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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table S1**. Model parameters used to perform automatic kriging and generation of variograms for spatial interpolation. | | | | | | | | |
| *isoscape* | *metric* | *site* | *model* | *nugget* | *psill* | *range* | *sserr* | *kappa* |
| soil + foliar | δ15N | KP | spherical | 0.00 | 5.83 | 2.19 | 58.20 | – |
| soil + foliar | δ15N | RK | spherical | 0.00 | 4.57 | 2.00 | 190.97 | – |
| soil + foliar | δ13C | KP | spherical | 0.00 | 5.80 | 2.20 | 129.00 | – |
| soil + foliar | δ13C | RK | spherical | 0.00 | 9.26 | 3.00 | 1042.44 | – |
| soil | δ15N | KP | Matern | 0.00 | 1.44 | 3.43 | 0.01 | 10.00 |
| soil | δ15N | RK | Matern | 0.00 | 1.20 | 8.49 | 0.08 | 0.60 |
| soil | δ13C | KP | Matern | 0.24 | 1.17 | 5.09 | 0.35 | 10.00 |
| soil | δ13C | RK | Matern | 0.40 | 2.42 | 26.46 | 0.29 | – |
| foliar | δ15N | KP | exponential | 0.20 | 0.40 | 3.00 | 0.09 | – |
| foliar | δ15N | RK | gaussian | 0.22 | 1.20 | 12.11 | 0.07 | – |
| *isoscape* = input sample type used in the spatial interpolation  *metric* = input data type used in isoscapes  *model* = best fit model automatically selected using R package automap ([Hiemstra](http://paperpile.com/b/bkvWwH/6aPFm) et al. 2009) *nugget* = initial minimum of semi-variance *psill* = estimated mean of semi-variance max and median  *range* = 0.10x the diagonal of data bounding box *sserr* = sum of squares between sample and fitted variogram *kappa* = smoothing parameter in Matern model. | | | | | | | | |