

Brief Curriculum Vitae  
David K. Adams

Centro de Ciencias de la Atmósfera  
Universidad Nacional Autónoma de México  
Mexico D.F., Mexico  
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Birthplace  
Riverside, California, USA

**Research Interests**

Atmospheric Convection, Atmospheric Thermodynamics, GPS/GNSS Meteorology,  
Tropical Meteorology

**Education**

B.A. (1992)  
University of California, Berkeley  
*With Distinction in General Scholarship*  
M.A. (1995) University of Arizona  
Ph.D. (2003) University of Arizona

**Professional Experience**

Professor Titular with Tenure (2012 to Present) -- Centro de Ciencias de la Atmósfera  
Universidad Nacional Autónoma de México, Mexico City, Mexico.

Affiliate (2012 to present) Department of Atmospheric Sciences, Institute of Atmospheric Physics  
University of Arizona, Tucson, Arizona, U.S.A.

Research Professor (2007 to 2013) -- Program of Climate and Environment,  
Universidade do Estado do Amazonas/Instituto Nacional de Pesquisa da Amazônia, Manaus,  
Amazonas, Brazil.

Visiting Professor (Spring 2006) -- Department of Atmospheric Sciences,  
Universidade Federal de Campina Grande, Campina Grande, Paraíba, Brazil.

Instructor (2005) -- Southwestern College, School of Mathematics, Science and Engineering.  
Chula Vista, California, U.S.A.

Postgraduate Research Atmospheric Scientist, Step V, (2003 to 2004)  
Center for Atmospheric Sciences, Scripps Institution of Oceanography, University of  
California, San Diego.

**Scholarships and Awards**

Margarita Fastabend Von Brockdorff Scholarship (for Spanish), Pasadena City College, 1990  
Honors Extraordinary (for Spanish), Pasadena City College, 1990  
Cal-Grant Tuition Scholarship, University of California, Berkeley, 1990

Graduate and Professional Student Travel Grant, University of Arizona, March 1995  
AMS Graduate Student Scholarship (Sixth Symposium on Global Change Studies), January 1995  
Graduate Registration Scholarship, University of Arizona Spring 1996  
Graduate Registration Scholarship, University of Arizona Spring 1997  
N.A.S.A. Space Grant Fellowship, University of Arizona, Fall 1997 to Spring 1999  
Graduate College Fellowship University of Arizona, Fall 1999/Spring 2000

### **Publications (Last 5 Years)**

Peralta, O., M. Espinoza, H. Alvarez-Ospina, **D. K. Adams**, T. Castro 2018: Urban Sprawl and Ozone Episodes in Mexico City, *Urban Climate*, (Accepted with Revisions)

Cabral-Cano, E. , X. Pérez-Campos, B. Márquez-Azúa, M. A. Sergeeva, , L. Salazar-Tlaczani, C. DeMets, **D. Adams**, J. Galetzka, K. Hodgkinson, K. Feaux, Y. L. Serra, G. S. Mattioli, and M. Miller 2018: TLALOCNet: A Continuous GPS-Met Backbone in Mexico for Seismotectonic and Atmospheric Research, *Seismological Research Letters* (2018) 89 (2A): 373-381.  
DOI:<https://doi.org/10.1785/0220170190>

Alves, E. G., Tóta, J., Turnipseed, A., Guenther, A. B., Vega Bustillos, J. O. W., Santana, R. A., Cirino, G. G., Tavares, J. V., Lopes, A., Nelson, B. W., de Souza, R. A., Gu, D., Stavrakou, T., **Adams**, D. K., Wu, J., Saleska, S., and Manzi, A. O. 2018: Leaf phenology as one important driver of seasonal changes in isoprene emission in central Amazonia, *Biogeosciences*, **15**, 4019-4032, <https://doi.org/10.5194/bg-15-4019-2018>

Moker, J. M., C. L. Castro, Y. L. Serra, A. Arellano Jr., and **D. K. Adams**, 2018: Convective-permitting hindmost simulations during The North American Monsoon GPS Transect Experiment 2013: Establishing Baseline Model Performance Without Data Assimilation. *J. Appl. Meteor. Climatol.*, **57**, 1683–1710,  
<https://doi.org/10.1175/JAMC-D-17-0136.1>

**Adams, D.K.**, H.M. Barbosa, and K.P. Gaitán De Los Ríos, 2017: A spatiotemporal water vapor/deep convection correlation metric derived from the Amazon Dense GNSS Meteorological Network, *Mon. Wea. Rev.*, **145**, 279–288, doi: 10.1175/MWR-D-16-0140.1.

