

CLIP/NSF Meeting Notes (Sept 19-21, 2003)

Aim: define the project activities for the next 12-24 months.

- Combine the components of the project, up-and-running.
- Need to understand what each of the group members is doing, so that we can coordinate activities.
- Where the project fits on the broader activities and objects.

Review of the Project Activities.

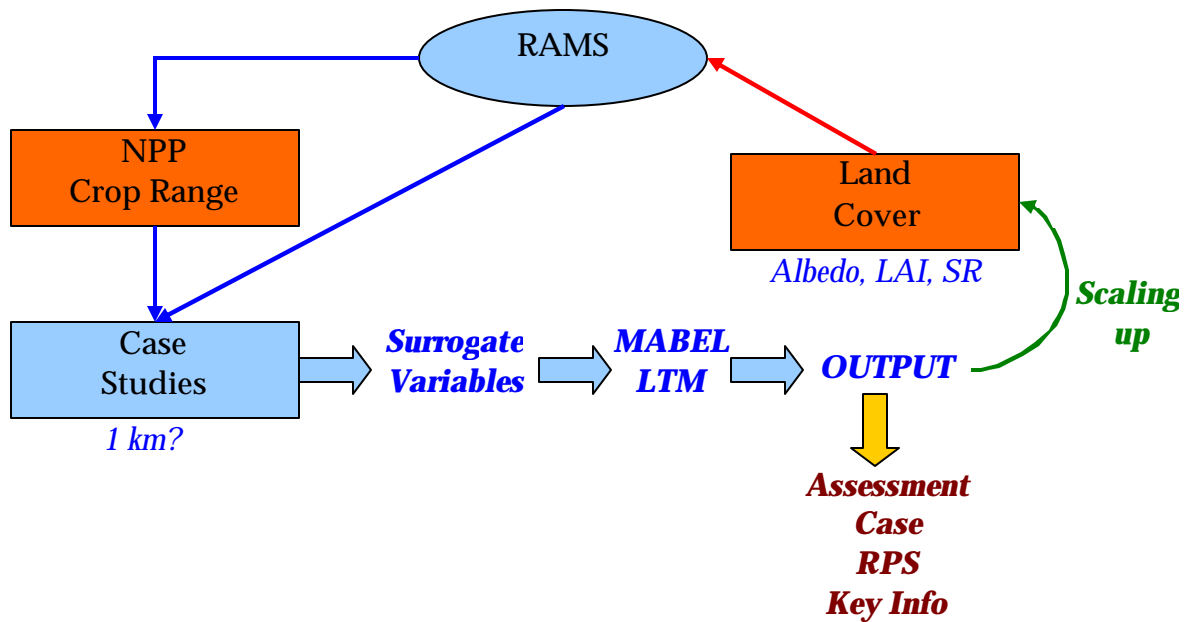
- The Project's flow diagram (slide) – the one from the proposal, p.3
- Linkages and feedbacks between project activities (Table 1 in proposal, p.5)

Website Discussion

- FTP site?
- Power-point & data sharing
- Flyer
- Poster available
- Publicly available data, or meta-data (data via email or other method)?

GROUP DISCUSSION – Land Use Change

- RAMS ? Regional Climate Model
- LTM ? Land Transformation Model
- MABEL ? Agent-Based Model
- NPP ? Net Primary Productivity
- RPS ? Role Playing Simulation
- BBN ? Bayesian Belief Networks



- **Scaling-up:** km ? 40 km.
 - Representativeness of case studies
 - Degree of LUC needed for CE
 - Eg., 10%? -where/when
 - Eg., urbanization + rings of ag + deforestation, or Von Thuen
 - Eg., capitalism
 - Eg., peace
- An important issue is how we parameterize the models to coordinate in compatible time-steps?
- How the people change their LU/LC behavior?
 - Policy Adjudication 5-10 yrs
 - Econ., population changes (?) decline on coffee (eg) gradual ? tipping point.

- On the RAMS side, what is the level of resolution? Projections?
- Discussion about scenario properties:
 - Emergent (“noise”)
 - Resilient (“continuous”)
 - Shock (“A”, eg, drought, SAP, tech, GMO)
 - Response (“local, generic”)
- Core (Tz, Ug, Ke) versus Boundary (Za, Zi, Co)
 - Broad LU/LC cover change
 - ¼ hot spots of change ? experts why?

3. Bluecase

- future based on past
- if inputs ? - ? NPP
- bookend motif? Of amount of LUC%?
- Land cover classes

GROUP DISCUSSION: Communicating Results from Climate Group

An Overview

- Step 1: initial perturbation (CO₂, forced climate change, externally imposed land cover change)
- Step 2: climate response to climate-induced land use change
- The first step comes from a base-case, while step two is a higher hierarchy of climate interactions.
- Step 2 is a unique scenario, while step 1 is not a unique scenario.

Key-points:

- Possible hiring plans/use of RegCM – may delay initial model runs, but may give large gains in terms of model.

- Boundary conditions – Hadley model data is available for 1961-90, 2070-2100.
- Feedback, temporal aspects, time lags – annual update to land cover is too often. Updates may be better if based on a good sample of climate (decade).
- BIOME III – Ruth
 - Gives some biome type based on precip., temp., and radiation.
 - Validation may need to be done by others.
- Activity II: Ecosystems Productivity
 - 1. Agricultural 2. Ecosystem
 - Prepare model simulations, collect process necessary weather, auxiliary data (Eco: Dec 03, Ag: Sum 04)
 - Validate simulations, run with historical data, process/analyze output (Eco: SUM 04, Ag. WIN 04)
 - Run sims with projected future data, analyze output, interactive sims with LULC (Eco: WIN 04, Ag: FAL 06).
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