

LACAf-II: GEOSPATIAL ANALYSIS AND MODELLING RELEVANT TO BIOENERGY – A CONTRIBUTION TO THE GLOBAL SUSTAINABLE BIOENERGY PROJECT

Brazilian Partners: Unicamp, Embrapa

Foreign Partners: ORNL, University of Illinois, Dartmouth College



Current TASKS/PAPERS

Task I. Pasture land use and intensification

- I.1. Understanding and evaluating pasture intensification in Brazil, 1980 to the present.
- I.2. Ground truth analysis of pasture performance gap estimation using climate binning.
- I.3. The impact of soil, seasonal variability of precipitation, and climate change on pasture performance gap estimation using climate binning

Current TASKS/PAPERS

Task II. Energy Crop Model Development

- II.1. Modeling sustainability metrics and the impact of management for sugar cane production.
- II.2. Development and preliminary application of a multicrop global energy crop yield model.

Current TASKS/PAPERS

Task III. Geospatial Analysis and Remote Sensing

- III.1. Geospatial analysis of pasture-based livestock productivity increases in Brazil
- III.2. Mixed crop-livestock detection/mapping using remote sensing.
- III.3. Tactical/strategic modeling for investment studies of integrated crop-livestock systems

Current Research Team

Work Element	Senior Participants
Task I.	John Sheehan, Leader
Paper I.1.	Geraldo Martha*, Jansle Rocha, John Sheehan
Paper I.2.	John Sheehan*, Lee Lynd, Geraldo Martha, Jansle Rocha, Antonio Moretti
Paper I.3.	John Sheehan*, Lee Lynd, Geraldo Martha, Jansle Rocha,
Task II.	Keith Kline, Steve Long, Co-leaders
Paper II.1.	Deepak Jaiswal*, Keith Kline, David LeBauer, Steve Long, Jansle Rocha
Paper II.2.	David LeBauer *, Keith Kline, , Steve Long, Lee Lynd, Jansle Rocha, John Sheehan, Dan Wang, Stan Wullschleger
Task III	Jansle Rocha, Leader
Paper III.1.	Jansle Rocha*, Rubens Lamparelli, John Sheehan, Geraldo Martha
Paper III.2.	Rubens Lamparelli*, Jansle Rocha, John Sheehan, Keith Kline, Geraldo Martha
Paper III.3.	Luis Augusto Barbosa Cortez *, Miguel Taube Netto, Jansle Rocha, Antonio Moretti, Rubens Lamparelli

*** indicates lead coordinators for the indicated papers.**

Project Status

- submitted to FAPESP (february/2014)
- denied (july 2014)
- need to be reformulated and resubmitted