Caro-Borrero, AP; Carmona-Jimenez, J; Varley, A; De Garay-Arellano, G; Mazari-Hiriart, M; **Adams**, DK; (2017) Local and scientific ecological knowledge potential as a source of information in a periurban river, Mexico City, Mexico. *Applied Ecology and Environmental Research* , **15** (1), 541-562.[10.15666/aeer/1501\\_541562](https://doi.org/10.15666/aeer/1501_541562).

Minjarez-Sosa, C.M., C.L. Castro, K.L. Cummins, J. Waissmann, and **D. K. Adams**, 2017: An Improved QPE over Complex Terrain Employing Cloud-to-Ground Lightning Occurrences. *J. Appl. Meteor. Climatol.*, **56**, 2489–2507, <https://doi.org/10.1175/JAMC-D-16-0097.1>

Lintner, B. R., **D. K. Adams**, K. A. Schiro, A. M. Stansfield, A. A. Amorim Rocha, and J. D. Neelin (2017), Relationships among climatological vertical moisture structure, column water vapor, and precipitation over the central Amazon in observations and CMIP5 models, *Geophys. Res. Lett.*, **44**, 1981–1989, doi:[10.1002/2016GL071923](https://doi.org/10.1002/2016GL071923). (4.2)

Luong, T.M., C.L. Castro, H. Chang, T. Lahmers, **D. K. Adams**, and C.A. Ochoa-Moya, 2017: The More Extreme Nature of North American Monsoon Precipitation in the Southwestern United

States as Revealed by a Historical Climatology of Simulated Severe Weather Events. *J. Appl. Meteor. Climatol.*, 56, 2509–2529, <https://doi.org/10.1175/JAMC-D-16-0358.1>

Schiro, K. A., J. D. Neelin, **D. K. Adams**, and B. R. Lintner, 2016: Deep Convection and Column Water Vapor over Tropical Land vs. Tropical Ocean: A comparison between the Amazon and the Tropical Western Pacific. *Journal of the Atmospheric Sciences*, **73**, 4043-4063.

Granados-Olivas, A., C. Eastoe, L. C. Alatorre-Cejudo, **D. Adams**, Y. L. Serra, V. H. Esquivel-Ceballos, F. A. Vázquez-Gálvez, M. E. Giner, 2016: Induced Aquifer Recharge Using Green Infrastructure in Ciudad Juarez, Chihuahua Mexico: Policy for Potential Solutions to Small Scale Flooding, *Journal of Contemporary Water Research and Education* **1(159)**, 50-61 (Invited Submission)

**Adams, D. K.**, A. Q. Isaias, and C. Lizárraga (2016), The North American monsoon: Models versus observations, *Eos*, **97**, doi:10.1029/2016EO043151.

Serra, Yolande, John Braun, **David K. Adams**, 2016: Observing the Intra-Americas Sea Climate: Existing and Emerging Technologies, *CLIVAR Exchanges*, **14(1)**, 1-10.  
[https://usclivar.org/sites/default/files/documents/2016/Variations2016Winter\\_0.pdf](https://usclivar.org/sites/default/files/documents/2016/Variations2016Winter_0.pdf)  
(Invited Submission)

Mazon, Jeremy J. , Christopher L. Castro, **D. K. Adams**, Hsin-I Chang, Carlos M. Carrillo, and John J Brost, 2016: Objective Climatological Analysis of Extreme Weather Events in Arizona during the North American Monsoon, *Journal of Applied Meteorology and Climatology*, **55**, 2431-2450. DOI: <http://dx.doi.org/10.1175/JAMC-D-16-0075.1>.

