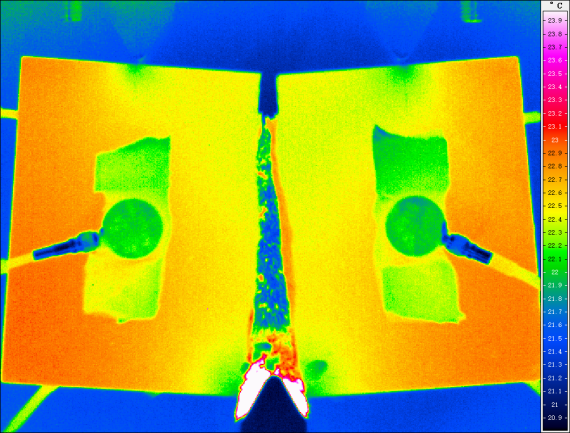


(a)

**AE sensors**

**Tensile fracturing zone**



(b)

**Fig. 4 Rock macroscopic failure phenomena: (a) visible light and (b) infrared thermography**