Southern India: Hot Spots & Clusters of Dengue Fever

44 Villages of Pennathur INDIA

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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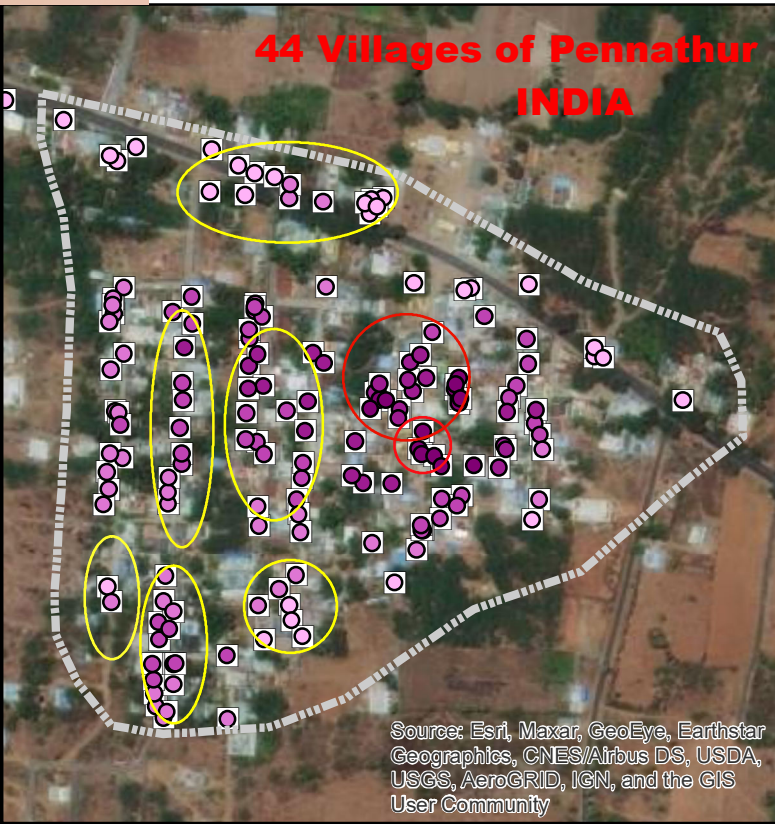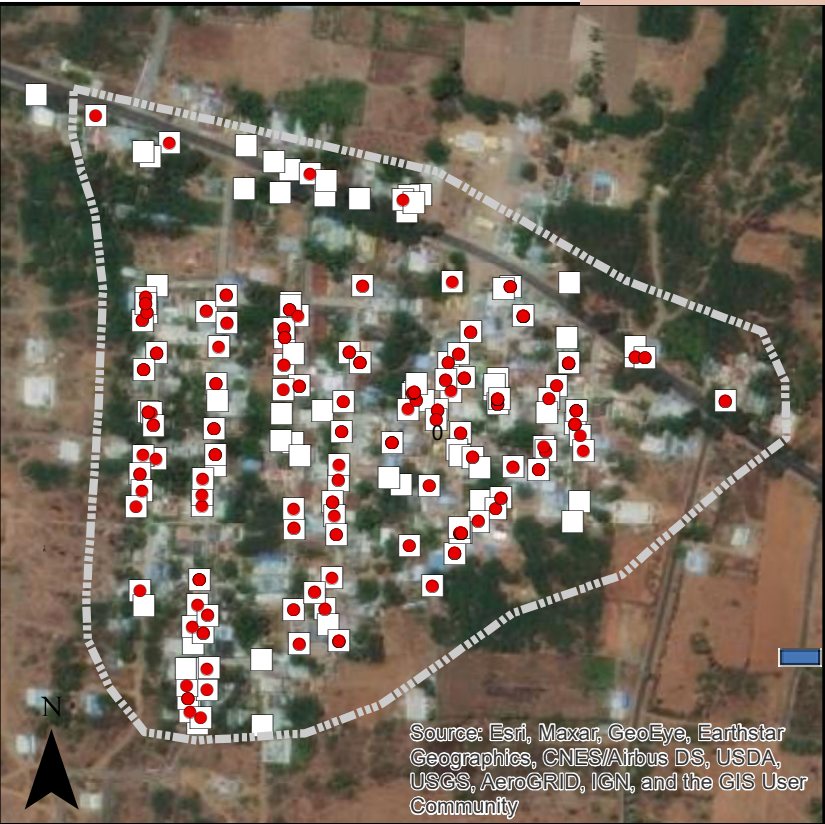
□ Individual Households

● Cases of Denague Fever

Z-score -26 displays evidence that is father down the tail of the normal curve. Indicating spatial patterns are randomly distributed. The KNN indicators show individual cases in each household.

Nearest Neighbors

- ● 2 - 10
- ● 10.01 - 16
- ● 16.01 - 22
- ● 22.01 - 30
- ● 30.01 - 38

⬭ Clusters with individual Cases Using fixed distance Hot Spots

⬭ Clustered &KNN

Average Nearest Neighbor Summary

Observed Mean Distance:	1.6652 Meters
Expected Mean Distance:	9.2749 Meters
Nearest Neighbor Ratio:	0.179535
z-score:	-26.913167
p-value:	0.000000

In the use of Spatial Statistics we analyze Dengue Fever in Pennathur Village in India.Highlighting differences of affected population using KNearest Neighbor for clustering and Hotspot analysis for using spatial patterns.The analysis of the study areas numbering 44 villages gives opportunity;protect from the disease, identify risk factors,and create strategies to interrupt patterns and trends enabling medical advancement time to find relief from the disease.