Lahmers, Timothy M., Christopher L. Castro, **D. K. Adams**, Yolande L. Serra, John J. Brost, Thang Luong, 2016: Long-term changes in the climatology of transient inverted troughs over the North American Monsoon region and their effects on precipitation, *Journal of Climate*, **29**, 6037-6064. doi:10.1175/JCLI-D-15-0726.1

Serra, Yolande, **David K. Adams**, Carlos Minjarez-Sosa, Christopher Castro, James M. Moker Jr., Avelino Arellano, Arturo Quintanar, L. Alatorre, A. Granados, E. Vazquez, Kirk Holub and Charles DeMets, 2016: The North American Monsoon GPS Transect Experiment 2013, *Bull. Amer. Meteor. Soc.* doi:10.1175/BAMS-D-14-00250.1

Peralta, O., **D. Adams**, T. Castro, M. Grutter, and A. Varela (2016), Mexico's University Network of Atmospheric Observatories, *Eos*, **97**, doi:10.1029/2016EO045273.

Alatorre Luis Carlos, Salvador Sánchez, Sonia Miramontes, Ramiro Medina, María Torres, Luis Bravo, Lara Wiebe, Alfredo Granados, **David Adams**, Erick Sánchez, Mario Uc: 2016, Temporal Changes of NDVI for Qualitative Environmental Assessment of Mangroves: Shrimp Farming Impact on the Health Decline of the Arid Mangroves in the Gulf of California (1990-2010), *Journal of Arid Environments*, **125**, 98 -109

Moreno-Rodríguez, V., Rafael Del Rio-Salas, **David K. Adams**, Lucas Ochoa-Landin, Joel Zepeda, Agustín Gómez-Alvarez, Juan Palafox-Reyes, Diana Meza-Figueroa, 2015: Historical trends and sources of TSP in a Sonoran desert city: Can the North America Monsoon enhance dust emissions?, *Atmospheric Environment*, **110**, 111-121.

<http://dx.doi.org/10.1016/j.atmosenv.2015.03.049>.

**Adams, D. K.**, Rui M. S. Fernandes, Kirk L. Holub, Seth I. Gutman, Henrique M. J. Barbosa, Luiz A. T. Machado, Alan J. P. Calheiros, Richard A. Bennett, E. Robert Kursinski, Luiz F. Sapucci, Charles DeMets, Glayson F. B. Chagas, Ave Arellano, Naziano Filizola, Alciélio A. Amorim Rocha, Rosimeire Araújo Silva, Lilia M. F. Assunção, Glauber G. Cirino, Theotonio Pauliquevis, Bruno T. T. Portela, André Sá, Jeanne M. de Sousa, and Ludmila M. S. Tanaka, The Amazon Dense GNSS Meteorological Network: A New Approach for Examining Water Vapor and Deep Convection Interactions in the Tropics. *Bull. Amer. Meteor. Soc.*, **96**, 2151–2165. doi: <http://dx.doi.org/10.1175/BAMS-D-13-00171.1>

Celaya, C. L., **D. K. Adams** and A. Q. Isaias (2014), Climate Variability in Northwestern Mexico, *Eos Transactions*, **95**(9), 81.

**Adams, D.K.**, Carlos Minjarez, Yolande Serra, Arturo Quintanar, Luis Alatorre, Alfredo Granados E. Vázquez, J. Braun, 2014, Mexican GPS Track North American Monsoon Convection, *Eos Transactions*, **95**, 61-62

