

Climate change effects on air quality over Central and Eastern Europe

May 21st, 2013



Moyan Brenn Berkut83@hotmail.it

Anticipated climate impacts on air quality were assessed for the Czech Republic, Poland, Hungary and Bulgaria by simulating air quality for 3 decades: 1991–2000, 2041–2050, and 2091–2100.

The impacts of the simulated climate change on the air quality are rather weak for the mid-century (2041–2050). For the end-century (2091–2100), an increase in summer mean ozone was shown and a decrease in annual mean particulate matter with a diameter $< 10 \mu\text{m}$ for all four countries. The main climate factors responsible for the projected changes were an increase in summer temperature and a decrease in summer precipitation for ozone, and an increase in winter precipitation for fine particulate matter.

Source: Juda-Rezler et al., 2012. Climate Research 53: 179–203.

Photo: Moyan Brenn (www.stckr.com)