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

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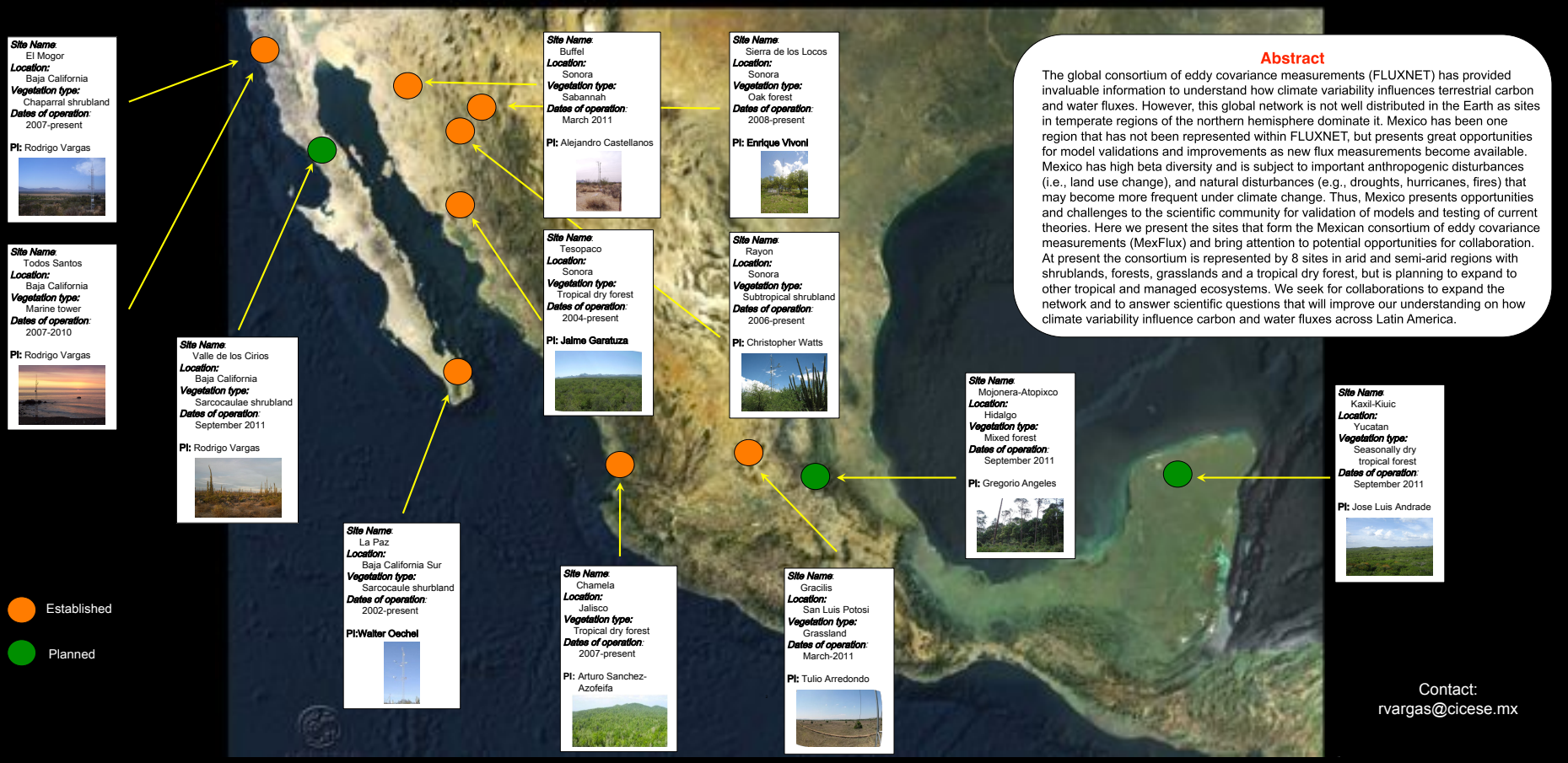

Abstract

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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