

Curriculum Vita Tiruvalam N. Krishnamurti

U.S. citizen

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Recognition & Awards:

Professorial Excellence Program Award, Florida State University, April 1997

International Meteorological Organization Prize, June 1996. Awarded by the World Meteorological Organization. The award is the most prestigious international award in the field of meteorology and includes a gold medal, certificate and cash award.

U.S. CLIVAR Asian-Australian Monsoon Working Group (2000-continuing)

Science Team Member NASA LAWS (Laser Atmospheric Wind Sounder) (1991 - continuing)

Science Team Member NASA TRMM (Tropical Rainfall Measurement Mission) (1991 - continuing)

Director NOAA/FSU Cooperative Institute of Tropical Meteorology (CITM) (1993-99)

Co-Chief Editor, Monthly Weather Review (1991-1994)

Member National Academy Board on Atmosphere and Climate (1989 - 1991)

Member UCAR climate advisory (CCM) (1983 - 1987)

Florida Scientist of the Year Award (1986)

Robert O. Lawton Distinguished Professor Award (1985). The highest honor the University can confer upon its faculty.

The Carl Gustaf Rossby Research Medal (1985). The highest award of the American Meteorological Society.

Program Chairman FGGE Tropics seminar WMO (1983)

Fellow: Royal Meteorological Society and American Meteorological Society.

Councilor, American Meteorological Society, 1979-1982

The Second Half Century Award, the Charney Award (1974). The second highest award of the American Meteorological Society.

Publications 2000-2003

- Krishnamurti, T.N., D.R. Chakraborty and T.S.V. Kumar, 2003. Enhancement of moisture fluxes via the planetary boundary layer on the time scale of the Madden-Julian Oscillation. Submitted to *Tellus*.
- Krishnamurti, T.N., J. Sanjay, A.K. Mitra and T.S.V. Kumar, 2003. Forecast errors arising from Different components of a model physics and dynamics. *Quart. J. Roy. Meteor. Soc.*, October 2003 issue.
- Kumar, T.S. V., Krishnamurti, T.N., M. Fiorino and M. Nagata, 2003. Numerical Prediction of Typhoon Tracks and Intensity using a Multimodel Superensemble. *Monthly Weather Review*, **131**, 574-583.
- Mitra, A.K., M. Dasgupta, S.V. Singh and T.N. Krishnamurti, 2003. Daily rainfall for Indian monsoon region from merged satellite and raingauge values: large-scale analysis from real-time data. *Journal of Hydrometeorology* (AMS), **4**, 769-781.
- Kamineni, R., T.N. Krishnamurti, R. Ferrare, S. Ismail and E. Browell, 2003. Impact of high resolution water vapor cross-sectional data on hurricane forecasting. *Geophysical Research Letters*, **30** (5), art. no. 1234, March 2003.
- Kamineni, R., T.N. Krishnamurti, R. Ferrare, S. Ismail and E. Browell, 2003. Impact of LASE and dropwindsonde data sets for hurricane forecasts during CAMEX-4. Submitted to *Journal of Atmospheric Sciences*.
- Krishnamurti, T.N., D.R. Chakraborty, N. Cubukcu, L. Stefanova and T.S.V. Kumar, 2003. A mechanism of the MJO based on interactions in the frequency domain. *Quart. J. Roy. Meteor. Soc.*, **129**, 2559-2590.
- Krishnamurti, T.N. and A. Chakraborty, 2003. Evaluation of a monsoon index from seasonal coupled model forecasts and reanalysis data sets. Accepted for publication, *J. Meteor. Atmos. Phys.*
- Krishnamurti, T. N., and J. Sanjay, 2003. A New Approach To The Cumulus Parameterization Issue. *Tellus*, **55A**, 275-300.
- Krishnamurti, T.N., P. Cunningham and K. Rajendran, 2003. Supergradient winds and forecast failures. Accepted for publication, *Meteorol. Atmos. Physics*.
- Krishnamurti, T.N., and T.S.V. Kumar, 2003. Superensemble forecasts for weather and climate In Press, Indian National Science Academy, Advances in Atmospheric and Oceanic Sciences.
- Krishnamurti, T.N., T.S.V. Kumar, K. Rajendran and Amanda Hopkins, 2003. Antecedents of the flooding over southeastern England during October 2000. *Weather*, **58**, 367-377.
- Krishnamurti, T.N., T.S.V. Kumar, B. P. Mackey, N. Cubukcu, R.S. Ross and R. Adler, 2003. Current thrusts on TRMM based modeling studies on heavy rain and flooding episodes. *Mausam* **54**, 121-140.