Machado, Luiz A.T., Maria A. F. Silva Dias, Carlos Morales, Gilberto Fisch, Daniel Vila, Rachel Albrecht, Steven J. Goodman, Alan J. P. Calheiros, Thiago Biscaro, Christian Kummerow, Julia Cohen, David Fitzjarrald, Ernani L. Nascimento, Meiry S. Sakamoto, Christopher Cunningham, Jean-Pierre Chaboureau, Walter A. Petersen, **David K. Adams**, Luca Baldini, Carlos F. Angelis, Luiz F. Sapucci, Paola Salio, Henrique M. J. Barbosa, Eduardo Landulfo, Rodrigo A. F. Souza, Richard J. Blakeslee, Jeffrey Bailey, Saulo Freitas, Wagner F. A. Lima, and Ali Tokay, 2014: The Chuva Project: How Does Convection Vary across Brazil?. *Bull. Amer. Meteor. Soc.*, **95**, 1365–1380. doi: <http://dx.doi.org/10.1175/BAMS-D-13-00084.1>

Cirino, G. G. , R. F. Souza, **D. K. Adams**, and P. Artaxo, 2014: The effect of atmospheric aerosol particles and clouds on Net Ecosystem Exchange in Amazonia, *Atmos. Chem. Phys.*, **14**, 6523-6543, 2014. [www.atmos-chem-phys.net/14/6523/2014/](http://www.atmos-chem-phys.net/14/6523/2014/)  
doi:10.5194/acp-14-6523-2014

**Adams, D. K.** , S. Gutman, K. Holub and D. Pereira, 2013: GNSS Observations of Deep Convective timescales in the Amazon, 2013: *Geophysical Research Letters*, **40**, 1-6, doi:10.1002/grl.50573

Abouchami W., K. Nätke, A. Kumar, S. Galer, K. Jochum, M. Andreae, E. Williams, A. Horbe, J. Rosa, W. Balsam, **D. Adams**, K. Mezger, 2013: Geochemical and isotope signatures of the Bodélé Depression and Amazon Basin sediments: implication for dust transport in and out of Africa, *Earth Surface Processes and Landforms*, **380**, 112–123.

## Funded Research and Scientific Collaborations

*Characterization of Convective Interactions with Easterly Waves, the Caribbean Low-Level Jet and Central America During OTREC*

Responsibility: Official Collaborator

Funding Organization: NSF AGS #1758666

P.I. Yolande Serra, University of Washington

Period: 2018-2021

*Maritime Continent as a barrier to the MJO propagation: an analysis of the sensitivity of convection to column moisture.*

Responsibility: Official Collaborator

Funding Organization: NOAA CPO, Climate Variability and Predictability (CVP) Program

P.I. Zhiming Kuang, Harvard University

Period: 2017-2019

*Collaborative use of GPS meteorology for understanding large to small-scale water vapor/deep convection interactions in the southwestern US and Mexico*

Responsibility: Principal Investigator (in Mexico)

Co-Pi. J. Haase, Scripps Institution of Oceanography, UCSD

Co-Pi. Y. Bock, Scripps Institution of Oceanography, UCSD

Funding Organization: UC-MEXUS Grants, CONACyT and the University of California

Period: 2015-2017

*Shallow-to-Deep Convective Transition in the Amazon*

Responsibility: Official Collaborator

P.I. Yolande Serra University of Washington

Funding Organization: U.S. Department of Energy Grant: DE-SC0016222

Period 2015-2017

*Fuentes de Humedad Terrestres versus Oceánicas en la Convección Monzónica:*

*Una Nueva Mirada a un Viejo Problema (Terrestrial vs Oceanic Humidity Sources for Monsoon Convection: A New Look at an Old Problem)*

Responsibility: Principal Investigator

Funding Organization: Programa de Apoyo a Proyectos de Investigación e Innovación Tecnológica, IA100916, UNAM

Period: 2015-2017

*Impact of Total Column Water Vapor Measurements on Short- to Medium-Range Forecasts of the North American Monsoon Precipitation*

Responsibility: Official Collaborator

Funding Organization: NSF AGS-1261226

P.I.: Y. Serra, University of Washington

Period: 2013-2015

*Study of Mesoscale Convective Systems in Mexico using GPS Technology*

Responsibility: Principal Investigator

Funding Organization: Programa de Apoyo a Proyectos de Investigación e Innovación Tecnológica, IA101913, UNAM

