| regions | sel\_bait\_type | mod\_name | mod\_formula | AICc | delta | model\_df | deviance | d2 | residual\_df | lr\_chisq | chisq\_df | p\_value\_chisq | lr\_signif | best\_model\_candidate | best\_model |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ecuador | amino\_acid | null | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ 1 | 39.94 | 2.93 | 2 | 35.34 | 1.00 | 21 | 0.00 | 0 | 1.00 |  | FALSE | FALSE |
| ecuador | amino\_acid | elevation | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 1) | 38.55 | 1.54 | 3 | 31.29 | 0.12 | 20 | 4.06 | 1 | 0.04 | \* | TRUE | FALSE |
| ecuador | amino\_acid | elevation-poly | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 2) | 40.52 | 3.51 | 4 | 30.30 | 0.14 | 19 | 5.04 | 2 | 0.08 |  | FALSE | FALSE |
| ecuador | amino\_acid | season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ seasons | 39.13 | 2.12 | 3 | 31.87 | 0.10 | 20 | 3.48 | 1 | 0.06 |  | FALSE | FALSE |
| ecuador | amino\_acid | elevation + season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 1) + seasons | 37.01 | 0.00 | 4 | 26.79 | 0.24 | 19 | 8.55 | 2 | 0.01 | \* | TRUE | FALSE |
| ecuador | amino\_acid | elevation \* season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 1) + seasons + poly(elevation\_mean, 1):seasons | 37.62 | 0.61 | 5 | 24.09 | 0.32 | 18 | 11.25 | 3 | 0.01 | \* | TRUE | TRUE |
| ecuador | amino\_acid | elevation-poly + season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 2) + seasons | 39.21 | 2.20 | 5 | 25.68 | 0.27 | 18 | 9.66 | 3 | 0.02 | \* | FALSE | FALSE |
| ecuador | amino\_acid | elevation-poly \* season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 2) + seasons + poly(elevation\_mean, 2):seasons | 40.90 | 3.89 | 7 | 19.43 | 0.45 | 16 | 15.91 | 5 | 0.01 | \*\* | FALSE | FALSE |
| png | amino\_acid | null | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ 1 | 35.17 | 0.80 | 2 | 30.47 | 1.00 | 18 | 0.00 | 0 | 1.00 |  | TRUE | FALSE |
| png | amino\_acid | elevation | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 1) | 37.85 | 3.47 | 3 | 30.35 | 0.00 | 17 | 0.12 | 1 | 0.73 |  | FALSE | FALSE |
| png | amino\_acid | elevation-poly | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 2) | 40.82 | 6.44 | 4 | 30.15 | 0.01 | 16 | 0.32 | 2 | 0.85 |  | FALSE | FALSE |
| png | amino\_acid | season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ seasons | 34.37 | 0.00 | 3 | 26.87 | 0.12 | 17 | 3.60 | 1 | 0.06 |  | TRUE | TRUE |
| png | amino\_acid | elevation + season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 1) + seasons | 37.45 | 3.08 | 4 | 26.78 | 0.12 | 16 | 3.69 | 2 | 0.16 |  | FALSE | FALSE |
| png | amino\_acid | elevation \* season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 1) + seasons + poly(elevation\_mean, 1):seasons | 41.01 | 6.63 | 5 | 26.72 | 0.12 | 15 | 3.75 | 3 | 0.29 |  | FALSE | FALSE |
| png | amino\_acid | elevation-poly + season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 2) + seasons | 40.98 | 6.60 | 5 | 26.69 | 0.12 | 15 | 3.78 | 3 | 0.29 |  | FALSE | FALSE |
| png | amino\_acid | elevation-poly \* season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 2) + seasons + poly(elevation\_mean, 2):seasons | 49.95 | 15.58 | 7 | 26.62 | 0.13 | 13 | 3.85 | 5 | 0.57 |  | FALSE | FALSE |
| tanzania | amino\_acid | null | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ 1 | 21.66 | 0.00 | 2 | 15.95 | 1.00 | 8 | 0.00 | 0 | 1.00 |  | TRUE | FALSE |
