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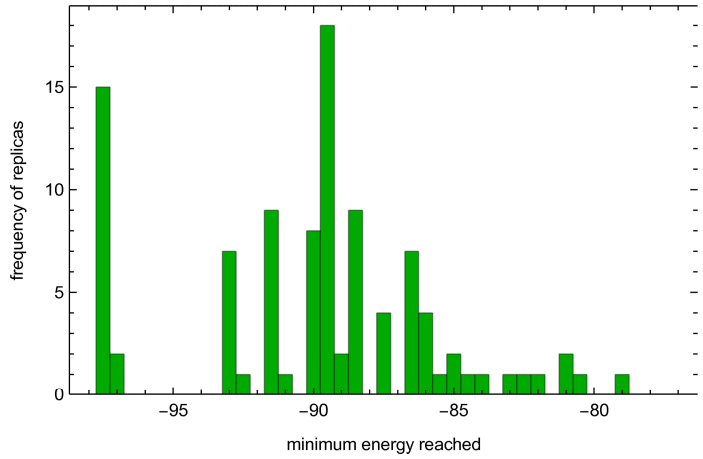
Thermal Annealing Analysis

Trial 1 (no annealing): N=64, M=100, R=100, J=2, S=3, C=4, β=5

In[1]:=
```
SetDirectory[NotebookDirectory[]];
trial1 = Flatten[Import["histogram1.csv", "CSV"]];
Histogram[trial1, 100, ChartStyle → Darker[Green], Frame → True,
 FrameLabel → {"minimum energy reached", "frequency of replicas"}]
```

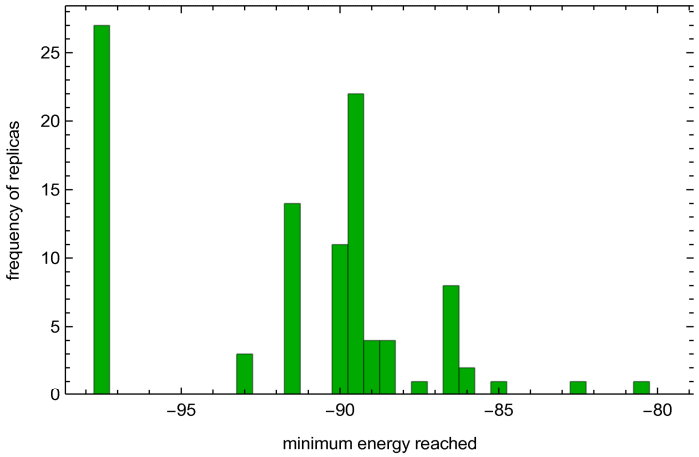
Out[3]=



Trial 2 (no annealing): N=64, M=200, R=100, J=2, S=4, C=5, β=5

In[4]:=
```
trial2 = Flatten[Import["histogram2.csv", "CSV"]];
Histogram[trial2, 100, ChartStyle → Darker[Green], Frame → True,
 FrameLabel → {"minimum energy reached", "frequency of replicas"}]
```

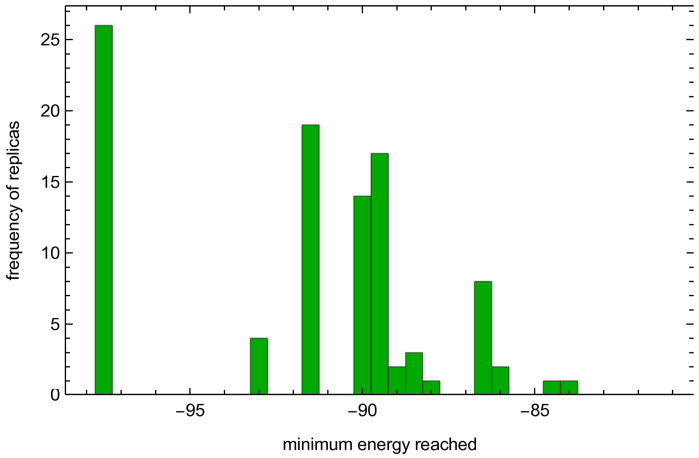
Out[5]=



Trial 3 (no annealing): N=64, M=400, R=100, J=2, S=5, C=6, β=5

In[6]:=
```
trial3 = Flatten[Import["histogram3.csv", "CSV"]];
Histogram[trial3, 100, ChartStyle → Darker[Green], Frame → True,
 FrameLabel → {"minimum energy reached", "frequency of replicas"}]
```

