The figures included in this document are provided **for example purposes** only to facilitate easy understanding of the recommended edits. Please do not use these images as they are cropped and may not accurately represent the intended changes.

It is advised to implement the suggested modifications using the original figures and data visualization tools (e.g. Matlab, Origin, or R) in the context of your work to maintain a consistent template and presentation.

Diagram, timeline

Description automatically generated

**Edit text as follows for consistency:**

**Data Collection**

Water Quality Monitoring Data

Algae Alert System Data

Hydraulics and Hydrological Data

**Exploratory Data Analysis**

Checking Descriptive Statistics

Correlation Analysis

Pattern Analysis of the Self-Organizing Map

**Comparison of the classification performance of the 11 statistical machine learning algorithms for predicting dominant algae.**

|  |  |
| --- | --- |
| (a) | Chart, line chart  Description automatically generated |
| (b) | Chart, line chart  Description automatically generated |
| (c) | Chart, line chart  Description automatically generated |
| (d) | Chart, line chart  Description automatically generated |
|  | Chart, line chart  Description automatically generated |

**Figure 3.** Line graphs of average algal cell count at sampling site (a) J1, (b) J2, (c) T1, and (d) T2 from January 2017 to November 2022.

**Figure 3 Suggestion:**

To maximize space, stack the line graphs with a shared x-axis label ("Month") using a data visualization software. Increase the font size to enhance readability. Ensure consistency in y-axis ticks and values for easier comparison, as differing y-axes can cause confusion for readers. Use a single legend for all four stacked lines. Edit the word "month" to "**Month**" and "Monthly mean of cell counts(cells/mL)" to "**Average cell count (cells/mL)",** ensuring there is a space between the word and the unit in parentheses. To avoid repetition, utilize one legend for all four panels.

|  |  |  |
| --- | --- | --- |
| Chart, box and whisker chart  Description automatically generated  (a) | Chart, box and whisker chart  Description automatically generated  (b) | Chart, box and whisker chart  Description automatically generated  (c) |
| Chart, box and whisker chart  Description automatically generated  (d) | Chart, box and whisker chart  Description automatically generated  (e) | Chart, box and whisker chart  Description automatically generated  (f) |
| Chart, box and whisker chart  Description automatically generated  (g) | Chart, box and whisker chart  Description automatically generated  (k)  (h) | Chart, box and whisker chart  Description automatically generated   |  | | --- | | **Figure 3 Suggestion:**  Combine related figures into a single, comprehensive figure with clearly labeled letter captions. To maximize space, use a single, concise figure legend and minimize white space. Ensure consistency in resolution, paying close attention to width inconsistencies, such as those seen in figures n, o, and f, even when scaling is maintained.  Ensure there is a space between water quality parameters and their units:  Example: DO(mg/L) should be DO (mg/L)  Use complete names whenever possible, or follow proper abbreviation conventions:  Example: Chla should be Chlorophyll a (mg/m3) or Chl a (mg/m3)  Discharge should be Discharge Rate (cms)  Inflow should be Inflow Rate (cms)  SS should be Suspended Solids  TOC should be Total Organic Carbon  DO should be Dissolved Oxygen  Please refer to the example edited figure provided, which demonstrates how to combine related figures into a single, comprehensive figure that fits on one page with clearly labeled captions. |   (l)  (i) |
| Chart, box and whisker chart  Description automatically generated  (j) | Chart, box and whisker chart  Description automatically generated | Chart, box and whisker chart  Description automatically generated  (o) |
| Chart, box and whisker chart  Description automatically generated  (m) | Chart  Description automatically generated  (n) | Chart  Description automatically generated |
| Chart, box and whisker chart  Description automatically generated  (p) | **Sampling Site**  Chart, box and whisker chart  Description automatically generated |  |

**Figure 12.** Boxplot of water quality parameter data at the four sampling sites J1, J2, T1, and T2.

|  |
| --- |
| **Figure 12 Suggestion:**  Combine related figures into a single, comprehensive figure that fits on one page with clearly labeled letter captions. To maximize space, use a single, concise figure legend and minimize white space. Ensure consistency in resolution, paying close attention to width inconsistencies, such as those seen in figures n, o, and f, even when scaling is maintained.  Ensure there is a space between water quality parameters and their units:  Example: DO(mg/L) should be DO (mg/L)  Please refer to the example edited figure provided, which demonstrates how to combine related figures into a single, comprehensive figure that fits on one page with clearly labeled captions. |

|  |  |
| --- | --- |
| Chart, bar chart  Description automatically generated  (a)  (a) | Chart, bar chart  Description automatically generated  (b)  (b) |
| Chart  Description automatically generated  (c)  (c) | Chart  Description automatically generated  (d)  (d) |
| 1.0 0.5 0 -0.5 -1  Chart  Description automatically generated | |

**Figure 13.** Correlation matrix showing Spearman’s correlation analysis of water quality parameters at sampling sites (a) J1, (b) J2, (c) T1, and (d) T2. The numbers within the boxes represent the Spearman correlation coefficients.

|  |
| --- |
| **Figure 13 Suggestion:**  It seems that the left panel of the figure is displaying the same information as the right panel, except for the addition of an "X" to mark correlations that are significant. To adhere to good scientific writing practices and maintain **conciseness** in accordance with the journal's guidelines, I recommend presenting only the figure on the left panel. Increase the size of the legend for enhanced visibility, avoiding repetition and ensuring clarity. Indicate at which level is the correlation analysis deemed significant in the caption. Instead of cross marks, you may instead set the font of the significant correlations to bold.  Combine related figures into a single, comprehensive figure that **fits on half page** with clearly labeled letter captions. To maximize space, use a single, concise figure legend and minimize white space. |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| A picture containing chart  Description automatically generated | A picture containing chart  Description automatically generated | Chart  Description automatically generated with low confidence | Chart  Description automatically generated | A picture containing chart  Description automatically generated | A picture containing chart  Description automatically generated |
| A picture containing chart  Description automatically generated | A picture containing chart  Description automatically generated | A picture containing chart  Description automatically generated | A picture containing chart  Description automatically generated | A picture containing background pattern  Description automatically generated | A picture containing chart  Description automatically generated |
| A picture containing chart  Description automatically generated | A picture containing chart  Description automatically generated | A picture containing background pattern  Description automatically generated | A picture containing qr code  Description automatically generated | A picture containing diagram  Description automatically generated |  |

Figure 14. Pattern analysis-based self-organizing map for sampling site J1.

|  |
| --- |
| **Figure 14 Suggestion:**  The original Figure occupies too much space for a journal (12 pages). As with other figures, I recommend combining the separate images into a single figure. In this case, it would be beneficial to group them by sampling site, which should only consume half a page or a whole landscape page. This will reduce number of pages from 12 to 4 or even 2.  Maximize space by reducing white space or border of each figure panels. Increase the size of axis labels and titles accordingly for improved readability. |