

DOE-BER Terrestrial Ecosystem Science Activities at AGU 2018 Fall Meeting
Lawrence Berkeley National Laboratory – Earth and Environmental Sciences Area

AmeriFlux

Date: Mon, Dec 10 **Time:** 12:30 PM - 1:30 PM

Location: Marriott Marquis Archives

Town Hall: AmeriFlux: Community Action, Decadal Synthesis, and the Year of Methane

TH13B – AmeriFlux: Community Action, Decadal Synthesis, and the Year of Methane

Torn, Margaret S; Biraud, Sebastien; Agarwal, Deb; Keenan, Trevor F; Pastorello, Gilberto; Chan, Stephen; Chu, Housen; Christianson, Danielle S; Knox, Sara; Papale, Dario

LBL Project: AmeriFlux

Date: Tue, Dec 11 **Time:** 8:00 AM - 10:00 AM

Location: Walter E Washington Convention Center 150A

Convened Session: **B21D** – Surface–Atmosphere Interactions: From Single Flux Measurements to Integrated Synthesis I

Chu, Housen; Metzger, Stefan; Durden, David; Papale, Dario; Battelle,

LBL Project: AmeriFlux

Date: Tue, Dec 11 **Time:** 10:20 AM - 12:20 PM

Location: Marriott Marquis Marquis 9-10

Convened Session: **NH22A** – Unmanned Aircraft Systems (UAS) in Geosciences: Research and Development

Webley, Peter W; Biraud, Sabastien; Pieri, David C; Krassovski, Misha

LBL Project: AmeriFlux

Date: Tue, Dec 11 **Time:** 10:20 AM - 12:20 PM

Location: Walter E Washington Convention Center 150A

Convened Session: **B22C** – Surface–Atmosphere Interactions: From Single Flux Measurements to Integrated Synthesis II

Chu, Housen; Metzger, Stefan; Durden, David; Papale, Dario; Battelle,

LBL Project: AmeriFlux

Date: Tue, Dec 11 **Time:** 12:05 PM - 12:20 PM

Location: Walter E Washington Convention Center 150A

Session: Surface–Atmosphere Interactions: From Single Flux Measurements to Integrated Synthesis II

Abstract Title: **B22C-08** – The processing pipeline code base for FLUXNET: present and future

Pastorello, Gilberto; Papale, Dario; Trotta, Carlo; Ribeca, Alessio; Elbashandy, Abdelrahman; Canfora, Eleonora; Cheah, You-Wei; Christianson, Danielle S; Chu, Housen; Keenan, Trevor F; Biraud, Sabastien; Agarwal, Deb

Presenter: Gilberto Pastorello

LBL Project: AmeriFlux

Date: Tue, Dec 11 **Time:** 1:40 PM - 6:00 PM

Location: Walter E Washington Convention Center Hall A-C (Poster Hall)

Convened Session: **NH23D** – Unmanned Aircraft Systems (UAS) in Geosciences: Research and Development Posters

Webley, Peter W; Biraud, Sebastien; Pieri, David C; Krassovski, Misha

LBL Project: AmeriFlux

Date: Wed, Dec 12 **Time:** 1:40 PM - 6:00 PM

Location: Walter E Washington Convention Center Hall A-C (Poster Hall)

Session: Surface–Atmosphere Interactions: From Single Flux Measurements to Integrated Synthesis Posters

Poster: B331-2793 – Optimizing the Use of Redundant and Similar Sensors in Automated Gap-Filling of Meteorological Measurements at the Network Level

Sturtevant, Cove; Papale, Dario; Pastorello, Gilberto

Presenter: Cove Sturtevant

LBL Project: AmeriFlux

Date: Wed, Dec 12 **Time:** 1:40 PM - 6:00 PM

Location: Walter E Washington Convention Center Hall A-C (Poster Hall)

Convened Session: B331 – Surface–Atmosphere Interactions: From Single Flux Measurements to Integrated Synthesis Posters

Chu, Housen; Metzger, Stefan; Durden, David; Papale, Dario; Battelle,

LBL Project: AmeriFlux

Date: Wed, Dec 12 **Time:** 1:40 PM - 6:00 PM

Location: Walter E Washington Convention Center Hall A-C (Poster Hall)

Session: Surface–Atmosphere Interactions: From Single Flux Measurements to Integrated Synthesis Posters

Poster: B331-2790 – Applying ‘universal’ functions as quality control tests for sonic anemometers: An analysis using AmeriFlux Tech Team site visits

Chan, Stephen; Chu, Housen; Billesbach, David P; Hanson, Chad V; Dengel, Sigrid; Biraud, Sebastien

