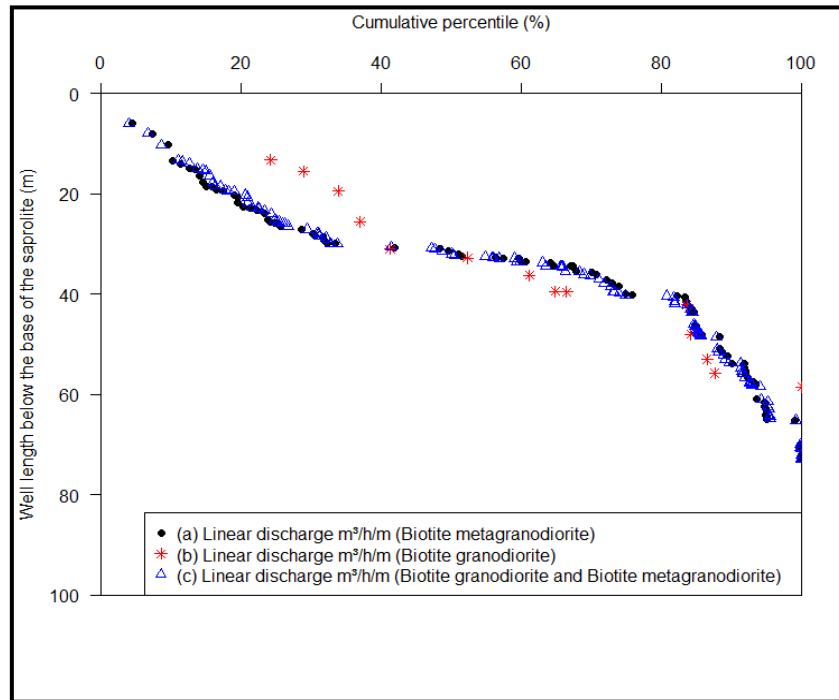


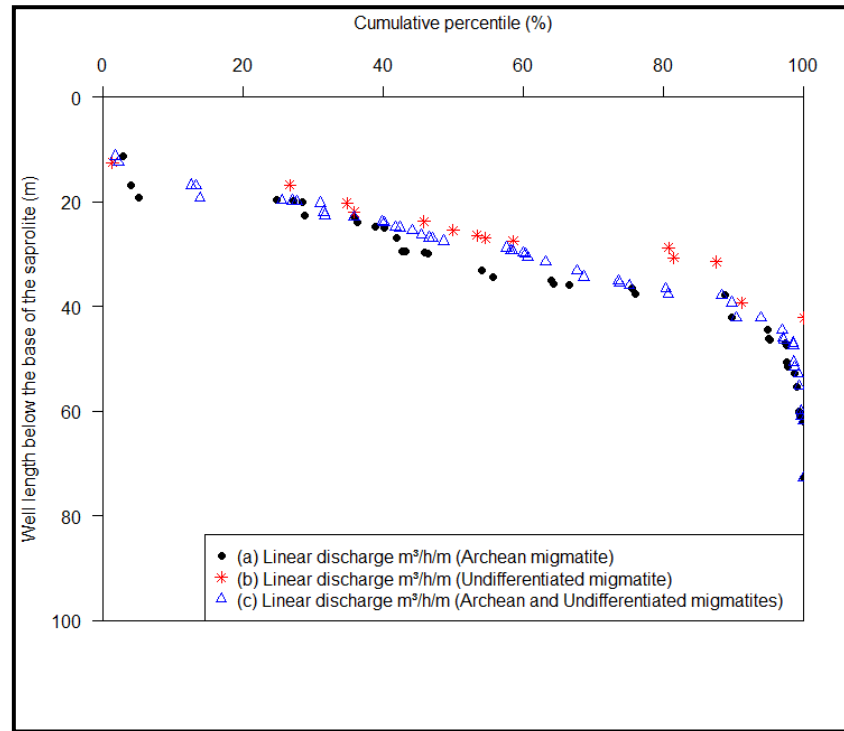
## 6. Supplementary Materials

### 6.1. Biotite granodiorite and Biotite metagranodiorite

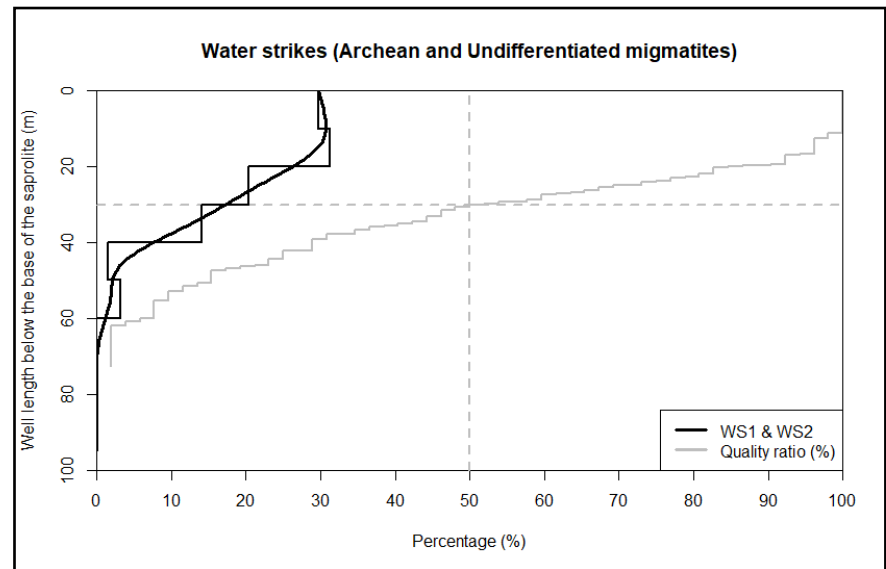


**Figure S1.** Cumulative percentage of linear discharge (X axis, %; see definition of the linear discharge in the text) as function of the length