Signal Processing
Final report

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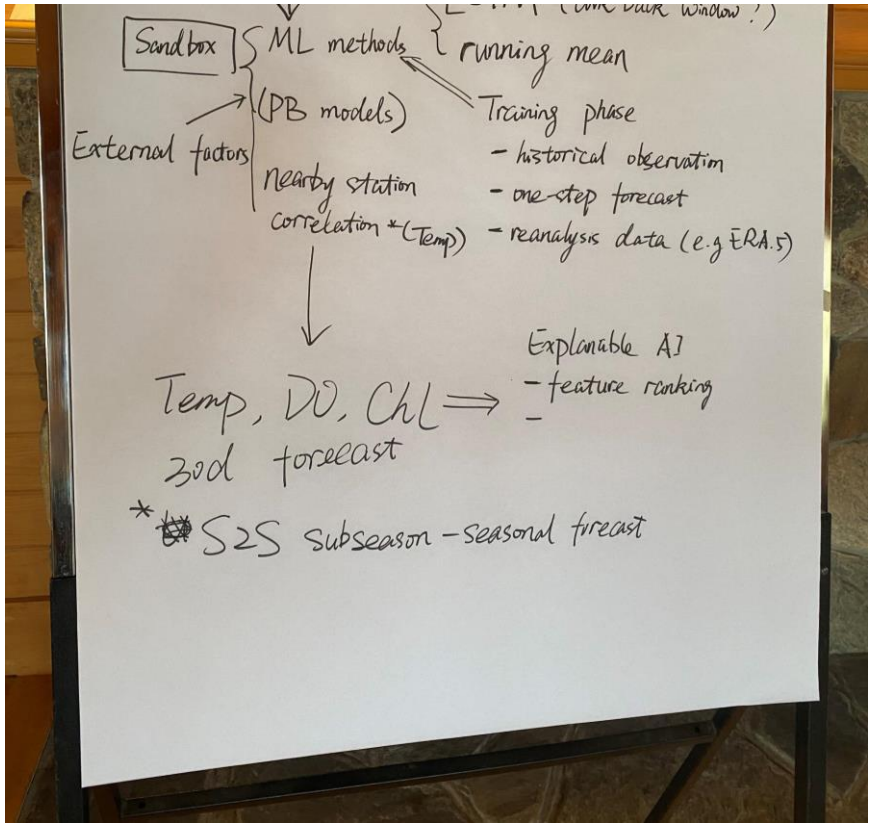


Brainstorm happened in this wooden house…

New Project: Sandbox (quick-sand)

Multiple data-driven methods (Targets: Temp, DO, Chl)

