



MONOGRAF

ANALISA PENYEBARAN VIRUS COVID-19 DI KALIMANTAN TIMUR, INDONESIA

MENGGUNAKAN UJI KORELASI DAN PERMODELAN BERBASIS GIS

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Dr. Bambang Irawan, M.Si



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Analisa penyebaran virus Covid-19 di Kalimantan Timur, Indonesia menggunakan uji korelasi dan permodelan berbasis GIS

Dr. Bambang Irawan, M.Si



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BAB I

PENDAHULUAN

Penyakit Coronavirus (Covid-19) merupakan masalah kesehatan dunia akibat pesatnya penyakit yang pertama kali dilaporkan di Wuhan, Provinsi Hubei, China pada Desember 2019 (Wu & McGoogan, 2020). Tahun 2020 dipastikan Covid-19 menyebar dengan cepat ke seluruh dunia yang pada 11 Maret 2020 Organisasi Kesehatan Dunia (WHO) menyatakan Covid-19 sebagai pandemi global. Pandemi ini telah menggoyahkan beberapa sektor: fasilitas kesehatan [2-3]. Selain itu, banyak dampak yang ditimbulkan dari pandemi ini seperti: kesehatan mental [4-5], pekerjaan [6-7], pendidikan (Ceesay, 2021; Chang et al., 2021; Mukuka et al., 2021) sektor energi (Hartono et al., 2021; Hoang et al., 2021; Si et al., 2021) dan agama [14-15]. Hingga 17 Juni 2021, Indonesia khususnya Kalimantan Timur telah mengkonfirmasi 73.218 infeksi dan 1758 kematian.

BAB V

PENUTUP

Penelitian ini dilakukan di Kalimantan Timur, Indonesia yang dimulai pada tanggal 17 Juni sampai dengan 18 Juli 2021. Hubungan antara kepadatan penduduk dengan kasus mingguan penyebaran Covid-19 di Kalimantan Timur dijelaskan dengan menggunakan Statistical Product and Service Solution (SPSS) dengan hasil Nilai R dalam penelitian ini adalah 0,682. Sedangkan nilai R^2 yang diperoleh 0,465 menunjukkan kepadatan penduduk mampu menggambarkan lebih dari 46,5% penyebaran Covid-19 di Kaltim. Selanjutnya hasil uji korelasi menunjukkan bahwa kepadatan penduduk berdampak korelasi sedang terhadap angka kejadian kasus mingguan Covid-19 di Kalimantan Timur. Area pemetaan tingkat kejadian dengan GIS yang dalam artikel ini menggunakan 3 tingkatan: tinggi, sedang, dan rendah. Selama satu bulan, analisis GIS diidentifikasi bahwa tingkat tinggi ditempati oleh Kutai Timur, Kutai Kertanegara, Bontang, Samarinda, dan

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