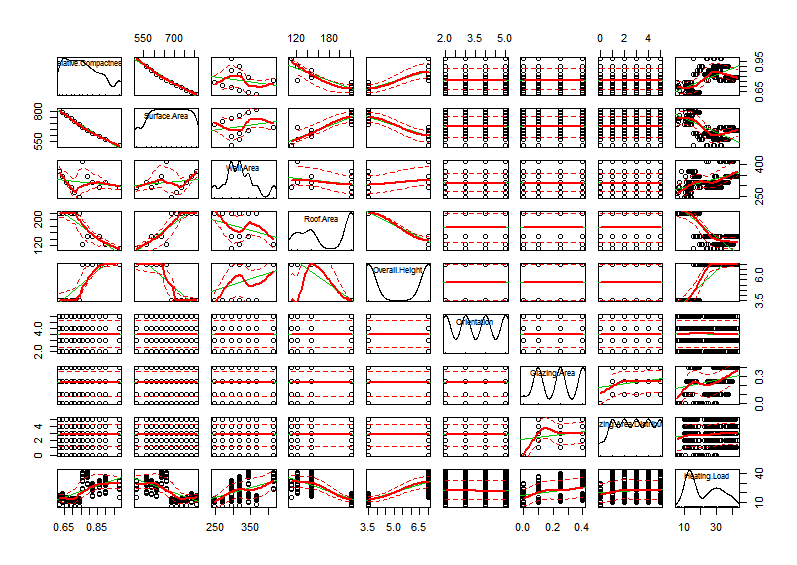
# UW Data Science – Methods of Data Analysis Dave Wine 8430191

## Summary

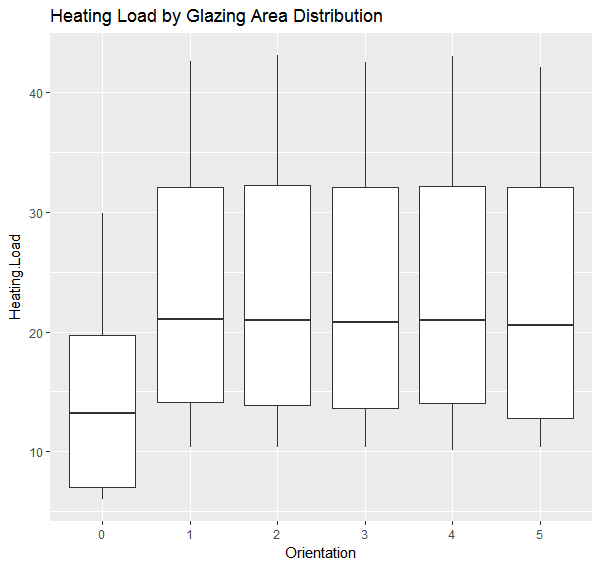
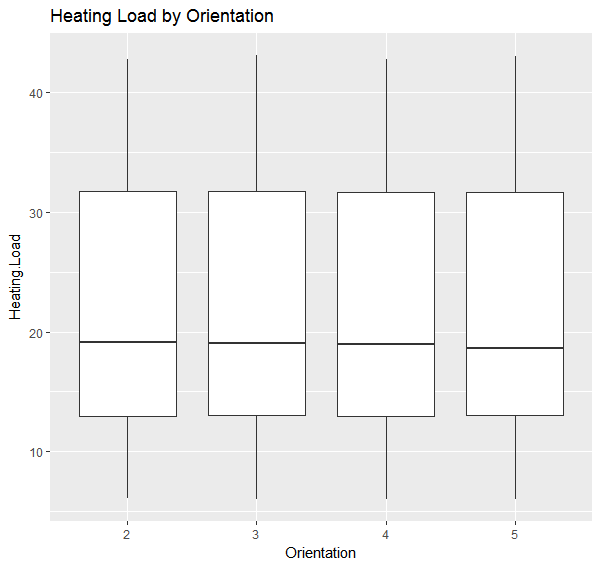
## Analysis