of the well below the base of saprolite (Y axis, to estimate the properties of the fractured layer for the lithological a) Biotite metagranodiorite (N = 105), b) Biotite granodiorite (N = 14), and c) Biotite metagranodiorite and Biotite granodiorite" (N = 119).

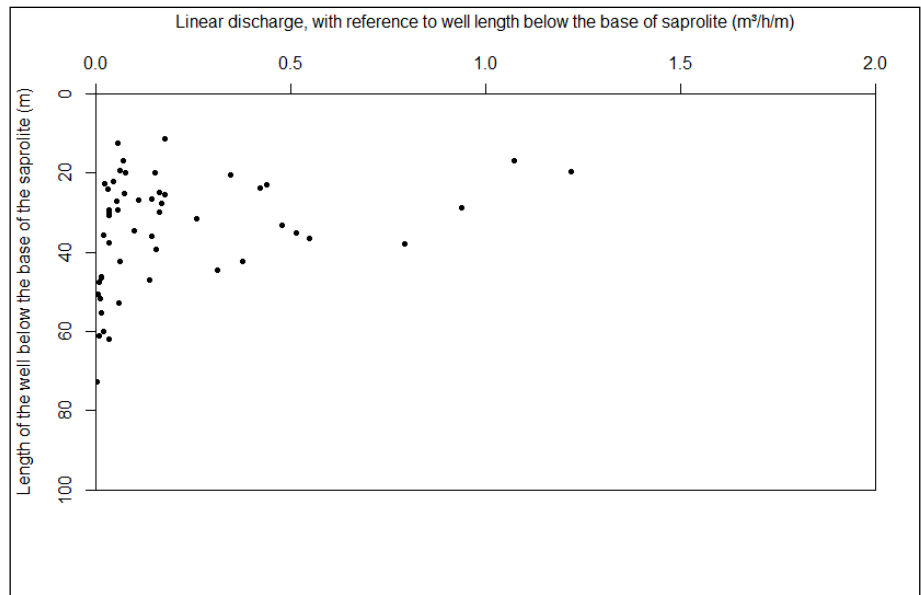
## 6.2. Archean migmatites and Undifferentiated migmatites



