

# Simulation of early DNA damage after the irradiation of a fibroblast cell nucleus using Geant4-DNA

Sylvain Meylan<sup>1, \*, +</sup>, Sébastien Incerti<sup>2, 3, +</sup>, Mathieu Karamitros<sup>+</sup>, Nicolas Tang<sup>1</sup>, Marta Bueno<sup>1</sup>, Isabelle Clairand<sup>1, +</sup>, and Carmen Villagrasa<sup>1, \*\*, +</sup>

<sup>1</sup>IRSN, Institut de Radioprotection et de Sûreté Nucléaire, BP17, 92962 Fontenay-aux-Roses, France

<sup>2</sup>Univ. Bordeaux, CENBG, UMR 5797, F-33170 Gradignan, France

<sup>3</sup>CNRS, IN2P3, CENBG, UMR 5797, F-33170 Gradignan, France

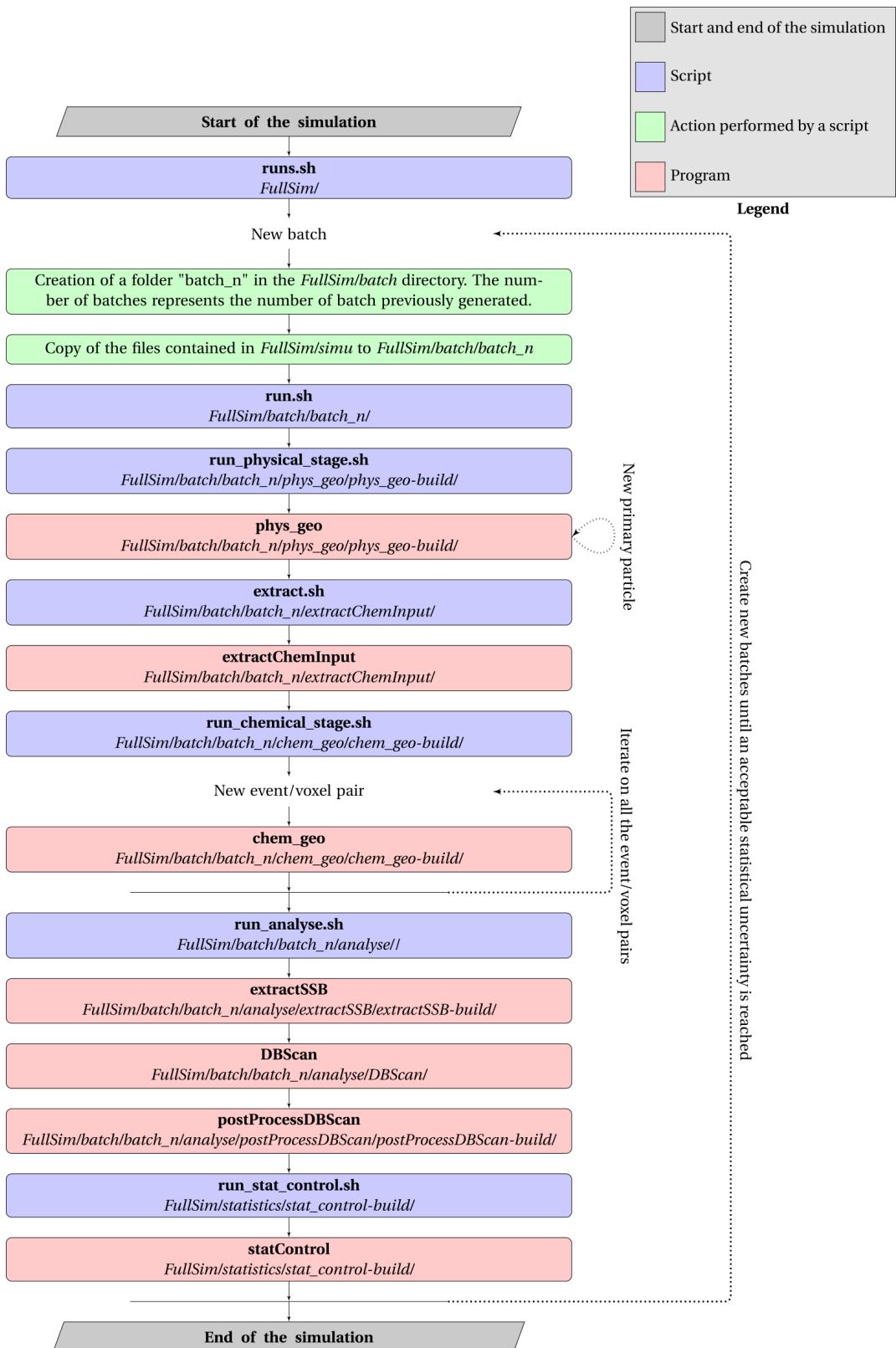
<sup>+</sup>Member of the Geant4-DNA collaboration

\*[sylvain.meylan@symalgo-tech.com](mailto:sylvain.meylan@symalgo-tech.com)

\*\*[carmen.villagrasa@irsn.fr](mailto:carmen.villagrasa@irsn.fr)

## ABSTRACT

Supplementary material.



**Figure 1.** Schematic representation of the calculation chain. Its different programs (red) and scripts (blue) are shown in their order of execution.