

Phase 1 Implementation of the Ground-Based Precipitation Observation Network  
in the North American Monsoon Experiment (NAME)

Juan-Carlos Leal, IMADES, Hermosillo, Sonora, MX  
Christopher Watts, IMADES, Hermosillo, Sonora, MX  
David Gochis, Dept. of Hydrology and Water Resources,  
Univ. of Arizona, Tucson, AZ, USA  
W. James Shuttleworth, Dept. of Hydrology and Water Resources,  
Univ. of Arizona, Tucson, AZ, USA  
Jaime Garatuza-Payan, ITSON, Obreg?n, Sonora, MX

Abstract:

Fifty, event-logging, tipping-bucket rain gauges have been installed in the northern half of the Tier 1 region of NAME. The new stations represent a significant addition to the surface observation network in Mexico in general and in the NAME region in particular. Three quasi-latitudinal transects of rain gauges are now in place which greatly improve the sampling of topographically enhanced convective precipitation from the Gulf of California coastal plains across the Sierra Madre Occidental (SMO) in northwestern Mexico. The new system allows for effective sampling of the temporal structure of diurnal convective precipitation as well. An overview of the network will be presented, as will a preliminary presentation of data collected during the 2002 North American Monsoon (NAM) season. Emphasis will also be given to the methods and experiences utilized for developing partnerships with local and national interest groups.