

Stanford



Chris Field

Melvin and Joan Lane Professor of Interdisciplinary Environmental Studies, Director, Woods Institute for the Environment and Professor of Earth System Science, of Biology and Senior Fellow at the Precourt Institute for Energy and at Woods

Curriculum Vitae available Online

Resume available Online

Bio

BIO

Chris Field is the Perry L. McCarty Director of the Stanford Woods Institute for the Environment and the Melvin and Joan Lane Professor for Interdisciplinary Environmental Studies at Stanford University.

Prior to his 2016 appointment at the Stanford Woods Institute, Field was a staff member at the Carnegie Institution for Science (1984-2002) and founding director of the Carnegie's Department of Global Ecology (2002-2016).

Field's research focuses on climate change, especially solutions that improve lives now, decrease the amount of future warming, and support vibrant economies. Recent projects emphasize decreasing risks from coastal flooding and wildfires. He has been deeply involved with national and international-efforts to advance understanding of global ecology and climate change. Field was co-chair of Working Group II of the Intergovernmental Panel on Climate Change (IPCC) (2008-2015), where he led the effort on "Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation" (2012), and "Climate Change 2014: Impacts, Adaptation, and Vulnerability(2014). His widely cited work has earned many recognitions, including election to the US National Academy of Sciences and the American Academy of Arts and Sciences, the Max Planck Research Award, and the Roger Revelle Medal. Field is a member of the Board of Directors of World Wildlife Fund (US) and the Board of Trustees of the California Academy of Sciences. He is a fellow of the American Association for the Advancement of Science, the American Geophysical Union, and the Ecological Society of America.

He holds a bachelor's degree in biology from Harvard College and a Ph.D. in biology from Stanford.

ACADEMIC APPOINTMENTS

- Professor, Biology
- Professor, Earth System Science
- Professor, Biology
- Senior Fellow, Precourt Institute for Energy
- Senior Fellow, Stanford Woods Institute for the Environment
- Perry L. McCarty Director, Stanford Woods Institute for the Environment

ADMINISTRATIVE APPOINTMENTS

- Perry L. McCarty Director, Stanford Woods Institute for the Environment, Stanford University, (2016- present)
- Melvin and Joan Lane Professor for Interdisciplinary Environmental Studies, Stanford University, (2012- present)

- Professor, Department of Earth System Science, Stanford University, (2008- present)
- Senior Fellow, Woods Institute for the Environment, Stanford University, (2008- present)
- Professor, Department of Biology, Stanford University, (2005- present)
- Faculty Director Jasper Ridge Biological Preserve, Stanford University, (2005-2016)
- Director, Department of Global Ecology, Carnegie Institution, (2002-2016)
- Staff Scientist, Carnegie Institution of Washington, (1984-2002)
- Assistant Professor, Biology, University of Utah, (1981-1984)

HONORS AND AWARDS

- Japan Prize, Japan Prize Foundation (2022)
- Member, American Philosophical Society (2022)
- Stephen H. Schneider Award for Outstanding Climate Science Communication, Climate One (2015)
- Roger Revelle Medal, American Geophysical Union (2014)
- BBVA Frontiers of Knowledge Award, BBVA Foundation (2013)
- Max Planck Research Prize, Max Planck Society (2013)
- Fellow, Ecological Society of America (2012)
- Member, American Academy of Arts and Sciences (2010)
- Fellow, American Association for the Advancement of Science (2009)
- Heinz Award, Heinz Group (2009)
- Member, US National Academy of Sciences (2001)
- ESA Aldo Leopold Fellow, ESA Aldo Leopold (2000)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Member, California Academy of Sciences Board of Trustees (2018 - present)
- Member, WWF US Board of Directors (2016 - present)
- Member, Harvard University Board of Overseers (2013 - 2019)
- Co-chair, WGII, Intergovernmental Panel on Climate Change (2008 - 2015)
- Member, NRC committee on energy externalities (2008 - 2009)
- Member, NRC comm on research opportunities at the interface of physics and biological sciences (2008 - 2009)
- Chair, NRC committee on ecological impacts of climate change (2008 - 2008)
- Chair, NEON Science, Technology, & Education Advisory Committee (2007 - 2013)
- Member, NRC Board on International Science Organizations (2006 - 2009)
- 2006 - 2008 | Co-chair, Stanford Environmental Venture Fund Panel, Stanford University (2006 - 2008)
- Member, SSC: Global Carbon Project (2006 - 2008)
- Chair, NEON ISEP revision committee (2006 - 2007)
- Coordinating Lead Author, IPCC, WG2 (2004 - 2007)
- Cluster Coordinator, SCOPE (2002 - 2005)
- Member, PNAS, Editorial Board (2000 - 2009)
- Chair, Advisory Comm., US Carbon Cycle Science Program (2000 - 2005)
- Chair, Advisory Committee, US Carbon Cycle Science Program (2000 - 2005)

