



UNIVERSITY OF LEEDS



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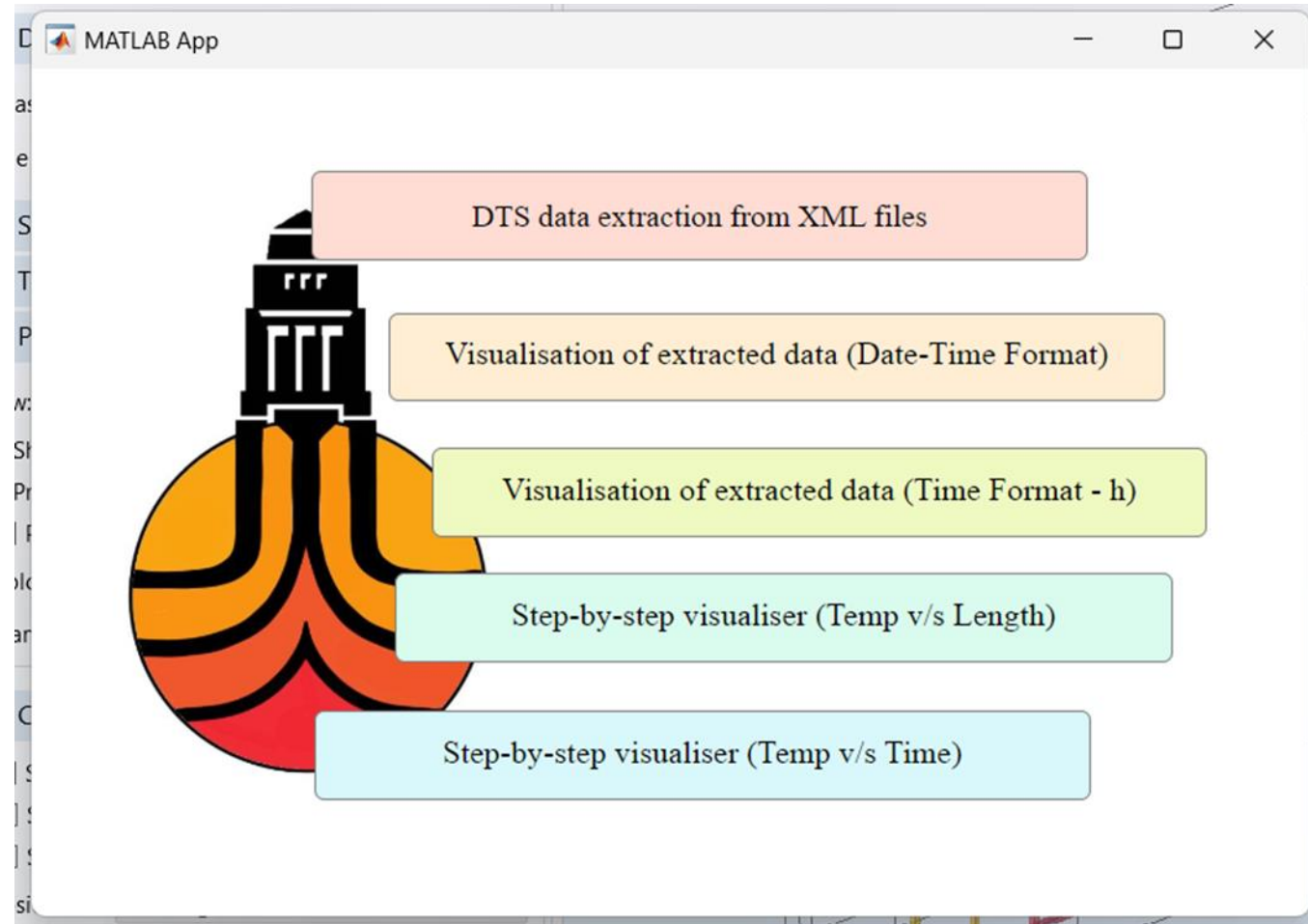
App – GUI for DTS

- Works on XML file
- Standalone App
- Only requires MATLAB runtime
- Can show waterfall plots
- Can show single files
 - Temp v/s Length at Fiber (Slider for time)
 - Temp v/s Time (Slider for length)
- Can be used to trim data for selective regions



