

**ANDREW E. SUYKER**, Associate Professor  
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### **EDUCATION**

B.S. Meteorology, University of Alberta, Edmonton, Alberta, Canada (1988)  
M.S. Micrometeorology (Agricultural Meteorology), University of Nebraska (1992)  
Ph.D. Micrometeorology (Agricultural Meteorology), University of Nebraska (2000)  
M.Ed. Masters of Education (Teaching, Learning, and Teacher Education), University of Nebraska (2010)

### **PROFESSIONAL EXPERIENCE**

2013-present Associate Prof., School of Natural Resources, University of Nebraska-Lincoln (Tenure: 2017)  
2010-2013 Research Associate Prof., School of Natural Resources, University of Nebraska-Lincoln  
2004-2010 Research Assistant Prof., School of Natural Resources, University of Nebraska-Lincoln  
2001-2004 Post Doc. Research. Assoc., School of Natural Resources, University of Nebraska-Lincoln  
1996-2001 Research Technologist, School of Natural Resources, University of Nebraska-Lincoln  
1989-1996 Graduate Research Asst., Dept. of Agricultural Meteorology, University of Nebraska-Lincoln

### **HONORS AND AWARDS**

Thomson Reuters World's Most Influential Scientific Minds, June 2014.  
University of Nebraska Institute of Agriculture and Natural Resources 2004 Team Award for the Carbon Sequestration Program.

### **RESEARCH ACTIVITIES**

Carbon dioxide, methane, nitrous oxide, and water vapor exchanges in natural and managed ecosystems; carbon sequestration; greenhouse gas emissions; water use efficiency; micrometeorology; eddy covariance instrumentation; atmospheric trace gas dynamics

### **SCHOLARLY SERVICE**

The focus of my scholarly service is as follows: a) provide data to the national archive of AmeriFlux (carbon flux network of the Americas), b) provide data to other scientists and graduate students at UNL and other research institutions, c) conduct inter-calibrations of key micrometeorological sensors, d) continue to collaborate with various scientific groups to measure high resolution CO<sub>2</sub> concentrations needed for inversion modeling of the regional carbon budget.

### **MAJOR GRANTS**

Foundation for Food & Agriculture Research, July 1, 2017-June 30, 2022, \$1,000,000, Enhancing animal protein through crops and cattle (Co-recipient with J. MacDonald, T. Awada, S. Banerjee, H. Blanco, M. Drewnoski, G. Erickson, J. Okalebo, J. Parsons, D. Redfearn, and G. Burba).

Nebraska Research Initiative. January 4, 2017-June 30, 2017, \$205,500. Dual quantum cascade laser trace gas analyzer for innovative micrometeorological measurement techniques necessary for mitigating climate change through continuous monitoring and evaluation of greenhouse gas emissions from managed and natural ecosystems. (Co-recipient with J. Okalebo, T. Awada G. Erickson, and G. Burba).

Lawrence Berkeley National Lab. October 1, 2020-September 30, 2025. \$565, 000. Long-Term Maize-Based Agro-Ecosystem Core Sites as Part of the AmeriFlux Management Project Network (Co-recipient with T.J. Arkebauer, J. Gamon, A. Gitelson, A. Liska, H. Blanco, T. Franz, and H. Yang).

Lawrence Berkeley National Lab. October 1, 2016-September 30, 2020. \$432, 000. Long-Term Maize-Based Agro-Ecosystem Core Sites as Part of the AmeriFlux Management Project Network (Co-recipient with T.J. Arkebauer, E.A. Walter-Shea, A.I. Zygielbaum, A. Gitelson, A. Liska, H. Blanco, T. Franz, and H. Yang).

Lawrence Berkeley National Lab. November 1, 2014-September 30, 2016. \$222, 472. Long-Term Maize-Based Agro-Ecosystem Core Sites as Part of the AmeriFlux Management Project Network (Co-recipient with T.J. Arkebauer, E.A. Walter-Shea, A.I. Zygielbaum, A. Liska, H. Blanco, T. Franz, and H. Yang).