- Member, NRC: Board on Environmental Studies and Toxicology (1999 - 2006)
- Member, NRC Grand Challenges in Environmental Biology (1998 - 2000)
- Member, NSF Ecosystem Studies Panel (1997 - 1999)
- Member, NRC Ecosystem Panel (1997 - 1999)
- Senior Editor, Global Change Biology (1994 - 1999)
- Chair, US National Committee for SCOPE (1993 - 1998)
- Member editorial board, Ecological Applications (1993 - 1996)
- Member, US National Committee for SCOPE (1991 - 1998)
- Chair, IGBP-BAHC focus 3: Large-scale processes (1991 - 1997)
- Editorial Review Board, Ecology (1991 - 1993)

PROFESSIONAL EDUCATION

- PhD, Stanford University , Biological Sciences (1981)
- AB, Harvard College , Biology (1975)

LINKS

- Stanford Woods Institute for the Environment: <https://woods.stanford.edu>
- Field Lab: <https://fieldlab.stanford.edu>

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Research

My field is climate-change science, and my research emphasizes human-ecological interactions across many disciplines. Most studies include aspects of ecology, but also aspects of law, sociology, medicine, or engineering. My colleagues and I develop diverse approaches to understanding climate change impacts, opportunities for adaptation, and the role of ecosystem processes in climate-change solutions. My lab has a long history of quantifying large-scale ecosystem processes, using satellites, atmospheric data, models, and census data. We explore global-scale patterns of vegetation-climate feedbacks, carbon cycle dynamics, primary production, forest management, and fire. Recent work on adaptation has emphasized strategic relocation and opportunities for strategies at the overlap of adaptation, mitigation, and economic development.

Teaching

Environmental Sustainability: Global Predicaments and Possible Solutions

Hacking for Climate and Sustainability

Professional Activities

Director, Stanford Woods Institute for the Environment

Board of Directors, World Wildlife Fund

Board of Trustees, California Academy of Sciences

Teaching

COURSES

2023-24

- Carbon Dioxide and Methane Removal, Utilization, and Sequestration: EARTHSYS 308, ENERGY 308, ENVRES 295, ESS 308, ME 308 (Aut)
- Climate Displacement, Migration, and Mobility: ESS 234, HUMRTS 224 (Spr)
- Environmental Sustainability: Global Predicaments and Possible Solutions: COLLEGE 106 (Spr)
- Hacking for Climate and Sustainability: EARTHSYS 213 (Win)
- Research Preparation for Undergraduates: ESS 108 (Spr)

2022-23

- Carbon Dioxide and Methane Removal, Utilization, and Sequestration: EARTHSYS 308, ENERGY 308, ENVRES 295, ESS 308, ME 308 (Aut)
- Environmental Sustainability: Global Predicaments and Possible Solutions: COLLEGE 106 (Spr)
- Hacking for Climate and Sustainability: EARTHSYS 213 (Win)
- Research Preparation for Undergraduates: ESS 108 (Spr)

2021-22

- Carbon Dioxide and Methane Removal, Utilization, and Sequestration: EARTHSYS 308, ENERGY 308, ENVRES 295, ESS 308, ME 308 (Aut)
- Environmental Sustainability: Global Predicaments and Possible Solutions: COLLEGE 106 (Spr)
- Hacking for Climate and Sustainability: EARTHSYS 213 (Win)
- Research Preparation for Undergraduates: ESS 108 (Spr)

2020-21

- Carbon Dioxide and Methane Removal, Utilization, and Sequestration: EARTHSYS 308, ENERGY 308, ENVRES 295, ESS 308, ME 308 (Aut)
- Research Preparation for Undergraduates: ESS 108 (Spr)

