

Week7-mollaiyan-mohammadjavad

Sunday, November 17, 2019

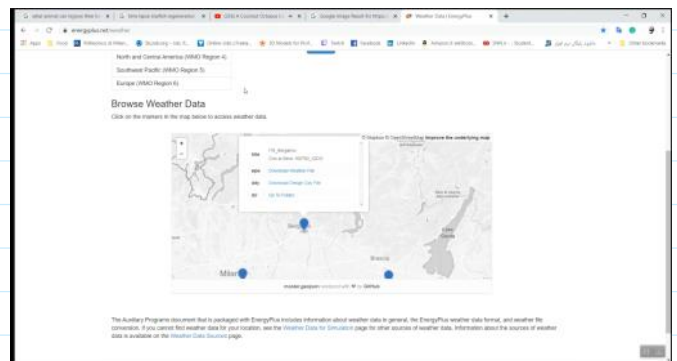
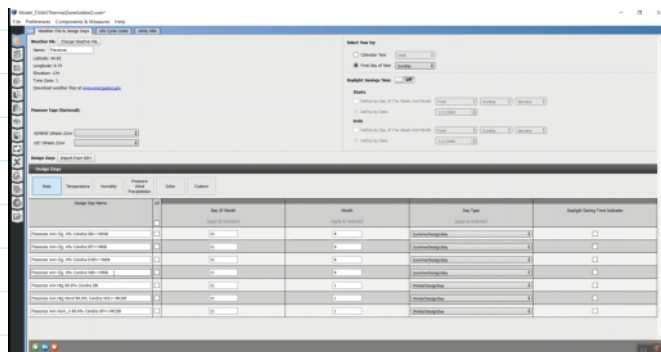
Solar radiation is generally electromagnetic energy emitted by sun and we calculate the density of that as yearly average in 2 side of the atmosphere one out of it and one at earth surface .

When we talk about solar radiation on surface of the earth we should know the atmosphere modified it in 2 way in spectral distribution and total irradiance in easy term the atmosphere block some of the total radiation and rest of it that cross have different output compare to the main source .

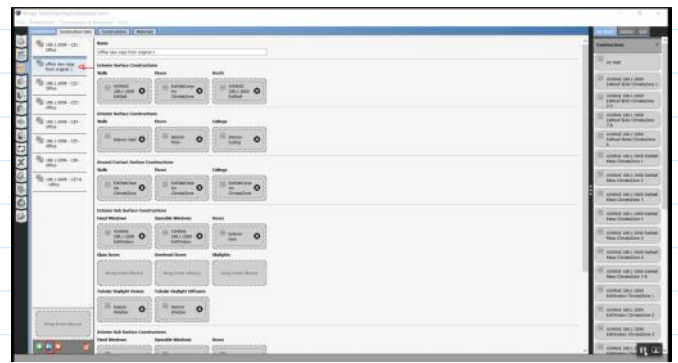
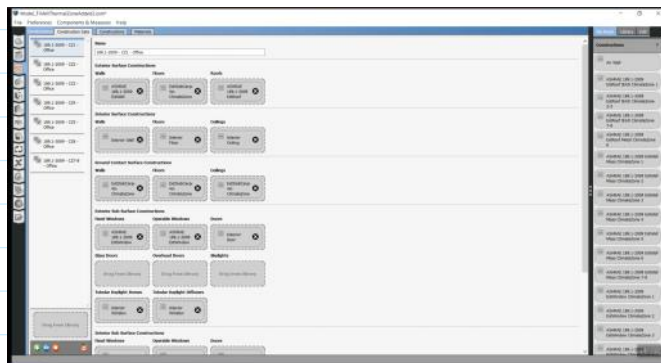
When the radiation scattering by atmosphere it first make albedo and next in next level it create diffuse irradiance .

In easy term atmosphere change the wavelength too .

