

A PROJECTED HISTORY OF SENSING TECHNOLOGY FOR EARTH KINETICS

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The paper will give an overview of the history and development of methods and instruments for monitoring and quantifying shocks and vibrations in the ground. The trends from the fields of military explosions, earthquakes, blast excavations/mines/tunnels and vibrations from traffic, industry etc. will be followed. The history will start at the ancient "passive observational" methods used primarily for earthquakes, go through the introduction and evolution of mechanical and electronical instruments and finally discuss our present "digital revolution". We will try to look back and extract the important lessons to learn from the past, and critically review the situation today. We will further in, to summarize the needs we see for the future, and discuss what may be practical to achieve with present and foreseeable future technology.