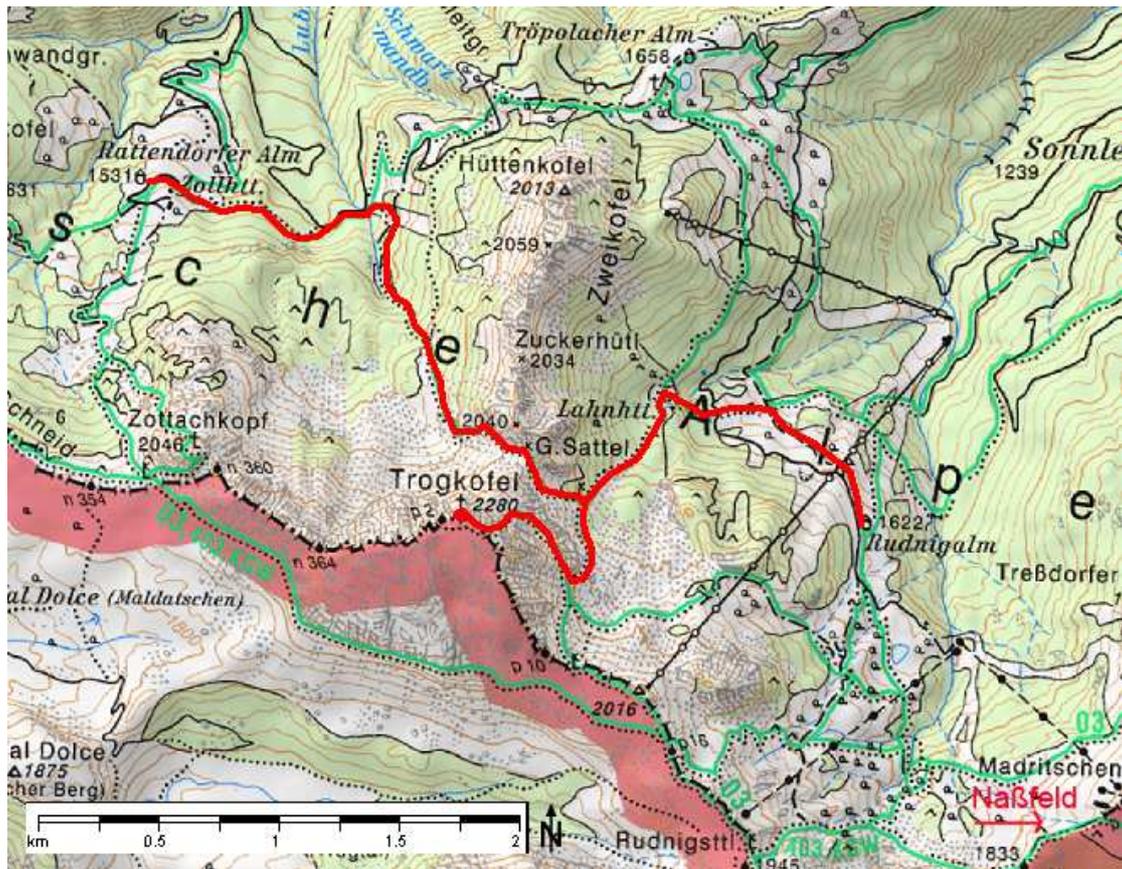


Geotope 29: Peak of Trogkofel – the Trogkofel Breccia



Red marking: Hiking route according to advance description; green tracks: hiking trails; ©BEV: Federal Office for Calibration and Measurement, 2005.

Access:

By car from the village of Rattendorf via Schlanitzen to Rudnig Alm. From the Alm there are three climbing trails (“Überlacher Steig” in Austria and via ferrate “Crete Rosse” or unsecured trail No. 416 in Italy, respectively), to the summit of mountain Trogkofel (2,280 m).

Description of the Geotope



Trogkofel



Contact between light Trogkofel limestones below and Trogkofel-breccia above.

The Trogkofel plateau extends to the south and southwest of the main peak. It is composed of a 10 to 15 m thick dolomitic breccia consisting of mainly angular or subangular greyish, reddish and blackish clasts. The breccia overlies the Lower Permian Trogkofel Limestone.

The breccia reflects an interesting story. Some 270 million years ago the marine sedimentation stopped. The extended platform was affected by strong ground motion which resulted in differential vertical movements. Some blocks were even uplifted above sea-level. Due to an arid climate, deep seated erosion started including reworking of the uppermost horizons, formation of fissures and caves and karst dissolution.

For those who are interested in more details:

Differences between conglomerate and breccia: **conglomerates** are sedimentary rocks, consisting of rounded and more than 2mm big cemented components; **breccias** are similar to conglomerates but consist of angular clasts.

Difference between limestone and dolomite: **limestone** is a chemical sedimentary rock with the formula CaCO_3 ; **dolomite** is a chemical sedimentary rock with the formula $[\text{CaMg}(\text{CO}_3)_2]$.

Chemical sediments are formed by chemical precipitation of minerals in seawater; **clastic sediments** are formed from breaking larger blocks into smaller ones which are dislocated and deposited.