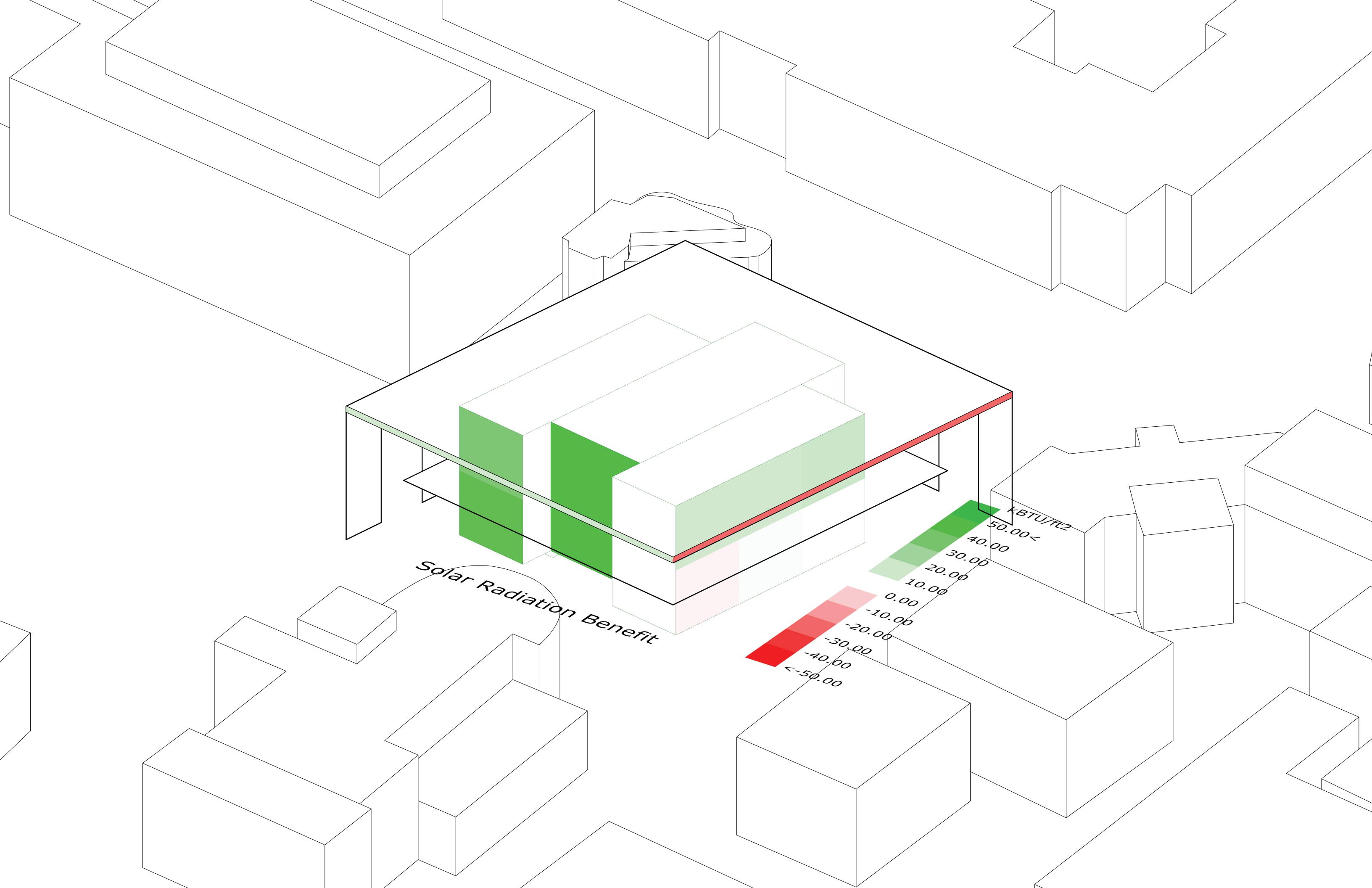
