



Analyze the vibration of pier through added mass method

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Although our country, Taiwan rains a lot, spatial and temporal distribution is uneven. In addition, the slope of rivers is steep, and the surface runoff is rushed into ocean quickly. Because of these conditions, Taiwan is lack of water. In order to avoid the water shortage, the water storage facilities become more important. Otherwise, Taiwan is located in the Ring of Fire. Due to the geographical environment, there are numerous earthquakes in Taiwan. According to these situations, this study help to combine water, pier, and earthquake and research the impact of mutual vibration of pier and water. However, the mutual vibration of pier and water is complex. To simplify the problem, use the added mass method in this study. In this study, make water be the added mass of pier and affect the vibration of pier.