| tanzania | amino\_acid | elevation | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 1) | 22.27 | 0.60 | 3 | 12.27 | 0.23 | 7 | 3.69 | 1 | 0.06 |  | TRUE | TRUE |
| tanzania | amino\_acid | elevation-poly | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 2) | 27.87 | 6.20 | 4 | 11.87 | 0.26 | 6 | 4.09 | 2 | 0.13 |  | FALSE | FALSE |
| tanzania | amino\_acid | season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ seasons | 25.88 | 4.21 | 3 | 15.88 | 0.00 | 7 | 0.07 | 1 | 0.79 |  | FALSE | FALSE |
| tanzania | amino\_acid | elevation + season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 1) + seasons | 27.82 | 6.15 | 4 | 11.82 | 0.26 | 6 | 4.13 | 2 | 0.13 |  | FALSE | FALSE |
| tanzania | amino\_acid | elevation \* season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 1) + seasons + poly(elevation\_mean, 1):seasons | 36.60 | 14.93 | 5 | 11.60 | 0.27 | 5 | 4.36 | 3 | 0.23 |  | FALSE | FALSE |
| tanzania | amino\_acid | elevation-poly + season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 2) + seasons | 36.10 | 14.43 | 5 | 11.10 | 0.30 | 5 | 4.86 | 3 | 0.18 |  | FALSE | FALSE |
| tanzania | amino\_acid | elevation-poly \* season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 2) + seasons + poly(elevation\_mean, 2):seasons | 80.62 | 58.95 | 7 | 10.62 | 0.33 | 3 | 5.33 | 5 | 0.38 |  | FALSE | FALSE |
| ecuador | cho | null | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ 1 | 37.91 | 0.00 | 2 | 33.31 | 1.00 | 21 | 0.00 | 0 | 1.00 |  | TRUE | FALSE |
| ecuador | cho | elevation | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 1) | 38.87 | 0.95 | 3 | 31.60 | 0.05 | 20 | 1.71 | 1 | 0.19 |  | TRUE | TRUE |
| ecuador | cho | elevation-poly | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 2) | 41.60 | 3.69 | 4 | 31.38 | 0.06 | 19 | 1.94 | 2 | 0.38 |  | FALSE | FALSE |
| ecuador | cho | season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ seasons | 39.65 | 1.74 | 3 | 32.39 | 0.03 | 20 | 0.93 | 1 | 0.34 |  | TRUE | FALSE |
| ecuador | cho | elevation + season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 1) + seasons | 40.70 | 2.78 | 4 | 30.47 | 0.09 | 19 | 2.84 | 2 | 0.24 |  | FALSE | FALSE |
| ecuador | cho | elevation \* season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 1) + seasons + poly(elevation\_mean, 1):seasons | 42.97 | 5.06 | 5 | 29.44 | 0.12 | 18 | 3.87 | 3 | 0.28 |  | FALSE | FALSE |
| ecuador | cho | elevation-poly + season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 2) + seasons | 43.75 | 5.84 | 5 | 30.22 | 0.09 | 18 | 3.09 | 3 | 0.38 |  | FALSE | FALSE |
| ecuador | cho | elevation-poly \* season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 2) + seasons + poly(elevation\_mean, 2):seasons | 50.21 | 12.30 | 7 | 28.75 | 0.14 | 16 | 4.57 | 5 | 0.47 |  | FALSE | FALSE |
| png | cho | null | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ 1 | 34.63 | 0.00 | 2 | 29.93 | 1.00 | 18 | 0.00 | 0 | 1.00 |  | TRUE | TRUE |
| png | cho | elevation | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 1) | 36.86 | 2.23 | 3 | 29.36 | 0.02 | 17 | 0.56 | 1 | 0.45 |  | FALSE | FALSE |
| png | cho | elevation-poly | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 2) | 39.87 | 5.23 | 4 | 29.20 | 0.02 | 16 | 0.73 | 2 | 0.70 |  | FALSE | FALSE |
