

The Equipment & Techniques Committee and Speleo Vercors Interim Test Results on Vercors Test Bed

Test Date: 17th August 2014

Location:

Vercors High Plateau: IGN: 847,66 X 292,87 X 1490

GPS: 31N 695222E 4974073 Alt: 1490m

Introduction:

The three anchor test bed was installed on 13th August 2008, see; <http://speleo-vercors.org/Scialet%20Combeau%20MASTER.pdf> For a number of logistical reasons, it has not been possible to adhere to the test regime specified at the time of installation and 2014 was the first opportunity to transport the Hydrajaws tester to the test location.

Method:

The Hydrajaws tester was attached to each anchor in turn and submitted to a load of 10kN for a period of 30 seconds.



Anchor 1

Anchor 2

Anchor 3

Test Results:

There was no egress of any of the three anchors. There was slight flexing of the anchor head in the direction of the load (all three) as it was not possible to take the additional load bridge to France. This movement resulted in some spalling of the surface resin (expected).

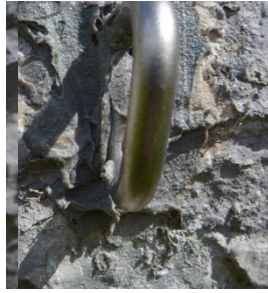
Conclusions:

We have data from the National Park which confirms the day/night and summer/winter temperature range on the high plateau. In the winter, at night, the temperature regularly falls to -12 and the summer day temperatures frequently exceed +30. We have further examples of "one off" extremes of -30 (February 2011) and +50 (August 2012). The purpose of this test bed is to understand the effects of these temperature ranges (in excess of typical UK temperatures) on the resin/anchor/substrate bond. The conclusion from this interim test is that given the ranges of temperatures, the anchors have performed as expected.

Before leaving the test bed, the spalled resin on anchors 1 & 2 was cleaned off and fresh resin applied to prevent ingress of moisture. Anchor 3 was left exposed. Future testing may demonstrate any weakness due to moisture ingress.



Anchor 3



Anchor 2



Anchor 1

Operatives, Photographs and Report;

Glenn Jones

Support;

Bev Jones

