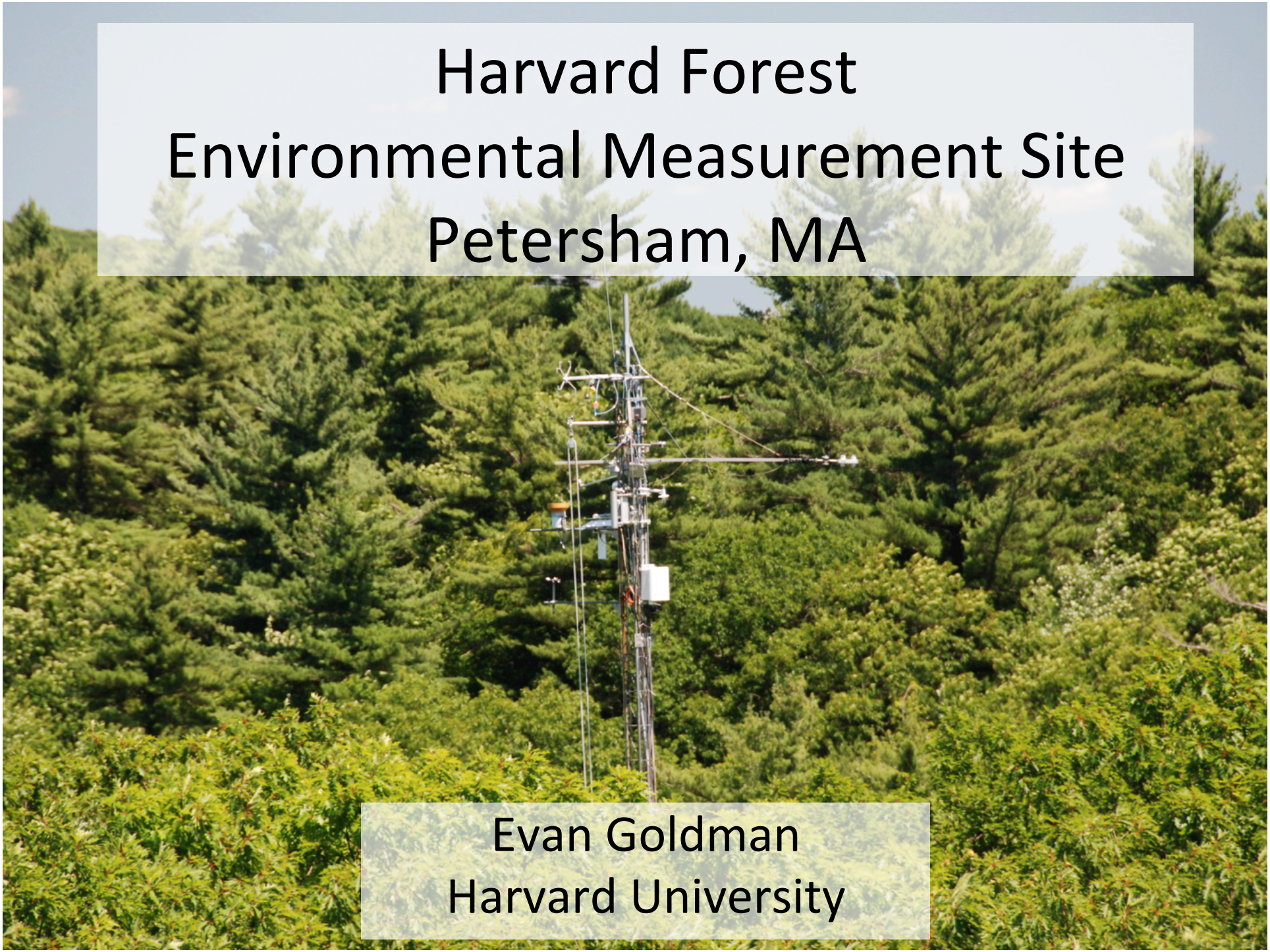
Harvard Forest Environmental Measurement Site Petersham, MA