| png | cho | season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ seasons | 37.38 | 2.75 | 3 | 29.88 | 0.00 | 17 | 0.05 | 1 | 0.83 |  | FALSE | FALSE |
| png | cho | elevation + season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 1) + seasons | 39.99 | 5.36 | 4 | 29.33 | 0.02 | 16 | 0.60 | 2 | 0.74 |  | FALSE | FALSE |
| png | cho | elevation \* season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 1) + seasons + poly(elevation\_mean, 1):seasons | 43.59 | 8.96 | 5 | 29.30 | 0.02 | 15 | 0.62 | 3 | 0.89 |  | FALSE | FALSE |
| png | cho | elevation-poly + season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 2) + seasons | 43.43 | 8.80 | 5 | 29.15 | 0.03 | 15 | 0.78 | 3 | 0.85 |  | FALSE | FALSE |
| png | cho | elevation-poly \* season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 2) + seasons + poly(elevation\_mean, 2):seasons | 52.31 | 17.68 | 7 | 28.98 | 0.03 | 13 | 0.95 | 5 | 0.97 |  | FALSE | FALSE |
| tanzania | cho | null | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ 1 | 18.72 | 0.00 | 2 | 13.01 | 1.00 | 8 | 0.00 | 0 | 1.00 |  | TRUE | TRUE |
| tanzania | cho | elevation | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 1) | 20.90 | 2.18 | 3 | 10.90 | 0.16 | 7 | 2.10 | 1 | 0.15 |  | FALSE | FALSE |
| tanzania | cho | elevation-poly | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 2) | 26.56 | 7.84 | 4 | 10.56 | 0.19 | 6 | 2.45 | 2 | 0.29 |  | FALSE | FALSE |
| tanzania | cho | season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ seasons | 23.01 | 4.28 | 3 | 13.01 | 0.00 | 7 | 0.00 | 1 | 0.98 |  | FALSE | FALSE |
| tanzania | cho | elevation + season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 1) + seasons | 26.77 | 8.05 | 4 | 10.77 | 0.17 | 6 | 2.24 | 2 | 0.33 |  | FALSE | FALSE |
| tanzania | cho | elevation \* season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 1) + seasons + poly(elevation\_mean, 1):seasons | 33.84 | 15.12 | 5 | 8.84 | 0.32 | 5 | 4.17 | 3 | 0.24 |  | FALSE | FALSE |
| tanzania | cho | elevation-poly + season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 2) + seasons | 35.50 | 16.78 | 5 | 10.50 | 0.19 | 5 | 2.51 | 3 | 0.47 |  | FALSE | FALSE |
| tanzania | cho | elevation-poly \* season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 2) + seasons + poly(elevation\_mean, 2):seasons | NA | NA | 7 | NA | NA | 3 | NA | 5 | NA |  | NA | NA |
| ecuador | cho\_amino\_acid | null | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ 1 | 36.15 | 0.00 | 2 | 31.55 | 1.00 | 21 | 0.00 | 0 | 1.00 |  | TRUE | FALSE |
| ecuador | cho\_amino\_acid | elevation | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 1) | 38.52 | 2.37 | 3 | 31.26 | 0.01 | 20 | 0.29 | 1 | 0.59 |  | FALSE | FALSE |
| ecuador | cho\_amino\_acid | elevation-poly | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 2) | 41.47 | 5.32 | 4 | 31.25 | 0.01 | 19 | 0.30 | 2 | 0.86 |  | FALSE | FALSE |
| ecuador | cho\_amino\_acid | season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ seasons | 37.40 | 1.25 | 3 | 30.14 | 0.04 | 20 | 1.41 | 1 | 0.23 |  | TRUE | TRUE |
| ecuador | cho\_amino\_acid | elevation + season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 1) + seasons | 40.12 | 3.98 | 4 | 29.90 | 0.05 | 19 | 1.65 | 2 | 0.44 |  | FALSE | FALSE |
