



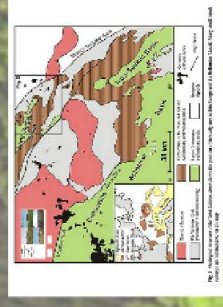
Erasmus+



The land of extinct volcanoes in POLAND

Private Salesian High School
Wrocław, Poland

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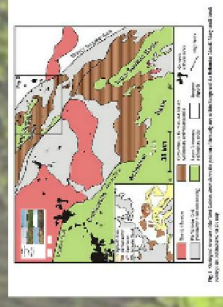
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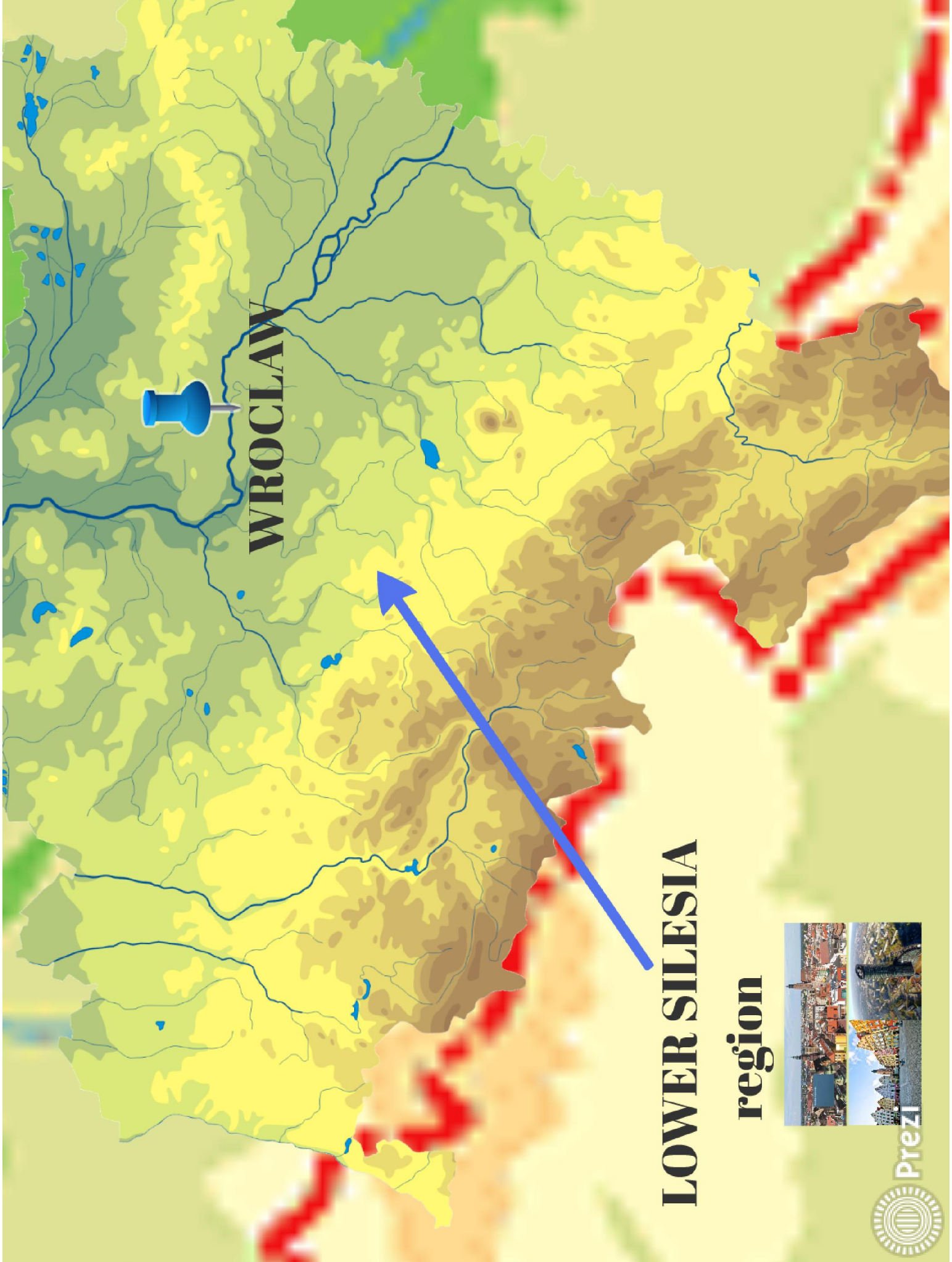
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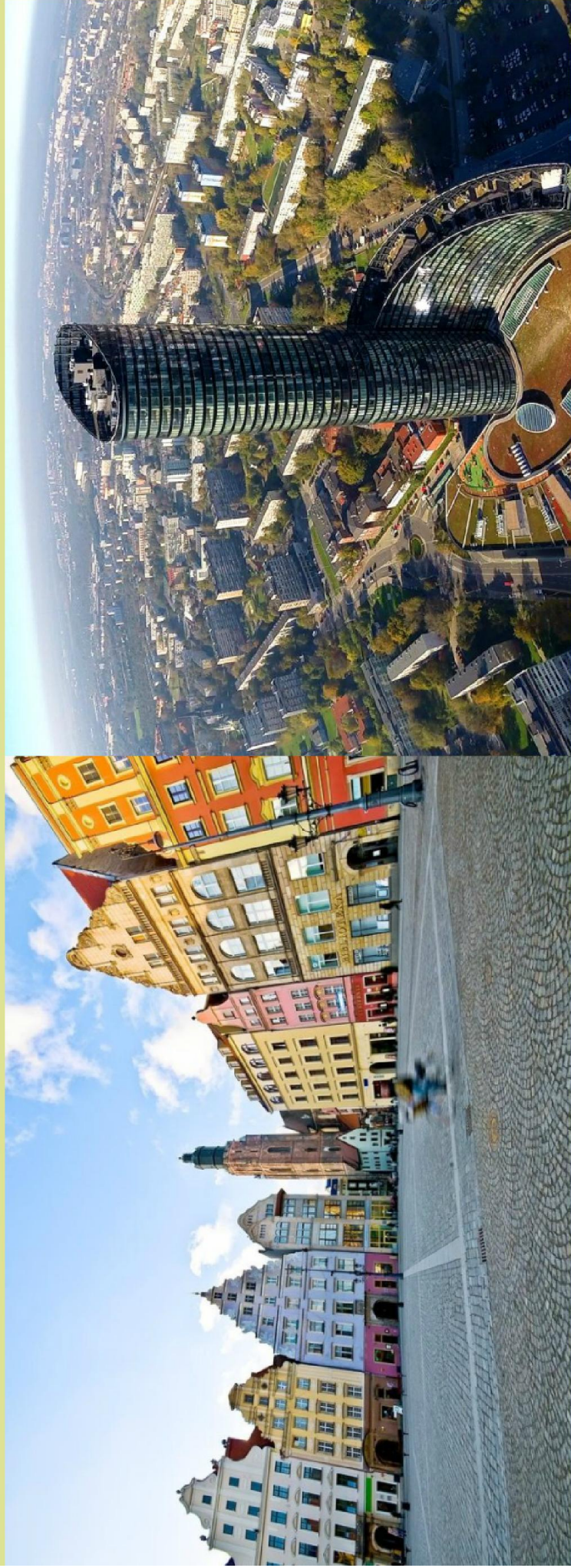
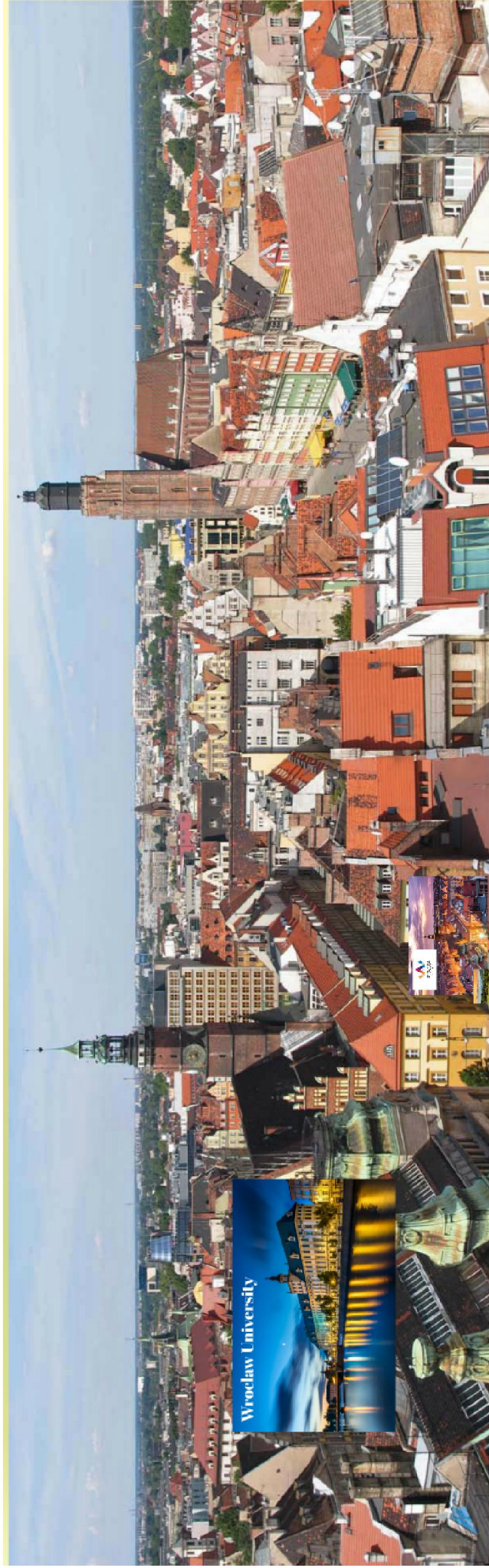