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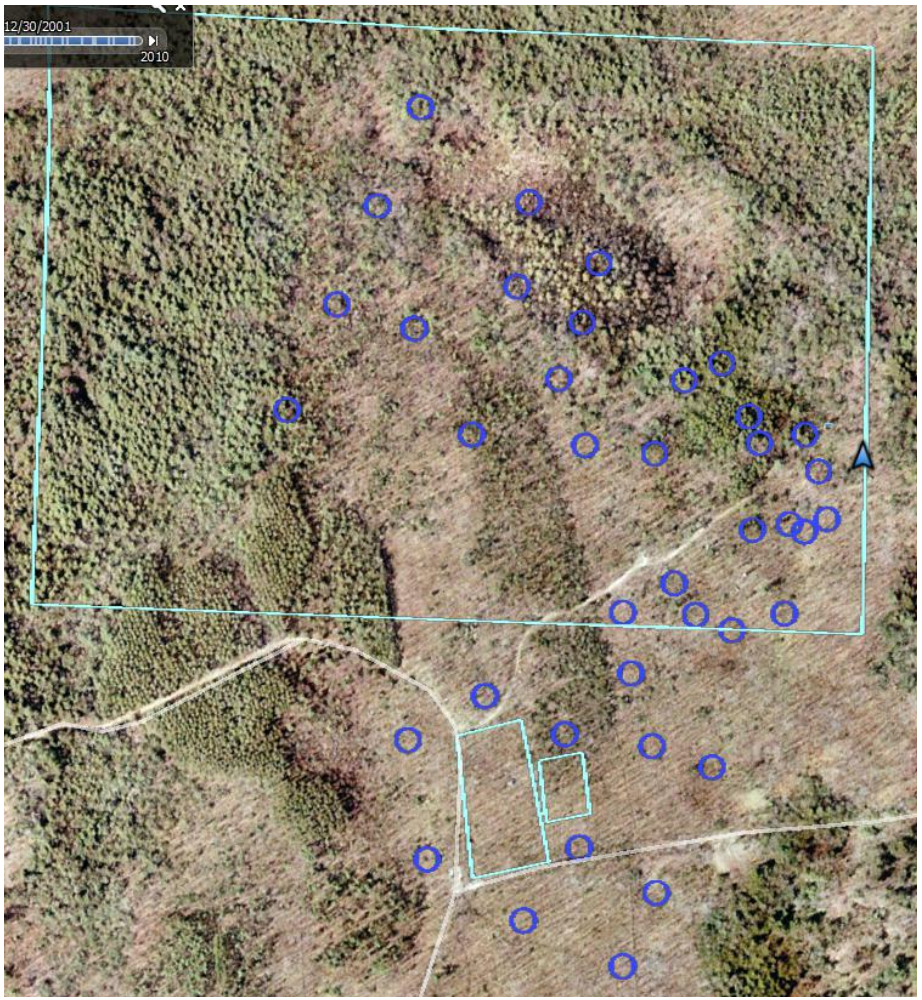
Site Description

- Mixed hardwood and conifer forest
- 40(34) Biometry plots
- CO2/H20 flux @29m& 8m
- CO2/O3/CH4 Profile
- Fht, Fmom
- Tair, RH, Tsoil, PAR, Rnet, diffuse PAR
- Other investigators…



Research Goals

- Show the long-term record of annual flux
- Goals are to quantify and understand interannual variability and long-term trends in fluxes and forest physiological responses

Stand History & Disturbances

- Synopsis of stand history
  - European agriculture & abandonment
  - 1938 Hurricane
  - 80's Gypsy Moths defoliations
  - 2008 Ice Storm
- Hemlock Wooly Adelgid