Period: 2013-2014

*Development of a Dense GNSS Meteorological Network for Observing Deep Convection in the Amazon (2010-2012)*

Responsibility: Principal Investigator

In Collaboration with Funded Project:

*Rede Temática de Estudos Geotectônicos*

*Sistema Integrado de Posicionamento GNSS para Estudos Geodinâmicos*

Funding Organization: Petrobras, Brazil

Co-P.I.: Ícaro Vitorello, INPE, Brazil

*Global Precipitation Measurements-CHUVA, Brazil (2010-2013)*

<http://gpmchuva.cptec.inpe.br/>

Responsibility: Collaborating Researcher

Funding Organization: FAPESP Grant 2009/15235-8

Principal Investigator: Luiz Machado, INPE, Brazil

*Informações de GPS derivadas da Água Precipitável na Amazônia (Information derived from GPS Precipitable Water Vapor in Amazonia)*

Responsibility: Principal Investigator

Funding Organization: INPA/LBA, Manaus, Brazil

### **Postdoctoral Researcher**

Alejandro Jaramillo (UNAM)

2018 - present

### **Graduated Students**

#### *Undergraduate Degree*

Diana Islas 2017 (UNAM, Mexico)

#### *Master's Degree*

Antônio Alciélio Amorim da Rocha, 2010 (CLIAMB, INPA/UEA, Brazil)

Omar Ramos Pérez 2016 (UNAM, Mexico)

### **Current Students**

#### *PhD Degree*

Omar Ramos Pérez (expected graduation 2019) (UNAM, Mexico)

Andrea Burgos (expected graduation 2019) (UNAM, Mexico)

Jaime Hernández (expected graduation 2019) (UNAM, Mexico)

#### *Master's Degree*

Maria Isabel González García (expected graduation 2018) (UNAM, Mexico)

Diana Islas (expected graduation 2019) (UNAM, Mexico)

#### *Undergraduate Degree*

Lourdes Fierro (expected graduation 2018) (UNAM, Mexico)

René Ortega (expected graduation 2018) (Instituto Politécnico Nacional, Mexico)

### **Invited\*\* Presentations and Seminars (Last 3 Years)**

2018 UNAVCO Science Workshop

**Adams, D. K., GPS Precipitable Water Vapor; The Critical Variable for Tropical Deep Convection,**  
Broomfield, Colorado, March 28-29, 2018

Interferometric Synthetic Aperture Radar (InSAR) Meteorology Workshop

**Adams, D. K., Column Water Vapor and Continental Convection,** Miami, FL, March 1-2, 2018.

2017 Reunión Anual de la Unión Geofísica Mexicana

**Adams, D. K., (Keynote Speaker) - Deep Convection: The Engine of the Storm,** Unión Geofísica Mexicana 2017, Puerto Vallarta, Mexico October 23 -27, 2017

Seminar: *La Convección Atmosférica: El Alma de las Tormentas.* II Escuela de Verano en Ciencias de la Atmósfera, UNAM, Campus Juriquilla, June 23, 2017

Seminar: *Controls on Tropical Continental Deep Convection: Water Vapor Vertical Structure vs Column Water Vapor: Quantity vs Quality.* Joint Institute for the Study of the Atmosphere and Ocean, University of Washington, Seattle, May 1<sup>st</sup>, 2017

Seminario: *GPS Technique to Studies of Tropical Deep Convection.* Department of Physics, New Mexico Institute of Mining and Technology, Socorro, New Mexico, March 25th, 2017

Seminar: *Fuentes de Humedad Terrestres versus Oceánicas en la Convección Monzónica: Una Nueva Mirada a un Viejo Problema,* Departamento de Oceanografía Física del CICESE, Ensenada, Baja California, March 3<sup>rd</sup>, 2017

COCONet Workshop: Results, Sustainability, & Capacity Building

**Adams, D. K., COCONet as a backbone network for the study of Central American land-based convective processes and large-scale water vapor transport for the North American Monsoon,** COCONet, Punta Cana, Republica Dominicana May 3-5, 2016