STANFORD ADVISEES

Doctoral Dissertation Reader (AC)

Sam Abernethy, Leehi Yona

Postdoctoral Faculty Sponsor

Josheena Naggea, Chelsea Pardini

Doctoral Dissertation Co-Advisor (AC)

Anela Arifi, Erica Bower, Leona Neftaliem

Doctoral (Program)

Raven Alcott, Alexis Wilson

GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

- Biology (School of Humanities and Sciences) (Phd Program)

Publications

PUBLICATIONS

- Enabling pathways for sustainable livelihoods in planned relocation *NATURE CLIMATE CHANGE*

Bower, E. R., Badamikar, A., Wong-Parodi, G., Field, C. B.
2023

- Long-term elevated precipitation induces grassland soil carbon loss via microbe-plant-soil interplay. *Global change biology*

Wang, M., Sun, X., Cao, B., Chiariello, N. R., Docherty, K. M., Field, C. B., Gao, Q., Gutknecht, J. L., Guo, X., He, G., Hungate, B. A., Lei, J., Niboyet, et al
2023

- **The magnitude and pace of photosynthetic recovery after wildfire in California ecosystems.** *Proceedings of the National Academy of Sciences of the United States of America*
Hemes, K. S., Norlen, C. A., Wang, J. A., Goulden, M. L., Field, C. B.
2023; 120 (15): e2201954120
- **Low-elevation conifers in California's Sierra Nevada are out of equilibrium with climate.** *PNAS nexus*
Hill, A. P., Nolan, C. J., Hemes, K. S., Cambron, T. W., Field, C. B.
2023; 2 (2): pgad004
- **Enhancing the review process in global environmental assessments: The case of the IPCC ENVIRONMENTAL SCIENCE & POLICY**
Palutikof, J. P., Boulter, S. L., Field, C. B., Mach, K. J., Manning, M. R., Mastrandrea, M. D., Meyer, L., Minx, J. C., Pereira, J. J., Plattner, G., Ribeiro, S., Sokona, Y., Stadler, et al
2023; 139: 118-129
- **Long-term nitrogen deposition enhances microbial capacities in soil carbon stabilization but reduces network complexity.** *Microbiome*
Ma, X., Wang, T., Shi, Z., Chiariello, N. R., Docherty, K., Field, C. B., Gutknecht, J., Gao, Q., Gu, Y., Guo, X., Hungate, B. A., Lei, J., Niboyet, et al
2022; 10 (1): 112
- **Atmospheric variability contributes to increasing wildfire weather but not as much as global warming.** *Proceedings of the National Academy of Sciences of the United States of America*
Diffenbaugh, N. S., Konings, A. G., Field, C. B.
2021; 118 (46)
- **Forest fires and climate-induced tree range shifts in the western US.** *Nature communications*
Hill, A. P., Field, C. B.
2021; 12 (1): 6583
- **The limiting factors and regulatory processes that control the environmental responses of C3, C3-C4 intermediate, and C4 photosynthesis.** *Oecologia*
Johnson, J. E., Field, C. B., Berry, J. A.
2021
- **Bob Scholes: Multifaceted scientist with a genius for synthesis.** *Proceedings of the National Academy of Sciences of the United States of America*
Archibald, S., Field, C. B.
2021; 118 (36)
- **An Ecosystem-Scale Flux Measurement Strategy to Assess Natural Climate Solutions.** *Environmental science & technology*
Hemes, K. S., Runkle, B. R., Novick, K. A., Baldocchi, D. D., Field, C. B.
2021
- **Long-term warming in a Mediterranean-type grassland affects soil bacterial functional potential but not bacterial taxonomic composition.** *NPJ biofilms and microbiomes*
Gao, Y., Ding, J., Yuan, M., Chiariello, N., Docherty, K., Field, C., Gao, Q., Gu, B., Gutknecht, J., Hungate, B. A., Le Roux, X., Niboyet, A., Qi, et al
2021; 7 (1): 17
- **Routing algorithms as tools for integrating social distancing with emergency evacuation.** *Scientific reports*
Tsai, Y., Rastogi, C., Kitanidis, P. K., Field, C. B.
2021; 11 (1): 19623
- **Directions for Research on Climate and Conflict.** *Earth's future*
Mach, K. J., Adger, W. N., Buhaug, H., Burke, M., Fearon, J. D., Field, C. B., Hendrix, C. S., Kraan, C. M., Maystadt, J., O'Loughlin, J., Roessler, P., Scheffran, J., Schultz, et al
2020; 8 (7): e2020EF001532
- **Landscape scale variation in the hydrologic niche of California coast redwood** *ECOGRAPHY*
Francis, E. J., Asner, G. P., Mach, K. J., Field, C. B.
2020
- **Climate change and ecosystems: threats, opportunities and solutions.** *Philosophical transactions of the Royal Society of London. Series B, Biological sciences*
Malhi, Y., Franklin, J., Seddon, N., Solan, M., Turner, M. G., Field, C. B., Knowlton, N.
2020; 375 (1794): 20190104