Presenter: Stephen Chan

LBL Project: AmeriFlux

Date: Wed, Dec 12 **Time:** 1:40 PM - 6:00 PM

Location: Walter E Washington Convention Center Hall A-C (Poster Hall)

Session: Surface–Atmosphere Interactions: From Single Flux Measurements to Integrated Synthesis Posters

Poster: B331-2791 – Implications of the Gill-Solent WindMaster-Pro “w-boost” firmware bug to archival flux data

Billesbach, David P; Chan, Stephen; Biraud, Sebastien

Presenter: David Billesbach

LBL Project: AmeriFlux

Date: Wed, Dec 12 **Time:** 1:40 PM - 6:00 PM

Location: Walter E Washington Convention Center Hall A-C (Poster Hall)

Session: Surface–Atmosphere Interactions: From Single Flux Measurements to Integrated Synthesis Posters

Poster: B331-2792 – Network at a glance: Probing turbulent statistics across AmeriFlux sites by using the roving eddy covariance system

Chu, Housen; Chan, Stephen; Biraud, Sebastien; Dengel, Sigrid; Billesbach, David P; Hanson, Chad V; Baldocchi, Dennis D

Presenter: Housen Chu

LBL Project: AmeriFlux

Date: Wed, Dec 12 **Time:** 1:40 PM - 6:00 PM

Location: Walter E Washington Convention Center Hall A-C (Poster Hall)

Session: Surface–Atmosphere Interactions: From Single Flux Measurements to Integrated Synthesis Posters

Poster: B331-2801 – The characteristics of low evapotranspiration in Chi-Lan montane cloud forest in Taiwan

Gu, Rong-Yu; Lo, Min-Hui; Liao, Chi-Ya; Juang, Jehn-Yih; Huang, Choying; Chang, Shih-Chieh; Hsieh, Cheng-I; Li, Ming-Hsu; Chen, Yiying; Chu, Housen; Chao, Li-Wei; Chang, Yu-Hung; Hwang, Jin-De; Chang, Po-Shen; Chu, Yun-Ya

Presenter: Rong-Yu Gu

LBL Project: AmeriFlux

Date: Wed, Dec 12 **Time:** 4:00 PM - 4:12 PM

Location: Walter E Washington Convention Center 209A-C

Session: Scalable Data Management Practices in Earth Sciences I

Abstract Title: IN34B-01 – Enabling Scalable Integration of Diverse Data (**Invited**)

Agarwal, Deb; Varadharajan, Charuleka; Christianson, Danielle S; Cheah, You-Wei; Pastorello, Gilberto; Chu, Housen; Cholia, Shreyas; Snavelly, Cory; Hendrix, Val; Faybishenko, Boris; Versteeg, Roelof; Juarez, Robinson I Negron

Presenter: Deb Agarwal

LBL Project: AmeriFlux

Date: Wed, Dec 12 **Time:** 4:33 PM - 4:47 PM

Location: Walter E Washington Convention Center 206

Session: Research Data Management: Developing Standards for Data Usability and Trust and Building Capacity with Targeted Data Training for the Research Team I

Abstract Title: IN34A-03 – AmeriFlux BADM: Implementing lessons from 12 years of long-tail data management into next generation earth science systems

Cheah, You-Wei; Christianson, Danielle S; Chu, Housen; Pastorello, Gilberto; O'Brien, Fianna; Ong, Yeongshnn; Ingen, Catharine van; Torn, Margaret S; Agarwal, Deb

Presenter: You-Wei Cheah

LBL Project: AmeriFlux

Date: Thu, Dec 13 **Time:** 1:40 PM - 6:00 PM

Location: Walter E Washington Convention Center Hall A-C (Poster Hall)

Session: Coastal Wetland Carbon: Recent Advances in Measurements, Modeling, and Syntheses III Posters

Poster: B43G-2935 – Tidal Effects on Ecosystem Exchange of Carbon Dioxide and Methane in Restored Tidal Marshes of San Francisco Bay

Bahramian, Jennifer; Chu, Housen; Biraud, Sebastien; Oikawa, Patty

Presenter: Jennifer Bahramian

LBL Project: AmeriFlux

Date: Thu, Dec 13 **Time:** 3:25 PM - 3:40 PM

Location: Walter E Washington Convention Center 147B

Session: The Global Methane Cycle I

Abstract Title: B43D-08 – FLUXNET methane synthesis activity: Objectives, Observations, and Future Directions

Knox, Sara H; Jackson, Robert B; Poulter, Benjamin; Zhang, Zhen; Fluet-Chouinard, Etienne; Bousquet, Philippe; Hugelius, Gustaf; Canadell, Josep Gili; Saunio, Marielle; Papale, Dario; Keenan, Trevor F; Chu, Housen; Baldocchi, Dennis D; Campbell, Dave; Ch

