THE CZERWONA WODA CREEK: A TECTONICALLY CONTROLLED MOUNTAIN RIVER BASIN

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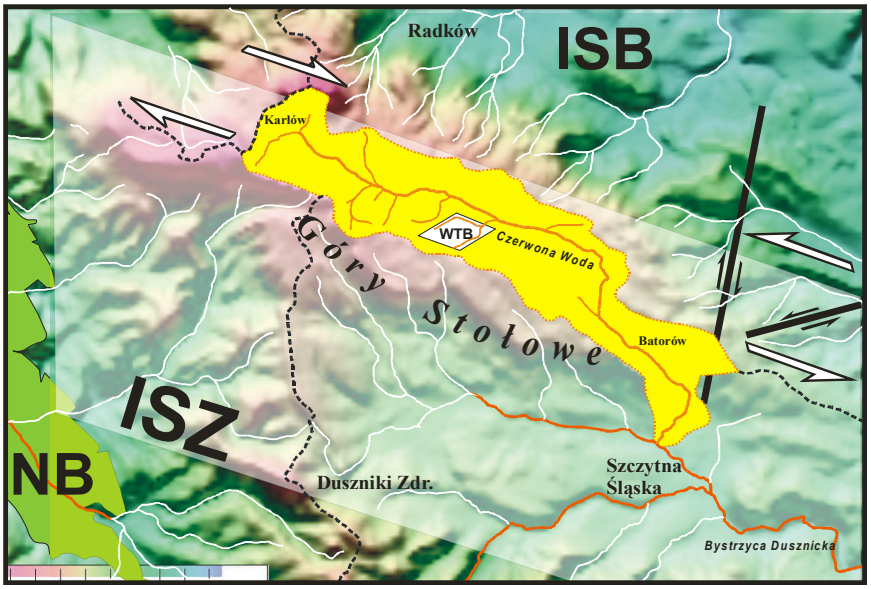
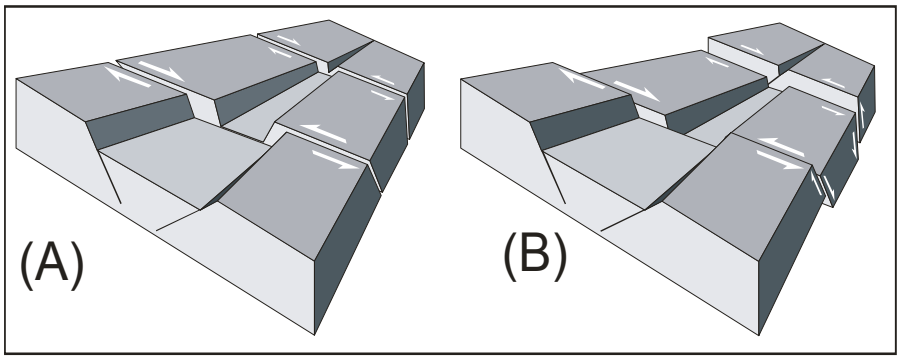
The Czerwona Woda Creek constitutes northern tributary of the Bystrzyca Dusznicka River (upper figure). Its springs are located near the village of Karłów and the drainage basin extends over 13 sq. km and takes central position in the Góry Stołowe Mts. Its valley developed inside a tectonic trough (the **Czerwona Woda Trough**, **CWT**) that is bordered by faults belonging to a fault system striking 110˚-120˚. Within the valley several small rhomboidal areas occur which indicate for high accommodation rate. One of these areas is known as **Wielkie Torfowisko Batorowskie** peatbog **(WTB)**. The oldest fitogenic sediments documented there are of the Pleistocene age (Marek 1998).



The bordering faults of the CWT have been active at present as indicated by destructions of bituminous pavements on roads above these fault planes. Also in the neighbouring rock, - Cretaceous sandstones and mudstones – tectonic structures related to the strike-slip and dip-slip fault displacement are documented. In some cases the opposite sense of the displacement is documented along one of the fault planes – dextral in the western and sinistral in the eastern part of the CWT. Such kinematics can be easily explained by the joined action of 110˚-120˚ striking strike-slip faults and SW-NE striking extension zone (figure beneath).The CWT is located in the axial part of the **Intrasudetic Shear Zone** and it is evident that it is controlled by neotectonic activity of the latter.



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