

Towards the creation of a regional flux network in Mexico (MexFlux): opportunities for collaboration

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Site Name: El Mogor
Location: Baja California
Vegetation type: Chaparral shrubland
Dates of operation: 2007-present
PI: Rodrigo Vargas



Site Name: Todos Santos
Location: Baja California
Vegetation type: Marine tower
Dates of operation: 2007-2010
PI: Rodrigo Vargas



Site Name: Valle de los Cirios
Location: Baja California
Vegetation type: Sarcocaulis shrubland
Dates of operation: September 2011
PI: Rodrigo Vargas



Site Name: La Paz
Location: Baja California Sur
Vegetation type: Sarcocaulis shrubland
Dates of operation: 2002-present
PI: Walter Oechel



Site Name: Buffet
Location: Sonora
Vegetation type: Sabannah
Dates of operation: March 2011
PI: Alejandro Castellanos




Site Name: Tesopaco
Location: Sonora
Vegetation type: Tropical dry forest
Dates of operation: 2004-present
PI: Jaime Garatuza




Site Name: Chamela
Location: Jalisco
Vegetation type: Tropical dry forest
Dates of operation: 2007-present
PI: Arturo Sanchez-Azofeifa



Site Name: Sierra de los Locos
Location: Sonora
Vegetation type: Oak forest
Dates of operation: 2008-present
PI: Enrique Vivoni




Site Name: Rayon
Location: Sonora
Vegetation type: Subtropical shrubland
Dates of operation: 2006-present
PI: Christopher Watts



Site Name: Gracilis
Location: San Luis Potosí
Vegetation type: Grassland
Dates of operation: March-2011
PI: Tulio Arredondo



Site Name: Mojonera-Atopixco
Location: Hidalgo
Vegetation type: Mixed forest
Dates of operation: September 2011
PI: Gregorio Angeles



Site Name: Kaxil-Kiuc
Location: Yucatan
Vegetation type: Seasonally dry tropical forest
Dates of operation: September 2011
PI: Jose Luis Andrade



Established
 Planned

Abstract

The global consortium of eddy covariance measurements (FLUXNET) has provided invaluable information to understand how climate variability influences terrestrial carbon and water fluxes. However, this global network is not well distributed in the Earth as sites in temperate regions of the northern hemisphere dominate it. Mexico has been one region that has not been represented within FLUXNET, but presents great opportunities for model validations and improvements as new flux measurements become available. Mexico has high beta diversity and is subject to important anthropogenic disturbances (i.e., land use change), and natural disturbances (e.g., droughts, hurricanes, fires) that may become more frequent under climate change. Thus, Mexico presents opportunities and challenges to the scientific community for validation of models and testing of current theories. Here we present the sites that form the Mexican consortium of eddy covariance measurements (MexFlux) and bring attention to potential opportunities for collaboration. At present the consortium is represented by 8 sites in arid and semi-arid regions with shrublands, forests, grasslands and a tropical dry forest, but is planning to expand to other tropical and managed ecosystems. We seek for collaborations to expand the network and to answer scientific questions that will improve our understanding on how climate variability influence carbon and water fluxes across Latin America.

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