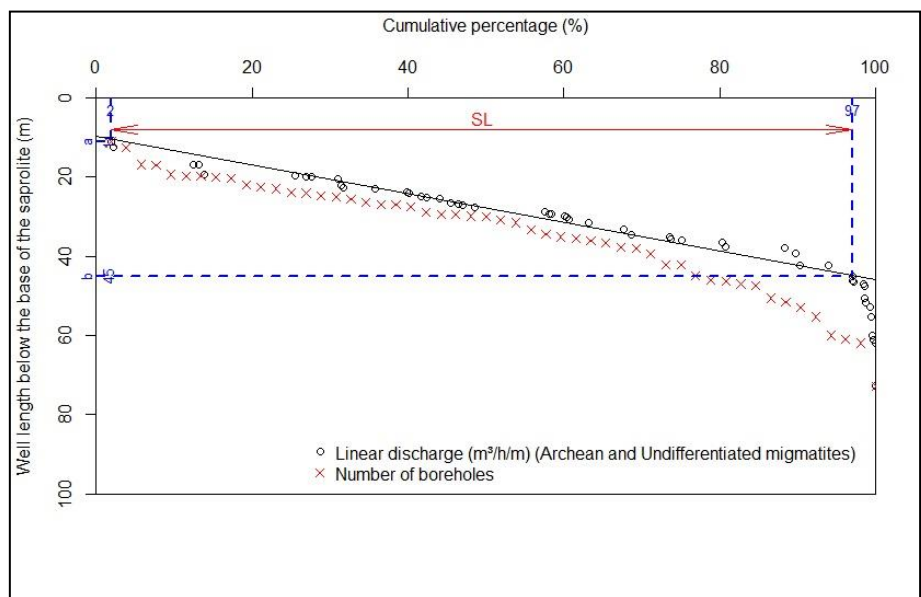
**Figure S2.** Cumulative percentage of linear discharge (X axis, %; see definition of the linear discharge in the text) as function of the length of the well below the base of saprolite (Y axis, to estimate the properties of the fractured layer for the lithological: a) Archean migmatite (N = 38), b) Undifferentiated migmatite (N = 14), and c) Archean and Undifferentiated migmatite (N = 52).



**Figure S3.** Vertical distribution of all water strikes observed as a function of depth below the base of the saprolite in Archean and Undifferentiated migmatites (NWS1 + NWS2 = 64; with NWS1= 44 and NWS2 = 20).

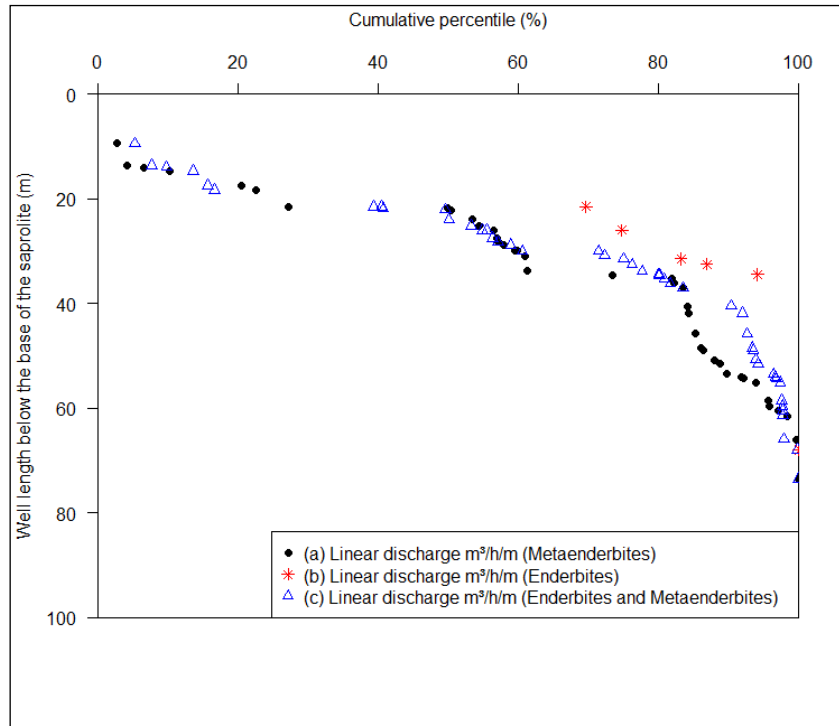


**Figure S4.** Linearized discharges (X;  $\text{m}^3/\text{h}/\text{m}$ ), computed with reference to well length below the base of the saprolite (Y: m), for Archean and undifferentiated migmatites (N = 52).