**Adams, D.K., GPS Meteorología: Avances con un Nuevo Sistema para el Estudio del Clima y la Meteorología en México** XXI Congreso Nacional de la Sociedad Latinoamericana de Percepción Remota y Sistemas de Información Espacial. Ciudad Júarez, Chih. 12-16 October, 2015

Seminar: *Tropical Convection: Unique Observations from GPS Meteorological Networks in Mexico and Amazonia.* Department of Environmental Sciences Rutgers, The State University of New Jersey, New Brunswick, New Jersey, September 2015

Seminar: *Advances in NAM Research: Collaborative efforts between the UNAM and UA.* UNAM@UA for the inauguration of the Center for Mexican Studies at Tucson of the National University of Mexico (UNAM). Tucson, AZ, September 2015

\*\* “Invited” here means hosting institution pays travel/stay expenses

#### **Conference Oral/Poster Presentations (Last 3 years)**

98<sup>th</sup> Annual Meeting of the American Meteorological Society

**Adams, D. K., E. R. Vivoni, B. R. Lintner, E. Cabral Cano C. Minjarez Sosa, Y. L. Serra, A. Granados, A. Vázquez Galvez, J. C. Rodriguez, V. Verduzco, E. R. Pérez Ruiz, F. Barffuson, M. Grutter, J. S. Haase, H. Liang, E. Cabral Cano D. J. Gochis, E. Yépez, A. Robles Morua, A. Bezanilla, R. Del Rio Salas, A. I. Quintanar, C. Ochoa Moya, and L. Salazar-Tlaczani:**[The North American Monsoon GPS Hydrometeorological Network 2017](#), 8-11, enero 2018

98<sup>th</sup> Annual Meeting of the American Meteorological Society

Moker, J., Univ. of Arizona, Tucson, AZ; and A. F. Arellano Jr., C. L. Castro, Y. L. Serra, and **D.K. Adams;** *Impact of Initial Estimates on Convective- Permitting Simulations during the North*

*American Monsoon GPS Transect Experiment, 8-11, enero 2018*

Castro, Christopher L. and H. I. Chang, **D. K. Adams, T. Luong**, T. M. Lahmers, and **C. Ochoa-Moya:** *The More Extreme Nature of North American Monsoon Precipitation in the Southwestern United States*, Meeting of the American Meteorological Society, 8-11, enero 2018 (**Invited Talk**)

2017 Reunión Anual de la Unión Geofísica Mexicana

Pérez Ruiz, Elí Rafael, Enrique R. Vivoni, Julio Cesar Rodríguez, Vivian Verduzco, **David Adams**, David Gochis, Enrico A. Yépez, Agustín Robles Morua: *Red Gps-Hidrometeorológico del Monzon 2017: Resultados Preliminares de Flujos de Agua, Energía Y Carbono en Tres Ecosistemas Del Noroeste de México*, Puerto Vallarta, Mexico 23 -27 de octubre, 2017

2017 Reunión Anual de la Unión Geofísica Mexicana

Zuber, Alain Jair García, Jorge Baylón, César Guarín, Alejandro Bezanilla, Wolfgang Stremme, Michel Grutter, **David Adams**: *Estimación Del Vapor De Agua Precipitable En El Centro de México A Través De Las Técnicas Ftir Y GPS En Dos Sitios De La Ruoa*, 2017, Puerto Vallarta, Mexico 23 -27 de octubre, 2017

2017 Fall Meeting of the American Geophysical Union

Chang, Hsin-I, Thang Manh Luong, Christopher L Castro, Timothy M Lahmers, **David K Adams** and Carlos Ochoa-Moya: *The more extreme nature of North American monsoon precipitation in the Southwestern United States*, New Orleans 2017

