**New Methodology to evaluate EDMF forced by MERRA Re-Analysis**

**Goal:** To develop a new methodology to evaluate Single Column Models (SCMs) and parameterizations against satellite data in realistic settings.

**Results:** 500 EDMF SCM simulations (June 2007) between Los Angeles and Hawaii forced by MERRA-2 show that new methodology is effective and that EDMF compares well against CloudSat observations.

**Significance:** New method will help develop and evaluate parameterizations (e.g. EDMF) against satellite observations in realistic settings.