

# **Electron backscatter diffraction analysis of zircon: A systematic assessment of match unit characteristics and pattern indexing optimization**

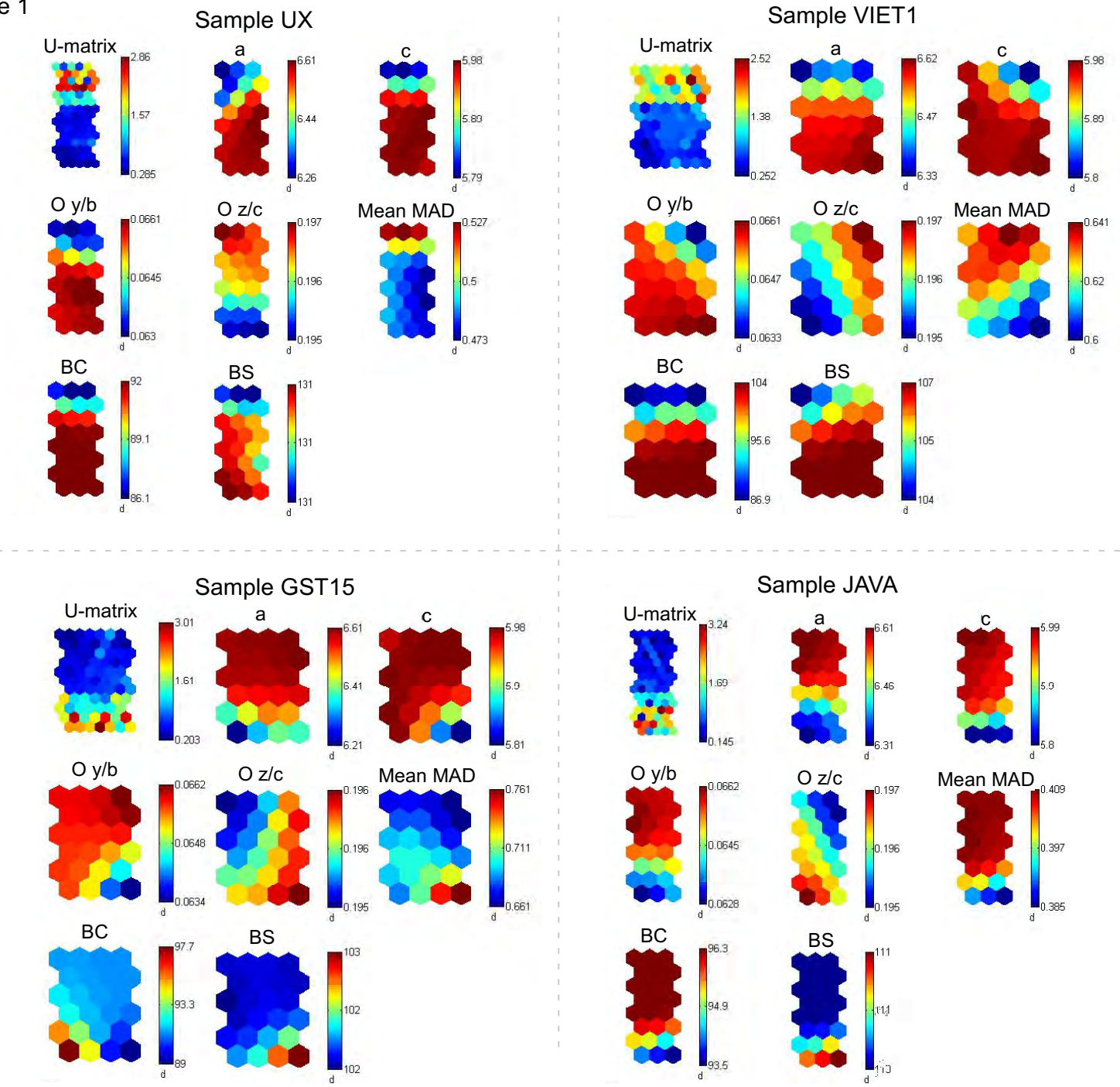
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## **Supplementary Figure Captions**

Supplementary Figure 1. Self-Organizing Map neural network for samples UX, VIET1, GST15 & JAVA, showing the unified matrix (U-matrix) and projection of selected crystallographic (a, c, Oy/b, Oz/c) and EBSD (mean MAD, BC, BS) variables onto the SOM net. The U-matrix shows the major boundaries between domains on the net. Increasing redness on the U-matrix indicates regions of major change in the net. For each sample, variables showing similar intensities of colours are correlated. Comparison of this data with that shown in Fig. 5 indicates a consistent agreement between the two principal component and SOM analyses.

