

Task-1

Solar radiation is electromagnetic energy emitted by the sun.

when the sun is radiating energy, some of it transmitted while rest of it absorbed or scattered.

Direct solar radiation or direct iridescence is the radiation that maintained the direction of incidence.

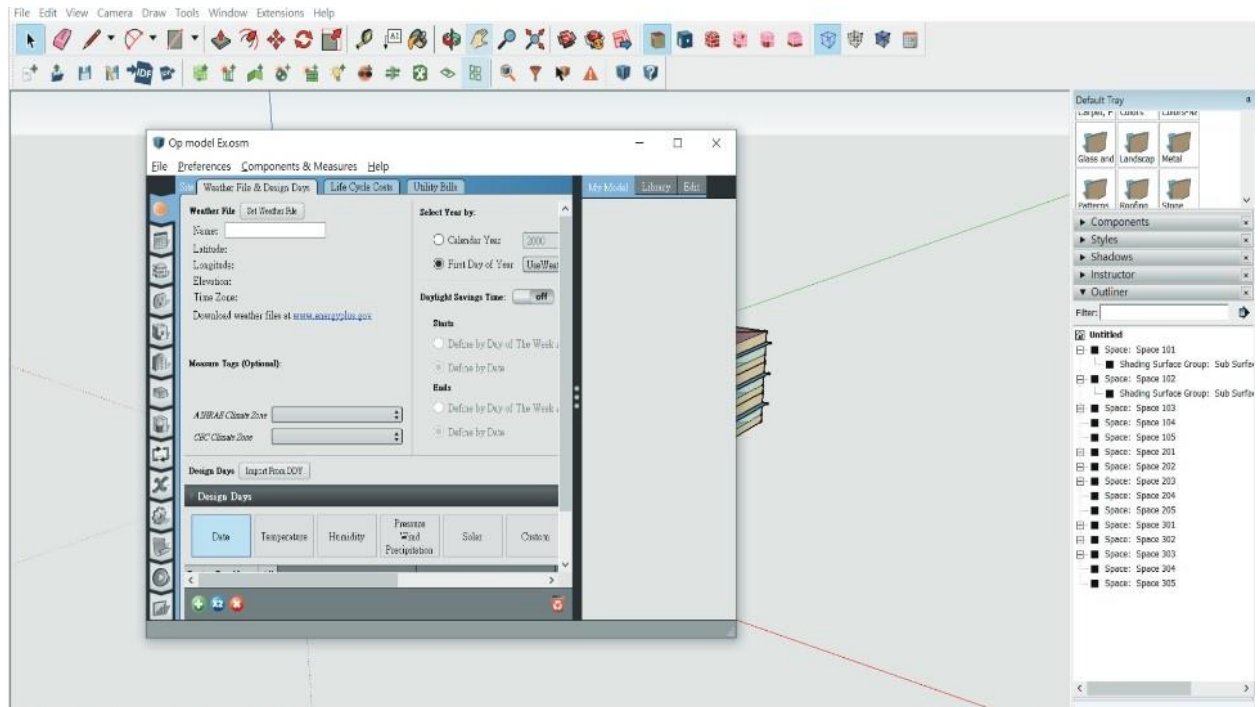
Solar radiation absorption is due to some atmospheric components which absorb the incident radiation in specific wavelength which modify energetic spectrum.

Solar radiation available on earth surface for conversion in other energy forms such as electricity depends on: sun position, the weather condition, the site sea level, daylight hours.

