

# **New Seismicity Map for Central Part of Saudi Arabia**

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Riyadh city and central part of Saudi Arabia are located in the Arabian Plat which is known as a relativity stable platform. However, we have been able to determine some events that were caused by local faults. In addition, we have been able to record some regional Earthquakes that cussed by tectonic movements. Most of these local events are not felt. The Institute of Astronomy and Geophysics Research at King Abdulaziz City for Science and Technology installed nine earthquake portable stations in central part of Saudi Arabia around Riyadh city to record local and micro- seismicity events. We are using digital recorders (RefTek 72A) for data acquisition, and SAISAN, HY-POINVERSE software for analyses. Currently, I am using different types of velocity models, and I am developing a map that shows some micro-earthquake events for that region. In addition, it includes some regional events. The objective of this study is to define the active faults in central part of Saudi Arabia, and this study will not only yield additional information regarding the tectonic setting, but also revised hazard assessments for the region.