- **Fire history and plant community composition outweigh decadal multi-factor global change as drivers of microbial composition in an annual grassland** *JOURNAL OF ECOLOGY*
Qin, C., Zhu, K., Chiariello, N. R., Field, C. B., Peay, K. G.
2020; 108 (2): 611–25
- **Fire affects the taxonomic and functional composition of soil microbial communities, with cascading effects on grassland ecosystem functioning** *GLOBAL CHANGE BIOLOGY*
Yang, S., Zheng, Q., Yang, Y., Yuan, M., Ma, X., Chiariello, N. R., Docherty, K. M., Field, C. B., Gutknecht, J. M., Hungate, B. A., Niboyet, A., Le Roux, X., Zhou, et al
2020; 26 (2): 431–42
- **Climate-driven risks to the climate mitigation potential of forests.** *Science (New York, N.Y.)*
Anderegg, W. R., Trugman, A. T., Badgley, G. n., Anderson, C. M., Bartuska, A. n., Ciais, P. n., Cullenward, D. n., Field, C. B., Freeman, J. n., Goetz, S. J., Hicke, J. A., Huntzinger, D. n., Jackson, et al
2020; 368 (6497)
- **The future of bioenergy** *GLOBAL CHANGE BIOLOGY*
Reid, W. V., Ali, M. K., Field, C. B.
2020; 26 (1): 274–86
- **Managed retreat through voluntary buyouts of flood-prone properties.** *Science advances*
Mach, K. J., Kraan, C. M., Hino, M., Siders, A. R., Johnston, E. M., Field, C. B.
2019; 5 (10): eaax8995
- **Methane removal and atmospheric restoration** *NATURE SUSTAINABILITY*
Jackson, R. B., Solomon, E. I., Canadell, J. G., Cagnello, M., Field, C. B.
2019; 2 (6): 436–38
- **Natural climate solutions are not enough.** *Science (New York, N.Y.)*
Anderson, C. M., DeFries, R. S., Litterman, R., Matson, P. A., Nepstad, D. C., Pacala, S., Schlesinger, W. H., Shaw, M. R., Smith, P., Weber, C., Field, C. B.
2019; 363 (6430): 933–34
- **Strengthened scientific support for the Endangerment Finding for atmospheric greenhouse gases** *SCIENCE*
Duffy, P. B., Field, C. B., Diffenbaugh, N. S., Doney, S. C., Dutton, Z., Goodman, S., Heinzerling, L., Hsiang, S., Lobell, D. B., Mickley, L. J., Myers, S., Natali, S. M., Parmesan, et al
2019; 363 (6427): 597–+
- **High-tide flooding disrupts local economic activity.** *Science advances*
Hino, M., Belanger, S. T., Field, C. B., Davies, A. R., Mach, K. J.
2019; 5 (2): eaau2736
- **Long-term elevated CO₂ shifts composition of soil microbial communities in a Californian annual grassland, reducing growth and N utilization potentials.** *The Science of the total environment*
Yang, S. n., Zheng, Q. n., Yuan, M. n., Shi, Z. n., Chiariello, N. R., Docherty, K. M., Dong, S. n., Field, C. B., Gu, Y. n., Gutknecht, J. n., Hungate, B. A., Le Roux, X. n., Ma, et al
2019; 652: 1474–81
- **Climate as a risk factor for armed conflict.** *Nature*
Mach, K. J., Kraan, C. M., Adger, W. N., Buhaug, H. n., Burke, M. n., Fearon, J. D., Field, C. B., Hendrix, C. S., Maystadt, J. F., O'Loughlin, J. n., Roessler, P. n., Scheffran, J. n., Schultz, et al
2019
- **Terrestrial Gross Primary Production: Using NIRV to Scale from Site to Globe.** *Global change biology*
Badgley, G. n., Anderegg, L. D., Berry, J. A., Field, C. B.
2019
- **Strengthened scientific support for the Endangerment Finding for atmospheric greenhouse gases.** *Science (New York, N.Y.)*
Duffy, P. B., Field, C. B., Diffenbaugh, N. S., Doney, S. C., Dutton, Z., Goodman, S., Heinzerling, L., Hsiang, S., Lobell, D. B., Mickley, L. J., Myers, S., Natali, S. M., Parmesan, et al
2018