Presenter: Sara Knox

LBL Project: AmeriFlux

NGEE-Arctic

Date: Mon, Dec 10 **Time:** 1:40 PM - 1:55 PM

Location: Walter E Washington Convention Center 143A-C

Session: The Resilience and Vulnerability of Arctic and Boreal Ecosystems to Climate Change III

Abstract Title: B13E-01 – *Non-growing season plant nitrogen uptake affects losses and carbon budgets in tundra and boreal systems*

Riley, William J; Mekonnen, Zelalem Amdie; Grant, Robert F; Tang, Jinyun; Bouskill, Nicholas; Zhu, Qing

Presenter: William Riley

LBL Project: NGEE-Arctic

Date: Mon, Dec 10 **Time:** 1:40 PM - 1:55 PM

Location: Walter E Washington Convention Center 150B

Session: Plant Traits, Biogeochemical Cycles, and Optimality-Driven Model Development I

Abstract Title: B13D-01 – Characterizing rooting depth distribution and nitrogen acquisition by dominant tundra plant species

Iversen, Colleen M.; Slette, Ingrid; Sloan, Victoria L; Childs, Joanne; Norby, Richard; Riley, William J; Salmon, Verity G; Stel, Holly M. Vander; Wullschleger, Stan D; Zhu, Qing

Presenter: Colleen Iversen

LBL Project: NGEE-Arctic

Date: Tue, Dec 11 **Time:** 2:25 PM - 2:40 PM

Location: Walter E Washington Convention Center 150B

Session: Advances in Soil Respiration Research II

Abstract Title: B23A-04 – A method to predict, rather than prescribe, soil heterotrophic respiration responses to soil moisture

Tang, Jinyun; Riley, William J

Presenter: Jinyun Tang

LBL Project: NGEE-Arctic

Date: Wed, Dec 12 **Time:** 8:00 AM - 12:20 PM

Location: Walter E Washington Convention Center Hall A-C (Poster Hall)

Session: Vulnerability of Permafrost Carbon to Climate Change II Posters

Poster: B31E-2491 – The influence of vegetation on shallow soil and air temperature coupling: a Pan-Arctic data synthesis

Kropp, Heather; Loranty, Michael M; Natali, Susan; Kholodov, Alexander L; Abbott, Benjamin; Abermann, Jakob; Blanc-Betes, Elena; Blok, Daan; Blume-Werry, Gesche; Boike, Julia; Breen, Amy Lynn; Cahoon, Sean M.P.; Christiansen, Casper; Douglas, Thomas A; be

Presenter: Heather Kropp

LBL Project: NGEE-Arctic

Date: Wed, Dec 12 **Time:** 8:00 AM - 12:20 PM

Location: Walter E Washington Convention Center Hall A-C (Poster Hall)

Session: Interactions Between Hydrological and Biogeochemical Change in Permafrost Environments II Posters

Poster: B31H-2579 – Soil pH Controls on Anaerobic Microbial Activity and Organic Carbon Transformations in Arctic Polygon Tundra

Graham, David E; Zheng, Jianqiu; Herndon, Elizabeth; Dillon, Megan; Tas, Neslihan; Moon, Ji-Won; Gu, Baohua; Wullschleger, Stan

Presenter: David Graham

LBL Project: NGEE-Arctic

Date: Wed, Dec 12 **Time:** 8:00 AM - 12:20 PM

Location: Walter E Washington Convention Center Hall A-C (Poster Hall)

Session: The Resilience and Vulnerability of Arctic and Boreal Ecosystems to Climate Change VI Posters

Poster: B31F-2525 – Fire driven vegetation dynamics and rapid carbon turnover cause a decline in high-latitude soil carbon stocks under future climate

Mekonnen, Zelalem Amdie; Riley, William J; Randerson, James Tremper; Grant, Robert F

Presenter: Zelalem Mekonnen

LBL Project: NGEE-Arctic

Date: Wed, Dec 12 **Time:** 8:00 AM - 12:20 PM

Location: Walter E Washington Convention Center Hall A-C (Poster Hall)

Session: The Resilience and Vulnerability of Arctic and Boreal Ecosystems to Climate Change VI Posters

Poster: B31F-2561 – Quantifying Cold Season Soil CO₂ Emissions in Alaska and Northwest Canada

Watts, Jennifer; Natali, Susan; Minions, Christina; Ludwig, Sarah; Rogers, Brendan M; Goetz, Scott J; Birch, Leah; Sonnentag, Oliver; Euskirchen, Eugenie Susanne; Ueyama, Masahito; Humphreys, Elyn; Zona, Donatella; Oechel, Walter C; Rocha, Adrian V; Arndt

