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The role of data recovery and historical climate records in understanding High Impact Weather

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The study of rare high impact weather and extreme events benefits from having long observational records to provide historical context and a sufficiently large sample of events for robust statistical analysis. The UK benefits from the substantial efforts of George Symons in the late 19th Century, and many others since, to both standardise the methods of measurement and also recognise the high value of historical observations. This legacy has left us with rich historical meteorological data. However a large majority of our observational data prior to about 1960 remains in paper archives, while modern meteorology and climate research continue to work toward increasing demands for more localised information in both space and time. In this poster we present a number of recent activities at the Met Office to supplement our digital meteorological archives from paper records such as daily climatological returns from specific long running observing stations, to monthly rainfall recorded in the British Rainfall publication since 1862. We will conclude with some case studies showing the impact of these additional data on our representation of historical high impact weather and climate events.