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Influence of air temperature on a landslide some hundred meters a.s.l.

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Displacement development of slopes is influenced by many internal (e.g. strength alteration due to deformation) and external (e.g. precipitation) factors. The combination of these factors is mostly unique, so derivation of universal performance rules is difficult, and landslides mostly are individual. The contribution describes a landslide in Flysch, most probably reactivated by exceptional rainfalls as well as by works for the renewal of a weir in the valley bottom in 2009. Monitoring showed that the landslide just some hundred meters a.s.l. moves more rapidly during wintertime caused by reduced evapotranspiration as well as by slope surface freezing both leading to groundwater impounding and, therefore, acceleration of displacements. Thus, it behaves completely different from landslides in higher altitudes, which are influenced predominantly by snowmelt causing larger displacements during late spring and summer.