Lateral carbon transfer from erosion in noncroplands matters

ID 4492322
Author(s) Borrelli, Pasquale; Panagos, Panos; Lugato, Emanuele; Alewell, Christine; Ballabio, Cristiano; Montanarella, Luca; Robinson, David A.
Author(s) at UniBasel Alewell, Christine ; Borrelli, Pasquale ;
Year 2018
Title Lateral carbon transfer from erosion in noncroplands matters
Journal Global change biology
Volume 24
Number 8
Pages / **Article-Number** 3283-3284
Mesh terms Agriculture, methods; Carbon, analysis; Forests; Soil, chemistry
This study combines two unprecedentedly high resolution (250ăŒă250ăm) maps of soil erosion (inter-rill and rill processes) and soil organic carbon to calculate a global estimate of erosioninduced organic carbon (C) displacement. The results indicate a gross C displacement by soil erosion of Pg C/year. The greatest share of displaced C (64%) comes from seminatural lands and forests. This suggests that lateral C transfer from erosion in noncroplands may play a more important role than previously assumed.
Publisher Wiley
ISSN/ISBN 1354-1013 ; 1365-2486
edoc-URL https://edoc.unibas.ch/67602/
Full Text on edoc No;
Digital Object Identifier DOI 10.1111/gcb.14125
PubMed ID http://www.ncbi.nlm.nih.gov/pubmed/29971951
ISI-Number WOS:000437284700004
Document type (ISI) Letter