

Geotope 30: Rattendorf Crest – The Spherical Rock



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 Dobergraben to Rattendorf Alm and Zanklhütte and further on along a trail to the state boundary on the southern crest to boundary rock n-127.

Description of the Geotope



View from the Rattendorfer Schneid to Rattendorfer Alm with the Zweikofel in the background.

The limestone slab containing the rounded spherical inclusions in the surrounding of boundary rock n-127 was formed 280 million years ago in the socalled Grenzland Formation of Lower Permian age. The surface is

covered by hundreds of rounded and oval disks.

They are cross sections of irregularly distributed spherical and cylindrical limestone nodules with diameters of 1 to 2 cm. They have a nucleus of fossil remains like algae, fusulinids, sea-lilies and even quartz grains. The core is surrounded by algal films which trap small sediment particles to be incorporated into the algal films. At the same time these small spheres are rounded in the agitated water and gradually grow like a turning snowball by adding new snow. Finally an ooid or, more frequently, an onkoid is formed.





The sphere rock from Rattendorf Crest in the field and as a micrograph.

For those who are interested in more details:

Onkoid: spherical to irregularly formed inclusions of a rock, mainly limestone, which are formed through algal or other biofilms and trapping of sediment particles around a nucleus. **Ooid**: regularly formed spherical rock components with thin sedimentary encrustations on biofilms. For the formation od both agitated water is needed.