**README**

The model is based on Model 12 in Marcilly et al. (2021) with refinements in exposed land area and extended from 520 to 540 Ma. This leads to changes (mostly very minor) in *f*A and *f*Aw10\_*f*A.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  | Corrected for aridity | |
| Time | *f*A  (Refined 2023) | *f*A  (Marcilly *et al.* 2021, Model 12 and 9) | *f*Aw10\_*f*A  (Refined 2023) | *f*Aw10\_*f*A  (Marcilly *et al.* 2021, Model 12 and 9) |
| 540 | 0.59 |  | 1.33 |  |
| 530 | 0.55 |  | 1.23 |  |
| 520 | 0.51 | 0.51 | 1.12 | 1.15 |
| 510 | 0.45 | 0.45 | 0.81 | 0.84 |
| 500 | 0.53 | 0.53 | 0.83 | 0.85 |
| 490 | 0.55 | 0.54 | 0.95 | 0.99 |
| 480 | 0.54 | 0.53 | 1.37 | 1.41 |
| 470 | 0.54 | 0.53 | 1.58 | 1.63 |
| 460 | 0.53 | 0.52 | 1.62 | 1.66 |
| 450 | 0.61 | 0.61 | 1.56 | 1.64 |
| 440 | 0.62 | 0.62 | 1.14 | 1.16 |
| 430 | 0.51 | 0.51 | 1.34 | 1.38 |
| 420 | 0.61 | 0.52 | 1.21 | 1.35 |
| 410 | 0.66 | 0.65 | 0.73 | 0.78 |
| 400 | 0.65 | 0.64 | 0.48 | 0.49 |
| 390 | 0.56 | 0.54 | 0.54 | 0.56 |
| 380 | 0.56 | 0.55 | 0.71 | 0.73 |
| 370 | 0.59 | 0.57 | 0.66 | 0.69 |
| 360 | 0.67 | 0.75 | 0.91 | 0.93 |
| 350 | 0.68 | 0.67 | 1.04 | 1.07 |
| 340 | 0.72 | 0.72 | 1.15 | 1.12 |
| 330 | 0.70 | 0.71 | 1.06 | 1.10 |
| 320 | 0.80 | 0.78 | 0.96 | 0.94 |
| 310 | 0.71 | 0.72 | 1.07 | 1.15 |
| 300 | 0.75 | 0.75 | 1.02 | 1.07 |
| 290 | 0.81 | 0.80 | 1.00 | 1.08 |
| 280 | 0.77 | 0.77 | 1.06 | 1.09 |
| 270 | 0.76 | 0.77 | 0.37 | 0.45 |
| 260 | 0.86 | 0.87 | 0.39 | 0.43 |
| 250 | 0.87 | 0.86 | 0.40 | 0.42 |
| 240 | 0.91 | 0.90 | 0.48 | 0.51 |
| 230 | 0.91 | 0.91 | 0.82 | 0.85 |
| 220 | 0.89 | 0.88 | 0.38 | 0.39 |
| 210 | 0.94 | 0.93 | 0.40 | 0.42 |
| 200 | 0.90 | 0.88 | 0.25 | 0.25 |
| 190 | 0.90 | 0.90 | 0.37 | 0.38 |
| 180 | 0.93 | 0.92 | 0.35 | 0.36 |
| 170 | 0.82 | 0.81 | 0.29 | 0.30 |
| 160 | 0.73 | 0.72 | 0.34 | 0.34 |
| 150 | 0.78 | 0.78 | 0.37 | 0.39 |
| 140 | 0.81 | 0.81 | 0.40 | 0.41 |
| 130 | 0.78 | 0.77 | 0.36 | 0.37 |
| 120 | 0.72 | 0.71 | 0.36 | 0.37 |
| 110 | 0.78 | 0.78 | 0.40 | 0.41 |
| 100 | 0.72 | 0.71 | 0.83 | 0.86 |
| 90 | 0.72 | 0.71 | 0.83 | 0.85 |
| 80 | 0.64 | 0.63 | 0.87 | 0.89 |
| 70 | 0.81 | 0.81 | 0.96 | 0.98 |
| 60 | 0.88 | 0.93 | 0.90 | 0.95 |
| 50 | 0.93 | 0.93 | 1.04 | 1.09 |
| 40 | 0.96 | 0.97 | 0.93 | 1.02 |
| 30 | 0.99 | 1.00 | 0.91 | 0.95 |
| 20 | 1.00 | 0.98 | 0.84 | 0.89 |
| 10 | 1.01 | 1.02 | 0.97 | 1.03 |
| 0 | 1.00 | 1.01 | 1.00 | 1.00 |