

Preliminary result of local site effect effect study at bandung using H/V spectral ration of microtremors / Mohammad Ridwan

Ridwan, Mohamad, author

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=20486726&lokasi=lokal>

Abstrak

ABSTRAK

Study of seismic microzonation for a city scale is a part the comprehensive study of seismic risk assessment that consist of analysis of seismic hazard and vulnerability of building structures. This study will be focused on identifying local site effect resulting by microtremor method using from H/V spectral ratio that was proposed by Nakamura (1989). microtremor data acquisition were conducted at 42 sites that covered the study area with interval 1-2 km. The geological background of Bandung shows that this area is located in the ancient lake basin that consist of quarter sediment which is the thickness increases toward the South. According to the result of microtremors analysis at entire observation sites, the natural periods of ground surface show generally longer toward the south (0.5-0.75 sec) while in Northern part is about 01-03 s. it was strongly correspond to the thickness and hardness of sediment. the implication of this feature, the Southern part of Bandung that has longest period of ground will give high amplification during earthquake and certainly may have severe effect on long period of structure in that location.