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Deep Peat:
Noninvasive Field-Scale Characterization of Gaseous-Phase Methane Dynamics in Peatlands Using the Ground-Penetrating Radar MethoMethane Dynamics in Peat: Importance of Shallow Peats and a Novel Reduced-Complexity Approach for Modeling Ebullition; The Stable Carbon Isotope Composition of Methane Produced and Emitted From Northern Peatlands; Laboratory Investigations of Methane Buildup in, and Release From, Shallow Peats; Physical Controls on Ebullition Losses of Methane From Peatlands; Section IV: Water and Dissolved Carbon Transfers Within and From Peatlands
Dissolved Organic Carbon Production and Transport in Canadian PeatlandsHydrological Controls on Dissolved Organic Carbon Production and Release From UK Peatlands; The Role of Natural Soil Pipes in Water and Carbon Transfer in and From Peatlands; Improving Conceptual Models of Water and Carbon Transfer Through Peat; Water Relations in Cutover Peatlands; The Influence of Permeable Mineral Lenses on Peatland Hydrology; Index

Sommario/riassunto

Published by the American Geophysical Union as part of the Geophysical Monograph Series, Volume 184.Carbon Cycling in Northern Peatlands examines the role that northern peatlands play in regulating the atmospheric carbon budget. It summarizes current research in four interconnected areas: large-scale peatland dynamics and carbon cycling; plant and microbial dynamics and their effect on carbon fluxes to the atmosphere; methane accumulation in, and loss from, peatlands; and water and dissolved carbon fluxes through peatlands. The volume highlights includeA thorough assessment