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## Introduction/Background

- A reliable drought monitoring system allows to identify regions affected by these phenomena so that early response measures can be implemented (Wilhite, 2000).
- Drought monitoring systems around the world have taken advantage of global hydroclimatological datasets derived from remote sense tools (Hao et al., 2014; Sepulcre-Canto et al., 2012; Sheffield et al., 2014; Svoboda et al., 2002). However, its use in Mexico for drought assessment is still incipient (e.g., de Jesús, 2016).
- Mexico has the Mexico's Drought Monitor (MDM), derived from the North American Drought Monitor (NADM), since 2014. Although it has inherited several strengths from the NADM, its main limitation is the scarcity of ground-based data, as well as the subjective criteria to represent the spatial extent of droughts.
- MDM has failed to detect some past events.

# **Objectives**

Provide an operational framework for drought monitoring in Mexico, based on univariate and multivariate nonparametric standardized indexes.

# Data

Atmospheric reanalysis Modern-Era Retrospective analysis for Research and Applications version 2 (MERRA-2; Rienecker et al., 2011).



MERRA-2 temp. coverage Study area Mexico

