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Digitization of historical wind speed observations at the Swedish Meteorological and Hydrological Institute

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In this study we present the first steps of a joint initiative between the Swedish Meteorological and Hydrological Institute (SMHI) and the University of Gothenburg aimed at filling the key gap of short availability and low quality of wind datasets, and improve the limited knowledge on the causes driving wind speed variability in a changing climate across Sweden. The aim of the WP1 is to rescue historical wind speed series available in the old weather archives at SMHI for the 1920s-1930s. 13 stations with daily wind speed data (in meters per second) during the period 1925-1938 have been selected for digitization; i.e., spanning back our records 2 decades more. To get wind observations from paper to screen we will follow the “Guidelines on Best Practices for Climate Data Rescue” of the World Meteorological Organization. Our protocol will consist on (i) designing a template for digitization; (ii) digitizing papers by an imaging process based on scanning and photographs; and (iii) typing numbers of wind speed data into the template. WP2 will ensure the quality and homogeneity of wind speed series rescued.