

PERSONAL INFORMATION

First Name: Theodoros
 Last Name: Mavrommatis
 Date of Birth: 19/12/1967
 Country: Greece
 Marital Status: Married with two children.
 Address: Department of Meteorology – Climatology
 School of Geology
 Aristotle University of Thessaloniki
 University Campus, Thessaloniki 540 06
 Greece
 E-Mail: thmavrom@geo.auth.gr

PROFESSIONAL EXPERIENCE

- Jun 2004 – today, Department of Meteorology – Climatology,
School of Geology, Aristotle University of Thessaloniki, Greece.

Professor (since June 2021)
- Oct 1998 – Jun 2001, Agricultural and Biological Engineering
Department, University of Florida, Gainesville, Florida, U.S.A.

Postdoctoral associate under the supervision of Dr. J.W. Jones and Dr. K.J.
Boote
- Feb 1997 – Oct 1998, National Center for Atmospheric Research,
Boulder, Colorado, U.S.A.

Postdoctoral research fellow under the supervision of Dr. L.O. Mearns

EDUCATION

- 1993 – 1997 Climatic Research Unit, University of East Anglia (U.K.)
Ph.D. under the supervision of Dr. P.D. Jones
- Ph.D. title “Impact of Different Methods of Climate Change Scenario Construction on the yield Distributions of Winter Wheat using Crop Growth Simulation Models.”

1986 – 1991 Aristotelian University of Thessaloniki (Greece)
B.S. degree in Geology with minor in Climatology – Meteorology

SCHOLARSHIPS - AWARDS

1997 – 1998 Advanced study research fellowship in the National Center for Atmospheric Research (NCAR), Boulder, CO, USA.

1993 – 1997 Research scholarship from the State Scholarships Foundation in Greece (IKY).

1986 – 1991 Scholarship awards, Aristotle University of Thessaloniki

LIST OF REFEREED PUBLICATIONS IN INTERNATIONAL JOURNALS

Mavromatis, T and Jones, P.D., 1998. Comparison of climate change scenario construction methodologies for impact assessment studies. *Agricultural and Forest Meteorology*, 91, 51 – 67.

Mavromatis, T and Jones, P.D., 1999. Evaluation of HADCM2 and direct use of daily GCM data in impact assessment studies. *Climatic Change*, 41, 583 – 614.

Mearns, L.O., **Mavromatis, T.**, Tsvetsinskaya, E., Hays, C. and Easterling, W, 1999. Comparative Responses of EPIC and CERES Crop Models to High and Low Resolution Climate Change Scenarios. *Journal of Geophysical Research*, 104(D6), 6623 - 6646.

Irmak, A., Jones, J.W., **Mavromatis, T.**, Welch, S.M., Boote, K.J. and Wilkerson, G.G., 2000. Evaluating methods for simulating soybean cultivar responses using cross validation *Agronomy Journal*, 92, 1140-1149

Mavromatis, T., Boote, K.J., Jones, J.W., Irmak, A., Shinde, D. and Hoogenboom, G., 2000. Developing genetic coefficients for crop simulation models with data from crop performance trials, *Crop Science*, 41, 40-51.

Mavromatis, T., Boote, K.J., Jones, J.W., Wilkerson, G.G. and Hoogenboom, G., 2001. Repeatability of model genetic coefficients derived from soybean performance trials across different states, *Crop Science*, 42, 76-89.

Mavromatis, T. and Hansen, J.W., 2001. Interannual variability characteristics and simulated crop responses for four stochastic weather generators, *Agricultural and Forest Meteorology*, 109, 283-296.

Hansen, J.W., and **Mavromatis, T.**, 2001. Correcting low-frequency variability bias in stochastic weather generators, *Agricultural and Forest Meteorology*, 109, 297-310.

Mavromatis, T., Jagtap, S.S., and Jones, J.W., 2002. El Nino-Southern Oscillation effects on peanut yield and nitrogen leaching, *Climate Research*, 22, 129-140.

