

# **Relatório EDPs HCV**

para a reuniao do dia 06/17/21(mes/dia)

**DE 8param para V0/ DE 11param para 8 dias PATBXX e CXX**

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- A grande mudança nesse código e nesses resultados foi que a integral de **N** agora varia de 0,age(500)
- Primeiro foi feita uma aproximação para o valor de  $V_0$  com 8 parâmetros. 729.6 segundos para cada pat aproximadamente
- 10 popsize 10 maxiter Parametros e bounds:
  - $\alpha = 20,60$  //  $r = 0.1,10$  //  $\delta = (0.01,2)$  //  $\mu_c = (0.1,2)$
  - $\rho = (1,15)$
  - $\theta = (1,2)$
  - $\sigma = (1,2)$
  - $c = (10,25)$
- Depois foi feito uma DE para 8 dias usando  $V_0$  como o valor do primeiro ponto experimental
- 30 popsize 30 maxiter Parametros e bounds:
  - $\epsilon_r = (0.1,0.99)$   $\epsilon_\alpha = (0.1,0.99)$   $\epsilon_s = (0.1,0.99)$
  - $\alpha = 20,60$  //  $r = 0.1,10$  //  $\delta = (0.01,2)$  //  $\mu_c = (0.1,2)$
  - $\rho = (1,15)$
  - $\theta = (1,2)$
  - $\sigma = (1,2)$
  - $c = (10,25)$

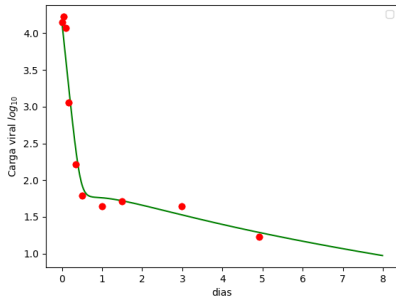
Table: Parametros da primeira DE

<b>Pt</b>	$\alpha$	$r$	$\delta$	$\mu_c$	$\rho$	$\theta$	$\sigma$	$c$	custo
<b>B07</b>	27.47	0.67	1.44	1.21	11.7	1.18	1.15	14	0.045
<b>B09</b>	34.25	0.67	1.33	0.76	8.5	1.35	1.44	12.6	0.0037
<b>B08</b>	30.37	0.49	0.53	1.52	12.4	1.4	1.96	11.2	0.0056
<b>B16</b>	34.47	0.75	0.96	1.59	8.6	1.34	1.59	14.9	0.0026
<b>B17</b>	22.9	1.04	1.1	0.77	14.97	1.5	1.66	16.8	0.0064
<b>B06</b>	43.84	0.35	1.05	0.38	7.61	1.85	1.36	12.3	0.0045
<b>C05</b>	21.25	3	1.96	1.92	10.75	1.23	1.1	24.4	0.0022
<b>C06</b>	29.48	1.34	1.72	0.5	4.44	1.86	1.69	20.3	2.8e-5
<b>C09</b>	27.51	1.32	1.85	0.68	2.1	1.51	1.23	23.3	0.0013
<b>C10</b>	45.74	0.26	0.61	1.48	3.29	1.49	1.79	21.6	0.004

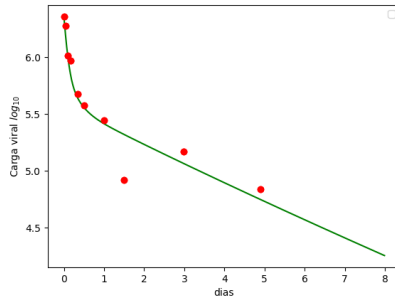
Table: Parametros da segunda DE

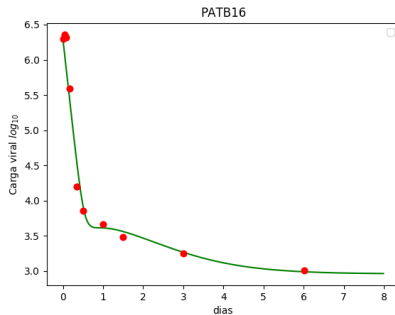
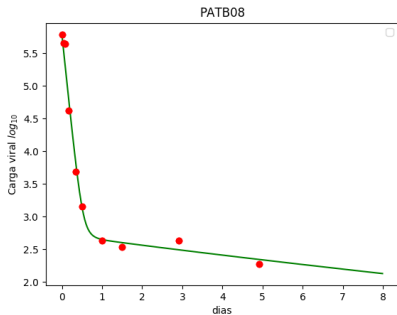
p	B07	B09	B08	B16	B17	B06	C05	C06	C09	C10
$\epsilon_r$	0.6	0.33	0.48	0.75	0.11	0.46	0.1	0.56	0.38	0.89
$\epsilon_\alpha$	0.76	0.48	0.91	0.45	0.65	0.898	0.77	0.91	0.72	0.76
$\epsilon_s$	0.95	0.23	0.51	0.96	0.17	0.9	0.33	0.14	0.17	0.96
$\alpha$	20.6	42.9	23.9	22.85	52.16	50.5	56.68	24.5	56.77	27.5
<b>r</b>	0.54	0.12	0.7	5.87	3.1	3.45	2.57	4.85	2.7	4.44
$\delta$	0.15	0.34	0.06	0.87	0.11	0.103	0.30	0.11	0.83	0.013
$\mu_c$	0.66	0.11	0.11	0.73	1.64	1.79	0.84	0.65	1.59	1.42
$\rho$	4.99	5.27	13.8	11.95	14.5	7.589	9.11	8.3	6.86	14.1
$\theta$	1.3	1.89	1.81	1.34	1.7	1.77	1.21	1.39	1.94	1.49
$\sigma$	1.27	1.7	1.96	1.39	1.6	1.797	1.48	1.05	1.84	1.5
<b>c</b>	11.4	11.6	12.7	11.17	10	10.16	10.0	10	10.1	11.56

PATB07

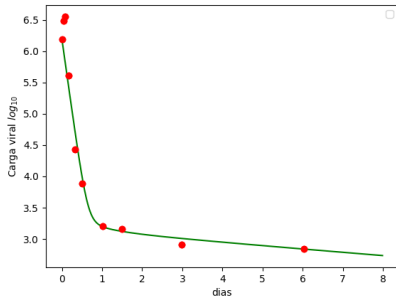


PATB09

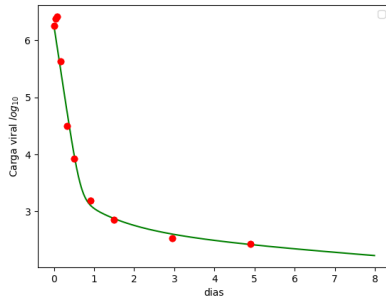




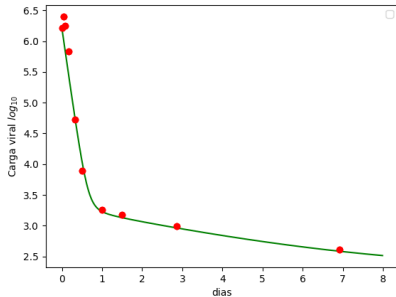
PATB17



PATB06



PATC05



PATC06

