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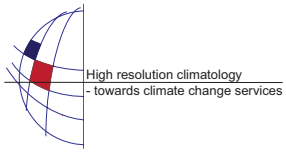

Assessment of factors responsbile for climate change and human health problems

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Weather and climate play important roles in determining patterns of air quality over multiple scales in time and space. Air quality is strongly dependent on weather and is therefore sensitive to climate change. There is growing recognition that development of optimal control strategies for key pollutants like fine particles now requires assessment of potential future climate conditions and their influence on the attainment of air quality objectives. Climate change induced by anthropogenic warming of the earth's atmosphere is a daunting problem. In addition, other air contaminants of relevance to human health, including smoke from wildfires and airborne pollens and molds, may be influenced by climate change. While further research is needed, climate change coupled with air pollutant exposures may have potentially serious adverse consequences for human health in urban and polluted regions. Climate change producing alterations in: food webs, lipid dynamics, ice and snow melt, and organic carbon cycling could result in increased PMs level in air. In this study, the focus is on the ways in which health-relevant measures of air quality, including particulate matter, and aeroallergens, may be affected by climate variability and change. The small but growing literature focusing on climate impacts on air quality, how these influences may play out in future decades, and the implications for human health is reviewed.
Keywords: Climate change, responsible factors, health effects,