Corrigendum

Corrigendum to “Challenges of dosimetry of ultra-short pulsed very high energy electron beams” [Phys. Med. 42 (2017) 327–331]

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The authors regret in the above-mentioned article, the evaluated bunch length values were incorrect.

A corrected Table 2 is reproduced below. In addition, Sections 2.1.1 and 4 now discuss the corrected data in Table 2.

2.1.1. Evolution of the temporal profile of 150 MeV VHEE beams

Electron and photon production and range thresholds are set to 250 eV and 25 μm , respectively. TOF is scored using GetGlobalTime function.

Table 2

Temporal evolution of a 150 MeV electron bunch along the propagation path (for an initial bunch duration of 1 fs).

Propagation distance	Evaluated bunch length
100 cm of air	~15 fs
100 cm of air and 1 cm of water	~25 fs
100 cm of air and 10 cm of water	~400 fs
100 cm of air and 20 cm of water	~2 ps
100 cm of air and 30 cm of water	~5 ps

4. Discussion

The electrons are not significantly scattered while passing through 100 cm of air, and therefore the bunch is only slightly lengthened to 15 fs. After 1 cm propagation in water the bunch elongates to 25 fs (Table 2). By the exit of the water phantom the electron bunch temporal duration has increased to 5 ps.

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