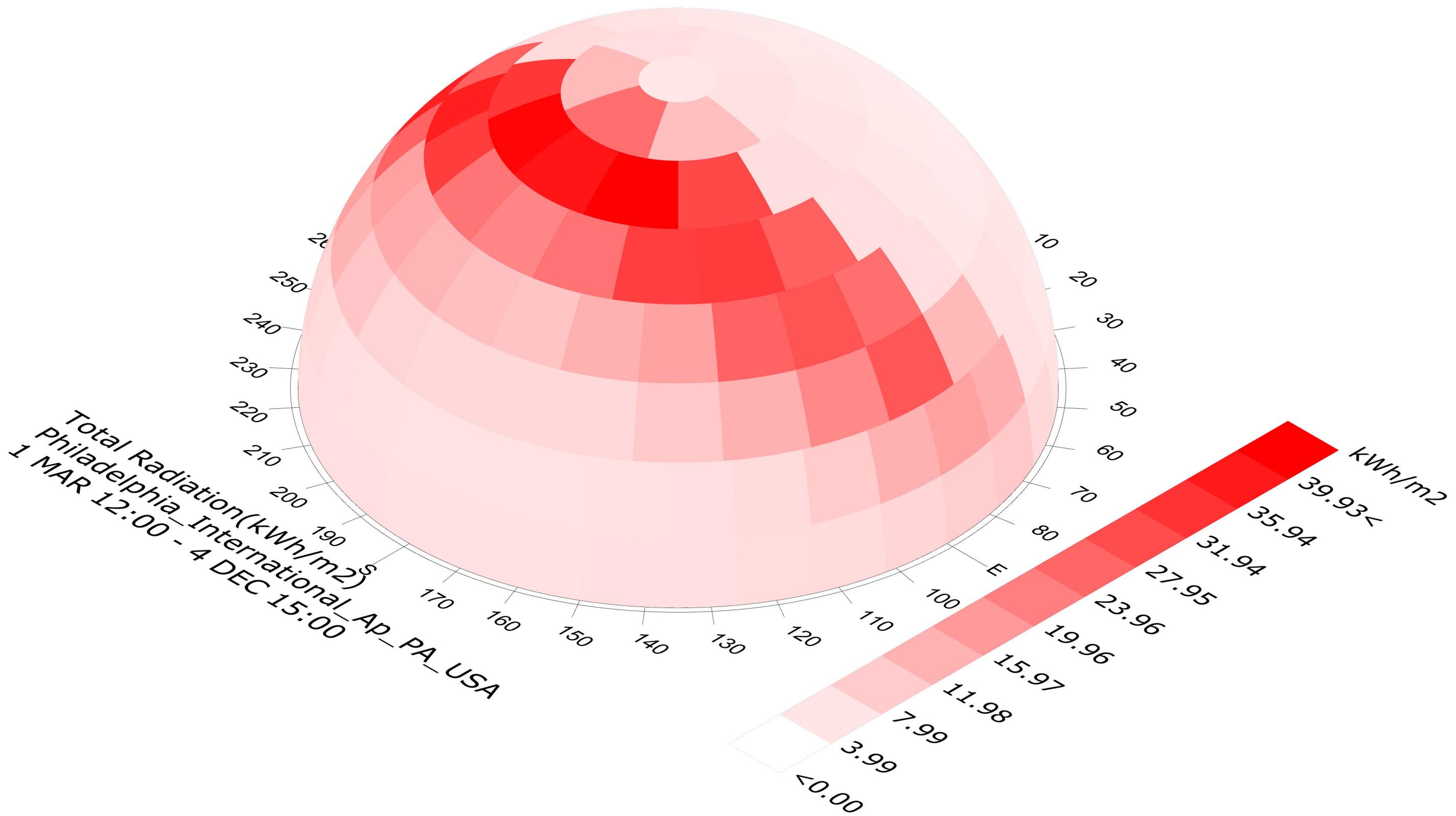