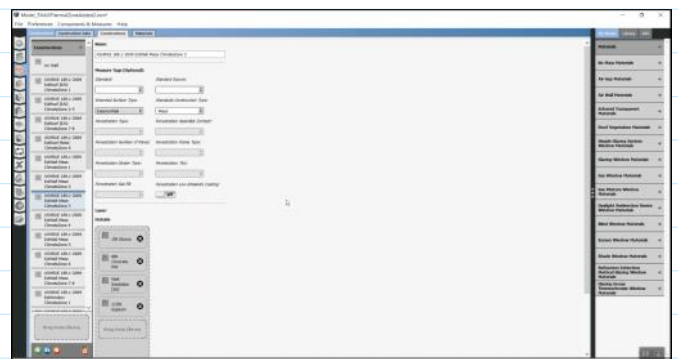
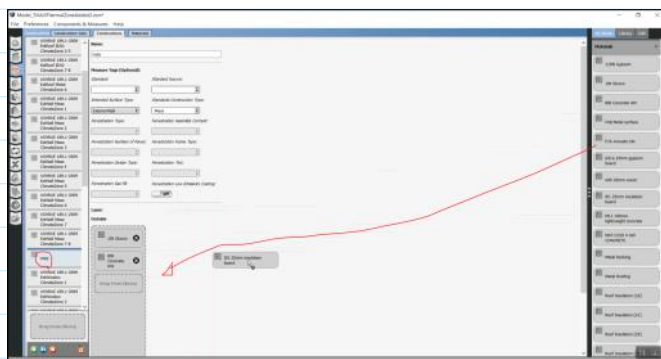
Part 2:



First we need to open our project and insert our data if we need more weather data we can download them from energyplus.net

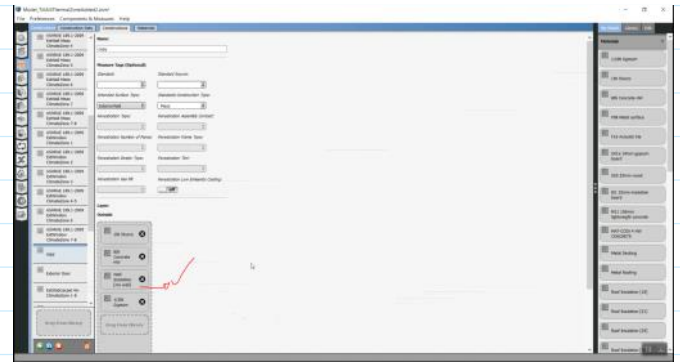
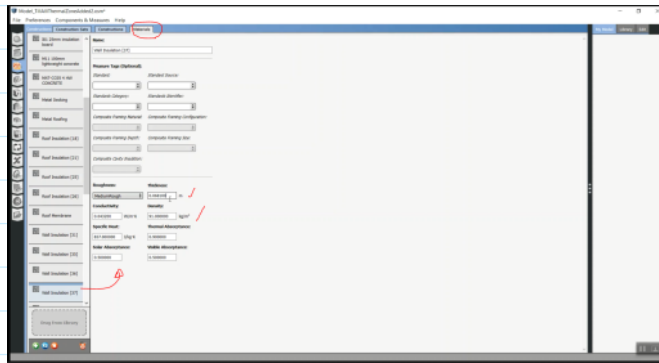


The next step is modifying the construction part of the project which contain all data of materials of the walls and floor and ceiling . To do that we need copy of each time of items just to not lose the old data

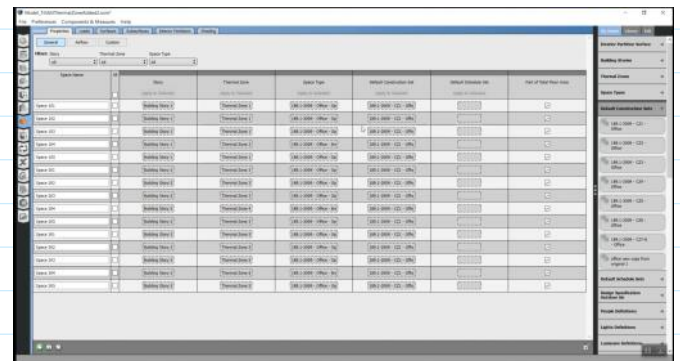
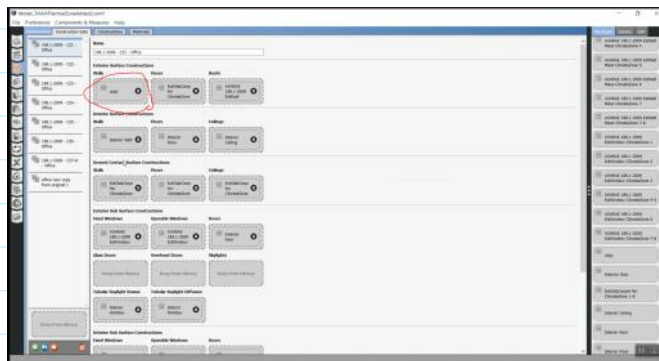


Next in construction tab which is second tab we can find each wall or items from the building and

