

# Analysis and Modeling of Water Resources in the Caribbean and Surrounding Coastal Regions

## **Equisha Glenn**

Civil Engineering Dept., PhD Candidate/NOAA-CREST Fellow  
The City College of New York, New York, NY

## **Dr. Reza Khanbilvardi**

NOAA-CREST Professor of Civil Engineering, The City College of New York, New York, NY

## **Dr. Jorge E. González**

NOAA-CREST Professor of Mechanical Engineering, The City College of New York, New York, NY

## **Dr. Thomas Smith**

NOAA/STAR/SCSB and CICS/ESSIC, University of Maryland, College Park, MD

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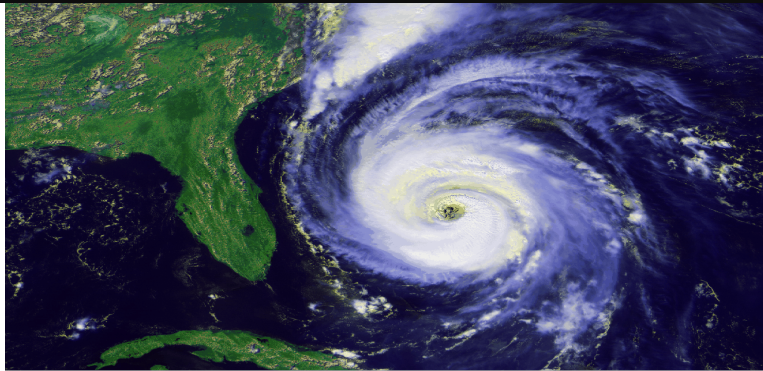
# Intra-Americas Region (IAR)





# Impacts of Global Climate Change

According to IPCC, the Small Island Developing States located in the IAR are likely to be ***among the most seriously impacted regions on Earth*** by these global climate changes



Hurricane activity



Moisture Transport/variability



Coral reefs/biodiversity



Water/natural resources



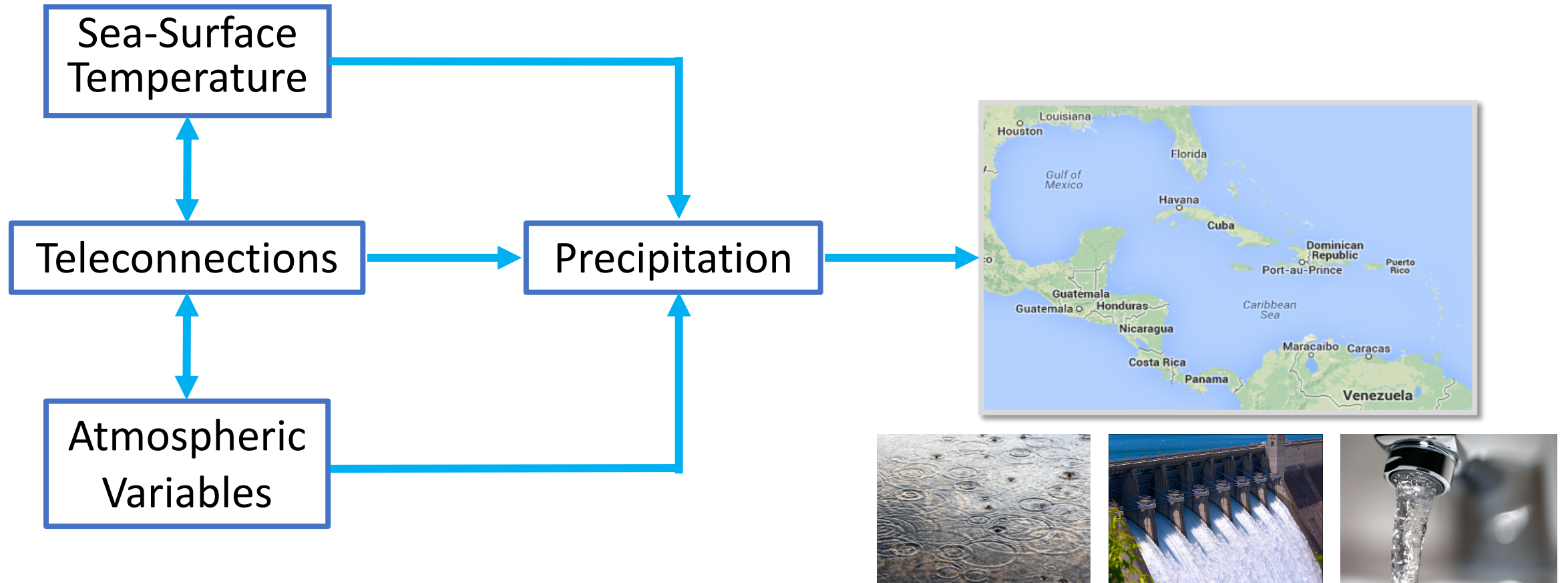
Agriculture



Tourism



# Caribbean Climate Analysis, 1982 - 2017



# NERTO – Fall 2018

## Objectives:

Analyze how sea-surface temperature (SST), meteorological, and land-surface variations influence precipitation in the Meso-American region, to understand the processes that drive precipitation variations to aid prediction and water resource management in coastal, urban regions.

- Evaluation of driving mechanisms of precipitation in the region
- Precipitation predictor identification for model development
- Development of comprehensive model for precipitation using predictors

This work will provide the foundation for analysis of regional-scale hydrological changes due to large-scale climate forcing.