RELOCATION OF EARTHQUAKES IN PAKISTAN USING BROAD BAND STATIONS

Shafiq-Ur-Rehman¹, Tahir Azeem¹, Abd El-Aal A.K²

 ¹ National Seismic Monitoring Center, Pakistan Meteorological Department, Islamabad, Pakistan:<u>srltp@yahoo.com</u>
² National Research Institute of Astronomy and Geophysics, Helwan, Cairo, Egypt, e-mails: <u>dewaky@nriag.sci.eg</u> or <u>dewaky@yahoo.com</u>

ABSTRACT: Analysis of seismicity in Pakistan is essential for the precise estimation of Hazard. Present study was carried out for relocation of earthquakes having Magnitude \geq 5.0 recorded in and around the Pakistan during the year 2009. The digital broadband data was collected from National Seismic Monitoring Center (NSMC) of Pakistan Meteorological Department (PMD) and Incorporated Research Institutions for Seismology (IRIS). Grid Search Method (GSM) and Modified Joint hypocenter determination (MJHD) is used for relocation. Further, focal mechanism solutions were applied for this study to pin point the epicentral location and nature of faulting. These techniques enable to relate the fault and corresponding seismicity.