|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | | Mean lifespan (Myrs) | Minimum lifespan (Myrs) | Maximum lifespan (Myrs) | Mean spacing (km) | Minimum spacing (km) | Maximum spacing (km) |
| *s* = 0 mm.yr-1 | *M* = 0.6 | 0.537 | 0.335 | 0.900 | 16.19 | 13.87 | 17.78 |
| *M* = 0.65 | 0.473 | 0.450 | 0.550 | 13.35 | 13.35 | 13.35 |
| *M* = 0.7 | 0.473 | 0.450 | 0.500 | 13.37 | 13.27 | 13.47 |
| *M* = 0.75 | 0.484 | 0.425 | 0.600 | 13.71 | 13.59 | 13.83 |
| *M* = 0.8 | 0.446 | 0.400 | 0.575 | 11.77 | 11.69 | 11.85 |
| *s* = 0.25 mm.yr-1 | *M* = 0.6 | 0.382 | 0.200 | 0.500 | 9.38 | 9.23 | 9.52 |
| *M* = 0.65 | 0.423 | 0.400 | 0.450 | 11.45 | 11.33 | 11.57 |
| *M* = 0.7 | 0.433 | 0.400 | 0.450 | 11.61 | 11.61 | 11.61 |
| *M* = 0.75 | 0.416 | 0.375 | 0.450 | 11.06 | 10 | 11.69 |
| *M* = 0.8 | 0.402 | 0.325 | 0.425 | 10.60 | 9.84 | 11.17 |
| *s* = 0.5 mm.yr-1 | *M* = 0.6 | 0.281 | 0.225 | 0.325 | 7.93 | 7.66 | 8.06 |
| *M* = 0.65 | 0.398 | 0.375 | 0.425 | 10.58 | 10 | 11.17 |
| *M* = 0.7 | 0.389 | 0.350 | 0.425 | 10.32 | 10.04 | 10.60 |
| *M* = 0.75 | 0.388 | 0.325 | 0.400 | 10.73 | 10.36 | 11.05 |
| *M* = 0.8 | 0.374 | 0.350 | 0.400 | 9.07 | 8.91 | 9.23 |
| *s* = 0.75 mm.yr-1 | *M* = 0.6 | 0.248 | 0.200 | 0.275 | 6.33 | 6.13 | 6.57 |
| *M* = 0.65 | 0.350 | 0.325 | 0.375 | 9.74 | 9.60 | 9.84 |
| *M* = 0.7 | 0.350 | 0.325 | 0.375 | 9.83 | 9.56 | 10.04 |
| *M* = 0.75 | 0.361 | 0.300 | 0.375 | 9.97 | 9.76 | 10.08 |
| *M* = 0.8 | 0.363 | 0.275 | 0.425 | 11.29 | 11.29 | 11.29 |
| *s* = 1 mm.yr-1 | *M* = 0.6 | 0.223 | 0.175 | 0.300 | 4.54 | 4.40 | 4.80 |
| *M* = 0.65 | 0.319 | 0.250 | 0.350 | 9.26 | 9.15 | 9.48 |
| *M* = 0.7 | 0.335 | 0.325 | 0.350 | 9.03 | 8.87 | 9.19 |
| *M* = 0.75 | 0.345 | 0.325 | 0.375 | 9.48 | 8.99 | 10.08 |
| *M* = 0.8 | 0.342 | 0.300 | 0.425 | 11.15 | 10.93 | 11.37 |

Table S2. Summary of model results.

de Sagazan, C. and Olive, J.-A., 2021, Assessing the impact of sedimentation on fault spacing at the Andaman Sea spreading center: Geology, v. 49, https://doi.org/10.1130/G48263.1