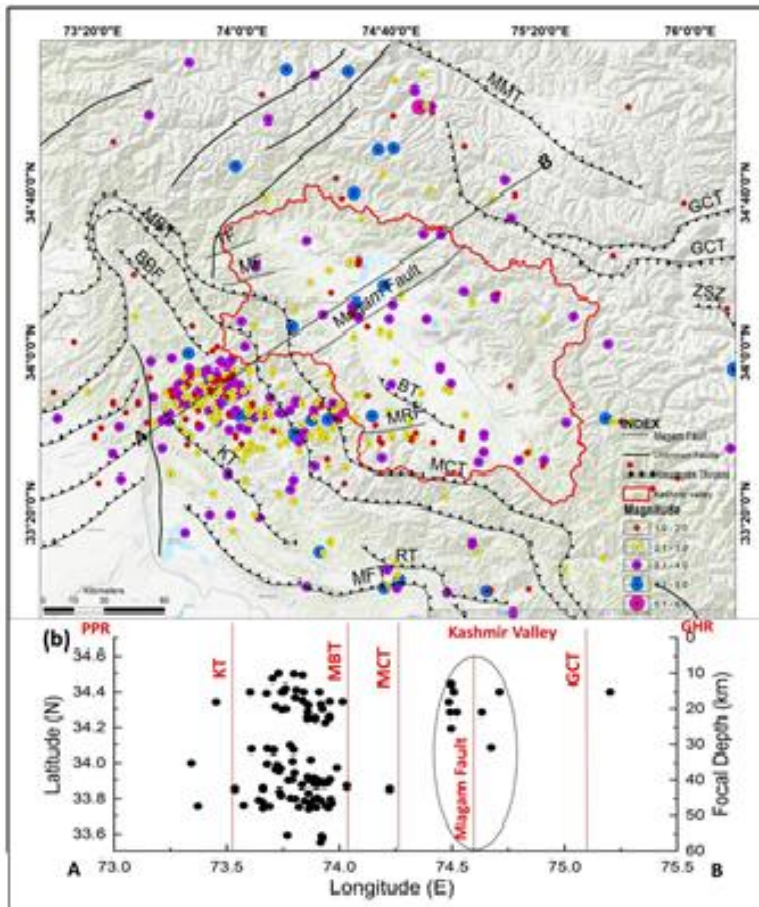
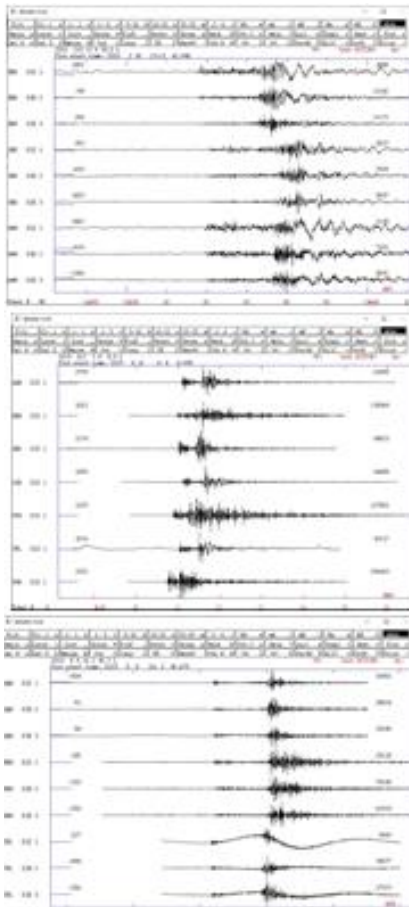


# BROADBAND SEISMOMETERS AND STRONG MOTION ACCELERATOR (SMA)



The **Broadband Seismometer and SMA** facility, established in 2017 at the Department of Earth Sciences, represents a pioneering effort in earthquake research within the Kashmir Valley. Both the instruments record low as well as high magnitude earthquakes at high resolution. Supported by the Ministry of Earth Sciences, Government of India, this state-of-the-art instrument facility was made possible through the visionary leadership of Prof. Bikram Singh Bali, serving as the Principal Investigator of the project titled "Seismic Hazard Assessment of Kashmir Himalayas using Geological, Seismological, and Geophysical Data". Equipped with cutting-edge instruments, this facility opens up a multitude of avenues for studying seismic activity in the region. From investigating active faults to comprehensively analysing earthquakes and understanding crustal dynamics, the facility plays a pivotal role in advancing seismic hazard assessment studies. Spanning across the Kashmir Valley, the facility boasts sixteen continuous Broadband and four SMA stations strategically positioned to capture vital seismic data. With a remarkable data capture rate of 15-second intervals, these stations provide an uninterrupted stream of information essential for in-depth analysis and forecasting. By leveraging this comprehensive network of instruments, researchers can delve deeper into the complexities of seismic activity, paving the way for enhanced understanding, preparedness, and mitigation strategies in earthquake-prone regions like Kashmir basin.