Presenter: Jennifer Watts

LBL Project: NGEE-Arctic

Date: Wed, Dec 12 **Time:** 8:00 AM - 12:20 PM

Location: Walter E Washington Convention Center Hall A-C (Poster Hall)

Session: The Resilience and Vulnerability of Arctic and Boreal Ecosystems to Climate Change VI Posters

Poster: B31F-2512 – Modelling climate change impacts on an Arctic polygonal tundra: Changes in CO₂ and CH₄ exchange depend on rates of permafrost thaw as affected by changes in vegetation and drainage

Grant, Robert F; Mekonnen, Zelalem Amdie; Riley, William J; Arora, Bhavna; Torn, Margaret S

Presenter: William Riley

LBL Project: NGEE-Arctic

Date: Wed, Dec 12 **Time:** 1:40 PM - 1:55 PM

Location: Walter E Washington Convention Center 146B

Session: Groundwater–Surface Water Interactions: Identifying and Integrating Physical, Biological, and Chemical Patterns and Processes Across Systems and Scales III

Abstract Title: H33F-01 – Linking Snowmelt and Nitrogen Cycling to Vegetation Community Dynamics along a Hillslope Transect **(Invited)**

Arora, Bhavna; Brodie, Eoin; Mekonnen, Zelalem Amdie; Tokunaga, Tetsu K; Wan, Jiamin; Steltzer, Heidi; Wu, Yuxin; Steefel, Carl I

Presenter: Bhavna Arora

LBL Project: NGEE-Arctic

Date: Thu, Dec 13 **Time:** 8:00 AM - 12:20 PM

Location: Walter E Washington Convention Center Hall A-C (Poster Hall)

Session: The Global Methane Cycle Posters

Poster: B41H-2808 – Seasonal water level strongly affects CH₄ emissions in a natural estuarine wetland: Current and future predictions using a mechanistic model

Morin, Timothy Hector; Riley, William J; Sanchez, Camilo Rey; Bohrer, Gil; Mekonnen, Zelalem Amdie; Stefanik, Kay C; Wrighton, Kelly C.

Presenter: Timothy Morin

LBL Project: NGEE-Arctic

Date: Thu, Dec 13 **Time:** 8:00 AM - 12:20 PM

Location: Walter E Washington Convention Center Hall A-C (Poster Hall)

Session: Nutrient–Carbon Cycle Interactions in Terrestrial Ecosystems Posters

Poster: B41K-2860 – Stimulation of anaerobic organic matter decomposition by subsurface organic N addition in tundra soils

Philben, Michael J; Zheng, Jianqiu; Bill, Markus; Heikoop, Jeffrey M; Perkins, George; Wullschleger, Stan; Graham, David E; Gu, Baohua

Presenter: Michael Philben

LBL Project: NGEE-Arctic

Date: Thu, Dec 13 **Time:** 11:20 AM - 11:35 AM

Location: Marriott Marquis Marquis 12-13

Session: Advances and Revelations from Geophysical Exploration and Observation in the Cryosphere I

Abstract Title: NS42A-05 – Permafrost characterization near Teller, Alaska, using petrophysical joint inversion of seismic and geoelectrical data

Wagner, Florian M.; Uhlemann, Sebastian; Dafflon, Baptiste; Ulrich, Craig; Peterson, John; Akins, Hunter; Kemna, Andreas; Hubbard, Susan

Presenter: Florian Wagner

LBL Project: NGEE-Arctic

Date: Fri, Dec 14 **Time:** 8:00 AM - 12:20 PM

Location: Walter E Washington Convention Center Hall A-C (Poster Hall)

Session: Advancing Understanding of Cold Climate Hydrologic and Geomorphic Systems in a Warming Climate Posters

Poster: C51C-1059 – Estimation of polygonal tundra soil properties by coupled inversion of ERT and hydrothermal data

Atchley, Adam Lee; Jafarov, Elchin E; Harp, Dylan R; Coon, Ethan T; Dafflon, Baptiste; Tran, Anh Phuong; Hubbard, Susan; Wilson, Cathy Jean

Presenter: Adam Atchley

LBL Project: NGEE-Arctic

Date: Fri, Dec 14 **Time:** 8:00 AM - 12:20 PM

Location: Walter E Washington Convention Center Hall A-C (Poster Hall)

Session: Advancing Understanding of Cold Climate Hydrologic and Geomorphic Systems in a Warming Climate Posters

Poster: C51C-1061 – Simulation of Landscape Changes on the Alaskan Arctic Coastal Plain with the Alaska Thermokarst Model

Bolton, Bob; Helene, Genet; Lara, Mark J; Urbana-Champaign, ; Romanovsky, Vladimir E; Riley, William J

