

Eli J. Mlawer, PhD

Radiation and Climate Scientist Lead, Radiation and Climate Section Research and Development Division



Dr. Mlawer's main areas of interest include atmospheric radiative transfer, climate study, and the characterization of molecular collisional broadening. He is the lead developer of the MT_CKD water vapor continuum model and is involved in efforts to validate and improve this model based on comparisons with spectrally resolved

measurements. Dr. Mlawer also leads the team at AER that develops and maintains the LBLRTM radiative transfer model. Dr. Mlawer was the co-PI of the two Radiative Heating in Underexplored Bands Campaigns, field experiments in Barrow, Alaska, and Cerro Toco, Chile, which were organized by the DOE Atmospheric Radiation Measurement (ARM) Program, that were aimed at improving spectroscopic knowledge in water vapor bands normally opaque at the surface. Dr. Mlawer has primary responsibility for the design, implementation, and validation of RRTM (including its updated version, RRTMGP), a radiative transfer model for climate applications used by many climate and NWP models.

Dr. Mlawer's recent research has been supported by:

- NASA Orbiting Carbon Observatory
- NOAA Joint Technology Transfer Initiative program
- National Science Foundation
- NASA U.S. Participating Investigator program
- Department of Energy Earth System Model Development
- NOAA Climate Program Office
- Department of Energy Atmospheric Systems Research program

Education

- PhD, Brandeis University, Physics
- MA, Cambridge University, Physics
- BA, Cambridge University, Physics
- BA, Williams College, Astrophysics and Mathematics

Memberships

- American Geophysical Union
- HITRAN Advisory Committee

For a list of publications, see Eli Mlawer's <u>Google Scholar Profile</u>.