- Welch, S.M., Wilkerson, G.G., Whiting, K., Sun, N., Vagts, T., Buol, G., and **Mavromatis, T.**, 2002. Estimating model genetic coefficients from private-sector variety performance trial data. *Transactions of the ASAE*, 45(4), 1163-1175.
- Carbone, C.J., Mearns, L.O., **Mavromatis, T.**, Sadler, E.J., and Stooksbury, D., 2003. Evaluating CROPGRO-Soybean performance for use in climate impact studies. *Agronomy Journal*, 95, 537-544.
- Tsvetsinskaya, E.A., Mearns, L.O., **Mavromatis, T.**, Gao, W., McDaniel, L.R., and Downton, M.W., 2003. The effect of spatial scale of climate change scenarios on simulated maize, winter wheat, and rice production in the southeastern United States. *Climatic Change*, 60, 37-72.
- Mavromatis, T.**, and Jagtap, S.S., 2005. Estimating solar radiation for crop modeling using temperature data from urban and rural stations. *Climate Research*, 29(3), 233-243.
- Mavromatis, T.**, 2007. Drought index evaluation for assessing future wheat production in Greece. *International Journal of Climatology*, 27, 911-924.
- Mavromatis, T.**, and Voudouris, K., 2007. Relationships between hydrological parameters using correlation and trend analysis in Crete Island. *Journal of Environmental Hydrology*, 15(29), 1-13.
- Voudouris, K., **Mavromatis, T.**, and Antonakos A., 2007. Hydrologic balance estimation using GIS in Korinthia prefecture, Greece. *Advances in Science and Research*, 1, 1-8.
- Mavromatis, T.**, 2008. Estimation of solar radiation and its application to crop simulation models in Greece. *Climate Research*, 36(3), 219-230.
- Stathis D. and **Mavromatis T.**, 2009. Characteristics of precipitation in Thessaloniki area, north Greece. *Fresenius Environmental Bulletin* 18 (7B): 1270-1275.
- Papakostas K., **Mavromatis T.** and Kyriakis N., 2009. Impact of the ambient temperature rise on the energy consumption for heating and cooling in residential buildings of Greece. *Renewable Energy*, 7, 1376-1379.
- Farajzadeh M., Rahimi M., Ali Kamali G. and **Mavromatis T.**, 2010. Modelling apple tree bud burst time and frost risk in Iran. *Meteorological Applications*, 17, 45-52.
- Mavromatis T.**, 2010. Use of drought indices in climate change impact assessment studies: an application to Greece. *International Journal of Climatology*, 30, 1336-1348.
- Mavromatis, T.** and Stathis, D., 2010. Response of the water balance in Greece to temperature and precipitation trends. *Theoretical and Applied Climatology* DOI10.1007/s00704-010-0320-9.
- Michopoulos, A., Papakostas K., **Mavromatis T.** and Kyriakis N., 2010. Comparative assessment of eight models predicting the ground temperature. *JP Journal of Heat and Mass Transfer*, 2, 119-135.
- Mavromatis, T.** and Stathis, D., 2011. Response of the water balance in Greece to temperature and precipitation trends. *Theoretical and Applied Climatology*, 104, 13-24.
- Mavromatis T.**, 2011. Changes in exceptional hydrological and meteorological weekly event frequencies in Greece. *Climatic Change* DOI 10.1007/s10584-011-0095-8
- Voudouris K., **Mavromatis T.** and Krinis P., 2011. Assessing runoff in future climate conditions in Messara valley in Krete with a rainfall – runoff model, *Meteorological Applications* DOI 10.1002/met.282

Papakostas K., Michopoulos, A., **Mavromatis T.** and Kyriakis N., 2013. Changes of temperature data for energy studies over time and their impact on energy consumption and CO₂ emissions. The case of Athens and Thessaloniki – Greece. *International Journal of Energy and Environment*, 4, 59-72

Charalampopoulos A., Damialis A., Tsiripidis I., **Mavromatis T.**, Halley J.M., Vokou D., 2013. Pollen production and circulation patterns along an elevation gradient in Mt Olympos (Greece) National Park, *Aerobiologia*, 29, 455-472

Koufos G, **Mavromatis T.**, Koundouras S, Fyllas N, Jones G, 2014. Viticulture–Climate relationships in Greece: the impacts of recent climate trends on harvest date variation. *International Journal of Climatology*, 34, 1445-1459

Mavromatis T., 2014. Pre-season Prediction of Regional Rainfed Wheat Yield in Northern Greece with CERES-Wheat. *Theoretical and Applied Climatology*, 117, 653-665

Mavromatis T., 2015. Crop–Climate Relationships of Cereals in Greece and the Impacts of Recent Climate Trends. *Theoretical and Applied Climatology*, 417–432.