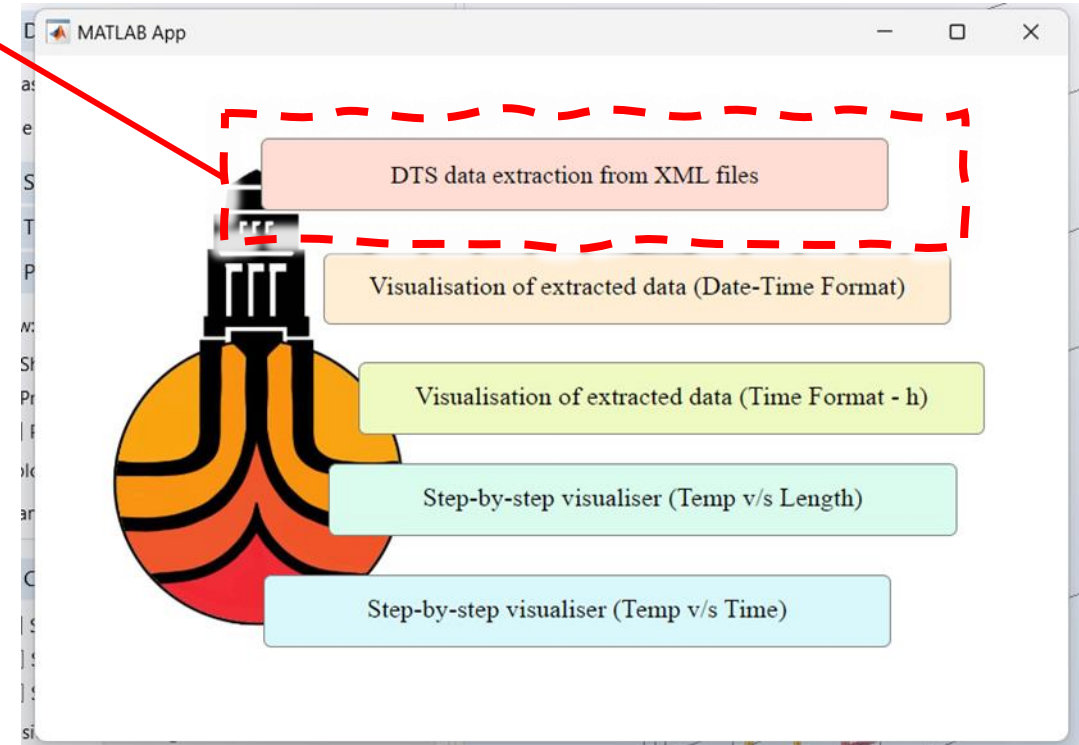
DTS GUI
Data Extractor and Visualiser

GUI for DTS – Main Page



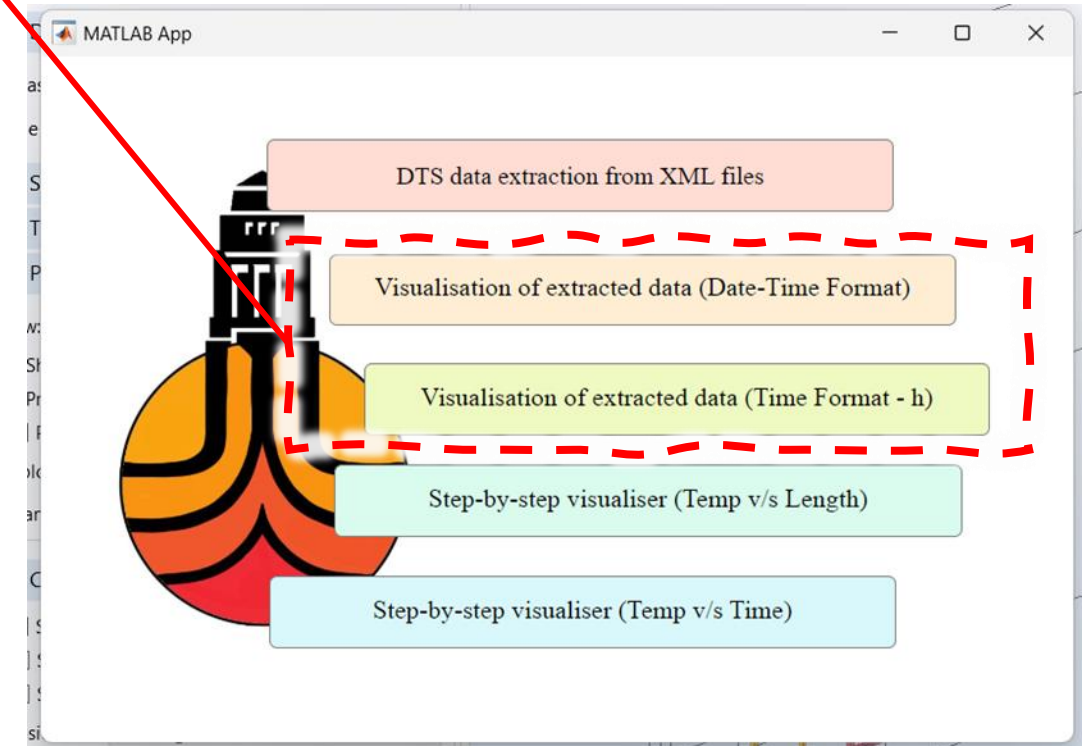
DTS data extraction from XML files

- Asks to load multiple XML files.
- Can operate on both:
 - Single-ended
 - Double-ended
- Shows the number of files selected and which one it is reading.
- Sorts out data and asks the user to save in '.mat' format.
- ** Only processes time, temperature and length at fiber (LAF).