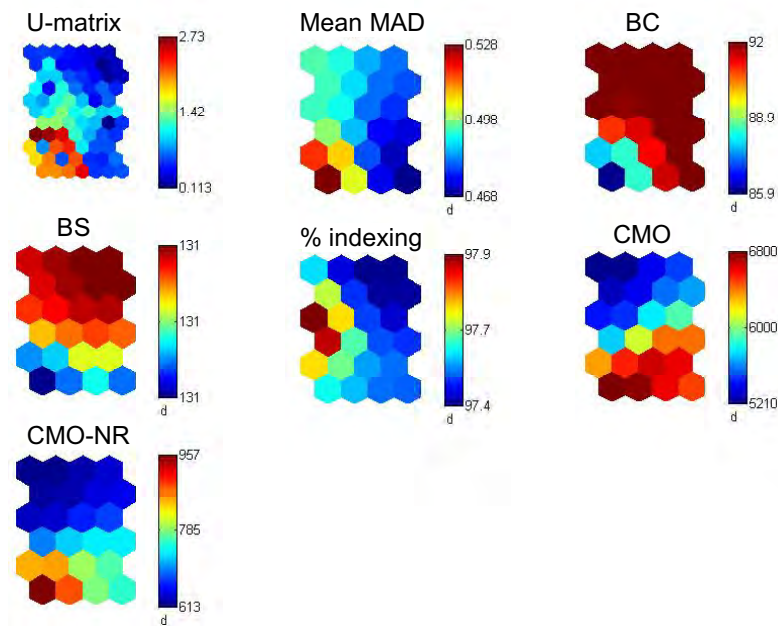
Supplementary Figure 2. Self-Organizing Map neural network for samples UX, VIET1, GST15 & JAVA, showing the unified matrix (U-matrix) and projection of EBSD variables (refer to Fig. 6 for legend) the SOM net. The U-matrix shows the major boundaries between domains on the net, associated with differences in variable correlation among the samples. For each sample, variables showing similar intensities of colors are correlated. Since it is unclear how the individual match units modify the SOM it is difficult to uniquely interpret the observed relationships between the variables without recourse to Fig. 6.

Supplementary Figure 1

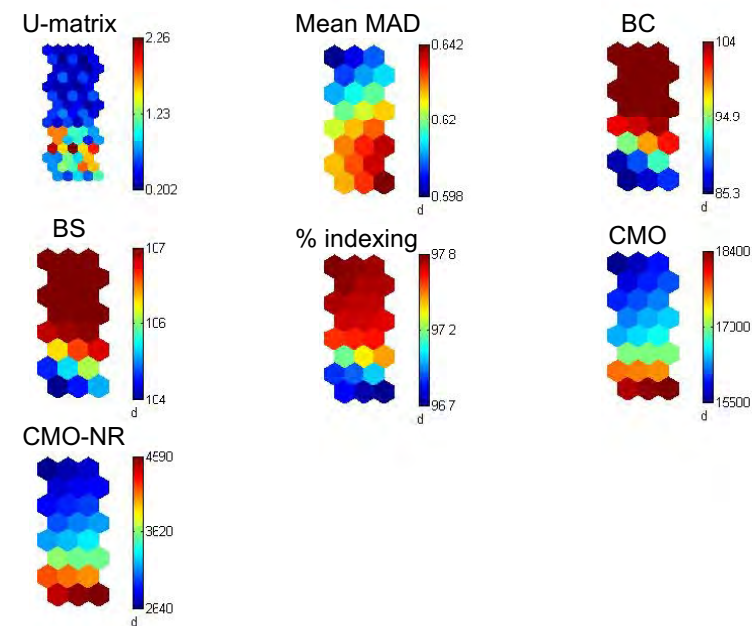


Supplementary Figure 2

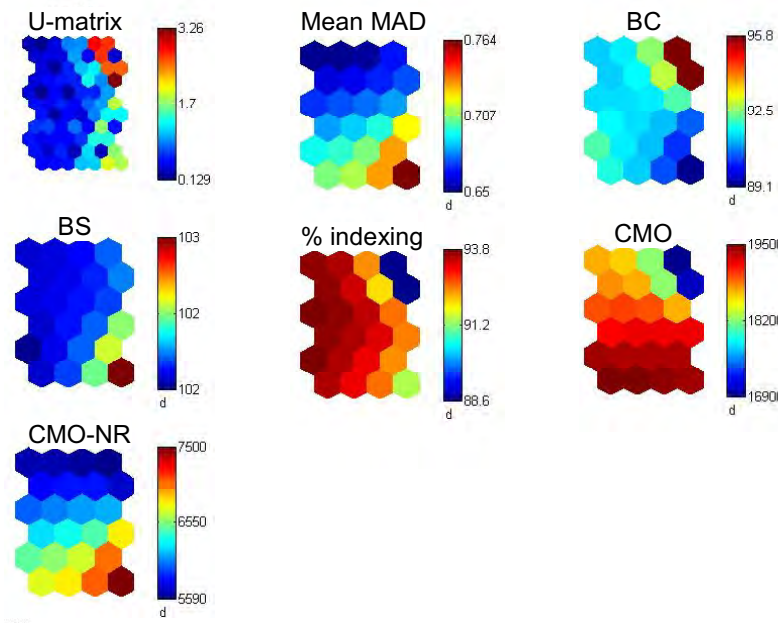
Sample UX



Sample VIET1



Sample GST15



Sample JAVA