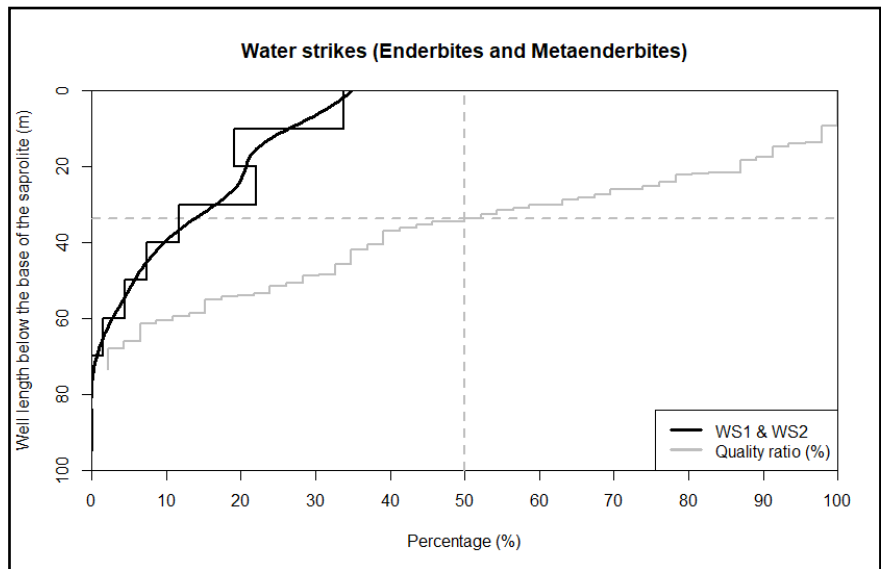


**Figure S5.** Cumulative percentage of linear discharge to estimate the properties of the fractured layer for the lithology Archean and Undifferentiated migmatites (N = 52).

