

## CliMates

### Summary of where we're at:

- Want overall some way to characterize what we might expect in terms of flooding events based on climate model (precip)
- Combine future precip with where flooding is taking place, and with stream networks (rate)
- Kate
  - Patterns of precipitation over time + how heavy of rain
  - Soil quality and how it holds on to water
- What individual pieces
  - Climate precip - spatial and temporal
  - NHD+ data for stream networks
  - Streamflow data
  - And how water works way to Willamette
- Big to do
  - We have all this info but we're missing how we're gonna classify it, like the amount of water, like at what point do we call it a flood? Is there data out there that says this is the floods that have taken place? i.e. how do we quantify flooded vs. not flooded. We need a response variable.
    - Intensity function? Like a mean value for times and places
  - Right now we have amount of precip over a regular grid. What do we need to do with that data in order to really summarize how much of that precipitation is going into stream system. How do we combine them
- Little to do
  - On gridded precip data: look at local watershed and stream data combined with precip data to see this. Look at some data
  - What are they predicting for the precip in this area even? Like in terms of cc. Should we look at this before getting into watersheds and into streams
- Do we focus on single grid point and look at precip and then expand to nearby? Do you look at places in state?

### For the next week:

- What is precipitation like in Oregon in our data set?
  - Start with a grid point in different parts of state? Use USGS hydrologic units (smallest subdivision of watersheds)
    - Pick a gridcell and a dataset and decide some kind of comparison to make. Remember question of interest is what's going on with precipitation in these different regions of Oregon?

- Ericka: Coast
  - Kate: Willamette Valley
  - Jess: Southeast Oregon
  - MLE: Cascades (top of a mountain, maybe Mt. Washington)
- Is it worth exploring how precip is forecasted to change in the different models?
- James
  - Email CJ PROJ library
  - Email Chris Wikle about team registration and updated info about environmental workshop and how it stands atm
  - James email us the R server link
- Jess's question
  - On behalf of OSSO, spring picnic event ideas. Trying to pick a date to put on a calendar. Throwing around week 7. During student and faculty happy hour? Approved by James and Charlotte.
- Emily: Add them to Slack