Introduction

Excavation is the most important tool in archaeological discovery. Geographical surfaces are considered the most stable material to gather information from them. If there is a relationship with the terrain, then data should become easier to understand in connection with known sites.

Historigraphically, human communities are present in areas of low steep and elevated locations, hence the assumption that more sites are in these areas. This is due to a combination of factors: accessibility, the need for water, and the availability of resources. Understanding the relationship between the terrain and the distribution of sites can be crucial.

Is there a time effect? Does the geographical layout of a site area have an effect on site locations? What is the relationship between elevation and site locations? And why are certain types of sites located where they are? Do we assume that this is true or can there be other factors? Further analysis is needed to determine if the steepness of the terrain affects site elevation or vice versa. Can we predict site elevations?

Distance of All Sites

Most of the sites are clustered in the England.

Conclusion

The steepness analysis describes the location of sites and their distance from the step. Locations within 2003 meters are assumed to be close to each other, and thus, the terrain is relatively flat. When considering the location of sites, the elevation suggests that lower elevations would have lower steepness values. Therefore, the archaeological sites would be located in areas with a higher elevation as justification for an earlier excavation.

Elevation and Steepness

The elevation and steepness are analyzed to determine the probability that sites are within the distance of 2003 meters from each other. The elevation and steepness values are then compared to the total sites to determine if there is a significant relationship.

There are 87% of the sites located at a steepness of 0 degrees. Of the 59 sites, 64% have elevations greater than 100 meters, suggesting a higher level of habitation at these sites. Although not a typical elevation value, the average value of 504 meters for the 87 sites is higher than the typical elevation of 2003 meters. However, based on the overall probability and statistics, we would expect that the lighter blue areas less than 99.89 to have lower steepness values.

The Co-Kriging prediction map, to the left, determines the probability of the elevation in relation to the steepness. Overall, it shows that the average elevation is 99.89 meters, which is considerably different from the typical elevation of 2003 meters. However, based on the overall probability and statistics, we would expect that the lighter blue areas less than 99.89 to have lower steepness values.