An attempt to compare variations of carbon stable isotopes composition in two replicate cores from a Baltic bog in N Poland

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Two one-meter long monolith cores were taken from Stążki mire. Stążki mire is well preserved Baltic type raised bog with a very small evidence of exploitation. Stable isotopic composition of carbon (13C) was investigated in the bulk organic matter of Sphagnum. One centimetre resolution sampling was chosen for the investigation. Only carefully selected, leaf-free Sphagnum stems were collected for the study. Isotopic composition was determined using elemental analyser coupled to isotopic ratio mass spectrometer. For the correlation purposes age-depth models were established for both monoliths. Radiocarbon dating and 210Pb dating results were used to obtain the age-depth model for one monolith. Age-depth model for the second monolith was based on radiocarbon dating only. Both cores covered the last 1200 years of Stążki mire history. We will present a detailed comparison of correlate isotopic signal from Sphagnum in both cores.