

3rd International Conference on Earth Science & Climate Change

July 28-30, 2014 DoubleTree by Hilton Hotel San Francisco Airport, USA



Leiming Zhang

Environment Canada, Canada

Overview of dry and wet removal algorithms

Atmospheric pollutants can be harmful to human health by the following pathways: (1) they can be absorbed into human lung tissues during breathing, and (2) they can be transported into various terrestrial and aquatic ecosystems through dry and wet deposition processes and cause subsequent health effects when the products from these ecosystems are consumed by humans. Quantifying the amount of dry and wet deposition is critical since these deposition processes determine the pollutant species' lifetimes in air and their input to various ecosystems. Existing algorithms in chemical transport modes for dry and below-cloud removal of gaseous pollutants and size-resolved aerosols particles are reviewed. Recent developments of a bulk dry deposition scheme and a bulk and size-resolved below-cloud aerosol removal scheme will also be discussed.

Biography

Leiming Zhang is a research scientist at Environment Canada. He received his Bachelor and Master of Science degrees from Nanjing University, China and his PhD from York University, Canada. His research covers diverse areas of air quality model development and data analysis and he has published over 80 journal papers.

Leiming.Zhang@ec.gc.ca