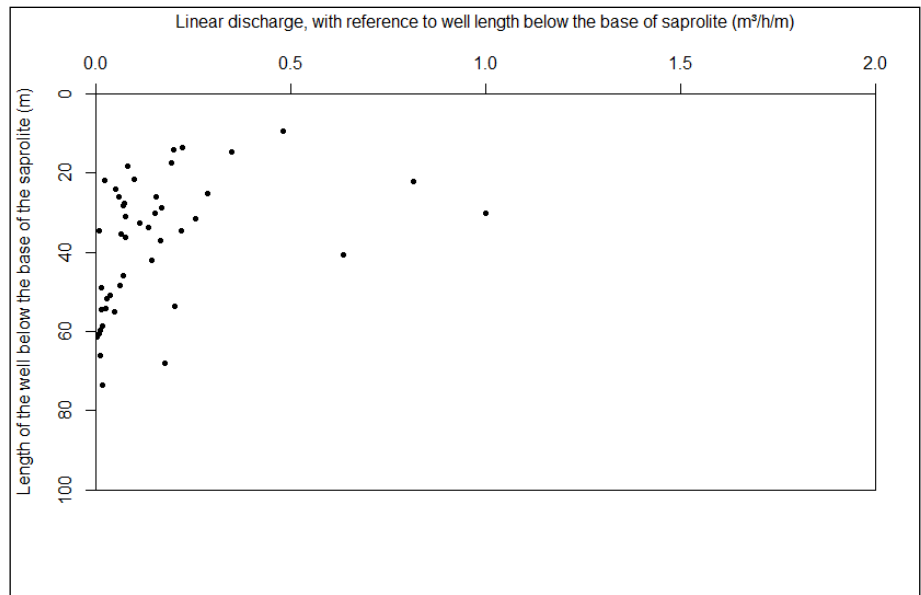
### 6.3. Enderbites and Metaenderbites



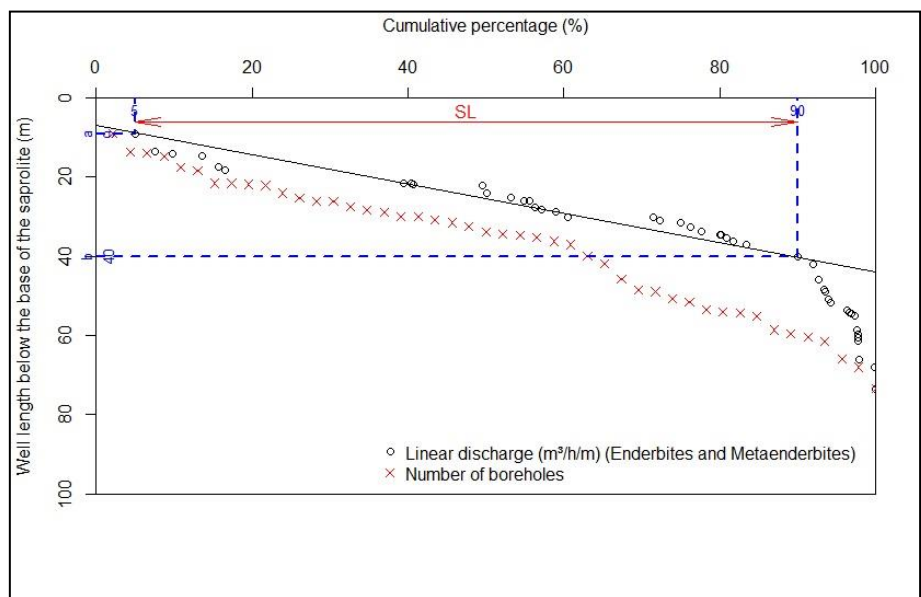
**Figure S6.** Cumulative percentage of linear discharge (X axis, %; see definition of the linear discharge in the text) as function of the length of the well below the base of saprolite (Y axis, m) to estimate the properties of the fractured layer for the lithological a) Metaenderbites (N = 41), b) Enderbites (N = 6), and c) Enderbites and Metaenderbites (N = 47).



**Figure S7.** Vertical distribution of all water strikes observed as a function of depth below the base of the saprolite in Enderbites and Metaenderbites (NWS1 + NWS2 = 68; with N WS1 = 45 and N WS2, = 23).

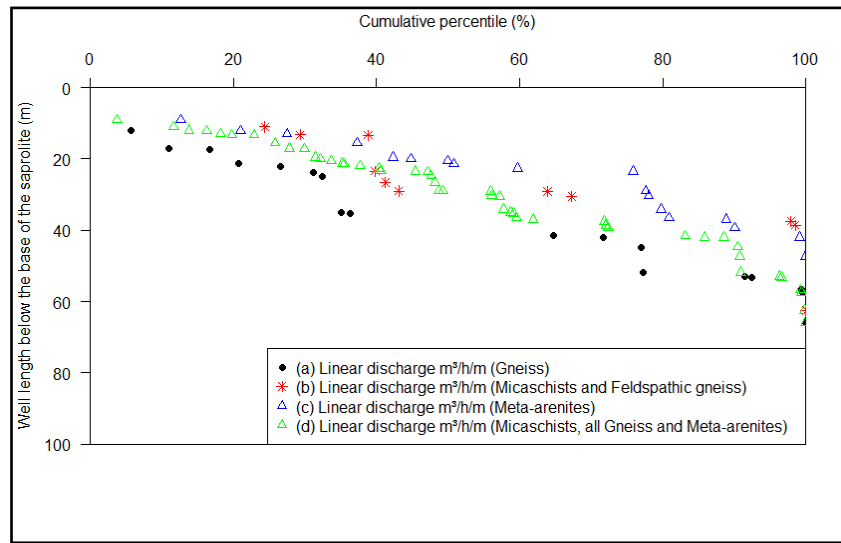


**Figure S8.** Linearized discharges ( $X$ ;  $\text{m}^3/\text{h}/\text{m}$ ), computed with reference to well length below the base of the saprolite ( $Y$ : m), for Enderbites and Metaenderbites ( $N = 47$ ).

