

DESIGNING AN ELECTRONIC ATLAS OF WORLD ENVIRONMENTAL DISASTERS

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The aim of this paper is the creation of an Atlas of world environmental disasters in order to depict various environmental disasters and analyse their consequences. An integrated and systematic cartographic documentation of the world's environmental disasters forms, as it is well known to cartographers, a great scientific step for every Atlas-cartographer.

Environmental disasters express the outcome of an occurring risk that exists in nature and which directly affect humans. Hazards and disasters can result in human victims, serious economic losses as well as environmental degradation. The potential for a hazard to become a disaster mainly depends on the society's capacity and promptitude to respond in case of emergency. This is the reason for 90% of environmental disasters, which respond to 95% of related deaths, account in developing countries. One of the basic categories of environmental disasters is natural disasters.

There are two types of natural hazards: hydrometeorological hazards and geophysical hazards. The first ones refer to storms, forest fires, floods, water scarcity and drought (WSD) and extreme temperature events, while the second ones to earthquakes, volcanic eruptions, landslides, avalanches and tsunamis. Both the types consist the main thematic layers of this atlas.

All the phenomena mentioned above set human health and even human life at risk. Although, some of them (floods, extreme temperatures, storms, volcanic eruptions) may become nowadays predictable due to technological development, it is extremely difficult to completely avoid their occurrence.

On the other hand, there are some phenomena (earthquakes, landslides, tsunamis, and fires), that occur without warning.

It is generally observed that when nature decides to show its negative side, it does so in the worst way. It is extremely crucial for humanity to answer the following questions:

Whether and to what extend natural disasters affect humans?

How the occurrence of natural disasters can be geographically and diachronically depicted?

What is their impact to physical environment?

How can they be addressed?

Visualisation issues both for the electronic variant and the hard-copy counterpart of this new Atlas is the core idea of this study and innovative tests concerning the visual treatment and some new design of symbols, pictograms and other means of thematic symbolic representation are suggested. Special attention is also attributed to the coupling of the electronic and the hard-copy versions of the Atlas.

KEY WORDS:

Atlas, Thematic Cartography, Environment, Geovisualization, Map design, Environmental Disasters.