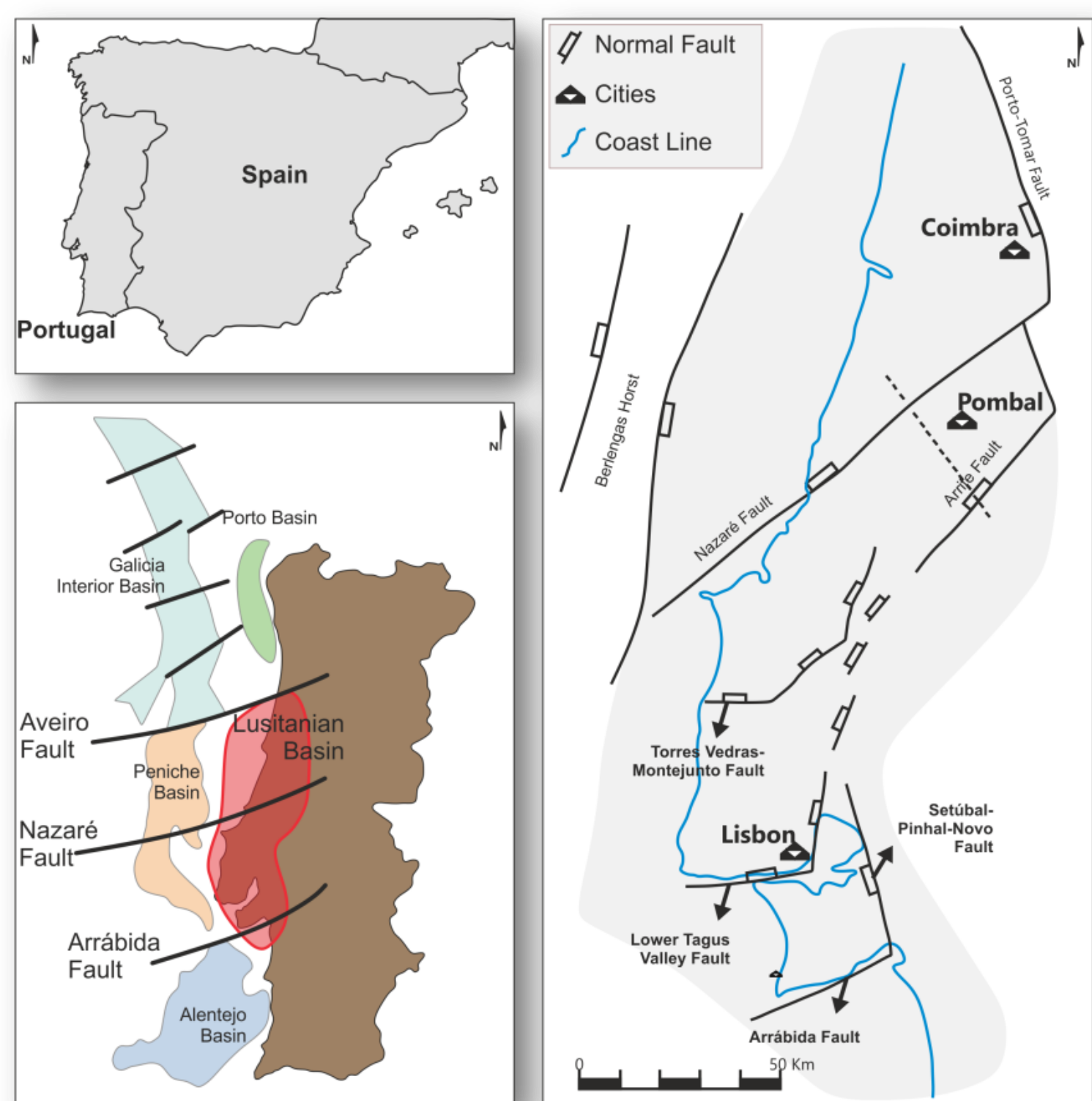


The Aspiring Atlantic Geopark: one geopark, 500 million years of geo-history

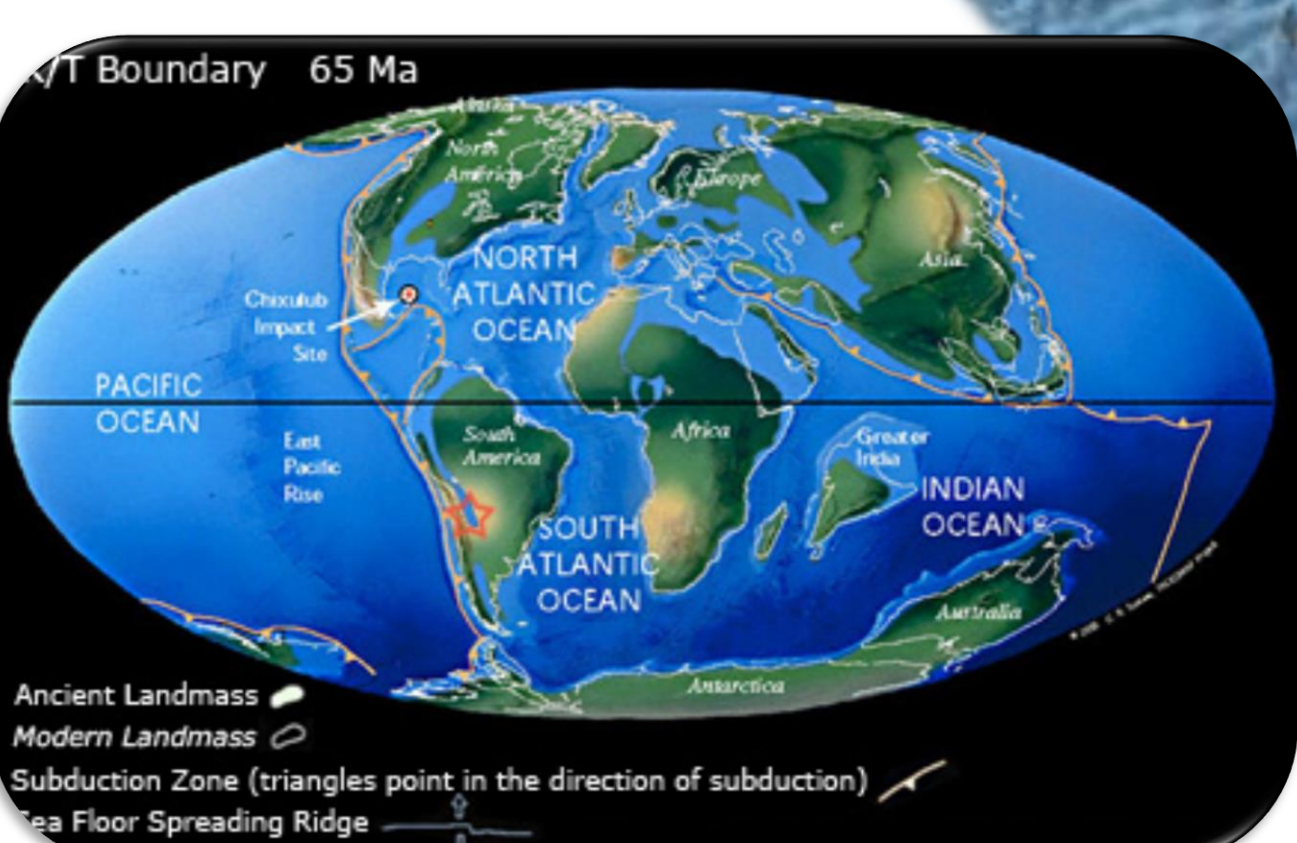
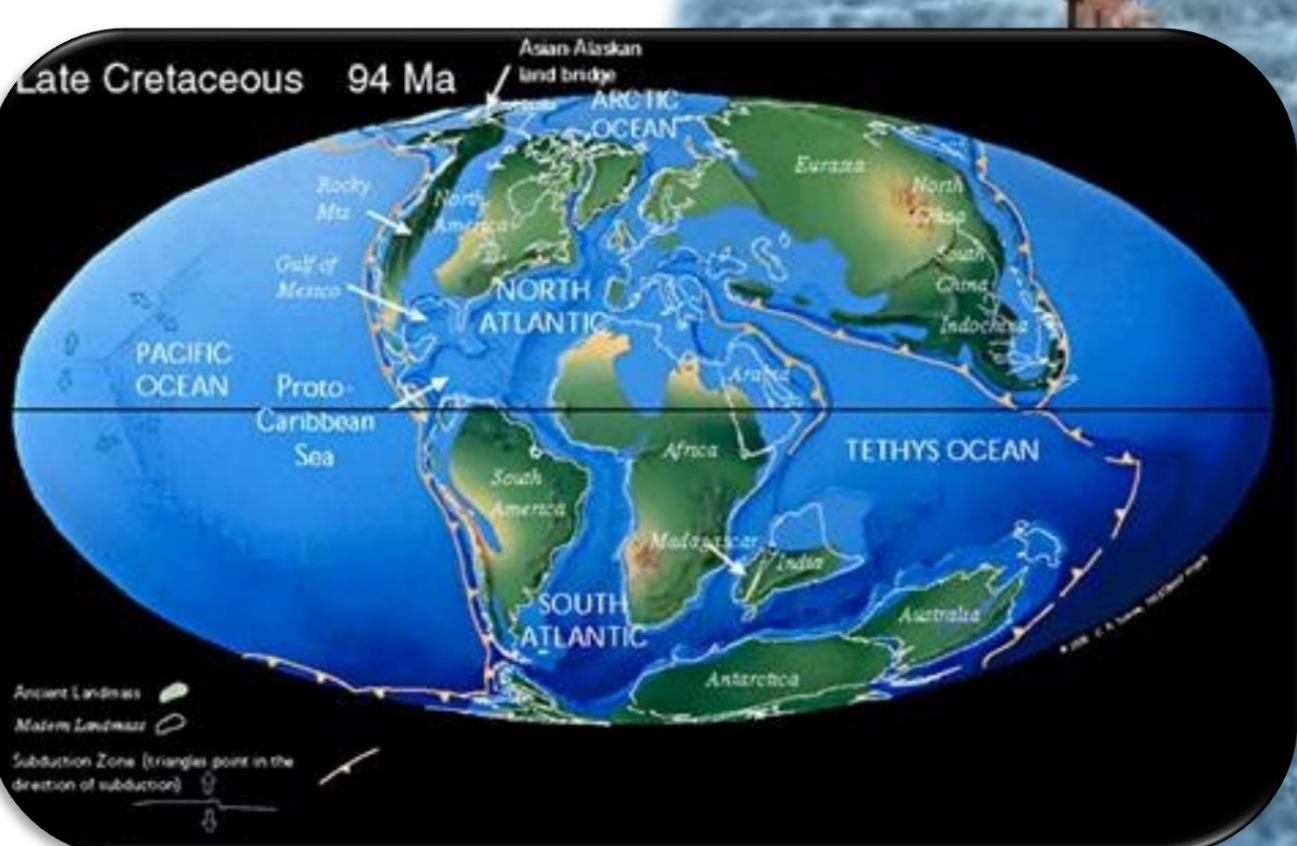
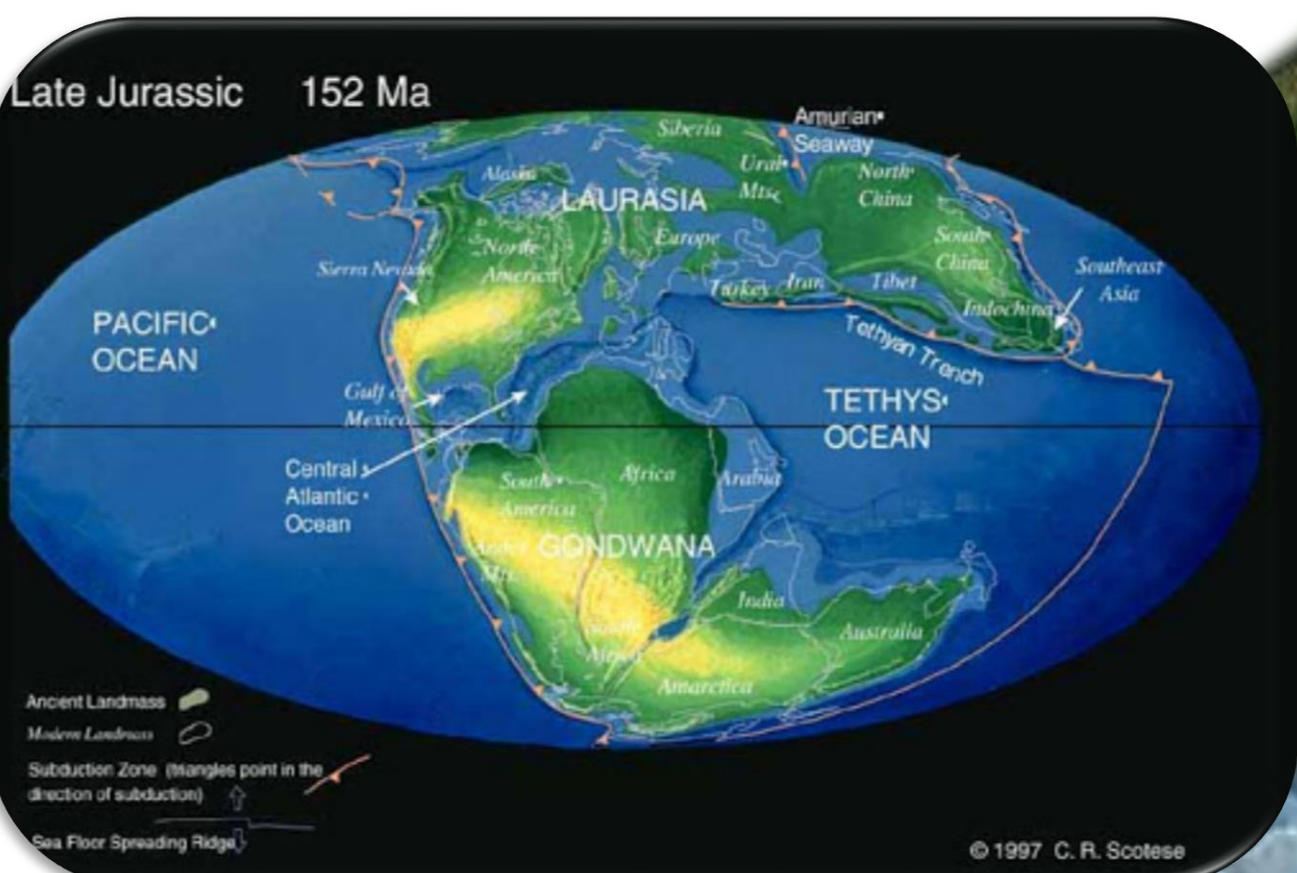
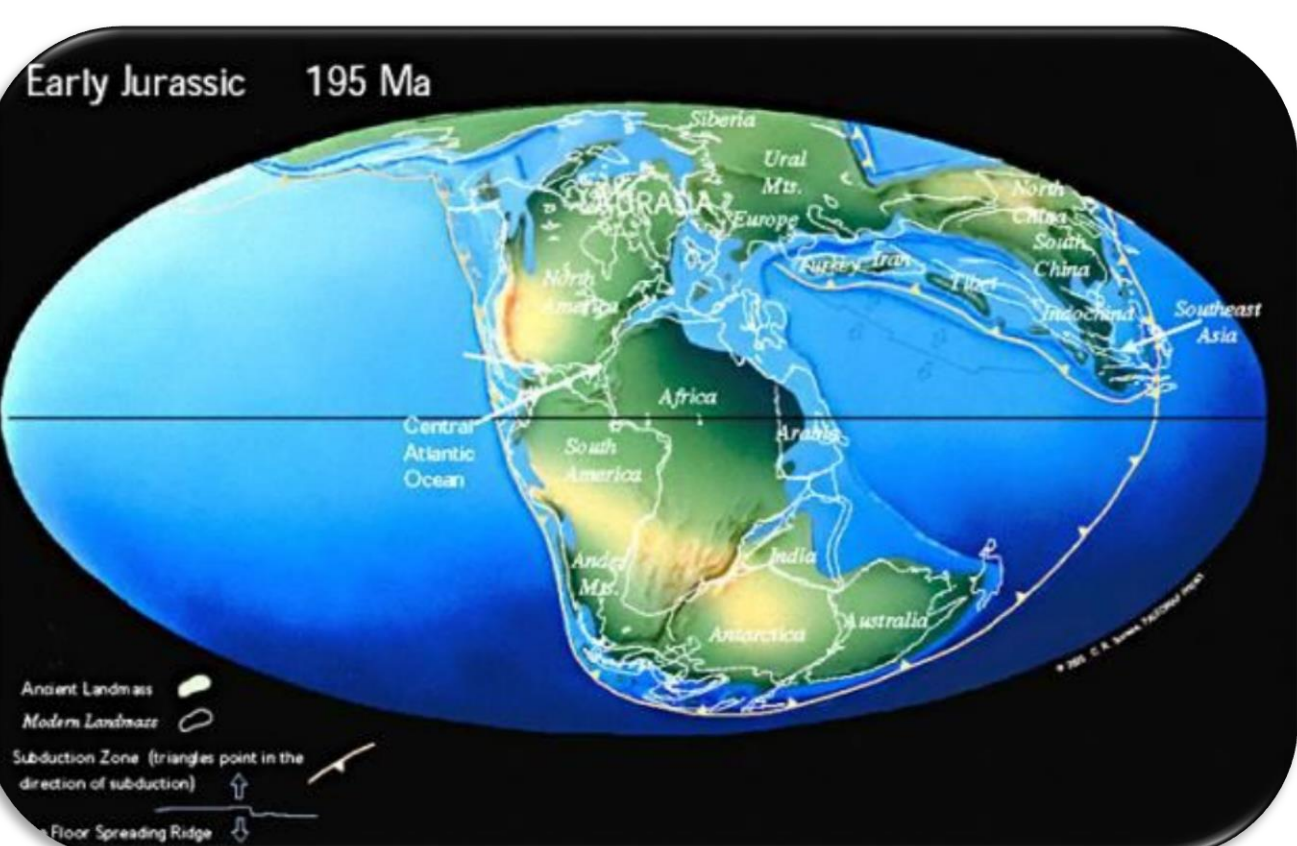
The Aspiring Atlantic Geopark project aims at inventorying, assessing, preserving, valorizing and monitoring those places of the Lusitanian Basin which represent the major milestones of the long history of the Atlantic, and use those geosites as a tool to promote the public understanding of the complex dynamics of the oceans within an application to the UNESCO Global Geoparks Program.