- Rajendran, K., T.N. Krishnamurti and V. Misra, 2003. An empirical cumulus parameterization scheme based on TRMM latent heating profiles. Accepted for publication *J. Met. Soc. Japan*.
- Ross, R.S. and T.N. Krishnamurti, 2003. Reduction of Forecast Error for Global Numerical Weather Prediction by the Florida State University (FSU) Superensemble. Accepted for publication, *Meteorol. Atmos. Phys.*
- Ross, R.S., T.N. Krishnamurti, D.F. Hanley and W.P. Duval, 2003. Low Level African Easterly Wave Activity and its Prediction by The Florida State University Superensemble. Part I: Concepts and Statistical Results. Submitted to *Mon. Wea. Rev.*
- Ross, R.S., T.N. Krishnamurti, D.F. Hanley and W.P. Duval, 2003. Low Level African Easterly Wave Activity and its Prediction by The Florida State University Superensemble. Part II: Synoptic Results. Submitted to *Mon. Wea. Rev.*
- Yun, W. , T.N. Krishnamurti and L. Stefanova, 2003. Improvement of the multi-model superensemble technique for seasonal forecasts. *J. Climate*, **16**, 3834-3840.
- Shin, D.W. and T.N. Krishnamurti, 2003. Short-to medium range superensemble precipitation forecasts using satellite products. Part I: Deterministic forecasting. *J. Geophys. Res.*, **108** (D8).
- Shin, D.W. and T.N. Krishnamurti, 2003. Short-to medium range superensemble precipitation forecasts using satellite products. Part II: Probabilistic forecasting. *J. Geophys. Res.*, **108** (D8).
- Krishnamurti, T.N. and A. Chakraborty, 2003. Life cycle of North American Monsoon System simulated by FSU-NRSM. Accepted for publication, *Meteorol. Atmos. Physics*.
- Krishnamurti, T.N., K. Rajendran, T.S.V. Kumar, S. Lord, Z. Toth, X. Zou, J. Ahlquist, S. Cocke, and I.M. Navon, 2003. Improved Skills for the Anomaly Correlation of Geopotential Heights at 500 hPa. *Monthly Weather Review*, **131**, 1082-1102.
- Krishnamurti, T.N., L. Stefanova, A. Chakraborty, T.S.V. Kumar, S. Cocke, D. Bachiochi and B. Mackey, 2002. Seasonal Forecasts of Precipitation Anomalies for North American and Asian Monsoons. *J. Met. Soc. Japan*, **80**, #6, 1415-1426.
- Krishnamurti, T.N., M. Tewari, K. Rajendran and S. Gadgil, 2002. A heavy winter monsoon rainfall influenced by easterly waves, a westerly trough, blocking and the ITCZ. *Weather*, **57**, 367-374.
- Staudt, A., D.J. Jacob, J. Logan, D. Bachiochi, T.N. Krishnamurti, and N. Poisson, 2002. Global chemical model analysis of biomass burning and lightning influences over the South Pacific in austral spring. *J. Geophys. Res.-Atmos.*, **107** (D14): art. No. 4200.
- Williford, C.E., T.N. Krishnamurti, R. Correa-Torres, S. Cocke, Z. Christidis and T.S.V. Kumar, 2002. Real-Time Multimodel Superensemble Forecasts of Atlantic Tropical Systems of 1999. *Monthly Weather Review*, **131**, 1878-1894.

