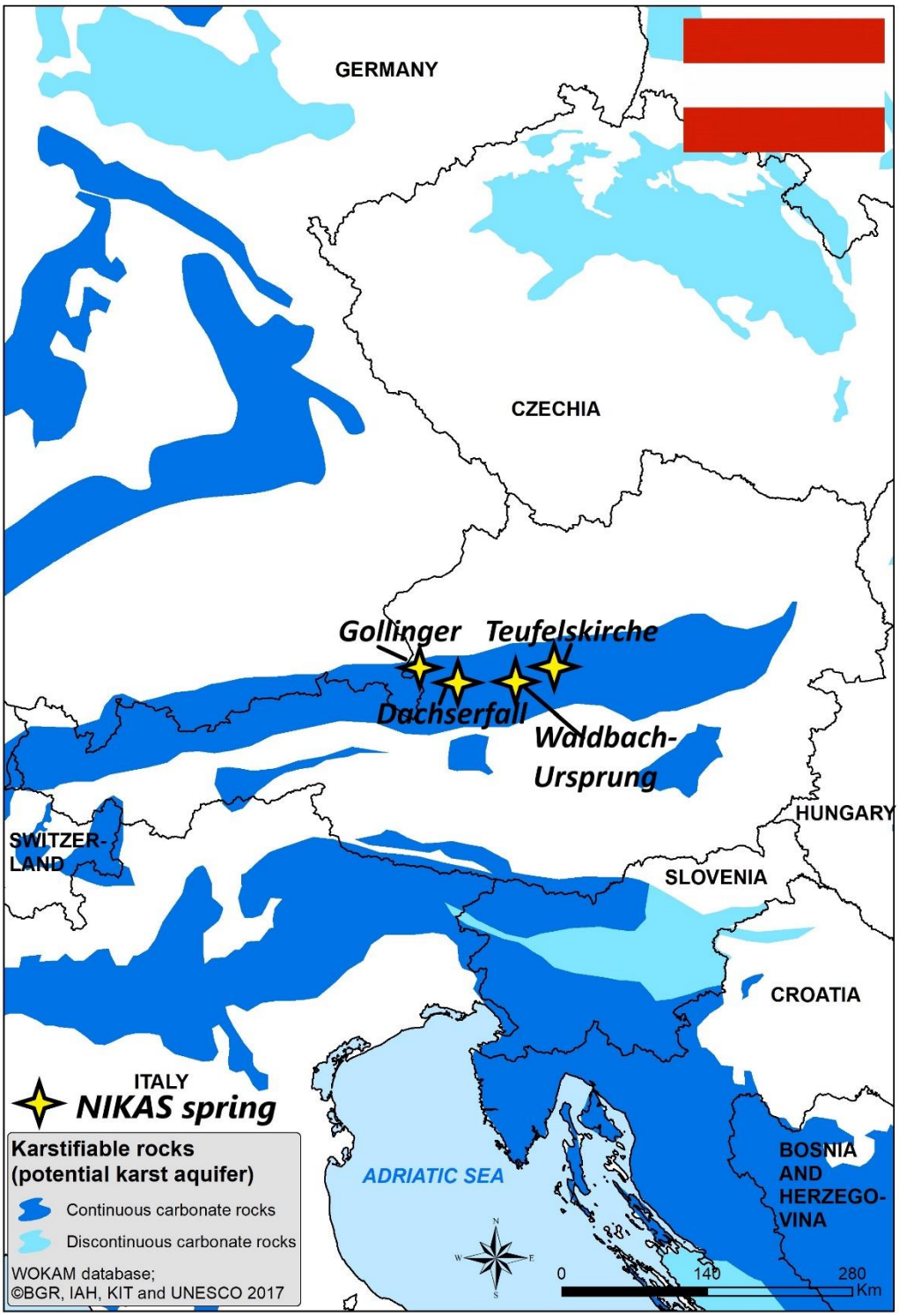

GERMANY
CZECHIA
Gollinger
Teufelskirche
Dachserfall
Waldbach-
Ursprung
HUNGARY
SWITZER-
LAND
SLOVENIA
CROATIA
ITALY
NIKAS spring
Karstifiable rocks
(potential karst aquifer)
Continuous carbonate rocks
Discontinuous carbonate rocks
WOKAM database;
©BGR, IAH, KIT and UNESCO 2017
ADRIATIC SEA
BOSNIA
AND
HERZEGO-
VINA
N
W
E
S
0
140
280
Km

