

```
In[*]:= Remove[a]
```

```
In[*]:= a = Import[  
    "~/LR5-SSR_2025-11-26_H15_M54_S34/LR5-SSR_2025-11-28_H14_M21_S55.csv",  
    "CSV"];
```

```
In[*]:= a[[1]]
```

```
Out[*]:= {2025 Nov 28 14:21:55.439, 0.12, 13.5625, 4.1875, 1}
```

```
In[*]:= a[[Length[a]]]
```

```
Out[*]:= {2025 Nov 28 17:57:18.664, 12 923.3, -16.8125, -17.5625, 1}
```

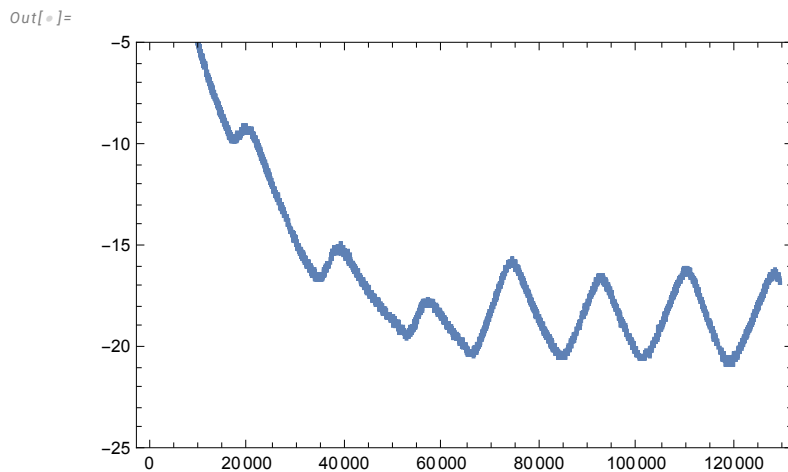
```
In[*]:= Dimensions[a]
```

```
Out[*]:= {112 175, 5}
```

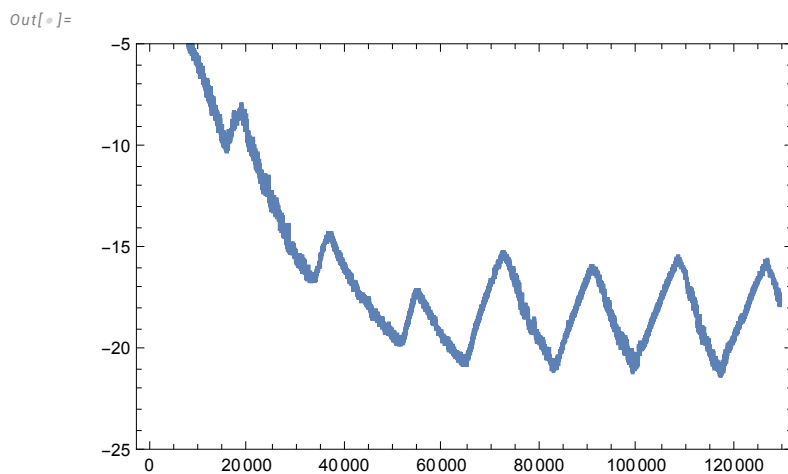
```
In[*]:= b = Table[{a[[i, 2]] * 10, a[[i, 3]]}, {i, 1, Length[a], 10}];
```

```
In[*]:= c = Table[{a[[i, 2]] * 10, a[[i, 4]]}, {i, 1, Length[a], 10}];
```

```
In[*]:= g1 = ListPlot[b, Axes → False, Frame → True, PlotRange → {-25, -5}, Joined → True]
```

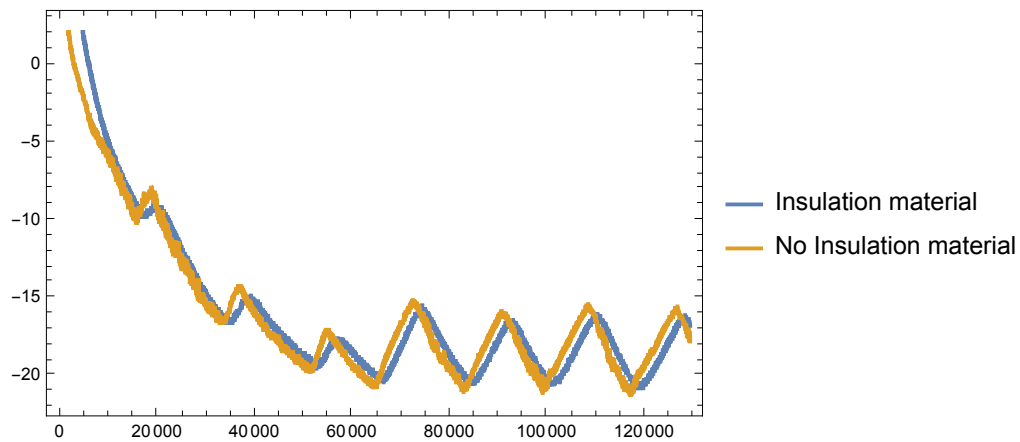


```
In[*]:= g2 = ListPlot[c, Axes → False, Frame → True, PlotRange → {-25, -5}, Joined → True]
```



```
In[*]:= ListPlot[{b, c},
  PlotLegends → {"Insulation material", "No Insulation material"},
  Axes → False, Frame → True, Joined → True]
```