- **Forest management in the Sierra Nevada provides limited carbon storage potential: an expert elicitation** *ECOSPHERE*
Lalonde, S. J., Mach, K. J., Anderson, C. M., Francis, E. J., Sanchez, D. L., Stanton, C. Y., Turner, P. A., Field, C. B.
2018; 9 (7)
- **Net-zero emissions energy systems** *SCIENCE*
Davis, S. J., Lewis, N. S., Shaner, M., Aggarwal, S., Arent, D., Azevedo, I. L., Benson, S. M., Bradley, T., Brouwer, J., Chiang, Y., Clack, C. M., Cohen, A., Doig, et al
2018; 360 (6396): 1419-+
- **Unprecedented rates of land-use transformation in modelled climate change mitigation pathways** *NATURE SUSTAINABILITY*
Turner, P. A., Field, C. B., Lobell, D. B., Sanchez, D. L., Mach, K. J.
2018; 1 (5): 240–45
- **The global overlap of bioenergy and carbon sequestration potential** *CLIMATIC CHANGE*
Turner, P. A., Mach, K. J., Lobell, D. B., Benson, S. M., Baik, E., Sanchez, D. L., Field, C. B.
2018; 148 (1-2): 1–10
- **Managing cropland and rangeland for climate mitigation: an expert elicitation on soil carbon in California** *CLIMATIC CHANGE*
Stanton, C. Y., Mach, K. J., Turner, P. A., Lalonde, S. J., Sanchez, D. L., Field, C. B.
2018; 147 (3-4): 633–46
- **Decoupled dimensions of leaf economic and anti-herbivore defense strategies in a tropical canopy tree community** *OECOLOGIA*
Chauvin, K., Asner, G. P., Martin, R. E., Kress, W. J., Wright, S. J., Field, C. B.
2018; 186 (3): 765–82
- **Assessing Cumulative Effects of Climate Change Manipulations on Phosphorus Limitation in a Californian Grassland** *ENVIRONMENTAL SCIENCE & TECHNOLOGY*
Mellett, T., Selvin, C., Defforey, D., Roberts, K., Lecher, A. L., Dennis, K., Gutknecht, J., Field, C., Paytan, A.
2018; 52 (1): 98–106
- **Geospatial analysis of near-term potential for carbon-negative bioenergy in the United States.** *Proceedings of the National Academy of Sciences of the United States of America*
Baik, E. n., Sanchez, D. L., Turner, P. A., Mach, K. J., Field, C. B., Benson, S. M.
2018; 115 (13): 3290–95
- **Forest offsets partner climate-change mitigation with conservation** *FRONTIERS IN ECOLOGY AND THE ENVIRONMENT*
Anderson, C. M., Field, C. B., Mach, K. J.
2017; 15 (7): 359–65
- **Rightsizing carbon dioxide removal.** *Science (New York, N.Y.)*
Field, C. B., Mach, K. J.
2017; 356 (6339): 706-707
- **Experimental fire increases soil carbon dioxide efflux in a grassland long-term multifactor global change experiment** *GLOBAL CHANGE BIOLOGY*
Strong, A. L., Johnson, T. P., Chiariello, N. R., Field, C. B.
2017; 23 (5): 1975-1987
- **Experimental fire increases soil carbon dioxide efflux in a grassland long-term multifactor global change experiment.** *Global change biology*
Strong, A. L., Johnson, T. P., Chiariello, N. R., Field, C. B.
2017; 23 (5): 1975-1987
- **Managed retreat as a response to natural hazard risk** *NATURE CLIMATE CHANGE*
Hino, M., Field, C. B., Mach, K. J.
2017; 7 (5): 364-?
- **Canopy near-infrared reflectance and terrestrial photosynthesis.** *Science advances*
Badgley, G., Field, C. B., Berry, J. A.
2017; 3 (3)
- **Toward the Next Generation of Assessment** *ANNUAL REVIEW OF ENVIRONMENT AND RESOURCES, VOL 42*