WROCLAW

LOWER SILESIA

region





Wrocław University



EUROPEAN CAPITAL OF CULTURE

WROCLAW
2016



Prezi

The land of extinct volcanoes

Pogórze Kaczawskie

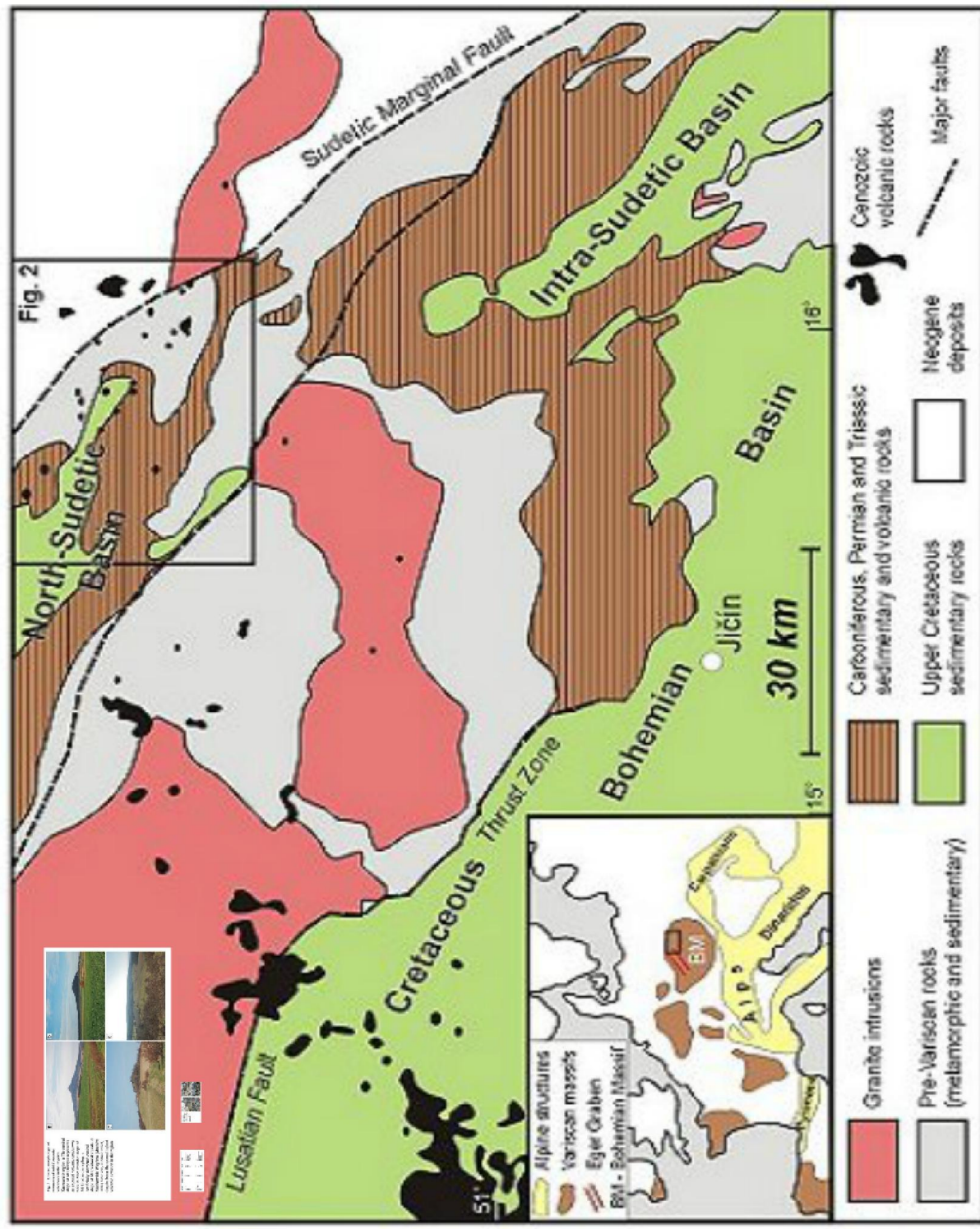


Fig. 1 Geological structure of the West Sudetes. *Inset* shows the position of the study area within Europe and the Bohemian Massif. Many small basalt outcrops are not indicated on the map

