Response to editor comments (bg-2018-422)

Dear Dr. Stoy,

thank you for your careful and thorough reading of our manuscript, in particular your constructive comments. In response to the minor concerns issued, we give some details below (in blue).

Concerns addressed

I feel that the manuscript could benefit strongly from a careful critique to improve flow.

And we strongly agree. Therefore, we have followed your suggestion. Thus, we have made quite some changes to the syntax of our manuscript, so that we now believe the flow has been greatly enhanced. Moreover, we have taken utmost (!) care to preserve the sense and meaning of our scientific results.

Page 2, line 18: Consider 'Across the world, research is being conducted to understand the reasons for the energy imbalance. One of the most extensive global EC networks is FLUXNET, with more than 500 EC towers around the world'. Across/around the world is mentioned twice in one sentence.

Thanks for this remark. The sentence was rephrased (Page 2, line 10-11). Now it reads as "Globally, a large number of research sites has been established to, inter alia, study reasons for the energy imbalance. This includes the FLUXNET network with more than 500 EC towers around the world (Wilson et al., 2002), and the AmeriFlux network operating in North, Central and South America (Peng et al., 2017)." (Page 2, Line: 1-13).

'A former waste dump' in the Figure 1 legend.

It does sound too colloquial. We changed the sentence to: *The yellow line demarks the boundaries of a former landfill site*.

Red and green should not be used simultaneously in Fig. 4 for our colorblind colleagues. (Fig. 7 is ok because green doesn't meaningfully enter that figure.)

Point well taken. The color of figure 4 was changed.

Take a close look at figure numbers: these repeat.

Repeated figure numbers were deleted.