

Vita – David J. Raymond

Professional Preparation

- 1961 - 1965: Rensselaer Polytechnic Institute – B.S. in Physics.
- 1965 - 1970: Stanford University – Ph.D. in Physics.

Appointments

- 2016 - present: Prof. Emeritus of Physics and Research Physicist, New Mexico Institute of Mining and Technology
- 2001-2002: Sabbatical leave, Centro de Ciencias de la Atmósfera, Universidad Nacional Autónoma de México.
- 1983 - 2016: Prof. of Physics, New Mexico Institute of Mining and Technology
- 1985 - 1994: Chairman, Dept. of Physics, New Mexico Institute of Mining and Technology.
- 1979 - 1983: Assoc. Prof. of Physics, New Mexico Institute of Mining and Technology.
- 1974 - 1979: Asst. Prof. of Physics, New Mexico Institute of Mining and Technology.
- 1973 - 1974: Research Associate, New Mexico Institute of Mining Mining and Technology.
- 1970 - 1973: Assistant Meteorologist with Cloud Physics Observatory, Dept. of Meteorology, University of Hawaii, and Assistant Professor of Physics, Hilo College, Hilo, Hawaii.

Products

Five relevant publications

Raymond, D. J., and Ž. Fuchs-Stone: 2021: Emergent properties of convection in OTREC and PREDICT. *J. Geophys. Res.*, **126**, <https://doi.org/10.1029/2020JD033585>.

Fuchs-Stone, Ž., D. J. Raymond, and S. Sentić: 2020: OTREC2019: Convection over the East Pacific and Southwest Caribbean. *Geophys. Res. Letters*, **47**, <https://doi.org/10.1029/2020GL087564>.

Juračić, A., and D. J. Raymond, 2016: The effects of moist entropy and moisture budgets on tropical cyclone development. *J. Geophys. Res.*, **121**, 9458-9473.

Raymond, D. J., Ž. Fuchs, S. Gjorgjievska, S. L. Sessions, 2015: Balanced dynamics and convection in the tropical troposphere. *J. Adv. Model. Earth Syst.*, **7**, doi:10.1002/2015MS000467.

Raymond, D. J., S. Gjorgjievska, S. Sessions, and Ž. Fuchs, 2014: Tropical cyclogenesis and mid-level vorticity. *Australian Meteorological and Oceanographic Journal*, **64**, 11-25.

Five other significant publications

Raymond, D. J., and G. Kilroy, 2019: Control of convection in high-resolution simulations of tropical cyclogenesis. *J. Adv. Model. Earth Syst.*, **11**, doi10.1029/2018MS001576.

Herman, M. J., and D. J. Raymond, 2014: WTG cloud modeling with spectral decomposition of heating. *J. Adv. Model. Earth Syst.*, DOI:10.1002/2014MS000359.

Raymond, D. J., S. Sessions, A. Sobel, and Ž. Fuchs, 2009: The mechanics of gross moist stability. *J. Adv. Model. Earth Syst.*, **1**, Art. #9, 20 pp.

Raymond, D. J., C. S. Bretherton, and J. Molinari, 2006: Dynamics of the intertropical convergence zone of the East Pacific. *J. Atmos. Sci.*, **63**, 582-597.

Raymond, D. J., G. B. Raga, C. S. Bretherton, J. Molinari, C. López-Carrillo, and Ž. Fuchs, 2003: Convective forcing in the intertropical convergence zone of the eastern Pacific, *J. Atmos. Sci.*, **60**, 2064-2082.

Raymond, D. J., 2000: Thermodynamic control of tropical rainfall. *Quart. J. Roy. Meteor. Soc.*, **126**, 889-898.

Synergistic activities

- Created the Candis system for data analysis and display with the help of many graduate and undergraduate students.