

Education

UC Berkeley

2015–2022 PhD: Environmental Science, Policy, and Management (ESPM). Advisor: Inez Fung
 Graduate Certificate in Applied Data Science awarded Spring 2021
Children born 2019, 2021

2006–2011 B.A. (with honors): Atmospheric Science; Music minor.

Professional Experience

Jet Propulsion Laboratory, Pasadena, CA **2022-present**
Postdoctoral researcher

University of California, Berkeley, Berkeley, CA **2015-2022**
Graduate student instructor and researcher

IPCC Working Group 2 Technical Support Unit, Stanford, CA **2012-2015**
Scientific Assistant

Carnegie Institution Department of Global Ecology, Stanford, CA **2014-2015**
Department Operations Manager

Carnegie Institution Department of Global Ecology, Stanford, CA **2012-2014**
Jasper Ridge Global Change Experiment Field Technician

Teaching

ESPM 15: **Introduction to Environmental Sciences** (Fall 2018) with Professors Inez Fung and Matthew Potts

EPS 3: **The Water Planet** (Spring 2021) with Professor Bill Dietrich

ESPM 50AC: **Introduction to Introduction to Culture and Natural Resource Management** (Summer 2021) with Dr. Kenneth Worthy

EPS 251: **Carbon Cycle Dynamics** (Fall 2021) with Professor Inez Fung

ESPM 15: **Introduction to Environmental Sciences** (Spring 2022) with Dr. Christine Gehrig-Downie

Scientific Workshops/Training

June 2018 Remote Data Acquisition (RDA) Sensor Training Workshop, Sevilleta, NM

February 2019 Community Terrestrial Systems Model Tutorial, Boulder, CO

December 2020 Graduate Remote Instruction Tutorial, online

Awards

DOE Office of Science Graduate Student Research (SCGSR) Program Award

Research presentations

Dec 2021 Bilir, T.E., I. Fung, and C. Koven: "Controls on Heterogeneity of Forest Dynamics in Northern California: An Exploration Using CLM-FATES" AGU fall meeting abstracts. Online.

Dec 2020 Bilir, T.E., I. Fung, and T. Dawson: "Transpiration in Pacific madrone along a microclimatic gradient shows variable relationship with above ground climate" AGU fall meeting abstracts. Online.

April 2019 Bilir, T.E., I. Fung, P. Link: "Transpiration timing of evergreen trees". Berkeley Atmospheric Sciences Center Symposium, Berkeley, CA.

August 2018 Bilir, T.E.: "Forest-climate feedbacks in a hilly terrain: setting up the observations". Carol Baird Research Symposium, Angelo Coast Range Reserve, Branscomb, CA.

July 2017 Bilir, T.E.: "Exploring the water cycle in Northern California". Presented to a group of high school students in a summer college prep class. Berkeley, CA.

Selected Publications

(full list: https://scholar.google.com/citations?hl=en&user=JEIVB2wAAAAJ&view_op=list_works&sortby=pubdate)

- Bilir, T.E.**, I. Fung, and T. Dawson, 2021: Slope-aspect induced climate differences influence how water is exchanged between the land and atmosphere. *JGR: Biogeosciences* 126, e2020JG006027.
- Bilir, T.E.**, 2020: Data and Software accompanying "Slope-aspect induced climate differences influence how water is exchanged between the land and atmosphere", submitted to *JGR: Biogeosciences* August 2020 [Data set]. Zenodo. <https://doi.org/10.5281/zenodo.3996308>
- Mach, K.J., M.D. Mastrandrea, **T.E. Bilir**, and C.B. Field, 2016: Understanding and responding to danger from climate change: the role of key risks in the IPCC AR5. *Climatic Change* 136(3), 427-444.
- IPCC, 2015: *Meeting Report of the Intergovernmental Panel on Climate Change Expert Meeting on Climate Change, Food, and Agriculture* [Mastrandrea, M.D., K.J. Mach, V.R. Barros, **T.E. Bilir**, D.J. Dokken, O. Edenhofer, C.B. Field, T. Hiraishi, S. Kadner, T. Krug, J.C. Minx, R. Pichs-Madruga, G.-K. Plattner, D. Qin, Y. Sokona, T.F. Stocker, M. Tignor (eds.)]. World Meteorological Organization, Geneva, Switzerland, 68 pp.
- IPCC, 2014: *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* [Field, C.B., V.R. Barros, D.J. Dokken, K.J. Mach, M.D. Mastrandrea, **T.E. Bilir**, M. Chatterjee, K.L. Ebi, Y.O. Estrada, R.C. Genova, B. Girma, E.S. Kissel, A.N. Levy, S. MacCracken, P.R. Mastrandrea, and L.L. White (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, 1132 pp.
- IPCC, 2014: *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part B: Regional Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* [Barros, V.R., C.B. Field, D.J. Dokken, M.D. Mastrandrea, K.J. Mach, **T.E. Bilir**, M. Chatterjee, K.L. Ebi, Y.O. Estrada, R.C. Genova, B. Girma, E.S. Kissel, A.N. Levy, S. MacCracken, P.R. Mastrandrea, and L.L. White (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, 688 pp.
- Field, C.B., V.R. Barros, K.J. Mach, M.D. Mastrandrea, M. van Aalst, W.N. Adger, D.J. Arent, J. Barnett, R. Betts, **T.E. Bilir**, et al. 2014: Technical Summary. In: *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* [Field, C.B., V.R. Barros, et al. (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, pp. 35-94.
- IPCC (2014). Glossary [Agard, J., E.L.F. Schipper, J. Birkmann, M. Campos, C. Dubeux, Y. Nojiri, L. Olsson, B. Osman-Elasha, M. Pelling, M.J. Prather, M.G. Rivera-Ferre, O.C. Ruppel, A. Sallenger, K.R. Smith, A.L. St. Clair, K.J. Mach, M.D. Mastrandrea, and **T.E. Bilir** (eds.)]. In: *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part B: Regional Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* [Barros, V.R., C.B. Field, et al. (eds.)]. Cambridge University Press, Cambridge, United Kingdom, and New York, NY, USA, pp.