Table 2 Characteristics of selected basaltic hills in the Pogórze Kaczawskie area

Name of the hill	Number (see Fig. 2)	Summit altitude (m a.s.l.)	Relative height (m) ^a	Country rock
Bazaltowa	1	369	109 (44)	Greenschist
Czartowska Skala	2	464	84	Greenschist
Czerwony Kamień	3	325	120 (40)	Sandstone (Triassic, Cretaceous)
Dębina	4	313	53	Phyllite
Diablak	5	391	128 (49)	Sandstone (Cretaceous)
Górzec	6	445	135 (25)	Greenschist, phyllite
Grodziec	7	389	109	Conglomerate (Permian)
Jeziorna	8	293	78 (38)	Sandstone (Triassic, Cretaceous)
Kamienna Góra	9	356	101 (56)	Sandstone (Triassic, Cretaceous)
Kostrza	10	312	52	Phyllite
Kozia	11	375	95 (40)	Sandstone (Cretaceous)
Krzyżowa Góra	12	258	48	Phyllite
Lysanka	13	444	179 (44)	Sandstone
Mnisza Góra	14	310	55	Conglomerate (Permian)
Muchowskie Wzgórze	15	475	90	Greenschist
Ostrzyca	16	501	161	Sandstone, conglomerate (Permian)
Owczarek	17	448	38	Greenschist, phyllite
Rataj	18	350	90 (35)	Greenschist, phyllite
Trupień	19	481	141 (81)	Sandstone (Triassic, Cretaceous)
Wilkołak	20	367	102	Sandstone (Cretaceous)

Greenschist

Greenschist

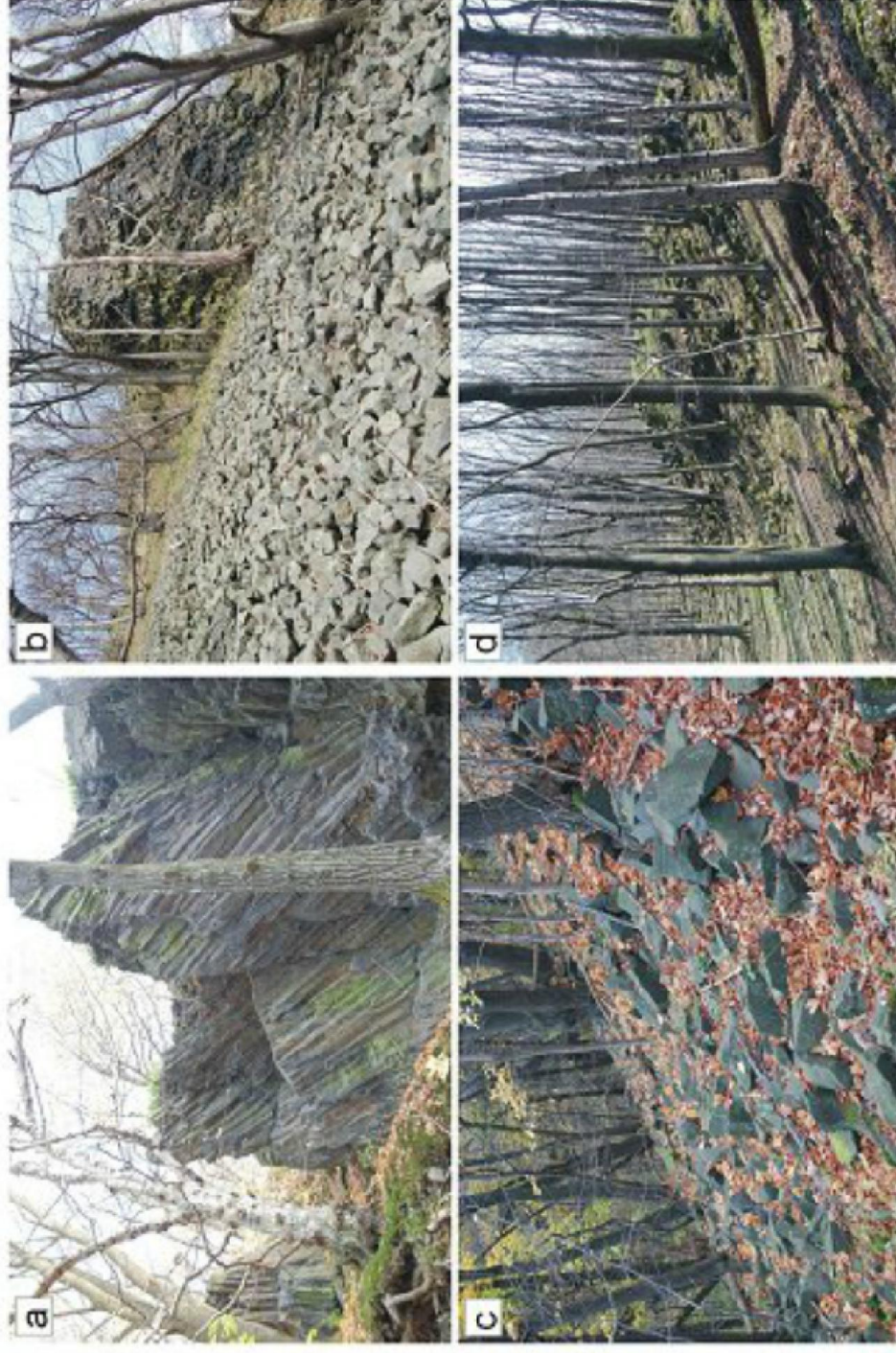
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Phyllite

Sandstone (Cretaceous)

Greenschist, phyllite

Fig. 4 Details of hillslope geomorphology of volcanic elevations in the Pogórze Kaczawskie region. **a** Impressive crags in regularly jointed basalt, more than 10 m high—Diablak locality. **b** Bare periglacial block fields and mid-slope crags at Mt Ostrzyca. **c** Considerably overgrown block slope of Mt Górzec. **d** Cliffs and cryoplanation terraces in massive basalt of Muchowskie Wzgórze



Wilcza Mountain Reserve,



Czartowska Skała



The biggest number of volcano remnants may be found in the Lower Silesia Region, in the Kaczawskie Foothills of the Sudety Mountains.

They are situated over a section of 85 km, and were active for the last time some 20-30 million years ago.

The activity of volcanoes has made that there are many rocks, minerals or metal ores in this area. Near Nowy Kosów is situated one of the biggest in Europe deposit of **agates** - unadorned rocks that reveal their beauty after cutting and polishing.

Our region attracts not only tourists but also prospectors. The agates of the Kaczawa, called "**rock flowers**", are situated on the western edge of the Kaczawa river, near Nowy Kosów, Sokolowec, Górnio and Lubachowa.