Presenter: Bob Bolton

LBL Project: NGEE-Arctic

Date: Fri, Dec 14 **Time:** 8:00 AM - 12:20 PM

Location: Walter E Washington Convention Center Hall A-C (Poster Hall)

Session: Advancing Understanding of Cold Climate Hydrologic and Geomorphic Systems in a Warming Climate Posters

Poster: C51C-1065 – Linking Surface and Subsurface Behaviors: UAV-based multi-spectral Imagery as Predictor of Soil Wetness, Thaw Depth and Soil Respiration in an Arctic Watershed

Shirley, Ian; Dafflon, Baptiste; Chafe, Oriana; Akins, Hunter; Biraud, Sebastien; Hanson, Chad V; Torn, Margaret S; Hubbard, Susan

Presenter: Ian Shirley

LBL Project: NGEE-Arctic

Date: Fri, Dec 14 **Time:** 8:00 AM - 12:20 PM

Location: Walter E Washington Convention Center Hall A-C (Poster Hall)

Session: Advancing Understanding of Cold Climate Hydrologic and Geomorphic Systems in a Warming Climate Posters

Poster: C51C-1060 – Development and use of a Distributed Temperature Profiling (DTP) System to Estimate Arctic Soil Thermohydrology and Depth to Permafrost, and their Relationships with Geomorphological and Vegetation Properties

Dafflon, Baptiste; Akins, Hunter; Lamb, Jack; Leger, Emmanuel; Ulrich, Craig; Uhlemann, Sebastian; Shirley, Ian; Peterson, John E; Biraud, Sebastien; Hubbard, Susan

Presenter: Baptiste Dafflon

LBL Project: NGEE-Arctic

NGEE-Tropics

Date: Mon, Dec 10 **Time:** 1:40 PM - 6:00 PM

Location: Walter E Washington Convention Center Hall A-C (Poster Hall)

Session: Vegetation Canopies: Physiology, Structure, Function I Posters

Poster: B13I-2241 – A Framework for Testing Plant Allocation and Reactive Transport Hypotheses

Knox, Ryan G; Koven, Charles; Riley, William J; Bisht, Gautam; Chambers, Jeffrey Q; Christoffersen, Bradley O; Holm, Jennifer; Fisher, Rosie; Kueppers, Lara M; Medvigy, David; Shuman, Jacquelyn K; Walker, Anthony; Wei, Liang; Xu, Chonggang

Presenter: Ryan Knox

LBL Project: NGEE-Tropics

Date: Wed, Dec 12 **Time:** 8:45 AM - 9:00 AM

Location: Walter E Washington Convention Center 147B

Session: Monitoring Forest Structure, Productivity, and Change at the Intersection of Forest Modeling, Remote Sensing, and Field Measurements I

Abstract Title: B31B-04 – Demographic modeling and Landsat sensitivity to forest recovery following tropical clear-cuts and boreal heat-driven forest mortality events

Holm, Jennifer A.; Juarez, Robinson I Negron; Knox, Ryan G; Koven, Charles; Fisher, Rosie; Riley, William J; Faybishenko, Boris; Chambers, Jeffrey Q

Presenter: Jennifer Holm

LBL Project: NGEE-Tropics

Date: Fri, Dec 14 **Time:** 8:00 AM - 10:00 AM

Location: Walter E Washington Convention Center 147B

Convened Session: B51C – Tropical Forests Under a Changing Environment I

Mao, Jiafu; Shuman, Jacquelyn K; Doughty, Chris; Juarez, Robinson I Negron

LBL Project: NGEE-Tropics

Date: Fri, Dec 14 **Time:** 8:00 AM - 12:20 PM

Location: Walter E Washington Convention Center Hall A-C (Poster Hall)

Session: Understanding the Role of Plant Hydraulics Across Scales I Posters

Poster: B51I-2062 – UNDERSTANDING THE CONTROL OF HYDRAULIC TRAITS IN TROPICAL FORESTS USING A HYDRODYNAMIC MODEL WITHIN A DEMOGRAPHIC VEGETATION MODEL

Xu, Chonggang; Christoffersen, Bradley O; Fisher, Rosie; Knox, Ryan G; Wei, Liang; Kueppers, Lara M; Chambers, Jeff; McDowell, Nate; Koven, Charlie

Presenter: Chonggang Xu

LBL Project: NGEE-Tropics

Date: Fri, Dec 14 **Time:** 8:36 AM - 8:48 AM

Location: Walter E Washington Convention Center 147B

Session: Tropical Forests Under a Changing Environment I

Abstract Title: B51C-04 – Wind-tree interactions in the Amazon (INVENTA): disturbance dynamics and forest functioning