- Cubukcu, N. and T.N. Krishnamurti, 2002. Low-frequency controls on the thresholds of sea surface temperature over the Western Tropical Pacific. *J. Climate*, **15**, 1626-1642.
- Cubukcu, N. and T.N. Krishnamurti, 2002. Pacific warm pool thermostat characteristics. *Bull. Amer. Met. Soc.*, **83**, 678-680.
- Fulakeza, M. L.M. Druyan and T.N. Krishnamurti, 2002. A simple soil moisture scheme for Regional climate simulations in the tropics. *Meteorol. Atmos. Phys.*, **79**, 105-126.
- Krishnamurti, T.N., N. Cubukcu and R.C. Dougherty, 2002. Chemical compositions in convective and non-convective regions during PEM Tropics B. *Journal of Geophysical Research-Atmospheres*, July issue.
- Mackey, B. and T.N. Krishnamurti, 2002. Ensemble Forecast of a Typhoon Flood Event. *Weather and Forecasting*, **16**, 399-415.
- Mayers, M., T.N. Krishnamurti, and C. Depradine, 2002. Numerical weather prediction over the Eastern Caribbean using Florida State University (FSU) global and regional spectral Models and multi-model/multi-analysis super-ensemble. *Meteorol. Atmos. Phys.*, **78**, 75-88.
- Rizvi, SRH, E.L. Bensman, T.S.V. Kumar, A. Chakraborty and T.N. Krishnamurti, 2002. Impact of CAMEX-3 data on the analysis and forecasts of Atlantic hurricanes. *Meteorol. Atmos. Phys.*, **79**, 13-32.
- Stano, G., T.N. Krishnamurti, T.S.V. Kumar and A. Chakraborty, 2002. Hydrometeor structure of a composite monsoon depression using the TRMM radar. *Tellus*, **54A**.
- Stefanova, L. and T.N. Krishnamurti, 2002. Interpretation of seasonal climate forecasts using Brier Skill Score, FSU superensemble and the AMIP1 Dataset. *Journal of Climate*, **15**, 537-544.
- Kishtawal, C.M. and T.N. Krishnamurti, 2001. Diurnal Variation of Summer Rainfall over Taiwan and Its Detection using TRMM Observations. *J. Appl. Meteor.*, **40**, 331-344.
- Krishnamurti, T.N., S. Surendran, D.W. Shin, R. Correa-Torres, T.S.V. Kumar, C.E. Williford, C. Kummerow, R.F. Adler, J. Simpson, R. Kakar, W. Olson and F.J. Turk, 2001. Real Time Multianalysis/Multimodel Superensemble Forecasts of Precipitation using TRMM and SSM/I Products. *Mon. Wea. Rev.*, **129**, 2861-2883.
- Staudt, A.C., D.J. Jacob, J.A. Logan, D. Bachiochi, T.N. Krishnamurti and G.W. Sachse, 2001. Continental sources transoceanic transport and interhemispheric exchange of carbon monoxide over the Pacific. *J. Geoph. Research-Atmospheres*, **106**, 32571-32589.
- Ramanathan, V., P.J. Crutzen, J. Lelieveld, A.P. Mitra, D. Althausen, J. Anderson, M.O. Andreae, W. Cantrell, G.R. Cass, C.E. Chung, A.D. Clarke, J.A. Coakley, W.D. Collins, W.C. Conant, F. Dulac, J. Heintzenberg, A.J. Heymsfield, B. Holben, S. Howell, J. Hudson, A. Jayaraman, J.T. Kiehl, T.N. Krishnamurti, D. Lubin, G. MacFarquhar, T. Novakov, J.A. Ogren, I.A. Podgorny, K. Prather, K. Priestley, J.M. Prospero, P.K. Quinn, K. Rajeev, P. Rasch, S. Rupert, R. Sadourny, S.K. Satheesh, G.E. Shaw, P. Sheridan and F.P.J. Valero, 2001. The Indian Ocean Experiment: An Integrated

- Analysis of the Climate Forcing and Effects of the Great Indo-Asian Haze. *Journal of Geophysical Research-Atmospheres*, **106**, 28371-28398.
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- Jha, B., T.N. Krishnamurti and Z. Christidis, 2000. A note on horizontal resolution dependence for monsoon rainfall simulations. *Meteorology and Atmospheric Physics* **74**, 11-18.
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- Krishnamurti, T.N. and V. Kumar Tallapragada, 2000. Compendium on Aviation Weather. World Meteorological Organization, Geneva, Switzerland. 145 pp
- Krishnamurti, T.N., C.M. Kishtawal, D.W. Shin and C.E. Williford, 2000. Improving tropical precipitation forecasts from a multi-analysis superensemble. *J. Climate*, **13**, 4217-4227.
- Krishnamurti, T.N., C.M. Kishtawal, T. LaRow, D. Bachiochi, Z. Zhang, C.E. Williford, S. Gadgil and S. Surendran, 2000. Multi-model superensemble forecasts for weather and seasonal climate. *J. Climate*, **13**, 4196-4216.
- Krishnamurti, T.N., D. Bachiochi, T. LaRow, B. Jha, M. Tewari, D. Chakraborty, R. Correa-Torres, and D. Oosterhof, 2000. Coupled Atmosphere-Ocean Modeling of the El-Niño of 1997-98. *J. Climate* **13**, 2428-2459.
- Krishnamurti, T.N. and C.M. Kishtawal, 2000. A pronounced continental scale diurnal mode of the Asian summer monsoon. *Monthly Weather Review* **128**, 462-473.
- Krishnamurti, T.N., B. Jha, H.S. Bedi and U.C. Mohanty, 2000. Diabatic effects on potential vorticity over the global tropics. *J. Met. Soc. Japan*, **78**, 527-542.
- Simpson, J., T.N. Krishnamurti, et al., 2000. The Tropical Rainfall Measuring Mission (TRMM) *Studying the Earth from Space*, **N4**, 71-90.
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