Mach, K. J., Field, C. B., Gadgil, A., Tomich, T. P.
2017; 42: 569–97

- **Nonlinear, interacting responses to climate limit grassland production under global change** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*

Zhu, K., Chiariello, N. R., Tobeck, T., Fukami, T., Field, C. B.
2016; 113 (38): 10589-10594

- **Mapping the climate change challenge** *NATURE CLIMATE CHANGE*

Hallegatte, S., Rogelj, J., Allen, M., Clarke, L., Edenhofer, O., Field, C. B., Friedlingstein, P., van Kesteren, L., Knutti, R., Mach, K. J., Mastrandrea, M., Michel, A., Minx, et al
2016; 6 (7): 663-668

- **Predicting the Responses of Soil Nitrite-Oxidizers to Multi-Factorial Global Change: A Trait-Based Approach** *FRONTIERS IN MICROBIOLOGY*

Le Roux, X., Bouskill, N. J., Niboyet, A., Barthes, L., Dijkstra, P., Field, C. B., Hungate, B. A., Lerondelle, C., Pommier, T., Tang, J., Terada, A., Tourna, M., Poly, et al
2016; 7

- **Colocation opportunities for large solar infrastructures and agriculture in drylands** *APPLIED ENERGY*

Ravi, S., Macknick, J., Lobell, D., Field, C., Ganesan, K., Jain, R., Elchinger, M., Stoltenberg, B.
2016; 165: 383-392

- **Phylogenetic Structure of Foliar Spectral Traits in Tropical Forest Canopies** *REMOTE SENSING*

McManus, K. M., Asner, G. P., Martin, R. E., Dexter, K. G., Kress, W. J., Field, C. B.
2016; 8 (3)

- **Building a sustained climate assessment process** *CLIMATIC CHANGE*

Buizer, J. L., Dow, K., Black, M. E., Jacobs, K. L., Waple, A., Moss, R. H., Moser, S., Luers, A., Gustafson, D. I., RICHMOND, T. C., Hays, S. L., Field, C. B.
2016; 135 (1): 23-37

- **In-field yellow starthistle (*Centaurea solstitialis*) volatile composition under elevated temperature and CO₂ and implications for future control** *CHEMOECOLOGY*

Oster, M., Beck, J. J., Furrow, R. E., Yeung, K., Field, C. B.
2015; 25 (6): 313-323

- **Projections of future meteorological drought and wet periods in the Amazon** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*

Duffy, P. B., Brando, P., Asner, G. P., Field, C. B.
2015; 112 (43): 13172-13177

- **Tree mortality predicted from drought-induced vascular damage** *NATURE GEOSCIENCE*

Anderegg, W. R., Flint, A., Huang, C., Flint, L., Berry, J. A., Davis, F. W., Sperry, J. S., Field, C. B.
2015; 8 (5): 367-371

- **Linking vegetation patterns to environmental gradients and human impacts in a mediterranean-type island ecosystem** *LANDSCAPE ECOLOGY*

Dahlin, K. M., Asner, G. P., Field, C. B.
2014; 29 (9): 1571-1585

- **Orientation behavior of predaceous ground beetle species in response to volatile emissions identified from yellow starthistle damaged by an invasive slug** *ARTHROPOD-PLANT INTERACTIONS*

Oster, M., Smith, L., Beck, J. J., Howard, A., Field, C. B.
2014; 8 (5): 429-437

- **Loss of whole-tree hydraulic conductance during severe drought and multi-year forest die-off** *OECOLOGIA*

