

**KORELASI INDEKS IKLIM GLOBAL DENGAN CURAH HUJAN DAN
KEJADIAN LONGSOR DI KABUPATEN BANJARNEGARA –
JAWA TENGAH**

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INTISARI

Penelitian ini bertujuan untuk menganalisa keterkaitan antara indeks iklim global, curah hujan dan kejadian longsor yang terjadi di Kabupaten Banjarnegara, Jawa Tengah. Pemilihan lokasi di Kabupaten Banjarnegara didasarkan pada potensi bencana longsor yang terjadi di wilayah tersebut. Data indeks iklim global yang diwakili oleh data SOI diperoleh dari *Bureau of Meteorology* (BOM), Australia dan SST diperoleh dari *National Oceanic and Atmospheric Administration* (NOAA), USA, sedangkan data curah hujan bulanan diperoleh dari Balai Pengkajian Teknologi Pertanian (BPTP) Jawa Tengah. Hasil penelitian menunjukkan bahwa ada keterkaitan antara indeks iklim global dengan curah hujan di Kabupaten Banjarnegara. Berdasarkan data curah hujan pada saat kejadian longsor di Kabupaten Banjarnegara didapatkan persamaan empirik ambang hujan yaitu $I=109,29D^{-0,491}$. Dengan keterkaitan indeks iklim global dengan curah hujan serta persamaan empirik ambang hujan dapat diperoleh perkiraan terjadinya bencana longsor. Hasil ini diharapkan bisa sebagai *early warning system* (EWS) di Kabupaten Banjarnegara.

Kata kunci : indeks iklim global, curah hujan, longsor

***CORRELATION OF GLOBAL CLIMATE INDEX WITH RAINFALL AND
LANDSLIDES IN BANJARNEGARA DISTRICT –
CENTRAL JAVA***

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ABSTRACT

Main purpose of the research is to analyze the correlation between global climate index, rainfall and landslides in Banjarnegara district, Central Java. Selection of Banjarnegara district as site of research is based on the susceptibility of landslides. Global climate index data was represented by the data of SOI which was obtained from the *Bureau of Meteorology* (BOM), Australia and SST was obtained from the *National Oceanic and Atmospheric Administration* (NOAA), USA, while the monthly rainfall data was obtained from the Agricultural Technology Assessment Institute (BPTP) of Central Java. The results revealed that there was a relationship between global climate index with rainfall in Banjarnegara district. The empirical equation of rain threshold was established $I=109,29D^{-0,491}$. Based on the relationship of global climate index with rainfall and empirical equation of rain threshold, the occurrences of landslides can then be estimated. This result could be used as one of method for early warning system (EWS) for landslide disaster in Banjarnegara.

Keywords: global climate index, rainfall, landslides