



Supplement of

Contrasting pH buffering patterns in neutral-alkaline soils along a 3600 km transect in northern China

W. Luo et al.

Correspondence to: Y. Jiang (jiangyong@iae.ac.cn)

The copyright of individual parts of the supplement might differ from the CC-BY 3.0 licence.

Soil pH buffering in neutral-alkaline soils: insights into controlling factors across northern China

Wentao Luo, Paul N. Nelson, Mai-He Li, Jiangping Cai, Yongyong Zhang, Yuge Zhang, Yang Shan, Ruzhen Wang, Xinguo Han, Yong Jiang

Figure S1 Titration curves for selected carbonate containing soils (#12, #23, and #36) and non-carbonate containing soils (#45, #58 and #62). Points show data and lines show the fitted curves.

Figure S2 Relationships between soil pH buffer capacity (pHBC) at the mid-point of the titration curve and pHBC at fixed vales of pH (pH 7.5 in the carbonate containing soils and pH 5 and 6 in the non-carbonate containing soils).

Figure S3 Relationships between soil clay content and cation exchange capacity (CEC) for the carbonate containing soils and the non-carbonate containing soils.

Figure S4 Soil pH buffering capacity (pHBC) as a function of pH for the carbonate containing soils (#12, #23 and #36) and the non-carbonate containing soils (#45, #58 and #62).

Figure S5 Relationships between carbonate content and initial pH along the carbonate containing soil sub-transect in northern China.



Figure S1



Figure S2



Figure S3



Figure S4



Figure S5