Errata

It is mentioned in paper (I) that the value for $\alpha_{\max}$ should be inversely proportional to the size of the problem (Bérenger 2002). This fact is important and requires some clarification. The approximate optimum value given by Bérenger (2002) is

$$\alpha_0 = \frac{c\epsilon}{w}, \tag{9}$$

where c and ϵ are the speed of light and permittivity in the medium, and w is the size of the simulated structure. For the small muscle sphere and the small muscle box in paper (I), $\alpha_{\max}$ calculated by (9) is close to the $\alpha = 0.05$ used in that paper. For the whole-body Norman model studied in paper (I), $\alpha_{\max} = 0.05$ is too large. However, this does not show because the frequencies are sufficiently high. For lower frequencies, for instance, about 70 MHz, too large $\alpha_{\max}$ would result in a significant reflection and erroneous results. Small optimum $\alpha_{\max}$ is also the reason why the regular PML performs so well for whole-body models (Findlay and Dimbylow 2006a).