## Observations - Heating Load

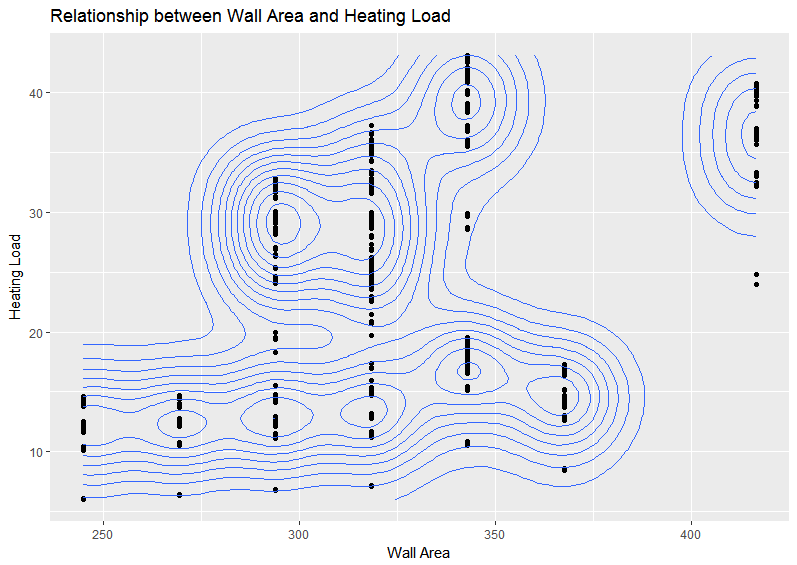
* Looked at overall correlations:



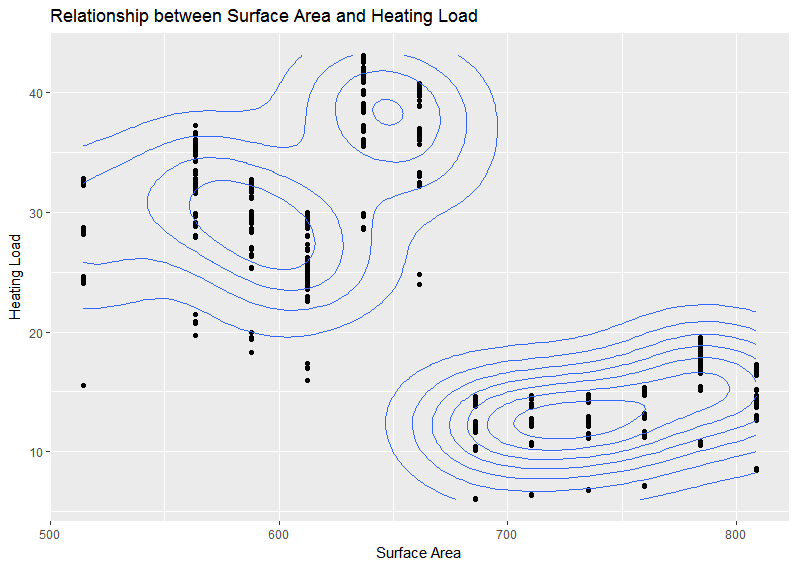
* Heating Load is obviously bimodal.
* Heating Load does not appear to depend strongly on Orientation or Glazing Area Distribution.



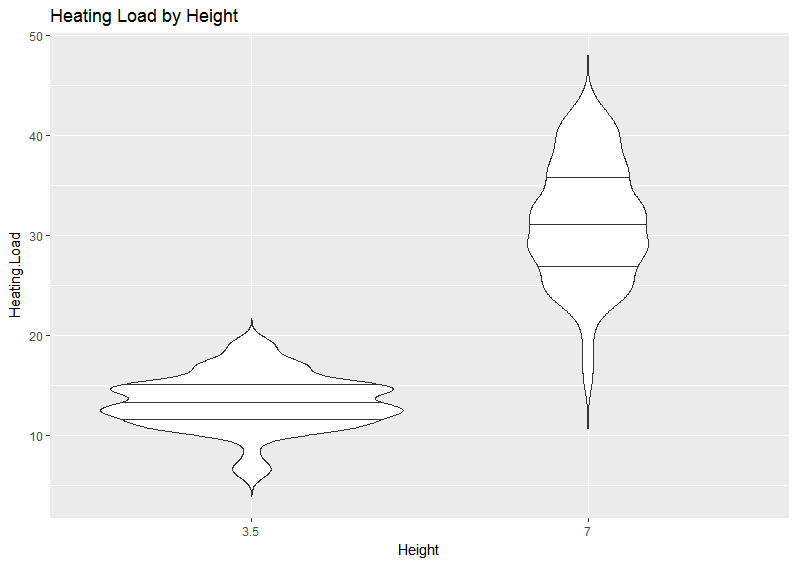
* Affected slightly by Glazing Area but it’s not the only factor.
* Some positive correlation with Overall Height, and negative correlation with Roof Area. Both are not surprising – tall buildings have more overall area, and tall thin buildings (low Roof Area) will not hold heat as well.
* Another unsurprising relationship is that relative compactness is inversely correlated to surface area
* Lots of confounding factors in Wall Area vs Heating Load