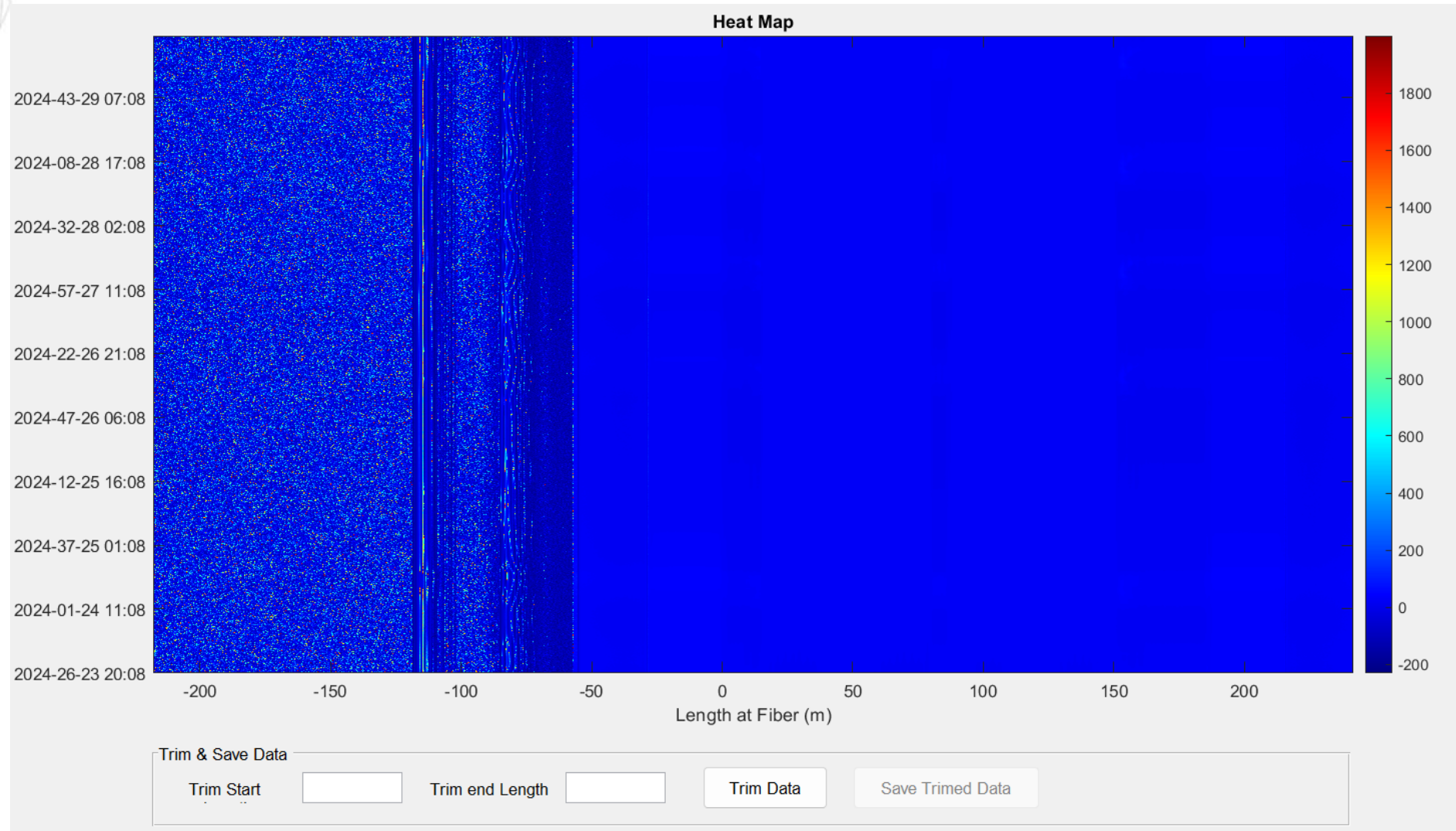
Visualisation of extracted data

- It uses the '.mat' files saved in the previous step.
- Can be used to make waterfall plots:
 - Date-Time format (Button 2)
 - Time (h) format (Button 3)
- Can be used to focus on specific sections (in both types) by using trim options.