| ecuador | cho\_amino\_acid | elevation \* season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 1) + seasons + poly(elevation\_mean, 1):seasons | 43.42 | 7.27 | 5 | 29.89 | 0.05 | 18 | 1.66 | 3 | 0.65 |  | FALSE | FALSE |
| ecuador | cho\_amino\_acid | elevation-poly + season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 2) + seasons | 43.42 | 7.27 | 5 | 29.89 | 0.05 | 18 | 1.66 | 3 | 0.65 |  | FALSE | FALSE |
| ecuador | cho\_amino\_acid | elevation-poly \* season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 2) + seasons + poly(elevation\_mean, 2):seasons | 51.26 | 15.11 | 7 | 29.79 | 0.06 | 16 | 1.76 | 5 | 0.88 |  | FALSE | FALSE |
| png | cho\_amino\_acid | null | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ 1 | 37.09 | 0.00 | 2 | 32.38 | 1.00 | 18 | 0.00 | 0 | 1.00 |  | TRUE | FALSE |
| png | cho\_amino\_acid | elevation | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 1) | 39.85 | 2.76 | 3 | 32.35 | 0.00 | 17 | 0.04 | 1 | 0.85 |  | FALSE | FALSE |
| png | cho\_amino\_acid | elevation-poly | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 2) | 42.68 | 5.58 | 4 | 32.01 | 0.01 | 16 | 0.38 | 2 | 0.83 |  | FALSE | FALSE |
| png | cho\_amino\_acid | season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ seasons | 38.40 | 1.31 | 3 | 30.90 | 0.05 | 17 | 1.49 | 1 | 0.22 |  | TRUE | TRUE |
| png | cho\_amino\_acid | elevation + season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 1) + seasons | 41.54 | 4.45 | 4 | 30.88 | 0.05 | 16 | 1.51 | 2 | 0.47 |  | FALSE | FALSE |
| png | cho\_amino\_acid | elevation \* season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 1) + seasons + poly(elevation\_mean, 1):seasons | 45.06 | 7.96 | 5 | 30.77 | 0.05 | 15 | 1.62 | 3 | 0.66 |  | FALSE | FALSE |
| png | cho\_amino\_acid | elevation-poly + season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 2) + seasons | 44.66 | 7.57 | 5 | 30.38 | 0.06 | 15 | 2.00 | 3 | 0.57 |  | FALSE | FALSE |
| png | cho\_amino\_acid | elevation-poly \* season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 2) + seasons + poly(elevation\_mean, 2):seasons | 53.48 | 16.39 | 7 | 30.15 | 0.07 | 13 | 2.23 | 5 | 0.82 |  | FALSE | FALSE |
| tanzania | cho\_amino\_acid | null | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ 1 | 20.97 | 0.00 | 2 | 15.26 | 1.00 | 8 | 0.00 | 0 | 1.00 |  | TRUE | TRUE |
| tanzania | cho\_amino\_acid | elevation | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 1) | 23.75 | 2.78 | 3 | 13.75 | 0.10 | 7 | 1.51 | 1 | 0.22 |  | FALSE | FALSE |
| tanzania | cho\_amino\_acid | elevation-poly | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 2) | 28.81 | 7.84 | 4 | 12.81 | 0.16 | 6 | 2.45 | 2 | 0.29 |  | FALSE | FALSE |
| tanzania | cho\_amino\_acid | season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ seasons | 24.76 | 3.79 | 3 | 14.77 | 0.03 | 7 | 0.49 | 1 | 0.48 |  | FALSE | FALSE |
| tanzania | cho\_amino\_acid | elevation + season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 1) + seasons | 29.52 | 8.55 | 4 | 13.52 | 0.11 | 6 | 1.74 | 2 | 0.42 |  | FALSE | FALSE |
| tanzania | cho\_amino\_acid | elevation \* season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 1) + seasons + poly(elevation\_mean, 1):seasons | 38.51 | 17.54 | 5 | 13.51 | 0.12 | 5 | 1.75 | 3 | 0.63 |  | FALSE | FALSE |
| tanzania | cho\_amino\_acid | elevation-poly + season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 2) + seasons | 37.31 | 16.34 | 5 | 12.31 | 0.19 | 5 | 2.95 | 3 | 0.40 |  | FALSE | FALSE |