Mavromatis T., 2016. Spatial resolution effects on crop yield forecasts: An application to rainfed wheat yield in north Greece with CERES-Wheat, *Agricultural Systems*, 143, 38–48. 4.2.32 Koufos G, Mavromatis T, Koundouras S, Jones G, 2018.

Koufos G, **Mavromatis T.**, Koundouras S, Jones G, 2018. Response of viticulture-related climatic indices and zoning to historical and future climate conditions in Greece. *International Journal of Climatology*, 38, 2097-2111.

Koufos G, **Mavromatis T.**, Koundouras S, Jones G, 2020. Adaptive capacity of winegrape varieties cultivated in Greece to climate change: current trends and future projections, *OENO one*, Vol. 54 No. 4.

Mavromatis T. and Voulanas D, 2020. Evaluating ERA-Interim, Agri4Cast and E-OBS gridded products in reproducing spatiotemporal characteristics of precipitation and drought over a data poor region: The Case of Greece, *International Journal of Climatology*, 41(3), 2118-2136.

Pantelidis G, **Mavromatis T.**, Drogoudi P, 2021. Consecutive wet days may impede fruit quality of peach and nectarine and cause fruit drop, *Scientia Horticulturae*, 282, 110011.

Koufos, G.C.; **Mavromatis, T.**; Koundouras, S.; Fyllas, N.M.; Theocharis, S.; Jones, G.V. Greek Wine Quality Assessment and Relationships with Climate: Trends, Future Projections and Uncertainties. *Water* 2022, 14, 573. <https://doi.org/10.3390/w14040573>.

Mavromatis, T.; Georgoulas, A.K.; Akritidis, D.; Melas, D.; Zanis, P. Spatiotemporal Evolution of Seasonal Crop-Specific Climatic Indices under Climate Change in Greece Based on EURO-CORDEX RCM Simulations. *Sustainability* 2022, 14, 17048. <https://doi.org/10.3390/su142417048>.

Liakopoulou, K.S.; **Mavromatis, T.** Evaluation of Gridded Meteorological Data for Crop Sensitivity Assessment to Temperature Changes: An Application with CERES-Wheat in the Mediterranean Basin. *Climate* 2023, 11, 180. <https://doi.org/10.3390/cli11090180>

Nikou, M.; **Mavromatis, T.** Demonstrating the Use of the Yield-Gap Concept on Crop Model Calibration in Data-Poor Regions: An Application to CERES-Wheat Crop Model in Greece. *Land* 2023, 12, 1372. <https://doi.org/10.3390/land12071372>.

Kazakis, N.; Karakatsanis, D.; Ntona, M.M.; Polydoropoulos, K.; Zavrıdou, E.; Voudouri, K.A.; Kalaitzidou, K.; Patsialis, T.; Perdikaki, M.; Tsourlos, P.; et al. Groundwater Depletion. Are Environmentally Friendly Energy Recharge Dams a Solution? *Water* 2024, 16, 1541. <https://doi.org/10.3390/w16111541>

TEACHING DUTIES

Pro graduate level

- Hydrometeorology (taught in the School of Geology)
- Meteorology – Climatology (taught in the School of Biology and in the School of Forestry and Natural Environment)
- Introduction to Meteorology and Climatology (taught in the School of Mathematics)
- Foreign Language Geological Terminology (taught in the School of Geology)

Postgraduate level

- Applied Meteorology and Climatology (taught in the Departmental Post-graduate Studies Program "Meteorology, Climatology and Atmospheric Environment")
- Climatic changes (taught in the Inter-Departmental Post-graduate Studies Program "Sustainable Management of Forest and Natural Ecosystems: Protection, Production and Exploitation")