- The trimmed (focused) sections can be saved into new '.mat' files for future use or to use in later options.



Visualisation of extracted data (Double Ended)

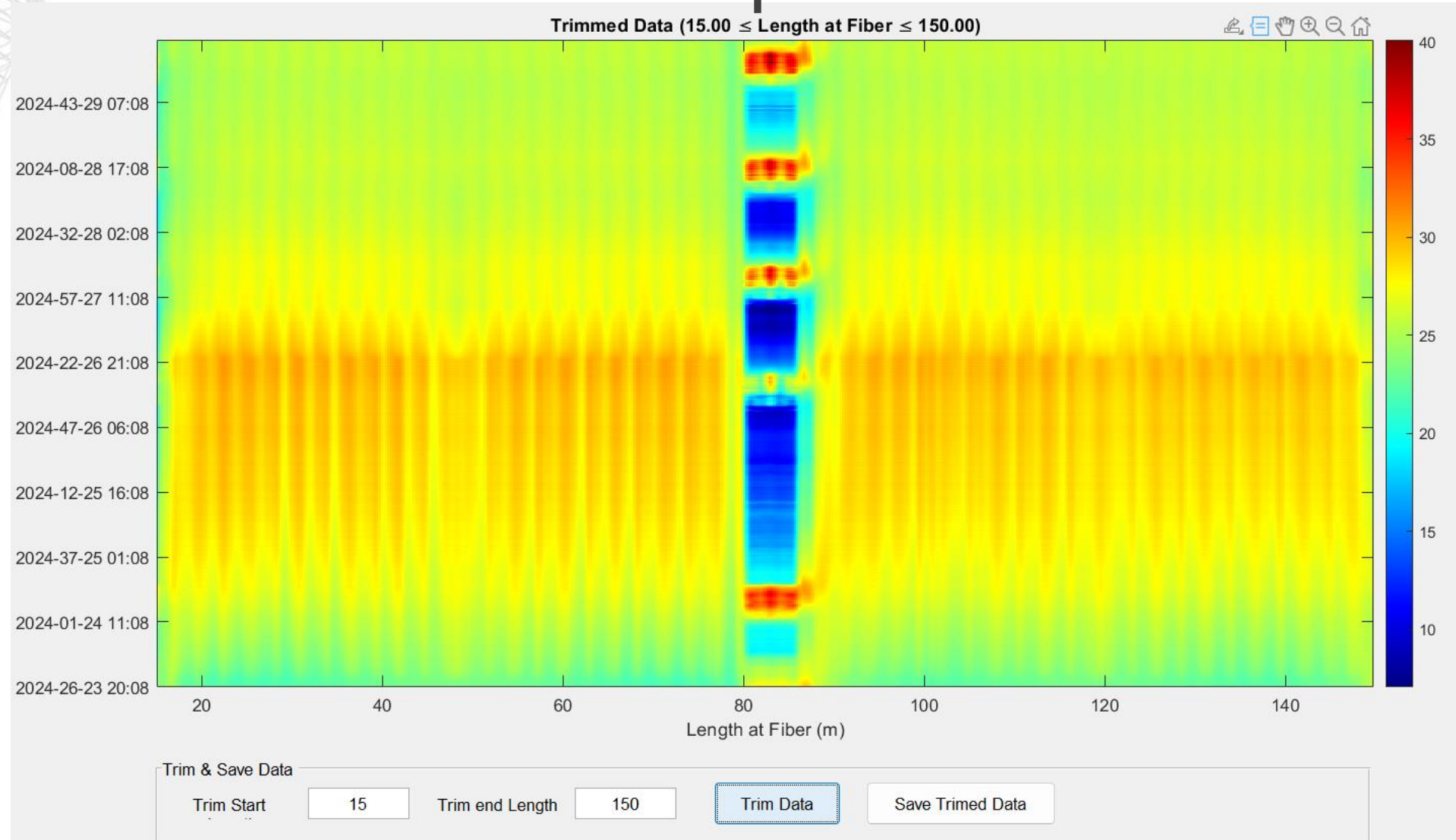
Date-Time format – Samples (Whole Data)