Out[7]=

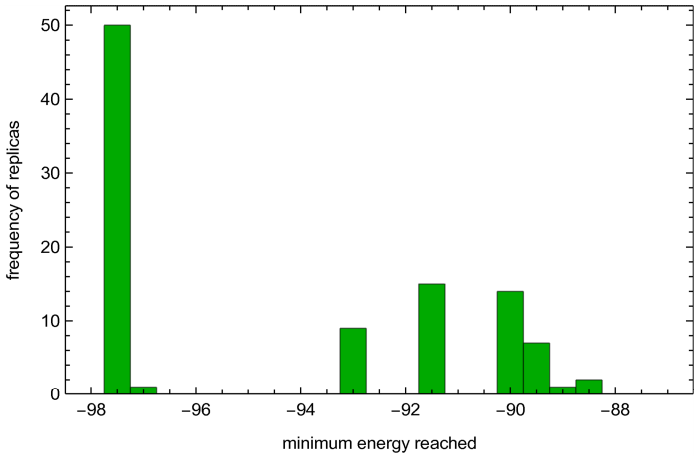


Trial 4 (w/ annealing): N=64, M=100, R=100, J=2, S=3, C=4,

β=5

In[8]:=
```
trial4 = Flatten[Import["histogram4.csv", "CSV"]];
Histogram[trial4, 100, ChartStyle → Darker[Green], Frame → True,
 FrameLabel → {"minimum energy reached", "frequency of replicas"}]
```

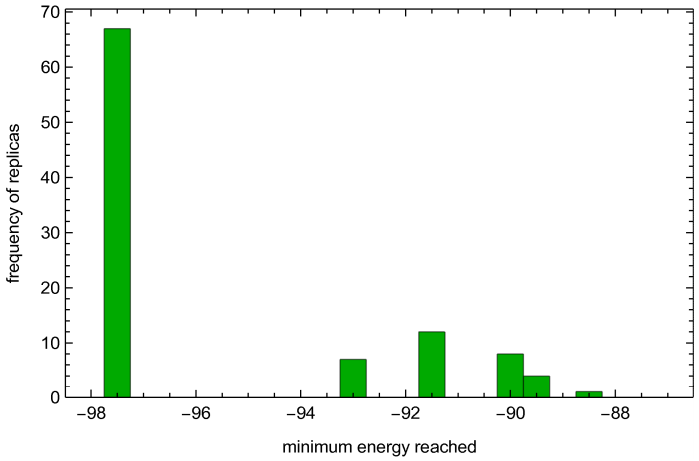
Out[9]=



Trial 5 (w/ annealing): N=64, M=200, R=100, J=2, S=4, C=5, β=5

In[10]:=
```
trial5 = Flatten[Import["histogram5.csv", "CSV"]];
Histogram[trial5, 100, ChartStyle → Darker[Green], Frame → True,
 FrameLabel → {"minimum energy reached", "frequency of replicas"}]
```

Out[11]=



Trial 6 (w/ annealing): N=64, M=400, R=100, J=2, S=5, C=6, β=5

In[12]:=
```
trial6 = Flatten[Import["histogram6.csv", "CSV"]];
Histogram[trial6, 100, ChartStyle → Darker[Green], Frame → True,
 FrameLabel → {"minimum energy reached", "frequency of replicas"}]
```

Out[13]=