| tanzania | cho\_amino\_acid | elevation-poly \* season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 2) + seasons + poly(elevation\_mean, 2):seasons | 82.22 | 61.24 | 7 | 12.21 | 0.20 | 3 | 3.04 | 5 | 0.69 |  | FALSE | FALSE |
| ecuador | h2o | null | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ 1 | 27.79 | 0.00 | 2 | 23.19 | 1.00 | 21 | 0.00 | 0 | 1.00 |  | TRUE | TRUE |
| ecuador | h2o | elevation | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 1) | 30.38 | 2.58 | 3 | 23.11 | 0.00 | 20 | 0.08 | 1 | 0.78 |  | FALSE | FALSE |
| ecuador | h2o | elevation-poly | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 2) | 33.33 | 5.54 | 4 | 23.11 | 0.00 | 19 | 0.08 | 2 | 0.96 |  | FALSE | FALSE |
| ecuador | h2o | season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ seasons | 30.04 | 2.24 | 3 | 22.77 | 0.02 | 20 | 0.42 | 1 | 0.52 |  | FALSE | FALSE |
| ecuador | h2o | elevation + season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 1) + seasons | 32.89 | 5.10 | 4 | 22.67 | 0.02 | 19 | 0.52 | 2 | 0.77 |  | FALSE | FALSE |
| ecuador | h2o | elevation \* season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 1) + seasons + poly(elevation\_mean, 1):seasons | 35.61 | 7.82 | 5 | 22.09 | 0.05 | 18 | 1.11 | 3 | 0.78 |  | FALSE | FALSE |
| ecuador | h2o | elevation-poly + season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 2) + seasons | 36.20 | 8.41 | 5 | 22.67 | 0.02 | 18 | 0.52 | 3 | 0.91 |  | FALSE | FALSE |
| ecuador | h2o | elevation-poly \* season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 2) + seasons + poly(elevation\_mean, 2):seasons | 43.25 | 15.46 | 7 | 21.78 | 0.06 | 16 | 1.41 | 5 | 0.92 |  | FALSE | FALSE |
| png | h2o | null | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ 1 | 35.44 | 0.00 | 2 | 30.74 | 1.00 | 18 | 0.00 | 0 | 1.00 |  | TRUE | FALSE |
| png | h2o | elevation | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 1) | 37.06 | 1.62 | 3 | 29.56 | 0.04 | 17 | 1.18 | 1 | 0.28 |  | TRUE | TRUE |
| png | h2o | elevation-poly | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 2) | 39.94 | 4.49 | 4 | 29.27 | 0.05 | 16 | 1.47 | 2 | 0.48 |  | FALSE | FALSE |
| png | h2o | season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ seasons | 37.62 | 2.17 | 3 | 30.12 | 0.02 | 17 | 0.62 | 1 | 0.43 |  | FALSE | FALSE |
| png | h2o | elevation + season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 1) + seasons | 39.64 | 4.19 | 4 | 28.97 | 0.06 | 16 | 1.77 | 2 | 0.41 |  | FALSE | FALSE |
| png | h2o | elevation \* season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 1) + seasons + poly(elevation\_mean, 1):seasons | 43.20 | 7.76 | 5 | 28.92 | 0.06 | 15 | 1.82 | 3 | 0.61 |  | FALSE | FALSE |
| png | h2o | elevation-poly + season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 2) + seasons | 43.01 | 7.57 | 5 | 28.73 | 0.06 | 15 | 2.01 | 3 | 0.57 |  | FALSE | FALSE |
| png | h2o | elevation-poly \* season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 2) + seasons + poly(elevation\_mean, 2):seasons | 51.43 | 15.99 | 7 | 28.10 | 0.09 | 13 | 2.64 | 5 | 0.76 |  | FALSE | FALSE |
| tanzania | h2o | null | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ 1 | 23.54 | 2.35 | 2 | 17.82 | 1.00 | 8 | 0.00 | 0 | 1.00 |  | FALSE | FALSE |