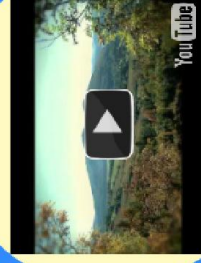
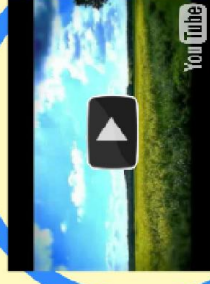
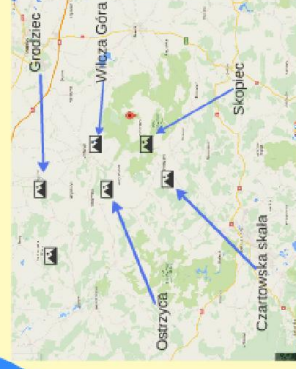


Ostrzyca Prokaszewicka Mountain



Formation of volcanic rocks, which are visible even today, comprise especially the basalt hills:

- Ostrzyca (501 m a.s.l.), Czartowska Skała (463 m a.s.l.), Rataj (350 m a.s.l.),
- Grodziec (389 m a.s.l.)
- Wilcza Góra (397 m a.s.l.)



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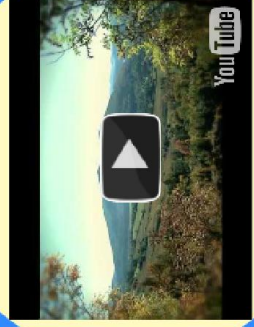
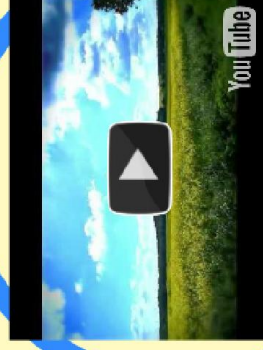
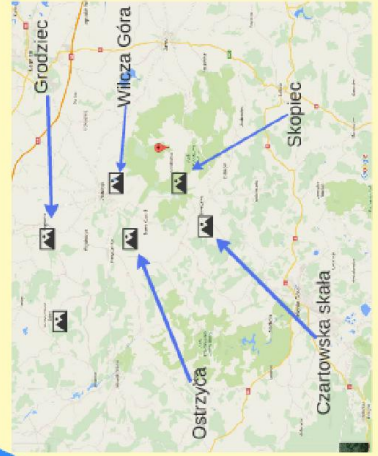


Czartowska Skała



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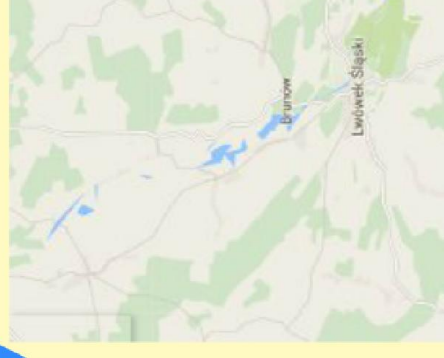
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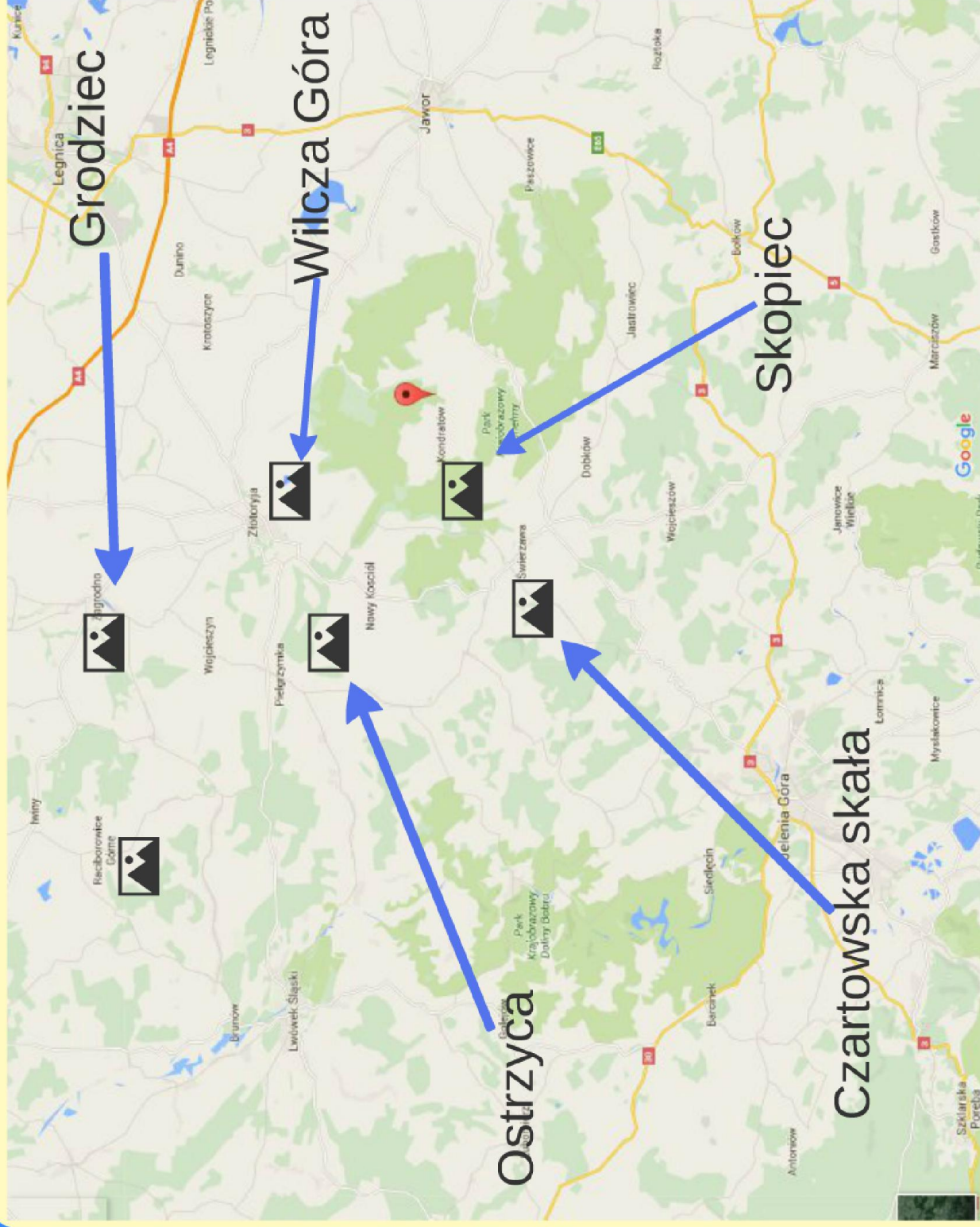
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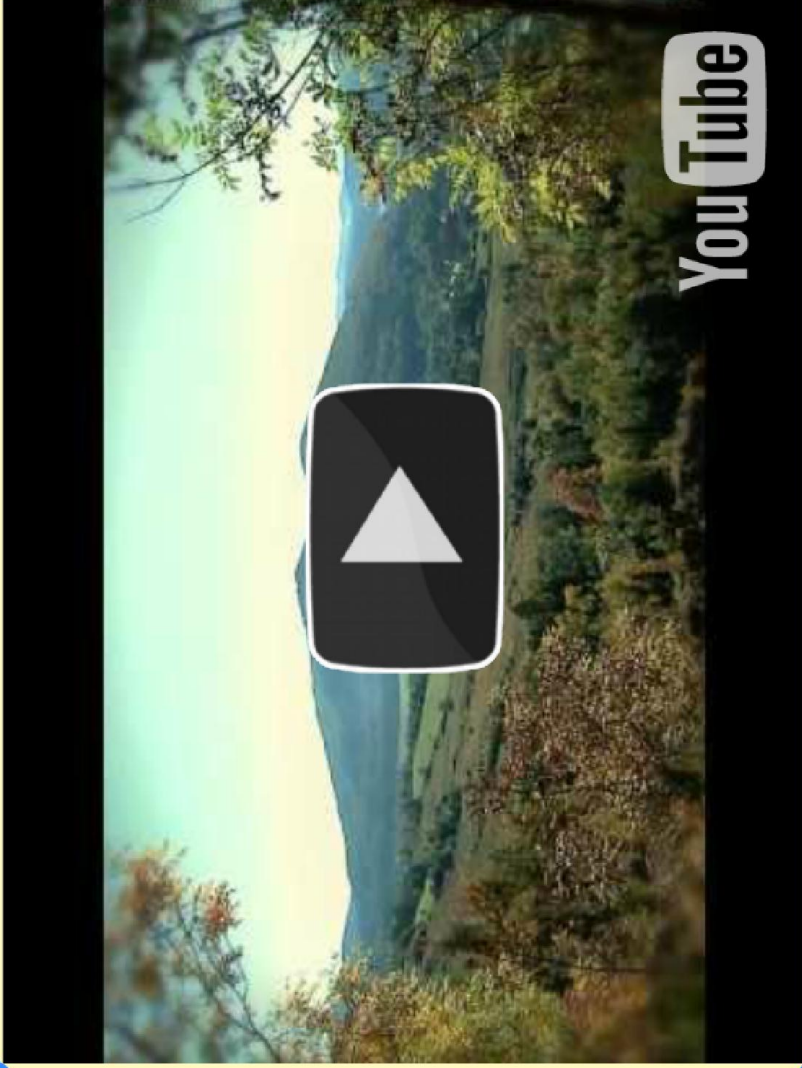


