Incremental Update

Local updates and global state synchronization of matches

- Following a rewrite event:

  1. Component invalidation

  2. Rule match invalidation

  3. Component matching

  4. Component validation

  5. Rule matching

  6. Rule match validation

- The incremental update is spatially local.

- The component matches are fully online and only incremental updated.

- Rule matches are semi-online and incrementally within a geocell.

  - Recomputed as needed during synchronization.

Sample Simulation

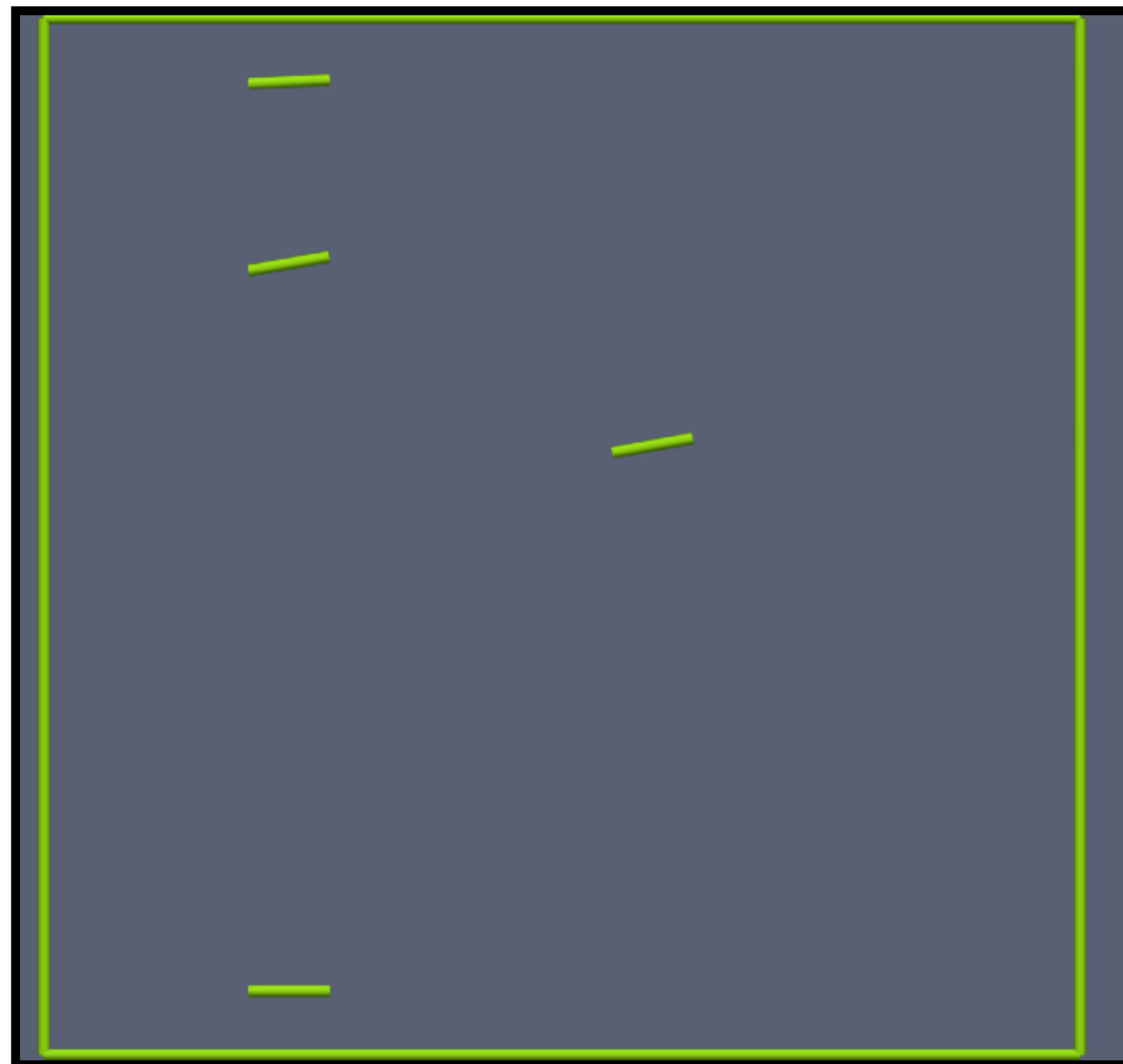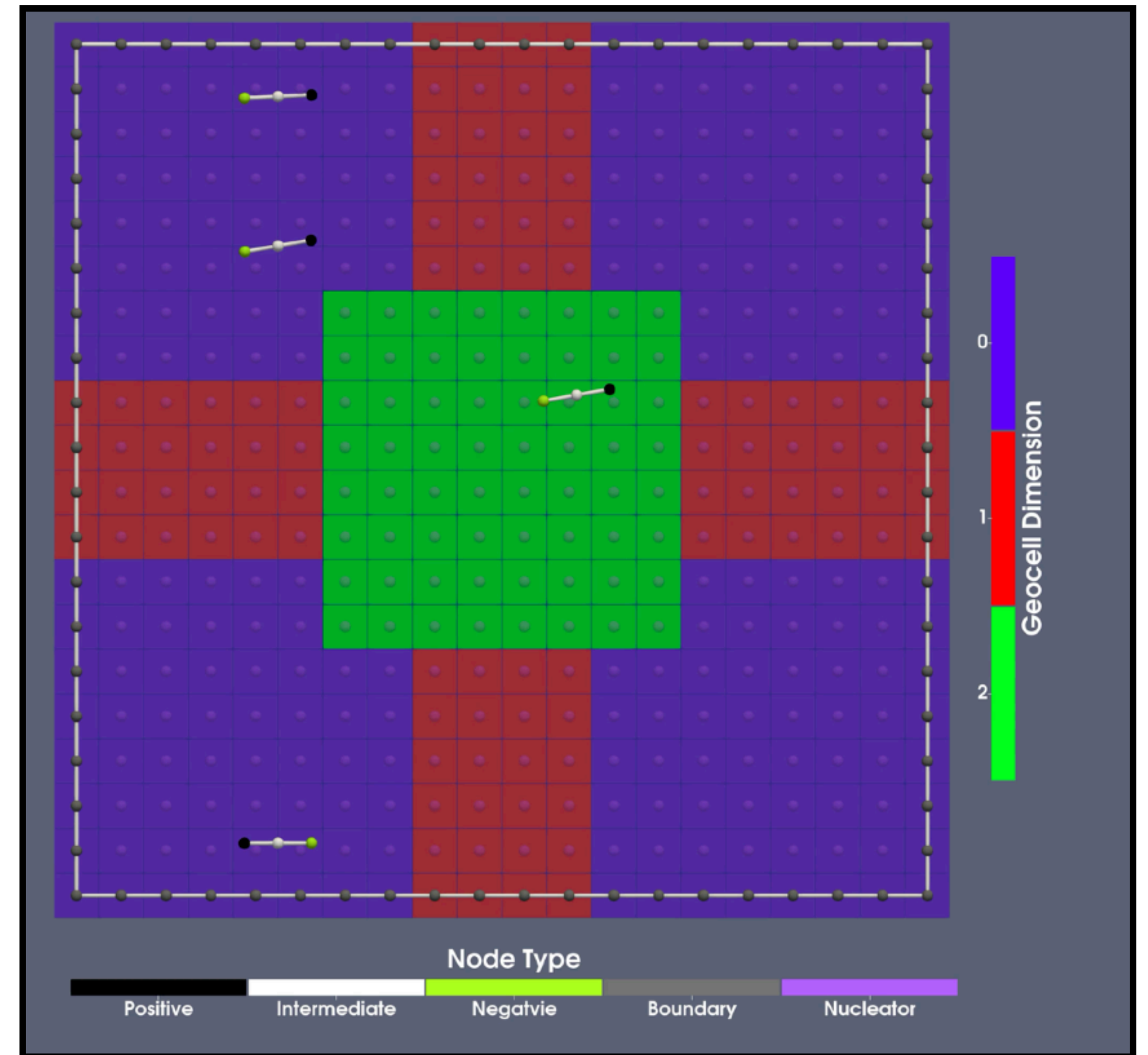**Putting the pieces together and a callback to the goals.**

Figure 26: Simulation no graph nodes shown.

Figure 27: Simulation with graph nodes shown.