Anderegg, W. R., Anderegg, L. D., Berry, J. A., Field, C. B.
2014; 175 (1): 11-23

- **Linking rainforest ecophysiology and microclimate through fusion of airborne LiDAR and hyperspectral imagery** *ECOSPHERE*

Broadbent, E. N., Zambrano, A. M., Asner, G. P., Field, C. B., Rosenheim, B. E., Kennedy-Bowdoin, T., Knapp, D. E., Burke, D., Giardina, C., Cordell, S.
2014; 5 (5)

- **Tradeoffs and Synergies between Biofuel Production and Large Solar Infrastructure in Deserts.** *Environmental science & technology*
Ravi, S., Lobell, D. B., Field, C. B.
2014; 48 (5): 3021-3030
- **Modeling the impact of carbon farming on land use in a New Zealand landscape** *ENVIRONMENTAL SCIENCE & POLICY*
Funk, J. M., Field, C. B., Kerr, S., Daigneault, A.
2014; 37: 1-10
- **Land-Use Efficiency of Big Solar** *ENVIRONMENTAL SCIENCE & TECHNOLOGY*
Hernandez, R. R., Hoffacker, M. K., Field, C. B.
2014; 48 (2): 1315-1323
- **Integrating stand and soil properties to understand foliar nutrient dynamics during forest succession following slash-and-burn agriculture in the Bolivian Amazon.** *PloS one*
Broadbent, E. N., Almeyda Zambrano, A. M., Asner, G. P., Soriano, M., Field, C. B., de Souza, H. R., Peña-Claros, M., Adams, R. I., Dirzo, R., Giles, L.
2014; 9 (2)
- **Integrating Stand and Soil Properties to Understand Foliar Nutrient Dynamics during Forest Succession Following Slash-and-Burn Agriculture in the Bolivian Amazon.** *PloS one*
Broadbent, E. N., Almeyda Zambrano, A. M., Asner, G. P., Soriano, M., Field, C. B., de Souza, H. R., Peña-Claros, M., Adams, R. I., Dirzo, R., Giles, L.
2014; 9 (2): e86042
- **Changes in Ecologically Critical Terrestrial Climate Conditions** *SCIENCE*
Diffenbaugh, N. S., Field, C. B.
2013; 341 (6145): 486-492
- **Seasonal energy storage using bioenergy production from abandoned croplands** *ENVIRONMENTAL RESEARCH LETTERS*
Campbell, J. E., Lobell, D. B., Genova, R. C., Zumkehr, A., Field, C. B.
2013; 8 (3)
- **Risk management and climate change** *NATURE CLIMATE CHANGE*
Kunreuther, H., Heal, G., Allen, M., Edensofer, O., Field, C. B., Yohe, G.
2013; 3 (5): 447-450
- **Environmental and community controls on plant canopy chemistry in a Mediterranean-type ecosystem.** *Proceedings of the National Academy of Sciences of the United States of America*
Dahlin, K. M., Asner, G. P., Field, C. B.
2013; 110 (17): 6895-6900
- **Drought's legacy: multiyear hydraulic deterioration underlies widespread aspen forest die-off and portends increased future risk** *GLOBAL CHANGE BIOLOGY*
Anderegg, W. R., Plavcova, L., Anderegg, L. D., Hacke, U. G., Berry, J. A., Field, C. B.
2013; 19 (4): 1188-1196
- **Simulated hydroclimatic impacts of projected Brazilian sugarcane expansion** *GEOPHYSICAL RESEARCH LETTERS*
Georgescu, M., Lobell, D. B., Field, C. B., Mahalov, A.
2013; 40 (5): 972-977
- **Fostering advances in interdisciplinary climate science** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Shaman, J., Solomon, S., Colwell, R. R., Field, C. B.
2013; 110: 3653-3656
- **A dual isotope approach to isolate soil carbon pools of different turnover times** *BIOGEOSCIENCES*
Torn, M. S., Kleber, M., Zavaleta, E. S., Zhu, B., Field, C. B., Trumbore, S. E.
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- **Biophysical Properties of Cultivated Pastures in the Brazilian Savanna Biome: An Analysis in the Spatial-Temporal Domains Based on Ground and Satellite Data** *REMOTE SENSING*
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