UNESCO Global Geoparks are single, unified geographical areas where sites and landscapes of international geological significance are managed with a holistic concept of protection, education and sustainable development. UNESCO Global Geoparks empower local communities and give them the opportunity to develop cohesive partnerships with the common goal of promoting the area's significant geological processes, features, periods of time, historical themes linked to geology, or outstanding geological beauty.

The Aspiring Atlantic Geopark corresponds to a bottom-up approach of combining conservation with sustainable development while involving local communities of six municipalities located in central Portugal: Figueira da Foz, Montemor-o-Velho, Cantanhede, Mira, Mealhada and Penacova. And it is in this territory that it is possible to learn about 500 million years of geo-history of the Western Iberian Margin and to understand the long life of the Atlantic Ocean. Such knowledge is critical in supporting appropriate decisions about its future.



The history of the Atlantic opening is recorded on the sea bottom and on its conjugate margins. However, only a few places are presently onshore and accessible to allow deciphering the different geological features that have been preserved on the rocks. They are located in the Lusitanian Basin, which results from the opening of the North Atlantic Ocean due to Mesozoic extension. This rift basin is located on both the mainland and continental shelf of the west-central coast of Portugal. Its onshore record provides highly representative outcrops mainly on the western coast, in sloping cliffs of fossiliferous sedimentary rocks, from which we can enjoy magnificent sunsets.



The Proto-Atlantic sea was born some 180 million years ago, i.e. it was during the Early Jurassic when the continents that formed from the breakup of the ancestral supercontinent, Pangaea, were being drifted apart by the process of seafloor spreading. During the Late Jurassic, when the oceanic crust appears, it became an ocean.

And since then, the North American and Eurasian Plates are moving away from each other along the line of the Mid Atlantic Ridge. The Ridge extends into the South Atlantic Ocean, which opened later, around 140 million years ago, as Africa separated from South America.

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