

**THE EVALUATION OF LAND SUBSIDENCE OF SURABAYA FROM  
GLOBAL POSITIONING SYSTEM MEASUREMENT USING GAMIT/GLOBK**

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**ABSTRACT**

*Land Subsidence is the main problem facing big cities such as Jakarta, Semarang, and Bandung. The Growth of the city influenced the land subsidence, beside tectonism, compaction and land consolidation. The centre of trades, bussiness, entertaintments and residences are growing fast in the cities such as Jakarta (Djaja,et al,2004), Semarang (Abidin,et al,2010), and Bandung (Abidin,et al,2006). This may caused the land subsidence.(Abidin,et al.2010)*

*Land subsidence data observation are obtained to know the trend of geometrics and physical pattern happened. The Global Positioning System technology provide 3 dimention position information related accurately, since the observation using the rights method. The research provide early information about rate of land subsidence, the highest rate - 2,792cm/year, lowest rate -0,322cm/year, and average rate -1,21cm/tahun.*

*The geometric model from this research are early model about the land subsidence of Surabaya.*

**Key Word : Land Subsidence, Global Positioning System, Rate**