

Temporal Changes of Residential Areas in The Past Hundred Years of Tai-jiang Region of Tainan, Taiwan

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Abstract: Tai-jiang region used to be a large lagoon in the southwest of Taiwan more than 300 years ago. This region refers to Tai-jiang Inner Sea, Tainan. The inner sea and wetland were everywhere so that this place was uninhabitable at that time. However, in 1832, a heavy rain made Tsenwen river basin changed that caused Tai-jiang Inner Sea becoming land gradually. And this also attracted nearby residents to relocate and started to cultivate here. The motivation of this study is to understand the temporal changes of residential areas in the past. The study is based on the investigation of the historical literature, topographic maps, and aerial images. All spatial/temporal data extracted from historical documents will be registered onto the contemporary coordinate system for analysis. The use of historical literature, such as historical records, local history, official documents that interpreted the historical event and phenomena through the description of words about humanities. This may help us link the human activities to the spatial information in the past. Since 1905, there were fine topographic map measured officially. Old maps recorded the geographic information that we can understand the development of residential areas in the past. Aerial images acquired in the past decades directly witness the historical landscape environment of a covered region that showed abundant historical phenomena related to natural resource and cultural changes. These two data sources may reveal a lot of precious spatial/temporal information. This paper covers the overall information we discovered from the historical documents.

Keywords: Temporal Changes, Spatial/Temporal, Residential Areas, Historical Documents, Tai-jiang