Out[\*]=



```
In[*]:= b1 = Table[a[[i, 3]], {i, 1, Length[a], 10}];
```

```
In[*]:= c1 = Table[a[[i, 4]], {i, 1, Length[a], 10}];
```

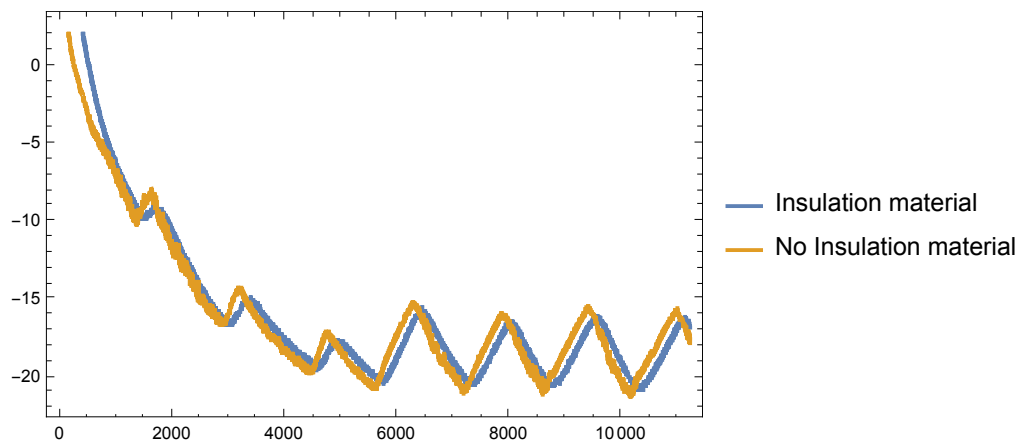
```
In[*]:= b1[[1]]
```

Out[\*]=

13.5625

```
In[*]:= ListPlot[{b1, c1},
  PlotLegends → {"Insulation material", "No Insulation material"},
  Axes → False, Frame → True, Joined → True]
```

Out[\*]=



```
In[*]:= b2 = Table[a[[i, 3]], {i, 90 000, 100 000}];
```

```
In[*]:= c2 = Table[a[[i, 4]], {i, 90 000, 100 000}];
```

```
In[*]:= Max[c2] - Max[b2]
```

Out[\*]=

0.75

## CrossCorrelation

```
In[58]:= w1 = Table[a[[i, 3]], {i, 50 000, 110 000}];
```

```
In[59]:= w2 = Table[a[[i, 4]], {i, 50 000, 110 000}];
```

```
In[60]:= f1 = Fourier[w1];
```

```
In[61]:= f2 = Conjugate[Fourier[w2]];

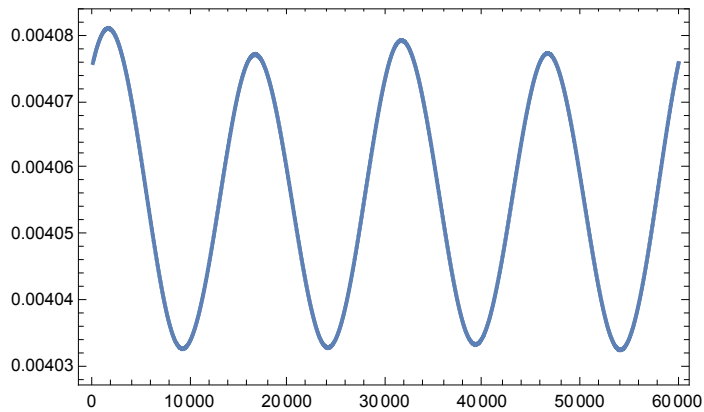
```

```
In[62]:= ff = f1 * f2;
```

```
In[63]:= c1 = Re[InverseFourier[ff]] / (Norm[w1] Norm[w2]);
```

```
In[64]:= ListPlot[Re[c1], Joined → True, PlotRange → All, Axes → False, Frame → True]
```

```
Out[64]=
```



```
In[65]:= mc = Max[c1]
```

```
Out[65]=
```

```
0.00408124
```

```
In[66]:= z = 0;
```

```
In[67]:= Do[If[c1[[i]] == mc, z = i], {i, Length[c1]}]
```

```
In[68]:= Print[z]
```

```
1590
```

```
In[69]:= a[[z, 2]]
```

```
Out[69]=
```

```
182.79
```