United States Department of Agriculture - Agricultural Research Services. September 1, 2015-August 31, 2020. \$630,000. Carbon Flux from Great Plains Agroecosystems Associated with the ARS LTAR Network (Co-recipient with T. Awada and G. Erickson).

Department of Energy: Office of Biological and Environmental Research. September 15, 2006-September 14, 2012. \$1,464,500. Carbon sequestration in dryland and irrigated ecosystems: Quantification at different scales for improved prediction. (Co-recipient with S.B. Verma, K.G. Cassman, T.A. Arkebauer, K.G. Hubbard, J.M. Knops, and D.T. Walters).

National Aeronautics and Space Administration: Earth Sciences Research and Analysis Program. 2008-2011. \$599,485. A Satellite-based Quantification of Carbon Exchange of the Dominant Ecosystems (Maize-Soybean) in the NACP Mid-Continent Intensive (MCI) Region. (Co-recipient with A. Gitelson and S.B. Verma).

Nebraska Department of Environmental Quality. 2013-2018. \$32,000. Mercury Deposition Network.  
Nebraska Department of Environmental Quality. 2018-2023. \$32,000. Mercury Deposition Network.

Great Lakes Integrated Science and Assessment (GLISA) Center. 2011-2012 \$29,992. Assessing the impacts of climate variability and change on Great Lakes evaporation: Implications for decision making, adaptation, and water resource management. (Co-recipient with J. Lenters).

## REFEREED PUBLICATIONS

- Bagnall, D. K., Morgan, C. L. S., Bean, G. M., Liptzin, D., Cappellazzi, S. B., Cope, M., Greub, K. L. H., Rieke, E. L., Norris, C. E., Tracy, P. W., Aberle, E., Ashworth, A., Tavarez, O. B., Bary, A. I., Baumhardt, R. L., Gracia, A. B., Brainard, D. C., Brennan, J. R., Reyes, D. B., ... Honeycutt, C. W. 2022. Selecting soil hydraulic properties as indicators of soil health: Measurement response to management and site characteristics. *Soil Science Society of America Journal*, 86(5), 1206–1226. Portico. <https://doi.org/10.1002/saj2.20428>
- Bagnall, D. K., Morgan, C. L. S., Cope, M., Bean, G. M., Cappellazzi, S., Greub, K., Liptzin, D., Norris, C. L., Rieke, E., Tracy, P., Aberle, E., Ashworth, A., Bañuelos Tavarez, O., Bary, A., Baumhardt, R. L., Borbón Gracia, A., Brainard, D., Brennan, J., Briones Reyes, D., ... Honeycutt, C. W. 2022. Carbon-sensitive pedotransfer functions for plant available water. *Soil Science Society of America Journal*, 86(3), 612–629. Portico. <https://doi.org/10.1002/saj2.20395>
- dos Santos, C. L., Abendroth, L. J., Coulter, J. A., Nafziger, E. D., Suyker, A., Yu, J., Schnable, P. S., & Archontoulis, S. V. 2022. Maize Leaf Appearance Rates: A Synthesis From the United States Corn Belt. *Frontiers in Plant Science*, 13. <https://doi.org/10.3389/fpls.2022.872738>
- Liptzin, D., Norris, C. E., Cappellazzi, S. B., Mac Bean, G., Cope, M., Greub, Kelsey L. H., Rieke, E. L., Tracy, P. W., Aberle, E., Ashworth, A., Banuelos Tavarez, Oscar, Bary, Andy, I, Baumhardt, R. L., Borbon Gracia, Alberto, Brainard, D. C., Brennan, J. R., Briones Reyes, Dolores, Bruhjell, D., Carlyle, C. N., Crawford, James J. W., Creech, C., Culman, S. W., Deen, B., Dell, C. J., Derner, J. D., Ducey, T. F., Duiker, S. W., Dyck, M. F., Ellert, B. H., Entz, M. H., Espinosa Solorio, Avelino, Fonte, S. J., Fonteyne, S., Fortuna, A.-M., Foster, J. L., Fultz, L. M., Gamble, Audrey, V, Geddes, C. M., Griffin-LaHue, D., Grove, J. H., Hamilton, S. K., Hao, X., Hayden, Z. D., Honsdorf, N., Howe, J. A., Ippolito, J. A., Johnson, G. A., Kautz, M. A., Kitchen, N., Kumar, S., Kurtz, Kirsten S. M., Larney, F. J., Lewis, K. L., Liebman, M., Lopez Ramirez, Antonio, Machado, S., Maharjan, B., Martinez Gamino, Miguel Angel, May, W. E., McClaran, M. P., McDaniel, M. D., Millar, N., Mitchell, J. P., Moore, A. D., Moore, P. A., Mora Gutierrez, Manuel, Nelson, K. A., Omondi, E. C., Osborne, S. L., Osorio Alcala, Leodegario, Owens, P., Pena-Yewtukhiw, E. M., Poffenbarger, H. J., Ponce Lira, Brenda, Reeve, J. R., Reinbott, T. M., Reiter, M. S., Ritchey, E. L., Roozeboom, K. L., Rui, Y., Sadeghpour, A., Sainju, U. M., Sanford, G. R., Schillinger, W. F., Schindelbeck, R. R., Schipanski, M. E., Schlegel, A. J., Scow, K. M., Sherrod, L. A., Shober, A. L., Sidhu, S. S., Moya, E. S., St Luce, Mervin, Stroock, J. S., Suyker, A., Sykes, V. R., Tao, H., Trujillo Campos, Alberto, Van Eerd, Laura L., van Es, Harold, Verhulst, N., Vyn, T. J., Wang, Y., Watts, D. B., Wright, D. L., Zhang, T., Morgan, Cristine L. S., Honeycutt, C. W. (2022). An evaluation of carbon indicators of soil health in long-term agricultural experiments. *SOIL BIOLOGY & BIOCHEMISTRY*, 172, 108708. <https://doi.org/10.1016/j.soilbio.2022.108708>.