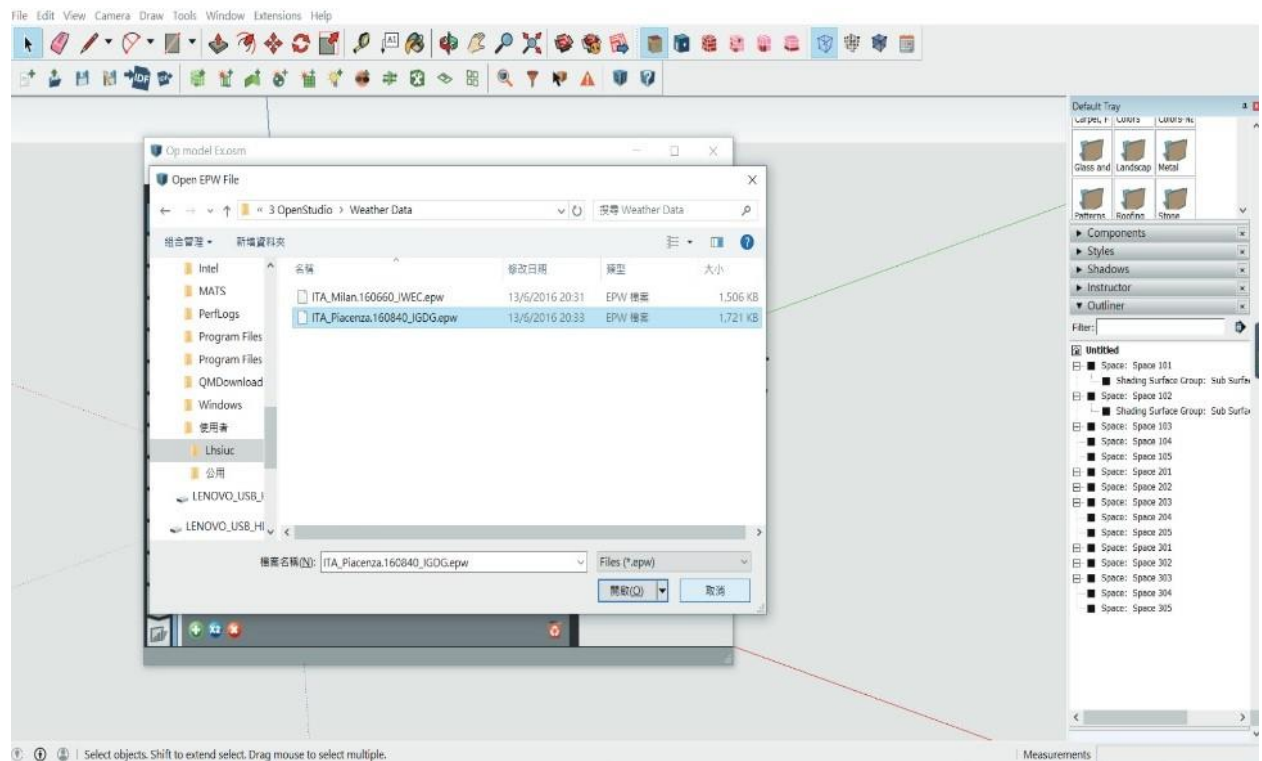
We can use pyranometer to measure the total solar energy which is direct or diffused.

