Early 20th century warming in the Arctic - recent findings and future subjects

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A large warming during 1920s and 40s in the Arctic, comparable to the recent 30-year warming is known. This was only concentrated to the high latitudes. Several explanations have been made; however, external forcing, which once was possible to explain global average, failed to explain, and one of the possible explanation was internal atmospheric variability with low frequency. Another candidate for the explanation was black carbon deposited on the snow and ice surfaces.

We have to continue our study in discovering historical meteorological, aerological, and radiation data; investigating the PDO which shows similar resemblance to the temperature curve; ice core analysis; Arctic system reanalysis together with long term reanalysis back to 1880s.