- McPhillips, L. J., Carlson, Z., MacDonald, J. C., Suyker, A., Awada, T., Watson, A. K., Okalebo, J., Xiong, Y., Dangal, S., Heil, H. A., Stowell, R., & Erickson, G. E. 2022. 211 Greenhouse Gas Emissions from Two Beef Systems from Birth to Slaughter in Eastern Nebraska. *Journal of Animal Science*, 100(Supplement\_2), 102–102. <https://doi.org/10.1093/jas/skac064.170>
- Menefee, D., Scott, R. L., Abraha, M., Alfieri, J. G., Baker, J., Browning, D. M., Chen, J., Gonet, J., Johnson, J. M. F., Miller, G. R., Nifong, R., Robertson, P., Russell, E. S., Saliendra, N., Schreiner-Mcgraw, A. P., Suyker, A., Wagle, P., Wentz, C., White, P. M., & Smith, D. 2022. Unraveling the effects of management and climate on carbon fluxes of U.S. croplands using the USDA Long-Term Agroecosystem (LTAR) network. *Agricultural and Forest Meteorology*, 326, 109154. <https://doi.org/10.1016/j.agrformet.2022.109154>
- Nandan, R., Bandaru, V., He, J., Daughtry, C., Gowda, P., & Suyker, A. E. 2022. Evaluating Optical Remote Sensing Methods for Estimating Leaf Area Index for Corn and Soybean. *Remote Sensing*, 14(21), 5301. <https://doi.org/10.3390/rs14215301>
- Rieke, E. L., Bagnall, D. K., Morgan, C. L. S., Flynn, K. D., Howe, J. A., Greub, K. L. H., Mac Bean, G., Cappellazzi, S. B., Cope, M., Liptzin, D., Norris, C. E., Tracy, P. W., Aberle, E., Ashworth, A., Bañuelos Tavarez, O., Bary, A. I., Baumhardt, R. L., Borbón Gracia, A., Brainard, D. C., ... Honeycutt, C. W. 2022. Evaluation of aggregate stability methods for soil health. *Geoderma*, 428, 116156. <https://doi.org/10.1016/j.geoderma.2022.116156>
- Rieke, E. L., Cappellazzi, S. B., Cope, M., Liptzin, D., Mac Bean, G., Greub, K. L. H., Norris, C. E., Tracy, P. W., Aberle, E., Ashworth, A., Bañuelos Tavarez, O., Bary, A. I., Baumhardt, R. L., Borbón Gracia, A., Brainard, D. C., Brennan, J. R., Briones Reyes, D., Bruhjell, D., Carlyle, C. N., ... Honeycutt, C. W. 2022. Linking soil microbial community structure to potential carbon mineralization: A continental scale assessment of reduced tillage. *Soil Biology and Biochemistry*, 168, 108618. <https://doi.org/10.1016/j.soilbio.2022.108618>
- Suyker, A. 2022. AmeriFlux FLUXNET-1F US-Ne1 Mead - irrigated continuous maize site. [Data set]. AmeriFlux; University of Nebraska - Lincoln.
- Wang, R., Gamon, J. A., Hmimina, G., Cogliati, S., Zyguelbaum, A. I., Arkebauer, T. J., & Suyker, A. 2022. Harmonizing solar induced fluorescence across spatial scales, instruments, and extraction methods using proximal and airborne remote sensing: A multi-scale study in a soybean field. *Remote Sensing of Environment*, 281, 113268. <https://doi.org/10.1016/j.rse.2022.113268>