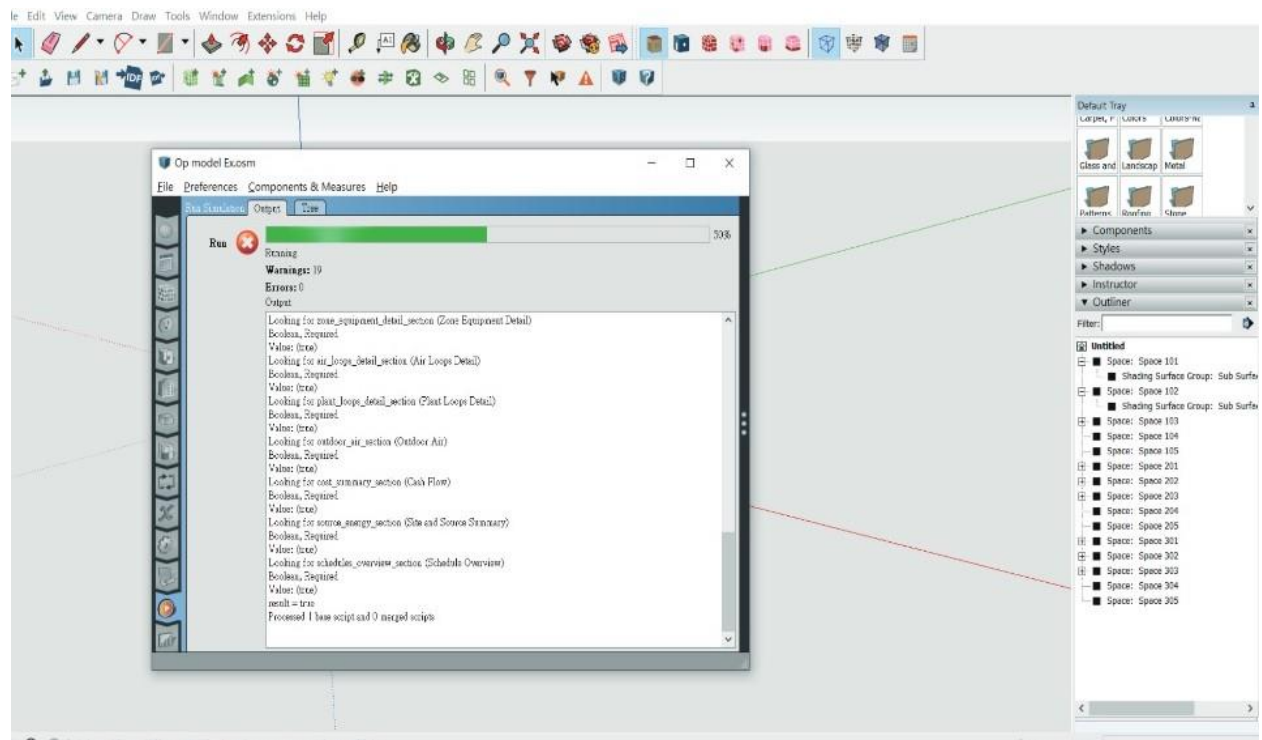
The maximum yearly average solar radiation density is the solar constant which is the solar irradiance. It's value is 1367 w/m^2

