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## Update on EcoMug cosmic-ray muon generator

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EcoMug is a Monte Carlo generator of cosmic-ray muons, specifically designed for muon radiography and tomography applications. It is a header-only C++11 library, based on a parametrization of experimental data and, unlike other tools, gives the possibility of generating from different surfaces (plane, cylinder and half-sphere), while keeping the correct angular and momentum distribution of generated tracks. Since its initial release, it has been used by several groups, mainly in the field of muography, and some improvements have been requested. In this talk we present a major update of EcoMug with several new features, including the estimation of the time necessary to collect the generated number of muons (even in presence of custom cuts on their momentum and/or angular distributions), the explicit specification of the units of measurement (like in GEANT4), a new tool for the generation of background events, and much more. An overview of all these improvements will be given, together with examples of their usage.

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