- Wu, G., Jiang, C., Kimm, H., Wang, S., Bernacchi, C., Moore, C. E., Suyker, A., Yang, X., Magney, T., Frankenberg, C., Ryu, Y., Dechant, B., & Guan, K. 2022. Difference in seasonal peak timing of soybean far-red SIF and GPP explained by canopy structure and chlorophyll content. *Remote Sensing of Environment*, 279, 113104. <https://doi.org/10.1016/j.rse.2022.113104>
- Zhou, X., Gao, T., Takle, E. S., Zhen, X., Suyker, A. E., Awada, T., Okalebo, J., & Zhu, J. 2022. Air temperature equation derived from sonic temperature and water vapor mixing ratio for turbulent airflow sampled through closed-path eddy-covariance flux systems. *Atmospheric Measurement Techniques*, 15(1), 95–115. <https://doi.org/10.5194/amt-15-95-2022>
- Batsukh, K., V.A. Zlotnik, A. Suyker, P. Nasta. 2021. Prediction of biome-specific potential evapotranspiration in Mongolia under a scarcity of weather data. *Water*, 13 (18), doi: 10.3390/w13182470.
- Browning, D. M., E.S. Russell, G.E. Ponce-Campos, N. Kaplan, A.D. Richardson, B. Seyednasrollah, S. Spiegel, N. Saliendra, J.G. Alfieri, J. Baker, C. Bernacchi, B.T. Bestelmeyer, D. Bosch, E.H. Boughton, R.K. Boughton, P. Clark, G. Flerchinger, N. Gomez-Casanovas, S. Goslee, N.M. Haddad, D. Hoover, A. Jaradat, M. Mauritz, G.W. McCarty, G.R. Miller, J. Sadler, A. Saha, R.L. Scott, A. Suyker, C. Tweedie, J.D. Wood, X.K. Zhang, S.D. Taylor. 2021. Monitoring agroecosystem productivity and phenology at a national scale: A metric assessment framework. *Ecological Indicators*, 131, 108147, doi: 10.1016/j.ecolind.2021.108147.
- Chu, H., X.Z. Luo, Z.T. Ouyang, W.S. Chan, S. Dengel, S.C. Biraud, ...A. Suyker, ...M.A. Arain, D. Zona. 2021. Representativeness of Eddy-Covariance flux footprints for areas surrounding AmeriFlux sites. *Agricultural and Forest Meteorology*, 301-302, 108350, doi: 10.1016/j.agrformet.2021.108350.
- Cuadra, S.V., B.A. Kimball, K.J. Boote, A.E. Suyker, N. Pickering. 2021. Energy balance in the DSSAT-CSM-CROPGRO model, *Agricultural and Forest Meteorology*, 297, 108241, doi: 10.1016/j.agrformet.2020.108241.
- Kimm, H., K.Y. Guan, C.Y. Jiang, G.F. Miao, G.H. Wu, A.E. Suyker, E.A. Ainsworth, C.J. Bernacchi, C.M. Montes, J.A. Berry, X. Yang, C. Frankenberg, M. Chen, P. Köhler. 2021. A physiological signal derived from sun-induced chlorophyll fluorescence quantifies crop physiological response to environmental

