

```

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, 12923.3, -16.8125, -17.5625, 1}

In[]:= Dimensions[a]
Out[]= {112175, 5}

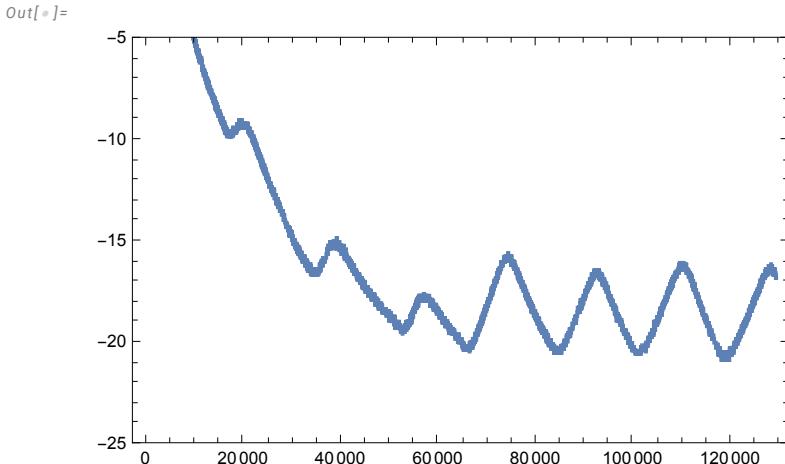
```

```

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]

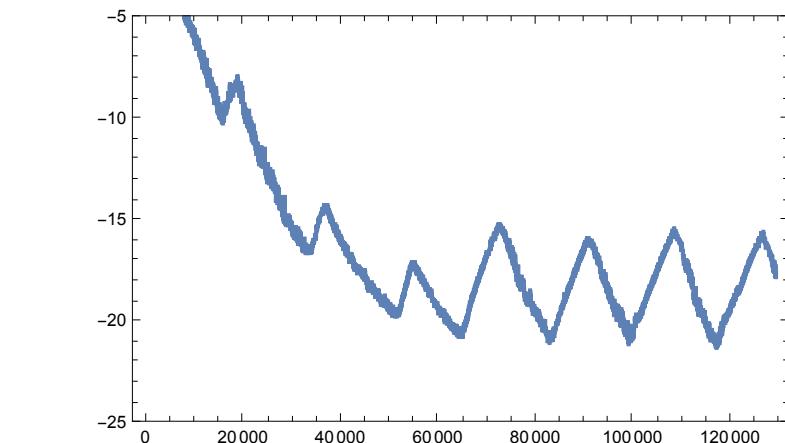
```



```

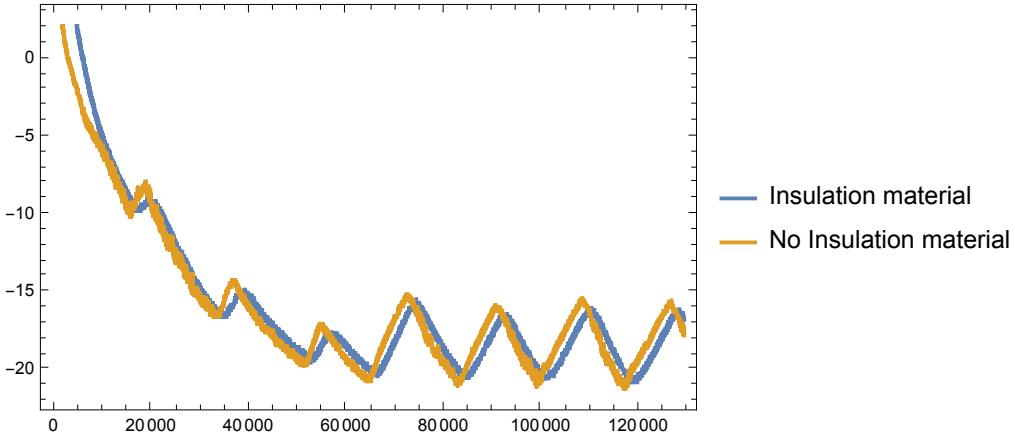
In[]:= g2 = ListPlot[c, Axes → False, Frame → True, PlotRange → {-25, -5}, Joined → True]