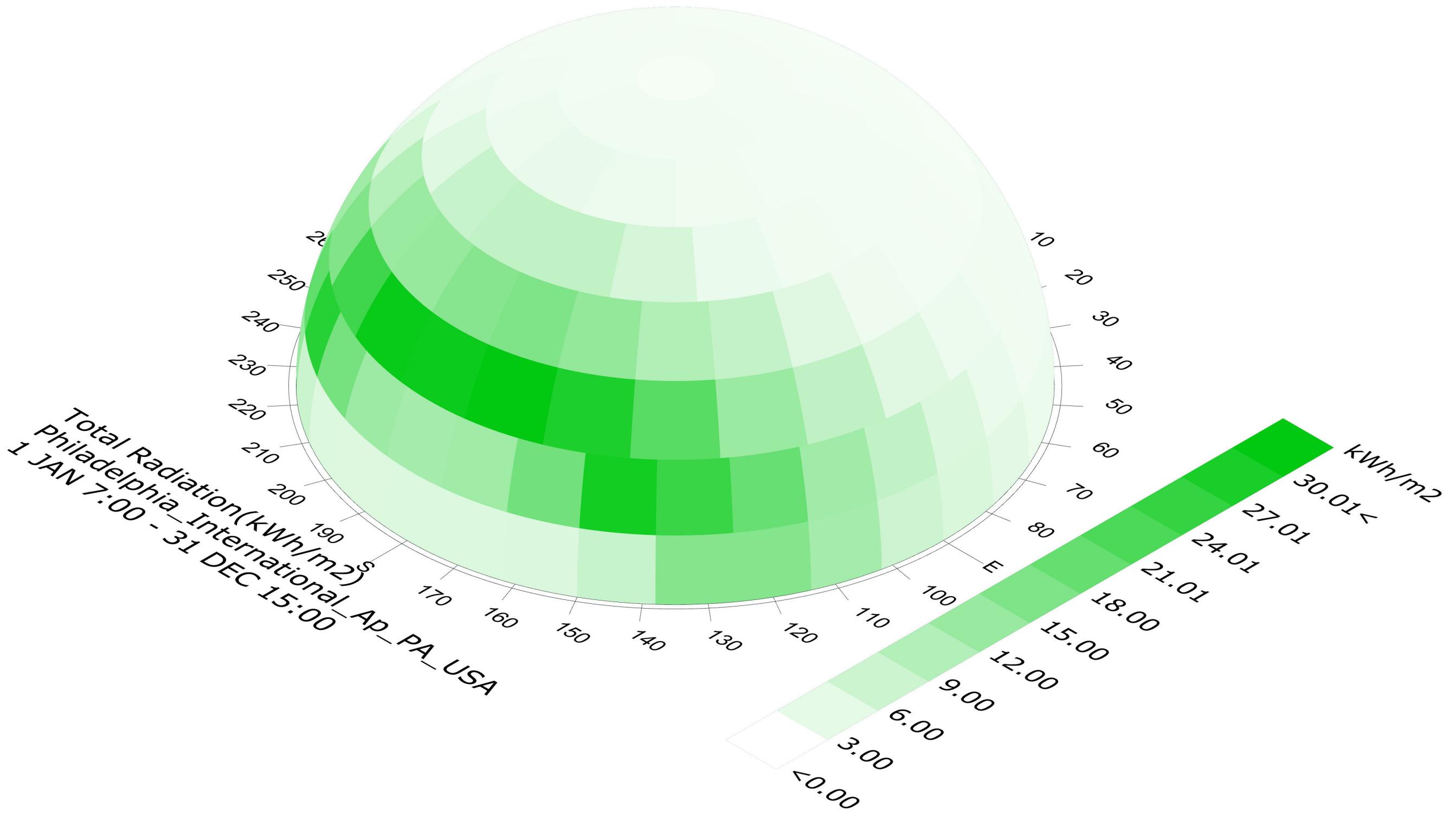
ENVIRONMENTAL SYSTEMS I

ASSIGNMENT 07

Ting Su







Analysis

After analysis the data from the script, I find that most of the harmful solar radiation come from west direction, thus I think to make a relatively larger volume on roof to block west side solar radiation, also the roof volume can be regarded as a shading device. Moreover, the west and north side have strong harmful solar radiation, thus, I think it'll be a good to provide vertical shading as well.

The overall strategies is to block solar radiation from west and north direction.

As can be illustrated in Figure 1, the solar radiation was acceptable. This massing and shading system can prevent most harmful solar radionation

Net solar benifit: -612 Bulding area: 3720 m²