pull the 5 nearest station form the current location and place them in order of increasing distance. Then select the station from where you want to pull the data. The best option will be the first one as it will be the nearest option for the current location. How ever in case the first option is not working or not mandetory you can chose other options as well. After this the program will automatically update the datas in the database at certain interal. To dissable the weather service you can uncheck enable checkbox and it will dissable the weather service .

## **Heat map**

Heat map is the counting of how many times a patter is occured. Based on the frequency the particular pattern is given a color and presented on chart with an indicator . In this application we used past data to generate the pattern for the heat map. Then the map is plotted in different color formate.

## **Export Data**

Export data helps you export the data stored in database in different format

We currently have three formats excel, csv, and txt

To export the data select the location of which you want to export the data and select time duration between which you want the data. After that hit export and it will let you save the exported data. Save it and you can view the stored data.

## Psychometric calculator

It helps you calibrate the enthalpy value for given DBT(dry bulb temperature) and humidity. The pressure value is taken as standard value for earth ie 1013 .