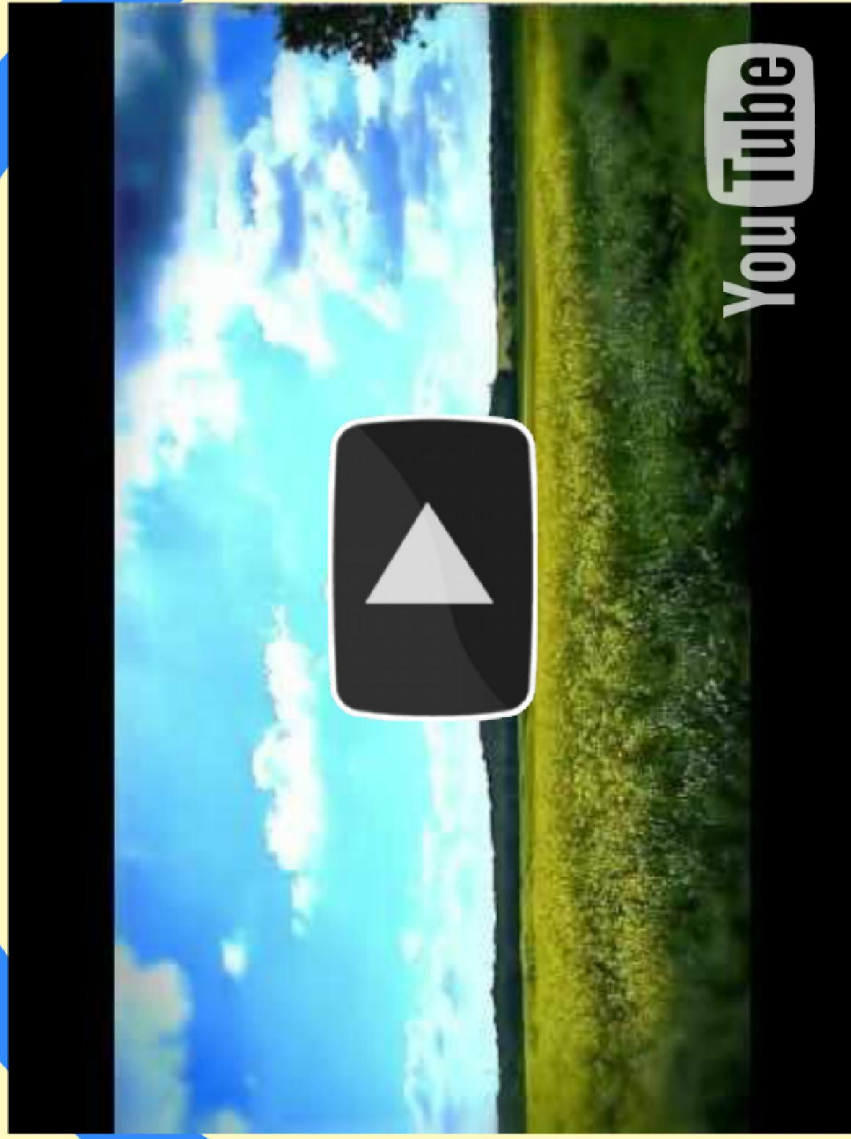
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Ostrzyca Proboszczowicka Mountain



Ostrzyca Proboszczowicka, also known as the "Silurian Fujiama", is a geological natural reserve established to protect rare plant species and a unique basalt boulder field. This peak is a vent of a Miocene volcano.

Low temperatures combined with water freezing and unfreezing caused the cracking of basalt rocks, thus creating boulder fields on the upper mountainsides. Rare rock snails (*Clausilia parvula*) and butterflies (mountain Apollo) are found here.