Marra, Daniel Magnabosco; Juarez, Robinson I Negron; Lima, Adriano Jose Nogueira; Higuchi, Niro; Celes, Carlos Henrique Souza; Ribeiro, Gabriel H.P.M.; Peterson, Chris J; Chambers, Jeffrey Q; Kolle, Olaf; Richter, Ronny; Wirth, Christian; Trumbore, Susan

Presenter: Daniel Magnabosco Marra

LBL Project: NGEE-Tropics

Date: Fri, Dec 14 **Time:** 10:20 AM - 12:20 PM

Location: Walter E Washington Convention Center 147B

Convened Session: B52C – Tropical Forests Under a Changing Environment II

Mao, Jiafu; Shuman, Jacquelyn K; Doughty, Chris; Juarez, Robinson I Negron

LBL Project: NGEE-Tropics

Date: Fri, Dec 14 **Time:** 11:50 AM - 12:05 PM

Location: Walter E Washington Convention Center 147B

Session: Tropical Forests Under a Changing Environment II

Abstract Title: B52C-07 – Modeling the impacts of plant hydraulics in tropical forest response to drought

Fang, Yilin; Leung, L. Ruby; Knox, Ryan G; McDowell, Nate; Grossiord, Charlotte; Wolfe, Brett; Xu, Chonggang; Christoffersen, Bradley O; Gentine, Pierre; Kennedy, Daniel; Koven, Charles

Presenter: Yilin Fang

LBL Project: NGEE-Tropics

Date: Fri, Dec 14 **Time:** 12:05 PM - 12:20 PM

Location: Walter E Washington Convention Center 147B

Session: Tropical Forests Under a Changing Environment II

Abstract Title: B52C-08 – Simulating drought-induced forest mortality for rainforests within ELM-FATES

Wei, Liang; Xu, Chonggang; Zhou, Hang; Christoffersen, Bradley O; Fisher, Rosie; Johnson, Daniel J; Knox, Ryan G; Koven, Charles; McDowell, Nate

Presenter: Liang Wei

LBL Project: NGEE-Tropics

Date: Fri, Dec 14 **Time:** 1:40 PM - 6:00 PM

Location: Walter E Washington Convention Center Hall A-C (Poster Hall)

Session: Tropical Forests Under a Changing Environment III Posters

Poster: B53J-2177 – Remote sensing and regression analysis of impacts from Hurricane Maria on forest of Puerto Rico

Feng, Yanlei; Juarez, Robinson I Negrón; Chambers, Jeffrey Q

Presenter: Yanlei Feng

LBL Project: NGEE-Tropics

Date: Fri, Dec 14 **Time:** 1:40 PM - 6:00 PM

Location: Walter E Washington Convention Center Hall A-C (Poster Hall)

Session: Tropical Forests Under a Changing Environment III Posters

Poster: B53J-2198 – Tree mortality and Extreme Rainfall in the Amazon

Juarez, Robinson I Negrón; Marra, Daniel Magnabosco; Jenkins, Hillary S; Aleixo, Izabela Fonseca; Barbosa, Antenor; Derroire, Geraldine; Holm, Jennifer; Hérault, Bruno; Rutishauser, Ervan; Burban, Benoit; Bonal, Damien; Christianson, Danielle S; Faybishen

Presenter: Robinson Negrón Juarez

LBL Project: NGEE-Tropics

Date: Fri, Dec 14 **Time:** 1:40 PM - 6:00 PM

Location: Walter E Washington Convention Center Hall A-C (Poster Hall)

Convened Session: B53J – Tropical Forests Under a Changing Environment III Posters

Mao, Jiafu; Shuman, Jacquelyn K; Doughty, Chris; Juarez, Robinson I Negrón

LBL Project: NGEE-Tropics

Date: Fri, Dec 14 **Time:** 1:40 PM - 6:00 PM

Location: Walter E Washington Convention Center Hall A-C (Poster Hall)

Session: Tropical Forests Under a Changing Environment III Posters

Poster: B53J-2180 – Benchmarking and parameter sensitivity of FATES predictions of ecosystem structure and function at Barro Colorado Island, Panama

Koven, Charles D; Knox, Ryan G; Fisher, Rosie; Chambers, Jeff; Christoffersen, Bradley O; Davies, Stuart J; Detto, Matteo; Dietze, Michael; Faybishenko, Boris; Holm, Jennifer; Kovenock, Marlies; Kueppers, Lara M; Massoud, Elias Charbel; McDowell, Nate; Mu

Presenter: Charles Koven

LBL Project: NGEE-Tropics

TES SFA

Date: Mon, Dec 10 **Time:** 1:55 PM - 2:10 PM

Location: Walter E Washington Convention Center 150B

Session: Plant Traits, Biogeochemical Cycles, and Optimality-Driven Model Development I

Abstract Title: B13D-02 – The persistence of root carbon in soil: data and modeling gaps