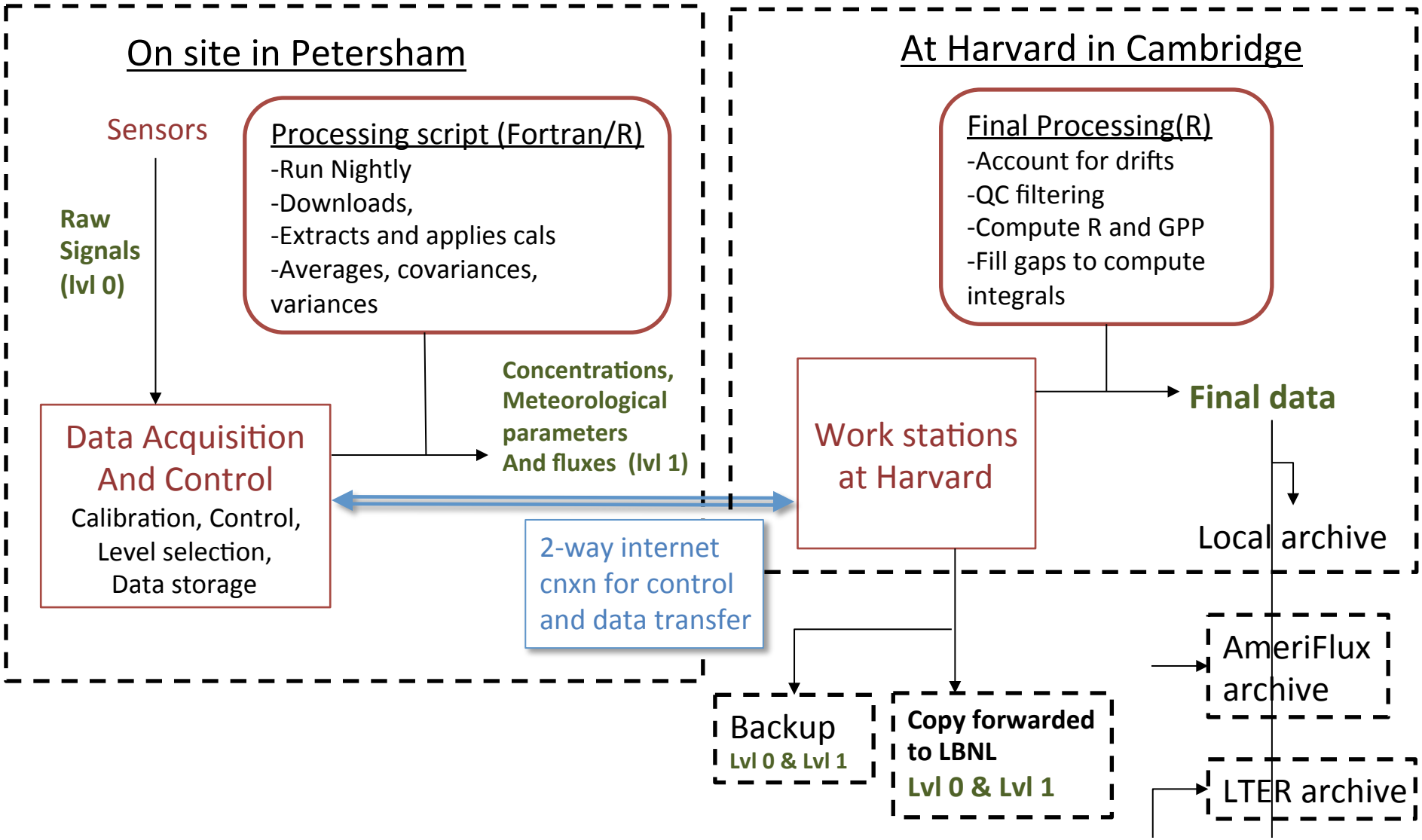
1850

1910

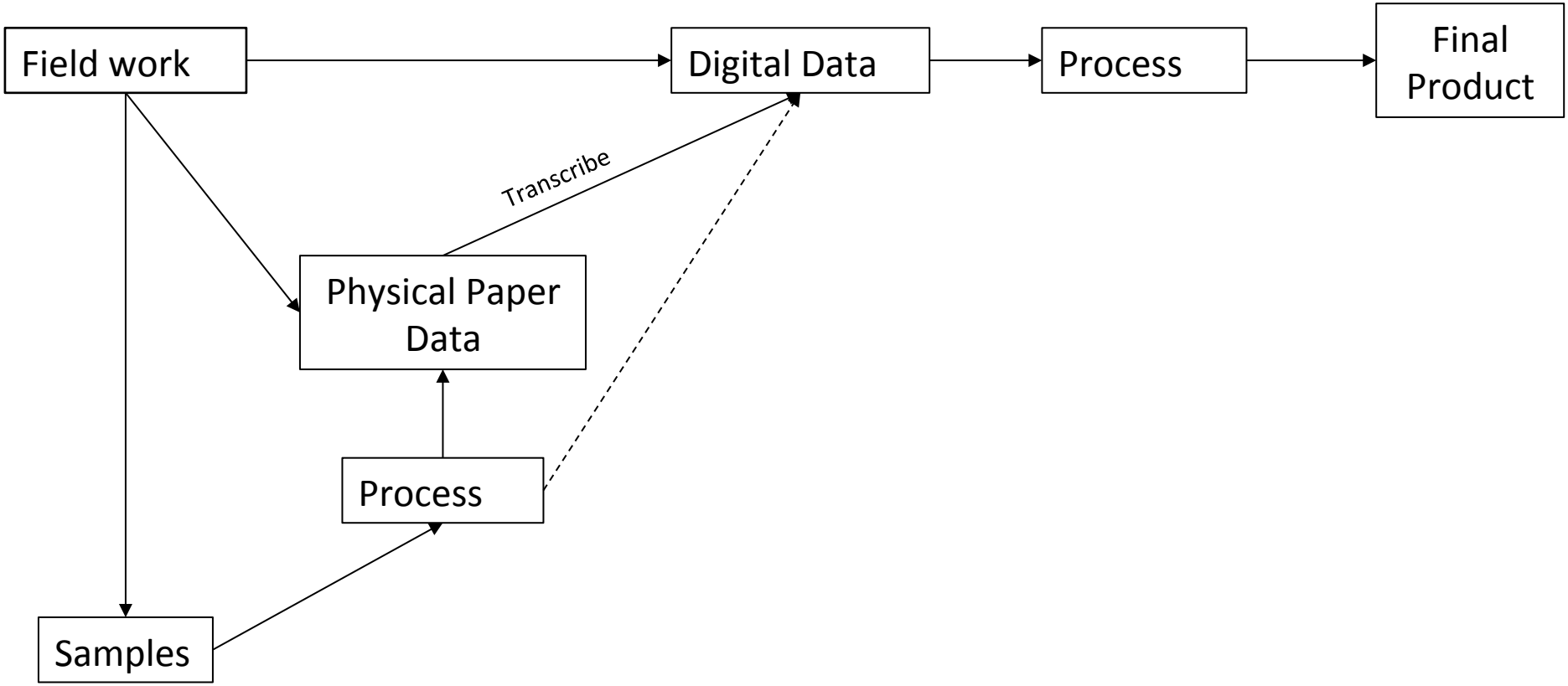
1930

Harvard Forest Dioramas

Data Processing pipeline



Biometry Data Processing



Challenges

- Long term maintenance
- Manage interactions with collaborators who want to work at the site
  - (e.g. avoid duplicate tree coring, avoid destructive sampling in the footprint, etc.)