

Chemical analysis of pottery

A mock article for a Quarto course

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Introduction

Data were collected from archaeological sites in the UK with the research objective to investigate if a particular chemical composition of pottery discovered at various sites could be linked to a particular site. The original paper in which the data were published is to be found in TUBB, PARKER, and NICKLESS (1980).

Materials and Methods

The data were obtained by atomic absorption spectrophotometry (AAS) and the results are reported as percentages of oxides of the various chemicals.

Results and discussion

Data exploration

For a first impression of the data, a boxplot is shown for each element at each site: see Figure [1](#)

A different way of expressing the same is by using the `facet_grid` function of `ggplot`, as shown in Figure [2](#).

The data show clearly big differences in elements per site.

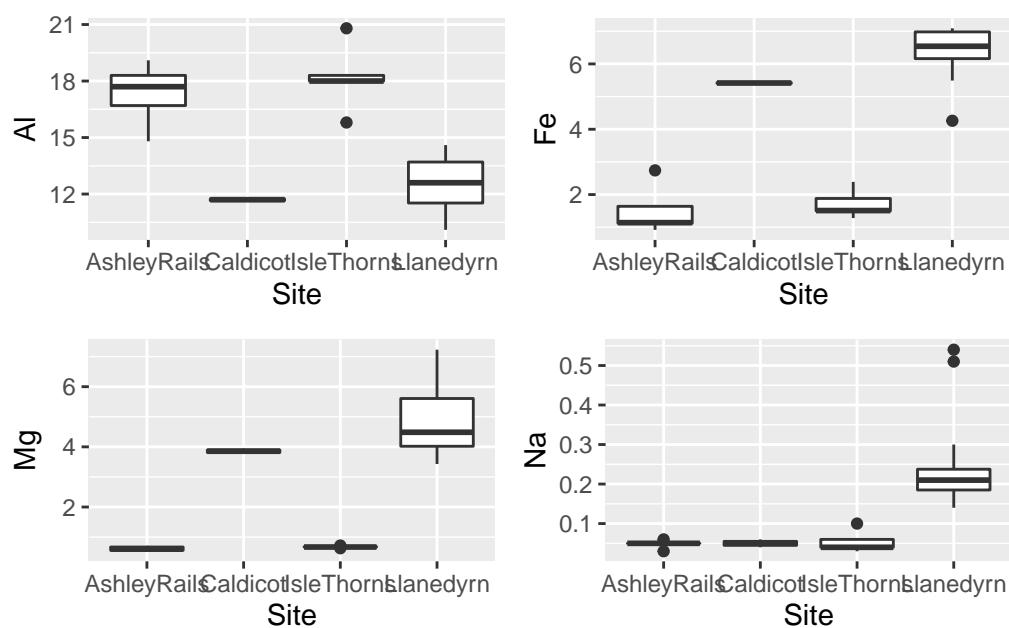


Figure 1: Boxplot of the elements per site

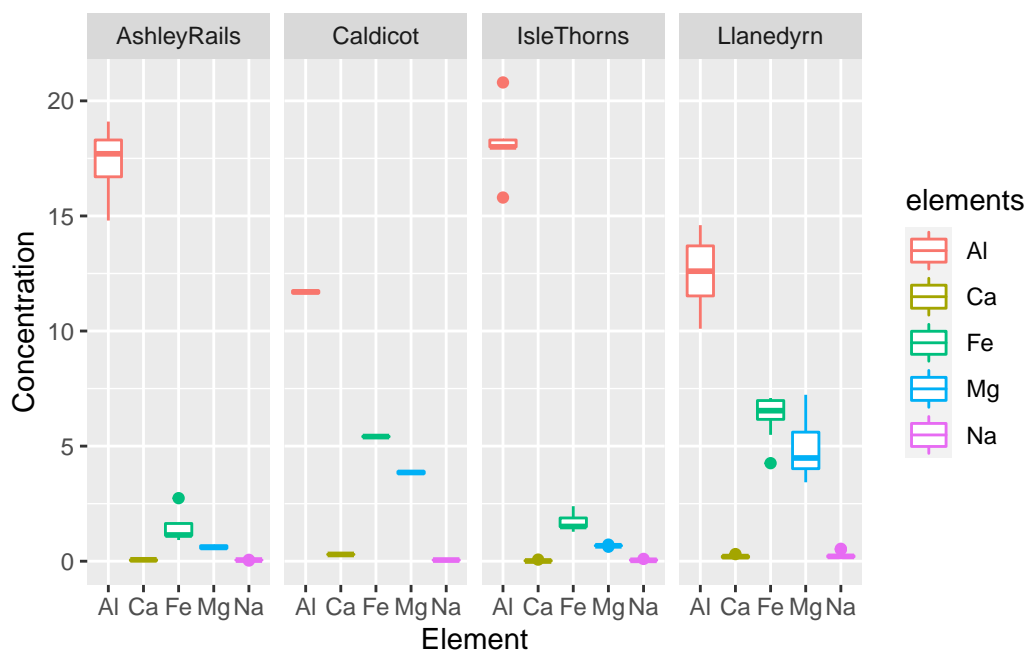


Figure 2: A faceted plot of the chemical elements in pottery per site

References

- TUBB, A., A. J. PARKER, and G. NICKLESS. 1980. "THE ANALYSIS OF ROMANO-BRITISH POTTERY BY ATOMIC ABSORPTION SPECTROPHOTOMETRY." *Archaeometry* 22 (2): 153–71. <https://doi.org/10.1111/j.1475-4754.1980.tb00939.x>.