```



```
In[6]:= ListPlot[{b, c},
  PlotLegends -> {"Insulation material", "No Insulation material"},
  Axes -> False, Frame -> True, Joined -> True]
```

Out[6]=



```
In[7]:= b1 = Table[a[[i, 3]], {i, 1, Length[a], 10}];
```

```
In[8]:= c1 = Table[a[[i, 4]], {i, 1, Length[a], 10}];
```

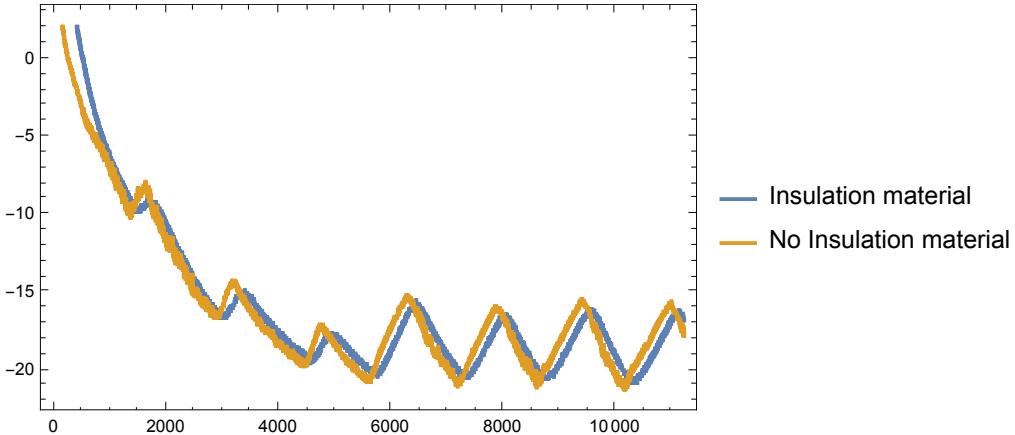
```
In[9]:= b1[[1]]
```

Out[9]=

13.5625

```
In[10]:= ListPlot[{b1, c1},
  PlotLegends -> {"Insulation material", "No Insulation material"},
  Axes -> False, Frame -> True, Joined -> True]
```

Out[10]=



```
In[11]:= b2 = Table[a[[i, 3]], {i, 90000, 100000}];
```

```
In[12]:= c2 = Table[a[[i, 4]], {i, 90000, 100000}];
```

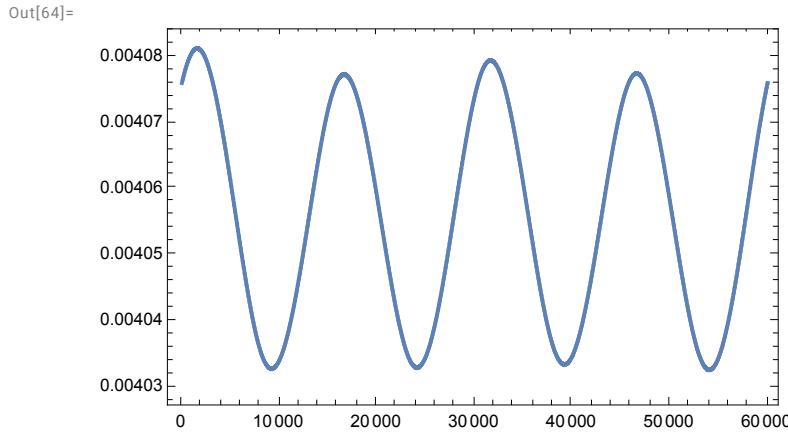
```
In[13]:= Max[c2] - Max[b2]
```

Out[13]=

0.75

CrossCorrelation

```
In[58]:= w1 = Table[a[[i, 3]], {i, 50000, 110000}];  
In[59]:= w2 = Table[a[[i, 4]], {i, 50000, 110000}];  
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]
```



```
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
```