# National Policy for Earthquake Risk Reduction in Greece
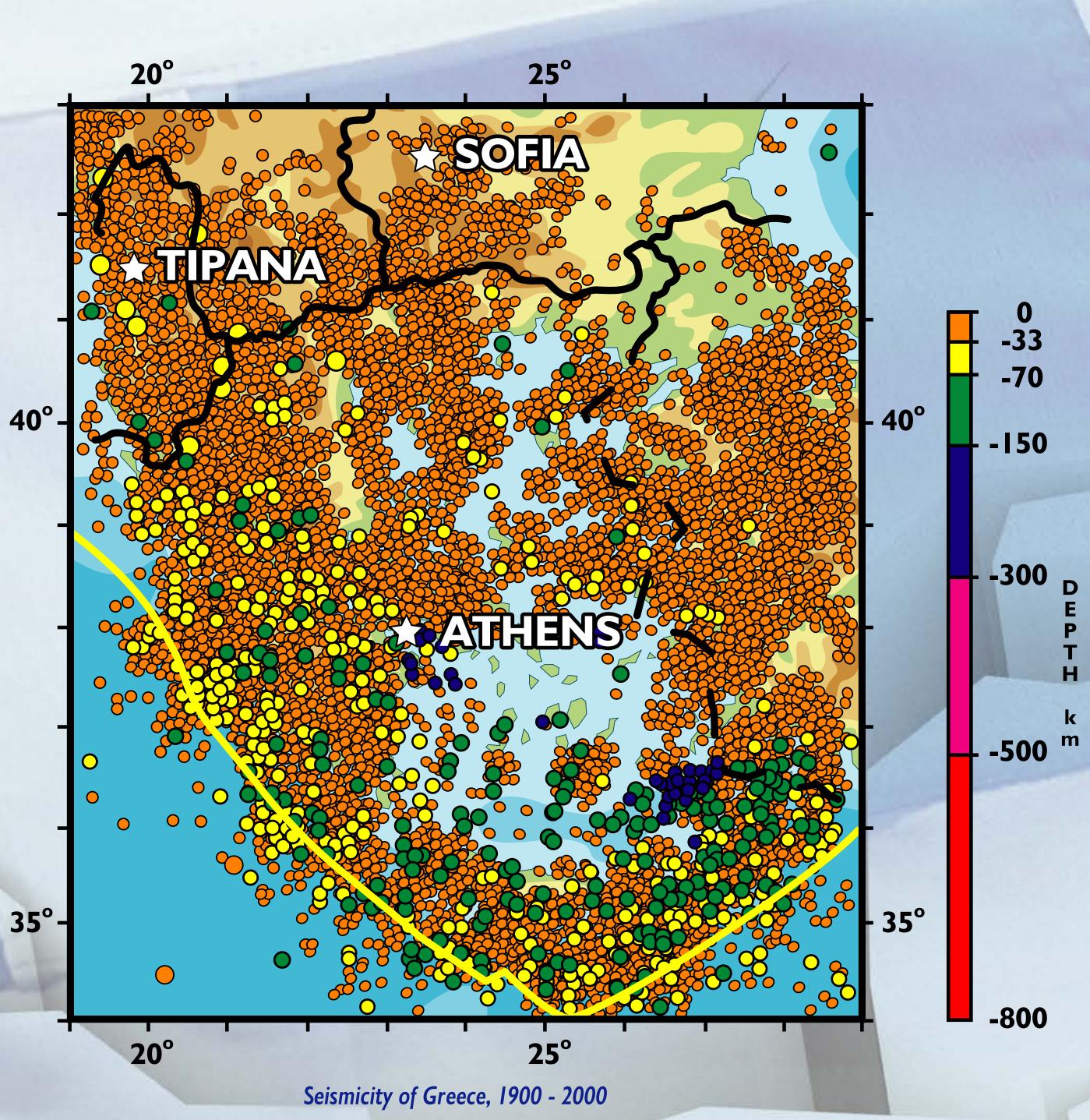
The seismicity of Greece is the highest in Europe and the 6th globally. Earthquakes seem to be distributed almost everywhere in the country whereas the scientific observation indicates that earthquakes are located in specific areas. These areas are related to major geotectonic structures, such as the subduction zone of the two large plates, the Eurasian and the African one, and the North Anatolian fault zone. Although earthquakes do not occur in every part of Greece, the truth is that there is no area that hasn't experienced an earthquake with intensity V in Modified Mercalli Scale in the last 50 years. In other words, earthquake's effects are present in every part of the country. In addition, the volcanic hazard is present in Greece due to the active volcanic arc in south Aegean which is a common structure in subduction zones.

## Lessons from recent earthquakes

The cases of Thessaloniki (1978) and Alkionides (1981) Earthquakes, which stroke the two most populated cities of Greece, introduced the need to identify and map the seismic faults of Greece and to develop probabilistic models by combining historical and instrumental data, for potential reactivation of the most important faults identified.

