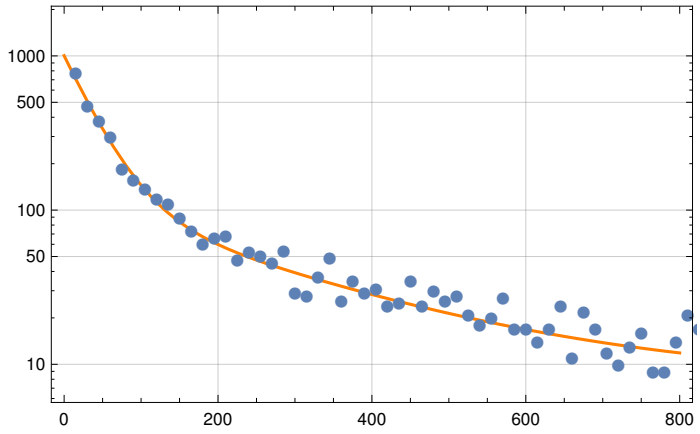
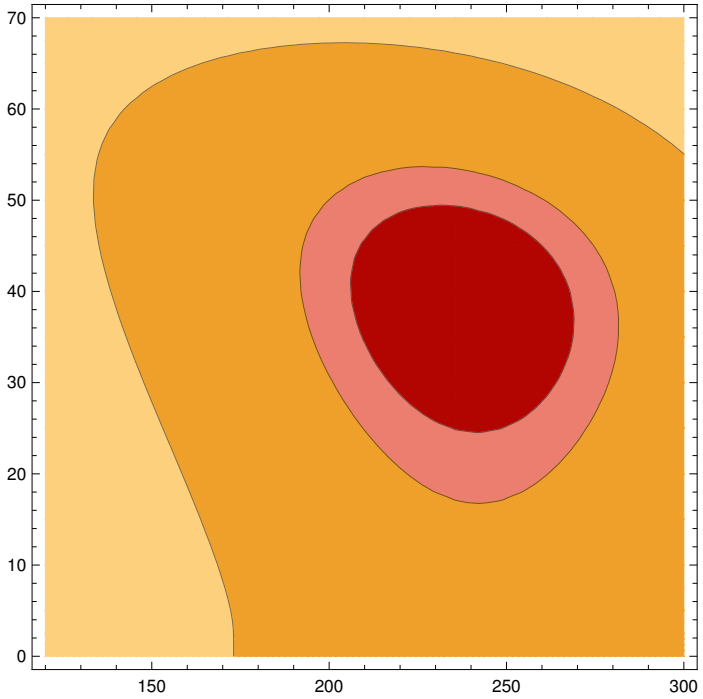
```
ClearAll["Global`*"]

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

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

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

S[a_, b_, c_, d_, e_] := Sum [((y[[i]] - f[x[[i]], a, b, c, d, e])/y[[i]])^2, {i, 1, Length[y]}]

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

res[[2]]
```

```
{a → 8.06945, b → 108.561, c → 886.315, d → 238.327, e → 38.3593}
```

```
Show[{LogPlot[f[x, a, b, c, d, e] /. res[[2]], {x, 0, 800},
      PlotStyle → Directive[Orange], Frame → True, GridLines→ Automatic ], DataPlot}]
```



```
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"]]
```




```
ColorData["TemperatureMap ", "ColorList"]
```

```
Missing[NotApplicable]
```

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