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A catalogue of the representative European intermittent rivers

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Within the SMIRES COST Action (Science and Management of Intermittent Rivers & Ephemeral Streams, www.smires.eu), examples of intermittent rivers across Europe were collected, including gauged catchments with both natural and highly influenced river flow regimes. The examples will be published in a catalogue to give a good overview of the variety of intermittent streams in Europe. Information on the gauged intermittent rivers is summarised in a two-page template:

The first page of the template describes the main characteristics of the catchments (land-use, geology, climate, etc.) and the river flow regime. Two panels display hydrographs and flow durations curves and a table gives metrics specific to river flow intermittence relevant for ecology. These hydrological indices have been computed by the SMIRES R package (https://homepage.boku.ac.at/h0540352/smires/framework.html) applied to daily discharge data.

The second page of the template is dedicated to the description and reasons for intermittence. A short description about the spatio-temporal pattern of zero-flow events (encompassing seasonal behaviour, observed long-term trends, locations with frequently observed zero-flow events along the river network, etc.). The monitoring network, including gauging stations and other types of observations (e.g. visual inspection of the flow states at different locations along the river) in the catchment, is also described.

This presentation gives examples of the pages in the catalogue and a preliminary classification of intermittent rivers at the European scale.