Interactive comment on “McGill Wetland Model: evaluation of a peatland carbon simulator developed for global assessments” by et al.

et al.

Received and published: 28 March 2010

1. The reviewer is correct that the model at the present-time is a peatland model but the intention is to expand the model in the future to encompass other types of wetlands that are not necessarily peatlands by definition. In the northern hemisphere north of 45°N there are in excess of 4 x 10^6 km² wetlands and well over 95% are peatlands. Also this model would apply to shallow organic accumulations in the north that do not make the official definitions in Canada (> 40 cm) or the USA and some European countries (> 30 cm) of peat accumulation to qualify as a peatlands. Hence we would prefer to stay with the more generic name.

2. In the footprint of the Mer Bleue tower the dominant plants are mosses and shrubs.
The Mer Bleue complex, which is 28 km² in size does contain areas that have a sparse tree cover: this may represent about 30 to 40% of the total peatland but these areas are not seen by the eddy covariance measurements used to evaluate the model. The additional plant function types of trees and sedges are in the MWM because it is a generic peatland model but in this study they were not used in the evaluation because they do not exist within our study area. We are currently pursuing the evaluation of MWM on a wide set of peatlands that contain a wider and more varied range of peatland plant function types as long-term records on NEE become available.

We would like to thank the reviewer for their technical comments, which we have incorporated into a revision of the manuscript we will be submitting.

______________________________

Interactive comment on Biogeosciences Discuss., 5, 1689, 2008.