

4. HYDROCHEMICAL INVESTIGATIONS

4.1. LONG-TERM OBSERVATIONS (M. ZUPAN)

The main purpose of the long-term observations was to collect the data about physical and chemical properties of the springs. On the basis of the collected physical, chemical and geological data we intended to estimate the background characteristics of the springs.

In twelve springs at the foot of Trnovsko Banjška plateau monthly sampling and analyzing was carried out for two years.

In the two main springs, Hubelj and Vipava (4/2), weekly samples had been taken. In the Hubelj the sampling lasts from March 1993 to May 1996 while in the Vipava from July 1993 to May 1996.

From September 1995 to February 1996 daily samples have been taken in the springs Hubelj, Vipava and Mrzlek. The aim of this investigation was to define the changes of physical and chemical parameters depending on the water quantity more detail.

In November 1995 the water pulse of the Vipava spring 4/2 was observed to estimate the changes during discharge increasing.

In the spring Hubelj continuous measuring of temperature, pH value and conductivity was performed during entire investigation period. In the springs Vipava more extensive measurements of mentioned parameters last from September 1995 till February 1996. The precipitation was observed on 5 sampling sites from January 1993 to December 1995.

4.1.1. Monthly observations of water of the karst springs and selected rivers (J. KOGOVSĚEK)

For two years observations, measurements and analyses were undertaken by sampling approximately once per month, the springs at the border of Trnovsko-Banjška Planota: Vipava, Hubelj, Lijak at overflow, Mrzlek, Kajža, Hotešk, and Podroteja, and also Prelesje and the rivers Soča, Bela and Belščica. Altogether 24 series of samples were taken from January 1993 to June 1995. The Vipava