

HYDRO-GIS LTD

Extreme Rainfall

One objective of the joint Oxford University/Hydro-GIS Ltd research project has been the compilation of an extreme rainfall digital archive for the British Isles. The outcome, known as the British Rainfall Digital Archive (BRDA) is the most comprehensive resource on historical extreme rainfall, including

- over 28,000 observations of extreme rainfall back to the year 1866;
- over 1000 pages of text and eye-witness accounts describing the rainfall events and associated impacts such as flooding;
- over 250 rainfall maps and photographs.



The BRDA records are far more comprehensive than digital records available from other organisations such as the Met Office and Environment Agency. The Met Office has digital records for most of its network of rain gauges back to 1961, then further back in time the number of gauges for which digital data is available rapidly drops to only a few hundred by the year 1900. By contrast the BRDA has records from over 4000 gauges as far back as 1900.

The BRDA data can be used to enhance a range of studies such as flood risk assessments, historical flooding studies, and insurance reports. It can provide more detail on the flood risk at a site and particularly the risk of surface water flooding directly from rainfall.

Hydro-GIS Ltd licence the BRDA for commercial purposes. A site search for extreme rainfalls within a 2.5 or 5km radius of any specified location costs £150 Plus VAT. The cost of other customised searches or data requests will depend on the volume of data requested and the complexity of the search.

Data is available in MS Excel and Word format, or pdf; images are available as jpg files; digitised maps can be provided as shape files, or interpolated grids in ESRI grid or ASCII grid format.

Example of a rain gauge search around Abingdon.

