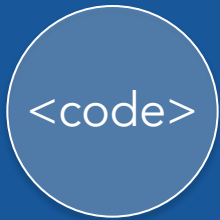P. Krishna Krishnamurthy presents

MAPPING RAINFALL ANOMALIES
DURING THE RECENT 2015-2016 EL NIÑO EVENT

P. Krishna Krishnamurthy

EEB 234 | Winter 2017
Thursday 9th March, 2017

EL NIÑO AFFECTS RAINFALL PATTERNS

El Nino is a cycle of unusually warm sea surface temperatures originating in the Eastern Pacific

El Nino has been associated with changes in rainfall patterns

Implications are significant for food and water security

The 2015-2016 event was the strongest on record; events of this scale may become more frequent under climate change

DATA

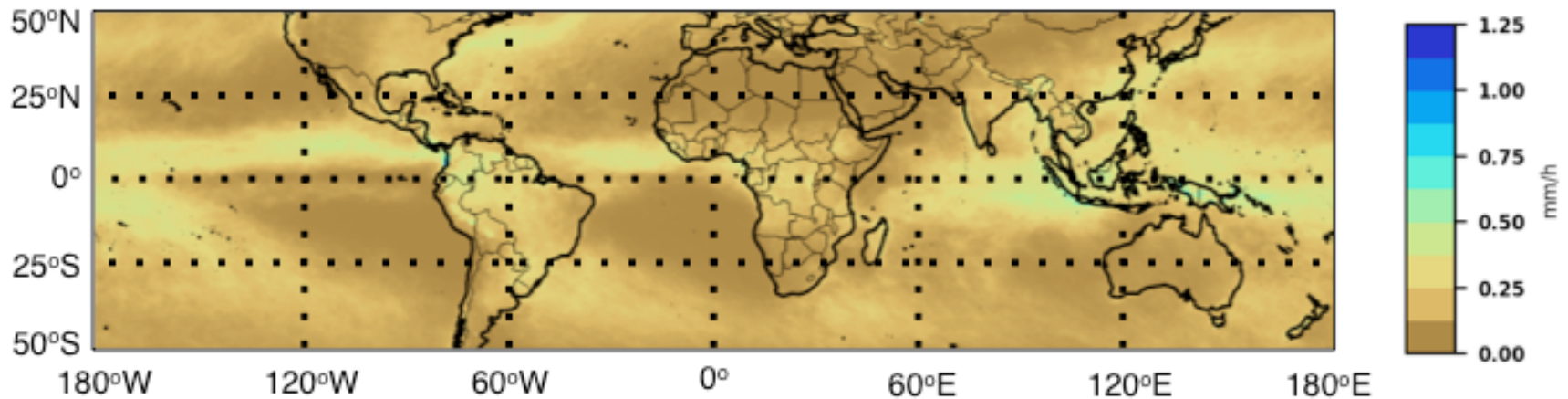NASA satellites

TRMM: 1998-2014

GPM: 2014-present

LIVE DEMONSTRATION

Let's move to Jupyter

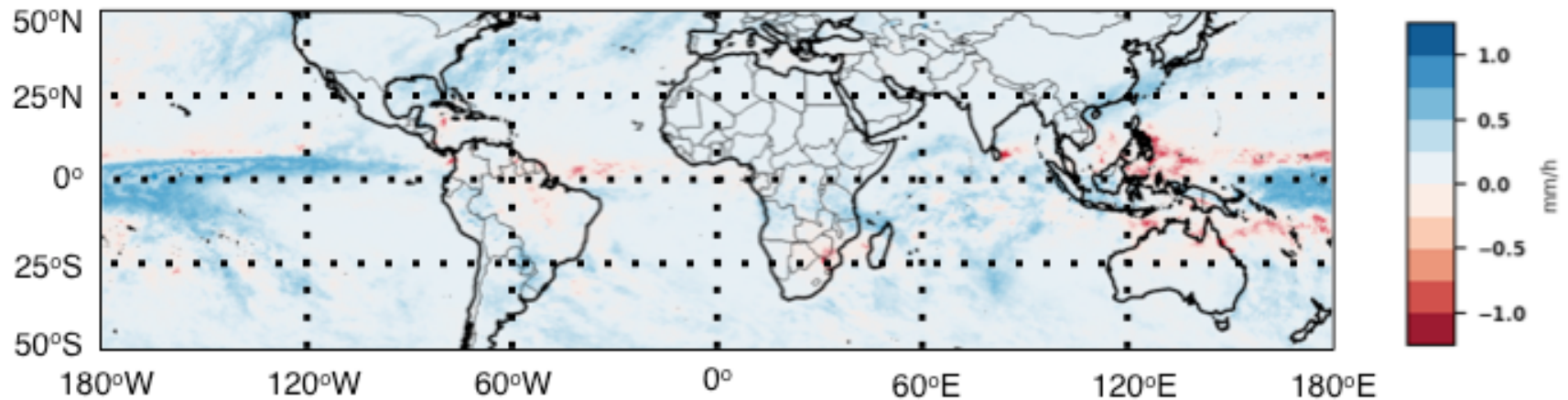# PLOTS: AVERAGE RAINFALL RATES

Annual average rainfall rates (2016)

PLOTS: DIFFERENCE

Monthly rainfall anomalies (2016) compared to long-term average (1998-2015)

REPRODUCIBLE SCIENCE

All files:
https://github.com/Krishna-K2609/eeb-177-final-project

This presentation:
https://github.com/Krishna-K2609/eeb-177-final-project/presentation