

Some new cave diving exploration results from Croatian karst area

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In the recent years, several international cave diving expeditions took place in the Dinaric karst of Croatia. The objectives were conducting a new research of previously known karstic springs and also exploring new ones. The deepest karst cave in Croatia filled with water is Crveno jezero (lake) near Imotski town, with water depth of 281 meters and total cave depth of 528 meters. Volume of water in this cave is about 16 millions m³. Diving expeditions were held in 1997 and 1998. The deepest karst spring in the Dinaric karst of Croatia is Vrelo of Una River (with max discharge about 100 m³/s), where divers measured depth of -248 meters. Explorations were made in 2007 and 2016. Sinac spring in Plaško Polje has been dived to the depth of -203 meters. Cave diving was done in 1984, 1999, 2003, 2007 - 2016. Furthermore, very popular springs of the river Kupa (-155 m) in Gorski Kotar (explored since 1995 till 2015), river Gacka (-105 m in depth, 1150m in length) in Lika, explored from 1992 to 2016, river Cetina (-110 m in depth, 1300 m in length), cave diving explored from 2000 to 2016 in the Dalmatinska Zagora, Rumin Veliki spring (- 150 m in depth) in the Sinjska Krajina (explored and dived in 2006 and 2010), than rivers Krnjeza and Krupa in Ravni kotari with diving depths of over 100 meters (in 2004 and 2005) and so on.

Along the Adriatic coast in Croatia there are many deep and long submarine springs (vrulje), ie. caves under seawater springs. called - vruljas for example Vrulja Zecica with over 900 meters in length and Vrulja Modrič with completely flooded cave channels that extend over 2300 meters in length. Cave diving was conducted from 2010 to 2016. Vrulja Dubci is also worth mentioning (dived and explored in 2000), 161 meters deep and so on. Tectonic activity plays a dominant role in the creation and function of these caves. Geological, hydrogeological and lithostratigraphic conditions are also very important in speleogenesis of these caves in Croatian karst system.