Cem Yologlu

SUMMARY

Highly motivated and skilled environmental engineer with experience in groundwater modeling, data analysis, and remote sensing. Proficient in programming languages like Python, R, and MATLAB. Committed to addressing environmental challenges and finding sustainable solutions.

EDUCATION

Boğaziçi University, Institute of Environmental Science 10.2020-09.2023
Environmental Science, MSc

Middle East Technical University Environmental Engineering, BSc 09.2015-07.2020

COMPUTER SKILLS

Programming Skills: Python, R, MATLAB, Google Earth Engine, LaTeX Computer Skills: QGIS, ArcGIS, Modflow, ModelMuse, MS Excel, MS Word

EXPERIENCE

Research Fellow

5.2021-10.2023

Boğaziçi University

- Conducted preliminary data analysis with Google Earth Engine to determine the field studies to be carried out in more detail.
- Collaborated with stakeholders to identify problems of the basin such as drought, depletion of groundwater, water quality and soil quality.
- Utilized geostatistical methods to interpolate data points precisely, ensuring detailed spatial representations.
- Simulated calibrated model with five agricultural management scenarios under seventeen regional climate models (RCMs) to minimize uncertainties of climate models.
- Developed of surface-subsurface groundwater model on UZF-MODFLOW model.
- Prepared report to inform stakeholders and policy makers such as State Hydraulic Work

CONFERENCE PROCEEDING

Yologlu, O. C., Uygur, I., Copty, K.N., Daloglu Çetinkaya, I., Saysel, A. K. (2023, April). Evaluation of Different Water Management Practices for the Sustainable Use of Groundwater Resources in the Konya Closed Basin. EGU General Assembly 2023, Vienna, Austria, 24–28 Apr 2023, EGU23-8796, https://doi.org/10.5194/egusphere-egu23-8796

Uygur, I., Yologlu, O. C., Copty, K.N., Daloglu Çetinkaya, I., Saysel, A. K. (2023, April). Partial validation of a socio-economic system dynamics model against a process based hydrogeological model. EGU General Assembly 2023, Vienna, Austria, 24–28 Apr 2023, EGU23-3417, https://doi.org/10.5194/egusphere-egu23-3417

Khandandel, M., Yologlu, O. C., Secci, D., Todaro, V., Daloglu Çetinkaya, I., Copty, K.N., Saysel, A. K. (2023, April). Drought Risk Assessment for an Agricultural Basin in Turkey using SPEI and SPI. EGU General Assembly 2023, Vienna, Austria, 24–28 Apr 2023, EGU23-8726, https://doi.org/10.5194/egusphere-egu23-8726

Secci, D., Todaro, V., Yologlu, O. C., Copty, K.N., Daloglu Çetinkaya, I., D'Oria, M., Saysel, A. K., Tanda, M.G., Zanini, A. (2023, April). An artificial neural network as a quick tool to assess the effects of climate change and agricultural policies on groundwater resources. EGU General Assembly 2023, Vienna, Austria, 24–28 Apr 2023, EGU23-5801, https://doi.org/10.5194/egusphere-egu23-5801

Daloglu Çetinkaya, I., Uygur, I., Saysel, A. K., Yologlu, O. C., Copty, N. (2022, October). Groundwater use in a semi-arid area: Governance of an overexploited resource. Sustain Valencia, Valencia, Spain, 6-8 October 2022. https://doi.org/10.5281/zenodo.8247521

Yologlu, O. C., Copty, N., Tunca, M.C., Daloglu, I., Saysel, A. K. (2022, September). Regional-Scale Modeling of Surface-Subsurface Flow: The Konya Closed Basin Case Study. 7th IAHR EUROPE CONGRESS, Athens, Greece, 7-9 September 2022. https://doi.org/10.5281/zenodo.8383837

Yologlu, O. C., Copty, N., Uygur, I., Tunca, M.C., Bal, E., Yetisti, B., Daloglu, I., Saysel, A. K. (2022, June). Coupled Surface-Subsurface Hydrological Model for the Estimation of Net Recharge of the Konya Closed Basin, Turkey. 14th International Conference on Geostatistics for Environmental Applications, Parma, Italy, 22-24 June 2022. https://doi.org/10.5281/zenodo.8383812

Yologlu, O. C., Alp E. (2020, December). Investigation of Low Impact Development Potential for a Densely Populated Area in a Semi-arid Climate. AGU Fall Meeting 2020, Online, 1-17 December 2020. https://agu.confex.com/agu/fm20/meetingapp.cgi/Paper/724492

INVOLVED PROJECTS

- InTheMED: Innovative&Sustainable Groundwater Management in the Mediterranean Water security has gained particular attention in the Mediterranean (MED) region, since it has been highlighted as one of the most sensitive regions in the world to water scarcity, due to both climate change and consistently increasing anthropogenic pressures. As a consequence, in several MED countries, inland and coastal areas are already undergoing drastic changes driven by deterioration in water quantity and water quality in the last decades. The overall objective of InTheMED is to implement innovative and sustainable management tools and remediation strategies for MED aquifers (inland and coastal) in order to improve their recharge as well as to mitigate anthropogenic and climate-change threats by creating new long-lasting spaces of social learning among multiple interdependent stakeholders, NGOs, and scientific researchers in five typical case studies, located at the two shores of the MED basin.
- Smart Campus Project, Fund: United States Trade and Development Agency (USTDA) I engaged in design thinking and interdisciplinary problem-solving methodologies at Middle East Technical University (METU) Design Factory. Collaborating with my team, our primary focus centered on crafting sustainable and intelligent transportation solutions within the METU campus environment. Our main achievement was the creation of METUNAVI, a platform rewarding pedestrians and hitchhikers with incentives like campus stickers, free tickets to art events, and discounts at the bookstore. This initiative aimed to promote eco-friendly mobilization within campus.

SCHOLARSHIPS & HONORS

- DAAD Scholarship for 5th International Summer School on Managed Aquifer Recharge at HTW Dresden, Dresden, Germany. (July 2023)
- Placed twice on honor roll and twice on high honor roll of Middle East Technical University.

EXTRA-CURRICULAR ACTIVITIES

- Tarlataban Boğaziçi
- METU Environmental Society