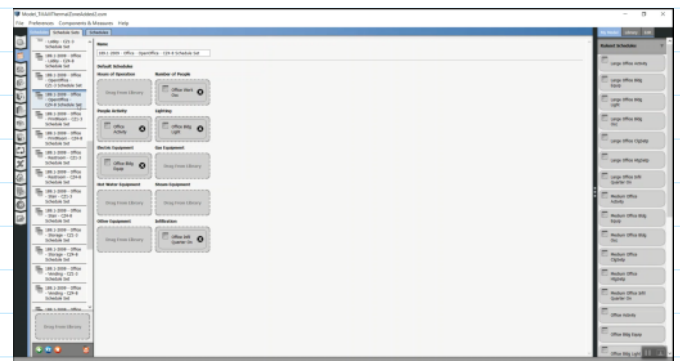
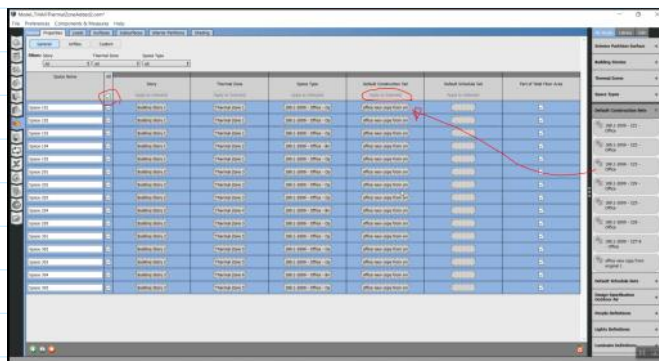
changing the layers of it . It is better to get copy of that and work on the copy one . The order is important because when we put layers it set them from first one to the last one by order of putting them in table .



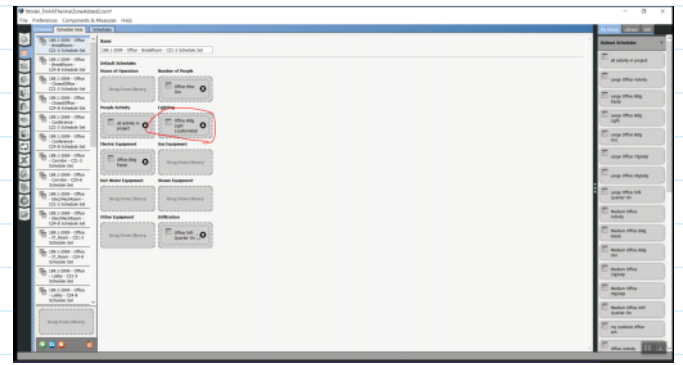
In next step we can even modify the layers and turn them into what we want and then we can go back to construction tab and set them as we like .



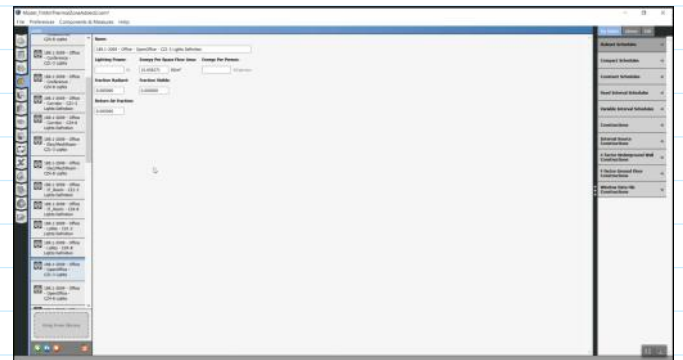
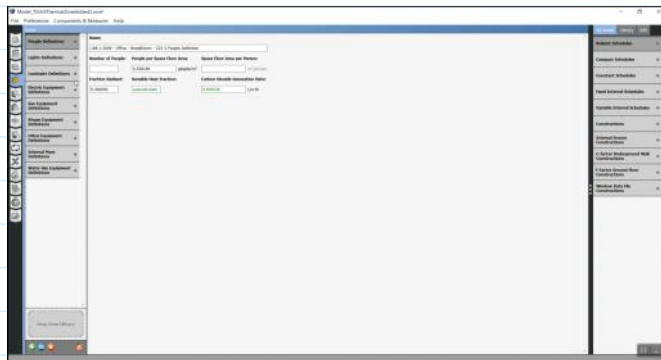
In last part we come back to construction set tab and put the construction layer we made in right space of the building



In space tab we can set our type of construction set we made and apply them to all spaces . next is schedule which is similar to construction and we can modify each parameter of it .



In schedule set tab we can put what ever schedule we made or modified and use them as resource for our project .



In the last part which is load we can customize all the load we have like units of each parameter and how they should be like how many people per meter in each space and how much light we need for each spaces .