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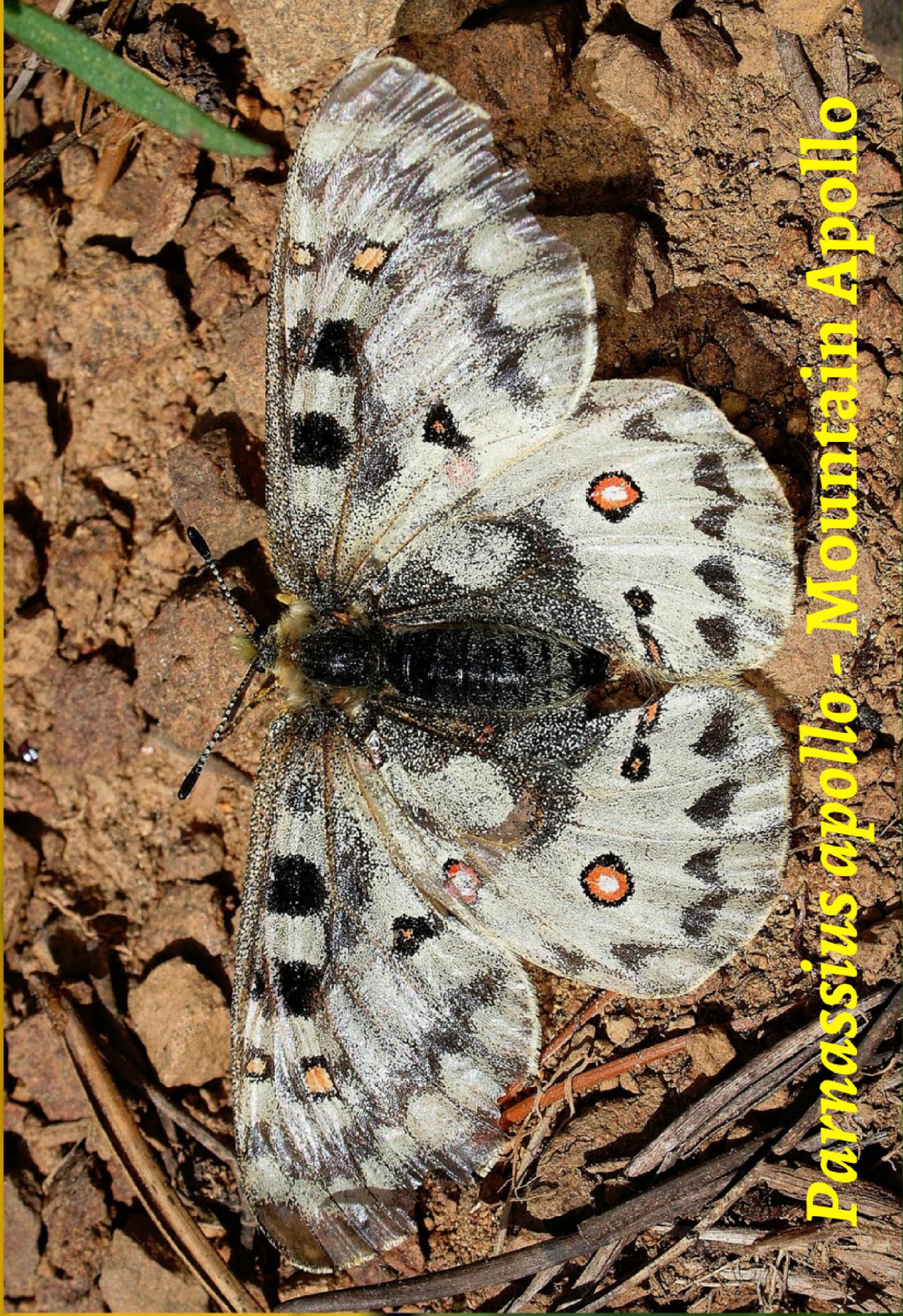
Clausilia parvula - rock snail



© O. Gargominy



Prezi



Parnassius apollo - Mountain Apollo

Wilcza Mountain Reserve,



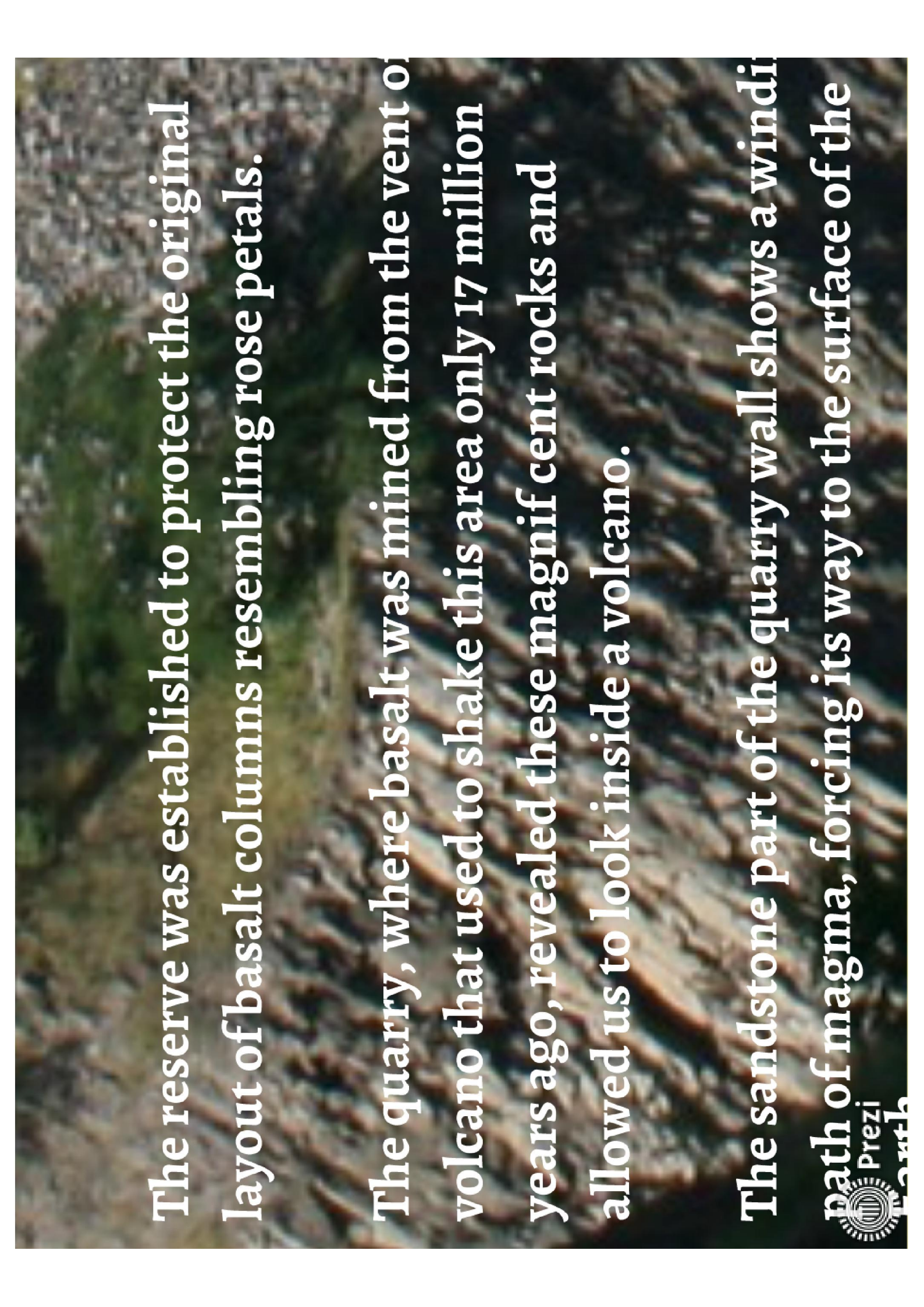
The reserve was established to protect the original layout of basalt columns resembling rose petals.