Malhotra, Avni; Abramoff, Rose Z; Hanson, Paul J; Harden, Jennifer W; Pries, Caitlin Hicks;
Jackson, Robert B; McCormack, M. Luke; Norby, Richard J; Sihi, Debjani; Sulman, Benjamin N;
Thornton, Peter E; Tumber-Davila, Shersingh Joseph; Walker, Anthony; We

Presenter: Avni Malhotra

LBL Project: TES SFA

Date: Tue, Dec 11 **Time:** 3:25 PM - 3:40 PM

Location: Walter E Washington Convention Center 150B

Session: Advances in Soil Respiration Research II

Abstract Title: B23A-08 – Digging down: How respiration from different soil depths responds to climate change

Pries, Caitlin Hicks; Krol, Owen; Frey, Serita D; Templer, Pamela H

Presenter: Caitlin Hicks Pries

LBL Project: TES SFA

Date: Wed, Dec 12 **Time:** 8:00 AM - 12:20 PM

Location: Walter E Washington Convention Center Hall A-C (Poster Hall)

Session: Vulnerability of Permafrost Carbon to Climate Change II Posters

Poster: B31E-2492 – Inter-annual Variation in Radiocarbon Age of Ecosystem Respiration Exceeds Permafrost Warming Effects

Pegoraro, Elaine; Mauritz, Marguerite; Crummer, Kathryn G; Ebert, Christopher; Pries, Caitlin Hicks; Schuur, Edward

Presenter: Elaine Pegoraro

LBL Project: TES SFA

Date: Wed, Dec 12 **Time:** 12:05 PM - 12:20 PM

Location: Walter E Washington Convention Center 150A

Session: Soil Carbon Change and Persistence in the Anthropocene II

Abstract Title: B32C-08 – The role of mineral content and composition on the capacity of soils to store carbon

Georgiou, Katerina; Feng, Wenting; Abramoff, Rose Z; Riley, William J; Jackson, Robert B; Torn, Margaret S

Presenter: Katerina Georgiou

LBL Project: TES SFA

Date: Thu, Dec 13 **Time:** 8:00 AM - 12:20 PM

Location: Walter E Washington Convention Center Hall A-C (Poster Hall)

Convened Session: B41K – Nutrient–Carbon Cycle Interactions in Terrestrial Ecosystems Posters

Soong, Jennifer; Marañon-Jimenez, Sara; Richter, Andreas; Peñuelas, Josep; CREAM, ; Valle, Cerdanyola Del; Spain, ; Vienna, ; Austria, ; Valles, Cerdanyola del

LBL Project: TES SFA

Date: Thu, Dec 13 **Time:** 1:40 PM - 3:40 PM

Location: Walter E Washington Convention Center 150B

Convended Session: **B43A** – Nutrient–Carbon Cycle Interactions in Terrestrial Ecosystems I

Soong, Jennifer; Marañon-Jimenez, Sara; Richter, Andreas; Peñuelas, Josep; CREAM, ; Valle, Cerdanyola Del; Spain, ; Vienna, ; Austria, ; Valles, Cerdanyola del

LBL Project: TES SFA

Date: Thu, Dec 13 **Time:** 1:40 PM - 6:00 PM

Location: Walter E Washington Convention Center Hall A-C (Poster Hall)

Convended Session: **B43M** – Plant–Soil Interactions Under Global Warming: Learning Mechanisms from Multiyear Field Experiments and Natural Gradients Posters

Solly, Emily; Schmidt, Michael W I; Torn, Margaret S; Hanson, Paul J

LBL Project: TES SFA

Date: Thu, Dec 13 **Time:** 1:40 PM - 6:00 PM

Location: Walter E Washington Convention Center Hall A-C (Poster Hall)

Session: Plant–Soil Interactions Under Global Warming: Learning Mechanisms from Multiyear Field Experiments and Natural Gradients Posters

Poster: **B43M-3001** – Does Soil Warming Alter Lipid Composition in Plants and Soils?

Ofiti, Nicholas Ouma; Solly, Emily; Zosso, Cyrill Urs; Torn, Margaret S; Wiesenberg, Guido LB; Schmidt, Michael W I

Presenter: Michael Schmidt

LBL Project: TES SFA

Date: Thu, Dec 13 **Time:** 1:40 PM - 6:00 PM

Location: Walter E Washington Convention Center Hall A-C (Poster Hall)

Session: Plant–Soil Interactions Under Global Warming: Learning Mechanisms from Multiyear Field Experiments and Natural Gradients Posters

Poster: **B43M-3017** – The response of soil-profile temperatures to climate change and potential impacts on decomposition, plant processes, and nutrient cycling.

