In[32]:= `distr00b = {{1, 88.6}, {3, 88.1}, {5, 85.9}, {7, 85.1}, {9, 83.5}, {11, 83.1},`
`{13, 81.4}, {15, 79.2}, {17, 79}, {19, 76.3}, {21, 74.3}, {23, 73.4},`
`{25, 71.4}, {27, 68.4}, {29, 68.8}, {31, 67.8}, {33, 63}, {35, 64.3}, {37, 61.9},`
`{39, 59.6}, {41, 59.3}, {43, 58.4}, {45, 58}, {47, 55.4}, {49, 51.4}, {51, 47.5},`
`{53, 46.9}, {55, 48.7}, {57, 443.4}, {59, 43.6}, {61, 43.5}, {63, 42.2},`
`{65, 42.7}, {67, 41.6}, {69, 39.9}, {71, 39.8}, {73, 39.2}, {74, 40.5}};`
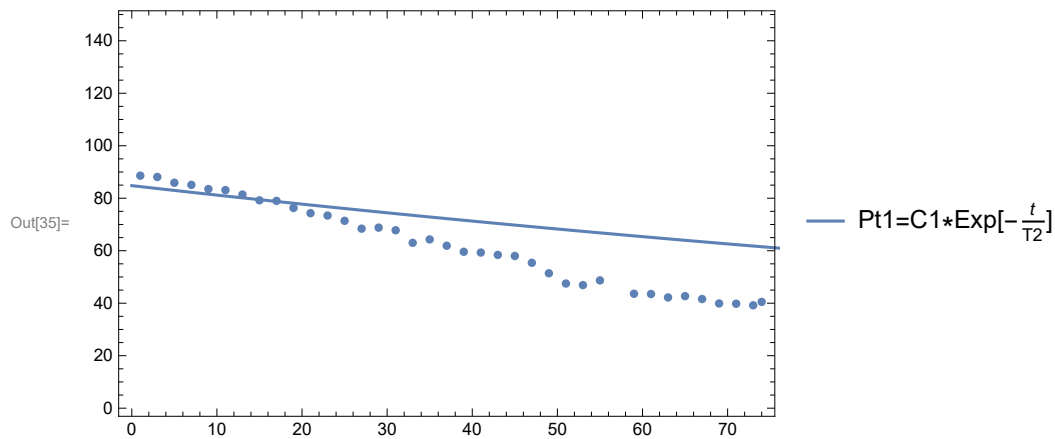
`Pt1 = C1 Exp`$\left[-\dfrac{t}{T2}\right]$`;`

`fit1 = NonlinearModelFit[distr00b, Pt1, {C1, T2}, t]`

Out[34]= `FittedModel`$\left[\boxed{84.7931\, e^{-0.00433558\, t}}\right]$

In[22]:= `Error1 = `$\dfrac{1}{38}$` Sum[84.7931 * Exp[-0.00433558 * distr00b[[i]][[1]]] - distr00b[[i]][[2]], {i, 1, 38}]`

Out[22]= `0.00643778`

In[35]:= `Show`$\Big[$`ListPlot[distr00b],`

`Plot`$\Big[$`fit1[t], {t, 0, 80}, PlotLegends → `$\Big\{$` "Pt1=C1*Exp[-`$\dfrac{t}{T2}$`]"`$\Big\}\Big]$`, Frame → True`$\Big]$

Out[35]=

In[23]:= $\text{Pt2 = C2 Exp}\left[-\left(\dfrac{t}{T2b}\right)^2\right];$

$\text{fit2 = NonlinearModelFit[distr00b, Pt2, \{C2, T2b\}, t]}$
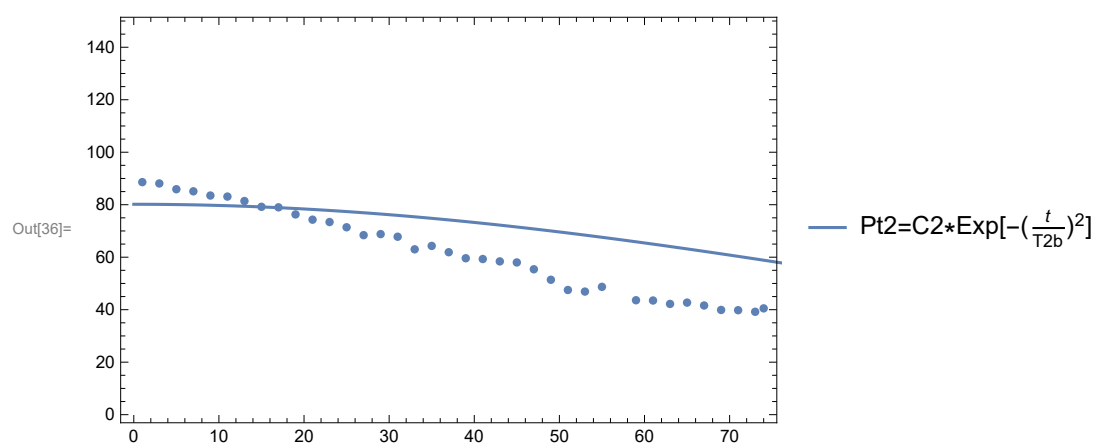
Out[24]= $\text{FittedModel}\left[\; 80.1676\, e^{-0.000056425\, t^2} \;\right]$