| tanzania | h2o | elevation | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 1) | 21.19 | 0.00 | 3 | 11.19 | 0.37 | 7 | 6.63 | 1 | 0.01 | \* | TRUE | TRUE |
| tanzania | h2o | elevation-poly | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 2) | 27.06 | 5.87 | 4 | 11.06 | 0.38 | 6 | 6.76 | 2 | 0.03 | \* | FALSE | FALSE |
| tanzania | h2o | season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ seasons | 27.56 | 6.37 | 3 | 17.56 | 0.01 | 7 | 0.26 | 1 | 0.61 |  | FALSE | FALSE |
| tanzania | h2o | elevation + season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 1) + seasons | 25.96 | 4.77 | 4 | 9.96 | 0.44 | 6 | 7.86 | 2 | 0.02 | \* | FALSE | FALSE |
| tanzania | h2o | elevation \* season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 1) + seasons + poly(elevation\_mean, 1):seasons | 33.31 | 12.12 | 5 | 8.31 | 0.53 | 5 | 9.52 | 3 | 0.02 | \* | FALSE | FALSE |
| tanzania | h2o | elevation-poly + season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 2) + seasons | 34.67 | 13.48 | 5 | 9.67 | 0.46 | 5 | 8.15 | 3 | 0.04 | \* | FALSE | FALSE |
| tanzania | h2o | elevation-poly \* season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 2) + seasons + poly(elevation\_mean, 2):seasons | 77.95 | 56.76 | 7 | 7.95 | 0.55 | 3 | 9.87 | 5 | 0.08 |  | FALSE | FALSE |
| ecuador | lipid | null | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ 1 | 39.78 | 13.71 | 2 | 35.18 | 1.00 | 21 | 0.00 | 0 | 1.00 |  | FALSE | FALSE |
| ecuador | lipid | elevation | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 1) | 26.07 | 0.00 | 3 | 18.80 | 0.47 | 20 | 16.38 | 1 | 0.00 | \*\*\* | TRUE | TRUE |
| ecuador | lipid | elevation-poly | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 2) | 28.09 | 2.03 | 4 | 17.87 | 0.49 | 19 | 17.31 | 2 | 0.00 | \*\*\* | FALSE | FALSE |
| ecuador | lipid | season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ seasons | 42.26 | 16.20 | 3 | 35.00 | 0.00 | 20 | 0.18 | 1 | 0.67 |  | FALSE | FALSE |
| ecuador | lipid | elevation + season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 1) + seasons | 28.75 | 2.69 | 4 | 18.53 | 0.47 | 19 | 16.65 | 2 | 0.00 | \*\*\* | FALSE | FALSE |
| ecuador | lipid | elevation \* season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 1) + seasons + poly(elevation\_mean, 1):seasons | 31.35 | 5.28 | 5 | 17.82 | 0.49 | 18 | 17.36 | 3 | 0.00 | \*\*\* | FALSE | FALSE |
| ecuador | lipid | elevation-poly + season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 2) + seasons | 31.02 | 4.95 | 5 | 17.49 | 0.50 | 18 | 17.69 | 3 | 0.00 | \*\*\* | FALSE | FALSE |
| ecuador | lipid | elevation-poly \* season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 2) + seasons + poly(elevation\_mean, 2):seasons | 38.52 | 12.45 | 7 | 17.05 | 0.52 | 16 | 18.13 | 5 | 0.00 | \*\* | FALSE | FALSE |
| png | lipid | null | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ 1 | 26.64 | 0.57 | 2 | 21.93 | 1.00 | 18 | 0.00 | 0 | 1.00 |  | TRUE | FALSE |
| png | lipid | elevation | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 1) | 27.01 | 0.94 | 3 | 19.51 | 0.11 | 17 | 2.42 | 1 | 0.12 |  | TRUE | FALSE |
| png | lipid | elevation-poly | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 2) | 29.95 | 3.89 | 4 | 19.29 | 0.12 | 16 | 2.64 | 2 | 0.27 |  | FALSE | FALSE |
| png | lipid | season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ seasons | 26.07 | 0.00 | 3 | 18.57 | 0.15 | 17 | 3.37 | 1 | 0.07 |  | TRUE | FALSE |
