

**GEOLOGICAL AND STUDY OF TSUNAMI RISK
REGION BAJULMATI AND SURROUNDING AREA
DISTRICT GEDANGAN, REGENCY MALANG
PROVINCE OF EAST JAVA**

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ABSTRACT

The study area lies in the southern region of Malang, administratively included in Bajulmati and the surrounding region, Gedangan subdistrict, Malang, East Java. Geographically located at coordinates 670 015 mT - 675 015 mT and mU 9,074,351 - 9,069,351 mU with an area of 108 km² (9 km x 12 km), which includes the village of Tumpakrejo, Sindurejo, Gajahrejo, Sidodadi and Sitarjo which has a scale of 1: 25,000

In geomorphic, the study area was divided into five units formed of origin, namely the formation of the origin of Structural consists of sub-units of geomorphic hills homoklin (S21) and escarpment fault (S22), the primary forms Fluvial composed of sub-units of geomorphic body streams (F1) and alluvial plains (F2), the primary forms Karst is composed of sub-units of geomorphic karst (K1) and the slopes of karst (K2), the original form Volcanic consists of sub-units of geomorphic hill intrusion (V1) and the original form Marin consists of a sub-unit of geomorphic shoreline (M1) ,

Stratigraphically carefully situations region is divided into five units namely Unit tuff rock Mandalika old Kala Late Oligocene - Early Miocene, Unit Andesite intrusion old Kala Late Oligocene - Early Miocene. Wonosari old limestone unit Kala Middle Miocene - Late Miocene. Unit alluvial deposits and coastal sediment old unit Kala Holocene. Geological structures carefully situations that develop in the area reverse fault and fault horizontal Sindurejo Wonogoro.

Regional tsunami threat is divided into three levels, namely low levels with a total area of 87.84 Ha covers an area Banjarsari, Ardimulyo, Swamp, Kedungrampal and Rawa, moderate with a total area of 153.99 hectares covering area Banjarsari, Kedungrampal and Swamp and a high level with total area of 193.41 hectares of high threat levels along the southern coast particularly Bajulmati area. Carefully situations in areas of risk the danger lies in a sloping area near the beach more to the north increasingly safe from the risk of a tsunami. For the area of tsunami hazard high level ie total 149.22 Ha village dominated by Bajulmati and Kedungrampal, was 198.36 Ha village is dominated by swamps and low Bajulmati and 80.64 Ha village dominated by Bajulmati, Banjarsari and Rawa.