NEON Forecast challenge

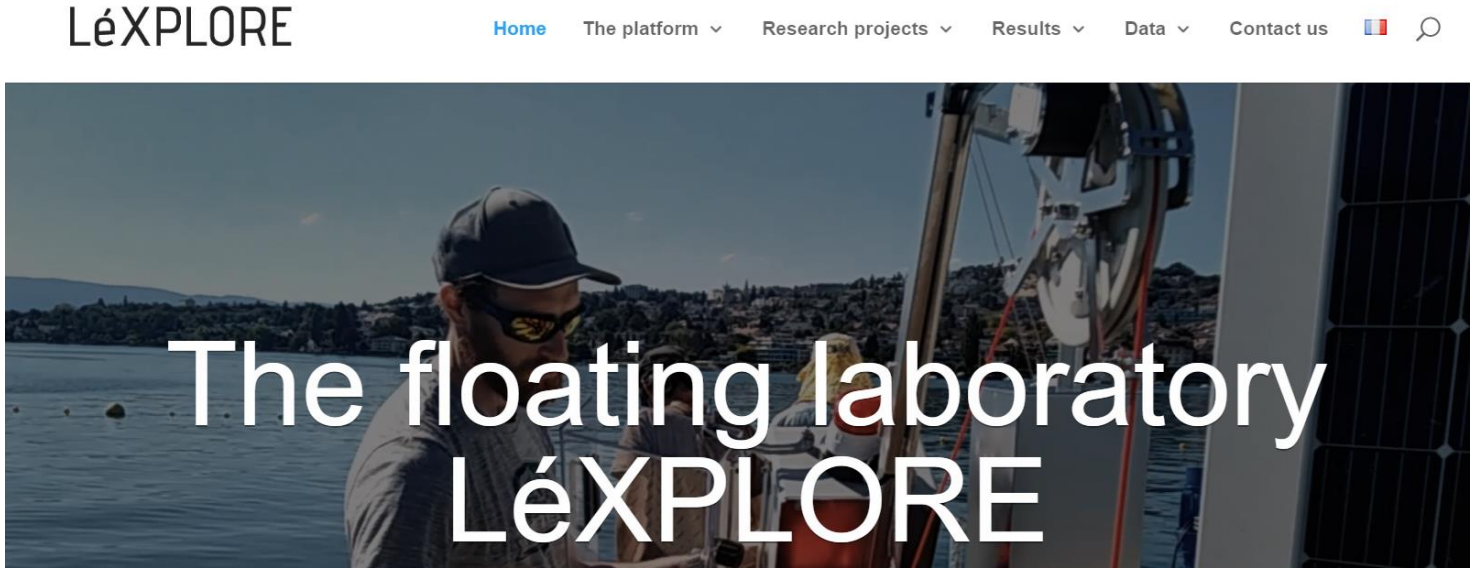
Automatic workflow

Fill the gap in the datasets

Data source

- **NEON sites (7 lakes)**

- **Eawag site (Lake Geneva)**



- **Lake George, New York, USA**

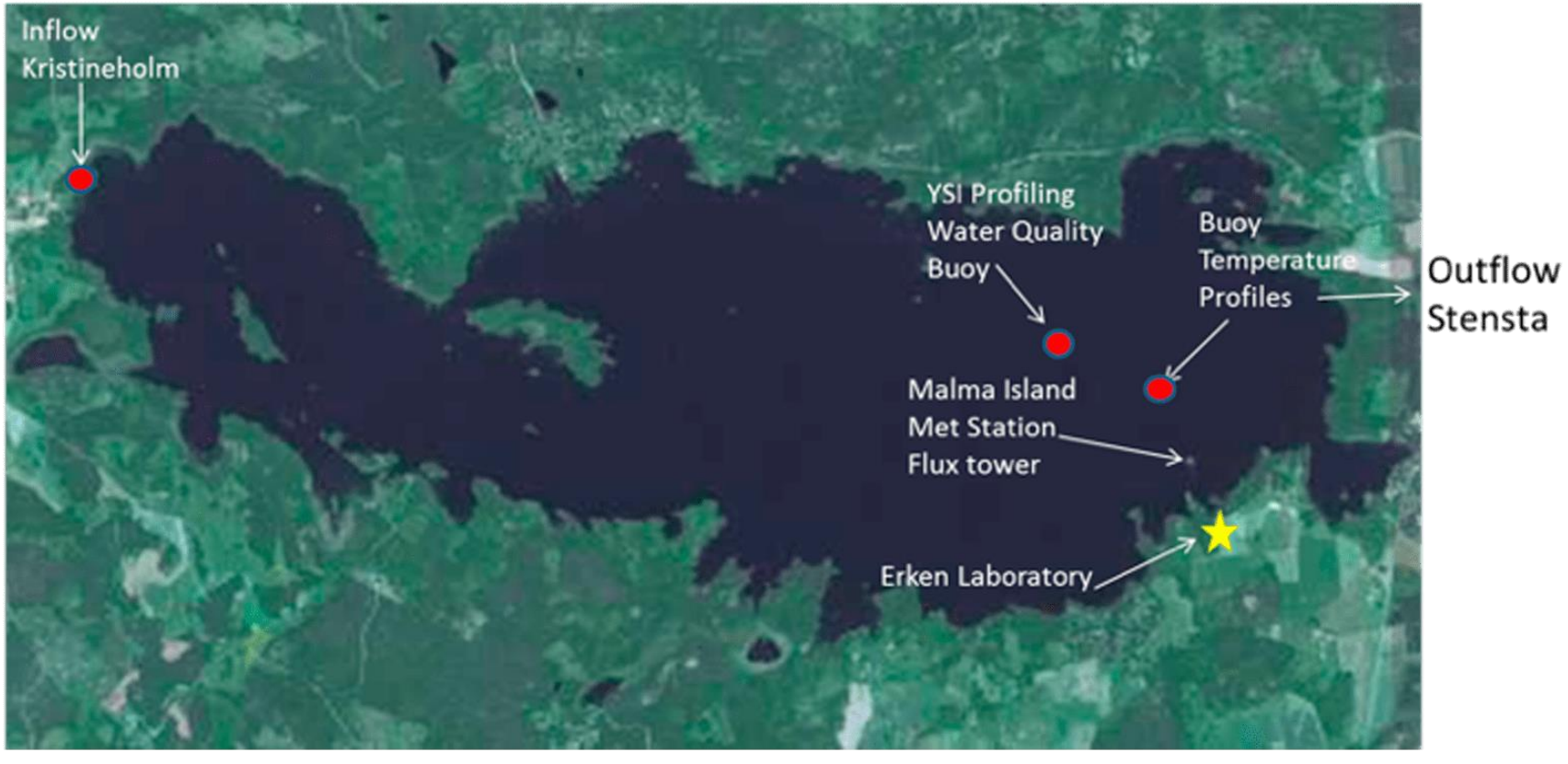
The Jefferson Project at Lake George – RPI, IBM, LGA