Visualisation of extracted data (Double Ended)

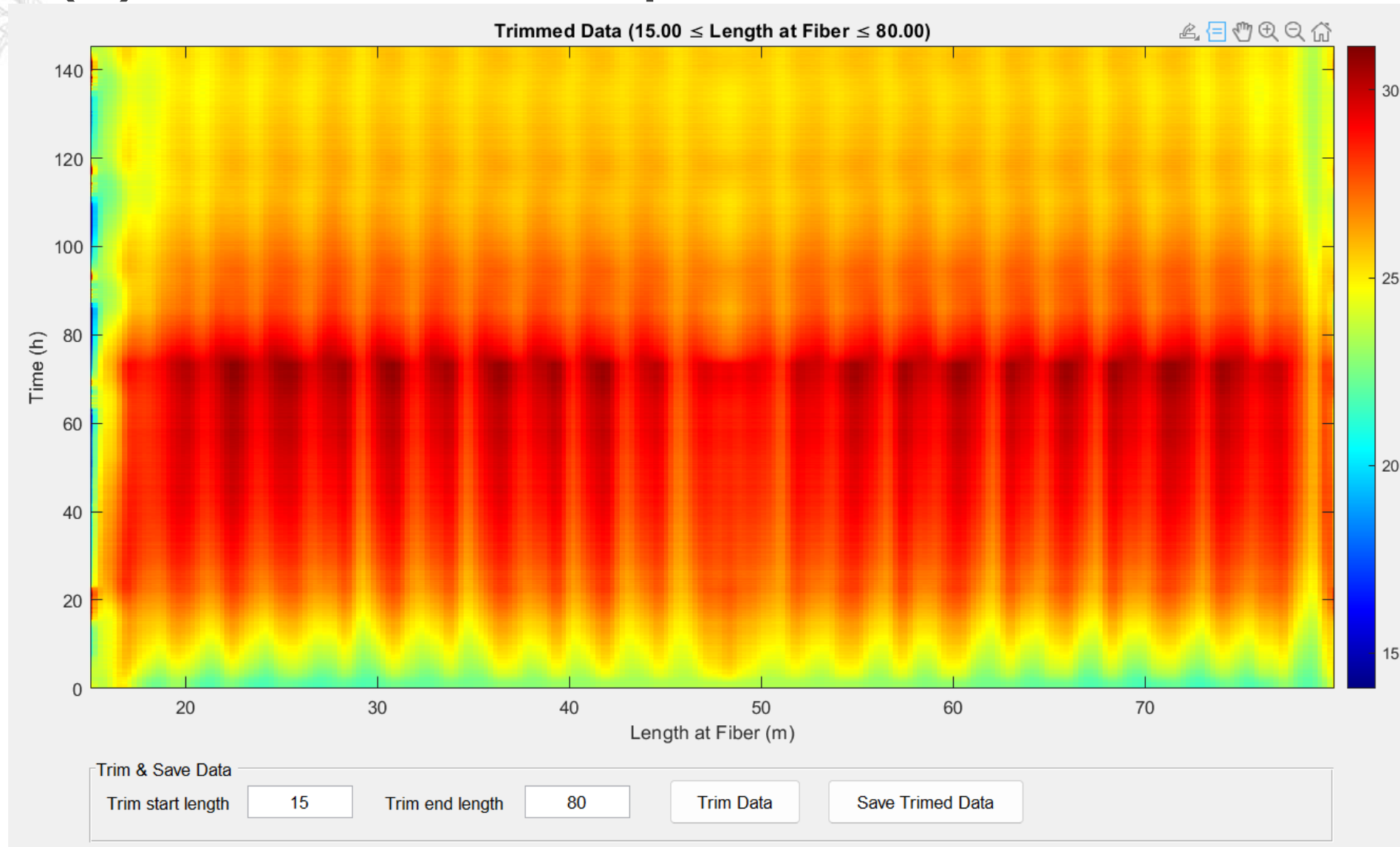
Date-Time format – Samples- Trimmed





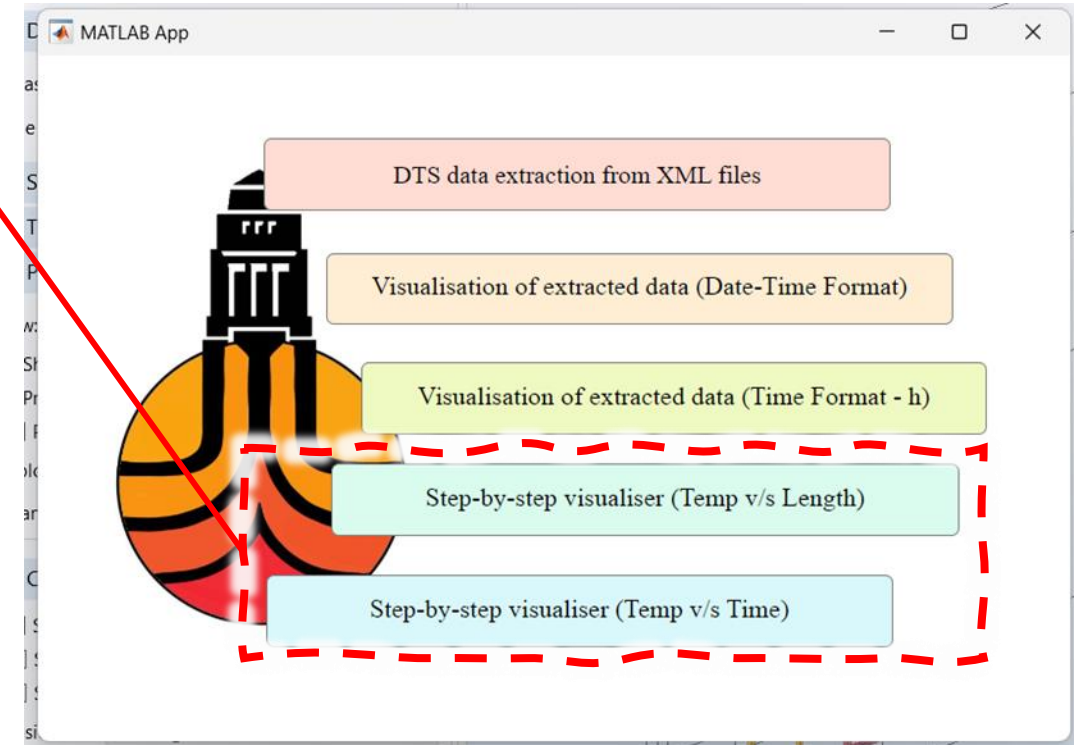
Visualisation of extracted data (Double Ended)

