NGEE-Tropics Software Distribution Policy

A central goal of the NGEE-Tropics project is to provide a modular dynamic vegetation model, the Functionally Assembled Terrestrial Ecosystem Simulator (FATES), that can be embedded in the land model of ESMs. Public releases of FATES will be frequent (approximately annual) and shared under the terms of a BSD-type license.

Pre-release access

As the model that FATES is based upon, CLM(ED), is itself a pre-release code developed under the CESM policy, NGEE-Tropics team members and any collaborators with access to the code will abide by all CESM policies as they relate to the FATES code, until the CLM5 public release.

The following policies are based on the CESM develop access philosophy (https://www2.cad.ucar.edu/sections/cseg/development-code)

Developers doing research resulting in presentations, technical reports, workshop reports or peer-reviewed manuscripts agree to the following procedures with regard to co-authorship:

- Users of FATES and/or associated CLM/CESM development code must offer co-authorship (or other mutually agreed upon recognition) on papers, conference abstracts or other scientific communications to the contributors of NGEE-Tropics development code named in the code if the following three conditions all apply:
 - a. The research utilized the code by invoking it at run time
 - b. Not utilizing the code would change the results and/or conclusions
 - c. At the time the code was first utilized, it had not yet been publicly released
- 2. Developers may not redistribute development code to others who do not have github access permission. Each developers within the same lab should apply for their own github account and agree to these conditions. Code is considered 'redistributed' where other parties modify, compile and /or run the codebase.
- 3. Any Developer doing research using a developmental version of the model that results in papers should document their experiments and provide the archival location of the history files used in the presentation or paper. If the source code used in the experiments is not available through the Git repository, it should be made available to the development team for checking back into the NGEE-Tropics code repository.

To avoid violating this policy, Developers working with (compiling and running) unreleased code should contact the NGEE Tropics leadership team before beginning any work with unreleased and unreferenced code. Failure to abide to the above policy could lead to developer's access being revoked.

NGEE-Tropics Repository Access Policy

NGEE-Tropics uses Git as a tool for source code control, and github as a software repository. The NGEE-Tropics Model repository will be administered based on the "forking pull request" format. Here, users will create forks of the central NGEE Tropics Model repo, make modifications on their fork, commit modifications to their fork, and then submit pull requests to integrate their changes into the central repo. The pull requests will be administered by the NGEE-Tropics team. Every pull request will have an assigned integrator, who will be in charge of checking the commits, managing conflicts and running post-merge tests. There will be an expectation that pull-requests from users have included the set of tests that are described in the FATES Github wiki.

Source code from the repository will only be used for the agreed upon code development project and may not be used for any projects outside the scope of the agreed upon project.

Developers shall be responsible for obtaining agreement to these Policies and the Terms of Use from the individuals with whom they share Development Code:

- Who are developing code under the direction of someone with repository access
- Who are working on the same tasks as those described in the repository request
- Whose work is supervised by the primary developer

Guidelines for code development

To avoid excessive duplication of effort, and increase the potential for developments to be integrated into the main codebase, frequent communication with the core code development team is encouraged, and major changes in the direction of research should ideally be communicated to the core FATES team. We encourage all collaborators who are planning or developing code modifications, and intending these modifications to be integrated into the master branch, to initiate a github "issue" on the core FATES repository describing their planned modifications at an early stage of their effort.