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## WEB SERVICES FOR THE PROVISION OF DESIGN RAINFALL

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In the field of GIS support for hydrological modelling there has been distinct evolution towards so called web services, which enable the users to obtain necessary input data for modelling in a fast and effective way. With respect to design rainfall data – one of the key component – the deficit has been considerable. This article describes an upcoming portal operating two types of web services providing rainfall data. First service provides the view-only raster layers of maximum daily precipitation with several levels of return period for the use in the map compositions. The second service offers several processing services which can be remotely utilized by the user.

The web services are provided according to the Open Geospatial Consortium (OGC) standards. First service is based on the Web Map Service (WMS) standard, the other on the Web Processing Service (WPS) standard.

The processing service based on WPS provides two basic sets of tools. First toolset takes the point or polygon data as an input and for the specified region of Czech republic calculates the design rainfall depths for an event of required duration and return period. The second toolset additionally considers the temporal distribution of the events, but is fixed to the duration of six hours. Beside the rainfall depths the tools return up to six typical temporal patterns and their occurrence probability for the specified region and return period.

Next this article presents a modern publishing platform Gisquick, which enables fast creation of an visual interactive web map application. Here it is utilized for publishing the typical project of design rainfalls derivation for the small catchments with the use of presented WPS tools.