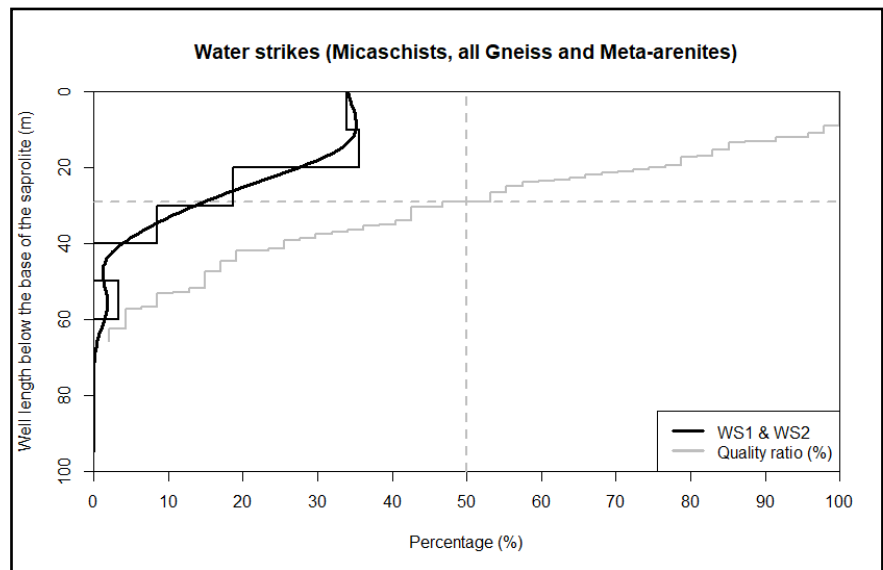


**Figure S9.** Cumulative percentage of linear discharge to estimate the properties of the fractured layer for the lithology Enderbites and Metaenderbites ( $N = 47$ ).

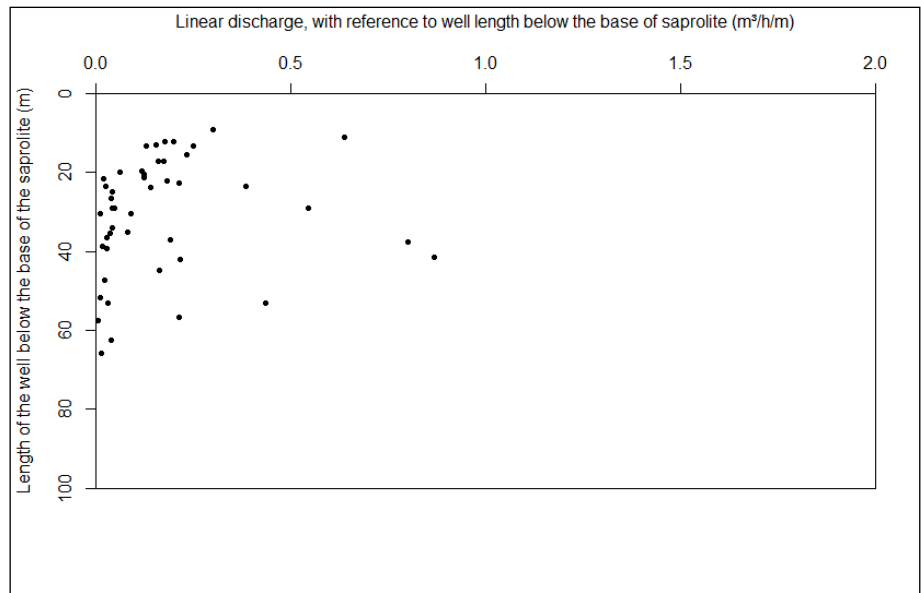
#### 6.4. Micaschists, all Gneiss, and Meta-arenites