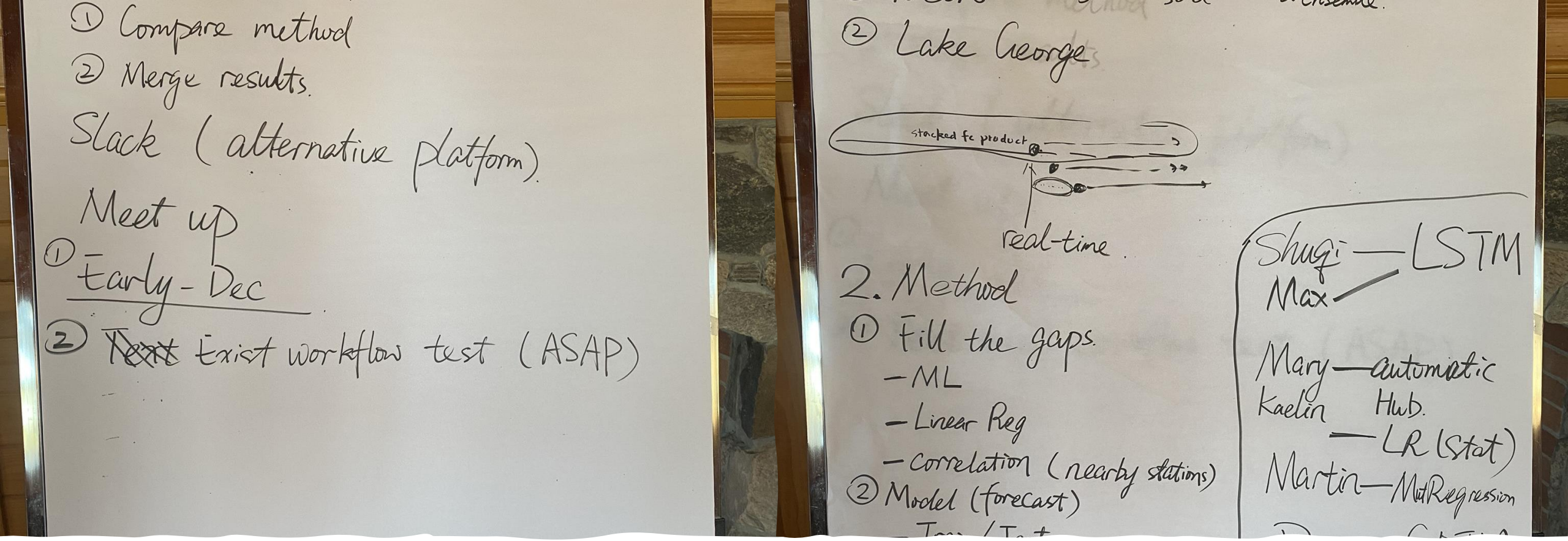
Sensor network comprised of 23 stations (2-4 vertical profilers, 12 tributary monitoring stations, 7 weather stations

