



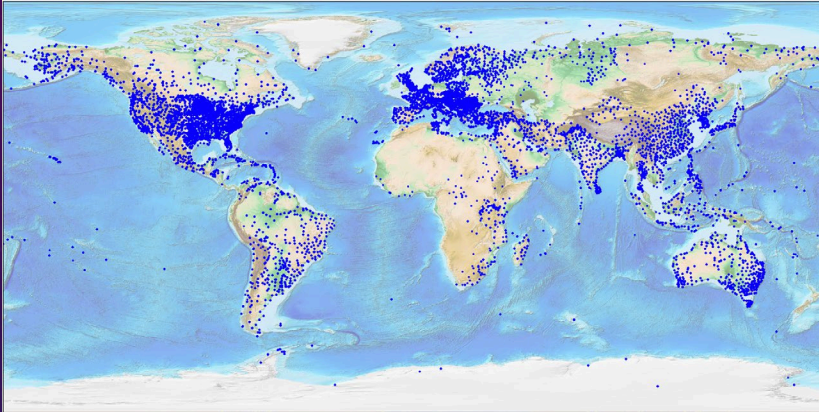
CISESS INTERNSHIP 2021

DENNIS KONGOLI

MENTOR: YONGZHEN FAN

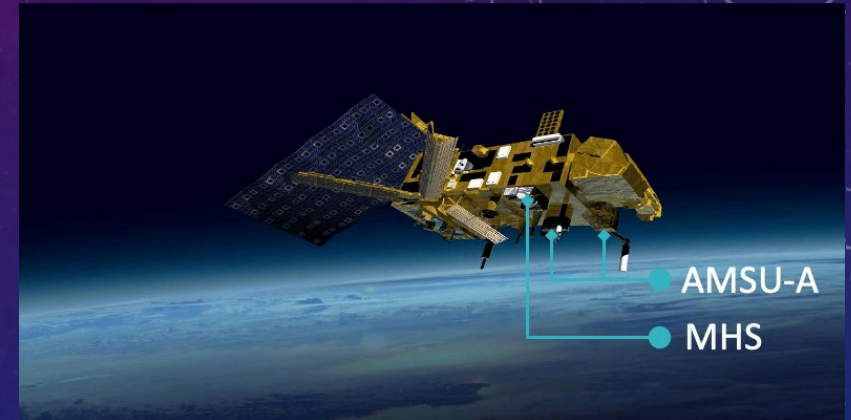
NOAA Integrated Surface Database (ISD)

- Weather stations around the world
- Weather report on precipitation (rainfall, snowfall, etc.)
- Can we detect snowfall globally under different environmental conditions?



AMSU-A / MHS

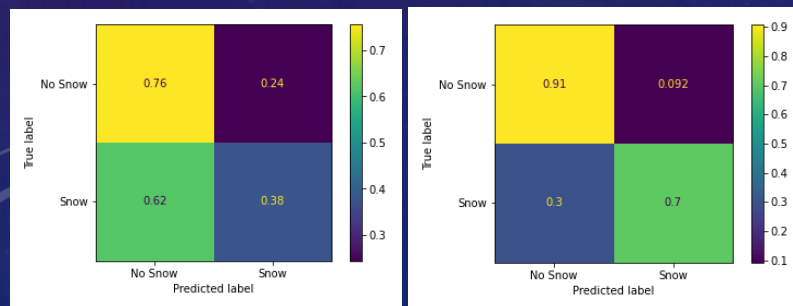
- Match ground observations with satellite measurements and GFS model analysis
- Build a model off satellite and GFS data and train the model with "ground truths"



Logistic Regression

Cold

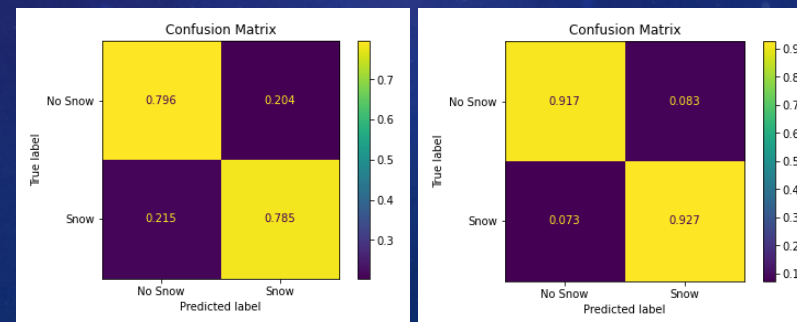
Warm



Neural Network

Cold

Warm



Random Forest

Cold

Warm