2017 Fall Meeting of the American Geophysical Union

Cabral-Cano, E. Luis Salazar-Tlaczani, **David K. Adams**, Enrique R Vivoni, Michel Grutter, Yolande L Serra, Charles DeMets, John Galetzka, Karl Feaux, Glen S. Mattioli and M Meghan Miller, *TLALOCNet continuous GPS-Met Array in Mexico upporting the 2017 NAM GPS Hydrometeorological Network*, New Orleans 2017

2017 Fall Meeting of the American Geophysical Union

**Adams, D. K.**, *The North American Monsoon GPS Hydrometeorological Network 2017: A New Look at an Old Problem*, New Orleans 2017 (Invited Talk)

2016 Fall Meeting of the American Geophysical Union

Serra, Yolande, Angela Rowe, **David K Adams**, Henrique M Barbosa and George N Kiladis. The Role of Intraseasonal Variability in Supporting the Shallow-to-Deep Transition in the Amazon, San Francisco, California, EUA, 12-16 diciembre, 2016

2016 Fall Meeting of the American Geophysical Union

Muong, T. L. , C. Castro, C. Ochoa, A. Quintanar, **D. Adams**, Extreme Precipitation Events in the Valley of Mexico as Revealed by a Long-term Climate Simulation, Annual Meeting of the American Geophysical Union, San Francisco, California, EUA, 12-16 diciembre, 2016

8th European Geophysical Union Leonardo Conference

Quintanar, A.I. ,C.A. Ochoa-Moya, J.C. Rodríguez, C. Lizarraga-Celaya, **D.K.Adams**, C. Minjarez-Sosa. The influence of local evapotranspiration on deep convection activity during the North American Monsoon season, Ourense Spain. 25-27 octubre, 2016

2016 Reunión Anual de la Unión Geofísica Mexicana

**Adams, D.K.**, Arturo Quintanar, Carlos Ochoa, Metrics for Models of all Resolutions from Global to Large Eddy Simulations  
Unión, Puerto Vallarta, Mexico, 1-6 noviembre, 2016

96th Meeting of the American Meteorological Society, New Orleans, U.S.A.

Pauliquevis, T., H.M.J. Barbosa, C.C. Alves, N. M. E. Rosario, L. V. Rizzo, A. Correia, **D. K. Adams**, and A. J. P. Calheiros, Micro and Macrophysical Characteristics of Non-precipitating Morning Shallow Clouds in Central Amazonia Using One-year of Data from Goamazon 2014/15 Experiment, New Orleans, Jan. 2016

2015 Fall Meeting of the American Geophysical Union

Castro, C. L. , Tim Lahmers , Yolande L Serra , John Brost , Thang Manh Luong and **David K. Adams**, Asessment of the Long-Term Trends of Transient Inverted Troughs within the North American Monsoon Region: Mechanisms and Implications for Warm Season Precipitation, San Francisco U.S.A., December, 2015

2015 Fall Meeting of the American Geophysical Union

**Adams, D. K.**, Tropical Continental Convection (Amazonia and the North American Monsoon): Unique Observations from GPS Meteorological Networks, San Francisco U.S.A., December, 2015

2015 Fall Meeting of the American Geophysical Union

Ochoa, Carlos, Arturo Quintanar, **David Adams**, Benjamin Martinez Lopez, Simulation of the Diurnal Cycle of Integrated Precipitable Water in the North American Monsoon Region. San Francisco U.S.A., December, 2015

2015 Fall Meeting of the American Geophysical Union

Quintanar, Arturo, Carlos Ochoa, **David Adams**, Benjamin Martinez-Lopez, Alejandro Campos-Solorzano, Thermodynamic Characteristics of Intense Convective Events Over the Mexico City Valley, San Francisco U.S.A., December, 2015

2015 Fall Meeting of the American Geophysical Union

Pauliquevis, Theotonio, Henrique Barbosa, Nilton Rosario, Luciana Rizzo, Alexandre Correia, **David Adams**, Alan James Calheiros, Microphysical And Macrophysical Characteristics Of Non-Precipitating Morning Shallow Clouds In Central Amazonia Using One-Year Of Data From GOAMAZON 2014/15 Experiment, San Francisco U.S.A., December, 2015