The quarry, where basalt was mined from the very old cones, so that they broke in pieces only 17 million years ago, revealed these magical cent rocks and allowed us to look inside a volcano.

Part of the quarry wall shows a winding path leading to the top, forcing its way to the surface of the

Piezi



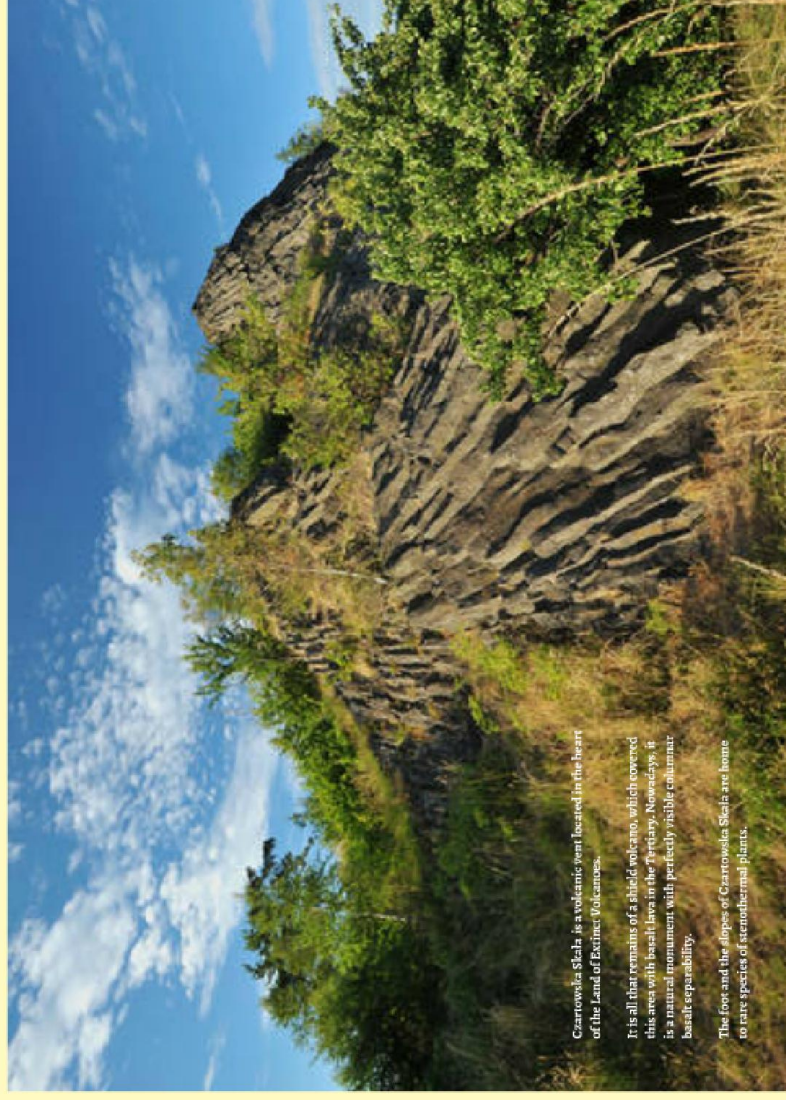
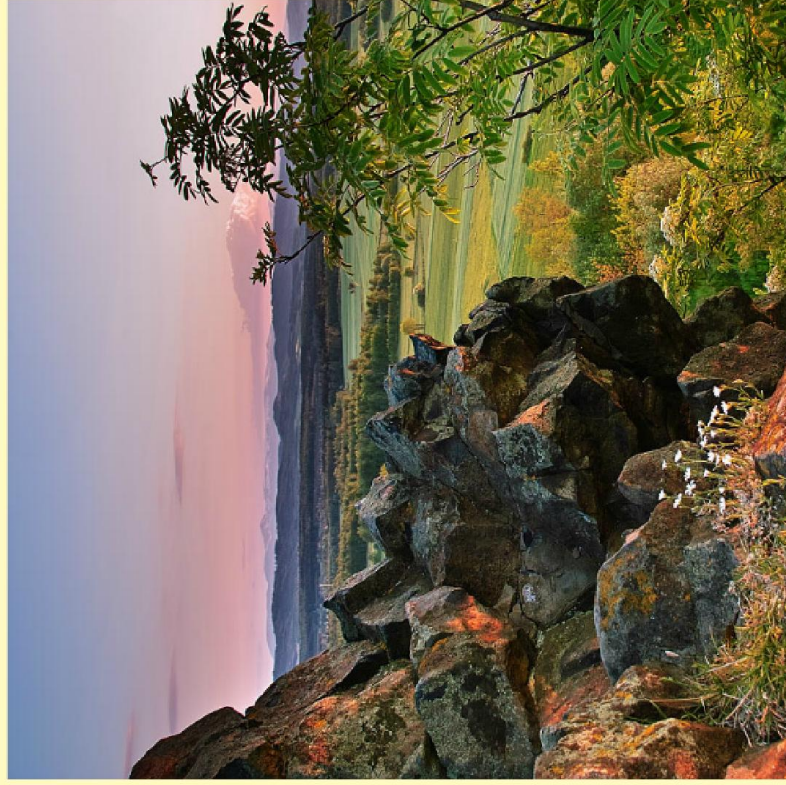
The background image shows a quarry with tall, dark basalt columns on the left and a steep, light-colored sandstone wall on the right. The text is overlaid on this image.

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Czartowska Skala



Czartowska Skala is a volcanic vent located in the heart of the Land of Eximur Volcanoes.

It is all that remains of a shield volcano, which covered this area with basalt lava in the Tertiary. Nowadays, it is a natural monument with perfectly visible columnar basalt separability.

The foot and the slopes of Czartowska Skala are home to rare species of stenothermal plants.

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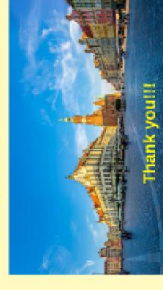
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Volcanic past and her amazing creations - that's how in a word can be described the Land of Extinct Volcanoes. We invite you to explore it.



SEE YOU IN POLAND !!!



Thank you!!!

