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unaltered rock. Rock that has not experienced physical or chemical erosion^[16].

unconfined. A condition in which the upper surface of the zone of saturation forms a water table under atmospheric pressure^[22].

unconfined aquifer. An aquifer where the water table is exposed to the atmosphere through openings in the overlying materials.

unconfined flow. Ground-water flow displaying a free surface^[16].

unconfined water. Ground water vertically in direct contact with the atmosphere^[16].

unconformity. A fossil land surface representing the absence of a sequence of sediments^[16].

unconformity spring. See spring, unconformity.

uncontaminated zone. In electrical logging practice, the zone around a borehole that has not become contaminated by mud filtrate^[16].

undercut karren. These are Rinnenkarren (solution grooves) that have been transformed by humus filling and by their side walls having been hollowed under by biogenic CO₂^[3].

underflow spring. See spring, underflow.

underdrainage. The drainage from under a hydrologic feature such as a river, barrier, lake, etc.

underfit stream. A small stream that flows along a cave passage that was enlarged to its current size by an earlier, larger stream. Commonly underfit streams are found flowing under vadose conditions along the floors of drained phreatic tubes, long abandoned by the phreatic flow that enlarged them. Underfit streams may also occur if the major flow in a vadose streamway is captured to lower levels by the opening of a new shaft. The main flow no longer uses the downstream passages, leaving any tributaries to amalgamate as an underfit stream^[9].

underflow. Deep phreatic flow within an aquifer, along flow lines that are largely unrelated to the more obvious flow at higher levels. Underflow drainage may be slower than that in shallower systems, and may travel towards more distant and/or unrelated springs^[9].

underground divide. Subsurface watershed between two catchment areas in karst; often with incongruent with the surface topography of the area^[20].
Synonyms: (French.) *ligne de partage des eaux souterraines*, *limit souterrainne*; (German.) *unterirdische Waßerscheide*; (Greek.) *ypoghios ythrocketis*; (Italian.) *spartiacque sotterraneo*; (Russian.) *vodorazdel podzemnih vod*; (Spanish.) *divisoria subterranea*; (Turkish.) *yeraltı su bölümü*; (Yugoslavian.) *podzemna razvodnica*, *podzemna vododelnica*. See also subsurface divide.

underground river, underground stream.

Water flowing in channels through caves, caverns, and larger galleries in karst terranes^[20]. Synonyms: (French.) *rivière souterraine*; (German.) *Höhlenfluß*, *unterirdischer Fluß*; (Greek.) *ypoghios roe*, *potamos*; (Italian.) *fiume sotterraneo*; (Russian.) *podzemnaja reka*; (Spanish.) *río subterráneo*; (Turkish.) *yeraltı nehri*, *deresi*; (Yugoslavian.) *podzemni tok*, *podzemna rijka*, *podzemna reka*. See subterranean river.

underground waters. All subsurface waters^[16]. Not to be confused with ground water which specifically refers to water within the phreatic zone.

uniaxial (unconfined) compression.

Compression caused by the application of normal stress in a single direction.

uniaxial state of stress. The state of stress in which two of the three principal stresses are zero.

uniform flow. Flow with constant velocity at all points and at all times^[16].

uniformity coefficient. A numerical expression of the variety in particle sizes in mixed natural soils, defined as the ratio of the sieve size on which 40% (by weight) of the material is retained to the sieve size on which 90% of the material is retained^[6].

unit-hydrograph. A hypothetical discharge hydrograph for a given point resulting from unit rainfall which produces unit runoff^[16].

unsaturated coefficient of permeability.

The apparent coefficient of permeability in flow through an unsaturated medium^[16].

unsaturated flow. 1. The movement of water in a porous medium in which the pore spaces are not filled to capacity with water^[22]. 2. Two phase flow through pores only partially filled with water and air^[16].

unsaturated zone. See vadose zone and zone of aeration.

unsteady flow. Flow with a finite local acceleration term and streamlines that vary with time^[16].

unterirdische karst. See interstratal karst.

upconing. Process by which saline water underlying freshwater in an aquifer rises upward into the freshwater zone as a result of pumping water from the freshwater zone^[22].

uplift. 1. The hydrostatic force of water exerted on or underneath a structure tending to cause a displacement of the structure. 2. The relative upward movement of a part of the earth's crust^[16].

upper confining bed. An impermeable bed overlying an aquifer^[16].

upside-down channel. See ceiling channel.

urkarst. See buried karst.

uvala. 1. A multi-coned closed depression; now little-used term of Croat, Serb or Bulgarian origin. The term was

introduced to describe features assumed to be the second step in a 3-stage process of polje development, in which dolines were supposed to coalesce into uvalas. This mechanism is no longer accepted and the term uvala has fallen into disuse^[9]. 2. Large closed depression formed by the coalescence of several dolines which have enlarged towards each other. Typically, the floor is irregular, being a combination of doline floors and degraded slopes of the individual hollows^[19]. 3. A Yugoslavian term for an elongated closed depression in karst that is commonly dry or with periodical small sinking streams or inundations. They are generally a few hundred meters long and may be considered as a small polje^[20].
Synonyms: (American.) *compound doline*; (French.) *cuvala*; (German.) *Uvala*; (Greek.) *ouvala*; (Italian.) *avvalamento carsico, uvala*; (Russian.) *uvala*; (Spanish.) *uvala*; (Turkish.) *koyak; kokurdan*; (Yugoslavian.) *draga*.
See also canyon; karst valley; valley sink.
Related to polje.

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