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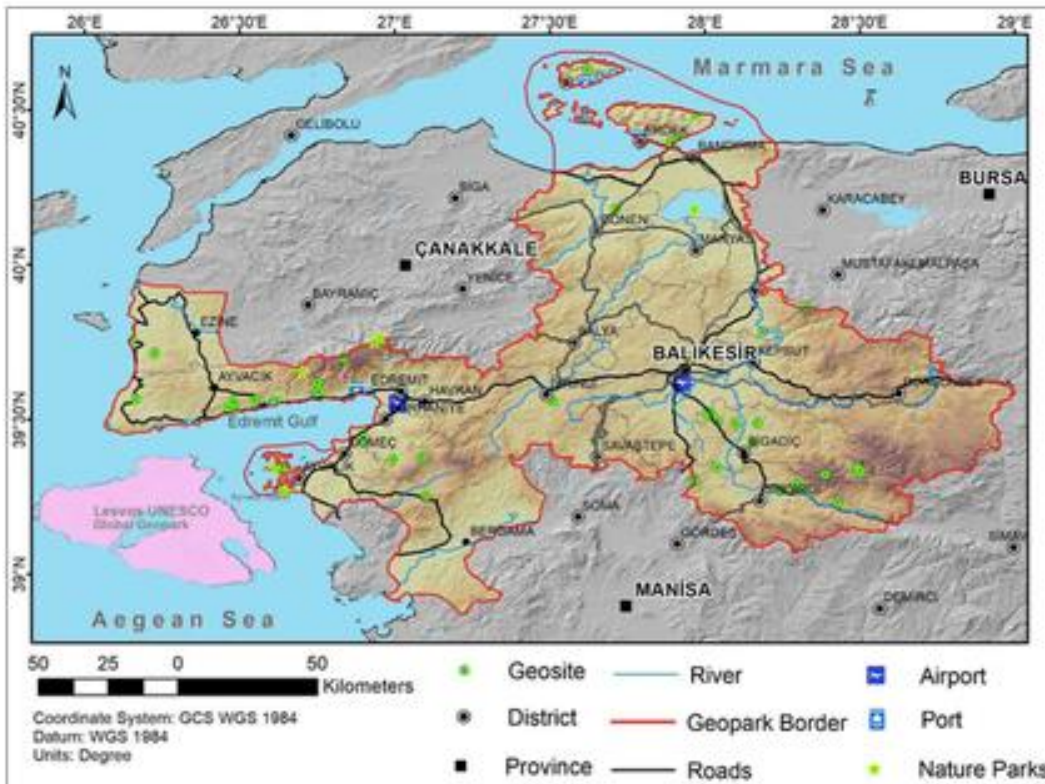


Géoparc  
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# Applicant UNESCO Global Geopark

*Ida Madra, Turkey*

## Geographical and geological summary



## **1. Physical and human geography**

The majority of the Ida Madra Geopark area is located within the Balıkesir Province; including Bergama town from İzmir Province, Ezine and Ayvacık towns from Çanakkale Province; the northwest of the Anatolian Peninsula, the South Marmara part of the Marmara Region. The bounding box coordinates are: 40°40'0"N, 27°40'0"E; 38°52'30"N, 27°15'0"E; 39°29'0"N, 26°50'E; 39°36'0"N, 29°0'0"E. Geopark has a surface area of 17.000 km<sup>2</sup>. The Geopark area is surrounded by some of the largest cities of Turkey. The Geopark measures 280km to Istanbul, 200km to Izmir, 200km to Çanakkale (Troy), 150 km to Bursa and 150km to Manisa. Ida Madra Geopark is next to the Lesvos UGG of Greece connected by 1-hour daily ferries. More than half (54%) of the geopark area consists of plateau surfaces. Mountainsides (38%) rank number two and plains (8%) take the smallest place. The Ida Madra Geopark have borders to two seas; Marmara Sea in the North and Aegean Sea in the West. Elevation, starting from sea level reaches up to 1774m at the summit of the Mt. Ida. The western coastal region is under Mediterranean climate, continental climate prevails in central mountainous areas and subtropical transition climate dominates Marmara coast and islands. Ida Madra Geopark has pristine nature hosting two National Parks (Mt. Ida National Park and Birds Paradise National Park) and a Ramsar Wetland as far as 7 Nature Parks. The total population of the Ida Madra Geopark area is about 1.4 million people. There are 23 municipalities within the geopark area.

## **2. Geological features and geology of international significance**

Alpide orogeny in Turkey is the result of the convergence and progressive collision of the Pontide and the Anatolide-Tauride blocks starting in the mid Cretaceous. Ida Madra Geopark area coincides with Anatolide-Tauride Block is defined by the İzmir-Ankara suture, which forms a profound stratigraphic, metamorphic, and magmatic boundary. To the north of the İzmir-Ankara suture lies the Sakarya Zone of the Pontides, and to the south the Tavşanlı Zone of the Anatolide-Tauride Bloc. The high grade Hercynian metamorphic rocks of the Sakarya Zone outcrops at Kazdağ mountain ranges. Eocene granitoids intrude the Nilüfer Formation in the Kapıdağ peninsula within the Ida Madra Geopark area. However the dominant surface lithology of the Ida Madra Geopark is the Miocene volcanism products of both acidic intrusions and extrusives.

The Ida Madra Geopark has rich geodiversity as result of its geological evolution and tectonic setting. Including active travertine chimneys which bears strong analogy to black smokers, origin of life on earth and astrobiology. Geothermal travertine chimney and terraces formation indicators of active faulting. Hydrothermal mineral enrichment and the formation of metallogenic ores through Tethyan Metallogeny Belt. Tectonics, faulting, volcanism, geothermal in western Anatolia and its role in understanding the geological evolution of the Aegean. Ancient mining and quarrying; long, deep, and intense interaction of culture and geology. Ignimbrite geoarchaeology; bedrock carved dwellings. All aspects of granite geology and geomorphology within the geopark.