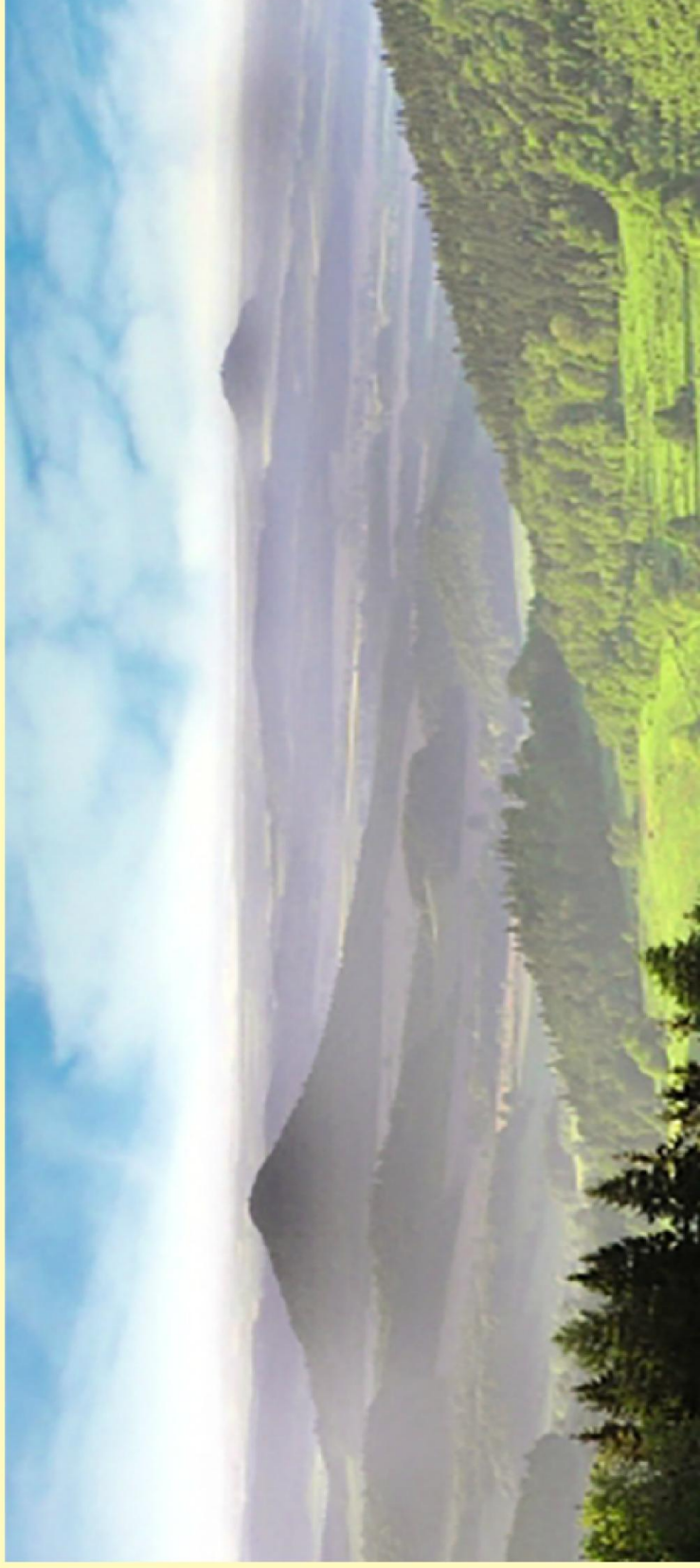




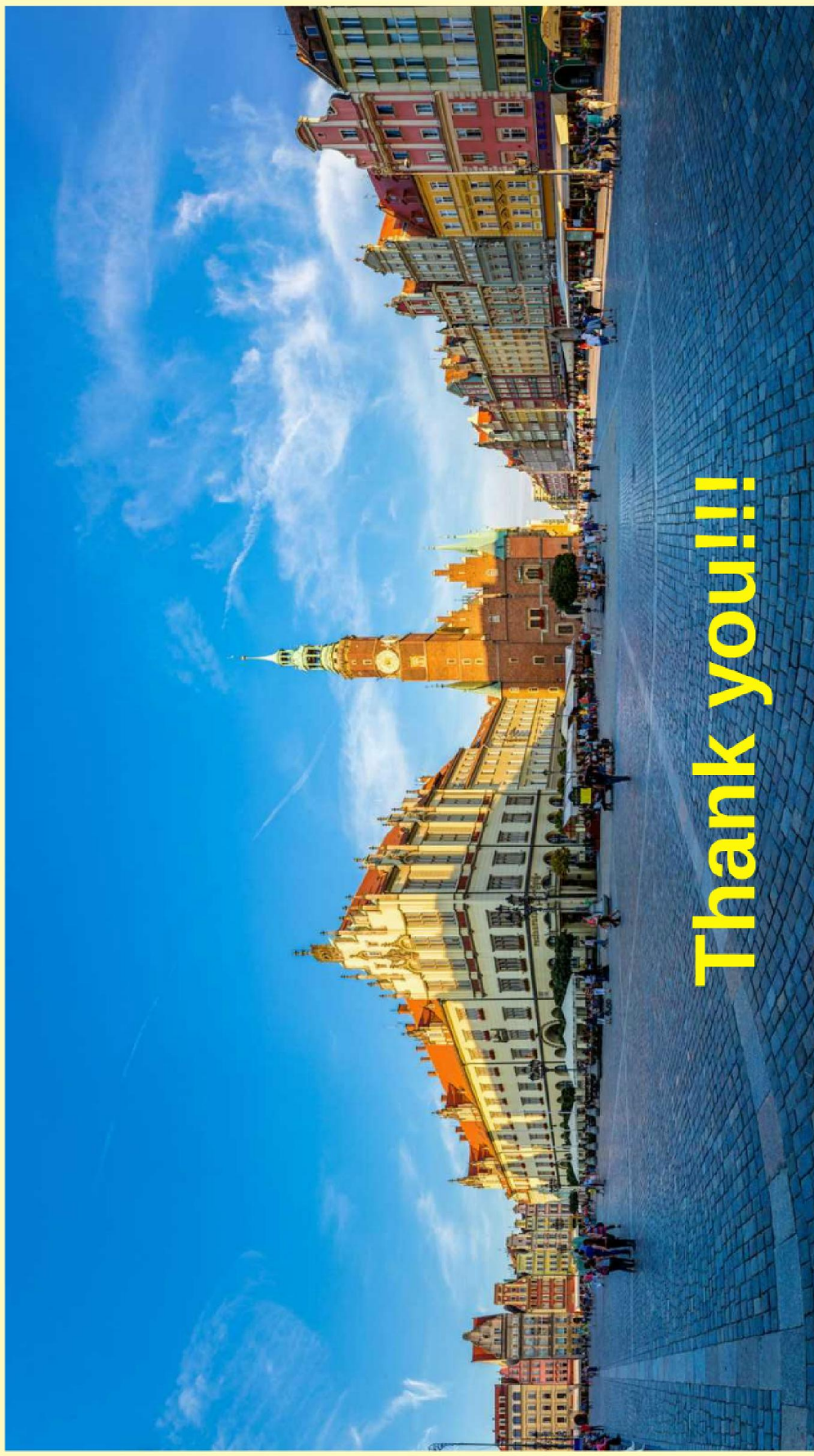


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