



Supplement of

Mixed Signals: interpreting mixing patterns of different soil bioturbation processes through luminescence and numerical modelling

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This supplementary file contains the following Figures:

Figure S1: point clouds and density functions of simulated luminescence age-depth profiles for mounding (left column) and subsurface mixing (right column), with gradational (a, b), exponential (c, d) and abrupt (e, f) depth functions. These plots correspond to the information provided in Figure 4 in the paper. The simulated layers were aggregated per five layers, resembling typical 5-cm thick luminescence samples. (2 pages)

Figure S2: point clouds and density functions of simulated luminescence age-depth profiles for different rates of mounding (left column) and subsurface mixing (right column), using a linear depth function. These plots correspond to the information provided in Figure 5 in the paper. The simulated layers were aggregated per five layers, resembling typical 5-cm thick luminescence samples. (3 pages)

Figure S3: point clouds and density functions of simulated luminescence age-depth profiles for different ratios between mounding and subsurface mixing. These plots correspond to the information provided in Figure 6 in the paper. The simulated layers were aggregated per five layers, resembling typical 5-cm thick luminescence samples. (3 pages)



Figure S1: point clouds and density functions of simulated luminescence age-depth profiles for mounding (left column) and subsurface mixing (right column), with gradational (a, b), exponential (c, d) and abrupt (e, f) depth functions. These plots correspond to the information provided in Figure 4 in the paper. The simulated layers were aggregated per five layers, resembling typical 5-cm thick luminescence samples. Figure continues on the next page.





Figure S2: point clouds and density functions of simulated luminescence age-depth profiles for different rates of mounding (left column) and subsurface mixing (right column), using a linear depth function. These plots correspond to the information provided in Figure 5 in the paper. The simulated layers were aggregated per five layers, resembling typical 5-cm thick luminescence samples. Figure continues on the next pages.



Figure S2, continued: point clouds and density functions of simulated luminescence age-depth profiles for different rates of mounding (left column) and subsurface mixing (right column), using a linear depth function. These plots correspond to the information provided in Figure 5 in the paper. The simulated layers were aggregated per five layers, resembling typical 5-cm thick luminescence samples.





Figure S3: point clouds and density functions of simulated luminescence age-depth profiles for different ratios between mounding and subsurface mixing. These plots correspond to the information provided in Figure 6 in the paper. The simulated layers were aggregated per five layers, resembling typical 5-cm thick luminescence samples. Figure continues on the next pages.



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