```
In[161]:= ClearAll["Global`*"]

In[162]:= Data = Import[
          "D:\\sebas\\estudios\\exactas\\materias\\materiasdf\\incertezas\\doble_exp.dat"
          , "Table", "HeaderLines" → 1]; x = Data[[All, 1]]; y = Data[[All, 2]];

In[163]:= DataPlot = ListLogPlot[Data, PlotMarkers → {Automatic, 10}];

In[164]:= f[x_, a_, b_, c_, d_, e_] := a + b * Exp[-x / d] + c * Exp[-x / e]
```

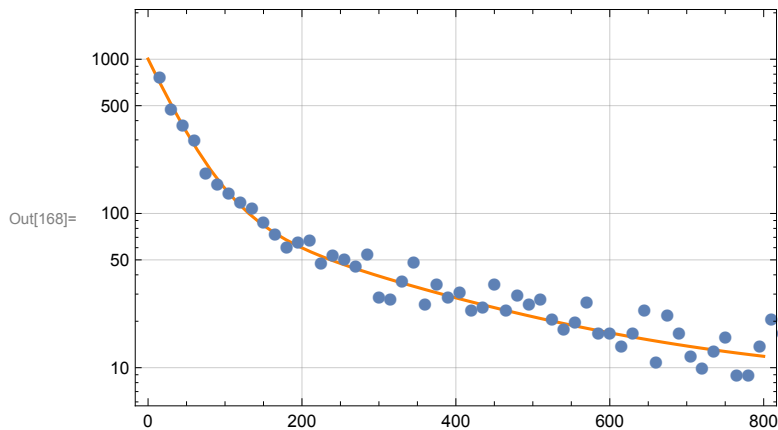$$In[165]:= S[a\_, b\_, c\_, d\_, e\_] := Sum\left[\left(\frac{y[[i]] - f[x[[i]], a, b, c, d, e]}{y[[i]]}\right)^2, \{i, 1, Length[y]\}\right]$$

```
In[166]:= res = FindMinimum[S[a, b, c, d, e], {{a, 10}, {b, 130}, {c, 1000}, {d, 200}, {e, 35}}];

In[167]:= res[[2]]

Out[167]= {a → 8.06945, b → 108.561, c → 886.315, d → 238.327, e → 38.3593}

In[168]:= Show[{LogPlot[f[x, a, b, c, d, e] /. res[[2]], {x, 0, 800},
          PlotStyle → Directive[Orange], Frame → True, GridLines → Automatic], DataPlot}]
```
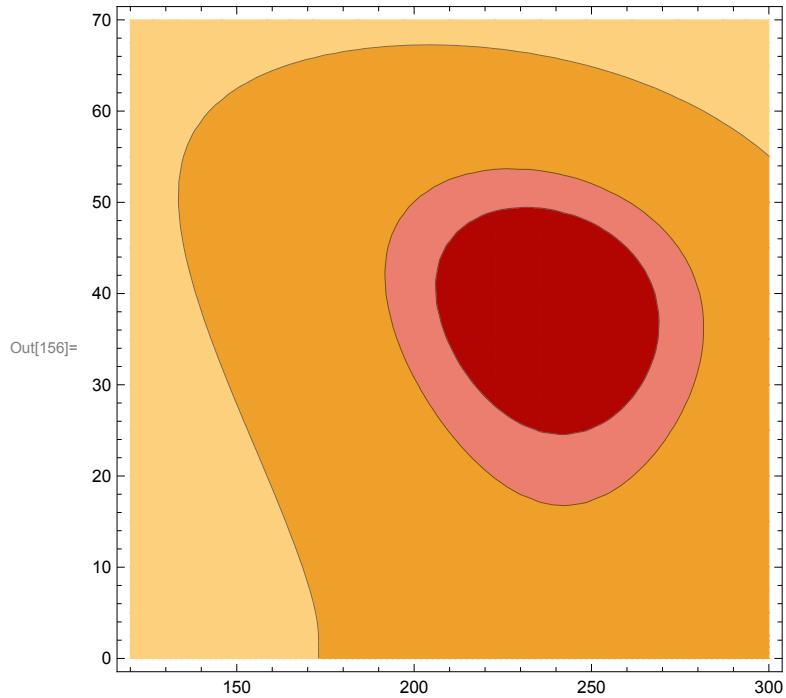
In[156]:= `ContourPlot[(S[a, b, c, X, Y] - res[[1]]) /. res[[2]], {X, 120, 300},`
`{Y, 0, 70}, Contours → {1, 2, 8}, ContourShading → ColorData[10, "ColorList"]]`

Out[156]=

In[151]:= `ColorData["TemperatureMap", "ColorList"]`

Out[151]= Missing[NotApplicable]

In[154]:= `ContourPlot[(S[X, Y, c, d, e] - res[[1]]) /. res[[2]], {X, 2, 15},`
`{Y, 40, 170}, Contours → {1, 2}, ContourShading → ColorData[10, "ColorList"]]`

Out[154]=