Task-2

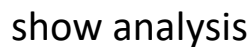


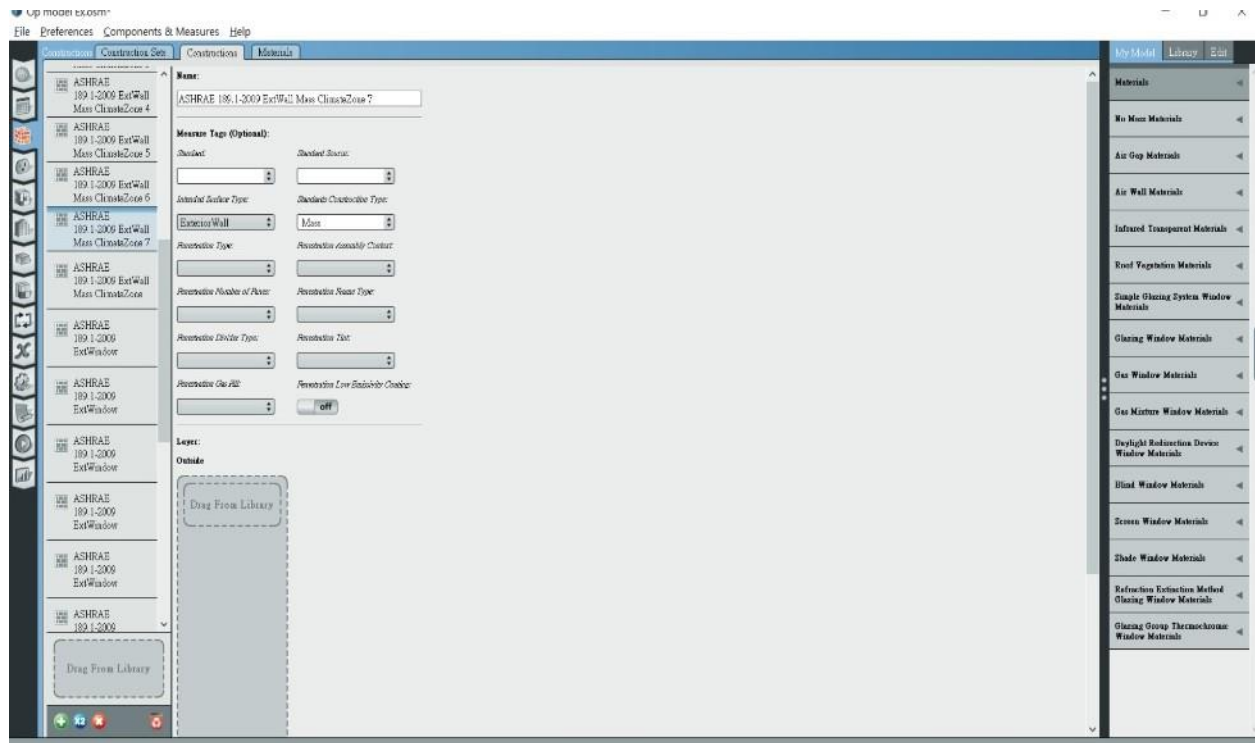
Adding weather data



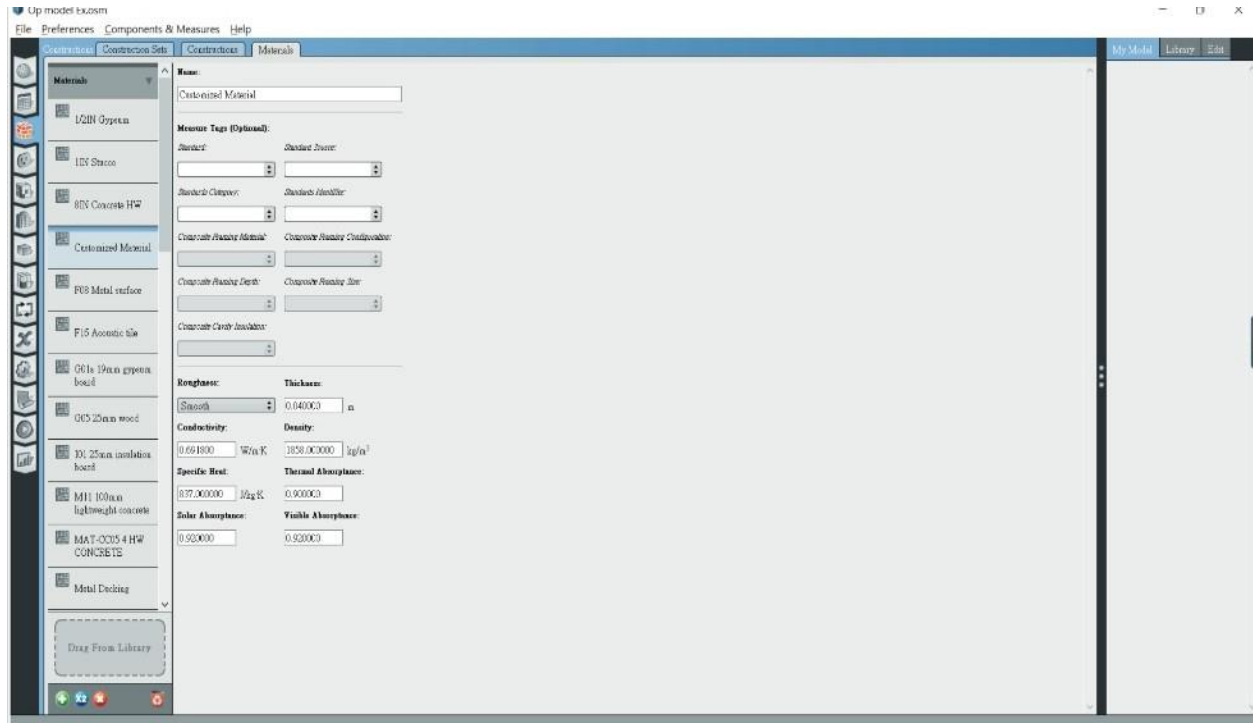


Run the analysis





Customizing the walls



Customizing materials



Apply customized walls to construction