In[25]:= $\text{Error2} = \dfrac{1}{38}\, \text{Sum}\left[80.1676 * \text{Exp}\left[-0.000056425 * \left(\text{distr00b}[\![i]\!][\![1]\!]\right)^2\right] - \text{distr00b}[\![i]\!][\![2]\!], \{i, 1, 38\}\right]$

Out[25]= 0.0224408

In[36]:= $\text{Show}\big[\text{ListPlot[distr00b],}$

$\quad \text{Plot}\big[\text{fit2[t]}, \{t, 0, 80\}, \text{PlotLegends} \to \big\{ \text{"Pt2=C2*Exp[-(}\dfrac{t}{T2b}\text{)}^2\text{]"}\big\}\big], \text{Frame} \to \text{True}\big]$

Out[36]=

$\text{Pt2=C2*Exp[-(}\tfrac{t}{T2b}\text{)}^2\text{]}$
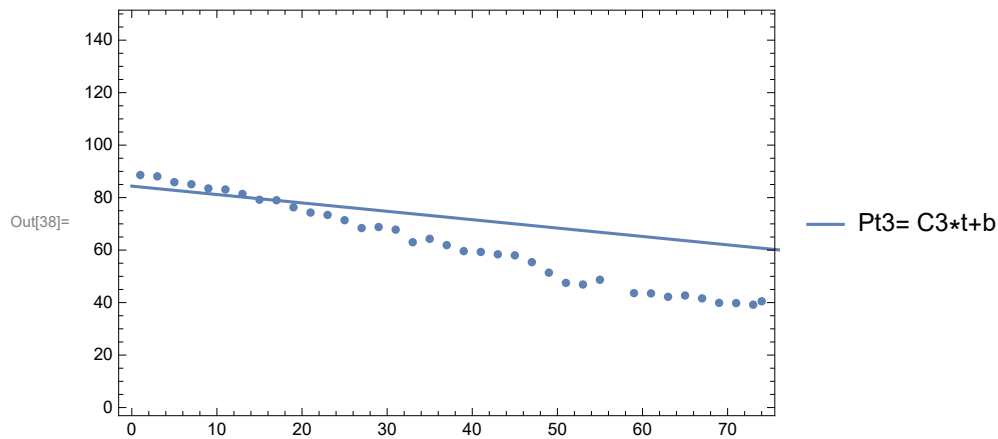
(* **Pt3= C3*t + b** *)

In[26]:= **fit3 = LinearModelFit[distr00b, t, t]**

Out[26]= FittedModel[84.3739 – 0.319548 t]

In[27]:= **Error3 = $\frac{1}{38}$ Sum[84.3739 – 0.3195478 * distr00b[[i]][[1]] – distr00b[[i]][[2]], {i, 1, 38}]**

Out[27]= 0.0000190684

In[38]:= **Show[ListPlot[distr00b],**
 Plot[fit3[t], {t, 0, 80}, PlotLegends → { "Pt3= C3*t+b"}], Frame → True]

Out[38]=

In[30]:= **Show$\left[$ListPlot[distr00b], Plot$\left[$ {fit1[t], fit2[t], fit3[t]}, {t, 0, 80}, PlotLegends →**
 $\left\{$ "Pt1=C1*Exp[$-\frac{t}{T2}$]", "Pt2=C2*Exp[$-(\frac{t}{T2b})^2$]", "Pt3= C3*t+b"$\right\}$], Frame → True$\right]$

Out[30]=

Legend:
- Pt1=C1*Exp[$-\frac{t}{T2}$]
- Pt2=C2*Exp[$-(\frac{t}{T2b})^2$]
- Pt3= C3*t+b