Torn, Margaret S; Phillips, Claire Louise; Ledna, Catherine; Soong, Jennifer; Koven, Charles

Presenter: Margaret Torn

LBL Project: TES SFA

Date: Thu, Dec 13 **Time:** 1:40 PM - 6:00 PM

Location: Walter E Washington Convention Center Hall A-C (Poster Hall)

Session: Plant–Soil Interactions Under Global Warming: Learning Mechanisms from Multiyear Field Experiments and Natural Gradients Posters

Poster: **B43M-3020** – Warming Deep Soils: Depth dependent Microbial Community responses

Zosso, Cyrill Urs; Soong, Jennifer; Ofiti, Nicholas Ouma; Solly, Emily; Torn, Margaret S; Wiesenberg, Guido LB; Schmidt, Michael W I

Presenter: Michael Schmidt

LBL Project: TES SFA

Date: Fri, Dec 14 **Time:** 10:20 AM - 12:20 PM

Location: Walter E Washington Convention Center 150A

Convened Session: B52A – Plant–Soil Interactions Under Global Warming: Learning Mechanisms from Multiyear Field Experiments and Natural Gradients I

Solly, Emily; Schmidt, Michael W I; Torn, Margaret S; Hanson, Paul J

LBL Project: TES SFA

Date: Fri, Dec 14 **Time:** 10:20 AM - 10:35 AM

Location: Walter E Washington Convention Center 150A

Session: Plant–Soil Interactions Under Global Warming: Learning Mechanisms from Multiyear Field Experiments and Natural Gradients I

Abstract Title: B52A-01 – Beyond Surface Flux: Gathering new insights from in situ warming experiments
(Invited)

Pries, Caitlin Hicks; Sulman, Benjamin N; Abramoff, Rose Z

Presenter: Caitlin Hicks Pries

LBL Project: TES SFA

Date: Fri, Dec 14 **Time:** 10:35 AM - 10:50 AM

Location: Walter E Washington Convention Center 150A

Session: Plant–Soil Interactions Under Global Warming: Learning Mechanisms from Multiyear Field Experiments and Natural Gradients I

Abstract Title: B52A-02 – Four years of warming the whole soil profile: Patterns in fluxes over time

Soong, Jennifer; Pries, Caitlin Hicks; Castanha, Cristina; Porras, Rachel C; Torn, Margaret S

Presenter: Jennifer Soong

LBL Project: TES SFA

Other

Date: Thu, Dec 13 **Time:** 9:15 AM - 9:30 AM

Location: Walter E Washington Convention Center 150B

Session: Constraining Biosphere–Atmosphere Exchange Processes Using Remote Sensing and in Situ Observations I

Abstract Title: A41C-06 – Quantifying regional-scale carbon fluxes from arctic and boreal ecosystems: insights from recent campaigns and long term trends

Schiferl, Luke D; Biraud, Sebastien; Euskirchen, Eugenie Susanne; Henderson, John; Humphreys, Elyn; Munger, William; Sonnentag, Oliver; Sweeney, Colm; Zona, Donatella; Wofsy, Steven C; Commane, Roisin

Presenter: Luke Schiferl

LBL Project: ARM ACME

Date: Thu, Dec 13 **Time:** 1:40 PM - 6:00 PM

Location: Walter E Washington Convention Center Hall A-C (Poster Hall)

Session: Constraining Biosphere–Atmosphere Exchange Processes Using Remote Sensing and in Situ Observations II Posters

Poster: A43N-3325 – A decadal atmosphere-based estimate on North American terrestrial uptake

Hu, Lei; Andrews, Arlyn E; Thoning, Kirk W; Sweeney, Colm; Miller, John B; Dlugokencky, Edward J; Tans, Pieter P; Michalak, Anna; Mountain, Marikate Ellis; Nehrkorn, Thomas; Trudeau, Michael; Montzka, Stephen A; McKain, Kathryn; Worthy, Doug; Kofler, Jona

Presenter: Lei Hu

LBL Project: ARM ACME

Date: Thu, Dec 13 **Time:** 1:40 PM - 6:00 PM

Location: Walter E Washington Convention Center Hall A-C (Poster Hall)

Session: Rising Atmospheric Methane: Causes and Consequences II Posters

Poster: A43P-3360 – Little evidence for significant increases in total U.S. methane emissions over the past decade

Lan, Xin; Tans, Pieter P; Sweeney, Colm; Andrews, Arlyn E; Dlugokencky, Edward J; Schwietzke, Stefan; Kofler, Jonathan; McKain, Kathryn; Lang, Patricia M; Thoning, Kirk W; Crotwell, Molly; Montzka, Stephen A; Miller, Benjamin R; Helmig, Detlev; Biraud, Se

Presenter: Xin Lan

LBL Project: ARM ACME