GAMA: 14 years and counting

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Abstract

GAMA in 2021 is more or less 13 years old, depending on where we place the starting point of this great adventure. Heir of a series of modeling "platforms" (MANTA, EMF, ...), first born as an extension of RePast to facilitate the handling of geographical data within agent-based models, influenced by great ancestors such as NetLogo, RePast, SWARM or CORMAS, made possible by the advent of IDEs such as Eclipse, the popularity of meta-modeling or the progresses in open-source code sharing, progressively provided with capabilities going well beyond the strict implementation of agents in agent-based models, used for applications that no one had foreseen ten years ago, GAMA does not have an exactly linear history ! While this (apparent) lack of roadmap has probably prevented a wider adoption of GAMA in the industrial (and even academic) world, it has allowed it to evolve with an amazing agility, and to be in particular flexible when incorporating other modeling approaches, open to new technologies and concepts, while remaining accessible to users and modelers.

This presentation, hopefully avoiding making a boring summary, will go through some of the main stages of the short history of GAMA with the aim of triggering discussions and providing insights on how the platform can – and should -- evolve in the future: i.e, what mistakes not to make again? Which lessons can we draw from these 13 years in terms of agility and organization of the development of GAMA? Which forgotten development path could or should be promoted again?