| png | lipid | elevation + season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 1) + seasons | 26.92 | 0.85 | 4 | 16.25 | 0.26 | 16 | 5.68 | 2 | 0.06 |  | TRUE | TRUE |
| png | lipid | elevation \* season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 1) + seasons + poly(elevation\_mean, 1):seasons | 29.69 | 3.62 | 5 | 15.40 | 0.30 | 15 | 6.53 | 3 | 0.09 |  | FALSE | FALSE |
| png | lipid | elevation-poly + season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 2) + seasons | 30.42 | 4.35 | 5 | 16.14 | 0.26 | 15 | 5.80 | 3 | 0.12 |  | FALSE | FALSE |
| png | lipid | elevation-poly \* season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 2) + seasons + poly(elevation\_mean, 2):seasons | 37.64 | 11.58 | 7 | 14.31 | 0.35 | 13 | 7.62 | 5 | 0.18 |  | FALSE | FALSE |
| tanzania | lipid | null | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ 1 | 20.15 | 0.00 | 2 | 14.43 | 1.00 | 8 | 0.00 | 0 | 1.00 |  | TRUE | TRUE |
| tanzania | lipid | elevation | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 1) | 24.42 | 4.28 | 3 | 14.42 | 0.00 | 7 | 0.01 | 1 | 0.92 |  | FALSE | FALSE |
| tanzania | lipid | elevation-poly | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 2) | 29.07 | 8.93 | 4 | 13.07 | 0.09 | 6 | 1.36 | 2 | 0.51 |  | FALSE | FALSE |
| tanzania | lipid | season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ seasons | 23.31 | 3.16 | 3 | 13.31 | 0.08 | 7 | 1.12 | 1 | 0.29 |  | FALSE | FALSE |
| tanzania | lipid | elevation + season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 1) + seasons | 29.30 | 9.15 | 4 | 13.30 | 0.08 | 6 | 1.13 | 2 | 0.57 |  | FALSE | FALSE |
| tanzania | lipid | elevation \* season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 1) + seasons + poly(elevation\_mean, 1):seasons | 36.78 | 16.64 | 5 | 11.78 | 0.18 | 5 | 2.65 | 3 | 0.45 |  | FALSE | FALSE |
| tanzania | lipid | elevation-poly + season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 2) + seasons | 36.09 | 15.94 | 5 | 11.09 | 0.23 | 5 | 3.34 | 3 | 0.34 |  | FALSE | FALSE |
| tanzania | lipid | elevation-poly \* season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 2) + seasons + poly(elevation\_mean, 2):seasons | 78.46 | 58.31 | 7 | 8.46 | 0.41 | 3 | 5.97 | 5 | 0.31 |  | FALSE | FALSE |
| ecuador | nacl | null | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ 1 | 40.94 | 0.00 | 2 | 36.34 | 1.00 | 21 | 0.00 | 0 | 1.00 |  | TRUE | FALSE |
| ecuador | nacl | elevation | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 1) | 41.08 | 0.14 | 3 | 33.81 | 0.07 | 20 | 2.53 | 1 | 0.11 |  | TRUE | FALSE |
| ecuador | nacl | elevation-poly | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 2) | 43.93 | 2.99 | 4 | 33.71 | 0.07 | 19 | 2.63 | 2 | 0.27 |  | FALSE | FALSE |
| ecuador | nacl | season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ seasons | 41.18 | 0.24 | 3 | 33.92 | 0.07 | 20 | 2.42 | 1 | 0.12 |  | TRUE | FALSE |
| ecuador | nacl | elevation + season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 1) + seasons | 41.72 | 0.78 | 4 | 31.50 | 0.13 | 19 | 4.84 | 2 | 0.09 |  | TRUE | TRUE |
| ecuador | nacl | elevation \* season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 1) + seasons + poly(elevation\_mean, 1):seasons | 43.17 | 2.23 | 5 | 29.64 | 0.18 | 18 | 6.70 | 3 | 0.08 |  | FALSE | FALSE |
