■ FINAL INTERPRETATION OF RESULTS

WILDFIRE AREA VS. DISTANCE TO NEAREST FIRE STATION – SAN DIEGO COUNTY (2017)

This analysis explored whether greater distance from fire stations correlates with larger wildfire perimeters, u

■ KEY FINDINGS:
- A Pearson correlation coefficient (r) of 0.04 was calculated, with a p-value of 0.271.
- This indicates a very weak and statistically insignificant relationship between fire area and distance to the n
- In practical terms, fires farther from fire stations did not consistently burn larger areas in this 2017 dataset.

■ ADDITIONAL OBSERVATIONS:
- A majority of fire perimeters were within 500–1000 km projected distances from stations.
- The most extreme outliers (e.g., Thomas Fire) were labeled and suggest that other factors (e.g., wind, terra

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■ IMPLICATIONS:
- Emergency response planning should not rely solely on geographic distance from stations as a predictor of
- Other spatial variables — such as slope, fuel type, wind corridors, and time of ignition — likely have more e
- Nonetheless, this workflow demonstrates a robust spatial analysis pipeline combining shapefiles, projection