2015 Fall Meeting of the American Geophysical Union

Feaux, Karl, **David Adams**, John Braun, Enrique Cabral-Cano, Korey Dausz, Stephen Dittman, Michael Fend, John Galetzka, Glen Mattioli, M Meghan Miller, James Normandeau, Luis Salazar-Tlaczani, John Sandru, Yolande Serra , Guoquan Wang, COCONet and TLALOCNet: Multi-hazard GNSS/Met Observatories, Enhancing Geodetic Infrastructure and the Scientific Community in Mexico and the Caribbean San Francisco EEUU, December, 2015

2015 Reunión Anual de la Unión Geofísica Mexicana

**Adams, D.K.** C. Ochoa, A. Quintanar, E. Vivoni, GPS Techniques for Studying Atmospheric Convection and Biosphere-atmosphere Interactions during the North American Monsoon. Unión Geofísica Mexicana, Puerto Vallarta, Mexico, 2-7 November, 2015

**Adams, D. K.**, *GPS Meteorological Networks for Process-Oriented Studies of Tropical Deep*

*Convection.* 2015 IASCLiP Virtual Workshop, US CLIVAR, 9 - 11 September 2015 (**Invited Talk**)

**Adams, D. K.**, *Precipitable Water Vapor, the Critical Variable of Tropical Deep Convection.* Tercer Encuentro de Climatología Regional del Noroeste de México, Mexico D.F., June 2015

**Adams, D. K.**, Tormentas Severas: ¿Por qué se forman?, Programa de Estaciones Meteorológicas de Bachillerato Universitario. UNAM, México, D.F. July, 2015

Meza Figueroa, D., V. Moreno, R. Del Rio, **D. K. Adams**, L. Ochoa, J. Zepeda, A Gómez, J. Palafox, Effect of the North American Monsoon in Dust Emission: Implications for Environment and Health. Congreso Internacional de Ingeniería Ambiental, Hermosillo, Sonora May 2015

95th Meeting of the American Meteorological Society, Phoenix, U.S.A.,  
**Adams, D.K.**, O. Ramos Pérez, C. Minjarez Sosa, Y. L. Serra., A. Quintanar, L. Alatorre, A. Granados and G. E. Vázquez. The North American Monsoon GPS Transect Experiment 2013. Phoenix, AZ, January, 2015

### **Academic Seminar/Talks (Last 3 Years)**

*Precipitable Water Vapor: The Critical Variable in Tropical Deep Convection,* National Oceanic and Atmospheric Administration, Earth System Research Laboratory, Boulder, Colorado, March 30, 2018.

*Tropical Deep Convection and Column Water Vapor: Explorations using the GPS Technique.* Department of Earth and Planetary Sciences en Harvard University, July 24, 2017.

*Fuentes de Humedad Terrestres versus Oceánicas en la Convección Monzónica: Una Nueva Mirada a un Viejo Problema,* Instituto de Ingeniería y Tecnología, UACJ, Ciudad Juárez, Chihuahua, March 21, 2017.

*Terrestrial versus Oceanic Source of Water Vapor for Monsoon Convection: A New Look at an Old Problem.* Department of Hydrology and Atmospheric Sciences, University of Arizona, Tucson, Arizona, March 9th 2017.

The shallow-to-deep convection transition over land, GOAmazon Journal Club Webinar, Brown University, Providence RI, May 26, 2016.

Webinar: *GPS Meteorological Networks for Process-Oriented Studies of Tropical Deep Convection.* 2015 IASCLiP Virtual Workshop, US CLIVAR, September 9-11, 2015

### **Editorial Activities**

Associate Editor: *Monthly Weather Review*, American Meteorological Society (2015 to present)  
Associate Editor: *Atmósfera*, Universidad Nacional Autónoma de México (2017 to present)

### **Professional Organizations**

American Meteorological Society  
American Geophysical Union  
Unión Geofísica Mexicana

**Languages**

English (Native)

Spanish (Near-Native Fluency)

Portuguese (Fluent)