

Interactive comment on “Widespread release of old carbon across the Siberian Arctic echoed by its large rivers” by Ö. Gustafsson et al.

Anonymous Referee #1

Received and published: 15 March 2011

General Comments: This manuscript by Gustafsson et al was a delight to read. It was simple, direct and clear in its message. These characteristics are often missing in papers. The question of mobilization of old soil organic carbon is of great importance, and the findings are novel and apparently clean (I am not a soil scientist). The methods and results are well and simply described. The abstract should include more specific information on what was actually measured; the fact that sediments in the estuaries of the major rivers were assessed is not mentioned. A reader of the abstract could believe that it is dissolved or suspended material that was assessed, since the distinction is not made there. There are a few places where the syntax could be improved (listed below), but they are relatively minor issues. Well done paper otherwise.

Technical Corrections:

C241

1. Section 2, line 3: “The GRARs and Kalix River span over >5000 km..” Delete ‘over’
2. Section 3.2, line 16: change to “Russian arctic rivers”
3. Page 1451, line 3: change “via” to “to”
4. Page 1452, line 3: “wherefrom” is not a word. Change to “where”
5. Page 1452, line 7: in general, “eastern” and “western” should not be capitalized (including e.g. “west Siberia” etc.), unless it is part of the formal name of a place. Correct it here (“western GRARs”) and elsewhere.
6. Page 1453, line 7: change to “draining the pan-Arctic”

Interactive comment on Biogeosciences Discuss., 8, 1445, 2011.