- stresses in the U.S. Corn Belt. *Environmental Research Letters*, 16(12), 124051, doi: 10.1088/1748-9326/ac3b16.
- Pastorello, G, C. Trotta, A. Suyker (...); D. Papale. 2021. The FLUXNET2015 dataset and the ONEFlux processing pipeline for eddy covariance data (vol 7, 225, 2020), *Scientific Data*, 8 (1), doi: 10.1038/s41597-021-00851-9.
- Young, A.M., M.A. Friedl, B. Seyednasrollah, E. Beamesderfer, C.M. Carrillo, X.L. Li, M. Moon, M.A. Arain, D.D. Baldocchi, P.D. Blanken, G. Bohrer, S.P. Burns, H. Chu, A.R. Desai, T.J. Griffis, D.Y. Hollinger, M.E. Litvak, K. Novick, R.L. Scott, A.E. Suyker, J. Verfaillie, J.D. Wood, A.D. Richardson. 2021. Seasonality in aerodynamic resistance across a range of North American ecosystems. *Agricultural and Forest Meteorology*, 310, 108613, doi: 10.1016/j.agrformet.2021.108613.
- Zhang, J.W., K.Y. Guan, B. Peng, M. Pan, W. Zhou, R.F. Grant, T.E. Franz, D.R. Rudnick, D.M. Heeren, A. Suyker, Y. Yang, G.H. Wu. 2021. Assessing different plant-centric water stress metrics for irrigation efficacy using soil-plant-atmosphere-continuum simulation. *Water Resources Research*, 57(9), doi: 10.1029/2021wr030211.
- Zhang, J.W., K.Y. Guan, B. Peng, M. Pan, W. Zhou, C.Y. Jiang, H. Kimm, T.E. Franz, R.F. Grant, Y. Yang, D.R. Rudnick, D.M. Heeren, A.E. Suyker, W.L. Bauerle, G.L. Miner. 2021. Sustainable irrigation based on co-regulation of soil water supply and atmospheric evaporative demand. *Nature Communications*, 12(1), doi: 10.1038/s41467-021-25254-7.
- Zhou, X.H., T. Gao, Y.C. Pang, H. Mahan, X.F. Li, N. Zheng, A.E. Suyker, T. Awada, J.J. Zhu. 2021. Based on atmospheric physics and ecological principle to assess the accuracies of field CO<sub>2</sub>/H<sub>2</sub>O measurements from infrared gas analyzers in closed-path eddy-covariance systems. *Earth and Space Science*, 8(10), doi: 10.1029/2021ea001763.
- Zhou, X.H., T. Gao, E.S. Takle, X. Zhen, A.E. Suyker, T. Awada, J. Okalebo, J. Zhu. 2021. Air temperature equation derived from sonic temperature and water vapor mixing ratio for air flow sampled through closed-path eddy-covariance flux systems. *Atmospheric Measurement Techniques*, 15 (1), 95-115, doi: 10.5194/amt-2021-160.
- Bandaru, V., R. Yaramasu, P. Koutilya, J. He, S. Fernando, R. Sahajpal B.D. Wardlow, A. Suyker, C. Justice. 2020. PhenoCrop: An integrated satellite-based framework to estimate physiological growth stages of corn and soybeans, *International Journal of Applied Earth Observation and Geoinformation*, 92, 102188, doi: 10.1016/j.jag.2020.102188.
