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Remote sensing of burnt moss fractional areas during an Alaskan spruce forest fire

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We evaluated the fractional area of burnt mosses during wildfires in an Alaskan black spruce forest. The spectral reflectance of the burnt areas, live mosses, and damaged mosses were measured just after a forest fire in a black spruce forest, interior Alaska. These spectral data was used for estimating the fractional areas of these landcovers after Alaskan black spruce forest fires from the moderate resolution imaging spectroradiometer (MODIS) sensor onboard Terra satellite. The accuracy of the estimation was evaluated by comparing with the fractional areas interpreted from aerial photographs acquired from an airplane. The fractional moss burnt areas concern with vegetation recovery after fire as well as carbon dioxide release during the combustion.

Keywords: Remote sensing, boreal forest, wildfire