

In the presented thesis we study changes of the circulation in the region North Atlantic and Europe. We express the circulation by index of the North Atlantic Oscillation. We focus on changes of the circulation during each synoptic situations. We are engaged in the relationship between the North Atlantic Oscillation and meteorological characteristics in the Czech Republic region – air temperature and wind velocity. We use correlation coefficients and focus on the each circulation types. In the last part we put brain to changes of the air temperature in the Czech Republic during chosen synoptic situations.