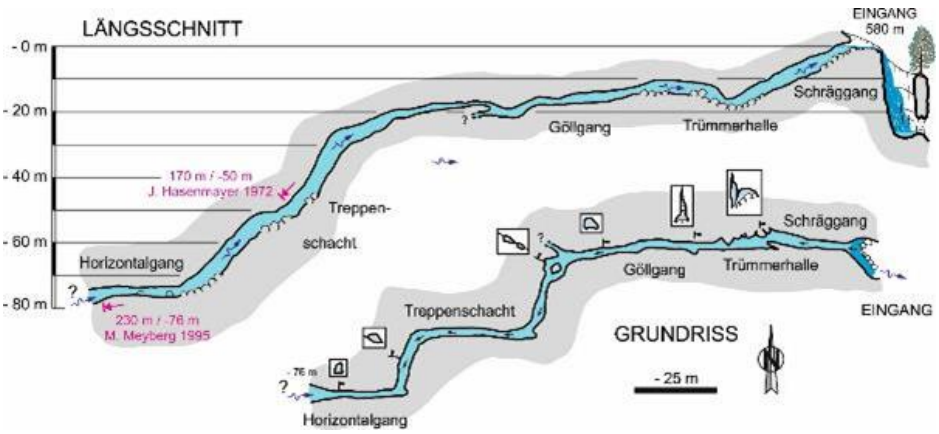
Country	MIKAS springs	Coordinates / Nearby City	Spring discharge (Q in l/s,min/av/max) / tapped or not	Criteria* in order / Main justification */ H-historic, A-aesthetic, S-scientific, E-Economic, Ec-ecologic	Data collected by
Austria 	1. **Dachserfall**	N 47° 32’ 43’’ E 13° 19’ 56’’ Z= 710 m asl Tennengebirge Abtenau	221/983/8153 Not tapped	***A, E, S, H, Ec*** *Due its aesthetic significance the Dachserfall is attractive to tourists. Not tapped but remains one of the strategic water resources of the Salzburg province. Several tracing tests conducted by use of fluorescent dye and spores. Spring is situated inside nature conservation area and ecologically is significant due to large population of Niphargus species.*	Ralf Benischke, Lukas Plan
	2. **"Gollinger Wasserfall (Schwarzbachfall)"**	N 47° 36’ 06’’ E 13° 08’ 15’’ Z = 580 m asl Golling	28/245/42616 Tapped by pipe for local use	***A, H, S, Ec, E*** *Beautiful waterfall spring (about 80 m high) as the outlet of Schwarzbachfall Cave. Between 1798 and 1805 the spring and its waterfall was made accessible, and was since this time a motif for painters of romanticism. Today it is a popular destination for tourists. The siphon at the outlet dived to a depth of 76 m. The spring and its surroundings were declared 1985 as natural monument.*	Ralf Benischke, Lukas Plan
	3. **Teufelskirche**	N 47° 47’ 15’’ E 14° 12’ 22’’ Z = 555 m asl St. Pankraz, Windischgarsten	12/995/41462 Not tapped	***S, A, H, Ec, E*** *The spring water issues from a picturesque cave ruin, formed by rock arches, and is not permanently active at the outlet (in low season flow appears a few tens meter from outlet. The discharge mechanism is intermittent, as result of complex hydraulic siphon system. The pulsation (2 – 5 cm) periodicity occurs within approx. 1 and 2.5 hours. The site, a scenic spot, is easily accessible for tourists. Spring declared as natural monument.*	Ralf Benischke, Lukas Plan
	4. **Waldbach-Ursprung**	N 47° 32' 35" E 13° 36' 25" Z = 915 m asl Hallstatt	9/3124/18973 Not tapped, more downstream part of water used for generating electricity	***S, E, A, Ec, H*** *The Waldbach-Ursprung spring drains much of the Dachstein plateau, including the two glaciers. Spring is connected to the adjacent Hirlatzhöhle cave, some of the water can be observed inside the cave, while in extreme high-water season flow emerges at the orifice of the cave.*	Lukas Plan, Ralf Benischke

NIKAS - Dachserfall

Dachserfall outlets (Photo: R. Benischke)

NIKAS - "Gollinger Wasserfall (Schwarzbachfall)"

Gollinger Wasserfall, left: lowest step, right: middle part with water flow through a rock arch (Photo: R. Benischke).



Plan view (bottom) and longitudinal section (top) of Gollinger Wasserfall (Schwarzbachfall Cave) to a depth of 76 m (from Spötl et al. 2016; Sketch Meyberg & Rinne 1995, drawing R.Seebache)

NIKAS - Teufelskirche

Teufelskirche spring. Top: Outlet of spring at low water conditions with upwelling water in the centre of the pool (Photo: R. Benischke). Bottom: Outlet of the spring at high water conditions during snow melt (Photo: H. Steinmaßl)

NIKAS - Waldbach-Ursprung

Waldbach-Ursprung (overflow cave) under flood conditions (Photo: G. Völkl)