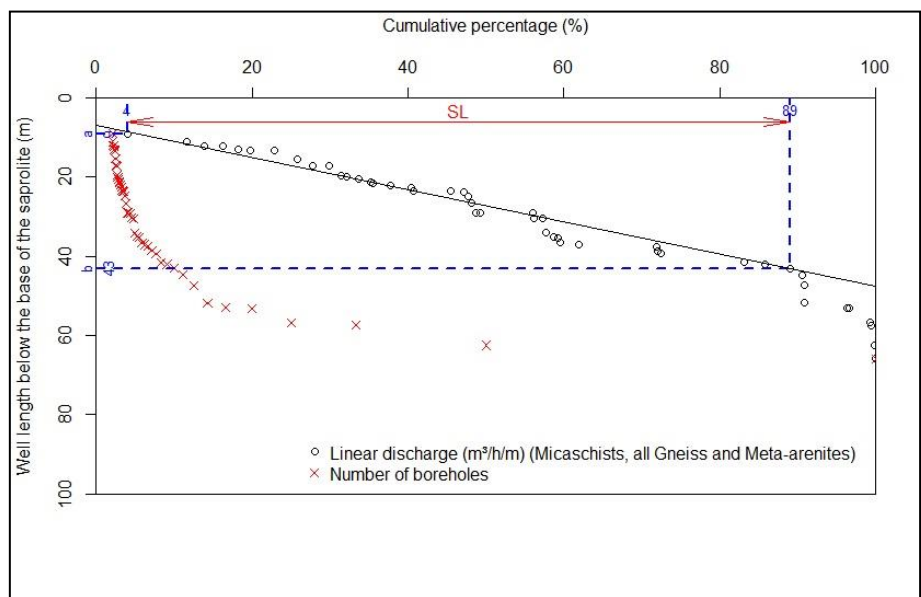
**Figure S10.** Cumulative percentage of linear discharge ( X axis, %; see definition of the linear discharge in the text) as function of the length of the well below the base of saprolite (Y axis, to estimate the properties of the fractured layer for the lithological: **a)** Gneiss (N = 18), **b)** Micaschists and Feldspathic gneiss (N = 11), and **c)** Meta-arenites (N = 18) **d)** . Micaschists, all Gneiss and Meta-arenites (N=47).



**Figure S11.** Vertical distribution of all water strikes observed as a function of depth below the base of the saprolite in Micaschists, all Gneiss, and Meta-arenites (NWS1 + NWS2 = 59; with N WS1 = 41 and N WS2, = 18).

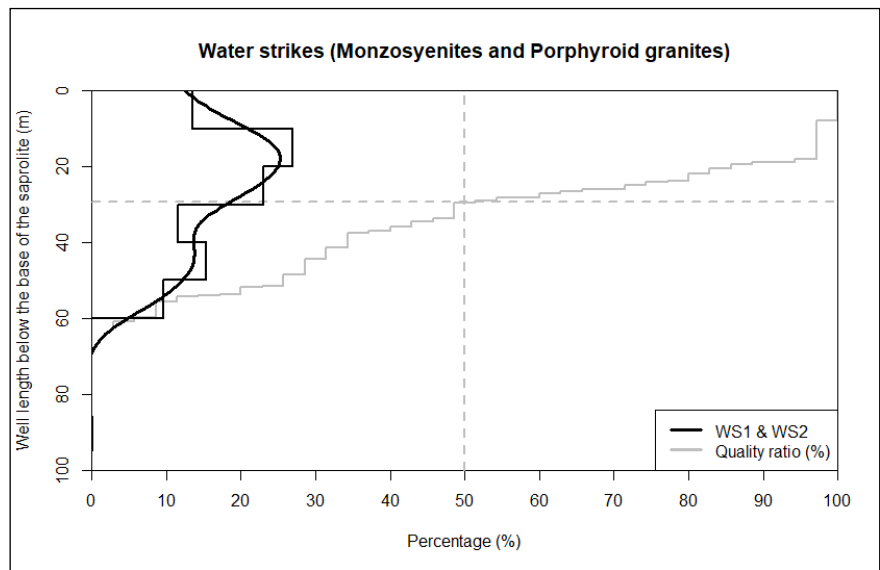


**Figure S12.** Linearized discharges ( $X$ ;  $\text{m}^3/\text{h}/\text{m}$ ), computed with reference to well length below the base of the saprolite ( $Y$ : m), for Micaschists, all Gneiss, and Meta-arenites ( $N = 47$ ).

