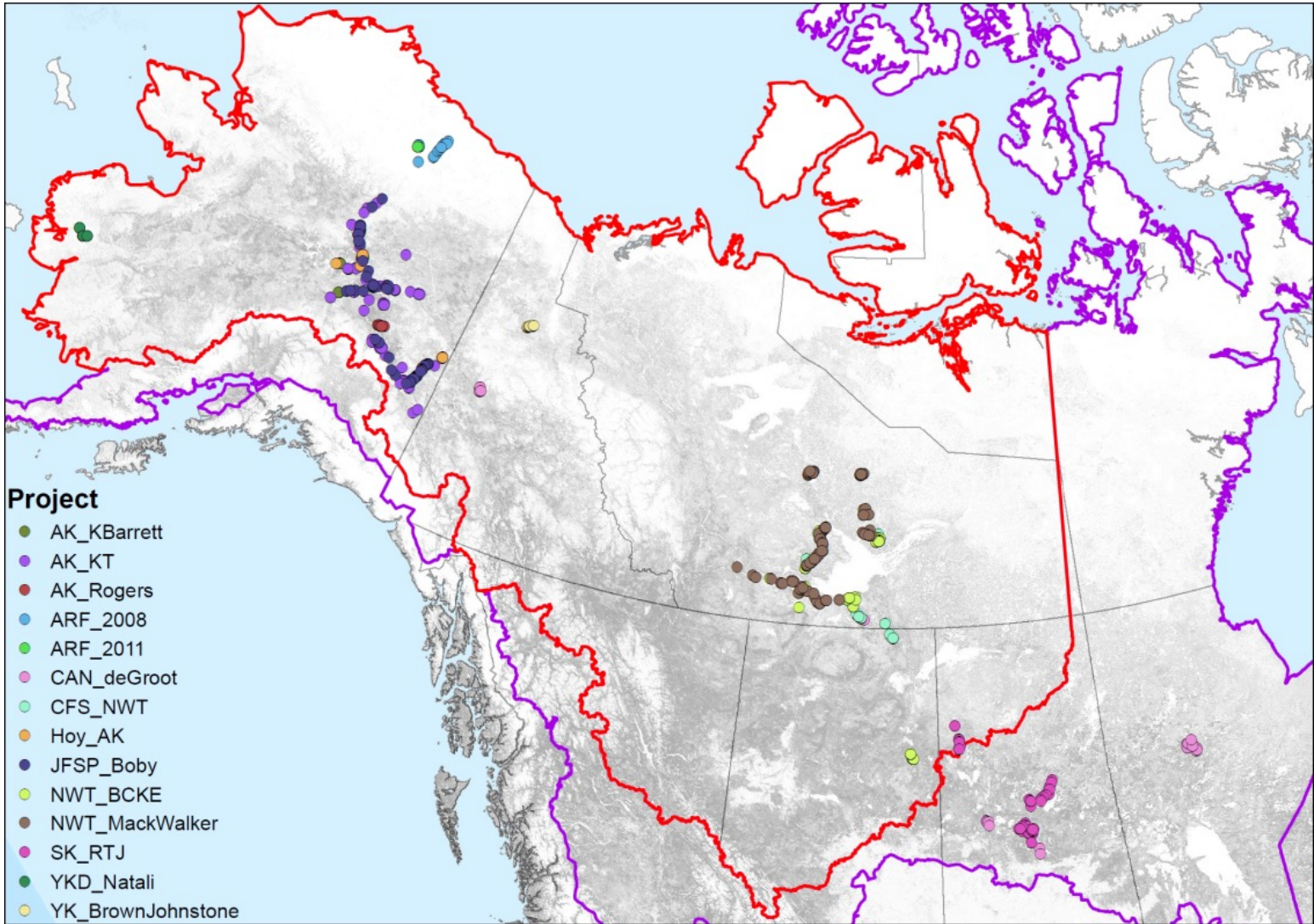
Fire Disturbance Working Group

Fire Disturbance Working Group

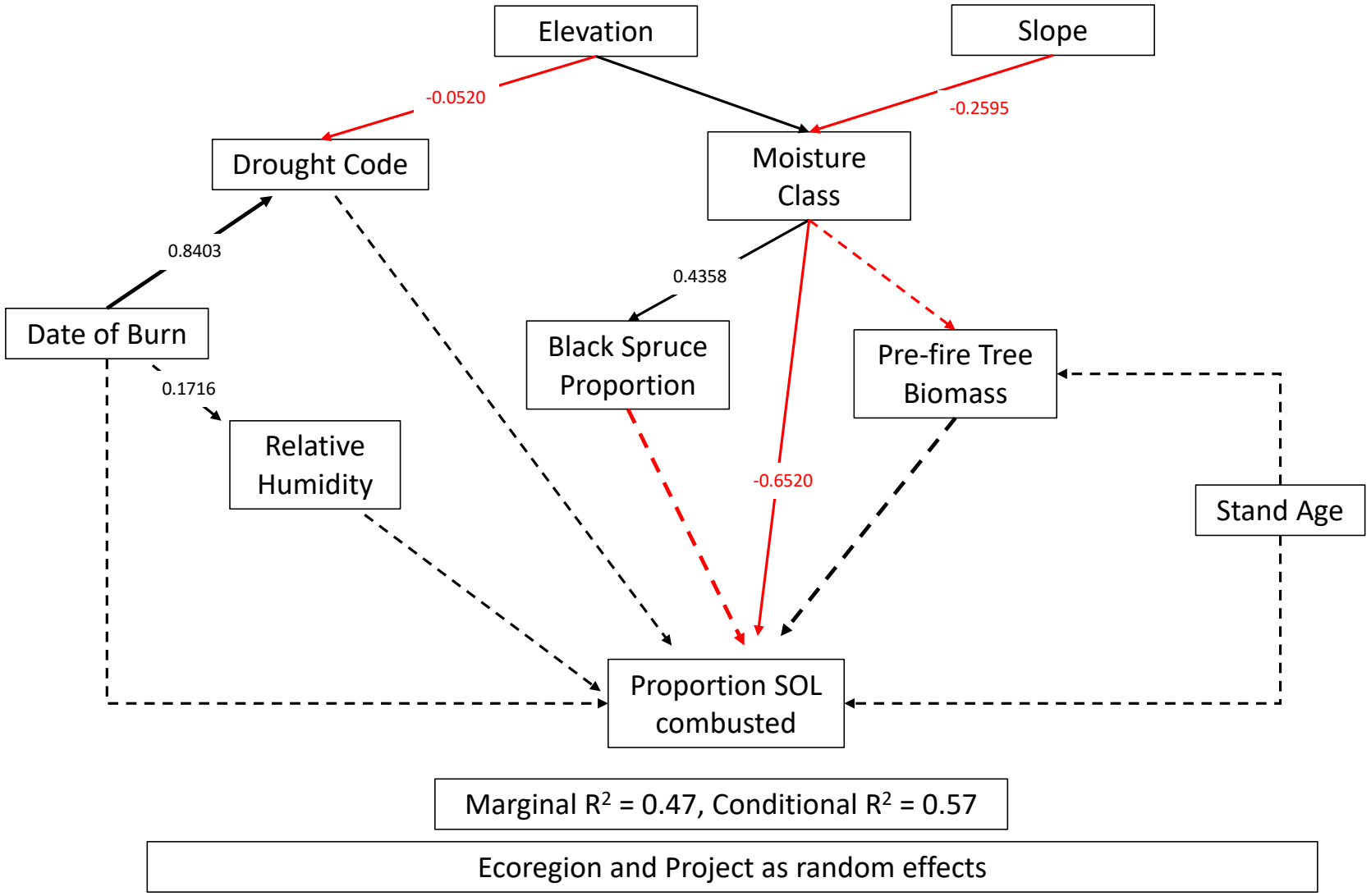
- Caught up on project developments & remaining goals
- Ideas for some new synergies and stakeholder engagement (Canadian management agencies)
- Updates from new participants:
  - Rocha nutrient additions
  - Potter fire effects on streams/rivers/fisheries, AVIRIS flight lines over accessible chronosequence
  - Michaelides InSAR thaw depth fire chronosequence in YKD
  - Jandt data for ARF

Combustion Synthesis

- ~1500 total plots (burned & unburned)
- ~700 have depth of burn
- ~500 have combustion (aboveground & belowground, including SK)
- Group has extracted wide range of geospatial predictors
- Xanthe Walker developing site-level model using SEMs:
    - Depth of burn
    - Proportional SOL loss
    - Combustion (below/aboveground/total)



Combustion Synthesis



Questions

- Drivers?
- Regional patterns?
- Soil properties <-> DoB?
- Most vulnerable landscapes?

Remaining issues

- Domain-wide vs. region
- Spatial autocorrelation
- Study-specific methods
- Model formulation

Future

- Paper
- Idealized soil profiles
- Geospatial model

New Directions

- Synthesis focused on tundra (Liza Jenkins)
- Model benchmarking
- Vulnerability assessment
- Reorganization of working groups