Time (h) format – Sample - Trimmed



Step-by-step Visualizer

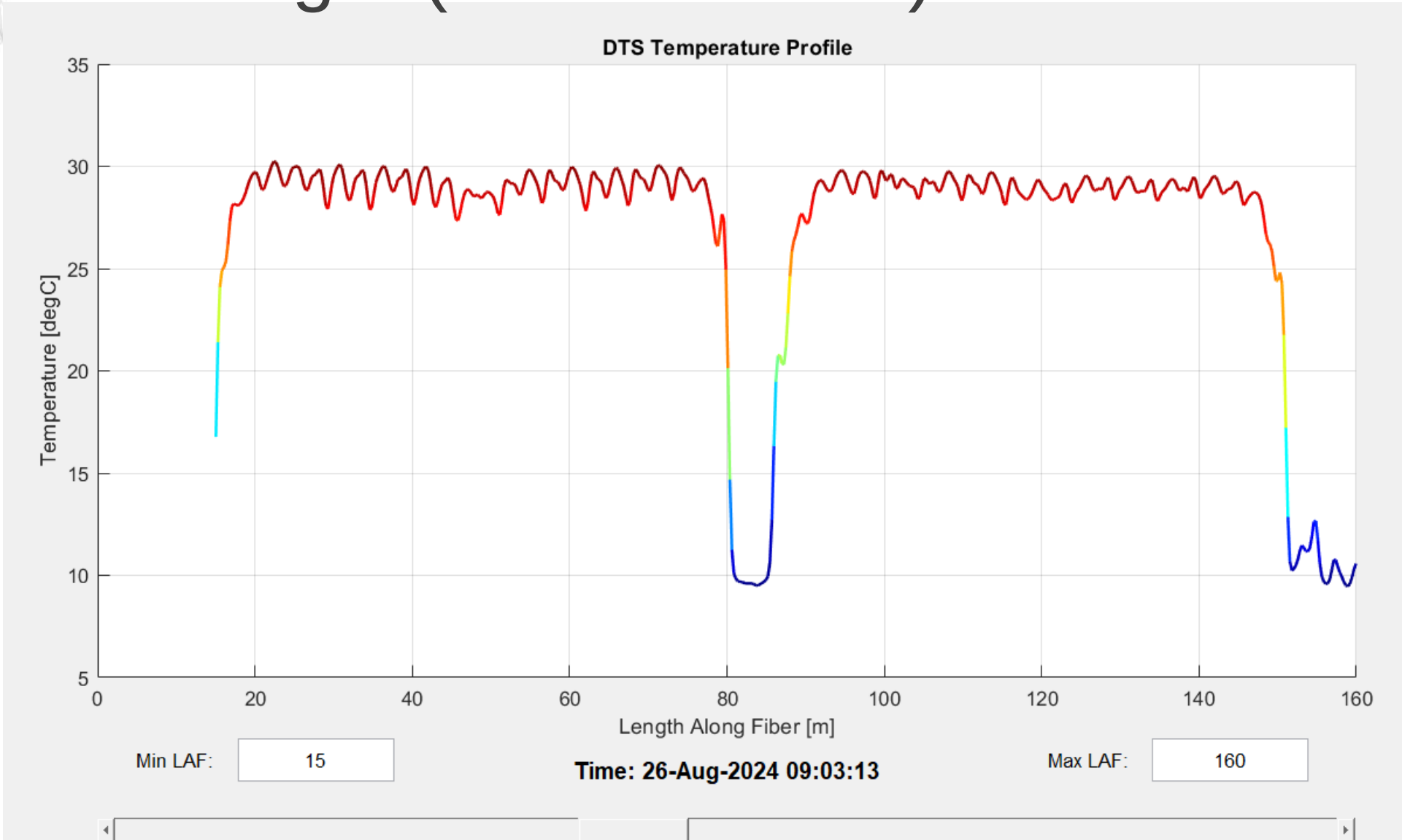
- It can use any of the '.mat' files saved in the previous three steps.
- It produces one plot at a time. It has two functions:
 - Trimming the data
 - A slider which can help you access different files in the series.
- Temp v/s Length (Slides in different times)
- Temp v/s Time (Slides in different lengths)





Step-by-Step Visualizer (Double Ended)

Temp v/s Length (Time in slider)





Step-by-Step Visualizer (Double Ended)

Temp v/s Time (Length along fiber in slider)