| ecuador | nacl | elevation-poly + season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 2) + seasons | 44.92 | 3.98 | 5 | 31.39 | 0.14 | 18 | 4.95 | 3 | 0.18 |  | FALSE | FALSE |
| ecuador | nacl | elevation-poly \* season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 2) + seasons + poly(elevation\_mean, 2):seasons | 48.93 | 7.99 | 7 | 27.47 | 0.24 | 16 | 8.87 | 5 | 0.11 |  | FALSE | FALSE |
| png | nacl | null | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ 1 | 37.63 | 0.00 | 2 | 32.92 | 1.00 | 18 | 0.00 | 0 | 1.00 |  | TRUE | FALSE |
| png | nacl | elevation | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 1) | 39.83 | 2.20 | 3 | 32.33 | 0.02 | 17 | 0.60 | 1 | 0.44 |  | FALSE | FALSE |
| png | nacl | elevation-poly | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 2) | 42.75 | 5.12 | 4 | 32.08 | 0.03 | 16 | 0.84 | 2 | 0.66 |  | FALSE | FALSE |
| png | nacl | season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ seasons | 39.30 | 1.68 | 3 | 31.80 | 0.03 | 17 | 1.12 | 1 | 0.29 |  | TRUE | TRUE |
| png | nacl | elevation + season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 1) + seasons | 41.92 | 4.29 | 4 | 31.25 | 0.05 | 16 | 1.67 | 2 | 0.43 |  | FALSE | FALSE |
| png | nacl | elevation \* season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 1) + seasons + poly(elevation\_mean, 1):seasons | 43.95 | 6.32 | 5 | 29.66 | 0.10 | 15 | 3.26 | 3 | 0.35 |  | FALSE | FALSE |
| png | nacl | elevation-poly + season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 2) + seasons | 45.18 | 7.55 | 5 | 30.90 | 0.06 | 15 | 2.03 | 3 | 0.57 |  | FALSE | FALSE |
| png | nacl | elevation-poly \* season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 2) + seasons + poly(elevation\_mean, 2):seasons | 52.53 | 14.90 | 7 | 29.20 | 0.11 | 13 | 3.73 | 5 | 0.59 |  | FALSE | FALSE |
| tanzania | nacl | null | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ 1 | 22.62 | 0.00 | 2 | 16.91 | 1.00 | 8 | 0.00 | 0 | 1.00 |  | TRUE | FALSE |
| tanzania | nacl | elevation | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 1) | 23.54 | 0.92 | 3 | 13.54 | 0.20 | 7 | 3.36 | 1 | 0.07 |  | TRUE | TRUE |
| tanzania | nacl | elevation-poly | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 2) | 29.54 | 6.92 | 4 | 13.54 | 0.20 | 6 | 3.36 | 2 | 0.19 |  | FALSE | FALSE |
| tanzania | nacl | season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ seasons | 26.65 | 4.03 | 3 | 16.65 | 0.01 | 7 | 0.26 | 1 | 0.61 |  | FALSE | FALSE |
| tanzania | nacl | elevation + season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 1) + seasons | 28.66 | 6.04 | 4 | 12.65 | 0.25 | 6 | 4.25 | 2 | 0.12 |  | FALSE | FALSE |
| tanzania | nacl | elevation \* season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 1) + seasons + poly(elevation\_mean, 1):seasons | 37.57 | 14.96 | 5 | 12.57 | 0.26 | 5 | 4.33 | 3 | 0.23 |  | FALSE | FALSE |
| tanzania | nacl | elevation-poly + season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 2) + seasons | 37.61 | 14.99 | 5 | 12.61 | 0.25 | 5 | 4.30 | 3 | 0.23 |  | FALSE | FALSE |
| tanzania | nacl | elevation-poly \* season | cbind(n\_abundance\_log, max\_abundance\_log - n\_abundance\_log) ~ poly(elevation\_mean, 2) + seasons + poly(elevation\_mean, 2):seasons | 82.23 | 59.61 | 7 | 12.23 | 0.28 | 3 | 4.68 | 5 | 0.46 |  | FALSE | FALSE |