## Evidencia Subida de Paper

Estudiante Yhack Bryan Aycaya Paco Docente Dr. Fred Torres Cruz Curso Estadística Espacial

Institución Universidad Nacional del Altiplano (UNA PUNO)

Link: https://t1jack.github.io/

## Subida de Paper

## **Submission Summary** The 2nd International Symposium on Green Technologies and Applications Paper ID Paper Title Spatio-Temporal Modeling of Agricultural Patterns in Peru Using Cox Processes: An Approach Based on ENA 2022-2024 This study models agricultural patterns in Peru using Log-Gaussian Cox Processes (LGCP) with data from the National Agricultural Survey (ENA) 2022-2024. The objective was to analyze the spatio-temporal distribution of 174,040 agricultural events, considering covariates such as water source and land area The methodology included intensity estimation via kernel smoothing ( $\sigma$ = 0.0009) and LGCP modeling with exponential covariance. Results revealed significant clustering (L(r) > 0 for r < 1.0°), with higher intensity in the Sierra (524 points/unit²) compared to the Coast (194) and Jungle (168). The LGCP model yielded significant coefficients ( $\beta_0$ = 6.8006, $\beta_1$ = -0.3957, $\beta_2$ = -0.7300, p < 0.001, AIC = -810,737), but low explained variance (R2 = 0.0535). It is concluded that LGCPs are effective for identifying agricultural patterns, recommending the integration of climatic and satellite data to enhance sustainable agricultural Created 19/10/2025, 9:48:11 p.m. Last Modified 19/10/2025, 9:48:11 p.m Yhack Aycaya Paco (Universidad Nacional del Altiplano) <yaycaya@est.unap.edu.pe> Authors Submission Files PAPER.pdf (1.5 Mb, 19/10/2025, 9:46:14 p.m.) Back to Author Console Edit Submission

Figura 1: Resumen de Subida

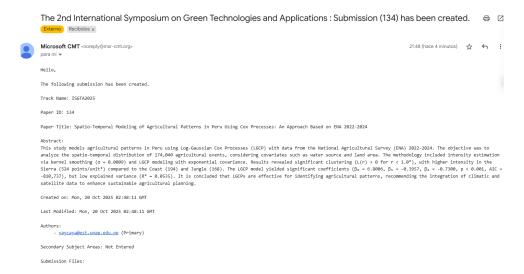


Figura 2: Acuse de recibo