Detailed seismotectonic maps were thus produced for many areas that host the largest or most touristic towns in Greece and for largest territories like the northern Aegean, whereas a complete map of active faults of Greece has been produced. Such detailed studies not only contribute to the better understanding of the seismotectonic regime of Greece and the potential risks, but also help for the safer and better town planning.
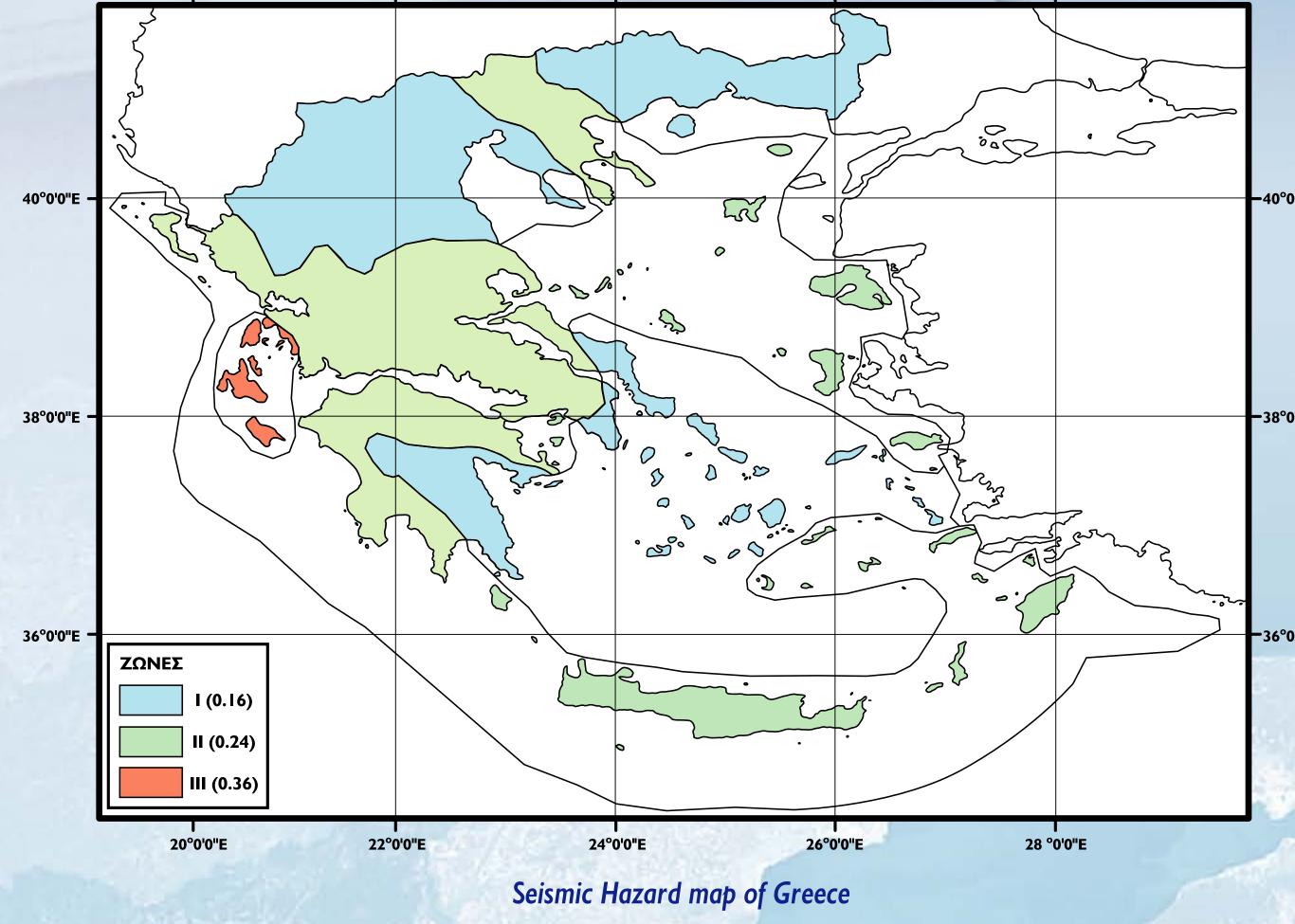


*Seismicity of Greece, 1900 - 2000*

## Earthquake Risk Reduction National Policy

The framework of the National Policy for Earthquake Risk Reduction is being processed and planned by **Earthquake Planning and Protection Organization (E.P.P.O.)** which is the competent authority in Greece. Since its foundation in 1983, E.P.P.O. has contributed substantially towards the formulation of the national earthquake policy and consequently the reduction of seismic risk.

E.P.P.O. is providing information to the State Authorities by given the official notification regarding seismic risk. For this reason, the E.P.P.O. supports the development and the modernization of the National Network of Seismographs, the National Accelerographic Network and the GPS Network, the publi-cation of the Neotectonic Maps of Greece (sc. 1:100000), etc.

## Improving the seismic capacity of structures

The Seismic Hazard map of Greece is a result of the active faulting and the seismicity of the country that is continuously reassessed every time a strong EQ happens. According to this map, Greece is divided into three seismic hazard zones I, II, an III. The Seismic Hazard Map is part of the Greek Seismic Design Code (EAK-2000) - National Law (YA D17a/115/9/FN275/12-08-2003, Gov. Gaz. B'/1154). The values of the ground seismic accelerations are estimated to have a 10% probability of exceedance in 50 years according to the seismological data. According to this Law, improvements are made for the earthquake resistant construction of buildings and other infrastructure projects which are the major factors for the protection of citizens' life and properties in the case of an earthquake.



*Seismic Hazard map of Greece*

## Raising public awareness and educating the population

One of the main targets of earthquake policy in Greece is to build up a culture of safety and resilience at all levels, in order to reduce the consequences in case of earthquake.

The aim of public awareness and the relevant education projects is to promote informed, alert and self-reliant citizens and communities.

The last decades numerous efforts have been made in Greece towards the familiarization, information and education of different target groups (teachers, students, volunteers, officers, tourists, people with disabilities etc.) on seismic protection issues.