

```
[6.18047086e+02, 1.62788566e+04, 1.30065379e+03, 1.09654125e+00,
1.91617561e+03, 1.88742408e+04, 9.03017988e-03, 8.20433340e-01,
6.32150857e+02, 1.82923784e+04, 2.82320227e-04, 5.06240755e+00,
2.67254099e-03, 5.12686179e-01, 3.30753397e+00, 1.33683244e+00],
[6.18047086e+02, 1.62788566e+04, 1.30065379e+03, 1.09654125e+00,
1.91617561e+03, 1.88742408e+04, 9.03017988e-03, 8.20433340e-01,
6.32150852e+02, 1.82923784e+04, 2.82320227e-04, 5.06240757e+00,
2.67253596e-03, 5.12686177e-01, 3.30753397e+00, 1.33683244e+00],
[6.18047086e+02, 1.62788566e+04, 1.30065379e+03, 1.09654125e+00,
1.91617561e+03, 1.88742408e+04, 9.03017988e-03, 8.20433340e-01,
6.32150857e+02, 1.82923784e+04, 2.82320227e-04, 5.06240754e+00,
2.67254084e-03, 5.12686179e-01, 3.30753397e+00, 1.33683244e+00]]], array([0.05761003,
0.05761003, 0.05761003, 0.05761003, 0.05761003,
0.05761003, 0.05761003, 0.05761003, 0.05761003, 0.05761003,
0.05761003, 0.05761003]))
fun: 0.05761003114295259
message: 'Optimization terminated successfully.'
nfev: 6371
nit: 4667
status: 0
success: True
x: array([6.18047086e+02, 1.62788566e+04, 1.30065379e+03, 1.09654125e+00,
1.91617561e+03, 1.88742408e+04, 9.03017988e-03, 8.20433340e-01,
6.32150844e+02, 1.82923784e+04, 2.82320227e-04, 5.06240754e+00,
2.67253500e-03, 5.12686179e-01, 3.30753397e+00, 1.33683244e+00])
```

2.07255500E+03, 3.12688175E+01, 3.50735557E+00, 1.55685244E+00],

	epsilon	Initial guesses	Converged
A_s	0.000000	618.047086	618.047086
B_s	0.000000	16278.856600	16278.856600
C_s	0.000000	1300.653790	1300.653790
N_s	0.000000	1.096541	1.096541
A_r	0.000000	1916.175610	1916.175610
B_r	0.000000	18874.240800	18874.240800
C_r	0.000000	0.009030	0.009030
N_r	0.000000	0.820433	0.820433
A_h	-51.684794	683.835638	632.150844
B_h	-14172.001789	32464.380200	18292.378411
C_h	-0.000191	0.000473	0.000282
F_o	2.241056	2.821352	5.062408
A_o	-0.629476	0.632148	0.002673
B_o	-0.460082	0.972768	0.512686
C_o	0.667360	2.640174	3.307534
N_o	-0.582507	1.919339	1.336832