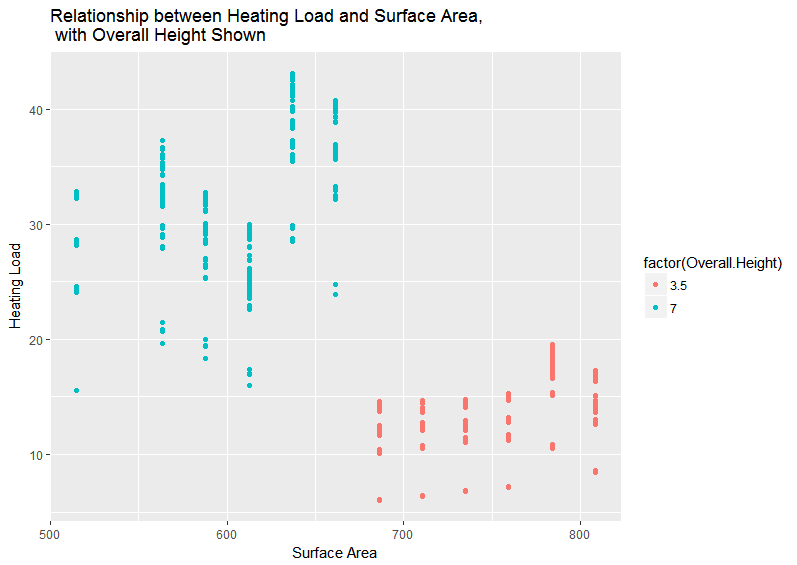
* The sum of (wall area + roof area) should be roughly equal to the surface area. Look at HL vs SA



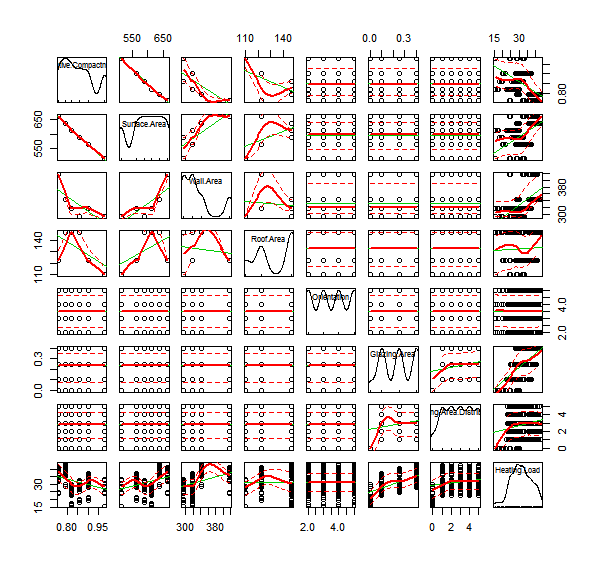
* Height is clearly important:

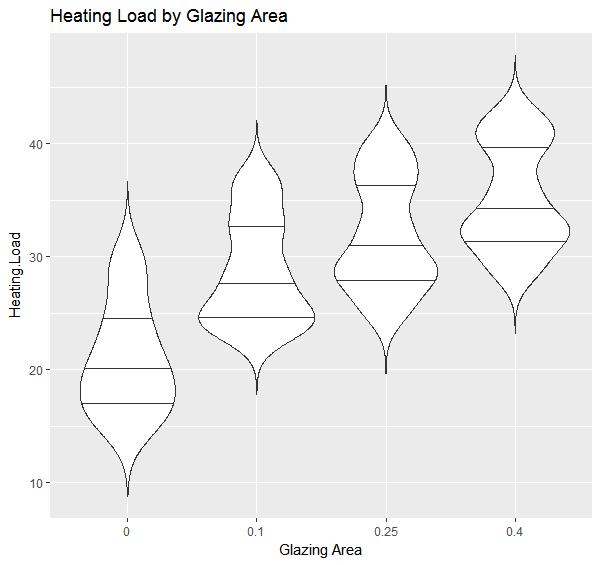


* It explains the difference in the Surface Area clusters and to a first order, the bimodality.



Look at Tall Buildings





The same is true for Cooling Load:

