**Agenda**

1. Check with Data preparation (should be done…)
   1. Jim, ok
   2. Michael, any progress?
   3. Thee:
      1. Review Q&A with our partners
         1. Use vegetation bands or NDVI to detect greens

**Really useful, maybe first step**

* + - 1. Up-to-date weather/temp data from NASA (NOAA) (Yujie)
      2. Incorporate dynamic data (e.g. changes of water reservoir size)

**Change of a feature**

* + - 1. Deal with cloud coverage (when and when not have it)
      2. A bunch of **pre-trained model** to detect water reservoir
      3. Recommend using shape file and pandas geo
      4. Use 10m resolution and aggregate results within each county
    1. Tell us your plan to tackle this (Thee will tackle it)
    2. Any help needed from us

1. Modeling direction
   1. Ensemble method or not??? **Yes**
   2. Possible baseline directions:
      1. Yujie: simply playing with Y, so do pure Y time series (prophet), or baseline LSTM. Predicting delta Y.
      2. Other ppl: dealing with X and Y, so how about baseline OLS, pooled OLS, DID, something fancier? Metrics: **MSE**, Rsquared, ACF
      3. **DEADLINE BEFORE MAR 22 MEETING**
   3. How to tell our story???
      1. First we have Y, single X with Y, maybe we are using the ensembling method
      2. We have multiple Xs with Y. As time goes, we have first

* **Y** (Yujie) (2012) and delta Y,
* **SET + Y** (Jim) (2015),
* then SET + SMAP + Y (2015),
* then SET + SMAP + SAT + Y (2017).

Is the accuracy improved?

* + 1. We will need to implement at least one improvement of baseline models for MS2

1. MS2 presentation
   1. See Jim’s doc. <https://docs.google.com/spreadsheets/d/1bssJEl84VcvXha08TjLi30vStEpvUwYX1Q5LL8j9FQI/edit#gid=0>
   2. Our usual template