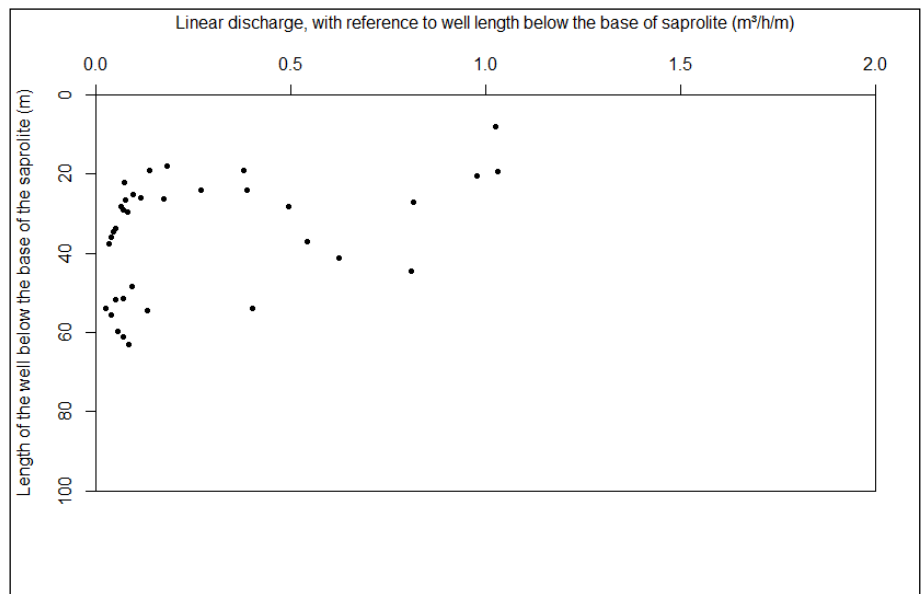


**Figure S13.** Cumulative percentage of linear discharge to estimate the properties of the fractured layer for the lithology Micaschists, all Gneiss, and Meta-arenites ( $N = 47$ ).

## 6.5. Monzosyenites and porphyroid granites

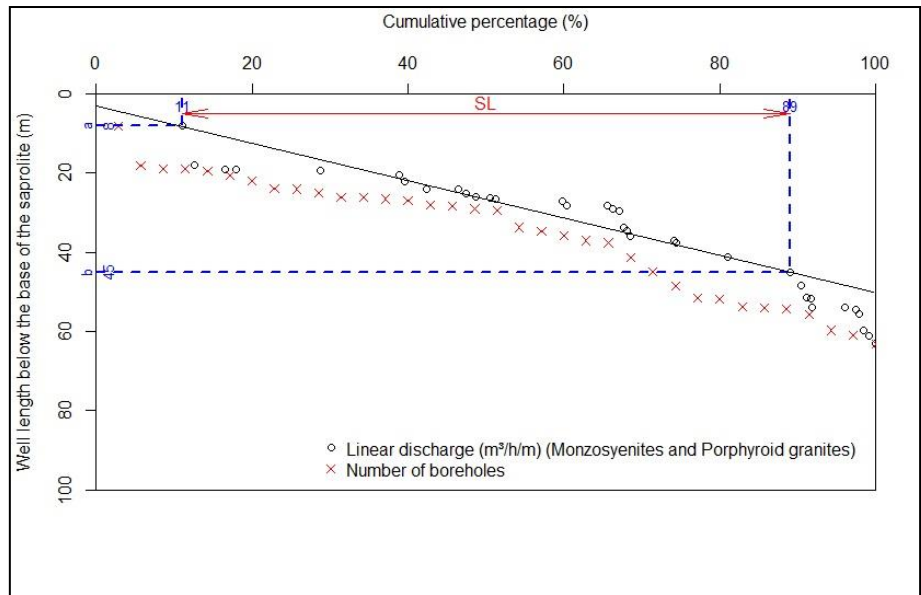


**Figure S14.** Vertical distribution of all water strikes observed as a function of depth below the base of the saprolite in Monzosyenites and Porphyroid granites (NWS1 + NWS2 = 52; with N WS1 = 33 and N WS2, = 19).



**Figure S15.** Linearized discharges ( $X$  ;  $\text{m}^3/\text{h}/\text{m}$ ), computed with reference to well length below the base of the saprolite ( $Y$ : m), for Monzosyenites and Porphyroid granites ( $N = 35$ ).





**Figure S16.** Cumulative percentage of linear discharge to estimate the properties of the fractured layer for the lithology Monzosyenites and Porphyroid granites (N = 35).