

Dear LBA-MIP participant,

At this time, a number of groups conducting their initial model simulations have sent clarifying comments and questions about MIP protocol sent out in June. Here is a summary of the issues (an amended protocol, with the modifications highlighted, will be posted and sent out):

1. **Salvador Workshop and MIP Timeframe.** There is a general concern regarding the tight timeframe for the runs (initial target for simulation results was mid-July, now just passed). We now suggest moving this target date for simulation outputs until one month from now (Friday August 24, 2007), which will be one month before the MIP workshop in Salvador, Brazil (September 24-25, 2007). This month will allow interested participants to make initial comparisons of different simulations for discussion at the workshop.

The Salvador workshop will allow an initial meeting and discussion of the MIP issues among participants. We should consider this a starting point (rather than an end point) for organizing the real work of the MIP: intercomparison of simulations and identification of key mechanisms.

Workshop Agenda. If you are coming to the workshop, please start thinking about contributions you would like to make to the discussions. We will be developing the agenda over the coming month or so, and contacting participants to ask for contributions, but at this point we envision including:

(a) A couple of presentations of individual model results, as applied across sites. We are especially interested in cases where something specific was learned about the model or the data as a result of conducting the runs.

(b) Some presentations examining models which produced different outcomes. We are especially interested in differences produced by dynamic vegetation models in key metrics such as seasonality of water or carbon exchange, differences between models across sites, or (to the extent possible within the limited datasets) differences in interannual variation.

(c) Presentations on how to conduct next steps, including comparisons to flux data and ideas for implementing a spatially continuous MIP across South America using re-analysis meteorological data for drivers.

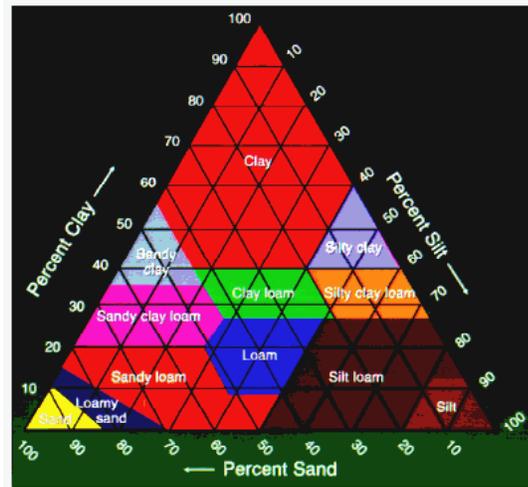
If you have suggestions or ideas for the agenda, for presentations you would like to give or you think would be valuable to have given, please contact us in the coming weeks.

2. **Consistent filling for MODIS-derived LAI.** It was correctly noted that different approaches to filling the missing values for LAI in Table 3 of the MIP Protocol will be a source of uncertainty for the model runs which are forced by MODIS-derived phenology (this will not be an issue for the runs in which leaf phenology is dynamically simulated). A complete “filled” LAI table can now be found at: ftp://ezdods.ethz.ch/pub_read/stockli/lba_mip/modis/mean_monthly/.

Please consider this as the standard “correct” table from now on for simulations.

3. **Site-specific Soil Classifications.** There was a concern that using only the soil classifications (LBA-MIP Protocol Table 1) would still be ambiguous, as this still leaves room for some differences in percentages of clay, silt and sand, even within soil classes (see Fig 1). We therefore clarify the protocol to recommend that the mid-point value within each soil texture class be used. This leaves other uncertainties due to hydraulic parameters and spatial variability, but we are not in a position to address these before the workshop. The impact of these uncertainties in model intercomparisons can be addressed at the workshop if it is found to be important.

Figure 1. The USDA soil texture triangle, with Soil texture classes overlaid.



4. **Reference Site for Calibration.** Several groups were concerned about not having a “reference site” for model calibration. We therefore suggest that Km34 be used for calibration of the models; the flux data for this site will become available after the LBA-MIP workshop in September/2007. We amend the protocol to request that each modeling group include in its output: (a) a baseline run (before tuning) at all sites and (b) the results at all sites after tuning to one site, with metadata describing the changes that were necessary to accomplish the tuning.

5. **Site-specific Vegetation Classification.** There was some concern regarding vegetation classification since related Plant Functional Types (PFT) could vary from model to model. Unfortunately, we do not at this time have consistent information on PFT fractions within each tower site. At this time, we ask the groups to follow the protocol as written, and provide the set of parameters assumed for each site to be considered during the output analysis.

6. **Soil Carbon.** The priority for Total Soil Carbon (Table 4F of outputs) will be changed from “Recommended” to “Priority” (mandatory) in order to include prognostic soil carbon as one of the output variables since it is part of DVGM’s outputs.

7. **Crop Growth history at Km 77 site.** It as pointed out by Koichi Sakaguchi (Xubin Zeng’s group) that the history of crops grown in Km77 (site number 4) is needed to specify vegetation cover fractions (e.g. when to use the 0 and when to use the 0.8 indicated in Table 1B of the MIP protocol). According to Sakai et al., (2004), rice was planted in February, 2002, sprouted in/around April/May and was harvested on mid-June same year (prior to this point the site was in pasture).