MINT: Model INTegration [Gil et al iEMSs'18]

http://mint-project.info

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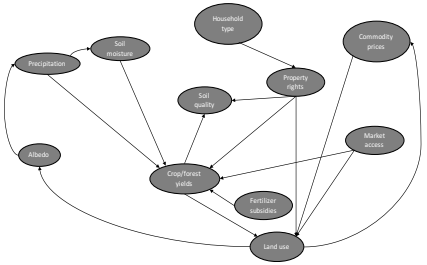
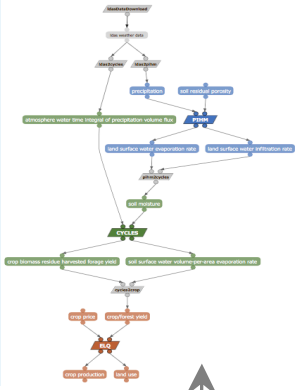
User creates scenarios and guides the model integration process

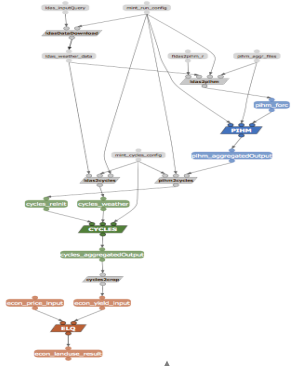
Causal Analysis Graph (CAG) contains variables of interest

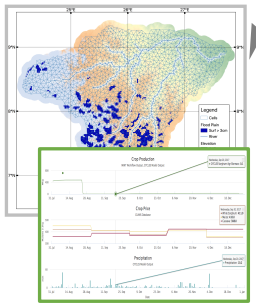


Model Graph has selected quantitative models for CAG variables

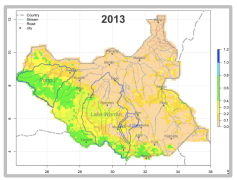


Workflow identifies data sources & includes data transformations





Reports (eg, flood index)



Uncertainty analysis (WM TA3)

Results and Provenance

MINT Model Integration

- Model & Data Selection
- Workflow Composition
- Model Parameterization
- Workflow Execution

Deep Learning for Remote Sensing Data

MINT Data Catalog

- Spatiotemporal queries
- Data transformations

Principled Ontologies

MINT Model Catalog

- Biophysical models based on expert scientific knowledge
  - Climate, hydrology, agriculture, economics
- Machine learning models from historical data
- Models built from text extraction (WM TA1)