- Malek-Madani, G., E.A. Walter-Shea, A.L. Nguy-Robertson, A. Suyker, T.J. Arkebauer. 2020. Modeling Gross Primary Production of Midwestern US Maize and Soybean Croplands with Satellite and Gridded Weather Data, *Remote Sensing*, 12(23), 3956, doi: 10.3390/rs12233956.
- Miao, G., K. Guan, A.E. Suyker, X. Yang, T.J. Arkebauer, E.A. Walter-Shea, H. Kimm, G.Y. Hmimina, J.A. Gamon, T.E. Franz, C. Frankenberg, J.A. Berry, G. Wu. 2020. Varying contributions of drivers to the relationship between canopy photosynthesis and far-red Sun-induced fluorescence for two maize sites at different temporal scales, *Journal of Geophysical Research: Biogeosciences*, 125(2), e2019JG005051, doi: 10.1029/2019JG005051.
- Pastorello, G., C. Trotta, E. Canfora, H. Chu, D. Christianson, Y.W. Cheah, A.E. Suyker, S. Biraud, M. Torn, D. Papale, et al. 2020. The FLUXNET2015 dataset and the ONEFlux processing pipeline for eddy covariance data, *Scientific Data*, 7(1), 1-27, doi: 10.6084/m9.figshare.12295910.
- Wu, G., K. Guan, C. Jiang, B. Peng, H. Kimm, M. Chen, X. Yang, S. Wang, A.E. Suyker, C.J. Bernacchi, C.E. Moore, Y. Zeng, J.A. Berry, M.P. Cendrero-Mateo. 2020. Radiance-based NIRv as a proxy for GPP of corn and soybean, *Environmental Research Letters*, 15(3), 034009, doi: 10.1088/1748-9326/ab65cc.
- Yang, H., Y.M. Indriwati, A.E. Suyker, J. Lee, K. Lee, J. Kim. 2020. Radiation, Energy, and Entropy Exchange in an Irrigated-Maize Agroecosystem in Nebraska, USA, *Korean Journal of Agricultural and Forest Meteorology*, 22 (1), 26-46, doi: 10.5532/KJAFM.2020.22.1.26.
- McCombs, A. G., A. L. Hiscox, A. E. Suyker. 2019. Point-to-Grid Conversion in Flux Footprints: Implications of Method Choice and Spatial Resolution for Regional-Scale Studies, *Boundary-Layer Meteorology*, 172(3) 457-479, doi: 10.1007/s10546-019-00455-2.
- Peng, Yi, O. Kira, A. Nguy-Robertson, A. Suyker, T. Arkebauer, Y. Sun, A. A. Gitelson. 2019. Gross Primary Production Estimation in Crops Using Solely Remotely Sensed Data, *Agronomy Journal*, 111, 1-10, doi:10.2134/agronj2019.05.0332.
- Safa, B., T. J. Arkebauer, Q. Zhu, A. Suyker, S. Irmak. 2019. Net Ecosystem Exchange (NEE) simulation in maize using artificial neural networks, *IFACSC Journal of Systems and Control*, 7, doi: 10.1016/j.ifacsc.2019.100036.