Data collection began in 2015

Curated data available beginning 2017

- **Erken sites**
- **Western Lake Erie**
- **Harp Lake**

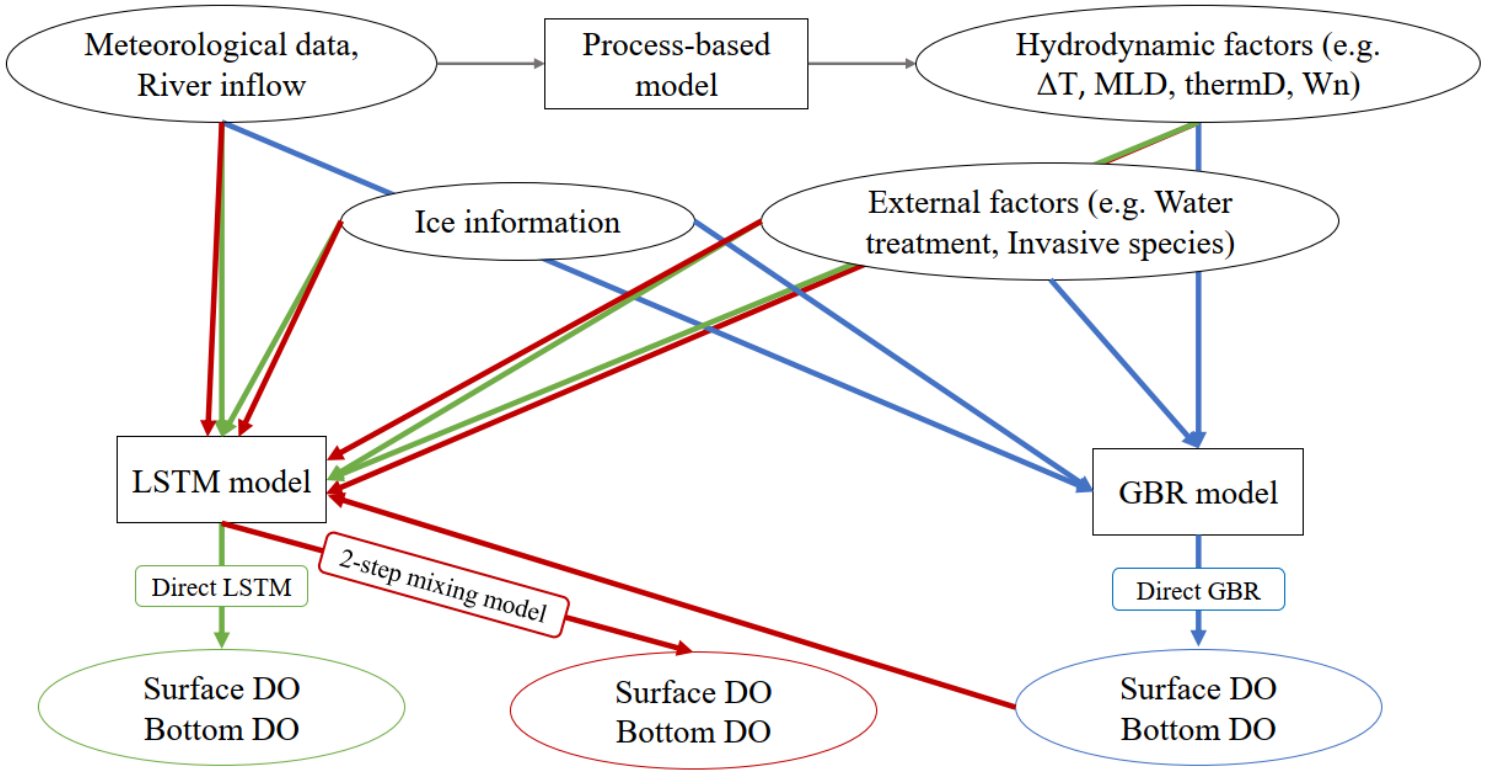



① Compare method
② Merge results.
Slack (alternative platform)
Meet up
① Early - Dec
② Exist workflow test (ASAP)
② Lake George
stacked fc product
real-time
2. Method
① Fill the gaps.
- ML
- Linear Reg
- correlation (nearby stations)
② Model (forecast)
Shuqi — LSTM
Max
Mary — automatic
Kaelin Hwb.
— LR (stat)
Martin — MutRegression

Homework

Ideas…

- Collaboration with Lake Modelling group
- KGML → AD Hoc meeting (Champion Mary Lofton)
- Testing the existing workflow with the new datasets → used in forecast challenge



Thanks!!!