



## **Catastrophic floods from documentary sources and old instrumental data. Meteorological aspects and impacts for 19th century events in Barcelona and Valencia cities**

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The mid 19th Century experienced a period of extreme flood events by torrential rainfall. Data collection from documentary sources and local newspapers offer enough information for reconstructing hydrology and impacts of singular events.

In this study, 19th Century flood events are analyzed for two large cities on Spanish Mediterranean coast: Valencia with 6 cases (1805, 1855, 1857, 1864, 1870, 1897) and Barcelona with 12 cases (1820, 1827, 1831, 1837, 1844, 1847, 1858, 1862, 1872, 1875, 1893, 1900).

Weather synoptic patterns are defined thanks to availability of daily sea level pressure series for scattered locations over Western Europe.

Finally, in order to establish severity levels for these events and their impacts, a preliminary comparative analysis with strongest 20th Century events is shown.