- Togliatti, K., T. Hartman, V. A. Walker, T. J. Arkebauer, A. E. Suyker, A. VanLoocke, B. K. Hornbuckle. 2019. Satellite L-band vegetation optical depth is directly proportional to crop water in the US Corn Belt, *Remote Sensing of the Environment*, 233, doi: 10.1016/j.rse.2019.111378.
- Zhan, M., A. J. Liska, A. L. Nguy-Robertson, A. E. Suyker, M. P. Pelton, H. S. Yang. 2019. Modeled and Measured Ecosystem Respiration in Maize-Soybean Systems Over 10 Years, *Agronomy Journal*, 111(1), 49-58, doi: 10.2134/agronj2018.02.0086.
- Barker, J. B., C. M. U. Neale, D. M. Heeren, A. E. Suyker. 2018. Evaluation of a Hybrid Reflectance-Based Crop Coefficient and Energy Balance Evapotranspiration Model for Irrigation Management. *Transactions of the ASABE*, doi: 10.13031/trans.12311.
- Campos, I., C. M. U. Neale, T. J. Arkebauer, A.E. Suyker, I. Z. Goncalves. 2018. Water productivity and crop yield: A simplified remote sensing driven operational approach. *Agricultural and Forest Meteorology*, 249, 501-511, doi: 10.1016/j.agrformet.2017.07.018.
- Campos, I., L. González-Gómez, J. Villodre, J. González-Piqueras, A. E. Suyker, A. Calera. 2018. Remote sensing based crop biomass with water or light-driven crop growth models in wheat commercial fields. *Field Crops Research*, 216C, 175-188, doi:10.1016/j.fcr.2017.11.025.
- Chen, M., T. Griffis, J. Baker, J. Wood, T. Meyers, A. Suyker. 2018. Comparing crop growth and carbon budgets simulated across AmeriFlux agricultural sites using the Community Land Model (CLM). *Agricultural and Forest Meteorology*, 256, 315-333, doi:10.1016/j.agrformet.2018.03.012.
- Gitelson, A., T. Arkebauer, A. Suyker. 2018. Convergence of daily light use efficiency in irrigated and rainfed C3 and C4 crops. *Remote Sensing of Environment*, 217, 30-37, doi: 10.1016/j.rse.2018.08.007.
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- Safa, B., T. Arkebauer, Q. Zhu, A. Suyker, S. Irmak. 2018. Latent heat and sensible heat flux simulation in maize using artificial neural networks. *Computers and Electronics in Agriculture*, 154, 155-164, doi:10.1016/j.compag.2018.08.038.
- Zhan, M., A. J. Liska, A. L. Nguy-Robertson, A. E. Suyker, M. P. Pelton, H. S. Yang. 2018. Modeled and Measured Ecosystem Respiration in Maize-Soybean Systems Over 10 Years, *Agronomy Journal*, 111(1), 49-58, doi: 10.2134/agronj2018.02.0086.
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- Campos, I., C. M. U. Neale, A. E. Suyker, T. J. Arkebauer, I. Z. Goncalves. 2017. Reflectance-based crop coefficients REDUX: For operational evapotranspiration estimates in the age of high producing hybrid varieties. *Agricultural Water Management*, 187, 140-153, doi: 10.1016/j.agwat.2017.03.022.
- Foolad, F., T.E. Franz, T.J. Wang, J. Gibson, A. Kilic, R.G. Allen, A. Suyker. 2017. Feasibility analysis of using inverse modeling for estimating field-scale evapotranspiration in maize and soybean fields from soil water content monitoring networks. *Hydrology and Earth System Sciences*, 21(2), 1263-1277, doi: 10.5194/hess-21-1263-2017.
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- Suyker AE (2000) “Station Footprint relative to flux at sensor location – the model”, Automated weather station for Applications in Agriculture and Water Resources Management: Current Use and Future Perspectives, Lincoln, NE, March 2000.
- Suyker AE, Verma SB (1998) "Surface Energy Fluxes in a Boreal Wetland", 23rd Conference on Agricultural and Forest Meteorology (AMS Conference), Albuquerque, NM, November 1998, pp. 271.
- Suyker AE, Verma SB, Arkebauer TJ (1996) "Carbon Dioxide (CO<sub>2</sub>) Exchange in a Boreal Fen", 22nd Conference on Agricultural and Forest Meteorology (AMS Conference), Atlanta, GA, January 1996, pp. 74.
- Suyker AE, Verma SB, Clement RJ, Billesbach DP (1995) "Methane flux by eddy correlation from a boreal fen", American Geophysical Union Spring Meeting, Baltimore, MD, May 1995, H31D-02.

#### **OTHER PROFESSIONAL ACTIVITIES**

Board of Editors, Agricultural and Forest Meteorology, An International Journal (since June, 2012).

Member, Carbon Sequestration Advisory Committee (mandated by Legislative Bill 957 and appointed by the Governor) (Feb. 2013 – May 2017).

Peer Review of manuscripts submitted to Journal of Geophysical Research - Biogeosciences, Journal of Geophysical Research - Atmospheres, Agricultural and Forest Meteorology, Agricultural Ecosystems and Environment, Wetlands, Great Plains Research, Rangeland Ecology and Management, Agronomy Journal,

Global Change Biology, Global Change Biology- Bioenergy, Plant and Soil, Journal of Hydrometeorology,  
Water Resources Research, Science of the Total Environment.