
Table of Contents

| | |
|--|---|
| | 1 |
| Header | 1 |
| Part 1: Importing Workspace Data | 1 |
| Part 2: Converting From F to C | 1 |
| Part 2: Converting From PSI to N/m ² (Pa) | 1 |
| Part 3: Graphing | 1 |

```
%Roshan Jaiswal-Ferri  
%Aero 215 Lab 5 - File Manipulation: 10/31/23
```

Header

```
close all;          %Clears all  
clear all;          %Clears Workspace  
clc;                %Clears Command Window
```

Part 1: Importing Workspace Data

```
load('turbineRunData.mat')
```

Part 2: Converting From F to C

```
T01_C = convtemp(T01_F, 'F', 'C');  
T03_C = convtemp(T03_F, 'F', 'C');  
T04_C = convtemp(T04_F, 'F', 'C');  
T05_C = convtemp(T05_F, 'F', 'C');
```

Part 2: Converting From PSI to N/m² (Pa)

```
P1_Pa = convpres(P1_psig, 'psi', 'Pa');  
P01_Pa = convpres(P01_psig, 'psi', 'Pa');  
P03_Pa = convpres(P03_psig, 'psi', 'Pa');  
P07_Pa = convpres(P07_psig, 'psi', 'Pa');
```

Part 3: Graphing

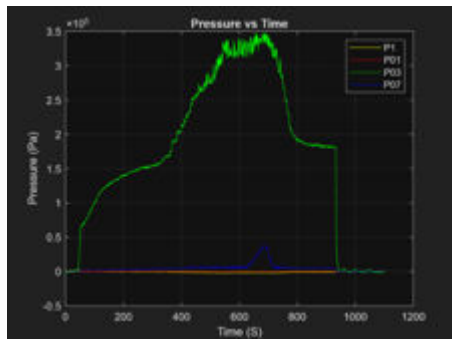
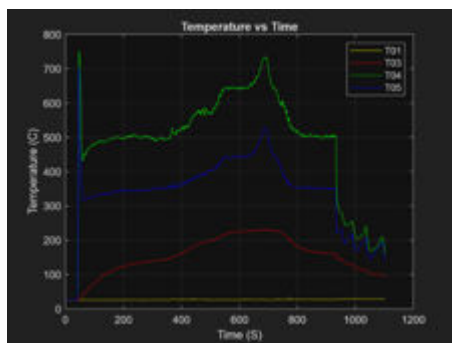
```
figure;  
plot(DTime_seconds_, T01_C, 'y')  
hold on;  
plot(DTime_seconds_, T03_C, 'r')  
plot(DTime_seconds_, T04_C, 'g')  
plot(DTime_seconds_, T05_C, 'b')  
xlabel('Time (S)');  
ylabel('Temperature (C)')  
title('Temperature vs Time')
```

```

grid on;
legend('T01', 'T03', 'T04', 'T05')

figure;
plot(DTime_seconds_, P1_Pa,'y')
hold on;
plot(DTime_seconds_, P01_Pa,'r')
plot(DTime_seconds_, P03_Pa,'g')
plot(DTime_seconds_, P07_Pa,'b')
xlabel('Time (S)');
ylabel('Pressure (Pa)')
title('Pressure vs Time')
grid on;
legend('P1', 'P01', 'P03', 'P07')

```



Published with MATLAB® R2023b