Abstract
Since 2011, an international training session is organized every summer in Montpellier (France) by a group of researchers who are using (and for some of them developing) various generic agent-based simulation platforms (Cormas, Gama, Mimosa, NetLogo). A benchmark model is implemented from scratch and demonstrated with these platforms by the trainers. From a textual description of a stylized socio-ecological system, the successive steps leading to a runnable model are performed in front of the trainees. The implementation is influenced by the platform, and also by the modellers' interpretations made from the initial description. More formal descriptions (like UML) are needed to enable implementing equivalent models with the different platforms. We draw some lessons from these parallel implementations of a benchmark model, a process that slightly differs from the replication of an existing agent-based model.